



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

Press Release: Dated: 16 May 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (16 May -29 May 2024)

1. Salient Observed Features for week ending 15 May 2024

- No Heat wave conditions developed over any parts of India during the week except at isolated pocket over Gujarat region on 15th May.
- It was mainly due to occurrence of rainfall accompanied with thunderstorm activities and gusty winds reported over many parts of India with eastern India mainly reported during 11-13 May, Southeast Peninsular India reported similar weather in most dates in the week and over northwest India on 10th May, central India during 10-15 May and western parts of India including Maharashtra and Gujarat during 13 to 15 May. The rainfall over northwest India on 10 May was mainly due to active Western Disturbance(WD) impacted the region and over eastern and central India were due to easterly wind with moisture incursion from Bay of Bengal while over Southeast Peninsular India, it was north-south trough/wind discontinuity over the same area.
- **Heavy rainfall: Isolated Heavy to very heavy rainfall observed** over Kerala on 10 May; Tamil Nadu on 10 & 13th; Sub-Himalayan West Bengal on 12th; Telangana on 13th; Coastal Andhra Pradesh on 14th & South Interior Karnataka on 14th May. **Heavy rainfall observed at isolated places** over Gangetic West Bengal on 10th ; South Interior Karnataka on 10th ,13th & 14th; Rayalaseema on 10th,13th & 14th; over Tamil Nadu on 11th ,12th ,14th & 15th ; East Rajasthan on 11th ; West Madhya Pradesh on 11th & 12th ; Meghalaya on 11th, Tripura on 11th, Odisha on 11th,12th & 13th ; Marathwada on 11th ; Bihar on 12th ; Madhya Maharashtra on 12th ; North Interior Karnataka on 12th,13th & 15th ; Kerala & Mahe on 12th to 15th ; Saurashtra on 14th and over Coastal Andhra Pradesh on 14th & 15th May.
- **Hailstorm:** Observed at isolated places Madhya Pradesh from 09th to 15th May; Himachal

Pradesh on 09th & 10th; Uttarakhand on 09th,11th,13th & 14th; East Rajasthan on 09th & 11th ; Vidarbha on 09th ,10th 11th, 13th & 15th; Jharkhand on 10th & 12th; over Haryana on 11th, West Uttar Pradesh on 11th & 13th; Chhattisgarh on 11th; Madhya Maharashtra from 12th to 15th; Jammu-Kashmir on 13th; Marathwada on 13th & 15th ; Telangana on 13th ; East Uttar Pradesh on 14th ; Konkan on 14th & 15th and Marathwada on 15th May.

- **Temperature Scenario:** The highest maximum temperature of **46.2°C** had been recorded at Phalodi (West Rajasthan) on 9th May 2024 and the lowest minimum temperature of **15.0°C** had been recorded at Dehri (Bihar) on 12th May 2024 over the plains of the country during the week.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 16 May 2024 and Summer Season’s Rainfall Scenario (1 March- 16 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 16 May was +6%. All India Seasonal cumulative rainfall % departure during this year’s **Summer Season’s** during **1 March to 16 May 2024** is -12% and over northwest India, it is -4%. 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		
	09.05.2024 TO 15.05.2024			01.03.2024 TO 15.05.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	19.9	37.8	-47%	186.1	264.2	-30%
NORTH-WEST INDIA	6.3	8.6	-27%	92.4	96.5	-4%
CENTRAL INDIA	11.6	4.4	+165%	45.2	24.8	+82%
SOUTH PENINSULA	25.9	16.4	+58%	54.8	81	-32%
Country as a whole	14.1	13.3	+6	84.1	96	-12

2. Large scale features

Madden Julian Oscillation (MJO) index is currently in Phase 3 with amplitude more than 1. It is likely to enter into phase 4 from 18th May onwards and would continue in same phase during entire forecast period with large amplitude (around 2). Thus MJO, phase and amplitude are highly favourable for enhancement of convective activity and hence cyclogenesis over the Bay of Bengal (BoB) during the entire forecast period.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (16 to 22 May, 2024) and Week 2 (23 to 29 May, 2024)

Weather systems & associated Precipitation during Week 1 (16 to 22 May, 2024)

Weather Systems and Forecast & Warnings:

- ❖ Southwest Monsoon is very likely to advance into South Andaman Sea, some parts of Southeast Bay of Bengal and Nicobar Islands around 19th May, 2024.
- ❖ A cyclonic circulation lies over Comorin area & adjoining south Tamil Nadu coast and a trough runs from this cyclonic circulation to Lakshadweep in lower tropospheric levels. Under their influence:
Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds(40-50 Kmph)** likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, south Karnataka and Isolated light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 Kmph)** over Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema during next 7 days.
- **Isolated heavy rainfall very likely over Tamil Nadu-Puducherry-Karaikal, Kerala-Mahe and South Interior Karnataka during the week; over Coastal Karnataka 17th-19th; Coastal Andhra Pradesh, Telangana and Rayalaseema on 16th and Lakshadweep during 19th-20th May, 2024.**
- **Isolated very heavy rainfall very likely over Tamil Nadu, Puducherry & Karaikal during 17th-19th; Kerala & Mahe 18th-19th and South Interior Karnataka during 18th-20th May, 2024.**
- **Isolated extremely heavy rainfall also very likely over Tamil Nadu on 16th & 20th and Kerala on 20th May, 2024.**
- Isolated light rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 Kmph)** very likely over Konkan & Goa, Madhya Maharashtra, Marathwada during many days of the week; over Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Gujarat state on 16th May.
- Scattered to fairly widespread light to moderate rainfall very likely over Andaman & Nicobar Islands during next 7 days. **Isolated heavy rainfall very likely over Nicobar Islands on 20th May.**

- Isolated light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds(30-40 Kmph)** very likely over Odisha during next 7 days; over Bihar, Jharkhand, Gangetic West Bengal during 19th-22nd May. ***Isolated heavy rainfall also likely over Odisha today, the 16th May.***
- ❖ A cyclonic circulation lies over northeast Assam & neighbourhood in lower tropospheric levels. Under its influence:
 - Scattered to fairly widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds(40-50 Kmph)** very likely over Sub-Himalayan West Bengal & Sikkim during next 7 days.
 - Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 Kmph)** very likely over Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram and Tripura during next 7 days.
 - ***Isolated heavy rainfall also likely over Sikkim on 16th, 19th & 20th; Arunachal Pradesh during 16th-19th and Assam & Meghalaya during 17th-20th May, 2024.***
- ❖ A fresh Western Disturbance likely to affect Western Himalayan region from 17th May. Under its influence; Isolated to scattered light rainfall activity very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 17th-19th May, 2024.

[Rainfall for week 2 \(23 to 29 May, 2024\):](#)

- ✓ Under the influence of trough/Cyclonic Circulation over Peninsular India, Scattered to fairly widespread rainfall with isolated heavy falls likely over south Peninsular India during many days of the week.
- ✓ Overall, rainfall activity is likely to be below normal over all the homogenous regions of India during the week except south Peninsular India, where it is likely to be above normal.

[Maximum temperatures for Week 1 \(16 to 22 May, 2024\) and Week 2 \(23 to 29 May, 2024\)](#)

Maximum temperatures for Week 1 (16 to 22 May, 2024):

- ❖ **Areas having maximum temperatures greater than 40°C:**Yesterday, maximum temperatures were in the range of 42-44°C in isolated pockets over Rajasthan, south Haryana and southwest Uttar Pradesh; 40-42°C in many parts of Rajasthan, Uttar Pradesh; in some parts of Punjab, Haryana, Delhi and in isolated pockets of Madhya Pradesh, Madhya Maharashtra, Vidarbha Odisha, Bihar Rayalaseema & Vidarbha.
- ❖ Gradual rise by about 2-3°C in maximum temperatures very likely over many parts of Northwest India and Gujarat state during 1st half of the week and no significant change thereafter.

- ❖ Gradual rise by about 2-4°C in maximum temperatures very likely over many parts of Central, East India and Maharashtra during 1st half of the week and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

Heat Wave and Hot & Humid weather warning for next one week:

- ❖ **Heat wave conditions** very likely in isolated/some pockets over Rajasthan, Punjab, Haryana and Uttar Pradesh during the week; north Madhya Pradesh during 18th-20th May, 2024. *Severe Heat wave conditions also very likely in some parts of West Rajasthan during 17th-20th; Punjab, Haryana during 18th-20th May, 2024.*
- ❖ **Heat wave conditions** very likely in isolated pockets over Gujarat state during 16th-18th; Konkan on 16th; Bihar during 16th-19th; Jharkhand during 18th-20th; Gangetic West Bengal on 18th & 19th; Odisha on 19th & 20th May, 2024.
- ❖ **Hot and humid weather** very likely to prevail over Sub-Himalayan West Bengal on 16th & 17th; Assam & Meghalaya, Tripura on 16th May, 2024.

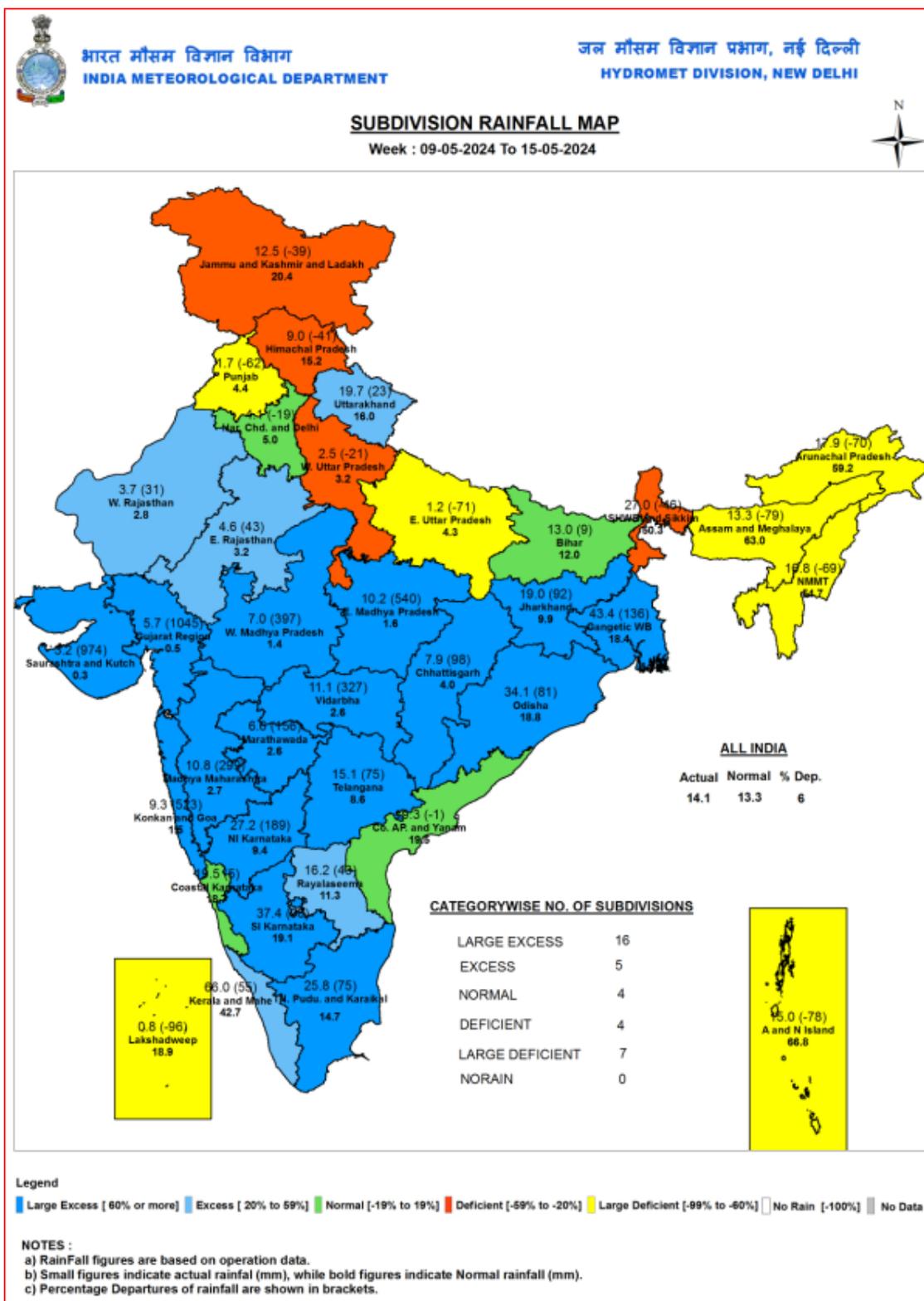
Maximum temperatures for Week 2 (23 to 29 May, 2024):

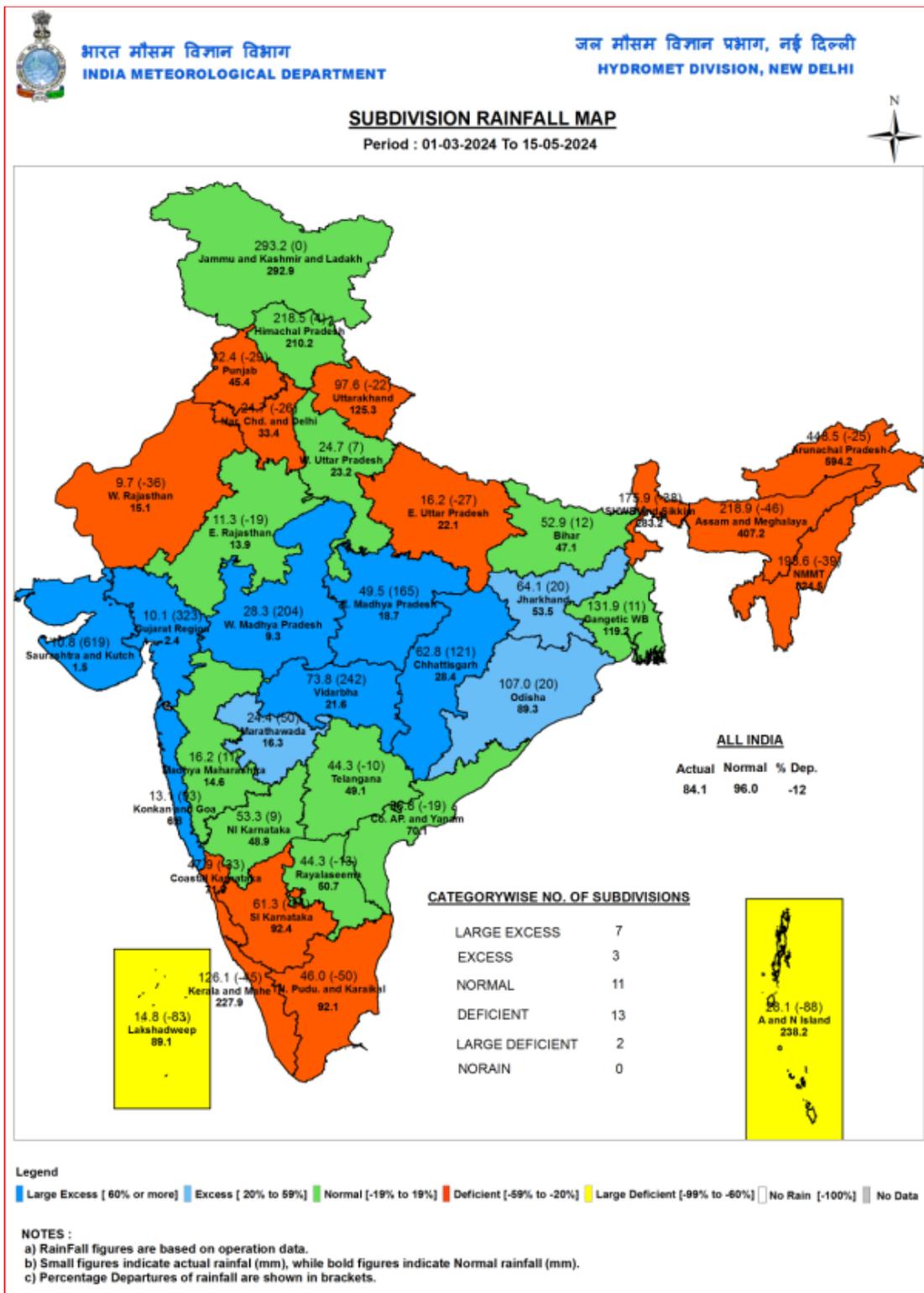
Maximum temperatures are likely to rise gradually mainly over central parts of the country as compared to week 1. These are very likely to be above normal by 2-3°C over most parts of the country except many parts of south Peninsular India and some parts of Western Himalayan Region, where it is likely to be below normal to near normal.

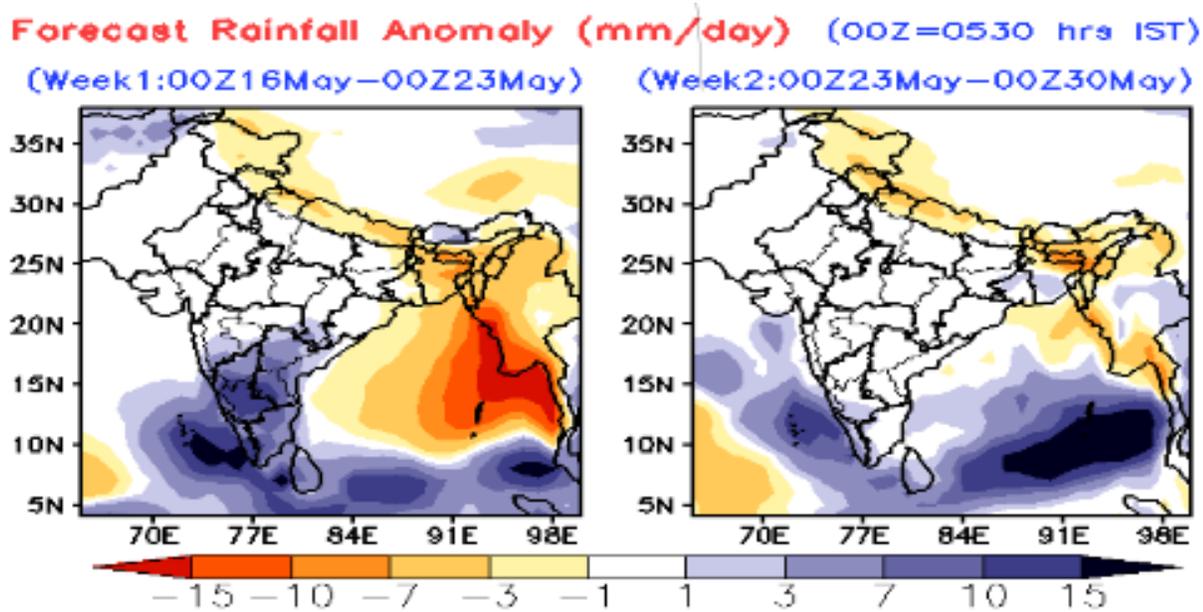
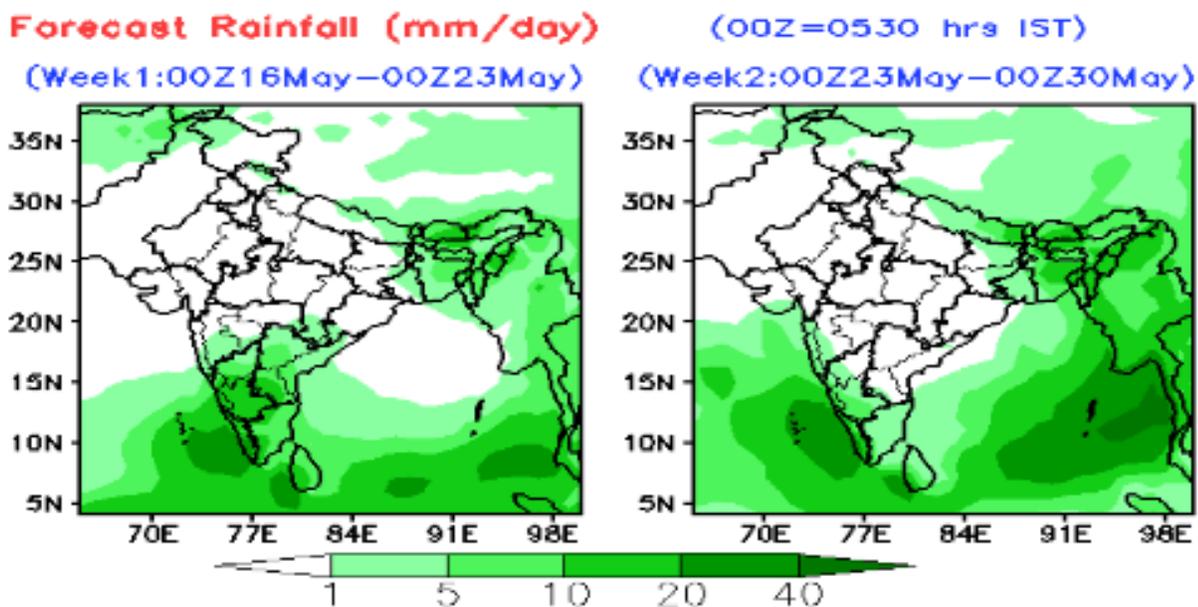
There is Moderate probability of heat wave over isolated/some pockets of Rajasthan, Gujarat, Bihar, Gangetic West Bengal and Odisha during some days of the weekend low probability of heat wave over parts of northwest and central India (Punjab, Haryana, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Vidarbha and northern parts of Maharashtra) during some days of the week.

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..

- For detailed Heat wave outlook please visit (<https://internal.imd.gov.in/pages/heatwave.php>)







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