

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

Press Release: Dated: 27th February, 2025

Subject: Current Weather Status and Extended range Forecast for the next two weeks (27th February to 12th March 2025)

1. Salient Observed Features for the week ending 26th February 2025:

- ❖ **Two Western Disturbances (WDs; 20-21 Feb & 23-26 Feb)** moved across northern parts of India during the week. First WD caused light rainfall/snowfall over Jammu & Kashmir on 20th & 21st February, Himachal Pradesh and Uttarakhand on 20th February. Light to moderate rainfall was observed over Punjab, Haryana, and Uttar Pradesh on 20th & 21st February. Second WD caused light rainfall/snowfall over Jammu & Kashmir, Himachal Pradesh on 25th & 26th February, Uttarakhand on 26th February. Light to moderate rainfall was observed over Punjab and Haryana on 26th February.
- ❖ **Dense to very Dense Fog** was observed in isolated pockets of Meghalaya on 20th February. **Dense Fog** was observed in isolated pockets of Himachal Pradesh, Punjab, East Rajasthan on 21st February, Gangetic West Bengal on 22nd February, Meghalaya on 22nd & 25th February, Himachal Pradesh, West Uttar Pradesh on 24th February, Odisha on 25th February.
- ❖ **Heavy rainfall** observed at isolated places over Jharkhand on 21st February, Gangetic West Bengal on 21st & 23rd February, Odisha on 23rd February, Tamilnadu Puducherry & Karaikal and Andaman & Nicobar Islands on 26th February.
- ❖ **Thunderstorm** recorded at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh on 21st February; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Odisha on 22nd February; Himachal Pradesh, West Bengal & Sikkim, Odisha, Jharkhand, Bihar, Chhattisgarh, Telangana, Kerala on 23rd February; Northeast India, Gangetic West Bengal, Odisha, Telangana on 24th February; Arunachal Pradesh, Assam, Andaman & Nicobar Islands on 25th February; Jammu & Kashmir on 26th February.
- ❖ **Hailstorms** reported at isolated places over Gangetic West Bengal, Punjab, Himachal Pradesh, Odisha, Chhattisgarh, Uttarakhand and West Uttar Pradesh

on 21st February; Sub-Himalayan West Bengal & Sikkim on 22nd February; Himachal Pradesh and Jharkhand on 23rd February; Arunachal Pradesh and Assam on 24th February; Assam and Sikkim on 25th February.

- ❖ **Weekly Average Minimum temperature** was above normal by 1-3°C over parts of north, northwest and west coast of India, and nearly normal over remaining parts of the country during the week. **Weekly Average Maximum temperature** was above normal by 1-3°C over northern, western and central India, below normal by 1-3°C over parts of northeast India, and near normal over south Peninsular India during the week.
- ❖ **Markedly above normal (3°C or more)** maximum temperature in the range of 37-40°C prevailed over west coast of India covering Konkan & Goa, Coastal Karnataka and north Kerala during 24th – 26th February.
- ❖ **Temperature Scenario:** The lowest minimum temperature of **6.1°C** was recorded at **Amritsar (Punjab)** on **21 February 2025**, and the highest maximum temperature of **40.4°C** was recorded at **Kannur Airport (Kerala & mahe)** on **24 February 2025** over the plains of the country during the week.
- ❖ **Analysis of weekly overall rainfall distribution during the week-ending on 26th February and Winter Season’s Rainfall Scenario (1st January – 26th February 2025):** The country as a whole, the weekly cumulative All India Rainfall (for 20th to 26th February 2025) in % departure from its long period average (LPA) is -06%. All India Seasonal cumulative rainfall % departure during this year’s Winter Season Rainfall (01st January to 26th February 2024) is -62%. Details of the rainfall distribution over the four broad geographical regions of India are given in Table 1, and Meteorological sub-division-wise rainfall for week and season are given in Annexure I & II, respectively.

Table 1: Rainfall status (Week and season)

Region	Week			Season		
	20.02.2025 TO 26.02.2025			01.01.2025 TO 26.02.2025		
	Actual (mm)	Normal (mm)	Departure (%)	Actual (mm)	Normal (mm)	Departure (%)
EAST & NORTHEAST INDIA	9.4	8.5	+10%	33.3	44.3	-25%
NORTHWEST INDIA	11.2	12.3	-9%	22.5	75.2	-70%
CENTRAL INDIA	1.3	1.3	-4%	1.6	14.2	-89%
SOUTH PENINSULA	0.8	2.0	-58%	8.3	15.2	-46%
THE COUNTRY AS A WHOLE	5.5	5.9	-6%	14.4	37.9	-62%

2. Large scale features:

- ❖ Over the equatorial Pacific Ocean, weak La Niña conditions are present and are expected to persist till April 2025. After that, a transition to ENSO-neutral conditions is likely.
- ❖ Near-average sea surface temperatures (SSTs) are currently seen across most of the Indian Ocean. Neutral Indian Ocean Dipole (IOD) conditions are observed over the Indian Ocean. The latest MMCFS forecast indicates that the neutral IOD conditions are likely to continue for the next 15 days.
- ❖ The Madden Julian Oscillation (MJO) index is currently in Phase 1 with an amplitude > 1 . It will remain in Phase 1 throughout Week 1 and Week 2 with amplitude remaining > 1 . It is not favorable for convective activity over the north Indian oceans and peninsular India.

3. Forecast for the next two weeks

Weather systems & associated Precipitation during Week 1 (27 February to 05 March, 2025):

- ❖ The **Western Disturbance** as a trough in lower to upper tropospheric levels with its axis at 5.8 km above mean sea level runs roughly along Long. 56°E to the north of Lat. 28°N . There is a Divergence of the order of $20\text{-}30 \times 10^{-6} \text{ s}^{-1}$ in the forward sector of the trough over Northwest India. High moisture feeding is also taking place over northwest India in lower tropospheric levels from Arabian Sea. As a result;
 - ✓ **Widespread** light to moderate rainfall/snowfall accompanied with thunderstorm & lightning likely over Western Himalayan region on 27th&28th February with **gusty winds (speed 40-50 Kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 27th February; with **gusty winds (speed 30-40 Kmph)** over Himachal Pradesh on 27th February and decrease in intensity thereafter.
 - ✓ **Heavy rainfall/snowfall** at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Uttarakhand on 27th & 28th February; with isolated **very heavy rainfall/snowfall** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 27th and Himachal Pradesh on 27th & 28th February.
 - ✓ **Fairly widespread** to **widespread** light to moderate rainfall accompanied with thunderstorm & lightning likely over Punjab, Haryana, Chandigarh on 27th & 28th February; **Isolated** to **Scattered** light to moderate rainfall accompanied

with thunderstorm & lightning likely over West Uttar Pradesh & Rajasthan during 27th February- 01st March; East Uttar Pradesh in 28th February & 01st March with **gusty winds (speed 30-40 Kmph)** very likely over Punjab & Haryana on 27th & 28th and Rajasthan on 28th February.

- ✓ **Heavy rainfall** at isolated places likely over Punjab on 27th & 28th February.
- ✓ **Isolated Hailstorm activity also likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh on 27th; Uttarakhand, Punjab & Haryana on 27th& 28th; West Uttar Pradesh on 28th February.**

- ❖ **Isolated to Scattered** light/moderate rainfall/snowfall accompanied with **thunderstorm, lightning** very likely over Arunachal Pradesh on 28th February & 01st March; **Isolated to scattered** light/moderate rainfall accompanied with **thunderstorm& lightning** likely over Sub-Himalayan West Bengal & Sikkim on 27th& 28th February; Assam & Meghalaya on 28th February & 01st March with **gusty winds (speed 30-40 Kmph)** on 28th February. Isolated **Heavy rainfall** likely over Arunachal Pradesh on 01st March.

- ❖ Under the influence of an active easterly wave;
- ✓ **Scattered to Fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning** very likely over Andaman & Nicobar Islands on 27th February.
- ❖ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm & lightning** very likely over Tamilnadu Puducherry & Karaikal during 27thFebruary -01stMarch; Kerala & Mahe during 28th February- 02nd March; Lakshadweep on 28th February & 01st March with isolated **heavy rainfall** on Tamilnadu Puducherry & Karaikal on 28th February & 01st March and Kerala & Mahe 01st March.

- ❖ A fresh **Western Disturbance** is likely to affect Northwest India from 02nd March. Under its influence; **Isolated to Scattered** light/moderate rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh during 02nd -05th; Uttarakhand during 02nd-04th; **Isolated** light/moderate rainfall/snowfall likely over Punjab, Haryana, Chandigarh on 03rd February.

- ❖ No significant weather likely over rest parts of the country during the week.

Precipitation for week 2 (06 to 12 March, 2025):

- ❖ Under the influence of western disturbances, scattered to fairly widespread rainfall/snowfall is likely over Western Himalayan Region during some to many days of the week.
- ❖ Light/moderate isolated to scattered rainfall is also likely over northeast India and extreme south Peninsular India during some days of the week.
- ❖ Overall, rainfall is likely to be below normal over all the homogeneous regions of the country during the week except northwest India, where it is likely to be near normal during the week.

Temperature forecast & heat wave warning for Week 1 (27 February to 05 March, 2025) and Week 2 (06 to 12 March, 2025)

Temperature forecast & heat wave warning for Week 1 (27 February to 05 March, 2025):

- ❖ Maximum temperatures were **markedly above normal (5°C or more)** at isolated places over Haryana-Chandigarh-Delhi, West Uttar Pradesh, East Rajasthan and Konkan & Goa; **appreciably above normal (3°C to 5°C)** at many places over Saurashtra & Kutch; at isolated places over Punjab, West Rajasthan and Coastal Karnataka; **above normal (1°C to 3°C)** at many places over Uttarakhand; at a few places over East Uttar Pradesh, Arunachal Pradesh, West Madhya Pradesh, Madhya Maharashtra and Kerala & Mahe. Yesterday, the highest **maximum temperature of 39.2°C** was reported at **Kannur Airport (Kerala)** over the plains of the country.
- ❖ Minimum temperatures are **markedly above normal (5°C or more)** over many parts of Punjab & Delhi; at a few places over Haryana, West Uttar Pradesh & Rajasthan; **appreciably above normal by (3°C to 5°C)** over many places over Gujarat State; at isolated places over Jammu-Kashmir & Himachal Pradesh; **above normal by (1°C to 3°C)** at many places over Madhya Pradesh, Bihar, Odisha, Tamilnadu Puducherry & Karaikal; at a few places over East Uttar Pradesh, Maharashtra, Coastal Andhra Pradesh & Yanam, Kerala & Mahe; at isolated places over Gangetic West Bengal, Coastal & North Interior Karnataka and Andaman & Nicobar Islands. These are **below normal or near normal over rest parts of the country**.

Forecast of temperature:

Maximum temperature:

- ❖ Gradual fall in maximum temperatures by 3-5°C likely over Northwest India during next 2 days and gradual rise by 4-6°C thereafter.
- ❖ No significant change in maximum temperatures likely over Konkan & Goa during next 24 hours and gradual fall by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures likely over West India during next 24 hours and gradual fall by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures likely over rest parts of India during next 4-5 days.

Heat Wave and Hot & Humid weather warnings:

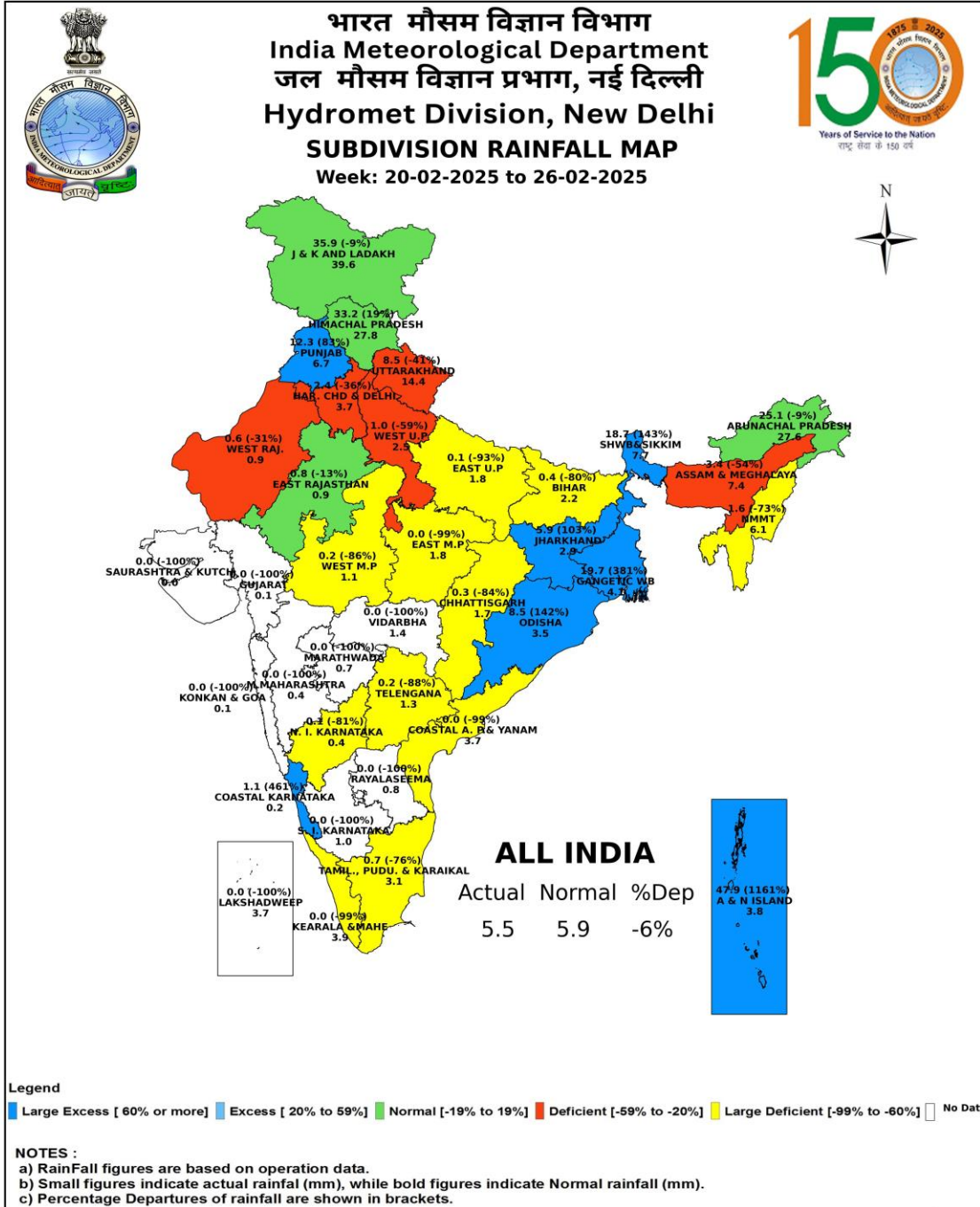
- ❖ **Heat wave conditions** very likely in isolated pockets over Konkan & Goa on 27th; Coastal Karnataka on 27th& 28th February.
- ❖ **Hot and humid weather** very likely to prevail over Konkan & Goa on 28th February and Coastal Karnataka on 01st March.

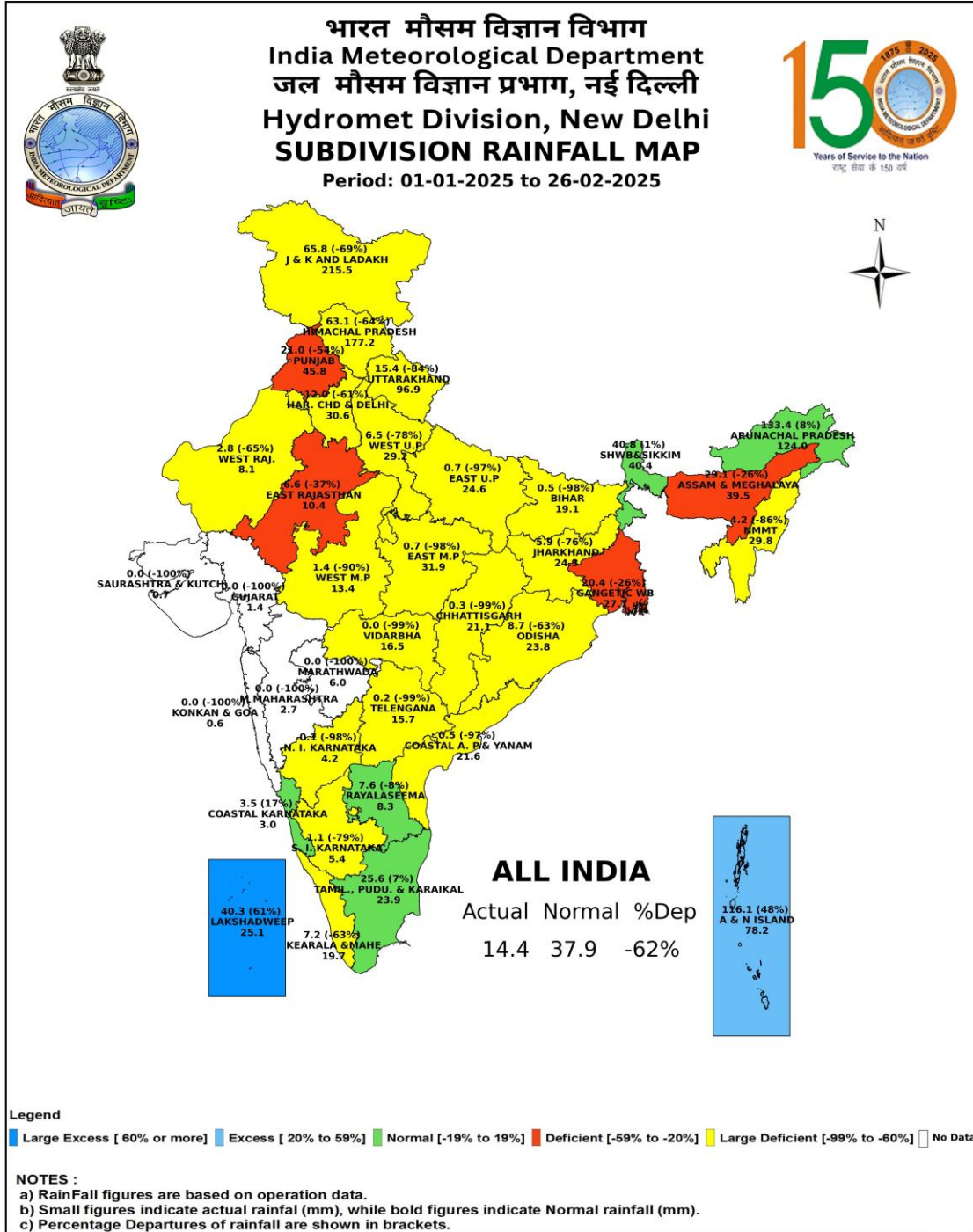
Minimum Temperature:

- ❖ No significant change in minimum temperatures likely over Northwest India during next 2 days and gradual fall by 2-4°C thereafter.
- ❖ No significant change in minimum temperatures likely over rest parts of India during most days of the week.

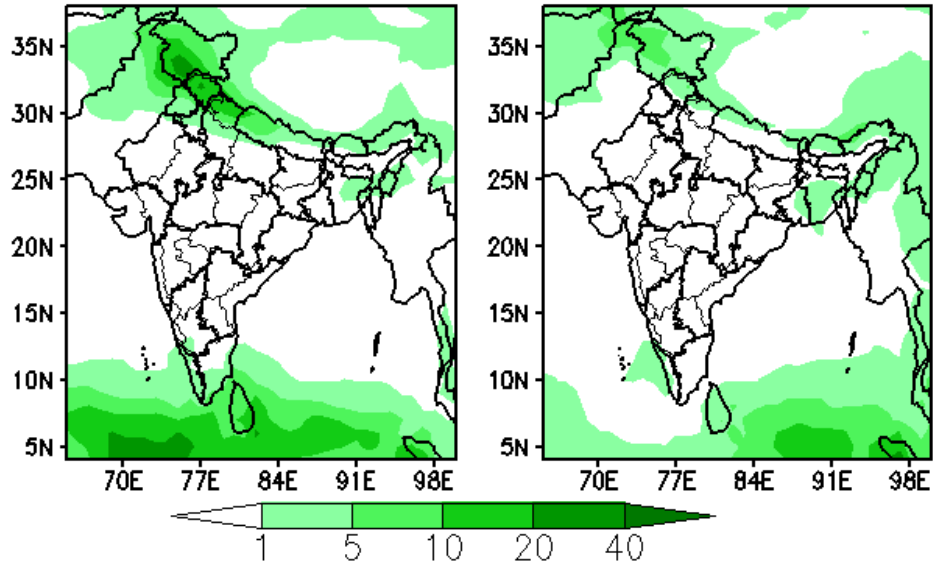
Temperature forecast & heat wave warning for Week 2 (06 to 12 March, 2025):

- ❖ Maximum temperatures are likely to be above normal by 2-3°C over many parts of northwest India and along west & east coast of India. It is likely to be near normal or below normal over rest parts of the country.
- ❖ There is low to moderate probability of heat wave conditions over Gujarat, Konkan and coastal Karnataka during some days of the week.
- ❖ Minimum temperatures are likely to be below normal or near normal over most parts of the country except Western Himalayan Region, where it is likely to be above normal 2-3°C.

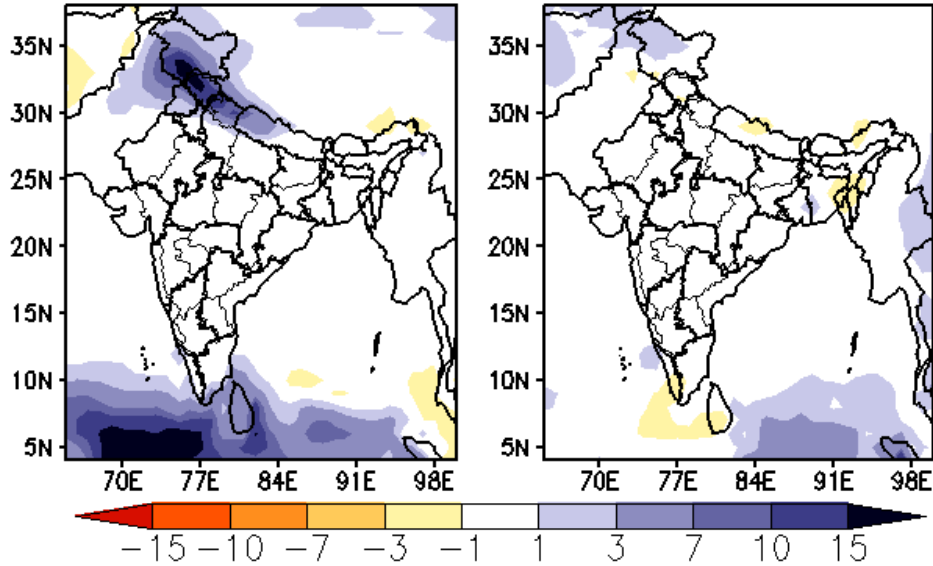




Forecast Rainfall (mm/day) (00Z=0530 hrs IST)
(Week1:00Z27Feb-00Z06Mar) (Week2:00Z06Mar-00Z13Mar)



Forecast Rainfall Anomaly (mm/day) (00Z=0530 hrs IST)
(Week1:00Z27Feb-00Z06Mar) (Week2:00Z06Mar-00Z13Mar)

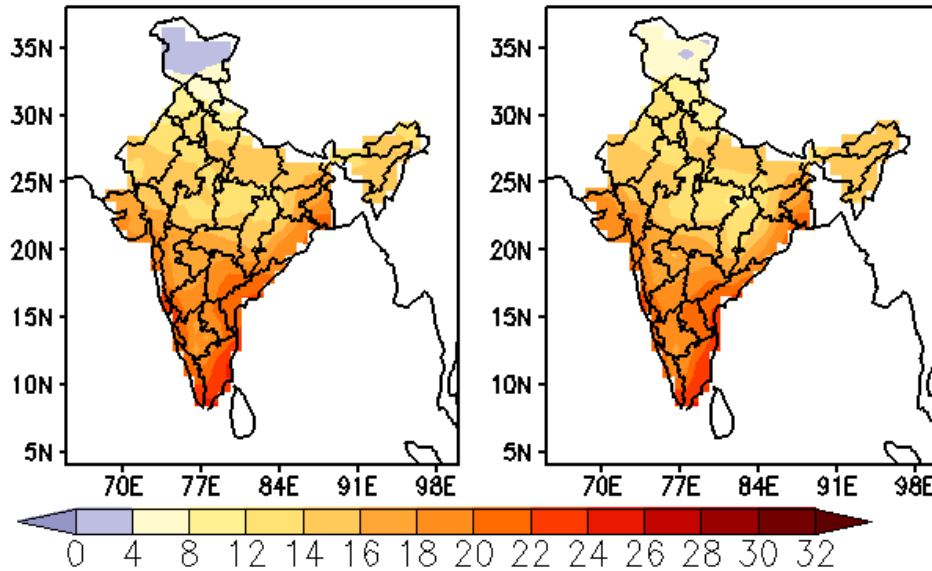


Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies (lower panel) from IMD MME

MME Bias corrected forecast Tmin (Deg C)

(Week1: 28Feb-06Mar)

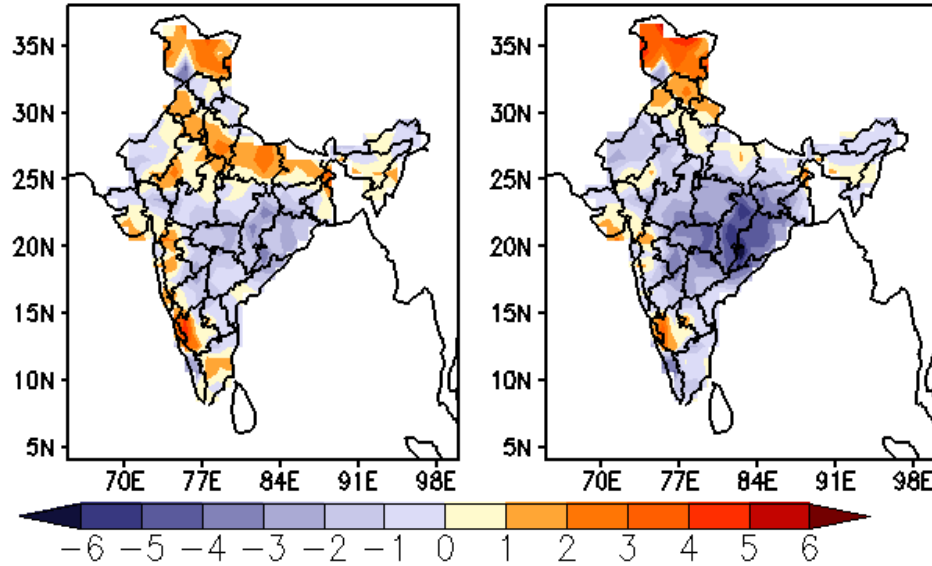
(Week2: 07Mar-13Mar)



MME forecast Tmin anomaly (Deg C)

(Week1: 28Feb-06Mar)

(Week2: 07Mar-13Mar)

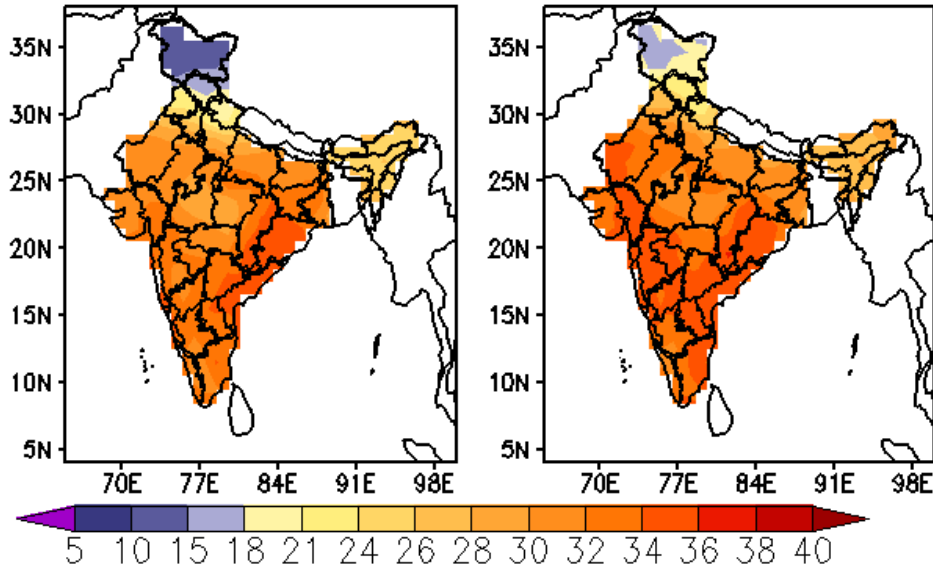


Extended range forecast of weekly distribution of Minimum Temperature in °C (top panel) and anomalies (lower panel) from IMD Bias Corrected Forecast

MME Bias corrected forecast Tmax (Deg C)

(Week1: 28Feb-06Mar)

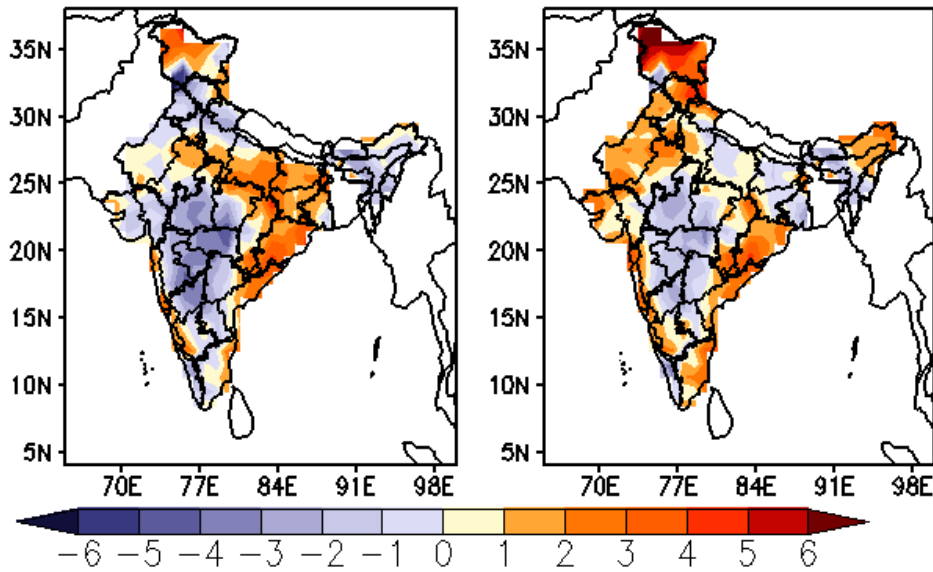
(Week2: 07Mar-13Mar)



MME forecast Tmax anomaly (Deg C)

(Week1: 28Feb-06Mar)

(Week2: 07Mar-13Mar)

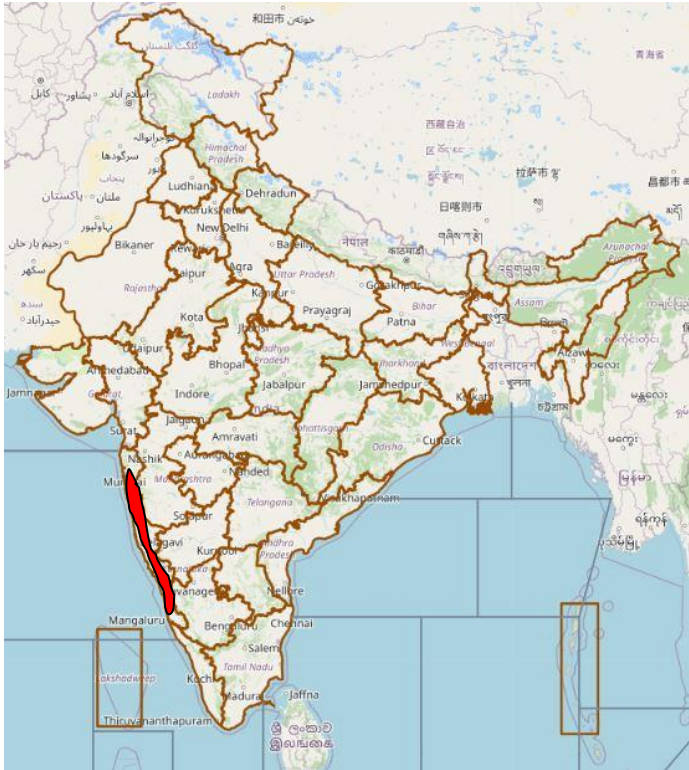


Extended range forecast of weekly distribution of Maximum Temperature in °C (top panel) and anomalies (lower panel) from IMD Bias Corrected Forecast

Heat Wave forecast during next 2 weeks

EXTENDED RANGE OUTLOOK FOR HEATWAVE

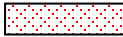

Week 1: 28.02.2025- 06.03.2025



Week2: 07.03.2025- 13.03.2025



PROBABILITY OF HEATWAVE CONFIDENCE

- LOW (1-33% PROBABILITY)** 
- MODERATE (34-67% PROBABILITY)** 
- HIGH (68-100% PROBABILITY)** 