

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

Press Release: Dated: 22th May, 2025

Subject: Current Weather Status and Extended range Forecast for the next two weeks (22nd May to 04th June 2025)

1. Salient Observed Features for the week ending 21st May 2025:

- ❖ **Further Advance of the Southwest Monsoon 2025:** Southwest Monsoon has further advanced into some parts of southeast Arabian Sea, Maldives & Comorin area and some more parts of South Bay of Bengal, Andaman Islands and Andaman Sea on 15th May, 2025. It further advanced over some more parts of south Arabian Sea, Maldives & Comorin area; South Bay of Bengal, remaining parts of Andaman Islands and Andaman Sea; and some parts of eastcentral Bay of Bengal on 17th May, 2025; further advanced over some more parts of south Arabian Sea, Maldives & Comorin area; South Bay of Bengal; some more parts of central Bay of Bengal and some parts of northeast Bay of Bengal 19th May, 2025; further advanced over some more parts of south Arabian Sea, Maldives & Comorin area; South Bay of Bengal; some more parts of central Bay of Bengal and some parts of northeast Bay of Bengal on 21st May, 2025.
- ❖ **Heavy to very heavy rainfall spell over Coastal Karnataka and Konkan & Goa during 19th - 21st May. Heavy to very heavy rainfall with extremely heavy rainfall** was recorded at isolated places over Assam & Meghalaya on 20th & 21st May, Kerala & Mahe on 20th May, Konkan & Goa and Coastal Karnataka on 21st May. **Heavy to very heavy rainfall** was recorded at isolated places over Arunachal Pradesh on 15th May, Assam & Meghalaya on 15th & 17th May, Rayalaseema on 15th May, Madhya Maharashtra on 17th May, Tamil Nadu Puducherry & Karaikal during 18th - 21st May, North Interior Karnataka on 18th May, Sub-Himalayan West Bengal & Sikkim on 18th, 19th & 21st May, Bihar and South Interior Karnataka on 19th May, Coastal Karnataka on 20th May, Kerala & Mahe on 21st May.

- ❖ **Thunderstorm and gusty winds activities accompanied with lighting and hail storm:** Last week's wet Spell accompanied with thunderstorm and gusty winds continued over south peninsular India due to formations of successive upper air cyclonic circulations and east-west trough observed in the lower and middle tropospheric levels. The wet spell accompanied with thunderstorm and gusty winds also continued over northeast India due to a cyclonic circulation over Assam & neighbourhood and an east-west trough during this week.
- ❖ **Hailstorm** occurred at isolated places over West Madhya Pradesh on 15th, 16th & 19th May, Odisha on 15th May, Himachal Pradesh on 16th, 17th, 19th & 21st May, Gangetic West Bengal and Jharkhand on 16th May, Jammu-Kashmir on 20th May, Uttarakhand on 20th & 21st May, East Uttar Pradesh, East Madhya Pradesh and Chhattisgarh on 21st May.
- ❖ **Development of fresh spell of Heat wave over northwest India:** Heat wave to Severe Heat wave conditions prevailed in isolated pockets of Jammu division on 17th & 18th May, East Rajasthan on 20th & 21st May, West Rajasthan, Punjab and Haryana on 21st May. Heat wave conditions prevailed in isolated pockets of Jammu division on 16th, 20th & 21st May; Rajasthan on 17th May; West Rajasthan on 18th May; Rajasthan on 19th May; East Uttar Pradesh on 20th & 21st May, West Rajasthan on 20th May.
- ❖ **Weekly Average Minimum temperature** was above normal by 1-3°C over parts of north and northwest India, and 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 and northwest India, and below normal by 3-5°C over south peninsular India and parts of central, east and northeast India during the week. It was nearly normal over remaining parts of the country during the week.
- ❖ **Analysis of weekly overall rainfall distribution during the week-ending on 21st May and Pre-monsoon Season's Rainfall Scenario (1st March – 21st May 2025):** The country as a whole, the weekly cumulative All India Rainfall (for 15th to 21st May 2025) in % departure from its long period average (LPA) is +106%. All India Seasonal cumulative rainfall % departure during this year's Pre-monsoon Season Rainfall (01st March to 21st May 2025) is +10%. 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		
	15.05.2025 TO 21.05.2025			01.03.2025 TO 21.05.2025		
	Actual (mm)	Normal (mm)	Departure (%)	Actual (mm)	Normal (mm)	Departure (%)
EAST & NORTHEAST INDIA	67.9	43.6	56%	261.3	301.6	-13%
NORTHWEST INDIA	3.2	7.8	-59%	78.1	103.0	-24%
CENTRAL INDIA	14.3	4.3	+232%	58.4	28.4	+106%
SOUTH PENINSULA	62.4	16.7	+274%	170.7	95.3	+79%
THE COUNTRY AS A WHOLE	28.9	14.0	+106%	118.9	108.0	+10%

2. Large scale features:

- ❖ Currently, Neutral El Nino-Southern Oscillation (ENSO) conditions are prevailing over the equatorial Pacific region. However, the atmospheric Circulation features are similar to La Niña conditions. The latest Monsoon Mission Climate Forecast System (MMCFS) as well as other climate model forecasts indicate that the Neutral ENSO conditions are likely to continue during the monsoon season.
- ❖ At present, 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 several months.
- ❖ The Madden Julian Oscillation (MJO) index is currently in Phase 4 with an amplitude > 1. It is likely to remain in Phase 4 for the entire duration of week 1, with amplitude remaining > 1. By the start of Week 2, it is likely to propagate gradually to Phase 5, with amplitude >1, and is likely propagate further to Phase 6 in the second half of Week 2, with amplitude > 1.

3. Forecast for the next two weeks:

Weather systems & associated Precipitation during Week 1 (22 to 28 May, 2025) and Week 2 (29 May to 04 June, 2025)

Advance of Southwest Monsoon:

Week 1 (22 to 28 May, 2025)

- ❖ **The Northern Limit of Monsoon passes through 5°N/60°E, 6°N/65°E, 7°N/70°E, 7°N/75°E, 10°N/81°E, 13°N/84.5°E, 16°N/88°E, 19.5°N/91°E and 23°N/95°E.**
- ❖ The conditions are likely to become favourable for Monsoon onset over Kerala during next 2-3 days.
- ❖ The conditions are also likely to become favourable for further advance of southwest Monsoon over some more parts of South Arabian Sea, remaining parts of Maldives and Comorin area; entire Lakshadweep area and Kerala; many parts of Karnataka and Tamil Nadu; some parts of Coastal Andhra Pradesh and Rayalaseema; some more parts South & Central Bay of Bengal, North Bay of Bengal and some parts of Northeastern states during remaining days of the week.

Week 2 (29 May to 04 June, 2025)

- ❖ Southwest Monsoon likely to advance over remaining parts of South Peninsular and northeast India and some parts of East & central India during the week.

Weather systems & associated Precipitation during Week 1 (22 to 28 May, 2025):

- ❖ **A low-pressure area lies over Eastcentral Arabian Sea off south Konkan-Goa. It is likely to move nearly northwards and intensify further into a depression during next 36 hours. There is also possibility of its further intensification thereafter.**
- ❖ A trough runs from the cyclonic circulation associated with the low-pressure area to north Telangana in lower & middle tropospheric levels.
- ❖ An upper air cyclonic circulation lies over Punjab and another over northeast Madhya Pradesh adjoining southeast Uttar Pradesh in lower tropospheric levels.
- ❖ A trough runs from above cyclonic circulation over Punjab & neighbourhood to central Madhya Pradesh in lower tropospheric levels.
- ❖ An upper air cyclonic circulation lies over northeast Assam in lower tropospheric levels.
- ❖ Under the influence of these systems:

South peninsular India:

- ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 Kmph with isolated heavy to very heavy rainfall** likely over Kerala, Karnataka during 22nd-28thMay.
- ✓ **Isolated extremely heavy rainfall** very likely over Coastal Karnataka on 24th May.

- ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-40 kmph** likely over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana during next one week.
- ✓ **Isolated heavy rainfall** likely over Tamil Nadu Puducherry & Karaikal during 22nd-26th; Coastal Andhra Pradesh & Yanam on 22nd, 26th & 27th with isolated very heavy rainfall over Tamil Nadu Puducherry & Karaikal and Telangana on 22nd May.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Coastal Andhra Pradesh & Yanam, Rayalaseema on 22nd & 26th May.

West India:

- ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph** likely over Konkan & Goa, Madhya Maharashtra, Marathawada during 22nd-28th and **Scattered to Fairly widespread** rainfall over Gujarat State during 22nd- 25th May with **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Konkan & Goa, Madhya Maharashtra, Marathawada on 22nd & 23rd and over Gujarat state during 25th-28th May.
- ✓ **Isolated Extremely heavy rainfall** very likely over Konkan & Goa during 22nd-24th and Madhya Maharashtra on 24th May.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Konkan & Goa, Madhya Maharashtra during 22nd- 28th, Marathawada on 22nd and isolated **heavy rainfall** over Gujarat State during 22nd-28th and Marathawada on 23rd May.

Northeast India:

- ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph** likely over Northeast India during next 7 days with **Isolated heavy rainfall** over Assam & Meghalaya during 22nd- 27th; Nagaland, Manipur, Mizoram & Tripura during 22nd- 25th; Arunachal Pradesh during 23rd- 26th May.

East & Central India:

- ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph** likely over West Bengal & Sikkim, Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha & Bihar during 22nd- 26th May with **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over East Madhya Pradesh during 22nd-25th; West Madhya Pradesh, Jharkhand, Chhattisgarh on 22nd & 23rd; Gangetic West Bengal on 22nd May.

- ✓ **Isolated heavy rainfall** likely over Jharkhand, Gangetic West Bengal, Chhattisgarh on 22nd & 23rd; Sub-Himalayan West Bengal & Sikkim on 22nd, Andaman & Nicobar Islands during 23rd- 26th, Vidarbha on 24th, Odisha on 27th & 28th May, 2025.

Northwest India:

- ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph** likely over Uttarakhand, Himachal Pradesh, Uttar Pradesh and **isolated to scattered** light to moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching 40-50 Kmph** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana Chandigarh, Rajasthan during 22nd -28th May with **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Uttarakhand during 22nd- 24th, West Rajasthan, Himachal Pradesh on 23rd & 24th; East Rajasthan on 25th & 26th May.
 - ✓ **Isolated hailstorm** over Himachal Pradesh on 23rd & 24th May.
 - ✓ **Isolated heavy rainfall** also likely over Uttarakhand on 23th & 24th May.
 - ✓ **Duststorm (40-50 kmph)** also very likely over West Rajasthan during 23rd-25th May.
- ❖ No significant weather likely over rest parts of the country during the week.

Precipitation for week 2 (29 May to 04 June, 2025):

- ❖ A low pressure area is likely to form over westcentral & adjoining North Bay of Bengal around 27th May. It is likely to become more marked during subsequent 2 days. Under the influence of this system and trough from the system to northwest India, enhanced rainfall activity with **isolated heavy to very heavy rainfall** likely over northwest, East & Northeast India during many days of the week.
- ❖ Due to strong westerly winds along the west coast and other favourable cyclonic circulations/trough in lower tropospheric levels, fairly widespread to widespread with **isolated heavy to very heavy rainfall** likely over Kerala, Karnataka, Maharashtra and Gujarat during many days of the week.
- ❖ Overall, above normal rainfall activity likely over northwest, central, east & northeast India; and normal to over many parts of northwest & northeast India during the week.

Temperature forecast & heat wave warning for Week 1 (22 to 28 May, 2025) and Week 2 (29 May to 04 June, 2025)

Temperature forecast & heat wave warning for Week 1 (22 to 28 May, 2025):

- ❖ Yesterday, **Maximum Temperatures** were in the range of **40-47°C** in most parts of Rajasthan, Haryana, Delhi, East Madhya Pradesh; at a few places over West Madhya Pradesh; in isolated parts of Uttar Pradesh, Chhattisgarh, Vidarbha, Odisha, Gujarat State; in the range **36-40°C** in few parts of Gangetic West Bengal, Jharkhand; in isolated parts of Bihar, Jammu Division, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and they were less than **36°C** elsewhere over remaining parts of the country. Yesterday, the highest **maximum temperature of 47.6°C** was reported at **Sri Ganganagar (West Rajasthan)** over the country.
- ❖ Yesterday, Maximum Temperature were **markedly above normal(> 5.1°C)** at few places over Jammu-Kashmir Ladakh-Gilgit-Baltistan-Muzaffarabad; at Isolated places over West Uttar Pradesh, Himachal Pradesh, West Rajasthan, East Rajasthan and East Madhya Pradesh. **Appreciably above normal (3.1°C to 5.0°C)** at few places over Arunachal Pradesh and Punjab; at Isolated places over Assam & Meghalaya, Gangetic West Bengal, Haryana-Chandigarh-Delhi and West Madhya Pradesh. **Above normal (1.6°C to 3.0°C)** at Isolated places over Odisha and Saurashtra & Kutch. These were below normal or near normal over rest parts of the country.

Forecast of temperature:

- ❖ Fall by 2-4°C in maximum temperatures likely over Northwest India during next 24 hours, rise by 2-3°C over thereafter for subsequent 3 days and no significant change thereafter.
- ❖ Fall by 2-4°C in maximum temperatures likely over Central India during next 4 days and rise by 2-3°C over thereafter for subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over rest parts of the country.

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

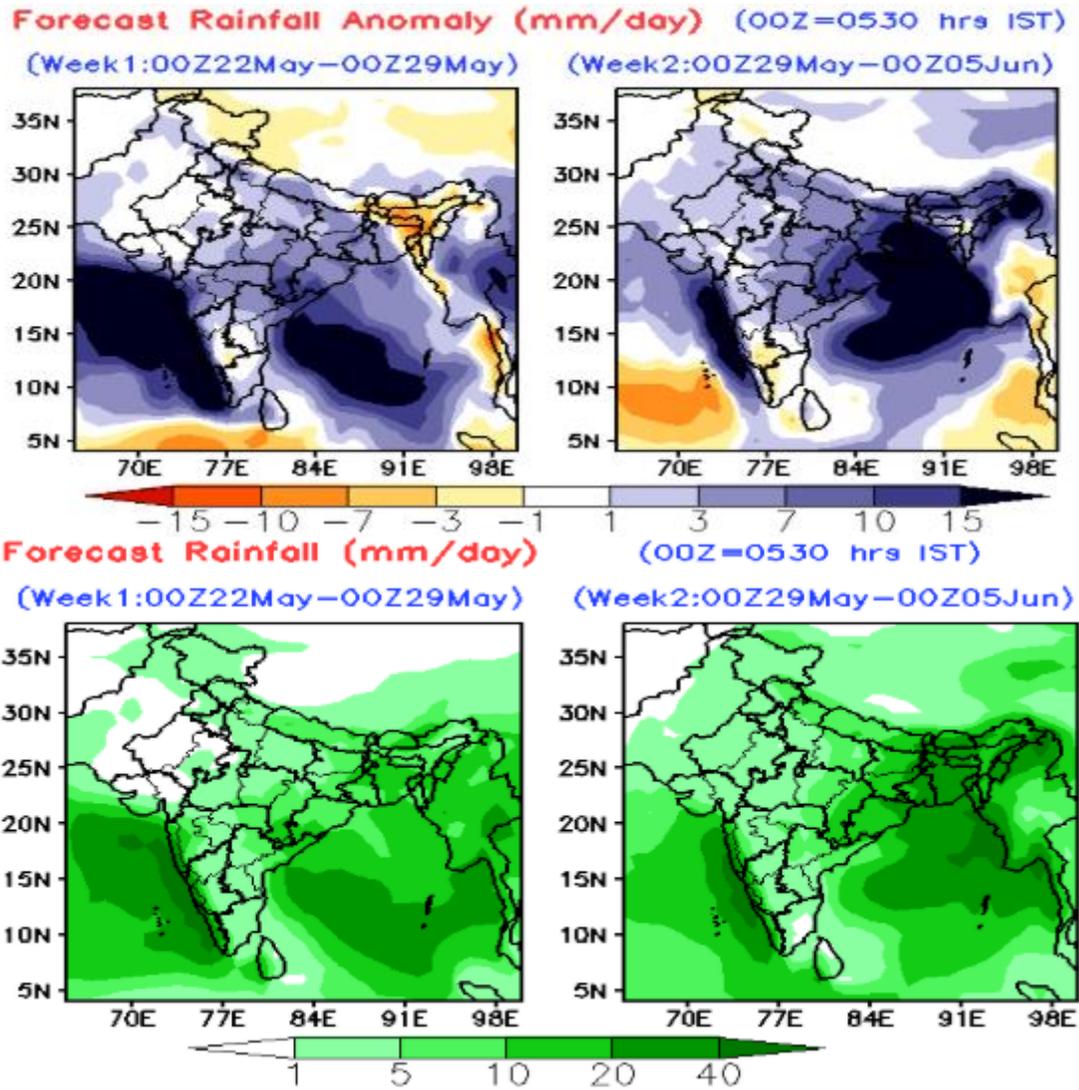
- ❖ **Heat wave to severe heat wave conditions** in isolated pockets of West Rajasthan during 22nd- 24th May.
- ❖ **Heat wave conditions** very likely in isolated pockets of Jammu, Punjab, Haryana Chandigarh, north Madhya Pradesh on 22nd & 23rd; East Rajasthan during 22nd- 24th and West Rajasthan on 25th & 26th May.
- ❖ **Warm night conditions** very likely in few pockets of south Haryana, Punjab on 22nd & 23rd and West Rajasthan during 22nd- 24th May.

Temperature forecast & heat wave warning for Week 2 (29 May to 04 June, 2025):

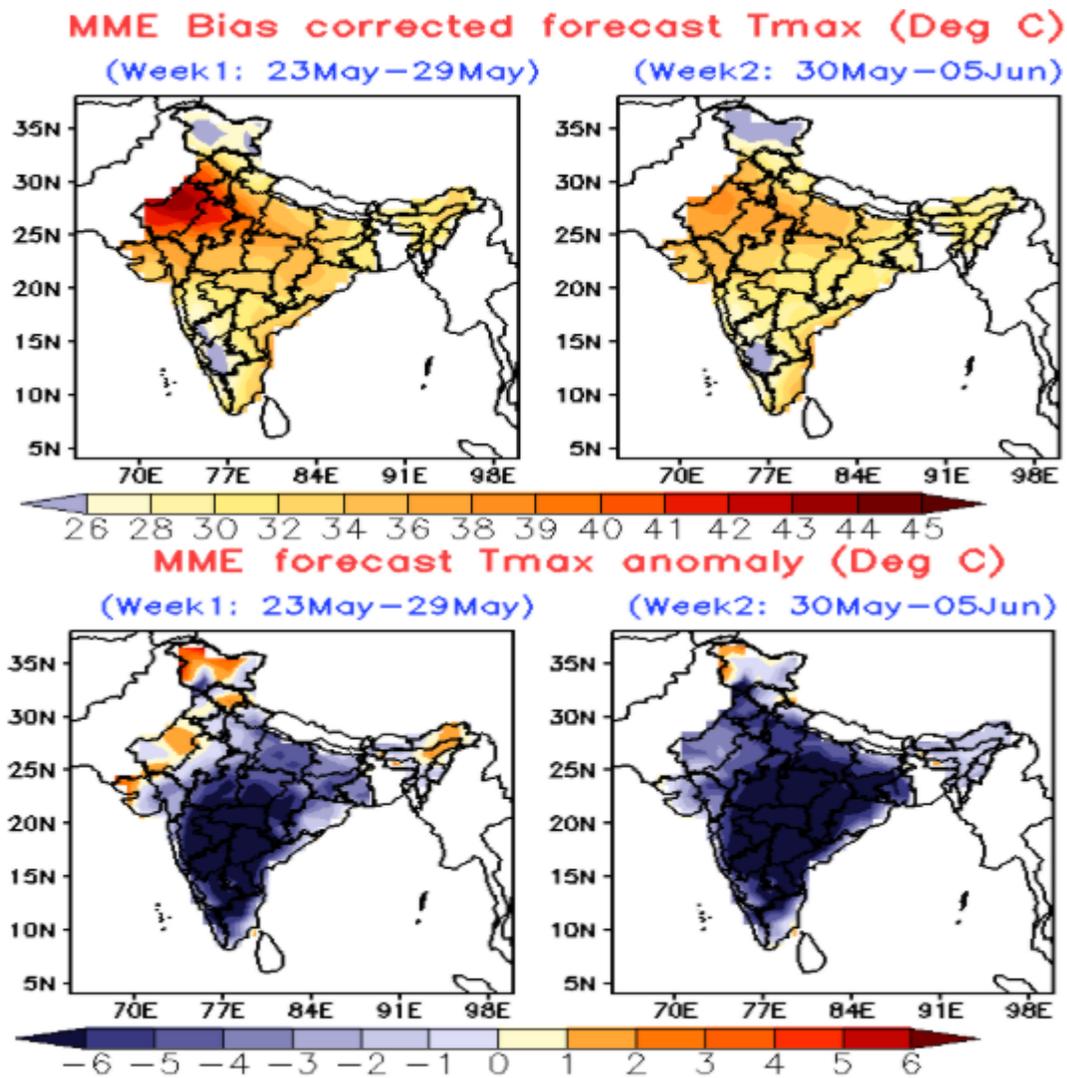
- ❖ Maximum temperatures are likely to fall by 1-3°C over most parts of the country as compared to week 1. These are likely to be below normal by 2-4°C over most parts of country except parts of Jammu & Kashmir, where it is likely to be near normal during the week.
- ❖ No heat wave conditions likely over any parts of the country during the week.







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

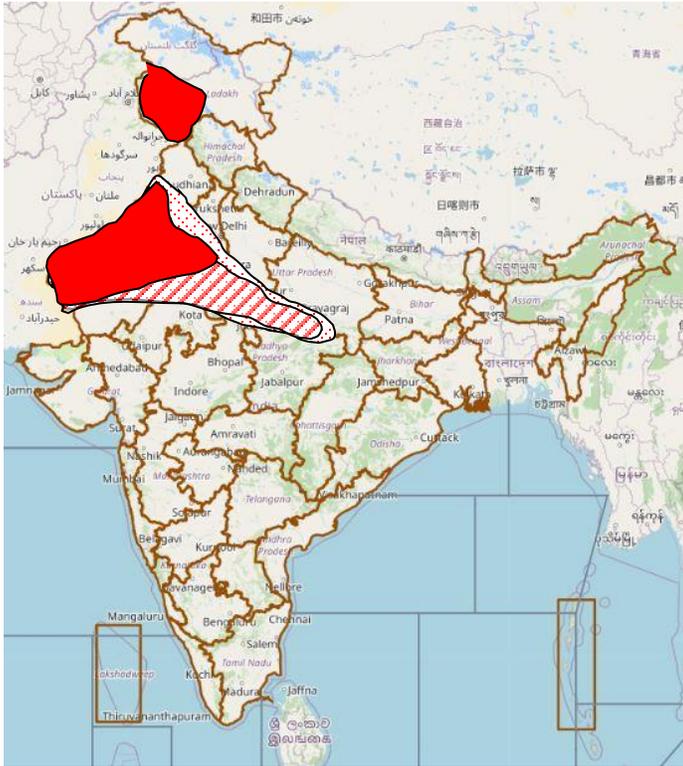


Extended range forecast of weekly distribution of Maximum Temperature in °C (top panel) and anomalies (lower panel) from IMD Bias Corrected Forecast

Heat Wave forecast during next 2 weeks

EXTENDED RANGE OUTLOOK FOR HEATWAVE

Week1: 23.05.2025- 29.05.2025



Week2: 30.05.2025- 05.06.2025



PROBABILITY OF HEATWAVE CONFIDENCE

LOW (1-33% PROBABILITY)



MODERATE (34-67% PROBABILITY)



HIGH (68-100% PROBABILITY)

