



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 24th January, 2025

Time of Issue: 1330 hours IST

Subject: Dense fog likely during morning hours over East & Northeast India during next 2-3 days.

i. Realised weather during past 24 hours till 0830 hours IST of today (Annexure I)

- ❖ **Cold Wave conditions** prevailed in some parts of Himachal Pradesh.
- ❖ **Dense to very dense fog conditions (visibility < 50 m)** reported in some parts of central & East Uttar Pradesh; in isolated pockets of Bihar, Coastal Odisha, Gangetic West Bengal, Meghalaya, Coastal Andhra Pradesh and **dense fog (visibility 50-199 m)** reported in isolated pockets of Northeast Rajasthan, Assam and Tripura.

ii. Weather Systems, Forecast and warning (Annexure II & III):

- ❖ A **cyclonic circulation** lies over northeast Assam in lower tropospheric levels. Under its influence,
 - ✓ Light to moderate rain at some places accompanied with thunderstorm activity at isolated places likely over Arunachal Pradesh and northeast Assam on 24th January.
- ❖ A **Western Disturbance** is likely to affect Western Himalayan Region from 29th January, 2025. Under its influence, isolated to scattered rainfall/snowfall activity likely over Western Himalayan region on 29th & 30th January.

Temperature, Cold Wave, Cold Day and Fog Forecast:

Temperature Conditions during past 24 hours till 0830 hours IST of today (Annexure IV):

- ❖ Minimum temperatures are **below 0°C** over isolated places of Jammu, Kashmir & Ladakh; **1-5°C** over some parts of Himachal Pradesh & Uttarakhand; **5-10°C** over many parts of plains of Northwest India; **10-16°C** in many parts of Central, West and East India. Today, the lowest minimum temperature of **5.2°C** is reported at **Amritsar (Punjab)** over the plains of the country.
- ❖ During the past 24 hours, there has been **fall in minimum temperatures upto 4°C** in many parts of northwest India.
- ❖ Minimum temperatures are **above normal (2°C or more)** over Northwest, Central & adjoining East India and near normal over rest parts of the country.

Forecast of temperature:

- ❖ Gradual fall in minimum temperatures by about 2°C likely over Northwest India during next 24 hours and no significant change during subsequent 4 days.
- ❖ Gradual fall in minimum temperatures by 2-3°C likely over Central India during next 3 days and no significant change during subsequent 2 days.
- ❖ No significant change in minimum temperatures likely over East India during next 24 hours and gradual fall by 3-5°C during subsequent 4 days.
- ❖ No significant change in minimum temperatures likely over rest parts of the country.

Cold Wave Warnings:

Cold Wave conditions very likely in isolated pockets of Himachal Pradesh and Punjab on 24th & 25th January.

Dense Fog Warnings:

Dense fog conditions very likely to continue to prevail during night/early morning hours in isolated pockets of Gangetic West Bengal till 25th; East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim & Bihar till 26th; Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura till 27th January.

Cold Day Warnings:

Cold day conditions very likely in a few pockets of Bihar during 24th - 26th January.

iii. Weather conditions and forecast over Delhi/NCR during 24th Jan. to 27th Jan. 2025 (Annexure V)

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>

Rainfall recorded during past 24 hours till 0830 hours IST of today 24.01.2025 (in cm):

- ❖ **Lakshadweep:** Minicoy (dist Lakshadweep) 6,
- ❖ **Arunachal Pradesh:** Kaying(aws) (dist West Siang) 4, Tenali aws (dist Upper Siang) 3, Huri(aws) (dist Kurung Kumey) 3, Boleng(aws) (dist Siang) 2.

Visibility reported (<200 m) (in meter):

Uttar Pradesh: Fursatganj, Azamgarh, Ayodhya, Varanasi and Bahraich 0 each **Bihar:** Forbesganj 0; **Coastal Odisha:** Bhubaneshwar, Paradip and Puri 0 each; **Gangetic West Bengal:** Shantiniketan, Panagarh and Kolkata (Dum Dum) 0 each, Bankura 200, **Coastal Andhra Pradesh:** Amravati 0; **Meghalaya:** Barapani 25; **Assam:** Dibrugarh 50, Tezpur and North Lakhimpur 100 each; **Tripura:** Agartala 50, Kailashahar 100; **Northeast Rajasthan:** Pilani 100.

Impact expected due to dense fog in the night /morning hour over East Uttar Pradesh, East & Northeast India:

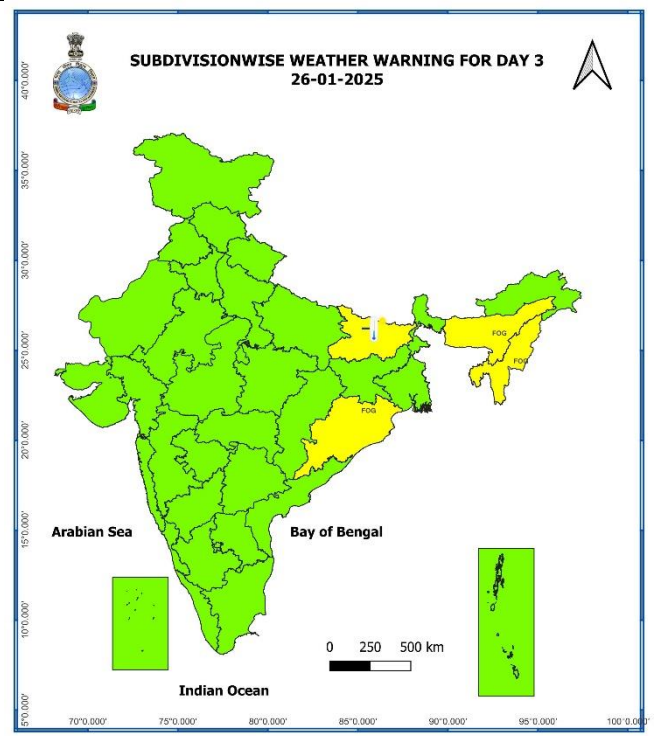
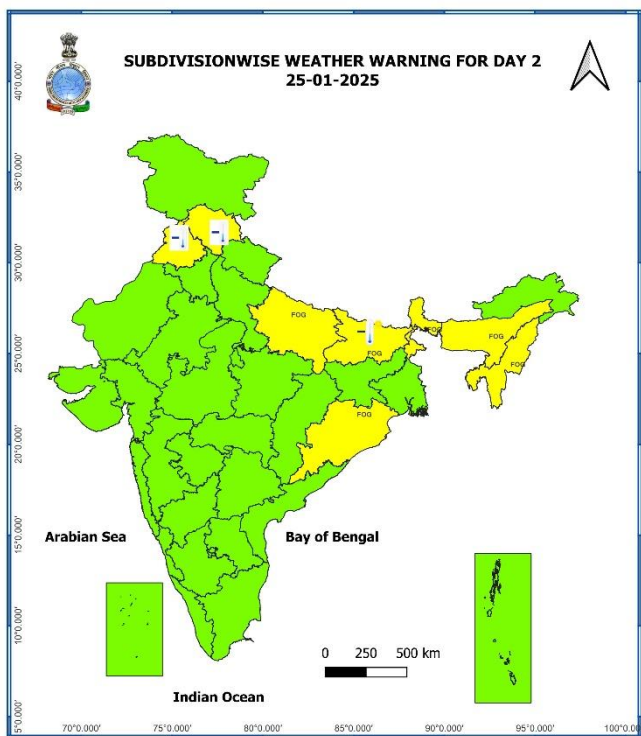
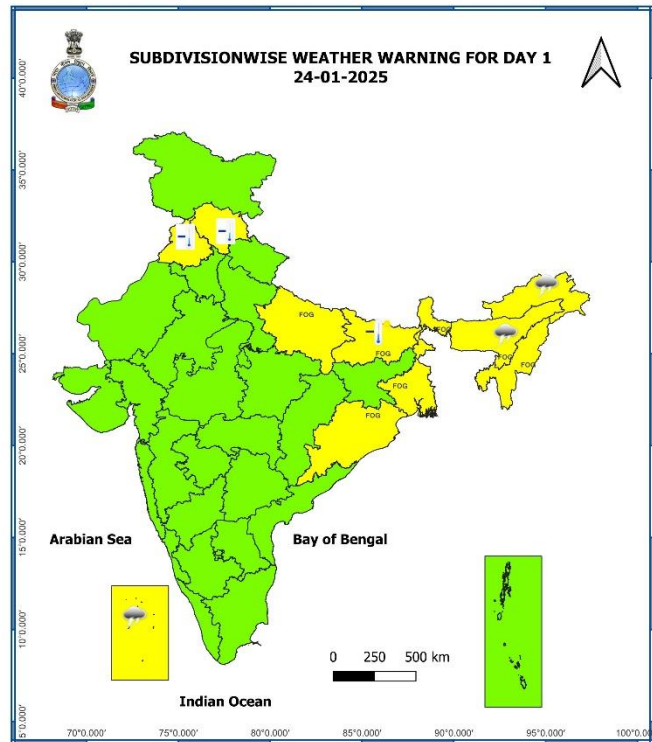
- ❖ Transport and Aviation:
 - May affect some airports, highways and railway routes in the areas of met- sub-division.
 - Difficult driving conditions with slower journey times.
 - Unless taken precautionary measures, it may lead to some road traffic collisions.
- ❖ Power Sector:
 - Chances of Tripping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

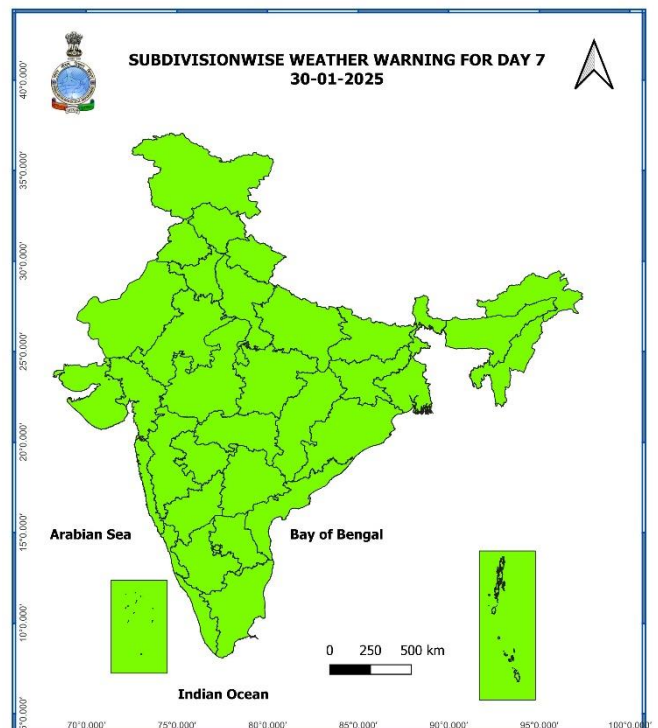
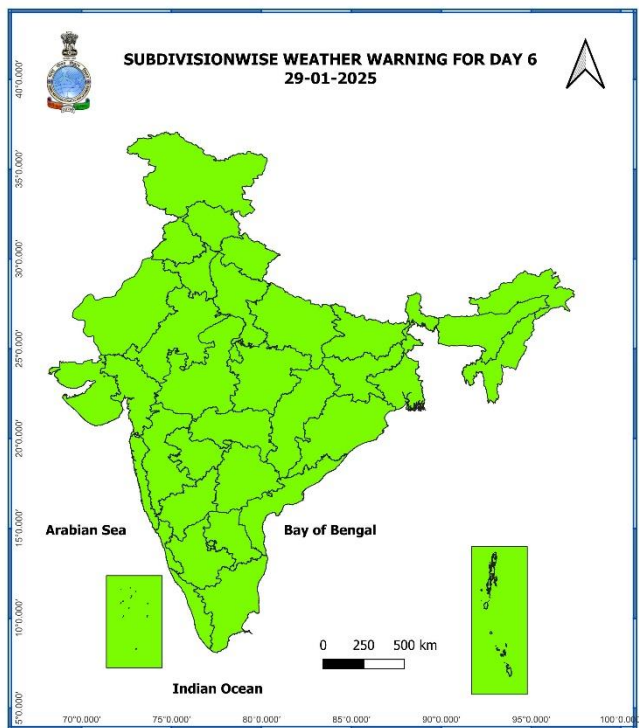
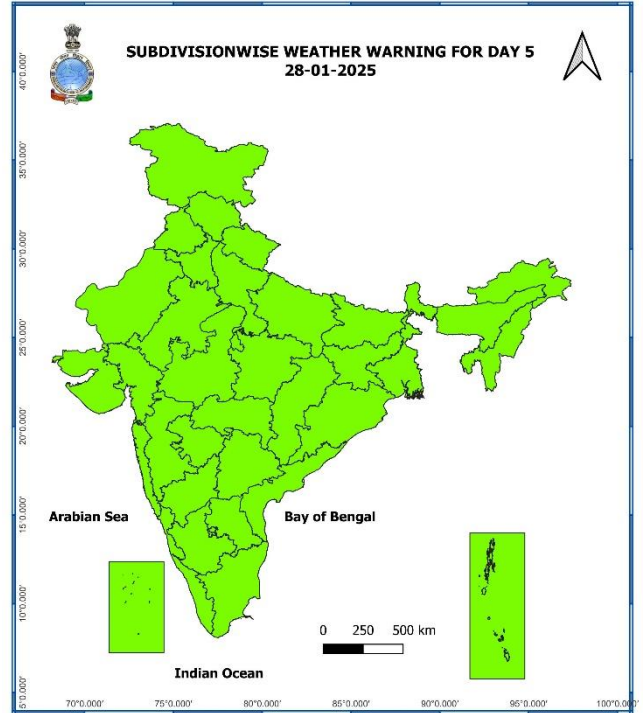
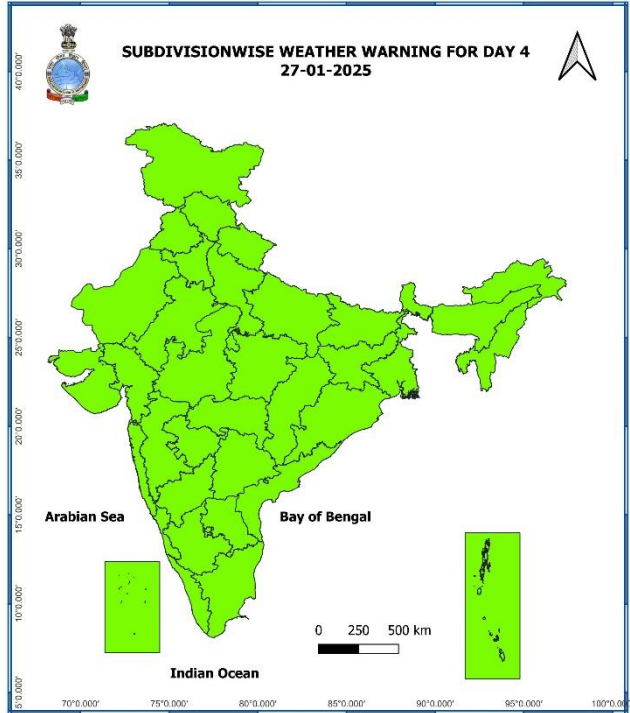
Action suggested:

- ❖ 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.

7 Days Rainfall Forecast								
S. No.	Subdivision	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	29-Jan	30-Jan
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	ISOL	ISOL	ISOL	SCT	FWS	SCT	ISOL
2	ARUNACHAL PRADESH	SCT	ISOL	ISOL	ISOL	SCT	FWS	FWS
3	ASSAM & MEGHALAYA	ISOL	DRY	DRY	DRY	ISOL	ISOL	SCT
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
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	DRY	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 & KASHMIR AND LADAKH	DRY	DRY	DRY	DRY	DRY	ISOL	SCT
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	GUJARAT 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	MARATHAWADA	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 & YANAM	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	DRY	DRY	DRY	DRY	DRY	ISOL	SCT
32	COASTAL 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 & MAHE	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	SCT
36	LAKSHADWEEP	SCT	SCT	DRY	DRY	DRY	DRY	DRY

- As the lead period increases forecast accuracy decreases





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

Fig. 1: Maximum Temperatures

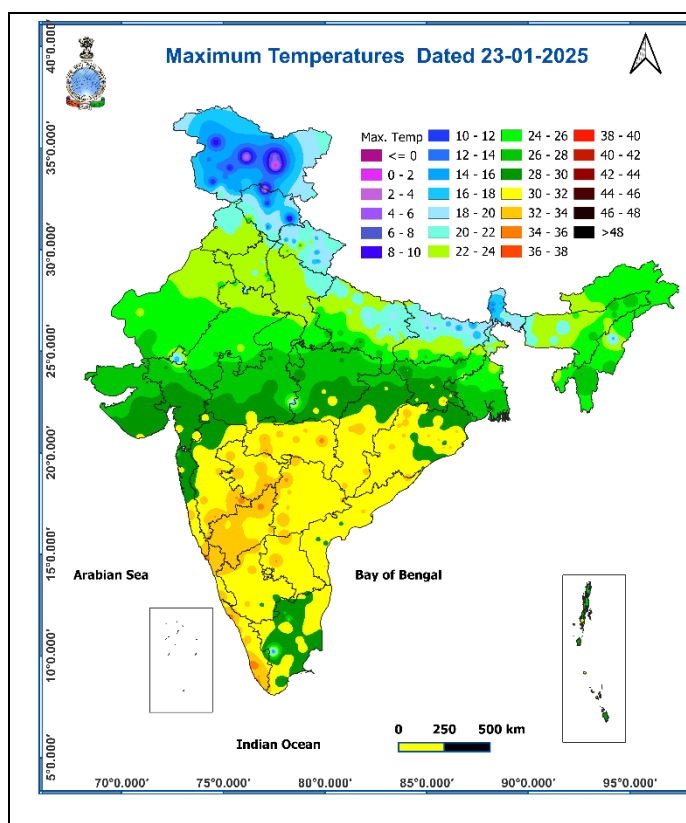


Fig. 2: Departure of Maximum Temperatures

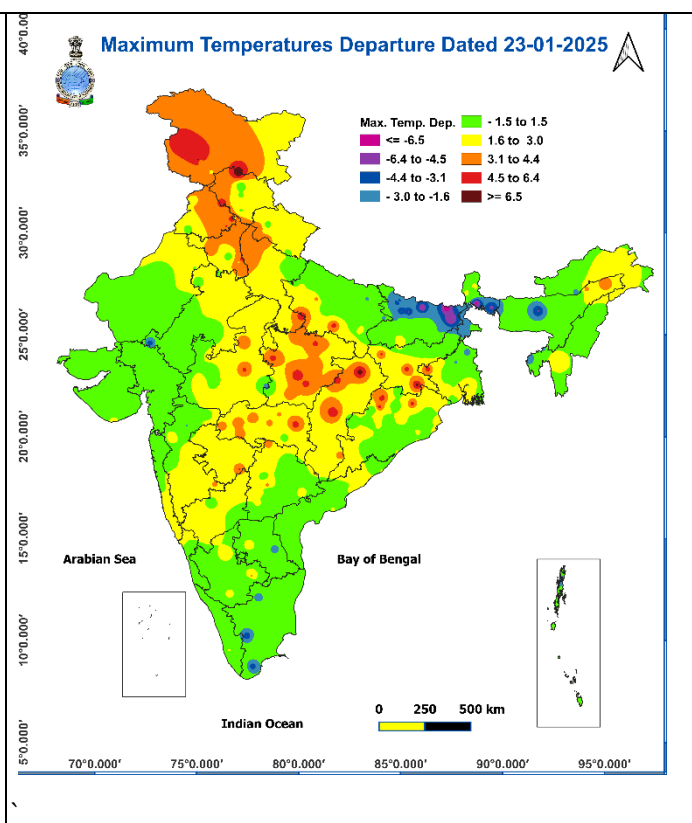


Fig. 3: Minimum Temperatures

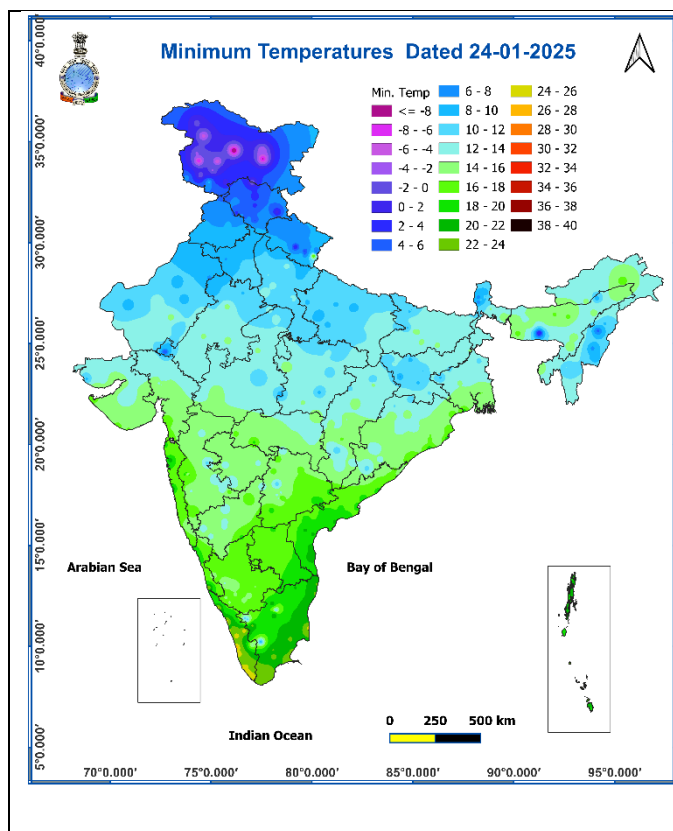
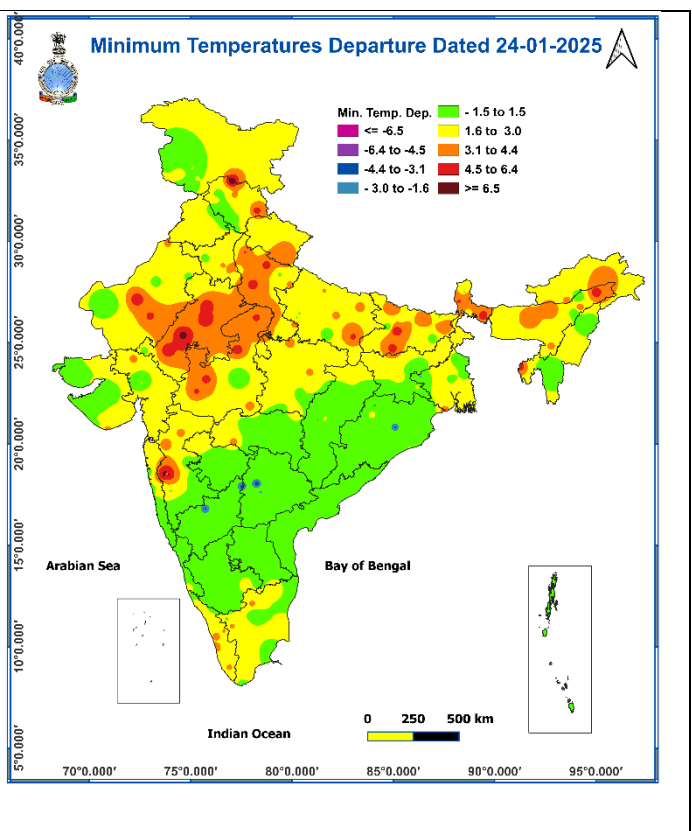


Fig. 4: Departure of Minimum Temperatures



Weather forecast over Delhi/NCR during 24th to 27th Jan. 2025**Past Weather:**

There has been a fall in minimum temperature upto 01°C over Delhi/NCR during past 24hr. The Maximum and Minimum temperatures over Delhi are in the range of 23 to 25°C and 09 to 10°C respectively. The minimum temperature was above normal upto 02°C and maximum temperature was above normal upto 05°C over most places. Mainly smog/mist conditions with predominant surface wind from the northwest direction with wind speed reaching 12 to 14 kmph prevailed during past 24hr. Mainly smog/mist conditions with wind speed less than 12 kmph west direction prevailed over the region in the forenoon today.

Weather Forecast:

24.01.2025: Mainly clear sky. The predominant surface wind will likely be in the northwest direction with a wind speed of less than 12 kmph till evening. It would decrease thereafter becoming less than 08 kmph from the northwest direction during the night. Smog/mist is likely in the evening/night.

25.01.2025: Mainly clear sky. The predominant surface wind is likely to be from the northwest direction with a wind speed less than 08 kmph during morning hours. Shallow fog/mist is likely during morning hours. The wind speed will gradually increase thereafter becoming 12-14 kmph from northwest direction during afternoon. It will decrease becoming less than 10 kmph from northwest direction during evening and night. Smog/mist is likely in the evening/night.

26.01.2025: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with wind speed less than 08 kmph during morning hours. Shallow fog/mist is likely during morning hours. The wind speed will gradually increase thereafter becoming 12-14 kmph from northwest direction during afternoon. It will decrease becoming less than 08 kmph from northwest direction during evening and night. Smog/mist is likely in the evening/night.

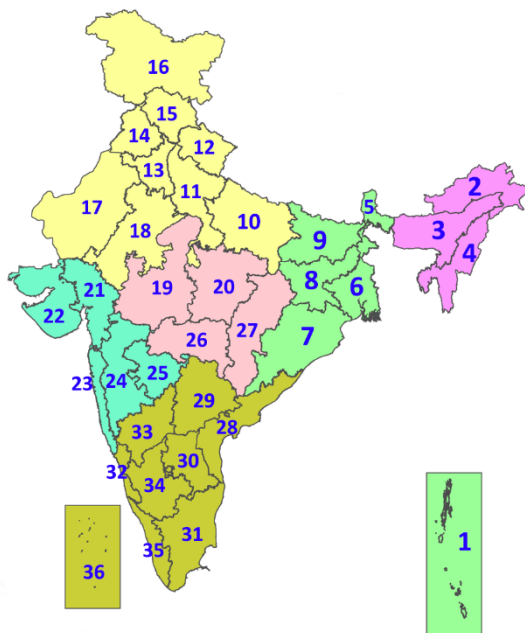
27.01.2025: Mainly clear sky. The predominant surface wind will likely be in the northwest direction with a wind speed of less than 06 kmph during morning hours. Smog/ shallow fog/mist is likely during morning hours. The wind speed will gradually increase thereafter becoming 08-10 kmph from northwest direction during afternoon. It will decrease becoming less than 06 kmph from northwest direction during evening and night. Smog/mist is likely in the evening/night.

Legends & abbreviations:

- ❖ **Heavy Rain:** 64.5-115.5mm; **Very Heavy Rain:** 115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** 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 62-87 kmph

Very Severe: Wind speed > 87 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 Strom: 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)