



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 31<sup>st</sup> January, 2025

Time of Issue: 1315 hours IST

**Subject: Light to moderate rainfall/snowfall likely to continue over Western Himalayan Region and rainfall likely over plains of Northwest India till 05<sup>th</sup> February, 2025.**

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

- ❖ **Dense to very dense fog conditions (visibility < 50 m)** reported in isolated pockets of Punjab, East Uttar Pradesh, West Rajasthan, Odisha, Chhattisgarh and **dense fog (visibility 50-199 m)** reported in isolated pockets of Haryana, West Uttar Pradesh, Bihar, West Bengal & Sikkim and Nagaland.
- ❖ **Heavy rainfall** recorded at isolated places over Assam & Meghalaya and **Light to moderate rainfall** at many places over Arunachal Pradesh.
- ❖ **Light rainfall/snowfall** occurred at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.

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

- ❖ A Western Disturbance seen as a cyclonic circulation over north Pakistan in lower tropospheric levels. An induced cyclonic circulation lies over Haryana & neighbourhood in lower tropospheric levels. A fresh Western Disturbance seen as a trough in middle & upper tropospheric level runs roughly along Long. 63°E to the north of Lat. 28°N. Another fresh Western Disturbance is likely to affect Northwest India during 03<sup>rd</sup> February, 2025. Under the influence of these systems,
  - ✓ Isolated to scattered light/moderate rainfall/snowfall activity likely over Western Himalayan Region; isolated light rainfall is also likely over Punjab and Haryana & Chandigarh till 01<sup>st</sup> February, 2025.
  - ✓ Thereafter, under the influence of fresh Western Disturbance from 03<sup>rd</sup> February; Fairly widespread light/moderate rainfall/snowfall likely over Western Himalayan Region on 04<sup>th</sup> February and Isolated to scattered light/moderate rainfall/snowfall activity likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 03<sup>rd</sup>, 05<sup>th</sup> & 06<sup>th</sup>, Himachal Pradesh and Uttarakhand on 03<sup>rd</sup> & 05<sup>th</sup> and isolated to scattered light rainfall activity likely over Punjab, Haryana & Chandigarh during 03<sup>rd</sup>-05<sup>th</sup>, West Uttar Pradesh & Rajasthan on 03<sup>rd</sup> & 04<sup>th</sup> February.
  - ✓ Thunderstorm activity accompanied with lightning at isolated places likely over Punjab and Haryana on 31<sup>st</sup> January.
- ❖ A **cyclonic circulation** lies over northeast Assam in lower tropospheric levels. Under its influence,
  - ✓ Isolated to scattered light to moderate rainfall very likely over Arunachal Pradesh during 31<sup>st</sup> January- 02<sup>nd</sup> February, Isolated light to moderate rainfall very likely over northeast Assam on 31<sup>st</sup> January & 01<sup>st</sup> February, Nagaland & Sub-Himalayan West Bengal & Sikkim on 31<sup>st</sup> January.
- ❖ Under the influence of a cyclonic circulation over south Kerala and a trough in easterly over south Bay of Bengal in lower tropospheric levels, Light to moderate rainfall accompanied with thunderstorm & lightning very likely at a few places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe on 31<sup>st</sup> January.

**Temperature and Fog Forecast:**

(Temperature Conditions during past 24 hours till 0830 hours IST of today is provided in **Annexure IV**)

**Forecast of temperature:**

- ❖ No significant change in minimum temperatures likely over Northwest India during next 48 hours and gradual rise by 2-3°C thereafter.
- ❖ No significant change in minimum temperatures likely over Central & East India and Gujarat State during next 5 days.
- ❖ No significant change in minimum temperatures likely over Maharashtra region during next 24 hours and gradual rise by 2-3°C thereafter.

### Dense Fog Warnings:

**Dense fog conditions** very likely to continue to prevail during night/early morning hours in isolated pockets of West Rajasthan till 01<sup>st</sup>, Uttar Pradesh, West Bengal & Sikkim, Odisha, Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura till 02<sup>nd</sup>; Bihar till 03<sup>rd</sup> February.

### iii. Weather conditions and forecast over Delhi/NCR during 31<sup>st</sup> Jan. to 03<sup>rd</sup> Feb. 2025 (Annexure V)

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>

### ANNEXURE I

#### Rainfall recorded during past 24 hours till 0830 hours IST of today 31.01.2025 (in cm):

- ❖ **Assam & Meghalaya:** Ranganadi Nt Xing (dist Lakhimpur) 7, Dhemaji (dist Dhemaji) 7, N.lakhimpur/lilabari (dist Lakhimpur) 3, Chauldhowaghat (dist Lakhimpur) 2, Lala Arg (dist Hailakandi) 1, Khowang Arg (dist Dibrugarh) 1, Sivasagar (dist Sibsagar) 1;
- ❖ **Arunachal Pradesh:** Naharlagun\_ Aws (dist Papumpara) 4, Basar\_ Aws (dist West Siang) 3

#### Visibility reported ( $\leq 200$ m) (in meter):

- ❖ **West Rajasthan:** Churu 0; **East Uttar Pradesh:** Gorakhpur 0, Ballia 20, Varanasi 200; **Chhattisgarh:** Jagdalpur 0; **Odisha:** Koraput 20; **Punjab:** Ludhiana 20; **Bihar:** Purnea 50; **Gangetic West Bengal:** Kalai Kunda 50; **Sub-Himalayan West Bengal & Sikkim:** Cooch Behar 50; **West Uttar Pradesh:** Moradabad 100; **Nagaland:** Dimapur 100; **Haryana:** Hisar 150

#### Impact expected due to dense fog in the night /morning hours:

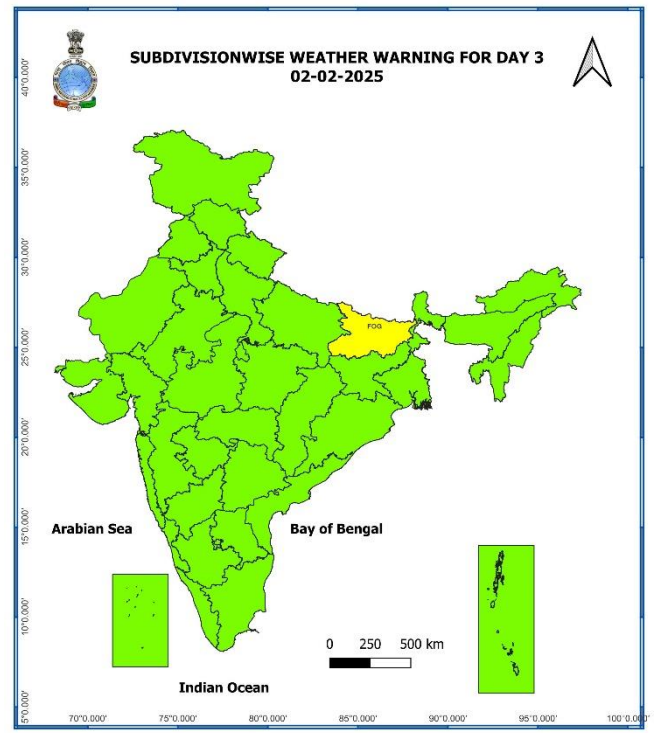
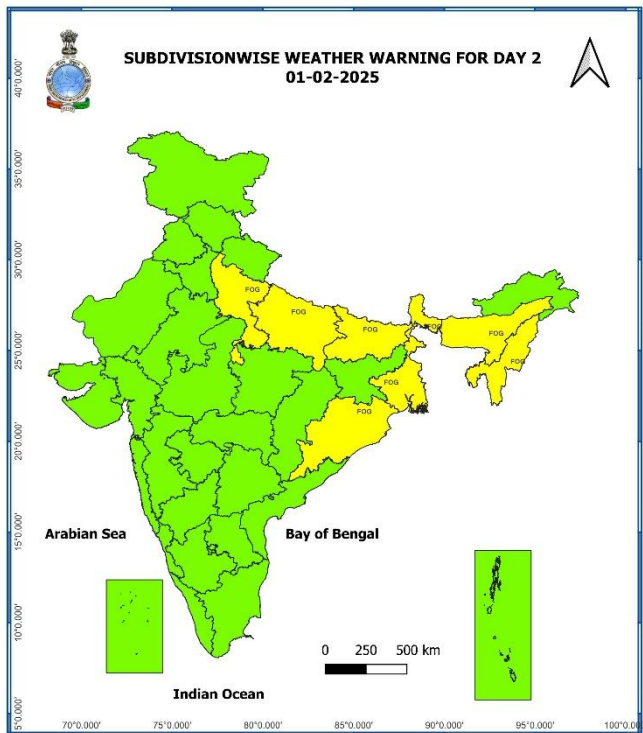
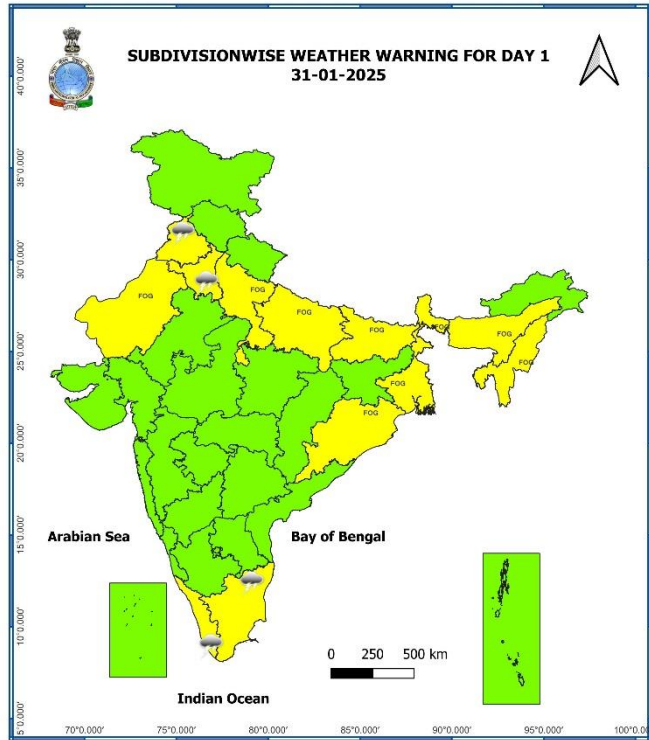
- ❖ Transport and Aviation:
  - May affect some airports, highways and railway routes in the areas of met- sub-division.
  - Difficult driving conditions with slower journey times.
  - Unless taken precautionary measures, it may lead to some road traffic collisions.
- ❖ Power Sector:
  - Chances of Tripping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

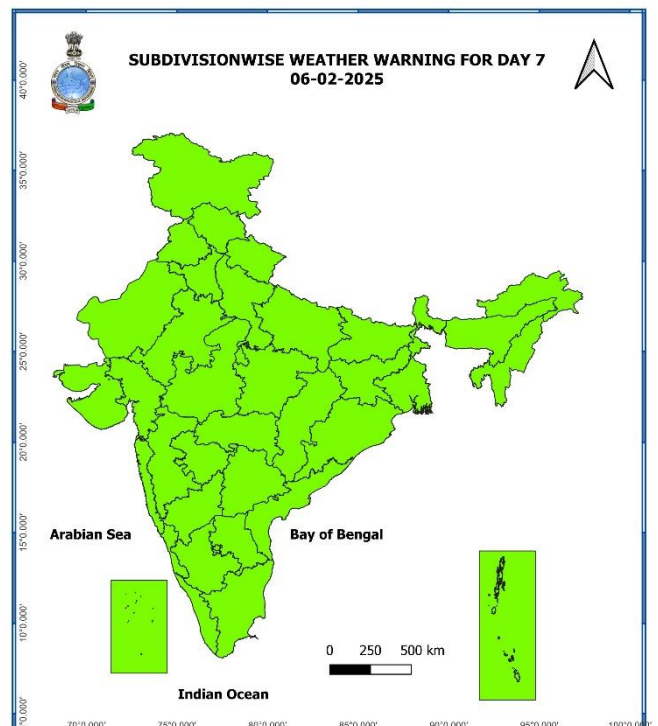
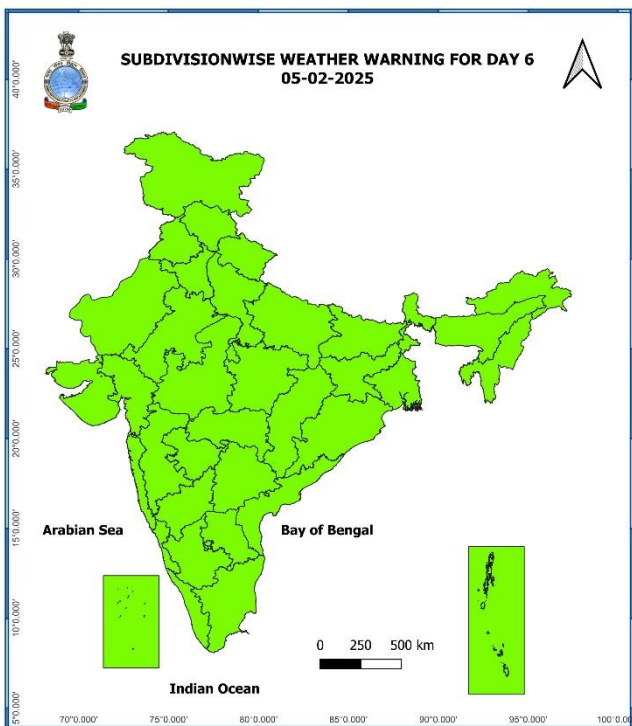
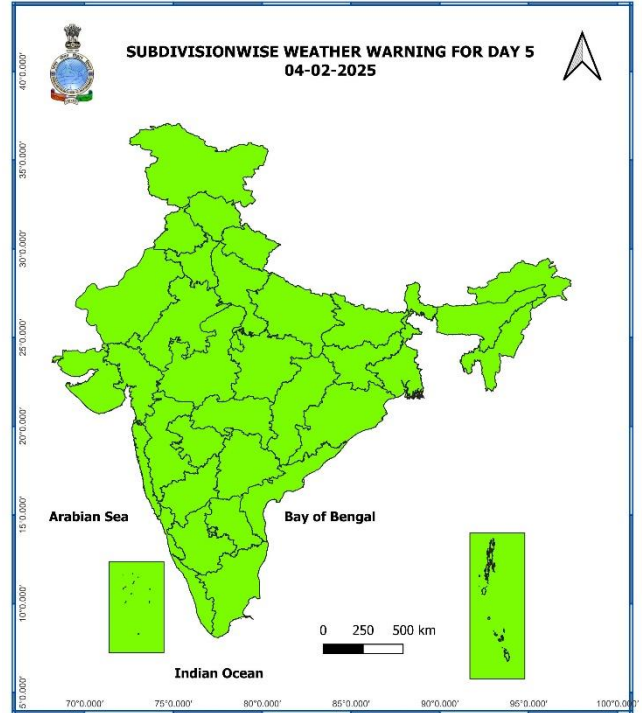
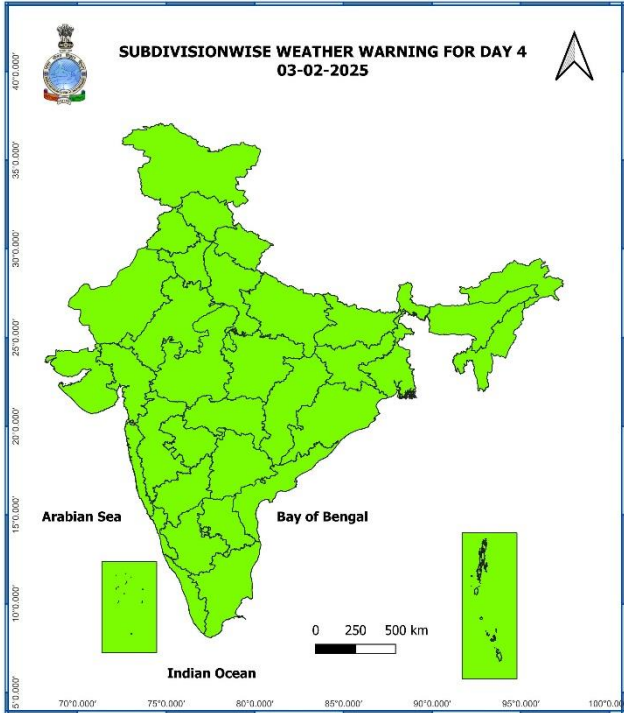
#### Action suggested:

- ❖ 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	31-Jan	01-Feb	02-Feb	03-Feb	04-Feb	05-Feb	06-Feb
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	ISOL	DRY	DRY	DRY	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	SCT	ISOL	ISOL	DRY	DRY	ISOL	SCT
3	ASSAM & MEGHALAYA	ISOL	ISOL	DRY	DRY	DRY	DRY	ISOL
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	DRY	DRY	DRY	DRY	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	ISOL	ISOL	DRY	DRY
12	UTTARAKHAND	DRY	ISOL	DRY	ISOL	FWS	ISOL	DRY
13	HARYANA CHANDIGARH & DELHI	ISOL	ISOL	DRY	SCT	SCT	ISOL	DRY
14	PUNJAB	ISOL	ISOL	DRY	ISOL	SCT	ISOL	DRY
15	HIMACHAL PRADESH	ISOL	SCT	DRY	ISOL	FWS	SCT	DRY
16	JAMMU & KASHMIR AND LADAKH	SCT	SCT	DRY	ISOL	FWS	SCT	ISOL
17	WEST RAJASTHAN	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	ISOL	ISOL	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	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	ISOL	ISOL	DRY	DRY	DRY	DRY
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	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.

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



- ❖ Minimum temperatures are **5-12°C** over many parts of plains of Northwest India & Bihar; **12-20°C** in many parts of Central, East & West India. Today, the lowest minimum temperature of **5.8°C** is reported at **Fatehpur (Rajasthan)** over the plains of the country.
- ❖ During the past 24 hours, there has been **fall in minimum temperatures by 1-4°C** in some parts of Madhya Pradesh; at isolated places over Himachal Pradesh, Gujarat State, Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam and **rise by 1-4°C** in many parts of Uttar Pradesh, Tamilnadu Puducherry & Karaikal; in some parts of Gangetic West Bengal, Vidarbha, Kerala & Mahe; at isolated places over Jammu-Kashmir, Bihar, Assam & Meghalaya and Jharkhand.
- ❖ Minimum temperatures are **above normal (2°C or more)** in many places over West & Central India, Odisha, Gangetic West Bengal & Tamilnadu Puducherry & Karaikal; in some parts of Northeast India; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Haryana Chandigarh & Delhi. These are **below normal (-1°C to -3°C)** at isolated places over East Uttar Pradesh and near normal over rest parts of the country.

Fig. 1: Maximum Temperatures

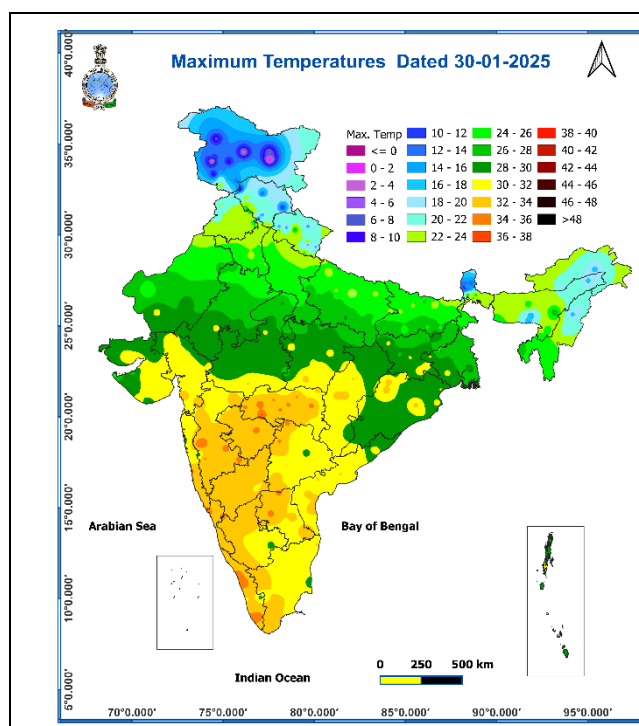


Fig. 2: Departure of Maximum Temperatures

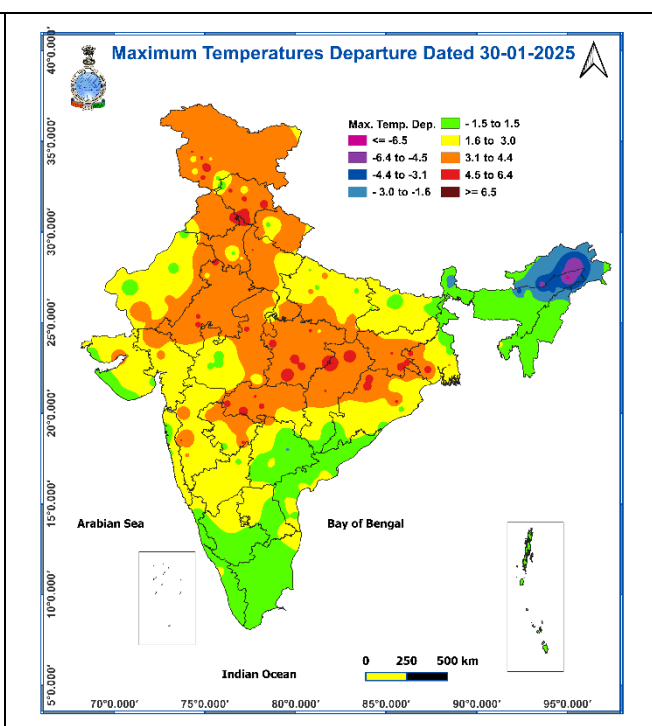


Fig. 3: Minimum Temperatures

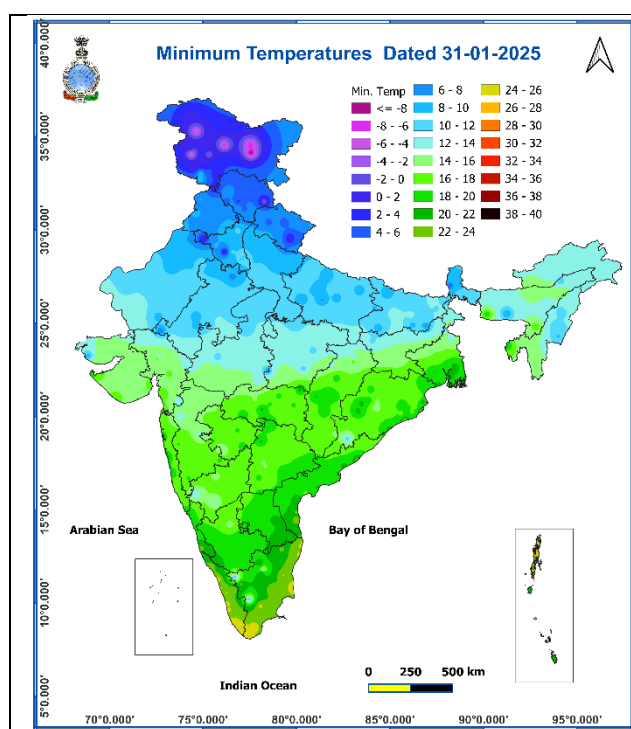
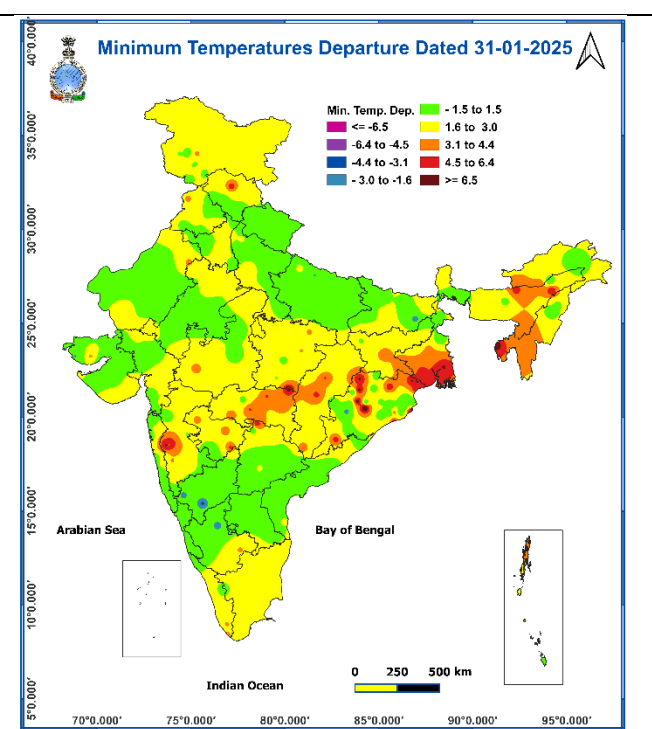


Fig. 4: Departure of Minimum Temperatures



## Weather forecast over Delhi/NCR during 31<sup>st</sup> Jan. to 03<sup>rd</sup> Feb. 2025

### Past Weather:

There has been no significant change in minimum temperature over Delhi/NCR during the past 24 hours. The Maximum and Minimum temperatures over Delhi are in the range of 24 to 27°C and 09 to 12°C respectively. The minimum temperatures were above normal up to 03 °C, and the maximum temperature was above normal up to 05 °C over most places. Moderate fog was reported at Safdarjung and Palam airports. Safdarjung airport recorded the lowest visibility, 200m at 0700 hours IST, which improved to 300 m at 0730 hours. Palam airport recorded the lowest visibility, 350 m from 0800 hours to 0900 hours IST, which improved thereafter, becoming 400 m at 0930 hours IST. Mainly smog/shallow fog conditions with predominant surface wind from the southeast direction with wind speed reaching 10 to 15 kmph prevailed during the past 24hr. Mainly Smog/Shallow fog conditions with wind speed less than 10 kmph southeast direction prevailed over the region in the forenoon today.

### Weather Forecast:

**31.01.2025:** Partly cloudy sky. The predominant surface wind will likely be in the southeast direction with a wind speed of less than 08 kmph till evening. It would decrease thereafter, becoming less than 08 kmph from the southeast direction during the night. Smog/mist is likely in the night.

**01.02.2025:** Partly cloudy sky. The predominant surface wind is likely to be from the southeast direction with a wind speed less than 06 kmph during morning hours. Smog/ shallow fog in most places is very likely to commence during the early morning hours, with moderate fog in isolated places during the morning hours. The wind speed will gradually increase thereafter, becoming 08-10 kmph from the southeast direction during the afternoon. It will decrease becoming less than 06 kmph from the southeast direction during evening and night. Smog/mist is likely in the night.

**02.02.2025:** Mainly Clear sky. The predominant surface wind is likely from the east direction with wind speed less than 06 kmph during morning hours. Smog/ shallow fog in most places is very likely to commence during the early morning hours, with moderate fog in isolated places during the morning hours. The wind speed will gradually increase thereafter becoming 10-12 kmph from southeast direction during afternoon. It will decrease becoming less than 06 kmph from variable direction during evening and night. Smog/mist is likely in the night.

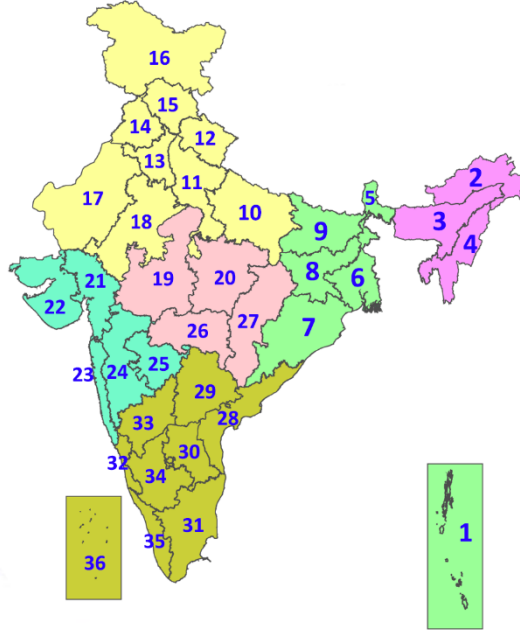
**03.02.2025:** Partly cloudy sky. The predominant surface wind will likely be in the north/northeast direction with a wind speed of less than 04 kmph during morning hours. Smog/ shallow fog in most places is very likely to commence during the early morning hours, with moderate fog in isolated places during the morning hours. The wind speed will gradually increase thereafter becoming 06-08 kmph from southeast direction during afternoon. It will decrease becoming less than 04 kmph from northeast direction during evening and night. Smog/mist is likely in the 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  $4.5^\circ\text{C}$  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 62-87 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 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)