



Thursday, August 17, 2023
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Significant Weather features:

- ❖ The western end of the Monsoon Trough lies north of its normal position. It now passes through Amritsar, Dehradun, Bareilly, Gorakhpur, Patna, Bankura, Digha and thence southeastwards to eastcentral Bay of Bengal.
- ❖ A cyclonic circulation lies over northeast & adjoining eastcentral Bay of Bengal in middle tropospheric levels tilting southwards with height. Under its influence a low pressure area is likely to form over north Bay of Bengal & neighbourhood around 18th August 2023.
- ❖ A cyclonic circulation lies over northwest Uttar Pradesh & neighbourhood lower tropospheric levels.
- ❖ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 68°E to the north of Lat. 32°N.

Weather Forecast and Warnings:

East India: Light/moderate scattered to fairly widespread rainfall with **isolated heavy rainfall** activity very likely over Andaman & Nicobar Islands on 17th; over Odisha during 17th to 19th; over Jharkhand on 17th & 18th; over West Bengal & Sikkim on 17th August. **Isolated very heavy falls also likely over Odisha on 17th & 18th August.**

Northeast India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 17th to 21st August.

Central India: Light/moderate fairly to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Chhattisgarh during 17th to 21st; over East Madhya Pradesh and Vidarbha during 18th-21st August.

Northwest India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** likely over Uttarakhand during 18th to 21st August, 2023.

South India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Coastal Andhra Pradesh & Yanam on 18th & 19th and Telangana on 19th August.

Hot and humid weather is likely to prevail over Tamil Nadu in 17th August, 2023.

Subdued rainfall activity likely over remaining parts of the country during next 5 days.

Ma7in Weather Observations

- ❖ **Rainfall/thundershowers observed** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Andaman & Nicobar Islands and Punjab; **at a few places** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa, Madhya Maharashtra, Odisha, Gangetic West Bengal, Bihar, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and **at isolated places** over Himachal Pradesh, Haryana-Chandigarh-Delhi, East Rajasthan, Madhya Pradesh, Gujarat state, West Uttar Pradesh, Vidarbha, Telangana, Coastal Andhra Pradesh & Yanam, Sub-Himalayan West Bengal & Sikkim and Jharkhand.
- ❖ **Significant rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **(in cm): Odisha:** Jharsuguda-6, Balasore-3; **Manipur:** Imphal-3; **Sub-Himalayan West Bengal & Sikkim:** Balurghat-1; **Andaman & Nicobar Islands:** Long Islands-3, Maya Bandar-2, Hut Bay-1; **Jharkhand:** Ranchi-1; **Telangana:** Kothagudem & Khammam-1 each; **Delhi:** Palam-2; **West Uttar Pradesh:** Meerut-1; **Punjab:** Amritsar-1; **East Madhya Pradesh:** Jabalpur-2; **Madhya Maharashtra:** Mahabaleshwar-2; **Goa:** Panjim-1; **Bihar:** Patna-2; **Gangetic West Bengal:** Shanti Niketan-2; Kolkata (Dum Dum) & Canning-1 each.
- ❖ **Thunderstorm observed** (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Chhattisgarh, Jharkhand, Odisha, Gangetic West Bengal and Coastal Andhra Pradesh & Yanam.
- ❖ **Minimum Temperature Departures (as on 16-08-2023):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at many places over Bihar; at a few places over Haryana-Chandigarh-Delhi, East Madhya Pradesh, Vidarbha, Konkan & Goa, North Interior Karnataka, Rayalaseema, Coastal Andhra Pradesh & Yanam, Odisha, West Bengal & Sikkim and at isolated places over Punjab and Himachal Pradesh. They were **below normal (-1.6°C to -3.0°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Tamil Nadu, Puducherry & Karaikal and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 19.6°C** was reported at **Belgaum (North Interior Karnataka)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 16-08-2023):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at many places over East Uttar Pradesh, Gangetic West Bengal, East Madhya Pradesh, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and North Interior Karnataka; at a few places over Odisha, Arunachal Pradesh, Rayalaseema and Tamil Nadu, Puducherry & Karaikal and at isolated places over Bihar and Madhya Maharashtra; **above normal (1.6°C to 3.0°C)** at most places over West Uttar Pradesh, Jharkhand, Coastal Karnataka and South Interior Karnataka; at many places over Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Punjab, East Rajasthan, Gujarat Region, Konkan & Goa, Vidarbha and Lakshadweep; at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Madhya Pradesh, Telangana, Assam & Meghalaya and Sub-Himalaya West Bengal & Sikkim and at isolated places over Saurashtra & Kutch. They were **below normal (-1.6°C to -3.0°C)** at isolated places over Andaman & Nicobar Islands and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 40.0°C** was reported at **K. Paramathy (Tamil Nadu)**.



Meteorological Analysis (Based on 0530 hours IST)

- ❖ The **Monsoon Trough** at mean sea level now passes through Amritsar, Dehradun, Bareilly, Gorakhpur, Patna, Bankura, Digha and thence southeastwards to eastcentral Bay of Bengal.
- ❖ The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 68°E to the north of Lat. 32°N persists.
- ❖ The **cyclonic circulation** over northeast & adjoining Eastcentral Bay of Bengal between 4.5 & 7.6 km above mean sea level tilting southwards with height persists. Under its influence, a low pressure area is likely to form over north Bay of Bengal around 18th August 2023.
- ❖ The **cyclonic circulation** over northwest Uttar Pradesh & neighbourhood between 3.1 & 5.8 km above mean sea level persists.
- ❖ The north-south trough from South Interior Karnataka to Comorin Area at 0.9 km above mean sea level persists.

Weather Forecast for next 5 days (Upto 0830 hours IST of 22nd 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	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	FWS	FWS	FWS	FWS	FWS
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	FWS	FWS	WS	WS	WS	WS
6	GANGETIC WEST BENGAL	WS	WS	FWS	SCT	SCT	SCT	SCT
7	ODISHA	WS	WS	FWS	SCT	SCT	SCT	SCT
8	JHARKHAND	WS	WS	FWS	SCT	FWS	FWS	FWS
9	BIHAR	SCT	SCT	SCT	SCT	FWS	FWS	FWS
10	EAST UTTAR PRADESH	SCT	SCT	FWS	FWS	FWS	FWS	FWS
11	WEST UTTAR PRADESH	ISOL	ISOL	SCT	SCT	FWS	FWS	FWS
12	UTTARAKHAND	FWS	FWS	FWS	FWS	FWS	FWS	FWS
13	HARYANA CHANDIGARH & DELHI	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
14	PUNJAB	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
15	HIMACHAL PRADESH	SCT	SCT	FWS	FWS	FWS	FWS	FWS
16	JAMMU & KASHMIR AND LADAKH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
17	WEST RAJASTHAN	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY
18	EAST RAJASTHAN	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
19	WEST MADHYA PRADESH	SCT	SCT	SCT	FWS	FWS	SCT	SCT
20	EAST MADHYA PRADESH	FWS	WS	WS	WS	WS	FWS	FWS
21	GUJARAT REGION	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
22	SAURASHTRA & KUTCH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
23	KONKAN & GOA	FWS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	SCT	SCT	SCT	SCT	SCT	SCT	SCT
25	MARATHAWADA	SCT	FWS	FWS	SCT	SCT	SCT	SCT
26	VIDARBHA	FWS	WS	WS	WS	WS	FWS	FWS
27	CHHATTISGARH	WS	WS	WS	WS	FWS	FWS	FWS
28	COASTAL ANDHRA PRADESH & YANAM	SCT	SCT	SCT	SCT	SCT	SCT	SCT
29	TELANGANA	SCT	FWS	FWS	FWS	FWS	SCT	SCT
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	SCT	FWS	FWS	FWS	FWS	FWS	FWS
33	NORTH INTERIOR KARNATAKA	ISOL	ISOL	SCT	SCT	SCT	SCT	SCT
34	SOUTH INTERIOR KARNATAKA	ISOL	SCT	SCT	SCT	ISOL	ISOL	ISOL
35	KERALA & MAHE	ISOL	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 16.08.2023

Fig. 2: Departure of Maximum Temp. Dated 16.08.2023

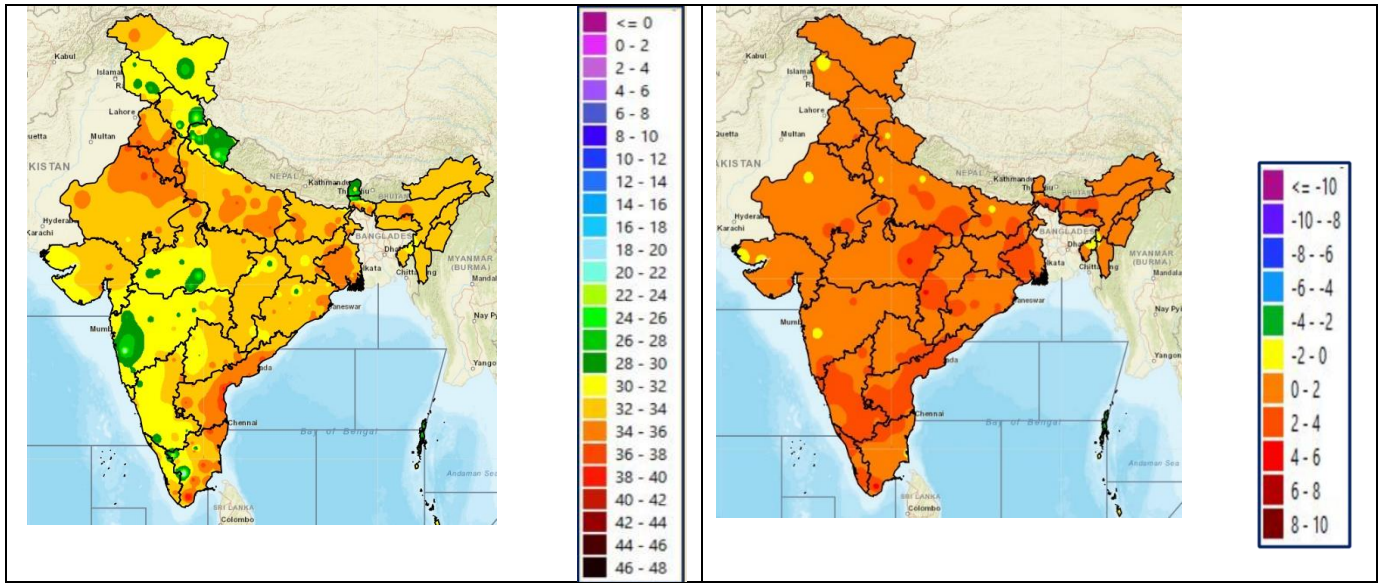


Fig. 3: Minimum Temperatures Dated 16.08.2023

Fig. 4: Departure of Minimum Temp. Dated 16.08.2023

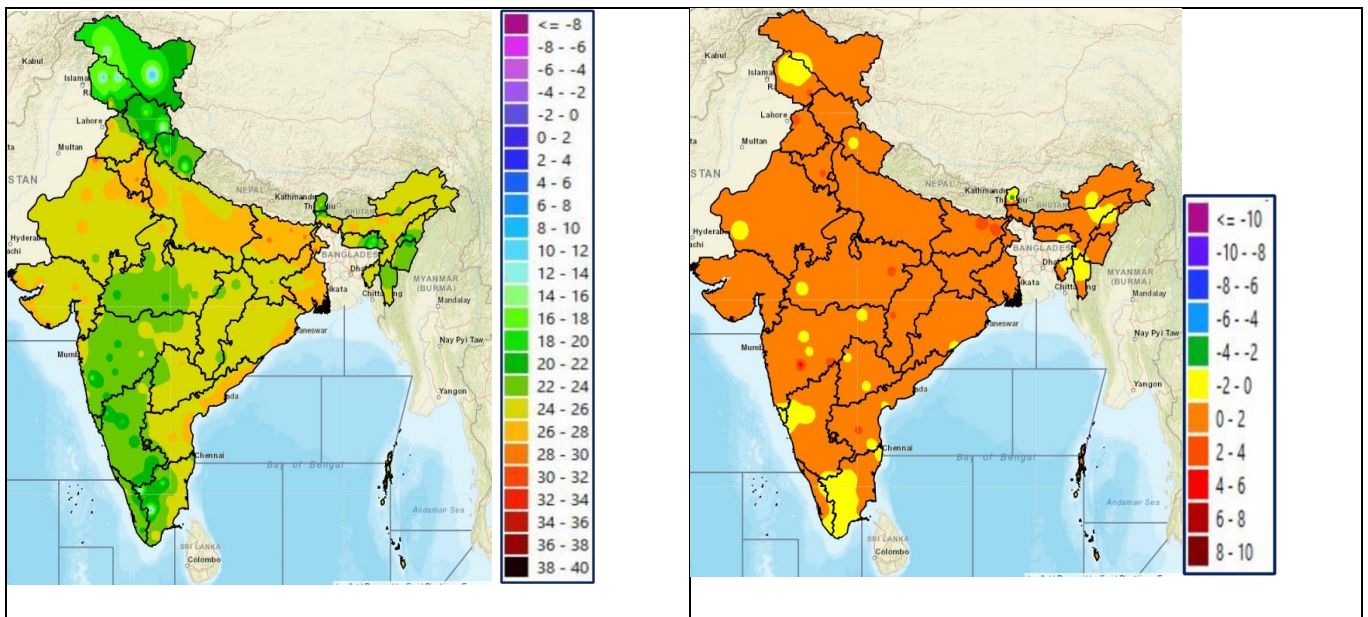
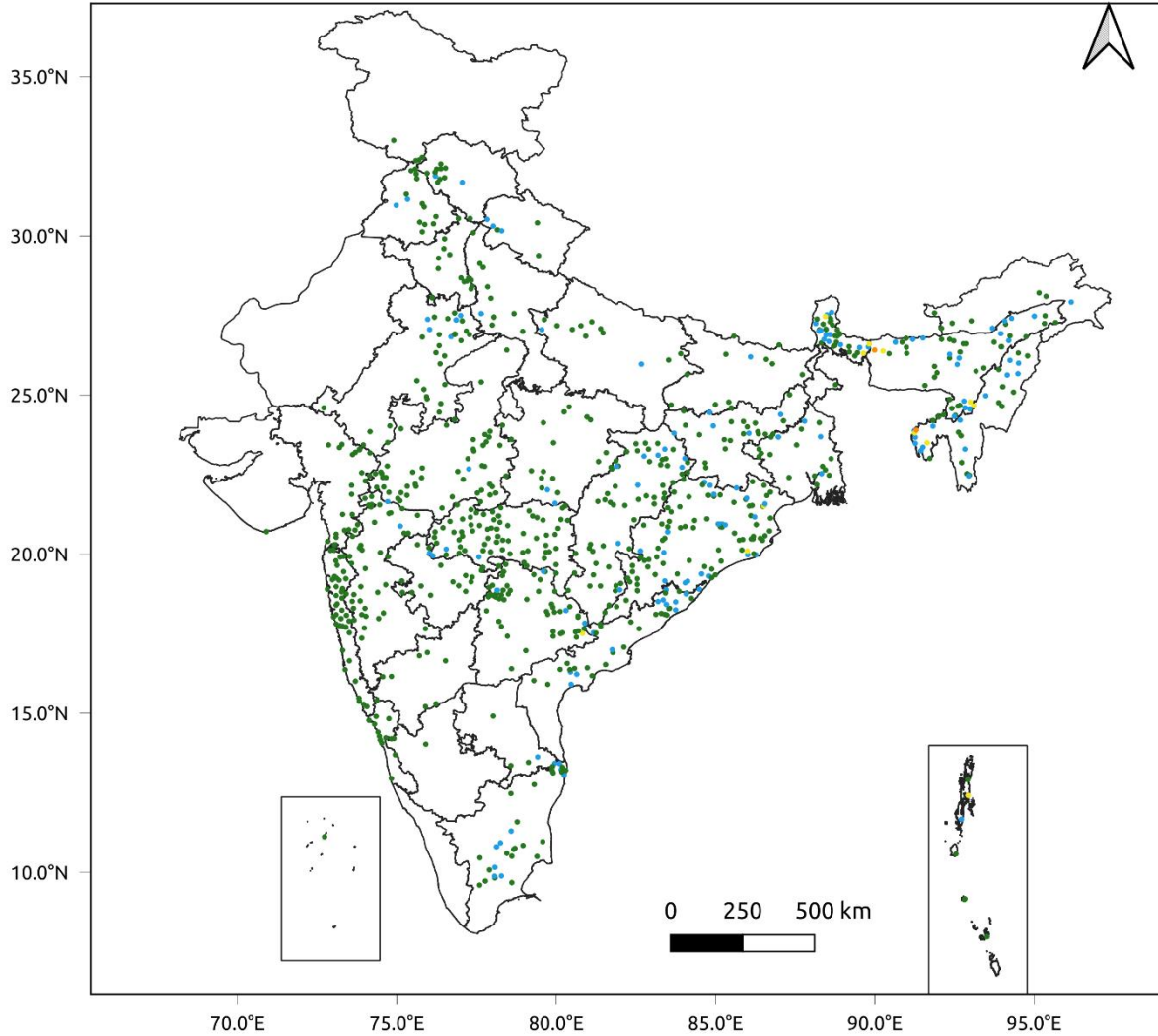


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

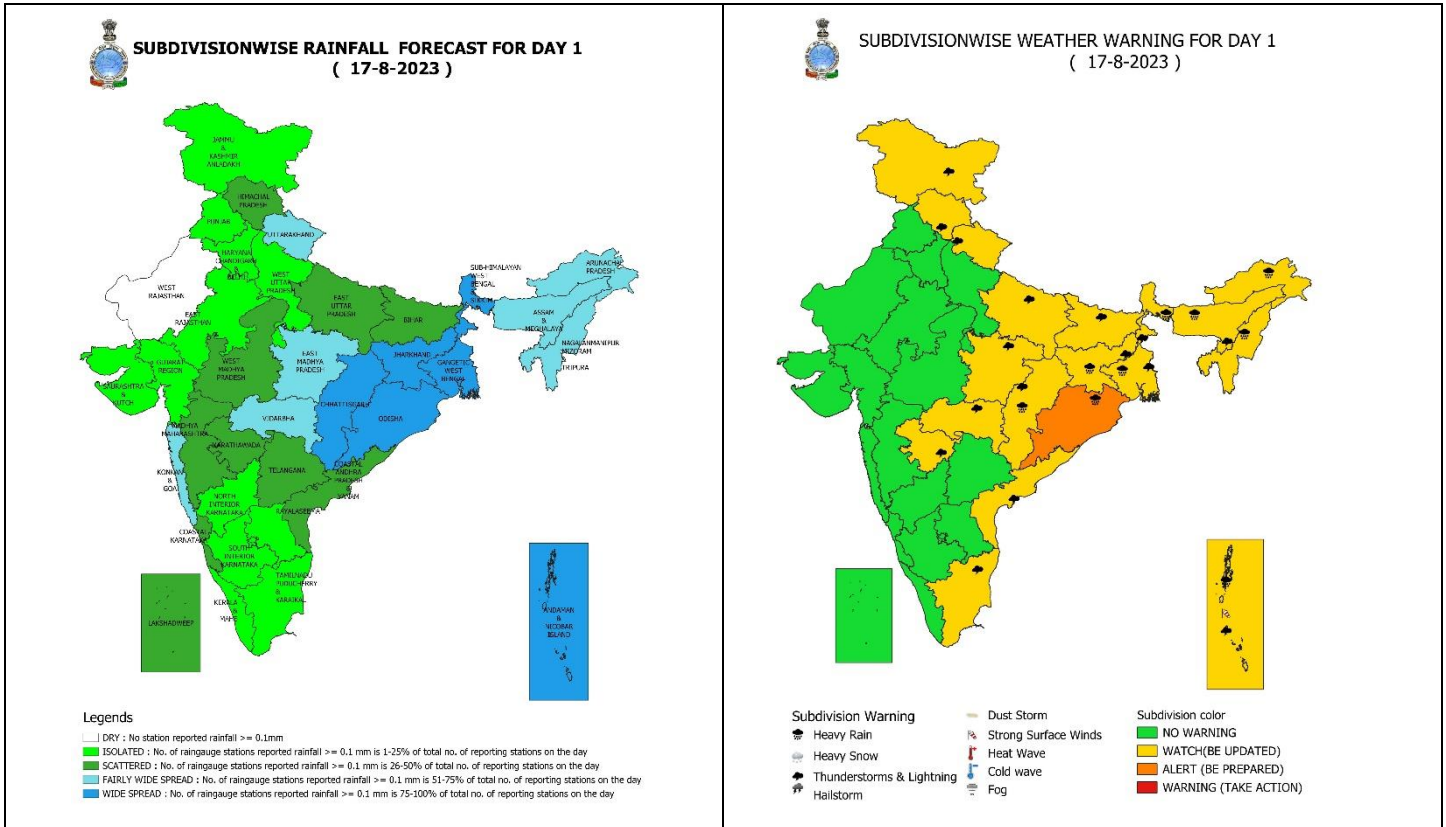


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 15-8-2023 to 0830 IST of 16-8-2023



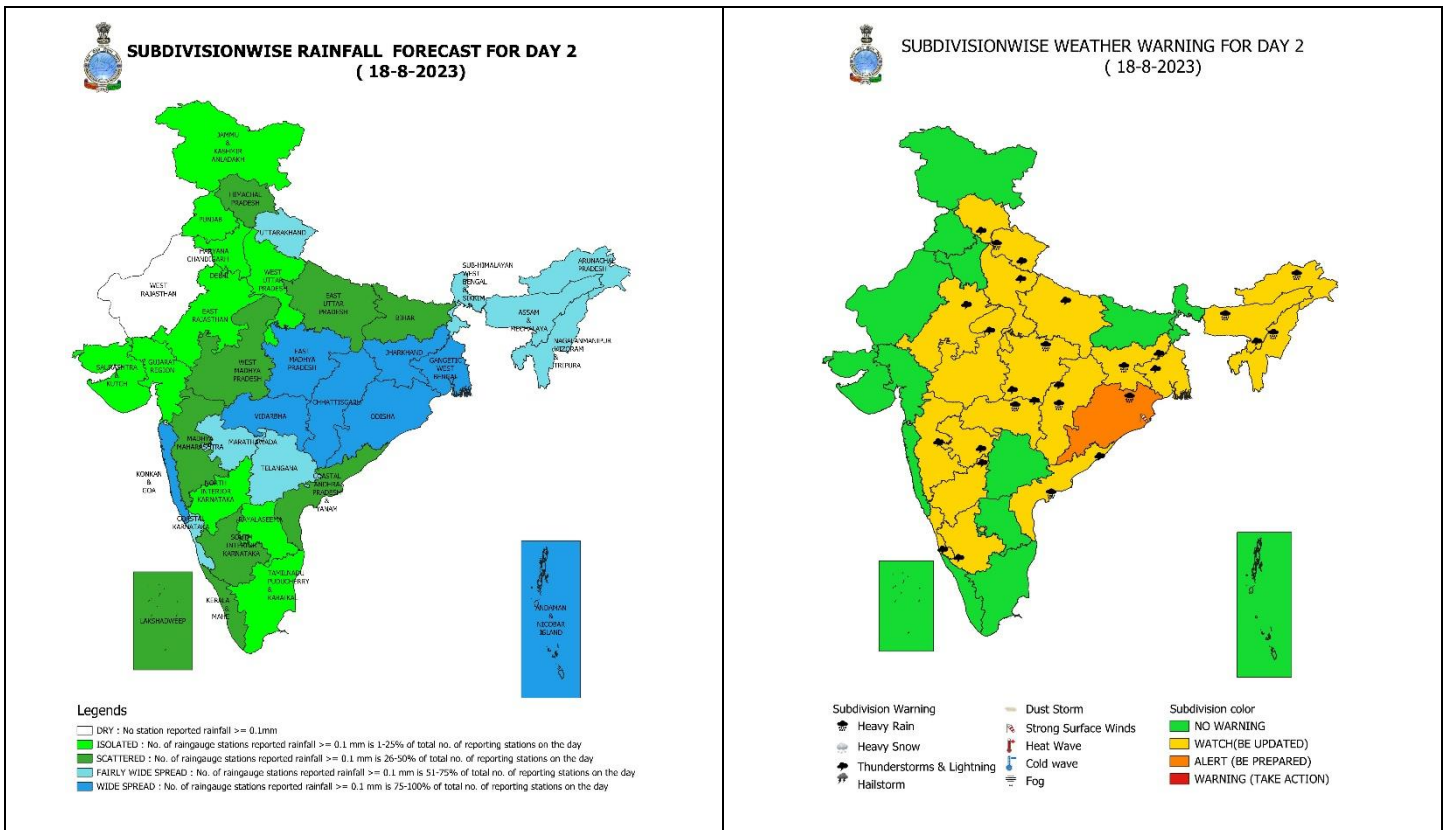
Legends

- 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)



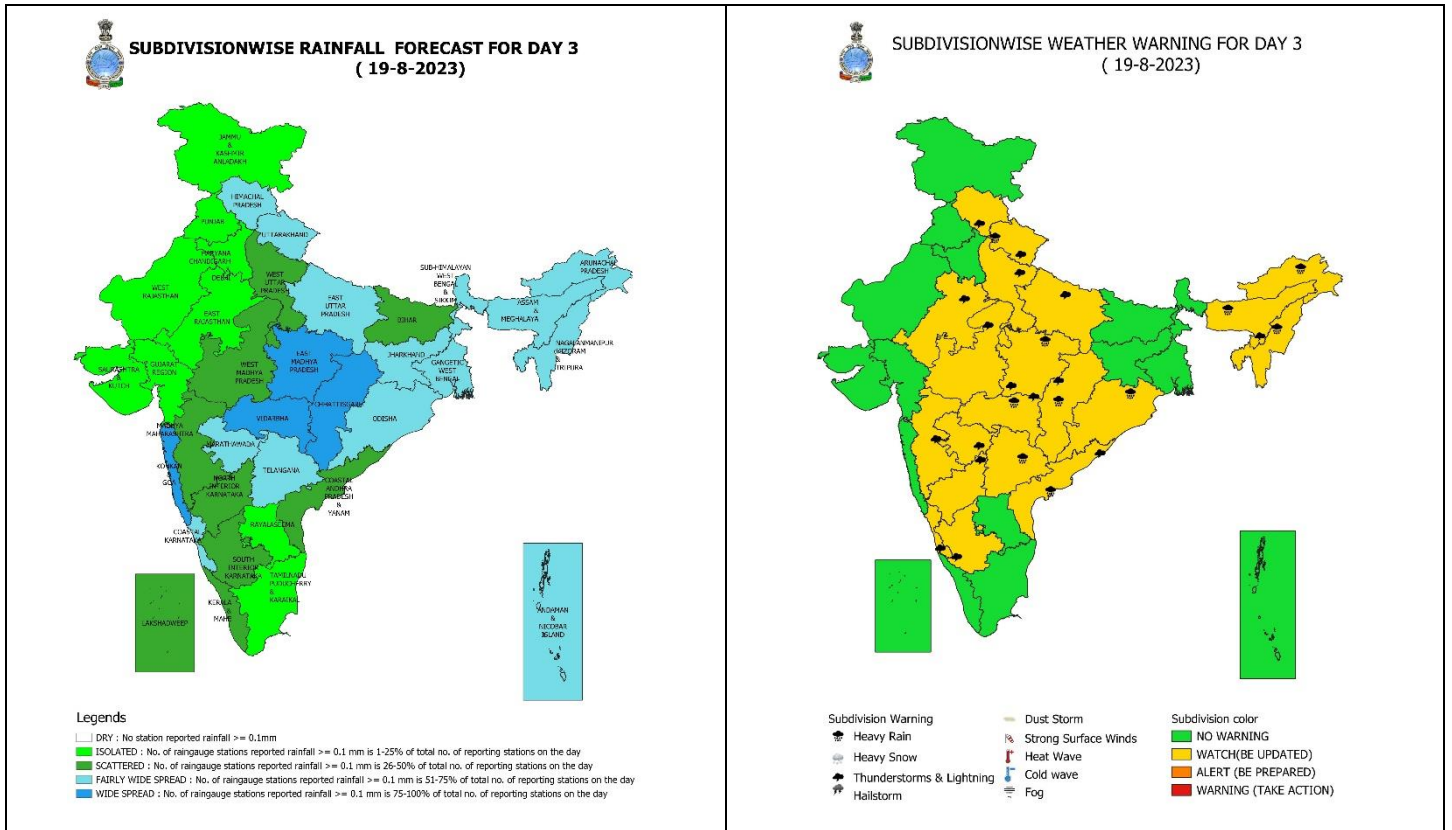
17 August (Day 1): -

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Odisha; **Heavy rainfall** very likely at isolated places over Chhattisgarh, Jharkhand, West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Thunderstorm with lightning & gusty winds (speed 30-40 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Chhattisgarh, East Madhya Pradesh, Vidarbha, West Bengal & Sikkim, Bihar, Jharkhand, Marathwada, Coastal Andhra Pradesh & Yanam 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. **Squally weather wind speed of 40-45 kmph gusting to 55 kmph** likely over north & Eastcentral Bay of Bengal and north Andaman Sea. **Fishermen are advised not to venture into these areas.**



18 August (Day 2): -

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Odisha; **Heavy rainfall** very likely at isolated places over Uttarakhand, East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Coastal Andhra Pradesh, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Thunderstorm with lightning** very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Chhattisgarh, Madhya Pradesh, Vidarbha, Gangetic West Bengal, Jharkhand, Marathwada, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Karnataka.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Westcentral & adjoining Eastcentral, Southwest and Northwest Arabian Sea. **Squally weather wind speed of 40-45 kmph gusting to 55 kmph** likely over Northwest & Westcentral Bay of Bengal and along & off Odisha coast. **Fishermen are advised not to venture into these areas.**

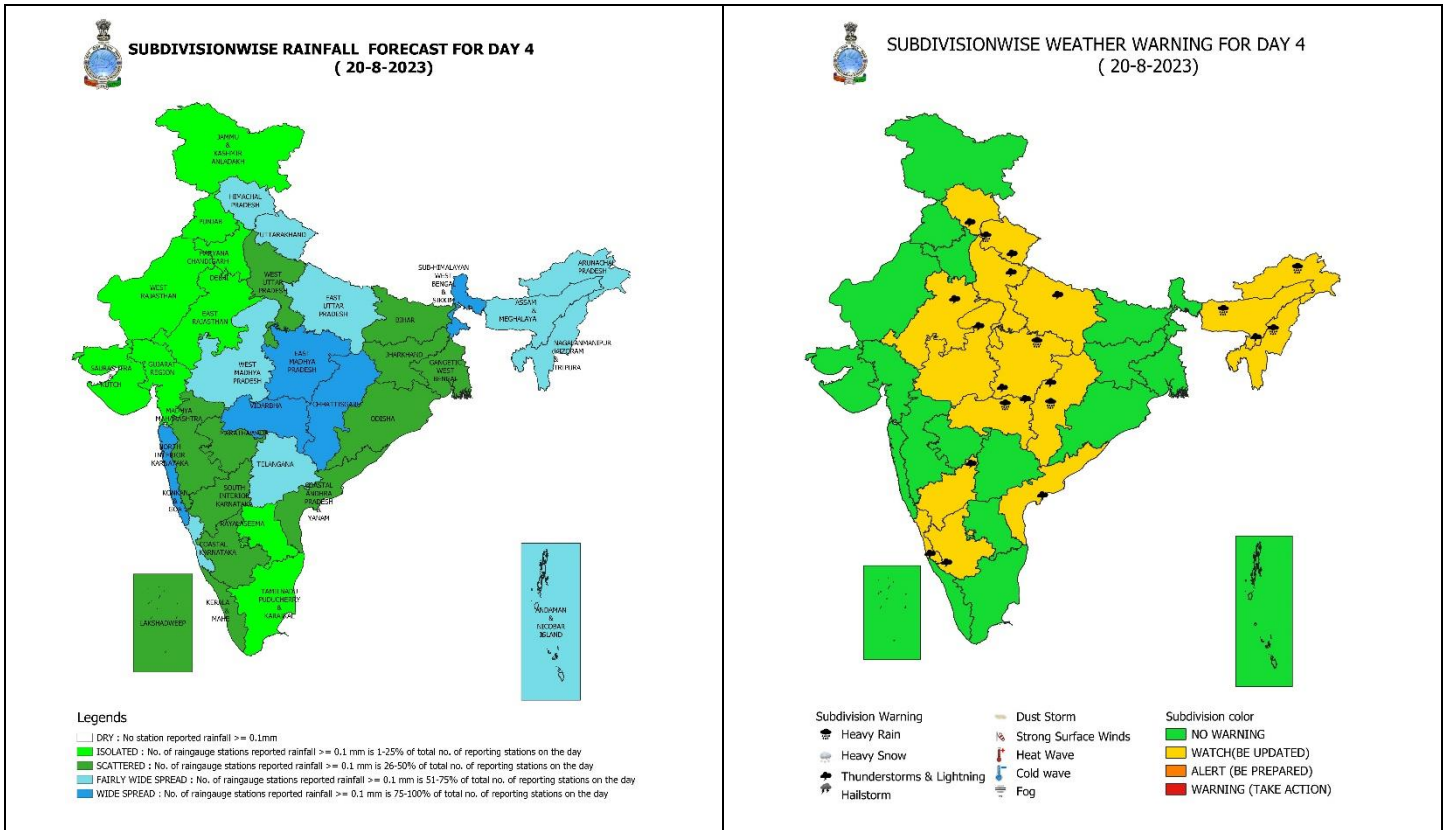


19 August (Day 3): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; **Heavy rainfall** very likely at isolated places over Uttarakhand, East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Coastal Andhra Pradesh, Arunachal Pradesh and Telangana.
- ❖ **Thunderstorm with lightning** likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Chhattisgarh, Madhya Pradesh, Vidarbha, Marathwada, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Karnataka.
- ❖ **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.**

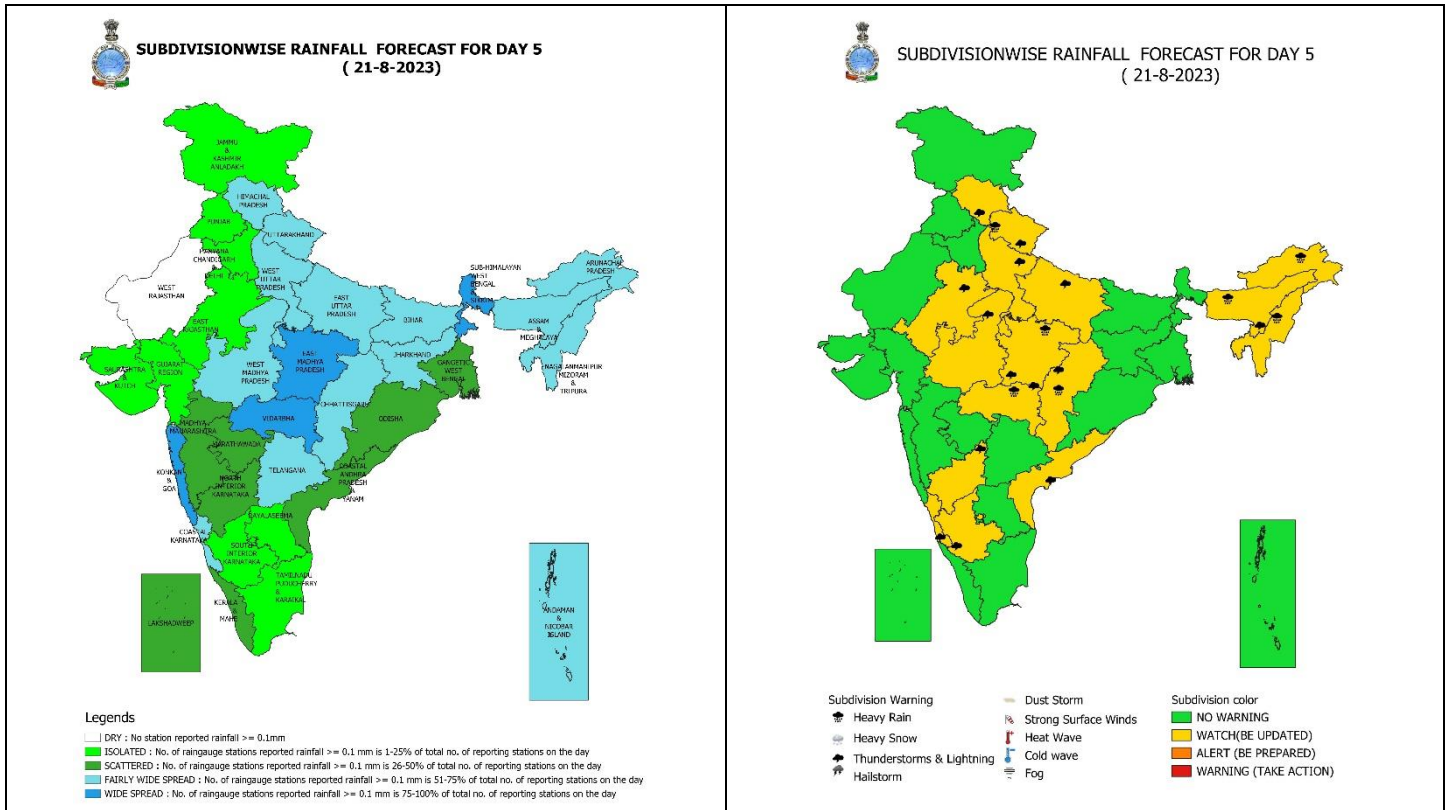
*** Red color warning does not mean "Red Alert" Red color warning means "Take Action".**

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)



20 August (Day 4): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; **Heavy rainfall** very likely at isolated places over Uttarakhand, East Madhya Pradesh, Vidarbha, Chhattisgarh and Arunachal Pradesh.
- ❖ **Thunderstorm with lightning** very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Chhattisgarh, Madhya Pradesh, Vidarbha, Coastal Andhra Pradesh & Yanam and Karnataka.
- ❖ **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.**



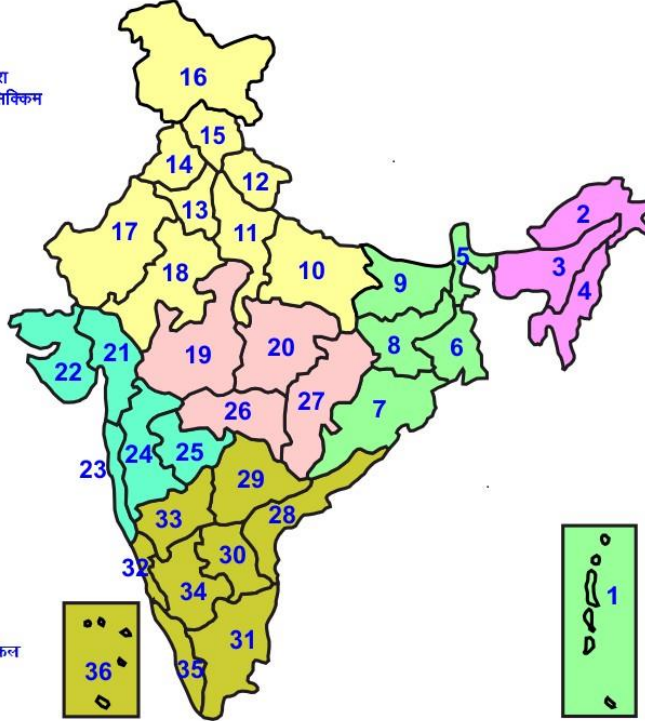
21 August (Day 5): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; **Heavy rainfall** very likely at isolated places over Uttarakhand, East Madhya Pradesh, Vidarbha, Chhattisgarh and Arunachal Pradesh.
- ❖ **Thunderstorm with lightning** very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Chhattisgarh, Madhya Pradesh, Vidarbha, Coastal Andhra Pradesh & Yanam and Karnataka.
- ❖ **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 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 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. Marathwada
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)