



**Government of India
Ministry of Earth Sciences
India Meteorological Department**

**Press Release
Date: 13th March, 2023
Time of Issue: 1330 hours IST**

Subject: Light to moderate rainfall accompanied by thunderstorms and hailstorms likely over South, Central and East and northeast India during 15th-17th March, 2023.

Weather observed during past 24hours ending at 0830 hrs IST of today:

- ❖ **Maximum temperature** were in the range of **38-39°C** at isolated place over Gujarat state and Konkan & Goa and in the range of **35-37°C** at many places over West Rajasthan, Rayalaseema and Coastal Karnataka; Madhya Pradesh, Chhattisgarh, Odisha, Gangetic West Bengal, Telangana, Kerala, Jharkhand and Vidarbha; at isolated places over Coastal Andhra Pradesh, Tamilnadu, Puducherry, North Interior Karnataka and Marathwada and at the range of **32-35°C** at most places over East Uttar Pradesh, Bihar and South Interior Karnataka; at many places over Delhi, West Uttar Pradesh and East Rajasthan; at a few places over Sub-Himalayan West Bengal, Northeast India, Coastal Andhra Pradesh, Tamilnadu, Puducherry and North Interior Karnataka; at isolated places over Konkan & Goa and Vidarbha and at the range of **30-32°C** at a few places over Punjab; at isolated places over Haryana, Chandigarh and Uttarakhand. Maximum temperatures are below 30°C over rest parts of the country.
- ❖ **Maximum temperatures** were above normal by **6-8°C** at many place over Jammu division and above normal by **4-6°C** at isolated places over Saurashtra, Konkan, Haryana & Delhi and north Rajasthan and above normal by **2-4°C** at many places over Punjab, Haryana and West Uttar Pradesh; at a few places over West Rajasthan, Saurashtra & Kutch, Konkan & Goa, Coastal Karnataka and Northeast India; at isolated places over East Uttar Pradesh, Madhya Pradesh, Bihar, West Bengal & Sikkim and Odisha. They are below normal by **2-4°C** at isolated places over North Interior Karnataka, Andhra Pradesh and Rayalaseema and near normal over rest parts of the country.
- ❖ Yesterday, **heat wave conditions** observed at isolated pockets over Konkan.
- ❖ **Light/Moderate rainfall/thundershowers** observed at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand and Arunachal Pradesh.
- ❖ **Hailstorm** observed at isolated places over Uttarakhand.

Weather Forecast and Warnings (Annexure I):

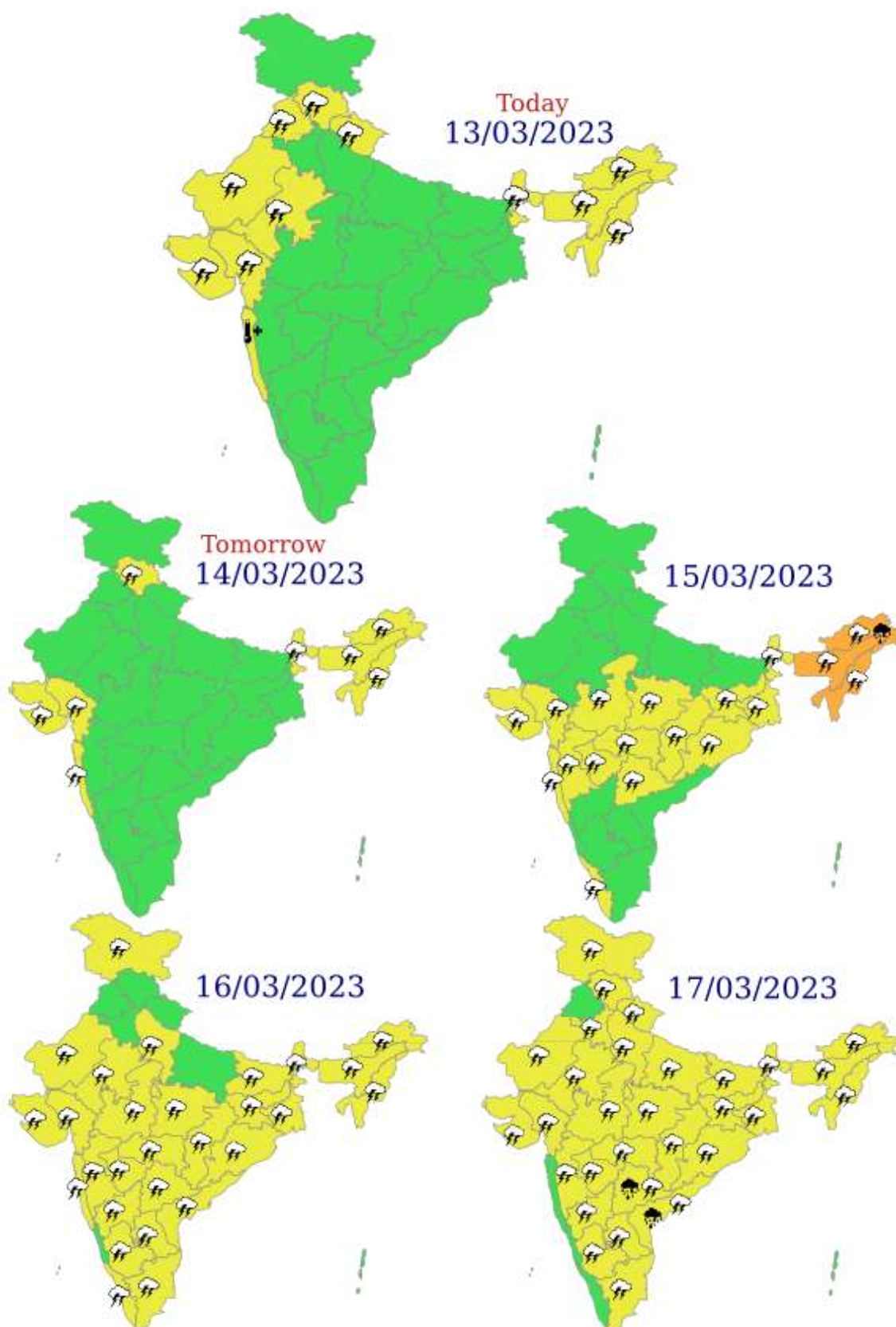
- ❖ A cyclonic circulation lies over south Assam & neighbourhood in lower tropospheric levels. Under its influence:
 - Isolated to Scattered light rainfall activity with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** very likely over Sub-Himalayan West Bengal & Sikkim and northeast India during 13th-14th March, 2023.
- ❖ The **Western Disturbance** as a trough in westerlies in middle & upper tropospheric levels runs roughly along Long. 65°E and to the north of 25°N and an induced cyclonic circulation lies over southwest Rajasthan & neighbourhood in lower tropospheric levels. Under its influence:
 - Isolated to scattered rainfall **with thunderstorm & lightning** very likely over Western Himalayan Region during 13th-15th; over Punjab and Rajasthan on 13th March, 2023. Isolated **hailstorm** activity also likely over Uttarakhand on 13th March.
- ❖ Due to likely interaction of middle tropospheric westerly trough with lower level easterly winds over central parts of Peninsular India, East and Northeast India:
 - Scattered light/moderate rainfall with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** likely over north interior Tamil Nadu, Andhra Pradesh, Telangana, Karnataka, Gujarat, Maharashtra, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Odisha, West Bengal and Jharkhand during 15th-17th March and over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh and Rajasthan on 16th & 17th March, 2023.
 - Isolated **hailstorm** activity also likely over northeast Madhya Pradesh, Vidarbha, Chhattisgarh and Telangana on 16th & 17th; over Madhya Maharashtra on 15th & 16th; over Marathwada on 16th and over Himachal Pradesh Uttarakhand, Haryana, West Uttar Pradesh and East Rajasthan on 17th March 2023.
 - Scattered to fairly widespread light to moderate rainfall activity **with thunderstorm, lightning & gusty** winds (speed 30-40 kmph) likely over Sub-Himalayan West Bengal & Sikkim and northeast India during 15th -17th March and with **isolated hailstorm** over the region on 15th March, 2023.
 - Isolated **heavy rainfall** likely over Arunachal Pradesh on 15th March, 2023.

Maximum Temperatures Forecast and Heat Wave warnings during next 5 days:

- ❖ **Heat wave conditions very likely to occur in isolated pockets over Konkan on 13th March, 2023.**
- ❖ **Northwest India:** No significant change in maximum temperatures very likely during next 3 days and fall by 2-3⁰C thereafter.
- ❖ **West India:** Gradual fall by 2-4⁰C in Maximum Temperatures very likely over Gujarat state during next 5 days.
- ❖ **Central & East India:** No significant change in maximum temperatures very likely during next 2 days and fall by 2-4⁰C thereafter.
- ❖ **Rest parts of the Country:** No significant change in Maximum Temperatures very likely during next 5 days.

For more details kindly

refer:[https://mausam.imd.gov.in/imd latest/contents/all india forecast bulletin.php](https://mausam.imd.gov.in/imd%20latest/contents/all%20india%20forecast%20bulletin.php)



Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** > 204.4 mm.
- ❖ **Region wise classification of meteorological Sub-Divisions:**
 - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
 - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
 - **East India:** Bihar, Jharkhand, Sub-Himalaya West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
 - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
 - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
 - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

SPATIAL DISTRIBUTION			
(% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

WARNING
WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

- Heavy Rain
- Strong Winds
- Frost

- Heavy Snow
- Visibility
- Cold Wave

- Thunderstorm
- Cyclone
- Heat Wave

- Dust Storm
- Squall/ Hail
- Sea State