



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

Press Release: Dated: 2 May 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (2 May -15 May 2024)

1. Salient Observed Features for week ending 1 May 2024

- **Heat wave to severe Heat wave conditions** further intensified and continued to prevail during all dates in the week(entered into 3rd Week) and it was mainly observed over the eastern parts of India and Southeast Peninsular during this week. Heat wave to sever heat wave conditions observed over Odisha and West Bengal during 25 April till 1 May, over Bihar since 26 April. Heat wave conditions prevailed over Jharkhand, Rayalaseema and interior Karnataka almost all dates in the week during 25 April-1 May, over Kerala since 26 April, over Konkan during 27-30 April, Tamil Nadu on 1 May, Saurashtra & Kutch on 30th April. **It may be added that the current Heat wave spell have been prevailing for longer period with Odisha Current heat wave to severe heat wave spell started since 15th April, Gangetic West Bengal since 17th April, Jharkhand & Sub-Himalayan West Bengal, Rayalaseema since 24th April and Bihar since 26th April, 2024.**
- **Temperature Scenario:** The highest maximum temperature of **47.2°C** had been recorded at Kalaikunda (Gangetic West Bengal) on 30th April 2024 and the lowest minimum temperature of **13.2°C** had been recorded at Amritsar (Punjab) on 30th April 2024 over the plains of the country during the week.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 1 May 2024 and Summer Season's Rainfall Scenario (1 March- 1 May 2024):** It shows for the country as a whole, the weekly cumulative All India Rainfall in % departure from its long period average (LPA)

till week ending on 1 May was -12%. All India Seasonal cumulative rainfall % departure during this year's **Summer Season's** during **1 March to 1 May 2024** is -14% and over northwest India, it is 5%. Details of the rainfall distribution over the four broad geographical regions of India are given in Table 1 and Meteorological sub-division-wise rainfall both for week and season are given in Annex I and II respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	25.04.2024 TO 01.05.2024			01.03.2024 TO 01.05.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	21.1	35.8	-41%	132.3	188.8	-30%
NORTH-WEST INDIA	17.6	7.5	+135%	85.4	81.1	+5%
CENTRAL INDIA	1.6	2.6	-37%	31	17.4	+78%
SOUTH PENINSULA	1	10	-90%	16.1	51.2	-69%
Country as a whole	9.5	10.8	-12%	60.9	70.9	-14%

2. Large scale features

Madden Julian Oscillation (MJO) index is currently entered into Phase 4 with amplitude greater than 1. The consensus forecast amongst different models indicates that the MJO index will continue to propagate eastward in the same phase during 1st half and enter into phase 5 with gradually decreasing amplitude in the second half of first week. Thereafter, the ensemble members of GEFS and ECMWF models portray larger spread. However, a large number of ensemble members suggest continued quick propagation sequentially through the Pacific (phases 6 & 7) and Western Hemisphere & Africa (phases 8 & 1) during first half of week 2. Subsequently, it is likely to re-emerge over eastern Indian Ocean (phase 3) at the end of second week. Thus, MJO signal may not support enhancement of convective activity over North Indian Ocean region during early May i.e., till first half of second week.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (02 to 08 May, 2024) and Week 2 (09 to 15 May, 2024)

Weather systems & associated Precipitation during Week 1 (02 to 08 May, 2024)

- ❖ A cyclonic circulation lies over northeast Assam in lower tropospheric levels. Strong southwesterly winds from Bay of Bengal to northeast India are prevailing at lower tropospheric levels. Under their influence:
 - ✓ Fairly widespread to widespread, light to moderate rainfall accompanied with isolated **thunderstorm & lightning & gusty winds (40-50 kmph)** very likely over Arunachal Pradesh, Assam, Meghalaya, Sikkim, Nagaland, Manipur, Mizoram, Tripura during the week.
 - ✓ Isolated **heavy to very heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 02nd; 05th & 06th May and isolated heavy rainfall over Sikkim on 05th May.

- ✓ A Western Disturbance seen as a trough in middle tropospheric westerlies roughly along Long. 45°E to the north of Lat. 26°N. Under its influence:
 - ✓ Isolated to scattered light to moderate rainfall/snowfall accompanied with **thunderstorm and lightning** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand and Himachal Pradesh during 03rd-06th May 2024.
 - ✓ Isolated very light/light rainfall very likely over West Uttar Pradesh during 05th-08th; Haryana Chandigarh-Delhi on 04th & 05th and Punjab, West Rajasthan on 04th May, 2024.
 - ✓ **Strong surface winds (30-40 kmph)** very likely to prevail over Uttar Pradesh, south Rajasthan and Haryana & Delhi on 02nd, 03rd, 05th & 06th May, 2024.
 - ✓ Isolated light to moderate rainfall accompanied with **thunderstorm & lightning** likely over Odisha, Gangetic West Bengal during 02nd-05th and increase thereafter with scattered to fairly widespread rainfall during 06th-09th May. Isolated **hailstorm** likely over Odisha on 2nd May 2024.
 - ✓ Isolated to scattered light to moderate rainfall accompanied with **thunderstorm & lightning** likely over Bihar, Jharkhand during 05th-09th May, 2024.
 - ✓ Isolated to scattered, light to moderate rainfall accompanied with thunderstorm & lightning over Andhra Pradesh, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during 02nd – 08th; and over Telangana and Karnataka during 06th – 08th May, 2024.

Rainfall for week 2 (09 to 15 May, 2024):

- ✓ Under the influence of Western Disturbances, light to moderate scattered/fairly widespread rainfall/snowfall activity likely over Western Himalayan Region and light to moderate isolated/scattered rainfall/thunderstorm likely over plains of northwest India during some days of the week.
- ✓ Due to trough/cyclonic circulation over central India, light to moderate isolated/scattered rainfall/thunderstorm & lightening likely over central India during many days of the week.
- ✓ Due to trough/cyclonic circulation over south peninsular India, light to moderate isolated/scattered rainfall/thunderstorm & lightening likely over south Peninsular India during many days of the week.
- ✓ Scattered/fairly widespread rainfall/thunderstorm likely over Northeast India during many days of the week.
- ✓ Overall, rainfall activity is likely to be normal to above normal over some parts of east India and south peninsular India; below normal over many parts of northeast & some parts of north India and near normal over rest parts of India.

Maximum temperatures for Week 1 (02 to 08 May, 2024) and Week 2 (09 to 15 May, 2024)

Maximum temperatures for Week 1 (02 to 08 May, 2024):

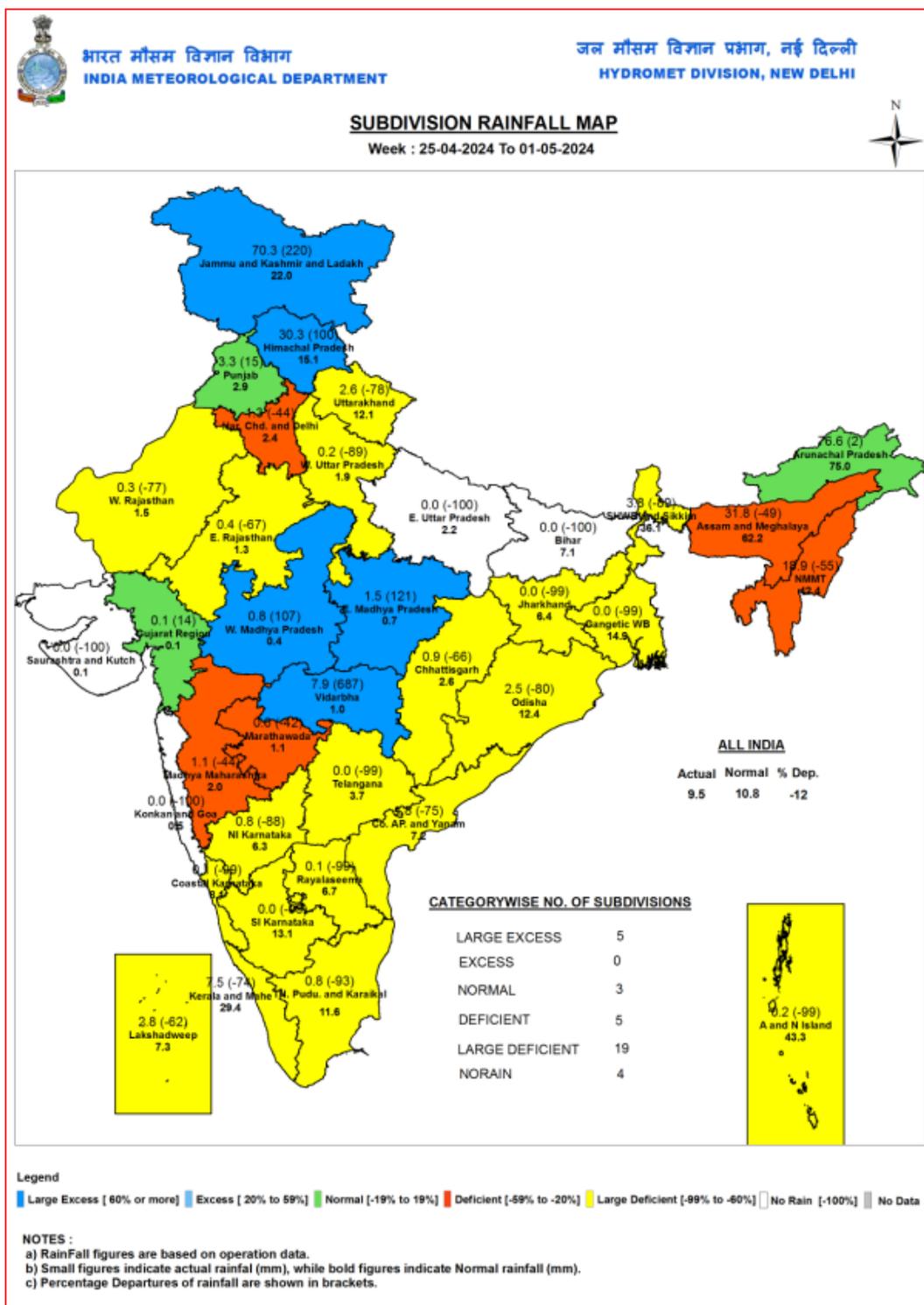
- ❖ Yesterday, maximum temperatures were in the range of 44-46°C in some parts of Odisha; in isolated pockets of Telangana, Coastal Andhra Pradesh & Rayalaseema; in the range of 42-44°C over many parts of Gangetic West Bengal; in some parts of Vidarbha; in isolated pockets of Chhattisgarh, southwest Madhya Pradesh, Madhya Maharashtra, North Interior Karnataka, and Tamil Nadu, Puducherry & Karaikal; in the range of 40-42°C over many parts of Bihar & Marathwada; in some parts of East Uttar Pradesh, Jharkhand, East Madhya Pradesh & Gujarat state; in isolated pockets of Sub-Himalayan West Bengal & southwest Uttar Pradesh. These were above normal by 5-7°C in many parts of Gangetic West Bengal; in isolated pockets of Sub-Himalayan West Bengal, Bihar & Tamil Nadu and above normal by 2-4°C in many parts of Odisha, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka; in some parts of Saurashtra & Kutch; in isolated pockets of East Uttar Pradesh, Jharkhand, Chhattisgarh, Gujarat Region & Madhya Maharashtra.
- ❖ Rise in maximum temperatures by 4-6 °C very likely over many parts of Northwest India during next 5 days.
- ❖ No significant change in maximum temperatures very likely over Maharashtra during next 24 hours and rise by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

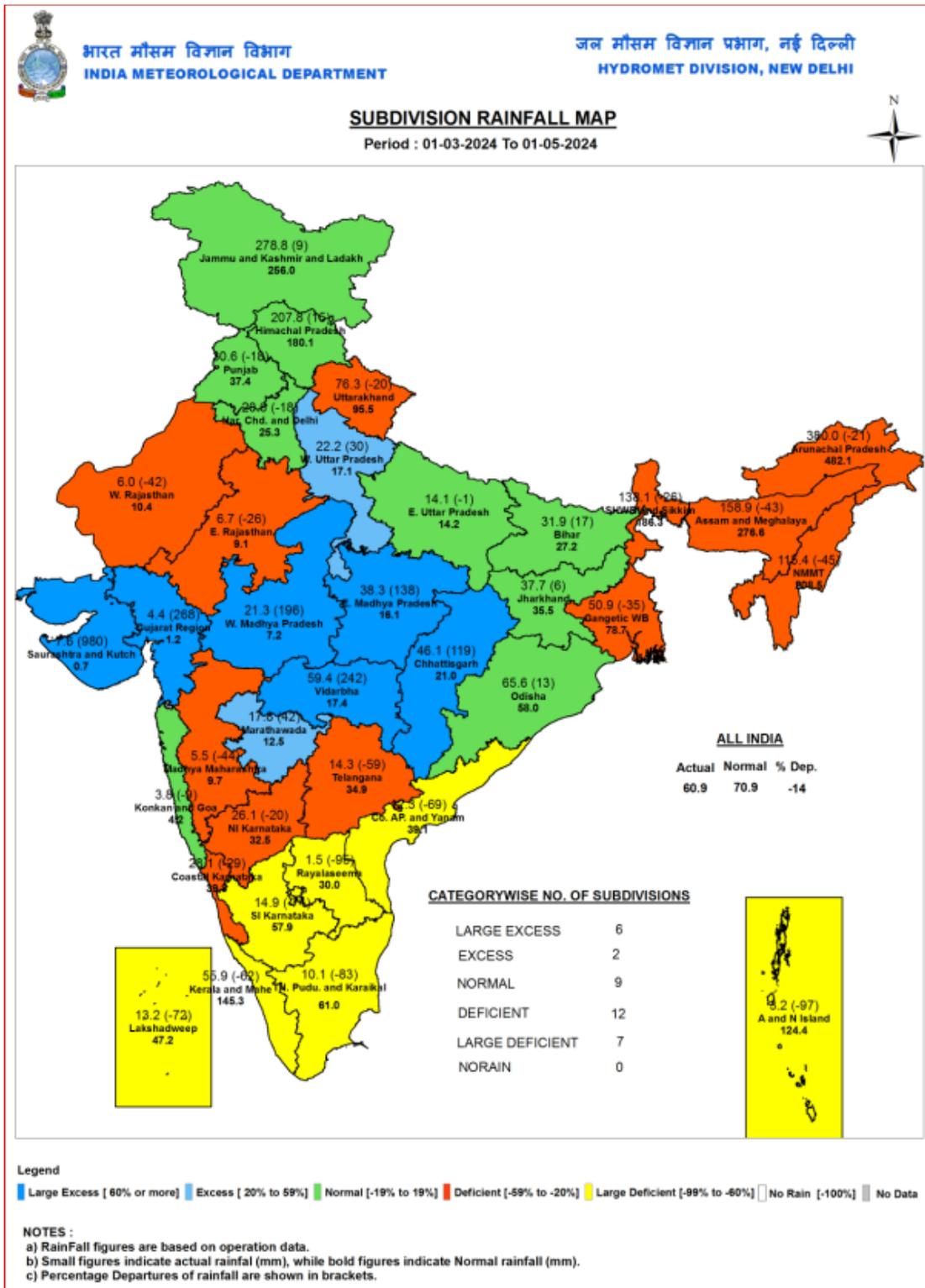
Heat Wave, Warm Night and Hot & Humid weather warning:

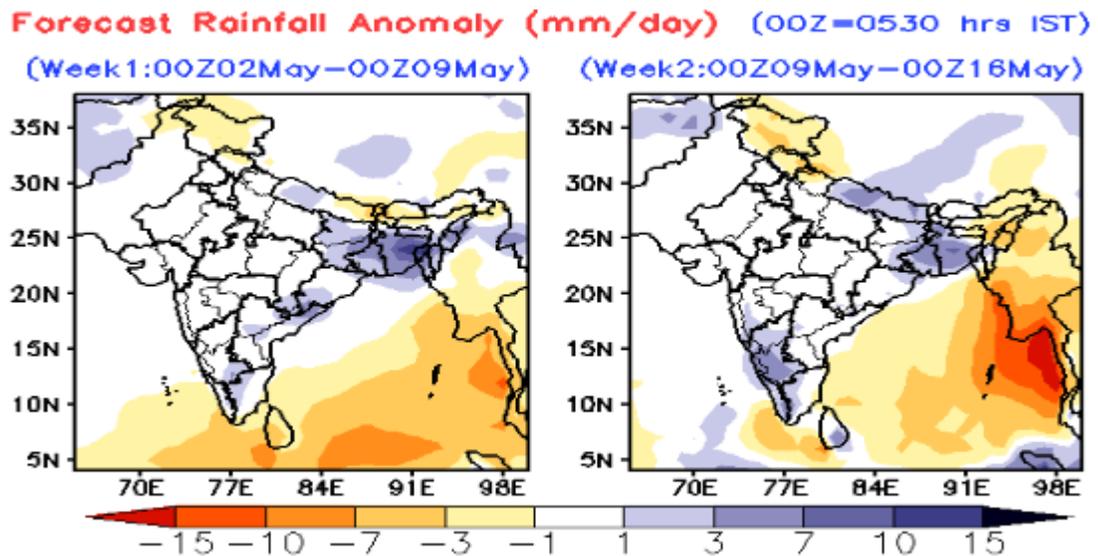
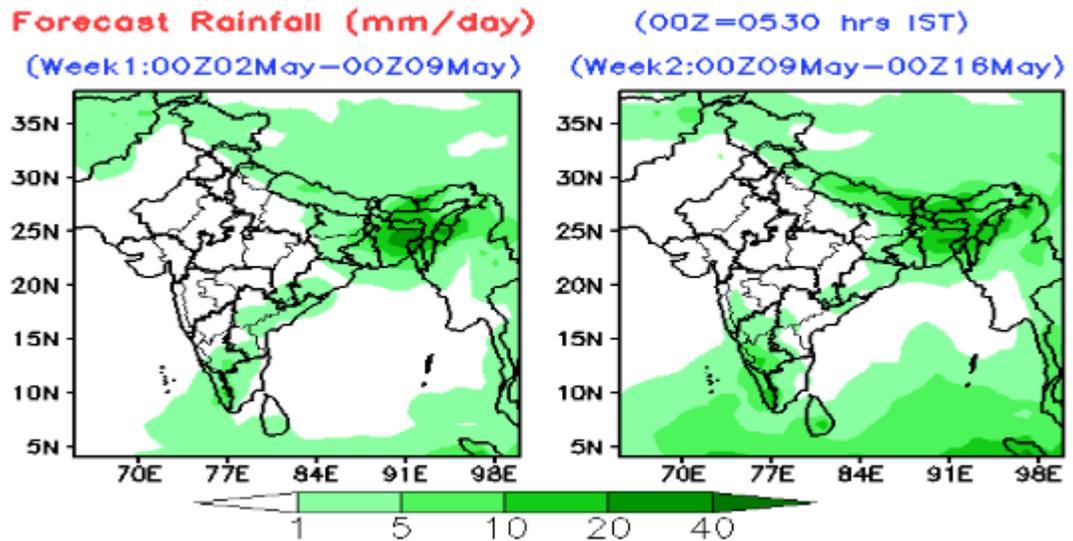
- ❖ **Heat Wave to severe heat wave conditions** very likely to prevail at a few places over Gangetic West Bengal and in isolated pockets over Bihar during 02nd – 05th May. **Heat wave conditions** in isolated pockets over Telangana, Interior Karnataka, Coastal Andhra Pradesh & Yanam, Gujarat State, Odisha during next 4 days; over Kerala on 02nd; Konkan, Madhya Maharashtra and Marathwada on 03rd & 04th; Vidarbha on 04th & 05th and over Tamil Nadu, Puducherry & Karaikal during 02nd -04th May and over southern parts of Rajasthan during the end of the week (**Annexure III**).
- ❖ **Hot and humid weather** very likely to prevail over Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during most days of the week and over Konkan on 02nd & 05th May, 2024.
- ❖ **Warm night** very likely to prevail over Odisha, Rayalaseema, South Interior Karnataka on 02nd & 03rd and West Bengal on 02nd May 2024.

Maximum temperatures for Week 2 (09 to 15 May, 2024):

- Maximum temperatures are likely to be below normal to near normal over many parts of south peninsular India and plains of northwest India. They are likely to be above normal at many places by 2-4°C over western & central parts of the country and at some places over eastern and east central parts of the country.
- **There is moderate probability of heat wave over isolated/some pockets of south Rajasthan, south Uttar Pradesh, Madhya Pradesh, Gujarat state during some days of the week. There is low probability of Heat Wave over Chhattisgarh, Vidarbha, Telangana, Odisha and coastal Andhra Pradesh during some days of the week (Annexure III).**
- **Hot and humid weather likely to prevail over isolated pockets of Maharashtra & Karnataka Coast, Coastal Andhra Pradesh, Odisha and Tamilnadu during some days of the week(Refer Annex 3 for probable areas of Heat wave in next 2-weeks).**



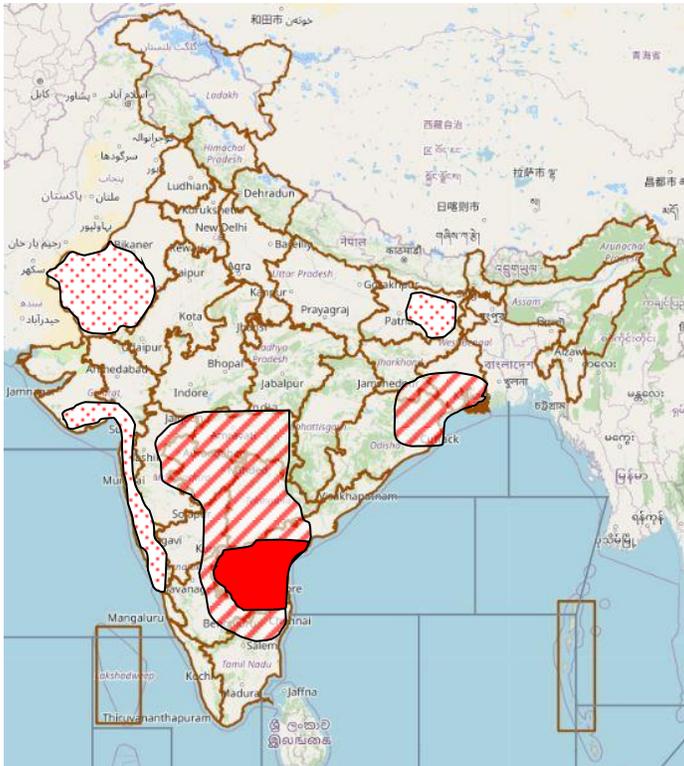




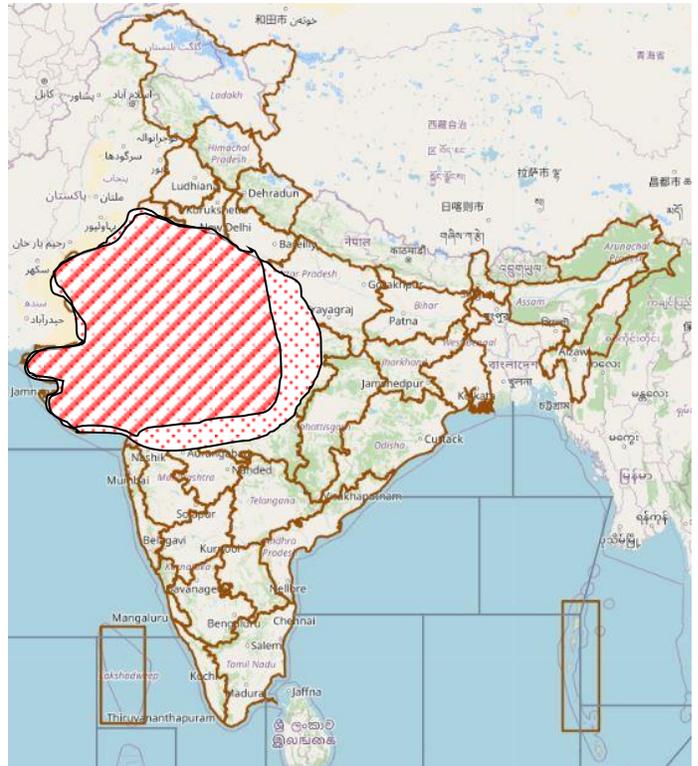
Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies (lower panels) from IMD MME

EXTENDED RANGE OUTLOOK FOR HEATWAVE

Week 1: 02.05.2024 -08.05.2024



Week2: 09.05.2024- 15.05.2024



PROBABILITY OF HEATWAVE CONFIDENCE

LOW (1-33% PROBABILITY)



MODERATE (34-67% PROBABILITY)



HIGH (68-100% PROBABILITY)

