

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 02nd February, 2024

Time of Issue: 1245 hours IST

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

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

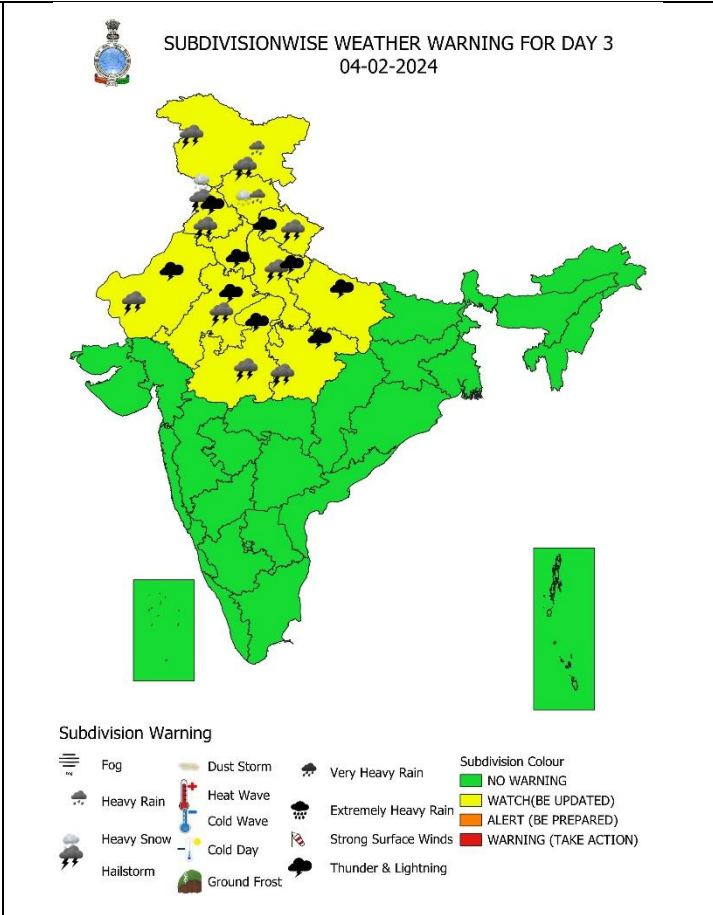
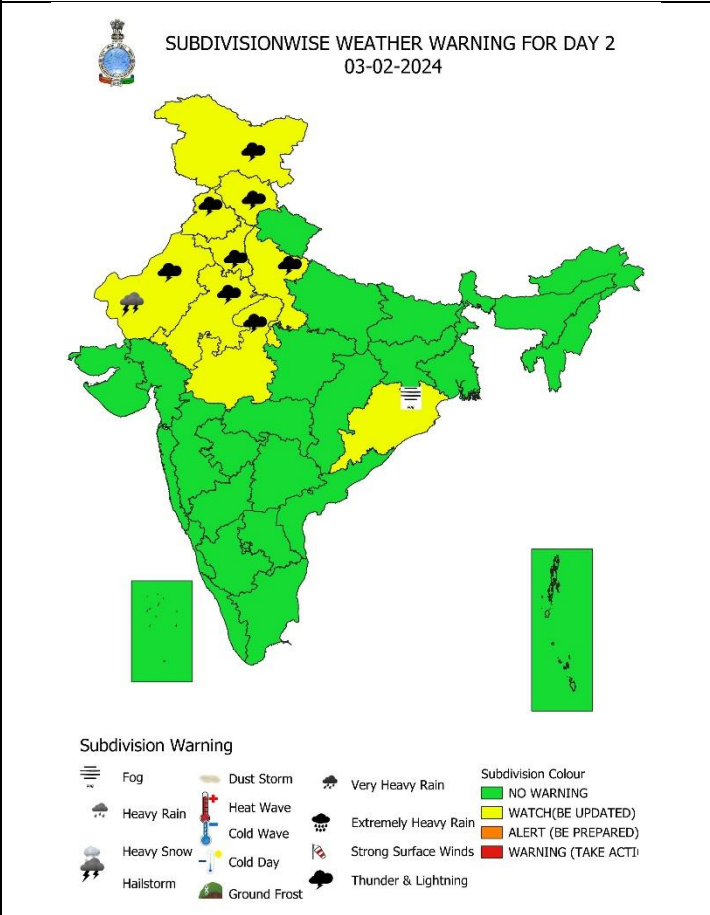
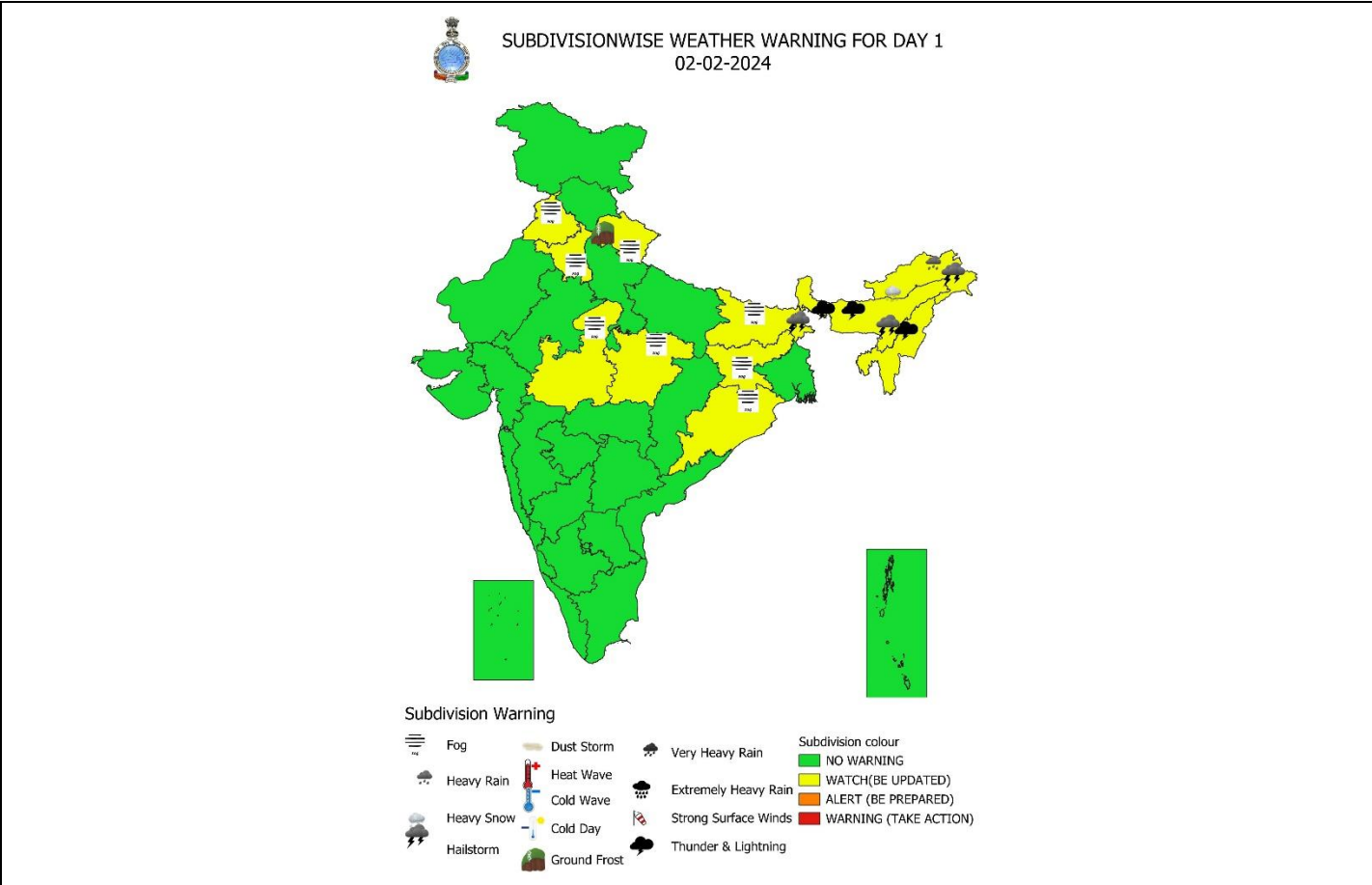
Minimum Temperature Forecast:

- ❖ 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_forecast_bulletin.php

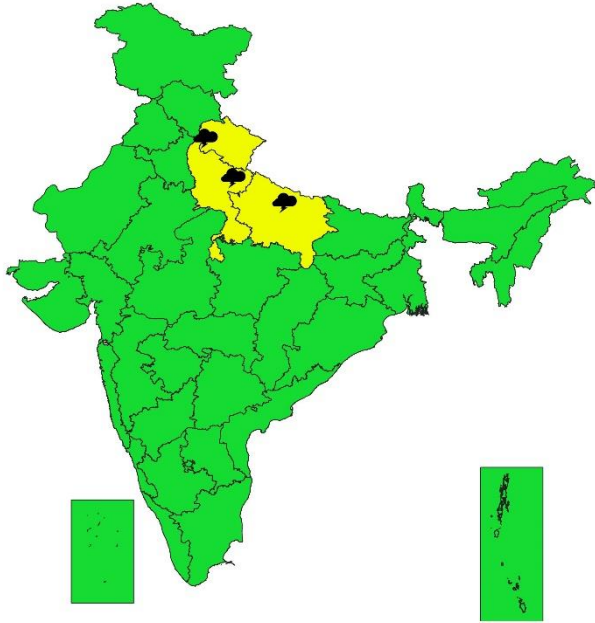
Realized weather during past 24 hours till 0830 hours IST of today:

- ❖ 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

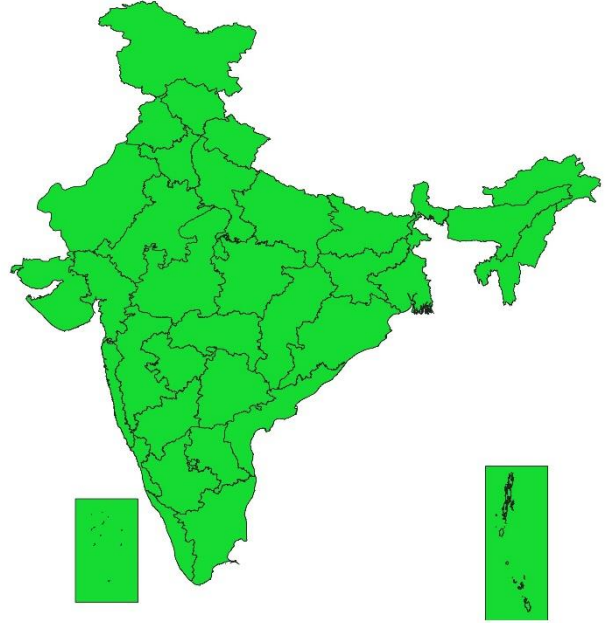


Subdivision Warning

- | | | | |
|------------|--------------|----------------------|---------------------------|
| Fog | Dust Storm | Very Heavy Rain | Subdivision Colour |
| Heavy Rain | Heat Wave | Extremely Heavy Rain | NO WARNING |
| Heavy Snow | Cold Wave | Strong Surface Winds | WATCH (BE UPDATED) |
| Hailstorm | Cold Day | Thunder & Lightning | ALERT (BE PREPARED) |
| | Ground Frost | | WARNING (TAKE ACTION) |



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 | NO WARNING |
| Heavy Snow | Cold Wave | Strong Surface Winds | WATCH (BE UPDATED) |
| Hailstorm | Cold Day | Thunder & Lightning | ALERT (BE PREPARED) |
| | Ground Frost | | 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		Flash Flood Risk	
Terms	Probability of Occurrence (%)		
Unlikely	< 25	 High Risk (Take Action)	
Likely	25 - 50	 Moderate Risk (Be Prepared)	
Very Likely	50 - 75	 Low Risk (Be Updated)	
Most Likely	> 75		

Definition of Cold wave, Cold Day and Fog Conditions:

 Cold Wave	<p>When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions.</p> <p>(a) Based on departure</p> <p>Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$</p> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <p>Cold Wave: When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$</p> <p>Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$</p> <p>(c) For Coastal Stations</p> <p>When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$</p>
 Cold Day	<p>When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions</p> <p>Based on departure</p> <p>Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$</p>
 Fog	<p>Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$</p> <p>Moderate Fog: When the visibility between 500-200 metres</p> <p>Dense Fog: when the visibility between 50-200 metres</p> <p>Very Dense Fog: when the visibility < 50 metres</p>