



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



**Press Release**

**Date: 09<sup>th</sup> February, 2024**

**Time of Issue: 1230 hours IST**

**Subject: Light to moderate rainfall activity likely over Central India during 10<sup>th</sup>-13<sup>th</sup> and East India during 13<sup>th</sup>-15<sup>th</sup> February, 2024.**

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

- ❖ **Minimum temperatures:** Minimum temperatures are in the range of 5-10°C over most parts of Punjab, Haryana-Chandigarh-Delhi, plains of Uttarakhand, Rajasthan, Uttar Pradesh, Bihar, Jharkhand, north Chhattisgarh and Madhya Pradesh which are below normal over the region. **Today, the lowest minimum temperature of 2.7°C reported at Sikar (East Rajasthan).**
- ❖ **Cold wave** observed in isolated pockets of Punjab and Himachal Pradesh.

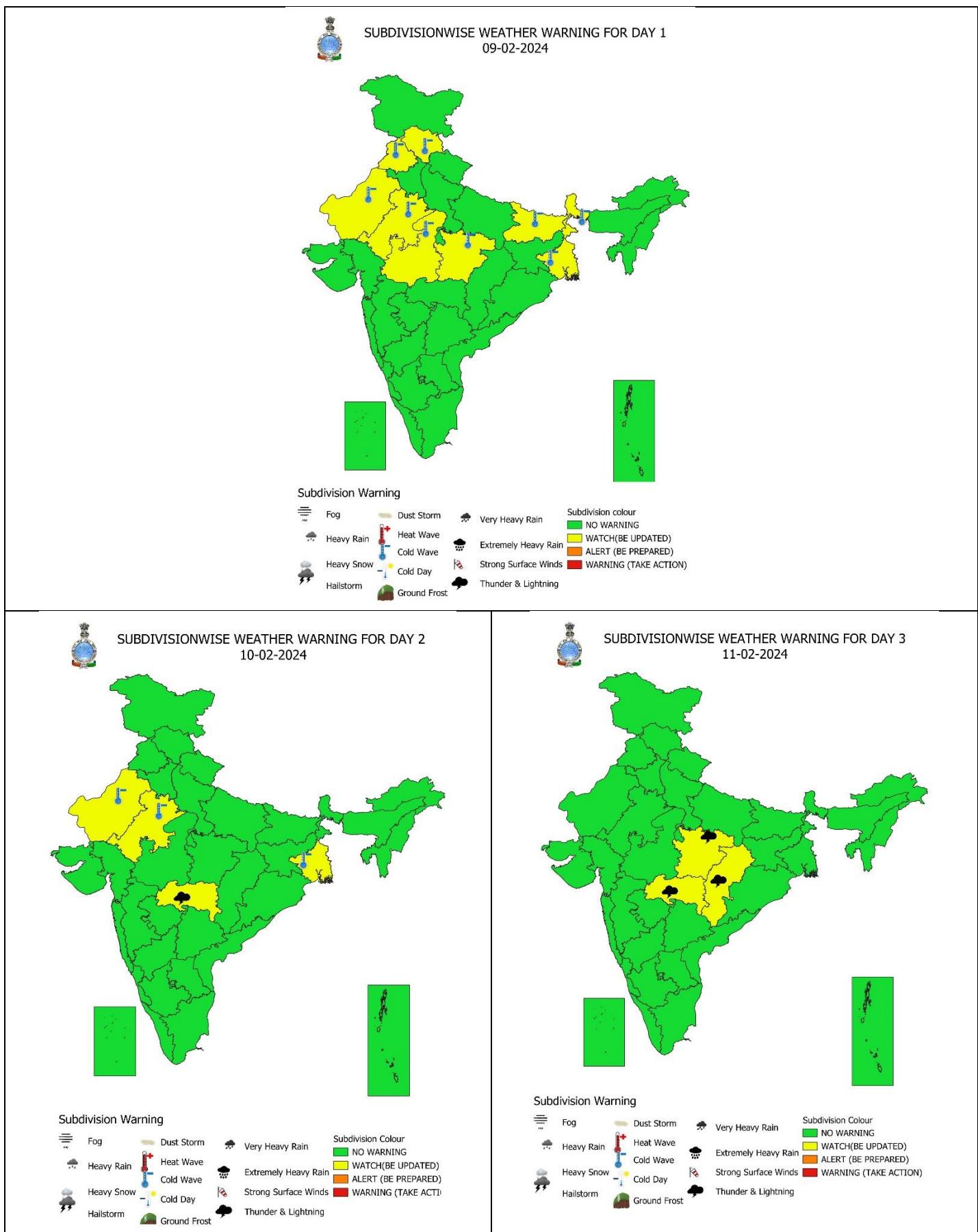
**Weather Systems and Forecast & Warnings during next 5 days:**

- ❖ Light isolated rainfall/snowfall very likely over Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim on 09<sup>th</sup> February, 2024.
- ❖ Under the influence of a likely formation of trough/cyclonic circulation over central parts of country; isolated to scattered light rainfall activity is likely over East Madhya Pradesh, Vidarbha, Chhattisgarh during 10<sup>th</sup>-14<sup>th</sup>, Madhya Maharashtra, Marathwada on 10<sup>th</sup> & 11<sup>th</sup>; Odisha on 11<sup>th</sup> & 12<sup>th</sup>; over Uttar Pradesh, Bihar, Jharkhand 12<sup>th</sup>-15<sup>th</sup> and Gangetic West Bengal during 13<sup>th</sup>-15<sup>th</sup> February, 2024.
- ❖ Isolated light thunderstorm accompanied with lightning very likely over East Madhya Pradesh, Vidarbha and Chhattisgarh during 10<sup>th</sup>-12<sup>th</sup> February, 2024.
- ❖ Light isolated rainfall very likely over Coastal Andhra Pradesh on 09<sup>th</sup>; Tamil Nadu on 12<sup>th</sup> & 13<sup>th</sup>; Telangana on 10<sup>th</sup> & 11<sup>th</sup> and Kerala on 14<sup>th</sup> & 15<sup>th</sup> February.

**Minimum Temperature Forecast and Cold Wave warning: (graphics in Annexure I)**

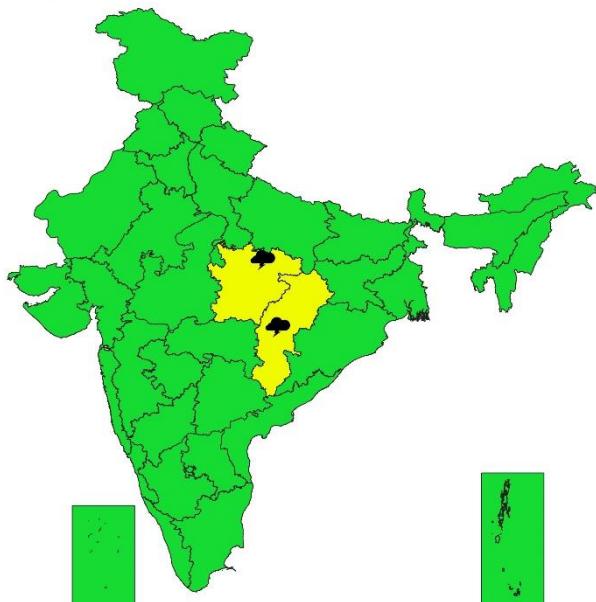
- ❖ No significant change in minimum temperatures very likely over many parts of Northwest, Central & East India during next 2 days and rise by 2-3°C thereafter.
- ❖ **Cold wave** conditions very likely in isolated pockets over Himachal Pradesh, Punjab, Madhya Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim on 09<sup>th</sup> and over north Rajasthan & Gangetic West Bengal on 09<sup>th</sup> & 10<sup>th</sup> February, 2024.

For more details kindly refer: [https://mausam.imd.gov.in/responsive/all\\_india\\_forcast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php)





SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
12-02-2024

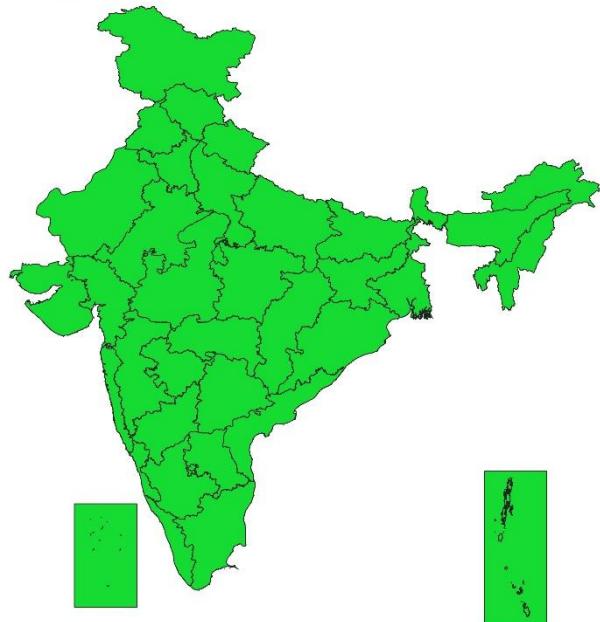


Subdivision Warning

	Fog		Dust Storm		Very Heavy Rain		Subdivision Colour
	Heavy Rain		Heat Wave		Extremely Heavy Rain		WATCH (BE UPDATED)
	Cold Wave		Cold Day		Strong Surface Winds		ALERT (BE PREPARED)
	Heavy Snow		Hailstorm		Ground Frost		WARNING (TAKE ACTION)
	Thunder & Lightning						



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5  
13-02-2024



Subdivision Warning

	Fog		Dust Storm		Very Heavy Rain		Subdivision Colour
	Heavy Rain		Heat Wave		Extremely Heavy Rain		WATCH (BE UPDATED)
	Cold Wave		Cold Day		Strong Surface Winds		ALERT (BE PREPARED)
	Heavy Snow		Hailstorm		Ground Frost		WARNING (TAKE ACTION)
	Thunder & Lightning						

## 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 Widespred (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		Flash Flood Risk
Terms	Probability of Occurrence (%)	
Unlikely	< 25	High Risk (Take Action)
Likely	25 - 50	Moderate Risk (Be Prepared)
Very Likely	50 - 75	
Most Likely	> 75	Low Risk (Be Updated)

### Definition of Cold wave, Cold Day and Fog Conditions:

 <b>Cold Wave</b>	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 $-4.5^{\circ}\text{C}$ to $-6.4^{\circ}\text{C}$ . 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 $\leq 2.0^{\circ}\text{C}$
 <b>Cold Day</b>	(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 $-4.5^{\circ}\text{C}$ to $-6.4^{\circ}\text{C}$ . Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$
 <b>Fog</b>	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