

Wednesday, February 12, 2025  
Time of Issue: 0800 hours IST  
(MORNING)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### . Weather Systems, Forecast and warning:

- ❖ A **Western Disturbance** is seen as a cyclonic circulation over north Pakistan & neighbourhood in lower tropospheric levels. Subtropical westerly Jet Stream with core winds of the order of 125 knots at 12.6 km above mean sea level is prevailing over the plains of northwest & northeast India. A **cyclonic circulation** lies over northeast Assam & neighbourhood in lower tropospheric levels. Under their influence,
  - ✓ Fairly widespread to widespread light rainfall/snowfall accompanied with thunderstorm & lightning activity likely over Arunachal Pradesh and isolated over Assam & Meghalaya on 12<sup>th</sup> February with isolated **heavy rainfall** on Arunachal Pradesh on 12<sup>th</sup> February.
  - ✓ Isolated light rainfall activity likely over Nagaland, Manipur, Mizoram & Tripura & Sub-Himalayan West Bengal & Sikkim on 12<sup>th</sup> February.
  - ✓ Isolated to scattered light rainfall/snowfall activity likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 12<sup>th</sup> February, 2025.

#### Temperature Conditions:

- ❖ Minimum temperatures are in the range of **7-14°C** over many parts of plains of Northwest India, West India, Madhya Pradesh, Bihar and Jharkhand.
- ❖ During the past 24 hours, **minimum temperatures has fallen by 1-3°C** over some parts of Himachal Pradesh, West Madhya Pradesh, Maharashtra, Karnataka; at isolated places over Jammu-Kashmir & Rayalaseema and **risen by 1-3°C** over many parts of Uttar Pradesh, East Madhya Pradesh & Odisha; at isolated places over Saurashtra & Kutch, Assam & Meghalaya & Tamil Nadu; **risen by 3-6°C** over some parts of Chhattisgarh & Gangetic West Bengal.
- ❖ Maximum temperatures are in the range of **34-37°C** over many parts of Maharashtra & Odisha; in some parts of Kerala & Mahe; at isolated places over Chhattisgarh, Rayalaseema, Telangana, North Interior Karnataka and Tamilnadu Puducherry & Karaikal.

#### Forecast of temperature:

- ❖ Gradual fall in minimum temperatures by about 2°C likely over Northwest India during next 3 days and no significant change thereafter.
- ❖ No significant change in minimum temperature likely over Central India during next 24 hours and gradual fall by 2-4°C thereafter.
- ❖ No significant change in minimum temperature likely over East India during next 48 hours and gradual fall by 2-3°C thereafter.
- ❖ Gradual fall in minimum temperatures by 2-3°C likely over Maharashtra region during next 3 days and no significant change thereafter.
- ❖ No significant change in minimum temperature over remaining parts of the country during next 5 days.
- ❖ Gradual fall in maximum temperature by about 2°C likely over Northwest India during next 3 days and no significant change thereafter.
- ❖ No significant change in maximum temperature likely over Central India during next 24 hours and gradual fall by 2-3°C during subsequent 3 days.

#### Cold Wave Warnings:

- ❖ **Cold Wave conditions** very likely in isolated pockets of Himachal Pradesh on 12<sup>th</sup> February.

#### Dense Fog Warnings:

- ❖ **Dense fog conditions** very likely to continue to prevail during early morning hours in isolated pockets of Bihar till 12<sup>th</sup> and Gangetic West Bengal till 13<sup>th</sup> February.

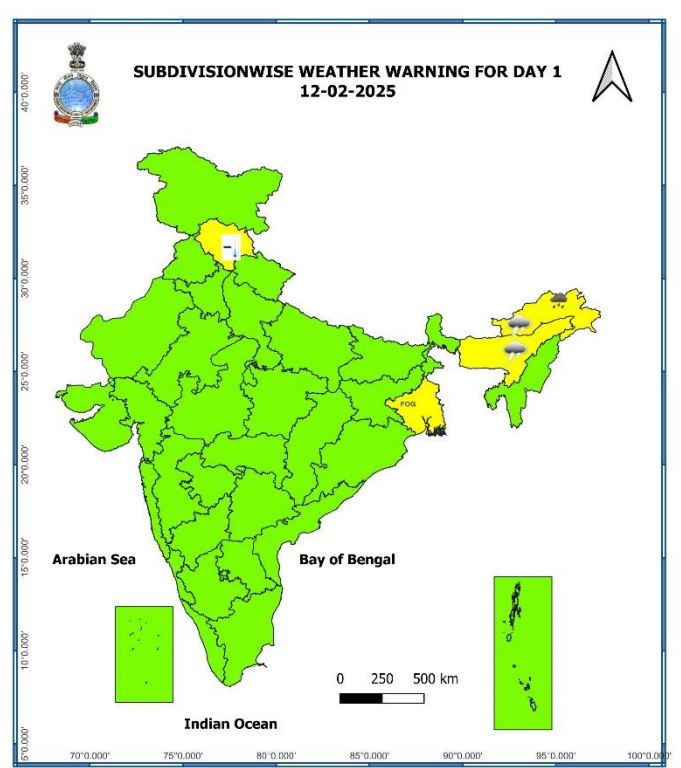
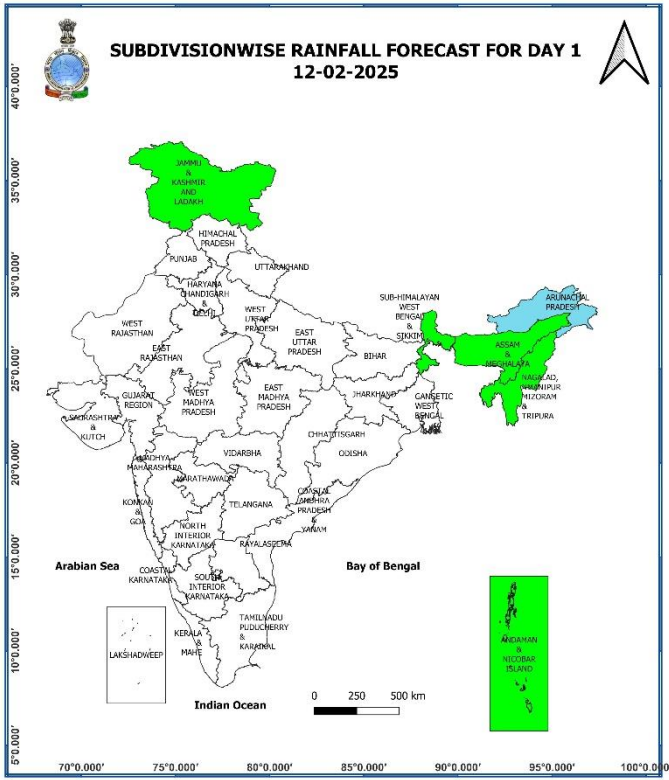
## Main Weather Observations:

- ❖ **Rainfall/Snowfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Arunachal Pradesh; **at isolated places** over Himachal Pradesh and Assam & Meghalaya.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday): (in cm): **NIL.**
- ❖ **Fog reported** (at 0530 hours IST of today): **Dense to very dense fog conditions** in isolated pockets of West Bengal.
- ❖ **Visibility reported** (at 0530 hours IST of today) ( $\leq 500$  m): **West Bengal : Kolkata 0.**
- ❖ **Minimum Temperature Departures (as on 11-02-2025):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Assam & Meghalaya, Gangetic West Bengal, Madhya Maharashtra and Vidarbha; **above normal (1.6°C to 3.0°C)** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, East Madhya Pradesh, Chhattisgarh, Konkan & Goa and Marathwada; at a few places over West Rajasthan, Odisha, West Madhya Pradesh, Telangana; at isolated places over Punjab, East Rajasthan, Uttar Pradesh, Arunachal Pradesh, Bihar, Saurashtra & Kutch and North Interior Karnataka. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Rayalaseema and near normal over rest parts of the country (Fig. 4). Yesterday, the **lowest minimum temperature of 6.6°C** was reported at **Adampur (Punjab)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 11-02-2025):** Maximum temperatures were **markedly above normal (5.1°C or more)** at many places over Delhi; at a few places over West Uttar Pradesh: at isolated places over West Rajasthan, Chhattisgarh, Jharkhand and Odisha; **appreciably above normal (3.1°C to 5.0°C)** at many places over East Madhya Pradesh; at a few places over East Uttar Pradesh; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana, East Rajasthan, West Madhya Pradesh, Bihar, Vidarbha and Gangetic West Bengal; **above normal (1.6°C to 3.0°C)** at most places over North Interior Karnataka; at a few places over Coastal Andhra Pradesh & Yanam, Telangana, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal; at isolated places over Himachal Pradesh, Gujarat state and Konkan & Goa. These were **markedly below normal (-5.0°C or less)** at a few places over Assam & Meghalaya and near normal over rest parts of the country (Fig. 2). Yesterday, the **highest maximum temperature of 37.3°C** was reported at **Kurnool (Rayalaseema)** over the plains of the country.

## Meteorological Analysis (Based on 0530 hours IST)

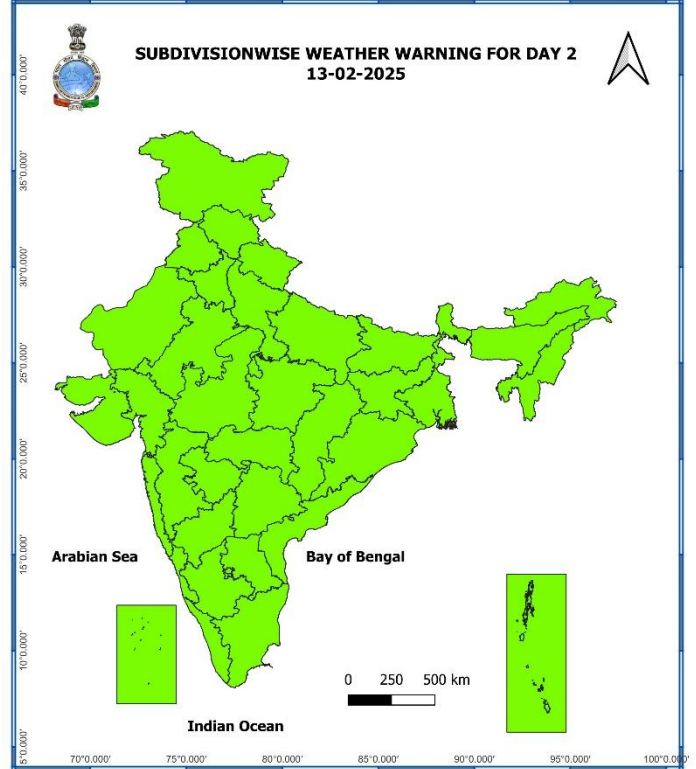
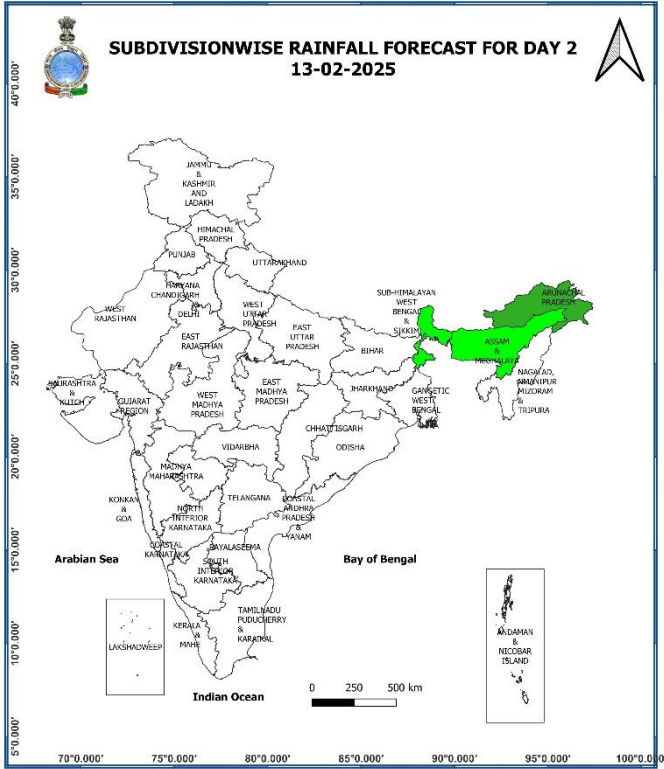
- ❖ The **Western Disturbance** as a cyclonic circulation over north Pakistan & neighbourhood at 3.1 km above mean sea level persists.
- ❖ The **cyclonic circulation** over northeast Assam & neighbourhood between 1.5 & 3.1 km above mean sea level persists.
- ❖ Subtropical **westerly Jet Stream** with core winds of the order of 125 knots at 12.6 km above mean sea level continues to prevail over the plains of northwest & northeast India.

**Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 19<sup>th</sup> February, 2025)**



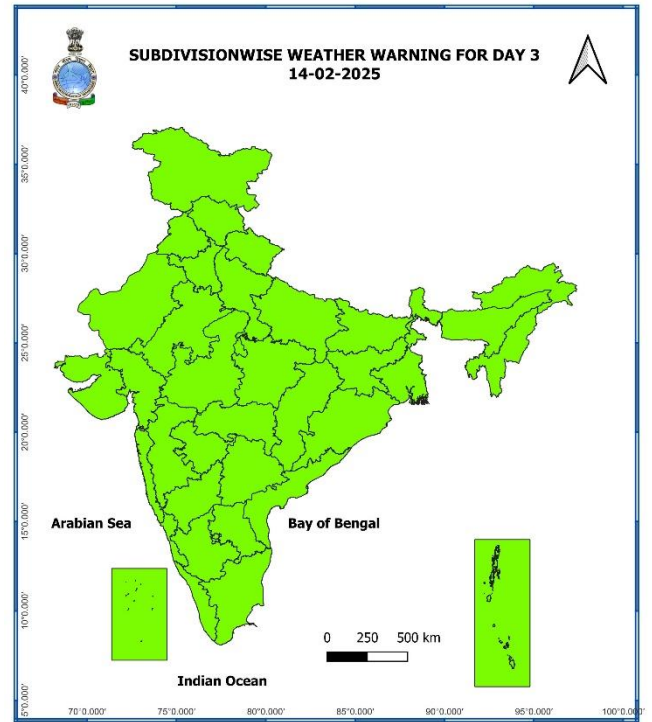
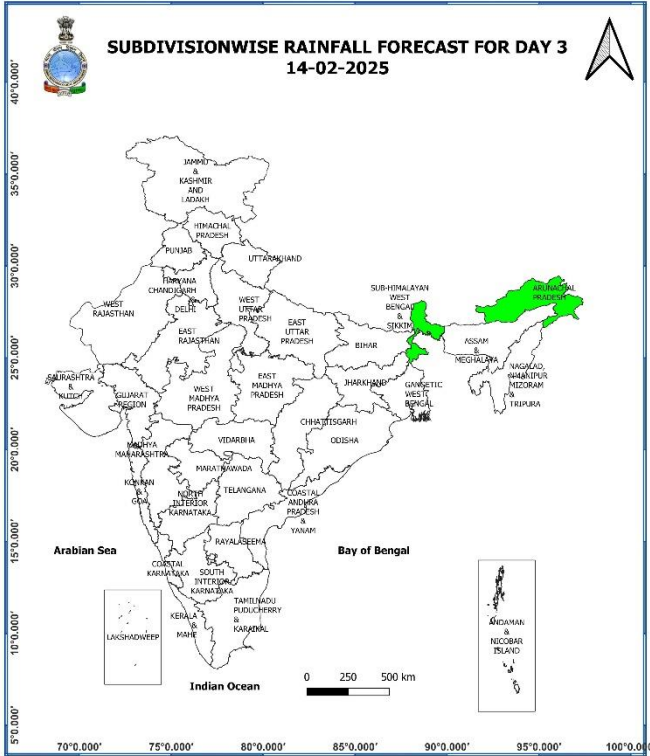
**12<sup>th</sup> February (Day 1):**

- ❖ **Heavy Rainfall/snowfall ( $\geq 7$  cm)** very likely at isolated places of Arunachal Pradesh.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Dense fog conditions** very likely in isolated pockets of Gangetic West Bengal.
- ❖ **Cold Wave Conditions** very likely at a few places over Himachal Pradesh.



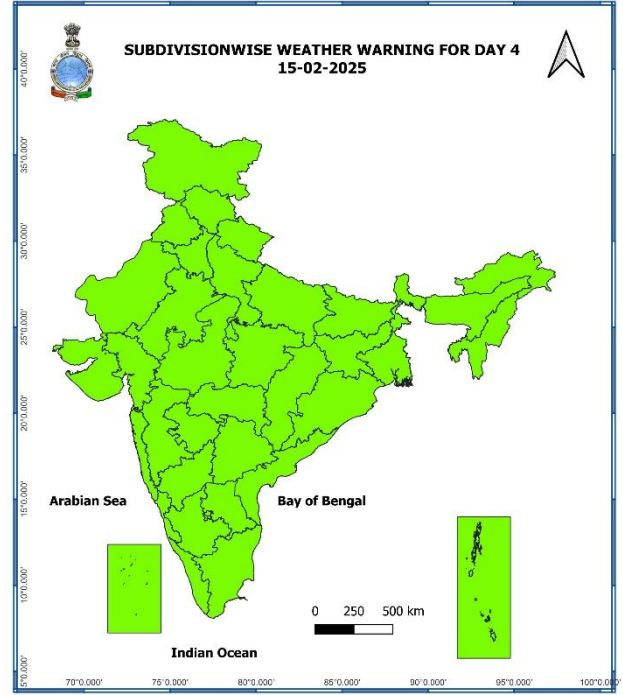
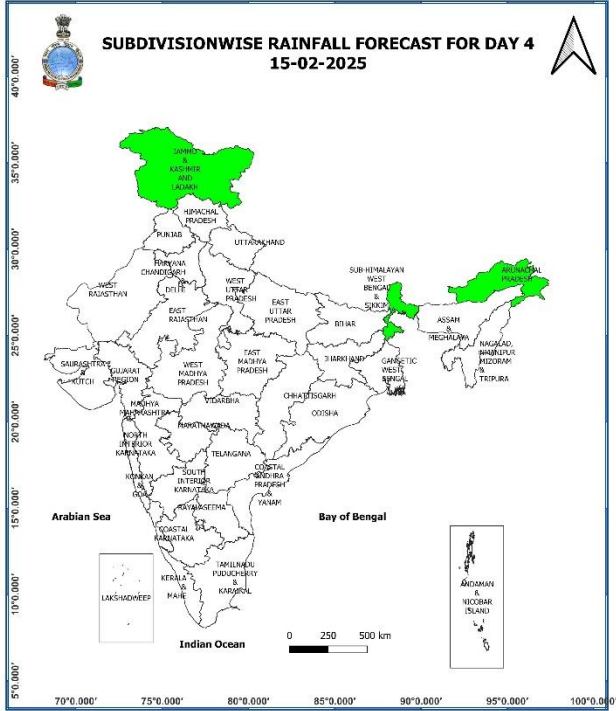
**13<sup>th</sup> February (Day 2):**

❖ **No Weather Warning.**



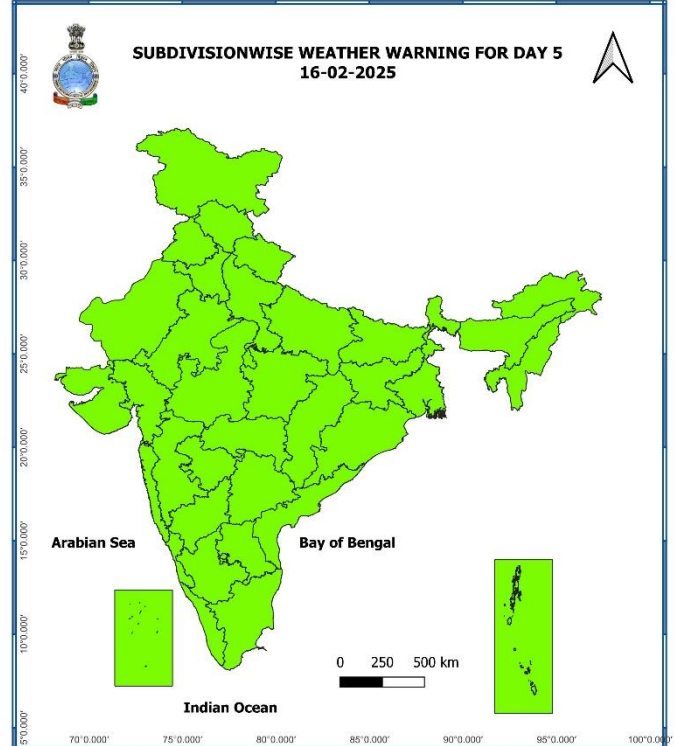
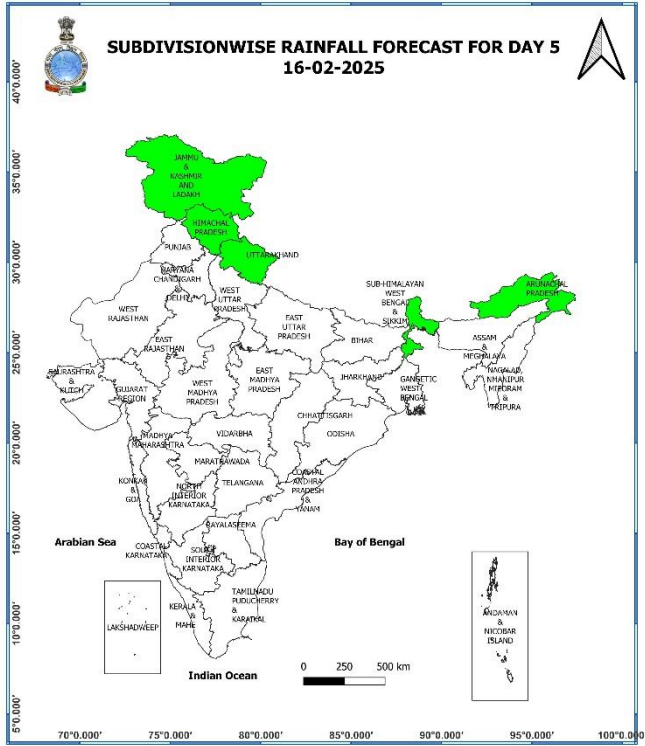
**14<sup>th</sup> February (Day 3):**

**❖ No Weather Warning.**



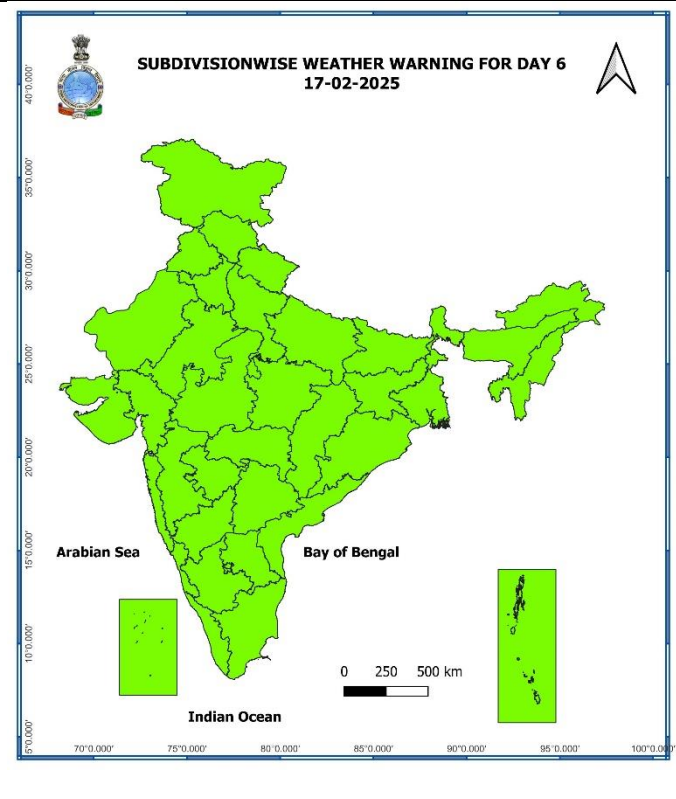
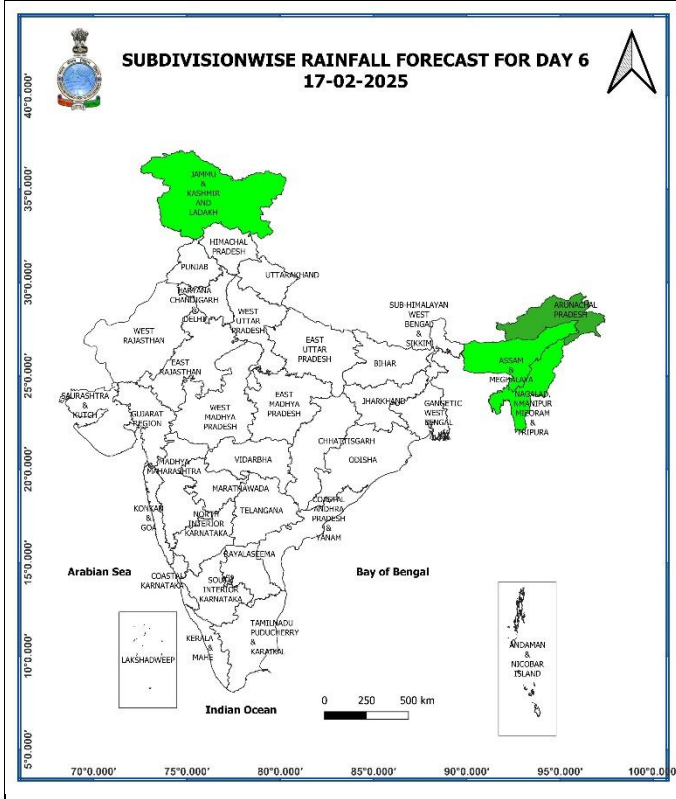
**15<sup>th</sup> February (Day 4):**

❖ **No Weather Warning.**



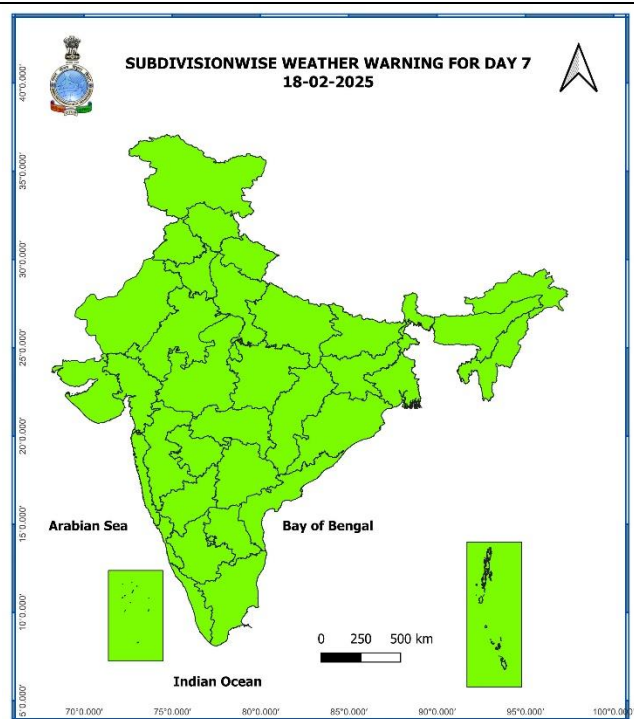
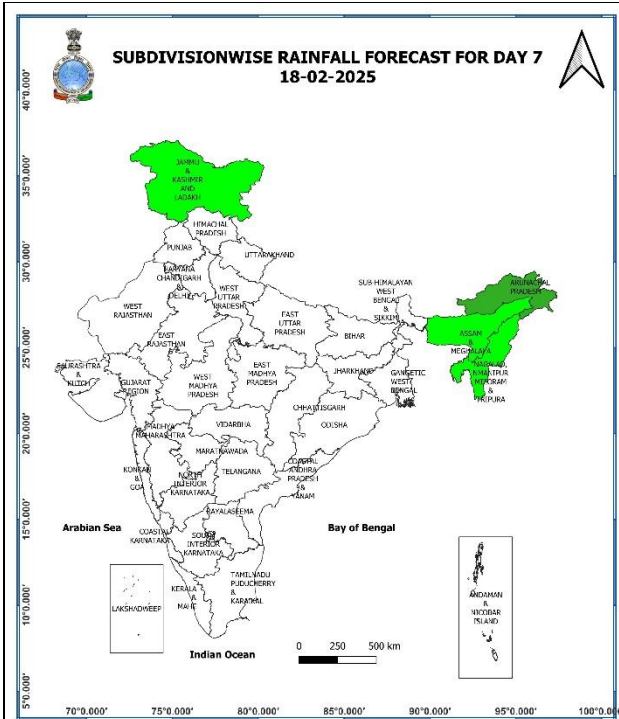
**16<sup>th</sup> February (Day 5):**

❖ **No Weather Warning.**



**17<sup>th</sup> February (Day 6):**

❖ **No Weather Warning.**



**18<sup>th</sup> February (Day 7):**

❖ **No Weather Warning.**

**Weather Outlook for subsequent 3 days (During 19<sup>th</sup> February- 21<sup>th</sup> February, 2025)**

- ❖ **Scattered to fairly widespread rainfall/snowfall** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh.
- ❖ **Isolated rainfall** likely over Uttarakhand and Northeast India.

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.

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

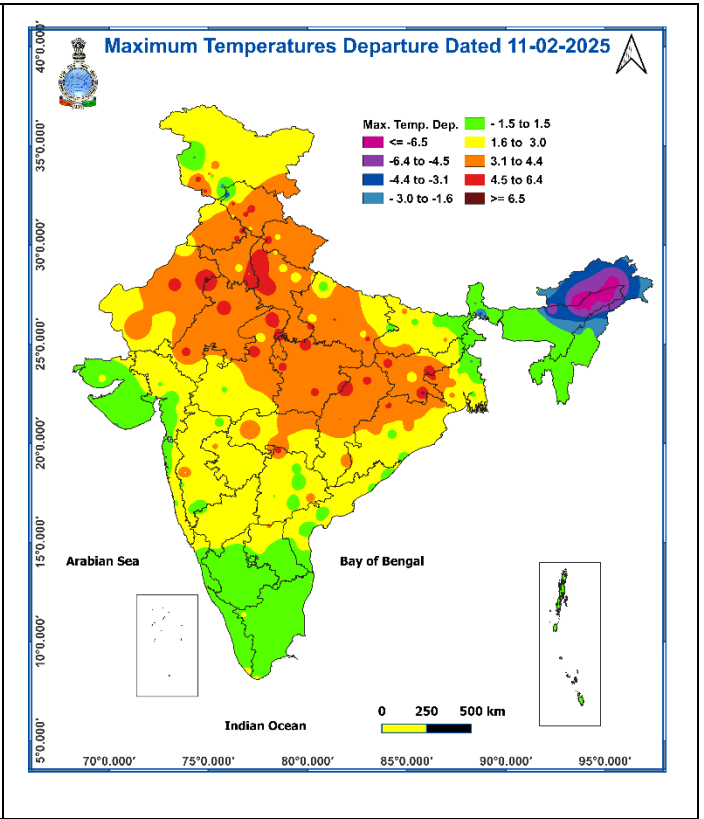
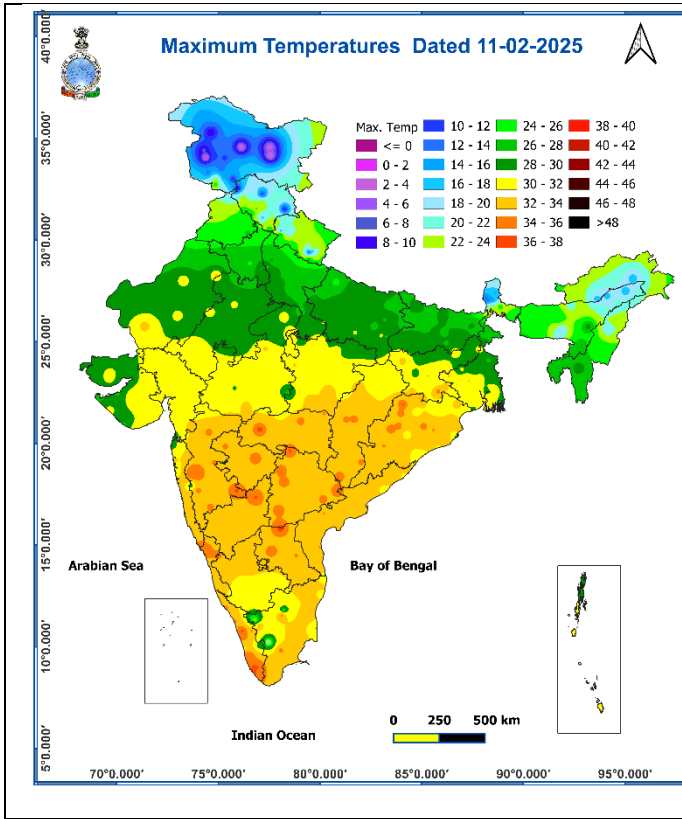


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

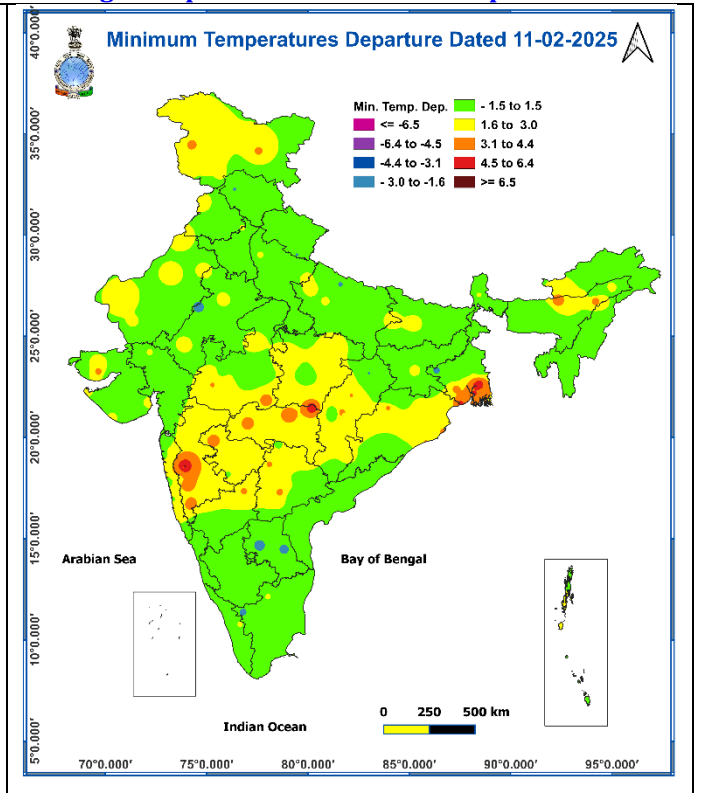
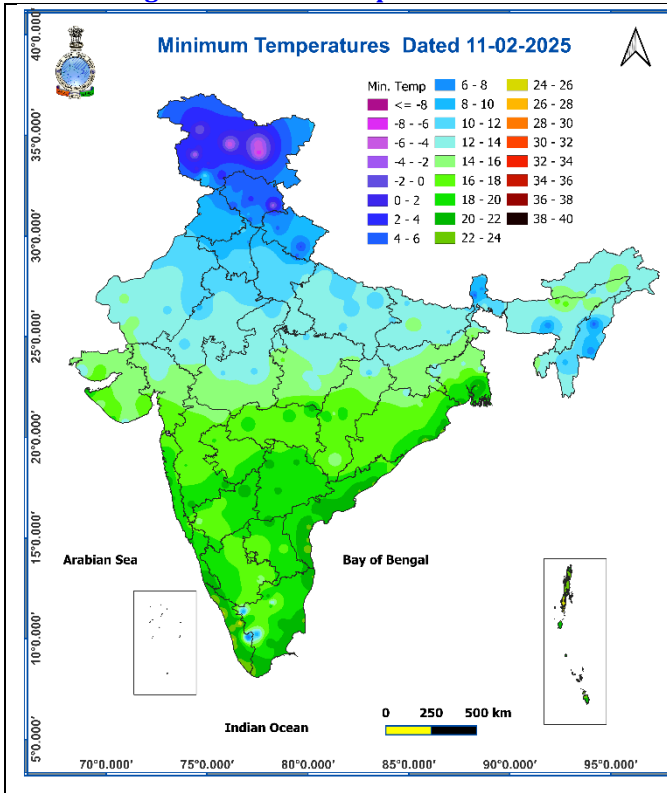
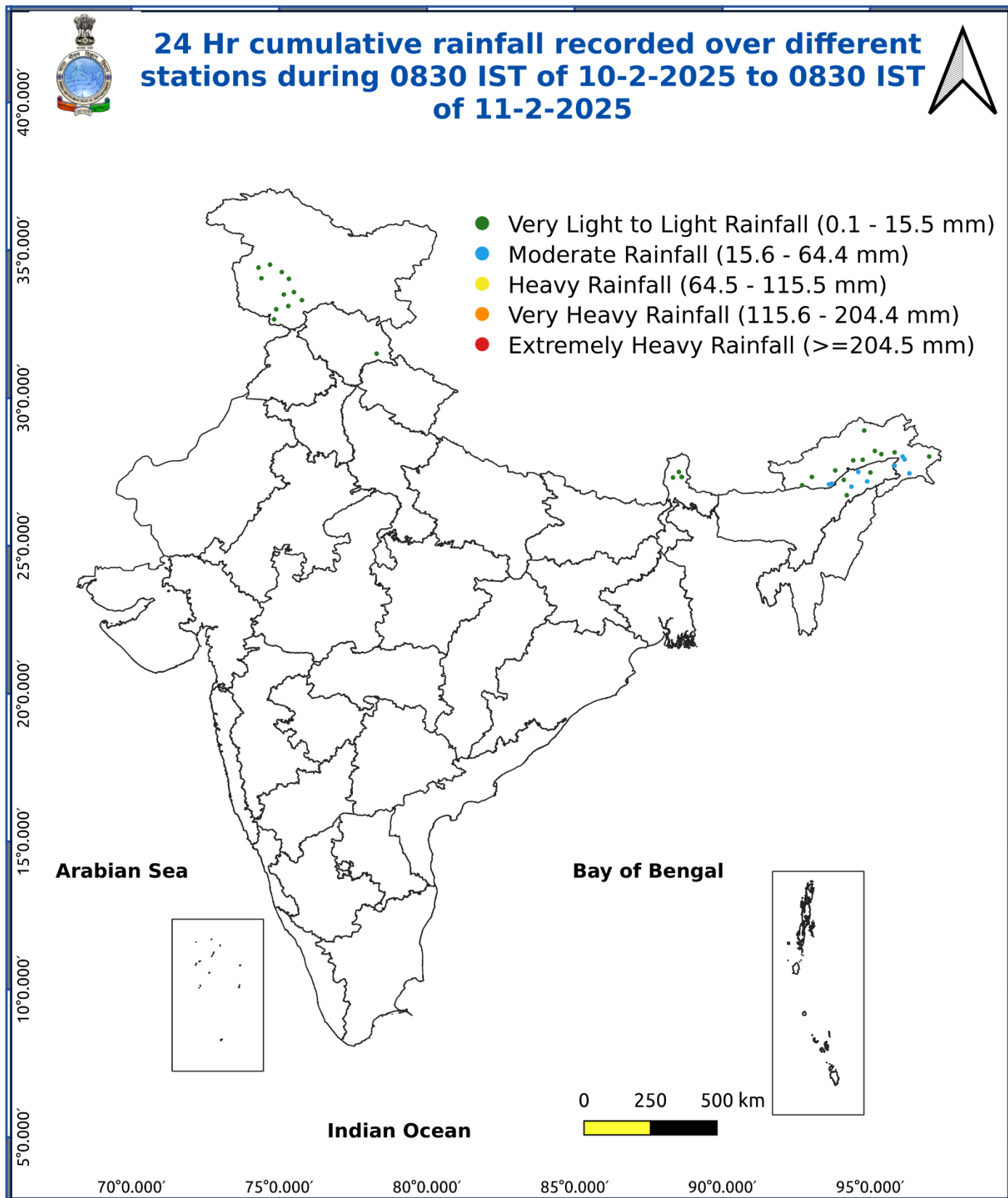


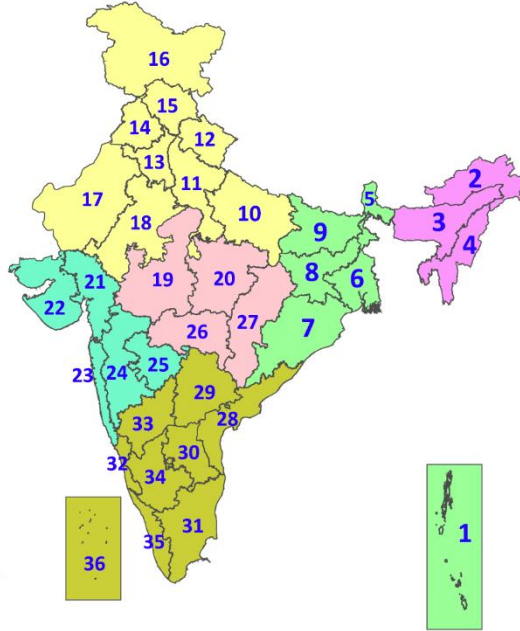
Fig. 5: Accumulated Rainfall (mm) during past 24 hours



\* 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  
(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

<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>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</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>When maximum temperature remains <math>40^\circ\text{C}</math></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>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.</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>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</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>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p>
<b>Dust/Sand Storm</b>	<p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p>
<b>Frost</b>	<p>Ice deposits on ground</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>