

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

Press Release: Dated: 7 March 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (7-21 March 2024)

1. Salient Observed Features for week ending 6 March 2024

- During the 1st half of the week, an active Western Disturbance (WD) caused severe weather over northwest India. The peak activity was occurred during the period 1-3 March, 2024. During this period, the WD and its associated induced systems, caused widespread rainfall/snowfall activities which were was observed over most places in Western Himalayan Region (WHR) states (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand). Light to moderate Rainfall also reported at many places to most places over adjoining plains of northwest India covering Punjab, Haryana, north Rajasthan, Uttar Pradesh and north Madhya Pradesh during the same period. Isolated heavy to very heavy rainfall/snowfall also reported mainly over WHR and Haryana on 2 March. During this wet spell, most of these areas experienced isolated intense Thunderstorm activities accompanied with lightning, gusty winds & Hailstorm. It occurred over Punjab, Haryana, Chandigarh, Rajasthan, Delhi- NCR, Uttar Pradesh and north Madhya Pradesh for 1-day on 2nd March while over Madhya Pradesh, Uttar Pradesh and Uttarakhand, it was continued for 2-days consecutively on 2 and 3 March.
- **Temperature Scenario:** The highest maximum temperature of 41.1°C had been recorded at Anantapur (Rayalaseema) on 02nd March 2024 and the lowest minimum temperature of 5.0°C had been recorded at Pilani (East Rajasthan) on 04th March 2024 and Karnal (Haryana) on 06th March 2024 over the plains of the country during the week.
- Analysis of Weekly overall Rainfall distribution during the week ending on 6 March 2024 and Winter Season's Rainfall Scenario (1 Jan- 29 Feb 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 6 March 2024 was 95%. All India Seasonal cumulative rainfall % departure during this year's **Winter's Rainfall** during **1 Jan to 29 Feb 2024** is -33% and over northwest India, it is -46%. 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.

Region	WEEK			SEASON		
	29.02.2024 TO 06.03.2024			01.01.2024 TO 29.02.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	5.1	8.3	-39%	39.4	47.2	-16%
NORTH- WEST INDIA	30.1	10.5	187%	42.3	78.7	-46%
CENTRAL INDIA	3	1.9	60%	11.4	14.9	-24%
SOUTH PENINSULA	0	2.6	-99%	18.9	15.7	20%
Country as a whole	11.1	5.7	95%	26.8	39.8	-33%

Table 1: Rainfall status (Week and season)

2. Large scale features

Based on ECMM forecast, currently Madden Julian Oscillation (MJO) index is in Phase 4 with amplitude more than 1 and would continue in same phase during first half of week 1. It is likely to propagate eastwards and enter into Phase 5 in later half of week 1. Thereafter during week 2, it is likely to enter into Phase 6 with amplitude remaining more than 2. Thus, the MJO is likely to support enhancement of rainfall activity over Bay of Bengal (BoB) region during week 1 only.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (07 to 13 March, 2024) and Week 2 (14 to 20 March, 2024)

Weather systems & associated Precipitation during Week 1 (07 to 13 March, 2024)

- A Western Disturbance as a cyclonic circulation over north Pakistan with trough aloft roughly along Long. 67°E to the north of Lat. 30°N. An induced cyclonic circulation lies over southwest Rajasthan & adjoining Pakistan in lower tropospheric levels. Under its influence scattered light/moderate rainfall/snowfall accompanied with thunderstorms, lightning very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and isolated rainfall/snowfall very likely over Uttarakhand on 07th March, 2024.Isolated rainfall very likely over Punjab on 07th March, 2024.
- Thereafter, two Western Disturbances in quick succession likely to affect northwest India, 1st from the night of 10th March and 2nd from the night of 12th March. Under the influence of these systems;
- ✓ Isolated to scattered light/moderate rainfall/snowfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and isolated rainfall/snowfall likely over Uttarakhand during 10th -12th March and Scattered to fairly widespread light/moderate rainfall/snowfall with isolated thunderstorms, lightning likely over the region on 13th& 14thMarch, 2024.
- ✓ Isolated to scattered rainfall very likely over Punjab on 12th & 13th; over Haryana, West Uttar Pradesh on 13th March, 2024.
- Strong surface winds (25-35 kmph) very likely to prevail over plains of Northwest India except south Rajasthan on 09th & 10th March, 2024.
- Isolated rainfall very likely over Odisha, Sub-Himalayan West Bengal & Sikkim during 07th-09th; over Gangetic West Bengal, Jharkhand and Chhattisgarh on 07thMarch, 2024.
- Scattered light/moderate rainfall/snowfall very likely over Arunachal Pradesh on 07th March and isolated light rainfall/snowfall during subsequent 6 days.
- Light isolated rainfall is likely over Coastal Andhra Pradesh on 08th & 09th and over Andaman & Nicobar Islands during 2nd half of the week.

Rainfall for week 2 (14 to 20 March, 2024):

- ✓ No active Western Disturbances is likely to affect northwest India during the week.
- ✓ Overall, rainfall activity is likely to be below **normal** over all the homogeneous regions of India.

Maximum temperatures for Week 1 (07 to 13 March, 2024) and Week 2 (14 to 20 March, 2024)

Maximum temperatures for Week 1 (07 to 13 March, 2024):

Yesterday (06.03.2024), Maximum temperatures were above normal (1.6°C to 3.0°C) at a few places over Rayalaseema, Assam & Meghalaya, South Interior Karnataka; at isolated places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Odisha, Vidarbha, Chhattisgarh, Marathwada, Madhya Maharashtra, Konkan & Goa, North Interior Karnataka, Telangana, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. They were near normal or below normal over rest parts of the country. Yesterday, the highest maximum temperature of 39.9°C was reported at Anantapur (Rayalaseema) over the country.

- These are very likely to below normal to near normal over most parts of the country except extreme south Peninsular India and east coast, where it is likely to be above normal by 1-3°C.
- ✤ Hot and humid weather very likely to prevail over isolated pockets of Kerala, Tamil Nadu, Andhra Pradesh, Rayalaseema and Odisha during some days of the week.
- ✤ No heat wave likely over any part of the country.

Maximum temperatures for Week 2 (14 to 20 March, 2024):

- The maximum temperatures are likely to rise gradually by 2-4°C over most parts of the country as compared to week 1.
- These are very likely to above normal over most parts of the country by 1-3°C except many parts of central India and interior parts of Peninsular India, where it is likely to be below normal by 1-2°C.
- Hot and humid weather likely to prevail over isolated pockets of Maharashtra & Karnataka Coast, Tami Nadu, Andhra Pradesh, Rayalaseema and Odisha during some days of the week.
- There is low probability of heat wave over isolated pockets of Coastal Andhra Pradesh & adjoining areas of Rayalaseema and coastal Odisha during some days of the week.

Annex: I



Annex II



Annexure III



Extended range froecast of weekly dsitirubtion of rainfall in mm per day (top panel) and anomalies (lower panesl) from IMD MME



Extended range froecast of Minimum Temperature (top panel) and anomalies(lower panesl) from IMD MME



Extended range froecast of Maximun Temperature (top panel) and anomalies(lower panesl) from IMD MME



