

Tuesday, January 16, 2024  
Time of Issue: 0800 hours IST  
(MORNING)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems and Forecast & Warnings during next 5 days:

- ❖ A fresh feeble Western Disturbance is likely to affect Western Himalayan Region from night of 16<sup>th</sup> January, 2024. It is likely to cause light rainfall/snowfall at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh on 16<sup>th</sup> & 17<sup>th</sup> and Uttarakhand on 17<sup>th</sup> & 18<sup>th</sup> January.
- ❖ Light to moderate rainfall in isolated to some places very likely over Bihar, Jharkhand, Chhattisgarh, Odisha, West Bengal & Sikkim and Northeast India from 16<sup>th</sup> to 18<sup>th</sup> January, 2024.
- ❖ **Isolated Hailstorm** likely over Arunachal Pradesh and Sikkim on 17<sup>th</sup> January, 2024.

#### Dense fog and Cold day warning:

- ❖ **Dense to very dense fog** conditions very likely to prevail for a few hours in night/morning over many parts of Punjab and Haryana, Chandigarh & Delhi during 16<sup>th</sup> morning to 17<sup>th</sup> morning, in some parts on 17<sup>th</sup> night & 18<sup>th</sup> morning and Dense fog in some parts for subsequent 24 hours.
- ❖ **Dense to very dense fog** conditions very likely to prevail for a few hours in night/morning in some parts of Uttar Pradesh and Bihar during 16<sup>th</sup> morning to 17<sup>th</sup> morning and Dense fog in isolated pockets for subsequent 2 days.
- ❖ **Dense fog** conditions very likely to prevail for a few hours in night/morning in isolated pockets of Jharkhand during 16<sup>th</sup>-20<sup>th</sup>; over Uttarakhand, north Rajasthan, north Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim during 16<sup>th</sup>-17<sup>th</sup>; Jammu division, Himachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on & 16<sup>th</sup> January, 2024.
- ❖ **Cold Day to Severe Cold Day** conditions very likely to continue in some parts of Punjab, Haryana-Chandigarh on 16<sup>th</sup> and **Cold Day** in some parts on 17<sup>th</sup> January, 2024.
- ❖ **Cold Day to Severe Cold Day** conditions very likely to continue in isolated pockets of Uttar Pradesh on 16<sup>th</sup> January, 2024.
- ❖ **Cold Day to Severe Cold Day** conditions very likely to continue in isolated pockets of Bihar on 16<sup>th</sup> January, 2024.
- ❖ **Cold wave/severe cold wave** conditions very likely in few places over Punjab & Haryana-Chandigarh-Delhi on 16<sup>th</sup> & 17<sup>th</sup> January, 2024

## Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at isolated places** over Andaman & Nicobar Islands.
- ❖ **Significant amount of rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Andaman & Nicobar Islands:** Nancowry-1.
- ❖ Yesterday, **Cold day** conditions prevailed in many parts of East Uttar Pradesh & Bihar; in some parts of Punjab & West Uttar Pradesh; in isolated pockets of Haryana-Chandigarh, northwest Rajasthan & Gangetic West Bengal. **Severe Cold day** conditions also prevailed in isolated pockets of Punjab, northwest Rajasthan, Uttar Pradesh & east Bihar.
- ❖ **Fog conditions observed** (at 0530 hours IST of today): **Dense to Very dense fog** conditions observed over isolated pockets of Punjab, Haryana & Chandigarh, Uttar Pradesh, Bihar; **Dense fog** conditions observed over isolated pockets of Northwest Rajasthan, North Madhya Pradesh, Assam, Tripura, Andhra Pradesh; **Moderate fog** conditions observed over isolated pockets of West Bengal, **Shallow fog** conditions observed over isolated pockets of Delhi.
- ❖ **Visibility recorded** (at 0530 hours IST of today) (**≤500 metres**): **Punjab:** Patiala-25, Amritsar-200; **Haryana & Chandigarh:** Ambala, Chandigarh-25 each, Hissar-50; **Uttar Pradesh:** Bahraich, Varanasi-25 each, Lucknow, Sultanpur-200 each, Bareilly, Jhansi, Gorakhpur-500 each; **Bihar:** Gaya-25, Patna, Bhagalpur-500 each; **Northwest Rajasthan:** Ganganagar-50; **Madhya Pradesh:** Gwalior, Satna-50 each; **Assam:** Tezpur-50, Guwahati-500; **Tripura:** Agartala-50; **Andhra Pradesh:** Vijayawada-50; **West Bengal:** Digha, Haldia-200 each, Diamond Harbour, Kolkata/Alipore, Malda-500 each; **Delhi:** Safdarjung, Palam-500 each.
- ❖ **Minimum Temperature Departures (as on 15-01-2024):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at many places over Sub-Himalayan West Bengal & Sikkim, Telangana, Coastal Andhra Pradesh & Yanam; at few places over Chhattisgarh, Vidarbha, Odisha, Konkan & Goa, Madhya Maharashtra, North Interior Karnataka, Rayalaseema; at isolated pockets over Madhya Pradesh, Saurashtra & Kutch, Coastal Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, Assam & Meghalaya, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura. They were **below normal (-1.6°C to -3.0°C)** at many places over Haryana-Chandigarh-Delhi, at a few places over Punjab; at isolated places over Rajasthan, Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal, South Interior Karnataka, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 1.0 °C** was reported at **Ludhiana (Punjab)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 15-01-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at many places over 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 many places over Gujarat Region; at a few places over Assam & Meghalaya, Saurashtra & Kutch, Vidarbha, Chhattisgarh, Madhya Maharashtra and Telangana; at isolated places over Nagaland, Manipur, Mizoram & Tripura, Rajasthan, Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. They were **markedly below normal (-5.1°C or less)** at many places over Bihar; at a few places over Uttar Pradesh; at isolated places over Haryana, northwest Rajasthan and Gangetic West Bengal; **appreciably below normal (-3.1°C to -5.0°C)** at most places over Punjab; at isolated places over Chandigarh & Delhi; **below normal (-1.6°C to -3.0°C)** at isolated places over Sub-Himalayan West Bengal & Sikkim and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 35.0°C** was reported at **Punalur (Kerala)**.

## Meteorological Analysis (Based on 0530 hours IST)

- ❖ The **Cyclonic circulation** over South Bangladesh & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The **Cyclonic circulation** over Southwest Bay of Bengal off Sri Lanka coast at 0.9 km above mean sea level persists.
- ❖ A fresh feeble Western Disturbance is likely to affect Western Himalayan Region from 16<sup>th</sup> January night, 2024.

## Weather Forecast for next 7 days (Upto 0830 hours IST of 23<sup>rd</sup> January, 2024)

- ❖ Gradual rise by 2-3°C in minimum temperatures very likely over Northwest India during next 4-5 days.
- ❖ Rise by 3-4°C in minimum temperatures very likely over East India during next 4-5 days.
- ❖ No significant change in minimum temperatures likely over rest parts of the country during next 4-5 days.

## Weather Outlook for subsequent 2 days

- ❖ Light to moderate rainfall at isolated places over East Madhya Pradesh and Odisha.
- ❖ Mainly dry weather likely to prevail over rest parts of the country.

Table-1

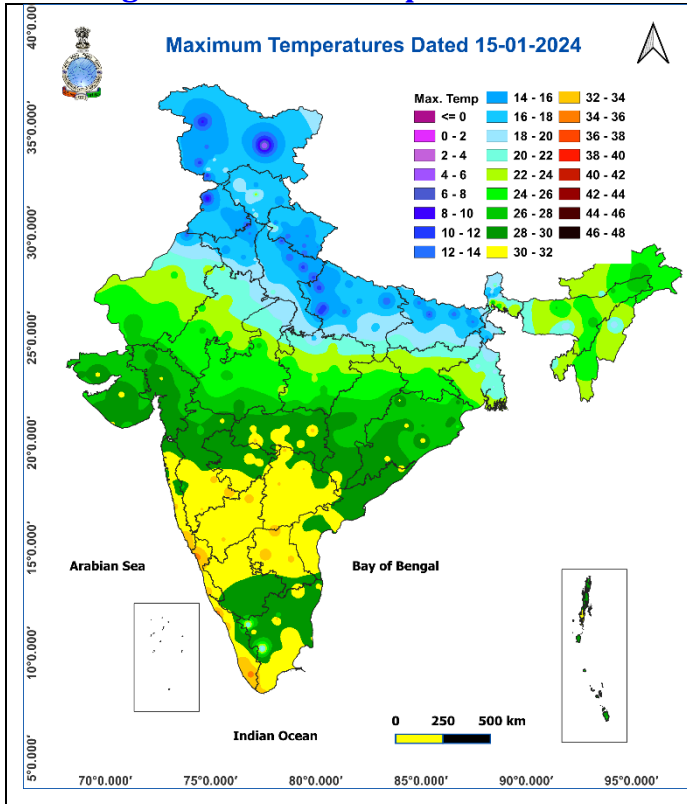
7 Days Rainfall Forecast

S. No.	Subdivision	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	22-Jan
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	SCT	ISOL	ISOL	DRY	DRY	DRY
2	ARUNACHAL PRADESH	SCT	FWS	FWS	ISOL	DRY	DRY	DRY
3	ASSAM & MEGHALAYA	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	SCT	SCT	ISOL	ISOL	DRY	DRY
6	GANGETIC WEST BENGAL	ISOL	SCT	FWS	ISOL	DRY	DRY	DRY
7	ODISHA	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY
8	JHARKHAND	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY
9	BIHAR	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	ISOL	DRY	DRY	DRY	DRY	DRY
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
16	JAMMU & KASHMIR AND LADAKH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21	GUJARAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHAWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	DRY	DRY	DRY	DRY	DRY	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAİKAL	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY
32	COASTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
35	KERALA & MAHE	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
36	LAKSHADWEEP	SCT	SCT	SCT	SCT	DRY	DRY	DRY

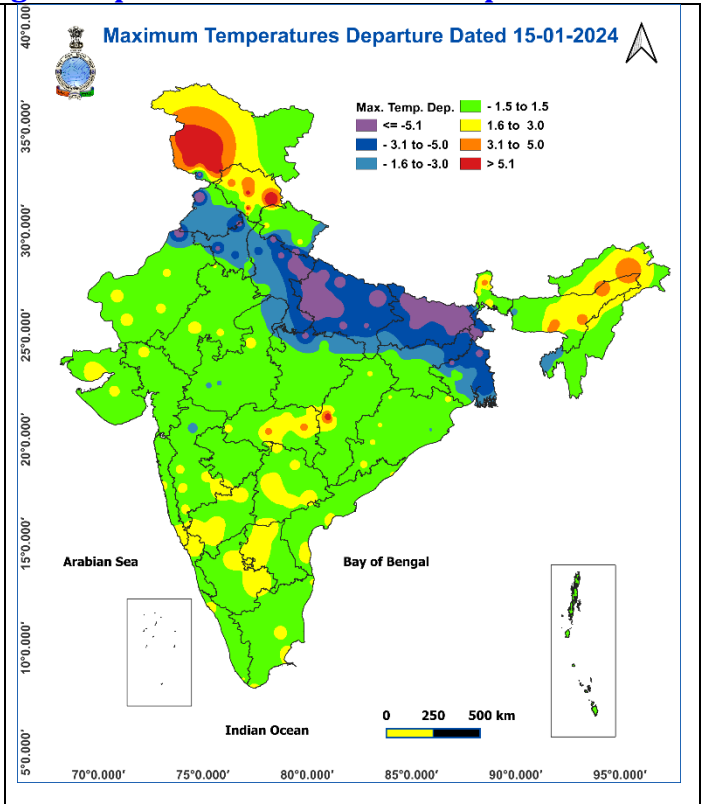
Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

\* 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)

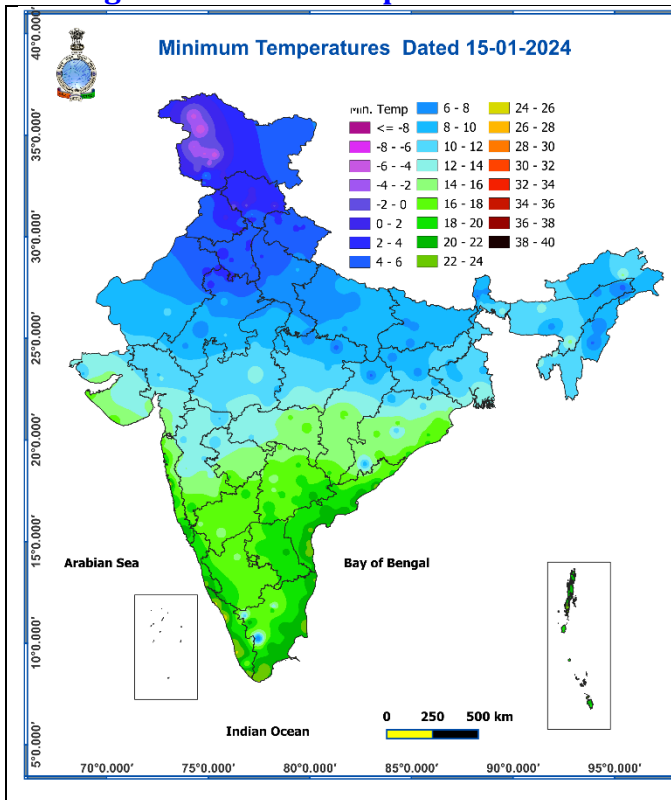
**Fig. 1: Maximum Temperatures**



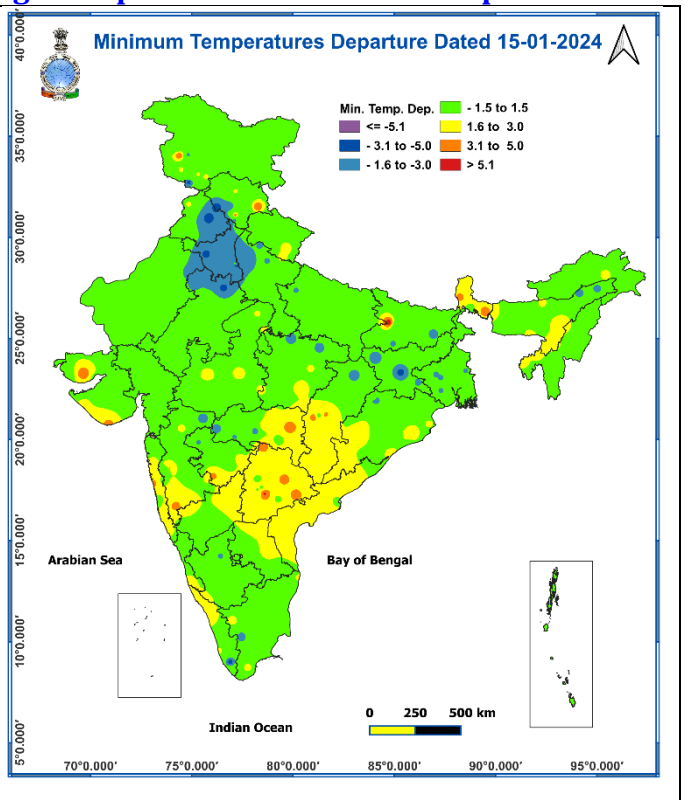
**Fig. 2: Departure of Maximum Temperatures**



**Fig. 3: Minimum Temperatures**



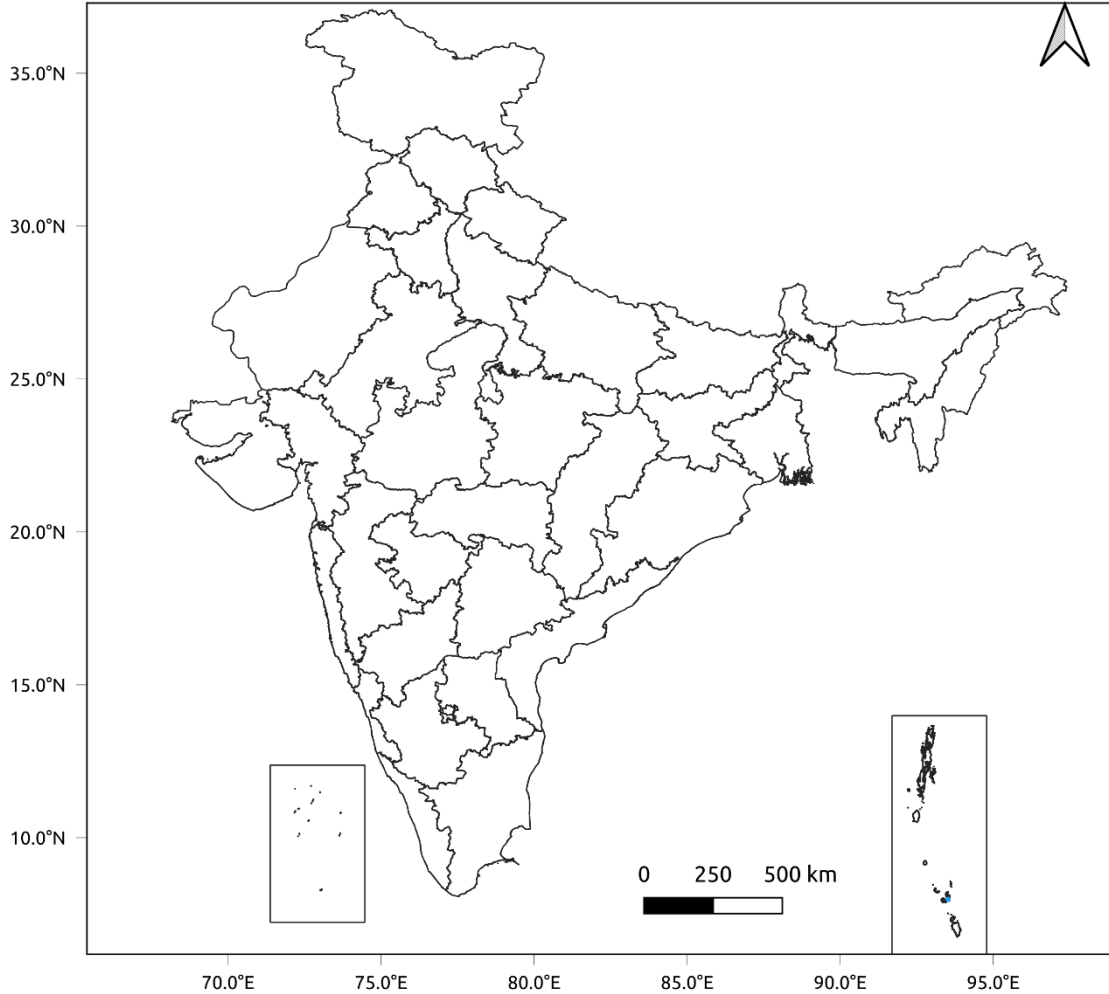
**Fig. 4: Departure of Minimum Temperatures**



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

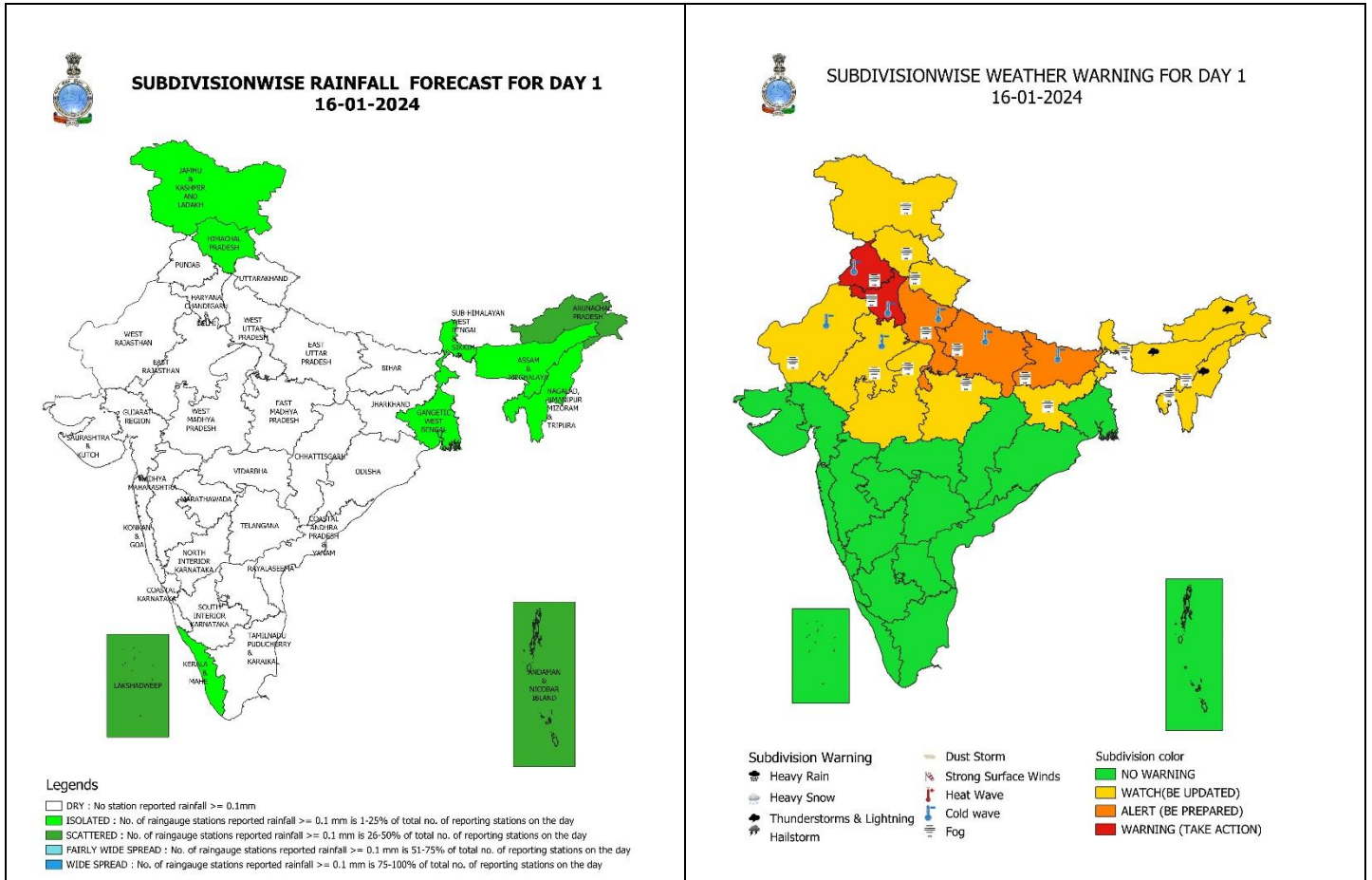


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 14-1-2024 to 0830 IST of 15-1-2024



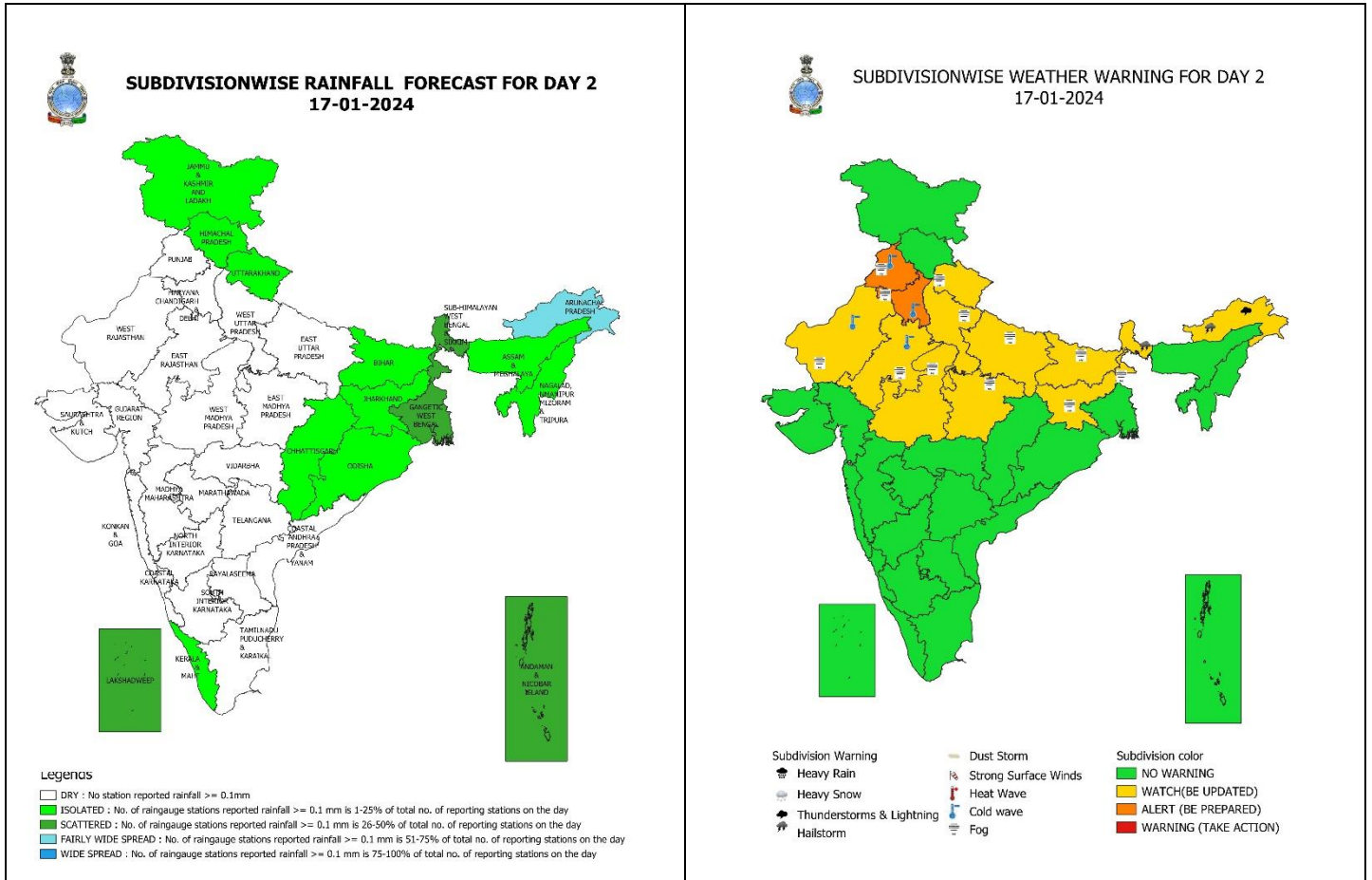
### Legends

- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall ( $\geq 204.5$  mm)



## 16 January (Day 1):

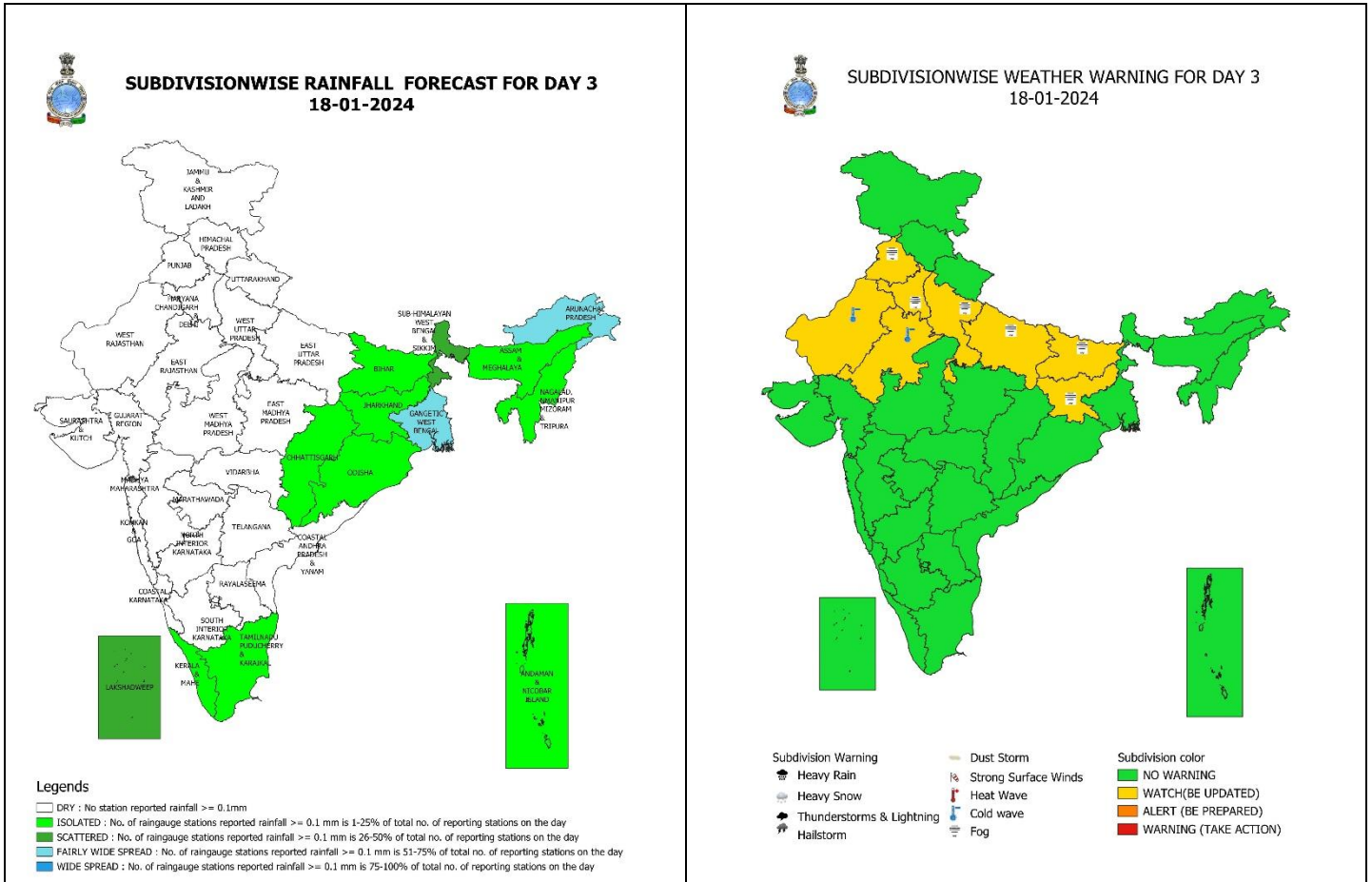
- ❖ **Dense to very dense fog** very likely in many parts over Punjab and Haryana-Chandigarh-Delhi, at a few places over Uttar Pradesh and Bihar; **Dense fog** in isolated pockets over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Cold day to severe cold day** conditions very likely at a few places over Punjab, Haryana-Chandigarh; at isolated places over Uttar Pradesh and Bihar.
- ❖ **Cold wave to severe cold wave** conditions very likely in few places over Punjab & Haryana-Chandigarh-Delhi and **cold wave** conditions in isolated pockets over West Uttar Pradesh, Rajasthan and Bihar.
- ❖ **Thunderstorm accompanied with lightning** at isolated places over Assam & Meghalaya, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Ground frost** conditions very likely in isolated pockets over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh and Rajasthan.



## 17 January (Day 2):

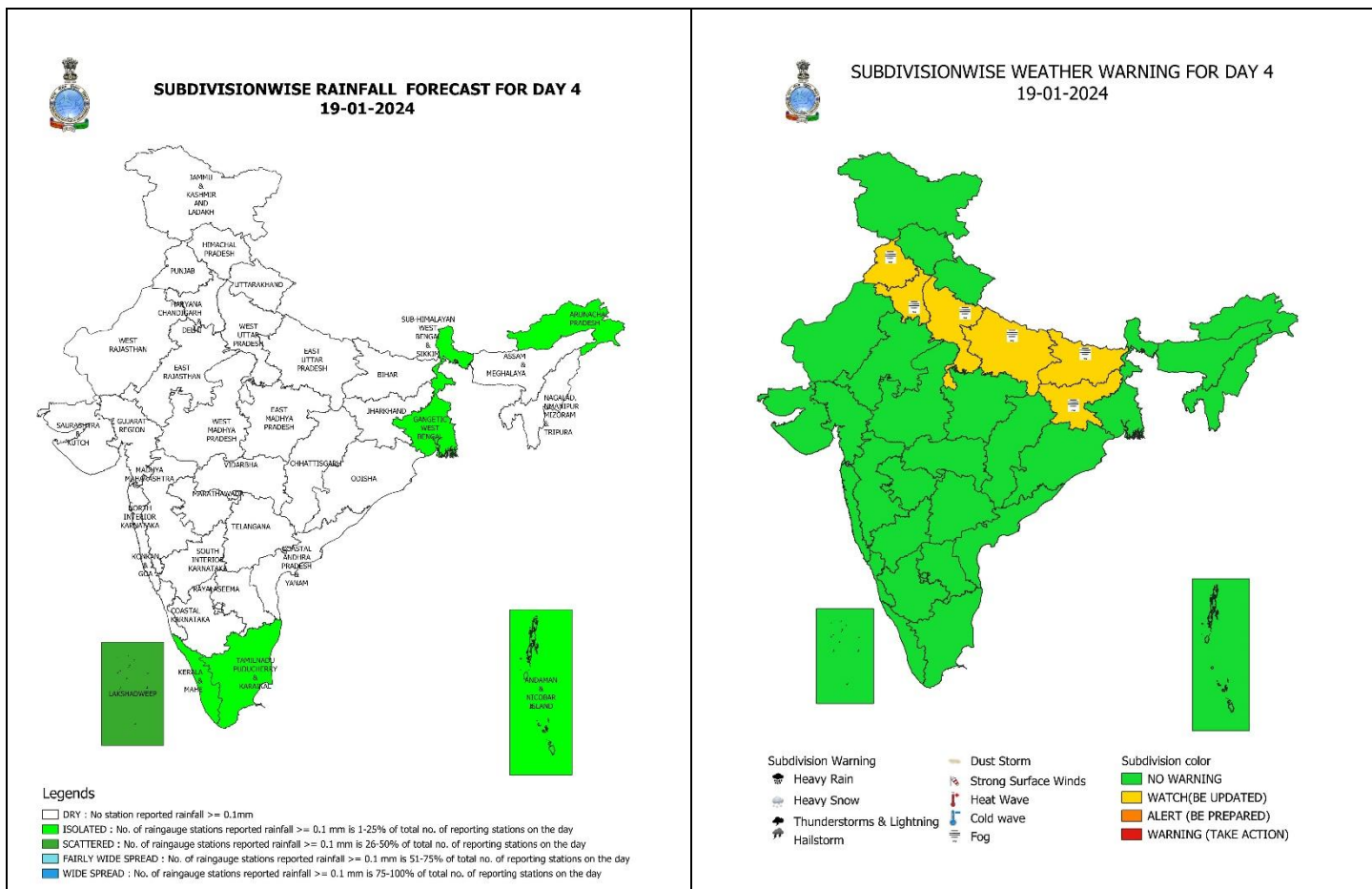
- ❖ **Dense to very dense fog** very likely at a few places over Punjab, Haryana-Chandigarh-Delhi; **Dense fog** at a few places over Bihar; at isolated places over Uttarakhand, Uttar Pradesh, Madhya Pradesh, Jharkhand and Sub-Himalayan West Bengal & Sikkim.
- ❖ **Cold day** conditions very likely at a few pockets over Punjab and Haryana-Chandigarh.
- ❖ **Cold wave** conditions very likely at a few places over Punjab, Haryana-Chandigarh-Delhi; at isolated places over Rajasthan.
- ❖ **Thunderstorm accompanied with lightning & hail** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh.





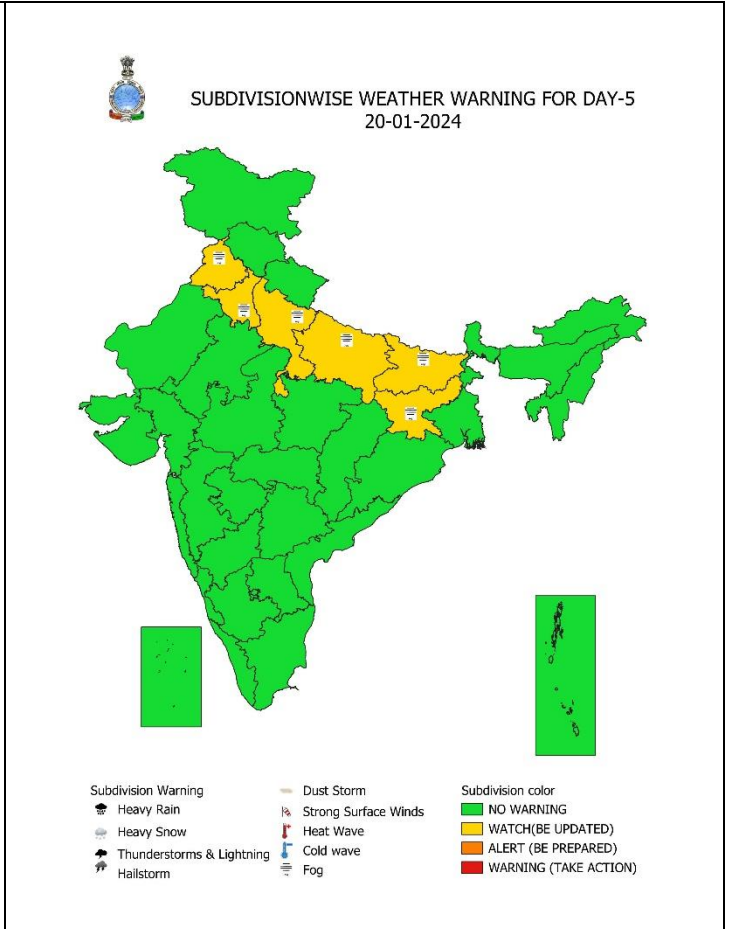
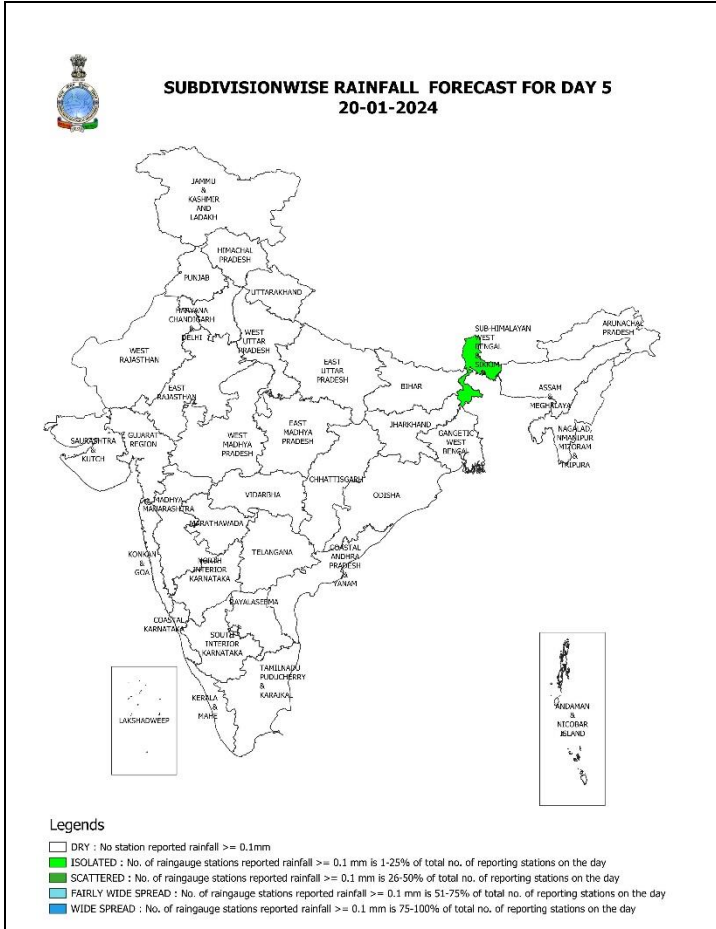
## 18 January (Day 3):

- ❖ **Dense fog** likely at a few pockets over Punjab, Haryana-Chandigarh-Delhi; at isolated places over Uttar Pradesh, Bihar and Jharkhand.
- ❖ **Cold wave** conditions likely at isolated places over Rajasthan.



## 19 January (Day 4):

❖ **Dense fog** likely at a few pockets over Punjab, Haryana-Chandigarh-Delhi; at isolated places over Uttar Pradesh, Bihar and Jharkhand.

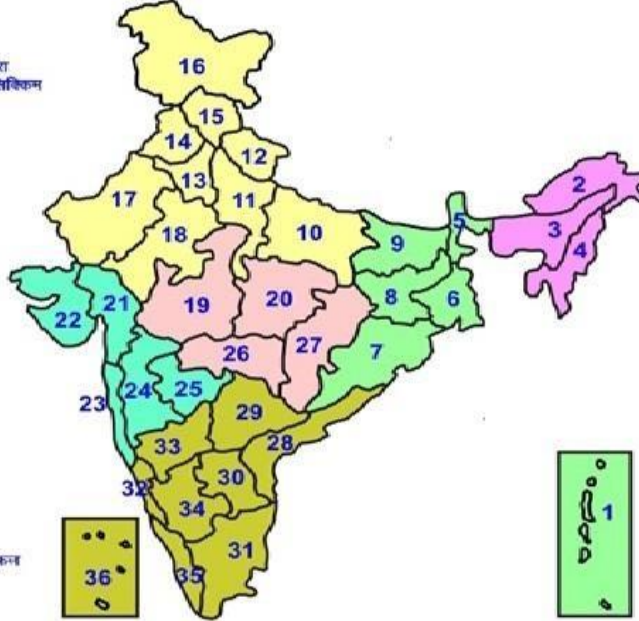


## 20 January (Day 5):

❖ **Dense fog** likely at a few pockets over Punjab, Haryana-Chandigarh-Delhi; at isolated places over Uttar Pradesh, Bihar and Jharkhand.

## LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मीज़ोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा, चंडीगढ़ 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 महाराष्ट्र
- 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. Odisha
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. Marathwada
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnada, 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)

## WARNING

<b>WARNING (TAKE ACTION)</b>
<b>ALERT ( BE PREPARED)</b>
<b>WATCH (BE UPDATED)</b>
<b>NO WARNING ( NO ACTION)</b>

## Probabilistic Forecast

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

Heavy Rain	Heavy Snow	Thunderstorm	Dust Storm
Strong Winds	Visibility	Cyclone	Squall/ Hail
Frost	Cold Wave	Heat Wave	Sea State

## LEGENDS

### WARNING

<b>WARNING (TAKE ACTION)</b>
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 \*

Rain/ Snow \*



Heat Wave

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  $\geq 37^\circ\text{C}$



Warm Night

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  $> 6.4^\circ\text{C}$ .



Cold Wave

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

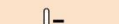
Cold Wave: Minimum Temperature Departure from normal  $-4.5^\circ\text{C}$  to  $-6.4^\circ\text{C}$ .  
Severe Cold Wave: Minimum Temperature Departure from normal  $\leq -6.5^\circ\text{C}$

(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  $\leq 15^\circ\text{C}$



Cold Day

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  $\leq -6.5^\circ\text{C}$



Fog

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



Thunderstorm

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



Dust/Sand Storm

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



Frost

Ice deposits on ground

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



Squall

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



Sea State

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



Cyclone

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 Strom: Wind speed  $> 220$  kmph ( $> 119$  knots)

\* 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)