



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release  
Date: 18<sup>th</sup> April, 2025  
Time of Issue: 1400 hours IST

- Subject:** i) Heat wave to severe heat wave conditions likely to continue over Rajasthan on 18<sup>th</sup> April and it is likely to abate from 20<sup>th</sup> April.  
ii) Light to moderate rainfall at most places accompanied with thunderstorm & lightning and gusty/Squally winds are also likely over Western Himalayan region and adjoining plains of northwest India during 18<sup>th</sup> to 20<sup>th</sup> April, 2025.  
iii) Isolated heavy rainfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 18<sup>th</sup> & 19<sup>th</sup> April with moderate rainfall activity on 20<sup>th</sup> April.

**i. Realised weather during past 24 hours till 0830 hours IST of today, the 18<sup>th</sup> April 2025 (Annexure I):**

- ❖ **Thunderstorm** accompanied with Squally/Gusty winds prevailed at isolated places over West Bengal & Sikkim, Odisha, Jharkhand, Bihar, East Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Hailstorm** occurred at isolated places over Gangetic West Bengal, north Odisha, East Uttar Pradesh.
- ❖ **Heavy rainfall** has been recorded at isolated places over north Odisha and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heat wave to severe heat wave conditions** prevailed at a few places over East Rajasthan; **Heat wave conditions** at many places over West Rajasthan.
- ❖ **Warm Night conditions** prevailed in isolated places over Rajasthan.

For more details of realised weather, kindly refer [Annexure I](#)

**Temperature:**

- ❖ Maximum Temperature observations during past 24 hours till 0830 hours IST of today are appended in [Annexure II](#).

**ii. Weather Systems, Forecast and Warnings (refer to Annexure III & IV):**

- ❖ A **Western Disturbance** as a cyclonic circulation over north Iran & neighbourhood in lower to upper tropospheric levels and an upper air cyclonic circulation lies over south Punjab in lower tropospheric levels. Under its influence:
  - ✓ **Light to moderate rainfall at most places accompanied with Thunderstorm, lightning & squally winds (speed 50-60 kmph gusting to 70 kmph)** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 18<sup>th</sup>-21<sup>st</sup> April; Himachal Pradesh, Uttarakhand on 19<sup>th</sup>; with **gusty winds (speed 30-40 kmph gusting to 50 kmph)** over Himachal Pradesh, Uttarakhand on 18<sup>th</sup> & 20<sup>th</sup> April.
  - ✓ **Isolated Hailstorm** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 18<sup>th</sup> & 19<sup>th</sup>; Uttarakhand on 19<sup>th</sup> April.

- ✓ **Isolated heavy rainfall** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 18<sup>th</sup> & 19<sup>th</sup> April.
  - ✓ Isolated rainfall along with **thunderstorm, lightning & squally winds (speed 50-60 kmph gusting to 70 kmph)** likely over Punjab, Haryana, Uttar Pradesh on 18<sup>th</sup> and **thunderstorm, lightning & gusty winds (speed 30-40 kmph gusting to 50 kmph)** is likely over the region on 19<sup>th</sup> & 20<sup>th</sup> April, 2025.
  - Isolated Duststorm/Thunderstorm **gusty winds (speed 30-40 kmph gusting to 50 kmph)** likely over West Rajasthan on 18<sup>th</sup> & 19<sup>th</sup> April.
- ❖ An **upper air cyclonic circulation** lies over central parts of Uttar Pradesh, 2<sup>nd</sup> over north Bangladesh & neighbourhood and 3<sup>th</sup> over northeast Assam in lower tropospheric levels.
  - ❖ A **trough** runs from south Punjab to Jharkhand; 2<sup>nd</sup> trough north Madhya Maharashtra to Gulf of Mannar and 3<sup>rd</sup> trough from Jharkhand to central Assam in lower tropospheric levels.
  - ❖ Under the influence of these systems:
    - ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed reaching 40-50 kmph gusting to 60 kmph)** likely over Northeast & East India during next 5 days.
    - ✓ **Heavy rainfall** likely over Sub-Himalayan West Bengal & Sikkim on 18<sup>th</sup> & 19<sup>th</sup>; Gangetic West Bengal and adjoining districts of northeast Jharkhand and southeast Bihar, north Odisha on 18<sup>th</sup>; Arunachal Pradesh during 22<sup>nd</sup>- 24<sup>th</sup>; Assam & Meghalaya during 18<sup>th</sup>, 19<sup>th</sup> & during 21<sup>st</sup> -24<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura on 24<sup>th</sup> April.
    - ✓ **Isolated Hailstorm** likely over Odisha on 18<sup>th</sup> April.
    - ✓ **Thundersquall (wind speed reaching 50-60 kmph gusting to 70 kmph)** very likely at isolated places over West Bengal & Sikkim on 18<sup>th</sup> & Odisha on 18<sup>th</sup> & 21<sup>st</sup> April.
    - ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed 40-50 kmph gusting to 60 kmph)** likely over Kerala & Mahe and **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (wind speed reaching 40-50 kmph gusting to 60 kmph)** likely over remaining parts of south peninsular India during next 7 days.

#### Temperature Forecast:

- ❖ No significant change in maximum temperatures likely over Northwest India during next 24 hours; gradual fall by 2-3°C during subsequent 3 days and rise by 2-3°C during subsequent 3 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Central India during next 5 days and no significant change during subsequent 2 days.
- ❖ No significant change in maximum temperatures likely over East India during next 48 hours and gradual rise by 3-5°C over Bihar & Jharkhand and 2-4°C over Odisha & West Bengal during subsequent 5 days.
- ❖ No significant change in maximum temperatures likely over Gujarat State during next 24 hours; gradual fall by 2-3°C during subsequent 3 days and gradual rise by 2-3°C during subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over Maharashtra during next 4 Days hour; gradual fall by 2-3°C during subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over rest parts of the country.

#### Heat wave, warm night and Hot & Humid weather warning:

- ❖ **Heat wave conditions** at many/some places with **severe heat wave conditions** at isolated parts likely over Rajasthan on 18<sup>th</sup> April and heat wave conditions at isolated parts thereafter on 18<sup>th</sup> April.
- ❖ **Heat wave conditions** are very likely at isolated places over Saurashtra & Kutch on 18<sup>th</sup> April.
- ❖ **Hot & humid** weather is likely to prevail over Marathwada & Madhya Maharashtra during 18<sup>th</sup>- 21<sup>st</sup>; over Gujarat State during 22<sup>nd</sup>-24<sup>th</sup>April.

❖ **Warm Night conditions** are likely at isolated places over East Rajasthan on 18<sup>th</sup> April.

#### **iv. Weather conditions and forecast over Delhi/NCR during 18<sup>th</sup> April to 21<sup>st</sup> April, 2025 (Annexure V)**

**For more details, kindly refer National Weather Bulletin:**

[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

**For District wise warnings refer:**

<https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

#### **ANNEXURE I**

#### **Significant weather reported during past 24 hours till 0830 hours IST of today:**

- ❖ **Light/moderate Rainfall with thunderstorm & lightning observed** at most places over West Bengal & Sikkim; at many places over Nagaland, Manipur, Mizoram & Tripura, Bihar, Andaman & Nicobar Islands; at a few places over Arunachal Pradesh, Assam & Meghalaya, Odisha, Jharkhand; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttar Pradesh, West Madhya Pradesh, Chhattisgarh, Tamilnadu Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Interior Karnataka.

#### **Rainfall recorded (in cm):**

- ❖ **Odisha:** Muruda (dist Mayurbhanj) 10, Sarasakana (dist Mayurbhanj) 8, Chandbali (dist Bhadrak) 7, Baripada (dist Mayurbhanj) 7, Remuna (dist Balasore) 6, Rasagovindapur (dist Mayurbhanj) 6, Nilgiri (dist Balasore) 6, Samakhunta (dist Mayurbhanj) 6, Balasore (dist Balasore) 6, Bonth (dist Bhadrak) 5, Rajkanika (dist Kendrapara) 5, Bangiriposi (dist Mayurbhanj) 5, Suliapada (dist Mayurbhanj) 5, Jaleswar (dist Balasore) 5, Betanati (dist Mayurbhanj) 5, Bahanga (dist Balasore) 5, Rajnagar (dist Kendrapara) 4, Tihidi (dist Bhadrak) 3, Athgarh (dist Cuttack) 3, Udala (dist Mayurbhanj) 3,
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Karbook (dist Gomati) 8, Gandechehra (dist Dhalai) 7, Khowai (dist Khowai) 5, Bishalgarh (dist Sipahijala) 4, Cti Arg (dist Sipahijala) 4,
- ❖ **Gangetic West Bengal:** Barrackpur (dist North 24 Parganas) 6, Mo Saltlake (dist North 24 Parganas) 5, Suri (dist Birbhum) 4, Jhargram (dist Jhargram) 4, Panagarh (dist Paschim Bardhaman) 4, Sri Niketan (dist Birbhum) 3,
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Majitar (dist Pakyong) 3, Damthang (dist Namchi) 3, Ravangla Arg (dist Namchi) 3,
- ❖ **Kerala & Mahe:** Palode Aws (dist Thiruvananthapuram) 3, Konni (dist Pathanamthitta) 3, Kottayam (dist Kottayam) 3, Perumkadavila Arg (dist Thiruvananthapuram) 3, Kurudamannil (dist Pathanamthitta) 3,
- ❖ **Assam & Meghalaya:** Baghmara\_aws (dist South Garo Hills) 3, Shillong C.s.o. (dist East Khasi Hills) 3,

#### **Realised Gusty Winds during past 24 hours ending at 0300 UTC of today i.e 18.04.2025:**

- ❖ **Odisha:** Ranital(Bhadrak)-46kt, Mayurbhanj-43kt, Balasore-28kt, Cuttack-24kt, Janhukuda(Puri)-23kt **Assam & Meghalaya:** Diphu=20kt, West Karbi Anglong=19kt, Nagaon=19kt
- ❖ **Gangetic West Bengal:** Nimpith, Durgapur-36kt, Diamond-35kt, Howrah-33kt, Digha-32kt, Barrackpore-27kt, Canning-25kt, Raidighi-24kt, Kharagpur, Howrah-23kt, Berhampore-20kt, Digha (55 Kmph), Alipore (43 Kmph)
- ❖ **Bihar:** Ziradei (Siwan)-36kt, Rajgir (Nalanda)-27kt, Saraiya (Muzzafarpur)-25kt, Patna-24kt, Banka-23kt, Sheikpura-21kt
- ❖ **Jharkhand:** Bokaro-26kt, Jamtara, Chatra-21kt, Godda-20kt
- ❖ **East Uttar Pradesh:** Lucknow (AP)-10G20KT

### Temperature observations during past 24 hours till 0830 hours IST of today:

- ❖ **Yesterday, Maximum Temperatures** had risen by 1 to 2 °C at many parts of Madhya Pradesh, Uttar Pradesh, Jharkhand, Delhi; at a few parts of East Rajasthan, west Bihar, north Chhattisgarh, Coastal Andhra Pradesh & Yanam, Andaman & Nicobar Islands; at isolated parts of Himachal Pradesh, Tamil Nadu, Puducherry & Karaikal; **fallen by 2 to 5°C** over east Bihar, west Assam and Sub-Himalayan West Bengal. No significant change over remaining parts of the country.
- ❖ **Yesterday, Maximum Temperatures** were in the range of **42-45°C** at many places over Rajasthan; at a few places over Saurashtra & Kutch, interior Maharashtra; at isolated places over West Madhya Pradesh; **38-42°C** at most places over East Madhya Pradesh; at many places over Haryana-Chandigarh-Delhi, Gujarat Region, Rayalaseema; at a few places over Uttar Pradesh, Telangana; at isolated places over Punjab, Vidarbha, Chhattisgarh, Odisha, southwest Bihar, North Interior Karnataka; **33-38°C** at most places over Jharkhand, Lakshadweep; at many places over Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Konkan & Goa, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal; at a few places over South Interior Karnataka, Coastal Karnataka. Yesterday, the highest **maximum temperature of 45.1°C** was reported at **Bikaner (West Rajasthan)** over the country.
- ❖ Yesterday, Maximum Temperatures were above normal by 5-7°C at a few places over West Rajasthan; by 2-4°C at many places over Himachal Pradesh, Konkan & Goa; at a few places over East Rajasthan, Haryana Chandigarh & Delhi East Madhya Pradesh; at isolated places over East Madhya Pradesh, Madhya Maharashtra; below normal by 2-4°C at a few places over Andaman & Nicobar Islands; at isolated places over Gangetic West Bengal, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, South Interior Karnataka, East Uttar Pradesh and near normal over rest parts of the country. (Fig. 2)

Fig. 1: Maximum Temperatures

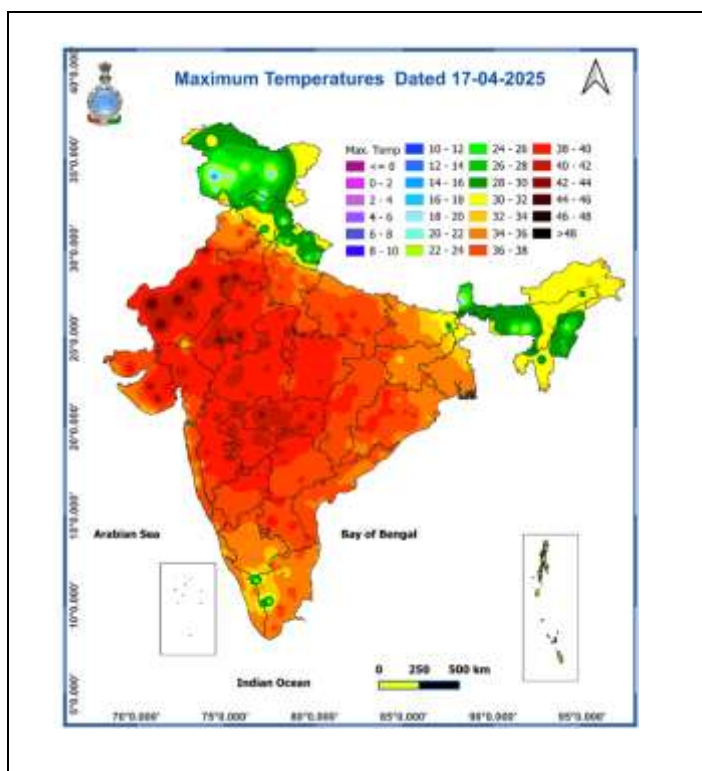
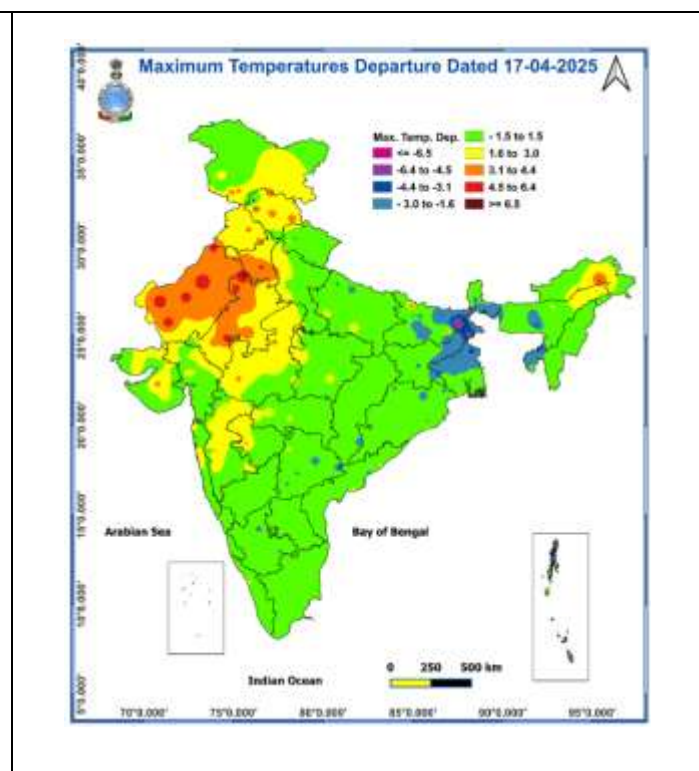
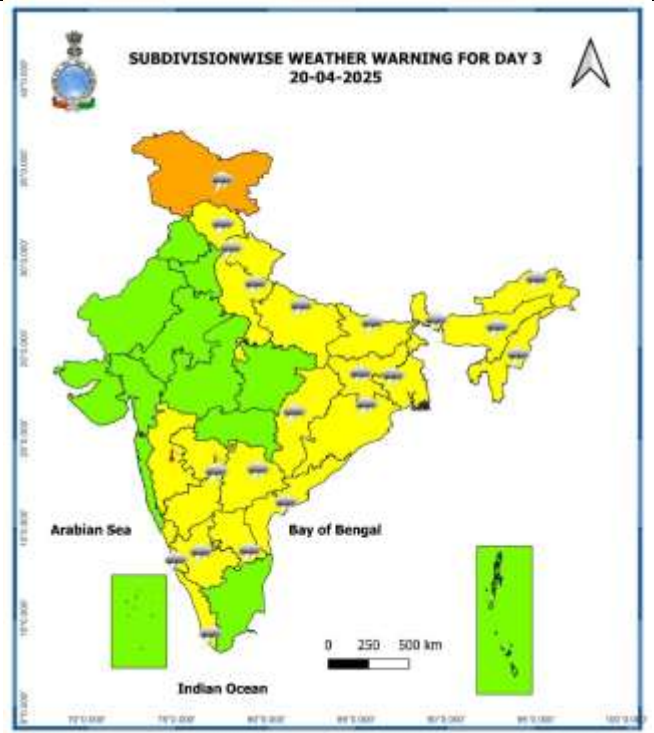
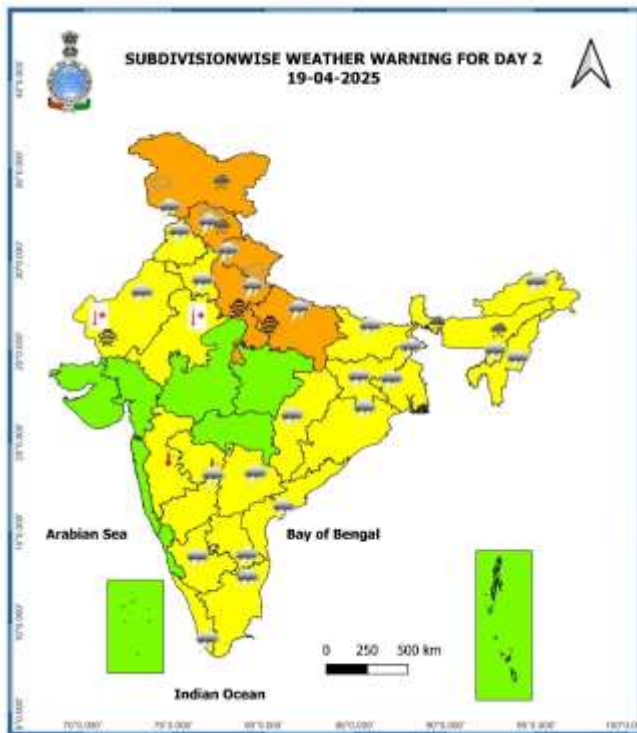
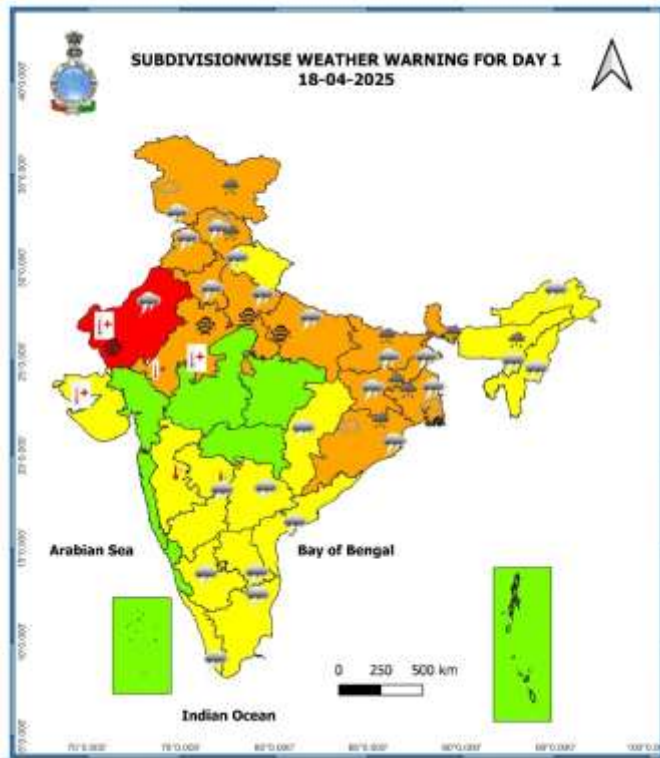


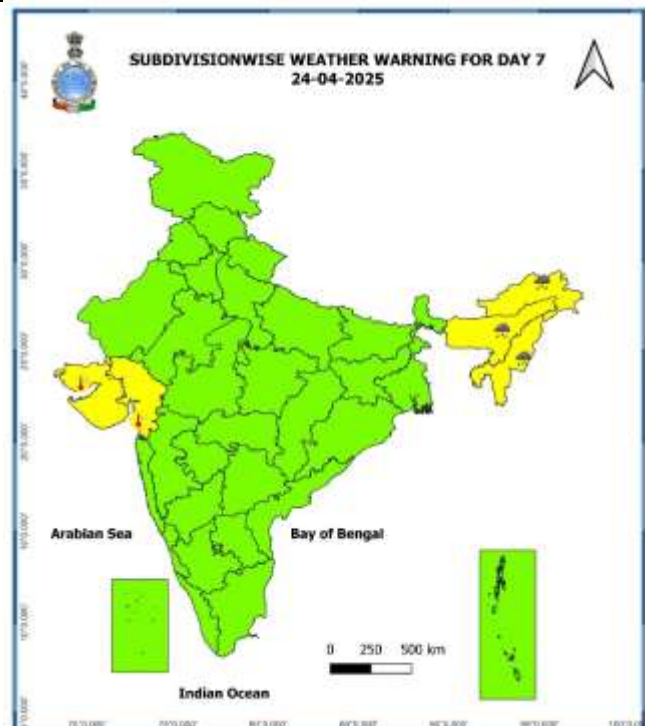
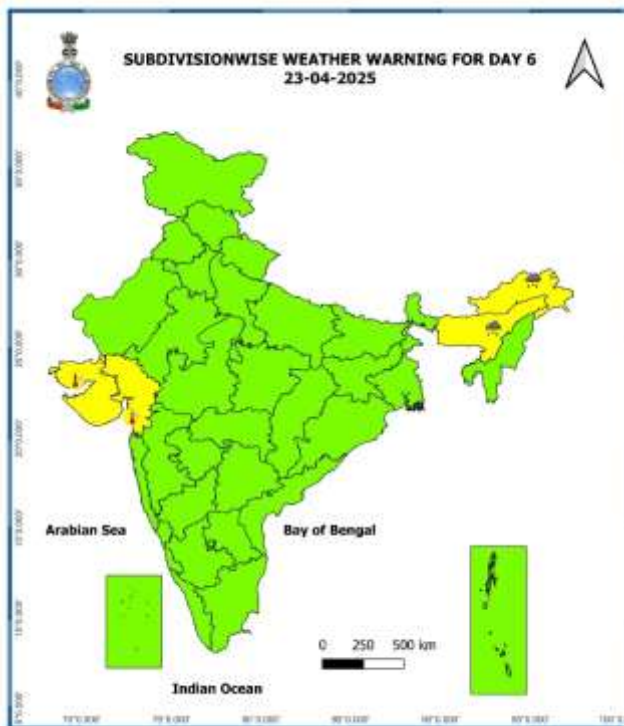
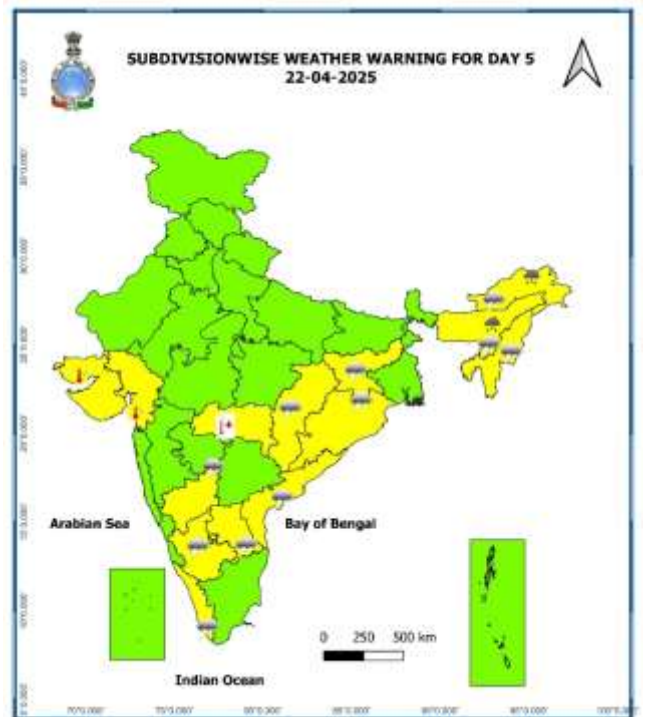
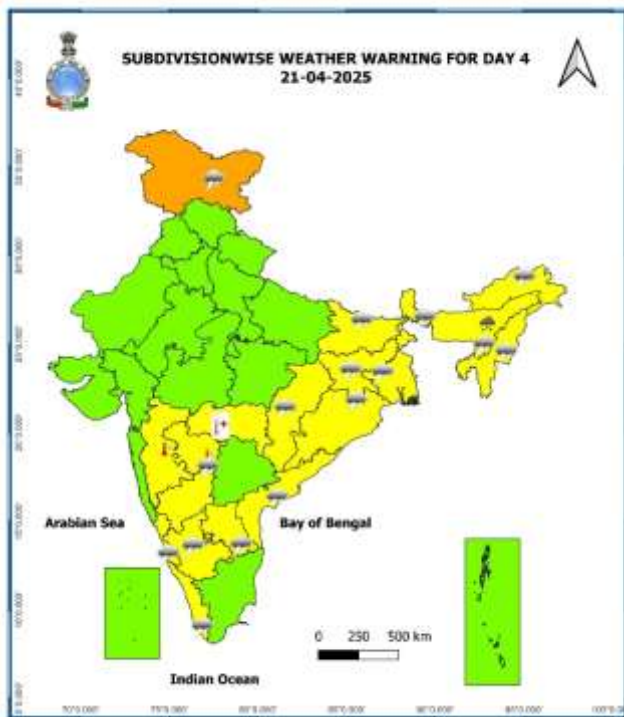
Fig. 2: Departure of Maximum Temperatures



7 Days Rainfall Forecast								
S. No.	Subdivision	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	FWS	SCT	ISOL	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	SCT	SCT	SCT	SCT	FWS	FWS	WS
3	ASSAM & MEGHALAYA	FWS	SCT	SCT	FWS	WS	WS	WS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS	SCT	SCT	SCT	FWS	SCT	SCT
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	FWS	FWS	FWS	FWS	FWS	FWS	SCT
6	GANGETIC WEST BENGAL	FWS	SCT	ISOL	ISOL	DRY	DRY	DRY
7	ODISHA	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
8	JHARKHAND	ISOL	ISOL	SCT	ISOL	ISOL	ISOL	DRY
9	BIHAR	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY
10	EAST UTTAR PRADESH	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
12	UTTARAKHAND	SCT	WS	FWS	ISOL	ISOL	DRY	DRY
13	HARYANA CHANDIGARH & DELHI	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
14	PUNJAB	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	FWS	WS	FWS	ISOL	ISOL	DRY	DRY
16	JAMMU & KASHMIR AND LADAKH	WS	WS	FWS	SCT	DRY	DRY	DRY
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	DRY	DRY	DRY	DRY
25	MARATHAWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	ISOL	ISOL	SCT	SCT	ISOL	ISOL	ISOL
33	NORTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	ISOL	ISOL	SCT	SCT	SCT	ISOL	ISOL
35	KERALA & MAHE	FWS	SCT	FWS	SCT	SCT	SCT	SCT
36	LAKSHADWEEP	DRY	DRY	DRY	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.ind.gov.in/responsive/districtWiseWarningGIS.php>

## **Weather forecast over Delhi/NCR during 18<sup>th</sup> to 21<sup>th</sup> Apr. 2025**

### **Past Weather:**

There has been slight fall in minimum temperature and rise in maximum temperature upto 02°C over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 40 to 41 °C and 24 to 25 °C respectively. The minimum temperature was above normal upto 03°C and maximum temperature was above normal upto 04°C at most places. Mainly clear sky conditions with predominant surface wind from the southeast direction with wind speeds less than 10 to 12 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 12 kmph from the southeast direction prevailed over the region in the forenoon today.

### **Weather Forecast:**

**18.04.2025:** Partly cloudy sky. Very light rain/drizzle accompanied with thunderstorm, lighting, dust storm and winds with speed 40-50 kmph gusting to 60 kmph during night. The maximum temperature over Delhi is likely to be in the range of 38 to 40°C. The predominant surface wind will likely be from the west direction with a wind speed of less than 18 kmph till evening. It would decrease becoming less than 12 kmph from the east direction during the night.

**19.04.2025:** Partly cloudy sky becoming generally cloudy sky towards evening. Very light rain/drizzle accompanied with thunderstorm, lighting, dust storm and winds with speed 40-50 kmph gusting to 60 kmph during evening. The maximum and minimum temperatures over Delhi are likely to be in the range of 37 to 39°C and 25 to 27°C respectively. The predominant surface wind will likely be from the southwest direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase thereafter becoming 20-24 kmph from the southwest direction during the afternoon. It will decrease becoming less than 18 kmph from the southwest direction during evening and night.

**20.04.2025:** Partly cloudy sky. Sustained Surface winds (speed 10-20 kmph). The maximum and minimum temperatures over Delhi are likely to be in the range of 36 to 38°C and 24 to 26°C respectively. The predominant surface wind will likely be from the west direction with a wind speed of 06-08 kmph during morning hours. The wind speed will gradually increase becoming 10-12 kmph from the west direction in the afternoon. It will increase becoming less than 14 kmph from the northwest direction during evening and night.

**21.04.2025:** Mainly clear sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 37 to 39°C and 24 to 26°C respectively. The predominant surface wind will likely be from the west direction with a wind speed of 08-10 kmph during morning hours. The wind speed will gradually increase becoming 12-16 kmph from the west direction in the afternoon. It will increase becoming less than 18 kmph from the northwest direction during evening and night.



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

- (i) **Isolated Hailstorm** likely over Odisha on 18<sup>th</sup>; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 18<sup>th</sup> & 19<sup>th</sup>; Uttarakhand on 19<sup>th</sup> April.
- (ii) **Light to moderate rainfall at most places accompanied with Thunderstorm, lightning & squally winds (speed 50-60 kmph gusting to 70 kmph)** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 18<sup>th</sup>-21<sup>st</sup> April; West Bengal & Sikkim on 18<sup>th</sup> & Odisha on 18<sup>th</sup> & 21<sup>st</sup>; Himachal Pradesh, Uttarakhand on 19<sup>th</sup> April.

### 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.

## Impact expected and action suggested due to Heat wave to severe heat wave conditions over

- ❖ **Heat wave conditions** at many/some places with **severe heat wave conditions** at isolated parts likely over Rajasthan on 18<sup>th</sup> April and heat wave conditions at isolated parts thereafter on 18<sup>th</sup> April.
- ❖ **Heat wave conditions** are very likely at isolated places over Saurashtra & Kutch on 18<sup>th</sup> April.

### Red alert Areas:

- Very high likelihood of developing heat illness and heat stroke in all ages.
- Extreme care needed for vulnerable people.

### Orange alert Areas

- High temperature & increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work.
- High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Avoid heat exposure– keep cool. Avoid dehydration.
- Drink sufficient water- even if not thirsty.
- Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.

### Yellow alert Areas

- Moderate temperature & heat is tolerable for general public but moderate health concern likely for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Avoid heat exposure.

- Wear lightweight, light colour, loose, cotton clothes.
- Cover your head, use a cloth, hat or umbrella.

### **Agromet advisories for likely impact of Hailstorm / Heavy Rainfall / Gusty Winds / Heat wave**

- In **Jammu & Kashmir, Himachal Pradesh and Odisha**, use hail net and hail caps to prevent mechanical damage in vegetables and orchards due to possibility of hailstorms. Drain out excess water from standing crops and vegetable fields.
- In **Assam and Meghalaya, West Bengal and Bihar**, drain out excess water from standing crops and vegetable fields.
- In **Rajasthan and Saurashtra & Kutch**, apply light and frequent irrigation to standing crops, vegetables and orchards in the evening to protect them from adverse effects of heat waves and high temperatures.
- Shift the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields. Tie the harvested crops properly and cover them to minimise the risk of displacement due to strong surface winds.
- Provide mechanical support to horticultural crops and staking to vegetables to avoid lodging.

### **Livestock / Poultry / Fishery**

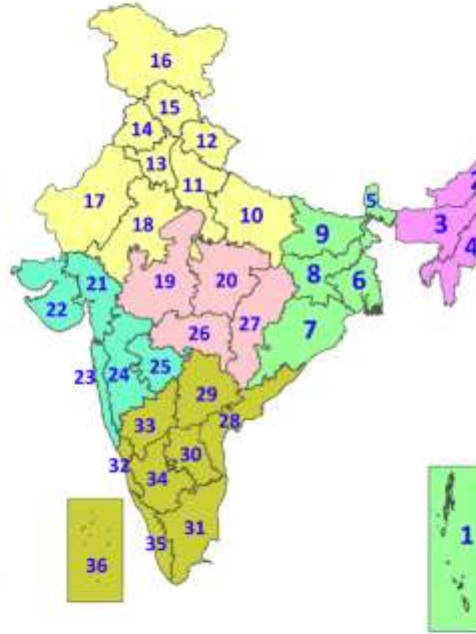
- Keep the animals inside the shed during heavy rainfall / hailstorm and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.
- To reduce the effect of heat wave/high temperature, cover the roof of poultry sheds with grass. Also, provide clean, hygienic and plenty of drinking water to animals.
- Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.

## 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>	<p><b>Heavy:</b> 64.5 to 115.5 mm/cm *</p> <p><b>Very Heavy:</b> 115.6 to 204.4 mm/cm*</p> <p><b>Extremely Heavy:</b> &gt; 204.4 mm/cm *</p>
<b>Heat Wave</b>	<p>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</p> <p><b>(a) Based on Departure from normal</b></p> <p><b>Heat Wave:</b> Maximum Temperature Departure from normal <math>4.5^{\circ}\text{C}</math> to <math>6.4^{\circ}\text{C}</math>.</p> <p><b>Severe Heat Wave:</b> Maximum Temperature Departure from normal <math>\geq 6.5^{\circ}\text{C}</math></p> <p><b>(b). Based on Actual maximum temperature</b></p> <p><b>Heat Wave:</b> When actual maximum temperature <math>\geq 45^{\circ}\text{C}</math>.</p> <p><b>Severe Heat Wave:</b> When actual maximum temperature <math>\geq 47^{\circ}\text{C}</math></p> <p><b>( c). Criteria for heat wave for coastal stations</b></p> <p>When maximum temperature departure is <math>&gt;4.5^{\circ}\text{C}</math> from normal. Heat Wave may be described provided maximum temperature <math>\geq 37^{\circ}\text{C}</math>.</p>
<b>Warm Night</b>	<p><b>When maximum temperature remains <math>40^{\circ}\text{C}</math></b></p> <p><b>Warm Night:</b> When minimum temperature departure <math>4.5^{\circ}\text{C}</math> to <math>6.4^{\circ}\text{C}</math>.</p> <p><b>Severe Warm Night:</b> When minimum temperature departure <math>&gt;6.4^{\circ}\text{C}</math>.</p>
<b>Cold Wave</b>	<p>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.</p> <p><b>(a). Based on departure</b></p> <p><b>Cold Wave:</b> Minimum Temperature Departure from normal <math>-4.5^{\circ}\text{C}</math> to <math>-6.4^{\circ}\text{C}</math>.</p> <p><b>Severe Cold Wave:</b> Minimum Temperature Departure from normal <math>\leq -6.5^{\circ}\text{C}</math></p> <p><b>(b) Based on actual Minimum Temperature (for Plains only)</b></p> <p><b>Cold Wave :</b> When Minimum Temperature is <math>\leq 4.0^{\circ}\text{C}</math></p> <p><b>Severe Cold Wave:</b> When Minimum Temperature is <math>\leq 2.0^{\circ}\text{C}</math></p> <p><b>( c) For Coastal Stations</b></p> <p>When Minimum Temperature departure is <math>\leq -4.5^{\circ}\text{C}</math> &amp; actual Minimum Temperature is <math>\leq 15^{\circ}\text{C}</math></p>
<b>Cold Day</b>	<p>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</p> <p><b>Based on departure</b></p> <p><b>Cold Day:</b> Maximum Temperature Departure from normal <math>-4.5^{\circ}\text{C}</math> to <math>-6.4^{\circ}\text{C}</math>.</p> <p><b>Severe Cold Day:</b> Maximum Temperature Departure from normal <math>\leq -6.5^{\circ}\text{C}</math></p>
<b>Fog</b>	<p><b>Phenomenon of small droplets suspended in air and the horizontal visibility <math>&lt; 1\text{km}</math></b></p> <p><b>Moderate Fog:</b> When the visibility between 500-200 metres</p> <p><b>Dense Fog:</b> when the visibility between 50- 200 metres</p> <p><b>Very Dense Fog:</b> when the visibility <math>&lt; 50</math> metres</p>
<b>Thunderstorm</b>	<p>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p>
<b>Dust/Sand Storm</b>	<p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p>
<b>Frost</b>	<p><b>Ice deposits on ground</b></p> <p>Air temperature <math>\leq 4^{\circ}\text{C}</math> ( over Plains)</p>
<b>Squall</b>	<p><b>A strong wind that rises suddenly, lasts for atleast 1 minute.</b></p> <p><b>Moderate:</b> Wind speed 52-61 kmph</p> <p><b>Severe:</b> Wind speed 62-67 kmph</p> <p><b>Very Severe:</b> Wind speed <math>&gt;67</math> kmph</p>
<b>Sea State</b>	<p><b>Effect of various waves in the sea over specific area</b></p> <p><b>Rough to very rough:</b> Wind speed 41-62 kmph (22-33 knots) &amp; Wave height 2.5-6 metre</p> <p><b>High to very high:</b> Wind speed 63-117 kmph ( 34-63 knots) &amp; Wave height 6-14 metre</p> <p><b>Phenomenal:</b> Wind speed <math>&gt;117</math> kmph (<math>&gt;63</math> knots) &amp; Wave height <math>&gt;14</math> metre</p>
<b>Cyclone</b>	<p><b>Cyclonic Storm:</b> Wind speed 62-87 kmph (34-47 knots)</p> <p><b>Severe Cyclonic Storm:</b> Wind speed 88-117 kmph (48-63 knots)</p> <p><b>Very Severe Cyclonic Storm:</b> Wind speed 118-165 kmph (64 - 89 knots)</p> <p><b>Extremely Severe Cyclonic Storm:</b> Wind speed 166-220 kmph (90 -119 knots)</p> <p><b>Super Cyclone Storm:</b> Wind speed <math>&gt;220</math> kmph (<math>&gt;119</math> knots)</p>

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