**Government of India**

**Earth System Science Organization**

**Ministry of Earth Sciences**

**India Meteorological Department**

**Press Release: Dated: 23rd January, 2025**

## Subject: Current Weather Status and Extended range Forecast for the next two weeks (23rd January to 05th February 2025)

## 1. Salient Observed Features for the week ending 23rd January 2025:

- **Four WDs (16-17, 17-21, 19-21 and 21-22 Jan) moved to extreme norther parts of India during the week in quick succession. However, due to lack of sufficient moisture incursion, only one WD of 21-22 Jan, caused light** Rainfall/Snowfall at isolated places over Jammu Kashmir 21 and 22 Jan.
- **Last week's Large-scale Dense fog/ low cloud cover across Indo Gangetic Plains reduced significantly due to above frequent WD activities over north India and it was mainly remained across** Himalayan foothills during the week and over Bihar and east Uttar Pradesh, parts of northeast and eastern India on 22 Jan and over Odisha during most dates in the week with larger areas on 21 and 22 Jan . **Dense to very Dense Fog** was observed in isolated pockets of Punjab from 16th to 19th January, Haryana from 16th to 18th & 22nd January, Rajasthan from 16th to 20th January, East Uttar Pradesh on 16th & 18th to 22nd January, West Uttar Pradesh from 17th to 20th & 22nd January, West Madhya Pradesh from 17th to 19th January, Odisha on 17th, 21st & 22nd January; Bihar on 18th, 21st & 22nd January, Meghalaya on 18th & 21st January. **Dense Fog** was observed in isolated pockets of Chandigarh on 16th & 18th January, West Uttar Pradesh on 16th & 21st January, Tripura on 16th & 17th January, Odisha on 16th, 19th & 20th January, Assam & Meghalaya on 16th & 22nd January, North Madhya Pradesh on 16th January, Himachal Pradesh, East Uttar Pradesh on 17th January; Uttarakhand on 18th & 19th January, East Madhya Pradesh on 18th & 19th January, Sub-Himalayan West Bengal on 18th, 21st & 22nd January, Bihar on 19th & 20th January, Haryana, Meghalaya on 19th January, Manipur on 19th & 20th January; West Uttar Pradesh on 21st January; Jammu-Kashmir and Gangetic West Bengal on 22nd January.
- **Cold day to severe cold day** conditions observed in isolated pockets of West Madhya Pradesh on 18th January.
- **Heavy to very heavy rainfall with extremely heavy fall** was observed at isolated places over Tamil Nadu on 20th January. **Heavy to very heavy rainfall** was recorded at isolated places over Tamil Nadu on 16th & 19th January. **Heavy rainfall** was observed at isolated places over Tamil Nadu on 17th January.

- **Weekly Average Minimum temperature** was above normal by 1-3ºC over entire country during this week. **Weekly Average Maximum temperature** was below normal by 1-3ºC over north India during first half of the week & above normal by 2-4ºC during second half of the week; and above normal by 1-3ºC over northeast India and near normal over rest parts of the country during this week.
- **Temperature Scenario:** The lowest minimum temperature of **2.8ºC** was recorded at Pathankot (Punjab) on 17th January 2025, and the highest maximum temperature of 37.5oC was recorded at **Kannur Airport (Kerala & Mahe)** on **21st January 2025** over the plains of the country during the week.

- **Analysis of weekly overall rainfall distribution during the week-ending on 22nd January and Winter Season's Rainfall Scenario (1st – 22nd January 2025):** The country as a whole, the weekly cumulative All India Rainfall (for 16th to 22nd January 2025) in % departure from its long period average (LPA) is -60%. All India Seasonal cumulative rainfall % departure during this year's Winter Season Rainfall (01st – 22nd January 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 | | |
|---|---|---|---|---|---|---|
| | 16.01.2025 TO 22.01.2025 | | | 01.01.2025 TO 22.01.2025 | | |
| | Actual (mm) | Normal (mm) | Departure (%) | Actual (mm) | Normal (mm) | Departure (%) |
| **EAST & NORTHEAST INDIA** | **0.1** | **4.4** | **-99%** | **5.7** | **11.1** | **-49%** |
| **NORTHWEST INDIA** | **2.2** | **8.4** | **-73%** | **6.2** | **21.6** | **-71%** |
| **CENTRAL INDIA** | **0.0** | **1.2** | **-98%** | **0.3** | **4.9** | **-94%** |
| **SOUTH PENINSULA** | **4.3** | **1.4** | **+208%** | **6.9** | **6.4** | **+8%** |
| **THE COUNTRY AS A WHOLE** | **1.6** | **3.9** | **-60%** | **4.3** | **11.3** | **-62%** |

## 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 3 with an amplitude > 1. It is likely to migrate to Phase 4 during the start of the second half of Week 1, with amplitude becoming < 1, and will continue to propagate in Phase 4 till the end of Week 1. Thereafter, during the start of week 2, it is likely to migrate to Phase 5 with amplitude remaining < 1. By the latter half of Week 2, it is likely to propagate to Phase 6 with amplitude remaining < 1.

## 3. Forecast for the next two weeks

### Weather systems & associated Precipitation during Week 1 (23 to 29 January, 2025):

- The Western Disturbance now seen as a cyclonic circulation over north Pakistan & neighbourhood in lower tropospheric levels with a trough aloft in middle & upper tropospheric levels runs roughly along Long. 71°E to the north of Lat. 30°N. A cyclonic circulation lies over southwest Madhya Pradesh & neighbourhood in lower tropospheric levels. Under the influence of these systems:
  - ✓ Isolated rainfall/snowfall very likely over Western Himalayan Region and isolated rainfall likely over West Uttar Pradesh and East Rajasthan on 23rd January.
- A cyclonic circulation lies over East Bangladesh and neighbourhood in lower tropospheric levels. Under its influence,
  - ✓ Thunderstorm activity at isolated places likely over Arunachal Pradesh, northeast Assam on 23rd & 24th January.
- Overall, rainfall is likely to be below normal over all the homogeneous regions of India during the week.

### Precipitation for week 2 (30 January to 05 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 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 most parts of south Peninsular and near normal over northeastern states; below normal over rest parts of the country during the week.

## Minimum temperature and Fog forecast & warning for Week 1 (16 to 22 January, 2025):

- Minimum temperatures are **below 0°C** over isolated places of Jammu, Kashmir & Ladakh; **1-5°C** over some parts of Himachal Pradesh & Uttarakhand; **6-10°C** over many parts of plains of Northwest & some parts of East India; **10-18°C** in many parts of Central, West and East India. Today, the lowest minimum temperature of **6.1°C** is reported at **Amritsar (Punjab)** over the plains of the country.
- During the past 24 hours, there has been **fall in minimum temperatures by 1-3ºC** in some parts of Saurashtra & Kutch; in isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Rajasthan and **rise by 1-3ºC** in most parts of Odisha; in many parts of East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Tamilnadu Puducherry & Karaikal; in some parts of Chhattisgarh, Uttar Pradesh, West Madhya Pradesh and in isolated places of West Bengal & Sikkim, Assam & Meghalaya, Madhya Maharashtra, Marathawada, Vidarbha, Telangana and Karnataka.
- Minimum temperatures are **below normal (-1°C to -3°C)** at isolated places over Odisha and Coastal Andhra Pradesh & Yanam. These are **markedly above normal (5°C or more)** at isolated places over East Madhya Pradesh & East Rajasthan; **appreciably above normal (3°C to 5°C)** at most places over Indo-Gangetic plains, Central & West India, Assam & Meghalaya; at isolated places over Haryana, Chandigarh & Delhi, Kerala & Mahe, Tamilnadu Puducherry & Karaikal; **above normal (1°C to 3°C)** at a few places over Gangetic West Bengal; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Maharashtra, Chhattisgarh, Telangana, Rayalaseema and near normal over rest parts of the country.

## Forecast of temperature:

- Gradual fall in minimum temperatures by 2-4°C likely over Northwest India during 1st half of the week and no significant change thereafter.
- No significant change in minimum temperatures likely over Central India during next 24 hours and gradual fall by 2-3°C thereafter.
- No significant change in minimum temperatures likely over East India during next 48 hours and gradual fall by 2-4°C thereafter.

- No significant change in minimum temperatures likely over rest parts of the country.

**Dense Fog Warnings:**

- **Dense to very dense fog Condition** very likely to continue to prevail during night/early morning hours in some parts of East Uttar Pradesh on 23rd January.
- **Dense fog conditions** very likely to continue to prevail during night/early morning hours in isolated pockets of East Rajasthan, Gangetic West Bengal, Bihar, Jharkhand till 24th; Himachal Pradesh, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura till 25th; East Uttar Pradesh on 24th & 25th January.

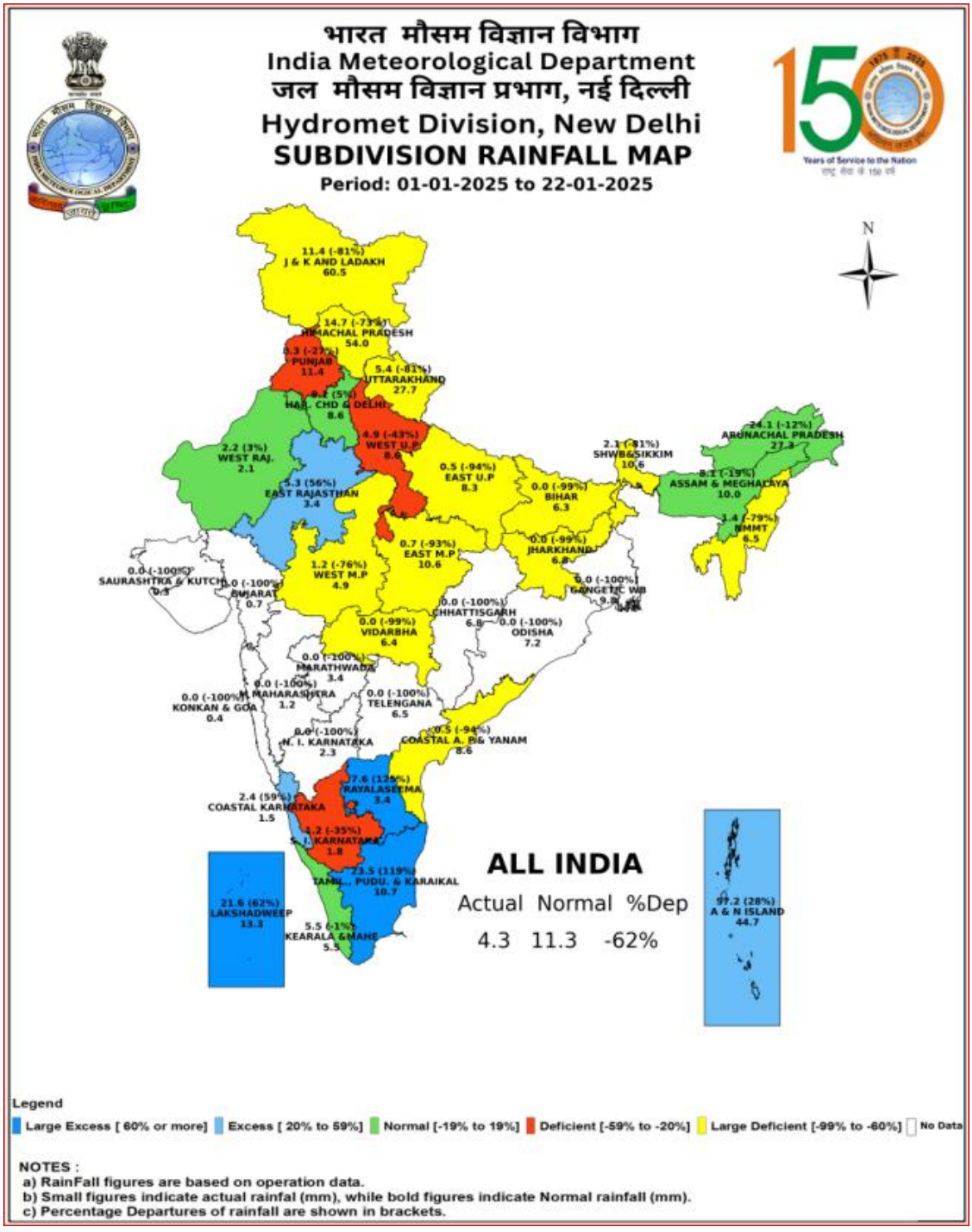
**Minimum temperature forecast and dense fog warning for Week 2 (30 January to 05 February, 2025):**

- Minimum temperatures are likely to be between 4-8°C over many parts of northwest India (excluding Western Himalayan Region) and above 8°C over rest parts of the country during the week.
- Minimum temperatures are likely to be below normal by 1-2°C over East & adjoining central India and near normal over rest parts of the country during the week **(Annexure V).**
- There is no probability of cold wave conditions over any part of the country.

Annexure I


भारत मौसम विज्ञान विभाग
India Meteorological Department
जल मौसम विज्ञान प्रभाग, नई दिल्ली
Hydromet Division, New Delhi
SUBDIVISION RAINFALL MAP
Week: 16-01-2025 to 22-01-2025
Years of Service to the Nation
N
3.8 (-83%) J & K AND LADAKH 23.1
10.1 (-54%) HIMACHAL PRADESH 21.9
0.1 (-98%) PUNJAB 3.4
2.1 (-81%) UTTARAKHAND 11.1
1.8 (-40%) HARYANA, CHD & DELHI 3.1
0.0 (-100%) WEST RAJ. 0.7
2.2 (-37%) WEST U.P 3.5
0.0 (-99%) EAST U.P 3.5
2.9 (123%) EAST RAJASTHAN 1.3
0.0 (-100%) BIHAR 3.1
0.0 (-99%) SHWB&SIKKIM 3.8
0.3 (-97%) ARUNACHAL PRADESH 11.8
0.0 (-100%) ASSAM & MEGHALAYA 4.0
0.0 (-100%) NMMT 2.3
0.0 (-100%) JHARKHAND 2.8
0.0 (-100%) EAST M.P 3.0
0.2 (-86%) WEST M.P 1.3
0.0 (-100%) SAURASHTRA & KUTCH 0.2
0.0 (-100%) GUJARAT 0.2
0.0 (-100%) GANGETIC WB 2.6
0.0 (-100%) CHHATTISGARH 1.5
0.0 (-100%) ODISHA 1.5
0.0 (-100%) VIDARBHA 0.9
0.0 (-100%) MARATHWADA 1.3
0.0 (-100%) KONKAN & GOA 0.1
0.0 (-100%) M.MAHARASHTRA 0.4
0.0 (-100%) TELENGANA 1.4
0.0 (-100%) N. I. KARNATAKA 1.0
0.1 (-91%) COASTAL A. R& YANAM 1.3
5.0 (450%) RAYALASEEMA 0.9
1.0 (894%) COASTAL KARNATAKA 0.1
0.7 (-5%) S. I. KARNATAKA 0.7
17.3 (686%) TAMIL ., PUDU. & KARAIKAL 2.2
15.9 (206%) LAKSHADWEEP 5.2
2.1 (31%) KEARALA &MAHE 1.6
2.4 (-73%) A & N ISLAND 8.6
ALL INDIA
Actual Normal %Dep
1.6 3.9 -60%
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 rainfal (mm), while bold figures indicate Normal rainfall (mm).
c) Percentage Departures of rainfall are shown in brackets.

Annexure II


भारत मौसम विज्ञान विभाग
India Meteorological Department
जल मौसम विज्ञान प्रभाग, नई दिल्ली
Hydromet Division, New Delhi
SUBDIVISION RAINFALL MAP
Period: 01-01-2025 to 22-01-2025
150
Years of Service to the Nation
N
11.4 (-81%) J & K AND LADAKH 60.5
14.7 (-73%) HIMACHAL PRADESH 54.0
8.3 (-27%) PUNJAB 11.4
5.4 (-81%) UTTARAKHAND 27.7
8.2 (5%) HARY. CHD & DELHI 8.6
2.2 (3%) WEST RAJ. 2.1
4.9 (-43%) WEST U.P 8.6
5.3 (56%) EAST RAJASTHAN 3.4
0.5 (-94%) EAST U.P 8.3
2.1 (-81%) SHWB&SIKKIM 10.6
24.1 (-12%) ARUNACHAL PRADESH 27.3
8.1 (-19%) ASSAM & MEGHALAYA 10.0
3.4 (-79%) NMMT 6.5
0.0 (-99%) BIHAR 6.3
0.0 (-99%) JHARKHAND 6.8
0.7 (-93%) EAST M.P 10.6
1.2 (-76%) WEST M.P 4.9
0.0 (-100%) SAURASHTRA & KUTCH 0.3
0.0 (-100%) GUJARAT 0.7
0.0 (-100%) GANGETIC WB 9.9
0.0 (-100%) CHHATTISGARH 6.8
0.0 (-100%) ODISHA 7.2
0.0 (-99%) VIDARBHA 6.4
0.0 (-100%) MARATHWADA 3.4
0.0 (-100%) M.MAHARASHTRA 1.2
0.0 (-100%) KONKAN & GOA 0.4
0.0 (-100%) TELENGANA 6.5
0.0 (-100%) N. I. KARNATAKA 2.3
0.5 (-94%) COASTAL A. P& YANAM 8.6
27.6 (125%) RAYALASEEMA 3.4
2.4 (59%) COASTAL KARNATAKA 1.5
4.2 (-35%) S. I. KARNATAKA 1.8
23.5 (119%) TAMIL, PUDU. & KARAIKAL 10.7
21.6 (62%) LAKSHADWEEP 13.3
5.5 (-1%) KEARALA &MAHE 5.5
97.2 (28%) A & N ISLAND 44.7
ALL INDIA
Actual Normal %Dep
4.3 11.3 -62%
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 :
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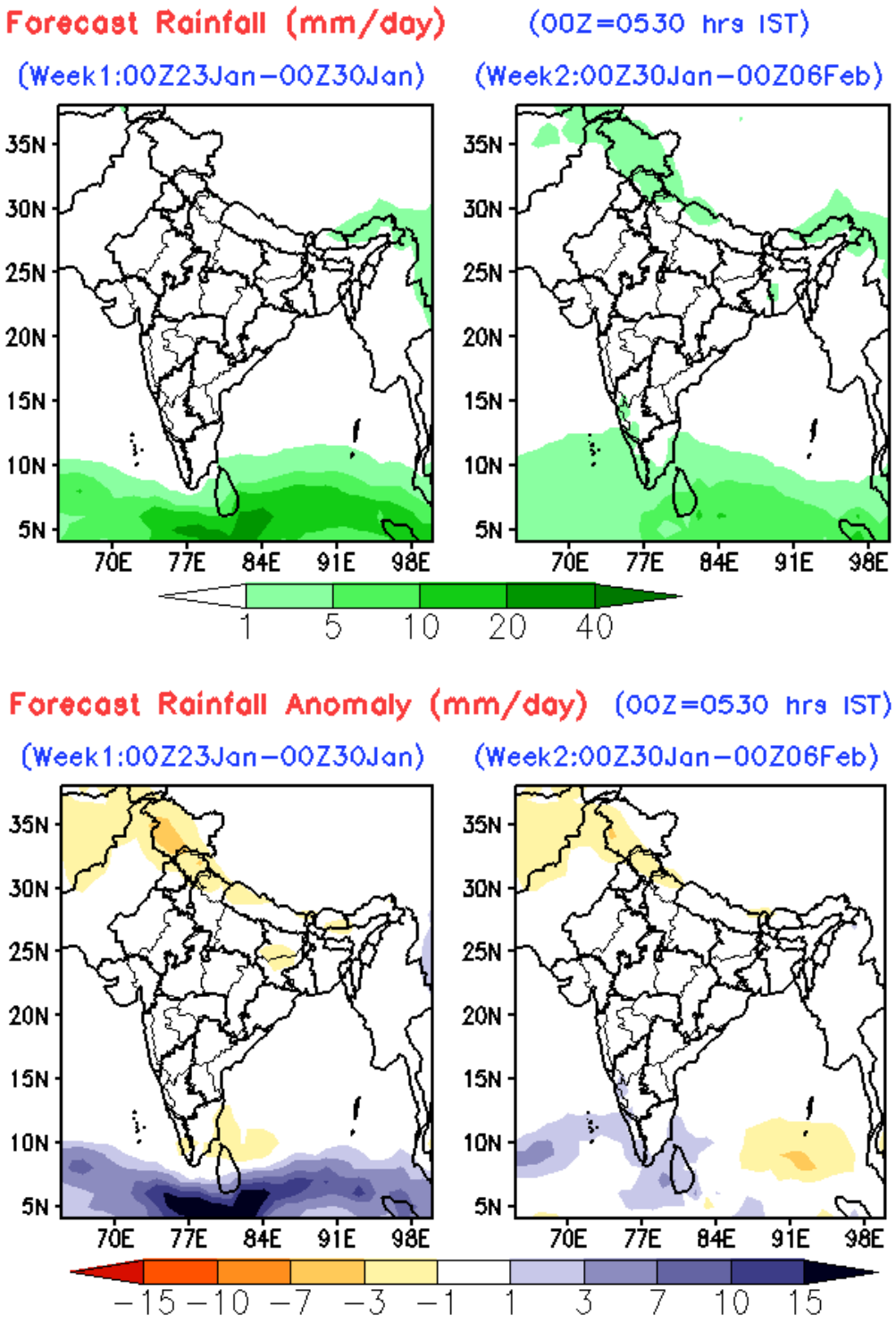
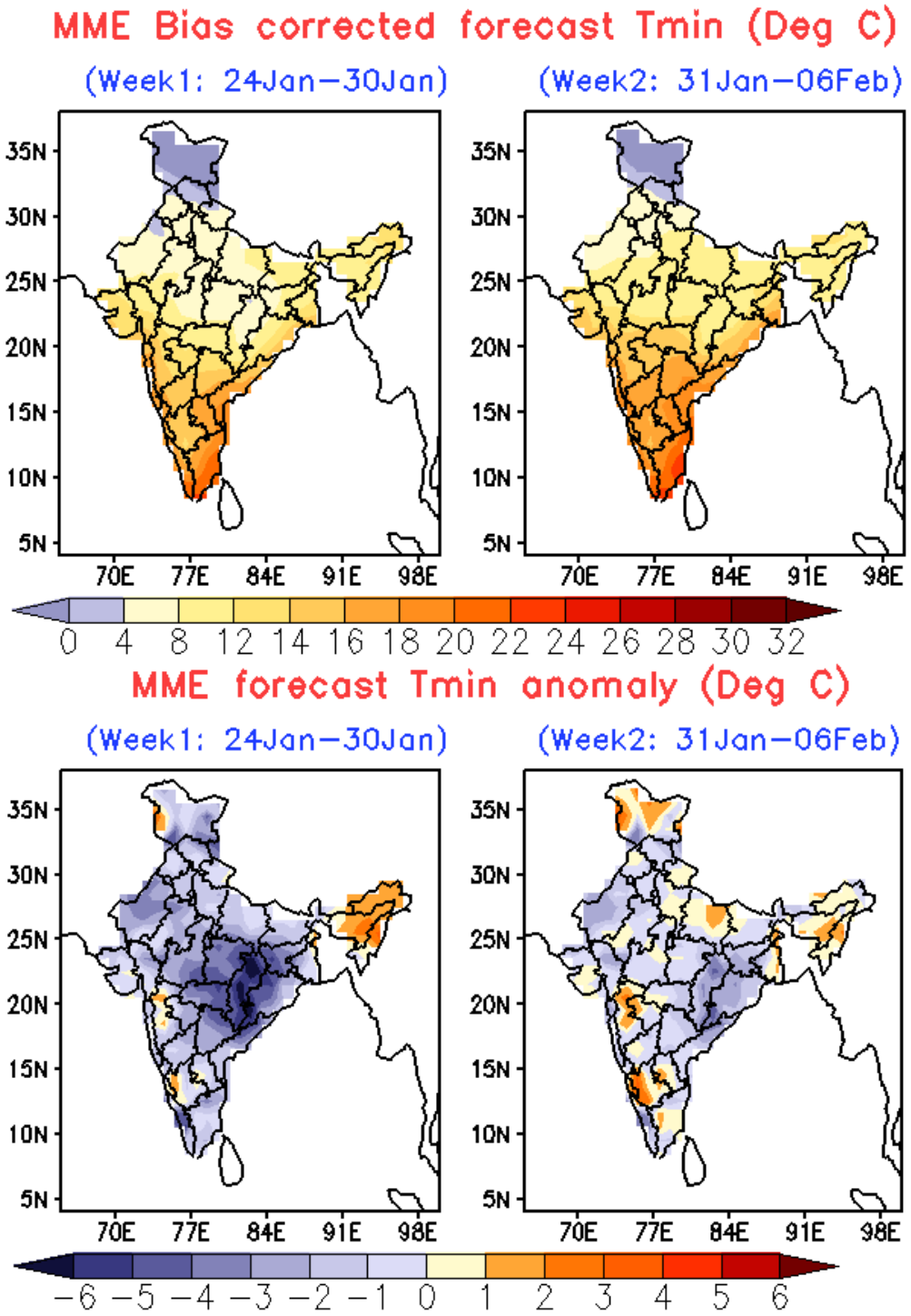



Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies (lower panel) from IMD MME




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

Annexure V

## Cold Wave forecast during next 2 weeks

**EXTENDED RANGE OUTLOOK FOR COLDWAVE**

**Week 1: 24.01.2025-30.01.2025**


**Week2: 31.01.2025-06.02.2025**


**PROBABILITY OF COLD WAVE** **CONFIDENCE**

**LOW (1-33% PROBABILITY)**

**MODERATE (34-67% PROBABILITY)**

**HIGH (68-100% PROBABILITY)**