

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 18th March, 2024

Time of Issue: 1315 hours IST

Subject: Light to moderate rainfall accompanied with thunderstorm, lightning & hail likely over East, Central & adjoining Peninsular India during 18th-20th with peak intensity on 19th March, 2024.

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

- ❖ **Light rainfall/snowfall** observed at isolated places over Arunachal Pradesh.
- ❖ **Light/moderate rainfall** observed at a few places over Chhattisgarh; at isolated places over Madhya Pradesh, Vidarbha, Gangetic West Bengal, Jharkhand, Odisha, Assam & Meghalaya, Marathwada, North Interior Karnataka and Telangana.
- ❖ **Hailstorm** observed at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh and Telangana.
- ❖ **Thundersquall/gusty winds** observed at isolated places over Jharkhand, Telangana, Madhya Pradesh, Vidarbha and Chhattisgarh.

Weather Systems and Forecast & Warnings: (Annexure I)

- ❖ A cyclonic circulation lies over west Vidarbha and a trough/wind discontinuity runs from south Tamil Nadu to west Vidarbha & another trough from Jharkhand to north Coastal Andhra Pradesh in lower tropospheric levels. The anti-cyclonic circulation lies over Westcentral & adjoining Northwest Bay of Bengal off Odisha coast 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 and Odisha** during 18th-21st with possibility of **hailstorm & squall (speed reaching 50-60 kmph)** on 19th March, 2024.
 - ✓ Scattered to fairly widespread light to moderate rainfall with **thunderstorms, lightning & gusty winds** over Jharkhand, Vidarbha, Chhattisgarh & East Madhya Pradesh during 18th-20th and Bihar during 18th-21st March, 2024. **Isolated hailstorm also very likely over Vidarbha, East Madhya Pradesh & Chhattisgarh on 18th & 19th and Jharkhand on 19th March, 2024. Thundersquall (speed reaching 50-60 kmph)** likely over East Madhya Pradesh on 18th & 19th March, 2024.
 - ✓ Isolated **heavy rainfall** very likely over Odisha on 19th & 20th and Chhattisgarh, Gangetic West Bengal & Jharkhand on 19th 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 18th-24th March, 2024.
 - ✓ Scattered to fairly widespread light/moderate rainfall with isolated thunderstorms & lightning very likely over Telangana during 18th-20th with possibility of **hailstorm** on 18th & 19th and over

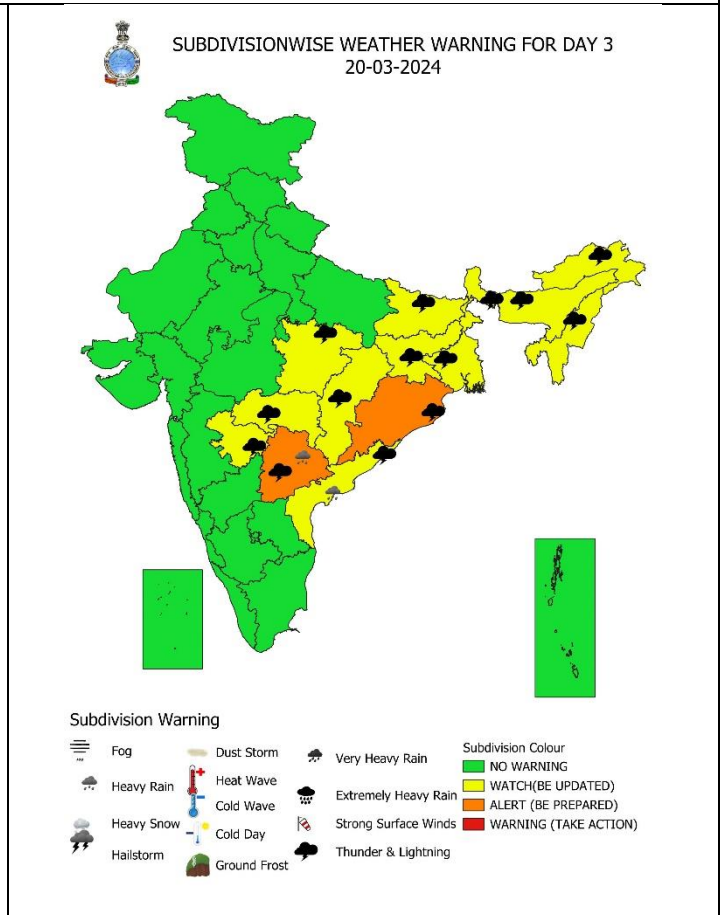
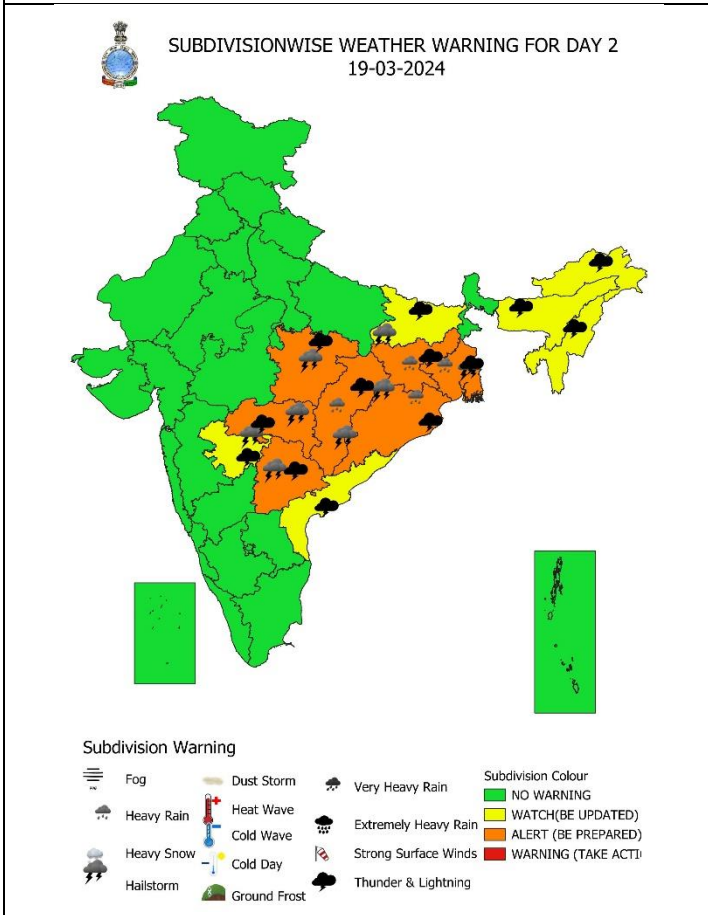
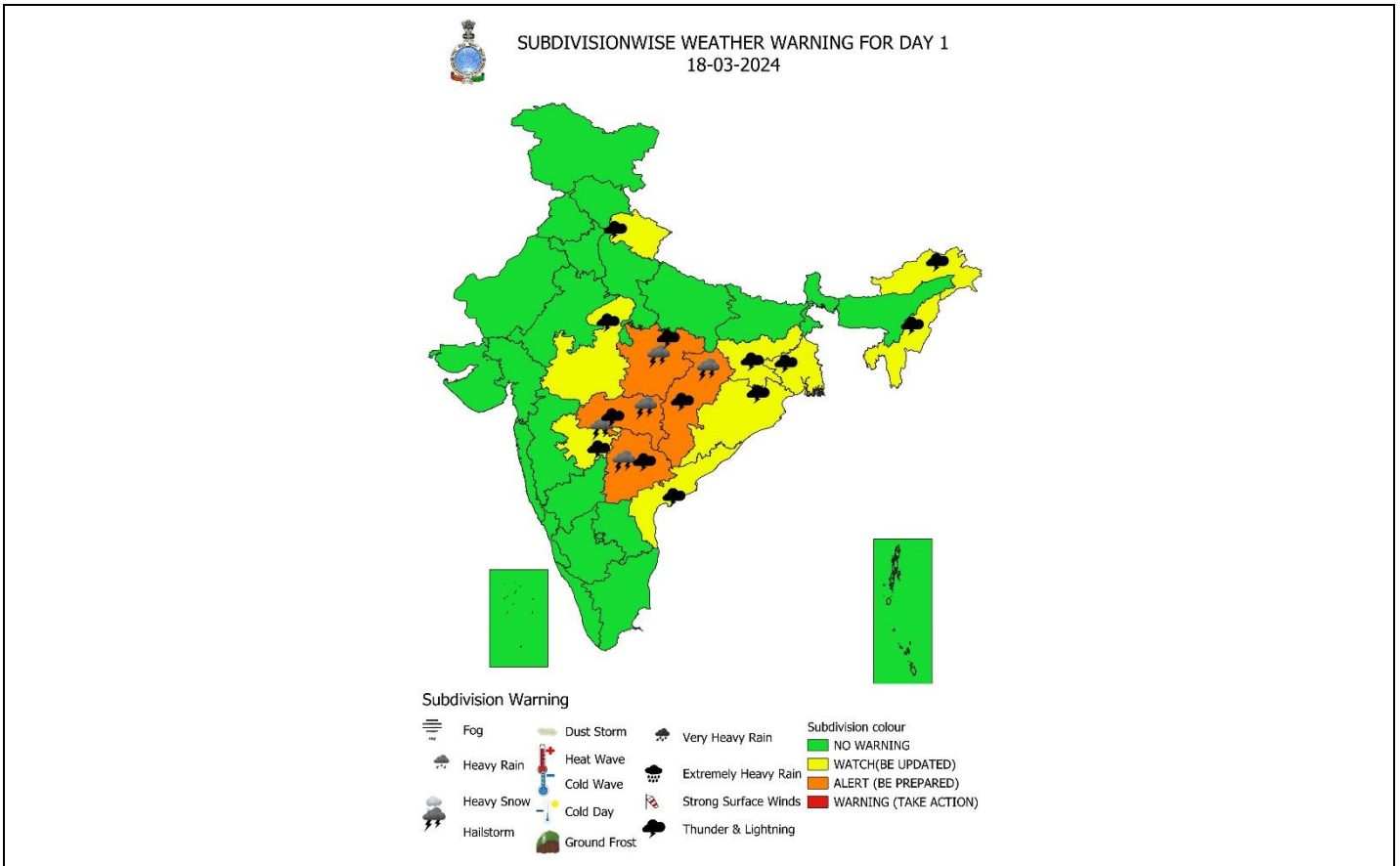
Coastal Andhra Pradesh & Yanam during 18th-21st March, 2024. Isolated **heavy rainfall** also likely over these sub-divisions on 20th March, 2024.

- ✓ Isolated light rainfall with thunderstorm & lightning very likely over Marathwada during 18th-20th with possibility of **hailstorm** on 18th & 19th March.
- ❖ The feeble Western Disturbance seen as a trough in middle tropospheric westerlies along Long. 68°E to the north of Lat. 30°N. Another fresh Western Disturbance is likely to affect Western Himalayan Region from the night of 20th March, 2024. Under their influence; isolated/scattered light rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 18th & again during 20th-24th and over Himachal Pradesh & Uttarakhand on 18th, 19th & again during 21st-24th March, 2024.

Maximum temperature forecast for next 5 days:

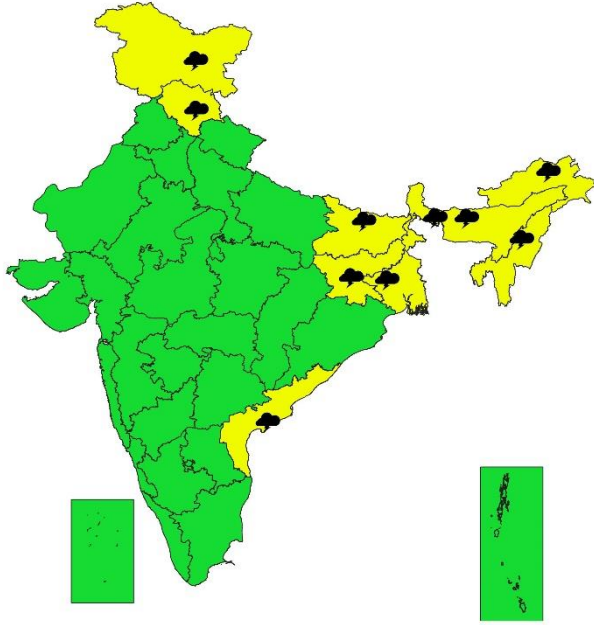
- ❖ **Maximum temperatures** are above normal by 2-3°C over many parts of the country except over some parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab and Northeast India & south Peninsular India, where these are near normal.
- ❖ **Hot and humid weather** very likely to prevail over coastal districts of Saurashtra & Kutch during next 5 days; over Kerala & Mahe, Rayalaseema and Tamil Nadu, Puducherry & Karaikal during next 3 days.
- ❖ Gradual rise in maximum temperatures by 2-4°C very likely over Northwest India 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 rest part of the country during next 5 days.

For more details, kindly refer: https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php





SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
21-03-2024

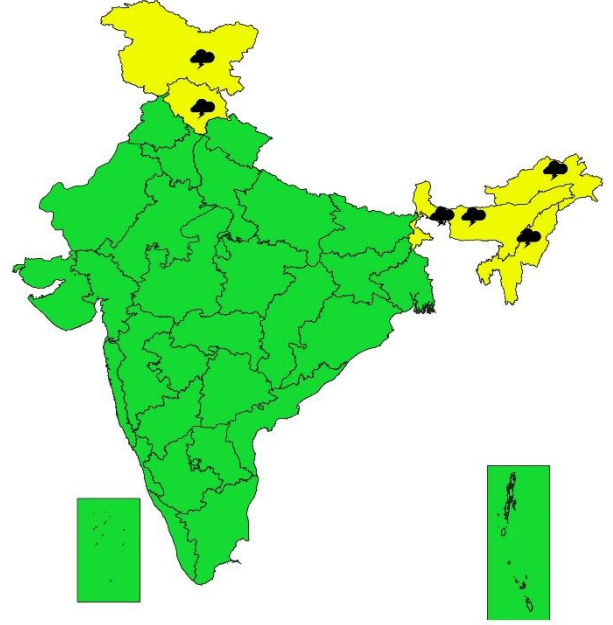


Subdivision Warning

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



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
22-03-2024



Subdivision Warning

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

Impact expected and action suggested due to thunderstorm with lightning, gusty winds & Hailstorm: over East Madhya Pradesh, Vidarbha, Chhattisgarh, Telangana, Marathwada on 18th & 19th; Gangetic West Bengal, Jharkhand & Odisha on 19th 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.

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)

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)

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