



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

Press Release: Dated: 18 April 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (18 April-1 May 2024)

1. Salient Observed Features for week ending 17 April 2024

- **Heat wave conditions(2nd spell of Heat wave during this season)** with day maximum temperature range of 40-44 degC prevailed in isolated pockets of Odisha during 15th-17th; Gangetic West Bengal, Saurashtra & Kutch & north Konkan on 16th & 17th April, 2024. Many parts of Gujarat and Maharashtra states, states in east coast of India and parts of Southeast Peninsular India including Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and interior Tamil Nadu also experienced higher day maximum temperature towards 2nd half of the week at the range of 40-43degC with above normal by 1-4degC.
- Due to movement of an **active Western Disturbance (WD)** across north India and formation of an Induced Low pressure area over Rajasthan during 13-15 April, light to moderate rainfall/snowfall with isolated thunderstorm & lightning observed at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand. Isolated light to moderate rainfall and thunderstorms activities also reported over adjoining plains of northwest India during the same period. Due to supporting wind convergence at lower which was seen from south Peninsular India to central India during most dates in the week, light to moderate rainfall with isolated thunderstorm & lightning observed over Madhya Pradesh, North Interior Karnataka and Vidarbha and Chhattisgarh during some dates in the week.
- **Thunder squall/gusty winds** also reported at isolated places over Madhya Pradesh during 11th-15th April, over Vidarbha on 12th & 13th; over Chhattisgarh on 11th & 12th; over Marathwada on 13th April. **Hailstorm** reported at isolated places over Madhya Pradesh during 11th-15th April, over

Vidarbha on 11th, 12th, 16th & 17th; over Chhattisgarh on 11th & 12th; over Marathwada on 13th; over West Uttar Pradesh 14th; Himachal Pradesh on 17th April.

- **Temperature Scenario:** The highest maximum temperature of **44.0°C** had been recorded at Amreli (Saurashtra & Kutch) on 17th April 2024 and the lowest minimum temperature of **15.5°C** had been recorded at Sagar (East Madhya Pradesh) on 12th April 2024 over the plains of the country during the week.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 17 April 2024 and Summer Season's Rainfall Scenario (1 March- 17 April 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 17 April was 1%. All India Seasonal cumulative rainfall % departure during this year's **Summer Season's** during **1 March to 17 April 2024** is -9% and over northwest India, it is -14%. 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		
	11.04.2024 TO 17.04.2024			01.03.2024 TO 17.04.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	7	25	-72%	87.8	121.2	-28%
NORTH-WEST INDIA	14	7.8	+79%	61	66.9	-9%
CENTRAL INDIA	7.6	2.2	+246%	26.7	12.5	+114%
SOUTH PENINSULA	5	9	-44%	9.1	32.1	-72%
Country as a whole	9	8.9	1%	43.5	50.4	-14%

2. Large scale features

Madden Julian Oscillation (MJO) index is currently in Phase 1 with amplitude less than 1. It will continue in same phase with gradually decreasing amplitude during first half of week 1. Thereafter, it would move across

phases 2 and 3 during remaining part of the forecast period with amplitude remaining less than 1. Thus, MJO Phase may support enhancement of convective activity and cyclogenesis over the Arabian Sea (AS) from second half of the forecast period.

3. Forecast for next two week

[Weather systems & associated Precipitation during Week 1 \(18 to 24 April, 2024\) and Week 2 \(25 April to 01 May, 2024\)](#)

[Weather systems & associated Precipitation during Week 1 \(18 to 24 April, 2024\)](#)

- ❖ A Western Disturbance as a cyclonic circulation lies over east Iran & adjoining Afghanistan in middle & upper tropospheric levels another Western Disturbance is likely to affect Northwest India from 22nd April, 2024. Under the influence of these systems:
 - ✓ Scattered to fairly widespread light to moderate rainfall/snowfall with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh during 18th- 20th and isolated thereafter; isolated to scattered rainfall over Uttarakhand during 18th-24th April, 2024.
 - ✓ Isolated to scattered rainfall with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Punjab, Haryana-Chandigarh-Delhi during 18th-22nd; West Uttar Pradesh, Rajasthan on 18th& 19th and East Uttar Pradesh on 19th April, 2024.
 - ✓ **Isolated hailstorm** very likely over Himachal Pradesh 18th & 19th April, 2024.
 - ✓ **Isolated heavy rainfall/snowfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 19th April, 2024.
 - ✓ **Strong surface winds (25-35 kmph)** very likely to prevail over Haryana-Chandigarh-Delhi, Uttar Pradesh and Bihar on 18th & 19th April, 2024.
- ✓ A cyclonic circulation lies over Bangladesh & neighbourhood and another over northeast Assam in lower tropospheric levels. Under their influence:
 - ✓ Fairly widespread to widespread light to moderate rainfall/snowfall with isolated **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Arunachal Pradesh; rainfall over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during the week.
 - ✓ Scattered to fairly widespread light/moderate rainfall/snowfall with isolated **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Sub-Himalayan West Bengal & Sikkim during 18th-21st April, 2024.
 - ✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh during 19th-22nd; Assam & Meghalaya during 19th-21st and Nagaland, Manipur, Mizoram & Tripura during 18th-21st April, 2024. **Isolated very heavy rainfall** also very likely over Arunachal Pradesh on 20th April, 2024.

- ❖ A trough/Wind discontinuity runs from Comorin area to south Telangana in lower tropospheric levels. Under its influence:
 - ✓ Isolated light rainfall very likely over Madhya Maharashtra and Marathwada during the week and Konkan & Goa on 18th April, 2024.
 - ✓ Isolated to scattered rainfall with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Vidarbha and Chhattisgarh during 19th-22nd and Madhya Pradesh on 20th & 21st April, 2024.
 - ✓ Scattered to fairly widespread light/moderate rainfall accompanied with isolated **thunderstorm & lightning** very likely over Kerala & Mahe during 18th-22nd and isolated rainfall with **thunderstorm & lightning & gusty winds (30-40 kmph)** over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana during 19th-22nd; Tamil Nadu, Puducherry & Karaikal on 19th & 20th; Coastal Karnataka during 18th-20th; North Interior Karnataka during 18th-21st and South Interior Karnataka and Lakshadweep on 19th & 20th April, 2024.
 - ✓ **Isolated heavy rainfall** over Kerala & Mahe and South Interior Karnataka on 19th April, 2024.

Rainfall for week 2 (25 April to 01 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.
- ✓ Overall, rainfall activity is likely to be normal to above normal over most parts of northwest & central India; below **normal** east & north India and many parts of south Peninsular India.

Maximum temperatures for Week 1 (18 to 24 April, 2024) and Week 2 (25 April to 01 May, 2024)

Maximum temperatures for Week 1 (18 to 24 April, 2024):

- ❖ Yesterday, maximum temperatures were in the range of 42-43°C over many parts of Coastal Andhra Pradesh & Yanam, south Odisha, Rayalaseema; at a few places over Gujarat state, Madhya Maharashtra and Telangana; 40-42°C over many places over Vidarbha & Marathwada; at a few places over west Madhya Pradesh, Jharkhand, Chhattisgarh, Gangetic West Bengal at isolated pockets over Uttar Pradesh, south east Madhya Pradesh, North Interior Karnataka and interior Tamil

Nadu, Puducherry & Karaikal. These were above normal by 3-5°C at many places over Saurashtra & Kutch and above normal by 2-3°C over many parts in rest of the above areas.

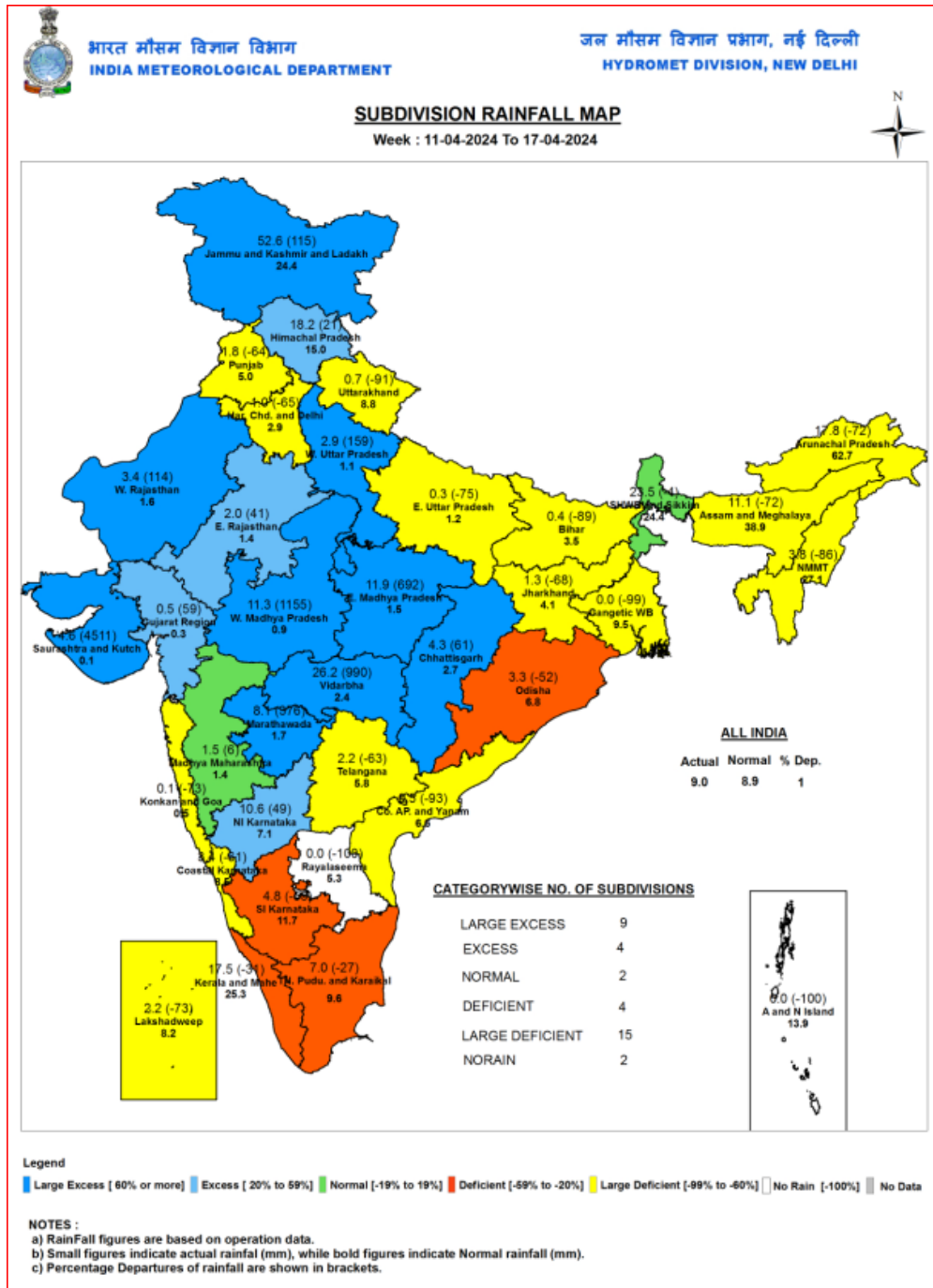
- ❖ Rise in maximum temperatures by 2-3°C very likely over East India during 1st half of the week and no significant change thereafter.
- ❖ Gradual fall in maximum temperatures by 2-3°C very likely over Gujarat during next 4-5 days and significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over Maharashtra during next 24 hours and fall by 2-4°C for subsequent days of the week.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

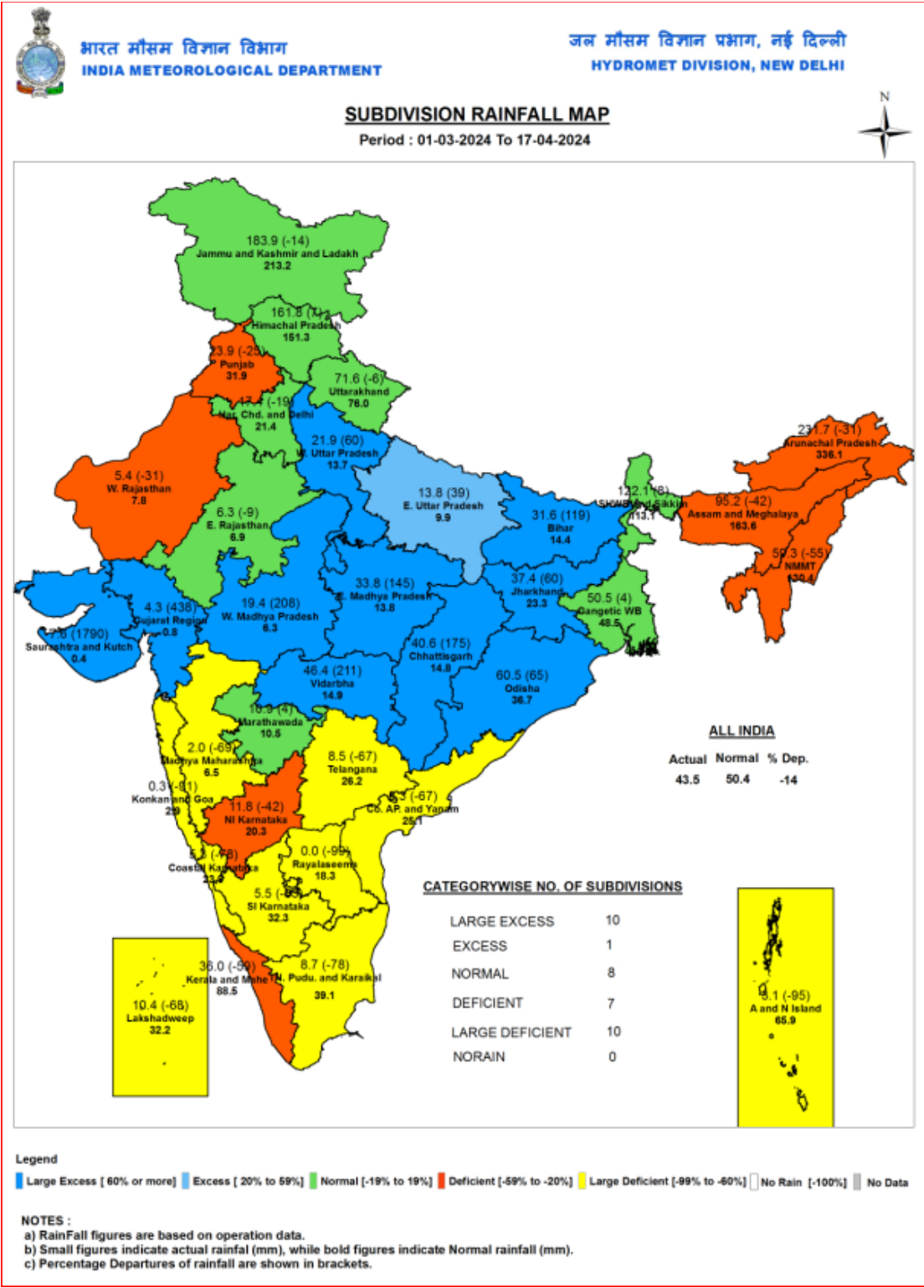
Heat Wave, Warm Night and Hot & Humid weather warning:

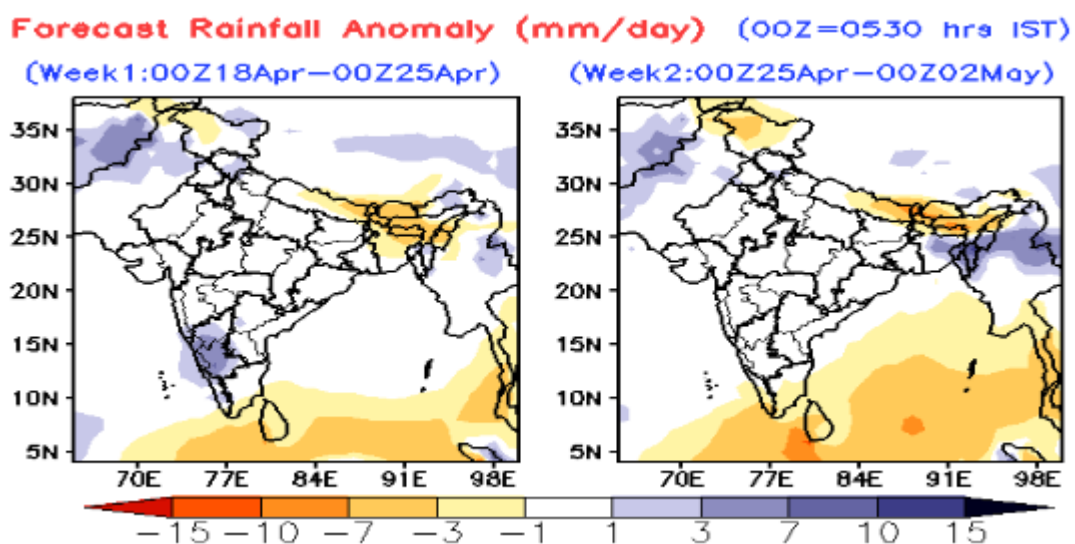
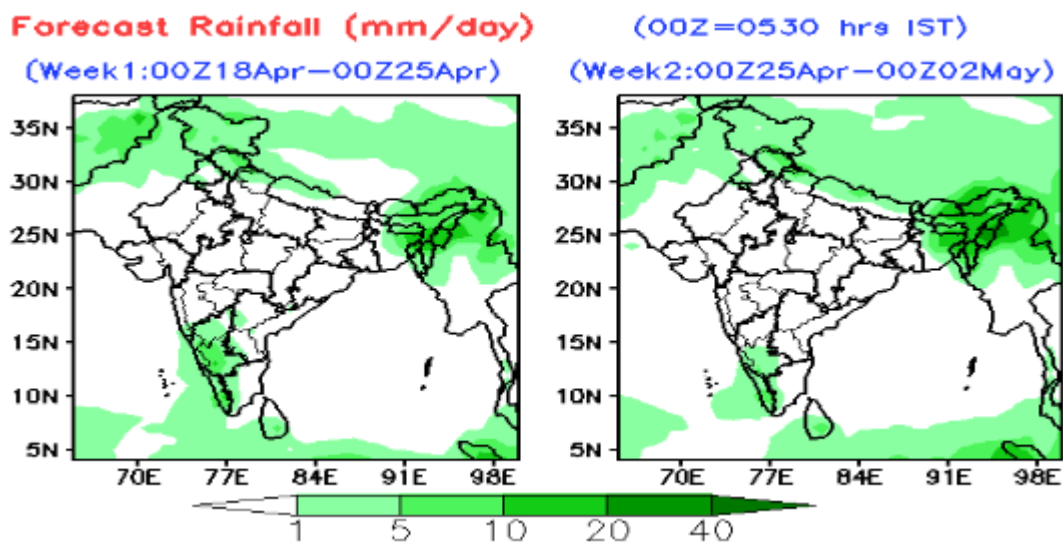
- ❖ **Heat Wave conditions** very likely to prevail in isolated/some pockets of Odisha, Jharkhand and Gangetic West Bengal during most days of the week; over Bihar during 2nd half of the week; Saurashtra & Kutch, Madhya Maharashtra and Marathawada on 18th; Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and interior Tamil Nadu on 18th & 19th April, 2024. **Severe Heat Wave conditions also likely in isolated/some pockets of Odisha on 18th& 19th and Gangetic West Bengal during 19th-21st April, 2024 (Annexure III).**
- ❖ **Hot and humid weather** very likely to prevail over Konkan & Goa on 18th & 19th; Gujarat state on 18th; Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana during 20th-22nd and Kerala & Mahe on 18th, 21st & 22nd to 24th April, 2024.
- ❖ **Warm night** very likely to prevail over Rayalaseema on 18th& 19th April, 2024.

Maximum temperatures for Week 2 (25 April to 01 May, 2024):

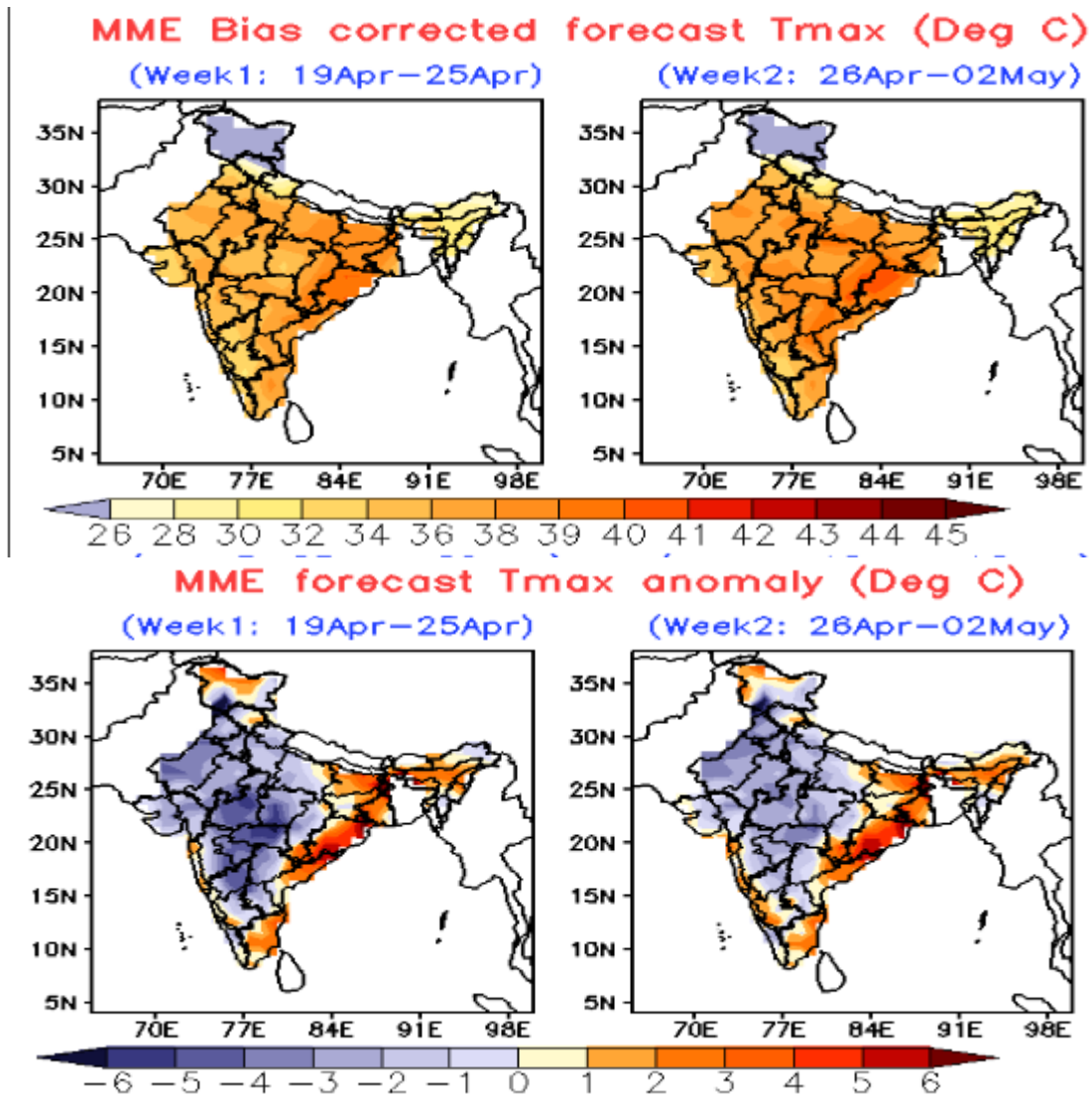
- Maximum temperatures are likely to be below normal to near normal over most parts of the country except over many parts of East & northeast India, Coastal Andhra Pradesh, Tamilnadu and along the West Coast, where these are likely to be above normal by 2-4°C.
- **There is moderate probability of heat wave over isolated pockets of Coastal Andhra Pradesh, Odisha, West Bengal, East Jharkhand and Bihar during some days of the week; and there is low probability of Heat Wave over Tamilnadu and West coast on one or two days of the week (Annexure III).**
- **Hot and humid weather likely to prevail over isolated pockets of Maharashtra & Karnataka Coast, Tamilnadu and Andhra Pradesh during some days of the week. (Annexure V).**







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

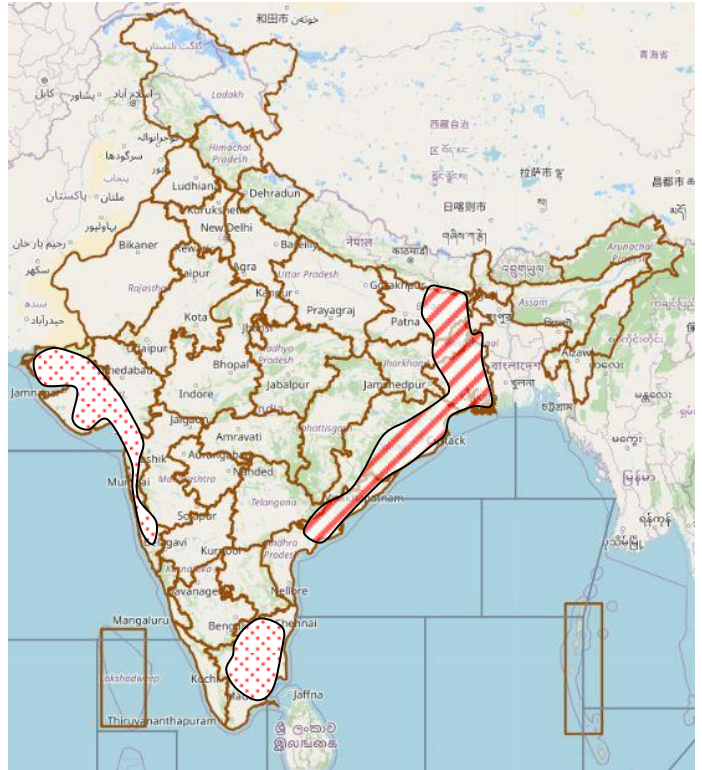
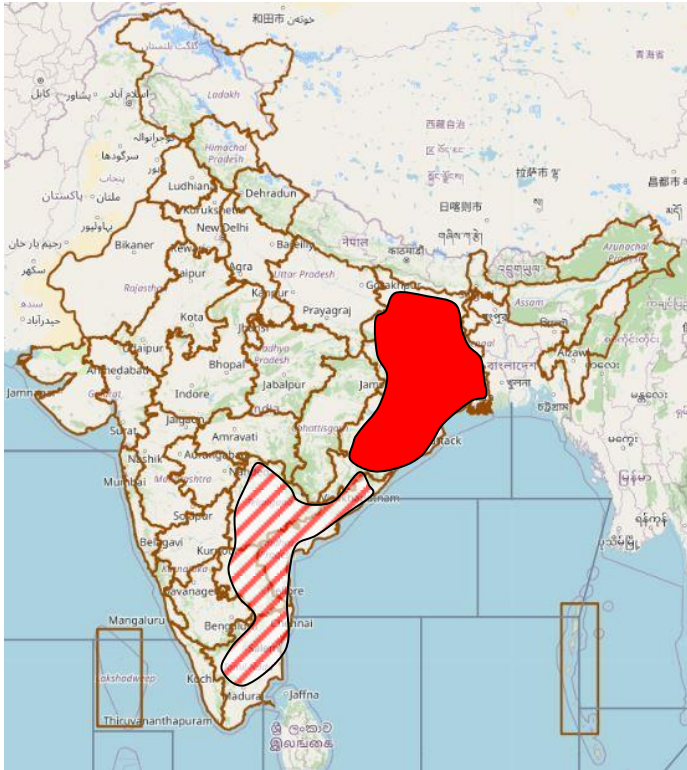


Extended range forecast of Maximum Temperature (top panel) and anomalies(lower panels) from IMD MME

EXTENDED RANGE OUTLOOK FOR HEATWAVE

Week 1: 19.04.2024 - 25.04.2024

Week 2: 26.04.2024 - 02.05.2024



PROBABILITY OF HEATWAVE

CONFIDENCE

LOW (1-33% PROBABILITY)



MODERATE (34-67% PROBABILITY)



HIGH (68-100% PROBABILITY)

