



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

**Press Release
Date: 21st January, 2023
Time of Issue: 1315 hours IST**

**Subject: (i) An intense Western Disturbance likely to affect Western Himalayan Region from 23rd and plains of northwest India during 24th to 27th January, 2023.
(ii) No cold wave conditions over north India during next one week.**

Weather observed during past 24 hours ending at 0830 hrs IST of today:

- ❖ **The minimum temperatures** are in the range of 4-7°C over many parts of Punjab, Haryana, Chandigarh & Delhi and 7-10°C over many parts of Rajasthan and Uttar Pradesh and in isolated pockets of Bihar and north Madhya Pradesh. **The Lowest Minimum Temperature of 3.5°C observed over Hissar (Haryana).**
- ❖ **Dense fog** occurred in isolated pockets over Himachal Pradesh, Odisha and Assam.
- ❖ **Light to moderate rainfall/snowfall** occurred at most places over Jammu & Kashmir, Himachal Pradesh and at isolated places over Uttarakhand. Light/moderate rainfall at many places over Punjab; at a few places over East Uttar Pradesh and Chandigarh,

Weather Systems and associated rainfall/snowfall

- ❖ The **Western Disturbance** lies as a cyclonic circulation over north Pakistan & adjoining Jammu & Kashmir in middle tropospheric level and an induced cyclonic circulation lies over Southwest Rajasthan & neighbourhood in lower tropospheric level. There is Jet stream winds of order upto 130 Knots along Latitude 28°N over Indian Region in upper tropospheric levels (between 100 to 250 hPa levels). Under the influence of these systems:
 - ✓ Light to moderate fairly widespread rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; light isolated rainfall/snowfall over Himachal Pradesh and Uttarakhand and light isolated rainfall over Punjab on 21st January, 2023.
- ❖ **Another active Western Disturbance now seen as a cyclonic circulation over Afghanistan & neighbourhood in middle & upper tropospheric with trough aloft along Long. 64°E to the north of Lat. 26°N. It is very likely to move slowly eastwards and with high moisture feeding from Arabian Sea into western Himalayan region at lower & middle tropospheric levels during 23rd to 27th January, 2023.**

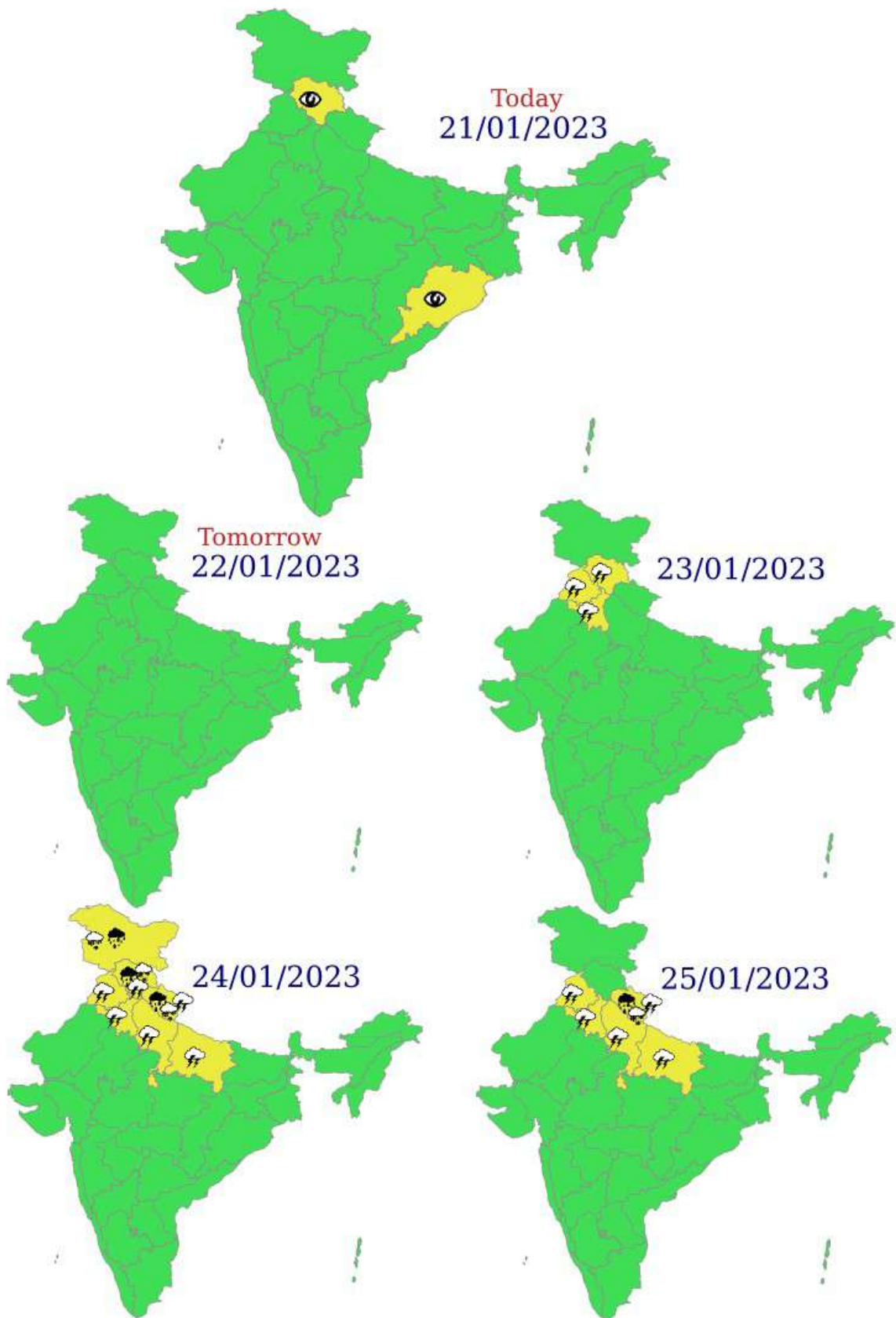
- ✓ Under its influence, light/moderate scattered to widespread rainfall/snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 23rd-27th with **its peak intensity during 24th to 26th January, 2023. Isolated heavy rainfall/snowfall** also likely over Jammu & Kashmir and Himachal Pradesh on 24th and over Uttarakhand on 24th & 25th January, 2023.
- ✓ Isolated **hailstorm** also likely over Himachal Pradesh on 23rd & 24th, Uttarakhand on 24th & 25th; over Punjab, Haryana & Chandigarh on 24th January, 2023.
- ✓ Light isolated rainfall likely over Punjab, Haryana & Chandigarh and Uttar Pradesh on 23rd and increase thereafter over the area with scattered to fairly widespread rainfall accompanied by thunderstorm activity during 24th-27th and over Delhi during 24th-27th January, 2023.
- ❖ Light isolated to scattered rainfall/thundershower is likely over north Rajasthan and Madhya Pradesh during 25th-27th January (**Annexure I**).

Minimum Temperature Forecast and Fog Warning:

- ❖ Rise in minimum temperatures by 2-3°C over Madhya Pradesh during next 24 hours and no significant change thereafter. Rise in minimum temperatures by 2-4°C over East India during next 4-5 days.
- ❖ **Dense fog** very likely in isolated pockets during night & morning hours over Himachal Pradesh and Odisha during next 24 hours.

For more details kindly refer:

https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php



Legends:

Heavy Rain: 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

Region wise classification of meteorological Sub-Divisions:

- 1) **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.
- 2) **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **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)

WARNING	
WARNING (TAKE ACTION)	
ALERT (BE PREPARED)	
WATCH (BE UPDATED)	
NO WARNING (NO ACTION)	

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

 Heavy Rain	 Heavy Snow	 Thunderstorm	 Dust Storm
 Strong Winds	 Visibility	 Cyclone	 Squall/ Hail
 Frost	 Cold Wave	 Heat Wave	 Sea State