

Thursday, August 03, 2023  
Time of Issue: 0830 hours IST  
(MORNING)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features

- ❖ **Depression over north Chhattisgarh and neighbourhood:** The **Depression** over Jharkhand and adjoining north Chhattisgarh moved west-northwestwards with a speed of 12 kmph during past 6 hours and lay centred at 0530 hours IST of 03<sup>rd</sup> August, 2023 over north Chhattisgarh and neighbourhood near latitude 23.4°N and longitude 83.4°E, about 40 km north-northeast of Ambikapur (Chhattisgarh) and 190 km east-southeast of Sidhi (East Madhya Pradesh). It is likely to move west-northwestwards towards northeast Madhya Pradesh and adjoining southeast Uttar Pradesh and weaken into a Well Marked Low Pressure Area during next 12 hours.
- ❖ The Western end of the Monsoon Trough at mean sea level runs close to foothills of Himalayas and Eastern end lies to the south of its normal position. Western end of the Monsoon trough likely to shift southwards from 3<sup>rd</sup> August.

### Weather Forecast and Warning associated with Deep Depression:

#### (i) Rainfall warning:

**East Madhya Pradesh:** Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places on 3<sup>rd</sup> & 4<sup>th</sup> and isolated extremely heavy rainfall on 3<sup>rd</sup> August. Heavy rainfall at isolated places is likely on 5<sup>th</sup> August.

**West Madhya Pradesh:** Light to moderate rainfall at most places with heavy to extremely heavy rainfall at isolated places on 3<sup>rd</sup> August. Heavy rainfall at isolated places is likely on 4<sup>th</sup> August.

**East Uttar Pradesh:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall on 3<sup>rd</sup> August and isolated heavy rainfall during 4<sup>th</sup> to 6<sup>th</sup> August.

**West Uttar Pradesh:** Light to moderate rainfall at most places with isolated heavy rainfall on 3<sup>rd</sup> August.

**Vidharbha:** Light to moderate rainfall at most places with isolated heavy rainfall on 3<sup>rd</sup> August.

**Chattisgarh:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall over Chhattisgarh on 3<sup>rd</sup> and heavy rainfall at isolated places on 4<sup>th</sup> August.

#### (ii) Damage Expected over Jharkhand, north Chhattisgarh, east Madhya Pradesh and east Uttar Pradesh:

- Minor damage to loose / unsecured structures.
- Some breaches in Kutcha road due to flooding.
- Damage to standing agriculture & horticulture crops.
- Minor damage to Kutcha embankments.

### Weather Forecast and Warning for remaining parts of the country:

**Northwest India:** Light/moderate scattered to fairly widespread rainfall with isolated **heavy rainfall** is very likely over Himachal Pradesh, Uttarakhand, Uttar Pradesh during 03<sup>rd</sup>-07<sup>th</sup>; Punjab, Haryana and East Rajasthan during 03<sup>rd</sup>-05<sup>th</sup> August, 2023. **Isolated very heavy rainfall also likely over Uttarakhand during 03<sup>rd</sup>-05<sup>th</sup>; West Uttar Pradesh on 03<sup>rd</sup> and over Himachal Pradesh on 04<sup>th</sup> & 05<sup>th</sup> August.**

**Northeast India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya during next 5 days.

**West India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely to continue over Konkan & Goa and ghat areas of Madhya Maharashtra during next 3 days with possibility of **very heavy rainfall** over Konkan & Goa and Madhya Maharashtra on 03<sup>rd</sup> August.

**South India:** Light/moderate widespread rainfall with **isolated heavy rainfall** very likely over Coastal Karnataka on 03<sup>rd</sup> & 04<sup>th</sup> August and subdued rainfall activity over the remaining region.

\* 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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## Main Weather Observations

- ❖ **Rainfall/thundershowers observed** (from 0830 hours IST to 1730 hours IST of yesterday): **at most places** over Odisha, Chhattisgarh, Madhya Pradesh; **at many places** over Vidarbha, Punjab, Uttarakhand, East Uttar Pradesh, Sub-Himalaya West Bengal & Sikkim; **at a few places** over Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Gangetic West Bengal and **at isolated places** over Gujarat Region, West Uttar Pradesh, Bihar, East Rajasthan, Assam & Meghalaya.
- ❖ **Heavy rainfall observed** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy rainfall** at isolated places over Odisha and Chhattisgarh.
- ❖ **Significant rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **(in cm): Odisha:** Rourkela-9, Sambalpur-5, Bhubaneswar, Hirakud-2 each; **Chhattisgarh:** Ambikapur-7, PBO Raipur-2; **Madhya Maharashtra:** Mahabaleshwar-6; **Jharkhand:** Khunti-5, Simdega-3; **Madhya Pradesh:** Shahdol-4, Mandla-3, Narmadapuram, Rewa-2 each; **Punjab:** Ludhiana-4; **East Uttar Pradesh:** Lucknow-3; **West Rajasthan:** Hoshangabad-2.
- ❖ **Thunderstorm observed** (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh Punjab, Haryana-Chandigarh-Delhi, East Uttar Pradesh, Odisha, Sub-Himalaya West Bengal & Sikkim and Assam & Meghalaya.
- ❖ **Minimum Temperature Departures (as on 02-08-2023):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at a few places over Himachal Pradesh and Punjab; at isolated places over Coastal Andhra Pradesh & Yanam; **above normal (1.6°C to 3.0°C)** at many places over Assam & Meghalaya and Lakshadweep; at a few places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Vidarbha, Rayalaseema and Kerala & Mahe and at isolated places over Andaman & Nicobar Islands, West Uttar Pradesh, East Madhya Pradesh, Telangana and Tamil Nadu, Puducherry & Karaikal. Yesterday, **the lowest minimum temperature of 19.2°C** was reported at **Narsinghpur (East Madhya Pradesh)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 02-08-2023):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at a few places over Punjab, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Assam & Meghalaya; **above normal (1.6°C to 3.0°C)** at most places over Himachal Pradesh; at a few places over Andaman & Nicobar Islands; at isolated places over Konkan & Goa. They were **appreciably below normal (-3.1°C to -5.0°C)** at most places over Odisha, Jharkhand; at many places over East Madhya Pradesh, Gangetic West Bengal, Chhattisgarh; **below normal (-1.6°C to -3.0°C)** at many places over Vidarbha, Uttarakhand; at a few places over West Rajasthan, West Madhya Pradesh; at isolated places over Bihar and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 38.6°C** was reported at **Phalodi (West Rajasthan)**.

### Meteorological Analysis (Based on 0530 hours IST)

- ❖ The **Depression** over Jharkhand and adjoining north Chhattisgarh moved west-northwestwards with a speed of 12 kmph during past 6 hours and lay centred at 0530 hours IST of 03<sup>rd</sup> August, 2023 over north Chhattisgarh and neighbourhood near latitude 23.4°N and longitude 83.4°E, about 40 km north-northeast of Ambikapur (Chhattisgarh) and 190 km east-southeast of Sidhi (East Madhya Pradesh). It is likely to move west-northwestwards towards northeast Madhya Pradesh and adjoining southeast Uttar Pradesh and weaken into a Well Marked Low Pressure Area during next 12 hours.
- ❖ The Western end of the Monsoon Trough at mean sea level runs close to foothills of Himalayas and Eastern end now passes through Gorakhpur, Gaya, center of Depression over north Chhattisgarh and neighbourhood, Balasore and thence east-southeastwards to Northeast Bay of Bengal extending upto 3.1 km above mean sea level.
- ❖ The Western Disturbance as a trough in mid-tropospheric westerlies with its axis at 7.6 km above mean sea level roughly along Long. 70°E to the north of Lat. 32°N with an embedded cyclonic circulation over Jammu & neighbourhood at 5.8 km above mean sea level persists.

### Weather Forecast for next 5 days (Upto 0830 hours IST of 08<sup>th</sup> August, 2023)

- ❖ Meteorological sub-division wise detailed 5 days rainfall forecast is given in Table-1.
- ❖ No significant change in maximum temperatures likely over most parts of country during next 5 days.
- ❖ Strong surface winds (speed reaching 40-50 kmph) very likely over south Uttar Pradesh during next 24 hours.

### Weather Outlook for subsequent 2 days

- ❖ Fairly widespread to widespread light/moderate rainfall likely over parts of northwest, central, east & northeast India, along the west coasts and islands and isolated to scattered rainfall over rest parts of the country.



Table-1

**7 Days Rainfall Forecast**

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

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

Fig. 1: Maximum Temperatures Dated 02.08.2023

Fig. 2: Departure of Maximum Temp. Dated 02.08.2023

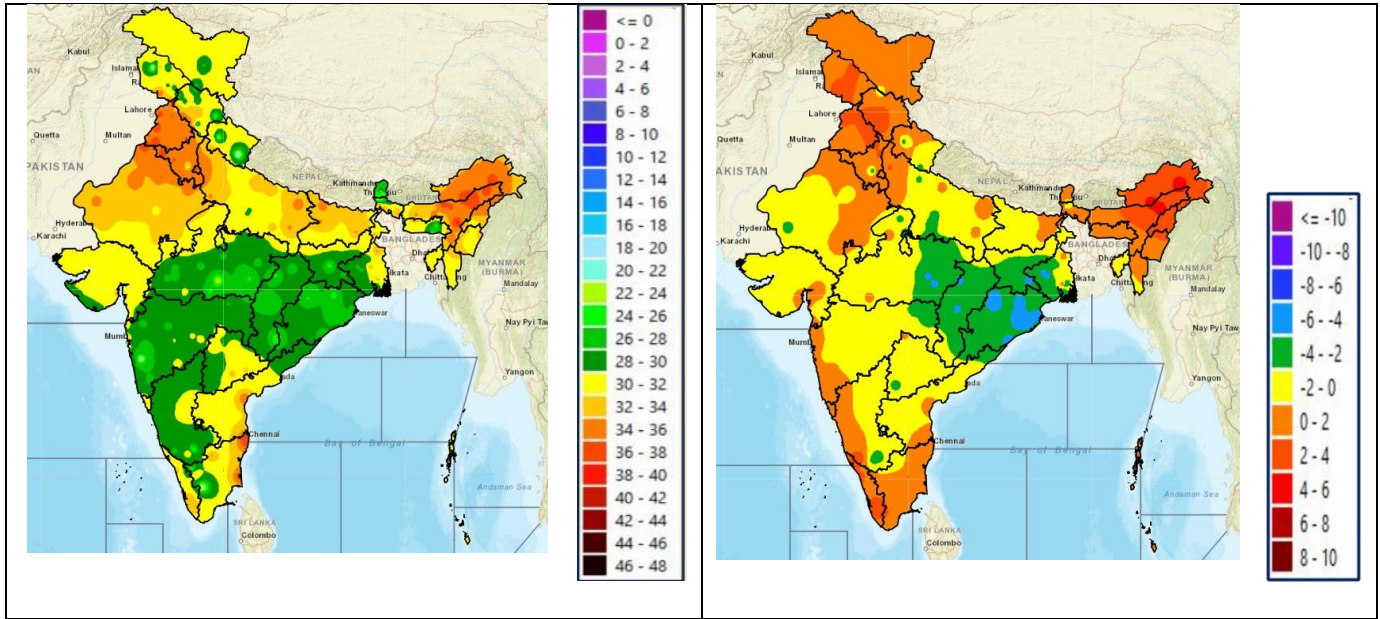
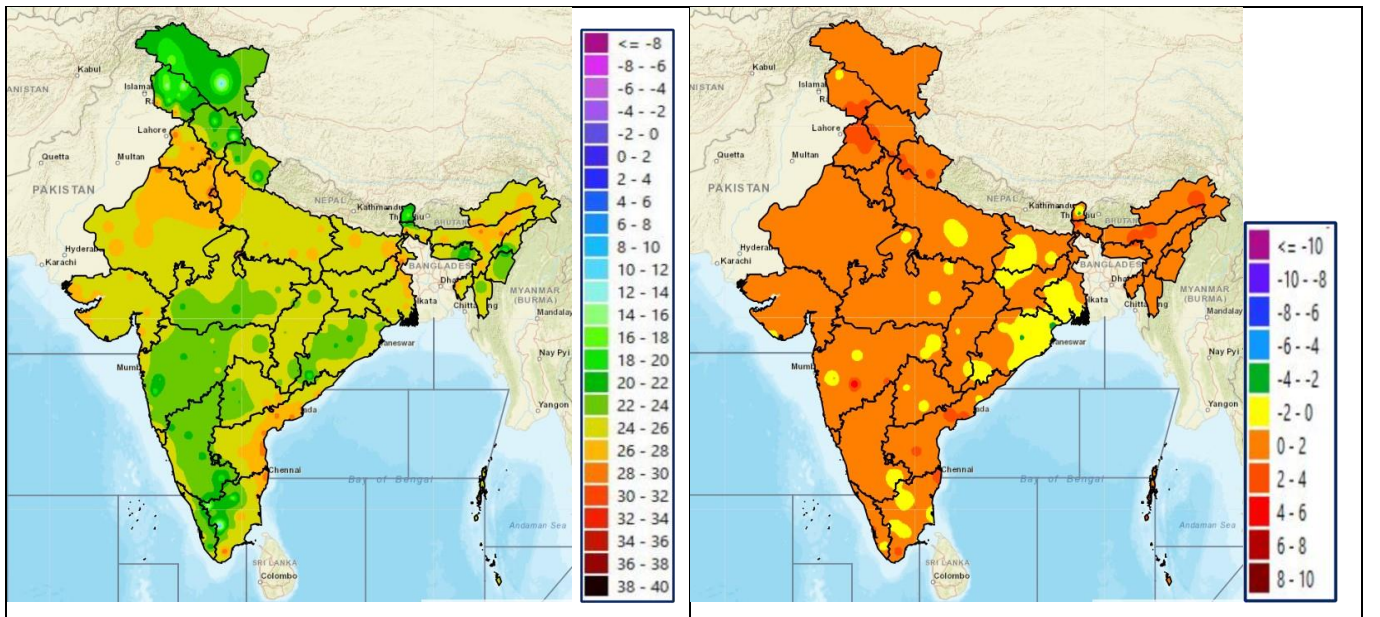


Fig. 3: Minimum Temperatures Dated 02.08.2023

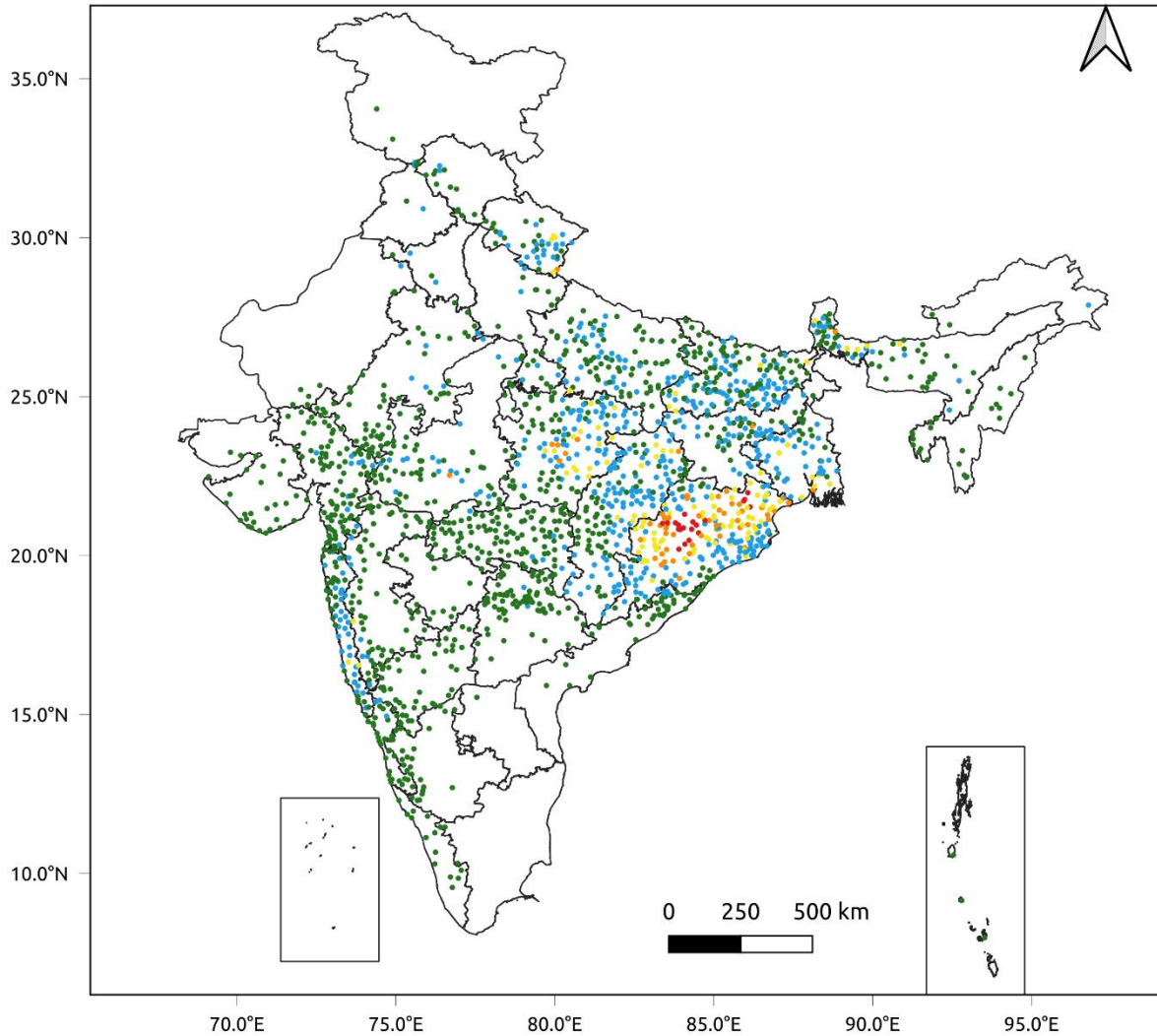
Fig. 4: Departure of Minimum Temp. Dated 02.08.2023



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

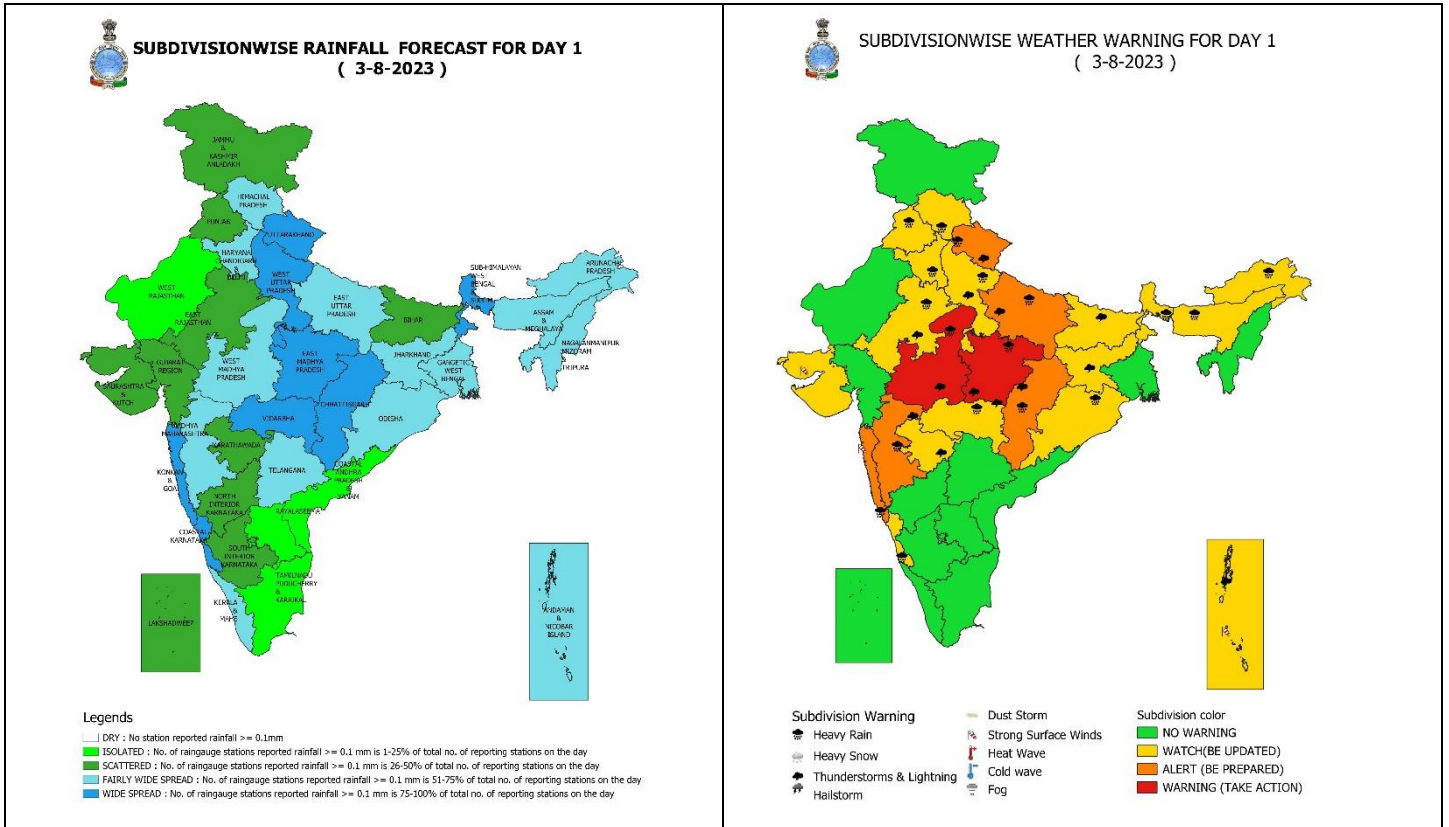


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 1-8-2023 to 0830 IST of 2-8-2023



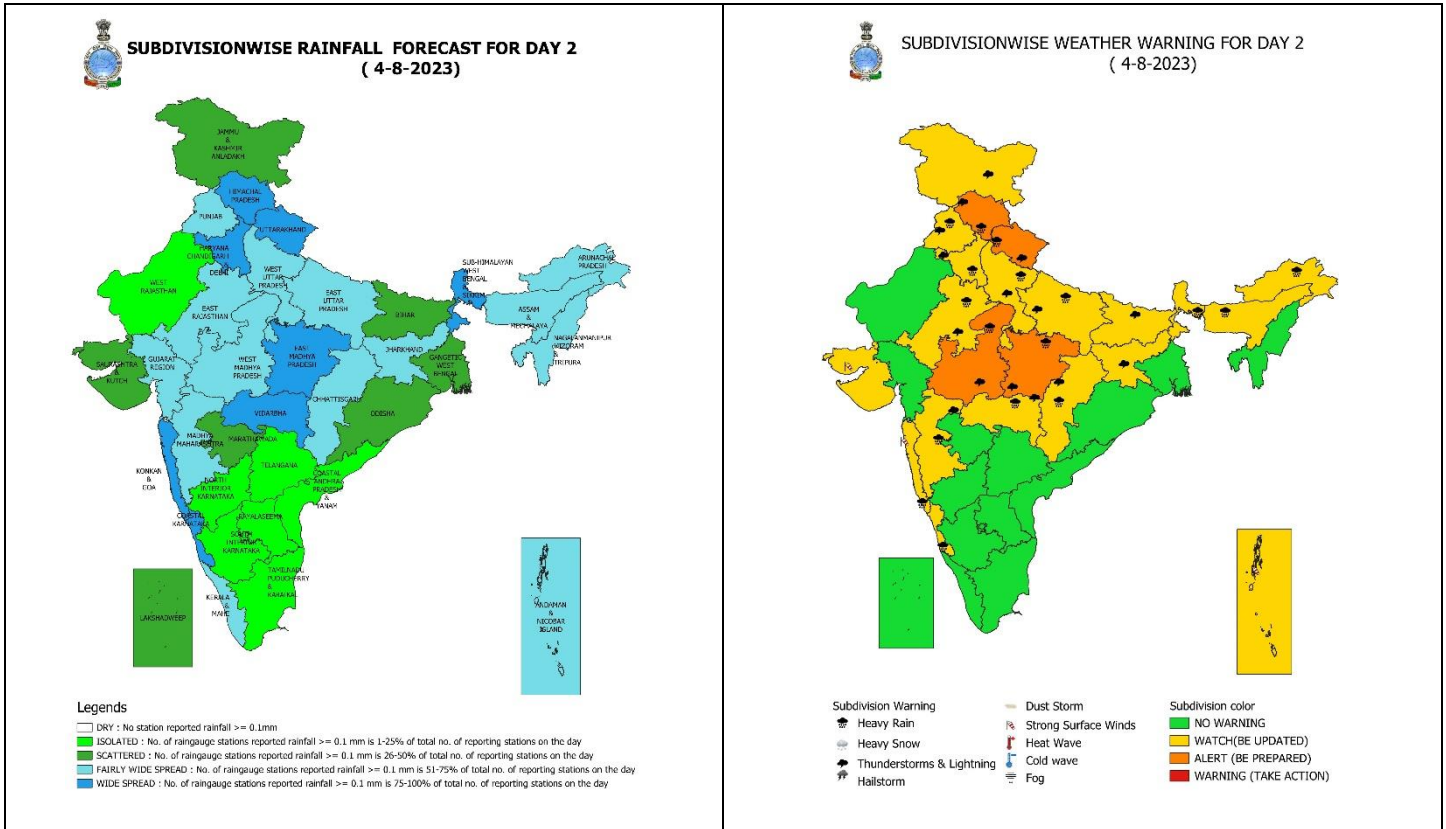
## Legends

- 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)



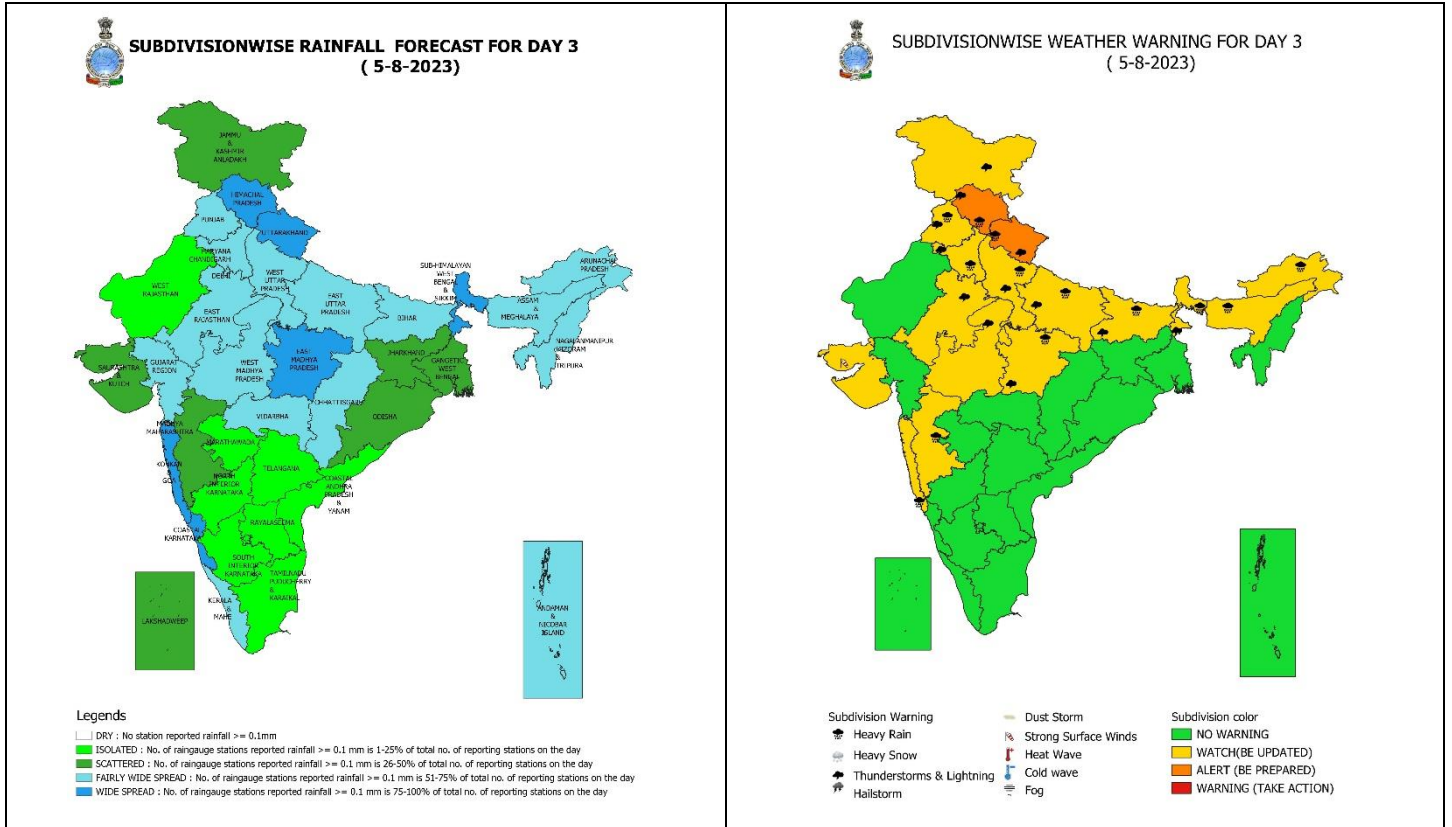
### 03 August (Day 1):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls** very likely at isolated places over Madhya Pradesh; **Heavy to very heavy rainfall** at isolated places over Uttarakhand, East Uttar Pradesh, Chhattisgarh, Konkan & Goa and Madhya Maharashtra; **Heavy rainfall** at isolated places over Himachal Pradesh, Punjab, Haryana, West Uttar Pradesh, East Rajasthan, Vidarbha, Sub-Himalaya West Bengal & Sikkim, Odisha, Arunachal Pradesh and Coastal Karnataka.
- ❖ **Thunderstorm with lightning gusty (wind speed 30-40 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **with lightning** at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Bihar, Madhya Maharashtra and Marathwada.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** very likely over Southwest, Central & North Arabian Sea, along & off Gujarat-north Maharashtra coasts and Comorin area; Central & adjoining South Bay of Bengal and north Andaman Sea. **Fishermen are advised not to venture into these areas.**
- ❖ **24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 04-08-2023 :**
  - **Moderate flash flood risk** likely over few watersheds & neighbourhood of **Chhattisgarh, East Madhya Pradesh, Vidarbha, West Madhya Pradesh** and **Odisha** Met Sub-divisions during next 24 hours.
  - **Moderate flash flood risk** likely over few watersheds & neighbourhood of **Assam & Meghalaya** and **NMMT** Met Sub-divisions during next 24 hours.



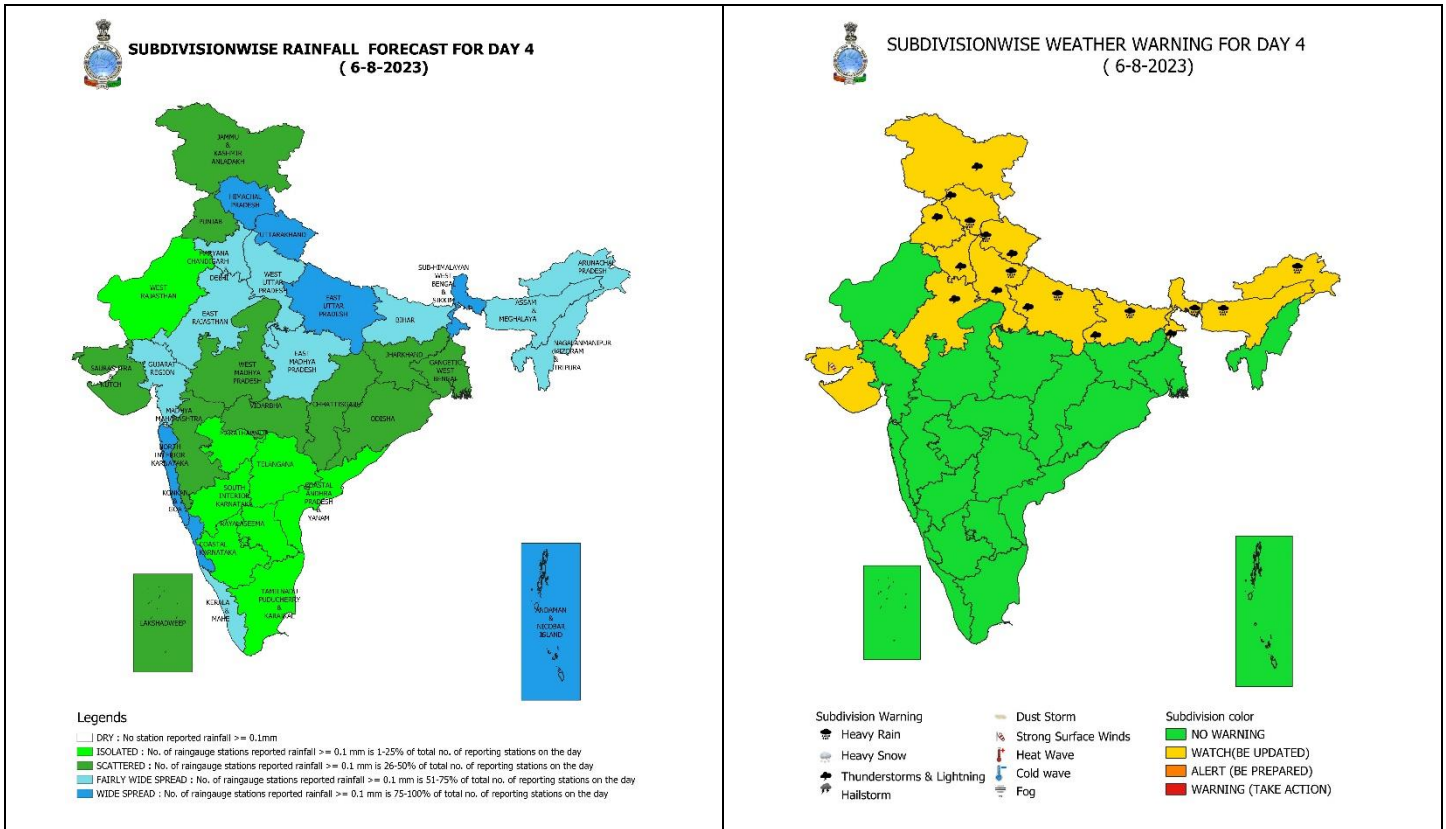
### 04 August (Day 2):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Himachal Pradesh, Uttarakhand and East Madhya Pradesh **Heavy rainfall** likely at isolated places over Punjab, Haryana, Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalaya West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra and Coastal Karnataka.
- ❖ **Thunderstorm with lightning** very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand and Bihar.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** very likely over Southwest, Central & North Arabian Sea, along & off Gujarat-north Maharashtra coasts and Comorin area. **Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph** over North, Central & adjoining South Bay of Bengal and north Andaman Sea. **Fishermen are advised not to venture into these areas.**



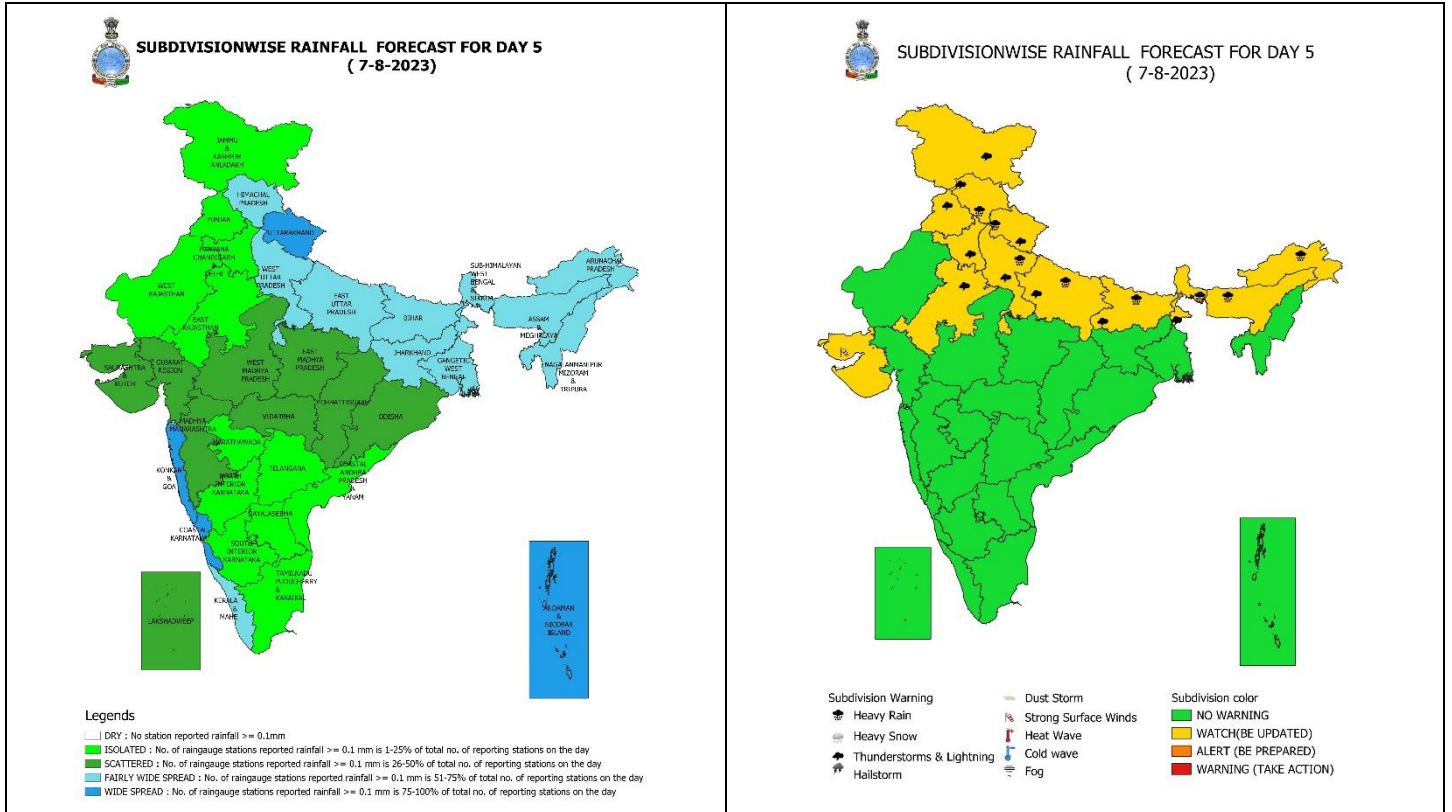
### 05 August (Day 3):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Himachal Pradesh, Uttarakhand and East Madhya Pradesh; **Heavy rainfall** likely at isolated places over Punjab, Haryana, Uttar Pradesh, East Madhya Pradesh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa and Madhya Maharashtra.
- ❖ **Thunderstorm with lightning** likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim and Bihar.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Southwest, Central & North Arabian Sea, along & off Gujarat coast and Comorin area. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** over Southwest Bay of Bengal and north Andaman Sea. **Fishermen are advised not to venture into these areas.**



### 06 August (Day 4):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim; **Heavy rainfall** likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Thunderstorm with lightning** likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, East Rajasthan, Sub-Himalayan West Bengal & Sikkim and Bihar.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Southwest, Central & North Arabian Sea, along & off Gujarat coast and Comorin area. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** over Southeast Bay of Bengal and north Andaman Sea. **Fishermen are advised not to venture into these areas.**



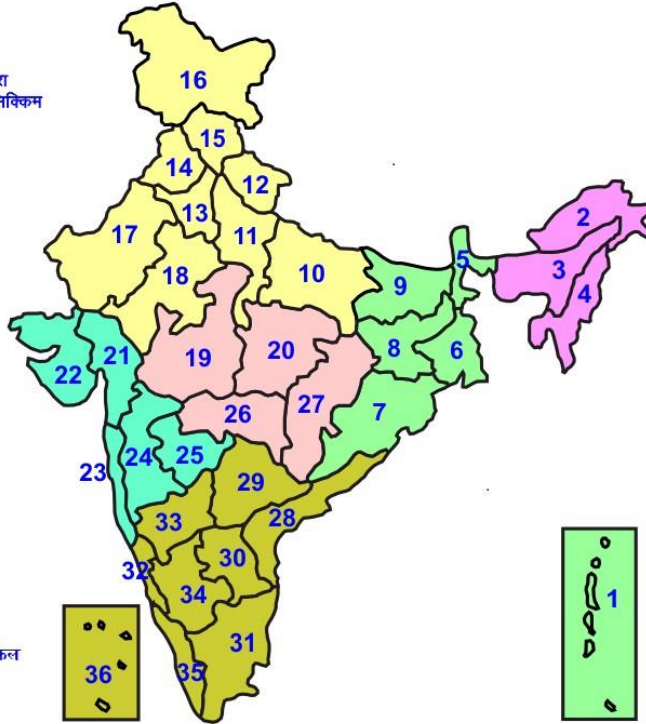
### 07 August (Day 5):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim; **Heavy rainfall** likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Thunderstorm with lightning** likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, East Rajasthan, Sub-Himalayan West Bengal & Sikkim and Bihar.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Southwest, Central & North Arabian Sea, along & off Gujarat coast and Comorin area. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** over Southeast Bay of Bengal and north Andaman Sea. **Fishermen are advised not to venture into these areas.**



## 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 गंगेय बंगाल
- 7 ओडिशा
- 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 मराठावाड़ा
- 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)

## 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

\* 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

(Service to the Nation since 1875)

## LEGENDS

### 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



Rain/ Snow \*

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



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 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

(Service to the Nation since 1875)