

Thursday, November 7, 2024
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems:

- ❖ A **cyclonic circulation** lies over central parts of south Bay of Bengal in lower tropospheric levels.

Forecast & Warnings (upto 7 days):

- ✓ **Isolated heavy rainfall** very likely over Andaman & Nicobar Islands on 07th; Tamil Nadu, Puducherry & Karaikal during 07th – 12th; Kerala & Mahe during 08th – 10th; Coastal Andhra Pradesh & Yanam & Rayalaseema on 09th & 10th November.

ii. Temperature conditions and Forecast

Temperature Conditions during past 24 hours till 0830 hours IST of yesterday

On 06th November, there had been no significant change in Minimum temperatures over many parts of the country, except West Madhya Pradesh, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe where there was a fall by 1-2°C in some places. Minimum temperatures continued to be above normal by 2-4°C over Punjab, Haryana, Rajasthan, Gujarat state, north Madhya Pradesh, Uttar Pradesh, Bihar, Jharkhand and Gangetic West Bengal. Maximum temperatures were above normal by 2-4°C over Rajasthan, Gujarat state, Vidarbha and Chhattisgarh.

Forecast of temperature

- ✓ No significant change in Minimum temperatures likely over northern parts of the country and likely rise over central & south India by 2-3°C during next one week.

iii. Weather forecast over Delhi/NCR during 07th November to 09th November 2024

Past Weather:

There had been slight fall in minimum temperature over Delhi/NCR on 06th November. The Maximum and Minimum temperatures over Delhi were in the range of 30-33°C and 14-18°C respectively. The Maximum temperature was above normal by 1 – 2°C and Minimum temperature was above normal by 2 -3°C over some places. Mainly smog conditions with predominant surface wind from variable directions with speed reaching 04-08 kmph prevailed on 06th November. Mainly smog conditions with wind speed in the range of 04 -06 kmph from variable directions over the region prevailed in the forenoon of yesterday.

Weather Forecast:

07th November: Mainly clear sky. The surface wind is likely to be from variable directions with wind speed less than 04 kmph during morning hours. Smog/Shallow fog/mist in the morning. The wind speed will increase thereafter becoming less than 08 kmph from variable directions during afternoon. It will decrease thereafter becoming less than 04 kmph from variable directions during evening and night. Smog/ mist is likely in the night.

08th November: Mainly clear sky. The surface wind is likely to be from variable directions with wind speed less than 04 kmph during morning hours. Smog/Shallow fog/mist in the morning. The wind speed will gradually increase becoming 06- 08 kmph from variable directions during afternoon. It will decrease thereafter becoming less than 04 kmph from variable directions during evening and night. Smog/ mist is likely in the night.

09th November: Mainly clear sky. The surface wind is likely to be from variable directions with wind speed less than 04 kmph during morning hours. Smog/Shallow fog/mist in the morning. The wind speed will increase thereafter becoming 06 - 08 kmph from variable directions during afternoon. It will gradually decrease becoming 04 – 06 kmph from variable directions during evening and night. Smog/ mist is likely in the night.

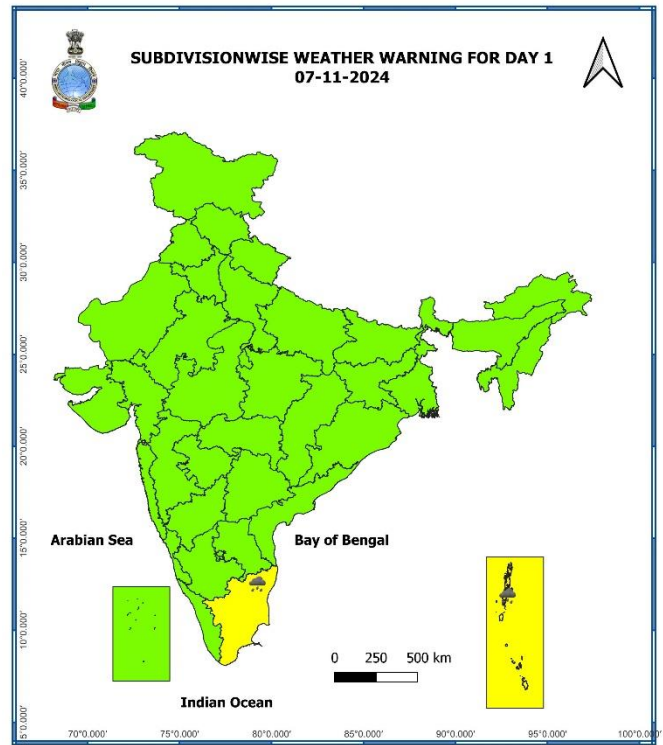
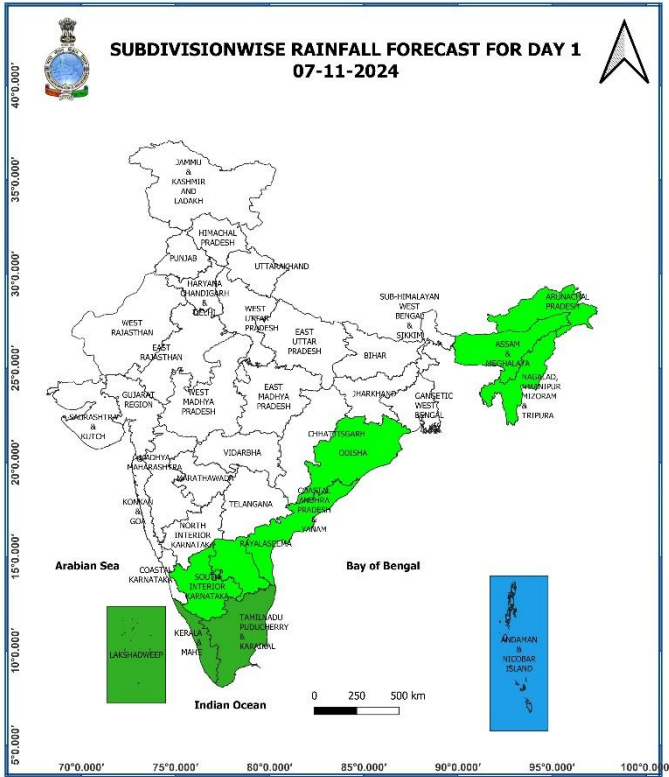
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Andaman & Nicobar Islands; **at isolated places** over Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **NIL**
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): Assam & Meghalaya: Golaghat-1; Andaman & Nicobar Islands: Nancowry-3, Sri Vijaya Puram-1;
- ❖ **Minimum Temperature Departures (as on 06-11-2024)**: Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at a few places over Himachal Pradesh, Punjab, West Uttar Pradesh; at isolated places over Rajasthan, East Uttar Pradesh, Gujarat state, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **above normal (1.6°C to 3.0°C)** at a few places over Gangetic West Bengal, Odisha; at isolated places over Haryana-Chandigarh-Delhi, Bihar, Jharkhand, Marathwada, Coastal Andhra Pradesh & Yanam. Tamil Nadu, Puducherry & Karaikal, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Uttarakhand. Yesterday, **the lowest minimum temperature** of **13.3°C** was reported at **Hindan_IAF (West Uttar Pradesh)** over the plains of the country. **(Fig.4)**
- ❖ **Maximum Temperature Departures (as on 06-11-2024)**: Maximum temperatures were **markedly above normal (5.1°C or more)** at isolated places Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Himachal Pradesh; **above normal (1.6°C to 3.0°C)** at most places over Gujarat state; at many places over Rajasthan, Marathwada; at a few places over Madhya Maharashtra, Telangana, Rayalaseema; at a isolated places over Konkan & Goa, Vidarbha, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, East Uttar Pradesh, Punjab. These were **appreciably below normal (-5.0°C to -3.1°C)** at isolated places over Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya. Yesterday, **the highest maximum temperature** of **39.1°C** was reported at **Deesa (Gujarat)** over the country. **(Fig. 2)**

Meteorological Analysis (Based on 0530 hours IST)

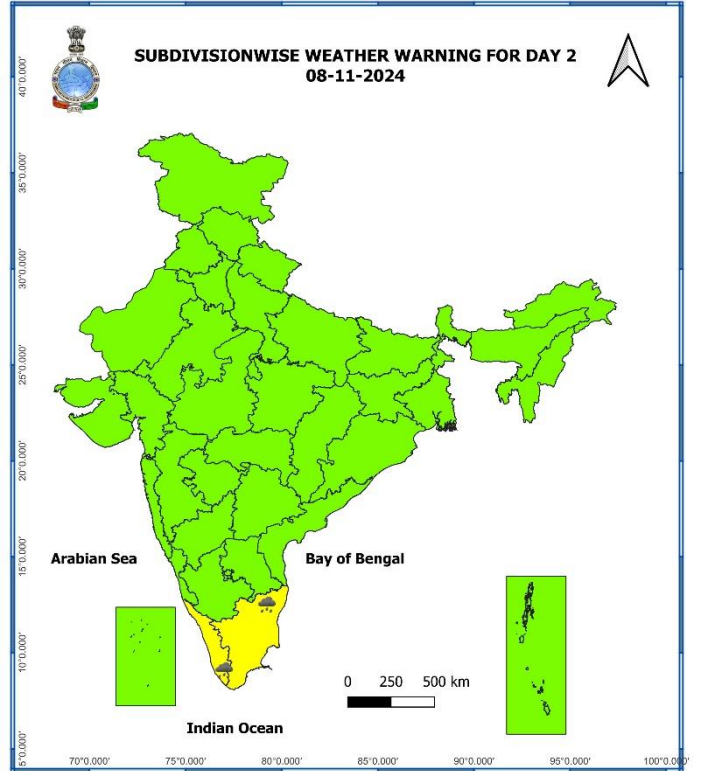
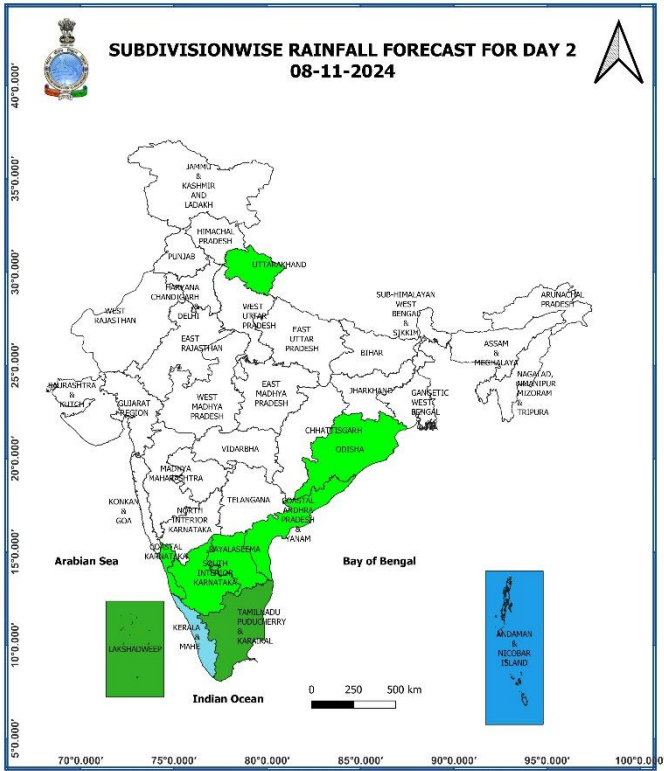
- ❖ The **cyclonic circulation** over southern parts of Bangladesh extending upto 1.5km above mean sea level persists.
- ❖ The **north-south trough** roughly along Long. 92°E to the north of Lat. 23°N at 5.8 km above mean sea level persists.
- ❖ The **cyclonic circulation** over central parts of south Bay of Bengal extending upto 3.1 km above mean sea level persists.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 14th November, 2024)



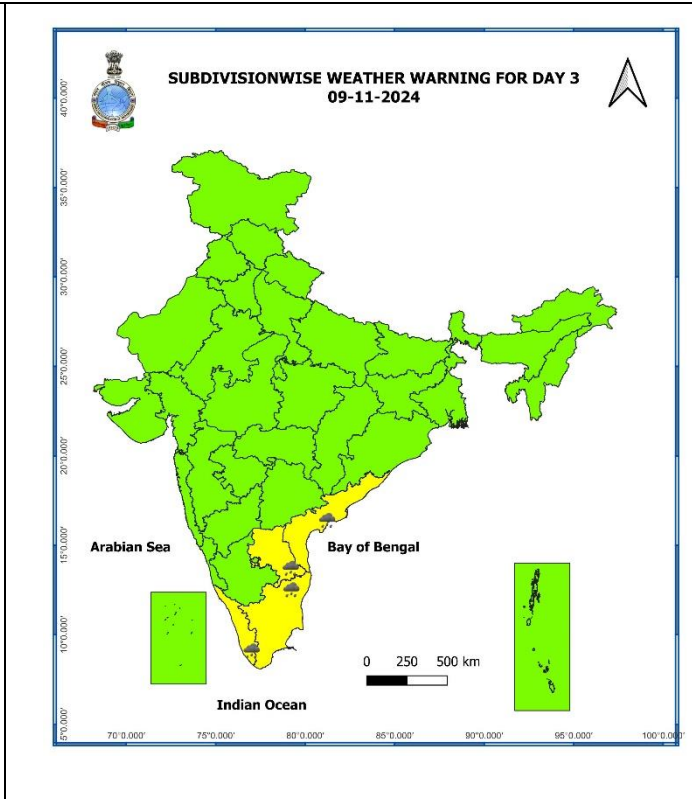
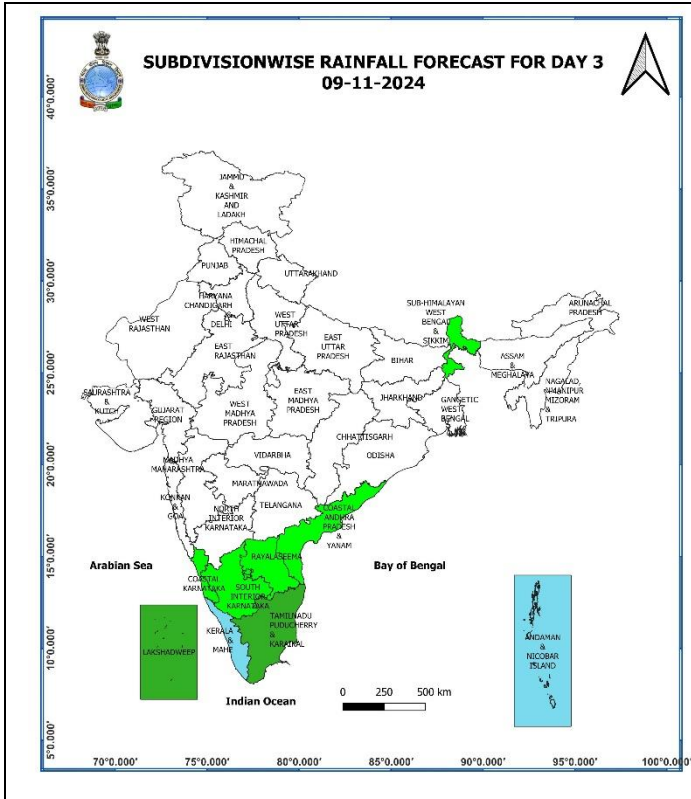
07 November (Day 1):

- ❖ **Heavy rainfall (≥ 7 cm)** very likely at isolated places over Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema.
- ❖ **Squally weather with wind speed 35-45 kmph gusting to 55 kmph** very likely over western parts of westcentral & adjoining southwest Bay of Bengal, along and off south Andhra Pradesh coast and adjoining north Tamil Nadu coast. Fishermen are advised not to venture into these areas.



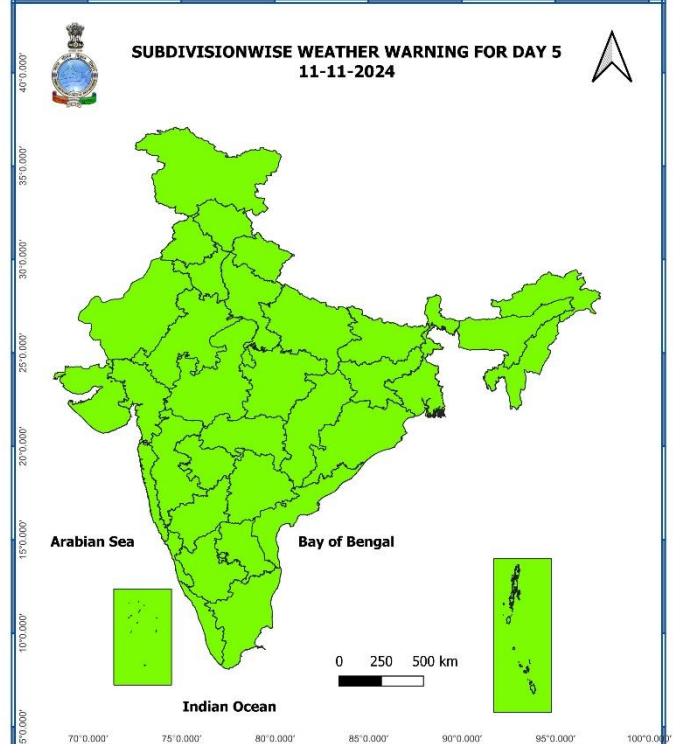
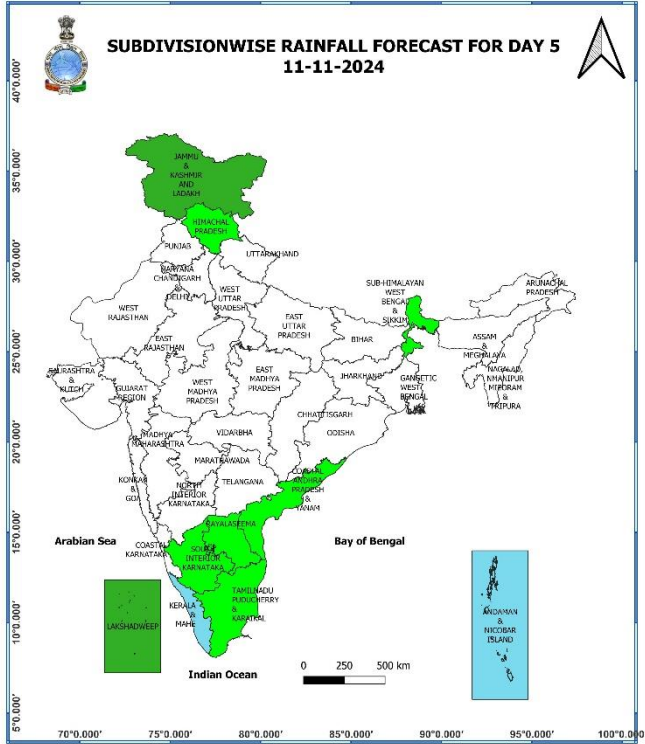
08 November (Day 2):

- ❖ **Heavy rainfall (≥ 7 cm)** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema.
- ❖ **Squally weather with wind speed 35-45 kmph gusting to 55 kmph** very likely over along & off south Andhra Pradesh & adjoining north Tamil Nadu coasts and adjoining sea area.



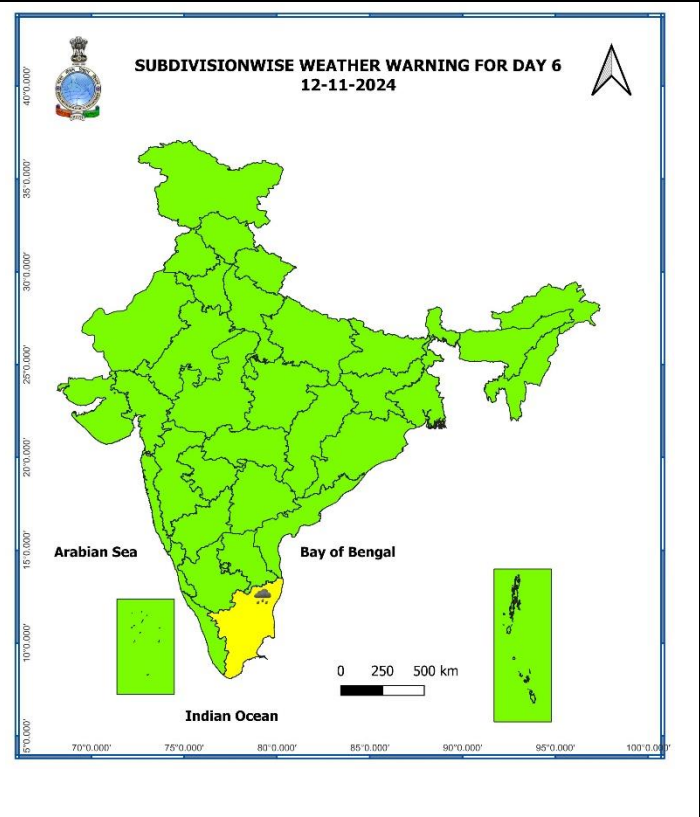
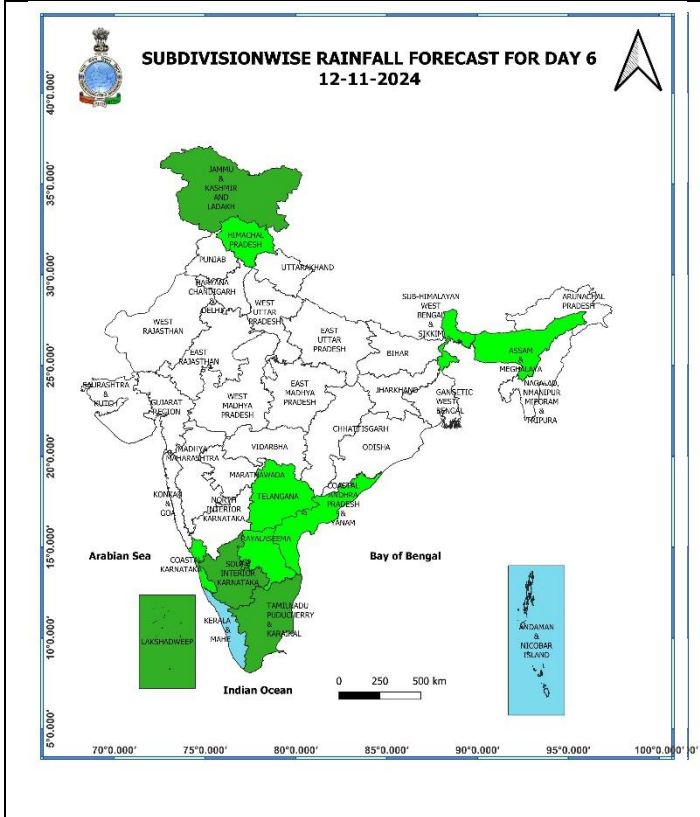
09 November (Day 3):

- ❖ **Heavy rainfall (≥ 7 cm)** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema.



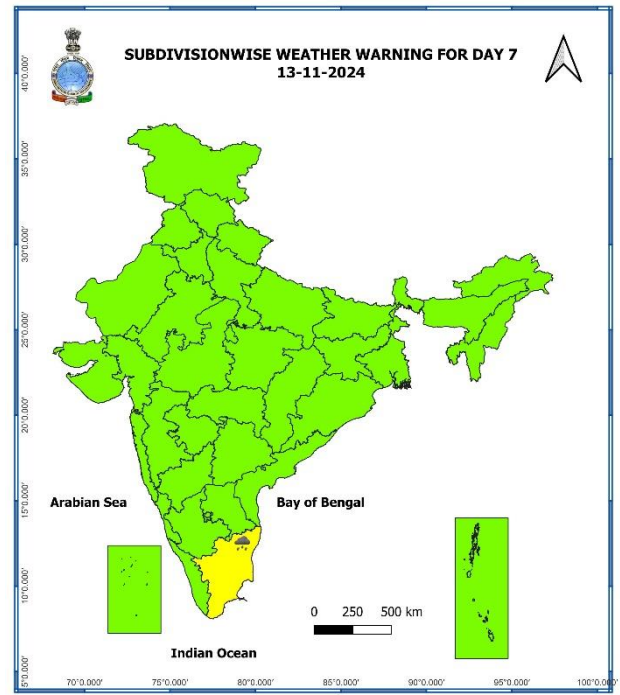
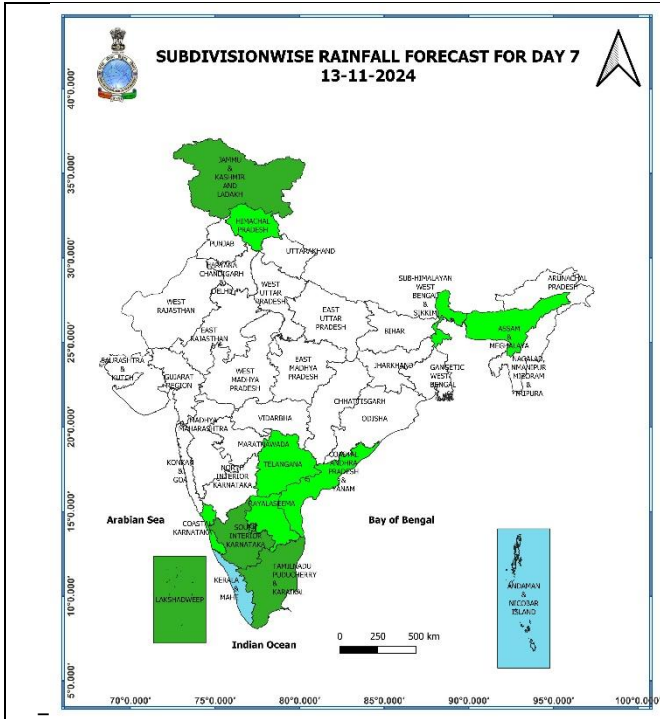
11 November (Day 5):

❖ **NO WARNING**



12 November (Day 6):

- ❖ Heavy rainfall (≥ 7 cm) likely at isolated places over Tamil Nadu, Puducherry & Karaikal.



13 November (Day 7):

- ❖ Heavy rainfall (≥ 7 cm) likely at isolated places over Tamil Nadu, Puducherry & Karaikal.

Weather Outlook for subsequent 3 days (During 14th November – 16th November, 2024)

- ❖ Isolated to Scattered light rainfall likely over some parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Northeast India.
- ❖ 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.



Agromet advisories for Heavy Rainfall likely over Tamil Nadu, Kerala and Andaman & Nicobar Islands

- ✓ Drain out excess water from the standing crops in Tamilnadu, Kerala and Andaman & Nicobar Islands.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops and staking to vegetables.

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

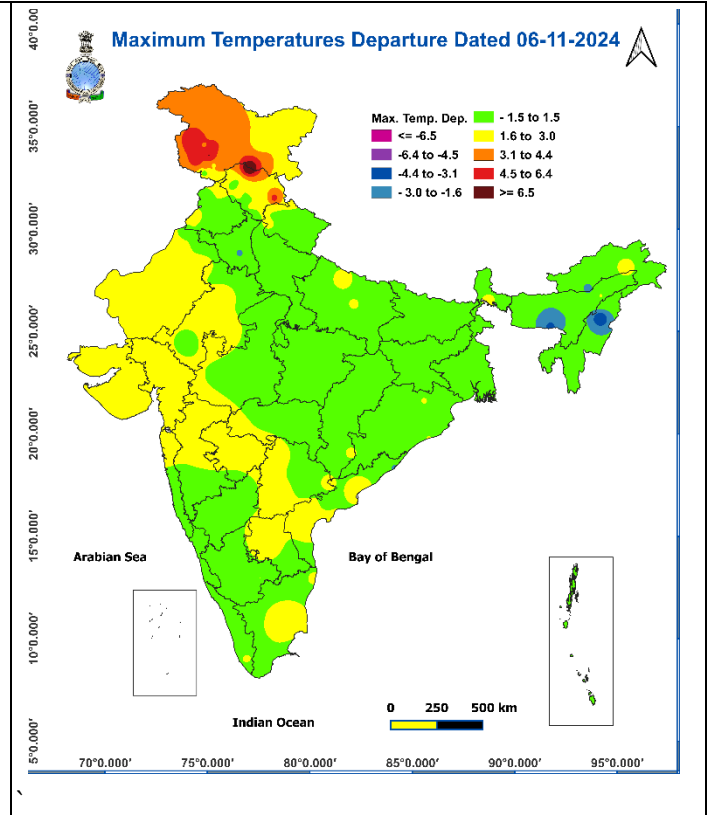
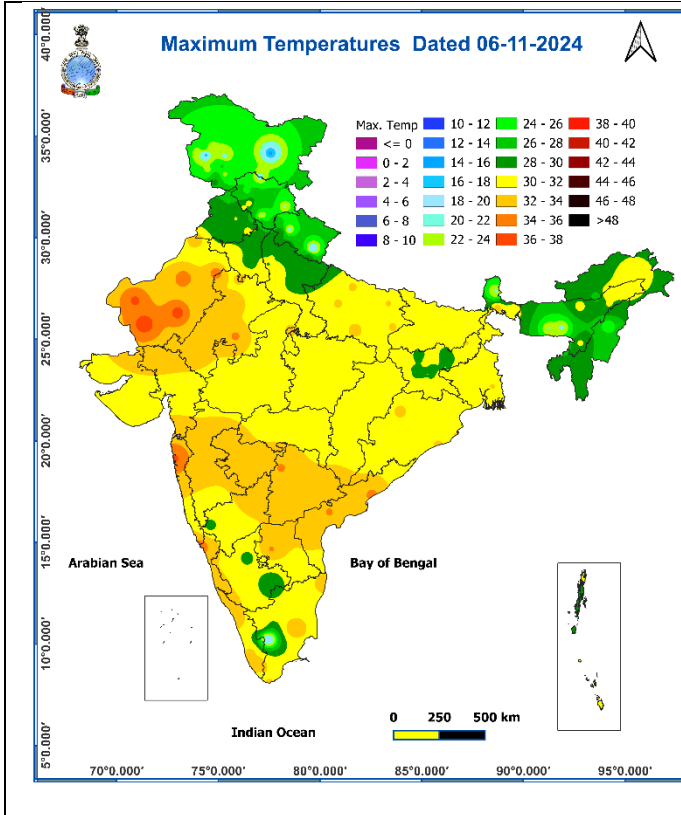


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

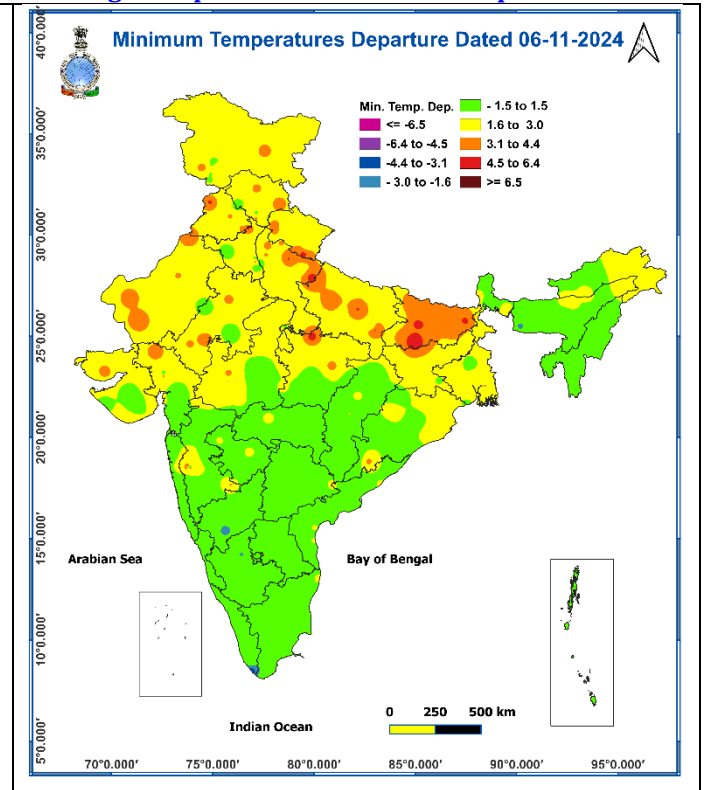
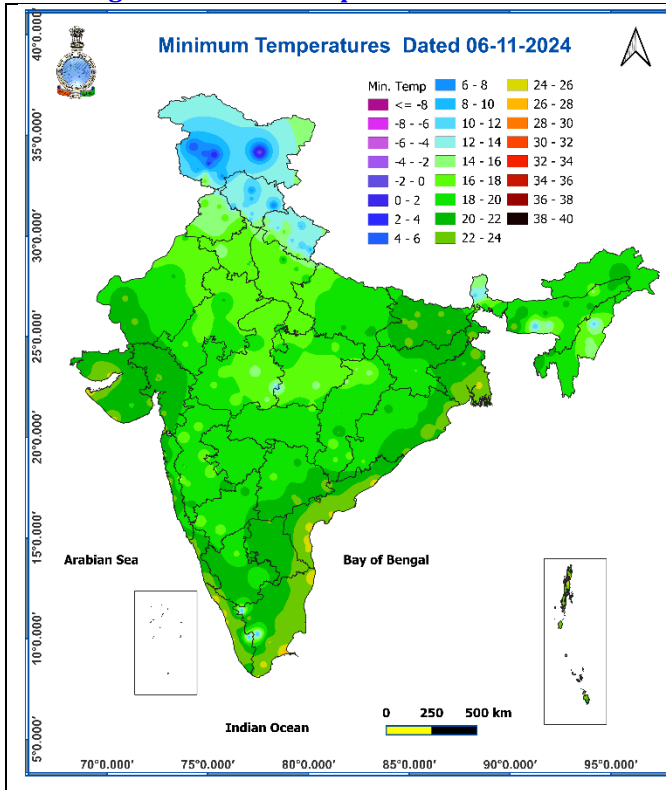
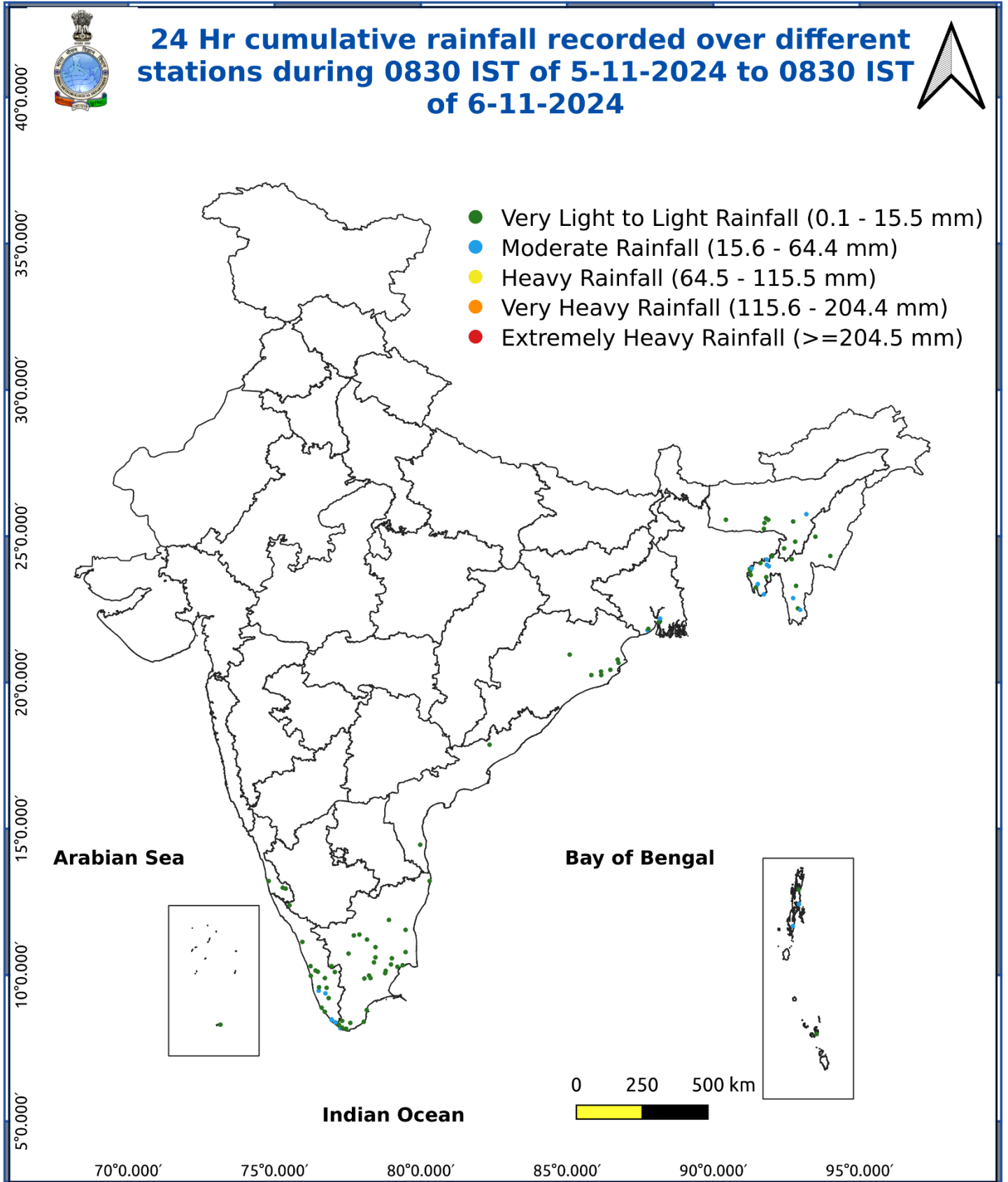


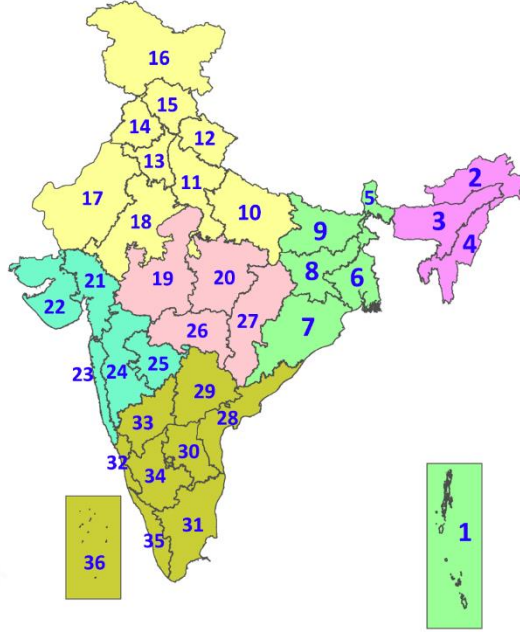
Fig. 5: Accumulated Rainfall (mm) during past 24 hours



* 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
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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>