

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 09th March, 2025

Time of Issue: 1400 hours IST

Subject: i) Heat wave spell likely over Gujarat state during 09th -12th March, 2025

ii) A fresh rainfall episode over States of Western Himalayan region during 10th -15th March, 2025.

i. Realised weather during past 24 hours till 0830 hours IST of today, the 08th March 2025:

- ❖ Light to moderate **Rainfall/Snowfall** observed at many places over Arunachal Pradesh and Sikkim; Light to moderate rainfall at most places over Andaman & Nicobar Islands; Isolated light rainfall over Assam, Kerala and south Tamil Nadu.
- ❖ **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 warning (Annexure III & IV):

- ❖ A fresh **Western Disturbance** seen as a cyclonic circulation over Iraq in lower to upper tropospheric levels. It is likely to move gradually eastwards and impact **States of Western Himalayan region** during next 10-12th March. Under its influence;
 - ✓ **Isolated light/moderate** rainfall/snowfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 09th March; it is likely to increase to **fairly widespread to widespread light/moderate rainfall/snowfall accompanied with thunderstorm & lightning** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 10th-15th March; **Scattered to fairly widespread light/moderate rainfall/snowfall accompanied with thunderstorm & lightning** over Himachal Pradesh and **isolated to scattered light/moderate rainfall/snowfall** accompanied with thunderstorm & lightning over Uttarakhand during the same period.
 - ✓ **Isolated heavy rainfall/snowfall very likely over** Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 10th March.
 - ✓ Isolated light/moderate rainfall **accompanied with thunderstorm & lightning** likely over Punjab, Haryana and West Uttar Pradesh on 12th & 13th; West Rajasthan during 13th-15th and over East Rajasthan on 15th March.
- ❖ A **cyclonic circulation** lies over Northeast Bangladesh in lower tropospheric levels. Under its influence,
 - ✓ **Isolated to Scattered light/moderate rainfall/snowfall** likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland on 09th. It is likely to increase to **Scattered to fairly widespread** light/moderate rainfall/snowfall accompanied with thunderstorm and lightning over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 11th-15th March.
 - ✓ **Isolated Heavy rainfall likely over Arunachal Pradesh during 11th-13th March.**
 - ✓ Isolated light/moderate rainfall/snowfall also likely over Sikkim during next 7 days.
- ❖ Under the influence of easterly wave activity,
 - ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm & lightning** likely over Tamilnadu, Puducherry & Karaikal on 10th-11th and Lakshadweep on 11th & 12th; Isolated to **Scattered** light/moderate rainfall accompanied with **thunderstorm & lightning** likely over Kerala & Mahe, coastal & South Interior Karnataka during 11th-13th March.
 - ✓ **Isolated heavy to very heavy rainfall likely over south Tamil Nadu on 11th and heavy rainfall over Kerala & Mahe on 11th & 12th March.**
 - ✓ Scattered to Fairly widespread light to moderate rainfall likely over Andaman & Nicobar Islands during next 7 days.

Temperature Forecast:

Forecast of temperature:

Maximum temperature:

- ❖ Gradual rise in maximum temperatures by 3-4°C likely over plains of Northwest India during next 4 days and fall by 2-3°C thereafter.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Central India & Maharashtra and by 3-5°C over East India during next 5 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Gujarat State during next 4 days and fall by 2-3°C thereafter.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over north Peninsular India during next 3 days and no significant change thereafter.
- ❖ No significant change in maximum temperatures likely over northeast India during next 2 days and fall by 2-3°C during subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over rest parts of the country.

Hot & Humid weather warning:

- ❖ **Hot and humid weather** very likely to prevail over Konkan & Goa during 09th -11th and over Coastal Karnataka on 09th & 10th March.

Heat Wave Warning:

- ❖ **Heat wave** very likely to prevail over Saurashtra & Kutch during 09th-12th; Gujarat Region during 10th-12th and over Konkan & Goa on 10th March.

Fishermen Warnings:

- ❖ Day 1 (09th march to 10th march): squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph likely to prevail over northeast equatorial Indian ocean and adjoining southeast Bay of Bengal.
- ❖ Day 2 (10th march to 11th march): squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph likely to prevail over northeast equatorial Indian ocean and adjoining southwest & southeast Bay of Bengal.
- ❖ Day 3 (11th march to 12th march): squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph likely to prevail over northeast equatorial Indian ocean and adjoining Comorin area & Gulf of Mannar.
- ❖ Fishermen are advised not to venture into northeast Equatorial Indian Ocean on 09th, 10th & 11th March, adjoining area of southeast Bay of Bengal on 09th, southwest Bay of Bengal on 10th and Comorin area & Gulf of Mannar on 11th March.

iii. Weather conditions and forecast over Delhi/NCR during 09th March to 12th March. 2025 (Annexure V)

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

For District wise warnings refer: <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

ANNEXURE I

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

Rainfall/snowfall recorded (in cm)

- ❖ **Arunachal Pradesh:** Tuting-3
- ❖ **Sikkim:** Kabi-3
- ❖ **Andaman & Nicobar Islands:** Nancowry-2

- ❖ During the past 24 hours, maximum temperatures had fallen by 1-3°C at many places over northeast India and East Rajasthan, along the west coast of Tamil Nadu, Puducherry & Karaikal; at some parts over east Uttarakhand, Saurashtra & Kutch, northwest Madhya Pradesh, Konkan & Goa; Coastal Karnataka. It had risen by 1-2°C at many places over remaining parts of Central India, East India, northwest India, Interior Maharashtra, Interior Karnataka, Telangana, north Gujarat State.
- ❖ Maximum temperatures were in the range of 35-39°C at many places over interior Maharashtra, Gujarat Region and Kutch, West Rajasthan, Telangana, south Chhattisgarh, North Interior Odisha, Kerala & Mahe and Rayalaseema; 30 -35°C at many places over Madhya Pradesh, Saurashtra, Konkan & Goa, East Rajasthan, Madhya Pradesh, north Chhattisgarh, Odisha, south Gangetic West Bengal, Jharkhand, Delhi, south Uttar Pradesh and south Bihar; 25-30°C at many places over Punjab, Haryana, north Uttar Pradesh, north Bihar, remaining West Bengal and North east India. Yesterday, the highest **maximum temperature of 39.4°C** was reported at **Kurnool (Rayalaseema)** over the country.
- ❖ **Maximum Temperature Departures (as on 08-03-2025):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at a few places over south west Rajasthan and Saurashtra & Kutch; at isolated places over Himachal Pradesh, Gujarat Region, Konkan & Goa and West Madhya Pradesh; **above normal (1.6°C to 3.0°C)** at many places over Delhi; at a few places over Tamil Nadu, Puducherry & Karaikal; at isolated places over Haryana, East Rajasthan, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Madhya Maharashtra, Marathwada, Vidarbha, Odisha, Interior Karnataka, Telangana and Rayalaseema. These were **below normal (-3.0°C to -1.6°C)** at isolated places over Bihar, Gangetic West Bengal, Assam & Meghalaya near normal over rest parts of the country.

Fig. 1: Maximum Temperatures

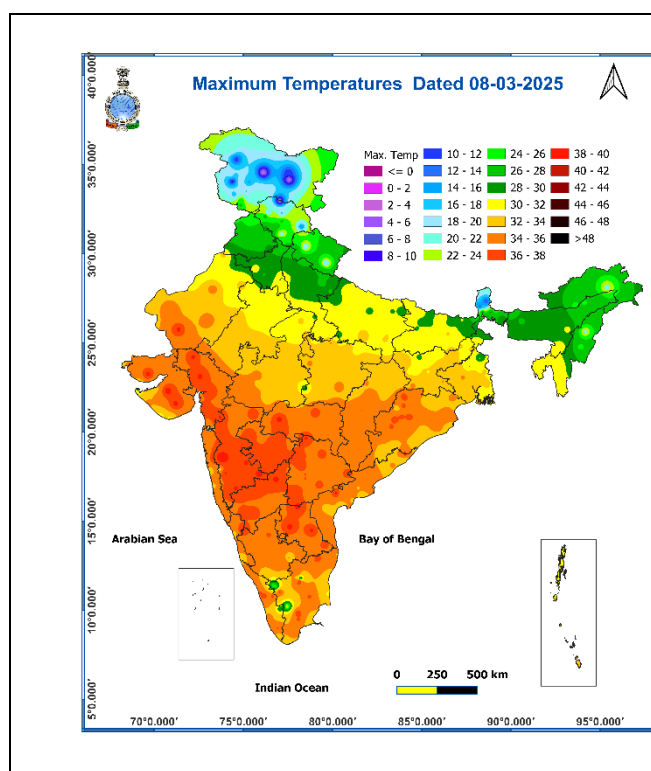
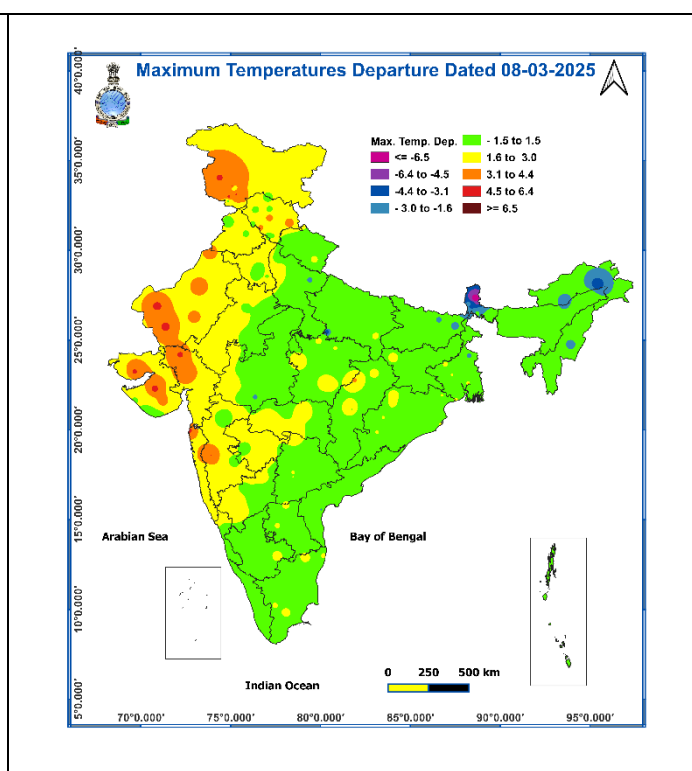
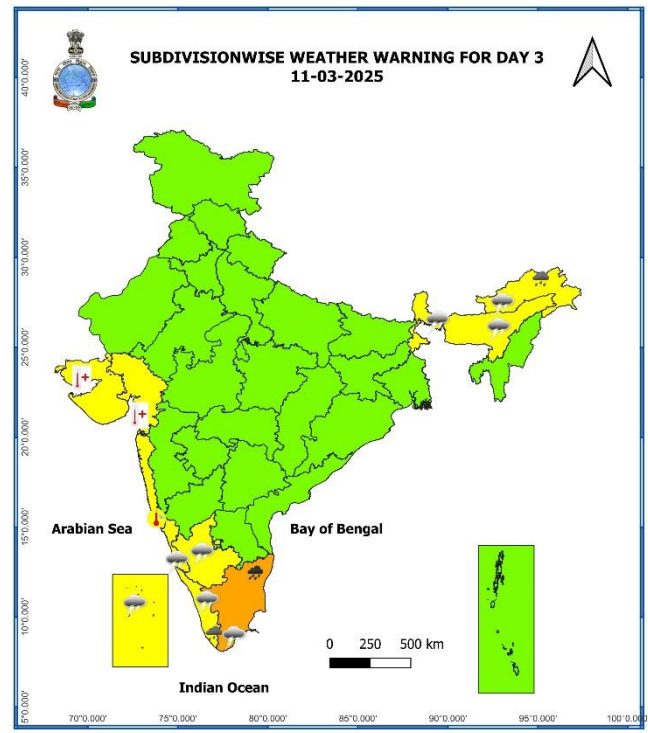
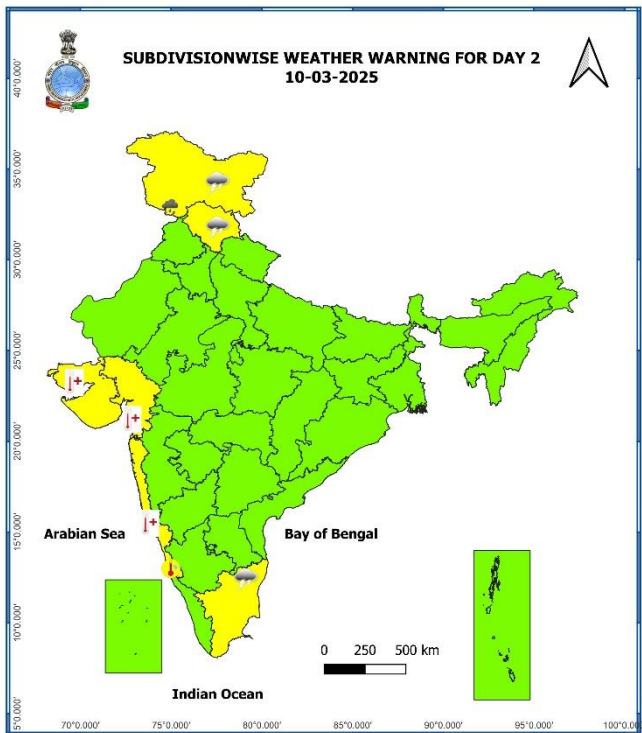
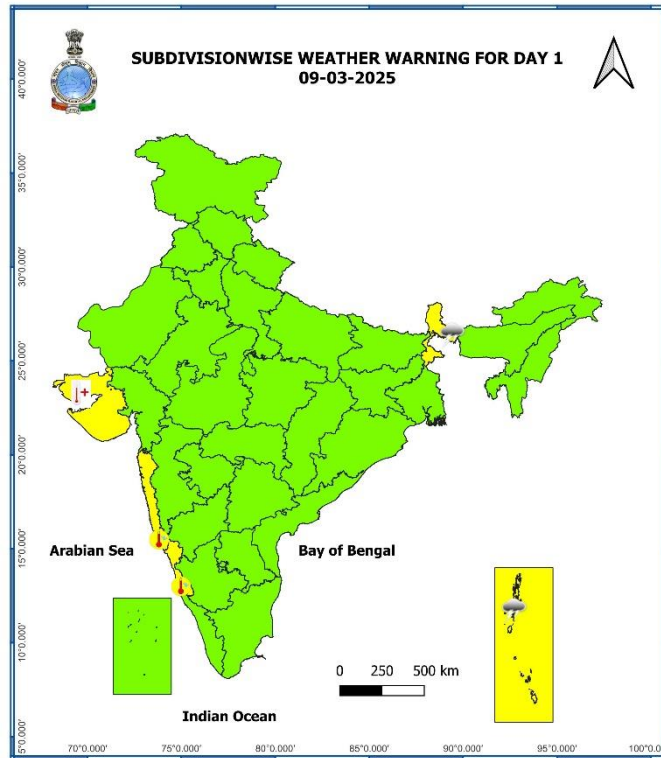


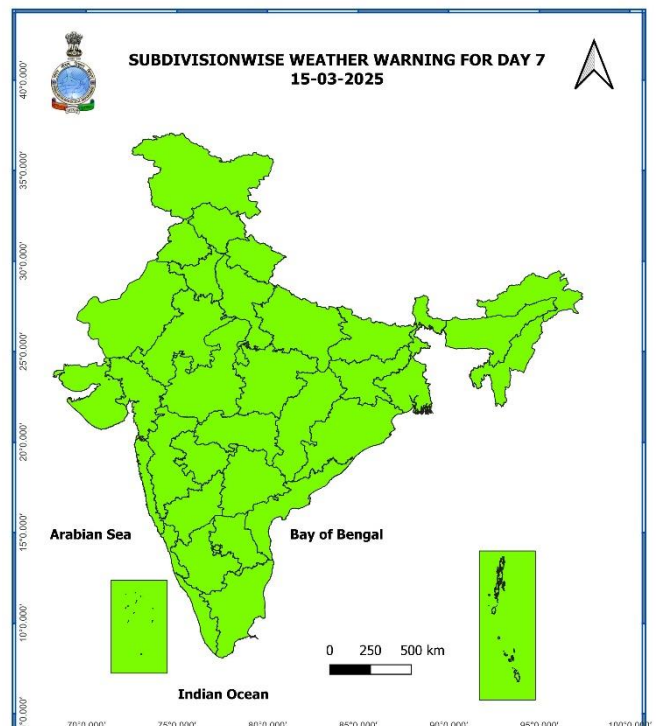
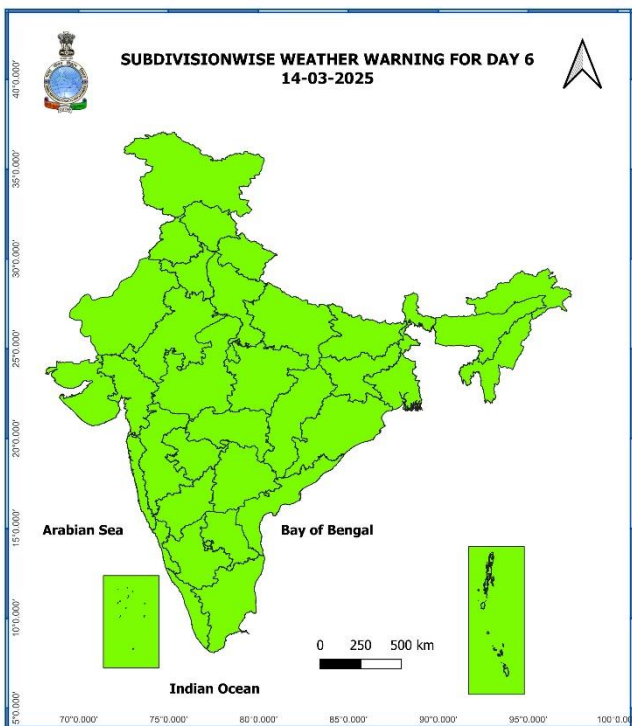
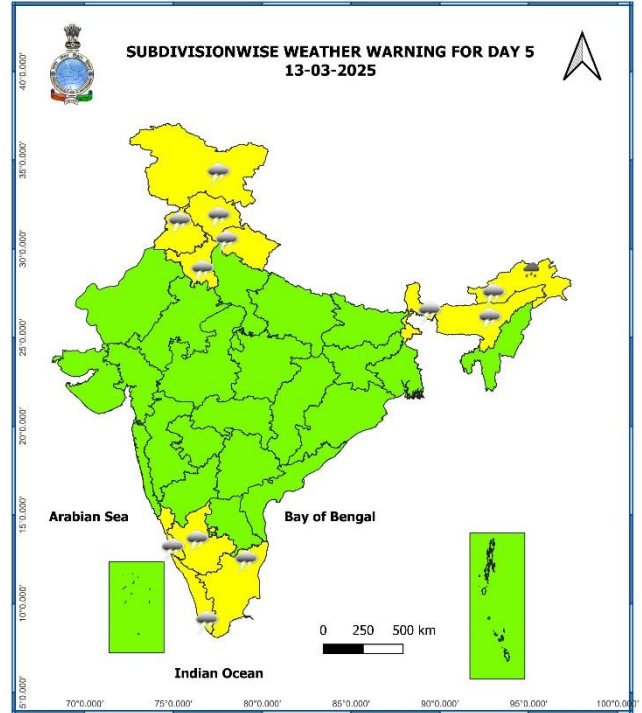
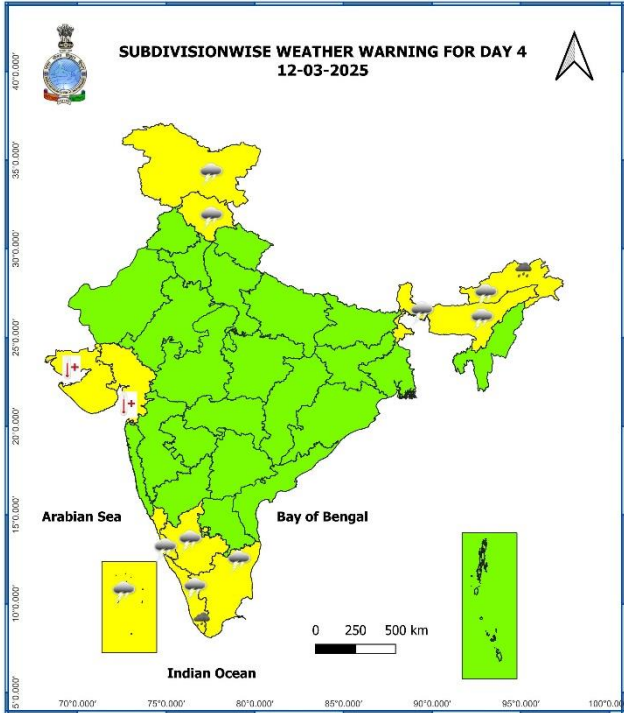
Fig. 2: Departure of Maximum Temperatures



7 Days Rainfall Forecast								
S. No.	Subdivision	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	FWS	SCT	SCT	SCT	FWS	FWS
2	ARUNACHAL PRADESH	ISOL	ISOL	FWS	FWS	FWS	SCT	SCT
3	ASSAM & MEGHALAYA	ISOL	DRY	SCT	SCT	FWS	SCT	SCT
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	DRY	DRY	SCT	SCT	SCT	SCT	SCT
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	SCT	ISOL	ISOL	DRY
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY	DRY	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
12	UTTARAKHAND	DRY	ISOL	ISOL	ISOL	SCT	SCT	SCT
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
14	PUNJAB	DRY	ISOL	DRY	ISOL	ISOL	ISOL	DRY
15	HIMACHAL PRADESH	ISOL	SCT	ISOL	SCT	FWS	FWS	SCT
16	JAMMU & KASHMIR AND LADAKH	ISOL	WS	SCT	FWS	WS	WS	WS
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21	GUJARAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHAWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	DRY	DRY	DRY	DRY	DRY	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	DRY	SCT	FWS	ISOL	ISOL	DRY	DRY
32	COASTAL KARNATAKA	DRY	DRY	ISOL	ISOL	ISOL	DRY	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	ISOL	ISOL	ISOL	DRY	DRY
35	KERALA & MAHE	ISOL	ISOL	SCT	SCT	ISOL	ISOL	ISOL
36	LAKSHADWEEP	DRY	DRY	WS	FWS	SCT	DRY	DRY

- 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 09th Mar. to 12th Mar. 2025**Past Weather:**

There has been a rise in minimum and maximum temperatures upto 2°C over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 29 to 32°C and 13 to 15°C respectively. The minimum temperature was near normal and maximum temperature was above normal upto 2°C in most places. Mainly clear sky conditions with predominant surface wind from the northwest direction with wind speeds less than 12 to 14 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 10 kmph from the southeast direction prevailed over the region in the forenoon today.

Weather Forecast:

09.03.2025: Mainly clear sky becoming partly cloudy sky towards evening/night. 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 east direction with a wind speed of less than 14 kmph till evening. It would decrease thereafter becoming less than 06 kmph from the southeast direction during the night.

10.03.2025: Partly cloudy sky. Mist likely in the morning. The maximum and minimum temperatures over Delhi are likely to be in the range of 31 to 33°C and 14 to 16°C respectively. The predominant surface wind will likely be from the southeast direction with a wind speed of 06-08 kmph during morning hours. The wind speed will gradually increase thereafter becoming, 10-12 kmph from the southeast direction during the afternoon. It will decrease becoming less than 08 kmph from the southeast direction during evening and night.

11.03.2025: Partly cloudy sky. Mist likely in the morning. Strong surface winds (speed 20-30 kmph). The maximum and minimum temperatures over Delhi are likely to be in the range of 32 to 34°C and 15 to 17°C respectively. The predominant surface wind will likely be from the southeast direction with a wind speed of 04-06 kmph during morning hours. The wind speed will gradually increase becoming 18-20 kmph from the northwest direction in the afternoon. It will decrease becoming less than 14 kmph from the north direction during evening and night.

12.03.2025: Partly cloudy sky. Mist likely in the morning. Strong surface winds (speed 20-30 kmph). 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 12-14 kmph during morning hours. The wind speed will gradually increase becoming 18-20 kmph from the northwest direction in the afternoon. It will decrease becoming less than 10 kmph from the northwest direction during evening and night.

Impact expected and action suggested due Heat Wave conditions over Saurashtra & Kutch during 09th-12th; Gujarat Region during 10th-12th and over Konkan & Goa on 10th March.

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 Heat Wave over Gujarat State during next 4 days

- In **Gujarat** State, apply light and frequent irrigation to the standing crops, vegetables and orchards in the evening to protect them from 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

- 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.

Impact & Action Suggested due to heavy rainfall/ snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 10th March and very heavy rainfall over south Tamil Nadu on 11th 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

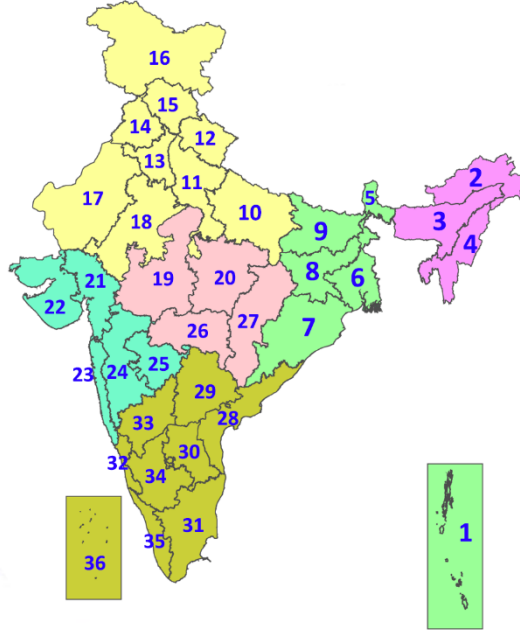
- ❖ Check for traffic congestion on your route before leaving for your destination.
- ❖ Follow any traffic advisories that are issued in this regard.
- ❖ Avoid going to areas that face the water logging problems often.
- ❖ Avoid staying in vulnerable structure.

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 62-87 kmph
Very Severe: Wind speed > 87 kmph

Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre
High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre
Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre

Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)
Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)
Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)
Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)
Super Cyclone Storm: Wind speed > 220 kmph (> 119 knots)

* 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)

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