

2026-01-19

Time of Issue: 13:09:00 hours IST  
(Mid-Day)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features

#### Weather Forecast and warning:

- Isolated to scattered light to moderate rainfall/snowfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabadduring 19<sup>th</sup> -21<sup>st</sup>; Himachal Pradesh on 19<sup>th</sup> January and Fairly widespread to widespread rainfall/snowfall over Western Himalayan Region during 22<sup>nd</sup> -24<sup>th</sup> with reduce in intensity on 25<sup>th</sup> January; with **isolated heavy falls over Kashmir valleyon 22<sup>nd</sup> & 23<sup>rd</sup> and higher reaches of Himachal Pradesh on 23<sup>rd</sup> January.**
- Scattered to Fairly widespread light to moderate rainfall likely over Punjab during 22<sup>nd</sup>-25<sup>th</sup>; Isolated to scattered light to moderate rainfall over Haryana, Chandigarh, West Uttar Pradesh during 22<sup>nd</sup> - 25<sup>th</sup>; East Uttar Pradesh on 23<sup>rd</sup> & 24<sup>th</sup> and Rajasthan on 22<sup>nd</sup> & 23<sup>rd</sup> January.
- Thunderstorm activity accompanied with **lightning & gusty winds (speed 40-50 kmph)** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 23<sup>rd</sup>; with **gusty winds (speed 30-40 kmph)** over Punjab, Haryana, Chandigarh, Uttar Pradesh and Rajasthan on 22<sup>nd</sup> & 23<sup>rd</sup>; with **lightning** over Himachal Pradesh on 22<sup>nd</sup> & 23<sup>rd</sup>; Uttarakhand on 23<sup>rd</sup> January.

#### Forecast of minimum temperatures:

- No significant change in minimum temperatures likely over Northwest India during next 3 days; gradual rise by 2-4°C during subsequent 2 days and gradual fall by 2-3°C during subsequent 2 days.
- Gradual rise in minimum temperatures by 2-4°C likely over Maharashtra during next 3 days and no significant change during subsequent 4 days.
- No significant change in minimum temperatures likely over rest parts of the country.

#### Dense Fog, Cold day & Cold wave Warnings:

- **Dense to very dense fog conditions very likely to prevail in morning/night hours in isolated pockets over Punjab till 20<sup>th</sup> and Dense fog in isolated pockets on 21<sup>st</sup> January 2026.**
- **Dense fog** conditions also likely during morning/night hours in isolated pockets over Haryana, Chandigarh till 21<sup>st</sup>; Uttar Pradesh till 20<sup>th</sup> and Bihar till 21<sup>st</sup> January.
- **Cold wave conditions** very likely in isolated pockets of Himachal Pradesh on 20<sup>th</sup> & 21<sup>st</sup> January.

**\*Red color warning does not mean "Red Alert" Red color 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

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### Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at isolated places** over Andaman & Nicobar Islands; **Dry** over rest of the country.
- ❖ **Fog Condition Observed (at 0830 hours of today): Dense to very Dense fog(visibility <50 m) conditions** prevailed in some parts of Punjab, East Uttar Pradesh; in isolated pockets of Haryana & West Uttar Pradesh and **dense fog (visibility 50-199 m) conditions** prevailed in isolated pockets of East Rajasthan, Bihar and Meghalaya.
- ❖ **Visibility reported (at 0830 hours of today): Punjab:** Amritsar 0m; **East Uttar Pradesh:** AMS Ayodhya, AMS Fursatganj & Lucknow (AP)-0m each, Fursatganj 20m, Bahraich 25m, Ballia 40m, AMS Kushinagar 50m, Gorakhpur (IAF) 100m; **West Uttar Pradesh:** AMS Moradabad & AMS Aligarh 0m each, Meerut 20m; **Haryana:** Bhiwani 10m; **Meghalaya:** Barapani 50m; **East Rajasthan:** Vanasthali < 200m.
  - **Cold wave to severe cold wave conditions** prevailed in some parts of Himachal Pradesh and cold wave conditions in isolated pockets over Punjab.
- ❖ **Minimum Temperature Departures (as on 19-01-2026):** Above normal by (2°C to 5°C) over Central India and adjoining western India, Haryana, East Uttar Pradesh, Bihar, Assam & Meghalaya and below normal (-2°C to -4°C) at isolated places over Jharkhand, Chhattisgarh, Odisha, Telangana, Rayalaseema, Tamil Nadu and near normal over rest parts of the country. The lowest minimum temperature of 2.9°C is reported at Amritsar (Punjab) over the Plains of India.
- ❖ **Maximum Temperature Departures (as on 18-01-2026):** The highest maximum temperature of 35.6°C is reported at KARWAR (KARNATAKA).

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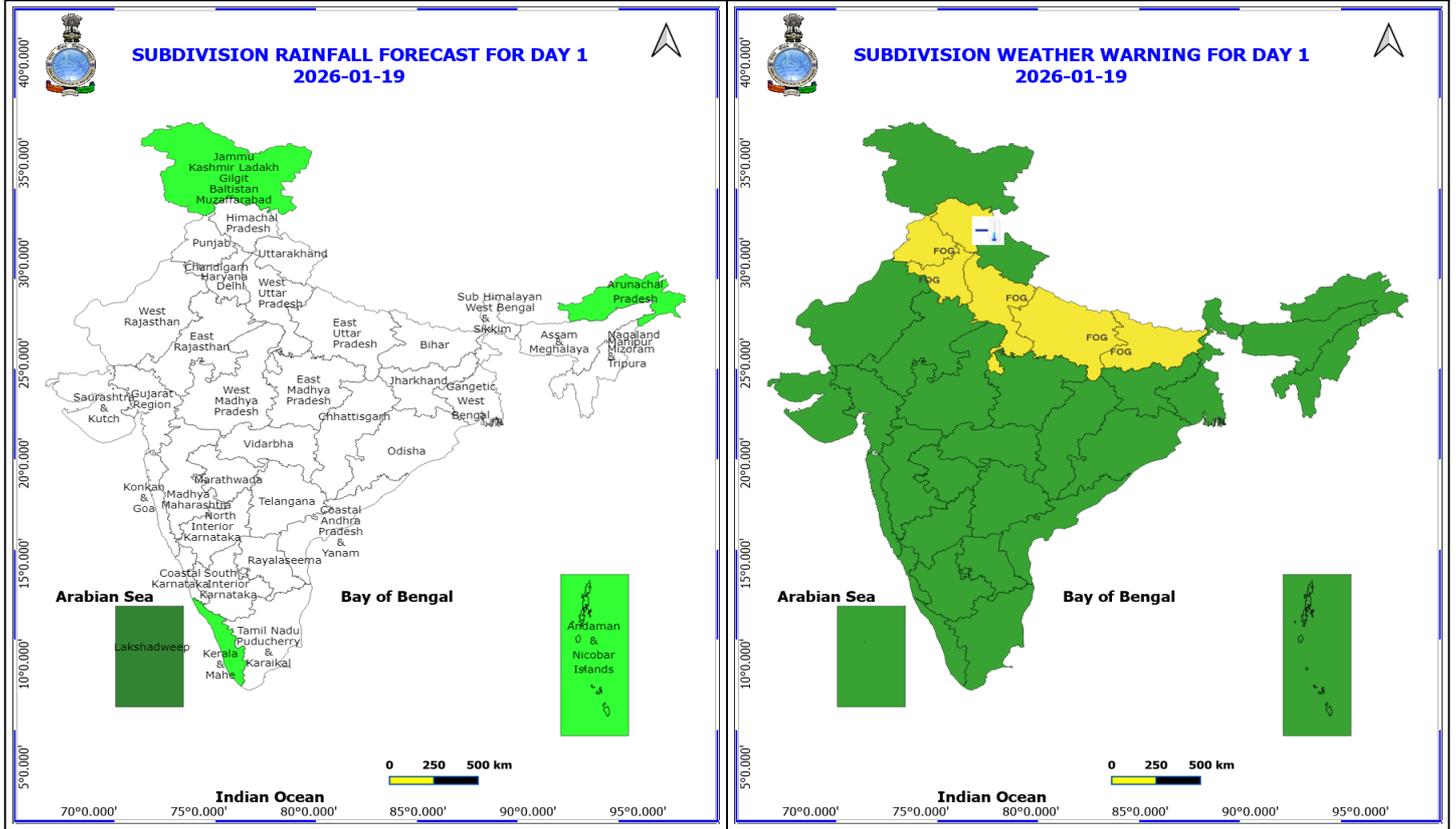
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### Meteorological Analysis (Based on 0830 hours IST)

- No significant rainfall activity occurred over southeast peninsular India during past 2 days. In the lower levels, dry winds from northern India are prevailing over the region. Thus, the **Northeast Monsoon** rains have ceased over southeast peninsular India from today, the 19<sup>th</sup> January, 2026. Dry weather likely to prevail over southeast peninsular India during next 2 days.
- The **Western Disturbance** as a cyclonic circulation over north Pakistan & neighbourhood lay over north Punjab and neighbourhood at 3.1 km above mean sea level with the trough aloft in middle and upper tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along Long. 73°E to the north of Lat. 30°N.
- The **induced cyclonic circulation** over northeast Rajasthan & neighbourhood extending upto 1.5 km above mean sea level persists.
- A fresh **Western Disturbance** seen as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along Long. 62°E to the north of Lat. 32°N.
- Thereafter and intense **Western disturbance** in quick succession is likely to affect Northwest India from 21<sup>st</sup> January, 2026 night onwards.
- **Subtropical westerly Jet Stream** with core winds of the order of 125 knots at 12.6 km above mean sea level prevails over Northeast India.
- The **upper air cyclonic circulation** over Comorin area between 0.9 km & 1.5 km above mean sea level has been less marked.
- The **upper air cyclonic circulation** over northeast Assam & neighbourhood lay over central Assam at 1.5 km above mean sea level has been less marked.

### Weather Outlook for subsequent 3 days

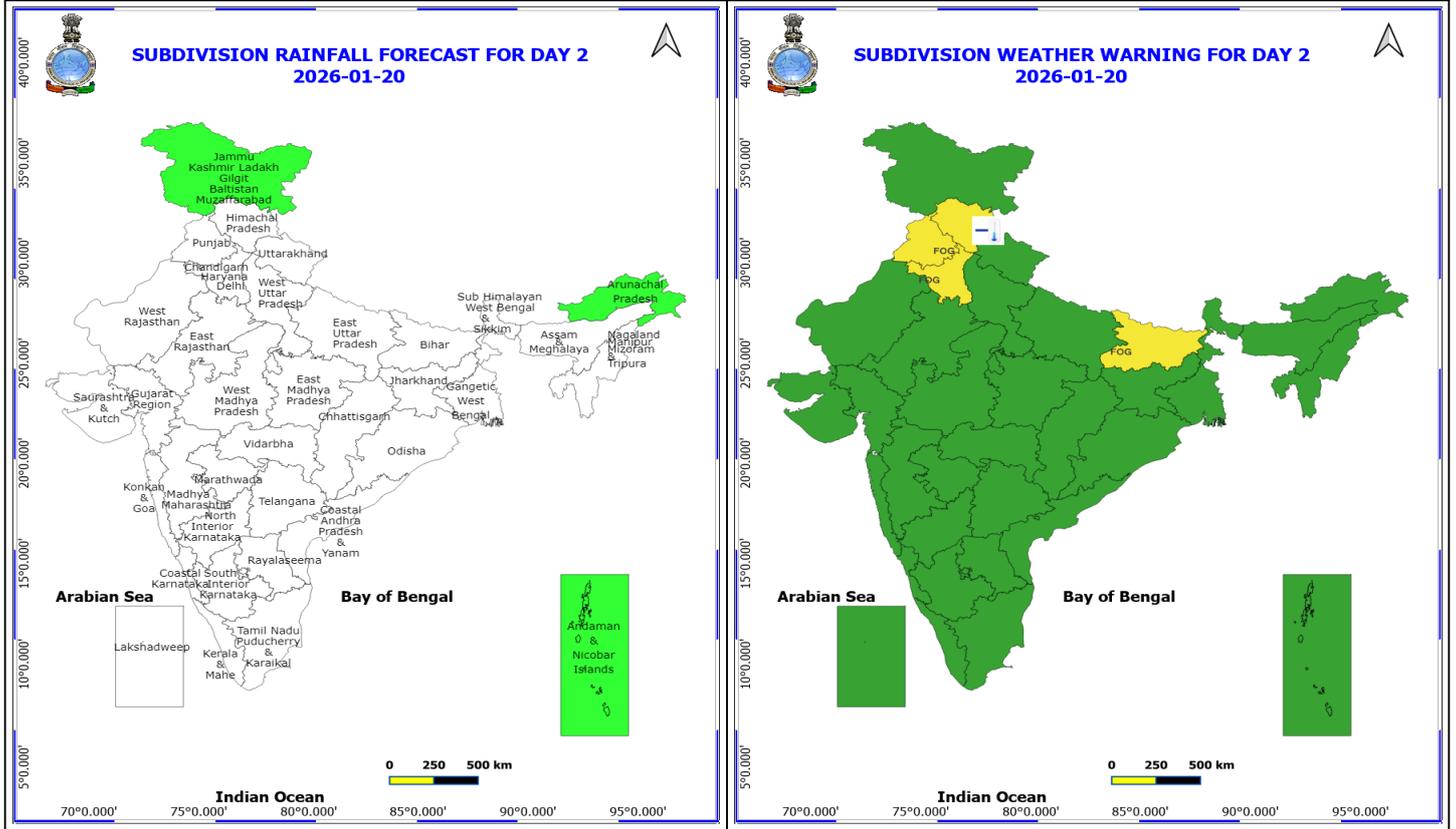
- Scattered to Fairly widespread activity likely over Western Himalayan Region, Punjab, Haryana, Delhi.
- Isolated/Scattered rainfall activity is likely over West Uttar Pradesh.
- Isolated rainfall activity is likely over Lakshadweep and Nicobar islands.



**19 January (Day 1)**

- ❖ **Cold wave conditions** very likely at isolated places over Himachal Pradesh.
- ❖ **Dense Fog** very likely at isolated places over Bihar, Haryana, Chandigarh & Delhi and Uttar Pradesh.
- ❖ **Dense to Very Dense Fog** very likely at isolated places over Punjab.

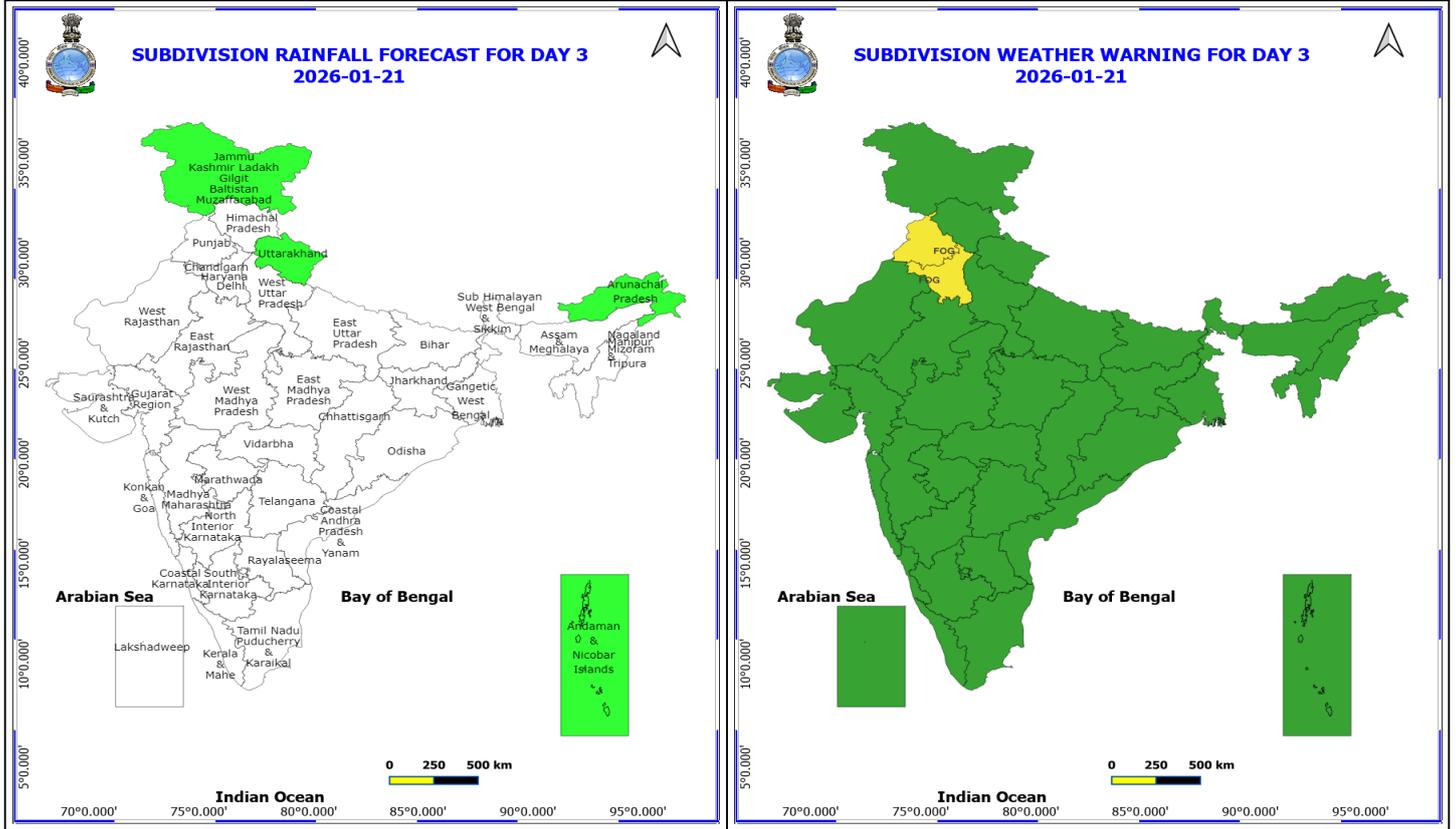
**No Fishermen Warning**



**20 January (Day 2)**

- ❖ **Cold wave conditions** very likely at isolated places over Himachal Pradesh.
- ❖ **Dense Fog** very likely at isolated places over Bihar, Haryana, Chandigarh & Delhi and Punjab.

No Warning.

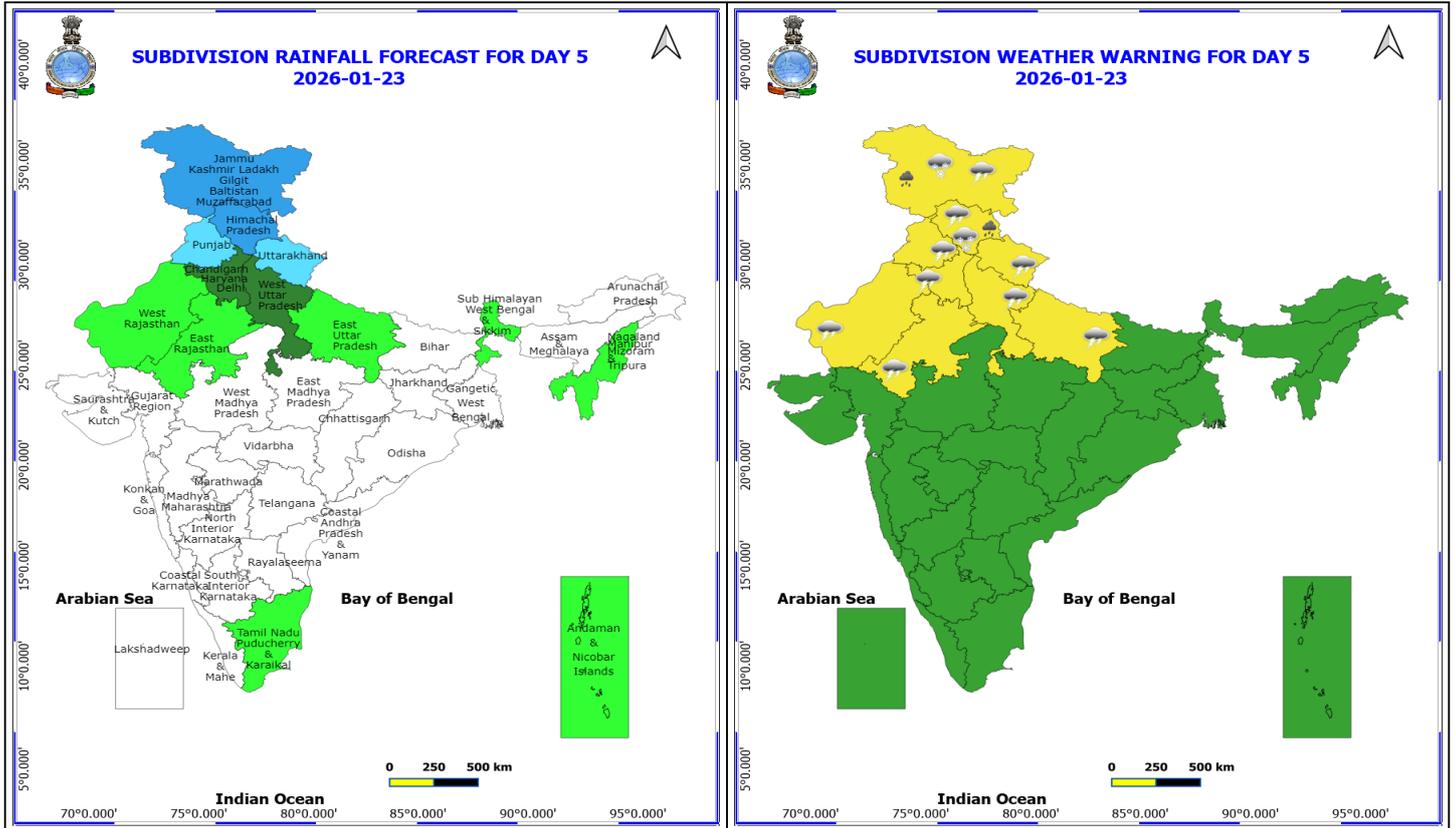


**21 January (Day 3)**

❖ **Dense Fog** very likely at isolated places over Haryana, Chandigarh & Delhi and Punjab.

No Warning.

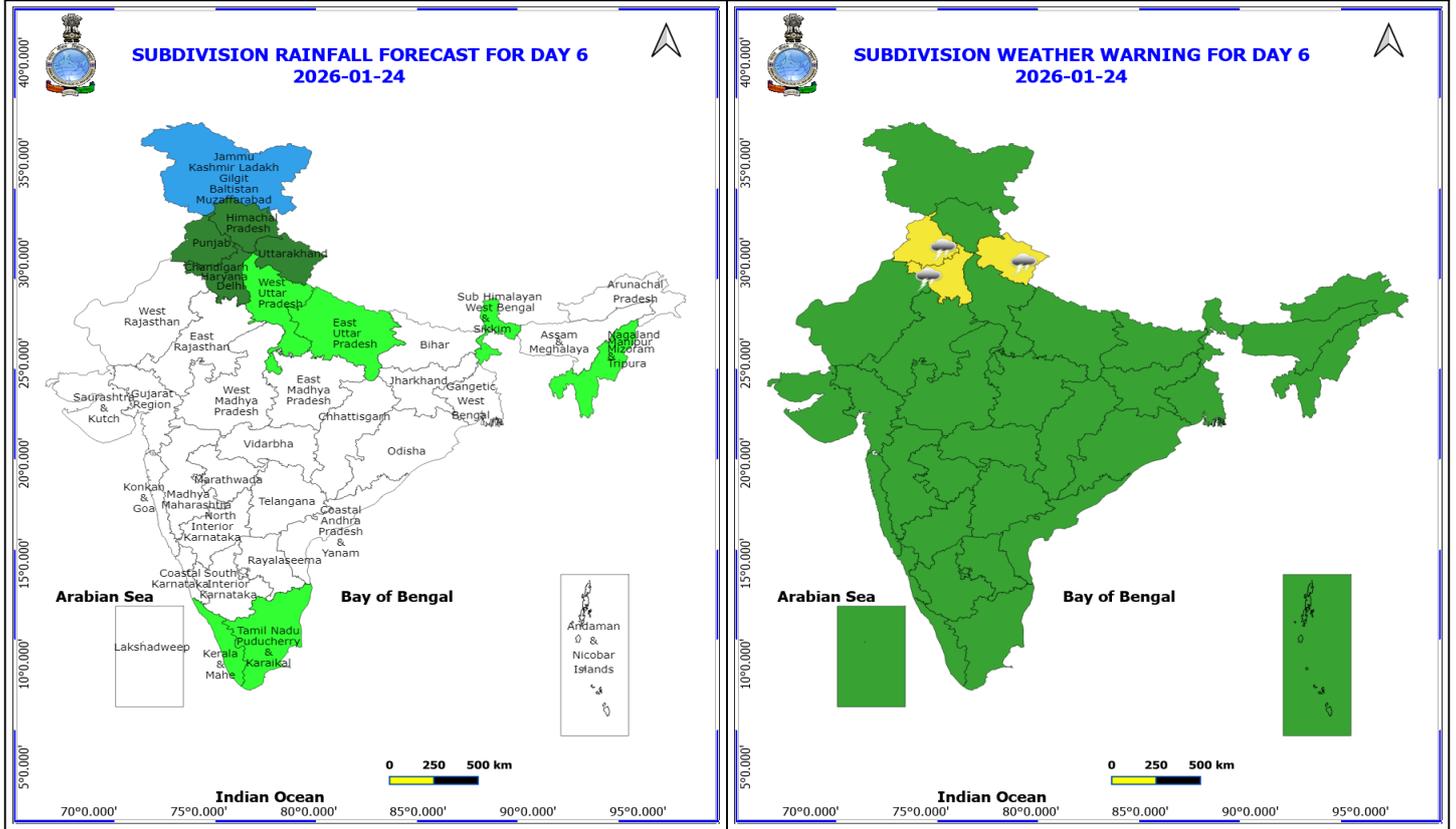




**23 January (Day 5)**

- ❖ **Heavy Rainfall** likely at isolated places over Himachal Pradesh and Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Heavy Snowfall** likely at isolated places over Himachal Pradesh and Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** likely at isolated places over Haryana, Chandigarh & Delhi, Punjab, Rajasthan and Uttar Pradesh.
- ❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Himachal Pradesh and Uttarakhand.
- ❖ Squally weather with wind speeds reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over some parts of southwest Bay of Bengal.

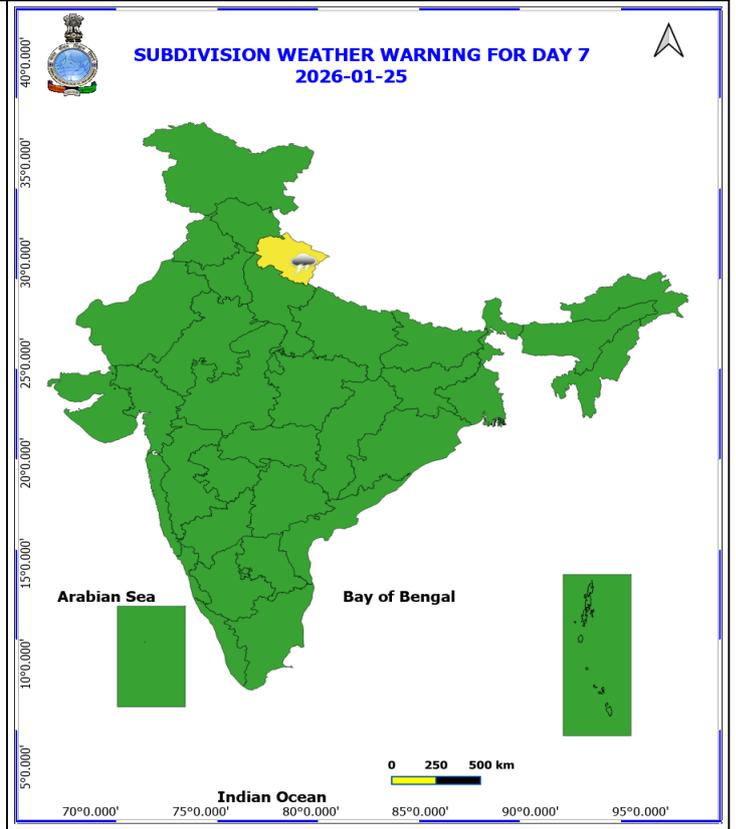
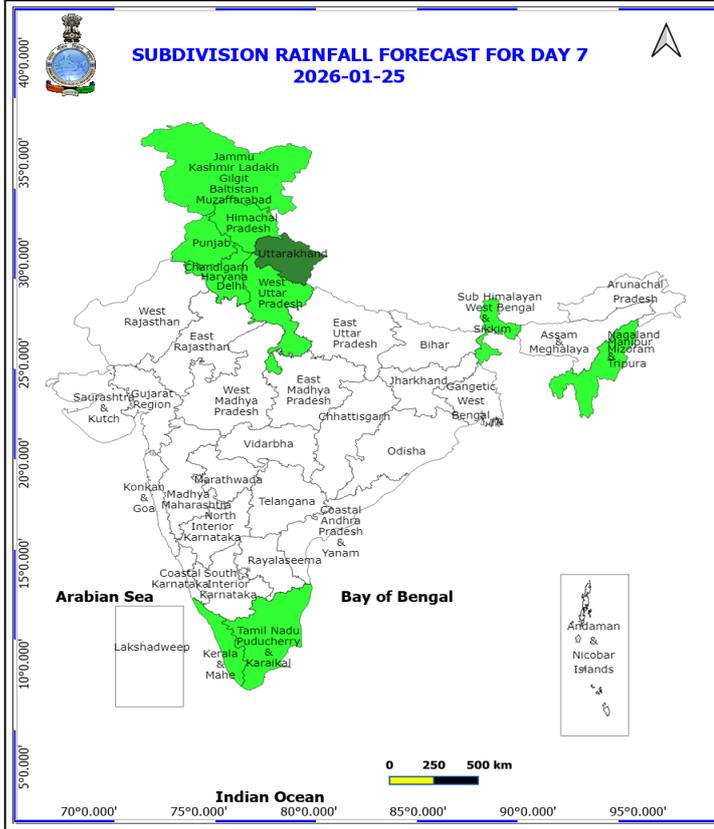
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**24 January (Day 6)**

❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Haryana, Chandigarh & Delhi, Punjab and Uttarakhand.

**No Fishermen Warning**



**25 January (Day 7)**

❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Uttarakhand.

**No Fishermen Warning**



**Table-1**

**7 Days Rainfall Forecast**

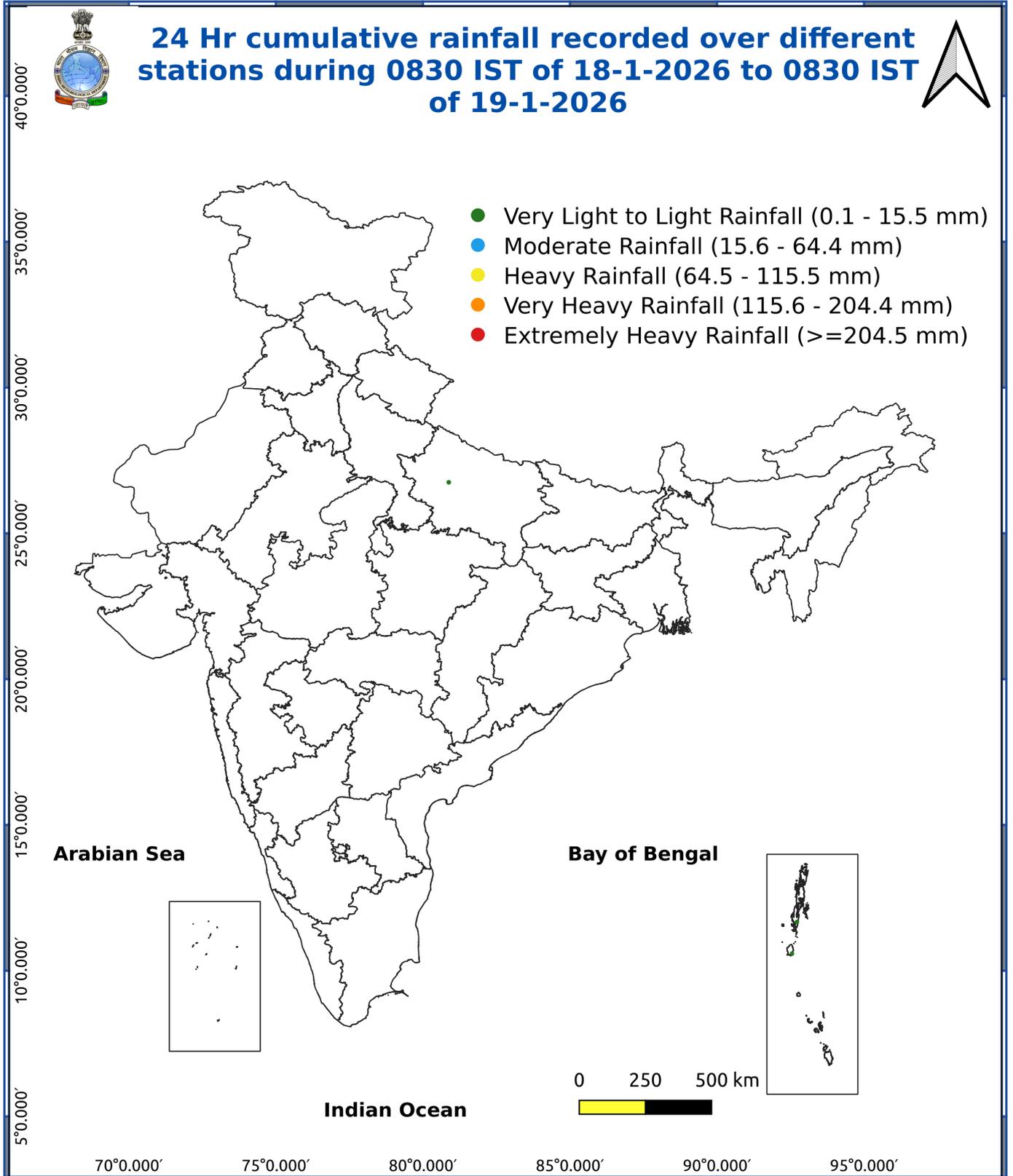
S.No.	Subdivision	19- Jan	20- Jan	21- Jan	22- Jan	23- Jan	24- Jan	25- Jan
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
2	ARUNACHAL PRADESH	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
3	ASSAM & MEHGHALAYA	DRY						
4	N. M. M. & T.	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
5	S.H. WEST BENGAL & SIKKIM	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
6	GANGETIC WEST BENGAL	DRY						
7	ODISHA	DRY						
8	JHARKHAND	DRY						
9	BIHAR	DRY						
10	EAST UTTAR PRADESH	DRY	DRY	DRY	ISOL	ISOL	ISOL	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	ISOL	SCT	ISOL	ISOL
12	UTTARAKHAND	DRY	DRY	ISOL	ISOL	FWS	SCT	SCT
13	HARYANA, CHD & DELHI	DRY	DRY	DRY	ISOL	SCT	SCT	ISOL
14	PUNJAB	DRY	DRY	DRY	SCT	FWS	SCT	ISOL
15	HIMACHAL PRADESH	DRY	DRY	DRY	SCT	WS	SCT	ISOL
16	JAMMU AND KASHMIR AND LADAKH	ISOL	ISOL	ISOL	FWS	WS	WS	ISOL
17	WEST RAJASTHAN	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
19	WEST MADHYA PRADESH	DRY						
20	EAST MADHYA PRADESH	DRY						
21	GUJRAT REGION	DRY						
22	SAURASHTRA & KUTCH	DRY						
23	KONKAN & GOA	DRY						
24	MADHYA MAHARASHTRA	DRY						
25	MARATHWADA	DRY						
26	VIDARBHA	DRY						
27	CHATTISGARH	DRY						
28	COASTAL ANDHRA PRADESH	DRY						
29	TELANGANA	DRY						
30	RAYALASEEMA	DRY						
31	TAMILNADU & PUDUCHERRY	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
32	COSTAL KARNATAKA	DRY						
33	NORTH INTERIOR KARNATAKA	DRY						
34	SOUTH INTERIOR KARNATAKA	DRY						
35	KERALA	ISOL	DRY	DRY	DRY	DRY	ISOL	ISOL
36	LAKSHDWEEP	SCT	DRY	DRY	DRY	DRY	DRY	DRY

Legend	Category	%Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

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## Impact and Actions

### Impact expected due to dense/very dense fog in the morning hours:

- Dense to very dense fog conditions very likely over Punjab, Haryana, Chandigarh, Uttar Pradesh and Bihar during next 2-3 days.

### 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 to Severe Cold wave conditions:

**Cold wave conditions** very likely in isolated pockets of Himachal Pradesh on 20<sup>th</sup> & 21<sup>st</sup> January.

- 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:

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- Wear several layers of loose fitting, light weight; warm woollen 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 woollen 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.

### Agromet advisories for various parts of the country

#### Agromet advisories for likely impact of Cold Waves/ Low Temperatures

- In **Himachal Pradesh**, apply light and frequent irrigation to the standing crops in the evening hours to protect crops from low temperature stress or cold injury. Use mulching and cover the vegetable nurseries and young fruit plants with straw / polythene sheets to maintain optimum soil temperature.

#### Livestock / Poultry

- Keep the cattle in the sheds during night and provide dry bedding to protect them from cold.
- Keep the chicks warm by providing artificial light in the poultry sheds.

#### Agromet advisories for likely impact of Thunderstorm / Gusty Winds

- Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.

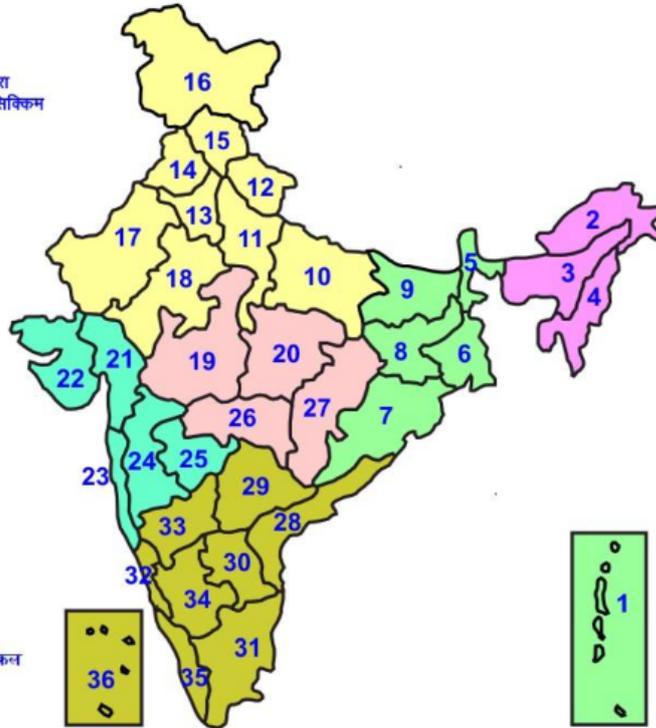
#### Legends & abbreviations:

#### Region wise classification of meteorological Sub-Divisions:

- **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
- **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathawada.
- **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

## LEGENDS

- 1 अंडमान और निकोबार द्वीप समुह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिसा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा चंडिगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठावाडा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 रायलसीमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवं 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. Orissa
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & 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. Marathawada
26. Vidharbha
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)

### Subdivision Colour

- NO WARNING
- WATCH (BE UPDATED)
- 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

- |                          |                 |                      |                    |
|--------------------------|-----------------|----------------------|--------------------|
| Heavy Rain               | Very Heavy Rain | Extremely Heavy Rain | Heavy Snow         |
| Thunderstorm & Lightning | Hailstorm       | Dust Storm           | Dust Raising Winds |
| Strong surface winds     | Heat Wave       | Hot Day              | Warm Night         |
| Cold Wave                | Cold Day        | Ground Frost         | Fog                |
| Hot & Humid              |                 |                      |                    |

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## LEGENDS

### WARNING

WARNING (TAKE ACTION)
ALERT ( BE PREPARED)
WATCH (BE UPDATED)
NO WARNING ( NO ACTION)

### Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75



Heavy: 64.5 to 115.5 mm/cm \*  
Very Heavy: 115.6 to 204.4 mm/cm\*  
Extremely Heavy: > 204.4 mm/cm \*



When maximum temperature of a station reaches  $\geq 40^{\circ}\text{C}$  for plains and  $\geq 30^{\circ}\text{C}$  for hilly regions  
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
Severe Heat Wave: Maximum Temperature Departure from normal  $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature  $\geq 45^{\circ}\text{C}$ .  
Severe Heat Wave: When actual maximum temperature  $\geq 47^{\circ}\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is  $> 4.5^{\circ}\text{C}$  from normal. Heat Wave may be described provided maximum temperature  $\geq 37^{\circ}\text{C}$



When maximum temperature remains  $40^{\circ}\text{C}$

Warm Night: When minimum temperature departure  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
Severe Warm Night: When minimum temperature departure  $> 6.4^{\circ}\text{C}$ .



When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions.  
(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
Severe Cold Wave: Minimum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is  $\leq 4.0^{\circ}\text{C}$   
Severe Cold Wave: When Minimum Temperature is  $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is  $\leq -4.5^{\circ}\text{C}$  & actual Minimum Temperature is  $\leq 15^{\circ}\text{C}$



When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions  
Based on departure

Cold Day: Maximum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
Severe Cold Day: Maximum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$



Phenomenon of small droplets suspended in air and the horizontal visibility  $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres  
Dense Fog: when the visibility between 50- 200 metres  
Very Dense Fog: when the visibility  $< 50$  metres



Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)



An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.



Ice deposits on ground

Air temperature  $\leq 4^{\circ}\text{C}$  ( over Plains)



A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph  
Severe: Wind speed 62-87 kmph  
Very Severe: Wind speed  $> 87$  kmph



Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre  
High to very high: Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre  
Phenomenal: Wind speed  $> 117$  kmph ( $> 63$  knots) & Wave height  $> 14$  metre



Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)  
Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)  
Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)  
Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)  
Super Cyclone Storm: Wind speed  $> 220$  kmph ( $> 119$  knots)

\*Red color warning does not mean "Red Alert" Red color 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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