



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

Press Release: Dated: 6 June 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (6 -19 June 2024)

1. Salient Observed Features for week ending 5 June 2024

- **Heat wave to severe Heat wave spell continued to prevail over many areas covering northwest, central and eastern parts of India during 1st half of the week and then gradually abated from most of these areas during the 2nd half of this week. It was abated by 5th June 2024 from many areas and it was only Heat wave conditions prevailed over some parts of southern parts of Uttar Pradesh and in isolated pockets of Northeast Rajasthan, Haryana, Delhi, northwest parts of Madhya Pradesh. It may be noted that this heat wave spell prevailed for longer period which started since 17th May over northwest India.**
- It may be noted that this heat wave spell started since 17 May over northwest India. The maximum temperature reported were at the range of 44-48degC reported mainly in isolated pockets over northwest Rajasthan, south Haryana, Delhi and southern parts of Uttar Pradesh during this heat wave spell in these areas during the heat wave spell.
- **In terms of Meteorological Sub-division-wise**, Heat wave to severe heat wave conditions prevailed over Haryana-Chandigarh-Delhi, Uttar Pradesh on all days during all dates in the week of 30th May – 05th June , 2024; over Punjab, West Rajasthan on all days during 30th May – 04th June , 2024; over East Rajasthan during 30-31 May & 4-5 June; Himachal Pradesh during 30-31 May & 2-3 June; East Madhya Pradesh on all days during the week 30th May – 05th June , 2024 except on 4th June; West Madhya Pradesh on 30 May-1 June & 4-5 June; Chhattisgarh,

Jharkhand, Odisha & Vidarbha during 30 May -1 June; Uttarakhand during 30-31 May; Coastal Andhra Pradesh & Yanam on 31st May.

- During the week, **Southwest Monsoon was set in over Kerala, on the 30th May.** Monsoon was also further advanced on 1, 3 and 4th June over more parts of southern parts of Peninsular India. On 4th June, Northern Limit of Monsoon passed through Goa (Mormugao), Gadag, Narayanpet, Narsapur, 17°N/85°E, 19.5°N/88°E 21.5°N/90°E, 23°N/89.5°E and Islampur and there was no further advance on 5th June.(refer Fig 1 for Monsoon advance map over India).
- In association with onset of Monsoon over Kerala on 30 May, Heavy to very heavy rainfall continued to observed at isolated places over Kerala in most dates with isolated **Extremely heavy rainfall** observed at isolated places Kerala & Mahe on 01st June
- **Extremely heavy also** observed at isolated places over Meghalaya on 30th June ,31 June and 04 June. **Very heavy also observed** at isolated places over Assam on 30th, 31st and May,03rd June; Coastal Andhra Pradesh & Yanam on 03rd June; Odisha on 03rd June; Sub-Himalaya West Bengal & Sikkim on 31 May, 04th & 05th June; Rayalaseema on 03rd June; Meghalaya on 03rd June; North Interior Karnataka on 03rd June; Telangana on 03rd & 05th June; Manipur on 04th June; Tamil Nadu, Puducherry & Karaikal on 05th June. **Isolated heavy rainfall** reported over Lakshadweep on 30th May; Arunachal Pradesh on 30thMay,31st May,01st June; Nagaland on 30th May & 05th June; Manipur on 30th May & 05th June; Bihar on 31st May; Gangetic West Bengal on 31st May; Coastal Andhra Pradesh & Yanam on 01st & 05th June; Andaman & Nicobar Islands on 01st & 02nd June; Sub-Himalaya West Bengal & Sikkim on 01st & 02nd June; Rayalaseema on 02nd June; Tamil Nadu, Puducherry & Karaikal on 02nd,03rd&04thJune; Chhattisgarh on 03rdJune; South Interior Karnataka on 03rd & 04thJune; North Interior Karnataka on 04th & 05th June; Coastal Karnataka on 04th June; Assam & Meghalaya on 05th June; Rayalaseema on 05th June; West Madhya Pradesh 05th June; Madhya Maharashtra on 05th June.
- ◆ **Temperature Scenario:** The highest maximum temperature of **48.3°C** had been recorded at **Ganganagar (West Rajasthan)** on **30th May 2024** and the lowest minimum

temperature of **20.0°C** had been recorded at **Bulandshahr (West Uttar Pradesh)** on **31st May 2024** over the plains of the country during the week.

- **Analysis of Weekly overall Rainfall distribution during the week ending on 5 June 2024 and Summer Season’s Rainfall Scenario (1 March- 31 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 5 June was +8%. All India Seasonal cumulative rainfall % departure during this year’s **Summer Season’s** during **1 March to 31 May 2024** is -4% and over northwest India, it is -16%. 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		
	30.05.2024 TO 05.06.2024			01.03.2024 TO 31.05.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	69.5	51.9	+34%	312.0	373.1	-16%
NORTH-WEST INDIA	2.5	8.3	-70%	96.3	114.4	-16%
CENTRAL INDIA	8.5	11.5	-26%	56.0	36.0	+56%
SOUTH PENINSULA	33.6	25.3	+33%	140.9	121.2	+16%
Country as a whole	21.3	19.7	+8%	125.9	130.6	-4%

2. Large scale features

Madden Julian Oscillation (MJO) index is currently in Phase 5 with a weaker amplitude less than 1. Dynamical models predict a very weak MJO signal over the next two weeks. The GEFS forecasts indicate that the weak MJO signal is likely to move eastwards and enter into

phase 7 passing over phase 6 during first week. Thereafter, the forecasts are displaying very slow and loopy movement within phase 7 during second week rather reaching phase 8. The ECMWF continues to favour a coherent eastward propagation of the weak signal across the Pacific (Phase 6 & 7) and likely to reach the Western Hemisphere (phase 8) at the end of the second week. Thus MJO, phase and amplitude are not favourable for enhancement of convective activity over the North Indian Ocean region during the entire forecast period.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (06 to 12 June, 2024) and Week 2 (13 to 19 June, 2024)

Weather systems & associated Precipitation during Week 1 (06 to 12 June, 2024)

Advance of Southwest Monsoon:

- ❖ Southwest Monsoon has further advanced into some more parts of central Arabian Sea; most parts of Karnataka; some more parts of Maharashtra, Telangana & Coastal Andhra Pradesh; most parts of Westcentral Bay of Bengal and some more parts of Northwest Bay of Bengal.
- ❖ The Northern Limit of Monsoon now passes through 17.0°N/60°E, 17.0°N/65°E, 16.5°N/70°E, Ratnagiri, Solapur, Medak, Bhadrachalam, Vizianagaram, 19.5°N/88°E, 21.5°N/89.5°E, 23°N/89.5°E and Islampur.
- ❖ *Conditions are favourable for further advance of Southwest Monsoon into some more parts of central Arabian Sea, remaining parts of Karnataka & Coastal Andhra Pradesh, some more parts of Maharashtra (including Mumbai), Telangana, some parts of south Chhattisgarh & South Odisha, remaining parts of Westcentral & more parts of Northwest Bay of Bengal during next 3-4 days.*
- ❖ *Subsequently, it is very likely to cover many parts of Gujarat, Most parts of Maharashtra and some parts central India and Bihar 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 their 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 rainfall** very likely over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim during the week; Arunachal Pradesh during 08th-12th; Nagaland on 10th to 12th June, 2024.
 - ❖ A cyclonic circulation lies over north Rayalaseema & neighbourhood in lower tropospheric levels and a shear zone runs roughly along 16°N in middle tropospheric levels. Under their influence:
 - ✓ Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds(40-50 Kmph)** likely over Konkan & Goa, Madhya Maharashtra, Marathwada, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Karnataka during the week; Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during 06th-08th June.
 - ✓ Isolated **heavy rainfall** very likely over Konkan & Goa, Madhya Maharashtra during the week and Marathwada during 06th-08th June.
 - ✓ Isolated **heavy rainfall** very likely over Interior Karnataka, Kerala & Mahe during 06th-09th; Coastal Karnataka on 08th, 09th & 10th; Tamil Nadu, Puducherry & Karaikal on 06th & 07th; Coastal Andhra Pradesh on 06th, 09th & 10th; Telangana on 06th & 10th and Rayalaseema on 06th & 07th June, 2024.
 - ✓ Isolated **very heavy rainfall** very likely over Konkan & Goa during 08th-11th; Madhya Maharashtra and Coastal Karnataka on 09th to 11th June.
 - ❖ A cyclonic circulation lies over northwest Madhya Pradesh and a trough runs from this cyclonic circulation to West Bengal in lower tropospheric levels. Under their influence:
 - ✓ Isolated to scattered light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds(30-40 Kmph)** very likely over Bihar, Jharkhand, Gangetic West Bengal during next 2-3 days; Odisha, Madhya Pradesh, Vidarbha, Chhattisgarh during next 4-5 days.
 - ✓ Isolated **hailstorm and squally winds (50-60 kmph)** very likely over West Madhya Pradesh during 06th-08th June, 2024.
 - ✓ **Strong winds** (wind speed 25-35 kmph) very likely over Andaman & Nicobar Islands during next 5 days.
 - ✓ **Heavy rainfall** at isolated places likely over Odisha during 06th-08th June; Andaman & Nicobar Islands on 09th & 10th June, 2024.
 - ❖ A Western Disturbance seen as a cyclonic circulation over north Pakistan in lower tropospheric levels with trough in middle tropospheric westerlies roughly along Long.

65°E to the north of Lat. 30°N. Prevailing southwesterly winds from Arabian Sea over the plains of Northwest India are likely to continue during next 2 days. Under their influence:

- ✓ Scattered to fairly widespread light rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 Kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand on 06th & 07th June, 2024.
- ✓ Isolated **hailstorm** very likely over Himachal Pradesh and Uttarakhand on 06th June, 2024.
- ✓ Isolated to scattered very light to light rainfall with **thunderstorm, lightning & gusty winds (40-50 Kmph)** very likely over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh and Rajasthan during 06th-07th June, 2024.
- ✓ **Duststorm** very likely over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh on 06th and Rajasthan during 06th-07th June, 2024.
- ✓ Isolated **hailstorm** very likely over West Rajasthan on 07th June, 2024.

Rainfall for week 2 (13 to 19 June, 2024):

- ✓ Under the influence of trough/Cyclonic Circulation over south 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 near normal over many parts of South Peninsular India and northeastern states & Odisha and below normal over rest parts of the country.
- ❖ Southwest Monsoon likely to advance over some more parts of Central & East India during the week.

Maximum temperatures for Week 1 (06 to 12 June, 2024) and Week 2 (13 to 19 June, 2024)

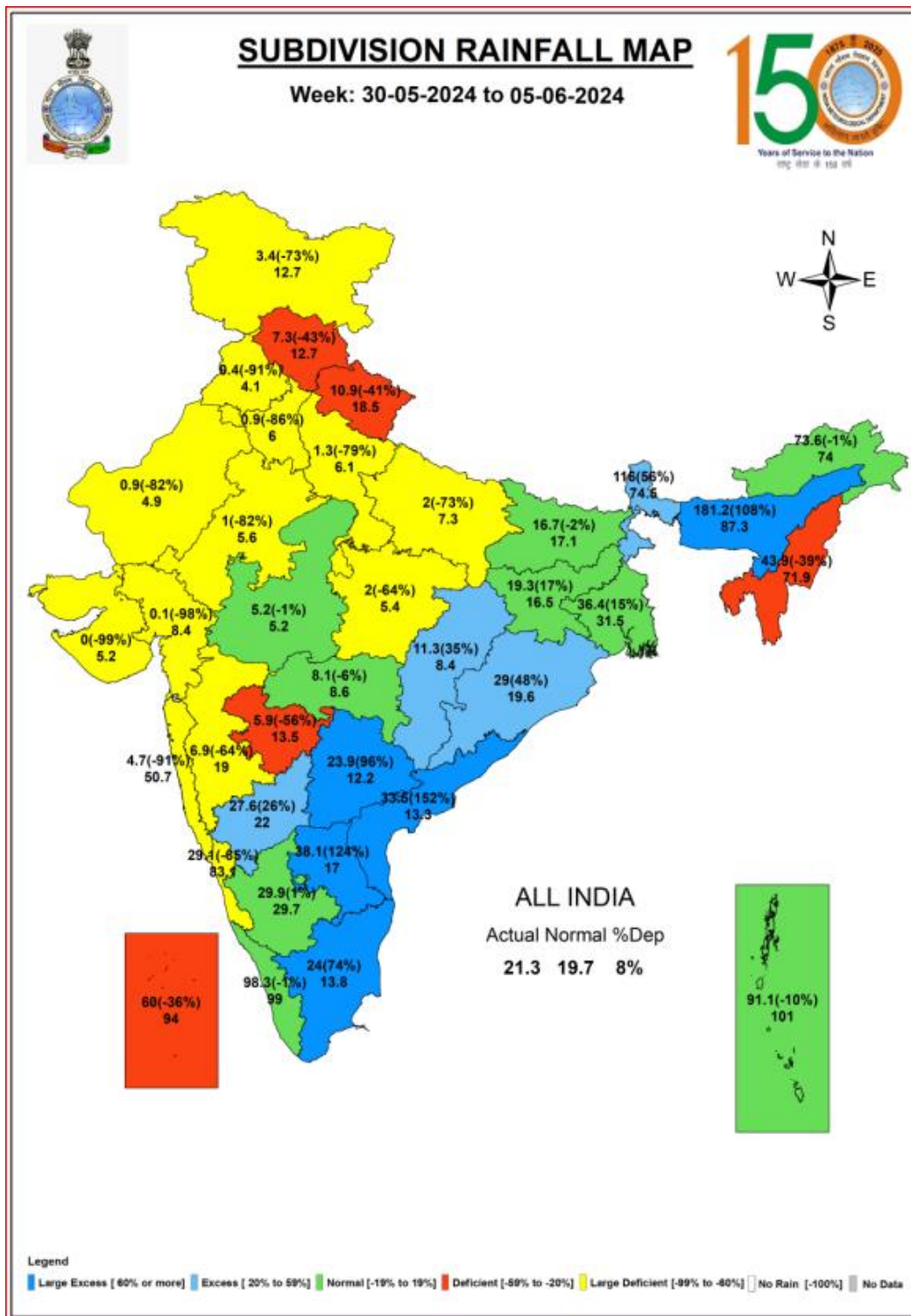
- ❖ Rise in maximum temperatures by 2-3°C very likely over East India during 1st half of the week and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over northwest India during 1st half of the week and rise by about 2-3°C thereafter.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

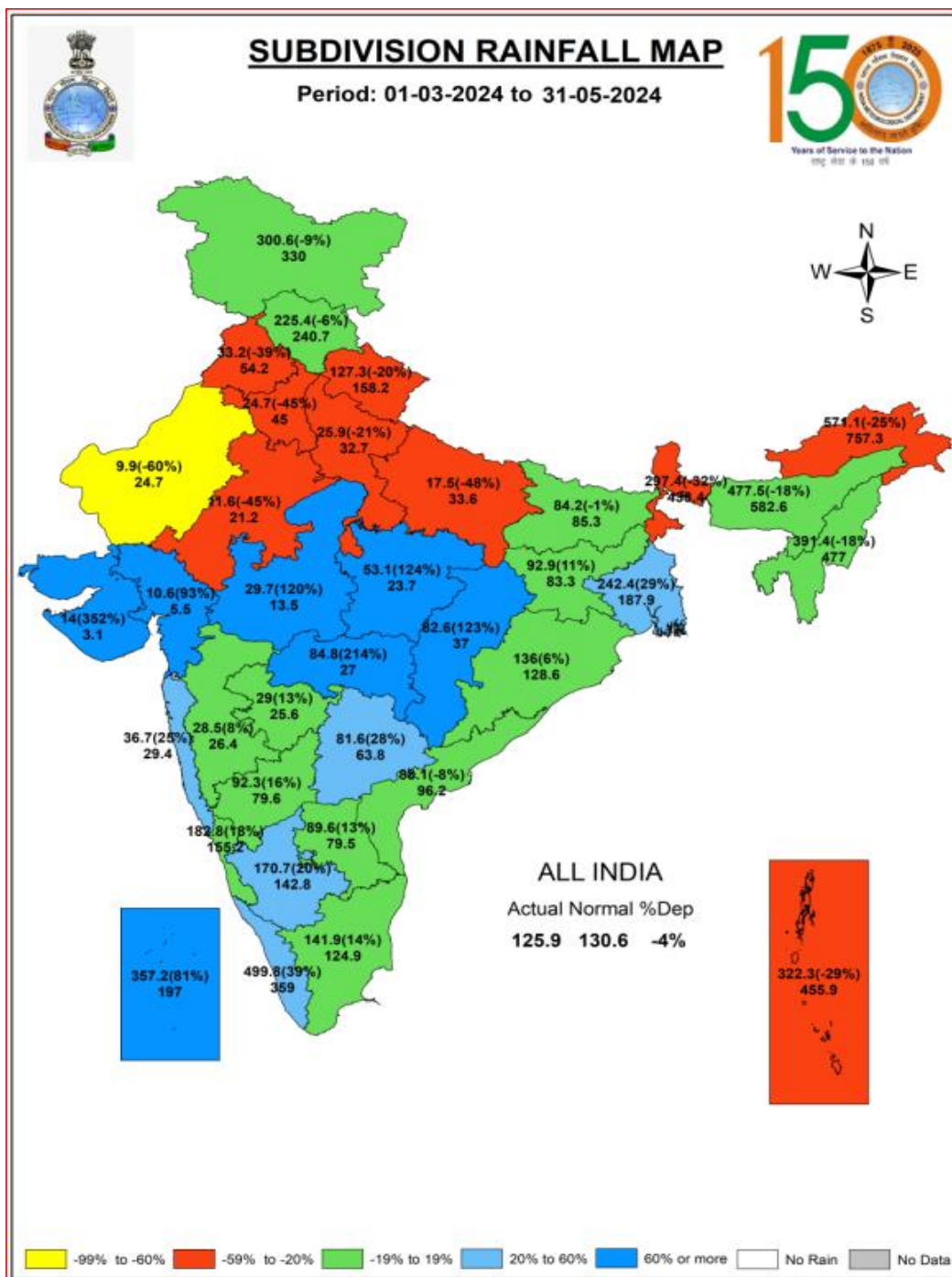
Heat Wave, Warm Night and Hot & Humid weather warning during the week:

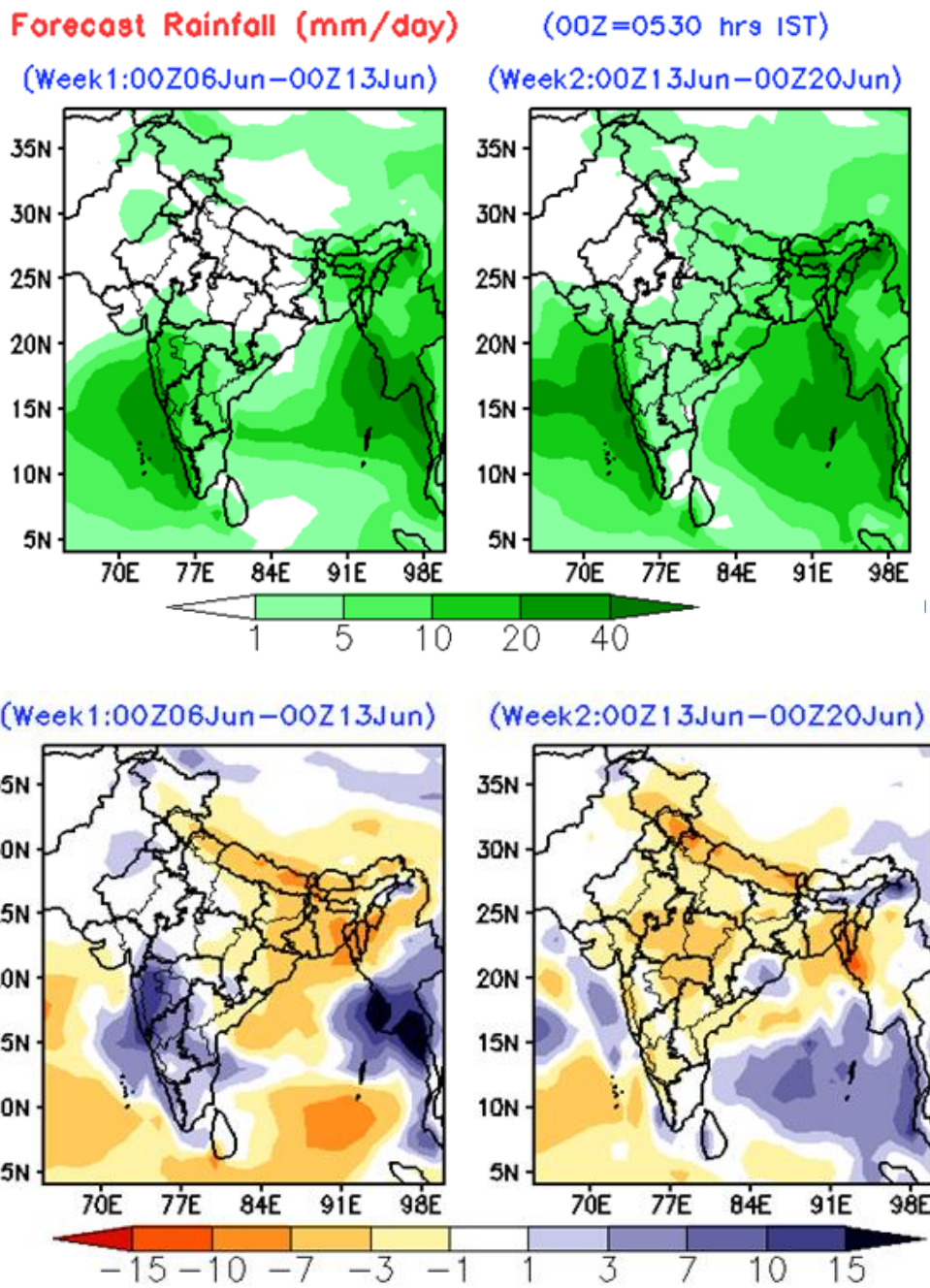
- ❖ A fresh **Heat Wave** spell is very likely to commence around 10th June over northwest India and extend to some parts of eastern India towards end of the week 1.
- ❖ **Hot and humid weather** very likely to prevail over isolated pockets of Bihar on 07th; Odisha on 06th & 07th; Jharkhand on 06th; Gangetic West Bengal during most days of the week.

Maximum temperatures for Week 2 (13 to 19 June, 2024):

- Maximum temperatures are likely to be between 42-44°C over many parts of the northwest & adjoining central India and between 40-42°C over many parts of East India during the week. These are very likely to be above normal by 2-4°C over most parts of plains of northwest India, Central & East India during the week. It is likely to be near normal or slightly below normal over rest parts of the country.
- Heat wave spell likely to prevail over northwest and adjoining central India and extend further to some parts of eastern India during the week 2. **Severe Heat Wave** conditions are likely over some places of northwest India during this period.
- For detailed Heat wave outlook please visit (https://internal.imd.gov.in/pages/heatwave_mausam.php)
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Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies (lower panels) from IMD MME