



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

**Press Release  
Date: 15<sup>th</sup> March, 2023  
Time of Issue: 1345 hours IST**

**Subject: Fairly widespread light to moderate rainfall/thunderstorms/hailstorms likely over: (i) Interior parts of Maharashtra, Telangana, Chhattisgarh, Jharkhand, Madhya Pradesh from 16<sup>th</sup>-19<sup>th</sup> March; (ii) Northeast India during 15<sup>th</sup>-19<sup>th</sup> March and over East India during 16<sup>th</sup>-20<sup>th</sup> March; (iii) Northwest India including Western Himalayan Region during 17<sup>th</sup>-19<sup>th</sup> March.**

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

- ❖ **Maximum temperature** are in the range of **35-38°C** at most places over plains of the country except over most parts of Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Bihar and northeastern states where temperatures are in the range of **30-34°C**. It is at the range of **25-29°C** over some parts of Jammu & Kashmir, Himachal Pradesh and Uttarakhand.
- ❖ **Maximum temperatures** are above normal by **5-7°C** over many parts of Jammu and Kashmir; **by 3-5°C** over many place of Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, north Madhya Pradesh, Chhattisgarh, Gujarat state, Konkan & Goa and Northeast India and near normal over rest parts of the country.
- ❖ **Light/Moderate rainfall/thundershowers** observed at many places over Arunachal Pradesh; at a few places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Uttarakhand and at isolated places over Andaman & Nicobar Islands, Gangetic West Bengal, Odisha, Nagaland, Manipur, Mizoram & Tripura, Himachal Pradesh, Madhya Pradesh, Gujarat Region, Madhya Maharashtra, Marathawada, Vidarbha, Telangana, Coastal & South Interior Karnataka and Kerala.
- ❖ **Hailstorm** observed at isolated places over Uttarakhand and Sub-Himalayan West Bengal.

**Weather Forecast and Warnings (Annexure I):**

- ❖ A **Western Disturbance** as a cyclonic circulation lies over east Iran in middle & upper tropospheric levels with an induced cyclonic circulation over central parts of Rajasthan & neighbourhood in lower tropospheric levels.
- ❖ There is also likely low level southeasterly moist air incursion from the Bay of Bengal into east-central, east and northeast India and its interaction with the middle tropospheric westerly trough from 16<sup>th</sup>-20<sup>th</sup> March.

**Under its influence:**

**Northwest India:**

- Scattered to fairly widespread light/moderate rainfall with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand during 16<sup>th</sup>-

19<sup>th</sup> and over Punjab, Haryana, Uttar Pradesh and Rajasthan on 17<sup>th</sup>-19<sup>th</sup> March, 2023.

- **Isolated hailstorm activity** also likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh on 16<sup>th</sup> & 17<sup>th</sup>; Uttarakhand during 15<sup>th</sup>-19<sup>th</sup>; Haryana & West Uttar Pradesh on 17<sup>th</sup>; over north Rajasthan during 17<sup>th</sup>-19<sup>th</sup> March, 2023.

#### **West & Central India:**

- Scattered to fairly widespread light/moderate rainfall with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** likely over Gujarat, Maharashtra, Madhya Pradesh, Vidarbha, Chhattisgarh during 16<sup>th</sup>-19<sup>th</sup> March, 2023.
- **Isolated hailstorm activity** also likely over East Madhya Pradesh, Vidarbha, Chhattisgarh on 16<sup>th</sup> & 17<sup>th</sup>; over Madhya Maharashtra & Marathawada during 15<sup>th</sup>-17<sup>th</sup> March, 2023.

#### **South Peninsular India:**

- ❖ A north-south trough runs from north interior Tamil Nadu to Konkan in lower tropospheric levels. Under its influence:
  - Scattered to fairly widespread light/moderate rainfall with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** likely over north interior Tamil Nadu, Andhra Pradesh, Telangana, Karnataka during 16<sup>th</sup>-19<sup>th</sup> March, 2023.
  - Isolated **heavy rainfall** very likely over Coastal Andhra Pradesh and Telangana on 18<sup>th</sup> March, 2023.
  - **Isolated hailstorm activity** also likely over Telangana on 16<sup>th</sup> & 17<sup>th</sup> March, 2023.

#### **East & Northeast India:**

- ❖ A trough in westerlies in middle tropospheric levels runs roughly along Long. 82°E and to the north of 25°N. Another trough runs from Sub-Himalayan West Bengal to south Odisha in lower tropospheric levels. Under the influence of these systems:
  - Fairly widespread light/moderate rainfall activity **with thunderstorm, lightning & gusty winds** (speed 30-40 kmph) likely over East and Northeast India during 15<sup>th</sup> -19<sup>th</sup> March, 2023.
  - **Isolated hailstorm activity** also likely over Sub-Himalayan West Bengal, Arunachal Pradesh, south Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 15<sup>th</sup> and over Bihar, Jharkhand and Gangetic West Bengal on 17<sup>th</sup> March, 2023.
  - Isolated **heavy rainfall** very likely over Arunachal Pradesh on 15<sup>th</sup> March, 2023

#### **Maximum Temperatures Forecast during next 5 days:**

- ❖ **Northwest India:** No significant change in maximum temperatures very likely during next 24 hours; fall by 2-4<sup>o</sup>C for subsequent 2 days and no significant change thereafter.
- ❖ **East India:** No significant change in maximum temperatures very likely during next 2 days and fall by 2-4<sup>o</sup>C thereafter.
- ❖ **Central & West India:** Fall by 2-4<sup>o</sup>C in maximum temperatures very likely during next 3 days and no significant change thereafter.
- ❖ **Rest parts of the Country:** No significant change in Maximum Temperatures very likely during next 5 days.

**Impact expected and action suggested due to Isolated Thunderstorm/lightning/Squall & Hailstorm** over Sub-Himalayan West Bengal and Northeast India on 15<sup>th</sup>; East Madhya Pradesh, Vidarbha, Chhattisgarh, Telangana, Madhya Maharashtra and Marathawada on 16<sup>th</sup> & 17<sup>th</sup> and over Bihar, Jharkhand and Gangetic West Bengal on 17<sup>th</sup> March.

**Impact expected:**

- Strong wind/hail may damage plantation, horticulture and standing crops.
- Hail may injure people and cattle at open places.
- Partial damage to vulnerable structures due to strong winds.
- Minor damage to kutcha houses/walls and huts.
- Loose objects may fly.

**Action suggested:**

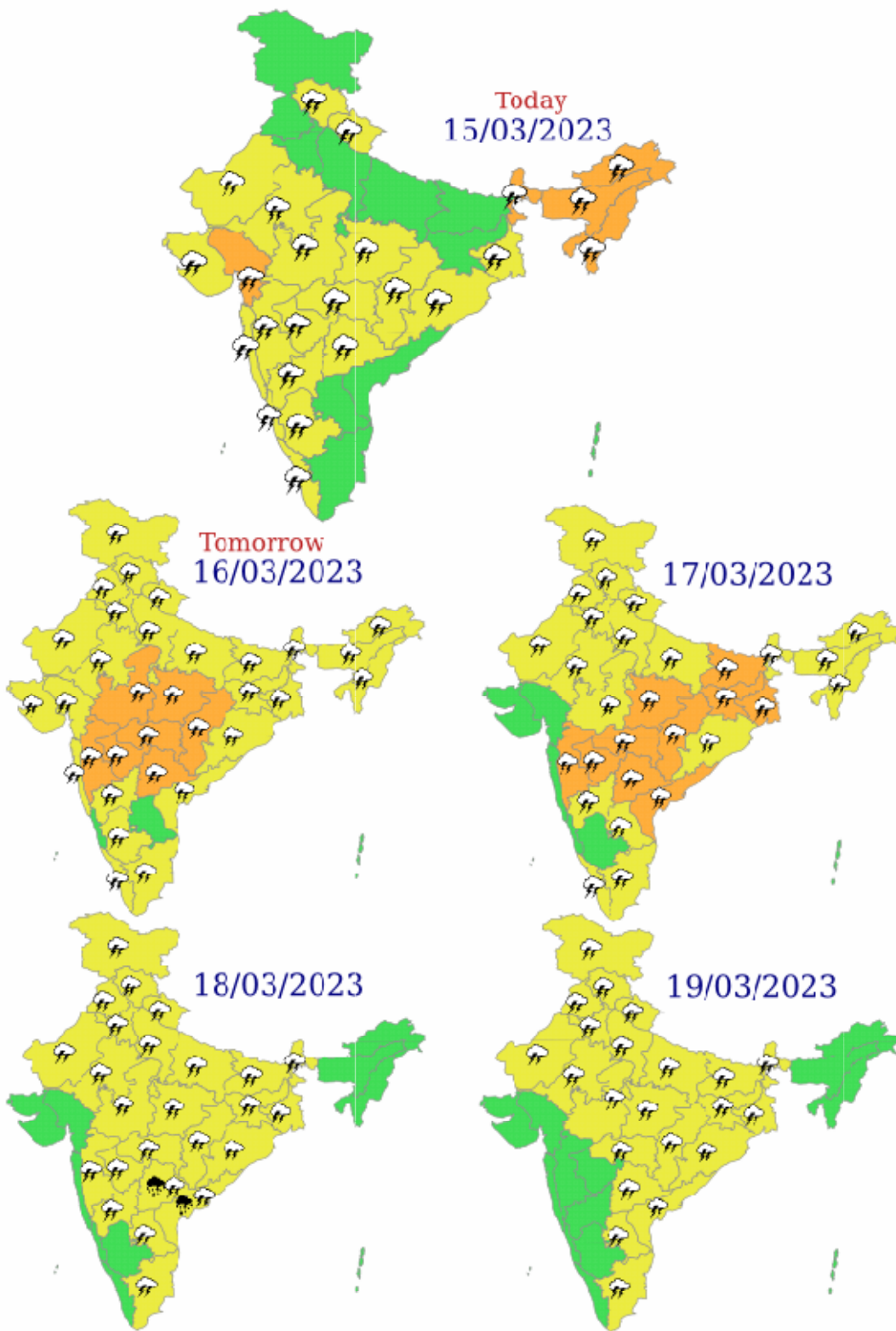
- Stay indoors, close windows & doors and avoid travel if possible.
- Take safe shelters; do not take shelter under trees.
- Do not lie on concrete floors and do not lean against concrete walls.
- Unplug electrical/ electronic appliances.
- Immediately get out of water bodies.
- Keep away from all the objects that conduct electricity.

**Advisory for farmers:**

- Farmers are advised to Carry out harvesting of matured mustard, chickpea and vegetables in North, West and Central India; wheat, mustard and pulses in Madhya Pradesh and wheat, pulses and grapes in Maharashtra at the earliest and store them in safe place.
- Provide support to banana bunches with bamboo sticks or polypropylene sticks and staking to newly planted vegetables /creeper vegetables.
- Use the skirting bags or aluminium coated paper for grape bunches in Madhya Maharashtra to protect from rains.
- Avoid irrigation and any kind of chemical spray.

For more details kindly

refer:[https://mausam.imd.gov.in/imd\\_latest/contents/all\\_india\\_forcast\\_bulletin.php](https://mausam.imd.gov.in/imd_latest/contents/all_india_forcast_bulletin.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.

<b>SPATIAL DISTRIBUTION</b> (% 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



Heavy Snow



Thunderstorm



Dust Storm



Strong Winds



Visibility



Cyclone



Squall/ Hail



Frost



Cold Wave



Heat Wave



Sea State