



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 28th March, 2024

Time of Issue: 1315 hours IST

Subject:

- i. **Light to moderate Rainfall/thunderstorm activity over Northwest India during 28th-31st with possibility of isolated heavy falls over Western Himalayan Region on 29th & 30th March, 2024.**
- ii. **A fresh spell of intense rainfall/thunderstorm likely over Northeast India from 30th March to 01st April, 2024.**

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

- ❖ **Light/Moderate rainfall/snowfall** accompanied with thunderstorm recorded at a few places over Sikkim and at isolated places over Arunachal Pradesh, Jammu-Kashmir and Himachal Pradesh.
- ❖ **Light/Moderate rainfall** accompanied with thunderstorm recorded at a few places over Sub-Himalayan West Bengal; at isolated places over Punjab, Haryana, West Rajasthan, Odisha, Gangetic West Bengal, Vidarbha, Chhattisgarh, Marathwada, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu.
- ❖ **Warm night conditions** prevailed in isolated pockets over north Gujarat, Marathwada and Madhya Maharashtra.
- ❖ **Heat wave conditions** prevailed in isolated pockets over West Rajasthan.

Weather Systems and Forecast & Warnings: (Annexure I)

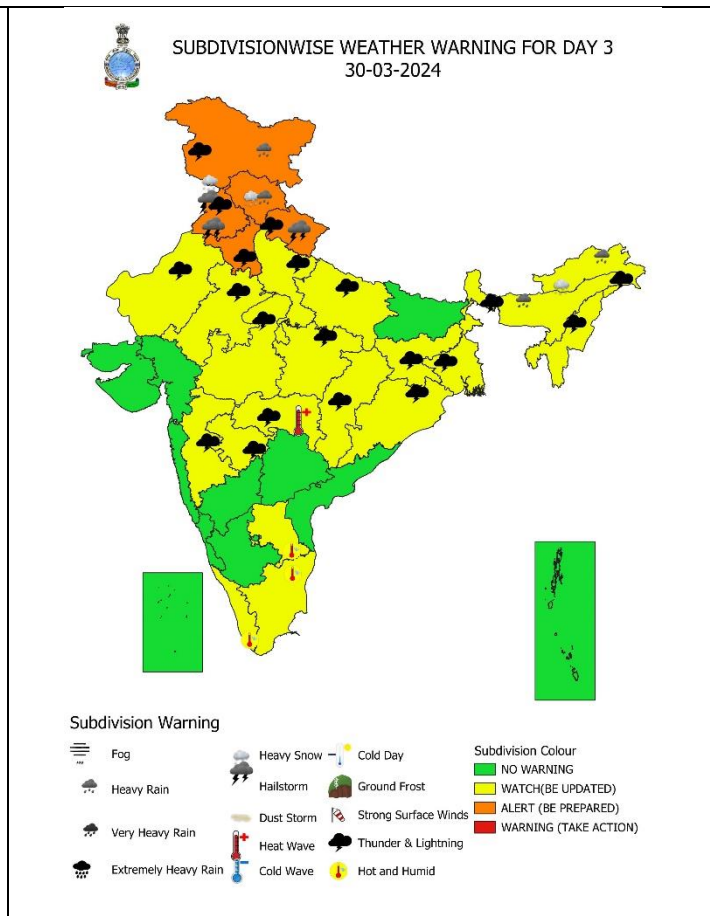
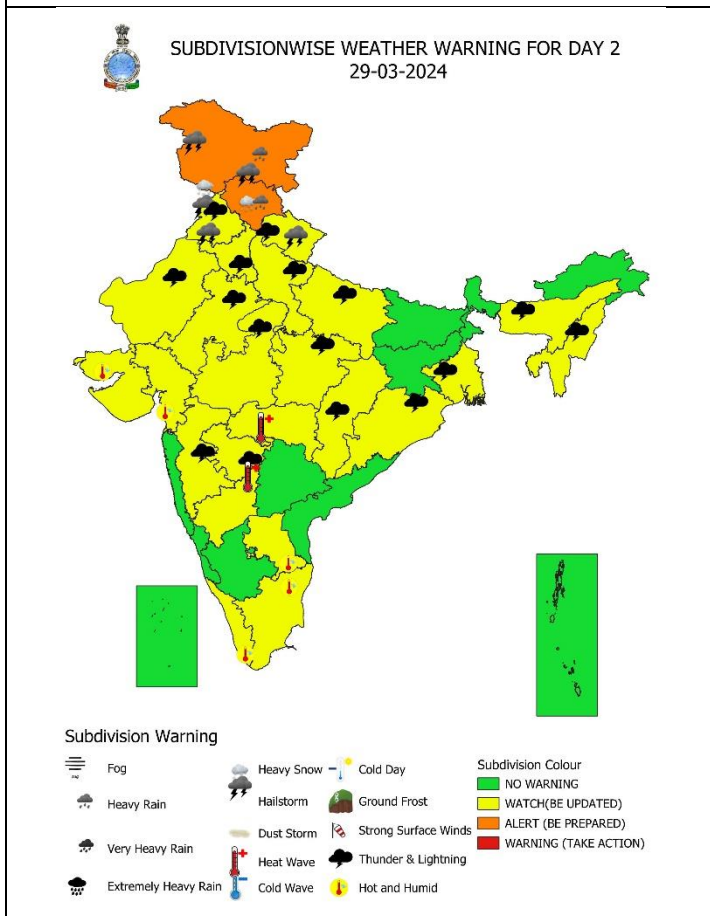
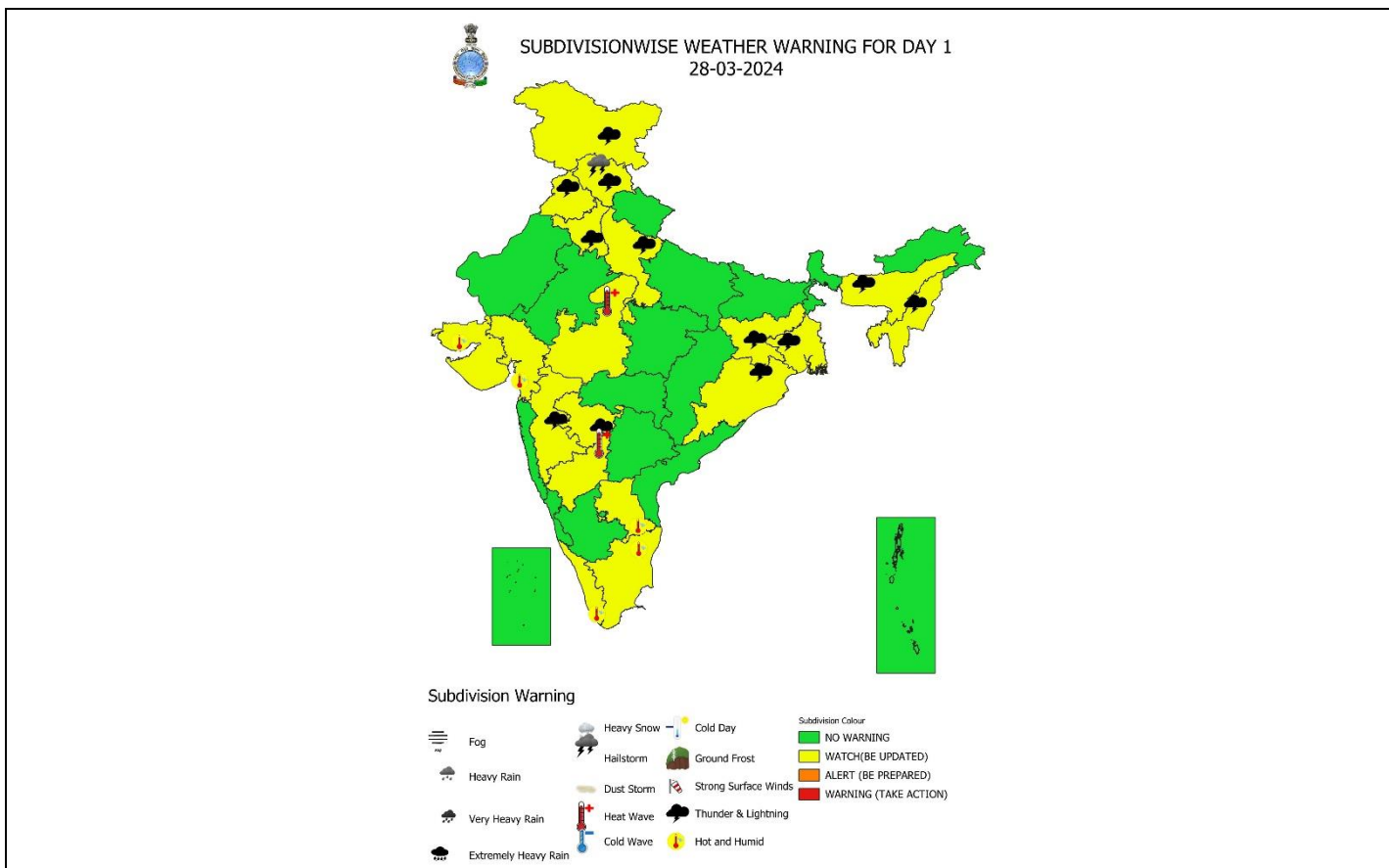
- ❖ A cyclonic circulation lies over Bihar and another over south Assam in lower tropospheric levels. Under the influence of these systems:
 - ✓ Isolated to scattered rainfall/snowfall with isolated **thunderstorms & lightning** very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 28th & 29th and increase thereafter with fairly widespread to widespread light to moderate rainfall/snowfall with isolated **thunderstorms & lightning** very likely over Arunachal Pradesh and scattered to fairly widespread over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim during 30th March-03rd April, 2024.
 - ✓ **Isolated heavy rainfall/snowfall very likely over Arunachal Pradesh and isolated heavy rainfall over Assam & Meghalaya during 30th March-01st April with possibility of isolated very heavy falls over Arunachal Pradesh & Assam & Meghalaya on 31st March, 2024.**
 - ✓ Isolated light to moderate rainfall with **thunderstorms & lightning** very likely over Gangetic West Bengal and Odisha during 28th March-01st April, 2024.
 - ✓ Isolated light to moderate rainfall very likely over Bihar on 28th, 30th and over Jharkhand with **thunderstorms & lightning** on 28th, 30th & 31st March, 2024.

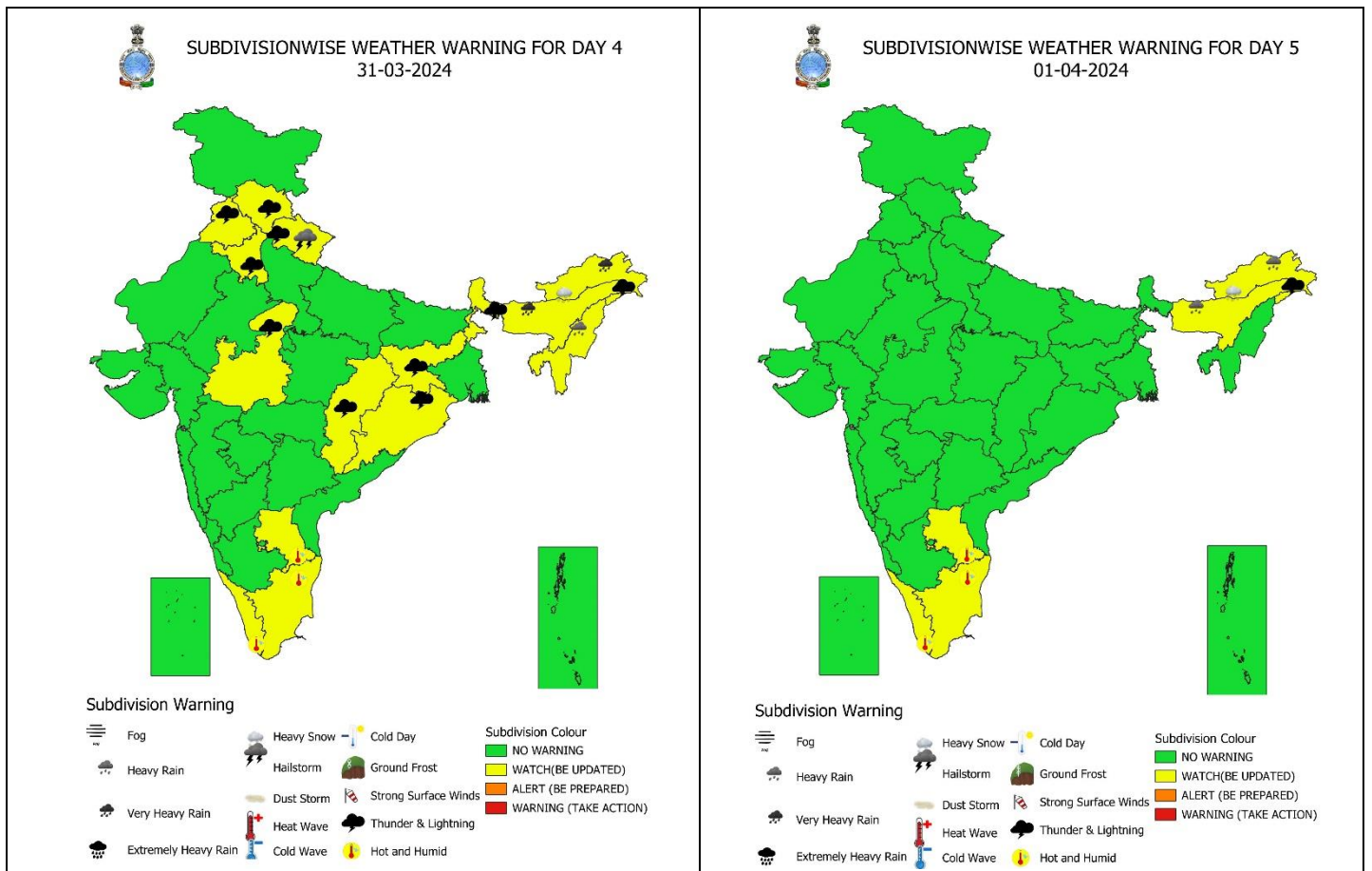
- ❖ A Western Disturbance as a trough in lower & middle tropospheric westerlies runs roughly along Long. 56°E to the north of Lat. 22°N. A cyclonic circulation lies over northwest Rajasthan & neighbourhood in lower tropospheric levels. Under their influence:
 - ✓ Fairly widespread to widespread light rainfall/snowfall with isolated **thunderstorms & lightning** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 28th-31st March, 2024.
 - ✓ Isolated **heavy rainfall/snowfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 29th & 30th March, 2024.
 - ✓ Isolated light to moderate rainfall with **thunderstorms & lightning** likely over Punjab, Haryana, Chandigarh, West Uttar Pradesh during 28th-31st; Rajasthan and East Uttar Pradesh on 29th & 30th March, 2024.
 - ✓ Isolated **hailstorm** also likely over Jammu & Kashmir on 29th; over Himachal Pradesh on 28th & 29th; over Uttarakhand during 29th-31st, Punjab and Haryana & Chandigarh on 29th & 30th March, 2024.

Maximum temperature observation and forecast for next 5 days:

- ❖ Yesterday's, the maximum temperatures were in the range 40-42°C at some places over West Madhya Pradesh, Vidarbha, Gujarat Region, Marathwada, Madhya Maharashtra and West Rajasthan; at isolated places over North Interior Karnataka, Telangana, Rayalaseema, East Madhya Pradesh and East Rajasthan which were above normal by 3-4°C, in the range 36-39°C over at many parts of peninsular & central India and Odisha; at some parts over south Uttar Pradesh, Delhi and Saurashtra & Kutch and at isolated pockets over south Haryana, south Gangetic West Bengal, Jharkhand and south Bihar which were above normal by 1-2°C and in the range 32-35°C over states of Indo-Gangetic plane comprising of Punjab and remaining parts of north Haryana and north Uttar Pradesh, north Bihar at isolated pockets of remaining parts of Tripura, and south Assam which were below normal by 1-2°C.
- ❖ Currently, the maximum temperatures are exceeding 95th percentile of climatological value at many places over Delhi and adjoining south Haryana; at few pockets of West Madhya Pradesh and adjoining East Madhya Pradesh, Marathwada and adjoining Vidarbha, Madhya Maharashtra; isolated pockets over Rajasthan, West Uttar Pradesh, Saurashtra & Kutch and adjoining Gujarat Region, Kerala & Mahe, costal Tamil Nadu. These are likely to continue to exceed 95th percentile of climatological value over extended areas of Rajasthan, Madhya Pradesh, Maharashtra, interior Odisha, interior Karnataka and Kerala & Mahe on 28th & 29th March.
- ❖ No significant change in maximum temperatures very likely over Northwest India during next 24 hours and fall by 2-3°C thereafter.
- ❖ Gradual rise in maximum temperatures by 2-3°C very likely over Central & East India during next 2 days and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over rest part of the country during next 5 days.
- ❖ **Heat wave conditions** very likely in isolated pockets over West Madhya Pradesh on 28th; North Interior Karnataka on 28th & 29th and Vidarbha on 29th & 30th March, 2024.
- ❖ **Warm night** very likely to prevail in isolated pockets over Gujarat, Marathwada and Madhya Maharashtra on 28th & 29th March, 2024.
- ❖ **Hot and humid weather** very likely to prevail over Saurashtra & Kutch on 28th & 29th; over Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during 28th March-01st April, 2024.

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





Impact expected and action suggested due to thunderstorm with lightning/gusty winds & Hailstorm over Jammu & Kashmir on 29th; over Himachal Pradesh on 28th & 29th; over Uttarakhand during 29th-31st; over Punjab and Haryana & Chandigarh on 29th & 30th 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.

Impact & Action Suggested due to heavy rainfall/snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh on 29th & 30th March; Arunachal Pradesh and Assam & Meghalaya on 31st March, 2024.

Impacts Expected for Rain/Snow

- Disruption of Electricity.
- Landslide, rock fall and mudslides, Blocking/washout of roads/highways/bridges Nallahs.
- Disruption of traffic flow.
- Damage to Kuccha and unsecured structures.

Suggested Actions

- Avoid roadway underpasses, drainage ditches, low lying areas and areas where water collects – they can unexpectedly flood or overflow.
- Stay away from power lines or electrical wires.
- Don't stay in kuchcha houses during heavy rainfall as it may collapse anytime soon.
- Drive carefully.

Agromet advisories for Heavy Rainfall, Gusty winds, Hailstorms and Heat Wave 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 Himachal Pradesh, Uttarakhand, Punjab and Haryana.
- In Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab and Haryana, 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 Gangetic West Bengal and Rajasthan.
- Apply light and frequent irrigation to standing crops in West Rajasthan, West Madhya Pradesh, Vidarbha and North Interior Karnataka.

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