



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release
Date: 24th April, 2025
Time of Issue: 1345 hours IST

Subject: i) Heat wave conditions likely over plains of Northwest India till 29th and East & Central India till 26th April, 2025;
ii) Heavy to very heavy rainfall spell likely to continue over Northeast India till 27th April, 2025.
iii) A fresh spell of rainfall accompanied with thunderstorms & lightning over East & adjoining central India from 26th to 28th April, 2025.

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

- ❖ **Thunderstorm accompanied with Squally/Gusty winds** speed reaching 50-60 kmph prevailed at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Madhya Pradesh, Tamilnadu Puducherry & Karaikal, Kerala & Mahe, North Interior Karnataka, Coastal Andhra Pradesh & Yanam and Telangana.
- ❖ **Hailstorm** occurred at isolated places over Sub-Himalayan West Bengal & Sikkim.
- ❖ **Heavy to very heavy rainfall with extremely heavy falls** recorded at isolated places over Assam & Meghalaya; heavy to very heavy rainfall at isolated places over Arunachal Pradesh; and **heavy rainfall** at isolated places over Kerala
- ❖ **Heat wave conditions** prevailed in isolated pockets of Gangetic West Bengal, Bihar, Odisha, Jharkhand, East Madhya Pradesh, Vidarbha and Telangana.
- ❖ **Warm night conditions** prevailed in isolated pockets of Telangana, Jharkhand and Odisha.
- ❖ **Hot & humid weather** prevailed in isolated pockets of Marathawada.

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):

- ❖ An upper air cyclonic circulation lies over north Bangladesh and another over northeast Assam in lower tropospheric levels. A north-south trough runs from central Chhattisgarh to Gulf of Mannar in lower tropospheric levels.
- ❖ Under the influence of these systems:
 - ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 40-50 kmph gusting to 60 kmph** likely over Northeast India during next 7 days.
 - ✓ **Heavy rainfall** likely over Assam & Meghalaya, Arunachal Pradesh during 24th-27th; over Nagaland, Mizoram & Tripura during 24th-26th with **very heavy rainfall** over Arunachal Pradesh on 24th and over Assam & Meghalaya on 24th & 26th April.

- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe, Tamilnadu Puducherry & Karaikal during next 7 days.
 - ✓ **Isolated heavy rainfall** over Kerala on 24th, 28th & 29th and Tamil Nadu on 24th April.
 - ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 40-50 kmph gusting to 60 kmph** likely over East India and East Uttar Pradesh during 26th-29th April.
 - ✓ **Isolated hailstorm** activity likely over Jharkhand on 27th & 28th and Odisha on 28th April.
 - ✓ **Thundersquall (wind speed reaching 50-60 kmph)** likely over Bihar during 26th-28th and Gangetic West Bengal, Vidarbha, Chhattisgarh, East Madhya Pradesh on 27th & 28th and South Interior Karnataka on 27th April.
 - ✓ **Isolated heavy rainfall** over Sikkim on 26th & 27th with **very heavy rainfall** on 26th April.
- ❖ A fresh Western Disturbance seen as a trough in middle tropospheric westerlies roughly along Long. 69°E to the north of Lat. 31°N. Under its influence;
- ✓ **Isolated to scattered** light rainfall with **thunderstorm & lightning** likely over Western Himalayan Region during 24th-26th April.

Temperature Forecast:

- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Punjab, Haryana Chandigarh & Delhi, Rajasthan during next 6 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Uttar Pradesh during next 3 days and fall by 2-3°C for subsequent 4 days.
- ❖ No significant change in maximum temperatures likely over Gujarat during next 3 Days and rise by 2-3°C for subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over East India & adjoining Central India during next 3 days and fall by 3-5°C for subsequent 4 days.
- ❖ 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 West Madhya Pradesh during 24th-30th; Rajasthan during 25th-30th; East Madhya Pradesh during 24th-27th; Uttar Pradesh, Vidarbha, Bihar, Odisha, Jharkhand, West Bengal during 24th-26th; Punjab, Haryana during 25th-29th; Chhattisgarh, Telangana, Madhya Maharashtra and Marathwada on 24th & 25th April.
- ❖ **Warm night conditions** very likely in isolated pockets over Gangetic West Bengal, Odisha on 24th & 25th; Bihar, Telangana on 24th April.
- ❖ **Hot & humid weather** is likely to prevail over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema during 24th-26th; Gujarat State on 24th & during 27th-30th April.

iv. Weather conditions and forecast over Delhi/NCR during 24th April to 27th 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>

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

- ❖ **Light/moderate Rainfall with thunderstorm & lightning observed** at many places over Arunachal Pradesh, Assam & Meghalaya; at a few places over Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe, Lakshadweep; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Tamilnadu Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Karnataka.

Rainfall recorded (in cm):

- ❖ **Assam & Meghalaya:** D/mohanbari Aero (dist Dibrugarh) 19, Mohanbari_aws (dist Dibrugarh) 17, Khowang (dist Dibrugarh) 17, Dholla Bazar (dist Tinsukia) 16, Nahar Katia (dist Dibrugarh) 13, Cherrapunji(rkm) (dist East Khasi Hills) 10, Ranganadi Nt Xing (dist Lakhimpur) 9, Moranhat (dist Dibrugarh) 8, Khliehriat (dist East Jaintia Hills) 8, Dhemaji (dist Dhemaji) 7, Majuli (dist Jorhat) 7, Goibargaon (dist Baksa) 7;
- ❖ **Arunachal Pradesh:** Tezu_ Aws (dist Lohit) 13, Namsai (dist Lohit) 10, Roing (dist Lower Dibang Valley) 8, Pasighat_ Aero (dist East Siang) 8, Passighat_aws (dist East Siang) 7;
- ❖ **Kerala & Mahe:** Kurudamannil (dist Pathanamthitta) 10, Kanjirappally (dist Kottayam) 6, Ernakulam South (dist Ernakulam) 6, Mattanchery (dist Ernakulam) 5;
- ❖ **Tamilnadu Puducherry & Karaikal:** Kannimar (dist Kanyakumari), Udumalpet (dist Tiruppur) 4 each

Realised Gusty wind since last 24 hours (till 0830 hrs IST) (Max Gust in knots, time in IST)

- ❖ **Assam & Meghalaya:** Umium=34, Shillong=31, Dhubri (Gauripur_Aegcl)- 19 Kt
Sonitpur (Sonitpur_Amfu)-19 Kt, Kokrajhar (Gossaiganj_Amfu)- 17 Kt, Kokrajhar (Kokraghar)- 17 Kt, Kokrajhar (Salakati_Aegcl)- 17 Kt, Chirang (Kajalgaon)- 23 Kt
Chirang (Chirang)- 20 Kt, Bongaigaon (Bongaigaon)-20 Kt, Barpeta (Barpeta_Kvk)- 20 Kt , Goalpara (Dudhnoi_Kvk)- 23 Kt, Kamrup (Chandubi)- 24 Kt , Karbi_Anglong(West) (Umpanai_Apdcl)-)- 20 Kt, Karbi_Anglong(West) (Umlapher)- 20 Kt, Karbi_Anglong(West) (Habang_Circle)- 20 Kt Udalguri (Rowta_Aegcl) -25 Kt, Sonitpur (Dhekiajuli_Aegcl)- 24 Kt, Sonitpur (Ghoramara_Aegcl)- 18 Kt , Dima Hasao (Lkhep)- 23 Kt, Dima Hasao (Haflong Aegcl)- 17 Kt, Hailakandi (Panchgram Aegcl)- 24 Kt Karbi Anglong (Diphu Amfu)- 28kt, Karbi_Anglon (Bokajaan_Aegcl)- 19kt, Jorhat (Mariyani_Aegcl)- 22 Kt, Sivasagar (Sivsagar_Aegcl)- 25 Kt, Charaideo (Sonari_Aegcl)- 22 Kt;
- ❖ **Arunachal Pradesh:** BOMDILA=30;
- ❖ **Jammu-Kashmir:-** Kupwara_Kvk=17kt, Baramulla_Kvk=17kt, Shopian(Aws)=15kt, Chatta_Amfu=15kt;
- ❖ **Uttarakhand:** Pantnagar (U.S. Nagar)-35, Jollygrant (Dehradun)-33, Roorkee_AMFU (Haridwar)-31;
- ❖ **East Uttar Pradesh:** Gorakhpur(Iaf)-15g25kt, Varanasi-12g22kt, Prayagraj(Iaf)-10g20 Kt, Chitrakoot(Iaf)-12g24kt, Lucknow-10g20kt,
- ❖ **West Madhya Pradesh:** Sehore-37 kmph, Ashoknagar-35 kmph, Guna-33 kmph
- ❖ **East Madhya Pradesh:** Singrauli-44 kmph, Sagar-42 kmph, Satna&Mandala-35 kmph;
- ❖ **Chhattisgarh:** Koriya -37 Kmph;
- ❖ **Haryana:** kaul = 38kmph, panipat = 36kmph

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

- ❖ **Yesterday, maximum temperatures** were in the range of 40-45°C at many/some stations over interior Maharashtra, Gujarat, west & southeast Rajasthan, Madhya Pradesh, East Uttar Pradesh, Bihar, North Chhattisgarh, interior Odisha, northwest Jharkhand, Telangana, Rayalaseema and North interior Karnataka. Yesterday, the highest **maximum temperature of 45.6°C** was reported at **Brahmapuri (Vidarbha)** over the country.
- ❖ **Yesterday, Maximum Temperatures** were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Gujarat state, Vidarbha, Jharkhand, Telangana, Gangetic West Bengal; **above normal (1.6°C to 3.0°C)** at most places over Punjab, Haryana-Chandigarh-Delhi, East Madhya Pradesh, Chhattisgarh, Madhya Maharashtra; at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Odisha, Bihar, Konkan & Goa, Marathwada; at a few places over Sub-Himalayan West Bengal & Sikkim, North Interior Karnataka, Coastal Karnataka; at isolated places over Kerala & Mahe. (Fig. 2)
- ❖ **Yesterday, Maximum Temperatures** had risen by 2-3°C over Jammu & Kashmir, Himachal Pradesh, West Rajasthan, east Bihar, North Gujarat, Konkan, West Bengal, Sikkim, West Assam, Nagaland, Manipur and fallen by 2-4°C over Arunachal Pradesh and northeast Assam and no significant change over rest parts of the country.

Fig. 1: Maximum Temperatures

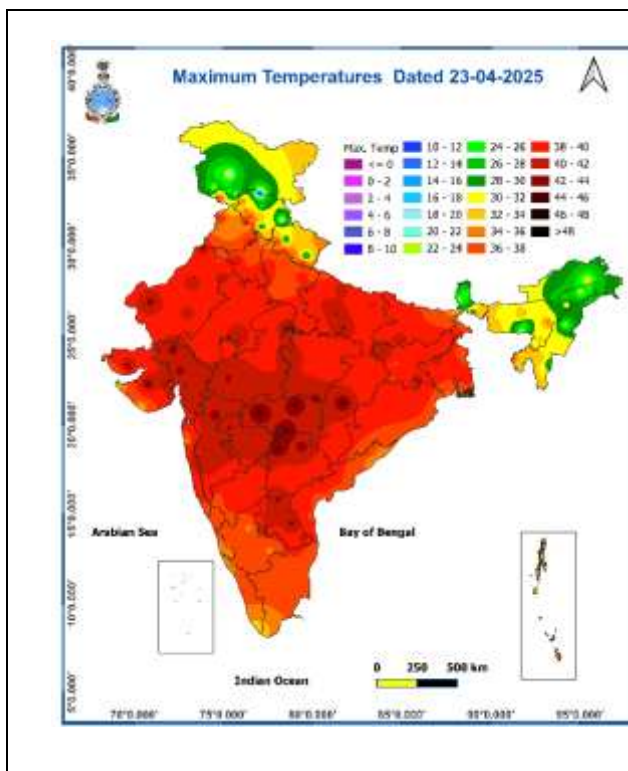
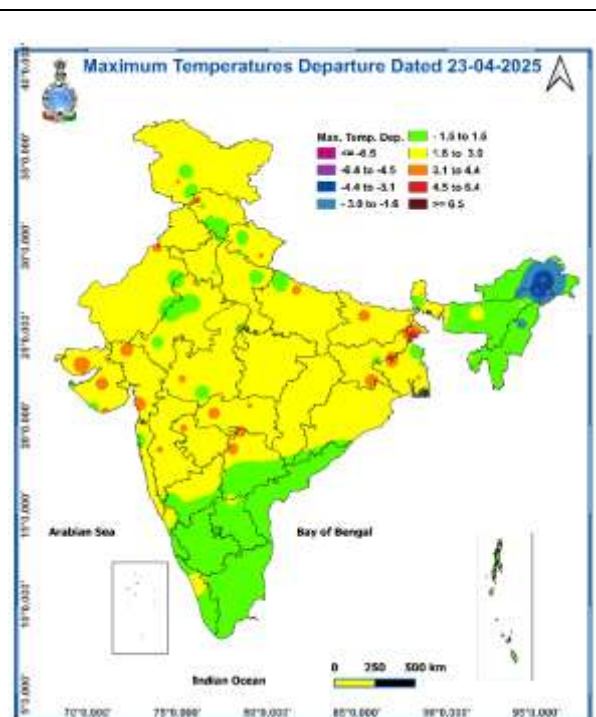
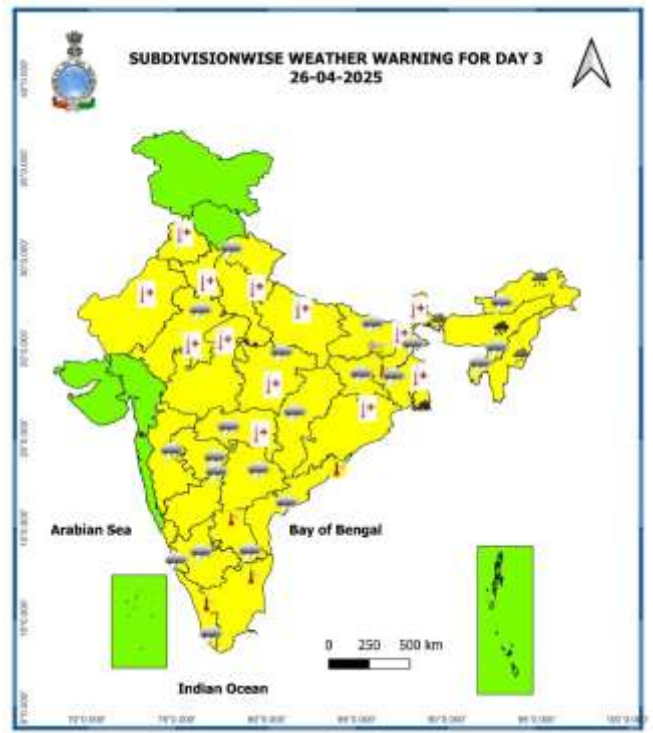
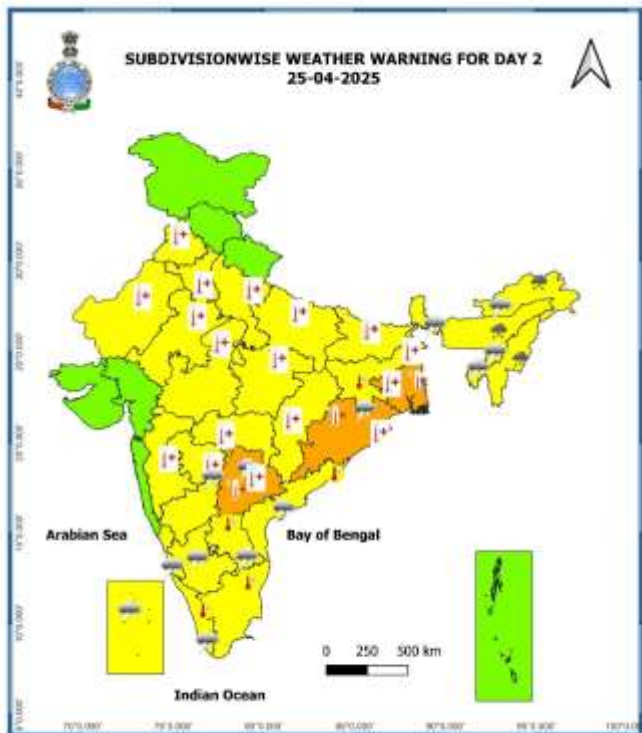
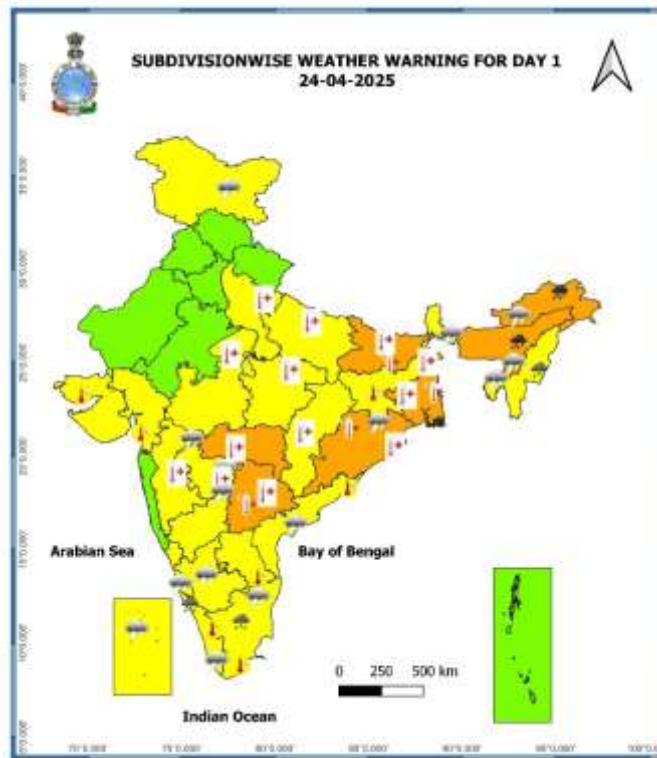


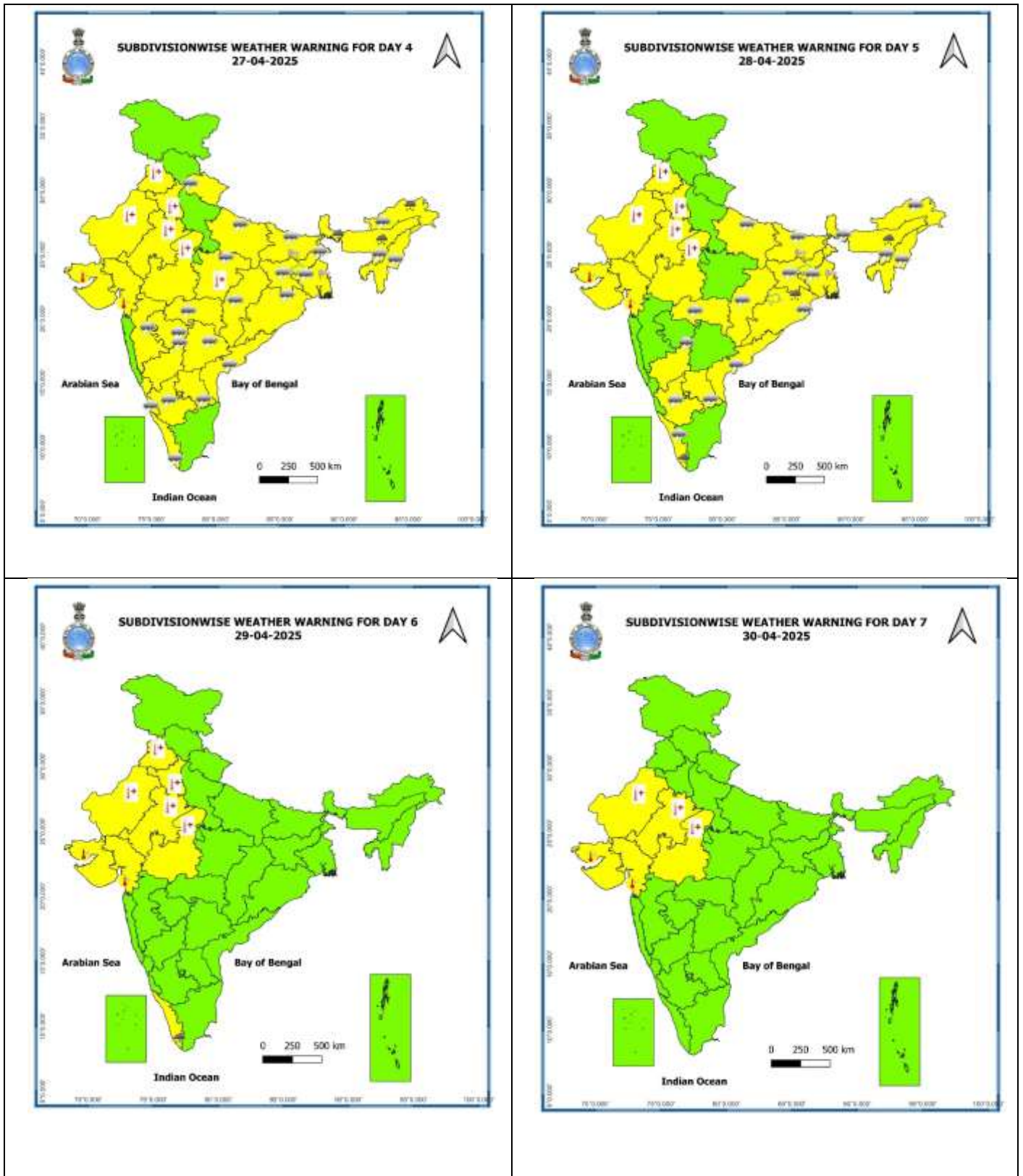
Fig. 2: Departure of Maximum Temperatures



| 7 Days Rainfall Forecast | | | | | | | | |
|--------------------------|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| S. No. | Subdivision | 24-Apr | 25-Apr | 26-Apr | 27-Apr | 28-Apr | 29-Apr | 30-Apr |
| | | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 |
| 1 | ANDAMAN & NICOBAR ISLANDS | ISOL | SCT | SCT | ISOL | SCT | SCT | ISOL |
| 2 | ARUNACHAL PRADESH | WS | WS | WS | FWS | FWS | SCT | SCT |
| 3 | ASSAM & MEGHALAYA | WS | WS | WS | WS | FWS | FWS | FWS |
| 4 | NAGALAND, MANIPUR, MIZORAM & TRIPURA | SCT | SCT | SCT | SCT | SCT | SCT | SCT |
| 5 | SUB-HIMALAYAN WEST BENGAL & SIKKIM | SCT | SCT | FWS | WS | FWS | FWS | SCT |
| 6 | GANGETIC WEST BENGAL | DRY | DRY | ISOL | FWS | FWS | FWS | SCT |
| 7 | ODISHA | ISOL | ISOL | ISOL | SCT | FWS | FWS | FWS |
| 8 | JHARKHAND | DRY | DRY | ISOL | SCT | FWS | FWS | FWS |
| 9 | BIHAR | DRY | DRY | ISOL | SCT | ISOL | ISOL | ISOL |
| 10 | EAST UTTAR PRADESH | DRY | DRY | DRY | ISOL | ISOL | ISOL | ISOL |
| 11 | WEST UTTAR PRADESH | DRY | DRY | DRY | DRY | DRY | ISOL | ISOL |
| 12 | UTTARAKHAND | ISOL | ISOL | SCT | ISOL | DRY | ISOL | FWS |
| 13 | HARYANA CHANDIGARH & DELHI | DRY | DRY | DRY | DRY | DRY | DRY | ISOL |
| 14 | PUNJAB | DRY | DRY | DRY | DRY | DRY | DRY | ISOL |
| 15 | HIMACHAL PRADESH | ISOL | ISOL | ISOL | ISOL | DRY | DRY | ISOL |
| 16 | JAMMU & KASHMIR AND LADAKH | SCT | ISOL | ISOL | DRY | DRY | DRY | DRY |
| 17 | WEST RAJASTHAN | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 18 | EAST RAJASTHAN | DRY | DRY | ISOL | DRY | DRY | DRY | DRY |
| 19 | WEST MADHYA PRADESH | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 20 | EAST MADHYA PRADESH | DRY | DRY | ISOL | ISOL | ISOL | ISOL | ISOL |
| 21 | GUJARAT REGION | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 22 | SAURASHTRA & KUTCH | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 23 | KONKAN & GOA | ISOL | DRY | DRY | ISOL | DRY | DRY | DRY |
| 24 | MADHYA MAHARASHTRA | ISOL | ISOL | ISOL | ISOL | DRY | DRY | DRY |
| 25 | MARATHAWADA | DRY | ISOL | ISOL | ISOL | DRY | DRY | DRY |
| 26 | VIDARBHA | DRY | DRY | ISOL | ISOL | ISOL | ISOL | ISOL |
| 27 | CHHATTISGARH | DRY | DRY | ISOL | ISOL | ISOL | ISOL | ISOL |
| 28 | COASTAL ANDHRA PRADESH & YANAM | ISOL | ISOL | ISOL | ISOL | ISOL | ISOL | ISOL |
| 29 | TELANGANA | DRY | ISOL | ISOL | ISOL | ISOL | ISOL | ISOL |
| 30 | RAYALASEEMA | DRY | DRY | ISOL | ISOL | ISOL | ISOL | ISOL |
| 31 | TAMILNADU PUDUCHERRY & KARAİKAL | ISOL | ISOL | ISOL | ISOL | ISOL | ISOL | ISOL |
| 32 | COASTAL KARNATAKA | ISOL | ISOL | ISOL | SCT | SCT | SCT | ISOL |
| 33 | NORTH INTERIOR KARNATAKA | ISOL | DRY | ISOL | ISOL | ISOL | ISOL | ISOL |
| 34 | SOUTH INTERIOR KARNATAKA | ISOL | ISOL | ISOL | SCT | SCT | SCT | SCT |
| 35 | KERALA & MAHE | SCT | SCT | SCT | SCT | SCT | SCT | SCT |
| 36 | LAKSHADWEEP | SCT | SCT | 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 24 to 27 Apr. 2025

Past Weather:

There has been rise in minimum temperature upto 01°C and slight fall in maximum temperature 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 18 to 24 °C respectively. The minimum temperature was below normal upto 01 - 02°C and maximum temperature was above normal upto 01 - 03°C over Delhi/NCR. Predominant surface wind from the west direction with wind speeds less than 20 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 12 kmph from the southwest direction prevailed over the region in the forenoon today.

Weather Forecast:

24.04.2025: Mainly clear sky. Occasional sustained surface winds (speed 10-20 kmph) gusting upto 30 kmph. The maximum temperature over Delhi is likely to be in the range of 40 to 42°C. The minimum temperature will be below normal upto 01 - 02°C and maximum temperature will be above normal upto 01 - 03°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 12 kmph from the northwest direction during the night.

25.04.2025: Mainly clear sky. Occasional sustained surface winds (speed 10-20 kmph) gusting upto 30 kmph. Heat wave conditions very likely at isolated places over Delhi. The maximum and minimum temperatures over Delhi are likely to be in the range of 41 to 43°C and 22 to 24°C respectively. The minimum temperature will be near normal and maximum temperature will be above normal upto 03 - 05°C. The predominant surface wind will likely be from the northwest direction with a wind speed of 06-10 kmph during morning hours. The wind speed will gradually increase thereafter becoming 14-16 kmph from the northwest direction during the afternoon. It will decrease becoming less than 12 kmph from the northwest direction during evening and night.

26.04.2025: Mainly clear sky becoming partly cloudy sky towards evening. Occasional sustained surface winds (speed 10-20 kmph). Heat wave conditions very likely at isolated places over Delhi. The maximum and minimum temperatures over Delhi are likely to be in the range of 41 to 43°C and 23 to 25°C respectively. The minimum temperature will be near normal and maximum temperature will be above normal upto 03 - 05°C. The predominant surface wind will likely be from the southeast direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase becoming 12-16 kmph from the south direction in the afternoon. It will decrease becoming less than 12 kmph from the southeast direction during evening and night.

27.04.2025: Partly cloudy sky. Occasional sustained surface winds (speed 10-20 kmph). The maximum and minimum temperatures over Delhi are likely to be in the range of 40 to 42°C and 23 to 25°C respectively. The minimum temperature will be near normal and maximum temperature will be above normal upto 02 - 04°C. The predominant surface wind will likely be from the southeast direction with a wind speed less than 18 kmph during morning hours. The wind speed will gradually decrease becoming 12-14 kmph from the southeast direction in the afternoon. It will decrease becoming less than 12 kmph from the southeast 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 expected and action suggested due to isolated thunderstorm with lightning/gusty & Squally winds & Hailstorm over

- ✓ **Hailstorm over Jharkhand on 27th & 28th and Odisha on 28th April.**
- ✓ **Thundersquall** likely over Bihar during 26th-28th and Gangetic West Bengal, Vidarbha, Chhattisgarh, East Madhya Pradesh on 27th & 28th and South Interior Karnataka on 27th 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 conditions over plains of Northwest India till 29th and East & Central India till 26th 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.

Impact & Action Suggested due to heavy to very heavy rainfall over Arunachal Pradesh, Assam & Meghalaya on 24th April.

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.

Agromet advisories for likely impact of Hailstorm / Heavy Rainfall / Gusty Winds / Heat wave

- In **Arunachal Pradesh, Assam, Meghalaya, Nagaland and Kerala**, drain out excess water from standing crop and vegetable fields.
- In **Madhya Pradesh, Chhattisgarh, Vidarbha, Madhya Maharashtra, Marathwada, Uttar Pradesh, Rajasthan, Haryana, Punjab, Odisha, Bihar, Gangetic West Bengal, Telangana and Gujarat**, 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

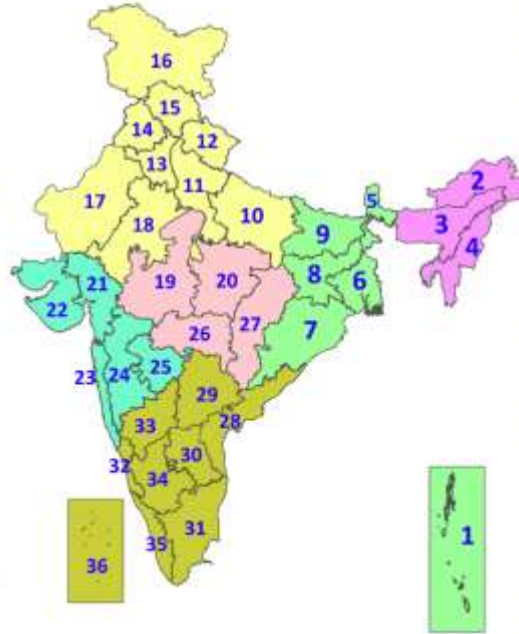
- Keep the animals inside the shed during heavy rainfall / hailstorm and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.
- To reduce the effect of heat wave/high temperature, cover the roof of poultry sheds with grass. Also, provide clean, hygienic and plenty 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) |

- | | | |
|----------------------|----------------------|--------------|
| 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 * | <p>Heavy: 64.5 to 115.5 mm/cm *</p> <p>Very Heavy: 115.6 to 204.4 mm/cm*</p> <p>Extremely Heavy: > 204.4 mm/cm *</p> |
| Heat Wave | <p>When maximum temperature of a station reaches $\geq 40^{\circ}\text{C}$ for plains and $\geq 30^{\circ}\text{C}$ for hilly regions</p> <p>(a) Based on Departure from normal</p> <p>Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C.</p> <p>Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^{\circ}\text{C}$</p> <p>(b). Based on Actual maximum temperature</p> <p>Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$.</p> <p>Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$</p> <p>(c). Criteria for heat wave for coastal stations</p> <p>When maximum temperature departure is $>4.5^{\circ}\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^{\circ}\text{C}$</p> |
| Warm Night | <p>When maximum temperature remains 40°C</p> <p>Warm Night: When minimum temperature departure 4.5°C to 6.4°C.</p> <p>Severe Warm Night: When minimum temperature departure $>6.4^{\circ}\text{C}$.</p> |
| Cold Wave | <p>When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions.</p> <p>(a). Based on departure</p> <p>Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$</p> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <p>Cold Wave : When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$</p> <p>Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$</p> <p>(c) For Coastal Stations</p> <p>When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$</p> |
| Cold Day | <p>When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions</p> <p>Based on departure</p> <p>Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$</p> |
| Fog | <p>Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$</p> <p>Moderate Fog: When the visibility between 500-200 metres</p> <p>Dense Fog: when the visibility between 50- 200 metres</p> <p>Very Dense Fog: when the visibility < 50 metres</p> |
| Thunderstorm | <p>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p> |
| Dust/Sand Storm | <p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p> |
| Frost | <p>Ice deposits on ground</p> <p>Air temperature $\leq 4^{\circ}\text{C}$ (over Plains)</p> |
| Squall | <p>A strong wind that rises suddenly, lasts for atleast 1 minute.</p> <p>Moderate: Wind speed 52-61 kmph</p> <p>Severe: Wind speed 62-67 kmph</p> <p>Very Severe: Wind speed >67 kmph</p> |
| Sea State | <p>Effect of various waves in the sea over specific area</p> <p>Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre</p> <p>High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre</p> <p>Phenomenal: Wind speed >117 kmph (>63 knots) & Wave height >14 metre</p> |
| Cyclone | <p>Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)</p> <p>Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)</p> <p>Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)</p> <p>Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)</p> <p>Super Cyclone Storm: Wind speed >220 kmph (>119 knots)</p> |

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