



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 13<sup>th</sup> December, 2025

Time of Issue: 1220 hours IST

**Subject: (i) Cold wave conditions very likely to prevail at isolated places over Telangana and Interior Karnataka on 14<sup>th</sup> and 15<sup>th</sup>; over Chhattisgarh and Odisha on 14<sup>th</sup> with severe cold wave conditions likely to prevail over North Interior Karnataka on 14<sup>th</sup> December.**

**(ii) Dense fog conditions very likely to prevail during morning hours in isolated pockets of East Uttar Pradesh during 14<sup>th</sup>-16<sup>th</sup> with very dense fog over East Uttar Pradesh on 14<sup>th</sup> & 15<sup>th</sup> December. Dense fog conditions very likely to prevail during morning hours in isolated pockets of Nagaland, Manipur, Mizoram & Tripura during 14<sup>th</sup> -18<sup>th</sup>; Assam & Meghalaya and West Uttar Pradesh during 14<sup>th</sup> -16<sup>th</sup>; Himachal Pradesh on 14<sup>th</sup>; Punjab, Haryana, Chandigarh & Delhi on 15<sup>th</sup> and 16<sup>th</sup> December.**

**Realised weather during past 24 hours ending at 0830 hours IST of today, the 13<sup>th</sup> December, 2025:**

- ❖ **Dense fog (visibility 50-199 m):** reported in isolated pockets of Himachal Pradesh, Uttar Pradesh, Odisha, Assam & Meghalaya.
- ❖ **Visibility reported ( $\leq 200$  m) (in meter):** **Assam & Meghalaya:** Barapani 50m, Jorhat 150m; **Odisha:** Rourkela 100m; **Himachal Pradesh:** Bilaspur 100m; **East Uttar Pradesh:** Varanasi, Kushinagar, Ballia, Azamgarh, Kanpur - 50m each and Gorakhpur 100m; **West Uttar Pradesh:** Moradabad 50 m
- ❖ **Cold wave conditions prevailed at isolated places** over west Madhya Pradesh, Madhya Maharashtra, Telangana, Odisha and Chhattisgarh with **severe cold wave conditions** prevailed over North Interior Karnataka.
- ❖ **Cold wave conditions are prevailing since last 7 days** over Chhattisgarh and Odisha.

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

- ❖ The **Western Disturbance** now seen as an **upper air cyclonic circulation** over north Pakistan & neighbourhood in lower tropospheric level.
- ❖ A fresh **Western Disturbance** as a trough in middle tropospheric level runs roughly along Long. 52°E to the north of Lat. 31°N.
- ❖ **Subtropical westerly Jet Stream** with core winds of the order upto 95 knots at 12.6 km above mean sea level continues to prevail over Northeast India.

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

- ❖ Light rainfall/snowfall at isolated places over Western Himalayan Region Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad from 13<sup>th</sup>-18<sup>th</sup> and over Himachal Pradesh and Uttarakhand on 13<sup>th</sup> & 14<sup>th</sup> and over Arunachal Pradesh during 15<sup>th</sup> -17<sup>th</sup> December.
- ❖ **Thunderstorm and lightning with gusty winds with speed reaching upto 30-40 kmph** very likely at a isolated places likely to prevail over Andaman & Nicobar Islands during 13<sup>th</sup> - 15<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; at few places over Himachal Pradesh and Uttarakhand in the **range of 5°-10°C** at many places over Punjab, Haryana Chandigarh & Delhi, Madhya Pradesh; at few places over Chhattisgarh, Odisha, Jharkhand, Uttar Pradesh; at isolated places over Rajasthan and Northeast India. **The lowest minimum temperature of 6.2 °C is reported at Muzaffarnagar (West Uttar Pradesh) over the plains of India.**

- ❖ **Minimum Temperatures** were **below normal (-1.6°C to -3.0°C)** at many places over South Interior Karnataka; at a few places over Coastal Andhra Pradesh & Yanam; at a few places over isolated places over Saurashtra & Kutch, Uttar Pradesh, Bihar, Jharkhand and Kerala & Mahe; **appreciably below normal (-3.1°C to -5.0°C)** at many places over Madhya Maharashtra; at few places over Odisha, Chhattisgarh, Marathwada; at isolated places over, West Madhya Pradesh, Assam & Meghalaya and Konkan & Goa (**refer to ANNEXURE IV**)
- ❖ **Minimum Temperatures show falling tendency by 1-2°C** over many parts over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and North Interior Karnataka; at isolated parts of Vidarbha, Assam & Meghalaya, Gangetic West Bengal and Odisha.

#### **Forecast of minimum temperatures:**

- ❖ Gradual rise in minimum temperature likely by about 2°C over Northwest India during next 2 days and no significant change thereafter.
- ❖ Gradual rise in minimum temperature likely by 2-3°C over Maharashtra during next 5 days and no significant change thereafter. No significant change in minimum temperature very likely over Gujarat region during next 4 days and thereafter rise by 2-3°C during subsequent 3 days.
- ❖ No significant change in minimum temperature over Central India, east and north east India during next 7 days.

#### **Dense Fog & Cold wave warning Warnings:**

- ❖ **Cold wave conditions** very likely to prevail at isolated places over Telangana and Interior Karnataka on 14<sup>th</sup> and 15<sup>th</sup>; over Chhattisgarh and Odisha on 14<sup>th</sup> with **severe cold wave conditions** likely to prevail over North Interior Karnataka on 14<sup>th</sup> December.
- ❖ **Dense fog conditions** very likely to prevail during morning hours in isolated pockets of Nagaland, Manipur, Mizoram & Tripura during 14<sup>th</sup> -18<sup>th</sup>; Assam & Meghalaya and west Uttar Pradesh during 14<sup>th</sup> -16<sup>th</sup>; Himachal Pradesh on 14<sup>th</sup>; Punjab, Haryana, Chandigarh & Delhi on 15<sup>th</sup> and 16<sup>th</sup> December.
- ❖ **Dense fog conditions** very likely to prevail during morning hours in isolated pockets of east Uttar Pradesh during 14<sup>th</sup>-16<sup>th</sup> with **very dense fog** over east Uttar Pradesh on 14<sup>th</sup> & 15<sup>th</sup> December.

#### **Fisherman Warning:**

Fishermen are advised not to venture into the following areas during 13<sup>th</sup> December to 18<sup>th</sup> December:

- Bay of Bengal: Over Gulf of Mannar and adjoining Comorin area during 13<sup>th</sup> to 16<sup>th</sup> December.

#### **ii) Weather conditions and forecast over Delhi/NCR during 13<sup>th</sup> December-16<sup>th</sup> December, 2025 (ANNEXURE III)**

**For more details, kindly refer National Weather Bulletin:**

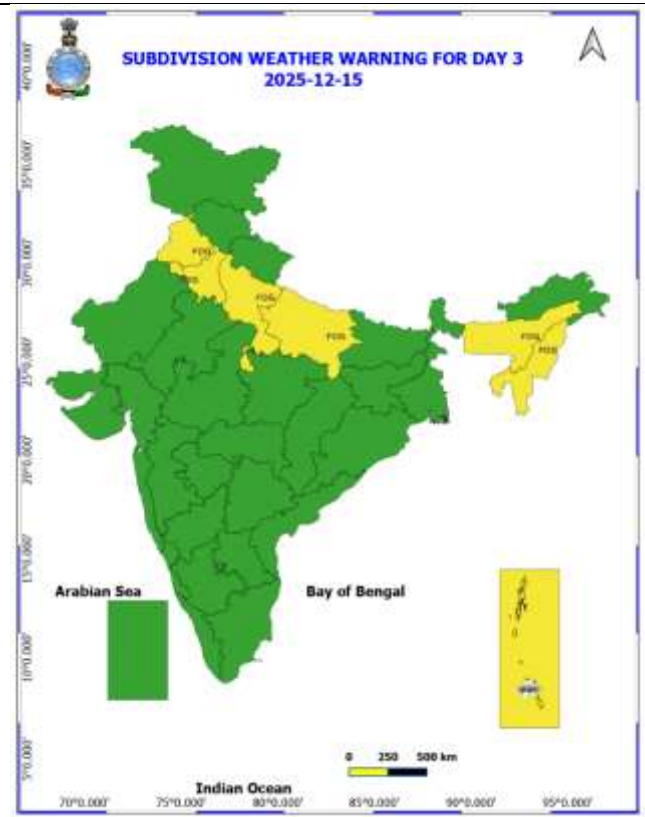
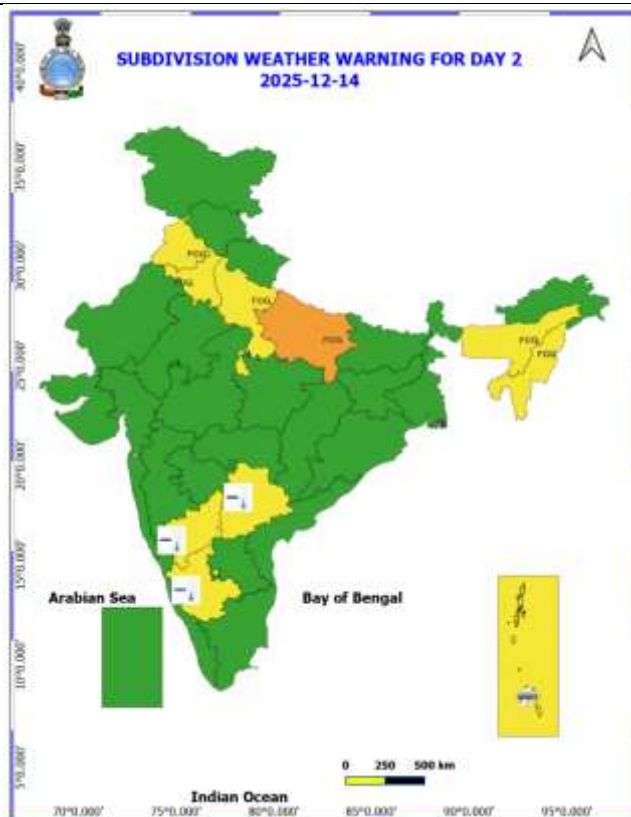
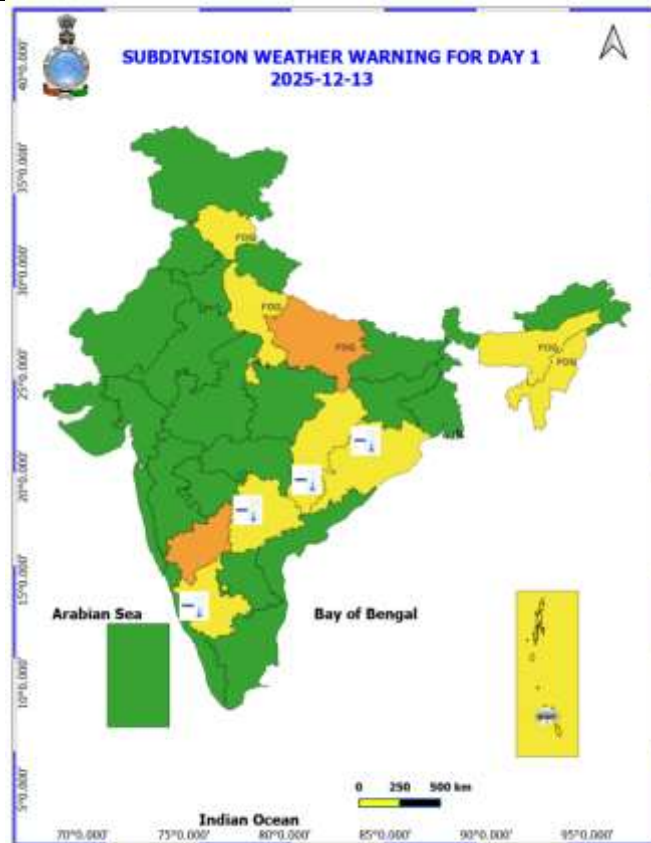
[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

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

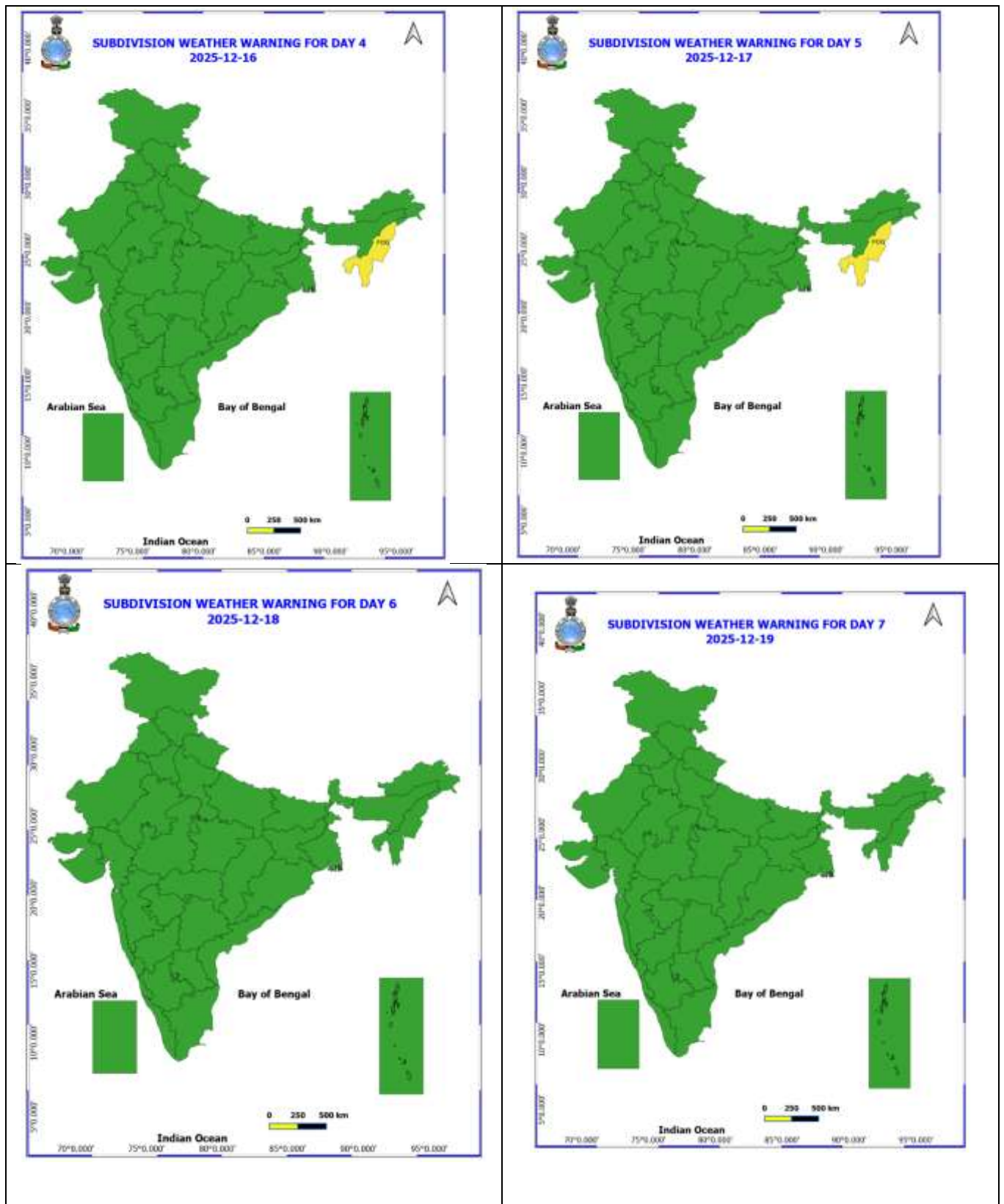
**For Fishermen warning refer** <https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php>

Table-1								
7 Days Rainfall Forecast								
S.No.	Subdivision	13- Dec	14- Dec	15- Dec	16- Dec	17- Dec	18- Dec	19- Dec
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	FWS	FWS	FWS	SCT	SCT	SCT	SCT
2	ARUNACHAL PRADESH	DRY	DRY	DRY	ISOL	ISOL	ISOL	DRY
3	ASSAM & MEHGHALAYA	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
4	NAGALAND, MANIPUR, MIZORAM AND TRIPURA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
5	SUB HIMALAYAN WEST BENGAL & SIKKIM	DRY	DRY	DRY	DRY	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	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
13	HARYANA, CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
16	JAMMU AND KASHMIR AND LADAKH	ISOL	ISOL	ISOL	DRY	ISOL	ISOL	DRY
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	ISOL	DRY	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	ISOL	ISOL	ISOL	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	ISOL	ISOL	DRY
36	LAKSHADWEEP	DRY	DRY	DRY	DRY	DRY	SCT	SCT

- 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 13<sup>th</sup> to 16<sup>th</sup> December 2025

### Past Weather:

There has been no significant change in maximum and minimum temperatures over Delhi during the past 24 hours. The maximum and minimum temperatures over Delhi were around 22 to 27°C and 08 to 09°C, respectively. The minimum temperatures are below normal (-1.6 to -3.0°C) at isolated places and normal (-1.5 to 1.5°C) over Delhi. The maximum temperatures were normal (-1.5 to 1.5°C) at isolated places, above normal (1.6 to 3.0°C) at many places and appreciably above normal (3.0 to 5.0°C) at isolated places over Delhi. Safdarjung Airport recorded the lowest visibility of 400m from 0800 Hrs IST to 0900 Hrs IST on 13 December 2025, which subsequently improved to 500m at 0930 Hrs IST. Palam airport recorded the lowest visibility of 700m from 0700 Hrs IST to 0800 Hrs IST on 13 December 2025, which subsequently improved to 800m at 030 Hrs IST. Mainly clear sky conditions with predominant surface wind from the west direction, with a wind speed up to 08 kmph, prevailed during the past 24 hours. Partly cloudy sky conditions with wind from the southeast direction with a wind speed up to 12 kmph prevailed over the region in the forenoon today.

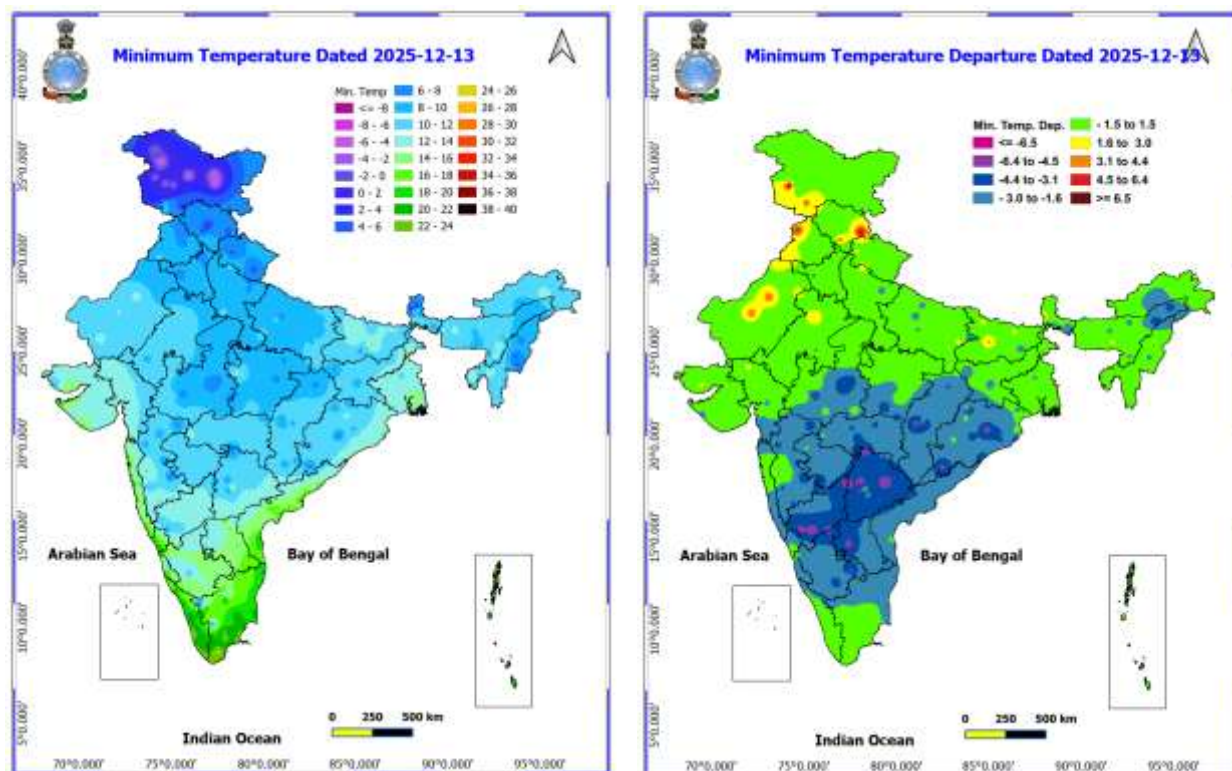
### Weather Forecast:

**13.12.2025:** Partly cloudy sky. Mist/Haze during Night. The maximum temperatures are likely to be in the range of 23 to 25°C. The maximum temperatures will be above normal (up to 2.0°C) over Delhi. The predominant surface wind is likely to be from the east direction with wind speed reaching up to 10 kmph during the afternoon hours. The wind speed will be less than 05 kmph from the east direction during the evening and night.

**14.12.2025:** Partly cloudy sky. Moderate fog during the morning hours. The maximum and minimum temperatures over Delhi are likely to be in the range of 23 to 25°C and 09 to 11°C respectively. The minimum temperatures will be above normal (0.4 to 2.4°C), and the maximum temperatures will be above normal (up to 2.0°C) over Delhi. The predominant surface wind is likely to be from the east direction associated with calm wind speed reaching up to 05 kmph during the morning hours. The wind speed will remain the same up to 05 kmph from the north direction in the afternoon. The wind speed will remain the same up to 05 kmph from the northwest direction during the evening and night.

**15.12.2025:** Mainly clear sky. Shallow fog at most places with moderate fog at isolated places during morning hours. The maximum and minimum temperatures over Delhi are likely to be in the range of 24 to 26°C and 08 to 10°C respectively. The minimum temperatures will be near normal, and the maximum temperatures will be above normal (1.0 to 3.0°C) over Delhi. The predominant surface wind is likely to be from the northwest direction associated with calm wind speeds reaching up to 05 kmph during morning hours. The wind speed is likely to be from the northwest direction with wind speeds reaching up to 15 kmph during the afternoon. The wind speed will decrease, becoming less than 05 kmph during the evening and night.

**16.12.2025:** Mainly clear sky. Shallow fog during morning hours. The maximum and minimum temperatures over Delhi are likely to be in the ranges of 24 °C to 26 °C and 07°C to 09°C, respectively. The minimum temperatures will be near normal and the maximum temperatures will be above normal (1.0 to 3.0°C) over Delhi. The predominant surface wind is likely to be from the northwest with wind speed up to 10 kmph during the morning hours. The wind speed will increase becoming up to 15 kmph from the northwest direction in the afternoon. The wind speed will decrease becoming less than 10 kmph from the northwest direction during evening and night.



- ❖ **Impact expected due to Cold Wave/severe cold wave conditions** likely to prevail at isolated places over Telangana and Interior Karnataka on 14<sup>th</sup> and 15<sup>th</sup>; over Chhattisgarh and Odisha on 14<sup>th</sup> with **severe cold wave conditions** likely to prevail over North Interior Karnataka on 14<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 woollen 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.

- ❖ **Impact expected due to dense/very dense fog in the morning hours:** likely to prevail during morning hours in isolated pockets Nagaland, Manipur, Mizoram & Tripura during 14<sup>th</sup> -18<sup>th</sup>; Assam & Meghalaya and west Uttar Pradesh during 14<sup>th</sup> -16<sup>th</sup>; Himachal Pradesh on 14<sup>th</sup>; Punjab, Haryana, Chandigarh & Delhi on 15<sup>th</sup> and 16<sup>th</sup> and East Uttar Pradesh during 14<sup>th</sup>-16<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.

**Agromet advisories for likely impact of Cold Waves / below normal Temperatures**

- In **Odisha, Chhattisgarh, Interior Karnataka and Telangana**, apply light and frequent irrigation to the standing crops in the evening to protect the crops from low temperature stress. Use mulching and cover vegetable nurseries and young fruit plants with straw / polythene sheets to maintain optimum soil temperature.

**Livestock / Poultry**

- Keep cattle inside the sheds during night and provide dry bedding to protect them from cold.
- Keep the chicks warm by providing artificial light in the poultry sheds.

**Agromet advisories for likely impact of Thunderstorm / Gusty Winds for Andaman & Nicobar Islands**

- Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.



### Legends & abbreviations:

- ❖ **Heavy Rain:** 64.5-115.5mm; **Very Heavy Rain:** 115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; Automatic Weather Station; **ARG:** Automatic Rain Gauge; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office, **Aero:** Aerodrome, **IAF:** Indian Air Force.
- ❖ **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 Marathawada.
  - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

## 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)



Fog



Heavy Snow



Cold Wave



Heavy Rain



Dust Storm



Cold Day



Very Heavy Rain



Heat Wave



Ground Frost



Extremely Heavy Rain



Warm Night



Thunder & Lightning



Hot Day



Hailstorm



Hot & Humid



Dust Raising Winds



Strong Surface Winds

### 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

(Service to the Nation since 1875)