



Monday, August 21, 2023
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Significant Weather features:

- ❖ The **Low Pressure Area** over central parts of north Madhya Pradesh has become less marked. However, the associated cyclonic circulation persists over the same region.
- ❖ Monsoon Trough runs near its normal position and now passes through Bikaner, Ajmer, Guna, Satna, Daltonganj, Bankura, Kolkata and thence eastwards to Mizoram.
- ❖ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 58°E to the north of Lat. 28°N.

Weather Forecast and Warnings:

Northwest India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** likely over Himachal Pradesh during 21st-25th; over Uttarakhand during 21st-25th; over West Uttar Pradesh during 21st -23rd and over East Uttar Pradesh during 22nd -25th; over East Rajasthan during 20th -22th August, 2023.

Isolated very heavy rainfall also likely over Uttarakhand during 22nd -25th; over Himachal Pradesh during 21st-24th and over northwest Uttar Pradesh on 22nd & 23rd August, 2023.

Central India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over Madhya Pradesh on 21st & 22nd and Chhattisgarh on 24th & 25th August, 2023.

East India: Light/moderate fairly widespread to widespread rainfall/ thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Sub-Himalayan West Bengal & Sikkim during next 5 days; over Gangetic West Bengal on 24th & 25th; over Odisha during 23rd - 25th and over Bihar and Jharkhand during 22nd-25th August, 2023.

Isolated very heavy rainfall also likely over Sub-Himalaya West Bengal & Sikkim during 22nd-25th; over Bihar during 23rd-25th August.

Northeast India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over Assam & Meghalaya and Arunachal Pradesh during 21st-25th and over Nagaland, Manipur, Mizoram & Tripura during 21st-25th August, 2023.

Isolated very heavy rainfall also likely over Assam & Meghalaya during 21st-25th; over Arunachal Pradesh during 22nd-25th; over Nagaland, Manipur, Mizoram & Tripura on 24th-25th August, 2023.

South India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over Tamil Nadu on 21st & 22nd August, 2023.

No significant weather over rest parts of the country during next 5 days.



Main Weather Observations:

- ❖ **Rainfall/thundershowers observed** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Konkan & Goa and Vidarbha; **at a few places** over East Rajasthan, Madhya Pradesh, Gujarat state, Odisha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Marathwada and Coastal Karnataka and **at isolated places** over Punjab, Uttarakhand, Chandigarh, East Uttar Pradesh, Bihar, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, Madhya Maharashtra, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Significant rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **(in cm): Vidarbha:** Buldana-3, Wardha-1; **West Madhya Pradesh:** Ratlam-2, Betul & Pachmarhi-1 each; **Madhya Maharashtra:** Mahabaleshwar- 2; **East Madhya Pradesh:** Jabalpur & Rewa-1 each; **East Rajasthan:** Ajmer-1; **Chandigarh-1.**
- ❖ **Thunderstorm observed recorded** (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Himachal Pradesh and Haryana.
- ❖ **Minimum Temperature Departures (as on 20-08-2023):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at most places over Himachal Pradesh and Punjab; at many places over East Uttar Pradesh, Uttarakhand and Andaman & Nicobar Islands; at a few places over West Uttar Pradesh, Haryana-Chandigarh-Delhi, Rajasthan and Konkan & Goa and at isolated places over East Madhya Pradesh, Saurashtra & Kutch and Tamil Nadu, Puducherry & Karaikal. They were **below normal (-1.6°C to -3.0°C)** at isolated places over Telangana, Assam & Meghalaya and West Madhya Pradesh and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 19.0°C** was reported at **Matheran (Konkan & Goa)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 20-08-2023):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at a few places over Himachal Pradesh, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam and Kerala & Mahe; at isolated places over Bihar, Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal; **above normal (1.6°C to 3.0°C)** at most places over Punjab and North Interior Karnataka; at many places over Uttar Pradesh, Rayalaseema and Lakshadweep; at a few places over East Rajasthan and at isolated places over West Rajasthan, Assam & Meghalaya and Madhya Maharashtra. They were **appreciably below normal (-3.1°C to -5.0°C)** at a few places over Gujarat Region and Vidarbha; at isolated places over Saurashtra & Kutch and West Madhya Pradesh; **below normal (-1.6°C to -3.0°C)** at a few places over Marathwada and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 39.8°C** was reported at **Palayankottai (Tamil Nadu).**



Meteorological Analysis (Based on 0530 hours IST)

- ❖ The **Low Pressure Area** over central parts of north Madhya Pradesh has become less marked. However, the associated cyclonic circulation persists over the same region and extends upto 3.1 km above mean sea level.
- ❖ The **Monsoon Trough** at mean sea level now passes through Bikaner, Ajmer, Guna, Satna, Daltonganj, Bankura, Kolkata and thence eastwards to Mizoram and extends upto 1.5 km above mean sea level.
- ❖ The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 58°E to the north of Lat. 28°N persists.

Weather Forecast for next 5 days (Upto 0830 hours IST of 26th 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.

Weather Outlook for subsequent 2 days

- ❖ Fairly widespread to widespread light/moderate rainfall likely over along the foothills of the Himalayas, parts of east & northeast India, along the west coasts and islands.
- ❖ Scattered to fairly widespread light/moderate rainfall likely over Central India.
- ❖ Subdued rainfall activity with isolated to scattered rainfall likely over rest parts of the country.



Table-1

7 Days Rainfall Forecast

S. No.	Subdivision	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-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	WS	WS	WS	FWS	FWS
3	ASSAM & MEGHALAYA	FWS	FWS	WS	WS	WS	FWS	FWS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS	FWS	FWS	FWS	FWS	FWS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	WS	WS	WS	WS	WS
6	GANGETIC WEST BENGAL	SCT	FWS	FWS	WS	WS	WS	WS
7	ODISHA	SCT	SCT	FWS	FWS	FWS	FWS	FWS
8	JHARKHAND	FWS	FWS	WS	WS	WS	FWS	FWS
9	BIHAR	SCT	FWS	WS	WS	WS	FWS	FWS
10	EAST UTTAR PRADESH	FWS	FWS	WS	WS	FWS	FWS	FWS
11	WEST UTTAR PRADESH	FWS	WS	FWS	SCT	SCT	SCT	SCT
12	UTTARAKHAND	WS	WS	FWS	FWS	FWS	SCT	SCT
13	HARYANA CHANDIGARH & DELHI	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
14	PUNJAB	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
15	HIMACHAL PRADESH	FWS	FWS	FWS	FWS	FWS	FWS	FWS
16	JAMMU & KASHMIR AND LADAKH	ISOL	DRY	DRY	DRY	DRY	ISOL	ISOL
17	WEST RAJASTHAN	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
19	WEST MADHYA PRADESH	FWS	FWS	FWS	SCT	SCT	SCT	SCT
20	EAST MADHYA PRADESH	WS	WS	FWS	FWS	SCT	SCT	SCT
21	GUJARAT REGION	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
22	SAURASHTRA & KUTCH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
23	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	SCT	SCT	SCT	SCT	SCT	SCT	SCT
25	MARATHAWADA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
26	VIDARBHA	WS	WS	FWS	FWS	SCT	SCT	SCT
27	CHHATTISGARH	FWS	FWS	FWS	FWS	FWS	FWS	FWS
28	COASTAL ANDHRA PRADESH & YANAM	SCT	SCT	SCT	SCT	SCT	SCT	SCT
29	TELANGANA	SCT	SCT	SCT	SCT	SCT	SCT	SCT
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	FWS	SCT	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	FWS	FWS	FWS	SCT	SCT	SCT	SCT
33	NORTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
35	KERALA & MAHE	SCT	SCT	SCT	SCT	SCT	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 20.08.2023

Fig. 2: Departure of Maximum Temp. Dated 20.08.2023

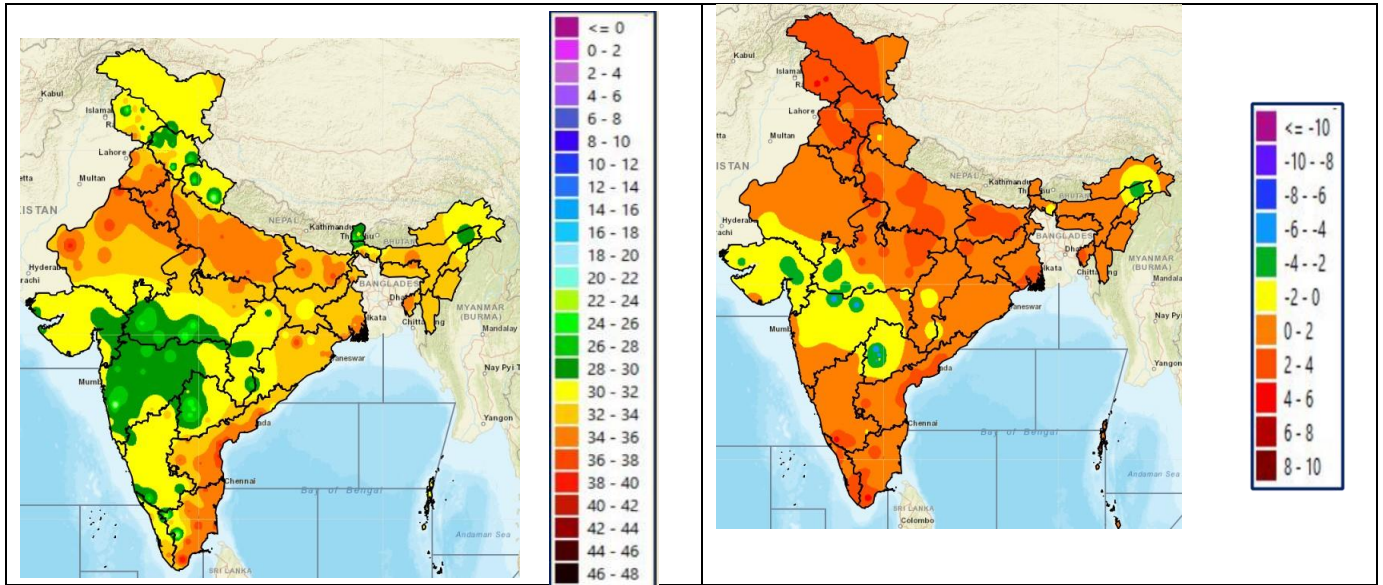


Fig. 3: Minimum Temperatures Dated 20.08.2023

Fig. 4: Departure of Minimum Temp. Dated 20.08.2023

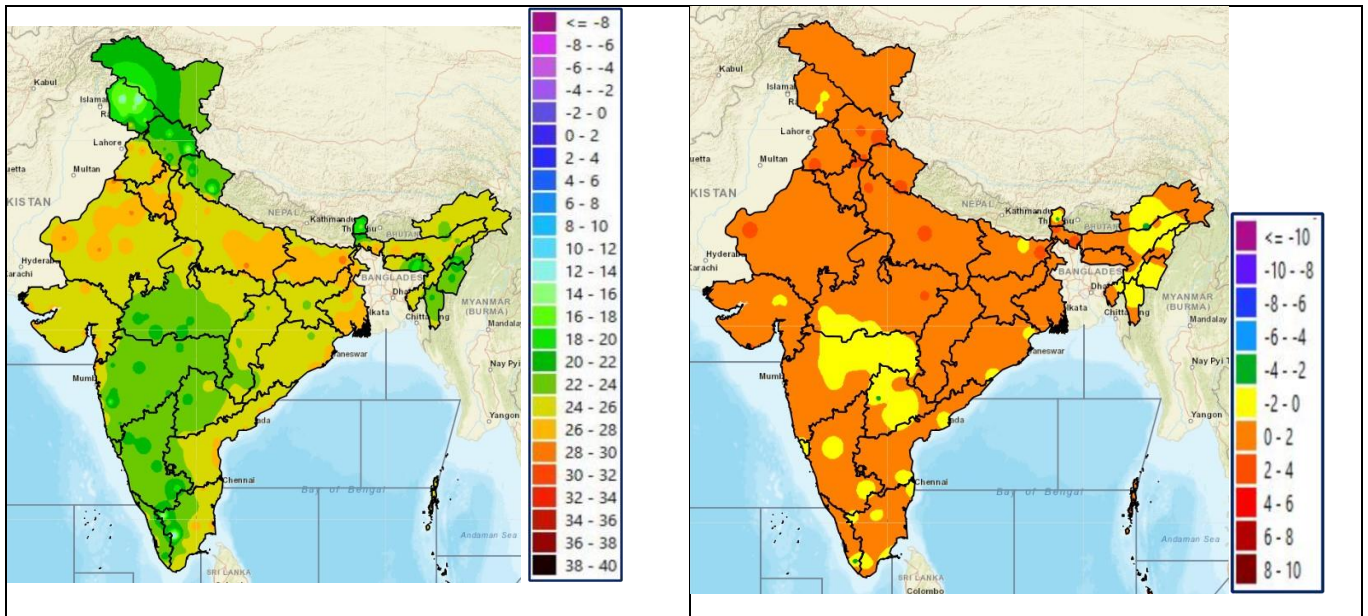
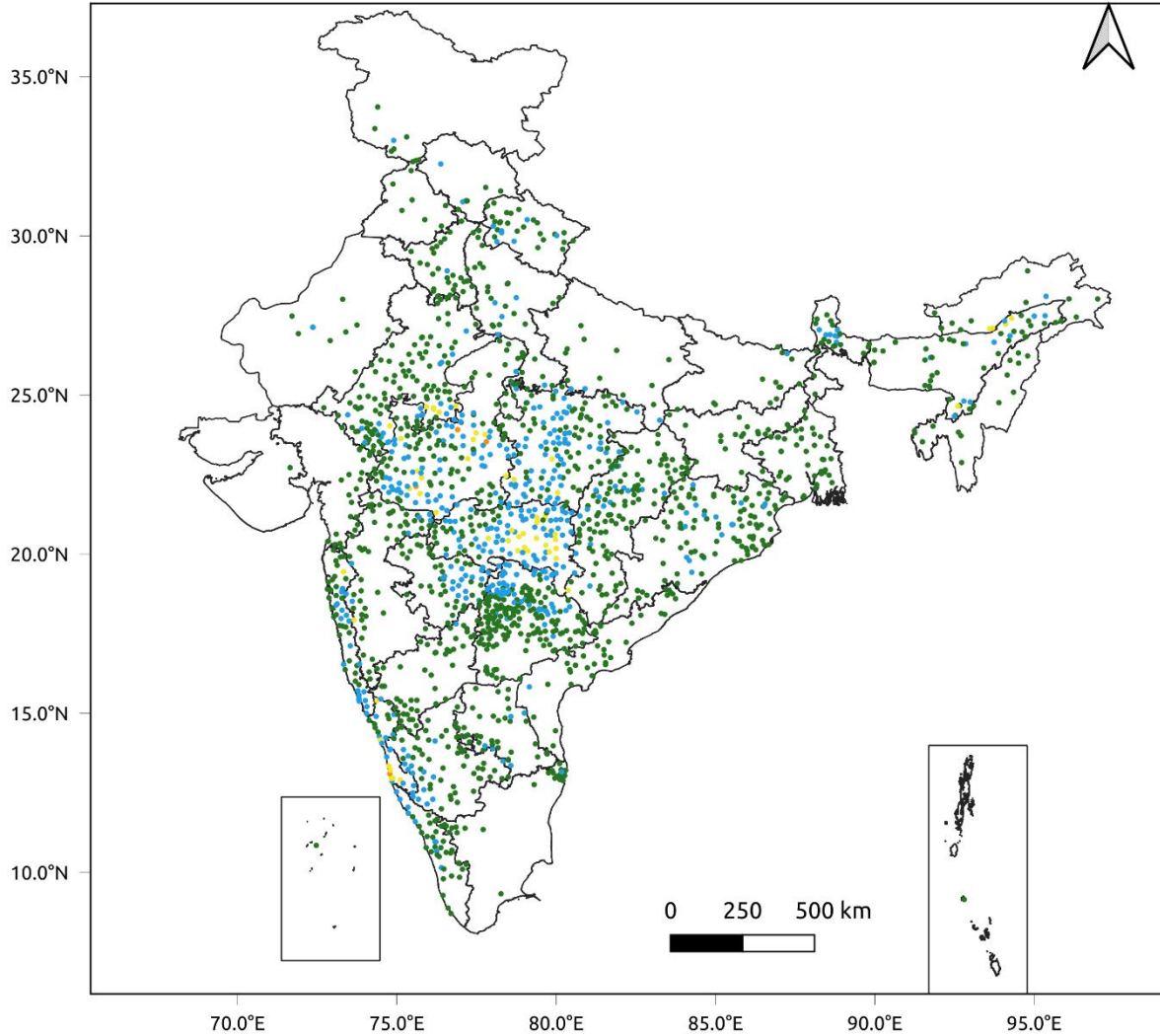


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

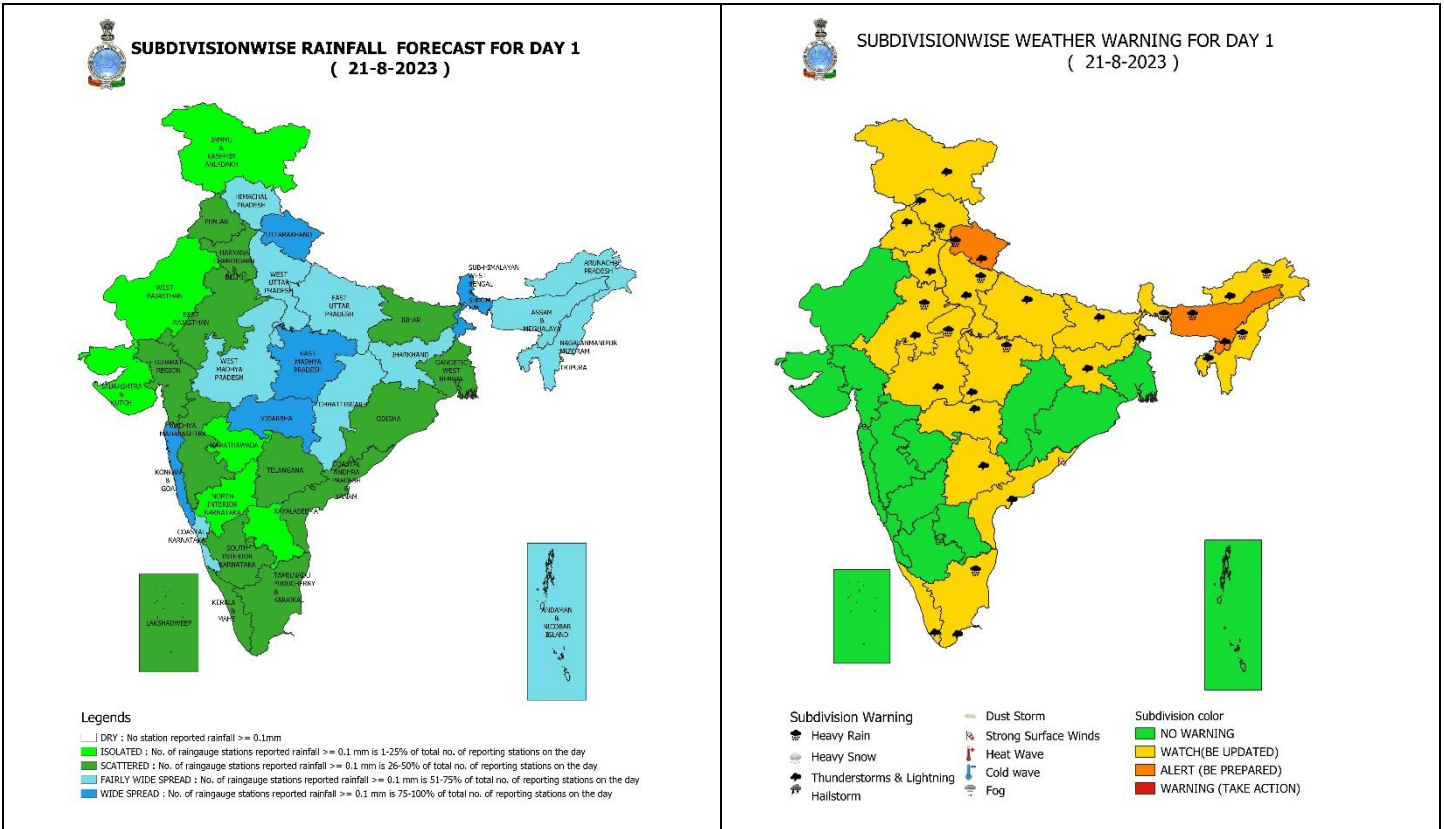


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 19-8-2023 to 0830 IST of 20-8-2023



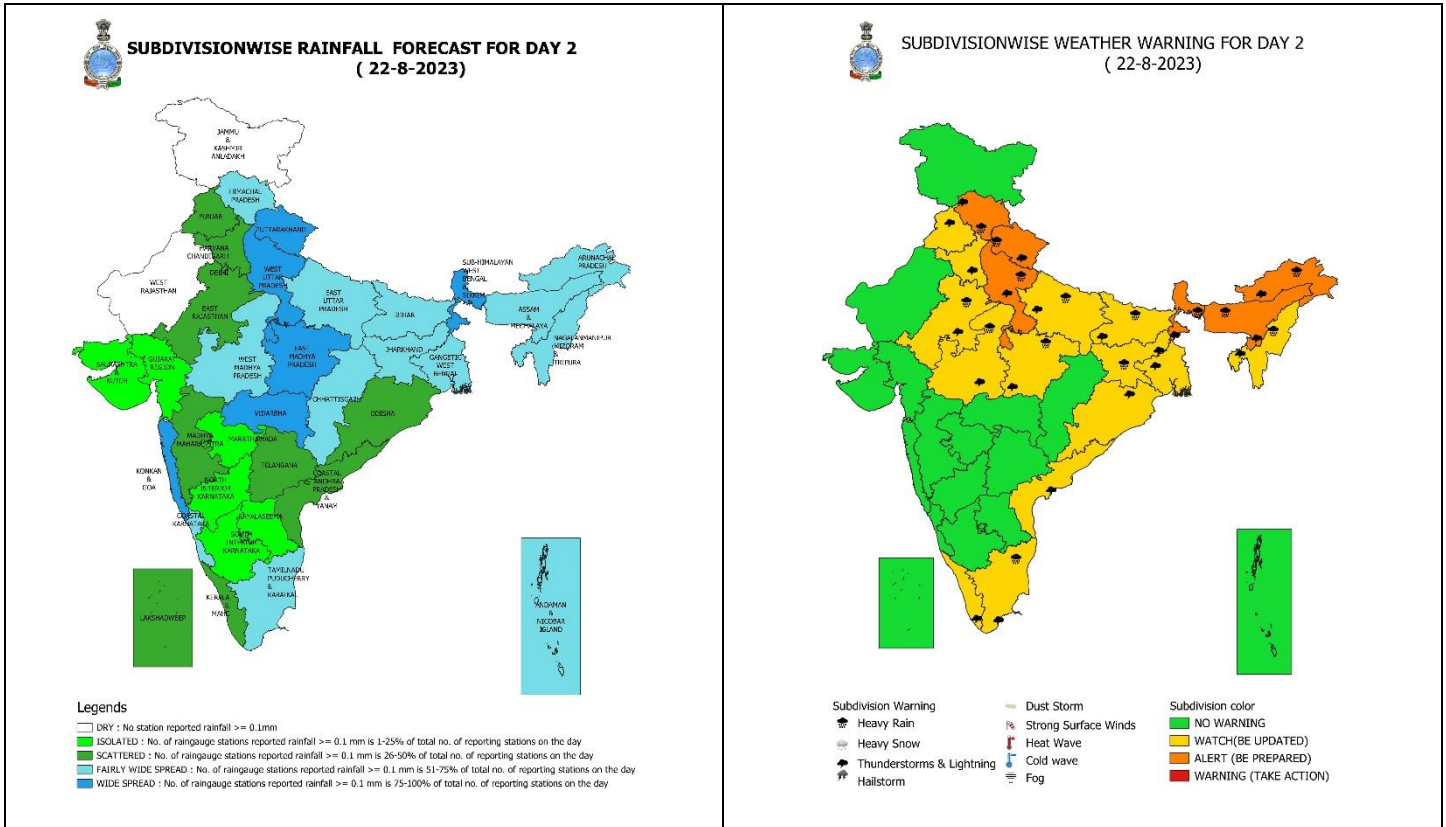
Legends

- 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 (≥ 204.5 mm)



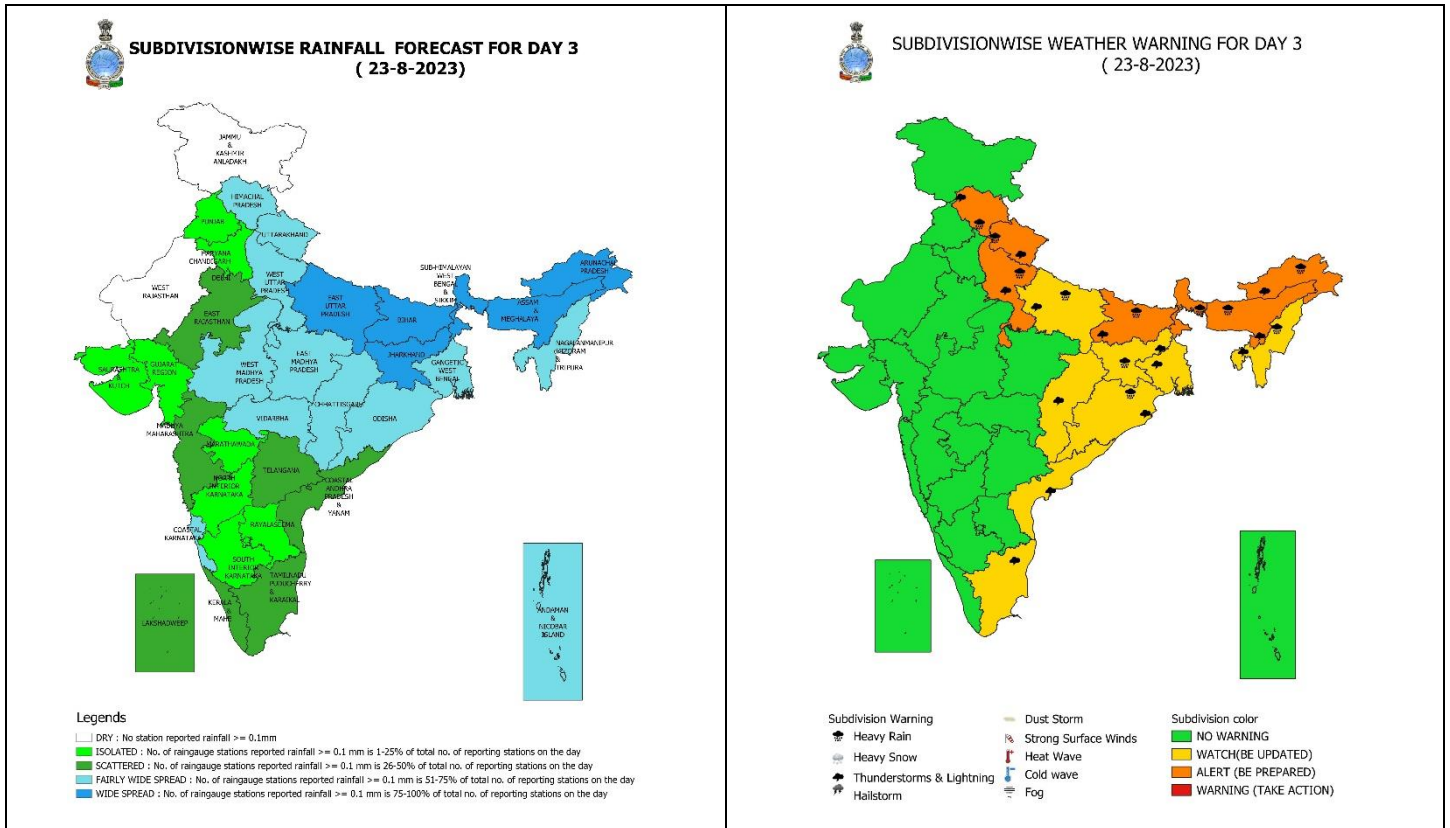
21 August (Day 1): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Uttarakhand and Assam & Meghalaya and **Heavy rainfall** at isolated places over Himachal Pradesh, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Thunderstorm with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Punjab, Uttar Pradesh, East Rajasthan, Vidarbha, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh, Telangana, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Westcentral & adjoining Southwest Arabian Sea. **Fishermen are advised not to venture into these areas.**



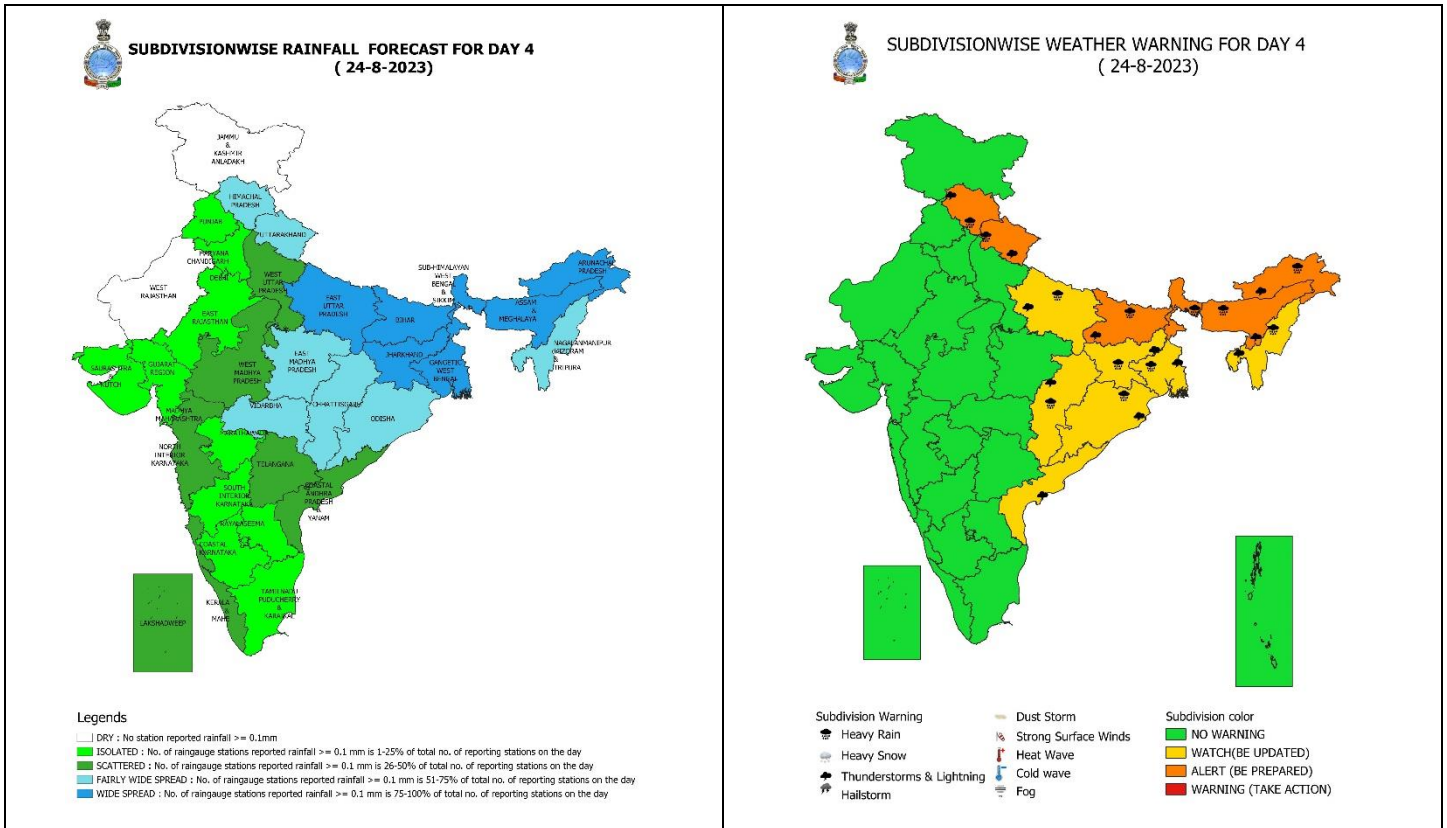
22 August (Day 2): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya and **Heavy rainfall** at isolated places over East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Bihar, Jharkhand, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Thunderstorm with lightning** likely at isolated places over Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Punjab, Uttar Pradesh, East Rajasthan, Madhya Pradesh, West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Westcentral & adjoining Southwest Arabian Sea. **Fishermen are advised not to venture into these areas.**



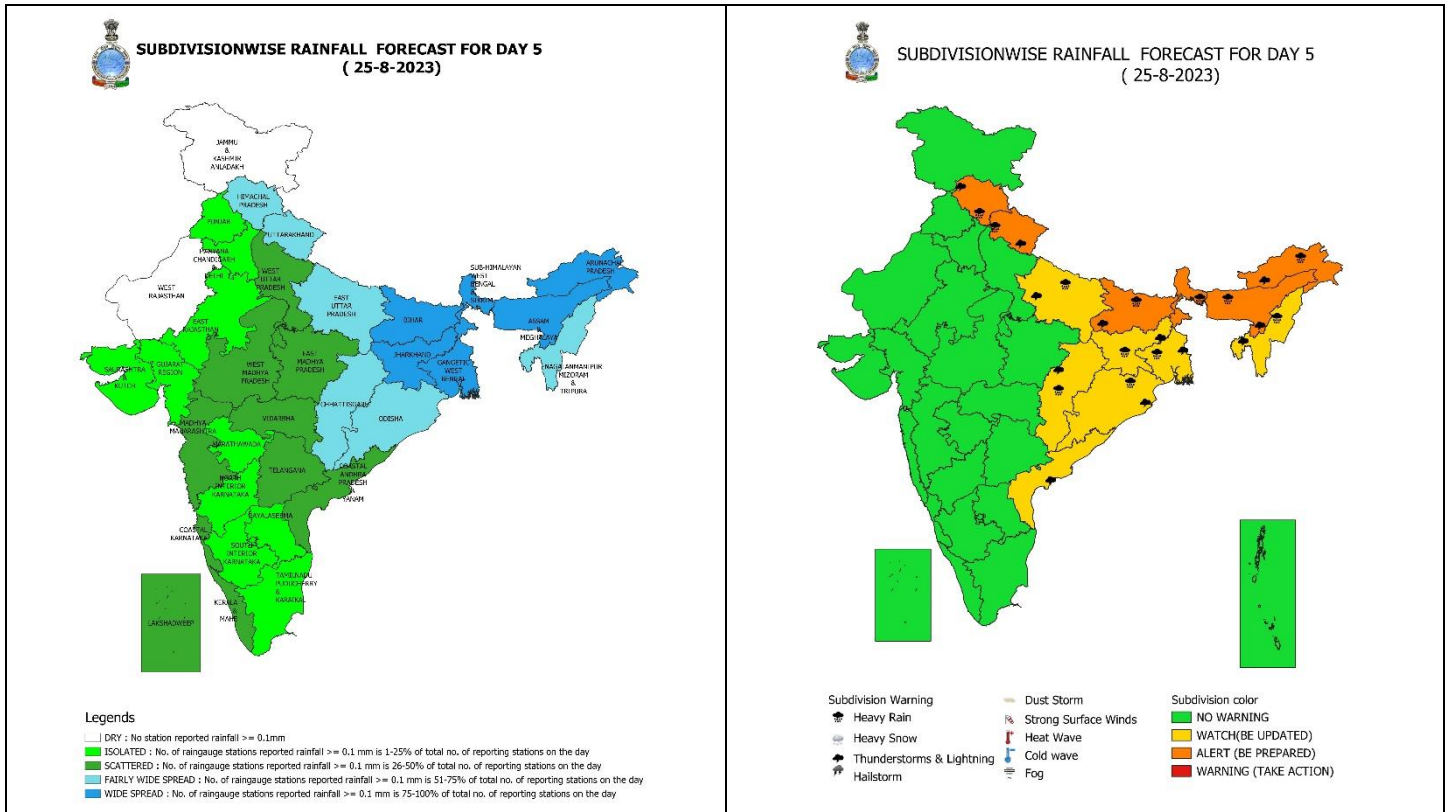
23 August (Day 3): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh and Assam & Meghalaya and **Heavy rainfall** at isolated places over East Uttar Pradesh, Jharkhand, Odisha and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Thunderstorm with lightning** likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Westcentral & adjoining Eastcentral, Southwest and Northwest Arabian Sea. **Fishermen are advised not to venture into these areas.**



24 August (Day 4): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Himachal Pradesh, Uttarakhand, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya and **Heavy rainfall** at isolated places over East Uttar Pradesh, Chhattisgarh, Gangetic West Bengal, Jharkhand and Odisha.
- ❖ **Thunderstorm with lightning** likely at isolated places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Westcentral & adjoining Eastcentral, Southwest and Northwest Arabian Sea. **Fishermen are advised not to venture into these areas.**



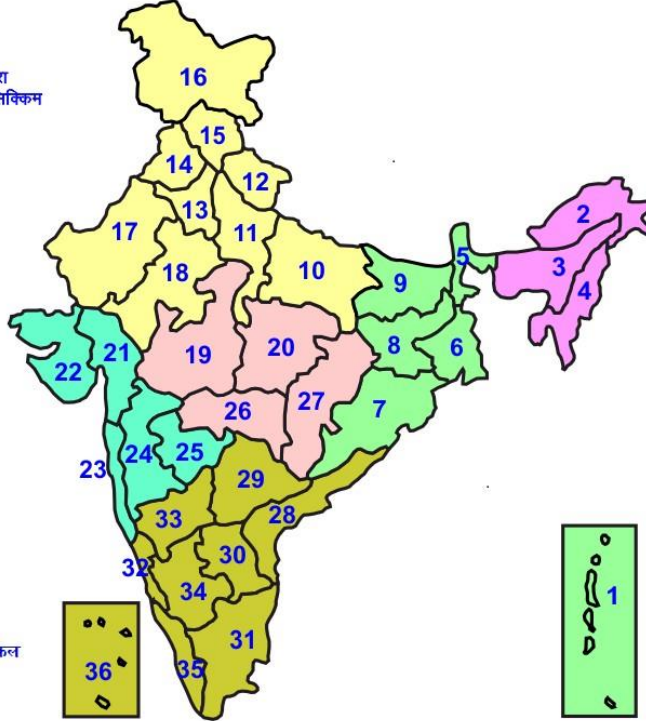
25 August (Day 5): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Himachal Pradesh, Uttarakhand, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya and **Heavy rainfall** at isolated places over East Uttar Pradesh, Chhattisgarh, Gangetic West Bengal, Jharkhand and Odisha.
- ❖ **Thunderstorm with lightning** likely at isolated places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Westcentral & adjoining Eastcentral, Southwest and Northwest Arabian Sea. **Fishermen are advised not to venture into these areas.**



LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 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 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 मराठावाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 रायलसेमा
- 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

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 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

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



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°C to 6.4°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°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°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°C to -6.4°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°C to -6.4°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 < 1km

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 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

(Service to the Nation since 1875)