

Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 20<sup>th</sup> February, 2025

Time of Issue: 1345 hours IST

- Subject: a) Isolated to scattered rainfall along with thunderstorm/lightning/hailstorm likely over East India during next 3 days.**  
**b) Widespread rainfall/snowfall with isolated heavy falls likely over Western Himalayan Region and scattered rainfall over plains of Northwest India on today.**  
**c) A intense Western Disturbance likely to affect Western Himalayan Region from 24<sup>th</sup> and adjoining plains from 26<sup>th</sup> February 2025.**

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

**Temperature:**

- ❖ During Past 24 hours, Day temperatures have risen by 1-3°C at many places over Jammu-Kashmir, Bihar; at some places over Chhattisgarh, Jharkhand, Coastal Andhra Pradesh & Yanam, Tamilnadu Puducherry & Karaikal, East Rajasthan, Gujarat Region. It has fallen by 1-3°C at few places over Uttarakhand, Himachal Pradesh, West Rajasthan, Maharashtra, Gangetic West Bengal; at isolated places over West Madhya Pradesh, Karnataka, West Uttar Pradesh.
- ❖ Day temperatures were **markedly above normal (5°C or more)** at many places over Jammu-Kashmir and Himachal Pradesh; **above normal (2.0°C to 5.0°C)** at many places over Haryana-Chandigarh-Delhi, Uttarakhand, Punjab, West Rajasthan, West Uttar Pradesh, East India; at a few places over West India, South Peninsular and Northeast India; at isolated places over East Uttar Pradesh, East Rajasthan, Vidarbha, Madhya Maharashtra, Odisha, West Madhya Pradesh and near normal over rest parts of the country.
- ❖ During past 24 hours, Night temperatures have risen by 1-4°C at many places over Northwest India except Rajasthan, East Madhya Pradesh, East India, Peninsular India, Assam & Meghalaya and fallen by 1-4°C at many places over West India, Rajasthan Nagaland, Manipur, Mizoram & Tripura.
- ❖ Night temperatures were **markedly above normal (5.1°C or more)** at a few places over Rajasthan; at isolated places over Saurashtra & Kutch; **above normal (2.0°C to 5.0°C)** at many places over Central, East & West India; at isolated places over Jammu-Kashmir, Himachal Pradesh, West Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and North Interior Karnataka. These were **below normal (-1°C to -3°C)** at isolated places over East Uttar Pradesh, Tamilnadu Puducherry & Karaikal, Kerala & Mahe 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 many places over Jammu-Kashmir, Himachal Pradesh; at isolated places over Uttarakhand; Light to moderate **Rainfall** at most places over Punjab; at a few places over Haryana Chandigarh, Gangetic West Bengal, Arunachal Pradesh; at isolated places over Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.

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

- ❖ **A trough runs from north Bangladesh to Telangana and an anti-cyclonic circulation lies over north Bay of Bengal in lower tropospheric levels. Under the influence of these systems and their confluence,**
  - ✓ **Scattered to fairly widespread light/moderate rainfall accompanied with thunderstorm, lightning with gusty winds (speed 30-40 kmph) very likely over Gangetic West Bengal, Jharkhand and Odisha on 20<sup>th</sup> & 22<sup>nd</sup>;**  
**Isolated to scattered light/moderate rainfall accompanied with thunderstorm & lightning very likely over Sub-**

Himalayan West Bengal & Sikkim, Bihar on 20<sup>th</sup> & 22<sup>nd</sup>; Gangetic West Bengal, Jharkhand and Odisha on 21<sup>st</sup> & 23<sup>rd</sup> February.

- ✓ **Hailstorm activity also likely at isolated places** over Gangetic West Bengal, Jharkhand & Odisha on 20<sup>th</sup> & 22<sup>nd</sup> February.
- ❖ A **Western Disturbance** seen as a cyclonic circulation over north Pakistan & neighbourhood in lower tropospheric levels with a trough aloft in middle & upper tropospheric level with its axis at 5.8 km above mean sea level roughly along Long. 70°E to the north of Lat. 30°N. The induced **cyclonic circulation** lies over West Rajasthan & neighbourhood in lower tropospheric levels. Under their influence;
  - ✓ **fairly widespread to widespread light to moderate rainfall/snowfall accompanied with thunderstorm & lightning** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand on 20<sup>th</sup> and isolated light rainfall/snowfall on 21<sup>st</sup> & 22<sup>nd</sup> February.
  - ✓ **Heavy rainfall/snowfall** at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 20<sup>th</sup> February.
  - ✓ **Hailstorm activity also likely at isolated places** over Uttarakhand and West Uttar Pradesh on 20<sup>th</sup> February.
  - ✓ Isolated to Scattered light to moderate rainfall accompanied with **thunderstorm & lightning with gusty winds (speed 30-40 kmph)** likely over Punjab, Haryana, Chandigarh and West Uttar Pradesh on 20<sup>th</sup> February; with **thunderstorm & lightning** likely over East Uttar Pradesh, north Chhattisgarh on 20<sup>th</sup> February.
- ❖ A **fresh Western Disturbance** is likely to affect Northwest India from 24<sup>th</sup> February, 2025. Under its influence, Isolated to Scattered light to moderate rainfall/snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 24<sup>th</sup>-26<sup>th</sup> February.
- ❖ Isolated light/moderate rainfall very likely over Coastal Andhra Pradesh & Yanam and Kerala & Mahe during 21<sup>st</sup>-25<sup>th</sup> February.
- ❖ A **cyclonic circulation** lies over central Assam 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 on 20<sup>th</sup> & 21<sup>st</sup> February; with **gusty winds (speed 30-40 kmph)** over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 22<sup>nd</sup> & 23<sup>rd</sup> February.
  - ✓ **Heavy rainfall** at isolated places likely over Arunachal Pradesh on 21<sup>st</sup> February.

### Temperature Forecast:

#### Forecast of temperature:

##### Minimum Temperature:

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

##### Maximum temperature:

- ❖ Gradual fall in maximum temperatures by 2-4°C likely over Northwest India during next 24 hours and gradual rise by 3-4°C during subsequent 4 days.
- ❖ No significant change in maximum temperatures likely over Central India during next 24 hours and gradual fall by 2°C during subsequent 3 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 Sub-Himalayan West Bengal & Sikkim till 23<sup>rd</sup> February.

### iii. Weather conditions and forecast over Delhi/NCR during 20<sup>th</sup> Feb. to 23<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>

**Significant rainfall recorded during past 24 hours till 0830 hours IST of today 20.02.2025 (in cm):**

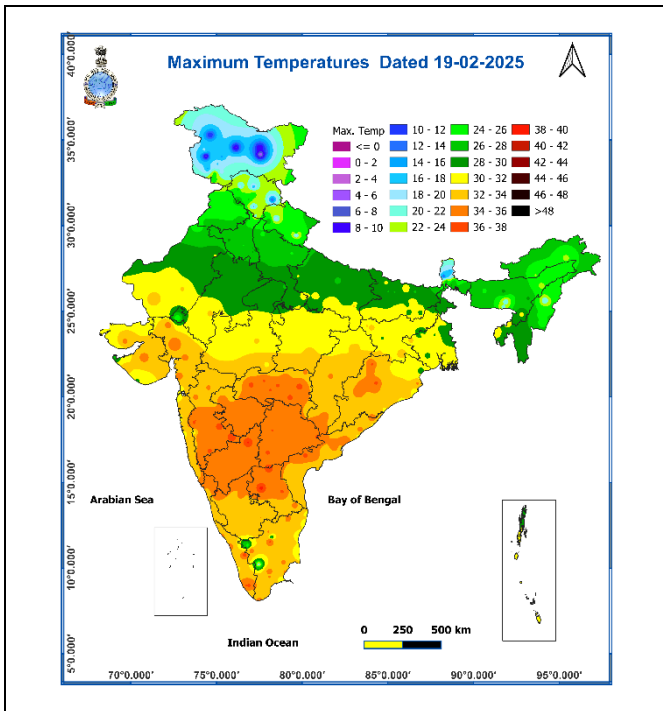
- ❖ **Odisha:** Marsaghai ( Kendrapara) 5, Derabis ( Kendrapara) 5, Akhuapada ( Bhadrak) 4, Narsinghpur ( Cuttack) 4, Begunia ( Khurda) 4, Bari ( Jajpur) 4,
- ❖ **Jammu Kashmir:** Rajouri (dist Rajouri) 2, Udhampur(iaf) (dist Udhampur) 2, Reasi Arg (dist Reasi) 1 , Rajouri Arg (dist Rajouri) 1, Banihal (dist Ramban) 1, Batote (dist Ramban) 1, Reasi Kvk Aws (dist Reasi) 1, Katra (dist Reasi) 1, Tengmarg (dist Baramula) 1, Raj Pura Arg (dist Poonch) 1, Kupwara Kvk Aws (dist Kupwara) 1, Jammu Aero (dist Jammu) 1, Govindpura Aws (dist Ramban) 1, Bakore Arg (dist Jammu) 1, Jammu Aws (dist Jammu) 1, Jammu (dist Jammu) 1, Gulmarg R.s. (dist Baramula) 1,
- ❖ **Punjab:** Taran Taran (dist Tarn Taran) 2,
- ❖ **Assam & Meghalaya:** Dhemaji\_ Aws (dist Dhemaji) 1
- ❖ **Haryana:** Sohana (dist Gurgaon) 1, Nuh (dist Nuh) 1, Karnal (dist Karnal) 1, Manesar Rev (dist Gurgaon) 1, Gurgaon Kvk Aws (dist Gurgaon) 1, Pataudi (dist Gurgaon) 1,
- ❖ **East Uttar Pradesh:** Banda (dist Banda) 1,

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

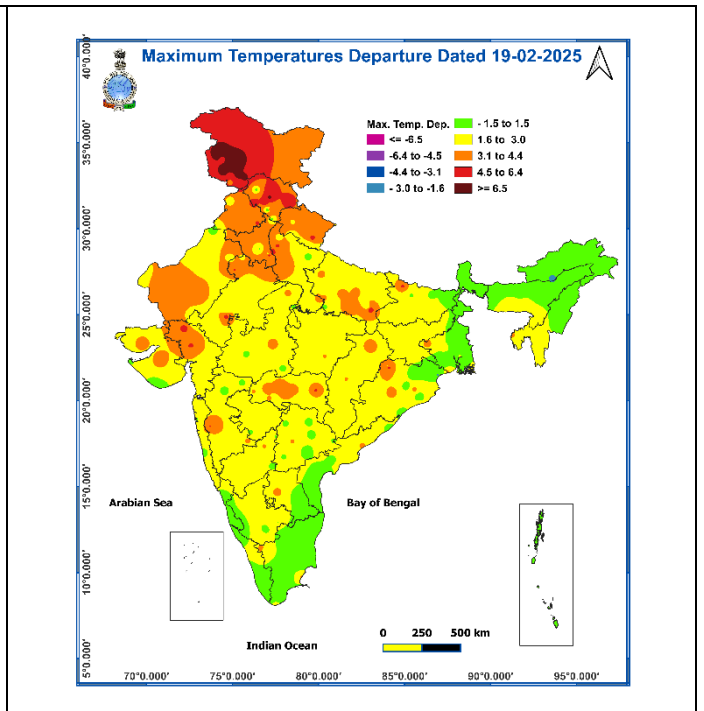
- ❖ **Dense to very dense fog conditions (visibility < 50 m)** reported in isolated pockets of Meghalaya.
- ❖ **Visibility reported ( $\leq 200$  m) (in meter): Meghalaya:** Barapani 30.

- ❖ Minimum temperatures are in the range of **9-14°C** over many parts of plains of Northwest India; **14-20°C** over many parts of West, Central and East India. Today, the lowest minimum temperature of **9.0°C** is reported at **Nahan (Haryana)** over the plains of the country.
- ❖ During the past 24 hours, **minimum temperatures** have risen by 1-4°C at many places over Northwest India except Rajasthan, East Madhya Pradesh, East India, Peninsular India, Assam & Meghalaya and fall by 1-4°C at many places over West India, Rajasthan Nagaland, Manipur, Mizoram & Tripura.
- ❖ Minimum temperatures are **markedly above normal (5.1°C or more)** at isolated places over West Rajasthan, Gujarat Region, Madhya Maharashtra, Odisha; **appreciably above normal (3.1°C to 5.0°C)** at many places over Gangetic West Bengal; at a few places over Bihar, Chhattisgarh, West Rajasthan, Konkan & Goa; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, West Madhya Pradesh, Jharkhand, Punjab, Himachal Pradesh, West Uttar Pradesh; **above normal (1.6°C to 3.0°C)** at most places over North Interior Karnataka, Coastal Karnataka; at many places over Uttarakhand, East Rajasthan, East Madhya Pradesh, Marathwada; at few places over Rayalaseema, Coastal Andhra Pradesh & Yanam, Sub-Himalayan West Bengal & Sikkim, Vidarbha; at isolated places over Assam & Meghalaya, Arunachal Pradesh, South Interior Karnataka, Kerala & Mahe and near normal over rest parts of the country
- ❖ Maximum temperatures are in the range of **35-38°C** over many parts of Odisha, Maharashtra, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, North Interior Karnataka; in some parts of Gujarat Region, Kerala & Mahe, Tamilnadu Puducherry & Karaikal; at isolated places over Jharkhand and. Yesterday, the highest **maximum temperature of 38.6°C** was reported at **PBO Anantapur (Rayalaseema)** over the plains of the country.
- ❖ Maximum temperatures were **markedly above normal (5.1°C or more)** at many places over Jammu-Kashmir-Ladakh-Gilgit Baltistan-Muzaffarabad; at few places over Himachal Pradesh; **appreciably above normal (3.1°C to 5.0°C)** at many places over Haryana-Chandigarh-Delhi, Uttarakhand, Punjab; at few places over West Rajasthan, Gujarat state, West Uttar Pradesh; at isolated places over East Uttar Pradesh, East Rajasthan, Vidarbha, Madhya Maharashtra, Odisha, West Madhya Pradesh; **above normal (1.6°C to 3.0°C)** at most places over Jharkhand, East Madhya Pradesh, Konkan & Goa, North Interior Karnataka, South Interior Karnataka, Chhattisgarh, Bihar, Marathwada, Telangana; at a few places over Coastal Andhra Pradesh & Yanam, Rayalaseema, Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya; at isolated places over Gangetic West Bengal, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and near normal over rest parts of the country

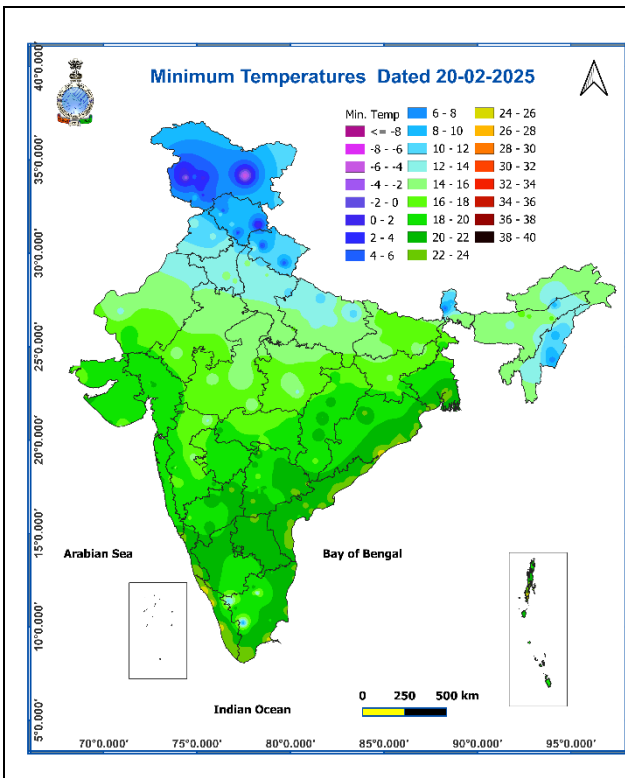
**Fig. 1: Maximum Temperatures**



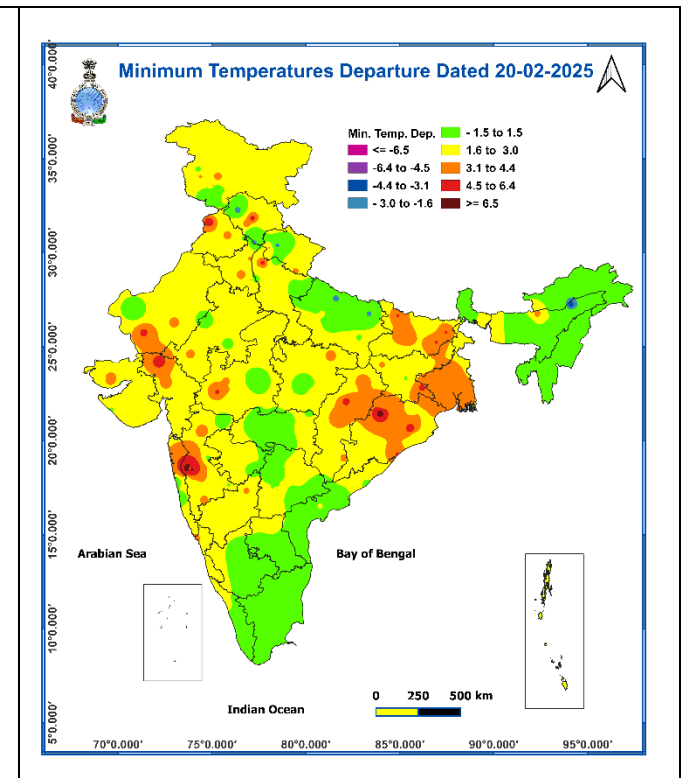
**Fig. 2: Departure of Maximum Temperatures**



**Fig. 3: Minimum Temperatures**

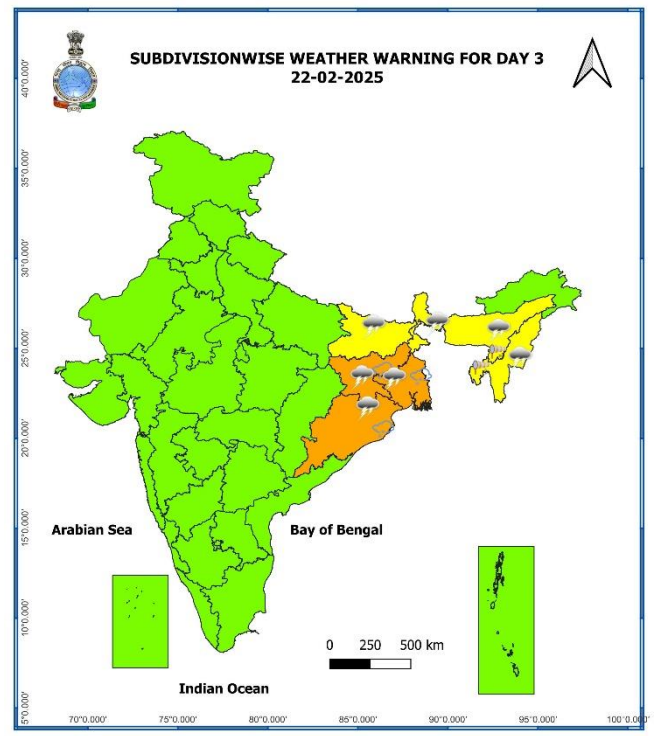
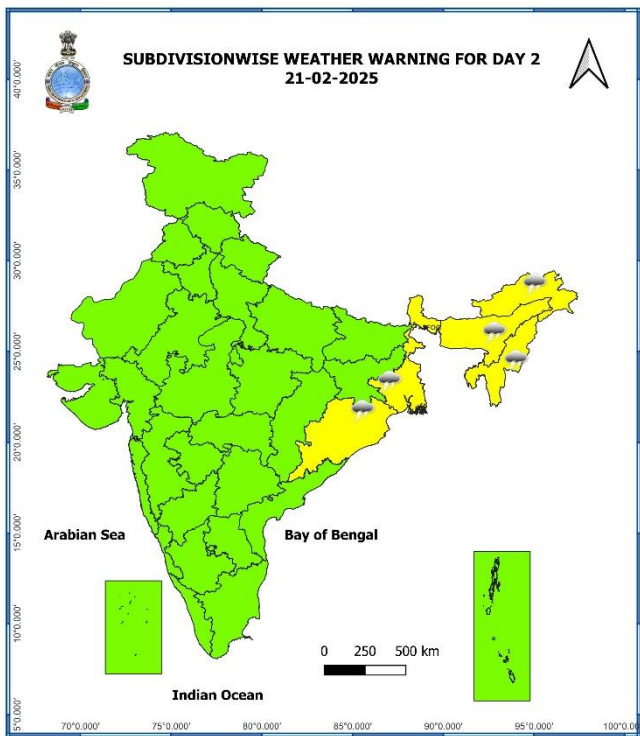
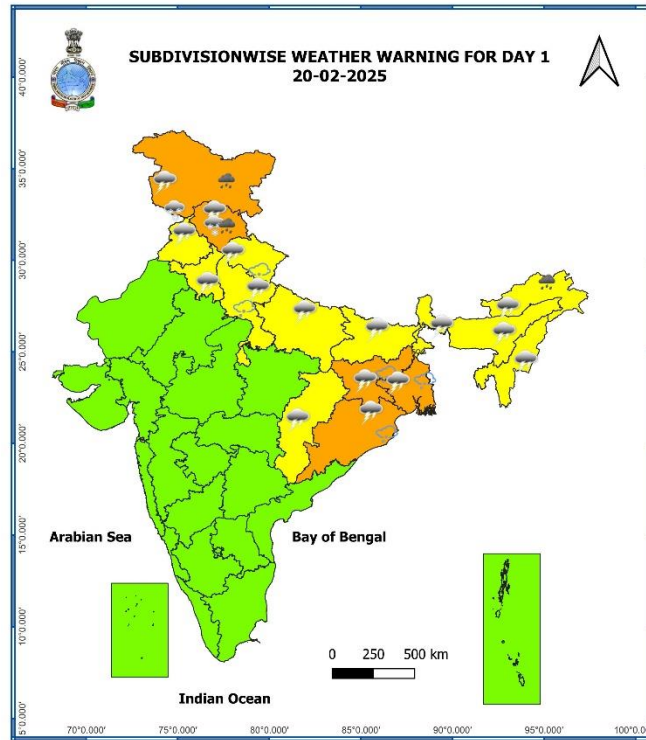


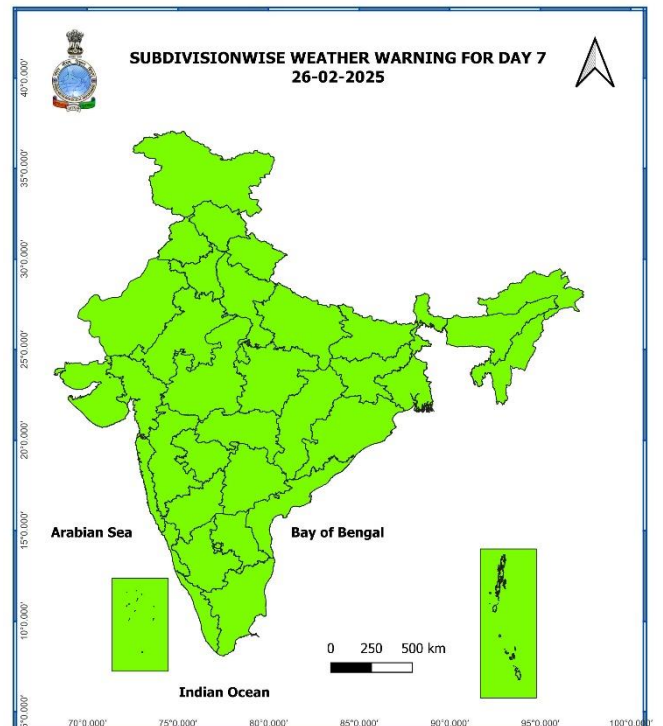
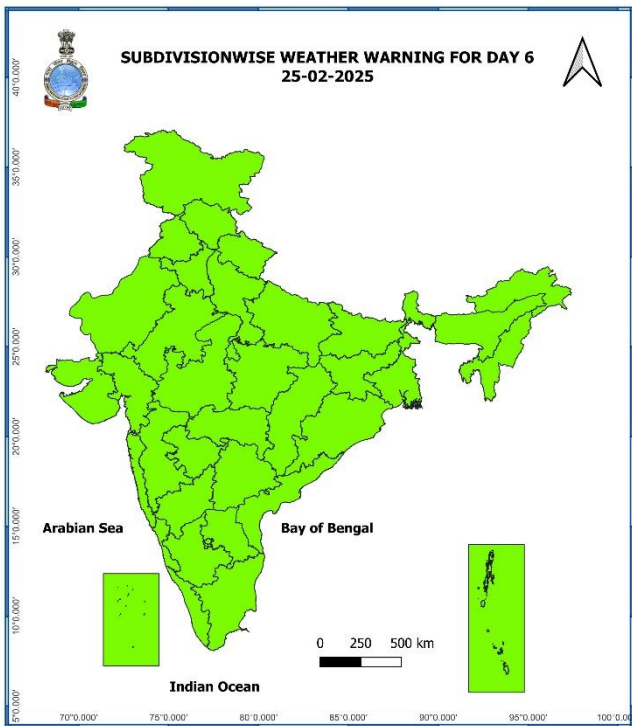
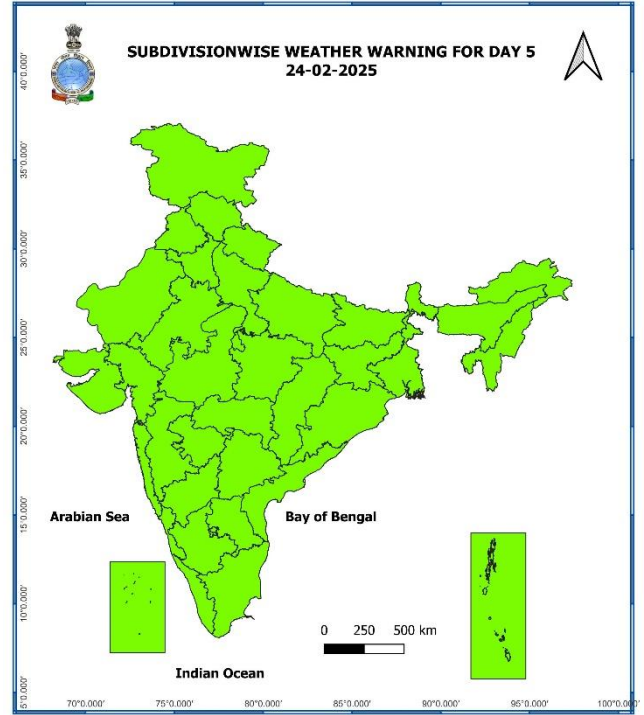
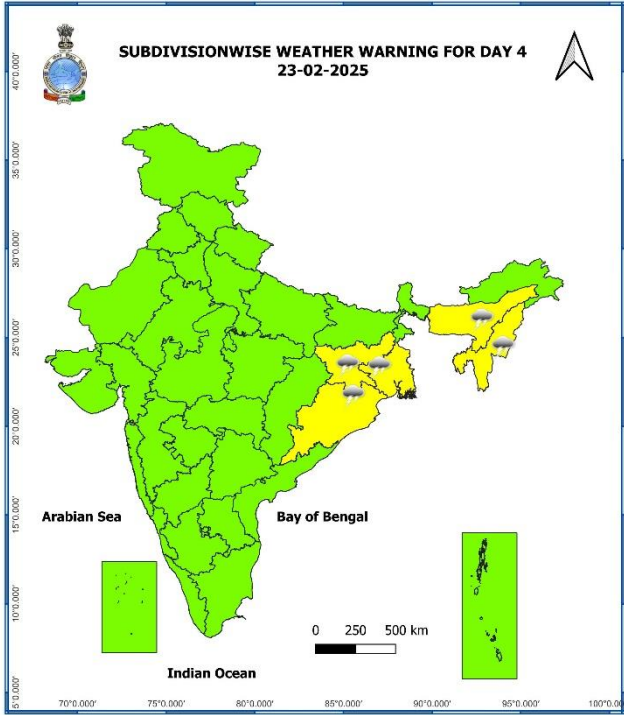
**Fig. 4: Departure of Minimum Temperatures**



7 Days Rainfall Forecast								
S. No.	Subdivision	20-Feb	21-Feb	22-Feb	23-Feb	24-Feb	25-Feb	26-Feb
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	ISOL	SCT	FWS	FWS	WS	WS	WS
2	ARUNACHAL PRADESH	SCT	SCT	ISOL	SCT	SCT	ISOL	ISOL
3	ASSAM & MEGHALAYA	ISOL	ISOL	ISOL	SCT	ISOL	ISOL	ISOL
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	ISOL	ISOL	SCT	ISOL	ISOL	ISOL
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	SCT	ISOL	SCT	SCT	ISOL	ISOL	DRY
6	GANGETIC WEST BENGAL	FWS	ISOL	FWS	SCT	ISOL	DRY	DRY
7	ODISHA	SCT	ISOL	SCT	ISOL	ISOL	ISOL	DRY
8	JHARKHAND	SCT	ISOL	SCT	ISOL	ISOL	DRY	DRY
9	BIHAR	ISOL	DRY	ISOL	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	SCT	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	FWS	ISOL	ISOL	DRY	DRY	ISOL	SCT
13	HARYANA CHANDIGARH & DELHI	SCT	DRY	DRY	DRY	DRY	DRY	ISOL
14	PUNJAB	FWS	DRY	DRY	DRY	DRY	DRY	ISOL
15	HIMACHAL PRADESH	WS	ISOL	ISOL	DRY	ISOL	SCT	FWS
16	JAMMU & KASHMIR AND LADAKH	WS	ISOL	DRY	DRY	ISOL	SCT	FWS
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	ISOL	DRY	DRY	DRY
25	MARATHAWADA	DRY	DRY	DRY	ISOL	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	ISOL	DRY	DRY	DRY	DRY
27	CHHATTISGARH	ISOL	DRY	ISOL	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	DRY	DRY	DRY	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	DRY	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
36	LAKSHADWEEP	DRY	DRY	DRY	DRY	DRY	DRY	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 20<sup>th</sup> Feb. to 23<sup>th</sup> Feb. 2025

### Past Weather:

There has been a rise in minimum temperature upto 04°C and slight fall in maximum temperature over Delhi/NCR during the past 24 hours. The Maximum and Minimum temperatures over Delhi are in the range of 26 to 29°C and 13 to 15°C respectively. The minimum temperature was above normal upto 04°C and maximum temperature was above normal upto 06°C over most places. Mainly clear sky conditions with predominant surface wind from the west direction with wind speed reaching 10 to 12 kmph prevailed during the past 24 hours. Partly cloudy conditions with wind speed less than 14 kmph east direction prevailed over the region in the forenoon today.

### Weather Forecast:

**20.02.2025:** Partly cloudy sky. Possibility of a spell of very light rain/drizzle during evening. Strong surface wind (speed 20-30 kmph) during the day. The maximum temperature over Delhi is likely to be in the range of 25 to 27°C. The predominant surface wind will likely to be from southeast direction with a wind speed of less than 20 kmph till evening. It would decrease thereafter becoming less than 10 kmph from the southeast direction during the night.

**21.02.2025:** Partly cloudy sky. Smog/mist likely in the morning. The maximum and minimum temperatures over Delhi are likely to be in the range of 26 to 28°C and 11 to 13°C respectively. The predominant surface wind is likely to be from the northeast direction with a wind speed less than 04 kmph during morning hours. The wind speed will gradually increase thereafter becoming 04-06 kmph from the east direction during the afternoon. It will increase further becoming less than 08 kmph from the north direction during evening and 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 26 to 28°C and 10 to 12°C respectively. The predominant surface wind will likely to be from the northwest direction with a wind speed of less than 08 kmph during morning hours. The wind speed will gradually increase thereafter becoming 12-14 kmph from the northwest direction during the afternoon. It will decrease becoming less than 04 kmph from north 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 26 to 28°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 04 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 northwest 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, Jharkhand, West Uttar Pradesh and Uttarakhand.**
- Make provision for draining out excess water from the fields of wheat, mustard, pulses, other standing crops, vegetables and horticultural crops in **Jammu & Kashmir** and **Himachal Pradesh**; 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.

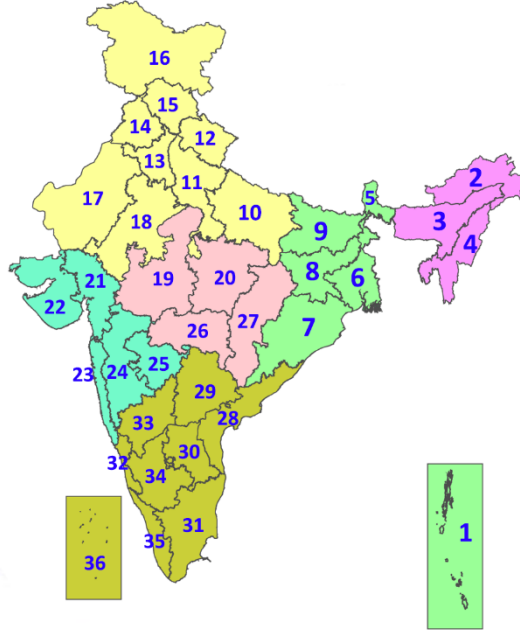


## Legends & abbreviations:

- ❖ **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  $4.5^\circ\text{C}$  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)

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