

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

Press Release: Dated: 20th February, 2025

Subject: Current Weather Status and Extended range Forecast for the next two weeks (20th February to 05th March 2025)

1. Salient Observed Features for the week ending 19th February 2025:

- ❖ **Three Western Disturbances (WDs; 15-17 Feb, 17-19 Feb & 18-19 Feb)** moved across northern parts of India during the week. It caused light rainfall/snowfall over Himachal Pradesh on 16th February, Uttarakhand on 16th & 18th February; Jammu & Kashmir on 17th February. Isolated light to moderate rainfall was also observed over Rajasthan on 18th & 19th February, West Madhya Pradesh on 19th February.
- ❖ **Last week's Dense Fog/Low Cloud** continued to persist in isolated pockets of east & northeast India during the most days of this week.
- ❖ **Dense to very Dense Fog** was observed in isolated pockets of Meghalaya on 17th February. **Dense Fog** was observed in isolated pockets of Odisha on 14th February, Assam & Meghalaya on 15th & 19th February, Sub-Himalayan West Bengal & Sikkim on 15th, 17th & 19th February, Gangetic West Bengal on 17th to 19th February, Punjab on 18th February.
- ❖ **Cold wave to severe cold wave** conditions prevailed in isolated pockets of Himachal Pradesh on 14th February.
- ❖ **Weekly Average Minimum temperature** was above normal by 2-4°C over parts of northwest and west coast of India during second half of the week, and nearly normal over remaining parts of the country during the week. **Weekly Average Maximum temperature** was above normal by 2-4°C over northern, western and central India, below normal by 2-4°C over parts of northeast India, and near normal over south Peninsular India during the week.
- ❖ **Temperature Scenario:** The lowest minimum temperature of **4.2°C** had been recorded at **Adampur (Punjab)** on **14 February 2025** and the highest maximum temperature of **38.6°C** had been recorded at **PBO Anantapur (Rayalseema)** on **19 February 2025** over the plains of the country during the week.
- ❖ **Analysis of weekly overall rainfall distribution during the week-ending on 19th February and Winter Season's Rainfall Scenario (1st January – 19th February 2025):** The country as a whole, the weekly cumulative All India Rainfall (for 13th to 19th February 2025) in % departure from its long period average (LPA) is -79%. All India Seasonal cumulative rainfall % departure during this year's Winter Season Rainfall (01st January to 19th February 2024) is -72%. 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		
	13.02.2025 TO 19.02.2025			01.01.2025 TO 19.02.2025		
	Actual (mm)	Normal (mm)	Departure (%)	Actual (mm)	Normal (mm)	Departure (%)
EAST & NORTHEAST INDIA	8.3	8.6	-3%	24.4	35.8	-32%
NORTHWEST INDIA	0.1	12.8	-99%	11.4	62.9	-82%
CENTRAL INDIA	0.0	2.3	-100%	0.3	12.9	-98%
SOUTH PENINSULA	0.0	2.4	-100%	7.4	13.2	-44%
THE COUNTRY AS A WHOLE	1.4	6.6	-79%	8.9	32.0	-72%

2. Large scale features:

- ❖ Over the equatorial Pacific Ocean, weak La Niña conditions are present and are expected to persist through the first quarter of 2025 (January to March). 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 JFM season.
- ❖ As per ECMM guidance, Madden Julian Oscillation (MJO) is currently in phase 8 with amplitude < 1. It would continue in same phase during beginning of week 1. Thereafter, it would move across phase 1 with amplitude remaining < 1 during remaining part of week 1. During week 2, it would exhibit very slow movement into phase 2 with amplitude remaining < 1. MJO would marginally support enhancement of convective activity over the Arabian Sea (AS).

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (20 to 26 February, 2025) and Week 2 (27 February to 05 March, 2025)

Weather systems & associated Precipitation during Week 1 (20 to 26 February, 2025):

- ❖ **A trough runs from north Bangladesh to Telangana and an anti-cyclonic circulation lies over north Bay of Bengal in lower tropospheric levels. Under the influence of these systems and their confluence,**
 - ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning with gusty winds (speed 30-40 Kmph)** very likely over Gangetic West Bengal, Jharkhand and Odisha on 20th & 22nd; Isolated to scattered light/moderate rainfall accompanied with **thunderstorm & lightning** very likely over Sub-Himalayan West Bengal

& Sikkim, Bihar on 20th & 22nd; Gangetic West Bengal, Jharkhand and Odisha on 21st & 23rd February.

- ✓ **Hailstorm activity also likely at isolated places** over Gangetic West Bengal, Jharkhand & Odisha on 20th & 22nd February.
- ❖ A **Western Disturbance** seen as a cyclonic circulation over north Pakistan & neighbourhood in lower tropospheric levels with a trough aloft in middle & upper tropospheric level with its axis at 5.8 km above mean sea level roughly along Long. 70°E to the north of Lat. 30°N. The induced **cyclonic circulation** lies over West Rajasthan & neighbourhood in lower tropospheric levels. Under their influence;
 - ✓ **Fairly widespread to widespread light to moderate rainfall/snowfall accompanied with thunderstorm & lightning** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand on 20th and isolated light rainfall/snowfall on 21st & 22nd February.
 - ✓ **Heavy rainfall/snowfall** at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 20th February.
 - ✓ **Hailstorm activity also likely at isolated places** over Uttarakhand and West Uttar Pradesh on 20th February.
 - ✓ Isolated to Scattered light to moderate rainfall accompanied with **thunderstorm & lightning with gusty winds (speed 30-40 Kmph)** likely over Punjab, Haryana, Chandigarh and West Uttar Pradesh on 20th February; with **thunderstorm & lightning** likely over East Uttar Pradesh, north Chhattisgarh on 20th February.
- ❖ A **fresh Western Disturbance** is likely to affect Northwest India from 24th February, 2025. Under its influence, Isolated to Scattered light/moderate rainfall/snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 24th-26th and light rainfall over adjoining plains on 26th February.
- ❖ Isolated light/moderate rainfall very likely over Coastal Andhra Pradesh & Yanam and Kerala & Mahe during 21st-25th February.
- ❖ A **cyclonic circulation** lies over central Assam in lower tropospheric levels. Under its influence,
 - ✓ Isolated to scattered light rainfall activity likely over Northeast India and Sub-Himalayan West Bengal & Sikkim during next 7 days.
 - ✓ Thunderstorm & lightning activity likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 20th & 21st February; with **gusty winds (speed 30-40 Kmph)** over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 22nd & 23rd February.
 - ✓ **Heavy rainfall** at isolated places likely over Arunachal Pradesh on 21st February.
- ❖ No significant weather likely over rest parts of the country during the week.

Precipitation for week 2 (27 February to 05 March, 2025):

- ❖ Under the influence of an active western disturbance, fairly widespread to widespread rainfall/snowfall is likely over Western Himalayan Region during 1st half of the week. Isolated heavy rainfall/snowfall also likely on 27th & 28th February over the region. Isolated to scattered light/moderate rainfall likely over adjoining plains of northwest India during the same period.
- ❖ 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 & extreme south Peninsular India, where above normal rainfall activity is likely.

Temperature and Fog forecast & warning for Week 1 (20 to 26 February, 2025) and Week 2 (27 February to 05 March, 2025)

Temperature and Fog forecast & warning for Week 1 (20 to 26 February, 2025):

- ❖ Minimum temperatures are in the range of **5-12°C** over many parts of plains of Northwest India; **12-20°C** over many parts of Central, East & West India. Today, the lowest minimum temperature of **3.5°C** is reported at **Sikar (East Rajasthan)** over the plains of the country.
- ❖ During the past 24 hours, **minimum temperatures has fallen by 1-4°C** over many parts of Northwest & Central India; in some parts of Saurashtra & Kutch and **risen by 1-4°C** over many parts of East India; in some parts of Northeast India; at isolated places over Karnataka & Coastal Andhra Pradesh & Yanam.
- ❖ Minimum temperatures are **above normal (2°C or more)** in most parts of East India; in some parts of Central, West & Northeast India. These are **below normal (-1°C to -3°C)** at isolated places over Rajasthan, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, Saurashtra & Kutch, East Uttar Pradesh and near normal over rest parts of the country.
- ❖ Maximum temperatures are in the range of **35-39°C** over many parts of Odisha & Coastal Andhra Pradesh & Yanam; in some parts of Telangana, at isolated places over Chhattisgarh, Rayalaseema and Kerala & Mahe. Yesterday, the highest **maximum temperature** of **38.4°C** was reported at **Nandigama (Coastal Andhra Pradesh)** over the plains of the country.
- ❖ Maximum temperatures were **markedly above normal (5°C or above)** at a few places over Chhattisgarh; at isolated places over Odisha, Jharkhand; **appreciably above normal (3°C to 5°C)** at isolated places over East Uttar Pradesh, Bihar, Gangetic West Bengal, East Madhya Pradesh, Vidarbha, Telangana, Coastal Andhra Pradesh & Yanam; **above normal (1°C to 3°C)** at a few places over Marathwada, Rayalaseema; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Uttar Pradesh, West Madhya Pradesh, Madhya Maharashtra, North Interior Karnataka, Tamil Nadu, Puducherry

& Karaikal. These were **below normal (-1°C to -3°C)** at isolated places over Himachal Pradesh, East Rajasthan, Gujarat state and near normal over rest parts of the country.

Forecast of temperature:

- ❖ No significant change in minimum temperatures likely over Northwest India during next 24 hours and gradual rise by 2-3°C during subsequent days of the week.
- ❖ Gradual fall in minimum temperatures by 2-3°C likely over Central India during 1st half of the week and no significant change during subsequent days of the week.
- ❖ Gradual fall in minimum temperatures by 3-5°C likely over East India during next 2 days and no significant change during subsequent days of the week.
- ❖ No significant change in minimum temperatures likely over Maharashtra during next 24 hours and gradual rise by 2-3°C during subsequent days of the week.
- ❖ Maximum temperatures are likely to be above normal by 3-5°C over north Peninsular & East India during most days of the week.

Cold Wave Warnings:

- ❖ There is no probability of cold wave conditions over any part of the country (**Annexure VI**).

Temperature forecast and dense fog warning for Week 2 (27 February to 05 March, 2025):

- ❖ Minimum temperatures are likely to be below normal by 1-2°C to near normal over most parts of country except Western Himalayan Region, Uttar Pradesh, Bihar and northeast India, Where it is likely to be above normal by 1-2°C during the week.
- ❖ There is no probability of cold wave conditions over any part of the country (**Annexure VI**).
- ❖ Maximum temperatures are likely to be above normal by 2-4°C over east & adjoining central India and many parts of Western Himalayan Region and northeast India. It is likely to be below normal 1-2°C to near normal over rest parts of the country.





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India Meteorological Department
जल मौसम विज्ञान प्रभाग, नई दिल्ली
Hydromet Division, New Delhi
SUBDIVISION RAINFALL MAP
 Period: 01-01-2025 to 19-02-2025

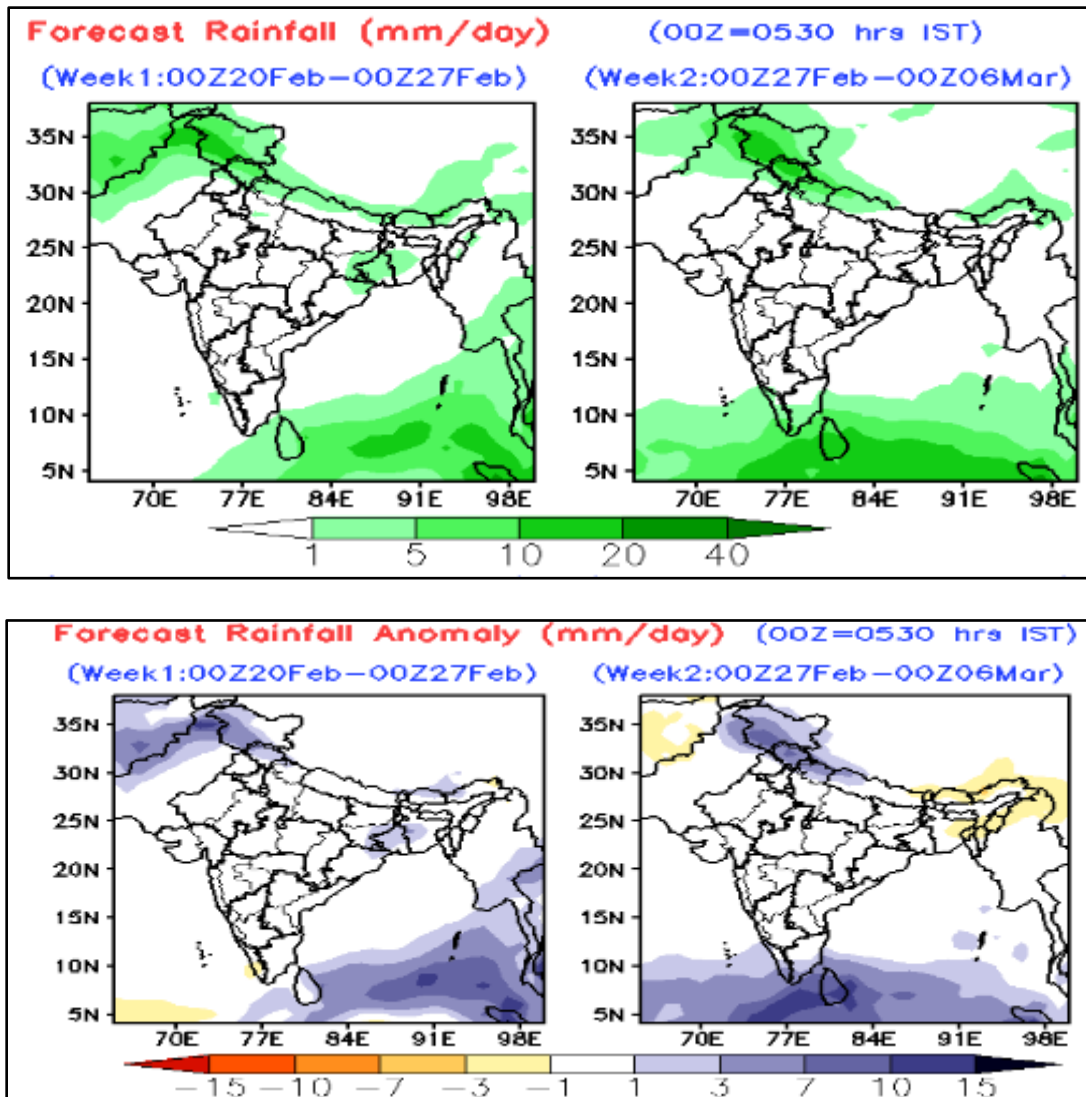


Legend

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

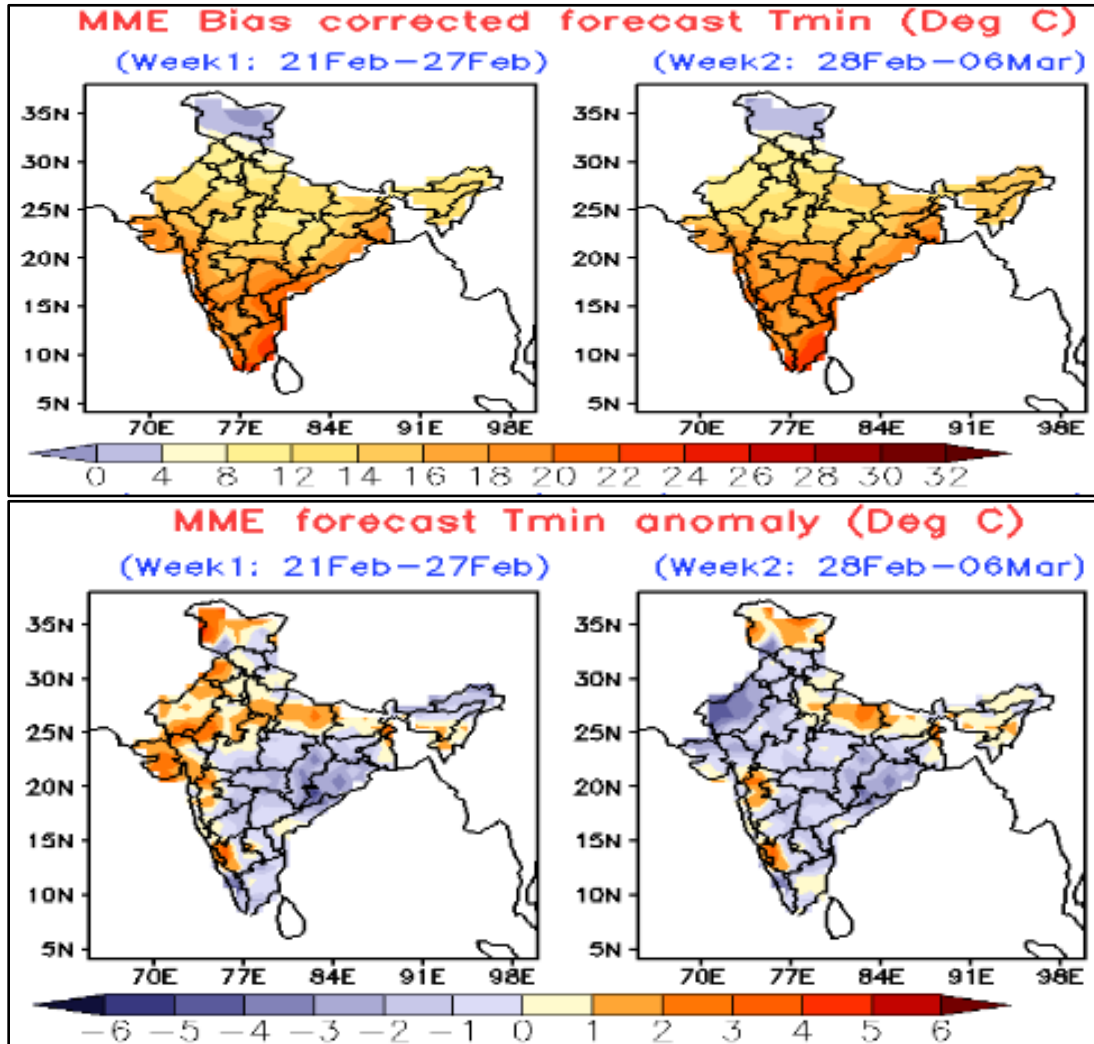
NOTES :

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



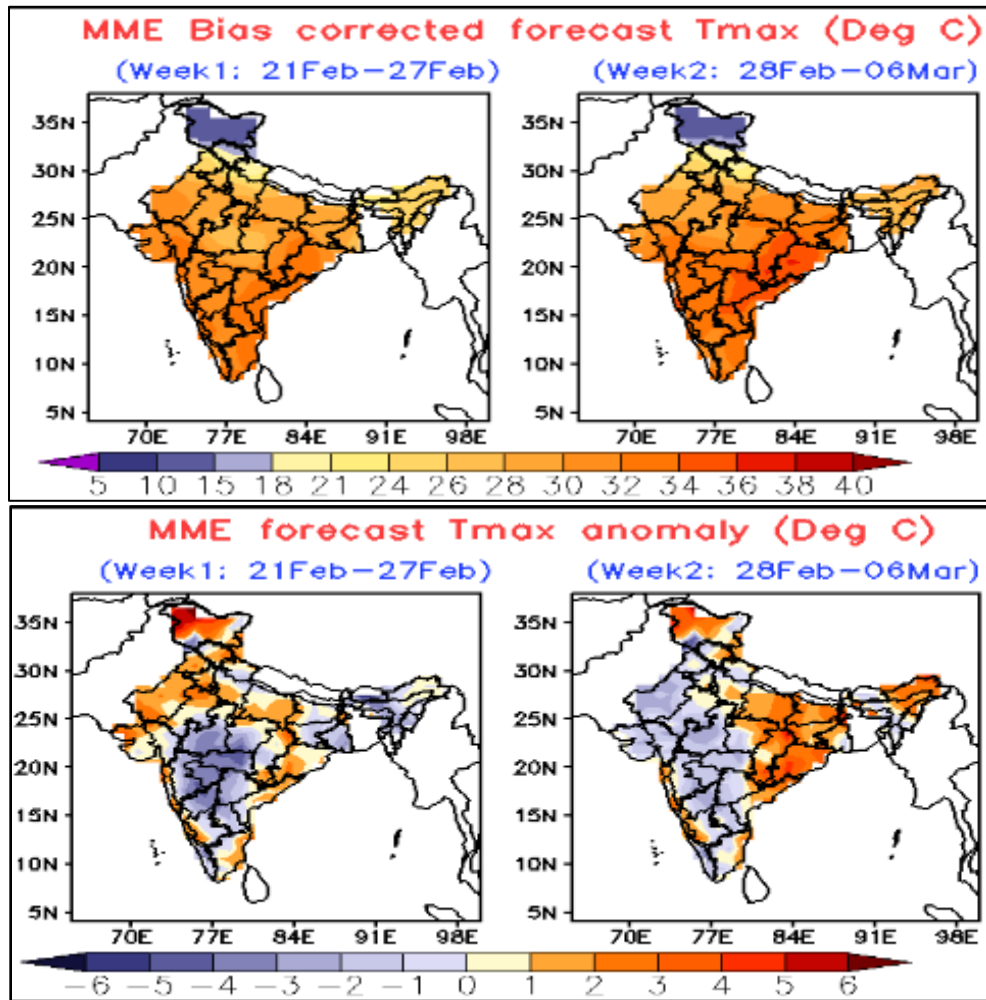
Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies (lower panel) from IMD MME

Annexure IV



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

Annexure V



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

Cold Wave forecast during next 2 weeks

EXTENDED RANGE OUTLOOK FOR COLDWAVE

Week 1: 21.02.2025-27.02.2025

Week2: 28.02.2025-06.03.2025



PROBABILITY OF HEATWAVE CONFIDENCE

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

