



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

Press Release: Dated: 9 May 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (9 May -22 May 2024)

1. Salient Observed Features for week ending 8 May 2024

- **Last week's heat wave to severe heat wave spell over eastern parts of India and over southeast Peninsular India and interior parts of Karnataka was continued over these areas during 1st half of the week, though heat wave conditions gradually improved and finally abated from these areas on 6th and 7th May respective. The abatement of the heat wave during the week was mainly due to occurrences of thunderstorms and rainfall activities over these areas from respective dates. It may be added that this heat wave spell prevailed for longer period which started over eastern parts of India since 15 April and over southeast Peninsular India and interior parts of Karnataka since 24 April.**
- **Date-wise heat wave conditions analysis during the week shows Heat wave to Severe Heat wave prevailed in many parts of Gangetic West Bengal during 2nd to 5th May; Heat wave prevailed at isolated over Odisha during 2nd to 5th May; Jharkhand on 05th; Telangana during 2nd to 6th May; Coastal Andhra Pradesh during 2nd & 3rd May; Rayalaseema on 2nd to 6th May; north interior Tamil Nadu 2nd to 6th May.**
- **Heat wave conditions prevailed over West Rajasthan on 8th May during the week.**
- **Rain and thunderstorms accompanied with gusty winds and lightning occurred over eastern and Southeast Peninsular India from 6th and 7th May respectively and continued till end of the week. Over eastern India, covering West Bengal, Odisha and Jharkhand, it was mainly due to incursion of moist south-easterly and easterly winds at lower levels from Bay of Bengal and favourable weather systems over the region while over Southeast Peninsular India, it was due to north-south trough and wind**

discontinuity at lower levels located in favourable areas.

- **Heavy to very heavy rainfall observed** at isolated places over Meghalaya on 02nd; at isolated places over Arunachal Pradesh on 03rd; over Assam & Meghalaya on 06th May.
 - **Heavy rainfall observed** at isolated places Arunachal Pradesh and Assam on 02nd; over Assam & Meghalaya on 07th; at isolated places over Tripura on 03rd & 06th; over Nagaland, Manipur & Mizoram on 06th May; Gangetic West Bengal, Odisha and Kerala & Mahe on 07th; Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam and Rayalaseema on 08th May.
 - **Hailstorm:** At isolated places over Odisha on 07th May; over Coastal Andhra Pradesh, Jharkhand and Assam on 07th May; over East Madhya Pradesh, Vidarbha, northeast Uttar Pradesh and Telangana on 08th May.
 - **Temperature Scenario:** The highest maximum temperature of **46.3°C** had been recorded at Nandyal (Rayalaseema) on 03rd May 2024 and the lowest minimum temperature of **14.5°C** had been recorded at Sikar (East Rajasthan) on 03rd May 2024 over the plains of the country during the week.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 8 May 2024 and Summer Season's Rainfall Scenario (1 March- 8 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 8 May was -25%. All India Seasonal cumulative rainfall % departure during this year's **Summer Season's** during **1 March to 8 May 2024** is -16% and over northwest India, it is -2%. 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		
	02.05.2024 TO 08.05.2024			01.03.2024 TO 08.05.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	33.3	37.6	-12%	165.6	226.4	-27%
NORTH-WEST INDIA	0.6	6.8	-91%	86	87.9	-2%
CENTRAL INDIA	2.4	3	-21%	33.4	20.4	+64%

SOUTH PENINSULA	12.9	13.4	-4%	29	64.6	-55%
Country as a whole	8.8	11.8	-25%	69.8	82.7	-16%

2. Large scale features

Madden Julian Oscillation (MJO) index is currently in Phase 4 with amplitude less than 1. Thereafter, it will move across phase 3 with gradually increasing amplitude (becoming greater than 1) towards the end of week 1. During week 2, it would propagate across phase 4 with large amplitude (around 2). Thus MJO, phase and amplitude are highly favourable for enhancement of convective activity over the Bay of Bengal (BoB) during the entire forecast period.

3. Forecast for next two week

[Weather systems & associated Precipitation during Week 1 \(09 to 15 May, 2024\) and Week 2 \(16 to 22 May, 2024\)](#)

[Weather systems & associated Precipitation during Week 1 \(09 to 15 May, 2024\)](#)

- ❖ A cyclonic circulation lies over northeast Assam, another cyclonic circulation over east Bangladesh and a trough runs from east Assam to north Odisha in lower tropospheric levels. Under their influence:
- ✓ Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & squally winds(40-50 Kmph)** very likely over West Bengal & Sikkim; scattered to fairly widespread rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 Kmph)** over Bihar, Jharkhand & Odisha during 1st half of the week; isolated to scattered rainfall accompanied with **thunderstorm** during 2nd half of the week.
- ✓ **Thunderstorm, lightning & gusty winds (50-60 kmph) very likely over Bihar, Sub-Himalayan West Bengal & Sikkim on 9th; over Gangetic West Bengal on 10th & 11th and Jharkhand on 10th May, 2024**
- ✓ **Isolated heavy rainfall also very likely over Gangetic West Bengal on 09th & 10th; over Sub-Himalayan West Bengal & Sikkim and Bihar on 09th; over Odisha during 09th-12th May, 2024.**
- ✓ Fairly widespread to widespread light to moderate rainfall accompanied with isolated **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram & Tripura during the week.
- ✓ **Isolated heavy rainfall also very likely over Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram and Tripura on 10th May, 2024.**

- ❖ A cyclonic circulation lies over Madhya Maharashtra and a trough runs from northwest Rajasthan to west Vidarbha in lower tropospheric levels. Under their influence:
 - ✓ Isolated to scattered rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 Kmph)** over very likely Vidarbha, Madhya Maharashtra and Chhattisgarh during most days of the week; over Madhya Pradesh during 1st half of the week; over Marathwada on 09th May, 2024.
 - ✓ **Thunderstorm, lightning & gusty winds (50-60 Kmph) very likely over East Madhya Pradesh and Vidarbha on 09th May, 2024**
 - ✓ **Hailstorm activity also very likely over Madhya Pradesh and Vidarbha on 09th & 10th; over Madhya Maharashtra and Marathwada on 09th May, 2024.**
 - ✓ Isolated to scattered light to moderate rainfall accompanied with **thunderstorm & lightning & gusty winds (30-40 Kmph)** very likely over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and North Interior Karnataka; scattered to fairly widespread rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 Kmph)** over Kerala & Mahe, Interior Karnataka and Lakshadweep during most days of the week.
 - ✓ **Isolated heavy rainfall very likely over South Interior Karnataka on 09th, 12th & 13th; over Tamil Nadu, Puducherry & Karaikal on 09th & 12th; Rayalaseema, Telangana on 13th and Kerala & Mahe on 09th, 12th & 13th May, 2024.**

- ❖ A Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 50°E to the north of Lat. 30°N. A cyclonic circulation lies over northeast Rajasthan and another over northwest Rajasthan in lower tropospheric levels. Under its influence:
 - ✓ Scattered to fairly widespread rainfall activity accompanied with **thunderstorm, lightning & gusty winds (30-40 Kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during most days of the week.
 - ✓ **Hailstorm activity** very likely at isolated places over Uttarakhand during 09th – 13th May, 2024.
 - ✓ Isolated light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 Kmph)** very likely over Haryana-Chandigarh and Punjab during 10th-13th; over Uttar Pradesh during 09th-13th; Rajasthan during 10th-12th May, 2024. Dry weather is likely over these areas over remaining days of the week.
 - ✓ **Dust storm/thunderstorm with gusty winds (30-40 Kmph)** very likely to prevail East Uttar Pradesh during 09th-13th; Rajasthan during 10th-13th; West Uttar Pradesh during 11th-13th and Haryana-Chandigarh during 10th-13th May, 2024.
 - ✓ **Strong surface winds (30-40kmph)** very likely to prevail over plains of northwest India during next 3 days.

[Rainfall for week 2 \(16 to 22 May, 2024\):](#)

- ✓ Under the influence of trough/wind discontinuity over Peninsular India, light to moderate scattered/fairly widespread rainfall accompanied with thunderstorm 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 (09 to 15 May, 2024) and Week 2 (16 to 22 May, 2024)

Maximum temperatures for Week 1 (09 to 15 May, 2024):

- ❖ **Areas having maximum temperatures greater than 40°C:-**Yesterday, maximum temperatures were in the range of 43-46°C over many parts of West Rajasthan; in isolated pockets of East Rajasthan and in the range of 40-43°C over many parts of Madhya Pradesh; in some parts of interior parts of Gujarat & north Madhya Maharashtra and in isolated pockets of Punjab, south Haryana, interior Tamil Nadu, North Interior Karnataka, Marathawada and Vidarbha. These were above normal by 2-4°C over Rajasthan and above normal by 1-2°C over rest of the above-mentioned areas.
- ❖ No significant change in maximum temperatures very likely over Northwest India for next 2 days, fall by about 2-3°C thereafter for subsequent 3 days and rise by 2-4°C thereafter.
- ❖ Fall in maximum temperatures by about 2-3°C very likely over central India during next 24 hours and rise by about 2-4°C thereafter for subsequent 3-4 days.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country during most days of the week.

Heat Wave, Warm Night and Hot & Humid weather:

- ❖ **Heat wave conditions** very likely to prevail in isolated pockets over West Rajasthan on 09th & 10th and over Kerala on 09th May, 2024.
- ❖ **Hot and humid weather** very likely to prevail in isolated pockets over coastal areas of Gujarat during most days of the week.

Maximum temperatures for Week 2 (16 to 22 May, 2024):

- Maximum temperatures are likely to rise gradually over most parts of the country as compared to week 1. These are very likely to be above normal by 2-3°C over many parts of east & northeast India and Western Himalayan Region. These are likely to be near normal over remaining parts of the country.
- **There is moderate probability of heat wave over isolated/some pockets of Bihar, Gangetic West Bengal and Odisha during some days of the week; and there is low probability of Heat Wave over Rajasthan, Madhya Pradesh and Vidarbha during some days of the week.**

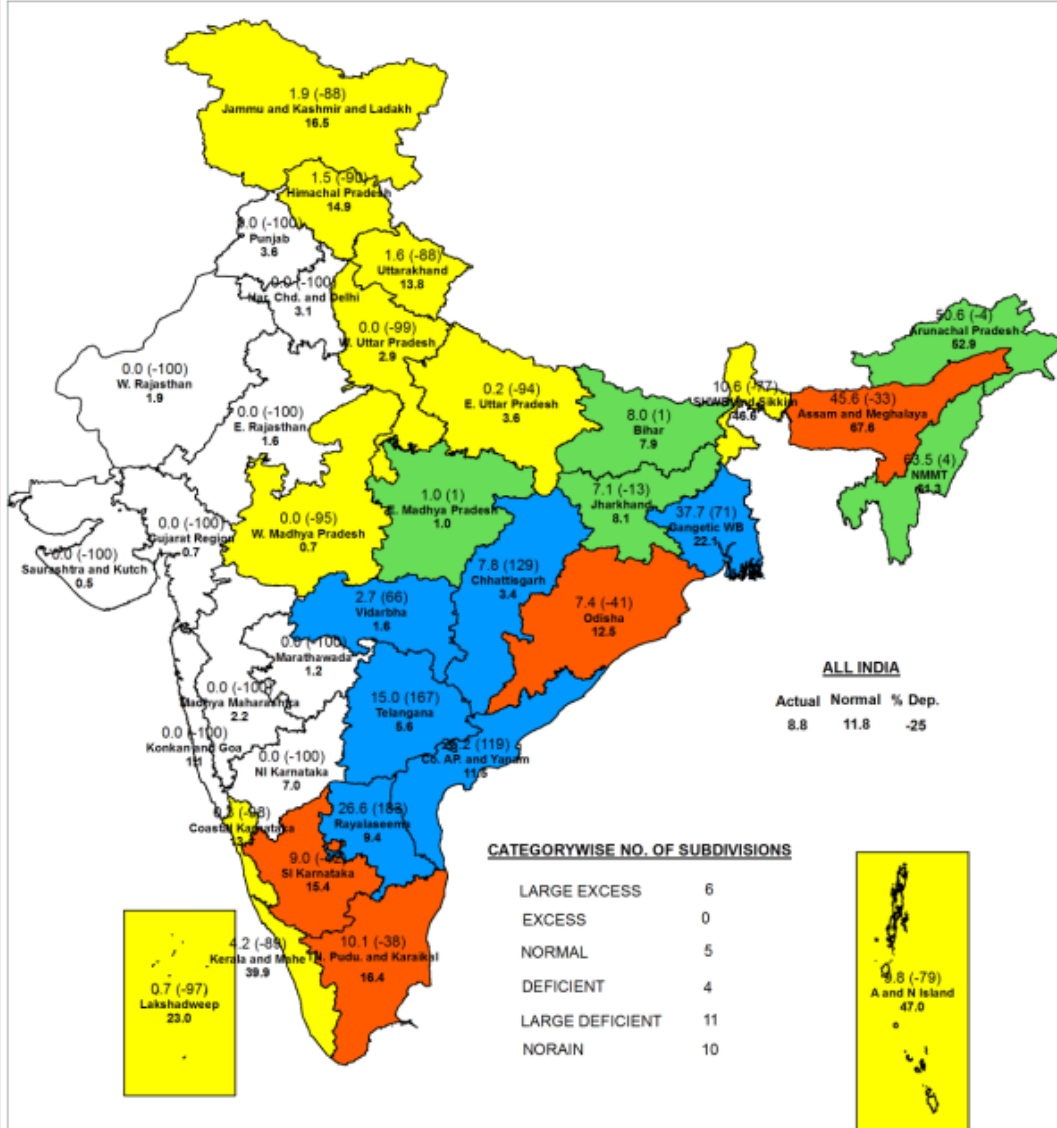
- **Hot and humid weather likely to prevail over isolated pockets of Maharashtra & Karnataka Coast, Coastal Andhra Pradesh, Odisha and Tamilnadu during some days of the week.**
- For detailed Heat wave outlook please visit (<https://internal.imd.gov.in/pages/heatwave.php>)

Annex: I



SUBDIVISION RAINFALL MAP

Week : 02-05-2024 To 08-05-2024



Legend

Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -60%] No Rain [-100%] No Data

NOTES :

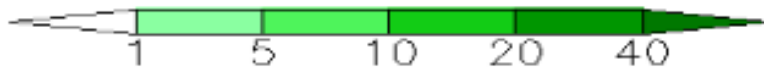
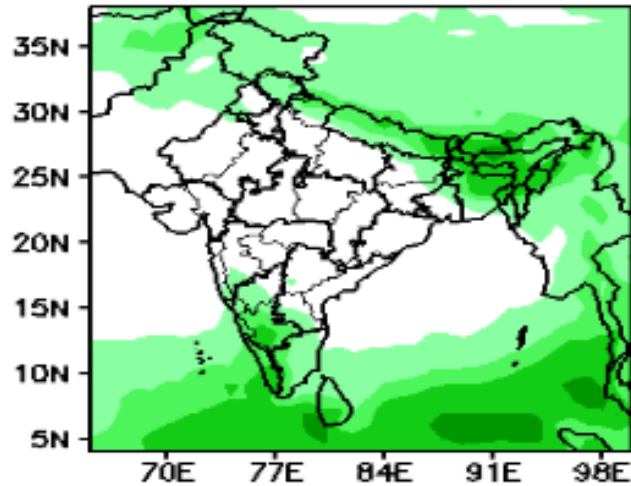
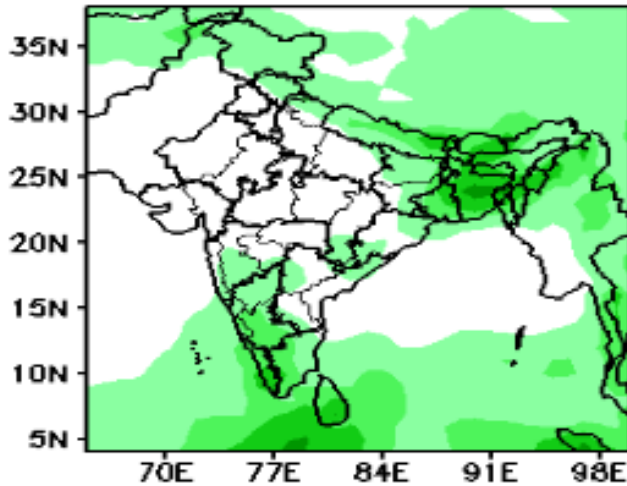
- a) Rainfall figures are based on operation data.
- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.

Forecast Rainfall (mm/day)

(00Z=0530 hrs IST)

(Week1:00Z09May-00Z16May)

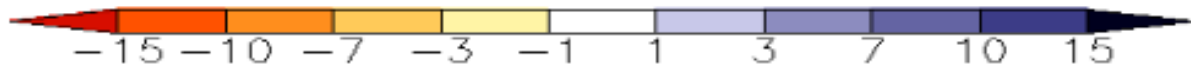
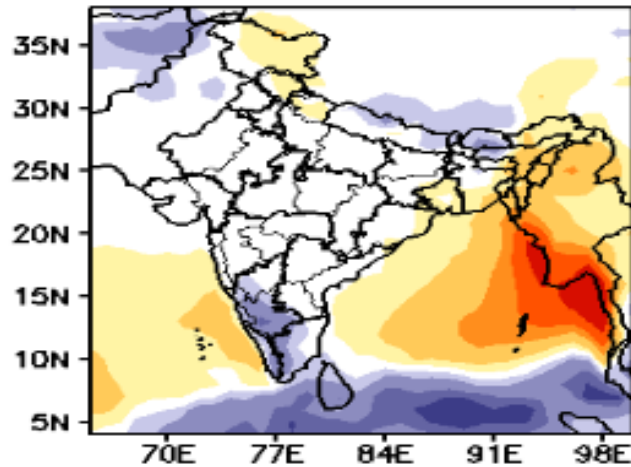
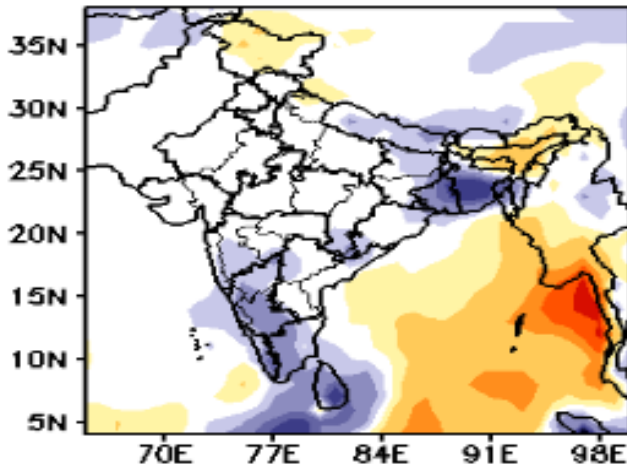
(Week2:00Z16May-00Z23May)



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

(Week1:00Z09May-00Z16May)

(Week2:00Z16May-00Z23May)



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