Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department

Dated: 09 November, 2023

Subject: Current Weather Status and Extended range Forecast for next two weeks (09 to 22 November, 2023)

➢ Significant Features for week ending on 08 November, 2023

- A trough of low in easterlies influenced south Peninsular India on 3rd & 4th November. Thereafter, a cyclonic circulation developed over Tamil Nadu on 4th, persisted over same area on 5th and moved west-northwestwards subsequently till 7th. Under its influence, a Low Pressure Area formed over Eastcentral Arabian Sea on 08th November. Due to these systems, light/moderate scattered to fairly widespread rainfall with isolated heavy to very heavy falls occurred over south Peninsular India during most days of the week.
- Under the influence of Western Disturbance, light isolated rainfall/snowfall occurred over Western Himalayan Region during 1st half of the week.
- **Analysis of Weekly overall Rainfall distribution during the current week (02.11.2023 to 08.11.2023) and Post Monsoon Season's Rainfall (01.10.2023 to 08.11.2023):** The country as a whole, the weekly cumulative All India Rainfall till week ending on 08.11.2023 was 02**%** above its long period average (LPA) and all India Post Monsoon Season **(01.10.2023 to 08.11.2023)** cumulative rainfall during this year is 30**%** below LPA**.** Details of the rainfall distribution over the four broad geographical regions of India are given in **Table 1** and Meteorological sub-division-wise rainfall both for week and season are given in **Annexure I and II** respectively.

Table 1: Rainfall status (Weekly and seasonal)

Region	WEEK			SEASON		
	02.11.2023 to 08.11.2023			01.10.2023 to 08.11.2023		
	Actual	Normal	% Departure	Actual	Normal	% Departure
East & Northeast India	2.5	7.4	-66	136.7	131.5	4
Northwest India	0.2	3.5	-95	31.3	25.2	24
Central India	2.2	3.5	-36	25.1	61.1	-59
South Peninsula	42	30	40	105.7	187.3	-44
Country as a Whole	9.5	9.3	2	60.7	86.1	-30

➢ Large scale features

- ➢ Currently, Moderate El Niño conditions are prevailing over equatorial Pacific and the sea surface temperatures (SSTs) are above average over most of the equatorial Pacific Ocean. The latest Monsoon Mission Climate Forecasting System (MMCFS) forecast indicates moderate to strong El Niño conditions are likely to continue during the upcoming season.
- ➢ At present, positive Indian Ocean Dipole (IOD) conditions are observed over the Indian Ocean and the latest MMCFS forecast indicates positive IOD conditions are likely to continue until the end of this year.
- ➢ The Madden Julian Oscillation (MJO) Index is currently in Phase 6 with amplitude less than 1. It is very likely to move in Phase 8 with high amplitude (more than 1) across Phase 7 towards end of the week.

➢ Forecast for next two week

Weather systems & associated Precipitation during Week 1 (09 to 15 November, 2023)

- ❖ A Low Pressure area lies over Eastcentral Arabian Sea.
- ❖ Strong Easterly/Northeasterly winds from Bay of Bengal are prevailing over Southeast peninsular India and a **cyclonic circulation** lies over Comorin area in lower tropospheric levels.
- ❖ Under the influence of above systems;
  - ✓ Light/moderate scattered to fairly widespread rainfall very likely over south Peninsular India and light/moderate isolated to scattered rainfall over Konkan & Goa and Madhya Maharashtra during next 2 days and decrease thereafter.
  - ✓ Isolated **heavy rainfall** very likely over Lakshadweep on 09th November and over Kerala and Tamil Nadu, Puducherry & Karaikal on 09th & 10th November.
  - ✓ Isolated **very heavy rainfall** also likely over Tamil Nadu on 09th November.
- ❖ The Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 65°E to the north of Lat. 28°N.Underits influence:
  - ✓ Light to moderate isolated rainfall/snowfall very likely over Uttarakhand on 09th & 10th November; scattered to fairly widespread rainfall/snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 09th & 10thNovember. Isolated light rainfall over Punjab, Haryana, Chandigarh on 09th& 10th November; over West Rajasthan on 09th November and over Delhi on 10th November.
- ❖ Light/moderate scattered to fairly widespread rainfall very likely over Andaman & Nicobar Islands during the week.
- ❖ **No significant weather likely over rest parts of the country.**

Rainfall for week 2 (16 to 22 November, 2023):

- ✓ Under the influence of easterly wave, scattered to fairly widespread rainfall with isolated heavy falls is very likely over south Peninsular India during many days of the week.
- ✓ No active Western Disturbance likely to affect northwest India during the week.
- ✓ Overall, rainfall activity is likely to be **above normal** over Andaman & Nicobar Islands, Tamilnadu, Kerala and Lakshadweep during the week and no rain or below normal rainfall likely over rest parts of the country **(Annexure III)**.

Minimum temperature forecast for Week 1 (09 to 15 November, 2023) and Week 2 (16 to 22 November, 2023)

Minimum temperature forecast for Week 1 (09 to 15 November, 2023):

- ✓ **Minimum Temperature Departures (as on 09-11-2023):** Minimum temperatures are above normal (2°C to 4°C) over many parts of plains of northwest India & adjoining central India. They are below normal (2°C to 3°C) at many parts of east India and near normal over rest parts of the country.
- ✓ **Gradual fall by 2-4°C in minimum temperatures are very likely over many parts of Northwest India after 48 hours for subsequent 3-4 days of the week.**

Minimum temperature forecast for Week 2 (16 to 22 November, 2023):

- ✓ **Minimum Temperature Departures** are likely to be below normal by 1°C to 3°C over most parts of the country except parts of Western Himalayan Region, northeast India & south Peninsular India, where these are likely to above normal by 1°C to 3°C or near normal **(Annexure IV)**.

Legends:

Heavy Rain: 64.5 to 115.5 mm **Very Heavy Rain:** 115.6 to 204.4 mm, **Extremely Heavy Rain**> 204.4 mm

SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

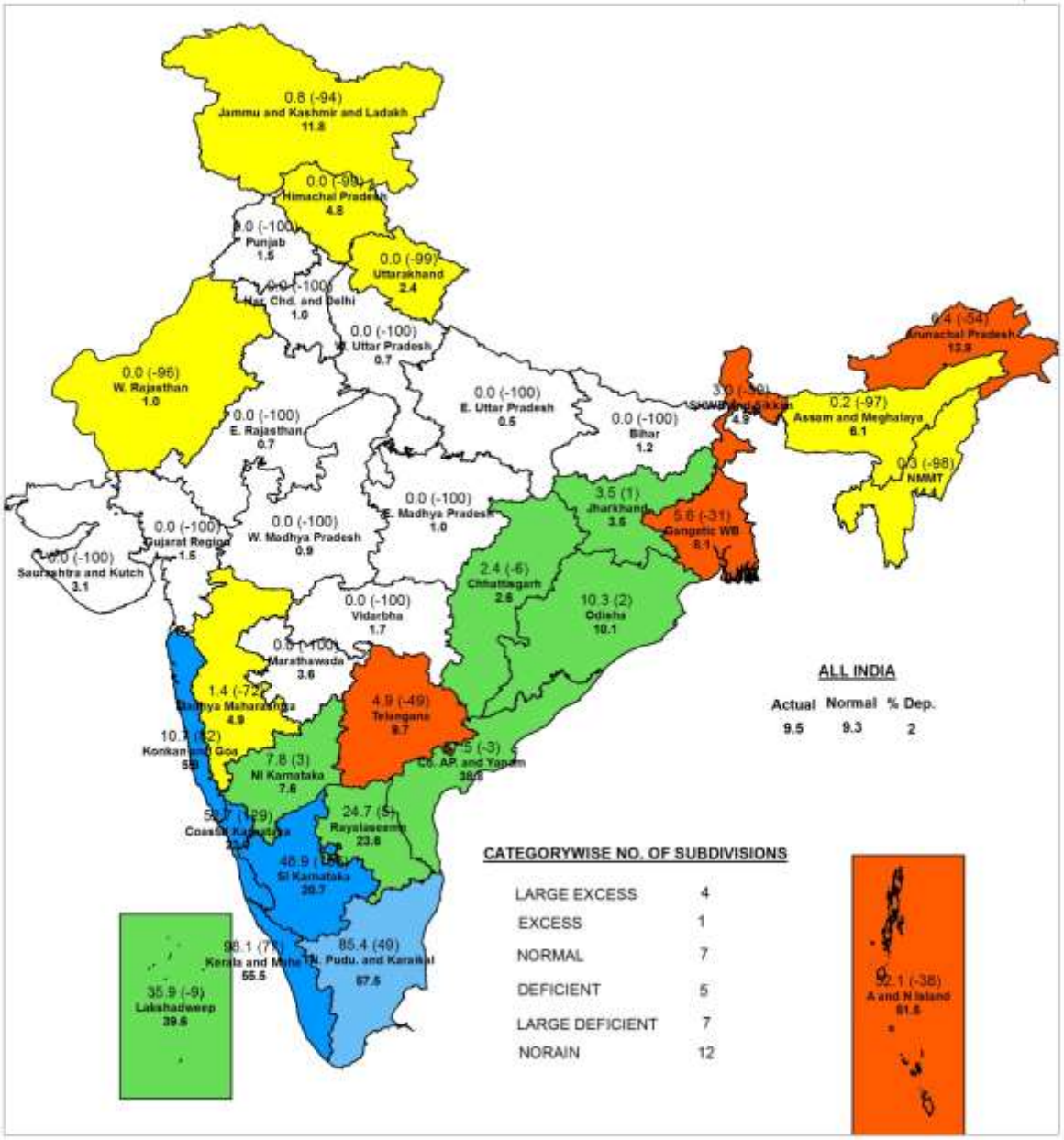
Annexure I

भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT

जल मौसम विज्ञान प्रभाग, नई दिल्ली
HYDROMET DIVISION, NEW DELHI

SUBDIVISION RAINFALL MAP

Week : 02-11-2023 To 08-11-2023



Legend

Large Excess [60% or more] | Excess [20% to 59%] | Normal [-19% to 19%] | Deficient [-59% to -20%] | Large Deficient [-99% to -60%] | No Rain [-100%] | No Data

NOTES :
a) RainFall figures are based on operation data.
b) Small figures indicate actual rainfal (mm), while bold figures indicate Normal rainfall (mm).
c) Percentage Departures of rainfall are shown in brackets.

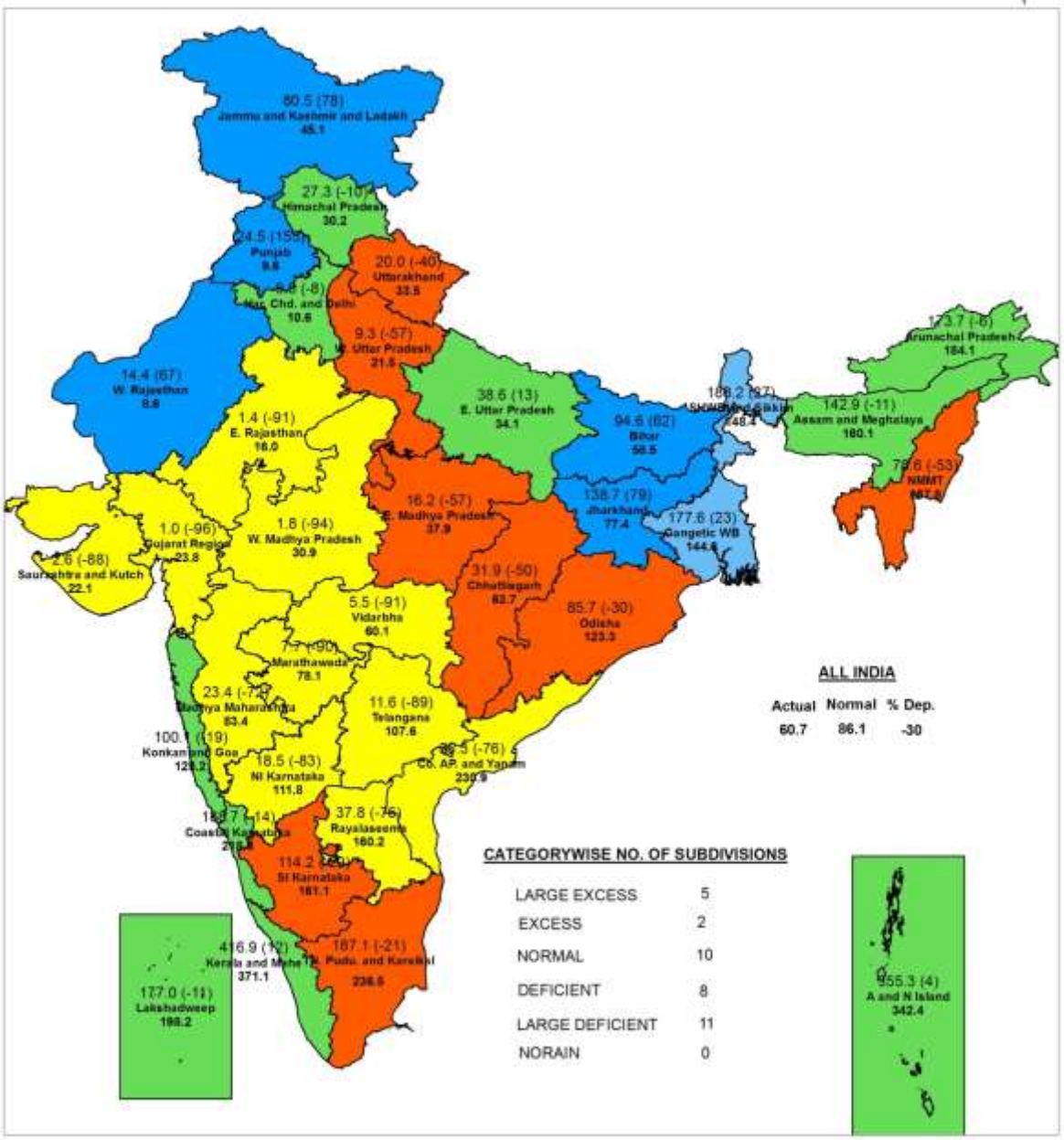
Annexure II

भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT

जल मौसम विज्ञान प्रभाग, नई दिल्ली
HYDROMET DIVISION, NEW DELHI

SUBDIVISION RAINFALL MAP

Period : 01-10-2023 To 08-11-2023



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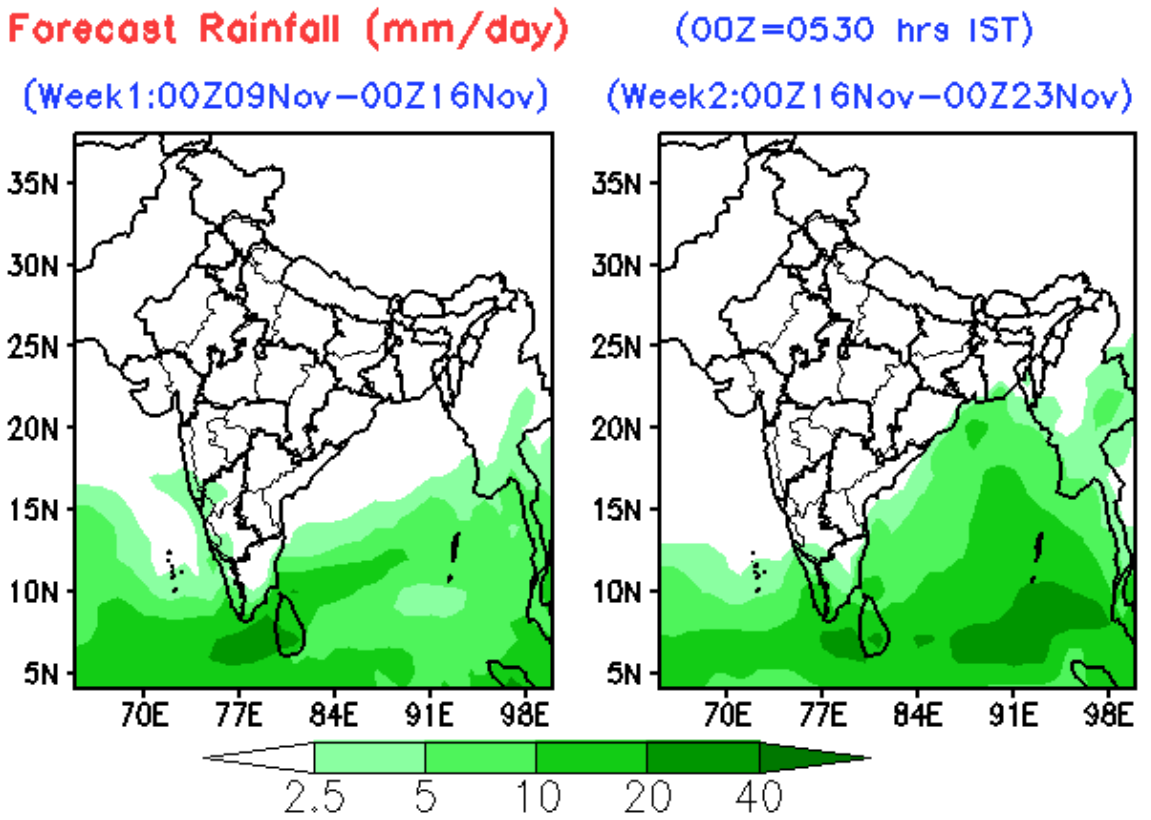
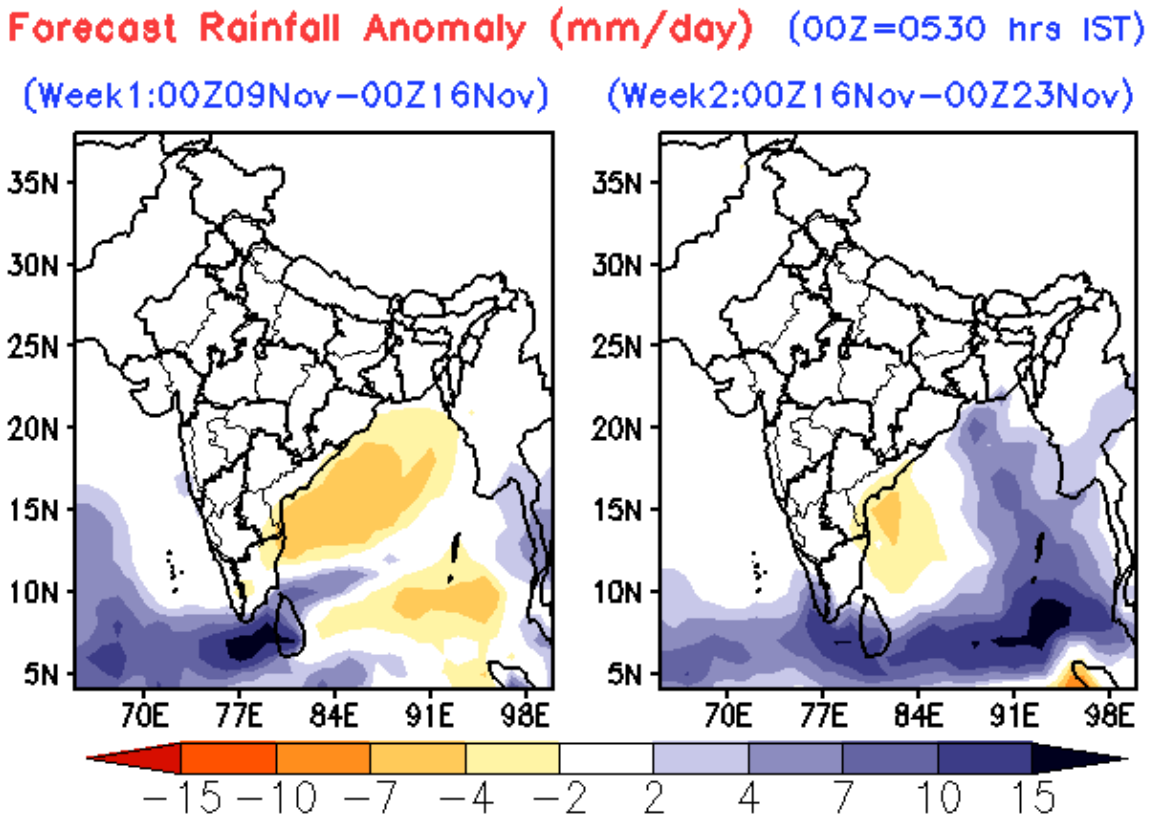
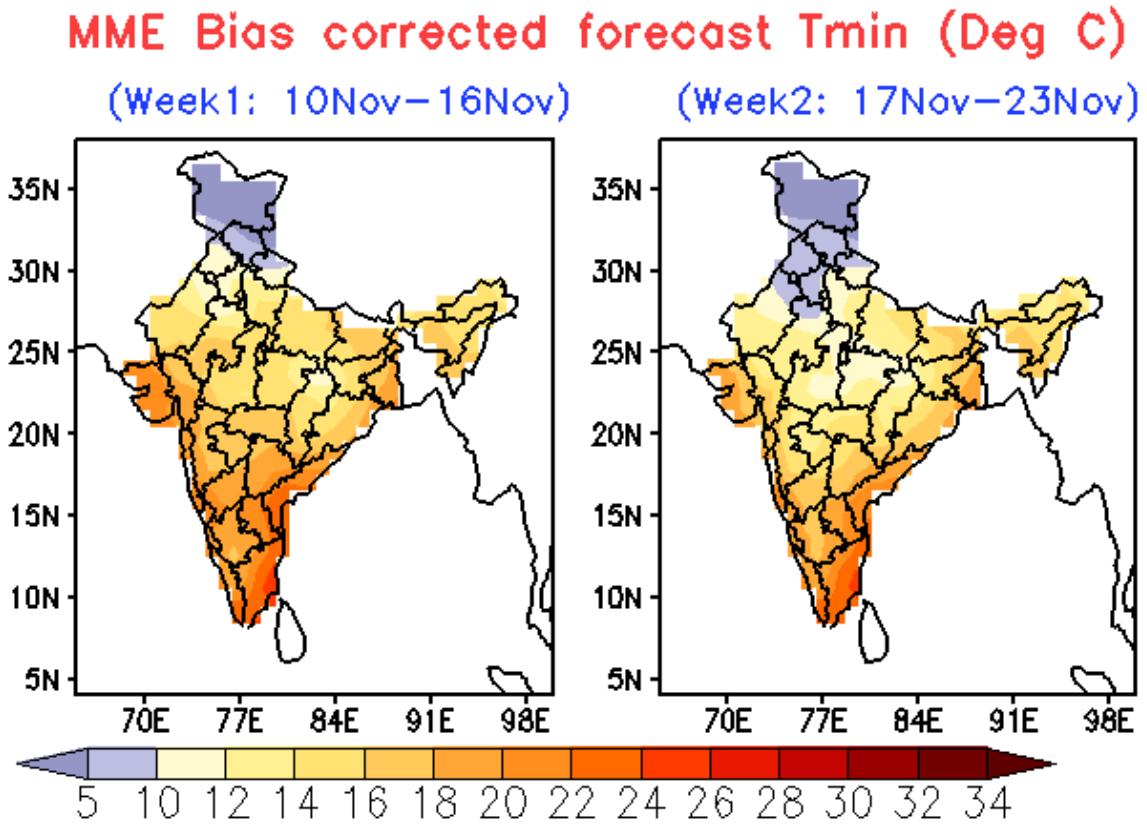
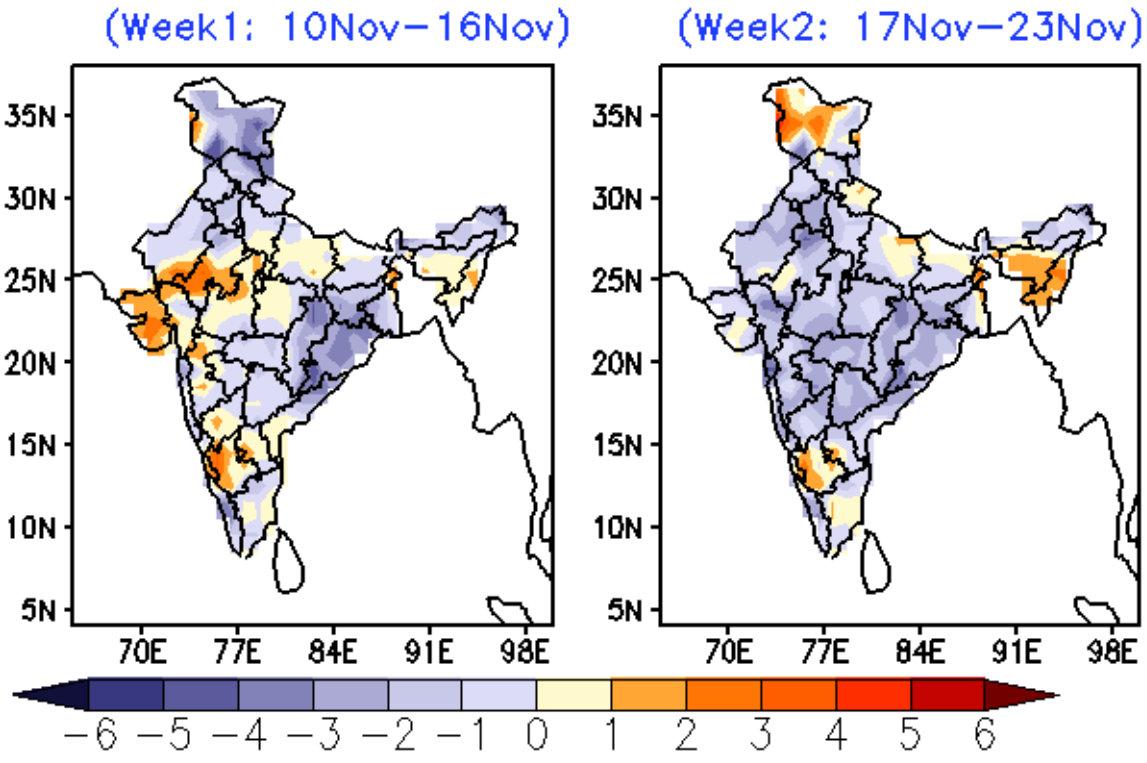
Annexure III





Annexure IV


MME Bias corrected forecast Tmin (Deg C)
(Week1: 10Nov−16Nov)
(Week2: 17Nov−23Nov)
35N
30N
25N
20N
15N
10N
5N
70E
77E
84E
91E
98E
5 10 12 14 16 18 20 22 24 26 28 30 32 34


MME forecast Tmin anomaly (Deg C)
(Week1: 10Nov−16Nov)
(Week2: 17Nov−23Nov)
35N
30N
25N
20N
15N
10N
5N
70E
77E
84E
91E
98E
−6 −5 −4 −3 −2 −1 0 1 2 3 4 5 6