



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

**Press Release  
Date: 28<sup>th</sup> March, 2023  
Time of Issue: 1315 hours IST**

**Subject: (i) A fresh spell of rainfall/thunderstorm/hailstorm over Northwest India from night of 29<sup>th</sup> March-01<sup>st</sup> April, 2023.  
(ii) A fresh spell of rainfall/thunderstorm activity over East and Northeast India on 30<sup>th</sup> March-01<sup>st</sup> April, 2023.**

**Weather observed during past 24 hours ending at 0830 hrs IST of today: Refer Annexure 1**

**Weather Forecast and Warnings (Graphics in Annexure II):**

- ❖ A **Western Disturbance** seen as a roughly along Long. 52°E to the north of Lat. 30°N and another trough runs roughly along Long. 85°E to the north of Lat. 25°N in middle tropospheric levels. A cyclonic circulation lies over southwest Rajasthan in lower tropospheric levels.
- ❖ A **trough** runs from east Bihar to south Chhattisgarh in lower tropospheric levels.
- ❖ Under the influence of above synoptic features, following major weather is expected:

**Northwest India:** Scattered to fairly widespread **rainfall/thunderstorm activity** very likely over the region during 30<sup>th</sup> March-01<sup>st</sup> April, 2023. Isolated **hailstorm activity** likely over the region on 30<sup>th</sup> & 31<sup>st</sup> March, 2023.

**Central India:** Isolated **rainfall along with thunderstorm/hailstorm** likely over East Madhya Pradesh on 30<sup>th</sup> & 31<sup>st</sup> and over Chhattisgarh on 31<sup>st</sup> March, 2023.

**East India:** Scattered to fairly widespread **rainfall/thunderstorm activity** very likely over Bihar, Jharkhand, Odisha and West Bengal & Sikkim during 30<sup>th</sup> March-01<sup>st</sup> April. Isolated **heavy rainfall** also likely over West Bengal & Sikkim and Odisha on 31<sup>st</sup> March. Isolated **hailstorm** is likely over Bihar, Jharkhand, West Bengal & Sikkim on 31<sup>st</sup> March, 2023.

**Northeast India:** Scattered to fairly widespread light/moderate rainfall activity **with thunderstorm & lightning/gusty winds** likely to continue over Northeast India during 28<sup>th</sup>-30<sup>th</sup> March, 2023. **Isolated hailstorm** likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland on 28<sup>th</sup> March. **Another spell of enhanced rainfall activity likely over the region from 31<sup>st</sup> March. Isolated heavy rainfall** also likely over Arunachal Pradesh and east Assam on 31<sup>st</sup> March & 01<sup>st</sup> April, 2023

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

- ❖ **Northwest India:** Rise in Maximum Temperatures by 2-4<sup>0</sup>C very likely during next 2 days and fall by 3-5<sup>0</sup>C during subsequent 3 days.
- ❖ **Central & East India:** No significant change in Maximum Temperatures very likely during next 2 days and fall by 2-4<sup>0</sup>C during subsequent 3 days.
- ❖ **Rest parts of the country:** No significant change in Maximum Temperatures very likely during next 5 days.
- ❖ **No heat wave likely over any part of country during next 5 days.**

**Impact expected and action suggested due to isolated thunderstorm with lightning/gusty winds & Hailstorm on and over**

- **30<sup>th</sup> March:** Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh, Rajasthan, East Madhya Pradesh
- **31<sup>st</sup> March:** Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim
- **01<sup>st</sup> April:** Himachal Pradesh, Uttarakhand, West Uttar Pradesh

**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.

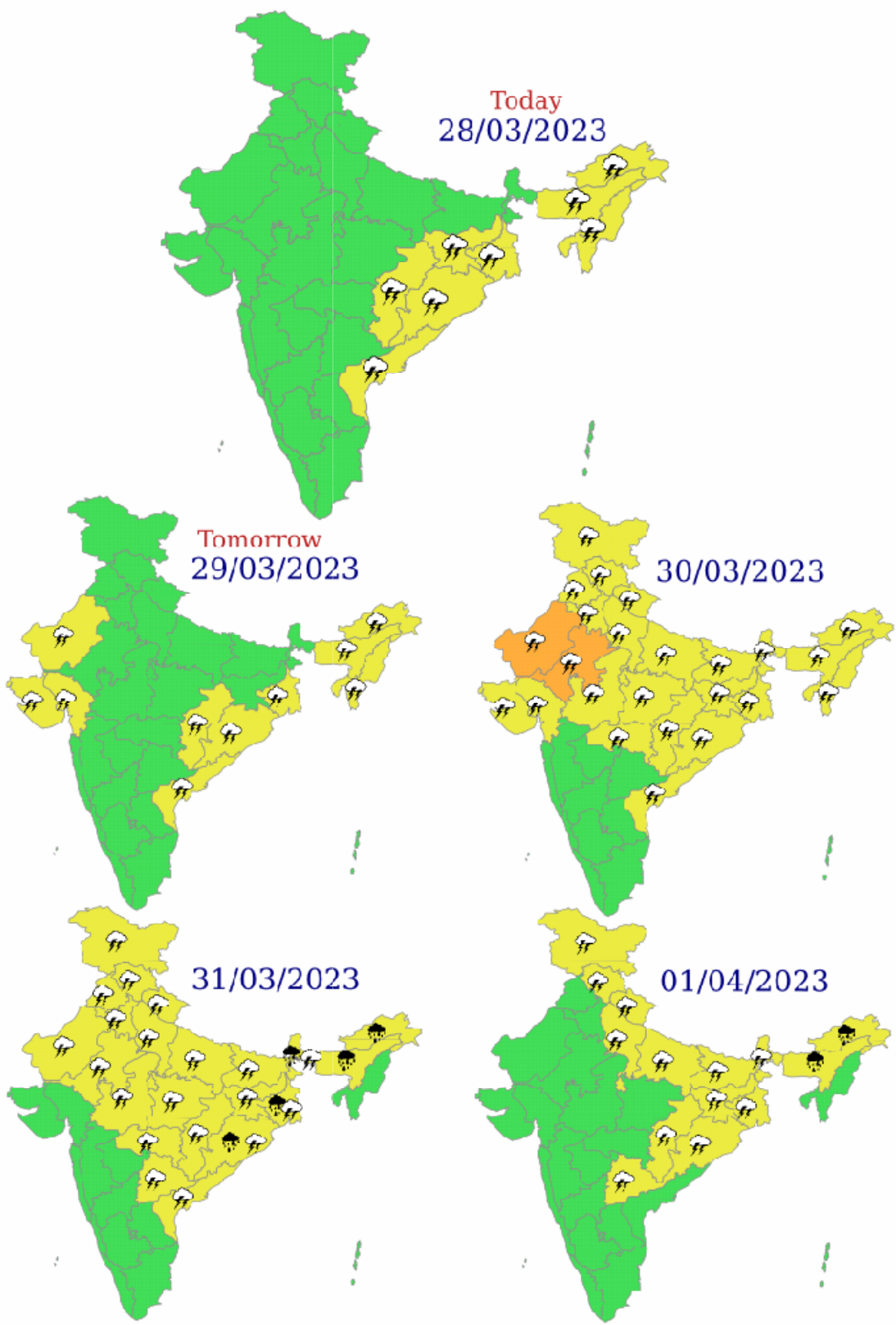
**Advisory for farmers:**

- Postpone harvesting of matured crops in Assam & Meghalaya and Arunachal Pradesh; keep already harvested produce in a safe place or cover the heaps of already harvested produce in the field with trampoline sheets.
- Complete harvesting of matured crops in Jammu, Himachal Pradesh, Punjab, Haryana, Uttarakhand, Uttar Pradesh and Rajasthan during clear weather and keep the harvest at safe place.
- Use hail net to protect the crops in Nagaland, North East Assam and East Arunachal Pradesh.
- Provide mechanical support to horticultural crops and staking to vegetables.
- Drain out excess water from the crop fields.

For more details kindly refer:

[https://mausam.imd.gov.in/imd\\_latest/contents/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php)

- ❖ **Light/moderate rainfall/thundershowers** observed at most places over Arunachal Pradesh; **at a few places** over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam and **at isolated places** over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, East Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Odisha, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Heavy rainfall** occurred at isolated over Arunachal Pradesh.
- ❖ **Hailstorm and squall** observed at isolated places over Assam.
- ❖ **Significant amount of rainfall (in cm):**
  - **Arunachal Pradesh:** Tuting (dist Upper Siang) 10, Kibithu (dist Anjaw) 6, Yingkiong (dist Upper Siang) 4,
  - **Assam:** Margherita (dist Tinsukia) 3,
  - **Sikkim:** North Sikkim-5
  - **Coastal Andhra Pradesh & Yanam:** Mandasa (dist Srikakulam) 4, Pathapatnam (dist Srikakulam) 3, Tekkali (dist Srikakulam) 3, Parvathipuram (dist Parvathipuram Manyam) 3, Amaravati (dist Guntur) 3,



**Legends:**

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **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, Tamilnadu, 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