



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

Press Release: Dated: 31st Oct, 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (31st Oct-13 Nov, 2024)

1. Salient Observed Features for week ending 30th Oct, 2024

- **Severe Cyclonic Storm “DANA” over Bay of Bengal (23rd – 25th October, 2024) crossed North Odisha Coast:** Last week’s Cyclonic Storm “DANA” (pronounced as Dana) over northwest & adjoining central Bay of Bengal lay over northwest Bay of Bengal, near latitude 18.9° N and longitude 88.0°E, about 210 km southeast of Paradip (Odisha), 240 km south-southeast of Dhamara (Odisha) and 310 km south of Sagar Island (West Bengal) in the morning at 0830 hrs IST the 24th October. It crossed north Odisha coast close to Habalikhati Nature Camp (Bhitarkanika) and Dhamara during 0130 hrs IST to 0330 hrs IST of 25th October as a **Severe Cyclonic Storm** with a wind speed of 100-110 kmph gusting to 120 kmph. It weakened into a **Cyclonic Storm** over north coastal Odisha and lay near latitude 21.20°N and longitude 86.70°E about 30 km northeast of Bhadrak and 50 km northnorthwest of Dhamara at 0830 hrs IST of 25th October . It further weakened into a Deep Depression over North Coastal Odisha near latitude 21.4° N and longitude 86.4°E , about 40 km north-northwest of Bhadrak at 1430 hrs IST of 25th October, into a Depression over north Odisha in the evening (1730 hours IST) of 25th October and further weakened into a Well-Marked Low Pressure area over the same region in the morning (0530 hours IST) of 26th October. The low pressure area became less marked over north Odisha at 0530 IST of 27th October. However, its remnant lay as a cyclonic circulation over north Odisha extended upto 5.8 km above mean sea level on morning of 27th Oct and over south Odisha and adjoining north Andhra Pradesh coast, extended upto 5.8 km

above mean sea level tilting southwestwards with height on morning of 28th Oct.; over south Chhattisgarh & adjoining Odisha extended upto 5.8 km above mean sea level tilting southwards with height on 29th October and became less marked on 30th October.

- Under the influence of this system, very heavy to extremely heavy rainfall was observed at isolated places over Odisha on 25th & 26th October. Heavy to very heavy rainfall was observed over Gangetic West Bengal on 25th & 26th October, Jharkhand on 26th October. **Extremely heavy rainfall** was observed at isolated places over Odisha on 26th October. **Heavy to Very Heavy Rainfall** was observed at isolated places over Odisha on 25th, 28 to 30 October; Gangetic West Bengal on 25th and 26th October; Coastal Andhra Pradesh on 28th October; Odisha on 25th October and Coastal Andhra Pradesh on 28th October.
- **Very Heavy Rainfall** was observed at isolated places over Tamil Nadu, Puducherry & Karaikal on 24th and 25th October; Kerala & Mahe on 24th and 27th October; **Heavy Rainfall** observed at isolated places over Bihar, Jharkhand on 24th October; Kerala & Mahe, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Jharkhand on 26th October; Lakshadweep and Sub-Himalayan West Bengal on 27th October; Konkan & Goa on 29th October; Tamil Nadu on 30th October.
- **Minimum temperature** was above normal by 2-5°C over northern parts of the country during this week. **Maximum temperature** was above normal by 1-3°C over northwest and northern India, and normal to below normal over east and northeast India during this week. **During the 2nd half of the week, Maximum & Minimum Temperatures were above normal by 3-7°C over Northwest India. Minimum Temperatures were above normal by 3-5°C over parts of Central and Eastern India**
- **Analysis of weekly overall rainfall distribution during the week ending on 30th Oct and Post-monsoon Season's Rainfall Scenario (01st to 30th Oct, 2024):** The country as a whole, the weekly cumulative All India Rainfall in % departure from its long period average (LPA) is -13%. All India Seasonal cumulative rainfall % departure during this year's post-monsoon Season's Rainfall (01-30th Oct 2024) is 0%. 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 & II respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	24.10.2024 TO 30.10.2024			01.10.2024 TO 30.10.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
East & northeast India	30.0	12.9	+132%	136.6	122.1	+12%
Northwest India	0.1	1.8	-96%	5.2	21.4	-76%
Central India	6.4	6.3	+2%	53.5	56.3	-5%
South Peninsula	12.8	31.8	-60%	168.0	148.2	+13%
Country as a whole	9.5	10.9	-13%	74.4	74.1	0%

2. Large scale features

- Currently, neutral El Nino-Southern Oscillation (ENSO) conditions are observed over the equatorial Pacific Ocean with below average sea surface temperatures in the east equatorial Pacific Ocean. The probability forecast indicates a higher chance of development of La Niña conditions during Post-Monsoon season, 2024.
- Above-average sea surface temperatures (SSTs) are currently seen across most of the Indian Ocean. Currently, neutral Indian Ocean Dipole (IOD) conditions prevail over the Indian Ocean. The latest MMCFS forecast indicates that the neutral IOD conditions are likely to continue during post-monsoon season, 2024. Presently, neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The climate models forecast indicates that these neutral IOD conditions are likely to continue until the end of the monsoon season.
- The Madden Julian Oscillation (MJO) index is currently in phase 7 with amplitude greater than 1. It would move across phases 7 and 8 with amplitude remaining more than 1 during week 1. Thereafter, it would move across phases 1 and 2 during week 2 with amplitude becoming less than 1. Thus, MJO would support enhancement of convective activity over the Arabian Sea during week 2.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (31st Oct-6 Nov, 2024) and Week 2 (7-13 Nov, 2024)

Salient features:

- Northeast Monsoon likely to continue remain normal to below normal over south peninsular India during week 1 with Significant improvement of the rainfall activities during Week 2. During Week 2, it is likely to be normal to above normal rainfall over the same area.
- **There is likelihood of formation of a trough of low over south BoB during week 1 with formation of a Low Pressure Area over southwest BoB towards the end of week 1. There is also low probability of its intensification into a depression over southwest BoB off Tamil Nadu coast during first half of week 2.** Under its influence, a fresh spell of Isolated heavy to very heavy rainfall likely over Tamil Nadu, Rayalaseema and Kerala during 7-11 Nov.
- Temperature likely to continue remain above normal over many parts of North West India, Central and eastern India during week 1 with slight fall during week 2.
- A feeble WD is likely impact WHR and adjoining planes with a light isolated rain/ Snow during week 2 (7-11 Nov).

Weather systems & associated Precipitation during Week 1 (31st Oct-6 Nov, 2024)

Weather Systems:

- ❖ A **cyclonic circulation** lies over Gulf of Mannar in lower tropospheric levels.
- ❖ An **upper air cyclonic circulation** lies over southwest Bay of Bengal off south Andhra Pradesh in lower & middle tropospheric levels.
- ❖ Another **upper air cyclonic circulation** lies over northeast Assam in lower tropospheric levels.
- ❖ **There is likelihood of formation of a trough of low over south BoB during week 1 with formation of a Low Pressure Area over southwest BoB towards the end of week 1.**

Forecast & Warnings:

✓ Light to moderate rainfall at a few places accompanied with isolated thunderstorm and lightning very likely over Kerala & Mahe during 31st October-04th November, Tamil Nadu, Puducherry & Karaikal during 31st October-03rd November and Karnataka during 31st October-02nd November; Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana on 31st October & 01st November, Konkan & Goa, Madhya Maharashtra and Marathwada on 31st October & 01st November.

✓ **Isolated heavy to very heavy rainfall** also very likely over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe on 01st November.

✓ **Isolated heavy rainfall** also very likely over Tamil Nadu, Puducherry & Karaikal during 31st October-02nd November; Kerala & Mahe during 31st October-03rd November and South Interior Karnataka on 31st October-02nd November.

ii. Forecast of temperature

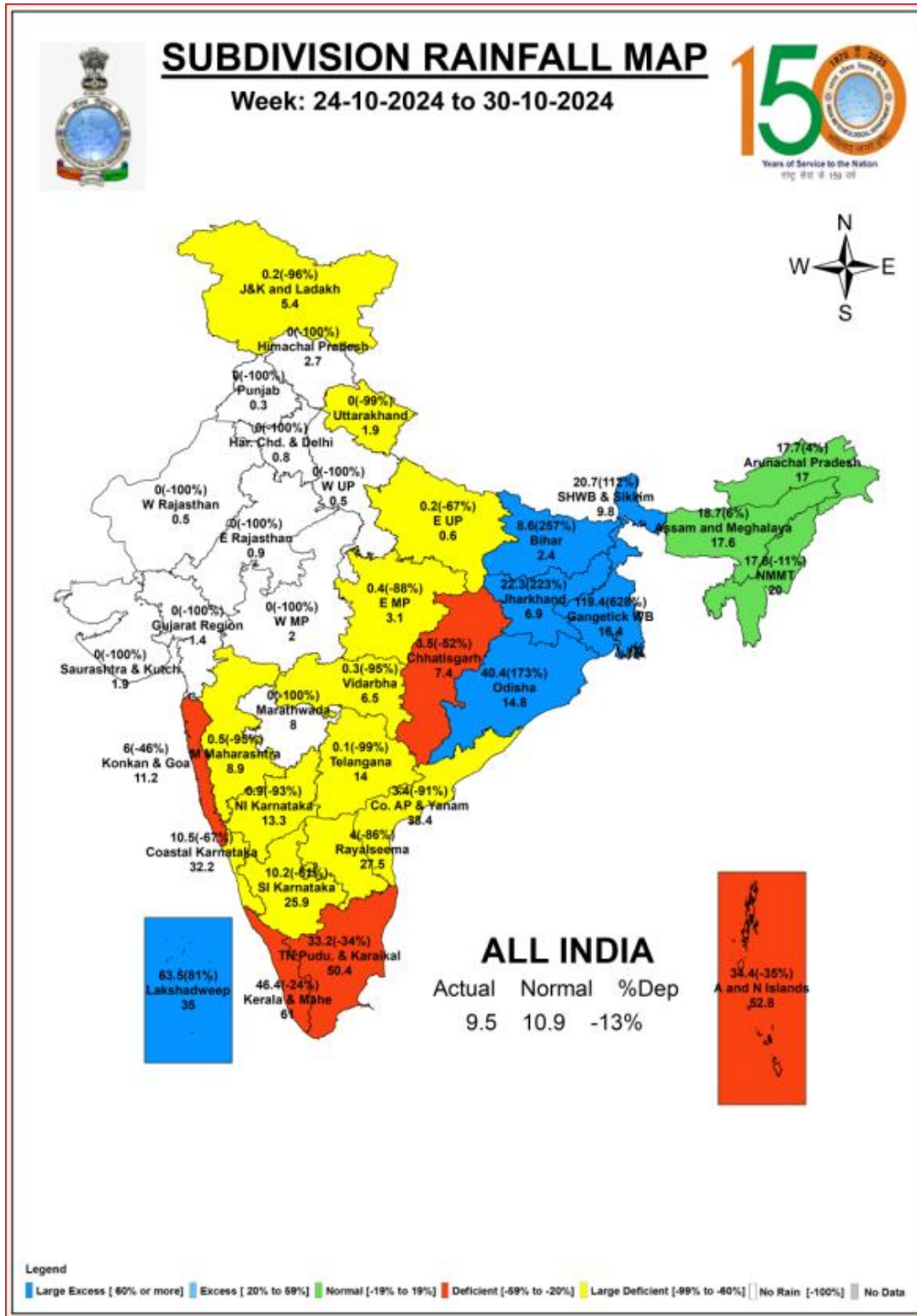
✓ The above normal Temperature tendency over Northwest India and parts of Central India is likely to continue during next one week.

Rainfall and Temperature Forecast for week 2 (7-13 Nov, 2024):

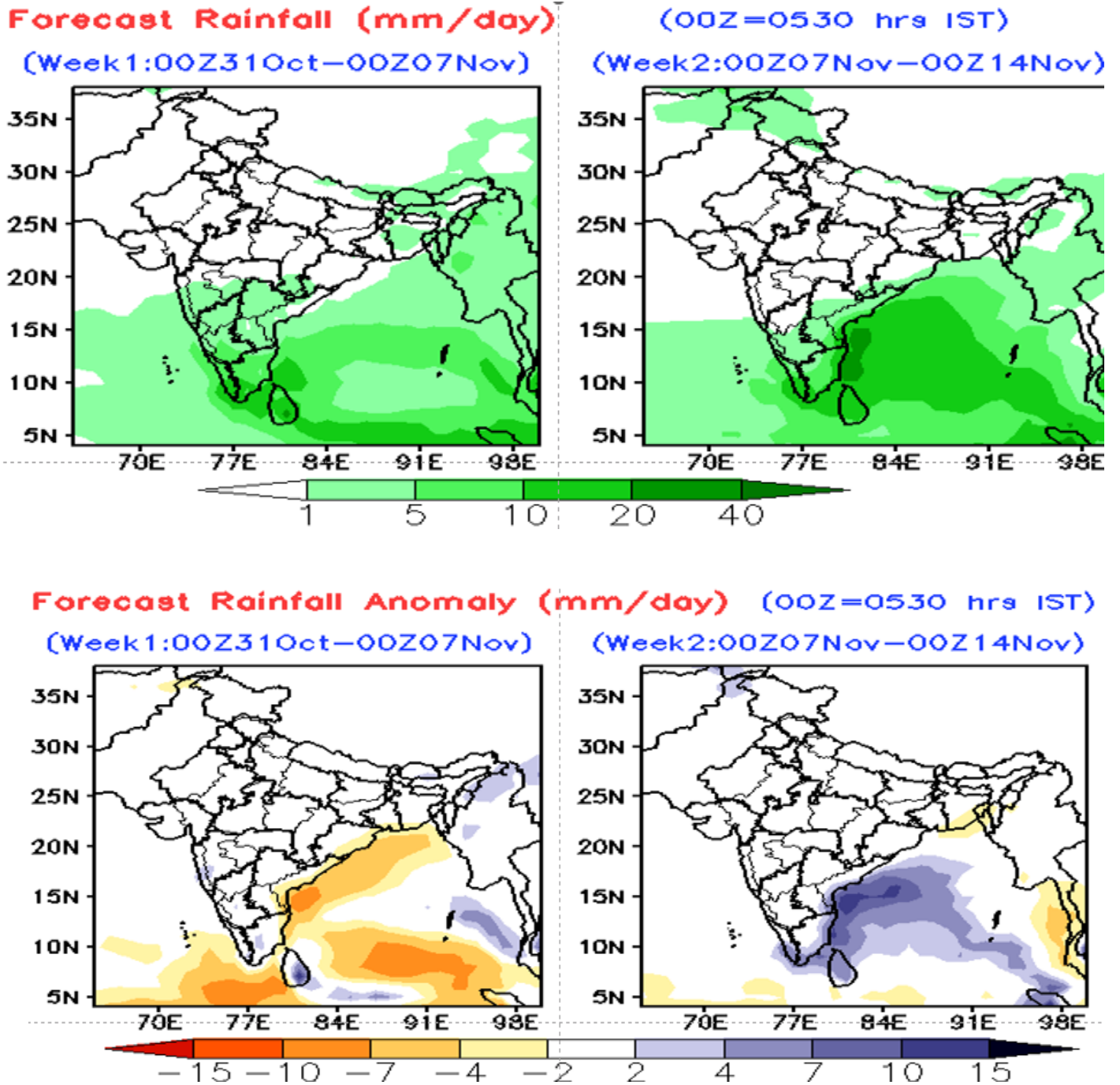
- ❖ **There is likelihood of a Low Pressure Area over southwest BoB towards the end of week 1. There is also low probability of its intensification into a depression over southwest BoB off Tamil Nadu coast during first half of week 2.** Under its influence, a fresh spell of Isolated heavy to very heavy rainfall likely over Tamil Nadu, Rayalaseema and Kerala during 7-11 Nov.
- ❖ A feeble WD is likely impact WHR and adjoining planes with a light isolated rain/ Snow during week 2 (7-11 Nov).
- ❖ Overall, rainfall is likely to be normal to above normal southeast Peninsular India and Kashmir and normal over rest of the country.
- ❖ Temperature likely to fall slightly in most parts of India 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



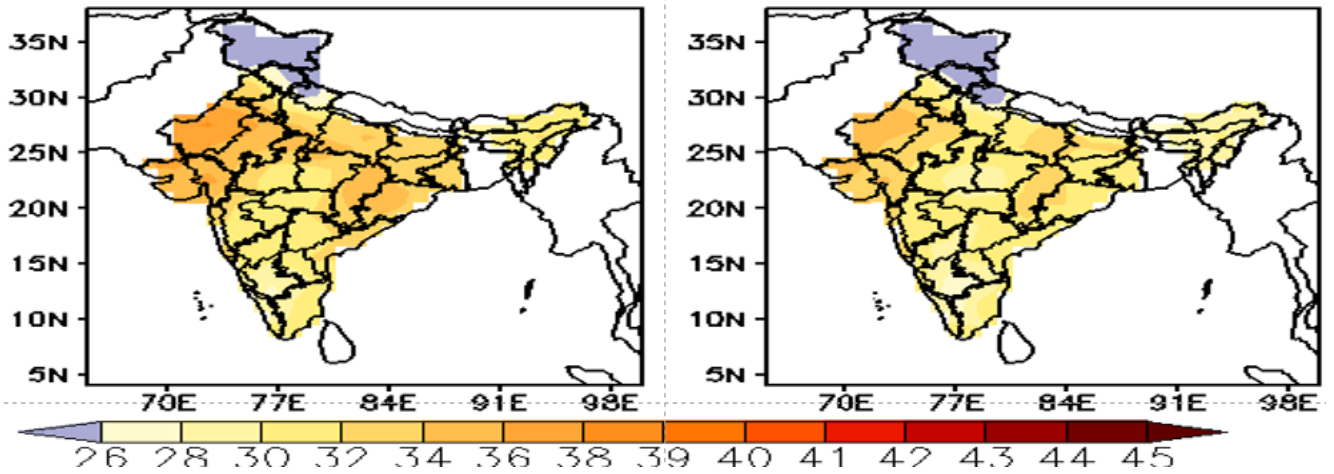




MME Bias corrected forecast Tmax (Deg C)

(Week1: 01Nov-07Nov)

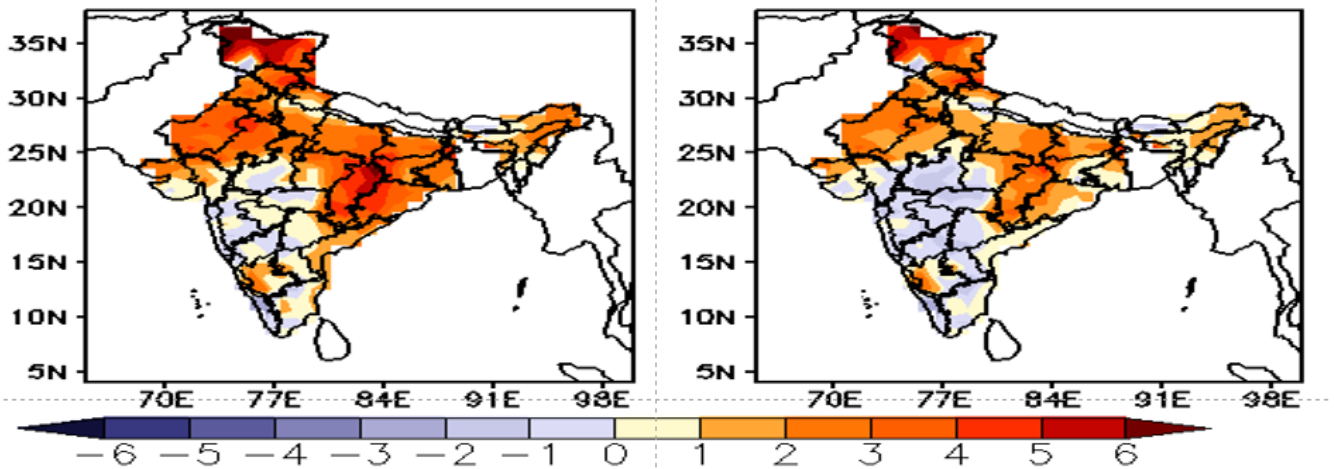
(Week2: 08Nov-14Nov)



MME forecast Tmax anomaly (Deg C)

(Week1: 01Nov-07Nov)

(Week2: 08Nov-14Nov)



Extended range forecast of weekly distribution of Temperature in DegC (top panel) and anomalies (lower panel) from IMD Bias Corrected Forecast