

Sunday, October 27, 2024  
Time of Issue: 1315 hours IST  
(MID-DAY)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### **Weather Systems:**

Yesterday's **Well marked Low pressure area** over north Odisha weakened into a **low pressure area** over the same region at 1730 hrs IST of yesterday, the 26<sup>th</sup> October and became less marked at 0530 hrs IST of today, the 27<sup>th</sup> October. However, the associated **upper air cyclonic circulation** extending upto middle tropospheric levels lay over the same region. The **upper air cyclonic circulation** lay over coastal Odisha at 0830 hrs IST of today, the 27<sup>th</sup> October extending upto middle tropospheric levels.

#### **Forecast & Warnings (upto 7 days):**

##### **South Peninsular India**

- ✓ Light to moderate rainfall at a few places accompanied with isolated thunderstorm and lightning very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep today.
- ✓ **Isolated heavy rainfall** also very likely over Tamil Nadu and Kerala & Mahe on 27<sup>th</sup> October.

**No significant weather likely over rest parts of the country.**

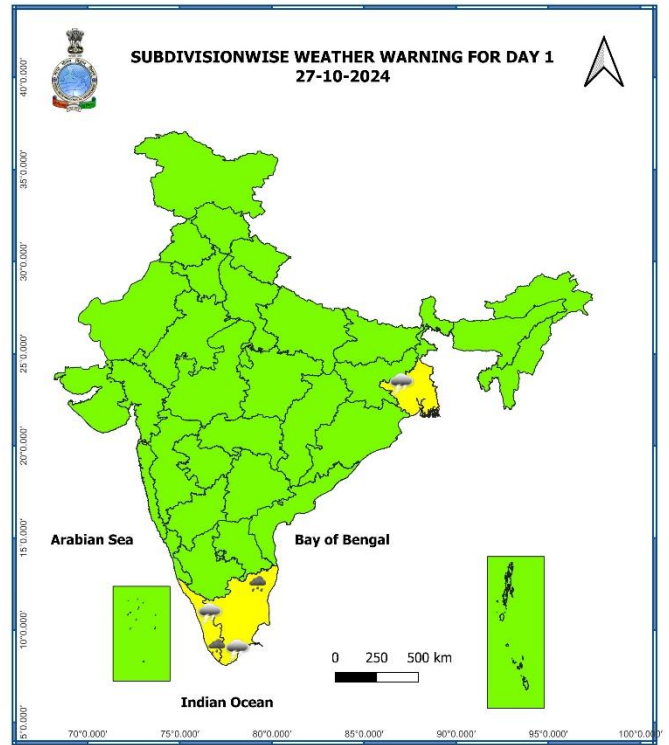
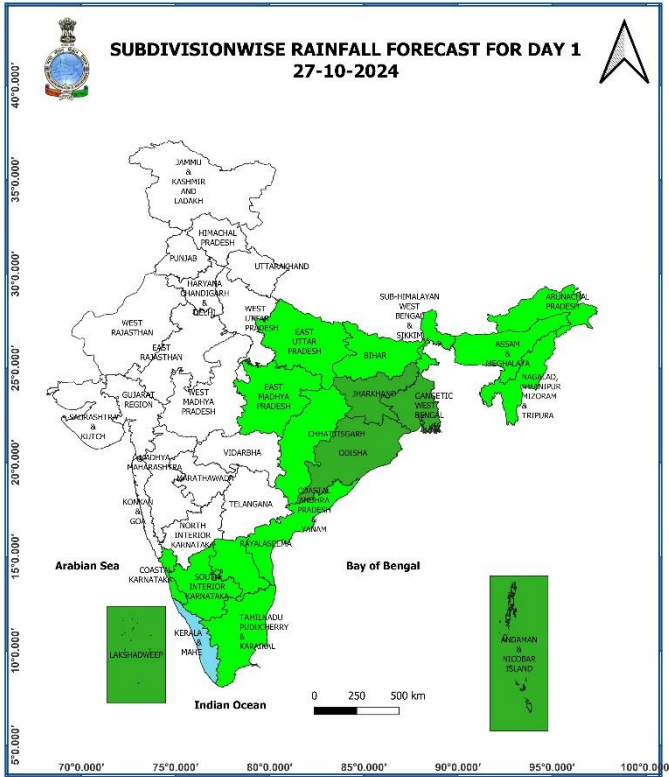
## Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at many places** over Gangetic West Bengal, Jharkhand; **at a few places** over Andaman & Nicobar Islands, Odisha, Kerala & Mahe, Lakshadweep; **at isolated places** over Uttar Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Coastal Karnataka, South Interior Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST of yesterday to 0830 hours IST of today): **Heavy to very heavy rainfall** at isolated places over Kerala; **Heavy rainfall** at isolated places over Lakshadweep and Sub-Himalayan West Bengal.
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): **Kerala:** Peermade To (dist Idukki) 13, Aryankavu (dist Kollam) 6, Kanjirapuzha(dist Palakkad) 5, Vannamada(dist Palakkad) 5, Ayyankunnu(dist Cannur) 4, Idamalayar Dam(dist Ernakulam) 4, Peringalkuthu(dist Thrissur) 4;**Lakshadweep:** Minicoy (dist Lakshadweep) 11;**Sub-Himalayan West Bengal:** Balurghat (dist South Dinajpur) 8;**Gangetic West Bengal:** Purihansa (dist Purulia) 4, Tantloi (dist Birbhum) 4, Kharidwar (dist Purulia) 4;**Jharkhand:** Jamtara Fmo (dist Jamtara) 4, Putki (dist Dhanbad) 4.
- ❖ **Minimum Temperature Departures (as on 27-10-2024):** Minimum temperatures are **markedly above normal (5.1°C or more)** at isolated places over Uttar Pradesh; **appreciably above normal (3.1°C to 5.0°C)** at a few places over Punjab; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, Rajasthan, Gujarat state, Madhya Pradesh, Bihar, Jharkhand, Odisha, Gangetic West Bengal; **above normal (1.6°C to 3.0°C)** at a few places over Coastal Andhra Pradesh & Yanam; at isolated places over Marathwada, Vidarbha, Chhattisgarh, Tamil Nadu, Puducherry & Karaikal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura. Today, **the lowest minimum temperature** of 15.5°C is reported at **Adampur (Punjab)** over the plains of the country. **(Fig.4)**
- ❖ **Maximum Temperature Departures (as on 26-10-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh; **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Uttarakhand, West Rajasthan, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal; **above normal (1.6°C to 3.0°C)** at many places over East Rajasthan, Saurashtra & Kutch; at a few places over Gujarat Region, Haryana-Chandigarh-Delhi; at isolated places over Uttar Pradesh, Madhya Pradesh, Vidarbha, Madhya Maharashtra, Marathwada, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Telangana, Rayalaseema, South Interior Karnataka, Kerala & Mahe. These were **markedly below normal (-5.1°C or less)** at few places over Bihar; at isolated places over Jharkhand, Gangetic West Bengal & Sikkim; **below normal (-3.0°C to -1.6°C)** at isolated places over Odisha, Arunachal Pradesh. Today, **the highest maximum temperature** of 39.9°C was reported at **Bhuj-Rudramata (Saurashtra & Kutch)** over the country. **(Fig. 2)**

## Meteorological Analysis (Based on 0830 hours IST)

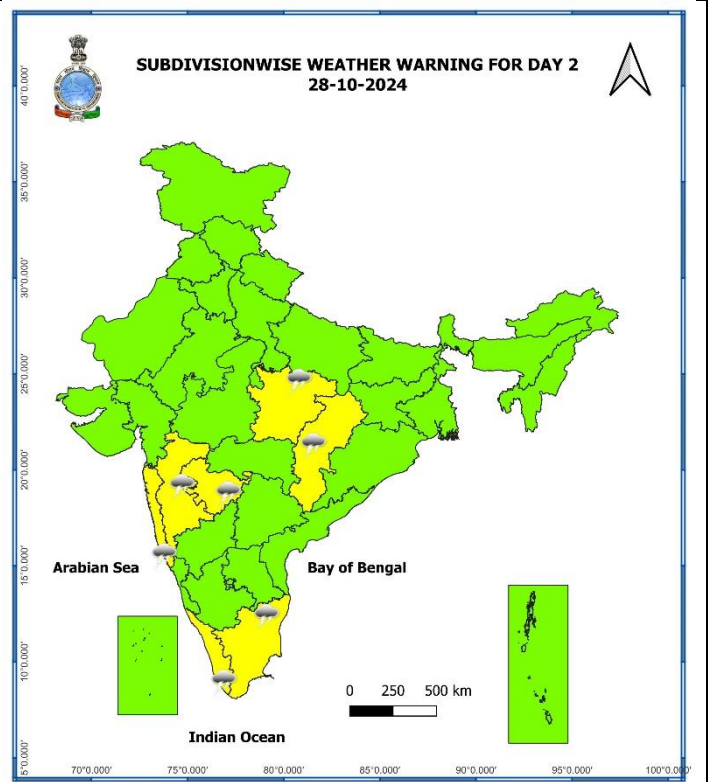
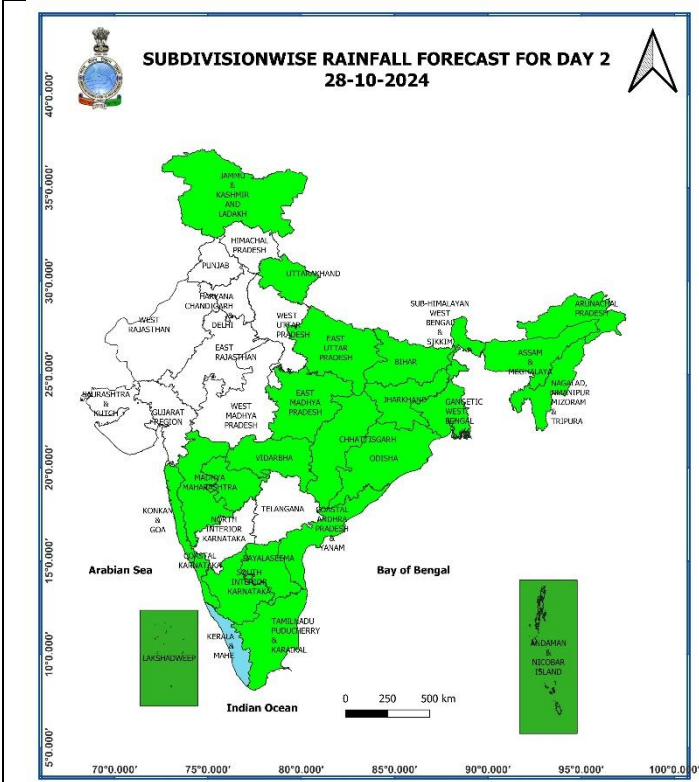
- ❖ The **upper air cyclonic circulation** over north Odisha now lies over coastal Odisha and extends upto 5.8 km above mean sea level tilting southwestwards with height.
- ❖ The **upper air cyclonic circulation** over Southwest Arabian Sea extending upto 3.1 km above mean sea level persists.
- ❖ The **trough** from Lakshadweep area to north Tamil Nadu coast between 4.5 & 5.8 km above mean sea level has become less marked.
- ❖ The **cyclonic circulation** over central 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 02<sup>nd</sup> November, 2024)**



**27 October (Day 1):**

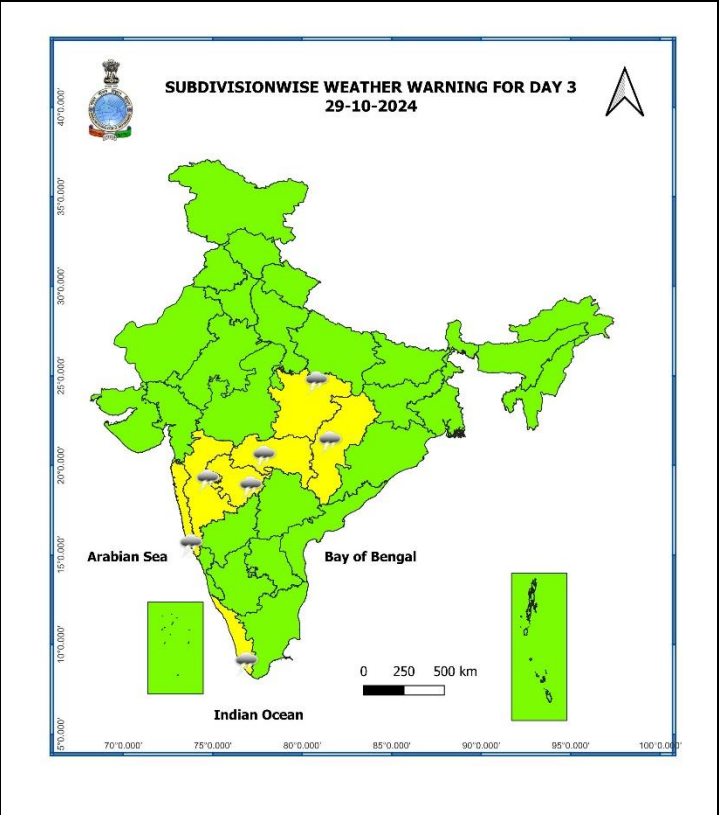
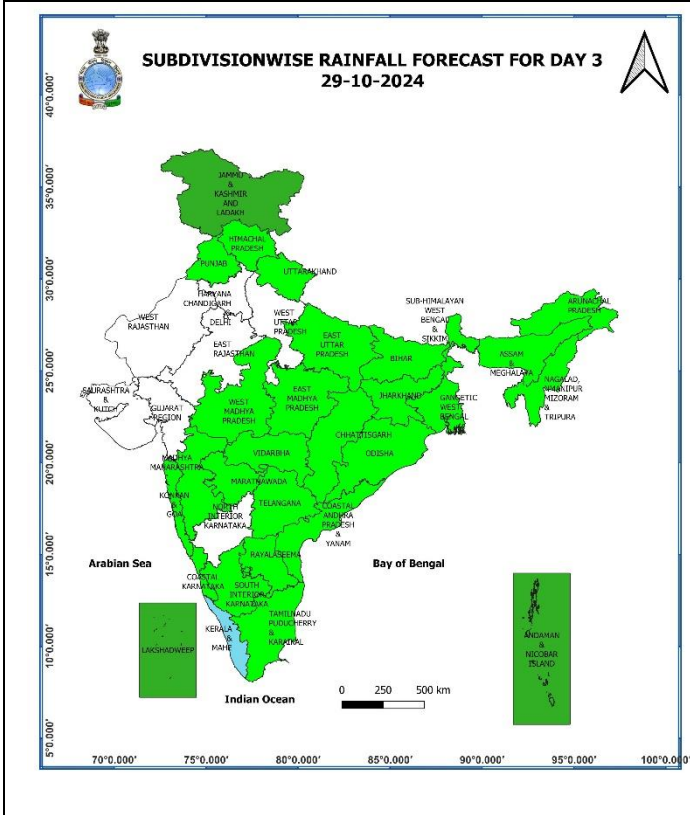
- ❖ **Heavy rainfall ( $\geq 7\text{cm}$ )** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Gangetic West Bengal.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over Comorin area, off Kerala coast, south of Lakshadweep adjoining southeast Arabian sea.



## 28 October (Day 2):

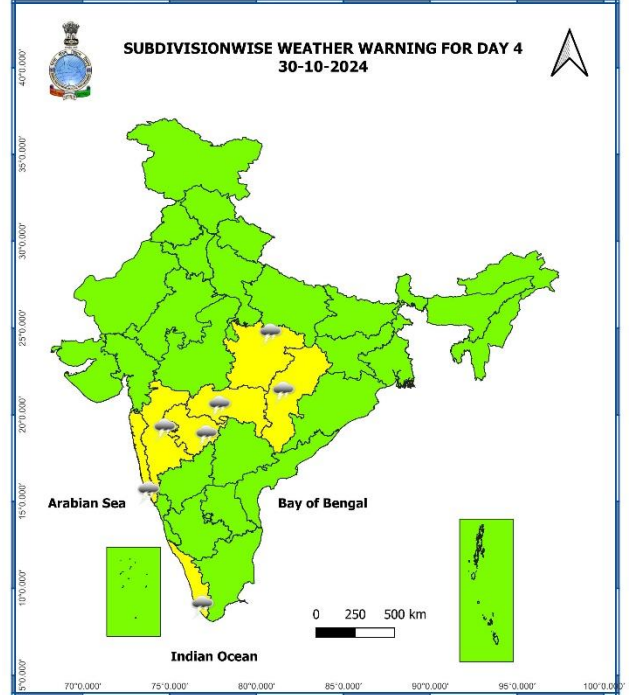
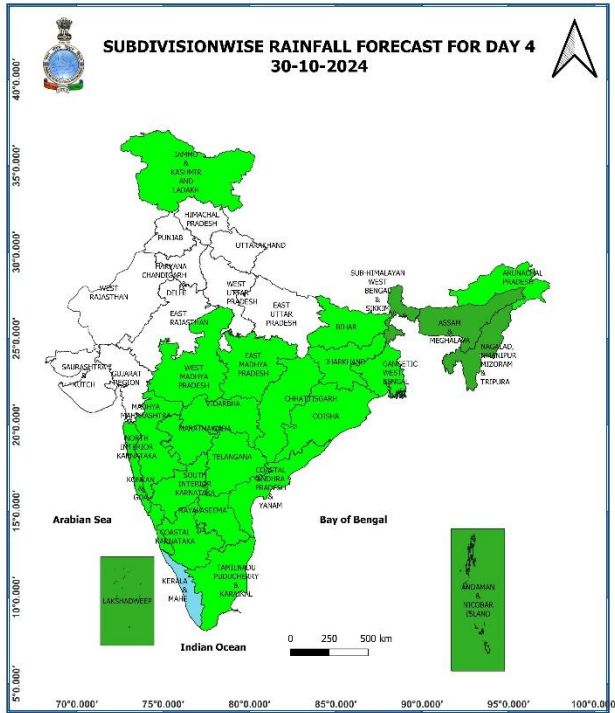
❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Konkan & Goa, Madhya Maharashtra, Marathwada, East Madhya Pradesh, Chhattisgarh.





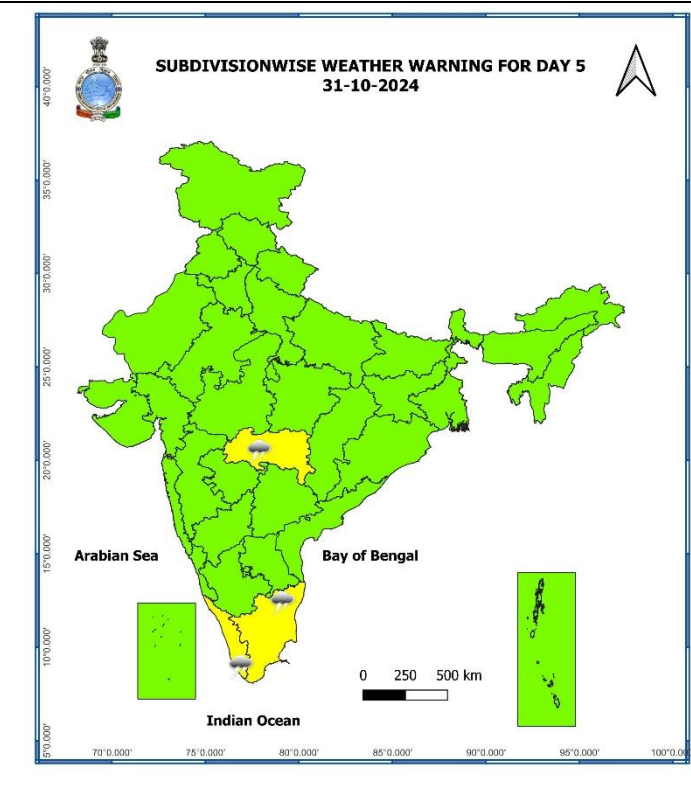
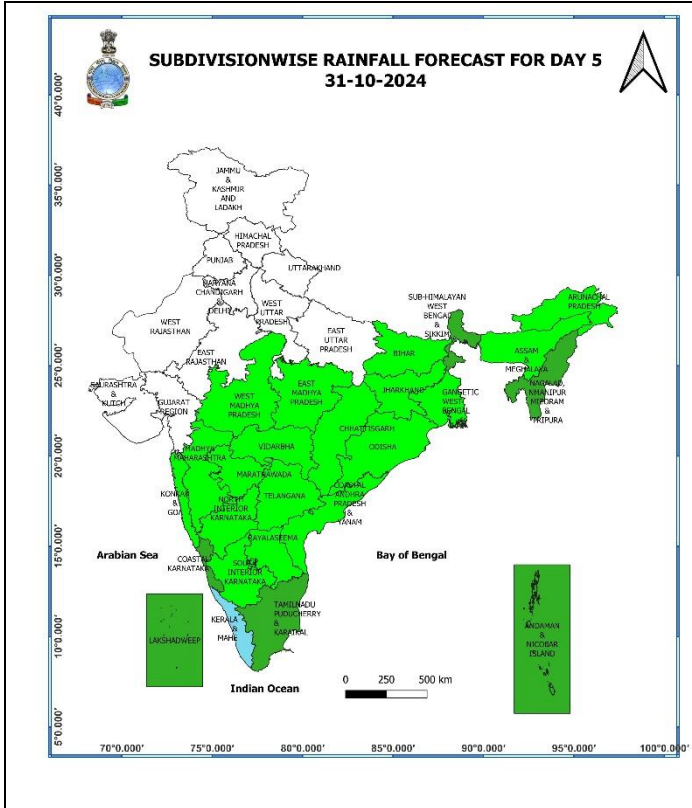
**29 October (Day 3):**

- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Kerala & Mahe, Konkan & Goa, Madhya Maharashtra, Marathwada, East Madhya Pradesh, Vidarbha, Chhattisgarh.



### 30 October (Day 4):

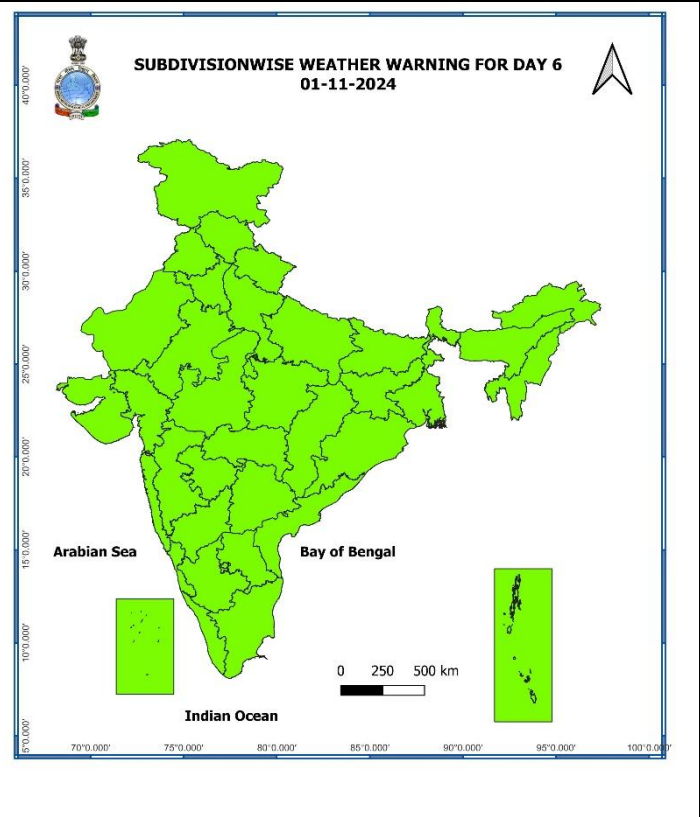
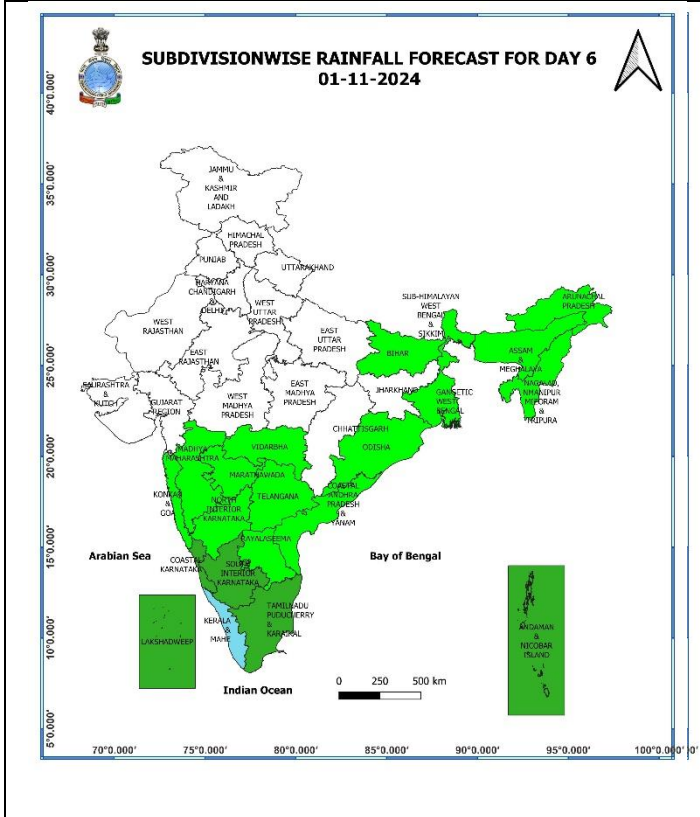
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Kerala & Mahe, Konkan & Goa, Madhya Maharashtra, Marathwada, East Madhya Pradesh, Vidarbha, Chhattisgarh.



**31 October (Day 5):**

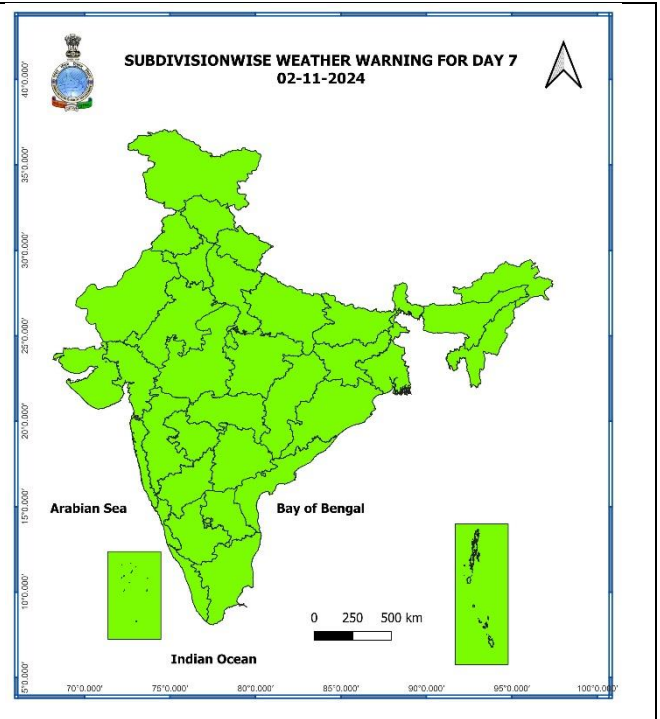
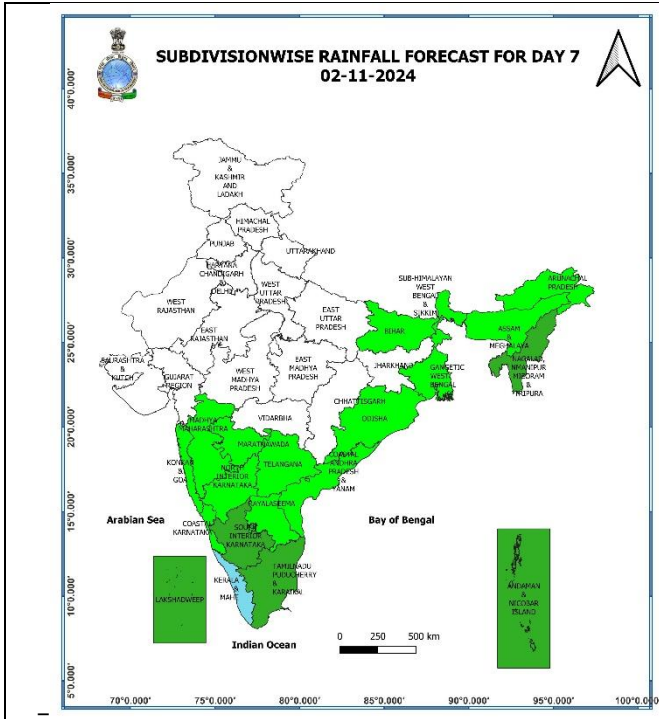
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Vidarbha.





**01 November (Day 6):**

❖ **No weather warning.**



**02 November (Day 7):**

❖ **No weather warning.**

**Weather Outlook for subsequent 3 days (During 03<sup>rd</sup> November – 05<sup>th</sup> 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.

\* 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)



राष्ट्रीय मौसम पूर्वानुमान केन्द्र  
भारत मौसम विज्ञान विभाग  
पृथ्वी विज्ञान मंत्रालय



National Weather Forecasting Centre  
India Meteorological Department  
Ministry of Earth Sciences

## Agromet advisories for Heavy Rainfall likely over Tamilnadu and Kerala

- ✓ Drain out excess water from the standing crops in Tamilnadu and Kerala.
- ✓ 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

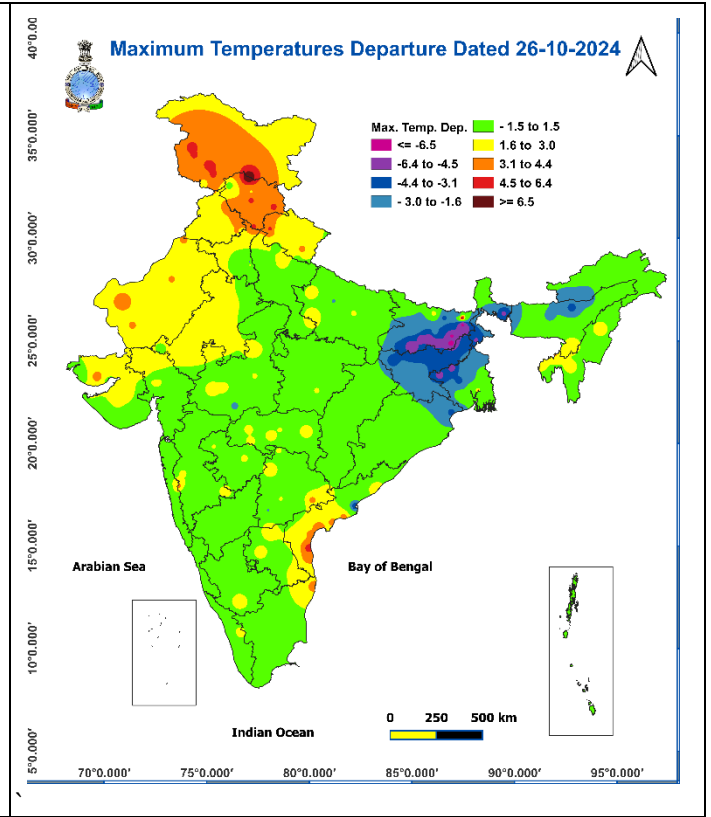
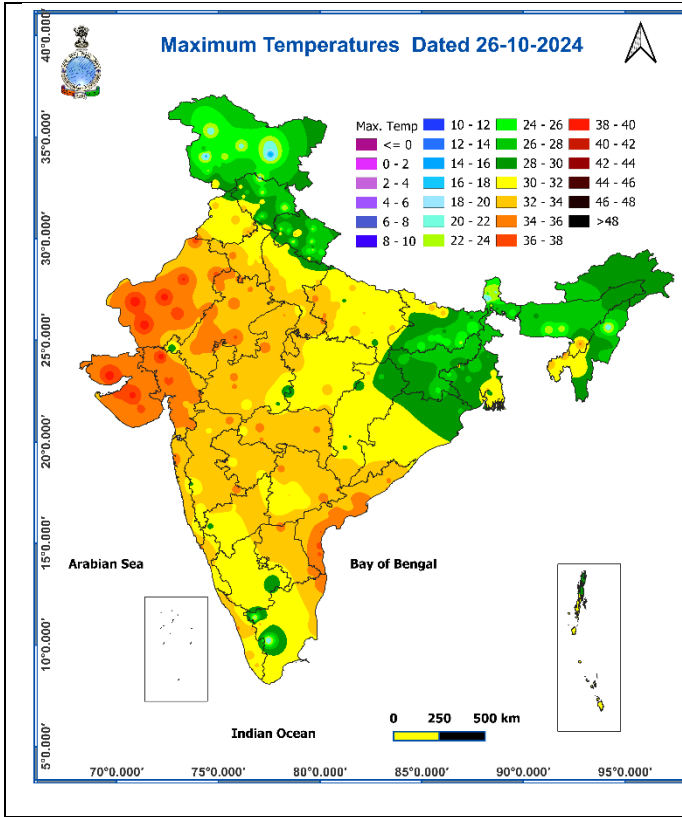


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

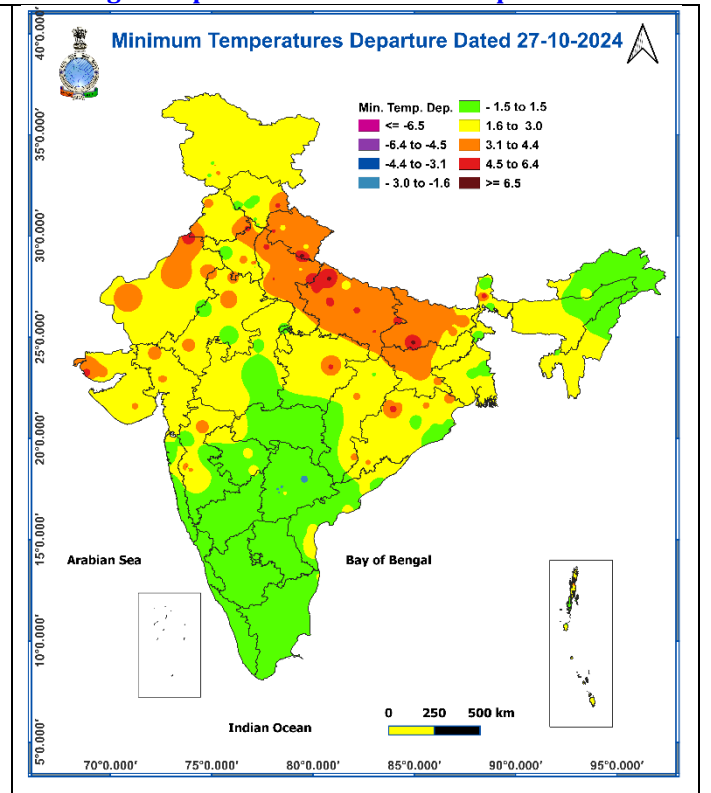
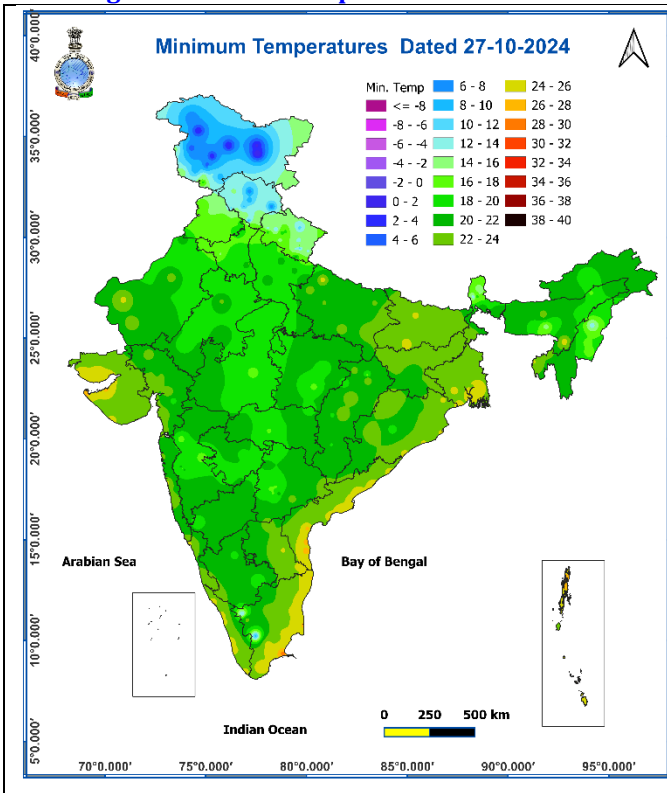
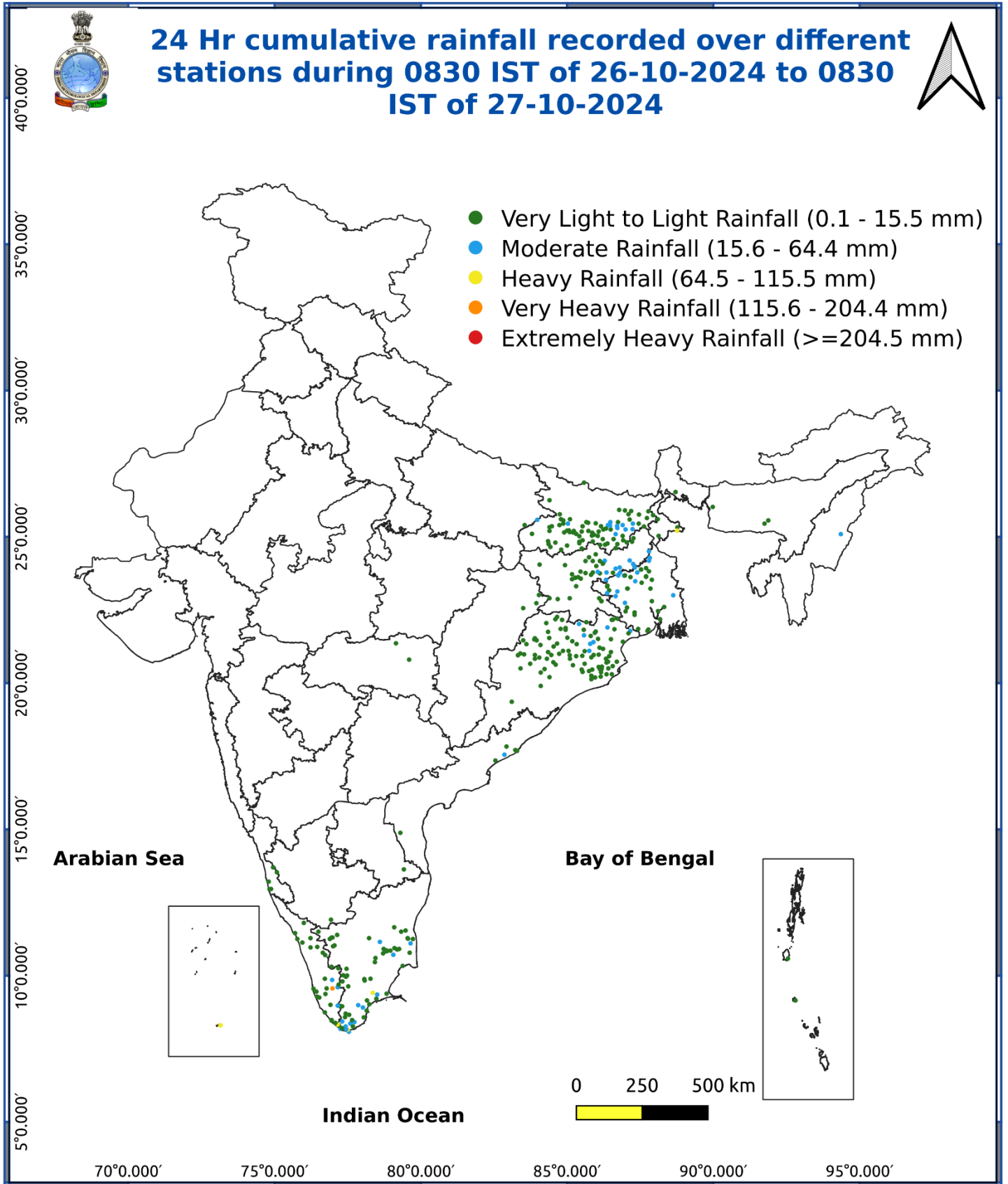


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

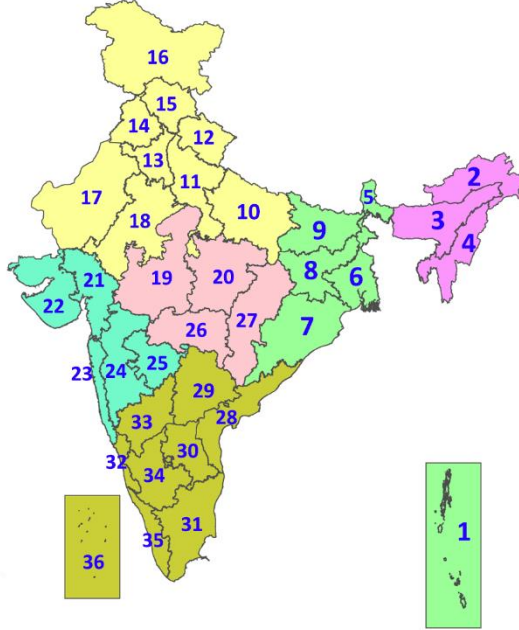


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## LEGENDS

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

<b>Rain/ Snow *</b>	<p><b>Heavy:</b> 64.5 to 115.5 mm/cm *</p> <p><b>Very Heavy:</b> 115.6 to 204.4 mm/cm*</p> <p><b>Extremely Heavy:</b> &gt; 204.4 mm/cm *</p>
<b>Heat Wave</b>	<p><b>When maximum temperature of a station reaches <math>\geq 40^\circ\text{C}</math> for plains and <math>\geq 30^\circ\text{C}</math> for hilly regions</b></p> <p><b>(a) Based on Departure from normal</b></p> <p><b>Heat Wave:</b> Maximum Temperature Departure from normal <math>4.5^\circ\text{C}</math> to <math>6.4^\circ\text{C}</math>.</p> <p><b>Severe Heat Wave:</b> Maximum Temperature Departure from normal <math>\geq 6.5^\circ\text{C}</math></p> <p><b>(b). Based on Actual maximum temperature</b></p> <p><b>Heat Wave:</b> When actual maximum temperature <math>\geq 45^\circ\text{C}</math>.</p> <p><b>Severe Heat Wave:</b> When actual maximum temperature <math>\geq 47^\circ\text{C}</math></p> <p><b>(c) Criteria for heat wave for coastal stations</b></p> <p>When maximum temperature departure is <math>&gt;4.5^\circ\text{C}</math> from normal. Heat Wave may be described provided maximum temperature <math>\geq 37^\circ\text{C}</math></p>
<b>Warm Night</b>	<p><b>When maximum temperature remains <math>40^\circ\text{C}</math></b></p> <p><b>Warm Night:</b> When minimum temperature departure <math>4.5^\circ\text{C}</math> to <math>6.4^\circ\text{C}</math>.</p> <p><b>Severe Warm Night:</b> When minimum temperature departure <math>&gt;6.4^\circ\text{C}</math>.</p>
<b>Cold Wave</b>	<p><b>When minimum temperature of a station <math>\leq 10^\circ\text{C}</math> for plains and <math>\leq 0^\circ\text{C}</math> for hilly regions.</b></p> <p><b>(a). Based on departure</b></p> <p><b>Cold Wave:</b> Minimum Temperature Departure from normal <math>-4.5^\circ\text{C}</math> to <math>-6.4^\circ\text{C}</math>.</p> <p><b>Severe Cold Wave:</b> Minimum Temperature Departure from normal <math>\leq -6.5^\circ\text{C}</math></p> <p><b>(b) Based on actual Minimum Temperature (for Plains only)</b></p> <p><b>Cold Wave :</b> When Minimum Temperature is <math>\leq 4.0^\circ\text{C}</math></p> <p><b>Severe Cold Wave:</b> When Minimum Temperature is <math>\leq 2.0^\circ\text{C}</math></p> <p><b>(c) For Coastal Stations</b></p> <p>When Minimum Temperature departure is <math>\leq -4.5^\circ\text{C}</math> &amp; actual Minimum Temperature is <math>\leq 15^\circ\text{C}</math></p>
<b>Cold Day</b>	<p><b>When minimum temperature of a station <math>\leq 10^\circ\text{C}</math> for plains and <math>\leq 0^\circ\text{C}</math> for hilly regions</b></p> <p><b>Based on departure</b></p> <p><b>Cold Day:</b> Maximum Temperature Departure from normal <math>-4.5^\circ\text{C}</math> to <math>-6.4^\circ\text{C}</math>.</p> <p><b>Severe Cold Day:</b> Maximum Temperature Departure from normal <math>\leq -6.5^\circ\text{C}</math></p>
<b>Fog</b>	<p><b>Phenomenon of small droplets suspended in air and the horizontal visibility <math>&lt; 1\text{km}</math></b></p> <p><b>Moderate Fog:</b> When the visibility between 500-200 metres</p> <p><b>Dense Fog:</b> when the visibility between 50- 200 metres</p> <p><b>Very Dense Fog:</b> when the visibility <math>&lt; 50</math> metres</p>
<b>Thunderstorm</b>	<p><b>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</b></p>
<b>Dust/Sand Storm</b>	<p><b>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</b></p>
<b>Frost</b>	<p><b>Ice deposits on ground</b></p> <p>Air temperature <math>\leq 4^\circ\text{C}</math> ( over Plains)</p>
<b>Squall</b>	<p><b>A strong wind that rises suddenly, lasts for atleast 1 minute.</b></p> <p><b>Moderate:</b> Wind speed 52-61 kmph</p> <p><b>Severe:</b> Wind speed 62-87 kmph</p> <p><b>Very Severe:</b> Wind speed <math>&gt;87</math> kmph</p>
<b>Sea State</b>	<p><b>Effect of various waves in the sea over specific area</b></p> <p><b>Rough to very rough:</b> Wind speed 41-62 kmph (22-33 knots) &amp; Wave height 2.5-6 metre</p> <p><b>High to very high:</b> Wind speed 63-117 kmph ( 34-63 knots) &amp; Wave height 6-14 metre</p> <p><b>Phenomenal:</b> Wind speed <math>&gt;117</math> kmph (<math>&gt;63</math> knots) &amp; Wave height <math>&gt;14</math> metre</p>
<b>Cyclone</b>	<p><b>Cyclonic Storm:</b> Wind speed 62-87 kmph (34-47 knots)</p> <p><b>Severe Cyclonic Storm:</b> Wind speed 88-117 kmph (48-63 knots)</p> <p><b>Very Severe Cyclonic Storm:</b> Wind speed 118-165 kmph (64 - 89 knots)</p> <p><b>Extremely Severe Cyclonic Storm:</b> Wind speed 166-220 kmph (90 -119 knots)</p> <p><b>Super Cyclone Strom:</b> Wind speed <math>&gt;220</math> kmph (<math>&gt;119</math> knots)</p>