



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 19th 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°C-8°C over most parts of Punjab, Haryana-Chandigarh-Delhi and some parts of Uttar Pradesh, northwest Rajasthan, East Madhya Pradesh, north Chhattisgarh, Jharkhand and west Bihar.
- **Dense fog** observed in the morning hours in isolated pockets over **Punjab**.
- **Cold wave** observed in isolated pockets over **Punjab**.
- **Heavy to very heavy rainfall with extremely heavy falls** observed at isolated places over south Tamil Nadu and **very heavy rainfall** at isolated places over Lakshadweep.
- **Significant rainfall** (from 0830 hrs IST of yesterday to 0830 hrs IST of today) is given in Annexure- I

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

Weather Systems

- Yesterday's Cyclonic Circulation over Comorin area & neighbourhood now lies over Lakshadweep & neighbourhood and extends upto middle tropospheric levels.

Forecast & Warnings:

- Light to moderate rainfall at many places very likely over south Tamil Nadu and Kerala & Mahe on 19th and at most places over Lakshadweep on 19th December and decrease significantly thereafter.
- Isolated **heavy rainfall** likely over south Tamil Nadu and Lakshadweep on 19th December, 2023.
- 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 and Haryana during next 5 days, over northwest Uttar Pradesh during next 3 days and over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during morning hours of 20th December, 2023.

Cold Wave warning:

- **Cold wave conditions** very likely in isolated pockets over Punjab on 19th & 20th December, 2023.

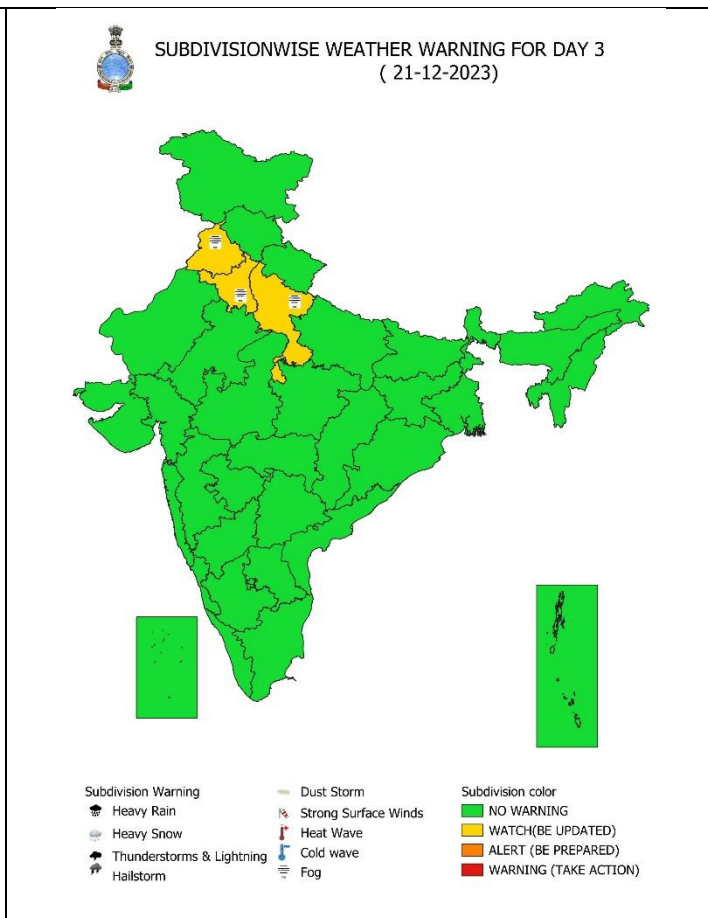
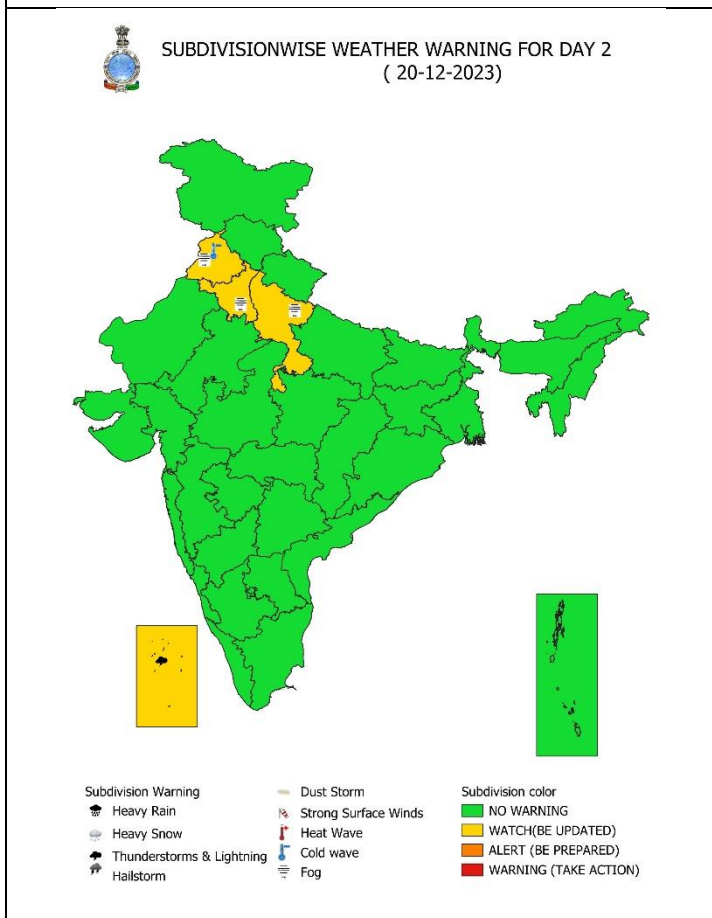
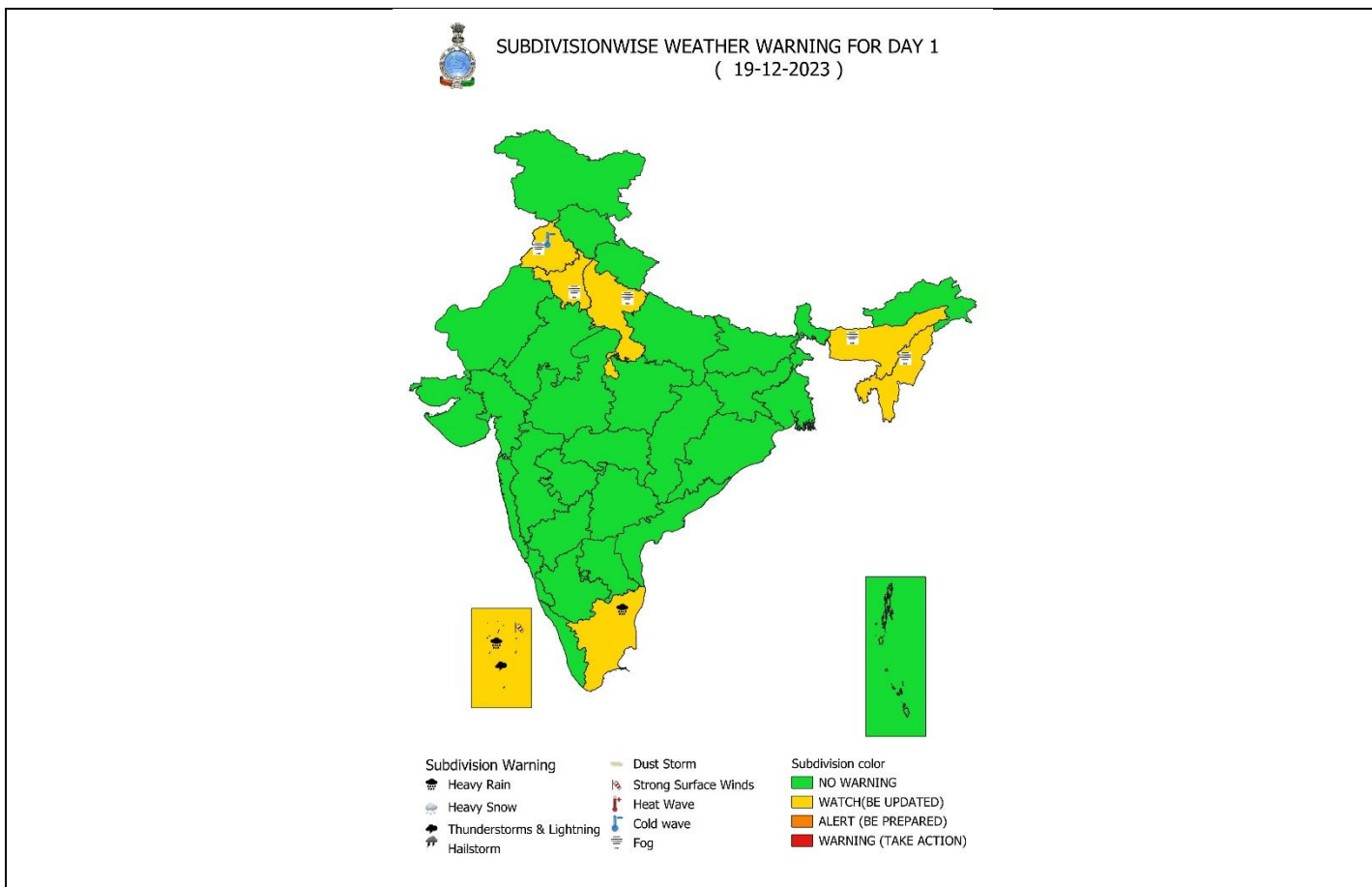
Minimum Temperatures Forecast:

- No significant change in Minimum Temperatures likely over northern parts of the country during next 4-5 days.

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

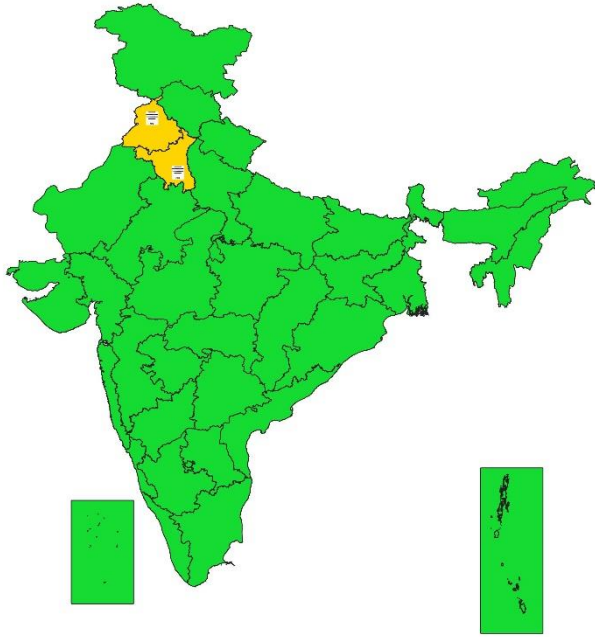
Annexure I

- **Significant rainfall** (from 0830 hrs of yesterday to 0830 hrs of today): **Tamil Nadu:** Tiruchendur (dist Toothukudi) 23, Kayalpattinam (dist Toothukudi) 21, Nalumukku (dist Tirunelveli) 19, Kakkachi (dist Tirunelveli) 18, Manjolai (dist Tirunelveli) 17, Oothu (dist Tirunelveli) 15, Moolaikaraipatti (dist Tirunelveli) 13, Ambasamudram (dist Tirunelveli) 12, Papanasam (dist Tirunelveli) 11, Kannadaian Anicut (dist Tirunelveli) 9, Manimutharu (dist Tirunelveli) 8.
- **Lakshadweep:** Minicoy (Lakshadweep UT) 15.





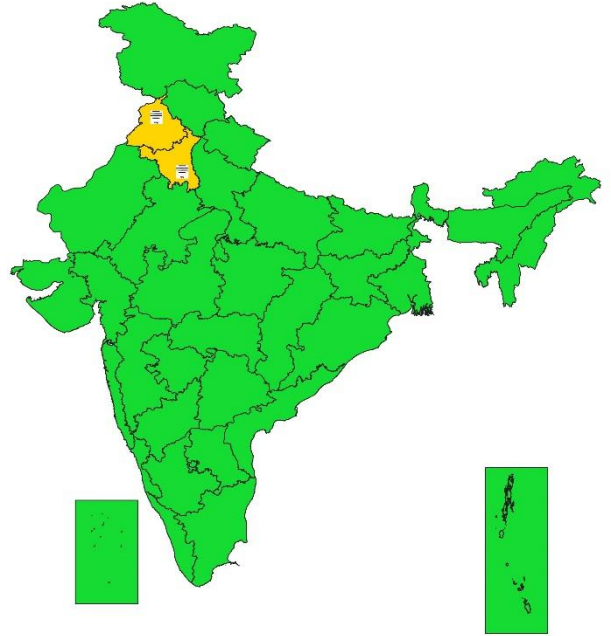
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(22-12-2023)**



- | | | |
|----------------------------|----------------------|--------------------------|
| 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
(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) |

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)

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

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

Cold Wave

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 $\leq 15^{\circ}\text{C}$.

Cold Day

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 $\leq -6.5^{\circ}\text{C}$.

Fog

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