



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 16th March, 2024

Time of Issue: 1245 hours IST

Subject: Thunderstorms accompanied with lightning/hail and moderate to heavy rainfall at isolated places is likely over East & Central India during 16th-20th March, 2024.

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

- ❖ **Light/Moderate rainfall/snowfall** at many places over Arunachal Pradesh; at isolated places over Himachal Pradesh.
- ❖ **Light to moderate rainfall** at a few places over Gangetic West Bengal; at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Odisha, Bihar, Chhattisgarh, Coastal Andhra Pradesh, Tamil Nadu, Telangana and Kerala.

Weather Systems and Forecast & Warnings: (Annexure I)

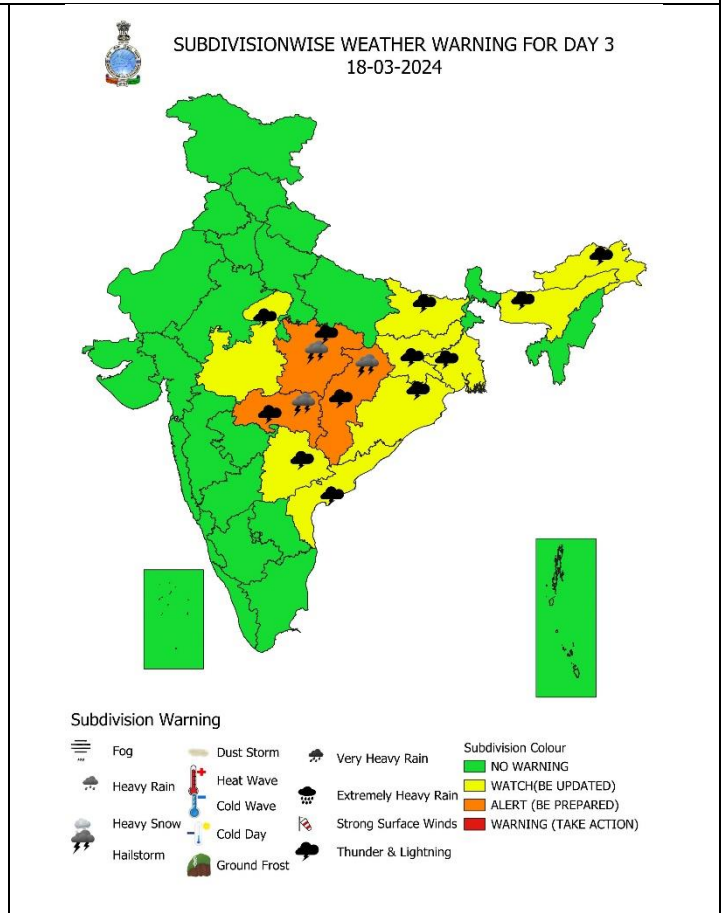
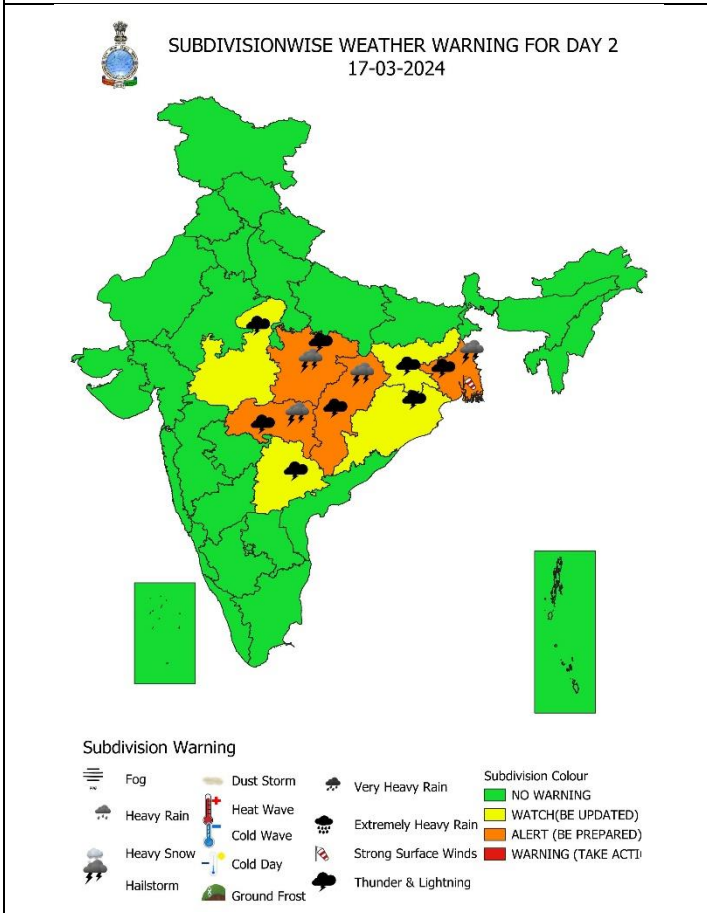
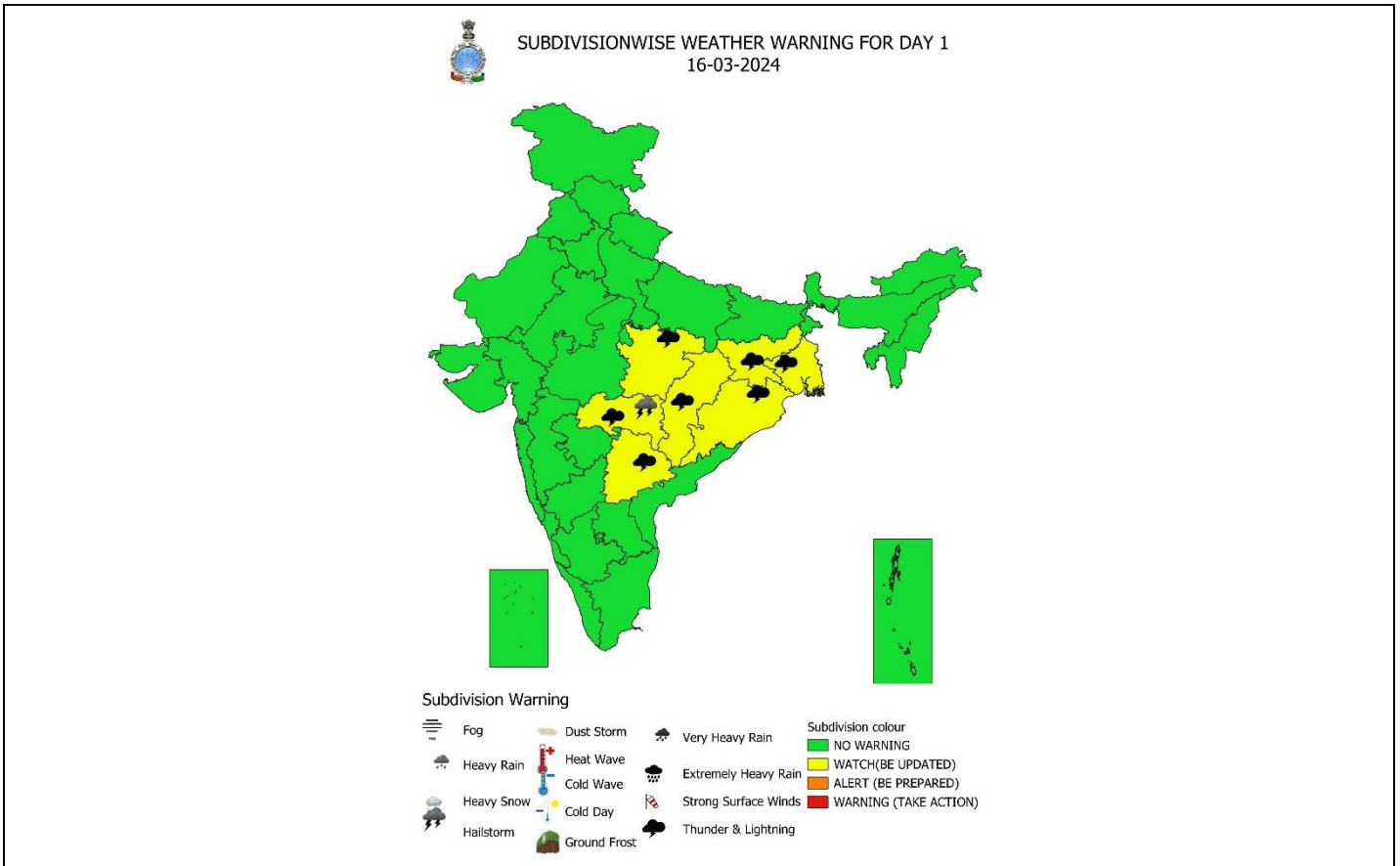
- ❖ A trough runs from Sub-Himalayan West Bengal to Coastal Andhra Pradesh and another trough runs from Marathwada to Comorin Area in lower tropospheric levels. The anti-cyclonic circulation lies over westcentral Bay of Bengal & neighbourhood and has strengthened since yesterday. The Sub Tropical Westerly Jet core lies over east central India at upper tropospheric levels today. Under their influence:
 - ✓ Scattered to fairly widespread light to moderate rainfall with isolated **thunderstorms, lightning & gusty winds (30-40 kmph)** very likely over Gangetic West Bengal during **16th-20th March with possibility of hailstorm & squall (speed reaching 50-60 kmph) on 17th March, 2024.**
 - ✓ Scattered to fairly widespread light to moderate rainfall with **thunderstorms, lightning & gusty winds (30-40 kmph)** over Jharkhand, Odisha, Vidarbha, Chhattisgarh and East Madhya Pradesh during 17th-20th March, 2024. **Isolated hailstorm also likely over Vidarbha during 16th-19th; East Madhya Pradesh & Chhattisgarh during 17th-19th March.**
 - ✓ Isolated **heavy rainfall** very likely over Odisha and Chhattisgarh on 19th March, 2024.
 - ✓ Isolated light rainfall/snowfall very likely over Sub-Himalayan West Bengal & Sikkim on 16th, 18th & 19th March, 2024.
 - ✓ Isolated light rainfall likely over Telangana and Coastal Andhra Pradesh & Yanam during 16th-20th; Kerala on 17th & 18th March, 2024.
 - ✓ Scattered to fairly widespread light/moderate rainfall/snowfall with thunderstorms and lightning very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 16th-22nd March, 2024.

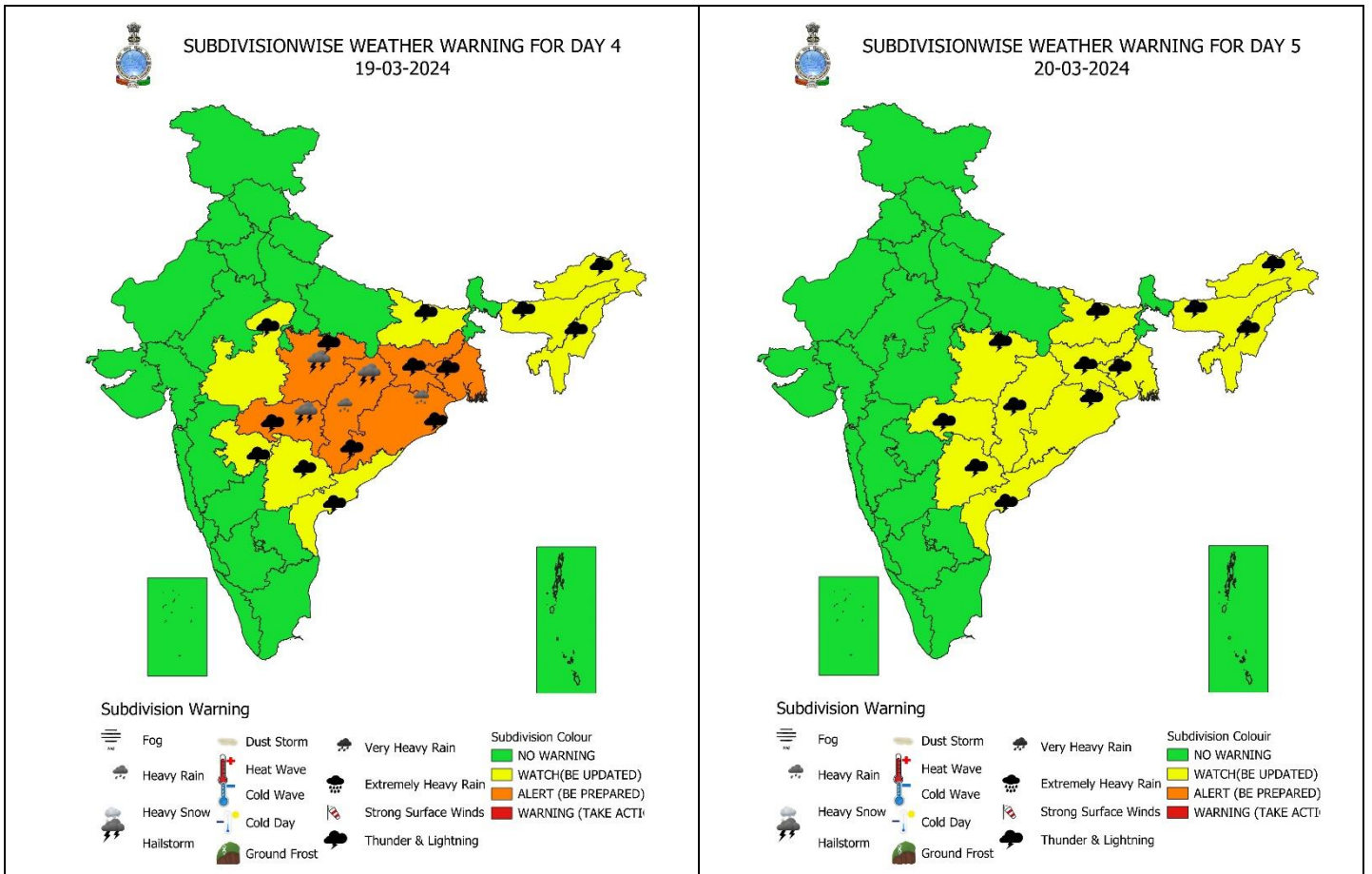
- ❖ A fresh Western Disturbance is likely to affect Western Himalayan Region from 18th March and another from the night of 20th March, 2024. Under its influence, Isolated light rainfall/snowfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 18th & during 20th-22nd; over Himachal Pradesh on 21st & 22nd and over Uttarakhand on 22nd March, 2024.

Maximum temperature forecast:

- ❖ **Maximum temperatures are above normal by 2-3°C in isolated pockets of Jharkhand, Chhattisgarh, Bihar, West Bengal, east Vidarbha, Telangana & Tamil Nadu and above normal by 1-2°C over rest parts of Peninsular India. It is likely to remain so during next 4-5 days.**
- ❖ **Hot and humid weather** very likely to prevail over Tamil Nadu, Puducherry & Karaikal during next 2 days and Kerala & Mahe, Rayalaseema during next 5 days.
- ❖ Fall by 2-3°C in maximum temperatures very likely over Central and East India during next 4-5 days.
- ❖ Gradual rise in maximum temperatures by 2-4°C very likely over West & Northwest India during next 4-5 days.
- ❖ 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





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

(Based on the IBF and advisories issued by different AMFUs)

- 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 Gangetic West Bengal.
- 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