



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release  
Date: 02<sup>nd</sup> February, 2024  
Time of Issue: 1245 hours IST

**Subject: A fresh Western Disturbance is likely to affect Northwest India during 03<sup>rd</sup> to 05<sup>th</sup> February, 2024.**

**Realized weather during past 24 hours till 0830 hours IST of today: (Details given in Annexure I)**

- ❖ **Minimum temperatures:** Minimum temperatures are in the range of 7-10°C in many parts of Punjab, Haryana, Chandigarh, Delhi, plains of Uttarakhand & West Uttar Pradesh; in some parts of East Uttar Pradesh and 11-15°C in many parts of Rajasthan, Madhya Pradesh, Bihar, Jharkhand & West Bengal. These are normal to above normal over northern parts of the country. **Today, the lowest minimum temperature of 4.8 °C reported at Amritsar (Punjab).**
- ❖ **Fog conditions observed** (at 0530 & 0830 hours IST of today): **Dense to very Dense fog** in some parts of Punjab, Haryana, Chandigarh & Delhi; in isolated pockets of north Rajasthan; **dense fog** in isolated pockets of West Uttar Pradesh, north Madhya Pradesh, Bihar, Jharkhand, Tripura and Assam.
- ❖ Light to moderate rainfall/snowfall occurred **at most places over** Himachal Pradesh, Uttarakhand; **at many places over** Arunachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad. Light to moderate rainfall also occurred **at most places over** Gangetic West Bengal; **at a few places** over Punjab, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim and Jharkhand; **at isolated places** over Haryana-Chandigarh-Delhi, East Uttar Pradesh, Bihar, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Vidarbha, Rayalaseema, Tamil Nadu and Kerala & Mahe.
- ❖ **Hailstorm** observed at isolated places over Jammu, Punjab, Haryana, Chandigarh & northwest Uttar Pradesh.
- ❖ **Ground Frost** observed at isolated places over Uttarakhand.

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

- ❖ **A cyclonic circulation** lies over east Assam & neighbourhood in lower tropospheric levels. **A fresh Western Disturbance is likely to affect Northwest India from 03<sup>rd</sup> February, 2024.** Under the influence of these systems:
  - Light/moderate scattered to fairly widespread rainfall/snowfall very likely over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand during 03<sup>rd</sup> to 05<sup>th</sup> February, 2024.

- Light/moderate scattered to fairly widespread rainfall very likely over Punjab, Chandigarh, Haryana, Delhi & Rajasthan on 03<sup>rd</sup> & 04<sup>th</sup> and over Uttar Pradesh on 04<sup>th</sup> & 05<sup>th</sup> February, 2024.
- Isolated **heavy rainfall/snowfall** also likely over Jammu, Kashmir and Himachal Pradesh on 04<sup>th</sup> February.
- Isolated **hailstorm** also likely over Jammu, Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Chandigarh, Haryana, West Uttar Pradesh, East Rajasthan & north Madhya Pradesh on 04<sup>th</sup> and over West Rajasthan on 03<sup>rd</sup> & 04<sup>th</sup> February, 2024.
- Light/moderate scattered to fairly widespread rainfall/snowfall very likely over Arunachal Pradesh during 02<sup>nd</sup> to 06<sup>th</sup> and isolated to scattered rainfall over West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Mizoram, Manipur & Tripura on 02<sup>nd</sup> & 03<sup>rd</sup> February, 2024.
- Isolated **heavy rainfall/snowfall** also likely over Arunachal Pradesh on 02<sup>nd</sup> February.
- Isolated **hailstorm** likely over Arunachal Pradesh, Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim on 02<sup>nd</sup> February, 2024.

#### **Dense fog warning: (graphics in Annexure II)**

- ❖ **Dense to very dense fog** conditions very likely to prevail in morning hours in isolated pockets of Punjab, Haryana-Chandigarh-Delhi on 03<sup>rd</sup> February, 2024.
- ❖ **Dense fog** conditions very likely to prevail in morning hours in isolated pockets of Uttarakhand, north Madhya Pradesh, Bihar, Jharkhand and Odisha on 03<sup>rd</sup> February, 2024.

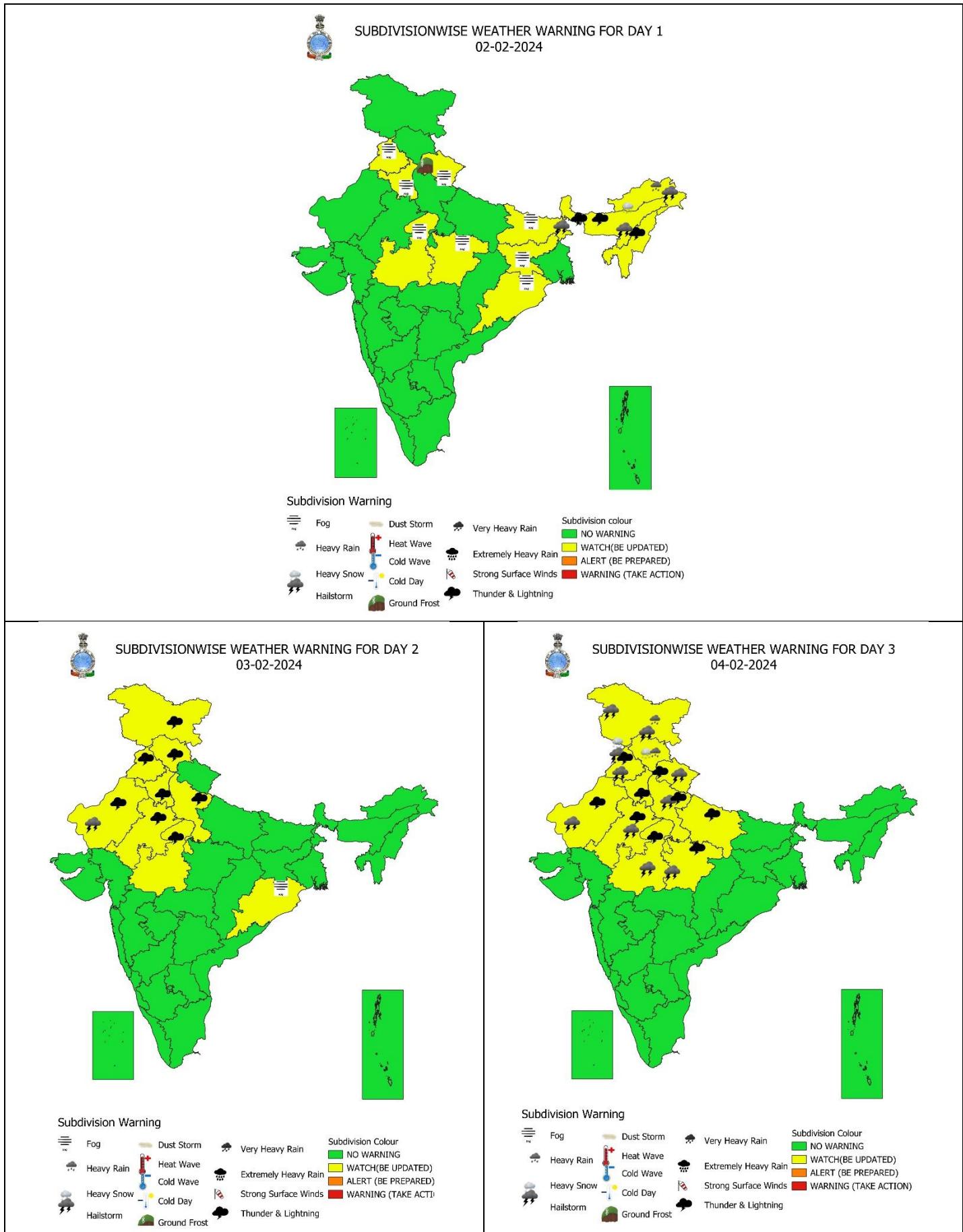
#### **Minimum Temperature Forecast:**

- ❖ No significant change in minimum temperatures likely over northwest & central India during next 5 days.
- ❖ Fall by 2-4°C in minimum temperatures likely over many parts of East India during 2 days and no significant change thereafter.

For more details kindly refer: <https://mausam.imd.gov.in/responsive/all india forcast bulletin.php>

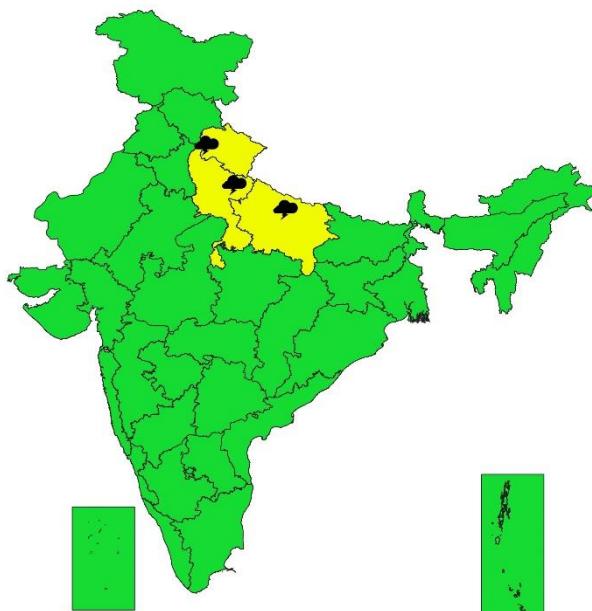
## Realized weather during past 24 hours till 0830 hours IST of today:

- ❖ Yesterday, **Maximum temperatures** were in the range of 15-20°C in most parts of Punjab, Haryana, Chandigarh, Delhi, plains of Uttarakhand & West Uttar Pradesh. These were below normal by 4-6°C over these areas.
- ❖ **Visibility recorded (at 0530 hours IST of today) (≤200 metres):** **Delhi:** Palam-25, Safdarjung- 50; **Haryana:** Hissar-25; **Rajasthan:** Ganganagar-200; **East Uttar Pradesh:** Gorakhpur-200; **Bihar:** Purnea-50; **Jharkhand:** Ranchi-200; **Odisha:** Jharsuguda, Chandbali- 200 each.
- ❖ **Visibility recorded (at 0830 hours IST of today) (≤200 metres):** **Punjab:** Bhatinda-0; **Delhi:** Palam-25, Safdarjung-50; **Uttarakhand:** Tehri-50; **Haryana:** Hissar-50, Karnal-200; **southwest Uttar Pradesh:** Jhansi-50; **northeast Madhya Pradesh:** Tikamgarh & Khajuraho-50 each, Nowgong-200; **Bihar:** Gaya-50; **Himachal Pradesh:** Mandi & Sundernagar-200 each; **northwest Rajasthan:** Ganganagar-200; **Gangetic West Bengal:** Bankura & Shanti Niketan-200 each.
- ❖ **Significant rainfall amount recorded** (in cm): **Himachal Pradesh:** Kangra-6, Shimla & Bilaspur-4 each, Mandi, Kullu, Hamirpur, Sirmaur, Solan & Chamba-3 each; **Sikkim:** North Sikkim-4; **Gangetic West Bengal:** Kakinada (dist West Midnapore)-3, Canning (Norh 24 Parganas)-2; **Haryana-Chandigarh-Delhi:** Chandigarh Iaf (dist Chandigarh) 4, Dadupur (dist Yamuna Nagar) 3, Naraingarh (dist Ambala) 3, Chandigarh (dist Chandigarh) 3, Chandigarh Aws (dist Chandigarh) 3, Tajewala (dist Yamuna Nagar) 2, Mayur Vihar (dist East Delhi) 2; **Punjab:** Ranjit Sagar Dam Site (dist Pathankot) 3, Ludhiana Irr (dist Ludhiana) 3, Phangota (dist Pathankot) 3, Ludhiana (dist Ludhiana) 3; **Jammu & Kashmir:** Batote, Reasi, Bandipore- 3 each; Kukernag, Baramula, Baderwah, Qazi Gund, Banihal- 2 each; **Uttarakhand:** Mussoorie & Uttarkashi- 3 each, Tehri, Srinagar, Karnprayag, Joshimath, Loharkhet- 2 each; **Kerala:** Thiruvananthapuram-3.





SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
05-02-2024

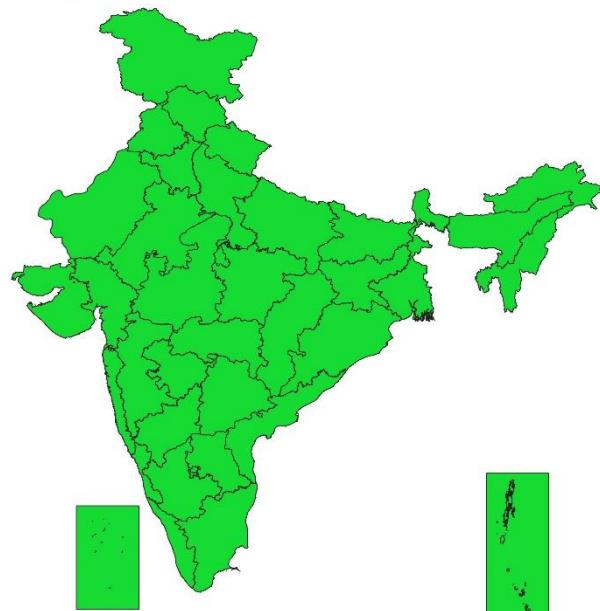


Subdivision Warning

	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		Ground Frost		Thunder & Lightning		WARNING (TAKE ACT!)
	Hailstorm						



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5  
06-02-2024



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		Ground Frost		Thunder & Lightning		WARNING (TAKE ACT!)
	Hailstorm						

## 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 (%)	High Risk (Take Action)	Moderate Risk (Be Prepared)
Unlikely	< 25		
Likely	25 - 50		
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