

Final Report

on

**Agrometeorological data analysis and future scenario development of
487 upazilas of Bangladesh (Package No. DAE/SD-03)**

Submitted to

**Project Director
Agro-Meteorological Information Systems Development Project
Department of Agricultural Extension (DAE)
Khamarbari, Farmgate, Dhaka-1215**

June 2020

Submitted by



**Bureau of Research, Testing and Consultation (BRTC)
Bangladesh University of Engineering and Technology (BUET)
Dhaka-1000**

Table of contents

Table of contents	Page No
Foreword	iv
List of Figures	v
List of Tables	xviii
Abbreviations	xxi
SUMMARY	1
CHAPTER 1:INTRODUCTION	
1.1 Introduction	7
1.2 Study objectives	9
1.3 Scope of the works	9
CHAPTER 2: METHODOLOGY AND DATA COLLECTION	10
CHAPTER 3: AGROMETEOROLOGICAL DATA ANALYSIS	
3.1 Monthly trend analysis for observed rainfall, Aphrodite rainfall, CRU rainfall	14
3.2 Seasonal trend analysis for observed rainfall, Aphrodite rainfall, CRU rainfall	35
3.3 Annual trend analysis for observed rainfall, Aphrodite rainfall, CRU rainfall	41
3.4 Monthly trend analysis for observed maximum temperature, CRU maximum temperature	43
3.5 Seasonal trend analysis for observed maximum temperature, CRU maximum temperature	47
3.6 Annual trend analysis for observed maximum temperature, CRU maximum temperature	49
3.7 Monthly trend analysis for observed minimum temperature, CRU minimum temperature	49
3.8 Seasonal trend analysis for observed minimum temperature, CRU minimum temperature	54
3.9 Annual trend analysis for observed minimum temperature, CRU minimum temperature	56
3.10 Monthly trend analysis for observed maximum relative humidity	57
3.11 Seasonal trend analysis for observed maximum relative humidity	60
3.12 Annual trend analysis for observed maximum relative humidity	61
3.13 Monthly trend analysis for observed minimum relative humidity	62
3.14 Seasonal trend analysis for observed minimum relative humidity	64
3.15 Annual trend analysis for observed minimum relative humidity	65

3.16	Monthly trend analysis for observed sunshine hours	66
3.17	Seasonal trend analysis for observed sunshine hours	68
3.18	Annual trend analysis for observed sunshine hours	69
3.19	Monthly trend analysis for NCEP/NCAR evaporation	71
3.20	Seasonal trend analysis for NCEP/NCAR evaporation	73
3.21	Annual trend analysis for NCEP/NCAR evaporation	74
3.22	Monthly trend analysis for CRU evapotranspiration	75
3.23	Seasonal trend analysis for CRU evapotranspiration	77
3.24	Annual trend analysis for CRU evapotranspiration	78
3.25	Monthly trend analysis for NCEP/NCAR soil moisture(0-10cm depth)	79
3.26	Seasonal trend analysis for NCEP/NCAR soil moisture(0-10cm depth)	81
3.27	Annual trend analysis for NCEP/NCAR soil moisture(0-10cm depth)	81

CHAPTER 4: FUTURE SCENARIOS GENERATION FOR 487 UPAZILAS IN BANGLADESH

4.1	Future scenario generation for the mid-century using RCP4.5	82
4.1.1	Monthly rainfall scenario for the mid-century	82
4.1.2	Seasonal rainfall scenario for the mid-century	84
4.1.3	Annual rainfall scenario for the mid-century	84
4.1.4	Monthly maximum temperature scenario for the mid-century	85
4.1.5	Seasonal maximum temperature scenario for the mid-century	87
4.1.6	Annual maximum temperature scenario for the mid-century	87
4.1.7	Monthly minimum temperature scenario for the mid-century	88
4.1.8	Seasonal minimum temperature scenario for the mid-century	90
4.1.9	Annual minimum temperature scenario for the mid-century	90
4.2	Future Scenario generation for the last-century using RCP4.5	91
4.2.1	Monthly rainfall scenario for the last-century	91
4.2.2	Seasonal rainfall scenario for the last-century	93
4.2.3	Annual rainfall scenario for the last-century using	93
4.2.4	Monthly maximum temperature scenario for the last-century	94
4.2.5	Seasonal maximum temperature scenario for the last-century	96
4.2.6	Annual maximum temperature scenario for the last-century	96
4.2.7	Monthly minimum temperature scenario for the last-century	97
4.2.8	Seasonal minimum temperature scenario for the las-century	99
4.2.9	Annual minimum temperature scenario for the last-century	99

4.3	Future scenario generation for the mid-century using RCP8.5	100
4.3.1	Monthly rainfall scenario for the mid-century	100
4.3.2	Seasonal rainfall scenario for the mid-century	102
4.3.3	Annual rainfall scenario for the mid-century	102
4.3.4	Monthly maximum temperature scenario for the mid-century	103
4.3.5	Seasonal maximum temperature scenario for the mid-century	105
4.3.6	Annual maximum temperature scenario for the mid-century	105
4.3.7	Monthly minimum temperature scenario for the mid-century	106
4.3.8	Seasonal minimum temperature scenario for the mid-century	108
4.3.9	Annual minimum temperature scenario for the mid-century	108
4.4	Future scenario generation for the last-century using RCP8.5	109
4.4.1	Monthly rainfall scenario for the last-century	109
4.4.2	Seasonal rainfall scenario for the last-century	111
4.4.3	Annual rainfall scenario for the last-century	111
4.4.4	Monthly maximum temperature scenario for the last-century	112
4.4.5	Seasonal maximum temperature scenario for the last-century	114
4.4.6	Annual maximum temperature scenario for the last-century	114
4.4.7	Monthly minimum temperature scenario for the last-century	115
4.4.8	Seasonal minimum temperature scenario for the las-century	117
4.4.9	Annual minimum temperature scenario for the last-century	117
	CHAPTER 5: CONCLUSIONS	118
	APPROACHES TO CLIMATE CHANGE ADAPTATION, MITIGATION IN AGRICULTURE	123
	REFERENCES	126

List of Figures

	Page
Fig. 3.1 Observed and gridded rainfall tend analysis for the month of January in Bangladesh for 1971-2015.	128
Fig. 3.2 Gridded and observed rainfall tend analysis for the month of January and February in Bangladesh for 1971-2015.	129
Fig. 3.3 Gridded rainfall tend analysis for the month of February in Bangladesh for 1971-2015.	130
Fig. 3.4 Observed and gridded rainfall tend analysis for the month of March in Bangladesh for 1971-2015.	131
Fig. 3.5 Gridded and observed rainfall tend analysis for the month of March and April in Bangladesh for 1971-2015.	132
Fig. 3.6 Gridded rainfall tend analysis for the month of April in Bangladesh for 1971-2015.	133
Fig. 3.7 Observed and gridded rainfall tend analysis for the month of May in Bangladesh for 1971-2015.	134
Fig. 3.8 Gridded and observed rainfall tend analysis for the month of May and June in Bangladesh for 1971-2015.	135
Fig. 3.9 Gridded rainfall tend analysis for the month of June in Bangladesh for 1971-2015.	136
Fig. 3.10 Observed and gridded rainfall tend analysis for the month of July in Bangladesh for 1971-2015.	137
Fig. 3.11 Gridded and observed rainfall tend analysis for the month of July and August in Bangladesh for 1971-2015.	138
Fig. 3.12 Gridded rainfall tend analysis for the month of August in Bangladesh for 1971-2015.	139
Fig. 3.13 Observed and gridded rainfall tend analysis for the month of September in Bangladesh for 1971-2015.	140
Fig. 3.14 Gridded and observed rainfall tend analysis for the month of September and October in Bangladesh for 1971-2015.	141
Fig. 3.15 Gridded rainfall tend analysis for the month of October in Bangladesh for 1971-2015.	142
Fig. 3.16 Observed and gridded rainfall tend analysis for the month of November in Bangladesh for 1971-2015.	143
Fig. 3.17 Gridded and observed rainfall tend analysis for the month of November and December in Bangladesh for 1971-2015.	144
Fig. 3.18 Gridded rainfall tend analysis for the month of December in Bangladesh for 1971-2015.	145
Fig. 3.19 Observed and gridded rainfall tend analysis for the season of Winter in Bangladesh for 1971-2015.	146
Fig. 3.20 Gridded and observed rainfall tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.	147
Fig. 3.21 Gridded rainfall tend analysis for the season of Pre-monsoon in Bangladesh for 1971-2015.	148

Fig. 3.22	Observed and gridded rainfall tend analysis for the season of Monsoon in Bangladesh for 1971-2015.	149
Fig. 3.23	Gridded and observed rainfall tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.	150
Fig. 3.24	Gridded rainfall tend analysis for the season of Post-monsoon in Bangladesh for 1971-2015.	151
Fig. 3.25	Observed and gridded rainfall tend analysis for the annual in Bangladesh for 1971-2015.	152
Fig. 3.26	Gridded rainfall tend analysis for the annual in Bangladesh for 1971-2015.	153
Fig. 3.27	Observed and gridded maximum temperature tend analysis for the month of January in Bangladesh for 1971-2015.	154
Fig. 3.28	Observed and gridded maximum temperature tend analysis for the month of February in Bangladesh for 1971-2015.	155
Fig. 3.29	Observed and gridded maximum temperature tend analysis for the month of March in Bangladesh for 1971-2015.	156
Fig. 3.30	Observed and gridded maximum temperature tend analysis for the month of April in Bangladesh for 1971-2015.	157
Fig. 3.31	Observed and gridded maximum temperature tend analysis for the month of May in Bangladesh for 1971-2015.	158
Fig. 3.32	Observed and gridded maximum temperature tend analysis for the month of June in Bangladesh for 1971-2015.	159
Fig. 3.33	Observed and gridded maximum temperature tend analysis for the month of July in Bangladesh for 1971-2015.	160
Fig. 3.34	Observed and gridded maximum temperature tend analysis for the month of August in Bangladesh for 1971-2015.	161
Fig. 3.35	Observed and gridded maximum temperature tend analysis for the month of September in Bangladesh for 1971-2015.	162
Fig. 3.36	Observed and gridded maximum temperature tend analysis for the month of October in Bangladesh for 1971-2015.	163
Fig. 3.37	Observed and gridded maximum temperature tend analysis for the month of November in Bangladesh for 1971-2015.	164
Fig. 3.38	Observed and gridded maximum temperature tend analysis for the month of December in Bangladesh for 1971-2015.	165
Fig. 3.39	Observed and gridded maximum temperature tend analysis for the Winter season in Bangladesh for 1971-2015.	166
Fig. 3.40	Observed and gridded maximum temperature tend analysis for the Pre-monsoon season in Bangladesh for 1971-2015.	167
Fig. 3.41	Observed and gridded maximum temperature tend analysis for the Monsoon season in Bangladesh for 1971-2015.	168
Fig. 3.42	Observed and gridded maximum temperature tend analysis for the Post-monsoon season in Bangladesh for 1971-2015.	169

Fig. 3.43	Observed and gridded maximum temperature tend analysis for the Annual in Bangladesh for 1971-2015.	170
Fig. 3.44	Observed and gridded minimum temperature tend analysis for the month of January in Bangladesh for 1971-2015.	171
Fig. 3.45	Observed and gridded minimum temperature tend analysis for the month of February in Bangladesh for 1971-2015.	172
Fig. 3.46	Observed and gridded minimum temperature tend analysis for the month of March in Bangladesh for 1971-2015.	173
Fig. 3.47	Observed and gridded minimum temperature tend analysis for the month of April in Bangladesh for 1971-2015.	174
Fig. 3.48	Observed and gridded minimum temperature tend analysis for the month of May in Bangladesh for 1971-2015.	175
Fig. 3.49	Observed and gridded minimum temperature tend analysis for the month of June in Bangladesh for 1971-2015.	176
Fig. 3.50	Observed and gridded minimum temperature tend analysis for the month of July in Bangladesh for 1971-2015.	177
Fig. 3.51	Observed and gridded minimum temperature tend analysis for the month of August in Bangladesh for 1971-2015.	178
Fig. 3.52	Observed and gridded minimum temperature tend analysis for the month of September in Bangladesh for 1971-2015.	179
Fig. 3.53	Observed and gridded minimum temperature tend analysis for the month of October in Bangladesh for 1971-2015.	180
Fig. 3.54	Observed and gridded minimum temperature tend analysis for the month of November in Bangladesh for 1971-2015.	181
Fig. 3.55	Observed and gridded minimum temperature tend analysis for the month of December in Bangladesh for 1971-2015.	182
Fig. 3.56	Observed and gridded minimum temperature tend analysis for the Winter season in Bangladesh for 1971-2015.	183
Fig. 3.57	Observed and gridded minimum temperature tend analysis for the Pre-monsoon season in Bangladesh for 1971-2015.	184
Fig. 3.58	Observed and gridded minimum temperature tend analysis for the Monsoon season in Bangladesh for 1971-2015.	185
Fig. 3.59	Observed and gridded minimum temperature tend analysis for the Post-monsoon season in Bangladesh for 1971-2015.	186
Fig. 3.60	Observed and gridded minimum temperature tend analysis for the Annual in Bangladesh for 1971-2015.	187
Fig. 3.61	Observed maximum relative humidity tend analysis for the month of January and February in Bangladesh for 1971-2015.	188
Fig. 3.62	Observed maximum relative humidity tend analysis for the month of March and April in Bangladesh for 1971-2015.	189
Fig. 3.63	Observed maximum relative humidity tend analysis for the month of May and June in Bangladesh for 1971-2015.	190

Fig. 3.64	Observed maximum relative humidity tend analysis for the month of July and August in Bangladesh for 1971-2015.	191
Fig. 3.65	Observed maximum relative humidity tend analysis for the month of September and October in Bangladesh for 1971-2015.	192
Fig. 3.66	Observed maximum relative humidity tend analysis for the month of November and December in Bangladesh for 1971-2015.	193
Fig. 3.67	Observed maximum relative humidity tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.	194
Fig. 3.68	Observed maximum relative humidity tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.	195
Fig. 3.69	Observed maximum relative humidity tend analysis for the Annual in Bangladesh for 1971-2015.	196
Fig. 3.70	Observed minimum relative humidity tend analysis for the month of January and February in Bangladesh for 1971-2015.	197
Fig. 3.71	Observed minimum relative humidity tend analysis for the month of March and April in Bangladesh for 1971-2015.	198
Fig. 3.72	Observed minimum relative humidity tend analysis for the month of May and June in Bangladesh for 1971-2015.	199
Fig. 3.73	Observed minimum relative humidity tend analysis for the month of July and August in Bangladesh for 1971-2015.	200
Fig. 3.74	Observed minimum relative humidity tend analysis for the month of September and October in Bangladesh for 1971-2015.	201
Fig. 3.75	Observed minimum relative humidity tend analysis for the month of November and December in Bangladesh for 1971-2015.	202
Fig. 3.76	Observed minimum relative humidity tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.	203
Fig. 3.77	Observed minimum relative humidity tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.	204
Fig. 3.78	Observed minimum relative humidity tend analysis for the Annual in Bangladesh for 1971-2015.	205
Fig. 3.79	Observed sunshine hours tend analysis for the month of January and February in Bangladesh for 1971-2015.	206
Fig. 3.80	Observed sunshine hours tend analysis for the month of March and April in Bangladesh for 1971-2015.	207
Fig. 3.81	Observed sunshine hours tend analysis for the month of May and June in Bangladesh for 1971-2015.	208

Fig. 3.82	Observed sunshine hours tend analysis for the month of July and August in Bangladesh for 1971-2015.	209
Fig. 3.83	Observed sunshine hours tend analysis for the month of September and October in Bangladesh for 1971-2015.	210
Fig. 3.84	Observed sunshine hours tend analysis for the month of November and December in Bangladesh for 1971-2015.	211
Fig. 3.85	Observed sunshine hours tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.	212
Fig. 3.86	Observed sunshine hours tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.	213
Fig. 3.87	Observed sunshine hours tend analysis for the Annual in Bangladesh for 1971-2015.	214
Fig. 3.88	NCEP/NCAR gridded evaporation tend analysis for the month of January and February in Bangladesh for 1971-2015.	215
Fig. 3.89	NCEP/NCAR gridded evaporation tend analysis for the month of March and April in Bangladesh for 1971-2015.	216
Fig. 3.90	NCEP/NCAR gridded evaporation tend analysis for the month of May and June in Bangladesh for 1971-2015.	217
Fig. 3.91	NCEP/NCAR gridded evaporation tend analysis for the month of July and August in Bangladesh for 1971-2015.	218
Fig. 3.92	NCEP/NCAR gridded evaporation tend analysis for the month of September and October in Bangladesh for 1971-2015.	219
Fig. 3.93	NCEP/NCAR gridded evaporation tend analysis for the month of November and December in Bangladesh for 1971-2015.	220
Fig. 3.94	NCEP/NCAR gridded evaporation tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.	221
Fig. 3.95	NCEP/NCAR gridded evaporation tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.	222
Fig. 3.96	NCEP/NCAR gridded evaporation tend analysis for Annual in Bangladesh for 1971-2015.	223
Fig. 3.97	CRU gridded evapotranspiration (PET) tend analysis for the month of January and February in Bangladesh for 1971-2015.	224
Fig. 3.98	CRU gridded evapotranspiration (PET) tend analysis for the month of March and April in Bangladesh for 1971-2015.	225
Fig. 3.99	CRU gridded evapotranspiration (PET) tend analysis for the month of May and June in Bangladesh for 1971-2015.	226
Fig. 3.100	CRU gridded evapotranspiration (PET) tend analysis for the month of July and August in Bangladesh for 1971-2015.	227
Fig. 3.101	CRU gridded evapotranspiration (PET) tend analysis for the month of September and October in Bangladesh for 1971-2015.	228
Fig. 3.102	CRU gridded evapotranspiration (PET) tend analysis for the month of November and December in Bangladesh for 1971-2015.	229

Fig. 3.103	CRU gridded evapotranspiration (PET) tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.	230
Fig. 3.104	CRU gridded evapotranspiration (PET) tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.	231
Fig. 3.105	CRU gridded evapotranspiration (PET) tend analysis for Annual in Bangladesh for 1971-2015.	232
Fig. 3.106	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for the month of January and February in Bangladesh for 1971-2015.	233
Fig. 3.107	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for the month of March and April in Bangladesh for 1971-2015.	234
Fig. 3.108	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for the month of May and June in Bangladesh for 1971-2015.	235
Fig. 3.109	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for the month of July and August in Bangladesh for 1971-2015.	236
Fig. 3.110	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for the month of September and October in Bangladesh for 1971-2015.	237
Fig. 3.111	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for the month of November and December in Bangladesh for 1971-2015.	238
Fig. 3.112	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.	239
Fig. 3.113	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.	240
Fig. 3.114	NCEP/NCAR gridded soil moisture (0-10 cm) tend analysis for Annual in Bangladesh for 1971-2015.	241
Fig. 4.1	Percentage of change in rainfall projection(RCP4.5) for January and February for the mid- century (2021-2050) in Bangladesh.	242
Fig. 4.2	Percentage of change in rainfall projection(RCP4.5) for March and April for the mid- century (2021-2050) in Bangladesh.	243
Fig. 4.3	Percentage of change in rainfall projection(RCP4.5) for May and June for the mid- century (2021-2050) in Bangladesh.	244
Fig. 4.4	Percentage of change in rainfall projection(RCP4.5) for July and August for the mid- century (2021-2050) in Bangladesh.	245
Fig. 4.5	Percentage of change in rainfall projection(RCP4.5) for September and October for the mid- century (2021-2050) in Bangladesh.	246

Fig. 4.6	Percentage of change in rainfall projection(RCP4.5) for November and December for the mid- century (2021-2050) in Bangladesh.	247
Fig. 4.7	Percentage of change in rainfall projection(RCP4.5) for Winter and Pre-monsoon season for the mid- century (2021-2050) in Bangladesh.	248
Fig. 4.8	Percentage of change in rainfall projection(RCP4.5) for Monsoon and Post-monsoon season for the mid- century (2021-2050) in Bangladesh.	249
Fig. 4.9	Percentage of change in rainfall projection(RCP4.5) for Annual for the mid- century (2021-2050) in Bangladesh.	250
Fig. 4.10	Maximum temperature change projection(RCP4.5) in degree for January and February for the mid-century (2021-2050) in Bangladesh.	251
Fig. 4.11	Maximum temperature change projection(RCP4.5) in degree for March and April for the mid-century (2021-2050) in Bangladesh.	252
Fig. 4.12	Maximum temperature change projection(RCP4.5) in degree for May and June for the mid-century (2021-2050) in Bangladesh.	253
Fig. 4.13	Maximum temperature change projection(RCP4.5) in degree for July and August for the mid-century (2021-2050) in Bangladesh.	254
Fig. 4.14	Maximum temperature change projection(RCP4.5) in degree for September and October for the mid-century (2021-2050) in Bangladesh.	255
Fig. 4.15	Maximum temperature change projection(RCP4.5) in degree for November and December for the mid-century (2021-2050) in Bangladesh.	256
Fig. 4.16	Maximum temperature change projection(RCP4.5) in degree for Winter and Pre-monsoon season for the mid-century (2021-2050) in Bangladesh.	257
Fig. 4.17	Maximum temperature change projection(RCP4.5) in degree for Monsoon and Post-monsoon season for the mid-century (2021-2050) in Bangladesh.	258
Fig. 4.18	Maximum temperature change projection(RCP4.5) in degree for Annual for the mid-century (2021-2050) in Bangladesh.	259
Fig. 4.19	Minimum temperature change projection(RCP4.5) in degree for January and February for the mid-century (2021-2050) in Bangladesh.	260
Fig. 4.20	Minimum temperature change projection(RCP4.5) in degree for March and April for the mid-century (2021-2050) in Bangladesh.	261

Fig. 4.21	Minimum temperature change projection(RCP4.5) in degree for May and June for the mid-century (2021-2050) in Bangladesh.	262
Fig. 4.22	Minimum temperature change projection(RCP4.5) in degree for July and August for the mid-century (2021-2050) in Bangladesh.	263
Fig. 4.23	Minimum temperature change projection(RCP4.5) in degree for September and October for the mid-century (2021-2050) in Bangladesh.	264
Fig. 4.24	Minimum temperature change projection(RCP4.5) in degree for November and December for the mid-century (2021-2050) in Bangladesh.	265
Fig. 4.25	Minimum temperature change projection(RCP4.5) in degree for Winter and Pre-monsoon season for the mid-century (2021-2050) in Bangladesh.	266
Fig. 4.26	Minimum temperature change projection(RCP4.5) in degree for Monsoon and post-monsoon season for the mid-century (2021-2050) in Bangladesh.	267
Fig. 4.27	Minimum temperature change projection(RCP4.5) in degree for Annual for the mid-century (2021-2050) in Bangladesh.	268
Fig. 4.28	Percentage of change in rainfall projection(RCP4.5) for January and February for the last- century (2071-2100) in Bangladesh.	269
Fig. 4.29	Percentage of change in rainfall projection(RCP4.5) for March and April for the last- century (2071-2100) in Bangladesh.	270
Fig. 4.30	Percentage of change in rainfall projection(RCP4.5) for May and June for the last- century (2071-2100) in Bangladesh.	271
Fig. 4.31	Percentage of change in rainfall projection(RCP4.5) for July and August for the last- century (2071-2100) in Bangladesh.	272
Fig. 4.32	Percentage of change in rainfall projection(RCP4.5) for September and October for the last- century (2071-2100) in Bangladesh.	273
Fig. 4.33	Percentage of change in rainfall projection(RCP4.5) for November and December for the last- century (2071-2100) in Bangladesh.	274
Fig. 4.34	Percentage of change in rainfall projection(RCP4.5) for Winter and Pre-monsoon season for the last- century (2071-2100) in Bangladesh.	275
Fig. 4.35	Percentage of change in rainfall projection(RCP4.5) for Monsoon and Post-monsoon season for the last- century (2071-2100) in Bangladesh.	276
Fig. 4.36	Percentage of change in rainfall projection(RCP4.5) for Annual for the last- century (2071-2100) in Bangladesh.	277

Fig. 4.37	Maximum temperature change projection(RCP4.5) in degree for January and February for the last-century (2071-2100) in Bangladesh.	278
Fig. 4.38	Maximum temperature change projection(RCP4.5) in degree for March and April for the last-century (2071-2100) in Bangladesh.	279
Fig. 4.39	Maximum temperature change projection(RCP4.5) in degree for May and June for the last-century (2071-2100) in Bangladesh.	280
Fig. 4.40	Maximum temperature change projection(RCP4.5) in degree for July and August for the last-century (2071-2100) in Bangladesh.	281
Fig. 4.41	Maximum temperature change projection(RCP4.5) in degree for September and October for the last-century (2071-2100) in Bangladesh.	282
Fig. 4.42	Maximum temperature change projection(RCP4.5) in degree for November and December for the last-century (2071-2100) in Bangladesh.	283
Fig. 4.43	Maximum temperature change projection(RCP4.5) in degree for Winter and Pre-monsoon season for the last-century (2071-2100) in Bangladesh.	284
Fig. 4.44	Maximum temperature change projection(RCP4.5) in degree for Monsoon and Post-monsoon season for the last-century (2071-2100) in Bangladesh.	285
Fig. 4.45	Maximum temperature change projection(RCP4.5) in degree for Annual for the last-century (2071-2100) in Bangladesh.	286
Fig. 4.46	Minimum temperature change projection(RCP4.5) in degree for January and February for the last-century (2071-2100) in Bangladesh.	287
Fig. 4.47	Minimum temperature change projection(RCP4.5) in degree for March and April for the last-century (2071-2100) in Bangladesh.	288
Fig. 4.48	Minimum temperature change projection(RCP4.5) in degree for May and June for the last-century (2071-2100) in Bangladesh.	289
Fig. 4.49	Minimum temperature change projection(RCP4.5) in degree for July and August for the last-century (2071-2100) in Bangladesh.	290
Fig. 4.50	Minimum temperature change projection (RCP4.5) in degree for September and October for the last-century (2071-2100) in Bangladesh.	291
Fig. 4.51	Minimum temperature change projection (RCP4.5) in degree for November and December for the last-century (2071-2100) in Bangladesh.	292

Fig. 4.52	Minimum temperature change projection(RCP4.5) in degree for Winter and Pre-monsoon season for the last-century (2071-2100) in Bangladesh.	293
Fig. 4.53	Minimum temperature change projection (RCP4.5) in degree for Monsoon and Post-monsoon season for the last-century (2071-2100) in Bangladesh.	294
Fig. 4.54	Minimum temperature change projection(RCP4.5) in degree for Annual for the last-century (2071-2100) in Bangladesh.	295
Fig. 4.55	Percentage of change in rainfall projection (RCP8.5) for January and February for the mid- century (2021-2050) in Bangladesh.	296
Fig. 4.56	Percentage of change in rainfall projection (RCP8.5) for March and April for the mid- century (2021-2050) in Bangladesh.	297
Fig. 4.57	Percentage of change in rainfall projection (RCP8.5) for May and June for the mid- century (2021-2050) in Bangladesh.	298
Fig. 4.58	Percentage of change in rainfall projection (RCP8.5) for July and August for the mid- century (2021-2050) in Bangladesh.	299
Fig. 4.59	Percentage of change in rainfall projection (RCP8.5) for September and October for the mid- century (2021-2050) in Bangladesh.	300
Fig. 4.60	Percentage of change in rainfall projection (RCP8.5) for November and December for the mid- century (2021-2050) in Bangladesh.	301
Fig. 4.61	Percentage of change in rainfall projection (RCP8.5) for Winter and Pre-monsoon season for the mid- century (2021-2050) in Bangladesh.	302
Fig. 4.62	Percentage of change in rainfall projection (RCP8.5) for Monsoon and Post-monsoon season for the mid- century (2021-2050) in Bangladesh.	303
Fig. 4.63	Percentage of change in rainfall projection (RCP8.5) for Annual for the mid- century (2021-2050) in Bangladesh.	304
Fig. 4.64	Maximum temperature change projection(RCP8.5) in degree for January and February for the mid-century (2021-2050) in Bangladesh.	305
Fig. 4.65	Maximum temperature change projection(RCP8.5) in degree for March and April for the mid-century (2021-2050) in Bangladesh.	306
Fig. 4.66	Maximum temperature change projection(RCP8.5) in degree for May and June for the mid-century (2021-2050) in Bangladesh.	307
Fig. 4.67	Maximum temperature change projection(RCP8.5) in degree for July and August for the mid-century (2021-2050) in Bangladesh.	308

Fig. 4.68	Maximum temperature change projection(RCP8.5) in degree for September and October for the mid-century (2021-2050) in Bangladesh.	309
Fig. 4.69	Maximum temperature change projection(RCP8.5) in degree for November and December for the mid-century (2021-2050) in Bangladesh.	310
Fig. 4.70	Maximum temperature change projection(RCP8.5) in degree for Winter and Pre-monsoon season for the mid-century (2021-2050) in Bangladesh.	311
Fig. 4.71	Maximum temperature change projection(RCP8.5) in degree for Monsoon and Post-monsoon season for the mid-century (2021-2050) in Bangladesh.	312
Fig. 4.72	Maximum temperature change projection(RCP8.5) in degree for Annual for the mid-century (2021-2050) in Bangladesh.	313
Fig. 4.73	Minimum temperature change projection(RCP8.5) in degree for January and February for the mid-century (2021-2050) in Bangladesh.	314
Fig. 4.74	Minimum temperature change projection(RCP8.5) in degree for March and April for the mid-century (2021-2050) in Bangladesh.	315
Fig. 4.75	Minimum temperature change projection(RCP8.5) in degree for May and June for the mid-century (2021-2050) in Bangladesh.	316
Fig. 4.76	Minimum temperature change projection(RCP8.5) in degree for July and August for the mid-century (2021-2050) in Bangladesh.	317
Fig. 4.77	Minimum temperature change projection(RCP8.5) in degree for September and October for the mid-century (2021-2050) in Bangladesh.	318
Fig. 4.78	Minimum temperature change projection(RCP8.5) in degree for November and December for the mid-century (2021-2050) in Bangladesh.	319
Fig. 4.79	Minimum temperature change projection(RCP8.5) in degree for Winter and Pre-monsoon season for the mid-century (2021-2050) in Bangladesh.	320
Fig. 4.80	Minimum temperature change projection(RCP8.5) in degree for Monsoon and Post-monsoon season for the mid-century (2021-2050) in Bangladesh.	321
Fig. 4.81	Minimum temperature change projection(RCP8.5) in degree for Annual for the mid-century (2021-2050) in Bangladesh.	322
Fig. 4.82	Percentage of change in rainfall projection (RCP8.5) for January and February for the last- century (2071-2100) in Bangladesh.	323
Fig. 4.83	Percentage of change in rainfall projection (RCP8.5) for March and April for the last- century (2071-2100) in Bangladesh.	324

Fig. 4.84	Percentage of change in rainfall projection (RCP8.5) for May and June for the last- century (2071-2100) in Bangladesh.	325
Fig. 4.85	Percentage of change in rainfall projection (RCP8.5) for July and August for the last- century (2071-2100) in Bangladesh.	326
Fig. 4.86	Percentage of change in rainfall projection (RCP8.5) for September and October for the last- century (2071-2100) in Bangladesh.	327
Fig. 4.87	Percentage of change in rainfall projection (RCP8.5) for November and December for the last- century (2071-2100) in Bangladesh.	328
Fig. 4.88	Percentage of change in rainfall projection (RCP8.5) for Winter and Pre-monsoon season for the last- century (2071-2100) in Bangladesh.	329
Fig. 4.89	Percentage of change in rainfall projection (RCP8.5) for Monsoon and Post-monsoon season for the last- century (2071-2100) in Bangladesh.	330
Fig. 4.90	Percentage of change in rainfall projection (RCP8.5) for Annual for the last- century (2071-2100) in Bangladesh.	331
Fig. 4.91	Maximum temperature change projection(RCP8.5) in degree for January and February for the last-century (2071-2100) in Bangladesh.	332
Fig. 4.92	Maximum temperature change projection(RCP8.5) in degree for March and April for the last-century (2071-2100) in Bangladesh.	333
Fig. 4.93	Maximum temperature change projection(RCP8.5) in degree for May and June for the last-century (2071-2100) in Bangladesh.	334
Fig. 4.94	Maximum temperature change projection(RCP8.5) in degree for July and August for the last-century (2071-2100) in Bangladesh.	335
Fig. 4.95	Maximum temperature change projection(RCP8.5) in degree for September and October for the last-century (2071-2100) in Bangladesh.	336
Fig. 4.96	Maximum temperature change projection(RCP8.5) in degree for November and December for the last-century (2071-2100) in Bangladesh.	337
Fig. 4.97	Maximum temperature change projection(RCP8.5) in degree for Winter and Pre-monsoon season for the last-century (2071-2100) in Bangladesh.	338
Fig. 4.98	Maximum temperature change projection(RCP8.5) in degree for Monsoon and Post-monsoon for the last-century (2071-2100) in Bangladesh.	339

Fig. 4.99	Maximum temperature change projection(RCP8.5) in degree for Annual for the last-century (2071-2100) in Bangladesh.	340
Fig. 4.100	Minimum temperature change projection(RCP8.5) in degree for January and February for the last-century (2071-2100) in Bangladesh.	341
Fig. 4.101	Minimum temperature change projection(RCP8.5) in degree for March and April for the last-century (2071-2100) in Bangladesh.	342
Fig. 4.102	Minimum temperature change projection(RCP8.5) in degree for May and June for the last-century (2071-2100) in Bangladesh.	343
Fig. 4.103	Minimum temperature change projection(RCP8.5) in degree for July and August for the last-century (2071-2100) in Bangladesh.	344
Fig. 4.104	Minimum temperature change projection(RCP8.5) in degree for September and October for the last-century (2071-2100) in Bangladesh.	345
Fig. 4.105	Minimum temperature change projection(RCP8.5) in degree for November and December for the last-century (2071-2100) in Bangladesh.	346
Fig. 4.106	Minimum temperature change projection(RCP8.5) in degree for Winter and Pre-monsoon season for the last-century (2071-2100) in Bangladesh.	347
Fig. 4.107	Minimum temperature change projection(RCP8.5) in degree for Monsoon and Post-monsoon season for the last-century (2071-2100) in Bangladesh.	348
Fig. 4.108	Minimum temperature change projection(RCP8.5) in degree for Annual for the last-century (2071-2100) in Bangladesh.	349

List of Tables

	Page No
Table 1.1: District level observed (BMD) monthly and annual rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	350
Table 1.2: District level observed seasonal rainfall (BMD) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	352
Table 1.3: Upazila level Aphrodite observed gridded monthly and annual rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	354
Table 1.4: Upazila level Aphrodite observed gridded seasonal rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	376
Table 1.5: Upazila level CRU gridded monthly and annual rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	384
Table 1.6: Upazila level CRU gridded seasonal rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined	406
Table 1.7: District level observed (BMD) mean monthly and annual maximum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	415
Table 1.8: District level observed (BMD) seasonal mean maximum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	417
Table 1.9: Upazila level CRU gridded mean monthly and annual maximum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	419
Table 1.10: Upazila level CRU gridded seasonal maximum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	441

Table 1.11:	District level observed (BMD) mean monthly and annual minimum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	450
Table 1.12:	District level observed (BMD) seasonal mean minimum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	452
Table 1.13:	Upazila level CRU gridded mean monthly and annual minimum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	454
Table 1.14:	Upazila level CRU gridded seasonal minimum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	476
Table 1.15:	District level observed(BMD) mean monthly and annual maximum relative humidity (%) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	485
Table 1.16:	District level observed(BMD) seasonal maximum relative humidity (%) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	487
Table 1.17:	District level observed(BMD) mean monthly and annual minimum relative humidity (%) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	489
Table 1.18:	District level observed(BMD) seasonal minimum relative humidity (%) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	491
Table 1.19:	District level observed(BMD) mean monthly sunshine hours with significant increasing and decreasing trends for 1981-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	493

Table 1.20:	District level observed(BMD) seasonal sunshine hours with significant increasing and decreasing trends for 1981-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	495
Table 1.21:	Upazila level NCEP/NCAR gridded mean monthly and annual evaporation with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	497
Table 1.22:	Upazila level NCEP/NCAR gridded seasonal evaporation with significant increasing and decreasing trends for 1981-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	518
Table 1.23:	Upazila level CRU gridded mean monthly and annual potential evapotranspiration (PET) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	527
Table 1.24:	Upazila level CRU gridded seasonal potential evapotranspiration (PET) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	549
Table 1.25:	Upazila level NCEP/NCAR gridded mean monthly and annual soil moisture (0-10 cm depth) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	558
Table 1.26:	Upazila level NCEP/NCAR gridded seasonal soil moisture (0-10 cm depth) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.	572

Abbreviations

Aphrodite Data	:	Asian Precipitation-Highly-Resolved Observational Data
BMD	:	Bangladesh Meteorological Department
BCSD	:	Bias-Correction Spatial Disaggregation
CRU Data	:	Climate Research Unit of the University of East Anglia Data
CanESM2	:	Canadian Earth System Model CanESM2
CMIP5	:	Coupled Model Intercomparison Project Phase 5
GDP	:	Gross Domestic Product
GCM	:	General Circulation Model
GFDL-ESM2M	:	Earth System Model – Geophysical Fluid Dynamics Laboratory
IPSL-CM5A-MR	:	Institut Pierre Simon Laplace Model CM5A-MR
IPCC	:	Intergovernmental Panel on Climate Change
Last-century	:	2071-2100
Mid-century	:	2021-2050
MIROC-ESM	:	Model for Interdisciplinary Research on Climate–Earth System Model
MPI-ESM-MR	:	Max Planck Institute for Meteorology Earth System Model MR
Monsoon season	:	June-July-August-September
NCEP/NCAR	:	National Centers for Environmental Prediction/ National Centre for Atmospheric Research
NASA	:	The National Aeronautics and Space Administration
NEX-GDDP	:	NASA Earth Exchange (NEX) High Resolution Global Daily Downscaled Projection
NorESM1	:	Norwegian Earth System Model
NAS	:	NASA Advanced Supercomputing
PET	:	Evapotranspiration
Pre-monsoon season	:	March-April-May
Post-monsoon season	:	October-November
RCP	:	Representative Concentration Pathway

SUMMARY

Agrometeorology is the science that applies knowledge of weather and climate to direct agricultural activities towards improving yield and production qualitatively and quantitatively. Weather and climate data and/or information play a crucial role in making many agricultural decisions. Agrometeorological information not only relates fundamental crop physiology, growth and development, but also application of agricultural productivity related technological factors such as sowing, irrigation, fertilizer applications, crop protection, harvesting and even storage crops etc. On another angle, agrometeorological information greatly impacts on decision making process for sustainable agriculture and managing natural disasters, with a view to preserving natural resources and improving the quality of life. Though traditional planning and forecasting practices are important in operational agro-services but on their own are not enough to serve all needs in viewing the insights and answering the solutions to the future. Trend analysis is based on the assumption that the factors driving change in the past will continue to do the same it in the future. Scenarios, on the other hand, are not predictions, but narratives of alternative environments in which today's decisions may be played out. Scenarios are more similar to hypotheses of different futures specifically designed to highlight the risks and opportunities involved in specific strategic issues. Therefore, a scenario assessment process is decided to be applied to address many of the uncertainties, and to help define the key decisions that need to be undertaken to ensure that Bangladesh's agricultural technology system is well prepared for the future. Scenarios are an important and useful tool in providing a neutral space for discussion, helping to build consensus on the key issues facing various stakeholders. Besides being useful in strategy formulation, scenarios can be used in policy development for agriculture.

Climate change and agriculture practices are interrelated processes, both of which take place on a global scale compared to various other sectors of economy, agriculture is a unique phenomenon, whose output is largely dependent on weather conditions. The degree of success of agricultural production and its economics is determined to a large extent by how well weather conditions corresponding to the optimal requirements of the crop are best exploited to raise the crops. As such there is a need to study and understand the impact of climate changes on agriculture globally as well as at regional level. There is a lot of research and analysis going on to quantify the actual impact of climate change in each and every country. In order to mark global level scenario, the first step is to proceed with regional to local level. In this regard the present research aim is to study the trend of weather parameters and future scenarios development at upazila level in Bangladesh. The study will provide the suitable information through the trend analysis on future climate change and its impact on crop productivity. The study included nine location-specific weather parameters., rainfall, maximum temperature, minimum temperature, maximum relative humidity, minimum relative humidity, sunshine hour, evaporation, evapotranspiration and soil moisture. The highlights of the results are:

Trend analysis

- (i) The trend analysis was carried out to identify the trend pattern of rainfall using observed (data from Bangladesh Meteorological Department (BMD)), gridded Aphrodite and CRU (Climate Research Unit of the University of East Anglia) during the period 1971-2015. The results based on observed (BMD) data indicated decreasing trends in rainfall for most of the months except for March, June, August, September and October. For these months, the rainfall showed increasing trend, the trend was statistically significant in all upazilas under Bagerhat, Chittagong, Cox's Bazar, Feni, Habiganj, Khulna, Mymensingh, Moulvibazar, Netrokona, Rangamai, Satkhira, zilas. Almost similar results were obtained from Aphrodite and CRU data-source for the same period of time. Winter and pre-monsoonal rainfall showed a general decreasing trend, which was statistically significant in limited locations (e.g. in a few upazilas under Chuadanga, Dhaka zilas). On the contrary, monsoonal and post-monsoonal rainfall showed an increasing trend, again this was significant in limited locations mainly in the upazilas under Chittagong, Noakhali zilas. It may be noted that CRU rainfall data showed decreasing but insignificant trend in monsoonal rainfall. Spatially coherent increasing and decreasing trends in annual rainfall were observed in many locations of Bangladesh, though not always statistically significant. Notably, annual rainfall had been significantly increasing in all the upazilas under Chittagong and Patuakhali zilas and significantly decreasing in all upazilas under Chuadanga, Dhaka, and Faridpur zilas (with exception of CRU data, which it showed a decreasing trend in all upazilas).
- (ii) Mean monthly maximum temperature revealed significant increasing trend in most of the months in a majority upazilas except for the month of December and January, this two month showed a decreasing trend in almost all upazilas with exception of upazilas in the northeast and southeast in Bangladesh showing an opposite trend (increasing). These results are based on observed datasets and CRU largely agreed on the results except for the month of December, for this month CRU data tended to reveal an increasing but non-significant trend. On mean monthly minimum temperatures in most of the months showed an increasing trend for majority upazilas; the exception was the months of January and November revealing a significantly decreasing trend over northeastern and southeastern parts of the country. The observed (BMD) and CRU data produced the similar trends. On seasonality, the mean maximum temperature had shown a significant increasing trend in all but winter season; the maximum temperature had been decreasing except for parts of northeast and southeast experiencing an increasing trend. With respect to seasonal mean minimum temperatures, a significant increasing trend was found in post-monsoon season. On annual scale, both the mean maximum temperature and mean minimum temperatures revealed significantly increasing trend in a majority upazilas across Bangladesh for the study period.

- (iii) The maximum relative humidity had significantly increased in a majority upazilas for most of the months; here July was the exception with coherent increasing trend over northwestern part but decreasing trend over southern part. The minimum relative humidity showed a significantly decreasing trend for most of the months in a majority upazilas except for the month of December and January, in this two months, it had been increasing over western but decreasing over eastern parts of Bangladesh. Season-wise, the maximum relative humidity had significantly increased in most of the upazilas for all but monsoon season. The minimum relative humidity had been significantly decreasing in most of the upazilas in all but winter season; it had been increasing over western part and decreasing over eastern part of the country. On annual scale, the maximum relative humidity shown increasing trend and the minimum relative humidity observed decreasing trend in most of the upazilas, notably in the eastern Bangladesh.
- (iv) The results revealed significant decreasing trend in monthly sunshine hours in various month in most of the upazilas; the month of July and September being expectations, which significantly increasing trend over hilly region. To be noted that the month of September showed coherent increasing and decreasing trend over northern and southern parts of the country but not significant across the whole country. Seasonal sunshine hours showed a significantly decreasing trend in most of the upazilas across the seasons except in monsoon; however, in the season-the upazilas of Bogura, Gazipur and Narsingdhi zilas experienced a decreasing trend, whereas, majority upazilas of southern and hilly parts felt significant increasing trend. Annually, the sunshine hours had shown decreasing trend in almost all upazilas but upazilas under Patuakhali and Cox's Bazar zilas, had been experiencing the significant increasing trend.
- (v) The evaporation shown decreasing trend from March-August with significant in a majority upazilas during May-July and increasing trend during January-February and September-December with significant in most of upazilas of central to eastern part in Bangladesh. Seasonal evaporation had shown significant increasing trend in a majority upazilas for winter and post-monsoon but significantly decreasing trend over central to eastern parts in pre-monsoon and monsoon season. Annual evaporation shown decreasing trend in almost all upazilas with significant in southwest part upazilas; the exception being northwest and northeast part upazilas of the country, where it had been decreasing but not necessarily significant.
- (vi) The evapotranspiration(PET) had shown significantly decreasing trend in most of the months though only significant over southern part upazilas of Bangladesh in the month of January. During February, April, July and September, it had been in increasing trend though not always significant nationally. Seasonal PET had shown non-significant decreasing trend for all season; it was, however, significant over the upazilas of southeastern part of Bangladesh in winter season. Annual evaporation shown significant decreasing trend in a majority

upazilas except in northern part, where it showed increasing trend but not significant.

- (vii) The soil moisture (in 0-10 cm depth) had shown significant decreasing trend during most of the months except in April, May, June and July; in the latter months, it showed increasing trend over southern and decreasing over northern part upazilas. Seasonal soil moisture had shown significant decreasing trend for winter season; in pre-monsoon, monsoon and post-monsoon season, it showed significant increasing trend in a few upazilas over eastern part and decreasing over western part upazilas. Annual soil moisture showed significant decreasing trend over the upazilas of northwest part and increasing trend over the upazilas of southeast part in Bangladesh.

Projections

- (viii) **Scenarios for mid-century (2021-2050):** Monthly rainfall is projected to decrease by more than -10% in various month in a majority upazilas except during June-October, where it is likely to increase by more than 10% in most of the upazilas of southern part and to remain unchanged in the upazilas of northern part. Seasonal rainfall is likely to decrease by more than -10% during winter and pre-monsoon season in a majority upazilas; monsoonal and post-monsoonal rainfall, is expected to remain the same in all but southern part where an increase by more than 10% expected compared to the baseline period. Annual rainfall is expected to remain the same under RCP4.5 for the mid-century (2021-2050). Similarly, for RCP8.5 the monthly rainfall is projected to remain constant in most of the months in most of the upazilas; the exception being the months of January, February, April and May is projected to decrease by more than -10% and June, September, November, it is likely to increase by more than 10% in a majority upazilas of Bangladesh. Seasonal rainfall is expected to decrease by more than -10% for winter and pre-monsoon in most of the upazilas; in monsoon and post-monsoon rainfall is projected to increase by more than 10% over southern and to remain constant over northwest part upazilas during the mid-century. Annual rainfall is expected to remain the same in the country under RCP8.5 for the mid-century (2021-2050).
- (ix) **Scenarios for last-century (2071-2100):** Monthly rainfall is projected to increase by more than 10% in various months in most of the upazilas except for January, February, May and August, is expected to experience a decrease rainfall by more than -10% and it is likely to remain constant under RCP4.5. Seasonal rainfall is expected to remain the same for winter season in most of the upazilas except in some upazilas in southern and northwest part, where its likely to decrease by more than -10%. For the pre-monsoon, monsoon and post-monsoon season, rainfall is projected to increase by more than 10% in almost all upazilas. Annual rainfall is projected to increase by more than 10% under RCP4.5. Similarly, for RCP8.5 the monthly rainfall is projected to increase by more than 10% in most of the months in most of the upazilas except for the months of January, February, May and August; January is likely to receive a

decreased rainfall by more than -10% and in rest of the months to remain the same compared to the baseline period (1971-2000) under RCP8.5. Seasonal rainfall is projected to increase by more than 10% for monsoon and post-monsoon seasons. Winter season rainfall is likely to decrease by more than -10% over the upazilas of southern part and to remain the same over northern part in most of the upazilas and pre-monsoon season rainfall is projected to increase by more than 10% over the upazilas of northern part and to remain the same over the upazilas of southern part. Annual rainfall is expected to increase by more than 10% to the country under RCP8.5 for the last-century (2071-2100).

- (x) **Scenarios for mid-century (2021-2050):** The projected increase in monthly maximum temperature varies between 0.5 to 3.0°C by the mid-century (2021-2050). Highest in maximum temperature in March is expected to increase by about 3.0°C over the upazilas of northwest part of Bangladesh under RCP4.5. Seasonal maximum temperature is expected to vary between 0.7-1.7, 0.9-1.9, 0.7-1.0 and 0.8-1.3°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual maximum temperature is projected to increase on an average by 1.2°C under RCP4.5 for the mid-century (2021-2050). Similarly, under RCP8.5, the monthly maximum temperature is projected to increase between 0.5 to 2.5°C by the mid-century (2021-2050). Highest maximum temperature in March is expected to increase by about 2.1°C over the upazilas in the northwest part of Bangladesh. Seasonal maximum temperature is expected to increase the range of 0.9-1.6°C, 0.7-1.1°C, 0.6-1.1°C and 0.6-1.1°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual maximum temperature is projected to increase on an average by 1.1°C under RCP8.5 for the mid-century (2021-2050).
- (xi) **Scenarios for last-century (2071-2100):** Monthly maximum temperature is projected to increase in the range of 1.0 to 3.0°C by the last-century (2071-2100). The highest in maximum temperature in April is expected to increase by 3.0°C over the upazilas of northwest part in Bangladesh under RCP4.5. The seasonal maximum temperature is expected to vary from 1.2-2.3°C, 1.5-2.5°C, 1.1-1.9°C and 0.9-2.0°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual maximum temperature is projected to increase on an average by 1.6°C under RCP4.5. For RCP8.5 the monthly maximum temperature is projected to increase in the range of 2.6 to 5.1°C. The highest maximum temperature in March is expected to increase by 5.1°C over the upazilas of northwest part of Bangladesh. Seasonal maximum temperature is expected to vary from 2.7-4.3°C, 2.8-4.8°C, 2.6-3.6°C and 3.0-4.0°C for winter, pre-monsoon, and monsoon and post-monsoon season, respectively. Annual maximum temperature is projected to increase about 3.5°C under RCP8.5.
- (xii) **Scenarios for mid-century (2021-2050):** Change in minimum temperature in different months under RCP4.5 is projected about 0.6 to 2.4°C for the mid-century (2021-2050). The highest increase in minimum temperature in March is projected to be about 2.5°C for the upazilas over northeast part (Sylhet region)

of Bangladesh. Seasonal minimum temperature is likely may vary from 0.7-1.7°C, 0.8-1.8°C, 0.8-1.1°C and 0.9-1.5°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual minimum temperature is projected to increase by about 1.2°C under RCP4.5 for the mid-century. Under RCP8.5, the change of minimum temperature in different months is projected to be about 0.6 to 2.0°C by the mid-century. The highest minimum temperature in March is expected to increase by 2.0°C over the upazilas of northwest (Kurigram region) part of Bangladesh. Seasonal minimum temperature is likely may vary from 0.7-1.5°C, 0.8-1.5°C, 0.8-1.2°C and 0.7-1.3°C for winter, pre-monsoon, monsoon and post-monsoon season respectively. Annual minimum temperature is projected to increase on an average by about 1.1°C under RCP8.5.

- (xiii) **Scenarios for last-century (2071-2100):** Change in minimum temperature in different months is projected about 1.0 to 2.1°C for the last-century (2071-2100). The highest increase in minimum temperature in April is projected about 2.1°C over the upazilas of northeast part (Sylhet region) of Bangladesh under RCP4.5. Seasonal minimum temperature is likely to increase by 0.2-1.6°C, 1.0-2.0°C, 1.0-1.6°C and 1.0-1.9°C for winter season, pre-monsoon, monsoon and post-monsoon season, respectively. Annual minimum temperature is projected to increase about 1.2°C under RCP4.5. For RCP8.5, the change in minimum temperature in different months is projected to be about 2.4-4.5°C for the last-century (2071-2100). The highest increase in minimum temperature in March is projected about 4.5°C over the upazilas of northern part (Sylhet region) of Bangladesh. Seasonal minimum temperature is likely may vary from 2.6-4.0°C, 2.9-4.0°C, 2.7-3.5°C and 2.9-4.2°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual minimum temperature is projected to increase on an average by about 3.3°C under RCP8.5.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The agro-meteorological information is most useful for solution of agricultural problems. The adoption of farming system to an area might be unsuccessful with the future climatic conditions without studying the trends. Meteorological data sets are used in evaluation of potential aspects of crop production. Investigations of regional, global climatic changes & variability and their impacts on the society have received considerable attention in recent years.

To determine the risk involved in climate change for agriculture, it is necessary to define a set of agro meteorological parameters, derived from the classic climate parameters that are capable of indicating the consequences of climate change for crop production.

Weather components namely rainfall, temperature, relative humidity, sunshine hours, cloudiness, wind speed, evapotranspiration, etc., play a very important role in agricultural production. It has a profound influence on crop growth, development and yields; on the incidence of pests and diseases; on water needs; and on fertilizer requirements. This is due to differences in nutrient mobilization as a result of water stress, as well as the timeliness and effectiveness of preventive measures, scientific and cultural operations with different crops. Weather aberrations may cause optimal physical damage to crops and soil erosion. The quality of crop produce during movement from field to storage and transport to market depends also weather conditions which lead to economic variation.

Climate change is mainly attributed to the unabated increase in greenhouse gases, including fluorinated gases, carbon dioxide, methane, and nitrous oxide, which bring changes in rain pattern, temperature, and negative effects on water and land resources, floods, and droughts. Climate change is considered to be a global phenomenon; however, its impacts are more widely felt in the developing countries, due to their greater vulnerabilities and lesser ability to mitigate the effects of climate change. Because most developing nations including Bangladesh are agriculture-based economies, their agricultural sector is affected the most due to direct exposure to nature. Therefore, the major impact of climate change is on agricultural production due to changes in rain pattern, temperature, floods, droughts, and negative effects on water and land resources [1,2]. In the developing states, the latest work has progressively considered the impacts of climate change on agricultural production [1,2].

Climate change will affect crop productivity, and can thus cause food security problems [3-5]. It has been expected that global warming will increase yields due to "fertilizer effect", but will influence poor farmers negatively. For example, countries closer to the equator will have reduced production due to global warming [6]. If climate change affects

the productivity of the agriculture sector in the lower-income countries of Asia or Africa, a large number of people will be at risk, and the problem of food insecurity will increase. Climate change is the main driver of food security in the developing world, because it affects the productivity of the agriculture sector, its stability, and other components of the food system, including storage, access, and utilization [7].

Generally, climate change has minor effects on global food production, but these effects are unevenly distributed geographically. Most of the losses are suffered in lower-income countries, such as those in arid and sub-humid South Asia and Africa. These regions are engaged in subsistence agriculture, and are not technically sound or financially strong enough to abate the negative impacts of climate change. Moreover, they have almost no potential for adaptation [1]. This adversely affects the people in these countries because of their dependence on agriculture for their livelihood. The most vulnerable region to climate change is South Asia [8]. In South Asia, more than 70% of the people (approximately 1.1 billion) live in rural regions dominated by agriculture, and almost 75% of these people are poor [14]. More importantly, nearly 18% of the region's GDP is comprised of agriculture, and the industry employs more than 50% of the population [9]. In addition, climate change can pose threats to agriculture and food security by changing the spatial and temporal distribution of rainfall, water availability, land, capital, biodiversity, and terrestrial resources. Due to changes in agricultural production, it could potentially cause food uncertainty for 9 billion people by 2050 [8]. Research shows that regional and global water requirements can be altered due to climate change and can trigger a shortage of water for agricultural purposes.

Several studies reveal that increasing temperature and the changing pattern of rainfall have a substantial impact on food production [5,10,11]. A recent study anticipates that the wheat production of South Asia will decline by 50% by 2050 equal to almost 7% of the global crop production [12].

The Peterson Institute states that agricultural production in developing countries will further fall between 10% to 25% and global warming will decrease the agricultural capacity of India by 40% if it continues unabated [13]. Hence, climate change causes serious threats to food security [6,14-16], negative impacts on productivity of different crops, the food supply [17,18], and the cost of adoption of climate change is high [19].

Therefore, food security has remained a prominent policy of Bangladesh's Government. Wheat, rice, and maize are the main food crops, and sugar cane is the main cash crop of Bangladesh. Therefore, food security policy mainly focuses on the production of these crops. In light of the above discussions, this study aims to examine the nexus agrometeorological data trend line analysis and future scenario production of 487 upazilas of Bangladesh and it will help to reduce loss of agricultural production from weather and climate extremes and enhance production of agriculture in relation to climate information over Bangladesh.

1.2 Study Objectives

The objectives of the study are as follows:

- The agrometeorological data analysis and future scenario development of 487 upazilas of Bangladesh will be to assess the climate variability and change at the upazila level through agro-meteorological data analysis.
- This analysis will be helped in the decision making process for sustainable agriculture production and natural disaster reduction in future in Bangladesh.

1.3 Scope of the works

- To find out the appropriate calibration method for the application of model output for climate variability and climate change impact studies in Bangladesh, through analyses that will be performed on point-to-point or grid-to-grid basis. Without calibration and validation, model output (data) is not directly useful for application purposes.
- To find out trend line analysis of climate variability based on agrometeorological data (such as soil temperature, soil moisture and evaporation), observed gridded climate data (Rainfall and temperature) during the period 1971-2015 or based on availability of data for 487 upazilas in Bangladesh. This analysis will be done to show as to which upazilas were vulnerable due to climate variability and if their trends were increasing or decreasing.
- To generate future scenarios for 487 upazilas based on high resolution GCM climate data to the projected changes in climate for the period 2021-2050 as mid-century and for the period 2071-2100 as end-century relative to the baseline 1971-2000 using the RCP 4.5 and RCP 8.5 scenarios respectively and to help farmers to take appropriate decisions for sustainable development in agriculture and natural disaster reduction in future.

CHAPTER 2:

METHODOLOGY AND DATA COLLECTION

The Agrometeorological data has been collected from different sources like Bangladesh Meteorological Department (BMD), National Centers for Environmental Prediction (NCEP) / National Center for Atmospheric Research (NCAR) reanalysis data, Climatic Research Unit (CRU), as well as Asian Precipitation-Highly-Resolved Observational Data (Aphrodite). 34 stations of BMD data (rainfall, maximum & minimum temperature, humidity, sun shine hours, wind speed and wind direction) were collected from climate division and made it 64 stations through interpolation/extrapolation by using GIS technology. NCEP/NCAR gridded data (evaporation, soil moisture) was collected from their web site and upazila level data was extracted as per latitude and longitude. High resolution gridded Aphrodite data (rainfall) and CRU data (rainfall, evapotranspiration) were also extracted as per upazilas latitude and longitude. After collection all agrometeorological data (soil moisture, evaporation, evapotranspiration, rainfall, surface temperature, humidity and sunshine hours) then trend line analysis is done to see the increasing/decreasing trend with significant test using non-parametric Mann-Kendall test at 487 upazilas during the period 1971-2015 or availability on data.

The National Aeronautics and Space Administration (NASA) Earth Exchange (NEX) High Resolution (25X25 km) Global Daily Downscaled Projections (NEX-GDDP) of six (6) models (namely: CanESM2, GFDL-ESM2M, IPSL-CM5A-MR, MIROC-ESM., MPI-ESM-MR and NorESM1) datasets have been collected from their web site and model data was extracted as per upazilas latitude and longitude from the models over Bangladesh. Extracted upazila level model data were compared with the observation data of BMD for rainfall and temperature. It has been seen that NorESM1 model gives better result than the other models for rainfall and temperature over Bangladesh.

The National Aeronautics and Space Administration (NASA) Earth Exchange Global Daily Downscaled Projections (NEX-GDDP) dataset is comprised of downscaled climate scenarios for the globe that are derived from the General Circulation Model (GCM) runs conducted under the Coupled Model Intercomparison Project Phase 5 (CMIP5) and across two RCPs (RCP 4.5 and RCP 8.5), of the four greenhouse gas emissions scenarios known as Representative Concentration Pathways (RCPs). The CMIP5 GCM runs have been developed in support of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5). The purpose of these datasets is to provide a set of global daily, high resolution, bias-corrected climate change projections that can be used to evaluate climate change impacts on processes that are sensitive to finer-scale climate gradients and the effects of local topography on climate conditions.

The demand for downscaling of GCM outputs arises from two primary limitations inherent with current global simulation results. First, most GCMs are run using relatively coarse resolution grids (e.g., a few degrees or 102 km), which limit their ability to capture the spatial details in climate patterns that are often required or desired in regional or local analyses.

Second, even the most advanced GCMs may produce projections that are globally accurate but locally biased in their statistical characteristics (i.e., mean, variance, etc.) when compared with observations.

The Bias-Correction Spatial Disaggregation (BCSD) method has been used in generating the NEX-GDDP dataset is a statistical downscaling algorithm specifically developed to address these current limitations of global GCM outputs. The algorithm compares the GCM outputs with corresponding climate observations over a common period and uses information derived from the comparison to adjust future climate projections so that they are (progressively) more consistent with the historical climate records and, presumably, more realistic for the spatial domain of interest. The algorithm also utilizes the spatial detail provided by observationally-derived datasets to interpolate the GCM outputs to higher-resolution grids.

With the help of the computational resources provided by NEX and the NASA Advanced Supercomputing (NAS) facility, they have applied the BCSD method to produce a dataset of downscaled CMIP5 climate projections to facilitate the assessment of climate change impacts. The dataset compiles two RCP scenarios (RCP 4.5 and RCP 8.5) for the period from 2006 to 2100, as well as the historical experiment for each model for the period from 1950-2005. Each of these climate projections is downscaled at a spatial resolution of 0.25 degrees' x 0.25 degrees (approximately 25 km x 25 km).

Future climate scenarios are based upon the baseline (1971-2000) climate and changes simulated by high resolution General Circulation Models (GCM) from the Fifth Coupled Model Intercomparison Project (CMIP5). In this study we have used NorESM model output to generated future scenario at upazila level in Bangladesh. In this connection, NorESM1 has been used to generate future scenarios for 487 upazilas for the period 2021-2050 as mid-century and for the period 2071-2100 as end-century relative to the baseline 1971-2000 using the RCP 4.5 and RCP 8.5 scenarios respectively.

One of the best ways of understanding how climate may change in future is to examine how it has changed in the past based upon long-term observational records. Recent long-term meteorological data for 1971-2015 period were obtained BMD. Climatological trend analysis for more than 40-year period to reflect natural climatic variability on a multi-decadal timescale, which is important in considering long-term impacts of climate change. It is important to note that state averages of temperature, humidity, evaporation, evapotranspiration, sun shine hours and rainfall are calculated as simple arithmetic means of number of stations in the country.

From the monthly values, annual (January-December) and seasonal (Winter: December-January-February; Pre-monsoon: March-May; Monsoon: June-September; Post monsoon: October-November) time series of mean maximum temperature, mean minimum temperature, humidity, evaporation, evapotranspiration, sun shine hours, and rainfall were prepared. Country annual, seasonal and monthly time series of maximum temperature, minimum temperature, humidity, evaporation, evapotranspiration, sun shine hours and rainfall were computed by averaging the stations series in the country.

Behavior of annual, seasonal and monthly county time series of the above parameters are studied by subjecting them to non-parametric Mann-Kendall test and increasing or decreasing slope of trends in the time series is determined by using Sen's method (Sen, 1968). The Mann-Kendall test consists of comparing each value of the time-series with the others remaining, always in sequential order. The number of times that the remaining terms are greater than that under analysis is counted.

The Mann-Kendall statistic is given by:

$$S = \sum_{i=2}^n \sum_{j=1}^{i-1} \text{sign}(x_i - x_j)$$

where n is the length of the data set, x_i and x_j are two generic sequential data values.

The function $\text{sign}(x_i - x_j)$ assumes the following values:

$$\text{sign}(x_i - x_j) = \begin{cases} +1, & \text{if } (x_i - x_j) > 0 \\ 0, & \text{if } (x_i - x_j) = 0 \\ -1, & \text{if } (x_i - x_j) < 0 \end{cases}$$

Under the hypothesis of independent and randomly distributed variables when $n \geq 8$, the statistic S is approximately normally distributed with zero mean and the variance $\text{Var}(S)$ as follows:

$$\text{Var}(S) = \frac{1}{18} [n(n-1)(2n+5)]$$

where n is the length of the times-series.

The standardized test statistic Z is given by:

$$Z = \begin{cases} \frac{S-1}{\sqrt{\text{Var}(S)}} & \text{if } S > 0 \\ 0 & \text{if } S = 0 \\ \frac{S+1}{\sqrt{\text{Var}(S)}} & \text{if } S < 0 \end{cases}$$

The presence of a statistically significant trend is evaluated using the Z value. This statistic is used to test the null hypothesis such that no trend exists. A positive Z indicates an increasing trend in the time-series, while a negative Z indicates a decreasing trend. In this study, if $Z > +1.96$ or $Z < -1.96$, the null hypothesis (H_0) is rejected at the 95% significance level. The estimate for the magnitude of the slope of trend b is calculated using non-parametric Sen's method, which is the median of slopes of all data value pairs.

$$b = \text{median} \left[\frac{(x_i - x_j)}{(j - i)} \right] \text{ for all } i < j$$

where b is the slope between data points x_j and x_i measured at times j and i respectively.

The results of trend analysis are presented in Figures 3.1 to 4.108 where statistically significant trends at 95% level and non-significant trends are shown in different colours. Country annual, seasonal and monthly trend values of mean maximum temperature, minimum temperature, humidity, evaporation, evapotranspiration, sun shine hours, soil moisture and rainfall for the period 1971-2015 are given in Tables 1.1 to 1.28 where increasing (+) and decreasing (-) trends significant at 95% level of significance are shown in bold with undersigned.

CHAPTER 3

AGROMETEOROLOGICAL DATA ANALYSIS

Long-term changes in rainfall, surface temperature, humidity, sun shine hours, evaporation, evapotranspiration and soil moisture in Bangladesh were analysed for trend line using observational records of BMD and high resolution gridded data were collected from various sources from 1971 to 2015.

3.1 Monthly trend analysis for observed rainfall, Aphrodite rainfall, CRU rainfall

3.1.1 Observed (BMD) rainfall trends for January

Fig. 3.1 shows decreasing monthly rainfall trends almost all zilas including upazilas except some zilas over Bangladesh but it is not significant during the period 1971-2015. Increasing trends in rainfall of January month have been observed over Coxsbazar, Cumilla, Faridpur, Gopalganj, Khulna, Moulvibazar, Mymensingh, Narail, Patuakhali and Satkhira including upazila., but it is also not significant as presented in Table 3.1.

3.1.2 Aphrodite (gridded) rainfall trends for January

Fig. 3.1 shows decreasing monthly rainfall trends almost all upazilas except some upazilas over Bangladesh but it is not significant. Increasing trends in rainfall of January month have been noticed over Bagerhat Sadar, Fakirhat, Kachua, Mollahat, Morrelganj, Sarankhola upazil-under Bagerhat zila, Amtali, Bamna, Barguna Sadar, Betagi, Patharghata, Taltoli upzila-under Barguna, Agailjhara, Babuganj, Bakerganj, Banari Para, Barisal Sadar, Gaurnadi, Hizla, Mehendiganj, Muladi, Wazirpur upazila- under Barisal zila, Bhola Sadar, Burhanuddin, Char Fasson, Daulatkhan upazila-under Bhola zila, Akhaura, Ashuganj, Bijohnagar, Brahmanbaria Sadar, Kasba, Nasirnagar, Sarail upazila- under Brahmanbaria zila, Barura, Brahman Para, Burichang, Chandina, Chauddagran, Comilla Adarsha Sadar, Daudkandi, Laksam, Meghna, Comilla Sadar Dakshin upazila- under Comilla zila, Bhanga, Nagarkanda, Sadarpur, Saltha upazila- under Faridpur zila, Feni Sadar, Fulgazi, Parshuram upazila- under Feni zila, Kaliganj, Gopalganj Sadar, Kashiani, Muksudpur upazila- under Gopalganj zila, Chunarughat Madhabpur upazila- under Habiganj zila, Keshabpur upazila- under Jeshore zila, Jhalokati Sadar, Kanthalia, Nalchity, Rajapur upazila- under Jhalokati zila, Dighinala, Panchhari upazila- under Khagrachhari zila, Dighalia, Dumuria, Koyra, Phultala, Paikgachha, Rupsa, Terokhada upazila- under Khulna zila, Bajitpur, Bhairab, Kuliar Char upazila- under Kishoreganj zila, Ramgati upazila- under Lakshmipur zila, Kalkini, Madaripur Sadar, Rajoir upazila- under Madaripur zila, Shibalaya upazila- Manikganj zila, Gazaria, Kalia, Lohagara, Narail Sadar upazila- under Narail zila, Araihasar, Bandar, Rupganj, Sonargaon, Belabo, Narsingdi Sadar, Palash upzila- under Narsingdi zila, Begumganj, Kabirhat, Noakhali Sadar, Senbagh, Subarnachar upazila- under Noakhali zila, Bauphal, Dashmina, Dumki, Galachipa, Kala Para, Mirzaganj, Patuakhali Sadar, Rangabali upazila- under Patuakhali zila, Bhandaria, Zianagar, Kawkhali, Mathbaria, Nazirpur, Nesarabad, Pirojpur Sadar upazila- under Pirojpur zila, Assasuni, Kaliganj, Satkhira Sadar, Shyamnagar, Tala upazila- under Satkhira zila, Bhedarganj, Damudya, Gosairhat, Shariatpur Sadar upazila- under Shariatpur zila, but it is also

not significant as presented in Table 3.2. However, Mongla upazila- under Bagerhat zila, Banchharampur, Nabinagar upazila- under Brahmanbaria zila, Manoharganj, Nangalkot upazila- under Comilla zila, Roypura upazila- under Narsingdi zila, Sonaimuri upazila- under Noakhali zila, Debhata upazila- under Satkhira zila showed no trend in rainfall for the month of January during the period 1971-2015.

3.1.3 CRU (gridded) rainfall trends for January

Fig. 3.2 shows decreasing monthly rainfall trends over almost northwest, west, southwest, southeast parts upazilas of Bangladesh except central to north-eastern, and some pocket at different places of Bangladesh. Increasing trends in rainfall of January month have been observed over Fakirhat, Rampal upazila- under Bagerhat zila, Sariakandi, Shajahanpur upazila- under Bogra zila, Akhaura, Ashuganj, Banchharampur, Bijoy Nagar, Brahmanbaria Sadar, Kasba, Nabinagar, Nasirnagar, Sarail upazila- under Brahmanbaria, Matlab Uttar, Shahrasti, upazila- Chandpur zila, Barura, Brahman Para, Burichang, Chandina, Chauddagam, Comilla Adarsha Sadar, Daudkandi, Debidwar, Homna, Laksam, Meghna, Manoharganj, Muradnagar, Nangalkot, Comilla Sadar Dakshin, Titas upazila- under Comilla zila, Dhamrai, Keraniganj, Savar upazila- under Dhaka zila, Chhagalnaiya, Fulgazi, Parshuram upazila- under Feni zila, Gaibandha Sadar, Fulchhari upazila- under Gaibandha zila, Gazipur Sadar, Kaliganj, Kaliakair, Kapasia, Sreepur upazila- under Gazipur zila, Ajmiriganj, Bahubal, Baniachong, Chunarughat, Habiganj Sadar, Lakhai, Madhabpur, Nabiganj upazila- under Habiganj zila, Bakshiganj, Dewanganj, Islampur, Jamalpur Sadar, Madarganj, Melandaha, Sharishabari upazila- under Jamalpur zila, Abhaynagar, Bagher Para, Sadar, Manirampur upazila- under Jessore zila, Shaikupa upazila- under Jhenaidah zila, Dighinala, Matiranga upazila- under Khagrachhari zila, Dighalia, Phultala, Terokhada upazila- under Khulna zila, Austagram, Bajitpur, Bhairab, Hossainpur, Itna, Karimganj, Katiadi, Kishoreganj Sadar, Kuliar Char, Mithamain, Nikli, Pakundia, Tarail upazila- under Kishoreganj zila, Char Rajibpur, Raumari upazila- under Kurigram zila, Ramganj upazila- under Lakshmipur zila, Sreepur upazila- under Magura zila, Daulatpur, Ghior, Manikganj Sadar, Satoria, Singair upazila- under Manikganj zila, Barlekha, Juri, Kamalganj, Kulaura, Maulvi Bazar Sadar, Rajnagar, Sreemangal upazila- under Maulvibazar zila, Gazaria, Munshiganj Sadar, Serajdikhan, Sreenagar upazila- under Munshiganj zila, Bhaluka, Dhobaura, Fulbaria, Gaffargaon, Gauripur, Haluaghat, Ishwarganj, Muktagachha, Mymensingh Sadar, Nandail, Phulpur, Tarakanda, Trishal upazila- under Mymensingh zila, Dharmoirhat, Kalia, Lohagara, Narail Sadar upazila- under Narail zila, Araihaazar, Bandar, Narayanganj Sadar, Rupganj, Sonargaon, Belabo, Manohardi, Narsingdi Sadar, Palash, Roypura, Shibpur upazila- under Narsingdi zila, Atpara, Barhatta, Durgapur, Kalmakanda, Kendua, Khaliajuri, Madan, Mohanganj, Netrokona Sadar, Purbadhala upazila- under Netrokona zila, Domar upazila- under Nilphamari zila, Begumganj, Senbagh, Sonaimuri upazila- under Noakhali zila, Debiganj, Tentulia upazila- under Panchagarh zila, Goalandaghat upazila- under Rajbari zila, Mohanpur, Tanore upazila- under Rajshahi zila, Baghai Chhari, Kawkhali (Betunia) upazila- under Rangamati zila, Shariatpur Sadar upazila- under Shariatpur zila, Jhenaigati, Nakla, Nalitabari, Sherpur Sadar, Sreebardi upazila- under Sherpur zila, Belkuchi, Chauhali, Kazipur, Shahjadpur upazila- under Sirajganj zila, Bishwambarpur, Chhatak, Derai, Dharampasha, Dowarabazar, Jagannathpur, Jamalganj, Dakshin Sunamganj,

Sulla, Sunamganj Sadar, Tahirpur upazila- under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Companiganj, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila- under Sylhet zila, Basail, Bhuapur, Delduar, Dhanbari, Ghatail, Gopalpur, Kalihati, Mirzapur, Madhupur, Nagarpur, Sakhipur, Tangail Sadar upazila- under Tangail zila. but it is also not significant as presented in Table 3.3. However, Chitalmari, Mollahat upazila- under Bagerhat zila, Adamdighi, Bogra Sadar, Gabtali, Kahaloo, Sherpur, Shibganj upazila- under Bogra zila, Chandpur Sadar, Faridganj, Kachua upazila- under Chandpur zila, Daganbhuiyan, Feni Sadar upazila- under Feni zila, Palashbari upazila- under Gaibandha zila, Gopalganj Sadar, Kashiani, Tungi Para upazila- under Gopalganj zila, Jhikargachha upazila- under Jessore zila, Kalai upazila- under Joypurhat zila, Khagrachhari Sadar, Ramgarh upazila- under Khagrachhari zila, Batiaghata, Rupsa upazila- under Khulna zila, Chilmari upazila- under Kurigram zila, Roypur upazila- under Lakshmipur zila, Madaripur Sadar, Rajoir upazila- under Madaripur zila, Magura Sadar upazila under Magura zila, Shibalaya upazila- under Manikganj zila, Atrai, Raninagar upazila- under Naogaon zila, Chatkhil upazila- under Noakhali zila, Bera upazila- under Pabna zila, Boda upazila- under Panchagarh zila, Kamarkhanda, Sirajganj Sadar upazila- under Sirajganj zila showed no trend in rainfall for the month of January during the period 1971-2015.

3.1.4 Observed (BMD) rainfall trends for February

Observed (BMD) February monthly rainfall trends have decreased over Bagerhat, Bandarban, Barguna, Barishal, Bhola, Brahmanbaria, Chapainawabganj, Chattogram, Chuadanga, Cumilla, Dhaka, Dinajpur, Faridpur, Feni, Gaibandha, Gazipur, Gopalganj, Habiganj, Jamalpur, Jhalakati, Jhenaidah, Joypurhat, Khagrachari, Kishoreganj, Kurigram, Lakshmipur, Lalmonirhat, Madaripur, Magura, Manikganj, Meherpur, Munshiganj, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Netrokona, Nilphamari, Noakhali, Panchagarh, Pirojpur, Rajbari, Rajshahi, Satkhira, Shariatpur, Sherpur, Sirajganj, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazilas) as shown in Fig. 3.2 but not significant. Rainfall trends of February month has increased over Bogura, Chandpur, Coxsbazar, Jashore, Khulna, Kushtia, Mymensingh, Pabna, Patuakhali, Rangamati, Rangpur zila including upazila as presented in Fig. 3.2. But also not significant. However, Moulvibazar zila including upazila showed no trend in rainfall during 1971-2015.

3.1.5 Aphrodite (gridded) rainfall trends for February

Monthly rainfall trends for February almost all upazilas decreasing trend except some northern upazilas as well as few upazilas at different places over Bangladesh but it is not significant. Increasing trends in rainfall of February month have been noticed over Amtali, Barguna Sadar, Taltoli upazila- under Barguna zila, Sonatola upazila- under Bogra zila, Maheshkhali upazila- under Cox's Bazar zila, Fulchhari, Saghatta, Sundarganj upazila- under Gaibandha zila, Bakshiganj, Dewanganj, Islampur upazila- under Jamalpur zila, Bhurungamari, Chilmari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, Ulipur upazila- under Kurigram zila, Aditmari, Hatibandha, Lalmonirhat Sadar upazila- under Lalmonirhat zila, Dhobaura, Haluaghat upazila- under Mymensingh zila, Durgapur, Dimla, Domar, Jaldhaka, Kishoreganj

upazila- under Nilphamari zila, Debiganj, Panchagarh Sadar upazila- under Panchagarh zila, Galachipa, Rangabali upazila- under Patuakhali zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Jhenaigati, Nalitabari, Sherpur Sadar, Sreebardi upazila- under Sherpur zila, but not significant as presented in Fig. 3.3. However, Muktagachha, Mymensingh Sadar, Phulpur, Tarakanda upazila- under Mymensingh zila, Kala Para upazila- under Patuakhali zila showed no trend in rainfall at the same month during the period 1971-2015.

3.1.6 CRU (gridded) rainfall trends for February

Fig. 3.3 shows decreasing monthly rainfall trends over almost all upazilas except north-western parts of upazilas of Bangladesh, North-western upazilas shows increasing trend. Increasing trends in rainfall of February month have been noticed over Bogra Sadar, Dhupchanchia, Gabtali, Kahaloo, Shibganj, Sonatola upazila- under Bogra zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Ghoraghat, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila- under Dinajpur zila, Gaibandha Sadar, Gobindaganj, Palashbari, Fulchhari, Sadullapur, Saghatta, Sundarganj upazila- under Gaibandha zila, Bakshiganj, Dewanganj, Islampur upazila- under Jamalpur zila, Akkelpur, Joypurhat Sadar, Kalai, Khetlal, Panchbibi upazila- under Joypurhat zila, Bhurungamari, Char Rajibpur, Chilmari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, Ulipur upazila- under Kurigram zila, Aditmari, Hatibandha, Kaliganj, Lalmonirhat Sadar, Patgram upazila- under Lalmonirhat zila, Dhobaura, Haluaghat upazila- under Mymensingh zila, Dhamoirhat upazila- under Naogaon zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur upazila- under Nilphamari zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Pirganj, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Jhenaigati, Nalitabari, Sreebardi upazila- under Sherpur zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila. but it is not significant as shown in Fig. 3.3. However, Badalgachhi, Patnitala upazila- under Naogaon zila, Jaintiapur upazila- under Sylhet zila showed no trend in rainfall for the month of February during the period 1971-2015.

3.1.7 Observed (BMD) rainfall trends for March

Rainfall trends for March month has deceased over Bagerhat, Bogura, Brahmanbaria, Chapainawabganj, Chuadanga, Dhaka, Dinajpur, Faridpur, Gaibandha, Gazipur, Gopalganj, Jhenaidah, Joypurhat, Madaripur, Magura, Manikganj, Munshiganj, Naogaon, Narail, Narayanganj, Narsingdi, Nilphamari, Noakhali, Panchaghar, Pirojpur, Rajbari, Shariatpur, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazilz) as shown in Fig. 3.4. The decreasing trends in rainfall were not significant. March month rainfall trends have increased over Bandarban, Barguna, Barishal, Bhola, Chandpur, Chattogram, Coxsbazar, Cumilla, Feni, Habiganj, Jamalpur, Jashore, Jhalakati, Khagrachari, Khulna, Kishoreganj, Kurigram, Kushtia, Lakshmipur, Lalmonirhat, Meherpur, Moulvibazar, Mymensingh, Natore, Netrokona, Pabna, Patuakhali, Rajshahi, Satkhira, Sherpur, Sirajganj zila (including upazila). The increasing

trends were significant over Rangamati (0.29 mm/year). However, Rangpur zila (including upazila) showed no trend in rainfall during 1971-2015.

3.1.8 Aphrodite (gridded) rainfall trends for March

Monthly rainfall trends for March have increased in almost all upazilas except in central, western and some places of north-eastern parts upazilas of Bangladesh (Fig. 3.4). The central, western and some places of north-eastern parts upazilas shows decreasing trend. The decreasing trend is over Adamdighi, Bogra Sadar, Dhunat, Dhupchanchia, Gabtali, Kahaloo, Nandigram, Sariakandi, Shajahanpur, Sherpur, Shibganj, upazila- under Bogra zila, Akhaura, Ashuganj, Banchhampur, Brahmanbaria Sadar, Kasba, Nabinagar, Nasirnagar. Sarail upazila- under Brahmanbaria zila, Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila- under Ch. Nawabganj zila, Hajiganj, Kachua, Matlab Dakshin, Matlab Uttar, upazila- under Chandpur zila, Barura, Brahman Para, Burichang, Chandina, Comilla Adarsha Sadar, Daudkandi, Debidwar, Homna, Laksam, Meghna, Muradnagar, Comilla Sadar Dakshin Titas upazila- under Comilla zila, Dhamrai, Dohar, Keraniganj, Nawabganj, Savar upazila- under Dhaka zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Ghoraghat, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila- under Dinajpur zila, Alfadanga, Bhanga, Boalmari, Char Bhadrasan, Faridpur Sadar, Madhukhali, Nagarkanda, Sadarpur, Saltha upazila- under Faridpur zila, Gobindaganj upazila- under Gaibandha zila, Gazipur Sadar, Kaliganj, Kaliakair, Kapasia, Sreepur upazila- under Gazipur zila, Gopalganj Sadar, Kashiani, Muksudpur upazila- under Gopalganj zila, Abhaynagar, Bagher Para, Jessore Sadar, Jhikargachha, Manirampur upazila- under Jessore zila, Shailkupa upazila- under Jhenaidah zila, Akkelpur, Joypurhat Sadar, Kalai, Khetlal, Panchbibi upazila- under Joypurhat zila, Bajitpur, Bhairab, Kuliar Char upazila- under Kishoreganj zila, Khoksa, Kumarkhali, Kushtia Sadar, Mirpur upazila- under Kushtia zila, Kaliganj upazila- under Lalmonirhat zila, Shib Char upazila- under Madaripur zila, Magura Sadar, Mohammadpur, Shalikha, upazila- under Magura zila, Daulatpur, Ghior, Harirampur, Manikganj Sadar, Saturia, Shibalaya, Singair upazila- under Manikganj zila, Barlekha, Juri, Kulaura, Sreemangal upazila- under Maulvibazar zila, Gazaria, Lohajang, Munshiganj Sadar, Serajdikhan, Sreenagar, Tongibari upazila- Munshiganj zila, Atrai, Badalgachhi, Dhamoirhat, Manda, Mahadebpur, Naogaon Sadar, Niamatpur, Patnitala, Porsha, Raninagar, Sapahar upazila- under Naogaon zila, Kalia, Lohagara, Narail Sadar upazila- under Narail zila, Araihaazar, Bandar, Narayanganj Sadar, Rupganj, Sonargaon upazila- under Narayanganj zila, Belabo, Manohardi, Narsingdi Sadar, Palash, Roypura, Shibpur upazila- under Narsingdi zila, Bagati Para, Baraigram, Gurudaspur, Naldanga, Natore Sadar, Singra upazila- under Natore zila, Nilphamari Sadar, Saidpur upazila- under Nilphamari zila, Atgharia, Bera, Bhangura, Chatmohar, Faridpur, Pabna Sadar, Santhia, Sujanagar upazila- under Pabna zila, Atwari, Boda, Tentulia upazila- under Panchagarh zila, Balia Kandi, Goalandaghat, Kalukhali, Pangsha, Rajbari Sadar upazila- under Rajbari zila, Baghmara, Charghat, Durgapur, Godagari, Mohanpur, Paba, Puthia, Tanore upazila- under Rajshahi zila, Badarganj upazila- under Rangpur zila, Bhedarganj, Damudya, Gosairhat, Naria, Shariatpur Sadar, Zanjira upazila- under Shariatpur zila, Belkuchi, Chauhali, Kamarkhanda, Shahjampur, Sirajganj Sadar, Tarash, Ullah Para upazila- under Sirajganj zila, Chhatak, Dowarabazar, Jagannathpur upazila- under Sunamganj zila, Beani Bazar,

Companiganj, Dakshin Surma, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar upazila- under Sylhet zila, Basail, Bhuapur, Delduar, Ghatail, Kalihati, Mirzapur, Nagarpur, Tangail Sadar upazila- under Tangail zila as presented in Fig. 3.4. However, the increasing and decreasing trends in April month rainfall were not found significant. No trends in rainfall during 1971-2015 were observed over Palashbari, Sadullapur upazila- under Gaibandha zila, Patgram upazila- under Lalmonirhat, Pirganj upazila- under Rangpur zila.

3.1.9 CRU (gridded) rainfall trends for March

Monthly rainfall trends for March have decreased almost all upazilas except in southeast parts upazilas in Bangladesh (Fig. 3.5). The southeast parts upazilas rainfall trends have increased over Bandarban Sadar, Lama, Rowangchhari, Ruma, upazila- under Bandarban zila, Amtali, Bamna, Barguna Sadar, Betagi, Taltoli upazila- under Barguna zila, Babuganj, Bakerganj, Banari Para, Barisal Sadar, Wazirpur upazila- under Barisal zila, Bhola Sadar, Burhanuddin, Char Fasson, Daulatkhan, Lalmohan, Manpura, Tazumuddin upazila- under Bhola zila, Anowara, Banskhali, Boalkhali, Chandanaish, Fatikchhari, Hathazari, Lohagara, Mirsharai, Patiya, Rangunia, Raozan, Sandwip, Satkania, Sitakunda upazila- under Chittagong zila, Chaudagram, Manoharganj, Nangalkot upazila- under Comilla zila, Chakaria, Kutubdia, Maheshkhali, Pekua upazila- Cox'S Bazar zila, Chhagalnaiya, Daganbhuiyan, Feni Sadar, Sonagazi upazila- Feni zila, Jhalokati Sadar, Kanthalia, Nalchity, Rajapur upazila- under Jhalokati zila, Dighinala, Khagrachhari Sadar, Lakshmichhari, Mahalchhari, Manikchhari, Matiranga, Ramgarh upazila- under Khagrachhari zila, Kamalnagar, Lakshmipur Sadar, Ramgati upazila- under Lakshmipur zila, Kalkini upazila- under Madaripur zila, Begumganj, Chatkhil, Companiganj, Hatiya, Kabirhat, Noakhali Sadar, Senbagh, Sonaimuri, Subarnachar upazila- under Noakhali zila, Bauphal, Dashmina, Dumki, Galachipa, Kala Para, Mirzaganj, Patuakhali Sadar, Rangabali upazila- under Patuakhali zila, Bhandaria, Kawkhali, Mathbaria, Nesarabad, upazila- under Pirojpur zila, Barkal, Belai Chhari, Jurai Chhari, Kaptai, Kawkhali, Naniarchar, Rajasthali, Rangamati Sadar upazila- under Rangamati zila as shown in Fig. 3.5. However, the decreasing/increasing trends in March rainfall were not found statistically significant. No trends in rainfall during 1971-2015 were observed over Kachua, Sarankhola upazila- under Bagerhat zila, Parshuram upazila- under Feni zila, Zianagar upazila- under Pirojpur zila, Langadu upazila- under Rangamati zila, Damudya upazila- under Shariatpur zila.

3.1.10 Observed (BMD) rainfall trends for April

Monthly rainfall trends for April have deceased over Bagerhat, Bandarban, Barguna, Barishal, Bhola, Bogura, Brahmanbaria, Chandpur, Chapainawabganj, Chattogram, Chuadanga, Coxsbazar, Cumilla, Dhaka, Dinajpur, Faridpur, Feni, Gaibandha, Gazipur, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Joypurhat, Khagrachari, Khulna, Kishoreganj, Kurigram, Kushtia, Lakshmipur, Lalmonirhat, Madaripur, Magura, Manikganj, Meherpur, Moulvibazar, Munshiganj, Mymensingh, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Netrokona, Nilphamari, Noakhali, Pabna, Panchagarh, Patuakhali, Pirojpur, Rajbari, Rajshahi, Rangamati, Rangpur, Satkhira, Shariatpur, Sherpur, Sirajganj, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazila) as presented in Fig. 3.5. The decreasing trends

were statistically significant over Chuadanga, Faridpur zila (including upazila). April month rainfall has also increased over Bogura, Chandpur, Chapainawabganj, Coxsbazar, Dinajpur, Gaibandha, Jamalpur, Jashore, Joypurhat, Kurigram, Lalmonirhat, Moulvibazar, Mymensingh, Naogaon, Natore, Netrokona, Nilphamari, Panchaghar, Rajshahi, Rangpur, Sherpur, Sylhet, Thakurgaon zila (including upazila) during 1971-2015 but not significant.

3.1.11 Aphrodite (gridded) rainfall trends for April

Monthly rainfall trends for April is observed decreasing trend almost all upazilas except in north-west parts upazilas of Bangladesh (Fig.3.6). The north-west parts upazilas shows increasing trend. April month rainfall has increased over Sonatola upazila- under Bogra zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Ghoraghat, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila- under Dinajpur zila, Alfadanga, Bhanga, Boalmari, Char Bhadrasan, Faridpur Sadar, Madhukhali, Nagarkanda, Sadarpur, Saltha upazila- under Faridpur zila, Gobindaganj upazila- under Gaibandha zila, Gazipur Sadar, Kaliganj, Kaliakair, Kapasia, Sreepur upazila- under Gazipur zila, Gopalganj Sadar, Kashiani, Muksudpur upazila- under Gopalganj zila, Abhaynagar, Bagher Para, Jessore Sadar, Jhikargachha, Manirampur upazila- under Jessore zila, Shailkupa upazila- under Jhenaidah zila, Akkelpur, Joypurhat Sadar, Kalai, Khetlal, Panchbibi upazila- under Joypurhat zila, Bajitpur, Bhairab, Kular Char upazila- under Kishoreganj zila, Khoksa, Kumarkhali, Kushtia Sadar, Mirpur upazila- under Kushtia zila, Kaliganj upazila- under Lalmonirhat zila, Shib Char upazila- under Madaripur zila, Magura Sadar, Mohammadpur, Shalikhah, upazila- under Magura zila, Daulatpur, Ghior, Harirampur, Manikganj Sadar, Saturia, Shibhalaya, Singair upazila- under Manikganj zila, Barlekha, Juri, Kulaura, Sreemangal upazila- under Moulvibazar zila, Gazaria, Lohajang, Munshiganj Sadar, Serajdikhan, Sreenagar, Tongibari upazila- Munshiganj zila, Atrai, Badalgachhi, Dharmoirhat, Manda, Mahadebpur, Naogaon Sadar, Niamatpur, Patnitala, Porsha, Raninagar, Sapahar upazila- under Naogaon zila, Kalia, Lohagara, Narail Sadar upazila- under Narail zila, Araihasar, Bandar, Narayanganj Sadar, Rupganj, Sonargaon upazila- under Narayanganj zila, Belabo, Manohardi, Narsingdi Sadar, Palash, Roypura, Shibpur upazila- under Narsingdi zila, Bagati Para, Baraigram, Gurudaspur, Naldanga, Natore Sadar, Singra upazila- under Natore zila, Nilphamari Sadar, Saidpur upazila- under Nilphamari zila, Atgharia, Bera, Bhangura, Chatmohar, Faridpur, Pabna Sadar, Santhia, Sujanagar upazila- under Pabna zila, Atwari, Boda, Tentulia upazila- under Panchagarh zila, Balia Kandi, Goalandaghat, Kalukhali, Pangsha, Rajbari Sadar upazila- under Rajbari zila, Baghmara, Chorghat, Durgapur, Godagari, Mohanpur, Paba, Puthia, Tanore upazila- under Rajshahi zila, Badarganj upazila- under Rangpur zila, Bhedarganj, Damudya, Gosairhat, Naria, Shariatpur Sadar, Zanjira upazila- under Shariatpur zila, Belkuchi, Chauhali, Kamarkhanda, Shahjampur, Sirajganj Sadar, Tarash, Ullah Para upazila- under Sirajganj zila, Chhatak, Dowarabazar, Jagannathpur upazila- under Sunamganj zila, Beani Bazar, Companiganj, Dakshin Surma, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar upazila- under Sylhet zila, Basail, Bhuapur, Delduar, Ghatail, Kalihati, Mirzapur, Nagarpur, Tangail Sadar upazila- under Tangail zila as presented in Fig. 3.4. However, the increasing/decreasing trends in April rainfall were not found significant. No trends in rainfall during 1971-2015 were observed over

Palashbari, Sadullapur upazila- under Gaibandha zila, Patgram upazila- under Lalmonirhat, Pirganj upazila- under Rangpur zila as presented in Fig.3.6.

3.1.12 CRU (gridded) rainfall trends for April

Monthly rainfall trends for April have increased almost all upazilas except in some upazilas of southeast and northwest parts over Bangladesh (Fig. 3.6). The southeast and northwest parts upazilas rainfall trends have decreased over Alikadam, Naikhongchhari, Thanchi upazila- under Bandarban zila, Chakaria, Cox'S Bazar Sadar, Maheshkhali, Ramu, Teknaf, Ukhia upazila- under Cox'S Bazar zila, Atwari, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Baliadangi, Haripur, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila as shown in Fig. 3.6. However, the increasing/ decreasing trends in April month rainfall were not found statistically significant. No trends in rainfall were noticed that over Lama, Ruma upazila- under Bandarban zila, Pekua upazila- under Cox'S Bazar zila during the period 1971-2015.

3.1.13 Observed (BMD) rainfall trends for May

Rainfall trends for May have decreased over Bagerhat, Barguna, Barishal, Bhola, Bogura, Brahmanbaria, Chandpur, Chapainawabganj, Chuadanga, Cumilla, Dinajpur, Gaibandha, Gopalganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Joypurhat, Khulna, Kishoreganj, Kurigram, Kushtia, Lakshmipur, Lalmonirhat, Madaripur, Magura, Manikganj, Meherpur, Munshiganj, Mymensingh, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Nilphamari, Pabna, Panchagarh, Pirojpur, Rajbari, Shariatpur, Sherpur, Sirajganj, Tangail zila (including upazila) during 1971-2015 as shown in Fig. 3.7. The decreasing trends were significant over Dhaka, Faridpur, Gazipur zila (including all upazilas). May in rainfall has increased over Bandarban, Chattogram, Coxsbazar, Feni, Habiganj, Khagrachari, Moulvibazar, Netrokona, Noakhali, Patuakhali, Rajshahi, Rangamati, Rangpur, Satkhira, Sunamganj, Sylhet, Thakurgaon zila (including upazila) during 1971-2015.

3.1.14 Aphrodite (gridded) rainfall trends for May

Rainfall trends for the month of May is noticed decreasing trend in almost all upazilas except north-west, northeast, southeast and some pockets upazilas in Bangladesh (Fig.3.7). The decreasing trends were found statistically significant in Bhanga, Faridpur Sadar, Madhukhali, Nagarkanda, Sadarpur, Saltha upazila- under Faridpur zila, Muksudpur upazila- under Gopalganj zila, Harirampur, Shibalaya upazila- under Manikganj zila, Balia Kandi, Goalandaghat, Rajbari Sadar upazila- Rajbari zila as shown in Fig. 3.7. North-west, northeast, southeast and some pockets upazilas shows increasing trend. The increasing trends have been non-significant over Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila- under Bandarban zila, Akhaura, Ashuganj, Bijohnagar, Brahmanbaria Sadar, Nasirnaga, Sarail upazila- under Brahmanbaria zila, Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila- under Chapai Nawabganj zila, Anowara, Banshkhali, Boalkhali, Chandanaish, Fatikchhari, Hathazari, Lohagara, Mirsharai, Patiya, Rangunia, Raozan, Sandwip, Satkania, Sitakunda upazila- under Chittagong zila, Chakaria, Cox's Bazar

Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Kaharole, Khansama, Parbatipur upazila- under Dinajpur zila, Chhagalnaiya upazila- under Feni zila, Gaibandha, Sundarganj upazila- under Gaibandha zila, Ajmiriganj, Bahubal, Baniachong, Chunarughat, Habiganj Sadar, Lakhai, Madhabpur, Nabiganj upazila- under Habiganj zila, Bakshiganj, Dewanganj, Islampur, Jamalpur Sadar, Madarganj, Melandaha, upazila- under Jamalpur zila, Dighinala, Khagrachhari Sadar, Lakshmichhari, Mahalchhari, Manikchhari, Matiranga, Panchhari, Ramgarh upazila- under Khagrachhari zila, Austagram, Bajitpur, Bhairab, Itna, Karimganj, Katiadi, Kishoreganj Sadar, Kuliar Char, Mithamain, Nikli, Tarail upazila- under Kishoreganj zila, Bhurungamari, Char Rajibpur, Chilmari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, Ulipur upazila- under Kurigram zila, Aditmari, Hatibandha, Lalmonirhat Sadar, Patgram upazila- under Lalmonirhat zila, Sreepur upazila- under Magura zila, Barlekha, Juri, Kamalganj, Kulaura, Maulvi Bazar Sadar, Rajnagar upazila- under Maulvi Bazar zila, Dhobaura, Gauripur, Haluaghat, Ishwarganj, Muktagachha, Mymensingh Sadar, Nandail, Phulpur, Tarakanda, upazila-under Mymensingh zila, Badalgachhi, Manda, Mahadebpur, Naogaon Sadar, Niamatpur, Porsha, upazila- under Naogaon zila, Belabo upazila- under Narsingdi zila, Atpara, Barhatta, Durgapur, Kalmakanda, Kendua, Khaliajuri, Madan, Mohanganj, Netrokona Sadar, Purbadhala upazila- under Netrokona zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur, upazila- under Nilphamari zila, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Godagari, Mohanpur, Paba, Tanore upazila- under Rajshahi zila, Baghai Chhari, Barkal, Belai Chhari, Jurai Chhari, Kaptai, Kawkhali, Langadu, Naniarchar, Rajasthali, Rangamati Sadar upazila-under Rangamati zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Pirganj, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Debhata, Kaliganj, upazila- under Satkhira zila, Jhenaigati, Nakla, Nalitabari, Sherpur Sadar, Sreebardi upazila-under Sherpur zila, Bishwambarpur, Chhatak, Dera, Dharampasha, Dowarabazar, Jagannathpur, Jamalganj, Dakshin Sunamganj, Sulla, Sunamganj Sadar, Tahirpur upazila- under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Companiganj, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila-under Sylhet zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila as presented in Fig. 3.7. No trends in rainfall during 1971-2015 were observed over Kasba upazila- under Brahmanbaria zila, Brahman Para, Burichang upazila- under Comilla zila during the period 1971-2015.

3.1.15 CRU (gridded) rainfall trends for May

Monthly rainfall trends for May have decreased in almost all upazilas except in northwest parts upazila in Bangladesh (Fig. 3.8). The decreasing trends have been significant in Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila- under Bandarban zila, Anowara, Banshkhali, Boalkhali, Chandanaish, Lohagara, Patiya, Rangunia, Satkania, upazila- under Chittagong zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila, Belai Chhari, Jurai Chhari, Kaptai, Rajasthali, Rangamati Sadar upazila- under Rangamati zila (northeast part) as shown

in Fig. 3.8. No trends in rainfall were noticed over Nageshwari, Rajarhat upazila- under Kurigram zila during the period 1971-2015.

3.1.16 Observed (BMD) rainfall trends for June

Rainfall trends for June have increased over Bandarban, Barguna, Bogura, Brahmanbaria, Chandpur, Chapainawabganj, Chattogram, Coxsbazar, Cumilla, Dinajpur, Feni, Gaibandha, Gopalganj, Habiganj, Jamalpur, Jashore, Joypurhat, Khagrachari, Khulna, Kishoreganj, Kurigram, Lakshmipur, Lalmonirhat, Magura, Manikganj, Moulvibazar, Munshiganj, Mymensingh, Naogaon, Narail, Narsingdi, Natore, Netrokona, Nilphamari, Nilphamari, Noakhali, Panchagarh, Patuakhali, Rajbari, Rangpur, Satkhira, Sherpur, Sirajganj, Sunamganj, Sylhet, Thakurgaon zila (including upazila) during 1971-2015 as shown in Fig. 3.8. June rainfall has decreasing over Bagerhat, Barishal, Bhola, Chuadanga, Dhaka, Faridpur, Gazipur, Jhalakati, Jhenaidah, Kushtia, Madaripur, Meherpur, Narayanganj, Pabna, Pirojpur, Rajshahi, Rangamati, Shariatpur, Tangail zila (including upazila). during 1971-2015. The increasing /decreasing rainfall trends for June have not been statistically significant during the same period.

3.1.17 Aphrodite (gridded) rainfall trends for June

Rainfall trends for the month of June is observed increasing trend in almost all upazilas except in some pockets upazilas at different places over Bangladesh (Fig.3.9). The increasing trends were found statistically significant in Gaibandha Sadar upazila- under Gaibandha zila, Char Rajibpur, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, upazila- under Kurigram zila, Dhobaura, Haluaghat upazila- under Mymensingh zila, Durgapur, Kalmakanda upazila- under Netrakona zila. June rainfall has also seen decreasing trends over Babuganj, Muladi, Wazirpur upazila- under Barisal zila, Bhola Sadar, Burhanuddin, Daulatkhan upazila- under Bhola zila, Patgram upazila- under Lalmonirhat zila, Chhatak, Dowerabazar upazila- under Sunamganj zila, Companiganj, Jaintiapur, Gowainghat, Kanaighat upazila- under Sylhet zila during the period 1971-2015. But decreasing trends were non-significant.

3.1.18 CRU (gridded) rainfall trends for June

Monthly rainfall trends for June have increased in almost half of the upazilas of the country and rest of the upazilas have been decreasing (Fig. 3.9). June in rainfall trends have seen decreasing over Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila- under Bandarban zila, Amtali, Bamna, Barguna Sadar, Patharghata, Taltoli upazila- under Barguna zila, Babuganj, Bakerganj, Banari Para, Barisal Sadar, Hizla, Mehendiganj, upazila- under Barisal zila, Bhola Sadar, Burhanuddin, Daulatkhan, Lalmohan, Manpura, Tazumuddin upazila- under Bhola zila, Akhaura, Ashuganj, Banchharampur, Bijoy Nagar, Brahmanbaria Sadar, Kasba, Nabinagar, Nasirnagar, Sarail upazila- under Brahmanbaria zila, Chandpur Sadar, Faridganj, Haim Char, Kachua, Matlab Dakshin, Matlab Uttar, Shahrasti upazila- under Chandpur zila, Banshkhali, Chandanaish, Lohagara, Satkania upazila- under Chittagong zila, Barura, Brahman Para, Burichang, Chandina, Comilla Adarsha

Sadar, Daudkandi, Debidwar, Homna, Meghna, Manoharganj, Muradnagar, Comilla Sadar, Titas upazila- under Comilla zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Ukhia upazila-under Cox's Bazar zila, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Kaharole, Khansama, Parbatipur upazila- under Dinajpur zila, Kaliganj, Kapasia, Sreepur upazila- under Gazipur zila, Ajmiriganj, Bahubal, Baniachong, Chunarughat, Habiganj Sadar, Lakhai, Madhabpur, Nabiganj upazila-under Habiganj zila, Nalchity upazila- under Jhalokati zila, Khagrachhari Sadar, Austagram, Bajitpur, Bhairab, Hossainpur, Itna, Karimganj, Katiadi, Kishoreganj Sadar, Kuliar Char, Mithamain, Nikli, Pakundia, Tarail upazila- under Kishoreganj zila, Bhurungamari, Chilmari, Nageshwari, Phulbari, upazila-under Kurigram zila, Kamalnagar, Lakshmipur Sadar, Roypur, Ramganj, Ramgati upazila- under Lakshmipur zila, Aditmari, Hatibandha, Kaliganj, Lalmonirhat Sadar, Patgram upazila- under Lalmonirhat zila, Barlekha, Juri, Kamalganj, Kulaura, Maulvi Bazar Sadar, Rajnagar, Sreemangal upazila- under Maulvi Bazar zila, Gazaria, Lohajang, Munshiganj Sadar, Serajdikhan, Tongibari upazila- under Munshiganj zila, Bhaluka, Dhobaura, Fulbaria, Gaffargaon, Gauripur, Haluaghat, Ishwarganj, Muktagachha, Mymensingh Sadar, Nandail, Phulpur, Tarakanda, Trishal upazila- under Mymensingh zila, Dhamoirhat, Sapahar upazila-under Naogaon zila, Araihasar, Bandar, Narayanganj Sadar, Rupganj, Sonargaon upazila-under Narayanganj zila, Belabo, Manohardi, Narsingdi Sadar, Palash, Roypura, Shibpur upazila-under Narsingdi zila, Atpara, Barhatta, Durgapur, Kalmakanda, Kendua, Khaliajuri, Madan, Mohanganj, Netrokona Sadar, Purbadhala upazila-under Netrokona zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur, upazila- under Nilphamari zila, Chatkhil, Hatiya, Kabirhat, Noakhali Sadar, Sonaimuri, upazila-under Noakhali zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila-under Panchagarh zila, Bauphal, Dashmina, Dumki, Galachipa, Kala Para, Mirzaganj, Patuakhali Sadar, Rangabali upazila-under Patuakhali zila, Belai Chhari, Langadu, Rajasthali upazila- under Rangamati zila, Badarganj, Gangachara, Kaunia, Rangpur Sadar, Taraganj upazila-under Rangpur zila, Bhedarganj, Damudya, Gosairhat, Naria, upazila-under Shariatpur zila, Nalitabari upazila-under Sherpur zila, Bishwambarpur, Chhatak, Derai, Dharampasha, Dowarabazar, Jagannathpur, Jamalganj, Dakshin Sunamganj, Sulla, Sunamganj Sadar, Tahirpur upazila-under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila- under Sylhet zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila as shown in Fig. 3.9. The increasing/decreasing trends were not found significant over the year. No trends in rainfall during 1971-2015 were observed over Sarankhola upazila- under Bagerhat zila, Muladi upazila- under Barisal zila, Jhalokati Sadar upazila, Rajarhat upazila-under Kurigram zila, Sreenagar upazila- under Munshiganj zila, Subarnachar upazila- under Noakhali zila, Mitha Pukur upazila- under Rangpur zila, Zanjira upazila- under Shariatpur zila during the period 1971-2015.

3.1.19 Observed (BMD) rainfall trends for July

Rainfall trends for July have decreased over Bhola, Chandpur, Chapainawabganj, Chuadanga, Cumilla, Dinajpur, Gaibandha, Jamalpur, Jhenaidah, Joypurhat, Kurigram, Kushtia, Lakshmipur, Lalmonirhat, Madaripur, Manikganj, Meherpur, Naogaon, Natore, Nilphamari,

Pabna, Panchaghar, Rajshahi, Rangamati, Rangpur, Satkhira, Shariatpur, Sherpur, Sirajganj, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazila). The decreasing trends have been significant over Bogura zila (including upazila) as shown in Fig. 3.10. July in rainfall has increased over Bagerhat, Bandarban, Barguna, Barishal, Brahmanbaria, Chattogram, Coxsbazar, Dhaka, Faridpur, Feni, Gazipur, Gopalganj, Habiganj, Jhalakati, Khagrachari, Kishoreganj, Magura, Moulvibazar, Munshiganj, Mymensingh, Narail, Narayanganj, Narsingdi, Netrokona, Noakhali, Pirojpur zila (including upazila) as shown in Fig. 3.10. The increasing trends were significant over Jashore, Khulna, Patuakhali zila (including upazila). Rajbari did not show showing no trend in rainfall during the period 1971-2015.

3.1.20 Aphrodite (gridded) rainfall trends for July

Rainfall trends for the month of July is noticed increasing trend in almost half portion upazilas of Bangladesh and rest of the upazilas showing decreasing trend (Fig.3.10). The increasing trends were significant in Fakirhat, Mollahat upazila- under Bagerhat zila, Keshabpur upazila- under Jessore zila, Dighalia, Rupsa, Terokhada upazila- under Jessore zila as shown in Fig. 3.10. July in rainfall tends have decreased in Rowangchhari, Ruma upazila-under Bandarban zila, Hizla, Mehendiganj upazila- under Barisal zila, Bhola Sadar, Burhanuddin, Daulatkhani, upazila- under Bhola zila, Adamdighi, Dhunat, Dhupchanchia, Nandigram, Sariaikandi, Sherpur, Shibganj, Sonatola upazila-under Bogra zila, Akhaura, Bijoy Nagar, Brahmanbaria Sadar, Kasba, upazila-under Brahmanbaria zila, Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila-under Ch. Nawabganj zila, Chandpur Sadar, Faridganj, Haim Char, Shahrasti upazila-under Chandpur zila, Boalkhali, Fatikchhari, Hathazari, Mirsharai, Patiya, Rangunia, Raozan, upazila- under Chittagong zila, Alamdanga, Chuadanga Sadar, Damurhuda, upazila- under Chuadanga zila. Barura, Brahman Para, Burichang, Chandina, Comilla Adarsha Sadar, Debidwar, Homna, Laksam, Manoharganj, Muradnagar, Nangalkot, Comilla Sadar Dakshin Titas upazila- under Comilla zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Ghoraghat, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila- under Dinajpur zila, Chhagalnaiya, Daganbhuiyan, Sonagazi upazila- under Feni zila, Gaibandha Sadar, Gobindaganj, Palashbari, Fulchhari, Sadullapur, Saghatta, Sundarganj upazila-under Gaibandha zila, Bahubal, Madhabpur, Nabiganj upazila- under Habiganj zila, Bakshiganj, Dewanganj, Islampur, Jamalpur Sadar, Madarganj, Melandaha, Sharishabari upazila- under Jamalpur zila, Harinakunda, Jhenaidah Sadar upazila- Jhenaidah zila, Akkelpur, Joypurhat Sadar, Kalai, Khetlal, Panchbibi upazila-under Joypurha zila, Khagrachhari Sadar, Lakshmichhari, Mahalchhari, Manikchhari, Matiranga, Panchhari, Ramgarh upazila-under Khagrachhari zila, Bhurungamari, Char Rajibpur, Chilmari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, Ulipur upazila-under Kurigram zila, Bheramara, Daulatpur, Khoksa, Kumarkhali, Kushtia Sadar, Mirpur upazila-under Kushtia zila, Kamalnagar, Lakshmipur Sadar, Roypur, Ramganj, Ramgati upazila- under Lakshmipur zila, Aditmari, Hatibandha, Kaliganj, Lalmonirhat Sadar, Patgram upazila- under Lalmonirhat zila, Sreepur upazila- under Magura zila, Barlekha, Juri, Kulaura, Rajnagar, upazila- under Maulvi Bazar zila, Gangni, Meherpur Sadar, Mujib Nagar upazila-under Meherpur zila, Atrai, Badalgachhi, Dhamoirhat, Manda, Mahadebpur, Naogaon Sadar, Niamatpur, Patnitala, Porsha, Raninagar, Sapahar upazila- under Naogaon zila, Bagati Para,

Baraigram, Gurudaspur, Lalpur, Naldanga, Natore Sadar, Singra upazila- under Natore zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur, upazila- under Nilphamari zila, Begumganj, Chatkhil, Companiganj, Kabirhat, Noakhali Sadar, Senbagh, Sonaimuri, Subarnachar upazila-under Noakhali zila, Atgharia, Bera, Bhangura, Chatmohar, Faridpur, Ishwardi, Pabna Sadar, Santhia, Sujanagar upazila- under Pabna zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Kalukhali, Pangsha, Rajbari Sadar upazila-under Rajbari zila, Bagha, Baghmara, Charchat, Durgapur, Godagari, Mohanpur, Paba, Puthia, Tanore upazila- under Rajshahi zila, Baghai Chhari, Barkal, Belai Chhari, Jurai Chhari, Kaptai, Kawkhali, Langadu, Naniarchar, Rajasthali, Rangamati Sadar upazila-under Rangamati zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Pirganj, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Jhenaigati, Nakla, Nalitabari, Sherpur Sadar, Sreebardi upazila- under Sherpur zila, Belkuchi, Chauhali, Kamarkhanda, Kazipur, Royganj, Shahjampur, Sirajganj Sadar, Tarash, Ullah Para upazila-under Sirajganj zila, Chhatak, Dowarabazar, Jagannathpur upazila- under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Companiganj, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila- under Sylhet zila, Basail, Bhuapur, Delduar, Dhanbari, Ghatail, Gopalpur, Kalihati, Madhupur, Nagarpur, Sakhipur, Tangail Sadar upazila-under Tangail zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila as presented in Fig. 3.10. The decreasing trends in July rainfall have been significant in Bogra Sadar upazila, Gabtali, Kahaloo, Shajahanpur upazila- under Bogra zila during the period 1971-2015.

3.1.21 CRU (gridded) rainfall trends for July

Monthly rainfall trends for July have decreased in almost all upazilas of the country and in some upazilas have been increased (Fig. 3.11). July monthly rainfall has increased over Akhaura, Ashuganj, Bijoynagar, Brahmanbaria Sadar, Nabinagar, Sarail upazila-under Brahmanbaria zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Ukhia upazila-under Cox's Bazar zila, Ajmiriganj, Bahubal, Baniachong, Chunarughat, Habiganj Sadar, Lakhsai, Madhabpur, Nabiganj upazila- under Habiganj zila, Austagram, Bhairab, Mithamain upazila- under Kishoreganj zila, Barlekha, Juri, Kamalganj, Kulaura, Maulvi Bazar Sadar, Rajnagar, Sreemangal upazila- under Maulvi Bazar zila, Jagannathpur upazila- under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Dakshin Surma, Fenchuganj, Golabganj, Sylhet Sadar, upazila- under Sylhet zila as shown in Fig. 3.11. However, the increasing trends have been found significant in Sapahar upazila- under Naogaon zila. No trend has been found for Naikhongchhari upazila-under Bandarban zila, Chandanaish upazila- under Chittagong zila, Boalmari upazila-under Faridpur zila.

3.1.22 Observed (BMD) rainfall trends for August

Monthly rainfall trends for August have increased over Bagerhat, Bandarban, Bogura, Brahmanbaria, Chandpur, Coxsbazar, Dhaka, Feni, Gaibandha, Gazipur, Jamalpur, Joypurhat, Khagrachari, Khulna, Kishoreganj, Kurigram, Lalmonirhat, Munshiganj, Naogaon, Narsingdi, Nilphamari, Panchagarh, Patuakhali, Rangpur, Satkhira, Sherpur, Sunamganj, Sylhet,

Thakurgaon zila (including upazila) as shown in Fig. 3.11. The increasing trends were found statistically significant in Habiganj, Moulvibazar, Mymensingh, Netrokona zila (including upazila). August in rainfall trends have decreased over Barguna, Barishal, Bhola, Chapainawabganj, Chattogram, Cumilla, Dinajpur, Faridpur, Gopalganj, Jashore, Jhalakati, Jhenaidah, Kushtia, Lakshmipur, Madaripur, Magura, Manikganj, Narail, Natore, Noakhali, Pabna, Pirojpur, Rajbari, Rajshahi, Rangamati, Sirajganj, Tangail zila (including upazila). However, the decreasing trends in August monthly rainfall have been found significant in Meherpur zila (including upazilas). No trends in August rainfall were observed over Narayanganj, Shariatpur zila (including upazilas) during the period 1971-2015.

3.1.23 Aphrodite (gridded) rainfall trends for August

Rainfall trends for the month of August has increased in almost half portion upazilas of Bangladesh and rest of the upazila showing decreasing trend (Fig.3.12). The increasing trends have been found statistically significant over Ajmiriganj, Baniachong, Lakhai upazila- under Habiganj zila, Austagram, Bajitpur, Bhairab, Itna, Karimganj, Katiadi, Kishoreganj Sadar, Kuliar Char, Mithamain, Nikli, Tarail upazila- under Kishoreganj zila, Dhobaura, Fulbaria, Gauripur, Haluaghat, Ishwarganj, Muktagachha, Mymensingh Sadar, Nandail, Phulpur, Tarakanda, Trishal upazila- under Mymensingh zila, Belabo upazila-under Narsingdi zila, Atpara, Barhatta, Durgapur, Kalmakanda, Kendua, Khaliajuri, Madan, Mohanganj, Netrokona Sadar, Purbadhala upazila-under Netrokona zila, Jhenaigati, Nalitabari, Sherpur Sadar, upazila-under Sherpur zila, Bishwambarpur, Derai, Dharampasha, Jamalganj, Dakshin Sunamganj, Sulla, Sunamganj Sadar, Tahirpur upazila- under Sunamganj zila, Bishwanath upazila- under sylhet zila. August montly rainfall trends have decreased over Rowangchhari, Ruma upazila-under Bandarban zila, Amtali, Bamna, Barguna Sadar, Betagi, Taltoli upazila- under Barguna zila, Agailjhara, Babuganj, Bakerganj, Banari Para, Barisal Sadar, Gaurnadi, Hizla, Mehendiganj, Muladi, Wazirpur upazila-under Barisa zila, Bhola Sadar, Burhanuddin, Char Fasson, Daulatkhan, Lalmohan, Manpura, Tazumuddin upazila-under Bhola zila, Chandpur Sadar, Faridganj, Haim Char, Shahrasti upazila-under Chandpur zila, Boalkhali, Fatikchhari, Hathazari, Mirsharai, Patiya, Rangunia, Raozan, Sandwip, Sitakunda upazila-under Chittagong zila, Alamdanga upazila- under Chuadanga zila, Barura, Chandina, Chauddagam, Comilla Adarsha Sadar, Laksam, Manoharganj, Nangalkot, Comilla Sadar Dakshin upazila-under Comilla zila, Teknaf upazila- under Cox's Bazar zila, Dhamrai, Dohar, Nawabganj, upazila-under Dhaka zila, Alfadanga, Bhanga, Boalmari, Char Bhadrasan, Faridpur Sadar, Madhukhali, Nagarkanda, Sadarpur, Saltha upazila- under Faridpur zila, Daganbhuiyan, Feni Sadar, Fulgazi, Parshuram, Sonagazi upazila-under Feni zila, Gopalganj Sadar, Muksudpur upazila- under Gopalganj zila, Jhalokati Sadar, Kanthalia, Nalchity, Rajapur upazila-under Jhalokati zila, Harinakunda, Jhenaidah Sadar, Shailkupa upazila- under Jhenaidah zila, Khagrachhari Sadar, Lakshmichhari, Mahalchhari, Manikchhari, Matiranga, Ramgarh upazila-under Khagrachhari zila, Bheramara, Daulatpur, Khoksa, Kumarkhali, Kushtia Sadar, Mirpur upazila- under Kushtia zila, Kamalnagar, Lakshmipur Sadar, Roypur, Ramganj, Ramgati upazila- under Lakshmipur zila, Kalkini, Madaripur Sadar, Rajoir, Shib Char upazila-under Madaripur zila, Magura Sadar, Mohammadpur, Shalikha, upazila- under Magura zila, Daulatpur, Ghior, Harirampur, Manikganj Sadar, Saturia, Shibalaya, Singair upazila- under Manikganj zila,

Sreemangal upazila- under Maulvibazar zila, Gangni, Meherpur Sadar upazila- under Meherpur zila, Lohajang upazila-under Munshiganj zila, Bagati Para, Baraigram, Gurudaspur, Lalpur, Naldanga, Natore Sadar, upazila-under Natore zila, Begumganj, Chatkhil, Companiganj, Hatiya, Kabirhat, Noakhali Sadar, Senbagh, Sonaimuri, Subarnachar upazila- under Noakhali zila, Atgharia, Bera, Bhangura, Chatmohar, Faridpur, Ishwardi, Pabna Sadar, Santhia, Sujanagar upazila- under Pabna zila, Bauphal, Dashmina, Dumki, Galachipa, Kala Para, Mirzaganj, Patuakhali Sadar, Rangabali upazila-under Patuakhali zila, Bhandaria, Kawkhali, Nesarabad, upazila- under Pirojpur zila, Balia Kandi, Goalandaghat, Kalukhali, Pangsha, Rajbari Sadar upazila- under Rajbari zila, Bagha, Charchat, Durgapur, Godagari, Paba, Puthia, upazila- under Rajshahi zila, Baghai Chhari, Barkal, Belai Chhari, Jurai Chhari, Kaptai, Kawkhali, Langadu, Naniarchar, Rajasthali, Rangamati Sadar upazila-under Rangamati zila, Bhedarganj, Damudya, Gosairhat, Naria, Shariatpur Sadar, Zanjira upazila-under Shariatpur zila, Chauhali, Shahjadpur, Tarash, upazila-under Sirajganj zila, Delduar, Nagarpur upazila-under Tangail zila. However, no trends in August rainfall were observed over Alikadam upazila- under Bandarban zila, Belkuchi, Kamarkhanda, Sirajganj Sadar, Ullah Para upazila-under Sirajganj zila as presented in Fig. 3.12.

3.1.24 CRU (gridded) rainfall trends for August

Monthly rainfall trends for August have decreased in almost half portion upazilas of the country and rest of the country (northern, southeast and southwest parts upazilas) have been increased (Fig. 3.12). August monthly rainfall has increased over Mongla, Sarankhola upazila-under Bagerhat zila, Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila-under Bandarban zila, Dhupchanchia, Kahaloo, Sariaikandi, Shibganj, Sonatola upazila- under Bogra zila, Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila-under Chapai Nawabganj zila, Anowara, Banshkhali, Boalkhali, Chandanaish, Lohagara, Patiya, Rangunia, Satkania, upazila-under Chittagong zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Ghoraghat, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila-under Dinajpur zila, Gaibandha Sadar, Gobindaganj, Palashbari, Fulchhari, Sadullapur, Saghatta, Sundarganj upazila- under Gaibandha zila, Ajmiriganj, Baniachong, Nabiganj upazila- under Habiganj zila, Bakshiganj, Dewanganj, Islampur, Jamalpur Sadar, Madarganj, Melandaha, upazila- under Jamalpur zila, Akkelpur, Joypurhat Sadar, Kalai, Khetlal, Panchbibi upazila- under Joypurhat zila, Dacope, Koyra upazila- under Khulna zila, Itna upazila- under Kishoreganj zila, Bhurungamari, Char Rajibpur, Chilmari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, Ulipur upazila- under Kurigram zila, Aditmari, Hatibandha, Kaliganj, Lalmonirhat Sadar, Patgram upazila- under Lalmonirhat zila, Barlekha, Juri, Kulaura, Maulvi Bazar Sadar, Rajnagar upazila- under Maulvi Bazar zila, Dhobaura, Haluaghat, Muktagachha, Phulpur, Tarakanda, upazila- under Mymensingh zila, Badalgachhi, Dhamoirhat, Manda, Mahadebpur, Naogaon Sadar, Niamatpur, Patnitala, Porsha, Sapahar upazila-under Naogaon zila, Atpara, Barhatta, Durgapur, Kalmakanda, Khaliajuri, Madan, Mohanganj, Netrokona Sadar, Purbadhala upazila- under Netrokona zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur upazila- under Nilphamari zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia

upazila- Panchagarh zila, Baghmara, Durgapur, Godagari, Mohanpur, Paba, Puthia, Tanore upazila- under Rajshahi zila, Barkal, Belai Chhari, Jurai Chhari, Kaptai, Langadu, Rajasthali, Rangamati Sadar upazila- under Rangamati zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Pirganj, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Shyamnagar upazila- under Satkhira zila, Jhenaigati, Nakla, Nalitabari, Sherpur Sadar, Sreebardi upazila- under Sherpur zila, Bishwambarpur, Chhatak, Derai, Dharampasha, Dowarabazar, Jagannathpur, Jamalganj, Dakshin Sunamganj, Sulla, Sunamganj Sadar, Tahirpur upazila- under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Companiganj, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila- under Sylhet zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila as shown in Fig. 3.12. It was not found statistically significant. However, no trends in August rainfall were noticed over Adamdighi upazila- under Bogra zila, Mithamain, Tarail, upazila- under Kishoreganj zila, Kaliganj upazila- under Satkhira zila, Madhupur upazila- under Tangail zila during the period 1971-2015.

3.1.25 Observed (BMD) rainfall trends for September

September monthly rainfall trends have increased over Barguna, Barishal, Bhola, Brahmanbaria, Chandpur, Chapainawabganj, Chattogram, Cumilla, Dinajpur, Gaibandha, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Joypurhat, Kishoreganj, Kurigram, Kushtia, Lakshmipur, Lalmonirhat, Madaripur, Magura, Moulvibazar, Munshiganj, Mymensingh, Naogaon, Narayanganj, Narsingdi, Netrokona, Nilphamari, Noakhali, Pabna, Panchagarh, Patuakhali, Pirojpur, Rajbari, Rangamati, Rangpur, Shariatpur, Sherpur, Sunamganj, Sylhet, Thakurgaon zila (including upazila) as shown in Fig. 3.13. The increasing trends have been found statistically significant in Bagerhat, Bandarban, Coxsbazar, Feni, Khagrachari, Khulna, Narail, Satkhira zila (including upazila). Monthly rainfall trends for September have decreased over Bogura, Chuadanga, Dhaka, Faridpur, Gazipur, Manikganj, Meherpur, Natore, Rajshahi, Sirajganj, Tangail zila (including upazila) during the period 1971-2015. But not statistically significant.

3.1.26 Aphrodite (gridded) rainfall trends for September

Rainfall trends for the month of September has increased in almost all upazilas of Bangladesh and in some upazilas (central to northwest part) have found decreasing trend (Fig.3.13). The increasing rainfall trends for the month of September have been found significant in Bagerhat Sadar, Chitalmari, Fakirhat, Kachua, Mongla, Mollahat, Rampal, upazila- under Bagerhat zila, Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila- under Bandarban zila, Chandanaish, Lohagara, Satkania upazila- under Chittagong zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Ukhia upazila- under Cox's Bazar zila, Kashiani, Kotali Para, Tungi Para upazila- Gopalganj zila, Abhaynagar, Bagher Para, Keshabpur upazila- under Jessore zila, Dighinala upazila- under Khagrachhari zila, Batiaghata, Dacope, Dighalia, Dumuria, Koyra, Phultala, Paikgachha, Rupsa, Terokhada upazila- under Khulna zila, Kalia, Lohagara, Narail Sadar upazila- under Narail zila, Atpara, Barhatta, Mohanganj, upazila- under Netrokona zila, Nazirpur, Pirojpur Sadar upazila- under

Pirojpur zila, Belai Chhari upazila- under Rangamati zila, Assasuni, Kalaroa, Satkhira Sadar, Tala upazila- under Satkhira zila, Dharampasha, Jamalganj, Tahirpur upazila-under Sunamganj zila as presented in Fig. 3.13. September monthly rainfall trends have decreased over Nandigram, Sherpur upazila-under Bogra zila, Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila-under Chapai Nawabganj zila, Alamdanga upazila-under Chuadanga zila, Dhamrai, Dohar, Nawabganj, Savar upazila-under Dhaka zila, Birampur, Birganj, Biral, Bochaganj, Dinajpur Sadar, Kaharole, Khansama, upazila- under Dinajpur zila, Char Bhadrasan, Faridpur Sadar, Madhukhali, upazila- under Faridpur zila, Gazipur Sadar, Kaliakair upazila- under Gazipur zila, Shaikupa upazila- under Jhenaidah zila, Bhurungamari upazila- under Kurigram zila, Bheramara, Daulatpur, Khoksa, Kumarkhali, Kushtia Sadar, Mirpur upazila- under Kushtia zila, Patgram upazila- under Lalmonirhat zila, Shib Char upazila- under Madaripur zila, Daulatpur, Ghior, Harirampur, Manikganj Sadar, Satoria, Singair upazila- under Manikganj zila, Sreemangal upazila- under Maulvibazar zila, Gangni, Meherpur Sadar upazila- under Meherpur zila, Atrai, Badalgachhi, Dhamoirhat, Manda, Mahadebpur, Naogaon Sadar, Niamatpur, Patnitala, Porsha, Raninagar, Sapahar upazila- under Naogaon zila, Bagati Para, Baraigram, Gurudaspur, Lalpur, Naldanga, Natore Sadar, Singra upazila- under Natore zila, Dimla, Domar upazila- under Nilphamari zila, Atgharia, Bera, Bhangura, Chatmohar, Faridpur, Ishwardi, Pabna Sadar, Santhia, Sujanagar upazila- under Pabna zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Balia Kandi, Goalandaghat, Kalukhali, Pangsha, Rajbari Sadar upazila- under Rajbari zila, Bagha, Baghmara, Charchat, Durgapur, Godagari, Mohanpur, Paba, Puthia, Tanore upazila- under Rajshahi zila, Belkuchi, Chauhali, Kamarkhanda, Shahjadpur, Sirajganj Sadar, Tarash, Ullah Para upazila- nder Sirajganj zila, Basail, Bhuapur, Delduar, Ghatail, Kalihati, Mirzapur, Nagarpur, Sakhipur, Tangail Sadar upazila- under Tangail zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila during the period 1971-2015. The decreasing trends have not been found statistically significant.

3.1.27 CRU (gridded) rainfall trends for September

Monthly rainfall trends for September have decreased in more than half portion upazilas of the country and rest of the country (southwest and southeast parts upazilas) have been increased (Fig. 3.14). The decreasing trends in September in rainfall have not been found statistically significant for the year 1971-2015 as shown in Fig. 3.14. September monthly rainfall trends have increased over Bagerhat Sadar, Chitalmari, Fakirhat, Kachua, Mollahat, Morrelganj, Rampal, upazila- under Bagerhat zila, Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila- under Bandarban zila, Amtali, Bamna, Barguna Sadar, Betagi, Patharghata, Taltoli upazila- under Barguna zila, Agailjhara, Babuganj, Bakerganj, Banari Para, Barisal Sadar, Gaurnadi, Hizla, Mehendiganj, Muladi, Wazirpur upazila- under Barisal zila, Bhola Sadar, Burhanuddin, Char Fasson, Daulatkhan, Lalmohan, Manpura, Tazumuddin upazila- under Bhola zila, Chapai Nawabganj Sadar upazila, Chandpur Sadar, Faridganj, Haim Char, Hajiganj, Matlab Dakshin, Matlab Uttar, upazila- under Chandpur zila, Anowara, Banshkhali, Boalkhali, Chandanaish, Fatikchhari, Hathazari, Lohagara, Patiya, Rangunia, Raozan, Sandwip, Satkania, Sitakunda upazila-under Chittagong zila, Alamdanga, Chuadanga Sadar, Damurhuda, Jiban Nagar upazila- under Chuadanga zila, Chakaria, Cox's

Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila, Dohar upazila- under Dhaka zila, Alfadanga, Bhanga, Boalmari, Faridpur Sadar, Madhukhali, Nagarkanda, Sadarpur upazila-under Faridpur zila, Gopalganj Sadar, Kashiani, Kotali Para, Muksudpur, Tungi Para upazila-under Gopalganj zila, Abhaynagar, Bagher Para, Chaugachha, Jessore Sadar, Jhikargachha, Keshabpur, Manirampur, Sharsha upazila-under Jessore zila, Jhalokati Sadar, Kanthalia, Nalchity, Rajapur upazila- under Jhalokati zila, Harinakunda, Jhenaidah Sadar, Kaliganj, Kotchandpur, Maheshpur, Shailkupa upazila-under Jhenaidah zila, Batiaghata, Dighalia, Dumuria, Phultala, Rupsa, Terokhada upazila-under Khulna zila, Daulatpur, Khoksa, Kumarkhali, Kushtia Sadar, Mirpur upazila-under Kushtia zila, Kamalnagar, Lakshmipur Sadar, Roypur, Ramganj, Ramgati upazila- under Lakshmipu zila, Kalkini, Madaripur Sadar, Rajoir, Shib Char upazila- under Madaripur zila, Magura Sadar, Mohammadpur, Shalikka, Sreepur upazila- under Magura zila, Gangni, Meherpur Sadar, Mujib Nagar upazila- under Meherpur zila, Lohajang, Sreenagar, Tongibari upazila-under Munshiganj zila, Kalia, Lohagara, Narail Sadar upazila-under Narail zila, Companiganj, Hatiya, Kabirhat, Noakhali Sadar, Subarnachar upazila-under Noakhali zila, Pabna Sadar upazila, Bauphal, Dashmina, Dumki, Galachipa, Kala Para, Mirzaganj, Patuakhali Sadar, Rangabali upazila- under Patuakhali zila, Bhandaria, Zianagar, Kawkhali, Mathbaria, Nazirpur, Nesarabad, Pirojpur Sadar upazila- under Pirojpur zila, Balia Kandi upazila- under Rajbari zila, Paba upazila- under Rajshahi zila, Belai Chhari, Jurai Chhari, Kaptai, Kawkhali, Rajasthali, Rangamati Sadar upazila- under Rangamati zila, Kalaroa, Tala upazila- under Satkhira zila, Bhedarganj, Damudya, Gosairhat, Naria, Shariatpur Sadar, Zanjira upazila-under Shariatpur zila. The increasing trends have been found statistically significant in Mongla, Sarankhola upazila- under Bagerhat zila, Teknaf upazila- under Cox's Bazar zila, Dacope, Koyra, Paikgachha upazila-under Khulna zila, Assasuni, Debhata, Kaliganj, Satkhira Sadar, Shyamnagar, upazila-under Satkhira zila. However, no trends in September month rainfall during 1971-2015 were observed over Nachole upazila-under Chapai Nawabganj zila, Lakshmichhari upazila-under Khagrachhari zila, Begumganj upazila- under Noakhali zila, Pangsha, Rajbari Sadar upazila-under Rajbari zila, Godagari upazila- under Rajshahi zila as shown in Fig. 3.14 during the period 1971-2015.

3.1.28 Observed (BMD) rainfall trends for October

October monthly rainfall trends have increased over Bagerhat, Bandarban, Barguna, Barishal, Bhola, Bogura, Brahmanbaria, Chapainawabganj, Coxsbazar, Cumilla, Feni, Gaibandha, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Joypurhat, Khagrachari, Khulna, Kishoreganj, Kurigram, Kushtia, Lakshmipur, Madaripur, Magura, Manikganj, Meherpur, Moulvibazar, Munshiganj, Mymensingh, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Netrokona, Pabna, Pirojpur, Rajbari, Rangpur, Satkhira, Shariatpur, Sherpur, Sirajganj zila (including upazila) as presented in Fig. 3.14. The increasing trends in rainfall were found statistically significant in Chandpur, Chattogram, Noakhali, Patuakhali, Rangamati zila (including upazila). Monthly rainfall trends for October have decreased over Dhaka, Dinajpur, Faridpur, Gazipur, Lalmonirhat, Nilphamari, Panchagarh, Rajshahi, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazila) during the period 1971-2015. The decreasing

trend were not found statistically significant over the year. Chuadanga showed no trend in October rainfall as shown in Fig. 3.14 during 1971-2015.

3.1.29 Aphrodite (gridded) rainfall trends for October

Rainfall trends for the month of October has increased in almost all upazilas of Bangladesh except in northwest and northeast parts upazilas, these upazilas have seen decreasing trend (Fig.3.15). The increasing rainfall trends for the month of October have been found statistically significant in Alikadam, Lama, Naikhongchhari upazila-under Bandarban zila, Chakaria, Cox's Bazar Sadar, Maheshkhali, Ramu, Teknaf, Ukhia upazila-under Cox's Bazar zila. In October, monthly rainfall has also decreased over Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila-under Chapai Nawabganj zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila- under Dinajpur zila, Bhurungamari, Nageshwari, Phulbari, Rajarhat, Raumari, upazila- under Kurigram zila, Hatibandha, Patgram upazila- under Lalmonirhat zila, Barlekha, Juri, Kamalganj, Kulaura, Maulvi Bazar Sadar, Rajnagar, upazila-under Maulvi Bazar zila, Porsha upazila-under Naogaon zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur upazila-under Nilphamari zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia-under Panchagarh zila, Godagari, Mohanpur, Tanore upazila- under Rajshahi zila, Badarganj, Gangachara, Mitha Pukur, Pirgachha, Rangpur Sadar, Taraganj upazila-under Rangpur zila, Chhatak, Dowarabazar, Jagannathpur upazila- under Sunamganj zila, Balaganj, Beani Bazar, Companiganj, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila- under Sylhet zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila as shown in Fig. 3.15. It is not found statistically significant. Sundarganj upazila-under Gaibandha zila, Chilmari, Ulipur upazila- under Kurigram zila, Patnitala, Sapahar upazila- under Naogaon zila showed no trend in October monthly rainfall during 1971-2015.

3.1.30 CRU (gridded) rainfall trends for October

Monthly rainfall trends for October have increased in more than half portion upazilas of the country and northwest part upazilas have been found decreasing (Fig. 3.15). The increasing trends in rainfall have been found statistically significant over Teknaf and Ukhia upazila- under coz's Bazar zila as shown in Fig. 3.15. In October monthly rainfall trends have decreased over Shibganj upazila- under Bogura zila, Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila- under Chapai Nawabganj zila, Alamdanga, Damurhuda upazila-under Chuadanga zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Ghoraghat, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila- under Dinajpur zila, Gaibandha Sadar, Gobindaganj, Palashbari, Fulchhari, Sadullapur, Saghatta, Sundarganj upazila- under Gaibandha zila, Bakshiganj, Dewanganj upazila- under Jamalpur zila, Sharsha upazila- under Jessore zila, Joypurhat Sadar, Kalai, Khetlal, Panchbibbi upazila-under Joypurhat zila, Bhurungamari, Char Rajibpur, Chilmari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, Ulipur upazila-under Kurigram zila, Aditmari, Hatibandha, Kaliganj, Lalmonirhat Sadar, Patgram upazila- under Lalmonirhat zila, Meherpur Sadar, Mujib

Nagar upazila- under Meherpur zila, Badalgachhi, Dhamoirhat, Mahadebpur, Niamatpur, Patnitala, Porsha, Sapahar upazila- under Naogaon zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur upazila- under Nilphamari zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Godagari, Tanore upazila- under Rajshahi zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Pirganj, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Jhenaigati, Nakla, Nalitabari, Sreebardi upazila- under Sherpur zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila. It is not found statistically significant. However, no trends in October month rainfall during 1971-2015 were observed over Bagher Para, Manirampur upazila- under Jessore zila, Manda upazila- under Naogaon zila, Mohanpur upazila- under Rajshahi zila as presented in Fig. 3.15 during the period 1971-2015.

3.1.31 Observed (BMD) rainfall trends for November

Monthly rainfall trends for November have increased over Khulna, Mymensingh zila (including upazilas) as presented in Fig. 3.16. The increasing trends in rainfall have not been found statistically significant. Monthly rainfall trends for October have decreased over Bagerhat, Barguna, Barishal, Bogura, Chandpur, Chapainawabganj, Dhaka, Faridpur, Feni, Gaibandha, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Joypurhat, Kushtia, Madaripur, Magura, Moulvibazar, Munshiganj, Naogaon, Narail, Natore, Netrokona, Noakhali, Pabna, Patuakhali, Pirojpur, Rajbari, Rajshahi, Rangamati, Rangpur, Satkhira, Shariatpur, Sherpur, Sirajganj, Sylhet zila (including upazila) during the period 1971-2015. The decreasing trends in rainfall were found statistically significant in Bandarban, Bhola, Brahmanbaria, Chattogram, Chuadanga, Coxsbazar, Cumilla, Dinajpur, Gazipur, Khagrachari, Kishoreganj, Kurigram, Lakshmipur, Lalmonirhat, Manikganj, Meherpur, Narayanganj, Narsingdi, Nilphamari, Panchagarh, Sunamganj, Tangail, Thakurgaon. No trend has not been found in November month rainfall as shown in Fig. 3.16 during 1971-2015.

3.1.32 Aphrodite (gridded) rainfall trends for November

Rainfall trends for the month of November has been found decreasing all upazilas of Bangladesh (Fig.3.16). The decreasing trend in November monthly rainfall has been found statistically significant in Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila- under Bandarban zila, Agailjhara, Babuganj, Bakerganj, Banari Para, Barisal Sadar, Gaurnadi, Hizla, Mehendiganj, Muladi, Wazirpur upazila- under Barisal zila, Bhola Sadar, Burhanuddin, Daulatkhan upazila- under Bhola zila, Akhaura, Ashuganj, Banchharampur, Bijoy Nagar, Brahmanbaria Sadar, Kasba, Nabinagar, Nasirnagar, Sarail upazila- under Brahmanbaria zila, Chandpur Sadar, Faridganj, Haim Char, Hajiganj, Kachua, Matlab Dakshin, Matlab Uttar, Shahrasti upazila- under Chandpur zila, Anowara, Banshkhali, Boalkhali, Chandanaish, Fatikchhari, Hathazari, Lohagara, Mirsharai, Patiya, Rangunia, Raozan, Satkania, Sitakunda upazila- under Chittagong zila, Barura, Brahman Para, Burichang, Chandina, Chaudagram, Comilla Adarsha Sadar, Daudkandi, Debidwar, Homna, Laksam, Meghna, Manoharganj, Muradnagar, Nangalkot, Comilla Sadar Dakshin Titas upazila- under Comilla zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Teknaf,

Ukhia upazila- under Cox's Bazar zila, Dohar, Keraniganj, Nawabganj, Savar upazila- under Dhaka zila, Bhanga, Char Bhadrasan, Nagarkanda, Sadarpur, Saltha upazila-under Faridpur zila, Chhagalnaiya, Daganbhuiyan, Feni Sadar, Fulgazi, Parshuram, Sonagazi upazila- under Feni zila, Gazipur Sadar, Kaliganj, Kapasia upazila- under Gazipur zila, Gopalganj Sadar, Muksudpur upazila- Gopalganj zila, Ajmiriganj, Bahubal, Baniachong, Chunarughat, Habiganj Sadar, Madhabpur, Nabiganj upazila- under Habiganj zila, Nalchity upazila- under Jhalokati zila, Dighinala, Khagrachhari Sadar, Lakshmichhari, Mahalchhari, Manikchhari, Matiranga, Panchhari, Ramgarh upazila- under Khagrachhari zila, Bajitpur, Bhairab, Karimganj, Katiadi, Kishoreganj Sadar, Kuliar Char, Nikli, upazila- under Kishoreganj zila, Roypur, Ramganj upazila- under Lakshmipur zila, Sreepur upazila- under Magura zila, Shibhalaya upazila- under Manikganj zila, Barlekha, Juri, Kamalganj, Kulaura, Maulvi Bazar Sadar, Rajnagar, upazila-under Maulvi Bazar zila, Gazaria, Lohajang, Munshiganj Sadar, Serajdikhan, Sreenagar, Tongibari upazila-under Munshiganj zila, Araihasar, Bandar, Narayanganj Sadar, Rupganj, Sonargaon upazila- under Narayanganj zila, Belabo, Manohardi, Narsingdi Sadar, Palash, Roypura, Shibpur upazila- under Narsingdi zila, Begumganj, Chatkhil, Companiganj, Kabirhat, Noakhali Sadar, Senbagh, Sonaimuri, upazila- under Noakhali zila, Nesarabad upazila- under Pirojpur zila, Baghai Chhari, Barkal, Belai Chhari, Jurai Chhari, Kaptai, Kawkhali, Langadu, Naniarchar, Rajasthali, Rangamati Sadar upazila- under Rangamati zila, Bhedarganj, Damudya, Gosairhat, Naria, Shariatpur Sadar, Zanjira upazila- under Shariatpur zila, Bishwambarpur, Chhatak, Derai, Dowarabazar, Jagannathpur, Dakshin Sunamganj, Tahirpur upazila- under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Companiganj, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila- under Sylhet zila as shown in Fig. 3.16.

3.1.33 CRU (gridded) rainfall trends for November

Monthly rainfall trends for November is observed decreasing all upazilas of Bangladesh (Fig. 3.17). The decreasing trends have been found statistically significant in Barlekha upazila- under Maulvibazar zila, Baghai Chhari upazila- under Rangamati zila, Bishwambarpur, Chhatak, Dharampasha, Dowarabazar, Jamalganj, Dakshin Sunamganj, Sunamganj Sadar, Tahirpur upazila- under Sunamganj zila, Beani Bazar, Companiganj, Dakshin Surma, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila- under Sylhet zila as shown in Fig. 3.17 and others zilas (upazilas) were not found significant in Bangladesh. Increasing and no trend has not been found in November monthly rainfall during 1971-2015.

3.1.34 Observed (BMD) rainfall trends for December

Monthly rainfall trends for December have increased over Bhola and Cumilla zila (including upazila) as presented in Fig. 3.17. The increasing trends in December monthly rainfall have not been found significant. The decreasing trends in rainfall were not found statistically significant in Bandarban, Barguna, Barishal, Brahmanbaria, Chandpur, Chapainawabganj, Chattogram, Coxsbazar, Dhaka, Faridpur, Feni, Gaibandha, Gazipur, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Joypurhat, Khagrachari, Khulna, Kishoreganj, Kurigram, Kushtia, Lakshmipur, Madaripur, Magura, Manikganj, Meherpur, Moulvibazar, Munshiganj,

Mymensingh, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Netrokona, Noakhali, Pabna, Panchaghar, Patuakhali, Pirojpur, Rajbari, Rajshahi, Rangamati, Rangpur, Satkhira, Shariatpur, Sherpur, Sirajganj, Sunamganj, Sylhet, Thakurgaon. The decreasing trends have been found statistically significant in Bogura, Chuadanga, Dinajpur, Nilphamari, Tangail and Bagerhat as presented in Fig. 3.17 during the period 1971-2015.

3.1.35 Aphrodite (gridded) rainfall trends for December

Rainfall trends for the month of December have been found decreasing all upazilas of Bangladesh except in some pocket upazilas at different places in Bangladesh (Fig.3.18). Some pocket upazilas at different places show increasing trend for the month of December. The increasing trends are over Chitalmari upazila- under Bagerhat zila, Amtali, Barguna Sadar, Taltoli upazila- under Barguna zila, Agailjhara, Banari Para, Gaurnadi upazila- under Barisal zila, Kotali Para, Tungi Para upazila- under Gopalganj zila, Jhalokati Sadar, Rajapur upazila- under Jhalokati zila, Dumki, Galachipa, Patuakhali Sadar upazila- under Patuakhali zila, Kawkhali, Nesarabad upazila- under Pirojpur as shown in Fig. 3.18. The increasing/decreasing trends have not been found significant for the month of December during the period 1971-2015.

3.1.36 CRU (gridded) rainfall trends for December

Monthly rainfall trends for December is observed decreasing all upazilas of Bangladesh except in southeast part upazilas (Fig.3.18). The southeast part upazilas shows increasing trend for the month of December. Rainfall trends have increased over Bandarban Sadar, Lama, Rowangchhari, Ruma upazila- under Bandarban zila, Banshkhali, Chandanaish, Lohagara, Patiya, Satkania upazila- under Chittagong zila, Kutubdia, Pekua upazila- under Cox's Bazar zila, Dighinala, Panchhari upazila- under Khagrachhari zila, Baghai Chhari, Belai Chhari, Kawkhali, Rajasthali, Rangamati Sadar upazila- under Rangamati zila. The increasing/decreasing trends in December monthly rainfall have not been found significant during the period 1971-2015 as shown in Fig. 3.18. However, no trends in December monthly rainfall were observed over Anowara, Boalkhali upazila- under Chittagong zila, Barkal, Jurai Chhari, Langadu, Naniarchar upazila- under Rangamati zila.

3.2 Seasonal trend analysis for observed rainfall, Aphrodite rainfall, CRU rainfall

3.2.1 Observed (BMD) rainfall trends for winter season

Rainfall trends for winter season is noticed increasing over Bogura, Chandpur, Coxsbazar, Khulna, Kushtia, Moulvibazar, Mymensingh, Netrokona, Pabna, Rangamati zila (including upazilas) as shown in Fig. 3.19. The increasing trends in winter season rainfall have not been found significant. Decreasing trends in winter season have observed over Bagerhat, Bandarban, Barguna, Barishal, Bhola, Brahmanbaria, Chapainawabganj, Chattogram, Chuadanga, Cumilla, Dhaka, Dinajpur, Faridpur, Gaibandha, Gazipur, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Joypurhat, Khagrachari, Kishoreganj, Kurigram, Lakshmipur, Lalmonirhat, Madaripur, Magura, Manikganj, Meherpur, Munshiganj, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Nilphamari, Noakhali, Panchaghar, Patuakhali, Pirojpur,

Rajbari, Rajshahi, Satkhira, Shariatpur, Sherpur, Sirajganj, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazilas). The decreasing trends in winter season were found statistically significant in Feni zila (including upazila) as presented in Fig. 3.19. No trend has been found in winter season over Rangpur zila (including upazila) during the period 1971-2015.

3.2.2 Aphrodite (gridded) rainfall trends for winter season

Winter season rainfall trends are observed decreasing in almost all upazilas in Bangladesh except in some upazilas, where the rainfall trends have found increasing for winter season as shown in Fig. 3.19. Winter season rainfall trends is noticed increasing over Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila- under Bandarban zila, Amtali, Barguna Sadar, Taltoli upazila- under Barguna zila, Chandanaish, Lohagara, Satkania upazila- under Chittagong zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila, Fulbaria, Gauripur, Ishwarganj, Muktagachha, Mymensingh Sadar, Nandail, Phulpur, Tarakanda, Trishal upazila-under Mymensingh zila, Netrokona Sadar, Purbadhala upazila-under Netrokona zila, Dumki, Galachipa, Kala Para, Patuakhali Sadar upazila-under Patuakhali zila, Barkal, Belai Chhari, Jurai Chhari, Kaptai, Kawkhali, Rangamati Sadar upazila-under Rangamati zila. The increasing/decreasing trends in winter season rainfall have not been found statistically significant. However, no trends in winter season rainfall during 1971-2015 were observed over Bamna, Betagi upazila-under Barguna zila, Kanthalia upazila-under Jhalokati zila, Bhurungamari upazila-under Kurigram zila, Haluaghat upazila-under Mymensingh zila, Mirzaganj upazila-under Patuakhali zila, Bhandaria upazila-under Pirojpur zila as presented in Fig. 3.19 during the period 1971-2015.

3.2.3 CRU (gridded) rainfall trends for winter season

Rainfall trends for winter season have seen decreasing all upazilas in Bangladesh except in one upazila, where the rainfall trends have found increasing as shown in Fig. in 3.20. Rainfall trends for winter season is observed over Bhurungamari upazila- under Kurigram zila. The increasing/decreasing trends were not found statistically significant. No trend has been found in winter season for Patgram upazila- under Lalmonirhat zila during the period 1971-2015.

3.2.4 Observed (BMD) rainfall trends for pre-monsoon season

Rainfall trends for pre-monsoon season is noticed increasing over Bandarban, Chattogram, Coxsbazar, Habiganj, Khagrachari, Moulvibazar, Patuakhali, Rajshahi, Rangamati, Rangpur, Satkhira, Sunamganj, Sylhet zila (including all upazilas) as shown in Fig. 3.20. The increasing trends in pre-monsoon season rainfall have not been found statistically significant. Decreasing trends in pre-monsoon season have observed over Barguna, Barishal, Bhola, Bogura, Brahmanbaria, Chandpur, Chapainawabganj, Cumilla, Dinajpur, Feni, Gaibandha, Jamalpur, Jashore, Jhalakati, Joypurhat, Khulna, Kishoreganj, Kurigram, Lakshmipur, Madaripur, Magura, Munshiganj, Naogaon, Narail, Natore, Netrokona, Nilphamari, Noakhali, Panchagarh, Shariatpur, Sherpur, Sirajganj, Tangail, Thakurgaon zila (including upazila). The decreasing trends in pre-monsoon season rainfall have been found statistically significant in Bagerhat,

Chuadanga, Dhaka, Faridpur, Gazipur, Gopalganj, Jhenaidah, Kushtia, Manikganj, Meherpur, Narayanganj, Narsingdi, Pabna, Pirojpur, Rajbari zila (including upazila) as presented in Fig. 3.20. However, no trends in pre-monsoon season rainfall were observed over Lalmonirhat, Mymensingh zila (including upazila) during 1971-2015.

3.2.5 Aphrodite (gridded) rainfall trends for pre-monsoon season

Rainfall trends for pre-monsoon season have been found decreasing in more than half portion upazilas of the country except in northern and southeast parts upazilas, where the rainfall trends have seen increasing as shown in Fig. in 3.21. Pre-monsoon season rainfall trends have been found significantly decreasing in Dhamrai, Dohar, Keraniganj, Nawabganj, Savar upazila-under Dhaka zila, Alfadanga, Bhanga, Boalmari, Char Bhadrasan, Faridpur Sadar, Madhukhali, Nagarkanda, Sadarpur, Saltha upazila- under Faridpur zila, Gazipur Sadar upazila, Gopalganj Sadar, Muksudpur upazila, Shaikupa upazila- under Jhenaidah zila, Khoksa, Kumarkhali, Kushtia Sadar, Mirpur upazila- under Kushtia zila, Kalkini, Madaripur Sadar, Rajoir, Shib Char upazila- under Madaripur zila, Magura Sadar, Mohammadpur, Shalikha, upazila- under Magura zila, Daulatpur, Ghior, Harirampur, Manikganj Sadar, Saturia, Shibalaya, Singair upazila-under Manikganj zila, Sreemangal upazila-under Maulvibaza zila, Lohajang, Serajdikhan, Sreenagar, Tongibari upazila- under Munshiganj zila, Narayanganj Sadar upazila, Atgharia, Bera, Bhangura, Chatmohar, Faridpur, Ishwardi, Pabna Sadar, Santhia, Sujanagar upazila-under Pabna zila, Balia Kandi, Goalandaghat, Kalukhali, Pangsha, Rajbari Sadar upazila- under Rajbari zila, Naria, Zanjira upazila- under Shariatpur zila, Chauhali, Shahjadpur upazila- under Sirajganj zila. Pre-monsoon season rainfall trends have increased over Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Rowangchhari, Ruma, Thanchi upazila-under Bandarban zila, Sariaikandi, Shibganj, Sonatola upazila-under Bogra zila, Anowara, Banshkhali, Boalkhali, Chandanaish, Fatikchhari, Hathazari, Lohagara, Patiya, Rangunia, Raozan, Sandwip, Satkania, upazila- under Chittagong zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Teknaf, Ukhia upazila- under Cox's bazar zila, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila-under Dinajpur zila, Gaibandha Sadar, Gobindaganj, Palashbari, Fulchhari, Sadullapur, Saghatta, Sundarganj upazila- under Gaibandha zila, Bahubal, Nabiganj upazila- under Habiganj zila, Bakshiganj, Dewanganj, Islampur, Jamalpur Sadar, Madarganj, Melandaha, upazila- under Jamalpur zila, Bhurungamari, Char Rajibpur, Chilmari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, Ulipur upazila- under Kurigram zila, Aditmari, Hatibandha, Lalmonirhat Sadar, upazila-under Lalmonirhat zila, Sreepur upazila- under Magura zila, Barlekha, Juri, Kamalganj, Kulaura, Maulvi Bazar Sadar, Rajnagar, upazila- under Maulvi Bazar zila, Dhobaura, Gauripur, Haluaghat, Muktagachha, Mymensingh Sadar, Phulpur, Tarakanda, upazila- under Mymensingh zila, Porsha upazila-under Naogaon zila, Atpara, Barhatta, Durgapur, Kalmakanda, Mohanganj, Netrokona Sadar, Purbadhala upazila-under Netrokona zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur, upazila- under Nilphamari zila, Atwari, Boda, Debiganj, Tentulia upazila- under Panchagarh zila, Barkal, Belai Chhari, Jurai Chhari, Kaptai, Kawkhali, Rajasthali, Rangamati Sadar upazila- under Rangamati zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Pirganj, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Debhata, upazila-under Satkhira

zila, Jhenaigati, Nakla, Nalitabari, Sherpur Sadar, Sreebardi upazila-under Sherpur zila, Bishwambarpur, Chhatak, Dera, Dharampasha, Dowarabazar, Jagannathpur, Jamalganj, Dakshin Sunamganj, Tahirpur upazila-under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Companiganj, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila-under Sylhet zila, Haripur, Pirganj, Ranisankail, upazila- under Thakurgaon zila as presented in Fig. 3.21. The increasing trends in pre-monsoon season rainfall have been found significant in Patgram upazila-under Lalmonirhat zila, Panchagarh Sadar upazila, Baliadangi, Thakurgaon Sadar upazila- under Thakurgaon zila. However, no trends in pre-monsoon season rainfall during 1971-2015 were observed over Sitakunda upazila- under Chittagong zila.

3.2.6 CRU (gridded) rainfall trends for pre-monsoon season

Rainfall trends for pre-monsoon season have observed decreasing in almost all upazilas of the country except in northwest upazilas, where the rainfall trends are noticed increasing as shown in Fig. in 3.21. Pre-monsoon season rainfall trends have been found significantly decreasing over Alikadam, Naikhongchhari, Thanchi upazila- under Bandarban zila, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila. Pre-monsoon season rainfall trends is noticed increasing over Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Kaharole, Khansama, Parbatipur upazila- under Dinajpur zila, Bhurungamari, Nageshwari, Phulbari, Rajarhat, Ulipur upazila- under Kurigram zila, Aditmari, Hatibandha, Kaliganj, Lalmonirhat Sadar, Patgram upazila- under Lalmonirhat zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur, upazila- under Nilphamari zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila- under Thakurgaon zila. The increasing trends in pre-monsoon season rainfall have not been found significant during the period 1971-2015 as presented in Fig. 3.21.

3.2.7 Observed (BMD) rainfall trends for monsoon season

Rainfall trends for monsoon season have seen increasing over Bagerhat, Bandarban, Barguna, Brahmanbaria, Chandpur, Coxsbazar, Cumilla, Feni, Gaibandha, Gazipur, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Joypurhat, Khagrachari, Khulna, Kishoreganj, Kurigram, Lakshmipur, Lalmonirhat, Magura, Moulvibazar, Munshiganj, Mymensingh, Narail, Narayanganj, Narsingdi, Netrokona, Nilphamari, Noakhali, Panchagarh, Pirojpur, Rajbari, Rangamati, Rangpur, Satkhira, Shariatpur, Sherpur, Sunamganj, Sylhet, Thakurgaon zila (including upazilas) as shown in Fig. 3.22. The increasing trends in monsoon season rainfall have been found statistically significant in Chattogram, Patuakhali zila (including upazilas). Decreasing trends in monsoon season have observed over Barishal, Bhola, Bogura, Chapainawabganj, Dhaka, Dinajpur, Faridpur, Jhenaidah, Kushtia, Madaripur, Manikganj, Meherpur, Naogaon, Natore, Pabna, Sirajganj, Tangail zila (including upazilas). The decreasing trends in monsoon season rainfall have been found statistically significant in

Chuadanga, Rajshahi zila (including upazilas). However, no trend has not been found during the period.

3.2.8 Aphrodite (gridded) rainfall trends for monsoon season

Rainfall trends for monsoon season have been found increasing in almost all upazilas in the country except in western parts upazila, where the rainfall trend is noticed decreasing as shown in Fig. in 3.22. Rainfall trends have been seen significantly increasing in Fakirhat, Mollahat, Rampal, upazila- under Bagerhat zila, Alikadam, Bandarban Sadar, Lama, Naikhongchhari, Thanchi upazila- under Bandarban zila, Anowara, Banshkhali, Chandanaish, Lohagara, Satkania, upazila- under Chittagong zila, Chakaria, Cox's Bazar Sadar, Kutubdia, Maheshkhali, Pekua, Ramu, Ukhia upazila- under Cox's Bazar zila, Kashiani upazila-under Gopalganj zila, Ajmiriganj, Baniachong, Lakhai, upazila-under Habiganj zila, Keshabpur upazila-under Jessore zila, Batiaghata, Dacope, Dighalia, Dumuria, Phultala, Paikgachha, Rupsa, Terokhada upazila- under Khulna zila, Austagram, Bajitpur, Bhairab, Hossainpur, Itna, Karimganj, Katiadi, Kishoreganj Sadar, Kuliari Char, Mithamain, Nikli, Pakundia, Tarail upazila- under Kishoreganj zila, Dhobaura, Gaffargaon, Gauripur, Haluaghat, Ishwarganj, Muktagachha, Mymensingh Sadar, Nandail, Phulpur, Tarakanda, upazila-under Mymensingh zila, Kalia, Lohagara, Narail Sadar upazila- under Narail zila, Belabo upazila-under Narsingdi zila, Atpara, Barhatta, Durgapur, Kalmakanda, Kendua, Khaliajuri, Madan, Mohanganj, Netrokona Sadar, Purbadhala upazila- under Netrokona zila, Tala upazila-under Satkhira zila, Jhenaigati, Nalitabari, Sherpur Sadar, upazila-under Sherpur zila, Bishwambarpur, Derai, Dharampasha, Jamalganj, Dakshin Sunamganj, Sulla, Sunamganj Sadar, Tahirpur upazila-under Sunamganj zila, Bishwanath upazila- under Sylhet zila as presented in Fig. 3.22. However, no trends in monsoon season rainfall during 1971-2015 were observed over Barkal, Jurai Chhari upazila-under Rangamati zila.

3.2.9 CRU (gridded) rainfall trends for monsoon season

Rainfall trends for Monsoon season have been found decreasing in almost all upazilas of the country except in southwest part upazilas, where the rainfall trends have seen increasing as shown in Fig. in 3.23. Rainfall trends is noticed increasing over Bagerhat Sadar, Chitalmari, Fakirhat, Kachua, Mongla, Morrelganj, Rampal, Sarankhola upazila- under Bagerhat zila, Patharghata upazila- under Barguna zila, Ajmiriganj, Bahubal upazila- under Habiganj zila, Jhikargachha, Keshabpur, Manirampur, Sharsha upazila- under Jessore zila, Batiaghata, Dacope, Dumuria, Koyra, Phultala, Paikgachha, Rupsa, upazila- under Khulna zila, Khaliajuri upazila- under Netrakona zila, Kala Para upazila- under Patuakhali zila, Mathbaria, Nazirpur upazila- under Pirojpur zila, Assasuni, Debhata, Kalaroa, Kaliganj, Satkhira Sadar, Shyamnagar, Tala upazila- under Satkhira zila, Dowarabazar upazila-under Sunamganj zila, Companiganj upazila-under Sylhet zila. The increasing/decreasing trends have not found statistically significant over the year. However, no trends in monsoon season rainfall during 1971-2015 were observed over Abhaynagar upazila- under Jessore zila, Maheshpur upazila-under Jhenaidah zila, Sreemangal upazila- under Maulvibazar zila, Belabo upazila- under Narsingdi zila, Zianagar upazila- under Pirojpur zila, Pirojpur Sadar upazila.

3.2.10 Observed (BMD) rainfall trends for post-monsoon season

Rainfall trends for post-monsoon season have been found increasing over Bagerhat, Barguna, Barishal, Bogura, Chandpur, Chattogram, Feni, Gaibandha, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Khagrachari, Khulna, Kishoreganj, Kurigram, Kushtia, Lakshmipur, Madaripur, Magura, Meherpur, Moulvibazar, Munshiganj, Mymensingh, Narail, Natore, Netrokona, Pabna, Patuakhali, Pirojpur, Rajbari, Rangamati, Rangpur, Satkhira, Shariatpur, Sherpur, Sirajganj zila (including upazilas) as shown in Fig. 3.23. The increasing trends in post-monsoon season rainfall have been found statistically significant in Noakhali zila (including upazilas). Decreasing trends in post-monsoon season have observed over Bandarban, Bhola, Brahmanbaria, Chapainawabganj, Chuadanga, Coxsbazar, Cumilla, Dhaka, Dinajpur, Faridpur, Gazipur, Lalmonirhat, Manikganj, Naogaon, Narayanganj, Narsingdi, Nilphamari, Panchagarh, Rajshahi, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazila). But it is not statistically significant. No trend has been found in post-monsoon season for Joypurhat zila (including upazila) during the period 1971-2015.

3.2.11 Aphrodite (gridded) rainfall trends for post-monsoon season

Rainfall trends for post-monsoon season have been seen increasing in almost all upazilas in the country except in northwest and northeast parts upazilas, where the rainfall trend is noticed decreasing as shown in Fig. in 3.24. Rainfall trends for post-monsoon season have been observed decreasing over Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila- under Chapai Nawabganj zila, Fatikchhari, Hathazari, Raozan upazila-under Chittagong zila, Keraniganj upazila- under Dhaka zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Kaharole, Khansama, Parbatipur upazila-under Dinajpur zila, Ajmiriganj, Bahubal, Baniachong, Nabiganj upazila-under Habiganj zila, Dighinala, Panchhari upazila- under Khagrachhari zila, Bhurungamari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, upazila- under Kurigram zila, Aditmari, Hatibandha, Lalmonirhat Sadar, Patgram upazila- under Lalmonirhat zila, Sreepur upazila- under Magura zila, Barlekha, Juri, Kamalganj, Kulaura, Maulvi Bazar Sadar, Rajnagar, upazila-under Maulvi Bazar zila, Serajdikhan, Sreenagar, Tongibari upazila- under Munshiganj zila, Porsha upazila- under Naogaon zila, Narayanganj Sadar upazila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur, upazila- under Nilphamari zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Paba, upazila-under Rajshahi zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Rangpur Sadar, Taraganj upazila- under Rangpur zila, Bishwambarpur, Chhatak, Derai, Dowarabazar, Jagannathpur, Dakshin Sunamganj, Sunamganj Sadar, upazila- under Sunamganj zila, Balaganj, Beani Bazar, Bishwanath, Companiganj, Dakshin Surma, Fenchuganj, Jaintiapur, Golabganj, Gowainghat, Kanaighat, Sylhet Sadar, Zakiganj upazila- under Sylhet zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila as presented in Fig. 3.24. The increasing/decreasing trends have not found statistically significant for the year 1971-2015. However, no trends in post-monsoon season rainfall during 1971-2015 were observed over Sundarganj upazila- under Gaibandha zila, Khagrachhari Sadar, Matiranga upazila- under Khagrachhari zila, Chilmari,

Ulipur, upazila- under Kurigram zila, Patnitala, Sapahar upazila- under Naogaon zila, Baghai Chhari upazila- under Rangamati zila.

3.2.12 CRU (gridded) rainfall trends for post-monsoon season

Rainfall trends for post-monsoon season is observed increasing in almost all upazilas of the country except in western and northern parts upazilas, where the rainfall trends are noticed decreasing as shown in Fig. in 3.24. Post-monsoon season rainfall trends have been found decreasing over Gabtali, Shibganj, Sonatola upazila-under Bogra zila, Bholahat, Chapai Nawabganj Sadar, Gomastapur, Nachole, Shibganj upazila-under Chapai Nawabganj zila, Chuadanga Sadar, Damurhuda, Jiban Nagar upazila- under Chuadanga zila, Birampur, Birganj, Biral, Bochaganj, Chirirbandar, Dinajpur Sadar, Fulbari, Ghoraghat, Hakimpur, Kaharole, Khansama, Nawabganj, Parbatipur upazila-under Dinajpur zila, Gaibandha Sadar, Gobindaganj, Palashbari, Fulchhari, Sadullapur, Saghatta, Sundarganj upazila-under Gaibandha zila, Bakshiganj, Dewanganj, Islampur, Jamalpur Sadar, upazila-under Jamalpur zila, Bagher Para, Chaugachha, Jessore Sadar, Jhikargachha, Manirampur, Sharsha upazila-under Jessore zila, Jhenaidah Sadar, Kaliganj, Maheshpur, Shailkupa upazila-under Jhenaidah zila, Akkelpur, Joypurhat Sadar, Kalai, Khetlal, Panchbibi upazila-under Joypurhat zila, Hossainpur, Karimganj, Kishoreganj Sadar, Pakundia, Tarail upazila-under Kishoreganj zila, Bhurungamari, Char Rajibpur, Chilmari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, Raumari, Ulipur upazila- under Kurigram zila, Aditmari, Hatibandha, Kaliganj, Lalmonirhat Sadar, Patgram upazila- under Lalmonirha zila, Shalikha upazila-Magura zila, Meherpur Sadar, Meherpur Sadar upazila-under Meherpur zila, Dhobaura, Fulbaria, Gaffargaon, Gauripur, Haluaghat, Ishwarganj, Muktagachha, Mymensingh Sadar, Nandail, Phulpur, Tarakanda, Trishal upazila- under Mymensingh zila, Badalgachhi, Dhamoirhat, Mahadebpur, Niamatpur, Patnitala, Porsha, Sapahar upazila-under Naogaon zila, Atpara, Barhatta, Durgapur, Kalmakanda, Kendua, Khaliajuri, Madan, Mohanganj, Netrokona Sadar, Purbadhala upazila-under Netrokona zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur upazila- under Nilphamari zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila-under Panchagarh zila, Godagari, upazila- under Rajshahi zila, Badarganj, Gangachara, Kaunia, Mitha Pukur, Pirgachha, Pirganj, Rangpur Sadar, Taraganj upazila-under Rangpur zila, Kalaroa upazila-under Sathhira zila, Jhenaigati, Nakla, Nalitabari, Sherpur Sadar, Sreebardi upazila-under Sherpur zila, Bishwambarpur, Chhatak, Derai, Dharampasha, Dowarabazar, Jamalganj, Dakshin Sunamganj, Sunamganj Sadar, Tahirpur upazila- under Sunamganj zila, Companiganj, Sylhet Sadar upazila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila. The increasing/decreasing trends have not found statistically significant for the year 1971-2015. However, no trends in post-monsoon season rainfall during 1971-2015 were noticed over Bogra Sadar upazila, Naogaon Sadar upazila, Satkhira Sadar upazila.

3.3 Annual trend analysis for observed rainfall, Aphrodite rainfall, CRU rainfall

3.3.1 Observed (BMD) rainfall trends for Annual

Rainfall trends for Annual is observed increasing over Bagerhat, Bandarban, Barguna, Brahmanbaria, Chandpur, Coxsbazar, Feni, Gaibandha, Habiganj, Jamalpur, Jashore,

Khagrachari, Khulna, Kishoreganj, Kurigram, Lalmonirhat, Magura, Moulvibazar, Munshiganj, Mymensingh, Narail, Netrokona, Nilphamari, Noakhali, Rangamati, Rangpur, Satkhira, Sherpur zila (including upazilas) as shown in Fig. 3.25. The increasing trends in annual rainfall have been found significant in Chattogram, Patuakhali zila (including upazilas). Decreasing trends in annual rainfall has observed over Barishal, Bhola, Bogura, Chapainawabganj, Cumilla, Dhaka, Dinajpur, Gazipur, Gopalganj, Jhalakati, Jhenaidah, Joypurhat, Kushtia, Lakshmipur, Madaripur, Manikganj, Naogaon, Narayanganj, Narsingdi, Natore, Pabna, Pirojpur, Rajbari, Shariatpur, Sirajganj, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazilas). The decreasing trends in annual rainfall have been found statistically significant in Chuadanga, Faridpur, Meherpur, Rajshahi zila (including upazilas). No trends in annual rainfall during 1971-2015 were observed Panchagarh zila (including upazilas) as presented in Fig. 3.25.

3.3.2 Aphrodite (gridded) rainfall trends for Annual

Rainfall trends for annual is noticed increasing in most of the upazilas in the country except in south to west narrow band parts of the upazilas, where the rainfall trend is observed decreasing as shown in Fig. in 3.25. The increasing trends for annual have been found statistically significant in Alikadam, Bandarban Sadar, Lama, Thanchi upazila-under Bandarban zila, Anowara, Banshkhali, Chandanaish, Lohagara, Satkania, upazila-under Chittagong zila, Chakaria, Kutubdia, Maheshkhali, Pekua, Teknaf, upazila-under Cox's Bazar zila, Tarail upazila-under Kishoreganj zila, Dhobaura, Gauripur, Haluaghat, Muktagachha, Mymensingh Sadar, Phulpur, Tarakanda, upazila-under Mymensingh zila, Atpara, Barhatta, Durgapur, Kalmakanda, Kendua, Madan, Mohanganj, Netrokona Sadar, Purbadhala upazila-under Netrokona zila, Jhenaigati, Nalitabari, Sherpur Sadar, upazila-under Sherpur zila, Dharampasha, Jamalganj, Tahirpur upazila- under Sunamganj zila. Annual rainfall trends have seen decreasing over Babuganj, Hizla, Mehendiganj, Muladi, Wazirpur upazila-under Barisal zila, Bhola Sadar, Burhanuddin, Daulatkhan, upazila- under Bhola zila, Sherpur upazila- under Bogra zila, Chapai Nawabganj Sadar, Gomastapur, Nachole, upazila- under Chapai Nawabganj zila, Alamdanga upazila- under Chuadanga zila, Chaudagram upazila-under Comilla zila, Dhamrai, Dohar, Keraniganj, Nawabganj, Savar upazila- under Dhaka zila, Alfadanga, Bhanga, Boalmari, Char Bhadrasan, Faridpur Sadar, Madhukhali, Nagarkanda, Sadarpur, Saltha upazila-under Faridpur zila, Feni Sadar, Fulgazi, Parshuram, upazila- under Feni zila, Gazipur Sadar upazila, Muksudpur upazila-under Gopalganj zila, Shailkupa upazila-under Jhenaidah zila, Bheramara, Daulatpur, Khoksa, upazila-under Kushtia zila, Kamalnagar, Lakshmipur Sadar upazila, Kalkini, Madaripur Sadar, Rajoir, Shib Char upazila-under Madaripur zila, Mohammadpur upazila- under Magura zila, Daulatpur, Ghior, Harirampur, Manikganj Sadar, Satoria, Shibailaya, Singair upazila-under Manikganjzila, Sreemangal upazila-under Maulvibazar zila, Gangni, Meherpur Sadar, upazila, Lohajang, Serajdikhan, Sreenagar, Tongibari upazila- under Munshiganj zila, Manda, Niamatpur, Patnitala, Sapahar upazila-under Naogaon zila, Narayanganj Sadar zila, Bagati Para, Baraigram, Gurudaspur, Lalpur, Natore Sadar, upazila, Atgharia, Bera, Bhangura, Chatmohar, Faridpur, Ishwardi, Pabna Sadar, Santhia, Sujanagar upazila- under Pabna zila, Atwari, Tentulia upazila-under Rangpur zila, Balia Kandi, Goalandaghat, Kalukhali, Pangsha, Rajbari Sadar upazila, Bagha, Charghat,

Durgapur, Godagari, Mohanpur, Paba, Puthia, Tanore upazila- under Rajshahi zila, Baghai Chhari upazila-under Rangamati zila, Bhedarganj, Damudya, Gosairhat, Naria, Shariatpur Sadar, Zanjira upazila- under Shariatpur zila, Belkuchi, Chauhali, Shahjadpur, Tarash, upazila-under Sirajganj zila as presented in Fig. 3.25. But it is not statistically significant. No trends in annual rainfall during 1971-2015 were noticed over Shibganj upazila- under Ch. Nawabganj zila, Kamalganj, Maulvi Bazar Sadar upazila.

3.3.3 CRU (gridded) rainfall trends for Annual

Rainfall trends for annual have been found decreasing for all upazilas in the country. Annual rainfall trend has not found statistically significant in Bangladesh during the period 1971-2015 as shown in Fig. 3.26.

3.4 Monthly trend analysis for observed maximum temperature, CRU maximum temperature

3.4.1 Observed (BMD) maximum temperature for January

Mean maximum temperature for the month of January have shown significantly increasing trends over Chattogram zila (including upazilas) during the period 1971-2015 as shown in Fig. 3.27. Mean maximum temperature trends for January were significantly decreasing in Bhola, Bogura, Chapainawabganj, Chuadanga, Cumilla, Dhaka, Dinajpur, Feni, Gaibandha, Gazipur, Jamalpur, Jhenaidah, Joypurhat, Khulna, Kishoreganj, Kurigram, Kushtia, Lalmonirhat, Madaripur, Magura, Manikganj, Meherpur, Mymensingh, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Netrokona, Nilphamari, Pabna, Panchaghar, Rajbari, Rajshahi, Rangpur, Satkhira, Shariatpur, Sherpur, Sirajganj, Tangail, Thakurgaon zila (including upazilas) as presented in Table 1.7.

3.4.2 CRU maximum temperature for January

January mean maximum temperature trends have increased towards northern part upazilas, half portions of the country. Central to south part upazilas mean maximum temperatures have been seen decreasing trend as shown in Fig. 3.27. Mean maximum temperature trends for January were significantly decreasing in Naikhongchhari upazila- under Bandarban zila, Cox's Bazar Sadar, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila as shown in Table 1.9.

3.4.3 Observed (BMD) maximum temperature for February

Mean maximum temperatures for the month of February have shown significantly increasing trends in Bagerhat, Bandarban, Barguna, Chandpur, Chattogram, Cox's Bazar, Habiganj, Jhalakati, Khagrachari, Lakshmipur, Moulvibazar, Munshiganj, Noakhali, Patuakhali, Pirojpur, Shariatpur, Sunamganj and Sylhet zila (including upazilas) during the period 1971-2015 as shown in Fig. 3.28. Mean maximum temperature trends for February have seen decreasing but not significant in Dinajpur, Kurigram, Lalmonirhat, Mymensingh, Nilphamari, Panchaghar, Rangpur, Satkhira, Thakurgaon zila (including upazilas) as given in Table 1.9.

3.4.4 CRU maximum temperature for February

February mean maximum temperatures were seen increasing all upazila of Bangladesh but it is not significant as shown in Fig. 3.28 during the period 1971-2015.

3.4.5 Observed (BMD) maximum temperature for March

March in mean maximum temperatures is observed decreasing trend over northwest and southwest part upazilas in Bangladesh and rest of parts upazilas have seen increasing trend as shown in Fig. 3.29. Mean maximum temperatures for the month of March have shown significantly increasing trends in Bandarban, Barguna, Chandpur, Chattogram, Coxsbazar, Noakhali, Patuakhali, Pirojpur, Rangamati, Sylhet zila (including upazilas) during the period 1971-2015. Mean maximum temperature trends for March have found significantly decreasing in Dinajpur, Mymensingh, Rangpur as given in Table 1.7.

3.4.6 CRU maximum temperature for March

March in mean maximum temperatures have observed increasing trend in almost all upazilas in Bangladesh except in southeast parts upazilas, where the mean maximum temperature has seen decreasing trend as shown in Fig. 3.29. Mean maximum temperature trends for March have increased significantly in Patgram upazila- under Lalmonirhat zila as shown in Fig. 3.29. Similarly, mean maximum temperature trends for March have decreased significantly over Teknaf, Ukhia upazila under Cox's Bazar zila as given in Table 1.9.

3.4.7 Observed (BMD) maximum temperature for April

April in mean maximum temperatures is observed decreasing trend over northwest part upazilas in Bangladesh and rest of the parts (southern) upazilas have seen increasing trend as shown in Fig. 3.30. Mean maximum temperatures for the month of April have shown significantly increasing trends in Bagerhat, Bandarban, Barguna, Barishal, Chandpur, Chattogram, Cox's Bazar, Jhalakati, Lakshmipur, Noakhali, Patuakhali, Pirojpur, Rangamati, Shariatpur zila (including upazila) during the period 1971-2015. Mean maximum temperature trends for April have decreased significantly in Rangpur zila (including upazila) as given in Table 1.7.

3.4.8 CRU maximum temperature for April

April in mean maximum temperatures have seen increasing trend all upazilas in Bangladesh except one upazila of southeast parts, where the mean maximum temperature trend has decreased as shown in Fig. 3.30. Mean maximum temperature trends for April have decreased over Teknaf, upazila under Cox's Bazar zila as given in Table 1.9. The increasing/decreasing trends of mean maximum temperature have not been found significant during the period 1971-2015.

3.4.9 Observed (BMD) maximum temperature for May

May in mean maximum temperatures have seen increasing trend all upazilas in Bangladesh

as shown in Fig. 3.31. Mean maximum temperatures for the month of May have shown significantly increasing trends in Bagerhat, Bandarban, Barguna, Barishal, Bhola, Bogura, Brahmanbaria, Chandpur, Chapainawabganj, Chattogram, Chuadanga, Coxsbazar, Cumilla, Dhaka, Faridpur, Gaibandha, Gazipur, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Khagrachari, Khulna, Kishoreganj, Kushtia, Lakshmipur, Madaripur, Magura, Manikganj, Meherpur, Munshiganj, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Netrokona, Noakhali, Pabna, Patuakhali, Pirojpur, Rajbari, Rangamati, Shariatpur, Sherpur, Sirajganj, Sunamganj, Sylhet, Tangail zila (including upazilas) as given in Table 1.7.

3.4.10 CRU maximum temperature for May

May in mean maximum temperatures have found increasing trend in all upazilas in Bangladesh as shown in Fig. 3.31. Mean maximum temperature trends for May have increased significantly in northwest upazilas during the period 1971-2015 as presented in Table 1.9

3.4.11 Observed (BMD) maximum temperature for June

Mean maximum temperatures for the month of June is observed increasing trend all upazilas in Bangladesh as shown in Fig. 3.32. Mean maximum temperatures for the month of June have shown significantly increasing trends in Bagerhat, Bandarban, Barguna, Barishal, Bhola, Bogura, Brahmanbaria, Chandpur, Chapainawabganj, Chattogram, Chuadanga, Coxsbazar, Cumilla, Dhaka, Dinajpur, Faridpur, Gaibandha, Gazipur, Gopalganj, Habiganj, Jamalpur, Jashore, Jhalakati, Jhenaidah, Joypurhat, Khagrachari, Khulna, Kishoreganj, Kurigram, Kushtia, Lakshmipur, Madaripur, Magura, Manikganj, Meherpur, Munshiganj, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Netrokona, Nilphamari, Noakhali, Pabna, Panchagarh, Patuakhali, Pirojpur, Rajbari, Rajshahi, Rangamati, Shariatpur, Sherpur, Sirajganj, Sunamganj, Sylhet, Tangail, Thakurgaon zila (including upazilas) as given in Table 1.7.

3.4.12 CRU maximum temperature for June

June in mean maximum temperatures trend have found increasing in all upazilas in Bangladesh as shown in Fig. 3.32. Mean maximum temperature trends for June have not found significant during the period 1971-2015 as presented in Table 1.9

3.4.13 Observed (BMD) maximum temperature for July

Mean maximum temperatures for the month of July have seen significantly increasing trend in all upazilas in Bangladesh except one (Feni) zila, where the mean maximum temperatures have not found significant as shown in Fig. 3.33.

3.4.14 CRU maximum temperature for July

July in mean maximum temperatures trends have increased in all upazilas in Bangladesh as shown in Fig. 3.33. Mean maximum temperature trends for July have not found significant during the period 1971-2015 as presented in Table 1.9

3.4.15 Observed (BMD) maximum temperature for August

August in mean maximum temperatures trend have increased significantly in almost all zila (including upazilas) in Bangladesh except one zila (Mymensingh), where the mean maximum temperatures have seen decreasing trend but not significant as shown in Fig. 3.34. Mean maximum temperature trends for August have not found significant in Feni and Rangpur zila (including upazilas) as presented in Table 1.7.

3.4.16 CRU maximum temperature for August

August in mean maximum temperature trends have seen increasing in all upazilas in Bangladesh as shown in Fig. 3.34. The increasing trends have been found significant in Jashore, Barishal, Chittagong, Cox's Bazar and Bandarban zilas in most of the upazilas presented in Table 1.9.

3.4.17 Observed (BMD) maximum temperature for September

September in mean maximum temperatures trend have seen significantly increasing in all zila (including upazilas) in Bangladesh except two zilas (Feni and Mymensingh), where the mean maximum temperatures have not found significant as shown in Fig. 3.35. The increasing trends of mean maximum temperature for September have presented in Table 1.7.

3.4.18 CRU maximum temperature for September

September in mean maximum temperature trends have found increasing in all upazilas in Bangladesh as shown in Fig. 3.35. The increasing trends have been found significant over northern and southeast upazilas and non-significant is found over southwest part upazilas. The increasing trends have presented in Table 1.9.

3.4.19 Observed (BMD) maximum temperature for October

October in mean maximum temperatures trend is observed significantly increasing in almost all zila (including upazilas) in Bangladesh except in some zilas, where the mean maximum temperatures have seen increasing but not significant as shown in Fig. 3.36. The increasing trends of mean maximum temperature for October have presented in Table 1.7.

3.4.20 CRU maximum temperature for October

October in mean maximum temperature trends have seen increasing trend in almost all upazilas in Bangladesh except in southeast part upazilas, where the mean maximum temperature trends have found decreasing as shown in Fig. 3.36. October mean maximum temperature trends have not found significant during the period 1971-2015. The decreasing trends of mean maximum temperature have shown over Naikhongchhari upazila- under Bandarban zila, Cox's Bazar Sadar, Maheshkhali, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila as presented in Table 1.9.

3.4.21 Observed (BMD) maximum temperature for November

Mean maximum temperatures trend for November is observed significantly increasing in almost all zila (including upazilas) in Bangladesh except in two zila (Cumilla and Satkhira), where the mean maximum temperatures have seen decreasing trend but not significant as shown in Fig. 3.37. The increasing trends of mean maximum temperature for November have presented in Table 1.7.

3.4.22 CRU maximum temperature for November

November in mean maximum temperature trends have found increasing in almost all upazilas in Bangladesh except in one upazila (Ukhia, Cox's Bazar), where the mean maximum temperature has seen decreasing trend but not significant as shown in Fig. 3.37. No trend has been found over Cox's Bazar Sadar upazila as presented in Table 1.9.

3.4.23 Observed (BMD) maximum temperature for December

Mean maximum temperatures for December have seen increasing trend over southern part upazilas and decreasing trend over northern part upazilas in Bangladesh as shown in Fig. 3.38. Mean maximum temperatures trend for December have found significantly increasing in Chattogram, Coxsbazar, Patuakhali, Rangamati, Sylhet zila (including upazilas). Similarly, mean maximum temperatures for December have seen significantly decreasing in Dinajpur and Satkhira zila (including upazilas). The increasing/decreasing trends of mean maximum temperature for December have presented in Table 1.7.

3.4.24 CRU maximum temperature for December

December in mean maximum temperature trends have found increasing in almost all upazilas in Bangladesh except in southeast part upazilas, where the mean maximum temperature trends have seen decreasing but not significant as shown in Fig. 3.38. Mean maximum temperature trends for December have decreased over Naikhongchhari upazila- under Bandarban zila, Cox's Bazar Sadar, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila. No trend has been found over Alikadam upazila- under Bandarban as presented in Table 1.9.

3.5 Seasonal trend analysis for observed maximum temperature, CRU maximum temperature

3.5.1 Observed (BMD) maximum temperature for winter season

Mean maximum temperatures for winter season have found decreasing trend in almost all upazilas in Bangladesh except in northeast, southeast parts and some pockets upazilas, where the winter season mean maximum temperature trend has seen increasing as shown in Fig. 3.39. The trends of mean maximum temperatures are observed significantly increasing in Bandarban, Chattogram, Coxsbazar, Moulvibazar, Patuakhali, Rangamati, Sylhet zila (including upazilas). The trends of mean minimum temperature have noticed significantly decreasing in Dinajpur, Gaibandha, Joypurhat, Kurigram, Lalmonirhat, Mymensingh, Naogaon, Nilphamari, Pabna,

Panchaghar, Rangpur, Satkhira, Tangail, Thakurgaon zila (including upazilas). However, no trend has been found over Brahmanbaria zila (including upazila) as presented Table 1.8.

3.5.2 CRU maximum temperature for winter season

Winter season in mean maximum temperature trends are observed increasing in almost all upazilas in Bangladesh except in southeast upazilas, where the mean maximum temperature trends have noticed decreasing but not significant as shown in Fig. 3.39. Mean maximum temperature trends have decreased over Alikadam, Lama, Naikhongchhari, Ruma upazila- under Bandarban zila, Chakaria, Cox's Bazar Sadar, Maheshkhali, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila. Winter season in mean maximum temperature trends have found significantly increasing in Bochaganj, Kaharole, Khansama upazila- under Dinajpur zila, Bhurungamari, Kurigram Sadar, Nageshwari, Phulbari, Rajarhat, upazila- under Kurigram zila, Aditmari, Hatibandha, Kaliganj, Lalmonirhat Sadar, Patgram upazila- under Lalmouirhat zila, Dimla, Domar, Jaldhaka, Kishoreganj, Nilphamari Sadar, Saidpur, upazila- under Nilphamari zila, Atwari, Boda, Debiganj, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Gangachara, Kaunia, Taraganj upazila- under Rangpur zila, Baliadangi, Haripur, Pirganj, Ranisankail, Thakurgaon Sadar upazila as presented in Table 1.10.

3.5.3 Observed (BMD) maximum temperature for pre-monsoon season

Mean maximum temperatures trend for Pre-monsoon season is observed increasing in almost all upazilas in Bangladesh except in northwest upazilas, where the pre-monsoon season mean maximum temperature trend has seen decreasing as shown in Fig. 3.40. The trends of mean maximum temperatures for pre-monsoon season have found significantly increasing in Bagerhat, Bandarban, Barguna, Barishal, Bhola, Brahmanbaria, Chandpur, Chattogram, Chuadanga, Coxsbazar, Dhaka, Faridpur, Gopalganj, Habiganj, Jhalakati, Khagrachari, Lakshmipur, Madaripur, Meherpur, Munshiganj, Narayanganj, Narsingdi, Noakhali, Patuakhali, Pirojpur, Rangamati, Shariatpur, Sunamganj, Sylhet zila (including upazila). Mean maximum temperatures trends have seen significantly decreasing in Rangpur zila (including upazila) as presented Table 1.8.

3.5.4 CRU maximum temperature for pre-monsoon season

Pre-monsoon season in mean maximum temperature trends have observed increasing in almost all upazilas in Bangladesh except in southeast upazilas, where the mean maximum temperature trends is noticed decreasing but not significant as shown in Fig. 3.40. Mean maximum temperature trends have seen decreasing in Alikadam, Naikhongchhari, Thanchi upazila- under Bandarban zila, Cox's Bazar Sadar, Ramu, Teknaf, Ukhia upazila- under Cox's Bazar zila as presented in Table 1.10.

3.5.5 Observed (BMD) maximum temperature for monsoon season

Monsoon season in mean maximum temperatures trends have found significantly increasing all zilas (including upazilas) in Bangladesh except in one zila (Mymensingh), where the mean

maximum temperatures trends have seen increasing but not significant as shown in Fig. 3.41. The increasing trends have been presented Table 1.8.

3.5.6 CRU maximum temperature for monsoon season

Monsoon season in mean maximum temperature trends are observed significantly increasing all upazilas in Bangladesh as shown in Fig. 3.41. The increasing trends have been presented in Table 1.10.

3.5.7 Observed (BMD) maximum temperature for post-monsoon season

Post-monsoon season in mean maximum temperatures trends have noticed significantly increasing almost all zilas (including upazilas) in Bangladesh except in one zila (Satkhira), where the mean maximum temperatures trends have seen decreasing but not significant as shown in Fig. 3.42. The increasing/decreasing trends have been presented in Table 1.10.

3.5.8 CRU maximum temperature for post-monsoon season

Post-monsoon season in mean maximum temperature trends have found increasing all upazilas in Bangladesh except in southeast part upazilas, where the post-monsoon season in mean maximum temperature is noticed decreasing as shown in Fig. 3.42. Mean maximum temperature trends for post-monsoon season have decreased over Naikhongchhari upazila-under Bandarban, Cox's Bazar Sadar, Ramu, Teknaf, Ukhia upazila-under Cox's Bazar zila. The increasing/decreasing trends have not found significant and have been presented in Table 1.10.

3.6 Annual trend analysis for observed maximum temperature, CRU maximum temperature

3.6.1 Observed (BMD) maximum temperature for annual

Annual mean maximum temperatures trends have increased in almost all zilas (including upazilas) in Bangladesh except some zilas, where the annual mean maximum temperatures trends have decreased as shown in Fig. 3.43. Annual mean maximum temperatures trends have decreased over Mymensingh, Rangpur, Satkhira zilas (including upazila) as presented in Table 1.7. The increasing trends have been found significant in southern part and northeast part zilas.

3.6.2 CRU maximum temperature for annual

Annual season mean maximum temperature trends have noticed increasing all upazilas in Bangladesh as shown in Fig. 3.43. The increasing trends have been found significant in northern part and in some pockets upazilas of southwest part which is presented in Table 1.9.

3.7 Monthly trend analysis for observed minimum temperature, CRU minimum temperature

3.7.1 Observed (BMD) minimum temperature for January

Mean minimum temperatures for the month of January have shown decreasing trends over west, northwest as well as southeast parts zilas (including upazilas) in Bangladesh except in central to northeast parts zilas (including upazilas) where the mean minimum temperature trend has seen decreasing during the period 1971-2015 as shown in Fig. 3.44. Mean minimum temperature trends for January have found significantly decreasing in Bandarban, Chattogram, Chuadanga, Khagrachari, Meherpur, Rajshahi, Rangamati. Mean minimum temperatures for January showed significantly increasing trends over Bagerhat, Dhaka, Sylhet as presented in Table 1.11.

3.7.2 CRU minimum temperature for January

January in mean minimum temperatures trend have observed decreasing in almost all upazilas in Bangladesh except in northwest and southeast part upazilas, where the mean minimum temperatures have seen increasing as shown in Fig. 3.44. The increasing/decreasing trends for January mean minimum temperature have not been found significant as presented in Table 1.13. However, Shajahanpur upazila- under Bogra zila, Madarganj upazila- under Jamalpur zila, Naldanga upazila- under Natore zila, Charchat upazila- under Rajshahi zila, Kaptai upazila, Rangamati zila showed no trends in mean minimum temperature for January during 1971-2015.

3.7.3 Observed (BMD) minimum temperature for February

Mean minimum temperatures trends for the month of February have shown increasing in almost all zila (including upazilas) in Bangladesh except in southeast part zilas (including upazilas) where the mean minimum temperature has seen decreasing during the period 1971-2015 as shown in Fig. 3.45. Mean minimum temperature trends for February have found significantly decreasing in Rangamati zila (including upazilas) as presented in Table 1.11. The increasing trends have been found significant in almost all zilas.

3.7.4 CRU minimum temperature for February

February in mean minimum temperature trends have observed increasing all upazilas in Bangladesh as shown in Fig. 3.45. The increasing trends for February mean minimum temperature have been found significant in Cox's Bazar and Bandarban upazilas during 1971-2015 as presented in Table 1.13.

3.7.5 Observed (BMD) minimum temperature for March

Mean minimum temperatures for the month of March have shown increasing trends in almost all zila (including upazilas) in Bangladesh except in southeast part zilas (including upazilas) where the mean minimum temperature has observed decreasing during the period 1971-2015 as shown in Fig. 3.46. Mean minimum temperature trends for March have found significantly

decreased in Rangamati zila (including upazila) as presented in Table 1.11. The increasing/decreasing trends have been found significant.

3.7.6 CRU minimum temperature for March

March in mean minimum temperature trends have seen increasing all upazilas in Bangladesh as shown in Fig. 3.46. The increasing trends for March in mean minimum temperature have been found significant in northwest and southeast part upazilas during 1971-2015 as presented in Table 1.13.

3.7.7 Observed (BMD) minimum temperature for April

Mean minimum temperatures for the month of April have shown increasing trends in almost all zila (including upazilas) in Bangladesh except in some zilas (including upazilas) where the mean minimum temperature has seen decreasing during the period 1971-2015 as shown in Fig. 3.47. Mean minimum temperature trends for April have found decreasing over Cumilla, Dinajpur, Kurigram, Lalmonirhat, Moulvibazar, Nilphamari, Panchagarh, Rajshahi, Rangamati, Tangail, Thakurgaon zila (including upazila) but not significant as presented in Table 1.11.

3.7.8 CRU minimum temperature for April

April in mean minimum temperature trends have observed increasing all upazilas in Bangladesh as shown in Fig. 3.47. The increasing trends for April mean minimum temperature have been found significant in northwest and southeast upazilas during 1971-2015 as presented in Table 1.13.

3.7.9 Observed (BMD) minimum temperature for May

Mean minimum temperatures for the month of May have shown increasing trends in almost all zila (including upazilas) in Bangladesh except in southeast part zilas (including upazilas) where the mean minimum temperature has noticed decreasing during the period 1971-2015 as shown in Fig. 3.48. Mean minimum temperature trends for May have found decreasing in Rangamati zila (including upazilas) but not significant as presented in Table 1.11.

3.7.10 CRU minimum temperature for May

Mean minimum temperature trends for May have found increasing all upazilas in Bangladesh as shown in Fig. 3.48. The increasing trends for May mean minimum temperature have been found significant all upazilas during 1971-2015 as presented in Table 1.13.

3.7.11 Observed (BMD) minimum temperature for June

Mean minimum temperatures for the month of June have shown significantly increasing trends in almost all zila (including upazilas) in Bangladesh except in some zilas (including upazilas)

where the mean minimum temperature has seen decreasing trend during the period 1971-2015 as shown in Fig. 3.49. Mean minimum temperature trends have found non-significant decreasing in Rangamati and Rangpur zila (including upazilas) as presented in Table 1.11.

3.7.12 CRU minimum temperature for June

Mean minimum temperature trends for June have seen increasing all upazilas in Bangladesh as shown in Fig. 3.49. The increasing trends in mean minimum temperature have been found significant all upazilas during 1971-2015 as presented in Table 1.13.

3.7.13 Observed (BMD) minimum temperature for July

Mean minimum temperatures for the month of July have shown significantly increasing trends in almost all zila (including upazilas) in Bangladesh except in southeast zilas (including upazilas) where the mean minimum temperature has seen decreasing during the period 1971-2015 as shown in Fig. 3.50. Mean minimum temperature trends have found no-significant decreasing in Rangamati zila (including upazilas) as presented in Table 1.11.

3.7.14 CRU minimum temperature for July

Mean minimum temperature trends for the month of July have observed increasing all upazilas in Bangladesh as shown in Fig. 3.50. The increasing trends for July in mean minimum temperature have been found significant all upazilas during 1971-2015 as presented in Table 1.13.

3.7.15 Observed (BMD) minimum temperature for August

Mean minimum temperatures for the month of August have shown significantly increasing trends in almost all zila (including upazilas) in Bangladesh except in southeast part zilas (including upazilas) where the mean minimum temperature has seen decreasing during the period 1971-2015 as shown in Fig. 3.51. Mean minimum temperature trends for August have observed decreasing in Rangamati zila (including upazilas) but not significant as presented in Table 1.11.

3.7.16 CRU minimum temperature for August

Mean minimum temperature trends for the month of August have seen increasing all upazilas in Bangladesh as shown in Fig. 3.51. The increasing trends for August mean minimum temperature have been found significant almost all upazilas during 1971-2015 as presented in Table 1.13.

3.7.17 Observed (BMD) minimum temperature for September

Mean minimum temperatures for the month of September have shown significantly increasing trends in almost all zila (including upazilas) in Bangladesh except in southeast part zilas

(including upazilas) where the mean minimum temperature has seen decreasing during the period 1971-2015 as shown in Fig. 3.52. Mean minimum temperature trends for the month of September have found significantly decreasing in Rangamati zila (including upazilas) as presented in Table 1.11.

3.7.18 CRU minimum temperature for September

Mean minimum temperature trends for the month of September have noticed increasing all upazilas in Bangladesh as shown in Fig. 3.52. The increasing trends for September in mean minimum temperature have been found significant all upazilas during 1971-2015 as presented in Table 1.13.

3.7.19 Observed (BMD) minimum temperature for October

Mean minimum temperatures for October have shown increasing trends in almost all zila (including upazilas) in Bangladesh except in west, northwest and southeast part zilas (including upazilas) where the mean minimum temperature has seen decreasing trend during the period 1971-2015 as shown in Fig. 3.53. Mean minimum temperature trends for the month of October have found significantly decreasing in Rangamati zila (including upazilas) as presented in Table 1.11.

3.7.20 CRU minimum temperature for October

Mean minimum temperature trends for October have observed increasing all upazilas in Bangladesh except in some pockets upazilas, where the mean minimum temperature trends have seen decreasing as shown in Fig. 3.53. The increasing trends for October in mean minimum temperature have not been found significant all upazilas during 1971-2015 as presented in Table 1.13. However, Rampal upazila- under Bagerhat zila, Dumuria, Phultala, Rupsa upazila- under Khulna zila, Kalia, Narail Sadar upazila, Zianagar, Pirojpur Sadar upazila showed no trend in mean minimum temperature.

3.7.21 Observed (BMD) minimum temperature for November

Mean minimum temperatures for November have shown increasing trends in almost all zila (including upazilas) in Bangladesh except in some zilas (including upazilas) where the mean minimum temperature has seen decreasing trend during the period 1971-2015 as shown in Fig. 3.54. Mean minimum temperature trends for the month of November have found significantly decreasing in Bandarban, Chattogram, Chuadanga, Khagrachari and Rangamati zila (including upazilas) as presented in Table 1.11. However, no trends in mean minimum temperature for November were found over Bhola zila (including upazilas) during 1971-2015.

3.7.22 CRU minimum temperature for November

Mean minimum temperature trends for November have observed decreasing in almost all upazilas in Bangladesh except in northwest part upazilas, where the mean minimum

temperature trends have seen increasing as shown in Fig. 3.54. The increasing/decreasing trends for November mean minimum temperature have not been found significant all upazilas during 1971-2015 as presented in Table 1.13. However, Ramu upazila- under Cox's Bazar zila, Ghoraghat upazila- under- Dinajpur zila, Mitha Pukur, Pirgachha upazila- under-Rangpur zila showed no trend in mean minimum temperature.

3.7.23 Observed (BMD) minimum temperature for December

Mean minimum temperatures for December have shown increasing trends in almost all zila (including upazilas) in Bangladesh except in southeast zilas (including upazilas) where the mean minimum temperature has noticed decreasing during the period 1971-2015 as shown in Fig. 3.55. Mean minimum temperature trends for the month of December have found significantly decreasing in Rangamati zila (including upazilas) as presented in Table 1.11. However, no trends in mean minimum temperature for November were found over Rajshahi zila (including upazila) during 1971-2015.

3.7.24 CRU minimum temperature for December

Mean minimum temperature trends for December have noticed increasing all upazilas in Bangladesh as shown in Fig. 3.55. The increasing trends for southeast part upazilas have been found significant only during 1971-2015 as presented in Table 1.13.

3.8 Seasonal trend analysis for observed minimum temperature, CRU minimum temperature

3.8.1 Observed (BMD) minimum temperature for winter season

Increasing trends in mean minimum temperature for Winter season have been observed in almost all zila (including upazilas) in Bangladesh except in southeast and some pockets zila, where the mean minimum temperature has seen decreasing as shown in Fig. 3.56. Mean minimum temperature trends for Winter season have found significantly decreasing in Khagrachari, Rangamati zila (including upazilas) as presented in Table 1.12. Winter season in mean minimum temperature trends have observed non-significantly decreasing in Bandarban, Chattogram, Chuadanga, Jashore, Meherpur, Noakhali, Patuakhali, Rajshahi, Tangail.

3.8.2 CRU minimum temperature for winter season

Mean minimum temperature trends for Winter season have noticed increasing in almost all zila (including upazilas) in Bangladesh except in southern part upazilas, where the mean minimum temperature has seen decreasing as shown in Fig. 3.56. Mean minimum temperature trends for Winter season have decreased over Morrelganj upazila- under Bagerhat zila, Amtali, Bamna, Barguna Sadar, Betagi, Patharghata upazila- under Barguna, Char Fasson, Lalmohan upazila- under Bhola zila, Jhalokati Sadar, Kanthalia, Rajapur upazila- under Jhalokati zila, Dashmina, Galachipa, Mirzaganj, Patuakhali Sadar, upazila- under Patuakhali zila, Bhandaria, Zianagar, Mathbaria upazila- under Pirojpur zila as presented in Table 1.14. However, no trends in mean minimum temperature for Winter season during 1971-2015 were found over Mongla,

Sarankhola, upazila- under Bagerhat zila, Nalchity upazila- Jhalokati zila, Dumki, Rangabali upazila- under Patuakhali zila.

3.8.3 Observed (BMD) minimum temperature for pre-monsoon season

Significantly increasing trends in mean minimum temperature for Pre-monsoon season have been observed in almost all zila (including upazilas) in Bangladesh except in two zilas (Nilphamari, Rangamati), where the mean minimum temperature has seen decreasing trend as shown in Fig. 3.57. Mean minimum temperature trends for Pre-monsoon season have noticed decreasing in Nilphamari, Rangamati zila (including upazilas) as presented in Table 1.12.

3.8.4 CRU minimum temperature for pre-monsoon season

Mean minimum temperature trends for Pre-monsoon season have been noticed significantly increasing in Bangladesh shown in Fig. 3.57. The increasing trends have been presented in Table 1.14.

3.8.5 Observed (BMD) minimum temperature for monsoon season

Significantly increasing trends in mean minimum temperature for Monsoon season have been observed in almost all zila (including upazila) in Bangladesh except in southeast zila (including upazilas), where the mean minimum temperature has seen decreasing as shown in Fig. 3.58. Mean minimum temperature trends have noticed decreasing over Rangamati zila (including upazilas) as presented in Table 1.12.

3.8.6 CRU minimum temperature for monsoon season

Mean minimum temperature trends for Monsoon season have been noticed significantly increasing in Bangladesh shown in Fig. 3.58. The increasing trends have been presented in Table 1.14.

3.8.7 Observed (BMD) minimum temperature for post-monsoon season

Decreasing trends in mean minimum temperature for Post-Monsoon season have been observed in almost all zila (including upazilas) in Bangladesh except in southwest, northeast and different places zila (including upazilas), where the mean minimum temperature has seen increasing trend as shown in Fig. 3.59. Mean minimum temperature trends for Post-monsoon season have found significantly increasing in Bagerhat, Chandpur, Sylhet zila (including upazila) as presented in Table 1.12.

3.8.8 CRU minimum temperature for post-monsoon season

Mean minimum temperature trends for Post-monsoon season have been noticed increasing in almost all upazilas in Bangladesh except around central parts upazilas, where the mean minimum temperature trends have seen decreasing trend as shown in Fig. 3.59. The

increasing/decreasing trends have not found significant. However, no trends in mean minimum temperature for post-monsoon during 1971-2015 were found over Mongla, upazila- under Bagerhat zila, Bahubal upazila- under Habiganj zila, Gurudaspur upazila- under Natore zila, Atpara, Kalmakanda, Kendua upazila- under Netrakona zila, Jamalganj, Dakshin Sunamganj upazila- under Sunamganj, Dakshin Surma, Fenchuganj upazila- under Sylhet zila presented in Table 1.14.

3.9 Annual trend analysis for observed minimum temperature, CRU minimum temperature

3.9.1 Observed minimum temperature for annual

Annual in mean minimum temperatures trends have observed significantly increasing in almost all zilas (including upazilas) in Bangladesh except in some zilas, where the annual mean minimum temperatures trends have seen decreasing as shown in Fig. 3.60. Annual in mean maximum temperatures trends have noticed decreasing over Chattogram, Chuadanga, Khagrachari zilas (including upazilas) as presented in Table 1.11.

3.9.2 CRU minimum temperature for annual

Annual in mean minimum temperature trends have observed significantly increasing all upazilas in Bangladesh as shown in Fig. 3.60. The increasing trends have been presented in Table 1.12.

3.10 Monthly trend analysis for observed maximum relative humidity

3.10.1 Observed (BMD) maximum relative humidity for January

Mean maximum humidity trends for the month of January have observed increasing in almost all zila in the country except in Cumilla, Dhaka, Lalmonirhat and Rangpur. The increasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.61. The mean maximum humidity trend has seen decreasing but not significant in Cumilla, Dhaka, Lalmonirhat, Rangpur zila (including upazilas) as presented in Table 1.15.

3.10.2 Observed (BMD) maximum relative humidity for February

Mean maximum humidity trends for the month of February have observed increasing in almost all zila in Bangladesh except in Cumilla, Dhaka, Gazipur and Narayanganj. The increasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.61. The mean maximum humidity trend has seen significantly decreasing in Dhaka only. The mean maximum humidity trend has found non-significantly decreasing in Cumilla, Lalmonirhat, Rangpur zila (including upazila) as presented in Table 1.15.

3.10.3 Observed (BMD) maximum relative humidity for March

Mean maximum humidity trends for the month of March have increased in almost all zilas in the country except in Cumilla, Dhaka, Gazipur, Khulna, Munshiganj, Narayanganj, Narsingdi, Noakhali, Sylhet zila (including upazilas). The increasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.62. The mean maximum humidity trend has found significantly decreasing in Cumilla, Dhaka, Gazipur, Narayanganj. Non-significantly decreasing trends in mean maximum humidity for March have been observed over Khulna, Munshiganj, Narsingdi, Noakhali, Sylhet as presented in Table 1.15.

3.10.4 Observed (BMD) maximum relative humidity for April

Mean maximum humidity trends for the month of April have observed increasing in almost all zila in Bangladesh except in Cumilla, Dhaka, Faridpur, Gazipur, Khulna, Narayanganj, Narsingdi, Sylhet zila (including upazilas). The increasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.62. The mean maximum humidity trend has decreased significantly in Dhaka, Gazipur, Khulna. Non-significantly decreasing trends in mean maximum humidity for April have been noticed over Cumilla, Faridpur, Narayanganj, Narsingdi, Sylhet as presented in Table 1.15.

3.10.5 Observed (BMD) maximum relative humidity for May

Mean maximum humidity trends for the month of May have noticed increasing in almost all zila in Bangladesh except in Bogura, Cumilla, Dhaka, Faridpur, Gaibandha, Gazipur, Joypurhat, Khulna, Lalmonirhat, Manikganj, Narayanganj, Narsingdi, Nilphamari, Rangpur zila (including upazilas). The increasing trends have been significant most of the zila (including

upazilas) in Bangladesh as shown in Fig. 3.63. The mean maximum humidity trend has observed significantly decreasing in Bogura, Dhaka, Gazipur, Khulna, Narayanganj. Non-significantly decreasing trends in mean maximum humidity for May have been observed in Cumilla, Faridpur, Gaibandha, Joypurhat, Lalmonirhat, Manikganj, Narsingdi, Nilphamari, Rangpur during the period 1971-2015 as presented in Table 1.15.

3.10.6 Observed (BMD) maximum relative humidity for June

Mean maximum humidity trends for the month of June have seen increasing in almost all zila in the country except in Bogura, Cumilla, Dhaka, Faridpur, Gaibandha, Gazipur, Jashore, Joypurhat, Khulna, Kurigram, Lalmonirhat, Magura, Manikganj, Narail, Narayanganj, Narsingdi, Nilphamari, Panchaghar, Rangpur, Thakurgaon zila (including upazilas). The increasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.63. The mean maximum humidity trend has decreased significantly in Bogura, Dhaka, Faridpur, Gazipur, Jashore, Narayanganj. Non-significantly decreasing trends in mean maximum humidity for June have been noticed in Cumilla, Gaibandha, Joypurhat, Khulna, Kurigram, Lalmonirhat, Magura, Manikganj, Narail, Narsingdi, Nilphamari, Panchaghar, Rangpur, Thakurgaon during the period 1971-2015 as presented in Table 1.15.

3.10.7 Observed (BMD) maximum relative humidity for July

Mean maximum humidity trends for the month of July have observed increasing in almost all zila in the country except in Bogura, Chapainawabganj, Cumilla, Dhaka, Dinajpur, Faridpur, Gaibandha, Gazipur, Jamalpur, Jashore, Joypurhat, Kurigram, Lalmonirhat, Magura, Manikganj, Naogaon, Narail, Narayanganj, Narsingdi, Natore, Nilphamari, Panchaghar, Rajbari, Rajshahi, Rangpur, Sherpur, Sirajganj, Sunamganj, Sylhet, Thakurgaon zila (including upazilas). The increasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.64. The mean maximum humidity trend has seen significantly decreasing in Bogura, Dhaka, Faridpur, Gaibandha, Gazipur, Jashore, Joypurhat, Kurigram, Lalmonirhat, Narayanganj, Narsingdi, Nilphamari, Panchaghar, Rangpur, Sylhet, Thakurgaon. Non-significantly decreasing trends in mean maximum humidity for July have been noticed in Chapainawabganj, Cumilla, Dinajpur, Jamalpur, Magura, Manikganj, Naogaon, Narail, Natore, Rajbari, Rajshahi, Sherpur, Sirajganj, Sunamganj during the period 1971-2015 as presented in Table 1.15.

3.10.8 Observed (BMD) maximum relative humidity for August

Mean maximum humidity trends for the month of August have noticed increasing in most of the zila in Bangladesh except in Bogura, Cumilla, Dhaka, Gazipur, Jashore, Lalmonirhat, Narayanganj, Nilphamari, Rangpur, Satkhira, Sylhet zila (including upazilas). The increasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.64. The mean maximum humidity trend has decreased significantly in Bogura, Dhaka, Jashore zila (including upazilas). Non-significant decreasing trends in mean maximum humidity for August have been observed over Cumilla, Gazipur, Lalmonirhat, Narayanganj,

Nilphamari, Rangpur, Sylhet zila (including upazila) during the period 1971-2015 as presented in Table 1.15.

3.10.9 Observed (BMD) maximum relative humidity for September

Mean maximum humidity trends for September have seen increasing in almost all zila in the country except in Bogura, Chapainawabganj, Cumilla, Dhaka, Gaibandha, Gazipur, Jashore, Joypurhat, Khulna, Kurigram, Lalmonirhat, Naogaon, Narayanganj, Narsingdi, Natore, Nilphamari, Panchagarh, Rajshahi, Rangpur, Satkhira, Sylhet, Thakurgaon zila (including upazilas). The increasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.65. The mean maximum humidity trend has observed significantly decreasing in Bogura, Dhaka, Jashore, Joypurhat, Kurigram, Lalmonirhat, Rangpur and Sylhet zila (including upazila). Non-significant decreasing trends in mean maximum humidity for September have been observed in Narayanganj, Cumilla, Gazipur, Khulna, Naogaon, Narayanganj, Narsingdi, Natore, Nilphamari, Panchagrah, Rajshahi, Satkhira and Thakurgaon zila (including upazila) during the period 1971-2015 as presented in Table 1.15.

3.10.10 Observed (BMD) maximum relative humidity for October

October in mean maximum humidity trends have observed increasing in almost all zila in the country except in Bogura, Cumilla, Dhaka, Gaibandha, Gazipur, Jashore, Joypurhat, Khulna, Kurigram, Lalmonirhat, Narayanganj, Nilphamari, Rangpur, Sylhet zila (including upazilas). The increasing trends have been found significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.65. Non-significant decreasing trends in mean maximum humidity for October have been observed in Cumilla, Dhaka, Gaibandha, Gazipur, Jashore, Joypurhat, Khulna, Narayanganj and Nilphamari zila (including upazila) during the period 1971-2015 as presented in Table 1.15.

3.10.11 Observed (BMD) maximum relative humidity for November

November in mean maximum humidity trends have observed increasing in most of the zila in Bangladesh except in a few zila (including upazilas), where the mean maximum humidity trends have seen decreasing as shown in Fig. 366. The increasing trends have been significant most of the zila (including upazilas) in Bangladesh. The mean maximum humidity trends have decreased non-significantly in Bogura, Cumilla, Dhaka, Khulna, Kurigram, Lalmonirhat and Rangpur during the period 1971-2015. However, no trends in mean maximum humidity over Sylhet were observed for November during the same period as presented in Table 1.5.

3.10.12 Observed (BMD) maximum relative humidity for December

December in mean maximum humidity trends have noticed increasing in most of the zila in Bangladesh except in a few zila (including upazilas), where the mean maximum humidity trends have found decreasing as shown in Fig. 366. The increasing trends have been significant most of the zila (including upazilas) in Bangladesh. The mean maximum humidity trends have

decreased non-significantly in Cumilla, Dhaka, Khulna, and Rangpur during the period 1971-2015. However, no trends in mean maximum humidity over Lalmonirhatt were observed for December during the same period as presented in Table 1.5.

3.11 Seasonal trend analysis for observed maximum relative humidity

3.11.1 Observed (BMD) maximum relative humidity for winter season

Mean maximum humidity for Winter season have shown significantly increasing trends most of the zila (including upazilas) except in some zila (including upazilas), where the mean maximum humidity has seen decreasing trend as shown in Fig. 3.67. Significant decreasing trends in mean maximum humidity were found in Dhaka during the period 1971-2015. Non-significant decreasing trends in mean maximum humidity were also found in Cumilla, Gazipur and Rangpur during the same period as presented in Table 1.16.

3.11.2 Observed (BMD) maximum relative humidity for pre-monsoon season

Mean maximum humidity for Pre-monsoon season have shown significantly increasing trends most of the zila (including upazilas) except in some zila (including upazilas), where the mean maximum humidity trend has seen decreasing in Bangladesh as shown in Fig. 3.67. Significant decreasing trends in mean maximum humidity were found in Dhaka, Gazipur, Khulna, Narayanganj during the period 1971-2015. Non-significant decreasing trends in mean maximum humidity have found in Cumilla, Faridpur, Narsingdi and Sylhet zila (including upazilas) during the same period as presented in Table 1.16.

3.11.3 Observed (BMD) maximum relative humidity for monsoon season

Mean maximum humidity for Monsoon season have shown significantly increasing trends in almost all zila (including upazilas) except in some zila (including upazilas), where the mean maximum humidity trend has noticed decreasing in Bangladesh as shown in Fig. 3.68. Significant decreasing trends in mean maximum humidity were found in Bogura, Dhaka, Gaibandha, Gazipur, Jashore, Joypurhat, Kurigram, Lalmonirhat, Narayanganj, Narsingdi, Rangpur during the period 1971-2015. Non-significant decreasing trends in mean maximum humidity were also found in Cumilla, Faridpur, Khulna, Magura, Manikganj, Naogaon, Narail, Nilphamari, Panchagarh, Satkhira, Sylhet, Thakurgaon zila (including upazilas) during the same period as presented in Table 1.16.

3.11.4 Observed (BMD) maximum relative humidity for post-monsoon season

Mean maximum humidity for Post-monsoon season have shown significantly increasing trends in almost all zila (including upazilas) except in some zila (including upazilas), where the mean maximum humidity trend has seen decreasing in Bangladesh as shown in Fig. 3.68. Significant decreasing trends in mean maximum humidity were found in Rangpur during the period 1971-2015. Non-significant decreasing trends in mean maximum humidity have found in Bogura,

Cumilla, Dhaka, Jashore, Khulna, Kurigram, Lalmonirhat, Nilphamari and Sylhet zila (including upazilas) during the same period as presented in Table 1.16.

3.12 Annual trend analysis for observed maximum relative humidity

Annual in mean maximum humidity trends have shown significantly increasing in almost all zila (including upazilas) except in some zila (including upazilas), where the Annual in mean maximum humidity trend has noticed decreasing in Bangladesh as shown in Fig. 3.69. Significant decreasing trends in annual mean maximum humidity were found in Dhaka, Gazipur during the period 1971-2015. Non-significant decreasing trends in annual mean maximum humidity have seen in Bogura, Cumilla, Jashore, Khulna, Narayanganj, Rangpur, Sylhet zila (including upazula) during the same period as presented in Table 1.15.

3.13 Monthly trend analysis for observed minimum relative humidity

3.13.1 Observed (BMD) minimum relative humidity for January

Mean minimum humidity trends for the month of January have observed increasing half portions zila from central to northwest part and another half portions zila from central to southeast part zila has noticed decreasing trend (including upazilas) in Bangladesh as shown in Fig. 3.70. The increasing trends have been significant most of the zila (including upazilas) in Bangladesh. The mean minimum humidity trends have decreased significantly in Bandarban, Chattogram, Moulvibazar and Rangamati during the period 1971-2015. Mean minimum humidity trends for January have decreased non-significantly in Bagerhat, Barguna, Barishal, Bhola, Brahmanbaria, Coxsbazar, Dhaka, Feni, Gazipur, Habiganj, Jhalakati, Khagrachari, Lakshmipur, Narayanganj, Narsingdi, Noakhali, Patuakhali, Pirojpur, Sunamganj and Sylhet zila (including upazilas) as presented in Table 1.17.

3.13.2 Observed (BMD) minimum relative humidity for February

Mean minimum humidity trends for February have observed decreasing in almost all zila (including upazilas) except in some zila (including upazilas), where the mean minimum humidity trends have seen increasing in Bangladesh as shown in Fig. 3.70. Mean minimum humidity trends have been found non-significantly increasing in Dinajpur, Kushtia, Mymensingh, Natore, Nilphamari, Pabna, Panchaghar, Rajshahi and Thakurgaon. However, no trends in mean minimum humidity were found in Rangpur during the period 1971-2015 as presented in Table 1.17.

3.13.3 Observed (BMD) minimum relative humidity for March

Mean minimum humidity trends for March have noticed decreasing in almost all zila in the country except in Bogura, Kurigram, Lalmonirhat, Mymensingh, Naogaon, Natore, Nilphamari, Panchaghar, Rajshahi, Rangpur, Satkhira zila (including upazilas), where the mean minimum humidity trends have observed increasing in Bangladesh as shown in Fig. 3.71. The increasing trends have been found significant in Mymensing zila (including upazilas) in Bangladesh. Non-significant increasing trends in mean minimum humidity have been observed in Bogura, Kurigram, Lalmonirhat, Naogaon, Natore, Nilphamari, Panchaghar, Rajshahi, Rangpur, Satkhira as presented in Table 1.17.

3.13.4 Observed (BMD) minimum relative humidity for April

Mean minimum humidity trends for April have seen decreasing in most of the zila (including upazilas) (south, southeast and northeast part) except in southwest and northwest part zila (including upazilas), where the mean minimum humidity trends have noticed increasing in Bangladesh as shown in Fig. 3.71. The increasing trends have been significant in Mymensingh, Nilphamari, Rajshahi zila as presented in Table 1.17.

3.13.5 Observed (BMD) minimum relative humidity for May

Mean minimum humidity trends for May have observed decreasing in almost all zila in the country except in Dinajpur, Pabna zila (including upazilas), where the mean minimum humidity trends have seen increasing in Bangladesh as shown in Fig. 3.72. Non-significant increasing trends in mean minimum humidity for May have been observed in Dinajpur, Pabna during the period 1971-2015 as presented in Table 1.17. However, no trends in mean minimum humidity were found over Kushtia zila (including upazilas) during the same period.

3.13.6 Observed (BMD) minimum relative humidity for June

Mean minimum humidity trends for June have noticed decreasing in most of the zila in the country except in Noakhali zila (including upazilas), where the mean minimum humidity trends have increased in Bangladesh as shown in Fig. 3.72. The decreasing trends have been found significant in most of the zila as shown in Table. The mean minimum humidity trends have increased non-significantly in Noakhali during the period 1971-2015 as presented in Table 1.17.

3.13.7 Observed (BMD) minimum relative humidity for July

Mean minimum humidity trends for July have observed decreasing in all zila (including upazilas) in the country as shown in Fig. 3.73. Non-significant decreasing trends in mean minimum humidity for July have been noticed in Bagerhat, Bhola, Chandpur, Chattogram, Chuadanga, Khulna, Kushtia, Madaripur, Meherpur, Noakhali, Pabna, Patuakhali, Pirojpur, Satkhira and other zilas have seen significant during the period 1971-2015 as presented in Table 1.17.

3.13.8 Observed (BMD) minimum relative humidity for August

Mean minimum humidity trends for August have noticed decreasing all over the country except in Pabna zila (including upazilas), where the mean minimum humidity trends have seen increasing. The decreasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.73. The mean minimum humidity trend has increased non-significantly in Pabna zila (including upazilas). No trend in mean minimum humidity were found over Kushtia zila (including upazila) during the period 1971-2015 as presented in Table 1.17.

3.13.9 Observed (BMD) minimum relative humidity for September

Mean minimum humidity trends for the month of September have found decreasing all over the country. The decreasing trends have been significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.74. Non-significant decreasing trends in mean minimum humidity have been observed in Bagerhat, Bhola, Dinajpur, Kushtia, Madaripur, Noakhali, Pabna and Patuakhali zila (including upazila) during the period 1971-2015 as presented in Table 1.17.

3.13.10 Observed (BMD) minimum relative humidity for October

October in mean minimum humidity trends have noticed decreasing in almost all zila in the country except in some zila (including upazilas), where the mean minimum humidity trends have seen increasing. The decreasing trends have been non-significant most of the zila (including upazilas) in Bangladesh as shown in Fig. 3.74. The increasing trends in mean minimum humidity were not significant in Bagerhat, Dinajpur, Madaripur, Mymensingh, Satkhira zila (including upazila) during the period 1971-2015 as presented in Table 1.17.

3.13.11 Observed (BMD) minimum relative humidity for November

November in mean minimum humidity trends have observed decreasing in most of the country except in a few zila (including upazilas), where the mean minimum humidity trends have noticed increasing as shown in Fig. 3.75. The decreasing trends have been found non-significant most of the zila (including upazilas) in Bangladesh. The increasing trends in mean minimum humidity were not significant in Chuadanga, Meherpur, Mymensingh and Satkhira during the period 1971-2015 as presented in Table 1.17.

3.13.12 Observed (BMD) minimum relative humidity for December

December in mean minimum humidity trends have seen increasing in most of the zila in the country except in a few zila (including upazilas), where the mean minimum humidity trends have observed decreasing as shown in Fig. 3.75. The increasing trends in mean minimum humidity were found significant in Khulna, Kushtia, Madaripur, Mymensingh, Pabna, Satkhira. The decreasing trends in mean minimum humidity have seen significant in Rangamati zila (including upazilas) only during the period 1971-2015 as presented in Table 1. 17.

3.14 Seasonal trend analysis for observed minimum relative humidity

3.14.1 Observed (BMD) minimum relative humidity for winter season

Mean minimum humidity for Winter season have shown increasing trends over northwest, west and southwest parts zila (including upazilas) and decreasing trends over northeast, south and southeast parts zila (including upazilas) in Bangladesh as shown in Fig. 3.76. Significant decreasing trends in mean minimum humidity were found in Bandarban, Barguna, Barishal, Bhola, Brahmanbaria, Chattogram, Coxsbazar, Dhaka, Habiganj, Jhalakati, Khagrachari, Moulvibazar, Noakhali, Patuakhali, Rangamati and Sunamganj during the period 1971-2015. Significant increasing trends in mean minimum humidity were found in Dinajpur, Kushtia, Mymensingh, Natore, Nilphamari, Pabna, Panchagarh, Rajshahi and Thakurgaon during the same period as presented in Table 1.18.

3.14.2 Observed (BMD) minimum relative humidity for pre-monsoon season

Mean minimum humidity for Pre-monsoon season have shown decreasing trends in most of the zila (including upazilas) except in northwest zila (including upazilas), where the mean

minimum humidity has seen decreasing in Bangladesh as shown in Fig. 3.76. Significant decreasing trends in mean minimum humidity were found most of the zila (including upazilas) during the period 1971-2015. Significant increasing trends in mean minimum humidity for Pre-monsoon season were also found in Nilphamari, Rajshahi zila (including upazila) during the same period as presented in Table 1.18.

3.14.3 Observed (BMD) minimum relative humidity for monsoon season

Mean minimum humidity for Monsoon season have shown increasing trends all zila (including upazilas) in Bangladesh as shown in Fig. 3.77. Significant increasing trends in mean minimum humidity were found most of the zila (including upazilas) during the period 1971-2015. Non-significant increasing trends in mean minimum humidity for Monsoon season were seen in Bagerhat, Chandpur, Kushtia, Madaripur, Noakhali, Pabna zila (including upazilas) during the same period as presented in Table 1.18.

3.14.4 Observed (BMD) minimum relative humidity for post-monsoon season

Mean minimum humidity for Post-monsoon season have shown decreasing trends in almost all zila (including upazilas) except in two zila (including upazilas), where the mean minimum humidity has observed increasing in Bangladesh during the period 1971-2015 as shown in Fig. 3.77. Non-significant increasing trends in mean minimum humidity for Post-monsoon season were found in Mymensingh and Satkhira zila (including upazilas) during the same period as presented in Table 1.18.

3.15 Annual trend analysis for observed minimum relative humidity

Annual in mean minimum humidity trends have shown decreasing in almost all zila (including upazilas) except in some zila (including upazilas), where the mean minimum humidity has seen increasing in Bangladesh as shown in Fig. 3.78. Non-significant increasing trends in Annual mean minimum humidity were found in Kushtia, Madaripur, Mymensingh, Natore, Nilphamari, Pabna, Rajshahi, Satkhira, Thakurgaon zila (including upazilas) during the period 1971-2015. The decreasing trends have seen significant in most of the zila in southeast and northeast part as shown in table. However, Panchagarh zila (including upazilas) showed no trend in mean minimum humidity during the same period as presented in Table 1.17.

3.16 Monthly trend analysis for observed sunshine hours

3.16.1 Observed sunshine hours for January

Mean observed sunshine hours' trends for January have shown decreasing all zila (including upazilas) over Bangladesh as shown in Fig. 3.79. The decreasing trends in sunshine hours were found significant most of the zilas (including upazilas) except in Bhola, Coxsbazar, Patuakhali, Rangamati zilas, where it has seen non-significant decreasing trend during the period 1971-2015 as presented in Table 1.19.

3.16.2 Observed sunshine hours for February

Mean observed sunshine hours' trends for February have shown decreasing in almost all zila (including upazilas) except in some zilas (southern parts), where the mean sunshine hours have seen increasing trend as shown in Fig. 3.79. The decreasing trends have found significant in northwest part zilas and in some pockets zilas in Bangladesh. The increasing trends in sunshine hours were seen significant in Patuakhali zila (including upazilas) as presented in Table 1.19. Observed sunshine hours' trends for February have noticed non-significant increasing in Bagerhat, Barguna, Bhola, Coxsbazar, Khulna, Madaripur and Pirojpur during the period 1971-2015.

3.16.3 Observed sunshine hours for March

Mean observed sunshine hours for March has shown decreasing trends in almost all zila (including upazilas) except in some zilas (central to southern parts), where the mean sunshine hours have seen increasing trend as shown in Fig. 3.80. The decreasing trends have found significant in Naogaon, Bogura, Joypurhat, Gaibandha and Chittagong zilas. The increasing trends in sunshine hours were seen significant in Bagerhat, Kushtia, Patuakhali zila (including upazilas) as presented in Table 1.19. However, no trends in mean observed sunshine hours for March were observed in Meherpur zila (including upazilas) during the period 1971-2015.

3.16.4 Observed sunshine hours for April

Mean observed sunshine hours for April has shown decreasing trends over northwest part and in some pockets zilas (including upazilas) and increasing trends have observed over northeast, south and southeast parts zilas (including upazilas) as shown in Fig. 3.80. The increasing trends in sunshine hours were found significant in Coxsbazar zila (including upazilas) only as presented in Table 1.19. The decreasing trends have seen significant in Naogaon, Bogura, Joypurhat, Gaibandha, Rangpur, Kurigram, Nilphamari, Dinajpur, Thakurgaon, Panchagrah zila (including upazilas).

3.16.5 Observed sunshine hours for May

Mean observed sunshine hours for May has shown decreasing trends in almost all zilas (including upazilas) except in some zilas, where the mean observed sunshine hours have seen

increasing trend in Bangladesh as shown in Fig. 3.81. The decreasing trends in sunshine hours were found significant in Bogura, Jashore and Nilphamari zila (including upazilas) and other zilas were not found significant as presented in Table 1.19. The increasing trends in sunshine hours have not found significant in Bangladesh. However, no trends in mean observed sunshine hours for May were observed in Barguna zila (including upazila) during the period 1971-2015.

3.16.6 Observed sunshine hours for June

Mean observed sunshine hours for June has shown decreasing trends in almost all zilas (including upazilas) except in some zilas (southeast part zilas), where the mean observed sunshine hours have seen increasing trend in Bangladesh as shown in Fig. 3.81. The decreasing trends in sunshine hours were found significant in Bogura, Dhaka, Gaibandha, Gazipur, Jamalpur, Jashore, Joypurhat, Kurigram, Lalmonirhat, Moulvibazar, Naogaon, Nilphamari, Panchagarh, Rangpur, Sherpur, Sunamganj, Sylhet and Thakurgaon zila (including upazilas) as presented in Table 1.19. The increasing trends in sunshine hours have seen significant in Coxsbazar zila (including upazilas) only. However, no trends in mean observed sunshine hours for June were observed in Barguna zila (including upazilas) during the period 1971-2015.

3.16.7 Observed sunshine hours for July

Mean observed sunshine hours for July has shown increasing trends in almost all zila (including upazilas) except in two zilas (Dhaka, Jashore zila), where the mean observed sunshine hours have noticed decreasing trend in Bangladesh as shown in Fig. 3.82. The decreasing trends in sunshine hours were not found significant in Dhaka and Jashore zila (including upazilas) as presented in Table 1.19. The increasing trends in sunshine hours were found significant in Feni, Khagrachari, Rangamati zila (including upazilas) and other zilas have not shown significant during the period 1971-2015.

3.16.8 Observed sunshine hours for August

Mean observed sunshine hours for August has shown decreasing trends in almost all zila (including upazilas) except in some zilas (south and southeast parts), where the mean observed sunshine hours have noticed increasing trend in Bangladesh as shown in Fig. 3.82. The decreasing trends in sunshine hours were found significant in Bogura, Dhaka, Gaibandha, Gazipur, Jashore, Joypurhat, Kurigram, Naogaon, Narayanganj, Narsingdi and Rangpur zila (including upazilas) and other zilas have not shown significant as presented in Table 1.19. The increasing trends in sunshine hours were not found significant in Bandarban, Bhola, Coxsbazar, Madaripur, Noakhali, Patuakhali and Rangamati zila (including upazilas) during the period 1971-2015.

3.16.9 Observed sunshine hours for September

Mean observed sunshine hours for September has shown increasing trends in almost all zilas (including upazilas) except in some zilas (Central, southwest and southeast parts), where the mean observed sunshine hours have observed decreasing trend in Bangladesh as shown in Fig.

3.83. The increasing trends in sunshine hours were not found significant in Bangladesh. The decreasing trends in sunshine hours were found significant in Chattogram, Dhaka zila (including upazilas) as presented in Table 1.19. However, no trends in observed sunshine hours for September were observed in Brahmanbaria and Magura zila (including upazilas) during the period 1971-2015.

3.16.10 Observed sunshine hours for October

Mean observed sunshine hours for October has shown decreasing trends in almost all zilas (including upazilas) in Bangladesh except in some zilas (northwest, southern and southeast parts), where the mean observed sunshine hours have seen increasing trend in Bangladesh as shown in Fig. 3.83. The increasing trends in sunshine hours were not found significant in Nilphamari, Bhola, Patuakhali, Cox's Bazar. The decreasing trends in sunshine hours were found significant in Chattogram, Dhaka, Narsingdhi, Gazipur, Narayanganj, Satkhira, Jashore, Khulna and Barishal zilas (including upazilas) as presented in Table 1.19. However, no trends in observed sunshine hours were noticed in Brahmanbaria and Magura zila (including upazilas) during the period 1971-2015.

3.16.11 Observed sunshine hours for November

Mean observed sunshine hours for November has shown decreasing trends in almost all zilas (including upazilas) except in some zilas (south and southeast parts), where the mean observed sunshine hours have noticed increasing trends in Bangladesh as shown in Fig. 3.84. The increasing trends in sunshine hours were not found significant over Bangladesh. The decreasing trends in sunshine hours were found significant most of the zilas (including upazilas) as presented in Table 1.19. However, no trends in observed sunshine hours for November were noticed in Bagerhat, Cumilla and Pirojpur zila (including upazilas) during the period 1971-2015.

3.16.12 Observed sunshine hours for December

Mean observed sunshine hours for December has shown decreasing trends all zilas (including upazilas) in Bangladesh as shown in Fig. 3.84. The decreasing trends in sunshine hours were found significant most of the zila except in three zilas such as Bhola, Coxsbazar and Patuakhali, where it was not found significant in Bangladesh during the period 1971-2015 as presented in Table 1.19.

3.17 Seasonal trend analysis for observed sunshine hours

3.17.1 Observed sunshine hours for winter season

Mean observed sunshine hours for Winter season has shown decreasing trends in almost all zilas (including upazilas) in Bangladesh except in two zilas like Coxsbazar, Patuakhali zilas, where it has seen increasing trend as shown in Fig. 3.85. The decreasing trends in sunshine hours were found significant in most of the zilas except in three zilas like Bhola, Madaripur

and Rangamati zilas, where it was not found significant in Bangladesh during the period 1971-2015 as presented in Table 1.20. Mean observed sunshine hours' trends have noticed non-significant increasing in Coxsbazar and Patuakhali zila (including upazilas).

3.17.2 Observed sunshine hours for pre-monsoon season

Mean observed sunshine hours for Pre-monsoon season has shown decreasing trends in almost all zilas (including upazilas) in Bangladesh except in some zilas, where the mean observed sunshine hours have seen increasing trend as shown in Fig. 3.85. The increasing trends in sunshine hours were found significant in Patuakhali zila (including upazilas) over Bangladesh during the period 1971-2015 as presented in Table 1.20. The decreasing trends have been found significant in Chittagong, Barishal, Jashore as well as northwest part zilas as shown in table. However, no trends in mean observed sunshine hours for Pre-monsoon season were observed in Patuakhali zila (including upazilas).

3.17.3 Observed sunshine hours for monsoon season

Mean observed sunshine hours for Pre-monsoon season has shown decreasing trends in almost all zilas (including upazilas) in Bangladesh except in some zilas, where the mean observed sunshine hours have observed increasing trends as shown in Fig. 3.86. The increasing trends in sunshine hours were found significant in Coxsbazar, Rangamati zila (including upazilas) over Bangladesh during the period 1971-2015 as presented in Table 1.20. The decreasing trends in sunshine hours were found significant in Bogura, Dhaka, Gazipur, Jashore, Narayanganj and Narsingdi (including upazilas) and other zilas have seen non-significant. However, no trends in mean observed sunshine hours for Pre-monsoon season were observed in Gopalganj and Jhenaidah.

3.17.4 Observed sunshine hours for post-monsoon season

Mean observed sunshine hours for Post-monsoon season has shown decreasing trends in almost all zilas (including upazilas) in Bangladesh except in some zilas, where the mean observed sunshine hours have noticed increasing trend as shown in Fig. 3.86. The increasing trends in sunshine hours were found significant in Patuakhali zila (including upazilas) only as presented in Table 1.20. The decreasing trend have found significant in most of the zilas in northwest-southwest direction as shown in table. However, no trends in mean observed sunshine hours for Post-monsoon season were observed in Bandarban zila (including upazila) during the period 1971-2015.

3.18 Annual trend analysis for observed sunshine hours

Mean observed sunshine hours for Annual has shown decreasing trends in almost all zilas (including upazilas) in Bangladesh except in some zilas, where the mean observed sunshine hours have seen increasing trend as shown in Fig. 3.87. The increasing trends in sunshine hours were found significant in Coxsbazar and Patuakhali zila (including upazilas) in Bangladesh as

presented in Table 1.19. The decreasing trends in sunshine hours were found significant in most of the zilas except in a few zilas (including upazilas) as shown in table. The decreasing trends in sunshine hours were not found significant in Bagerhat, Bandarban, Chuadanga, Cumilla, Jhalakati, Lakshmipur, Meherpur, Pirojpur, Rangamati, Shariatpur.

3.19 Monthly trend analysis for NCEP/NCAR evaporation

3.19.1 NCEP/NCAR evaporation for January

Mean evaporation for the month of January has shown increasing trends in almost all upazilas in Bangladesh except in some upazilas, where the mean evaporation has seen decreasing trends as shown in Fig. 3.88. The increasing trends in evaporation were found significant in most of the upazilas (north-east parts) and other parts upazilas show non-significant over Bangladesh as presented in Table 1.21. However, no trends in mean evaporation for January were observed in Satkhira Sadar upazila during the period 1971-2015.

3.19.2 NCEP/NCAR evaporation for February

Mean evaporation for the month of February has shown increasing trends in almost all upazilas in Bangladesh except in some upazilas, where the mean evaporation is observed decreasing trend as shown in Fig. 3.88. The increasing trends in evaporation were found significant in Alamdanga, Chuadanga Sadar, Damurhuda, Jiban Nagar upazilas-under Chuadanga zila, Chaugachha upazila- under Jashore zila, Harinakunda, Jhenaidah Sadar, Kaliganj, Kotchandpur, Maheshpur, Shailkupa upazila-under Jhenaidah zila, Khoksa, Kumarkhali, Kushtia Sadar, Mirpur, upazila- under Kushtia zila, Shalikha, Gangni, Meherpur Sadar, Mujib Nagar upazila- under Meherpur zila and other parts upazilas show non-significant in Bangladesh as presented in Table 1.21. However, no trends in mean evaporation for February were observed in Cox's Bazar sadar upazila during the period 1971-2015.

3.19.3 NCEP/NCAR evaporation for March

Mean evaporation for the month of March has shown decreasing trends all upazilas in Bangladesh except in a few upazilas, where the mean evaporation is noticed decreasing trends as shown in Fig. 3.89. The decreasing trends in evaporation were found significant in eastern part upazilas and other parts upazilas show non-significant in Bangladesh as presented in Table 1.21. The increasing trends in evaporation were found non-significant in Gangni, Meherpur Sadar, Mujib Nagar upazilas during the period 1971-2015.

3.19.4 NCEP/NCAR evaporation for April

Mean evaporation for the month of April has shown decreasing trends all upazilas in Bangladesh as shown in Fig. 3.89. The decreasing trends in evaporation were found non-significant in northwest part upazilas and other parts upazilas show significant in Bangladesh as presented in Table 1.21.

3.19.5 NCEP/NCAR evaporation for May

Mean evaporation for the month of May has shown decreasing trends all upazilas over Bangladesh as shown in Fig. 3.90. The decreasing trends in evaporation were found significant

in northeast, east and southeast parts upazilas and other parts upazilas show non-significant over Bangladesh as presented in Table 1.21.

3.19.6 NCEP/NCAR evaporation for June

Mean evaporation for the month of June has shown decreasing trends in almost all upazilas in Bangladesh except in northern part upazilas, where it has seen increasing trends but not significant as shown in Fig. 3.90. The decreasing trends in evaporation were found significant over central to southeast part upazilas, and other parts upazilas show non-significant over Bangladesh as presented in Table 1.21. However, no trends in mean evaporation for June were observed in Sariakandi upazila- under Bogra zila, Madarganj upazila- under Jamalpur zila during the period 1971-2015.

3.19.7 NCEP/NCAR evaporation for July

Mean evaporation for the month of July has shown decreasing trends all upazilas in Bangladesh as shown in Fig. 3.91. The decreasing trends in evaporation were found significant in almost all upazilas in Bangladesh except in a few upazilas of southwest, southeast and northwest parts upazilas, where the mean evaporation is noticed non-significant as presented in Table 1.21.

3.19.8 NCEP/NCAR evaporation for August

Mean evaporation for the month of August has shown decreasing trends in almost all upazilas over Bangladesh except in north-west part upazilas, where the mean evaporation is noticed increasing trends but not significant as shown in Fig. 3.91. The decreasing trends in evaporation were found significant in some upazilas of northeast, and eastern part, and others upazilas have seen non-significant in Bangladesh as presented in Table 1.21. However, no trends in mean evaporation for August were observed in Atrai upazila- under Naogaon during the period 1971-2015.

3.19.9 NCEP/NCAR evaporation for September

Mean evaporation for the month of September has shown decreasing trends in northeast, south and southeast parts upazilas and other parts upazilas (northwest, southwest parts) have seen increasing trends in Bangladesh as shown in Fig. 3.92. The increasing trends have observed significant in a few upazilas of northwest part and others parts upazilas have seen non-significant. The decreasing trends in evaporation were found significant in Dighinala upazila- under Khagrachhari, Barlekha, Juri, Kamalganj, Kulaura upazila- under Maulvibazar zila, Baghai Chhari upazila- under Rangamati zila as presented in Table 1.21. However, no trends in mean evaporation for September were observed in Tungi Para upazila- under Gopalganj zila, Mohanganj upazila- under Netrokona zila during the period 1971-2015.

3.19.10 NCEP/NCAR evaporation for October

Mean evaporation for the month of October has shown increasing trends in almost all upazilas in Bangladesh except in northeast part upazilas where it has seen decreasing trends as shown in Fig. 3.92. The decreasing trends in evaporation were not found significant as presented in Table 1.21. The increasing trends in evaporation were found significant in northwest part upazilas in Bangladesh. However, no trends in mean evaporation for October were observed in Banchharampur, Bijoy Nagar, Nabinagar upazila- under Brahmanbaria zila, Nabiganj upazila- under Habiganj zila during the period 1971-2015.

3.19.11 NCEP/NCAR evaporation for November

Mean evaporation for the month of November has shown increasing trends in almost all upazilas in Bangladesh except in southeast part upazilas, where it has noticed decreasing trends but not significant as shown in Fig. 3.93. The increasing trends in evaporation were found significant in most of the upazilas in Bangladesh as presented in Table 1.21.

3.19.12 NCEP/NCAR evaporation for December

Mean evaporation for the month of December has shown increasing trends in almost all upazilas in Bangladesh except in southwest part upazilas where the mean evaporation has seen non-significant decreasing trends as shown in Fig. 3.93. The increasing trends in evaporation were found significant in northeast and eastern part upazilas and other parts upazilas have observed non-significant trend as presented in Table 1.21.

3.20 Seasonal trend analysis for NCEP/NCAR evaporation

3.20.1 NCEP/NCAR evaporation for winter season

Mean evaporation for Winter season has shown increasing trends in almost all upazilas in Bangladesh except in one upazilas where the mean evaporation has seen decreasing trends as shown in Fig. 3.94. The increasing trends in evaporation were found significant in northeast and eastern parts upazilas and other parts upazilas have noticed non-significant trend during the period 1971-2015 as presented in Table 1.22.

3.20.2 NCEP/NCAR evaporation for pre-monsoon season

Mean evaporation for Pre-monsoon season has shown decreasing trends all upazilas in Bangladesh as shown in Fig. 3.94. The decreasing trends in evaporation were found significant in most of the upazilas except in northwest part upazilas, where the evaporation has seen non-significant as presented in Table 1.22.

3.20.3 NCEP/NCAR evaporation for monsoon season

Mean evaporation for Monsoon season has shown decreasing trends in almost all upazilas in Bangladesh except in northwest part upazilas, where the mean evaporation has noticed increasing trends but not significant as shown in Fig. 3.95. The decreasing trends in evaporation were found significant in eastern part upazilas and other parts upazilas have observed non-significant trend as presented in Table 1.22. However, no trends in mean evaporation for Monsoon season were observed in Bogra Sadar upazila, Khansama upazila-under Dinajpur zila, Mahadebpur upazila- under Naogaon zila during the period 1971-2015.

3.20.4 NCEP/NCAR evaporation for post-monsoon season

Mean evaporation for Post-monsoon season has shown increasing trends all upazilas in Bangladesh as shown in Fig. 3.95. The increasing trends in evaporation were found significant in most of the upazilas in north-south direction and other part upazilas have noticed non-significant in Bangladesh as presented in Table 1.22.

3.21 Annual trend analysis for NCEP/NCAR evaporation

Mean evaporation for Annual has shown decreasing trends in almost all upazilas in Bangladesh except in northeast and northwest parts upazilas, where the mean evaporation has seen increasing trends but not significant as shown in Fig. 3.96. The decreasing trends in evaporation were found significant in southwest part upazilas and other parts upazilas have noticed non-significant in Bangladesh as presented in Table 1.21. However, no trends in mean evaporation for Annual were observed in Bahubal upazila-under Habiganj zila, Daulatpur upazila- Kushtia zila, Dhobaura upazila-under Mymensingh zila, Lalpur, Naldanga, upazila- under Natore zila, Barhatta, Durgapur, Madan, upazila- under Netrokona zila, Nilphamari Sadar upazila during the period 1971-2015.

3.22 Monthly trend analysis for CRU evapotranspiration

3.22.1 CRU evapotranspiration for January

Mean evapotranspiration for the month of January has shown decreasing trends in almost all upazilas in Bangladesh except in a few upazilas (northwest part), where the mean evapotranspiration has seen non-significant increasing trend in Patgram upazila-under Lalmonirhat zila, Atwari, Panchagarh Sadar, Tentulia upazila- under Panchagarh zila, Haripur, Ranisankail upazila- under Thakurgaon zila as shown in Fig. 3.97. The decreasing trends in evapotranspiration were found significant in southern part upazilas and other parts upazilas have seen non-significant trend as presented in Table 1.23.

3.22.2 CRU evapotranspiration for February

Mean evapotranspiration for February has shown increasing trends in almost all upazilas in Bangladesh except in some upazilas (northeast parts), where it is observed decreasing trend but not significant as shown in Fig. 3.97. The increasing trends in evapotranspiration were not found significant in Bangladesh as presented in Table 1.23. However, no trends in mean evapotranspiration were observed in Bakerganj, Barisal Sadar upazila, Bhola Sadar, Burhanuddin, Daulatkhan upazila-under Bhola zila, Lakhai upazila-under Habiganj zila, Nalchity upazila-under Jhalokati zila, Bajitpur, Bhairab, Kuliar Char, upazila-under Kishoreganj zila, Maulvi Bazar Sadar upazila, Narsingdi Sadar, Shibpur upazila, Bauphal, Dashmina, Dumki, Patuakhali Sadar upazila, Bishwambarpur, Sunamganj Sadar upazila, Beani Bazar, Kanaighat upazila-under Sylhet zila during the period 1971-2015.

3.22.3 CRU evapotranspiration for March

Mean evapotranspiration for the month of March has shown decreasing trends in almost all upazilas in Bangladesh except in some upazilas (northwest parts), where the mean evapotranspiration is noticed increasing trend but not significant as shown in Fig. 3.98. The decreasing trends in evapotranspiration were found significant over southeast part upazilas and other parts upazilas show non-significant as presented in Table 1.23. However, no trends in mean evapotranspiration for the month of March were observed in Gauripur, Haluaghat upazila-under Mymensingh zila, Nakla upazila- under Sherpur zila during the period 1971-2015.

3.22.4 CRU evapotranspiration for April

Mean evapotranspiration for April has shown increasing trends in almost all upazilas in Bangladesh except in some upazilas (wester part), where the mean evapotranspiration has seen non-significant decreasing trend as shown in Fig. 3.98. The increasing trends in evapotranspiration were not found significant in Bangladesh as presented in Table 1.23. However, Barguna Sadar upazila, Paikgachha upazila- under Khulna zila, Meherpur Sadar, Mujib Nagar upazila- under Meherpur zila, Baraigram upazila- Natore zila, Bera upazila- under

Pabna zila, Baghmara, Charghat, Durgapur, Mohanpur, Paba, Puthia upazila- under Rajshahi zila have shown no trend in mean evapotranspiration for April during 1971-2015.

3.22.5 CRU evapotranspiration for May

Mean evapotranspiration for the month of May has shown decreasing trends in almost all upazilas in Bangladesh except in some upazilas of northeast and southeast parts, where it has seen non-significant increasing trends as shown in Fig. 3.99. The decreasing trends in evapotranspiration were not found significant in Bangladesh as presented in Table 1.23. However, Sirajganj Sadar upazila showed no trend in mean evapotranspiration during the period 1971-2015.

3.22.6 CRU evapotranspiration for June

Mean evapotranspiration for the month of June has shown decreasing trends in almost all upazilas in Bangladesh except in a few upazilas of northwest part, where the mean evapotranspiration is observed non-significant increasing trends as shown in Fig. 3.99. The decreasing trends in evaporation were not found significant in Bangladesh as presented in Table 1.23. However, no trends in mean evapotranspiration for June were observed in Melandaha upazila-under Jamalpur zila, Raumari upazila-under Kurigram zila, Jaldhaka upazila-under Nilphamari zila, Baliadangi upazila- under Thakurgaon zila during the period 1971-2015.

3.22.7 CRU evapotranspiration for July

Mean evapotranspiration for July has shown increasing trends in almost all upazilas in Bangladesh except in some upazilas of northwest and southeast parts and in some pockets upazilas, where it has seen non-significant decreasing trends as shown in Fig. 3.100. The increasing trends in evapotranspiration were not found significant in Bangladesh as presented in Table 1.23. However, Amtali upazila- under Barguna zila, Sariaikandi upazila- under Bogra zila, Sandwip upazila-under Chittagong zila, Madarganj upazila-under Jamalpur zila, Lakshmichhari, Manikchhari, Ramgarh upazila-under Khagrachhari zila, Madan upazila- under Netrakona zila, Rangabali upazila- under Patuakhali zila, Tahirpur upazila-under Sunamganj zila have shown no trend in mean evapotranspiration for July during the period 1971-2015.

3.22.8 CRU evapotranspiration for August

Mean evapotranspiration for August has shown decreasing trends in almost all upazilas in Bangladesh except in some upazilas of southwest and southeast parts, where the mean evapotranspiration is noticed increasing trends but not significant as shown in Fig. 3.100. The decreasing trends in evapotranspiration were not found significant in Bangladesh as presented in Table 1.23. However, no trends in mean evapotranspiration for August were observed in Chhagalnaiya upazila-under Feni zila, Sharishabari upazila-under Jamalpur, Shib Char upazila-under Madaripur zila, Dumki upazila- under Patuakhali zila, Dhanbari upazila- under Tangail zila during the period 1971-2015.

3.22.9 CRU evapotranspiration for September

Mean evapotranspiration for September has shown increasing trends in most of the upazilas in Bangladesh except in some upazilas of southwest and southeast parts, where the mean evapotranspiration has seen non-significant decreasing trends as shown in Fig. 3.101. The increasing trends in evapotranspiration were found non-significant in Bangladesh as presented in Table 1.23. However, no trends in mean evapotranspiration for September were observed in Rowangchhari upazila-under Bandarban zila, Amtali upazila-under Barguna zila, Daulatkhan upazila- under Bhola zila, Kumarkhali upazila-under Kushtia zila, Bauphal, Dashmina, Rangabali upazila- Patuakhali zila during the period 1971-2015.

3.22.10 CRU evapotranspiration for October

Mean evapotranspiration for the month of October has shown decreasing trends in almost all upazila in Bangladesh except in a few upazilas (northeast part), where it has noticed non-significant increasing trends as shown in Fig. 3.101. The decreasing trends in evapotranspiration were found non-significant in Bangladesh during the period 1971-2015 as presented in Table 1.23.

3.22.11 CRU evapotranspiration for November

Mean evapotranspiration for November has shown decreasing trends in almost all upazilas in Bangladesh except in northwest and northeast upazilas, where the mean evapotranspiration has observed non-significant increasing trends as shown in Fig. 3.102. The decreasing trends in evapotranspiration were found non-significant in Bangladesh as presented in Table 1.23. However, no trends in mean evapotranspiration for November were observed in Dhupchanchia, Gabtali upazila-under Bogura zila, Sharishabari upazila-under Jamalpur zila, Muktagachha upazila- under Mymensingh zila, Bhuapur, Dhanbari, Ghatail, Gopalpur, Kalihati, Madhupur, Tangail Sadar upazila-under Tangail zila during the period 1971-2015.

3.22.12 CRU evapotranspiration for December

Mean evapotranspiration for December has shown decreasing trends in almost all upazilas in Bangladesh except in some upazilas of northwest part, where it has noticed non-significant increasing trends as shown in Fig. 3.102. The decreasing trends in evapotranspiration were found significant in southeast part upazilas and other parts upazilas have seen non-significant in Bangladesh as presented in Table 1.23.

3.23 Seasonal trend analysis for CRU evapotranspiration

3.23.1 CRU evapotranspiration for winter season

Mean evapotranspiration for Winter season has shown decreasing trends in almost all upazilas in Bangladesh except in some upazilas of northwest part, where the mean evapotranspiration has seen non-significant increasing trends as shown in Fig. 3.103. The decreasing trends in

evapotranspiration were found significant in southeast part upazilas and other parts upazilas have observed non-significant in Bangladesh as presented in Table 1.24. However, Char Rajibpur upazila-under Kurigram zila, Naogaon Sadar upazila have shown no trend in mean evapotranspiration for Winter season during 1971-2015.

3.23.2 CRU evapotranspiration for pre-monsoon season

Mean evapotranspiration for Pre-monsoon season has shown decreasing trends in almost all upazilas in Bangladesh except in northern part upazilas, where it has noticed non-significant increasing trends as shown in Fig. 3.103. The decreasing trends in evapotranspiration were not found significant in Bangladesh as presented in Table 1.24. However, Pakundia upazila-Kishoreganj zila, Kulaura upazila-Maulvibazar zila, Atrai upazila-under Naogaon zila, Baghmara, Durgapur, Tanore upazila-under Rajshahi zila showed no trend in evapotranspiration during the period 1971-2015.

3.23.3 CRU evapotranspiration for monsoon season

Mean evapotranspiration for Monsoon season has shown decreasing trends in almost all upazilas in Bangladesh except in some pockets upazilas, where it has noticed non-significant increasing trends as shown in Fig. 3.104. The decreasing trends in evapotranspiration were found non-significant in Bangladesh as presented in Table 1.24. However, no trends in mean evapotranspiration for Monsoon season were observed in Kachua upazila-under Bagerhat zila, Dohar upazila-under Dhaka zila, Dinajpur Sadar, Nawabganj upazila-under Dinajpur zila, Maulvi Bazar Sadar upazila, Tongibari upazila- Munshiganj zila during the period 1971-2015.

3.23.4 CRU evapotranspiration for post-monsoon season

Mean evapotranspiration for Post-monsoon season has shown decreasing trends in almost all upazilas in Bangladesh except in a few upazilas of northwest and northeast parts, where it has noticed increasing trends but not significant as shown in Fig. 3.104. The decreasing trends in evapotranspiration were not found significant in Bangladesh as presented in Table 1.24. However, Nilphamari Sadar upazila, Dakshin Surma, Sylhet Sadar upazila showed no trend in evapotranspiration during the period 1971-2015.

3.24 Annual trend analysis for CRU evapotranspiration

Mean evapotranspiration for Annual has shown decreasing trends in almost all upazilas in Bangladesh except in some upazilas of northwest of northern parts, where the mean evapotranspiration has observed non-significant increasing trends as shown in Fig. 3.105. The decreasing trends in evapotranspiration were found significant in some upazilas of Cox's Bazar and Bandarban zilas and other upazilas have seen non-significant trends in Bangladesh as presented in Table 1.23. However, no trends in mean evaporation for Annual were observed in Sundarganj upazila- under Gaibandha zila, Islampur upazila- Jamalpur zila, Chilmari, Raumari upazila- under Kurigram zila, Lalmonirhat Sadar upazila during the period 1971-2015.

3.25 Monthly trend analysis for NCEP/NCAR soil moisture (0-10cm depth)

3.25.1 NCEP/NCAR soil moisture for January

Mean soil moisture for the month of January has shown decreasing trends all upazilas in Bangladesh as shown in Fig. 3.106. The decreasing trends in soil moisture were found significant in most of the upazilas except in some upazilas (southeast part), where the mean soil moisture is observed non-significant during the period 1981-2015 as presented in Table 1.25.

3.25.2 NCEP/NCAR soil moisture for February

Mean soil moisture for February has shown decreasing trends all upazilas in Bangladesh as shown in Fig. 3.106. The decreasing trends in soil moisture were found significant in almost all upazilas except in some upazilas (northwest and southeast parts), where the mean soil moisture have observed non-significant as presented in Table 1.25.

3.25.3 NCEP/NCAR soil moisture for March

March in mean soil moisture has shown decreasing trends all upazilas in Bangladesh as shown in Fig. 3.107. The decreasing trends in soil moisture were found significant in almost all upazilas except in southeast part upazilas as well as in different pocket upazilas, where it has noticed non-significant during the period 1981-2015 as presented in Table 1.25.

3.25.4 NCEP/NCAR soil moisture for April

Mean soil moisture for the month of April has shown increasing trends in almost half portions upazilas from central to northwest parts and another half portions upazilas from central to southeast parts have observed decreasing trends in Bangladesh as shown in Fig. 3.107. The increasing trends in soil moisture were not found significant during the period 1981-2015 as presented in Table 1.25. The decreasing trends have found significant in northwest part upazilas as shown in the table.

3.25.5 NCEP/NCAR soil moisture for May

Mean soil moisture for the month of May has shown increasing trends in more than half portions upazilas from central to southeast parts and rest of the upazilas from central to northwest part have observed decreasing trends as shown in Fig. 3.108. The increasing trends in soil moisture were found significant in southern part upazilas during the period 1981-2015. The decreasing trends in soil moisture were found significant in a few upazilas of northwest part as presented in Table 1.25.

3.25.6 NCEP/NCAR soil moisture for June

Mean soil moisture for June has shown increasing trends in most of the upazilas in Bangladesh except in some upazilas of northwest part, where the soil moisture has observed decreasing

trends but some upazilas of it has seen statistically significant as shown in Fig. 3.108. The increasing trends in soil moisture were found significant in some upazilas of southeast part during the period 1981-2015 as presented in Table 1.25.

3.25.7 NCEP/NCAR soil moisture for July

Mean soil moisture for the month of July has shown increasing trends in most of the upazilas in Bangladesh except in some upazilas of western part, where it has noticed non-significant decreasing trends as shown in Fig. 3.109. The increasing trends in soil moisture were found significant in northeast part upazilas and other parts have seen non-significant during the period 1981-2015 as presented in Table 1.25.

3.25.8 NCEP/NCAR soil moisture for August

Mean soil moisture for the month of August has shown decreasing trends in most of the upazilas in Bangladesh except in some upazilas of northern part, where it has noticed increasing trends as shown in Fig. 3.109. The decreasing trends in soil moisture for August were not found significant as presented in Table 1.25. The increasing trends in soil moisture were found significant in some upazilas of northern part during the period 1981-2014.

3.25.9 NCEP/NCAR soil moisture for September

Mean soil moisture for September has shown increasing trends in northwest, northeast and southeast parts upazilas in Bangladesh except in some upazilas of western part, where it has observed non-significant decreasing trends during the period 1981-2014 as shown in Fig. 3.110. The increasing trends in soil moisture were found significant in northeast part upazilas as presented in Table 1.25.

3.25.10 NCEP/NCAR soil moisture for October

October in mean soil moisture has shown increasing trends in northeast and southeast part upazilas in Bangladesh except in some upazilas of western part, where it has noticed non-significant decreasing trends during the period 1981-2014 as shown in Fig. 3.110. The increasing trends in soil moisture for October were found significant in some upazilas of northeast and southeast parts as presented in Table 1.25.

3.25.11 NCEP/NCAR soil moisture for November

Mean soil moisture for the month of November has shown increasing trends in most of the upazilas in Bangladesh except in northeast part upazilas where it has noticed non-significant increasing trends as shown in Fig. 3.111. The decreasing trends in soil moisture for November were not found significant as presented in Table 1.25.

3.25.12 NCEP/NCAR soil moisture for December

Mean soil moisture for the month of December has shown decreasing trends all upazilas in Bangladesh as shown in Fig. 3.111. The increasing trends in soil moisture for December were found significant in northern, and western part upazilas and other parts upazilas have seen non-significant during the period 1981-2014 as presented in Table 1.25.

3.26 Seasonal trend analysis for NCEP/NCAR soil moisture (0-10cm depth)

3.26.1 NCEP/NCAR soil moisture for winter season

Mean soil moisture for Winter season has shown decreasing trends all upazilas in Bangladesh as shown in Fig. 3.112. The decreasing trends in soil moisture were found significant in almost all upazilas except in a few upazilas of southeast part in Bangladesh as presented in Table 1.26.

3.26.2 NCEP/NCAR soil moisture for pre-monsoon season

Pre-monsoon season in mean soil moisture has shown increasing trends in central to southern part upazilas and northern parts upazilas have observed decreasing trends in Bangladesh as shown in Fig. 3.112. The increasing trends in soil moisture were not found significant as presented in Table 1.26. The decreasing trends in soil moisture were found significant in a few upazilas of northwest part during the period 1971-2015.

3.26.3 NCEP/NCAR soil moisture for monsoon season

Mean soil moisture for Monsoon season has shown increasing trends in most of the upazilas in Bangladesh except in western part upazilas, where it has observed non-significant decreasing trends as shown in Fig. 3.113. The increasing trends in soil moisture were found significant in northeast and southeast part upazilas in Bangladesh as presented in Table 1.26.

3.26.4 NCEP/NCAR soil moisture for post-monsoon season

Mean soil moisture for Post-monsoon season has shown decreasing trends in almost all upazilas in Bangladesh except in some upazilas of northeast part, where the mean soil moisture has seen non-significant increasing trends as shown in Fig. 3.113. The decreasing trends in soil moisture were not found significant in Bangladesh as presented in Table 1.26.

3.27 Annual trend analysis for NCEP/NCAR soil moisture

Mean soil moisture for Annual has shown decreasing trends in almost all upazilas in Bangladesh except in some upazilas of southeast part, where it has observed non-significant increasing trends as shown in Fig. 3.114. The decreasing trends in soil moisture were found significant in northwest part upazilas and other part upazilas have seen non-significant trend in Bangladesh as presented in Table 1.25.

CHAPTER 4

FUTURE SCENARIOS GENERATION FOR 487 UPAZILAS IN BANGLADESH

4.1 Future scenario generation for the mid-century using RCP4.5

4.1.1 Monthly rainfall scenario for the mid-century

4.1.1.1 Rainfall scenario for January for the mid-century

Rainfall for January is projected to decrease by more than -10% in north-western region upazilas and other pockets area upazilas in Bangladesh during the mid-century (2021-2050) but other regions like in northeast, south-western upazilas including some hilly region upazilas in rainfall is likely to increase by more than 10% during the same period as shown in Fig. 4.1. The change in rainfall is expected to between -10 to +10% compared to the baseline period in southern part upazilas and some isolated upazilas in Bangladesh.

4.1.1.2 Rainfall scenario for February for the mid-century

Rainfall for February is projected to decrease by more than -10% in a majority upazilas in Bangladesh except in some pockets upazilas (western and southern parts upazilas) during the mid-century (2021-2050) as shown in Fig. 4.1. Some western and southern upazilas in rainfall may be changed of -10 to +10 % during the same period. Some western and southern pockets upazilas in rainfall is likely to change by more than 10% in Bangladesh.

4.1.1.3 Rainfall scenario for March for the mid-century

Rainfall for the month of March is projected to decrease by more than -10% in a majority upazilas in Bangladesh except in some pockets upazilas (western and northwest parts) during the mid-century (2021-2050) as shown in Fig. 4.2. Some pockets upazilas of west and northwest parts in rainfall may be changed of -10 to +10 % during the same period.

4.1.1.4 Rainfall scenario for April for the mid-century

The change in rainfall for April is expected to between -10 to +10% compared to the baseline period in northern and southeast part upazilas in Bangladesh except in southern part upazilas in rainfall is likely to decrease by more than -10% during the mid-century (2021-2050) as shown in Fig. 4.2.

4.1.1.5 Rainfall scenario for May for the mid-century

Rainfall for the month of May is projected to increase by more than 10% over northern part upazilas in Bangladesh but central part upazilas (west to north and southeast part hilly region) in rainfall change is expected to between -10 to +10 % during the mid-century (2021-2050) as shown in Fig. 4.3. Rainfall is likely to decrease by more than -10% in southwest and south part upazilas in Bangladesh at the same period.

4.1.1.6 Rainfall scenario for June for the mid-century

Rainfall for the month of June is projected to increase by more than 10% in northern part upazilas in Bangladesh but southwest, south and southeast part upazilas in rainfall change is expected between -10 to +10 % during the mid-century (2021-2050) as shown in Fig. 4.3.

4.1.1.7 Rainfall scenario for July for the mid-century

The change of rainfall is found to be -10 to +10% in northwest, west and southwest part upazilas for the month of July and rest of the part in northeast, east and southeast upazilas rainfall is projected to increase by more than 10% in Bangladesh during the mid-century (2021-2050) as shown in Fig. 4.4.

4.1.1.8 Rainfall scenario for August for the mid-century

The change of rainfall is expected to increase by more than 10% for the month of August in northern part upazilas. Southern part upazilas in rainfall change is expected to between -10 to +10 % compared to the baseline period for the same month in Bangladesh during the mid-century (2021-2050) as shown in Fig. 4.4.

4.1.1.9 Rainfall scenario for September for the mid-century

The change of rainfall is found to be -10 to +10% almost all upazilas in Bangladesh except in a few upazilas (northwest upazilas), where the rainfall is likely to increase by more than 10% for the month of September during the mid-century (2021-2050) as shown in Fig. 4.5.

4.1.1.10 Rainfall scenario for October for the mid-century

The change of rainfall is projected to increase by more than +10% almost all upazilas in Bangladesh except in northwest part upazilas, where the rainfall change is likely to between -10 to +10% compared to the baseline period for the month of October during the mid-century (2021-2050) as shown in Fig. 4.5.

4.1.1.11 Rainfall scenario for November for the mid-century

The change of rainfall is found to be more than +10% in southern part upazilas in Bangladesh. Central part upazilas and some pockets upazilas in rainfall change is expected to between -10 to +10 % compared to the baseline period for the month of November during the mid-century (2021-2050) as shown in Fig. 4.6. Rainfall of northern part upazilas is projected to decrease by more than -10% during the same period.

4.1.1.12 Rainfall scenario for December for the mid-century

The change of rainfall is found to be more than -10% almost all upazilas in Bangladesh except in central to north part upazilas, where the rainfall is projected to increase by more than 10%

for the month of December during the mid-century (2021-2050) as shown in Fig. 4.6. Rainfall change of some pocket upazilas is expected to be between -10 to +10% compared to the baseline period in Bangladesh during the same period.

4.1.2 Seasonal rainfall scenario for the mid-century

4.1.2.1 Rainfall scenario for winter season for the mid-century

Winter season rainfall is projected to decrease by more than -10% almost all upazilas in Bangladesh except in some pockets upazilas of western and southern part, where the rainfall change is expected to be between -10 to +10% and it is likely to increase by more than 10% during the mid-century as shown in Fig. 4.7.

4.1.2.2 Rainfall scenario for pre-monsoon season for the mid-century

Pre-monsoon season rainfall is likely to increase by more than 10% in northwest part upazilas in Bangladesh. Central part and southeast part upazilas in rainfall change is expected to be between -10 to 10% compared to the baseline period during the mid-century as presented in Fig. 4.7. Rainfall of southern part upazilas are found to be more than -10% at the same period for pre-monsoon season.

4.1.2.3 Rainfall scenario for monsoon season for the mid-century

Monsoon season rainfall is found to be -10 to 10% almost all upazilas in Bangladesh except in northeast part upazilas, where the monsoon rainfall is projected to increase by more than 10% during the mid-century as presented in Fig. 4.8.

4.1.2.4 Rainfall scenario for post-monsoon season for the mid-century

Post-monsoon season rainfall is found to be -10 to 10% in northern part upazilas in Bangladesh except in southern part upazilas, where the rainfall change is likely to increase by more than 10% compared to the baseline period during the mid-century as presented in Fig. 4.8.

4.1.3 Annual rainfall scenario generation for the mid-century

Annual rainfall is expected to be between -10 to 10% compared to the baseline period in almost all upazilas in Bangladesh except in some northwest upazilas, where the annual rainfall change is projected to increase by more than 10% during the mid-century as shown in Fig. 4.9.

4.1.4 Monthly maximum temperature scenario for the mid-century

4.1.4.1 Maximum temperature scenario for January for the mid-century

Maximum temperature for the month of January is likely to change by 1.0-1.5°C almost all upazilas in Bangladesh except in some southeast hilly region and isolated upazilas (northwest and southern part), where the maximum temperature is projected to change by 0.5-1.0°C for the mid-century (2021-2050) as presented in Fig. 4.10.

4.1.4.2 Maximum temperature scenario for February for the mid-century

Maximum temperature for the month of February is expected to increase by 1.0-1.5°C in southern part upazilas in Bangladesh. Central to northeast part upazilas and some isolated upazilas (northwest part) in maximum temperature is likely to increase by 1.5-2.0 and 2.0-2.5°C respectively for the mid-century (2021-2050) as presented in Fig. 4.10.

4.1.4.3 Maximum temperature scenario for March for the mid-century

Maximum temperature for the month of March is projected to increase by 2.5-3.0°C in northern part upazilas in Bangladesh. Southern part upazilas in maximum temperature is likely to increase by 1.5-2.5°C for the mid-century (2021-2050) as presented in Fig. 4.11. The rate of increase of maximum temperature in the northern side upazilas is higher than that of the southern side upazilas of Bangladesh.

4.1.4.4 Maximum temperature scenario for April for the mid-century

Maximum temperature for the month of April is expected to increase by 0.5-1.5°C in northern and southern part upazilas in Bangladesh. But central part upazilas in maximum temperature is likely to increase by 1.5-2.0°C for the mid-century (2021-2050) as presented in Fig. 4.11. The rate of increase of maximum temperature in the northern part upazilas and southern part upazilas are the same but central part upazilas are different, i.e. higher in Bangladesh.

4.1.4.5 Maximum temperature scenario for May for the mid-century

Maximum temperature for the month of May is likely to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in some upazilas of northwest part and eastern part upazilas, where the maximum temperature is found to be in the range of about 1.0-1.5°C in Bangladesh for the mid-century (2021-2050) as presented in Fig. 4.12. The rate of increase of maximum temperature in the some upazilas of northwest part and eastern part upazilas are higher than that of others part upazilas in Bangladesh.

4.1.4.6 Maximum temperature scenario for June for the mid-century

Maximum temperature for the month of June is expected to increase by 0.5-1.0°C almost all

upazilas in Bangladesh except in some upazilas of northwest part upazilas, where the maximum temperature is found to be in the range of about 1.0-1.5°C in Bangladesh for the mid-century (2021-2050) as presented in Fig. 4.12.

4.1.4.7 Maximum temperature scenario for July for the mid-century

Maximum temperature for July is projected to increase by 0.5-1.0°C all upazilas in Bangladesh for the mid-century (2021-2050) as presented in Fig. 4.13.

4.1.4.8 Maximum temperature scenario for August for the mid-century

Maximum temperature during August is likely to increase by 0.5-1.0°C all upazilas in Bangladesh for the mid-century (2021-2050) as presented in Fig. 4.13.

4.1.4.9 Maximum temperature scenario for September for the mid-century

Maximum temperature for September is expected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some pockets upazilas of northeast and southeast part, where the maximum temperature for September is projected to increase by 0.5-1.0°C for the mid-century (2021-2050) as shown in Fig. 4.14.

4.1.4.10 Maximum temperature scenario for October for the mid-century

Maximum temperature for October is likely to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some pockets upazilas of western part, where the maximum temperature for October is expected to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) as shown in Fig. 4.14. The rate of increase of maximum temperature in some pockets upazilas of western part is less than the others parts.

4.1.4.11 Maximum temperature scenario for November for the mid-century

Maximum temperature for November is projected to increase by 1.0-1.5°C in northern part upazilas in Bangladesh but southern part upazilas in maximum temperature for November is expected to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) as shown in Fig. 4.15. The rate of increase of maximum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.1.4.12 Maximum temperature scenario for December for the mid-century

Maximum temperature for December is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some southern part upazilas, where the maximum temperature for December is expected to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) as shown in Fig. 4.15. The rate of increase of maximum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.1.5 Seasonal maximum temperature scenario for the mid-century

4.1.5.1 Maximum temperature scenario for winter season for the mid-century

Winter season maximum temperature is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in northwest and some southern part upazilas in maximum temperature for winter season is expected to change by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) as shown in Fig. 4.16.

4.1.5.2 Maximum temperature scenario for pre-monsoon season for the mid-century

Maximum temperature for Pre-monsoon season is likely to increase by 1.5-2.0°C almost all upazilas in Bangladesh except in southern part upazilas, where the maximum temperature for pre-monsoon season is projected to increase by 1.0-1.5°C compared to the baseline period for the mid-century (2021-2050) as shown in Fig. 4.16. The rate of increase of maximum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.1.5.3 Maximum temperature scenario for monsoon season for the mid-century

Monsoon season maximum temperature is likely to change by 0.5-1.0°C almost all upazilas in Bangladesh except in some pockets of northwest and northeast part upazilas, where the maximum temperature for monsoon season is projected to increase by 1.0-1.5°C compared to the baseline period for the mid-century (2021-2050). The rate of increase of maximum temperature in some pockets of northwest and northeast part upazilas is higher than that of other part upazilas in Bangladesh as shown in Fig. 4.17.

4.1.5.3 Maximum temperature scenario for post-monsoon season for the mid-century

Maximum temperature during Post-monsoon season is projected to change by 1.0-1.5°C in northern part upazilas in Bangladesh but southern part upazilas in maximum temperature of Post-monsoon season is expected to change by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050). The rate of increase of maximum temperature in Post-monsoon season of northern part upazilas is higher than that of southern part upazilas in Bangladesh as shown in Fig. 4.17.

4.1.6 Annual maximum temperature scenario for the mid-century

Annual maximum temperature is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in southern part upazilas, where the annual maximum temperature is likely to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) in Bangladesh as shown in Fig. 4.18.

4.1.7 Monthly minimum temperature scenario for the mid-century

4.1.7.1 Minimum temperature scenario for January for the mid-century

It is found that the minimum temperature for January is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some upazilas of northwest, northeast, southern and southeastern part in Bangladesh. Minimum temperature of northwest and northeast part upazilas and southern and southeastern part upazilas is expected to increase by 1.5-2.0°C and 0.5-1.0 °C, respectively for the mid-century (2021-2050) as presented in Fig. 4.19.

4.1.7.2 Minimum temperature scenario for February for the mid-century

Minimum temperature for the month of February is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some upazilas of northwest, northeast, southern and southeastern part in Bangladesh. Minimum temperature of northwest and northeast part upazilas and southern and southeastern part upazilas is likely to increase by 1.5-2.0°C and 0.5-1.0 °C, respectively for the mid-century (2021-2050) as presented in Fig. 4.19.

4.1.7.3 Minimum temperature scenario for March for the mid-century

Minimum temperature for the month of March is likely to increase by 2.0-2.5°C in northern part upazilas in Bangladesh. Near central (towards south) part and southern part upazilas in minimum temperature is projected to increase by 1.5-2.0 °C and 1.0-1.5 °C, respectively, for the mid-century (2021-2050) as presented in Fig. 4.20. The rate of increase of minimum temperature in the northern side upazilas is higher than that of the southern side upazilas in Bangladesh.

4.1.7.4 Minimum temperature scenario for April for the mid-century

Minimum temperature during April is projected to increase by 1.0-1.5°C in northern part upazilas in Bangladesh. But southern part upazilas in minimum temperature is likely to increase by 0.5-1.0°C for the mid-century (2021-2050) as presented in Fig. 4.20. Some upazilas of Sylhet regions in minimum temperature is expected to change by 1.5-2.0°C compared to the baseline period at the same period. The rate of increase of minimum temperature in the northern part upazilas is the higher then the southern part upazilas over Bangladesh.

4.1.7.5 Minimum temperature scenario for May for the mid-century

Minimum temperature for the month of May is expected to increase by 1.0-1.5°C in northern part upazilas in Bangladesh. But southern part upazilas in minimum temperature is likely to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) as presented in Fig. 4.21. Some upazilas of Sylhet regions in minimum temperature is projected to change by 1.5-2.0°C at the same period. The rate of increase of minimum temperature in the northern part upazilas is the higher then the southern part upazilas over Bangladesh.

4.1.7.6 Minimum temperature scenario for June for the mid-century

Minimum temperature for the month of June is projected to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in some upazilas of west, northwest and northeast part upazilas, where the minimum temperature is found to be in the range of about 1.0-1.5°C in Bangladesh for the mid-century (2021-2050) as presented in Fig. 4.21.

4.1.7.7 Minimum temperature scenario for July for the mid-century

Minimum temperature for July is likely to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in some upazilas of northeast part, where the minimum temperature is expected to increase by 1.0-1.5°C compared to the baseline period for the mid-century (2021-2050) as presented in Fig. 4.22.

4.1.7.8 Minimum temperature scenario for August for the mid-century

Minimum temperature for August is expected to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in some upazilas of northwest and northeast part, where the minimum temperature is projected to increase by 1.0-1.5°C compared to the baseline period for the mid-century (2021-2050) as presented in Fig. 4.22.

4.1.7.9 Minimum temperature scenario for September for the mid-century

Minimum temperature for September is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in southern part upazilas, where the minimum temperature for September is likely to increase by 0.5-1.0°C for the mid-century (2021-2050) as shown in Fig. 4.23.

4.1.7.10 Maximum temperature scenario for October for the mid-century

Minimum temperature for October is likely to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some pockets upazilas of northeastern part, where the minimum temperature for October is expected to increase by 1.5-2.0°C compared to the baseline period for the mid-century (2021-2050) as shown in Fig. 4.23.

4.1.7.11 Minimum temperature scenario for November for the mid-century

Minimum temperature for November is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some of northwest and northeast and south, southeast part upazilas, where the minimum temperature for November is likely to increase by 1.5-2.0°C and 0.5-1.0°C, respectively for the mid-century (2021-2050) as shown in Fig. 4.24.

4.1.7.12 Minimum temperature scenario for December for the mid-century

Minimum temperature for December is expected to increase by 1.0-1.5°C almost all upazilas

in northern part in Bangladesh except in some pockets upazilas of northwest and northeast part, where the minimum temperature for December is projected to increase by 1.5-2.0°C for the mid-century (2021-2050) as shown in Fig. 4.24. In a few upazilas in southern part in minimum temperature is likely to change by 0.5-1.0°C at the same period. The rate of increase of minimum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.1.8 Seasonal minimum temperature scenario for the mid-century

4.1.8.1 Minimum temperature scenario for winter season for the mid-century

Winter season minimum temperature is projected to increase by 1.0-1.5°C almost all upazilas in northern part in Bangladesh except in some upazilas in northwest and northeast part, where the winter season in minimum temperature is likely to increase by 1.5-2.0°C for the mid-century (2021-2050) as shown in Fig. 4.25. Minimum temperature of southern part upazilas is expected to change by 0.5-1.0°C at the same period. The rate of increase of minimum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.1.8.2 Minimum temperature scenario for pre-monsoon season for the mid-century

Minimum temperature during Pre-monsoon season is likely to increase by 1.5-2.0°C almost all upazilas of northern part in Bangladesh except in southern part upazilas, where the minimum temperature for pre-monsoon season is projected to increase by 1.0-1.5°C for the mid-century (2021-2050) as shown in Fig. 4.25. Some pockets upazilas of southern part in minimum temperature for pre-monsoon is expected to change by 0.5-1.0°C compared to the baseline period at the same period.

4.1.8.3 Minimum temperature scenario for monsoon season for the mid-century

Monsoon season minimum temperature is projected to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in some pockets of northwest and northeast part upazilas, where the minimum temperature for monsoon season is likely to increase by 1.0-1.5°C compared to the baseline period for the mid-century (2021-2050) as shown in Fig. 4.26.

4.1.8.3 Minimum temperature scenario for post-monsoon season for the mid-century

Post-monsoon season minimum temperature is expected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some pockets upazilas of northeast part, where the minimum temperature is likely to increase by 1.5-2.0°C for the mid-century (2021-2050) as shown in Fig. 4.26.

4.1.9 Annual minimum temperature scenario for the mid-century

Annual minimum temperature is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some upazilas of northeast, south and southeast part, where the annual

minimum temperature is projected to increase by 1.5-2.0 and 0.5-1.0°C respectively, for the mid-century (2021-2050) as shown in Fig. 4.27.

4.2 Future Scenario generation for the last-century using RCP4.5

4.2.1 Monthly rainfall scenario for the last-century

4.2.1.1 Rainfall scenario for January for the last-century

Rainfall for January is projected to decrease by more than -10% almost all upazilas in Bangladesh except in some pockets area (eastern part) upazilas, where the rainfall change is expected to between -10 to +10 % compared to the baseline period in Bangladesh for the last century (2071-2100) as shown in Fig. 4.28.

4.2.1.2 Rainfall scenario for February for the last-century

Rainfall during February is expected to decrease by more than -10% in most of the upazilas in Bangladesh except in some pockets upazilas (west, northwest and southern upazilas) for the last century (2071-2100) as shown in Fig. 4.28. Rainfall in west and northwest upazilas is projected to increase by more than 10% and southern part upazilas in rainfall change is expected to between -10 to +10 % during the same period.

4.2.1.3 Rainfall scenario for March for the last-century

Rainfall for the month of March is likely to increase by more than 10% in northern part upazilas in Bangladesh except in some pockets upazilas of central to eastern part as well as southern part for last-century (2071-2100) as shown in Fig. 4.29. Some pockets upazilas of central to eastern part in rainfall change is projected to between -10 to +10% and southern part upazilas in rainfall is expected to decrease by more than -10% during the same period.

4.2.1.4 Rainfall scenario for April for the last-century

Rainfall for April is projected to increase by more than 10% almost all upazilas in Bangladesh except in some upazilas of southern part, where the rainfall change is expected to between -10 to +10 % compared to the baseline period in Bangladesh for the last-century (2071-2100) as shown in Fig. 4.29.

4.2.1.5 Rainfall scenario for May for the last-century

Rainfall during May is expected to between -10 to +10% compared to the baseline period in almost all upazilas in Bangladesh except in some pocket upazilas (west and southeast part) for the last-century (2071-2100) as shown in Fig. 4.30. Pocket upazilas of west part in rainfall is projected to increase by more than 10% and rainfall of southern part upazilas is likely to decrease by more than -10% at the same period.

4.2.1.6 Rainfall scenario for June for the last-century

Rainfall for the month of June is projected to increase by more than 10% almost all upazilas in Bangladesh except in some upazilas of northwest part, where the rainfall change is expected to between -10 to +10 % compared to the baseline period during the last-century (2071-2100) as shown in Fig. 4.30.

4.2.1.7 Rainfall scenario for July for the last-century

The change of rainfall for July is found to be more than 10% almost all upazilas in Bangladesh except in south and southeast upazilas, where the rainfall change is expected to between -10 to +10% compared to the baseline period in Bangladesh for the last-century (2071-2100) as shown in Fig. 4.31.

4.2.1.8 Rainfall scenario for August for the last-century

Rainfall for August is found to be changed of -10 to +10% compared to the baseline period in almost all upazilas in Bangladesh except in northwest and eastern part upazilas, where the rainfall is projected to increase by more than 10 % in Bangladesh for the last-century (2071-2100) as shown in Fig. 4.31.

4.2.1.9 Rainfall scenario for September for the last-century

Rainfall for September is found to be increased by more than 10% almost all upazilas in Bangladesh except in some pocket upazilas (northeast part), where the rainfall change is expected to between -10 to +10 % compared to the baseline period for the last-century (2071-2100) as shown in Fig. 4.32.

4.2.1.10 Rainfall scenario for October for the last-century

Rainfall for the month of October is found to be changed by more than +10 % all upazilas in Bangladesh for the last-century (2071-2100) as shown in Fig. 4.32.

4.2.1.11 Rainfall scenario for November for the last-century

The change of rainfall is found to be increased by more than +10% in southern and central part upazilas in Bangladesh. Rainfall change of northeast and other pockets region is expected to between -10 to +10 % compared to the baseline period for the last-century (2071-2100) as shown in Fig. 4.33. Rainfall of northwest and west part upazilas is likely to decrease by more than -10% for the same period.

4.2.1.12 Rainfall scenario for December for the last-century

Rainfall for December is found to be decreased by more than -10% in northwest and some pocket upazilas of southern part in Bangladesh. Central to northeast part upazilas in rainfall is

projected to increase by more than 10% and rainfall of southern part upazilas is likely to between -10 to +10% compared to the baseline period in Bangladesh for the last-century (2071-2100) as shown in Fig. 4.33.

4.2.2 Seasonal rainfall scenario for the last-century

4.2.2.1 Rainfall scenario for winter season for the last-century

Winter season rainfall is projected to decrease by more than -10% in southern and northwest part upazilas in Bangladesh. Some pockets upazilas of western part in rainfall is likely to increase by more than 10%. Central to northeast part and southeast pocket upazilas in rainfall change is expected to between -10 to +10 % compared to the baseline period for the last-century as shown in Fig. 4.34.

4.2.2.2 Rainfall scenario for pre-monsoon season for the last-century

Pre-monsoon season rainfall is likely to increase by more than 10% in northern part upazilas in Bangladesh. Southern part upazilas in rainfall change is expected to between -10 to 10% compared to the baseline period for the last-century as presented in Fig. 4.34. Rainfall in some pockets upazilas of southern part is found to be decreased more than -10% at the same period for pre-monsoon season.

4.2.2.3 Rainfall scenario for monsoon season for the last-century

Monsoon season rainfall is found to be increased by more than 10% all upazilas in Bangladesh for the last-century as presented in Fig. 4.35.

4.2.2.4 Rainfall scenario for post-monsoon season for the last-century

Post-monsoon season rainfall is projected to increase by more than 10% all upazilas in Bangladesh for the last-century as presented in Fig. 4.35. This season rainfall pattern similar to monsoon season for the same period.

4.2.3 Annual rainfall scenario generation for the mid-century

Annual rainfall is expected to increase by more than 10% all upazilas in Bangladesh for the last-century as shown in Fig. 4.36.

4.2.4 Monthly maximum temperature scenario for the last-century

4.2.4.1 Maximum temperature scenario for January for the last-century

Maximum temperature for February is projected to increase by 1.0-1.5°C in southern part upazilas in Bangladesh. Central part and northwest part upazilas in maximum temperature is likely to increase by 1.5-2.0 and 2.0-2.5°C respectively for the last-century (2071-2100) as presented in Fig. 4.37. The rate of increase of maximum temperature in the northwest part upazilas is higher than that of the southern part upazilas of Bangladesh for the month of January.

4.2.4.2 Maximum temperature scenario for February for the last-century

Maximum temperature for the month of February is projected to increase by 1.5-2.0°C almost all upazilas in Bangladesh except in some upazilas of northwest, northeast and southwest part upazilas. Some upazilas of northwest and northeast in maximum temperature is likely to increase by 2.0-2.5°C compared to the baseline period for the last-century (2071-2100) as presented in Fig. 4.37. Some upazilas of southwest part in maximum temperature is expected to increase by 1.0-1.5°C at the same time.

4.2.4.3 Maximum temperature scenario for March for the last-century

Maximum temperature for the month of March is expected to increase by 1.5-2.0°C along southwest to north part upazilas in Bangladesh. Eastern part upazilas in maximum temperature is projected to increase by 2.0-2.5°C compared to the baseline period for the last-century (2071-2100) as presented in Fig. 4.38. The rate of increase of maximum temperature in the eastern side upazilas is higher than that of the western side upazilas of Bangladesh at the same period.

4.2.4.4 Maximum temperature scenario for April for the last-century

Maximum temperature during April is projected to increase by 2.5-3.0°C in northern (from near south to up to north) part upazilas in Bangladesh and southern part upazilas in maximum temperature is likely to change 1.5-2.5°C compared to the baseline period for the last-century (2071-2100) as presented in Fig. 4.38. The rate of increase of maximum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.2.4.5 Maximum temperature scenario for May for the last-century

Maximum temperature for the month of May is expected to increase by 1.5-2.5°C in northwest, northeast and southeast part upazilas in Bangladesh. Central to southern part upazilas in maximum temperature is found to be in the range of about 1.0-1.5°C in Bangladesh for the last-century (2071-2100) as presented in Fig. 4.39.

4.2.4.6 Maximum temperature scenario for June for the last-century

Maximum temperature for the month of June is projected to increase by 1.0-1.5°C almost all

upazilas in Bangladesh except in northwest and some pocket upazilas of southwest and southeast part upazilas, where the maximum temperature is found to be in the range of about 1.5-2.0°C compared to the baseline period in Bangladesh for the last-century (2071-2100) as presented in Fig. 4.39.

4.2.4.7 Maximum temperature scenario for July for the last-century

Maximum temperature for July is expected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in northern part upazilas, where the maximum temperature is projected to increase by 1.5-2.0°C compared to the baseline period for the last-century (2071-2100) as presented in Fig. 4.40.

4.2.4.8 Maximum temperature scenario for August for the last-century

Maximum temperature for August is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in northwest and some pockets upazilas of northeast and southeast, where the maximum temperature is likely to change by 0.5-1.0°C for the last-century (2071-2100) as presented in Fig. 4.40.

4.2.4.9 Maximum temperature scenario for September for the last-century

Maximum temperature for September is expected to increase by 1.0-1.5°C in southern part upazilas in Bangladesh. Central part upazilas in maximum temperature is likely to increase by 1.5-2.0°C and northern part upazilas in maximum temperature for September is expected to increase by 2.0-2.5°C for the last-century (2071-2100) as shown in Fig. 4.41.

4.2.4.10 Maximum temperature scenario for October for the last-century

Maximum temperature for October is expected to increase by 1.0-1.5°C in central to southern part upazilas in Bangladesh. Maximum temperature of northwest to southeast part upazilas is likely to increase by 1.5-2.0°C for the last-century (2071-2100) as shown in Fig. 4.41.

4.2.4.11 Maximum temperature scenario for November for the last-century

Maximum temperature for November is projected to increase by 1.0-1.5°C in southern and central part upazilas in Bangladesh and northern and western part upazilas in maximum temperature for November is likely to increase by 1.5-2.0°C for the last-century (2071-2100) as shown in Fig. 4.42.

4.2.4.12 Maximum temperature scenario for December for the last-century

Maximum temperature for December is projected to increase by 1.5-2.0°C in northern part upazilas in Bangladesh and central to southern part upazilas in maximum temperature for December is likely to change by 1.0-1.5°C compared to the baseline period for the last-century

(2071-2100) as shown in Fig. 4.42. The rate of increase of maximum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.2.5 Seasonal maximum temperature scenario for the last-century

4.2.5.1 Maximum temperature scenario for winter season for the last-century

Winter season maximum temperature is expected to increase by 1.0-1.5°C in southern part upazilas in Bangladesh. Central part upazilas in maximum temperature for winter season is projected to change by 1.5-2.0°C compared to the baseline period and northern part upazilas is likely to increase by 2.0-2.5°C for the last-century (2071-2100) as shown in Fig. 4.43.

4.2.5.2 Maximum temperature scenario for pre-monsoon season for the last-century

Pre-monsoon season maximum temperature is projected to increase by 1.5-2.0°C in southern part upazilas in Bangladesh and northern part upazilas in maximum temperature for pre-monsoon season is likely to increase by 2.0-2.5°C for the last-century (2071-2100) as shown in Fig. 4.43. The rate of increase of maximum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.2.5.3 Maximum temperature scenario for monsoon season for the last-century

Monsoon season maximum temperature is expected to change by 1.0-1.5°C most of upazilas in Bangladesh except in some upazilas of northern, where the maximum temperature for monsoon season is likely to increase by 1.5-2.0°C for the last-century (2071-2100) as shown in Fig. 4.44.

4.2.5.4 Maximum temperature scenario for post-monsoon season for the last-century

Post-monsoon season maximum temperature is projected to change by 1.0-1.5°C almost all upazilas in Bangladesh except in some upazilas of northern part in maximum temperature of Post-monsoon season is expected to change by 1.5-2.0°C for the last-century (2071-2100). The rate of increase of maximum temperature in Post-monsoon season of northern part upazilas is higher than that of southern part upazilas in Bangladesh as shown in Fig. 4.44.

4.2.6 Annual maximum temperature scenario for the mid-century

Annual maximum temperature is projected to increase by 1.0-1.5°C in southern part upazilas in Bangladesh. Central to northern part upazilas, in annual maximum temperature is likely to increase by 1.5-2.0°C and northwest part upazilas in annual maximum temperature is expected to rise by 2.0-2.5°C compared to the baseline period in Bangladesh for the last-century (2071-2100) as shown in Fig. 4.45.

4.2.7 Monthly minimum temperature scenario for the last-century

4.2.7.1 Minimum temperature scenario for February for the last-century

The minimum temperature for January is projected to increase by 0.5-1.0°C in southern part upazilas in Bangladesh except in some upazilas of northern part, as well as eastern part, where the minimum temperature may vary by 1.5-2.0°C and 0.0-0.5°C respectively, for January for the last-century (2071-2100) as presented in Fig. 4.46.

4.2.7.2 Minimum temperature scenario for February for the last-century

Minimum temperature for the month of February is expected to increase by 0.5-1.0°C in southern part upazilas in Bangladesh. Northern part upazilas in minimum temperature is projected to increase by 1.0-1.5°C and some pocket upazilas of northwest and northeast part in minimum temperature is likely to increase by 1.5-2.0°C for the last-century (2071-2100) as presented in Fig. 4.46.

4.2.7.3 Minimum temperature scenario for March for the last-century

Minimum temperature for the month of March is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some pockets upazilas of central part as well as some isolated upazilas of northwest, northeast and southeast. Some pockets upazilas of central part in minimum temperature is likely to change by 0.5-1.0°C and some isolated upazilas of northwest, northeast and southeast in minimum temperature may be risen by 1.5-2.0°C for the last-century (2071-2100) as presented in Fig. 4.47.

4.2.7.4 Minimum temperature scenario for April for the last-century

Minimum temperature for the month of April is expected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some upazilas of northwest, northeast and southeast, where the minimum temperature may be risen by 1.5-2.0°C for the last-century (2071-2100) as presented in Fig. 4.47.

4.2.7.5 Minimum temperature scenario for May for the mid-century

Minimum temperature for May is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some pocket upazilas of central part, northwest, northeast and southeast part. Minimum temperature of northwest, northeast and southeast part upazilas may be risen by 1.5-2.0°C for the last-century (2071-2100) as presented in Fig. 4.48. Some pocket upazilas of central part in minimum temperature may be changed 0.5-1.0°C at the same period.

4.2.7.6 Minimum temperature scenario for June for the last-century

Minimum temperature for the month of June is expected to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in some upazilas of west, northern and southern part upazilas,

where the minimum temperature is found to be in the range of about 1.5-2.0°C in Bangladesh for the last-century (2071-2100) as presented in Fig. 4.48.

4.2.7.7 Minimum temperature scenario for July for the last-century

Minimum temperature for July is projected to increase by 1.0-1.5°C in northern and southern part upazilas in Bangladesh except in some pockets upazilas of northwest and northeast part as well as along west-east central part. West-east central part upazilas in minimum temperature is likely to change by 0.5-1.0°C and some pockets upazilas of northwest and northeast part upazilas in minimum temperature may be risen by 1.5-2.0°C for the last-century (2071-2100) as presented in Fig. 4.49.

4.2.7.8 Minimum temperature scenario for August for the last-century

Minimum temperature for August is expected to increase by 1.0-1.5°C in northern and southern part upazilas in Bangladesh except in west-east central part upazilas, where the minimum temperature is projected to change by 0.5-1.0°C for the last-century (2071-2100) as presented in Fig. 4.49.

4.2.7.9 Minimum temperature scenario for September for the last-century

Minimum temperature for September is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in northern part upazilas, where the minimum temperature for September is likely to increase by 1.5-2.0°C for the last-century (2071-2100) as shown in Fig. 4.50. Some isolated upazilas of Sylhet region in minimum temperature is expected to increase by 2.0-2.5 °C at the same period.

4.2.7.10 Maximum temperature scenario for October for the last-century

Minimum temperature for October is likely to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in northern part upazilas, where the minimum temperature for October is projected to increase by 1.5-2.0°C for the last-century (2071-2100) as shown in Fig. 4.50. Some pockets upazilas of northwest part in minimum temperature may be risen by 2.0-2.5°C at the same period.

4.2.7.11 Minimum temperature scenario for November for the last-century

Minimum temperature for November is expected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in northern part upazilas, where the minimum temperature for November is projected to increase by 1.5-2.0°C for the last-century (2071-2100) as shown in Fig. 4.51.

4.2.7.12 Minimum temperature scenario for December for the last-century

Minimum temperature for December is projected to increase by 0.5-1.0°C in southern and

northern part upazilas in Bangladesh except in northwest and northeast upazilas as well as along west to east of central part upazilas, where the minimum temperature for December is likely to change by 0.0-0.5°C and 1.0-1.5°C respectively, for the last-century (2071-2100) as shown in Fig. 4.51.

4.2.8 Seasonal minimum temperature scenario for the last-century

4.2.8.1 Minimum temperature scenario for winter season for the last-century

Winter season minimum temperature is likely to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in some upazilas of central part and northern part, where the winter season in minimum temperature is projected to change by 0.0-0.5°C and may also vary by 1.0-1.5°C and 1.5-2.0 °C, respectively, for the last-century (2071-2100) as shown in Fig. 4.52.

4.2.8.2 Minimum temperature scenario for pre-monsoon season for the last-century

Pre-monsoon season minimum temperature is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in northwest, northeast part upazilas, where the minimum temperature for pre-monsoon season is expected to increase by 1.5-2.0°C for the last-century (2071-2100) as shown in Fig. 4.52. Moreover, some pockets upazilas of Sylhet region in minimum temperature for pre-monsoon may also be risen by 2.0-2.5°C at the same period.

4.2.8.3 Minimum temperature scenario for monsoon season for the last-century

Monsoon season minimum temperature is likely to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in northwest and northeast part upazilas, where the minimum temperature for monsoon season is expected to increase by 1.5-2.0°C compared to baseline period for the last-century (2071-2100) as shown in Fig. 4.53.

4.2.8.3 Minimum temperature scenario for post-monsoon season for the last-century

Post-monsoon season minimum temperature is projected to change by 1.0-1.5°C almost all upazilas in Bangladesh except in northern part upazilas, where the minimum temperature is likely to increase by 1.5-2.0°C for the last-century (2071-2100) as shown in Fig. 4.53.

4.2.9 Annual minimum temperature scenario for the last-century

Annual minimum temperature is expected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some upazilas of northwest, northeast and central part, where the annual minimum temperature is projected to change by 1.5-2.0 and 0.5-1.0°C respectively, for the last-century (2071-2100) as shown in Fig. 4.54.

4.3 Future scenario generation for the mid-century using RCP8.5

4.3.1 Monthly rainfall scenario for the mid-century

4.3.1.1 Rainfall scenario for January for the mid-century

Rainfall for January is projected to decrease by more than -10% almost all upazilas in Bangladesh except in some pockets upazilas of Chittagong region, where the rainfall change is expected to between -10 to +10% compared to baseline period during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.55.

4.3.1.2 Rainfall scenario for February for the mid-century

Rainfall for the month of February is expected to decrease by more than -10% almost all upazilas in Bangladesh except in some pockets upazilas (western upazilas and northwest part upazilas) during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.55. Some pockets upazilas in western and northwest part upazilas in rainfall is expected to between -10 to +10 % compared to baseline period and likely to increase by more than 10% during the same period.

4.3.1.3 Rainfall scenario for March for the mid-century

Rainfall for the month of March is likely to between -10 to +10 % compared to baseline period in almost all upazilas in Bangladesh except some pockets upazilas (western, northeast and eastern parts) and southwest and southeast part upazilas during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.56. Some pockets upazilas of western, northeast and eastern parts in rainfall is projected to change by more than 10% and some southwest and southeast part upazilas in rainfall is expected to decrease by more than -10 during the same period.

4.3.1.4 Rainfall scenario for April for the mid-century

Rainfall for the month of April is projected to decrease by more than -10% for all upazilas in Bangladesh during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.56.

4.3.1.5 Rainfall scenario for May for the mid-century

Rainfall during May is likely to decrease by more than -10% in central to southern part upazilas in Bangladesh except in northern part upazilas, where the rainfall change is expected to between -10 to +10 % compared to baseline period during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.57. The rate of change of rainfall for May in the northern part upazilas is higher than that of southern part upazilas in Bangladesh at the same period.

4.3.1.6 Rainfall scenario for June for the mid-century

Rainfall for the month of June is projected to increase by more than 10% almost all upazilas in Bangladesh except in some upazilas of northwest part, where the rainfall change is expected to

between -10 to +10 % compared to baseline period for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.57.

4.3.1.7 Rainfall scenario for July for the mid-century

The change in rainfall is expected to between -10 to +10% compared to the baseline period in a majority of upazilas except in a few upazilas in northwest part, where it is projected to decrease by more than -10%. In a few upazilas in southwest part, where it is projected to increase by more than 10% in Bangladesh during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.58.

4.3.1.8 Rainfall scenario for August for the mid-century

The change in rainfall is expected to between -10 to +10% compared to the baseline period in all upazilas in Bangladesh during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.58.

4.3.1.9 Rainfall scenario for September for the mid-century

Rainfall for September is projected to increase by more than 10% in a majority of upazilas in Bangladesh except in a few upazilas in northwest and northeast, the change in rainfall is expected to between -10 to +10% compared to the baseline period during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.59.

4.3.1.10 Rainfall scenario for October for the mid-century

The change of rainfall is found to be increased by more than +10% on southern upazilas in Bangladesh except in few upazilas in central to northern part, the change in rainfall is expected to between -10 to +10 % compared to the baseline period. In a few upazilas in northern part, where it is projected to decrease by more than -10% for the month of October during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.59.

4.3.1.11 Rainfall scenario for November for the mid-century

Rainfall is projected to increase by more than 10% in a majority of upazilas in Bangladesh except in a few upazilas in northwest and northeast, where it is projected to decrease by more than -10%. In a few districts in northwest and southeast, the change in rainfall is expected to between -10 to +10% compared to the baseline period for the month of November during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.60.

4.3.1.12 Rainfall scenario for December for the mid-century

This is projected to increase in rainfall by more than 10% in majority of upazilas in southern and western parts. In a few upazilas of western and northern parts in rainfall is likely to decrease by more than -10% and in some isolated upazilas, the change in rainfall is expected to between

-10 to + 10% compared to the baseline period for the month of December during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.60.

4.3.2 Seasonal rainfall scenario for the mid-century

4.3.2.1 Rainfall scenario for winter season for the mid-century

Winter season rainfall is likely to decrease more than -10% almost all upazilas in Bangladesh except in some pockets upazilas (western and southern part), where the change in rainfall is expected to between -10 to + 10% compared to the baseline period during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.61.

4.3.2.2 Rainfall scenario for pre-monsoon season for the mid-century

This is projected to decrease in rainfall by more than -10% in a majority of upazilas in Pre-monsoon season in Bangladesh except in a few upazilas in northwest and northeast part, where the change in rainfall for post-monsoon season is expected to between -10 to + 10% compared to the baseline period during the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.61.

4.3.2.3 Rainfall scenario for monsoon season for the mid-century

Rainfall is projected to increase by more than 10% in a majority upazilas over southern part. In a few upazilas in northern part, where the change in rainfall for monsoon season is expected to between -10 to + 10% compared to the baseline period during the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.62.

4.3.2.4 Rainfall scenario for post-monsoon season for the mid-century

Rainfall during post-monsoon season is projected to increase by more than 10% in most parts upazilas of southern Bangladesh and is expected to decrease by more than -10% in a few upazilas in northwest part. In some upazilas in northern part, the change in rainfall is expected to between -10 to + 10% compared to the baseline period during the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.62.

4.3.3 Annual rainfall scenario generation for the mid-century

Rainfall for annual is projected to between -10 to + 10% compared to the baseline period. Except in a few upazilas in isolated place, where the rainfall it is expected to increase by more than 10% in Bangladesh during the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.63.

4.3.4 Monthly maximum temperature scenario for the mid-century

4.3.4.1 Maximum temperature scenario for January for the mid-century

Maximum temperature is projected to increase by 1.0-1.5°C in a majority of upazilas in Bangladesh except in a few upazilas in southern and northwest parts, where it is projected to increase by 0.5-1.0°C and 1.5-2.0°C respectively in Bangladesh for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.64. The rate of increase of maximum temperature in the northern side upazilas is higher than that of the southern side upazilas of Bangladesh.

4.3.4.2 Maximum temperature scenario for February for the mid-century

Maximum temperature for the month of February is expected to increase by 1.0-1.5°C on southern part upazilas and northern part upazilas in Bangladesh is also expected to increase by 1.5-2.0°C for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.64.

4.3.4.3 Maximum temperature scenario for March for the mid-century

Maximum temperature during March is projected to increase by 1.5-2.0°C in majority of upazilas in Bangladesh except in some northwest and southern part upazilas. In southern part upazilas the maximum temperature is expected to increase by 1.0-1.5°C and in northwest part upazilas is likely to increase by 2.0-2.5°C for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.65.

4.3.4.4 Maximum temperature scenario for April for the mid-century

Maximum temperature for April is projected to increase by 1.5-2.0°C in majority of upazilas in Bangladesh except in some northwest and southern part upazilas. In southern part upazilas, the maximum temperature is expected to increase by 1.0-1.5°C and in northwest part upazilas is likely to increase by 2.0-2.5°C for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.65. Some isolated upazilas in southern part is expected to increase by 0.5-1.0°C at the same period.

4.3.4.5 Maximum temperature scenario for May for the mid-century

The maximum temperature is expected to increase by 1.0-1.5°C in most upazilas with the rise being somewhat moderate (0.5-1.0°C) in the southern part and some isolated places in central part upazilas in Bangladesh for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.66. In a few upazilas in southern part, the maximum temperature is expected to increase by 0.0-0.5°C at the same period.

4.3.4.6 Maximum temperature scenario for June for the mid-century

Maximum temperature is projected to increase by 0.5-1.0°C in a majority of upazilas in Bangladesh except in a few upazilas in eastern part, it is expected to increase by 0.0-0.5°C for

the month of June in Bangladesh for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.66.

4.3.4.7 Maximum temperature scenario for July for the mid-century

Maximum temperature for July is expected to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in a few upazilas in northwest part, where the maximum temperature is projected to increase by 1.0-1.5°C for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.67.

4.3.4.8 Maximum temperature scenario for August for the mid-century

The maximum temperature is likely to increase by 1.0-1.5°C in a majority of upazilas in northern part in Bangladesh except in southern part upazilas, where the maximum temperature for August is expected to increase by 0.5-1.0°C compared to the baseline period in Bangladesh for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.67.

4.3.4.9 Maximum temperature scenario for September for the mid-century

Maximum temperature for September is projected to increase by 0.5-1.0°C in a majority upazilas in southern part in Bangladesh except in northern part upazilas, where it is likely to increase by 1.0-1.5°C for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.68. The rate of increase of maximum temperature in northern part is higher than that of southern part in Bangladesh at the same period.

4.3.4.10 Maximum temperature scenario for October for the mid-century

Maximum temperature for October is likely to increase by 0.5-1.0°C all upazilas in central to southern part in Bangladesh except in a few upazilas in northern part, it is expected to increase by 1.0-1.5°C compared to the baseline period for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.68.

4.3.4.11 Maximum temperature scenario for November for the mid-century

Maximum temperature for November is projected to increase by 0.5-1.0°C in a majority upazilas in Bangladesh except in a few upazilas in some pockets part (central, and northwest part). Some pockets part (central, and northwest part) upazilas in maximum temperature is likely to increase by 0.0-0.5°C compared to the baseline period in Bangladesh for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.69.

4.3.4.12 Maximum temperature scenario for December for the mid-century

The maximum temperature is likely to increase by 1.0-1.5°C in a majority of upazilas in northern part in Bangladesh except in southern part upazilas, where the maximum temperature

for August is expected to increase by 0.5-1.0°C compared to the baseline period in Bangladesh for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.69.

4.3.5 Seasonal maximum temperature scenario for the mid-century

4.3.5.1 Maximum temperature scenario for winter season for the mid-century

Maximum temperature for Winter season is projected to increase by 1.0-1.5°C in a majority upazilas in Bangladesh except in a few upazilas in southern and northwest part, where it is likely to increase by 0.5-1.0°C and 1.5-2.0°C, respectively, compared to the baseline period in Bangladesh for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.70.

4.3.5.2 Maximum temperature scenario for pre-monsoon season for the mid-century

Pre-monsoon season maximum temperature is expected to increase by 1.5-2.0°C in a majority upazilas in Bangladesh except in a few upazilas in southern part, where the maximum temperature for pre-monsoon season is projected to increase by 1.0-1.5°C compared to the baseline period. In some isolated upazilas in southern part, it is likely to increase by 0.5-1.0°C for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.70. The rate of increase of maximum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.3.5.3 Maximum temperature scenario for monsoon season for the mid-century

Maximum temperature for Monsoon season is projected to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in few upazilas in northern part, where the maximum temperature for monsoon season is likely to increase by 1.0-1.5°C compared to the baseline period in Bangladesh for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.71.

4.3.5.3 Maximum temperature scenario for post-monsoon season for the mid-century

Maximum temperature during Post-monsoon season is expected to change by 0.5-1.0°C in a majority upazilas in Bangladesh except in a few upazilas in northwest and northeast part, where the maximum temperature in Post-monsoon season is projected to increase by 1.0-1.5°C compared to the baseline period in Bangladesh for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.71.

4.3.6 Annual maximum temperature scenario for the mid-century

Annual maximum temperature is likely to increase by 1.0-1.5°C in a majority upazilas in Bangladesh except in southern part upazilas, where the annual maximum temperature is projected to increase by 0.5-1.0°C compared to the baseline period in Bangladesh for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.72.

4.3.7 Monthly minimum temperature scenario for the mid-century

4.3.7.1 Minimum temperature scenario for January for the mid-century

The minimum temperature for January is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some upazilas of northwest and southern part in Bangladesh. Minimum temperature of northwest and southern part upazilas is expected to increase by 1.5-2.0°C and 0.5-1.0 °C, respectively for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.73.

4.3.7.2 Minimum temperature scenario for February for the mid-century

Minimum temperature for the month of February is likely to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in some upazilas of northwest and southern part in Bangladesh. Minimum temperature of northwest and southern part upazilas is expected to increase by 1.5-2.0°C and 0.5-1.0 °C, respectively for the mid-century (2021-2050) as presented in Fig. 4.73.

4.3.7.3 Minimum temperature scenario or March for the mid-century f

Minimum temperature during March is likely to increase by 1.5-2.0°C in northern part upazilas in Bangladesh and except in southern part upazilas in minimum temperature is projected to increase by 1.0-1.5 °C compared to baseline period for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.74. The rate of increase of minimum temperature in the northern side upazilas is higher than that of the southern side upazilas in Bangladesh.

4.3.7.4 Minimum temperature scenario for April for the mid-century

Minimum temperature during April is projected to increase by 1.0-1.5°C in a majority upazilas in Bangladesh and except in isolated upazilas in northwest part and in a few upazilas in southern part. Isolated upazilas in northwest part, the minimum temperature is expected to increase by 1.5-2.0°C and in a few upazilas in northwest part, the minimum temperature is likely to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.74.

4.3.7.5 Minimum temperature scenario for May for the mid-century

Minimum temperature for the month of May is expected to increase by 1.0-1.5°C in northern part upazilas in Bangladesh except in some upazilas in southern part, where it is projected to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.75.

4.3.7.6 Minimum temperature scenario for June for the mid-century

Minimum temperature during June is projected to increase by 0.5-1.0°C almost all upazilas (along north to south) in Bangladesh except in some upazilas of eastern part, where the

minimum temperature is found to be in the range of about 0.5-1.0°C in Bangladesh for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.75.

4.3.7.7 Minimum temperature scenario for July for the mid-century

Minimum temperature for July is projected to increase by 0.5-1.0°C compared to the baseline period in all upazilas in Bangladesh for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.76.

4.3.7.8 Minimum temperature scenario for August for the mid-century

Minimum temperature for August is expected to increase by 1.0-1.5°C in a majority upazilas in Bangladesh except in some upazilas in southern part, where the minimum temperature is projected to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) under RCP8.5 as presented in Fig. 4.76.

4.3.7.9 Minimum temperature scenario for September for the mid-century

Minimum temperature for September is projected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in a few upazilas in southeast part, where the minimum temperature for September is likely to increase by 0.5-1.0°C for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.77.

4.3.7.10 Maximum temperature scenario for October for the mid-century

Minimum temperature for October is likely to increase by 1.0-1.5°C compared to the baseline period in all upazilas in Bangladesh for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.77.

4.3.7.11 Minimum temperature scenario for November for the mid-century

Minimum temperature for November is projected to increase by 0.5-1.0°C in a majority upazilas in Bangladesh except in some upazilas in northern part, where the minimum temperature for November is likely to increase by 1.0-1.5°C for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.78.

4.3.7.12 Minimum temperature scenario for December for the mid-century

Minimum temperature for December is expected to increase by 1.0-1.5°C in a majority upazilas in Bangladesh except in some upazilas in northern part, where the minimum temperature for December is projected to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) as shown in Fig. 4.78.

4.3.8 Seasonal minimum temperature scenario for the mid-century

4.3.8.1 Minimum temperature scenario for winter season for the mid-century

Winter season minimum temperature is projected to increase by 0.5-1.0°C in almost all upazilas in Bangladesh except in some upazilas in northern part and in a few upazilas in northwest part. In a few upazilas in northwest part, it is expected to increase by 1.5-2.0°C and northern part upazilas in minimum temperature is likely to increase by 1.0-1.5°C for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.79.

4.3.8.2 Minimum temperature scenario for pre-monsoon season for the mid-century

Minimum temperature during Pre-monsoon season is likely to increase by 1.0-1.5°C in a majority upazilas in Bangladesh except in southern part upazilas and some isolated upazilas in northeast part, where the minimum temperature for pre-monsoon season is projected to increase by 0.5-1.0°C and 1.5-2.0 compared to the baseline period for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.79.

4.3.8.3 Minimum temperature scenario for monsoon season for the mid-century

Monsoon season minimum temperature is projected to increase by 0.5-1.0°C almost all upazilas in Bangladesh except in northern upazilas, where the minimum temperature for monsoon season is likely to increase by 1.0-1.5°C compared to the baseline period for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.80.

4.3.8.3 Minimum temperature scenario for post-monsoon season for the mid-century

Post-monsoon season minimum temperature is expected to increase by 1.0-1.5°C almost all upazilas in Bangladesh except in southern part upazilas, where the minimum temperature is likely to increase by 0.5-1.0°C compared to the baseline period for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.80.

4.3.9 Annual minimum temperature scenario for the mid-century

Annual minimum temperature is projected to increase by 1.0-1.5°C in a majority upazilas in Bangladesh except in some upazilas of southern part, where the annual minimum temperature is expected to increase by 0.5-1.0°C, compared to the baseline period for the mid-century (2021-2050) under RCP8.5 as shown in Fig. 4.81.

4.4 Future scenario generation for the last-century using RCP8.5

4.4.1 Monthly rainfall scenario for the last-century

4.4.1.1 Rainfall scenario for January for the last-century

Rainfall for January is projected to decrease by more than -10% in a majority upazilas in Bangladesh except in some pockets upazilas in southern part, where the rainfall change is expected to between -10 to +10% compared to baseline period during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.82.

4.4.1.2 Rainfall scenario for February for the last-century

Rainfall for the month of February is expected to decrease by more than -10% in southern part upazilas in Bangladesh except in some pockets upazilas (western part, northwest and northeast part upazilas) and eastern part upazilas. Some pockets upazilas (western part, northwest and northeast part upazilas) in rainfall is projected to increase by more than 10% and eastern part upazilas in rainfall for February is expected to between -10 to +10 % compared to the baseline period during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.82.

4.4.1.3 Rainfall scenario for March for the last-century

Rainfall during March is projected to decrease by more than -10% in southern upazilas in Bangladesh except in a few upazilas in eastern part and northern part. In a few upazilas in eastern part, where it is expected to between -10 to +10 % compared to baseline period and northern part upazilas in rainfall is likely to increase by more than 10% during the last-century (2071-2050) under RCP8.5 as shown in Fig. 4.83.

4.4.1.4 Rainfall scenario for April for the last-century

Rainfall for the month of April is projected to increase by more than 10% in a majority upazilas in Bangladesh except southern part upazilas, where the change in rainfall is expected to between -10 to +10 % compared to baseline period during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.83.

4.4.1.5 Rainfall scenario for May for the last-century

Rainfall during May is expected to between -10 to +10 % compared to baseline period in a majority upazilas in Bangladesh except in some pockets upazilas in western, and southeast part. Some pockets upazilas in western part in rainfall is likely to increase by more than 10% and others pockets upazilas in rainfall is projected to decrease by more than -10% in Bangladesh during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.84.

4.4.1.6 Rainfall scenario for June for the last-century

Rainfall for the month of June is projected to increase by more than 10% in a majority upazilas

in Bangladesh except in a few upazilas in northwest part, where the rainfall change is expected to between -10 to +10 % compared to baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.84.

4.4.1.7 Rainfall scenario for July for the last-century

The change in rainfall is projected to increase by more than 10% in a majority upazilas in Bangladesh except in a few upazilas in southern part, where it is expected to between -10 to +10% compared to the baseline period during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.85.

4.4.1.8 Rainfall scenario for August for the last-century

The change in rainfall is expected to between -10 to +10% compared to the baseline period in a majority upazilas in Bangladesh except in a few upazilas in northwest, northeast and southeast part, where it is projected to increase by more than +10% during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.85.

4.4.1.9 Rainfall scenario for September for the last-century

Rainfall for September is projected to increase by more than 10% in a majority of upazilas in Bangladesh except in a few upazilas in northeast part, where the change in rainfall is expected to between -10 to +10% compared to the baseline period during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.86.

4.4.1.10 Rainfall scenario for October for the last-century

Rainfall for October is projected to increase by more than +10% compared to the baseline period in all upazilas in Bangladesh during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.86.

4.4.1.11 Rainfall scenario for November for the last-century

Rainfall is projected to increase by more than 10% in a majority of upazilas in Bangladesh except in a few upazilas in northwest part and northeast part with some isolated upazilas. In a few upazilas in northwest part, where it is projected to decrease by more than -10% and northeast part with some isolated upazilas in rainfall is expected to between -10 to +10% compared to the baseline period for the month of November during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.87.

4.4.1.12 Rainfall scenario for December for the last-century

This is projected to increase in rainfall by more than 10% in majority of upazilas in Bangladesh except northwest, some pockets upazilas of southern part. Northwest and some pockets upazilas of southern part in rainfall is likely to decrease by more than -10% and in a few upazilas of

southern parts in rainfall is expected to between -10 to + 10% compared to the baseline period for the month of December during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.87.

4.4.2 Seasonal rainfall scenario for the last-century

4.4.2.1 Rainfall scenario for winter season for the last-century

The change in rainfall for Winter season is expected to between -10 to + 10% compared to the baseline period in a majority upazilas in Bangladesh except in some upazilas in northwest, southern part and some isolated upazilas. Some upazilas in northwest and southern part in rainfall is likely to decrease by more than -10% and some isolated upazilas in rainfall is projected to increase by more than 10% compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.88.

4.4.2.2 Rainfall scenario for pre-monsoon season for the last-century

This is projected to decrease in rainfall by more than -10% in a majority of upazilas in Pre-monsoon season in Bangladesh except in a few upazilas in southern part and some isolated upazilas in southern part. In a few upazilas in southern part in rainfall change is expected to between -10 to + 10% compared to the baseline period and some isolated upazilas in southern part in rainfall is likely to decrease by more than -10% for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.88.

4.4.2.3 Rainfall scenario for monsoon season for the last-century

Rainfall is projected to increase by more than 10% in all upazilas in Bangladesh during the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.89.

4.4.2.4 Rainfall scenario for post-monsoon season for the last-century

Rainfall during post-monsoon season is projected to increase by more than 10% in all upazilas in Bangladesh compared to the baseline period during the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.89.

4.4.3 Annual rainfall scenario for the last-century

Rainfall for annual is projected to increase by more than 10% in all upazilas compared to the baseline period in Bangladesh during the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.90.

4.4.4 Monthly maximum temperature scenario for the last-century

4.4.4.1 Maximum temperature scenario for January for the last-century

Maximum temperature for January is projected to increase by 3.0-3.5°C in southern part upazilas in Bangladesh except in some upazilas of middle, and northwest parts and isolated upazilas, where it is projected to increase by 3.5-4.0°C and 4.0-4.5°C respectively in Bangladesh for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.91. Some isolated upazilas in maximum temperature is likely increase by 4.5-5.0 °C at the same period.

4.4.4.2 Maximum temperature scenario for February for the last-century

Maximum temperature for February is projected to increase by 3.0-3.5°C in southern part upazilas in Bangladesh except in some upazilas of middle, and northwest parts and isolated upazilas, where it is projected to increase by 3.5-4.0°C and 4.0-4.5°C respectively in Bangladesh for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.91. Some isolated upazilas in maximum temperature is likely increase by 4.5-5.0 °C at the same period

4.4.4.3 Maximum temperature scenario for March for the last-century

Maximum temperature during March is projected to increase by 4.5-5.0°C in majority of upazilas in Bangladesh except in some upazilas in southern part and some isolated upazilas in northwest part. Southern part upazilas in maximum temperature is likely to increase vary by 3.0-4.5 °C at different places in Bangladesh. In some isolated upazilas in northwest part in maximum temperature is expected to increase by 5.0-5.5°C for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.92.

4.4.4.4 Maximum temperature scenario for April for the last-century

Maximum temperature for April is projected to increase by 2.5-3.0°C in northern part upazilas in Bangladesh except in some northwest and middle part upazilas, where it is expected to increase by 3.0-3.5°C and 3.5-4.0°C respectively for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.92.

4.4.4.5 Maximum temperature scenario for May for the last-century

The maximum temperature is expected to increase by 2.0-3.0°C in southern part upazilas in Bangladesh except in some upazilas in middle part and northwest part, where it is projected to increase by 3.0-3.5 °C and 3.5-4.0 °C compared to the baseline period for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.93. In a few upazilas in northwest part, the maximum temperature is expected to increase by 4.0-4.5°C at the same period.

4.4.4.6 Maximum temperature scenario for June for the last-century

Maximum temperature for June is projected to increase by 3.5-5.0°C at different places from

middle to northwest part upazilas and some upazilas from middle to northwest part in maximum temperature is likely to increase vary 3.0-3.5°C and 2.5-3.0°C respectively for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.93.

4.4.4.7 Maximum temperature scenario for July for the last-century

Maximum temperature for July is expected to increase by 2.5-3.0°C in a majority upazilas in Bangladesh except in a few upazilas in middle part, where the maximum temperature is projected to increase by 2.0-2.5°C for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.94.

4.3.4.8 Maximum temperature scenario for August for the last-century

The maximum temperature is likely to increase by 2.5-3.0°C in a majority upazilas in southern part in Bangladesh except in northern part upazilas, where the maximum temperature for August is expected to increase by 3.0-3.5°C compared to the baseline period in Bangladesh for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.94.

4.4.4.9 Maximum temperature scenario for September for the last-century

Maximum temperature for September is projected to increase by 3.5-4.0°C in a majority upazilas in northern part in Bangladesh except in some southern part upazilas and some isolated upazilas, where it is likely to increase by 3.0-3.5°C and .5-3.0°C for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.95.

4.4.4.10 Maximum temperature scenario for October for the last-century

Maximum temperature for October is likely to increase by 3.5-4.0°C in a majority upazilas in Bangladesh except in a few upazilas in southern part and some isolated upazilas in northeast part, it is expected to increase by 3.0-3.5°C and 4.0-4.5 °C compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.95.

4.4.4.11 Maximum temperature scenario for November for the last-century

Maximum temperature for November is projected to increase by 3.5-4.0°C in a majority upazilas in Bangladesh except in a few upazilas in southern part and some isolated upazilas in northeast parts, where it is expected to increase by 3.0-3.5°C and 4.0-4.5°C respectively, for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.96.

4.4.4.12 Maximum temperature scenario for December for the last-century

The maximum temperature for December is likely to increase by 3.0-3.5°C in a majority upazilas in Bangladesh except in some upazilas in northwest part and some isolated upazilas in southern part, where the maximum temperature for August is expected to increase by 3.5-4.0°C

and 2.5-3.0°C compared to the baseline period in Bangladesh for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.96.

4.4.5 Seasonal maximum temperature scenario for the last-century

4.4.5.1 Maximum temperature scenario for winter season for the last-century

Maximum temperature for Winter season is projected to increase by 3.5-4.0°C in a majority upazilas in Bangladesh except in a few upazilas in southern and northwest part, where it is likely to increase by 3.0-3.5°C and 4.0-4.5°C, respectively, compared to the baseline period in Bangladesh for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.97.

4.4.5.2 Maximum temperature scenario for pre-monsoon season for the last-century

Pre-monsoon season in maximum temperature is expected to increase by 3.5-4.0°C in a majority upazilas in Bangladesh except in a few upazilas in southern part and northwest part, where the maximum temperature for pre-monsoon season is projected to increase by 3.0-3.5°C and 4.0-4.5°C compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.97. The rate of increase of maximum temperature in the northern part upazilas is higher than that of southern part upazilas in Bangladesh.

4.4.5.3 Maximum temperature scenario for monsoon season for the last-century

Maximum temperature for Monsoon season is projected to increase by 3.0-3.5°C in a majority upazilas in Bangladesh except in few upazilas in northern part and northwest part, where the maximum temperature for monsoon season is likely to increase by 2.5-3.0°C and 3.5-4.0°C respectively, compared to the baseline period in Bangladesh for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.98.

4.4.5.3 Maximum temperature scenario for post-monsoon season for the last-century

Maximum temperature during Post-monsoon season is expected to change by 3.5-4.0°C in a majority upazilas in Bangladesh except in a few upazilas in southern part and northeast part, where it is projected to increase by 2.5-3.0°C and 4.0-4.5°C compared to the baseline period in Bangladesh for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.98.

4.4.6 Annual maximum temperature scenario for the last-century

Annual maximum temperature is likely to increase by 3.5-4.0°C in a majority upazilas in Bangladesh except in southern part upazilas and some isolated upazilas in northwest part, where the annual maximum temperature is projected to increase by 3.0-3.5°C and 4.0-4.5 °C respectively, compared to the baseline period in Bangladesh for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.99.

4.4.7 Monthly minimum temperature scenario for the last-century

4.4.7.1 Minimum temperature scenario for January for the last-century

The minimum temperature for January is projected to increase by 3.0-3.5°C in a majority upazilas (middle part) in Bangladesh except in some upazilas of northern and southern part, where it is likely to increase by 3.5-4.0°C and 2.5-3.0°C respectively, for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.100.

4.4.7.2 Minimum temperature scenario for February for the last-century

Minimum temperature for the month of February is likely to increase by 3.5-4.0°C in a majority (northern part) upazilas in Bangladesh except in some upazilas of middle and southern part in Bangladesh, where the minimum temperature is expected to increase by 3.0-3.5°C and 2.5-3.0 °C, respectively for the last-century (2071-2100) as presented in Fig. 4.100.

4.4.7.3 Minimum temperature scenario for March for the last-century

Minimum temperature during March is expected to increase by 4.0-4.5°C in a majority upazilas in Bangladesh except in southern part upazilas and some pockets upazilas in northern part. Southern part upazilas in minimum temperature is projected to increase may vary by 3.5-4.0°C and 3.0-3.5°C, respectively, compared to baseline period for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.1001. Some pockets upazilas in northeast part, it is likely to highest increase by 4.5-5.0 °C. The rate of increase of minimum temperature in the northern side upazilas is higher than that of the southern side upazilas in Bangladesh.

4.4.7.4 Minimum temperature scenario for April for the last-century

Minimum temperature during April is projected to increase by 3.0-3.5°C in a majority upazilas in Bangladesh and except in southern part, where it is expected to increase by 2.5-3.0 °C compared to the baseline period for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.101.

4.4.7.5 Minimum temperature scenario for May for the last-century

Minimum temperature for the month of May is expected to increase by 3.0-3.5°C in a majority upazilas in Bangladesh except in some upazilas in southwest part and northwest as well as northeast part, where it is projected to increase by 2.5-3.0°C and 3.5-4.0 °C respectively, compared to the baseline period for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.102.

4.4.7.6 Minimum temperature scenario for June for the last-century

Minimum temperature during June is projected to increase by 0.5-1.0°C almost all upazilas (along north to south) in Bangladesh except in some upazilas of eastern part, where the

minimum temperature is found to be in the range of about 0.5-1.0°C in Bangladesh for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.102.

4.4.7.7 Minimum temperature scenario for July for the last-century

Minimum temperature for July is projected to increase by 2.5-2.5°C in a majority upazilas in Bangladesh except in southern part, where it is expected to increase by 2.5-3.0 compared to the baseline period for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.103.

4.4.7.8 Minimum temperature scenario for August for the last-century

Minimum temperature for August is expected to increase by 2.5-3.0°C in a majority upazilas in Bangladesh except in some upazilas in northwest and northeast part, where the minimum temperature is projected to increase by 3.0-3.5°C compared to the baseline period for the last-century (2071-2100) under RCP8.5 as presented in Fig. 4.103.

4.4.7.9 Minimum temperature scenario for September for the last-century

Minimum temperature for September is projected to increase by 3.0-3.5°C in a majority upazilas in Bangladesh except in some upazilas in northern and southern part, where the minimum temperature for September is likely to increase by 3.5-4.0°C and 2.5-3.0°C, respectively, for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.104.

4.4.7.10 Maximum temperature scenario for October for the last-century

Minimum temperature for October is likely to increase by 3.5-4.0°C in a majority upazilas in Bangladesh except in some upazilas in northern and southern part, where it is expected to increase by 4.0-4.5°C and 2.5-3.0°C, respectively, compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.104.

4.4.7.11 Minimum temperature scenario for November for the last-century

Minimum temperature for November is projected to increase by 3.5-4.0°C in a majority upazilas in Bangladesh except in some upazilas in northern and southern part, where the minimum temperature for November is likely to increase by 4.0-4.5°C and also may vary 3.0-3.5 and 2.5-3.0 respectively for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.105.

4.4.7.12 Minimum temperature scenario for December for the last-century

Minimum temperature for December is expected to increase by 3.0-3.5°C in a majority upazilas in Bangladesh except in some upazilas in northern part and southern part, where it is projected to increase by 3.5-4.0°C and 2.5-3.0 °C, respectively, compared to the baseline period for the last-century (2071-2100) as shown in Fig. 4.105.

4.4.8 Seasonal minimum temperature scenario for the last-century

4.4.8.1 Minimum temperature scenario for winter season for the last-century

Winter season minimum temperature is projected to increase by 3.0-3.5°C in almost all upazilas in Bangladesh except in some upazilas in northern and southern part, where it is expected to increase 3.5-4.0°C and 2.5-3.0°C respectively, compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.106.

4.4.8.2 Minimum temperature scenario for pre-monsoon season for the last-century

Minimum temperature during Pre-monsoon season is likely to increase by 3.0-3.5°C in a majority upazilas in Bangladesh except in some upazilas in northern and some isolated upazilas in southern part, where it is projected to increase by 3.5-4.0°C and 2.5-3.0°C respectively compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.106.

4.4.8.3 Minimum temperature scenario for Monsoon season for the last-century

Monsoon season minimum temperature is projected to increase by 3.0-3.5°C almost all upazilas in Bangladesh except in some upazilas in southern part, where the minimum temperature for monsoon season is likely to increase by 2.5-3.5°C compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.107.

4.4.8.3 Minimum temperature scenario for post-monsoon season for the last-century

Post-monsoon season minimum temperature is expected to increase by 3.0-3.5°C in a majority upazilas in Bangladesh except in southern and northern part upazilas, where it is likely to increase by 2.5-3.0°C and 4.0-4.5°C respectively, compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.107.

4.4.9 Annual minimum temperature scenario for the last-century

Annual minimum temperature is projected to increase by 3.0-3.5°C in a majority upazilas in Bangladesh except in some upazilas of southern and northern part, where the annual minimum temperature is expected to increase by 2.5-3.0°C and 3.5-4.0°C, compared to the baseline period for the last-century (2071-2100) under RCP8.5 as shown in Fig. 4.108.

CHAPTER 5

CONCLUSIONS

The present study gives the suitable information regarding the trend analysis and future climate change and its impact on crop productivity at upazila level in Bangladesh. The weather parameters consider viz., rainfall, maximum temperature, minimum temperature, maximum relative humidity, minimum relative humidity, sunshine hour, evaporation, evapotranspiration and soil moisture in Bangladesh for the study. Based on results the following conclusions are drawn:

- (i) The trend analysis was carried out to identify the trend pattern of rainfall using observed (data from Bangladesh Meteorological Department (BMD)), gridded Aphrodite and CRU (Climate Research Unit of the University of East Anglia) during the period 1971-2015. The results based on observed (BMD) data indicated decreasing trends in rainfall for most of the months except for March, June, August, September and October. For these months, the rainfall showed increasing trend, the trend was statistically significant in all upazilas under Bagerhat, Chittagong, Cox's Bazar, Feni, Habiganj, Khulna, Mymensingh, Moulvibazar, Netrokona, Rangamai, Satkhira, zilas. Almost similar results were obtained from Aphrodite and CRU data-source for the same period of time. Winter and pre-monsoonal rainfall showed a general decreasing trend, which was statistically significant in limited locations (e.g. in a few upazilas under Chuadanga, Dhaka zilas). On the contrary, monsoonal and post-monsoonal rainfall showed an increasing trend, again this was significant in limited locations mainly in the upazilas under Chittagong, Noakhali zilas. It may be noted that CRU rainfall data showed decreasing but insignificant trend in monsoonal rainfall. Spatially coherent increasing and decreasing trends in annual rainfall were observed in many locations of Bangladesh, though not always statistically significant. Notably, annual rainfall had been significantly increasing in all the upazilas under Chittagong and Patuakhali zilas and significantly decreasing in all upazilas under Chuadanga, Dhaka, and Faridpur zilas (with exception of CRU data, which it showed a decreasing trend in all upazilas).
- (ii) Mean monthly maximum temperature revealed significant increasing trend in most of the months in a majority upazilas except for the month of December and January, this two month showed a decreasing trend in almost all upazilas with exception of upazilas in the northeast and southeast in Bangladesh showing an opposite trend (increasing). These results are based on observed datasets and CRU largely agreed on the results except for the month of December, for this month CRU data tended to reveal an increasing but non-significant trend. On mean monthly minimum temperatures in most of the months showed an increasing trend for majority upazilas; the exception was the months of January and November revealing a significantly decreasing trend over northeastern and southeastern parts of the country. The observed (BMD) and CRU data produced the similar trends. On seasonality, the mean maximum temperature had shown a significant increasing trend in all but winter season; the maximum temperature had been decreasing except for parts of northeast and southeast experiencing an increasing trend. With respect

to seasonal mean minimum temperatures, a significant increasing trend was found in post-monsoon season. On annual scale, both the mean maximum temperature and mean minimum temperatures revealed significantly increasing trend in a majority upazilas across Bangladesh for the study period.

- (iii) The maximum relative humidity had significantly increased in a majority upazilas for most of the months; here July was the exception with coherent increasing trend over northwestern part but decreasing trend over southern part. The minimum relative humidity showed a significantly decreasing trend for most of the months in a majority upazilas except for the month of December and January, in this two months, it had been increasing over western but decreasing over eastern parts of Bangladesh. Season-wise, the maximum relative humidity had significantly increased in most of the upazilas for all but monsoon season. The minimum relative humidity had been significantly decreasing in most of the upazilas in all but winter season; it had been increasing over western part and decreasing over eastern part of the country. On annual scale, the maximum relative humidity shown increasing trend and the minimum relative humidity observed decreasing trend in most of the upazilas, notably in the eastern Bangladesh.
- (iv) The results revealed significant decreasing trend in monthly sunshine hours in various month in most of the upazilas; the month of July and September being expectations, which significantly increasing trend over hilly region. To be noted that the month of September showed coherent increasing and decreasing trend over northern and southern parts of the country but not significant across the whole country. Seasonal sunshine hours showed a significantly decreasing trend in most of the upazilas across the seasons except in monsoon; however, in the season-the upazilas of Bogura, Gazipur and Narsingdhi zilas experienced a decreasing trend, whereas, majority upazilas of southern and hilly parts felt significant increasing trend. Annually, the sunshine hours had shown decreasing trend in almost all upazilas but upazilas under Patuakhali and Cox's Bazar zilas, had been experiencing the significant increasing trend.
- (v) The evaporation shown decreasing trend from March-August with significant in a majority upazilas during May-July and increasing trend during January-February and September-December with significant in most of upazilas of central to eastern part in Bangladesh. Seasonal evaporation had shown significant increasing trend in a majority upazilas for winter and post-monsoon but significantly decreasing trend over central to eastern parts in pre-monsoon and monsoon season. Annual evaporation shown decreasing trend in almost all upazilas with significant in southwest part upazilas; the exception being northwest and northeast part upazilas of the country, where it had been decreasing but not necessarily significant.
- (vi) The evapotranspiration(PET) had shown significantly decreasing trend in most of the months though only significant over southern part upazilas of Bangladesh in the month of January. During February, April, July and September, it had been in increasing trend though not always significant nationally. Seasonal PET had shown non-significant decreasing trend for all season; it was, however, significant over the upazilas of southeastern part of Bangladesh in winter season. Annual evaporation

shown significant decreasing trend in a majority upazilas except in northern part, where it showed increasing trend but not significant.

- (vii) The soil moisture (in 0-10 cm depth) had shown significant decreasing trend during most of the months except in April, May, June and July; in the latter months, it showed increasing trend over southern and decreasing over northern part upazilas. Seasonal soil moisture had shown significant decreasing trend for winter season; in pre-monsoon, monsoon and post-monsoon season, it showed significant increasing trend in a few upazilas over eastern part and decreasing over western part upazilas. Annual soil moisture showed significant decreasing trend over the upazilas of northwest part and increasing trend over the upazilas of southeast part in Bangladesh.
- (viii) **Scenarios for mid-century (2021-2050):** Monthly rainfall is projected to decrease by more than -10% in various month in a majority upazilas except during June-October, where it is likely to increase by more than 10% in most of the upazilas of southern part and to remain unchanged in the upazilas of northern part. Seasonal rainfall is likely to decrease by more than -10% during winter and pre-monsoon season in a majority upazilas; monsoonal and post-monsoonal rainfall, is expected to remain the same in all but southern part where an increase by more than 10% expected compared to the baseline period. Annual rainfall is expected to remain the same under RCP4.5 for the mid-century (2021-2050). Similarly, for RCP8.5 the monthly rainfall is projected to remain constant in most of the months in most of the upazilas; the exception being the months of January, February, April and May is projected to decrease by more than -10% and June, September, November, it is likely to increase by more than 10% in a majority upazilas of Bangladesh. Seasonal rainfall is expected to decrease by more than -10% for winter and pre-monsoon in most of the upazilas; in monsoon and post-monsoon rainfall is projected to increase by more than 10% over southern and to remain constant over northwest part upazilas during the last-century. Annual rainfall is expected to remain the same in the country under RCP8.5 for the mid-century (2021-2050).
- (ix) **Scenarios for last-century (2071-2100):** Monthly rainfall is projected to increase by more than 10% in various months in most of the upazilas except for January, February, May and August, is expected to experience a decrease rainfall by more than -10% and it is likely to remain constant under RCP4.5. Seasonal rainfall is expected to remain the same for winter season in most of the upazilas except in some upazilas in southern and northwest part, where its likely to decrease by more than -10%. For the pre-monsoon, monsoon and post-monsoon season, rainfall is projected to increase by more than 10% in almost all upazilas. Annual rainfall is projected to increase by more than 10% under RCP4.5. Similarly, for RCP8.5 the monthly rainfall is projected to increase by more than 10% in most of the months in most of the upazilas except for the months of January, February, May and August; January is likely to receive a decreased rainfall by more than -10% and in rest of the months to remain the same compared to the baseline period (1971-2000) under RCP8.5. Seasonal rainfall is projected to increase by more than 10% for monsoon and post-monsoon seasons. Winter season rainfall is likely to decrease by more than

-10% over the upazilas of southern part and to remain the same over northern part in most of the upazilas and pre-monsoon season rainfall is projected to increase by more than 10% over the upazilas of northern part and to remain the same over the upazilas of southern part. Annual rainfall is expected to increase by more than 10% to the country under RCP8.5 for the last-century (2071-2100).

- (x) **Scenarios for mid-century (2021-2050):** The projected increase in monthly maximum temperature varies between 0.5 to 3.0°C by the mid-century (2021-2050). Highest in maximum temperature in March is expected to increase by about 3.0°C over the upazilas of northwest part of Bangladesh under RCP4.5. Seasonal maximum temperature is expected to vary between 0.7-1.7, 0.9-1.9, 0.7-1.0 and 0.8-1.3°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual maximum temperature is projected to increase on an average by 1.2°C under RCP4.5 for the mid-century (2021-2050). Similarly, under RCP8.5, the monthly maximum temperature is projected to increase between 0.5 to 2.5°C by the mid-century (2021-2050). Highest maximum temperature in March is expected to increase by about 2.1°C over the upazilas in the northwest part of Bangladesh. Seasonal maximum temperature is expected to increase the range of 0.9-1.6°C, 0.7-1.1°C, 0.6-1.1°C and 0.6-1.1°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual maximum temperature is projected to increase on an average by 1.1°C under RCP8.5 for the mid-century (2021-2050).
- (xi) **Scenarios for last-century (2071-2100):** Monthly maximum temperature is projected to increase in the range of 1.0 to 3.0°C by the last-century (2071-2100). The highest in maximum temperature in April is expected to increase by 3.0°C over the upazilas of northwest part in Bangladesh under RCP4.5. The seasonal maximum temperature is expected to vary from 1.2-2.3°C, 1.5-2.5°C, 1.1-1.9°C and 0.9-2.0°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual maximum temperature is projected to increase on an average by 1.6°C under RCP4.5. For RCP8.5 the monthly maximum temperature is projected to increase in the range of 2.6 to 5.1°C. The highest maximum temperature in March is expected to increase by 5.1°C over the upazilas of northwest part of Bangladesh. Seasonal maximum temperature is expected to vary from 2.7-4.3°C, 2.8-4.8°C, 2.6-3.6°C and 3.0-4.0°C for winter, pre-monsoon, and monsoon and post-monsoon season, respectively. Annual maximum temperature is projected to increase about 3.5°C under RCP8.5.
- (xii) **Scenarios for mid-century (2021-2050):** Change in minimum temperature in different months under RCP4.5 is projected about 0.6 to 2.4°C for the mid-century (2021-2050). The highest increase in minimum temperature in March is projected to be about 2.5°C for the upazilas over northeast part (Sylhet region) of Bangladesh. Seasonal minimum temperature is likely may vary from 0.7-1.7°C, 0.8-1.8°C, 0.8-1.1°C and 0.9-1.5°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual minimum temperature is projected to increase by about 1.2°C under RCP4.5 for the mid-century. Under RCP8.5, the change of minimum temperature in different months is projected to be about 0.6 to 2.0°C by the mid-century. The highest minimum temperature in March is expected to increase by

2.0°C over the upazilas of northwest (Kurigram region) part of Bangladesh. Seasonal minimum temperature is likely may vary from 0.7-1.5°C, 0.8-1.5°C, 0.8-1.2°C and 0.7-1.3°C for winter, pre-monsoon, monsoon and post-monsoon season respectively. Annual minimum temperature is projected to increase on an average by about 1.1°C under RCP8.5.

- (xiii) **Scenarios for last-century (2071-2100):** Change in minimum temperature in different months is projected about 1.0 to 2.1°C for the last-century (2071-2100). The highest increase in minimum temperature in April is projected about 2.1°C over the upazilas of northeast part (Sylhet region) of Bangladesh under RCP4.5. Seasonal minimum temperature is likely to increase by 0.2-1.6°C, 1.0-2.0°C, 1.0-1.6°C and 1.0-1.9°C for winter season, pre-monsoon, monsoon and post-monsoon season, respectively. Annual minimum temperature is projected to increase about 1.2°C under RCP4.5. For RCP8.5, the change in minimum temperature in different months is projected to be about 2.4-4.5°C for the last-century (2071-2100). The highest increase in minimum temperature in March is projected about 4.5°C over the upazilas of northern part (Sylhet region) of Bangladesh. Seasonal minimum temperature is likely may vary from 2.6-4.0°C, 2.9-4.0°C, 2.7-3.5°C and 2.9-4.2°C for winter, pre-monsoon, monsoon and post-monsoon season, respectively. Annual minimum temperature is projected to increase on an average by about 3.3°C under RCP8.5.

APPROACHES TO CLIMATE CHANGE ADAPTATION, MITIGATION IN AGRICULTURE

Agriculture in Bangladesh is becoming vulnerable to climatic stresses such as drought, flood, and pests attack every year. The phenomena are occurring at greater diversity and intensity in recent years.

Any major alterations in water budget and change in temperature have major consequence in hydrologic processes and agriculture and in turn economy of the country. With warmer temperatures, evapotranspiration rates would rise, which would call for much greater efficiency of water use. Also weeds and insect-pest's infestation pattern could shift. Based on modelling results the following notes are drawn:

- The impacts of climate change on agriculture in Bangladesh will be uncertain and would need to be continually studied on a periodic basis.
- Depending on temperature rise (around 2.0°C, 3.0°C, 4.0°C), and increase in CO₂, the overall impact could be positive and negative.
- The rabi crops (winter season crop) in northern Bangladesh will be more at risk in future.
- In the winter season, the rainfall is scanty, and wheat is largely irrigated. Hence, such crops do not show any relation with the seasonal rainfall. However, as it has been projected in RCP4.5 that winter season would be drier in Bangladesh, growing wheat crop would need more and ensured irrigation for its sustainability.
- The regional wheat yields, however, do show a considerable relation with temperature. As temperature increases, there is a decrease in the duration and yield of crops.
- Wheat crop is very sensitive to temperature rise, even a 0.5°C increase in the mean winter temperature would reduce wheat yield.

Adaption and Mitigation in Agriculture

Increased intensity and frequency of storms, drought and flooding, altered hydrological cycles and precipitation variance have implications for future food availability. The potential impacts on rainfed agriculture vis-à-vis irrigated systems are still not well understood.

There are two main types of adaptation, autonomous and planned. Autonomous adaptation is the reaction of, for example, a farmer to changing precipitation patterns, in that s/he changes crops or uses different harvest and planting/sowing dates.

Planned adaptation measures are conscious policy options or response strategies, often multi-sectoral in nature, aimed at altering the adaptive capacity of the agricultural system or facilitating specific adaptations. For example, deliberate crops selection and distribution strategies across different agri-climatic zones, substitution of new crops for old ones and resource substitution induced by scarcity.

Farm level analyses have shown that large reductions in adverse impacts from climate change are possible when adaptation is fully implemented. Short-term adjustments are seen as autonomous in the sense that no other sectors (e.g. policy, research etc.) are needed in their development and implementation.

Long-term adaptations are major structural changes to overcome adversity such as changes in land-use to maximize yield under new conditions; application of new technologies; new land management techniques; and water-use efficiency related techniques. The following “major classes of adaptation are:

- seasonal changes and sowing dates;
- newer crop varieties crop and/or crop species;
- water supply and irrigation system;
- other inputs (fertilizer, tillage methods, grain drying, other field operations);

Accordingly, types of responses may include

- reduction of food security risk;
- identifying present vulnerabilities;
- adjusting agricultural research priorities;
- protecting genetic resources and intellectual property rights;
- strengthening agricultural extension and communication systems;
- increased training and education;

Soil and land management

Climate change adaptation for agricultural cropping systems requires a higher resilience against both excess of water (due to high intensity rainfall) and lack of water (due to extended drought periods). A key element to respond to both problems is soil organic matter, which improves and stabilizes the soil structure so that the soils can absorb higher amounts of water without causing surface run off, which could result in soil erosion and, further downstream, in flooding. Soil organic matter also improves the water absorption capacity of the soil for during extended drought.

While intensive soil tillage reduces soil organic matter through aerobic mineralization, low tillage and the maintenance of a permanent soil cover (through crops, crop residues or cover crops and the introduction of diversified crop rotations) increases soil organic matter. A no- or low-tilled soil conserves the structure of soil for fauna and related macrospores (earthworms, termites and root channels) to serve as drainage channels for excess water. Surface mulch cover protects soil from excess temperatures and evaporation losses and can reduce crop water requirements by 30 percent.

Conservation agriculture and organic agriculture that combine zero or low tillage and permanent soil cover are promising adaptation options promoted by FAO for their ability to increase soil organic carbon, reduce mineral fertilizers use and reduce on-farm energy costs. Risk-coping production systems, resilient to land and water modifications, require diversified structures in space and time such as crop rotations, agroforestry, crop-livestock associations,

crop-fish systems and the use of hedges, vegetative buffer strips and other farm landscaping practices. Accomplishing this can have an enormous impact on adaptation to drought, heavy rains and winds.

Water management

A broad range of agricultural water management practices and technologies are available to spread and buffer production risks. Enhancing residual soil moisture through land conservation techniques assists significantly at the margin of dry periods while buffer strips, mulching and zero tillage help to mitigate soil erosion risk in areas where rainfall intensities increase. The inter-annual storage of excess rainfall and the use of resource efficient irrigation remain the only guaranteed means of maintaining cropping intensities. Competing sectoral demands for water will place more pressure on allocations to agriculture to account for its dominant use of raw water. Additionally, there may be increased water demand for irrigated systems.

Interfaces with agriculture and food security

Trees and shrubs in farming systems (including agroforestry) can play a significant role in mitigating the impacts of extreme events and the resulting threats to food security. In addition to benefits such as the provision of wood and non-wood forest products, restoration of soil fertility, and the conservation of biological diversity, trees and forests improve the microclimate by buffering winds, regulating the water table, providing shade to crops and animals, and stabilizing coastal areas (e.g. through mangrove rehabilitation and reforestation). They thus contribute to sustainable agricultural production and food security.

REFERENCES

1. Kurukulasuriya, P.; Mendelsohn, R.; Hassan, R.; Benin, J.; Deressa, T.; Diop, M.; Eid, H.M.; Fosu, K.Y.; Gbetibuo, G.; Jain, S.; et al. Will African agriculture survive climate change? *World Bank Econ. Rev.* 2006, 20, 367–388.
2. Mendelsohn, R. The impact of climate change on agriculture in Asia. *J. Integr. Agric.* 2014, 13, 660–665.
3. Spash, C.L. Climate change: Need for new economic thought. *Econ. Political Wkly.* 2007, 42, 483–490.
4. Spash, C.L. The economics of climate change impacts à la Stern: Novel and nuanced or rhetorically restricted? *Ecol. Econ.* 2007, 63, 706–713.
5. Kirby, J.M.; Mainuddin, M.; Mpelasoka, F.; Ahmad, M.D.; Palash, W.; Quadir, M.E.; Shah-Newaz, S.M.; Hossain, M.M. The impact of climate change on regional water balances in Bangladesh. *Clim. Chang.* 2016, 135, 481–491.
6. Spash, C.L. Climate change: Need for new economic thought. *Econ. Political Wkly.* 2007, 42, 483–490.
7. Wheeler, T.; Von Braun, J. Climate change impacts on global food security. *Science* 2013, 341, 508–513. [CrossRef] [PubMed]
8. Bandara, J.S.; Cai, Y. The impact of climate change on food crop productivity, food prices and food security in South Asia. *Econ. Anal. Policy* 2014, 44, 451–465.
9. The World Bank (WB). World Bank Health Nutrition and Population Statistics. 2012. Available online: <http://databank.worldbank.org/data/home.aspx> (accessed on 20 May 2017).
10. Janjua, P.Z.; Samad, G.; Khan, N.U.; Nasir, M. Impact of Climate Change on Wheat Production: A Case Study of Pakistan. *Pak. Dev. Rev.* 2010, 49, 799–822.
11. Mahmood, N.; Ahmad, B.; Hassen, S.; Baskh, K. Impact of temperature and Precipitation on rice productivity in rice-wheat cropping system of punjab province. *J. Anim. Plant Sci.* 2012, 22, 993–997.
12. Facing Climate Change by Securing Water for Food, Livelihoods and Ecosystems. Available online: <http://www.iwmi.cgiar.org/wp-content/uploads/2013/02/sp11.pdf> (accessed on 21 May 2017).
13. Cline, W.R. *Global Warming and Agriculture: Impact Estimates by Country*; Peterson Institute: Washington, DC, USA, 2007.
14. Alcamo, J.; Dronin, N.; Endejan, M.; Golubev, G.; Kirilenko, A. A new assessment of climate change impacts on food production shortfalls and water availability in Russia. *Global Environ. Chang.* 2007, 17, 429–444.
15. Barnett, T.P.; Adam, J.C.; Lettenmaier, D.P. Potential impacts of a warming climate on water availability in snow-dominated regions. *Nature* 2005, 438, 303–309.
16. Döll, P.; Siebert, S. Global modeling of irrigation water requirements. *Water Resour. Res.* 2002, 38, 1–10.
17. Arnell, N.W.; Livermore, M.J.L.; Kovats, S.; Levy, P.E.; Nicholls, R.; Parry, M.L.; Gaffin, S.R. Climate and socio-economic scenarios for global-scale climate change impacts assessments: Characterising the SRES storylines. *Glob. Environ. Chang.* 2004, 14, 3–20.

18. Rosenzweig, C.; Parry, M.L. Potential impact of climate change on world food supply. *Nature* 1994, 367, 133–138.
19. Kandlikar, M.; Risbey, J. Agricultural impacts of climate change: if adaptation is the answer, what is the question? *Clim. Change* 2000, 45, 529–539.
20. Aggarwal, P.K., Nagarajan, S. and Udai Kumar. 2001. Climate Change and Indian Agriculture: Current State of Understanding and Future Perspectives. Report submitted to the Indian Council of Agricultural Research, New Delhi.
21. Kalra N, Aggarwal PK, Chander S, Pathak H, Choudhary R, Chaudhary A, Mukesh S, Rai HK, Soni UA, Anil S, Jolly M, Singh UK, Owrs A, and Hussain MZ, 2003: Impacts of climate change on Agriculture, in *Climate Change and India: Vulnerability Assessment and Adaptation*. Shukla PR, Subodh KS, Ravindranath NH, Garg A and Bhattacharya S (eds), University Press, India, 191–226.

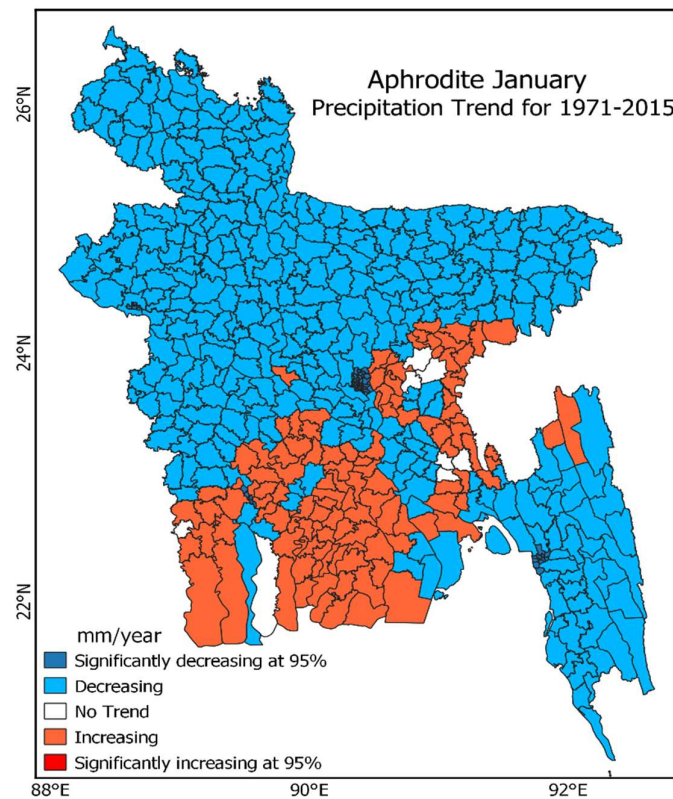
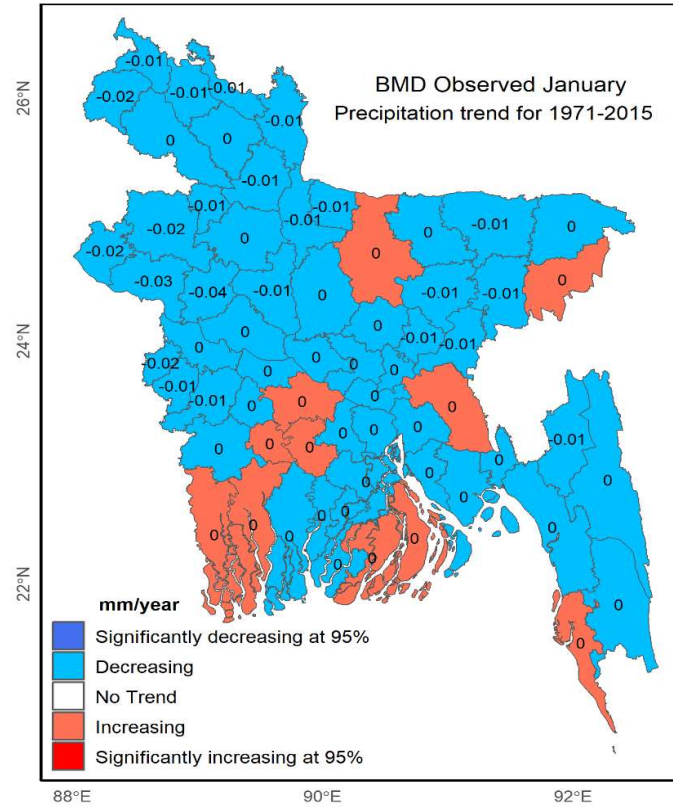


Fig. 3.1: Observed and gridded rainfall tend analysis for the month of January in Bangladesh for 1971-2015.

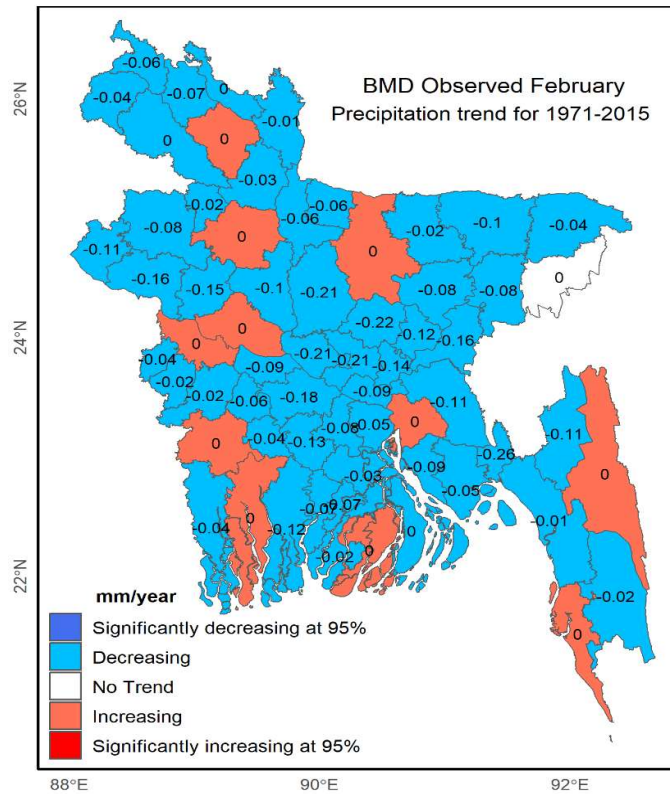
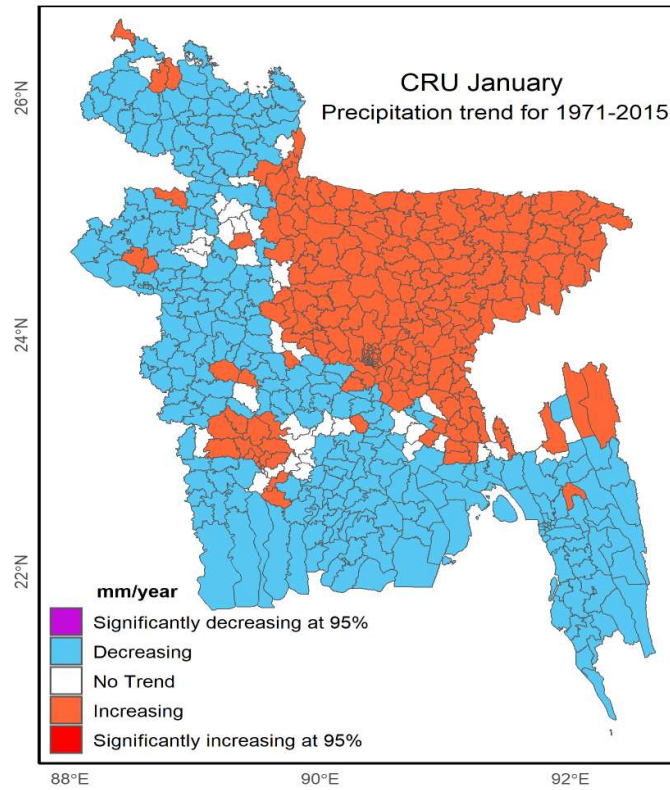
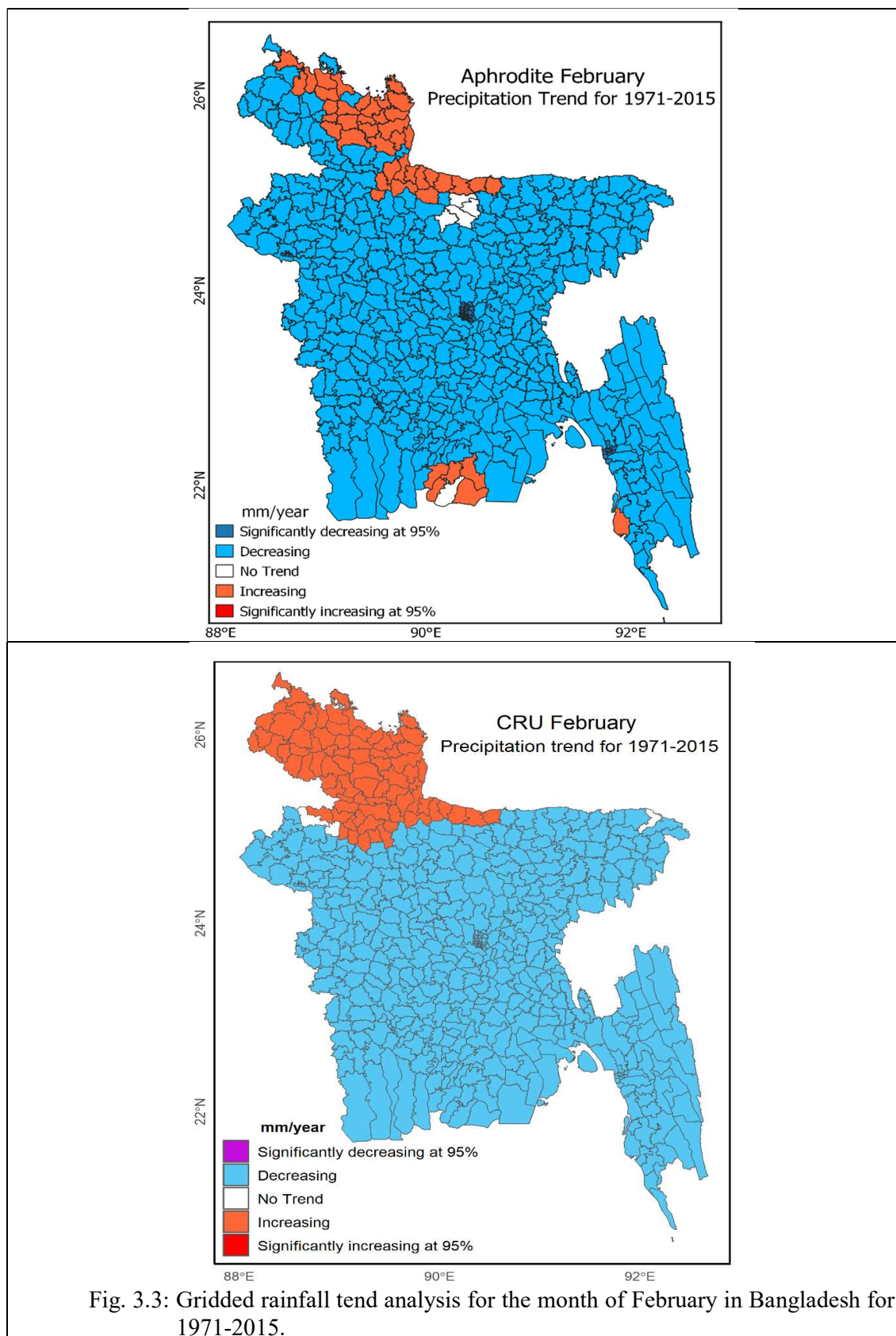


Fig.3.2: Gridded and observed rainfall tend analysis for the month of January and February in Bangladesh for 1971-2015.



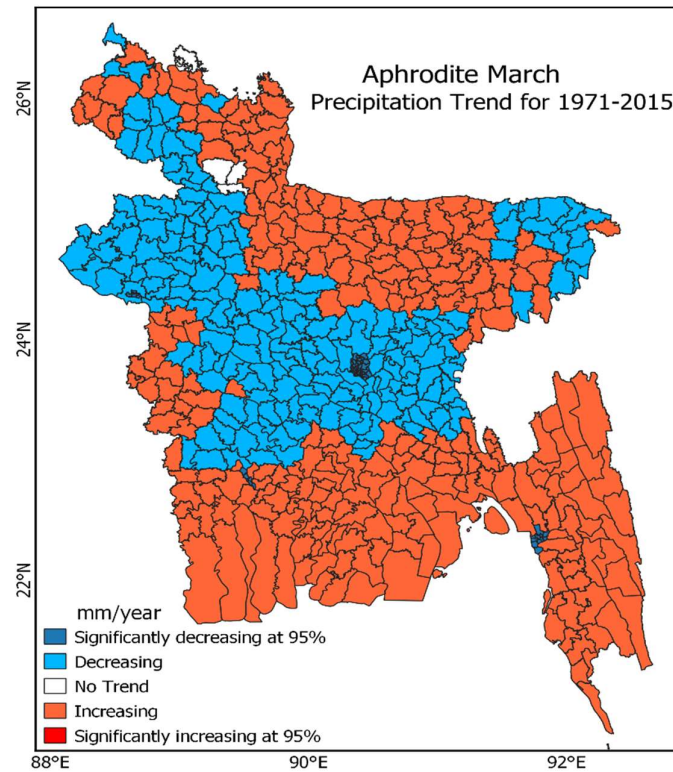
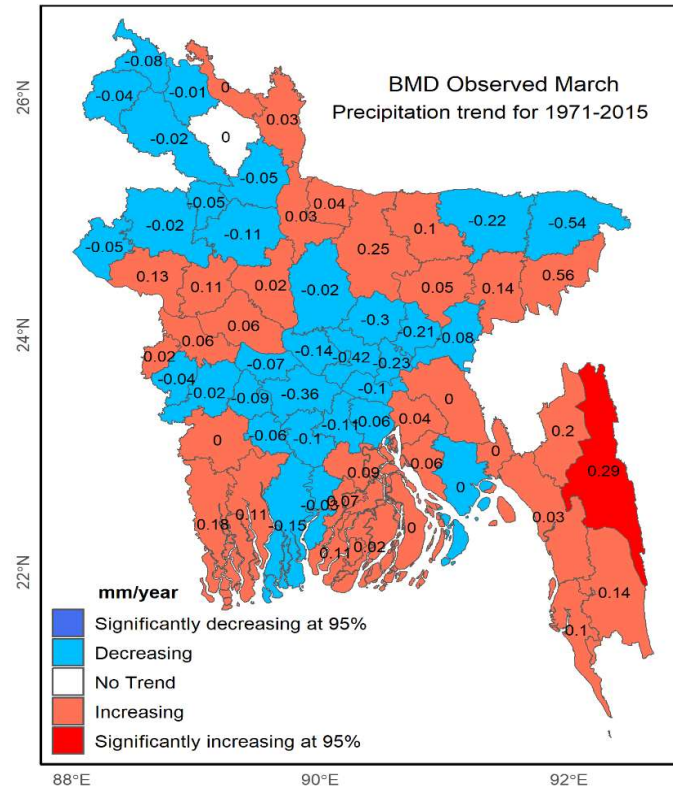


Fig. 3.4: Observed and gridded rainfall tend analysis for the month of March in Bangladesh for 1971-2015.

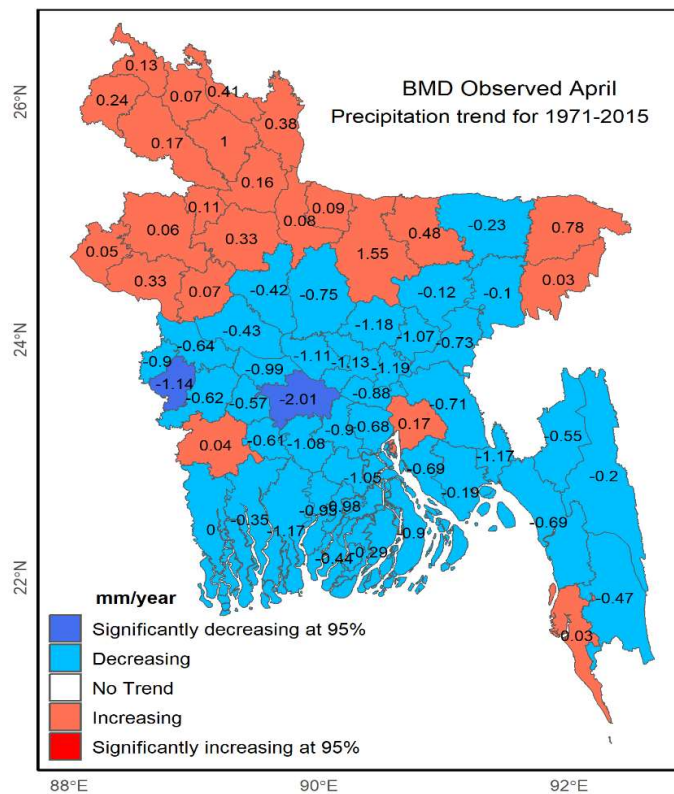
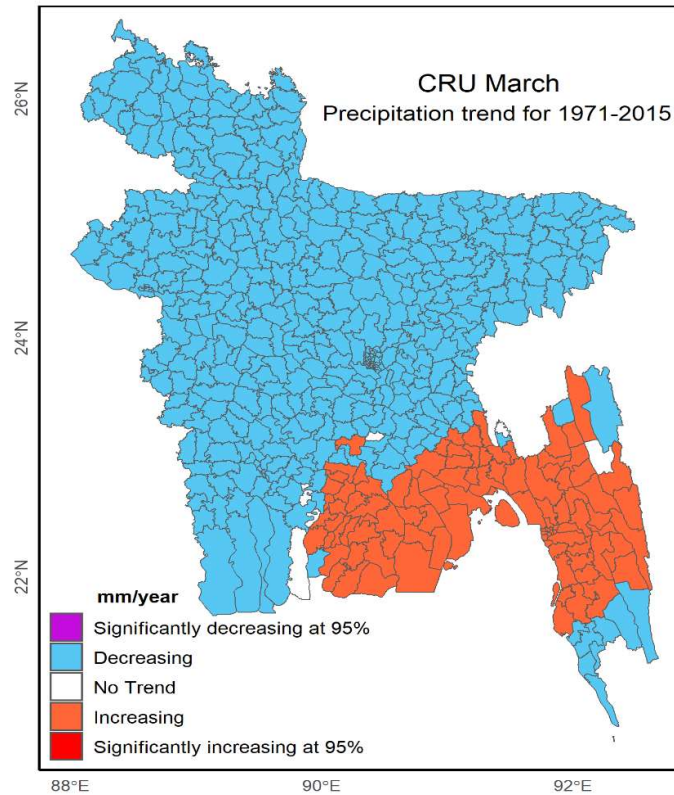


Fig. 3.5: Gridded and observed rainfall tend analysis for the month of March and April in Bangladesh for 1971-2015.

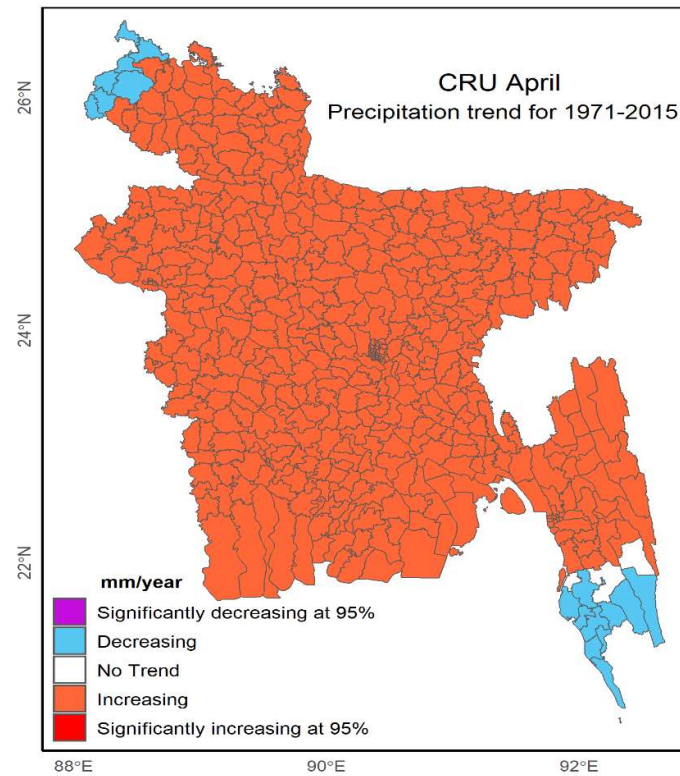
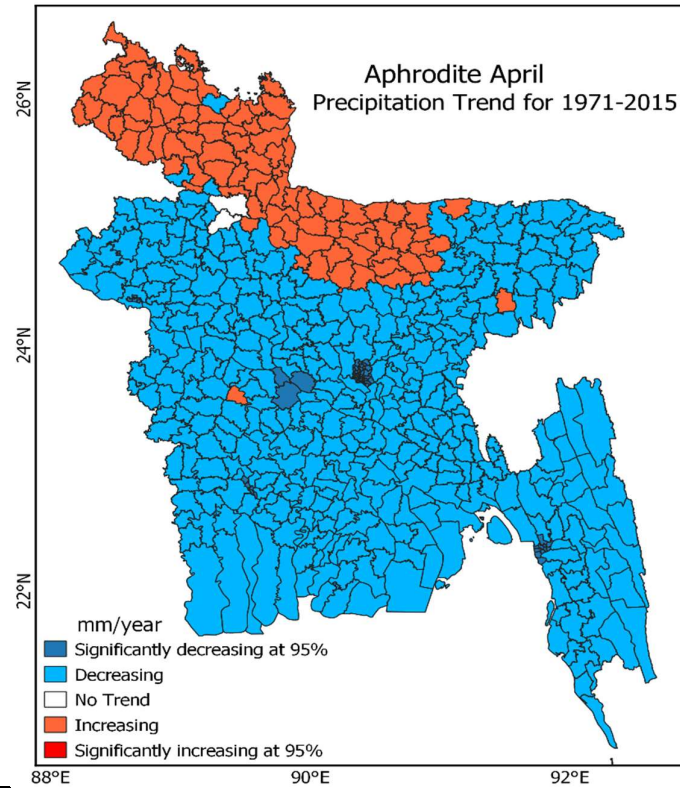


Fig. 3.6: Gridded rainfall tend analysis for the month of April in Bangladesh for 1971-2015.

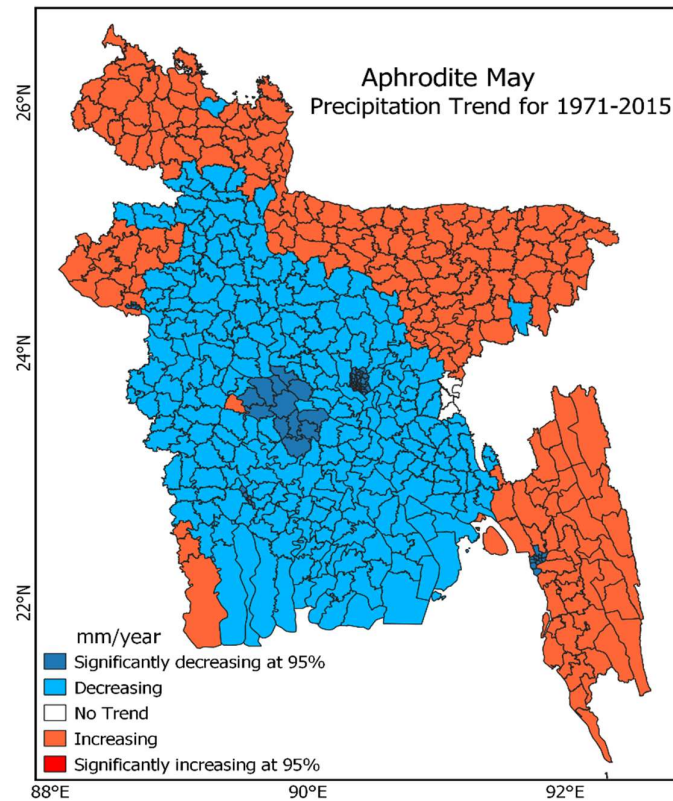
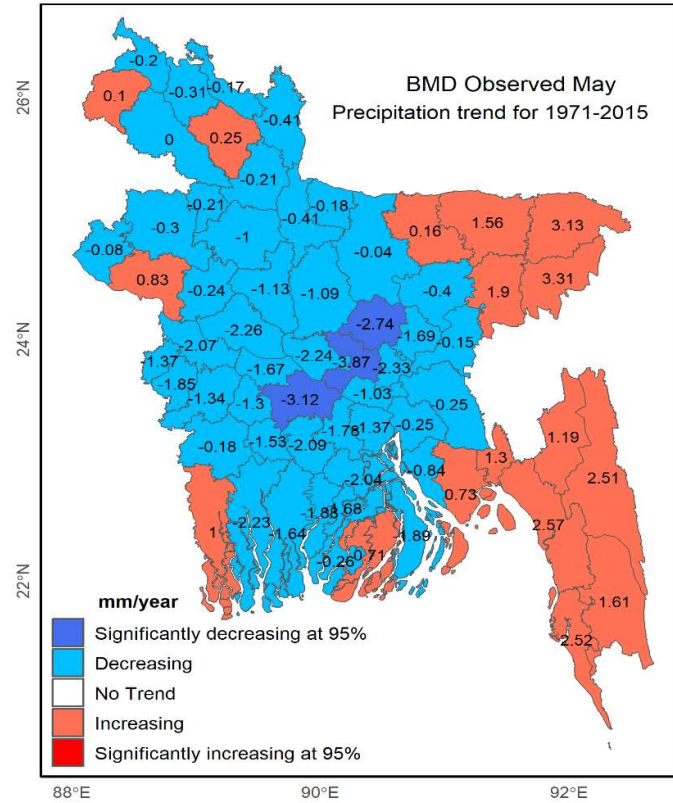


Fig. 3.7: Observed and gridded rainfall tend analysis for the month of May in Bangladesh for 1971-2015

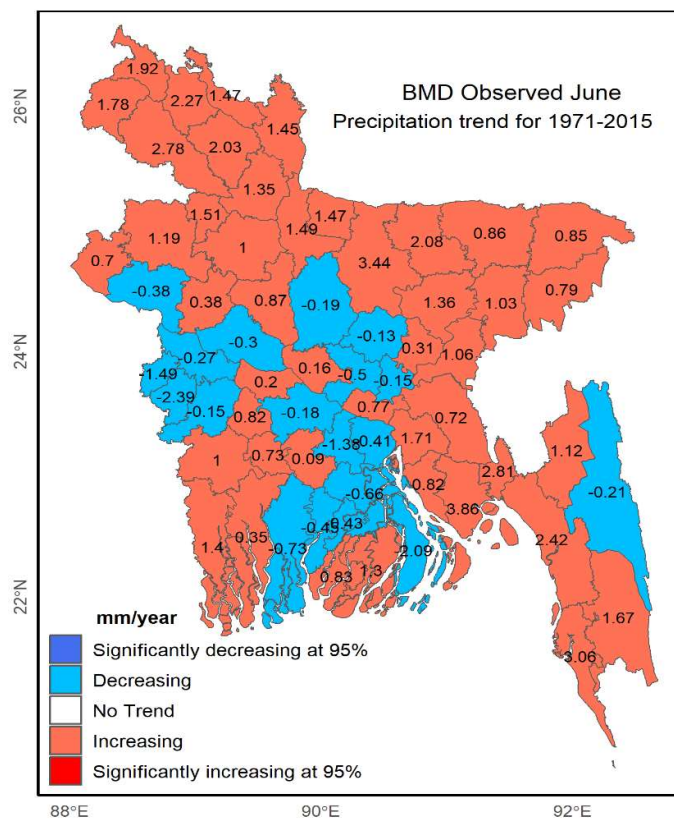
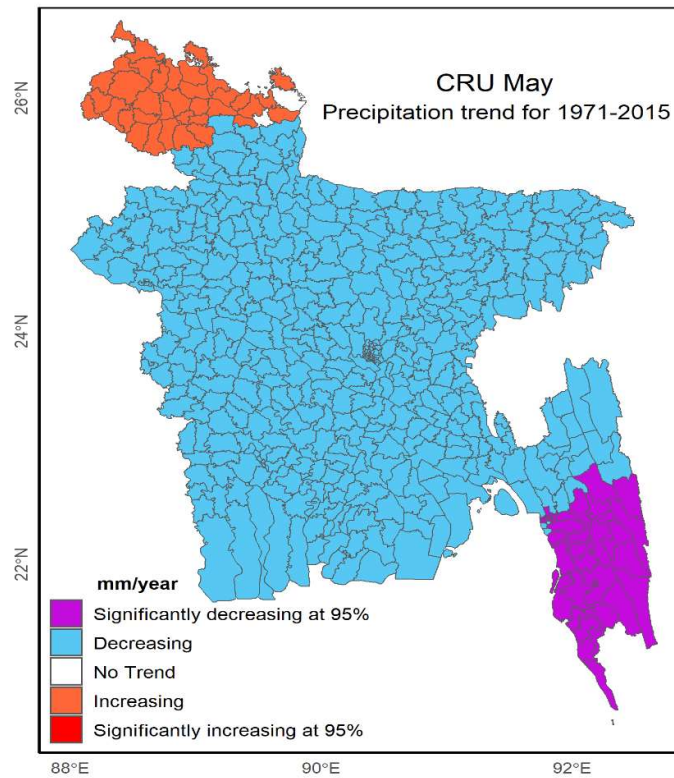


Fig. 3.8: Gridded and observed rainfall tend analysis for the month of May and June in Bangladesh for 1971-2015

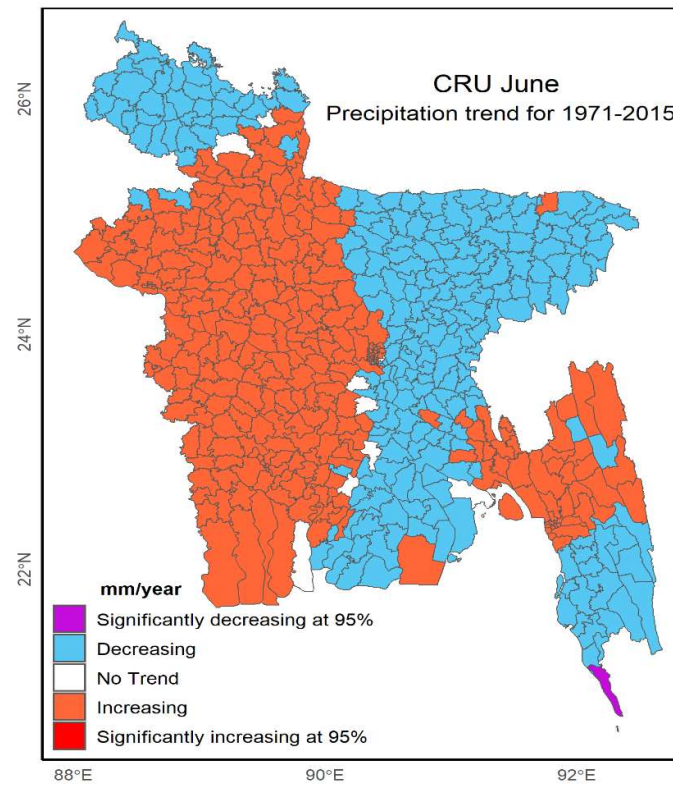
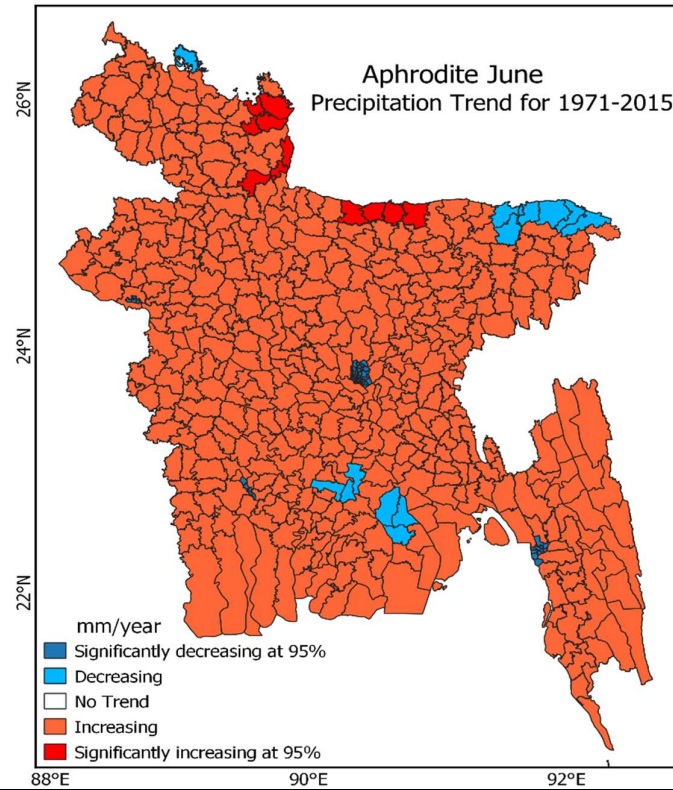


Fig. 3.9: Gridded rainfall tend analysis for the month of June in Bangladesh for 1971-2015

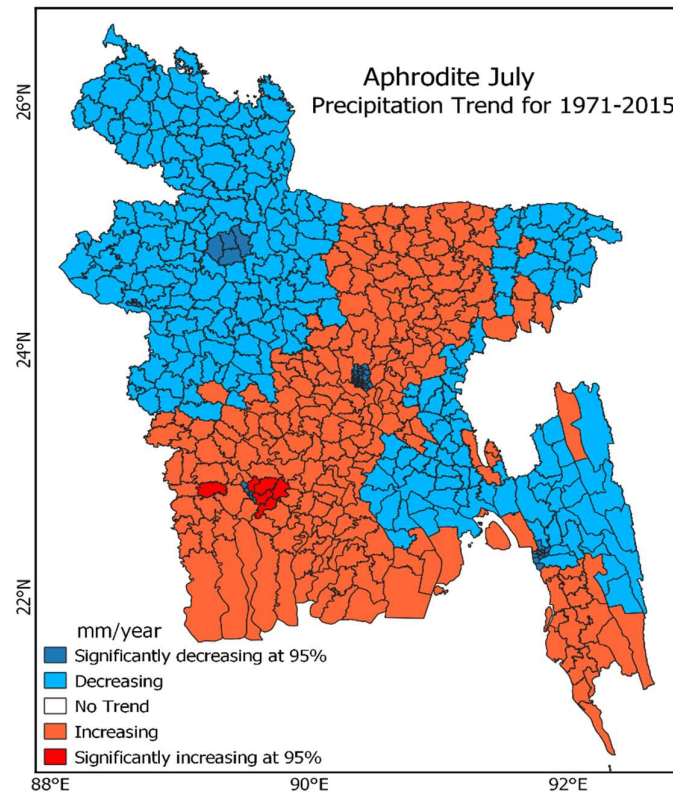
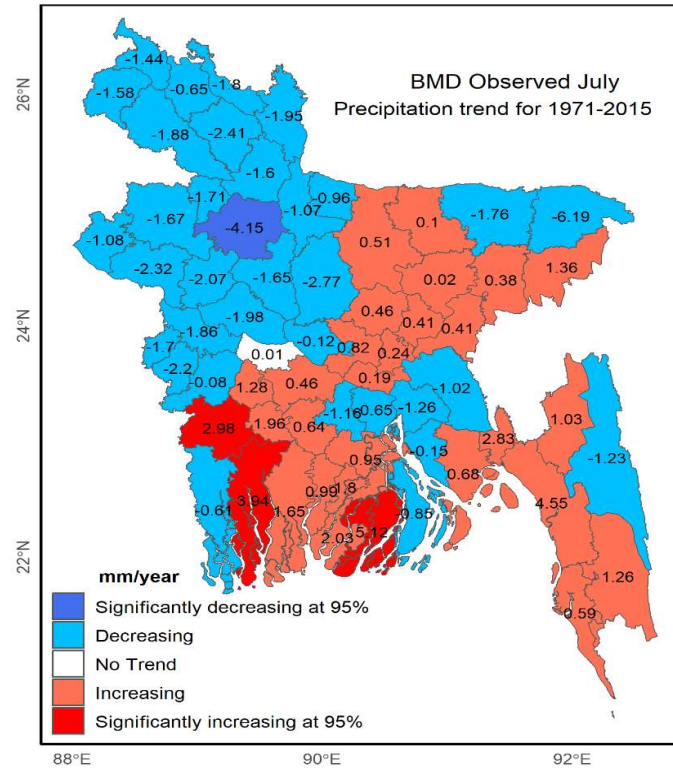


Fig. 3.10: Observed and gridded rainfall tend analysis for the month of July in Bangladesh for 1971-2015

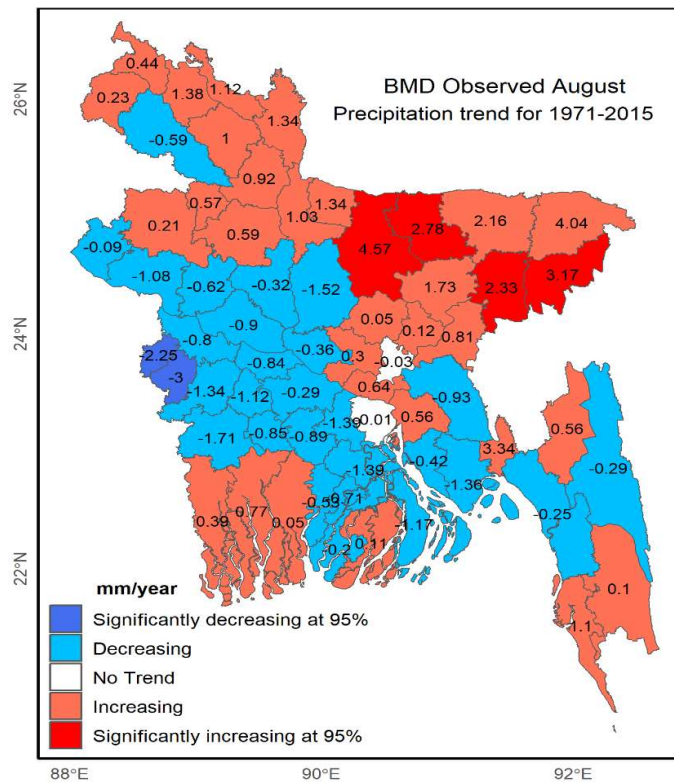
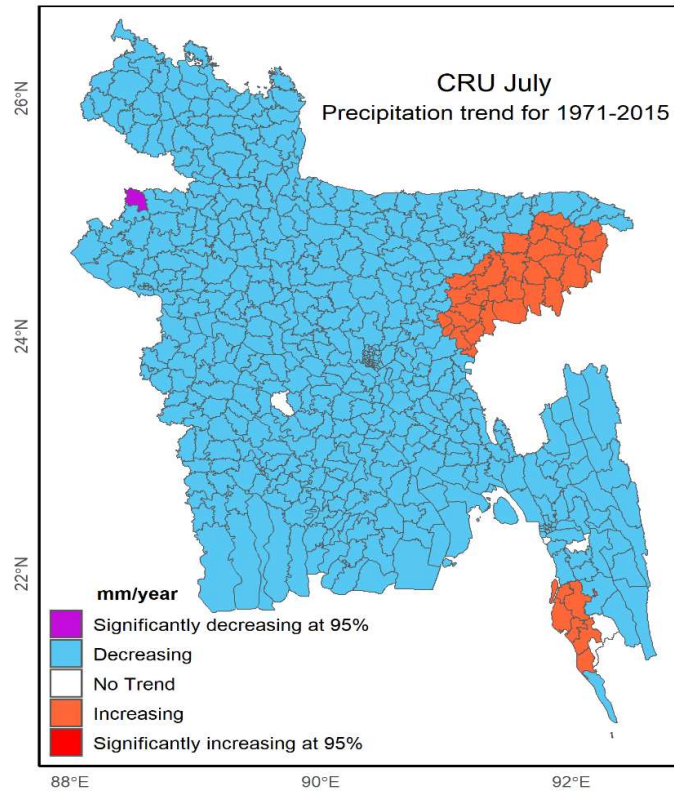


Fig. 3.11: Gridded and observed rainfall tend analysis for the month of July and August in Bangladesh for 1971-2015.

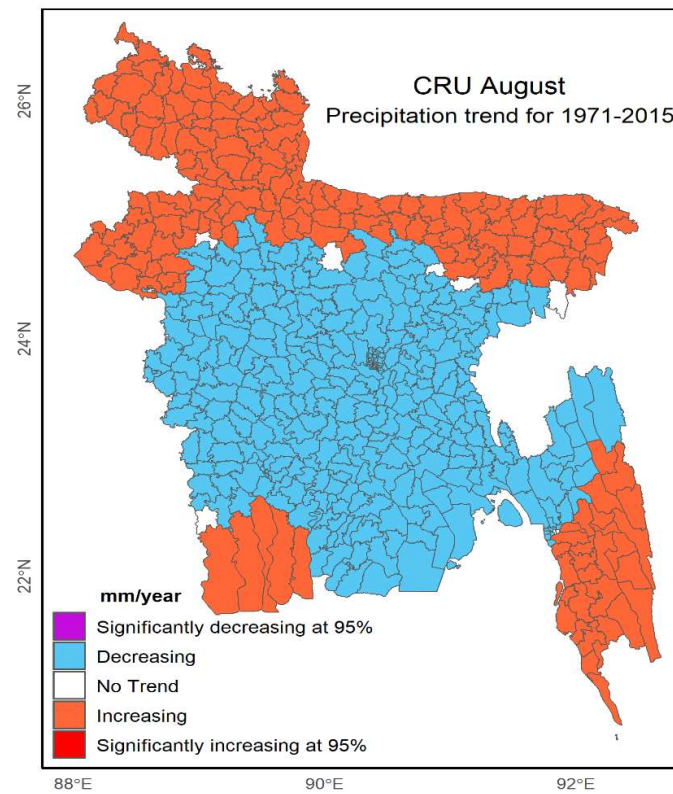
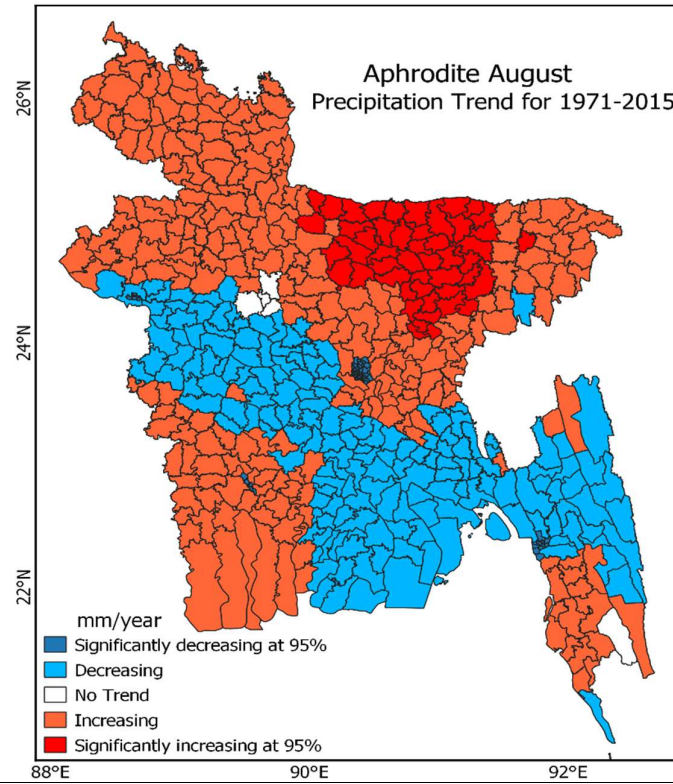


Fig. 3.12: Gridded rainfall tend analysis for the month of August in Bangladesh for 1971-2015.

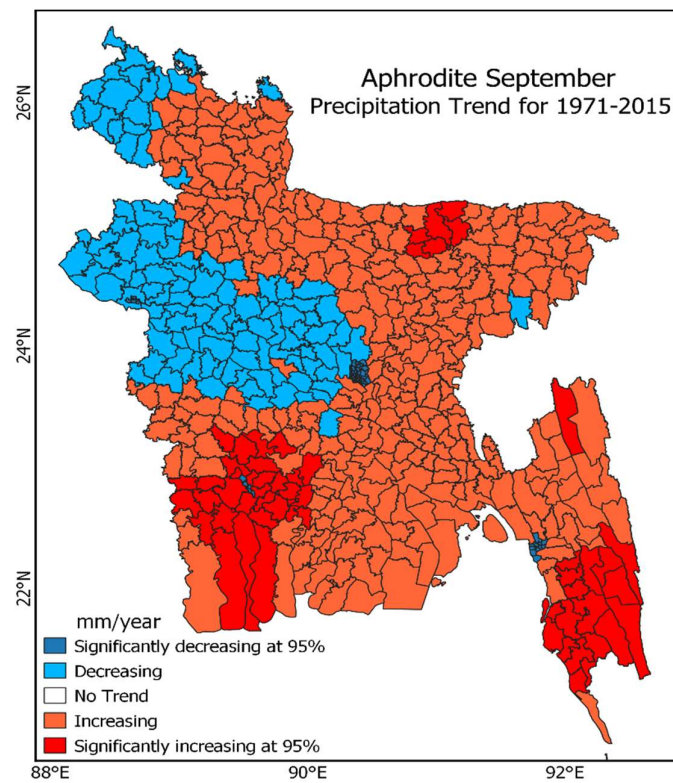
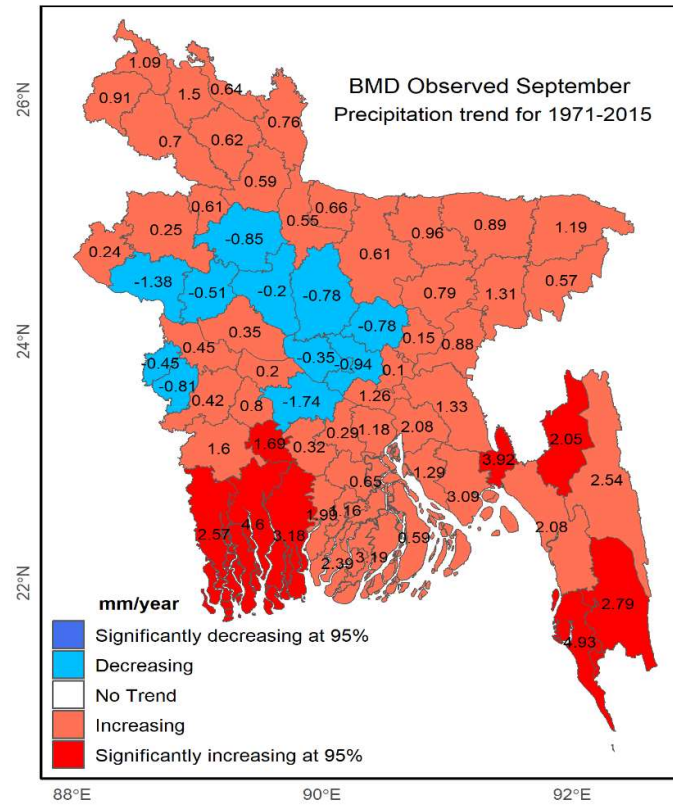


Fig. 3.13: Observed and gridded rainfall tend analysis for the month of September in Bangladesh for 1971-2015.

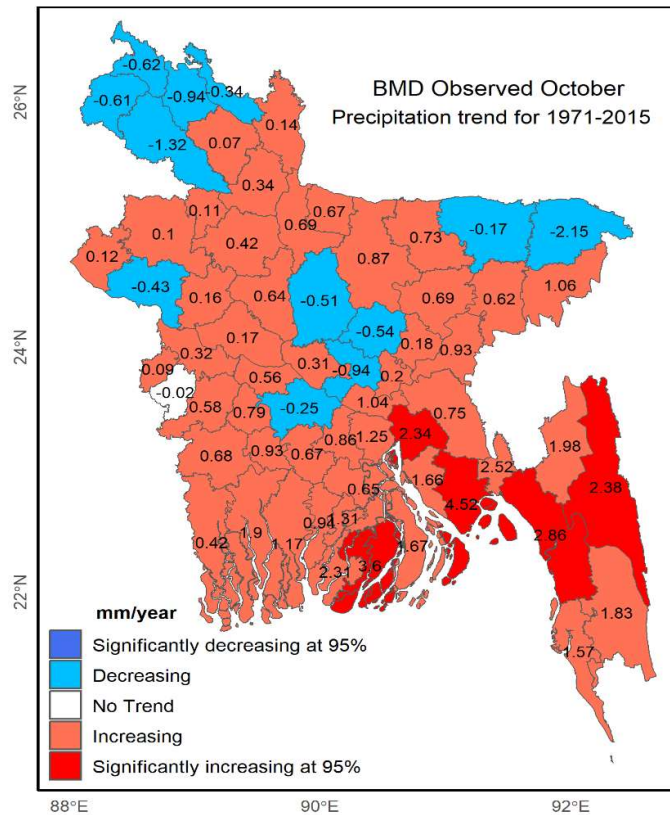
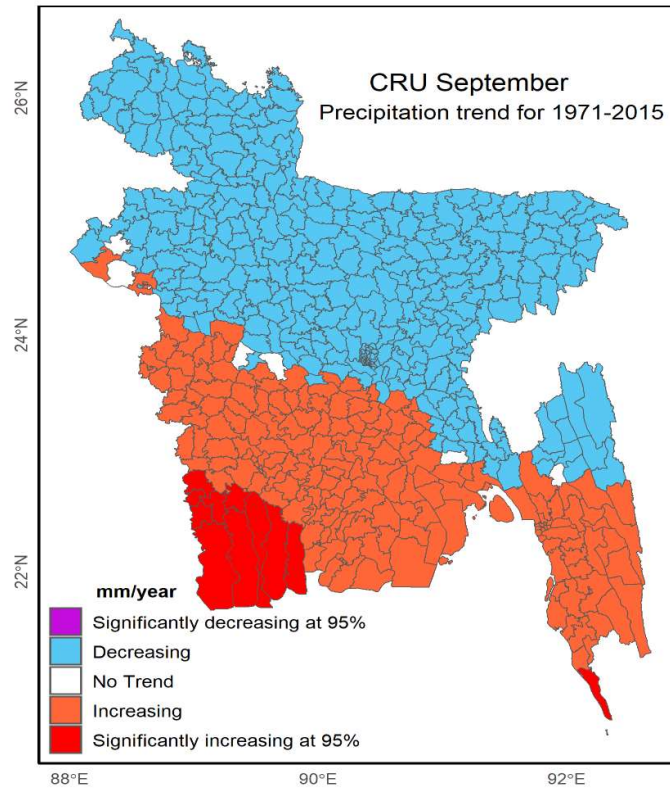


Fig. 3.14: Gridded and observed rainfall tend analysis for the month of September and October in Bangladesh for 1971-2015.

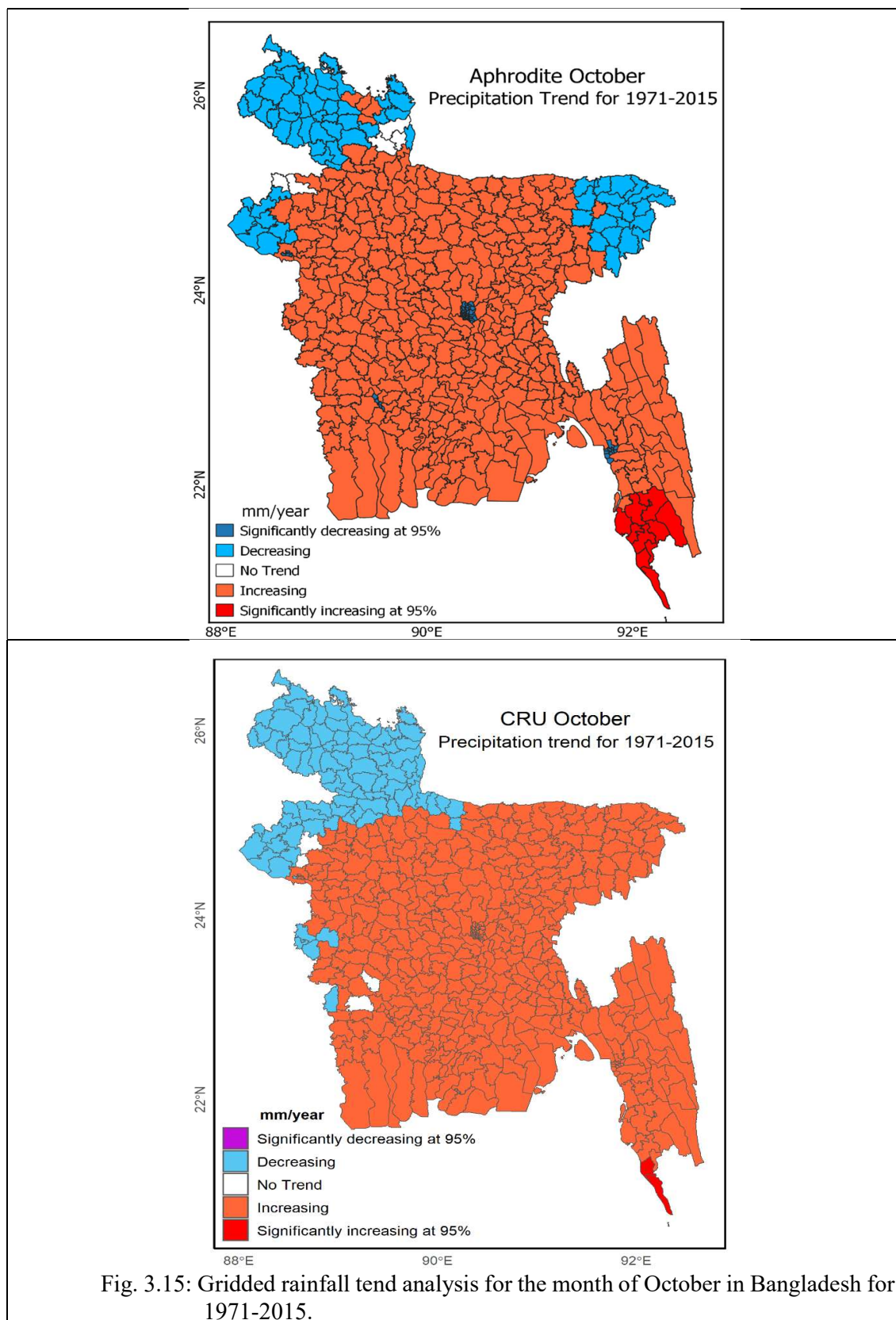


Fig. 3.15: Gridded rainfall tend analysis for the month of October in Bangladesh for 1971-2015.

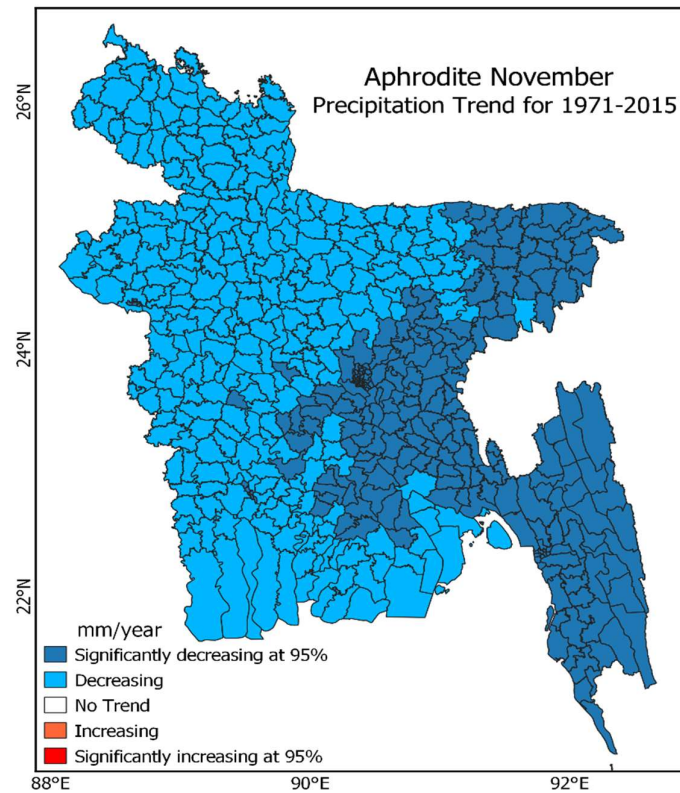
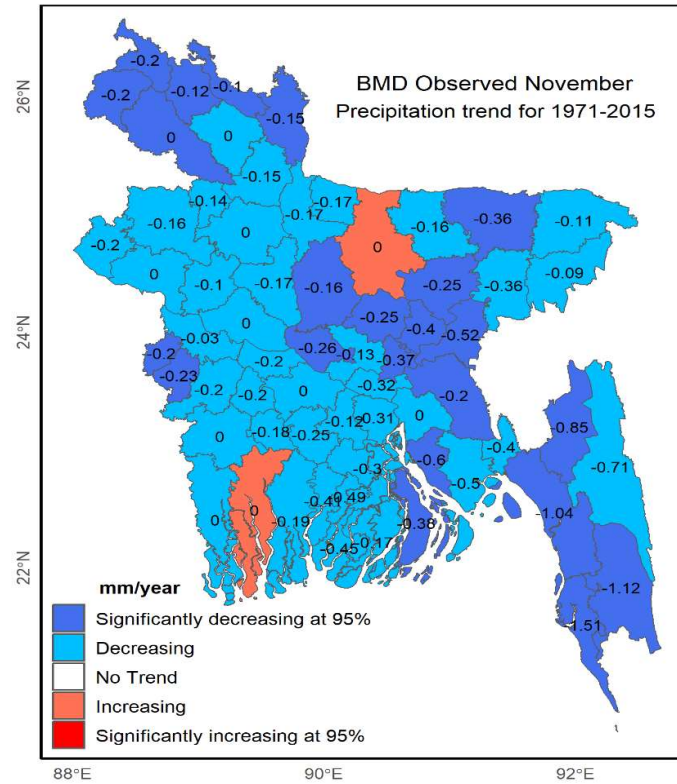


Fig. 3.16: Observed and gridded rainfall trend analysis for the month of November in Bangladesh for 1971-2015.

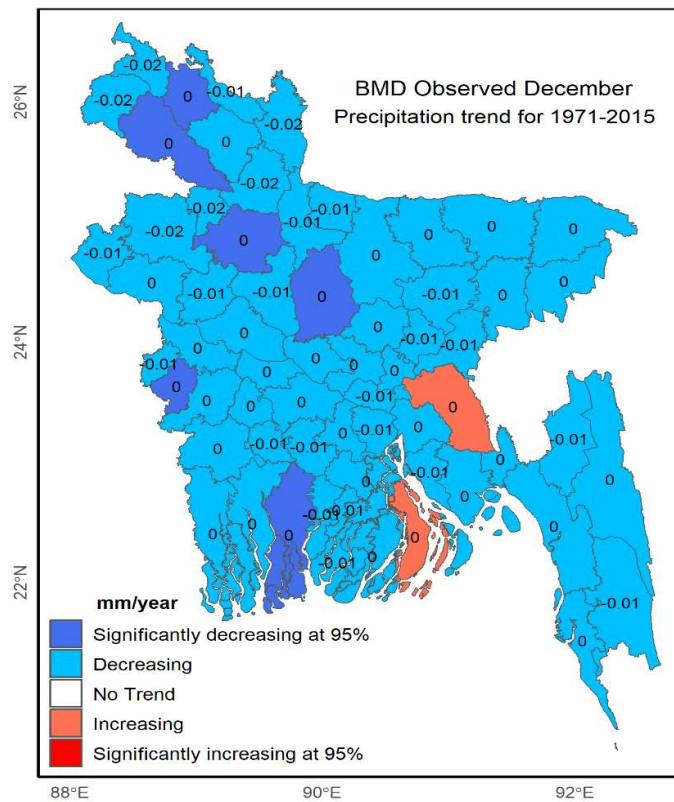
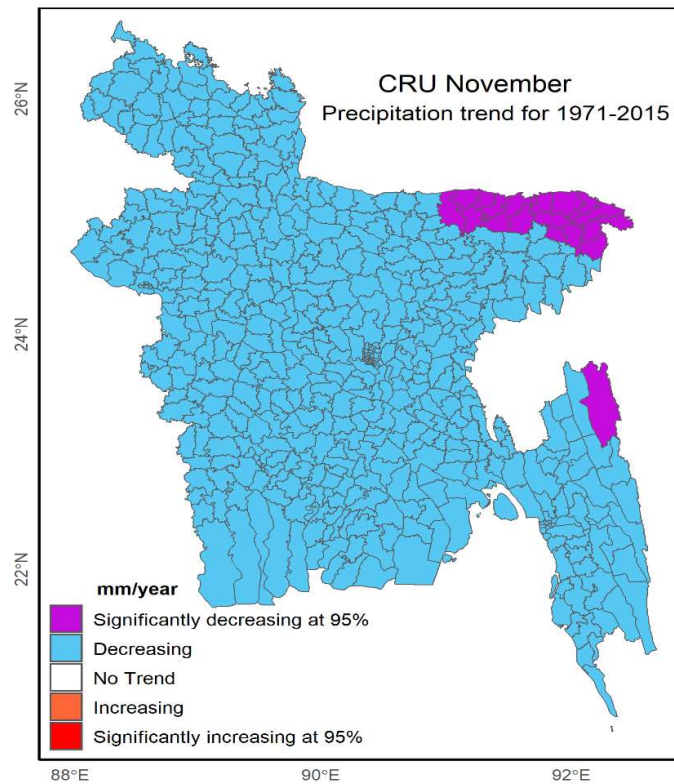
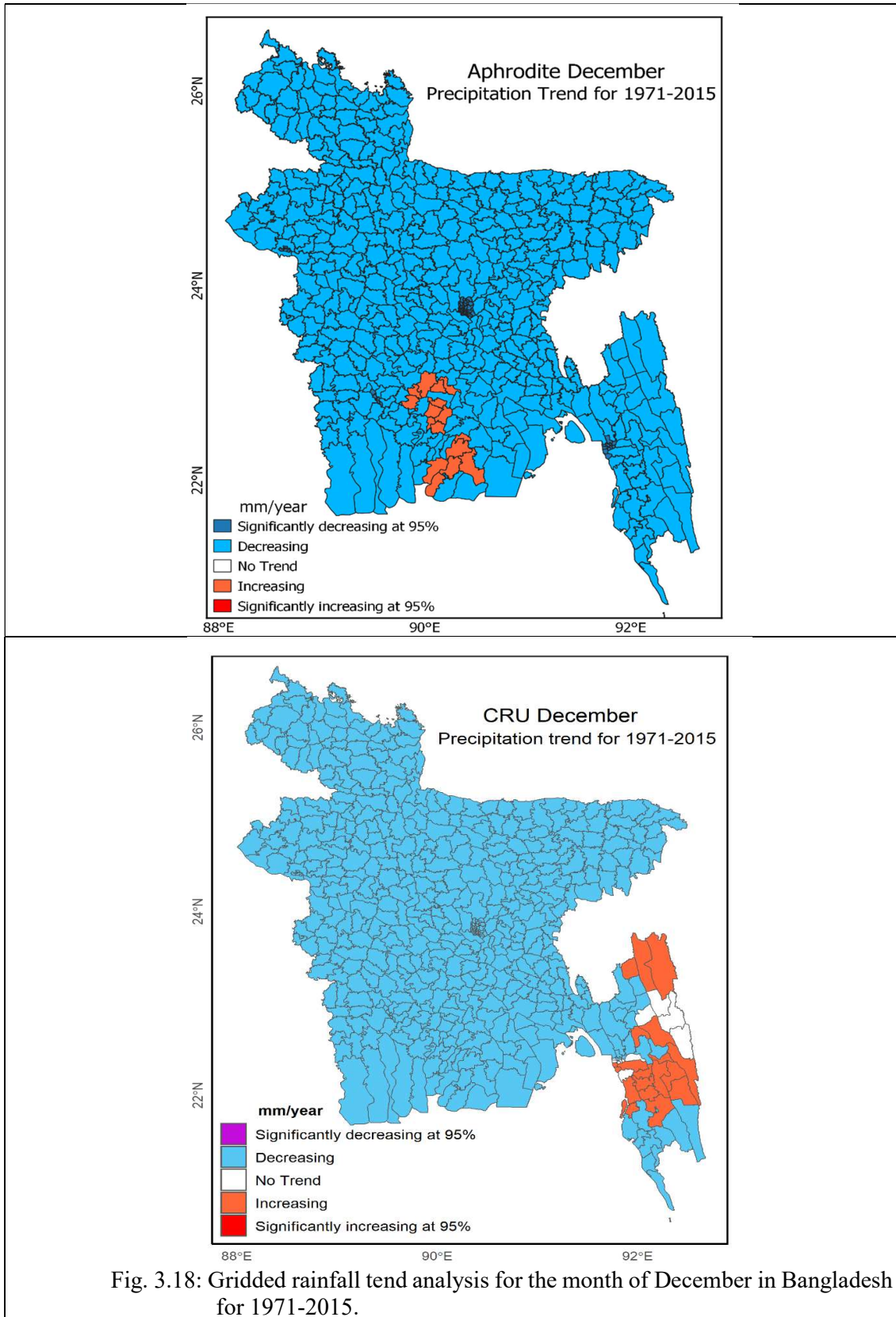


Fig. 3.17: Gridded and observed rainfall tend analysis for the month of November and December in Bangladesh for 1971-2015.



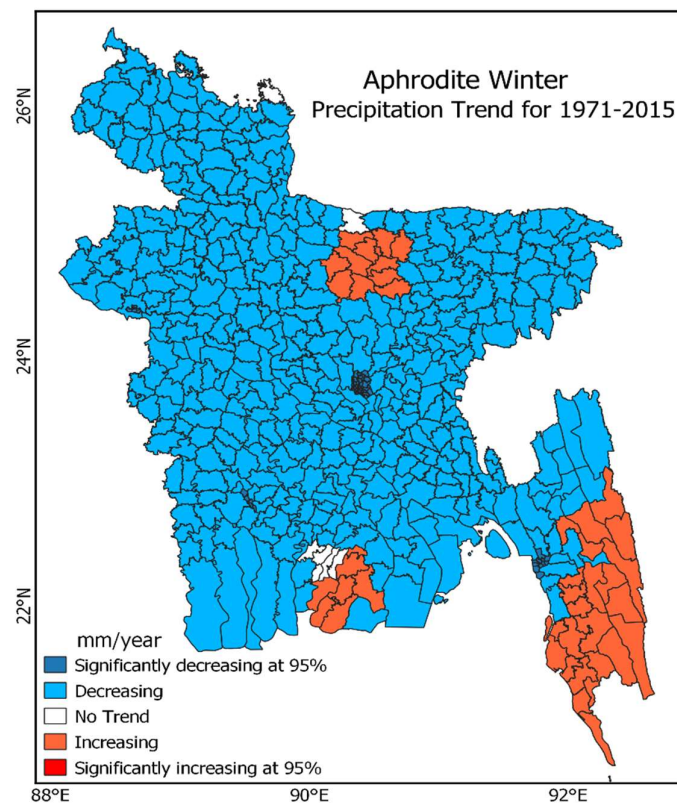
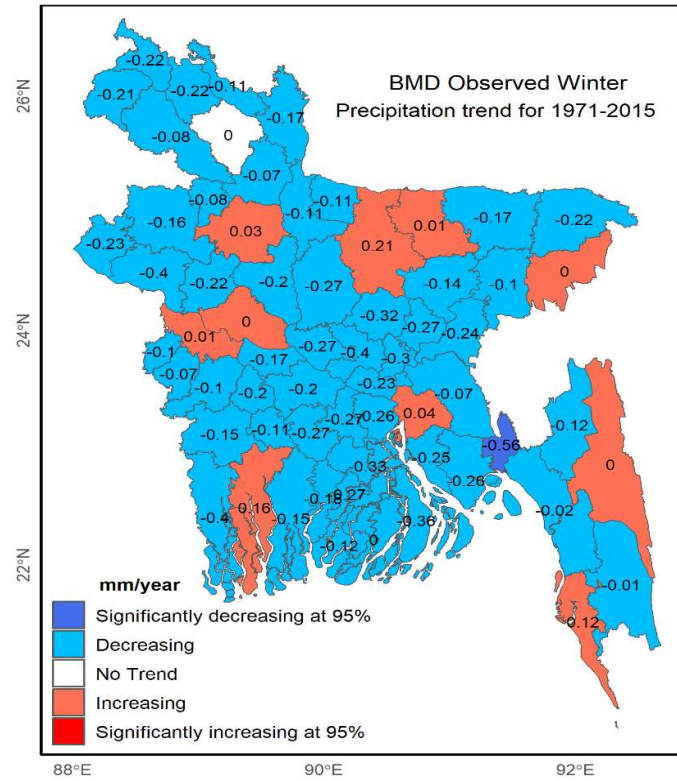


Fig. 3.19: Observed and gridded rainfall tend analysis for the season of Winter in Bangladesh for 1971-2015.

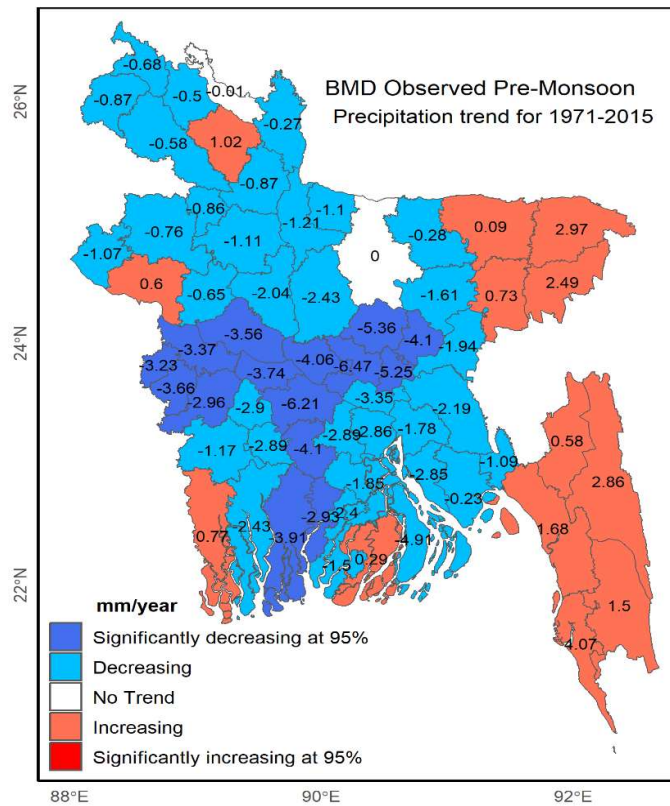
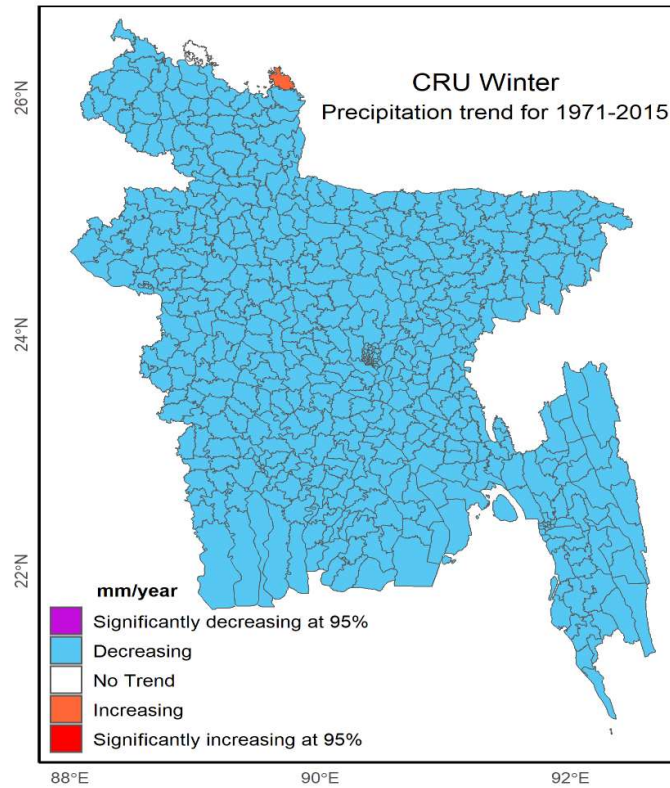


Fig. 3.20: Gridded and observed rainfall tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.

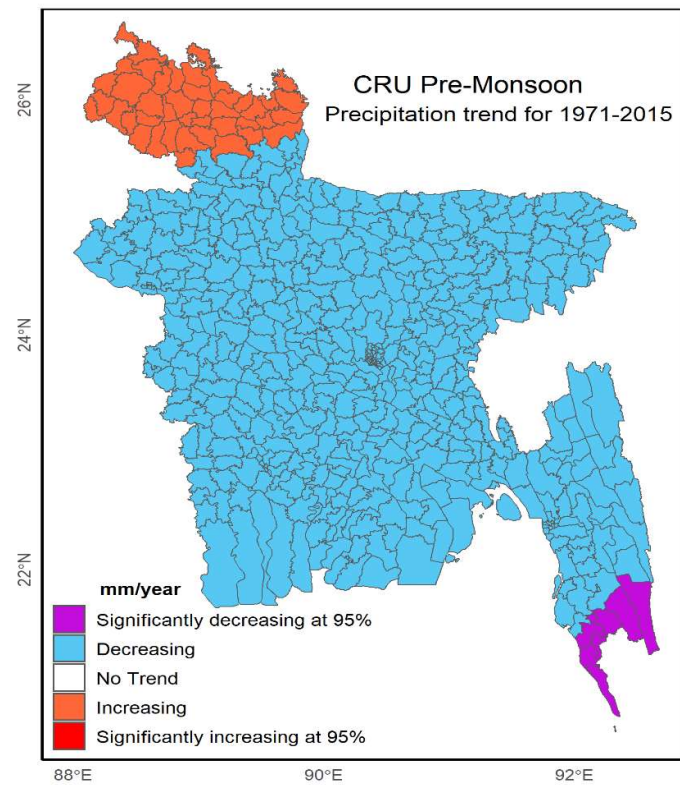
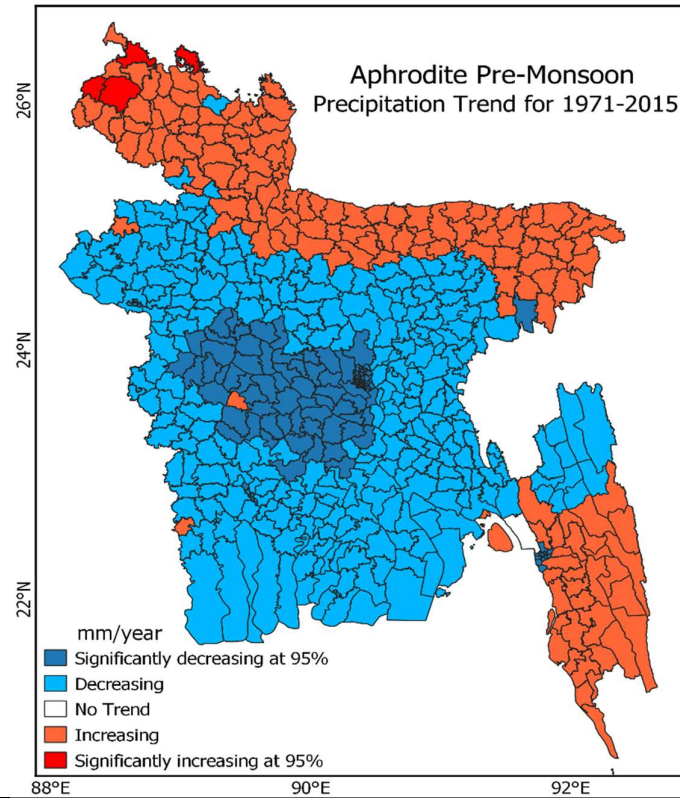


Fig. 3.21: Gridded rainfall tend analysis for the season of Pre-monsoon in Bangladesh for 1971-2015.

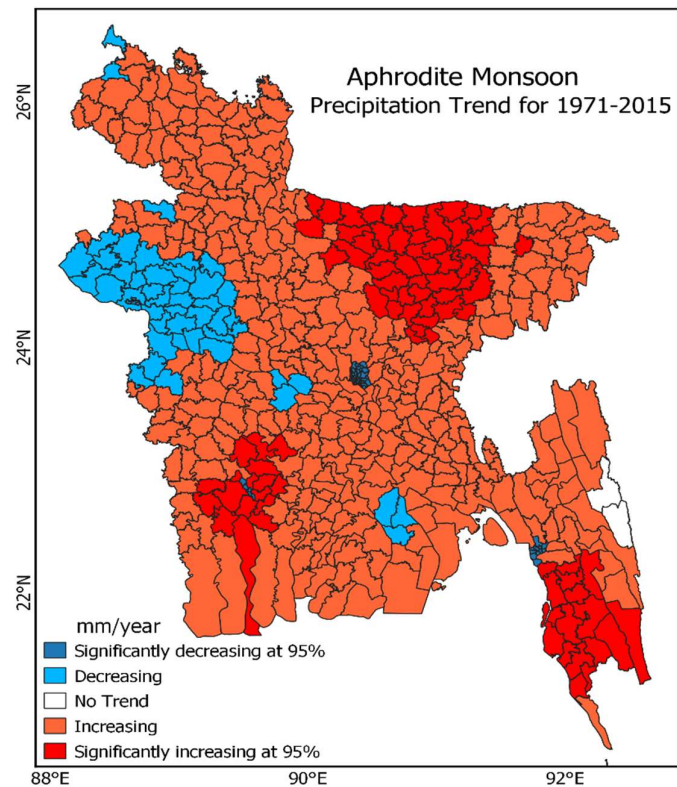
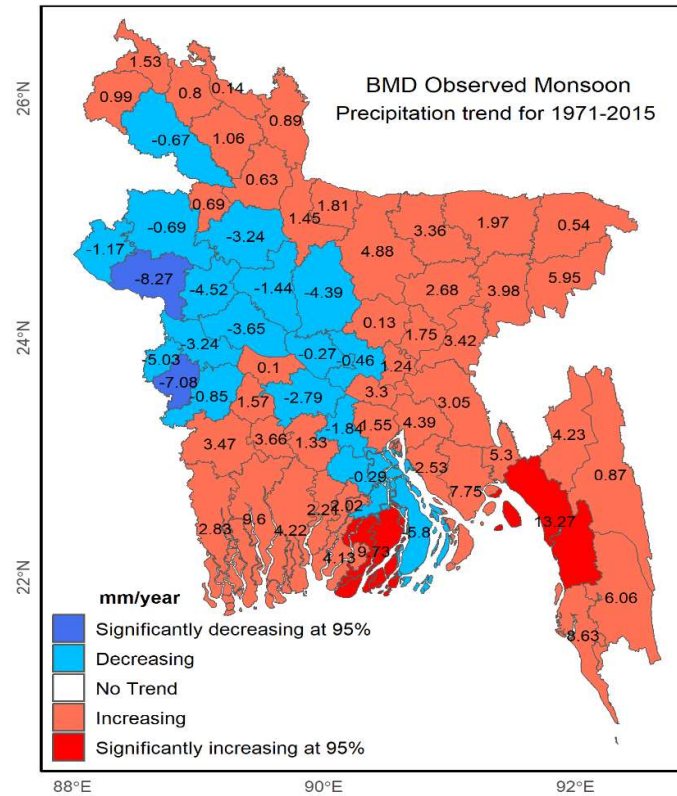


Fig. 3.22: Observed and gridded rainfall tend analysis for the season of Monsoon in Bangladesh for 1971-2015.

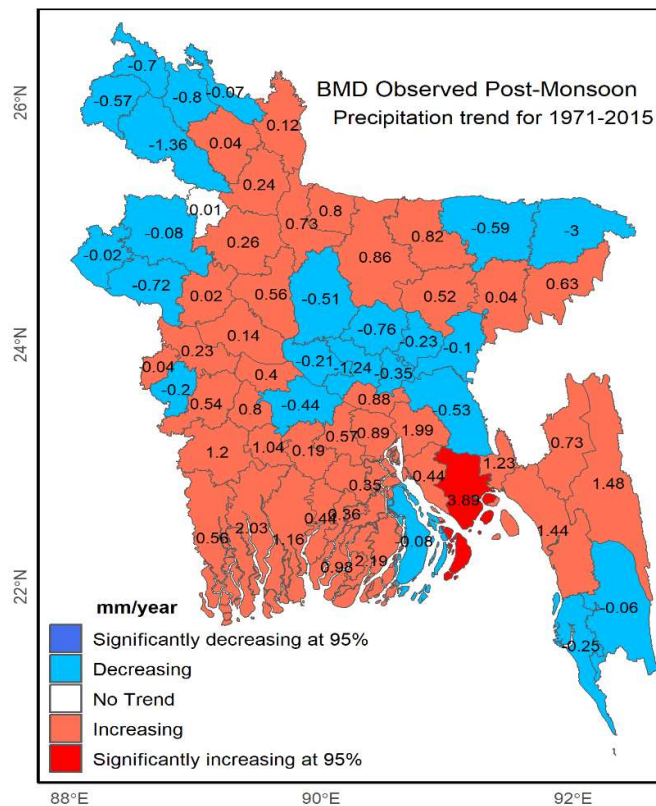
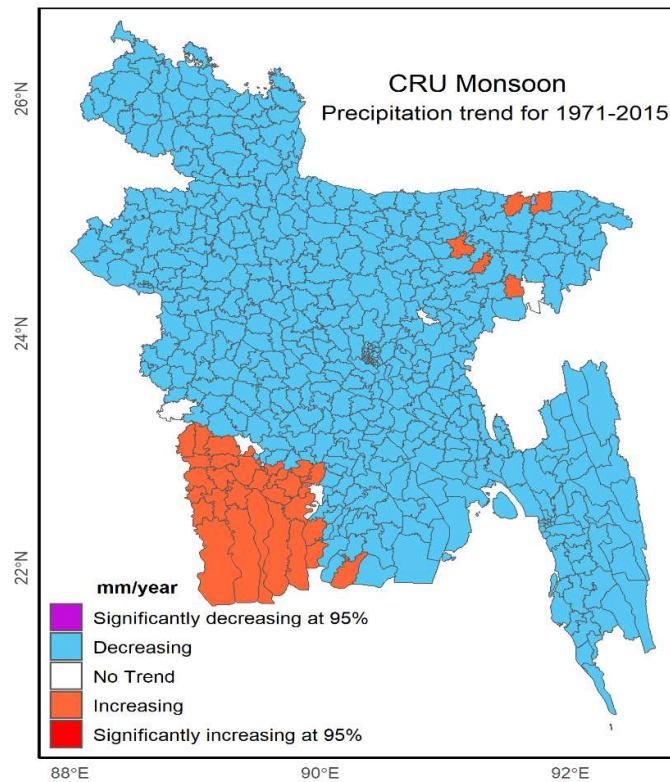


Fig. 3.23: Gridded and observed rainfall tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.

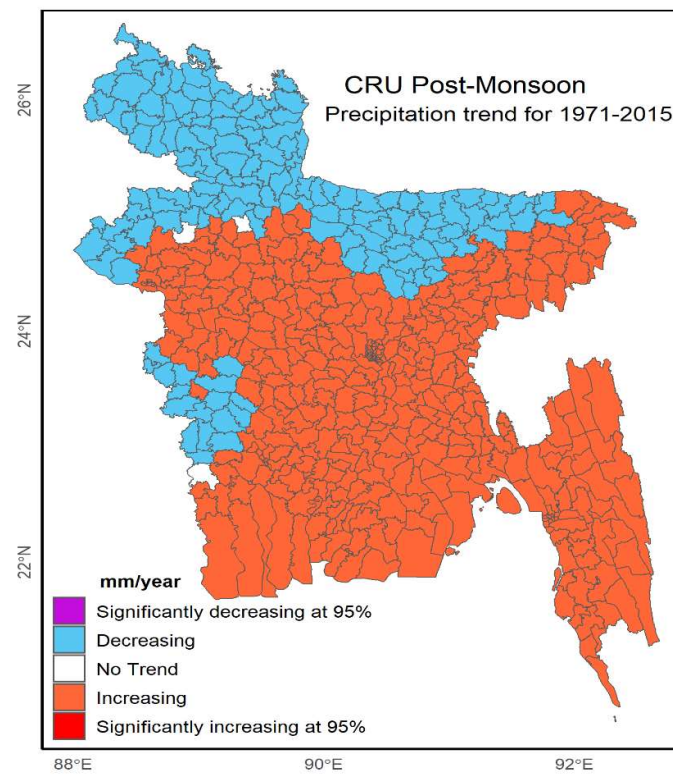
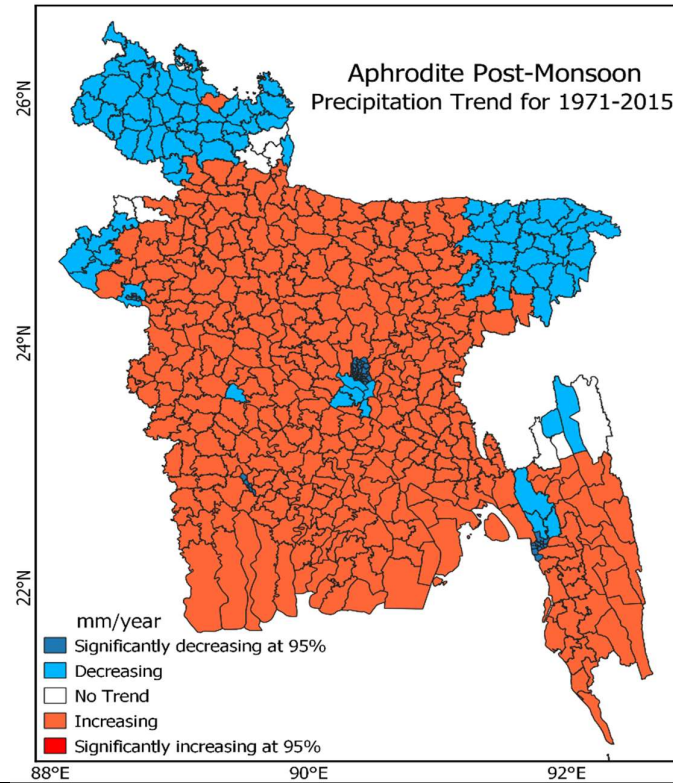


Fig. 3.24: Gridded rainfall tend analysis for the season of Post-monsoon in Bangladesh for 1971-2015.

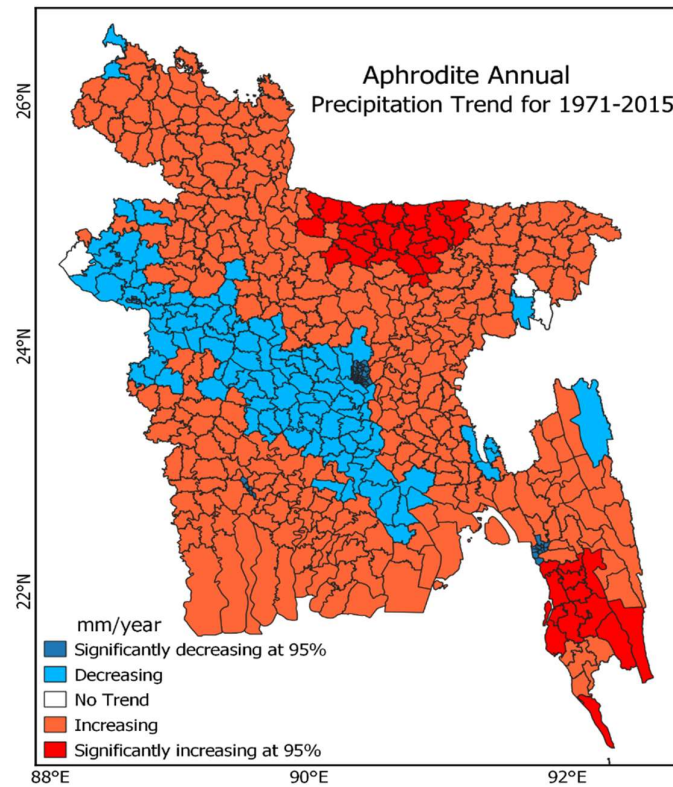
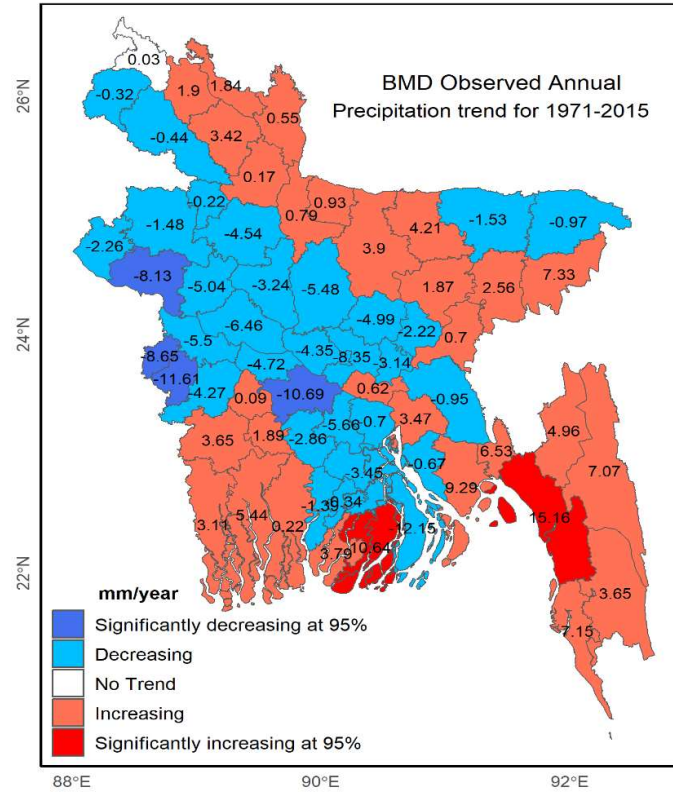


Fig. 3.25: Observed and gridded rainfall tend analysis for the annual in Bangladesh for 1971-2015.

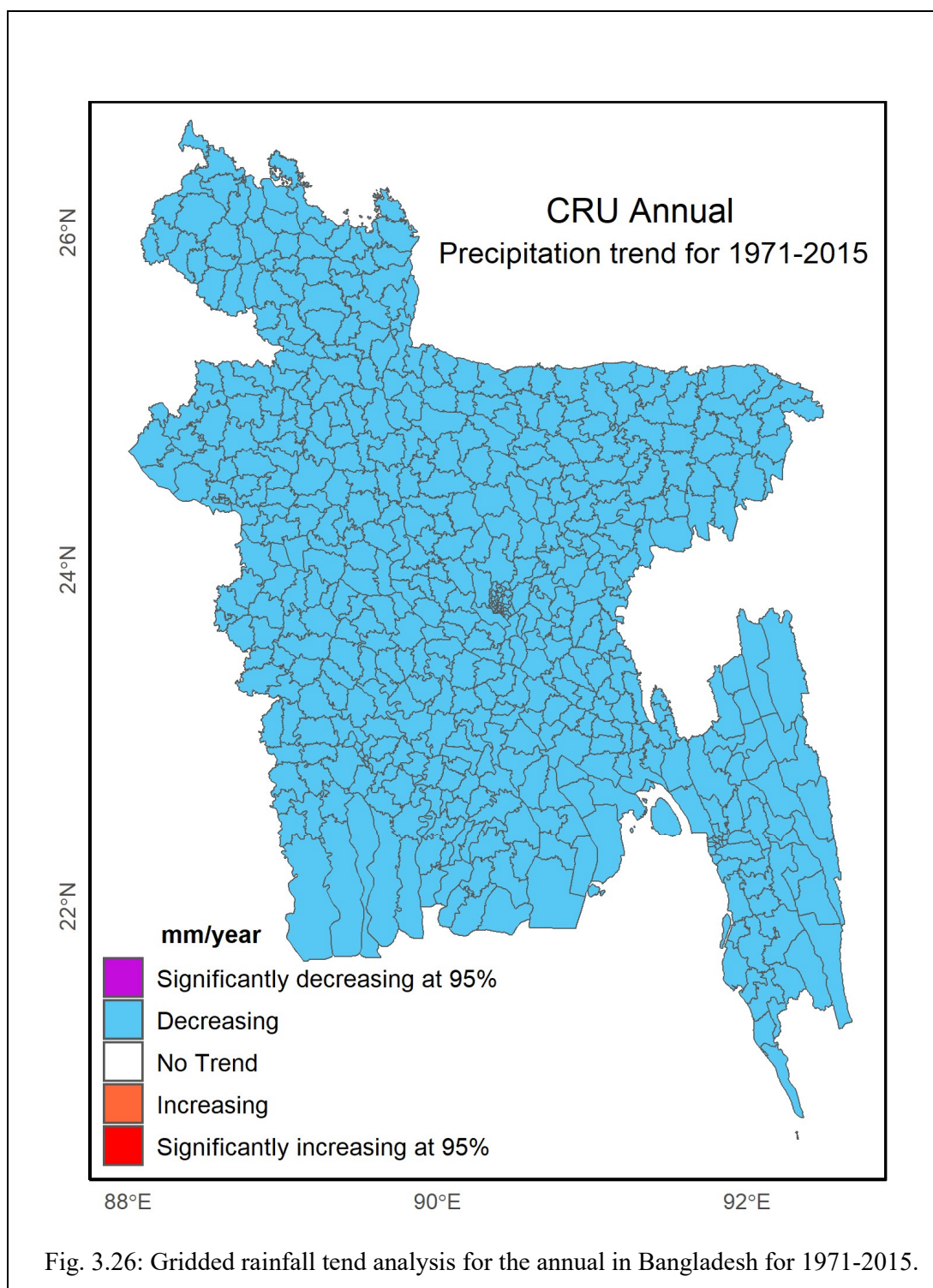


Fig. 3.26: Gridded rainfall tend analysis for the annual in Bangladesh for 1971-2015.

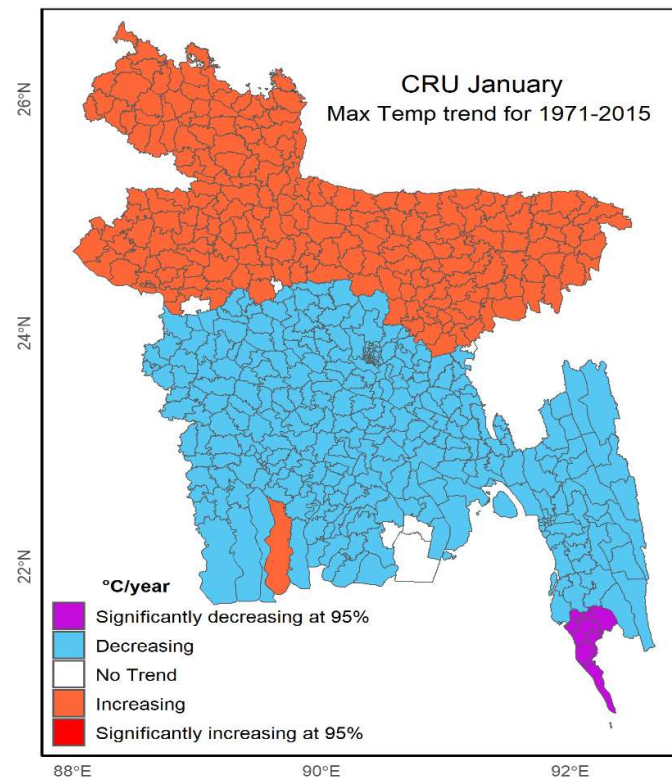
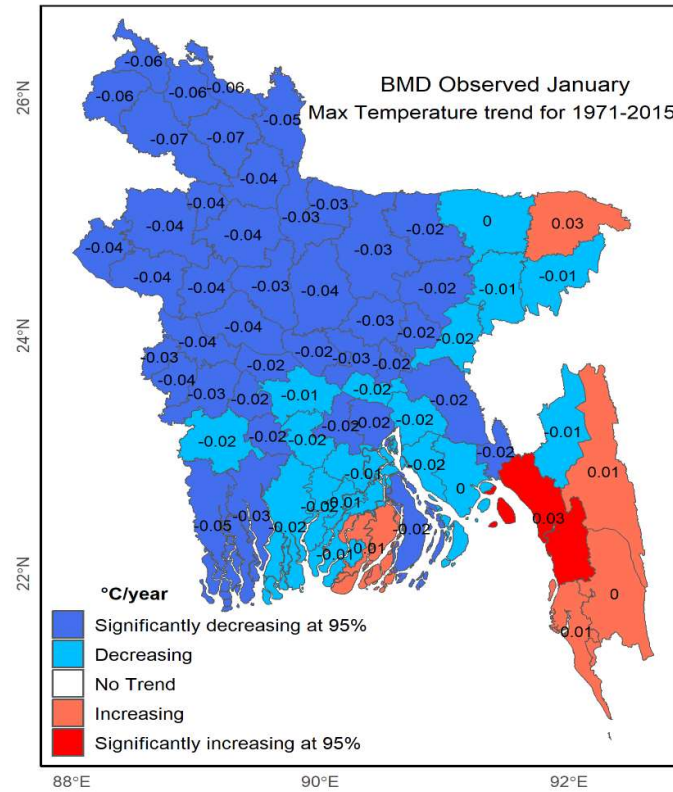


Fig. 3.27: Observed and gridded maximum temperature tend analysis for the month of January in Bangladesh for 1971-2015.

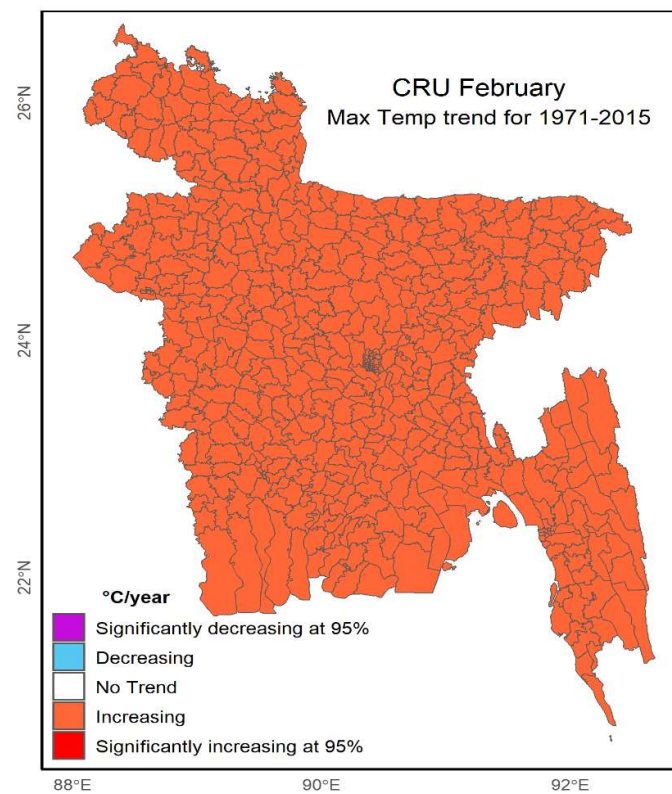
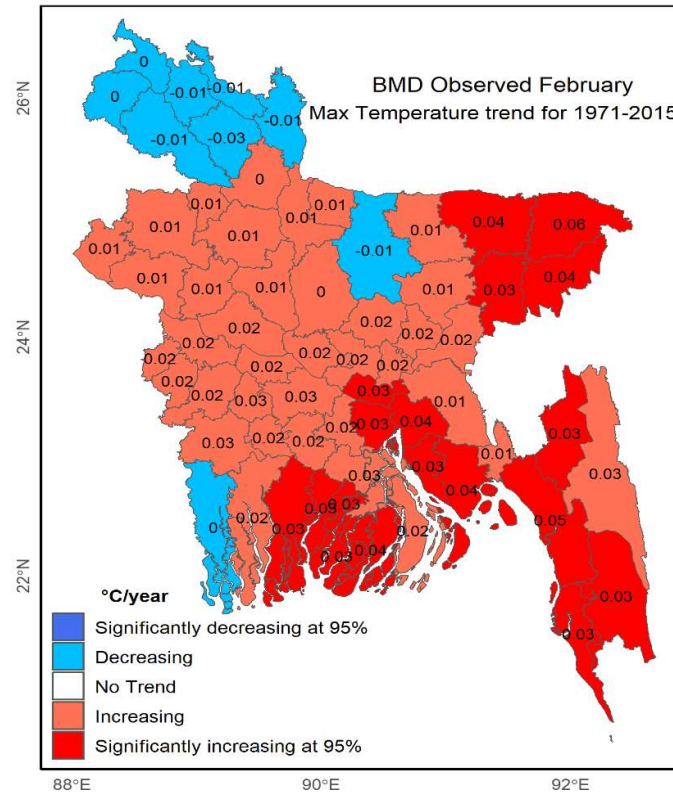


Fig. 3.28: Observed and gridded maximum temperature tend analysis for the month of February in Bangladesh for 1971-2015.

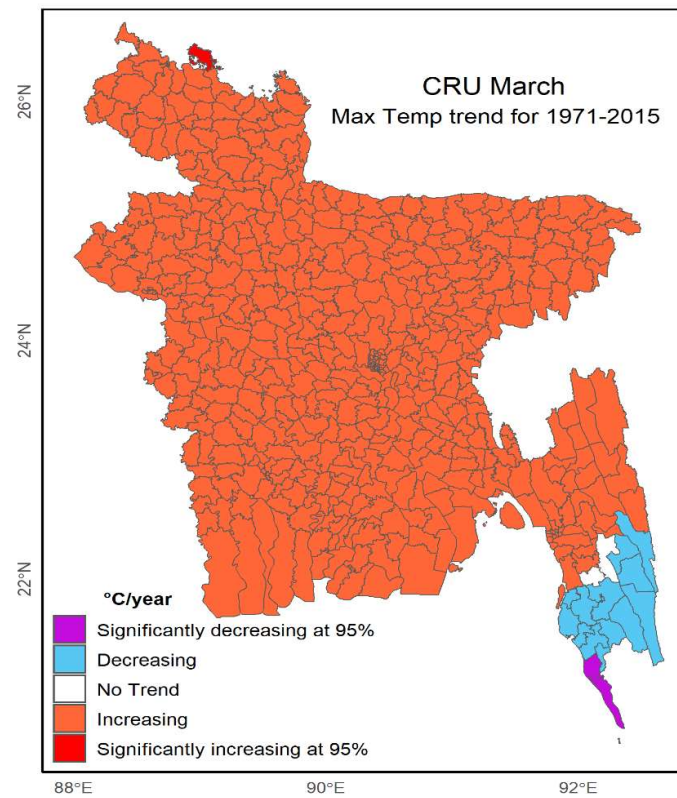
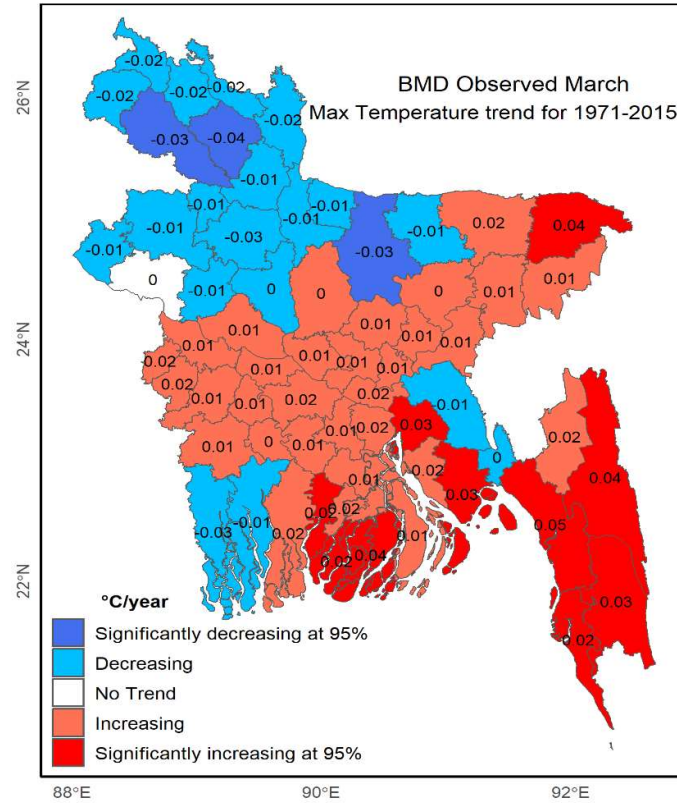


Fig. 3.29: Observed and gridded maximum temperature tend analysis for the month of March in Bangladesh for 1971-2015.

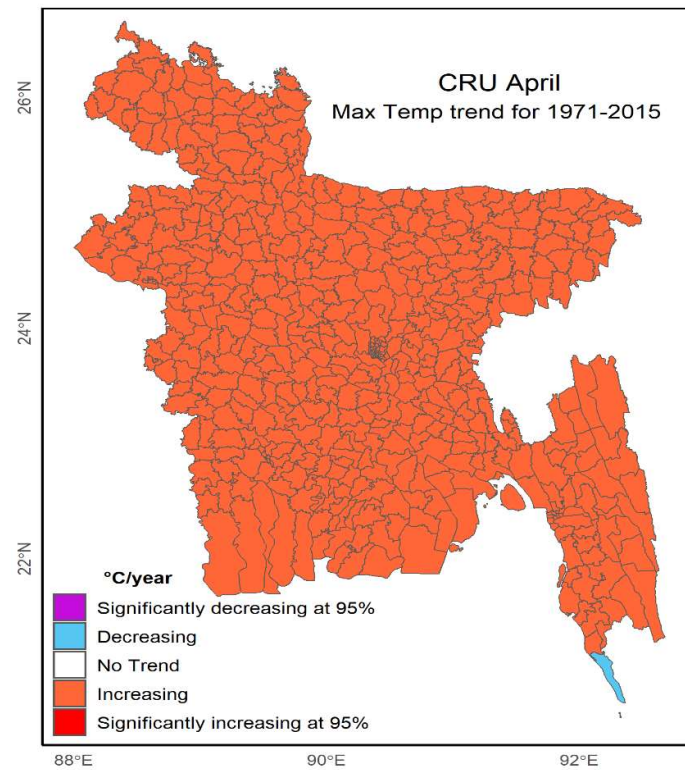
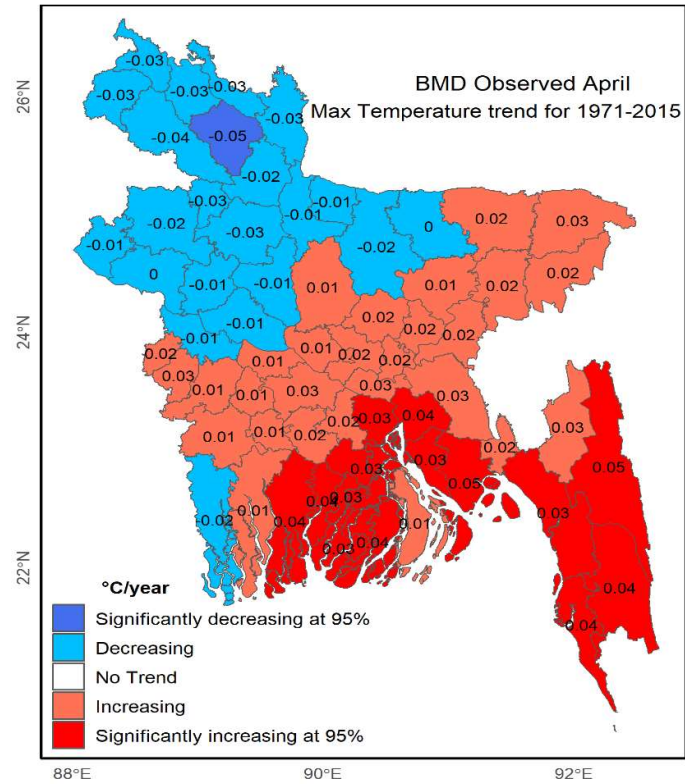


Fig. 3.30: Observed and gridded maximum temperature tend analysis for the month of April in Bangladesh for 1971-2015.

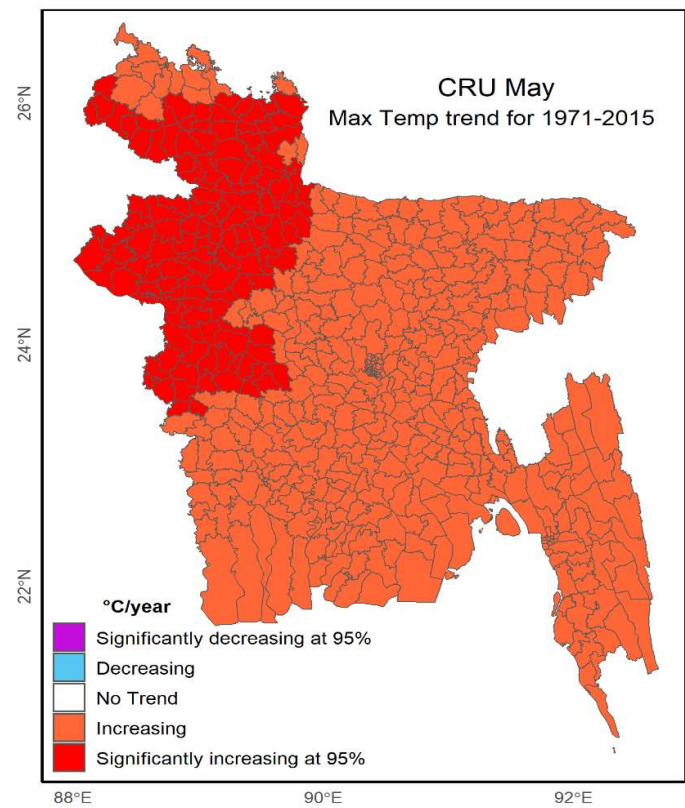
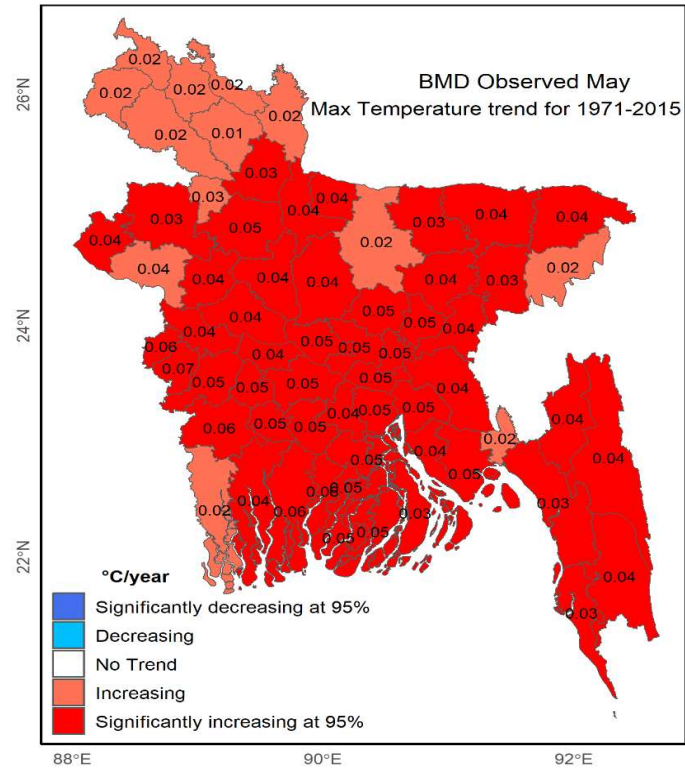


Fig. 3.31: Observed and gridded maximum temperature tend analysis for the month of May in Bangladesh for 1971-2015.

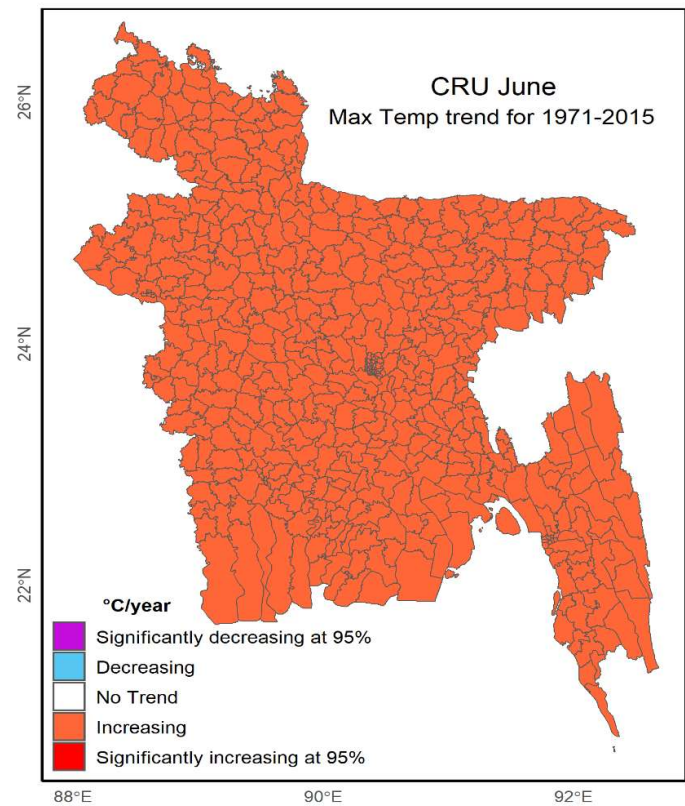
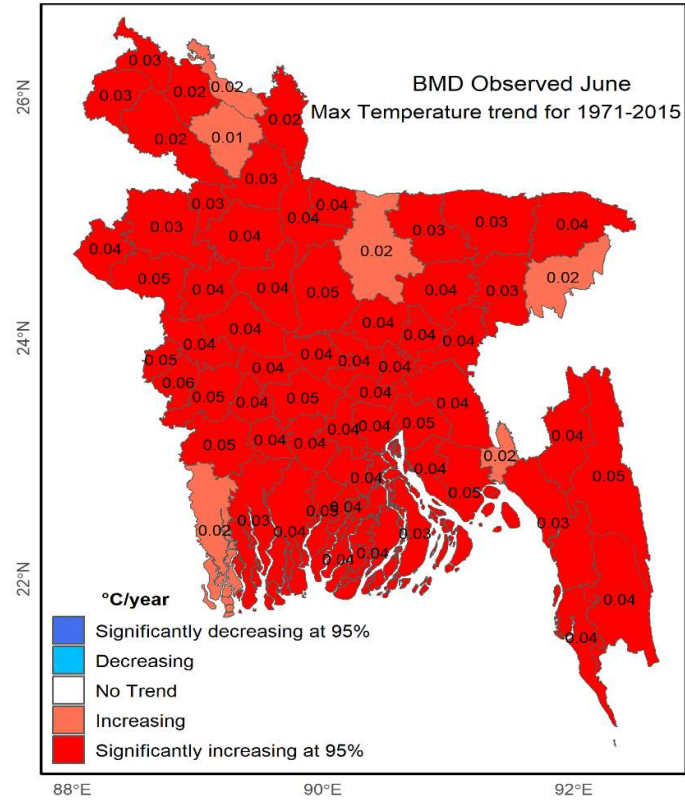


Fig. 3.32: Observed and gridded maximum temperature tend analysis for the month of June in Bangladesh for 1971-2015.

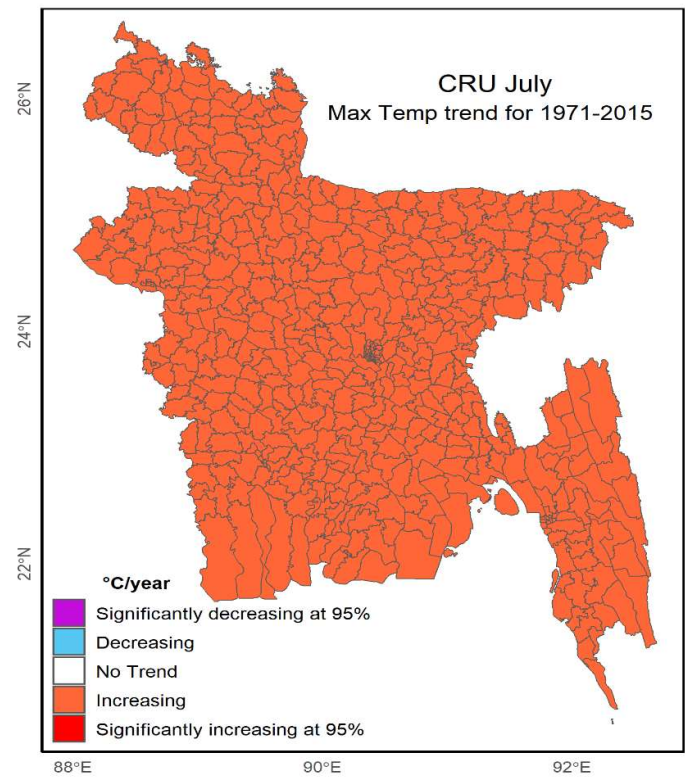
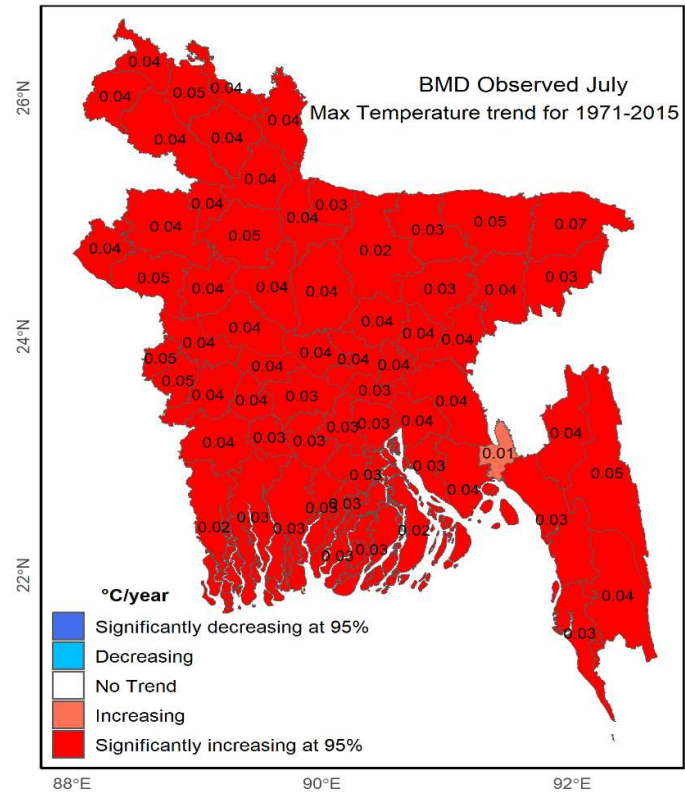


Fig. 3.33: Observed and gridded maximum temperature tend analysis for the month of July in Bangladesh for 1971-2015.

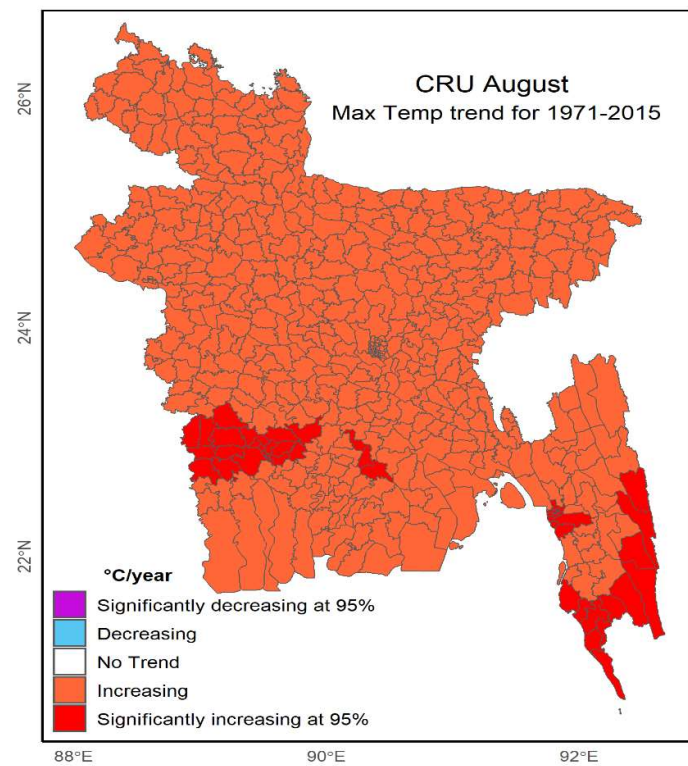
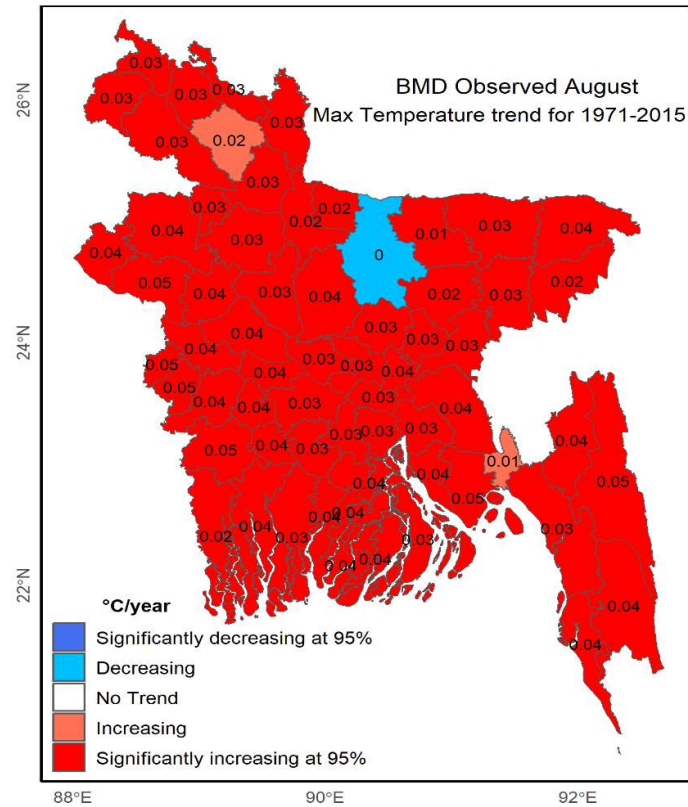


Fig. 3.34: Observed and gridded maximum temperature tend analysis for the month of August in Bangladesh for 1971-2015.

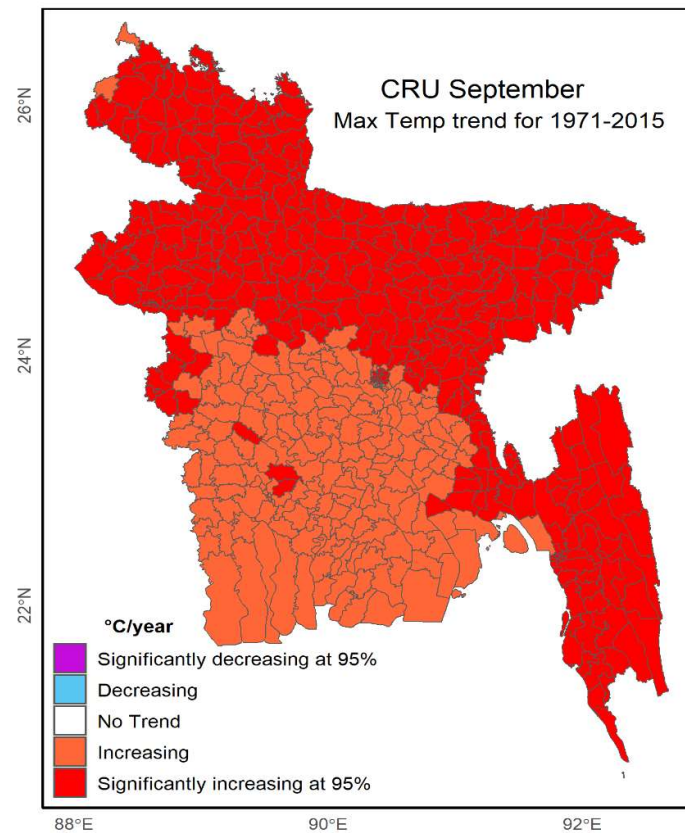
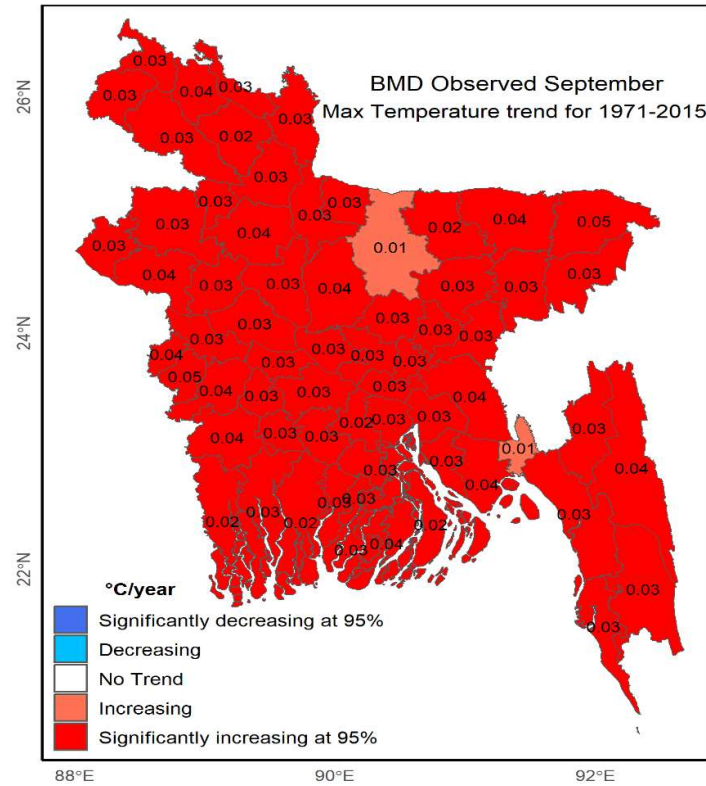


Fig. 3.35: Observed and gridded maximum temperature tend analysis for the month of September in Bangladesh for 1971-2015.

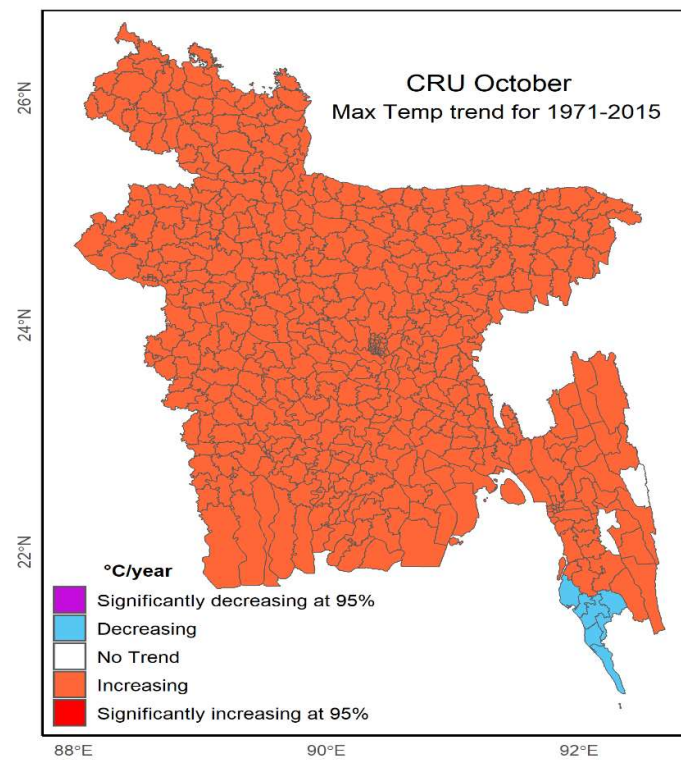
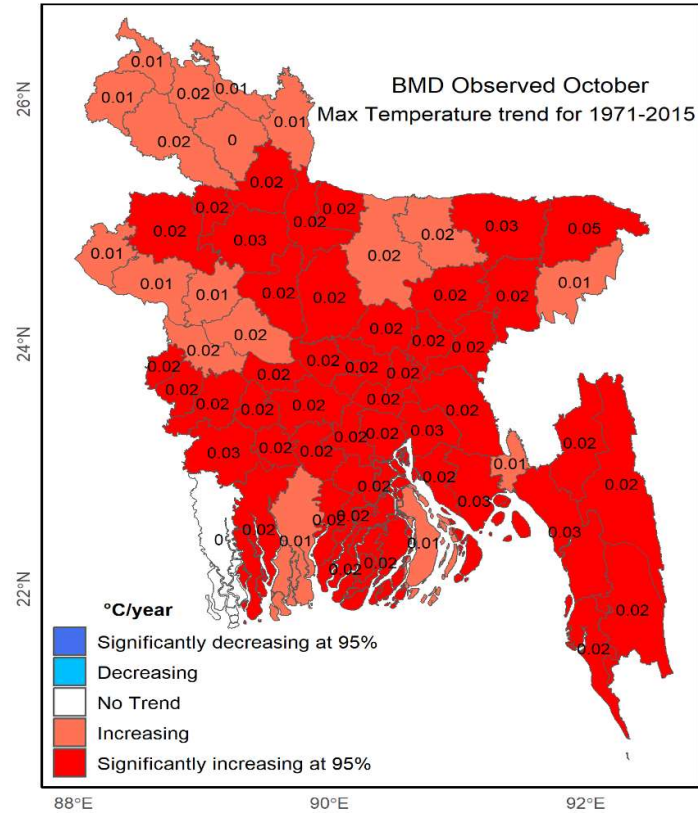


Fig. 3.36: Observed and gridded maximum temperature tend analysis for the month of October in Bangladesh for 1971-2015.

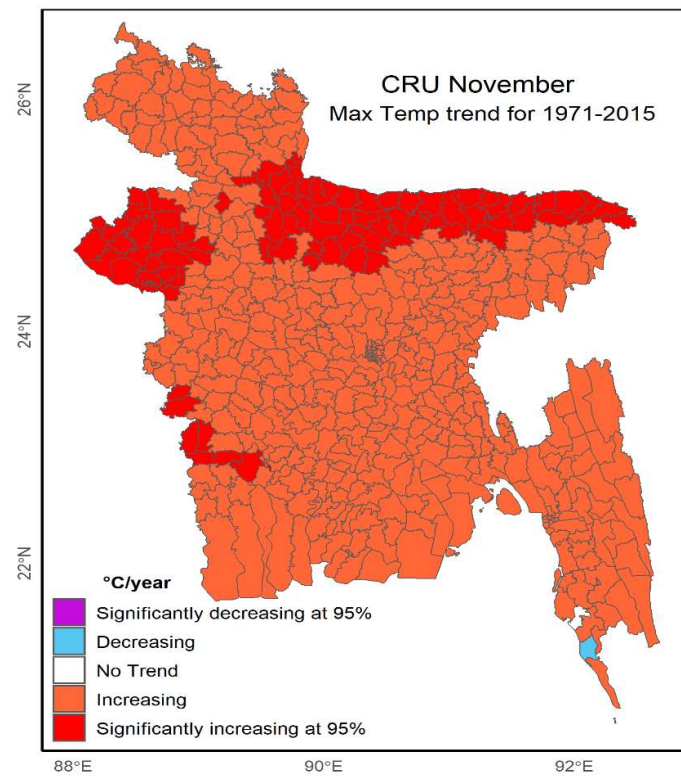
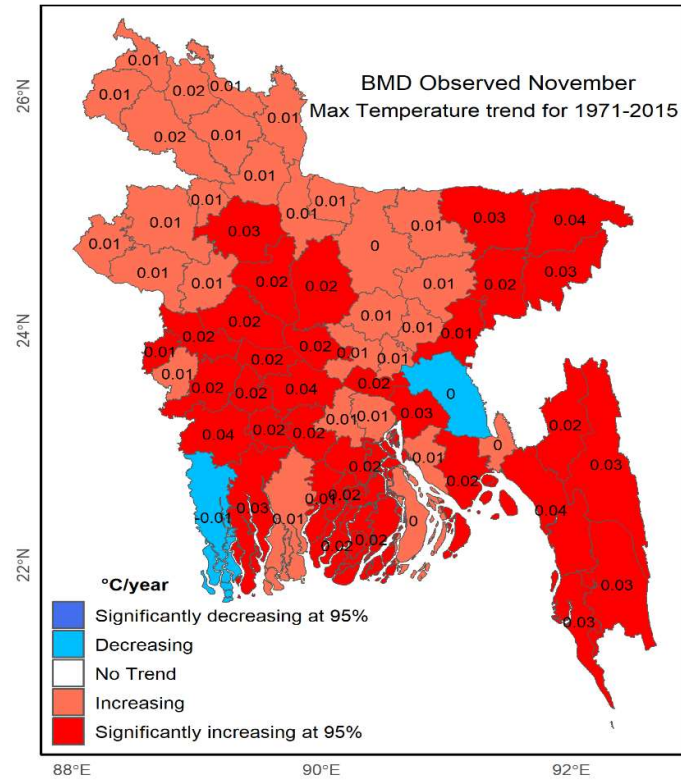


Fig. 3.37: Observed and gridded maximum temperature tend analysis for the month of November in Bangladesh for 1971-2015.

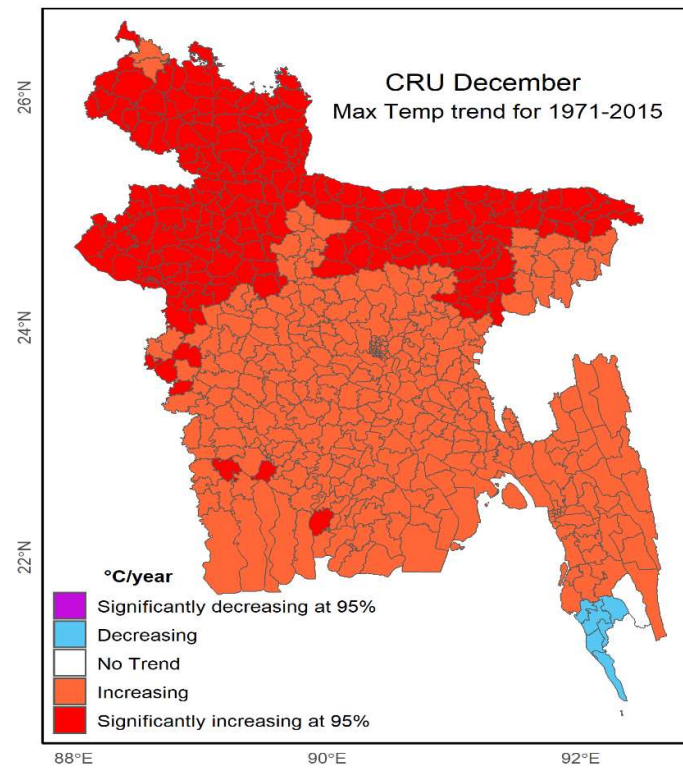
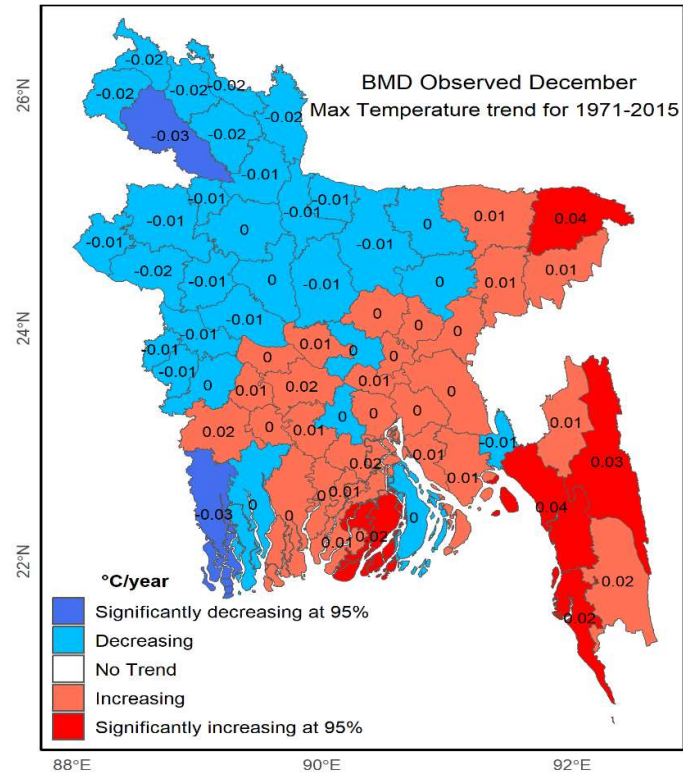


Fig. 3.38.: Observed and gridded maximum temperature tend analysis for the month of December in Bangladesh for 1971-2015.

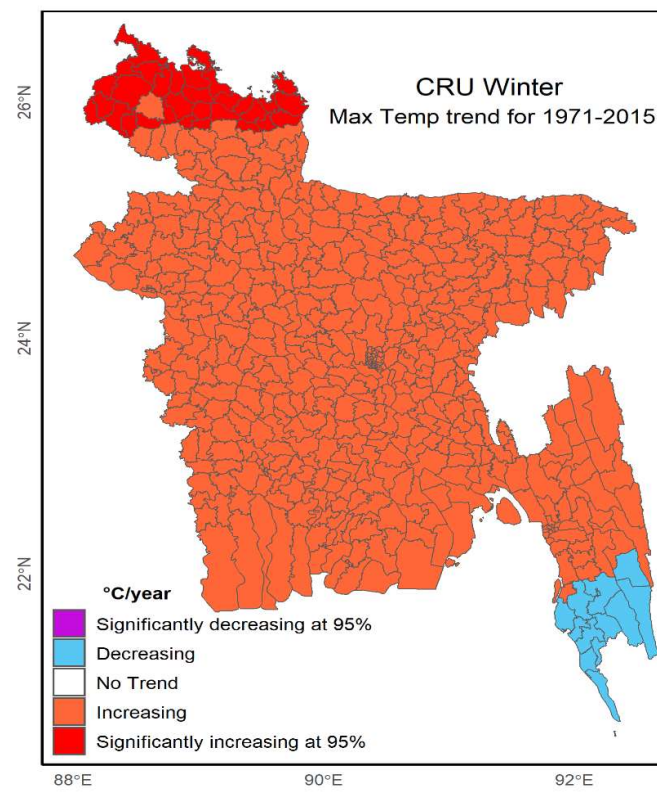
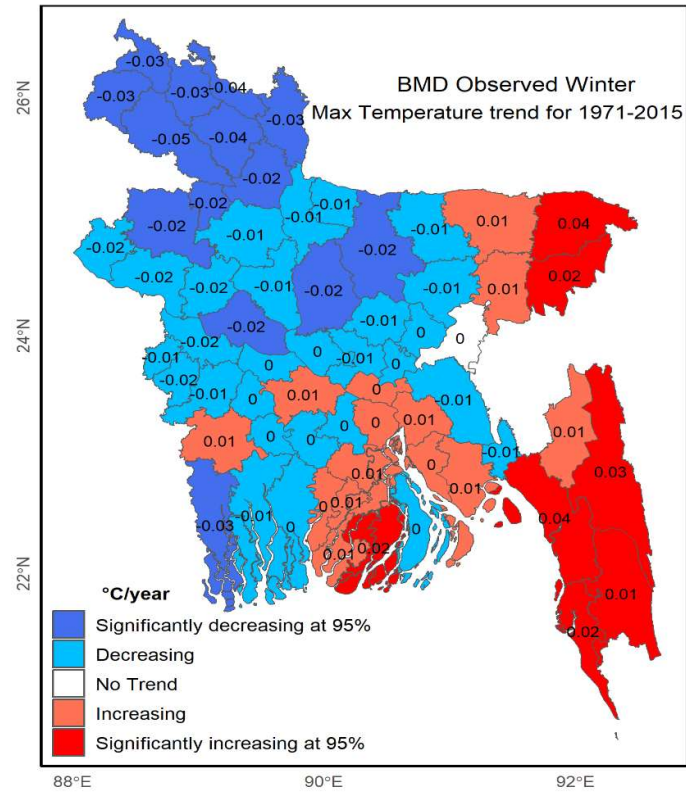


Fig. 3.39: Observed and gridded maximum temperature tend analysis for the Winter season in Bangladesh for 1971-2015.

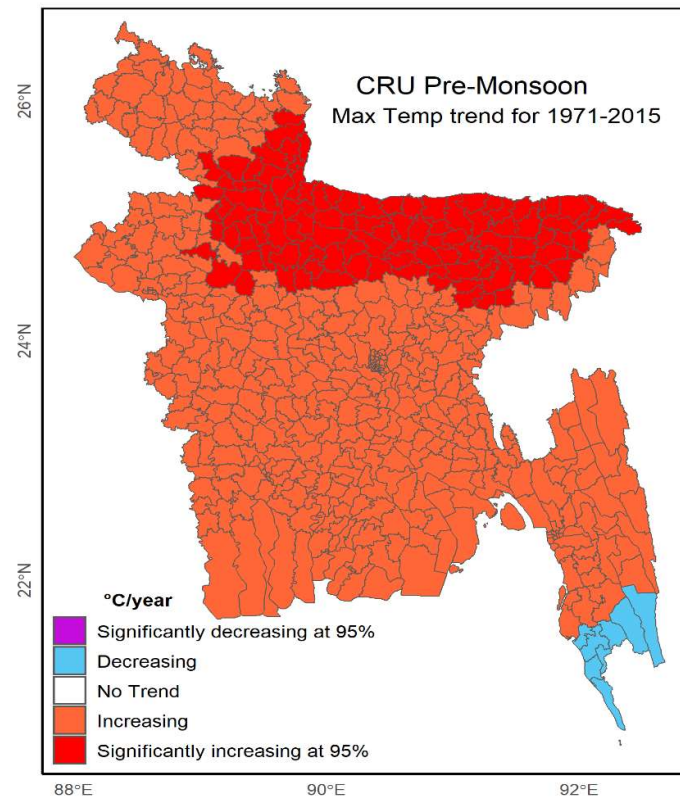
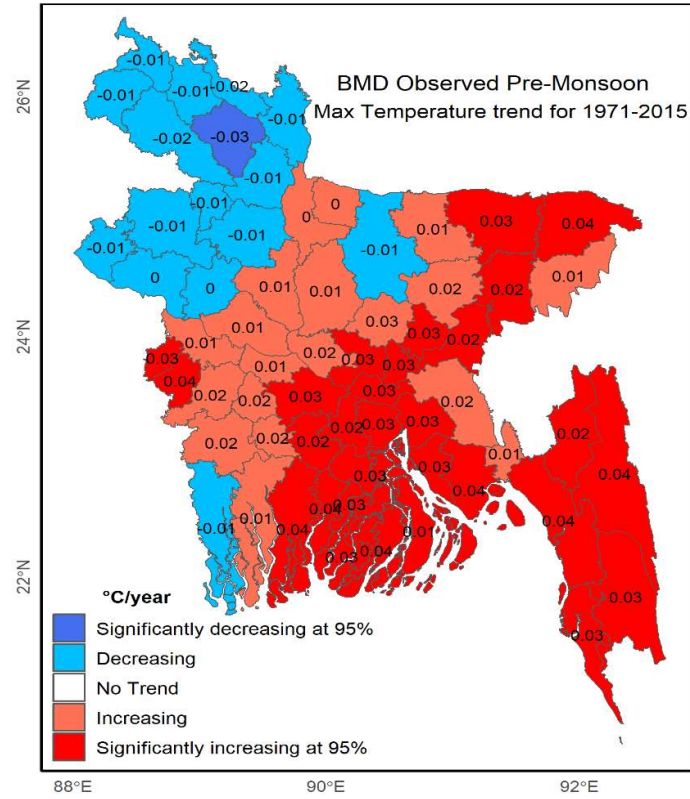


Fig. 3.40: Observed and gridded maximum temperature tend analysis for the Pre-monsoon season in Bangladesh for 1971-2015.

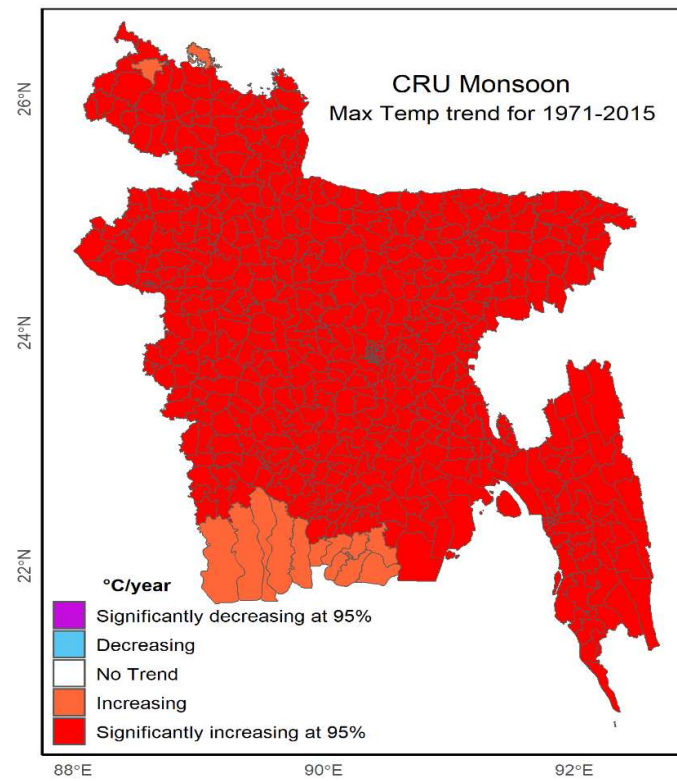
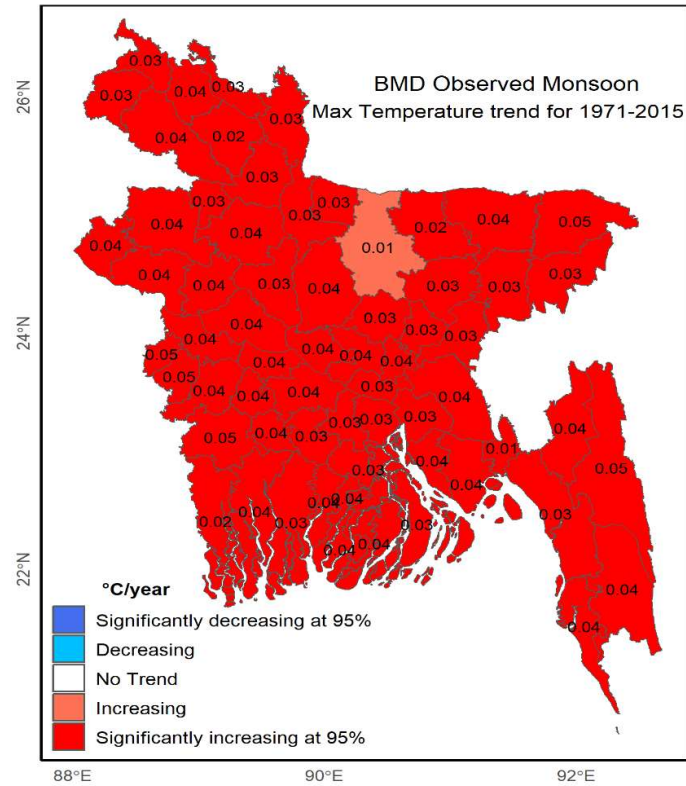


Fig. 3.41: Observed and gridded maximum temperature tend analysis for the Monsoon season in Bangladesh for 1971-2015.

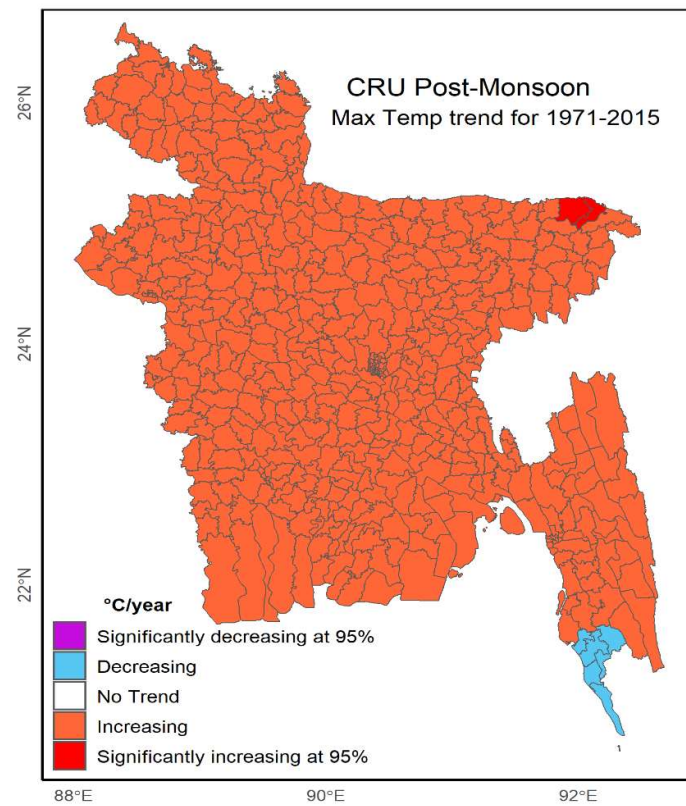
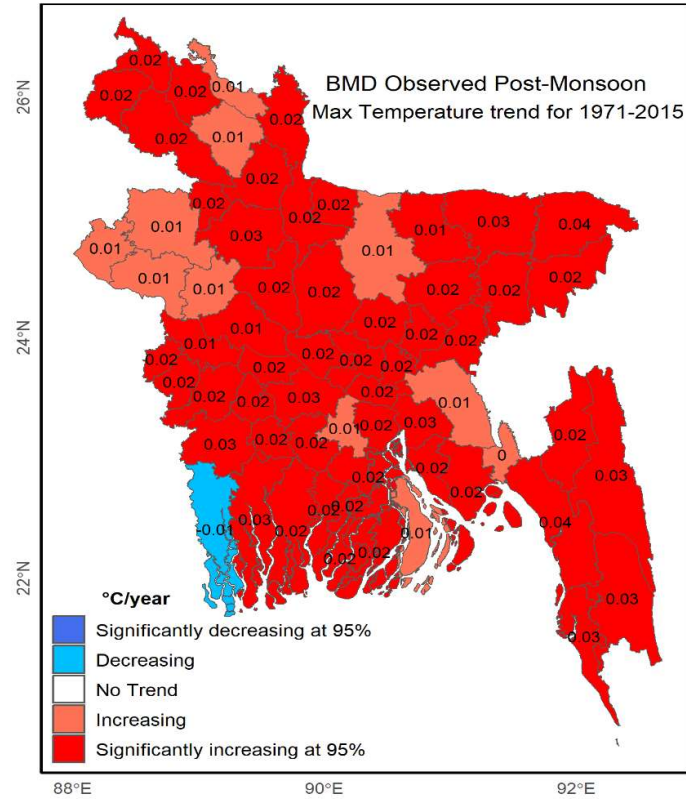


Fig. 3.42: Observed and gridded maximum temperature tend analysis for the Post-monsoon season in Bangladesh for 1971-2015.

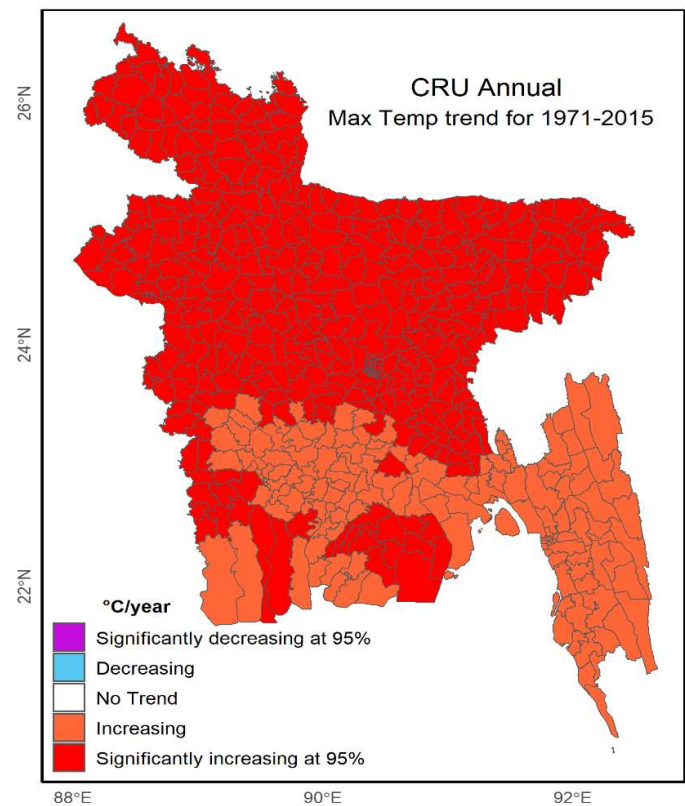
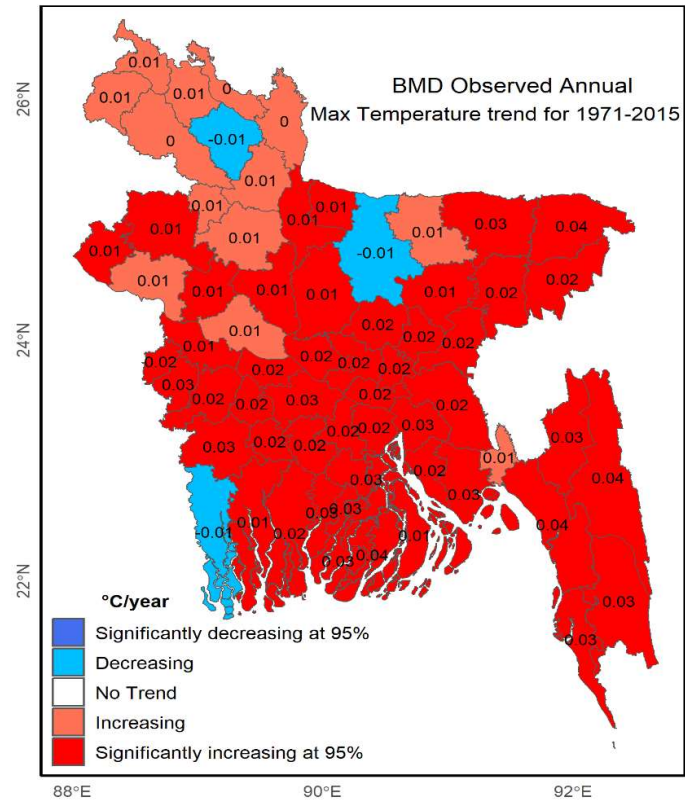


Fig. 3.43: Observed and gridded maximum temperature tend analysis for the Annual in Bangladesh for 1971-2015.

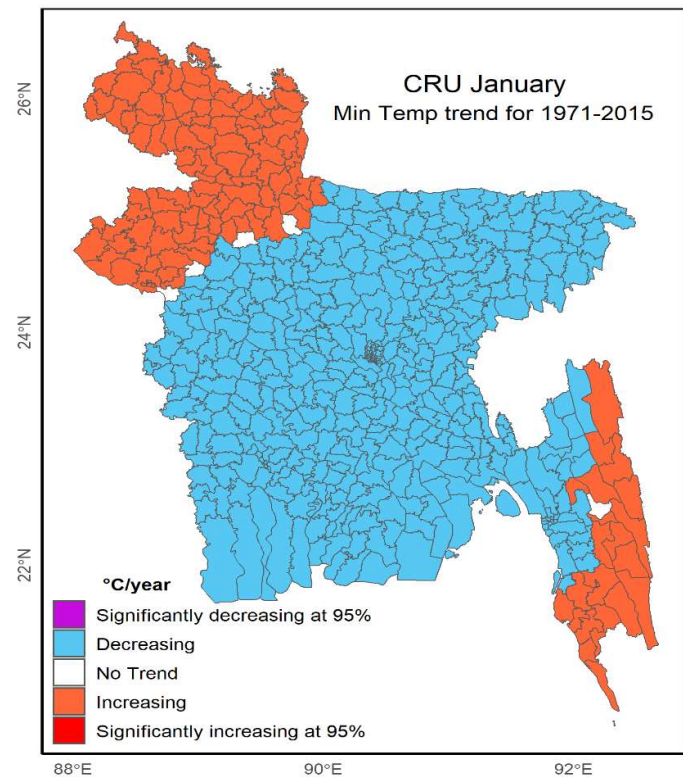
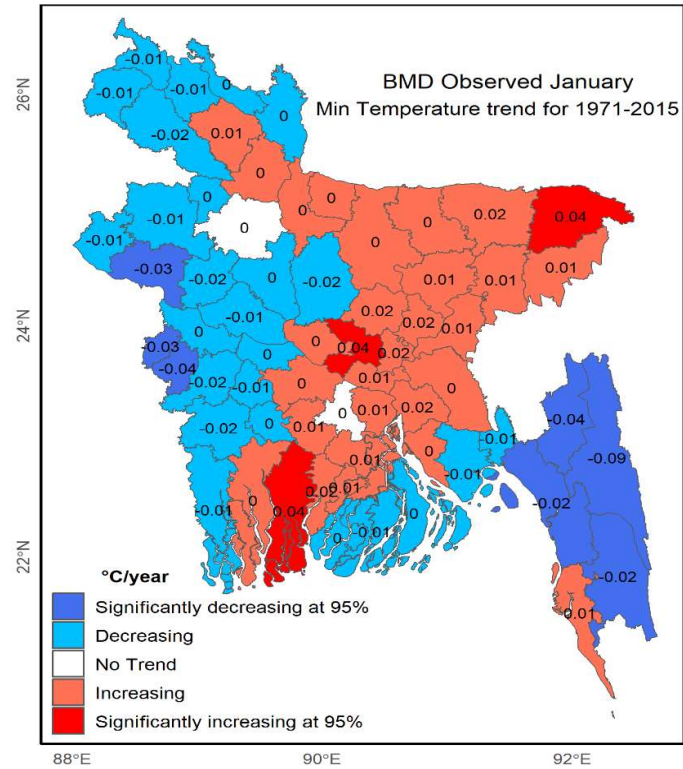


Fig. 3.44: Observed and gridded minimum temperature tend analysis for the month of January in Bangladesh for 1971-2015.

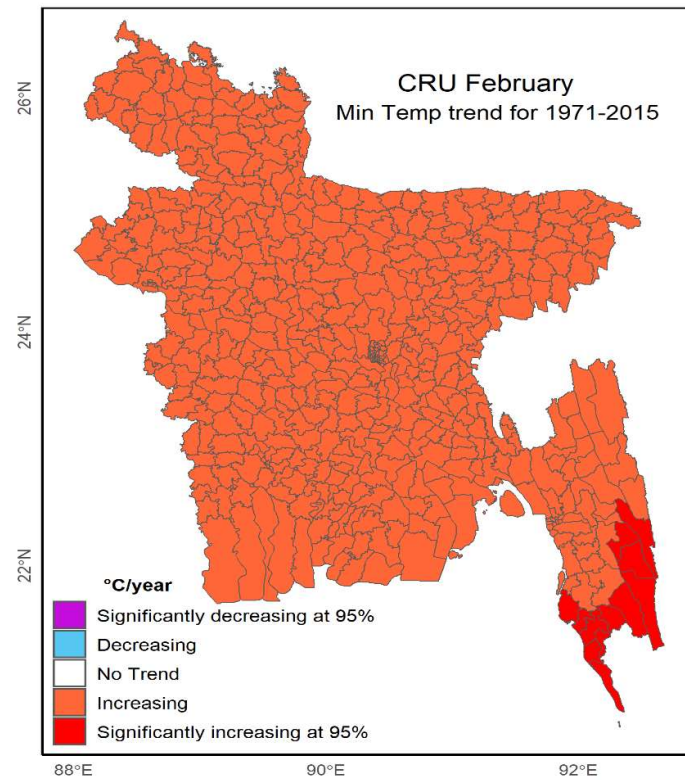
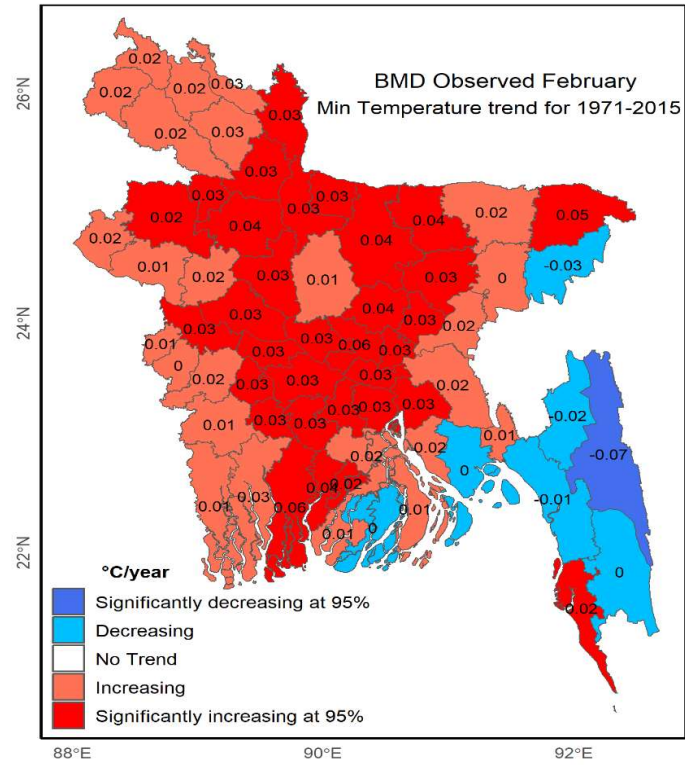


Fig. 3.45: Observed and gridded minimum temperature tend analysis for the month of February in Bangladesh for 1971-2015.

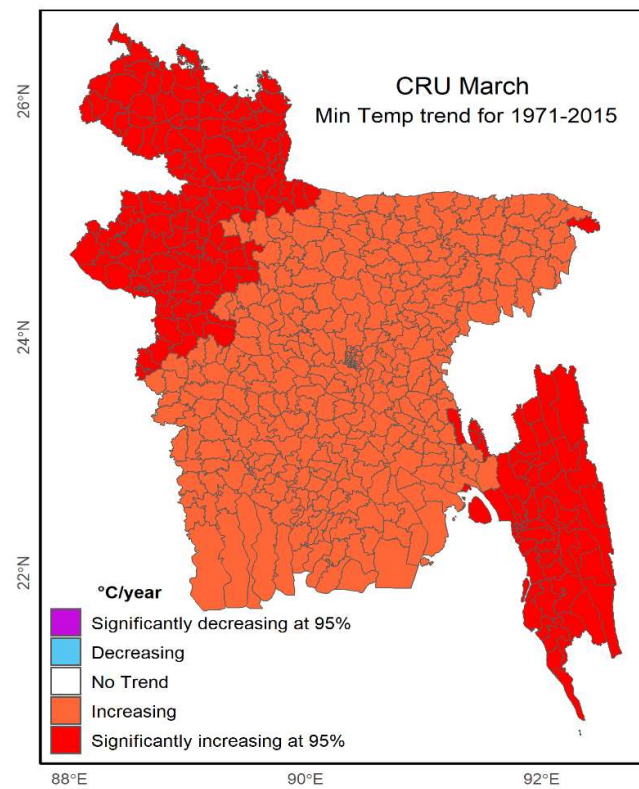
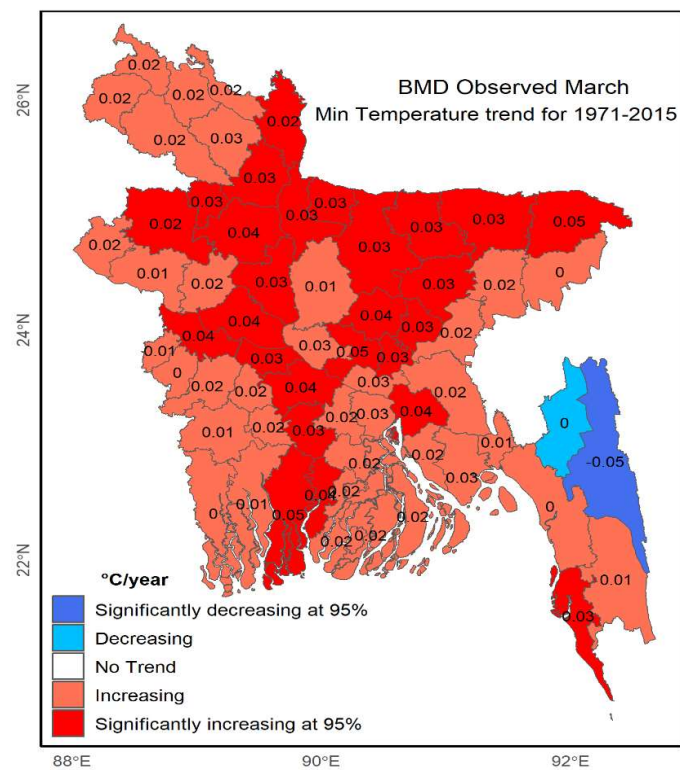


Fig. 3.46: Observed and gridded minimum temperature tend analysis for the month of March in Bangladesh for 1971-2015.

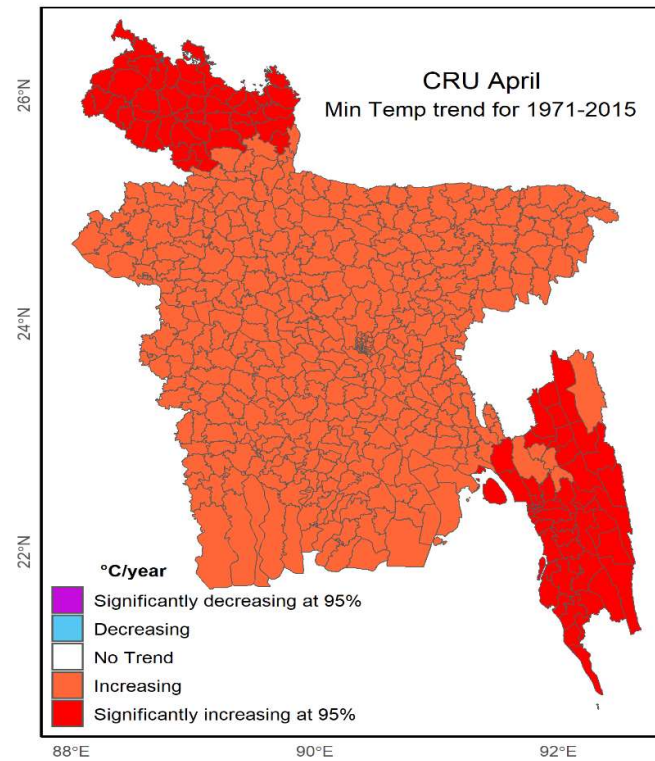
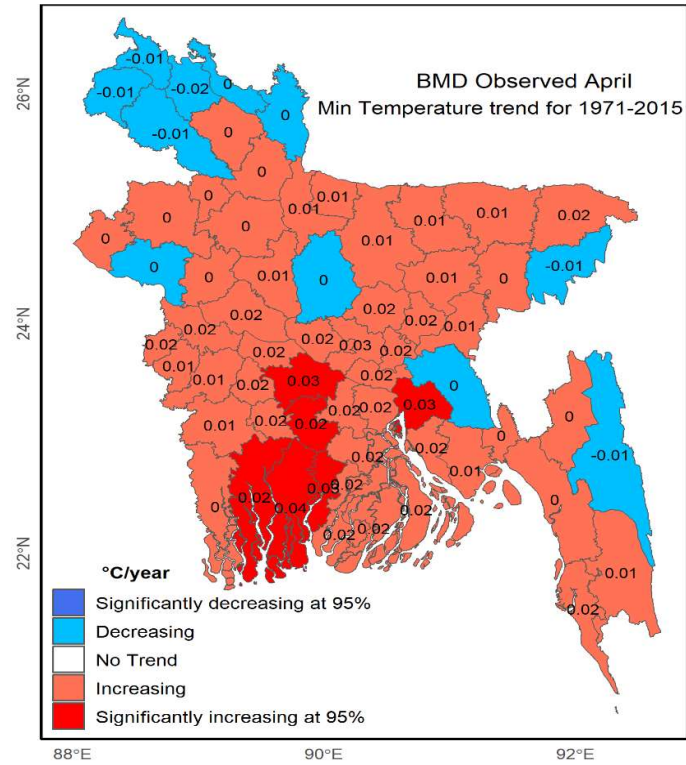


Fig. 3.47: Observed and gridded minimum temperature tend analysis for the month of April in Bangladesh for 1971-2015.

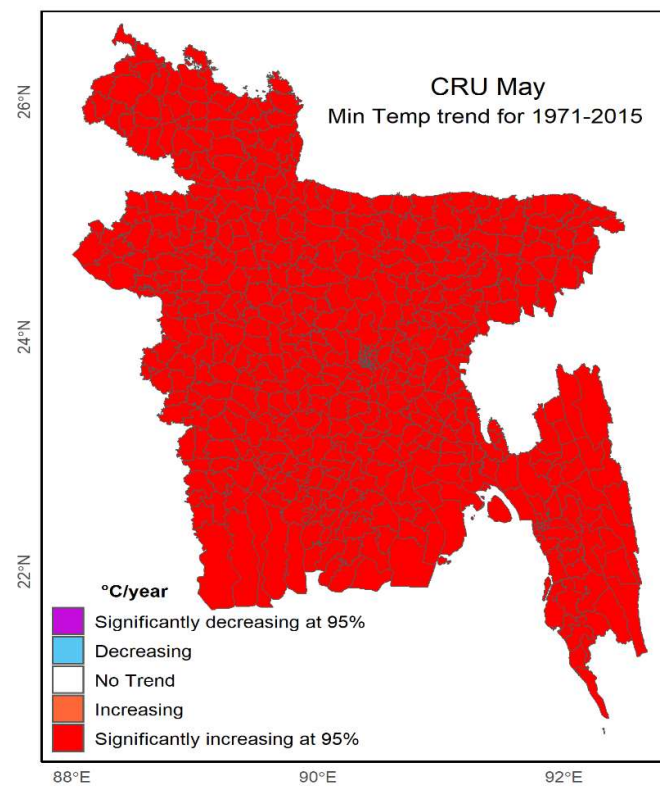
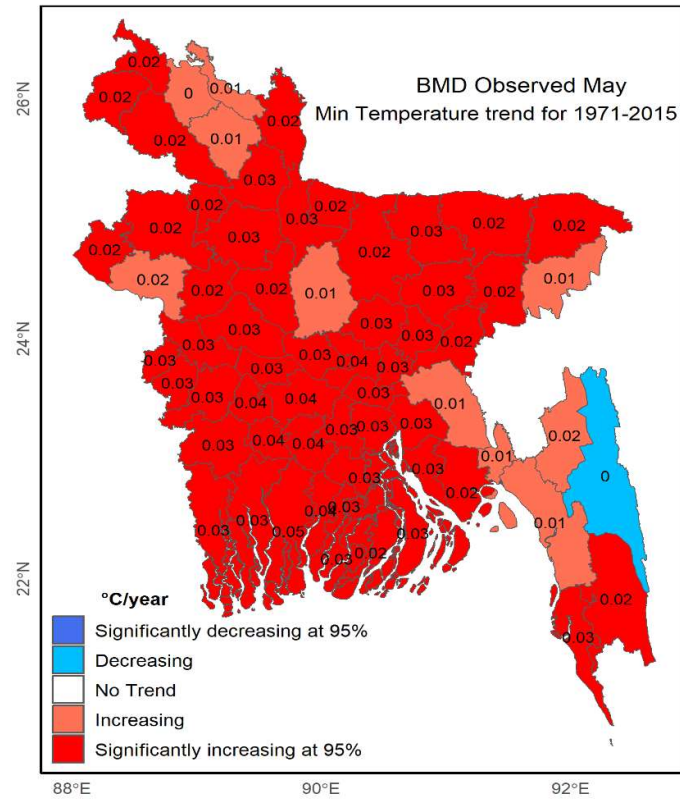


Fig. 3.48: Observed and gridded minimum temperature tend analysis for the month of May in Bangladesh for 1971-2015.

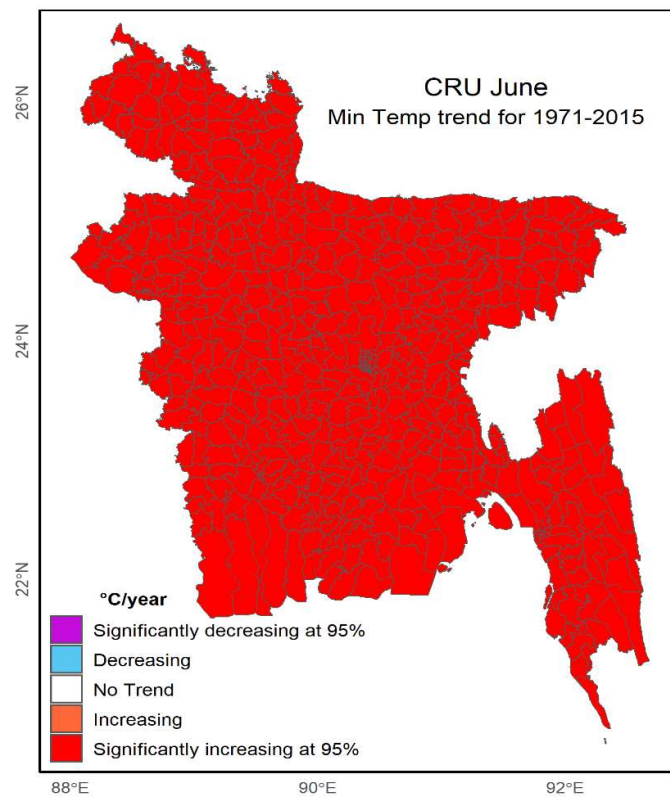
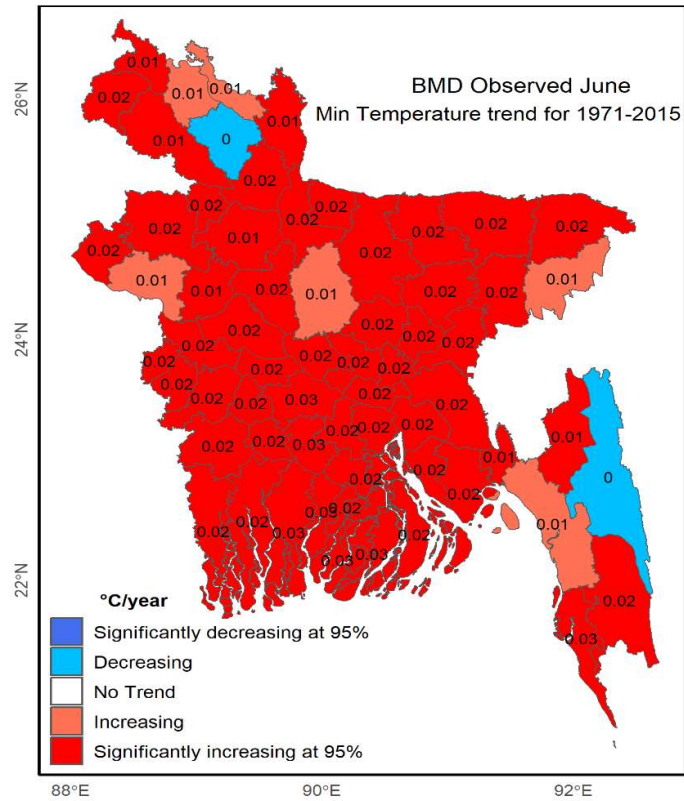


Fig. 3.49: Observed and gridded minimum temperature tend analysis for the month of June in Bangladesh for 1971-2015.

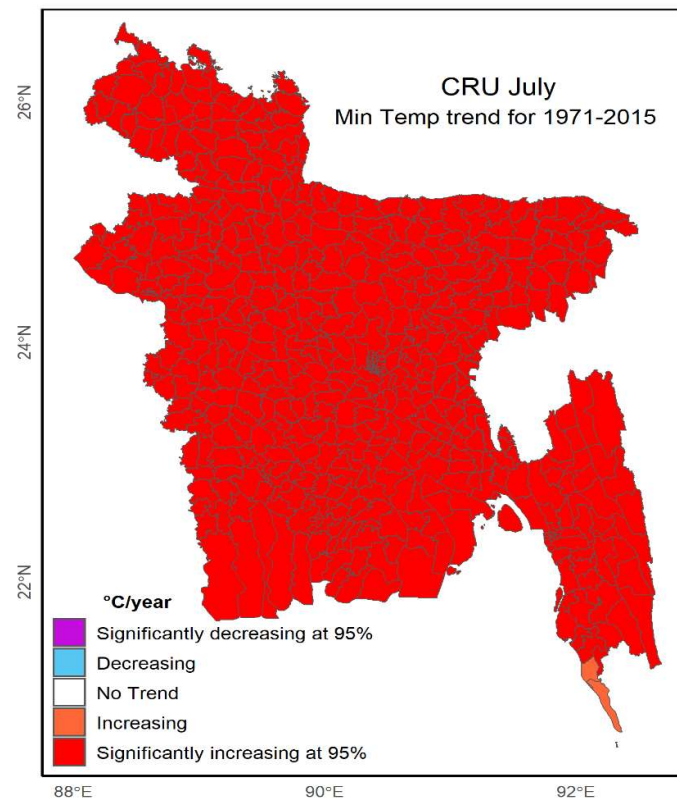
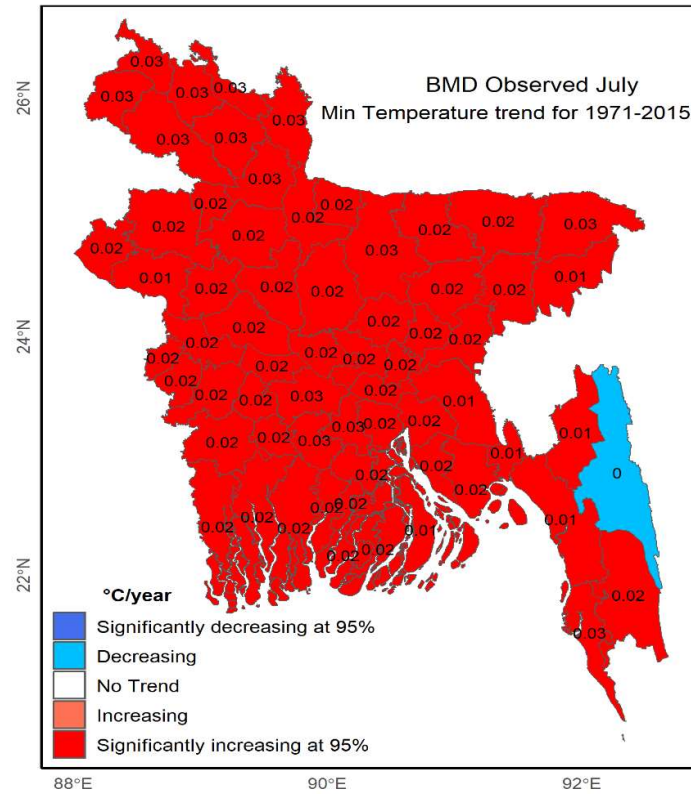


Fig. 3.50: Observed and gridded minimum temperature tend analysis for the month of July in Bangladesh for 1971-2015.

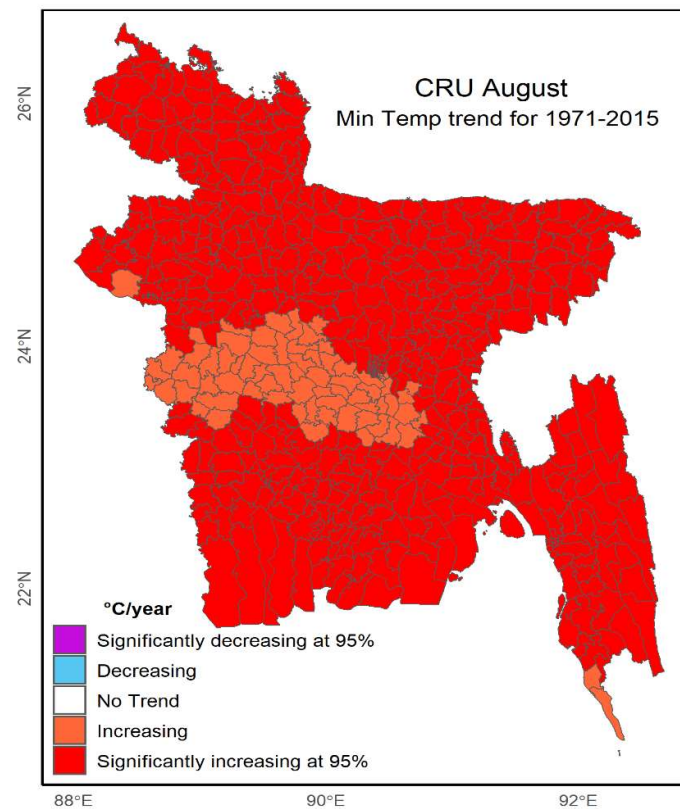
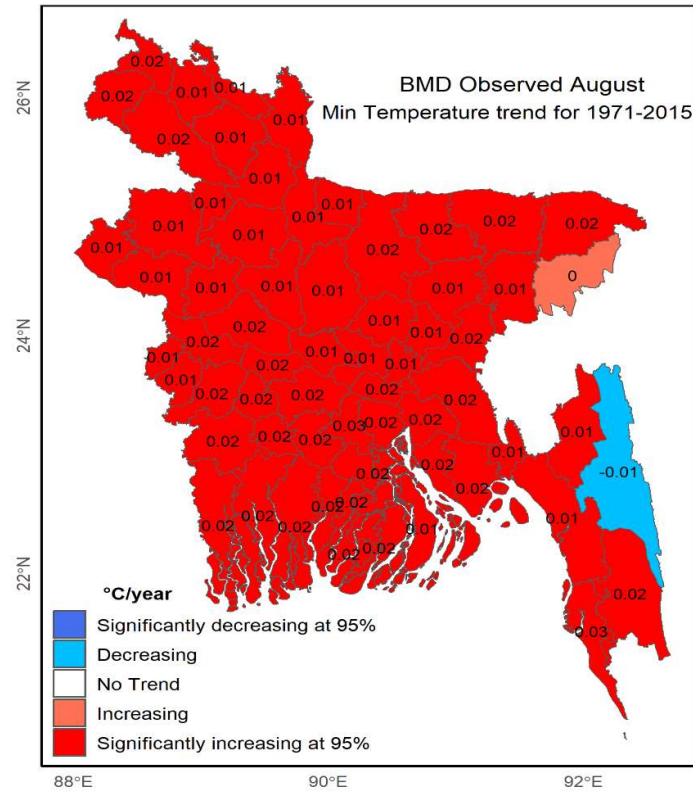


Fig. 3.51: Observed and gridded minimum temperature tend analysis for the month of August in Bangladesh for 1971-2015.

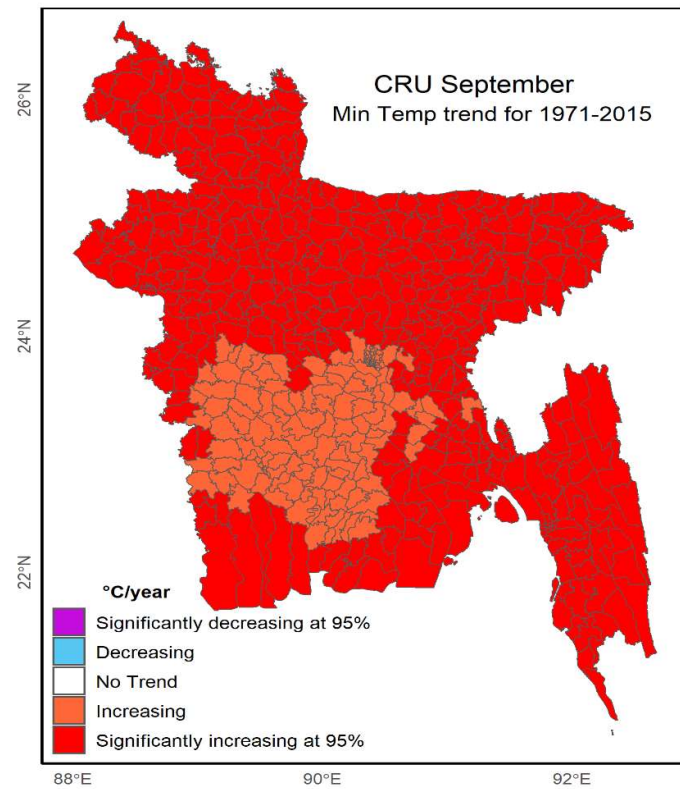
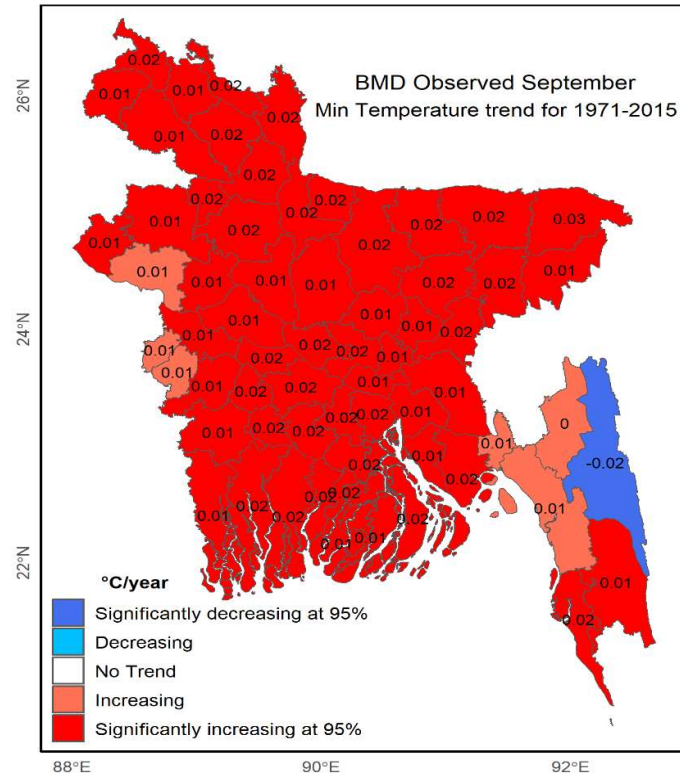


Fig. 3.52: Observed and gridded minimum temperature tend analysis for the month of September in Bangladesh for 1971-2015.

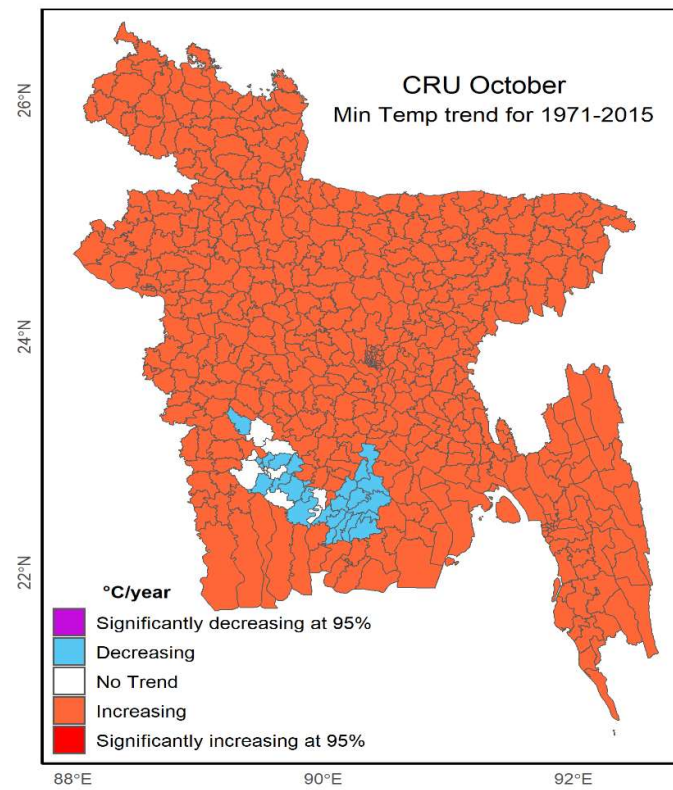
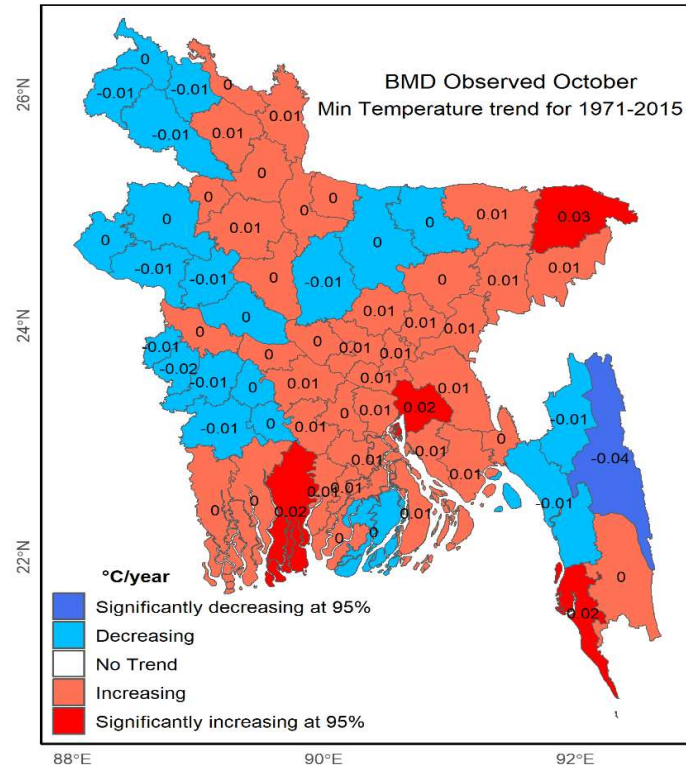


Fig. 3.53: Observed and gridded minimum temperature tend analysis for the month of October in Bangladesh for 1971-2015.

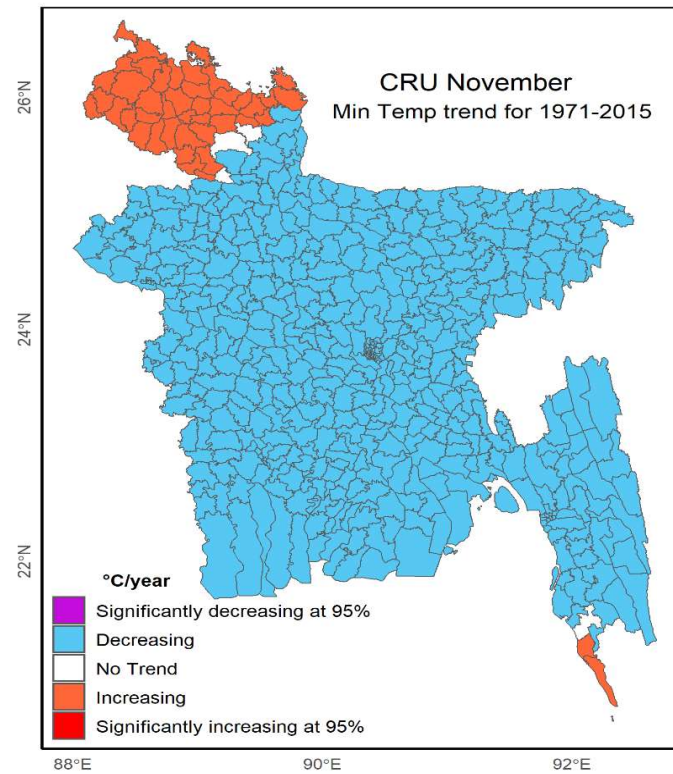
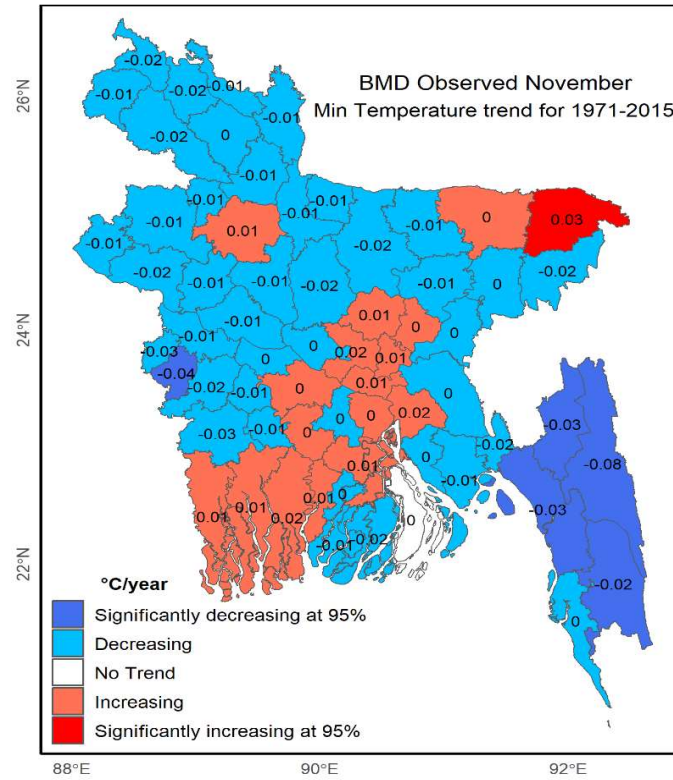


Fig. 3.54: Observed and gridded minimum temperature tend analysis for the month of November in Bangladesh for 1971-2015.

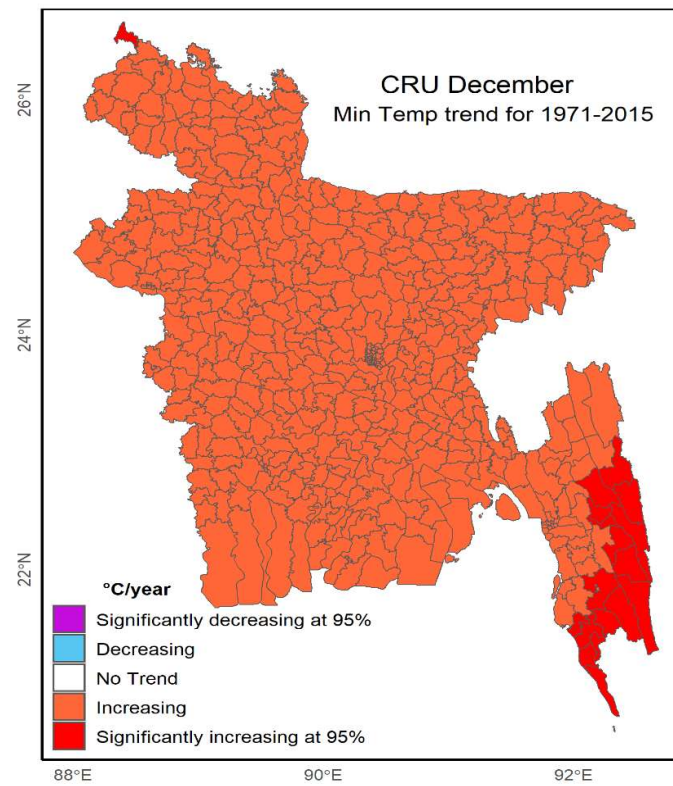
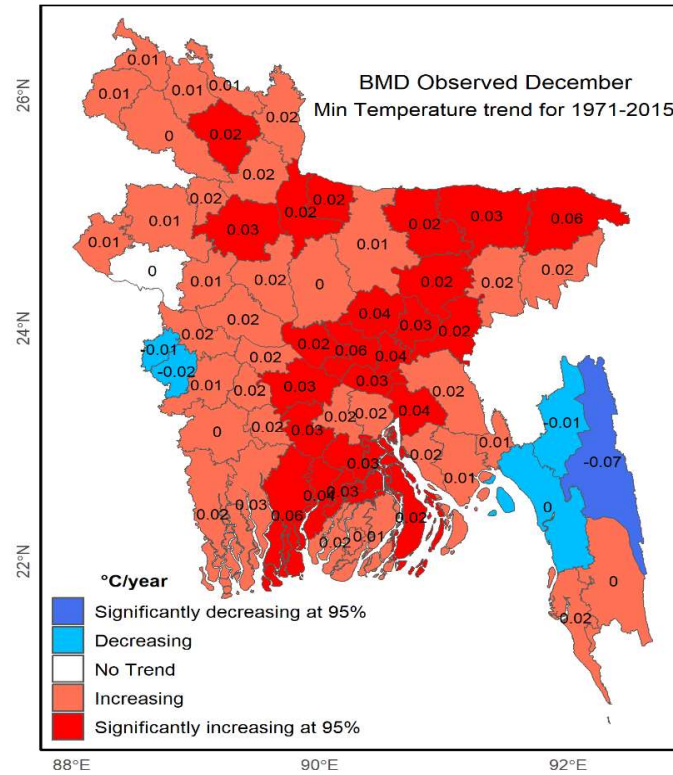


Fig. 3.55: Observed and gridded minimum temperature tend analysis for the month of December in Bangladesh for 1971-2015.

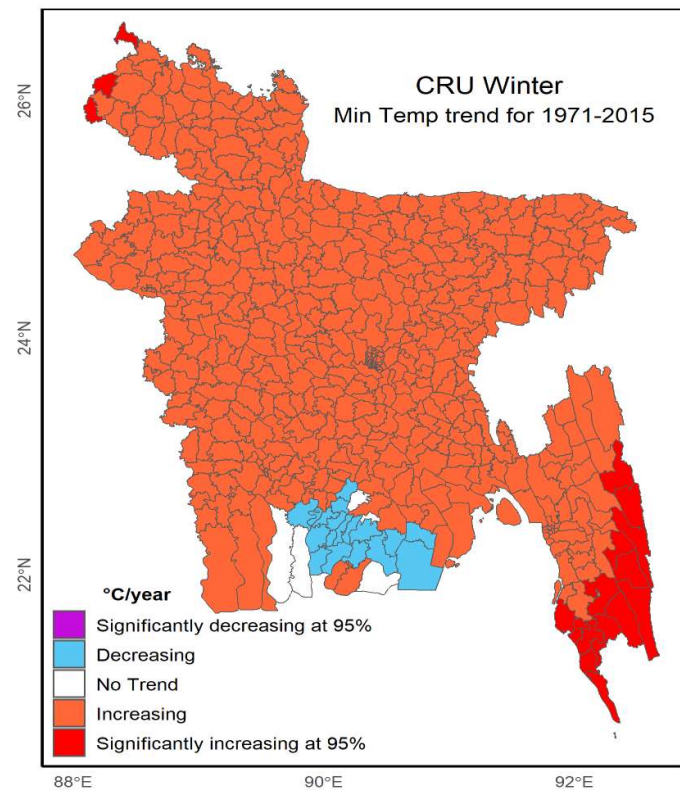
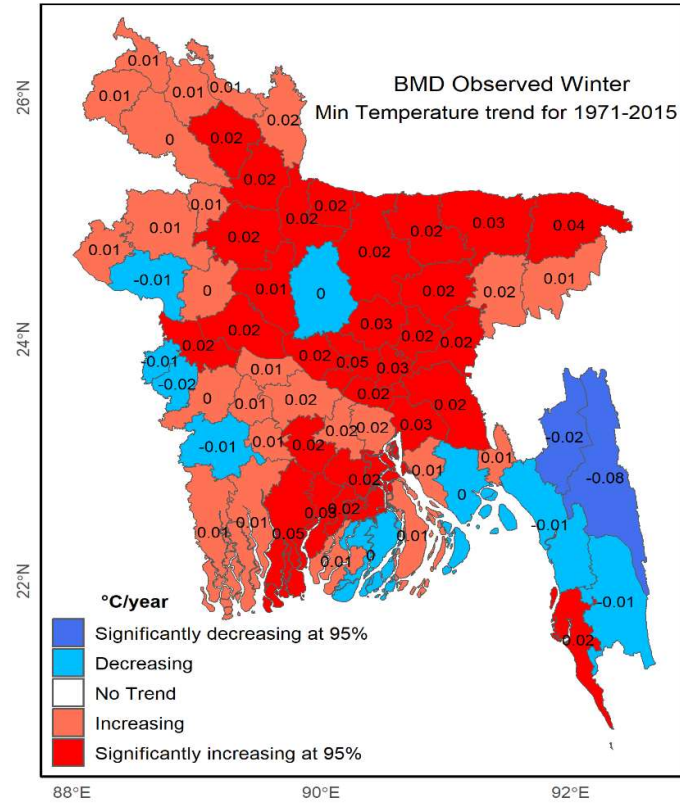


Fig. 3.56: Observed and gridded minimum temperature tend analysis for the Winter season in Bangladesh for 1971-2015.

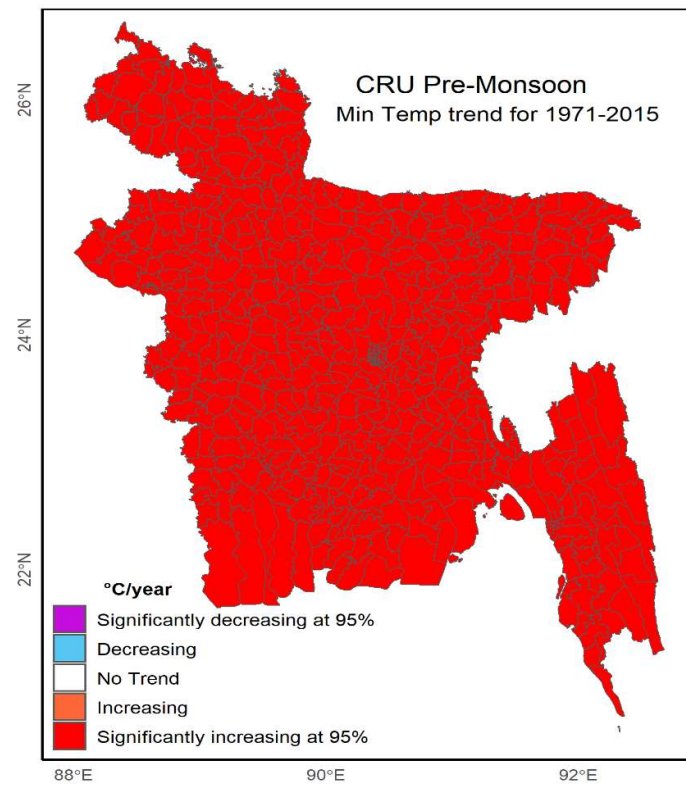
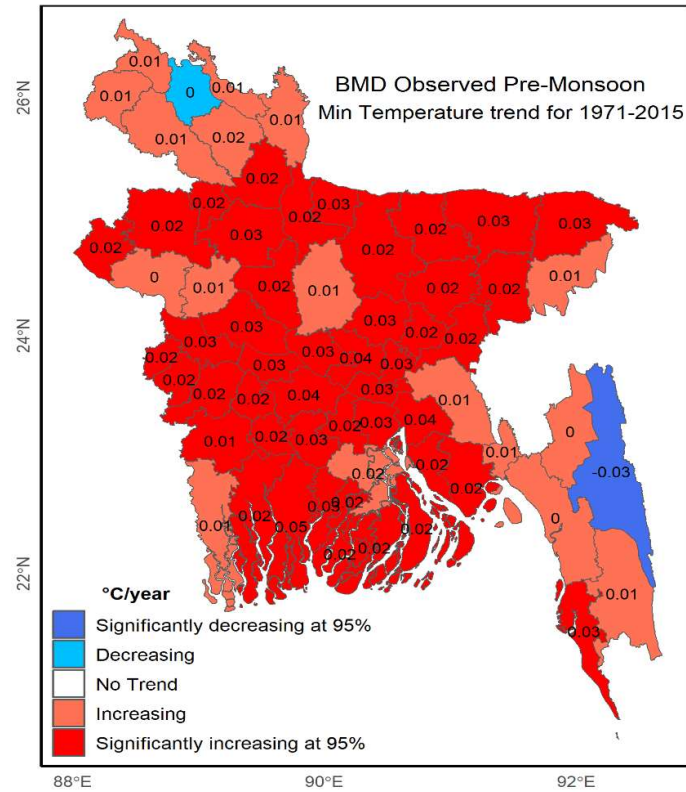


Fig. 3.57: Observed and gridded minimum temperature tend analysis for the Pre-monsoon season in Bangladesh for 1971-2015.

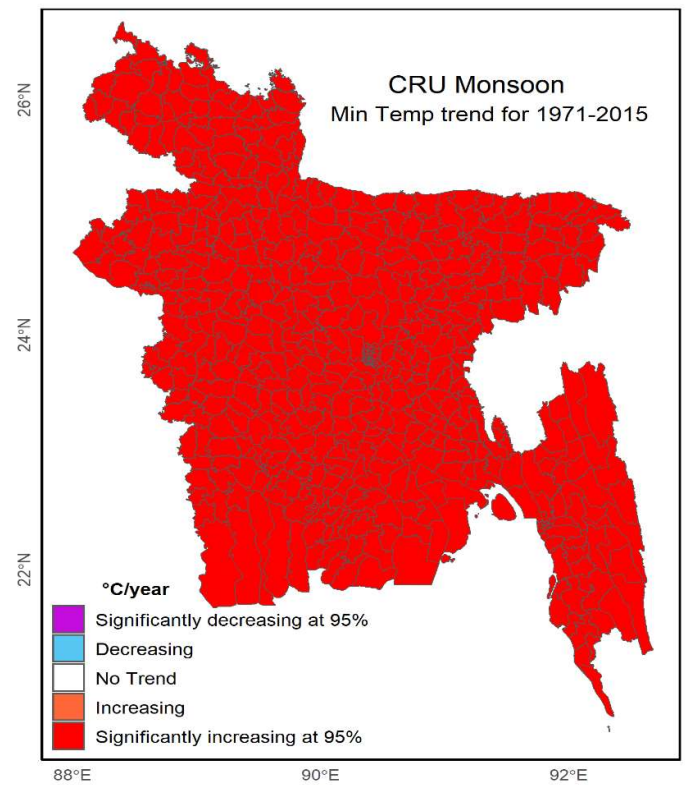
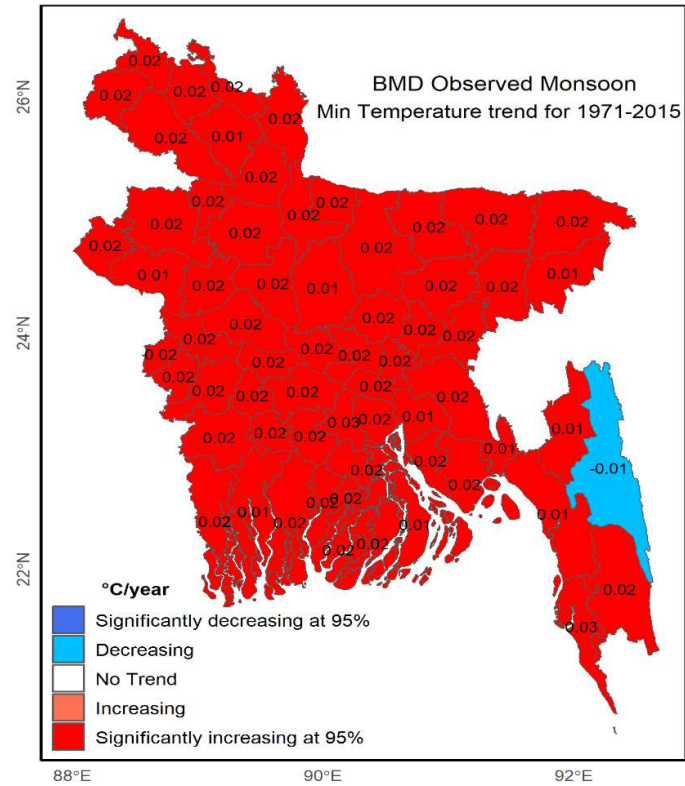


Fig. 3.58: Observed and gridded minimum temperature tend analysis for the Monsoon season in Bangladesh for 1971-2015.

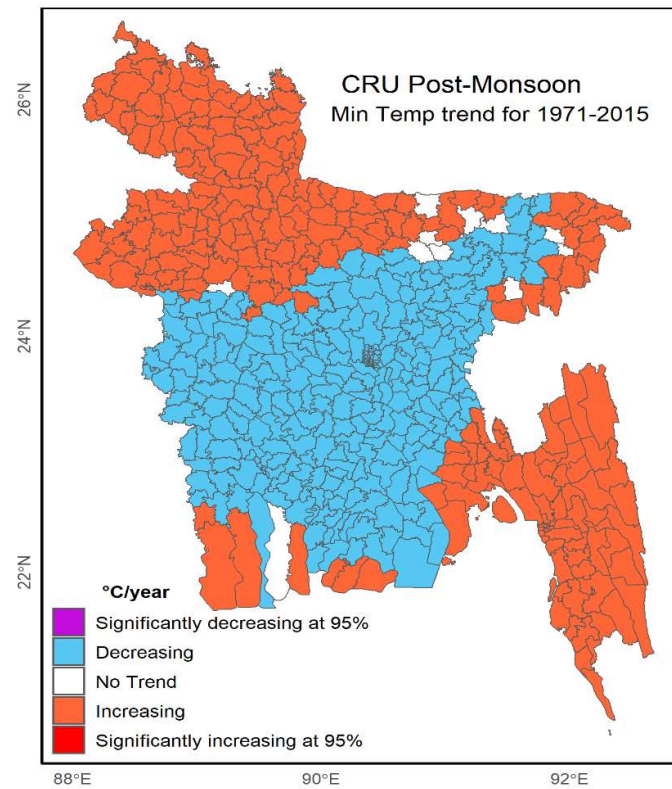
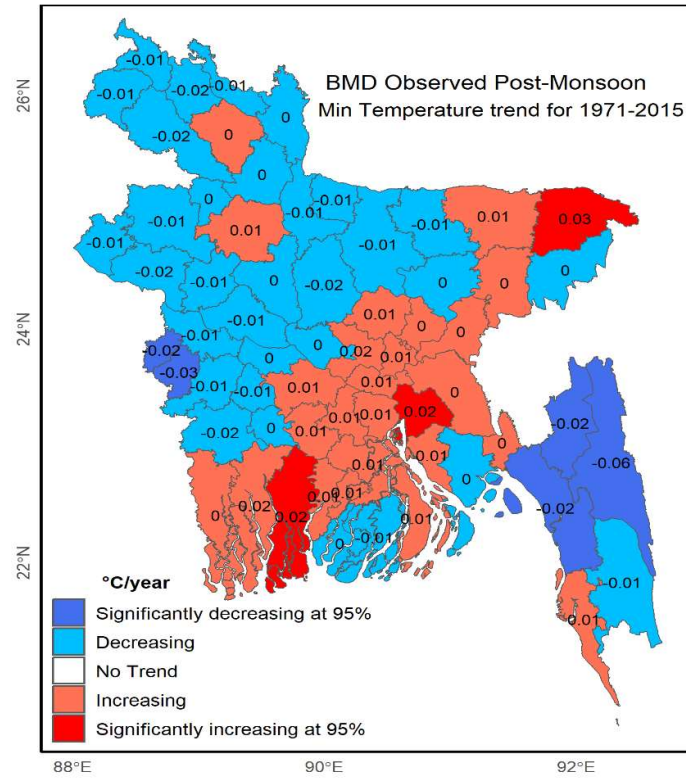


Fig. 3.59: Observed and gridded minimum temperature tend analysis for the Post-monsoon season in Bangladesh for 1971-2015.

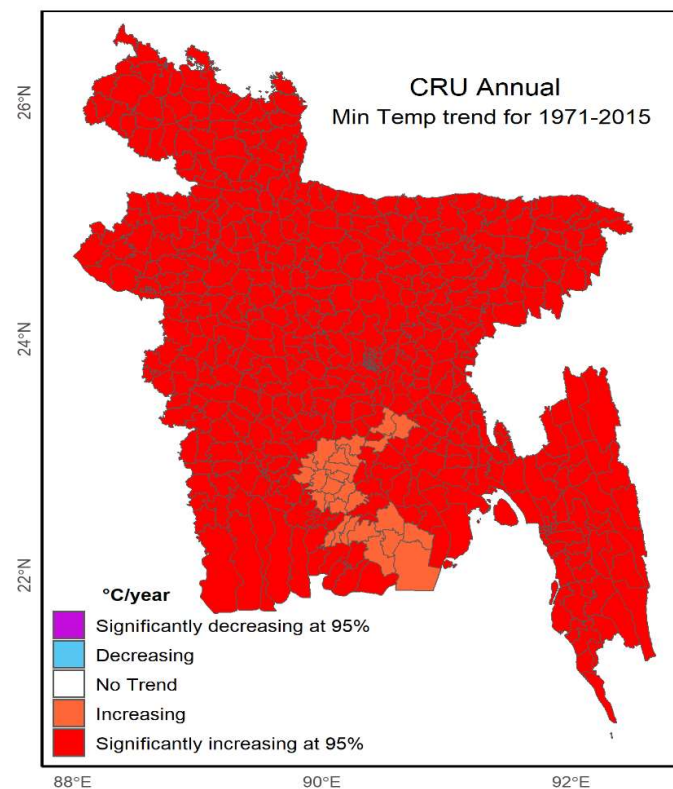
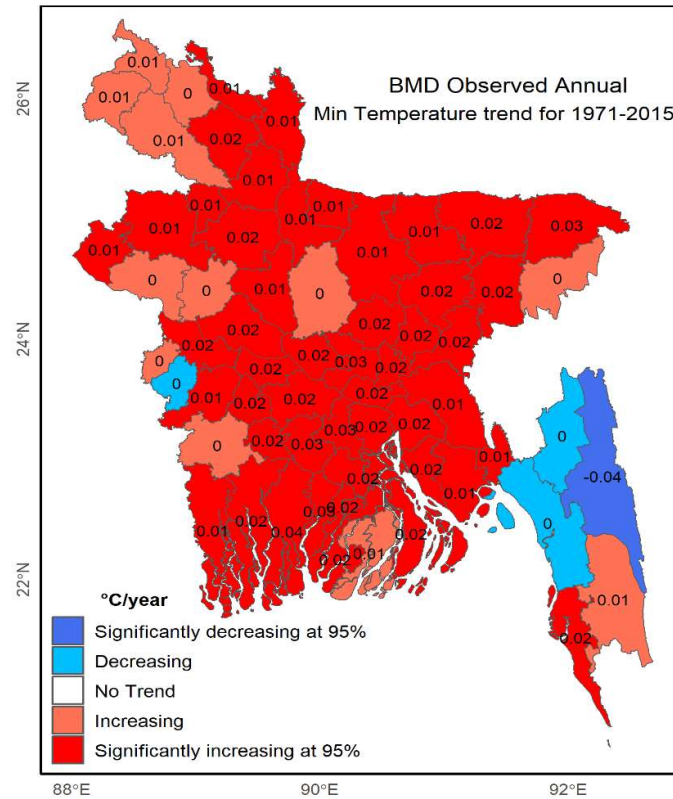


Fig. 3.60: Observed and gridded minimum temperature tend analysis for the Annual in Bangladesh for 1971-2015.

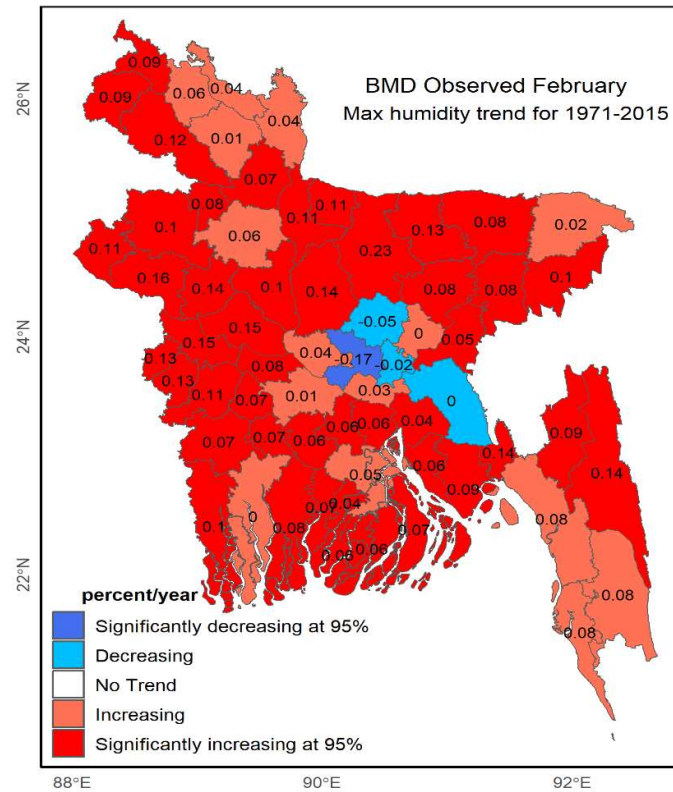
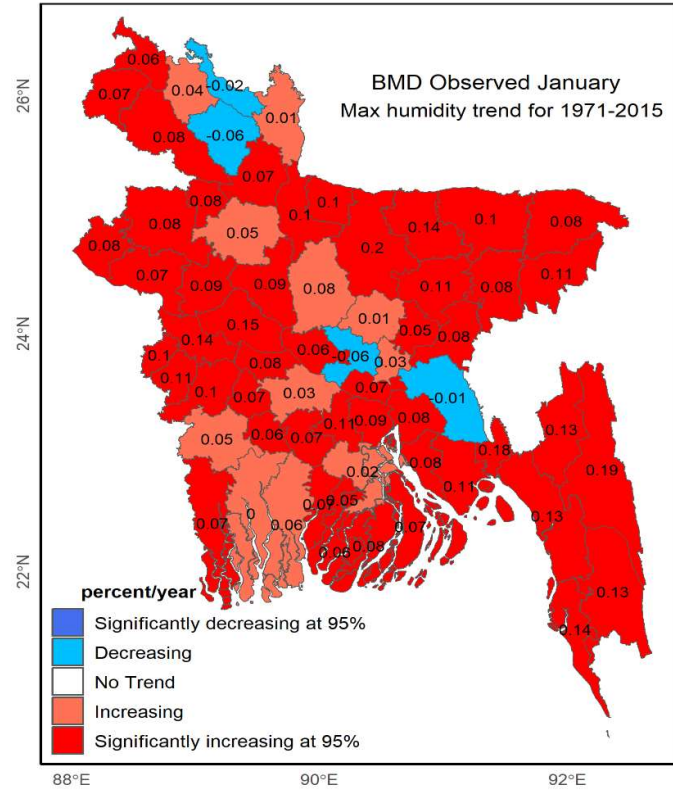
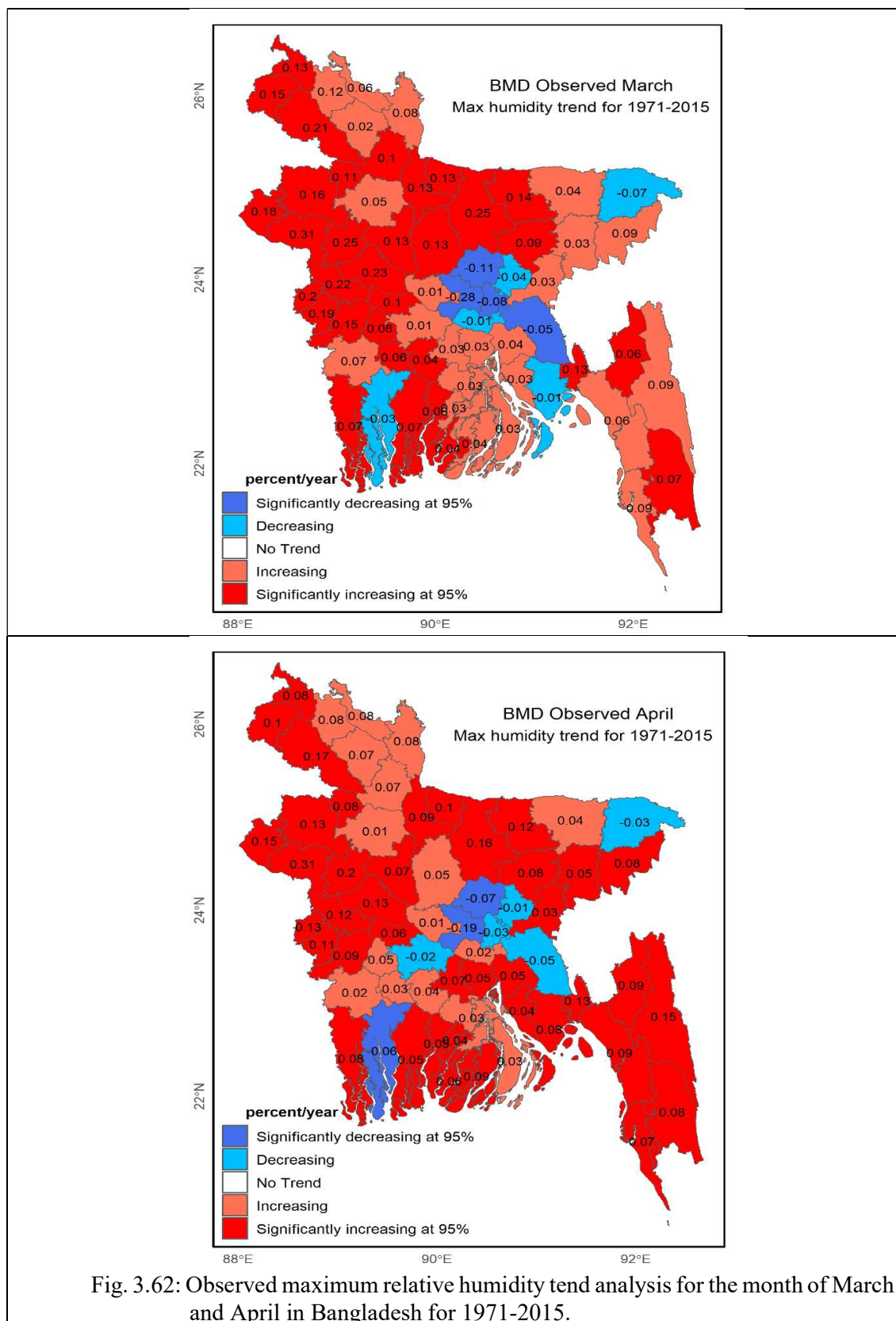


Fig. 3.61: Observed maximum relative humidity tend analysis for the month of January and February in Bangladesh for 1971-2015.



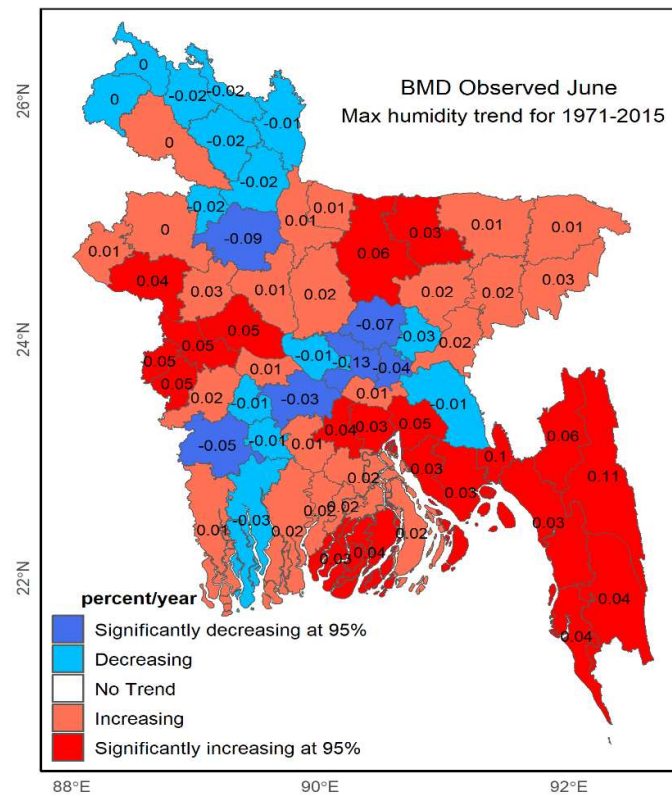
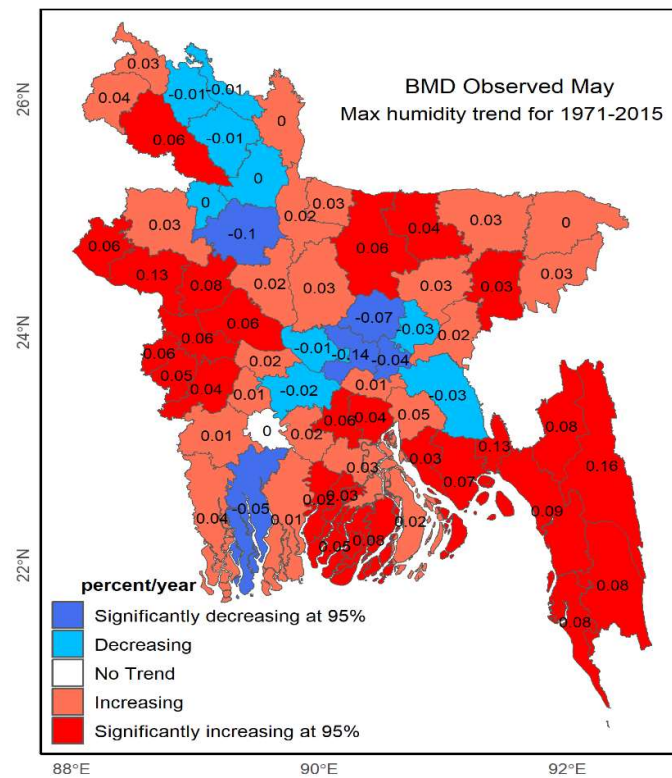


Fig. 3.63: Observed maximum relative humidity tend analysis for the month of May and June in Bangladesh for 1971-2015.

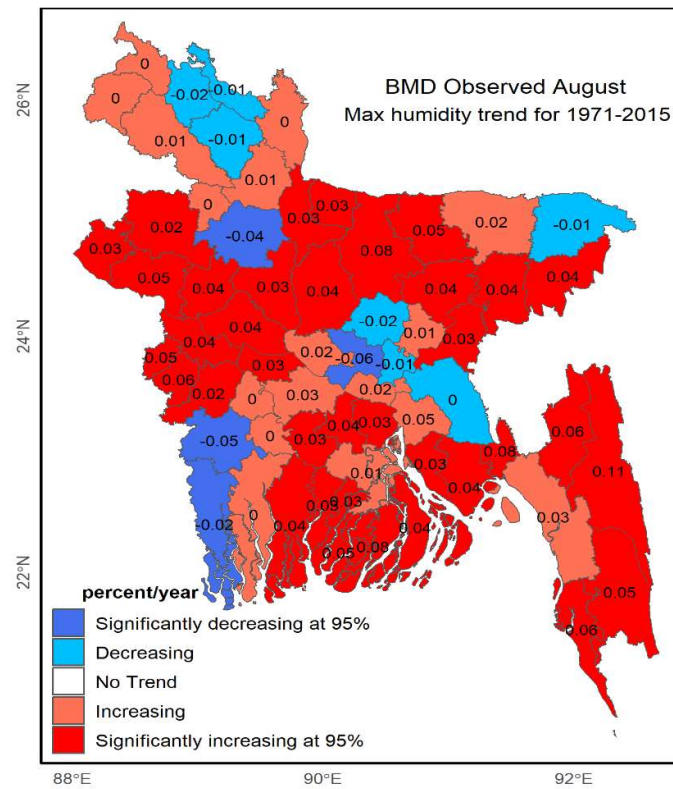
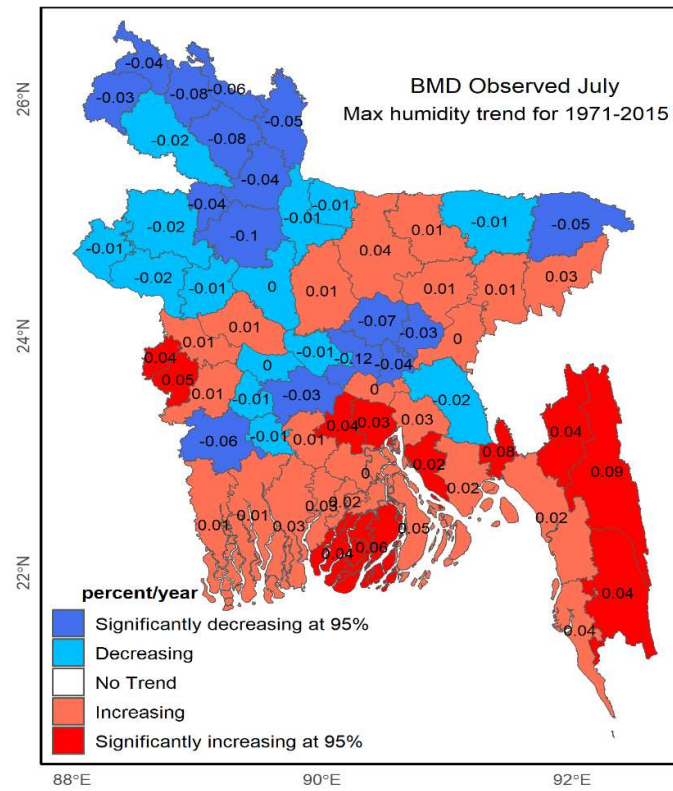


Fig. 3.64: Observed maximum relative humidity tend analysis for the month of July and August in Bangladesh for 1971-2015.

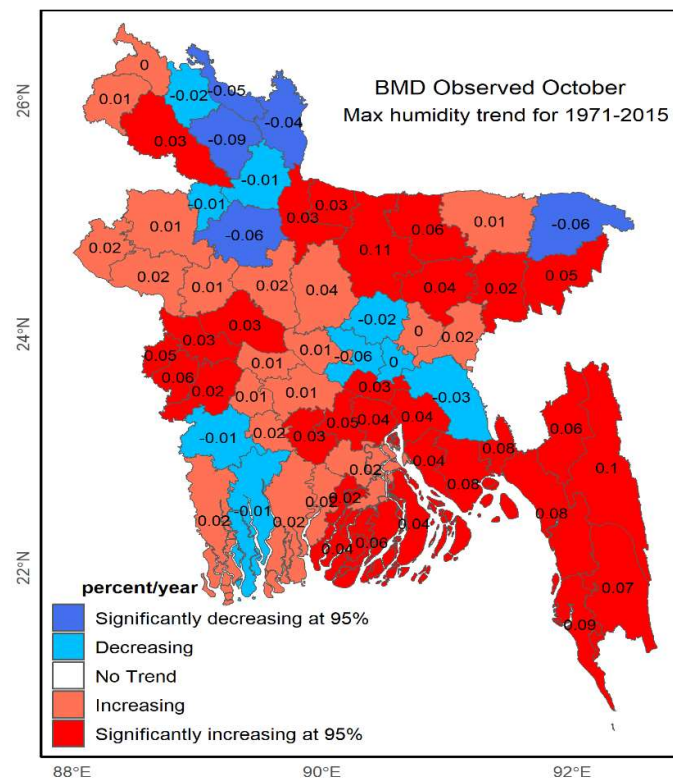
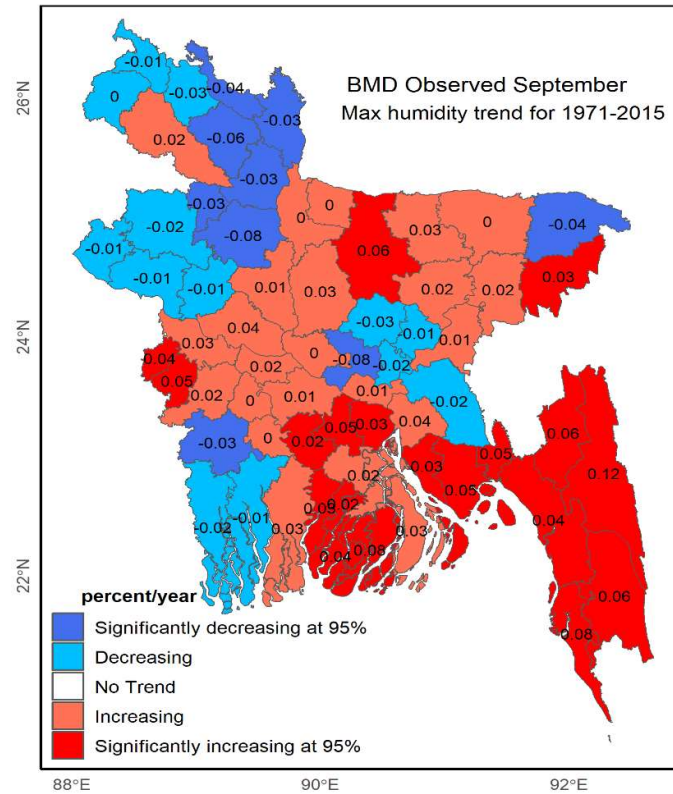


Fig. 3.65: Observed maximum relative humidity tend analysis for the month of September and October in Bangladesh for 1971-2015.

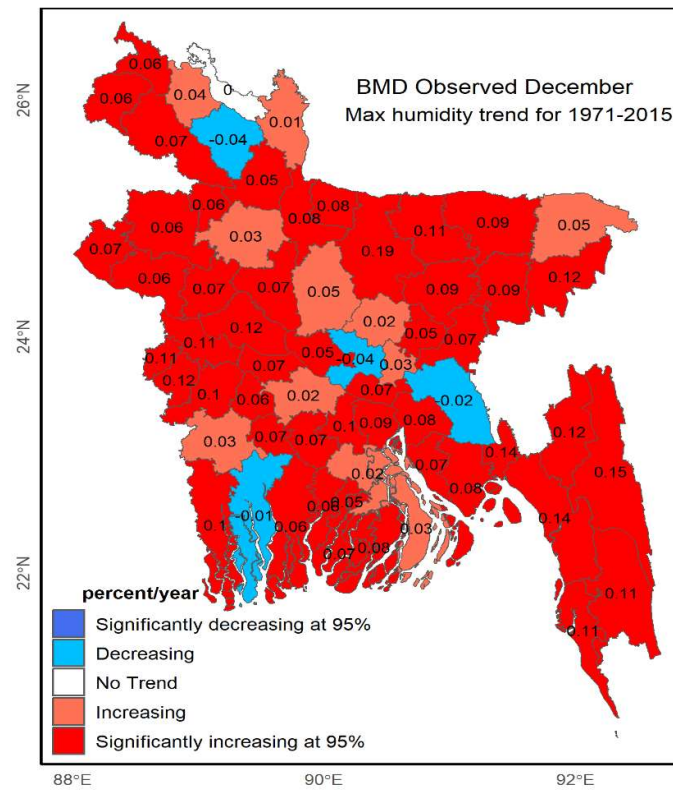
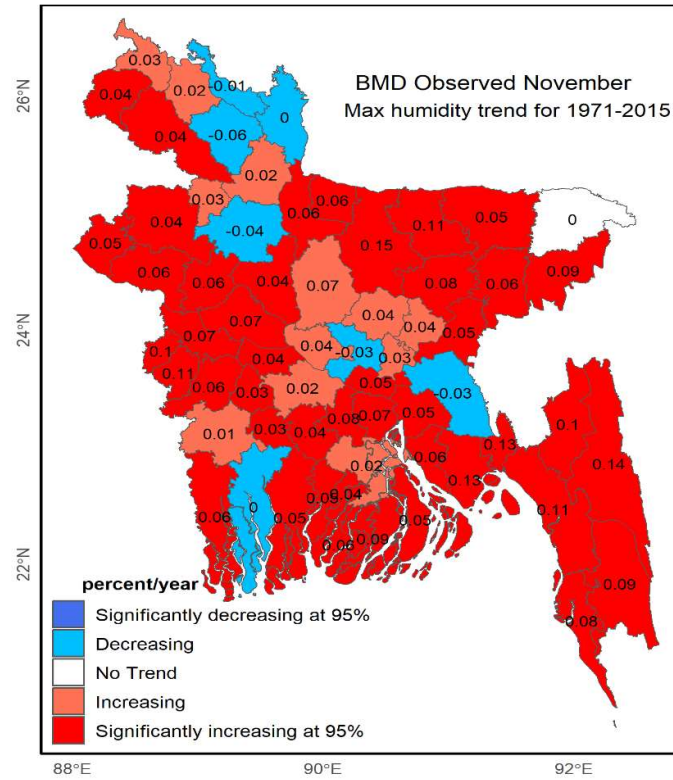


Fig. 3.66: Observed maximum relative humidity tend analysis for the month of November and December in Bangladesh for 1971-2015.

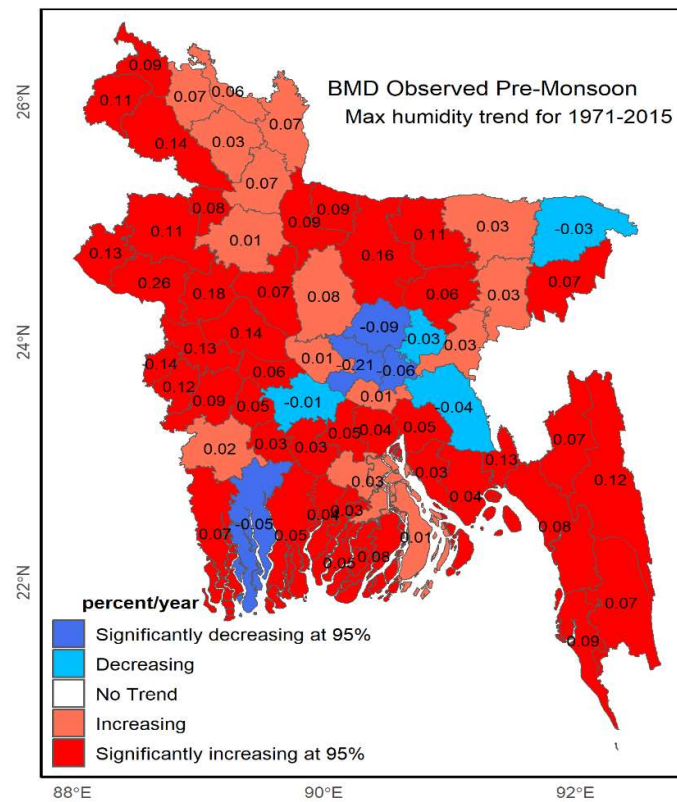
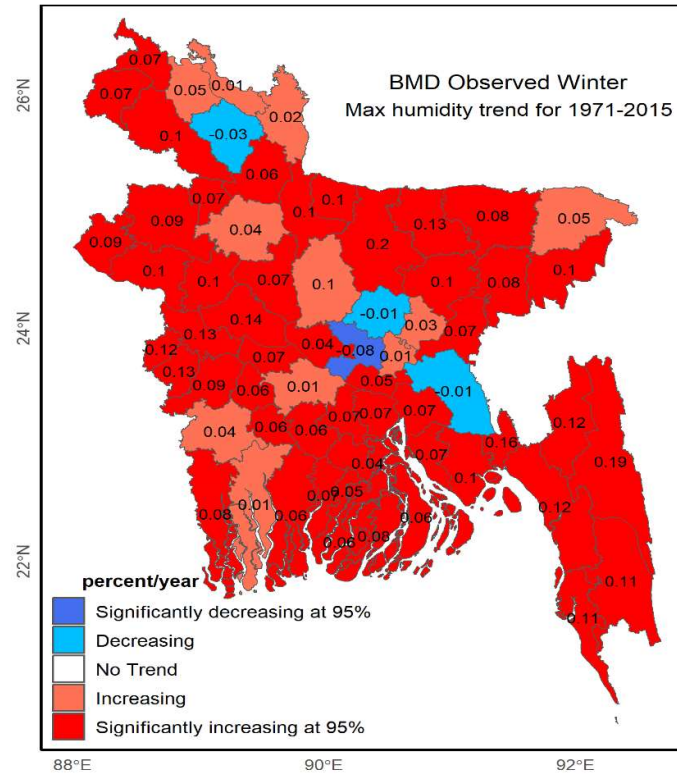


Fig. 3.67: Observed maximum relative humidity tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.

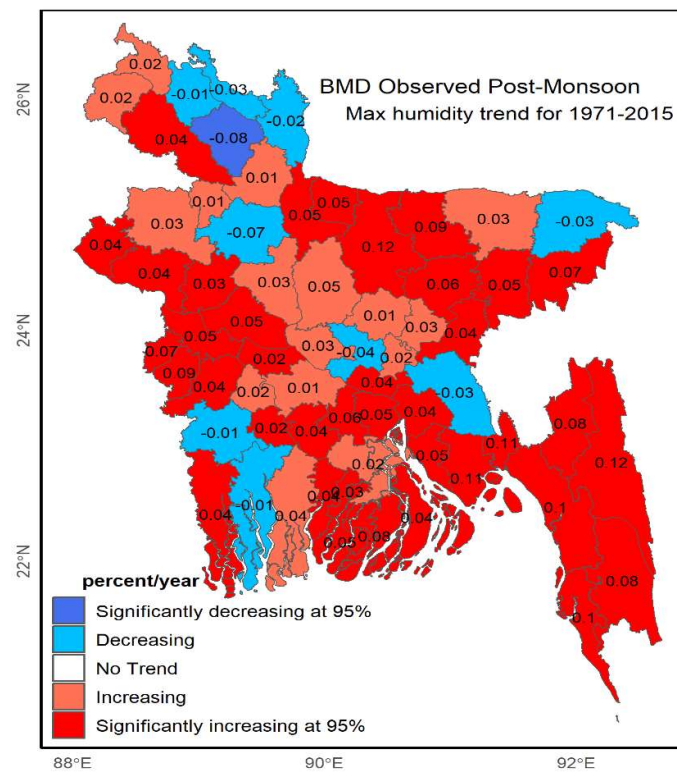
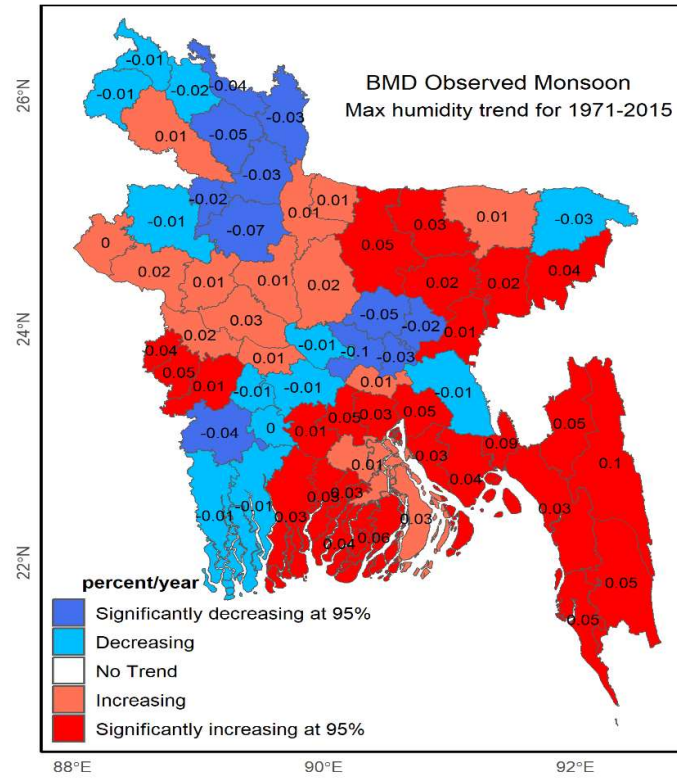


Fig. 3.68: Observed maximum relative humidity tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.

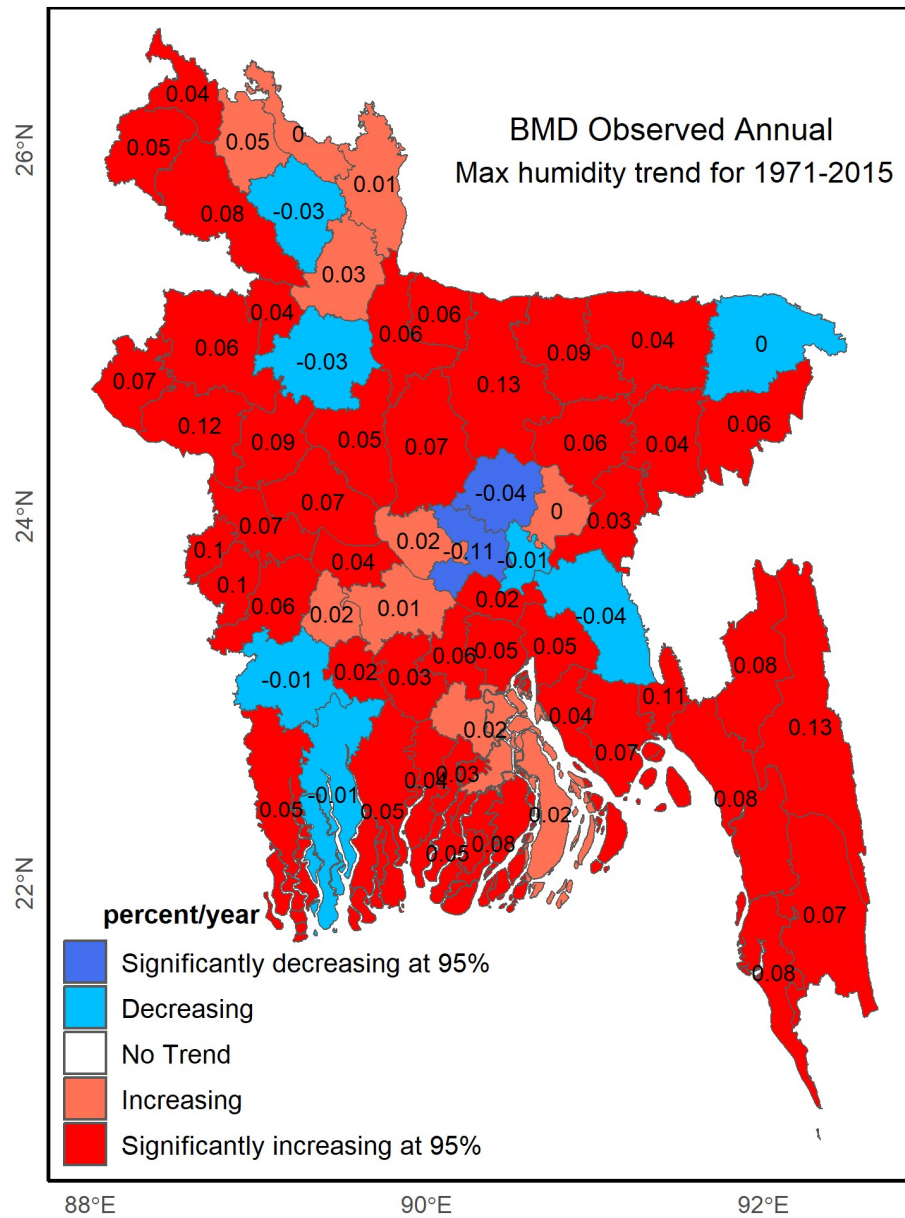


Fig. 3.69: Observed maximum relative humidity tend analysis for the Annual in Bangladesh for 1971-2015.

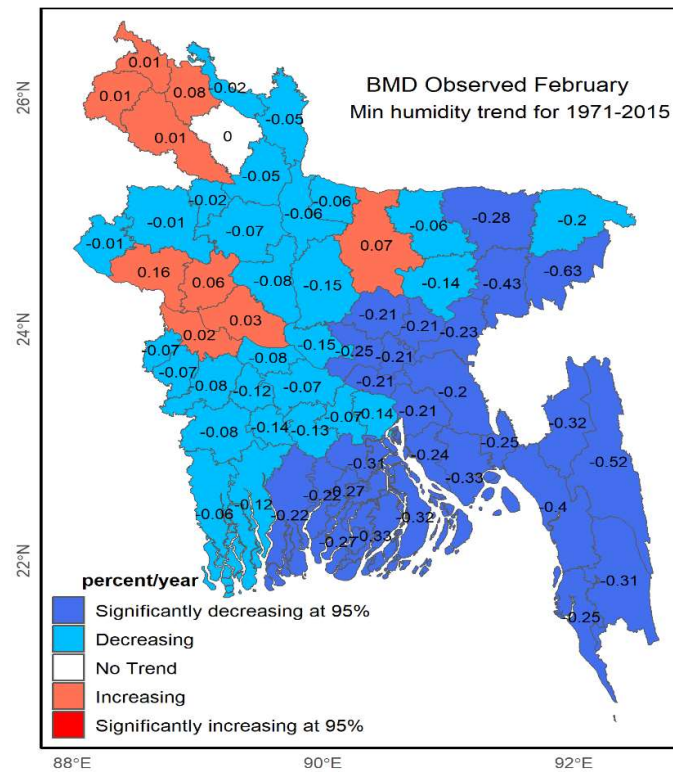
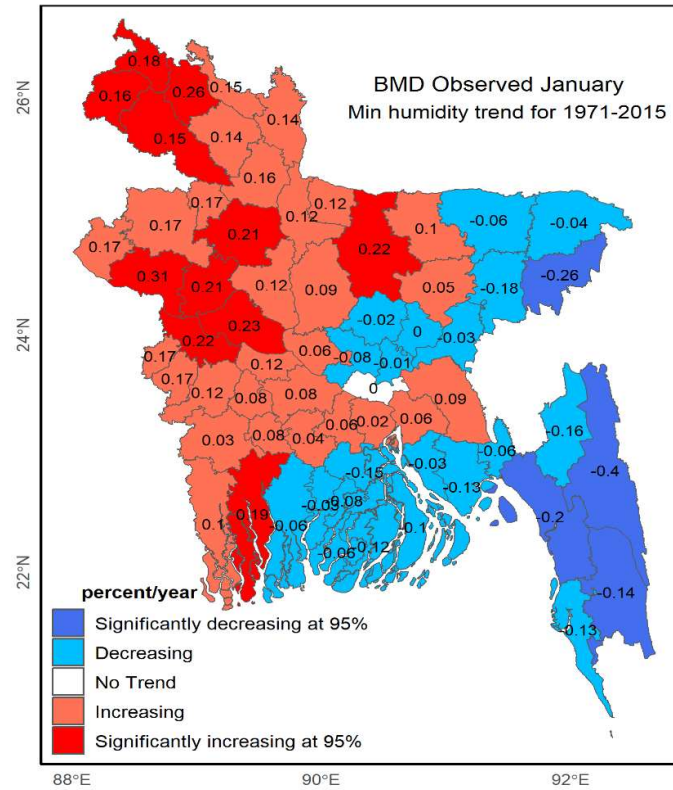


Fig. 3.70: Observed minimum relative humidity tend analysis for the month of January and February in Bangladesh for 1971-2015.

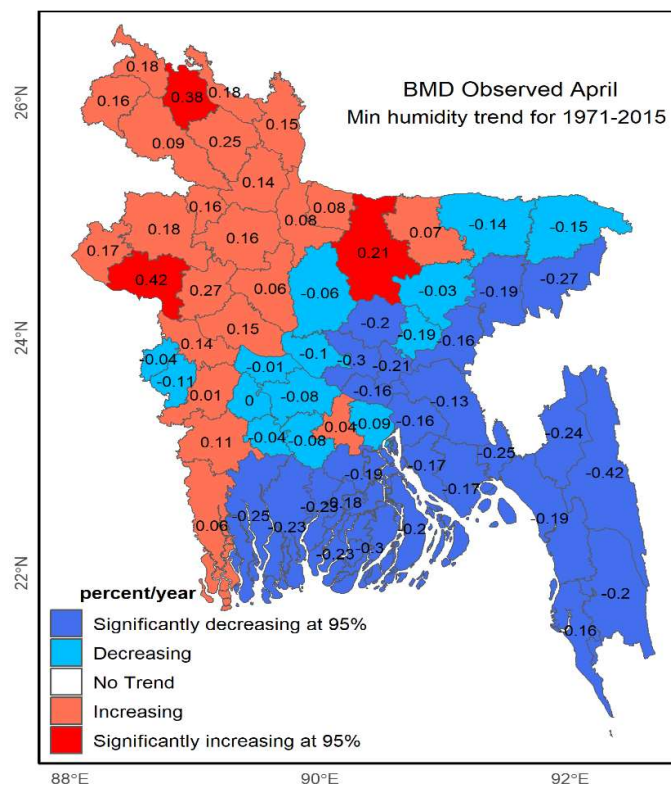
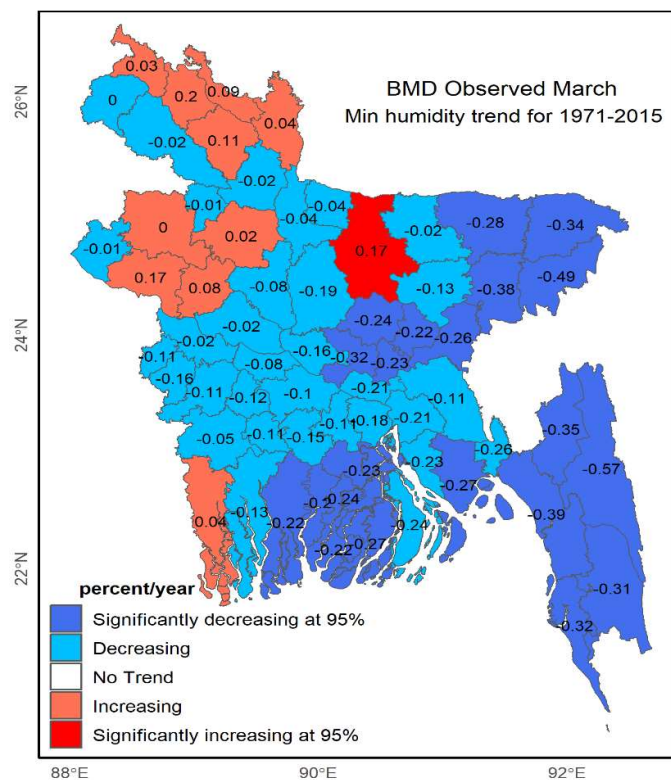
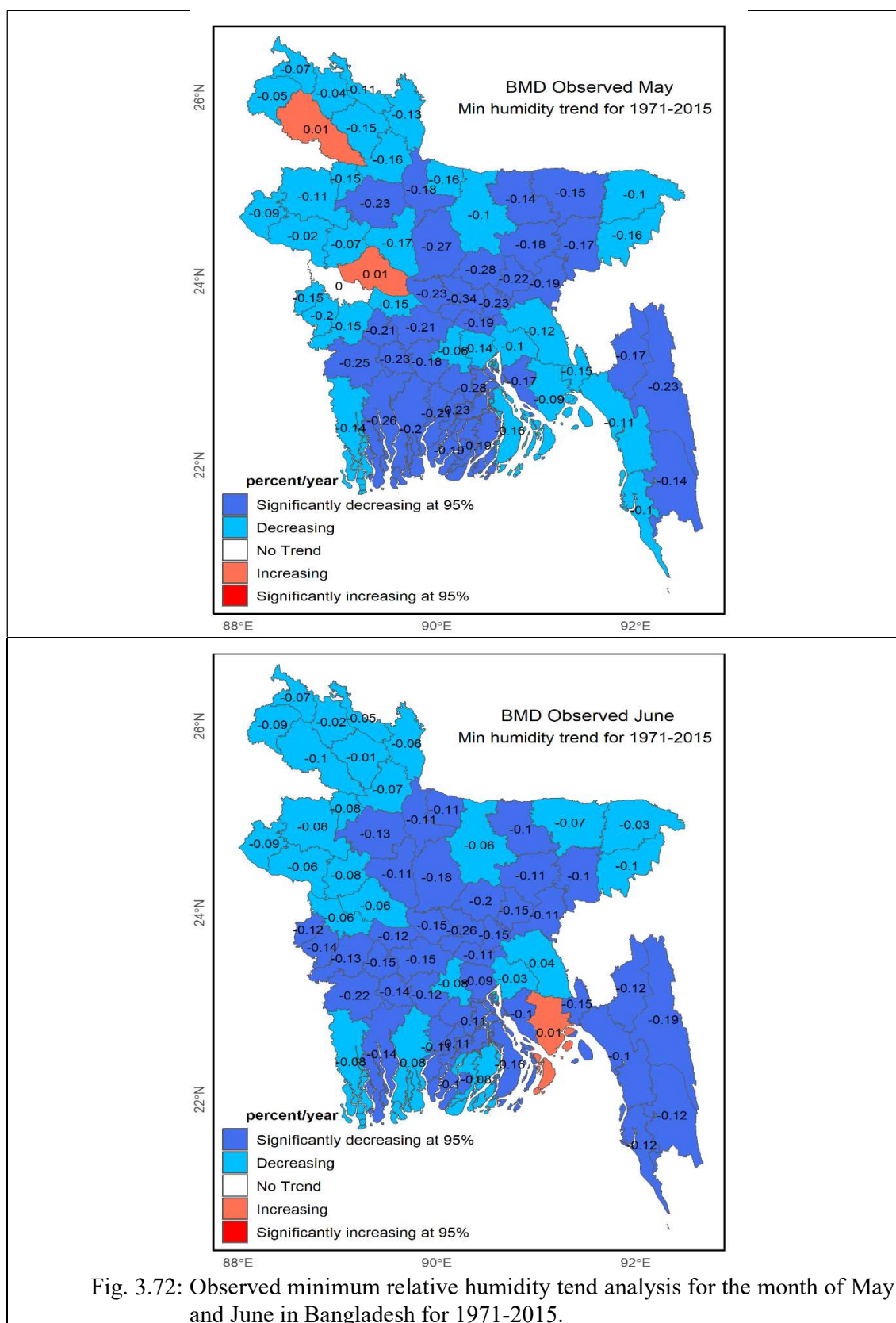


Fig. 3.71: Observed minimum relative humidity tend analysis for the month of March and April in Bangladesh for 1971-2015.



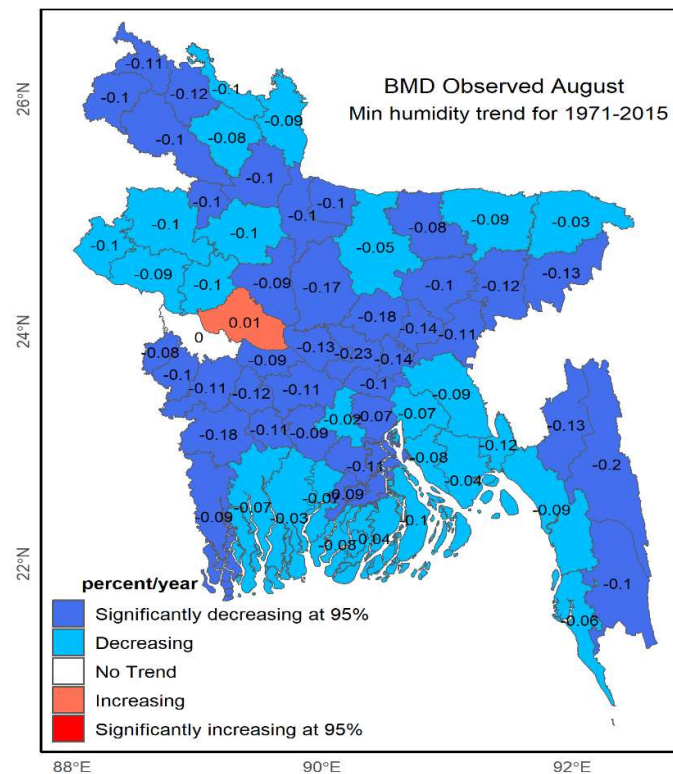
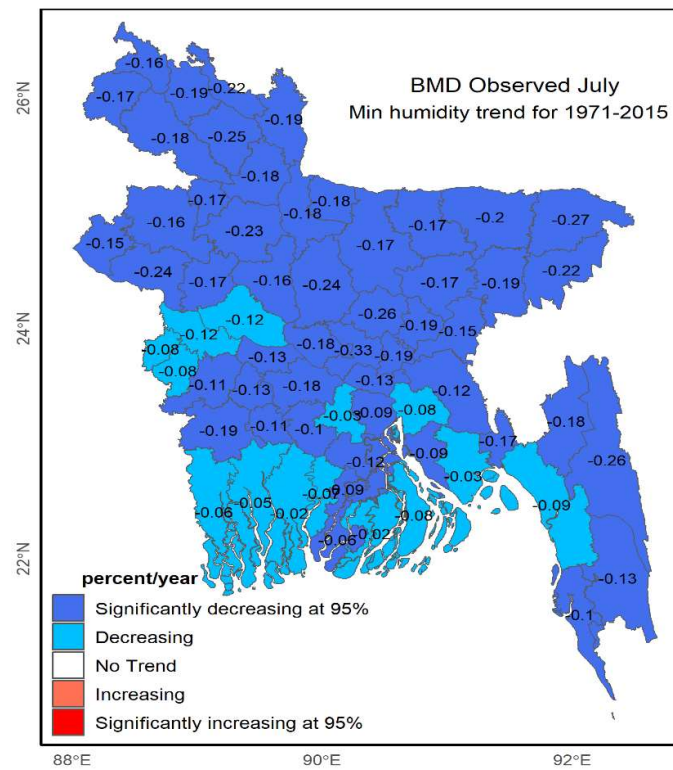


Fig. 3.73: Observed minimum relative humidity tend analysis for the month of July and August in Bangladesh for 1971-2015.

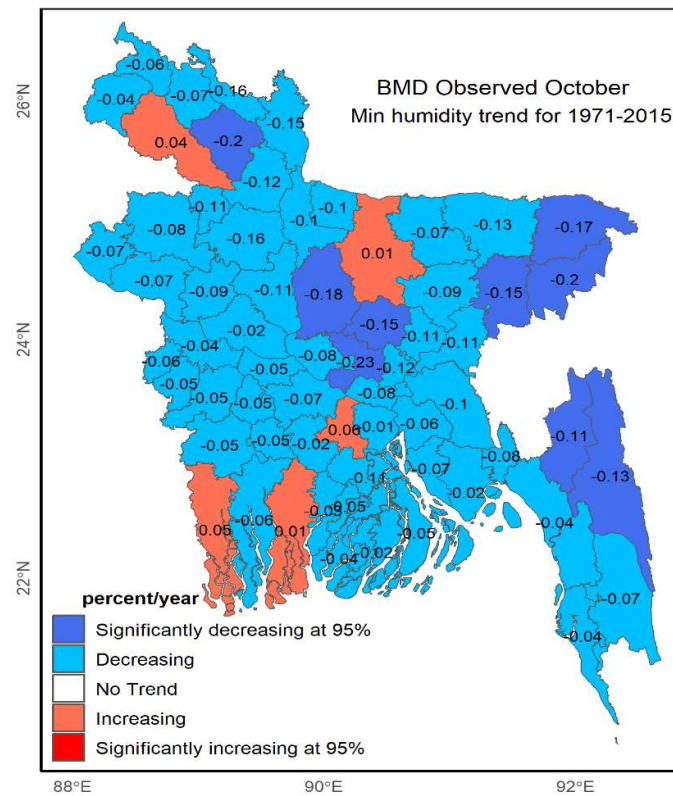
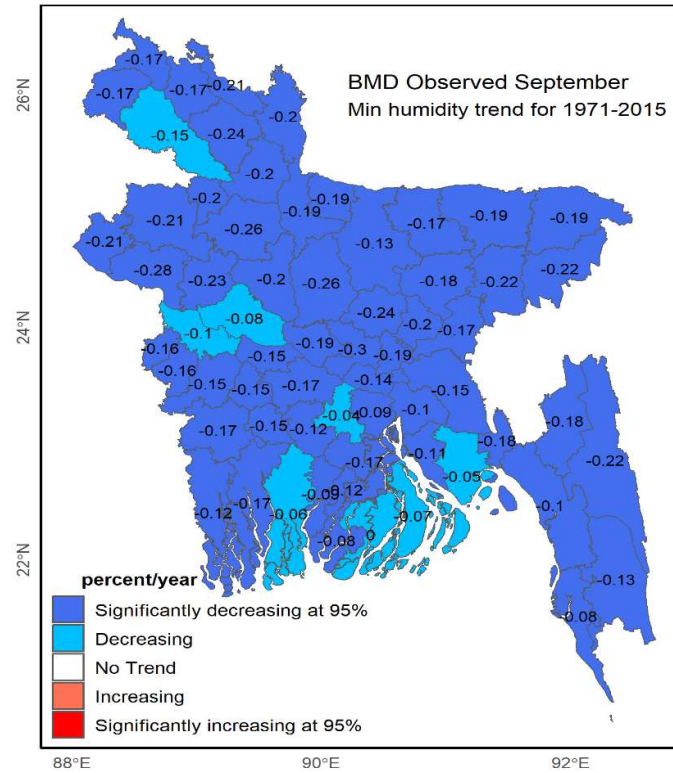


Fig. 3.74: Observed minimum relative humidity tend analysis for the month of September and October in Bangladesh for 1971-2015.

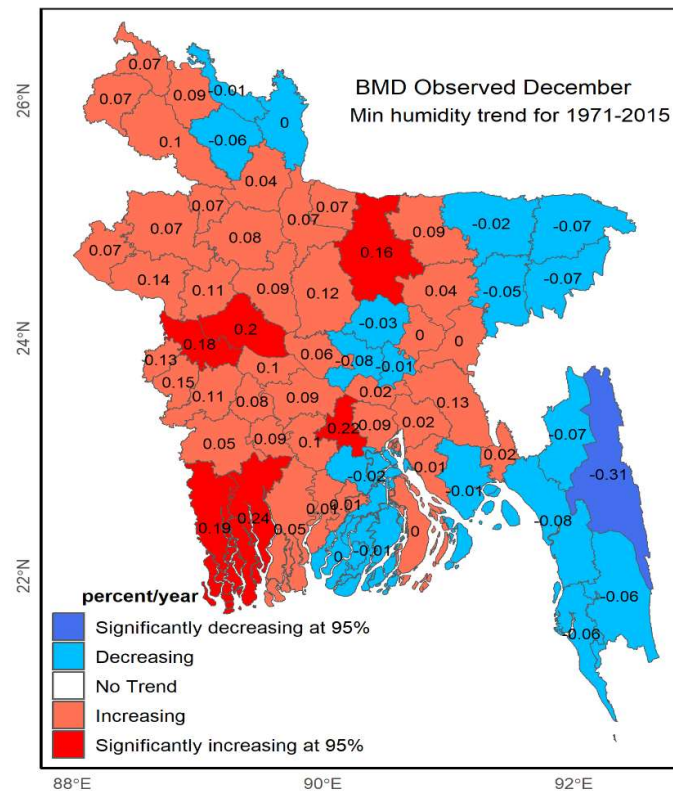
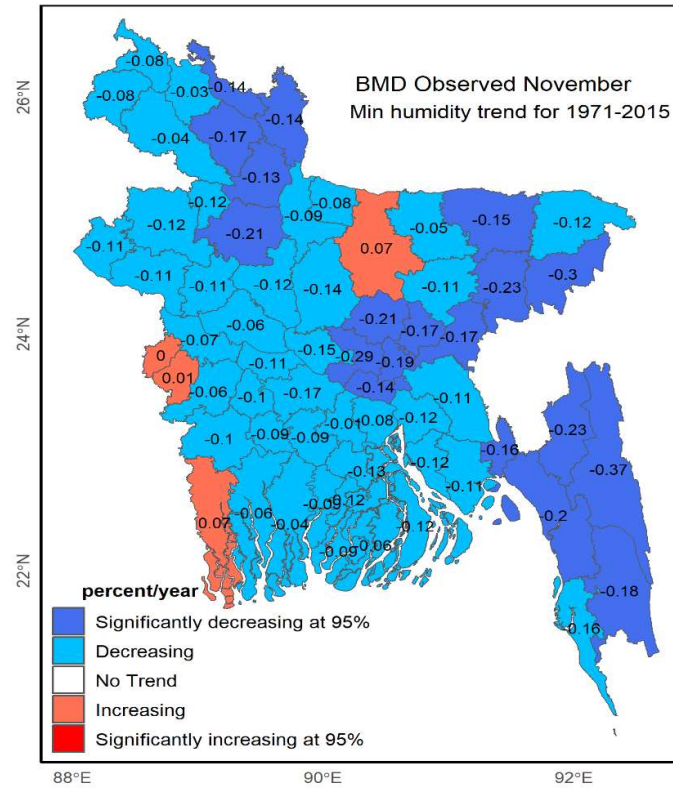


Fig. 3.75: Observed minimum relative humidity tend analysis for the month of November and December in Bangladesh for 1971-2015.

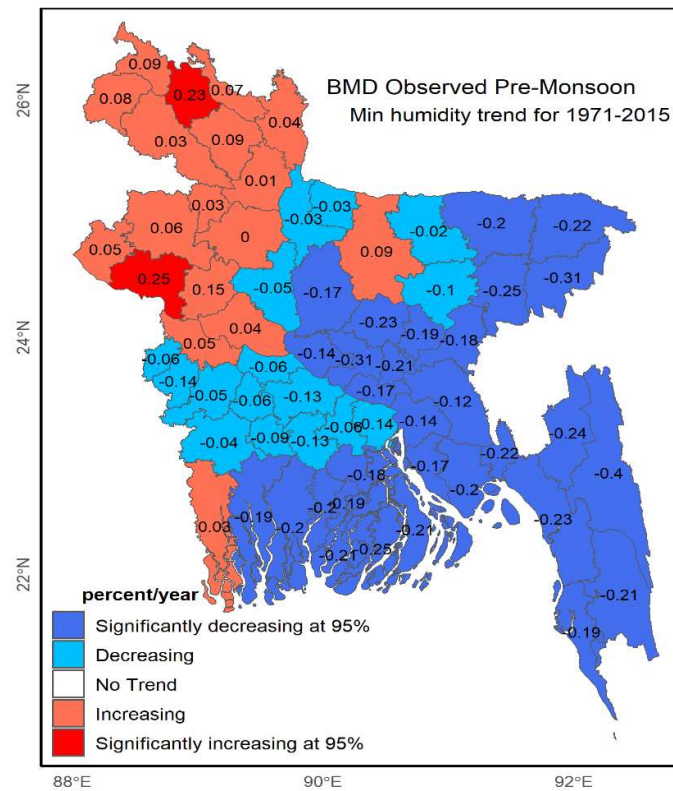
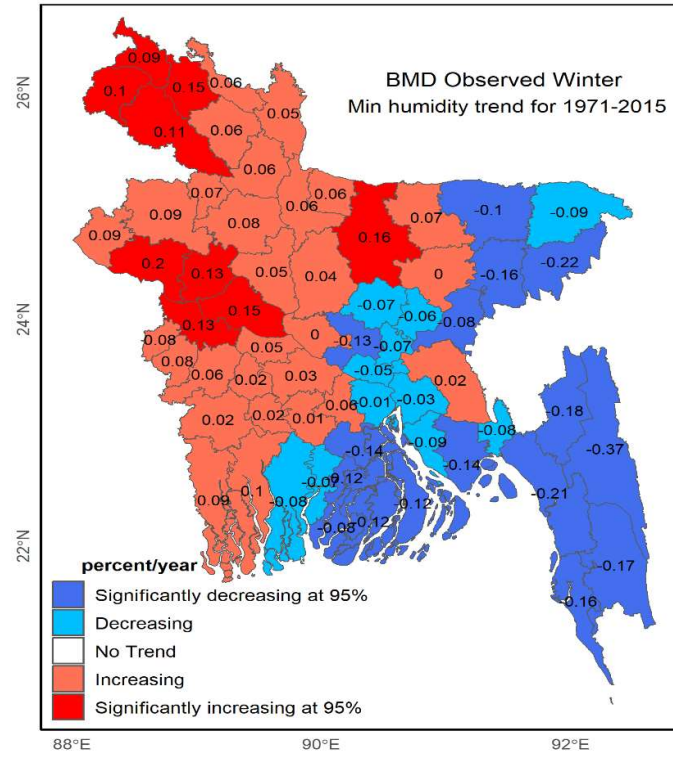


Fig. 3.76: Observed minimum relative humidity tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.

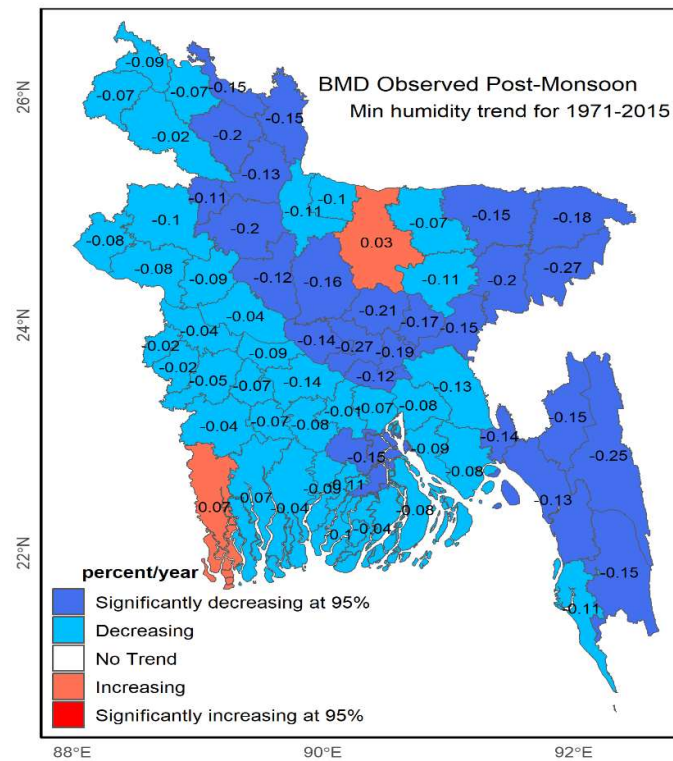
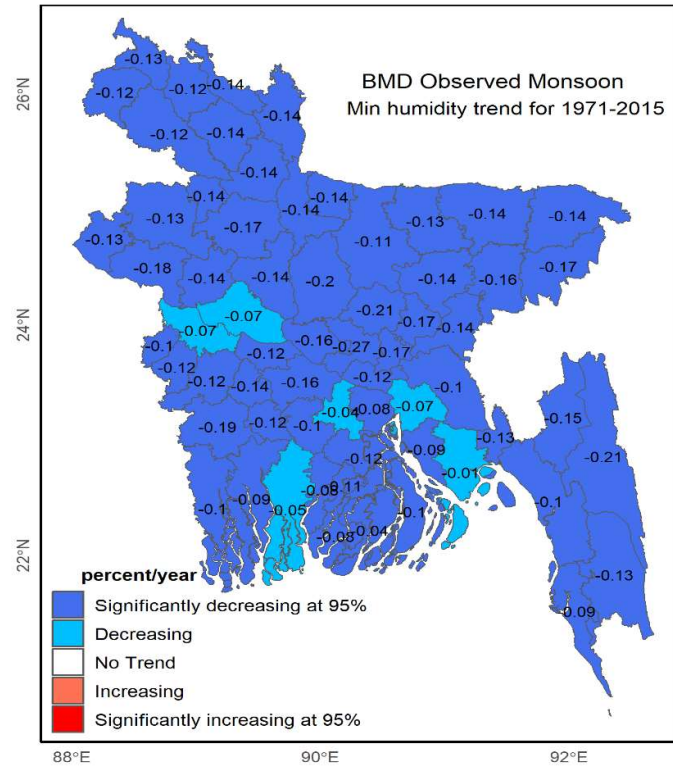
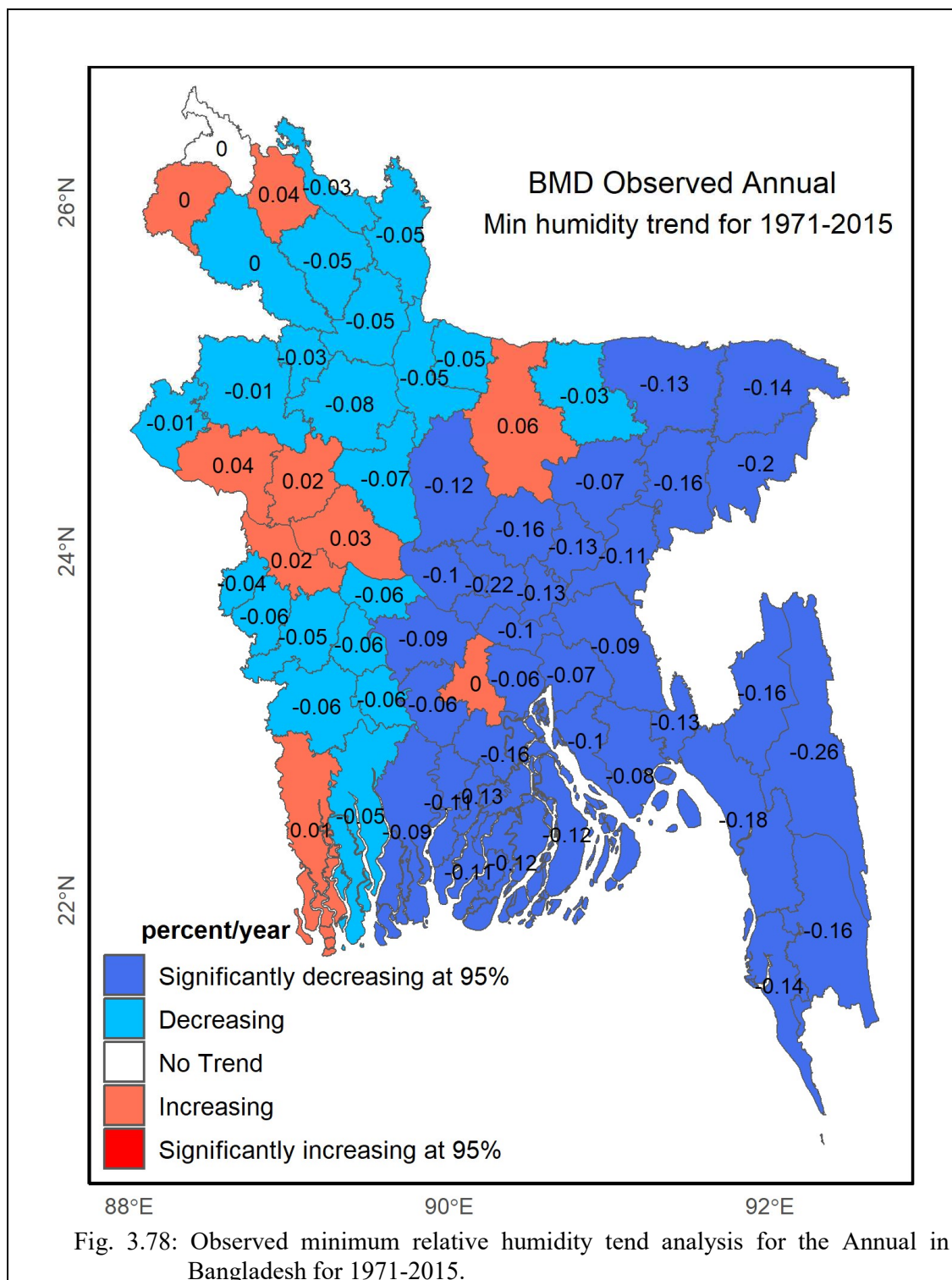


Fig. 3.77: Observed minimum relative humidity tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.



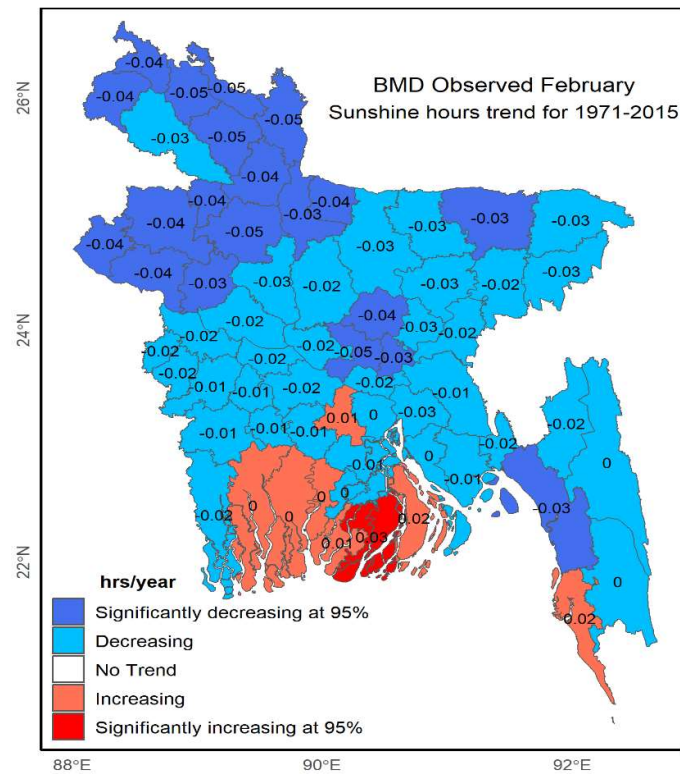
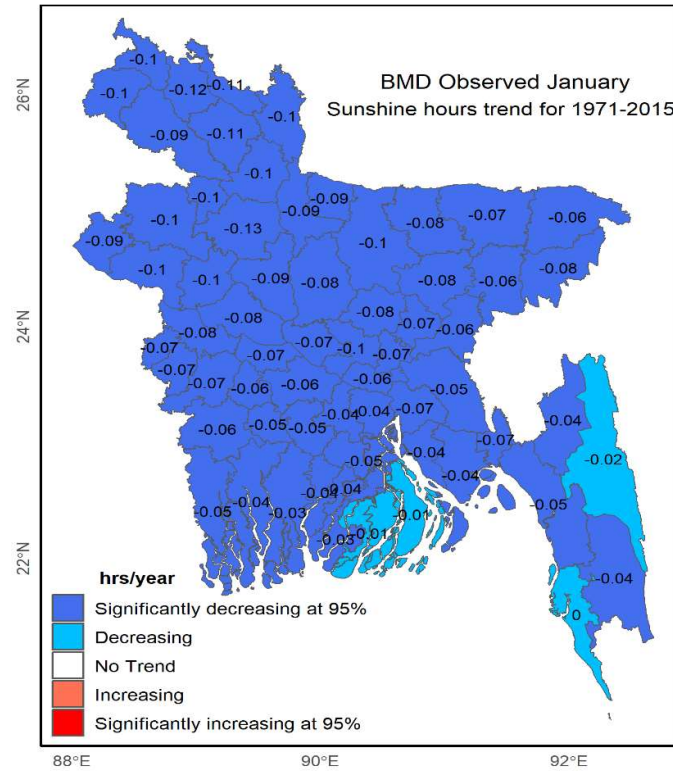


Fig. 3.79: Observed sunshine hours tend analysis for the month of January and February in Bangladesh for 1971-2015.

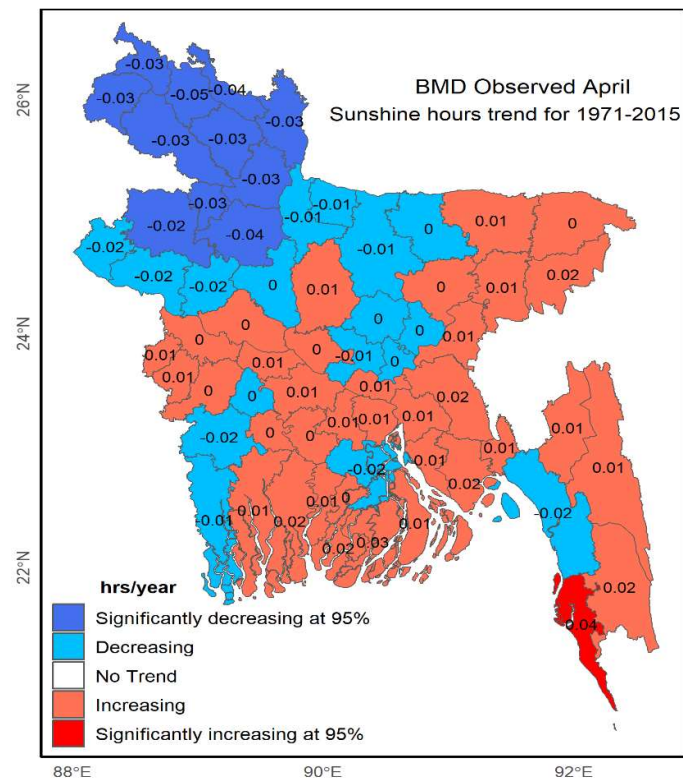
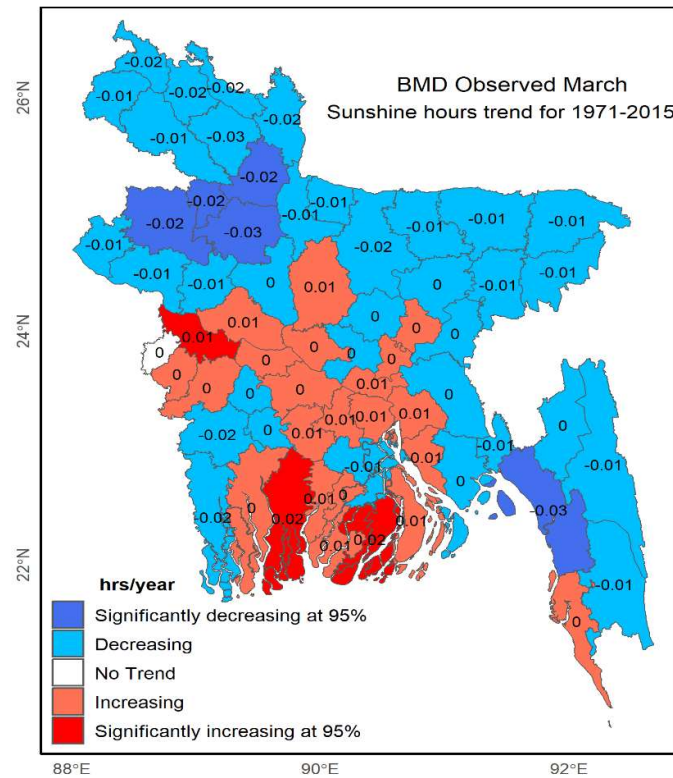


Fig. 3.80: Observed sunshine hours tend analysis for the month of March and April in Bangladesh for 1971-2015.

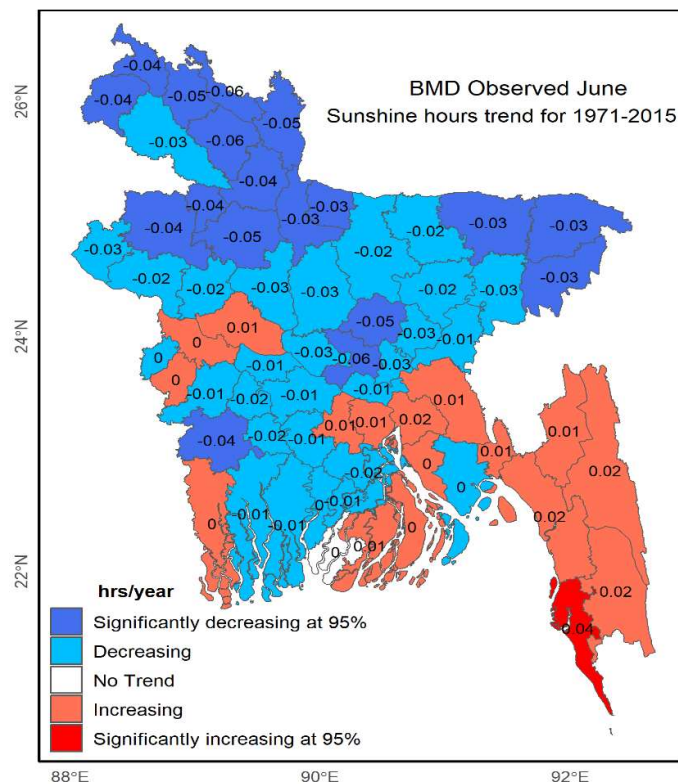
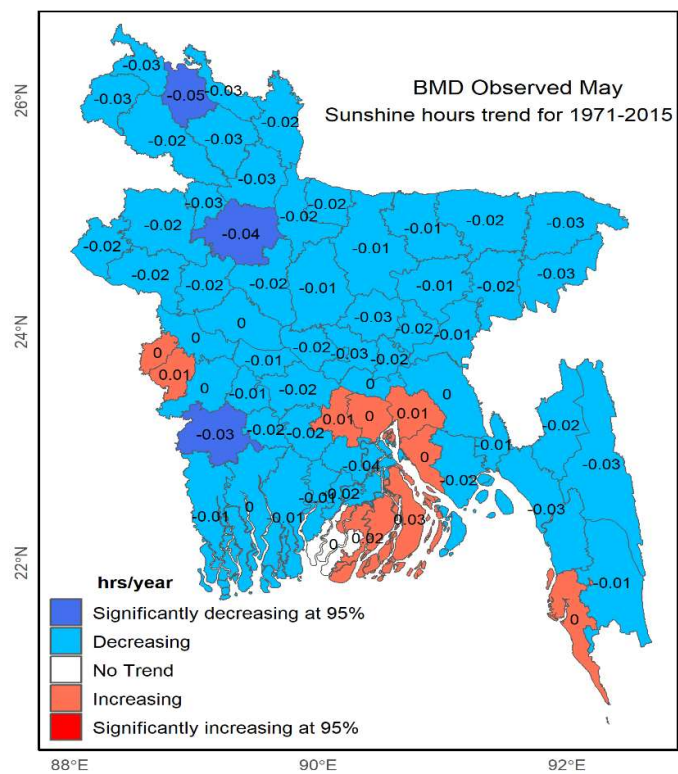


Fig. 3.81: Observed sunshine hours tend analysis for the month of May and June in Bangladesh for 1971-2015.

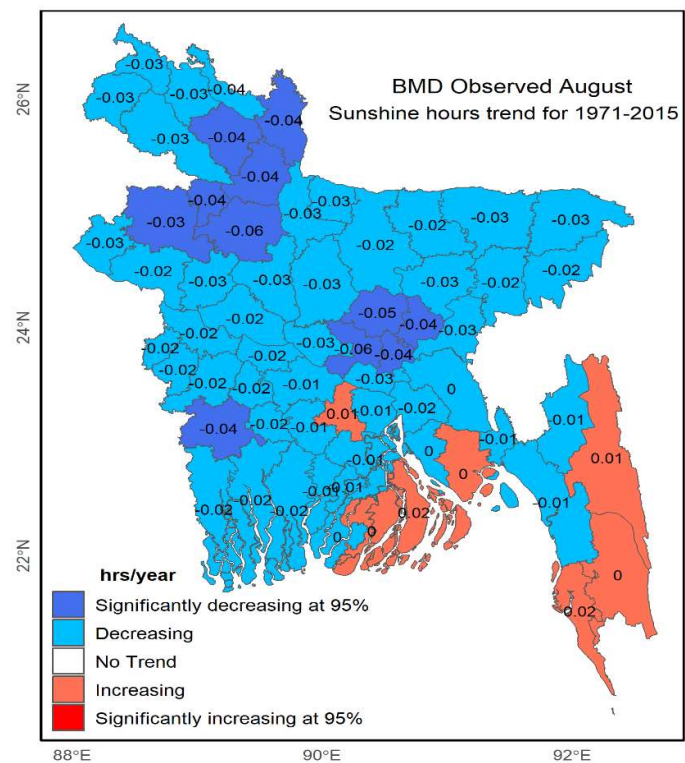
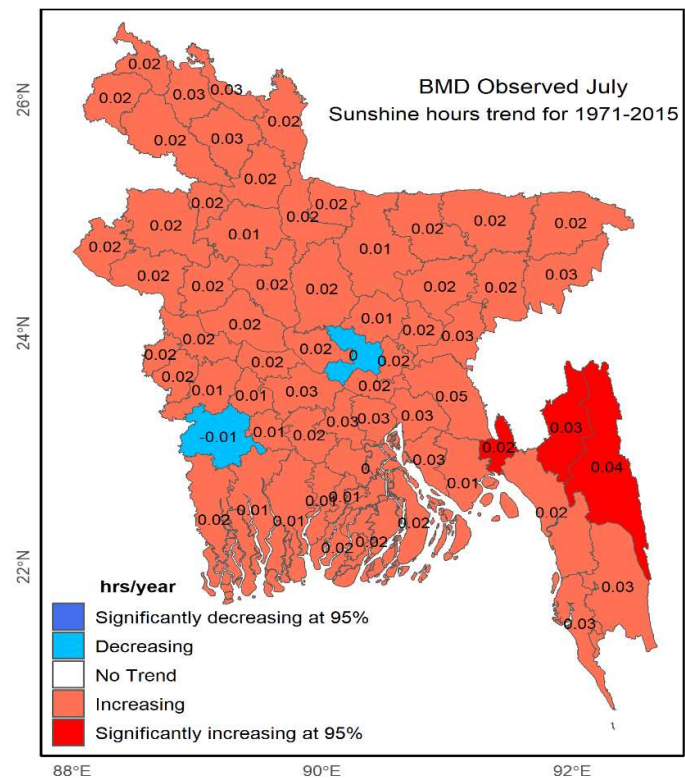


Fig. 3.82: Observed sunshine hours tend analysis for the month of July and August in Bangladesh for 1971-2015.

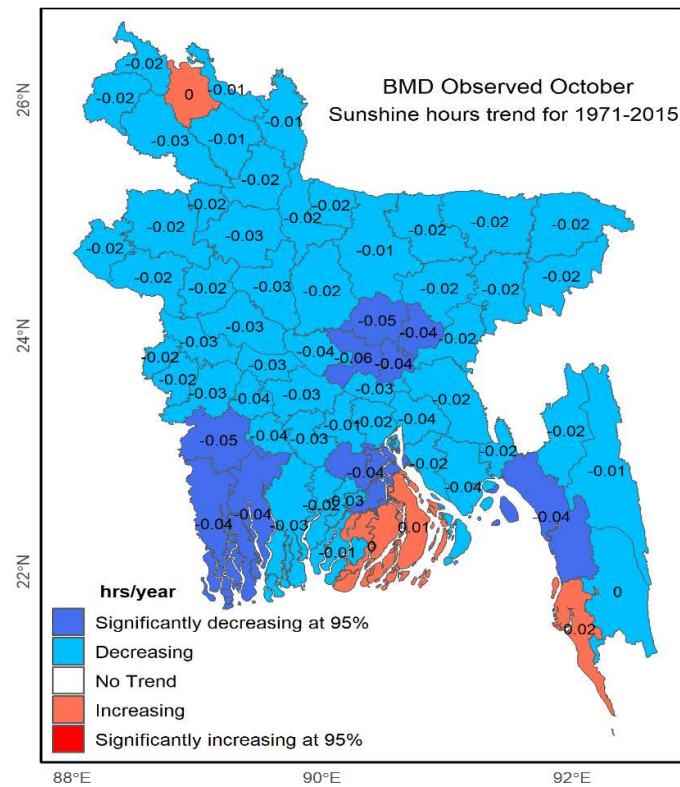
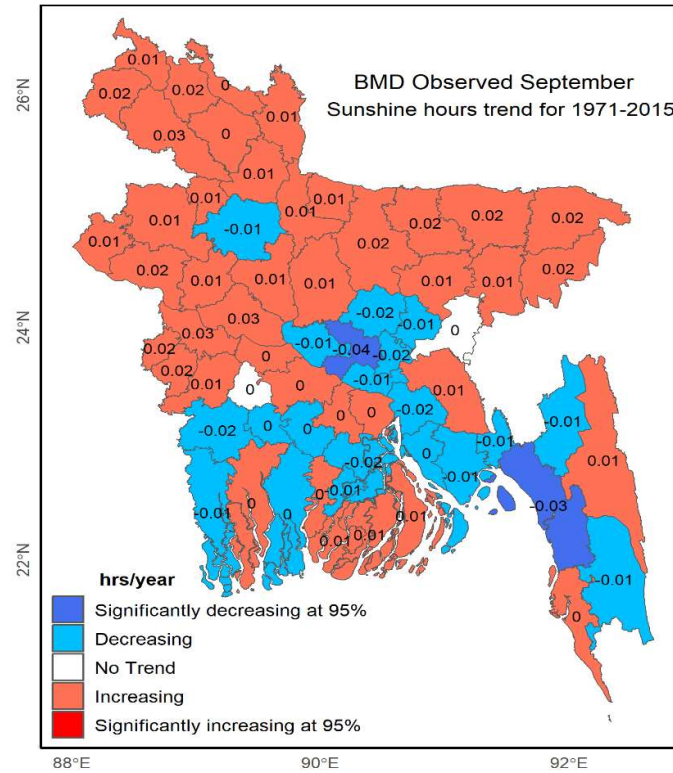


Fig. 3.83: Observed sunshine hours tend analysis for the month of September and October in Bangladesh for 1971-2015.

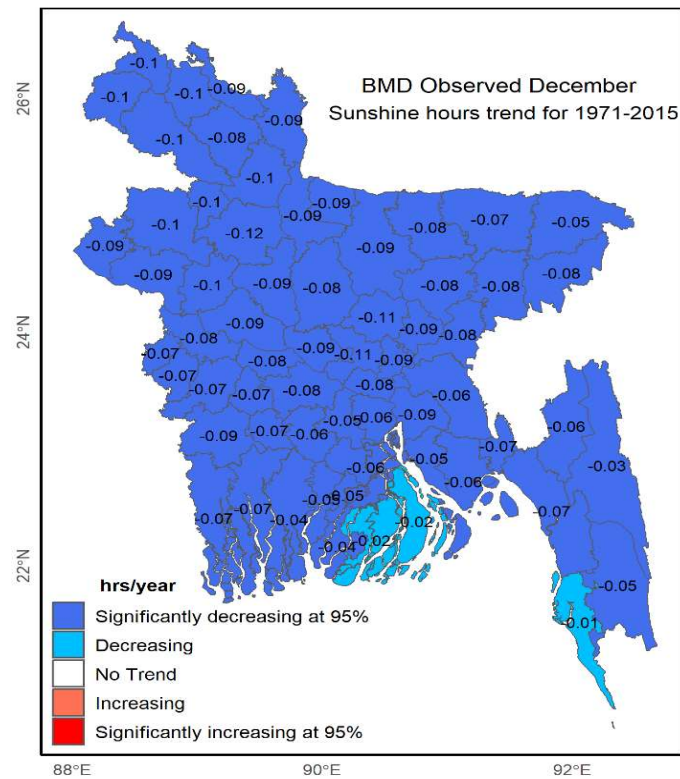
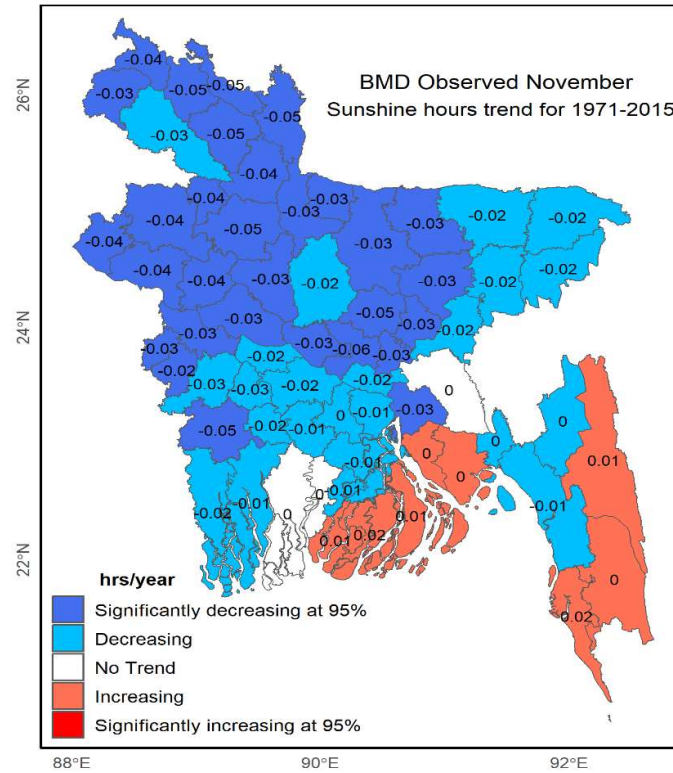


Fig. 3.84: Observed sunshine hours tend analysis for the month of November and December in Bangladesh for 1971-2015.

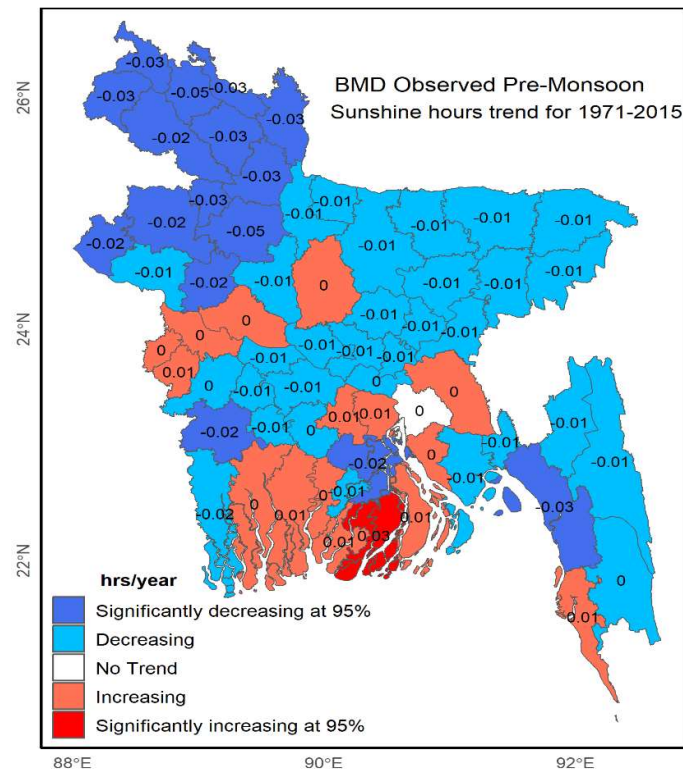
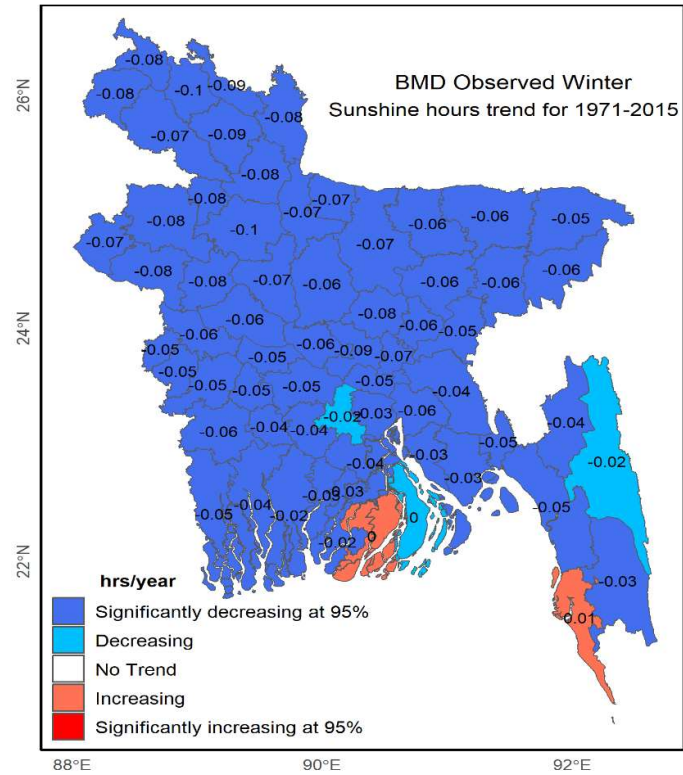


Fig. 3.85: Observed sunshine hours tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.

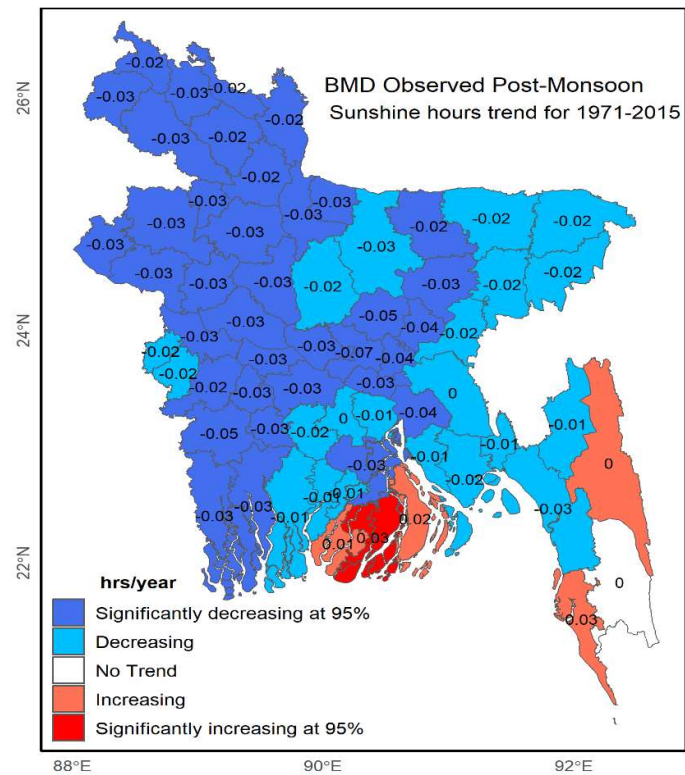
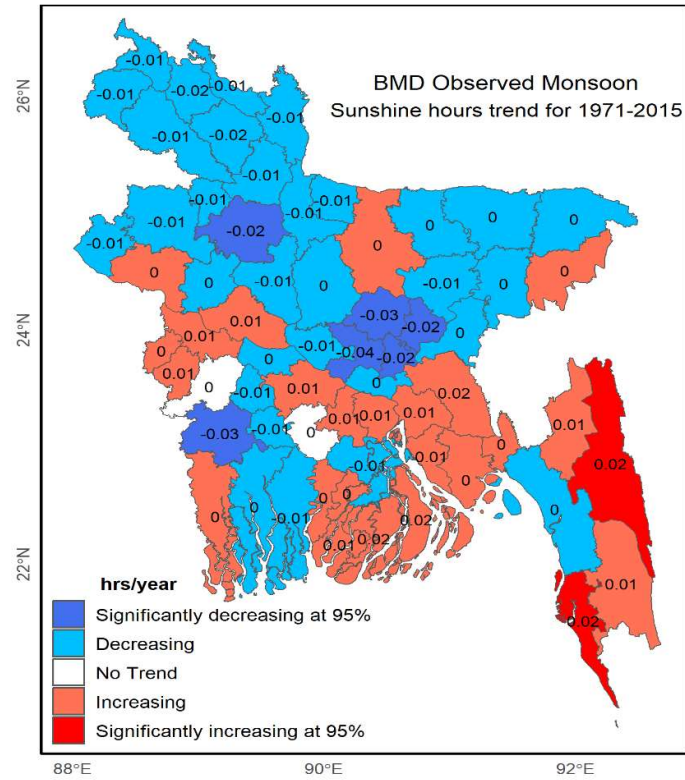


Fig. 3.86: Observed sunshine hours trend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.

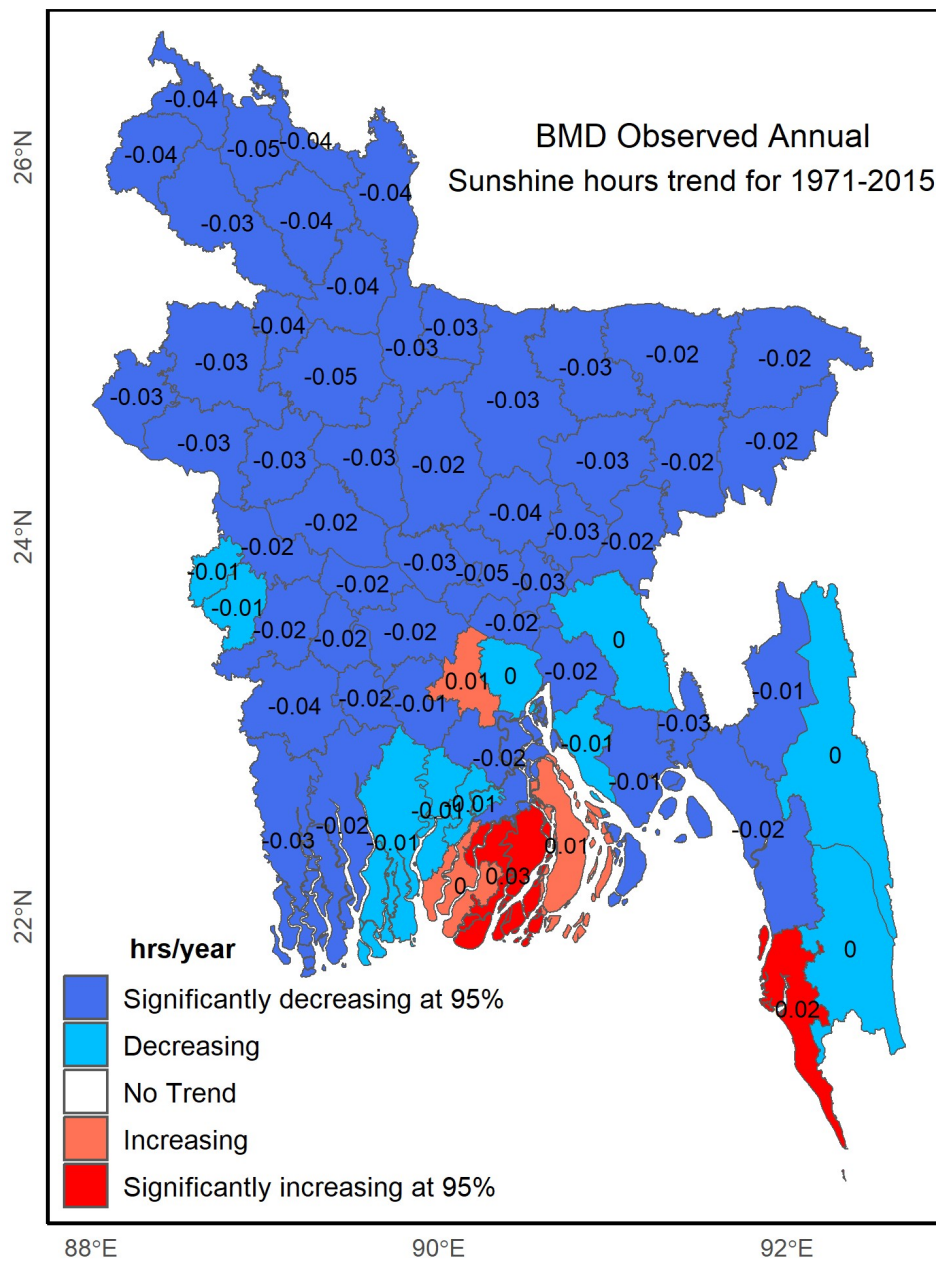


Fig. 3.87: Observed sunshine hours tend analysis for the Annual in Bangladesh for 1971-2015.

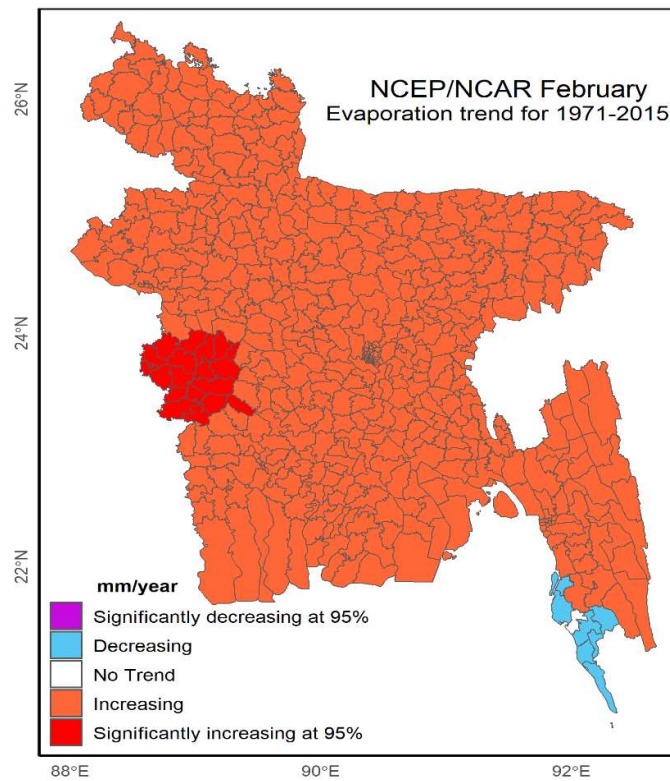
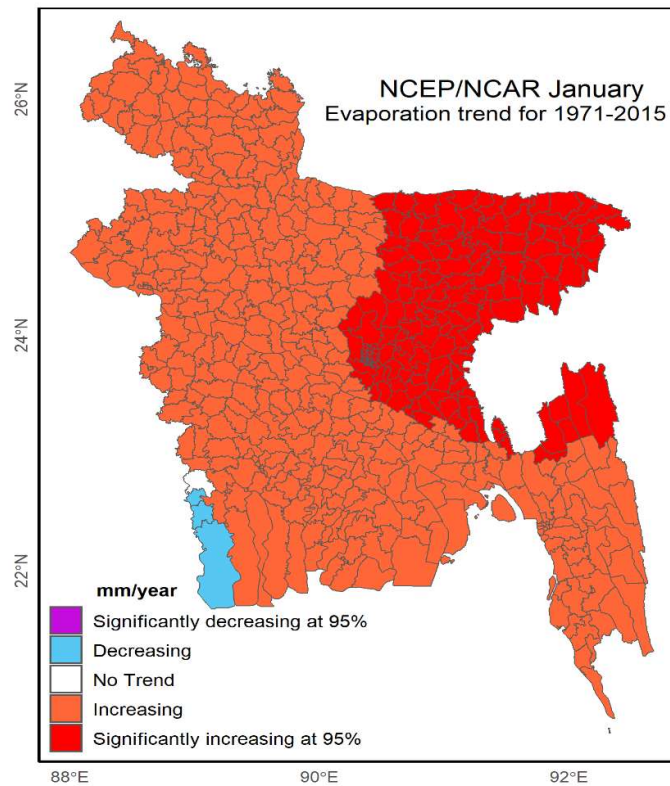


Fig. 3.88: NCEP/NCAR gridded evaporation tend analysis for the month of January and February in Bangladesh for 1971-2015.

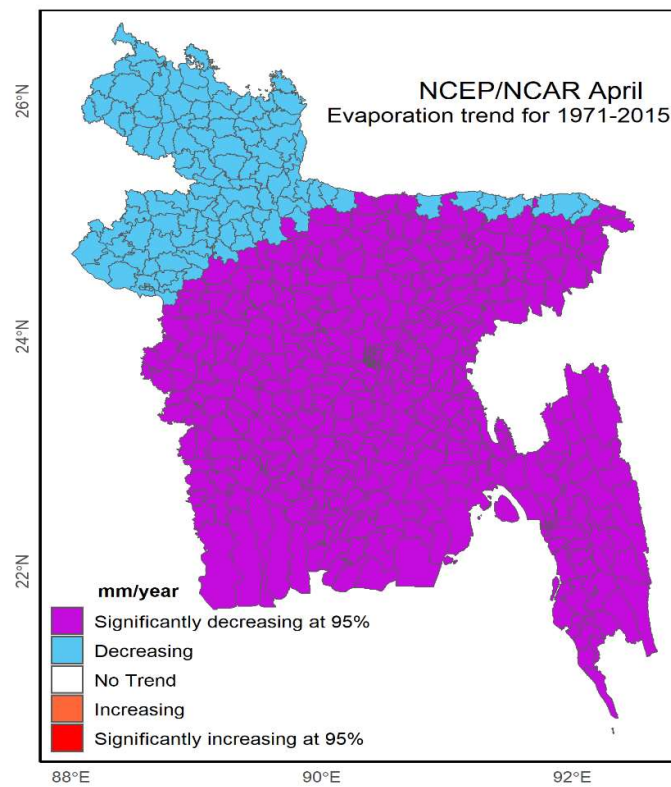
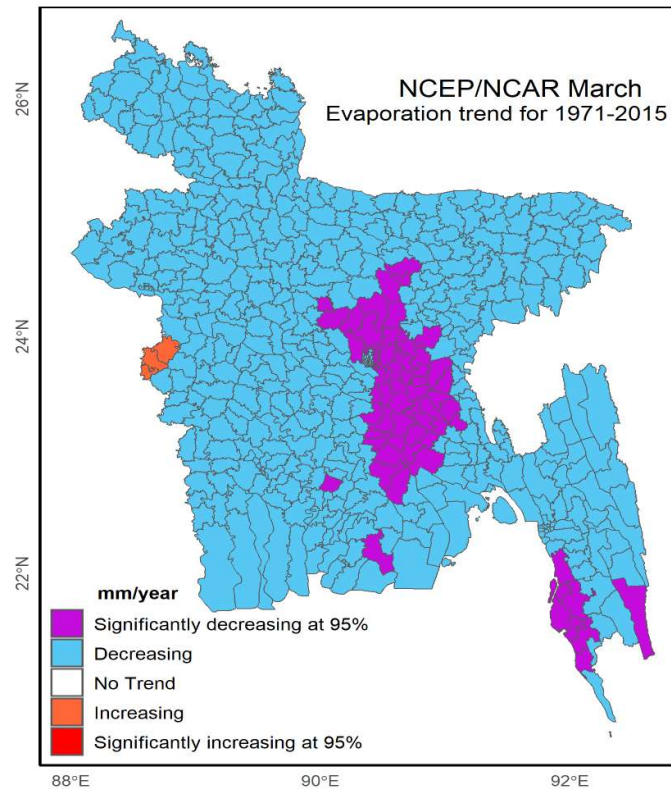


Fig. 3.89: NCEP/NCAR gridded evaporation tend analysis for the month of March and April in Bangladesh for 1971-2015.

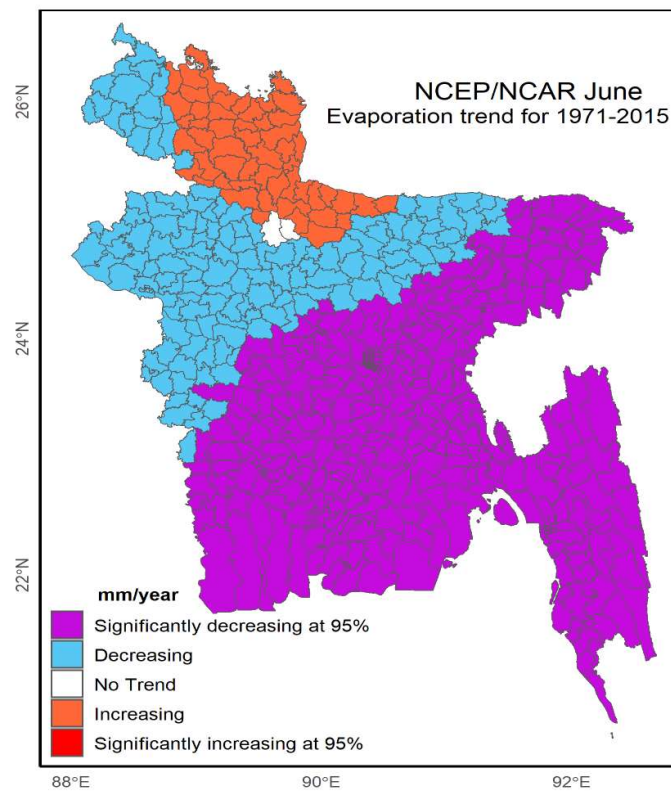
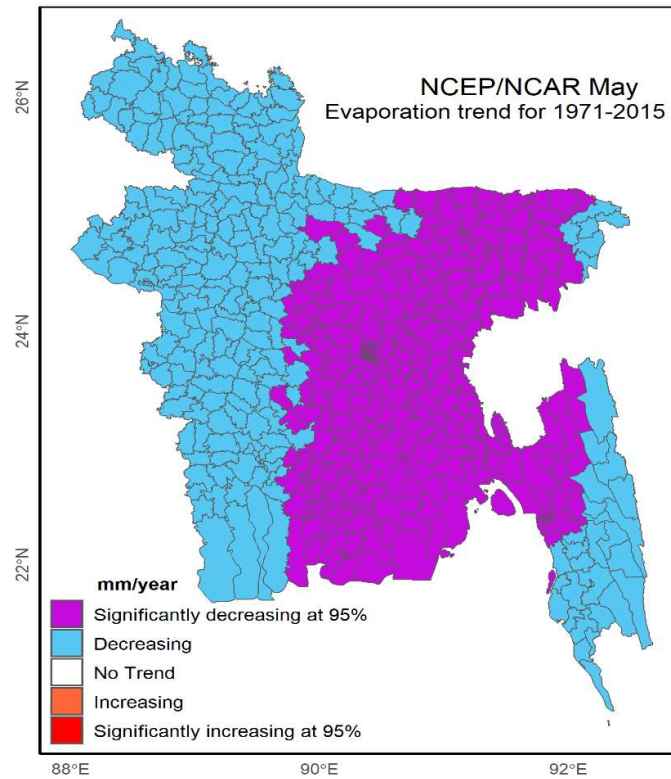


Fig. 3.90: NCEP/NCAR gridded evaporation tend analysis for the month of May and June in Bangladesh for 1971-2015.

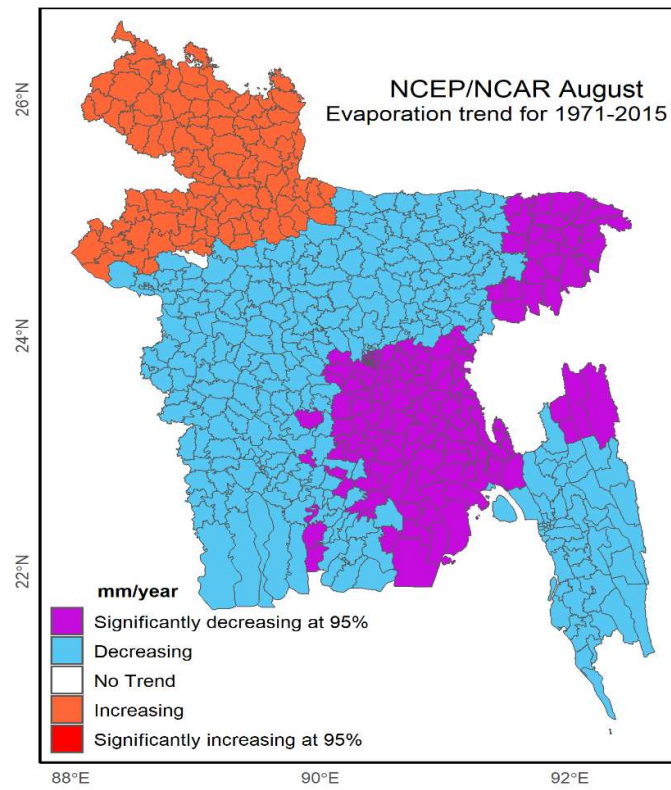
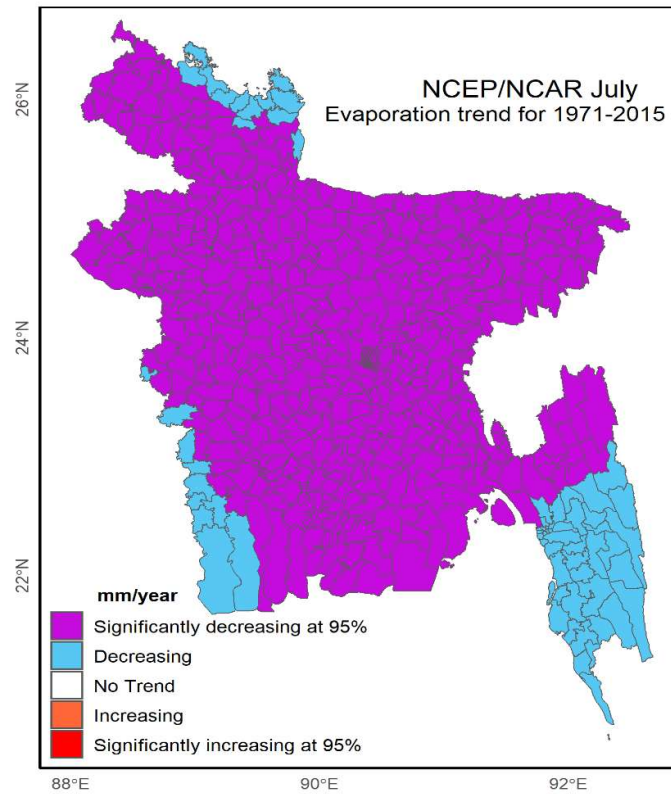


Fig. 3.91: NCEP/NCAR gridded evaporation tend analysis for the month of July and August in Bangladesh for 1971-2015.

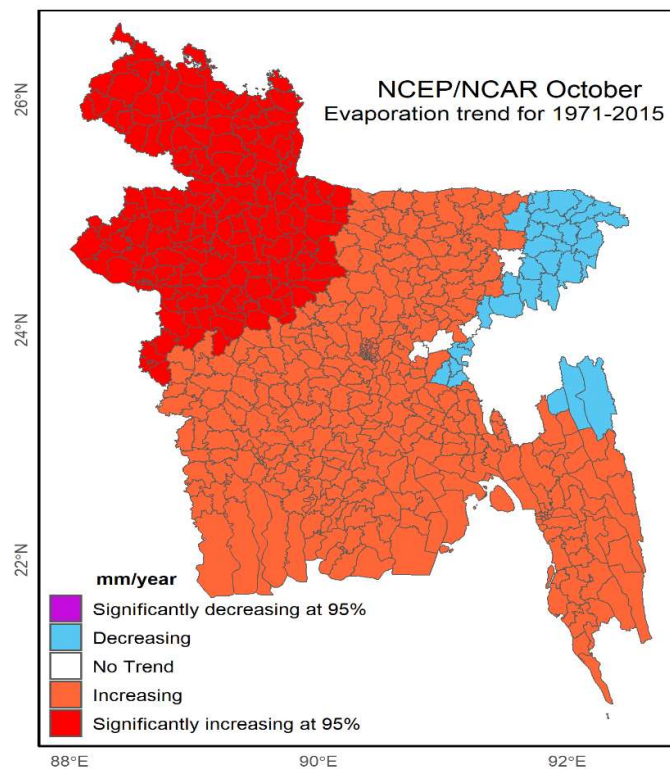
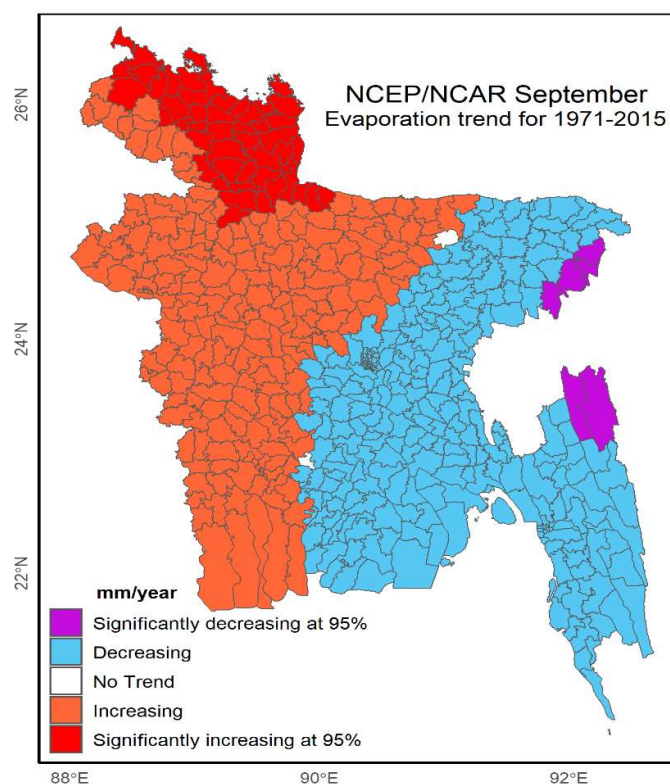


Fig. 3.92: NCEP/NCAR gridded evaporation tend analysis for the month of September and October in Bangladesh for 1971-2015.

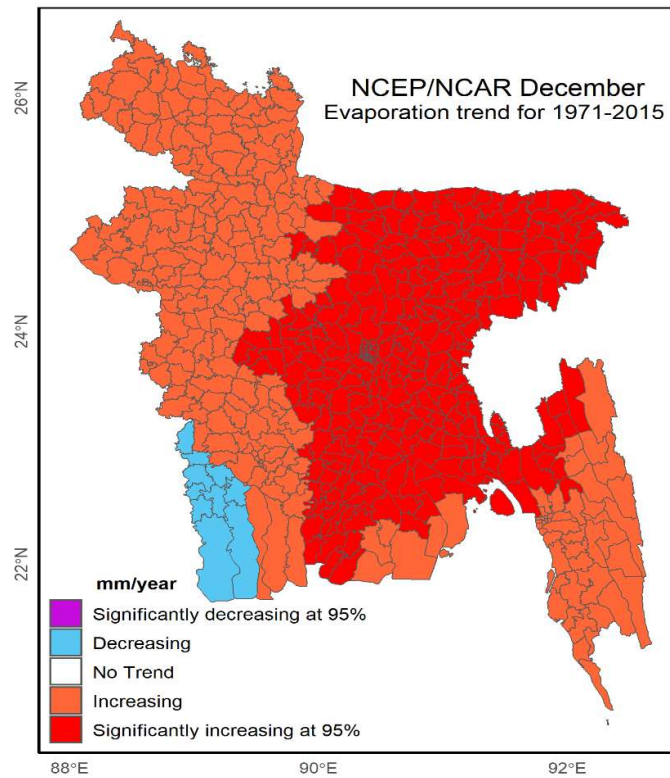
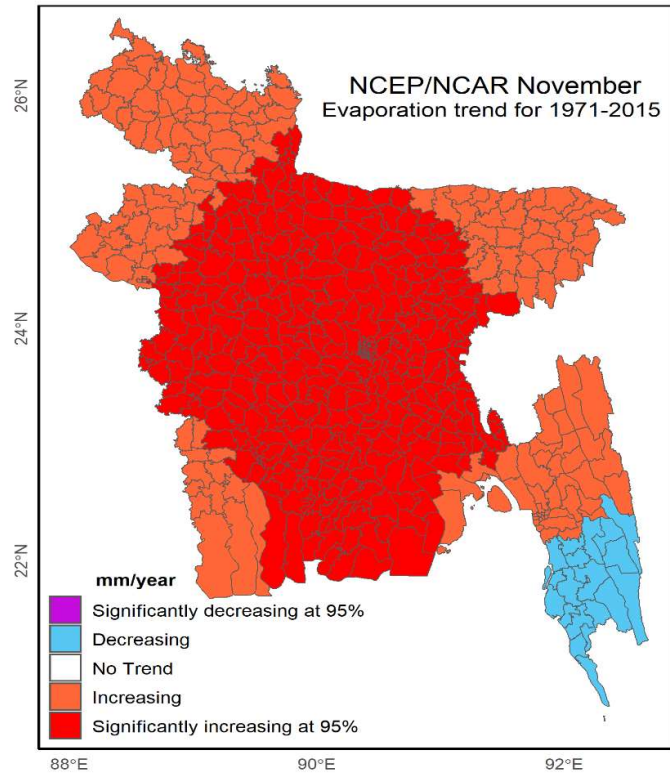


Fig. 3.93: NCEP/NCAR gridded evaporation tend analysis for the month of November and December in Bangladesh for 1971-2015.

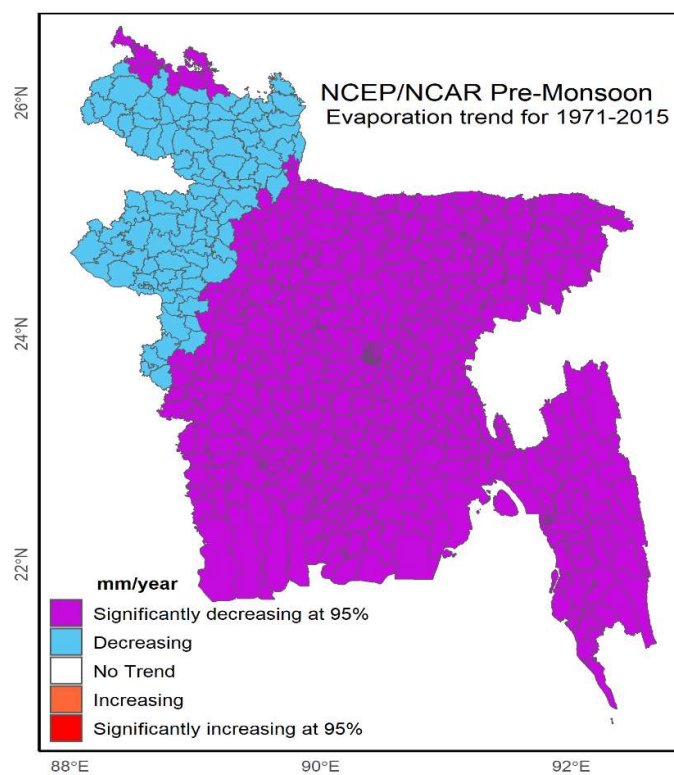
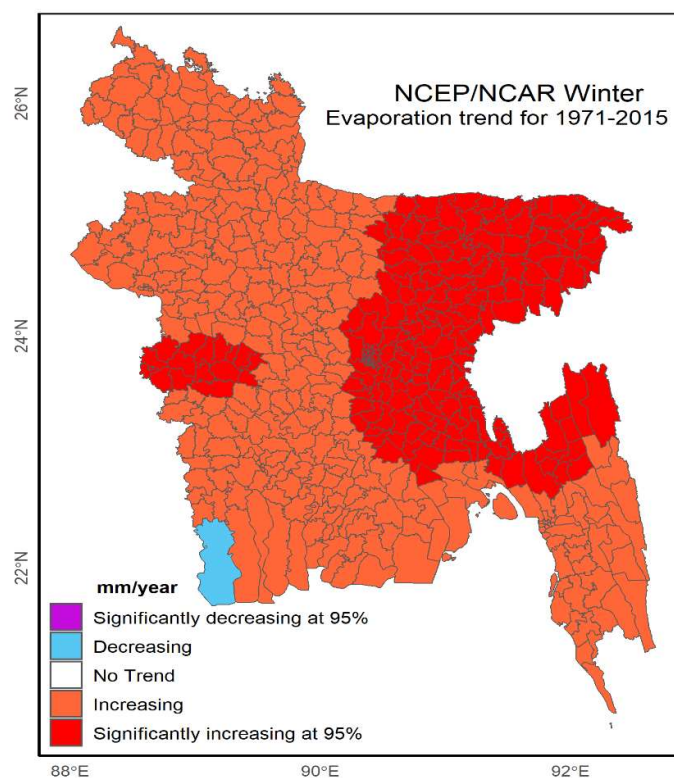


Fig. 3.94: NCEP/NCAR gridded evaporation tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.

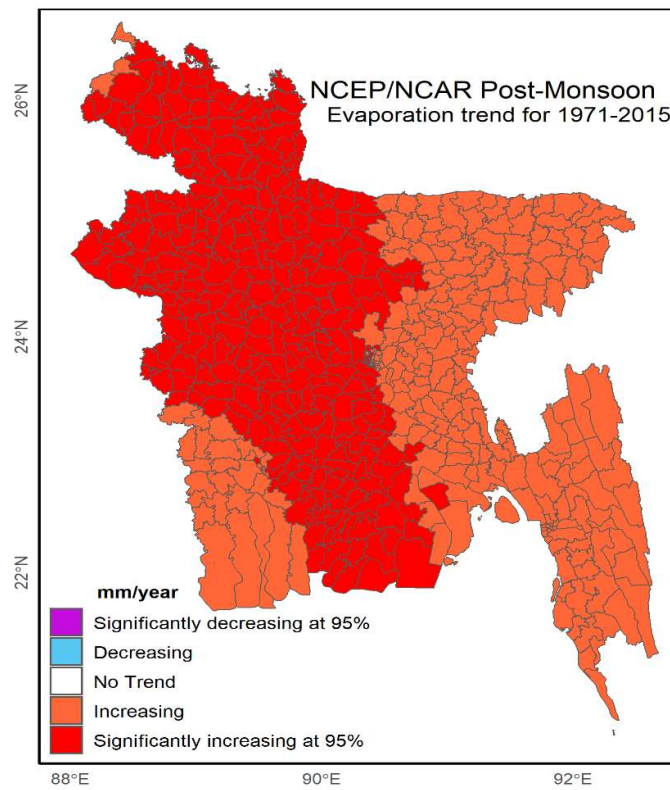
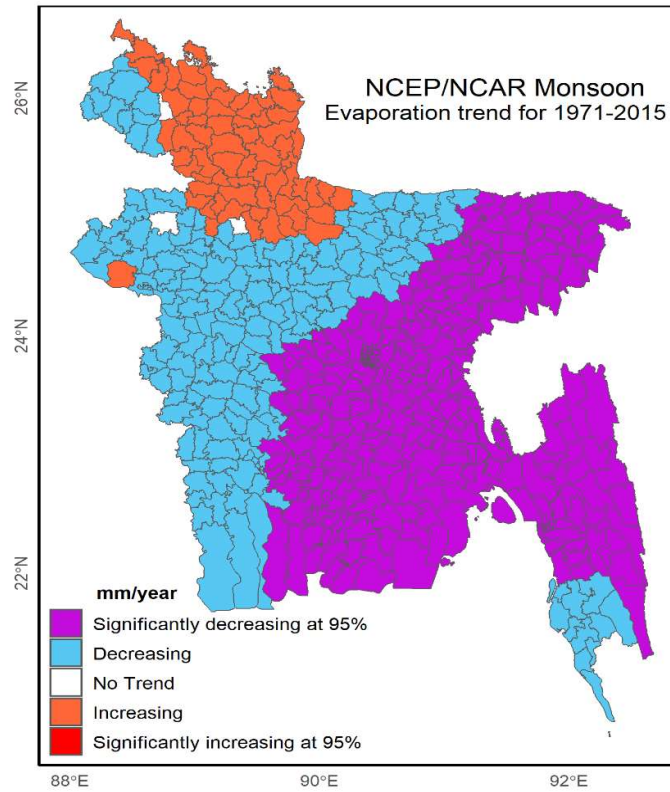
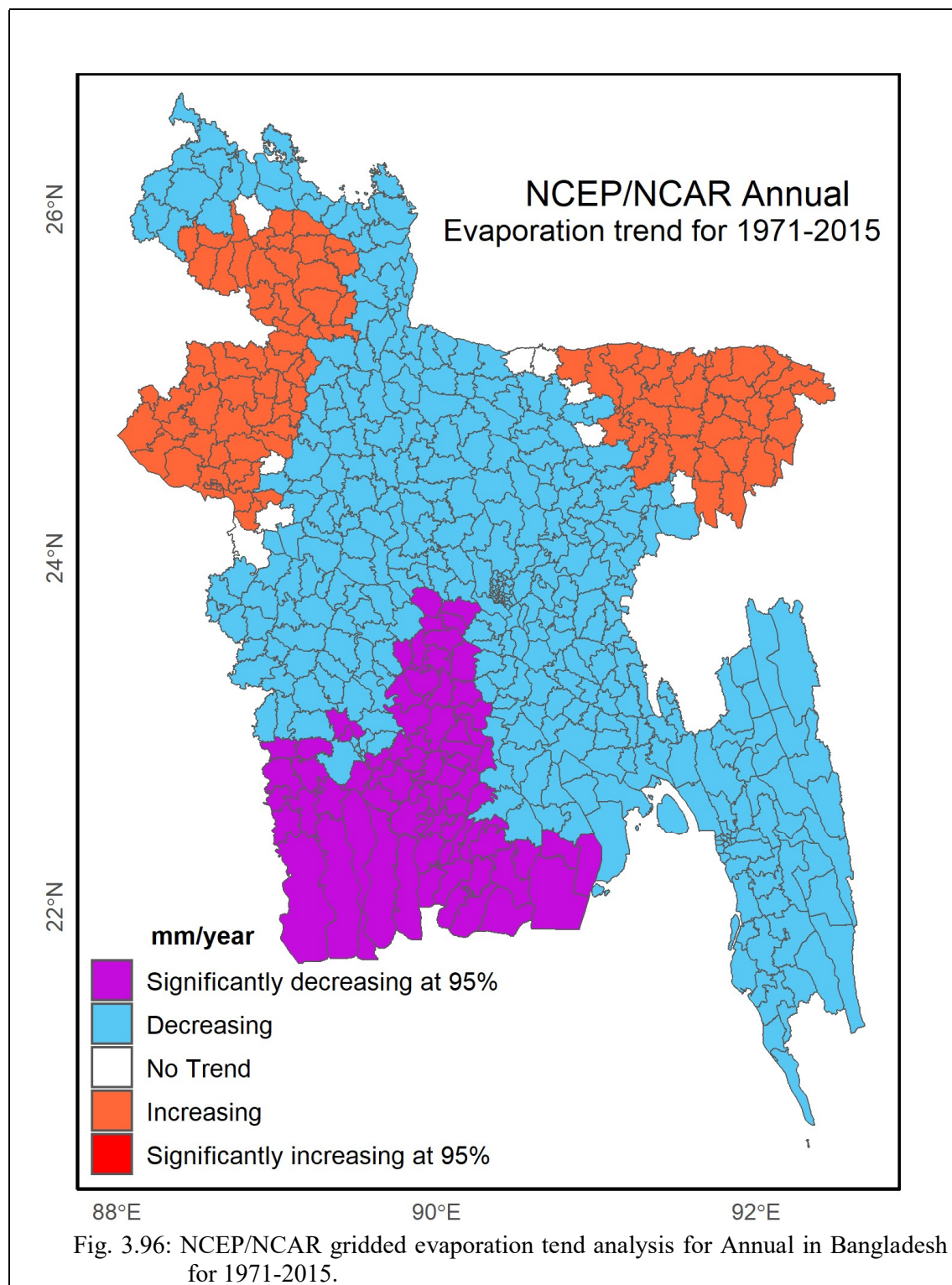


Fig. 3.95: NCEP/NCAR gridded evaporation tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.



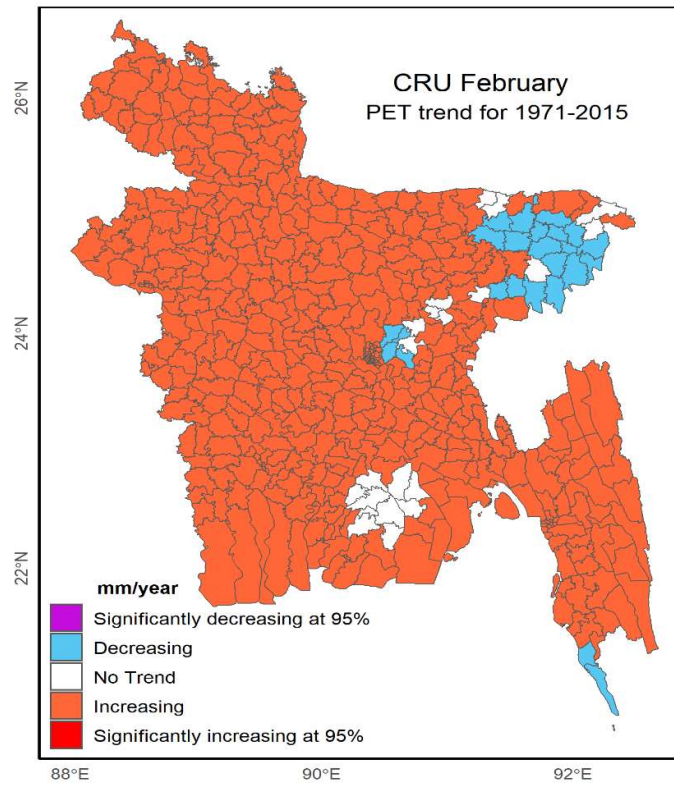
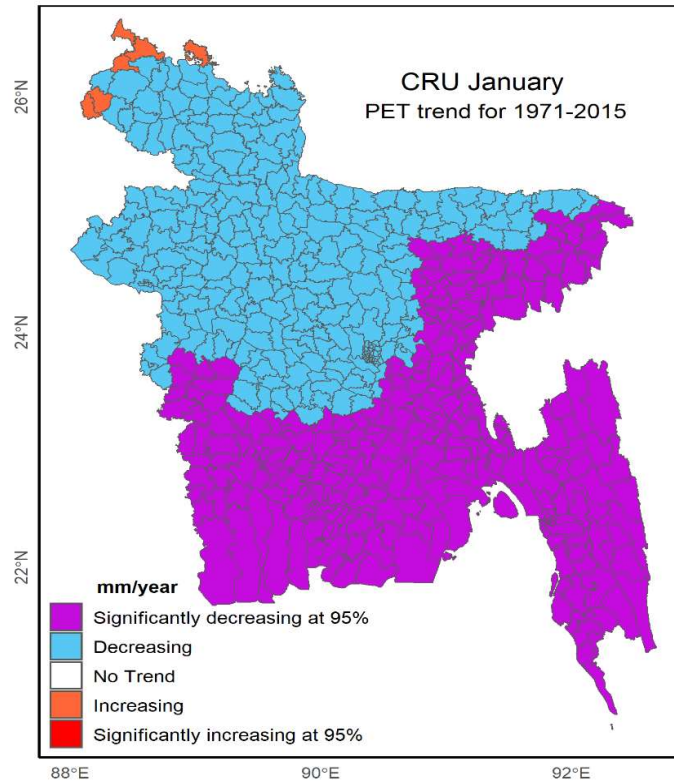


Fig. 3.97: CRU gridded evapotranspiration (PET) tend analysis for the month of January and February in Bangladesh for 1971-2015.

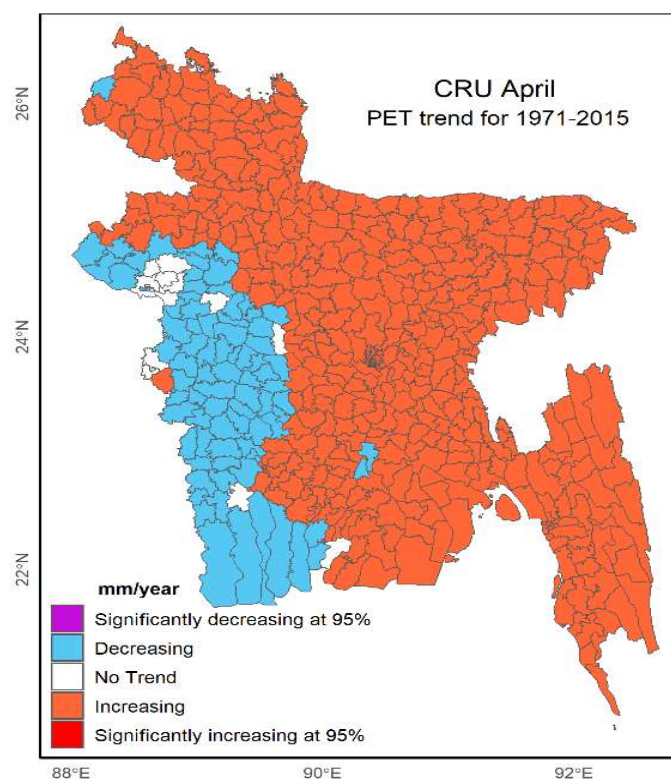
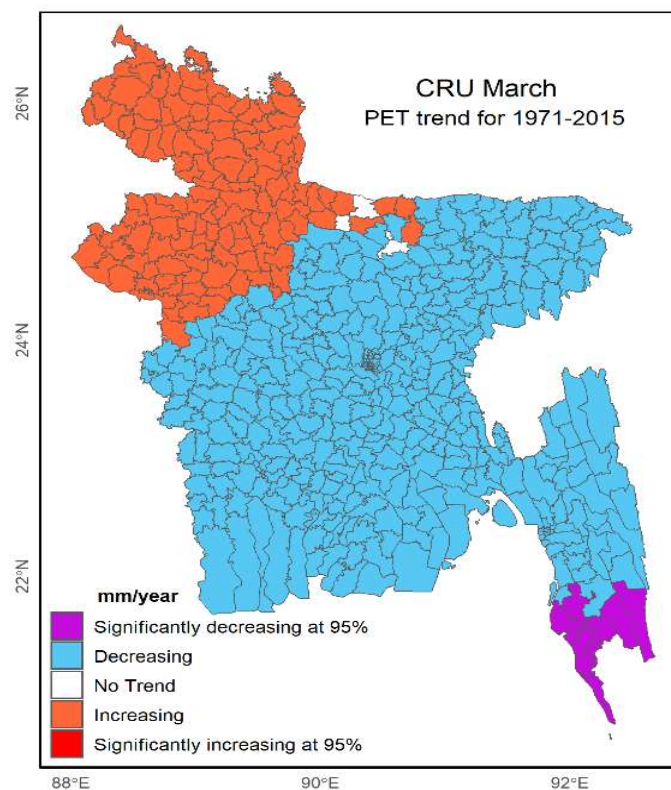


Fig. 3.98.: CRU gridded evapotranspiration (PET) tend analysis for the month of March and April in Bangladesh for 1971-2015.

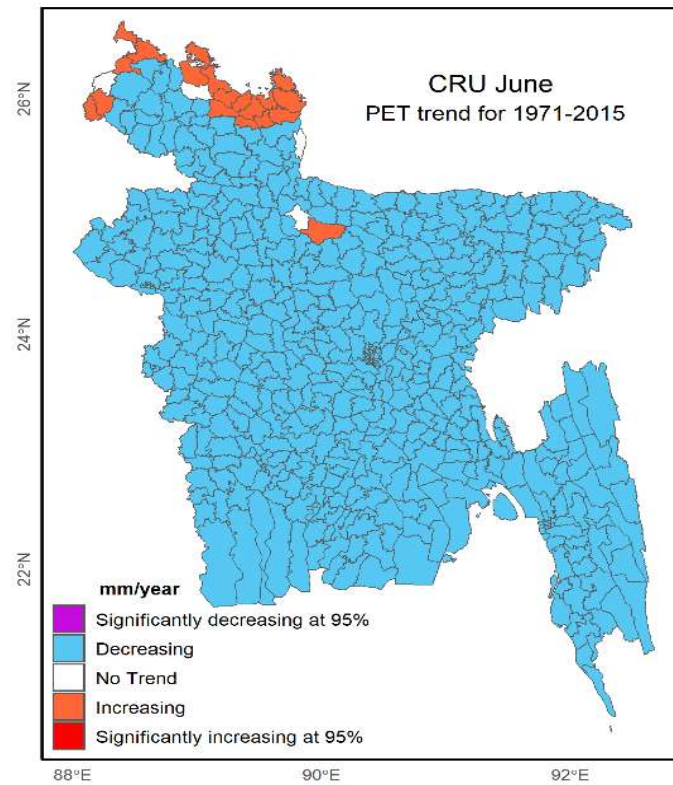
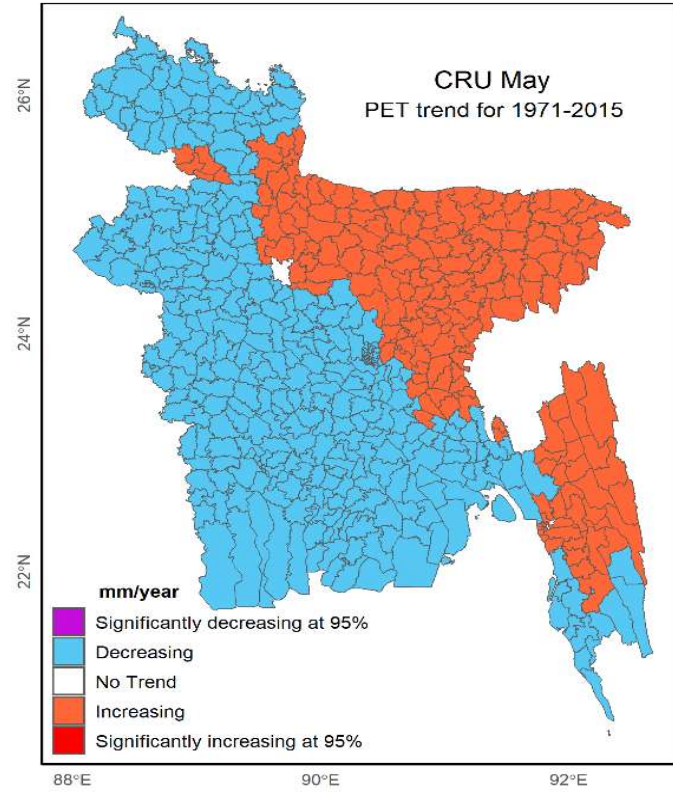


Fig. 3.99: CRU gridded evapotranspiration (PET) tend analysis for the month of May and June in Bangladesh for 1971-2015.

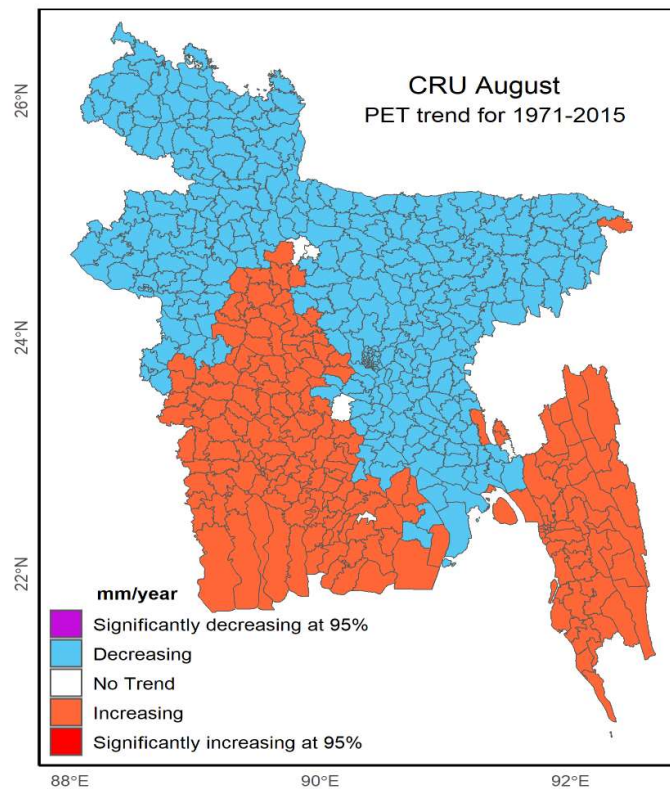
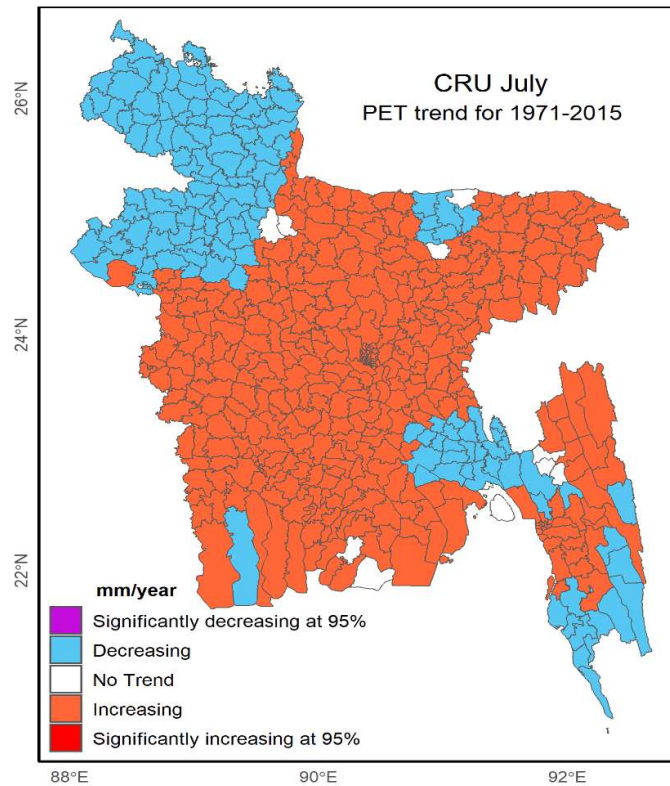


Fig. 3.100: CRU gridded evapotranspiration (PET) tend analysis for the month of July and August in Bangladesh for 1971-2015.

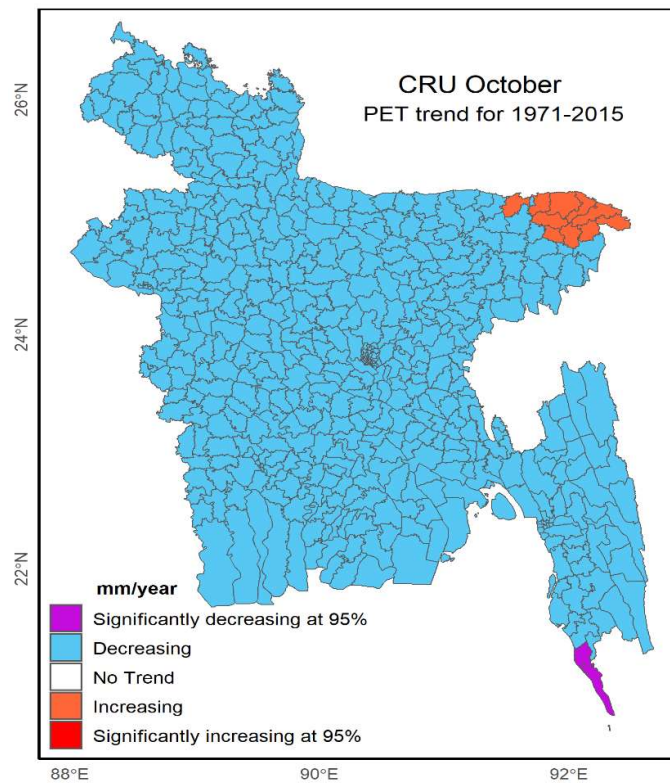
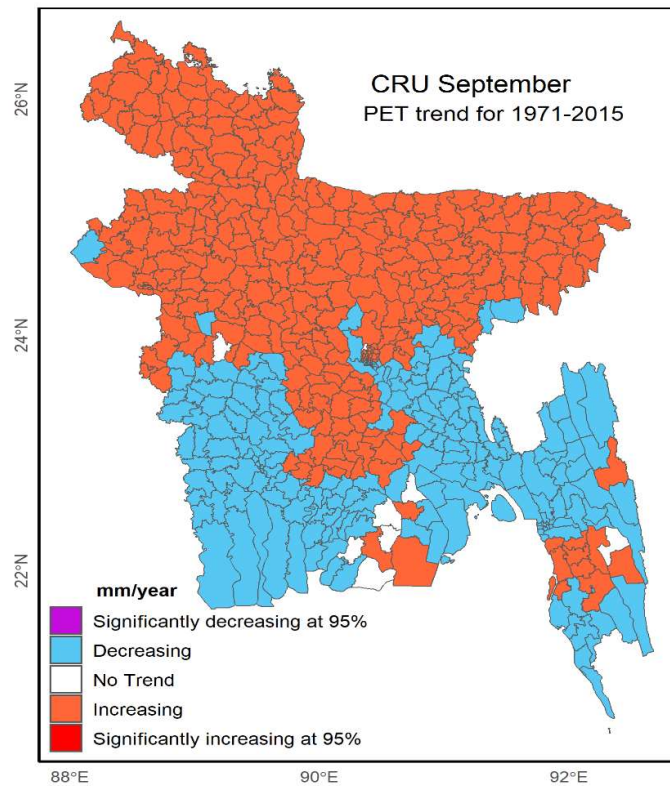


Fig. 3.101: CRU gridded evapotranspiration (PET) tend analysis for the month of September and October in Bangladesh for 1971-2015.

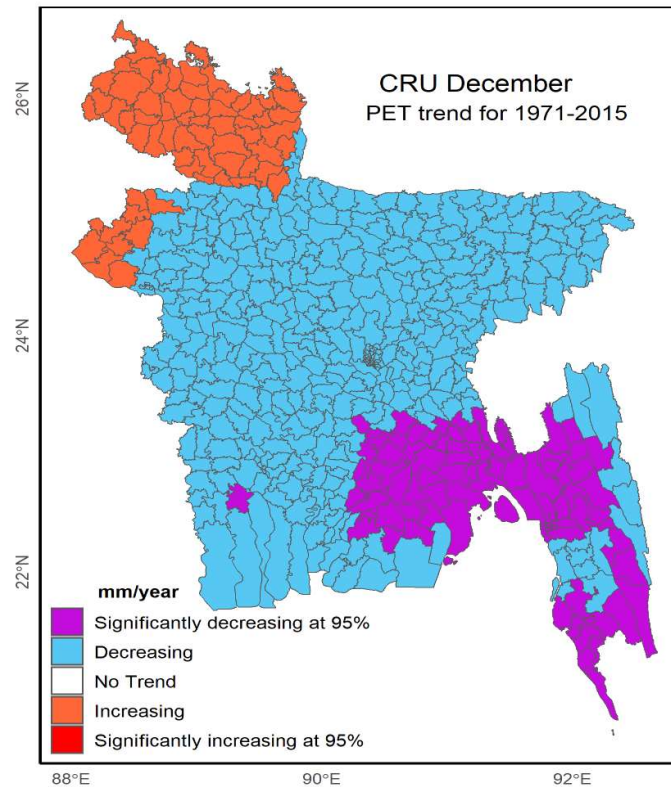
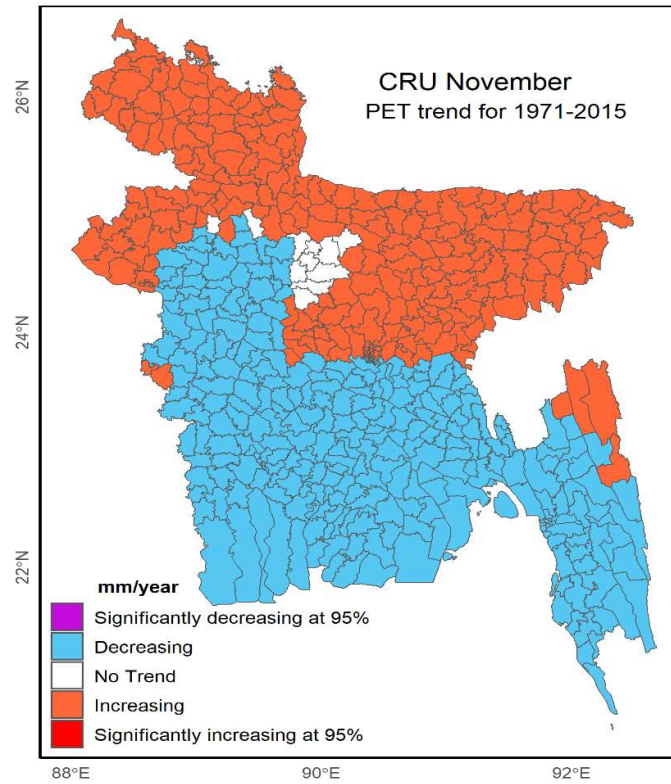


Fig. 3.102: CRU gridded evapotranspiration (PET) tend analysis for the month of November and December in Bangladesh for 1971-2015.

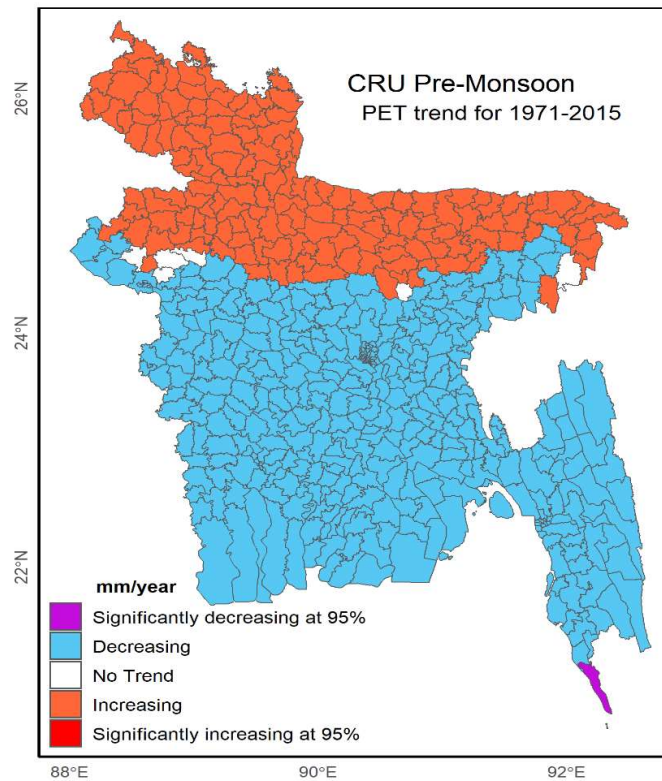
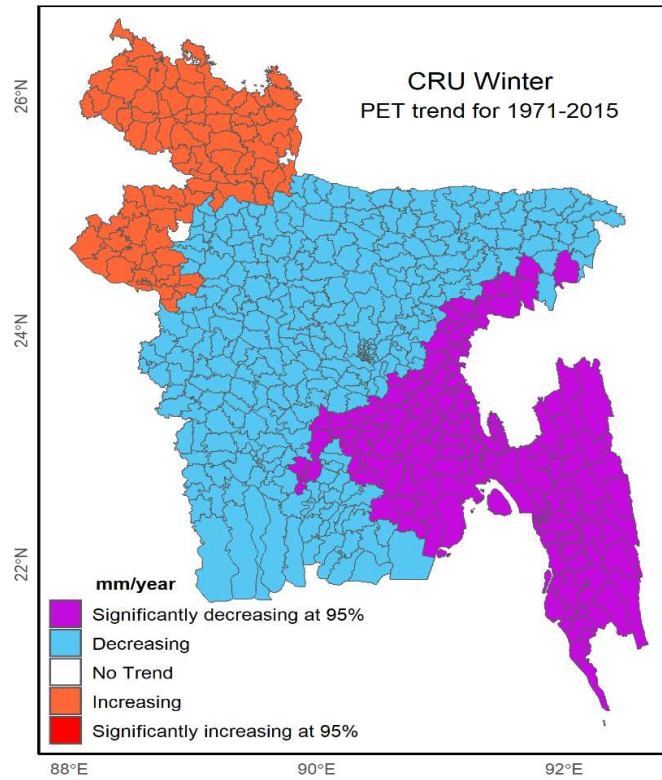


Fig. 3.103: CRU gridded evapotranspiration (PET) tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1971-2015.

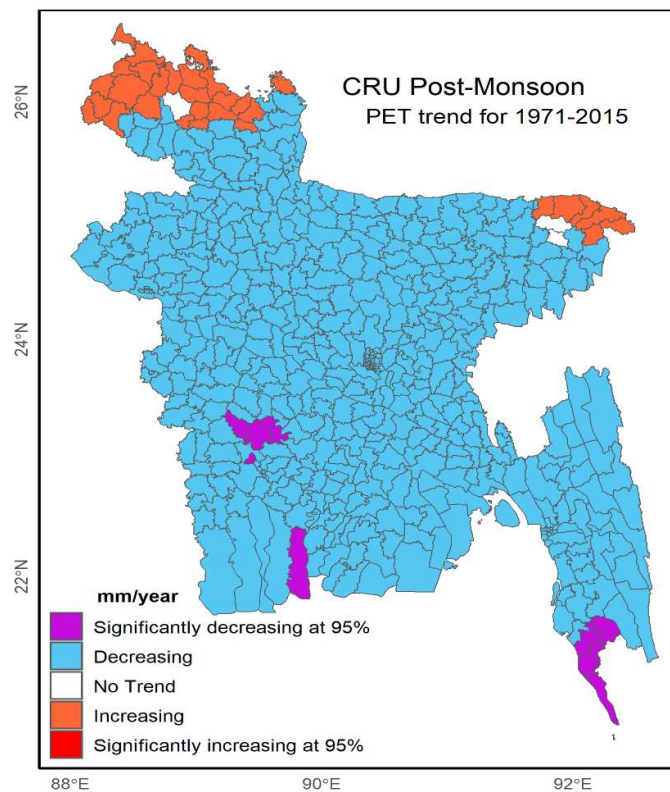
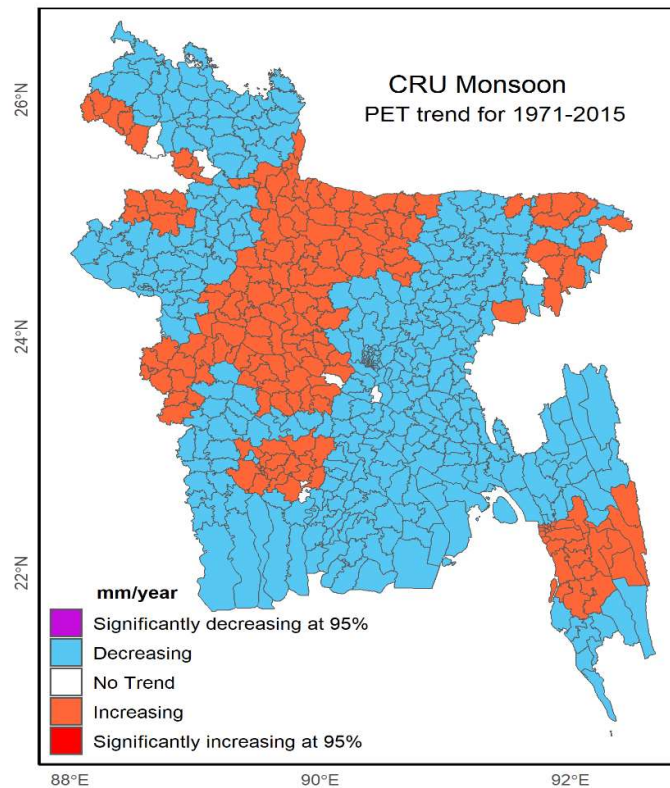


Fig. 3.104: CRU gridded evapotranspiration (PET) tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1971-2015.

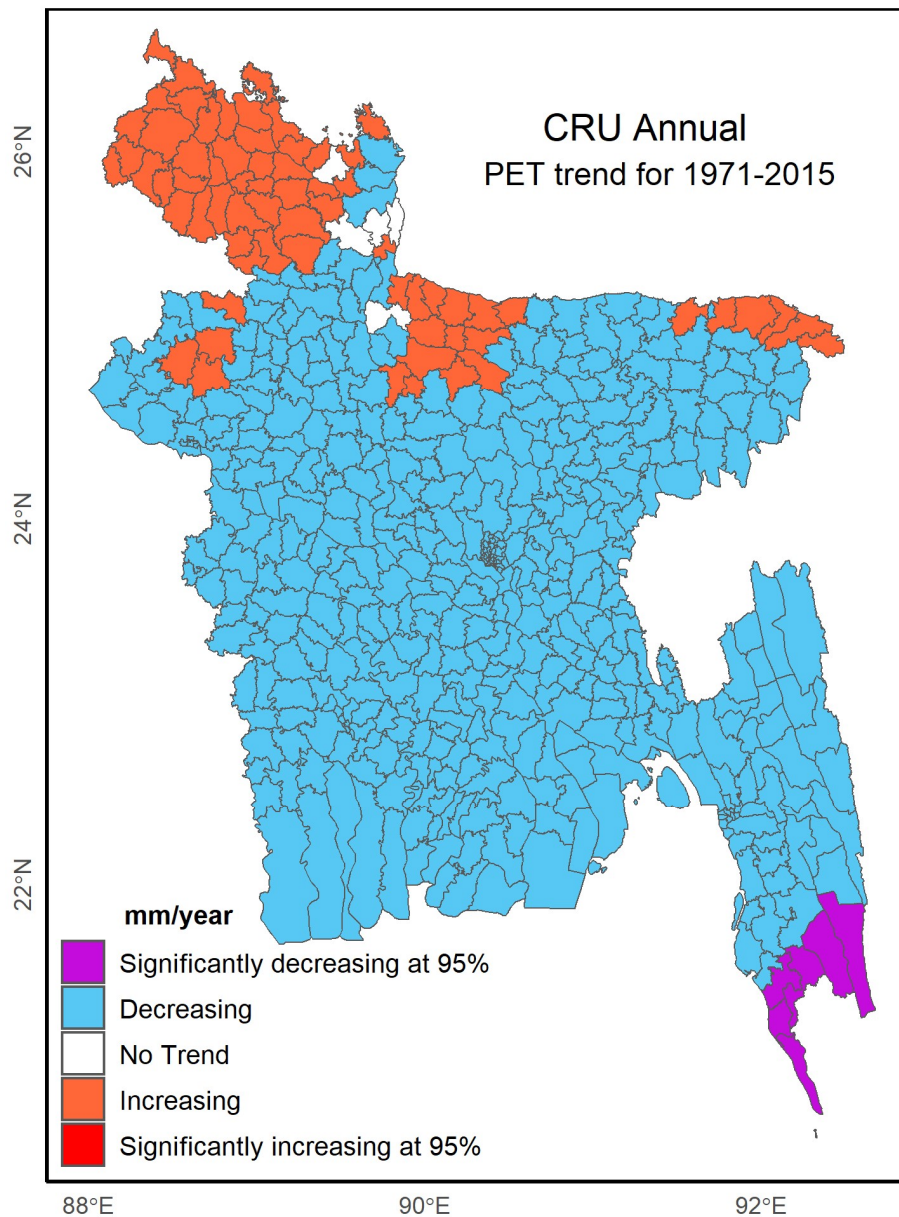


Fig. 3.105: CRU gridded evapotranspiration (PET) tend analysis for Annual in Bangladesh for 1971-2015.

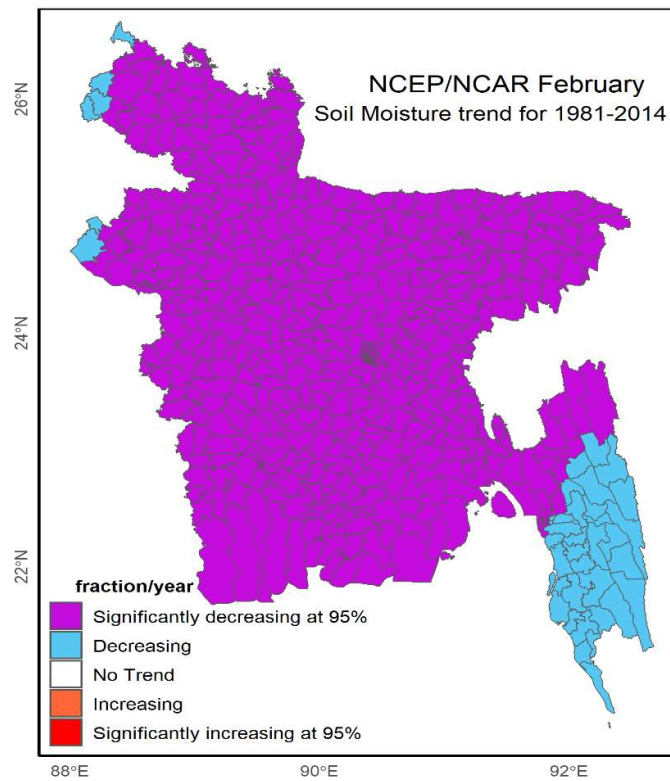
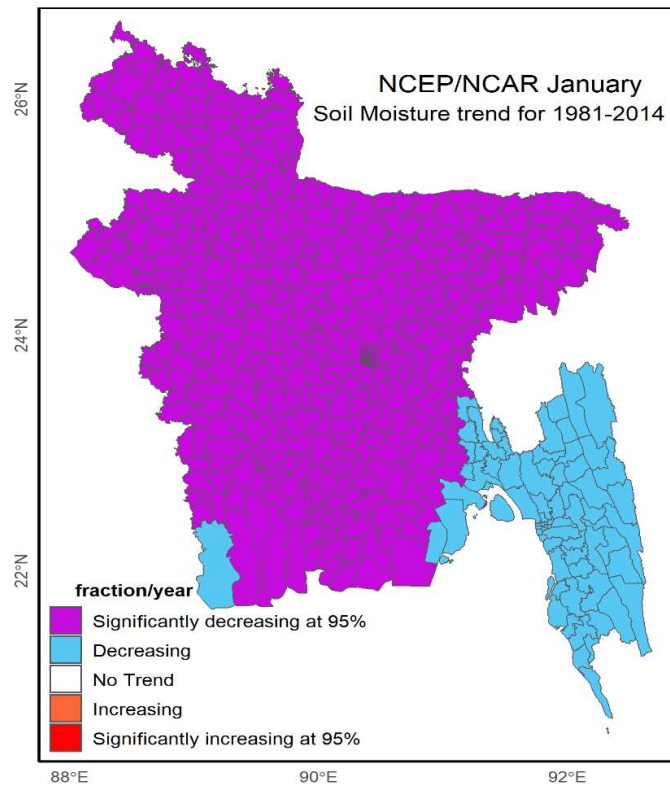
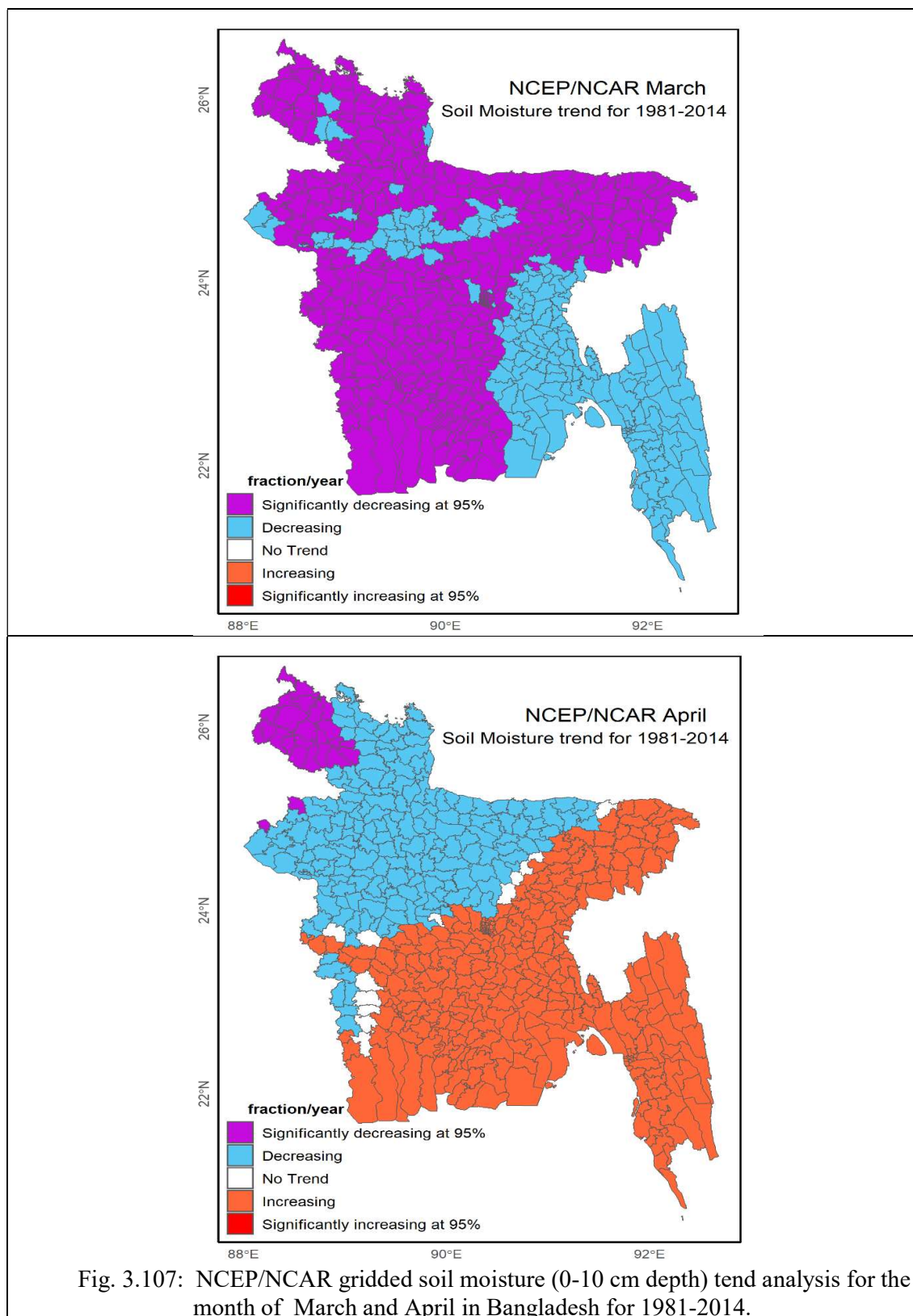


Fig. 3.106: NCEP/NCAR gridded soil moisture (0-10 cm depth) tend analysis for the month of January and February in Bangladesh for 1981-2014.



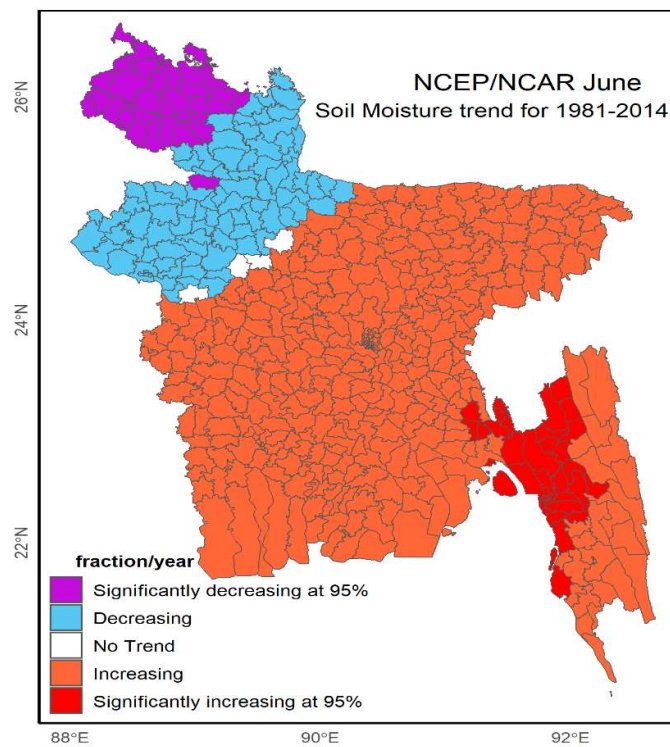
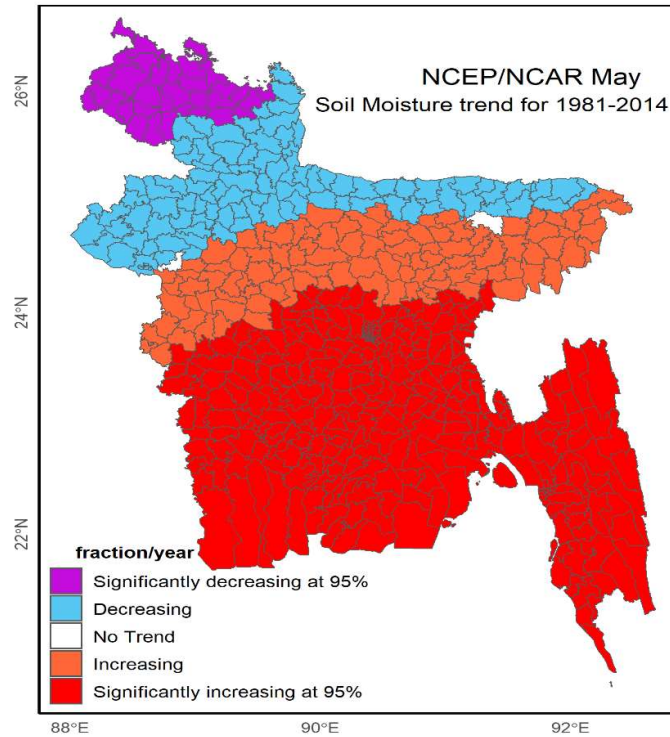


Fig. 3.108: NCEP/NCAR gridded soil moisture (0-10 cm depth) tend analysis for the month of May and June in Bangladesh for 1981-2014.

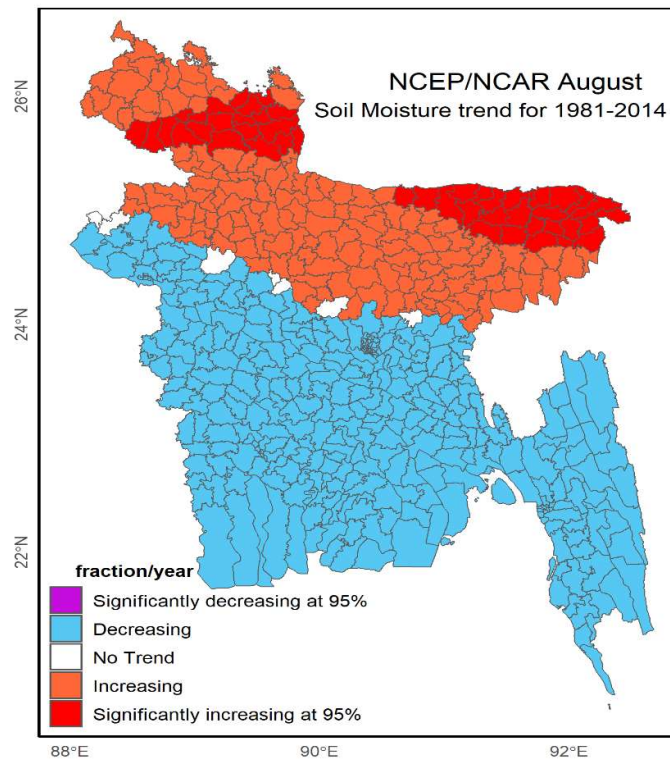
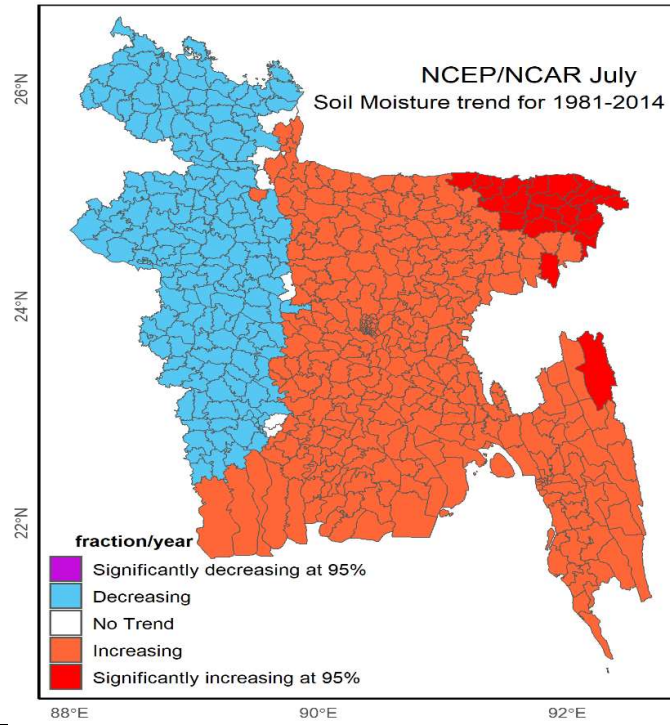


Fig. 3.109: NCEP/NCAR gridded soil moisture (0-10 cm depth) tend analysis for the month of July and August in Bangladesh for 1981-2014.

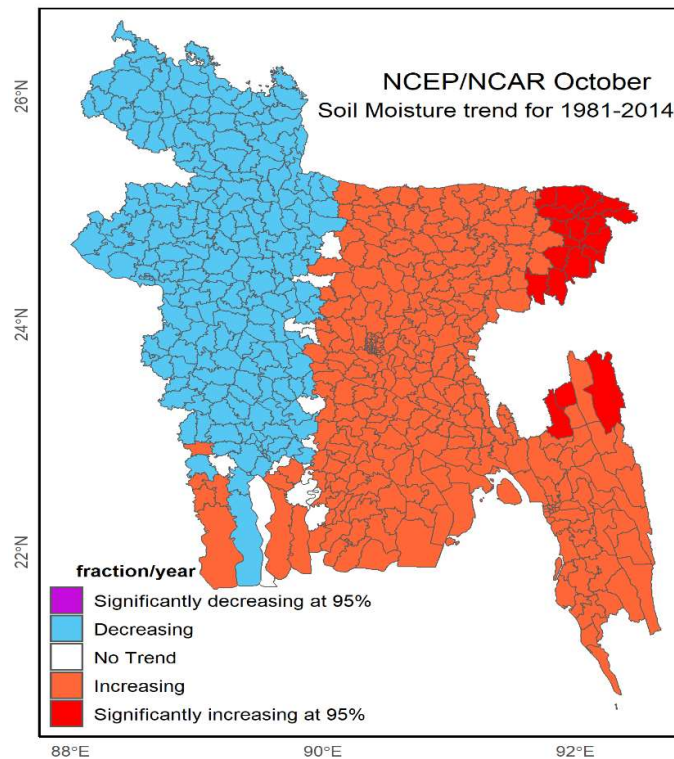
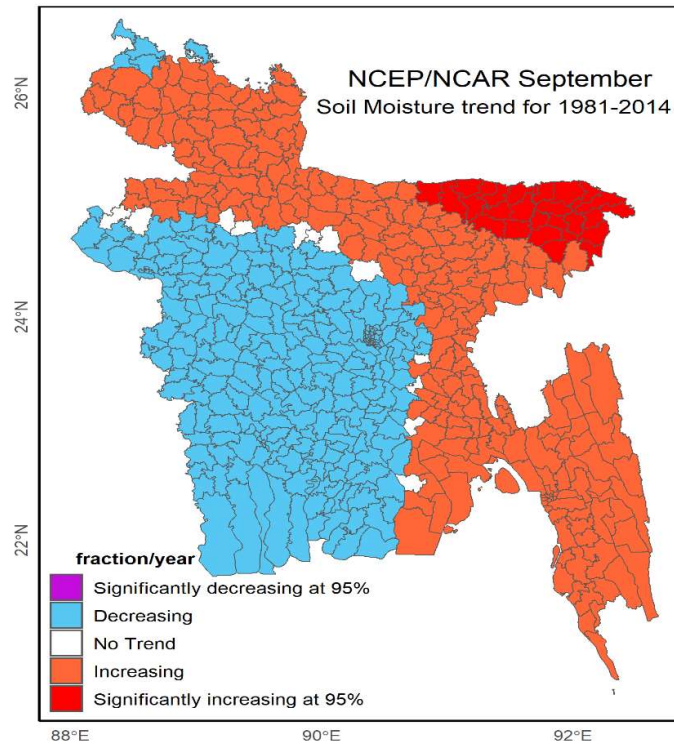


Fig. 3.110: NCEP/NCAR gridded soil moisture (0-10 cm depth) tend analysis for the month of September and October in Bangladesh for 1981-2014.

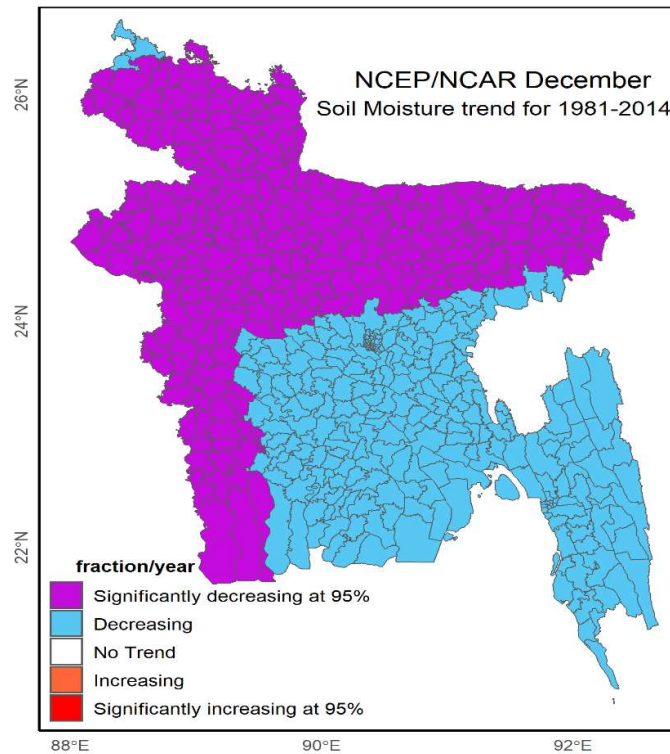
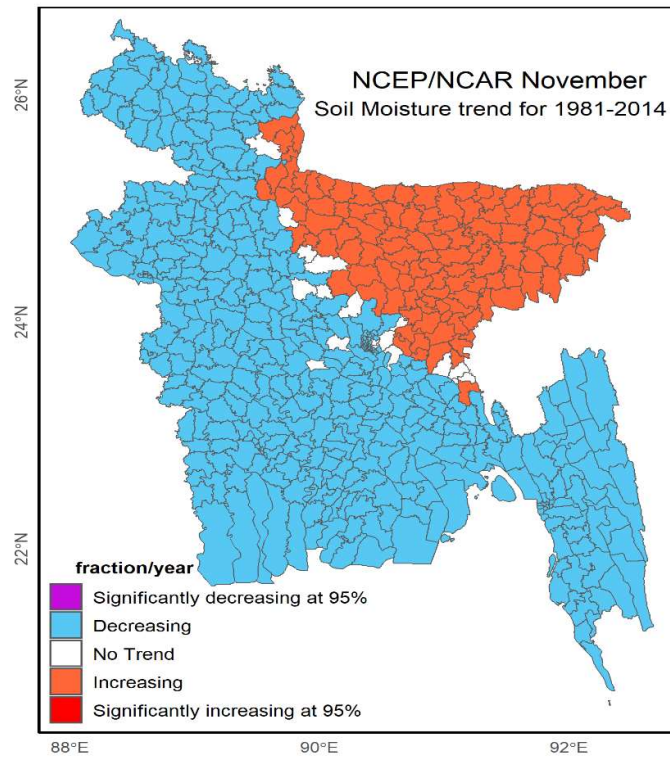


Fig. 3.111: NCEP/NCAR gridded soil moisture (0-10 cm depth) tend analysis for the month of November and December in Bangladesh for 1981-2014.

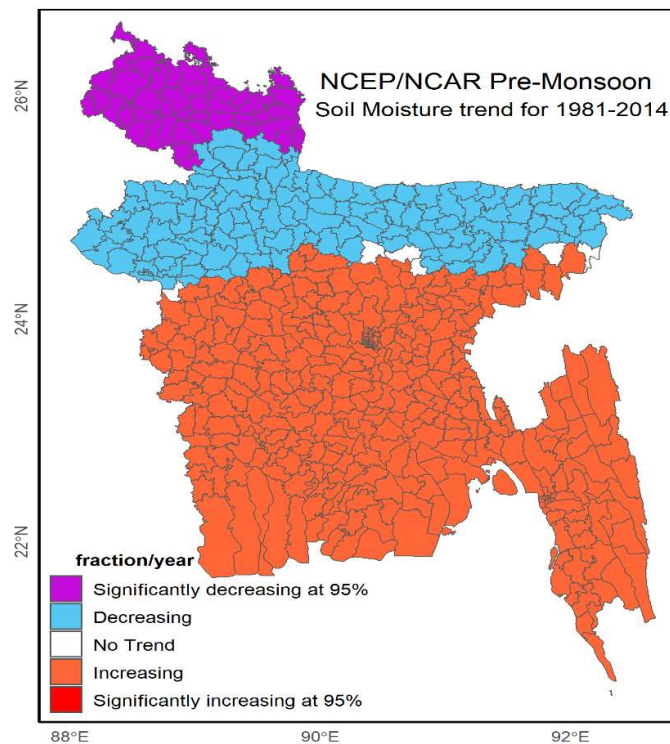
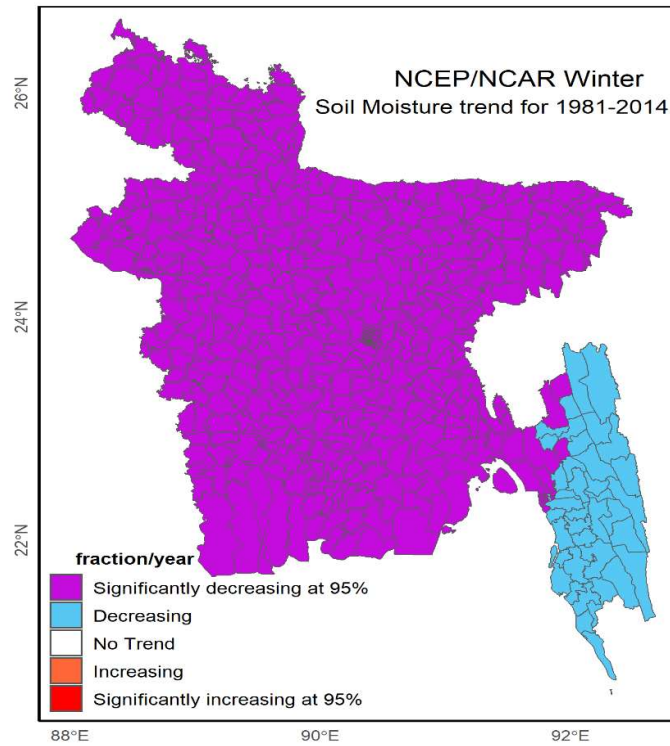


Fig. 3.112: NCEP/NCAR gridded soil moisture (0-10 cm depth) tend analysis for the season of Winter and Pre-monsoon in Bangladesh for 1981-2014.

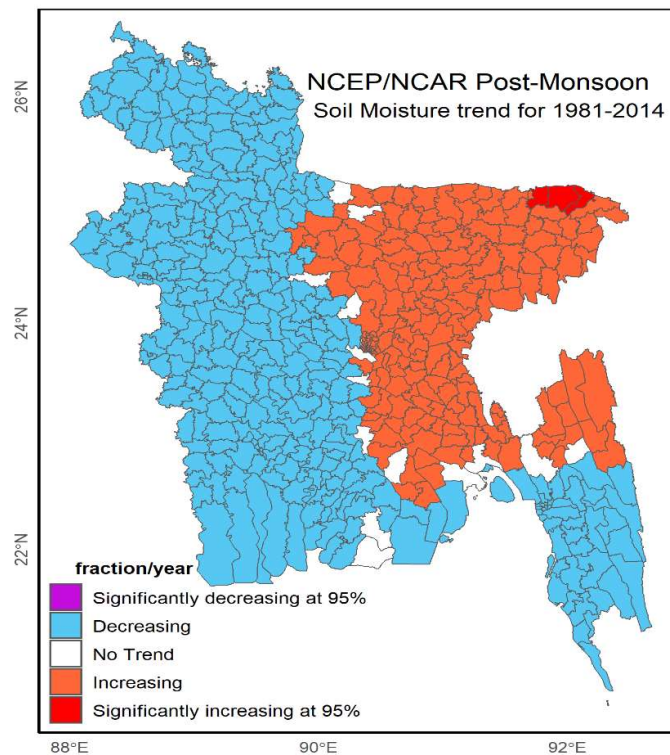
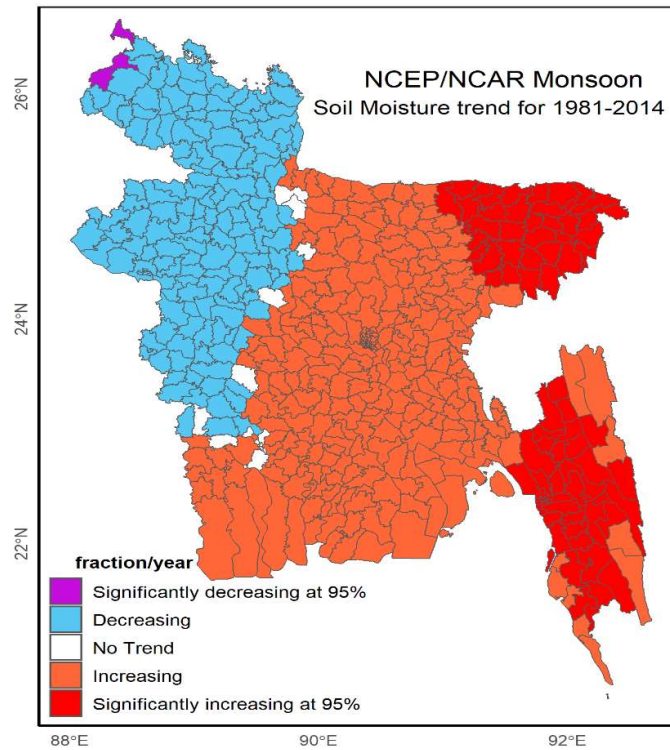


Fig. 3.113: NCEP/NCAR gridded soil moisture (0-10 cm depth) tend analysis for the season of Monsoon and Post-monsoon in Bangladesh for 1981-2014.

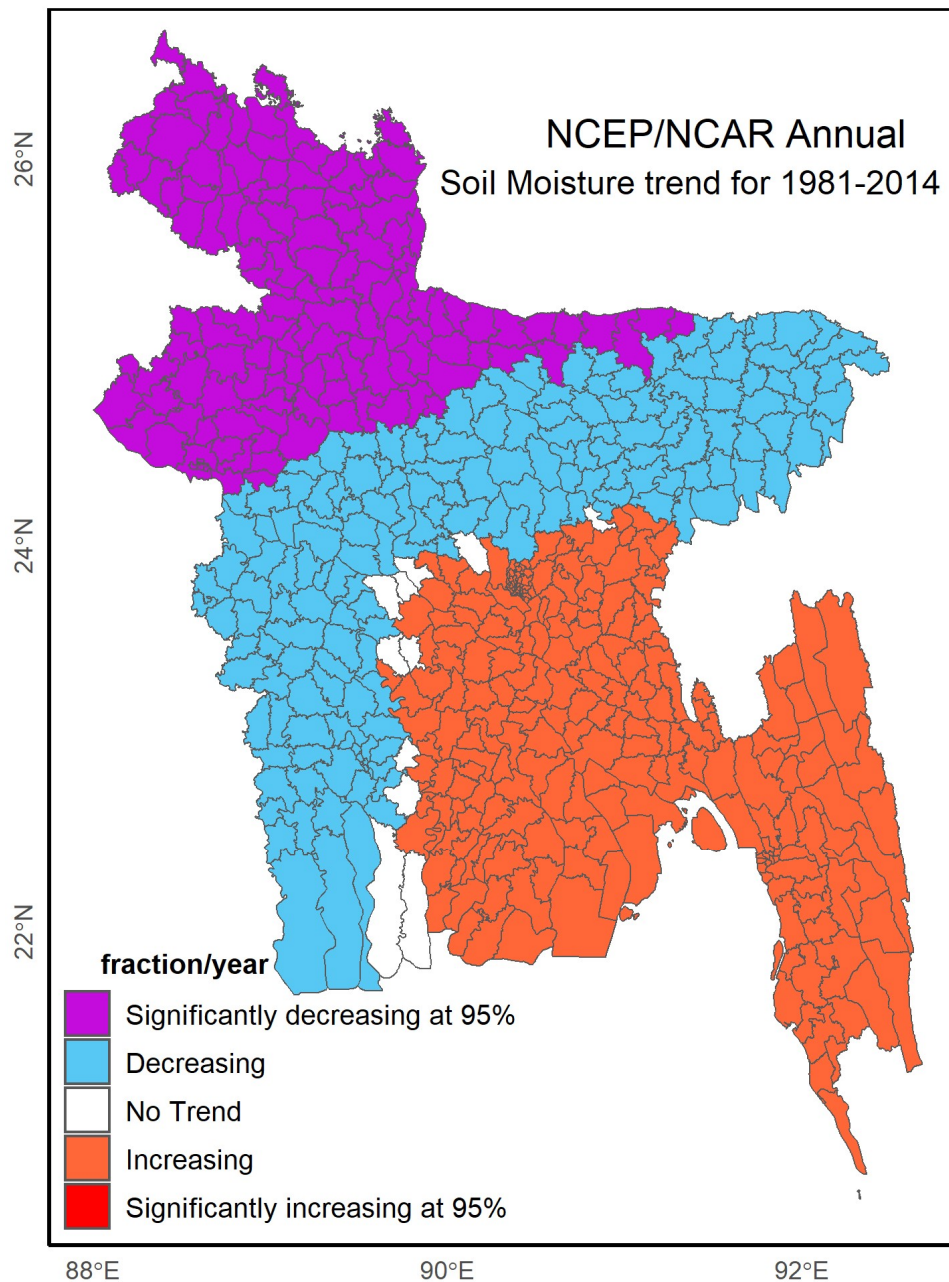


Fig. 3.114: NCEP/NCAR gridded soil moisture (0-10 cm depth) trend analysis for Annual in Bangladesh for 1981-2014.

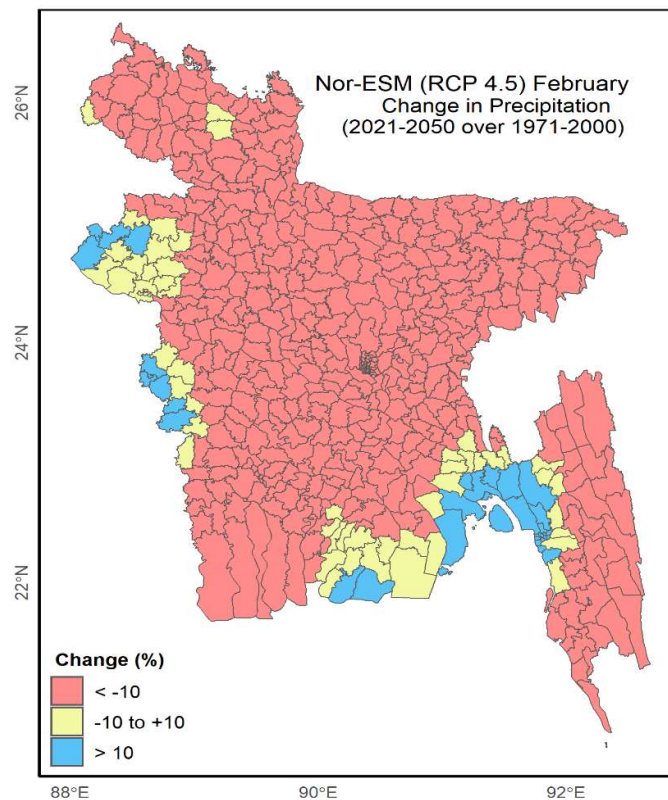
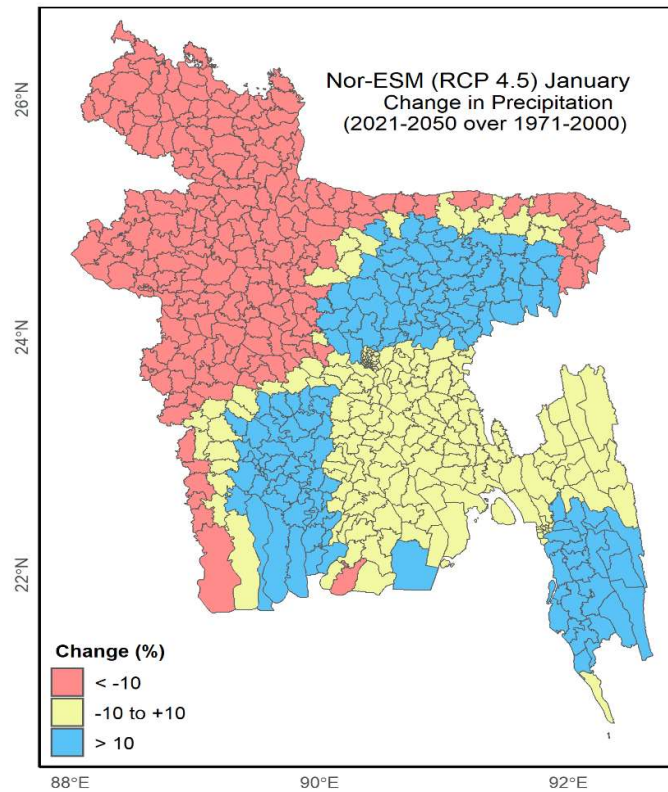


Fig. 4.1: Percentage of change in rainfall projection(RCP4.5) for January and February for the mid- century (2021-2050) in Bangladesh.

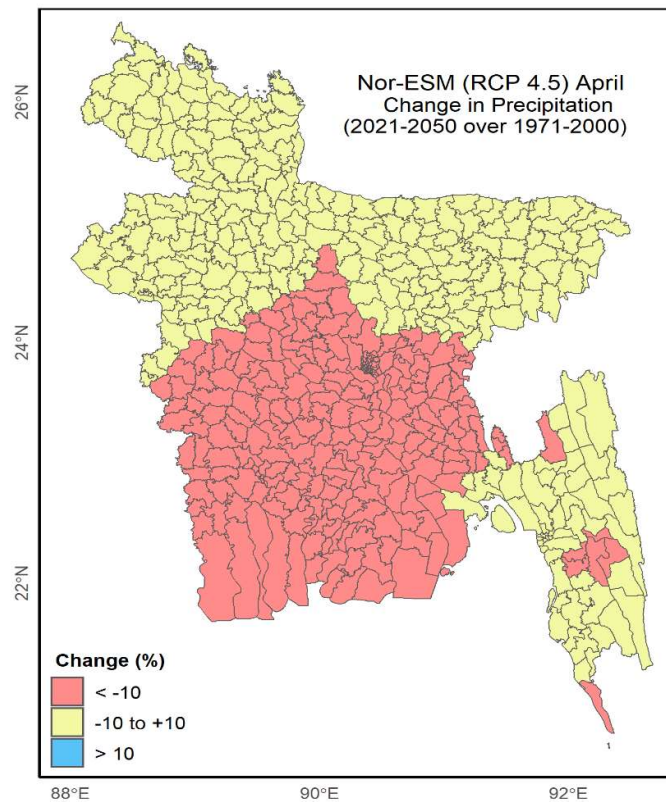
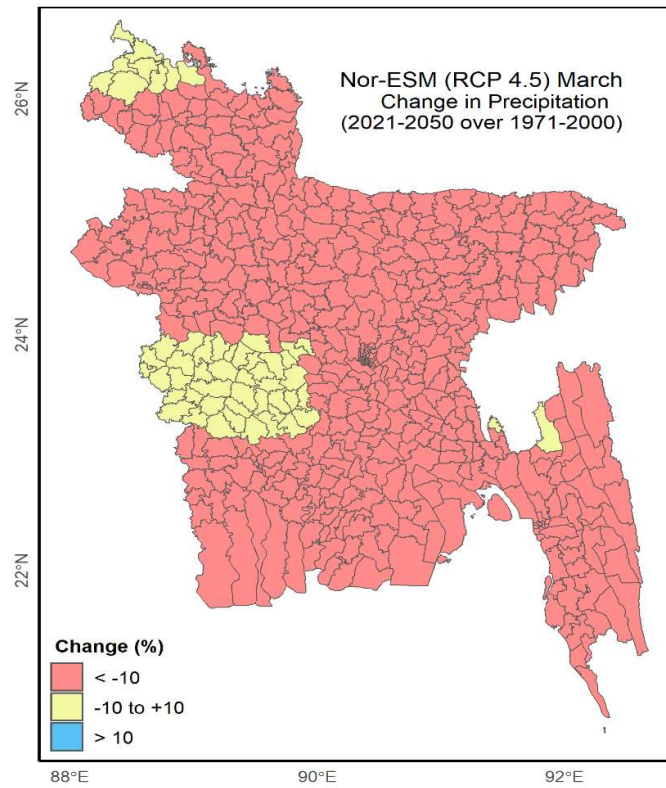


Fig.4.2: Percentage of change in rainfall projection(RCP4.5) for March and April for the mid- century (2021-2050) in Bangladesh.

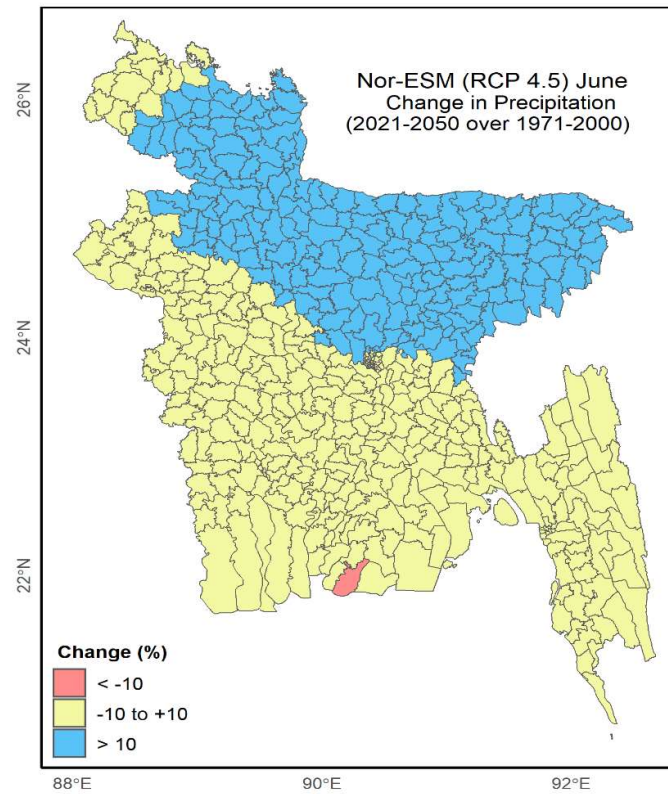
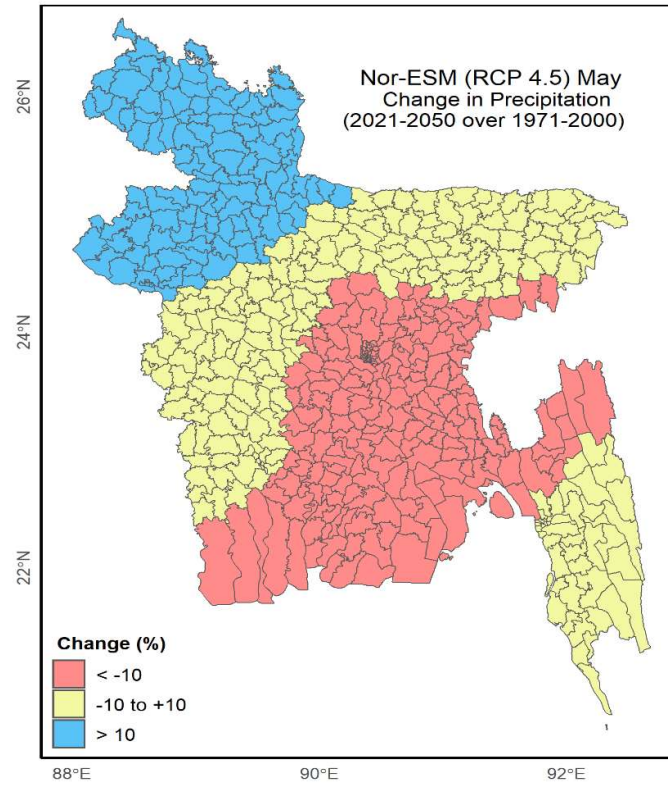


Fig. 4.3: Percentage of change in rainfall projection(RCP4.5) for May and June for the mid- century (2021-2050) in Bangladesh.

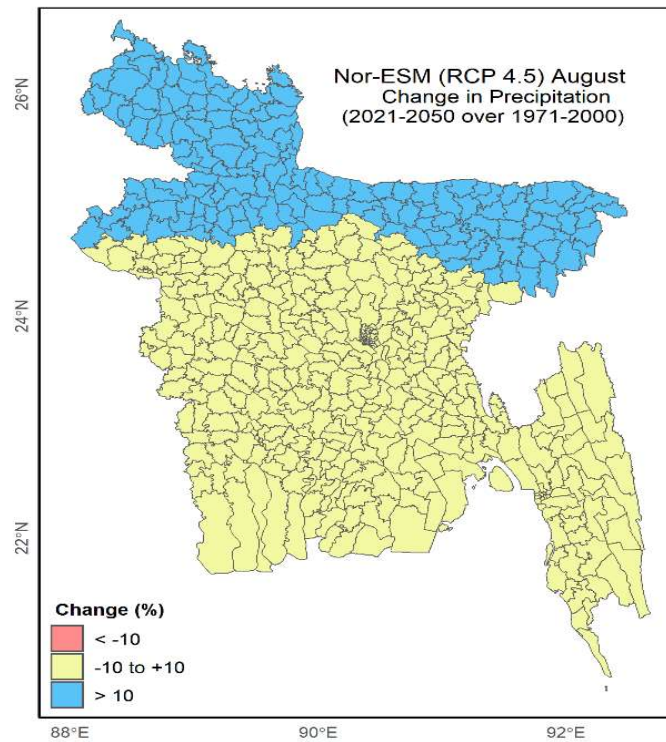
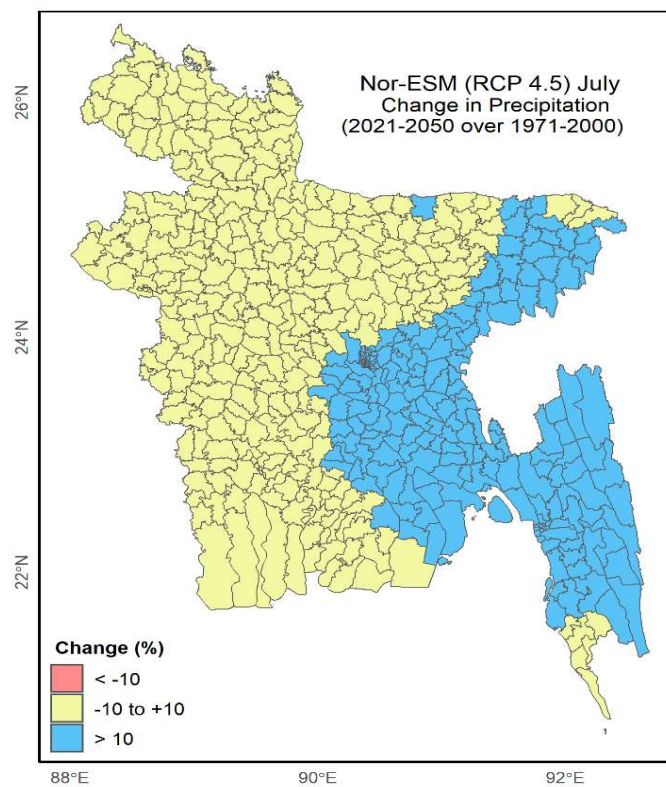


Fig. 4.4: Percentage of change in rainfall projection(RCP4.5) for July and August for the mid- century (2021-2050) in Bangladesh.

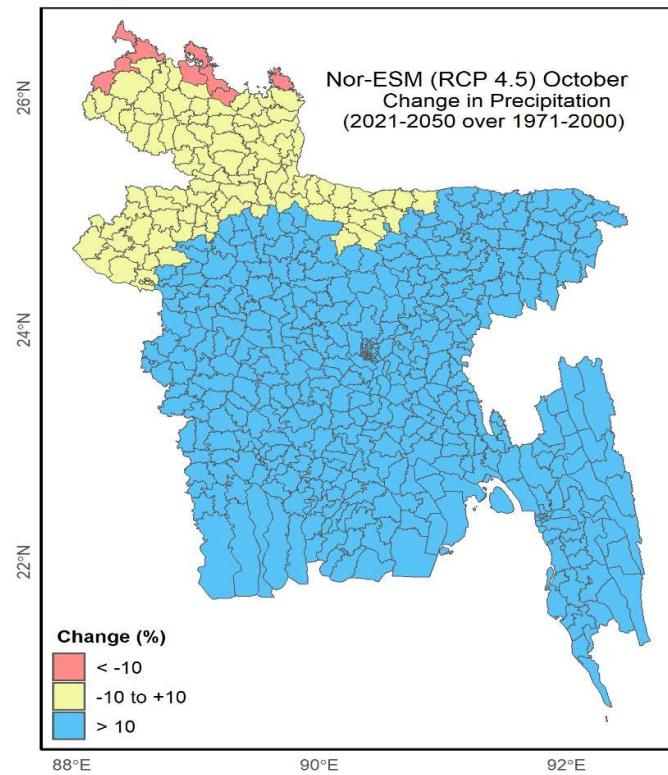
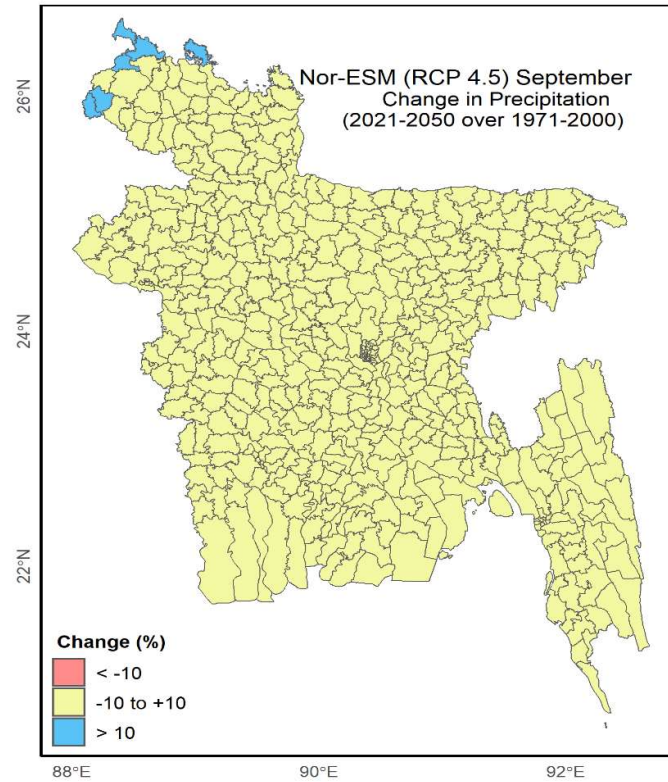


Fig. 4.5: Percentage of change in rainfall projection(RCP4.5) for September and October for the mid- century (2021-2050) in Bangladesh.

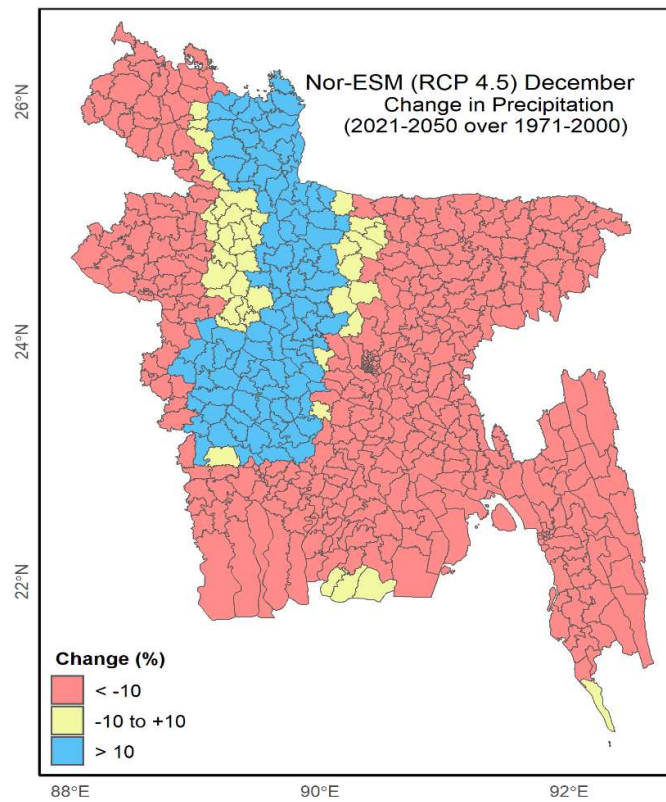
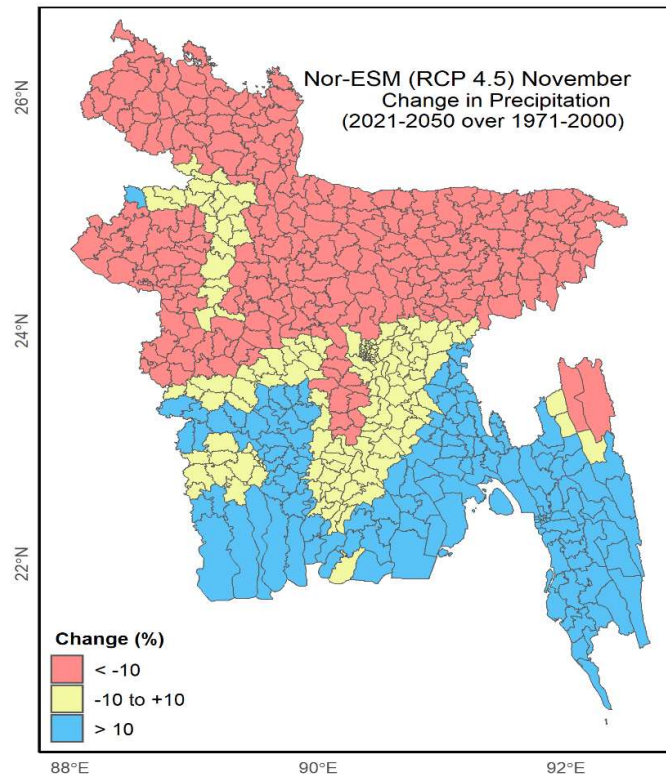


Fig. 4.6: Percentage of change in rainfall projection(RCP4.5) for November and December for the mid- century (2021-2050) in Bangladesh.

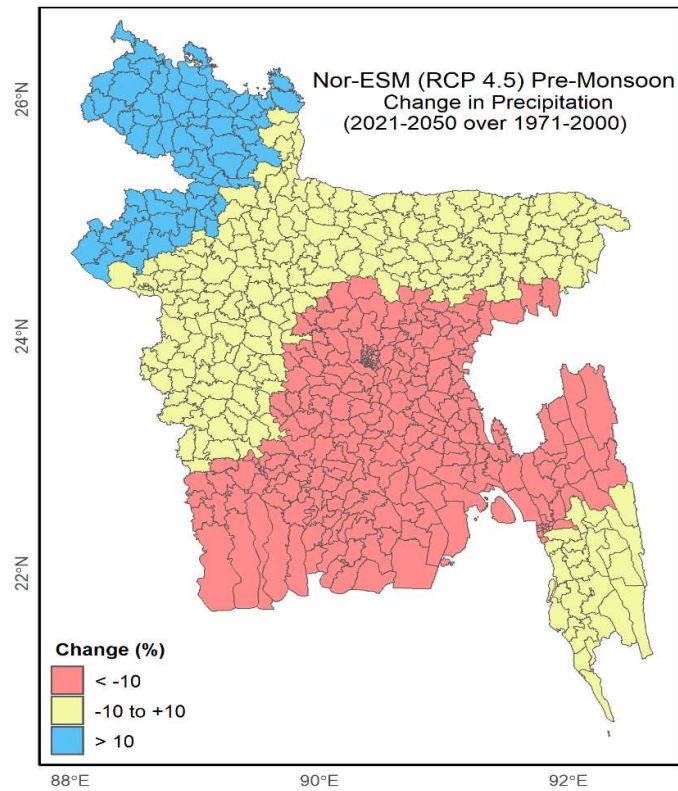
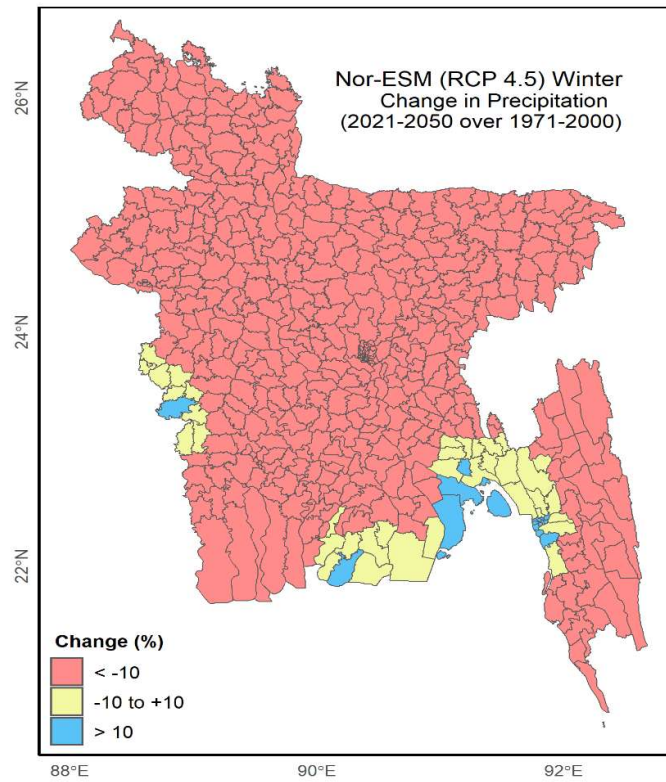


Fig. 4.7: Percentage of change in rainfall projection(RCP4.5) for Winter and Pre-monsoon season for the mid- century (2021-2050) in Bangladesh.

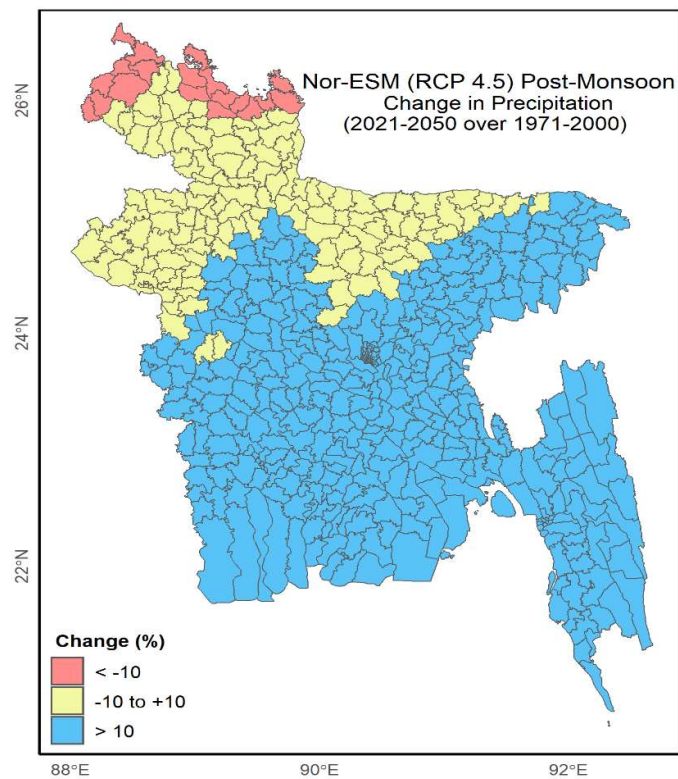
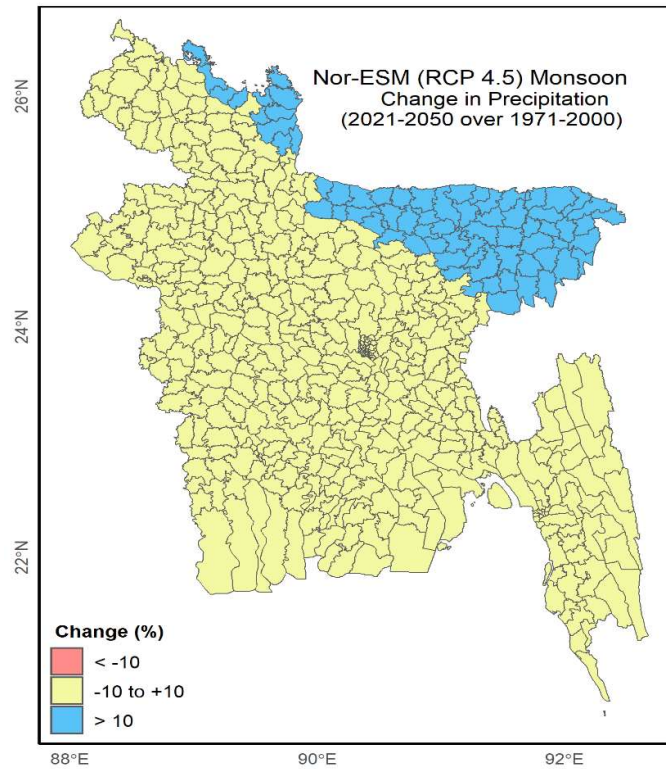


Fig. 4.8: Percentage of change in rainfall projection(RCP4.5) for Monsoon and Post-monsoon season for the mid- century (2021-2050) in Bangladesh.

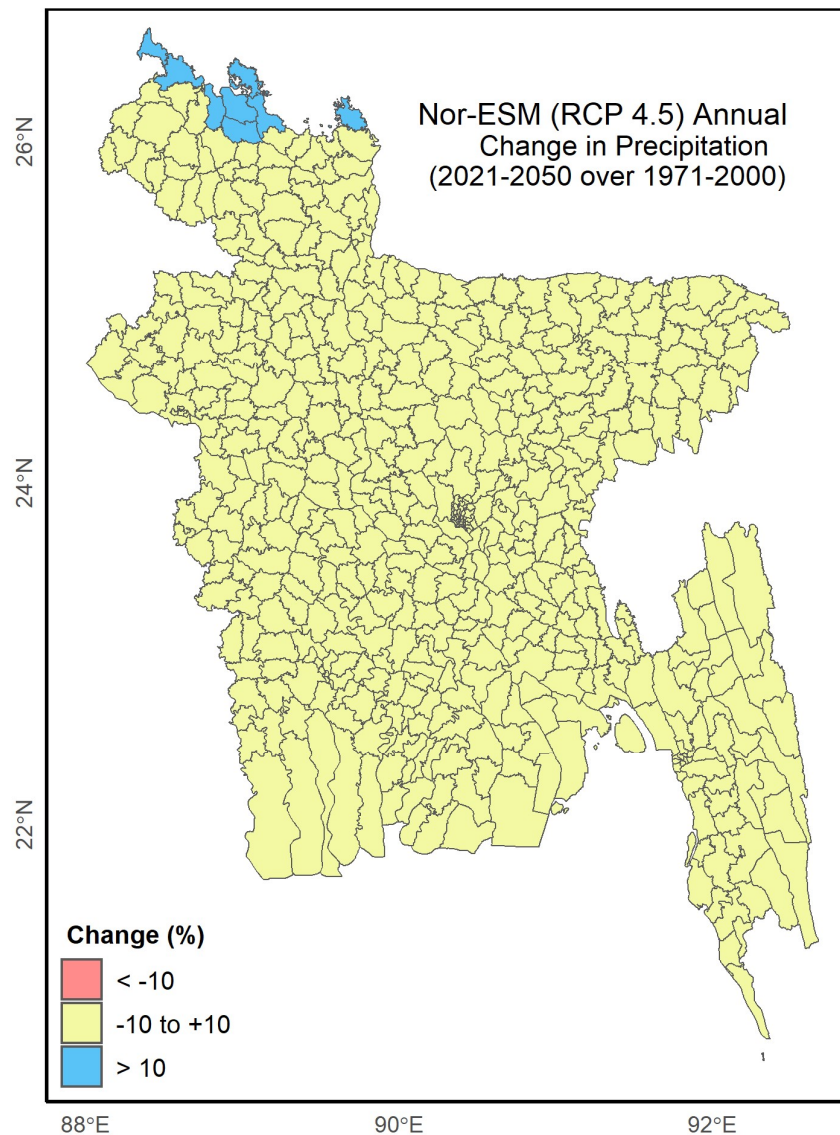


Fig. 4.9: Percentage of change in rainfall projection(RCP4.5) for Annual for the mid- century (2021-2050) in Bangladesh.

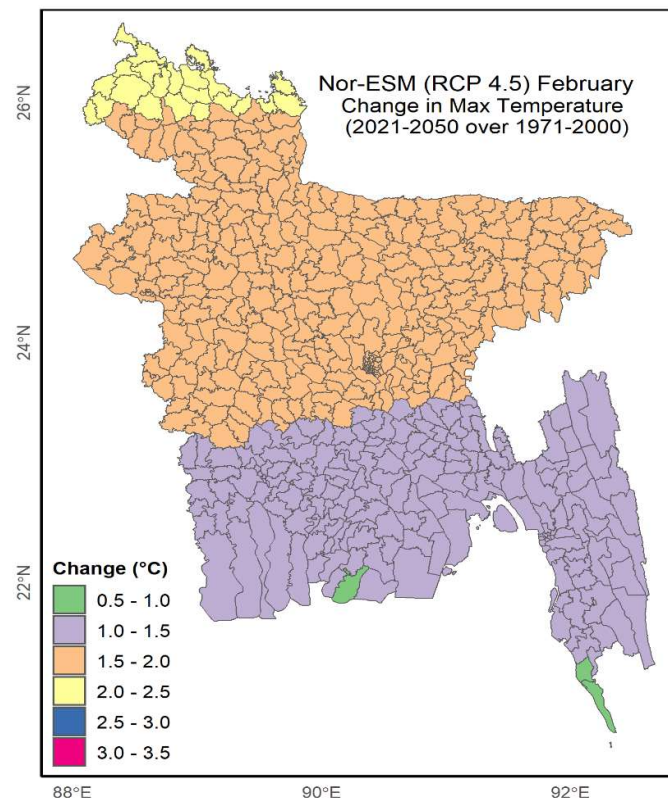
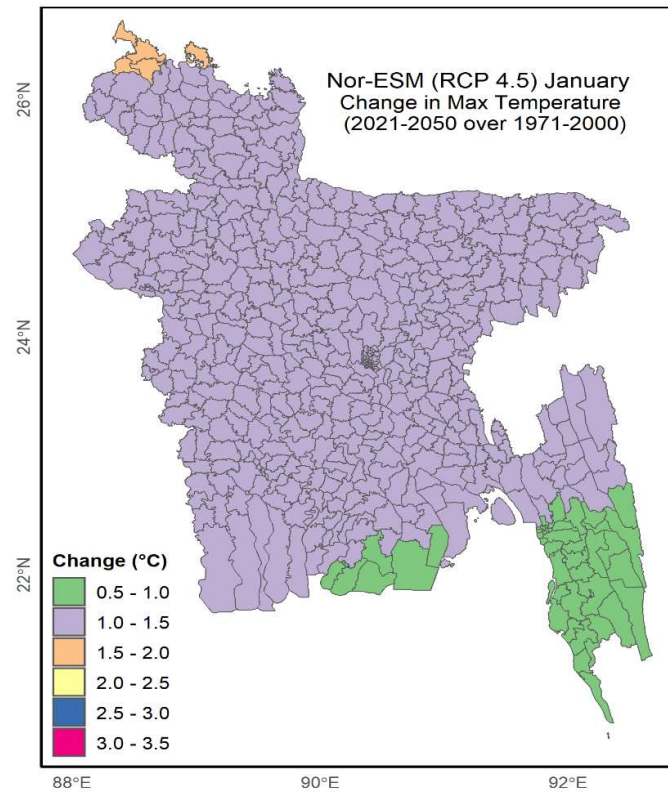


Fig. 4.10: Maximum temperature change projection(RCP4.5) in degree for January and February for the mid-century (2021-2050) in Bangladesh.

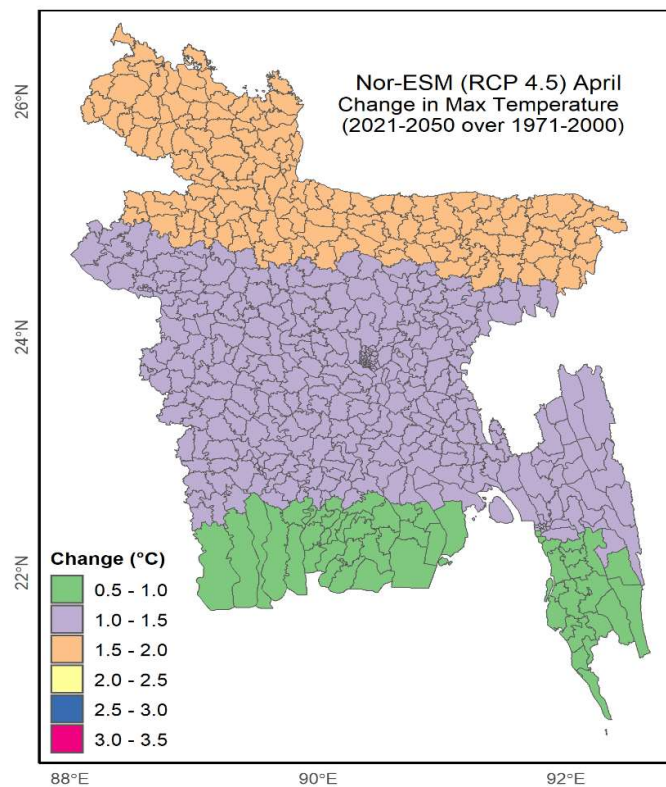
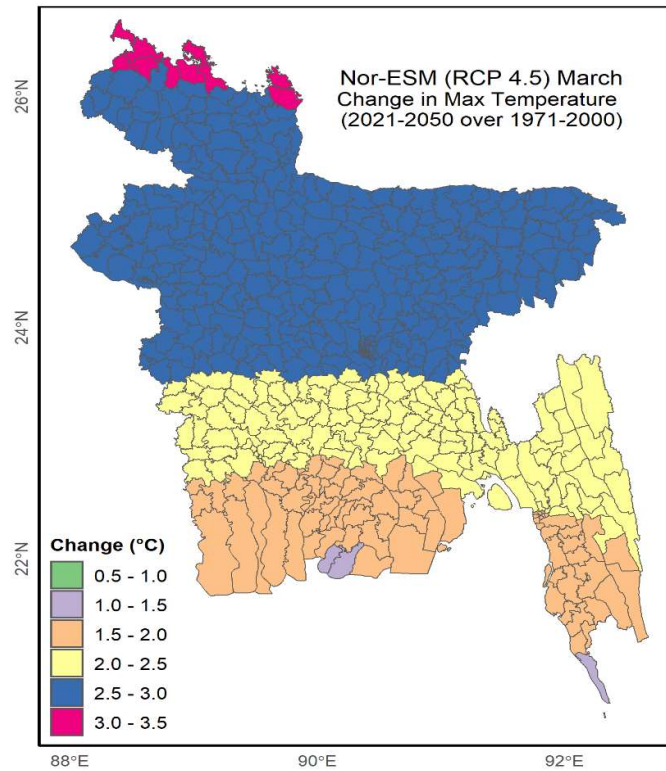


Fig. 4.11: Maximum temperature change projection(RCP4.5) in degree for March and April for the mid-century (2021-2050) in Bangladesh.

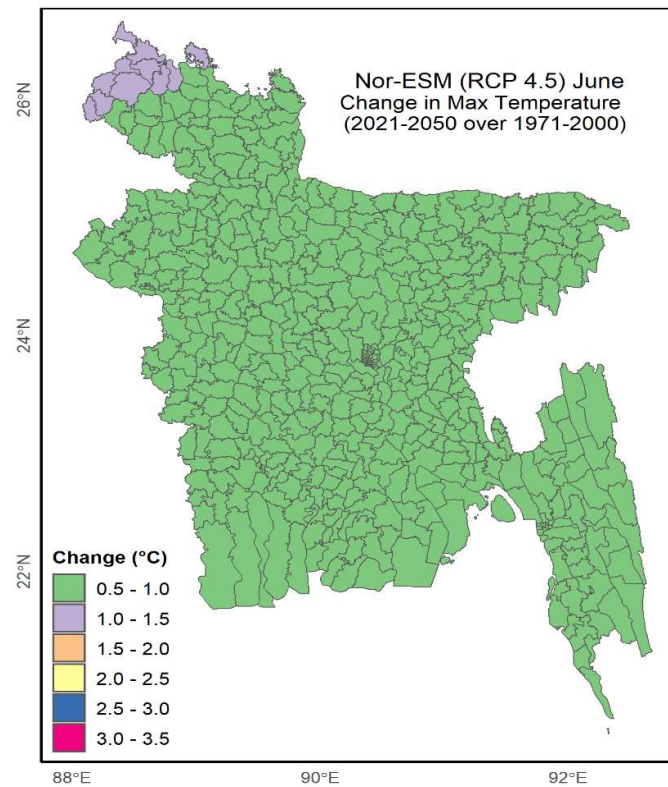
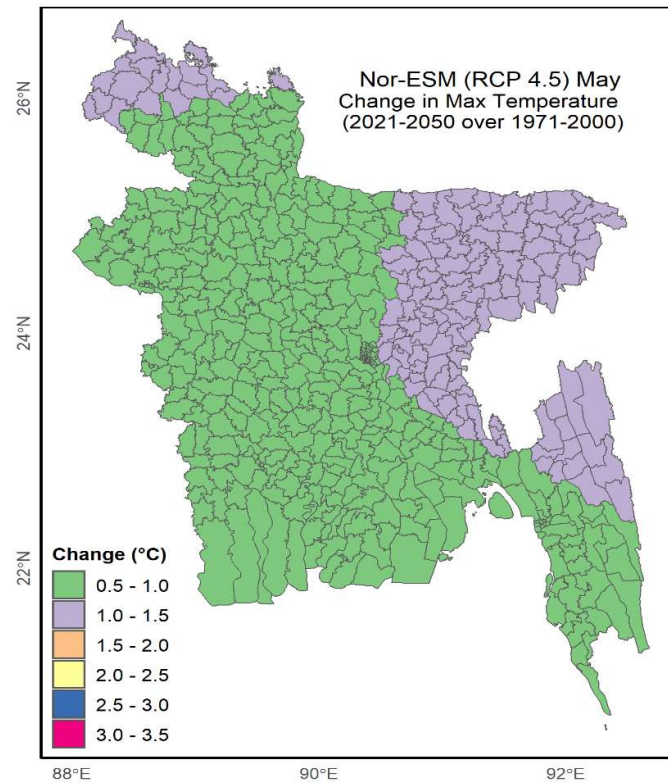


Fig. 4.12: Maximum temperature change projection(RCP4.5) in degree for May and June for the mid-century (2021-2050) in Bangladesh.

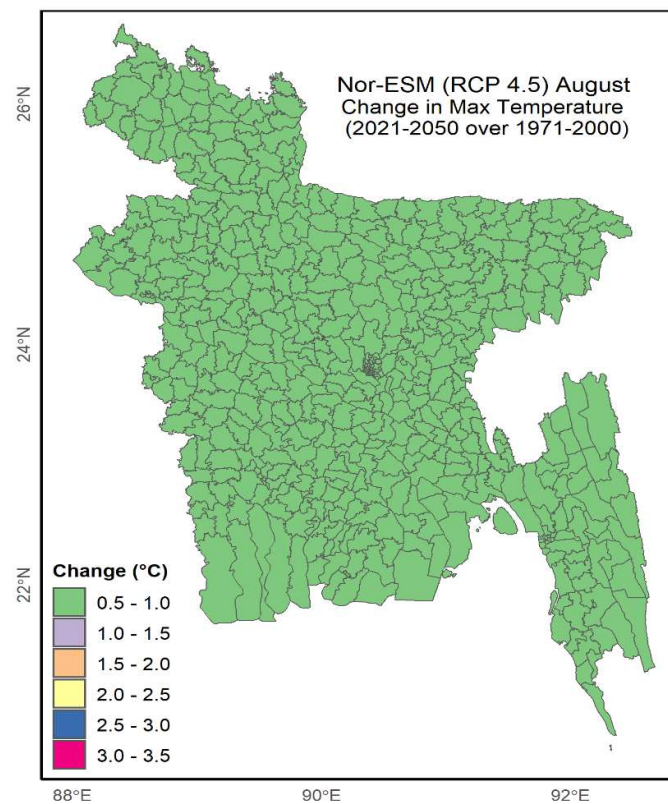
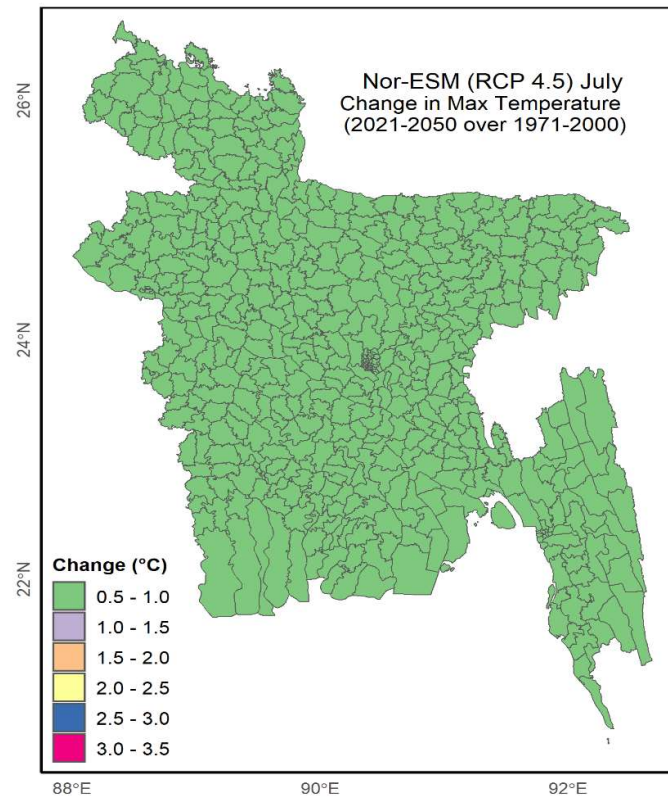


Fig. 4.13: Maximum temperature change projection(RCP4.5) in degree for July and August for the mid-century (2021-2050) in Bangladesh.

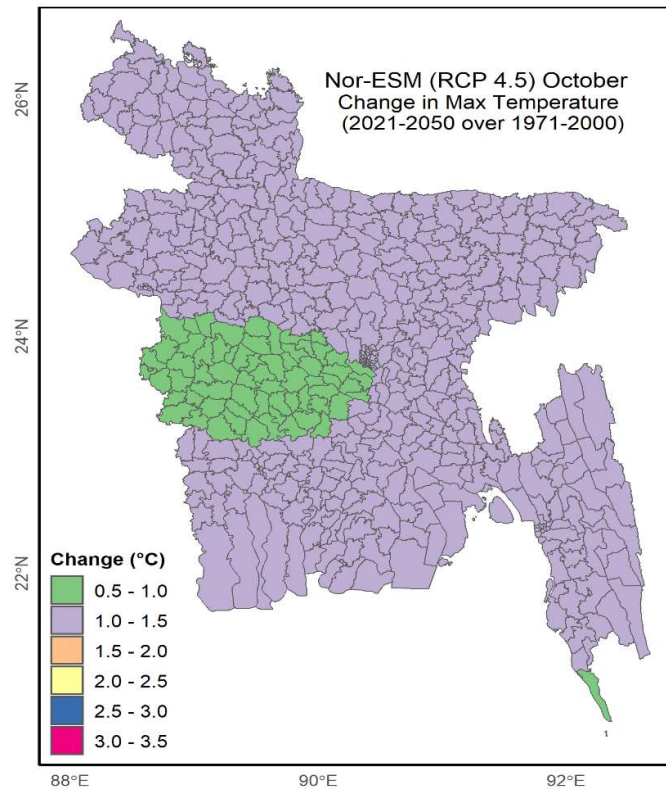
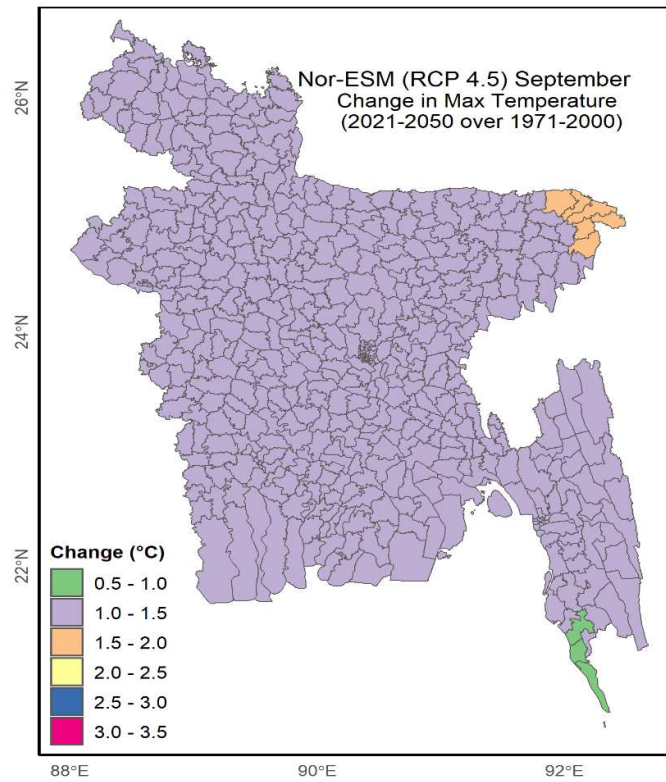


Fig. 4.14: Maximum temperature change projection(RCP4.5) in degree for September and October for the mid-century (2021-2050) in Bangladesh.

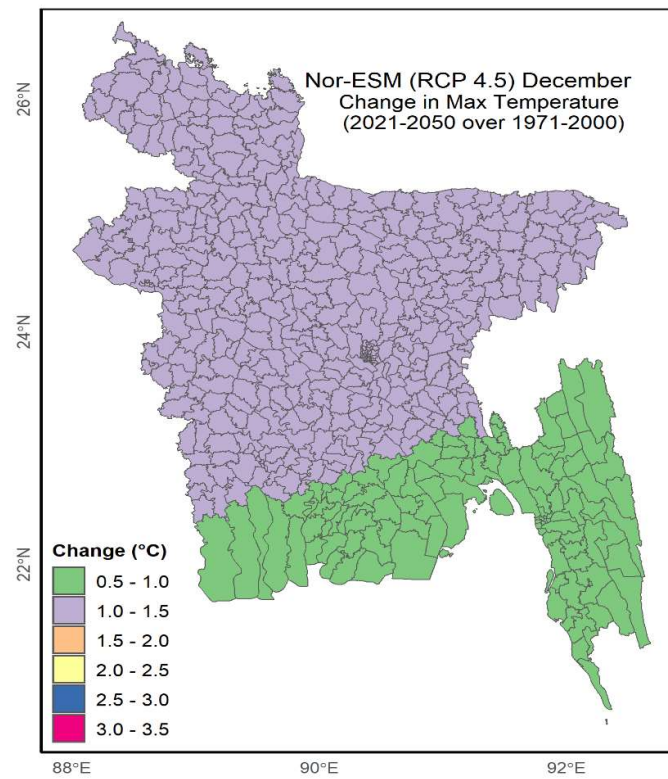
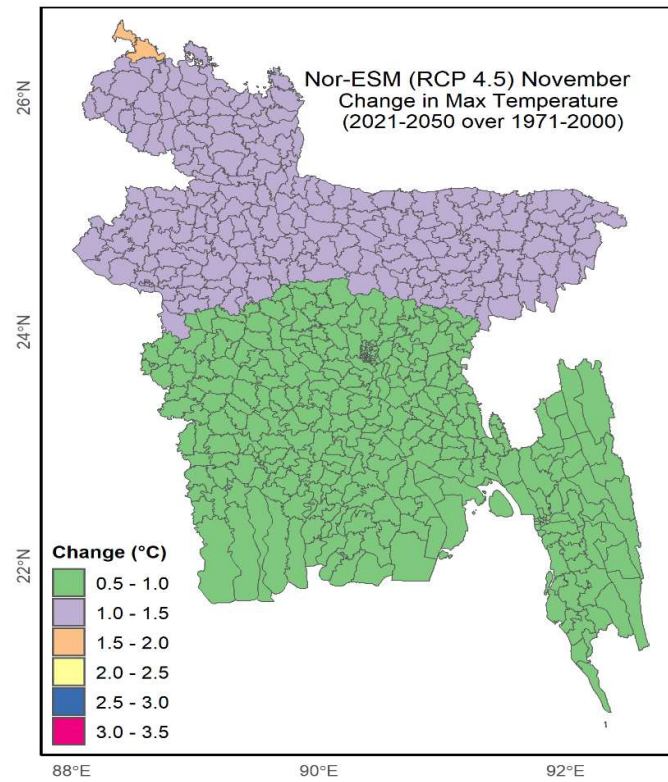


Fig.4.15: Maximum temperature change projection(RCP4.5) in degree for November and December for the mid-century (2021-2050) in Bangladesh.

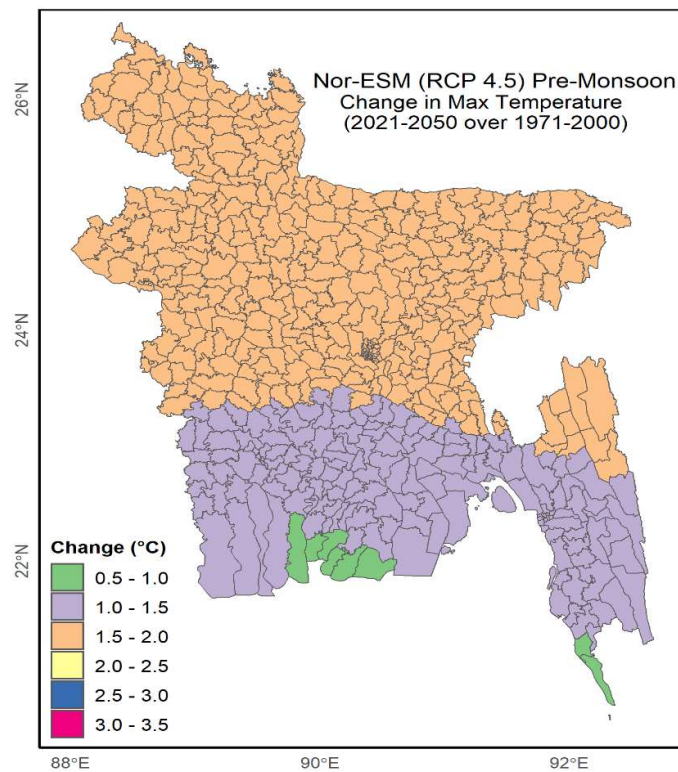
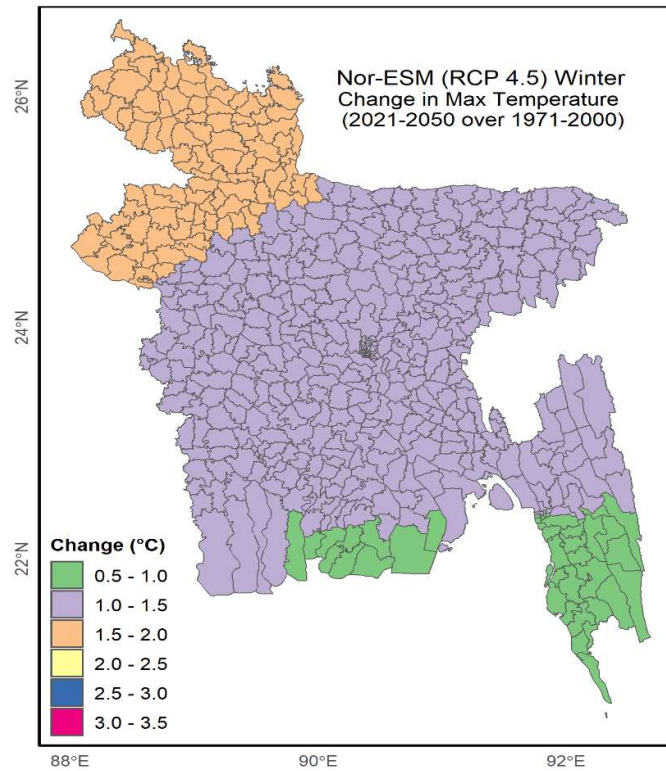


Fig. 4.16: Maximum temperature change projection(RCP4.5) in degree for Winter and Pre-monsoon season for the mid-century (2021-2050) in Bangladesh.

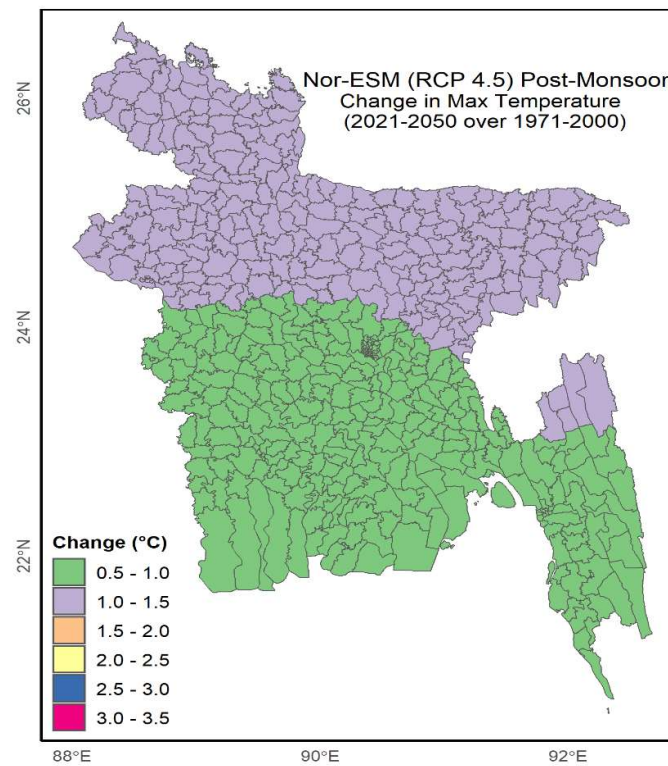
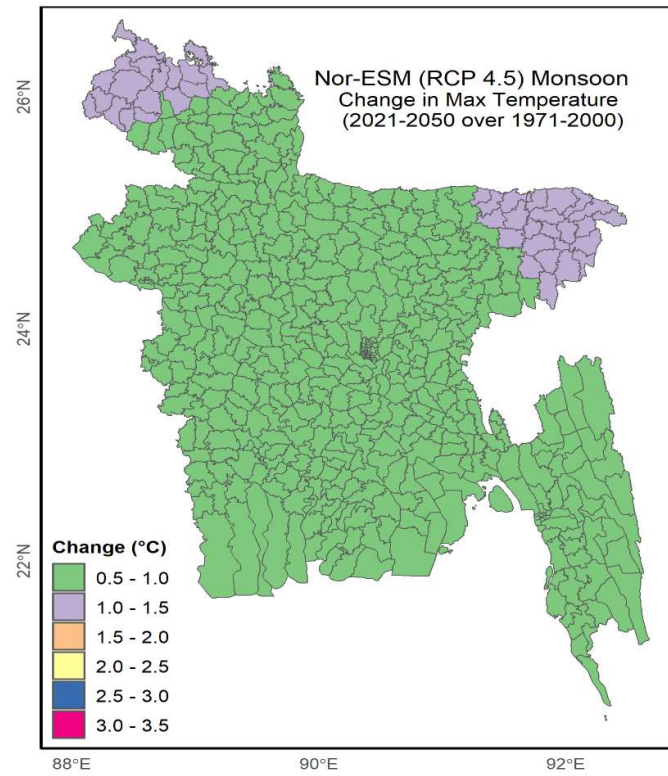


Fig. 4.17: Maximum temperature change projection(RCP4.5) in degree for Monsoon and Post-monsoon season for the mid-century (2021-2050) in Bangladesh.

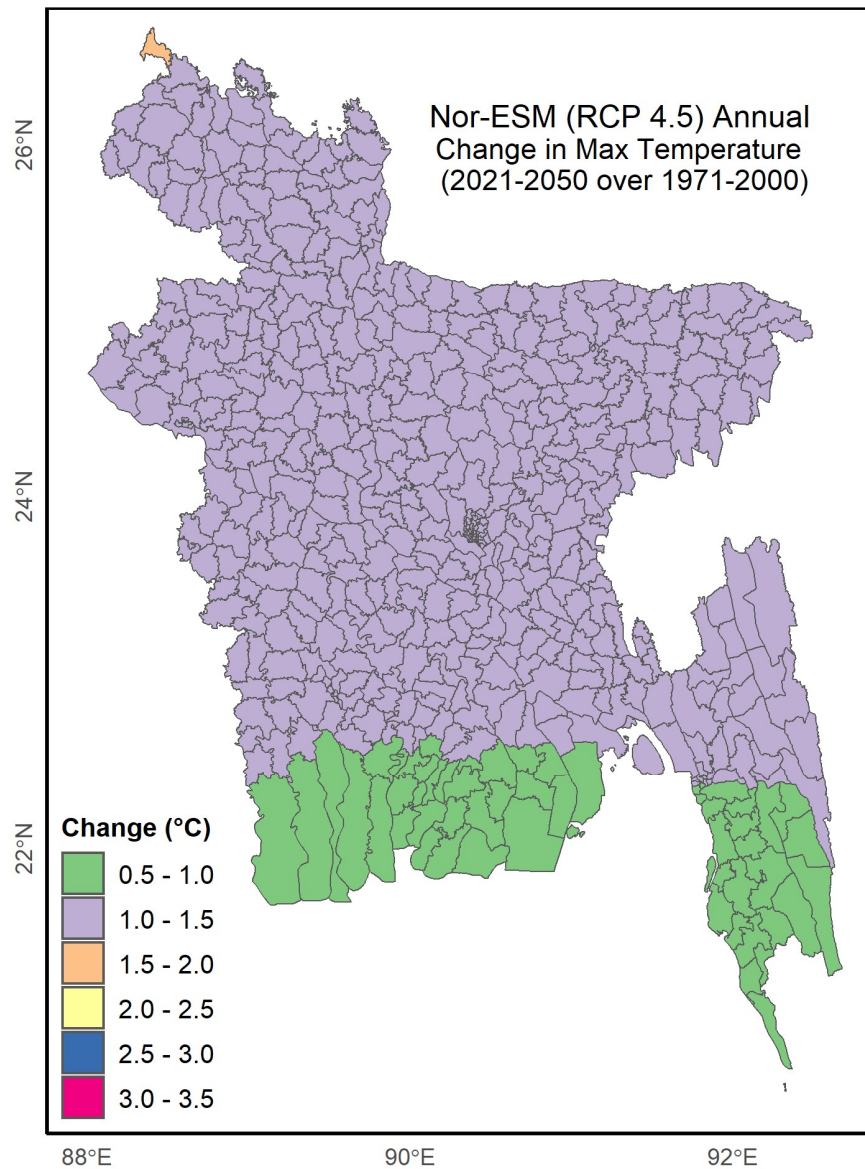


Fig. 4.18: Maximum temperature change projection(RCP4.5) in degree for Annual for the mid-century (2021-2050) in Bangladesh.

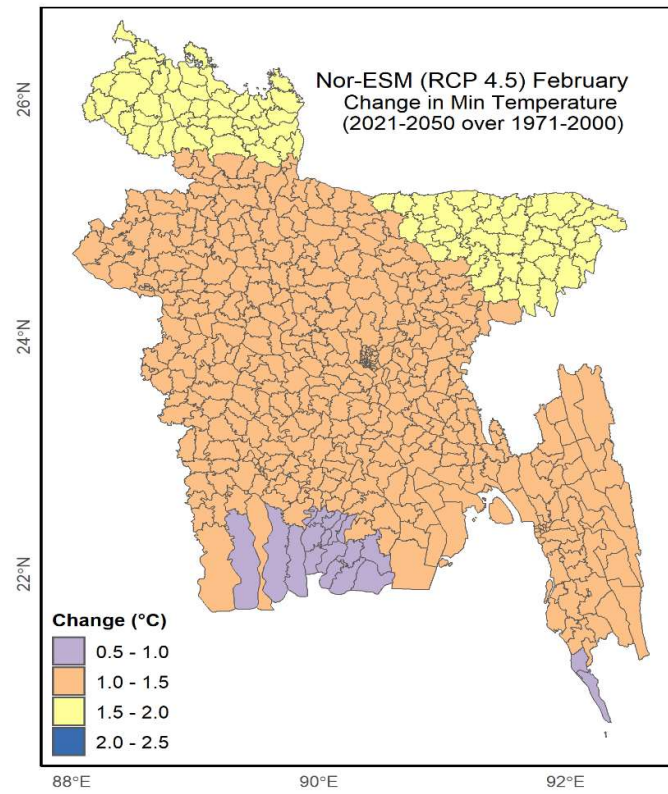
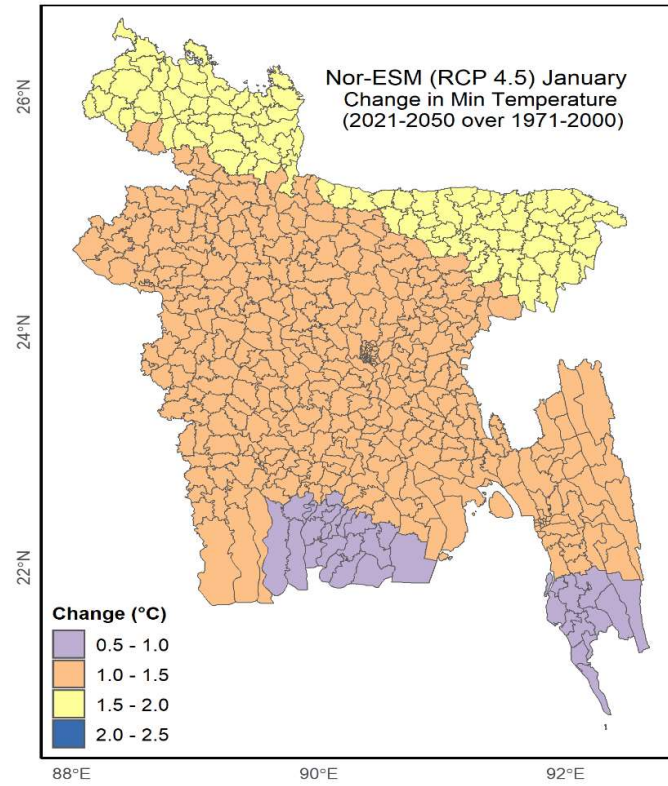


Fig. 4.19: Minimum temperature change projection(RCP4.5) in degree for January and February for the mid-century (2021-2050) in Bangladesh.

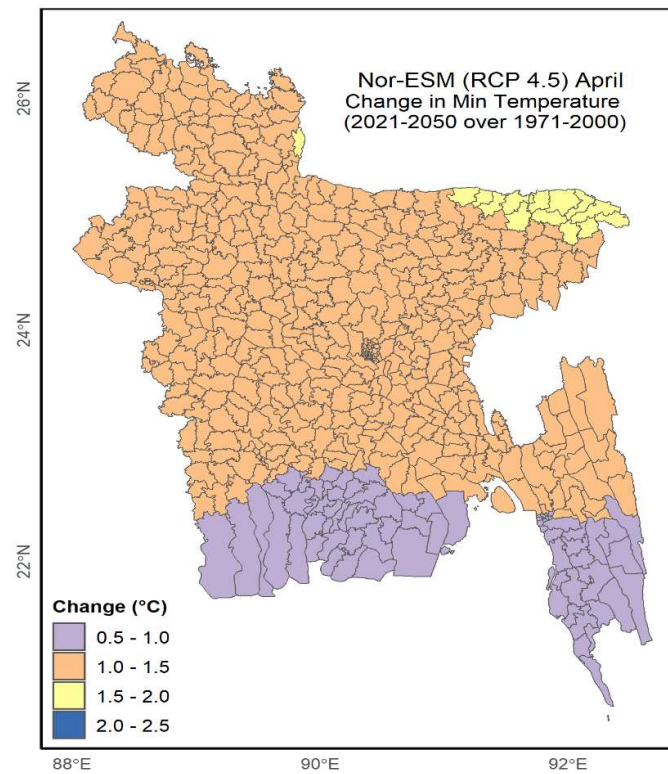
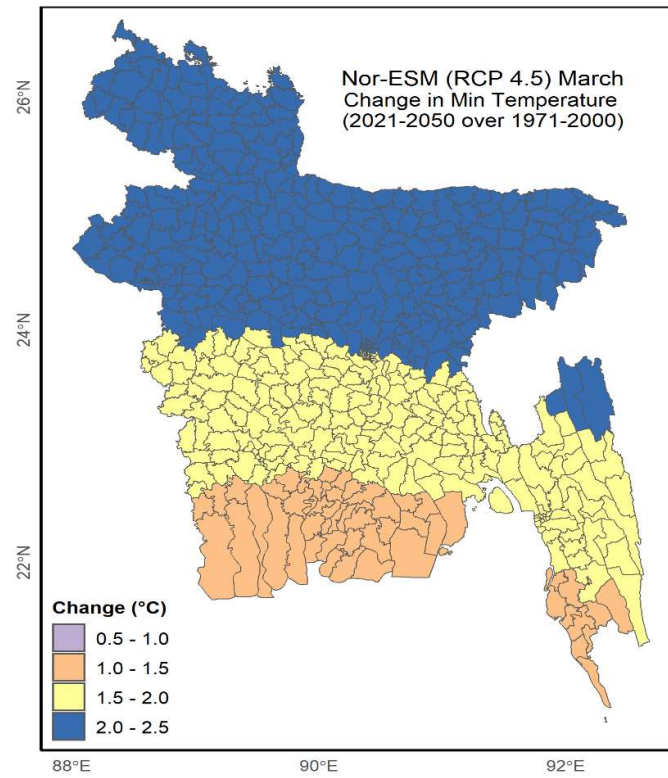


Fig. 4.20: Minimum temperature change projection(RCP4.5) in degree for March and April for the mid-century (2021-2050) in Bangladesh.

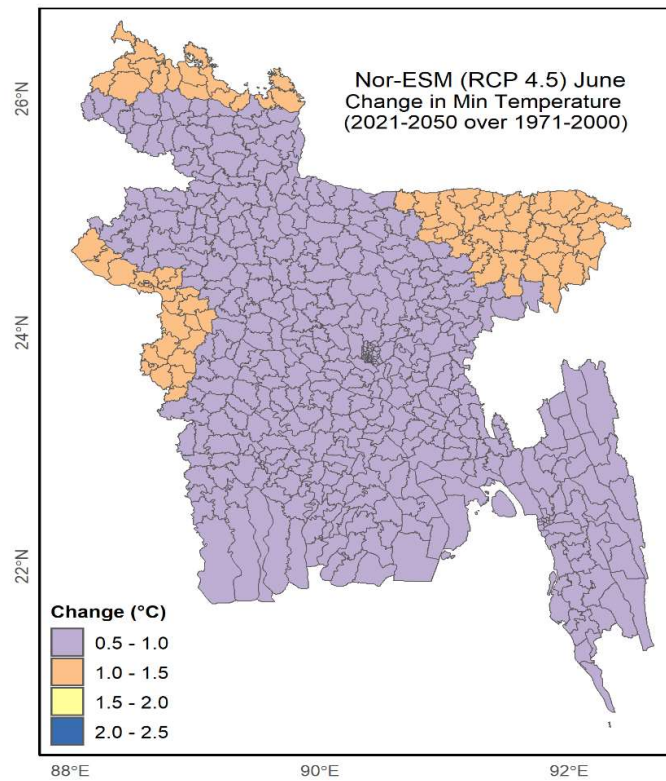
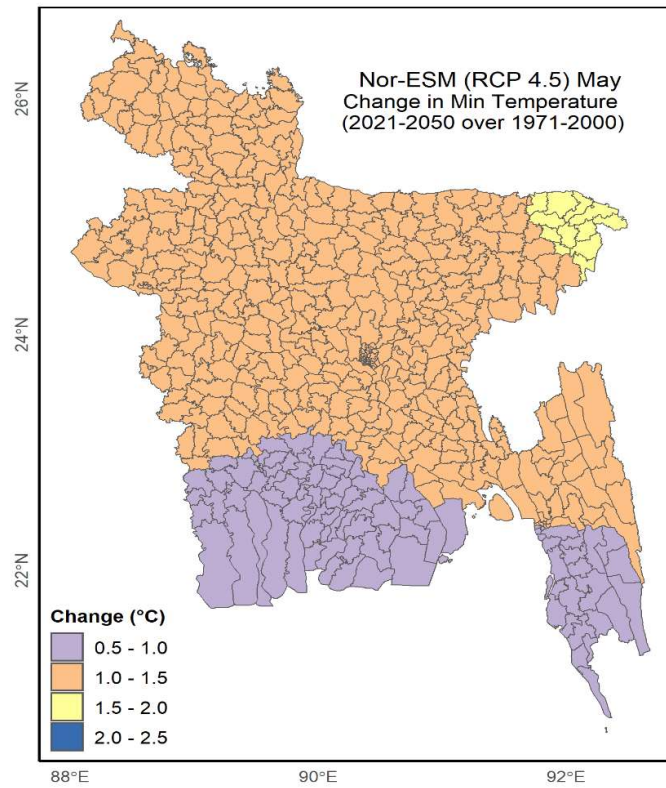


Fig. 4.21: Minimum temperature change projection(RCP4.5) in degree for May and June for the mid-century (2021-2050) in Bangladesh.

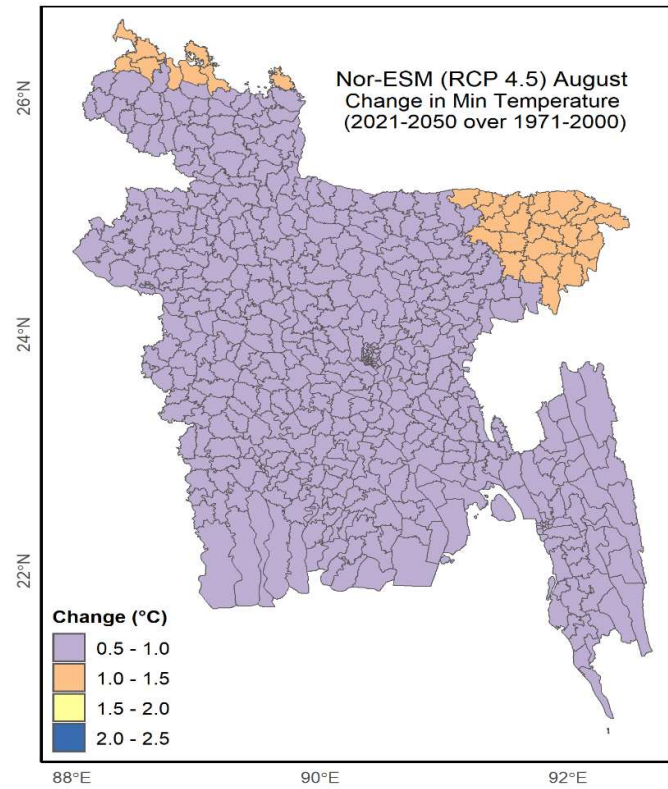
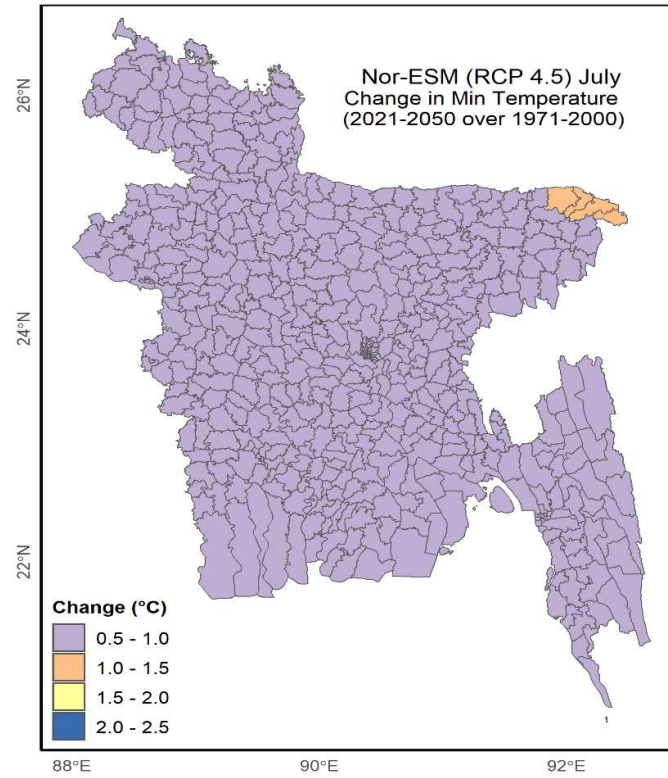


Fig. 4.22: Minimum temperature change projection(RCP4.5) in degree for July and August for the mid-century (2021-2050) in Bangladesh.

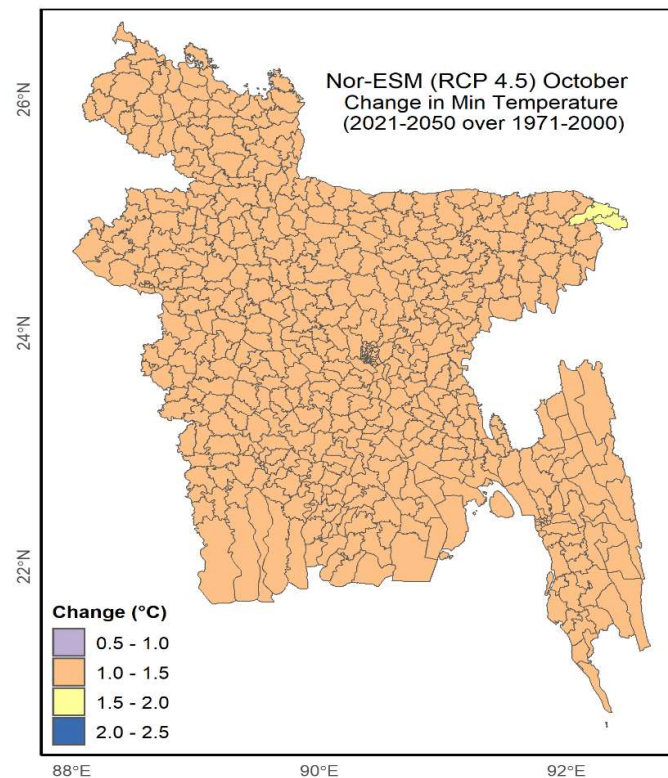
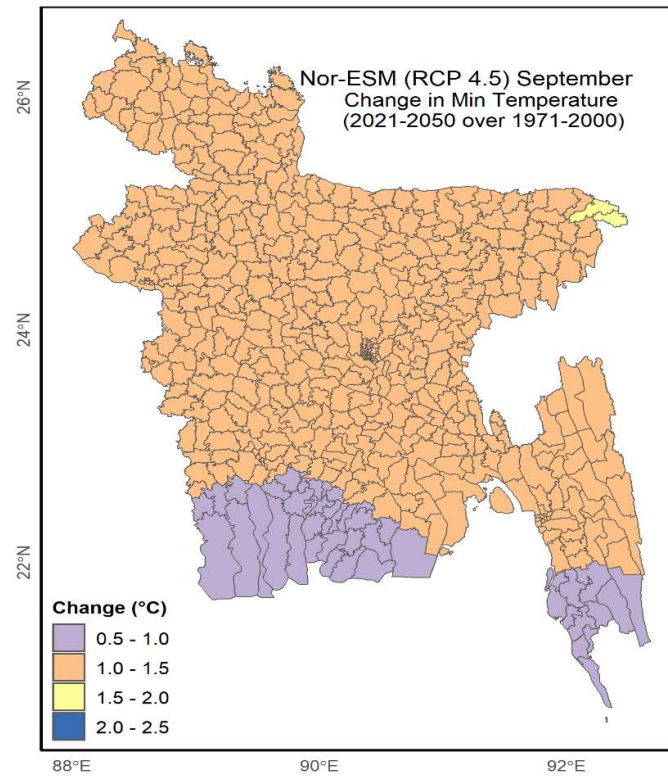


Fig. 4.23: Minimum temperature change projection(RCP4.5) in degree for September and October for the mid-century (2021-2050) in Bangladesh.

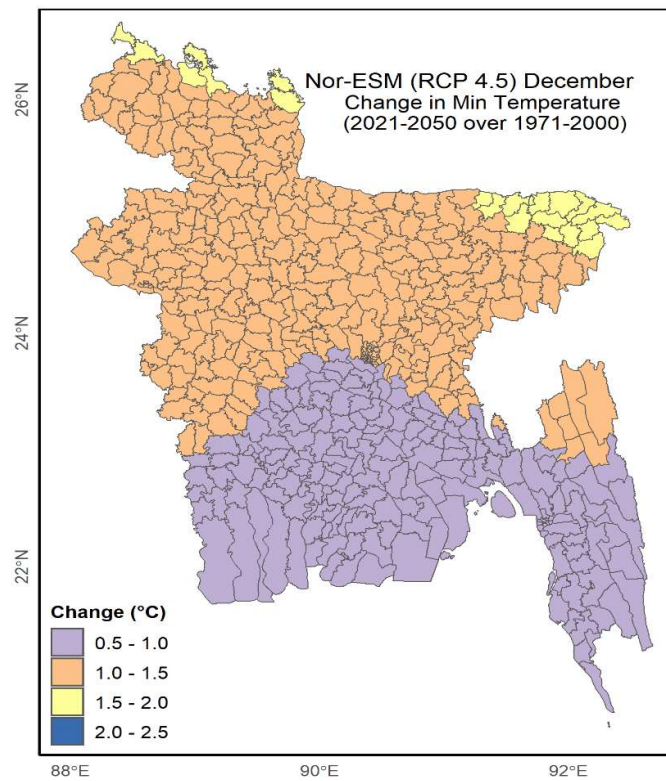
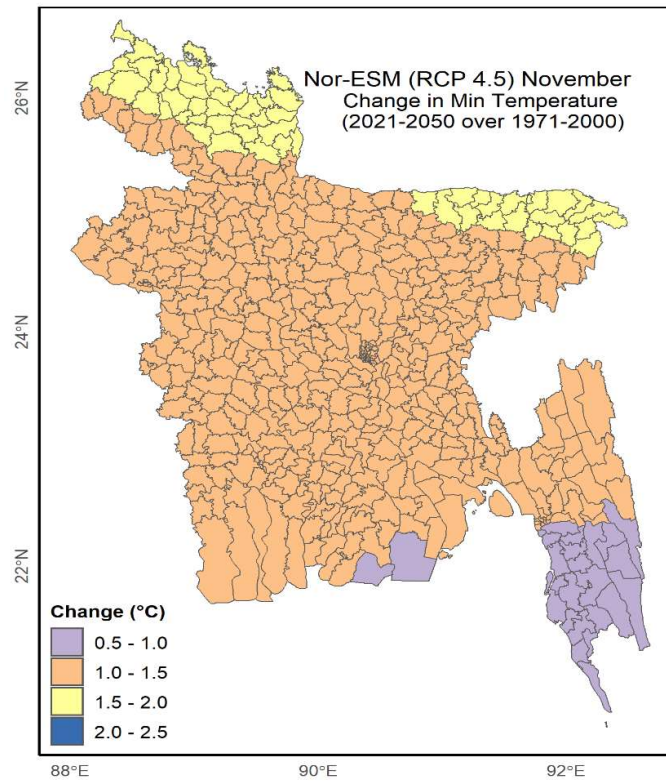


Fig. 4.24: Minimum temperature change projection(RCP4.5) in degree for November and December for the mid-century (2021-2050) in Bangladesh.

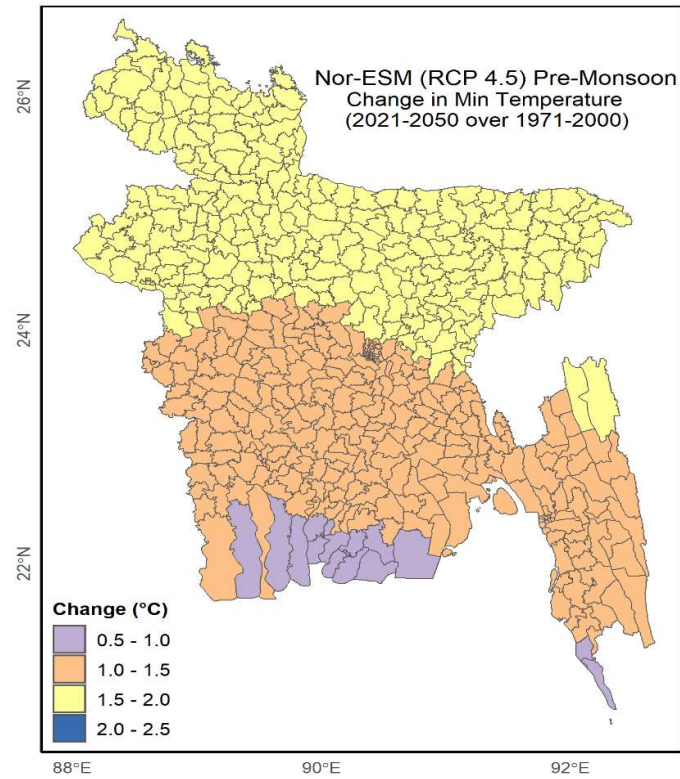
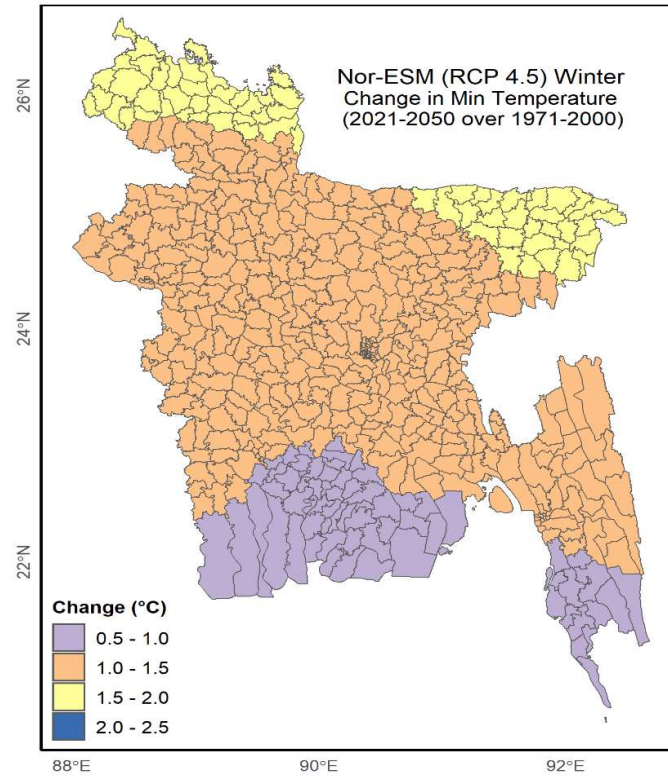


Fig. 4.25: Minimum temperature change projection(RCP4.5) in degree for Winter and Pre-monsoon season for the mid-century (2021-2050) in Bangladesh.

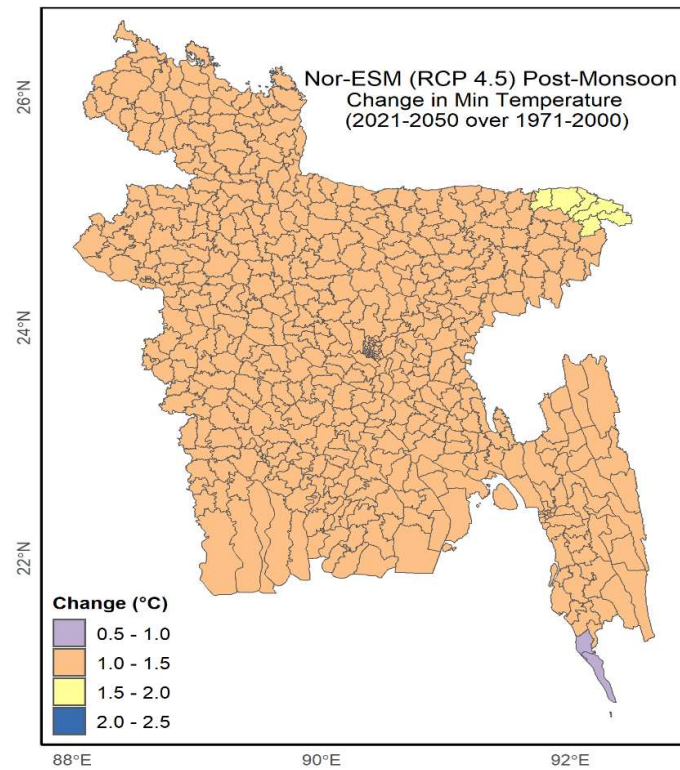
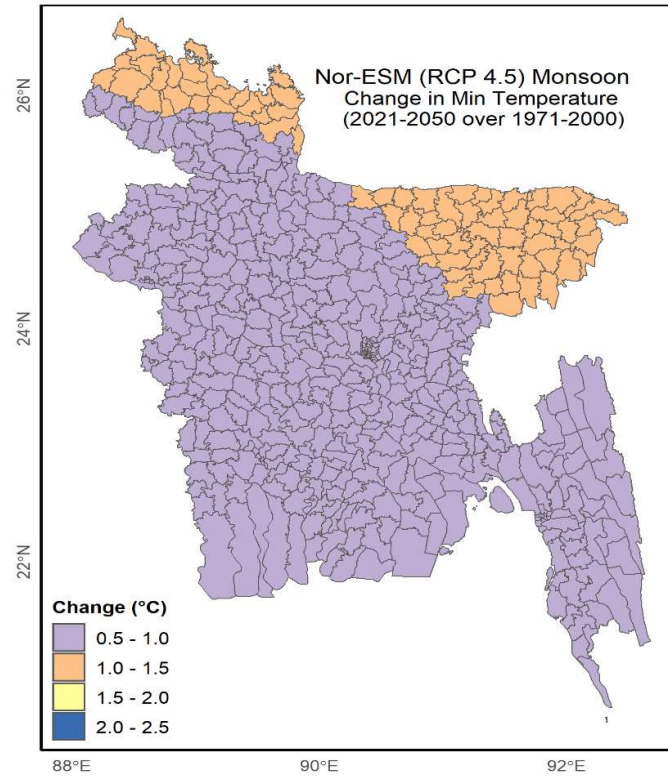


Fig. 4.26: Minimum temperature change projection(RCP4.5) in degree for Monsoon and post-monsoon season for the mid-century (2021-2050) in Bangladesh.

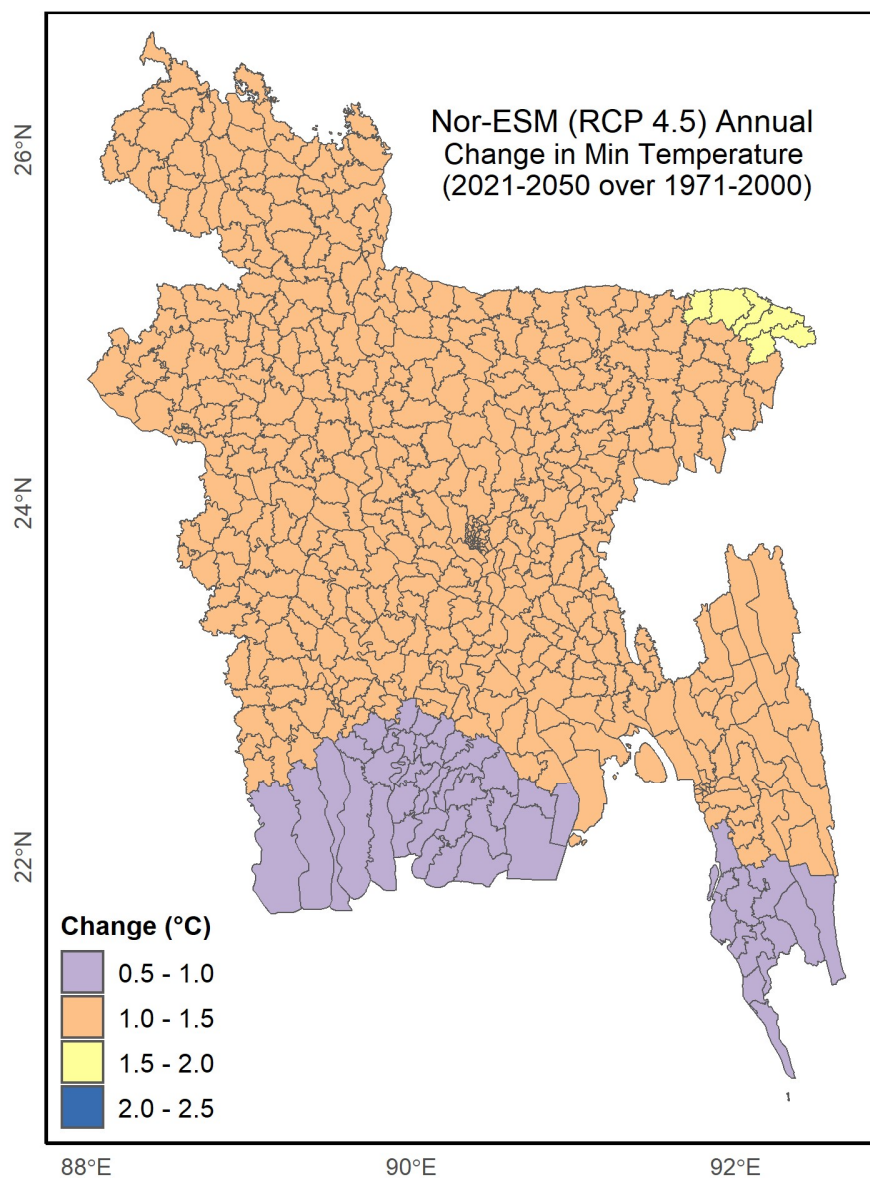


Fig. 4.27: Minimum temperature change projection(RCP4.5) in degree for Annual for the mid-century (2021-2050) in Bangladesh.

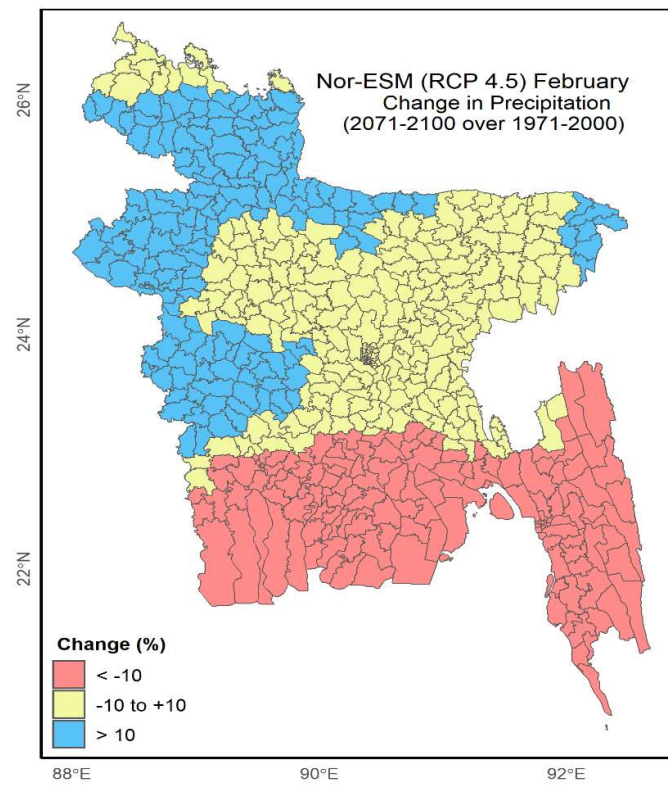
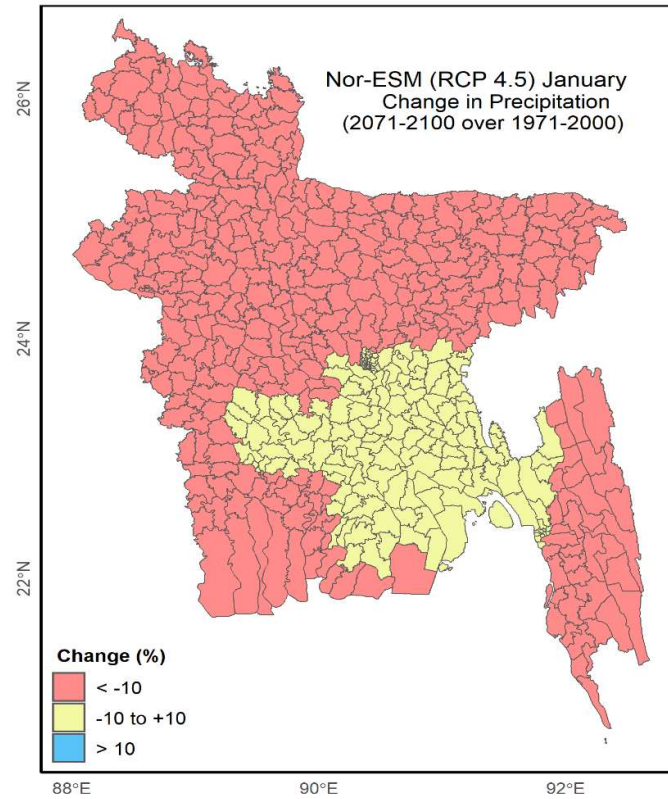


Fig. 4.28: Percentage of change in rainfall projection(RCP4.5) for January and February for the last- century (2071-2100) in Bangladesh.

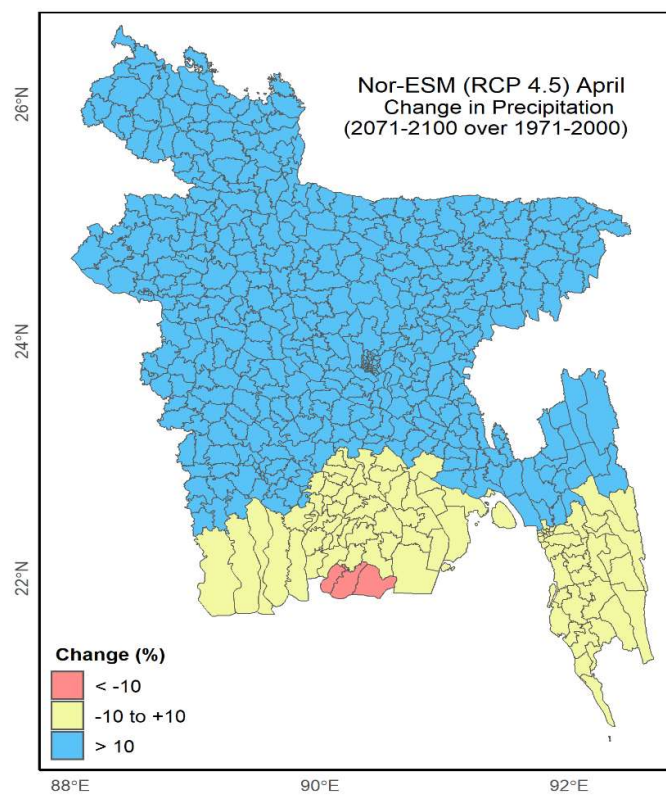
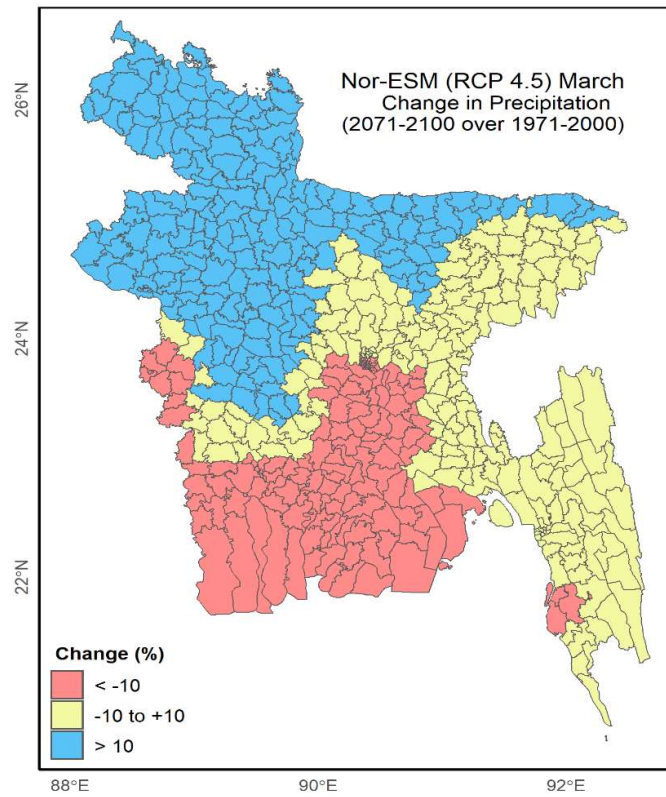


Fig. 4.29: Percentage of change in rainfall projection(RCP4.5) for March and April for the last- century (2071-2100) in Bangladesh.

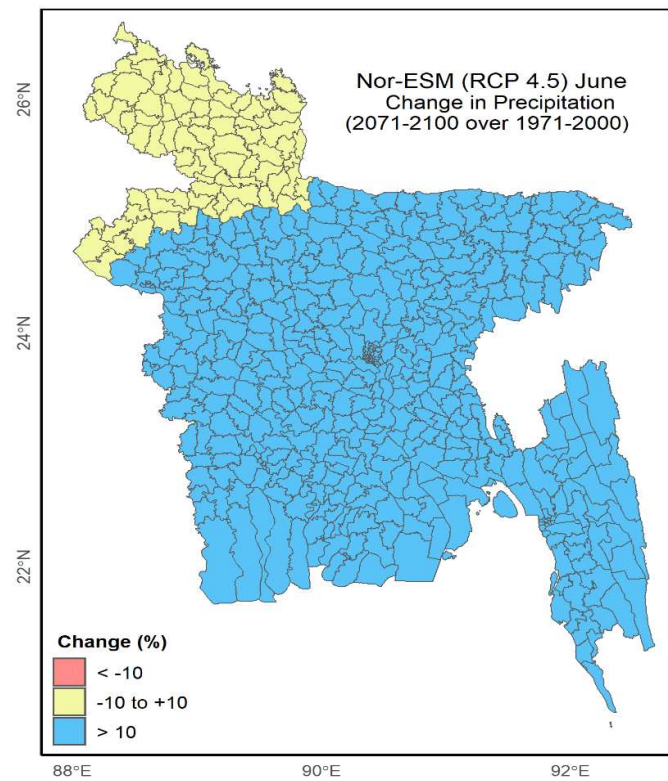
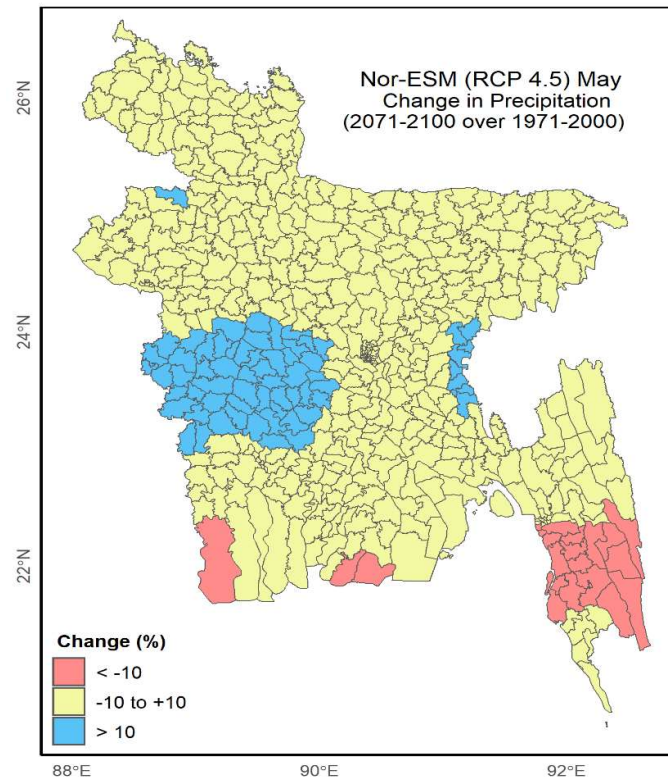


Fig. 4.30: Percentage of change in rainfall projection(RCP4.5) for May and June for the last- century (2071-2100) in Bangladesh.

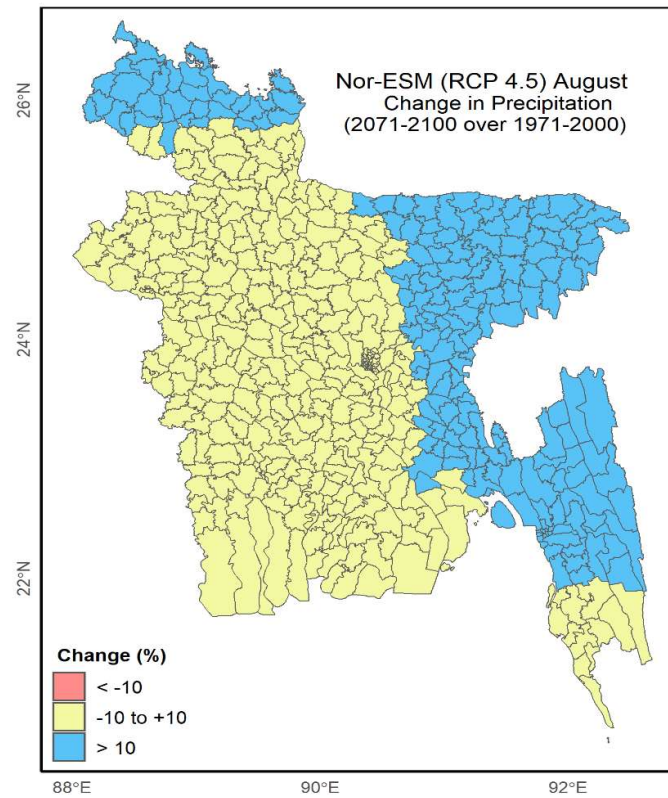
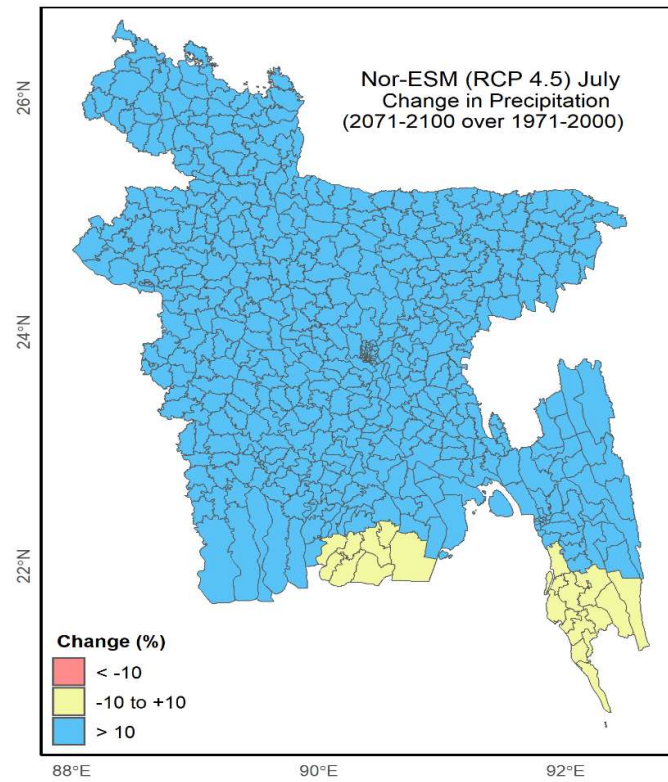


Fig. 4.31: Percentage of change in rainfall projection(RCP4.5) for July and August for the last- century (2071-2100) in Bangladesh.

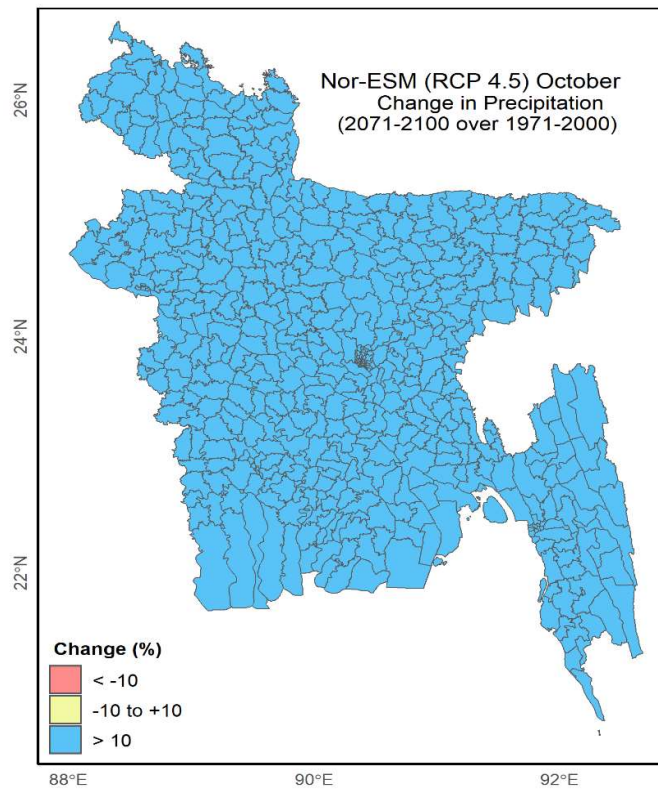
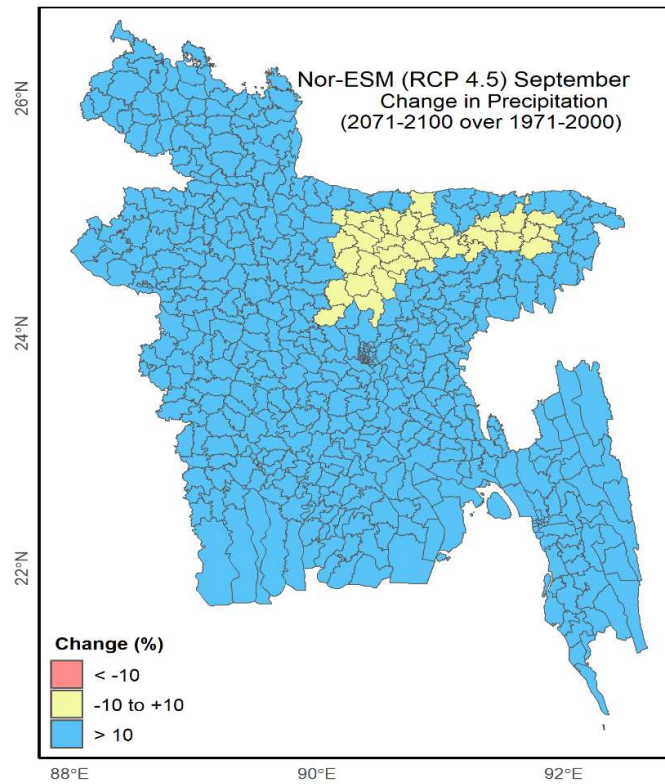


Fig. 4.32: Percentage of change in rainfall projection(RCP4.5) for September and October for the last- century (2071-2100) in Bangladesh.

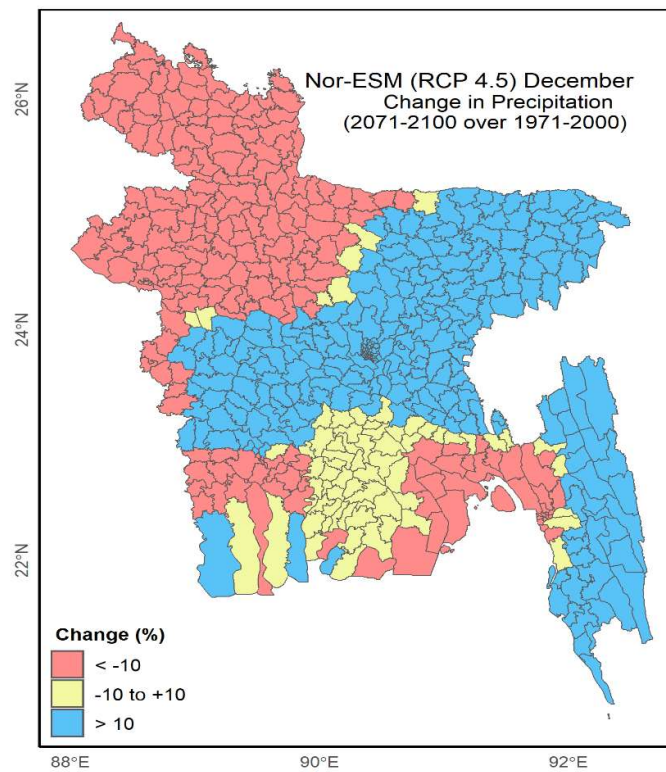
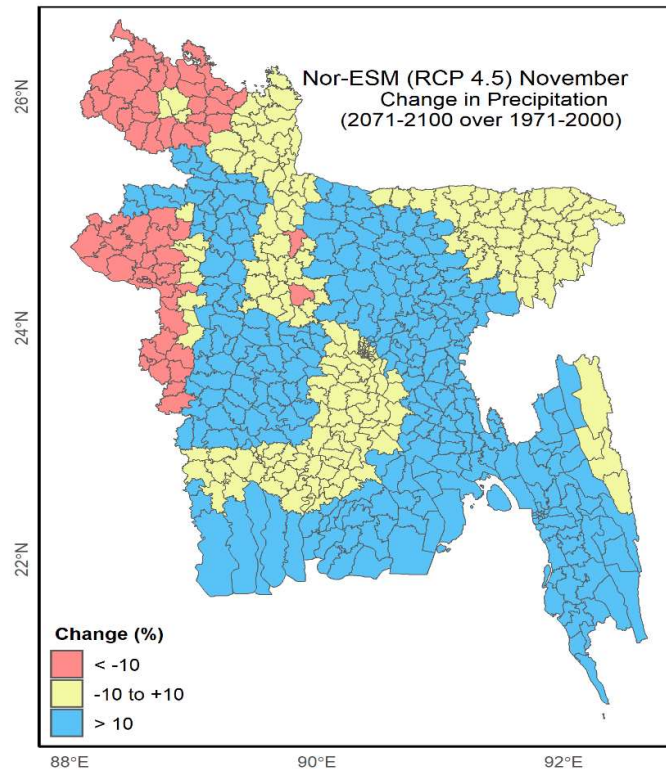


Fig. 4.33: Percentage of change in rainfall projection(RCP4.5) for November and December for the last- century (2071-2100) in Bangladesh.

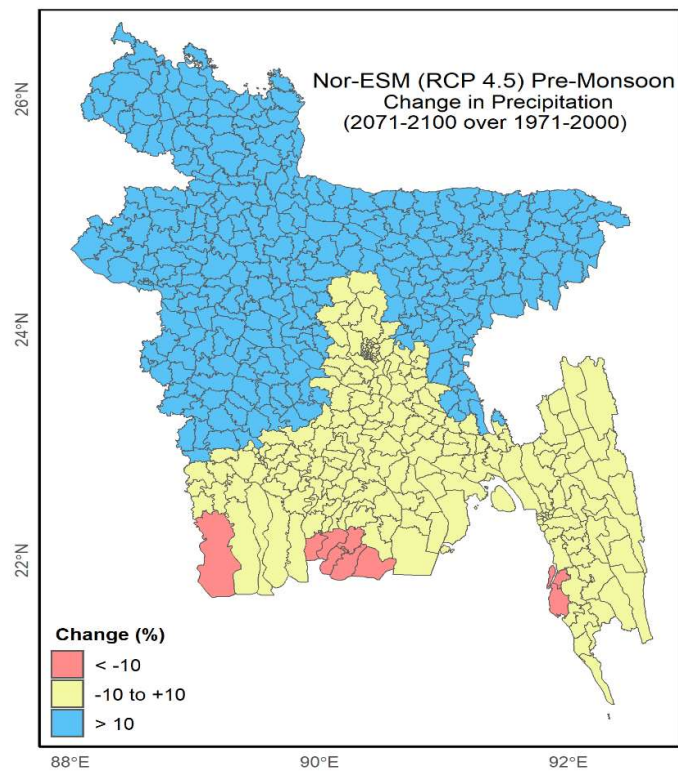
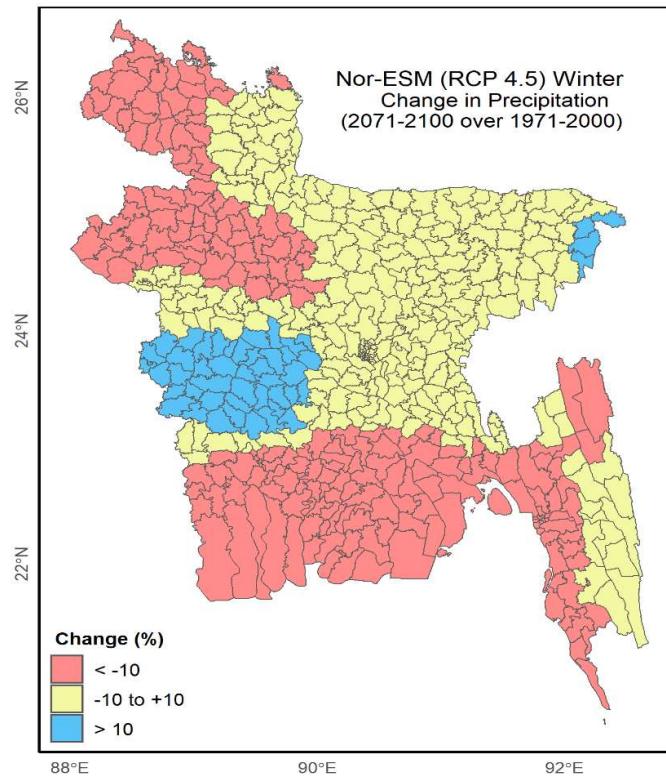


Fig. 4.34: Percentage of change in rainfall projection(RCP4.5) for Winter and Pre-monsoon season for the last- century (2071-2100) in Bangladesh.

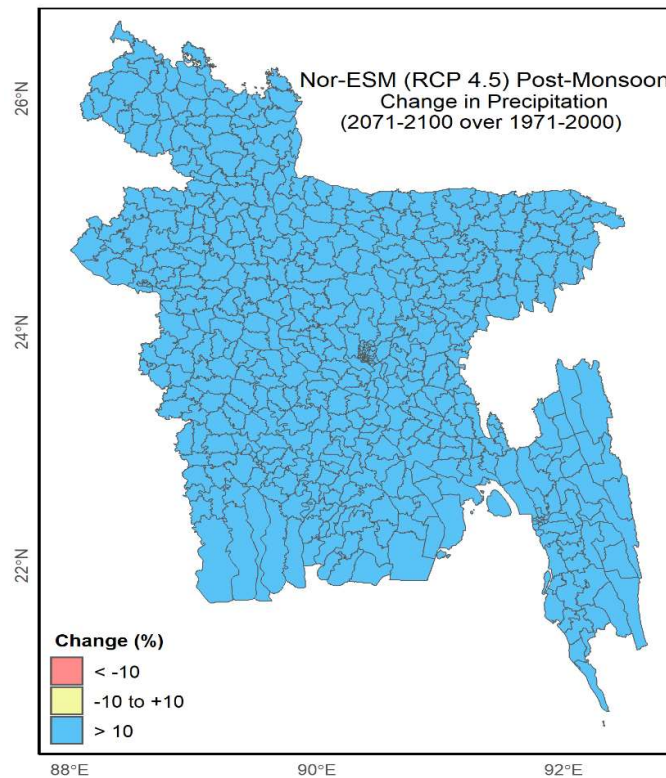
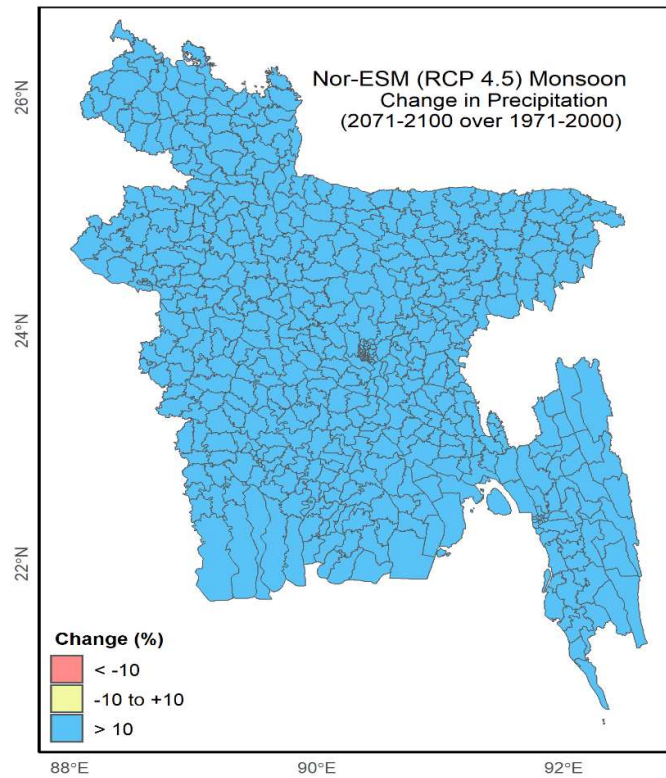


Fig. 4.35: Percentage of change in rainfall projection(RCP4.5) for Monsoon and Post-monsoon season for the last- century (2071-2100) in Bangladesh.

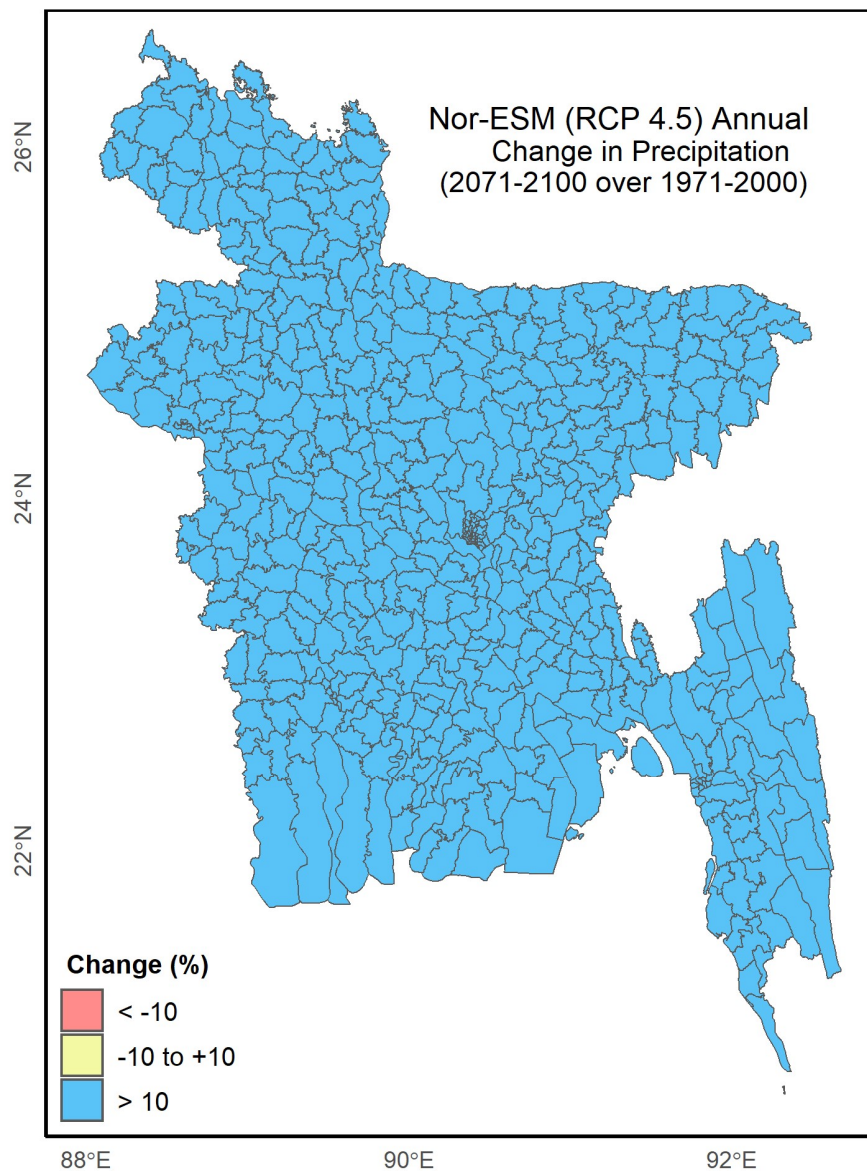


Fig. 4.36: Percentage of change in rainfall projection(RCP4.5) for Annual for the last- century (2071-2100) in Bangladesh.

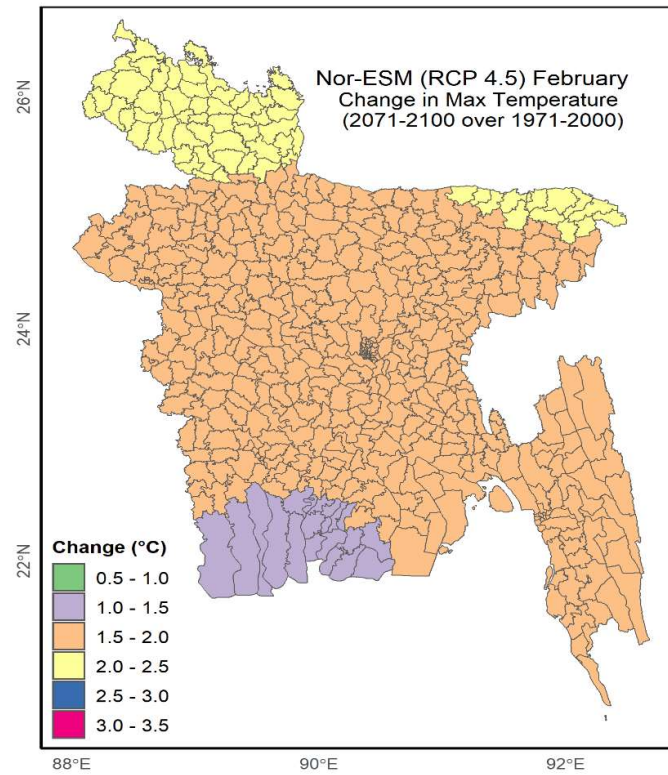
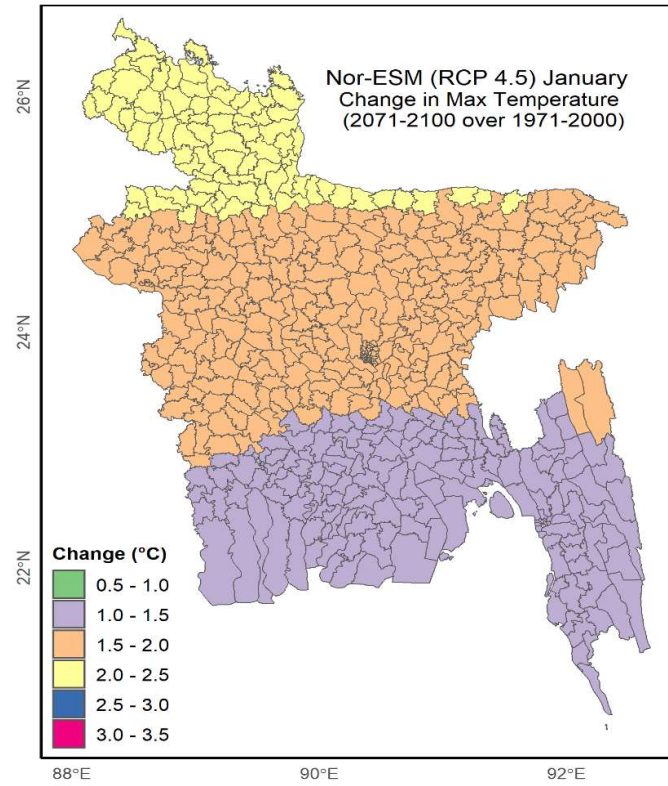


Fig. 4.37: Maximum temperature change projection(RCP4.5) in degree for January and February for the last-century (2071-2100) in Bangladesh.

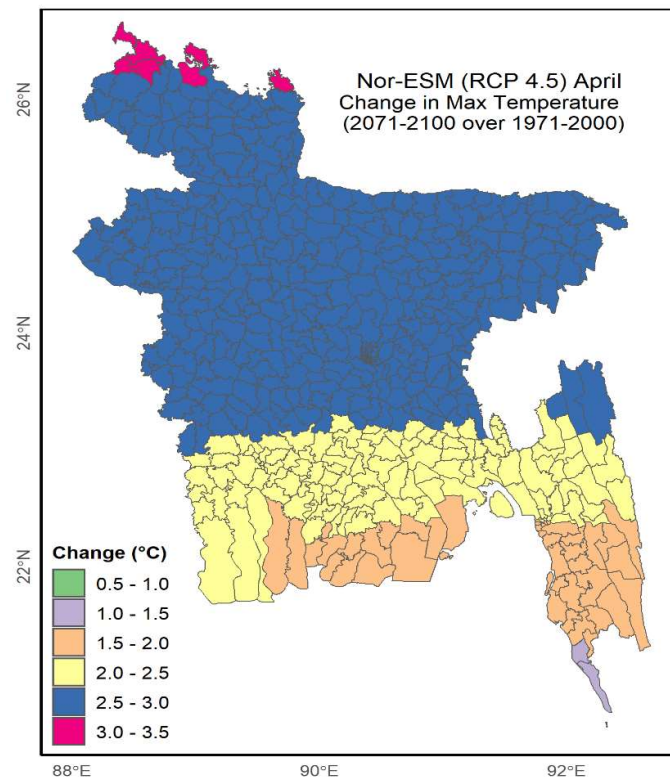
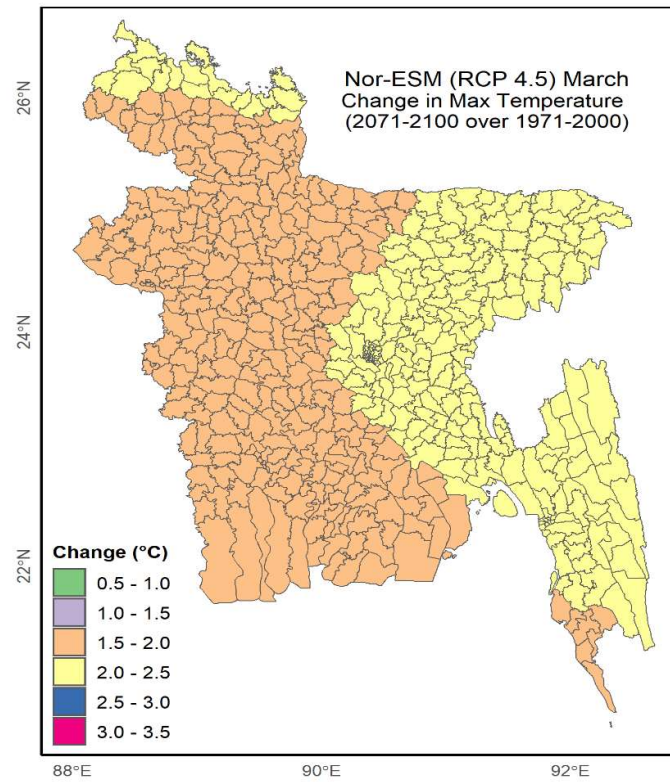


Fig. 4.38: Maximum temperature change projection(RCP4.5) in degree for March and April for the last-century (2071-2100) in Bangladesh.

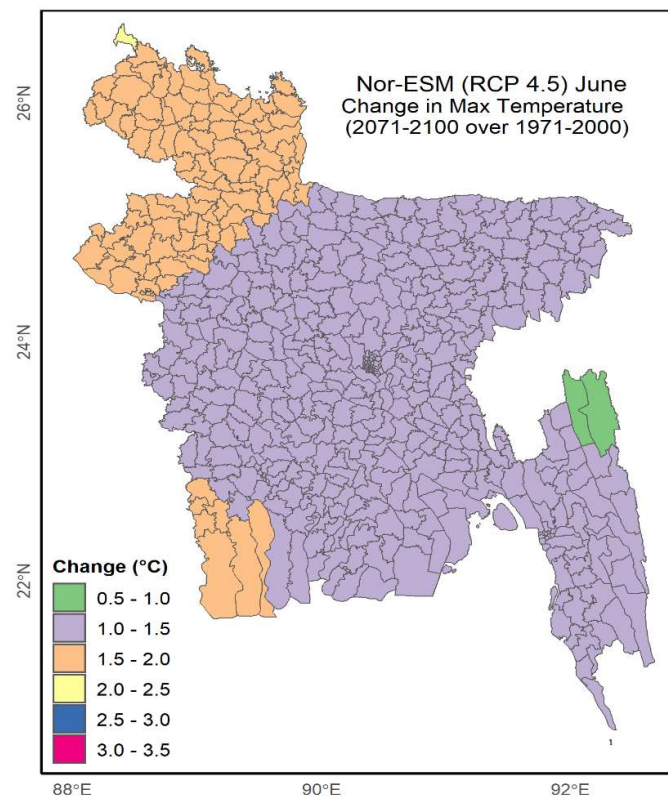
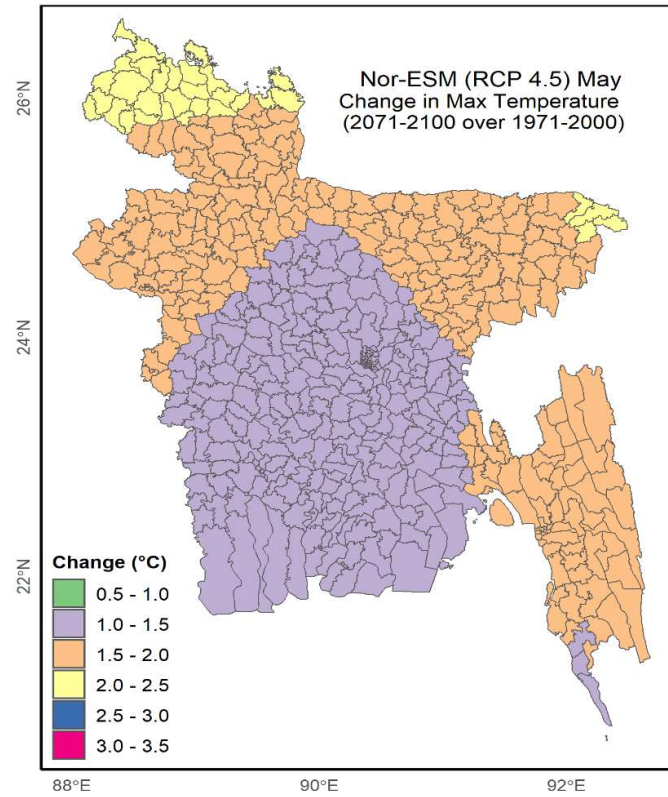


Fig. 4.39: Maximum temperature change projection(RCP4.5) in degree for May and June for the last-century (2071-2100) in Bangladesh.

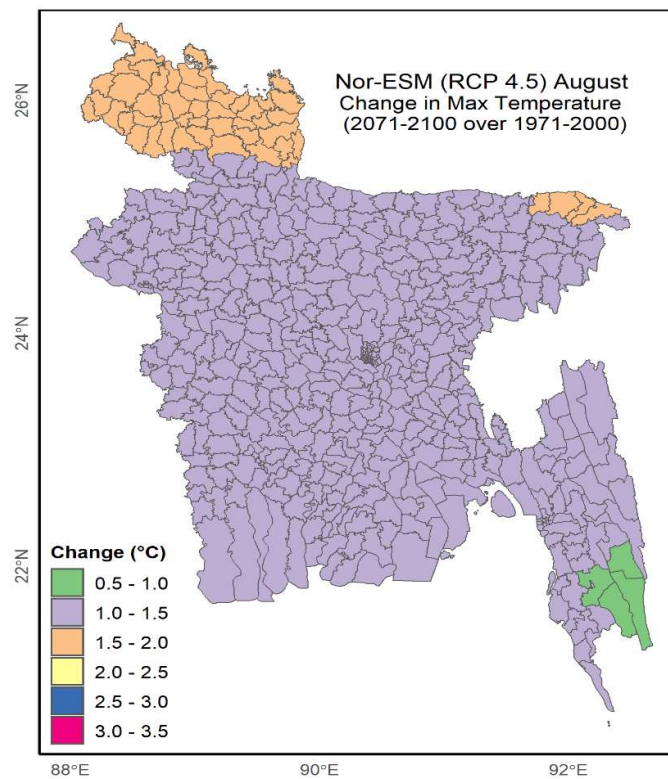
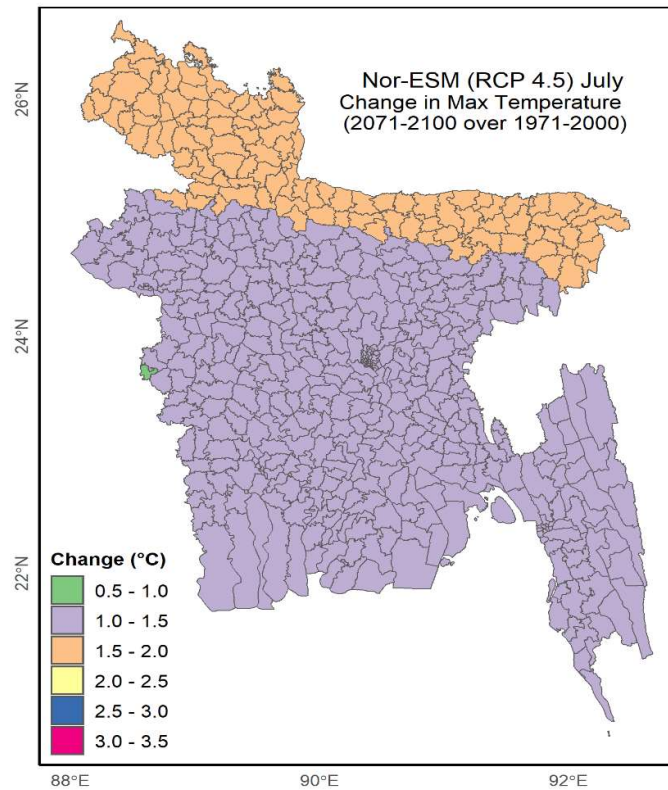


Fig. 4.40: Maximum temperature change projection(RCP4.5) in degree for July and August for the last-century (2071-2100) in Bangladesh.

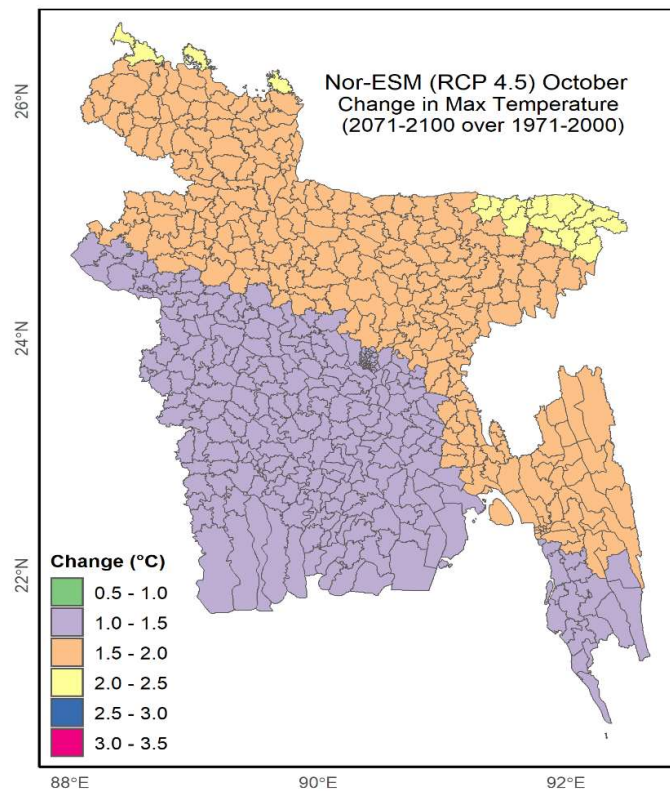
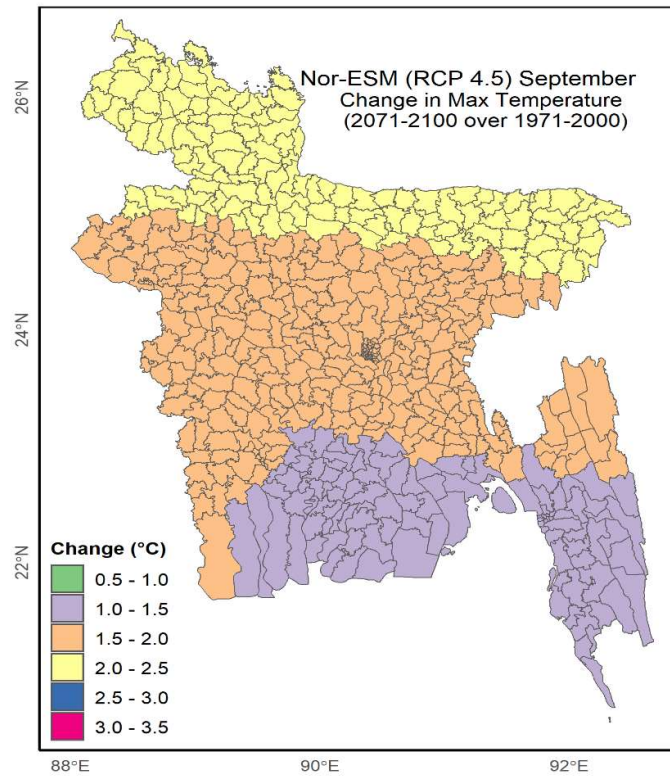


Fig. 4.41: Maximum temperature change projection(RCP4.5) in degree for September and October for the last-century (2071-2100) in Bangladesh.

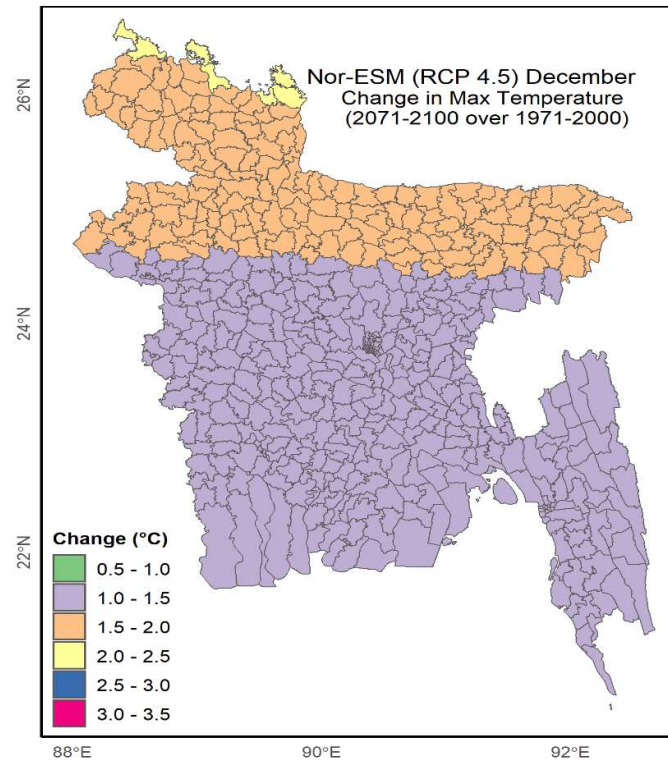
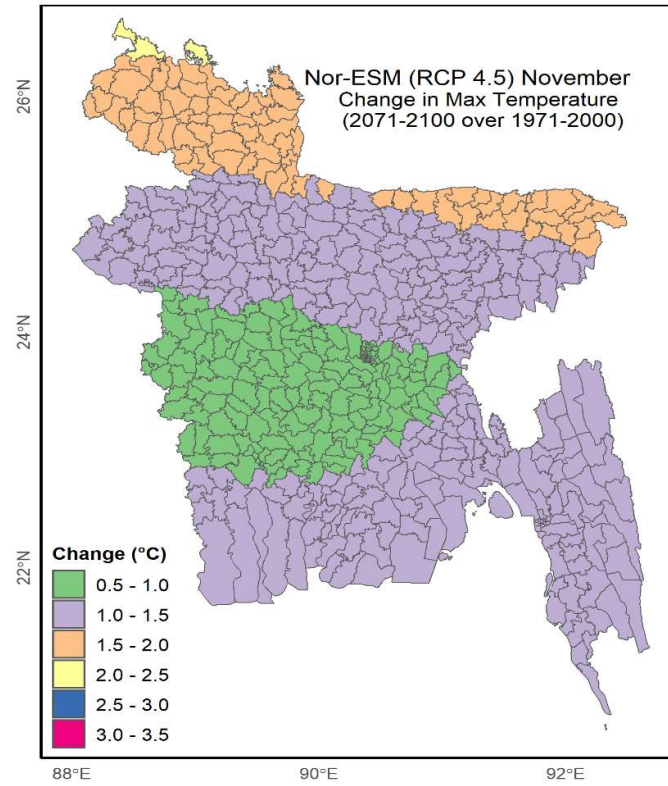


Fig. 4.42: Maximum temperature change projection(RCP4.5) in degree for November and December for the last-century (2071-2100) in Bangladesh.

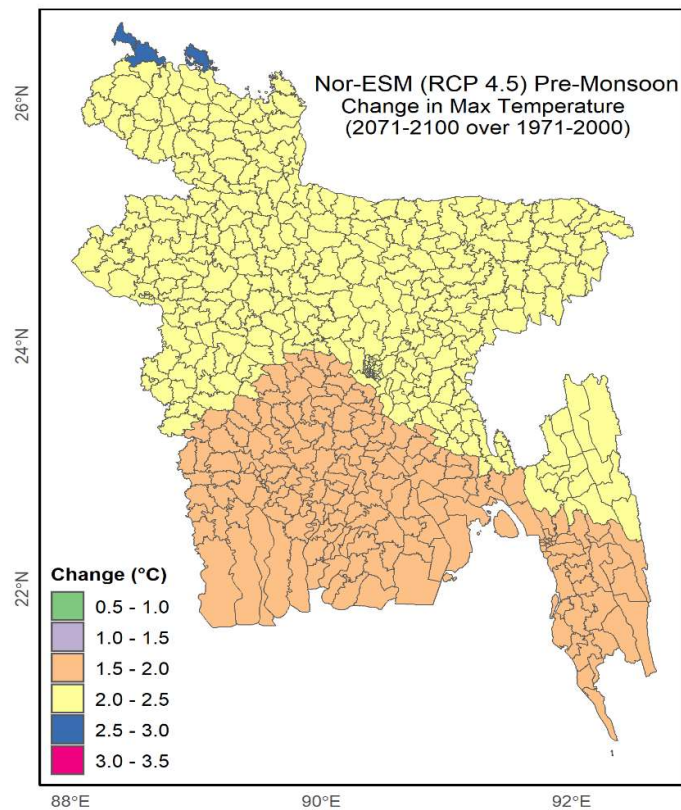
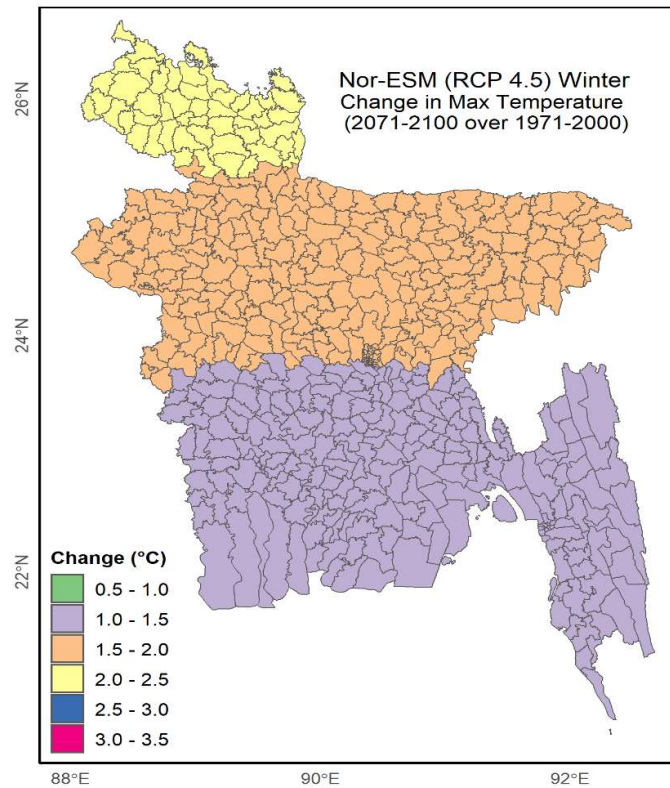


Fig. 4.43: Maximum temperature change projection(RCP4.5) in degree for Winter and Pre-monsoon season for the last-century (2071-2100) in Bangladesh.

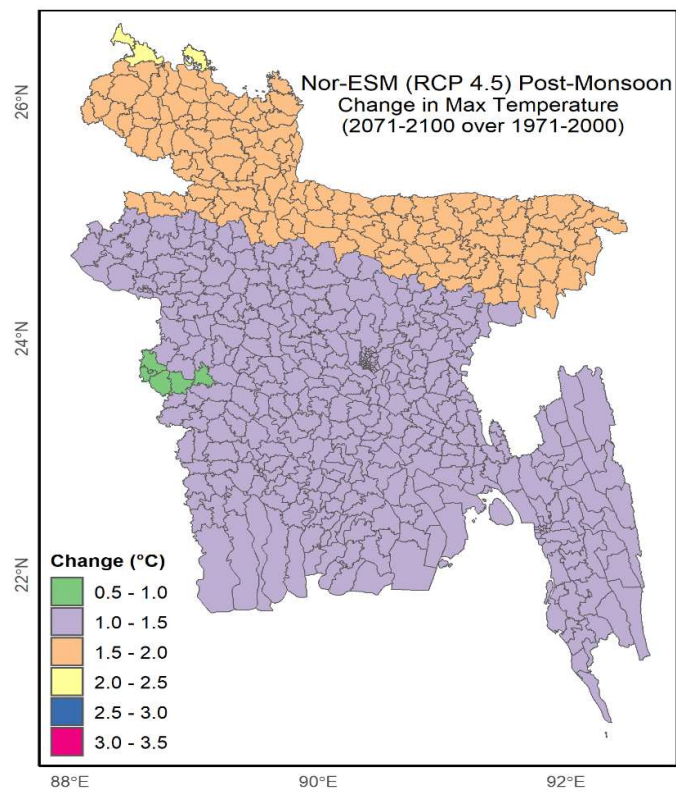
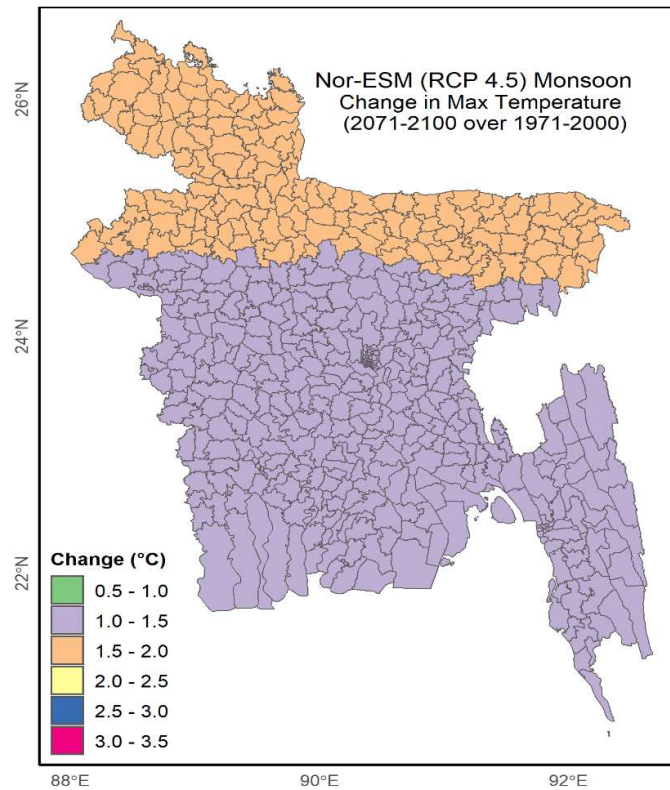


Fig. 4.44: Maximum temperature change projection(RCP4.5) in degree for Monsoon and Post-monsoon season for the last-century (2071-2100) in Bangladesh.

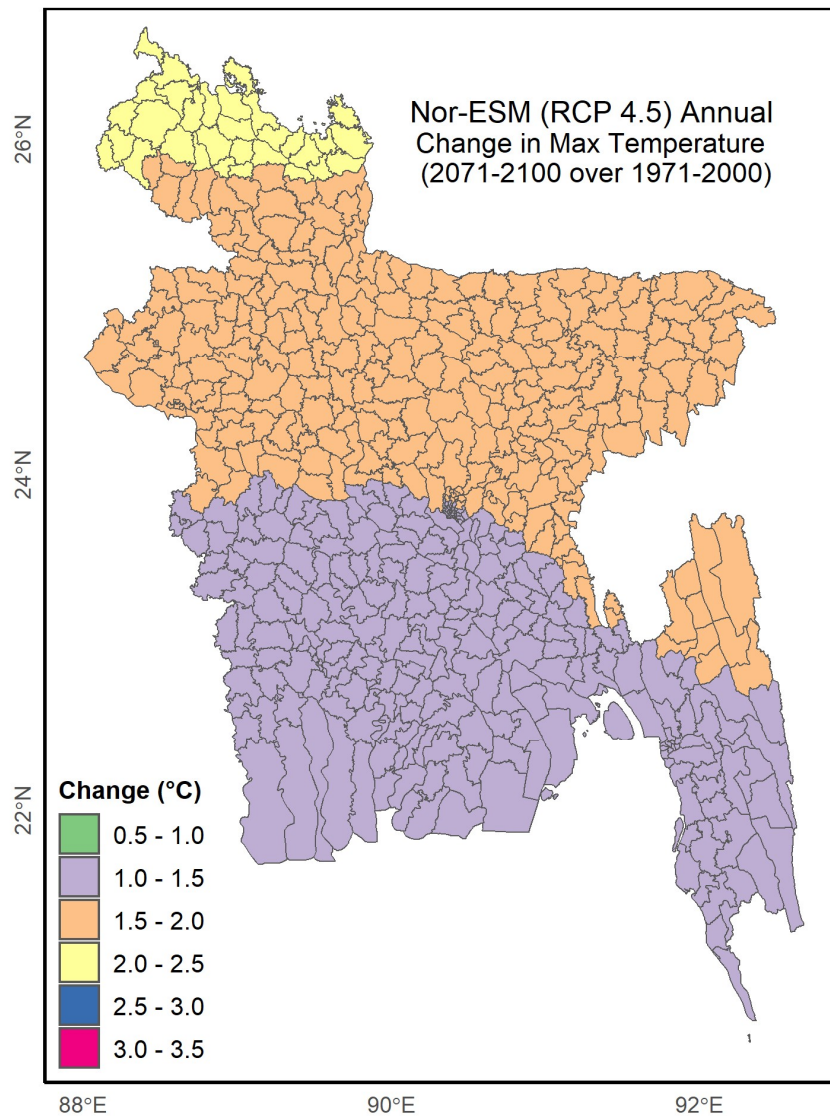


Fig. 4.45: Maximum temperature change projection(RCP4.5) in degree for Annual for the last-century (2071-2100) in Bangladesh.

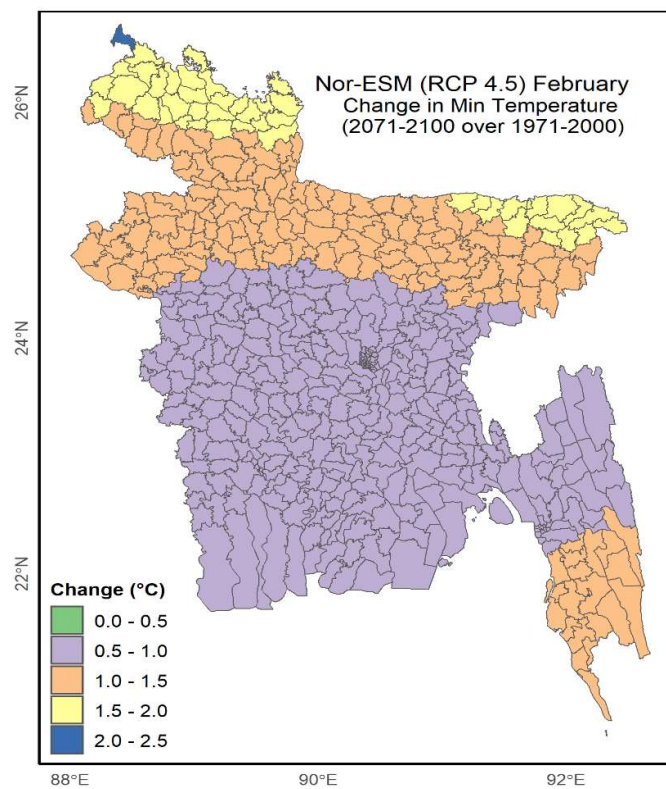
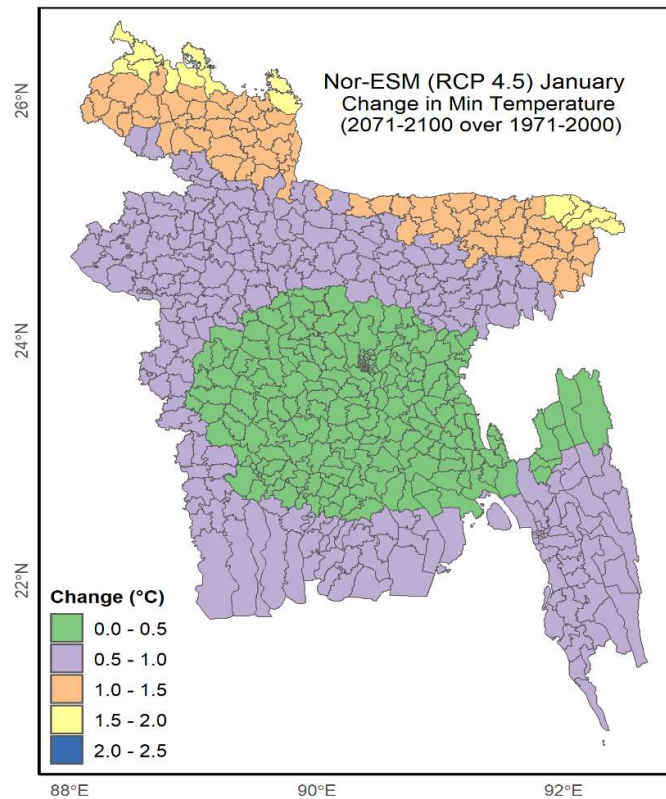


Fig. 4.46: Minimum temperature change projection(RCP4.5) in degree for January and February for the last-century (2071-2100) in Bangladesh.

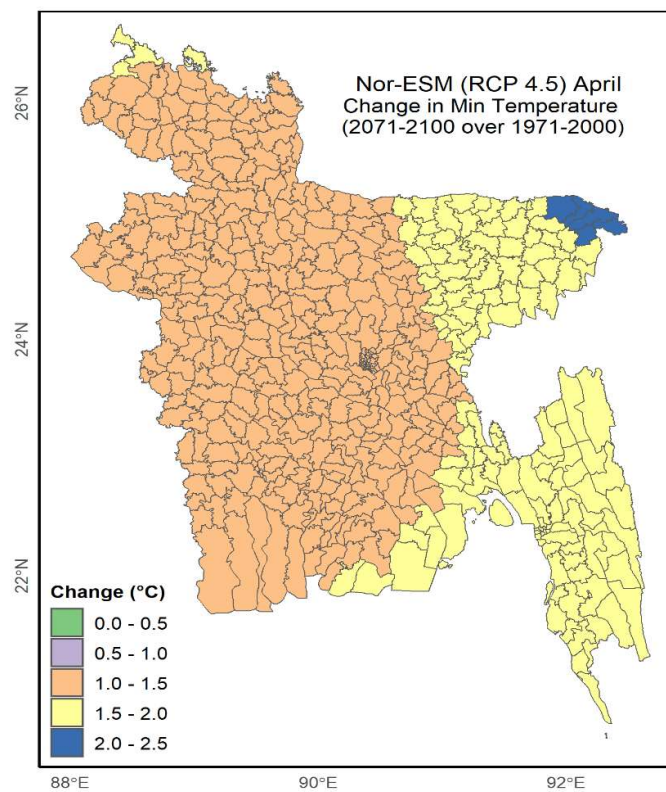
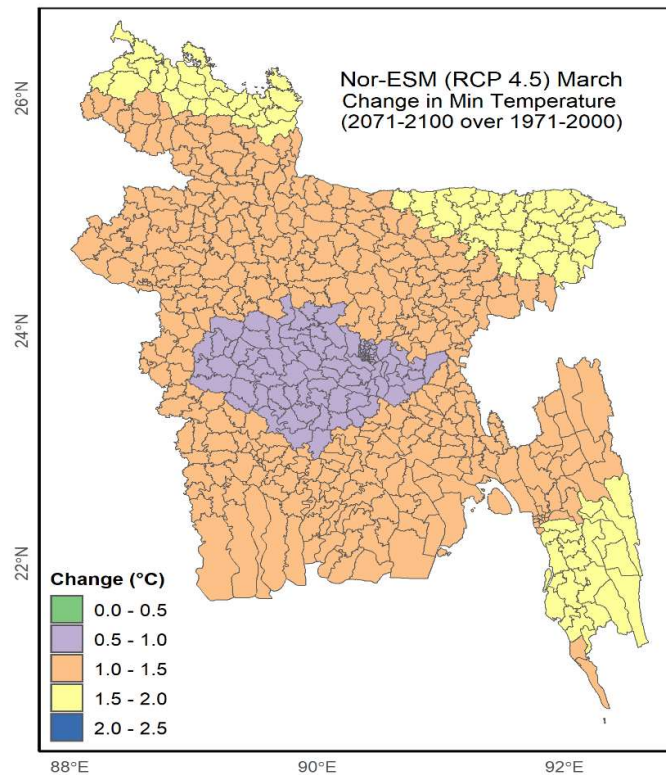


Fig. 4.47: Minimum temperature change projection(RCP4.5) in degree for March and April for the last-century (2071-2100) in Bangladesh.

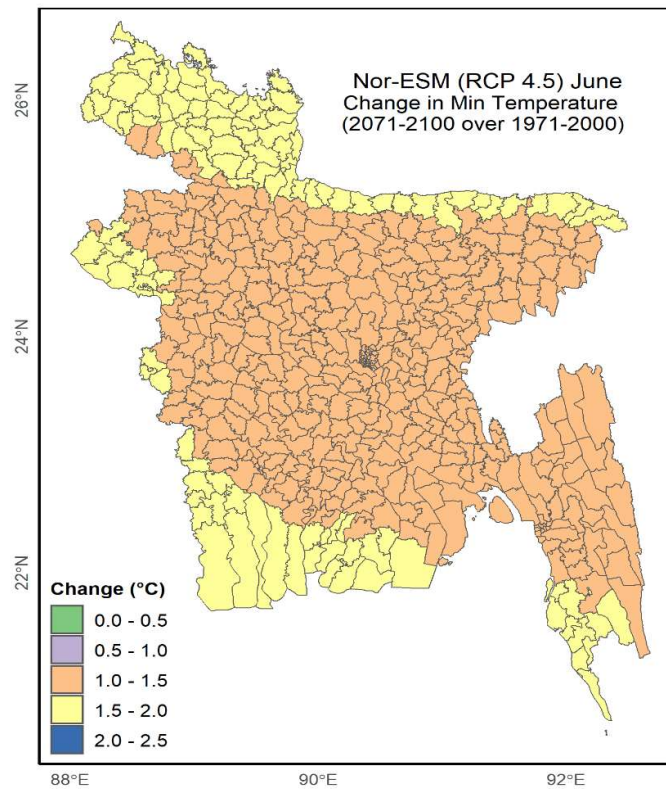
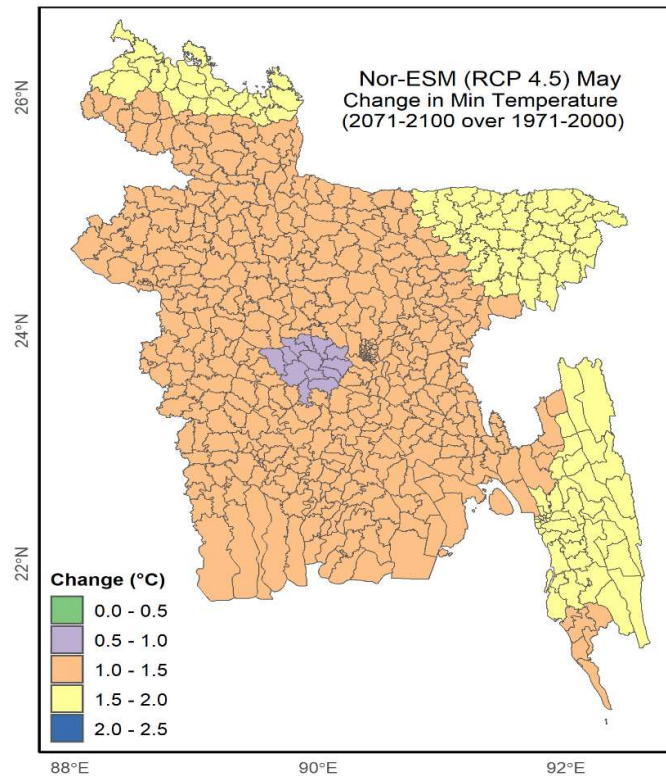


Fig. 4.48: Minimum temperature change projection(RCP4.5) in degree for May and June for the last-century (2071-2100) in Bangladesh.

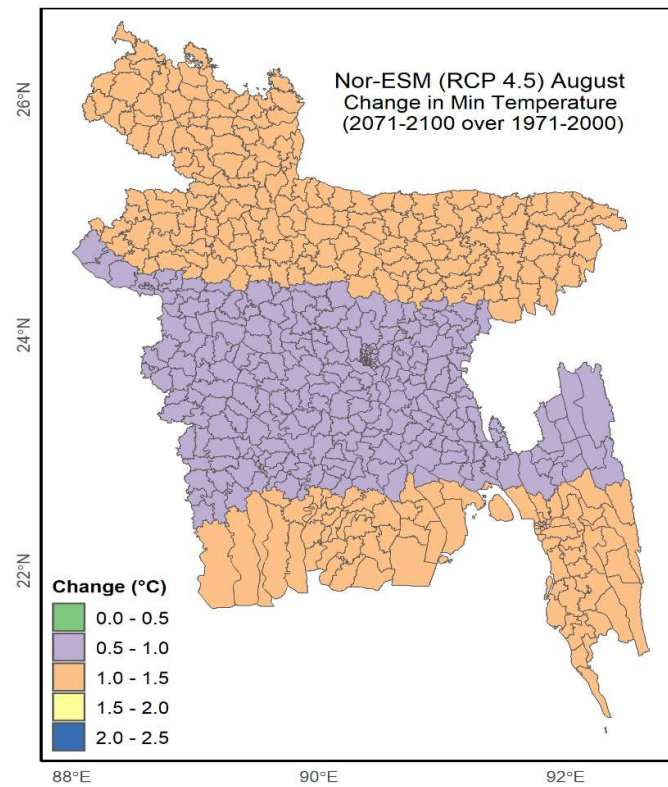
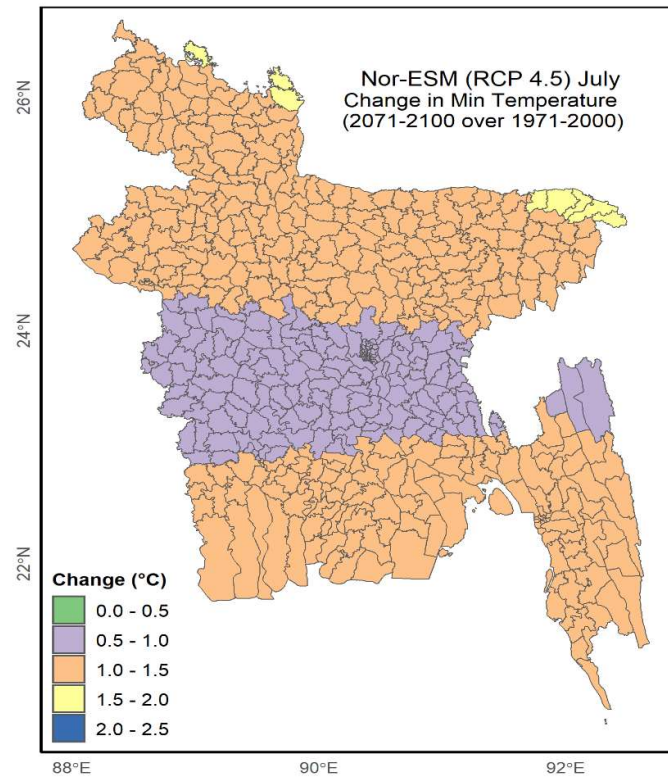


Fig. 4.49: Minimum temperature change projection(RCP4.5) in degree for July and August for the last-century (2071-2100) in Bangladesh.

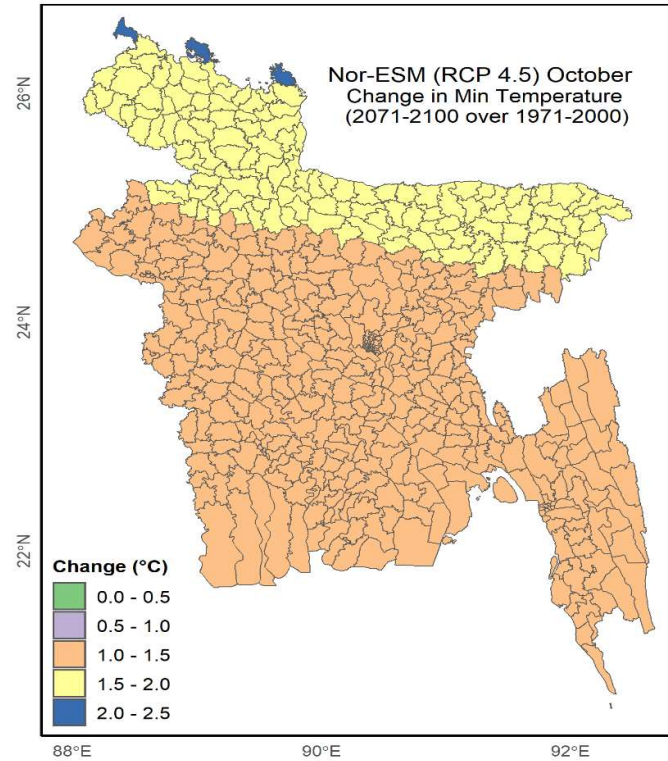
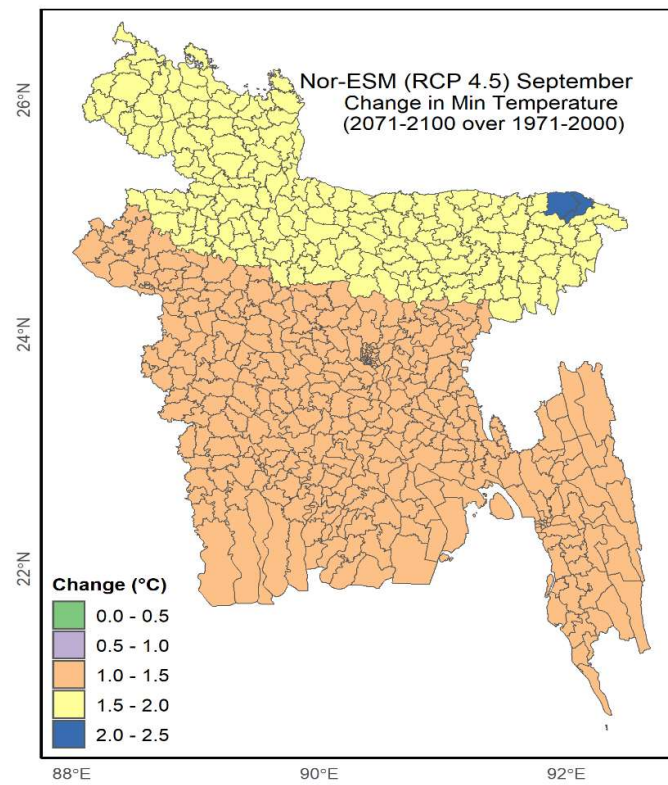


Fig. 4.50: Minimum temperature change projection (RCP4.5) in degree for September and October for the last-century (2071-2100) in Bangladesh.

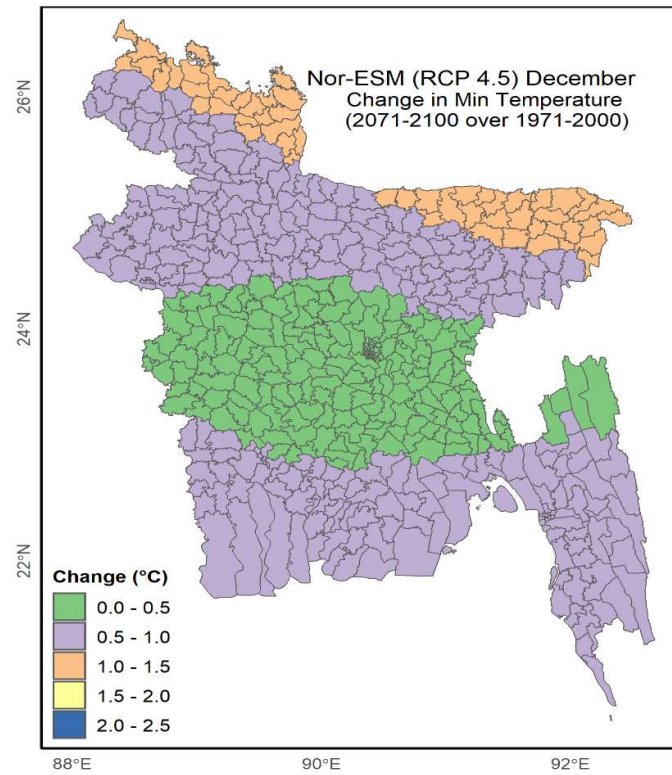
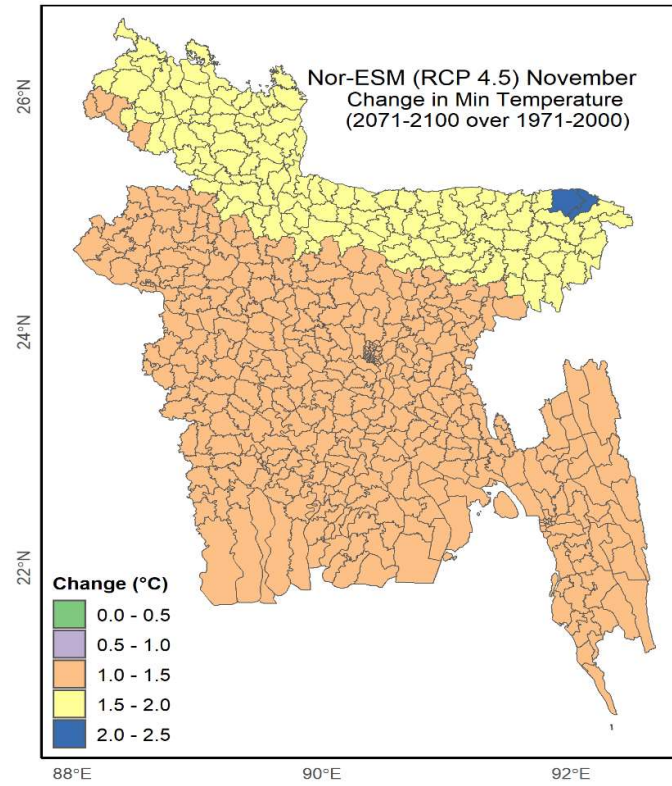


Fig. 4.51: Minimum temperature change projection (RCP4.5) in degree for November and December for the last-century (2071-2100) in Bangladesh.

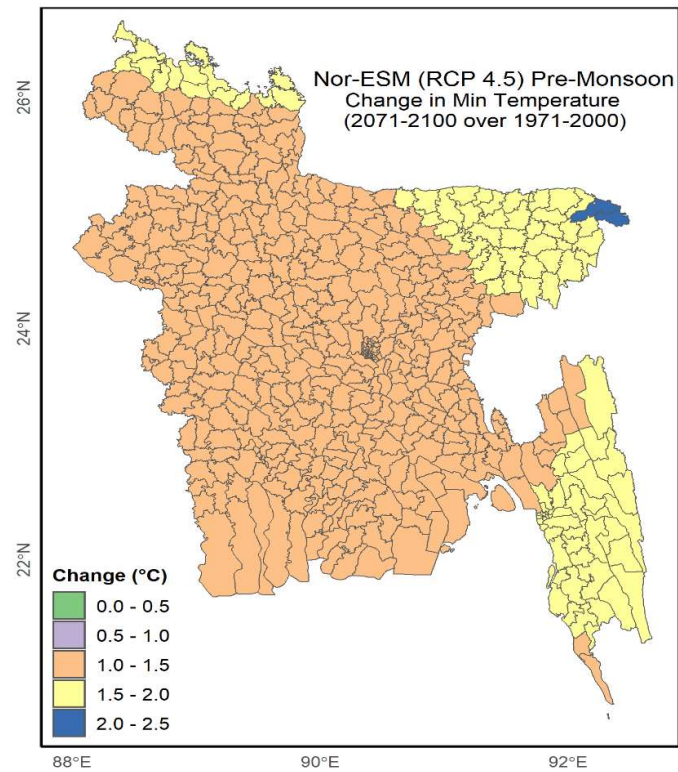
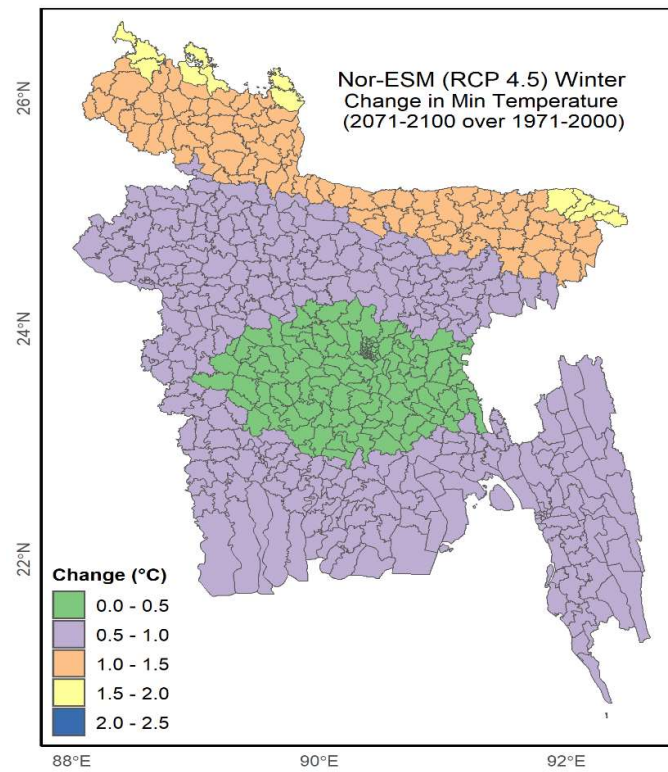


Fig. 4.52: Minimum temperature change projection(RCP4.5) in degree for Winter and Pre-monsoon season for the last-century (2071-2100) in Bangladesh.

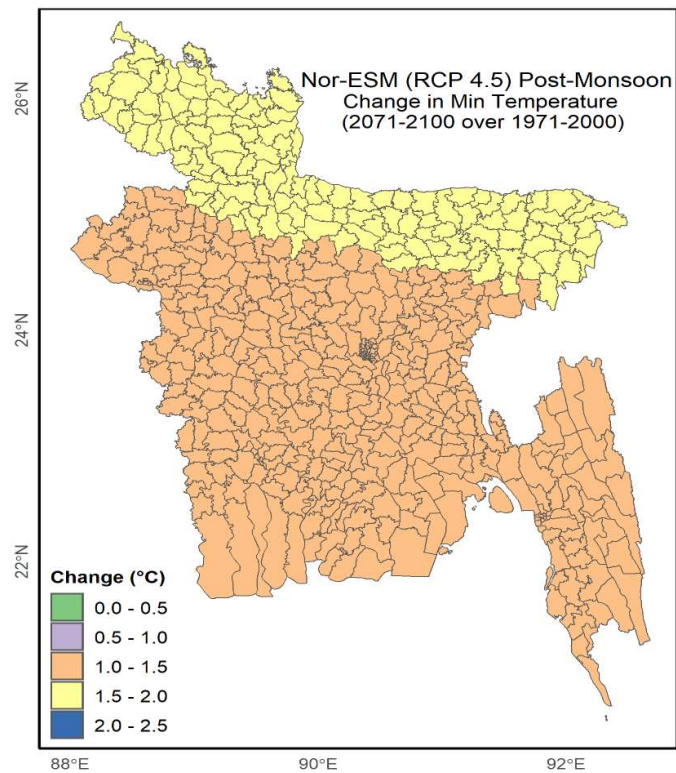
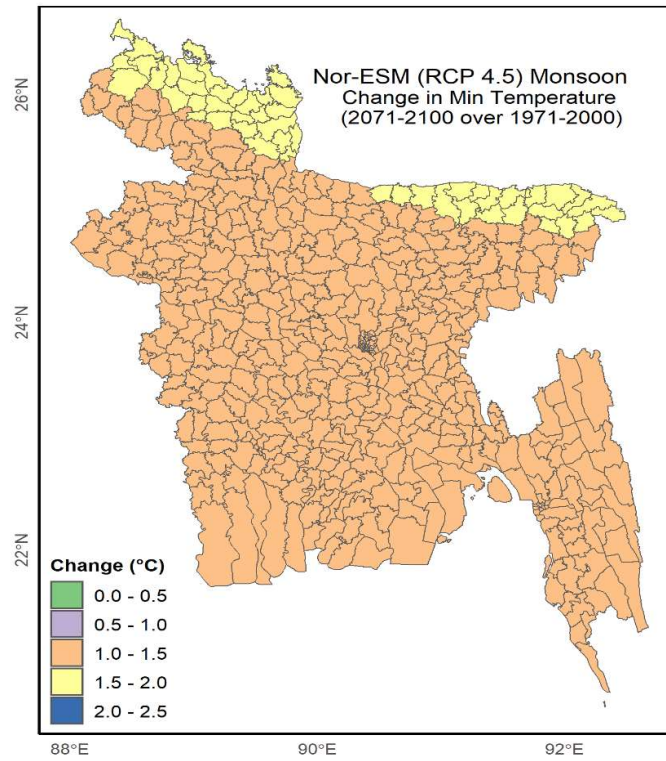


Fig. 4.53: Minimum temperature change projection (RCP4.5) in degree for Monsoon and Post-monsoon season for the last-century (2071-2100) in Bangladesh.

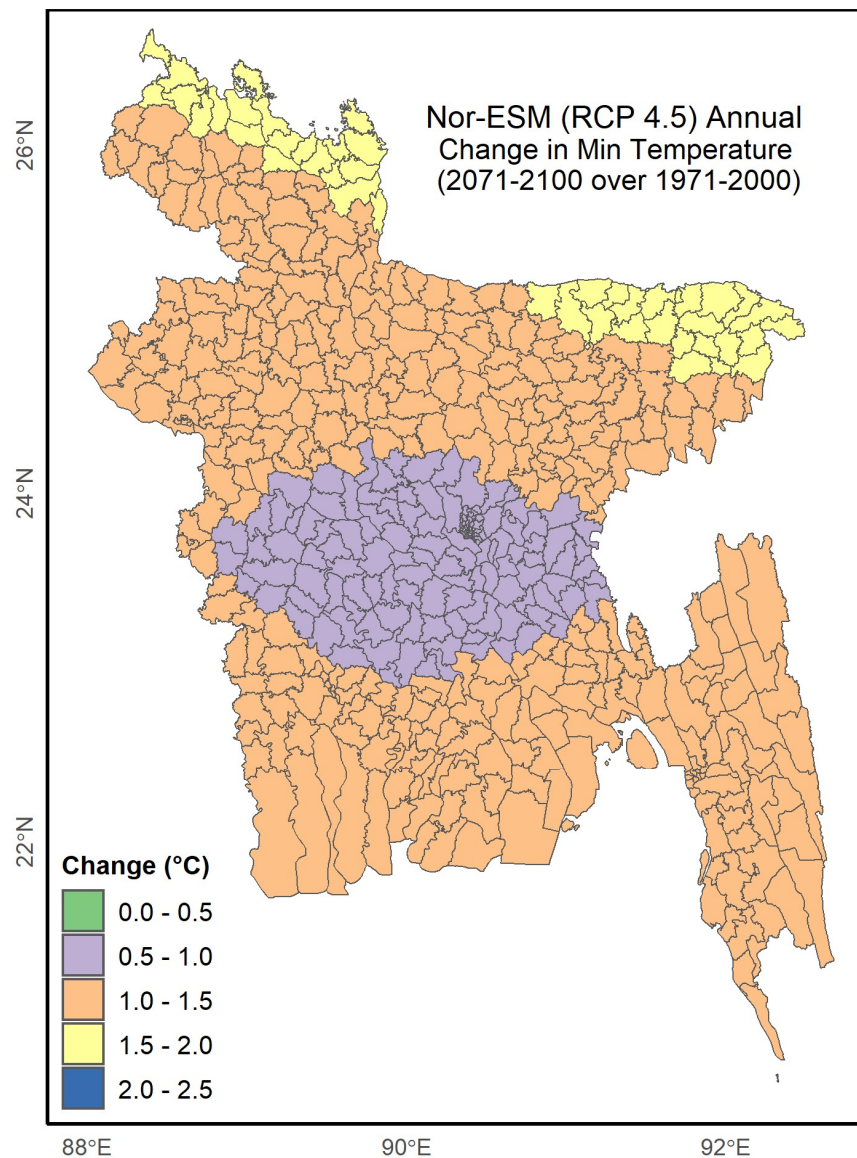


Fig. 4.54: Minimum temperature change projection(RCP4.5) in degree for Annual for the last-century (2071-2100) in Bangladesh.

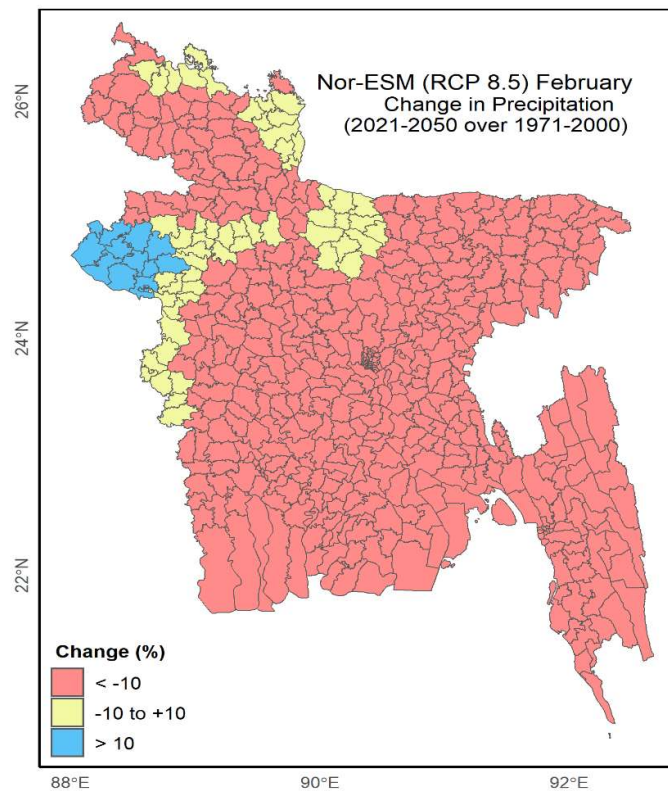
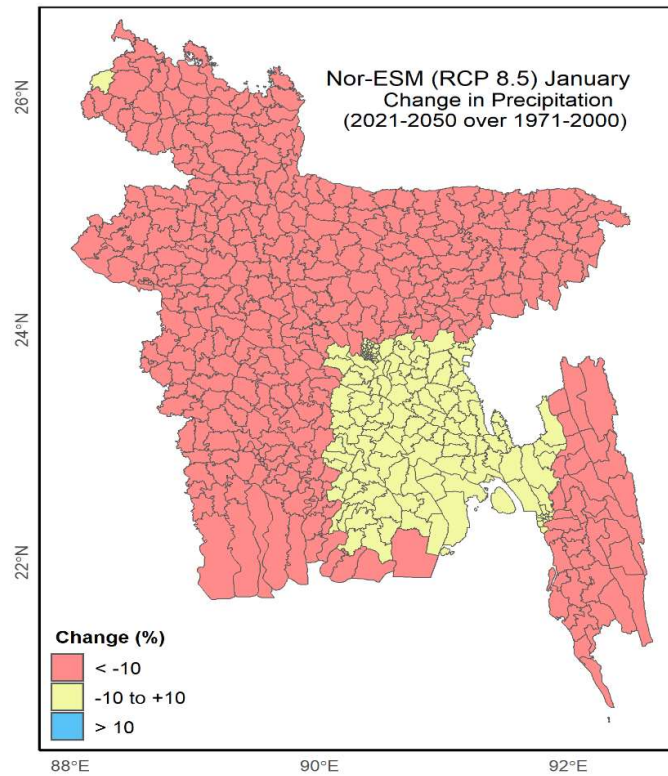


Fig. 4.55: Percentage of change in rainfall projection (RCP8.5) for January and February for the mid- century (2021-2050) in Bangladesh.

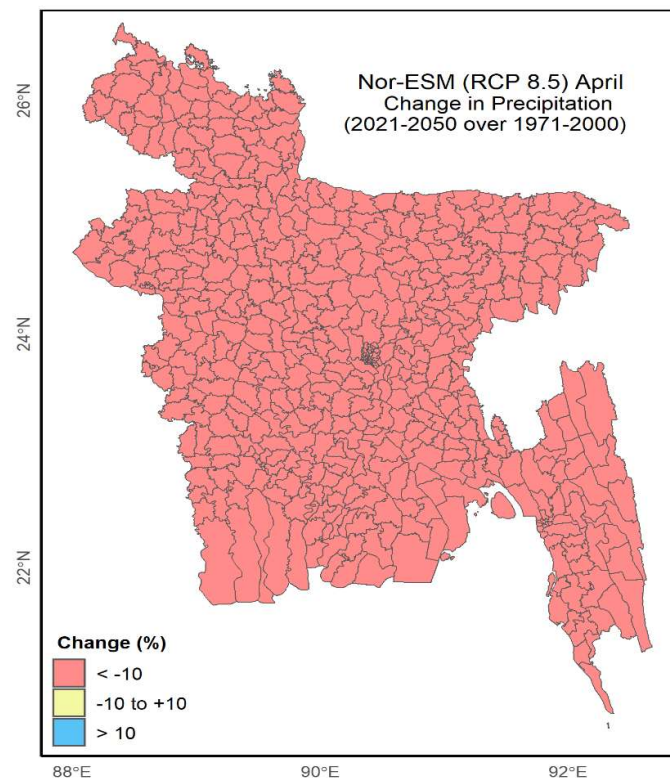
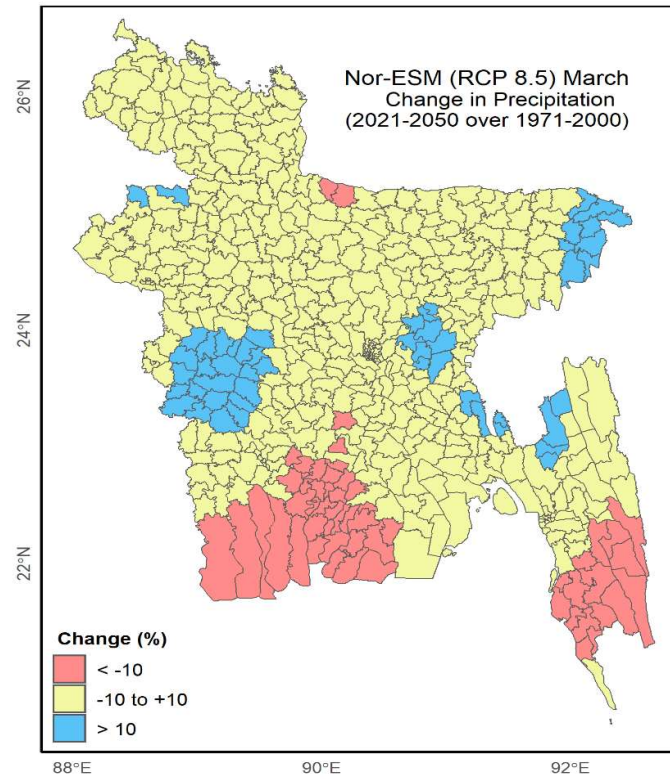


Fig. 4.56: Percentage of change in rainfall projection (RCP8.5) for March and April for the mid- century (2021-2050) in Bangladesh.

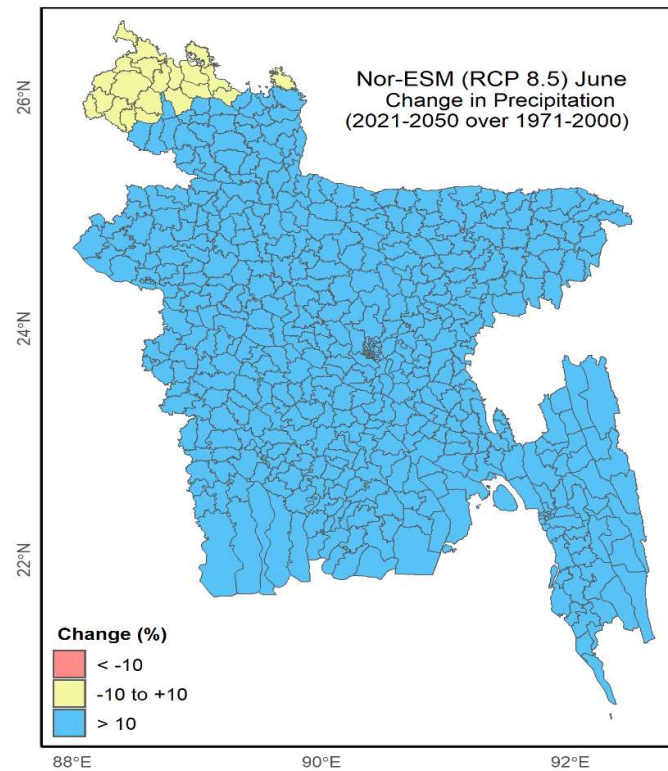
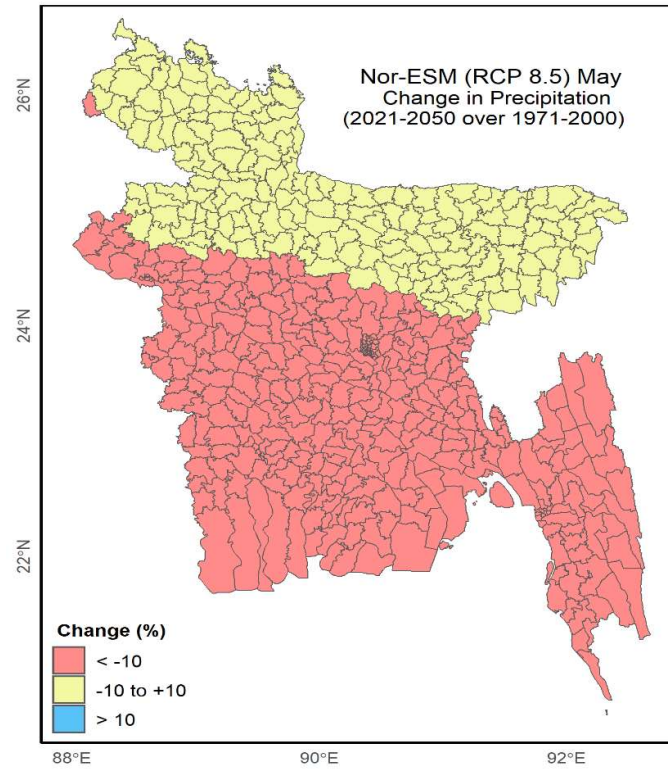


Fig. 4.57: Percentage of change in rainfall projection (RCP8.5) for May and June for the mid- century (2021-2050) in Bangladesh.

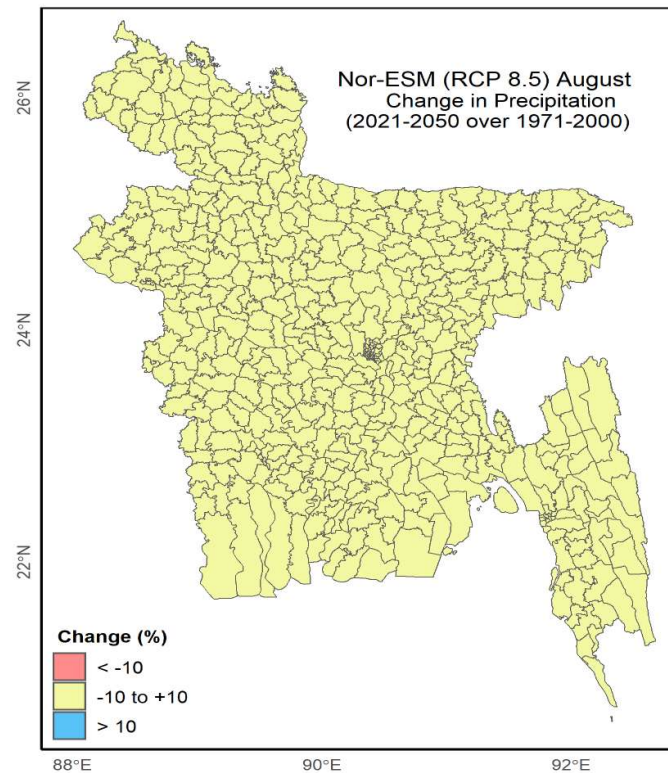
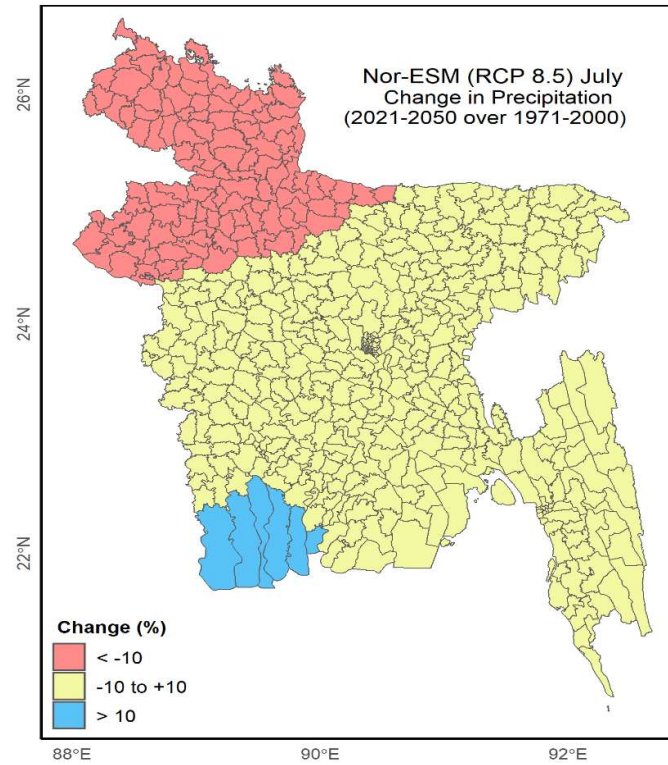


Fig. 4.58: Percentage of change in rainfall projection (RCP8.5) for July and August for the mid- century (2021-2050) in Bangladesh.

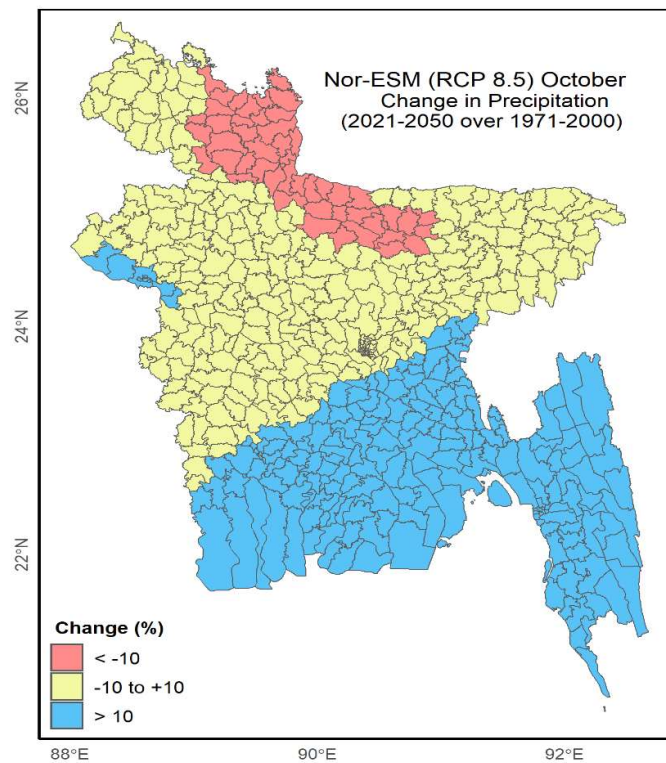
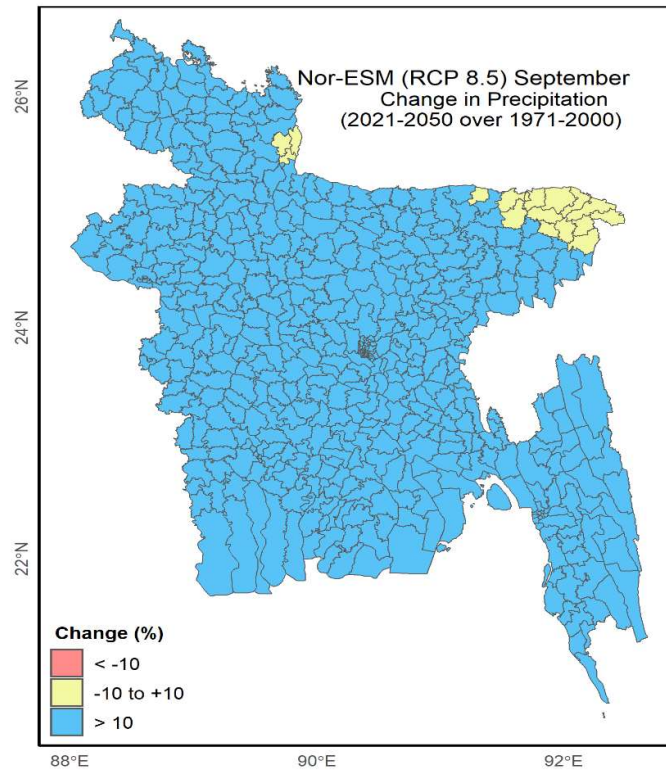


Fig. 4.59: Percentage of change in rainfall projection (RCP8.5) for September and October for the mid- century (2021-2050) in Bangladesh.

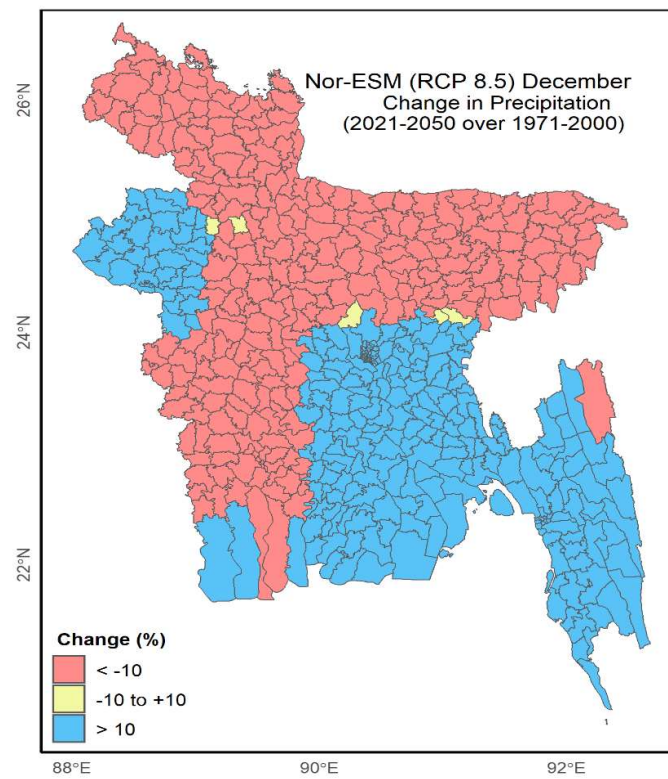
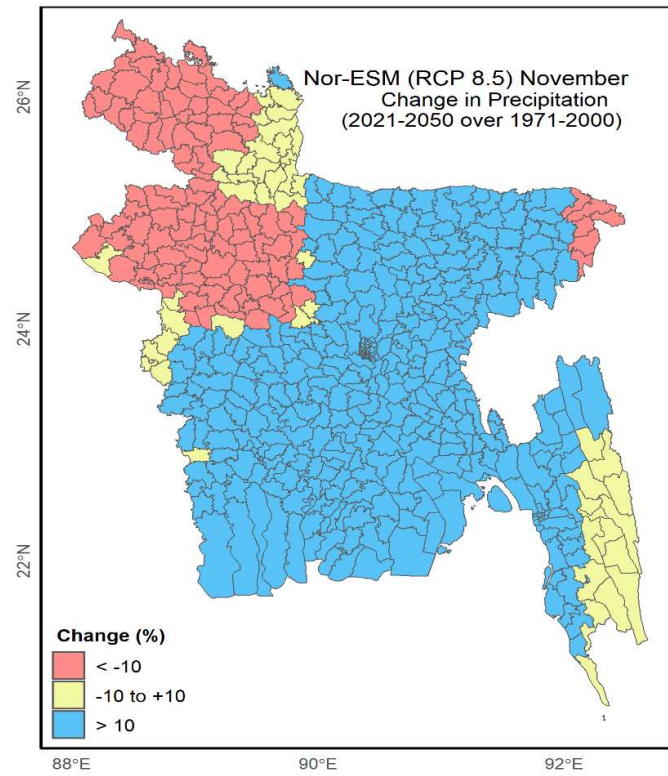


Fig. 4.60: Percentage of change in rainfall projection (RCP8.5) for November and December for the mid- century (2021-2050) in Bangladesh.

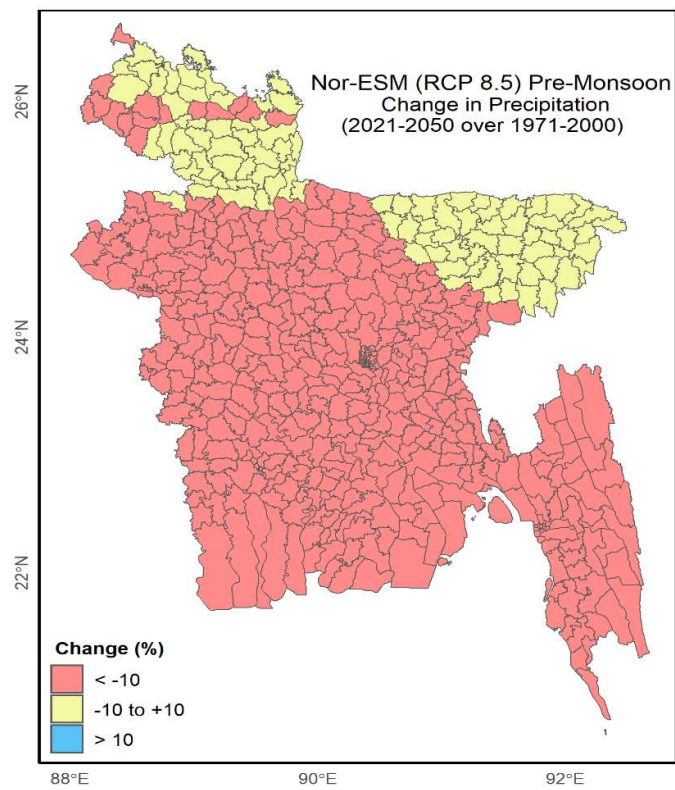
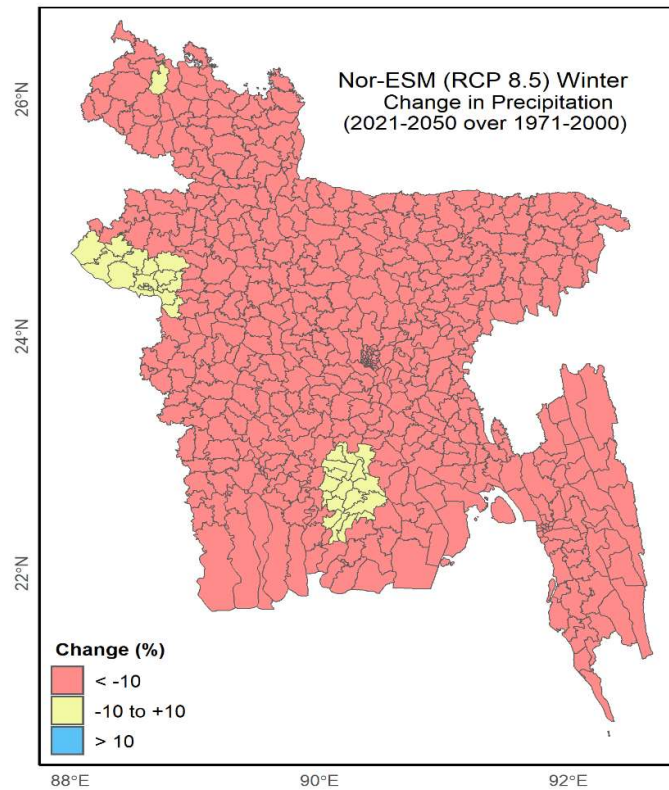


Fig. 4.61: Percentage of change in rainfall projection (RCP8.5) for Winter and Pre-monsoon season for the mid- century (2021-2050) in Bangladesh.

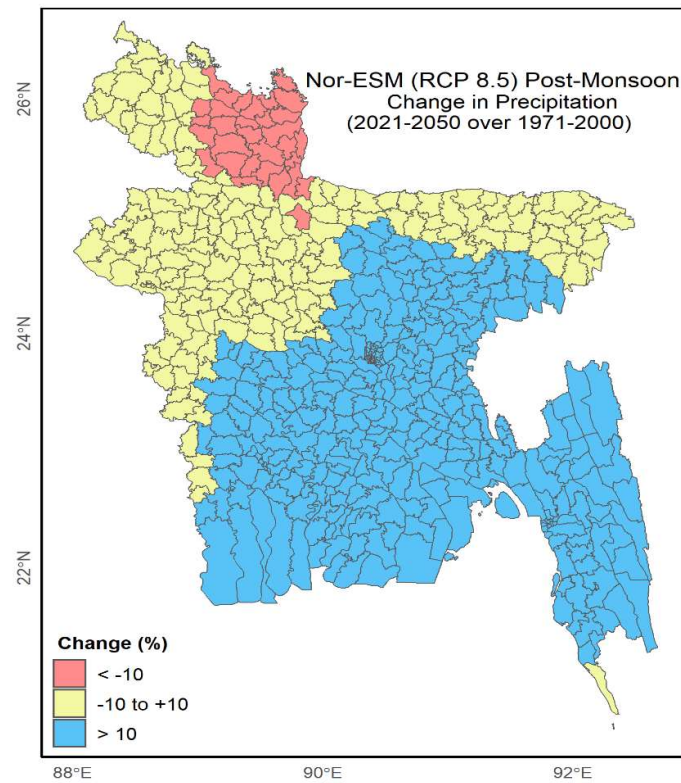
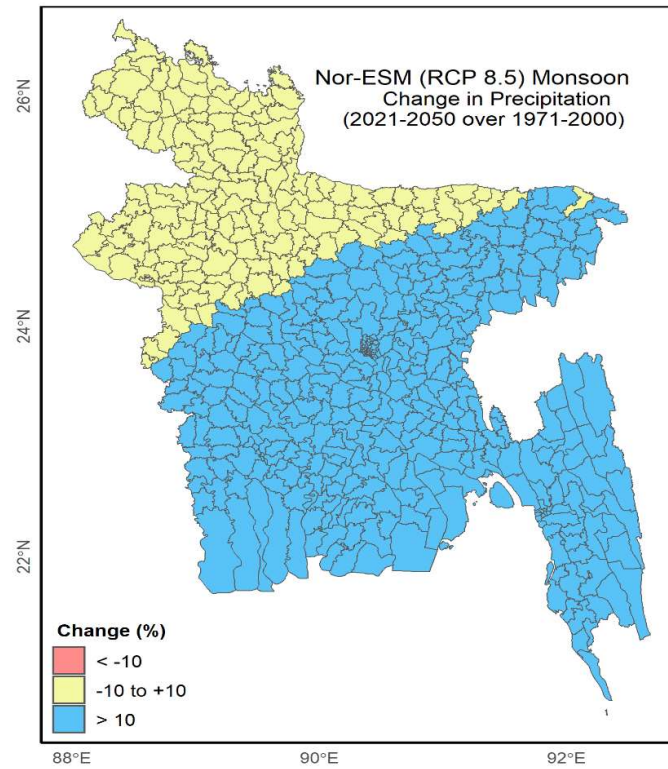


Fig. 4.62: Percentage of change in rainfall projection (RCP8.5) for Monsoon and Post-monsoon season for the mid- century (2021-2050) in Bangladesh.

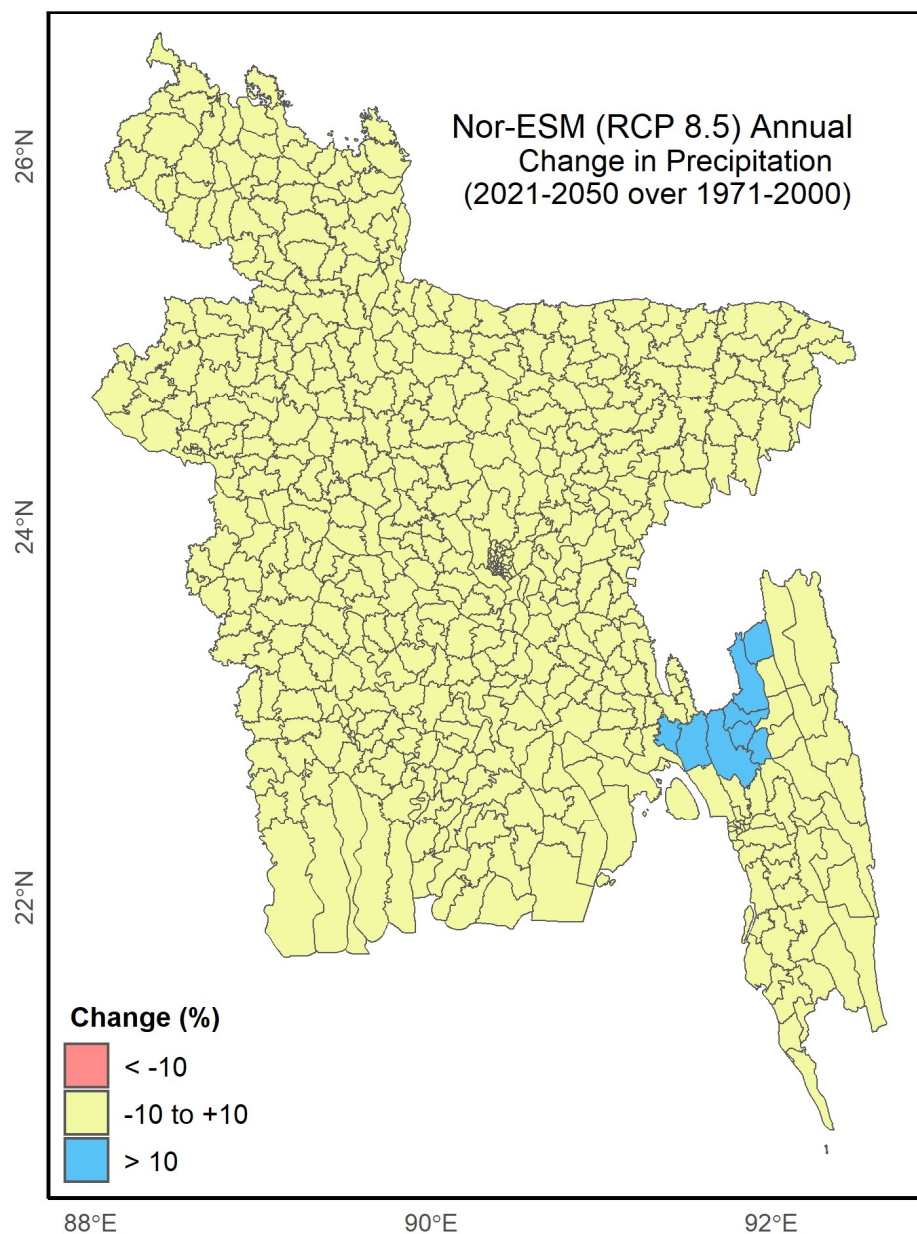


Fig. 4.63: Percentage of change in rainfall projection (RCP8.5) for Annual for the mid- century (2021-2050) in Bangladesh.

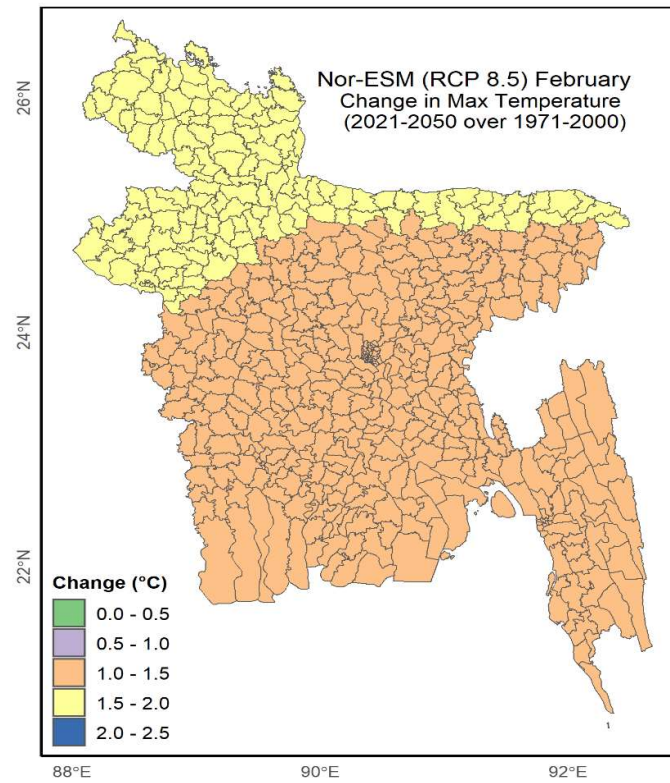
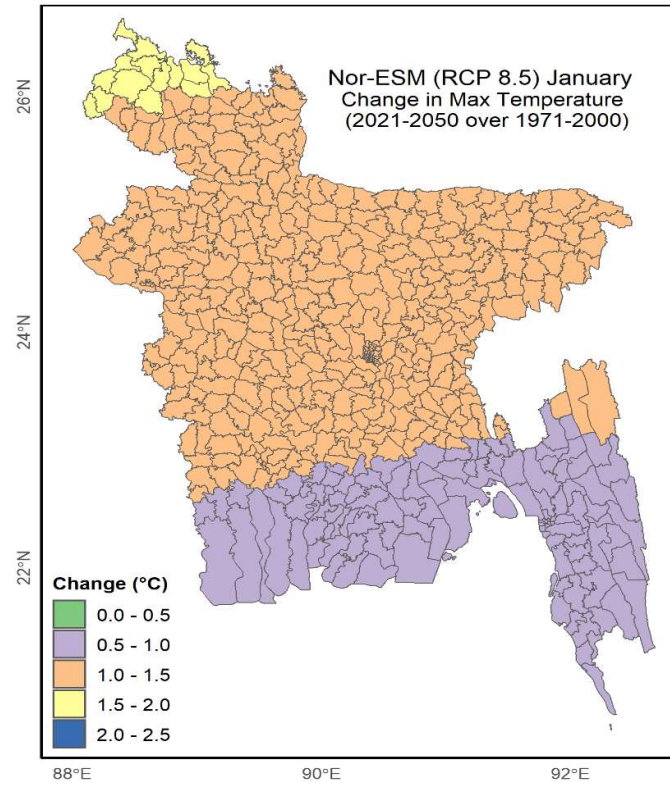


Fig. 4.64: Maximum temperature change projection(RCP8.5) in degree for January and February for the mid-century (2021-2050) in Bangladesh.

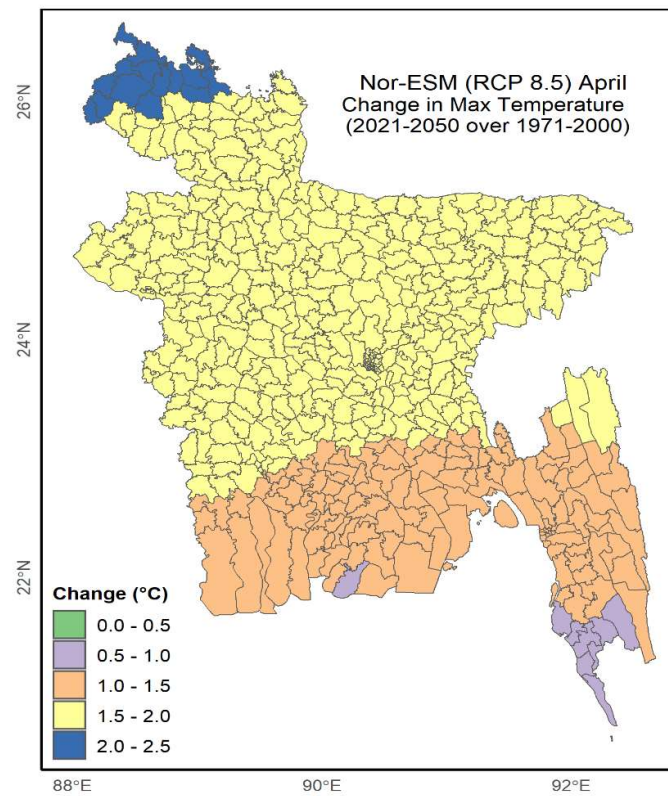
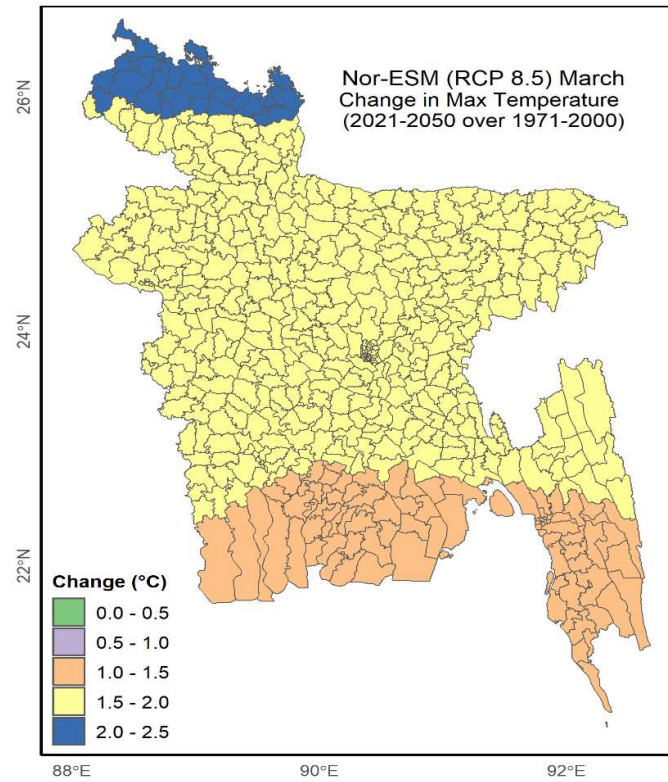


Fig. 4.65: Maximum temperature change projection(RCP8.5) in degree for March and April for the mid-century (2021-2050) in Bangladesh.

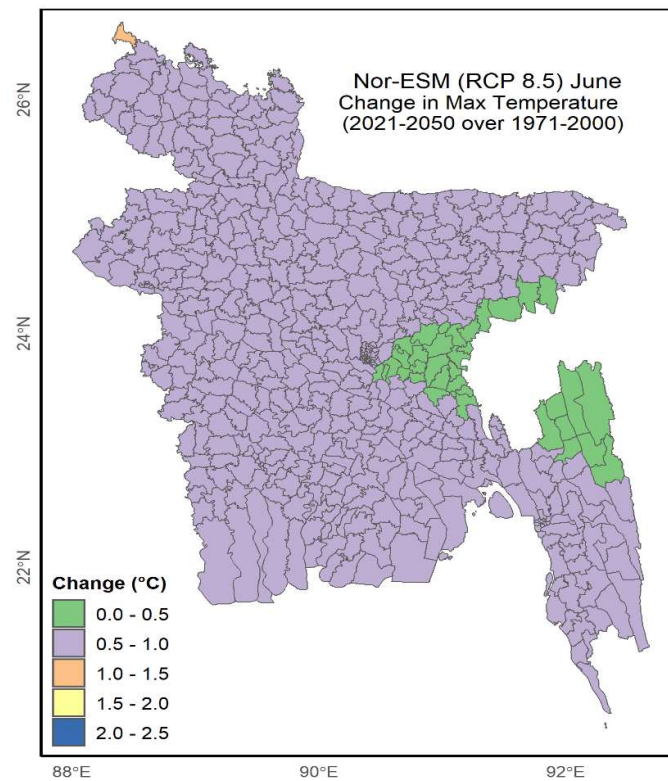
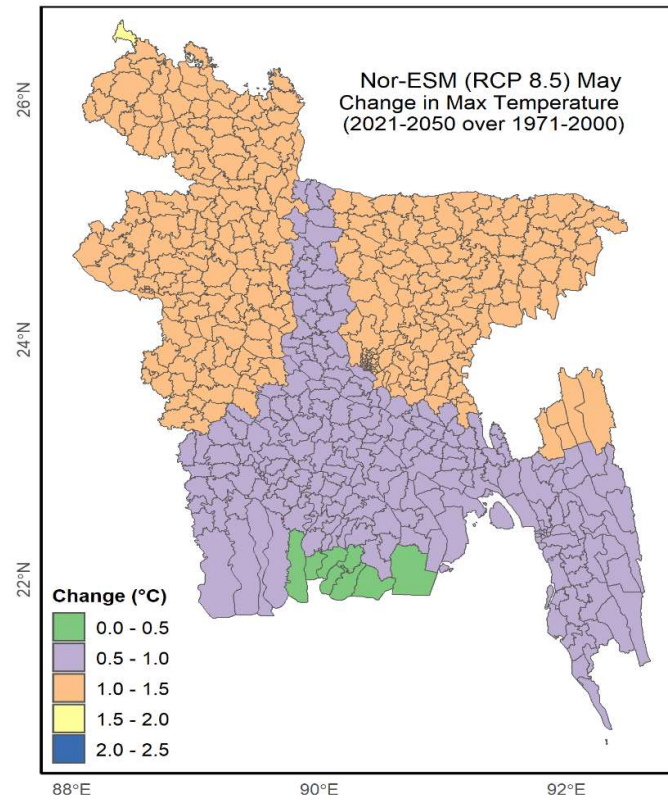


Fig. 4.66: Maximum temperature change projection(RCP8.5) in degree for May and June for the mid-century (2021-2050) in Bangladesh.

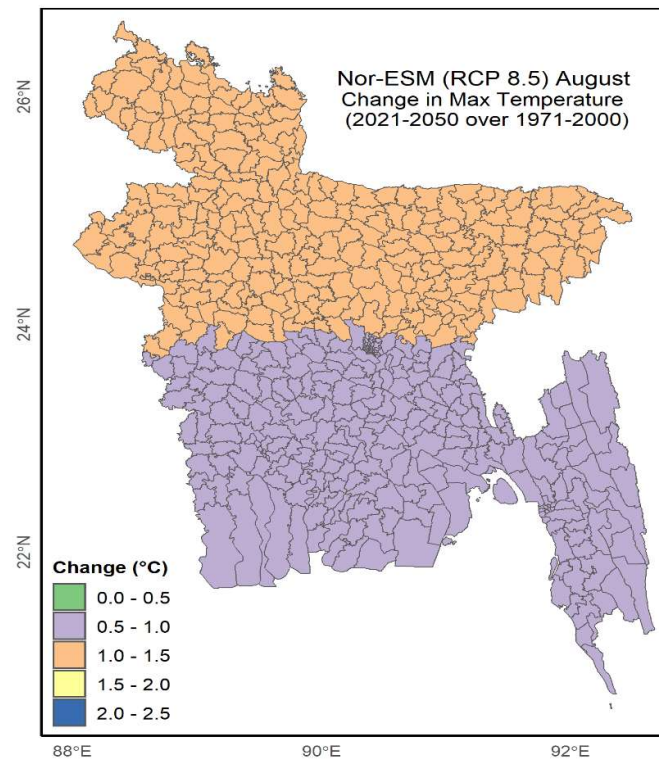
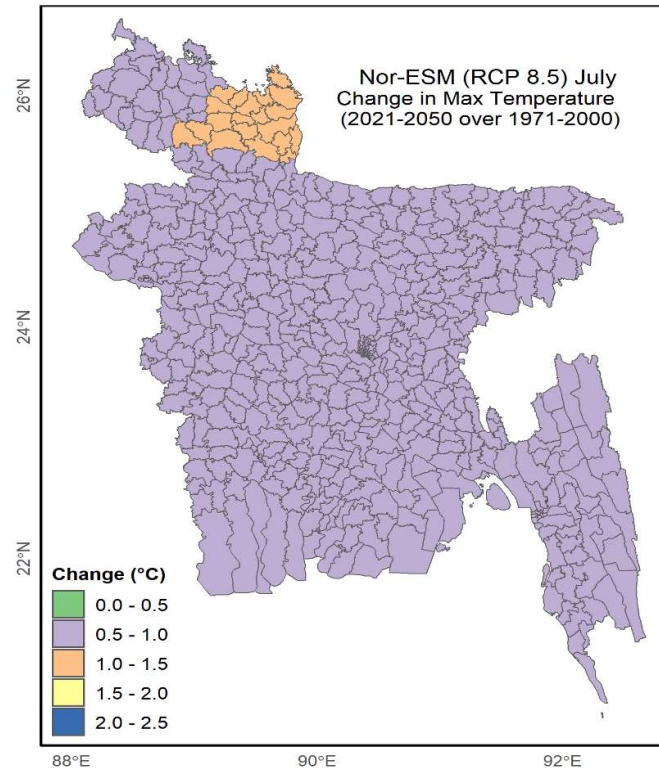


Fig. 4.67: Maximum temperature change projection(RCP8.5) in degree for July and August for the mid-century (2021-2050) in Bangladesh.

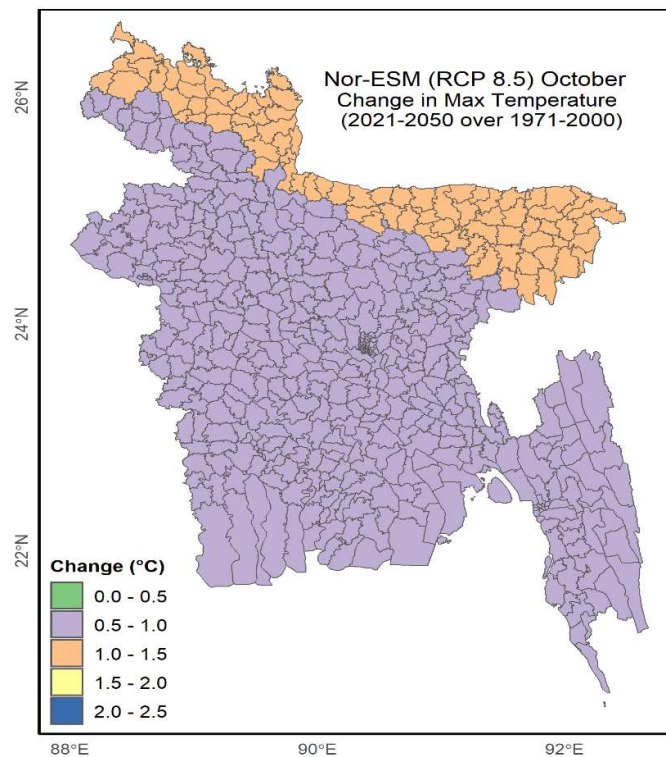
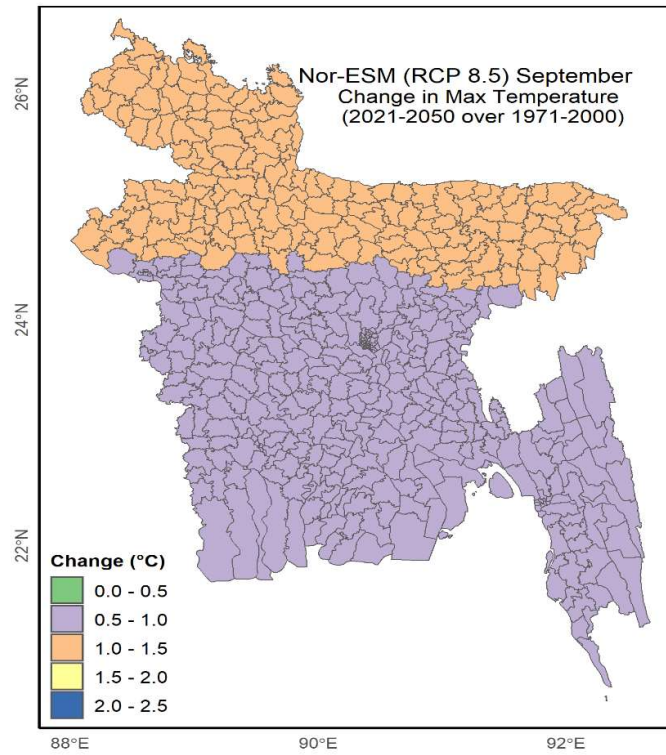


Fig. 4.68: Maximum temperature change projection(RCP8.5) in degree for September and October for the mid-century (2021-2050) in Bangladesh.

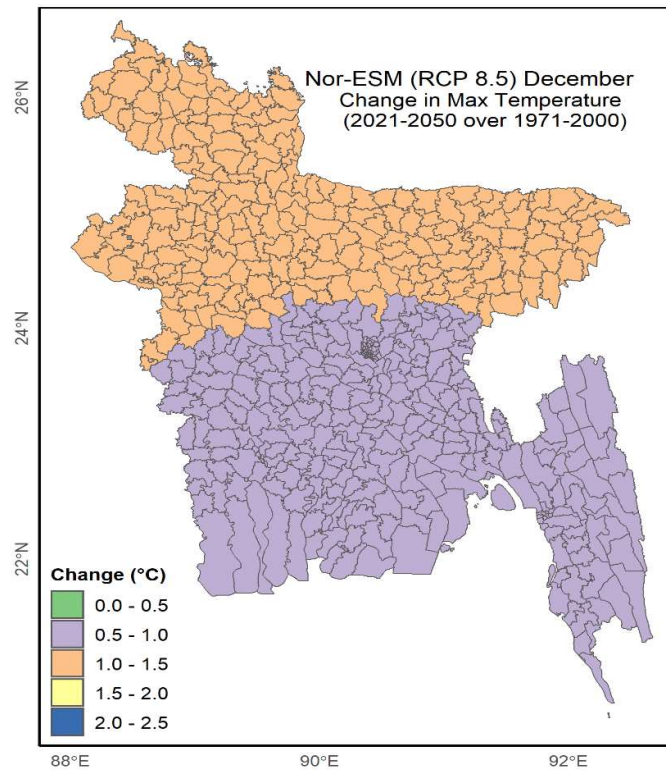
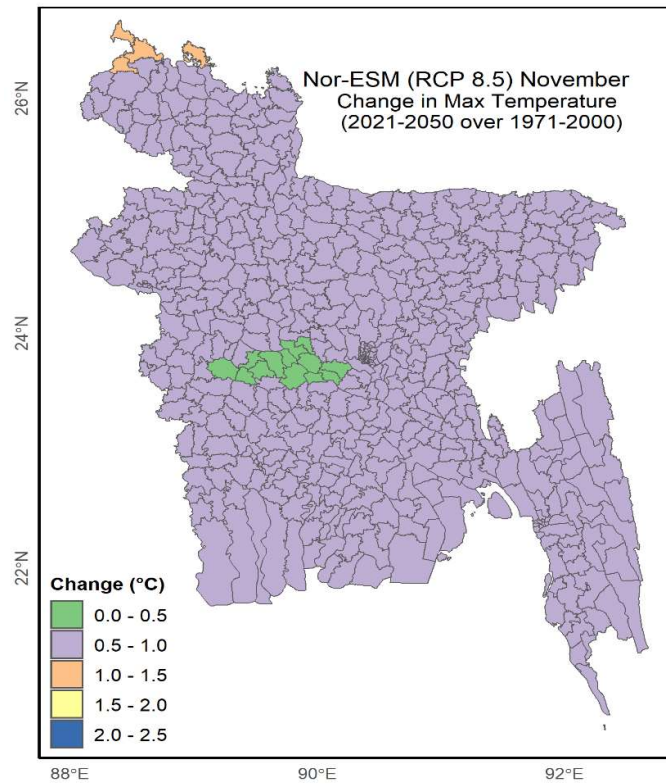


Fig. 4.69: Maximum temperature change projection(RCP8.5) in degree for November and December for the mid-century (2021-2050) in Bangladesh.

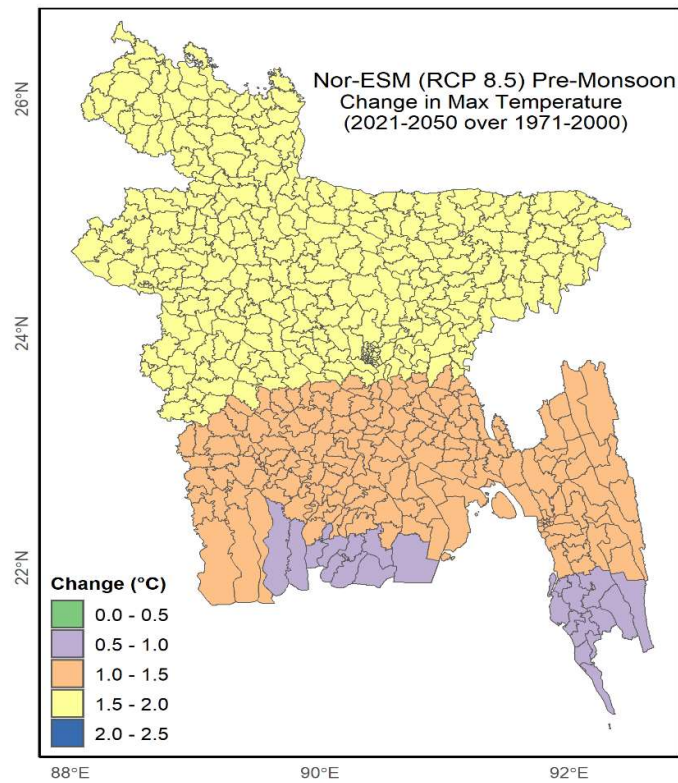
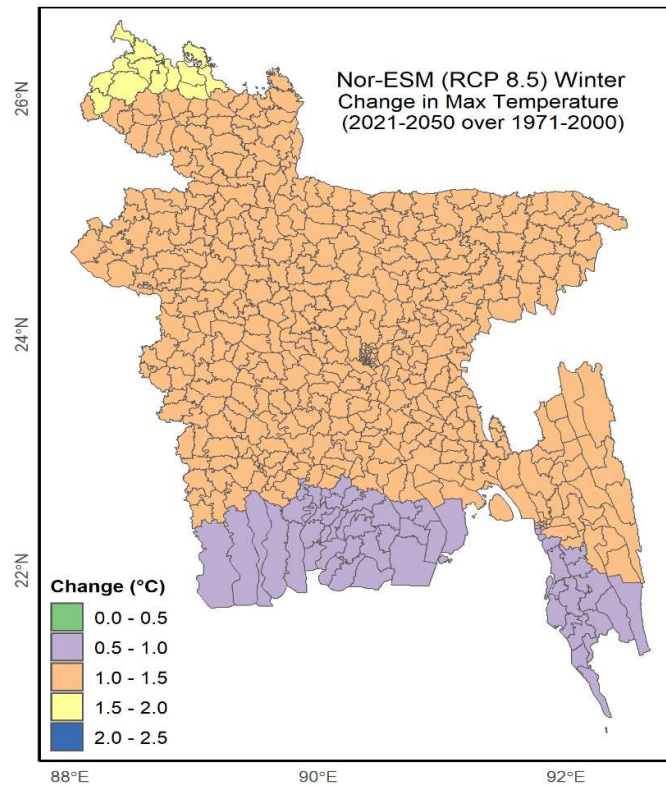


Fig. 4.70: Maximum temperature change projection(RCP8.5) in degree for Winter and Pre-monsoon season for the mid-century (2021-2050) in Bangladesh.

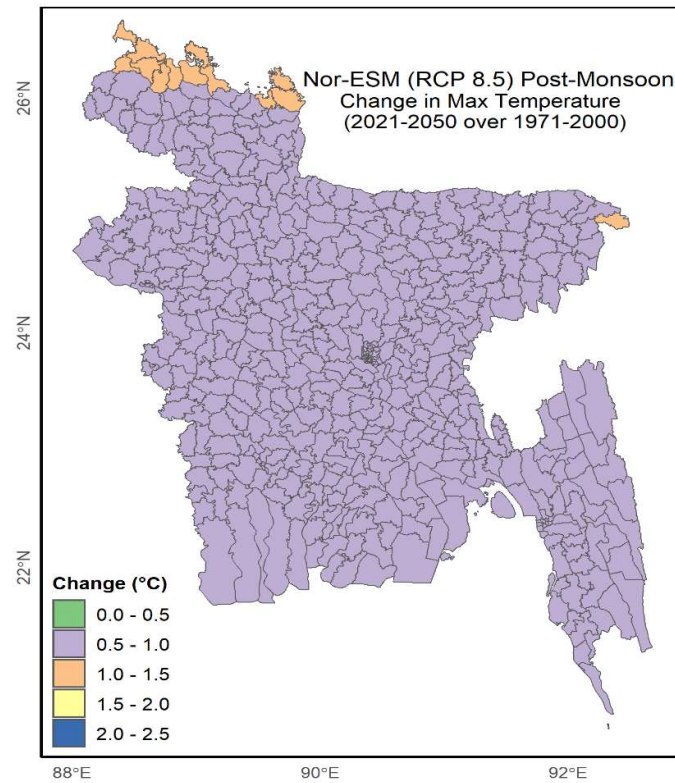
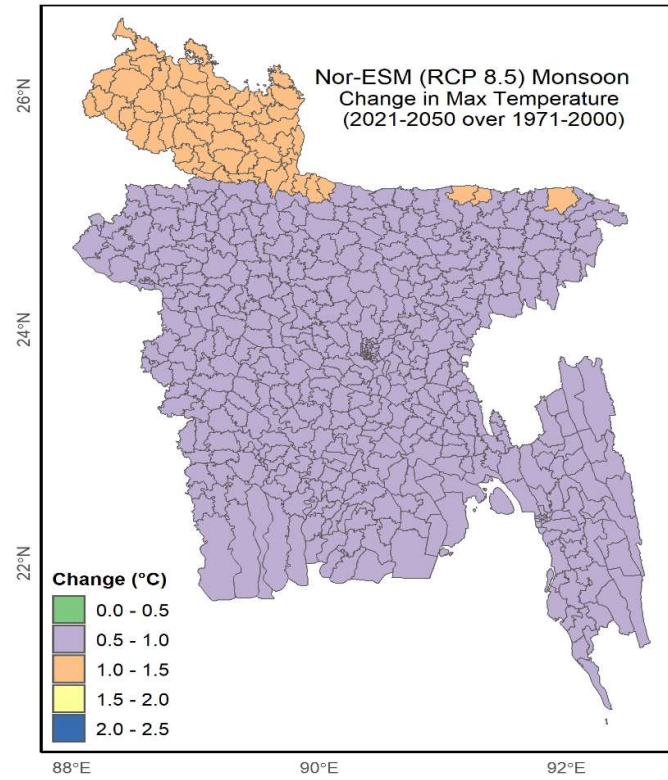


Fig. 4.71: Maximum temperature change projection(RCP8.5) in degree for Monsoon and Post-monsoon season for the mid-century (2021-2050) in Bangladesh.

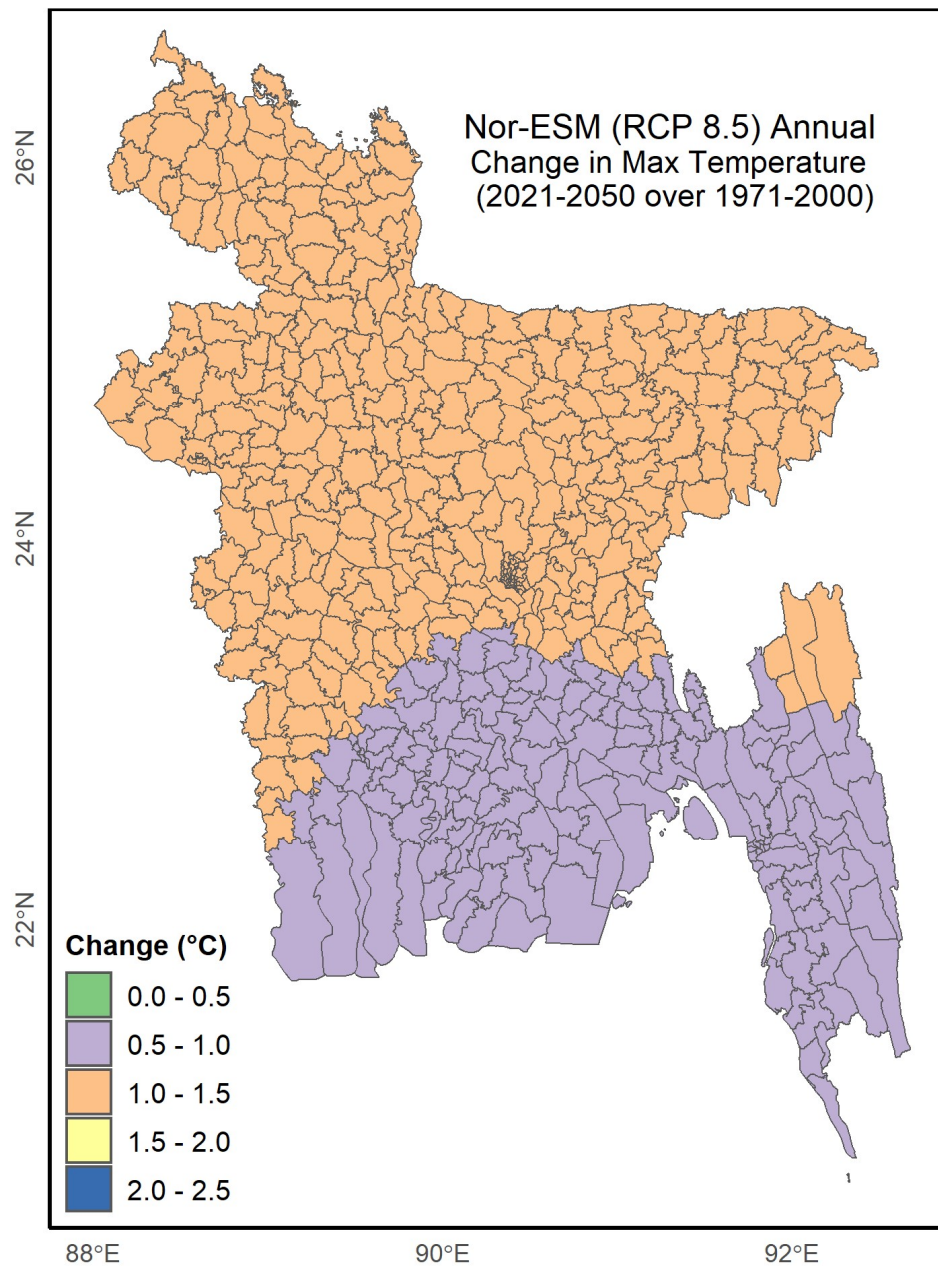


Fig. 4.72: Maximum temperature change projection(RCP8.5) in degree for Annual for the mid-century (2021-2050) in Bangladesh.

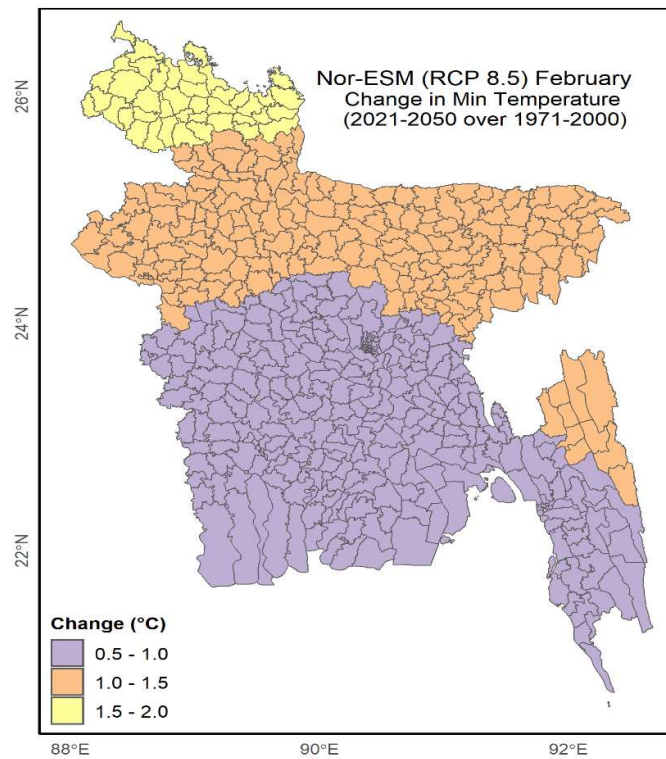
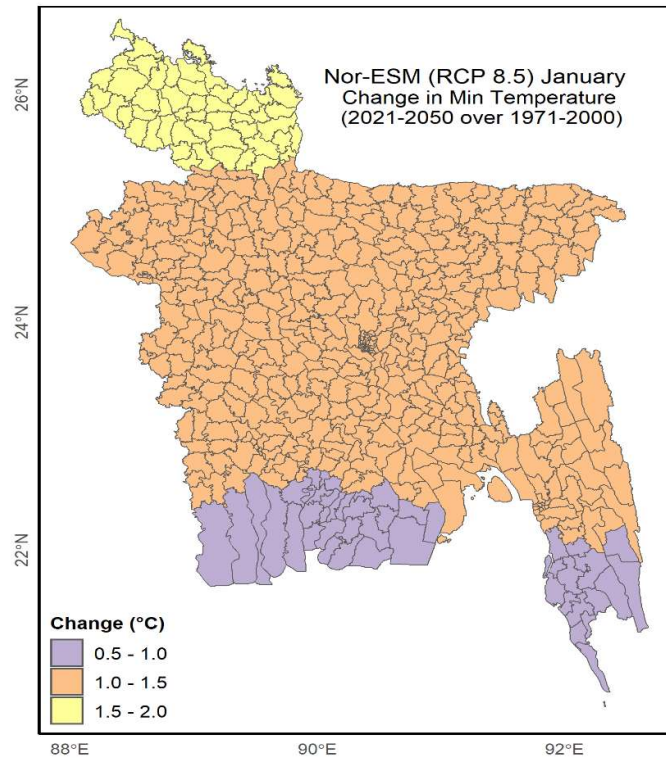


Fig. 4.73: Minimum temperature change projection(RCP8.5) in degree for January and February for the mid-century (2021-2050) in Bangladesh.

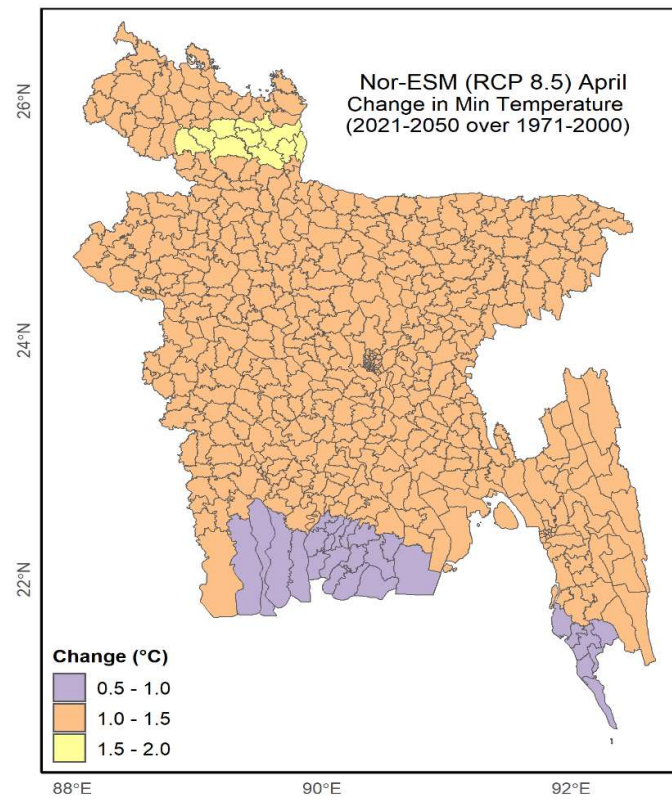
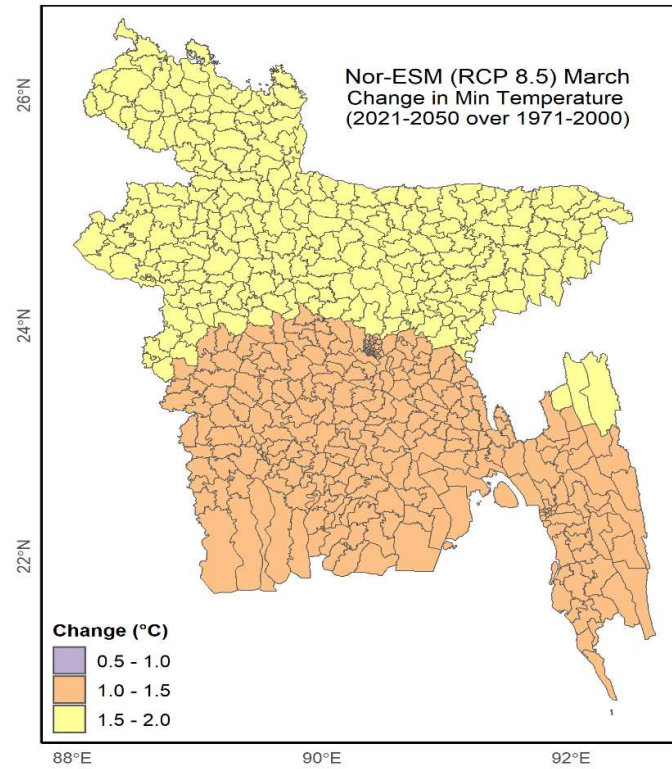


Fig. 4.74: Minimum temperature change projection(RCP8.5) in degree for March and April for the mid-century (2021-2050) in Bangladesh.

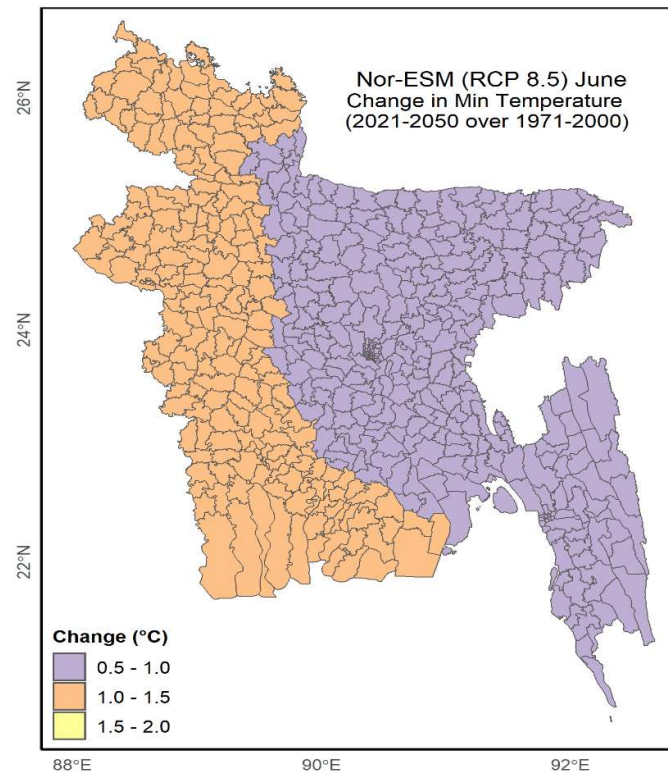
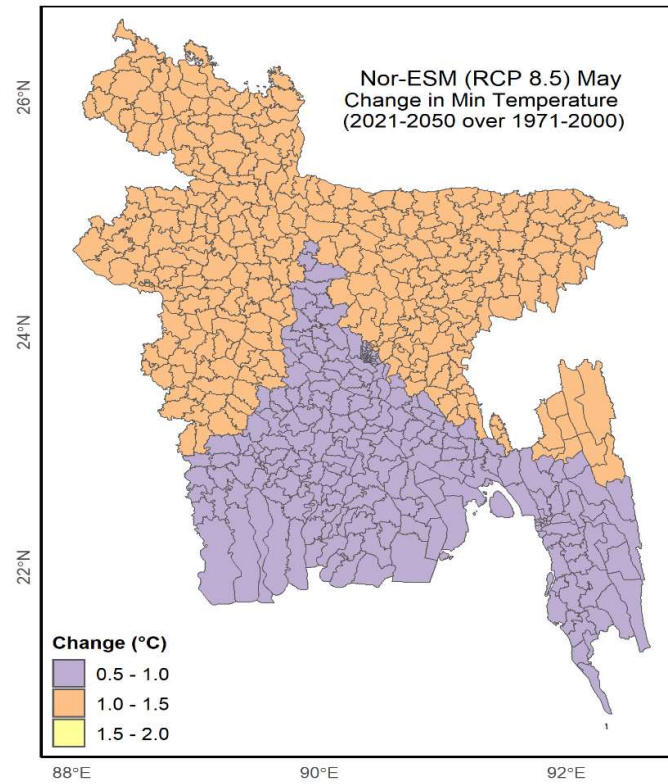


Fig. 4.75: Minimum temperature change projection(RCP8.5) in degree for May and June for the mid-century (2021-2050) in Bangladesh.

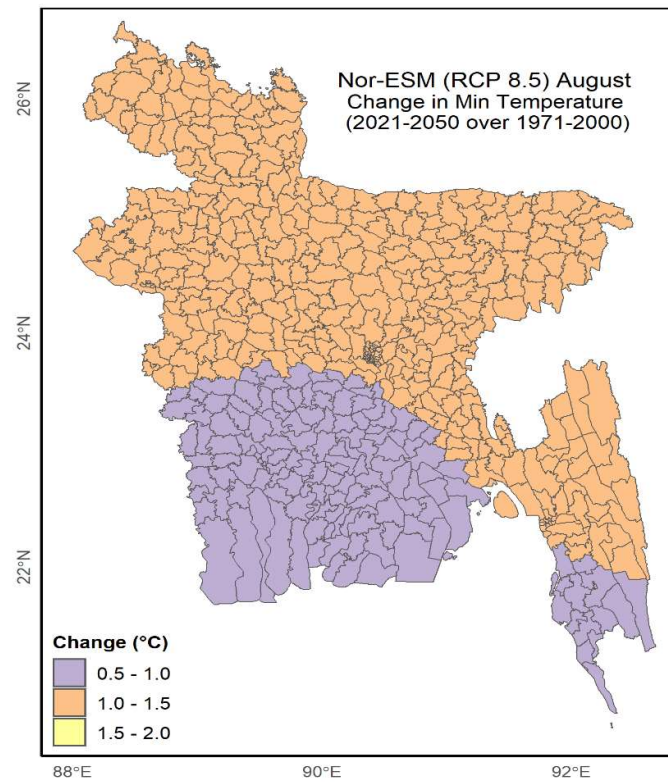
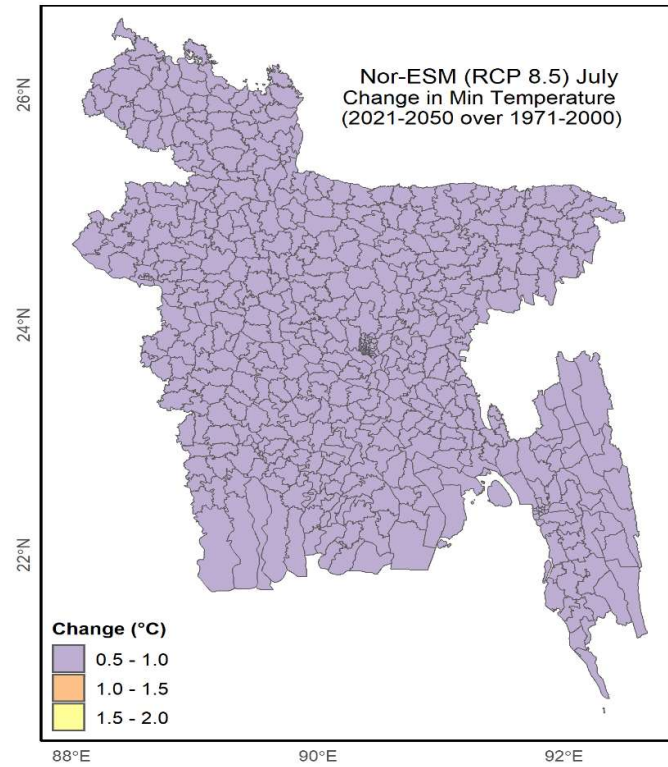


Fig. 4.76: Minimum temperature change projection(RCP8.5) in degree for July and August for the mid-century (2021-2050) in Bangladesh.

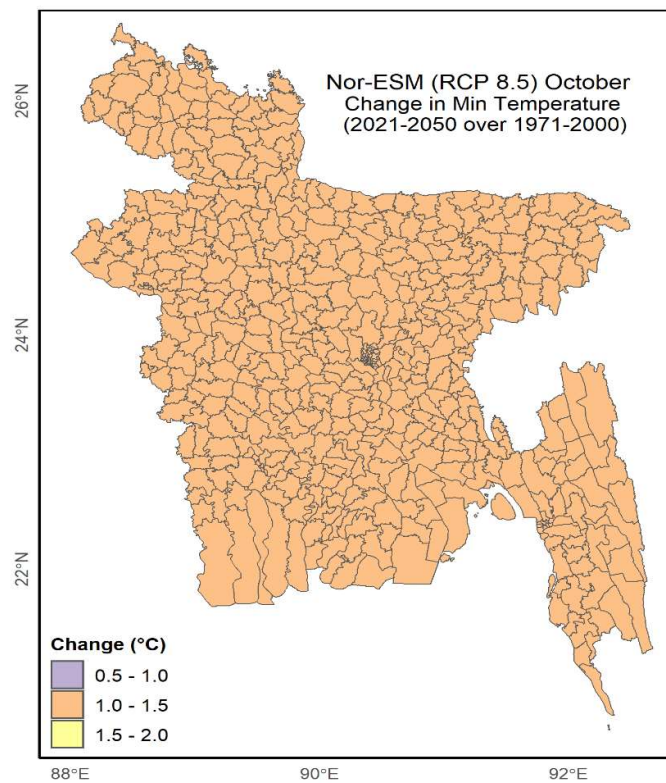
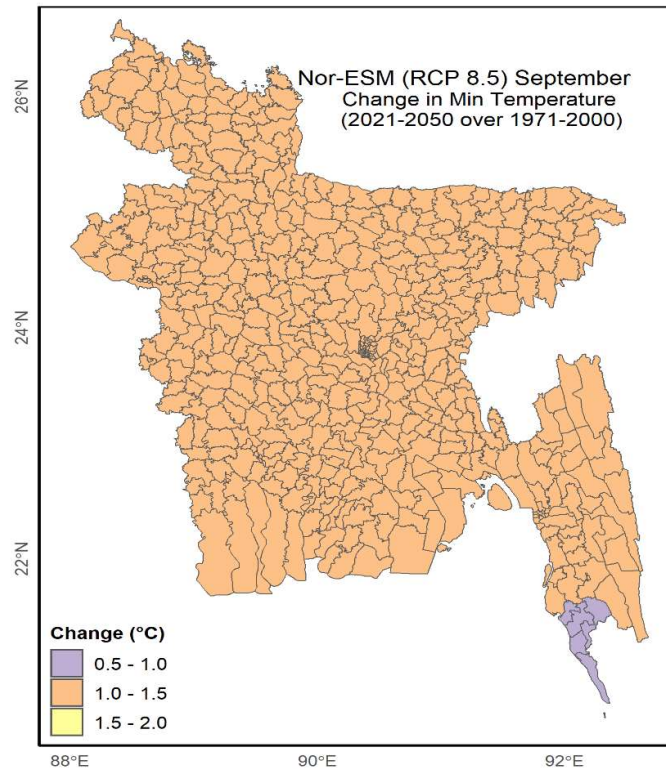


Fig. 4.77: Minimum temperature change projection(RCP8.5) in degree for September and October for the mid-century (2021-2050) in Bangladesh.

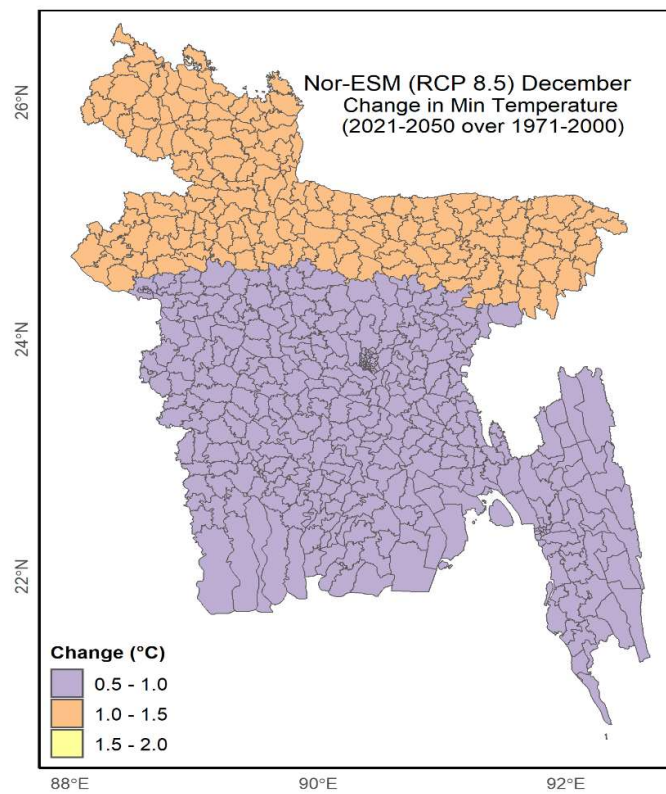
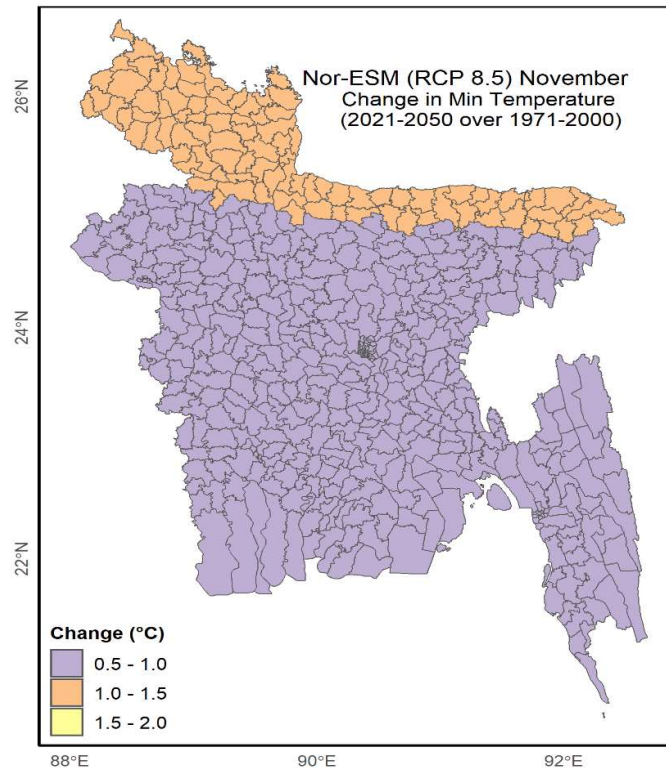


Fig. 4.78: Minimum temperature change projection(RCP8.5) in degree for November and December for the mid-century (2021-2050) in Bangladesh.

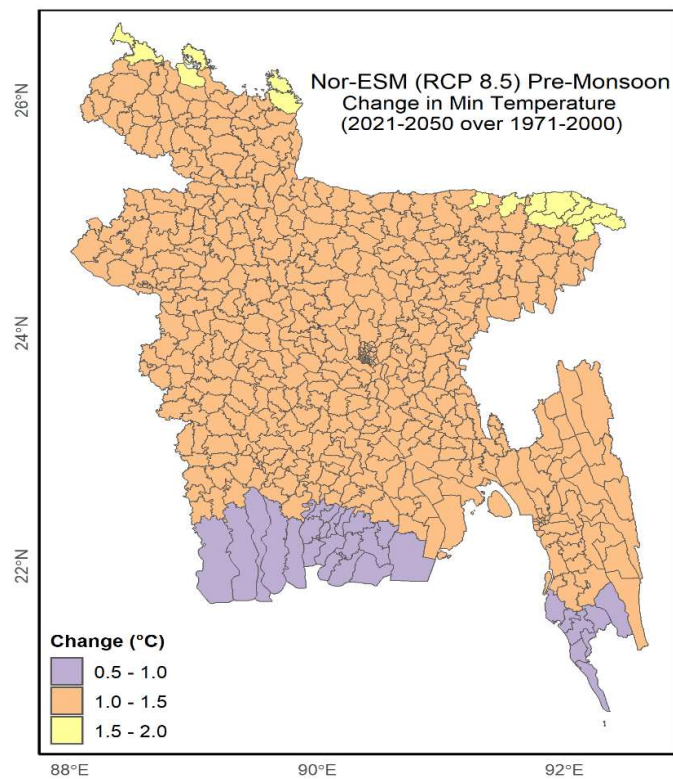
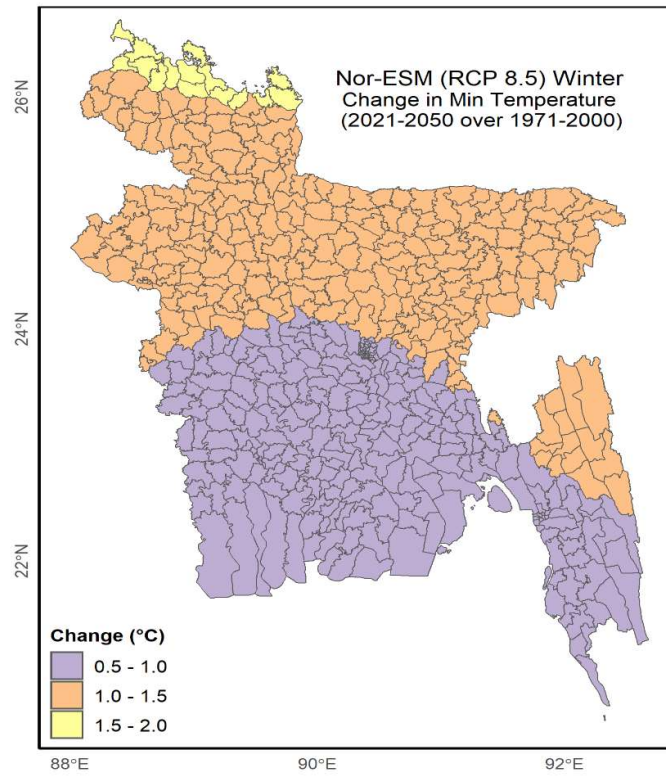


Fig. 4.79: Minimum temperature change projection(RCP8.5) in degree for Winter and Pre-monsoon season for the mid-century (2021-2050) in Bangladesh.

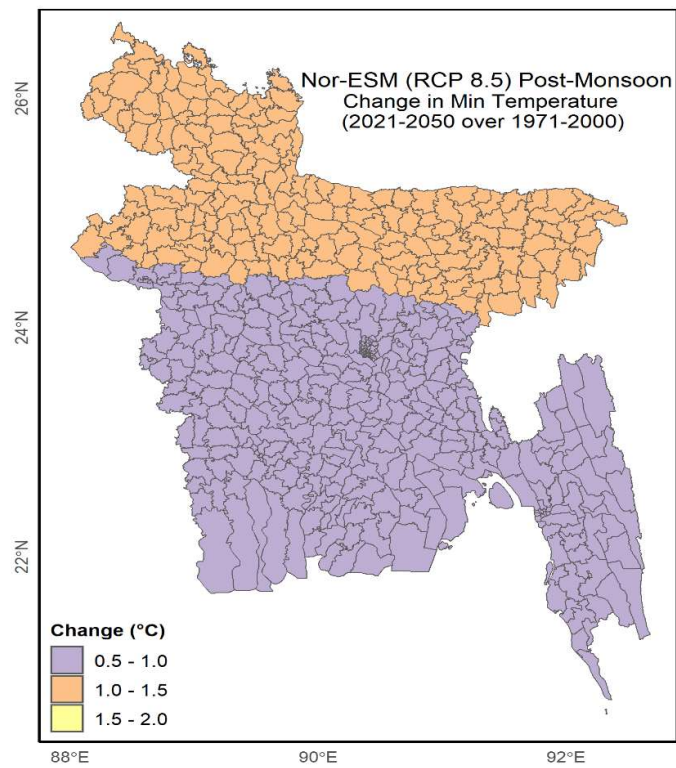
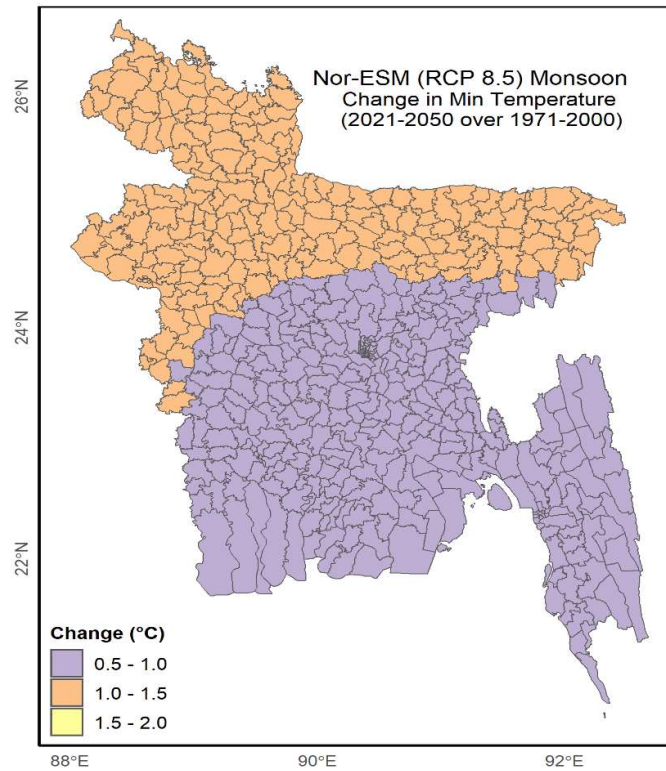


Fig. 4.80: Minimum temperature change projection(RCP8.5) in degree for Monsoon and Post-monsoon season for the mid-century (2021-2050) in Bangladesh.

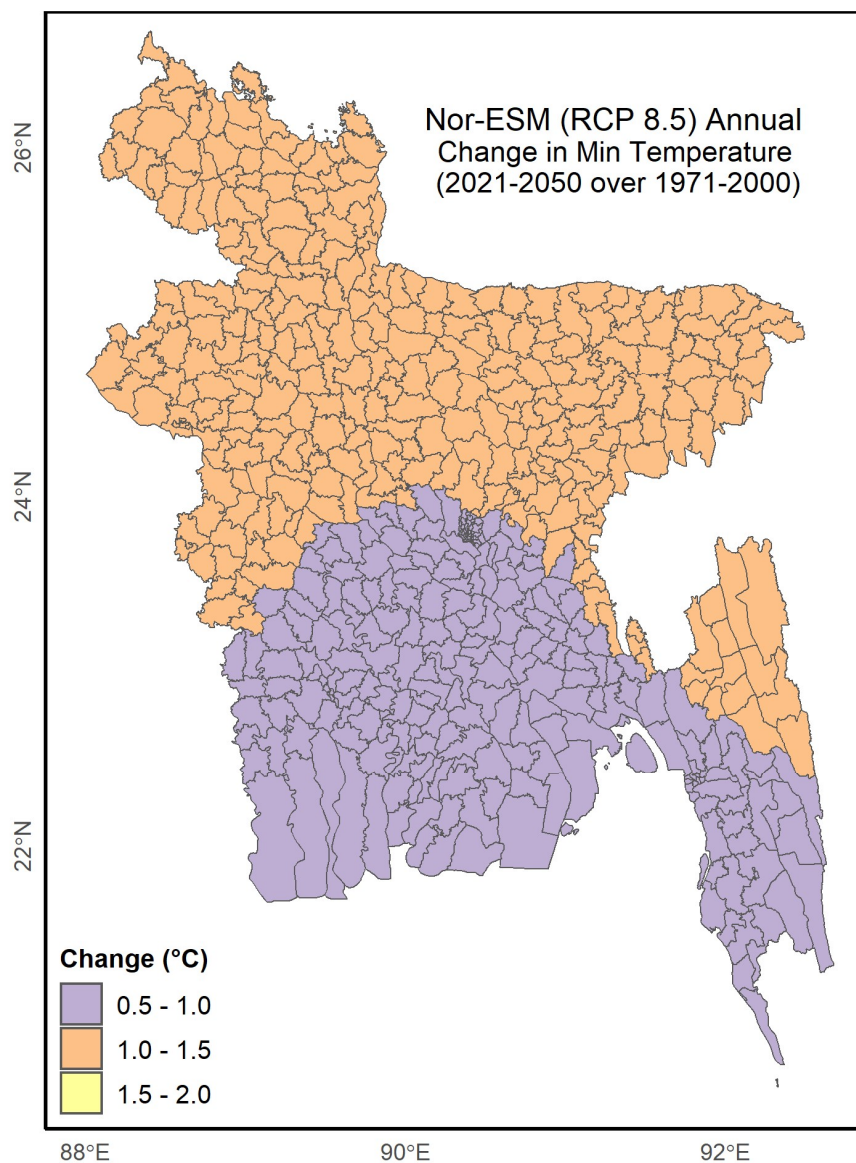


Fig. 4.81: Minimum temperature change projection(RCP8.5) in degree for Annual for the mid-century (2021-2050) in Bangladesh.

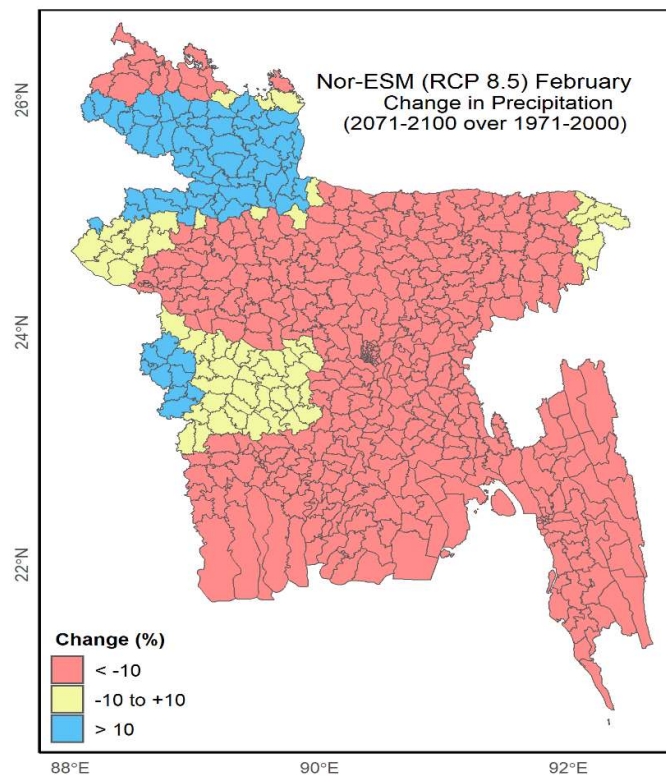
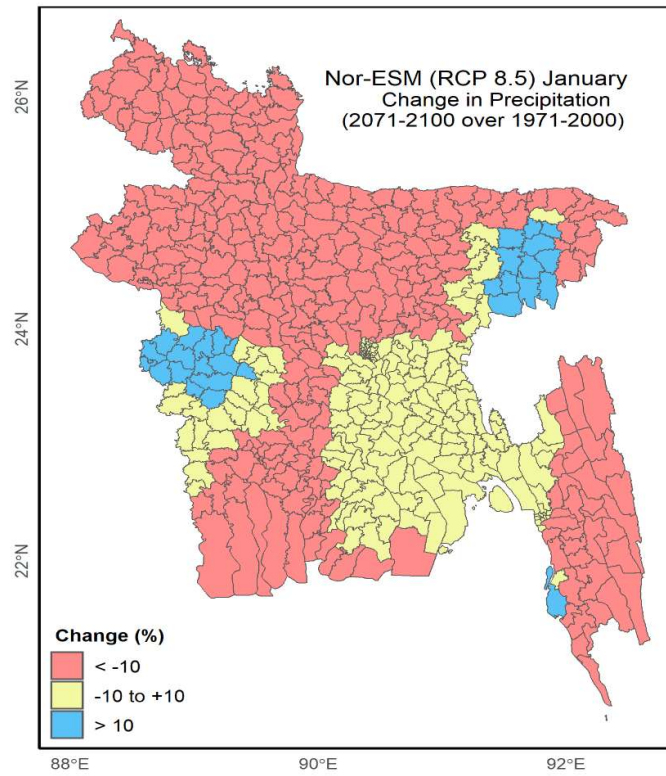


Fig. 4.82: Percentage of change in rainfall projection (RCP8.5) for January and February for the last- century (2071-2100) in Bangladesh.

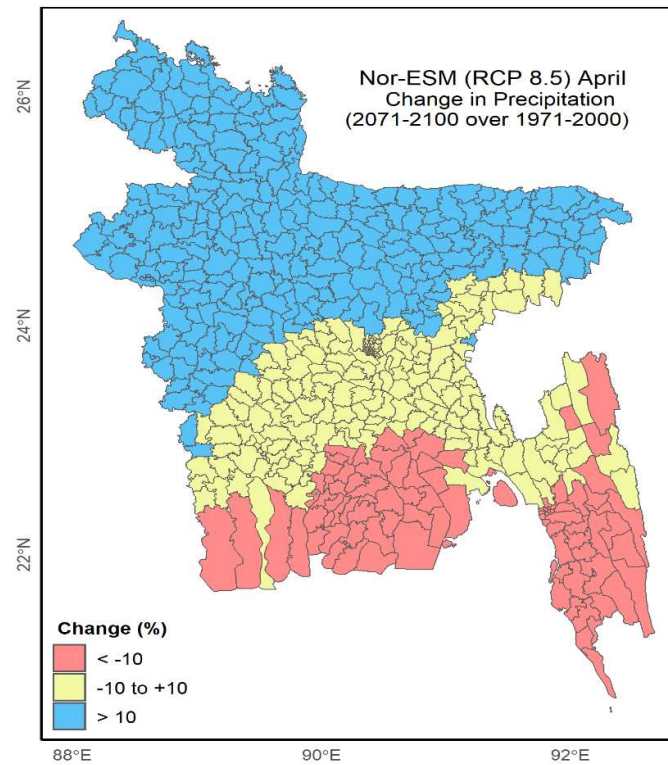
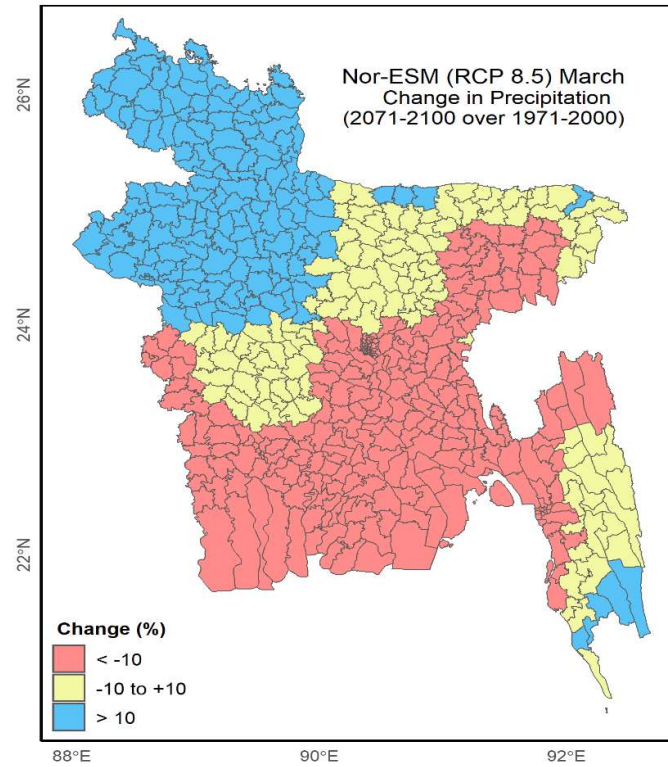


Fig. 4.83: Percentage of change in rainfall projection (RCP8.5) for March and April for the last-century (2071-2100) in Bangladesh.

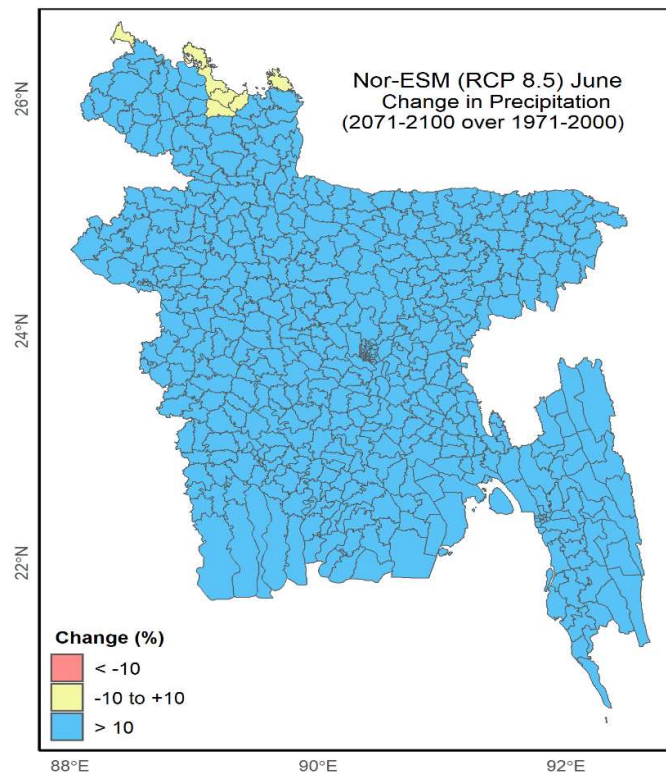
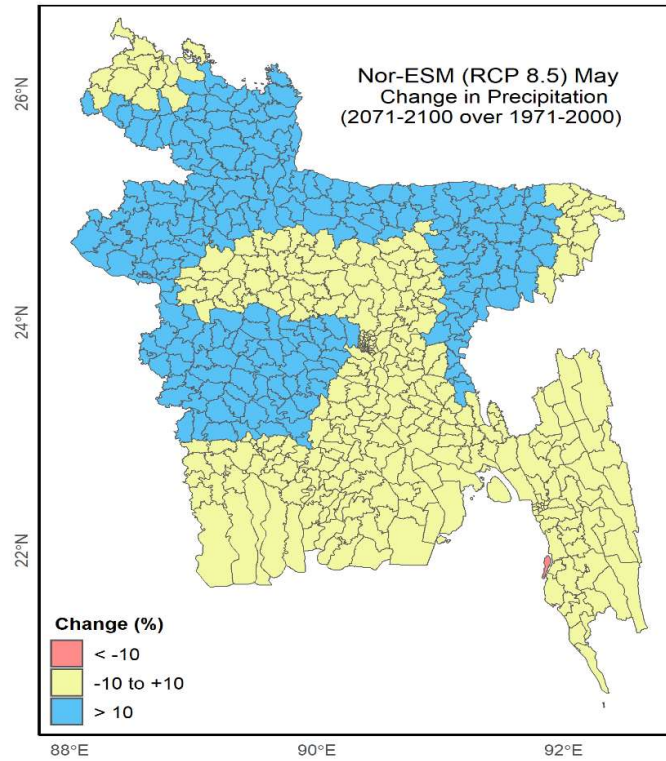


Fig. 4.84: Percentage of change in rainfall projection (RCP8.5) for May and June for the last- century (2071-2100) in Bangladesh.

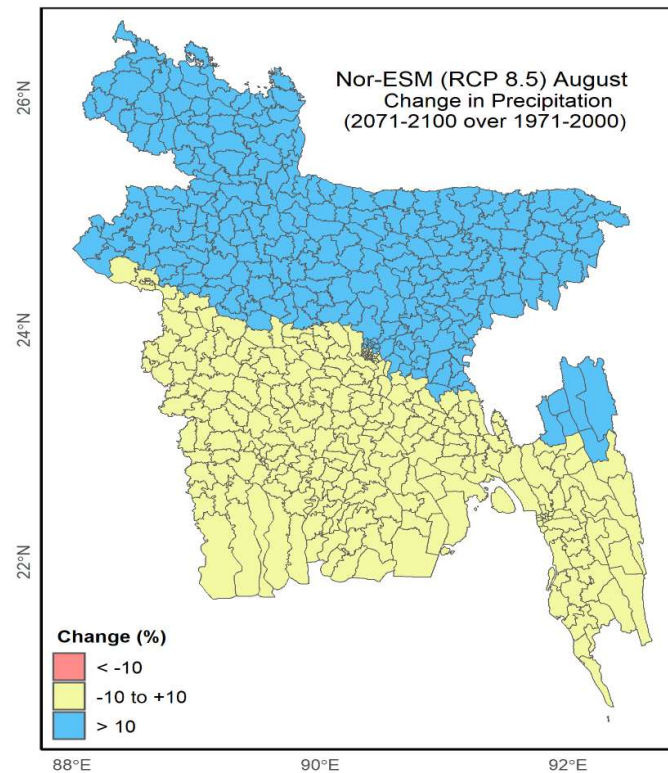
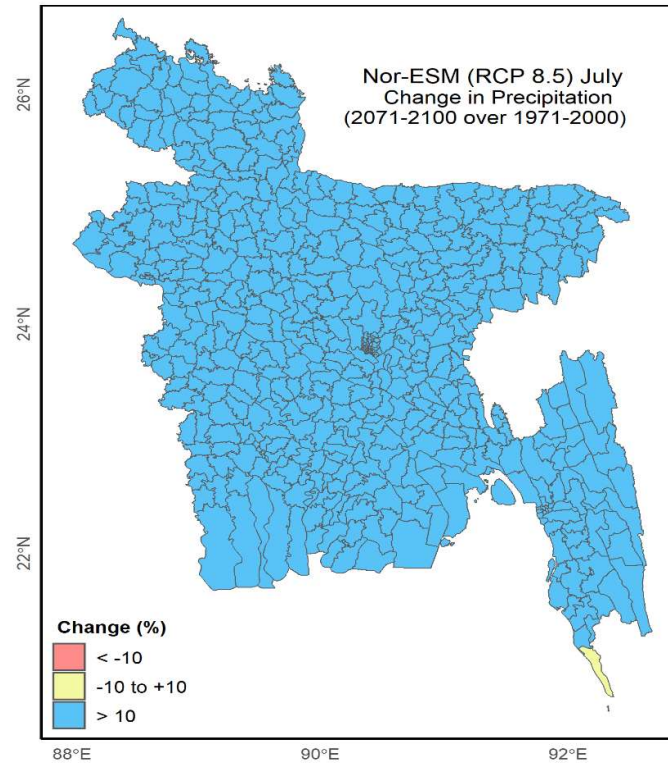


Fig. 4.85: Percentage of change in rainfall projection (RCP8.5) for July and August for the last-century (2071-2100) in Bangladesh.

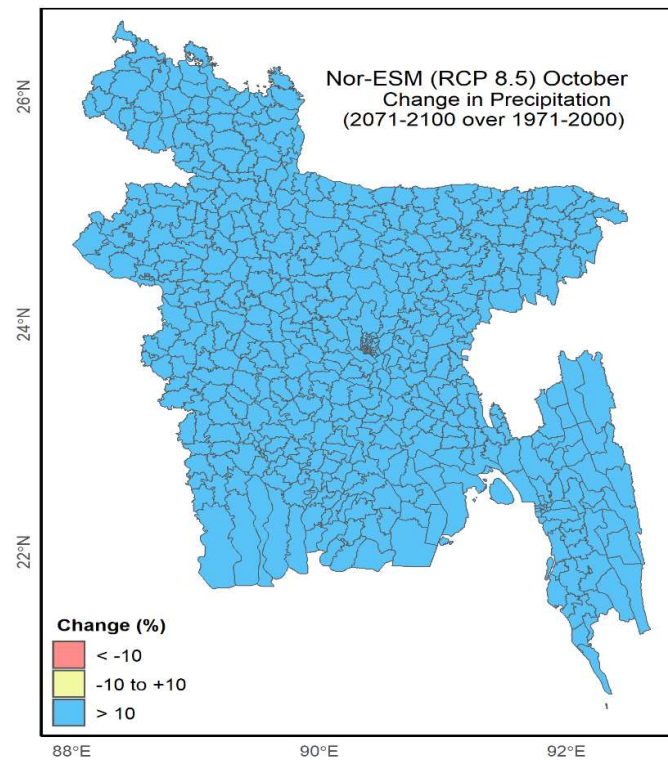
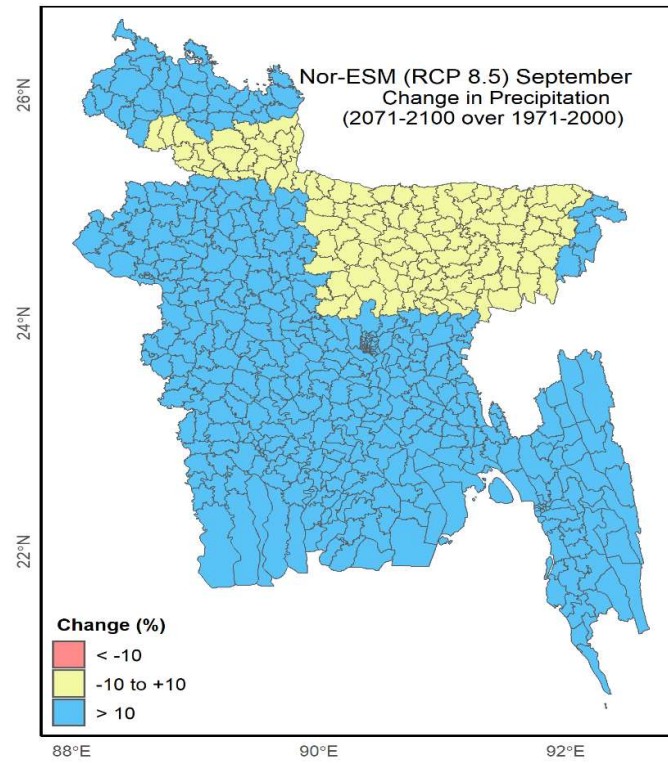


Fig. 4.86: Percentage of change in rainfall projection (RCP8.5) for September and October for the last-century (2071-2100) in Bangladesh.

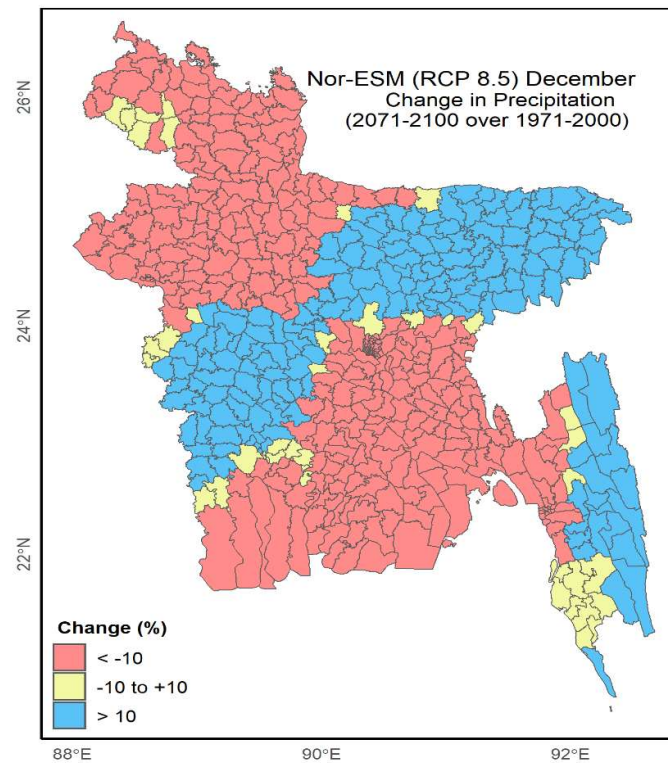
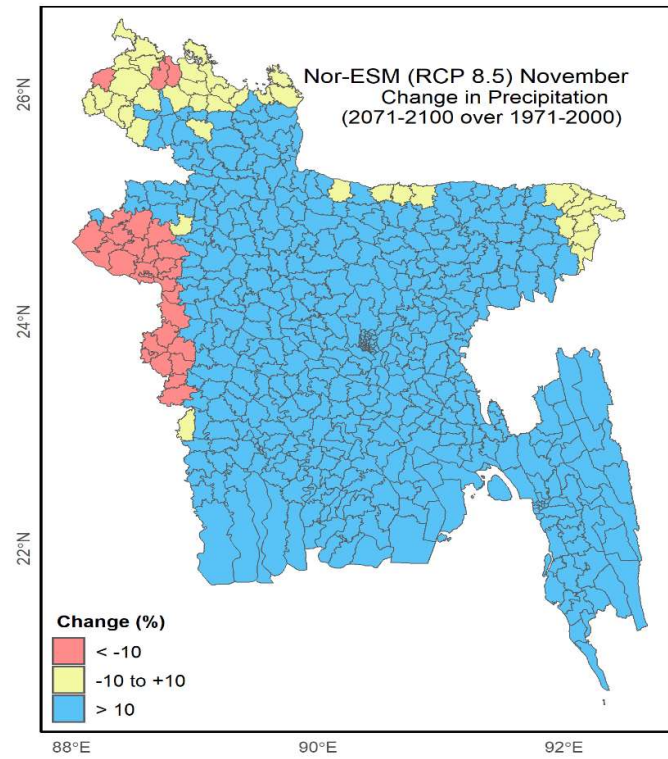


Fig. 4.87: Percentage of change in rainfall projection (RCP8.5) for November and December for the last- century (2071-2100) in Bangladesh.

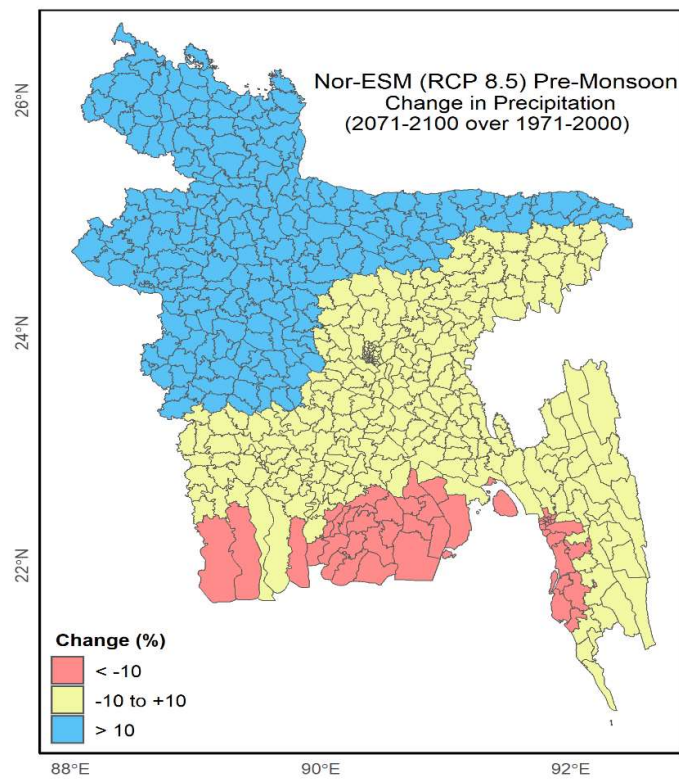
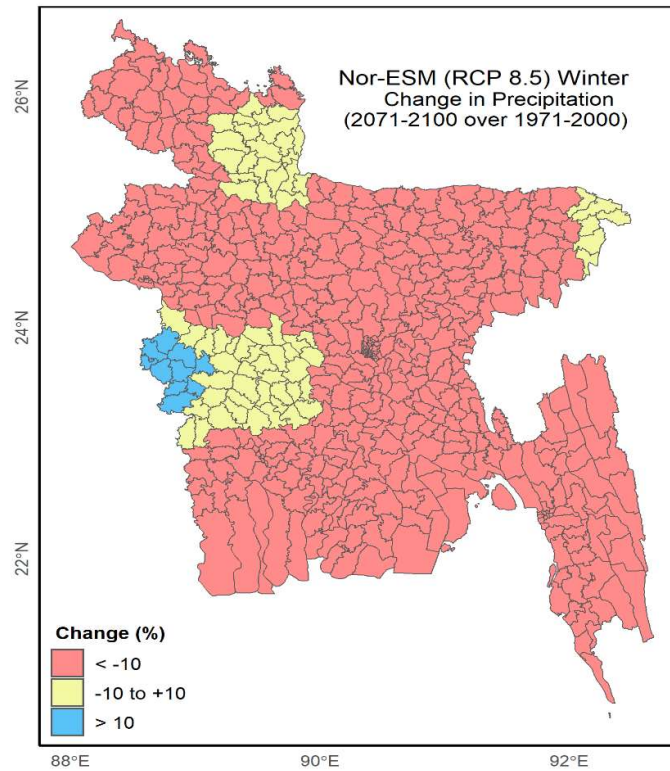


Fig. 4.88: Percentage of change in rainfall projection (RCP8.5) for Winter and Pre-monsoon season for the last- century (2071-2100) in Bangladesh.

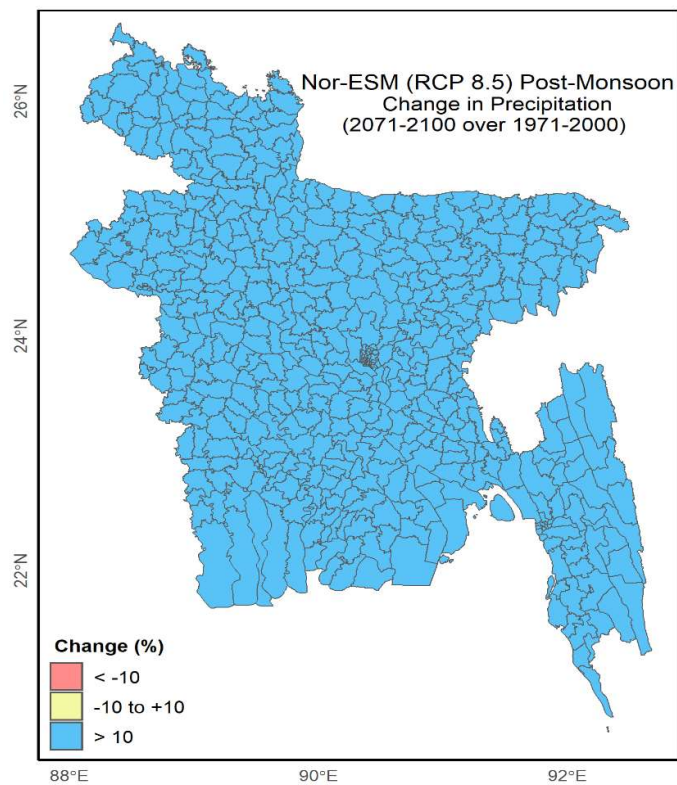
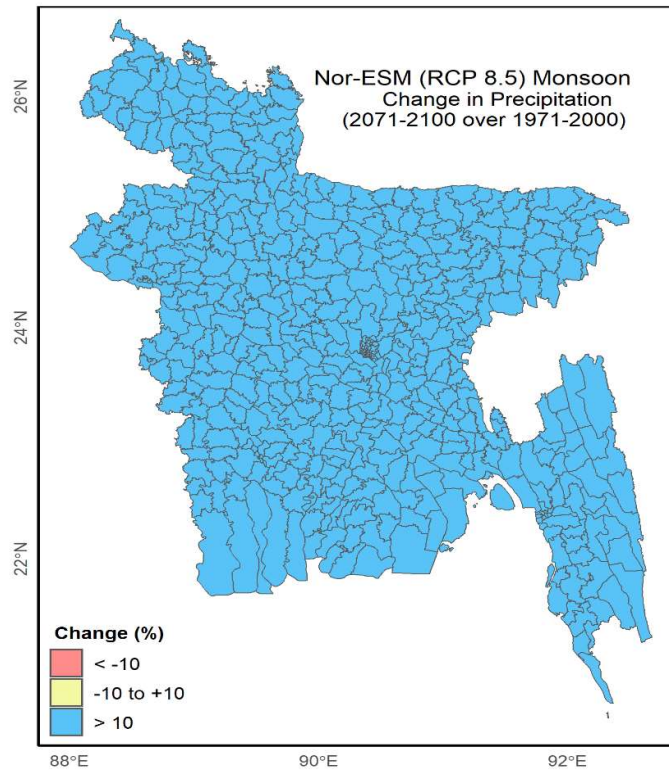


Fig. 4.89: Percentage of change in rainfall projection (RCP8.5) for Monsoon and Post-monsoon season for the last- century (2071-2100) in Bangladesh.

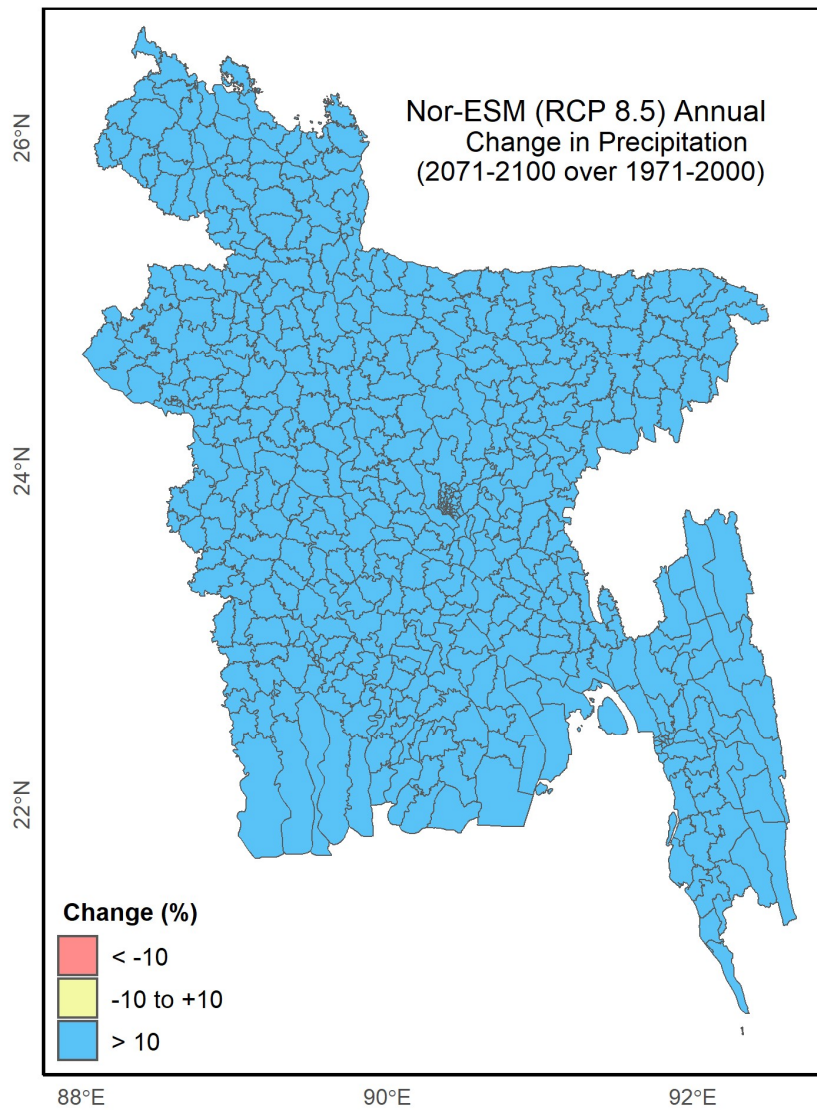


Fig. 4.90: Percentage of change in rainfall projection (RCP8.5) for Annual for the last- century (2071-2100) in Bangladesh.

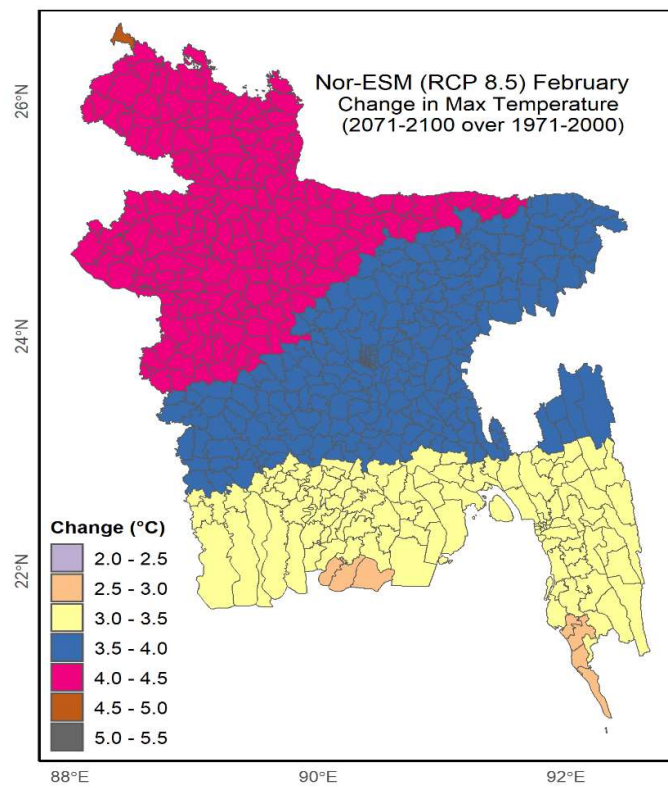
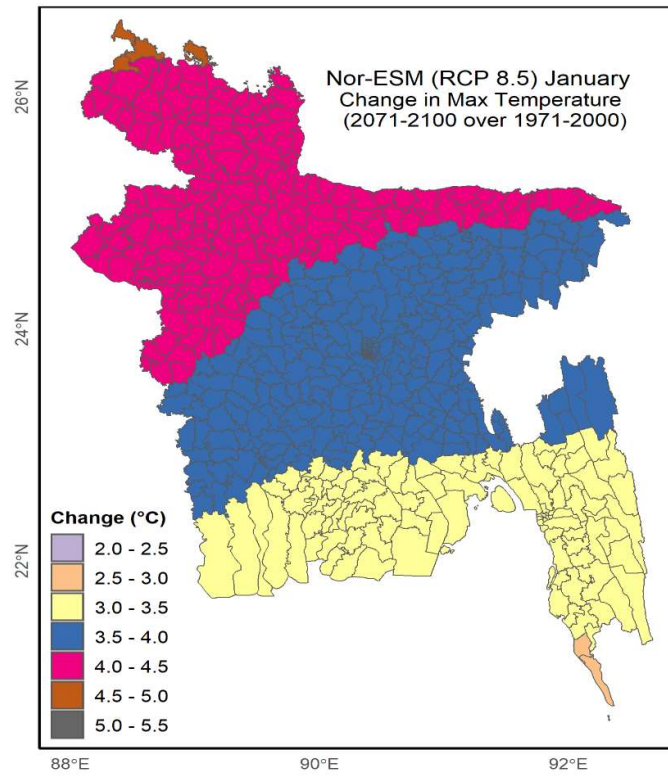


Fig. 4.91: Maximum temperature change projection(RCP8.5) in degree for January and February for the last-century (2071-2100) in Bangladesh.

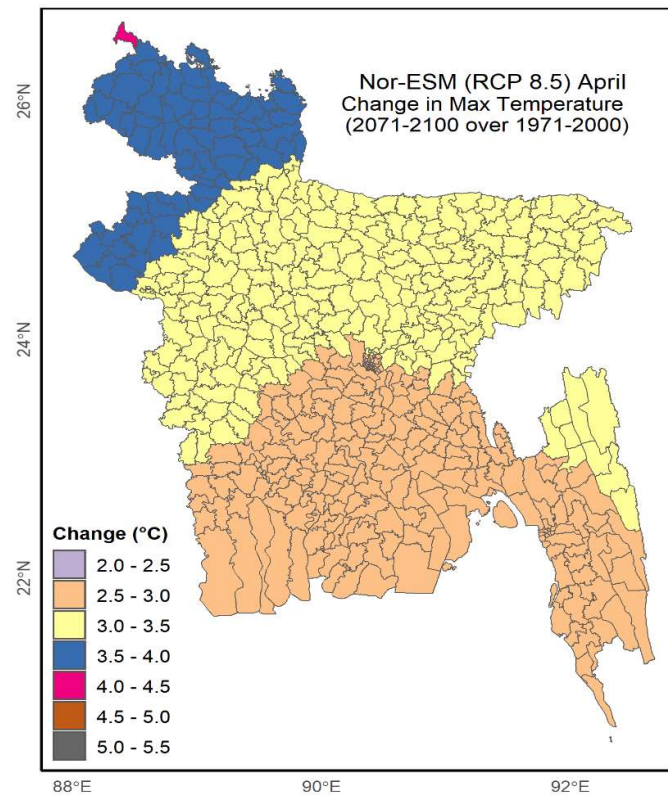
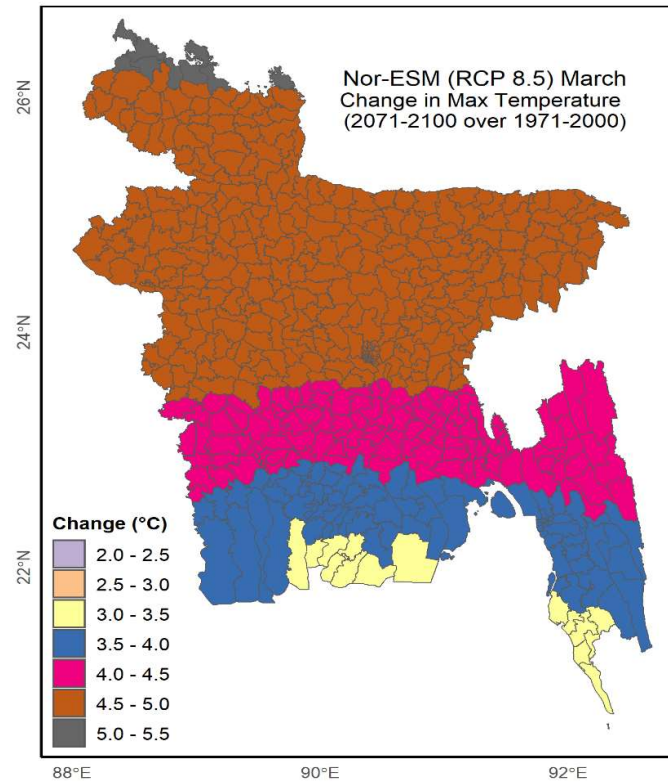


Fig. 4.92: Maximum temperature change projection(RCP8.5) in degree for March and April for the last-century (2071-2100) in Bangladesh.

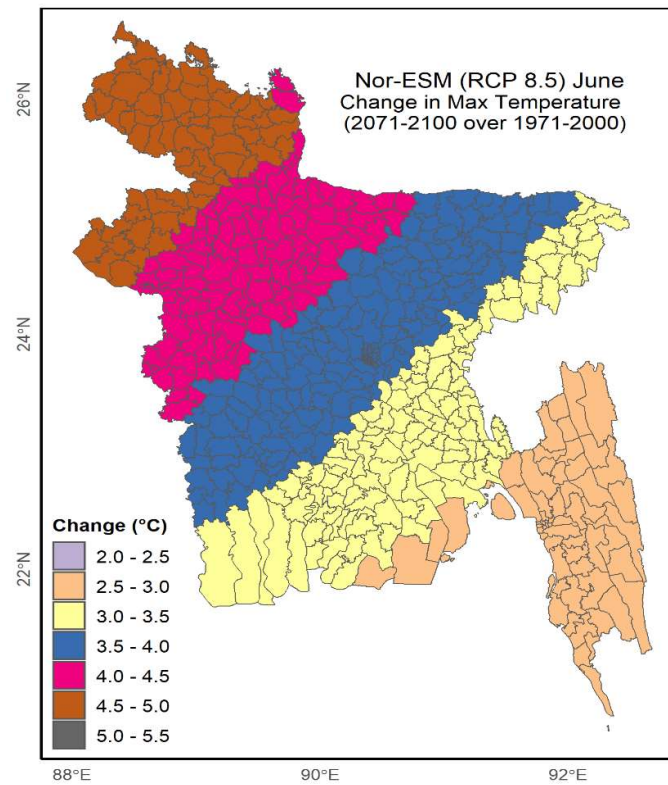
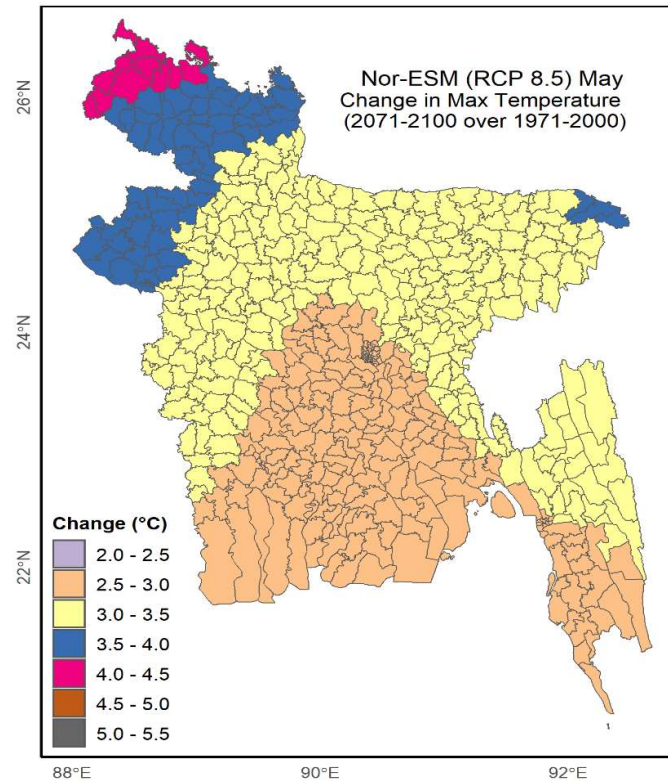


Fig. 4.93: Maximum temperature change projection(RCP8.5) in degree for May and June for the last-century (2071-2100) in Bangladesh.

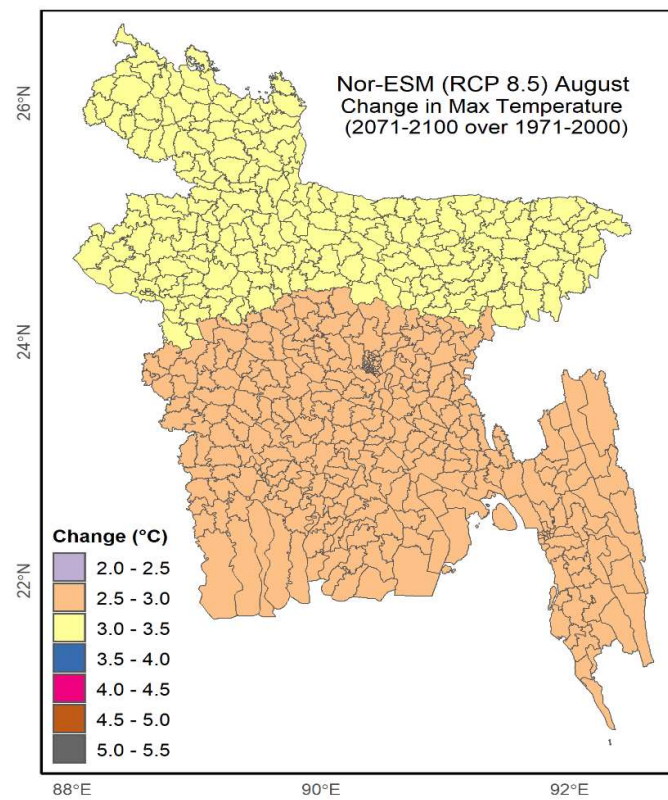
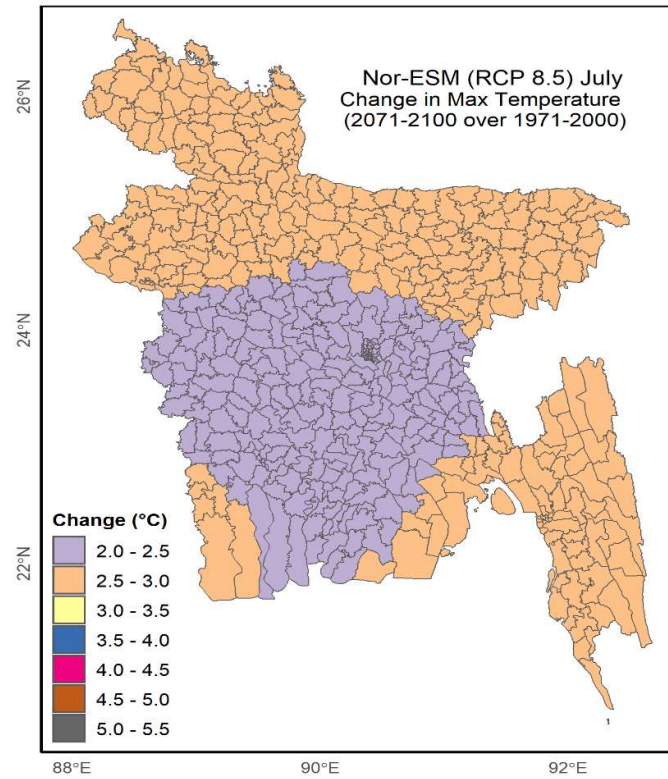


Fig. 4.94: Maximum temperature change projection(RCP8.5) in degree for July and August for the last-century (2071-2100) in Bangladesh.

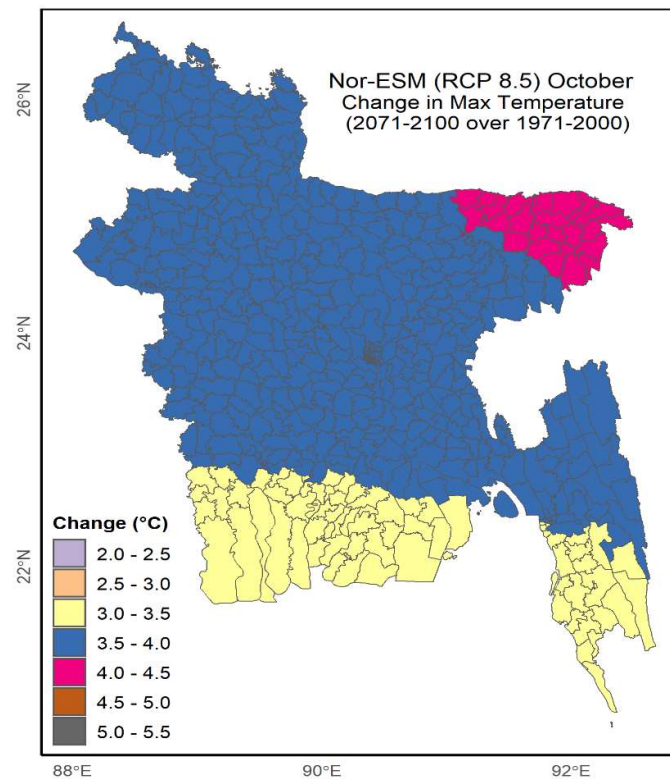
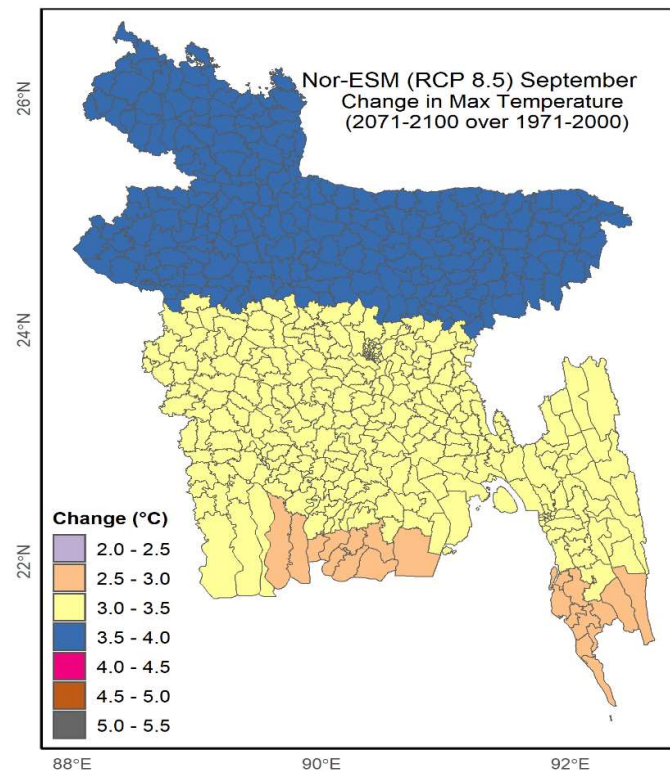


Fig.4.95: Maximum temperature change projection(RCP8.5) in degree for September and October for the last-century (2071-2100) in Bangladesh.

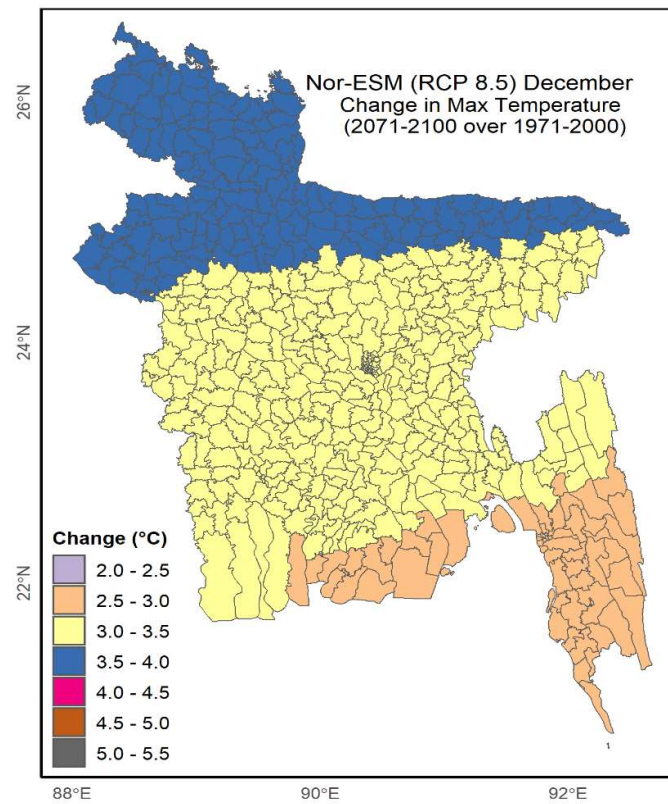
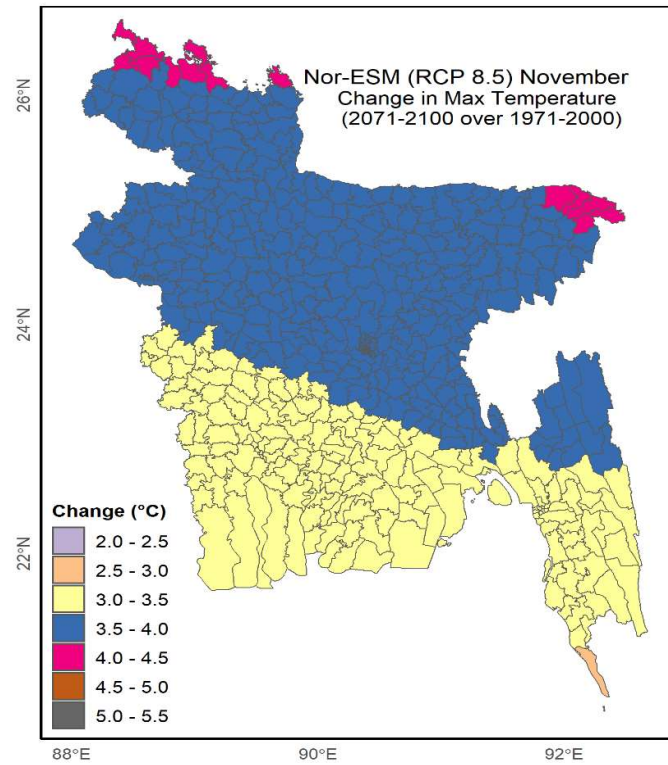


Fig. 4.96: Maximum temperature change projection(RCP8.5) in degree for November and December for the last-century (2071-2100) in Bangladesh.

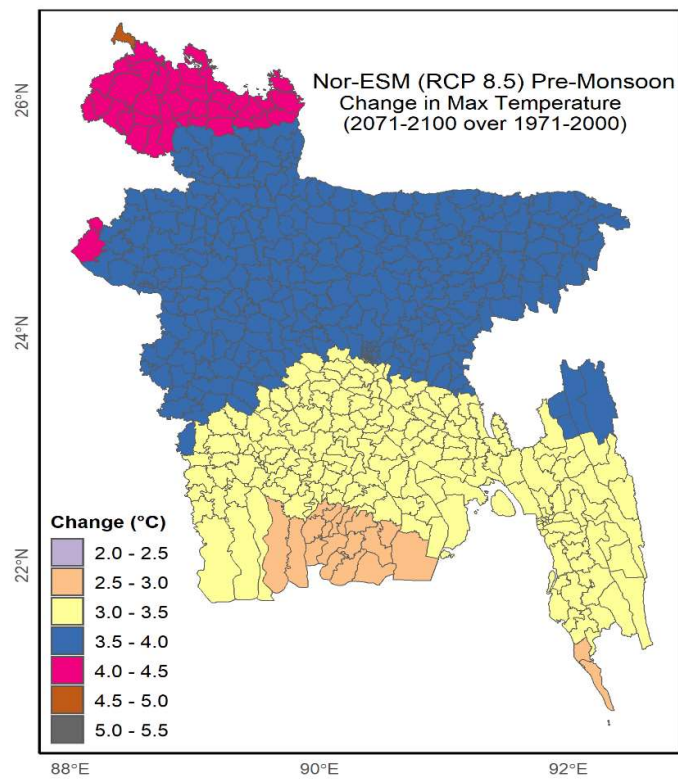
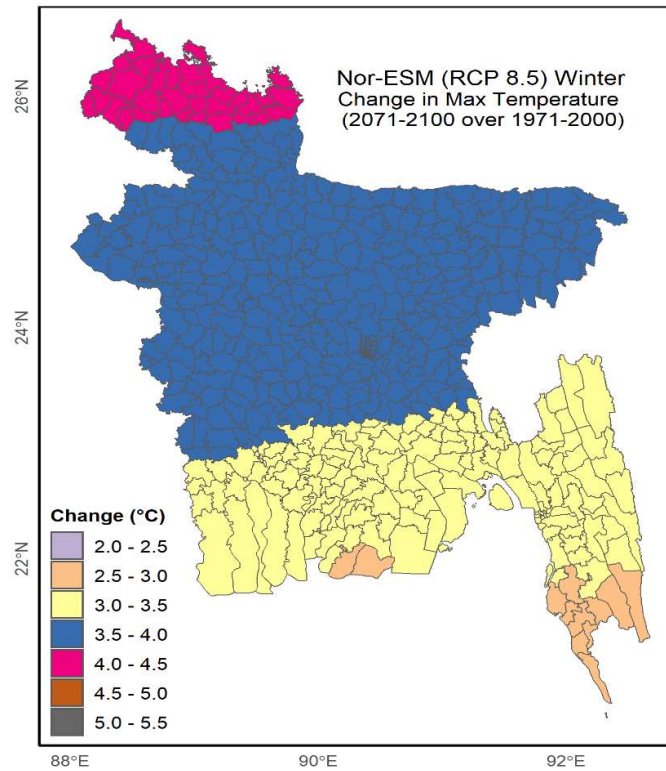


Fig. 4.97: Maximum temperature change projection(RCP8.5) in degree for Winter and Pre-monsoon season for the last-century (2071-2100) in Bangladesh.

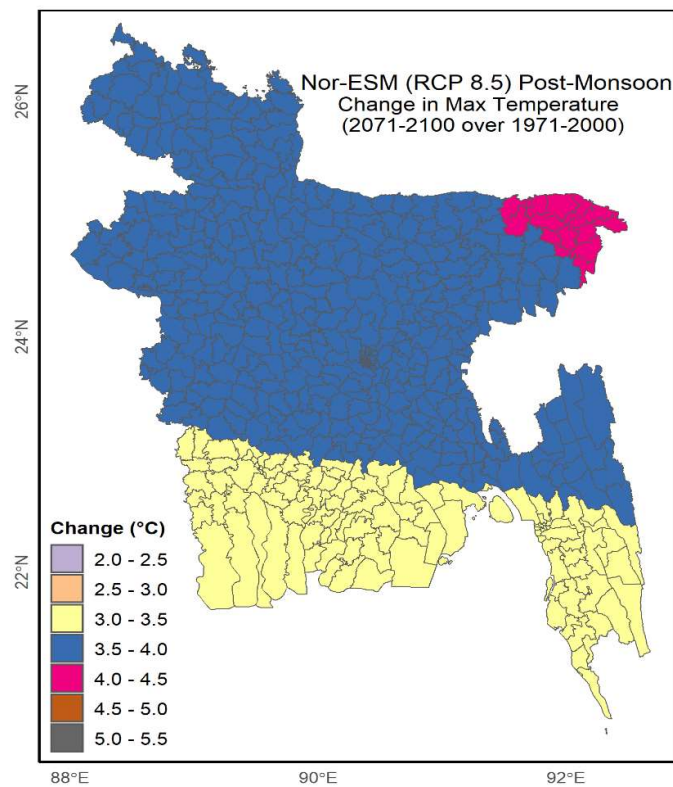
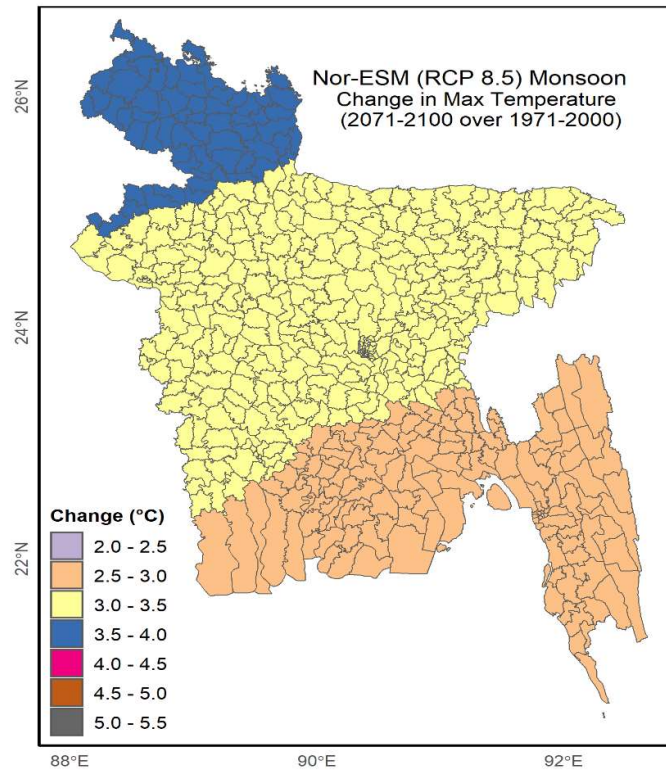


Fig. 4.98: Maximum temperature change projection(RCP8.5) in degree for Monsoon and Post-monsoon for the last-century (2071-2100) in Bangladesh.

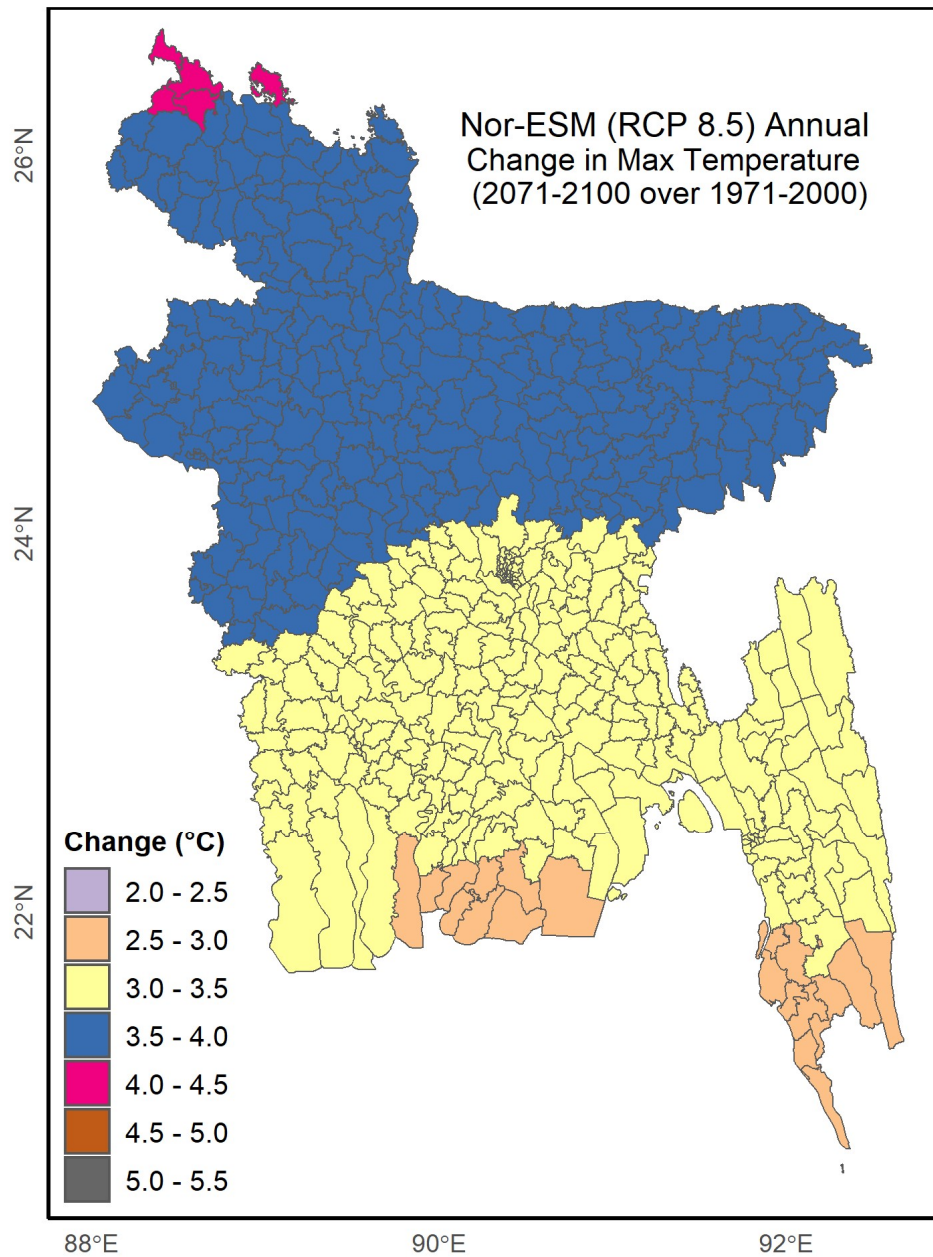


Fig. 4.99: Maximum temperature change projection(RCP8.5) in degree for Annual for the last-century (2071-2100) in Bangladesh.

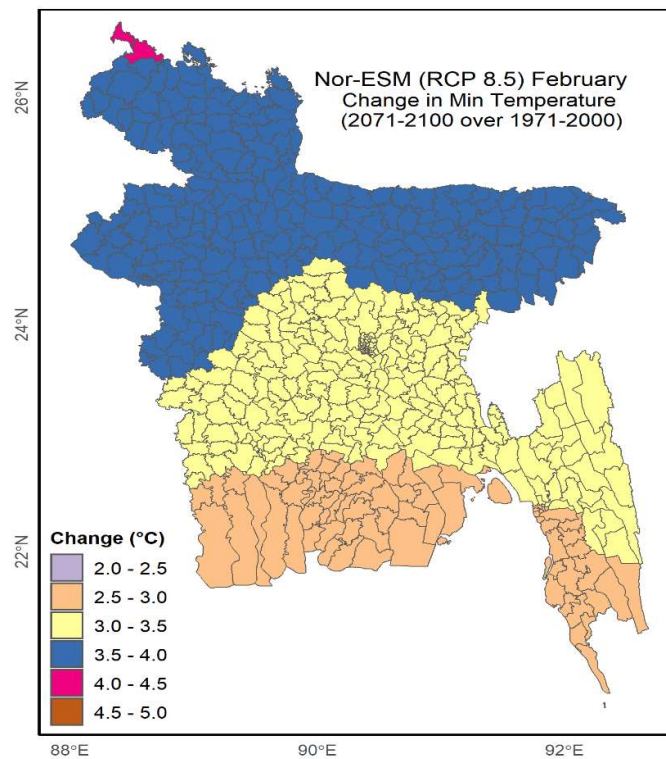
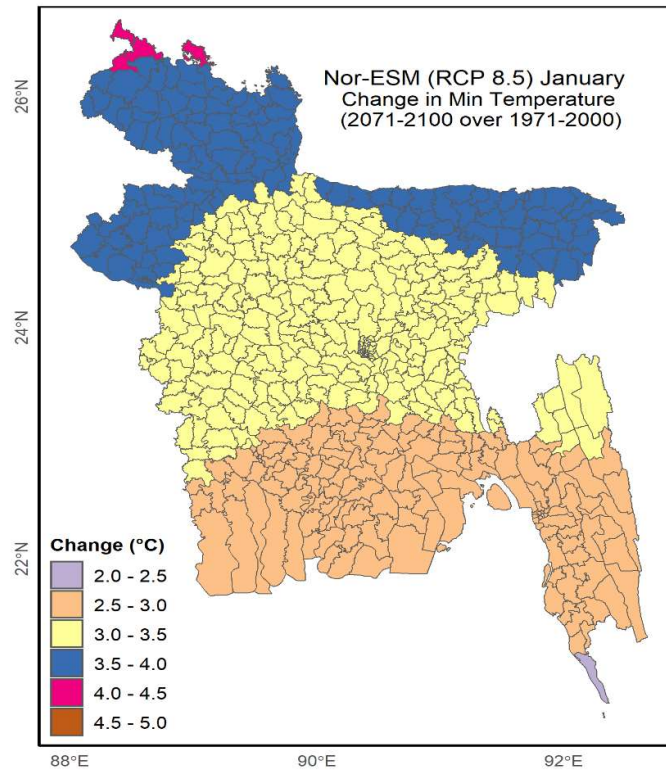


Fig. 4.100: Minimum temperature change projection(RCP8.5) in degree for January and February for the last-century (2071-2100) in Bangladesh.

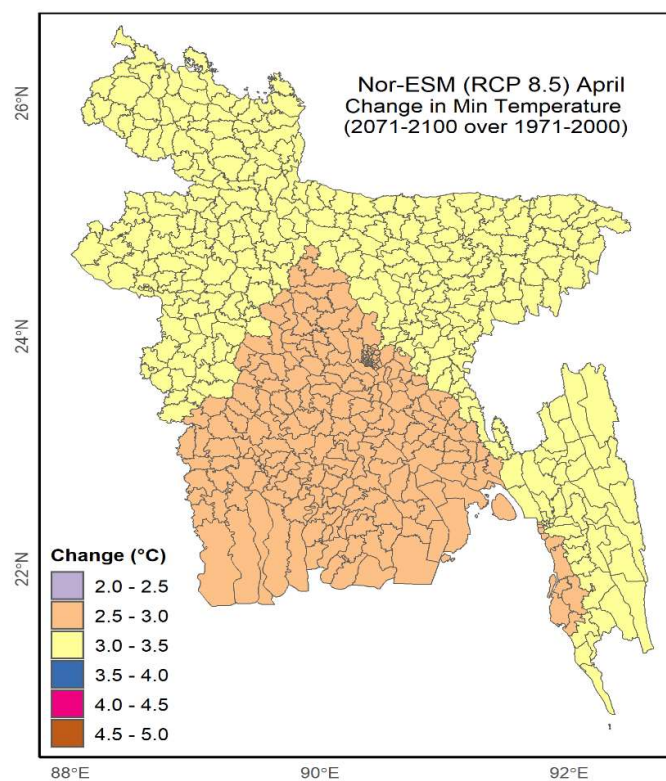
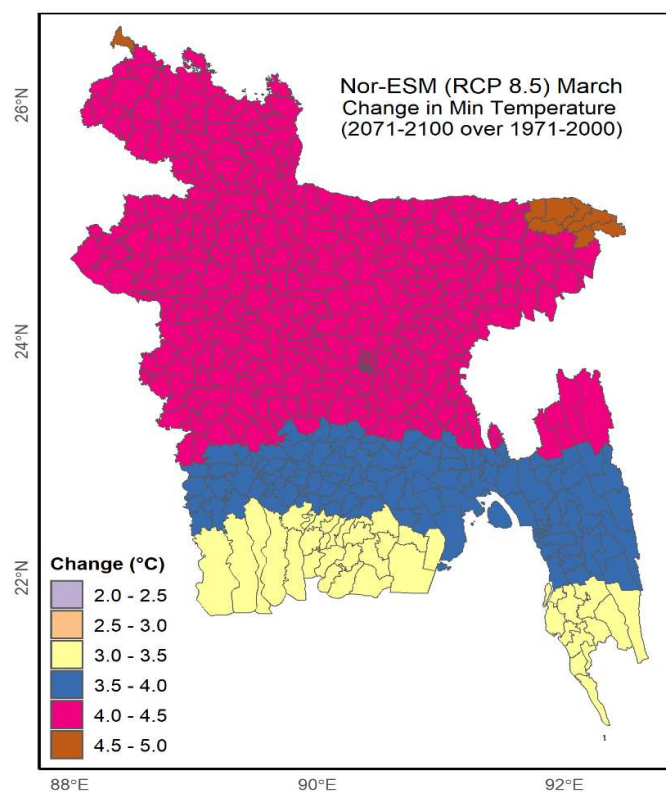


Fig. 4.101: Minimum temperature change projection(RCP8.5) in degree for March and April for the last-century (2071-2100) in Bangladesh.

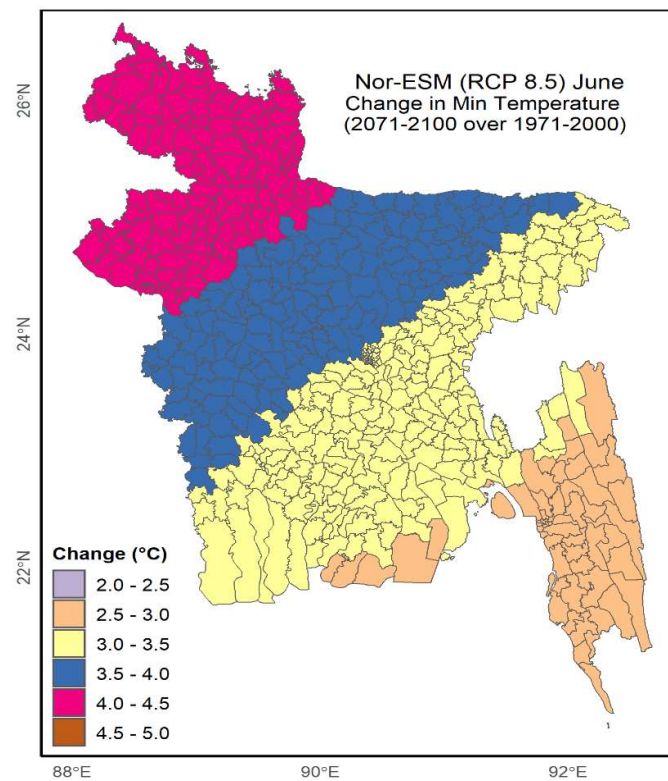
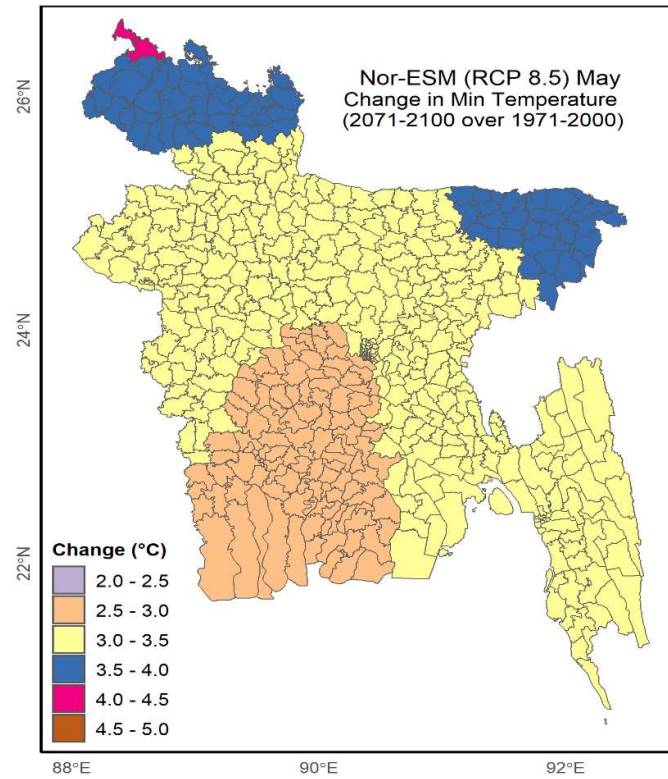


Fig. 4.102: Minimum temperature change projection(RCP8.5) in degree for May and June for the last-century (2071-2100) in Bangladesh.

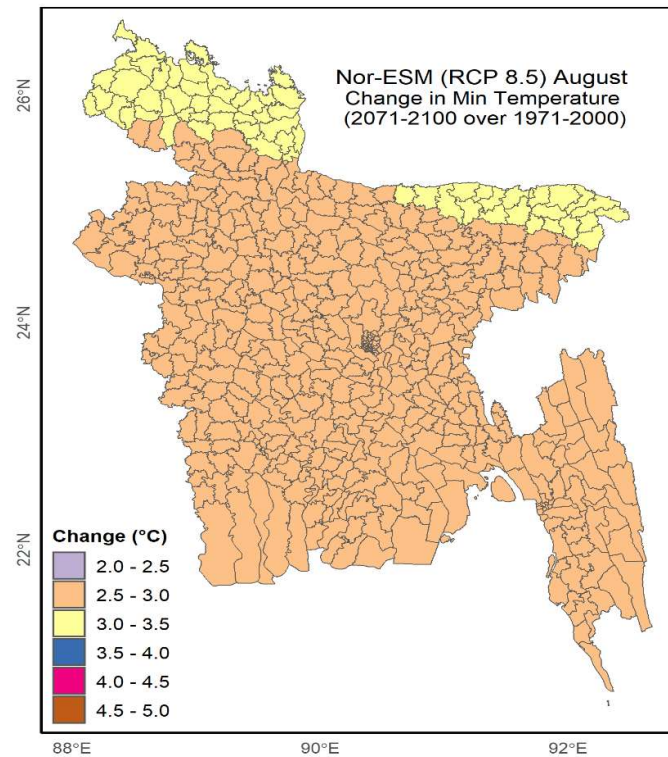
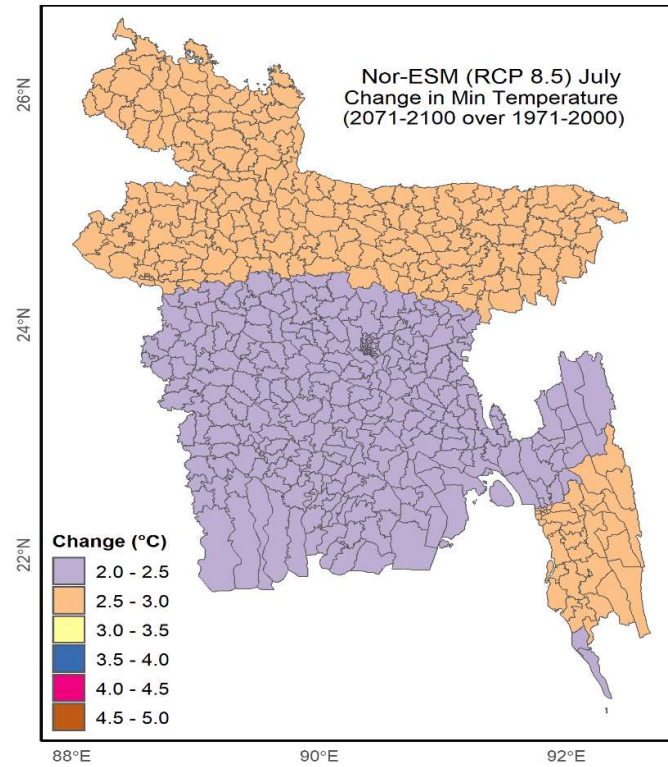


Fig. 4.103: Minimum temperature change projection(RCP8.5) in degree for July and August for the last-century (2071-2100) in Bangladesh.

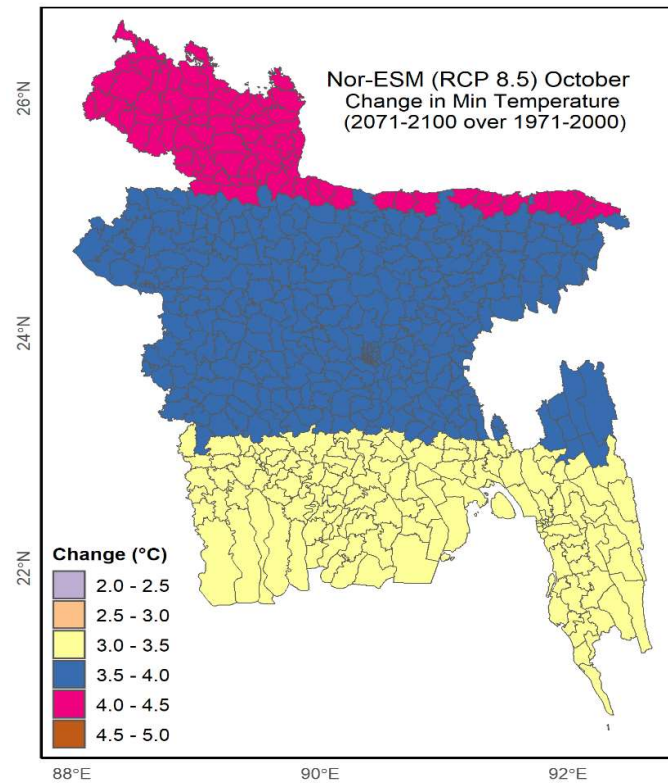
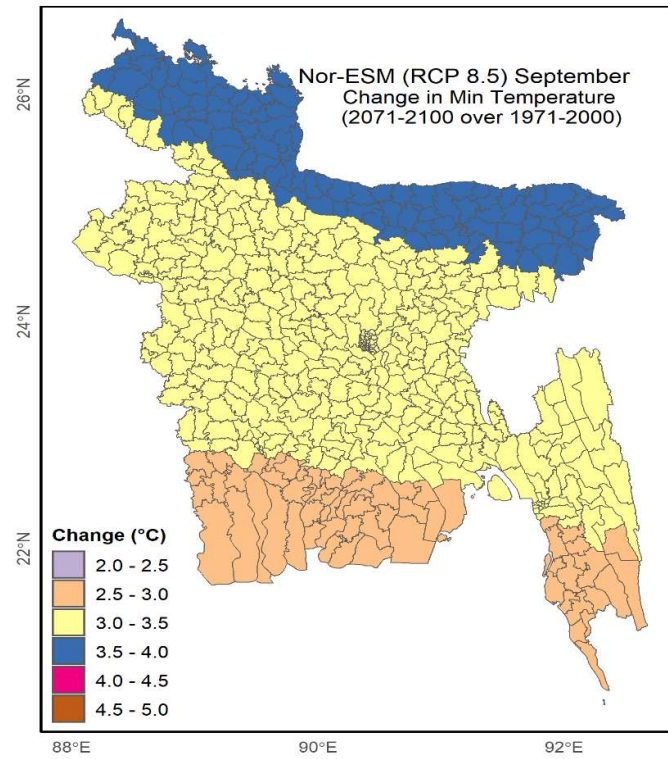


Fig. 4.104: Minimum temperature change projection(RCP8.5) in degree for September and October for the last-century (2071-2100) in Bangladesh.

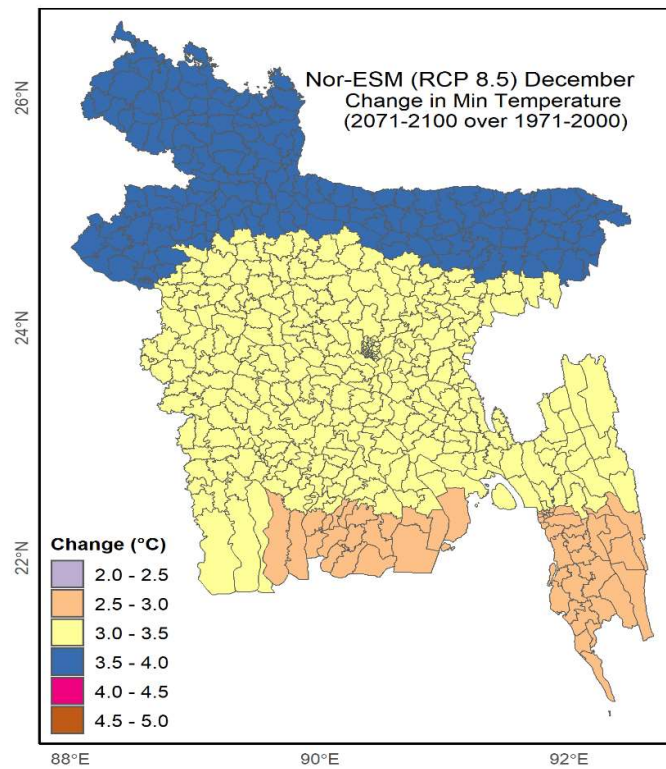
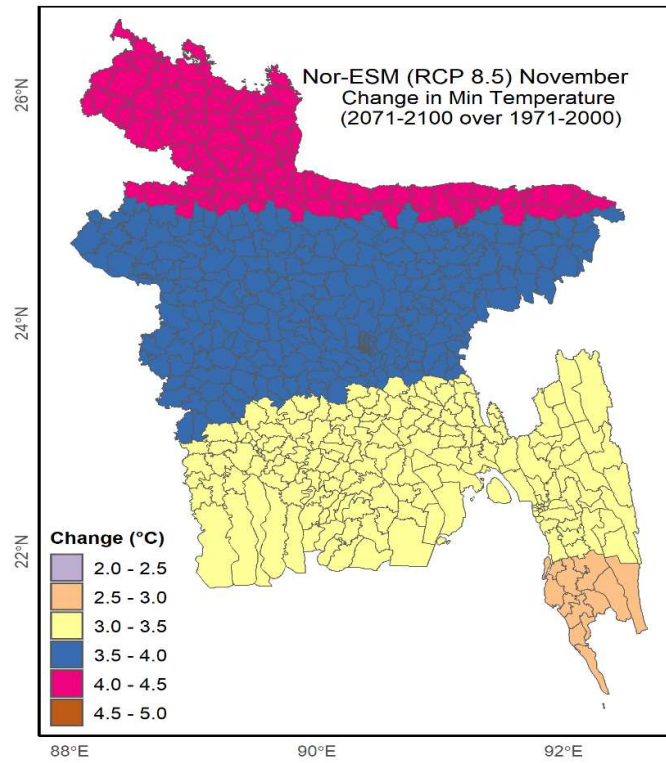


Fig. 4.105: Minimum temperature change projection(RCP8.5) in degree for November and December for the last-century (2071-2100) in Bangladesh.

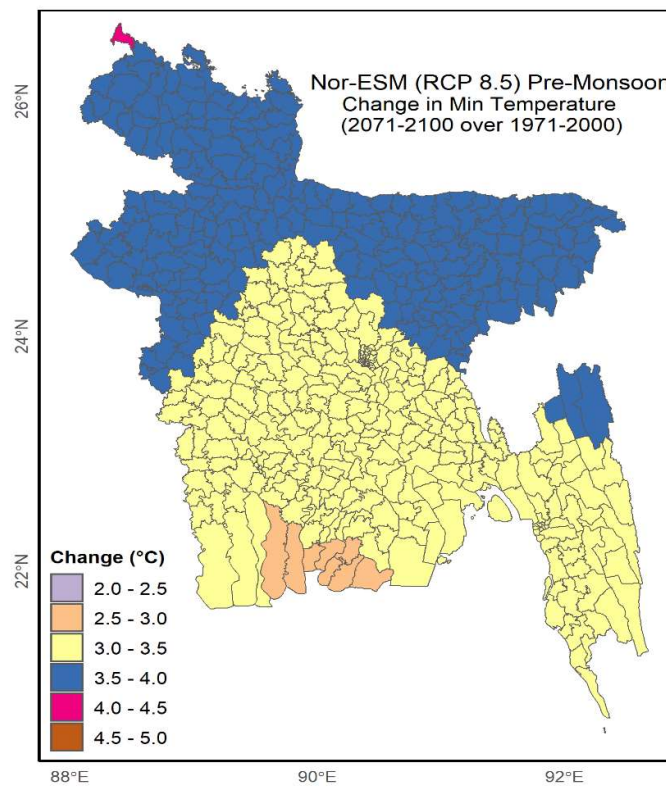
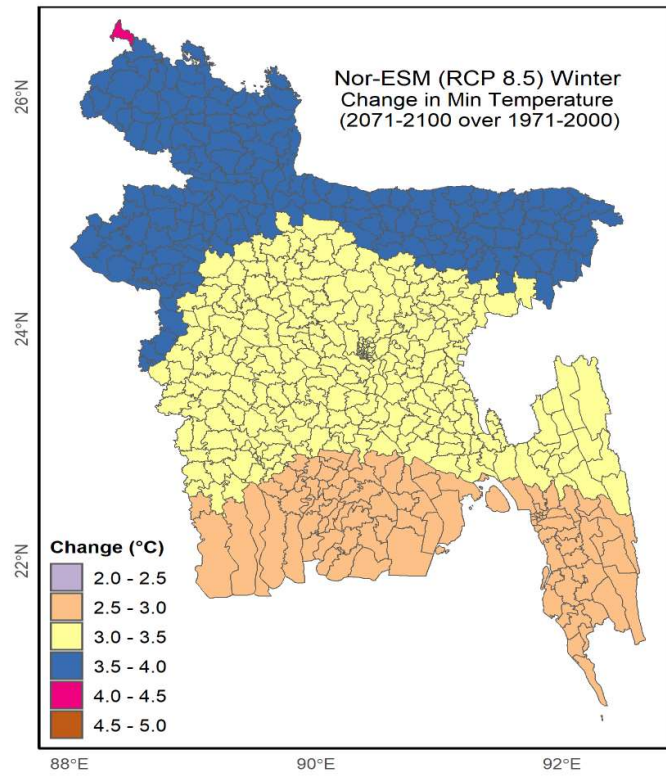


Fig. 4.106: Minimum temperature change projection(RCP8.5) in degree for Winter and Pre-monsoon season for the last-century (2071-2100) in Bangladesh.

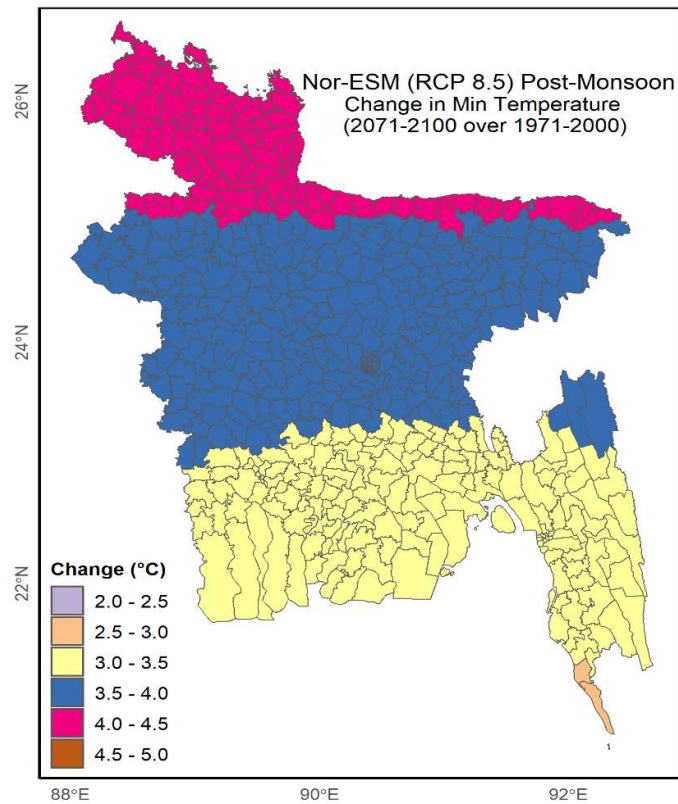
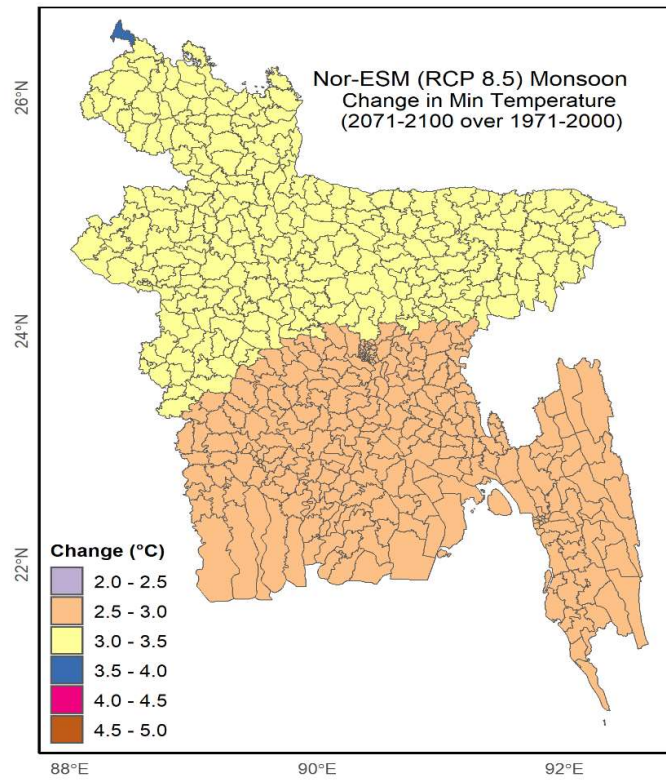


Fig. 4.107: Minimum temperature change projection(RCP8.5) in degree for Monsoon and Post-monsoon season for the last-century (2071-2100) in Bangladesh.

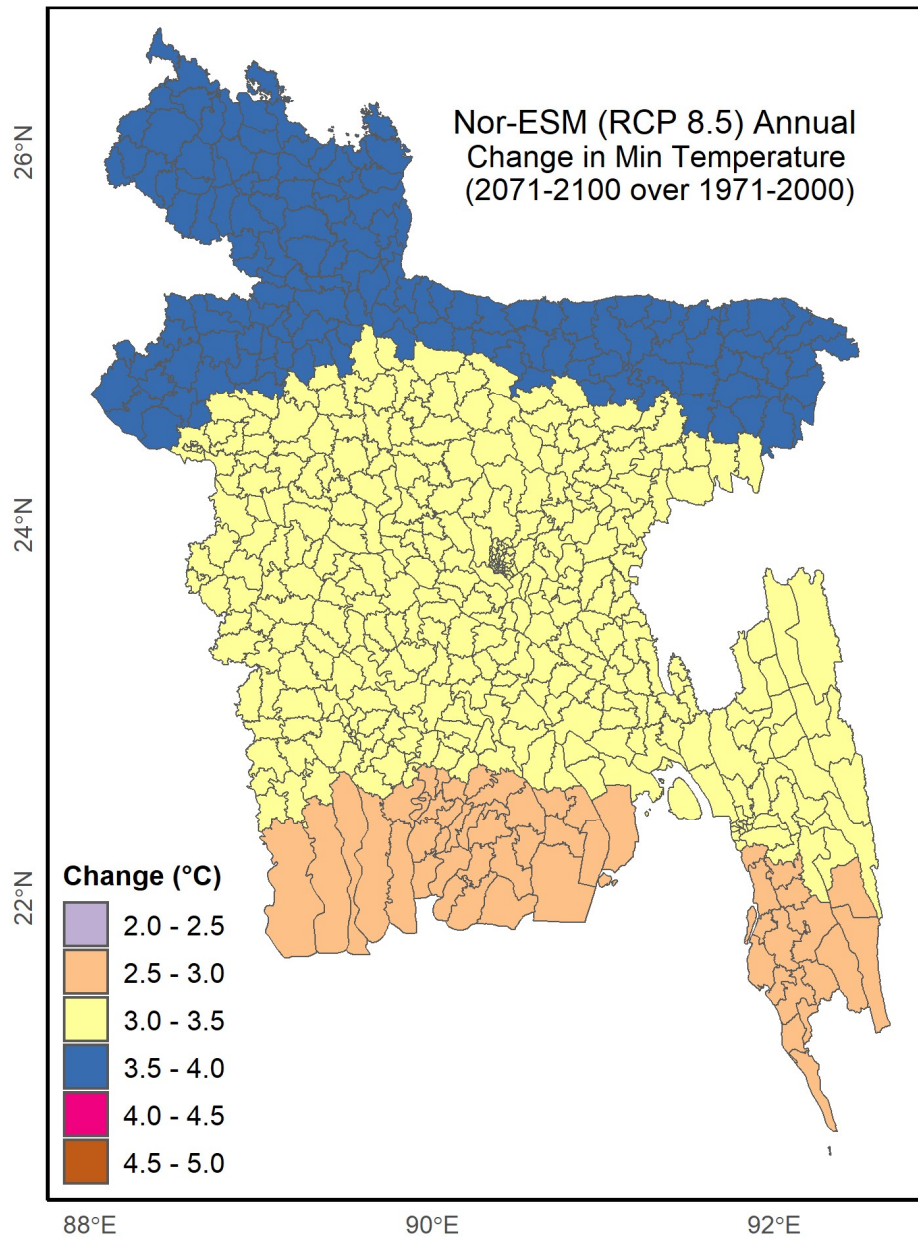


Fig. 4.108: Minimum temperature change projection(RCP8.5) in degree for Annual for the last-century (2071-2100) in Bangladesh.

1.1 District level observed (BMD) monthly and annual rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Decreasing	<u>Decreasing</u>	Increasing
Bandarban	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Barguna	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Barishal	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Bhola	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	<u>Decreasing</u>	Increasing	Decreasing
Bogura	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing
Brahmanbaria	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Chandpur	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	<u>Increasing</u>	Decreasing	Decreasing	Increasing
Chapainawabganj	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Chattogram	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	<u>Increasing</u>	<u>Decreasing</u>	Decreasing	Increasing
Chuadanga	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	No Trend	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Coxsbazar	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Cumilla	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	<u>Decreasing</u>	Increasing	Decreasing
Dhaka	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Dinajpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Faridpur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Feni	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing
Gaibandha	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Gazipur	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Gopalganj	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Habiganj	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing
Jamalpur	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Jashore	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	<u>Increasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Jhalakati	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Jhenaidah	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Joypurhat	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Khagrachari	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Khulna	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing
Kishoreganj	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Kurigram	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Kushtia	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Lakshmipur	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	<u>Decreasing</u>	Decreasing	Decreasing
Lalmohirhat	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Madaripur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Magura	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Manikganj	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Decreasing	Decreasing
Meherpur	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Increasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Moulvibazar	Increasing	No Trend	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing
Munshiganj	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing

Mymensingh	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing
Naogaon	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Narail	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Narayanganj	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	No Trend	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Narsingdi	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Natore	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Netrokona	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Nilphamari	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
Noakhali	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Pabna	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Panchaghar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	No Trend
Patuakhali	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Pirojpur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Rajbari	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Rajshahi	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Rangmati	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Rangpur	Decreasing	Increasing	No Trend	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Satkhira	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Shariatpur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	No Trend	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Sherpur	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Sirajganj	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Sunamganj	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Sylhet	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Tangail	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Thakurgaon	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing

1.2 District level observed seasonal rainfall (BMD) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

District Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Decreasing	<u>Decreasing</u>	Increasing	Increasing
Bandarban	Decreasing	Increasing	Increasing	Decreasing
Barguna	Decreasing	Decreasing	Increasing	Increasing
Barishal	Decreasing	Decreasing	Decreasing	Increasing
Bhola	Decreasing	Decreasing	Decreasing	Decreasing
Bogura	Increasing	Decreasing	Decreasing	Increasing
Brahmanbaria	Decreasing	Decreasing	Increasing	Decreasing
Chandpur	Increasing	Decreasing	Increasing	Increasing
Chapainawabganj	Decreasing	Decreasing	Decreasing	Decreasing
Chattogram	Decreasing	Increasing	<u>Increasing</u>	Increasing
Chuadanga	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Coxsbazar	Increasing	Increasing	Increasing	Decreasing
Cumilla	Decreasing	Decreasing	Increasing	Decreasing
Dhaka	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Dinajpur	Decreasing	Decreasing	Decreasing	Decreasing
Faridpur	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Feni	<u>Decreasing</u>	Decreasing	Increasing	Increasing
Gaibandha	Decreasing	Decreasing	Increasing	Increasing
Gazipur	Decreasing	<u>Decreasing</u>	Increasing	Decreasing
Gopalganj	Decreasing	<u>Decreasing</u>	Increasing	Increasing
Habiganj	Decreasing	Increasing	Increasing	Increasing
Jamalpur	Decreasing	Decreasing	Increasing	Increasing
Jashore	Decreasing	Decreasing	Increasing	Increasing
Jhalakati	Decreasing	Decreasing	Increasing	Increasing
Jhenaidah	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Joypurhat	Decreasing	Decreasing	Increasing	No Trend
Khagrachari	Decreasing	Increasing	Increasing	Increasing
Khulna	Increasing	Decreasing	Increasing	Increasing
Kishoreganj	Decreasing	Decreasing	Increasing	Increasing
Kurigram	Decreasing	Decreasing	Increasing	Increasing
Kushtia	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Lakshmipur	Decreasing	Decreasing	Increasing	Increasing
Lalmonirhat	Decreasing	No Trend	Increasing	Decreasing
Madaripur	Decreasing	Decreasing	Decreasing	Increasing
Magura	Decreasing	Decreasing	Increasing	Increasing
Manikganj	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Meherpur	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Moulvibazar	Increasing	Increasing	Increasing	Increasing
Munshiganj	Decreasing	Decreasing	Increasing	Increasing
Mymensingh	Increasing	No Trend	Increasing	Increasing
Naogaon	Decreasing	Decreasing	Decreasing	Decreasing
Narail	Decreasing	Decreasing	Increasing	Increasing
Narayanganj	Decreasing	<u>Decreasing</u>	Increasing	Decreasing
Narsingdi	Decreasing	<u>Decreasing</u>	Increasing	Decreasing
Natore	Decreasing	Decreasing	Decreasing	Increasing
Netrokona	Increasing	Decreasing	Increasing	Increasing
Nilphamari	Decreasing	Decreasing	Increasing	Decreasing
Noakhali	Decreasing	Decreasing	Increasing	<u>Increasing</u>
Pabna	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Panchaghar	Decreasing	Decreasing	Increasing	Decreasing
Patuakhali	Decreasing	Increasing	<u>Increasing</u>	Increasing
Pirojpur	Decreasing	<u>Decreasing</u>	Increasing	Increasing
Rajbari	Decreasing	<u>Decreasing</u>	Increasing	Increasing

Rajshahi	Decreasing	Increasing	<u>Decreasing</u>	Decreasing
Rangamati	Increasing	Increasing	Increasing	Increasing
Rangpur	No Trend	Increasing	Increasing	Increasing
Satkhira	Decreasing	Increasing	Increasing	Increasing
Shariatpur	Decreasing	Decreasing	Increasing	Increasing
Sherpur	Decreasing	Decreasing	Increasing	Increasing
Sirajganj	Decreasing	Decreasing	Decreasing	Increasing
Sunamganj	Decreasing	Increasing	Increasing	Decreasing
Sylhet	Decreasing	Increasing	Increasing	Decreasing
Tangail	Decreasing	Decreasing	Decreasing	Decreasing
Thakurgaon	Decreasing	Decreasing	Increasing	Decreasing

1.3 Upazila level Aphrodite observed gridded monthly and annual rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upz. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Bagerhat Sadar	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing
	Chitalmari	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Decreasing	Increasing	Increasing
	Fakirhat	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing
	Kachua	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing
	Mongla	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing
	Mollahat	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing
	Morrelganj	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Rampal	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing
	Sarankhola	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Bandarban	Alikadam	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	No Trend	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
	Bandarban Sadar	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
	Lama	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
	Naikhongchhari	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasing	Increasing
	Rowangchhari	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing	Increasing
	Ruma	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing	Increasing
	Thanchi	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
	Barguna	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Barguna	Bamna	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Barguna Sadar	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing
	Betagi	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Patharghata	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing

	Taltoli	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Barisal	Agailjhara	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing
	Babuganj	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Bakerganj	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Banari Para	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing
	Barisal Sadar	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Gaurnadi	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing
	Hizla	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Mehendiganj	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Muladi	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Wazirpur	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Bhola	Bhola Sadar	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Burhanuddin	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Char Fasson	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Daulatkhan	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Lalmohan	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Manpura	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Tazumuddin	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Bogra	Adamdighi	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Bogra Sadar	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Dhunat	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Dhupchanchia	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Gabatali	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing

	Kahaloo	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Nandigram	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Sariakandi	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Shajahanpur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Sherpur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Shibganj	Decreasing	Decreasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Sonatola	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Brahmanbaria	Akhaura	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Ashuganj	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Banchharampu	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Bijoyagar	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Brahmanbaria Sa	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Kasba	Increasing	Decreasing	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Nabinagar	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Nasirnagar	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Sarail	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Chapai Nawabganj	Bholahat	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
	Chapai Nawabganj Sad	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Gomastapur	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Nachole	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Shibganj	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	No Trend
Chandpur	Chandpur Sadar	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Faridganj	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing

[illegible]

	Jiban Nagar	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Comilla	Barura	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Brahman Para	Increasing	Decreasin g	Decreasin g	Decreasin g	No Trend	Increasing g	Decreasin g	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Burichang	Increasing	Decreasin g	Decreasin g	Decreasin g	No Trend	Increasing g	Decreasin g	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Chandina	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Chauddagram	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Increasing	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
	Comilla Sadar	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Daudkandi	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Debidwar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Homna	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Laksam	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Meghna	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Manoharganj	No Trend	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Muradnagar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Nangalkot	No Trend	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Comilla Sadar Dak	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Titas	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
Cox'S Bazar	Chakaria	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasin g	<u>Increasing</u>
	Cox'S Baz Sadar	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasin g	Increasing
	Kutubdia	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasin g	<u>Increasing</u>
	Maheshkhali	Decreasin g	Increasing	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasin g	<u>Increasing</u>
	Pekua	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasin g	<u>Increasing</u>
	Ramu	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasin g	Increasing

	Teknaf	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Ukhia	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
Dhaka	Dhamrai	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Dohar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Decreasin g	Decreasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
	Keraniganj	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
	Nawabganj	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Decreasin g	Decreasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
	Savar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Decreasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
Dinajpur	Birampur	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Birganj	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Biral	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Bochaganj	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Chirirbandar	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Increasing
	Dinajpur Sadar	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Fulbari	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Increasing
	Ghoraghat	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Hakimpur	Decreasin g	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Increasing
	Kaharole	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Khansama	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Nawabganj	Decreasin g	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Increasing
	Parbatipur	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Increasing
Faridpur	Alfadanga	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Bhanga	Increasing g	Decreasin g	Decreasin g	Decreasin g	<u>Decreasing</u>	Increasing g	Increasing	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
	Boalmari	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing

	Char Bhadrasan	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Faridpur Sadar	Decreasin g	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasin g	Increasing	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Madhukhali	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasing	Increasin g	Increasing	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Nagarkanda	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasing	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Sadarpur	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasing	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Saltha	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasing	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
Feni	Chhagalnaiya	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasin g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Daganbhuiyan	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Decreasin g	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Feni Sadar	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Fulgazi	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Parshuram	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Sonagazi	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Decreasin g	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Gaibandha	Gaibandha Sadar	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasing	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Gobindaganj	Decreasin g	Decreasin g	Decreasin g	No Trend	Decreasin g	Increasin g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Palashbari	Decreasin g	Decreasin g	No Trend	Increasing	Decreasin g	Increasin g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Fulchhari	Decreasin g	Increasing	Increasing	Increasing	Decreasin g	Increasin g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Sadullapur	Decreasin g	Decreasin g	No Trend	Increasing	Decreasin g	Increasin g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Saghatta	Decreasin g	Increasing	Increasing	Increasing	Decreasin g	Increasin g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Sundarganj	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasin g	Decreasin g	Increasing	Increasing	No Trend	Decreasing	Decreasin g	Increasing
Gazipur	Gazipur Sadar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Kaliganj	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Kaliakair	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Kapasia	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing

	Sreepur	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Gopalganj	Gopalganj Sadar	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Kashiani	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Kotali Para	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing
	Muksudpur	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasing	Increasing g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Tungi Para	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Habiganj	Ajmiriganj	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Bahubal	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Baniachong	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Chunarughat	Increasing	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Habiganj Sadar	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Lakhai	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing	Increasing g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Madhabpur	Increasing	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Nabiganj	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Jamalpur	Bakshiganj	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Dewanganj	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Islampur	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Jamalpur Sadar	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Madarganj	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Melandaha	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Sharishabari	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Jessore	Abhaynagar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Bagher Para	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing

	Chaugachha	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Sadar	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Jhikargachha	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Keshabpur	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Manirampur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Sharsha	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Jhalokati	Jhalokati Sadar	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing
	Kanthalia	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Nalchity	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Rajapur	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Jhenaidah	Harinakunda	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Jhenaidah Sadar	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Kaliganj	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Kotchandpur	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Maheshpur	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Shailkupa	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Joypurhat	Akkelpur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Joypurhat Sadar	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Kalai	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Khetlal	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Panchbibi	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Khagrachhari	Dighinala	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Khagrachhari Sad	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing

[illegible]

	Kuliar Char	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Decreasing</u>	Decreasing	Increasing
	Mithamain	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Nikli	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Decreasing</u>	Decreasing	Increasing
	Pakundia	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Tarail	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	<u>Increasing</u>
Kurigram	Bhurungamari	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
	Char Rajibpur	Decreasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Chilmari	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Increasing
	Kurigram Sadar	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Nageshwari	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Phulbari	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Rajarhat	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Raumari	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Ulipur	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Increasing
Kushtia	Bheramara	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Daulatpur	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Khoksa	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Kumarkhali	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing
	Kushtia Sadar	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing
	Mirpur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing
Lakshmipur	Kamalnagar	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing
	Lakshmipur Sad	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing
	Roypur	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	<u>Decreasing</u>	Increasing

	Ramganj	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Ramgati	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Lalmonirhat	Aditmari	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Hatibandha	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Kaliganj	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Lalmonirhat Sad	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Patgram	Decreasing	Decreasing	No Trend	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
Madaripur	Kalkini	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Madaripur Sad	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Rajoir	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Shib Char	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Magura	Magura Sadar	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Mohammadpur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Shalikha	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Sreepur	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Manikganj	Daulatpur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Ghior	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Harirampur	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Manikganj Sad	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Saturia	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Shibalaya	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Singair	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Maulvibazar	Barlekha	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing

	Juri	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasin g	Decreasin g	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing
	Kamalganj	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasin g	Increasing	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasin g	No Trend
	Kulaura	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasin g	Decreasin g	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing
	Maulvi Bazar Sad	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasin g	Increasing	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasin g	No Trend
	Rajnagar	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasin g	Decreasin g	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing
	Sreemangal	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
Meherpur	Gangni	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Meherpur Sadar	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Mujib Nagar	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Munshiganj	Gazaria	Increasing g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Lohajang	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
	Munshiganj Sada	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Increasing
	Serajdikhan	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
	Sreenagar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
	Tongibari	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	<u>Decreasing</u>	Decreasin g	Decreasing
Mymensingh	Bhaluka	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Dhobaura	Decreasin g	Increasing	Increasing	Increasing	Increasing	<u>Increasin g</u>	Increasing	<u>Increasin g</u>	Increasing	Increasing	Decreasing	Decreasin g	<u>Increasing</u>
	Fulbaria	Decreasin g	Decreasin g	Increasing	Increasing	Decreasin g	Increasin g	Increasing	<u>Increasin g</u>	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Gaffargaon	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Gauripur	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasin g	Increasing	<u>Increasin g</u>	Increasing	Increasing	Decreasing	Decreasin g	<u>Increasing</u>
	Haluaghat	Decreasin g	Increasing	Increasing	Increasing	Increasing	<u>Increasin g</u>	Increasing	<u>Increasin g</u>	Increasing	Increasing	Decreasing	Decreasin g	<u>Increasing</u>
	Ishwarganj	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasin g	Increasing	<u>Increasin g</u>	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Muktagachha	Decreasin g	No Trend	Increasing	Increasing	Increasing	Increasin g	Increasing	<u>Increasin g</u>	Increasing	Increasing	Decreasing	Decreasin g	<u>Increasing</u>

	Mymensingh Sad	Decreasin g	No Trend	Increasing	Increasing	Increasing	Increasing g	Increasing	Increasing g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Nandail	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasing g	Increasing	Increasing g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Phulpur	Decreasin g	No Trend	Increasing	Increasing	Increasing	Increasing g	Increasing	Increasing g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Tarakanda	Decreasin g	No Trend	Increasing	Increasing	Increasing	Increasing g	Increasing	Increasing g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Trishal	Decreasin g	Decreasin g	Increasing	Increasing	Decreasin g	Increasing g	Increasing	Increasing g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Naogaon	Atrai	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Badalgachhi	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Dhamoirhat	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Manda	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Mahadebpur	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Naogaon Sadar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Niamatpur	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Patnitala	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Decreasing	No Trend	Decreasing	Decreasin g	Decreasing
	Porsha	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Raninagar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Sapahar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Decreasing	No Trend	Decreasing	Decreasin g	Decreasing
Narail	Kalia	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Lohagara	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Narail Sadar	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Narayanganj	Araihazar	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Bandar	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Narayanganj Sad	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Rupganj	Increasing	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing

[illegible]

	Santhia	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Sujanagar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasin g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
Panchagarh	Atwari	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasin g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Boda	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasin g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Debiganj	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasin g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Panchagarh Sad	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasin g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing
	Tentulia	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Increasin g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
Patuakhali	Bauphal	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Dashmina	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Dumki	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Increasing
	Galachipa	Increasing	Increasing	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Increasing
	Kala Para	Increasing	No Trend	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Mirzaganj	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Patuakhali Sadar	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Increasing
	Rangabali	Increasing	Increasing	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Pirojpur	Bhandaria	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Zianagar	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Kawkhali	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Increasing
	Mathbaria	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Nazirpur	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Nesarabad	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Increasing
	Pirojpur Sadar	Increasing	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Rajbari	Balia Kandi	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasing	Increasin g	Increasing	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing

[illegible]

Rangpur	Badarganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Gangachara	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Kaunia	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Mitha Pukur	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Pirgachha	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Pirganj	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Rangpur Sadar	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
	Taraganj	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
Satkhira	Assasuni	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Debhata	No Trend	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Kalaroa	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Kaliganj	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Satkhira Sadar	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Shyamnagar	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Tala	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Shariatpur	Bhedarganj	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Damudya	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Gosairhat	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Naria	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Shariatpur Sadar	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Zanjira	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Sherpur	Jhenaigati	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Nakla	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing

	Nalitabari	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasing g	Decreasin g	<u>Increasing</u> g	Increasing	Increasing	Decreasing	Decreasin g	<u>Increasing</u> g
	Sherpur Sadar	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasing g	Decreasin g	<u>Increasing</u> g	Increasing	Increasing	Decreasing	Decreasin g	<u>Increasing</u> g
	Sreebardi	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
Sirajganj	Belkuchi	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	No Trend	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Chauhali	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Kamarkhanda	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	No Trend	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Kazipur	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Royganj	Decreasin g	Decreasin g	Increasing	Decreasin g	Decreasin g	Increasing g	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Shahjampur	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Sirajganj Sadar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	No Trend	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
	Tarash	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Ullah Para	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing g	Decreasin g	No Trend	Decreasing	Increasing	Decreasing	Decreasin g	Increasing
Sunamganj	Bishwambarpur	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing g	<u>Increasing</u> g	Increasing	Increasing	<u>Decreasing</u> g	Decreasin g	Increasing
	Chhatak	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Decreasing	Decreasin g	<u>Increasing</u> g	Increasing	Decreasing	<u>Decreasing</u> g	Decreasin g	Increasing
	Derai	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing g	<u>Increasing</u> g	Increasing	Increasing	<u>Decreasing</u> g	Decreasin g	Increasing
	Dharampasha	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing g	<u>Increasing</u> g	<u>Increasing</u> g	Increasing	Decreasing	Decreasin g	<u>Increasing</u> g
	Dowarabazar	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Decreasing	Decreasin g	Increasing	Increasing	Decreasing	<u>Decreasing</u> g	Decreasin g	Increasing
	Jagannathpur	Decreasin g	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing g	Decreasin g	Increasing	Increasing	Decreasing	<u>Decreasing</u> g	Decreasin g	Increasing
	Jamalganj	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing g	<u>Increasing</u> g	<u>Increasing</u> g	Increasing	Decreasing	Decreasin g	<u>Increasing</u> g
	Dak. Sunamganj	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing g	<u>Increasing</u> g	Increasing	Increasing	<u>Decreasing</u> g	Decreasin g	Increasing
	Sulla	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing g	<u>Increasing</u> g	Increasing	Increasing	Decreasing	Decreasin g	Increasing
	Sunamganj Sada	Decreasin g	Decreasin g	Increasing	Decreasin g	Increasing	Increasing g	Increasing g	<u>Increasing</u> g	Increasing	Increasing	<u>Decreasing</u> g	Decreasin g	Increasing
	Tahirpur	Decreasin g	Decreasin g	Increasing	Increasing	Increasing	Increasing g	Increasing g	<u>Increasing</u> g	<u>Increasing</u> g	Increasing	<u>Decreasing</u> g	Decreasin g	<u>Increasing</u> g

[illegible]

	Tangail Sadar	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
Thakurgaon	Baliadangi	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
	Haripur	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
	Pirganj	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
	Ranisankail	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
	Thakurgaon Sada	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing

1.4 Upazila level Aphrodite observed gridded seasonal rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upazila Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Bagerhat Sadar	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Chitalmari	Decreasing	Increasing	Increasing	Decreasing
	Fakirhat	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Kachua	Decreasing	Increasing	Increasing	Decreasing
	Mongla	Decreasing	Increasing	Increasing	Decreasing
	Mollahat	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Morrelganj	Decreasing	Increasing	Increasing	Decreasing
	Rampal	Decreasing	<u>Increasing</u>	Increasing	Decreasing
Bandarban	Sarankhola	Decreasing	Increasing	Increasing	Decreasing
	Alikadam	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bandarban Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lama	Increasing	<u>Increasing</u>	Increasing	Increasing
	Naikhongchhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rowangchhari	Increasing	Increasing	Increasing	Increasing
	Ruma	Increasing	Increasing	Increasing	Increasing
	Thanchi	Increasing	<u>Increasing</u>	Increasing	Increasing
Barguna	Amtali	Decreasing	Increasing	Increasing	Increasing
	Bamna	Decreasing	Increasing	Increasing	No Trend
	Barguna Sadar	Decreasing	Increasing	Increasing	Increasing
	Betagi	Decreasing	Increasing	Increasing	No Trend
	Patharghata	Decreasing	Increasing	Increasing	Decreasing
	Taltoli	Decreasing	Increasing	Increasing	Increasing
	Agailjhara	Decreasing	Increasing	Increasing	Decreasing
	Babuganj	Decreasing	Increasing	Increasing	Decreasing
Barisal	Bakerganj	Decreasing	Increasing	Increasing	Decreasing
	Banari Para	Decreasing	Increasing	Increasing	Decreasing
	Barisal Sadar	Decreasing	Increasing	Increasing	Decreasing
	Gaurnadi	Decreasing	Increasing	Increasing	Decreasing
	Hizla	Decreasing	Increasing	Increasing	Decreasing
	Mehendiganj	Decreasing	Increasing	Increasing	Decreasing
	Muladi	Decreasing	Increasing	Increasing	Decreasing
	Wazirpur	Decreasing	Increasing	Increasing	Decreasing
Bhola	Bhola Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Burhanuddin	Decreasing	Decreasing	Increasing	Decreasing
	Char Fasson	Decreasing	Increasing	Increasing	Decreasing
	Daulatkhan	Decreasing	Decreasing	Increasing	Decreasing
	Lalmohan	Decreasing	Increasing	Increasing	Decreasing
	Manpura	Decreasing	Increasing	Increasing	Decreasing
	Tazumuddin	Decreasing	Increasing	Increasing	Decreasing
	Adamdighi	Decreasing	Increasing	Increasing	Decreasing
Bogra	Bogra Sadar	Decreasing	Increasing	Increasing	Decreasing
	Dhunat	Decreasing	Increasing	Increasing	Decreasing
	Dhupchanchia	Decreasing	Increasing	Increasing	Decreasing
	Gabatali	Decreasing	Increasing	Increasing	Decreasing
	Kahaloo	Decreasing	Increasing	Increasing	Decreasing
	Nandigram	Decreasing	Decreasing	Increasing	Decreasing
	Sariakandi	Increasing	Increasing	Increasing	Decreasing
	Shajahanpur	Decreasing	Increasing	Increasing	Decreasing
Brahmanbaria	Sherpur	Decreasing	Increasing	Increasing	Decreasing
	Shibganj	Increasing	Increasing	Increasing	Decreasing
	Sonatola	Increasing	Increasing	Increasing	Decreasing
	Akhaura	Decreasing	Increasing	Increasing	Decreasing
	Ashuganj	Decreasing	Increasing	Increasing	Decreasing
	Banchharampur	Decreasing	Increasing	Increasing	Decreasing
	Bijoyagar	Decreasing	Increasing	Increasing	Decreasing
	Brahmanbaria Sadar	Decreasing	Increasing	Increasing	Decreasing
	Kasba	Decreasing	Increasing	Increasing	Decreasing
	Nabinagar	Decreasing	Increasing	Increasing	Decreasing

	Nasirnagar	Decreasing	Increasing	Increasing	Decreasing
	Sarail	Decreasing	Increasing	Increasing	Decreasing
Ch. Nawabganj	Bholahat	Decreasing	Increasing	Decreasing	Decreasing
	Chapai Nawabganj Sad	Decreasing	Decreasing	Decreasing	Decreasing
	Gomastapur	Decreasing	Decreasing	Decreasing	Decreasing
	Nachole	Decreasing	Decreasing	Decreasing	Decreasing
	Shibganj	Decreasing	Decreasing	Decreasing	Decreasing
Chandpur	Chandpur Sadar	Decreasing	Increasing	Increasing	Decreasing
	Faridganj	Decreasing	Increasing	Increasing	Decreasing
	Haim Char	Decreasing	Increasing	Increasing	Decreasing
	Hajiganj	Decreasing	Increasing	Increasing	Decreasing
	Kachua	Decreasing	Increasing	Increasing	Decreasing
	Matlab Dakshin	Decreasing	Increasing	Increasing	Decreasing
	Matlab Uttar	Decreasing	Increasing	Increasing	Decreasing
	Shahrasti	Decreasing	Increasing	Increasing	Decreasing
Chittagong	Anowara	Increasing	Increasing	Increasing	Decreasing
	Banshkhali	Increasing	Increasing	Increasing	Decreasing
	Boalkhali	Increasing	Increasing	Increasing	Decreasing
	Chandanaish	Increasing	Increasing	Increasing	Increasing
	Fatikchhari	Increasing	Increasing	Decreasing	Decreasing
	Hathazari	Increasing	Increasing	Decreasing	Decreasing
	Lohagara	Increasing	Increasing	Increasing	Increasing
	Mirsharai	Decreasing	Increasing	Increasing	Decreasing
	Patiya	Increasing	Increasing	Increasing	Decreasing
	Rangunia	Increasing	Increasing	Increasing	Decreasing
	Raozan	Increasing	Increasing	Decreasing	Decreasing
	Sandwip	Increasing	Increasing	Increasing	Decreasing
	Satkania	Increasing	Increasing	Increasing	Increasing
	Sitakunda	No Trend	Increasing	Increasing	Decreasing
Chuadanga	Alamdanga	Decreasing	Decreasing	Increasing	Decreasing
	Chuadanga Sadar	Decreasing	Increasing	Increasing	Decreasing
	Damurhuda	Decreasing	Increasing	Increasing	Decreasing
	Jiban Nagar	Decreasing	Increasing	Increasing	Decreasing
Comilla	Barura	Decreasing	Increasing	Increasing	Decreasing
	Brahman Para	Decreasing	Increasing	Increasing	Decreasing
	Burichang	Decreasing	Increasing	Increasing	Decreasing
	Chandina	Decreasing	Increasing	Increasing	Decreasing
	Chauddagram	Decreasing	Increasing	Increasing	Decreasing
	Comilla Adarsha Sadar	Decreasing	Increasing	Increasing	Decreasing
	Daudkandi	Decreasing	Increasing	Increasing	Decreasing
	Debidwar	Decreasing	Increasing	Increasing	Decreasing
	Homna	Decreasing	Increasing	Increasing	Decreasing
	Laksam	Decreasing	Increasing	Increasing	Decreasing
	Meghna	Decreasing	Increasing	Increasing	Decreasing
	Manoharganj	Decreasing	Increasing	Increasing	Decreasing
	Muradnagar	Decreasing	Increasing	Increasing	Decreasing
	Nangalkot	Decreasing	Increasing	Increasing	Decreasing
	Comilla Sadar Dakshin	Decreasing	Increasing	Increasing	Decreasing
	Titas	Decreasing	Increasing	Increasing	Decreasing
Cox'S Bazar	Chakaria	Increasing	Increasing	Increasing	Increasing
	Cox'S Bazar Sadar	Increasing	Increasing	Increasing	Increasing
	Kutubdia	Increasing	Increasing	Increasing	Increasing
	Maheshkhali	Increasing	Increasing	Increasing	Increasing
	Pekua	Increasing	Increasing	Increasing	Increasing
	Ramu	Increasing	Increasing	Increasing	Increasing
	Teknaf	Increasing	Increasing	Increasing	Increasing
	Ukhia	Increasing	Increasing	Increasing	Increasing
Dhaka	Dhamrai	Decreasing	Increasing	Increasing	Decreasing
	Dohar	Decreasing	Increasing	Increasing	Decreasing
	Keraniganj	Decreasing	Increasing	Decreasing	Decreasing
	Nawabganj	Decreasing	Increasing	Increasing	Decreasing
	Savar	Decreasing	Increasing	Increasing	Decreasing

Dinajpur	Birampur	Decreasing	Increasing	Decreasing	Decreasing
	Birganj	Increasing	Increasing	Decreasing	Decreasing
	Biral	Increasing	Increasing	Decreasing	Decreasing
	Bochaganj	Increasing	Increasing	Decreasing	Decreasing
	Chirirbandar	Increasing	Increasing	Decreasing	Decreasing
	Dinajpur Sadar	Increasing	Increasing	Decreasing	Decreasing
	Fulbari	Increasing	Increasing	Decreasing	Decreasing
	Ghoraghat	Decreasing	Increasing	Increasing	Decreasing
	Hakimpur	Increasing	Increasing	Increasing	Decreasing
	Kaharole	Increasing	Increasing	Decreasing	Decreasing
	Khansama	Increasing	Increasing	Decreasing	Decreasing
	Nawabganj	Increasing	Increasing	Increasing	Decreasing
	Parbatipur	Increasing	Increasing	Decreasing	Decreasing
Faridpur	Alfadanga	Decreasing	Increasing	Increasing	Decreasing
	Bhanga	Decreasing	Increasing	Increasing	Decreasing
	Boalmari	Decreasing	Increasing	Increasing	Decreasing
	Char Bhadrasan	Decreasing	Increasing	Increasing	Decreasing
	Faridpur Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Madhukhali	Decreasing	Increasing	Increasing	Decreasing
	Nagarkanda	Decreasing	Increasing	Increasing	Decreasing
	Sadarpur	Decreasing	Increasing	Increasing	Decreasing
	Saltha	Decreasing	Increasing	Increasing	Decreasing
Feni	Chhagalnaiya	Decreasing	Increasing	Increasing	Decreasing
	Daganbhuiyan	Decreasing	Increasing	Increasing	Decreasing
	Feni Sadar	Decreasing	Increasing	Increasing	Decreasing
	Fulgazi	Decreasing	Increasing	Increasing	Decreasing
	Parshuram	Decreasing	Increasing	Increasing	Decreasing
	Sonagazi	Decreasing	Increasing	Increasing	Decreasing
Gaibandha	Gaibandha Sadar	Increasing	Increasing	Increasing	Decreasing
	Gobindaganj	Increasing	Increasing	Increasing	Decreasing
	Palashbari	Increasing	Increasing	Increasing	Decreasing
	Fulchhari	Increasing	Increasing	Increasing	Decreasing
	Sadullapur	Increasing	Increasing	Increasing	Decreasing
	Saghatta	Increasing	Increasing	Increasing	Decreasing
	Sundarganj	Increasing	Increasing	No Trend	Decreasing
Gazipur	Gazipur Sadar	Decreasing	Increasing	Increasing	Decreasing
	Kaliganj	Decreasing	Increasing	Increasing	Decreasing
	Kaliakair	Decreasing	Increasing	Increasing	Decreasing
	Kapasia	Decreasing	Increasing	Increasing	Decreasing
	Sreepur	Decreasing	Increasing	Increasing	Decreasing
Gopalganj	Gopalganj Sadar	Decreasing	Increasing	Increasing	Decreasing
	Kashiani	Decreasing	Increasing	Increasing	Decreasing
	Kotali Para	Decreasing	Increasing	Increasing	Decreasing
	Muksudpur	Decreasing	Increasing	Increasing	Decreasing
	Tungi Para	Decreasing	Increasing	Increasing	Decreasing
Habiganj	Ajmiriganj	Decreasing	Increasing	Decreasing	Decreasing
	Bahubal	Increasing	Increasing	Decreasing	Decreasing
	Baniachong	Decreasing	Increasing	Decreasing	Decreasing
	Chunarughat	Decreasing	Increasing	Increasing	Decreasing
	Habiganj Sadar	Decreasing	Increasing	Increasing	Decreasing
	Lakhai	Decreasing	Increasing	Increasing	Decreasing
	Madhabpur	Decreasing	Increasing	Increasing	Decreasing
	Nabiganj	Increasing	Increasing	Decreasing	Decreasing
Jalalpur	Bakshiganj	Increasing	Increasing	Increasing	Decreasing
	Dewanganj	Increasing	Increasing	Increasing	Decreasing
	Islampur	Increasing	Increasing	Increasing	Decreasing
	Jalalpur Sadar	Increasing	Increasing	Increasing	Decreasing
	Madarganj	Increasing	Increasing	Increasing	Decreasing
	Melandaha	Increasing	Increasing	Increasing	Decreasing
	Sharishabari	Decreasing	Increasing	Increasing	Decreasing
Jessore	Abhaynagar	Decreasing	Increasing	Increasing	Decreasing
	Bagher Para	Decreasing	Increasing	Increasing	Decreasing
	Chaugachha	Decreasing	Increasing	Increasing	Decreasing

	Sadar	Decreasing	Increasing	Increasing	Decreasing
	Jhikargachha	Decreasing	Increasing	Increasing	Decreasing
	Keshabpur	Decreasing	Increasing	Increasing	Decreasing
	Manirampur	Decreasing	Increasing	Increasing	Decreasing
	Sharsha	Decreasing	Increasing	Increasing	Decreasing
Jhalokati	Jhalokati Sadar	Decreasing	Increasing	Increasing	Decreasing
	Kanthalia	Decreasing	Increasing	Increasing	No Trend
	Nalchity	Decreasing	Increasing	Increasing	Decreasing
	Rajapur	Decreasing	Increasing	Increasing	Decreasing
Jhenaidah	Harinakunda	Decreasing	Increasing	Increasing	Decreasing
	Jhenaidah Sadar	Decreasing	Increasing	Increasing	Decreasing
	Kaliganj	Decreasing	Increasing	Increasing	Decreasing
	Kotchandpur	Decreasing	Increasing	Increasing	Decreasing
	Maheshpur	Decreasing	Increasing	Increasing	Decreasing
	Shailkupa	Decreasing	Increasing	Increasing	Decreasing
Joypurhat	Akkelpur	Decreasing	Increasing	Increasing	Decreasing
	Joypurhat Sadar	Decreasing	Increasing	Increasing	Decreasing
	Kalai	Decreasing	Increasing	Increasing	Decreasing
	Khetlal	Decreasing	Increasing	Increasing	Decreasing
	Panchbibi	Decreasing	Increasing	Increasing	Decreasing
Khagrachhari	Dighinala	Decreasing	Increasing	Decreasing	Decreasing
	Khagrachhari Sadar	Decreasing	Increasing	No Trend	Decreasing
	Lakshmichhari	Decreasing	Increasing	Increasing	Decreasing
	Mahalchhari	Decreasing	Increasing	Increasing	Decreasing
	Manikchhari	Decreasing	Increasing	Increasing	Decreasing
	Matiranga	Decreasing	Increasing	No Trend	Decreasing
	Panchhari	Decreasing	Increasing	Decreasing	Decreasing
	Ramgarh	Decreasing	Increasing	Increasing	Decreasing
Khulna	Batiaghata	Decreasing	Increasing	Increasing	Decreasing
	Dacope	Decreasing	Increasing	Increasing	Decreasing
	Dighalia	Decreasing	Increasing	Increasing	Decreasing
	Dumuria	Decreasing	Increasing	Increasing	Decreasing
	Koyra	Decreasing	Increasing	Increasing	Decreasing
	Phultala	Decreasing	Increasing	Increasing	Decreasing
	Paikgachha	Decreasing	Increasing	Increasing	Decreasing
	Rupsa	Decreasing	Increasing	Increasing	Decreasing
	Terokhada	Decreasing	Increasing	Increasing	Decreasing
Kishoreganj	Austagram	Decreasing	Increasing	Increasing	Decreasing
	Bajitpur	Decreasing	Increasing	Increasing	Decreasing
	Bhairab	Decreasing	Increasing	Increasing	Decreasing
	Hossainpur	Decreasing	Increasing	Increasing	Decreasing
	Itna	Decreasing	Increasing	Increasing	Decreasing
	Karimganj	Decreasing	Increasing	Increasing	Decreasing
	Katiadi	Decreasing	Increasing	Increasing	Decreasing
	Kishoreganj Sadar	Decreasing	Increasing	Increasing	Decreasing
	Kuliar Char	Decreasing	Increasing	Increasing	Decreasing
	Mithamain	Decreasing	Increasing	Increasing	Decreasing
	Nikli	Decreasing	Increasing	Increasing	Decreasing
	Pakundia	Decreasing	Increasing	Increasing	Decreasing
	Tarail	Decreasing	Increasing	Increasing	Decreasing
Kurigram	Bhurungamari	Increasing	Increasing	Decreasing	No Trend
	Char Rajibpur	Increasing	Increasing	Increasing	Decreasing
	Chilmari	Increasing	Increasing	No Trend	Decreasing
	Kurigram Sadar	Increasing	Increasing	Decreasing	Decreasing
	Nageshwari	Increasing	Increasing	Decreasing	Decreasing
	Phulbari	Increasing	Increasing	Decreasing	Decreasing
	Rajarhat	Increasing	Increasing	Decreasing	Decreasing
	Raumari	Increasing	Increasing	Decreasing	Decreasing
	Ulipur	Increasing	Increasing	No Trend	Decreasing
Kushtia	Bheramara	Decreasing	Decreasing	Increasing	Decreasing
	Daulatpur	Decreasing	Decreasing	Increasing	Decreasing
	Khoksa	Decreasing	Increasing	Increasing	Decreasing

	Kumarkhali	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Kushtia Sadar	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Mirpur	<u>Decreasing</u>	Increasing	Increasing	Decreasing
Lakshmipur	Kamalnagar	Decreasing	Increasing	Increasing	Decreasing
	Lakshmipur Sadar	Decreasing	Increasing	Increasing	Decreasing
	Roypur	Decreasing	Increasing	Increasing	Decreasing
	Ramganj	Decreasing	Increasing	Increasing	Decreasing
	Ramgati	Decreasing	Increasing	Increasing	Decreasing
Lalmonirhat	Aditmari	Increasing	Increasing	Decreasing	Decreasing
	Hatibandha	Increasing	Increasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Increasing	Increasing	Decreasing
	Lalmonirhat Sadar	Increasing	Increasing	Decreasing	Decreasing
	Patgram	<u>Increasing</u>	Increasing	Decreasing	Decreasing
Madaripur	Kalkini	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Madaripur Sadar	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Rajoir	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Shib Char	<u>Decreasing</u>	Increasing	Increasing	Decreasing
Magura	Magura Sadar	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Mohammadpur	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Shalikha	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Sreepur	Increasing	Increasing	Decreasing	Decreasing
Manikganj	Daulatpur	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Ghior	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Harirampur	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Manikganj Sadar	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Saturia	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Shibalaya	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Singair	<u>Decreasing</u>	Increasing	Increasing	Decreasing
Maulvibazar	Barlekha	Increasing	Increasing	Decreasing	Decreasing
	Juri	Increasing	Increasing	Decreasing	Decreasing
	Kamalganj	Increasing	Increasing	Decreasing	Decreasing
	Kulaura	Increasing	Increasing	Decreasing	Decreasing
	Maulvi Bazar Sadar	Increasing	Increasing	Decreasing	Decreasing
	Rajnagar	Increasing	Increasing	Decreasing	Decreasing
	Sreemangal	<u>Decreasing</u>	Increasing	Increasing	Decreasing
Meherpur	Gangni	Decreasing	Decreasing	Increasing	Decreasing
	Meherpur Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Mujib Nagar	Decreasing	Increasing	Increasing	Decreasing
Munshiganj	Gazaria	Decreasing	Increasing	Increasing	Decreasing
	Lohajang	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Munshiganj Sadar	Decreasing	Increasing	Increasing	Decreasing
	Serajdikhan	<u>Decreasing</u>	Increasing	Decreasing	Decreasing
	Sreenagar	<u>Decreasing</u>	Increasing	Decreasing	Decreasing
	Tongibari	<u>Decreasing</u>	Increasing	Decreasing	Decreasing
Mymensingh	Bhaluka	Decreasing	Increasing	Increasing	Decreasing
	Dhobaura	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Fulbaria	Decreasing	Increasing	Increasing	Increasing
	Gaffargaon	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Gauripur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Haluaghat	Increasing	<u>Increasing</u>	Increasing	No Trend
	Ishwarganj	Decreasing	<u>Increasing</u>	Increasing	Increasing
	Muktagachha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mymensingh Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nandail	Decreasing	<u>Increasing</u>	Increasing	Increasing
	Phulpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Tarakanda	Increasing	<u>Increasing</u>	Increasing	Increasing
	Trishal	Decreasing	Increasing	Increasing	Increasing
Naogaon	Atrai	Decreasing	Decreasing	Increasing	Decreasing
	Badalgachhi	Decreasing	Increasing	Increasing	Decreasing
	Dhamoirhat	Decreasing	Decreasing	Increasing	Decreasing
	Manda	Decreasing	Decreasing	Increasing	Decreasing
	Mahadebpur	Decreasing	Increasing	Increasing	Decreasing
	Naogaon Sadar	Decreasing	Increasing	Increasing	Decreasing

	Niamatpur	Decreasing	Decreasing	Increasing	Decreasing
	Patnitala	Decreasing	Increasing	No Trend	Decreasing
	Porsha	Increasing	Increasing	Decreasing	Decreasing
	Raninagar	Decreasing	Decreasing	Increasing	Decreasing
	Sapahar	Decreasing	Increasing	No Trend	Decreasing
Narail	Kalia	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Lohagara	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Narail Sadar	Decreasing	<u>Increasing</u>	Increasing	Decreasing
Narayanganj	Araihazar	Decreasing	Increasing	Increasing	Decreasing
	Bandar	Decreasing	Increasing	Increasing	Decreasing
	Narayanganj Sadar	<u>Decreasing</u>	Increasing	Decreasing	Decreasing
	Rupganj	Decreasing	Increasing	Increasing	Decreasing
	Sonargaon	Decreasing	Increasing	Increasing	Decreasing
Narsingdi	Belabo	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Manohardi	Decreasing	Increasing	Increasing	Decreasing
	Narsingdi Sadar	Decreasing	Increasing	Increasing	Decreasing
	Palash	Decreasing	Increasing	Increasing	Decreasing
	Roytura	Decreasing	Increasing	Increasing	Decreasing
	Shibpur	Decreasing	Increasing	Increasing	Decreasing
Natore	Bagati Para	Decreasing	Decreasing	Increasing	Decreasing
	Baraigram	Decreasing	Decreasing	Increasing	Decreasing
	Gurudaspur	Decreasing	Decreasing	Increasing	Decreasing
	Lalpur	Decreasing	Decreasing	Increasing	Decreasing
	Naldanga	Decreasing	Decreasing	Increasing	Decreasing
	Natore Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Singra	Decreasing	Decreasing	Increasing	Decreasing
Netrakona	Atpara	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Barhatta	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Durgapur	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Kalmakanda	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Kendua	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Khaliajuri	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Madan	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Mohanganj	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Netrokona Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Purbadhala	Increasing	<u>Increasing</u>	Increasing	Increasing
Nilphamari	Dimla	Increasing	Increasing	Decreasing	Decreasing
	Domar	Increasing	Increasing	Decreasing	Decreasing
	Jaldhaka	Increasing	Increasing	Decreasing	Decreasing
	Kishoreganj	Increasing	Increasing	Decreasing	Decreasing
	Nilphamari Sadar	Increasing	Increasing	Decreasing	Decreasing
	Saidpur	Increasing	Increasing	Decreasing	Decreasing
Noakhali	Begumganj	Decreasing	Increasing	Increasing	Decreasing
	Chatkhil	Decreasing	Increasing	Increasing	Decreasing
	Companiganj	Decreasing	Increasing	Increasing	Decreasing
	Hatiya	Decreasing	Increasing	Increasing	Decreasing
	Kabirhat	Decreasing	Increasing	Increasing	Decreasing
	Noakhali Sadar	Decreasing	Increasing	Increasing	Decreasing
	Senbagh	Decreasing	Increasing	Increasing	Decreasing
	Sonaimuri	Decreasing	Increasing	Increasing	Decreasing
	Subarnachar	Decreasing	Increasing	Increasing	Decreasing
Pabna	Atgharia	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Bera	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Bhangura	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Chatmohar	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Faridpur	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Ishwardi	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Pabna Sadar	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Santhia	<u>Decreasing</u>	Increasing	Increasing	Decreasing
	Sujanagar	<u>Decreasing</u>	Increasing	Increasing	Decreasing
Panchagarh	Atwari	Increasing	Decreasing	Decreasing	Decreasing
	Boda	Increasing	Increasing	Decreasing	Decreasing

	Debiganj	Increasing	Increasing	Decreasing	Decreasing
	Panchagarh Sadar	Increasing	Increasing	Decreasing	Decreasing
	Tentulia	Increasing	Decreasing	Decreasing	Decreasing
Patuakhali	Bauphal	Decreasing	Increasing	Increasing	Decreasing
	Dashmina	Decreasing	Increasing	Increasing	Decreasing
	Dumki	Decreasing	Increasing	Increasing	Increasing
	Galachipa	Decreasing	Increasing	Increasing	Increasing
	Kala Para	Decreasing	Increasing	Increasing	Increasing
	Mirzaganj	Decreasing	Increasing	Increasing	No Trend
	Patuakhali Sadar	Decreasing	Increasing	Increasing	Increasing
	Rangabali	Decreasing	Increasing	Increasing	Decreasing
Pirojpur	Bhandaria	Decreasing	Increasing	Increasing	No Trend
	Zianagar	Decreasing	Increasing	Increasing	Decreasing
	Kawkhali	Decreasing	Increasing	Increasing	Decreasing
	Mathbaria	Decreasing	Increasing	Increasing	Decreasing
	Nazirpur	Decreasing	Increasing	Increasing	Decreasing
	Nesarabad	Decreasing	Increasing	Increasing	Decreasing
	Pirojpur Sadar	Decreasing	Increasing	Increasing	Decreasing
Rajbari	Balia Kandi	Decreasing	Increasing	Increasing	Decreasing
	Goalandaghat	Decreasing	Decreasing	Increasing	Decreasing
	Kalukhali	Decreasing	Increasing	Increasing	Decreasing
	Pangsha	Decreasing	Increasing	Increasing	Decreasing
	Rajbari Sadar	Decreasing	Increasing	Increasing	Decreasing
Rajshahi	Bagha	Decreasing	Decreasing	Increasing	Decreasing
	Baghmara	Decreasing	Decreasing	Increasing	Decreasing
	Charghat	Decreasing	Decreasing	Increasing	Decreasing
	Durgapur	Decreasing	Decreasing	Increasing	Decreasing
	Godagari	Decreasing	Decreasing	Increasing	Decreasing
	Mohanpur	Decreasing	Decreasing	Increasing	Decreasing
	Paba	Decreasing	Decreasing	Decreasing	Decreasing
	Puthia	Decreasing	Decreasing	Increasing	Decreasing
	Tanore	Decreasing	Decreasing	Increasing	Decreasing
Rangamati	Baghai Chhari	Decreasing	Increasing	No Trend	Decreasing
	Barkal	Increasing	No Trend	Increasing	Increasing
	Belai Chhari	Increasing	Increasing	Increasing	Increasing
	Jurai Chhari	Increasing	No Trend	Increasing	Increasing
	Kaptai	Increasing	Increasing	Increasing	Increasing
	Kawkhali (Betbunia)	Increasing	Increasing	Increasing	Increasing
	Langadu	Decreasing	Increasing	Increasing	Decreasing
	Naniarchar	Decreasing	Increasing	Increasing	Decreasing
	Rajasthali	Increasing	Increasing	Increasing	Decreasing
	Rangamati Sadar	Increasing	Increasing	Increasing	Increasing
Rangpur	Badarganj	Increasing	Increasing	Decreasing	Decreasing
	Gangachara	Increasing	Increasing	Decreasing	Decreasing
	Kaunia	Increasing	Increasing	Decreasing	Decreasing
	Mitha Pukur	Increasing	Increasing	Decreasing	Decreasing
	Pirgachha	Increasing	Increasing	Decreasing	Decreasing
	Pirganj	Increasing	Increasing	Increasing	Decreasing
	Rangpur Sadar	Increasing	Increasing	Decreasing	Decreasing
	Taraganj	Increasing	Increasing	Decreasing	Decreasing
Satkhira	Assasuni	Decreasing	Increasing	Increasing	Decreasing
	Debhata	Increasing	Increasing	Increasing	Decreasing
	Kalaroa	Decreasing	Increasing	Increasing	Decreasing
	Kaliganj	Decreasing	Increasing	Increasing	Decreasing
	Satkhira Sadar	Decreasing	Increasing	Increasing	Decreasing
	Shyamnagar	Decreasing	Increasing	Increasing	Decreasing
	Tala	Decreasing	Increasing	Increasing	Decreasing
Shariatpur	Bhedarganj	Decreasing	Increasing	Increasing	Decreasing
	Damudya	Decreasing	Increasing	Increasing	Decreasing
	Gosairhat	Decreasing	Increasing	Increasing	Decreasing
	Naria	Decreasing	Increasing	Increasing	Decreasing
	Shariatpur Sadar	Decreasing	Increasing	Increasing	Decreasing
	Zanjira	Decreasing	Increasing	Increasing	Decreasing

Sherpur	Jhenaigati	Increasing	Increasing	Increasing	Decreasing
	Nakla	Increasing	Increasing	Increasing	Decreasing
	Nalitabari	Increasing	Increasing	Increasing	Decreasing
	Sherpur Sadar	Increasing	Increasing	Increasing	Decreasing
	Sreebardi	Increasing	Increasing	Increasing	Decreasing
Sirajganj	Belkuchi	Decreasing	Increasing	Increasing	Decreasing
	Chauhali	Decreasing	Increasing	Increasing	Decreasing
	Kamarkhanda	Decreasing	Increasing	Increasing	Decreasing
	Kazipur	Decreasing	Increasing	Increasing	Decreasing
	Royganj	Decreasing	Increasing	Increasing	Decreasing
	Shahjampur	Decreasing	Increasing	Increasing	Decreasing
	Sirajganj Sadar	Decreasing	Increasing	Increasing	Decreasing
	Tarash	Decreasing	Decreasing	Increasing	Decreasing
	Ullah Para	Decreasing	Increasing	Increasing	Decreasing
Sunamganj	Bishwambarpur	Increasing	Increasing	Decreasing	Decreasing
	Chhatak	Increasing	Increasing	Decreasing	Decreasing
	Derai	Increasing	Increasing	Decreasing	Decreasing
	Dharampasha	Increasing	Increasing	Increasing	Decreasing
	Dowarabazar	Increasing	Increasing	Decreasing	Decreasing
	Jagannathpur	Increasing	Increasing	Decreasing	Decreasing
	Jamalganj	Increasing	Increasing	Increasing	Decreasing
	Dakshin Sunamganj	Increasing	Increasing	Decreasing	Decreasing
	Sulla	Decreasing	Increasing	Increasing	Decreasing
	Sunamganj Sadar	Increasing	Increasing	Decreasing	Decreasing
	Tahirpur	Increasing	Increasing	Increasing	Decreasing
Sylhet	Balaganj	Increasing	Increasing	Decreasing	Decreasing
	Beani Bazar	Increasing	Increasing	Decreasing	Decreasing
	Bishwanath	Increasing	Increasing	Decreasing	Decreasing
	Companiganj	Increasing	Increasing	Decreasing	Decreasing
	Dakshin Surma	Increasing	Increasing	Decreasing	Decreasing
	Fenchuganj	Increasing	Increasing	Decreasing	Decreasing
	Jaintiapur	Increasing	Increasing	Decreasing	Decreasing
	Golabganj	Increasing	Increasing	Decreasing	Decreasing
	Gowainghat	Increasing	Increasing	Decreasing	Decreasing
	Kanaighat	Increasing	Increasing	Decreasing	Decreasing
	Sylhet Sadar	Increasing	Increasing	Decreasing	Decreasing
	Zakiganj	Increasing	Increasing	Decreasing	Decreasing
Tangail	Basail	Decreasing	Increasing	Increasing	Decreasing
	Bhuapur	Decreasing	Increasing	Increasing	Decreasing
	Delduar	Decreasing	Increasing	Increasing	Decreasing
	Dhanbari	Decreasing	Increasing	Increasing	Decreasing
	Ghatail	Decreasing	Increasing	Increasing	Decreasing
	Gopalpur	Decreasing	Increasing	Increasing	Decreasing
	Kalihati	Decreasing	Increasing	Increasing	Decreasing
	Mirzapur	Decreasing	Increasing	Increasing	Decreasing
	Madhupur	Decreasing	Increasing	Increasing	Decreasing
	Nagarpur	Decreasing	Increasing	Increasing	Decreasing
	Sakhipur	Decreasing	Increasing	Increasing	Decreasing
	Tangail Sadar	Decreasing	Increasing	Increasing	Decreasing
Thakurgaon	Baliadangi	Increasing	Increasing	Decreasing	Decreasing
	Haripur	Increasing	Increasing	Decreasing	Decreasing
	Pirganj	Increasing	Increasing	Decreasing	Decreasing
	Ranisankail	Increasing	Increasing	Decreasing	Decreasing
	Thakurgaon Sadar	Increasing	Increasing	Decreasing	Decreasing

1.5 Upazila level CRU gridded monthly and annual rainfall with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upz. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Bagerhat Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Chitalmari	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Fakirhat	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kachua	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Mongla	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Mollahat	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Morrelganj	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Rampal	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Sarankhola	Decreasing	Decreasing	No Trend	Increasing	Decreasing	No Trend	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Bandarban	Alikadam	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Bandarban Sadar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Lama	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Naikhongchhari	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	No Trend	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Rowangchhari	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Ruma	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Thanchi	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Barguna	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Bamna	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Barguna	Barguna Sadar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Betagi	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Patharghata	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing

	Taltoli	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Barisal	Agailjhara	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Babuganj	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Bakerganj	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Banari Para	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Barisal Sadar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Gaurnadi	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Hizla	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Mehendiganj	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Muladi	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Wazirpur	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Bhola	Bhola Sadar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Burhanuddin	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Char Fasson	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Daulatkhan	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Lalmohan	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Manpura	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Tazumuddin	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Bogra	Adamdighi	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Bogra Sadar	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Dhunat	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Dhupchanchia	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Gabatali	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing

	Kahaloo	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Nandigram	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sariakandi	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Shajahanpur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sherpur	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Shibganj	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sonatola	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Brahmanbaria	Akhaura	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Ashuganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Banchharampu	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Bijohnagar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Brahmanbaria Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Kasba	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Nabinagar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Nasirnagar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sarail	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Chapai Nawabganj	Bholahat	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Chapai Nawabganj Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Gomastapur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Nachole	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
	Shibganj	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Chandpur	Chandpur Sadar	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Faridganj	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing

	Haim Char	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Hajiganj	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kachua	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Matlab Dakshin	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Matlab Uttar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Shahrasti	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Chittagong	Anowara	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	No Trend	Decreasing
	Banshkali	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Boalkhali	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	No Trend	Decreasing
	Chandanaish	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Fatikchhari	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Hathazari	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Lohagara	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Mirsharai	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Patiya	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Rangunia	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Raozan	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Sandwip	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Satkania	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Sitakunda	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Chuadanga	Alamdanga	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Chuadanga Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Damurhuda	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing

	Jiban Nagar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Comilla	Barura	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Brahman Para	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Burichang	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Chandina	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Chauddagram	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Comilla Adarsha Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Daudkandi	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Debidwar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Homna	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Laksam	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Meghna	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Manoharganj	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Muradnagar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Nangalkot	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Comilla Sadar Dak	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Titas	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Cox'S Bazar	Chakaria	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Cox'S Baz Sadar	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kutubdia	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Maheshkhali	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Pekua	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Ramu	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing

[illegible]

	Char Bhadrasan	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Faridpur Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Madhukhali	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Nagarkanda	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Sadarpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Saltha	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Feni	Chhagalnaiya	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Daganbhuiyan	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Feni Sadar	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Fulgazi	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Parshuram	Increasing	Decreasing	No Trend	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sonagazi	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Gaibandha	Gaibandha Sadar	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Gobindaganj	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Palashbari	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Fulchhari	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sadullapur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Saghatta	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sundarganj	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Gazipur	Gazipur Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Kaliganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Kaliakair	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Kapasias	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing

	Sreepur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Gopalganj	Gopalganj Sadar	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kashiani	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kotali Para	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Muksudpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Tungi Para	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Habiganj	Ajmiriganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Bahubal	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Baniachong	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Chunarughat	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Habiganj Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Lakhai	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Madhabpur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Nabiganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Jamalpur	Bakshiganj	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Dewanganj	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Islampur	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Jamalpur Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Madarganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Melandaha	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sharishabari	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Jessore	Abhaynagar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Bagher Para	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing

	Chaugachha	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Jhikargachha	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Keshabpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Manirampur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing
	Sharsha	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Jhalokati	Jhalokati Sadar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kanthalia	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Nalchity	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Rajapur	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Jhenaidah	Harinakunda	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Jhenaidah Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kotchandpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Maheshpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Shailkupa	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Joypurhat	Akkelpur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Joypurhat Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kalai	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Khetlal	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Panchbibi	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Khagrachhari	Dighinala	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Khagrachhari Sad	No Trend	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing

	Lakshmichhari	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing
	Mahalchhari	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Manikchhari	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Matiranga	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Panchhari	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Ramgarh	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Khulna	Batiaghata	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Dacope	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Dighalia	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Dumuria	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Koyra	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Phultala	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Paikgachha	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Rupsa	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Terokhada	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Kishoreganj	Austagram	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Bajitpur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Bhairab	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Hossainpur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Itna	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Karimganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Katiadi	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Kishoreganj Sad	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing

	Kuliar Char	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Mithamain	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Nikli	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Pakundia	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Tarail	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Kurigram	Bhurungamari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Char Rajibpur	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Chilmari	No Trend	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kurigram Sadar	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Nageshwari	Decreasing	Increasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Phulbari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rajarhat	Decreasing	Increasing	Decreasing	Increasing	No Trend	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Raumari	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Ulipur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Kushtia	Bheramara	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Daulatpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Khoksa	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kumarkhali	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kushtia Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Mirpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Lakshmipur	Kamalnagar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Lakshmipur Sad	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Roypur	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing

	Ramganj	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Ramgati	Decreasin g	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
Lalmonirhat	Aditmari	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Hatibandha	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Kaliganj	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Lalmonirhat Sad	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Patgram	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
Madaripur	Kalkini	Decreasin g	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Madaripur Sad	No Trend	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Rajoir	No Trend	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Shib Char	Decreasin g	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
Magura	Magura Sadar	No Trend	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Mohammadpur	Decreasin g	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Shalikha	Decreasin g	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
	Sreepur	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasin g	Decreasing
Manikganj	Daulatpur	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Ghior	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Harirampur	Decreasin g	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Manikganj Sad	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Saturia	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Shibalaya	No Trend	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
	Singair	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing
Maulvibazar	Barlekha	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasin g	Decreasing

	Juri	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Kamalganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Kulaura	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Maulvi Bazar Sad	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Rajnagar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sreemangal	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Meherpur	Gangni	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Meherpur Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Munshiganj	Mujib Nagar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Gazaria	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Lohajang	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Munshiganj Sada	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Serajdikhan	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sreenagar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Mymensingh	Tongibari	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Bhaluka	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Dhobaura	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Fulbaria	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Gaffargaon	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Gauripur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Haluaghat	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Ishwarganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Muktagachha	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing

	Mymensingh Sad	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Nandail	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Phulpur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Tarakanda	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Trishal	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Naogaon	Atrai	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Badalgachhi	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Dhamoirhat	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Manda	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing
	Mahadebpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Naogaon Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Niamatpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Patnitala	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Porsha	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Raninagar	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sapahar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Narail	Kalia	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Lohagara	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Narail Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Narayanganj	Araihazar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Bandar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Narayanganj Sad	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Rupganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing

[illegible]

	Purbadhala	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Nilphamari	Dimla	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Domar	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Jaldhaka	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kishoreganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Nilphamari Sada	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Saidpur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Noakhali	Begumganj	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing
	Chatkhil	No Trend	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Companiganj	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Hatiya	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kabirhat	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Noakhali Sadar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Senbagh	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sonaimuri	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Subarnachar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Pabna	Atgharia	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Bera	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Bhangura	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Chatmohar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Faridpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Ishwardi	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Pabna Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing

	Santhia	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sujanagar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Panchagarh	Atwari	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Boda	No Trend	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Debiganj	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Panchagarh Sad	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Tentulia	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Patuakhali	Bauphal	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Dashmina	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Dumki	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Galachipa	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kala Para	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Mirzaganj	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Patuakhali Sadar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Rangabali	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Pirojpur	Bhandaria	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Zianagar	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kawkhali	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Mathbaria	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Nazirpur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Nesarabad	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Pirojpur Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Rajbari	Balia Kandi	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing

	Goalandaghat	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Kalukhali	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Pangsha	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing
	Rajbari Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing
Rajshahi	Bagha	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Baghmara	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Charghat	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Durgapur	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Godagari	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
	Mohanpur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing
	Paba	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Puthia	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Tanore	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Rangamati	Baghai Chhari	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Barkal	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing
	Belai Chhari	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Jurai Chhari	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	No Trend	Decreasing
	Kaptai	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kawkhali (Betb)	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Langadu	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing
	Naniarchar	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing
	Rajasthali	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing
	Rangamati Sada	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing

Rangpur	Badarganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Gangachara	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kaunia	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mitha Pukur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Pirgachha	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Pirganj	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rangpur Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Taraganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Satkhira	Assasuni	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Debhata	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kalaroa	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Satkhira Sadar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Shyamnagar	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Tala	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Shariatpur	Bhedarganj	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Damudya	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Gosairhat	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Naria	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Shariatpur Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
	Zanjira	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing
Sherpur	Jhenaigati	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Nakla	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing

[illegible]

[illegible]

	Tangail Sadar	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
Thakurgaon	Baliadangi	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Haripur	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Pirganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Ranisankail	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Thakurgaon Sada	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing

1.6 Upazila level CRU gridded seasonal rainfall with significant increasing and decreasing trends for 1971-2015.
Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upazila Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Bagerhat Sadar	Decreasing	Increasing	Increasing	Decreasing
	Chitalmari	Decreasing	Increasing	Increasing	Decreasing
	Fakirhat	Decreasing	Increasing	Increasing	Decreasing
	Kachua	Decreasing	Increasing	Increasing	Decreasing
	Mongla	Decreasing	Increasing	Increasing	Decreasing
	Mollahat	Decreasing	Decreasing	Increasing	Decreasing
	Morrelganj	Decreasing	Increasing	Increasing	Decreasing
	Rampal	Decreasing	Increasing	Increasing	Decreasing
	Sarankhola	Decreasing	Increasing	Increasing	Decreasing
Bandarban	Alikadam	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Bandarban Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Lama	Decreasing	Decreasing	Increasing	Decreasing
	Naikhongchhari	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Rowangchhari	Decreasing	Decreasing	Increasing	Decreasing
	Ruma	Decreasing	Decreasing	Increasing	Decreasing
	Thanchi	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
Barguna	Amtali	Decreasing	Decreasing	Increasing	Decreasing
	Bamna	Decreasing	Decreasing	Increasing	Decreasing
	Barguna Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Betagi	Decreasing	Decreasing	Increasing	Decreasing
	Patharghata	Decreasing	Increasing	Increasing	Decreasing
	Taltoli	Decreasing	Decreasing	Increasing	Decreasing
Barisal	Agailjhara	Decreasing	Decreasing	Increasing	Decreasing
	Babuganj	Decreasing	Decreasing	Increasing	Decreasing
	Bakerganj	Decreasing	Decreasing	Increasing	Decreasing
	Banari Para	Decreasing	Decreasing	Increasing	Decreasing
	Barisal Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Gaurnadi	Decreasing	Decreasing	Increasing	Decreasing
	Hizla	Decreasing	Decreasing	Increasing	Decreasing
	Mehendiganj	Decreasing	Decreasing	Increasing	Decreasing
	Muladi	Decreasing	Decreasing	Increasing	Decreasing
	Wazirpur	Decreasing	Decreasing	Increasing	Decreasing
		Decreasing	Decreasing	Increasing	Decreasing
Bhola	Bhola Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Burhanuddin	Decreasing	Decreasing	Increasing	Decreasing
	Char Fasson	Decreasing	Decreasing	Increasing	Decreasing
	Daulatkhan	Decreasing	Decreasing	Increasing	Decreasing
	Lalmohan	Decreasing	Decreasing	Increasing	Decreasing
	Manpura	Decreasing	Decreasing	Increasing	Decreasing
	Tazumuddin	Decreasing	Decreasing	Increasing	Decreasing
		Decreasing	Decreasing	Increasing	Decreasing
Bogra	Adamdighi	Decreasing	Decreasing	Increasing	Decreasing
	Bogra Sadar	Decreasing	Decreasing	No Trend	Decreasing
	Dhunat	Decreasing	Decreasing	Increasing	Decreasing
	Dhupchanchia	Decreasing	Decreasing	Increasing	Decreasing
	Gabtali	Decreasing	Decreasing	Decreasing	Decreasing
	Kahaloo	Decreasing	Decreasing	Increasing	Decreasing
	Nandigram	Decreasing	Decreasing	Increasing	Decreasing
	Sariakandi	Decreasing	Decreasing	Increasing	Decreasing
	Shajahanpur	Decreasing	Decreasing	Increasing	Decreasing
	Sherpur	Decreasing	Decreasing	Increasing	Decreasing
	Shibganj	Decreasing	Decreasing	Decreasing	Decreasing
Brahamanbaria	Sonatola	Decreasing	Decreasing	Decreasing	Decreasing
	Akhaura	Decreasing	Decreasing	Increasing	Decreasing
	Ashuganj	Decreasing	Decreasing	Increasing	Decreasing

	Banchharampur	Decreasing	Decreasing	Increasing	Decreasing
	Bijoynagar	Decreasing	Decreasing	Increasing	Decreasing
	Brahmanbaria Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Kasba	Decreasing	Decreasing	Increasing	Decreasing
	Nabinagar	Decreasing	Decreasing	Increasing	Decreasing
	Nasirnagar	Decreasing	Decreasing	Increasing	Decreasing
	Sarail	Decreasing	Decreasing	Increasing	Decreasing
Ch. Nawabganj	Bholahat	Decreasing	Decreasing	Decreasing	Decreasing
	Chapai Nawabganj Sad	Decreasing	Decreasing	Decreasing	Decreasing
	Gomastapur	Decreasing	Decreasing	Decreasing	Decreasing
	Nachole	Decreasing	Decreasing	Decreasing	Decreasing
	Shibganj	Decreasing	Decreasing	Decreasing	Decreasing
Chandpur	Chandpur Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Faridganj	Decreasing	Decreasing	Increasing	Decreasing
	Haim Char	Decreasing	Decreasing	Increasing	Decreasing
	Hajiganj	Decreasing	Decreasing	Increasing	Decreasing
	Kachua	Decreasing	Decreasing	Increasing	Decreasing
	Matlab Dakshin	Decreasing	Decreasing	Increasing	Decreasing
	Matlab Uttar	Decreasing	Decreasing	Increasing	Decreasing
	Shahrasti	Decreasing	Decreasing	Increasing	Decreasing
Chittagong	Anowara	Decreasing	Decreasing	Increasing	Decreasing
	Banshkhali	Decreasing	Decreasing	Increasing	Decreasing
	Boalkhali	Decreasing	Decreasing	Increasing	Decreasing
	Chandanaish	Decreasing	Decreasing	Increasing	Decreasing
	Fatikchhari	Decreasing	Decreasing	Increasing	Decreasing
	Hathazari	Decreasing	Decreasing	Increasing	Decreasing
	Lohagara	Decreasing	Decreasing	Increasing	Decreasing
	Mirsharai	Decreasing	Decreasing	Increasing	Decreasing
	Patiya	Decreasing	Decreasing	Increasing	Decreasing
	Rangunia	Decreasing	Decreasing	Increasing	Decreasing
	Raozan	Decreasing	Decreasing	Increasing	Decreasing
	Sandwip	Decreasing	Decreasing	Increasing	Decreasing
	Satkania	Decreasing	Decreasing	Increasing	Decreasing
	Sitakunda	Decreasing	Decreasing	Increasing	Decreasing
Chuadanga	Alamdanga	Decreasing	Decreasing	Increasing	Decreasing
	Chuadanga Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Damurhuda	Decreasing	Decreasing	Decreasing	Decreasing
	Jiban Nagar	Decreasing	Decreasing	Decreasing	Decreasing
Comilla	Barura	Decreasing	Decreasing	Increasing	Decreasing
	Brahman Para	Decreasing	Decreasing	Increasing	Decreasing
	Burichang	Decreasing	Decreasing	Increasing	Decreasing
	Chandina	Decreasing	Decreasing	Increasing	Decreasing
	Chauddagram	Decreasing	Decreasing	Increasing	Decreasing
	Comilla Adarsha Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Daudkandi	Decreasing	Decreasing	Increasing	Decreasing
	Debidwar	Decreasing	Decreasing	Increasing	Decreasing
	Homna	Decreasing	Decreasing	Increasing	Decreasing
	Laksam	Decreasing	Decreasing	Increasing	Decreasing
	Meghna	Decreasing	Decreasing	Increasing	Decreasing
	Manoharganj	Decreasing	Decreasing	Increasing	Decreasing
	Muradnagar	Decreasing	Decreasing	Increasing	Decreasing
	Nangalkot	Decreasing	Decreasing	Increasing	Decreasing
	Comilla Sadar Dakshin	Decreasing	Decreasing	Increasing	Decreasing
	Titas	Decreasing	Decreasing	Increasing	Decreasing
Cox'S Bazar	Chakaria	Decreasing	Decreasing	Increasing	Decreasing

	Cox'S Bazar Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Kutubdia	Decreasing	Decreasing	Increasing	Decreasing
	Maheshkhali	Decreasing	Decreasing	Increasing	Decreasing
	Pekua	Decreasing	Decreasing	Increasing	Decreasing
	Ramu	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Teknaf	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Ukhia	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
Dhaka	Dhamrai	Decreasing	Decreasing	Increasing	Decreasing
	Dohar	Decreasing	Decreasing	Increasing	Decreasing
	Keraniganj	Decreasing	Decreasing	Increasing	Decreasing
	Nawabganj	Decreasing	Decreasing	Increasing	Decreasing
	Savar	Decreasing	Decreasing	Increasing	Decreasing
Dinajpur	Birampur	Decreasing	Decreasing	Decreasing	Decreasing
	Birganj	Increasing	Decreasing	Decreasing	Decreasing
	Biral	Increasing	Decreasing	Decreasing	Decreasing
	Bochaganj	Increasing	Decreasing	Decreasing	Decreasing
	Chirirbandar	Increasing	Decreasing	Decreasing	Decreasing
	Dinajpur Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Fulbari	Increasing	Decreasing	Decreasing	Decreasing
	Ghoraghat	Decreasing	Decreasing	Decreasing	Decreasing
	Hakimpur	Decreasing	Decreasing	Decreasing	Decreasing
	Kaharole	Increasing	Decreasing	Decreasing	Decreasing
	Khansama	Increasing	Decreasing	Decreasing	Decreasing
	Nawabganj	Decreasing	Decreasing	Decreasing	Decreasing
	Parbatipur	Increasing	Decreasing	Decreasing	Decreasing
Faridpur	Alfadanga	Decreasing	Decreasing	Increasing	Decreasing
	Bhanga	Decreasing	Decreasing	Increasing	Decreasing
	Boalmari	Decreasing	Decreasing	Increasing	Decreasing
	Char Bhadrasan	Decreasing	Decreasing	Increasing	Decreasing
	Faridpur Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Madhukhali	Decreasing	Decreasing	Increasing	Decreasing
	Nagarkanda	Decreasing	Decreasing	Increasing	Decreasing
	Sadarpur	Decreasing	Decreasing	Increasing	Decreasing
	Saltha	Decreasing	Decreasing	Increasing	Decreasing
Feni	Chhagalnaiya	Decreasing	Decreasing	Increasing	Decreasing
	Daganbhuiyan	Decreasing	Decreasing	Increasing	Decreasing
	Feni Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Fulgazi	Decreasing	Decreasing	Increasing	Decreasing
	Parshuram	Decreasing	Decreasing	Increasing	Decreasing
	Sonagazi	Decreasing	Decreasing	Increasing	Decreasing
Gaibandha	Gaibandha Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Gobindaganj	Decreasing	Decreasing	Decreasing	Decreasing
	Palashbari	Decreasing	Decreasing	Decreasing	Decreasing
	Fulchhari	Decreasing	Decreasing	Decreasing	Decreasing
	Sadullapur	Decreasing	Decreasing	Decreasing	Decreasing
	Saghatta	Decreasing	Decreasing	Decreasing	Decreasing
	Sundarganj	Decreasing	Decreasing	Decreasing	Decreasing
Gazipur	Gazipur Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Kaliganj	Decreasing	Decreasing	Increasing	Decreasing
	Kaliakair	Decreasing	Decreasing	Increasing	Decreasing
	Kapasia	Decreasing	Decreasing	Increasing	Decreasing
	Sreepur	Decreasing	Decreasing	Increasing	Decreasing
Gopalganj	Gopalganj Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Kashiani	Decreasing	Decreasing	Increasing	Decreasing
	Kotali Para	Decreasing	Decreasing	Increasing	Decreasing
	Muksudpur	Decreasing	Decreasing	Increasing	Decreasing
	Tungi Para	Decreasing	Decreasing	Increasing	Decreasing

Habiganj	Ajmiriganj	Decreasing	Increasing	Increasing	Decreasing
	Bahubal	Decreasing	Increasing	Increasing	Decreasing
	Baniachong	Decreasing	Decreasing	Increasing	Decreasing
	Chunarughat	Decreasing	Decreasing	Increasing	Decreasing
	Habiganj Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Lakhai	Decreasing	Decreasing	Increasing	Decreasing
	Madhabpur	Decreasing	Decreasing	Increasing	Decreasing
	Nabiganj	Decreasing	Decreasing	Increasing	Decreasing
Jamalpur	Bakshiganj	Decreasing	Decreasing	Decreasing	Decreasing
	Dewanganj	Decreasing	Decreasing	Decreasing	Decreasing
	Islampur	Decreasing	Decreasing	Decreasing	Decreasing
	Jamalpur Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Madarganj	Decreasing	Decreasing	Increasing	Decreasing
	Melandaha	Decreasing	Decreasing	Increasing	Decreasing
	Sharishabari	Decreasing	Decreasing	Increasing	Decreasing
Jessore	Abhaynagar	Decreasing	No Trend	Increasing	Decreasing
	Bagher Para	Decreasing	Decreasing	Decreasing	Decreasing
	Chaugachha	Decreasing	Decreasing	Decreasing	Decreasing
	Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Jhikargachha	Decreasing	Increasing	Decreasing	Decreasing
	Keshabpur	Decreasing	Increasing	Increasing	Decreasing
	Manirampur	Decreasing	Increasing	Decreasing	Decreasing
	Sharsha	Decreasing	Increasing	Decreasing	Decreasing
Jhalokati	Jhalokati Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Kanthalia	Decreasing	Decreasing	Increasing	Decreasing
	Nalchity	Decreasing	Decreasing	Increasing	Decreasing
	Rajapur	Decreasing	Decreasing	Increasing	Decreasing
Jhenaidah	Harinakunda	Decreasing	Decreasing	Increasing	Decreasing
	Jhenaidah Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Decreasing	Decreasing	Decreasing
	Kotchandpur	Decreasing	Decreasing	Increasing	Decreasing
	Maheshpur	Decreasing	No Trend	Decreasing	Decreasing
	Shailkupa	Decreasing	Decreasing	Decreasing	Decreasing
Joypurhat	Akkelpur	Decreasing	Decreasing	Decreasing	Decreasing
	Joypurhat Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Kalai	Decreasing	Decreasing	Decreasing	Decreasing
	Khetlal	Decreasing	Decreasing	Decreasing	Decreasing
	Panchbibi	Decreasing	Decreasing	Decreasing	Decreasing
Khagrachhari	Dighinala	Decreasing	Decreasing	Increasing	Decreasing
	Khagrachhari Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Lakshmichhari	Decreasing	Decreasing	Increasing	Decreasing
	Mahalchhari	Decreasing	Decreasing	Increasing	Decreasing
	Manikchhari	Decreasing	Decreasing	Increasing	Decreasing
	Matiranga	Decreasing	Decreasing	Increasing	Decreasing
	Panchhari	Decreasing	Decreasing	Increasing	Decreasing
	Ramgarh	Decreasing	Decreasing	Increasing	Decreasing
Khulna	Batiaghata	Decreasing	Increasing	Increasing	Decreasing
	Dacope	Decreasing	Increasing	Increasing	Decreasing
	Dighalia	Decreasing	Decreasing	Increasing	Decreasing
	Dumuria	Decreasing	Increasing	Increasing	Decreasing
	Koyra	Decreasing	Increasing	Increasing	Decreasing
	Phultala	Decreasing	Increasing	Increasing	Decreasing
	Paikgachha	Decreasing	Increasing	Increasing	Decreasing
	Rupsa	Decreasing	Increasing	Increasing	Decreasing
	Terokhada	Decreasing	Decreasing	Increasing	Decreasing
Kishoreganj	Austagram	Decreasing	Decreasing	Increasing	Decreasing
	Bajitpur	Decreasing	Decreasing	Increasing	Decreasing

	Bhairab	Decreasing	Decreasing	Increasing	Decreasing
	Hossainpur	Decreasing	Decreasing	Decreasing	Decreasing
	Itna	Decreasing	Decreasing	Increasing	Decreasing
	Karimganj	Decreasing	Decreasing	Decreasing	Decreasing
	Katiadi	Decreasing	Decreasing	Increasing	Decreasing
	Kishoreganj Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Kuliar Char	Decreasing	Decreasing	Increasing	Decreasing
	Mithamain	Decreasing	Decreasing	Increasing	Decreasing
	Nikli	Decreasing	Decreasing	Increasing	Decreasing
	Pakundia	Decreasing	Decreasing	Decreasing	Decreasing
	Tarail	Decreasing	Decreasing	Decreasing	Decreasing
Kurigram	Bhurungamari	Increasing	Decreasing	Decreasing	Increasing
	Char Rajibpur	Decreasing	Decreasing	Decreasing	Decreasing
	Chilmari	Decreasing	Decreasing	Decreasing	Decreasing
	Kurigram Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Nageshwari	Increasing	Decreasing	Decreasing	Decreasing
	Phulbari	Increasing	Decreasing	Decreasing	Decreasing
	Rajarhat	Increasing	Decreasing	Decreasing	Decreasing
	Raumari	Decreasing	Decreasing	Decreasing	Decreasing
	Ulipur	Increasing	Decreasing	Decreasing	Decreasing
Kushtia	Bheramara	Decreasing	Decreasing	Increasing	Decreasing
	Daulatpur	Decreasing	Decreasing	Increasing	Decreasing
	Khoksa	Decreasing	Decreasing	Increasing	Decreasing
	Kumarkhali	Decreasing	Decreasing	Increasing	Decreasing
	Kushtia Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Mirpur	Decreasing	Decreasing	Increasing	Decreasing
Lakshmipur	Kamalnagar	Decreasing	Decreasing	Increasing	Decreasing
	Lakshmipur Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Roypur	Decreasing	Decreasing	Increasing	Decreasing
	Ramganj	Decreasing	Decreasing	Increasing	Decreasing
	Ramgati	Decreasing	Decreasing	Increasing	Decreasing
Lalmonirhat	Aditmari	Increasing	Decreasing	Decreasing	Decreasing
	Hatibandha	Increasing	Decreasing	Decreasing	Decreasing
	Kaliganj	Increasing	Decreasing	Decreasing	Decreasing
	Lalmonirhat Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Patgram	Increasing	Decreasing	Decreasing	No Trend
Madaripur	Kalkini	Decreasing	Decreasing	Increasing	Decreasing
	Madaripur Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Rajoir	Decreasing	Decreasing	Increasing	Decreasing
	Shib Char	Decreasing	Decreasing	Increasing	Decreasing
Magura	Magura Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Mohammadpur	Decreasing	Decreasing	Increasing	Decreasing
	Shalikha	Decreasing	Decreasing	Decreasing	Decreasing
	Sreepur	Decreasing	Decreasing	Increasing	Decreasing
Manikganj	Daulatpur	Decreasing	Decreasing	Increasing	Decreasing
	Ghior	Decreasing	Decreasing	Increasing	Decreasing
	Harirampur	Decreasing	Decreasing	Increasing	Decreasing
	Manikganj Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Saturia	Decreasing	Decreasing	Increasing	Decreasing
	Shibalaya	Decreasing	Decreasing	Increasing	Decreasing
	Singair	Decreasing	Decreasing	Increasing	Decreasing
Maulvibazar	Barlekha	Decreasing	Decreasing	Increasing	Decreasing
	Juri	Decreasing	Decreasing	Increasing	Decreasing
	Kamalganj	Decreasing	Decreasing	Increasing	Decreasing
	Kulaura	Decreasing	Decreasing	Increasing	Decreasing
	Maulvi Bazar Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Rajnagar	Decreasing	Decreasing	Increasing	Decreasing

	Sreemangal	Decreasing	No Trend	Increasing	Decreasing
Meherpur	Gangni	Decreasing	Decreasing	Increasing	Decreasing
	Meherpur Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Mujib Nagar	Decreasing	Decreasing	Decreasing	Decreasing
Munshiganj	Gazaria	Decreasing	Decreasing	Increasing	Decreasing
	Lohajang	Decreasing	Decreasing	Increasing	Decreasing
	Munshiganj Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Serajdikhan	Decreasing	Decreasing	Increasing	Decreasing
	Sreenagar	Decreasing	Decreasing	Increasing	Decreasing
	Tongibari	Decreasing	Decreasing	Increasing	Decreasing
Mymensingh	Bhaluka	Decreasing	Decreasing	Increasing	Decreasing
	Dhobaura	Decreasing	Decreasing	Decreasing	Decreasing
	Fulbaria	Decreasing	Decreasing	Decreasing	Decreasing
	Gaffargaon	Decreasing	Decreasing	Decreasing	Decreasing
	Gauripur	Decreasing	Decreasing	Decreasing	Decreasing
	Haluaghat	Decreasing	Decreasing	Decreasing	Decreasing
	Ishwarganj	Decreasing	Decreasing	Decreasing	Decreasing
	Muktagachha	Decreasing	Decreasing	Decreasing	Decreasing
	Mymensingh Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Nandail	Decreasing	Decreasing	Decreasing	Decreasing
	Phulpur	Decreasing	Decreasing	Decreasing	Decreasing
	Tarakanda	Decreasing	Decreasing	Decreasing	Decreasing
	Trishal	Decreasing	Decreasing	Decreasing	Decreasing
Naogaon	Atrai	Decreasing	Decreasing	Increasing	Decreasing
	Badalgachhi	Decreasing	Decreasing	Decreasing	Decreasing
	Dhamoirhat	Decreasing	Decreasing	Decreasing	Decreasing
	Manda	Decreasing	Decreasing	Increasing	Decreasing
	Mahadebpur	Decreasing	Decreasing	Decreasing	Decreasing
	Naogaon Sadar	Decreasing	Decreasing	No Trend	Decreasing
	Niamatpur	Decreasing	Decreasing	Decreasing	Decreasing
	Patnitala	Decreasing	Decreasing	Decreasing	Decreasing
	Porsha	Decreasing	Decreasing	Decreasing	Decreasing
	Raninagar	Decreasing	Decreasing	Increasing	Decreasing
	Sapahar	Decreasing	Decreasing	Decreasing	Decreasing
Narail	Kalia	Decreasing	Decreasing	Increasing	Decreasing
	Lohagara	Decreasing	Decreasing	Increasing	Decreasing
	Narail Sadar	Decreasing	Decreasing	Increasing	Decreasing
Narayanganj	Araihazar	Decreasing	Decreasing	Increasing	Decreasing
	Bandar	Decreasing	Decreasing	Increasing	Decreasing
	Narayanganj Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Rupganj	Decreasing	Decreasing	Increasing	Decreasing
	Sonargaon	Decreasing	Decreasing	Increasing	Decreasing
Narsingdi	Belabo	Decreasing	No Trend	Increasing	Decreasing
	Manohardi	Decreasing	Decreasing	Increasing	Decreasing
	Narsingdi Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Palash	Decreasing	Decreasing	Increasing	Decreasing
	Royapura	Decreasing	Decreasing	Increasing	Decreasing
	Shibpur	Decreasing	Decreasing	Increasing	Decreasing
Natore	Bagati Para	Decreasing	Decreasing	Increasing	Decreasing
	Baraigram	Decreasing	Decreasing	Increasing	Decreasing
	Gurudaspur	Decreasing	Decreasing	Increasing	Decreasing
	Lalpur	Decreasing	Decreasing	Increasing	Decreasing
	Naldanga	Decreasing	Decreasing	Increasing	Decreasing
	Natore Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Singra	Decreasing	Decreasing	Increasing	Decreasing
Netrakona	Atpara	Decreasing	Decreasing	Decreasing	Decreasing

	Barhatta	Decreasing	Decreasing	Decreasing	Decreasing
	Durgapur	Decreasing	Decreasing	Decreasing	Decreasing
	Kalmakanda	Decreasing	Decreasing	Decreasing	Decreasing
	Kendua	Decreasing	Decreasing	Decreasing	Decreasing
	Khaliajuri	Decreasing	Increasing	Decreasing	Decreasing
	Madan	Decreasing	Decreasing	Decreasing	Decreasing
	Mohanganj	Decreasing	Decreasing	Decreasing	Decreasing
	Netrokona Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Purbadhala	Decreasing	Decreasing	Decreasing	Decreasing
Nilphamari	Dimla	Increasing	Decreasing	Decreasing	Decreasing
	Domar	Increasing	Decreasing	Decreasing	Decreasing
	Jaldhaka	Increasing	Decreasing	Decreasing	Decreasing
	Kishoreganj	Increasing	Decreasing	Decreasing	Decreasing
	Nilphamari Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Saidpur	Increasing	Decreasing	Decreasing	Decreasing
Noakhali	Begumganj	Decreasing	Decreasing	Increasing	Decreasing
	Chatkhil	Decreasing	Decreasing	Increasing	Decreasing
	Companiganj	Decreasing	Decreasing	Increasing	Decreasing
	Hatiya	Decreasing	Decreasing	Increasing	Decreasing
	Kabirhat	Decreasing	Decreasing	Increasing	Decreasing
	Noakhali Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Senbagh	Decreasing	Decreasing	Increasing	Decreasing
	Sonaimuri	Decreasing	Decreasing	Increasing	Decreasing
	Subarnachar	Decreasing	Decreasing	Increasing	Decreasing
Pabna	Atgharia	Decreasing	Decreasing	Increasing	Decreasing
	Bera	Decreasing	Decreasing	Increasing	Decreasing
	Bhangura	Decreasing	Decreasing	Increasing	Decreasing
	Chatmohar	Decreasing	Decreasing	Increasing	Decreasing
	Faridpur	Decreasing	Decreasing	Increasing	Decreasing
	Ishwardi	Decreasing	Decreasing	Increasing	Decreasing
	Pabna Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Santhia	Decreasing	Decreasing	Increasing	Decreasing
	Sujanagar	Decreasing	Decreasing	Increasing	Decreasing
Panchagarh	Atwari	Increasing	Decreasing	Decreasing	Decreasing
	Boda	Increasing	Decreasing	Decreasing	Decreasing
	Debiganj	Increasing	Decreasing	Decreasing	Decreasing
	Panchagarh Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Tentulia	Increasing	Decreasing	Decreasing	Decreasing
Patuakhali	Bauphal	Decreasing	Decreasing	Increasing	Decreasing
	Dashmina	Decreasing	Decreasing	Increasing	Decreasing
	Dumki	Decreasing	Decreasing	Increasing	Decreasing
	Galachipa	Decreasing	Decreasing	Increasing	Decreasing
	Kala Para	Decreasing	Increasing	Increasing	Decreasing
	Mirzaganj	Decreasing	Decreasing	Increasing	Decreasing
	Patuakhali Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Rangabali	Decreasing	Decreasing	Increasing	Decreasing
Pirojpur	Bhandaria	Decreasing	Decreasing	Increasing	Decreasing
	Zianagar	Decreasing	No Trend	Increasing	Decreasing
	Kawkhali	Decreasing	Decreasing	Increasing	Decreasing
	Mathbaria	Decreasing	Increasing	Increasing	Decreasing
	Nazirpur	Decreasing	Increasing	Increasing	Decreasing
	Nesarabad	Decreasing	Decreasing	Increasing	Decreasing
	Pirojpur Sadar	Decreasing	No Trend	Increasing	Decreasing
Rajbari	Balia Kandi	Decreasing	Decreasing	Increasing	Decreasing
	Goalandaghat	Decreasing	Decreasing	Increasing	Decreasing
	Kalukhali	Decreasing	Decreasing	Increasing	Decreasing

	Pangsha	Decreasing	Decreasing	Increasing	Decreasing
	Rajbari Sadar	Decreasing	Decreasing	Increasing	Decreasing
Rajshahi	Bagha	Decreasing	Decreasing	Increasing	Decreasing
	Baghmara	Decreasing	Decreasing	Increasing	Decreasing
	Charghat	Decreasing	Decreasing	Increasing	Decreasing
	Durgapur	Decreasing	Decreasing	Increasing	Decreasing
	Godagari	Decreasing	Decreasing	Decreasing	Decreasing
	Mohanpur	Decreasing	Decreasing	Increasing	Decreasing
	Paba	Decreasing	Decreasing	Increasing	Decreasing
	Puthia	Decreasing	Decreasing	Increasing	Decreasing
	Tanore	Decreasing	Decreasing	Increasing	Decreasing
Rangamati	Baghai Chhari	Decreasing	Decreasing	Increasing	Decreasing
	Barkal	Decreasing	Decreasing	Increasing	Decreasing
	Belai Chhari	Decreasing	Decreasing	Increasing	Decreasing
	Jurai Chhari	Decreasing	Decreasing	Increasing	Decreasing
	Kaptai	Decreasing	Decreasing	Increasing	Decreasing
	Kawkhali (Betbunia)	Decreasing	Decreasing	Increasing	Decreasing
	Langadu	Decreasing	Decreasing	Increasing	Decreasing
	Naniarchar	Decreasing	Decreasing	Increasing	Decreasing
	Rajasthali	Decreasing	Decreasing	Increasing	Decreasing
	Rangamati Sadar	Decreasing	Decreasing	Increasing	Decreasing
Rangpur	Badarganj	Increasing	Decreasing	Decreasing	Decreasing
	Gangachara	Increasing	Decreasing	Decreasing	Decreasing
	Kaunia	Increasing	Decreasing	Decreasing	Decreasing
	Mitha Pukur	Increasing	Decreasing	Decreasing	Decreasing
	Pirgachha	Increasing	Decreasing	Decreasing	Decreasing
	Pirganj	Decreasing	Decreasing	Decreasing	Decreasing
	Rangpur Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Taraganj	Increasing	Decreasing	Decreasing	Decreasing
Satkhira	Assasuni	Decreasing	Increasing	Increasing	Decreasing
	Debhata	Decreasing	Increasing	Increasing	Decreasing
	Kalaroa	Decreasing	Increasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Increasing	Increasing	Decreasing
	Satkhira Sadar	Decreasing	Increasing	No Trend	Decreasing
	Shyamnagar	Decreasing	Increasing	Increasing	Decreasing
	Tala	Decreasing	Increasing	Increasing	Decreasing
Shariatpur	Bhedarganj	Decreasing	Decreasing	Increasing	Decreasing
	Damudya	Decreasing	Decreasing	Increasing	Decreasing
	Gosairhat	Decreasing	Decreasing	Increasing	Decreasing
	Naria	Decreasing	Decreasing	Increasing	Decreasing
	Shariatpur Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Zanjira	Decreasing	Decreasing	Increasing	Decreasing
Sherpur	Jhenaigati	Decreasing	Decreasing	Decreasing	Decreasing
	Nakla	Decreasing	Decreasing	Decreasing	Decreasing
	Nalitabari	Decreasing	Decreasing	Decreasing	Decreasing
	Sherpur Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Sreebardi	Decreasing	Decreasing	Decreasing	Decreasing
Sirajganj	Belkuchi	Decreasing	Decreasing	Increasing	Decreasing
	Chauhali	Decreasing	Decreasing	Increasing	Decreasing
	Kamarkhanda	Decreasing	Decreasing	Increasing	Decreasing
	Kazipur	Decreasing	Decreasing	Increasing	Decreasing
	Royganj	Decreasing	Decreasing	Increasing	Decreasing
	Shahjadpur	Decreasing	Decreasing	Increasing	Decreasing
	Sirajganj Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Tarash	Decreasing	Decreasing	Increasing	Decreasing
	Ullah Para	Decreasing	Decreasing	Increasing	Decreasing

Sunamganj	Bishwambarpur	Decreasing	Decreasing	Decreasing	Decreasing
	Chhatak	Decreasing	Decreasing	Decreasing	Decreasing
	Derai	Decreasing	Decreasing	Decreasing	Decreasing
	Dharampasha	Decreasing	Decreasing	Decreasing	Decreasing
	Dowarabazar	Decreasing	Increasing	Decreasing	Decreasing
	Jagannathpur	Decreasing	Decreasing	Increasing	Decreasing
	Jamalganj	Decreasing	Decreasing	Decreasing	Decreasing
	Dakshin Sunamganj	Decreasing	Decreasing	Decreasing	Decreasing
	Sulla	Decreasing	Decreasing	Increasing	Decreasing
	Sunamganj Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Tahirpur	Decreasing	Decreasing	Increasing	Decreasing
Sylhet	Balaganj	Decreasing	Decreasing	Increasing	Decreasing
	Beani Bazar	Decreasing	Decreasing	Increasing	Decreasing
	Bishwanath	Decreasing	Increasing	Decreasing	Decreasing
	Comaniganj	Decreasing	Decreasing	Increasing	Decreasing
	Dakshin Surma	Decreasing	Decreasing	Increasing	Decreasing
	Fenchuganj	Decreasing	Decreasing	Increasing	Decreasing
	Jaintiapur	Decreasing	Decreasing	Increasing	Decreasing
	Golabganj	Decreasing	Decreasing	Increasing	Decreasing
	Gowainghat	Decreasing	Decreasing	Increasing	Decreasing
	Kanaighat	Decreasing	Decreasing	Decreasing	Decreasing
	Sylhet Sadar	Decreasing	Decreasing	Increasing	Decreasing
	Zakiganj	Decreasing	Decreasing	Increasing	Decreasing
Tangail	Basail	Decreasing	Decreasing	Increasing	Decreasing
	Bhuapur	Decreasing	Decreasing	Increasing	Decreasing
	Delduar	Decreasing	Decreasing	Increasing	Decreasing
	Dhanbari	Decreasing	Decreasing	Increasing	Decreasing
	Ghatail	Decreasing	Decreasing	Increasing	Decreasing
	Gopalpur	Decreasing	Decreasing	Increasing	Decreasing
	Kalihati	Decreasing	Decreasing	Increasing	Decreasing
	Mirzapur	Decreasing	Decreasing	Increasing	Decreasing
	Madhupur	Decreasing	Decreasing	Increasing	Decreasing
	Nagarpur	Decreasing	Decreasing	Increasing	Decreasing
	Sakhipur	Decreasing	Decreasing	Increasing	Decreasing
	Tangail Sadar	Decreasing	Decreasing	Increasing	Decreasing
Thakurgaon	Baliadangi	Increasing	Decreasing	Decreasing	Decreasing
	Haripur	Increasing	Decreasing	Decreasing	Decreasing
	Pirganj	Increasing	Decreasing	Decreasing	Decreasing
	Ranisankail	Increasing	Decreasing	Decreasing	Decreasing
	Thakurgaon Sadar	Increasing	Decreasing	Decreasing	Decreasing

1.7 District level observed (BMD) mean monthly and annual maximum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

[illegible]

1.8 District level observed (BMD) seasonal mean maximum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

District Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Bandarban	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Barguna	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Barishal	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Bhola	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Bogura	Decreasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Brahmanbaria	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	No Trend
Chandpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Chapainawabganj	Decreasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Chattogram	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chuadanga	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Coxsazar	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Cumilla	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Dhaka	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Dinajpur	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Faridpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Feni	Increasing	<u>Increasing</u>	Increasing	Decreasing
Gaibandha	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Gazipur	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Gopalganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Habiganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Jamalpur	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Jashore	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing
Jhalakati	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Jhenaidah	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Joypurhat	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Khagrachari	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Khulna	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Kishoreganj	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Kurigram	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Kushtia	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Lakshmipur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Lalmonirhat	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Madaripur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
Magura	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Manikganj	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Meherpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Moulvibazar	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Munshiganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Mymensingh	Decreasing	Increasing	Increasing	<u>Decreasing</u>
Naogaon	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Narail	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Narayanganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Narsingdi	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Natore	Decreasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Netrokona	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Nilphamari	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Noakhali	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Pabna	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Panchaghar	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Patuakhali	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Pirojpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Rajbari	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing

Rajshahi	Decreasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Rangamati	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Rangpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Satkhira	Decreasing	<u>Increasing</u>	Decreasing	<u>Decreasing</u>
Shariatpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Sherpur	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Sirajganj	Increasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing
Sunamganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
Sylhet	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Tangail	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Thakurgaon	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>

1.9 Upazila level CRU gridded mean monthly and annual maximum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upz. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Bagerhat Sadar	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Chitalmari	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Fakirhat	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Kachua	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Mongla	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Mollahat	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Morrelganj	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Rampal	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Sarankhola	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Bandarban	Alikadam	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	No Trend	Increasing
	Bandarban Sadar	Decreasing	Increasing	No Trend	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	No Trend	Increasing	Increasing	Increasing
	Lama	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Naikhongchhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
	Rowangchhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Ruma	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Thanchi	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Barguna	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Bamna	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Barguna	Barguna Sadar	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Betagi	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Patharghata	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

	Sakhipur	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>
	Tangail Sadar	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>
Thakurgaon	Baliadangi	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
	Haripur	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
	Pirganj	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
	Ranisankail	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
	Thakurgaon Sada	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>

1.10 Upazila level CRU gridded seasonal maximum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upazila Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Bagerhat Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chitalmari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Fakirhat	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kachua	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mongla	Increasing	Increasing	Increasing	Increasing
	Mollahat	Increasing	<u>Increasing</u>	Increasing	Increasing
	Morrelganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rampal	Increasing	<u>Increasing</u>	Increasing	Increasing
Bandarban	Sarankhola	Increasing	Increasing	Increasing	Increasing
	Alikadam	Decreasing	<u>Increasing</u>	Increasing	Decreasing
	Bandarban Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lama	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Naikhongchhari	Decreasing	<u>Increasing</u>	Decreasing	Decreasing
	Rowangchhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Ruma	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Thanchi	Decreasing	<u>Increasing</u>	Increasing	Decreasing
Barguna	Amtali	Increasing	Increasing	Increasing	Increasing
	Bamna	Increasing	<u>Increasing</u>	Increasing	Increasing
	Barguna Sadar	Increasing	Increasing	Increasing	Increasing
	Betagi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Patharghata	Increasing	Increasing	Increasing	Increasing
	Taltoli	Increasing	Increasing	Increasing	Increasing
Barisal	Agailjhara	Increasing	<u>Increasing</u>	Increasing	Increasing
	Babuganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bakerganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Banari Para	Increasing	<u>Increasing</u>	Increasing	Increasing
	Barisal Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Gaurnadi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Hizla	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mehendiganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Muladi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Wazirpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bhola Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
Bhola	Burhanuddin	Increasing	<u>Increasing</u>	Increasing	Increasing
	Char Fasson	Increasing	<u>Increasing</u>	Increasing	Increasing
	Daulatkhan	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lalmohan	Increasing	<u>Increasing</u>	Increasing	Increasing
	Manpura	Increasing	<u>Increasing</u>	Increasing	Increasing
	Tazumuddin	Increasing	<u>Increasing</u>	Increasing	Increasing
	Adamdighi	Increasing	<u>Increasing</u>	Increasing	Increasing
Bogra	Bogra Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dhunat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dhupchanchia	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gabtali	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kahaloo	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nandigram	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sariakandi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Shajahanpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sherpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Shibganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sonatola	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Brahamanbaria	Akhaura	Increasing	<u>Increasing</u>	Increasing	Increasing

	Ashuganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Banchhampur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bijoyagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Brahmanbaria Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kasba	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nabinagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nasirnagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sarail	Increasing	<u>Increasing</u>	Increasing	Increasing
Ch. Nawabganj	Bholahat	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chapai Nawabganj Sad	Increasing	<u>Increasing</u>	Increasing	Increasing
	Gomastapur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nachole	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shibganj	Increasing	<u>Increasing</u>	Increasing	Increasing
Chandpur	Chandpur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Faridganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Haim Char	Increasing	<u>Increasing</u>	Increasing	Increasing
	Hajiganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kachua	Increasing	<u>Increasing</u>	Increasing	Increasing
	Matlab Dakshin	Increasing	<u>Increasing</u>	Increasing	Increasing
	Matlab Uttar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shahrasti	Increasing	<u>Increasing</u>	Increasing	Increasing
Chittagong	Anowara	Increasing	<u>Increasing</u>	Increasing	Increasing
	Banshkhali	Increasing	<u>Increasing</u>	Increasing	Increasing
	Boalkhali	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chandanaish	Increasing	<u>Increasing</u>	Increasing	Increasing
	Fatikchhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Hathazari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lohagara	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mirsharai	Increasing	<u>Increasing</u>	Increasing	Increasing
	Patiya	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rangunia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Raozan	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sandwip	Increasing	<u>Increasing</u>	Increasing	Increasing
	Satkania	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sitakunda	Increasing	<u>Increasing</u>	Increasing	Increasing
Chuadanga	Alamdanga	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chuadanga Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Damurhuda	Increasing	<u>Increasing</u>	Increasing	Increasing
	Jiban Nagar	Increasing	<u>Increasing</u>	Increasing	Increasing
Comilla	Barura	Increasing	<u>Increasing</u>	Increasing	Increasing
	Brahman Para	Increasing	<u>Increasing</u>	Increasing	Increasing
	Burichang	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chandina	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chauddagram	Increasing	<u>Increasing</u>	Increasing	Increasing
	Comilla Adarsha Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Daudkandi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Debidwar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Homna	Increasing	<u>Increasing</u>	Increasing	Increasing
	Laksam	Increasing	<u>Increasing</u>	Increasing	Increasing
	Meghna	Increasing	<u>Increasing</u>	Increasing	Increasing
	Manoharganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Muradnagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nangalkot	Increasing	<u>Increasing</u>	Increasing	Increasing
	Comilla Sadar Dakshin	Increasing	<u>Increasing</u>	Increasing	Increasing
	Titas	Increasing	<u>Increasing</u>	Increasing	Increasing

Cox'S Bazar	Chakaria	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Cox'S Bazar Sadar	Decreasing	<u>Increasing</u>	Decreasing	Decreasing
	Kutubdia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Maheshkhali	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Pekua	Increasing	<u>Increasing</u>	Increasing	Increasing
	Ramu	Decreasing	<u>Increasing</u>	Decreasing	Decreasing
	Teknaf	Decreasing	<u>Increasing</u>	Decreasing	Decreasing
	Ukhia	Decreasing	<u>Increasing</u>	Decreasing	Decreasing
Dhaka	Dhamrai	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dohar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Keraniganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nawabganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Savar	Increasing	<u>Increasing</u>	Increasing	Increasing
Dinajpur	Birampur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Birganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Biral	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bochaganj	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Chirirbandar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dinajpur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Fulbari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Ghoraghat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Hakimpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kaharole	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Khansama	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Nawabganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Parbatipur	Increasing	<u>Increasing</u>	Increasing	Increasing
Faridpur	Alfadanga	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bhanga	Increasing	<u>Increasing</u>	Increasing	Increasing
	Boalmari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Char Bhadrasan	Increasing	<u>Increasing</u>	Increasing	Increasing
	Faridpur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Madhukhali	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nagarkanda	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sadarpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Saltha	Increasing	<u>Increasing</u>	Increasing	Increasing
Feni	Chhagalnaiya	Increasing	<u>Increasing</u>	Increasing	Increasing
	Daganbhuiyan	Increasing	<u>Increasing</u>	Increasing	Increasing
	Feni Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Fulgazi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Parshuram	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sonagazi	Increasing	<u>Increasing</u>	Increasing	Increasing
Gaibandha	Gaibandha Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gobindaganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Palashbari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Fulchhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sadullapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Saghatta	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sundarganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Gazipur	Gazipur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kaliganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kaliakair	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kapasias	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sreepur	Increasing	<u>Increasing</u>	Increasing	Increasing
Gopalganj	Gopalganj Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kashiani	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kotali Para	Increasing	<u>Increasing</u>	Increasing	Increasing
	Muksudpur	Increasing	<u>Increasing</u>	Increasing	Increasing

	Tungi Para	Increasing	<u>Increasing</u>	Increasing	Increasing
Habiganj	Ajmiriganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Bahubal	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Baniachong	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chunarughat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Habiganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Lakhai	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Madhabpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nabiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Jamalpur	Bakshiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dewanganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Islampur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Jamalpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Madarganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Melandaha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sharishabari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Jessore	Abhaynagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bagher Para	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chaugachha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Jhikargachha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Keshabpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Manirampur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sharsha	Increasing	<u>Increasing</u>	Increasing	Increasing
Jhalokati	Jhalokati Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kanthalia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nalchity	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rajapur	Increasing	<u>Increasing</u>	Increasing	Increasing
Jhenaidah	Harinakunda	Increasing	<u>Increasing</u>	Increasing	Increasing
	Jhenaidah Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kaliganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kotchandpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Maheshpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shailkupa	Increasing	<u>Increasing</u>	Increasing	Increasing
Joypurhat	Akkelpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Joypurhat Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kalai	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Khetlal	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Panchbibi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Khagrachhari	Dighinala	Increasing	<u>Increasing</u>	Increasing	Increasing
	Khagrachhari Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lakshmichhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mahalchhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Manikchhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Matiranga	Increasing	<u>Increasing</u>	Increasing	Increasing
	Panchhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Ramgarh	Increasing	<u>Increasing</u>	Increasing	Increasing
Khulna	Batiaghata	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dacope	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dighalia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dumuria	Increasing	<u>Increasing</u>	Increasing	Increasing
	Koyra	Increasing	<u>Increasing</u>	Increasing	Increasing
	Phultala	Increasing	<u>Increasing</u>	Increasing	Increasing
	Paikgachha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rupsa	Increasing	<u>Increasing</u>	Increasing	Increasing
	Terokhada	Increasing	<u>Increasing</u>	Increasing	Increasing
Kishoreganj	Austagram	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing

	Bajitpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bhairab	Increasing	<u>Increasing</u>	Increasing	Increasing
	Hossainpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Itna	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Karimganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Katiadi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kishoreganj Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kuliar Char	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mithamain	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nikli	Increasing	<u>Increasing</u>	Increasing	Increasing
	Pakundia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Tarail	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Kurigram	Bhurungamari	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Char Rajibpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chilmari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kurigram Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Nageshwari	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Phulbari	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Rajarhat	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Raumari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ulipur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Kushtia	Bheramara	Increasing	<u>Increasing</u>	Increasing	Increasing
	Daulatpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Khoksa	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kumarkhali	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kushtia Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mirpur	Increasing	<u>Increasing</u>	Increasing	Increasing
Lakshmipur	Kamalnagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lakshmipur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Roypur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Ramganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Ramgati	Increasing	<u>Increasing</u>	Increasing	Increasing
Lalmonirhat	Aditmari	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Hatibandha	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Kaliganj	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Lalmonirhat Sadar	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Patgram	Increasing	Increasing	Increasing	<u>Increasing</u>
Madaripur	Kalkini	Increasing	<u>Increasing</u>	Increasing	Increasing
	Madaripur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rajoir	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shib Char	Increasing	<u>Increasing</u>	Increasing	Increasing
Magura	Magura Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mohammadpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shalikhah	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sreepur	Increasing	<u>Increasing</u>	Increasing	Increasing
Manikganj	Daulatpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Ghior	Increasing	<u>Increasing</u>	Increasing	Increasing
	Harirampur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Manikganj Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Saturia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shibalaya	Increasing	<u>Increasing</u>	Increasing	Increasing
	Singair	Increasing	<u>Increasing</u>	Increasing	Increasing
Maulvibazar	Barlekha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Juri	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kamalganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kulaura	Increasing	<u>Increasing</u>	Increasing	Increasing
	Maulvi Bazar Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing

	Rajnagar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sreemangal	Increasing	<u>Increasing</u>	Increasing	Increasing
Meherpur	Gangni	Increasing	<u>Increasing</u>	Increasing	Increasing
	Meherpur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mujib Nagar	Increasing	<u>Increasing</u>	Increasing	Increasing
Munshiganj	Gazaria	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lohajang	Increasing	<u>Increasing</u>	Increasing	Increasing
	Munshiganj Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Serajdikhan	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sreenagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Tongibari	Increasing	<u>Increasing</u>	Increasing	Increasing
Mymensingh	Bhaluka	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dhobaura	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Fulbaria	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gaffargaon	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gauripur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Haluaghat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ishwarganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Muktagachha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mymensingh Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nandail	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Phulpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tarakanda	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Trishal	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Naogaon	Atrai	Increasing	<u>Increasing</u>	Increasing	Increasing
	Badalgachhi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dhamoirhat	Increasing	<u>Increasing</u>	Increasing	Increasing
	Manda	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mahadebpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Naogaon Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Niamatpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Patnitala	Increasing	<u>Increasing</u>	Increasing	Increasing
	Porsha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Raninagar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sapahar	Increasing	<u>Increasing</u>	Increasing	Increasing
Narail	Kalia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lohagara	Increasing	<u>Increasing</u>	Increasing	Increasing
	Narail Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
Narayanganj	Araihazar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bandar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Narayanganj Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rupganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sonargaon	Increasing	<u>Increasing</u>	Increasing	Increasing
Narsingdi	Belabo	Increasing	<u>Increasing</u>	Increasing	Increasing
	Manohardi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Narsingdi Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Palash	Increasing	<u>Increasing</u>	Increasing	Increasing
	Royapura	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shibpur	Increasing	<u>Increasing</u>	Increasing	Increasing
Natore	Bagati Para	Increasing	<u>Increasing</u>	Increasing	Increasing
	Baraigram	Increasing	<u>Increasing</u>	Increasing	Increasing
	Gurudaspur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Lalpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Naldanga	Increasing	<u>Increasing</u>	Increasing	Increasing
	Natore Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Singra	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing

Netrakona	Atpara	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Barhatta	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Durgapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kalmakanda	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kendua	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Khaliajuri	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Madan	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mohanganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Netrokona Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Purbadhala	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Nilphamari	Dimla	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Domar	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Jaldhaka	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Kishoreganj	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Nilphamari Sadar	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Saidpur	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
Noakhali	Begumganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chatkhil	Increasing	<u>Increasing</u>	Increasing	Increasing
	Companiganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Hatiya	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kabirhat	Increasing	<u>Increasing</u>	Increasing	Increasing
	Noakhali Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Senbagh	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sonaimuri	Increasing	<u>Increasing</u>	Increasing	Increasing
	Subarnachar	Increasing	<u>Increasing</u>	Increasing	Increasing
Pabna	Atgharia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bera	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bhangura	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chatmohar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Faridpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Ishwardi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Pabna Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Santhia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sujanagar	Increasing	<u>Increasing</u>	Increasing	Increasing
Panchagarh	Atwari	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Boda	Increasing	Increasing	Increasing	<u>Increasing</u>
	Debiganj	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Panchagarh Sadar	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Tentulia	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
Patuakhali	Bauphal	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dashmina	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dumki	Increasing	<u>Increasing</u>	Increasing	Increasing
	Galachipa	Increasing	Increasing	Increasing	Increasing
	Kala Para	Increasing	Increasing	Increasing	Increasing
	Mirzaganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Patuakhali Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rangabali	Increasing	Increasing	Increasing	Increasing
Pirojpur	Bhandaria	Increasing	<u>Increasing</u>	Increasing	Increasing
	Zianagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kawkhali	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mathbaria	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nazirpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Nesarabad	Increasing	<u>Increasing</u>	Increasing	Increasing
	Pirojpur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
Rajbari	Balia Kandi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Goalandaghat	Increasing	<u>Increasing</u>	Increasing	Increasing

	Kalukhali	Increasing	<u>Increasing</u>	Increasing	Increasing
	Pangsha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rajbari Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
Rajshahi	Bagha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Baghmara	Increasing	<u>Increasing</u>	Increasing	Increasing
	Charghat	Increasing	<u>Increasing</u>	Increasing	Increasing
	Durgapur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Godagari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mohanpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Paba	Increasing	<u>Increasing</u>	Increasing	Increasing
	Puthia	Increasing	<u>Increasing</u>	Increasing	Increasing
	Tanore	Increasing	<u>Increasing</u>	Increasing	Increasing
Rangamati	Baghai Chhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Barkal	Increasing	<u>Increasing</u>	Increasing	Increasing
	Belai Chhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Jurai Chhari	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kaptai	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kawkhali (Betbunia)	Increasing	<u>Increasing</u>	Increasing	Increasing
	Langadu	Increasing	<u>Increasing</u>	Increasing	Increasing
	Naniarchar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rajasthali	Increasing	<u>Increasing</u>	Increasing	Increasing
	Rangamati Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
Rangpur	Badarganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Gangachara	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Kaunia	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Mitha Pukur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Pirgachha	Increasing	<u>Increasing</u>	Increasing	Increasing
	Pirganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Rangpur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Taraganj	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
Satkhira	Assasuni	Increasing	<u>Increasing</u>	Increasing	Increasing
	Debhata	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kalaroa	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kaliganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Satkhira Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shyamnagar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Tala	Increasing	<u>Increasing</u>	Increasing	Increasing
Shariatpur	Bhedarganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Damudya	Increasing	<u>Increasing</u>	Increasing	Increasing
	Gosairhat	Increasing	<u>Increasing</u>	Increasing	Increasing
	Naria	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shariatpur Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Zanjira	Increasing	<u>Increasing</u>	Increasing	Increasing
Sherpur	Jhenaigati	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nakla	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nalitabari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sherpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sreebardi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Sirajganj	Belkuchi	Increasing	<u>Increasing</u>	Increasing	Increasing
	Chauhali	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kamarkhanda	Increasing	<u>Increasing</u>	Increasing	Increasing
	Kazipur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Royganj	Increasing	<u>Increasing</u>	Increasing	Increasing
	Shahjadpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sirajganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tarash	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing

	Ullah Para	Increasing	<u>Increasing</u>	Increasing	Increasing
Sunamganj	Bishwambarpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chhatak	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Derai	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dharampasha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dowarabazar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Jagannathpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Jamalganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dakshin Sunamganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sulla	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sunamganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tahirpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Sylhet	Balaganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Beani Bazar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Bishwanath	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Companiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dakshin Surma	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Fenchuganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Jaintiapur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
	Golabganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gowainghat	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing
	Kanaighat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sylhet Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Zakiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Tangail	Basail	Increasing	<u>Increasing</u>	Increasing	Increasing
	Bhuapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Delduar	Increasing	<u>Increasing</u>	Increasing	Increasing
	Dhanbari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ghatail	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gopalpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kalihati	Increasing	<u>Increasing</u>	Increasing	Increasing
	Mirzapur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Madhupur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nagarpur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Sakhipur	Increasing	<u>Increasing</u>	Increasing	Increasing
	Tangail Sadar	Increasing	<u>Increasing</u>	Increasing	Increasing
Thakurgaon	Baliadangi	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Haripur	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Pirganj	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Ranisankail	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Thakurgaon Sadar	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>

1.11 District level observed (BMD) mean monthly and annual minimum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Bandarban	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Increasing	Increasing
Barguna	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Barishal	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Bhola	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	No Trend	<u>Increasing</u>	<u>Increasing</u>
Bogura	No Trend	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Brahmanbaria	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Chandpur	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Chapainawabganj	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>
Chattogram	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Chuadanga	<u>Decreasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Coxsbazar	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing	<u>Increasing</u>
Cumilla	Increasing	Increasing	Increasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Dhaka	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Dinajpur	Decreasing	Increasing	Increasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>
Faridpur	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Feni	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing	<u>Increasing</u>
Gaibandha	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Gazipur	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Gopalganj	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Habiganj	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Jamalpur	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Jashore	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>
Jhalakati	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Jhenaidah	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>
Joypurhat	Decreasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Khagrachari	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Khulna	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>
Kishoreganj	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Kurigram	Decreasing	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Kushtia	Decreasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Lakshmipur	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Lalmonirhat	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Madaripur	No Trend	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Magura	Decreasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>
Manikganj	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Meherpur	<u>Decreasing</u>	Increasing	Increasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing
Moulvibazar	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing	Decreasing	Increasing	Increasing
Munshiganj	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Mymensingh	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>
Naogaon	Decreasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>
Narail	Decreasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>

Narayanganj	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Narsingdi	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Natore	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing
Netrokona	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing
Nilphamari	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing
Noakhali	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Pabna	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing
Panchaghar	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing
Patuakhali	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing
Pirojpur	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Rajbari	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Rajshahi	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	No Trend	Increasing
Rangamati	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
Rangpur	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Satkhira	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Shariatpur	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Sherpur	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Sirajganj	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing
Sunamganj	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Sylhet	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Tangail	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing
Thakurgaon	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing

1.12 District level observed (BMD) seasonal mean minimum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

District Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Bandarban	Increasing	<u>Increasing</u>	Decreasing	Decreasing
Barguna	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Barishal	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
Bhola	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Bogura	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Brahmanbaria	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Chandpur	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chapainawabganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Chattogram	Increasing	<u>Increasing</u>	<u>Decreasing</u>	Decreasing
Chuadanga	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasing
Coxsazar	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Cumilla	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
Dhaka	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Dinajpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Faridpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Feni	Increasing	<u>Increasing</u>	Increasing	Increasing
Gaibandha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Gazipur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Gopalganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Habiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Jamalpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Jashore	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Jhalakati	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Jhenaidah	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Joypurhat	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Khagrachari	Increasing	<u>Increasing</u>	<u>Decreasing</u>	<u>Increasing</u>
Khulna	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Kishoreganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Kurigram	Increasing	<u>Increasing</u>	Decreasing	Increasing
Kushtia	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Lakshmipur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Lalmonirhat	Increasing	<u>Increasing</u>	Decreasing	Increasing
Madaripur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Magura	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Manikganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Meherpur	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>	Decreasing
Moulvibazar	Increasing	<u>Increasing</u>	Decreasing	Increasing
Munshiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Mymensingh	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Naogaon	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Narail	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Narayanganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Narsingdi	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Natore	Increasing	<u>Increasing</u>	Decreasing	Increasing
Netrokona	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Nilphamari	Decreasing	<u>Increasing</u>	Decreasing	Increasing
Noakhali	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
Pabna	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Panchaghar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Patuakhali	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
Pirojpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Rajbari	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing

Rajshahi	Increasing	<u>Increasing</u>	Decreasing	Decreasing
Rangamati	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Rangpur	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>
Satkhira	Increasing	<u>Increasing</u>	Increasing	Increasing
Shariatpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Sherpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Sirajganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Sunamganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Sylhet	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Tangail	Increasing	<u>Increasing</u>	Decreasing	Decreasing
Thakurgaon	Increasing	<u>Increasing</u>	Decreasing	Increasing

1.13 Upazila level CRU gridded mean monthly and annual minimum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upz. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Bagerhat Sadar	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>
	Chitalmari	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	Increasing	Decreasing	Increasing	<u>Increasing</u>
	Fakirhat	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>
	Kachua	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>
	Mongla	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
	Mollahat	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>
	Morrelganj	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>
	Rampal	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	No Trend	Decreasing	Increasing	<u>Increasing</u>
	Sarankhola	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
Bandarban	Alikadam	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing g</u>	<u>Increasing</u>
	Bandarban Sad	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
	Lama	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing g</u>	<u>Increasing</u>
	Naikhongchhari	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing g</u>	<u>Increasing</u>
	Rowangchhari	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing g</u>	<u>Increasing</u>
	Ruma	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing g</u>	<u>Increasing</u>
	Thanchi	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing g</u>	<u>Increasing</u>
	Barguna	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
	Bamna	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	Decreasing	Decreasing	Increasing	Increasing
Betagi	Barguna Sadar	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>
	Betagi	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	Increasing	Decreasing	Decreasing	Increasing	Increasing
	Patharghata	Decreasin g	Increasing	Increasing	Increasing	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing g</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Thakurgaon	Baliadangi	Increasing	Increasing	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	Increasing	Increasing	Increasing	<u>Increasing</u>
	Haripur	Increasing	Increasing	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	Increasing	Increasing	Increasing	<u>Increasing</u>
	Pirganj	Increasing	Increasing	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	Increasing	Increasing	Increasing	<u>Increasing</u>
	Ranisankail	Increasing	Increasing	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	Increasing	Increasing	Increasing	<u>Increasing</u>
	Thakurgaon Sada	Increasing	Increasing	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	<u>Increasing</u> g	Increasing	Increasing	Increasing	<u>Increasing</u>

1.14 Upazila level CRU gridded seasonal minimum temperature with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upazila Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Bagerhat Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Chitalmari	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Fakirhat	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Kachua	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Mongla	<u>Increasing</u>	<u>Increasing</u>	No Trend	No Trend
	Mollahat	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Morrelganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Rampal	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Bandarban	Sarankhola	<u>Increasing</u>	<u>Increasing</u>	Increasing	No Trend
	Alikadam	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Bandarban Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Lama	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Naikhongchhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Rowangchhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Ruma	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Thanchi	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Barguna	Amtali	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Bamna	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Barguna Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Betagi	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Patharghata	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Taltoli	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Barisal	Agailjhara	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Babuganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Bakerganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Banari Para	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Barisal Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Gournadi	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Hizla	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Mehendiganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Muladi	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Wazirpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
Bhola	Bhola Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Burhanuddin	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Char Fasson	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Daulatkhan	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Lalmohan	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Manpura	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Tazumuddin	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>
	Adamdighi	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Bogra	Bogra Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Dhunat	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Dhupchanchia	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Gabtali	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Kahaloo	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Nandigram	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Sariakandi	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Shajahanpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Sherpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Shibganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Brahamanbaria	Sonatola	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Akhaura	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Increasing</u>

	Ashuganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Banchhampur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bijoy nagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Brahmanbaria Sada	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kasba	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Nabinagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Nasirnagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sarail	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Ch. Nawabganj	Bholahat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chapai Nawabganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gomastapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nachole	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Shibganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Chandpur	Chandpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Faridganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Haim Char	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Hajiganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kachua	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Matlab Dakshin	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Matlab Uttar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Shahrasti	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Chittagong	Anowara	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Banshkhali	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Boalkhali	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chandanaish	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Fatikchhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Hathazari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Lohagara	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mirsharai	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Patiya	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Rangunia	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Raozan	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sandwip	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Satkania	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sitakunda	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Chuadanga	Alamdanga	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Chuadanga Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Damurhuda	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Jiban Nagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Comilla	Barura	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Brahman Para	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Burichang	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Chandina	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Chauddagram	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Comilla Adarsha Sa	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Daudkandi	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Debidwar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Homna	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Laksam	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Meghna	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Manoharganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Muradnagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Nangalkot	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Comilla Sadar Daks	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Titas	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Cox'S Bazar	Chakaria	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing

	Cox'S Bazar Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Kutubdia	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Maheshkhali	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Pekua	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ramu	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Teknaf	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Ukhia	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Dhaka	Dhamrai	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dohar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Keraniganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Nawabganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Savar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Dinajpur	Birampur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Birganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Biral	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Bochaganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chirirbandar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dinajpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Fulbari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ghoraghat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Hakimpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kaharole	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Khansama	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nawabganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Parbatipur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Faridpur	Alfadanga	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bhanga	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Boalmari	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Char Bhadrasan	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Faridpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Madhukhali	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Nagarkanda	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sadarpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Saltha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Feni	Chhagalnaiya	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Daganbhuiyan	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Feni Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Fulgazi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Parshuram	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sonagazi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Gaibandha	Gaibandha Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gobindaganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Palashbari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Fulchhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sadullapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Saghatta	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sundarganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Gazipur	Gazipur Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kaliganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kaliakair	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kapasla	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sreepur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Gopalganj	Gopalganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kashiani	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kotali Para	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Muksudpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Tungi Para	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing

Habiganj	Ajmiriganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bahubal	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Baniachong	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Chunarughat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Habiganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Lakhai	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Madhabpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Nabiganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Jamalpur	Bakshiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dewanganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Islampur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Jamalpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Madarganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Melandaha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sharishabari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Jessore	Abhaynagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bagher Para	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Chaugachha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Jhikargachha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Keshabpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Manirampur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sharsha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Jhalokati	Jhalokati Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Kanthalia	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Nalchity	<u>Increasing</u>	<u>Increasing</u>	Decreasing	No Trend
	Rajapur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
Jhenaidah	Harinakunda	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Jhenaidah Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kaliganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kotchandpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Maheshpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Shailkupa	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Joypurhat	Akkelpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Joypurhat Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kalai	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Khetlal	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Panchbibi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Khagrachhari	Dighinala	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Khagrachhari Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Lakshmichhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mahalchhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Manikchhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Matiranga	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Panchhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ramgarh	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Khulna	Batiaghata	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dacope	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dighalia	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dumuria	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Koyra	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Phultala	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Paikgachha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Rupsa	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Terokhada	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Kishoreganj	Austagram	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bajitpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing

	Bhairab	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Hossainpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Itna	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Karimganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Katiadi	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kishoreganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kuliar Char	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Mithamain	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Nikli	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Pakundia	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Tarail	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Kurigram	Bhurungamari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Char Rajibpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chilmari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kurigram Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nageshwari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Phulbari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Rajarhat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Raumari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ulipur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Kushtia	Bheramara	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Daulatpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Khoksa	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kumarkhali	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kushtia Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Mirpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Lakshmipur	Kamalnagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Lakshmipur Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Roypur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Ramganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Ramgati	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Lalmonirhat	Aditmari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Hatibandha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kaliganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Lalmonirhat Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Patgram	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Madaripur	Kalkini	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Madaripur Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Rajoir	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Shib Char	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Magura	Magura Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Mohammadpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Shalikha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sreepur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Manikganj	Daulatpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Ghior	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Harirampur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Manikganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Saturia	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Shibalaya	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Singair	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Maulvibazar	Barlekha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Juri	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kamalganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kulaura	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Maulvi Bazar Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Rajnagar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing

	Sreemangal	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Meherpur	Gangni	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Meherpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Mujib Nagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Munshiganj	Gazaria	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Lohajang	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Munshiganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Serajdikhan	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sreenagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Tongibari	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Mymensingh	Bhaluka	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dhobaura	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Fulbaria	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Gaffargaon	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Gauripur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Haluaghat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ishwarganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Muktagachha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mymensingh Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nandail	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Phulpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tarakanda	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Trishal	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Naogaon	Atrai	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Badalgachhi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dhamoirhat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Manda	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mahadebpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Naogaon Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Niamatpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Patnitala	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Porsha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Raninagar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sapahar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Narail	Kalia	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Lohagara	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Narail Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Narayanganj	Araihazar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bandar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Narayanganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Rupganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sonargaon	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Narsingdi	Belabo	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Manohardi	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Narsingdi Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Palash	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Roypura	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Shibpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Natore	Bagati Para	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Baraigram	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Gurudaspur	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Lalpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Naldanga	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Natore Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Singra	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Netrakona	Atpara	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing

	Barhatta	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Durgapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kalmakanda	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Kendua	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Khaliajuri	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Madan	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Mohanganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Netrokona Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Purbadhala	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Nilphamari	Dimla	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Domar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Jaldhaka	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kishoreganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nilphamari Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Saidpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Noakhali	Begumganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chatkhil	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Companiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Hatiya	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kabirhat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Noakhali Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Senbagh	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sonaimuri	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Subarnachar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Pabna	Atgharia	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bera	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bhangura	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Chatmohar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Faridpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ishwardi	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Pabna Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Santhia	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sujanagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Panchagarh	Atwari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Boda	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Debiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Panchagarh Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tentulia	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Patuakhali	Bauphal	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dashmina	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Dumki	<u>Increasing</u>	<u>Increasing</u>	Decreasing	No Trend
	Galachipa	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Kala Para	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mirzaganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Patuakhali Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Rangabali	<u>Increasing</u>	<u>Increasing</u>	Increasing	No Trend
Pirojpur	Bhandaria	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Zianagar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Kawkhali	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Mathbaria	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing
	Nazirpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Nesarabad	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Pirojpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Rajbari	Balia Kandi	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Goalandaghat	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kalukhali	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing

	Pangsha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Rajbari Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Rajshahi	Bagha	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Baghmara	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Charghat	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Durgapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Godagari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mohanpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Paba	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Puthia	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tanore	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Rangamati	Baghai Chhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Barkal	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Belai Chhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Jurai Chhari	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Kaptai	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kawkhali	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Langadu	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Naniarchar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Rajasthali	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Rangamati Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Rangpur	Badarganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gangachara	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kaunia	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Mitha Pukur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Pirgachha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Pirganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Rangpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Taraganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Satkhira	Assasuni	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Debhata	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kalaroa	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kaliganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Satkhira Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Shyamnagar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tala	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Shariatpur	Bhedarganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Damudya	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Gosairhat	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Naria	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Shariatpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Zanjira	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
Sherpur	Jhenaigati	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nakla	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nalitabari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sherpur Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sreebardi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Sirajganj	Belkuchi	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chauhali	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Kamarkhanda	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kazipur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Royganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Shahjampur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sirajganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tarash	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ullah Para	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing

Sunamganj	Bishwambarpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Chhatak	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dera	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dharampasha	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Dowarabazar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Jagannathpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Jamalganj	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Dakshin Sunamganj	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Sulla	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sunamganj Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tahirpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Sylhet	Balaganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Beani Bazar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Bishwanath	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Companiganj	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dakshin Surma	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Fenchuganj	<u>Increasing</u>	<u>Increasing</u>	No Trend	Increasing
	Jaintiapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Golabganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Gowainghat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kanaighat	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Sylhet Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Zakiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Tangail	Basail	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Bhuapur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Delduar	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Dhanbari	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ghatail	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Gopalpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Kalihati	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Mirzapur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Madhupur	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Nagarpur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Sakhipur	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Increasing
	Tangail Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Thakurgaon	Baliadangi	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Haripur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
	Pirganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Ranisankail	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Thakurgaon Sadar	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing

1.15 District level observed(BMD) mean monthly and annual maximum relative humidity (%) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Bandarban	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Barguna	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Barishal	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Bhola	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
Bogura	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
Brahmanbaria	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chandpur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chapainawabganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	<u>Increasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chattogram	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chuadanga	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Coxsbazar	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Cumilla	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Dhaka	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Dinajpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Faridpur	Increasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
Feni	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Gaibandha	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	Increasing
Gazipur	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Increasing	Increasing	<u>Decreasing</u>
Gopalganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Habiganj	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Jamalpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Decreasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Jashore	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing
Jhalakati	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Jhenaidah	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Joypurhat	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Khagrachari	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Khulna	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Kishoreganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Kurigram	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing
Kushtia	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Lakshmipur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Lalmonirhat	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	No Trend	Increasing
Madaripur	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Magura	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing
Manikganj	<u>Increasing</u>	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	<u>Increasing</u>	Increasing
Meherpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>

[illegible]

1.16 District level observed(BMD) seasonal maximum relative humidity (%) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

District Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Increasing</u>
Bandarban	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Barguna	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Barishal	Increasing	Increasing	Increasing	<u>Increasing</u>
Bhola	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Bogura	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Brahmanbaria	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chandpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chapainawabganj	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Chattogram	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Chuadanga	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Coxsazar	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Cumilla	Decreasing	Decreasing	Decreasing	Decreasing
Dhaka	<u>Increasing</u>	<u>Increasing</u>	Decreasing	<u>Decreasing</u>
Dinajpur	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Faridpur	Decreasing	Decreasing	Increasing	Increasing
Feni	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Gaibandha	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Gazipur	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Decreasing
Gopalganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Habiganj	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Jamalpur	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Jashore	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Jhalakati	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Jhenaidah	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Joypurhat	<u>Increasing</u>	Decreasing	Increasing	<u>Increasing</u>
Khagrachari	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Khulna	<u>Decreasing</u>	Decreasing	Decreasing	Increasing
Kishoreganj	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Kurigram	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Kushtia	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Lakshmipur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Lalmonirhat	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Madaripur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Magura	<u>Increasing</u>	Decreasing	Increasing	<u>Increasing</u>
Manikganj	Increasing	Decreasing	Increasing	<u>Increasing</u>
Meherpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Moulvibazar	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Munshiganj	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>
Mymensingh	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Naogaon	<u>Increasing</u>	Decreasing	Increasing	<u>Increasing</u>
Narail	<u>Increasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Narayanganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
Narsingdi	Decreasing	<u>Decreasing</u>	Increasing	Increasing
Natore	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Netrokona	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Nilphamari	Increasing	Decreasing	Decreasing	Increasing
Noakhali	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Pabna	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Panchagarh	<u>Increasing</u>	Decreasing	Increasing	<u>Increasing</u>
Patuakhali	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Pirojpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Rajbari	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>

Rajshahi	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Rangamati	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Rangpur	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Satkhira	<u>Increasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Shariatpur	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>
Sherpur	<u>Increasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>
Sirajganj	<u>Increasing</u>	Increasing	Increasing	<u>Increasing</u>
Sunamganj	Increasing	Increasing	Increasing	<u>Increasing</u>
Sylhet	Decreasing	Decreasing	Decreasing	Increasing
Tangail	Increasing	Increasing	Increasing	Increasing
Thakurgaon	<u>Increasing</u>	Decreasing	Increasing	<u>Increasing</u>

1.17 District level observed(BMD) mean monthly and annual minimum relative humidity (%) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	<u>Decreasing</u>
Bandarban	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Barguna	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Barishal	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Bhola	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Bogura	<u>Increasing</u>	Decreasing	Increasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Increasing	Decreasing
Brahmanbaria	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>
Chandpur	Increasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Chapainawabganj	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing
Chattogram	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Chuadanga	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing
Coxsbazar	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Cumilla	Increasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Dhaka	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Dinajpur	<u>Increasing</u>	Increasing	Decreasing	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Decreasing	Increasing	Decreasing
Faridpur	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Feni	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>
Gaibandha	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Increasing	Decreasing
Gazipur	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Gopalganj	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Habiganj	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Jamalpur	Increasing	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing
Jashore	Increasing	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing
Jhalakati	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Jhenaidah	Increasing	Decreasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing
Joypurhat	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing
Khagrachari	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Khulna	<u>Increasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	<u>Increasing</u>	Decreasing
Kishoreganj	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Kurigram	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Kushtia	<u>Increasing</u>	Increasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing	<u>Increasing</u>	Increasing
Lakshmipur	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Lalmonirhat	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Madaripur	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Magura	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing
Manikganj	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Decreasing</u>
Meherpur	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing

[illegible]

1.18 District level observed(BMD) seasonal minimum relative humidity (%) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

District Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing
Bandarban	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Barguna	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Barishal	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Bhola	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Bogura	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Brahmanbaria	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Chandpur	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing
Chapainawabganj	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Chattogram	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Chuadanga	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Coxsazar	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Cumilla	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Dhaka	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Dinajpur	Increasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Faridpur	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Feni	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Gaibandha	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Gazipur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Gopalganj	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Habiganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Jamalpur	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Jashore	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Jhalakati	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Jhenaidah	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Joypurhat	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Khagrachari	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Khulna	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing
Kishoreganj	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Kurigram	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Kushtia	Increasing	Decreasing	Decreasing	<u>Increasing</u>
Lakshmipur	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing
Lalmonirhat	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Madaripur	Decreasing	Decreasing	Decreasing	Increasing
Magura	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Manikganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Meherpur	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Moulvibazar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Munshiganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Mymensingh	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Naogaon	Increasing	<u>Decreasing</u>	Decreasing	Increasing
Narail	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Narayanganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Narsingdi	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Natore	Increasing	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
Netrokona	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Nilphamari	<u>Increasing</u>	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
Noakhali	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
Pabna	Increasing	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
Panchaghar	Increasing	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
Patuakhali	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Pirojpur	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing
Rajbari	Decreasing	<u>Decreasing</u>	Decreasing	Increasing

Rajshahi	<u>Increasing</u>	<u>Decreasing</u>	Decreasing	<u>Increasing</u>
Rangamati	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Rangpur	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Satkhira	Increasing	<u>Decreasing</u>	Increasing	Increasing
Shariatpur	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing
Sherpur	Decreasing	<u>Decreasing</u>	Decreasing	Increasing
Sirajganj	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Sunamganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Sylhet	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Tangail	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing
Thakurgaon	Increasing	<u>Decreasing</u>	Decreasing	<u>Increasing</u>

1.19 District level observed(BMD) mean monthly sunshine hours with significant increasing and decreasing trends for 1981-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	No Trend	<u>Decreasing</u>	Decreasing
Bandarban	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Decreasing
Barguna	<u>Decreasing</u>	Increasing	Increasing	Increasing	No Trend	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing
Barishal	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Bhola	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing
Bogura	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Brahmanbaria	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Chandpur	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Chapainawabganj	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Chattogram	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Chuadanga	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing
Coxsbazar	Decreasing	Increasing	Increasing	<u>Increasing</u>	Decreasing	<u>Increasing</u>	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	<u>Increasing</u>
Cumilla	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	<u>Decreasing</u>	Decreasing
Dhaka	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Dinajpur	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Faridpur	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Feni	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing	Increasing	<u>Increasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Gaibandha	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Gazipur	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Gopalganj	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Habiganj	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Jamalpur	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Jashore	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Jhalakati	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing
Jhenaidah	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Joypurhat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Khagrachari	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing	Increasing	<u>Increasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Khulna	<u>Decreasing</u>	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Kishoreganj	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Kurigram	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Kushtia	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Lakshmipur	<u>Decreasing</u>	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Decreasing
Lalmonirhat	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Madaripur	<u>Decreasing</u>	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing
Magura	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Manikganj	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>

1.20 District level observed(BMD) seasonal sunshine hours with significant increasing and decreasing trends for 1981-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

District Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
Bandarban	Decreasing	Increasing	No Trend	<u>Decreasing</u>
Barguna	Increasing	Increasing	Increasing	<u>Decreasing</u>
Barishal	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Bhola	Increasing	Increasing	Increasing	Decreasing
Bogura	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Brahmanbaria	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Chandpur	No Trend	Increasing	<u>Decreasing</u>	<u>Decreasing</u>
Chapainawabganj	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Chattogram	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
Chuadanga	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Coxsazar	Increasing	<u>Increasing</u>	Increasing	Increasing
Cumilla	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Dhaka	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Dinajpur	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Faridpur	Decreasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>
Feni	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
Gaibandha	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Gazipur	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Gopalganj	Decreasing	No Trend	Decreasing	<u>Decreasing</u>
Habiganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Jamalpur	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Jashore	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Jhalakati	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
Jhenaidah	Decreasing	No Trend	<u>Decreasing</u>	<u>Decreasing</u>
Joypurhat	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Khagrachari	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
Khulna	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Kishoreganj	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Kurigram	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Kushtia	Increasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>
Lakshmipur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Lalmonirhat	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Madaripur	Increasing	Increasing	Decreasing	Decreasing
Magura	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Manikganj	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Meherpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Moulvibazar	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
Munshiganj	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Mymensingh	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
Naogaon	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Narail	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Narayanganj	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Narsingdi	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>
Natore	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Netrokona	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Nilphamari	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Noakhali	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
Pabna	Increasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>
Panchagarh	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Patuakhali	<u>Increasing</u>	Increasing	<u>Increasing</u>	Increasing
Pirojpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Rajbari	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>

Rajshahi	Decreasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>
Rangamati	Decreasing	<u>Increasing</u>	Increasing	Decreasing
Rangpur	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Satkhira	Decreasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>
Shariatpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Sherpur	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Sirajganj	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Sunamganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Sylhet	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Tangail	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
Thakurgaon	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>

1.21 Upazila level NCEP/NCAR gridded mean monthly and annual evaporation with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upz. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Bagerhat Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Chitalmari	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Fakirhat	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Kachua	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Mongla	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Mollahat	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Morrelganj	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Rampal	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Sarankhola	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Bandarban	Alikadam	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Bandarban Sad	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Lama	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Naikhongchhari	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Rowangchhari	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Ruma	Increasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
Barguna	Thanchi	Increasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Amtali	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Bamna	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Barguna Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Betagi	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Patharghata	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Taltoli	Increasing	Increasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>

[illegible]

[illegible]

[illegible]

	Muradnagar	<u>Increasing</u> g	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u> g	<u>Decreasing</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Nangalkot	<u>Increasing</u> g	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Comilla Sadar Dak	<u>Increasing</u> g	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Titas	<u>Increasing</u> g	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
Cox'S Bazar	Chakaria	Increasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Cox'S Baz Sadar	Increasing	No Trend	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Kutubdia	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Maheshkhali	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Pekua	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Ramu	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Teknaf	Increasing	Decreasin g	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Ukhia	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	Decreasin g	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
Dhaka	Dhamrai	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Dohar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	<u>Decreasin</u> g
	Keraniganj	<u>Increasing</u> g	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Nawabganj	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	<u>Decreasin</u> g
	Savar	<u>Increasing</u> g	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
Dinajpur	Birampur	Increasing	Increasing	Decreasin g	Decreasin g	Decreasing	Increasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing
	Birganj	Increasing	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Biral	Increasing	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing
	Bochaganj	Increasing	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing
	Chirirbandar	Increasing	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing
	Dinajpur Sadar	Increasing	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing

[illegible]

	Gobindaganj	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing
	Palashbari	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Fulchhari	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing
	Sadullapur	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
	Saghatta	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing
	Sundarganj	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing
Gazipur	Gazipur Sadar	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Kaliganj	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Kaliakair	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing
	Kapasias	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Sreepur	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing
Gopalganj	Gopalganj Sadar	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing
	Kashiani	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing
	Kotali Para	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Muksudpur	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Tungi Para	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	Increasing	Increasing	Decreasing
Habiganj	Ajmiriganj	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing
	Bahubal	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	No Trend
	Baniachong	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing
	Chunarughat	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing
	Habiganj Sadar	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Lakhai	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Madhabpur	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing

	Nabiganj	<u>Increasing</u> g	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Decreasing	No Trend	Increasing	<u>Increasing</u> g	Increasing	
Jamalpur	Bakshiganj	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing	
	Dewanganj	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>		<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Islampur	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	Increasing		<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Jamalpur Sadar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	Increasing	<u>Decreasing</u>	Decreasin g	Increasing		<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Madarganj	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	No Trend	<u>Decreasing</u>	Increasing	Increasing		<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Melandaha	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	Increasing		<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Sharishabari	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing		<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
Jessore	Abhaynagar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Increasing	Increasing		<u>Increasing</u>	Increasing	<u>Decreasin</u> g
	Bagher Para	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Increasing	Increasing		<u>Increasing</u>	Increasing	Decreasing
	Chaugachha	Increasing	<u>Increasing</u> g	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	Increasing		<u>Increasing</u>	Increasing	Decreasing
	Sadar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Increasing	Increasing		<u>Increasing</u>	Increasing	Decreasing
	Jhikargachha	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing
	Keshabpur	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	Increasing	Increasing	Increasing	<u>Decreasin</u> g
	Manirampur	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	Increasing	Decreasing	Decreasing
	Sharsha	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	Decreasing	Decreasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing
Jhalokati	Jhalokati Sadar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing		<u>Increasing</u>	<u>Increasing</u> g	<u>Decreasin</u> g
	Kanthalia	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Decreasing	Increasing		<u>Increasing</u>	<u>Increasing</u> g	<u>Decreasin</u> g
	Nalchity	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Decreasing	Increasing		<u>Increasing</u>	<u>Increasing</u> g	<u>Decreasin</u> g
	Rajapur	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Decreasing	Increasing		<u>Increasing</u>	<u>Increasing</u> g	<u>Decreasin</u> g
Jhenaidah	Harinakunda	Increasing	<u>Increasing</u> g	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	Increasing		<u>Increasing</u>	Increasing	Decreasing
	Jhenaidah Sadar	Increasing	<u>Increasing</u> g	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasin g	Increasing	Increasing		<u>Increasing</u>	Increasing	Decreasing
	Kaliganj	Increasing	<u>Increasing</u> g	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	Increasing		<u>Increasing</u>	Increasing	Decreasing

[illegible]

[illegible]

[illegible]

	Shalikha	Increasing	<u>g</u> <u>Increasing</u>	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Sreepur	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Manikganj	Daulatpur	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
	Ghior	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
	Harirampur	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasin</u> <u>g</u>
	Manikganj Sad	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
	Saturia	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
	Shibalaya	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
	Singair	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
Maulvibazar	Barlekha	<u>Increasing</u> <u>g</u>	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u> <u>Decreasing</u>	<u>Decreasing</u> <u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u>
	Juri	<u>Increasing</u> <u>g</u>	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u> <u>Decreasing</u>	<u>Decreasing</u> <u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u>
	Kamalganj	<u>Increasing</u> <u>g</u>	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u> <u>Decreasing</u>	<u>Decreasing</u> <u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u>
	Kulaura	<u>Increasing</u> <u>g</u>	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u> <u>Decreasing</u>	<u>Decreasing</u> <u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u>
	Maulvi Bazar Sad	<u>Increasing</u> <u>g</u>	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u>
	Rajnagar	<u>Increasing</u> <u>g</u>	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u>
	Sreemangal	<u>Increasing</u> <u>g</u>	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u>
Meherpur	Gangni	Increasing	<u>Increasing</u> <u>g</u>	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Meherpur Sadar	Increasing	<u>Increasing</u> <u>g</u>	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Mujib Nagar	Increasing	<u>Increasing</u> <u>g</u>	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
Munshiganj	Gazaria	<u>Increasing</u> <u>g</u>	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
	Lohajang	Increasing	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
	Munshiganj Sada	<u>Increasing</u> <u>g</u>	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>
	Serajdikhan	<u>Increasing</u> <u>g</u>	Increasing	<u>g</u> <u>Decreasin</u>	<u>Decreasing</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasin</u> <u>g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u> <u>g</u>	<u>Increasing</u> <u>g</u>	<u>Decreasing</u>

	Mohanganj	<u>Increasing</u> g	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	Decreasing	<u>Decreasing</u>	Decreasin g	No Trend	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Netrokona Sada	<u>Increasing</u> g	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Purbadhala	<u>Increasing</u> g	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
Nilphamari	Dimla	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Domar	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Jaldhaka	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Kishoreganj	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Increasing
	Nilphamari Sada	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	No Trend
	Saidpur	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Increasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Increasing
Noakhali	Begumganj	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Chatkhil	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Companiganj	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u> g	Decreasing
	Hatiya	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Kabirhat	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Noakhali Sadar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Senbagh	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Sonaimuri	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Subarnachar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin</u> g	<u>Decreasin</u> g	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u> g	Decreasing
Pabna	Atgharia	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Bera	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin</u> g	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u> g	Decreasing
	Bhangura	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Chatmohar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Faridpur	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing

[illegible]

	Pirojpur Sadar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasin g	Decreasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	<u>Decreasin g</u>
Rajbari	Balia Kandi	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Goalandaghat	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Kalukhali	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Pangsha	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Rajbari Sadar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
Rajshahi	Bagha	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Baghmara	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing
	Charghat	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Durgapur	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Godagari	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Mohanpur	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing
	Paba	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing
	Puthia	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing
	Tanore	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Increasing
Rangamati	Baghai Chhari	<u>Increasing g</u>	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing
	Barkal	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	Decreasing	Decreasin g	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Belai Chhari	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	Decreasing	Decreasin g	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Jurai Chhari	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	Decreasing	Decreasin g	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Kaptai	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	Decreasing	Decreasin g	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Kawkhali (Betb)	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	Decreasing	Decreasing	Decreasing	Increasing	Increasing	<u>Increasin g</u>	Decreasing
	Langadu	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
	Naniarchar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing

[illegible]

[illegible]

	Sunamganj Sada	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	Decreasing	<u>Decreasin g</u>	Decreasing	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	<u>Increasin g</u>	Increasing
	Tahirpur	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	Decreasing	<u>Decreasin g</u>	Decreasing	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	<u>Increasin g</u>	Increasing
Sylhet	Balaganj	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Beani Bazar	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Bishwanath	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Companiganj	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Dakshin Surma	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Fenchuganj	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Jaintiapur	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Golabganj	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Gowainghat	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	Decreasing	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Kanaighat	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Sylhet Sadar	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
	Zakiganj	<u>Increasin g</u>	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	<u>Increasin g</u>	Increasing
Tangail	Basail	Increasing	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Bhuapur	Increasing	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Delduar	Increasing	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Dhanbari	Increasing	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Ghatail	Increasing	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Gopalpur	Increasing	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Kalihati	Increasing	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
	Mirzapur	Increasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasin g</u>	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Madhupur	Increasing	Increasing	<u>Decreasin g</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasin g</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasin g</u>	Decreasing

	Nagarpur	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin g</u>	<u>Decreasin g</u>	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Sakhipur	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin g</u>	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	Increasing	<u>Increasing</u>	<u>Increasin g</u>	Decreasing
	Tangail Sadar	Increasing	Increasing	Decreasin g	<u>Decreasing</u>	<u>Decreasin g</u>	Decreasing	<u>Decreasing</u>	Decreasin g	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Decreasing
Thakurgaon	Baliadangi	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Haripur	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Pirganj	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Ranisankail	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing
	Thakurgaon Sada	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Increasing	<u>Increasing</u>	<u>Increasing</u>	Increasing	Increasing	Decreasing

1.22 Upazila level NCEP/NCAR gridded seasonal evaporation with significant increasing and decreasing trends for 1981-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upazila Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Bagerhat Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Chitalmari	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Fakirhat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Kachua	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Mongla	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Mollahat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Morrelganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Rampal	<u>Decreasing</u>	Decreasing	Increasing	Increasing
Bandarban	Sarankhola	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Alikadam	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Bandarban Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Lama	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Naikhongchhari	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Rowangchhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Ruma	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Thanchi	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
Barguna	Amtali	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Bamna	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Barguna Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Betagi	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Patharghata	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Taltoli	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Barisal	Agailjhara	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Babuganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Bakerganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Banari Para	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Barisal Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Gaurnadi	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Hizla	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Mehendiganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Muladi	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Wazirpur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Bhola	Bhola Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Burhanuddin	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Char Fasson	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Daulatkhan	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Lalmohan	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Manpura	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Tazumuddin	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
Bogra	Adamdighi	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Bogra Sadar	<u>Decreasing</u>	No Trend	<u>Increasing</u>	Increasing
	Dhunat	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Dhupchanchia	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Gabtali	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Kahaloo	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Nandigram	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Sariakandi	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Shajahanpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Sherpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Shibganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Sonatola	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
Brahamanbaria	Akhaura	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>

	Ashuganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Banchhampur	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Bijoyagar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Brahmanbaria Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Kasba	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Nabinagar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Nasirnagar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sarail	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Ch. Nawabganj	Bholahat	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Chapai Nawabganj Sad	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Gomastapur	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Nachole	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Shibganj	Decreasing	Decreasing	<u>Increasing</u>	Increasing
Chandpur	Chandpur Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Faridganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Haim Char	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Hajiganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Kachua	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Matlab Dakshin	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Matlab Uttar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Shahrasti	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Chittagong	Anowara	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Banshkhali	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Boalkhali	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Chandanaish	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Fatikchhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Hathazari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Lohagara	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Mirsharai	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Patiya	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Rangunia	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Raozan	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Sandwip	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Satkania	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Sitakunda	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
Chuadanga	Alamdanga	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Chuadanga Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Damurhuda	Decreasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Jiban Nagar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Comilla	Barura	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Brahman Para	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Burichang	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Chandina	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Chauddagram	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Comilla Adarsha Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Daudkandi	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Debidwar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Homna	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Laksam	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Meghna	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Manoharganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Muradnagar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Nangalkot	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Comilla Sadar Dakshin	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Titas	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>

Cox'S Bazar	Chakaria	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Cox'S Bazar Sadar	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Kutubdia	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Maheshkhali	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Pekua	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Ramu	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Teknaf	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Ukhia	<u>Decreasing</u>	Decreasing	Increasing	Increasing
Dhaka	Dhamrai	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Dohar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Keraniganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Nawabganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Savar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
Dinajpur	Birampur	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Birganj	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Biral	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Bochaganj	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Chirirbandar	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Dinajpur Sadar	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Fulbari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Ghoraghat	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Hakimpur	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Kaharole	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Khansama	Decreasing	No Trend	<u>Increasing</u>	Increasing
	Nawabganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Parbatipur	Decreasing	Increasing	<u>Increasing</u>	Increasing
Faridpur	Alfadanga	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Bhanga	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Boalmari	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Char Bhadrasan	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Faridpur Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Madhukhali	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Nagarkanda	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Sadarpur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Saltha	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Feni	Chhagalnaiya	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Daganbhuiyan	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Feni Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Fulgazi	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Parshuram	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sonagazi	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Gaibandha	Gaibandha Sadar	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Gobindaganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Palashbari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Fulchhari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Sadullapur	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Saghatta	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Sundarganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
Gazipur	Gazipur Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Kaliganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Kaliakair	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Kapasia	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sreepur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
Gopalganj	Gopalganj Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Kashiani	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Kotali Para	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Muksudpur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing

	Tungi Para	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Habiganj	Ajmiriganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Bahubal	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Baniachong	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Chunarughat	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Habiganj Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Lakhai	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Madhabpur	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Nabiganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Jamalpur	Bakshiganj	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Dewanganj	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Islampur	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Jamalpur Sadar	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Madarganj	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Melandaha	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Sharishabari	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
Jessore	Abhaynagar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Bagher Para	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Chaugachha	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Sadar	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Jhikargachha	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Keshabpur	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Manirampur	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Sharsha	<u>Decreasing</u>	Decreasing	Increasing	Increasing
Jhalokati	Jhalokati Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Kanthalia	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Nalchity	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Rajapur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Jhenaidah	Harinakunda	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Jhenaidah Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Kaliganj	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Kotchandpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Maheshpur	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Shailkupa	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Joypurhat	Akkelpur	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Joypurhat Sadar	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Kalai	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Khetlal	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Panchbibi	Decreasing	Increasing	<u>Increasing</u>	Increasing
Khagrachhari	Dighinala	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Khagrachhari Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Lakshmichhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Mahalchhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Manikchhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Matiranga	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Panchhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Ramgarh	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Khulna	Batiaghata	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Dacope	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Dighalia	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Dumuria	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Koyra	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Phultala	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Paikgachha	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Rupsa	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Terokhada	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Kishoreganj	Austagram	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>

	Bajitpur	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Bhairab	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Hossainpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Itna	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Karimganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Katiadi	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Kishoreganj Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Kuliar Char	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Mithamain	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Nikli	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Pakundia	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Tarail	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Kurigram	Bhurungamari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Char Rajibpur	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Chilmari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Kurigram Sadar	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Nageshwari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Phulbari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Rajarhat	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Raumari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Ulipur	Decreasing	Increasing	<u>Increasing</u>	Increasing
Kushtia	Bheramara	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Daulatpur	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Khoksa	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Kumarkhali	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Kushtia Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Mirpur	Decreasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Lakshmipur	Kamalnagar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Lakshmipur Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Roypur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Ramganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Ramgati	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Lalmonirhat	Aditmari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Hatibandha	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Kaliganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Lalmonirhat Sadar	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Patgram	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
Madaripur	Kalkini	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Madaripur Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Rajoir	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Shib Char	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Magura	Magura Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Mohammadpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Shalikha	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Sreepur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Manikganj	Daulatpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Ghior	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Harirampur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Manikganj Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Saturia	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Shibalaya	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Singair	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Maulvibazar	Barlekha	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Juri	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Kamalganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Kulaura	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Maulvi Bazar Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>

	Rajnagar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sreemangal	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Meherpur	Gangni	Decreasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Meherpur Sadar	Decreasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Mujib Nagar	Decreasing	Decreasing	<u>Increasing</u>	<u>Increasing</u>
Munshiganj	Gazaria	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Lohajang	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Munshiganj Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Serajdikhan	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Sreenagar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Tongibari	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
Mymensingh	Bhaluka	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Dhobaura	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Fulbaria	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Gaffargaon	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Gauripur	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Haluaghat	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Ishwarganj	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Muktagachha	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Mymensingh Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Nandail	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Phulpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Tarakanda	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Trishal	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
Naogaon	Atrai	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Badalgachhi	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Dhamoirhat	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Manda	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Mahadebpur	Decreasing	No Trend	<u>Increasing</u>	Increasing
	Naogaon Sadar	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Niamatpur	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Patnitala	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Porsha	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Raninagar	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Sapahar	Decreasing	Decreasing	<u>Increasing</u>	Increasing
Narail	Kalia	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Lohagara	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Narail Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
Narayanganj	Araihazar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Bandar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Narayanganj Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Rupganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sonargaon	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Narsingdi	Belabo	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Manohardi	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Narsingdi Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Palash	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Roytura	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Shibpur	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Natore	Bagati Para	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Baraigram	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Gurudaspur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Lalpur	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Naldanga	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Natore Sadar	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Singra	Decreasing	Decreasing	<u>Increasing</u>	Increasing

Netrakona	Atpara	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Barhatta	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Durgapur	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Kalmakanda	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Kendua	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Khaliajuri	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Madan	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Mohanganj	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Netrokona Sadar	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Purbadhala	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
Nilphamari	Dimla	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Domar	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Jaldhaka	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Kishoreganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Nilphamari Sadar	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Saidpur	Decreasing	Increasing	<u>Increasing</u>	Increasing
Noakhali	Begumganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Chatkhil	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Companiganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Hatiya	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Kabirhat	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Noakhali Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Senbagh	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sonaimuri	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Subarnachar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
Pabna	Atgharia	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Bera	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Bhangura	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Chatmohar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Faridpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Ishwardi	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Pabna Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Santhia	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Sujanagar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
Panchagarh	Atwari	Decreasing	Decreasing	Increasing	Increasing
	Boda	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Debiganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Panchagarh Sadar	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Tentulia	<u>Decreasing</u>	Increasing	Increasing	Increasing
Patuakhali	Bauphal	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Dashmina	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Dumki	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Galachipa	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Kala Para	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Mirzaganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Patuakhali Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Rangabali	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Pirojpur	Bhandaria	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Zianagar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Kawkhali	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Mathbaria	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Nazirpur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Nesarabad	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
	Pirojpur Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Rajbari	Balia Kandi	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Goalandaghat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing

	Kalukhali	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Pangsha	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	<u>Increasing</u>
	Rajbari Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	Increasing
Rajshahi	Bagha	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Baghmara	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Charghat	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Durgapur	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Godagari	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Mohanpur	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Paba	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Puthia	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Tanore	Decreasing	Decreasing	<u>Increasing</u>	Increasing
Rangamati	Baghai Chhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Barkal	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Belai Chhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Jurai Chhari	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Kaptai	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Kawkhali (Betbunia)	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Langadu	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Naniarchar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Rajasthali	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
	Rangamati Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing
Rangpur	Badarganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Gangachara	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Kaunia	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Mitha Pukur	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Pirgachha	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Pirganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Rangpur Sadar	Decreasing	Increasing	<u>Increasing</u>	Increasing
	Taraganj	Decreasing	Increasing	<u>Increasing</u>	Increasing
Satkhira	Assasuni	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Debhata	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Kalaroa	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Kaliganj	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Satkhira Sadar	<u>Decreasing</u>	Decreasing	Increasing	Increasing
	Shyamnagar	<u>Decreasing</u>	Decreasing	Increasing	Decreasing
	Tala	<u>Decreasing</u>	Decreasing	Increasing	Increasing
Shariatpur	Bhedarganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Damudya	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Gosairhat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Naria	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Shariatpur Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
	Zanjira	<u>Decreasing</u>	<u>Decreasing</u>	<u>Increasing</u>	<u>Increasing</u>
Sherpur	Jhenaigati	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Nakla	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Nalitabari	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Sherpur Sadar	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
	Sreebardi	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing
Sirajganj	Belkuchi	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Chauhali	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Kamarkhanda	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Kazipur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Royganj	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Shahjampur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Sirajganj Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Tarash	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing

	Ullah Para	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
Sunamganj	Bishwambarpur	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Chhatak	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Derai	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Dharampasha	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
	Dowarabazar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Jagannathpur	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Jamalganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Dakshin Sunamganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sulla	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sunamganj Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Tahirpur	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>
Sylhet	Balaganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Beani Bazar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Bishwanath	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Companiganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Dakshin Surma	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Fenchuganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Jaintiapur	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Golabganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Gowainghat	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Kanaighat	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Sylhet Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
	Zakiganj	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>
Tangail	Basail	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Bhuapur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Delduar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Dhanbari	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Ghatail	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Gopalpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Kalihati	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Mirzapur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Madhupur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Nagarpur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Sakhipur	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
	Tangail Sadar	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing
Thakurgaon	Baliadangi	Decreasing	Decreasing	Increasing	Increasing
	Haripur	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Pirganj	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Ranisankail	Decreasing	Decreasing	<u>Increasing</u>	Increasing
	Thakurgaon Sadar	Decreasing	Decreasing	<u>Increasing</u>	Increasing

1.23 Upazila level CRU gridded mean monthly and annual potential evapotranspiration (PET) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upz. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Bagerhat Sadar	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Chitalmari	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Fakirhat	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kachua	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mongla	<u>Decreasing</u>	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mollahat	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Morrelganj	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rampal	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sarankhola	<u>Decreasing</u>	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Bandarban	Alikadam	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Bandarban Sadar	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Lama	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Naikhongchhari	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Rowangchhari	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing
	Ruma	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing
	Thanchi	<u>Decreasing</u>	Increasing	<u>Decreasing</u>	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Barguna	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
	Bamna	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Barguna	Barguna Sadar	<u>Decreasing</u>	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Betagi	<u>Decreasing</u>	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Patharghata	<u>Decreasing</u>	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing

	Taltoli	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Barisal	Agailjhara	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Babuganj	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Bakerganj	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Banari Para	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Barisal Sadar	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Gaurnadi	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Hizla	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mehendiganj	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Muladi	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Wazirpur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Bhola	Bhola Sadar	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Burhanuddin	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Char Fasson	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Daulatkhan	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
	Lalmohan	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Manpura	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Tazumuddin	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Bogra	Adamdighi	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Bogra Sadar	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Dhunat	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Dhupchanchia	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing
	Gabatali	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing

	Kahaloo	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Nandigram	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sariakandi	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Shajahanpur	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sherpur	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Shibganj	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Sonatola	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Brahamanbaria	Akhaura	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Ashuganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Banchharampu	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Bijoyagar	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Brahmanbaria Sad	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kasba	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Nabinagar	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Nasiragar	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Sarail	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Chapai Nawabganj	Bholahat	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Cha. Nawabganj	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Gomastapur	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Nachole	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Shibganj	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing
Chandpur	Chandpur Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Faridganj	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing

	Haim Char	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Hajiganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kachua	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Matlab Dakshin	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Matlab Uttar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Shahrasti	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Chittagon g	Anowara	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Banshkali	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Boalkhali	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Chandanaish	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Fatikchhari	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Hathazari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Lohagara	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mirsharai	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Patiya	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rangunia	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Raozan	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sandwip	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Satkania	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sitakunda	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Chuadanga	Alamdanga	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Chuadanga Sadar	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Damurhuda	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing

[illegible]

[illegible]

	Char Bhadrasan	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Faridpur Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Madhukhali	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Nagarkanda	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sadarpur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Saltha	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Feni	Chhagalnaiya	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Daganbhuiyan	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Feni Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Fulgazi	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Parshuram	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sonagazi	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Gaibandha	Gaibandha Sadar	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Gobindaganj	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Palashbari	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Fulchhari	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Sadullapur	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Saghatta	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Sundarganj	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	No Trend
Gazipur	Gazipur Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kaliakair	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Kapasia	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing

	Sreepur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Gopalganj	Gopalganj Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kashiani	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kotali Para	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Muksudpur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Tungi Para	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Habiganj	Ajmiriganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Bahubal	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Baniachong	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Chunarughat	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Habiganj Sadar	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Lakhai	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Madhabpur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Nabiganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Jamalpur	Bakshiganj	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
	Dewanganj	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Islampur	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend
	Jamalpur Sadar	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
	Madarganj	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Melandaha	Decreasing	Increasing	Increasing	Increasing	Increasing	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Sharishabari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	No Trend	Increasing	Decreasing	No Trend	Decreasing	Increasing
Jessore	Abhaynagar	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Bagher Para	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing

[illegible]

	Lakshmichhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mahalchhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Manikchhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Matiranga	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Panchhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Ramgarh	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Khulna	Batiaghata	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Dacope	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Dighalia	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Dumuria	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Koyra	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Phultala	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Paikgachha	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rupsa	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Terokhada	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Kishoreganj	Austagram	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Bajitpur	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Bhairab	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Hossainpur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Itna	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Karimganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Katiadi	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kishoreganj Sad	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing

	Kuliar Char	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Mithamain	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Nikli	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Pakundia	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Tarail	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Kurigram	Bhurungamari	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Char Rajibpur	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
	Chilmari	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	No Trend
	Kurigram Sadar	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Nageshwari	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Phulbari	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Rajarhat	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Raumari	Decreasing	Increasing	Increasing	Increasing	Increasing	No Trend	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend
	Ulipur	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
Kushtia	Bheramara	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Daulatpur	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Khoksa	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kumarkhali	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
	Kushtia Sadar	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Lakshmipur	Mirpur	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kamalnagar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Lakshmipur Sad	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Roypur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing

	Ramganj	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Ramgati	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Lalmonirhat	Aditmari	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Hatibandha	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Kaliganj	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Lalmonirhat Sad	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	No Trend
	Patgram	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
Madaripur	Kalkini	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Madaripur Sad	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rajoir	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Shib Char	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	No Trend	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Magura	Magura Sadar	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mohammadpur	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Shalikha	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sreepur	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Manikganj	Daulatpur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Ghior	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Harirampur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Manikganj Sad	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Saturia	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Shibalaya	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Singair	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Maulvibazar	Barlekha	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing

	Juri	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kamalganj	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kulaura	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Maulvi Bazar Sad	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Rajnagar	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Sreemangal	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Meherpur	Gangni	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Meherpur Sadar	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Munshiganj	Mujib Nagar	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Gazaria	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Lohajang	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Munshiganj Sada	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Serajdikhan	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sreenagar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Tongibari	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Mymensingh	Bhaluka	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Dhobaura	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
	Fulbaria	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Gaffargaon	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Gauripur	Decreasing	Increasing	No Trend	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Haluaghat	Decreasing	Increasing	No Trend	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
	Ishwarganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Muktagachha	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Increasing

	Mymensingh Sad	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Increasing
	Nandail	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Decreasing
	Phulpur	Decreasin g	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Increasing
	Tarakanda	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Decreasing
	Trishal	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Decreasing
Naogaon	Atrai	Decreasin g	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Badalgachhi	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Decreasing
	Dhamoirhat	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Increasing
	Manda	Decreasin g	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Increasing
	Mahadebpur	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Increasing
	Naogaon Sadar	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Decreasing
	Niamatpur	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Increasing
	Patnitala	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Porsha	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Raninagar	Decreasin g	Increasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Sapahar	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Decreasing
Narail	Kalia	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Lohagara	Decreasing	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Narail Sadar	Decreasing	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
Narayanganj	Araihazar	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Decreasing
	Bandar	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Narayanganj Sad	Decreasin g	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Rupganj	Decreasin g	Decreasin g	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Decreasing

	Sonargaon	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Narsingdi	Belabo	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Manohardi	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Narsingdi Sadar	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Palash	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Roypura	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Shibpur	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Natore	Bagati Para	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Baraigram	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Gurudaspur	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Lalpur	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Naldanga	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Natore Sadar	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Singra	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Netrakona	Atpara	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Barhatta	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Durgapur	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kalmakanda	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kendua	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Khaliajuri	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Madan	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Mohanganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Netrokona Sada	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing

	Purbadhala	Decreasin g	Increasing	Decreasin g	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Increasing	Decreasin g	Decreasing
Nilphamari	Dimla	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Increasing
	Domar	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Increasing
	Jaldhaka	Decreasin g	Increasing	Increasing	Increasing	Decreasing	No Trend	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Increasing
	Kishoreganj	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Increasing
	Nilphamari Sada	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Increasing
	Saidpur	Decreasin g	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Increasing	Decreasing	Increasing	Increasing	Increasing
Noakhali	Begumganj	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Chatkhil	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Companiganj	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Hatiya	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kabirhat	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Noakhali Sadar	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Senbagh	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sonaimuri	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Subarnachar	Decreasing	Increasing	Decreasin g	Increasing	Decreasing	Decreasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Pabna	Atgharia	Decreasin g	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Bera	Decreasin g	Increasing	Decreasin g	No Trend	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Bhangura	Decreasin g	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Chatmohar	Decreasin g	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Faridpur	Decreasin g	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Ishwardi	Decreasin g	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasing	Decreasin g	Decreasing	Decreasing	Decreasing	Decreasin g	Decreasing
	Pabna Sadar	Decreasin g	Increasing	Decreasin g	Decreasin g	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasin g	Decreasing

	Santhia	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Panchagarh	Sujanagar	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Atwari	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Boda	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Debiganj	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Panchagarh Sad	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Tentulia	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
Patuakhali	Bauphal	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
	Dashmina	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
	Dumki	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Galachipa	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kala Para	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mirzaganj	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Patuakhali Sadar	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rangabali	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
Pirojpur	Bhandaria	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Zianagar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kawkhali	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Mathbaria	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Nazirpur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Nesarabad	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Pirojpur Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Rajbari	Balia Kandi	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing

	Goalandaghat	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kalukhali	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Pangsha	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rajbari Sadar	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Rajshahi	Bagha	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Baghmara	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Charghat	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Durgapur	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Godagari	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing
	Mohanpur	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Paba	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Puthia	Decreasing	Increasing	Increasing	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Tanore	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
Rangamati	Baghai Chhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
	Barkal	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Belai Chhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Jurai Chhari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kaptai	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kawkhali (Betb)	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Langadu	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Naniarchar	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rajasthali	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Rangamati Sada	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing

[illegible]

	Nalitabari	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
	Sherpur Sadar	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
	Sreebardi	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing
Sirajganj	Belkuchi	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Chauhali	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Kamarkhanda	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Kazipur	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Royganj	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Shahjampur	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Sirajganj Sadar	Decreasing	Increasing	Increasing	Increasing	No Trend	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Tarash	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
	Ullah Para	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Sunamganj	Bishwambarpur	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Chhatak	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Derai	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Dharampasha	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Dowarabazar	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing
	Jagannathpur	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Jamalganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Dak. Sunamganj	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Sulla	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Sunamganj Sada	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Tahirpur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing

Sylhet	Balaganj	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Beani Bazar	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing
	Bishwanath	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Companiganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing
	Dakshin Surma	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing
	Fenchuganj	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Jaintiapur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing
	Golabganj	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing
	Gowainghat	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing
	Kanaighat	Decreasing	No Trend	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing
	Sylhet Sadar	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing
	Zakiganj	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing
Tangail	Basail	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Bhuapur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing
	Delduar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Dhanbari	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	No Trend	Increasing	Decreasing	No Trend	Decreasing	Increasing
	Ghatail	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing
	Gopalpur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing
	Kalihati	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing
	Mirzapur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Madhupur	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing
	Nagarpur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing
	Sakhipur	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing

	Tangail Sadar	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	No Trend	Decreasing	Decreasing
Thakurgaon	Baliadangi	Decreasing	Increasing	Increasing	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Haripur	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Pirganj	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Ranisankail	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing
	Thakurgaon Sada	Decreasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing

1.24 Upazila level CRU gridded seasonal potential evapotranspiration (PET) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upazila Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Bagerhat Sadar	Decreasing	Increasing	Decreasing	Decreasing
	Chitalmari	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Fakirhat	Decreasing	Increasing	Decreasing	Decreasing
	Kachua	Decreasing	No Trend	Decreasing	<u>Decreasing</u>
	Mongla	Decreasing	Decreasing	Decreasing	Decreasing
	Mollahat	Decreasing	Increasing	Decreasing	Decreasing
	Morrelganj	Decreasing	Decreasing	Decreasing	Decreasing
	Rampal	Decreasing	Decreasing	Decreasing	Decreasing
	Sarankhola	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing
Bandarban	Alikadam	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Bandarban Sadar	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Lama	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Naikhongchhari	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Rowangchhari	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Ruma	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Thanchi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Barguna	Amtali	Decreasing	Decreasing	Decreasing	Decreasing
	Bamna	Decreasing	Decreasing	Decreasing	Decreasing
	Barguna Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Betagi	Decreasing	Decreasing	Decreasing	Decreasing
	Patharghata	Decreasing	Decreasing	Decreasing	Decreasing
	Taltoli	Decreasing	Decreasing	Decreasing	Decreasing
Barisal	Agailjhara	Decreasing	Decreasing	Decreasing	Decreasing
	Babuganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Bakerganj	Decreasing	Decreasing	Decreasing	Decreasing
	Banari Para	Decreasing	Decreasing	Decreasing	Decreasing
	Barisal Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Gaurnadi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Hizla	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Mehendiganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Muladi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Wazirpur	Decreasing	Decreasing	Decreasing	Decreasing
	Bhola Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Bhola	Burhanuddin	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Char Fasson	Decreasing	Decreasing	Decreasing	Decreasing
	Daulatkhan	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Lalmohan	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Manpura	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Tazumuddin	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Adamdighi	Increasing	Decreasing	Decreasing	Decreasing
Bogra	Bogra Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Dhunat	Increasing	Increasing	Decreasing	Decreasing
	Dhupchanchia	Increasing	Decreasing	Decreasing	Decreasing
	Gabtali	Increasing	Decreasing	Decreasing	Decreasing
	Kahaloo	Increasing	Decreasing	Decreasing	Decreasing
	Nandigram	Increasing	Decreasing	Decreasing	Decreasing
	Sariakandi	Increasing	Increasing	Decreasing	Decreasing
	Shajahanpur	Increasing	Decreasing	Decreasing	Decreasing
	Sherpur	Increasing	Increasing	Decreasing	Decreasing
	Shibganj	Increasing	Decreasing	Decreasing	Decreasing
	Sonatola	Increasing	Increasing	Decreasing	Decreasing
	Akhaura	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>

	Ashuganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Banchhampur	Decreasing	Decreasing	Decreasing	Decreasing
	Bijoy nagar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Brahmanbaria Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kasba	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Nabinagar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Nasirnagar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sarail	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Ch. Nawabganj	Bholahat	Decreasing	Decreasing	Decreasing	Increasing
	Chapai Nawabganj Sad	Decreasing	Decreasing	Decreasing	Increasing
	Gomastapur	Increasing	Decreasing	Decreasing	Increasing
	Nachole	Decreasing	Decreasing	Decreasing	Increasing
	Shibganj	Decreasing	Decreasing	Decreasing	Increasing
Chandpur	Chandpur Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Faridganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Haim Char	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Hajiganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kachua	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Matlab Dakshin	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Matlab Uttar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Shahrasti	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Chittagong	Anowara	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Banshkhali	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Boalkhali	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Chandanaish	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Fatikchhari	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Hathazari	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Lohagara	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Mirsharai	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Patiya	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Rangunia	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Raozan	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sandwip	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Satkania	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Sitakunda	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Chuadanga	Alamdanga	Decreasing	Increasing	Decreasing	Decreasing
	Chuadanga Sadar	Decreasing	Increasing	Decreasing	Decreasing
	Damurhuda	Decreasing	Increasing	Decreasing	Decreasing
	Jiban Nagar	Decreasing	Increasing	Decreasing	Decreasing
Comilla	Barura	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Brahman Para	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Burichang	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Chandina	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Chauddagram	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Comilla Adarsha Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Daudkandi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Debidwar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Homna	Decreasing	Decreasing	Decreasing	Decreasing
	Laksam	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Meghna	Decreasing	Decreasing	Decreasing	Decreasing
	Manoharganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Muradnagar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Nangalkot	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Comilla Sadar Dakshin	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Titas	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>

Cox'S Bazar	Chakaria	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Cox'S Bazar Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kutubdia	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Maheshkhali	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Pekua	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Ramu	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Teknaf	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Ukhia	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
Dhaka	Dhamrai	Decreasing	Decreasing	Decreasing	Decreasing
	Dohar	Decreasing	No Trend	Decreasing	Decreasing
	Keraniganj	Decreasing	Decreasing	Decreasing	Decreasing
	Nawabganj	Decreasing	Increasing	Decreasing	Decreasing
	Savar	Decreasing	Decreasing	Decreasing	Decreasing
Dinajpur	Birampur	Increasing	Increasing	Decreasing	Increasing
	Birganj	Increasing	Decreasing	Increasing	Increasing
	Biral	Increasing	Increasing	Decreasing	Increasing
	Bochaganj	Increasing	Increasing	Decreasing	Increasing
	Chirirbandar	Increasing	Decreasing	Decreasing	Increasing
	Dinajpur Sadar	Increasing	No Trend	Decreasing	Increasing
	Fulbari	Increasing	Increasing	Decreasing	Increasing
	Ghoraghat	Increasing	Decreasing	Decreasing	Increasing
	Hakimpur	Increasing	Increasing	Decreasing	Increasing
	Kaharole	Increasing	Decreasing	Decreasing	Increasing
	Khansama	Increasing	Decreasing	Decreasing	Increasing
	Nawabganj	Increasing	No Trend	Decreasing	Increasing
	Parbatipur	Increasing	Decreasing	Decreasing	Increasing
Faridpur	Alfadanga	Decreasing	Decreasing	Decreasing	Decreasing
	Bhanga	Decreasing	Increasing	Decreasing	Decreasing
	Boalmari	Decreasing	Increasing	Decreasing	Decreasing
	Char Bhadrasan	Decreasing	Increasing	Decreasing	Decreasing
	Faridpur Sadar	Decreasing	Increasing	Decreasing	Decreasing
	Madhukhali	Decreasing	Increasing	Decreasing	Decreasing
	Nagarkanda	Decreasing	Increasing	Decreasing	Decreasing
	Sadarpur	Decreasing	Increasing	Decreasing	Decreasing
	Saltha	Decreasing	Increasing	Decreasing	Decreasing
Feni	Chhagalnaiya	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Daganbhuiyan	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Feni Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Fulgazi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Parshuram	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sonagazi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Gaibandha	Gaibandha Sadar	Increasing	Increasing	Decreasing	Increasing
	Gobindaganj	Increasing	Decreasing	Decreasing	Increasing
	Palashbari	Increasing	Increasing	Decreasing	Increasing
	Fulchhari	Increasing	Increasing	Decreasing	Increasing
	Sadullapur	Increasing	Decreasing	Decreasing	Increasing
	Saghatta	Increasing	Increasing	Decreasing	Increasing
	Sundarganj	Increasing	Decreasing	Decreasing	Increasing
Gazipur	Gazipur Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Decreasing	Decreasing	Decreasing
	Kaliakair	Decreasing	Decreasing	Decreasing	Decreasing
	Kapasias	Decreasing	Decreasing	Decreasing	Decreasing
	Sreepur	Decreasing	Decreasing	Decreasing	Decreasing
Gopalganj	Gopalganj Sadar	Decreasing	Increasing	Decreasing	Decreasing
	Kashiani	Decreasing	Decreasing	Decreasing	Decreasing
	Kotali Para	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Muksudpur	Decreasing	Decreasing	Decreasing	Decreasing

	Tungi Para	Decreasing	Increasing	Decreasing	Decreasing
Habiganj	Ajmiriganj	Increasing	Decreasing	Decreasing	Decreasing
	Bahubal	Decreasing	Decreasing	Decreasing	Decreasing
	Baniachong	Decreasing	Decreasing	Decreasing	Decreasing
	Chunarughat	Decreasing	Increasing	Decreasing	Decreasing
	Habiganj Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Lakhai	Decreasing	Decreasing	Decreasing	Decreasing
	Madhabpur	Decreasing	Decreasing	Decreasing	Decreasing
	Nabiganj	Decreasing	Decreasing	Decreasing	Decreasing
Jamalpur	Bakshiganj	Increasing	Increasing	Decreasing	Decreasing
	Dewanganj	Increasing	Increasing	Decreasing	Increasing
	Islampur	Increasing	Increasing	Decreasing	Decreasing
	Jamalpur Sadar	Increasing	Increasing	Decreasing	Decreasing
	Madarganj	Increasing	Increasing	Decreasing	Decreasing
	Melandaha	Increasing	Increasing	Decreasing	Decreasing
	Sharishabari	Increasing	Increasing	Decreasing	Decreasing
Jessore	Abhaynagar	Decreasing	Increasing	Decreasing	Decreasing
	Bagher Para	Decreasing	Decreasing	Decreasing	Decreasing
	Chaugachha	Decreasing	Decreasing	Decreasing	Decreasing
	Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Jhikargachha	Decreasing	Decreasing	Decreasing	Decreasing
	Keshabpur	Decreasing	Decreasing	Decreasing	Decreasing
	Manirampur	Decreasing	Decreasing	Decreasing	Decreasing
	Sharsha	Decreasing	Decreasing	Decreasing	Decreasing
Jhalokati	Jhalokati Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Kanthalia	Decreasing	Decreasing	Decreasing	Decreasing
	Nalchity	Decreasing	Decreasing	Decreasing	Decreasing
	Rajapur	Decreasing	Decreasing	Decreasing	Decreasing
Jhenaidah	Harinakunda	Decreasing	Increasing	Decreasing	Decreasing
	Jhenaidah Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Decreasing	Decreasing	Decreasing
	Kotchandpur	Decreasing	Increasing	Decreasing	Decreasing
	Maheshpur	Decreasing	Increasing	Decreasing	Decreasing
	Shailkupa	Decreasing	Decreasing	Decreasing	Decreasing
Joypurhat	Akkelpur	Increasing	Decreasing	Decreasing	Decreasing
	Joypurhat Sadar	Increasing	Decreasing	Decreasing	Increasing
	Kalai	Increasing	Decreasing	Decreasing	Increasing
	Khetlal	Increasing	Decreasing	Decreasing	Decreasing
	Panchbibi	Increasing	Decreasing	Decreasing	Increasing
Khagrachhari	Dighinala	Decreasing	Decreasing	Decreasing	Decreasing
	Khagrachhari Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Lakshmichhari	Decreasing	Decreasing	Decreasing	Decreasing
	Mahalchhari	Decreasing	Decreasing	Decreasing	Decreasing
	Manikchhari	Decreasing	Decreasing	Decreasing	Decreasing
	Matiranga	Decreasing	Decreasing	Decreasing	Decreasing
	Panchhari	Decreasing	Decreasing	Decreasing	Decreasing
	Ramgarh	Decreasing	Decreasing	Decreasing	Decreasing
Khulna	Batiaghata	Decreasing	Increasing	Decreasing	Decreasing
	Dacope	Decreasing	Decreasing	Decreasing	Decreasing
	Dighalia	Decreasing	Increasing	Decreasing	Decreasing
	Dumuria	Decreasing	Increasing	Decreasing	Decreasing
	Koyra	Decreasing	Decreasing	Decreasing	Decreasing
	Phultala	Decreasing	Decreasing	Decreasing	Decreasing
	Paikgachha	Decreasing	Decreasing	Decreasing	Decreasing
	Rupsa	Decreasing	Increasing	Decreasing	Decreasing
	Terokhada	Decreasing	Increasing	Decreasing	Decreasing
Kishoreganj	Austagram	Decreasing	Decreasing	Decreasing	Decreasing

	Bajitpur	Decreasing	Decreasing	Decreasing	Decreasing
	Bhairab	Decreasing	Decreasing	Decreasing	Decreasing
	Hossainpur	Increasing	Increasing	Decreasing	Decreasing
	Itna	Increasing	Decreasing	Decreasing	Decreasing
	Karimganj	Decreasing	Decreasing	Decreasing	Decreasing
	Katiadi	Decreasing	Decreasing	Decreasing	Decreasing
	Kishoreganj Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Kuliar Char	Decreasing	Decreasing	Decreasing	Decreasing
	Mithamain	Decreasing	Decreasing	Decreasing	Decreasing
	Nikli	Decreasing	Decreasing	Decreasing	Decreasing
	Pakundia	No Trend	Decreasing	Decreasing	Decreasing
	Tarail	Increasing	Decreasing	Decreasing	Decreasing
Kurigram	Bhurungamari	Increasing	Decreasing	Increasing	Increasing
	Char Rajibpur	Increasing	Increasing	Decreasing	No Trend
	Chilmari	Increasing	Decreasing	Decreasing	Increasing
	Kurigram Sadar	Increasing	Decreasing	Decreasing	Increasing
	Nageshwari	Increasing	Decreasing	Decreasing	Increasing
	Phulbari	Increasing	Decreasing	Decreasing	Increasing
	Rajarhat	Increasing	Decreasing	Decreasing	Increasing
	Raumari	Increasing	Increasing	Decreasing	Increasing
	Ulipur	Increasing	Decreasing	Decreasing	Increasing
Kushtia	Bheramara	Decreasing	Decreasing	Decreasing	Decreasing
	Daulatpur	Decreasing	Decreasing	Decreasing	Decreasing
	Khoksa	Decreasing	Increasing	Decreasing	Decreasing
	Kumarkhali	Decreasing	Increasing	Decreasing	Decreasing
	Kushtia Sadar	Decreasing	Increasing	Decreasing	Decreasing
	Mirpur	Decreasing	Increasing	Decreasing	Decreasing
Lakshmipur	Kamalnagar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Lakshmipur Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Roypur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Ramganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Ramgati	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Lalmonirhat	Aditmari	Increasing	Decreasing	Increasing	Increasing
	Hatibandha	Increasing	Decreasing	Increasing	Increasing
	Kaliganj	Increasing	Decreasing	Increasing	Increasing
	Lalmonirhat Sadar	Increasing	Decreasing	Increasing	Increasing
	Patgram	Increasing	Decreasing	Increasing	Increasing
Madaripur	Kalkini	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Madaripur Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Rajoir	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Shib Char	Decreasing	Decreasing	Decreasing	Decreasing
Magura	Magura Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Mohammadpur	Decreasing	Increasing	Decreasing	Decreasing
	Shalikha	Decreasing	Decreasing	Decreasing	Decreasing
	Sreepur	Decreasing	Increasing	Decreasing	Decreasing
Manikganj	Daulatpur	Decreasing	Increasing	Decreasing	Decreasing
	Ghior	Decreasing	Increasing	Decreasing	Decreasing
	Harirampur	Decreasing	Increasing	Decreasing	Decreasing
	Manikganj Sadar	Decreasing	Increasing	Decreasing	Decreasing
	Saturia	Decreasing	Increasing	Decreasing	Decreasing
	Shibalaya	Decreasing	Increasing	Decreasing	Decreasing
	Singair	Decreasing	Increasing	Decreasing	Decreasing
Maulvibazar	Barlekha	Increasing	Increasing	Decreasing	Decreasing
	Juri	Increasing	Decreasing	Decreasing	Decreasing
	Kamalganj	Increasing	Increasing	Decreasing	Decreasing
	Kulaura	No Trend	Increasing	Decreasing	<u>Decreasing</u>
	Maulvi Bazar Sadar	Decreasing	No Trend	Decreasing	<u>Decreasing</u>

	Rajnagar	Decreasing	Increasing	Decreasing	Decreasing
	Sreemangal	Decreasing	Decreasing	Decreasing	Decreasing
Meherpur	Gangni	Decreasing	Increasing	Decreasing	Decreasing
	Meherpur Sadar	Decreasing	Increasing	Decreasing	Decreasing
	Mujib Nagar	Decreasing	Increasing	Decreasing	Decreasing
Munshiganj	Gazaria	Decreasing	Decreasing	Decreasing	Decreasing
	Lohajang	Decreasing	Decreasing	Decreasing	Decreasing
	Munshiganj Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Serajdikhan	Decreasing	Decreasing	Decreasing	Decreasing
	Sreenagar	Decreasing	Decreasing	Decreasing	Decreasing
	Tongibari	Decreasing	No Trend	Decreasing	Decreasing
Mymensingh	Bhaluka	Decreasing	Decreasing	Decreasing	Decreasing
	Dhobaura	Increasing	Increasing	Decreasing	Decreasing
	Fulbaria	Increasing	Increasing	Decreasing	Decreasing
	Gaffargaon	Increasing	Decreasing	Decreasing	Decreasing
	Gauripur	Increasing	Increasing	Decreasing	Decreasing
	Haluaghat	Increasing	Increasing	Decreasing	Decreasing
	Ishwarganj	Increasing	Increasing	Decreasing	Decreasing
	Muktagachha	Increasing	Increasing	Decreasing	Decreasing
	Mymensingh Sadar	Increasing	Increasing	Decreasing	Decreasing
	Nandail	Increasing	Increasing	Decreasing	Decreasing
	Phulpur	Increasing	Increasing	Decreasing	Decreasing
	Tarakanda	Increasing	Increasing	Decreasing	Decreasing
	Trishal	Increasing	Increasing	Decreasing	Decreasing
Naogaon	Atrai	No Trend	Decreasing	Decreasing	Decreasing
	Badalgachhi	Increasing	Increasing	Decreasing	Increasing
	Dhamoirhat	Increasing	Increasing	Decreasing	Increasing
	Manda	Increasing	Decreasing	Decreasing	Increasing
	Mahadebpur	Increasing	Increasing	Decreasing	Increasing
	Naogaon Sadar	Increasing	Decreasing	Decreasing	No Trend
	Niamatpur	Increasing	Decreasing	Decreasing	Increasing
	Patnitala	Increasing	Increasing	Decreasing	Increasing
	Porsha	Increasing	Increasing	Decreasing	Increasing
	Raninagar	Increasing	Decreasing	Decreasing	Decreasing
	Sapahar	Increasing	Increasing	Decreasing	Increasing
Narail	Kalia	Decreasing	Increasing	Decreasing	Decreasing
	Lohagara	Decreasing	Decreasing	Decreasing	Decreasing
	Narail Sadar	Decreasing	Decreasing	Decreasing	Decreasing
Narayanganj	Araihazar	Decreasing	Decreasing	Decreasing	Decreasing
	Bandar	Decreasing	Decreasing	Decreasing	Decreasing
	Narayanganj Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Rupganj	Decreasing	Decreasing	Decreasing	Decreasing
	Sonargaon	Decreasing	Decreasing	Decreasing	Decreasing
Narsingdi	Belabo	Decreasing	Decreasing	Decreasing	Decreasing
	Manohardi	Decreasing	Decreasing	Decreasing	Decreasing
	Narsingdi Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Palash	Decreasing	Decreasing	Decreasing	Decreasing
	Roytura	Decreasing	Decreasing	Decreasing	Decreasing
	Shibpur	Decreasing	Decreasing	Decreasing	Decreasing
Natore	Bagati Para	Decreasing	Decreasing	Decreasing	Increasing
	Baraigram	Decreasing	Increasing	Decreasing	Decreasing
	Gurudaspur	Decreasing	Increasing	Decreasing	Decreasing
	Lalpur	Decreasing	Decreasing	Decreasing	Decreasing
	Naldanga	Decreasing	Decreasing	Decreasing	Decreasing
	Natore Sadar	Decreasing	Decreasing	Decreasing	Increasing
	Singra	Decreasing	Decreasing	Decreasing	Decreasing

Netrakona	Atpara	Increasing	Decreasing	Decreasing	Decreasing
	Barhatta	Increasing	Decreasing	Decreasing	Decreasing
	Durgapur	Increasing	Increasing	Decreasing	Decreasing
	Kalmakanda	Increasing	Increasing	Decreasing	Decreasing
	Kendua	Increasing	Decreasing	Decreasing	Decreasing
	Khaliajuri	Increasing	Decreasing	Decreasing	Decreasing
	Madan	Increasing	Decreasing	Decreasing	Decreasing
	Mohanganj	Increasing	Decreasing	Decreasing	Decreasing
	Netrokona Sadar	Increasing	Increasing	Decreasing	Decreasing
	Purbadhala	Increasing	Increasing	Decreasing	Decreasing
Nilphamari	Dimla	Increasing	Decreasing	Increasing	Increasing
	Domar	Increasing	Decreasing	Increasing	Increasing
	Jaldhaka	Increasing	Decreasing	Increasing	Increasing
	Kishoreganj	Increasing	Decreasing	Increasing	Increasing
	Nilphamari Sadar	Increasing	Decreasing	No Trend	Increasing
	Saidpur	Increasing	Decreasing	Increasing	Increasing
Noakhali	Begumganj	Decreasing	Decreasing	Decreasing	Decreasing
	Chatkhil	Decreasing	Decreasing	Decreasing	Decreasing
	Companiganj	Decreasing	Decreasing	Decreasing	Decreasing
	Hatiya	Decreasing	Decreasing	Decreasing	Decreasing
	Kabirhat	Decreasing	Decreasing	Decreasing	Decreasing
	Noakhali Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Senbagh	Decreasing	Decreasing	Decreasing	Decreasing
	Sonaimuri	Decreasing	Decreasing	Decreasing	Decreasing
	Subarnachar	Decreasing	Decreasing	Decreasing	Decreasing
Pabna	Atgharia	Decreasing	Increasing	Decreasing	Decreasing
	Bera	Decreasing	Increasing	Decreasing	Decreasing
	Bhangura	Decreasing	Increasing	Decreasing	Decreasing
	Chatmohar	Decreasing	Increasing	Decreasing	Decreasing
	Faridpur	Decreasing	Increasing	Decreasing	Decreasing
	Ishwardi	Decreasing	Increasing	Decreasing	Decreasing
	Pabna Sadar	Decreasing	Increasing	Decreasing	Decreasing
	Santhia	Decreasing	Increasing	Decreasing	Decreasing
	Sujanagar	Decreasing	Increasing	Decreasing	Decreasing
Panchagarh	Atwari	Increasing	Decreasing	Increasing	Increasing
	Boda	Increasing	Decreasing	Increasing	Increasing
	Debiganj	Increasing	Decreasing	Increasing	Increasing
	Panchagarh Sadar	Increasing	Decreasing	Increasing	Increasing
	Tentulia	Increasing	Decreasing	Increasing	Increasing
Patuakhali	Bauphal	Decreasing	Decreasing	Decreasing	Decreasing
	Dashmina	Decreasing	Decreasing	Decreasing	Decreasing
	Dumki	Decreasing	Decreasing	Decreasing	Decreasing
	Galachipa	Decreasing	Decreasing	Decreasing	Decreasing
	Kala Para	Decreasing	Decreasing	Decreasing	Decreasing
	Mirzaganj	Decreasing	Decreasing	Decreasing	Decreasing
	Patuakhali Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Rangabali	Decreasing	Decreasing	Decreasing	Decreasing
Pirojpur	Bhandaria	Decreasing	Decreasing	Decreasing	Decreasing
	Zianagar	Decreasing	Decreasing	Decreasing	Decreasing
	Kawkhali	Decreasing	Decreasing	Decreasing	Decreasing
	Mathbaria	Decreasing	Decreasing	Decreasing	Decreasing
	Nazirpur	Decreasing	Increasing	Decreasing	Decreasing
	Nesarabad	Decreasing	Decreasing	Decreasing	Decreasing
	Pirojpur Sadar	Decreasing	Decreasing	Decreasing	Decreasing
Rajbari	Balia Kandi	Decreasing	Increasing	Decreasing	Decreasing
	Goalandaghat	Decreasing	Increasing	Decreasing	Decreasing

	Kalukhali	Decreasing	Increasing	Decreasing	Decreasing
	Pangsha	Decreasing	Increasing	Decreasing	Decreasing
	Rajbari Sadar	Decreasing	Increasing	Decreasing	Decreasing
Rajshahi	Bagha	Decreasing	Decreasing	Decreasing	Increasing
	Baghmara	No Trend	Decreasing	Decreasing	Increasing
	Charghat	Decreasing	Decreasing	Decreasing	Increasing
	Durgapur	No Trend	Decreasing	Decreasing	Increasing
	Godagari	Decreasing	Decreasing	Decreasing	Increasing
	Mohanpur	Increasing	Decreasing	Decreasing	Increasing
	Paba	Decreasing	Decreasing	Decreasing	Increasing
	Puthia	Decreasing	Decreasing	Decreasing	Increasing
	Tanore	No Trend	Decreasing	Decreasing	Increasing
Rangamati	Baghai Chhari	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Barkal	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Belai Chhari	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Jurai Chhari	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Kaptai	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kawkhali (Betbunia)	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Langadu	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Naniarchar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Rajasthali	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Rangamati Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Rangpur	Badarganj	Increasing	Decreasing	Decreasing	Increasing
	Gangachara	Increasing	Decreasing	Increasing	Increasing
	Kaunia	Increasing	Decreasing	Increasing	Increasing
	Mitha Pukur	Increasing	Decreasing	Decreasing	Increasing
	Pirgachha	Increasing	Decreasing	Decreasing	Increasing
	Pirganj	Increasing	Decreasing	Decreasing	Increasing
	Rangpur Sadar	Increasing	Decreasing	Decreasing	Increasing
	Taraganj	Increasing	Decreasing	Increasing	Increasing
Satkhira	Assasuni	Decreasing	Decreasing	Decreasing	Decreasing
	Debhata	Decreasing	Decreasing	Decreasing	Decreasing
	Kalaroa	Decreasing	Decreasing	Decreasing	Decreasing
	Kaliganj	Decreasing	Decreasing	Decreasing	Decreasing
	Satkhira Sadar	Decreasing	Decreasing	Decreasing	Decreasing
	Shyamnagar	Decreasing	Decreasing	Decreasing	Decreasing
	Tala	Decreasing	Decreasing	Decreasing	Decreasing
Shariatpur	Bhedarganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Damudya	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Gosairhat	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Naria	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Shariatpur Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Zanjira	Decreasing	Decreasing	Decreasing	Decreasing
Sherpur	Jhenaigati	Increasing	Increasing	Decreasing	Decreasing
	Nakla	Increasing	Increasing	Decreasing	Decreasing
	Nalitabari	Increasing	Increasing	Decreasing	Decreasing
	Sherpur Sadar	Increasing	Increasing	Decreasing	Decreasing
	Sreebardi	Increasing	Increasing	Decreasing	Decreasing
Sirajganj	Belkuchi	Decreasing	Increasing	Decreasing	Decreasing
	Chauhali	Decreasing	Increasing	Decreasing	Decreasing
	Kamarkhanda	Decreasing	Increasing	Decreasing	Decreasing
	Kazipur	Increasing	Increasing	Decreasing	Decreasing
	Royganj	Increasing	Increasing	Decreasing	Decreasing
	Shahjadpur	Decreasing	Increasing	Decreasing	Decreasing
	Sirajganj Sadar	Increasing	Increasing	Decreasing	Decreasing
	Tarash	Decreasing	Increasing	Decreasing	Decreasing

	Ullah Para	Decreasing	Increasing	Decreasing	Decreasing
Sunamganj	Bishwambarpur	Increasing	Decreasing	Decreasing	Decreasing
	Chhatak	Increasing	Decreasing	Decreasing	Decreasing
	Derai	Increasing	Decreasing	Decreasing	Decreasing
	Dharampasha	Increasing	Decreasing	Decreasing	Decreasing
	Dowarabazar	Increasing	Increasing	Decreasing	Decreasing
	Jagannathpur	Increasing	Decreasing	Decreasing	Decreasing
	Jamalganj	Increasing	Decreasing	Decreasing	Decreasing
	Dakshin Sunamganj	Increasing	Decreasing	Decreasing	Decreasing
	Sulla	Increasing	Decreasing	Decreasing	Decreasing
	Sunamganj Sadar	Increasing	Decreasing	Decreasing	Decreasing
	Tahirpur	Increasing	Decreasing	Decreasing	Decreasing
Sylhet	Balaganj	Decreasing	Increasing	Decreasing	Decreasing
	Beani Bazar	Increasing	Decreasing	Increasing	Decreasing
	Bishwanath	Increasing	Decreasing	Decreasing	Decreasing
	Companiganj	Increasing	Increasing	Increasing	Decreasing
	Dakshin Surma	Decreasing	Decreasing	No Trend	Decreasing
	Fenchuganj	Decreasing	Increasing	Decreasing	Decreasing
	Jaintiapur	Increasing	Increasing	Increasing	Decreasing
	Golabganj	Increasing	Decreasing	Decreasing	Decreasing
	Gowainghat	Increasing	Increasing	Increasing	Decreasing
	Kanaighat	Increasing	Decreasing	Increasing	Decreasing
	Sylhet Sadar	Increasing	Increasing	No Trend	Decreasing
	Zakiganj	Increasing	Increasing	Increasing	Decreasing
Tangail	Basail	Decreasing	Increasing	Decreasing	Decreasing
	Bhuapur	Increasing	Increasing	Decreasing	Decreasing
	Delduar	Decreasing	Increasing	Decreasing	Decreasing
	Dhanbari	Increasing	Increasing	Decreasing	Decreasing
	Ghatail	Increasing	Increasing	Decreasing	Decreasing
	Gopalpur	Increasing	Increasing	Decreasing	Decreasing
	Kalihati	Decreasing	Increasing	Decreasing	Decreasing
	Mirzapur	Decreasing	Increasing	Decreasing	Decreasing
	Madhupur	Increasing	Increasing	Decreasing	Decreasing
	Nagarpur	Decreasing	Increasing	Decreasing	Decreasing
	Sakhipur	Decreasing	Decreasing	Decreasing	Decreasing
	Tangail Sadar	Decreasing	Increasing	Decreasing	Decreasing
Thakurgaon	Baliadangi	Increasing	Decreasing	Increasing	Increasing
	Haripur	Increasing	Increasing	Increasing	Increasing
	Pirganj	Increasing	Increasing	Increasing	Increasing
	Ranisankail	Increasing	Increasing	Increasing	Increasing
	Thakurgaon Sadar	Increasing	Decreasing	Increasing	Increasing

1.25 Upazila level NCEP/NCAR gridded mean monthly and annual soil moisture (0-10 cm depth) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upz. Name	Jan. trend	Feb. trend	Mar. trend	Apr. trend	May. trend	Jun. trend	Jul. trend	Aug. trend	Sep. trend	Oct. trend	Nov. trend	Dec trend	Ann.trend
Bagerhat	Bagerhat Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend
	Chitalmari	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
	Fakirhat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing
	Kachua	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing
	Mongla	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend
	Mollahat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	No Trend
Bandarban	Morrelganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Increasing
	Rampal	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing
	Sarankhola	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	No Trend
	Alikadam	Decreasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Bandarban Sad	Decreasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Lama	Decreasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
Barguna	Naikhongchhari	Decreasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Rowangchhari	Decreasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Ruma	Decreasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Thanchi	Decreasing	Decreasing	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Increasing
	Amtali	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Bamna	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
Barisal	Barguna Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Betagi	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Patharghata	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Taltoli	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Agailjhara	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Babuganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
Bhola	Bakerganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Banari Para	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Barisal Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Gaurnadi	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Hizla	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Mehendiganj	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
Bhola	Muladi	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
	Wazirpur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing
Bhola	Bhola Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Increasing

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

	Golabganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing
	Gowainghat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing
	Kanaighat	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing
	Sylhet Sadar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Decreasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing
	Zakiganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Increasing	Increasing	Increasing	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	<u>Increasing</u>	Increasing	<u>Decreasing</u>	Decreasing
Tangail	Basail	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	No Trend	<u>Decreasing</u>	Decreasing
	Bhuapur	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing
	Delduar	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing
	Dhanbari	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	Increasing	No Trend	Decreasing	Increasing	<u>Decreasing</u>	<u>Decreasing</u>
	Ghatail	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	No Trend	<u>Decreasing</u>	Decreasing
	Gopalpur	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	No Trend	<u>Decreasing</u>	Decreasing
	Kalihati	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	No Trend	Decreasing	<u>Decreasing</u>	Decreasing
	Mirzapur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing	Increasing	No Trend	Decreasing	Increasing	Decreasing	<u>Decreasing</u>	Decreasing
	Madhupur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	Increasing	No Trend	No Trend	Increasing	<u>Decreasing</u>	Decreasing
	Nagarpur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Increasing</u>	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>	Decreasing
	Sakhipur	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	<u>Decreasing</u>	Decreasing
Thakurgaon	Tangail Sadar	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	No Trend	<u>Decreasing</u>	Decreasing
	Baliadangi	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Haripur	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Pirganj	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Ranisankail	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>
	Thakurgaon Sada	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	Increasing	Increasing	Decreasing	Decreasing	<u>Decreasing</u>	<u>Decreasing</u>

1.26 Upazila level NCEP/NCAR gridded seasonal soil moisture (0-10 cm depth) with significant increasing and decreasing trends for 1971-2015. Increasing and decreasing trends significant at 95% level of significance are shown in bold with underlined.

Dist. Name	Upazila Name	Pre-monsoon	Monsoon	Post-monsoon	Winter
Bagerhat	Bagerhat Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Chitalmari	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Fakirhat	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kachua	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Mongla	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Mollahat	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Morrelganj	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Rampal	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Sarankhola	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Bandarban	Alikadam	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Bandarban Sadar	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Lama	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Naikhongchhari	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Rowangchhari	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Ruma	Increasing	Increasing	Decreasing	Decreasing
	Thanchi	Increasing	Increasing	Decreasing	Decreasing
Barguna	Amtali	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Bamna	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Barguna Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Betagi	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Patharghata	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Taltoli	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Barisal	Agailjhara	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Babuganj	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Bakerganj	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Banari Para	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Barisal Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Gaurnadi	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Hizla	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Mehendiganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Muladi	Increasing	Increasing	No Trend	<u>Decreasing</u>
	Wazirpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Bhola Sadar	Increasing	Increasing	No Trend	<u>Decreasing</u>
	Burhanuddin	Increasing	Increasing	Increasing	<u>Decreasing</u>
Bhola	Char Fasson	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Daulatkhan	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Lalmohan	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Manpura	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Tazumuddin	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Adamdighi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Bogra Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Dhunat	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Bogra	Dhupchanchia	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Gabtali	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kahaloo	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Nandigram	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sariakandi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Shajahanpur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sherpur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Shibganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sonatola	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>

Brahamanbaria	Akhaura	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Ashuganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Banchhampur	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Bijoynagar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Brahmanbaria Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Kasba	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Nabinagar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Nasirnagar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Sarail	Increasing	Increasing	Increasing	<u>Decreasing</u>
Ch. Nawabganj	Bholahat	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Chapai Nawabganj Sad	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Gomastapur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Nachole	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Shibganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Chandpur	Chandpur Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Faridganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Haim Char	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Hajiganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Kachua	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Matlab Dakshin	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Matlab Uttar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Shahrasti	Increasing	Increasing	Increasing	<u>Decreasing</u>
Chittagong	Anowara	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Banshkhali	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Boalkhali	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Chandanaish	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Fatikchhari	Increasing	<u>Increasing</u>	No Trend	<u>Decreasing</u>
	Hathazari	Increasing	<u>Increasing</u>	Decreasing	<u>Decreasing</u>
	Lohagara	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Mirsharai	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Patiya	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Rangunia	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Raozan	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Sandwip	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Satkania	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Sitakunda	Increasing	<u>Increasing</u>	Decreasing	<u>Decreasing</u>
Chuadanga	Alamdanga	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Chuadanga Sadar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Damurhuda	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Jiban Nagar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
Comilla	Barura	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Brahman Para	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Burichang	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Chandina	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Chauddagram	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Comilla Adarsha Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Daudkandi	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Debidwar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Homna	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Laksam	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Meghna	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Manoharganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Muradnagar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Nangalkot	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Comilla Sadar Dakshin	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Titas	Increasing	Increasing	Increasing	<u>Decreasing</u>

Cox'S Bazar	Chakaria	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Cox'S Bazar Sadar	Increasing	Increasing	Decreasing	Decreasing
	Kutubdia	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Maheshkhali	Increasing	Increasing	Decreasing	Decreasing
	Pekua	Increasing	Increasing	Decreasing	Decreasing
	Ramu	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Teknaf	Increasing	Increasing	Decreasing	Decreasing
	Ukhia	Increasing	Increasing	Decreasing	Decreasing
Dhaka	Dhamrai	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Dohar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Keraniganj	Increasing	Increasing	No Trend	<u>Decreasing</u>
	Nawabganj	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Savar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Dinajpur	Birampur	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Birganj	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Biral	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Bochaganj	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Chirirbandar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Dinajpur Sadar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Fulbari	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Ghoraghat	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Hakimpur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kaharole	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Khansama	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Nawabganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Parbatipur	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
Faridpur	Alfadanga	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Bhanga	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Boalmari	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Char Bhadrasan	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Faridpur Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Madhukhali	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Nagarkanda	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Sadarpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Saltha	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Feni	Chhagalnaiya	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Daganbhuiyan	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Feni Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Fulgazi	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Parshuram	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Sonagazi	Increasing	Increasing	Increasing	<u>Decreasing</u>
Gaibandha	Gaibandha Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Gobindaganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Palashbari	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Fulchhari	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sadullapur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Saghatta	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sundarganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Gazipur	Gazipur Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Kaliganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Kaliakair	Increasing	Increasing	No Trend	<u>Decreasing</u>
	Kapasias	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Sreepur	Increasing	Increasing	Increasing	<u>Decreasing</u>
Gopalganj	Gopalganj Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kashiani	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kotali Para	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Muksudpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>

	Tungi Para	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Habiganj	Ajmiriganj	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Bahubal	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Baniachong	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Chunarughat	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Habiganj Sadar	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Lakhai	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Madhabpur	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Nabiganj	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Jamalpur	Bakshiganj	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Dewanganj	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Islampur	Decreasing	No Trend	Decreasing	<u>Decreasing</u>
	Jamalpur Sadar	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Madarganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Melandaha	Decreasing	No Trend	Decreasing	<u>Decreasing</u>
	Sharishabari	Decreasing	Increasing	Increasing	<u>Decreasing</u>
Jessore	Abhaynagar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Bagher Para	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Chaugachha	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sadar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Jhikargachha	Increasing	No Trend	Decreasing	<u>Decreasing</u>
	Keshabpur	Increasing	No Trend	Decreasing	<u>Decreasing</u>
	Manirampur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sharsha	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
Jhalokati	Jhalokati Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kanthalia	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Nalchity	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Rajapur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Jhenaidah	Harinakunda	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Jhenaidah Sadar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kaliganj	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kotchandpur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Maheshpur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Shailkupa	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
Joypurhat	Akkelpur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Joypurhat Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kalai	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Khetlal	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Panchbibi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Khagrachhari	Dighinala	Increasing	Increasing	Increasing	Decreasing
	Khagrachhari Sadar	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Lakshmichhari	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Mahalchhari	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Manikchhari	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Matiranga	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Panchhari	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Ramgarh	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Khulna	Batiaghata	Increasing	No Trend	Decreasing	<u>Decreasing</u>
	Dacope	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Dighalia	Increasing	No Trend	Decreasing	<u>Decreasing</u>
	Dumuria	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Koyra	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Phultala	Increasing	No Trend	Decreasing	<u>Decreasing</u>
	Paikgachha	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Rupsa	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Terokhada	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Kishoreganj	Austagram	Increasing	Increasing	Increasing	<u>Decreasing</u>

	Bajitpur	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Bhairab	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Hossainpur	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Itna	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Karimganj	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Katiadi	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Kishoreganj Sadar	No Trend	Increasing	Increasing	<u>Decreasing</u>
	Kuliar Char	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Mithamain	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Nikli	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Pakundia	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Tarail	Decreasing	Increasing	Increasing	<u>Decreasing</u>
Kurigram	Bhurungamari	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Char Rajibpur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Chilmari	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Kurigram Sadar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Nageshwari	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Phulbari	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Rajarhat	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Raumari	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Ulipur	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
Kushtia	Bheramara	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Daulatpur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Khoksa	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kumarkhali	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kushtia Sadar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Mirpur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
Lakshmipur	Kamalnagar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Lakshmipur Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Roypur	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Ramganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Ramgati	Increasing	Increasing	Increasing	<u>Decreasing</u>
Lalmonirhat	Aditmari	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Hatibandha	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Kaliganj	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Lalmonirhat Sadar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Patgram	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
Madaripur	Kalkini	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Madaripur Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Rajoir	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Shib Char	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Magura	Magura Sadar	Increasing	No Trend	Decreasing	<u>Decreasing</u>
	Mohammadpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Shalikha	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sreepur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Manikganj	Daulatpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Ghior	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Harirampur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Manikganj Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Saturia	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Shibalaya	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Singair	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Maulvibazar	Barlekha	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Juri	No Trend	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Kamalganj	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Kulaura	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Maulvi Bazar Sadar	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>

	Rajnagar	No Trend	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Sreemangal	Increasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Meherpur	Gangni	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Meherpur Sadar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Mujib Nagar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
Munshiganj	Gazaria	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Lohajang	Increasing	Increasing	No Trend	<u>Decreasing</u>
	Munshiganj Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Serajdikhan	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Sreenagar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Tongibari	Increasing	Increasing	Increasing	<u>Decreasing</u>
Mymensingh	Bhaluka	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Dhobaura	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Fulbaria	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Gaffargaon	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Gauripur	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Haluaghat	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Ishwarganj	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Muktagachha	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Mymensingh Sadar	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Nandail	No Trend	Increasing	Increasing	<u>Decreasing</u>
	Phulpur	Decreasing	Increasing	No Trend	<u>Decreasing</u>
	Tarakanda	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Trishal	No Trend	Increasing	Increasing	<u>Decreasing</u>
Naogaon	Atrai	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Badalgachhi	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Dhamoirhat	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Manda	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Mahadebpur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Naogaon Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Niamatpur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Patnitala	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Porsha	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Raninagar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sapahar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Narail	Kalia	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Lohagara	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Narail Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Narayanganj	Araihazar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Bandar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Narayanganj Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Rupganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Sonargaon	Increasing	Increasing	Increasing	<u>Decreasing</u>
Narsingdi	Belabo	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Manohardi	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Narsingdi Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Palash	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Roytura	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Shibpur	Increasing	Increasing	Increasing	<u>Decreasing</u>
Natore	Bagati Para	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Baraigram	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Gurudaspur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Lalpur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Naldanga	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Natore Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Singra	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>

Netrakona	Atpara	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Barhatta	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Durgapur	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Kalmakanda	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Kendua	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Khaliajuri	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Madan	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Mohanganj	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Netrokona Sadar	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Purbadhala	Decreasing	Increasing	Increasing	<u>Decreasing</u>
Nilphamari	Dimla	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Domar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Jaldhaka	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Kishoreganj	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Nilphamari Sadar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Saidpur	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
Noakhali	Begumganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Chatkhil	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Companiganj	Increasing	Increasing	No Trend	<u>Decreasing</u>
	Hatiya	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kabirhat	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Noakhali Sadar	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Senbagh	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Sonaimuri	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Subarnachar	Increasing	Increasing	No Trend	<u>Decreasing</u>
Pabna	Atgharia	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Bera	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Bhangura	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Chatmohar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Faridpur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Ishwardi	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Pabna Sadar	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Santhia	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Sujanagar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Panchagarh	Atwari	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
	Boda	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Debiganj	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Panchagarh Sadar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Tentulia	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
Patuakhali	Bauphal	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Dashmina	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Dumki	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Galachipa	Increasing	Increasing	No Trend	<u>Decreasing</u>
	Kala Para	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Mirzaganj	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Patuakhali Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Rangabali	Increasing	Increasing	No Trend	<u>Decreasing</u>
Pirojpur	Bhandaria	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Zianagar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kawkhali	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Mathbaria	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Nazirpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Nesarabad	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Pirojpur Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Rajbari	Balia Kandi	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Goalandaghat	Increasing	Increasing	Decreasing	<u>Decreasing</u>

	Kalukhali	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Pangsha	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Rajbari Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Rajshahi	Bagha	No Trend	Decreasing	Decreasing	<u>Decreasing</u>
	Baghmara	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Charghat	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Durgapur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Godagari	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Mohanpur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Paba	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Puthia	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Tanore	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
Rangamati	Baghai Chhari	Increasing	Increasing	Increasing	Decreasing
	Barkal	Increasing	Increasing	Increasing	Decreasing
	Belai Chhari	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Jurai Chhari	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Kaptai	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Kawkhali (Betbunia)	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Langadu	Increasing	<u>Increasing</u>	Increasing	Decreasing
	Naniarchar	Increasing	<u>Increasing</u>	No Trend	Decreasing
	Rajasthali	Increasing	<u>Increasing</u>	Decreasing	Decreasing
	Rangamati Sadar	Increasing	<u>Increasing</u>	Decreasing	Decreasing
Rangpur	Badarganj	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Gangachara	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Kaunia	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Mitha Pukur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Pirgachha	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Pirganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Rangpur Sadar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Taraganj	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
Satkhira	Assasuni	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Debhata	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kalaroa	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kaliganj	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Satkhira Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Shyamnagar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Tala	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Shariatpur	Bhedarganj	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Damudya	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Gosairhat	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Naria	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Shariatpur Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Zanjira	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Sherpur	Jhenaigati	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Nakla	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Nalitabari	Decreasing	Increasing	No Trend	<u>Decreasing</u>
	Sherpur Sadar	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
	Sreebardi	Decreasing	Increasing	Decreasing	<u>Decreasing</u>
Sirajganj	Belkuchi	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Chauhali	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Kamarkhanda	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Kazipur	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Royganj	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Shahjadpur	Increasing	No Trend	Decreasing	<u>Decreasing</u>
	Sirajganj Sadar	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>
	Tarash	Decreasing	Decreasing	Decreasing	<u>Decreasing</u>

	Ullah Para	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
Sunamganj	Bishwambarpur	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Chhatak	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Derai	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Dharampasha	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Dowarabazar	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Jagannathpur	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Jamalganj	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Dakshin Sunamganj	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Sulla	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Sunamganj Sadar	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Tahirpur	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Sylhet	Balaganj	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Beani Bazar	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Bishwanath	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Companiganj	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Dakshin Surma	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Fenchuganj	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Jaintiapur	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Golabganj	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Gowainghat	Decreasing	<u>Increasing</u>	<u>Increasing</u>	<u>Decreasing</u>
	Kanaighat	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Sylhet Sadar	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
	Zakiganj	Decreasing	<u>Increasing</u>	Increasing	<u>Decreasing</u>
Tangail	Basail	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Bhuapur	Increasing	Decreasing	Decreasing	<u>Decreasing</u>
	Delduar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Dhanbari	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Ghatail	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Gopalpur	Increasing	No Trend	Decreasing	<u>Decreasing</u>
	Kalihati	Increasing	Increasing	No Trend	<u>Decreasing</u>
	Mirzapur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Madhupur	Decreasing	Increasing	Increasing	<u>Decreasing</u>
	Nagarpur	Increasing	Increasing	Decreasing	<u>Decreasing</u>
	Sakhipur	Increasing	Increasing	Increasing	<u>Decreasing</u>
	Tangail Sadar	Increasing	Increasing	Decreasing	<u>Decreasing</u>
Thakurgaon	Baliadangi	<u>Decreasing</u>	<u>Decreasing</u>	Decreasing	<u>Decreasing</u>
	Haripur	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Pirganj	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Ranisankail	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>
	Thakurgaon Sadar	<u>Decreasing</u>	Decreasing	Decreasing	<u>Decreasing</u>

