



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

> Wednesday, March 12, 2025 Time of Issue: 2000 hours IST (NIGHT)

<u>All India Impact Based Weather Warning Bulletin</u>

Weather Warnings for next 7 days is given below: (Graphics for warnings & rainfall distribution (Table 1) are given below the text:

# 12<sup>th</sup> March (Day 1):

- ★ Heavy rainfall (≥7 cm) very likely at isolated places over Arunachal Pradesh, south Tamil Nadu, Lakshadweep and south Kerala.
- Thunderstorm accompanied with gusty winds (speed reaching 40-50 kmph) & lightning very likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; with gusty winds (speed reaching 30-40 kmph) & lightning at isolated places over Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe and South Interior Karnataka; with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Arunachal Pradesh, Tamil Nadu, Puducherry & Karaikal, Coastal Karnataka and Lakshadweep.
- Heat Wave to severe Heat wave Conditions very likely at isolated places over Gujarat state;
   Heat wave Conditions at isolated places over West Rajasthan and Konkan & Goa.
- Hot and humid weather very likely to prevail over Coastal Karnataka.
- Warm Night Conditions very likely at isolated places over Saurashtra & Kutch.
- Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph likely to prevail over along and off south Kerala coast and adjoining Lakshadweep, Maldives & Comorin areas. Fishermen are advised not to venture into these areas.

# 13<sup>th</sup> March (Day 2):

- ✤ Heavy to very heavy rainfall (≥12 cm) very likely at isolated places over Arunachal Pradesh; Heavy rainfall (≥7 cm) at isolated places over Assam & Meghalaya.
- Thunderstorm accompanied with gusty winds (speed reaching 50-60 kmph) & lightning very likely at isolated places over Tripura; with gusty winds (speed reaching 40-50 kmph) & lightning at isolated places over Assam & Meghalaya; with gusty winds (speed reaching 30-40 kmph) & lightning at isolated places over Sub-Himalayan West Bengal & Sikkim; with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh and Arunachal Pradesh.
- Heat Wave Conditions very likely at isolated places over Vidarbha, Odisha and Gujarat state.
- Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph likely to prevail over Lakshadweep, Maldives areas and adjoining southeast Arabian sea. Fishermen are advised not to venture into these areas.





# 14<sup>th</sup> March (Day 3):

- ✤ Heavy rainfall (≥7 cm) very likely at isolated places over Arunachal Pradesh.
- Thunderstorm accompanied with gusty winds (speed reaching 30-40 kmph) & lightning very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightning at isolated places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh and Rajasthan.
- Heat Wave Conditions very likely at isolated places over Vidarbha, Jharkhand and Odisha.

# 15<sup>th</sup> March (Day 4):

- Thunderstorm accompanied with gusty winds (speed reaching 30-40 kmph) & lightning very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightning at isolated places over Arunachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh and Rajasthan.
- Heat Wave Conditions likely at isolated places over Jharkhand and Odisha.
- Warm Night Conditions likely at isolated places over Odisha.

# 16<sup>th</sup> March (Day 5):

- ◆ Heavy rainfall (≥7 cm) likely at isolated places over Arunachal Pradesh.
- Thunderstorm accompanied with gusty winds (speed reaching 30-40 kmph) & lightning very likely at isolated places over Assam & Meghalaya; with lightning at isolated places over Uttarakhand, Punjab, Haryana-Chandigarh-Delhi and West Uttar Pradesh.
- Heat Wave Conditions likely at isolated places over Gangetic West Bengal, Jharkhand and Odisha.
- Warm Night Conditions likely at isolated places over Odisha.

# 17<sup>th</sup> March (Day 6):

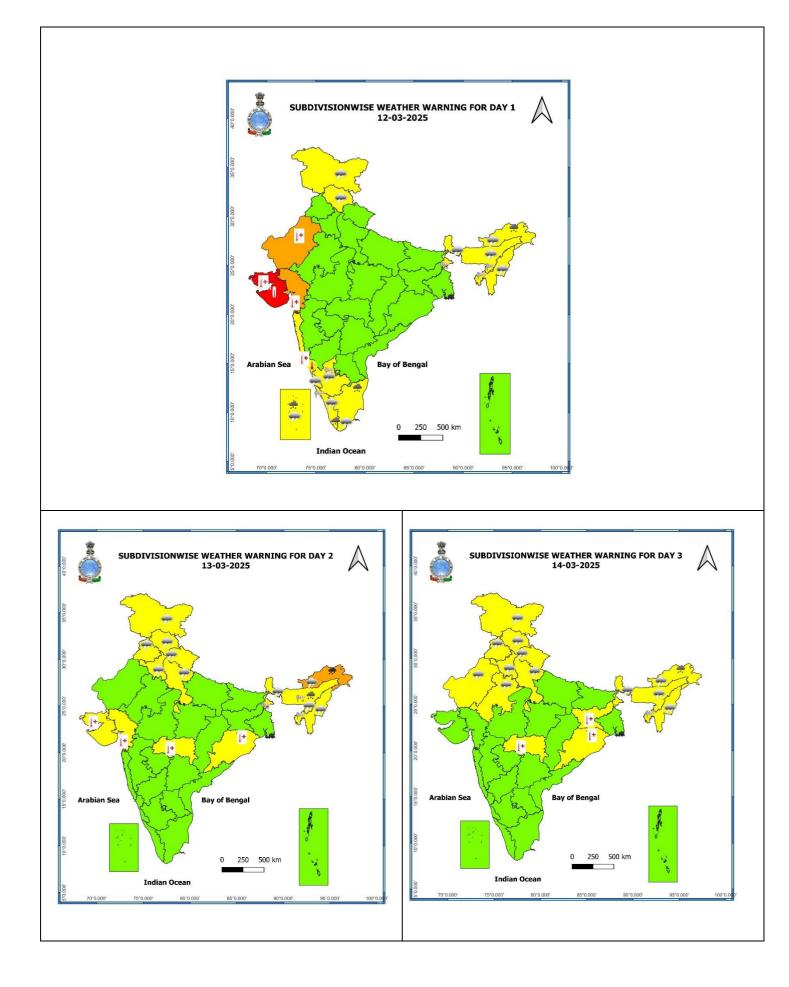
✤ Heavy rainfall (≥7 cm) at isolated places over Arunachal Pradesh.

### 18<sup>th</sup> March (Day 7):

\* No Weather Warning.



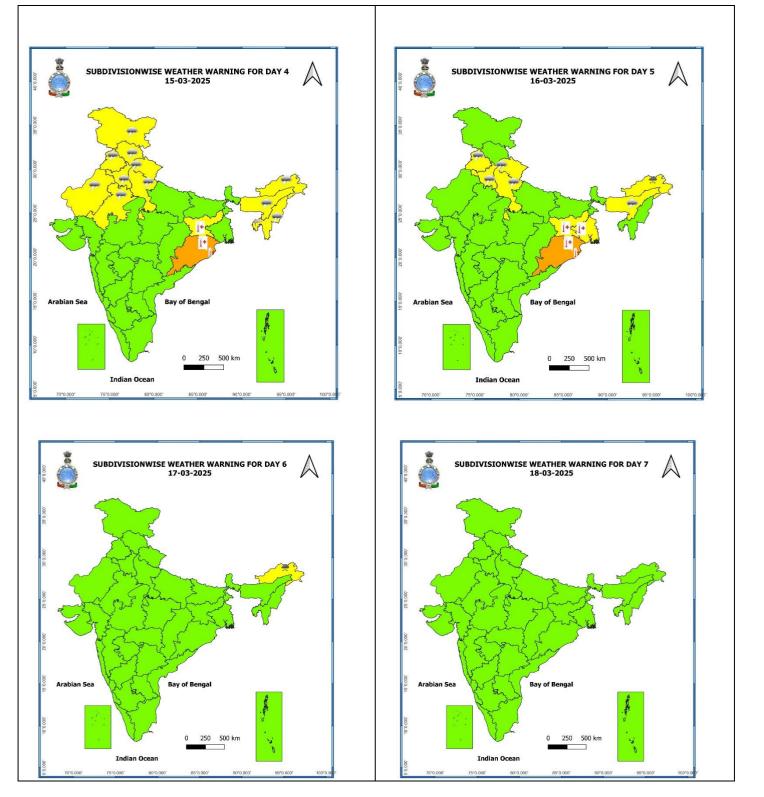








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- Action may be taken based on ORANGE AND RED COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.





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# Table-1

|           | 7 Days Ra                            | ainfall I  | orecas     | t          |            |            |            |            |
|-----------|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|
| S.<br>No. | Subdivision                          | 12-<br>Mar | 13-<br>Mar | 14-<br>Mar | 15-<br>Mar | 16-<br>Mar | 17-<br>Mar | 18-<br>Mar |
|           |                                      | Day 1      | Day 2      | Day 3      | Day 4      | Day 5      | Day 6      | Day 7      |
| 1         | ANDAMAN & NICOBAR ISLANDS            | ISOL       | ISOL       | SCT        | ISOL       | ISOL       | ISOL       | ISOL       |
| 2         | ARUNACHAL PRADESH                    | WS         | WS         | FWS        | SCT        | FWS        | WS         | WS         |
| 3         | ASSAM & MEGHALAYA                    | SCT        | FWS        | FWS        | SCT        | SCT        | SCT        | SCT        |
| 4         | NAGALAND, MANIPUR, MIZORAM & TRIPURA | ISOL       | SCT        | SCT        | SCT        | SCT        | SCT        | SCT        |
| 5         | SUB-HIMALAYAN WEST BENGAL & SIKKIM   | FWS        | SCT        | ISOL       | ISOL       | ISOL       | DRY        | DRY        |
| 6         | GANGETIC WEST BENGAL                 | DRY        |
| 7         | ODISHA                               | DRY        |
| 8         | JHARKHAND                            | DRY        |
| 9         | BIHAR                                | DRY        | DRY        | DRY        | DRY        | ISOL       | DRY        | DRY        |
| 10        | EAST UTTAR PRADESH                   | DRY        | DRY        | DRY        | ISOL       | ISOL       | DRY        | DRY        |
| 11        | WEST UTTAR PRADESH                   | DRY        | ISOL       | ISOL       | ISOL       | ISOL       | DRY        | DRY        |
| 12        | UTTARAKHAND                          | ISOL       | SCT        | SCT        | FWS        | FWS        | ISOL       | ISOL       |
| 13        | HARYANA CHANDIGARH & DELHI           | DRY        | ISOL       | ISOL       | SCT        | SCT        | DRY        | DRY        |
| 14        | PUNJAB                               | ISOL       | ISOL       | ISOL       | SCT        | SCT        | DRY        | DRY        |
| 15        | HIMACHAL PRADESH                     | SCT        | FWS        | FWS        | WS         | FWS        | ISOL       | DRY        |
| 16        | JAMMU & KASHMIR AND LADAKH           | FWS        | WS         | WS         | WS         | FWS        | ISOL       | DRY        |
| 17        | WEST RAJASTHAN                       | DRY        | ISOL       | ISOL       | ISOL       | ISOL       | DRY        | DRY        |
| 18        | EAST RAJASTHAN                       | DRY        | ISOL       | ISOL       | ISOL       | ISOL       | DRY        | DRY        |
| 19        | WEST MADHYA PRADESH                  | DRY        |
| 20        | EAST MADHYA PRADESH                  | DRY        |
| 21        | GUJARAT REGION                       | DRY        |
| 22        | SAURASHTRA & KUTCH                   | DRY        |
| 23        | KONKAN & GOA                         | DRY        |
| 24        | MADHYA MAHARASHTRA                   | DRY        |
| 25        | MARATHAWADA                          | DRY        |
| 26        | VIDARBHA                             | DRY        |
| 27        | CHHATTISGARH                         | DRY        |
| 28        | COASTAL ANDHRA PRADESH & YANAM       | DRY        |
| 29        | TELANGANA                            | DRY        |
| 30        | RAYALASEEMA                          | ISOL       | DRY        | DRY        | DRY        | DRY        | DRY        | DRY        |
| 31        | TAMILNADU PUDUCHERRY & KARAIKAL      | SCT        | ISOL       | ISOL       | ISOL       | ISOL       | SCT        | SCT        |
| 32        | COASTAL KARNATAKA                    | ISOL       | DRY        | DRY        | DRY        | DRY        | DRY        | DRY        |
| 32        | NORTH INTERIOR KARNATAKA             | DRY        |
|           |                                      |            |            |            |            |            |            |            |
| 34        | SOUTH INTERIOR KARNATAKA             | ISOL       | DRY        | DRY        | DRY        | DRY        | DRY        | DRY        |
| 35        | KERALA & MAHE                        | SCT        | ISOL       | ISOL       | ISOL       | ISOL       | SCT        | SCT        |
| 36        | LAKSHADWEEP                          | FWS        | SCT        | DRY        | DRY        | DRY        | SCT        | SCT        |

• As the lead period increases forecast accuracy decreases.





# Agromet advisories for likely impact of Heavy Rainfall / Heat Wave

- Make provision for draining out excess water from standing crops and vegetables fields in Arunachal Pradesh, Assam, South Tamil Nadu, South Kerala and Lakshadweep.
- In Gujarat, Konkan, Vidarbha, South West Rajasthan, Odisha and Jharkhand, apply light and frequent irrigation to the standing crops, vegetables and orchards in the evening to protect them from heat wave.
- > 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 to avoid lodging.

### Livestock and Fishery

- ▶ Keep the animals inside the shed during heavy rainfall and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.
- Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.
- > 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.

Impact expected and action suggested due to thunderstorm accompanied with lightning/gusty winds over Tamil Nadu Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, South Interior Karnataka on 12th; Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura during 12th -15th; Assam & Meghalaya during 12th-16th; Sub-Himalayan West Bengal & Sikkim during 12th-14th; Punjab, Haryana & Chandigarh and West Uttar Pradesh during 13th-16th and Rajasthan on 14th & 15th March.

#### Impact expected:

- Strong wind may damage plantation, horticulture and standing crops.
- 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 & Action Suggested due to heavy rainfall/ snowfall over Arunachal Pradesh on 13th; heavy rainfall/ snowfall over south Tamil Nadu, south Kerala and Lakshadweep on 12th March; Arunachal Pradesh during 12th-14th, 16th & 17th March with possibility of very heavy falls on 13th March.

### A. Impact Expected

Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.







- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- Minor damage to kutcha roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides
- Damage to horticulture and standing crops in some areas due to inundation.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC).

#### **B. Action Suggested**

- Check for traffic congestion on your route before leaving for your destination.
- Follow any traffic advisories that are issued in this regard.
- Avoid going to areas that face the water logging problems often.
- ✤ Avoid staying in vulnerable structure.

#### Impact expected and action suggested due to Heat Wave conditions

#### Red alert Areas (Gujarat State)

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

#### Orange alert Areas (southwest Rajasthan)

- 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 (Vidarbha, Odisha, Jharkhand, Gangetic West Bengal and Konkan)

- 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.

#### 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.

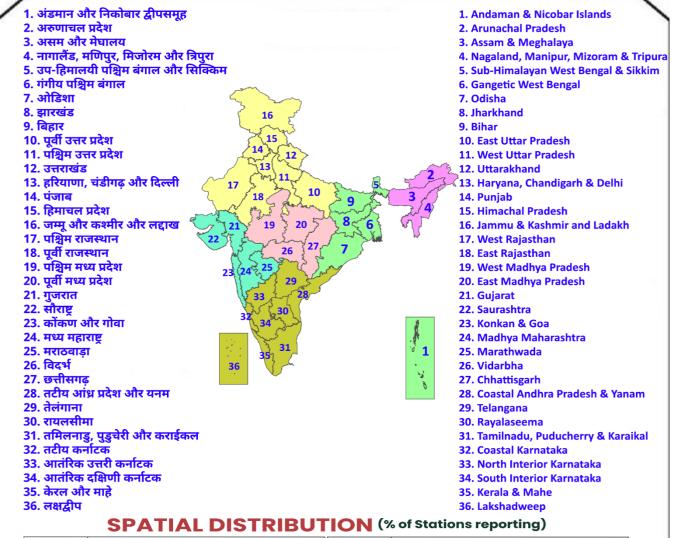




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- South India: Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and
  - kshadweep.

## LEGENDS



| % Stations                |  | Category            | % Stations         |                 | Cate                               | gory                         |  |
|---------------------------|--|---------------------|--------------------|-----------------|------------------------------------|------------------------------|--|
| 76-100                    | Widespre                                     | ad (WS/Most Places) | 26-50              | Scatte          | ered (SCT                          | A Few Places)                |  |
| 51-75                     | -75 Fairly Widespread (FWS/Many Places) 1-25 |                     |                    | Isolated (ISOL) |                                    |                              |  |
| Fog                       |  | Reavy Snow          | Cold Wa            | ve              |                                    | DED WARNING                  |  |
| Fog                       |  | - Heavy show        |                    |                 | No Warning (No Action)             |                              |  |
| 🗭 Heavy Rain              |  | 🚊 Dust Storm        | – Cold Da          | y               | Watch (Be Aware)                   |                              |  |
| 🗭 Very Heavy Rain         |  | + Heat Wave         | igen Ground        | Frost           | Alert (Be Prepared To Take Action) |                              |  |
| •<br>Extremely Heavy Rain |  | + Warm Night        |                    |                 | Warning (Take Action)              |                              |  |
| Thunder & Lightning       |  |                     |                    |                 | <b>Probabilistic Forecast</b>      |                              |  |
|                           |  | - Hot Day           |                    |                 | Terms                              | Probability of Occurrence (% |  |
|                           |  |                     |                    |                 | Unlikely                           | < 25                         |  |
| 🖡 Hailstorm               |  | 📘 Hot & Humid       |                    |                 | Likely                             | 25 - 50                      |  |
| •                         |  | •                   |                    |                 | Very Likely<br>Most Likely         | 50 - 75                      |  |
|                           | ing Winds                                    |                     | rong Surface Winds |                 |                                    | > 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 1ST 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)





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