



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 23<sup>rd</sup> December, 2025

Time of Issue: 1310 hours IST

**Subject: (i) Dense to very dense fog conditions during night/morning hours very likely over Uttar Pradesh, Haryana, Chandigarh and Punjab till 29th; over Uttarakhand till 28th; over Madhya Pradesh till 25th with Dense fog conditions during night/morning hours very likely at some pockets over Bihar till 25th; in isolated pockets of Jammu division, Himachal Pradesh and Odisha till 28th; Sub-Himalayan West Bengal and Jharkhand till 25th; Rajasthan and Chhattisgarh till 24th, northeast India till 26th; over Bihar during 26th - 28th December.**

**(ii) Cold day conditions very likely in isolated pockets of East Uttar Pradesh and East Madhya Pradesh on 23rd, over Bihar during 23rd - 28th December.**

**Realised weather during past 24 hours ending at 0830 hours IST of today, the 23<sup>rd</sup> December, 2025:**

- ❖ **Dense to very Dense fog (visibility <50 m)** prevailed in some/many parts of Uttar Pradesh; in isolated pockets of Uttarakhand, Punjab, Haryana Chandigarh & Delhi and West Madhya Pradesh; **dense fog (visibility 50-199 m):** reported in isolated pockets of East Madhya Pradesh, Bihar, Jharkhand, Odisha and Sub-Himalayan West Bengal & Sikkim.
- ❖ **Visibility in meter reported ( $\leq 200$  m): Sub-Himalayan West Bengal & Sikkim:** Cooch Behar, Bagdogra (100m); **Odisha:** Rourkela (50m); Bihar Gaya (50m); Patna (100m); Bhagalpur (50-199m); **Himachal Pradesh:** Bilaspur (30m); **Punjab:** Amritsar(0m), Faridkot (10m); **Haryana:** Hisar(0m) Ambala (10m); **West Uttar Pradesh:** Hindon(IAF), Bareilly(IAF), Saraswat(IAF) & Agra(IAF)-00 Each, Agara-20, Aligarh, Bareilly-30, Shajahanpur-40, Muzaffarnagar, Najibabad-50, Meerut, Etawah, Hamirpur-100; **East Uttar Pradesh:** Kushinagar(AP), Gorakhpur(IAF), Varanasi (Ap), Prayagraj(IAF) & Kanpur(IAF)-00 Each, Kanpur(City)-10, Bahraich, Fatehgarh, Prayagraj-20 Each, Fursatganj-30, Gorakhpur, Ballia, Churk-40 Each, Ams Ayodhya, Lucknow(AP), Hardoi, Varanasi Bhu, Ghazipur, Basti, Azamgarh-50 Each, Sultanpur-60, L Kheri, Banda-100; **West Madhya Pradesh:** Gwalior (30m); **East Madhya Pradesh:** Rewa, Satna, Khajuraho, Damoh (100m); **Jharkhand:** Ranchi (50m); **Tripura:** Agartala (50m); **Sub-Himalayan West Bengal & Sikkim:** Coochbehar, Bagdogra (100m)
- ❖ **Cold day to severe cold day conditions** observed at isolated places over East Uttar Pradesh, Jharkhand and Bihar; **cold day conditions** in isolated pockets of Sub-Himalayan West Bengal & Sikkim, Haryana, West Uttar Pradesh and Madhya Pradesh.

**Weather Systems, Forecast and Warnings (refer to ANNEXURE I & II):**

- ❖ The **Western Disturbance** as a trough in middle and upper tropospheric levels with its axis in middle tropospheric level roughly along Long. 70°E to the north of Lat. 32°N persists.
- ❖ **Subtropical westerly Jet Stream** with core winds of the order of 135 knots at 12.6 km above mean sea level continues to prevail over Northwest India.
- ❖ A **cyclonic circulation** lies over south Tamil Nadu and neighbourhood in lower tropospheric level.
- ❖ A **fresh feeble Western Disturbance** is likely to affect Western Himalayan Region from 27th December, 2025.

**Under the influence of these systems, the following weather is likely:**

- ❖ Isolated light/moderate rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 23<sup>rd</sup> and during 27<sup>th</sup> - 29<sup>th</sup> and over Himachal Pradesh & Uttarakhand on 28<sup>th</sup> & 29<sup>th</sup> December.
- ❖ **Isolated Thunderstorm and lightning** likely to prevail over Andaman & Nicobar Islands on 27<sup>th</sup> & 28<sup>th</sup> December.

### Temperature Conditions during past 24 hours till 0830 hours IST of today:

- ❖ **Minimum temperatures** were **below 5°C** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and at a few places over Himachal Pradesh; in the **range of 5°-10°C** at many places Uttar Pradesh, Madhya Pradesh, Punjab and Madhya Maharashtra; at a few places over Uttarakhand, Haryana Chandigarh & Delhi, north Rajasthan, Odisha, Assam & Meghalaya and Tamil Nadu, Puducherry & Karaikal; at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Chhattisgarh, Telangana, North Interior Karnataka.
- ❖ **Minimum Temperatures departures** were **markedly below normal (<-5.0°C)** at a isolated places over Interior Karnataka; **appreciably below normal (-5.0°C to -3.1°C)** at few places over Telangana; at isolated places over West Madhya Pradesh, Madhya Maharashtra, Odisha, Tamil Nadu, Puducherry & Karaikal and **below normal (-1.6°C to -3.0°C)** at a few places over Kerala & Mahe; at isolated places over East Madhya Pradesh, Chhattisgarh, Bihar, Gangetic West Bengal, Marathwada and Konkan & Goa. (refer to ANNEXURE IV)
- ❖ **Minimum Temperatures show rising tendency during past 24 hours by 1-2°C** over some parts of Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Marathwada and Interior Karnataka; **falling tendency by 1-2°C** at a few places over Himachal Pradesh, Rajasthan, West Madhya Pradesh and Tamil Nadu, Puducherry. **The lowest minimum temperature of 5.0 was observed over Gurdaspur (Punjab) over the plains of India.**

### Forecast of minimum temperatures:

- ❖ Gradual fall in minimum temperature by 2-3°C very likely over Northwest, Maharashtra and Central India for next 2 days and no significant change thereafter for subsequent 5 days.
- ❖ No significant change in minimum temperature very likely over East India for next 24 hours and gradual fall in minimum temperature by 2-3°C for subsequent 2 days and no significant change thereafter.
- ❖ Gradual fall in minimum temperature by 2-3°C very likely over Gujarat state for next 3 days and no significant change thereafter for subsequent 5 days.
- ❖ No significant change in minimum temperature over rest parts of the country during next 7 days.

### Dense Fog & Cold wave Warnings:

- ❖ **Dense to very dense fog conditions** during night/morning hours very likely over isolated / few places over Uttar Pradesh, Haryana, Chandigarh and Punjab till 29<sup>th</sup>; over Uttarakhand till 28<sup>th</sup>; over Madhya Pradesh till 25<sup>th</sup> with **Dense fog conditions** during night/morning hours very likely at some pockets over Bihar till 25<sup>th</sup>; in isolated pockets of Jammu division, Himachal Pradesh and Odisha till 28<sup>th</sup>; Sub-Himalayan West Bengal and Jharkhand till 25<sup>th</sup>; Rajasthan and Chhattisgarh till 24<sup>th</sup>, northeast India till 26<sup>th</sup>; over Bihar during 26<sup>th</sup> -28<sup>th</sup> December.
- ❖ **Cold day conditions** very likely in isolated pockets of East Uttar Pradesh and East Madhya Pradesh on 23<sup>rd</sup>, over Bihar during 23<sup>rd</sup> -28<sup>th</sup> December.

### Fisherman Warning:

Fishermen are advised not to venture into the following areas during 23<sup>rd</sup> December to 28<sup>th</sup> December:

- ❖ Bay of Bengal: Over Gulf of Mannar & adjoining, some parts of Comorin area during 23<sup>rd</sup> to 25<sup>th</sup> December; along and off Somalia coast, adjoining sea areas during 23<sup>rd</sup> to 25<sup>th</sup> December.

### ii) Weather conditions and forecast over Delhi/NCR during 23<sup>rd</sup> -26<sup>th</sup> December, 2025 (ANNEXURE III)

For more details, kindly refer National Weather Bulletin:

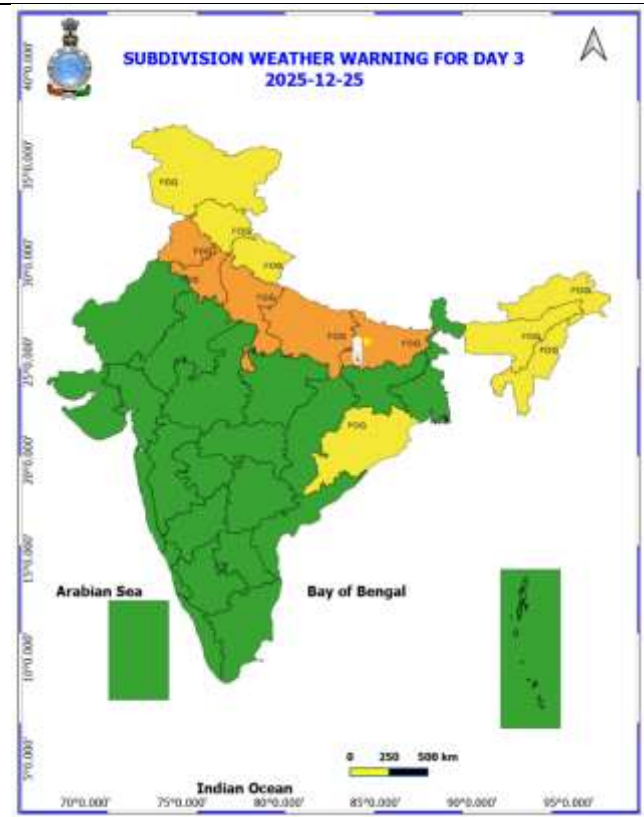
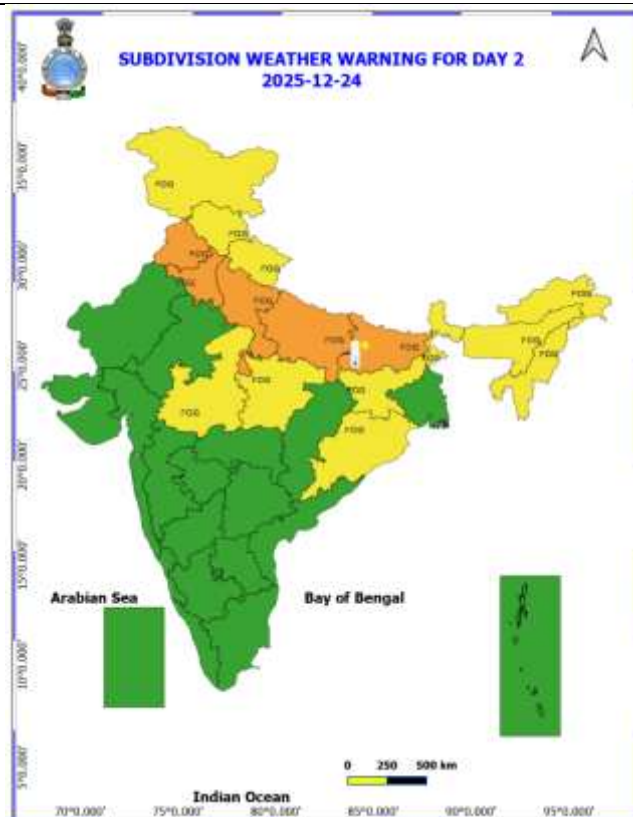
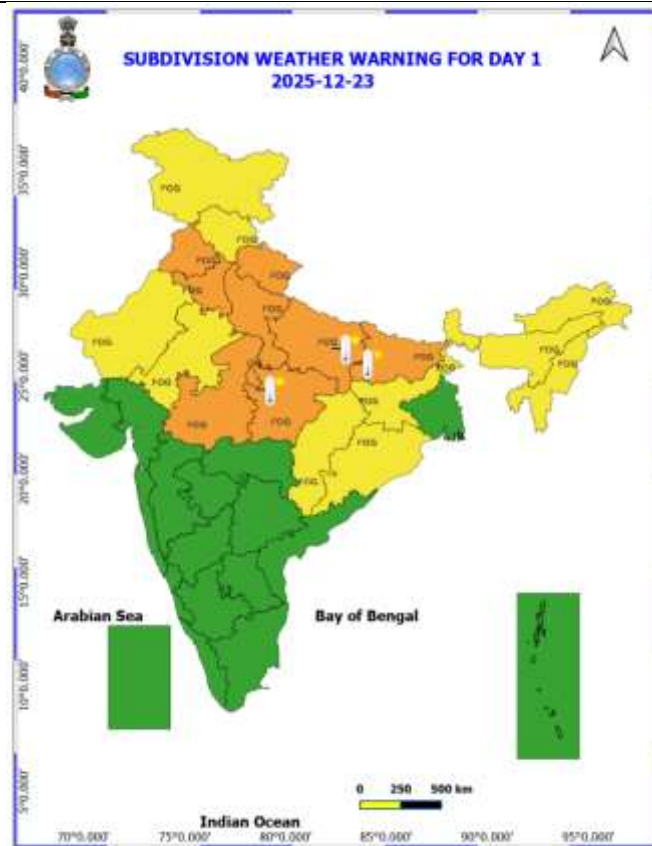
[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

For District wise warnings refer: <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

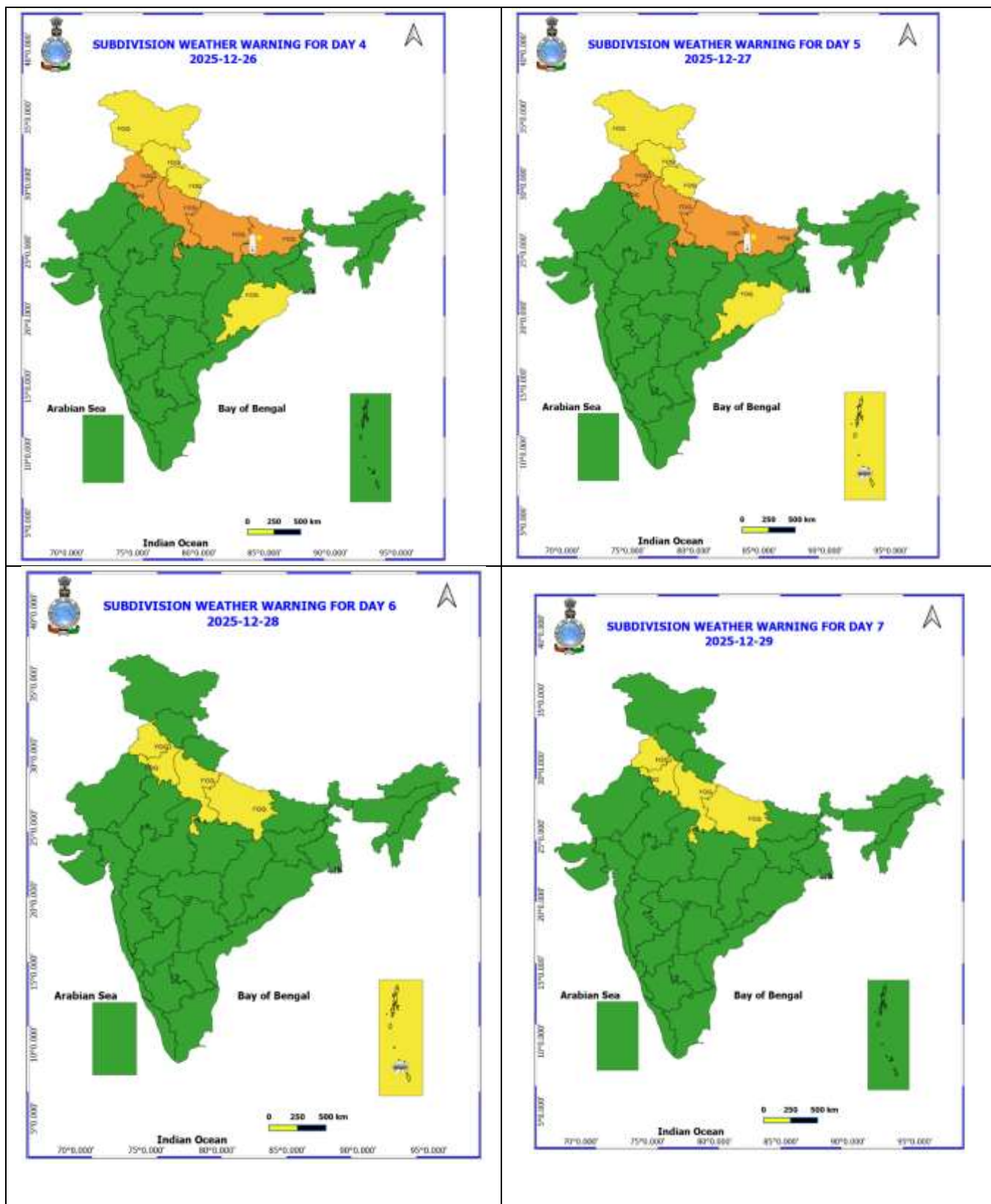
For Fishermen warning refer <https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php>

Table-1								
7 Days Rainfall Forecast								
S.No.	Subdivision	23- Dec	24- Dec	25- Dec	26- Dec	27- Dec	28- Dec	29- Dec
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	ISOL	ISOL	DRY	DRY	ISOL	ISOL	ISOL
3	ASSAM & MEHGHALAYA	DRY	ISOL	DRY	DRY	DRY	DRY	DRY
4	NAGALAND, MANIPUR, MIZORAM AND TRIPURA	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
5	SUB HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY	DRY	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
13	HARYANA, CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
16	JAMMU AND KASHMIR AND LADAKH	ISOL	DRY	DRY	DRY	ISOL	ISOL	ISOL
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21	GUJRAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COSTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
35	KERALA AND MAHE	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
36	LAKSHADWEEP	DRY	DRY	DRY	DRY	DRY	DRY	DRY

- As the lead period increases forecast accuracy decrease.







- Action may be taken based on ORANGE AND REDCOLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

Detailed districtwise MultiHazard weather warning for next five days available at <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

## Weather forecast over Delhi/NCR during 23<sup>rd</sup> December to 26<sup>th</sup> December 2025

### Past Weather:

There has been a 1-2°C fall in the minimum temperature and a 2-5°C rise in the maximum temperature over the past 24 hours in Delhi. The maximum and minimum temperatures over Delhi were around 19°C to 22°C and 08°C to 10°C, respectively. The minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places and above normal (1.6°C to 3.0°C) at isolated places and normal (-1.5°C to 1.5°C) at many places over Delhi. The maximum temperatures were above normal (1.6°C to 3.0°C) at isolated places and normal (-1.5°C to 1.5°C) over most places of Delhi. Palam and Safdarjung reported the lowest visibility of 50m in dense fog at 0730 IST on 23.12.2025, which thereafter improved to 100m from 0830 Hrs IST onwards. Moderate to dense fog was reported at Palam and Safdarjung during the past 24 hours. Mainly clear sky conditions with predominant surface wind from the southwest direction with a wind speed up to 06 kmph prevailed during the past 24 hours. Mainly clear sky with moderate to dense fog and wind reaching up to 10 kmph from the southwest direction prevailed over the region in the forenoon today.

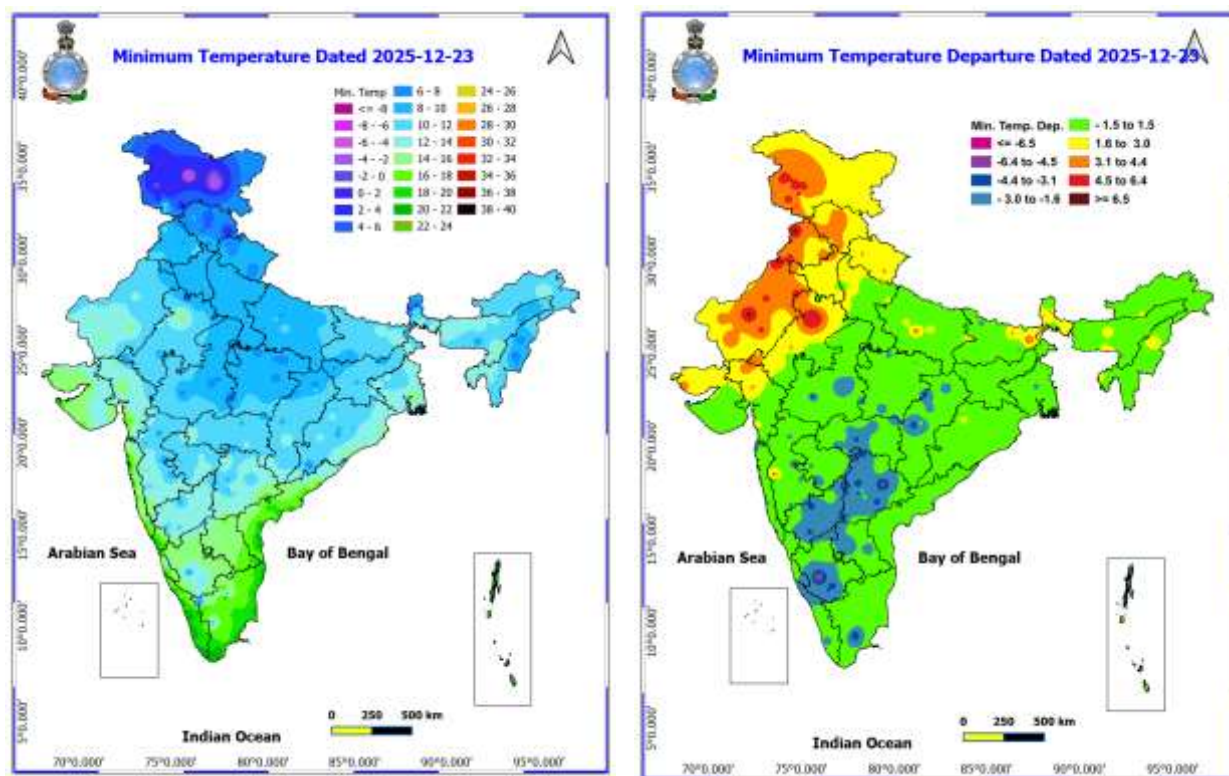
### Weather Forecast:

**23.12.2025:** Mainly clear sky. Surface wind speed 15-25 kmph during the day. Mist/Haze during evening/night. The maximum temperatures are likely to be in the range of 21 to 23°C. The maximum temperatures will be above normal (0.3 to 1.3°C) over Delhi. The predominant surface wind is likely to be from the northwest direction with wind speeds up to 20 kmph during the afternoon hours. The wind speed will decrease, becoming less than 16 kmph from the northwest direction during the evening and night.

**24.12.2025:** Mainly clear sky. Shallow fog at many places and with isolated dense fog during morning hours. Surface wind speed 15-25 kmph during the day. The maximum and minimum temperatures over Delhi are likely to be in the range of 18 to 20°C and 08 to 10°C respectively. The minimum temperatures will be above normal (0.5 to 2.5°C), and the maximum temperatures will be below normal by up to -2°C over Delhi. The predominant surface wind is likely to be from the northwest direction with wind speeds up to 15 kmph during the morning hours. The wind speed will increase, becoming up to 20 kmph from the northwest direction in the afternoon. The wind speed will decrease, becoming less than 10 kmph from the northwest direction during the evening and night.

**25.12.2025:** Mainly clear sky. Shallow fog at many places and with isolated dense fog during morning hours. The maximum and minimum temperatures over Delhi are likely to be in the range of 18 to 20°C and 06 to 08°C respectively. The minimum temperatures will be near normal, and the maximum temperatures will be below normal by up to -2°C over Delhi. The predominant surface wind is likely to be from the west direction, with wind speeds of up to 10 kmph during the morning hours. The wind speed is likely to be from the northwest direction with wind speeds up to 10 kmph during the afternoon. The wind speed will decrease, becoming less than 05 kmph from the northwest direction during the evening and night.

**26.12.2025:** Partly cloudy sky. Moderate fog at many places and with isolated dense fog during morning hours. The maximum and minimum temperatures over Delhi are likely to be in the ranges of 18°C to 20°C and 06°C to 08°C respectively. The minimum temperatures will be near normal, and the maximum temperatures will be below normal by up to -2°C over Delhi. The predominant surface wind is likely to be from the west direction, with wind associated with calm conditions reaching up to 5 kmph during the morning hours. The wind speed will remain the same up to 05 kmph from the northwest direction in the afternoon. The wind speed will be less than 05 kmph from the northwest direction during the evening and night.



**Impact expected due to dense/very dense fog in the night/morning hours:** hours very likely over isolated / few places over Uttar Pradesh, Haryana, Chandigarh and Punjab till 29<sup>th</sup>; over Uttarakhand till 28<sup>th</sup>; over Madhya Pradesh till 25<sup>th</sup> with **Dense fog conditions** during night/morning hours very likely at some pockets over Bihar till 25<sup>th</sup>; in isolated pockets of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Odisha till 28<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim and Jharkhand till 25<sup>th</sup>; Rajasthan and Chhattisgarh till 24<sup>th</sup>, northeast India till 26<sup>th</sup>; over Bihar during 26<sup>th</sup> -28<sup>th</sup> December.

❖ **Transport and Aviation:**

- May affect some airports, highways and railway routes in the areas of met- sub-division.
- Difficult driving conditions with slower journey times.
- Unless taken precautionary measures, it may lead to some road traffic collisions.

❖ **Power Sector:**

- Chances of Tripping of Power lines in the very dense fog routes.

❖ **Human Health:**

- Lung related health impacts: Dense fog contains particulate matter and other pollutants and in case exposed it gets lodged in the lungs, clogging them and decreasing their functional capacity which increases episodes of wheezing, coughing and shortness of breath.
- Impact on people having asthma bronchitis: Long time exposure to dense fog may cause respiratory problem for people having asthma bronchitis and other lung related health problems.
- Eye Irritation: Dense fog contains pollutions of various types and these Pollutants in the air if exposed may tend to irritate the membranes of the eye causing various infections leading to redness or swelling of the eye.

**Action suggested:**

❖ **Transport and Aviation:**

- Be careful while driving or outing through any transport.
- Use fog lights during driving.
- Be in touch with airlines, railways and state transport for schedule of your journey.

❖ **Power Sector:**

- To keep ready Maintenance Team.
- Human Health: To avoid outing until unless emergency and to cover the face.

- ❖ **Impact expected due to Cold Day conditions** very likely in isolated pockets of East Uttar Pradesh and East Madhya Pradesh on 23<sup>rd</sup>, over Bihar during 23<sup>rd</sup> -28<sup>th</sup> December.

- ❖ 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, crop, livestock, water supply, transport and power sector at some places.

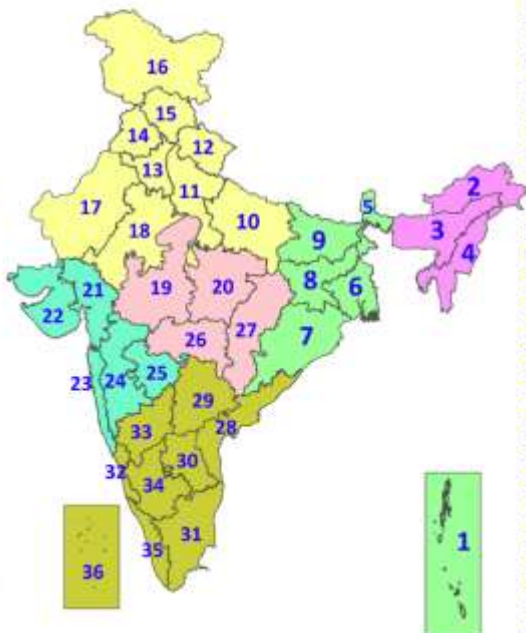
**Action suggested:**

- ❖ Wear several layers of loose fitting, light weight; warm woollen clothing.
- ❖ Cover your head, neck, hands and toes adequately as majority of heat loss occurs through these body parts. Wear several layers of loose fitting, light weight; warm Woolen clothing rather than one layer of heavy cloth.
- ❖ 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.
- ❖ Extreme care needed for vulnerable people.
- ❖ Seek medical attention as soon as possible for someone suffering from frostbite/ Hypothermia.
- ❖ Protect livestock from cold weather.



## LEGENDS

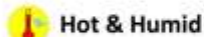
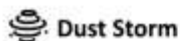
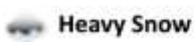
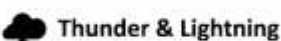
1. अंडमान और निकोबार द्वीपसमूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
6. गंगीय पश्चिम बंगाल
7. ओडिशा
8. झारखंड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखंड
13. हरियाणा, चंडीगढ़ और दिल्ली
14. पंजाब
15. हिमाचल प्रदेश
16. जम्मू और कश्मीर और लद्दाख
17. पश्चिम राजस्थान
18. पूर्वी राजस्थान
19. पश्चिम मध्य प्रदेश
20. पूर्वी मध्य प्रदेश
21. गुजरात
22. सौराष्ट्र
23. कोंकण और गोवा
24. मध्य महाराष्ट्र
25. मराठवाड़ा
26. विदर्भ
27. छत्तीसगढ़
28. तटीय आंध्र प्रदेश और यनम
29. तेलंगाना
30. रायलसीमा
31. तमिलनाडु, पुडुचेरी और कराईकल
32. तटीय कर्नाटक
33. आंतरिक उत्तरी कर्नाटक
34. आंतरिक दक्षिणी कर्नाटक
35. केरल और 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. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chandigarh & 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. Vidarbha
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)



### COLOUR CODED WARNING

No Warning (No Action)
Watch (Be Aware)
Alert (Be Prepared To Take Action)
Warning (Take Action)

### Probabilistic Forecast

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

\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".  
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.  
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599  
(Service to the Nation since 1875)

## DEFINITION/CRITERIA

### Rain/ Snow \*

Heavy: 64.5 to 115.5 mm/cm \*  
Very Heavy: 115.6 to 204.4 mm/cm \*  
Extremely Heavy: > 204.4 mm/cm \*

### Heat Wave

When maximum temperature of a station reaches  $\geq 40^{\circ}\text{C}$  for plains and  $\geq 30^{\circ}\text{C}$  for hilly regions  
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .

Severe Heat Wave: Maximum Temperature Departure from normal  $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature  $\geq 45^{\circ}\text{C}$ .

Severe Heat Wave: When actual maximum temperature  $\geq 47^{\circ}\text{C}$ .

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is  $> 4.5^{\circ}\text{C}$  from normal. Heat Wave may be described provided maximum temperature  $\geq 37^{\circ}\text{C}$ .

### Warm Night

When maximum temperature remains  $40^{\circ}\text{C}$

Warm Night: When minimum temperature departure  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .

Severe Warm Night: When minimum temperature departure  $> 6.4^{\circ}\text{C}$ .

### Cold Wave

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  $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is  $\leq -4.5^{\circ}\text{C}$  & actual Minimum Temperature is  $\leq 15^{\circ}\text{C}$

### Cold Day

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  $\leq -6.5^{\circ}\text{C}$

### Fog

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

### Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)

### Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.

### Frost

Ice deposits on ground

Air temperature  $\leq 4^{\circ}\text{C}$  ( over Plains)

### Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph

Severe: Wind speed 62-67 kmph

Very Severe: Wind speed  $> 67$  kmph

### Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre

High to very high: Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre

Phenomenal: Wind speed  $> 117$  kmph ( $> 63$  knots) & Wave height  $> 14$  metre

### Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)

Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)

Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)

Super Cyclone Storm: Wind speed  $> 220$  kmph ( $> 119$  knots)

\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".

Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.

For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599

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