



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 16th December, 2025

Time of Issue: 1300 hours IST

Subject: (i) Dense to very Dense fog conditions very likely to prevail during early hours/morning hours in isolated pockets of Uttar Pradesh and East Madhya Pradesh during 17th to 20th, also dense fog conditions very likely to prevail during morning hours in isolated pockets of Northwest and Northeast India during 17th-21st December.

(ii) Cold wave conditions very likely to prevail over West Madhya Pradesh, Telangana and North Interior Karnataka on 17th & 18th December.

Realised weather during past 24 hours ending at 0830 hours IST of today, the 16th December, 2025:

- ❖ **Very dense to dense fog (visibility <50 m)** prevailed at few places of Uttar Pradesh and isolated pockets of Punjab and Odisha in the morning hours; **dense fog (visibility 50-199 m):** reported in isolated pockets of Odisha, Himachal Pradesh, Uttarakhand, West Rajasthan, East Madhya Pradesh and Meghalaya.
- ❖ **Visibility reported (≤ 200 m): Himachal Pradesh:** Bilaspur 50 m, **Uttarakhand:** Pantnagar And Khatima 50, **Odisha:** Rourkela 25, Koraput 120, Phulbani 150 **Punjab:** Faridkot 20, Bathinda AMFU 40, **West Uttar Pradesh:** AMS Aligarh, Bareilly(IAF), Agra(IAF)-00 Each, Agra(Taj)-20, Aligarh-25, Bareilly-30, Shahjahanpur-40, AMS Moradabad-50, **East Uttar Pradesh:** AMS Ayodhya, Gorakhpur(IAF), Kanpur(IAF) & Prayagraj Iaf-00, Fursatganj-20, Kanpur(City)-40, Fatehgarh, Lucknow(AP), Hardoi, Varanasi(AP)-50, Basti-70, Ams Shrawasti-100, Sulltanpur-150, **West Rajasthan:** Sri Ganganagar 50, Bikaner 100, **East Madhya Pradesh:** Khajuraho(100), **Meghalaya:** Barapani(50).

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

- ❖ A **Western Disturbance** as an upper air cyclonic circulation over north Pakistan & adjoining Jammu in lower tropospheric level with a trough aloft in middle tropospheric westerlies with its axis roughly along Long. 72°E to the north of Lat. 32°N.
- ❖ **Subtropical westerly Jet Stream** with core winds of the order upto 120 knots at 12.6 km above mean sea level prevails over North India.
- ❖ An upper air cyclonic circulation over South Assam & neighbourhood in lower tropospheric levels.
- ❖ A fresh feeble **Western Disturbance** is likely to affect Western Himalayan region from the night of 17th December 2025.

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

- ❖ Light rainfall/snowfall at few/isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 18th -22nd and over Himachal Pradesh and Punjab on 20th & 21st and Uttarakhand on 21st December.
- ❖ **Isolated Hailstorm very likely over** Meghalaya on 16th December.
- ❖ **Thunderstorm and lightning with isolated heavy rainfall** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal on 16th, **with gusty winds with speed reaching upto 30-40 kmph** very likely at isolated places over Nicobar Islands and Tamil Nadu, Puducherry & Karaikal on 16th - 17th 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 isolated places over Himachal Pradesh and Uttarakhand in the **range of 5°-10°C** at many places over Punjab, Haryana Chandigarh & Delhi, Rajasthan, Madhya Pradesh; over few places over Uttar Pradesh, Vidarbha, Marathawada, Odisha; over isolated places over Chhattisgarh, Assam & Meghalaya, Manipur, Telangana

and Kerala & Mahe. **The lowest minimum temperature of 4.8 °C is reported at Adampur (Punjab) and Bhopal (West Madhya Pradesh) over the plains of India.**

- ❖ **Minimum Temperatures** were **markedly below normal ($\leq -5.1^{\circ}\text{C}$)** at isolated places over West Madhya Pradesh **appreciably below normal (-5.0°C to -3.1°C)** at isolated places over North Interior Karnataka and Assam & Meghalaya; **below normal (-1.6°C to -3.0°C)** at many places over Maharashtra, Kerala & Mahe; at few places over Telangana, Madhya Pradesh, Chhattisgarh, Odisha and Gangetic West Bengal; at isolated places over Bihar and Uttar Pradesh . **(refer to ANNEXURE IV)**
- ❖ **Minimum Temperatures show rising tendency during past 24 hours by $1-3^{\circ}\text{C}$** at few places over Uttarakhand, Himachal Pradesh, Punjab, Saurashtra & Kutch, Karnataka, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal; **falling tendency by $1-2^{\circ}\text{C}$** over some parts of Madhya Pradesh, West Uttar Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Rajasthan, Odisha, Assam and Kerala & Mahe

Forecast of minimum temperatures:

- ❖ No significant change in minimum temperature very likely over Northwest India during next 3 days and gradual rise by $2-3^{\circ}\text{C}$ thereafter during subsequent 4 days.
- ❖ No significant change in minimum temperature very likely over Gujarat state during next 24 hours and gradual rise by $2-3^{\circ}\text{C}$ during subsequent 3 days and no significant change thereafter.
- ❖ No significant change in minimum temperature over remaining parts of the country during next 7 days.

Dense Fog & Cold wave Warnings:

- ❖ **Dense fog conditions** very likely to prevail during early hours/morning hours in isolated pockets of Northeast India during 17th-21st, Punjab during 17th -20th; Himachal Pradesh during 17th -19th; Uttarakhand, West Madhya Pradesh and Odisha on 17th & 18th; Haryana & Chandigarh during 18th -20th December.
- ❖ **Dense fog conditions** very likely to prevail during early hours/morning hours in isolated pockets of Uttar Pradesh during 17th - 20th and Madhya Pradesh during 17th -19th with **very dense fog at a few places** over Uttar Pradesh on 17th and at isolated places over Uttar Pradesh on 18th; over East Madhya Pradesh on 17th & 18th December.
- ❖ **Cold wave conditions** very likely to prevailed at isolated places over Telangana, North Interior Karnataka, West Madhya Pradesh on 17th & 18th December.

Fisherman Warning:

Fishermen are advised not to venture into the following areas during 16th December to 21st December:

- **Bay of Bengal:** Over Gulf of Mannar and adjoining Comorin area during 16th to 20th December.

ii) Weather conditions and forecast over Delhi/NCR during 16th -19th December, 2025 (ANNEXURE III)

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

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

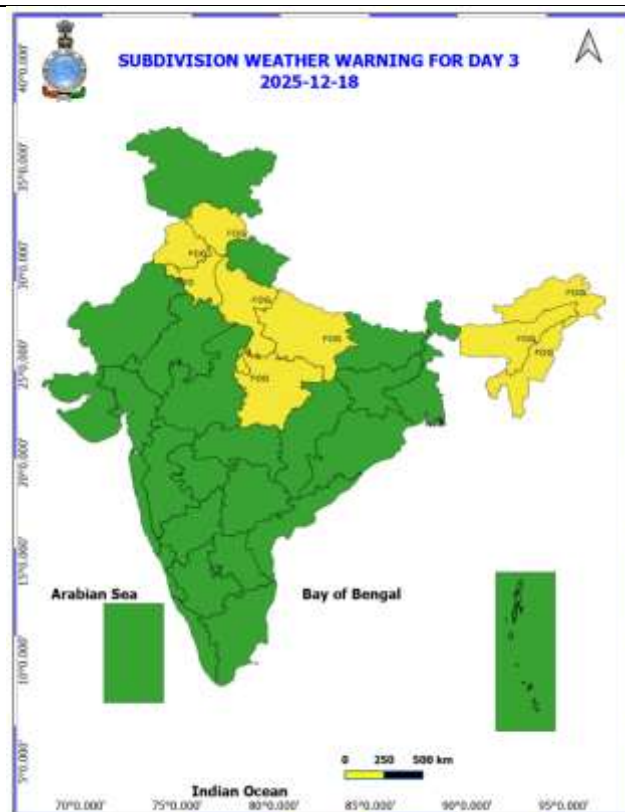
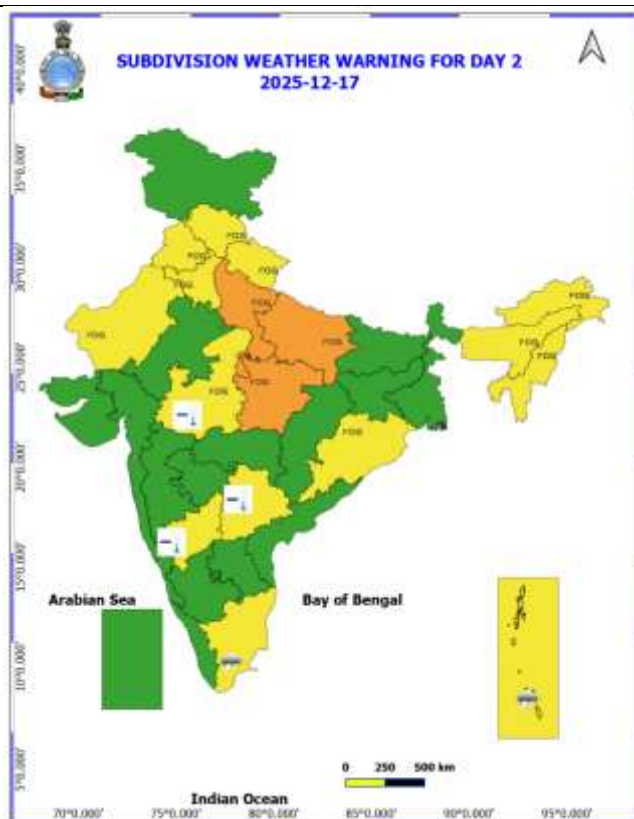
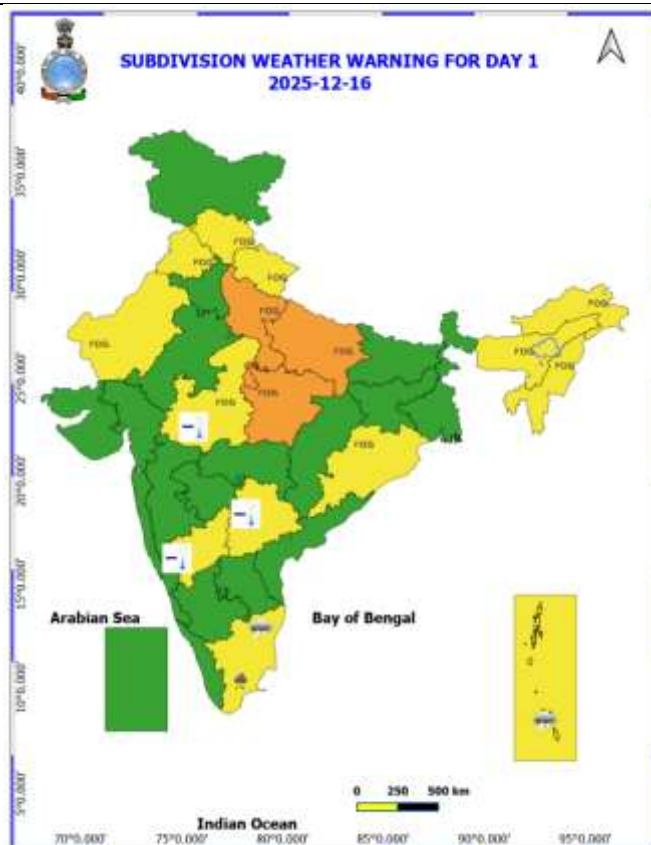
For Fishermen warning refer <https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php>

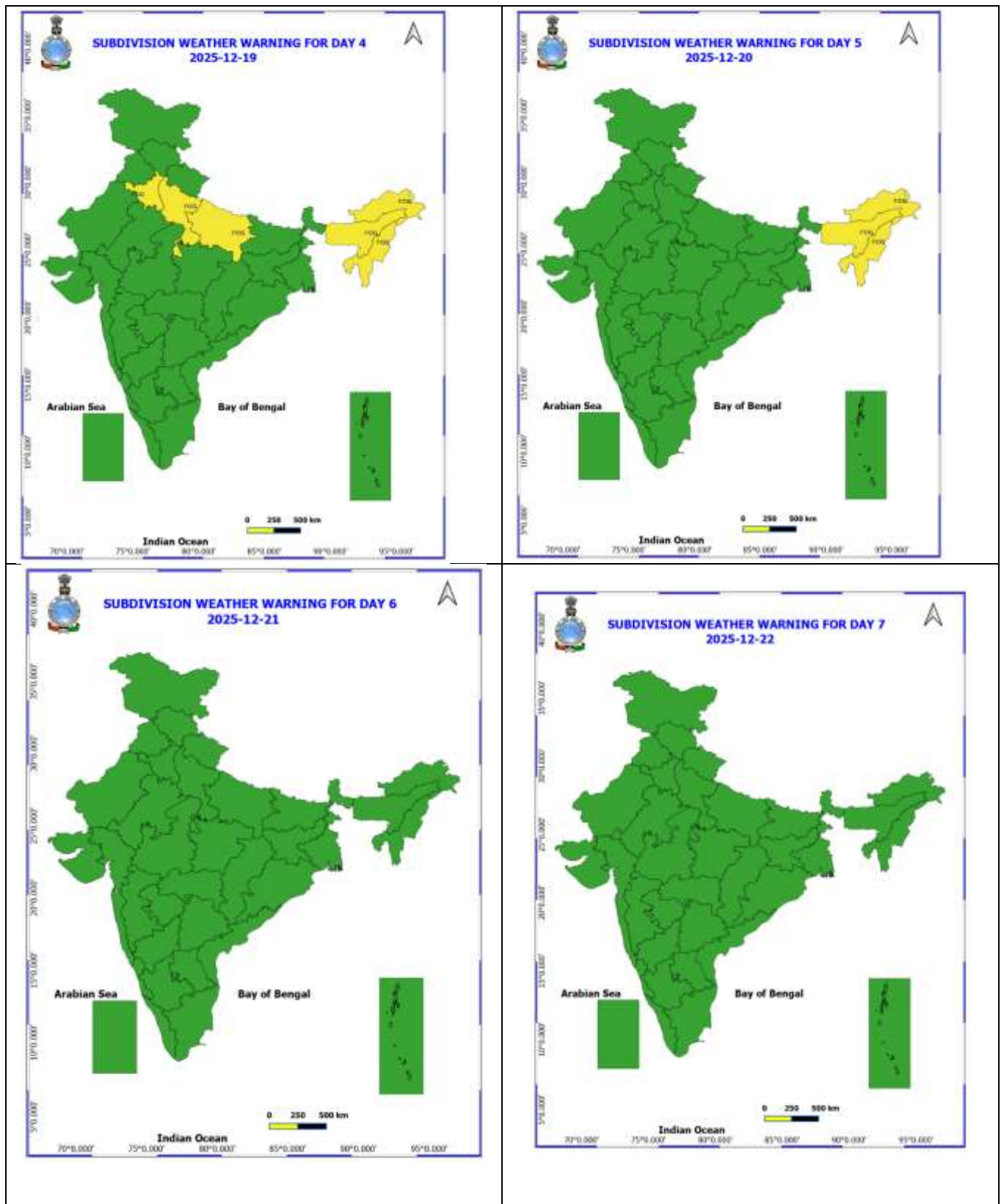
Significant rainfall recorded (in cm) (from 0830 hours IST of yesterday to 0830 hours IST of today):

- ❖ **Tamil Nadu :** Pamban (dist Ramanathapuram) 1.

Table-1								
7 Days Rainfall Forecast								
S.No.	Subdivision	16- Dec	17- Dec	18- Dec	19- Dec	20- Dec	21- Dec	22- Dec
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
3	ASSAM & MEHGHALAYA	ISOL	ISOL	DRY	DRY	DRY	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	DRY	DRY	DRY	DRY	DRY	ISOL	DRY
13	HARYANA, CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
16	JAMMU AND KASHMIR AND LADAKH	DRY	DRY	ISOL	ISOL	ISOL	SCT	ISOL
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	ISOL	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	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU & PUDUCHERRY	SCT	ISOL	ISOL	DRY	DRY	DRY	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	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
36	LAKSHADWEEP	DRY	SCT	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 16th December to 19th December 2025**Past Weather:**

There has been fall upto 02°C in minimum temperatures and fall upto 03°C in maximum temperatures over Delhi during the past 24 hours. The maximum and minimum temperatures over Delhi were around 20 to 24°C and 08 to 09°C, respectively. The minimum temperatures are normal (-1.5 to 1.5°C) at many places and above normal (1.6 to 3.0°C) at a few places over Delhi. The maximum temperatures were normal (-1.5 to 1.5°C) at most places over Delhi. Safdarjung airport recorded the lowest visibility 800m from 0730 Hrs IST to 0800 Hrs IST on 16.12.2025 which thereafter improved becoming 1000m at 0800 Hrs IST. Palam airport recorded the lowest visibility 600m from 0800 Hrs IST to 0900 Hrs IST on 16.12.2025 which thereafter improved becoming 700m at 0900 Hrs IST. Mainly clear sky conditions with predominant surface wind from the variable directions, with a wind speed up to 12 kmph, prevailed during the past 24 hours. Mainly clear sky conditions with wind from the northwest direction with a wind speed up to 14 kmph prevailed over the region in the forenoon today.

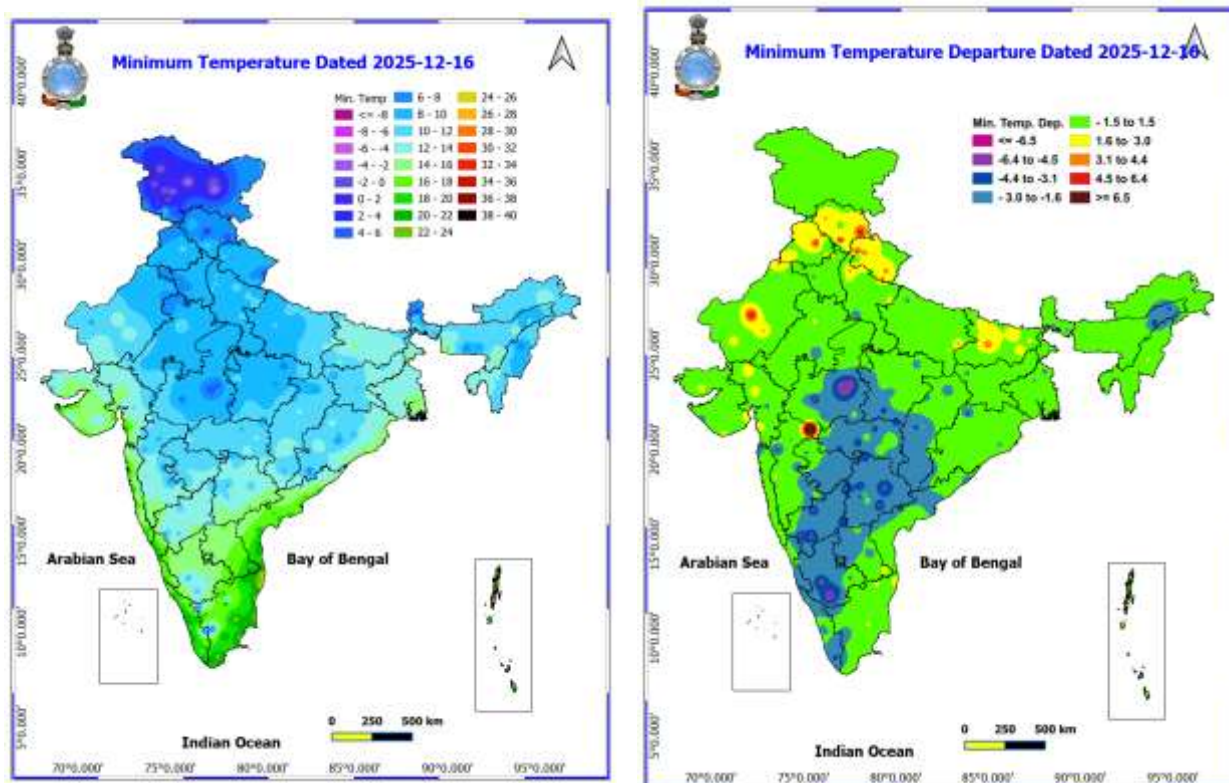
Weather Forecast:

16.12.2025: Mainly clear sky. mist/haze during night. surface wind speed 15-25 kmph during the day. The maximum temperatures are likely to be in the range of 22 to 24°C. The maximum temperatures will be near normal over Delhi. The predominant surface wind is likely to be from the northwest direction with wind speed up to 20 kmph during the afternoon hours. The wind speed will decrease becoming upto 08 kmph from the northwest direction during evening and night.

17.12.2025: Mainly clear sky. Shallow fog during 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 (0.9 to 2.9) and the maximum temperatures will be above normal (0.8 to 2.8) over Delhi. The predominant surface wind is likely to be from the west direction with wind speed up to 15 kmph during the morning hours. The wind speed will remain same upto 15 kmph from the west direction in the afternoon. The wind speed will decrease, becoming less than 10 kmph from the northwest direction during evening and night.

18.12.2025: Partly cloudy sky. shallow fog during morning hours. The maximum and minimum temperatures over Delhi are likely to be in the range of 22 to 24°C and 08 to 10°C respectively. The minimum temperatures will be above normal (0.9 to 2.9) and the maximum temperatures will be near normal over Delhi. The predominant surface wind is likely to be from the northwest direction with wind speed up to 10 kmph during morning hours. The wind speed is likely to be from the northwest direction with wind speed up to 15 kmph during afternoon. The wind speed will decrease, becoming less than 08 kmph from the west direction during evening and night.

19.12.2025: Partly cloudy sky. shallow fog during morning hours. The maximum and minimum temperatures over Delhi are likely to be in the ranges of 22 °C to 24 °C and 08 °C to 10°C, respectively. The minimum temperatures will be near normal and the maximum temperatures will be near normal over Delhi. The predominant surface wind is likely to be from the west direction associated with wind speed up to 15 kmph during the morning hours. The wind speed will increase becoming up to 15 kmph from the west direction in the afternoon. The wind speed will decrease becoming less than 08 kmph from the west direction during evening and night.



Impact expected due to Cold Wave conditions likely to prevail at isolated places over Telangana, North Interior Karnataka, West Madhya Pradesh on 17th & 18th 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 early hours/morning hours: likely to prevail during early hours/morning hours in isolated pockets of Northeast India during 17th-21st, Punjab, Uttar Pradesh during 17th -20th; Himachal Pradesh, Madhya Pradesh during 17th -19th; Uttarakhand, West Madhya Pradesh and Odisha on 17th & 18th; Haryana & Chandigarh during 18th -20th 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 / Low Temperatures

- In **West Madhya Pradesh, North 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

- 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°C to 6.4°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°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°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°C to -6.4°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°C to -6.4°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)