

Monday, March 24, 2025
Time of Issue: 1415 hours IST
(MID-DAY)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems, Forecast and Warnings:

- ❖ A trough/wind discontinuity runs from south Chhattisgarh to north Kerala across interior Maharashtra, and interior Karnataka in lower tropospheric levels. A trough in middle & upper tropospheric westerlies runs roughly along Long. 87°E to the north of Lat. 22°N. Under the influence of these systems:
 - ✓ **Scattered to Fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed 30-50 kmph)** likely over Tamilnadu Puducherry & Karaikal, Lakshadweep, Andhra Pradesh, Telangana, south Madhya Maharashtra, Chhattisgarh, Odisha, on 24th; Karnataka on 24th & 25th; Kerala & Mahe during 24th -27th March, 2025.
- ❖ A fresh Western Disturbance is likely to affect Western Himalayan Region from night of 24th March. A Western Disturbance as a trough in lower to upper tropospheric level with its axis at 3.1 km above mean sea level runs roughly along Long. 49°E to the north of Lat. 25°N. Under its influence:
 - ✓ **Isolated to scattered** light/moderate rainfall accompanied with **thunderstorm, lightning** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 24th-27th; Himachal Pradesh during 25th-27th and over Uttarakhand on 26th & 27th March.
 - ✓ **Heavy rainfall/snowfall** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 26th March.
 - ✓ **Heavy rainfall** likely at isolated places over Arunachal Pradesh on 28th March.

Temperature Forecast:

Forecast of temperature:

Maximum temperature:

- ❖ Gradual rise in maximum temperatures by 2-3°C likely over many places over plains of Northwest India during next 2 days and fall by 2-3°C thereafter (except Uttar Pradesh where rise by 4-6°C is expected during next 4 days).
- ❖ Gradual rise in maximum temperatures by 4-6°C likely over West India and Northeast India during next 4-5 days.
- ❖ Gradual rise in maximum temperatures by 2-4°C likely over Central India and Interior Maharashtra during next 4-5 days.
- ❖ No significant change in maximum temperatures likely over Gujarat during next 24 hours and rise by 2-3°C thereafter.

Heat wave and Hot & Humid weather warning:

Hot & humid weather conditions very likely to prevail in isolated pockets over coastal areas of Gujarat State on 24th & 25th; over Tamilnadu Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam and Rayalaseema on 27th & 28th March.

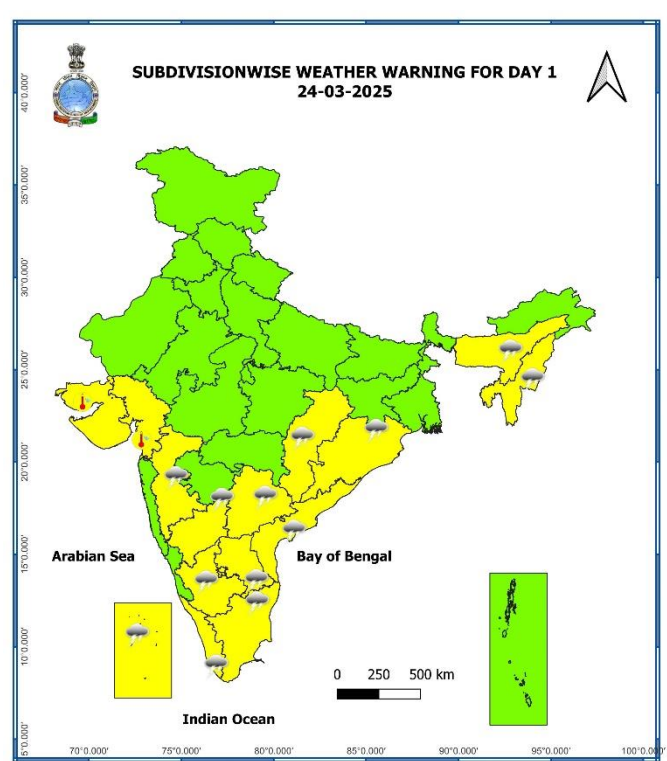
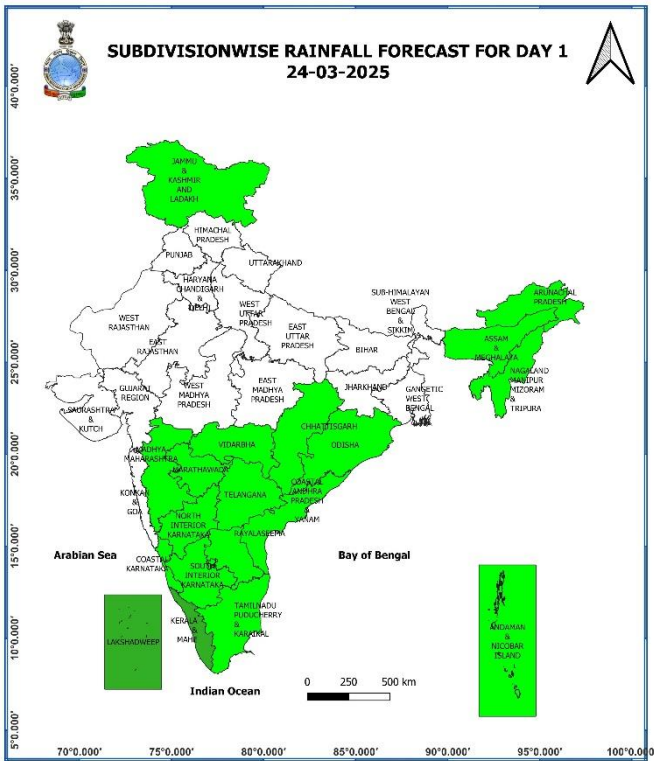
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at a few places** over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Jharkhand, South Interior Karnataka and Kerala & Mahe; **at isolated places** over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, East Uttar Pradesh, Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): **Coastal Andhra Pradesh & Yanam:** Palakonda (dist Parvathipuram Manyam) 7, Veeraghattam (dist Parvathipuram Manyam) 5, Parvathipuram (dist Parvathipuram Manyam) 5, Balajipeta (dist Parvathipuram Manyam) 3, Garividi (dist Vizianagaram) 3, Cheepurupalle (dist Vizianagaram) 3, Seethanagaram (dist Parvathipuram Manyam) 3; **Odisha:** Ganjam-5' **Chhattisgarh:** Jashpurnagar (dist Jashpur) 5, Manora (dist Jashpur) 1, Bhairamgarh (dist Bijapur) 1, Nangur (dist Bastar) 1, Tapkara (dist Jashpur) 1; **Tamil Nadu:** Vilupuram (dist Villupuram) 5; Rajapalayam (dist Virudhunagar), Kunderipallam (dist Erode), Thanjavur PTO (dist Thanjavur) 3 each; **Kerala & Mahe:** Nilambur (dist Malappuram) 5, Aralam (dist Cannur) 4, Perumpavur (dist Ernakulam) 3, Karapuzha (dist Wynad) 2, Manantoddy (dist Wynad) 2, Thritle (dist Palakkad) 2, Ulanad (dist Pathanamthitta) 2; **Arunachal Pradesh:** Deed AWS (dist Lower Siang) 4, Seppa Oampoli AWS (dist East Kameng) 3; **Assam & Meghalaya:** Barapani (dist Ri Bhoi) 3, Baithalangso (dist Karbi Anglong) 3; **North Interior Karnataka:** Chittapur (dist Kalaburgi) 3, Bidar Pto (dist Bidar) 1; **South Interior Karnataka:** Bandipura (dist Chamarajanagar) 3, Kunigal (dist Tumakuru) 3, Kolar Pwd (dist Kolar) 3, H D Kote (dist Mysuru) 3, Gubbi (dist Tumakuru) 3; **Telangana:** Regode (dist Medak) .
- ❖ **Heavy rainfall** reported at isolated places over Coastal Andhra Pradesh.
- ❖ **Hailstorms reported** at isolated locations over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Telangana.
- ❖ **Squally/Gusty winds** prevailed at isolated locations over Odisha, Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Hailstorm** reported at isolated places Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Telangana.
- ❖ **Minimum Temperature Departures (as on 24-03-2025):** Minimum temperatures are **above normal (1.6°C to 3.0°C)** a few places over West Rajasthan, Konkan & Goa, Madhya Maharashtra; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Saurashtra & Kutch, Telangana, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, Andaman & Nicobar Islands. These were **markedly below normal (-5.1°C or less)** at isolated places over Bihar; **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over East Madhya Pradesh, Gangetic West Bengal; **below normal (-3.0°C to -1.6°C)** at a few places over Jharkhand, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; at isolated places over Haryana-Chandigarh-Delhi, East Rajasthan, West Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Vidarbha and near normal over rest parts of the country (**Fig. 4**). Today, the **lowest minimum temperature of 12.8°C** is reported at **Karnal (Haryana)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 23-03-2025):** Maximum Temperatures were **markedly above normal (5.1°C or more)** at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **appreciably above normal (3.1°C to 5.0°C)** at many places over West Rajasthan; at a few places over Himachal Pradesh, Punjab; at isolated places over Saurashtra & Kutch; **above normal (1.6°C to 3.0°C)** at a few places over Haryana-Chandigarh-Delhi, Konkan & Goa, Coastal Karnataka; at isolated places over East Rajasthan, West Uttar Pradesh, Uttarakhand, Assam. These were **markedly below normal (-5.1°C or less)** at a few places over Jharkhand; at isolated places over Odisha, Gangetic West Bengal; **appreciably below normal (-3.1°C to -5.0°C)** at many places over Rayalaseema; at a few places over South Interior Karnataka; at isolated places over Bihar, Telangana; **below normal (-3.0°C to -1.6°C)** at a few places over East Uttar Pradesh; at isolated places over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Nagaland, Tripura, Meghalaya, Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country (**Fig. 2**). Yesterday, the highest **maximum temperature of 41.0°C** was reported at **Surendranagar (Saurashtra & Kutch)** over the country.

Meteorological Analysis (Based on 0830 hours IST)

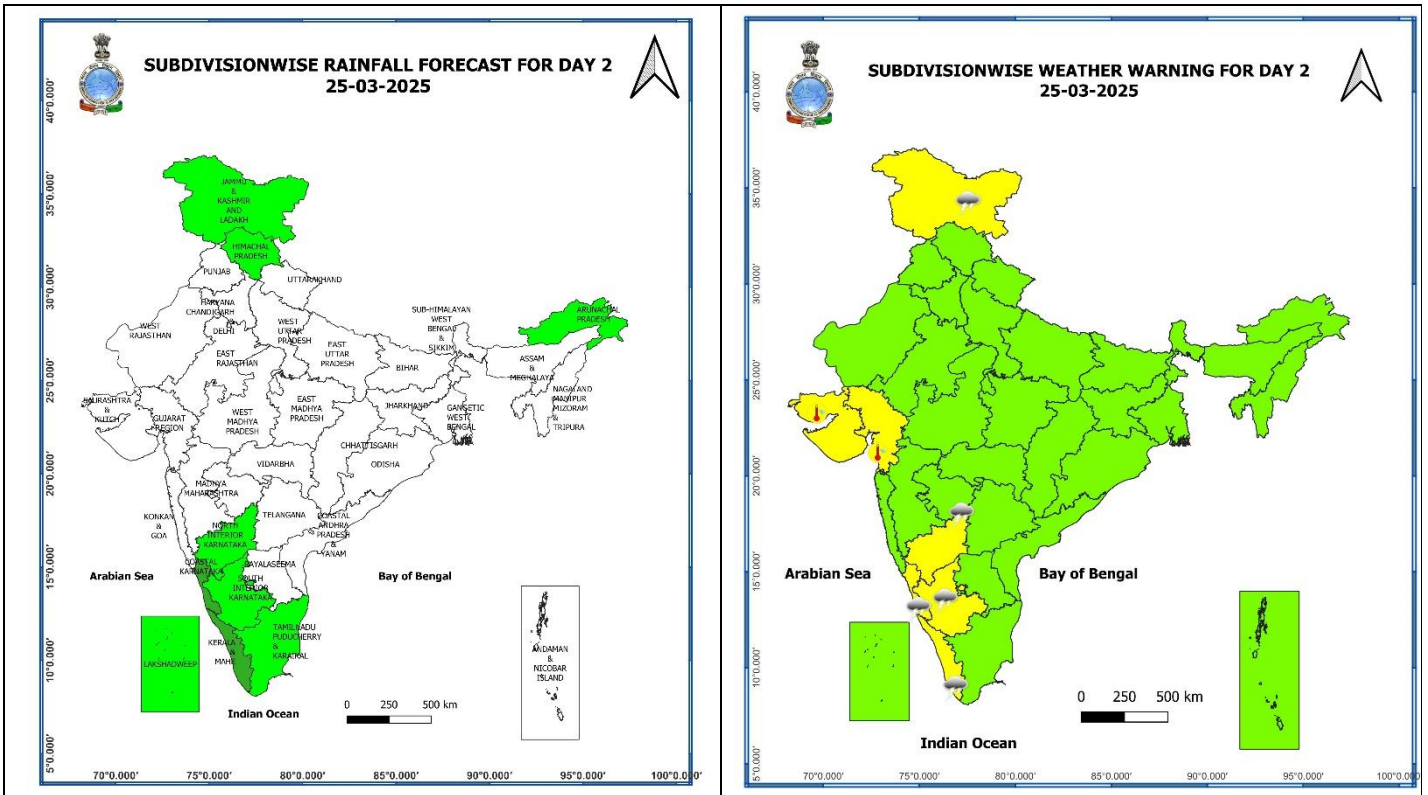
- ❖ The **Western Disturbance** as a trough in lower to upper tropospheric level with its axis at 3.1 km above mean sea level roughly along Long. 49°E to the north of Lat. 25°N persists.
- ❖ The **trough** in westerlies in middle & upper tropospheric levels with its axis between 3.1 & 7.6 km above mean sea level roughly along Long. 87°E to the north of Lat. 22°N persists.
- ❖ The north-south **trough/ wind discontinuity** from west Vidarbha to north Kerala now runs from south Chhattisgarh to north Kerala across Vidarbha, Madhya Maharashtra, North Interior Karnataka at 0.9 km above mean sea level.
- ❖ The **Cyclonic Circulation** over Equatorial Indian Ocean & adjoining southeast Bay of Bengal extending upto 1.5 km above mean sea level persists.
- ❖ The **Cyclonic Circulation** over northeast Assam & neighbourhood at 1.5 km above mean sea level has become less marked.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 31st March, 2025)



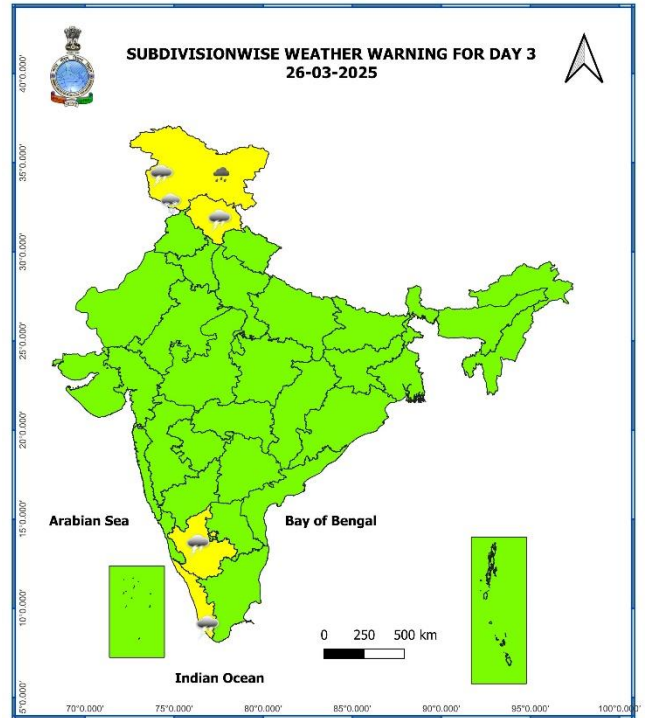
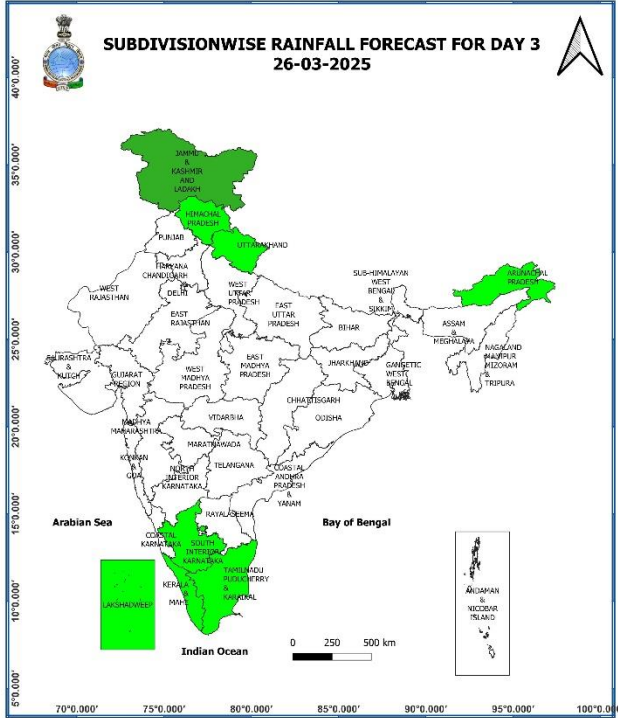
24th March (Day 1):

- ❖ **Thunderstorm accompanied with gusty winds (speed reaching 40 - 50 kmph) & lightning** very likely at isolated places over Kerala & Mahe and South Interior Karnataka; **with gusty winds (speed reaching 30 - 40 kmph) & lightning** at isolated places over Chhattisgarh, Madhya Maharashtra, Rayalaseema and North Interior Karnataka; **with lightning** at isolated places over Odisha, northeast Assam, Nagaland, Coastal Andhra Pradesh & Yanam, Telangana, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- ❖ **Hot and Humid Conditions** very likely at isolated places over Gujarat state.
- ❖ **Squally wind with speed 45 kmph to 50 kmph gusting to 55 kmph** is likely to prevail over western parts of northwest Arabian sea. Fishermen are advised no to venture into these areas.



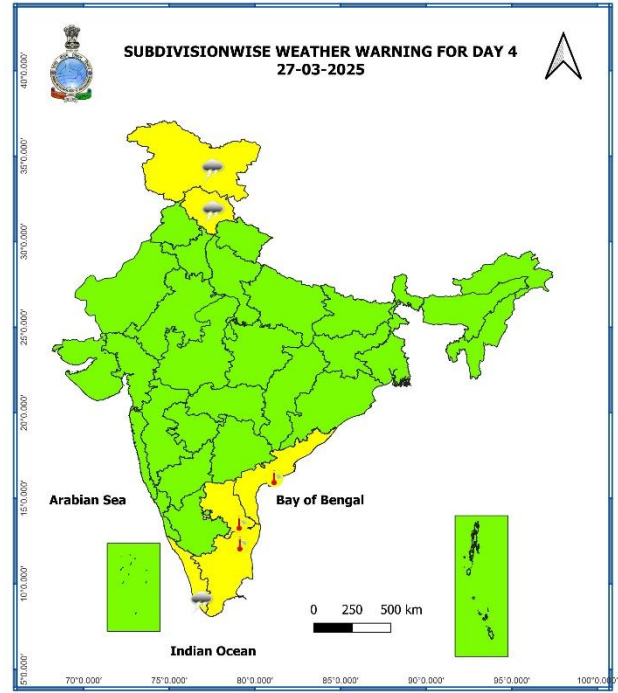
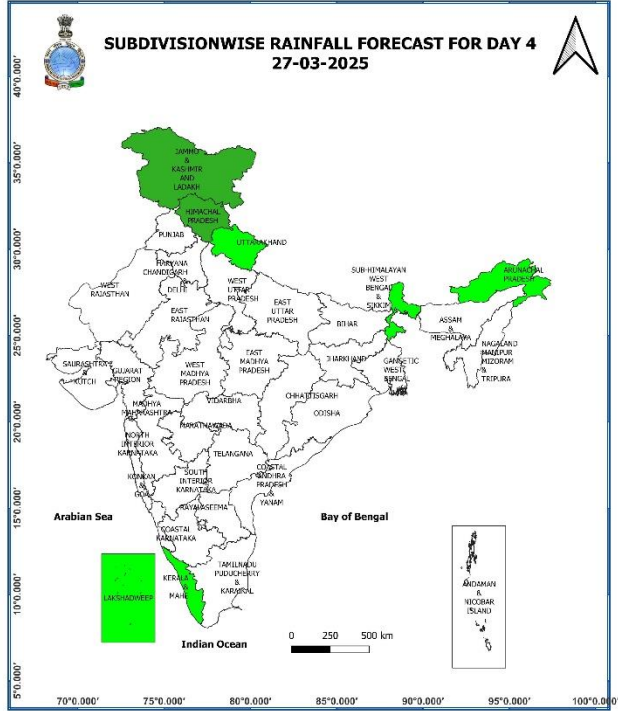
25th March (Day 2):

- ❖ **Thunderstorm accompanied with gusty winds (speed reaching 40 - 50 kmph) & lightning** very likely at isolated places over Kerala & Mahe and South Interior Karnataka; **with gusty winds (speed reaching 30 - 40 kmph) & lightning** at isolated places over Coastal & North Interior Karnataka; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Hot and Humid Conditions** very likely at isolated places over Gujarat state.
- ❖ **Squally wind with speed 45 kmph to 50 kmph gusting to 55 kmph** is likely to prevail over western parts of northwest Arabian sea. Fishermen are advised no to venture into these areas.



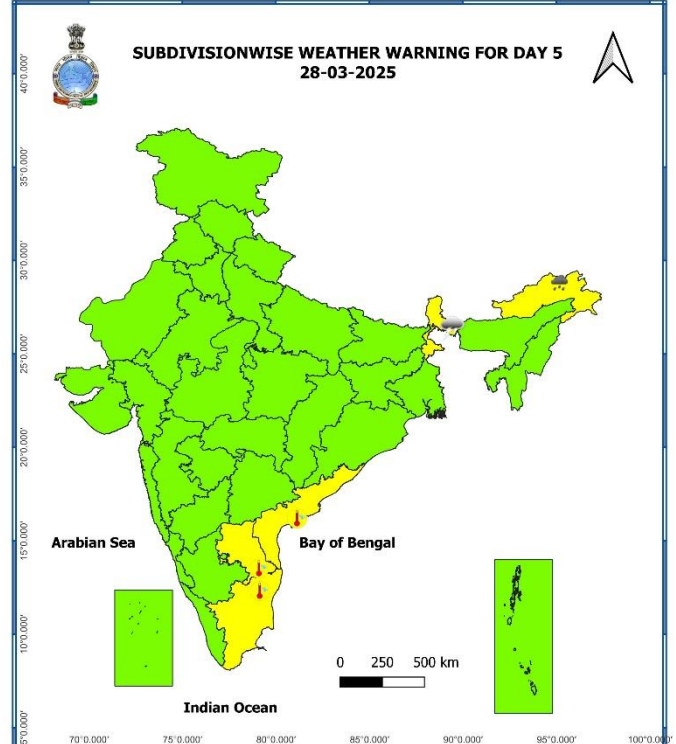
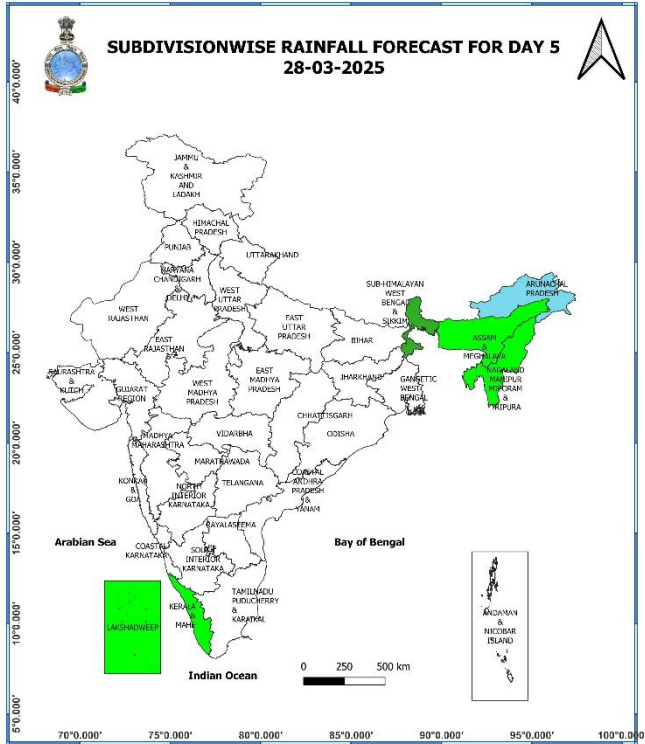
26th March (Day 3):

- ❖ **Heavy rainfall** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Thunderstorm accompanied with gusty winds (speed reaching 40 - 50 kmph) & lightning** very likely at isolated places over Kerala & Mahe; **with gusty winds (speed reaching 30 - 40 kmph) & lightning** at isolated places over South Interior Karnataka; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh.



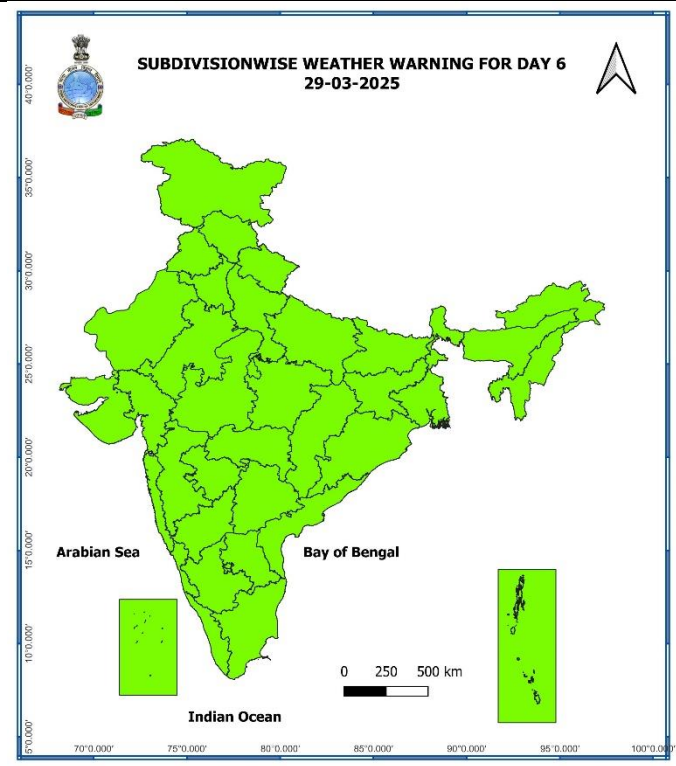
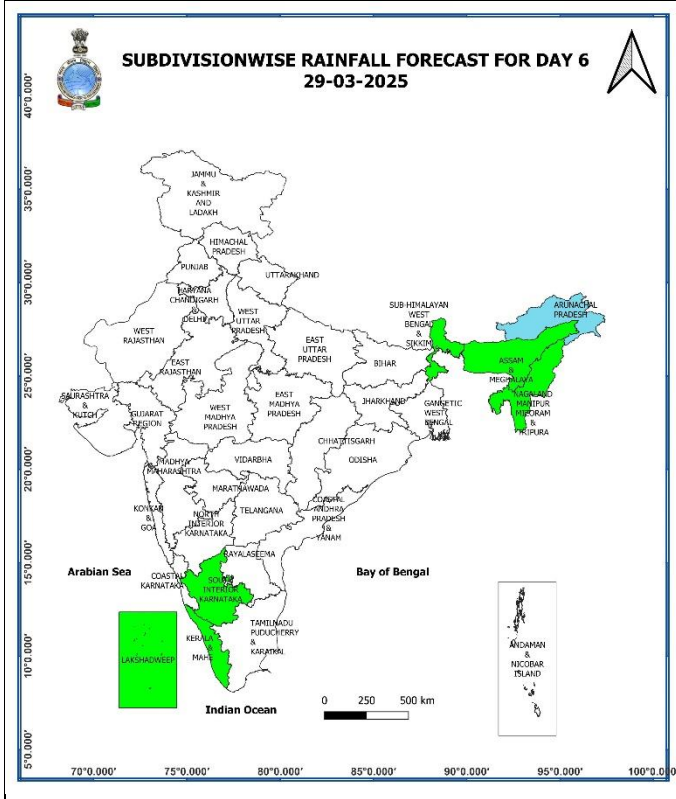
27th March (Day 4):

- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Kerala & Mahe.
- ❖ **Hot and Humid Conditions** likely at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.



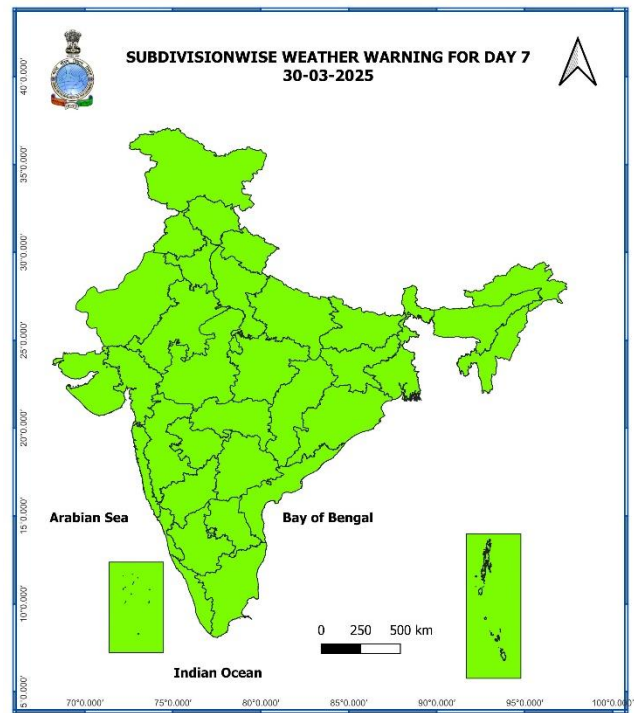
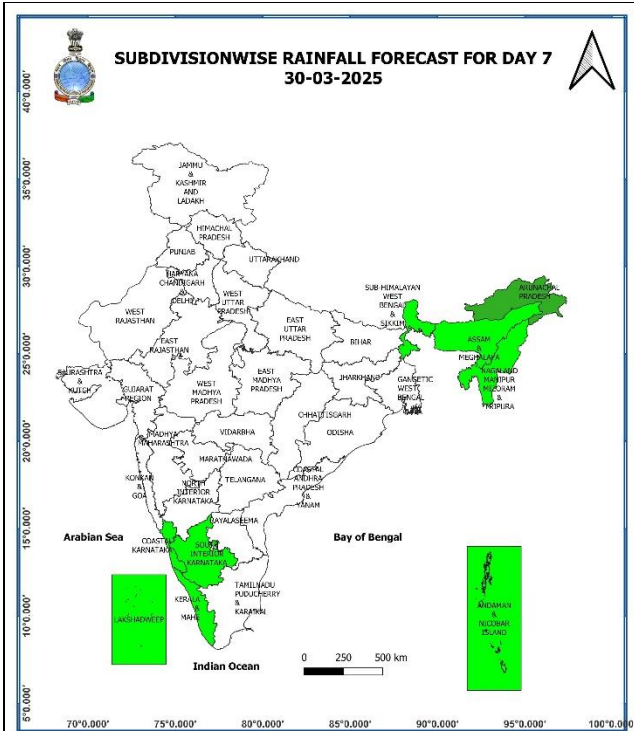
28th March (Day 5):

- ❖ **Heavy rainfall** likely at isolated places over Arunachal Pradesh.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Sub-Himalayan West Bengal & Sikkim.
- ❖ **Hot and Humid Conditions** likely at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.



29th March (Day 6):

❖ **No Weather Warning.**



30th March (Day 7):

❖ **No Weather Warning.**

Weather Outlook for subsequent 3 days (During 31st March- 02nd April, 2025)

❖ **Isolated to scattered rainfall** likely over central India, Arunachal Pradesh, Andaman & Nicobar Islands, Maharashtra, Gujarat state, Odisha, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Karnataka and South Interior Karnataka.

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.**

* 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)

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

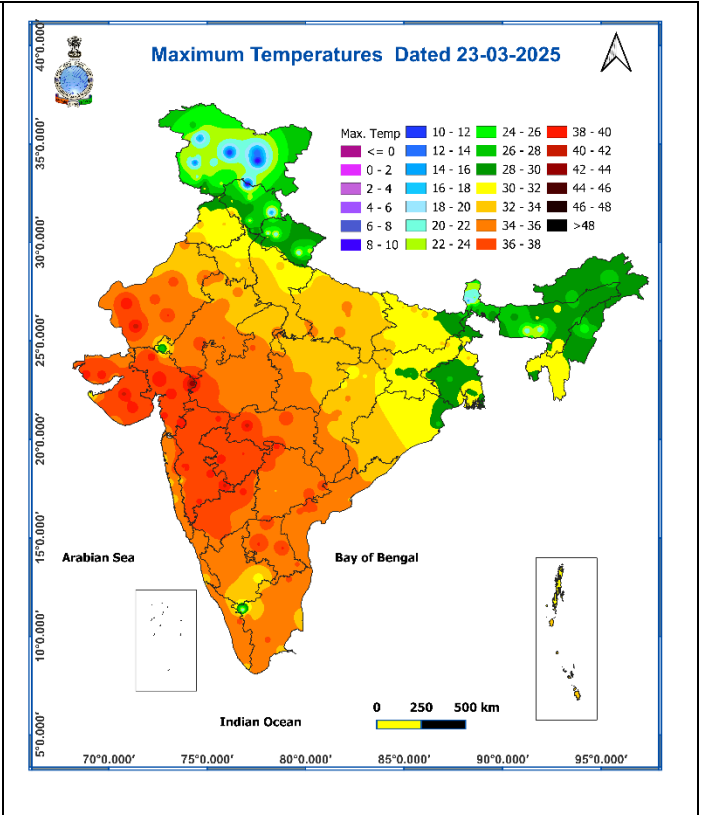
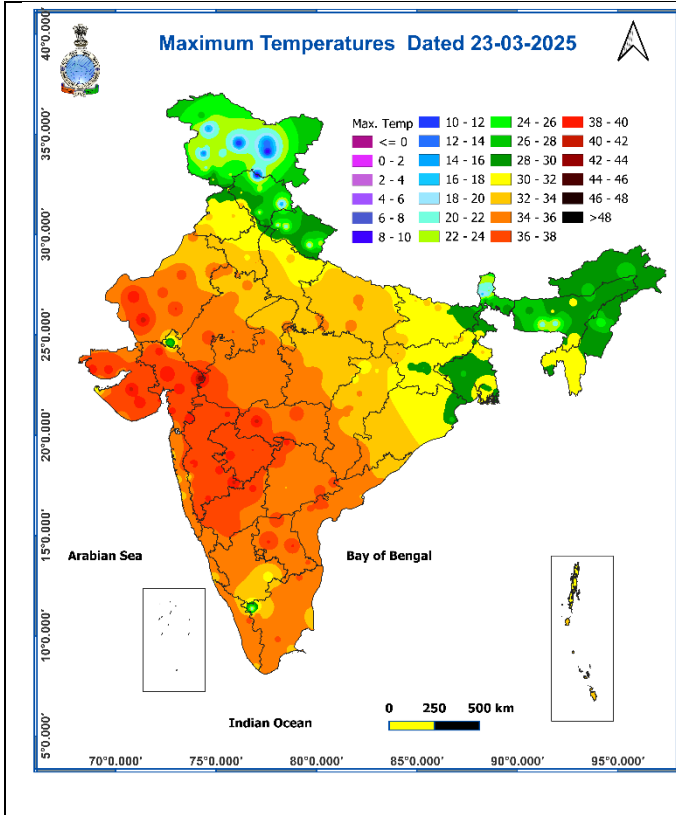


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

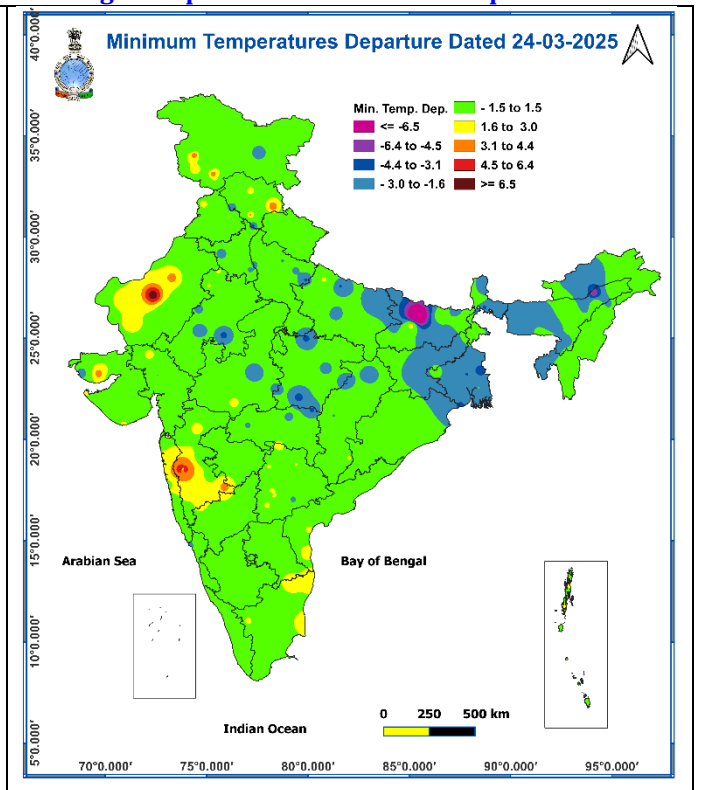
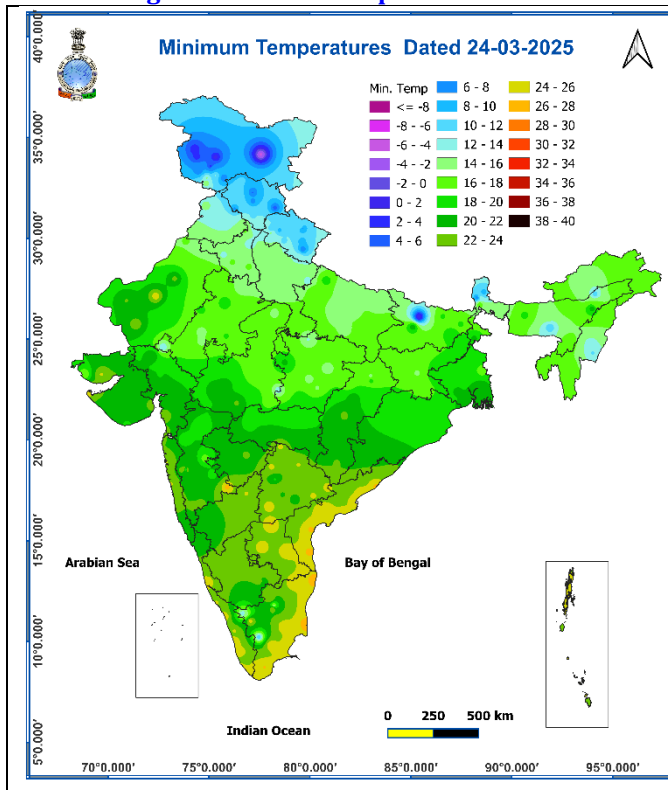
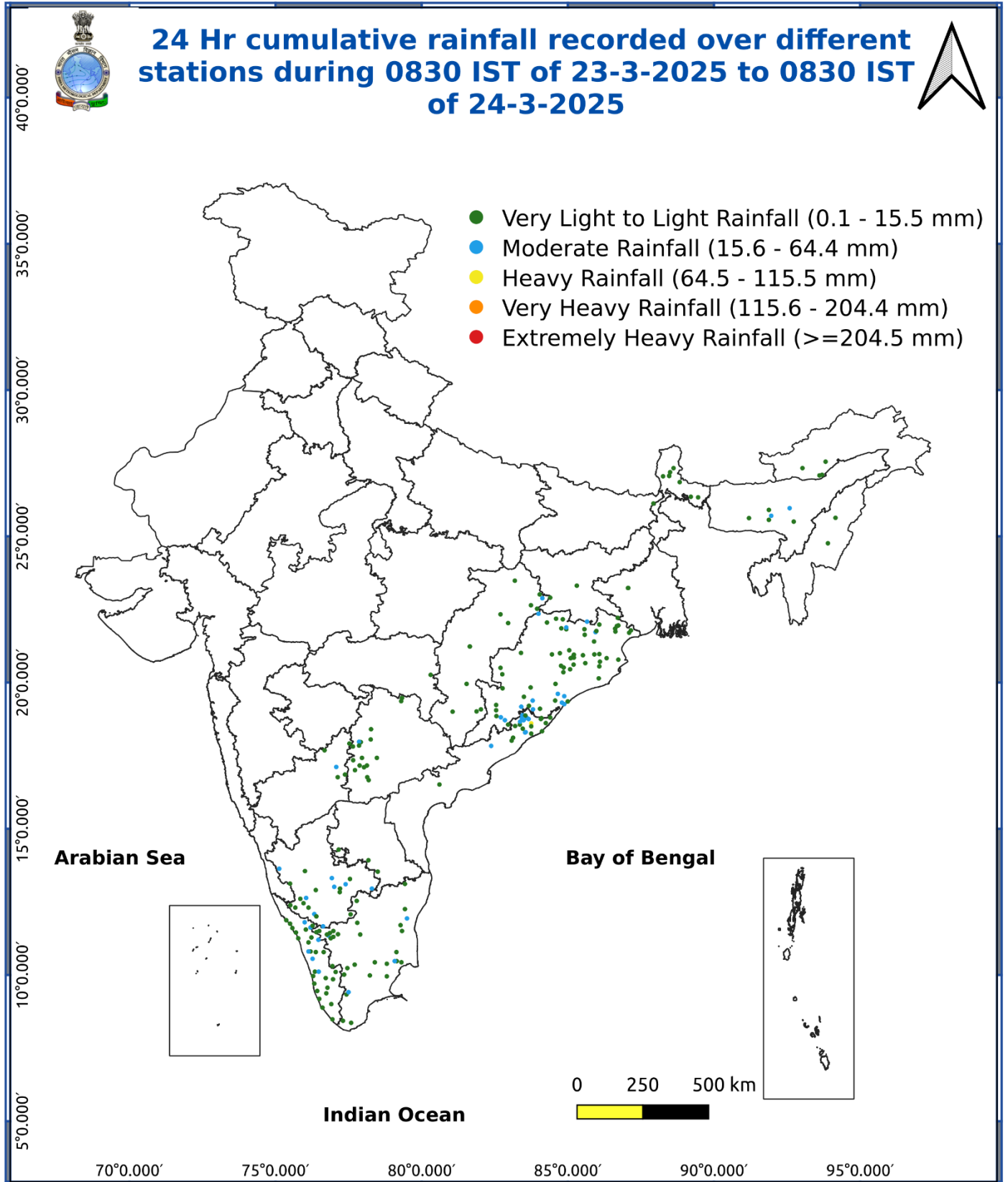


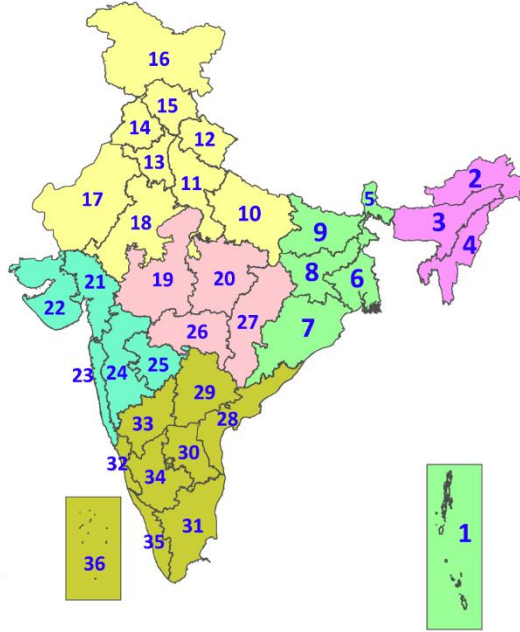
Fig. 5: Accumulated Rainfall (mm) during past 24 hours



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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 *	<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 62-87 kmph</p> <p>Very Severe: Wind speed >87 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 Strom: Wind speed >220 kmph (>119 knots)</p>