



**Government of India
Ministry of Earth Sciences
India Meteorological Department**



Press Release

Date: 19th April, 2025

Time of Issue: 1415 hours IST

Subject: i) Heat wave conditions likely to continue over Rajasthan on 19th April and it is likely to abate from 20th April.
ii) Light to moderate rainfall at most places accompanied with thunderstorm & lightning and gusty/Squally winds are also likely over Western Himalayan region on 19th & 20th with isolated heavy falls on 19th (J&K and HP) and adjoining plains of northwest India on 19th April, 2025.
iii) A fresh spell of heavy rainfall likely to impact Northeast India from 22nd April.

i. Realised weather during past 24 hours till 0830 hours IST of today, the 19th April 2025 (Annexure I):

- ❖ **Thunderstorm** accompanied with Squally/Gusty winds prevailed at isolated places over Jammu-Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Hailstorm** occurred at isolated places over Jammu-Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Jharkhand, Odisha, Chhattisgarh and Vidarbha.
- ❖ **Heavy rainfall** has been recorded at isolated places over North Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Heat wave to severe heat wave conditions** prevailed at isolated places over Rajasthan; **Heat wave conditions** at a few places over Rajasthan.
- ❖ **Duststorm** observed at isolated places over West 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 Afghanistan & neighbourhood seen as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along long. 63°E to the north of lat. 35°N and an upper air cyclonic circulation lies over south Haryana in lower tropospheric levels. Under its influence:
 - ✓ **Light to Moderate rainfall at most places accompanied with moderate to severe thunderstorm, lightning & squally winds (speed 60-70 kmph gusting to 80 kmph)** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad (**red colour warning**) on 19th; **with lightning & squally winds (speed 50-60 kmph gusting to 70 kmph)** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad (Orange colour warning) on 20th & 21st April; Himachal Pradesh (Orange colour warning) on 19th; Uttarakhand (Orange

colour warning) on 19th & 20th; with **gusty winds (speed 30-40 kmph gusting to 50 kmph)** over Himachal Pradesh on 20th April.

- ✓ **Isolated Hailstorm** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh on 19th and Uttarakhand on 19th & 20th April.
 - ✓ **Isolated heavy rainfall** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 19th April.
 - ✓ Isolated rainfall along with **thunderstorm, lightning & squally winds (speed 50-60 kmph gusting to 70 kmph)** likely over Punjab, Haryana (Orange colour warning) on 19th and with **gusty winds (speed 40-50 kmph gusting to 60 kmph)** over Uttar Pradesh (Orange colour warning) on 19th; with **gusty winds (speed 30-40 kmph gusting to 50 kmph)** over Uttar Pradesh on 20th April.
 - ✓ Isolated Duststorm/Thunderstorm **gusty winds (speed 30-40 kmph gusting to 50 kmph)** likely over Uttar Pradesh and West Rajasthan (Orange colour warning) on 19th April.
- ❖ An **upper air cyclonic circulation** lies over northwest Jharkhand, 2nd over north Bangladesh & neighbourhood and 3th over central Assam in lower tropospheric levels.
- ❖ A **trough** runs from south Haryana & neighbourhood to north Bangladesh; 2nd trough from northeast Vidarbha to Gulf of Mannar 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.
 - ✓ **Isolated to scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed reaching 40-50 kmph gusting to 60 kmph)** likely over West Bengal & Sikkim & Jharkhand on 19th and Odisha on 19th & 20th April. **Thundersquall (wind speed reaching 50-60 kmph gusting to 70 kmph)** very likely at isolated places over Jharkhand on 20th April.
 - ✓ **Isolated light to moderate rainfall accompanied with thunderstorm, lightning & gusty winds (speed reaching 30-40 kmph gusting to 50 kmph)** likely over East Madhya Pradesh & Madhya Maharashtra on 19th; Vidarbha & Chhattisgarh during 19th-23rd April.
 - ✓ **Heavy rainfall** likely over Arunachal Pradesh & Assam & Meghalaya during 22nd -25th April.
 - ✓ **Isolated Hailstorm** likely over Jharkhand and Odisha on 19th 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 Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema during next 5 days and Telangana during 19th-21st; **with lightning** over Tamilnadu, Puducherry & Karaikal on 19th & 20th April.
 - ✓ **Heavy rainfall** likely over Kerala & Mahe on 19th April, 2025.

Temperature Forecast:

- ❖ Gradual fall in maximum temperatures by 2-3°C likely over Northwest India (except Uttar Pradesh) during next 2-3 days and gradual rise by 2-3°C during subsequent 4 days.
- ❖ No significant change in maximum temperatures likely over Uttar Pradesh during next 24 hours and gradual rise by 2-4°C during subsequent 5 days.
- ❖ No significant change in maximum temperatures likely over Central India during next 5 days.
- ❖ No significant change in maximum temperatures likely over East India during next 24 hours and gradual rise by 4-5°C during subsequent 4 days.

- ❖ Gradual fall in maximum temperatures by 1-3°C likely over Gujarat State during next 3 days and gradual rise by 2-3°C during subsequent 4 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Maharashtra during next 4-5 Days and no significant change during subsequent 2 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over south peninsular India during next 3 days and no significant change thereafter.
- ❖ 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** very likely in isolated pockets over Rajasthan on 19th; Madhya Pradesh on 19th & 20th and Vidarbha during 21st-23rd April.
- ❖ **Hot & humid weather** is likely to prevail over Madhya Maharashtra on 19th & 20th; Gujarat State on 22nd & 23rd; Tamilnadu, Puducherry & Karaikal during 19th-21st April.
- ❖ **Warm Night conditions** very likely to prevail in isolated pockets over West Uttar Pradesh on 19th & 20th April.

iv. Weather conditions and forecast over Delhi/NCR during 19th April to 22nd April, 2025 (Annexure V)

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>

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 Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Andaman & Nicobar Islands; at many places over Himachal Pradesh, Punjab, Gangetic West Bengal, Odisha; at a few places over Uttarakhand, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe, North & South Interior Karnataka; at isolated places over Haryana, Chandigarh & Delhi, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.

Rainfall recorded (in cm):

- ❖ **Kerala & Mahe:** Thodupuzha (dist Idukki) 9, Vaikom (dist Kottayam) 7, Kanjirappally (dist Kottayam) 5, Kunnathanam Aws (dist Pathanamthitta) 4, Palluruthy Arg (dist Ernakulam) 4,
- ❖ **Tamilnadu Puducherry & Karaikal:** Anaikedanku (dist Kanyakumari) 8, Mambzhathuraiyaru (dist Kanyakumari) 7, Krishnagiri (dist Krishnagiri) 6, Periyanaickenpalayam (dist Coimbatore) 4,
- ❖ **North Interior Karnataka:** Annigere Ars (dist Dharwad) 7, Bilgi (irri.) (dist Bagalkote) 4, Kerur (dist Bagalkote) 2, Raichur Pto (dist Raichur) 2, Alamatti Hms (dist Vijayapura) 2
- ❖ **Gangetic West Bengal:** Sri Niketan (dist Birbhum) 6, Gheropara (dist Birbhum) 5, Tantloi (dist Birbhum) 5

Realised Gusty Winds during past 24hours ending at 0300 UTC of today i.e 19.04.2025:

- ❖ **Jammu-Kashmir:** Tangste(36,1230), Padum_KVK(35,0815), Govindpura(33,1930), Kargil(30,1100), Khaltse(29,1145), Upshi(25,1730), Baramulla(22,1700), Reasi(21,1845), Kathua (22,2045),
- ❖ **Himachal Pradesh:** Kufri (24,1730),
- ❖ **Uttarakhand:** Chamoli(31,1245), Jollygrant(25,1900), Roorkee_AMFU(26,1515), PantNagar_AMFU(38,1300),
- ❖ **Punjab:** Sangrur(57,1230), Firozpur_KVK(32,0930), Budh Singh Wala(37,1030), Faridkot(32,1015), Ropar(26,1245), Fatehghar Sahib(32,1230), Mohali(39,1330),
- ❖ **Haryana, Chandigarh & Delhi:** Kaul(45,1400), Pandu_Pindara(39,1400), Ujha(34,1500), Rohtak(31,1345), Ujwa_KVK(23,1415), Pitampura(24,1545), Pragati Maidan(29,1545),
- ❖ **West Uttar Pradesh:** Gautam Buddha Nagar(25,1600), Hapur(23,1630), Bulandshahar(29,1645), Ucheti(41,1715), Bareilly(25,1830), Shahjahanpur(34,1930).
- ❖ **East Uttar Pradesh:** Barabanki(26,2200), Lucknow(25,2200),
- ❖ **West Madhya Pradesh:** Ahmadpur(28,0900), Sagar(21,1145),
- ❖ **Jharkhand:** Simdega(28,1330), Jagannathpur(24,1215),
- ❖ **Gangetic West Bengal:** Kalyani_AMFU(26,0830), Canning(26,0945),
- ❖ **Odisha:** Bhubaneswar(44, 0400) Mayurbhanj(29,1000), Balasore(34,1045), Angul(30,1545), Cuttack_KVK(30,1545), Kendrapara(25,1245), Janhukuda(44,0800),
- ❖ **Telangana:** Siddipet(33,1115), Hyderabad(42,1230), Daira:32,1245), Ibrahimpatam(27,1300),
- ❖ **Rayalseema:** Dharmavaram(22,1230),
- ❖ **North Interior karnataka:** Gadag(37,1230), Davanagere(24,1400),
- ❖ **South Interior karnataka:** Chikballapur(25,0845), CHANDURAYANGHALI (27,1145),
- ❖ **Tamil Nadu:** Paiyur(21,1445), Sivaganga(22,1045),
- ❖ **Arunachal Pradesh:** Seppa(24,0730),
- ❖ **Meghalaya:** Umiam(27,0800),
- ❖ **Mizoram:** Chawnhu(27,0845)

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

- ❖ **Yesterday, Maximum Temperatures** had **risen by 2 to 4 °C** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, East Madhya Pradesh; **1 to 2 °C** over Himachal Pradesh, Chhattisgarh, Assam, Andaman & Nicobar Islands, West Madhya Pradesh; **fallen by 2 to 5°C** over West Bihar, East Uttar Pradesh, Jharkhand, 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 Madhya Pradesh, Vidarbha; at a few places over Rajasthan, Marathwada; at isolated places over Haryana, Gujarat state, Madhya Maharashtra; **38-42°C** at most places over Rayalaseema; at many places over Delhi, Punjab, Chhattisgarh, Telangana; at a few places over Odisha, Coastal Andhra Pradesh & Yanam, North Interior Karnataka; at isolated places over Uttar Pradesh, Bihar, Tamil Nadu, Puducherry & Karaikal; **33-38°C** at most places over Kerala & Mahe; at many places over Konkan & Goa, South Interior Karnataka, Lakshadweep; at a few places over Uttarakhand, Coastal Karnataka, Andaman & Nicobar Islands; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Assam, Nagaland, Manipur. Yesterday, the highest **maximum temperature of 45.4°C** was reported at **Churu & Sri Ganganagar (Rajasthan)** over the country.
- ❖ Yesterday, Maximum Temperatures were above normal by 5-7°C at isolated places over Rajasthan, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; by 2-4°C at a few places over Madhya Pradesh, Vidarbha; at isolated places over Gujarat State, Konkan & Goa, Madhya Maharashtra, Marathawada; below normal by 2-4°C at isolated places over Odisha, Jharkhand, East Uttar Pradesh, Bihar, Gangetic West Bengal and near normal over rest parts of the country. (Fig. 2)

Fig. 1: Maximum Temperatures

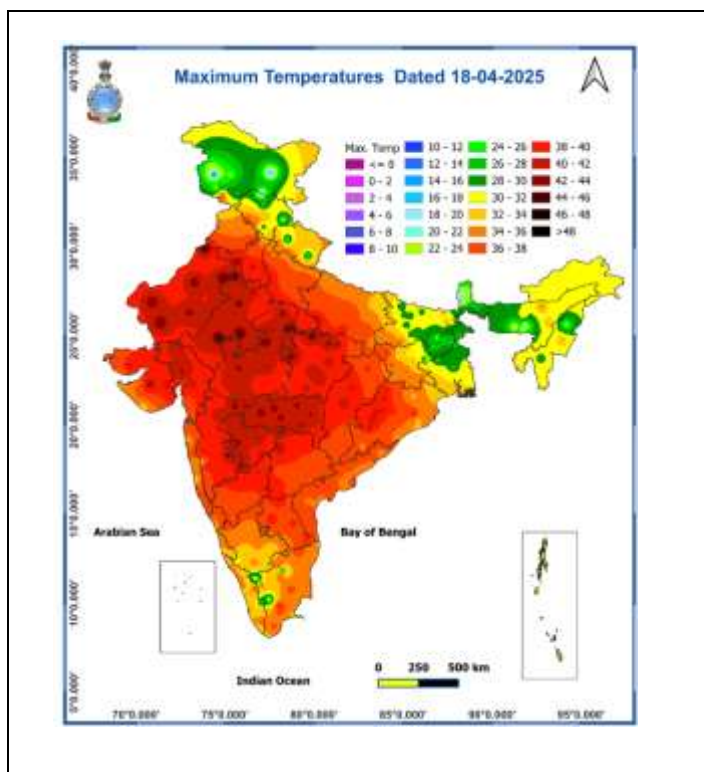
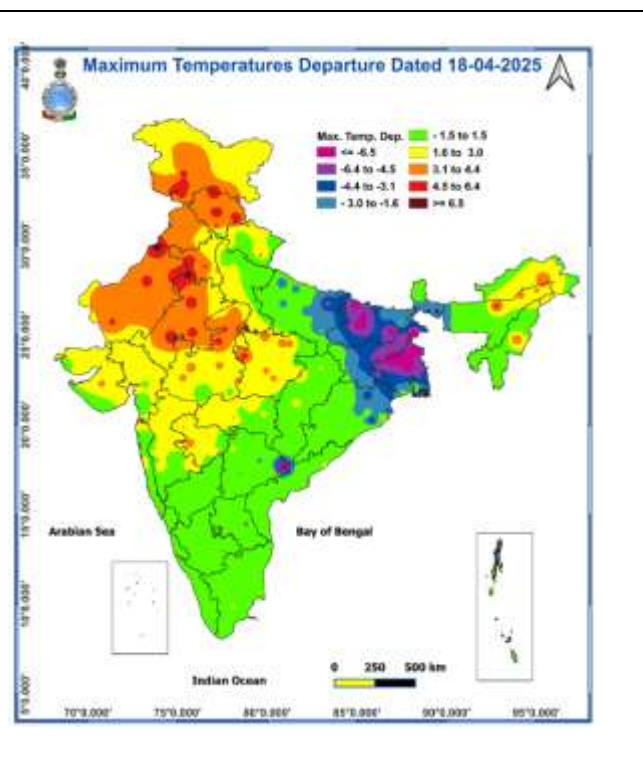
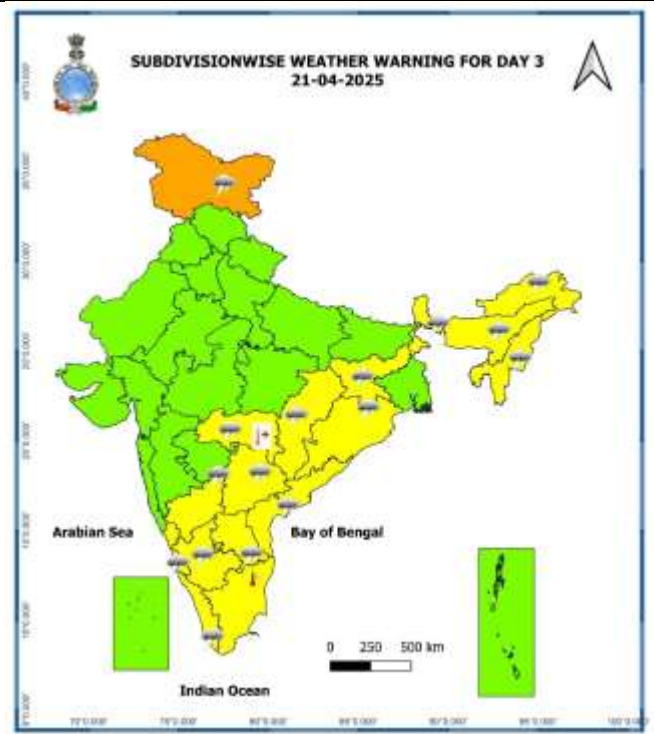
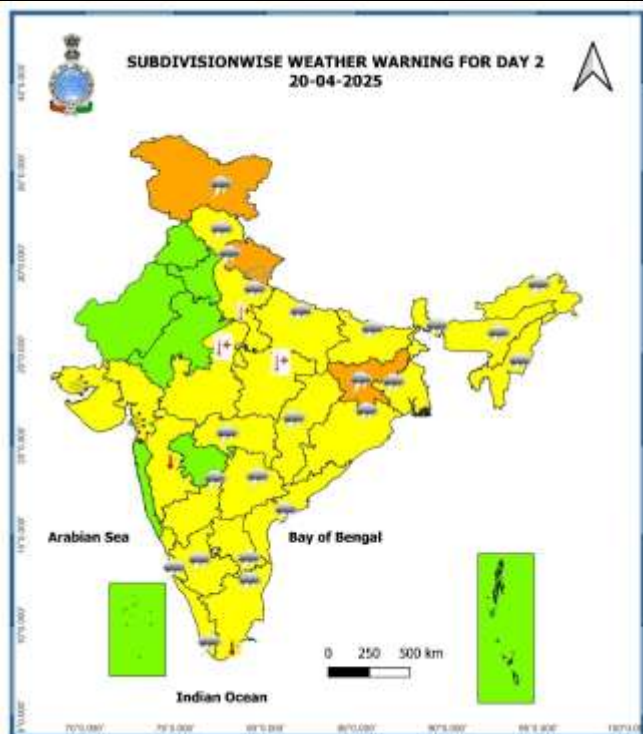
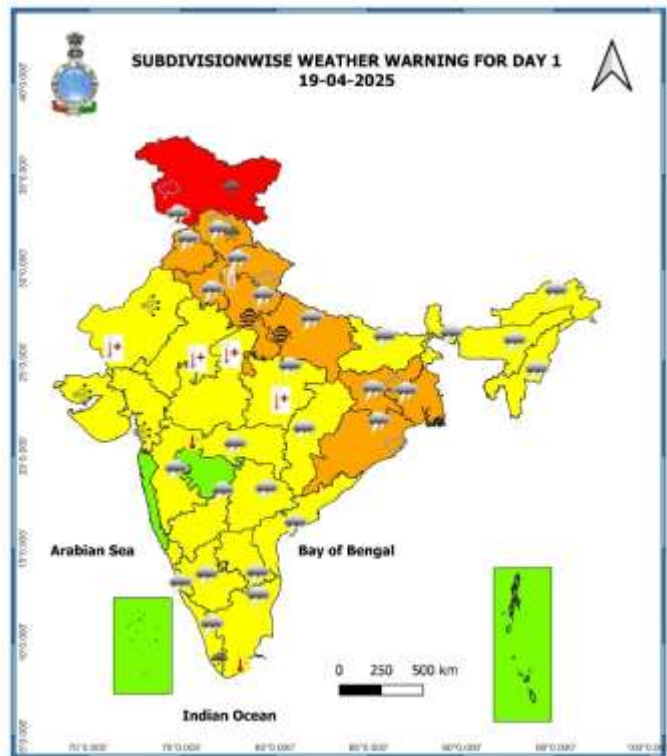


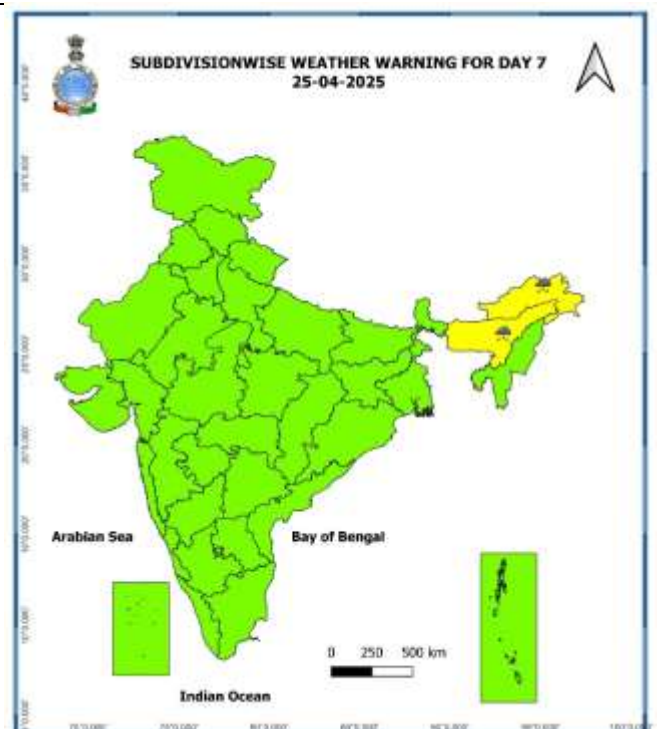
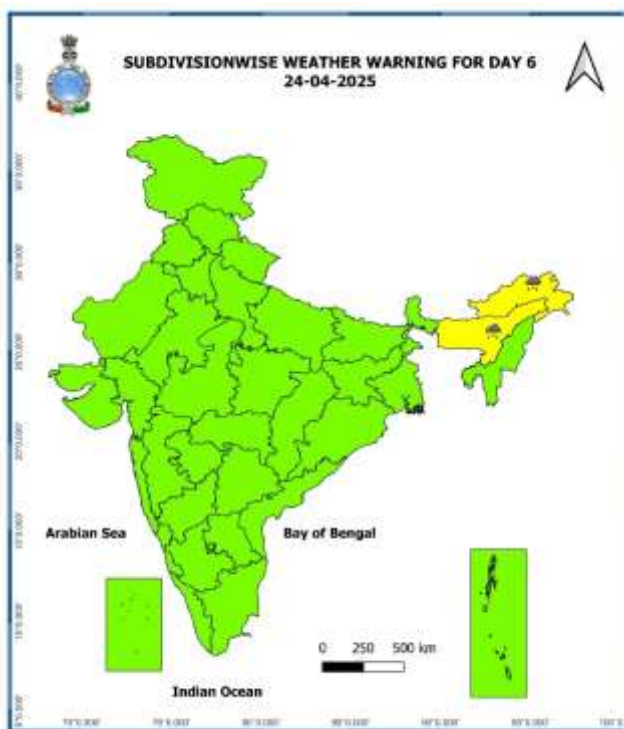
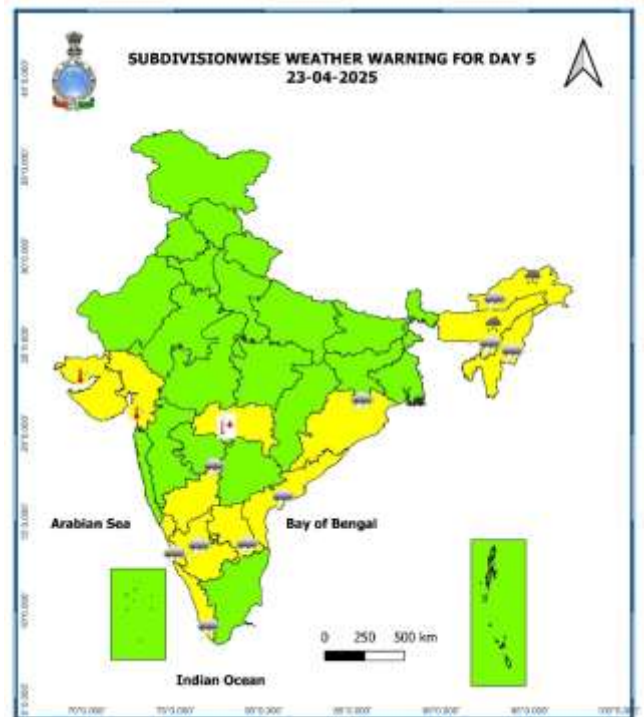
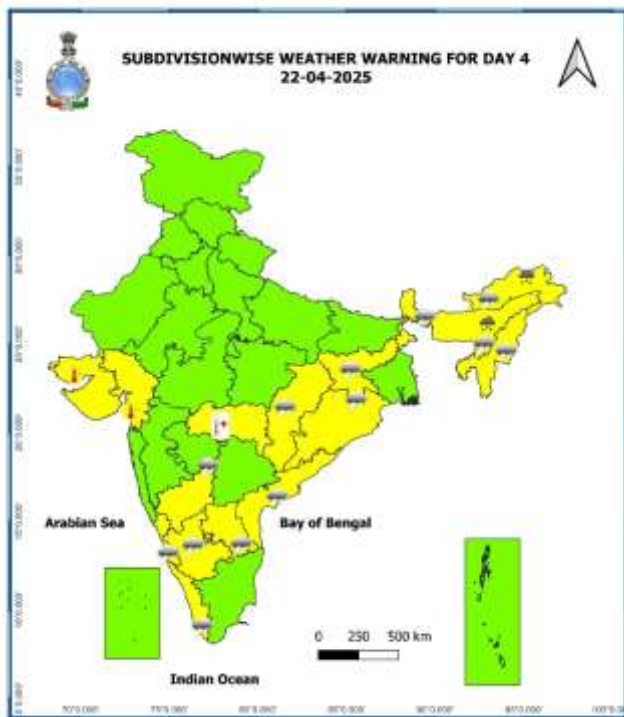
Fig. 2: Departure of Maximum Temperatures



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

Weather forecast over Delhi/NCR during 19th to 22nd Apr. 2025

Past Weather:

There has been rise in minimum temperature upto 01°C and fall in maximum temperature upto 01°C over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 39 to 41 °C and 23 to 26 °C respectively. The minimum temperature was above normal upto 04°C and maximum temperature was above normal upto 03°C at most places. Thunderstorm accompanied with Gusty winds prevailed at many places over Delhi. Very light rainfall has been recorded at many places over Delhi. Partly cloudy sky becoming generally cloudy sky towards evening with predominant surface wind from the southeast direction with wind speeds less than 18 to 20 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 20 kmph from the southeast direction prevailed over the region in the forenoon today.

Weather Forecast:

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/night hours. 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 southwest direction with a wind speed of less than 18 kmph till evening. It would decrease becoming less than 12 kmph from the south direction during the 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 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 decrease thereafter becoming 08-10 kmph from the southeast direction during the afternoon. It will increase becoming less than 15 kmph from the southeast direction during evening and night.

21.04.2025: Partly cloudy sky. Sustained Surface winds (speed 15-25 kmph) gusting to 35kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 38 to 40°C and 24 to 26°C respectively. The predominant surface wind will likely be from the east direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase becoming 16-20 kmph from the west direction in the afternoon. It will increase becoming less than 14 kmph from the northwest direction during evening and night.

22.04.2025: Mainly clear sky. Strong surface winds (speed 20-30 kmph) gusting to 40kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 38 to 40°C and 24 to 26°C respectively. The predominant surface wind will likely be from the west direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase becoming 16-20 kmph from the west direction in the afternoon. It will increase becoming less than 14 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

- ✓ **Isolated Hailstorm** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Jharkhand & Odisha on 19th and Uttarakhand on 19th & 20th April.
- ✓ **Light to moderate rainfall at most places accompanied with thunderstorm, lightning & squally winds (speed 60-70 kmph gusting to 80 kmph)** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 19th; **lightning & squally winds (speed 50-60 kmph gusting to 70 kmph)** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 20th & 21st April; Himachal Pradesh, Punjab & Haryana on 19th; Uttarakhand on 19th & 20th; Jharkhand on 20th; **lightning & squally winds (speed 40-50 kmph gusting to 60 kmph)** over Gangetic West Bengal on 19th & Odisha on 19th & 20th April.

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 to Heat wave to severe heat wave conditions over

- ❖ **Heat wave conditions** very likely in isolated pockets over Rajasthan on 19th; Madhya Pradesh on 19th & 20th and Vidarbha during 21st -23rd April.

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, Uttarakhand, Odisha and Jharkhand**, 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 **Rajasthan and Madhya Pradesh**, 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.

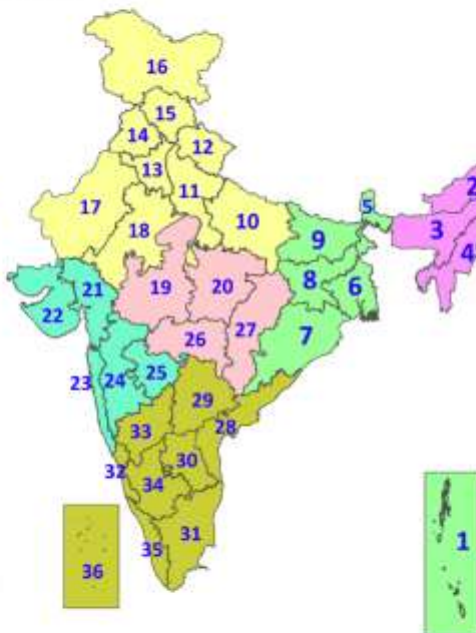
Legends & abbreviations:

- ❖ **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

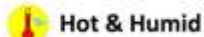
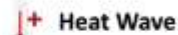
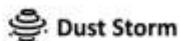
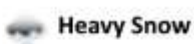
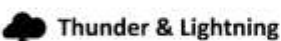
1. अंडमान और निकोबार द्वीपसमूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
6. गंगीय पश्चिम बंगाल
7. ओडिशा
8. झारखंड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखंड
13. हरियाणा, चंडीगढ़ और दिल्ली
14. पंजाब
15. 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)



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 62-87 kmph

Very Severe: Wind speed > 87 kmph

Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre

High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre

Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre

Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)

Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)

Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)

Super Cyclone Storm: Wind speed > 220 kmph (> 119 knots)

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Hot and Humid: When maximum temperatures remain 3°C above normal along with the above normal relative humidity.