



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 15th March 2026

Time of Issue: 1400 hours IST

Subject: (i) Isolated heavy to very heavy rainfall likely over Assam on 15th March & heavy rainfall on 16th & 17th March. Isolated heavy rainfall also likely over Arunachal Pradesh during 15th-17th and Mizoram on 15th March.

(ii) Present spell of isolated thunderstorm, lightning & gusty winds along with hailstorm likely to continue over Western Himalayan Region and adjoining plains on 15th March.

(iii) Isolated thunderstorm activities accompanied with Gusty winds also likely over East and adjoining Central India during 16th to 19th March, with its peak intensity on 16th March, 2026.

(iv) A fresh Western Disturbance likely to cause Rain/Thunderstorm, lightning & gusty winds along with hailstorm likely over Western Himalayan Region and adjoining plains from 18th March.

Realised weather during past 24 hours ending at 0830 hours IST of today, the 15th March, 2026:

- ❖ **Heat wave conditions** prevailed at isolated places over Vidarbha and Northwest Odisha.
- ❖ **Heavy to very heavy rainfall (7-20 cm)** has been recorded at isolated places over Assam.
- ❖ **Heavy rainfall (7-11 cm)** has been recorded at isolated places over Arunachal Pradesh.
- ❖ **Hail** reported at isolated places over Assam and Mizoram.

Temperature Conditions during past 24 hours till 0830 hours IST of today:

- ❖ **Maximum/day temperatures** were in the range of 38-41°C at few pockets over southwest Rajasthan, north Gujarat, north Interior Maharashtra, southwest Madhya Pradesh, south Chhattisgarh, northwest Odisha, north Telangana, Rayalaseema, north Tamil Nadu, south & west Jharkhand; 35-38°C over remaining parts of Rajasthan, Madhya Pradesh, Maharashtra (except hill stations & south Konkan) ; at a many pockets over South Uttar Pradesh, Gujarat, Jharkhand, Gangetic West Bengal, Interior Karnataka, Kerala, Andhra Pradesh, & Tamil Nadu. **Yesterday, the highest maximum temperature of 41.6°C was reported at Akola (Vidarbha).**
- ❖ **Maximum Temperatures/day temperatures** were markedly above normal (5.1°C or more) at many places over at isolated places over Himachal Pradesh, Uttarakhand and Jammu-Kashmir, Gangetic West Bengal, north Odisha, Jharkhand and Vidarbha; appreciably above normal (3.1°C to 5.0°C) over remaining parts of country except south peninsular India where it was near normal and northeast India where it was markedly below normal (-5.1°C or less).
- ❖ **Minimum/night temperatures** were in the range of 14-18°C over Punjab, Haryana, Chandigarh, Delhi, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Madhya Maharashtra, Sikkim, Assam & Meghalaya, Tripura, & South Interior Karnataka. They were in the range of 18-22°C over remaining parts of the plains of the country, except Bihar, Gangetic West Bengal, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe, Tamil Nadu, Andaman & Nicobar Islands and Lakshadweep, where they are in the range of 22- 27°C. **Today, the lowest minimum temperature of 10.3°C was observed at Alwar (Rajasthan) over the plains of India.**
- ❖ **Minimum/night Temperature** were markedly above normal (5.1°C or more) over Rajasthan & Bihar; appreciably above normal (3.1°C to 5.0°C) over Jammu-Kashmir, Himachal Pradesh, Punjab, Uttarakhand, Haryana Chandigarh & Delhi, Uttar Pradesh, Gujarat Region, Gangetic West Bengal; above normal (1.6°C to 3.0°C) over Madhya Pradesh, Maharashtra, Chhattisgarh, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country.

Weather Systems, Forecast and Warnings (refer to ANNEXURE I & II):

- ❖ The **Western Disturbance** as an upper air **cyclonic circulation** lies over north Punjab & neighbourhood in lower tropospheric levels with the trough aloft middle and upper level westerlies run roughly along Long. 70°E to the north of Lat. 25°N.
- ❖ An upper air **cyclonic circulation** lies over Northeast Assam & neighbourhood in lower tropospheric levels.
- ❖ An upper air **cyclonic circulation** lies over south Haryana & neighbourhood in lower tropospheric levels.
- ❖ A **trough** in lower & middle level westerlies roughly along Long. 93°E to the north of Lat. 22°N.
- ❖ A **trough** runs from Marathwada to North Interior Tamilnadu in lower tropospheric levels.
- ❖ Another **trough** runs from Southwest Bay of Bengal off North Sri Lanka coast to Comorian area in lower tropospheric levels.
- ❖ **Subtropical westerly Jet Stream** with core winds of the order of 115 knots at 12.6 km above mean sea level prevails over West India.
- ❖ The **Western Disturbance** as a trough in middle tropospheric westerlies runs roughly along Long. 60°E to the north of Lat. 32°N.
- ❖ A fresh **Western Disturbance** is likely to affect northwest India from night of 17th March, 2026.

Under the influence of above system, the following weather is likely:

Northwest India:

- ✓ **Scattered to fairly widespread light rainfall/snowfall** likely over Western Himalayan region **during 15th-21th March**.
- ✓ **Thunderstorm, lightning & gusty winds speed reaching (40-50 gusting to 60 kmph) with hailstorm** likely over Jammu-Kashmir-Ladakh and Himachal Pradesh on 15th & 19th; Haryana Chandigarh & Delhi, Uttar Pradesh and Punjab on 15th; East Uttar Pradesh on 16th and **Thunderstorm, lightning & Squally winds speed reaching (50-60 gusting to 70 kmph) with hailstorm** likely over Uttarakhand on 15th & 16th March.
- ✓ **Thunderstorm, lightning & gusty winds speed reaching (40-50 gusting to 60 kmph)** likely over Jammu-Kashmir-Ladakh on 16th, 18th & 20th; Himachal Pradesh 16th & 18th; Uttarakhand on 18th, 19th; Haryana Chandigarh & Delhi and Punjab on 19th; West Uttar Pradesh on 19th; East Uttar Pradesh on 16th; West Rajasthan on 15th March. **Thunderstorm, lightning & gusty winds speed reaching (30-40 kmph)** likely over Haryana Chandigarh & Delhi and Punjab on 16th & 20th; West Uttar Pradesh on 16th & 20th; West Rajasthan during 18th -21th; East Rajasthan during 15th and 19th -21th March.
- ✓ Isolated **heavy rainfall/snowfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 15th March.

Northeast India:

- ✓ **Fairly widespread to widespread** light/moderate rainfall with **thunderstorm & lightning** likely over Arunachal Pradesh and Assam & Meghalaya during next 5-6 days and Nagaland, Manipur, Mizoram & Tripura on 15th; with **gusty winds speed reaching (30-50 kmph)** over Arunachal Pradesh, Assam & Meghalaya during 15th-16th and Nagaland, Manipur, Mizoram & Tripura during 15th -17th March.
- ✓ Isolated **heavy rainfall/snowfall** very likely over Arunachal Pradesh during 15th-17th March.
- ✓ Isolated **heavy rainfall** very likely over Assam & Meghalaya during 15th -17th March with **heavy to very heavy rainfall** over Assam on 15th March and Nagaland, Manipur, Mizoram & Tripura on 15th March.

East & Central India:

- ✓ **Scattered to fairly widespread** light/moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching (30-50 kmph)** likely over Sub-Himalayan West Bengal & Sikkim during 15th-17th and 20th, 21th March.
- ✓ **Isolated to Scattered** light/moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching (30-50 kmph)** likely over West Madhya Pradesh on 15th, 18th & 19th; East Madhya Pradesh on 18th & 19th; Vidarbha during 16th -20th & Chhattisgarh during 15th-20th; Jharkhand during 15th -19th, Gangetic West Bengal during 15th-17th and 20th, 21th & Bihar during 15th-19th and Odisha during 15th-19th March. **Thunderstorm, lightning & squally winds speed reaching (50-60 gusting to 70 kmph) with hailstorm** likely over Gangetic West Bengal, Odisha, Jharkhand on 16th; **Thunderstorm, lightning & gusty winds speed reaching (40-50 gusting to 60 kmph) with hailstorm** likely over Bihar on 16th March.
- ✓ Isolated **heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim on 21th March.

South Peninsular India:

- ✓ **Isolated to Scattered** light/moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching (30-40 kmph)** likely over Telangana during 15th-19th; Rayalaseema and Coastal Andhra Pradesh &

Yanam on 16th-17th; Coastal Karnataka on 17th & 18th; Isolated light/moderate rainfall with **thunderstorm & lightning** over Kerala & Mahe on 16th & 17th; Tamil Nadu on 15th, 17th, 18th & 19th; Interior Karnataka during 15th-19th March.

West India:

- ✓ **Isolated** light/moderate rainfall with **thunderstorm & lightning & gusty winds speed reaching (30-50 kmph)** likely over the Region during 15th-19th March except Gujarat state where it is likely during 18th & 19th March only.

Forecast of maximum/day temperatures:

- ❖ Fall in maximum temperatures by 3-5°C likely over Northwest India during next 2 days and gradual increase by 3-5°C during subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over Central India during next 24 hours and gradual fall by 2-4°C during subsequent 5 days.
- ❖ No significant change in maximum temperatures likely over East India during next 24 hours and fall by 3-5°C during subsequent 4 days.
- ❖ Gradual fall in maximum temperature by 2-4°C likely over Gujarat State during next 3 days and no significant change during subsequent 4 days.
- ❖ Gradual fall by 2-4°C in maximum temperatures likely over Maharashtra during next 5 days and no significant change during subsequent 2 days.
- ❖ No significant change in maximum temperatures likely over South Peninsular India during next 3 days and gradual fall by 2-3°C during subsequent 3 days.

Heat Wave, Hot & Humid weather Warnings:

- ❖ **Heat wave conditions** likely in isolated pockets over Vidarbha on 15th March.

Weather conditions and forecast over Delhi/NCR during 15th-18th March, 2026 (ANNEXURE III)

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

For District wise warnings refer: <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

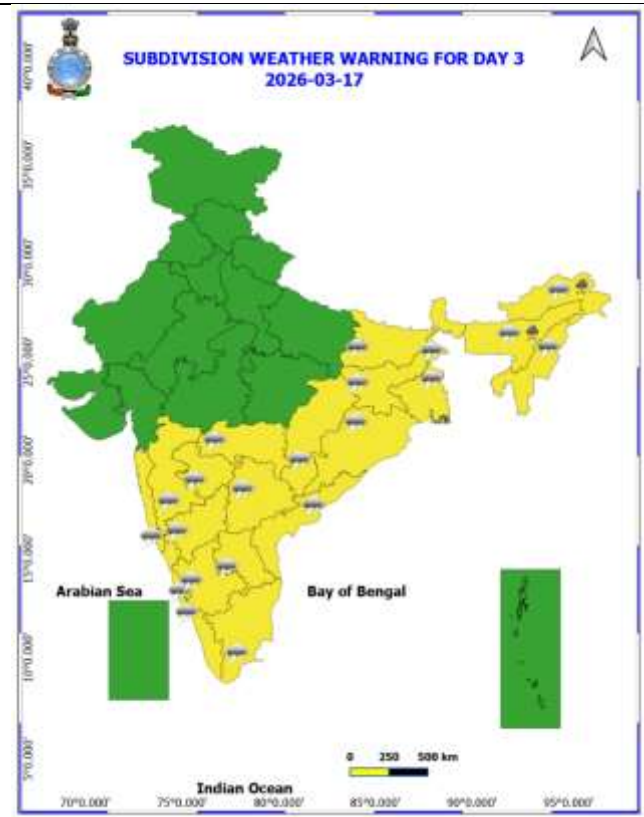
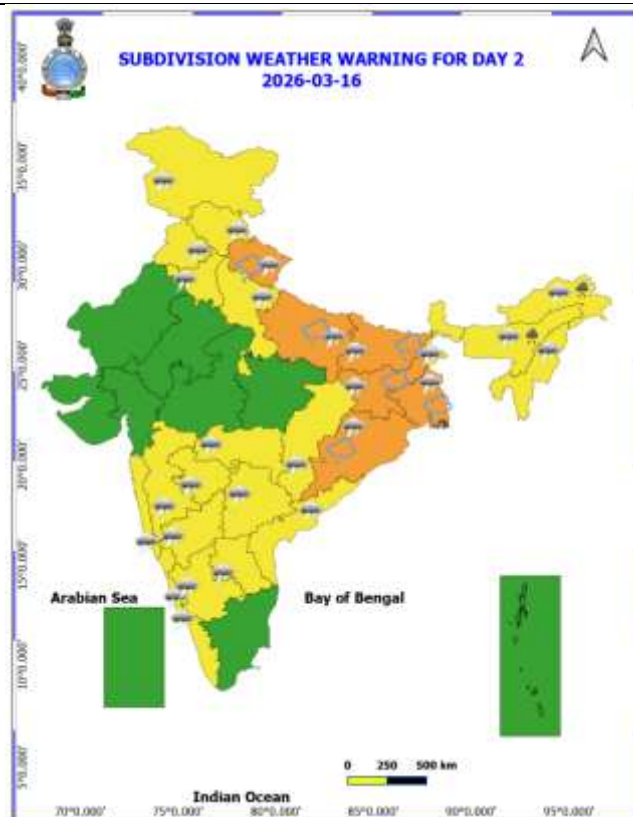
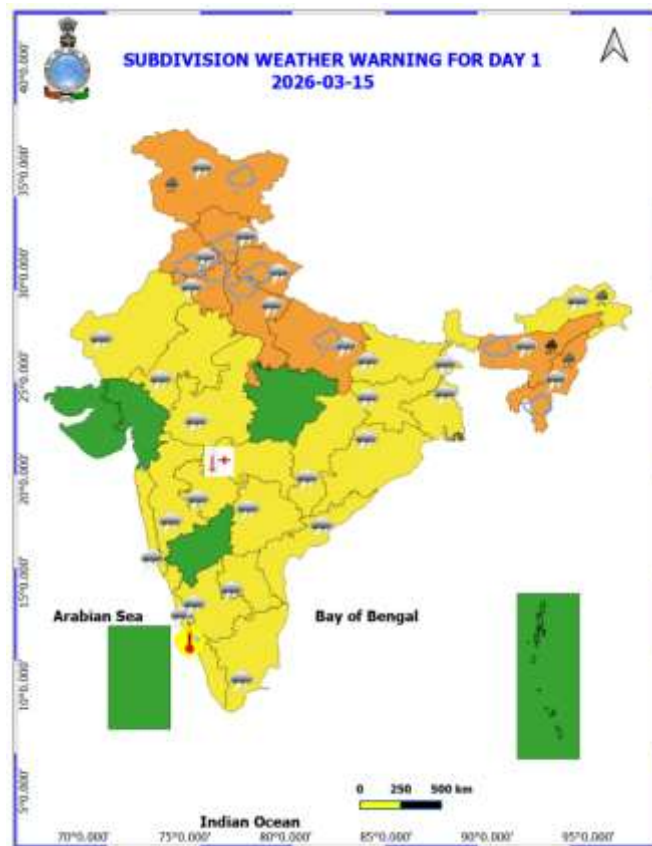
For Fishermen warning refer <https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php>

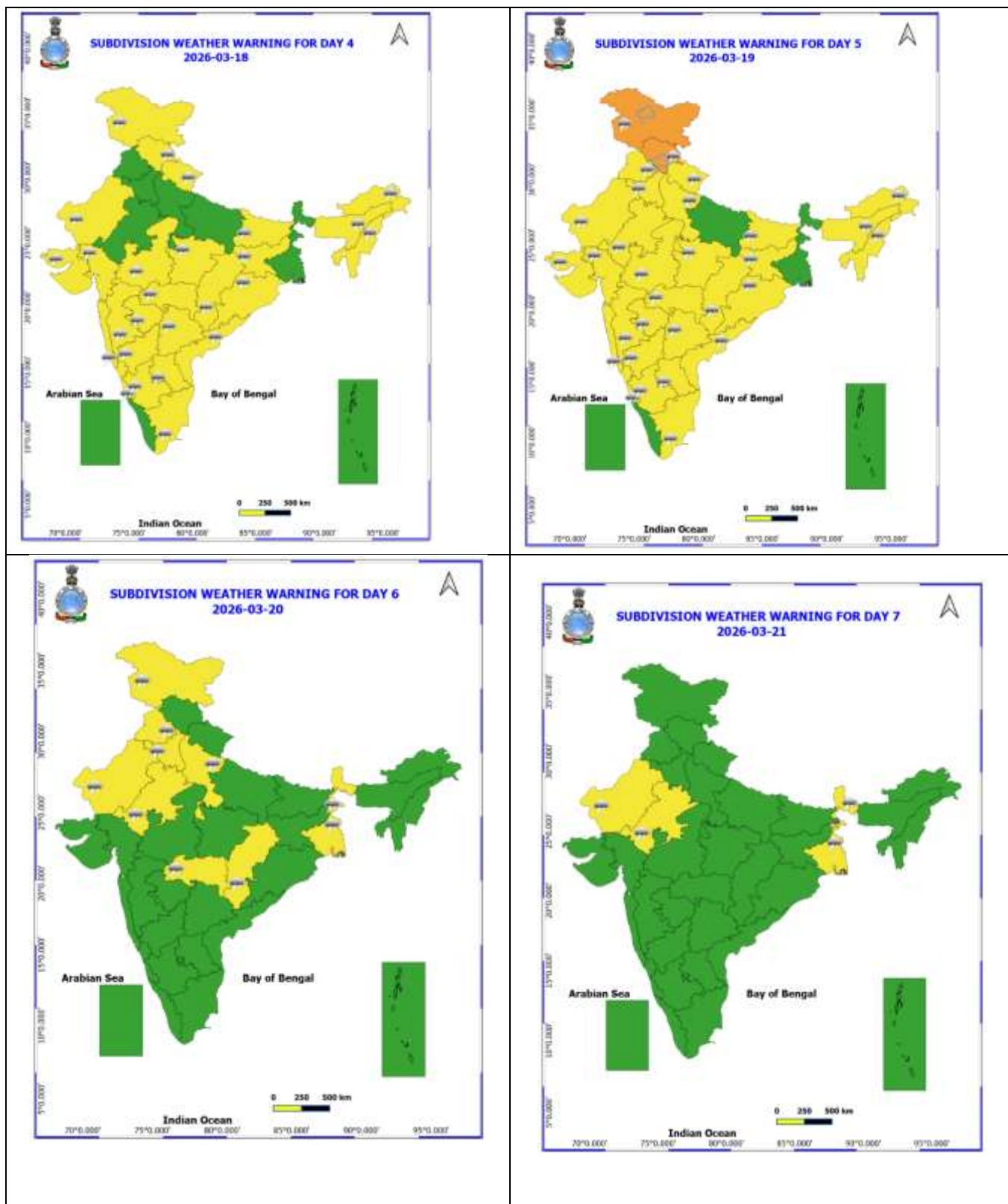
Significant rainfall recorded (in cm) (from 0830 hours IST of yesterday to 0830 hours IST of today):

- ❖ **Arunachal Pradesh:** Longding 9, Pasighat AP (dist East Siang) 8;;
- ❖ **Assam & Meghalaya:** Panchgram 14, Dhemaji (dist Dhemaji) 8; Manikpur ARG (dist Bongaigaon) 7.

Table-1								
7 Days Rainfall Forecast								
S.No.	Subdivision	15- Mar	16- Mar	17- Mar	18- Mar	19- Mar	20- Mar	21- Mar
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	SCT	SCT	SCT	SCT	SCT	ISOL
2	ARUNACHAL PRADESH	W2	W2	FWS	FWS	SCT	SCT	SCT
3	ASSAM & MEHGHALAYA	W2	W2	FWS	FWS	FWS	SCT	SCT
4	NAGALAND, MANIPUR, MIZORAM AND TRIPURA	FWS	SCT	SCT	SCT	SCT	ISOL	ISOL
5	SUB HIMALAYAN WEST BENGAL & SIKKIM	FWS	FWS	SCT	SCT	SCT	FWS	FWS
6	GANGETIC WEST BENGAL	SCT	FWS	SCT	ISOL	ISOL	SCT	SCT
7	ODISHA	ISOL	SCT	ISOL	ISOL	ISOL	ISOL	SCT
8	JHARKHAND	ISOL	SCT	SCT	ISOL	SCT	SCT	SCT
9	BIHAR	ISOL	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
10	EAST UTTAR PRADESH	ISOL	SCT	DRY	DRY	DRY	SCT	SCT
11	WEST UTTAR PRADESH	SCT	ISOL	DRY	DRY	ISOL	SCT	SCT
12	UTTARAKHAND	FWS	FWS	ISOL	SCT	FWS	FWS	SCT
13	HARYANA, CHANDIGARH & DELHI	SCT	ISOL	ISOL	ISOL	SCT	SCT	ISOL
14	PUNJAB	SCT	ISOL	ISOL	ISOL	SCT	SCT	ISOL
15	HIMACHAL PRADESH	W2	FWS	ISOL	FWS	FWS	SCT	ISOL
16	JAMMU AND KASHMIR AND LADAKH	FWS	FWS	SCT	FWS	FWS	FWS	SCT
17	WEST RAJASTHAN	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
18	EAST RAJASTHAN	ISOL	DRY	DRY	DRY	ISOL	ISOL	ISOL
19	WEST MADHYA PRADESH	ISOL	DRY	DRY	ISOL	ISOL	SCT	ISOL
20	EAST MADHYA PRADESH	DRY	DRY	DRY	ISOL	ISOL	SCT	ISOL
21	GUJRAT REGION	DRY	DRY	DRY	ISOL	ISOL	ISOL	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	ISOL	ISOL	ISOL	DRY
23	KONKAN & GOA	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
25	MARATHWADA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
26	VIDARBHA	ISOL	ISOL	ISOL	SCT	SCT	ISOL	ISOL
27	CHHATTISGARH	ISOL	ISOL	ISOL	SCT	SCT	ISOL	ISOL
28	COASTAL ANDHRA PRADESH	ISOL	ISOL	SCT	SCT	FWS	SCT	ISOL
29	TELANGANA	ISOL	SCT	SCT	SCT	SCT	SCT	ISOL
30	RAYALASEEMA	DRY	DRY	ISOL	SCT	FWS	SCT	ISOL
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL	ISOL	SCT	ISOL	ISOL	ISOL
32	COSTAL KARNATAKA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
33	NORTH INTERIOR KARNATAKA	ISOL	DRY	ISOL	ISOL	ISOL	ISOL	DRY
34	SOUTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
35	KERALA AND MAHE	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
36	LAKSHADWEEP	DRY	DRY	DRY	SCT	DRY	DRY	DRY

- As the lead period increases forecast accuracy decrease.





- Action may be taken based on ORANGE AND REDCOLOUR 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 districtwise Multi Hazard weather warning for next five days available at
<https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

Weather forecast over Delhi/NCR during 15th to 18th March 2026**Past Weather:**

There has been a rise in minimum temperatures by up to 2°C and a fall in maximum temperatures by 2-4°C during the past 24 hours over Delhi. The maximum and minimum temperatures were in the range of 31-33°C and 17-19°C, respectively. The minimum temperatures are above normal (1.6°C to 3.0°C) to appreciably above normal (3.1°C to 5.0°C) at a few places and normal (-1.5°C to 1.5°C) over the remaining part of Delhi. The maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places and above normal (1.6°C to 3.0°C) over the remaining parts of Delhi. Mainly clear sky with sustained surface wind (speed 10-20 kmph) from the northeast direction reaching up to 30 kmph prevailed during the past 24 hours. Generally cloudy sky. A spell of very light to light rain accompanied by thunderstorm/lightning and strong surface winds 30-40 kmph gusting to 50 kmph is in the forenoon from the northeast direction over the region today.

Weather Forecast:

15.03.2026: Generally cloudy sky. A spell of very light/light rain accompanied by thunderstorm/lightning and gusty winds 30-40 kmph gusting to 50 kmph in the afternoon/evening. The maximum temperatures over Delhi are likely to be in the range of 28°C to 30°C. The maximum temperatures will be near normal at most places over Delhi. The predominant surface wind is likely to be from the east direction with wind speed reaching up to 25 kmph during the afternoon hours. The wind speed will gradually decrease, becoming less than 20 kmph from the southeast direction during the evening and night.

16.03.2026: Partly cloudy sky. Strong surface wind speed 20-30 kmph during the daytime. The maximum and minimum temperatures over Delhi are likely to be in the range of 31°C to 33°C and 14°C to 16°C, respectively. The minimum temperature will be near normal at most places and markedly above normal (5.0°C or more) at isolated places, and the maximum temperature will be above normal (1.5°C or 3.0°C) at most places and appreciably above normal (3.1°C to 5.0°C) at isolated places over Delhi. The predominant surface wind is likely to be from the southeast direction with wind speed reaching up to 15 kmph during the morning hours. The wind speed will increase up to 25 kmph from the northwest direction during the afternoon. The wind speed will gradually decrease, becoming less than 15 kmph from the northwest direction during the evening and night.

17.03.2026: Partly cloudy sky. Strong surface wind speed 15-25 kmph during the daytime. The maximum and minimum temperatures over Delhi are likely to be in the range of 31°C to 33°C and 15°C to 17°C, respectively. The minimum temperature will be near normal at most places, and the maximum temperature will be near normal at most places over Delhi. The predominant surface wind is likely to be from the east direction with wind reaching up to 20 kmph during the morning hours. The wind speed will decrease up to 15 kmph from the east direction during the afternoon. The wind speed will gradually decrease becoming less than 10kmph from the east direction during evening and night.

18.03.2026: Generally cloudy sky. A spell of very light rain/drizzle accompanied by thunderstorm/lightning and strong surface wind speed 20-30 kmph gusting 40 kmph during evening/night. The maximum and minimum temperatures over Delhi are likely to be in the ranges of 32°C to 34°C and 17°C to 19°C, respectively. The minimum temperature will be near normal at most places, and the maximum temperature will be near normal at most places over Delhi. The predominant surface wind is likely to be from the southeast direction with wind speed reaching up to 10 kmph during the morning hours. The wind speed will increase up to 15 kmph from the northwest direction in the afternoon. The wind speed will gradually increase, reaching up to 20 kmph from the northeast direction during the evening and night.

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

- ✓ Isolated **hailstorm** likely over Jammu-Kashmir-Ladakh, Himachal Pradesh on 15th & 19th; Uttarakhand on 15th & 16th; Punjab, Haryana Chandigarh & Delhi, West Uttar Pradesh on 15th; East Uttar Pradesh 15th & 16th; Gangetic West Bengal, Bihar, Jharkhand, Odisha on 16th March.
- ✓ **Thundersquall** (wind speed reaching 50-60 kmph gusting to 70 kmph) with Hailstorm likely over Uttarakhand on 15th & 16th; Gangetic West Bengal, Jharkhand, Odisha on 16th March.
- ✓ **Thunderstorm, lightning & gusty winds speed reaching (40-50 gusting to 60 kmph)** likely over Jammu-Kashmir-Ladakh on 16th, 18th & 20th; Himachal Pradesh 16th & 18th; Uttarakhand on 18th, 19th; Haryana Chandigarh & Delhi and Punjab on 19th; West Uttar Pradesh on 19th; East Uttar Pradesh on 16th; West Rajasthan on 15th March, Haryana Chandigarh & Delhi and Punjab on 16th & 20th; West Uttar Pradesh on 16th & 20th; West Rajasthan during 18th -21th; East Rajasthan during 15th and 19th -21th; Arunachal Pradesh and Assam & Meghalaya during next 5-6 days and Nagaland, Manipur, Mizoram & Tripura on 15th; Arunachal Pradesh, Assam & Meghalaya during 15th-16th and Nagaland, Manipur, Mizoram & Tripura during 15th -17th; West Madhya Pradesh on 15th, 18th & 19th; East Madhya Pradesh on 18th & 19th; Vidarbha during 16th -20th & Chhattisgarh during 15th-20th; Jharkhand during 15th -19th, Gangetic West Bengal during 15th-17th and 20th, 21th & Bihar during 15th-19th and Odisha during 15th-19th; over West India during 15th -19th March except Gujarat state where it is likely during 18th & 19th March only.

Impact expected:

- Breaking of tree branches, uprooting of large avenue trees. Large dead limbs blown from trees. Damage to Standing crops.
- Minor to Major damage to banana and papaya trees.
- Minor to major damage to power and communication lines due to breaking of branches.
- 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:

- People are advised to keep a watch on the weather for worsening conditions and be ready to move to safer places accordingly.
- 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 Heat wave conditions

- ❖ **Heat wave conditions** likely in isolated pockets over Vidarbha 15th March.

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.

Impact & Action Suggested due to heavy/very heavy rainfall:

- ✓ Isolated **heavy rainfall/snowfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 15th March.
- ✓ Isolated **heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim on 21th March.
- ✓ Isolated **heavy rainfall/snowfall** very likely over Arunachal Pradesh during 15th-17th March.
- ✓ Isolated **heavy rainfall** very likely over Assam & Meghalaya during 15th -17th March with **heavy to very heavy rainfall** over Assam on 15th March and Nagaland, Manipur, Mizoram & Tripura on 15th March.

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 kutchha 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).

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.

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 Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh., Bihar, Jharkhand, Assam, Meghalaya, Manipur and Mizoram.

Agromet advisories for likely impact of Heavy Rainfall

- In **Arunachal Pradesh**, postpone harvesting of cabbage, pea, mustard and late-maturing paddy varieties and digging of potatoes. Shift the harvested produce to safe places. Drain out excess rainwater from the standing crop fields. Nursery for chilli, tomato, and other vegetables may be prepared under covered shelters or poly houses to protect seedlings from rain. Open nurseries should be immediately covered with polythene sheets or sack cloths to protect seedlings from rain.
- In **Assam**, drain out excess rainwater from the standing crop fields.
- In **Meghalaya**, ensure proper drainage in summer vegetable crops. Carry out staking and propping of plantation crops and protect young seedlings from heavy rainfall. Keep the harvested pods of garden peas in safer place immediately.
- In **Manipur**, harvest mature rapeseed, mustard, lentil during clear weather. Avoid water stagnation in the crop field due to rains.
- In **Sub-Himalayan West Bengal**, drain out excess rainwater from the standing crop fields. Cover the nursery of cucurbits and Dalle Korsani with polyethylene sheets or agro-net to protect the seedlings from adverse weather conditions.
- In **Kashmir** region, drain out excess rainwater from the standing crop fields.

Agromet advisories for likely impact of Thunderstorm / Gusty Winds

- Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.

Likely Impact of Above normal Temperatures

- Increased evapotranspiration leading to soil moisture depletion and moisture stress, which may adversely affect crop growth, seed development and yield.
- Accelerated crop maturity, shortened grain filling duration and shrivelled grain formation, resulting in possible yield reduction in wheat crop.
- Increased moisture stress and reduced grain filling in cereals and other *rabi* crops such as *rabi* maize, sorghum and other late sown *rabi* crops (vegetative to reproductive stages).
- Flower drop, poor pod setting, premature pod drying and reduction in seed size and seed weight in oilseed and pulse crops.
- Reduced tuber bulking and early plant senescence in tuber crops such as potato.

- Flower drop, fruit sunscald and reduction in marketable yield in vegetable crops such as tomato, capsicum, cabbage and cauliflower.
- Flower drop, reduced fruit setting, premature fruit drop, fruit sunburn (or sunscald), reduction in fruit size, uneven ripening, deformities such as spongy tissue (especially in mango), along with an overall decrease in yield and quality in horticultural crops (such as mango, apple, orange, etc.),
- Increased crop water requirements and higher risk of water stress under limited irrigation conditions.
- Reduced feed intake, milk yield and egg production along with increased water requirement in livestock and poultry.

Agromet advisories for likely impact of Above normal Temperatures

- In **Maharashtra**, provide light and frequent irrigation during the evening or early morning hours to sapota, chilli, brinjal and tomato. Apply irrigation at frequent intervals to reduce premature fruit drop and sun scorching in mango and undertake pre-harvest bagging of mango fruits using newspaper bags to prevent sun scalding in **Konkan**. Apply irrigation in late sown *rabi* crops like wheat, groundnut, sesame, safflower, sorghum, orchards and vegetables as per requirement and use straw mulch to reduce evaporation losses in **Vidarbha**.
- In **Madhya Pradesh**, apply light irrigation in wheat, chickpea and sugarcane to minimize the impact of high temperature. Complete harvesting of matured mustard during morning/evening hours and keep the produce in safe places.
- In **Chhattisgarh**, provide **light and frequent irrigation** in standing crops such as **wheat, chickpea, lentil and mustard** to minimize heat stress and maintain adequate soil moisture.
- In **Rajasthan**, provide protective irrigation in cumin, isabgol, mustard and gram during morning or evening hours to minimize heat stress.
- In **Uttar Pradesh**, provide light irrigation in wheat (grain filling stage), mustard and gram crops during morning or evening hours to reduce adverse impacts of heat.
- In **Punjab**, maintain optimum soil moisture through irrigation in mustard, gobhi sarson and potato.
- In **Haryana**, provide light irrigation to mustard and gram at flowering and pod formation stages. Maintain optimum soil moisture in wheat during grain filling stage.
- In **Himachal Pradesh**, apply irrigation to wheat during early morning or evening hours to protect the crop from heat stress conditions
- In **Uttarakhand**, apply irrigation to wheat, chickpea and lentil and French beans.
- In **Bihar**, provide irrigation to maize and wheat crops at their sensitive growth stages.
- In **Jharkhand**, provide irrigation in wheat at the grain-filling stage.
- In **Odisha**, apply light and frequent irrigation to *Boro* rice, green gram, black gram, vegetables, and horticultural crops at regular intervals in the early morning or late evening.
- Take appropriate action for conservation of soil moisture through mulching, proper field bunding, and avoiding unnecessary intercultivation.

Livestock / Poultry

- Keep the animals inside the shed during Heavy Rainfall/Hailstorm period and provide them balanced feed. Store feed and fodder in a safe place to prevent spoilage.
- Provide clean, hygienic and plenty of drinking water to animals.
- To reduce the effect of heat wave/high temperature, cover the roof of poultry sheds with grass.

Legends & abbreviations:

- ❖ **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; Automatic Weather Station; **ARG:** Automatic Rain Gauge; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office, **Aero:** Aerodrome, **IAF:** Indian Air Force.
- ❖ **Region wise classification of meteorological Sub-Divisions:**
 - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
 - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
 - **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
 - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
 - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathawada.
 - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

LEGENDS

1. अंडमान और निकोबार द्वीपसमूह

2. अरुणाचल प्रदेश

3. असम और मेघालय

4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा

5. उप-हिमालयी पश्चिम बंगाल और सिक्किम

6. गंगीय पश्चिम बंगाल

7. ओडिशा

8. झारखंड

9. बिहार

10. पूर्वी उत्तर प्रदेश

11. पश्चिम उत्तर प्रदेश

12. उत्तराखंड

13. हरियाणा, चंडीगढ़ और दिल्ली

14. पंजाब

15. हिमाचल प्रदेश

16. जम्मू और कश्मीर और लद्दाख

17. पश्चिम राजस्थान

18. पूर्वी राजस्थान

19. पश्चिम मध्य प्रदेश

20. पूर्वी मध्य प्रदेश

21. गुजरात

22. सौराष्ट्र

23. कोंकण और गोवा

24. मध्य महाराष्ट्र

25. मराठवाड़ा

26. विदर्भ

27. छत्तीसगढ़

28. तटीय आंध्र प्रदेश और यनम

29. तेलंगाना

30. रायलसीमा

31. तमिलनाडु, पुडुचेरी और कराईकल

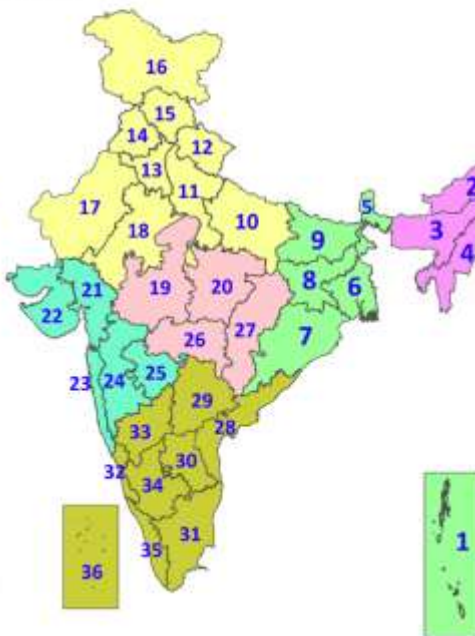
32. तटीय कर्नाटक

33. आंतरिक उत्तरी कर्नाटक

34. आंतरिक दक्षिणी कर्नाटक

35. केरल और माहे

36. लक्षद्वीप



1. Andaman & Nicobar Islands

2. Arunachal Pradesh

3. Assam & Meghalaya

4. Nagaland, Manipur, Mizoram & Tripura

5. Sub-Himalayan West Bengal & Sikkim

6. Gangetic West Bengal

7. Odisha

8. Jharkhand

9. Bihar

10. East Uttar Pradesh

11. West Uttar Pradesh

12. Uttarakhand

13. Haryana, Chandigarh & Delhi

14. Punjab

15. Himachal Pradesh

16. Jammu & Kashmir and Ladakh

17. West Rajasthan

18. East Rajasthan

19. West Madhya Pradesh

20. East Madhya Pradesh

21. Gujarat

22. Saurashtra

23. Konkan & Goa

24. Madhya Maharashtra

25. Marathwada

26. Vidarbha

27. Chhattisgarh

28. Coastal Andhra Pradesh & Yanam

29. Telangana

30. Rayalaseema

31. Tamilnadu, Puducherry & Karaikal

32. Coastal Karnataka

33. North Interior Karnataka

34. South Interior Karnataka

35. Kerala & Mahe

36. Lakshadweep

SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/A Few Places)
51-75	Fairly Widespread (FWS/Many Places)	1-25	Isolated (ISOL)



Fog



Heavy Snow



Cold Wave



Heavy Rain



Dust Storm



Cold Day



Very Heavy Rain



Heat Wave



Ground Frost



Extremely Heavy Rain



Warm Night



Thunder & Lightning



Hot Day



Hailstorm



Hot & Humid



Dust Raising Winds



Strong Surface Winds

COLOUR CODED WARNING

No Warning (No Action)

Watch (Be Aware)

Alert (Be Prepared To Take Action)

Warning (Take Action)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".

Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.

For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599

(Service to the Nation since 1875)

DEFINITION/CRITERIA

Rain/ Snow *

Heavy: 64.5 to 115.5 mm/cm *
Very Heavy: 115.6 to 204.4 mm/cm *
Extremely Heavy: > 204.4 mm/cm *

Heat Wave

When maximum temperature of a station reaches $\geq 40^\circ\text{C}$ for plains and $\geq 30^\circ\text{C}$ for hilly regions
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C .

Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.

Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$.

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is $> 4.5^\circ\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^\circ\text{C}$.

Warm Night

When maximum temperature remains 40°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°C .

Severe Warm Night: When minimum temperature departure $> 6.4^\circ\text{C}$.

Cold Wave

When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions.

(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave: When Minimum Temperature is $\leq 4.0^\circ\text{C}$

Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$

Cold Day

When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions

Based on departure

Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$

Fog

Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres

Dense Fog: when the visibility between 50- 200 metres

Very Dense Fog: when the visibility < 50 metres

Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)

Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.

Frost

Ice deposits on ground

Air temperature $\leq 4^\circ\text{C}$ (over Plains)

Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph

Severe: Wind speed 62-67 kmph

Very Severe: Wind speed > 67 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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