



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 15th May, 2025

Time of Issue: 1345 hours IST

Subject: i) Heavy to very heavy rainfall accompanied with thunderstorms & lightning likely over Northeast India and over Sub-Himalayan West Bengal & Sikkim during next 5 days.
ii) Rainfall accompanied with thunderstorms and lightning likely to continue over South Peninsular India during next 5 days with isolated heavy rainfall over Andhra Pradesh, Karnataka, Kerala and Tamilnadu during next 3 days.
iii) Heat wave conditions likely over West Rajasthan during 15th-19th; Uttar Pradesh during 15th-18th and over Bihar on 15th & 16th May 2025.

Advance of Southwest Monsoon: (Annexure I):

- ❖ Southwest Monsoon has further advanced today into some parts of southeast Arabian Sea, Maldives & Comorin area and some more parts of South Bay of Bengal, Andaman Islands and Andaman Sea.
- ❖ **The Northern Limit of Monsoon passes through 5°N/70°E, 6°N/75°E, 6°N/80°E, 7°N/85°E, 8°N/87°E, 10°N/90°E, Long Island, 15°N/95°E and 17°N/97°E.**
- ❖ Conditions are favorable for further advance of southwest Monsoon over some more parts of south Arabian Sea; over Maldives & Comorin area; South Bay of Bengal, remaining parts of Andaman Islands and Andaman Sea; and some parts of central Bay of Bengal during next 3-4 days.

Realised weather during past 24 hours till 0830 hours IST of today, the 15th May 2025 (Annexure II):

- ❖ **Thunderstorm accompanied with Squally/Gusty winds** with speed with speed 60-90 kmph prevailed at isolated places over Madhya Maharashtra, Coastal Andhra Pradesh, Rayalaseema, Tamilnadu; with speed 40-60 kmph prevailed at isolated places over Jammu-Kashmir, Punjab, Haryana, West Madhya Pradesh, Vidarbha, Bihar, Odisha, Assam & Meghalaya, Manipur, Marathawada, Kerala, Telangana and interior Karnataka.
- ❖ **Heavy to very heavy rainfall** has been recorded at isolated places over Arunachal Pradesh, Assam, Rayalaseema; **Heavy rainfall** at isolated places over Coastal Andhra Pradesh, South Interior Karnataka, Tamil Nadu, Sub-Himalayan West Bengal and Kerala.
- ❖ **Hailstorm** observed at isolated places over West Madhya Pradesh and Odisha.

For more details of realised weather, kindly refer **Annexure II**, Detailed observations of Maximum Temperature during past 24 hours till 0830 hours IST of today are appended in **Annexure III**.

i. Weather Systems, Forecast and Warnings (refer to Annexure IV & V):

- ❖ An upper air **cyclonic circulation** lies over Northeast Assam & neighbourhood in lower tropospheric levels.
- ❖ An upper air **cyclonic circulation** over North Interior Karnataka & neighbourhood in lower tropospheric levels.
- ❖ A **trough** runs from Sub-Himalayan West Bengal & Sikkim to southeast Madhya Pradesh across north Chhattisgarh in lower tropospheric levels.
- ❖ An upper air **cyclonic circulation** lies over southeast Bay of Bengal in lower & middle tropospheric levels tilting southwestwards with height.
- ❖ An upper air **cyclonic circulation** lies over north coastal Tamil Nadu & neighbourhood in lower tropospheric levels.
- ❖ Under the influence of these systems, the following weather is likely:

Northeast India:

- ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed 30-50 kmph** likely over Northeast India during next 5 days.
- ✓ **Isolated heavy rainfall** over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura during 15th-18th, Assam & Meghalaya during 15th-19th with isolated **very heavy rainfall** over Assam & Meghalaya during 15th-17th and Arunachal Pradesh on 15th & 16th May.

West India:

- ✓ **Isolated** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-50 kmph** likely over Konkan & Goa, Madhya Maharashtra, Marathawada during 15th-18th; Gujarat State on 15th May.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Madhya Maharashtra on 15th & 18th; Marathawada on 15th and Konkan & Goa on 19th May.
- ✓ **Isolated heavy rainfall** likely over Madhya Maharashtra on 15th May.

South peninsular India:

- ✓ **Scattered to fairly** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-50 kmph** over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Karnataka, Tamilnadu Puducherry & Karaikal, Kerala & Mahe during next 5 days.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, north Interior Karnataka on 15th & 16th May.
- ✓ **Isolated heavy rainfall** likely over Tamilnadu during 15th-17th; Interior Karnataka during 15th-19th; Coastal Andhra Pradesh, Telangana, Rayalaseema on 15th & 16th; Kerala & Mahe 15th, 18th & 19th May.

East & Central India:

- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-50 kmph** likely over Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Odisha, Bihar, West Bengal & Sikkim during next 5 days and over Andaman & Nicobar Islands on 15th May.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Gangetic West Bengal, Odisha on 15th; Bihar on 17th & 18th May.
- ✓ **Isolated heavy rainfall** likely over Andaman & Nicobar Islands on 15th; Sub-Himalayan West Bengal & Sikkim during 15th-19th May.

Northwest India:

- ✓ **Isolated to Scattered** light to moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching 30-50 kmph** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh during 18th-21st; Punjab, Haryana on 16th & during 19th-21st; West Rajasthan on 15th; East Rajasthan on 15th, 17th & 18th May.
- ✓ **Strong dust raising winds (25-35 kmph)** very likely over West Uttar Pradesh, Punjab and Haryana Chandigarh & Delhi on 16th & 17th and West Rajasthan during 15th-18th May.

Maximum Temperature Forecast:

- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Northwest India during next 3 days and no large change thereafter for subsequent 4 days.
- ❖ No significant change in maximum temperatures likely over East India during next 2 days; gradual fall by 2-3°C thereafter for subsequent 3 days and no large change thereafter for subsequent 2 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C over Madhya Pradesh for next 4 days and no large change thereafter for subsequent 3 days.
- ❖ Gradual rise in maximum temperatures by 2-4°C over Gujarat State for next 3 days and no large change thereafter for subsequent 4 days.
- ❖ No significant change in maximum temperatures likely over rest parts of the country.

Heat wave and Hot & Humid weather warning:

- ❖ **Heat wave conditions** very likely in isolated pockets of Bihar on 15th & 16th; Punjab on 16th & 17th; West Uttar Pradesh during 16th-18th; East Uttar Pradesh during 15th-17th; West Rajasthan during 15th-19th; East Madhya Pradesh during 17th-19th; West Madhya Pradesh on 18th & 19th May.
- ❖ **Hot & humid weather** is likely to prevail over Gangetic West Bengal, Tamilnadu Puducherry & Karaikal on 15th; Jharkhand on 15th & 16th; Bihar on 17th and Odisha during 15th-17th May.
- ❖ **Warm night conditions** very likely in isolated pockets of East Uttar Pradesh on 15th & 16th May.

Dust event over Northwest India:

There was high north-south pressure gradient over Northwest India which caused strong dust raising surface winds of 30-40kmph over Punjab, Haryana, Delhi & north Rajasthan from the night of 14th May to the morning of 15th May.

Under the influence of these strong winds dust was advected from West Rajasthan to Delhi NCR across north Rajasthan, south Punjab and south Haryana leading to reduction in visibility with IGI Airport Delhi reporting lowest Visibility of 1200m intermittently during the period.

IMD Jaipur predicted dust Storm over Rajasthan for 14th May in its bulletin issued at 1330 IST of yesterday. Visibility improved from the morning of today becoming 4000m at 1130 hrs IST of today.

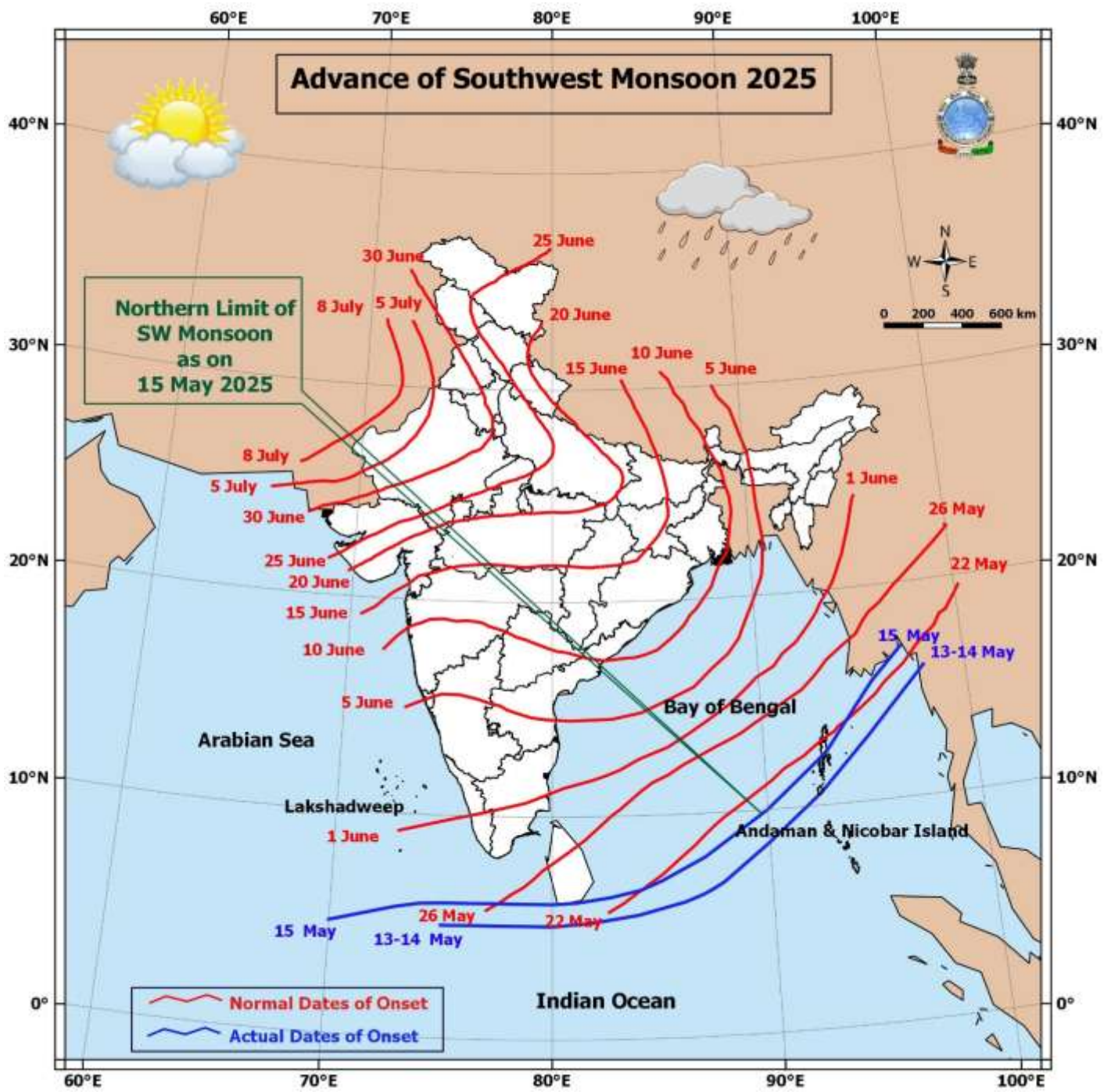
Thundery development accompanied with strong wind speed 15-25 gusting to 35 kmph towards evening/night was also forecast over Delhi for 14th May.

iv. Weather conditions and forecast over Delhi/NCR during 15th May to 18th May, 2025 (Annexure VI)

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>



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

- ❖ **Light/moderate Rainfall with thunderstorm & lightning** observed **at most places** over Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya; at many places over Rayalaseema; **at a few places** over Telangana, Tamilnadu Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, Nagaland, Manipur, Mizoram & Tripura; **at isolated places** over Uttarakhand, Rajasthan, Odisha, Bihar, Jharkhand, Gujarat, Konkan & Goa, Madhya Maharashtra, Marathawada, Madhya Pradesh, Vidarbha, Chhattisgarh, Coastal Karnataka, North Interior Karnataka; Dry over rest of the country.

Rainfall recorded (in cm) reported during past 24 hours till 0830 hours IST of today:

- ❖ **Assam & Meghalaya:** Ranganadi Nt Xing (dist Lakhimpur) 17; Hatsingimari ARG (dist South Salmara) 15; Chauldhowaghat (dist Lakhimpur) 13; Goalpara PTO (dist Goalpara), Goibargaon (dist Baksa), Drf (dist Baksa), N.lakhimpur/Lilabari (dist Lakhimpur) 10 Each; Chouldhuwaghat ARG (dist Lakhimpur) 9;
- ❖ **Rayalaseema:** Anantpur (dist Anantapuramu) 17; Raptadu (dist Anantapuramu) 14;
- ❖ **Arunachal Pradesh:** Naharlagun (dist Papumpara) 12;
- ❖ **South Interior Karnataka:** Harapanahalli (dist Vijayanagara), Jagalur (dist Davangere) 11 Each;
- ❖ **Sub Himalayan West Bengal & Sikkim:** Nh31 Bridge (dist Jalpaiguri) 11; Mathabhanga (dist Cooch Behar), Ghughumari (dist Cooch Behar) 8 Each;
- ❖ **Telangana:** Kohir (dist Sangareddy) 9; Chevella (dist Rangareddy) 8;
- ❖ **Tamil Nadu, Puducherry & Karaikal:** Hogenekal (dist Dharmapuri), Tiruchengode (dist Namakkal) 9 Each;
- ❖ **Kerala & Mahe:** Laha AWS (dist Pathanamthitta) 8.

Realised Gusty Winds (KMPH) during past 24hours ending at 0300 UTC of today i.e. 15.05.2025;

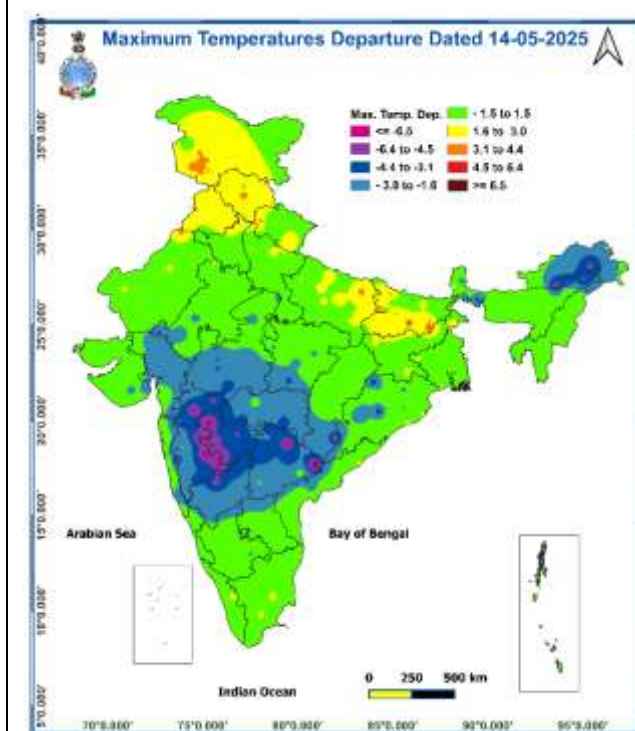
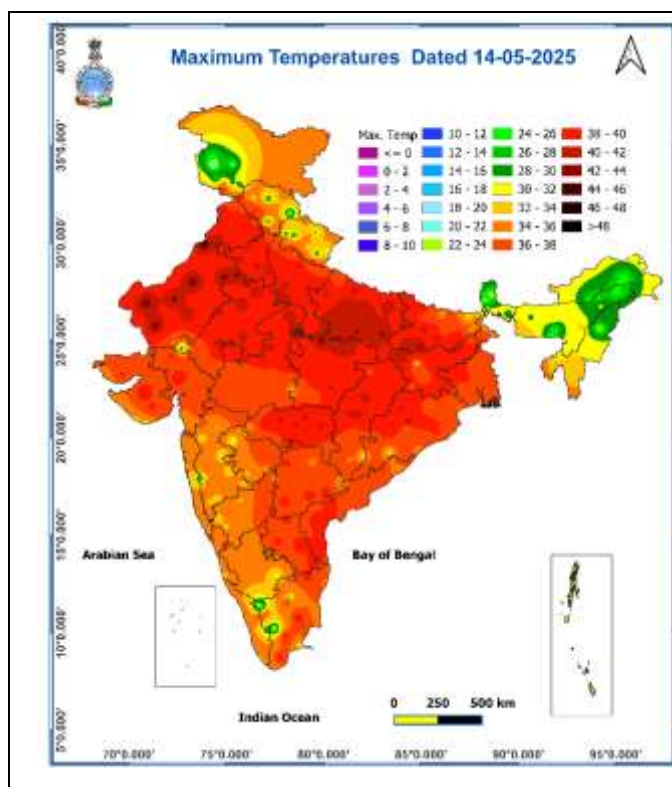
- ❖ **Madhya Maharashtra:** Viholi Nashik 87, Mahabaleshwar Satara 42;
- ❖ **Tamilnadu:** Natham Isro 63 Tenkasi 39
- ❖ **Assam & Meghalaya:** Haflong= 57, Silchar_Inns_College= 55, Kokraghar= 44, Chirang= 44, Marigaon = 39, Shillongani_Amfu = 39, Cachet_Kvk= 39, Dullavcherra_Aegcl= 39, Guwahati = 37, Borgaon_Hwc = 37
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Khoupum= 52, Tujangvaichong = 42,
- ❖ **Marathawada:** Ambejogai BEED 54
- ❖ **Gangetic West Bengal:** Barrackpore_Aws400 (40.7 Km/H), Dinhata_Aws400 (40.7 Km/H), Raidighi (38.9 Km/H), Kolkata Airport (33.3 Km/H), Berhampore (33.3 Km/H), Canning (33.3 Km/H), Diamond Harbour (35.2 Km/H), Gangasagar (31.5 Km/H), Imd_Mo_Digha (35.2 Km/H), Kzi_Airport (35.2 Km/H).
- ❖ **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Ramban(Govindpura)=35 Jammu(Chata)=35
- ❖ **Jharkhand:** Bokaro_Kvk (46.3 Km/H), Simdega (42.6 Km/H), Bano-Simdega_Kvk (38.9 Km/H), Diyakel-Khunti_Kvk (35.2 Km/H), West_Singhbhum - Jagannathpur-Bau_Kvk (29.6 Km/H), Saraikela (29.6 Km/H), Pakur_Kvk (29.6 Km/H).
- ❖ **Odisha:** Benakuda_Kvk (40.7 Km/H), Gunupur_Kvk (37.0 Km/H), Janhukuda(Near_Satapada) (37.0 Km/H), Cuttack_Kvk (31.5 Km/H), Jagatsinghpur_Kvk (31.5 Km/H).
- ❖ **West Madhya Pradesh:** Bhopal - Indore 52 kmph
- ❖ **East Madhya Pradesh:** Sagar 39 kmph
- ❖ **Vidarbha:** Wardha 57 kmph
- ❖ **Uttarakhand:** (AWS) Ranichauri-33, Pantnagar-31, Pithoragarh-31
- ❖ **Punjab:** FAZILKA=41
- ❖ **Haryana:** SIRSA=52, JIND=39, GURGAON=39
- ❖ **East Uttar Pradesh:** LUCKNOW-33

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

- ❖ Yesterday, Maximum Temperatures were in the range of **40-43°C** in many parts of Punjab, East Uttar Pradesh, Vidarbha; in a few parts of Haryana-Chandigarh-Delhi, East Madhya Pradesh; in isolated parts of Rajasthan, Saurashtra & Kutch, Bihar, Jharkhand, Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu, Puducherry & Karaikal; in the range **36-40°C** in many parts of Telangana, Gangetic West Bengal; in a few parts of Gujarat Region; in isolated parts of Madhya Maharashtra, Marathwada, Uttarakhand, Himachal Pradesh and they were less than **36°C** elsewhere over remaining parts of the country. Yesterday, the highest **maximum temperature of 45.1°C** was reported at **Ganganagar (West Rajasthan)** over the country.
- ❖ Yesterday, **Maximum Temperature Departures (as on 14-05-2025)**: Maximum Temperatures were **appreciably above normal (3.1°C to 5.0°C)** at few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at isolated places over Himachal Pradesh, Bihar, East Uttar Pradesh; **above normal (1.6°C to 3.0°C)** at most places over Punjab; at few places over Uttarakhand, Haryana-Chandigarh-Delhi; at isolated places over West Rajasthan, West Uttar Pradesh, Tamil Nadu, Puducherry & Karaikal, Gangetic West Bengal. These were **markedly below normal (-5.1°C or less)** at many places over Madhya Maharashtra, Marathwada; at few places over Telangana, Arunachal Pradesh; at isolated places over North Interior Karnataka, Konkan & Goa, Chhattisgarh, Assam & Meghalaya; **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Odisha, Madhya Pradesh, Vidarbha; **below normal (-1.6°C to -3.0°C)** at many places over Gujarat Region; at few places over Sub-Himalayan West Bengal & Sikkim; at isolated places over Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Saurashtra & Kutch, East Rajasthan and normal over rest parts of the country (Fig. 2).

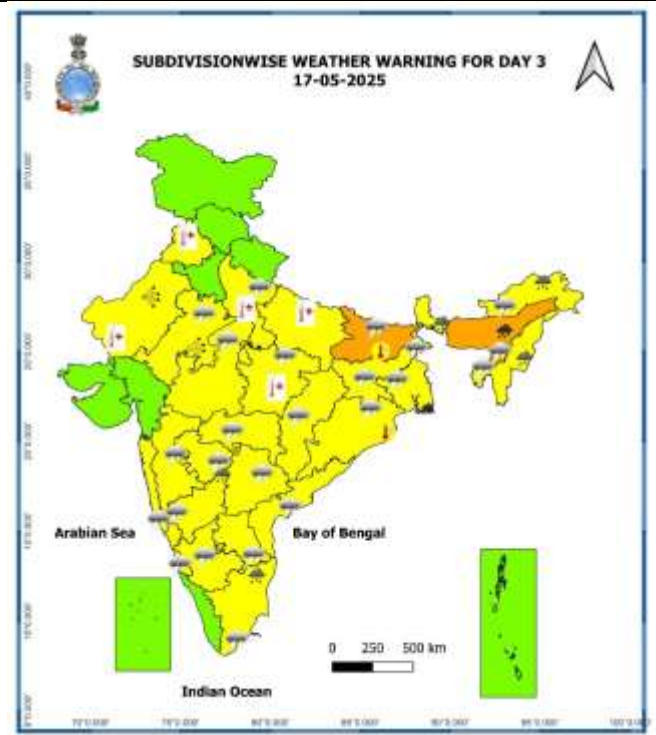
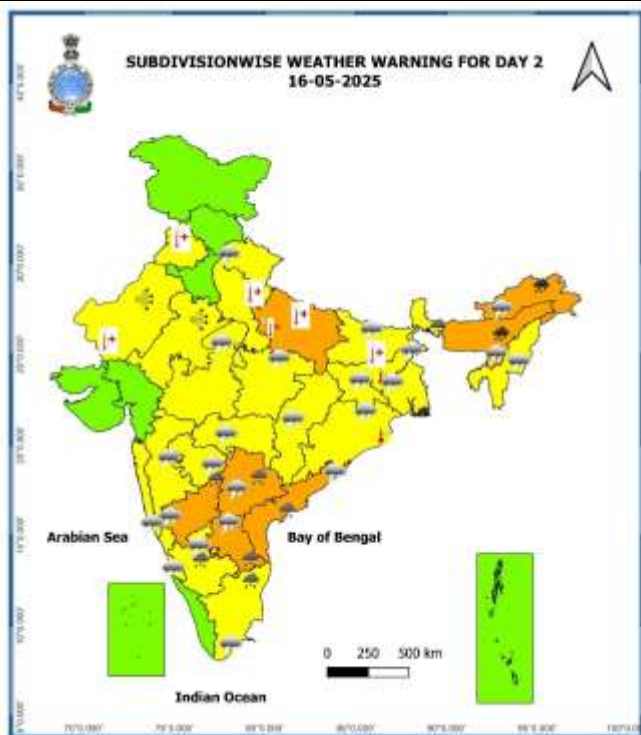
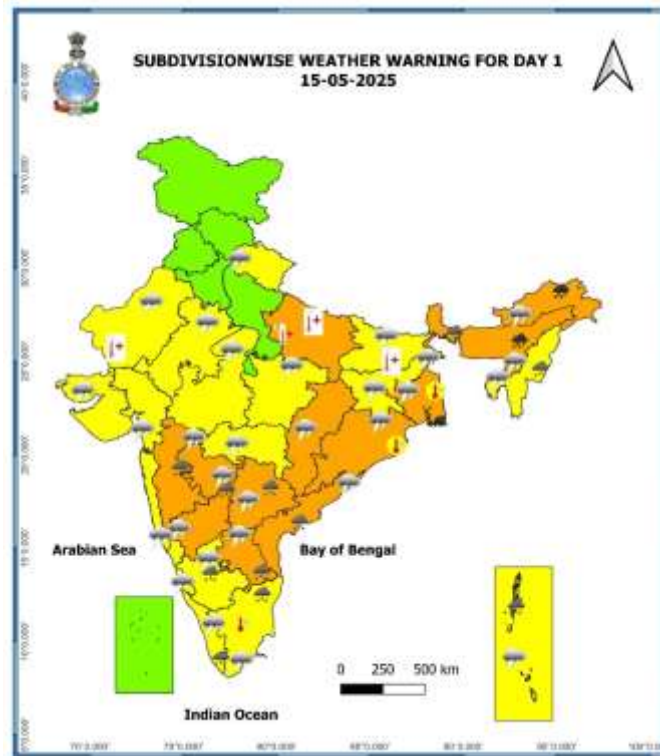
Fig. 1: Maximum Temperatures

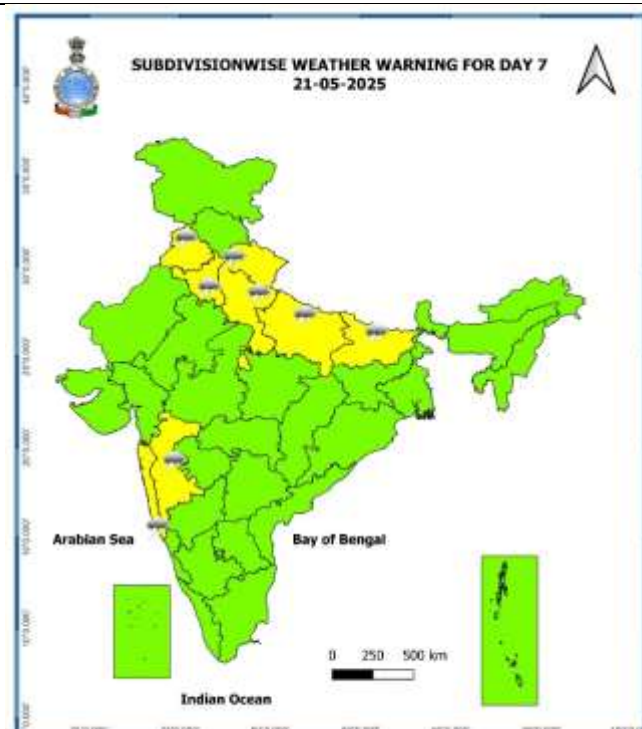
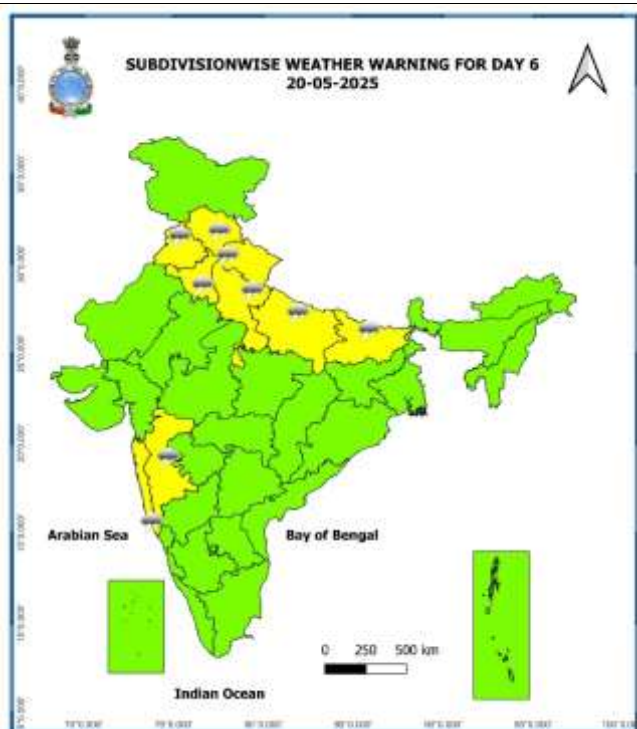
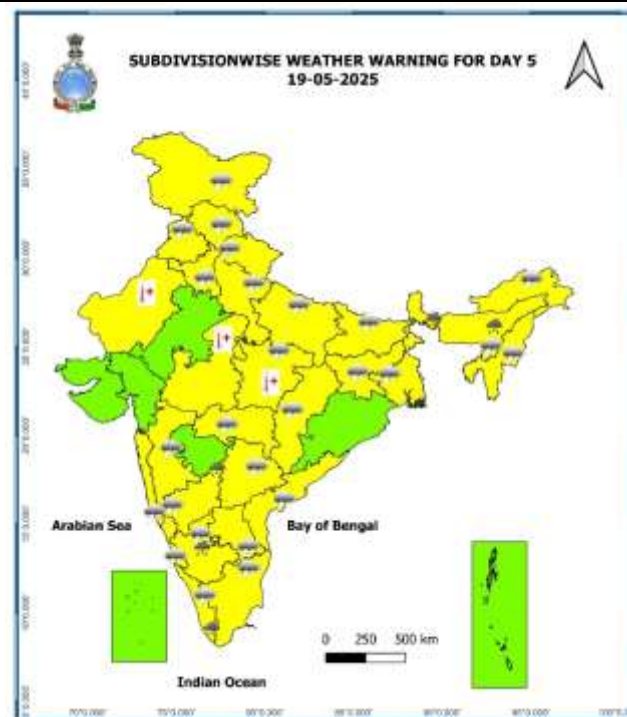
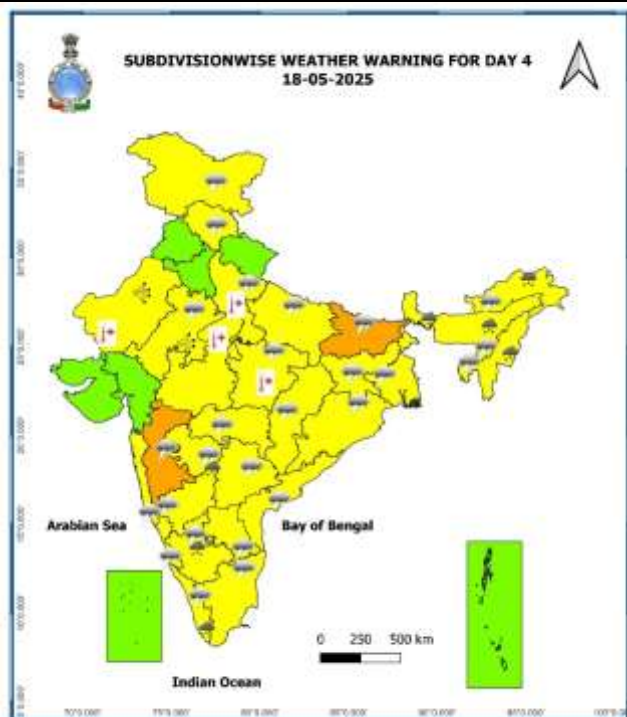
Fig. 2: Departure of Maximum Temperatures



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

- 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 15th to 18th May 2025**Past Weather:**

There has been rise in minimum temperature up to 03°C and rise in maximum temperature up to 01°C over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 40 to 42°C and 24 to 26°C respectively. The minimum temperature was near normal and the maximum temperature was near normal over Delhi/NCR. Partly cloudy sky conditions with predominant surface wind from the northwest direction with wind speeds less than 18 kmph gusting to 40 kmph prevailed during the past 24 hours. Partly cloudy sky conditions with wind speed less than 20 kmph from the northwest direction prevailed over the region in the forenoon today.

Weather Forecast:

15.05.2025: Partly cloudy sky. Sustained surface winds (speed 15 – 25 kmph) occasionally gusting to 35 kmph. The maximum temperatures over Delhi are likely to be in the range of 40 to 42°C. The maximum temperature will be above normal up to 01 - 02°C. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 25 kmph till evening. It would decrease becoming less than 12 kmph from the northwest direction during the night.

16.05.2025: Partly cloudy sky. Possibility of very light rain/thunderstorm/lighting and gusty winds (speed 30-40 kmph), temporarily reaching to 50 kmph during thunderstorm towards evening/night. The maximum and minimum temperatures over Delhi are likely to be in the range of 40 to 42°C and 25 to 27°C respectively. The minimum temperature will be near normal and the maximum temperature will be above normal up to 01 - 02°C. The predominant surface wind will likely be from the northwest direction with a wind speed of 15-20 kmph during morning hours. The wind speed will gradually decrease becoming 08-12 kmph from the northwest direction in the afternoon. It will increase becoming less than 20 kmph from the northwest direction during evening and night.

17.05.2025: Partly cloudy sky. Possibility of very light rain/thunderstorm/lighting and gusty winds (speed 30-40 kmph), temporarily reaching to 50 kmph during thunderstorm during morning. The maximum and minimum temperatures over Delhi are likely to be in the range of 39 to 41°C and 25 to 27°C respectively. The minimum temperature will be near normal and the maximum temperature will be above normal up to 01 - 02°C. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 20 kmph during the morning hours. The wind speed will gradually decrease becoming 08-12 kmph from the northwest direction in the afternoon. It will increase becoming less than 20 kmph from the northwest direction during evening and night.

18.05.2025: Partly cloudy sky. Sustained surface winds (speed 15 – 25 kmph) occasionally gusting to 35 kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 39 to 41°C and 23 to 25°C respectively. The minimum temperature will be below normal up to 01 – 03°C, and the maximum temperature will be near normal. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 18 kmph during the morning hours. The wind speed will gradually decrease becoming 08-12 kmph from the northwest direction in the afternoon. It will increase becoming less than 20 kmph from the northwest direction during evening and night.

Impact expected and Action Suggested:

- Be cautious and take precautionary measures though there is no likelihood of heat wave conditions. There is likelihood of heat related impact to vulnerable population as the temperatures are likely to be above normal.
- Moderate health concern for vulnerable people e.g. infants, elderly people with chronic diseases.
- Avoid heat exposure, wear light weight, light colored, loose, cotton clothes, cover your head, use a cloth, hat or umbrella.

Impact & Action Suggested due to very heavy rainfall over

- ✓ **Very heavy rainfall** over Arunachal Pradesh on 15th & 16th; Assam & Meghalaya during 15th-17th May.

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).

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 isolated thunderstorm with lightning/gusty & Squally winds & Hailstorm over

- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Gangetic West Bengal, Odisha, Marathwada on 15th; Madhya Maharashtra on 15th & 18th, Bihar on 17th & 18th May. Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, north Interior Karnataka on 15th & 16th and Konkan & Goa on 19th May..

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 conditions over in isolated pockets of Bihar on 15th & 16th; Punjab on 16th & 17th; West Uttar Pradesh during 16th-18th; East Uttar Pradesh during 15th-17th; West Rajasthan during 15th-19th; East Madhya Pradesh during 17th-19th; West Madhya Pradesh on 18th & 19th May.

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 Heavy Rainfall / Gusty Winds / Heat Wave

- In **North Eastern States, Andaman & Nicobar Islands, Sub Himalayan West Bengal & Sikkim, Madhya Maharashtra, Tamil Nadu, Kerala, Karnataka, Andhra Pradesh** and **Telangana**, make provision to drain out excess water from standing crop and vegetable fields.
- 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.
- In **Bihar, Punjab, Uttar Pradesh** and **West Rajasthan**, apply light and frequent irrigation in the evening to protect standing crops, vegetables and orchards from the adverse effects of heat waves and high temperatures.

Livestock / Poultry / 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.

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

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