



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

Press Release: Dated: 30 May 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (30 May -12 June 2024)

1. Salient Observed Features for week ending 29 May 2024

- **Heat wave to severe Heat wave spell continued to prevail over northwest and central India during the week and further intensified and extended towards east:** Last week's Heat wave to severe heat wave conditions over northwest and adjoining central India and Gujarat state continued to prevail in almost all dates during this week till 29 May 2024. It may be noted that this heat wave spell started since 16 May over these areas. Towards the 2nd half of the week, heat wave conditions also intensified and further extended to more parts of central and north India and to eastern parts of India such as to Chhattisgarh, Bihar and Vidarbha. The maximum temperature reported were at the range of 45-48degC in few pockets over these areas in most dates during the week with the peak reached over Rajasthan during 24 May to 29 May when it was at the range of 48degC to 50.5 DegC. Heat wave to severe heat wave conditions also observed over parts of western Himalayan region and northeaster states of India during the week.
- **In terms of Meteorological Sub-division-wise,** Heat wave to severe heat wave conditions observed over Rajasthan, West Madhya Pradesh, Jammu Division & Haryana and Vidarbha on all days during the week (23rd -29th May, 2024); West Uttar Pradesh and Himachal Pradesh during 24th-29 May, Punjab on 23, 26-29 May; Delhi during 25th -29th May; Madhya Maharashtra on 23rd, 24th & 26th May; East Uttar Pradesh and East Madhya Pradesh during 26th -28th May; Chhattisgarh on 28 and 29 May; Bihar on 29 May and Assam on 26 May.
- **Severe Cyclonic Storm "Remal" (pronounced as "Re-Mal") over Bay of Bengal during 22-29 May 2024** crossed Bangladesh and adjoining West Bengal coasts between Sagar

Island and Khepupara close to southwest of Mongla (Bangladesh) near latitude 21.75°N and longitude 89.20°E between 2230 hrs IST of 26th May & 0030 hrs IST of 27th May 2024 as a Severe Cyclonic Storm with wind speed of 110 to 120 kmph gusting to 135 kmph.

- **Isolated Heavy to Very Heavy rainfall** occurred over Kerala during most dates of the week due to Cyclonic Circulation over lower and middle tropospheric area. A low pressure which lay over southeast Arabian sea lay over Kerala coast on 23rd May also caused this heavy rainfall.
- **Heavy to Very heavy rainfall observed over Gangetic West Bengal on 27th May due to impact of Severe Cyclonic Storm Remal. Movement of remnants of Severe Cyclonic Storm caused Extremely Heavy rainfall over North Eastern states during 27th-29th May** including Meghalaya and Tripura, it also caused Heavy to Very Heavy rainfall over remaining parts of North Eastern states including Mizoram, Nagaland, Assam and Arunachal Pradesh during the week.
- **Further Advance of Southwest Monsoon 2024:** Southwest Monsoon has further advanced into some more parts of Maldives & Comorin area, south Bay of Bengal, remaining parts of Andaman & Nicobar Islands, Andaman Sea and some parts of Eastcentral Bay of Bengal on 24th May. It further advanced into some more parts of Southwest Bay of Bengal, remaining parts of Southeast Bay of Bengal, some more parts of Central Bay of Bengal and some parts of Northeast Bay of Bengal today on 25th May; advanced into some more parts of Southwest Bay of Bengal, Central Bay of Bengal and Northeast Bay of Bengal on 26th May; advanced into some more parts of South Arabian Sea and Maldives area on 28th May (For advance of Monsoon, refer Monsoon advance map).
- The highest maximum temperature of **50.5°C** had been recorded at **Churu (West Rajasthan)** on **28th May 2024** and the lowest minimum temperature of **18.5°C** had been recorded at **Dehri (Bihar)** on **23rd May 2024** over the plains of the country during the week.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 29 May 2024 and Summer Season's Rainfall Scenario (1 March- 29 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 +27%. All India Seasonal cumulative rainfall % departure during this year's **Summer Season's** during **1 March to 29 May 2024** is -4% and over northwest India, it is

-21%. 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		
	23.05.2024 TO 29.05.2024			01.03.2024 TO 29.05.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	76.2	50.2	52%	+284.5	358.4	-21%
NORTH-WEST INDIA	1.9	8.1	-76%	+95.8	112.2	-15%
CENTRAL INDIA	3.9	5.4	-27%	+55.9	34.3	63%
SOUTH PENINSULA	30.4	18.0	69%	+138.1	115.3	20%
Country as a whole	20.0	15.8	27%	+120.8	125.8	-4%

2. Large scale features

Madden Julian Oscillation (MJO) index is currently in Phase 4 with amplitude more than 1. It is very likely to move eastward and enter into phase 5 during next 1-2 days. With a decreasing trend in amplitude MJO signal is likely to propagate quickly through phase 5 and reach up to phase 6 at the end of first week. Thereafter, the MJO index is likely to continue its eastward slow migration inside phase 7 throughout the week 2. Thus MJO, phase and amplitude are favourable for enhancement of convective activity over the north Bay of Bengal during the first week only.

3. Forecast for next two week

[Weather systems & associated Precipitation during Week 1 \(30 May to 05 June, 2024\) and Week 2 \(06 to 12 June, 2024\)](#)

Weather systems & associated Precipitation during Week 1 (30 May to 05 June, 2024)

Advance of Southwest Monsoon:

- ❖ **Southwest Monsoon has set in over Kerala and advanced into most parts of northeast India including entire Nagaland, Manipur, Mizoram, Arunachal Pradesh and most parts of Tripura, Meghalaya and Assam today, the 30th May 2024.**
- ❖ The Southwest Monsoon has advanced into remaining parts of southwest Arabian Sea, some parts of west central Arabian Sea, most parts southeast Arabian Sea and Lakshadweep area, most parts of Kerala, Mahe, some parts of south Tamil Nadu, remaining parts of Maldives and Comorin area; some more parts northeast Bay of Bengal, most parts of northeast India including entire Nagaland, Manipur, Mizoram, Arunachal Pradesh and most parts of Tripura, Meghalaya and Assam. Thus, Southwest Monsoon has set in over Kerala, today the 30th May, 2024.
- ❖ The Northern Limit of Monsoon passes through 13°N/60°E, 12°N/65°E, 11°N/70°E, Amini, Kannur, Coimbatore, Kanyakumari, 8.5°N/80°E, 13°N/84°E, 16°N/87°E, 20°N/91°E, Agartala, Dhubri, 27°N/89.5°E.
- ❖ Conditions are favourable for further advance of Southwest Monsoon into some more parts of central Arabian Sea, remaining parts of south Arabian Sea, Lakshadweep area and Kerala, some parts of Karnataka, Some more parts of Tamil Nadu, Southwest & Central Bay of Bengal, remaining parts of Northeast Bay of Bengal and Assam and Meghalaya and some parts of Sub-Himalayan West Bengal and Sikkim during next 2-3 days.
- ❖ Southwest Monsoon likely to advance over remaining parts of South Peninsular India and some more parts of East India during remaining days of the week.

Weather Systems and Forecast & Warnings:

- ❖ A cyclonic circulation lies over northeast Assam & neighbourhood in lower tropospheric levels. Strong southwesterly/southerly winds are prevailing from Bay of Bengal to northeastern States in lower tropospheric levels. Under its influence:
 - ✓ Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm, lightning & gusty winds (30-40 kmph) likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim during the week.
 - ✓ Isolated **heavy/very heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim during the week and isolated **heavy rainfall** over Nagaland, Manipur, Mizoram & Tripura on 30th & 31st May, 2024.
 - ✓ Isolated **extremely heavy rainfall** also likely over Meghalaya today, the 30th May, 2024.
- ❖ A cyclonic circulation lies over northwest Uttar Pradesh & neighbourhood and a trough runs from above this to west Bangladesh in lower tropospheric levels. Under its influence; Isolated to scattered light/moderate rainfall with **thunderstorm, lightning & gusty winds(30-40 Kmph)** very likely over Bihar, Jharkhand, Gangetic West Bengal, Odisha, Chhattisgarh

during most days of the week and over Madhya Pradesh, Vidarbha, Madhya Maharashtra, Marathwada during 01st-03rd June.

- ❖ A shear zone runs roughly along Lat. 8°N over south peninsular India and a cyclonic circulation lies over southeast Arabian Sea off south Kerala in middle tropospheric levels. Strong westerly winds are prevailing along Kerala Coast. Under its influence:
- ✓ Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 Kmph)** likely over Kerala & Mahe, Lakshadweep, Andaman & Nicobar Islands, Karnataka; isolated to scattered light to moderate rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh, Telangana, Rayalaseema during the week.
- ✓ **Isolated heavy to very heavy rainfall very likely over Kerala & Mahe during most days of the week.**
- ✓ **Isolated heavy rainfall very likely over Lakshadweep on 30th; over Andaman & Nicobar Islands during 31st May- 02nd June; Tamil Nadu and South Interior Karnataka during 01st-03rd June, 2024.**
- ✓ **Strong surface winds (speed reaching 30-40 Kmph) likely over Coastal Andhra Pradesh & Yanam, Rayalaseema and Karnataka during 31st May-03rd June.**
- ❖ A Western Disturbance seen as a cyclonic circulation over Jammu division & neighbourhood with trough aloft in lower & middle tropospheric westerlies roughly along Long. 73°E to the north of Lat. 30°N. Under its influence;
- ✓ Isolated to scattered light rainfall accompanied with **thunderstorm, lightning** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 1st half of the week.
- ✓ Isolated very light/light rainfall with **thunderstorm & lightning** very likely over plains of Northwest India during 1st half of the week.

[Rainfall for week 2 \(06 to 12 June, 2024\):](#)

- ✓ Under the influence of trough/Cyclonic Circulation over Peninsular India strong westerly winds from Bengal to West Coast, Scattered to widespread rainfall with isolated heavy falls likely over south Peninsular India during many days of the week.
- ✓ Overall, rainfall activity is likely to be near normal over South Peninsular India and below normal over northwest, east, northeast and central India.
- ❖ Southwest Monsoon likely to advance over some parts of Central India during the week.

[Maximum temperatures for Week 1 \(30 May to 05 June, 2024\) and Week 2 \(06 to 12 June, 2024\)](#)

Maximum temperatures for Week 1 (30 May to 05 June, 2024):

- ❖ **Areas having maximum temperatures greater than 42°C:** Yesterday, maximum temperatures were in the range of 46-50°C in most parts of Haryana-Chandigarh-Delhi; in

many parts of West Rajasthan; in some parts of West Madhya Pradesh; in isolated pockets over East Madhya Pradesh, East Uttar Pradesh, Jharkhand, Odisha; in the range of 42-46°C in many parts of West Uttar Pradesh, Vidarbha; in some parts of Bihar, Chhattisgarh; in isolated pockets over Marathwada, Telangana, Coastal Andhra Pradesh. These were above normal by 3- 6°C over many parts of Northwest India and in some parts of Central & East India.

- ❖ **Gradual fall in maximum temperatures by 2-4°C very likely over Northwest & Central India** during 1st half of the week and significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over East India during next 2 days and gradual fall by 2-3°C thereafter.
- ❖ Rise in maximum temperatures by 2-3°C very likely over Maharashtra and south peninsular India 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.

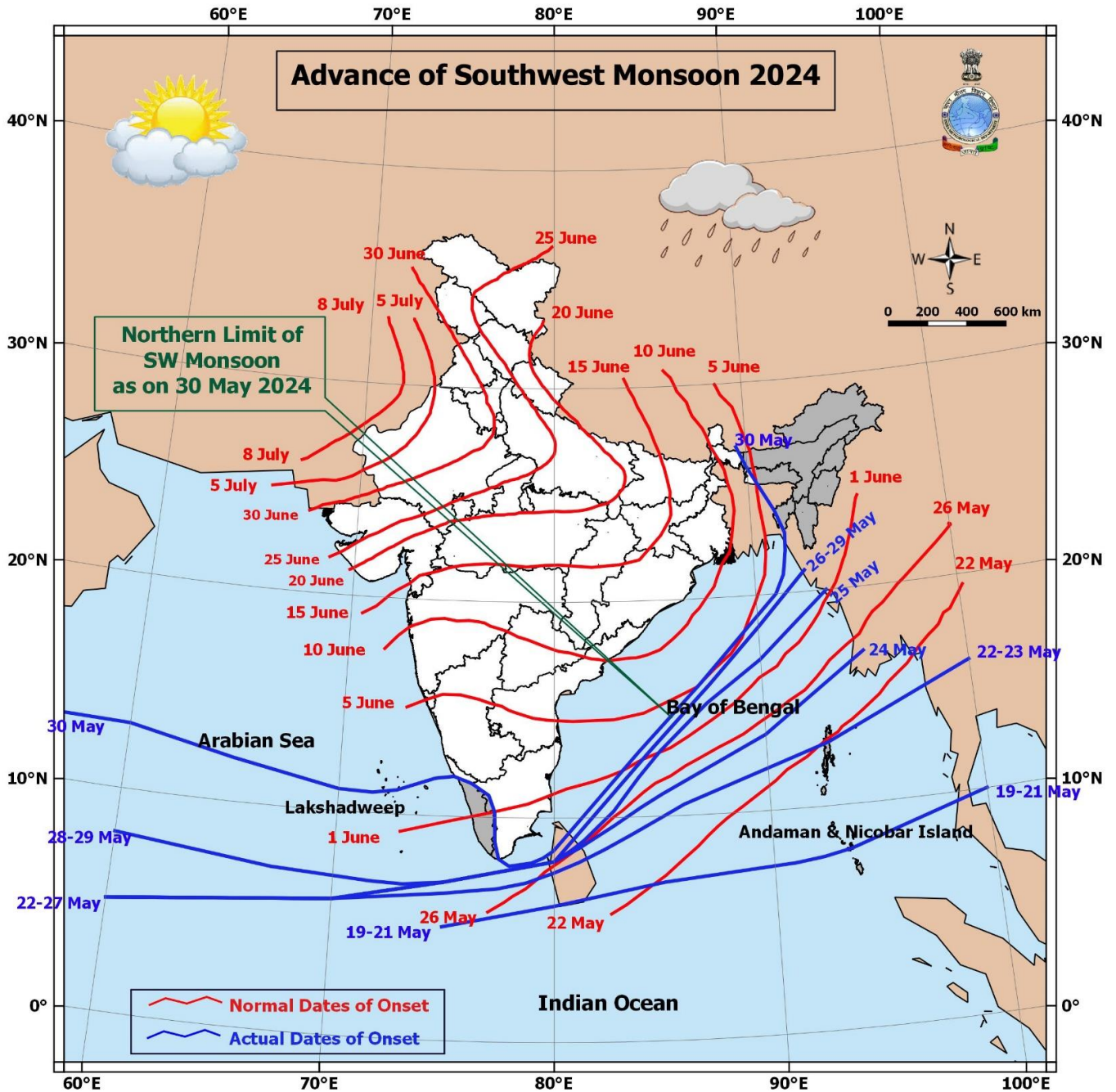
Heat Wave, Warm Night and Hot & Humid weather warning:

- ❖ **Heat wave to severe heat wave conditions** very likely in some parts of Punjab, Haryana-Chandigarh-Delhi, Rajasthan, Uttar Pradesh, Bihar; in isolated pockets of Jharkhand, Odisha on 30th and gradual reduction thereafter with heat wave conditions in isolated pockets till 01st June, 2024.
- ❖ **Prevailing heat wave to severe heat wave conditions likely to reduce gradually over Northwest & Central India from today, 30th May 2024.**
- ❖ **Heat wave conditions** very likely in isolated pockets of Madhya Pradesh, Vidarbha, Uttarakhand on 30th & 31st May, Chhattisgarh, Jammu division, Himachal Pradesh on 30th May, 2024.
- ❖ **Hot and humid weather** very likely to prevail over isolated pockets of Konkan & Goa during 30th May-01st June; Gangetic West Bengal on 30th & 31st May, 2024.
- ❖ **Warm night conditions** in isolated pockets very likely to prevail over Punjab, Haryana-Chandigarh-Delhi, Bihar, Odisha during 30th May-01st June; Uttar Pradesh on 30th & 31st May and Rajasthan, Jharkhand Chhattisgarh on 30th May, 2024.

Maximum temperatures for Week 2 (06 to 12 June, 2024):

- Maximum temperatures are likely to be between 42-44°C over many parts of the northwest, central & East India during the week. These are very likely to be above normal by 2-3°C over most parts of east and adjoining northwest & south Peninsular India and near normal or slightly below normal over rest parts of the country.
- There is Moderate probability of heat wave to severe heat wave over some places of East Uttar Pradesh, Bihar, Jharkhand & north Interior Odisha and at isolated pockets of Chhattisgarh & East Madhya Pradesh during few/many days of the week.

- There is low probability of heat waves at some places of Rajasthan, West Uttar Pradesh and at isolated pockets of Punjab, Haryana and Gangetic West Bengal during some days of the week.
- For detailed Heat wave outlook please visit (https://internal.imd.gov.in/pages/heatwave_mausam.php)

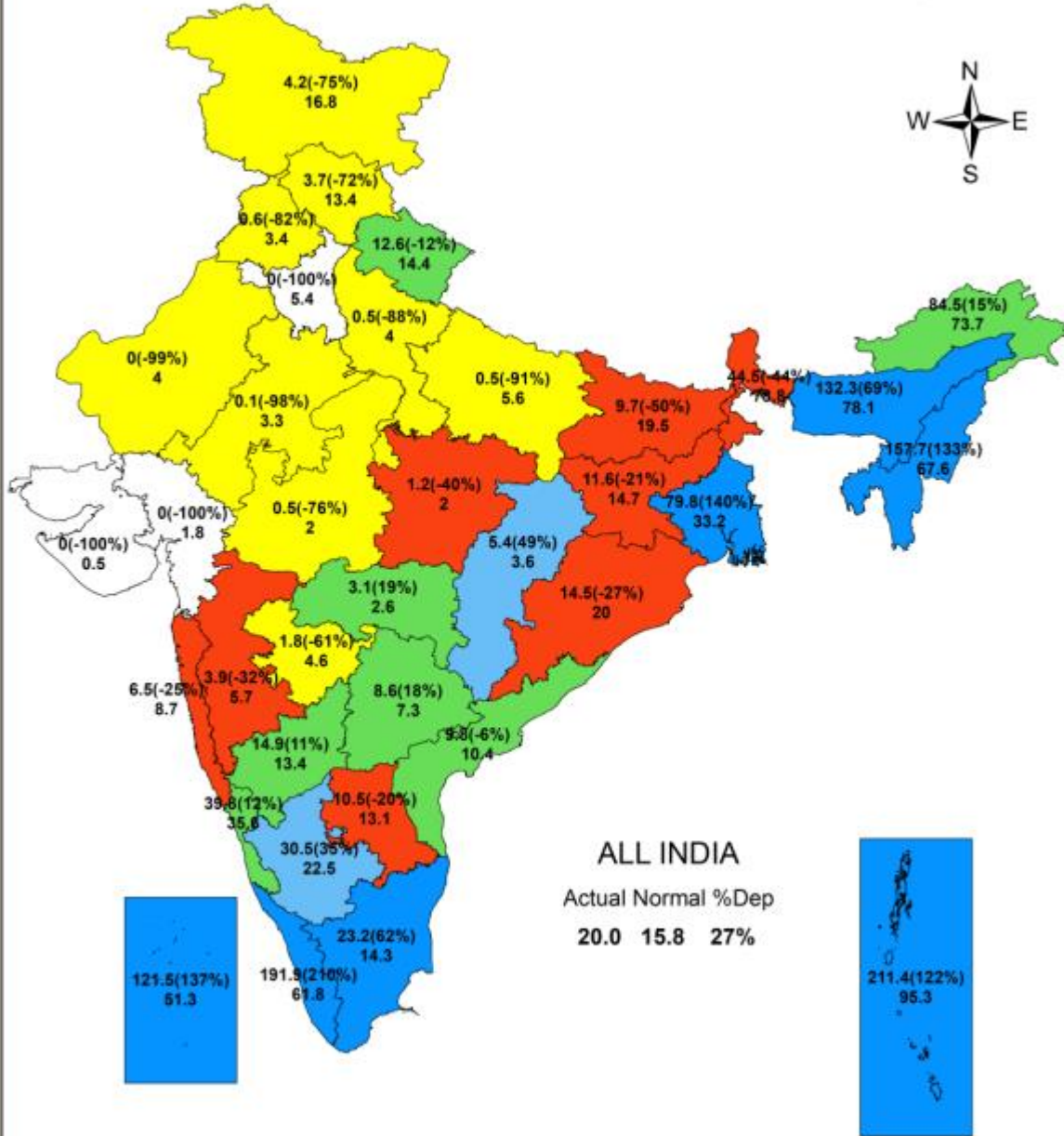


Annex: I

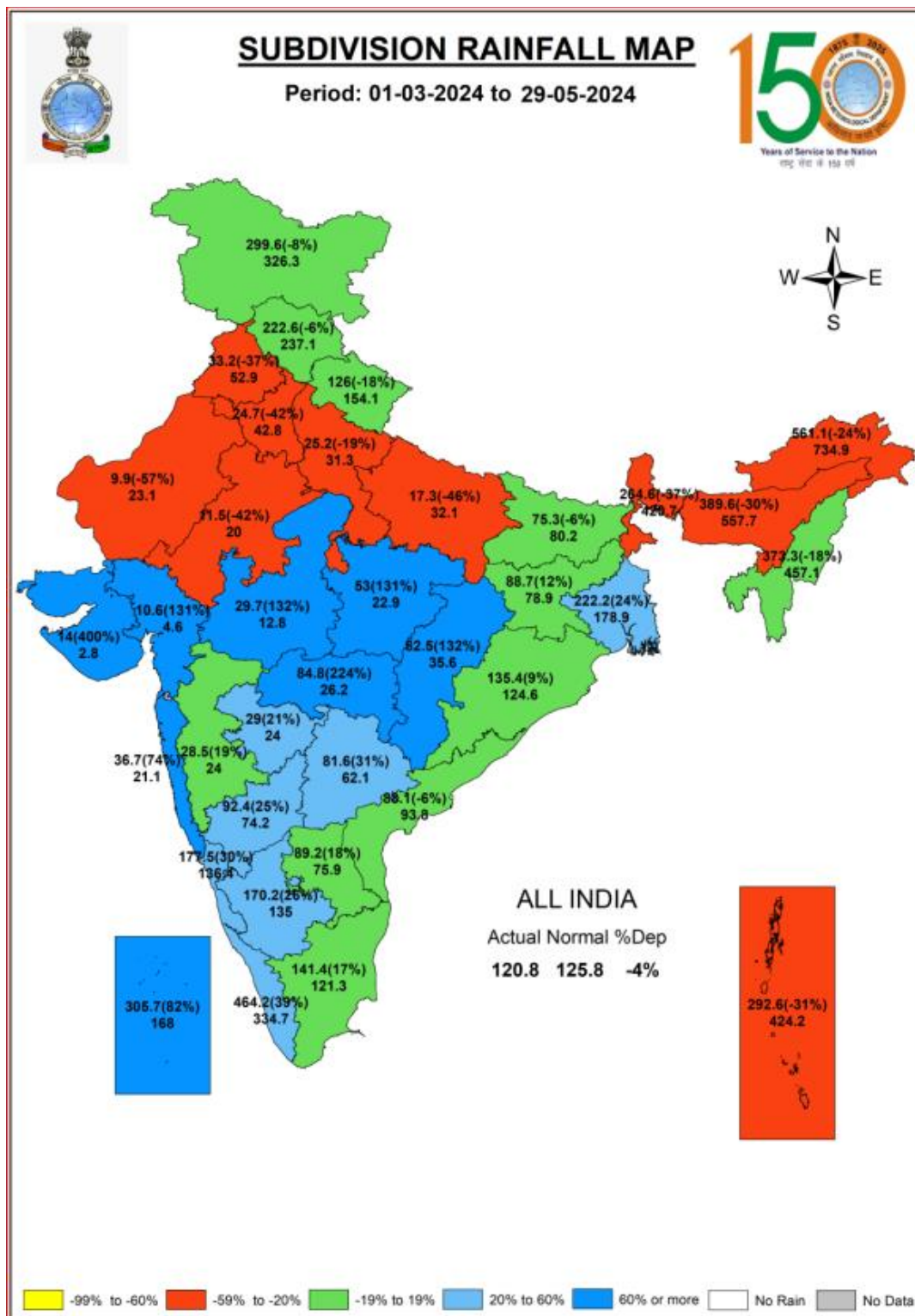


SUBDIVISION RAINFALL MAP

Week: 23-05-2024 to 29-05-2024



-99% to -60%
 -59% to -20%
 -19% to 19%
 20% to 60%
 60% or more
 No Rain
 No Data



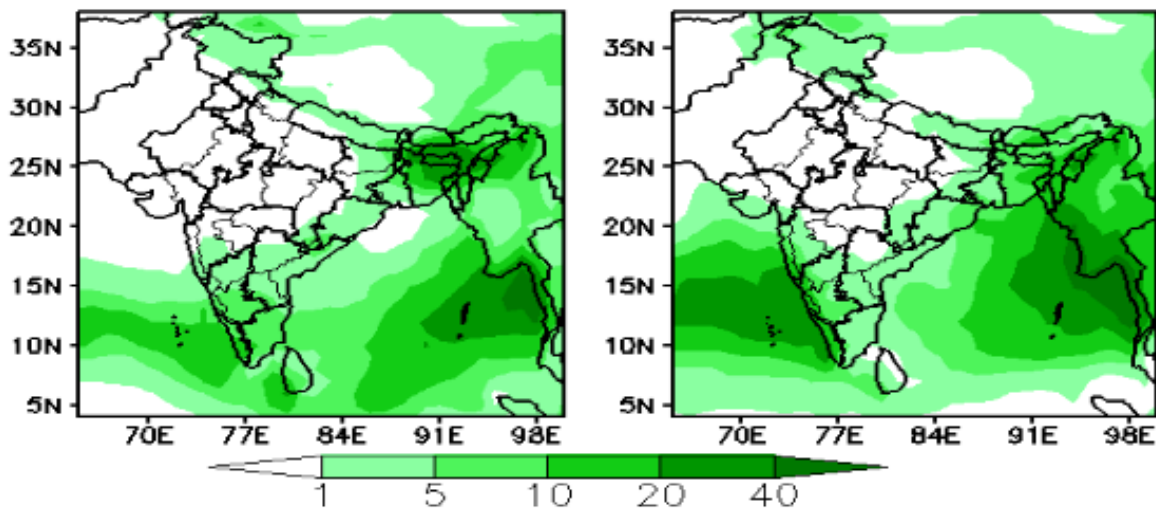
Annexure III

Forecast Rainfall (mm/day)

(00Z=0530 hrs IST)

(Week1:00Z30May-00Z06Jun)

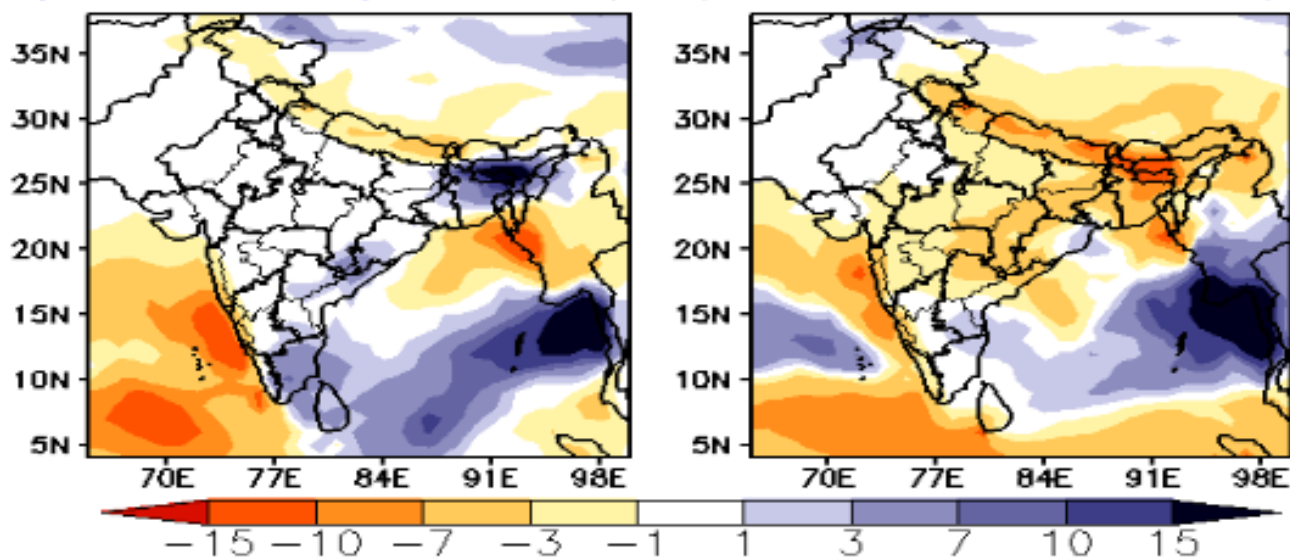
(Week2:00Z06Jun-00Z13Jun)



Forecast Rainfall Anomaly (mm/day) (00Z=0530 hrs IST)

(Week1:00Z30May-00Z06Jun)

(Week2:00Z06Jun-00Z13Jun)



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