

Monday, February 24, 2025
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems, Forecast and warning:

- ❖ A fresh **Western Disturbance** is seen as a cyclonic circulation over north Iran & neighbourhood from lower to upper tropospheric levels. Higher moisture feeding is also likely over Western Himalayan Region in lower tropospheric levels from Arabian Sea mainly during 25th -28th February, 2025. As a result;
 - ✓ **Fairly widespread to widespread** light to moderate rainfall/snowfall accompanied with thunderstorm & lightning likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand during 25th-28th February.
 - ✓ **Heavy rainfall/snowfall** at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 25th-28th; Himachal Pradesh during 26th-28th; Uttarakhand on 27th & 28th February.
 - ✓ **Isolated to scattered** light to moderate rainfall likely over Punjab, Haryana, Chandigarh during 26th February-01st March; over West Uttar Pradesh & Rajasthan during 27th February-01st March; over West Rajasthan on 27th & 28th February and East Uttar Pradesh, East Rajasthan on 28th February & 01st February.
- ❖ A trough runs from Gangetic West Bengal to south Chhattisgarh and an anti-cyclonic circulation lies over north Bay of Bengal in lower tropospheric levels. Under influence of these systems and likely their confluence;
 - ✓ Isolated to scattered light/moderate rainfall accompanied with **thunderstorm & lightning** very likely over Arunachal Pradesh on 24th; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 24th February.
- ❖ Under the influence of an active easterly wave **Heavy rainfall** at isolated places likely over Andaman & Nicobar Islands on 25th & 26th February. **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning** very likely over Andaman & Nicobar Islands during 24th-26th February.

Temperature Forecast:

Forecast of temperature:

Minimum Temperature:

- ❖ Gradual rise in minimum temperatures by 2-4°C likely over Northwest India during next 4 days.
- ❖ No significant change in minimum temperatures likely over Central India during next 3 days and rise by 2-4°C thereafter.
- ❖ No significant change in minimum temperatures likely over rest parts of India during next 4-5 days.

Maximum temperature:

- ❖ Gradual rise in maximum temperatures by 2-4°C likely over plains of Northwest India during next 4 days.
- ❖ No significant change in maximum temperatures likely over Central India during next 3 days and rise by 2-4°C thereafter.
- ❖ No significant change in maximum temperatures likely over Gujarat State during next 2 days and rise by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures likely over rest parts of India during next 4-5 days.
- ❖ **Hot & Humid conditions** likely over isolated pockets of Konkan & Goa and Coastal Karnataka during 24th-25th February.

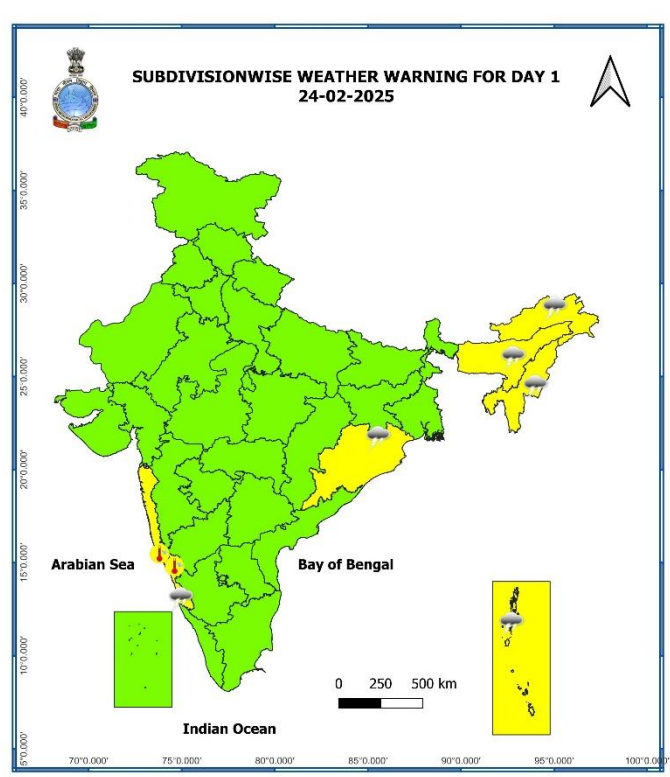
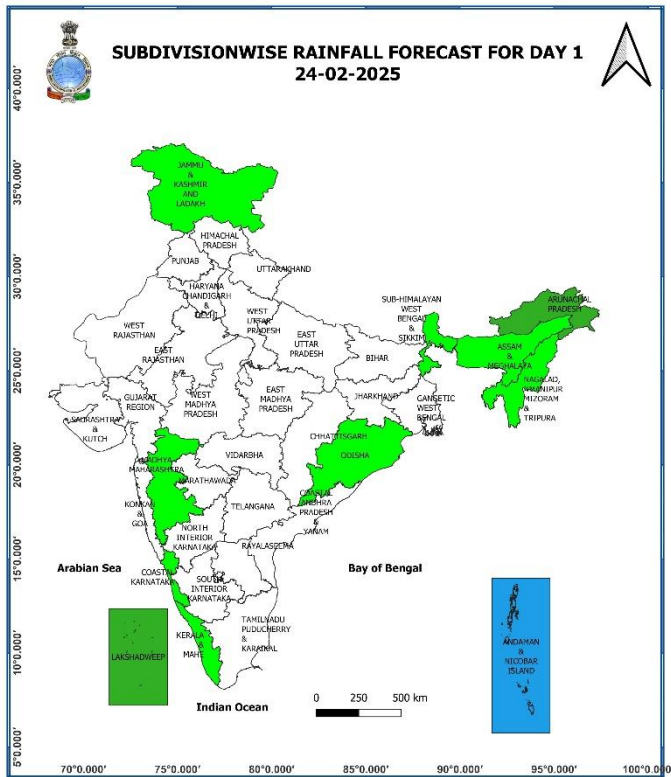
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Assam & Meghalaya; **at isolated places** over Odisha, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday): **(in cm): NIL**
- ❖ **Minimum Temperature Departures (as on 23-02-2025):** Minimum temperatures were **markedly above normal (5.1°C or more)** at isolated places over Bihar, Odisha and Madhya Maharashtra; **appreciably above normal (3.1°C to 5.0°C)** at a few places over Konkan & Goa; at isolated places over Nagaland, Manipur, Mizoram & Tripura and Saurashtra & Kutch; **above normal (1.6°C to 3.0°C)** at many places over West Rajasthan, East Uttar Pradesh, Jharkhand, Gujarat Region and Andaman & Nicobar Islands; at a few places over Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim; at isolated places over Kerala & Mahe, Chhattisgarh, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, North & South Interior Karnataka, Punjab, West Uttar Pradesh, West Madhya Pradesh, Marathwada, Coastal Andhra Pradesh & Yanam, Gangetic West Bengal. These were **below normal (-3.0°C to -1.6°C)** at isolated places over Arunachal Pradesh, Himachal Pradesh and Haryana-Chandigarh-Delhi and near normal over rest parts of the country (**Fig. 4**). Yesterday, the **lowest minimum temperature of 8.1°C** was reported at **Nahan (Haryana)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 23-02-2025):** Maximum temperatures were **markedly above normal (5.1°C or more)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **appreciably above normal (3.1°C to 5.0°C)** at a few places over Saurashtra & Kutch; at isolated places over West Rajasthan, Himachal Pradesh, Gujarat Region, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Jharkhand; **above normal (1.6°C to 3.0°C)** at most places over Madhya Maharashtra, Punjab; at a few places over Vidarbha, Marathwada, Coastal Karnataka, Kerala & Mahe; at isolated places over Telangana, Uttarakhand, West Rajasthan, Odisha, Rayalaseema, Tamil Nadu, Puducherry & Karaikal. These were **below normal (-3.0°C to -1.6°C)** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and West Bengal and near normal over rest parts of the country (**Fig. 2**). Yesterday, the highest **maximum temperature of 38.5°C** was reported at **Kurnool (Rayalaseema)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

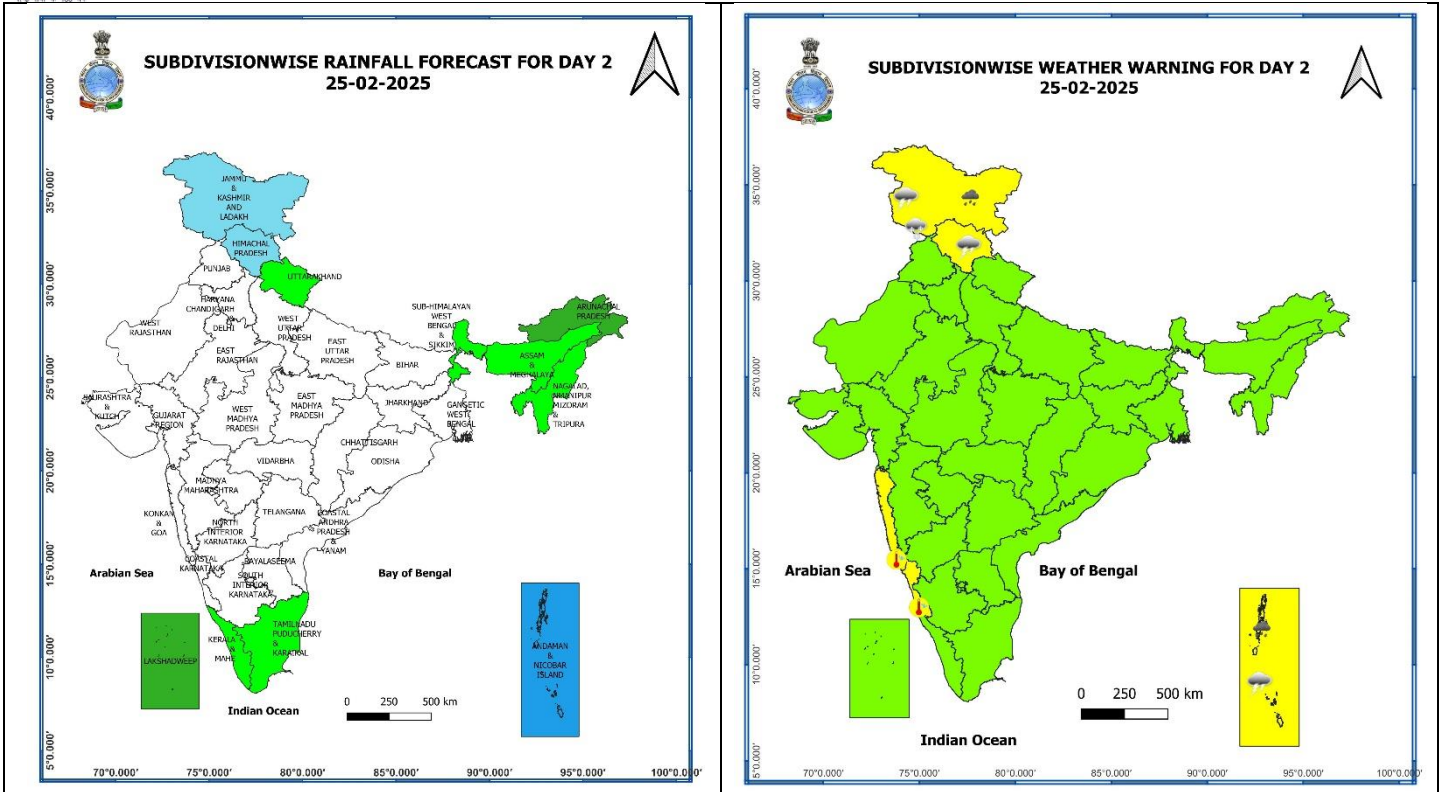
- ❖ The **Western Disturbance** as a cyclonic circulation over north Iran & neighbourhood between 3.1 & 9.6 km above mean sea level persists.
- ❖ The **cyclonic circulation** over north Pakistan & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The **trough in westerlies** from Gangetic West Bengal to south Chhattisgarh across Odisha at 0.9 km above mean sea level persists.
- ❖ The **cyclonic circulation** over northeast Assam and neighbourhood at 1.5 km above mean sea level persists.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 03rd March, 2025)



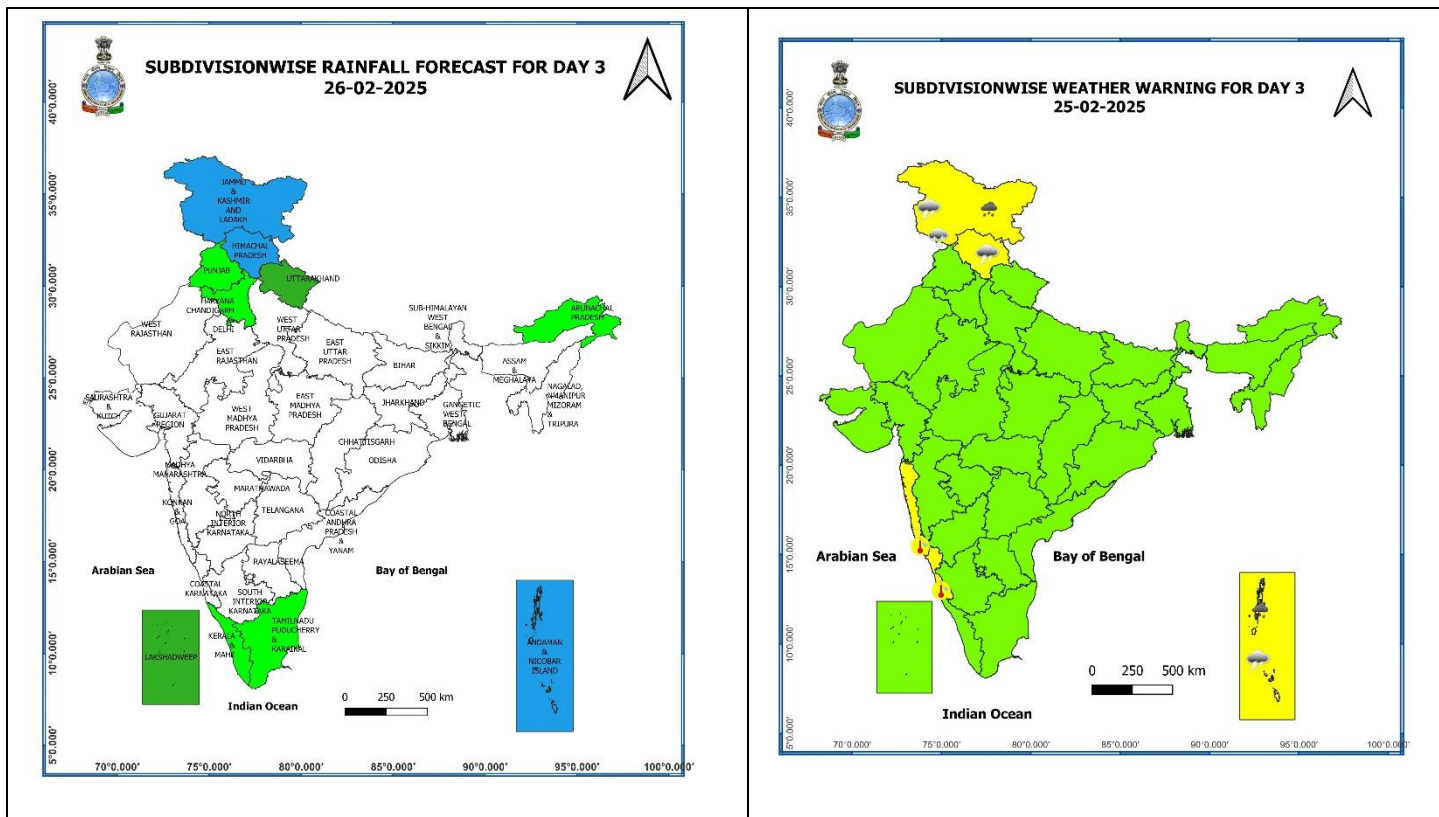
24th February (Day 1):

- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Andaman & Nicobar Islands, Odisha, Arunachal Pradesh, Assam & Meghalaya Nagaland, Manipur, Mizoram & Tripura and Coastal Karnataka;
- ❖ **Hot & Humid conditions** very likely at isolated pockets of Konkan & Goa and Coastal Karnataka.
- ❖ **Squally weather with wind (speed 35 kmph to 45 kmph gusting to 55 kmph)** likely to prevail over gulf of Mannar & adjoining Comorin area, along and off south Tamil Nadu coast, over south Andaman Sea. Fishermen are advised not to venture into these areas.



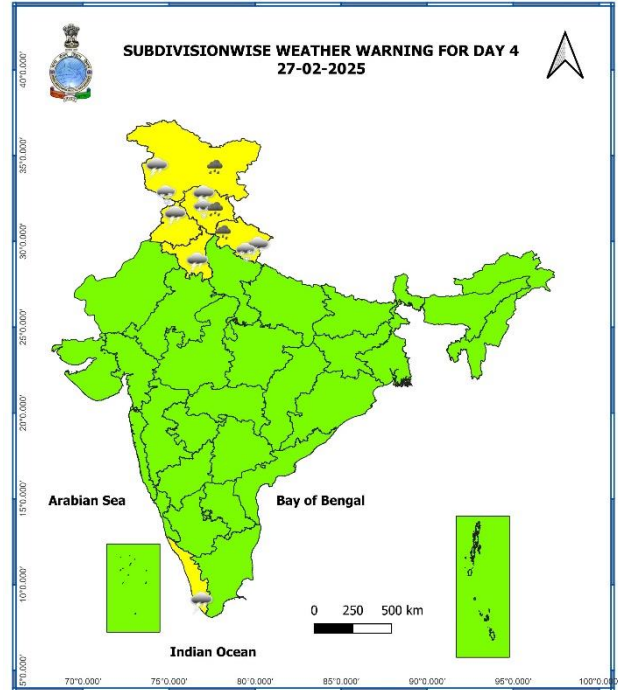
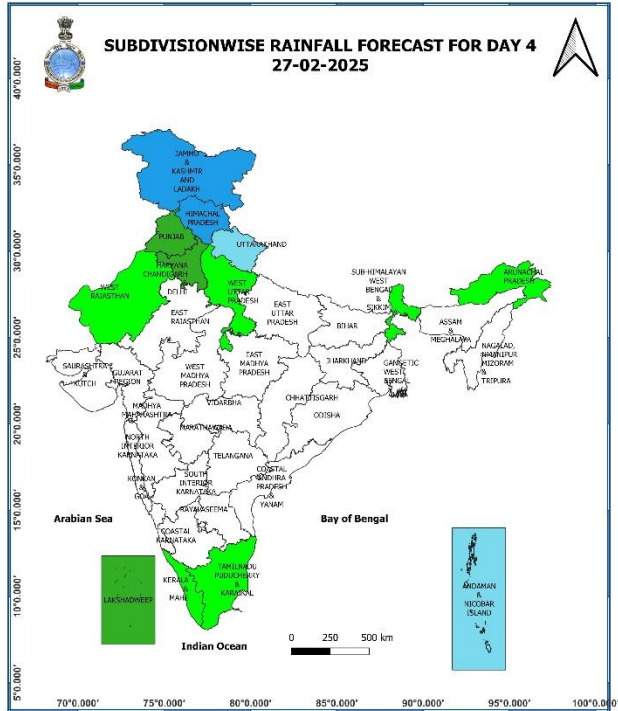
25th February (Day 2):

- ❖ **Heavy Rainfall/Snowfall (≥ 7 cm)** very likely at isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and **Heavy Rainfall (≥ 7 cm)** likely at isolated places of Andaman & Nicobar Islands.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Andaman & Nicobar Islands.
- ❖ **Hot & Humid conditions** very likely at isolated pockets of Konkan & Goa and Coastal Karnataka.
- ❖ **Squally weather with wind (speed 35 kmph to 45 kmph gusting to 55 kmph)** likely to prevail over gulf of Mannar & adjoining Comorin area, along and off south Tamilnadu coast, over south Andaman sea and adjoining parts of north Andaman sea & southeast Bay of Bengal. Fishermen are advised not to venture into these areas.



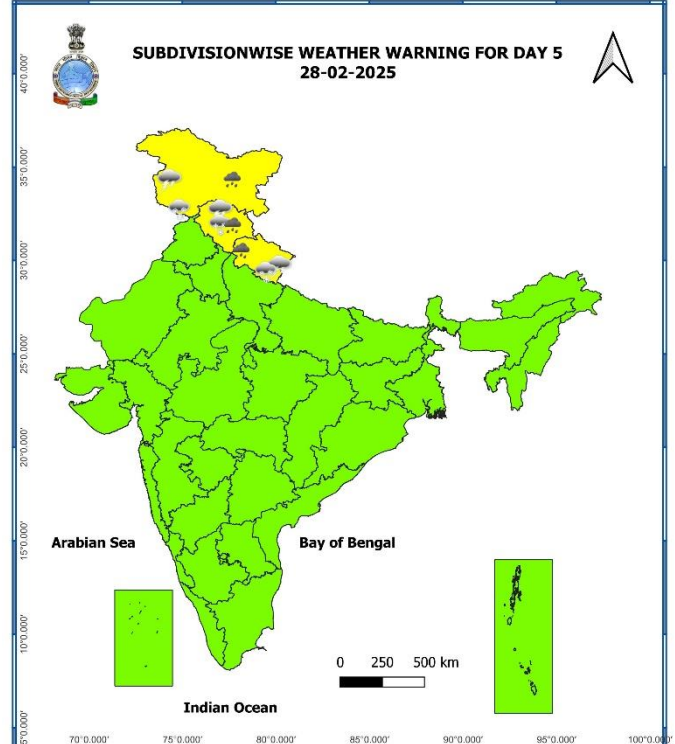
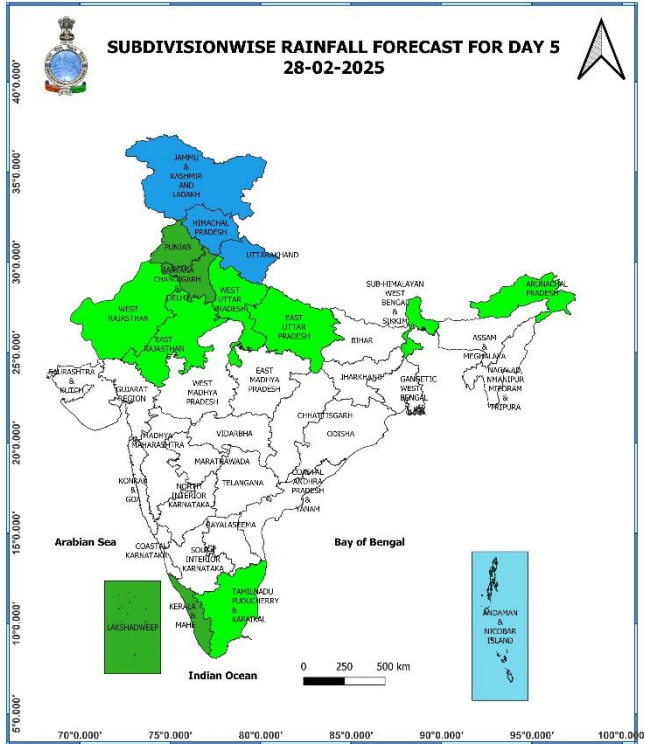
26th February (Day 3):

- ❖ **Heavy Rainfall/Snowfall (≥ 7 cm)** likely at isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and **Heavy Rainfall (≥ 7 cm)** likely at isolated places of Andaman & Nicobar Islands.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Andaman & Nicobar Islands, Kerala & Mahe.
- ❖ **Squally weather with wind (speed 35 kmph to 45 kmph gusting to 55 kmph)** likely to prevail over gulf of Mannar & adjoining Comorin area, along and off south Tamilnadu coast, over south Andaman sea and adjoining parts of north Andaman sea & southeast Bay of Bengal. Fishermen are advised not to venture into these areas.



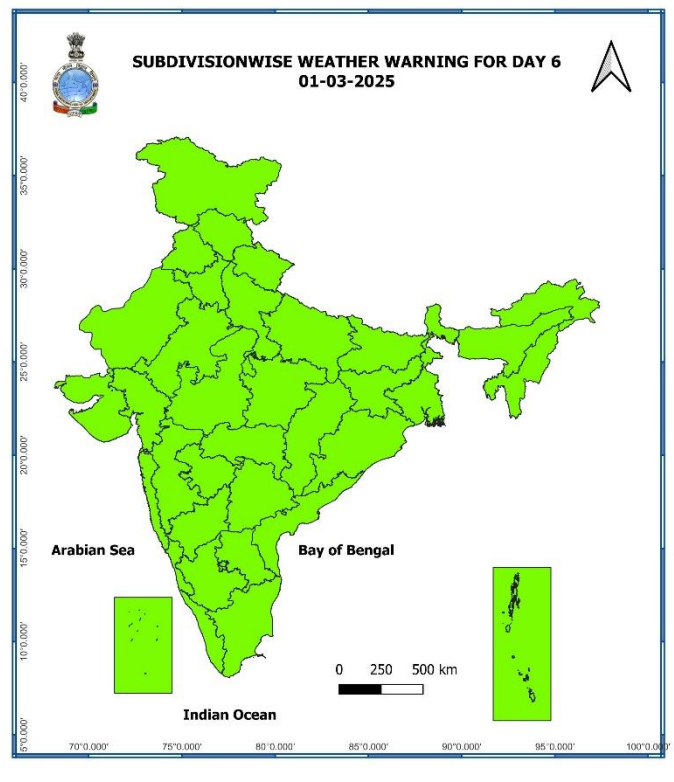
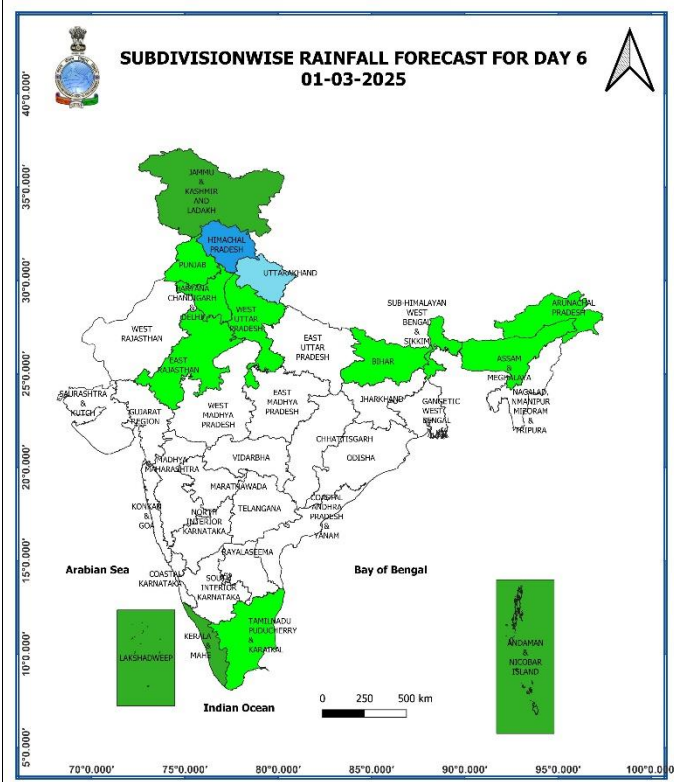
27th February (Day 4):

- ❖ **Heavy Rainfall/Snowfall (≥ 7 cm)** likely at isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Kerala & Mahe.
- ❖ **Squally weather with wind (speed 35 kmph to 45 kmph gusting to 55 kmph)** likely to prevail over gulf of Mannar & adjoining Comorin area, along and off south Tamilnadu coast, over south Andaman sea and adjoining parts of north Andaman sea & southeast Bay of Bengal. Fishermen are advised not to venture into these areas.



28th February (Day 5):

- ❖ **Heavy Rainfall/Snowfall (≥ 7 cm)** likely at isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand.



01st March (Day 6):

❖ **No Weather Warning.**

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

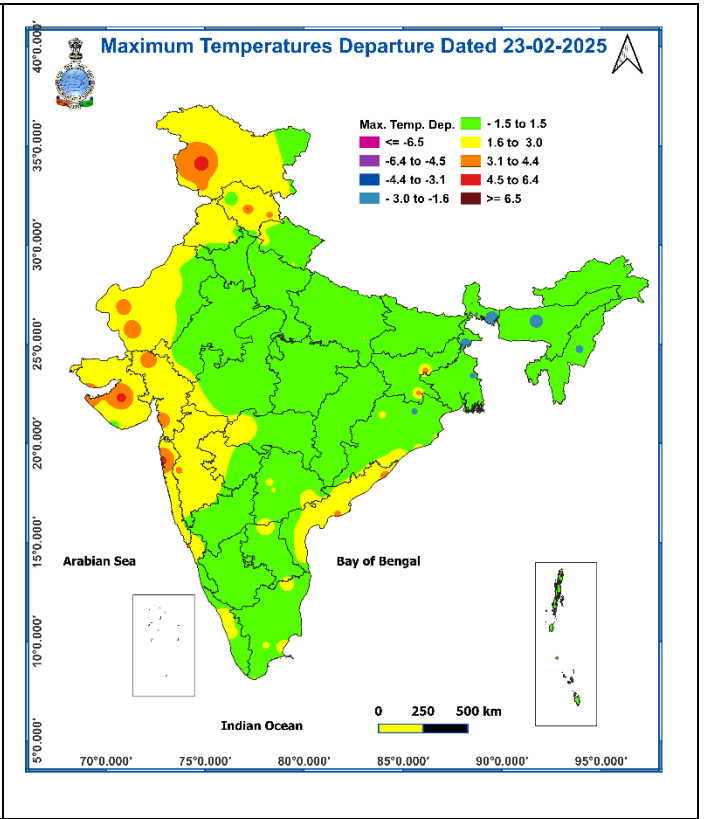
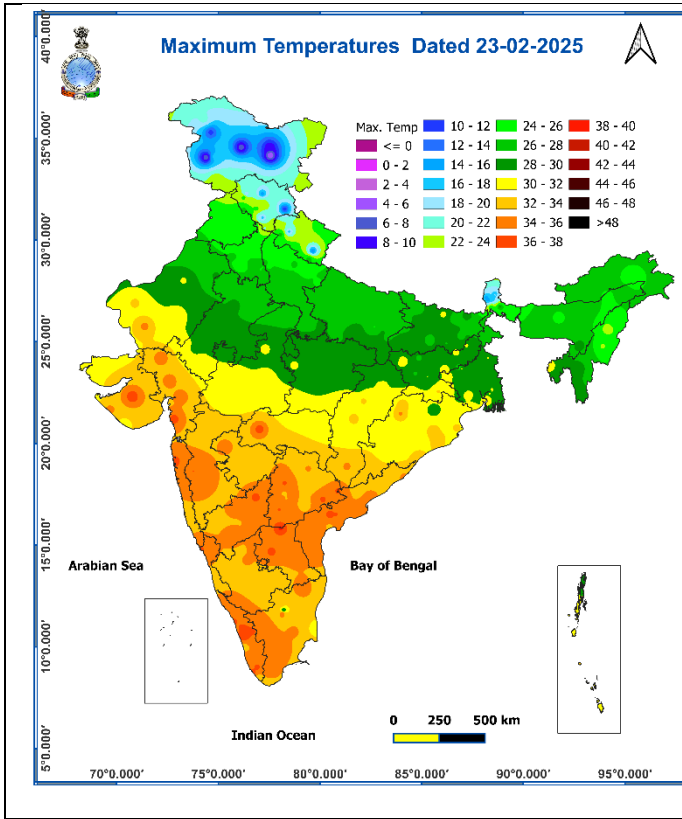
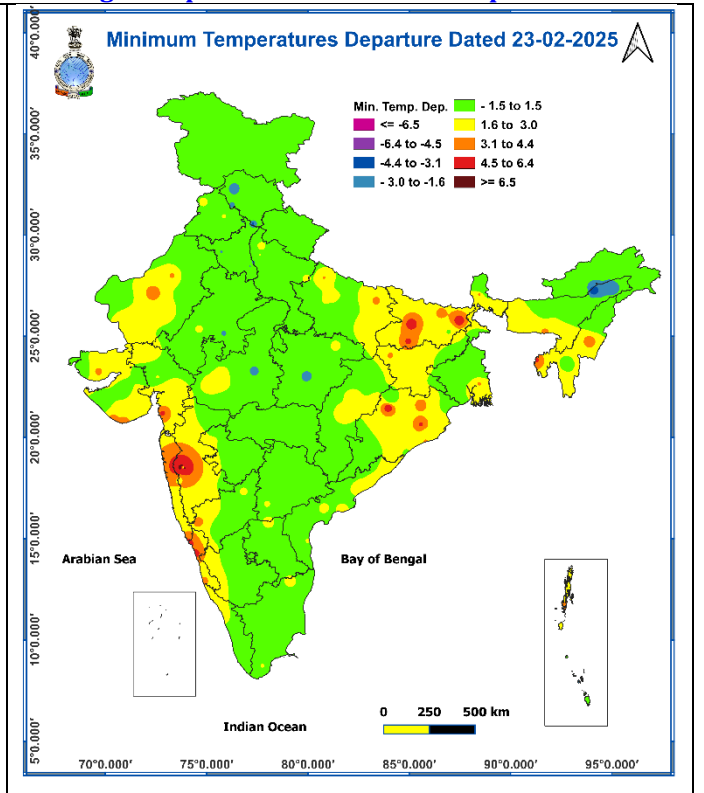
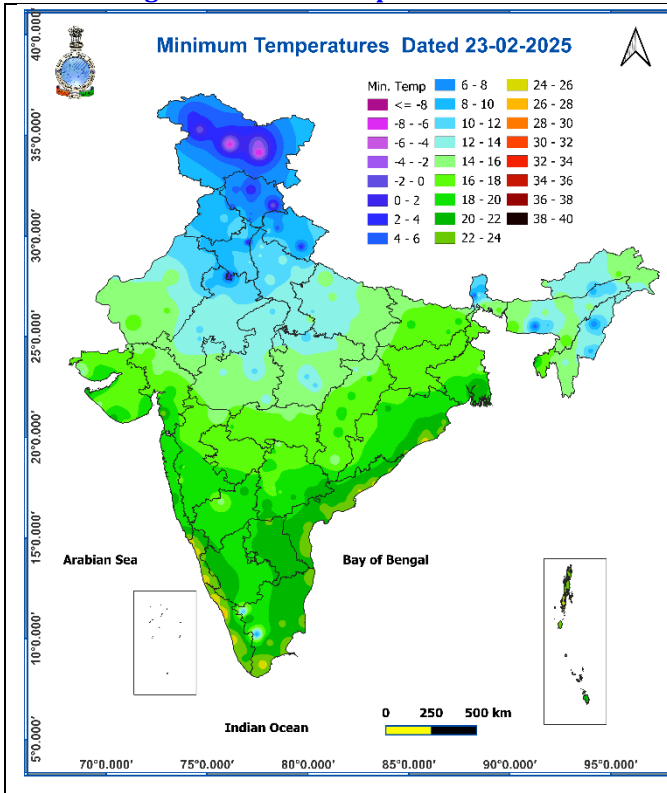


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures



Agromet advisories for likely impact of Hailstorms

- Use hail nets or hail caps in fruit orchards and vegetable plants to protect them from mechanical damage in **Assam, Meghalaya and Odisha**.
- Make provision for draining out excess water from the fields of rice, mustard, field pea, other standing crops, vegetables and horticultural crops in **Arunachal Pradesh** to avoid water stagnation.
- 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.

Livestock

- Keep the animals inside the shed during hailstorms and provide them with balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.

Impact expected and action suggested due to isolated thunderstorm with lightning/gusty winds & Hailstorm

Impact expected:

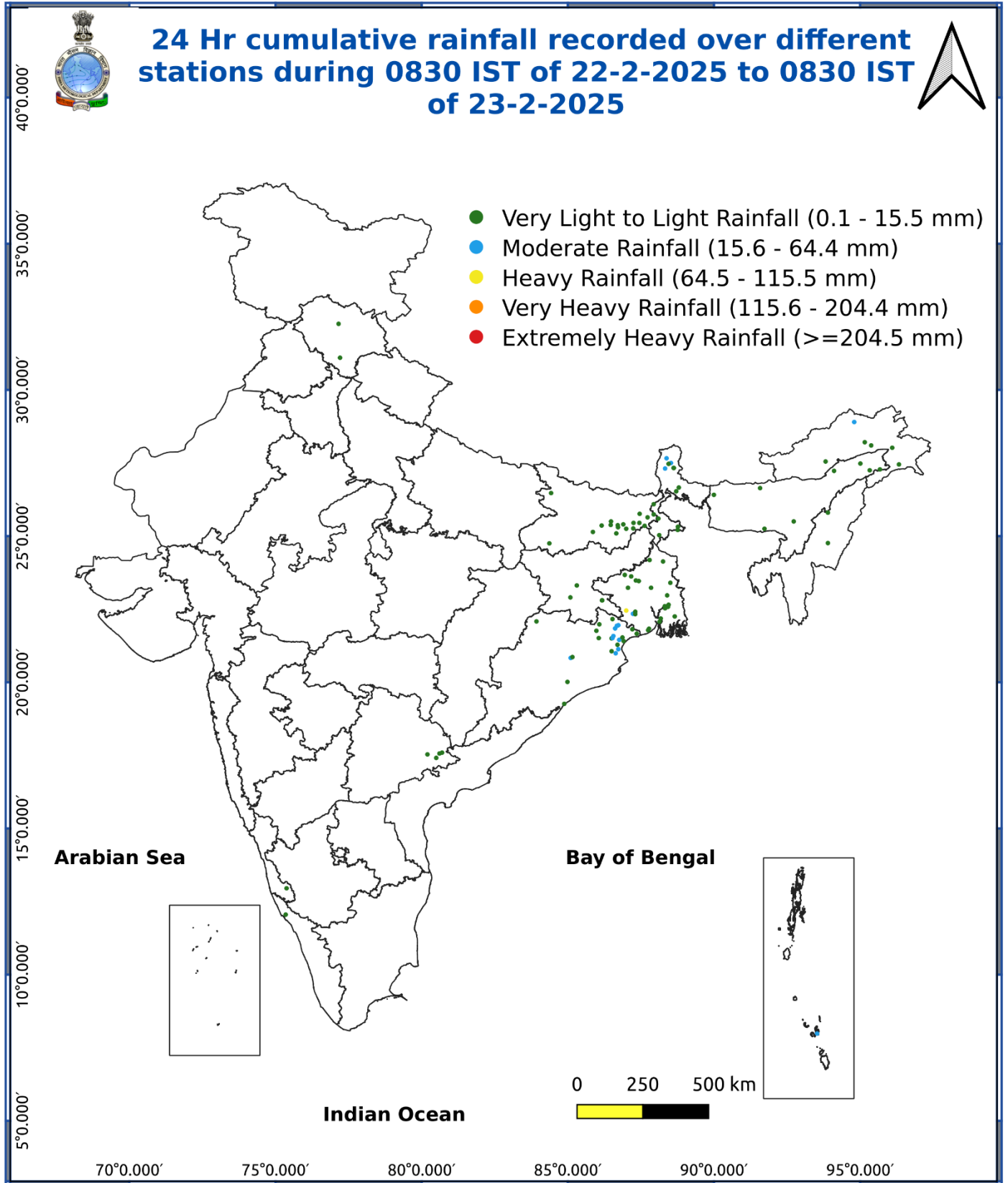
- Strong wind/hail may damage plantation, horticulture and standing crops.
- Hail may injure people and cattle at open places.
- Partial damage to vulnerable structures due to strong winds.
- Minor damage to kutcha houses/walls and huts.
- Loose objects may fly.

Action suggested:

- 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.

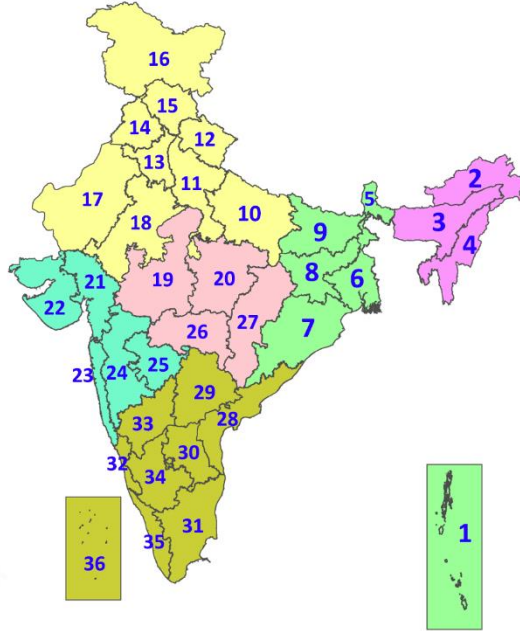
Fig. 5: Accumulated Rainfall (mm) during past 24 hours



* 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)

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

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 Strom: Wind speed > 220 kmph (> 119 knots)