

Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 23<sup>rd</sup> February, 2025

Time of Issue: 1330 hours IST

**Subject: a) An active Western Disturbance is likely to affect Northwest India from 25<sup>th</sup> and cause heavy rainfall/snowfall over Jammu & Kashmir during 25<sup>th</sup> -28<sup>th</sup>, Himachal Pradesh during 26<sup>th</sup>-28<sup>th</sup> and Uttarakhand on 27<sup>th</sup> & 28<sup>th</sup> February, 2025.**  
**b) Thunderstorms accompanied with lightning, gusty winds & hailstorm are likely over East India on 23<sup>rd</sup> February, 2025.**

**Temperature:**

- ❖ During Past 24 hours, Day temperatures have fallen by 1-4°C over most parts of Arunachal Pradesh, West Uttar Pradesh; at many places over East Madhya Pradesh. It has raised by 1-4°C at many places over Gujarat Region, Jammu & Kashmir and no significant change over remaining parts of the country.
- ❖ Day temperatures were above normal by 3-5°C at a few places over Konkan & Goa, Chhattisgarh, Jammu & Kashmir, Jharkhand, Saurashtra & Kutch and by 1-3°C at many places over Coastal Karnataka, Nagaland, Manipur, Mizoram & Tripura; at a few places over Coastal Andhra Pradesh & Yanam, Madhya Maharashtra, Marathwada, Sub-Himalayan West Bengal & Sikkim, Telangana and near normal over remaining parts of the country.
- ❖ During past 24 hours, Night temperatures have fallen by 1-4°C over most parts of Lakshadweep; at many places over North Interior Karnataka, Saurashtra & Kutch; at a few places over Assam & Meghalaya, East Madhya Pradesh, East Uttar Pradesh, Gangetic West Bengal, Gujarat Region, Haryana-Chandigarh-Delhi, Himachal Pradesh, Jammu & Kashmir, Vidarbha and it has raised by 1-4°C over some parts of Bihar, Coastal Andhra Pradesh & Yanam, Nagaland, Manipur, Mizoram & Tripura, Odisha, South Interior Karnataka, Sub-Himalayan West Bengal & Sikkim, West Rajasthan and no significant change over remaining parts of the country.
- ❖ Night temperatures were above normal by 3-5°C over some parts of Bihar, Coastal Karnataka, Assam & Meghalaya, Odisha, Jharkhand, Konkan & Goa, Nagaland, Manipur, Mizoram & Tripura, West Rajasthan and near normal over remaining 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 Arunachal Pradesh; at isolated places over Himachal Pradesh, Uttarakhand; Light to moderate **Rainfall** at most places over Gangetic West Bengal; at a few places over Sub-Himalayan West Bengal & Sikkim; at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Bihar, Odisha, Jharkhand, Kerala, Telangana, Coastal Karnataka & Andaman & Nicobar Islands.
- ❖ **Heavy rainfall** observed at isolated places over Gangetic West Bengal and Odisha.
- ❖ **Hailstorms reported** at isolated places over Himachal Pradesh and Jharkhand.
- ❖ **Thunderstorm with lightning** reported at isolated places over Himachal Pradesh, West Bengal & Sikkim, Odisha, Jharkhand, Bihar, Chhattisgarh, Telangana, Kerala.

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

- ❖ A fresh **Western Disturbance** is seen as a cyclonic circulation over north Iran & neighbourhood from lower to upper tropospheric levels. Higher moisture feeding is also likely over Western Himalayan Region in lower tropospheric levels from Arabian Sea mainly during 25<sup>th</sup> -28<sup>th</sup> February, 2025. As a result;
  - ✓ **Fairly widespread to widespread** light to moderate rainfall/snowfall accompanied with thunderstorm & lightning likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand during 25<sup>th</sup>-28<sup>th</sup> February.

- ✓ **Heavy rainfall/snowfall** at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 25<sup>th</sup>-28<sup>th</sup>; Himachal Pradesh during 26<sup>th</sup>-28<sup>th</sup>; Uttarakhand on 27<sup>th</sup> & 28<sup>th</sup> February.
- ✓ **Isolated to scattered** light to moderate rainfall likely over Punjab, Haryana, Chandigarh during 26<sup>th</sup> February-01<sup>st</sup> March; over West Uttar Pradesh & Rajasthan during 27<sup>th</sup> February-01<sup>st</sup> March; over West Rajasthan on 27<sup>th</sup> & 28<sup>th</sup> February and East Uttar Pradesh, East Rajasthan on 28<sup>th</sup> February & 01<sup>st</sup> March.
- ❖ A trough runs from Gangetic West Bengal to south Chhattisgarh and an anti-cyclonic circulation lies over north Bay of Bengal in lower tropospheric levels. Under influence of these systems and likely their confluence;
  - ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning with gusty winds (speed 30-40 kmph)** very likely over Bihar, Odisha, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 23<sup>rd</sup> February. Isolated to scattered light/moderate rainfall accompanied with **thunderstorm & lightning** very likely over Sub-Himalayan West Bengal & Sikkim, Jharkhand on 23<sup>rd</sup>; over Arunachal Pradesh on 23<sup>rd</sup> & 24<sup>th</sup>; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 24<sup>th</sup> February.
  - ✓ **Hailstorm activity also likely at isolated places over Odisha and Assam & Meghalaya on 23<sup>rd</sup> February.**
- ❖ Under the influence of an active easterly wave **Heavy rainfall** at isolated places likely over Andaman & Nicobar Islands on 25<sup>th</sup> & 26<sup>th</sup> February. **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning** very likely over Andaman & Nicobar Islands during 24<sup>th</sup>-26<sup>th</sup> February.

### Temperature Forecast:

#### Forecast of temperature:

##### Minimum Temperature:

- ❖ Gradual rise in minimum temperatures by 2-4°C likely over Northwest India during next 4 days.
- ❖ No significant change in minimum temperatures likely over Central India during next 3 days and rise by 2-4°C 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 plains of Northwest India during next 4 days.
- ❖ No significant change in maximum temperatures likely over Central India during next 3 days and rise by 2-4°C thereafter.
- ❖ No significant change in maximum temperatures likely over Gujarat State during next 2 days and rise by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures likely over rest parts of India during next 4-5 days.
- ❖ **Hot & Humid conditions** likely over isolated pockets of Konkan & Goa and Coastal Karnataka during 23<sup>rd</sup>-25<sup>th</sup> February.

### iii. Weather conditions and forecast over Delhi/NCR during 23<sup>rd</sup> Feb. to 26<sup>th</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 (in cm):**

- ❖ **Odisha:** G B Nagar (Mayurbhanj) 8, Khaira (Balasore) 5, Sarasakana (Mayurbhanj) 4, Betanati (Mayurbhanj) 4, Udala (Mayurbhanj) 3, Kaptipada (Mayurbhanj) 3, Samakhunta (Mayurbhanj) 3, Tihidi (Bhadrak) 3, Baripada (Mayurbhanj) 2, Angul (Angul) 2, Nilgiri (Balasore) 2, Oupada (Balasore) 2, Basudevpur (Bhadrak) 2, Karanjia (Mayurbhanj) 1, Raruana (Mayurbhanj) 1, Balasore (Balasore) 1, Remuna (Balasore) 1, Buguda (Ganjam) 1, Bahanga (Balasore) 1, Sukruli (Mayurbhanj) 1, Bhograi (Balasore) 1, Jaleswar (Balasore) 1,
- ❖ **Gangetic West Bengal:** Jhargram (pto) (dist Jhargram) 9, Kalaikunda ( Iaf) (dist West Midnapore) 2, Panagarh (iaf) (dist Paschim Bardhaman) 1, Amfu Kakdwip (dist South 24 Parganas) 1, Durgapur (dist Paschim Bardhaman) 1, Durgachack (dist East Midnapore) 1;
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Sankalan (dist Mangan) 4, Mangan (dist Mangan) 3, Singhik (dist Mangan) 3, AMFU Majhian (dist South Dinajpur) 1, Gyalsing (PTO) (dist Gyalshing) 1;
- ❖ **Andaman & Nicobar Islands:** Nancowry (dist Nicobar) 3.
- ❖ **Bihar:** Bhagalpur (dist Bhagalpur), Kursela (dist Katihar), Matihani (dist Begusarai) 1 each.
- ❖ **Jharkhand:** Dhalbhumgarh (dist East Singbhum), Bokaro (dist Bokaro) 1 each.

**Hailstorm reported:**

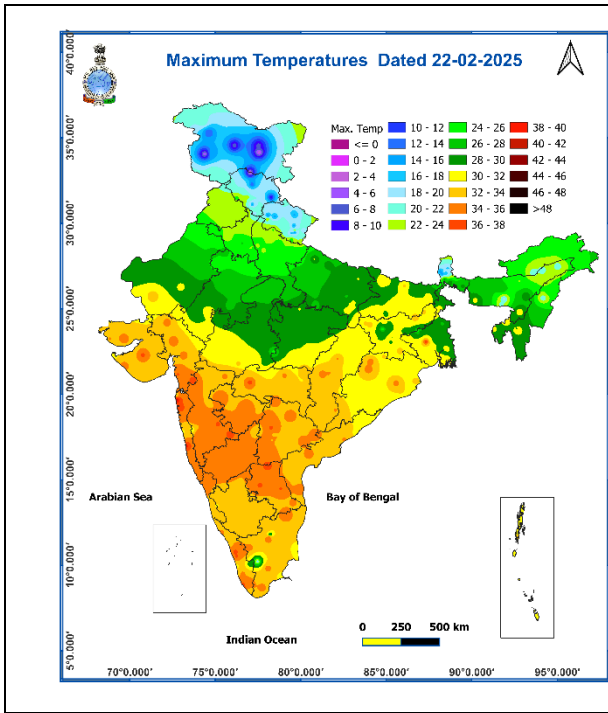
- ❖ **Himachal Pradesh:** Jubbarhatti; **Jharkhand:** Ranchi.

**Thunderstorm reported:**

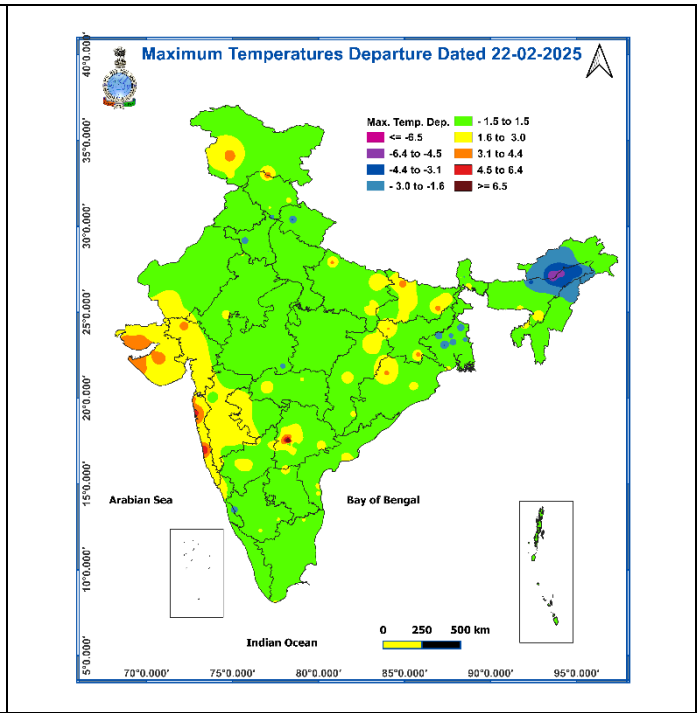
- ❖ **Northwest India:** Shimla; **Northeast India:** Agartala; **East India:** Malda, Diamond Harbour, Haldia, Digha, Bankura, Sriniketan, Bhagalpur, Purnia, Ranchi, Jamshedpur, Balasore, Gopalpur, Rourkela; **South India:** Kannur, Karipur.

- ❖ Minimum temperatures are in the range of 4°C to 8°C over many parts of Himachal Pradesh; 8-14°C over many parts of plains of Northwest India; 14-20°C over many parts of Bihar, Jharkhand, Central and West India; 20-24°C over many parts of south peninsular India. Today, the lowest minimum temperature of **8.1°C** is reported at **Nahan (Haryana)** over the plains of the country.
- ❖ During the past 24 hours, **minimum temperatures** have risen by 1-3°C at many places over Bihar; at a few places over Coastal Andhra Pradesh & Yanam, Nagaland, Manipur, Mizoram & Tripura, Odisha, South Interior Karnataka, Sub-Himalayan West Bengal & Sikkim, West Rajasthan; at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya, Chhattisgarh, East Uttar Pradesh, Gangetic West Bengal, Jammu & Kashmir, Madhya Maharashtra, Saurashtra & Kutch, Tamil Nadu, Puducherry & Karaikal, Uttarakhand and fallen by 1-4°C over most parts of Lakshadweep; at many places over East Madhya Pradesh, North Interior Karnataka, Saurashtra & Kutch; at a few places over Assam & Meghalaya, East Uttar Pradesh, Gangetic West Bengal, Gujarat Region, Haryana-Chandigarh-Delhi, Himachal Pradesh, Jammu & Kashmir, Vidarbha; at isolated places over Andaman & Nicobar Islands, Chhattisgarh, East Rajasthan, Madhya Maharashtra, Odisha, Punjab, Sub-Himalayan West Bengal & Sikkim, Tamil Nadu, Puducherry & Karaikal, Telangana, Uttarakhand, West Madhya Pradesh, West Rajasthan, West Uttar Pradesh.
- ❖ Minimum temperatures are **markedly above normal (5°C or more)** at a few places over Bihar, Coastal Karnataka; at isolated places over Assam & Meghalaya, Odisha; **appreciably above normal (3°C to 5°C)** at a few places over Jharkhand, Konkan & Goa, Nagaland, Manipur, Mizoram & Tripura, West Rajasthan; at isolated places over Andaman & Nicobar Islands, East Uttar Pradesh, Gangetic West Bengal, Gujarat Region, North Interior Karnataka, Saurashtra & Kutch, West Madhya Pradesh; **above normal (1°C to 3°C)** at many places over Coastal Andhra Pradesh & Yanam, Punjab; at a few places over Kerala & Mahe, Madhya Maharashtra, Marathwada, Rayalaseema, Sub-Himalayan West Bengal & Sikkim, West Uttar Pradesh; at isolated places over Chhattisgarh, East Madhya Pradesh, Haryana-Chandigarh-Delhi, Tamil Nadu, Puducherry & Karaikal, Telangana and near normal over rest parts of the country.
- ❖ Maximum temperatures are in the range of 35-39°C over most parts of Marathwada; at many places over Madhya Maharashtra, Rayalaseema, Telangana; at a few places over Coastal Karnataka, Gujarat Region, Kerala & Mahe, Konkan & Goa, Saurashtra & Kutch, Vidarbha; at isolated places over Chhattisgarh, Coastal Andhra Pradesh & Yanam, Odisha, Tamil Nadu, Puducherry & Karaikal; 30-35°C over most parts of Chhattisgarh, Coastal Andhra Pradesh & Yanam, Lakshadweep, North Interior Karnataka, South Interior Karnataka; at many places over Andaman & Nicobar Islands, Coastal Karnataka, Gujarat Region, Jharkhand, Kerala & Mahe, Konkan & Goa, Nagaland, Manipur, Mizoram & Tripura, Odisha, Tamil Nadu, Puducherry & Karaikal; at a few places over Bihar, Gangetic West Bengal, Madhya Maharashtra, Rayalaseema, Saurashtra & Kutch, Telangana, Vidarbha, West Madhya Pradesh, West Rajasthan; at isolated places over Assam & Meghalaya, East Madhya Pradesh, East Rajasthan, East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim. Yesterday, the highest **maximum temperature of 38.4°C** was reported at **Ratnagiri (Konkan & Goa)** over the plains of the country.
- ❖ During the past 24 hours, **maximum temperatures** have risen by 1-3°C over most parts of Jammu & Kashmir; at many places over Gujarat Region; at a few places over Odisha, Saurashtra & Kutch, Uttarakhand, West Rajasthan; at isolated places over Bihar, Chhattisgarh, Coastal Andhra Pradesh & Yanam, East Rajasthan, Gangetic West Bengal, Himachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Punjab, Rayalaseema, Sub-Himalayan West Bengal & Sikkim, Tamil Nadu, Puducherry & Karaikal, Telangana and fallen by 1-4°C over most parts of Arunachal Pradesh, East Madhya Pradesh, West Uttar Pradesh; at many places over Assam & Meghalaya; at a few places over East Uttar Pradesh, Haryana-Chandigarh-Delhi, Jharkhand, North Interior Karnataka, Punjab, West Madhya Pradesh; at isolated places over Chhattisgarh, East Rajasthan, Gangetic West Bengal, Himachal Pradesh, Kerala & Mahe, Odisha, Sub-Himalayan West Bengal & Sikkim, Tamil Nadu, Puducherry & Karaikal, Uttarakhand, Vidarbha.
- ❖ Maximum temperatures were **markedly above normal (5°C or more)** at a few places over Konkan & Goa; at isolated places over Chhattisgarh; **appreciably above normal (3°C to 5°C)** at a few places over Jammu & Kashmir, Jharkhand, Saurashtra & Kutch; at isolated places over Bihar, East Uttar Pradesh, Gujarat Region, Odisha, Vidarbha; **above normal (1°C to 3°C)** at many places over Coastal Karnataka, Nagaland, Manipur, Mizoram & Tripura; at a few places over Coastal Andhra Pradesh & Yanam, Madhya Maharashtra, Marathwada, Sub-Himalayan West Bengal & Sikkim, Telangana; at isolated places over Assam & Meghalaya, East Madhya Pradesh, East Rajasthan, Gangetic West Bengal, Himachal Pradesh, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, West Madhya Pradesh, West Rajasthan and near normal over rest parts of the country.

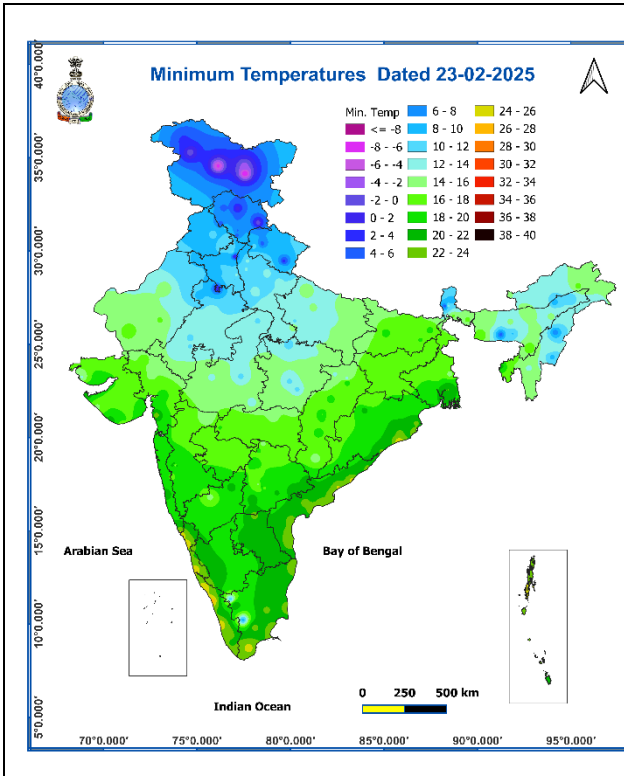
**Fig. 1: Maximum Temperatures**



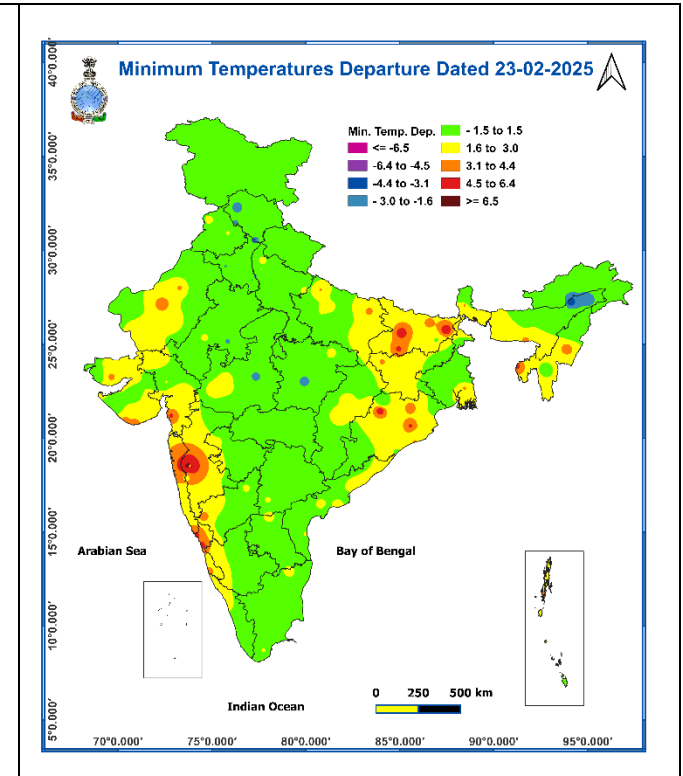
**Fig. 2: Departure of Maximum Temperatures**



**Fig. 3: Minimum Temperatures**



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

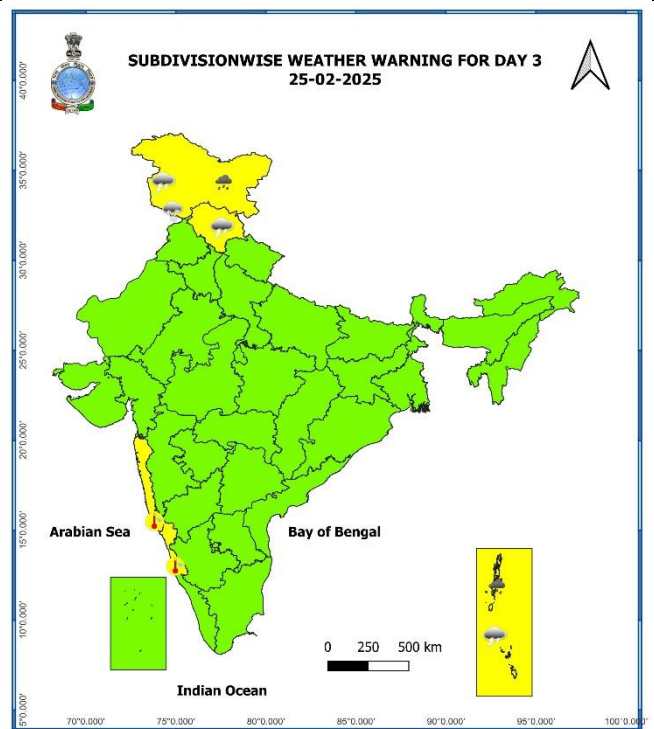
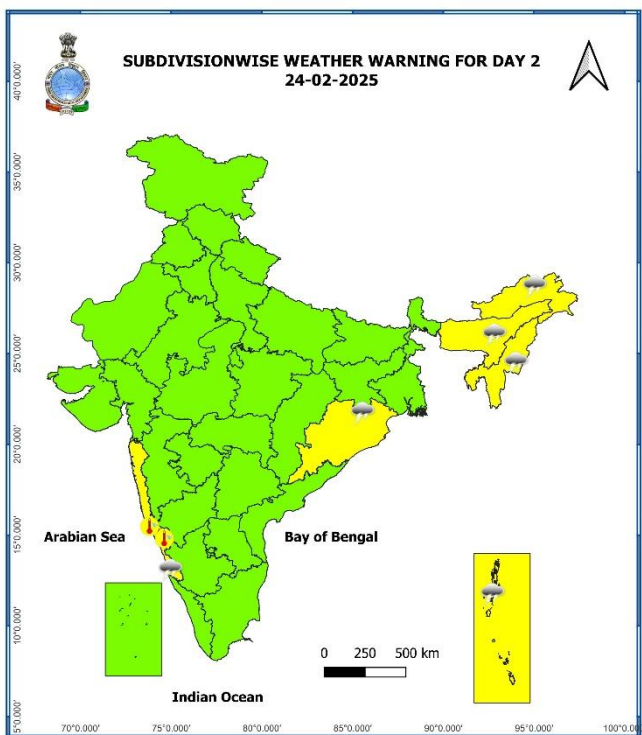
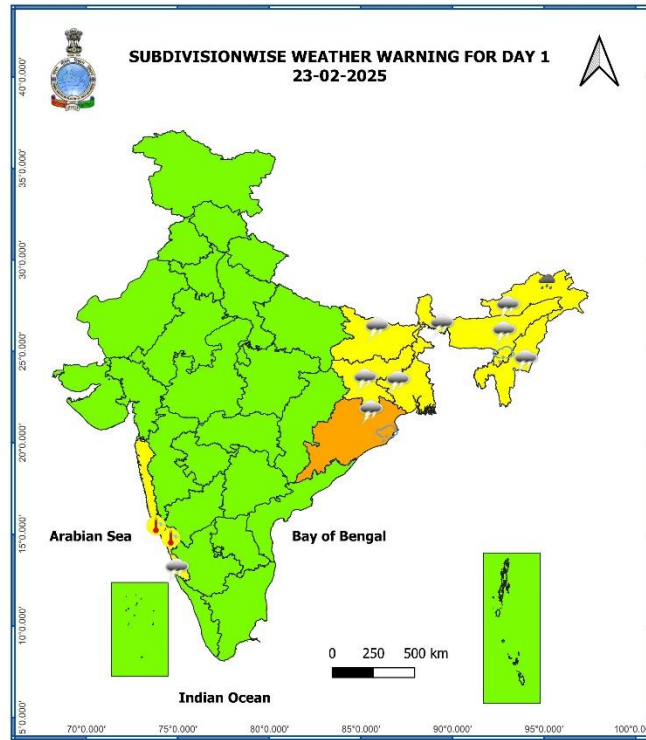


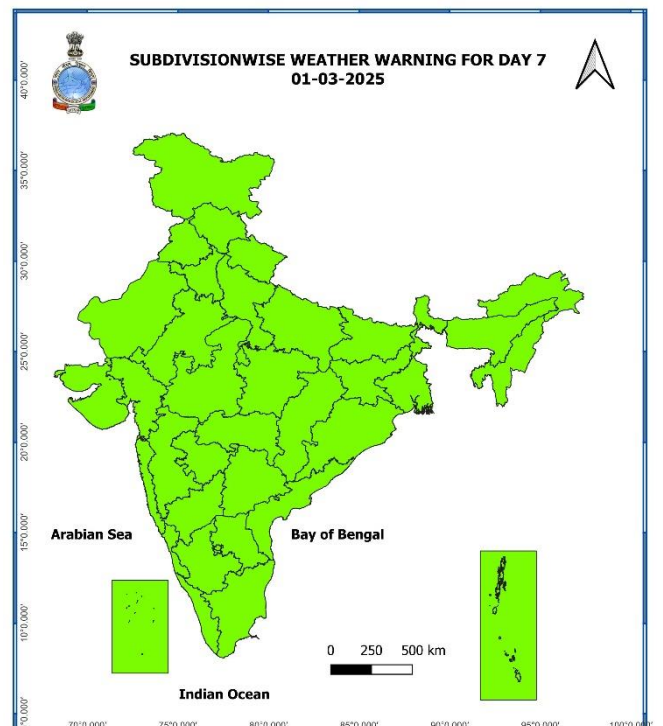
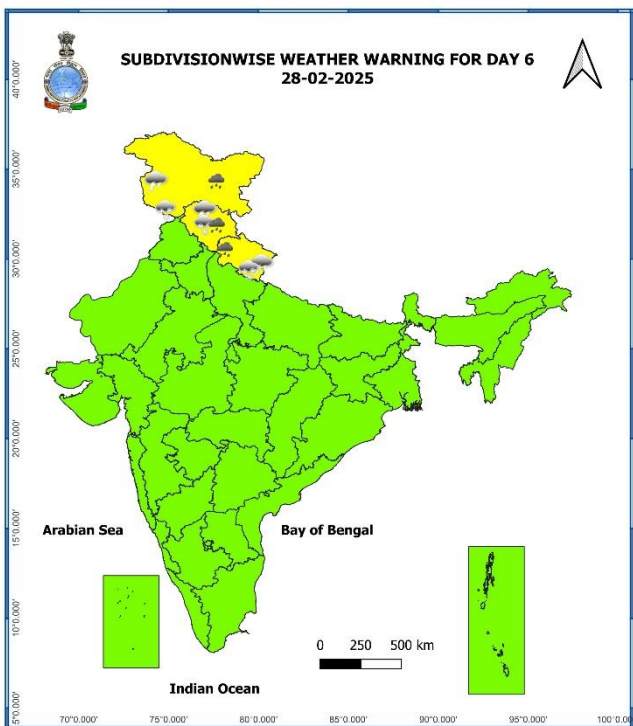
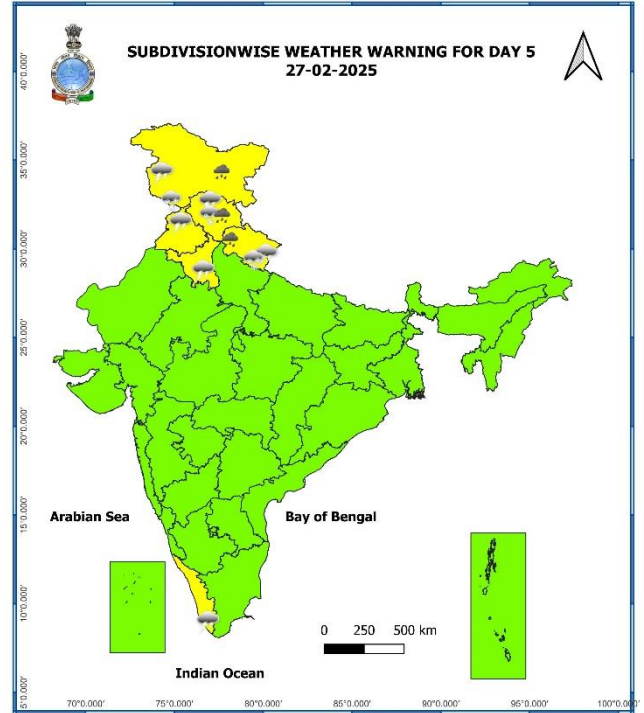
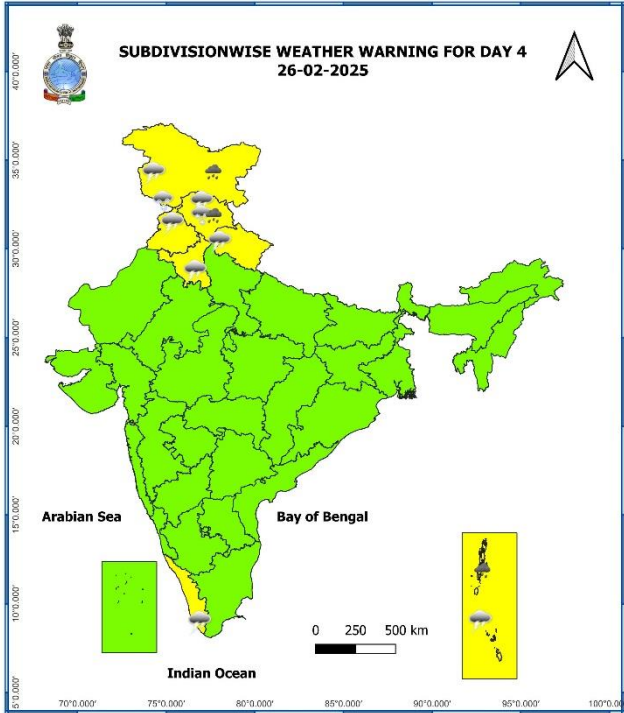
## ANNEXURE III

7 Days Rainfall Forecast								
S. No.	Subdivision	23-Feb	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb	01-Mar
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	FWS	WS	WS	WS	FWS	FWS	SCT
2	ARUNACHAL PRADESH	FWS	SCT	SCT	ISOL	ISOL	ISOL	ISOL
3	ASSAM & MEGHALAYA	SCT	ISOL	ISOL	DRY	DRY	DRY	ISOL
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	SCT	ISOL	ISOL	DRY	DRY	DRY	DRY
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	SCT	ISOL	ISOL	DRY	ISOL	ISOL	ISOL
6	GANGETIC WEST BENGAL	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	ISOL	DRY	DRY	DRY	DRY	DRY	ISOL
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	ISOL	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
12	UTTARAKHAND	DRY	DRY	ISOL	SCT	FWS	WS	FWS
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	ISOL	SCT	SCT	ISOL
14	PUNJAB	DRY	DRY	DRY	ISOL	SCT	SCT	ISOL
15	HIMACHAL PRADESH	DRY	DRY	FWS	WS	WS	WS	WS
16	JAMMU & KASHMIR AND LADAKH	DRY	DRY	FWS	WS	WS	WS	SCT
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
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	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	ISOL	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	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
35	KERALA & MAHE	ISOL	ISOL	ISOL	ISOL	ISOL	SCT	SCT
36	LAKSHADWEEP	SCT	SCT	SCT	SCT	SCT	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 23<sup>rd</sup> Feb. to 26<sup>th</sup> Feb. 2025

### Past Weather:

There has been a slight fall in minimum and maximum temperatures over Delhi/NCR during the past 24 hours. The Maximum and Minimum temperatures over Delhi are in the range of 23 to 25°C and 10 to 11°C respectively. The minimum and maximum temperatures were near normal over most places. Mainly clear sky conditions with predominant surface wind from the northwest direction with wind speed reaching 18 to 20 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 08 kmph northwest direction prevailed over the region in the forenoon today.

### Weather Forecast:

**23.02.2025:** Mainly clear sky. 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 northwest direction with a wind speed of less than 14 kmph till evening. It would decrease thereafter becoming less than 06 kmph from the northwest direction during the night.

**24.02.2025:** Mainly Clear Sky becoming Partly Cloudy Sky towards Afternoon. 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 06 kmph from northwest direction during evening and night.

**25.02.2025:** Partly cloudy sky. 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 11 to 13°C respectively. The predominant surface wind will likely to be from north-west direction with a wind speed of less than 10 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 06 kmph from north direction during evening and night.

**26.02.2025:** Partly cloudy sky. 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 12 to 14°C respectively. The predominant surface wind will likely to be from north-west direction with a wind speed of less than 04 kmph during morning hours. The wind speed will gradually increase thereafter becoming 12-14 kmph from the east-south-east direction during the afternoon. It will decrease becoming less than 16 kmph from east-south-east direction during evening and night.

### Agromet advisories for likely impact of Hailstorms

- Use hail nets or hail caps in fruit orchards and vegetable plants to protect them from mechanical damage in **Assam, Meghalaya and Odisha**.
- 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 hailstorms and provide them with balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.

## Impact expected and action suggested due to isolated thunderstorm with lightning/gusty winds & Hailstorm

### Impact expected:

- Strong wind/hail may damage plantation, horticulture and standing crops.
- Hail may injure people and cattle at open places.
- Partial damage to vulnerable structures due to strong winds.
- Minor damage to kutcha houses/walls and huts.
- Loose objects may fly.

### Action suggested:

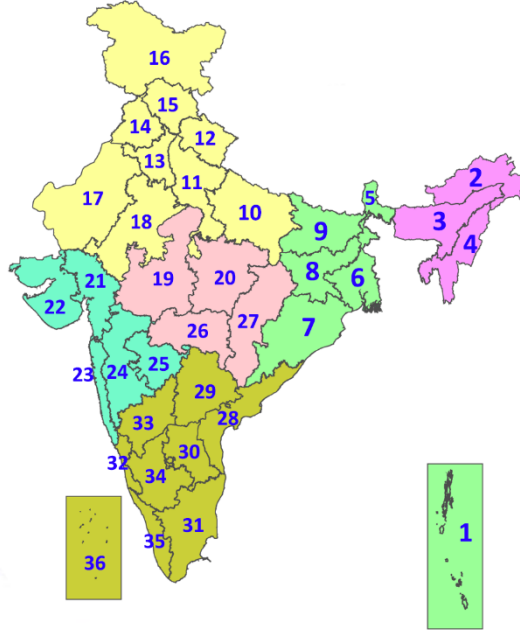
- Stay indoors, close windows & doors and avoid travel if possible.
- Take safe shelters; do not take shelter under trees.
- Do not lie on concrete floors and do not lean against concrete walls.
- Unplug electrical/ electronic appliances.
- Immediately get out of water bodies.
- Keep away from all the objects that conduct electricity.

### 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

<b>Rain/ Snow *</b>	<b>Heavy:</b> 64.5 to 115.5 mm/cm * <b>Very Heavy:</b> 115.6 to 204.4 mm/cm * <b>Extremely Heavy:</b> > 204.4 mm/cm *
<b>Heat Wave</b>	<b>When maximum temperature of a station reaches <math>\geq 40^\circ\text{C}</math> for plains and <math>\geq 30^\circ\text{C}</math> for hilly regions</b> <b>(a) Based on Departure from normal</b> <b>Heat Wave:</b> Maximum Temperature Departure from normal $4.5^\circ\text{C}$ to $6.4^\circ\text{C}$ . <b>Severe Heat Wave:</b> Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$ <b>(b). Based on Actual maximum temperature</b> <b>Heat Wave:</b> When actual maximum temperature $\geq 45^\circ\text{C}$ . <b>Severe Heat Wave:</b> When actual maximum temperature $\geq 47^\circ\text{C}$ <b>(c). Criteria for heat wave for coastal stations</b> When maximum temperature departure is $> 4.5^\circ\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^\circ\text{C}$
<b>Warm Night</b>	<b>When maximum temperature remains <math>40^\circ\text{C}</math></b> <b>Warm Night:</b> When minimum temperature departure $4.5^\circ\text{C}$ to $6.4^\circ\text{C}$ . <b>Severe Warm Night:</b> When minimum temperature departure $> 6.4^\circ\text{C}$ .
<b>Cold Wave</b>	<b>When minimum temperature of a station <math>\leq 10^\circ\text{C}</math> for plains and <math>\leq 0^\circ\text{C}</math> for hilly regions.</b> <b>(a). Based on departure</b> <b>Cold Wave:</b> Minimum Temperature Departure from normal $-4.5^\circ\text{C}$ to $-6.4^\circ\text{C}$ . <b>Severe Cold Wave:</b> Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$ <b>(b) Based on actual Minimum Temperature (for Plains only)</b> <b>Cold Wave :</b> When Minimum Temperature is $\leq 4.0^\circ\text{C}$ <b>Severe Cold Wave:</b> When Minimum Temperature is $\leq 2.0^\circ\text{C}$ <b>(c) For Coastal Stations</b> When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$
<b>Cold Day</b>	<b>When minimum temperature of a station <math>\leq 10^\circ\text{C}</math> for plains and <math>\leq 0^\circ\text{C}</math> for hilly regions</b> <b>Based on departure</b> <b>Cold Day:</b> Maximum Temperature Departure from normal $-4.5^\circ\text{C}$ to $-6.4^\circ\text{C}$ . <b>Severe Cold Day:</b> Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$
<b>Fog</b>	<b>Phenomenon of small droplets suspended in air and the horizontal visibility <math>&lt; 1\text{km}</math></b> <b>Moderate Fog:</b> When the visibility between 500-200 metres <b>Dense Fog:</b> when the visibility between 50- 200 metres <b>Very Dense Fog:</b> when the visibility $< 50$ metres
<b>Thunderstorm</b>	Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)
<b>Dust/Sand Storm</b>	An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.
<b>Frost</b>	<b>Ice deposits on ground</b> Air temperature $\leq 4^\circ\text{C}$ ( over Plains)
<b>Squall</b>	<b>A strong wind that rises suddenly, lasts for atleast 1 minute.</b> <b>Moderate:</b> Wind speed 52-61 kmph <b>Severe:</b> Wind speed 62-87 kmph <b>Very Severe:</b> Wind speed $> 87$ kmph
<b>Sea State</b>	<b>Effect of various waves in the sea over specific area</b> <b>Rough to very rough:</b> Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre <b>High to very high:</b> Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre <b>Phenomenal:</b> Wind speed $> 117$ kmph ( $> 63$ knots) & Wave height $> 14$ metre
<b>Cyclone</b>	<b>Cyclonic Storm:</b> Wind speed 62-87 kmph (34-47 knots) <b>Severe Cyclonic Storm:</b> Wind speed 88-117 kmph (48-63 knots) <b>Very Severe Cyclonic Storm:</b> Wind speed 118-165 kmph (64 - 89 knots) <b>Extremely Severe Cyclonic Storm:</b> Wind speed 166-220 kmph (90 -119 knots) <b>Super Cyclone Strom:</b> Wind speed $> 220$ kmph ( $> 119$ knots)

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**Hot and Humid:** When maximum temperatures remain  $3^\circ\text{C}$  above normal along with the above normal relative humidity.