

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

Press Release: Dated: 30th January, 2025

Subject: Current Weather Status and Extended range Forecast for the next two weeks (30th January to 12th February 2025)

1. Salient Observed Features for the week ending 29th January 2025:

- ❖ **Cessation of Northeast Monsoon rains over South Peninsular India on 27th January, 2025:** (a) No significant rainfall activity over southeast peninsula during past 2 days. (b) In the lower levels, dry winds from northern India are prevailing over the region. Considering these points, the Northeast Monsoon rains have ceased over Kerala-Mahe, South Interior Karnataka, Tamil Nadu-Puducherry-Karaikal, Rayalaseema & adjoining areas of Coastal Andhra Pradesh & Yanam on 27th January, 2025.
- ❖ **Two Western Disturbances (23-24 and 28-29 January)** moved across northern parts of India during the week. It caused light rainfall/snowfall at isolated places over Jammu & Kashmir and Ladakh on 23rd January and isolated light rainfall over east Rajasthan & west Uttar Pradesh on 23rd & 24th January.
- ❖ **Last week's large-scale Dense Fog/Low Cloud cover across the Himalayan foothills** persisted over the same region and extended towards east & northeast India including Odisha during the most days of this week. **Dense to very Dense Fog** was observed in isolated pockets of East Uttar Pradesh on 23rd, 24th & 26th to 29th January, Bihar on 23rd, 24th, 28th & 29th January, Sub-Himalayan West Bengal & Sikkim on 23rd & 26th January, Gangetic West Bengal on 23rd & 24th January, Assam & Meghalaya on 23rd to 27th & 29th January, Tripura on 23rd & 26th January; Odisha from 24th to 29th January, Coastal Andhra Pradesh on 24th January; West Uttar Pradesh on 27th to 29th January. **Dense Fog** was observed in isolated pockets of Himachal Pradesh & Odisha on 23rd January, Northeast Rajasthan on 24th January, Tripura on 24th & 25th January; Uttarakhand on 25th, 27th & 28th January, Bihar on 25th January, Gangetic West Bengal & Sikkim on 25th & 27th January.

- ❖ **Cold day to severe cold wave** conditions observed in isolated pockets of Himachal Pradesh, Punjab & Rajasthan on 28th January. **Cold Wave** conditions observed in isolated pockets of Himachal Pradesh from 23rd to 27th & 29th January, Punjab from 25th & 27th January, Haryana on 26th to 28th January, Rajasthan on 27th January.
- ❖ **Weekly Average Minimum temperature** was above normal by 1-3°C over northern & northeastern parts of the country during first half of the week; above normal by 2-4°C over isolated pockets of Maharashtra and near normal over rest parts of the country during the week. **Weekly Average Maximum temperature** was above normal by 2-4°C over north India, northwest and central India and near normal over rest parts of the country during this week.
- ❖ **Temperature Scenario:** The lowest minimum temperature of **0.5°C** was recorded at Fatehpur Sikar (East Rajasthan) on 27th January 2025, and the highest maximum temperature of 37.4oC was recorded at **Honavar (Coastal Karnataka)** on **25th January 2025** over the plains of the country during the week.
- ❖ **Analysis of weekly overall rainfall distribution during the week-ending on 29th January and Winter Season’s Rainfall Scenario (1st – 29th January 2025):** The country as a whole, the weekly cumulative All India Rainfall (for 23rd to 29th January 2025) in % departure from its long period average (LPA) is -95%. All India Seasonal cumulative rainfall % departure during this year’s Winter Season Rainfall (01st – 29th January 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		
	23.01.2025 TO 29.01.2025			01.01.2025 TO 29.01.2025		
	Actual (mm)	Normal (mm)	Departure (%)	Actual (mm)	Normal (mm)	Departure (%)
EAST & NORTHEAST INDIA	0.9	4.5	-80%	6.6	15.6	-58%
NORTHWEST INDIA	0.1	9.8	-99%	6.3	31.4	-80%
CENTRAL INDIA	0.0	1.8	-100%	0.3	6.7	-96%
SOUTH PENINSULA	0.2	1.1	-80%	7.2	7.5	-5%
THE COUNTRY AS A WHOLE	0.2	4.5	-95%	4.5	15.8	-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.
- ❖ The Madden Julian Oscillation (MJO) index is currently in Phase 4 with an amplitude = 1. It is likely to migrate to Phase 5 during the initial days of Week 1, with amplitude becoming < 1, and further to Phase 6 by the middle of Week 1, with amplitude remaining < 1. Thereafter, it will remain in Phase 6 until the second half of Week 2, during which it is likely to migrate to Phase 7 with amplitude becoming >1.

3. Forecast for the next two weeks

Weather systems & associated Precipitation during Week 1 (30 January to 05 February, 2025):

- ❖ The **Western disturbance** seen as a cyclonic circulation over East Afghanistan in lower tropospheric levels. Two fresh **Western Disturbances** are likely to affect Northwest India between 01st to 03rd February, 2025. Under the influence of these systems,
 - ✓ Scattered to fairly widespread light to moderate rainfall/snowfall activity likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 30th January- 05th February; isolated to scattered rainfall/snowfall over Himachal Pradesh during 30th January- 05th February, Uttarakhand during 01st February-05th February and isolated to scattered light to moderate rainfall over Punjab, Haryana during 31st January- 05th February, Uttar Pradesh, Rajasthan during 03rd -05th February.
- ❖ A **cyclonic circulation** lies over northeast Assam in lower tropospheric levels. Under its influence,
 - ✓ Light to moderate rainfall accompanied with thunderstorm & lightning very likely at a few places over Arunachal Pradesh, northeast Assam, Nagaland on 30th & 31st January.
 - ✓ Isolated light to moderate rainfall likely over Sub-Himalayan West Bengal & Sikkim on 30th & 31st January.
 - ✓ **Heavy rainfall/snowfall** likely over Arunachal Pradesh on 30th January.

- ❖ Under the influence of a trough in easterly, Light to moderate rainfall accompanied with thunderstorm & lightning very likely at a few places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe during 30th January – 02nd February with isolated **heavy rainfall** likely over Tamil Nadu, Puducherry & Karaikal on 30th & 31st January.
- ❖ Overall, rainfall is likely to be above normal over south Peninsular India and normal to above normal over northeast India during the week.

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

- ❖ No active western disturbance is likely to influence northwest India during the week. However, due to feeble Western disturbances, light/moderate isolated to scattered rainfall/snowfall likely over Western Himalayan Region during some/many days of the week.
- ❖ Light/moderate isolated to scattered rainfall is also likely over northeast India during some days of the week.
- ❖ Under the influence of easterly winds from Bay of Bengal, isolated to scattered rainfall likely over South Peninsular & adjoining central India during some days of the week.
- ❖ Overall, rainfall is likely to be normal to above normal over parts of central India and northeastern states; below normal over rest parts of the country during the week.

Minimum temperature and Fog forecast & warning for Week 1 (30 January to 05 February, 2025):

- ❖ Minimum temperatures are **5-10°C** over many parts of plains of Northwest India & adjoining Uttarakhand; **10-18°C** in many parts of Central, East & West India. Today, the lowest minimum temperature of **5°C** is reported at **Ayodhya (East Uttar Pradesh)** over the plains of the country.
- ❖ During the past 24 hours, there has been **fall in minimum temperatures by 1-4°C** in some places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Assam & Meghalaya; at isolated places of Rajasthan, Gujarat Region, Goa, East Uttar Pradesh, Madhya Maharashtra and **rise by 1-4°C** in many parts of Madhya Pradesh, Chhattisgarh, West Bengal; at some places over Himachal Pradesh, Haryana, Tamilnadu Puducherry & Karaikal; at isolated places over West Uttar Pradesh, Bihar, Vidarbha, Saurashtra & Kutch.
- ❖ Minimum temperatures are **above normal (2°C or more)** over at many places over West India, Odisha, Gangetic West Bengal, Madhya Pradesh; at isolated places over Bihar, Jharkhand, Telangana, Chhattisgarh, Rajasthan, Haryana, Punjab and Assam & Meghalaya These are **below normal (-1°C to -3°C)** at

isolated places over Uttar Pradesh and near normal over rest parts of the country.

Forecast of temperature:

- ❖ Gradual rise in minimum temperatures by 2-3°C likely over the Northwest, East, Central and West India during 1st half of the week and no significant change thereafter.
- ❖ No significant change in minimum temperatures likely over rest parts of the country.

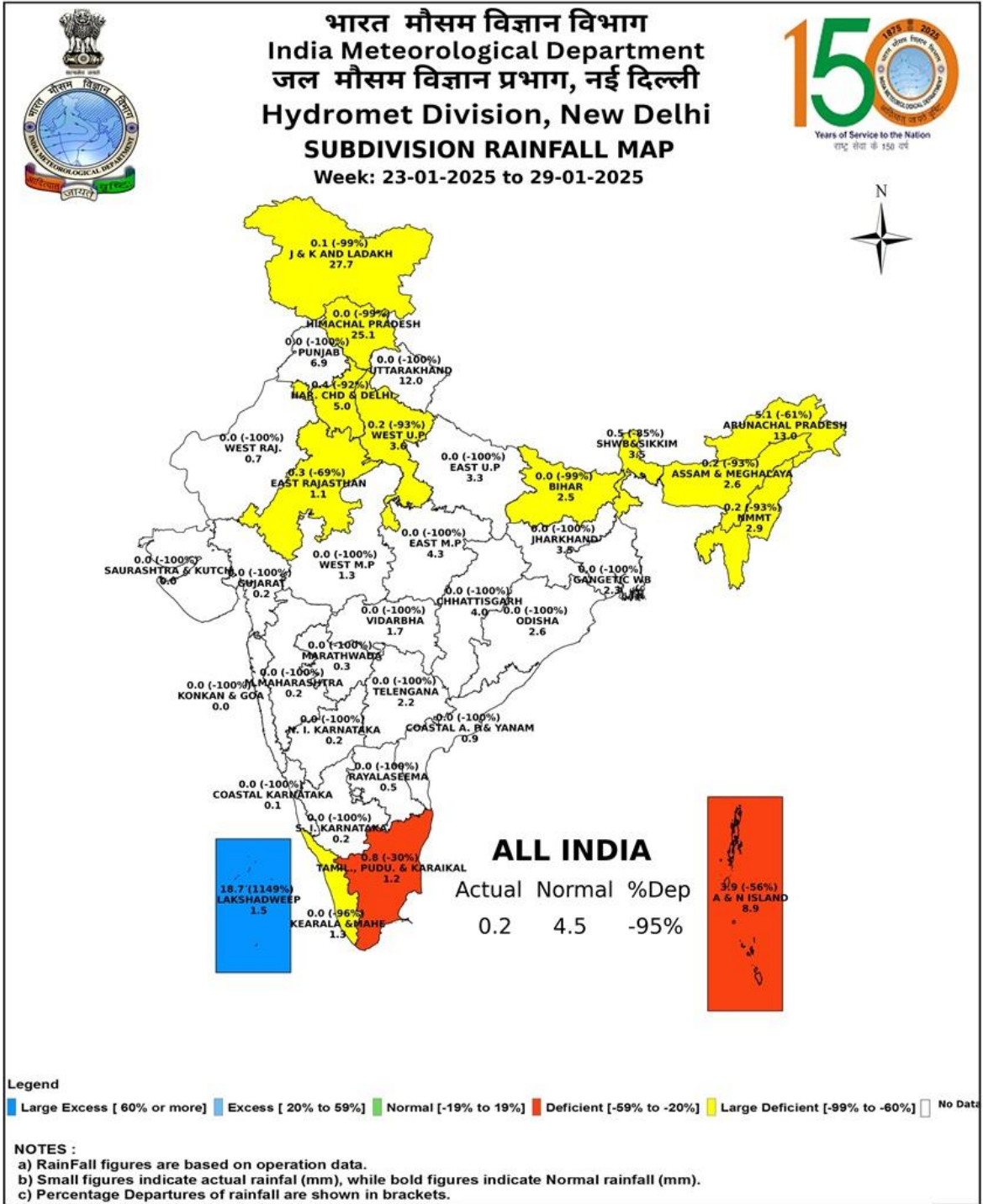
Dense Fog Warnings:

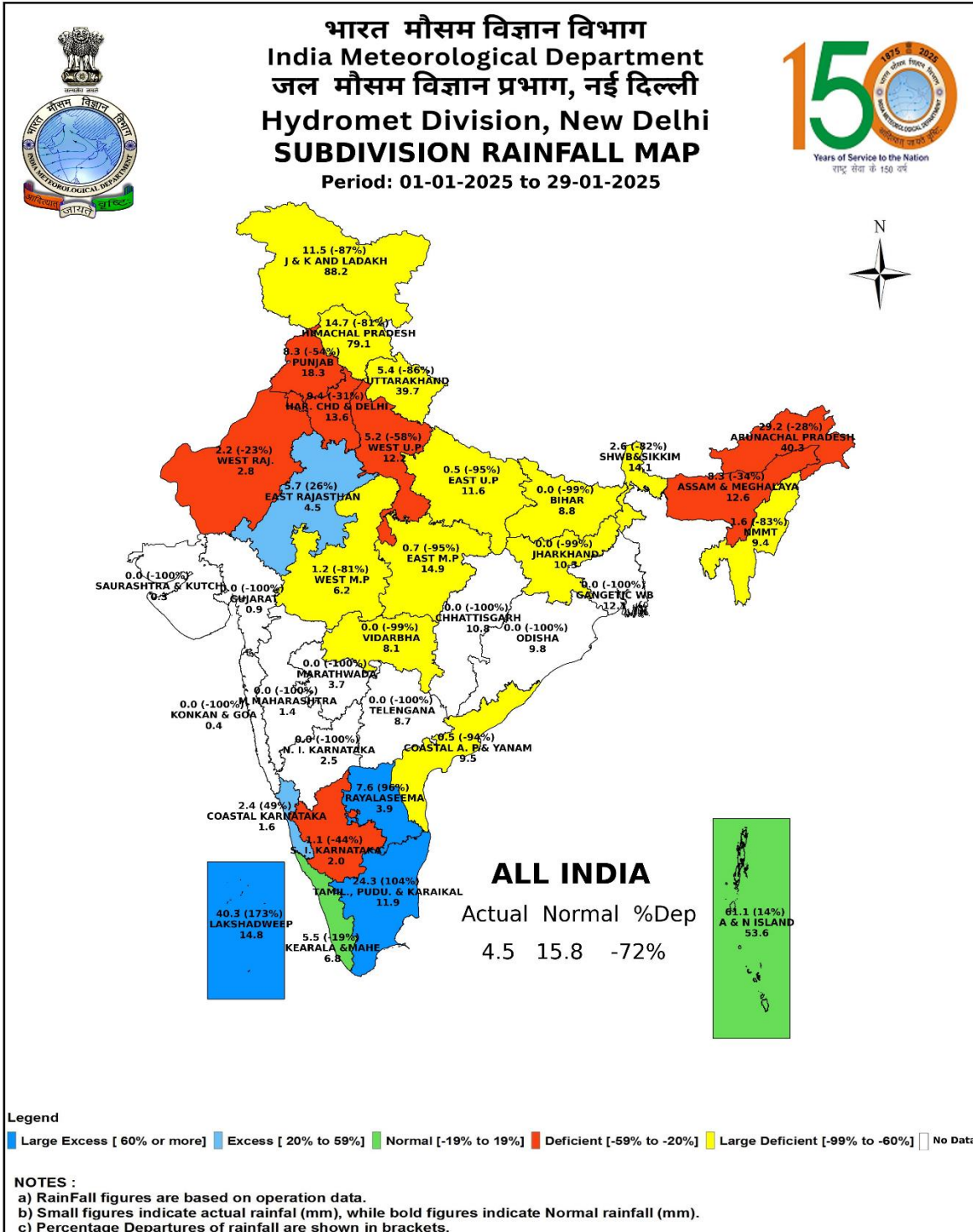
Dense to very Dense fog Conditions very likely to continue to prevail during night/early morning hours in isolated pockets of Uttar Pradesh till 01st February

Dense fog conditions very likely to continue to prevail during night/early morning hours in isolated pockets of Gangetic West Bengal till 31st January; Sub-Himalayan West Bengal & Sikkim till 01st February; Bihar, Odisha, Assam & Meghalaya till 02nd February.

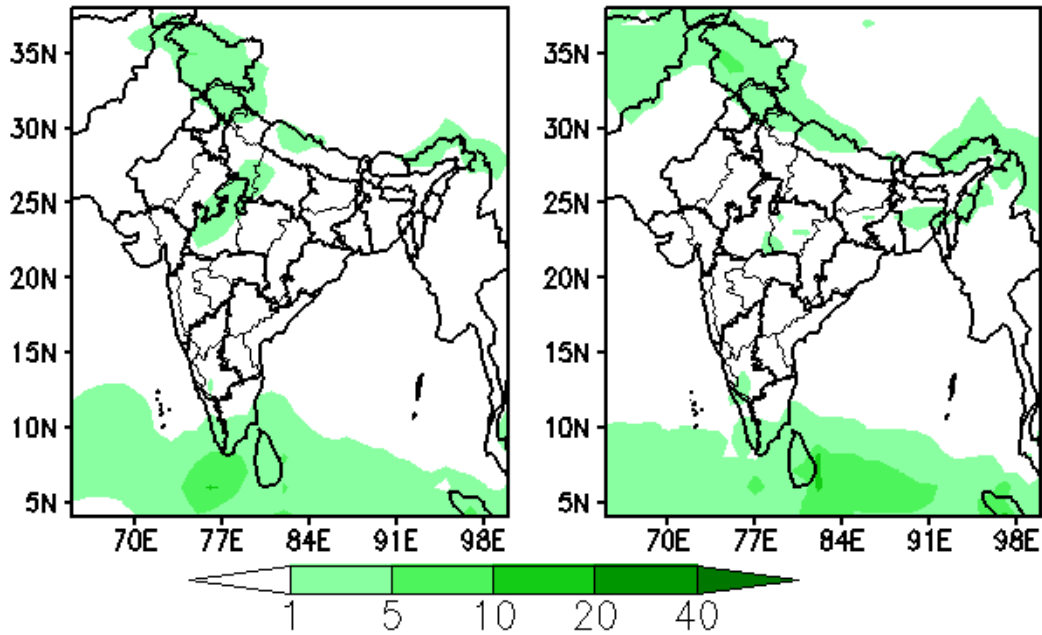
Minimum temperature forecast and dense fog warning for Week 2 (06 to 12 February, 2025):

- ❖ Minimum temperatures are likely to be between 4-8°C over Punjab, Haryana, Chandigarh & Delhi and north Rajasthan and above 8°C over rest parts of the country during the week.
- ❖ Minimum temperatures are likely to be near normal or slightly below normal by 1-2°C over most parts of the country during the week (**Annexure V**).
- ❖ There is no probability of cold wave conditions over any part of the country.
- ❖ There is less probability of significant dense fog over any part of the country.

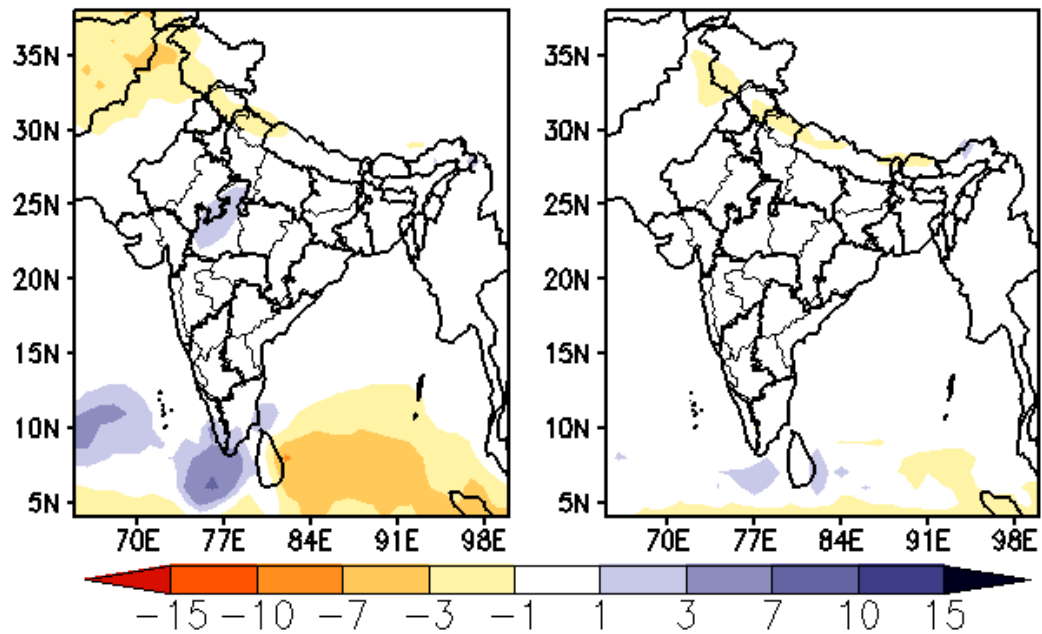




Forecast Rainfall (mm/day) (00Z=0530 hrs IST)
(Week1:00Z30Jan-00Z06Feb) (Week2:00Z06Feb-00Z13Feb)



Forecast Rainfall Anomaly (mm/day) (00Z=0530 hrs IST)
(Week1:00Z30Jan-00Z06Feb) (Week2:00Z06Feb-00Z13Feb)

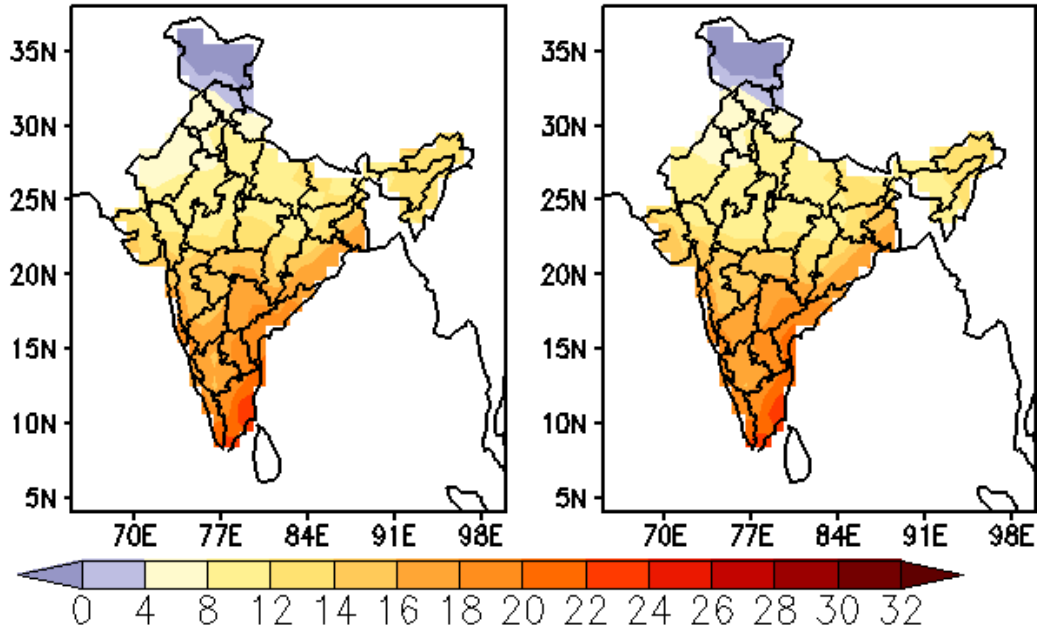


Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies (lower panel) from IMD MME

MME Bias corrected forecast Tmin (Deg C)

(Week1: 31Jan-06Feb)

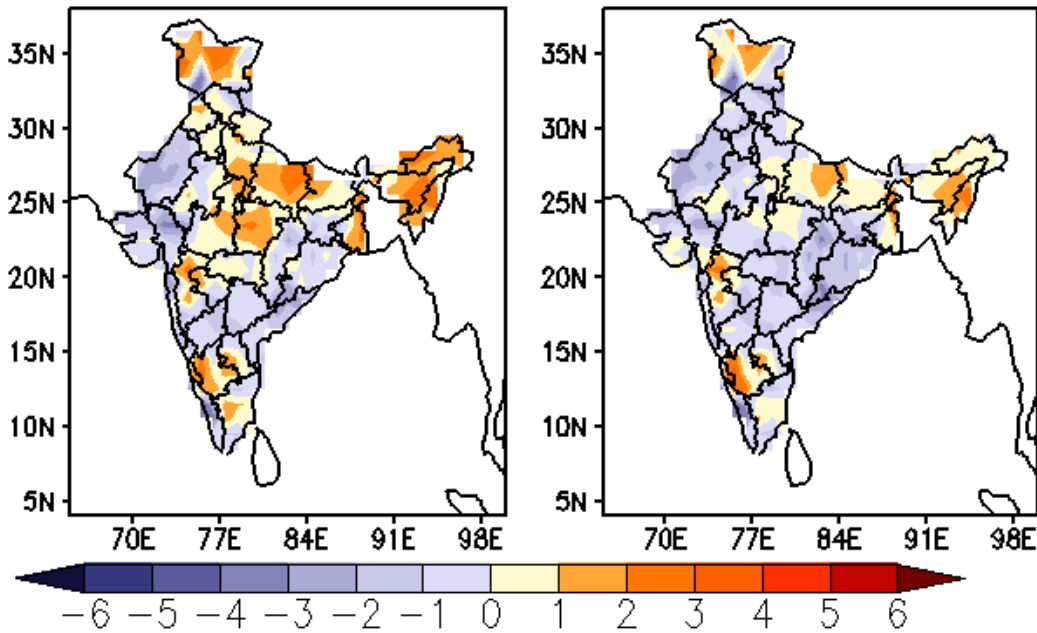
(Week2: 07Feb-13Feb)



MME forecast Tmin anomaly (Deg C)

(Week1: 31Jan-06Feb)

(Week2: 07Feb-13Feb)



Extended range forecast of weekly distribution of Minimum 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: 31.01.2025-06.02.2025

Week2: 07.02.2025-13.02.2025



PROBABILITY OF COLD WAVE CONFIDENCE

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