Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 29th January, 2025
Time of Issue: 1330 hours IST

Subject: Wet spell likely over Western Himalayan Region till 04th and over plains of Northwest India from 31st January to 04th February, 2025.

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

- **Cold Wave conditions** prevailed in isolated pockets of Himachal Pradesh.
- **Dense to very dense fog conditions (visibility < 50 m)** reported in isolated pockets of North Uttar Pradesh, Bihar & coastal Odisha, Meghalaya.

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

- The **Western disturbance** seen as a cyclonic circulation over West Afghanistan in lower tropospheric levels. Two fresh **Western Disturbances** are likely to affect Northwest India between 01st to 04th February, 2025. Under their influence,
  - ✓ Scattered to fairly widespread light to moderate rainfall/snowfall activity likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 29th January- 04th February; isolated to scattered rainfall/snowfall over Himachal Pradesh during 29th January-04th February, Uttarakhand on 29th January and 01st February and isolated to scattered light to moderate rainfall over Punjab, Haryana, West Uttar Pradesh during 31st January- 04th February, East Rajasthan, Vidarbha during 02nd -04th , Madhya Pradesh and Chhattisgarh on 03rd & 04th February, 2025.
- A **cyclonic circulation** lies over northeast Assam in lower tropospheric levels. Under its influence,
  - ✓ Light to moderate rainfall accompanied with thunderstorm & lightning very likely at a few places over Arunachal Pradesh and Assam & Meghalaya during 29th-31st January.
  - ✓ Isolated light to moderate rainfall likely over Sub-Himalayan West Bengal & Sikkim during 29th-31st January.
  - ✓ **Heavy rainfall/snowfall** likely over Arunachal Pradesh on 30th January.
- Under the influence of an easterly wave, Light to moderate rainfall accompanied with thunderstorm & lightning very likely at a few places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe during 29th January - 01st February with isolated **heavy rainfall** likely over Tamil Nadu, Puducherry & Karaikal on 30th & 31st January and over Kerala & Mahe on 31st 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:

- Gradual rise in minimum temperatures by 2-3°C likely over Northwest India during next 5 days and no significant change thereafter.
- Rise in minimum temperatures by 2-4°C likely over Central and East India during next 3 days and no significant change thereafter.
- No significant change in minimum temperatures likely over rest parts of the country.

Dense Fog Warnings:

Dense to very Dense fog Conditions very likely to continue to prevail during night/early morning hours in isolated pockets of Uttar Pradesh till 31st January.

Dense fog conditions very likely to continue to prevail during night/early morning hours in isolated pockets of Gangetic West Bengal till 30th January; coastal Odisha till 31st; Sub-Himalayan West Bengal & Sikkim and Bihar till 01st February and over Assam & Meghalaya during 31st January-03rd February, 2025.

iii. Weather conditions and forecast over Delhi/NCR during 29th Jan. to 01st Feb. 2025 (Annexure V)

For more details, kindly refer National Weather Bulletin:
https://mausam.imd.gov.in/responsive/all_india_forcast_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 29.01.2025 (in cm):

- **Andaman & Nicobar Islands:** Car Nicobar (dist Nicobar) 2,
- **Arunachal Pradesh:** Ziro (dist Lower Subansiri) 1;
- **Assam & Meghalaya:** Goibargaon (dist Baksa) 1;
- **Nagaland, Manipur, Mizoram & Tripura:** Kiphire (dist Kiphire) 1, Kiphire_ Aws (dist Kiphire) 1

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

- **East Uttar Pradesh:** Ayodhya, Kushinagar 0 each; **Odisha:** Angul 0; **West Uttar Pradesh:** Meerut 20; **Bihar:** Purnia 25; **Meghalaya**: Barapani 25; **Punjab:** Karnal 200.

Impact expected due to dense fog in the night /morning hours over plains of North Uttar Pradesh, East 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:

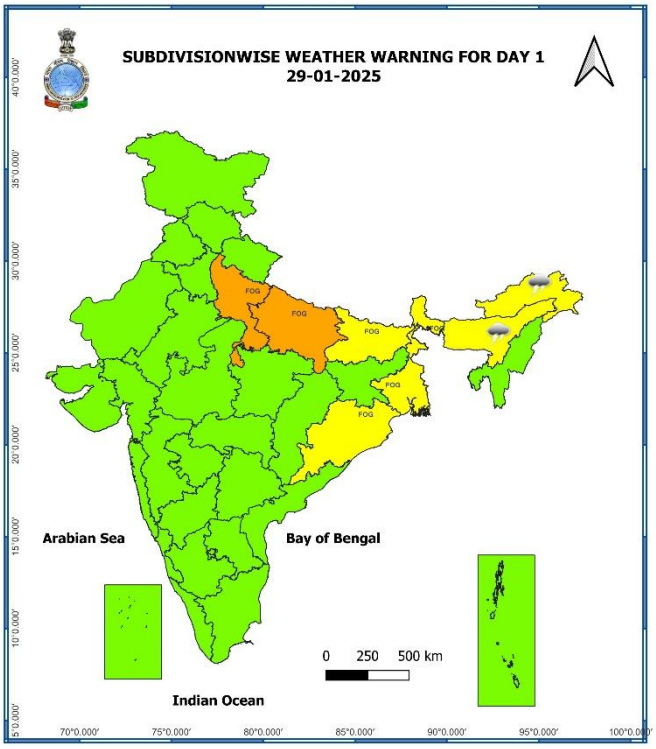
- Transport and Aviation:
  - Be careful while driving or outing through any transport.
  - Use fog lights during driving.
  - Be in touch with airlines, railways and state transport for schedule of your journey.
- Power Sector:
  - To keep ready Maintenance Team.
  - Human Health: To avoid outing until unless emergency and to cover the face.

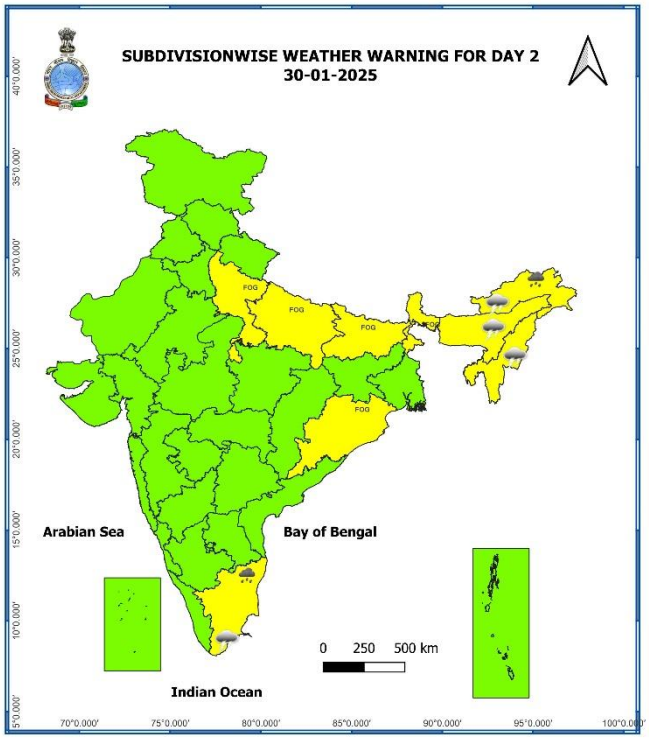
ANNEXURE II

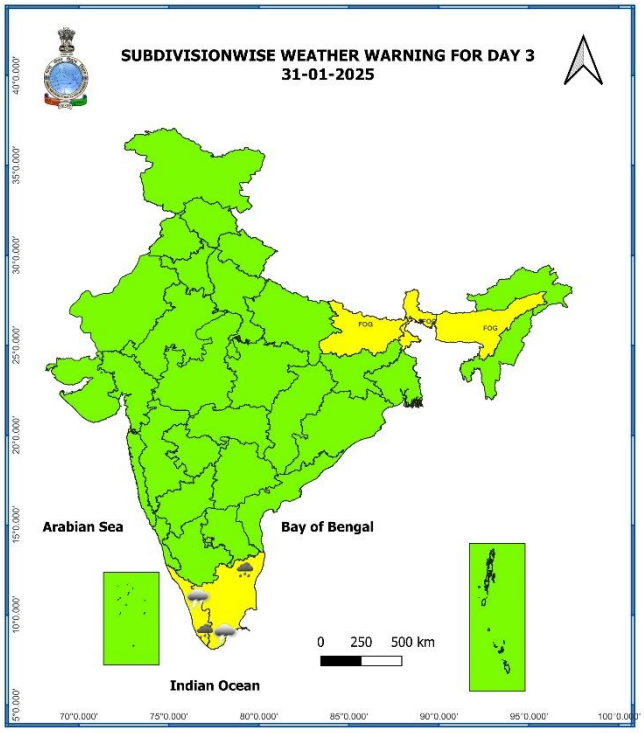
7 Days Rainfall Forecast								
S. No.	Subdivision	29-Jan	30-Jan	31-Jan	01-Feb	02-Feb	03-Feb	04-Feb
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	ISOL	DRY	DRY	DRY	DRY	ISOL
2	ARUNACHAL PRADESH	SCT	FWS	SCT	ISOL	ISOL	DRY	DRY
3	ASSAM & MEGHALAYA	ISOL	SCT	ISOL	DRY	DRY	DRY	DRY
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	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	ISOL	ISOL
11	WEST UTTAR PRADESH	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
12	UTTARAKHAND	ISOL	DRY	DRY	ISOL	DRY	SCT	FWS
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	ISOL	ISOL	DRY	SCT	ISOL
14	PUNJAB	DRY	DRY	SCT	ISOL	DRY	ISOL	SCT
15	HIMACHAL PRADESH	ISOL	ISOL	SCT	SCT	ISOL	SCT	FWS
16	JAMMU & KASHMIR AND LADAKH	FWS	SCT	SCT	FWS	ISOL	FWS	WS
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	ISOL	SCT	ISOL
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	ISOL	DRY	DRY
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
21	GUJARAT REGION	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
25	MARATHAWADA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
26	VIDARBHA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
27	CHHATTISGARH	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
28	COASTAL ANDHRA PRADESH & YANAM	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	SCT	FWS	SCT	ISOL	DRY	DRY
32	COASTAL KARNATAKA	DRY	DRY	DRY	ISOL	DRY	ISOL	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	ISOL	DRY	DRY	DRY
35	KERALA & MAHE	ISOL	SCT	SCT	ISOL	ISOL	DRY	DRY
36	LAKSHADWEEP	DRY	SCT	SCT	SCT	SCT	DRY	DRY

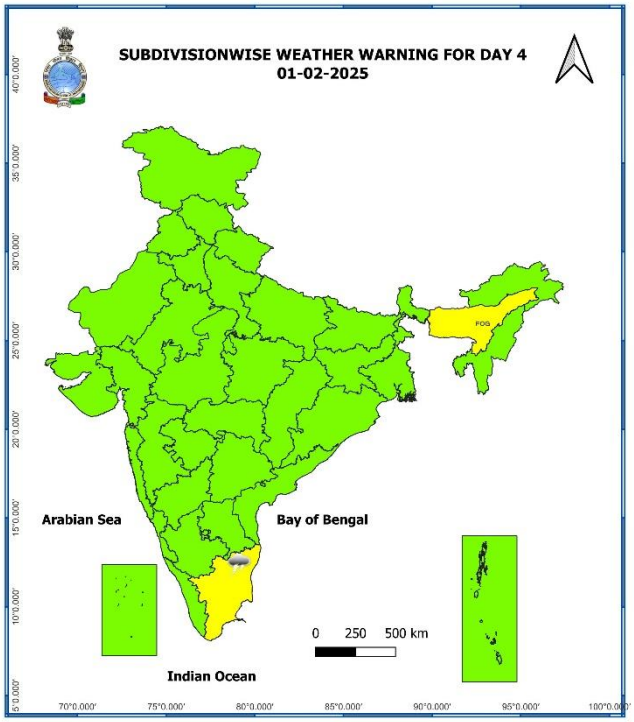
- **As the lead period increases forecast accuracy decreases**

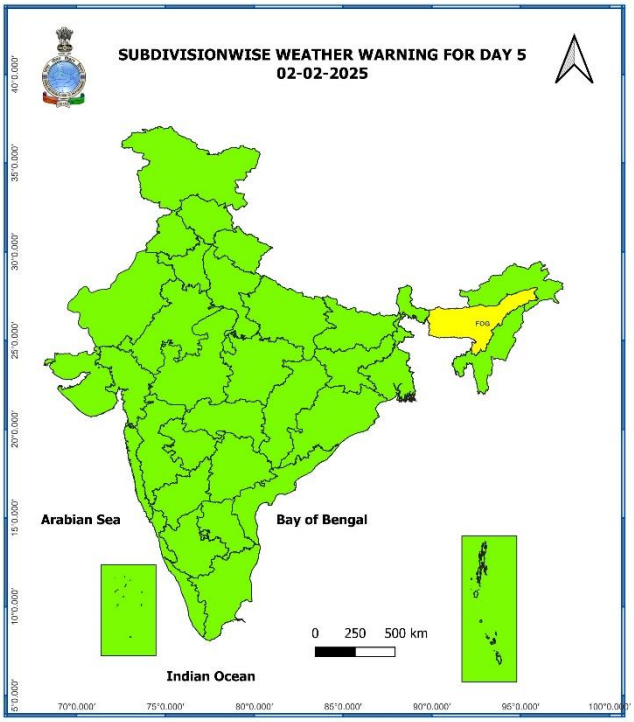
ANNEXURE III

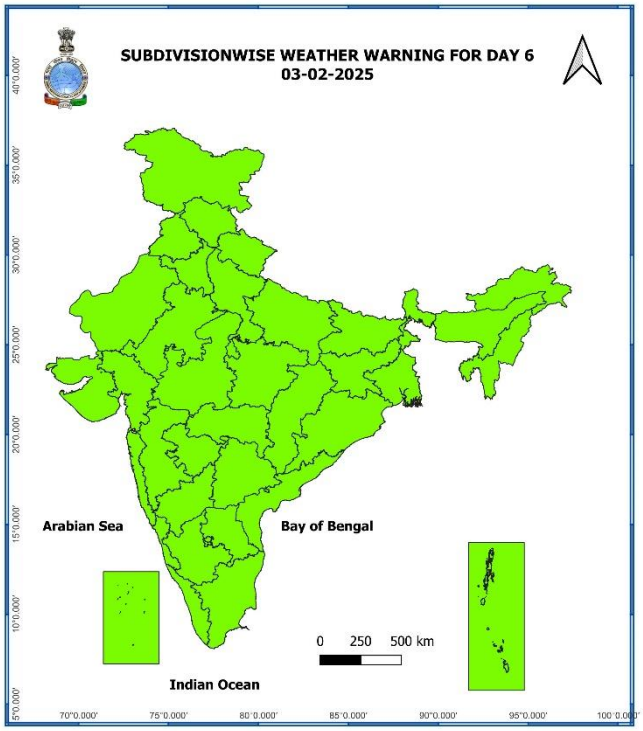


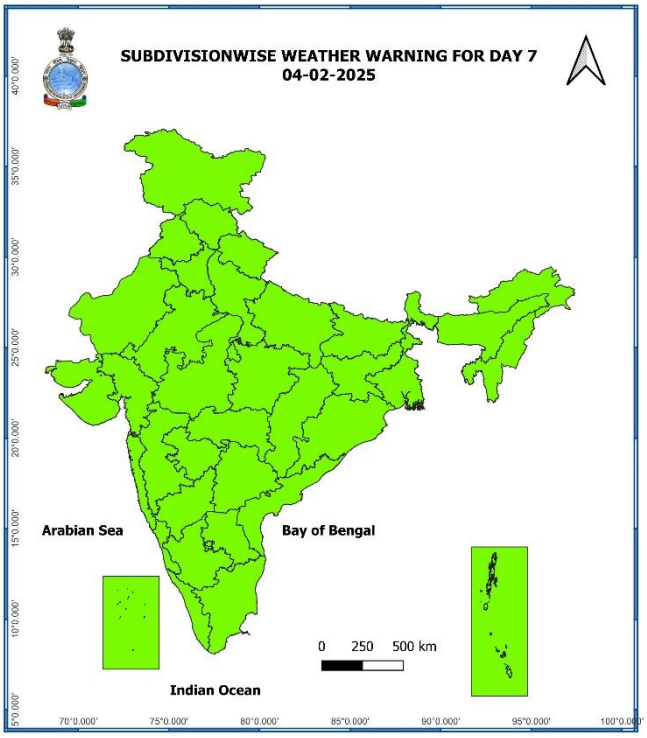












- **Action may be taken based on ORANGE AND RED COLOUR warnings.**
- **Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.**
- **As the lead period increases forecast accuracy decreases.**

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

- Minimum temperatures are **4-10°C** over many parts of plains of Northwest India & adjoining Uttarakhand, East Madhya Pradesh, Chhattisgarh and Jharkhand; **10-18°C** in many parts of Rajasthan, West Madhya Pradesh, East & West India. Today, the lowest minimum temperature of **4.8°C** is reported at **Narnaul (Haryana)** over the plains of the country.
- During the past 24 hours, there has been **fall in minimum temperatures by 1-3^{0}C** in isolated places of Sub-Himalayan West Bengal & Sikkim and Saurashtra & Kutch and **rise by 2-4^{0}C** in many parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, East Rajasthan, north Madhya Pradesh and West Uttar Pradesh and **1-3^{0}C** in some parts of, Chhattisgarh, Odisha and major parts of south peninsular India.
- Minimum temperatures are **above normal (2°C or more)** over many parts of West India, Odisha, East Rajasthan; at isolated places over West Madhya Pradesh, Bihar, Telangana, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura. These are **below normal (-1°C to -3°C)** at many places over Delhi; at isolated places over East Madhya Pradesh, Konkan & Goa, Rayalaseema and near normal over rest parts of the country.

Fig. 1: Maximum Temperatures

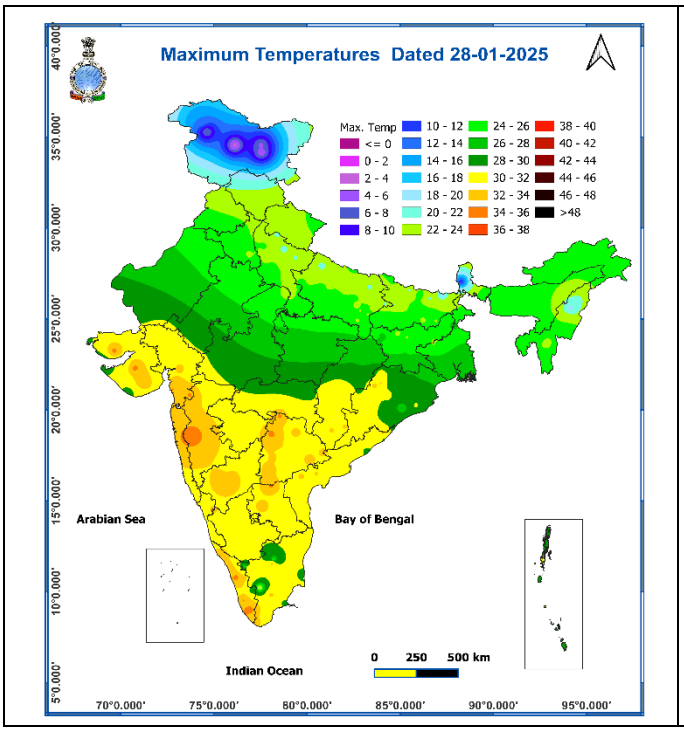


Fig. 2: Departure of Maximum Temperatures

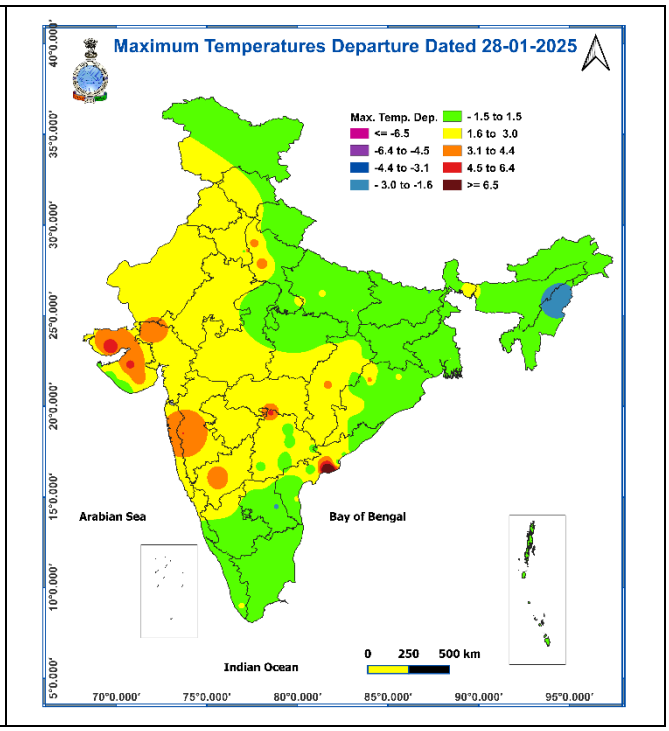


Fig. 3: Minimum Temperatures

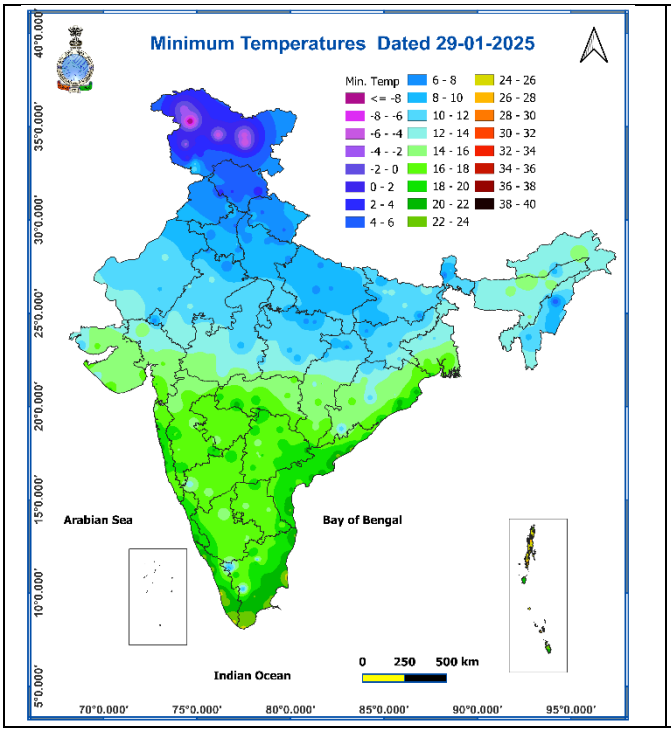
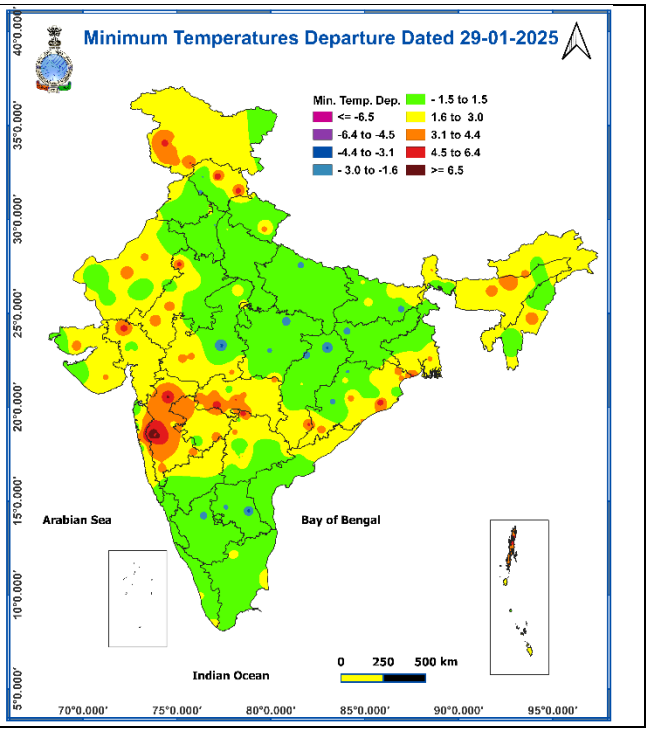


Fig. 4: Departure of Minimum Temperatures



ANNEXURE V

Weather forecast over Delhi/NCR during 29th Jan. to 01st Feb. 2025

Past Weather:

There has been a rise in minimum temperature upto 01°C over Delhi/NCR during past 24hr. The Maximum and Minimum temperatures over Delhi are in the range of 22 to 25°C and 06 to 09°C respectively. The minimum temperature was below normal upto 02°Cand maximum temperature was above normal upto 04°Cover most places. Shallow fog was reported at Safdarjung airport. Safdarjung airport recorded the lowest visibility 500m from 0900 hours to 1000 hours IST which improved thereafter becoming 600 m at 1030 hours IST. Palam airport recorded the lowest visibility 1100 m from 0730 hours to 1000 hours IST which improved thereafter becoming 1200 m at 1030 hours IST. Mainly smog/mist conditions with predominant surface wind from the west direction with wind speed reaching 08 to 10 kmph prevailed during past 24hr. Mainly smog/mist conditions with wind speed less than 08 kmph southeast direction prevailed over the region in the forenoon today.

Weather Forecast:

29.01.2025: Partly cloudy sky. The predominant surface wind will likely be in the southeast direction with a wind speed of less than 10 kmph till evening. It would decrease thereafter becoming less than 04 kmph from the variable direction during the night. Smog/mist is likely in the night.

30.01.2025: 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 of the places very likely to commence during early morning hours with moderate fog in isolated places during morning hours. The wind speed will gradually increase thereafter becoming 08-10 kmph from southeast direction during afternoon. It will decrease becoming less than 04 kmph from southeast direction during evening and night. Smog/mist is likely in the night.

31.01.2025: Partly cloudy sky. The predominant surface wind is likely to be from southeast direction with wind speed less than 04 kmph during morning hours. Smog/ shallow fog in most of the places very likely to commence during early morning hours with moderate fog in isolated places during morning hours. The wind speed will gradually increase thereafter becoming 08-10 kmph from southeast direction during afternoon. It will decrease becoming less than 04 kmph from southeast direction during evening and night. Smog/mist is likely in the night.

01.02.2025: Partly cloudy sky. The predominant surface wind will likely be in the southeast direction with a wind speed of less than 04 kmph during morning hours. Smog/ shallow fog in most of the places very likely to commence during early morning hours with moderate fog in isolated places during 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 southeast direction during evening and night. Smog/mist is likely in the night.

Agromet advisories for likely impact of Heavy Rainfall

- In Tamil Nadu, harvest the matured paddy immediately in order to protect from rainfall. Provide support to banana plants with wooden poles to avoid lodging due to rain and wind. Ensure adequate drainage facility in the turmeric and sugarcane fields.

Legends & abbreviations:

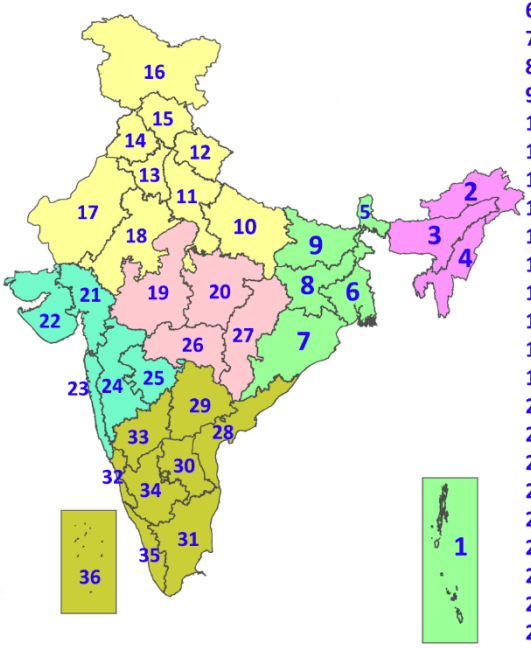
- **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- **Obsy:** Observatory; **AWS:** Automatic Weather Station; **ARG:** Automatic Rain Gauge; **dist:** District: **NH:** National Highway; **KVK**: Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **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.

राष्ट्रीय मौसम पूर्वानुमान केन्द्र
भारत मौसम विज्ञान विभाग
पृथ्वी विज्ञान मंत्रालय

National Weather Forecasting Centre
India Meteorological Department
Ministry of Earth Sciences

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 Rain
Very Heavy Rain
Extremely Heavy Rain
Thunder & Lightning
Hailstorm
Dust Raising Winds

Heavy Snow
Dust Storm
Heat Wave
Warm Night
Hot Day
Hot & Humid
Strong Surface Winds

Cold Wave
Cold Day
Ground Frost

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 ≥40° C for plains and ≥30° 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 ≥6.5° C

(b). Based on Actual maximum temperature

- **Heat Wave:** When actual maximum temperature ≥45°C.
- **Severe Heat Wave:** When actual maximum temperature ≥47°C

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°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 °C.

Cold Wave

When minimum temperature of a station ≤10°C for plains and ≤0°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 ≤ -6.5 °C

(b) Based on actual Minimum Temperature (for Plains only)

- **Cold Wave :** When Minimum Temperature is ≤ 4.0 °C
- **Severe Cold Wave:** When Minimum Temperature is ≤ 2.0 °C

(c) For Coastal Stations

When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C

Cold Day

When minimum temperature of a station ≤10°C for plains and ≤0°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 ≤ -6.5 °C

Fog

Phenomenon of small droplets suspended in air and the horizontal visibility < 1km

- **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 ≤4°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)