

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 21st February, 2025

Time of Issue: 1345 hours IST

Subject: a) An active Western Disturbance likely to cause widespread rainfall/snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 25th-27th; Himachal Pradesh on 26th & 27th; Uttarakhand on 27th February, 2025.
b) Isolated to scattered rainfall along with thunderstorm/lightning/hailstorm likely over East India on 22nd & 23rd February, 2025.

Temperature:

- ❖ During Past 24 hours, Day temperatures have risen by 1-2°C at many places over Madhya Pradesh, East Rajasthan, Interior Odisha, along the west coast and northeast India. It has fallen by 06-12°C at many places over Western Himalayan Region, by 02-04°C West Rajasthan, Punjab, Haryana, Uttar Pradesh, North coastal Odisha, Jharkhand, Gangetic West Bengal and no significant change over rest parts of the country.
- ❖ Day temperatures were **above normal (2.0°C to 5.0°C)** at many places over Central India, West India, Interior Karnataka, West Telangana, Chhattisgarh, Interior Odisha, South Rajasthan, south Bihar, West Jharkhand and South Assam. These were **markedly below normal (<-5.1°C)** at many places over Western Himalayan Region, Northwest Punjab; **below normal (-1°C to -3°C)** at many places over North Punjab, North Haryana, Northwest Uttar Pradesh, North Coastal Odisha, Gangetic West Bengal and near normal over rest parts of the country
- ❖ During past 24 hours, Night temperatures have risen by 1-3°C at many places along the west coast, Bihar, Andaman Islands, Meghalaya, Manipur, Mizoram & Tripura and fallen by 2-4°C at many places over Western Himalayan Region, Punjab, Haryana, West Rajasthan, East Madhya Pradesh, North Chhattisgarh, Odisha, Jharkhand, Gangetic West Bengal, South interior Karnataka and Nagaland and no significant change over rest parts of the country.
- ❖ Night temperatures were **markedly above normal (5.1°C or more)** at isolated places over South Interior Karnataka, West Bihar, south Assam, Northwest Odisha, southeast Rajasthan **above normal (2.0°C to 5.0°C)** at a few places over south & east Rajasthan, Gujarat, Konkan & Goa, Madhya Maharashtra, Marathwada, Telangana, Madhya Pradesh, South Uttar Pradesh, Chhattisgarh, Bihar, Andaman & Nicobar Islands. These were **below normal (-1°C to -3°C)** at many places over Western Himalayan Region, Northwest Rajasthan, Punjab, Haryana, North Uttar Pradesh, Gangetic West Bengal, Northeast India and coastal & south Tamil Nadu near and near normal over rest parts of the country
- ❖ Further detailed temperature observations during past 24 hours till 0830 hours IST of today are provided in **Annexure II**

Rainfall:

- ❖ Light to moderate **Rainfall/Snowfall** observed at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; Light to moderate **Rainfall** at most places over Punjab; **at many places over** Gangetic West Bengal; **at a few places over** Haryana Chandigarh, West Uttar Pradesh, North Odisha, Arunachal Pradesh; at isolated places over Northeast Uttar Pradesh, North Chhattisgarh, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Assam & Meghalaya.
- ❖ **Heavy rainfall reported at isolated places over** Jharkhand and Gangetic West Bengal.
- ❖ **Hailstorms reported at isolated locations over** Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh. North Chhattisgarh and North Interior Odisha.
- ❖ **Gusty winds reported at isolated locations over** Gangetic West Bengal, Punjab, Haryana.
- ❖ **Thunderstorm with lightning reported at isolated locations over** Gangetic West Bengal, Odisha, Jharkhand, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh.

i. Weather Systems, Forecast and warning (Annexure III & IV):

- ❖ A trough runs from Rayalaseema to South Chhattisgarh and an anti-cyclonic circulation lies over north Bay of Bengal in lower tropospheric levels. Under the influence of these systems;
 - ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning with squall (speed 40-60 kmph)** very likely over Odisha on 22nd & 23rd; **thunderstorm, lightning with gusty winds (speed 30-40 kmph)** very likely over Gangetic West Bengal, Jharkhand on 22nd & 23rd; Isolated to scattered light/moderate rainfall accompanied with **thunderstorm & lightning** very likely over Sub-Himalayan West Bengal & Sikkim, Bihar on 22nd & 23rd; Gangetic West Bengal and Odisha during 21st-24th February.
 - ✓ **Hailstorm activity also likely at isolated places over Gangetic West Bengal, Jharkhand & Odisha on 22nd February.**
 - ✓ **Heavy rainfall/snowfall** at isolated places likely over Andaman & Nicobar Islands on 25th & 26th February.
- ❖ A **fresh Western Disturbance** is likely to affect Northwest India from the night of 24th February, 2025. Under its influence,
 - ✓ **Fairly widespread to widespread** light to moderate rainfall/snowfall accompanied with thunderstorm & lightning over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh during 25th-27th; **Scattered to fairly widespread** light to moderate rainfall/snowfall accompanied with thunderstorm & lightning over Uttarakhand during 25th-27th February.
 - ✓ **Heavy rainfall/snowfall** at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 25th-27th; Himachal Pradesh on 26th & 27th; Uttarakhand on 27th February.
 - ✓ Isolated light to moderate rainfall likely over Punjab, Haryana, Chandigarh on 26th & 27th; over West Uttar Pradesh and West Rajasthan on 27th February.
- ❖ Isolated light/moderate rainfall very likely over Karnataka on 21st & 22nd; Coastal Andhra Pradesh & Yanam, Rayalaseema during 21st-23rd; over Kerala & Mahe during next 7 days.
- ❖ A **upper air cyclonic circulation** lies over Nagaland in lower tropospheric levels. Under its influence,
 - ✓ Isolated to scattered light rainfall activity likely over Northeast India and Sub-Himalayan West Bengal & Sikkim during next 7 days.
 - ✓ Thunderstorm & lightning activity likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 21st -23rd February; with **gusty winds (speed 30-40 kmph)** over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 22nd February.
 - ✓ **Heavy rainfall/snowfall at isolated places likely over Arunachal Pradesh on 21st February.**

Temperature Forecast:

Forecast of temperature:

Minimum Temperature:

- ❖ Gradual fall in minimum temperatures by 2-3°C likely over Northwest India during next 3 days and no significant change thereafter.
- ❖ No significant change in minimum temperatures likely over rest parts of India during next 4-5 days.

Maximum temperature:

- ❖ Gradual rise in maximum temperatures by 2-4°C likely over Northwest India during next 4 days and no significant change thereafter.
- ❖ No significant change in maximum temperatures likely over Gujarat Region during next 3 days and gradual rise by 2-3°C during subsequent 2 days.
- ❖ No significant change in maximum temperatures likely over rest parts of India during next 4-5 days.

Dense Fog Warnings:

Dense fog conditions very likely to continue to prevail during night/early morning hours in isolated pockets of Himachal Pradesh till 22nd; Sub-Himalayan West Bengal & Sikkim till 24th February.

iii. Weather conditions and forecast over Delhi/NCR during 21st Feb. to 24th Feb. 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>

Significant rainfall recorded during past 24 hours till 0830 hours IST of today 21.02.2025 (in cm):

- ❖ **Gangetic West Bengal:** Burdwan (dist Purba Bardhaman) 8, Alipore (dist Kolkata) 5,
- ❖ **Jharkhand:** Torpa (dist Khunti) 8, Chaibasa (dist West Singhbhum) 4,
- ❖ **Odisha:** Athgarh (Cuttack) 5, Ghasipura (Keonjhar) 4, Bhandaripokhari (Bhadrak) 4,
- ❖ **Chhattisgarh:** Kansabel (dist Jashpur) 4,
- ❖ **Himachal Pradesh:** Nagrota Surian (dist Kangra) 6, Ghamroor (dist Kangra) 4, Koksar (dist Lahaul & Spiti) 4, Chamba (dist Chamba) 4, Saloni (dist Chamba) 4, Keylong (dist Lahaul & Spiti) 4, Tissa (dist Chamba) 4,
- ❖ **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Batote (dist Ramban) 5, Badarwah (dist Doda) 4, Banihal (dist Ramban) 4,
- ❖ **Haryana:** Shivan Rev (dist Kaithal) 2,
- ❖ **Punjab:** Balachaur (dist Sbs Nagar) 3, Amritsar (dist Amritsar) 3, Gurudaspur (dist Gurdaspur) 3,

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

- ❖ **Dense fog (visibility 50-199 m)** reported in isolated pockets of Himachal Pradesh, Punjab, East Rajasthan.
- ❖ **Visibility reported (≤ 200 m) (in meter):** **Himachal Pradesh:** Sundernagar 150; **Punjab:** Faridkot, Bathinda 100, East Rajasthan: Pilani.

Hailstorm reported:

- ❖ **Gangetic West Bengal:** Alipore; **Punjab:** Taran Taran, Pathankot, Jalandhar (News); **Himachal Pradesh:** Sundernagar and Shimla; **Odisha:** Keonjhar, Mayurbhanj, Angul, **Chhattisgarh:** Sarguja, **Uttarakhand:** Chakrata, Mussoorie; **West Uttar Pradesh:** Ghaziabad

Gusty winds reported (30-50 kmph)

- ❖ **Gangetic West Bengal:** Alipur; **Punjab:** Hoshiarpur, Faridkot, Moga, Sangrur, Fatehgarh Sahib, Ropar, Mohali.

Thunderstorm reported:

- ❖ **Himachal Pradesh:** Sundernagar, Kangra, Jot, Palampur; **Uttarakhand:** Chakrata, Mussoorie, Dehradun, Jollygrant, Mukteshwar & Tehri; **Punjab:** Patiala; **Haryana:** Ambala, Karnal; **West Uttar Pradesh:** Bareilly.

- ❖ Minimum temperatures are in the range of -2°C to -8°C over many parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and north Himachal Pradesh; $6-12^{\circ}\text{C}$ over many parts of Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, Uttarakhand, north Rajasthan and northeast India; $14-20^{\circ}\text{C}$ over many parts of south Rajasthan, Central, East and West India; $20-24^{\circ}\text{C}$ over many parts of south peninsular India. Today, the lowest minimum temperature of 6.1°C is reported at **Amritsar (Punjab)** over the plains of the country.
- ❖ During the past 24 hours, **minimum temperatures** have risen by $1-3^{\circ}\text{C}$ at many places along the west coast, Bihar, Andaman Islands, Meghalaya, Manipur, Mizoram & Tripura and fallen by $2-4^{\circ}\text{C}$ at many places over Western Himalayan Region, Punjab, Haryana, West Rajasthan, East Madhya Pradesh, North Chhattisgarh, Odisha, Jharkhand, Gangetic West Bengal, South interior Karnataka and Nagaland and no significant change over rest parts of the country.
- ❖ Minimum temperatures are **markedly above normal (5.1°C or more)** at isolated places over South Interior Karnataka, West Bihar, south Assam, Northwest Odisha, southeast Rajasthan **above normal (2.0°C to 5.0°C)** at a few places over south & east Rajasthan, Gujarat, Konkan & Goa, Madhya Maharashtra, Marathwada, Telangana, Madhya Pradesh, South Uttar Pradesh, Chhattisgarh, Bihar, Andaman & Nicobar Islands. These were **below normal (-1°C to -3°C)** at many places over Western Himalayan Region, Northwest Rajasthan, Punjab, Haryana, North Uttar Pradesh, Gangetic West Bengal, Northeast India and coastal & south Tamil Nadu near and near normal over rest parts of the country
- ❖ Maximum temperatures are in the range of $32-37^{\circ}\text{C}$ over West and Peninsular & adjoining central India; $28-32^{\circ}\text{C}$ over remaining central & East India; $24-28^{\circ}\text{C}$ over Plains of Northwest India, Remaining East and Northeast India. and. Yesterday, the highest **maximum temperature of 38.2°C** was reported at **Kalaburagi (North Interior Karnataka)** over the plains of the country.
- ❖ Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at a few places over Vidarbha; at isolated places over East Rajasthan, West Madhya Pradesh and Konkan & Goa; **above normal (1.6°C to 3.0°C)** at most places over East Madhya Pradesh; at a few places over Marathwada, Madhya Maharashtra and Saurashtra & Kutch; at isolated places over Chhattisgarh, Odisha, Telangana, North Interior Karnataka, Bihar, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, West Rajasthan, Gujarat Region, Nagaland, Manipur, Mizoram & Tripura and Jharkhand. These were **appreciably below normal (-5.0°C to -3.1°C)** at isolated places over Gangetic West Bengal, Himachal Pradesh, Uttarakhand and **below normal (-3.0°C to -1.6°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit Baltistan-Muzaffarabad and near normal over rest parts of the country.

Fig. 1: Maximum Temperatures

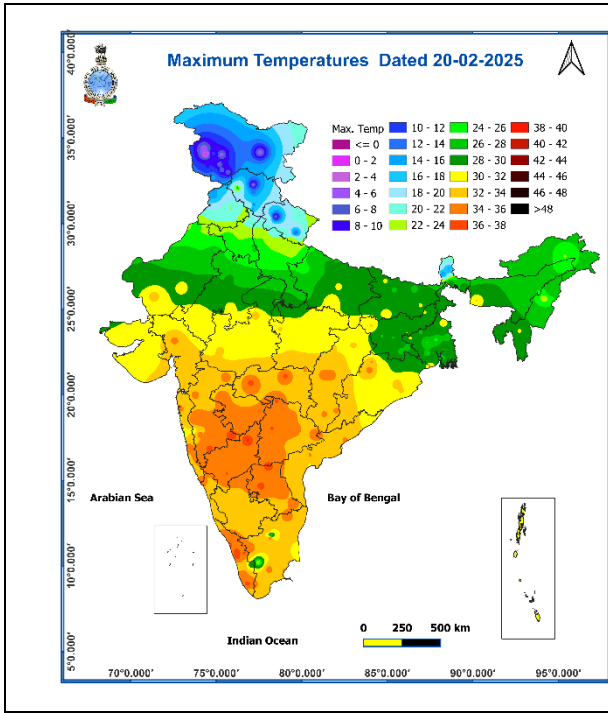


Fig. 2: Departure of Maximum Temperatures

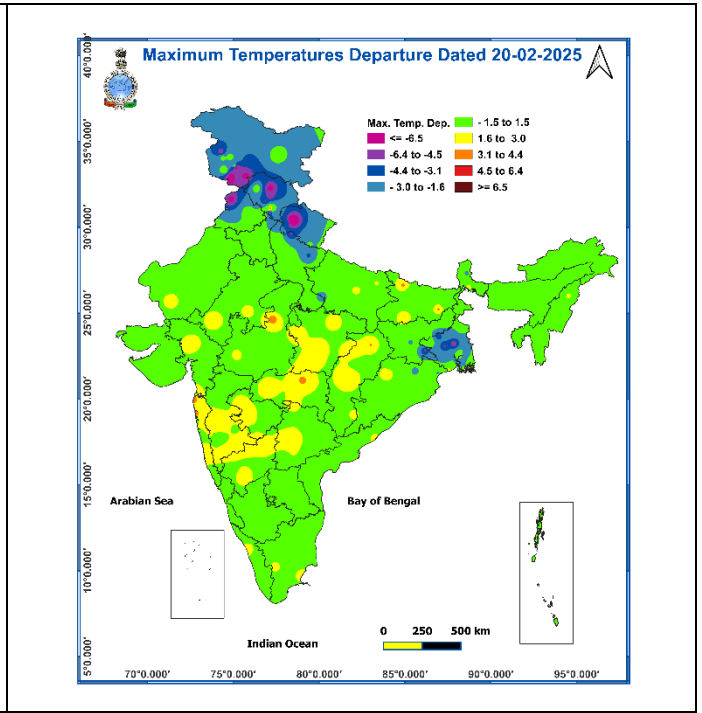


Fig. 3: Minimum Temperatures

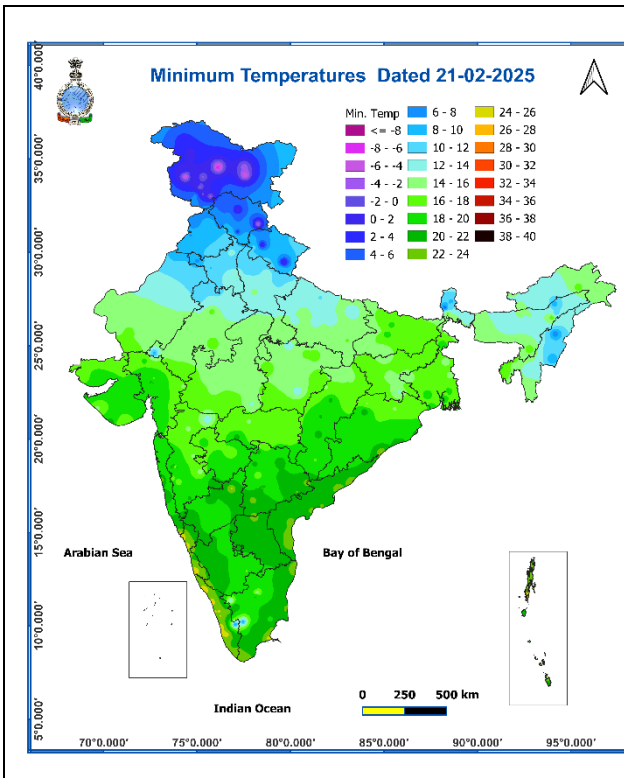
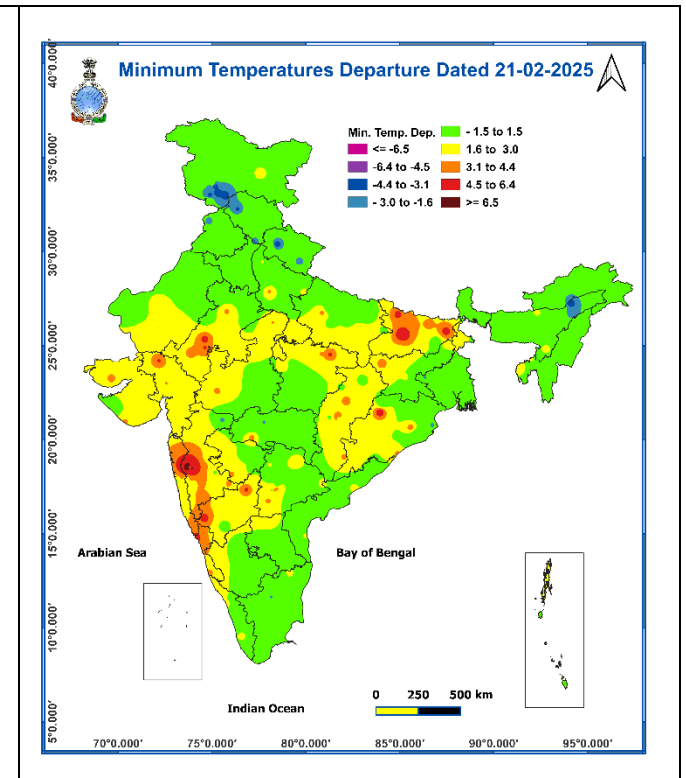
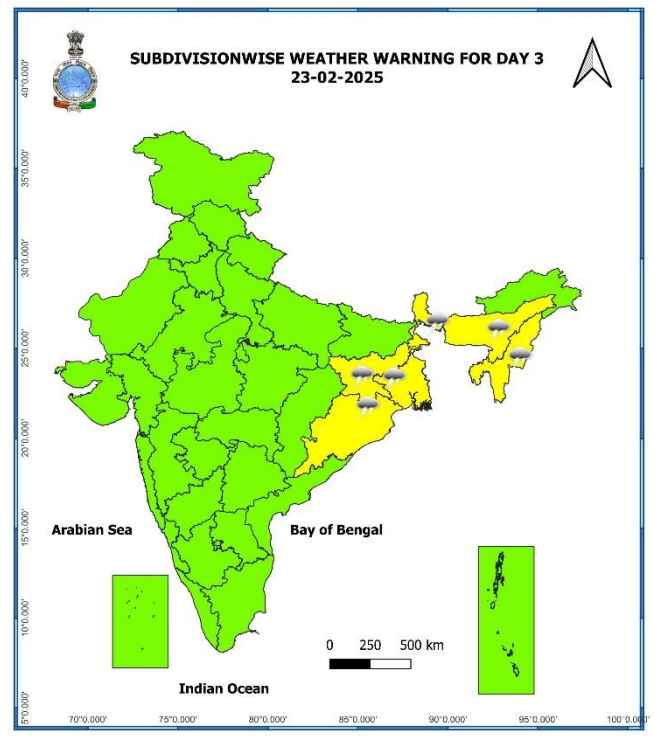
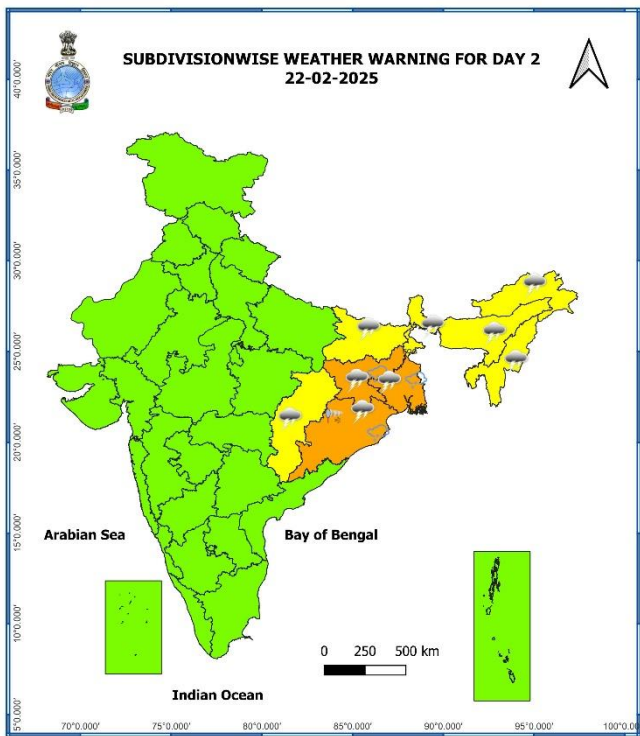
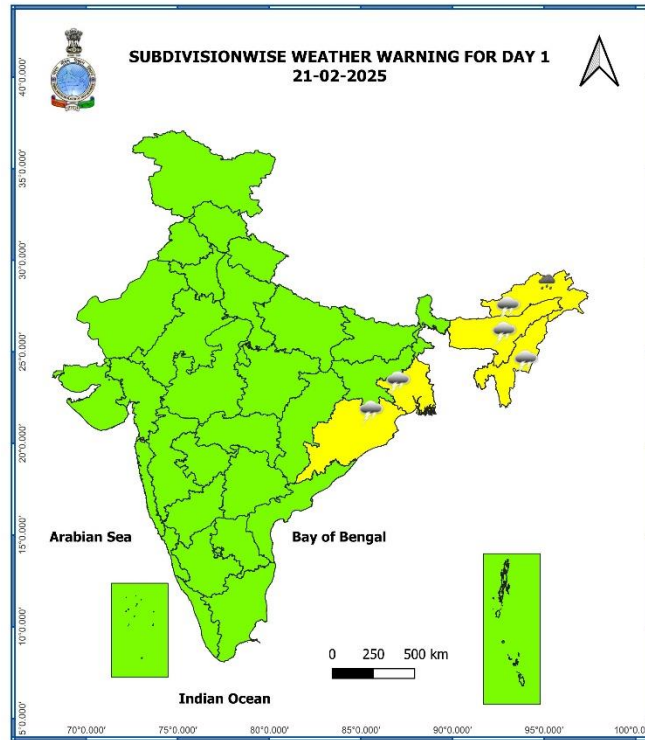


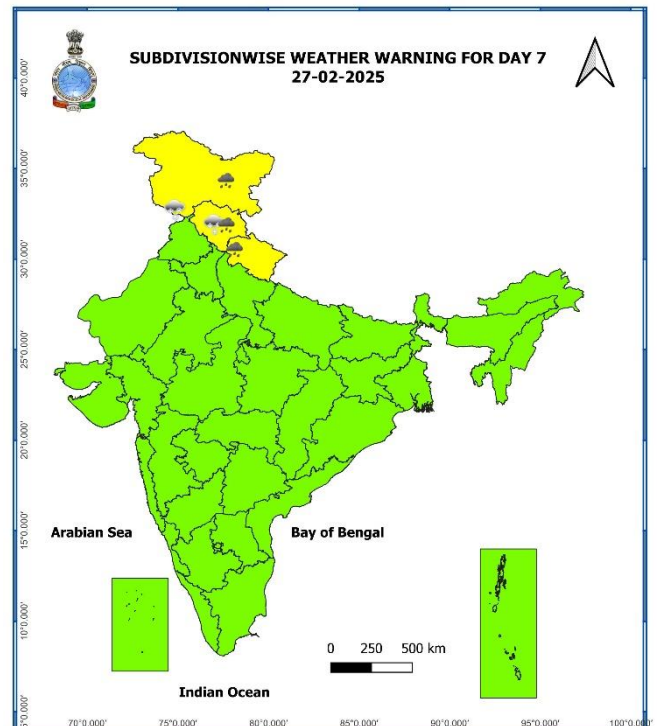
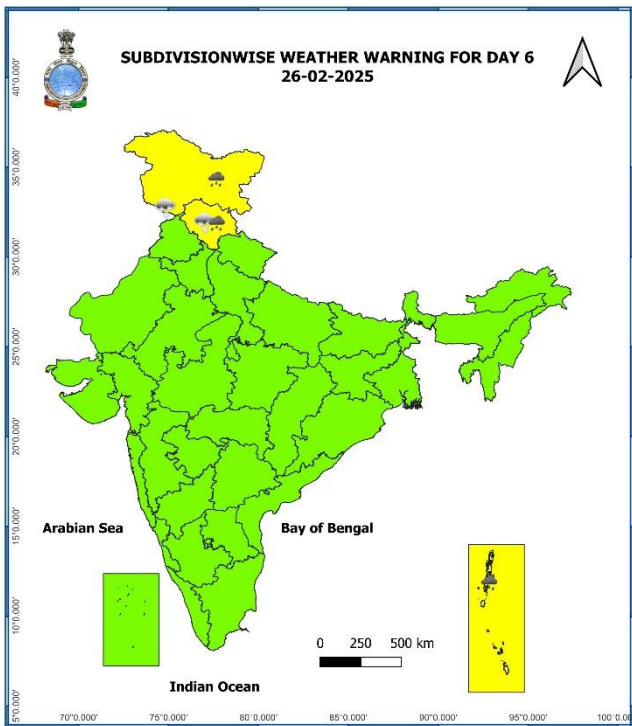
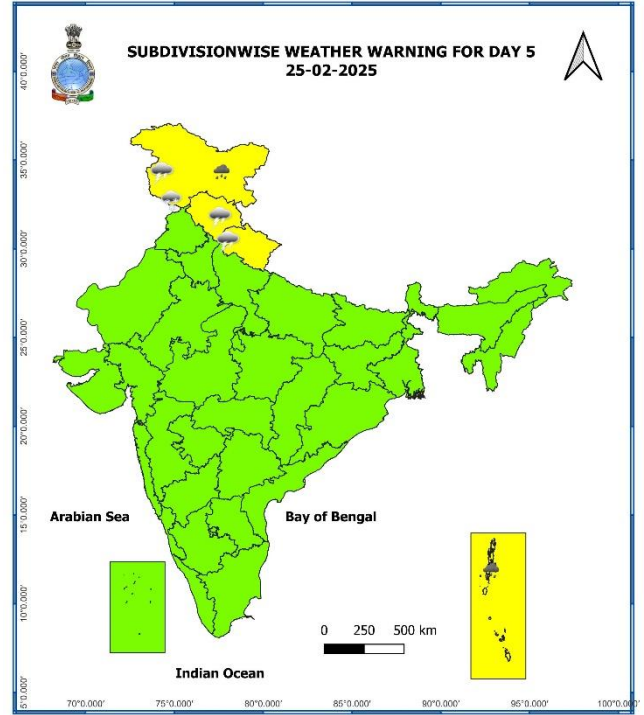
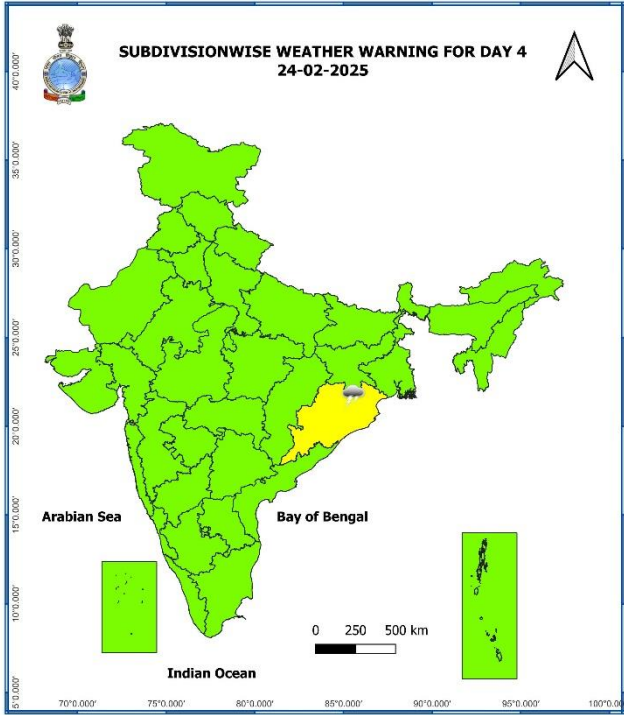
Fig. 4: Departure of Minimum Temperatures



| 7 Days Rainfall Forecast | | | | | | | | |
|--------------------------|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| S. No. | Subdivision | 21-Feb | 22-Feb | 23-Feb | 24-Feb | 25-Feb | 26-Feb | 27-Feb |
| | | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 |
| 1 | ANDAMAN & NICOBAR ISLANDS | SCT | FWS | FWS | WS | WS | WS | WS |
| 2 | ARUNACHAL PRADESH | SCT | SCT | SCT | ISOL | ISOL | ISOL | DRY |
| 3 | ASSAM & MEGHALAYA | ISOL | ISOL | ISOL | ISOL | ISOL | ISOL | DRY |
| 4 | NAGALAND, MANIPUR, MIZORAM & TRIPURA | ISOL | ISOL | ISOL | DRY | DRY | DRY | DRY |
| 5 | SUB-HIMALAYAN WEST BENGAL & SIKKIM | ISOL | SCT | SCT | ISOL | ISOL | DRY | DRY |
| 6 | GANGETIC WEST BENGAL | ISOL | FWS | SCT | ISOL | DRY | DRY | DRY |
| 7 | ODISHA | ISOL | SCT | ISOL | ISOL | DRY | DRY | DRY |
| 8 | JHARKHAND | ISOL | SCT | ISOL | DRY | DRY | DRY | DRY |
| 9 | BIHAR | DRY | ISOL | 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 | ISOL |
| 12 | UTTARAKHAND | DRY | DRY | DRY | DRY | ISOL | SCT | FWS |
| 13 | HARYANA CHANDIGARH & DELHI | DRY | DRY | DRY | DRY | DRY | ISOL | ISOL |
| 14 | PUNJAB | DRY | DRY | DRY | DRY | DRY | ISOL | ISOL |
| 15 | HIMACHAL PRADESH | DRY | DRY | DRY | DRY | SCT | WS | WS |
| 16 | JAMMU & KASHMIR AND LADAKH | DRY | DRY | DRY | DRY | FWS | WS | WS |
| 17 | WEST RAJASTHAN | DRY | DRY | DRY | DRY | DRY | DRY | ISOL |
| 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 | ISOL | ISOL | DRY | DRY | DRY |
| 25 | MARATHAWADA | DRY | DRY | ISOL | DRY | DRY | DRY | DRY |
| 26 | VIDARBHA | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 27 | CHHATTISGARH | DRY | ISOL | DRY | DRY | DRY | DRY | DRY |
| 28 | COASTAL ANDHRA PRADESH & YANAM | ISOL | ISOL | ISOL | DRY | DRY | DRY | DRY |
| 29 | TELANGANA | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 30 | RAYALASEEMA | ISOL | ISOL | ISOL | DRY | DRY | DRY | DRY |
| 31 | TAMILNADU PUDUCHERRY & KARAIKAL | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 32 | COASTAL KARNATAKA | ISOL | ISOL | DRY | DRY | DRY | DRY | DRY |
| 33 | NORTH INTERIOR KARNATAKA | ISOL | ISOL | DRY | DRY | DRY | DRY | DRY |
| 34 | SOUTH INTERIOR KARNATAKA | ISOL | ISOL | DRY | DRY | DRY | DRY | DRY |
| 35 | KERALA & MAHE | ISOL | ISOL | ISOL | ISOL | ISOL | ISOL | ISOL |
| 36 | LAKSHADWEEP | DRY | DRY | DRY | DRY | DRY | SCT | SCT |

- 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 Multi Hazard weather warning for next five days available at <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

Weather forecast over Delhi/NCR during 21st Feb. to 24th Feb. 2025

Past Weather:

There has been a fall in minimum and maximum temperatures upto 02 -03°C over Delhi/NCR during the past 24 hours. The Maximum and Minimum temperatures over Delhi are in the range of 26 to 27°C and 11 to 13°C respectively. The minimum and maximum temperatures were near normal over most places. Mainly clear sky conditions with predominant surface wind from the east direction with wind speed reaching 18 to 20 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 04 kmph variable direction prevailed over the region in the forenoon today.

Weather Forecast:

21.02.2025: Partly cloudy sky. The maximum temperature over Delhi is likely to be in the range of 27 to 29°C. The predominant surface wind will likely to be from northwest direction with a wind speed of less than 10 kmph till evening. It would decrease thereafter becoming less than 06 kmph from the north direction during the night.

22.02.2025: Mainly clear sky. Smog/mist likely in the morning. The maximum and minimum temperatures over Delhi are likely to be in the range of 27 to 29°C and 10 to 12°C respectively. The predominant surface wind is likely to be from the northwest direction with a wind speed less than 06 kmph during morning hours. The wind speed will gradually increase thereafter becoming 10-12 kmph from the northwest direction during the afternoon. It will increase further becoming less than 06 kmph from the northwest direction during evening and night.

23.02.2025: Mainly clear sky. Smog/mist likely in the morning. The maximum and minimum temperatures over Delhi are likely to be in the range of 27 to 29°C and 09 to 11°C respectively. The predominant surface wind will likely to be from the northwest direction with a wind speed of less than 06 kmph during morning hours. The wind speed will gradually increase thereafter becoming 10-12 kmph from the northwest direction during the afternoon. It will decrease becoming less than 06 kmph from north direction during evening and night.

24.02.2025: Partly cloudy sky. Smog/mist likely in the morning. The maximum and minimum temperatures over Delhi are likely to be in the range of 28 to 30°C and 10 to 12°C respectively. The predominant surface wind will likely to be from northwest direction with a wind speed of less than 06 kmph during morning hours. The wind speed will gradually increase thereafter becoming 10-12 kmph from the northwest direction during the afternoon. It will decrease becoming less than 06 kmph from north direction during evening and night.

Agromet advisories for likely impact of Heavy Rainfall/Hailstorms

- Use hail nets or hail caps in fruit orchards and vegetable plants to protect them from mechanical damage in **Gangetic West Bengal, Odisha and Jharkhand**.
- Make provision for draining out excess water from the fields of rice, mustard, field pea, other standing crops, vegetables and horticultural crops in **Arunachal Pradesh** to avoid water stagnation.
- Keep the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields.
- Provide mechanical support to horticultural crops and staking to vegetables.

Livestock

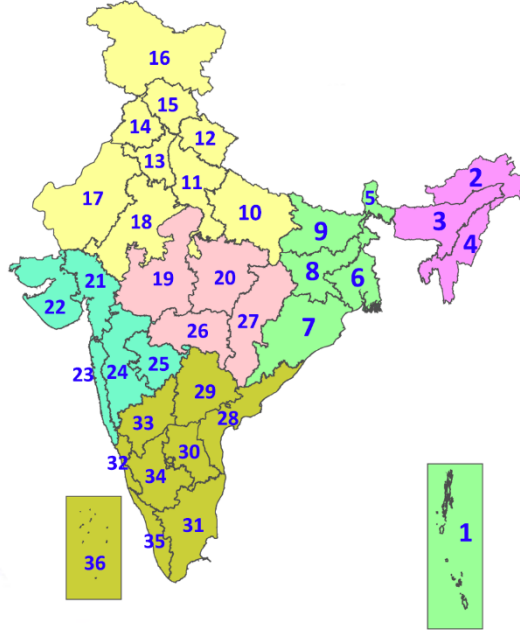
- Keep the animals inside the shed during heavy rainfall/ hailstorms and provide them with balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.

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 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)