



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

Press Release

Date: 20th December, 2023

Time of Issue: 1230 hours IST

Subject: No significant weather over the country during next 5 days.

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

- **Minimum temperatures** are in the range of 4-8°C over most parts of Punjab, Haryana-Chandigarh-Delhi, north Rajasthan and West Uttar Pradesh and 8-12°C over most parts of East Uttar Pradesh, south Rajasthan, Madhya Pradesh, Chhattisgarh and Bihar.
- **Dense fog** observed in the morning hours in isolated pockets over **Punjab**.
- **Cold wave** observed in isolated pockets over **Punjab**.

Weather Systems and Forecast & Warnings during next 5 days: (graphics in Annexure I)

Weather Systems

- Yesterday's Cyclonic Circulation over Lakshadweep now lies over southeast Arabian Sea and extends upto middle tropospheric levels.
- A fresh Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 50°E to the north of Lat. 30°N.

Forecast & Warnings:

- Light to moderate rainfall at isolated places accompanied with isolated thunderstorm, lightning very likely over south Tamil Nadu, Kerala & Mahe and Lakshadweep on 21th December and decrease significantly thereafter.
- Isolated light rainfall/snowfall likely over Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh during 22nd-24th and over north Punjab, north Haryana and Uttarakhand on 23rd December.
- No significant weather likely over remaining parts of the country during next 5 days.

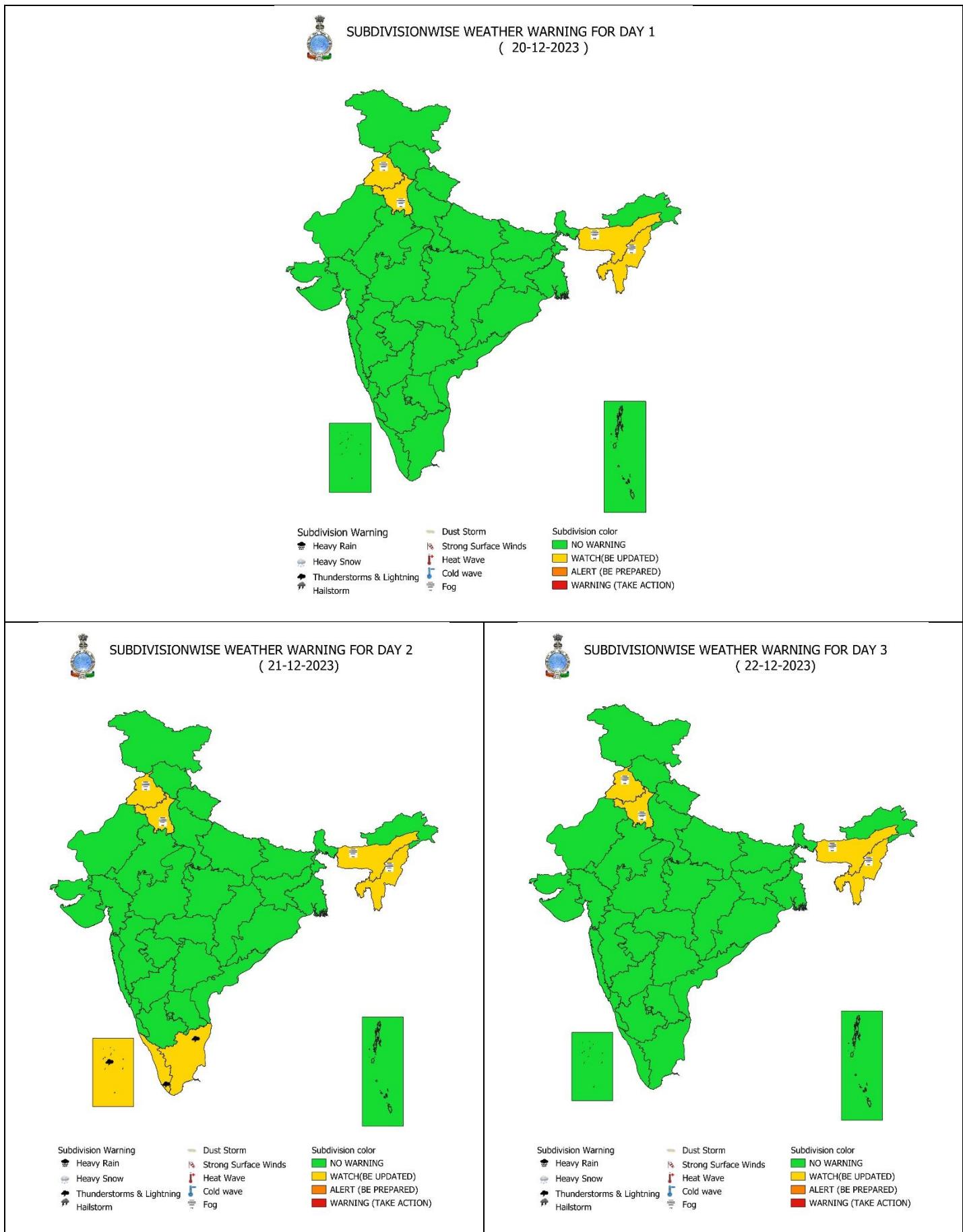
Dense fog warning:

- **Dense fog** in isolated pockets very likely over Punjab, Haryana, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura in the morning hours during next 4 days.

Minimum Temperatures Forecast:

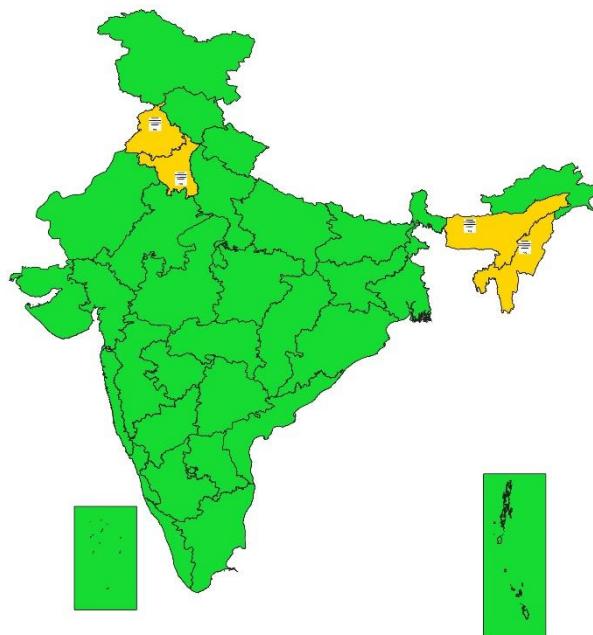
- No significant change in Minimum Temperatures likely over Northwest, Central and East India during next 2 days and rise by 2-3°C thereafter.

For more details kindly refer: https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php and <https://mausam.imd.gov.in/responsive/cycloneinformation.php>





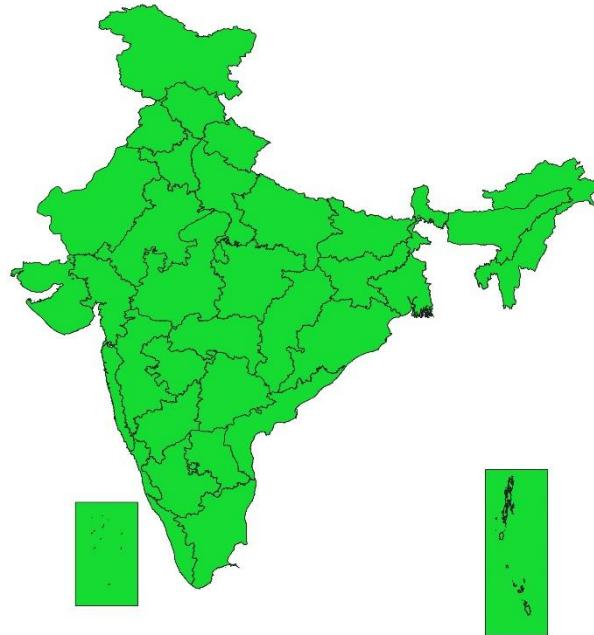
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(23-12-2023)



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)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
(24-12-2023)



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)

Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation
- ❖ **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)

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Probabilistic Forecast

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

Flash Flood Risk

High Risk (Take Action)
Moderate Risk (Be Prepared)
Low Risk (Be Updated)

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions.

(a) Based on departure

Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$.

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$

Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions

Based on departure

Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$

Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres

Dense Fog: when the visibility between 50- 200 metres

Very Dense Fog: when the visibility < 50 metres