



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



Press Release

Date: 11th May, 2025

Time of Issue: 1420 hours IST

- Subject:** i) Heat wave conditions likely over some areas of Bihar and West Bengal till 15th May and likely to commence over Jharkhand and north Odisha from 13th May, 2025.
ii) Rainfall accompanied with thunderstorms and lightning likely to continue over Northwest India till 12th & West and Central India till 13th May, 2025 and decrease significantly thereafter.
iii) Heavy to very heavy rainfall accompanied with thunderstorm & lightning likely over Northeast India during 11th to 15th May, 2025.

Advance of Southwest Monsoon:

Southwest Monsoon is very likely to advance into South Andaman Sea, some parts of Southeast Bay of Bengal and Nicobar Islands around 13th May, 2025. It is likely to further advance over some parts of south Arabian Sea, Maldives & Comorin area; some more parts of South Bay of Bengal, entire Andaman & Nicobar Islands and Andaman Sea; and some parts of central Bay of Bengal during subsequent 4-5 days.

Realised weather during past 24 hours till 0830 hours IST of today, the 11th May 2025 (Annexure I):

- ❖ **Thunderstorm accompanied with Squally/Gusty winds** with speed 70-85 kmph prevailed at isolated places over Haryana, Jharkhand, Gujarat Region, Telangana, Assam; with speed 30-60 kmph prevailed at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Manipur, Mizoram & Tripura, Madhya Maharashtra, Tamilnadu Puducherry & Karaikal, Kerala, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka.

- ❖ **Heavy rainfall** has been recorded at isolated places over Saurashtra and Assam.

For more details of realised weather, kindly refer **Annexure I**

Temperature:

- ❖ Yesterday, Maximum Temperatures were in the range of 39-43°C over some areas of Gangetic West Bengal, Odisha, Bihar and East Uttar Pradesh. Maximum Temperatures were also appreciably above normal over some areas of Sub-Himalayan West Bengal, Bihar and Gangetic West Bengal. Detailed observations of Maximum Temperature during past 24 hours till 0830 hours IST of today are appended in **Annexure II**.

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

- ❖ The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along Long. 71°E to the north of Lat. 28°N.
- ❖ A **trough** runs from Saurashtra to eastcentral Arabian Sea across North East Arabian Sea in lower tropospheric levels.
- ❖ The **north-south trough** from Marathwada to Gulf of Mannar across Interior Karnataka and Tamil Nadu in lower tropospheric levels.
- ❖ The upper air **cyclonic circulation** over Northeast Assam & neighbourhood in lower & middle tropospheric levels.
- ❖ A trough runs from above cyclonic circulation to Jharkhand across north Bangladesh, Gangetic West Bengal in lower tropospheric levels.
- ❖ Under the influence of these systems, the following weather is likely:

Northwest India:

- ✓ **Isolated to Scattered** light to moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Haryana Chandigarh, northeast Rajasthan on 11th & 12th; Uttarakhand, Uttar Pradesh, West Rajasthan on 11th May.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Punjab, Haryana Chandigarh on 11th May.

West India:

- ✓ **Isolated** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph** likely over Madhya Maharashtra during 11th-15th; **with winds speed reaching 30-40 kmph gusting to 50 kmph** over Konkan & Goa on 11th & 13th; Marathwada during 11th-13th; Gujarat State on 11th & 12th May.

East & Central India:

- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph** likely over West Madhya Pradesh during 11th-13th; Chhattisgarh, West Bengal & Sikkim during 11th-15th, Bihar, Jharkhand on 15th; **with winds speed reaching 30-40 kmph gusting to 50 kmph** over East Madhya Pradesh, Vidarbha, Jharkhand during 11th-13th; Bihar on 11th and over an during 13th-15th May.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Sub-Himalayan West Bengal & Sikkim on 11th & 12th; Chhattisgarh on 14th & 15th May.
- ✓ **Isolated heavy rainfall** likely over Nicobar on 13th & 14th; Sub-Himalayan West Bengal & Sikkim during 11th-15th with **isolated very heavy rainfall** on Sub-Himalayan West Bengal & Sikkim on 12th May.

South peninsular India:

- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Tamilnadu Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Interior Karnataka during 11th-15th; with **lightning** over Lakshadweep on 11th & 12th and over Coastal Karnataka during 11th-15th May.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Coastal Andhra Pradesh & Yanam on 13th & 14th and over Telangana on 14th & 15th May.
- ✓ **Isolated heavy rainfall** likely over Tamilnadu Puducherry & Karaikal during 13th-15th; Rayalaseema during 14th-16th; South Interior Karnataka on 11th and during 13th-15th May.

Northeast India:

- ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Northeast India during next 5 days.
- ✓ **Isolated heavy rainfall** over Arunachal Pradesh, Assam & Meghalaya during 11th-15th and over Nagaland, Manipur, Mizoram & Tripura during 11th-14th with isolated **very heavy rainfall** over Arunachal Pradesh, Assam & Meghalaya on 13th-14th May.
- ✓ **Extremely heavy rainfall** at isolated places over Meghalaya on 13th May.
- ✓ **Isolated hailstorm** at isolated places over Meghalaya on 11th May.

Maximum Temperature Forecast:

- ❖ Gradual rise in maximum temperatures by 3-5°C likely over Northwest India and Gujarat State during next 7 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Central India during next 7 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Jharkhand and north interior Odisha during next 3 days.
- ❖ No significant change in maximum temperatures likely over interior Maharashtra during next 2 days and gradual rise by 2-4°C thereafter for subsequent 5 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 Sub-Himalayan West Bengal, Bihar during 11th-14th; Gangetic West Bengal during 11th-15th; Jharkhand on 13th & 14th; north coastal Odisha during 13th-15th; West Uttar Pradesh during 15th-17th; East Uttar Pradesh during 14th-17th and West Rajasthan on 17th May.
- ❖ **Hot & humid weather** is likely to prevail over Jharkhand, Tamilnadu Puducherry & Karaikal, Kerala & Mahe on 11th & 12th; Odisha, Tripura on 11th May.

iv. Weather conditions and forecast over Delhi/NCR during 11th May to 14th May, 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>

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

- ❖ **Light/moderate Rainfall with thunderstorm & lightning** observed **at most places** over Assam & Meghalaya and Uttarakhand; **at many places** over Arunachal Pradesh, Sub Himalayan West Bengal & Sikkim, Himachal Pradesh, Vidarbha and Lakshadweep; **at a few places** over Nagaland, Manipur, Mizoram & Tripura, Haryana-Chandigarh-Delhi and Saurashtra & Kutch; **at isolated places** over Gangetic West Bengal, Odisha, Jharkhand, Bihar, East Uttar Pradesh, West Uttar Pradesh, Punjab, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, East Rajasthan, West Madhya Pradesh, East Madhya Pradesh, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Marathwada, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka and Kerala & Mahe.

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

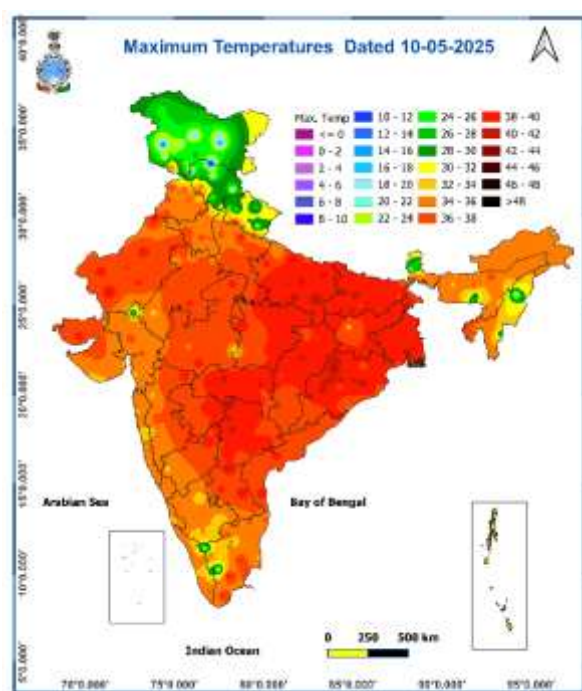
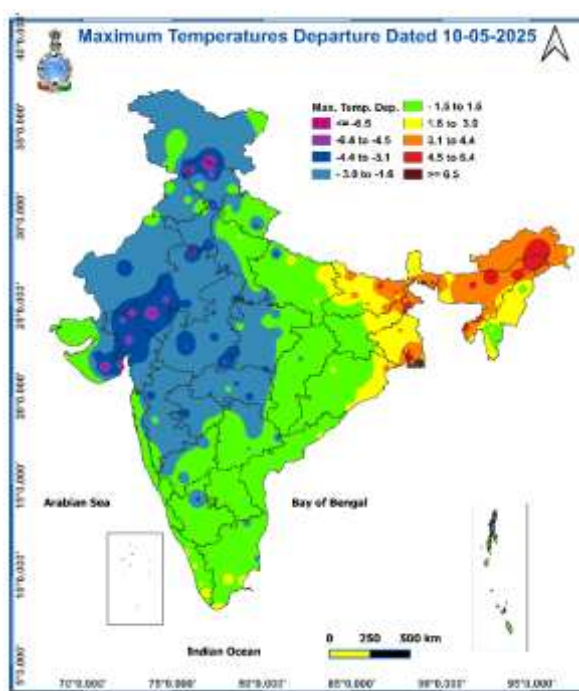
- ❖ **Saurashtra & Kutch:** Kutiana (dist Porbandar) 10; Jamkandorna (dist Rajkot) 8; Dhoraji (dist Rajkot) 7; Manavadar (dist Junagadh), Jetpur (dist Rajkot) 6 Each; Dhrol (dist Jamnagar), Upleta (dist Rajkot) 4 Each;
- ❖ **Assam & Meghalaya:** Algapur Circle AWS (dist Hailakandi) 7, Tangla_arg (dist Udalguri) 7, Pandu (dist Kamrup M) 7, B P Ghat (dist Sribhumi), Tangla ARG (dist Udalguri) 6 Each; Bajali AWS (dist Bajali) 5; Majbat (dist Udalguri), Sivasagar (dist Sibsagar), Ranganadi Nt Xing (dist Lakhimpur), Laharighat ARG (dist Morigaon), Mazbat ARG (dist Udalguri) 4 Each;
- ❖ **Gujarat Region:** Idar (dist Sabarkantha) 6;
- ❖ **South Interior Karnataka:** M M Hills (dist Chamarajanagar) 5;
- ❖ **Uttarakhand:** Dhanaulti (dist Garhwal Tehri) 5; Thalain (dist Garhwal Pauri) 4;
- ❖ **Sub Himalayan West Bengal & Sikkim:** Mangan (dist Mangan) 5; Chengmari/Diana (dist Jalpaiguri) 4; Coastal Karnataka: Puttur HMS (dist Dakshina Kannada) 4;

Realised Gusty Winds (Knot, IST) during past 24hours ending at 0300 UTC of today i.e 11.05.2025 (Received DATA):

- ❖ **Arunachal Pradesh:** Kalaktang = 23, Anini = 23, Deomali = 22, Itanagar = 22, Tawang = 21, Dirang 19, Longding_New = 19, Kangku = 17
- ❖ **Assam & Meghalaya:** Mawsynram = 21, Barpeta = 43, Sonitpur_Amfu = 43, Goalpara = 39, Gossaigaon_Amfu = 37, Bargaon_Hwc = 35, Chandubi = 35, Kukurmara_Mirza_Aegcl = 35, Gauhati_University = 34, Guwahati = 33, Marigaon = 32, Chirang = 31, Guwahati_City = 30, Shillongani_Amfu = 29, Down_Town_University = 28, Kokraghar = 26, Dullavcherra_Aegcl = 26, Nalbari_Kvk = 26
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Imphal_Afmu = 19, Porompat = 19, Aizawl = 25, Agartala = 32;
- ❖ **Andaman & Nicobar Islands:** Sri Vijayapuram (26 Kmph)
- ❖ **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Ramban (Govindpora) = 20kt, Kathua = 18kt
- ❖ **Himachal Pradesh:** R-Peo = 27kt, Bilaspur & Tabo (Each) = 22kt, Bajaura = 20kt
- ❖ **Punjab:** Sangrur = 52, Fatehgarh Sahib = 52, Patiala (Rauni) = 50, Patiala = 46, Pathankot = 43
- ❖ **Haryana:** Kaithal (Kaul) = 72, Rohtak = 54, Ind = 3, Panipat (Ujha) = 37
- ❖ **West Uttar Pradesh:** Shahjahanpur (Aws) = 48, Agra (Iaf) = 46, Bulandshahar (Aws) = 46
- ❖ **East Uttar Pradesh:** Kushinagar = 37, Fatehpur = 41
- ❖ **Madhya Maharashtra:** Jalgaon (Aws) = 26 Knots, Pune (Aws) = 23 Knots, Satara (Aws) = 25 knots
- ❖ **Telangana:** Warangal_Rural (47kt),
- ❖ **Jharkhand:** Bokaro (43kt)

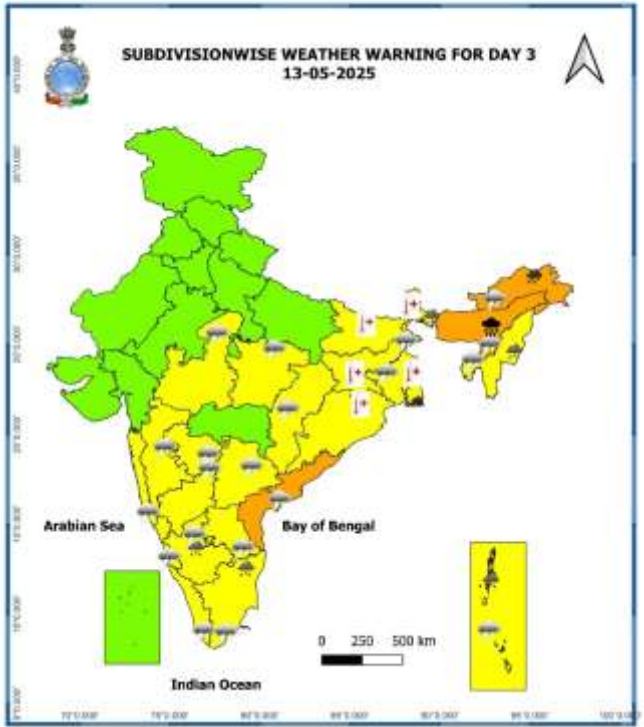
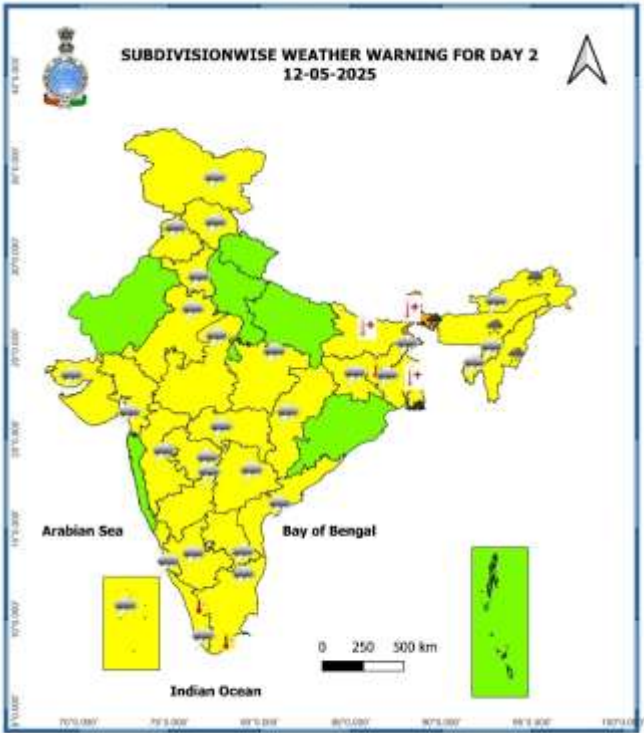
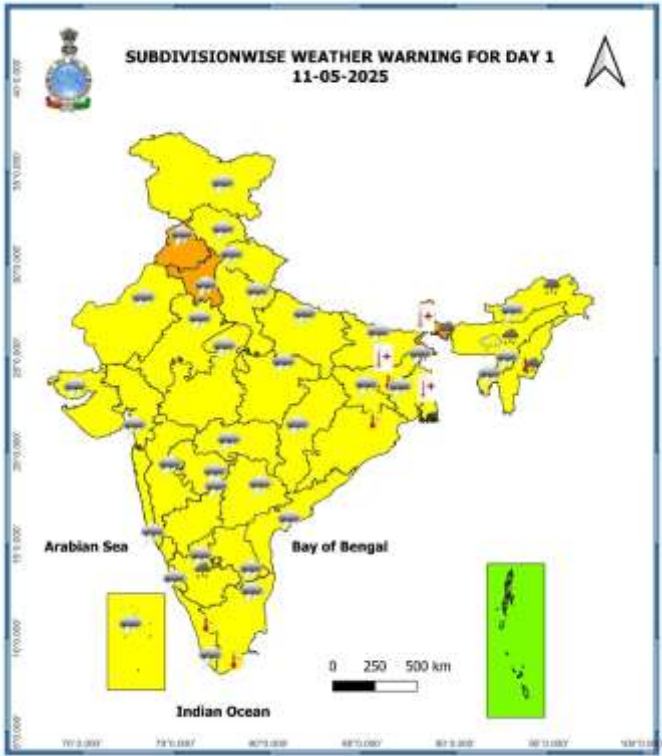
Temperature observations during past 24 hours till 0830 hours IST of today:

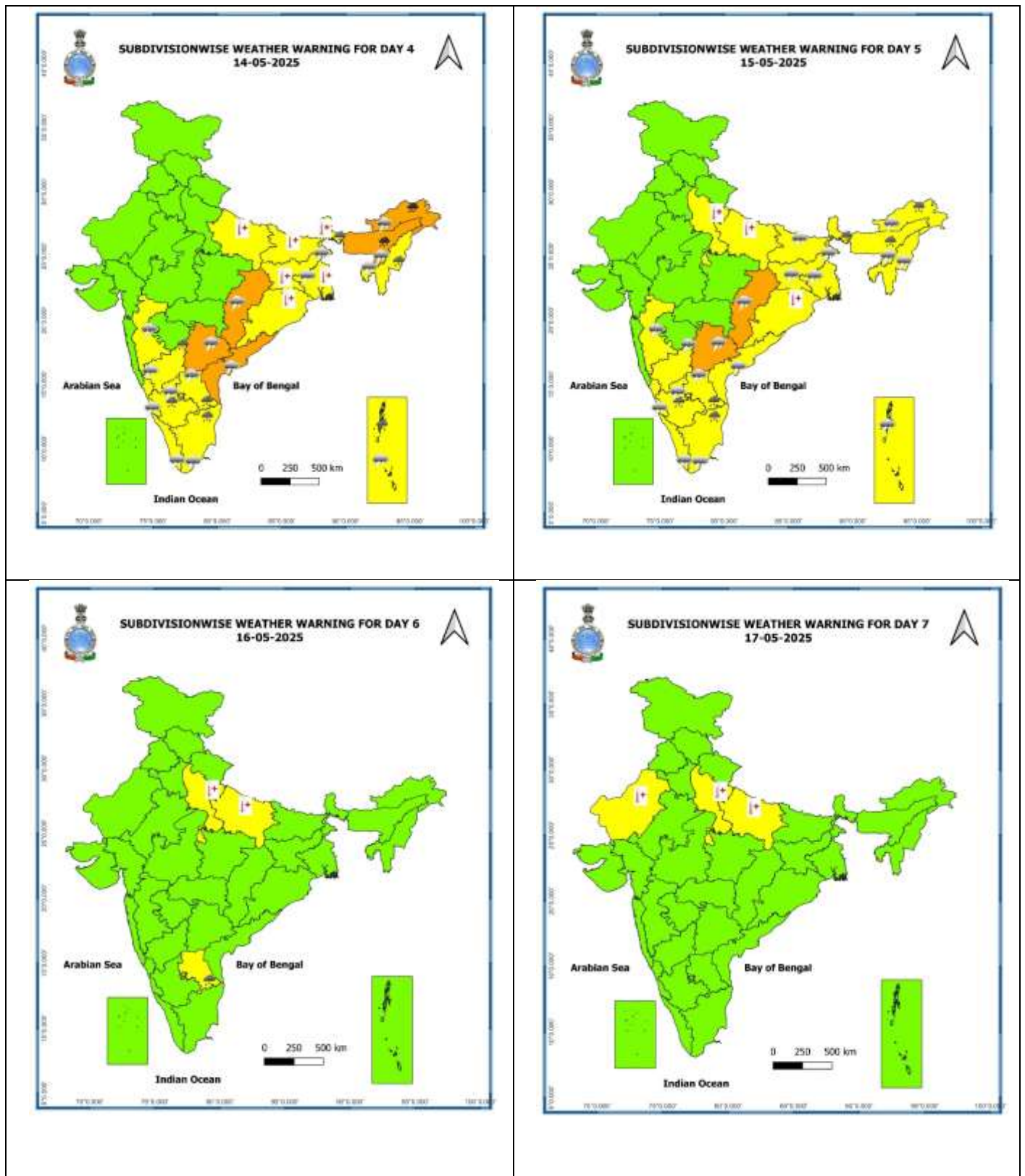
- ❖ Yesterday, Maximum Temperatures were in the **range of 39-43°C** in many pockets over Gangetic West Bengal, Odisha, Vidarbha; at a few pockets over Bihar, East Uttar Pradesh, East Madhya Pradesh, Jharkhand, Marathwada, Rayalaseema; at isolated places over Chhattisgarh, Coastal Andhra Pradesh & Yanam, West Rajasthan, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, West Uttar Pradesh; in the **range 35-39°C** at a few pockets over East Rajasthan, Haryana-Chandigarh-Delhi, Punjab, West Madhya Pradesh, Madhya Maharashtra, Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe; at a isolated pockets over Gujarat state, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, North Interior Karnataka and they were **less than 34°C** elsewhere over remaining parts of the country. Yesterday, the **highest maximum temperature of 43.2°C** was reported at **Kalikunda (West Bengal)** over the country.
- ❖ Yesterday, Maximum Temperatures were **markedly above normal (5.1 or more)** at isolated places over Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim; **appreciably above normal (3.1°C to 5.0°C)** at a few places over Bihar; at isolated places over Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura; **above normal (1.6°C to 3.0°C)** at isolated places over East Uttar Pradesh, Jharkhand, Odisha, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal. These were **markedly below normal (-5.1 or below)** at a few places over Himachal Pradesh, East Rajasthan, Gujarat State; at isolated places West Madhya Pradesh; **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Haryana, Vidarbha, Madhya Maharashtra; **below normal (-1.6°C to -3.0°C)** at many places over Punjab, Marathwada; at few places over East Madhya Pradesh; at isolated places over Uttarakhand, East Uttar Pradesh, Telangana, Interior Karnataka, Andaman & Nicobar Islands 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	11-May	12-May	13-May	14-May	15-May	16-May	17-May
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	FWS	WS	WS	WS	WS	WS	WS
2	ARUNACHAL PRADESH	FWS	WS	WS	WS	FWS	FWS	FWS
3	ASSAM & MEGHALAYA	WS	WS	WS	WS	FWS	FWS	FWS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS	FWS	SCT	SCT	SCT	SCT	SCT
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	FWS	WS	WS	WS	WS	FWS	FWS
6	GANGETIC WEST BENGAL	ISOL	ISOL	ISOL	ISOL	SCT	SCT	SCT
7	ODISHA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
8	JHARKHAND	ISOL	ISOL	DRY	DRY	ISOL	SCT	SCT
9	BIHAR	ISOL	DRY	DRY	ISOL	SCT	ISOL	ISOL
10	EAST UTTAR PRADESH	ISOL	DRY	DRY	DRY	DRY	ISOL	ISOL
11	WEST UTTAR PRADESH	ISOL	DRY	DRY	DRY	DRY	DRY	ISOL
12	UTTARAKHAND	SCT	ISOL	ISOL	ISOL	ISOL	SCT	SCT
13	HARYANA CHANDIGARH & DELHI	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY
14	PUNJAB	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY
15	HIMACHAL PRADESH	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
16	JAMMU & KASHMIR AND LADAKH	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
17	WEST RAJASTHAN	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	ISOL	ISOL	DRY	DRY	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	SCT	ISOL	ISOL	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	SCT	ISOL	ISOL	DRY	DRY	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	DRY	DRY
26	VIDARBHA	ISOL	ISOL	SCT	SCT	ISOL	ISOL	ISOL
27	CHHATTISGARH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	SCT	SCT	FWS	FWS	SCT	SCT
29	TELANGANA	ISOL	SCT	SCT	FWS	FWS	FWS	SCT
30	RAYALASEEMA	ISOL	SCT	SCT	FWS	FWS	FWS	SCT
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	SCT	SCT	SCT	SCT	SCT
32	COASTAL KARNATAKA	SCT	FWS	FWS	WS	WS	FWS	FWS
33	NORTH INTERIOR KARNATAKA	ISOL	SCT	SCT	FWS	FWS	FWS	SCT
34	SOUTH INTERIOR KARNATAKA	SCT	SCT	FWS	WS	WS	WS	FWS
35	KERALA & MAHE	SCT	SCT	SCT	SCT	SCT	SCT	SCT
36	LAKSHADWEEP	FWS	FWS	SCT	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 11th to 14th May 2025

Past Weather:

There has been fall in minimum temperature up to 02°C and fall 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 35 to 36°C and 21 to 24°C respectively. The minimum temperature was below normal up to 02 - 05°C and the maximum temperature was below normal up to 02 - 05°C over Delhi/NCR. Partly cloudy sky conditions with predominant surface wind from the variable direction with wind speeds less than 16 kmph gusting to 45 kmph prevailed during the past 24 hours. Light to moderate rainfall has been recorded in many parts of Delhi. Partly cloudy sky conditions with wind speed less than 10 kmph from the northwest direction prevailed over the region in the forenoon today.

Weather Forecast:

11.05.2025: Partly cloudy sky. Very light rain accompanied with thunderstorm/ lighting. Strong surface winds (speed 30 - 40 kmph) may increase temporarily upto 50 kmph during thunderstorm. The maximum temperatures over Delhi are likely to be in the range of 37 to 39°C. The maximum temperature will be below normal upto 01 - 02°C. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 20 kmph till evening. It would decrease becoming less than 18 kmph from the west direction during the night.

12.05.2025: 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 38 to 40°C and 25 to 27°C, respectively. The minimum temperature will be above normal up to 01 - 02 °C, 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 10-15 kmph during morning hours. The wind speed will gradually increase becoming 15-20 kmph from the northwest direction in the afternoon. It will decrease becoming less than 18 kmph from the west direction during evening and night.

13.05.2025: 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 38 to 40°C and 27 to 29°C respectively. The minimum temperature will be above normal up to 02 - 04 °C 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 increase becoming 20-25 kmph from the northwest direction in the afternoon. It will decrease becoming less than 18 kmph from the northwest direction during evening and night.

14.05.2025: 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 27 to 29°C respectively. The minimum temperature will be above normal up to 02 - 04 °C, and the maximum temperature will be below 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 increase becoming 20-25 kmph from the northwest direction in the afternoon. It will decrease becoming less than 16 kmph from the west 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 coloured, loose, cotton clothes, cover your head, use a cloth, hat or umbrella.

Impact & Action Suggested due to heavy to very heavy rainfall over

- ✓ **Extremely heavy rainfall** at isolated places over Meghalaya on 13th May.
- ✓ **Isolated heavy rainfall** over Arunachal Pradesh, Assam & Meghalaya during 11th-15th and over Nagaland, Manipur, Mizoram & Tripura during 11th-14th with isolated **very heavy rainfall** over Arunachal Pradesh, Assam & Meghalaya on 13th-14th May and **Isolated heavy rainfall** likely over Nicobar on 13th & 14th; Sub-Himalayan West Bengal & Sikkim during 11th-15th with **isolated very heavy rainfall** on Sub-Himalayan West Bengal & Sikkim on 12th 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** over Punjab, Haryana Chandigarh on 11th; Sub-Himalayan West Bengal & Sikkim on 11th & 12th; Chhattisgarh, Telangana on 14th & 15th May. Coastal Andhra Pradesh & Yanam on 13th & 14th May.
- ✓ **Isolated hailstorm** at isolated places over Meghalaya on 11th 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 Sub-Himalayan West Bengal, Bihar during 11th-14th; Gangetic West Bengal during 11th-15th; Jharkhand on 13th & 14th; north coastal Odisha during 13th-15th; West Uttar Pradesh during 15th-17th; East Uttar Pradesh during 14th-17th and West Rajasthan on 17th 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 **Tamil Nadu, South Interior Karnataka, Sub Himalayan West Bengal & Sikkim** and **North Eastern States**, make provision to drain out excess water from standing crop and vegetable fields.
- In **Meghalaya**, use hail nets and hail caps to prevent mechanical damage in vegetables and orchards due to the possibility of hailstorms.
- 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.
- To protect standing crops, vegetables and orchards from the adverse effects of heat waves and high temperatures, apply light and frequent irrigation in the evening.

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

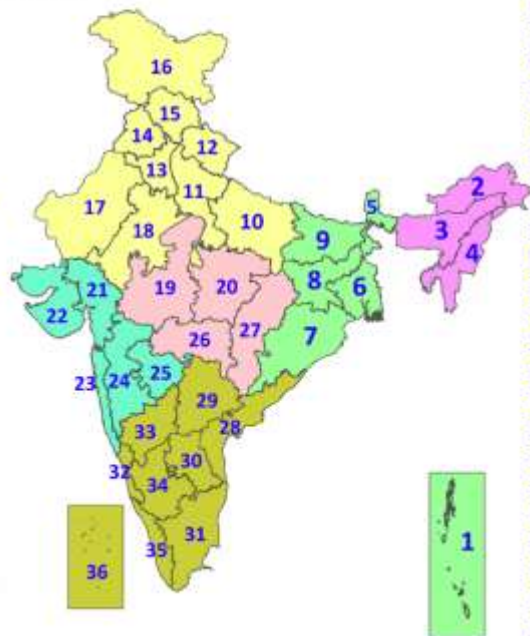
32. तटीय कर्नाटक

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.