



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

**Press: Dated: 14<sup>th</sup> Dec, 2023**

**Subject: Current Weather Status and Extended range Forecast for next two weeks  
(14-27 Dec 2023)**

**1. Salient Observed Features for week ending 14 Dec 2023**

- No significant weather was realized over the country during the week except parts of eastern and northeast India experienced isolated heavy rainfall during 7-9 Dec and coastal and south Tamil Nadu and Kerala experienced isolated heavy to very heavy rainfall during 7-10 Dec 2023 and **Isolated Dense Fog** observed over Punjab and northeastern states during the 2<sup>nd</sup> half of the week.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 13<sup>th</sup> Dec 2023 and monsoon Season's Rainfall Scenario (1 Oct-13 Dec 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 13 Dec 2023 was +81%. All India Seasonal cumulative rainfall % departure during this year's **Post monsoon Season's Rainfall** during **1 Oct to 13 Dec 2023** is -5% and over northwest India, it is +32%. 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                   |        |       |
|-------------------------|--------------------------|--------|-------|--------------------------|--------|-------|
|                         | 07.12.2023 TO 13.12.2023 |        |       | 01.10.2023 TO 13.12.2023 |        |       |
|                         | Actual                   | Normal | % Dep | Actual                   | Normal | % Dep |
| EAST & NORTH-EAST INDIA | 23.8                     | 4      | +496% | 173.4                    | 151.2  | +15%  |
| NORTH-WEST INDIA        | 0.4                      | 4.6    | -91%  | 51.7                     | 39.3   | +32%  |
| CENTRAL INDIA           | 6.7                      | 1.6    | +317% | 59.3                     | 73.7   | -20%  |
| SOUTH PENINSULA         | 8.2                      | 9.2    | -11%  | 222                      | 260.7  | -15%  |
| Country as a whole      | 7.8                      | 4.3    | +81%  | 107.1                    | 112.2  | -5%   |

## 2. Large scale features

- Currently, the moderate to strong El Niño conditions are prevailing over equatorial Pacific Ocean and the sea surface temperatures (SSTs) are above average over most parts of the central and eastern equatorial Pacific Ocean. The latest MMCFS forecast indicates that moderate to strong El Niño conditions are likely to continue during the upcoming winter season. In addition to El Niño-Southern Oscillation (ENSO) conditions over the Pacific, other factors such as the Indian Ocean SSTs also influence on Indian climate. At present, strong positive IOD conditions are observed over the Indian Ocean and the latest MMCFS forecast indicates that positive IOD conditions are likely to weaken and turn to neutral by the end of this year.
- Currently MJO lay in Phase 7 and Most of the models are indicating that MJO is likely to entered into phase 8 by end of week1 with amplitude <1 and then move further east to phase 1 with amplitude >1 during 2<sup>nd</sup> half of the week week 2.

### 3. Forecast for next two week

#### Forecast for next two week

#### Weather systems & associated Precipitation during Week 1 (14 to 20 December, 2023) and Week 2 (21 to 27 December, 2023)

#### Weather systems & associated Precipitation during Week 1 (14 to 20 December, 2023)

##### **Weather Systems:**

- The Cyclonic Circulation lies over southwest Arabian Sea & adjoining Equatorial Indian Ocean in lower tropospheric levels.
- A feeble Western Disturbance likely to affect Western Himalayan Region from 16<sup>th</sup> December.

##### **Forecast & Warnings:**

- Light/moderate rainfall at isolated to scattered places very likely over Tamil Nadu, Kerala, South Interior Karnataka, Lakshadweep and Andaman & Nicobar Islands during the week.
- **Isolated heavy rainfall also likely over south Tamil Nadu on 16<sup>th</sup> & 17<sup>th</sup> and over Kerala on 17<sup>th</sup> December.**
- Isolated rainfall/snowfall is very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 16<sup>th</sup> & 17<sup>th</sup> December.
- No significant rainfall likely over remaining parts of the country during next one week.

#### Rainfall for week 2 (21 to 27 December, 2023):

- ✓ No active Western Disturbance likely to affect northwest India during the week.
- ✓ Light/moderate scattered to fairly widespread rainfall is likely over south Peninsular India during the week. Isolated **heavy rainfall** is also likely over Tamilnadu and Kerala during some days of the week.
- ✓ Overall, rainfall activity is likely to be **above normal** over all the regions except northwest India, where it is likely to be below normal.

#### Minimum temperature forecast for Week 1 (14 to 20 December, 2023) and Week 2 (21 to 27 December, 2023)

##### **Minimum temperature forecast for Week 1 (14 to 20 December, 2023):**

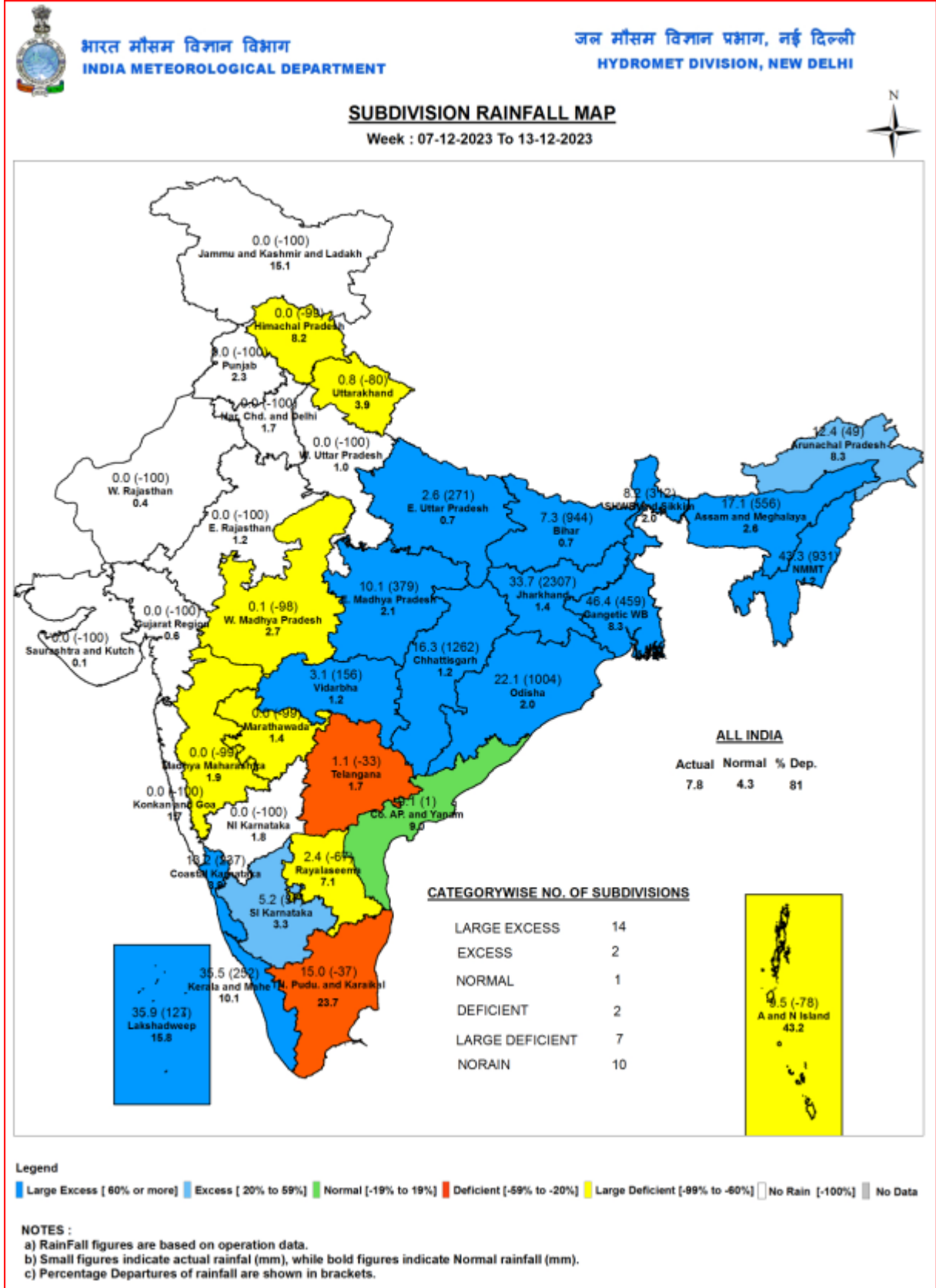
- ✓ **Minimum Temperature** are Minimum temperatures are in the range of 5-10°C over most parts of Punjab, Haryana, Chandigarh & Delhi, north Rajasthan and Uttar Pradesh. These are near normal or above normal over most parts of the country except parts of Western Himalayan Region, Haryana, Chandigarh & Delhi and West Uttar Pradesh, where these are below normal by 2-3°C.
- ✓ No significant change in Minimum Temperatures likely over northern parts of the country during the week.

**Minimum temperature forecast for Week 2 (21 to 27 December, 2023):**

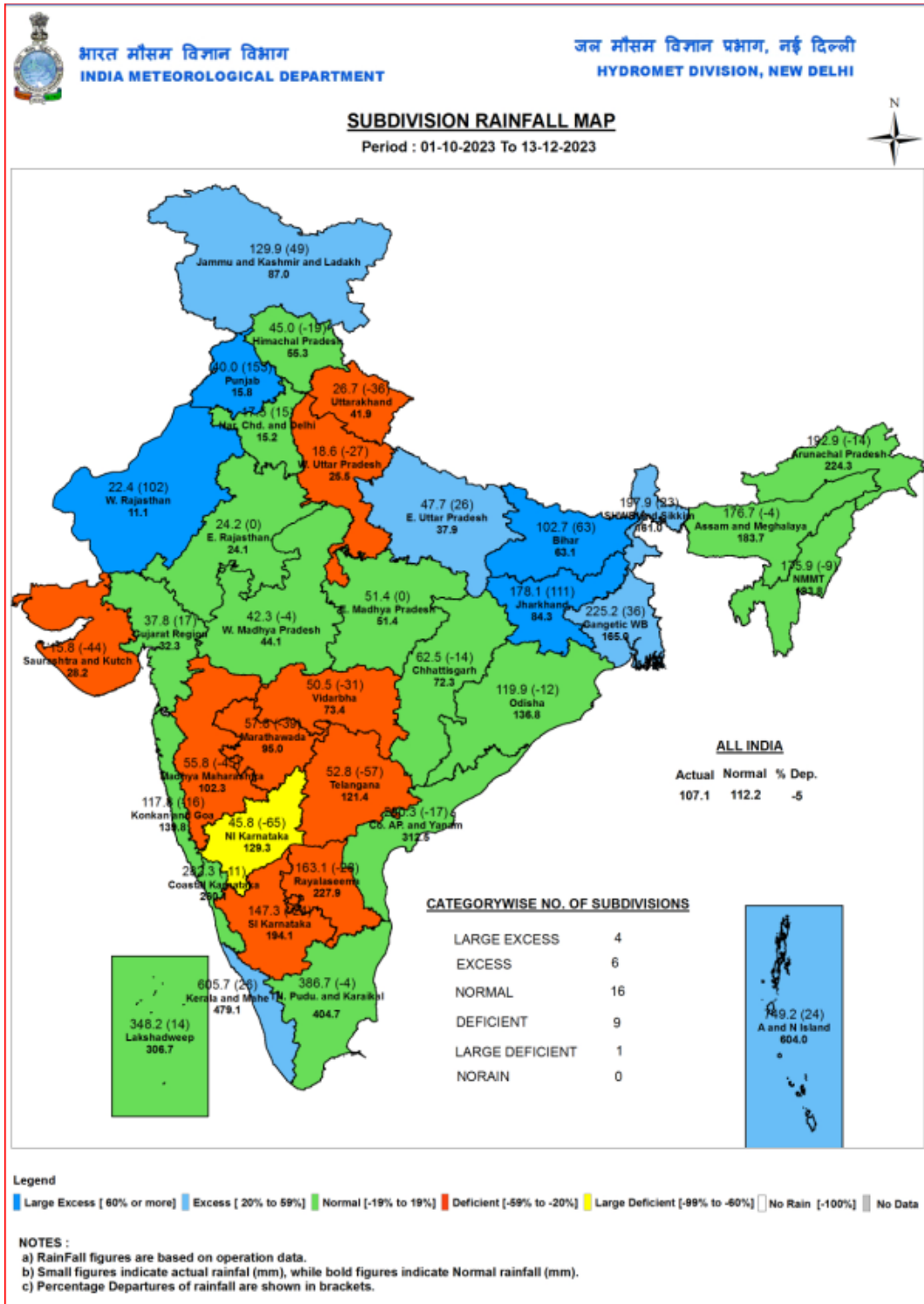
✓ **Minimum Temperature** are likely to near normal or below normal by 1-2°C over most parts of the country except parts of Western Himalayan Region, northeastern states and South Peninsular India, where these are likely to be above normal by 1-3°C.

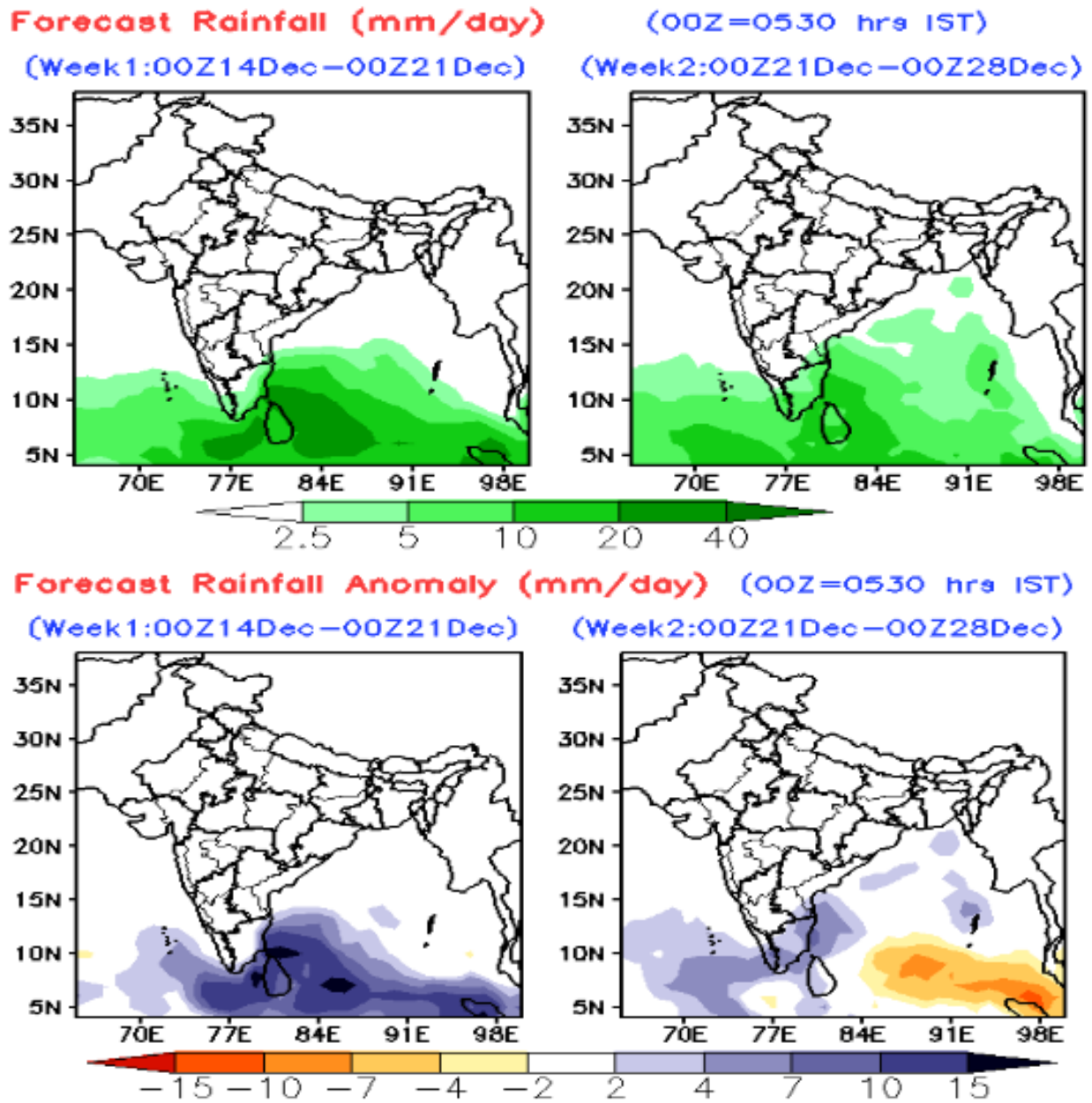
**Legends: Heavy Rain:** 64.5 to 115.5 mm **Very Heavy Rain:** 115.6 to 204.4 mm, **Extremely Heavy Rain**> 204.4 mm

## Annex: I



## Annex II



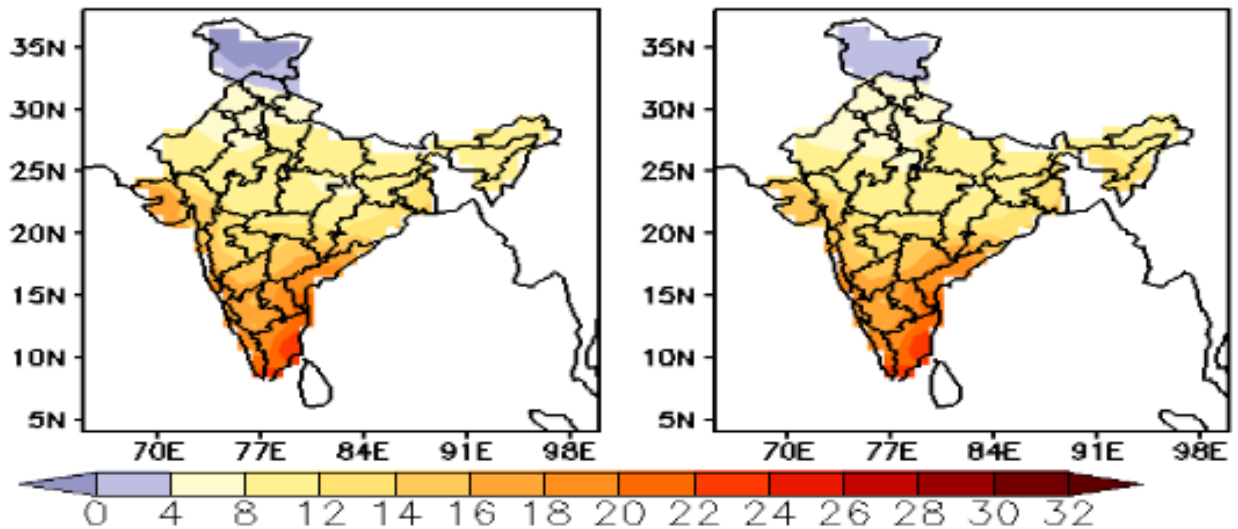


Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies(lower panels) from IMD MME

**MME Bias corrected forecast Tmin (Deg C)**

(Week1: 15Dec-21Dec)

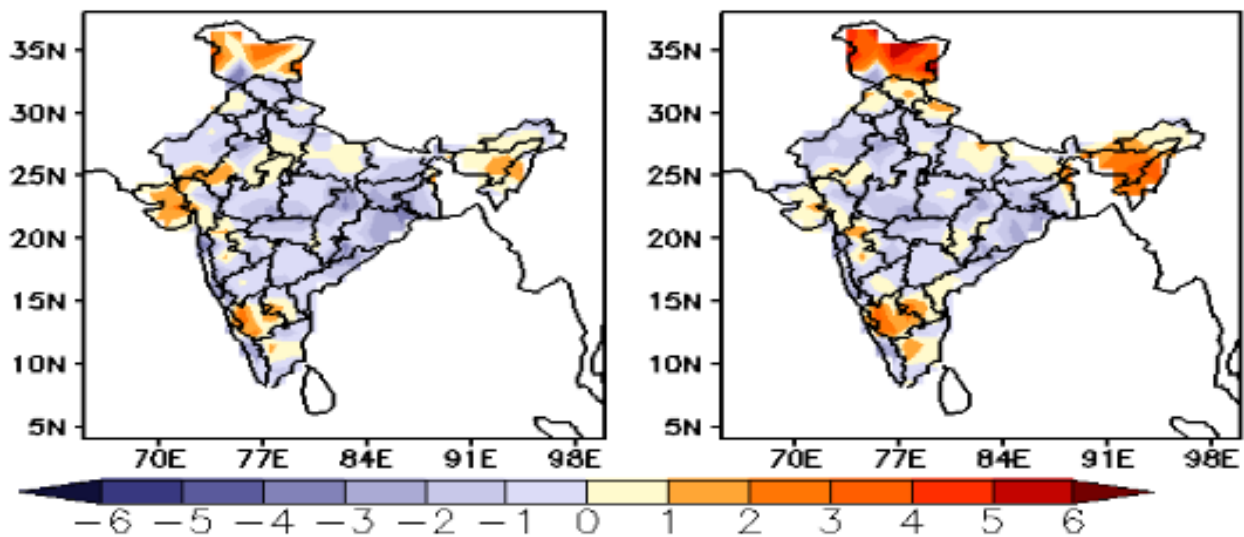
(Week2: 22Dec-28Dec)



**MME forecast Tmin anomaly (Deg C)**

(Week1: 15Dec-21Dec)

(Week2: 22Dec-28Dec)



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