



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 16<sup>th</sup> March, 2025

Time of Issue: 1400 hours IST

**Subject: i) Heat wave to Severe heat wave conditions likely to continue over interior Odisha during 16<sup>th</sup>-18<sup>th</sup>; and Heat wave conditions likely over Jharkhand, Gangetic West Bengal, Vidarbha, north Telangana on 16<sup>th</sup> & 17<sup>th</sup>; Chhattisgarh on 16<sup>th</sup> and North Interior Karnataka during 18<sup>th</sup>-20<sup>th</sup> March.**  
**ii) Thunderstorm accompanied with gusty winds over northeast India and with isolated heavy rainfall/snowfall over Arunachal Pradesh on 16<sup>th</sup> & 17<sup>th</sup> March.**  
**iii) Scattered to fairly widespread rainfall accompanied with Thunderstorm and gusty winds likely over east central India during 20<sup>th</sup>-23<sup>rd</sup> March.**

**i. Realised weather during past 24 hours till 0830 hours IST of today, the 14<sup>th</sup> March 2025:**

- ❖ Light to moderate **Rainfall/Snowfall** occurred at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh; at many places over Uttarakhand and Arunachal Pradesh and at a few places over Sikkim.
- ❖ **Light to moderate rainfall** at a few places over Assam and Lakshadweep and **light rainfall** at isolated places over Punjab, Haryana, Chandigarh, Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Nagaland Manipur, Mizoram & Tripura, Tamil Nadu and Kerala & Mahe.
- ❖ **Thunderstorm with lightning** reported at isolated places over Jammu-Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Assam and Sikkim.
- ❖ **Heavy to very heavy rainfall/snowfall** reported at isolated places over Arunachal Pradesh and Assam and **Heavy Rainfall** reported over Himachal Pradesh.
- ❖ **Hailstorms reported** at isolated locations over Uttarakhand.
- ❖ **Gusty wind reported** at isolated locations over Assam.
- ❖ **Heat wave to Severe heat wave conditions** prevailed at many places over interior Odisha and **Heat wave conditions** at many places over Jharkhand, at a few places over Vidarbha and at isolated places over Chhattisgarh
- ❖ **Warm night conditions** prevailed at a few places over interior Odisha and Jharkhand.
- ❖ For more details of realised weather, kindly refer **Annexure I**

**Temperature:**

- ❖ For temperature observations during past 24 hours till 0830 hours IST of today are provided in **Annexure II**

**ii. Weather Systems, Forecast and Warnings (Annexure III & IV):**

- ❖ A **Cyclonic Circulation** lies over northeast Assam and neighbourhood in lower tropospheric levels. Under its influence;
  - ✓ **Scattered to Fairly widespread light/moderate rainfall/snowfall** accompanied with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** likely over Arunachal Pradesh during next 7 days with Isolated **heavy rainfall/snowfall** on 16<sup>th</sup> & 17<sup>th</sup> March.
  - ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed 30-50 kmph)** likely over Assam & Meghalaya and Nagaland,

Manipur, Mizoram & Tripura on 16<sup>th</sup> & 17<sup>th</sup> March and isolated to Scattered rainfall thereafter during subsequent 5 days.

- ✓ **Scattered light to moderate rainfall/snowfall** accompanied with **thunderstorm, lightning, hail & gusty winds (speed 30-40 kmph)** likely over Sikkim on 16<sup>th</sup> March.
- ❖ A **Western Disturbance** lies as a cyclonic circulation over north Pakistan and adjoining Jammu region in lower & middle tropospheric levels. A cyclonic circulation lies over Haryana and another over Northwest Madhya Pradesh and a trough runs from to Northwest Madhya Pradesh to Marathwada in lower tropospheric levels. Under the influence of these systems;
  - ✓ Isolated to scattered light/moderate rainfall/snowfall accompanied with thunderstorm & lightning, Gusty wind (speed 30-40 kmph) likely over Jammu & Kashmir, Himachal Pradesh and Uttarakhand on and light rainfall accompanied with thunderstorm & lightning, Gusty wind (speed 30-40 kmph) over Punjab, Haryana, Uttar Pradesh and Rajasthan 16<sup>th</sup> March.
- ❖ Due to trough and wind confluence over East India in lower tropospheric levels, scattered to fairly widespread rainfall accompanied with Thunderstorm, lightning and gusty winds likely over east central India during 20<sup>th</sup>-23<sup>rd</sup> March.

#### Temperature Forecast:

##### Forecast of temperature:

##### Maximum temperature:

- ❖ Gradual rise in maximum temperatures by about 2-4°C likely over Northwest India during next 4-5 days
- ❖ No significant change in maximum temperatures likely over Central India during next 24 hours and fall by 2-4°C during subsequent 3-4 days.
- ❖ No significant change in maximum temperatures likely over East India during next 48 hours and fall by 2-3°C during subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over rest parts of India during next 3-4 days.

#### Heat wave, Warm Night and Hot & Humid weather warning:

- ❖ **Heat wave to Severe heat wave conditions** likely to continue over interior Odisha during 16<sup>th</sup>-18<sup>th</sup> March.
- ❖ **Heat wave conditions** likely over Jharkhand, Gangetic West Bengal, Vidarbha, north Telangana on 16<sup>th</sup> & 17<sup>th</sup>; Chhattisgarh on 16<sup>th</sup> and North Interior Karnataka during 18<sup>th</sup> -20<sup>th</sup> March.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over Odisha during 16<sup>th</sup> to 18<sup>th</sup>; Jharkhand and Gangetic West Bengal on 16<sup>th</sup> & 17<sup>th</sup> and Vidarbha on 16<sup>th</sup> March.
- ❖ **Hot & humid conditions** very likely to prevail in isolated pockets over coastal areas of Gujarat during next 5 days and over north interior Karnataka on 16<sup>th</sup> & 17<sup>th</sup> March.

#### iv. Weather conditions and forecast over Delhi/NCR during 16<sup>th</sup> March to 19<sup>th</sup> March. 2025 (Annexure V)

For more details, kindly refer National Weather Bulletin:

[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](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:

#### Rainfall recorded (in cm):

- ❖ **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Sangam Arg (dist Anantnag) 3, Tral Arg (dist Pulwama) 3, Jammu Aero (dist Jammu) 3;
- ❖ **Himachal Pradesh:** Manali (dist Kullu) 7, Bhuntar Aero (dist Kullu) 5, Hmo Kasol (dist Kullu) 4;
- ❖ **Assam & Meghalaya:** Majuli (dist Jorhat) 7
- ❖ **Arunachal Pradesh:** Longding (dist Longding) 15, Pakke\_Kesang AWS (dist Pakke Kesang) 6, Deomali (dist Tirap) 3, Anini\_aws (dist Dibang Valley) 3;
- ❖ **Tamilnadu Puducherry & Karaikal:** Thirparappu (dist Kanyakumari) 3;
- ❖ **Assam & Meghalaya:** Shella (dist East Khasi Hills) 15, Majuli (dist Jorhat) 7, Margherita (dist Tinsukia) 3.

#### Hailstorm reported:

- ❖ **Uttarakhand:** Surkandaji

### ANNEXURE II

- ❖ **Maximum Temperature Departures (as on 15-03-2025):** Maximum temperatures were markedly above normal (5.1°C or more) at many places over East Uttar Pradesh, Jharkhand, north interior Odisha, west Gangetic West Bengal, north Chhattisgarh, southwest Bihar; at a few places over East Madhya Pradesh; at isolated places over West Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Vidarbha; at a few places over remaining Bihar; at isolated places over East Rajasthan, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada; above normal (1.6°C to 3.0°C) at most places over North Interior Karnataka; at many places over Gujarat Region, South Interior Karnataka, Telangana, Rayalaseema; at a few places over Haryana-Chandigarh-Delhi; at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam. These were markedly below normal (-5.1°C or less) at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Punjab and near normal over rest parts of the country.
- ❖ Yesterday, the 15<sup>th</sup> March, the maximum temperatures have shown **falling tendency** by 06-10°C over many parts of Himachal Pradesh; by 2-5°C over many parts of Kashmir, east Punjab, Rajasthan, Haryana, Delhi, and adjoining west Uttar Pradesh, Gujarat State and **rising tendency** by 1-3°C over many parts of East Uttar Pradesh, Bihar, Jharkhand, North Chhattisgarh, east Madhya Pradesh, interior Odisha, Western parts of Gangetic West Bengal and Northeast India and no significant change over the rest parts of the country.
- ❖ Yesterday, the 15<sup>th</sup> March, the Maximum Temperatures were in the range of **39-42°C** over Vidarbha, Marathwada, north Madhya Maharashtra, Northwest & northeast Telangana, Rayalaseema, southeast Madhya Pradesh, southeast Uttar Pradesh, Chhattisgarh, northwest & southeast Jharkhand, western parts of Gangetic West Bengal and interior Odisha; in the range of **33-38°C** at many places over Gujarat state, at a few places over East Rajasthan, Bihar, Madhya south Maharashtra, North Interior Karnataka, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal. Yesterday, the highest **maximum temperature of 42.5°C** was reported at **Boudh (Odisha)** over the country.

Fig. 1: Maximum Temperatures

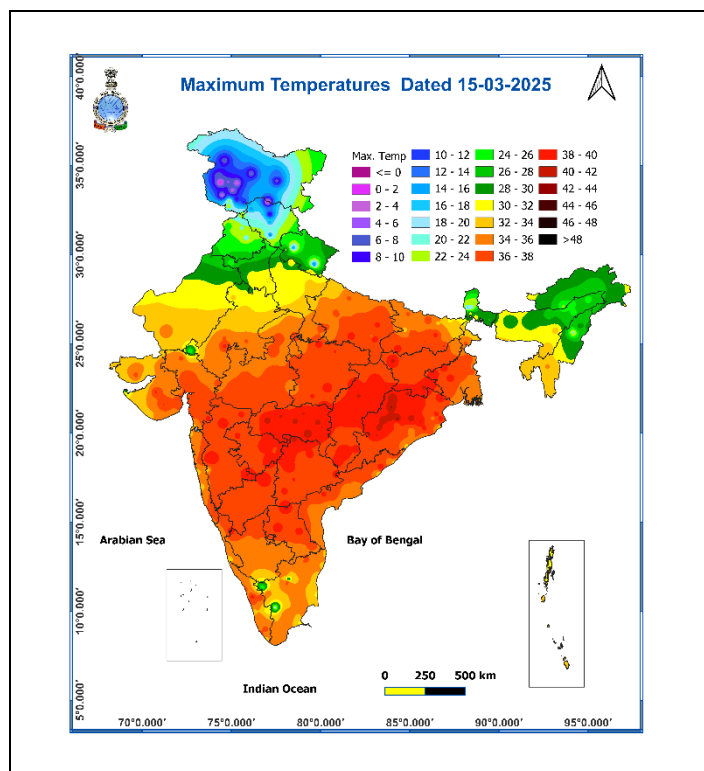
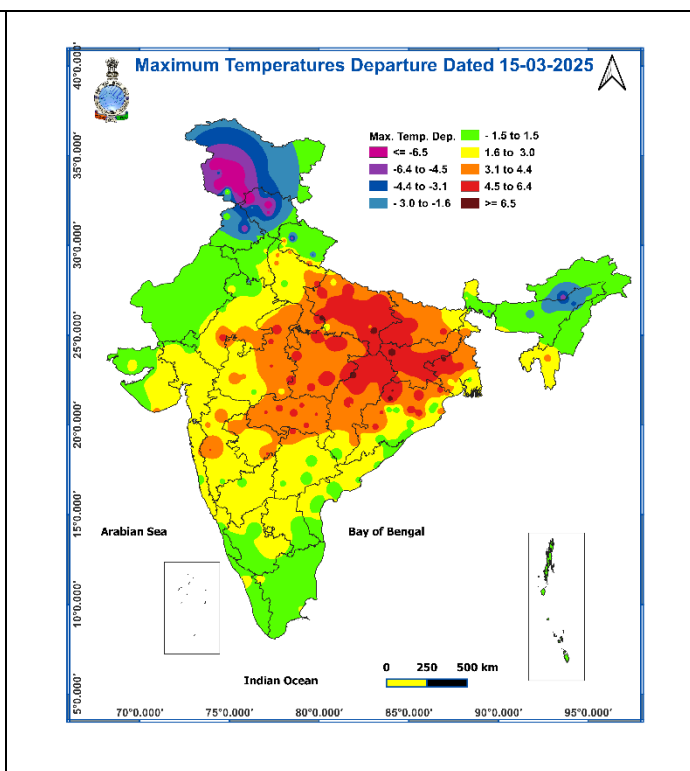
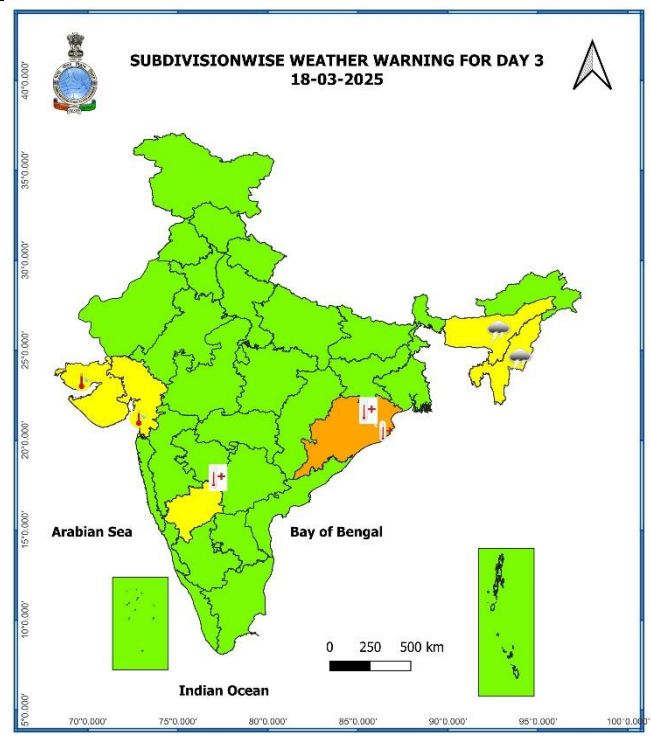
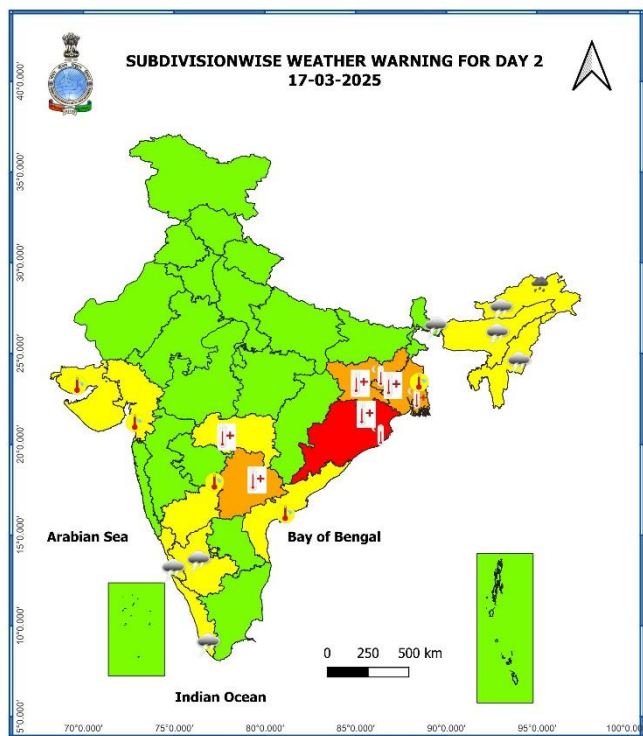
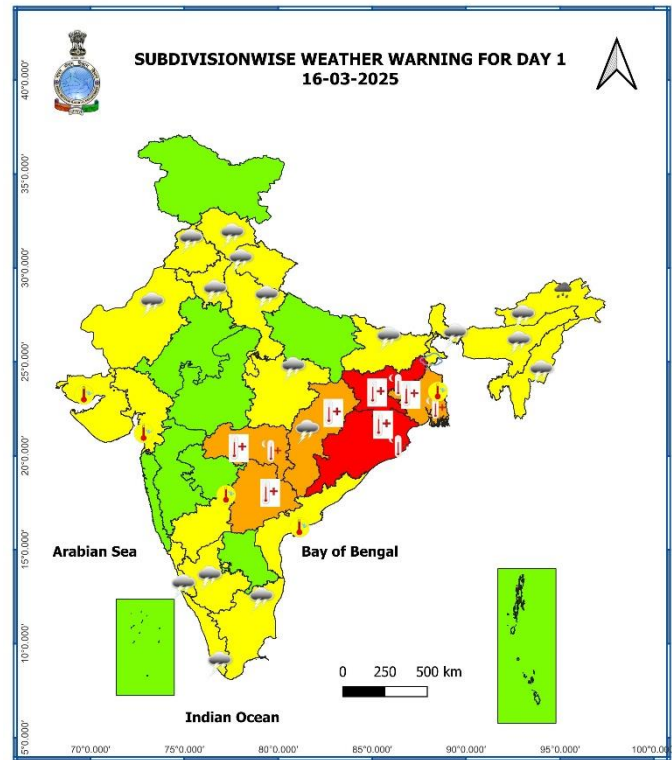


Fig. 2: Departure of Maximum Temperatures

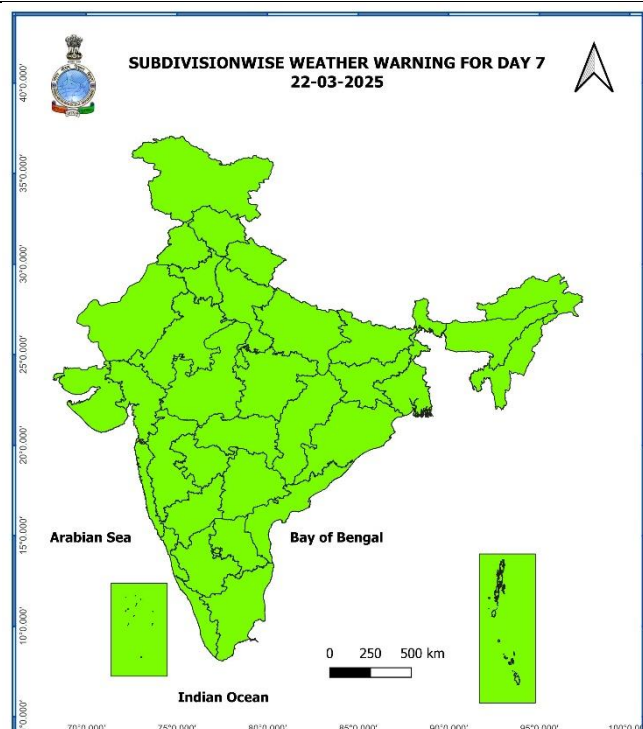
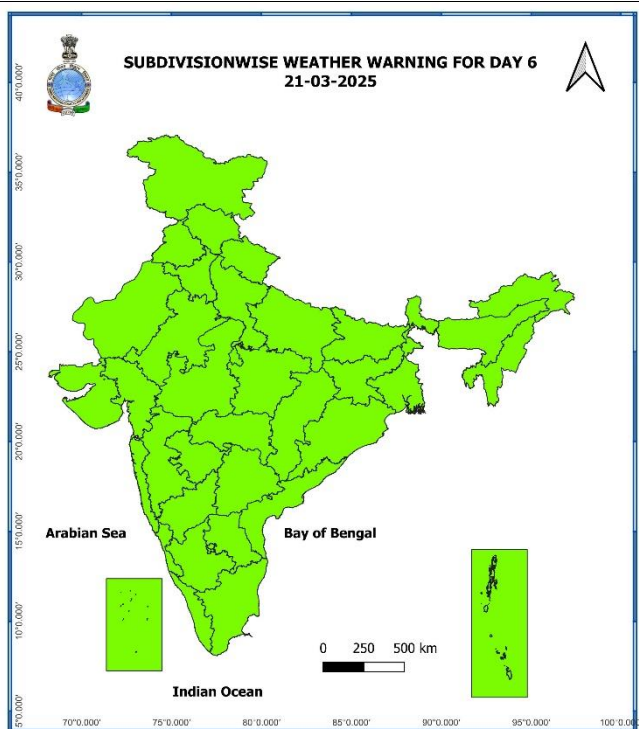
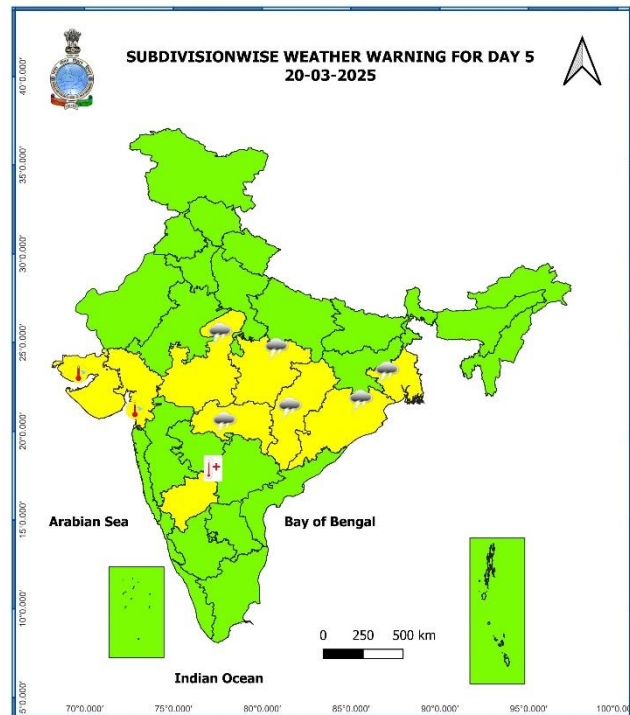
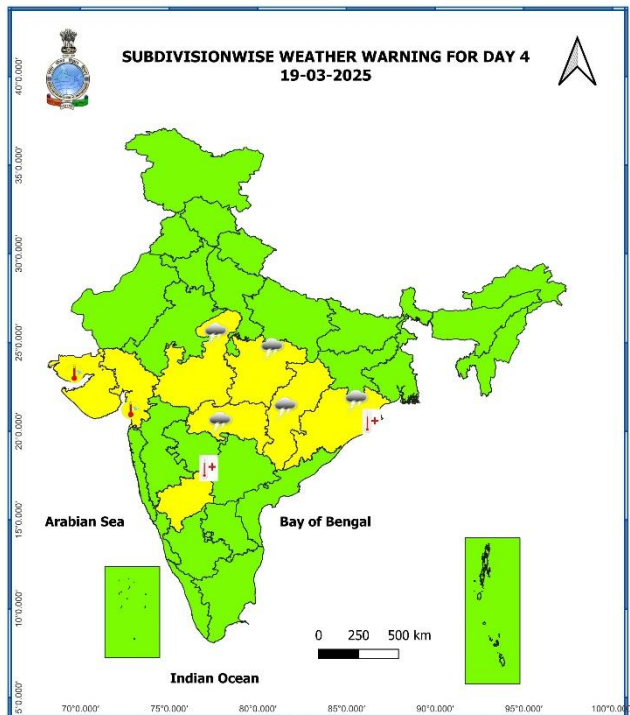


7 Days Rainfall Forecast								
S. No.	Subdivision	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	FWS	FWS	SCT	SCT	SCT	FWS	WS
3	ASSAM & MEGHALAYA	SCT	FWS	SCT	ISOL	ISOL	SCT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

There has been a fall in minimum and maximum temperatures upto 02 - 03°C over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 31 to 33°C and 15 to 18°C respectively. The minimum and maximum temperatures were above normal upto 03°C at most places. Mainly clear sky conditions with predominant surface wind from the east/northwest direction with wind speeds less than 16 to 18 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 08 kmph from the northwest direction prevailed over the region in the forenoon today.

**Weather Forecast:**

**16.03.2025:** Partly cloudy sky. Strong surface winds (speed 20-30kmph). The maximum temperature over Delhi is likely to be in the range of 31 to 33°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 thereafter becoming less than 10 kmph from the north-northwest direction during the night.

**17.03.2025:** Mainly clear sky. Mist likely in the morning. Strong surface winds (speed 20-30kmph). The maximum and minimum temperatures over Delhi are likely to be in the range of 31 to 33°C and 16 to 18°C respectively. The predominant surface wind will likely be from the northwest direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase thereafter becoming, 16-18 kmph from the northwest direction during the afternoon. It will decrease becoming less than 10 kmph from the northwest direction during evening and night.

**18.03.2025:** Mainly clear sky. Mist likely in the morning. Strong surface winds (speed 20-30kmph). The maximum and minimum temperatures over Delhi are likely to be in the range of 32 to 34°C and 16 to 18°C respectively. The predominant surface wind will likely be from the northwest direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase becoming 16-18 kmph from the northwest direction in the afternoon. It will decrease becoming less than 10 kmph from the northwest direction during evening and night.

**19.03.2025:** Partly cloudy sky. Mist likely in the morning. The maximum and minimum temperatures over Delhi are likely to be in the range of 33 to 35°C and 17 to 19°C respectively. The predominant surface wind will likely be from the north direction with a wind speed of 08-10 kmph during morning hours. The wind speed will gradually increase becoming 12-14 kmph from the north-northwest direction in the afternoon. It will decrease becoming less than 10 kmph from the north direction during evening and night.



**Impact expected and action suggested due to thunderstorm accompanied with lightning/gusty winds** over Northwest India on 16<sup>th</sup> and over Northeast India during next 3 days

❖ **Impact expected:**

- ❖ Strong wind may damage plantation, horticulture and standing crops.
- ❖ Partial damage to vulnerable structures due to strong winds.
- ❖ Minor damage to kutcha houses/walls and huts.
- ❖ Loose objects may fly.

❖ **Action suggested:**

- ❖ 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 & Action Suggested due to heavy rainfall/ snowfall over Arunachal Pradesh on 16<sup>th</sup> & 17<sup>th</sup> March**

**A. 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).

**B. 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 Heat wave to Severe heat wave conditions over interior Odisha during 16<sup>th</sup>-18<sup>th</sup> March. Heat wave conditions over Jharkhand, Gangetic West Bengal, Vidarbha, north Telangana on 16<sup>th</sup> & 17<sup>th</sup>; Chhattisgarh on 16<sup>th</sup> and North Interior Karnataka during 18<sup>th</sup> -20<sup>th</sup> March.**

**Red alert Areas (Interior Odisha on 16<sup>th</sup> & 17<sup>th</sup> and Jharkhand on 16<sup>th</sup> march)**

- ✓ Very high likelihood of developing heat illness and heat stroke in all ages.
- ✓ Extreme care needed for vulnerable people.

**Orange alert Areas (Vidarbha, North Telangana, Gangetic West Bengal on 16<sup>th</sup> & 17<sup>th</sup>, Chhattisgarh on 16<sup>th</sup> March)**

- ✓ High temperature & increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work.
- ✓ High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
- ✓ Avoid heat exposure– keep cool. Avoid dehydration.
- ✓ Drink sufficient water- even if not thirsty.
- ✓ Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.

## 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 / Hailstorm / Heat Wave

- In **Sikkim**, use hail net and hail caps to prevent mechanical damage in orchards due to hailstorms.
- In **Arunachal Pradesh**, make provision to drain out excess water from standing crop and vegetable fields. Postpone land preparation and sowing of *Jhum* rice and maize.
- In **Odisha, Jharkhand, Gangetic West Bengal, Vidarbha, Chhattisgarh** and **North Telangana**, apply light and frequent irrigation to the standing crops, vegetables and orchards in the evening to protect them from adverse impacts of heat wave.
- Keep the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields.
- Provide mechanical support to horticultural crops and staking to vegetables to avoid lodging.

## Livestock and Fishery

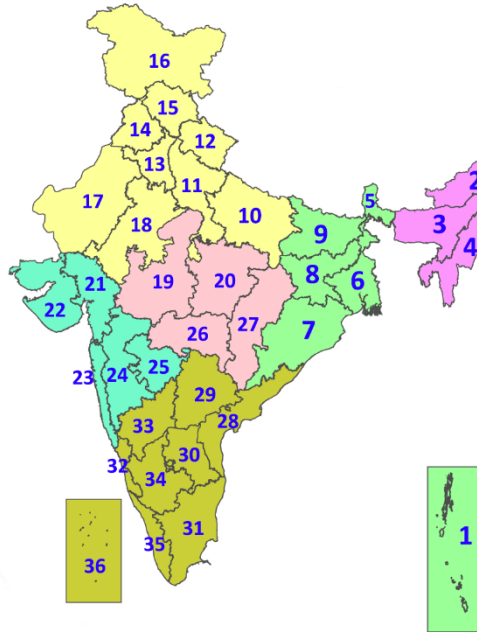
- Keep the animals inside the shed during heavy rainfall/hailstorm and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.
- Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.
- 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  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .

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  $40^{\circ}\text{C}$

Warm Night: When minimum temperature departure  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .

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  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .

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  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .

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

### Fog

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

Moderate Fog: When the visibility between 500-200 metres

Dense Fog: when the visibility between 50- 200 metres

Very Dense Fog: when the visibility  $< 50$  metres

### Thunderstorm

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

### Dust/Sand Storm

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

### Frost

Ice deposits on ground

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

### Squall

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

Moderate: Wind speed 52-61 kmph

Severe: Wind speed 62-87 kmph

Very Severe: Wind speed  $> 87$  kmph

### Sea State

Effect of various waves in the sea over specific area

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

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

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

### Cyclone

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

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

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

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

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

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**Hot and Humid:** When maximum temperatures remain  $3^{\circ}\text{C}$  above normal along with the above normal relative humidity.