



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

Press: Dated: 26 Oct, 2023

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(26 Oct-08 Nov 2023)**

1. Salient Observed Features for week ending 25 Oct 2023

- **Withdrawal of Southwest Monsoon from remaining parts of India:** Southwest Monsoon was withdrawn from the remaining parts of the country on 19th October, 2023(refer Annex 1).
- **Commencement of Northeast Monsoon rainfall:** In association with the Well Marked Low Pressure Area over Southeast & adjoining Central Bay of Bengal and a cyclonic circulation over the Comorin Area; northeasterly winds was strengthened over South & Central Bay of Bengal and extended upto middle tropospheric levels. Under the influence of these atmospheric conditions; Northeast Monsoon rainfall activity was commenced over Tamil Nadu and Kerala on 21st October, 2023.
- **Formation, intensification and Movement of Twin Cyclonic Storms over north India Ocean: “TEJ” and “Hamoon”:** a)Extremely Severe Cyclonic Storm “TEJ” during 18-24 Oct 2023 over Arabian Sea which crossed Yemen coast near latitude 15.9°N and longitude 52.15°E close to south of Al Ghaidah between 0230 hours IST and 0330 hours IST of 24th October as a very severe cyclonic storm and b) Very Severe Cyclonic Storm “Hamoon” during 19-25 Oct 2023 over Bay of Bengal which crossed Bangladesh coast to the south of Chittagong near latitude 21.9°N and longitude 91.9°E between 0130 hours IST & 0230 hours IST of 25th October as a Cyclonic Storm.
- **Heavy to very heavy rain** occurred at isolated places over Kerala & Mahe on one day during the week. **Heavy rain** occurred at isolated places over Kerala & Mahe on three days; over Tamilnadu & Puducherry and Karaikal on two days and over Andaman & Nicobar Islands and Gangetic West Bengal on one day each during the week. **Temperature Scenario:** The highest maximum

temperature of 38.7°C had been recorded at Surendranagar (Saurashtra & Kutch) on 21st October 2023 and the lowest minimum temperature of 13.0°C had been recorded at Sikar (East Rajasthan) on 23rd October 2023 over the plains of the country during the week.

LEGEND: Few days-(3 days), Many days-4 to 5 days and Most days-6 to 7 days during the week.

- **Analysis of Weekly overall Rainfall distribution during the week ending on 25 Oct 2023 and monsoon Season’s Rainfall Scenario (1 Oct-25 Oct 2023):** It shows for the country as a whole, the weekly cumulative All India Rainfall in % departure from its long period average (LPA) till week ending on 25 Oct 2023 was -81%, over south Peninsula, it was -81%, central India as -95% while over northwest India had -89% and east & northeast India had got -86%. All India Seasonal cumulative rainfall % departure during this year’s **Post monsoon Season’s Rainfall** during **1 Oct to 25 Oct 2023** is -27% and over northwest India, it is +16%. 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 Annex II and III respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	19.10.2023 TO 25.10.2023			01.10.2023 TO 25.10.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	3	21.1	-86%	131.7	113.6	+16%
NORTH-WEST INDIA	0.4	3.5	-89%	31.1	20.2	+54%
CENTRAL INDIA	0.5	9	-95%	22.8	52.7	-57%
SOUTH PENINSULA	6.3	33.1	-81%	53	125.6	-58%
Country as a whole	2	14	-86%	48.6	66.8	-27%

2. Large scale features

- Currently, El Niño conditions are prevailing over the equatorial Pacific region. The latest MMCFS forecast indicates that the El Niño conditions are likely to continue during the upcoming season. Other climate models are also indicating the continuation of El Niño conditions during the upcoming season.
- In addition to El Niño-Southern Oscillation (ENSO) conditions over the Pacific, other factors such as the Indian Ocean SSTs have also some influence on the northeast monsoon. Currently, the Indian Ocean is experiencing positive Indian Ocean Dipole (IOD) conditions, which began in August 2023. The latest MMCFS forecast indicates that the positive IOD conditions are likely to weaken by the end of the year.
- Most of the models are indicating that MJO will meander across the Western Hemisphere between phases 8 and 1 as it would move from the current phase 8 with amplitude nearly of 1 to phase 1 in the later half of the week 1 with gradual decreasing amplitude. Moving eastward in the beginning of week 2, it would enter into phase 2 with amplitude less than 1. Thus, MJO is not likely to support enhancement of convective activity over the North Indian Ocean (NIO) including the Bay of Bengal (BoB) and the Arabian Sea (AS) during the week 1. It will be slightly favorable during week 2.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (26 October to 01 November, 2023) and Week 2 (02 to 08 November, 2023)

Weather systems & associated Precipitation during Week 1 (26 October to 01 November, 2023)

Significant Weather features:

- ❖ A **cyclonic circulation** lies over Southwest Bay of Bengal off Tamil Nadu coast and another over south Tamil Nadu in lower tropospheric levels.

Weather forecast & warnings for next one week

- ❖ Light to moderate fairly widespread rainfall with thunderstorm, lightning/gusty winds very likely over Kerala & Mahe during the week; at a few places over Tamil Nadu, Puducherry & Karaikal, Coastal Karnataka and South Interior Karnataka on 29th & 30th

October. Isolated **heavy rainfall** also very likely over Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka and Kerala & Mahe on 29th & 30th October.

- ❖ Light to moderate rainfall at many places very likely over Andaman & Nicobar Islands during many days of the week.
- ❖ **No significant weather likely over rest parts of the country.**

Rainfall for week 2 (02 to 08 November, 2023):

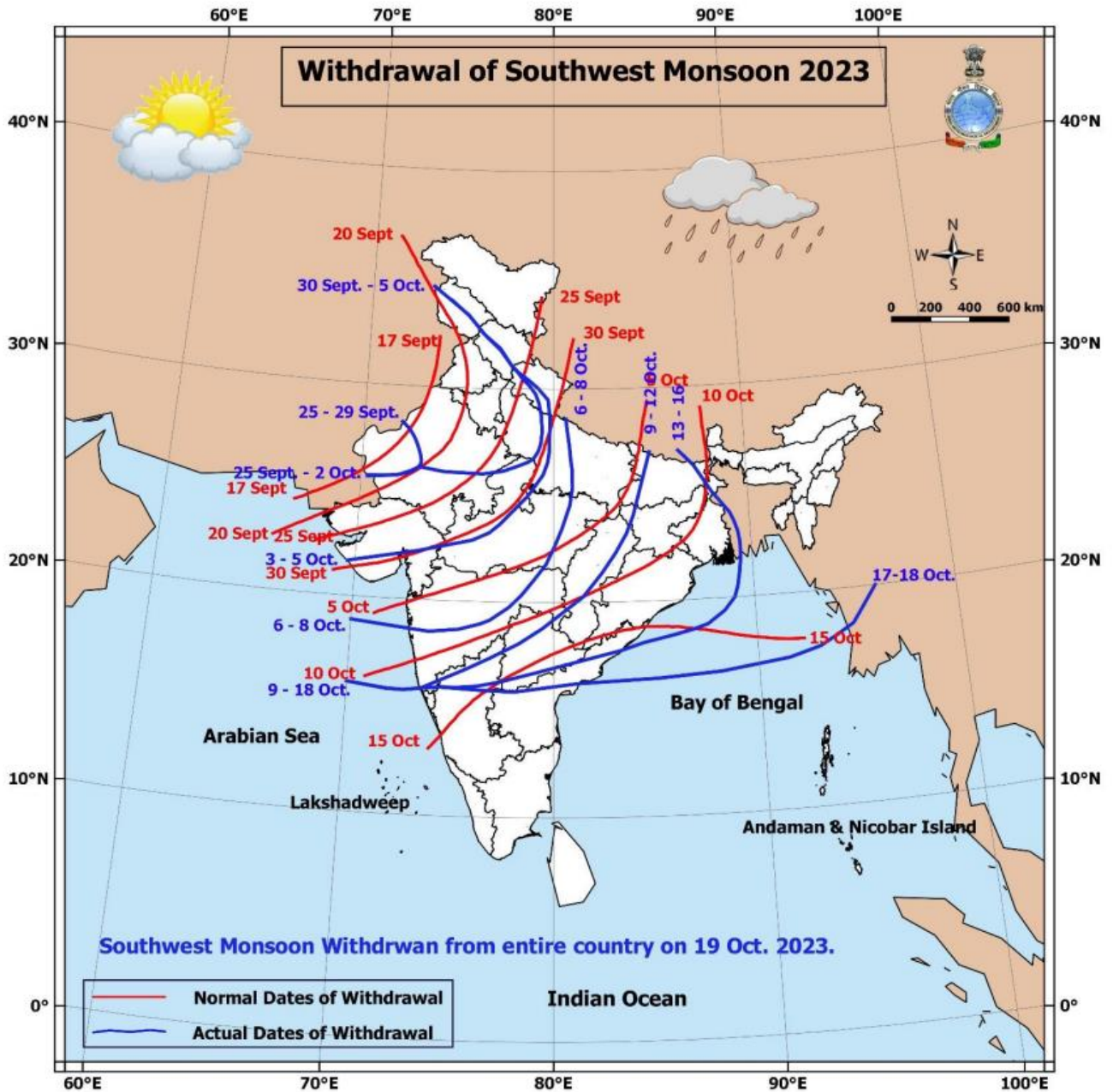
- ✓ Northeast monsoon is likely to be in active phase with light to moderate scattered to fairly widespread rainfall activity with **isolated heavy falls** over south Peninsular India during many days of the week.
- ✓ Under the influence of active Western Disturbance, light to moderate fairly widespread rainfall/snowfall likely over Western Himalayan Region and light/moderate isolated to scattered rainfall likely over adjoining plains of northwest India during some days of the week.
- ✓ Overall, rainfall activity is likely to be **normal to above normal** over south Peninsular India and northwest India (except Uttar Pradesh) and below normal over rest parts of the country during the week.

Minimum temperature forecast for Week 1 (26 October to 01 November, 2023) and Week 2 (02 to 08 November, 2023)

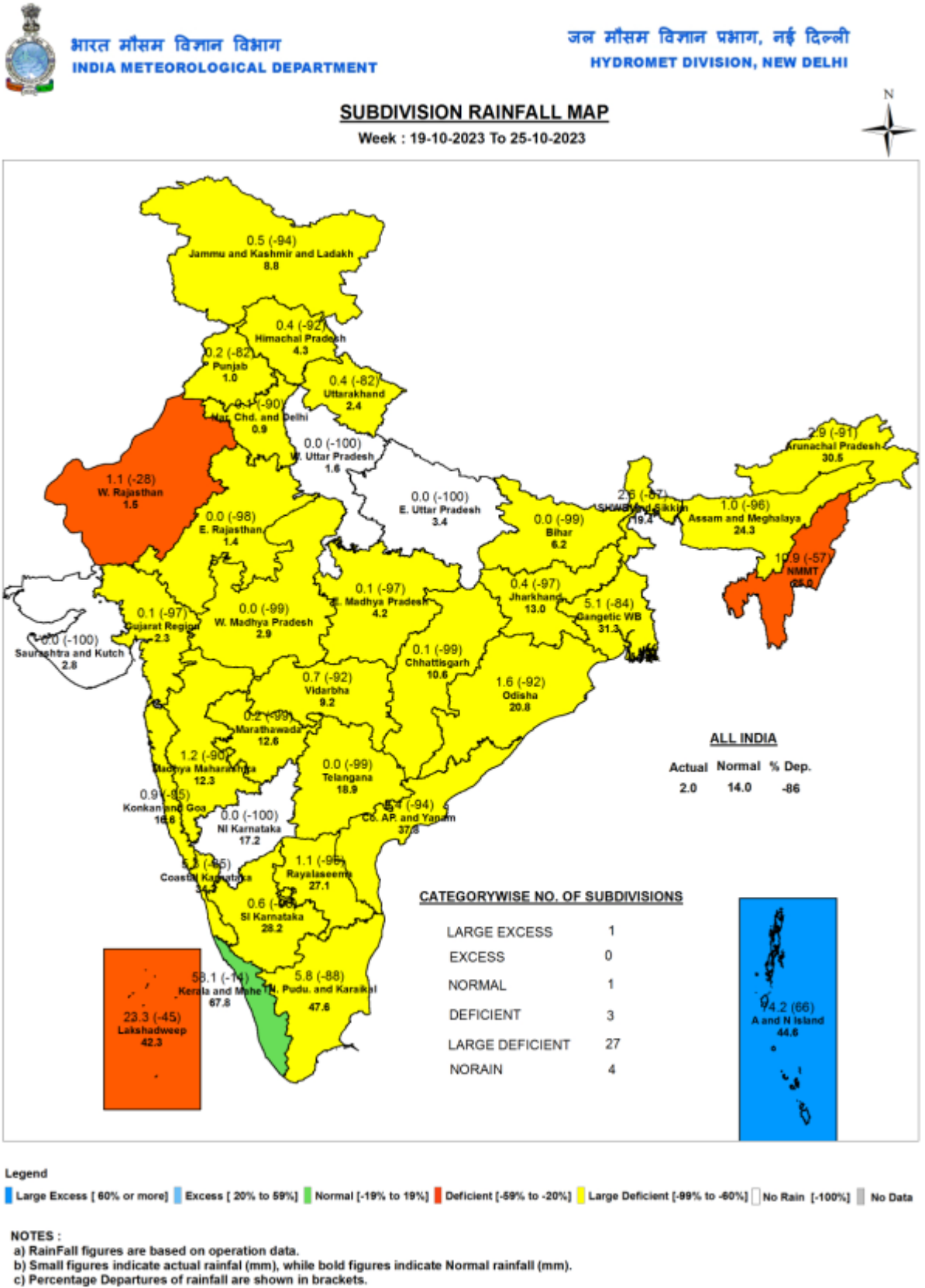
- ✓ Minimum temperatures are markedly below normal (-5.1°C or less) at isolated places over Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra, Telangana. They are below normal (-1.6°C to -3.0°C) at a few places over Chhattisgarh. They are near normal or above normal over rest parts of the country.
- ✓ Minimum temperatures are very likely to be near normal or above normal over Northwest India, Arunachal Pradesh and Some parts of Karnataka and below normal by $2-3^{\circ}\text{C}$ over rest parts of the country during week 1.
- ✓ Minimum temperatures are very likely to be near normal or above normal over Northwest & central India and Karnataka and below normal by about 2°C over rest parts of the country during week 2.

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

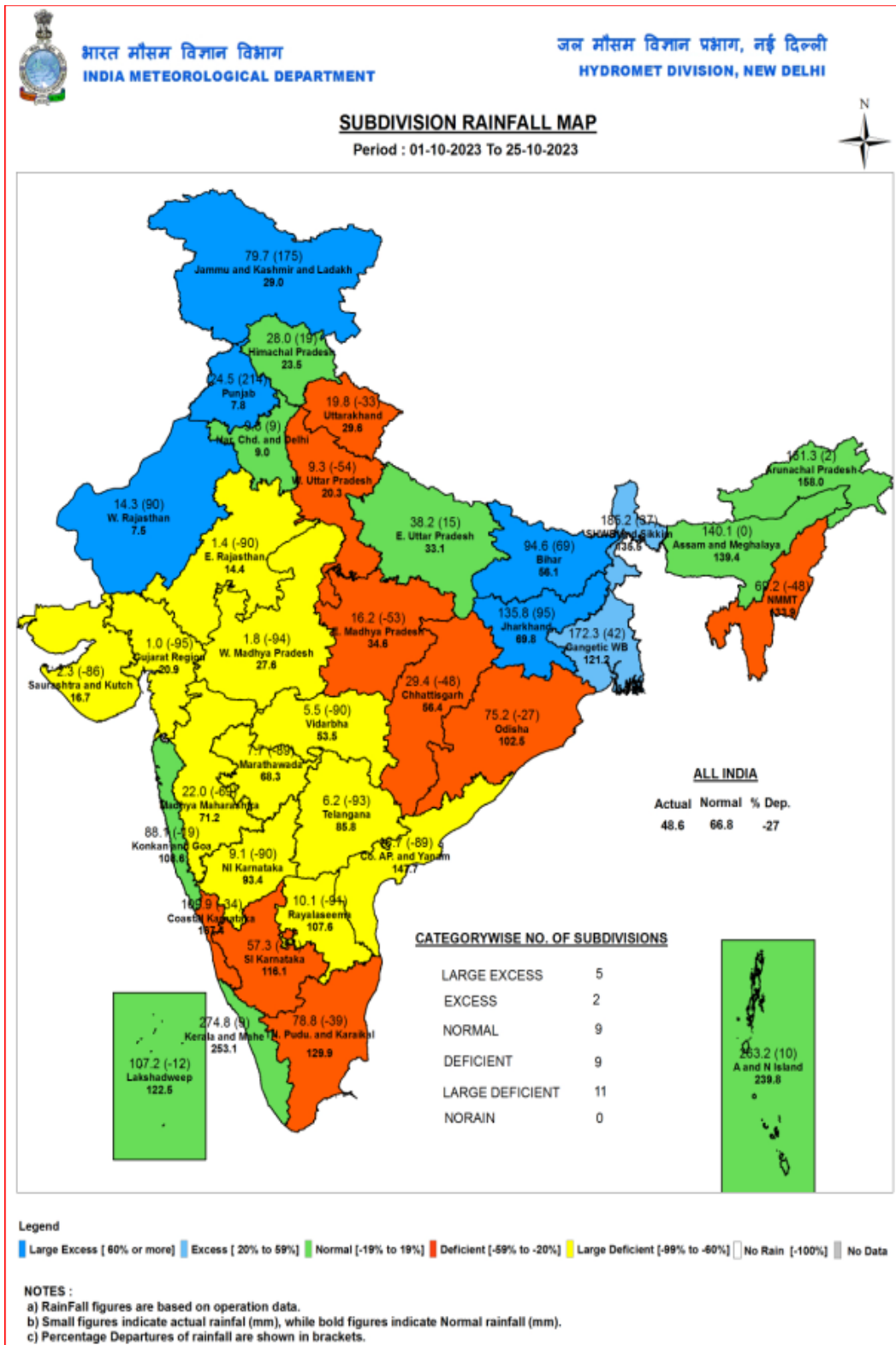
Annexure I

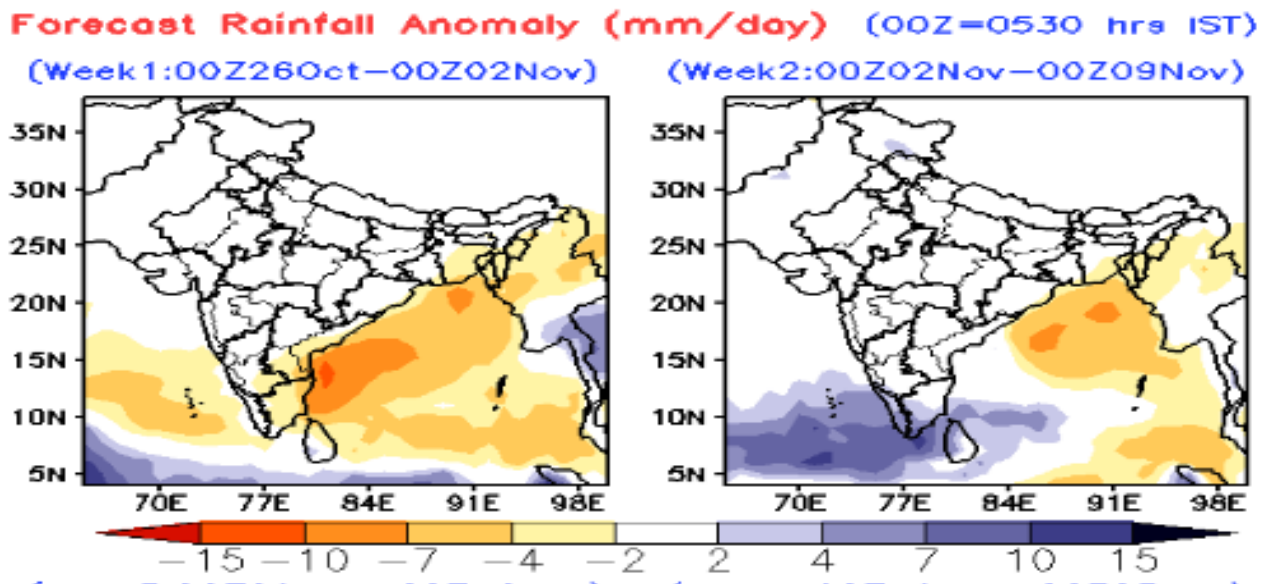
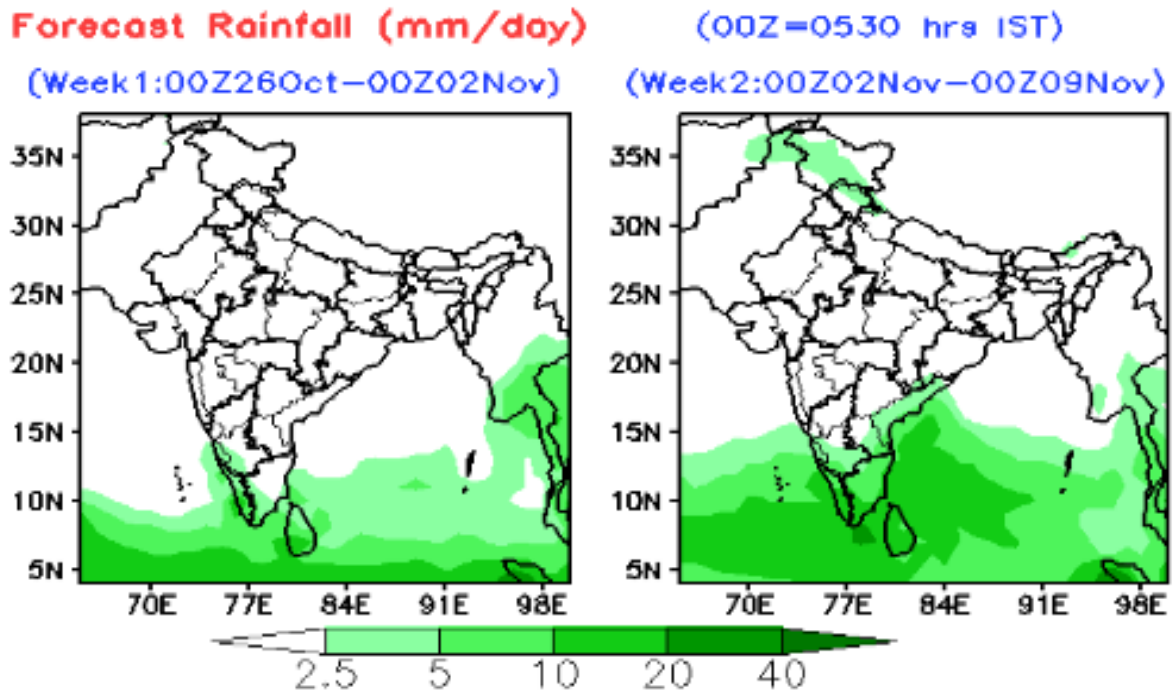


Annex: II



Annex III



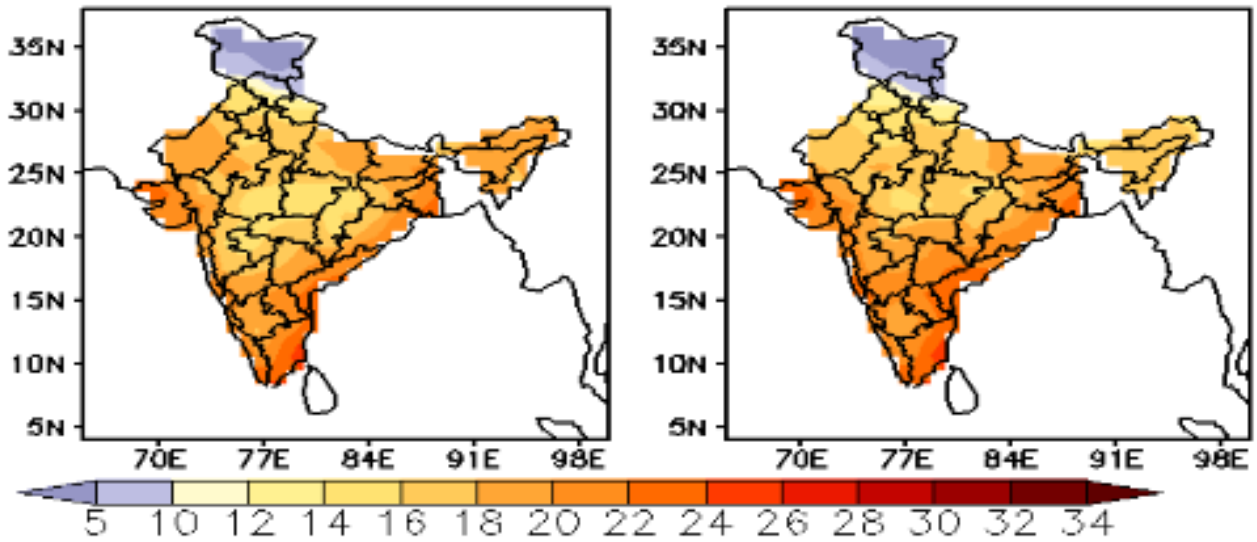


Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies(lower panesl) from IMD MME

MME Bias corrected forecast Tmin (Deg C)

(Week1: 27Oct-02Nov)

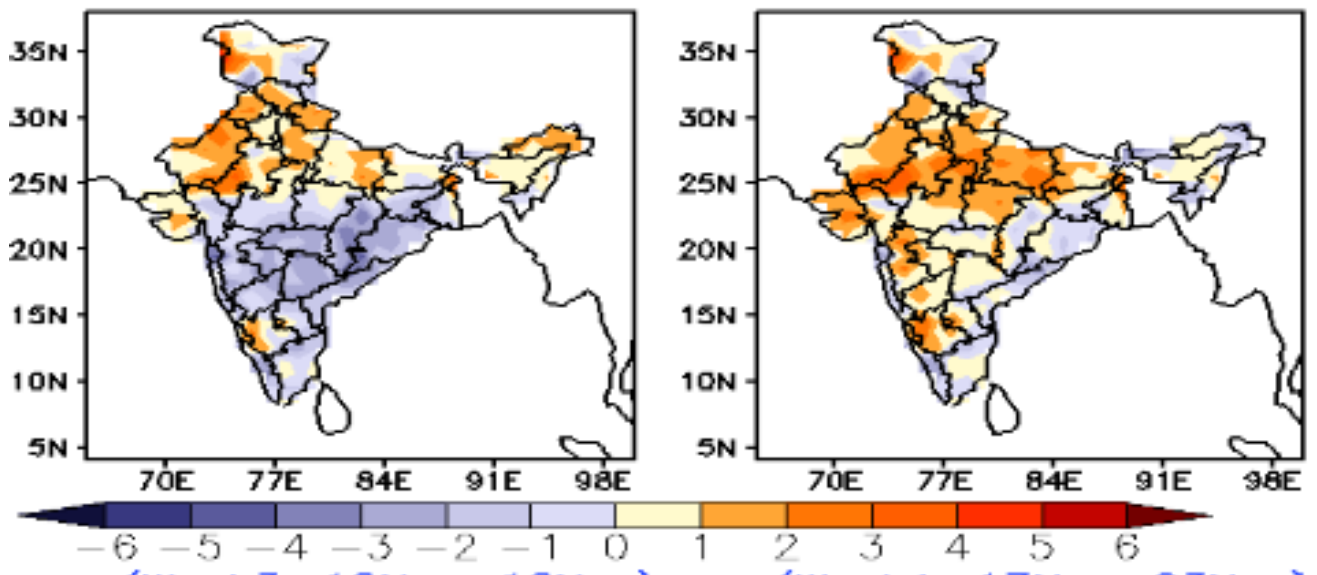
(Week2: 03Nov-09Nov)



MME forecast Tmin anomaly (Deg C)

(Week1: 27Oct-02Nov)

(Week2: 03Nov-09Nov)



Extended range forecast of Minimum Temperature (top panel) and anomalies(lower panels) from IMD MME