

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

Press Release: Dated: 1st May, 2025

Subject: Current Weather Status and Extended range Forecast for the next two weeks (1st May to 14th May)

1. Salient Observed Features for the week ending 30th April 2025:

- ❖ **Status of Heat wave during the week:** Last week's Heat wave conditions over eastern and adjoining central parts of India continued till 26th April. Heat wave to Severe Heat wave conditions at isolated places over Odisha on 23rd April and Heat wave condition was observed at isolated places over West Bengal on 24th April, Bihar on 24th & 26th April, Odisha and East Madhya Pradesh on 24th April, Vidarbha on 24th & 25th April. It was also observed for 1-2 days over East Uttar Pradesh on 26th April, Jammu & Kashmir and southwest Rajasthan on 29th & 30th April. Heat wave was abated from most parts of the country during 2nd half of the week due to wet spell and thunderstorm activities.
- ❖ **Rain and Thunderstorm activities** occurred over northeast India, south peninsular and adjoining central India during most dates of the week, while eastern parts of India experienced moderate to severe thunderstorm with squally/gusty winds and hailstorm during 2nd half of the week. It was mainly due to following synoptic features: 1) A Western Disturbance intensified and moved across central, eastern and northeast India observed upto 18°N and between 3.1 and 9.6 km above mean sea level during 27-30 April, 2) Jet core of 90-110 knots across north/northeast India, and 3) north-south trough in lower tropospheric levels extended from central India to Gulf of Mannar during the week.
- ❖ **Thunderstorm accompanied with Squally/Gusty winds** recorded at isolated locations over Arunachal Pradesh on 24th & 28th to 30th April, Assam & Meghalaya during 24th – 30th April, Nagaland, Manipur, Mizoram & Tripura during 24th – 26th & 28th – 30th April, Sub-Himalayan West Bengal & Sikkim on 24th, 28th & 29th April, Madhya Pradesh during 24th – 30th April, Tamil Nadu, Puducherry & Karaikal on 24th & 27th – 30th April, North Interior Karnataka and Kerala & Mahe during 24th – 30th April, Telangana and Coastal Andhra Pradesh & Yanam during 24th – 26th & 28th – 30th April, Jammu & Kashmir and Uttarakhand on 25th – 30th April, Himachal Pradesh on 25th, 27th, 29th & 30th April, East Uttar Pradesh, Bihar, Gangetic West

Bengal, Odisha, South Interior Karnataka and Vidarbha during 26th – 30th April, Punjab, Haryana on 26th, 27th, 29th & 30th April, Chhattisgarh and Coastal Karnataka during 27th – 30th April, Jharkhand during 27th – 29th April, Madhya Maharashtra on 27th April, Rayalaseema during 28th – 30th April, Punjab on 29th & 30th April.

- ❖ **Hailstorm** occurred at isolated places over Sub-Himalayan West Bengal & Sikkim on 24th & 28th April, Assam & Meghalaya and Jammu & Kashmir on 25th April, North interior Karnataka on 26th & 27th April, South Interior Karnataka on 27th April, East Madhya Pradesh during 28th to 30th April, Vidarbha, Chhattisgarh and Odisha on 29th & 30th April, Gangetic West Bengal and Coastal Andhra Pradesh on 29th April, Jharkhand on 30th April.
- ❖ **Heavy to very heavy rainfall with extremely heavy rainfall** was recorded at isolated places over Assam & Meghalaya on 24th & 25th April. It was mainly due to southerly/southeasterly wind and moisture convergence to the region superimposed by upper level Jet core and trough in easterly.
- ❖ **Heavy to very heavy rainfall** was recorded at isolated places over Arunachal Pradesh on 26th April. **Heavy rainfall** was recorded at isolated places over Kerala & Mahe on 24th & 26th April; Arunachal Pradesh on 25th & 27th April, Assam & Meghalaya on 27th & 29th April, Odisha on 27th, 29th & 30th April, Chhattisgarh on 27th April, Sub-Himalayan West Bengal & Sikkim, Coastal Karnataka, North Interior Karnataka on 28th April.
- ❖ **Weekly Average Minimum temperature** was above normal by 1-3°C over parts of east and northeast India during first half of the week, and below normal by 2-4°C over eastern parts of the country during second half of the week. It was nearly normal over remaining parts of the country during the week. **Weekly Average Maximum temperature** was above normal by 2-4°C over parts of north, west, east and northeast India, and nearly normal over remaining parts of the country during first half of the week. It was below normal by 2-5°C over parts of east and northeast India, above normal by 2-4°C over parts of Jammu division and southwest Rajasthan, and nearly normal over remaining parts of the country during second half of the week.
- ❖ **Temperature Scenario:** The lowest minimum temperature of **16.5°C** had been recorded at **Adampur (Punjab)** on **24th April, 2025** and the highest maximum temperature of **46.8°C** had been recorded at **Barmer (West Rajasthan)** on **30th April, 2025** over the plains of the country during the week.
- ❖ **Analysis of weekly overall rainfall distribution during the week-ending on 30th April and the Pre-Monsoon Season's Rainfall Scenario (01.03.2025 to 30.04.2025):** The country as a whole, the weekly cumulative All India Rainfall (for 24-30 April 2025) in % departure from its long period average (LPA) is -14%. All India Seasonal cumulative rainfall % departure during this year's Pre-Monsoon Season Rainfall (01st March to 30th April 2025) is -15%. 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		
	24.04.2025 TO 30.04.2025			01.03.2025 TO 30.04.2025		
	Actual (mm)	Normal (mm)	Departure (%)	Actual (mm)	Normal (mm)	Departure (%)
EAST & NORTHEAST INDIA	32.9	35.0	-6%	134.3	183.2	-27%
NORTHWEST INDIA	0.2	7.1	-98%	51.2	79.8	-36%
CENTRAL INDIA	5.4	2.5	116%	20.7	17.0	22%
SOUTH PENINSULA	9.7	9.7	0%	75.1	49.4	52%
THE COUNTRY AS A WHOLE	9.0	10.5	-14%	58.9	69.2	-15%

2. Large scale features:

- ❖ Currently, El Niño-Southern Oscillation (ENSO) neutral conditions are present over the equatorial Pacific region. The latest Monsoon Mission Coupled Forecasting System (MMCFS) forecast suggests that neutral ENSO conditions are likely to continue in the monsoon season 2025.
- ❖ Neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The latest climate models indicate that neutral IOD conditions will continue during the monsoon season 2025.
- ❖ The Madden Julian Oscillation (MJO) index is currently in Phase 8 with amplitude marginally less than 1. It is likely to remain in Phase 8 during the 1st half of the week 1, with amplitude significantly reducing to < 1 and reverting back to Phase 7 till end of week 1 and further to Phase 6 during start of week 2. It enters back to Phase 7 during 2nd half of week 2 with amplitude becoming < 1.

3. Forecast for the next two weeks

Weather systems & associated Precipitation during Week 1 (01 to 07 May, 2025) and Week 2 (08 to 14 May, 2025)

Weather systems & associated Precipitation during Week 1 (01 to 07 May, 2025):

- ❖ An upper air cyclonic circulation lies over southwest Rajasthan in lower tropospheric levels.

- ❖ A cyclonic circulation lies over southeast Rajasthan and a trough from this cyclonic circulation to north Kerala in lower tropospheric levels.
- ❖ An upper air cyclonic circulation lies over north Bangladesh in lower & middle tropospheric levels.
- ❖ Under the influence of these systems, the following weather is likely:

East & Central India:

- ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 Kmph gusting to 60 Kmph** likely over Bihar, Jharkhand, Odisha, West Bengal & Sikkim till 03rd May; Madhya Pradesh, Vidarbha, Chhattisgarh till 05th May.
- ✓ **Thundersquall (speed reaching 50-60 Kmph gusting to 70 Kmph)** very likely at isolated places over East Madhya Pradesh, Chhattisgarh during 02nd -04th; Vidarbha on 03rd & 04th, Odisha on 02rd & 03rd May.
- ✓ **Isolated hailstorm** activity likely over Sikkim on 01st & 03rd; Bihar on 01st; Odisha, East Madhya Pradesh on 02nd & 03rd; Chhattisgarh during 01st -03rd May.
- ✓ **Isolated heavy rainfall** over Odisha on 02rd & 03rd May.

Northwest India:

- ✓ **Scattered to fairly widespread** light to moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching 40-60 Kmph** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 01st May to 06th May.
- ✓ **Isolated hailstorm** very likely over Uttarakhand on 01st & 03rd May and **thundersquall** wind speed reaching 50-60 Kmph on 03rd May.
- ✓ Isolated to scattered rainfall with **thunderstorm, lightning & strong winds speed reaching 40-60 Kmph** likely over Punjab, Haryana Chandigarh & Delhi, Uttar Pradesh, Rajasthan during 01st May to 06th May.
- ✓ **Thundersquall (speed reaching 50-60 Kmph gusting to 70 Kmph)** very likely at isolated places over Rajasthan on 01st & 02nd May.
- ✓ **Isolated hailstorm** activity likely over East Uttar Pradesh on 01st May.
- ✓ **Duststorm** very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi on 01st & 02nd May; Rajasthan during 01st-05th May.

South peninsular India:

- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 30-40 Kmph gusting to 50 Kmph** likely over Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal during next 7 days with **thundersquall (wind speed reaching 50-60 Kmph)** likely over South Interior Karnataka on 01st May.

- ✓ **Isolated heavy rainfall** over South Interior Karnataka, Kerala & Mahe on 01st May.

Northeast India:

- ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-40 Kmph gusting to 50 Kmph** likely over Northeast India during next 5 days.
- ✓ **Isolated heavy rainfall** over Arunachal Pradesh, Assam & Meghalaya on 05th May.
- ❖ No significant weather likely over rest parts of the country during the week.

Precipitation for week 2 (08 to 14 May, 2025):

- ❖ Under the influence of western disturbances, scattered to fairly widespread rainfall with thunderstorm is likely over Western Himalayan Region; isolated to scattered over plains of northwest India during some/many days of the week.
- ❖ Due to trough/cyclonic circulations over central & south Peninsular India, light/moderate scattered to fairly widespread rainfall along with thunderstorm & lightening are likely over central & south Peninsular India during many days of the week.
- ❖ Overall, normal to above normal rainfall along with thunderstorm & lightening are likely over northwest, Central and South Peninsular India; below normal over east & northeast India during the week.

Temperature forecast & heat wave warning for Week 1 (01 to 07 May, 2025) and Week 2 (08 to 14 May, 2025)

Temperature forecast & heat wave warning for Week 1 (01 to 07 May, 2025):

- ❖ Yesterday, **Maximum Temperatures** are in the range of 42-46 °C west and southeast Rajasthan, Gujarat region & Saurashtra, West Madhya Pradesh, Vidarbha, Marathwada adjoining Madhya Maharashtra, Northwest Telangana and 38-42 ° C over Kutch, south Punjab, south Haryana, remaining Madhya Pradesh adjoining south Uttar Pradesh, south Chhattisgarh, interior Odisha, remaining Telangana and south Andhra Pradesh. **Yesterday, the highest maximum temperature of 46.3°C was reported at Jaisalmer (West Rajasthan) over the country.**
- ❖ **Yesterday's Maximum Temperature Departures (as on 28-04-2025):** **Maximum Temperatures** were markedly above normal (5.1°C or more) at a few places markedly above normal (5.1°C or more) at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; appreciably above normal (3.1°C to 5.0°C) at a few places over West Rajasthan; above normal (1.6°C to

3.0°C) at isolated places over East Rajasthan, Gujarat state, West Madhya Pradesh, Konkan & Goa, Marathwada, Vidarbha, Assam & Meghalaya, Arunachal Pradesh. These were below normal or near normal over rest parts of the country.

Forecast of temperature:

- ❖ No significant change in maximum temperatures likely over Northwest India during next 24 hours and fall by 3-5°C for subsequent 6 days.
- ❖ No significant change in maximum temperatures likely over Central & West India during next 2 days and fall by 2-4°C for subsequent 5 days.
- ❖ No significant change in maximum temperatures likely over East India during next 4 days and rise by 2-4°C for subsequent 5 days.
- ❖ No significant change in maximum temperatures likely over rest parts of the country.

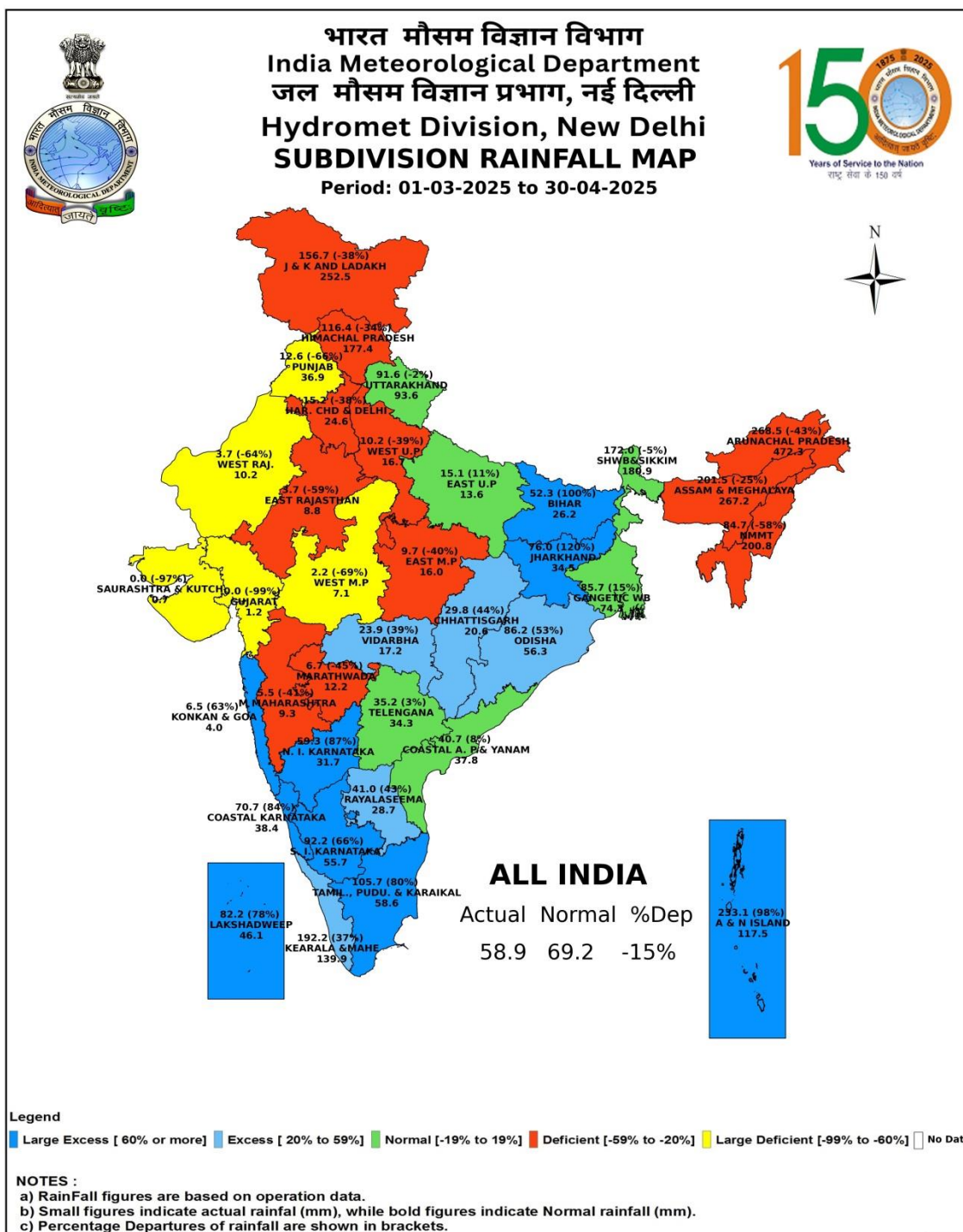
Heat Wave, Warm night and Hot & Humid weather warnings:

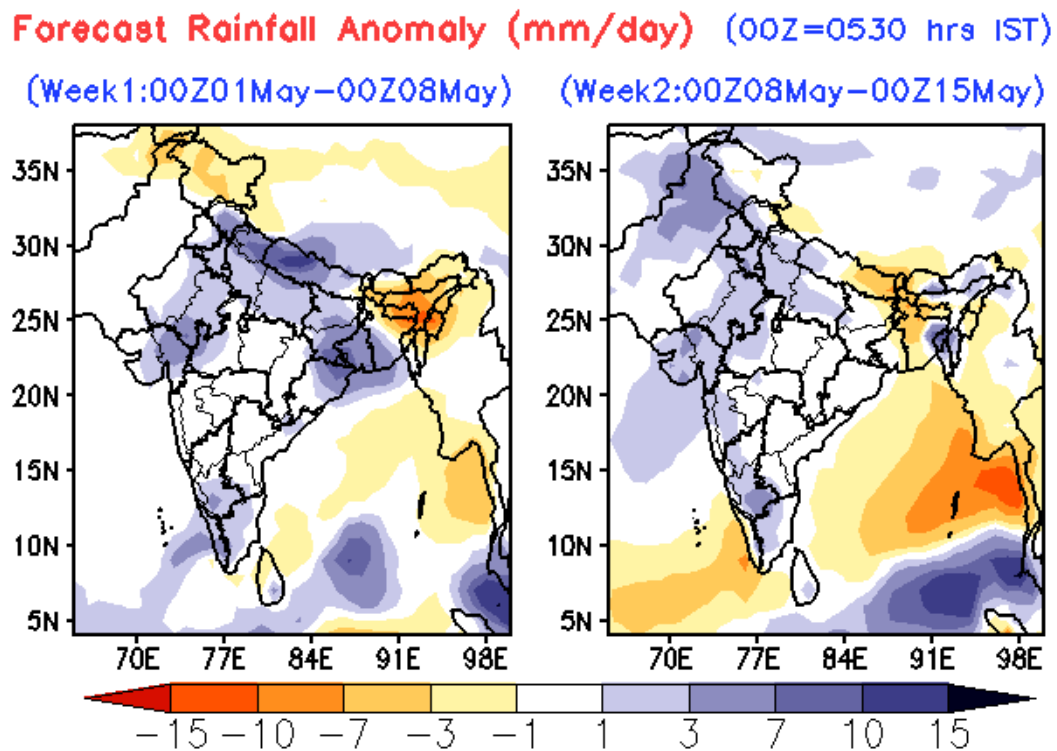
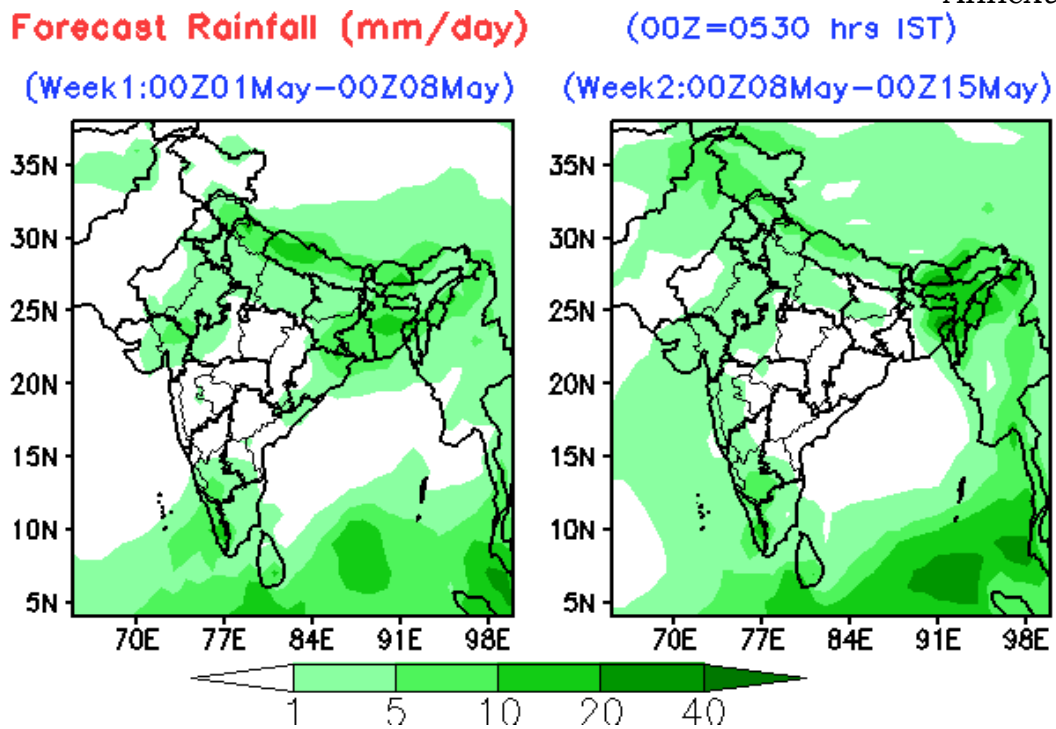
- ❖ **Heat wave conditions** very likely in isolated pockets of Jammu & Kashmir and southwest Rajasthan on 01st May.
- ❖ **Hot & humid weather** is likely to prevail over Marathawada, Madhya Maharashtra, Gujarat State on 01st; Tamilnadu Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema on 01st& 02nd May.

Temperature forecast & heat wave warning for Week 2 (08 to 14 May, 2025):

- ❖ Maximum temperatures are likely to be above normal by 1-3°C over many parts of Western Himalayan Region and northeast India, over Odisha, Coastal Andhra Pradesh and coastal Tamilnadu. These are likely to be near normal or below normal over rest parts of the country.
- ❖ There is a low probability of heat wave conditions over /isolated pockets of Odisha and Coastal Andhra Pradesh during some days of the week.





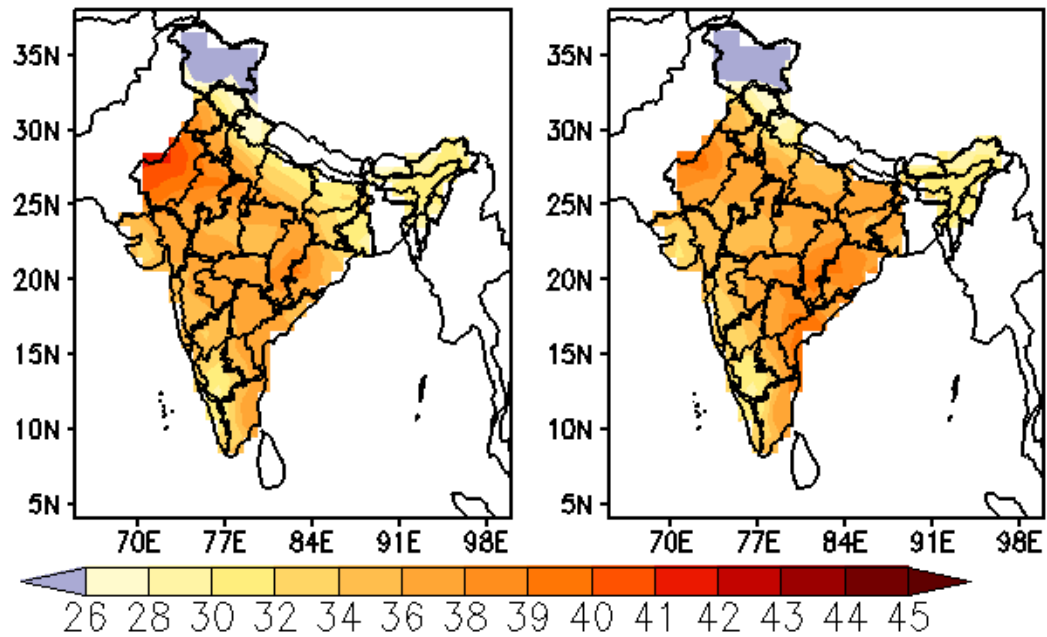


Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies (lower panel) from IMD MME

MME Bias corrected forecast Tmax (Deg C)

(Week1: 02May–08May)

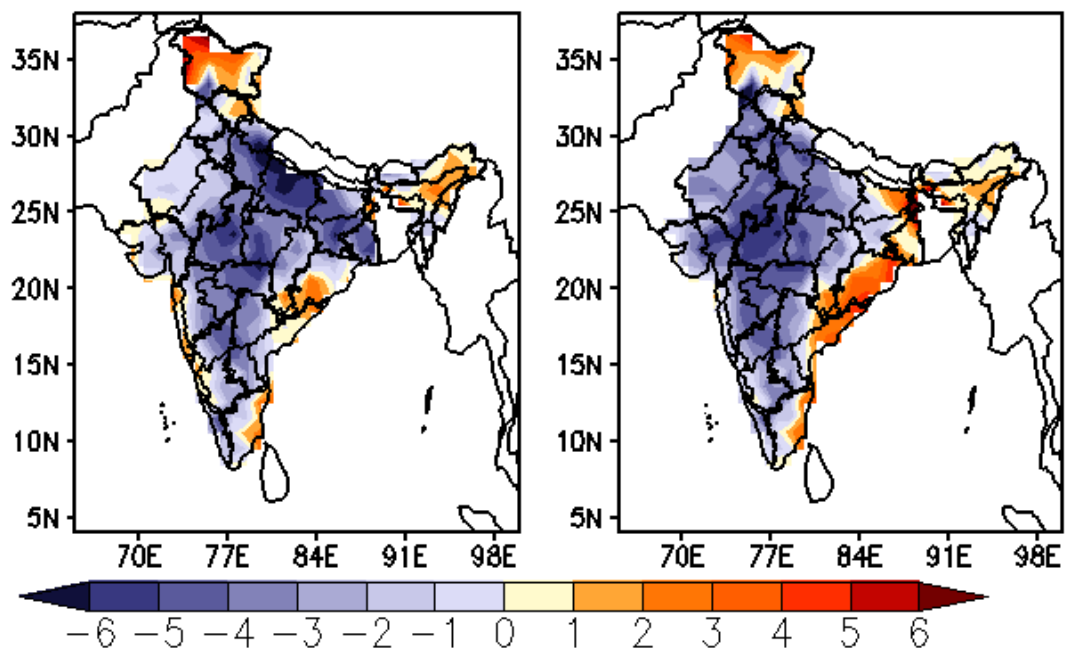
(Week2: 09May–15May)



MME forecast Tmax anomaly (Deg C)

(Week1: 02May–08May)

(Week2: 09May–15May)



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

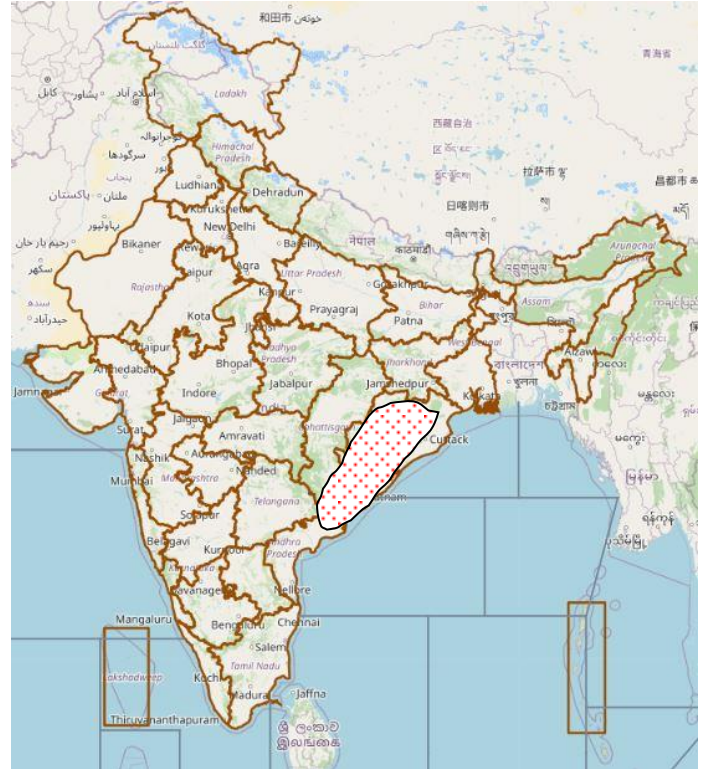
Heat Wave forecast during next 2 weeks

EXTENDED RANGE OUTLOOK FOR HEATWAVE

Week1: 02.05.2025- 08.05.2025



Week2: 09.05.2025- 15.05.2025



PROBABILITY OF HEATWAVE CONFIDENCE

LOW (1-33% PROBABILITY)

MODERATE (34-67% PROBABILITY)

HIGH (68-100% PROBABILITY)

