



**Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department**

**Press Release
Date 25th December, 2020
Time of Issue: 1500 hrs IST**

Subject: Precipitation over Western Himalayan Region and adjoining plains of Northwest India during 27th-28th December and fresh Cold wave spell over the plains of Northwest and adjoining Central India during subsequent days.

Weather System:

A fresh Western Disturbance likely to affect Western Himalayan Region and adjoining plains of northwest India from 27th Dec.

Rainfall/Snowfall Forecast:

- i) Scattered to Fairly widespread rainfall/snowfall over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad;
- ii) Isolated to scattered rainfall/snowfall over Himachal Pradesh, Uttarakhand and
- iii) Isolated rain/thundershowers over Punjab and Haryana, Chandigarh during 27th-28th December, 2020.

Cold wave/Cold Day and Dense Fog Scenario of Today and Forecast:

Cold Wave: Today Cold Wave to severe cold wave conditions observed in isolated pockets over Punjab and cold wave conditions in isolated pockets over Haryana. **It is likely to abate from 27 Dec due to a likely impact of Western Disturbances on the same date. (Refer forecast table)**

Cold Day: Today No cold day conditions observed over any areas of the country.

(For actual observed Maximum, minimum Temperature, their 24h-tendencies and departure from normal for major cities of already cold spell affected areas, refer Table 1 and 2)

Dense Fog observed (at 0530 & 0830 hours IST of today): Dense to very dense fog in a few pockets over Punjab and at isolated places over Haryana. Visibility recorded (at 0830 hours IST of today) (500 meters or less): Amritsar, Ludhiana and Patiala-25 m; Gwalior, Delhi Ridge and Nowgong-200 m each; Bhiwani, Delhi Palam, Aligarh, Gwalior, Kota, Lucknow, Fursatganj, Varanasi, Patna, Jamshedpur, Panagarh, Silchar, Agartala and Imphal-500 m each. **Dense fog conditions over Punjab and Haryana likely to improve further from 27 Dec 2020 under impact of WD.**

Temperature Forecast:

- ◆ Gradual rise by 2-3°C in minimum temperatures during next 3 days (25th-27th) and then fall by 3-

5°C in minimum temperatures over Northwest India during subsequent 3 days (28th-30th) .

◆ No significant change in maximum temperatures during next 3 days (25th-27th) and then fall by 3-5°C in maximum temperatures over Northwest India during subsequent 3 days (28th-30th).

◆ Gradual rise in minimum temperatures by 2-3°C over West & Central India during next 2-3 days and fall by 2-3°C during subsequent 3 days.

◆ No significant change in minimum temperatures over remaining parts of the country during next 4-5 days.

Cold Wave and Ground frost Warning:

◆ After the passage of the WD, Under the influence of strengthening of cold & dry northwesterly/northerly winds from night of 28 Dec :

i) **Cold Wave to Severe Cold Wave conditions** are likely in isolated pockets over Punjab and Haryana, Chandigarh & Delhi and **Cold Wave conditions** in isolated pockets over Uttar Pradesh, north Rajasthan and north Madhya Pradesh from 28th-29th December, 2020.

ii) **Ground Frost conditions** are likely in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, Uttarakhand, Himachal Pradesh and north Rajasthan also from 28th-29th December, 2020.

Fog Warning:

◆ Fresh spell of Dense to very dense fog in isolated pockets very likely over Punjab and isolated Dense fog over Haryana and Delhi in the morning hours from 29th December, 2020.

Detailed forecast & warnings are as follow:

Sub-Divisions	25 Dec. 2020*	26 Dec. 2020*	27 Dec. 2020*	28 Dec. 2020*	29 Dec. 2020*
Jammu, Kashmir, Ladakh, Baltistan & Muzaffarabad	Rain/Snow at isolated places	Rain/Snow at isolated places	Rain/Snow at a few places	Rain/Snow at many places	Rain/Snow at isolated places
Uttarakhand	Dry	Dry	Rain/Snow at isolated places	Rain/Snow at isolated places	Dry
Himachal Pradesh	Dry	Rain/Snow at isolated places	Rain/Snow at isolated places	Rain/Snow at a few places	Dry
Punjab	Cold Wave to Severe Cold Wave Conditions at isolated places and Dense to very Dense fog in isolated pockets	Cold Wave Conditions at isolated places	Dry	Cold Wave to Severe Cold Wave Conditions at isolated places	Cold Wave to Severe Cold Wave Conditions at isolated places
Haryana, Chandigarh & Delhi	Cold Wave Conditions at isolated places and Dense fog in isolated pockets	Dry	Dry	Cold Wave to Severe Cold Wave Conditions at isolated places	Cold Wave to Severe Cold Wave Conditions at isolated places
North Rajasthan	Dry	Dry	Dry	Dry	Cold Wave Conditions at isolated places

West Uttar Pradesh	Dry	Dry	Dry	Cold Wave Conditions at isolated places	Cold Wave Conditions at isolated places
East Uttar Pradesh	Dry	Dry	Dry	Dry	Cold Wave Conditions at isolated places

Impact expected and action suggested due to Cold Wave/Severe cold wave conditions over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and north Rajasthan from 28th December, 2020.

Impact expected:

- An increased likelihood of various illnesses like flu, running/ stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold.
- Do not ignore shivering. It is the first sign that the body is losing heat. Get Indoors.
- Frostbite can occur due to prolonged exposure to cold. The skin turns pale, hard and numb and eventually black blisters appear on exposed body parts such as fingers, toes, nose and or earlobes. Severe frostbite needs immediate medical attention and treatment.
- Impact on agriculture, water supply, transport and power sector at some places.

Action suggested:

- Moisturize your skin regularly with oil/cream.
- Eat vitamin-C rich fruits & vegetable and drink sufficient fluids preferably warm fluids to maintain adequate immunity.
- Avoid or limit outdoor activities.
- Keep dry, if wet, change cloths immediately to prevent loss of body heat. Wear insulated/waterproof shoes.
- Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.
- If the affected skin area turns black, immediately consult a doctor.
- Maintain ventilation while using Heaters to avoid inhaling toxic fumes.
- Take safety measures while using electrical and gas heating devices.



Note: * Warning till 0830 IST of next day.

Legends: Yellow: Be updated, Orange- Be prepared; Red- Take action, Green: No warning

A. Conditions for Cold Wave:

When minimum temperature of a station is 10°C or less for plains and 0°C or less for Hilly regions and fulfils any of the following criteria:

I) Based on Departure of Minimum Temperatures from Normal

Cold Wave: When the Departure is -4.5°C to -6.4°C

Severe Cold Wave: When the Departure is > -6.4°C

II) Based on Actual Minimum Temperature (For plain stations only)

Cold Wave: When minimum temperature is $\leq 4^{\circ}\text{C}$

Severe Cold Wave: When minimum temperature is $\leq 2^{\circ}\text{C}$

III) For coastal stations:

When the Departure of Minimum Temperature is -4.5°C or less and Minimum Temperature is 15°C or less.

B. Conditions for Cold Day:

When minimum temperature is 10°C or less for plains and 0°C or less for Hilly regions and fulfils following criteria:

Cold day: Maximum Temperature Departure is -4.5°C to -6.4°C

Severe Cold day: Maximum Temperature Departure is < -6.4°C

Table 1: Maximum Temp., Tendency and Departure over the Plains of North India Dated 24.12.2020

Station	Maximum Temperatures	24 hours Tendency	Departures
Delhi			
Palam	20.3	-0.5	-1.2
Safdarjung	23.1	-0.2	1.5
Ridge	22.4	-0.6	-
Ayanagar	22.8	-0.4	-
Haryana & Chandigarh			
Chandigarh	21.5	0.0	0.5
Ambala	21.1	-0.3	0.6
Karnal	21.0	1.0	0.3
Hissar	21.5	-0.1	-0.3
Narnaul	24.2	-	1.7
Rohtak	18.8	1.0	-3.3
Punjab			
Amritsar	17.0	-2.8	-3.0
Ludhiana	21.4	0.2	1.3
Patiala	22.0	-0.2	1.9
West Rajasthan			
Ganganagar	23.9	-1.1	2.6
Churu	24.5	-1.2	1.1
Bikaner	25.2	-0.5	1.0
Jaisalmer	25.3	-0.7	1.6
Barmer	27.4	-1.3	1.0
East Rajasthan			
Jaipur	23.4	-1.5	-0.1
Ajmer	24.4	-1.4	-0.5
Kota	24.5	0.2	0.1
Bhilwara	25.0	-0.6	0.6
Udaipur	25.2	-0.4	0.3
Chittorgarh	26.6	-1.0	1.1
West Uttar Pradesh			

Meerut	23.1	0.1	0.6
Bareilly	20.7	-0.6	-1.5
Shahjahanpur	23.0	-0.5	0.7
Jhansi	24.5	-1.6	1.0
East Uttar Pradesh			
Bahraich	23.2	-0.2	-0.7
Gorakhpur	23.4	0.1	-1.0
Lucknow	23.5	-0.8	0.0
Varanasi	24.4	0	-
Banda	23.4	-0.4	-0.7
West Madhya Pradesh			
Guna	26.6	-0.1	1.3
Rajgarh	25.2	-0.3	-1.6
Dhar	26.8	-0.9	-0.8
Khandwa	29.5	-1.0	0.0
Indore	28.4	0.4	1.3
Bihar			
Chapra	20.1	-0.1	-3.3
Patna	25.2	1.6	1.5
Bhagalpur	24.5	1.5	-0.8
Purnea	24.0	2.3	-0.9
Gaya	24.3	1.0	0.5
Muzaffarpur	22.0	0.8	-1.7

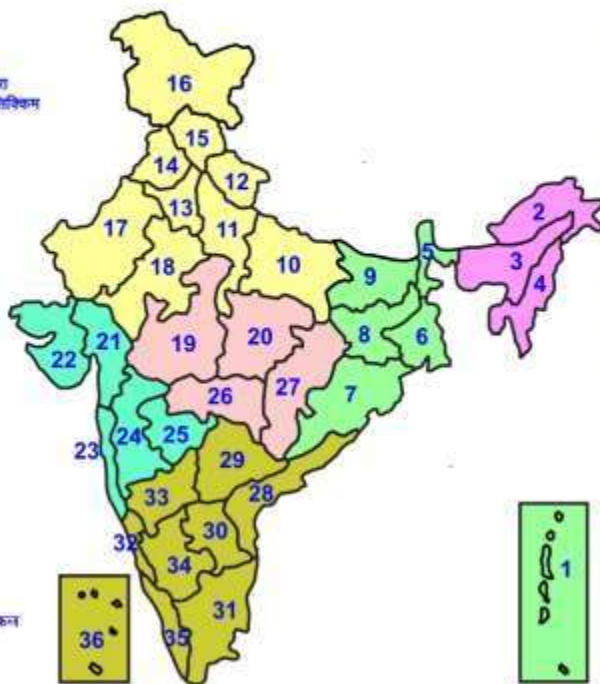
Table 2: Minimum Temperatures, their Departure and 24 hours Tendency over the Plains of North India
Dated: 25.12.2020

Station	Minimum Temperature	Departure from Normal	24 Hour Tendency
Delhi			
Palam	6.9	-0.9	-0.6
Safdarjung	4.6	-3.4	0.1
Lodhi Road	4.8	-2.0	-
Ridge	7.9	0	-0.7
Ayanagar	7.4	-1.0	-1.6
Haryana & Chandigarh			
Chandigarh	4.4	-1.7	-0.3
Ambala	6.0	-0.8	+0.3
Karnal	-	-	-
Hissar	2.5	-4.5	-0.8
Narnaul	3.7	-2.4	-0.9
Rohtak	4.2	-2.3	-0.4
Punjab			
Amritsar	2.4	-1.7	-1.7
Ludhiana	1.6	-5.7	-0.5
Patiala	4.0	-3.1	+1.6
West Rajasthan			
Ganganagar	5.8	-0.2	-2.0
Churu	3.7	-1.1	-1.1
Bikaner	12.6	5.4	-0.2
Jaisalmer	11.5	2.9	0.5
Barmer	12.4	1.2	0.3
East Rajasthan			
Jaipur	9.3	0.6	-0.1
Ajmer	11.0	2.4	0.5
Kota	8.1	-3.8	-1.4
Bhilwara	7.0	-1.1	0.5
Udaipur	8.0	0.5	-
Chittorgarh			

West Uttar Pradesh			
Meerut	6.4	-1.4	0.1
Bareilly	4.9	-4.4	-0.6
Shahjahanpur	9.0	1.6	-0.5
Jhansi	7.5	-0.4	-1.6
East Uttar Pradesh			
Bahraich	8.2	-1.7	0.2
Gorakhpur	8.2	-1.8	-1.0
Lucknow	7.5	-0.7	0
Varanasi	9.1	-0.6	0.8
Banda	5.2	-4.2	0.2
West Madhya Pradesh			
Guna	9.0	0.6	-1.1
Rajgarh	11.0	1.6	2.0
Dhar	9.4	-1.3	-0.2
Khandwa	10.4	-0.6	0.4
Indore	12.0	+1.7	1.7
Bihar			
Chapra	-	-	-
Patna	9.4	-0.8	1.2
Bhagalpur	11.2	-1.8	-0.9
Purnea	10.0	1.2	-0.9
Gaya	6.3	-2.0	-0.7

LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा, चंडीगढ़, एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात
- 22 मराठवाड़ा
- 23 मध्य प्रदेश
- 24 मध्य महाराष्ट्र
- 25 मध्य महाराष्ट्र
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 आंध्र प्रदेश
- 31 तमिलनाडु, पुदुचेरी एवं केरल
- 32 तटीय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवं माहे
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Orissa
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathwada
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. 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

Kindly download **MAUSAM APP** for location specific forecast & warning, **MEGHDOOT APP** for Agromet advisory and **DAMINI APP** for Lightning Warning & visit state MC/RMC websites for district wise warning.