

Friday, December 6, 2024
Time of Issue: 1315 hours IST
(MID-DAY)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems and associated weather:

- ❖ A fresh **Western Disturbance** is likely to affect Western Himalayan Region and adjoining plains of Northwest India from 08th December. It is very likely to cause light/moderate rainfall/snowfall over Western Himalayan Region and light isolated rainfall over Punjab, Haryana, Chandigarh & West Uttar Pradesh on 08th & 09th December, 2024.
- ❖ A **cyclonic circulation** lies over Equatorial Indian Ocean & adjoining southeast Bay of Bengal in lower tropospheric levels. Under its influence, a low pressure area is likely to form over central parts of south Bay of Bengal around 07th December. The system is likely to move west-northwestwards and reach over southwest Bay of Bengal off Sri-Lanka - Tamil Nadu coasts around 12th December. Under its influence, isolated heavy rainfall is likely over coastal Tamil Nadu on 11th & 12th December and Coastal Andhra Pradesh & Yanam & Rayalaseema on 12th December.

Forecast & Warnings (upto 7 day):

- ✓ **Heavy rainfall** at isolated places very likely over Tamil Nadu, Puducherry & Karaikal on 11th & 12th and Coastal Andhra Pradesh & Yanam & Rayalaseema on 12th December.
- ✓ **Dense fog conditions** very likely to prevail during late night/early morning hours in isolated pockets of Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura till 09th, Punjab, Haryana, Chandigarh & Uttar Pradesh during 07th-10th, Sub-Himalayan West Bengal & Sikkim, Bihar during 08th-10th and Himachal Pradesh on 10th & 11th December morning hours.
- ✓ **Cold wave** conditions very likely in isolated pockets over North Rajasthan during 10th -12th December.

ii. Temperature conditions and Forecast:

Forecast of temperature:

- ❖ No significant change in minimum temperatures likely over Punjab, Haryana-Chandigarh during next 48 hours, then rise by 2°C during subsequent 2 days and fall thereafter.
- ❖ No significant change in minimum temperatures likely over Rajasthan during next 3 days and gradual fall by 2-3°C during subsequent 2 days.
- ❖ Gradual fall in minimum temperatures by 2-3°C likely over East India during next 2 days and then gradual rise by 2-3°C during subsequent 3 days.
- ❖ Gradual fall in minimum temperatures by 3-5°C likely over West India during next 5 days.
- ❖ No significant change in minimum temperatures likely over Central India during next 3 days and gradual fall by 2-3°C during subsequent 2 days.

Weather Realised (past 24 hours) & forecast (during 06th Dec. to 09th Dec. 2024) over Delhi/NCR

Past Weather:

There has been a fall in maximum temperature upto 03°C over Delhi/NCR during past 24hr. The Maximum and Minimum temperature over Delhi is in the range of 23 to 26°C and 08 to 11°C respectively. The maximum and minimum temperature were near normal over most places. Mainly smog/ mist condition with predominant surface wind from northwest direction with wind speed reaching 12 to 20 kmph prevailed on 05.12.2024. Mainly clear sky condition with wind speed less than 12 kmph northwest direction prevailed over the region in the forenoon today.

Weather Forecast:

06.12.2024: Mainly clear sky. The predominant surface wind is likely to be northwest direction with wind speed less than 12 kmph till evening. It would decrease thereafter becoming less than 06 kmph from northwest direction during night. Smog/mist is likely in the evening/night.

07.12.2024: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with speed less than 04 kmph during morning hours. Smog/shallow fog is likely in the morning. The wind speed will increase thereafter becoming less than 06 kmph from variable direction during afternoon. It will decrease thereafter becoming less than 04 kmph from southeast direction during evening and night. Smog/mist is likely in the evening/night.

08.12.2024: Partly cloudy sky. The predominant surface wind is likely to be from southeast direction with speed less than 08 kmph during morning hours. Smog/shallow to moderate fog is likely in the morning. The wind speed will gradually increase becoming 12-14 kmph from southeast direction during afternoon. It will decrease thereafter becoming less than 08 kmph from southeast direction during evening and night. Smog/mist is likely in the evening/night.

09.12.2024: Mainly clear sky. The predominant surface wind is likely to be from variable direction with wind speed less than 04 kmph during morning hours. Smog/ moderate fog in the morning. The wind speed will increase thereafter becoming 08-10 kmph from southeast direction during afternoon. It will gradually decrease becoming less than 06 kmph from southeast direction during evening and night. Smog/ shallow fog is likely in the evening/night.

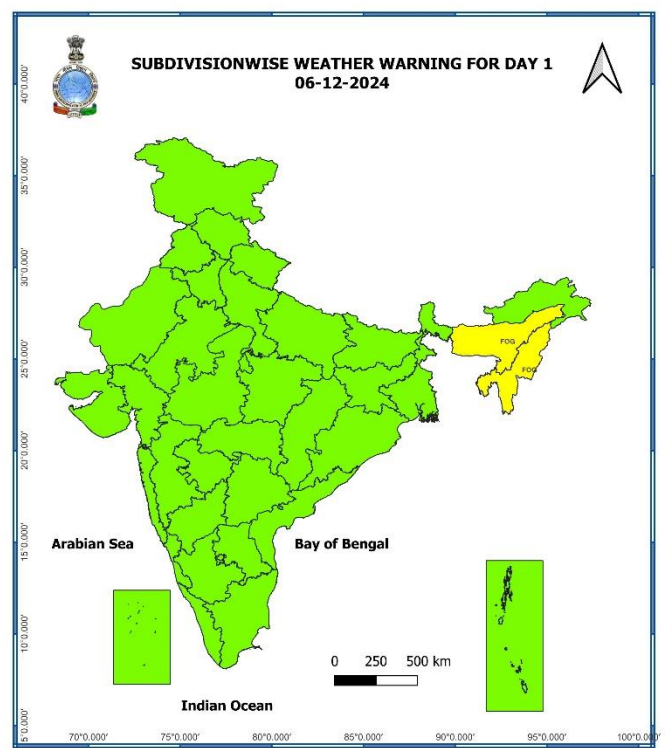
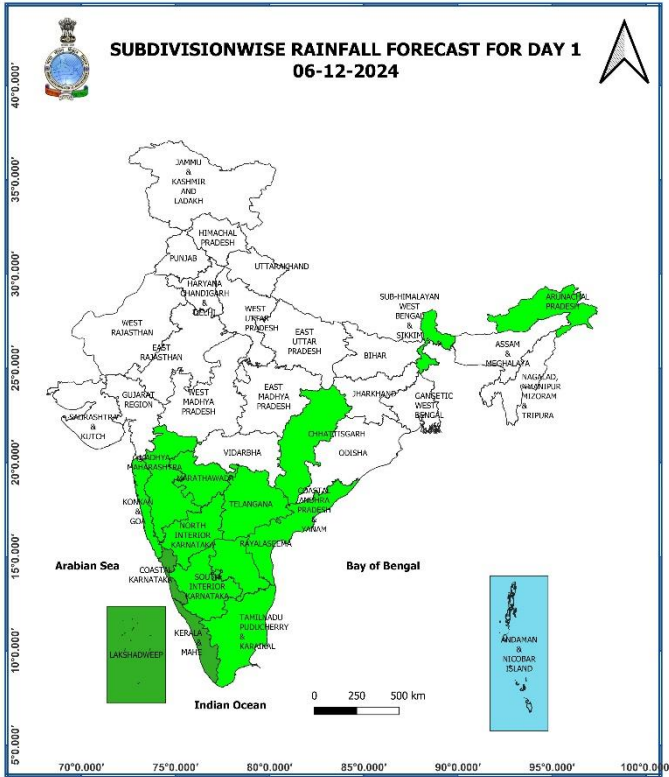
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at many** places over Coastal Karnataka; **at a few** places over Kerala & Mahe, Andaman & Nicobar Islands; **at isolated** places over Vidarbha, Chhattisgarh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Interior Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Lakshadweep.
- ❖ **Heavy to very heavy rainfall recorded** (from 0830 hours IST of yesterday to 0830 hours IST of today): Nil
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): **Konkan & Goa:** Sanguem (dist South Goa) 5, Quepem (dist South Goa) 3; **Coastal Andhra Pradesh & Yanam:** Veligandla (dist Prakasam) 4, Ongole (dist Prakasam) 4; **Kerala & Mahe:** Panathur (dist Kasargod) 2.
- ❖ **Fog conditions observed (at 0830 hours IST of today):** **Dense fog** reported at isolated places over West Bengal, Odisha; **Shallow to Moderate fog** in isolated pockets of Himachal Pradesh, Madhya Maharashtra.
- ❖ **Visibility reported (at 0830 hours IST of today) (≤ 500 metres):** **West Bengal:** Cooch Behar Airport - 50; **Odisha:** Chandbali 50; **Himachal Pradesh:** Mandi 500; **Madhya Maharashtra:** Nashik Airport 500.
- ❖ **Minimum Temperatures Departures (as on 06-12-2024):** Minimum temperatures are **markedly above normal (5.0°C or more)** at many places over Madhya Maharashtra; at a few places over Marathwada, Telangana and Chhattisgarh; at isolated places over Vidarbha; **appreciably above normal (3.1°C to 5.0°C)** at many places over Konkan & Goa, North Interior Karnataka, Rayalaseema, Coastal Andhra Pradesh & Yanam; and at isolated places over Uttar Pradesh, Bihar, Gujarat state, Madhya Pradesh and South Interior Karnataka; **above normal (1.6°C to 3.0°C)** at most places over Coastal Karnataka; at many places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe; at a few places over Jharkhand and Odisha; at isolated places over Rajasthan, Gangetic West Bengal, Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura. These are **below normal (-1.6°C to -3.0°C)** at isolated places Jammu-Kashmir, Punjab, Assam & Meghalaya and near normal over rest parts of the country. Today, **the lowest minimum temperature of 3.8°C** is reported at **Adampur_IAF (Punjab)** over the plains of the country. **(Fig.4)**
- ❖ **Maximum Temperature Departures (as on 05-12-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha and Telangana; **above normal (1.6°C to 3.0°C)** at a few places over Marathwada, Madhya Maharashtra, Jharkhand, Gangetic West Bengal; at isolated places over Bihar, Saurashtra & Kutch, Konkan & Goa, North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam. These were **below normal (-1.6°C to -3.0°C)** at isolated places Coastal Karnataka, Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura. Yesterday, **the highest maximum temperature of 35.8°C** was reported at **T.B.I.A (Konkan & Goa)** over the country. **(Fig. 2)**

Meteorological Analysis (Based on 0830 hours IST)

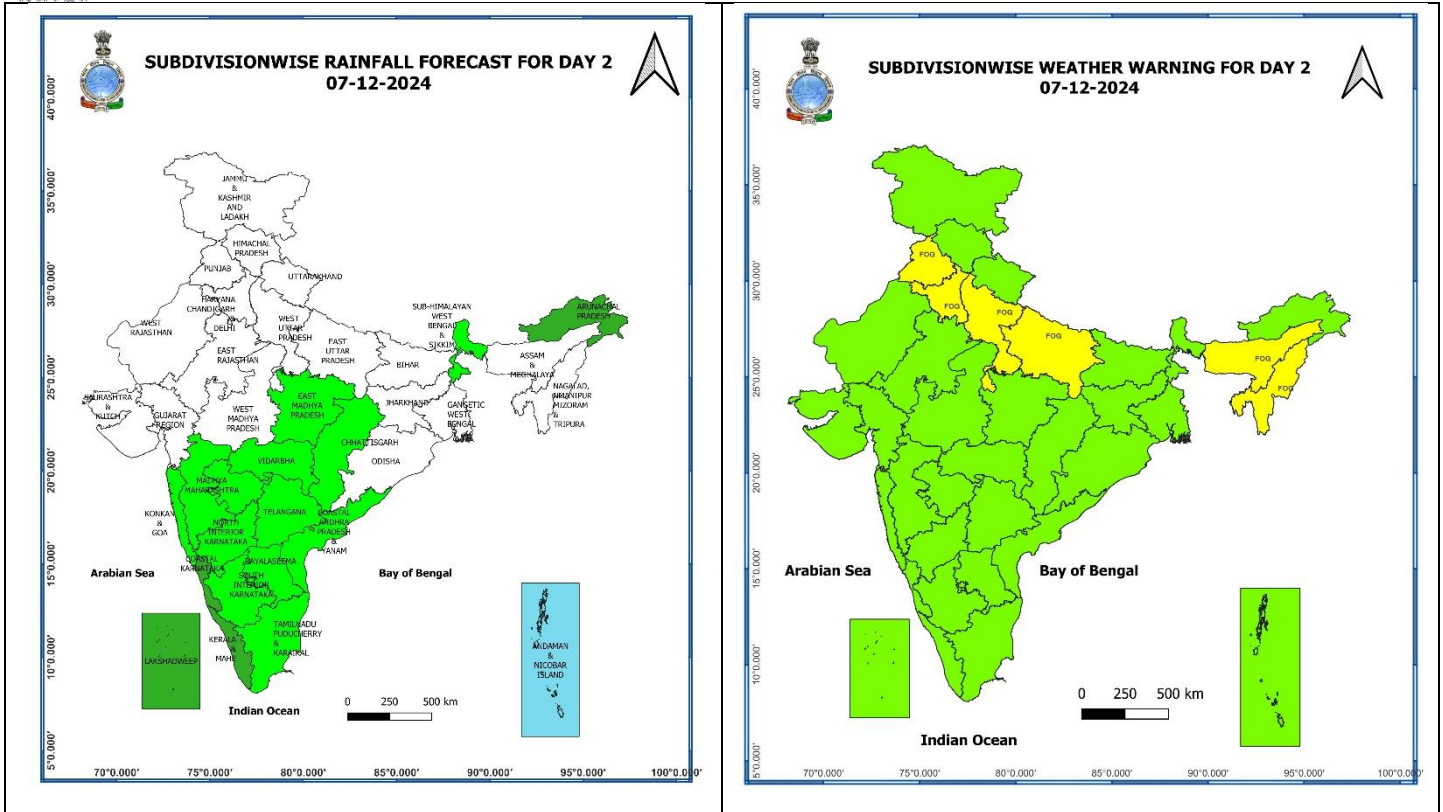
- ❖ **The cyclonic circulation** over southeast Arabian sea & neighbourhood now lies over southwest & adjoining southeast Arabian sea and extends upto 1.5 km above mean sea level.
- ❖ A **cyclonic circulation** lies over northeast Assam at 3.1 km above mean sea level.
- ❖ A **cyclonic circulation** lies over Equatorial Indian Ocean & adjoining southeast Bay of Bengal and extends upto 3.1 km above mean sea level. Under its influence, a low pressure area is likely to form over central parts of south Bay of Bengal around 07th December. The system is likely to move west-northwestwards and reach over southwest Bay of Bengal off Sri-Lanka – Tamil Nadu coasts around 12th December.
- ❖ **Jet Stream Winds** of the order upto 140 knots at 12.6 km above mean sea level are prevailing over Northwest India.
- ❖ A fresh **Western Disturbance** is likely to affect Western Himalayan Region and adjoining plains of Northwest India from 08th December.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 13th December, 2024)



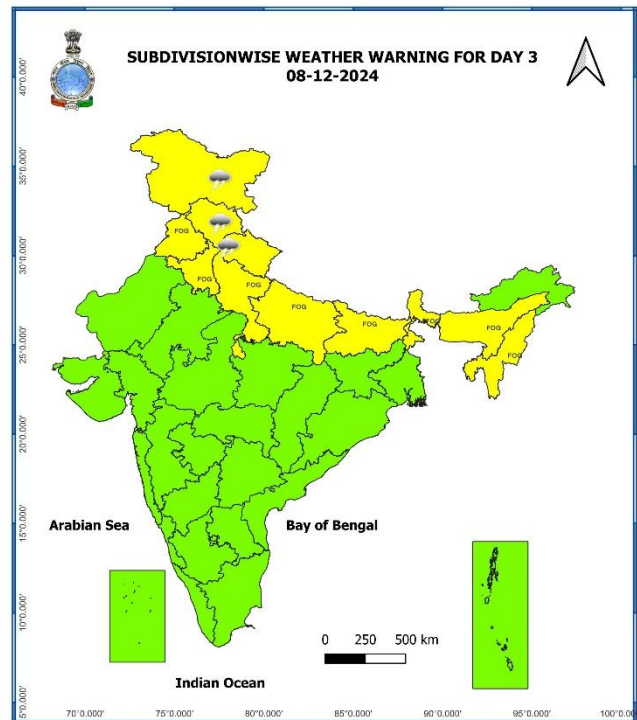
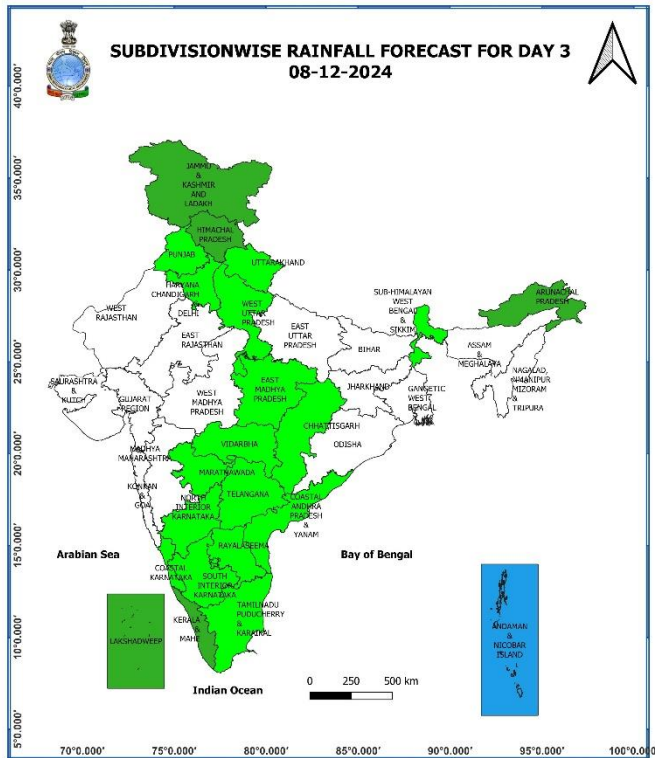
06 December (Day 1):

- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Konkan & Goa, Madhya Maharashtra Coastal Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Dense fog** very likely in isolated pockets of Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura in night/morning hours.



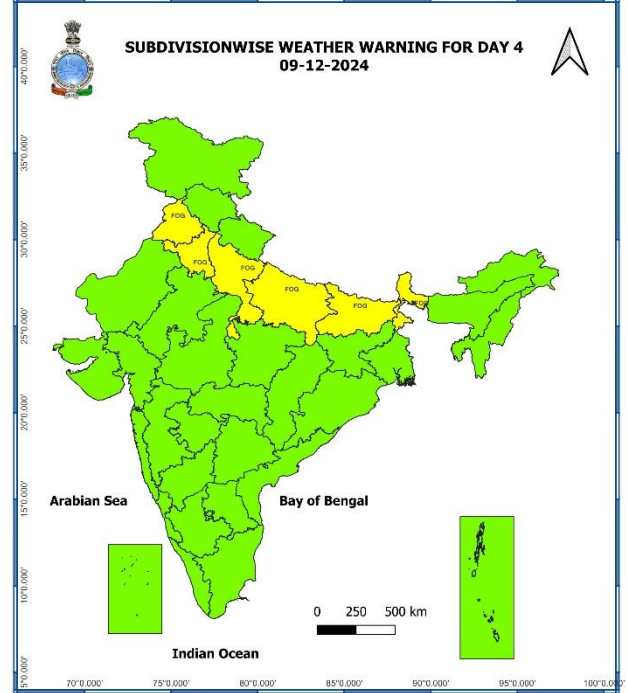
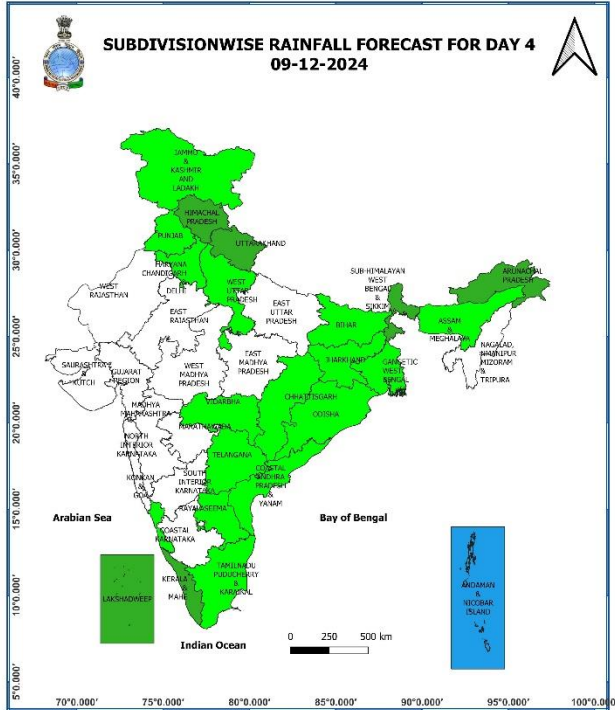
07 December (Day 2):

- ❖ **Dense fog** very likely in isolated pockets of Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura in night/morning hours.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevailing over southern parts of southeast Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevailing over along and off Somalia coast, parts of Northwest Arabian Sea. Fishermen are advised not to venture into these areas.



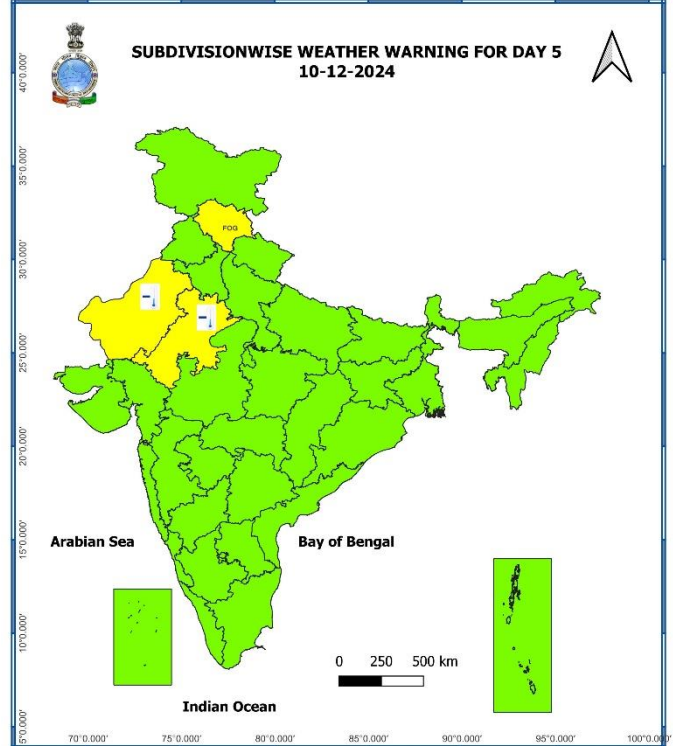
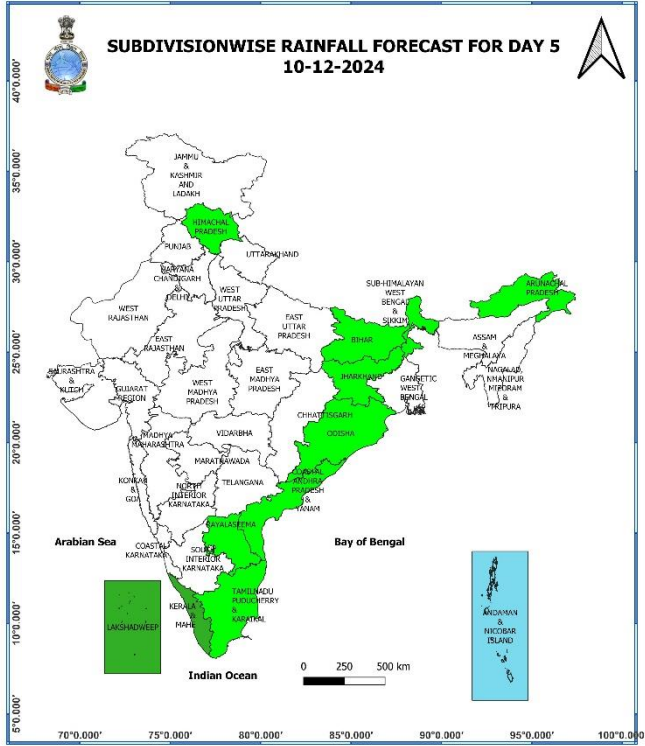
08 December (Day 3):

- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi.
- ❖ **Dense fog** likely in isolated pockets of Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura in night/morning hours.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevailing over southern parts of southeast and adjoining southwest Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevailing over along and off Somalia coast, parts of northwest Arabian Sea. Fishermen are advised not to venture into these areas.



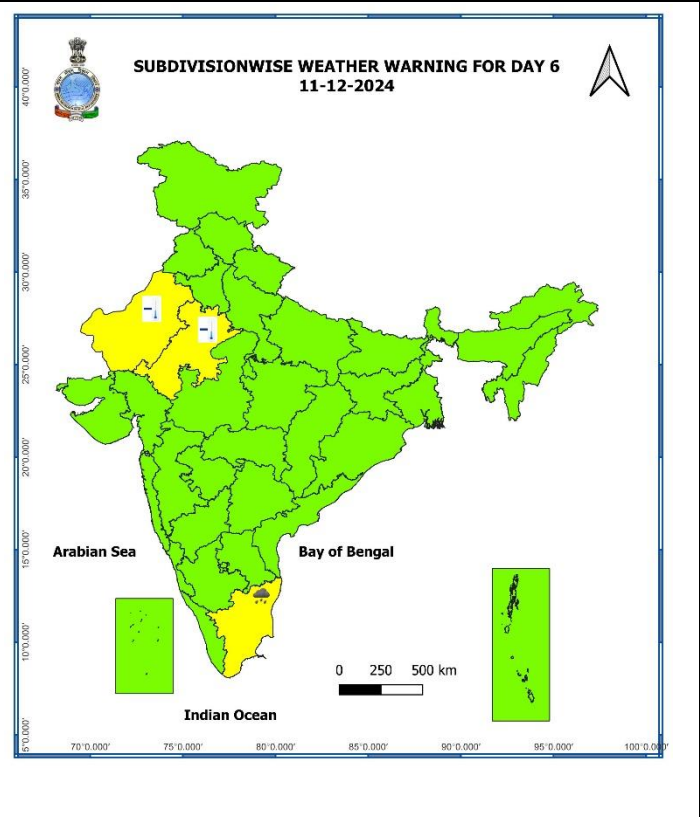
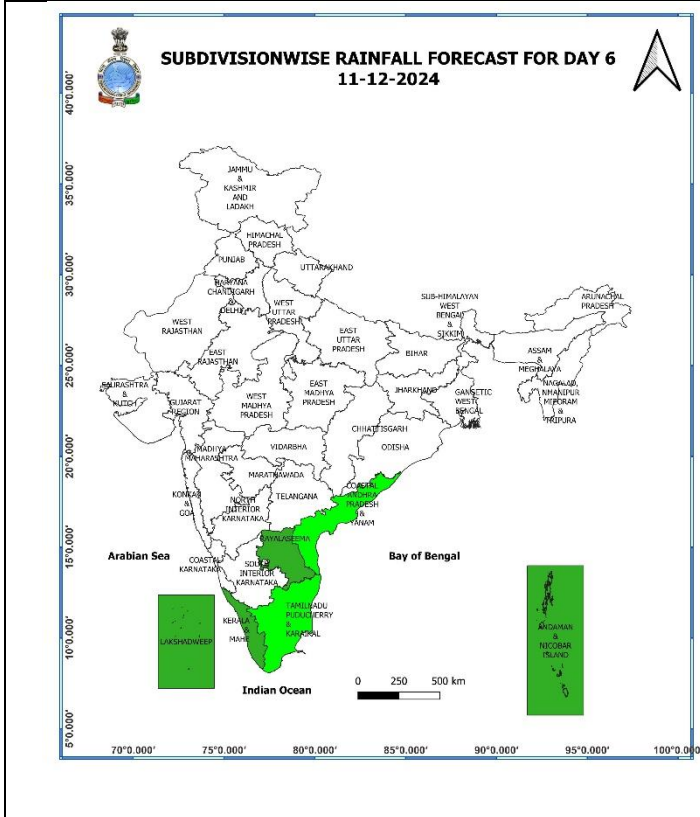
09 December (Day 4):

- ❖ **Dense fog** likely in isolated pockets of Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar in night/morning hours.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevailing over Central parts south Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevailing over parts of northwest Arabian Sea. Fishermen are advised not to venture into these areas.



10 December (Day 5):

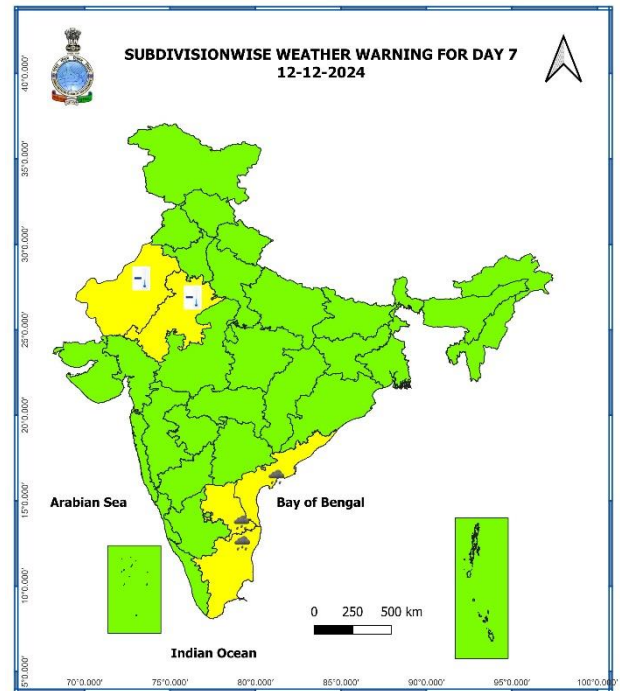
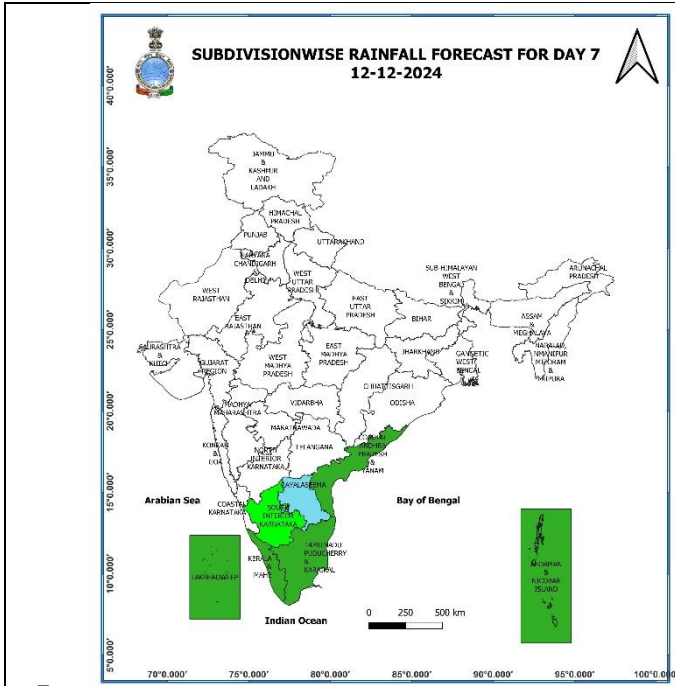
- ❖ **Dense fog** likely in isolated pockets of Himachal Pradesh night/morning hours.
- ❖ **Cold Wave Conditions** likely in isolated pockets of north Rajasthan.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevailing over southwest and adjoining southeast Bay of Bengal. Fishermen are advised not to venture into these areas.



11 December (Day 6):

- ❖ **Heavy rainfall (≥ 7 cm)** likely at isolated places over Tamil Nadu, Puducherry & Karaikal.
- ❖ **Cold Wave Conditions** likely in isolated pockets of north Rajasthan.

* 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)



12 December (Day 7):

- ❖ **Heavy rainfall (≥ 7 cm)** likely at isolated places over Rayalaseema, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Cold Wave Conditions** likely in isolated pockets of north Rajasthan.

Weather Outlook for subsequent 3 days (During 13th December – 15th December, 2024)

- ❖ Isolated to Scattered to light to moderate rainfall likely over some parts of south peninsular India and light rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ Mainly dry weather will prevail over rest parts of country.

- 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.

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Impact expected due to dense fog in the night /morning hour:

❖ Transport and Aviation:

- May affect some airports, highways and railway routes in the areas of met- sub-division.
- Difficult driving conditions with slower journey times.
- Unless taken precautionary measures, it may lead to some road traffic collisions.

❖ Power Sector:

- Chances of Tripping of Power lines in the very dense fog routes.

❖ Human Health:

- Lung related health impacts: Dense fog contains particulate matter and other pollutants and in case exposed it gets lodged in the lungs, clogging them and decreasing their functional capacity which increases episodes of wheezing, coughing and shortness of breath.
- Impact on people having asthma bronchitis: Long time exposure to dense fog may cause respiratory problem for people having asthma bronchitis and other lung related health problems.
- Eye Irritation: Dense fog contains pollutions of various types and these Pollutants in the air if exposed may tend to irritate the membranes of the eye causing various infections leading to redness or swelling of the eye.

Action suggested:

❖ Transport and Aviation:

- Be careful while driving or outing through any transport.
- Use fog lights during driving.
- Be in touch with airlines, railways and state transport for schedule of your journey.

❖ Power Sector:

- To keep ready Maintenance Team
- Human Health: To avoid outing until unless emergency and to cover the face.

Impact expected due to cold wave/severe cold wave conditions over north Rajasthan

- ❖ An increased likelihood of various illnesses like flu, running/ stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold.
- ❖ Do not ignore shivering. It is the first sign that the body is losing heat. Get Indoors.
- ❖ Frostbite can occur due to prolonged exposure to cold. The skin turns pale, hard and numb and eventually black blisters appear on exposed body parts such as fingers, toes, nose and or earlobes. Severe frostbite needs immediate medical attention and treatment.
- ❖ Impact on agriculture, crop, livestock, water supply, transport and power sector at some places.

Action suggested:

- ❖ Wear several layers of loose fitting, light weight; warm woolen clothing.
- ❖ Cover your head, neck, hands and toes adequately as majority of heat loss occurs through these body parts. Wear several layers of loose fitting, light weight; warm woolen clothing rather than one layer of heavy cloth.
- ❖ Eat vitamin-C rich fruits & vegetable and drink sufficient fluids preferably warm fluids to maintain adequate immunity.
- ❖ Avoid or limit outdoor activities.
- ❖ Keep dry, if wet, change cloths immediately to prevent loss of body heat. Wear insulated/waterproof shoes.
- ❖ Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.
- ❖ If the affected skin area turns black, immediately consult a doctor.
- ❖ Maintain ventilation while using Heaters to avoid inhaling toxic fumes.
- ❖ Take safety measures while using electrical and gas heating devices.
- ❖ Extreme care needed for vulnerable people.
- ❖ Seek medical attention as soon as possible for someone suffering from frostbite/ Hypothermia.
- ❖ Protect livestock from cold weather.

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

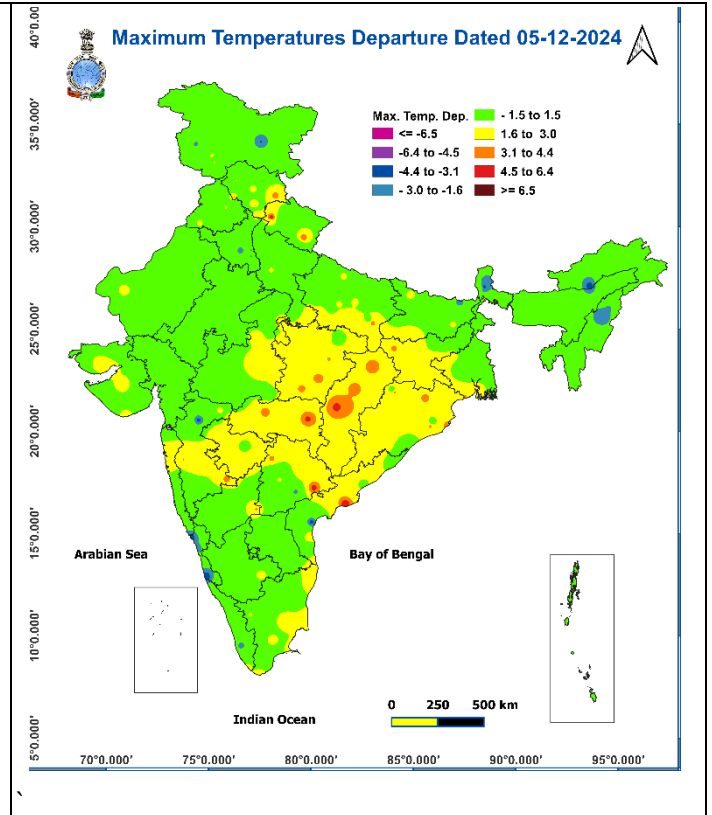
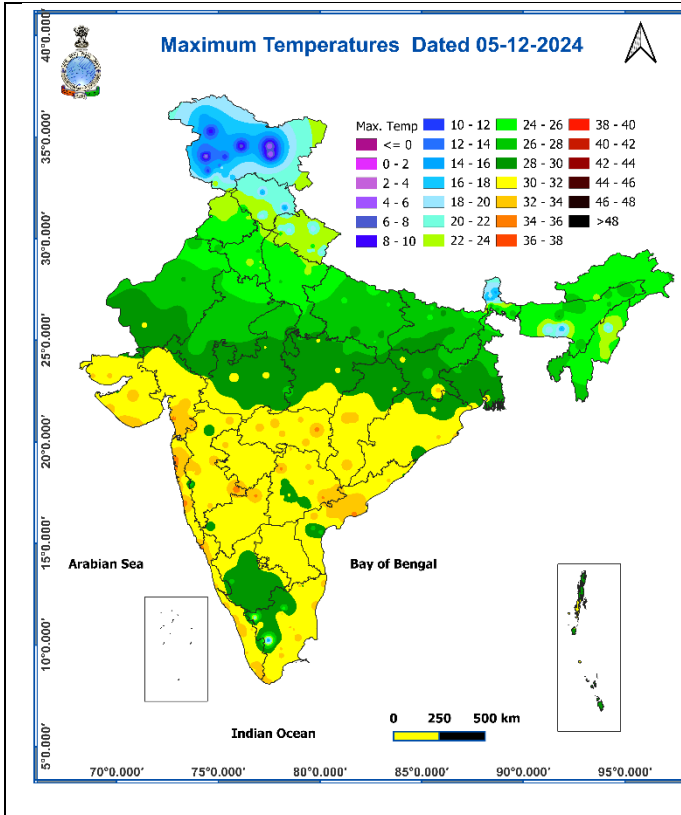


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

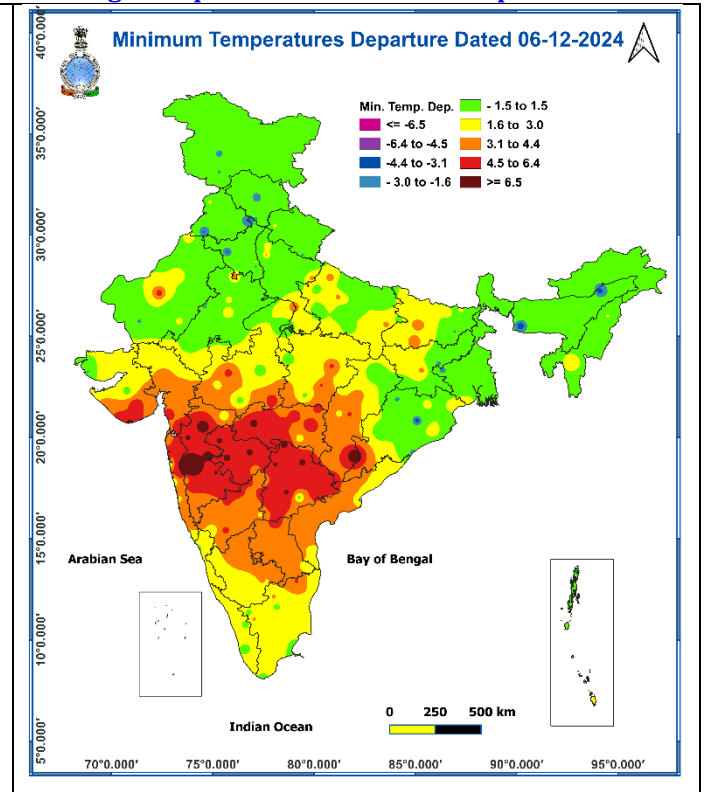
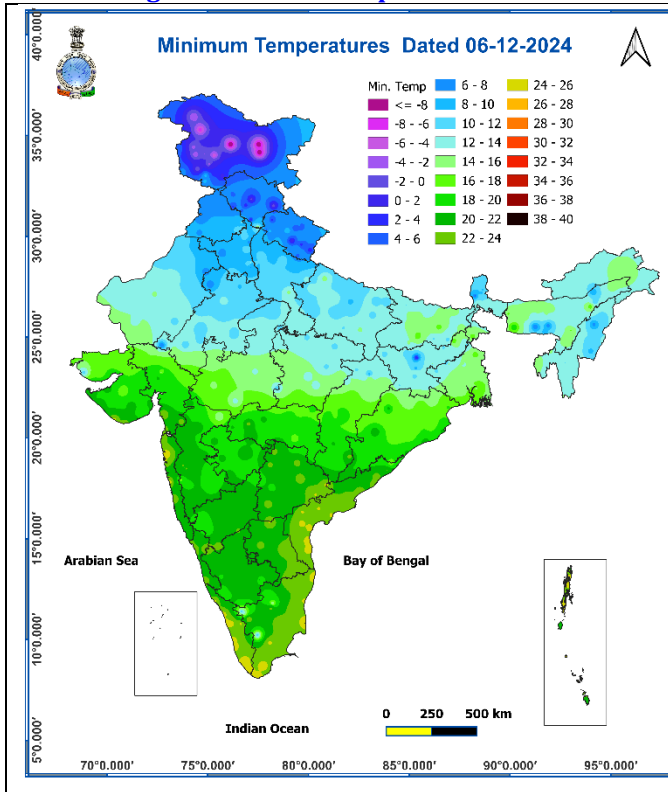
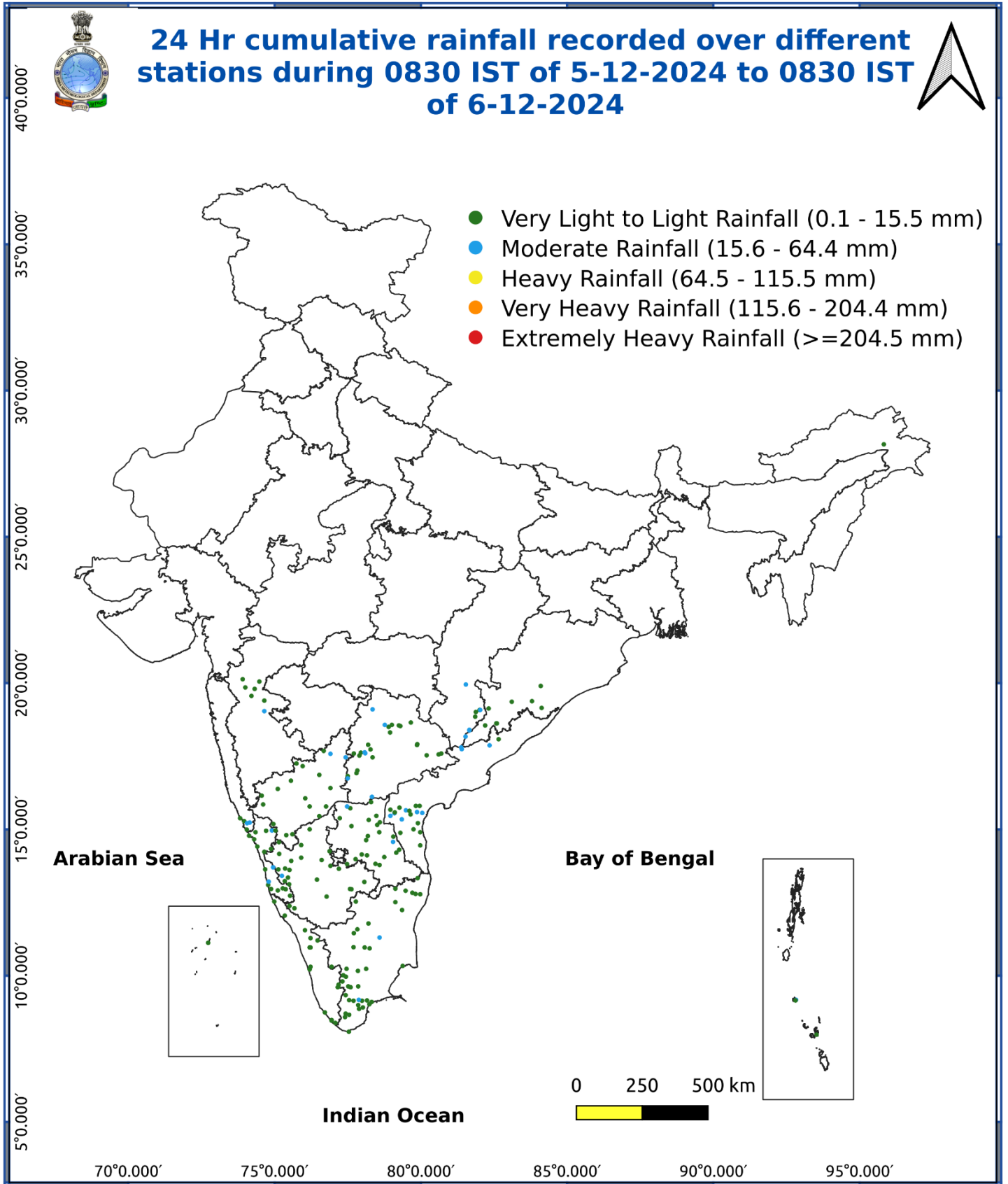


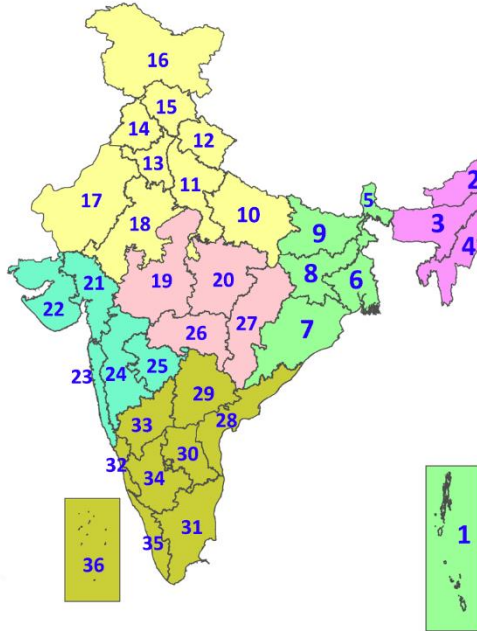
Fig. 5: Accumulated Rainfall (mm) during past 24 hours



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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>