

Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 17<sup>th</sup> March, 2024

Time of Issue: 1300 hours IST

**Subject: Light to moderate rainfall accompanied with thunderstorm, lightning & hail over East, Central & adjoining Peninsular India during 17<sup>th</sup>-20<sup>th</sup> with peak intensity on 19<sup>th</sup> March, 2024.**

**Realised weather during past 24 hours till 0830 hours IST of today:**

- ❖ **Light rainfall/snowfall** observed at isolated places over Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.
- ❖ **Light/Moderate rainfall** observed at most places over Gangetic West Bengal; at a few places over Odisha and Telangana; at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, North Interior Karnataka and Kerala & Mahe.
- ❖ **Hailstorm** observed at isolated places over East Madhya Pradesh, Vidarbha, Jharkhand, Marathwada and Telangana.

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

- ❖ A trough runs from west Vidarbha to north Kerala in lower tropospheric levels. The anti-cyclonic circulation now lies over Westcentral & adjoining Northwest Bay of Bengal in lower tropospheric levels. Under their influence:
  - ✓ Scattered to fairly widespread light to moderate rainfall with isolated **thunderstorms, lightning & gusty winds** very likely over **Gangetic West Bengal** during 17<sup>th</sup>-21<sup>st</sup> with possibility of **hailstorm & squall (speed reaching 50-60 kmph)** on 19<sup>th</sup> March, 2024.
  - ✓ Scattered to fairly widespread light to moderate rainfall with **thunderstorms, lightning & gusty winds** over Jharkhand, Odisha, Vidarbha, Chhattisgarh & East Madhya Pradesh during 17<sup>th</sup>-20<sup>th</sup> and Bihar during 19<sup>th</sup>-21<sup>st</sup> March, 2024. **Isolated hailstorm also very likely over Vidarbha, East Madhya Pradesh & Chhattisgarh during 17<sup>th</sup>-19<sup>th</sup> and Jharkhand & Odisha on 19<sup>th</sup> March, 2024.**
  - ✓ Isolated **heavy rainfall** very likely over Odisha on 19<sup>th</sup> & 20<sup>th</sup> and Chhattisgarh & Jharkhand on 19<sup>th</sup> March, 2024.
  - ✓ Scattered to fairly widespread light/moderate rainfall with isolated thunderstorms & lightning very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 18<sup>th</sup>-23<sup>rd</sup> March, 2024.
  - ✓ Scattered to fairly widespread light/moderate rainfall with isolated thunderstorms & lightning very likely over Telangana during 17<sup>th</sup>-21<sup>st</sup> with possibility of **hailstorm** on 17<sup>th</sup> and

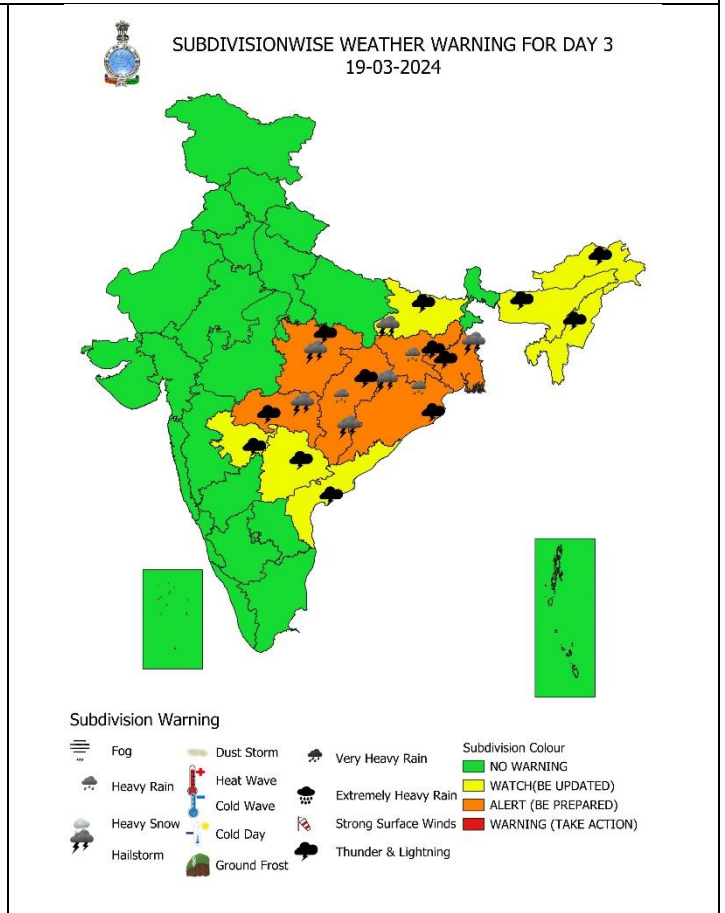
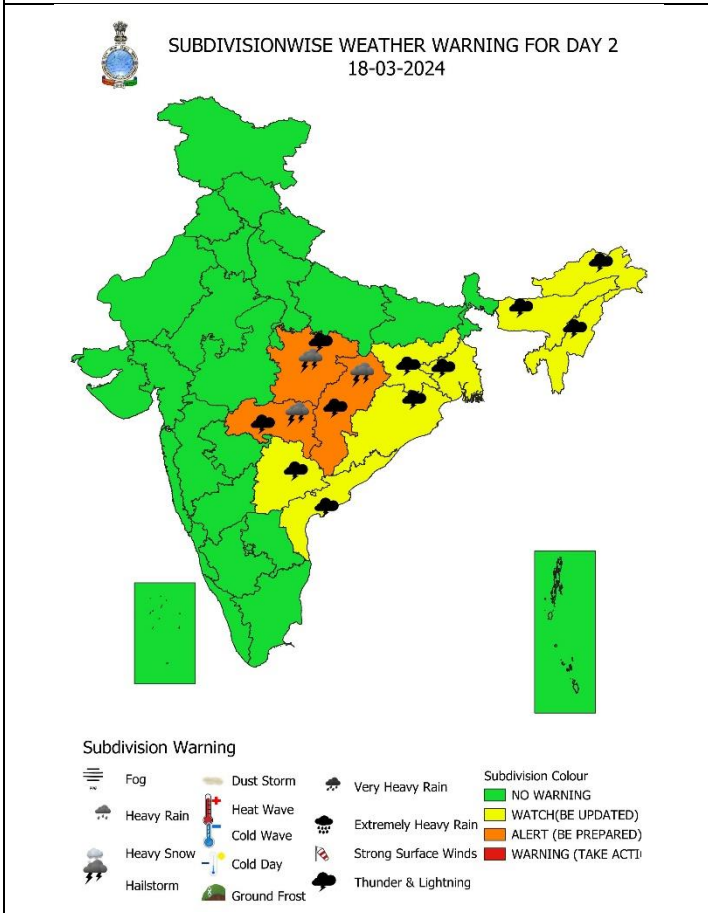
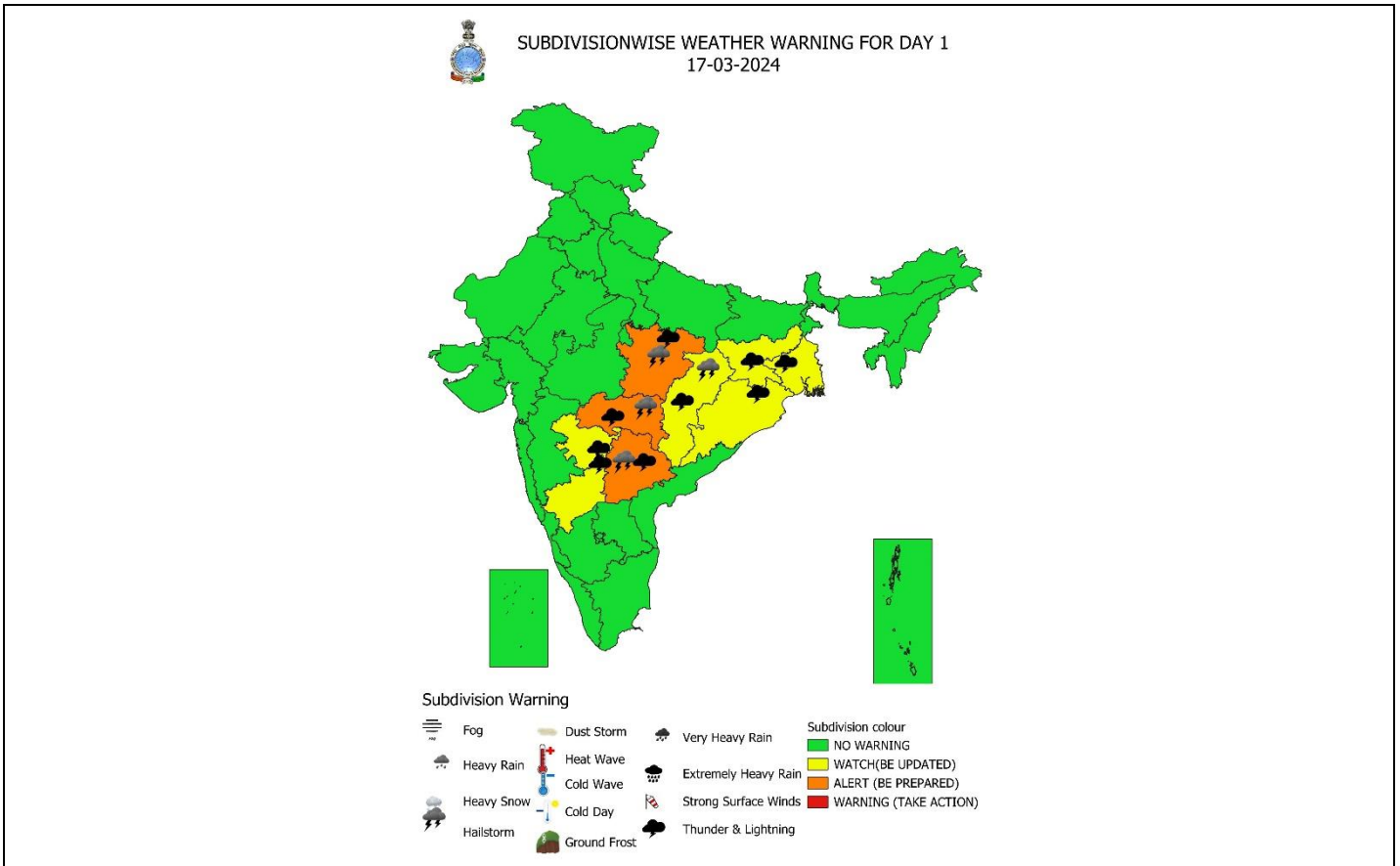
over Coastal Andhra Pradesh & Yanam during 18<sup>th</sup>-21<sup>st</sup> March, 2024. Isolated **heavy rainfall** also likely over these sub-divisions on 20<sup>th</sup> March, 2024.

- ✓ Isolated light rainfall with thunderstorm & lightning very likely over Marathwada on 17<sup>th</sup> & 19<sup>th</sup> and North Interior Karnataka on 17<sup>th</sup> March, 2024.
  
- ❖ A fresh feeble Western Disturbance is likely to affect Western Himalayan Region from 18<sup>th</sup> March and another from the night of 20<sup>th</sup> March, 2024. Under their influence; isolated/scattered light rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 18<sup>th</sup> & again during 20<sup>th</sup>-23<sup>rd</sup> and over Himachal Pradesh & Uttarakhand on 18<sup>th</sup>, 19<sup>th</sup> & again during 21<sup>st</sup>-23<sup>rd</sup> March, 2024.

#### **Maximum temperature forecast for next 5 days:**

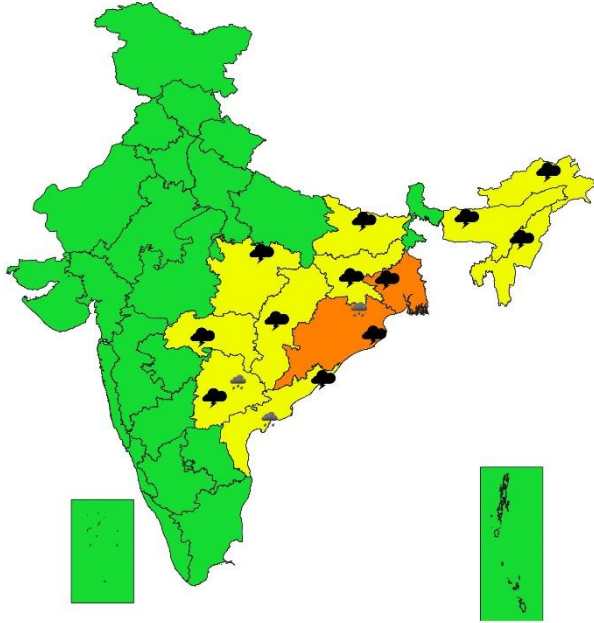
- ❖ **Maximum temperatures** are below normal by 2-3°C over many parts of the country except over some parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab and Northeast & south Peninsular India, where these are near normal.
- ❖ **Hot and humid weather** very likely to prevail over Kerala & Mahe during next 4 days; Rayalaseema during next 3 days and Tamil Nadu, Puducherry & Karaikal during next 2 days.
- ❖ Gradual rise in maximum temperatures by 2-4°C very likely over Northwest India & Gujarat during next 4-5 days.
- ❖ Fall in maximum temperatures by 2-3°C very likely over Central East India during next 3 days and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over East India during next 3 days and fall by 2-4°C thereafter.
- ❖ No significant change in maximum temperatures very likely over rest part of the country during next 5 days.

**For more details, kindly refer:** [https://mausam.imd.gov.in/responsive/all\\_india\\_forcast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php)





**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4**  
20-03-2024

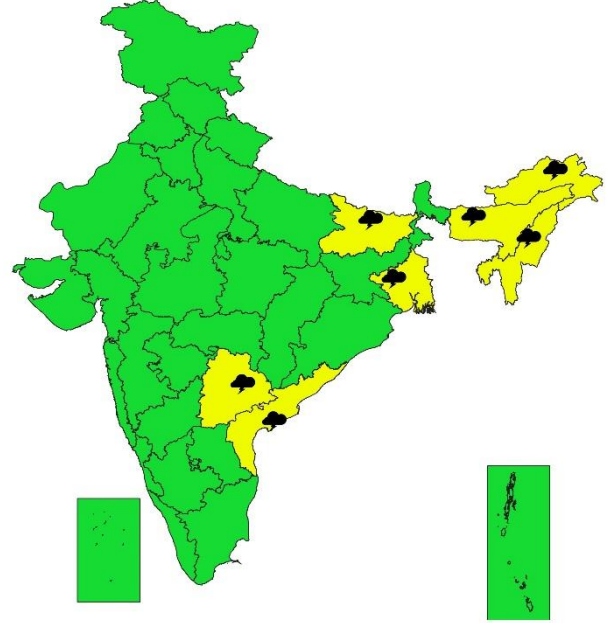


**Subdivision Warning**

- |            |              |                      |                           |
|------------|--------------|----------------------|---------------------------|
| Fog        | Dust Storm   | Very Heavy Rain      | <b>Subdivision Colour</b> |
| Heavy Rain | Heat Wave    | Extremely Heavy Rain | NO WARNING                |
| Heavy Snow | Cold Wave    | Strong Surface Winds | WATCH (BE UPDATED)        |
| Hailstorm  | Cold Day     | Thunder & Lightning  | ALERT (BE PREPARED)       |
|            | Ground Frost |                      | WARNING (TAKE ACTION)     |



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 5**  
21-03-2024



**Subdivision Warning**

- |            |              |                      |                           |
|------------|--------------|----------------------|---------------------------|
| Fog        | Dust Storm   | Very Heavy Rain      | <b>Subdivision Colour</b> |
| Heavy Rain | Heat Wave    | Extremely Heavy Rain | NO WARNING                |
| Heavy Snow | Cold Wave    | Strong Surface Winds | WATCH (BE UPDATED)        |
| Hailstorm  | Cold Day     | Thunder & Lightning  | ALERT (BE PREPARED)       |
|            | Ground Frost |                      | WARNING (TAKE ACTION)     |

**Impact expected and action suggested due to thunderstorm with lightning, gusty winds & Hailstorm:** over East Madhya Pradesh, Vidarbha & Chhattisgarh during 17<sup>th</sup>-19<sup>th</sup>; Gangetic West Bengal, Jharkhand & Odisha on 19<sup>th</sup> and Telangana 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.

**Agromet advisories for Heavy Rainfall, Gusty winds and Hailstorms likely over various parts of the country:**

- Use hail nets or hail caps in fruit orchards to protect them from mechanical damage and provide mechanical support to horticultural crops & staking to vegetables in East Madhya Pradesh, Vidarbha, Chhattisgarh and Telangana.
- In East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Jharkhand and Gangetic West Bengal, harvest the matured crops and vegetables at the earliest and keep the harvested produce at safer places or cover the heaps of harvested produce in the fields with tarpaulin sheets.
- Provide mechanical support to horticultural crops and staking to vegetables in Odisha and Jharkhand.

## Legends & abbreviations:














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

❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office.

### ❖ 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-Himalayan 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)

Subdivision Warning	 Dust Storm	Subdivision color
 Heavy Rain	 Strong Surface Winds	 NO WARNING
 Heavy Snow	 Heat Wave	 WATCH(BE UPDATED)
 Thunderstorms & Lightning	 Cold wave	 ALERT (BE PREPARED)
 Hailstorm	 Fog	 WARNING (TAKE ACTION)

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