



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

**Press Release
Date: 18th March, 2023
Time of Issue: 1345 hours IST**

**Subject: i) Rainfall accompanied with thunderstorm/hailstorm over Northwest & East India during 18th-20th; over Central, West India and south Peninsula on 18th & 19th March.
ii) Isolated heavy rainfall likely over Northeast India during 19th-22nd March, 2023.**

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

- ❖ **Light/moderate rainfall/thundershowers** observed over most parts of the country. Details of rainfall are given in Annexure 1).
- ❖ Isolated **heavy rainfall** occurred over Coastal Andhra Pradesh, Kerala, North Interior Karnataka and Tamilnadu.
- ❖ **Hailstorm** observed over Uttarakhand, Rajasthan, West Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal, Madhya Maharashtra, Gujarat Region, Marathwada, Rayalaseema and North Interior Karnataka.

Weather Forecast and Warnings (Annexure II):

- ❖ A **Western Disturbance** as a trough runs roughly along Long. 74°E to the north of Lat. 25°N in middle tropospheric levels. A cyclonic circulation lies over northwest Rajasthan & neighbourhood in lower tropospheric levels.
- ❖ A trough runs from northwest Rajasthan to north Bihar and another trough/wind discontinuity from South Interior Karnataka to Jharkhand in lower tropospheric levels.
- ❖ Under the influence of above favourable synoptic conditions, following weather is expected;
Northwest India: Scattered to fairly widespread light/moderate rainfall with **thunderstorm, lightning & gusty winds** likely over Western Himalayan Region and Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh & Rajasthan on 18th-20th March, 2023. **Isolated hailstorm also likely over Uttarakhand during 18th-21st; over West Uttar Pradesh, East Rajasthan during 18th-20th; Himachal Pradesh, Haryana on 18th; East Uttar Pradesh, West Rajasthan on 19th March, 2023.**

West & Central India: Scattered to fairly widespread light/moderate rainfall with **thunderstorm, lightning & gusty winds** likely over Gujarat, Maharashtra, Madhya Pradesh, Vidarbha, Chhattisgarh during 18th-19th March, 2023. **Isolated hailstorm also likely over East Madhya Pradesh, Vidarbha, Chhattisgarh and Marathawada on 18th March, 2023.**

South Peninsular India: Scattered to fairly widespread light/moderate rainfall with **thunderstorm, lightning & gusty winds** likely over north interior Tamil Nadu, Andhra Pradesh, Telangana, Karnataka during 18th-19th March, 2023.
Isolated heavy rainfall very likely over Coastal Andhra Pradesh during 18th-19th and Telangana on 18th March, 2023.

East & Northeast India: Fairly widespread to widespread light/moderate rainfall activity with **thunderstorm, lightning & gusty winds** likely over Sub-Himalayan West Bengal and Northeast India during 18th-22nd March and over East India during 18th-20th March, 2023. **Isolated hailstorm also likely over Bihar, Jharkhand, West Bengal & Odisha on 18th March, 2023.**
Isolated **heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya during 19th-22nd and over Nagaland, Manipur, Mizoram & Tripura during 20th-22nd March. **Isolated very heavy rainfall also likely over Assam & Meghalaya during 19th-20th March.**

Maximum Temperatures Forecast during next 5 days:

- ❖ **Central & East India:** No significant change in maximum temperatures very likely during next 2 days and rise by 2-3⁰C thereafter.
- ❖ **Maharashtra:** No significant change in maximum temperatures very likely during next 24 hours and rise by 3-5⁰C thereafter.
- ❖ **Rest parts of the Country:** No significant change in Maximum Temperatures very likely during next 4-5 days.

Impact expected and action suggested due to Isolated Thunderstorm/lightning/Squall & Hailstorm over

- **18th March:** Himachal Pradesh, Uttarakhand, Haryana, West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal, Odisha, Marathawada.
- **19th March:** Uttar Pradesh, Uttarakhand, Rajasthan, Chhattisgarh
- **20th March:** West Uttar Pradesh, Uttarakhand and East Rajasthan.
- **21st March:** Uttarakhand.

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:

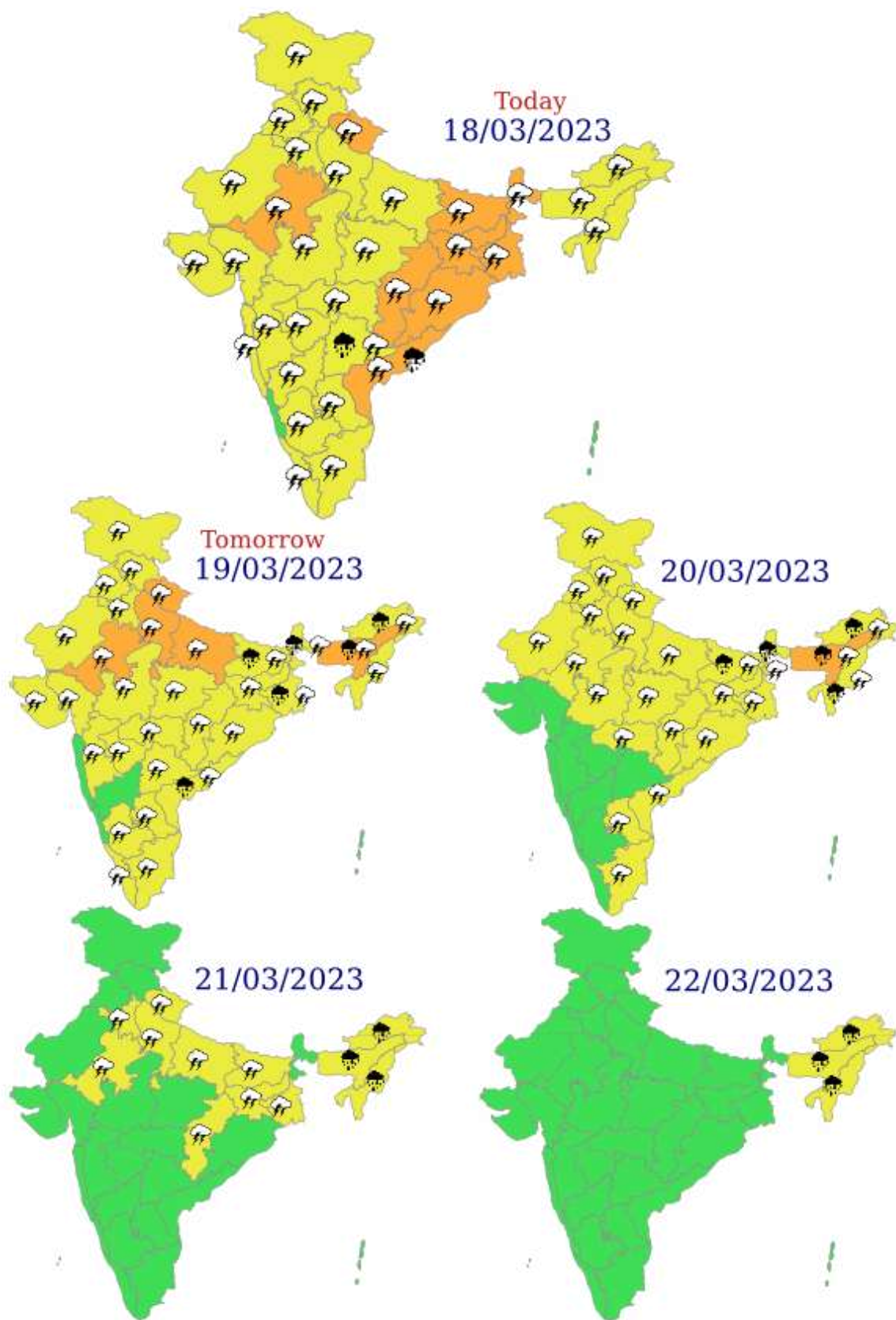
- Stay indoors, close windows & doors and avoid travel if possible.
- Take safe shelters; do not take shelter under trees.
- Do not lie on concrete floors and do not lean against concrete walls.
- Unplug electrical/ electronic appliances.
- Immediately get out of water bodies.
- Keep away from all the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

Advisory for farmers:

- Postpone harvesting of crops in Punjab, Haryana and West Madhya Pradesh; if already harvested, store at safe places to avoid losses. Withhold irrigation to wheat to avoid lodging.
- Carry out harvesting of matured mustard and chickpea in Rajasthan and mustard, chickpea and wheat in East Madhya Pradesh at the earliest and store them in safe place.
- Carry out harvesting of wheat, pulses and grapes in Madhya Maharashtra at the earliest and store them in safe place. Postpone harvesting of crops in Marathwada. Use the skirting bags or aluminium coated paper for grape bunches to protect from rains.
- Use hail nets to protect orchards.

For more details kindly refer:https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php

- ❖ **Light/moderate rainfall/thundershowers** observed over most parts of the country (Annexure 1). **at most places over** Sub-Himalayan West Bengal & Sikkim, Jammu & Kashmir, Punjab; **at many places over** Arunachal Pradesh, Assam & Meghalaya, Gangetic West Bengal, Uttarakhand, Himachal Pradesh, Haryana, Chandigarh & Delhi, Vidarbha; **at a few places over** Jharkhand, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Madhya Maharashtra, Marathawada, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka and **at isolated places** over Nagaland, Manipur, Mizoram & Tripura, Bihar, Odisha, East Uttar Pradesh, West Rajasthan, Gujarat State, Konkan & Goa, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- ❖ **Significant amount of rainfall (in cm): Kerala:** Thiruvananthapuram: Palode-7; **Tamilnadu:** Chennai-7; **Coastal Andhra Pradesh:** Repalle (dist Bapatla) 7; **Telangana:** Raikode (dist Sangareddy) 6, Kondapur (dist Sangareddy) 6, **East Rajasthan:** Jaipur: Jamwaramgarh-6, Karauli: Sapotra-6; **Sub-Himalayan West Bengal & Sikkim:** Darzeeling, Jalpaiguri-4 each; **Assam & Meghalaya:** Barpeta (dist Barpeta) 3; **North Interior Karnataka:** Bidar-7, Yadgir-6, **Punjab:** Nabha Arg (dist Patiala) 6, Bhadson Irr (dist Patiala) 6, Nabha (dist Patiala) 5, Patiala Rev (dist Patiala) 5; **Jammu & Kashmir:** Banihal-4, Kistwar-3; **Himachal Pradesh:** Chamba-4; **Uttarakhand:** Hardwar, Garhwal Tehri-3; **West Uttar Pradesh:** Saharanpur-4; **Chhattisgarh:** Pendra (dist Bilaspur) 6, Kusmi (dist Balrampur) 5; **Madhya Pradesh:** Barghat (dist Seoni) 6, Birsa (dist Balaghat) 5, Badi (dist Raisen) 6, Shahpur (dist Betul) 5.



Legends:

❖ **HeavyRain:**64.5to115.5mm;**VeryHeavyRain:**115.6to204.4mm;**ExtremelyHeavyRain:**>204.4mm.

❖ **Region wise classification of meteorological Sub-Divisions:**

- **NorthwestIndia:**WesternHimalayanRegion(Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad,HimachalPradeshandUttarakhand);Punjab,Haryana-Chandigarh-Delhi;WestUttarPradesh,EastUttarPradesh,WestRajasthanandEastRajasthan.
- **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.
- **NortheastIndia:**ArunachalPradesh,Assam&MeghalayaandNagaland,Manipur,Mizoram&Tripura.
- **WestIndia:**GujaratRegion,Saurashtra&Kutch,Konkan&Goa,MadhyaMaharashtraandMarathwada.
- **SouthIndia:**CoastalAndhraPradesh&Yanam,Telangana,Rayalaseema,CoastalKarnataka,NorthInterior Karnataka,SouthInteriorKarnataka,Kerala&Mahe,TamilNadu,Puducherry&KaraikalandLakshadweep.

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



Heavy Snow



Thunderstorm



Dust Storm



Strong Winds



Visibility



Cyclone



Squall/ Hail



Frost



Cold Wave



Heat Wave



Sea State