



Monday, July 24, 2023
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Significant Weather features:

- ❖ The Monsoon Trough is active and runs to the south of its normal position. The Western end is very likely to shift gradually northwards during next 2-3 days.
- ❖ A cyclonic circulation lies over central Madhya Pradesh in lower & middle tropospheric levels.
- ❖ The shear zone lies roughly along Lat. 20° N between 3.1 & 5.8 km above mean sea level.
- ❖ Another cyclonic circulation lies over south Odisha & neighbourhood in lower tropospheric levels.
- ❖ A cyclonic circulation lies over Westcentral & adjoining Northwest Bay of Bengal between 5.8 & 7.6 km above mean sea level. Under its influence, a Low Pressure Area is likely to form over the same region during next 24 hours.

Weather Forecast and Warning:

Northwest India: Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** is very likely over Himachal Pradesh and East Rajasthan during 24th-28th and over Punjab, Haryana-Chandigarh-Delhi & Uttar Pradesh during 25th-28th; over West Rajasthan on 25th & 26th and Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 26th-28th July, 2023.

Isolated very heavy rainfall also likely over Uttarakhand on 24th July.

Central India: Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** is very likely over the region during 24th-28th July, 2023.

Isolated very heavy rainfall also likely over Chhattisgarh during 26th-28th July, 2023.

West India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy to very heavy rainfall** very likely to continue over Konkan & Goa and ghat areas of Madhya Maharashtra during 24th-28th; over Marathwada on 24th and over Gujarat state on 24th & 25th July, 2023.

South India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam, Telangana, Karnataka and Kerala & Mahe during 24th-28th; over Rayalaseema during 25th-28th and over Tamil Nadu, Puducherry & Karaikal on 24th July, 2023.

Isolated very heavy rainfall very likely over Coastal Karnataka on 24th; over Coastal Andhra Pradesh & Yanam on 24th- 26th and over Telangana during 25th-28th July.

East India: Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over Odisha during 24th-28th and over Andaman & Nicobar Islands on 24th July, 2023.

Isolated very heavy rainfall likely over Odisha during 25th-28th July, 2023.

Northeast India: Light/moderate fairly widespread rainfall very likely over the region. **Isolated heavy rainfall** likely over and Arunachal Pradesh and Assam & Meghalaya during 24th-28th and over Nagaland, Manipur, Mizoram & Tripura during 24th, 26th-28th July, 2023.

Thunderstorm Warning: Light to moderate thunderstorm with lightning likely at isolated places over Central India and parts of Western Himalayan Region during next 05 days and adjoining plains of Northwest India during 25th-28th July, 2023.

* 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 Gujarat state, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka, Kerala & Mahe, Interior Karnataka; **at many places** over Telangana, Rayalaseema, Chhattisgarh, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Assam & Meghalaya; **at a few places** over Marathwada, Vidarbha, Madhya Pradesh, East Rajasthan, Uttarakhand, Gangetic West Bengal; **at isolated places** over West Rajasthan, Jharkhand, Sub-Himalaya West Bengal & Sikkim.
- ❖ **Heavy Rainfall observed** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy rainfall** at isolated places over Madhya Maharashtra.
- ❖ **Significant rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **(in cm): Madhya Maharashtra:** Mahabaleshwar-8, Kolhapur-1; **Coastal Andhra Pradesh & Yanam:** CWC Vishakhapatnam-6; **Coastal Karnataka:** Hohavor, Mangolre-5 each, Karwar-3; **Kerala & Mahe:** Goa-5, Mumbai-2, Ratnagiri-1; **Saurashtra & Kutch:** Varaval-5, Rajkot-3, Dwarka, Naliya-2 each; **Kerala & Mahe:** Kochin-2, Alapuzha-1; **Gujarat Region:** Baroda-2; **Madhya Pradesh:** Hoshangabad-2, Jabalpur-1.
- ❖ **Thunderstorm observed** (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Himachal Pradesh, Rajasthan, West Madhya Pradesh, Saurashtra & Kutch, Assam & Meghalaya, Chhattisgarh, Jharkhand, Gangetic West Bengal, Uttarakhand.
- ❖ **Minimum Temperature Departures (as on 23-07-2023):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at many places over Sub-Himalaya West Bengal & Sikkim; at a few places over Uttarakhand, Uttar Pradesh, Haryana-Chandigarh-Delhi, Madhya Pradesh, Chhattisgarh and Assam & Meghalaya and at isolated places over East Rajasthan, Odisha, Bihar and Tamil Nadu, Puducherry & Karaikal. They were **below normal (-1.6°C to -3.0°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Rajasthan, Gujarat Region, Telangana and Andaman & Nicobar Islands and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 20.0°C** was reported at **Khandwa (West Madhya Pradesh)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 23-07-2023):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at many places over Sub-Himalaya West Bengal & Sikkim; at a few places over Bihar, Assam & Meghalaya; at isolated places over East Uttar Pradesh, East Madhya Pradesh; **above normal (1.6°C to 3.0°C)** at most places over Punjab; at many places over West Uttar Pradesh, Uttarakhand; at a few places over West Madhya Pradesh, Gangetic West Bengal, Odisha and at isolated places over Haryana-Chandigarh-Delhi. They were **appreciably below normal (-3.1°C to -5.0°C)** at many places over Rayalaseema; at a few places over Telangana, Coastal Andhra Pradesh & Yanam, North Interior Karnataka, Saurashtra & Kutch and at isolated places over Tamil Nadu, Puducherry & Karaikal; **below normal (-1.6°C to -3.0°C)** at most places over Coastal Karnataka; at a few places over Gujarat Region, Konkan & Goa, Kerala & Mahe, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 38.8°C** was reported at **Phalodi (West Rajasthan)**.



Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Monsoon Trough at mean sea level now passes through Jaisalmer, Jodhpur, Kota, Guna, Sagar, Jabalpur, Raipur, Puri and thence east-southeastwards to Eastcentral Bay of Bengal and extends upto 1.5 km above mean sea level.
- ❖ The cyclonic circulation over central Madhya Pradesh extending upto 7.6 km above mean sea level tilting southwards with height persists.
- ❖ The cyclonic circulation over South Odisha & neighbourhood at 3.1 km above mean sea level persists.
- ❖ The shear zone roughly along Lat. 20° N between 3.1 & 5.8 km above mean sea level persists.
- ❖ A cyclonic circulation lies over Westcentral & adjoining Northwest Bay of Bengal between 5.8 & 7.6 km above mean sea level. Under its influence, a Low Pressure Area is likely to form over the same region during next 24 hours.

Weather Forecast for next 5 days (Upto 0830 hours IST of 29th July, 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 west coast, northwest, east and central India and isolated to scattered rainfall over rest parts of the country.



Table-1

7 Days Rainfall Forecast

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

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

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Fig. 1: Maximum Temperatures Dated 23.07.2023

Fig. 2: Departure of Maximum Temp. Dated 23.07.2023

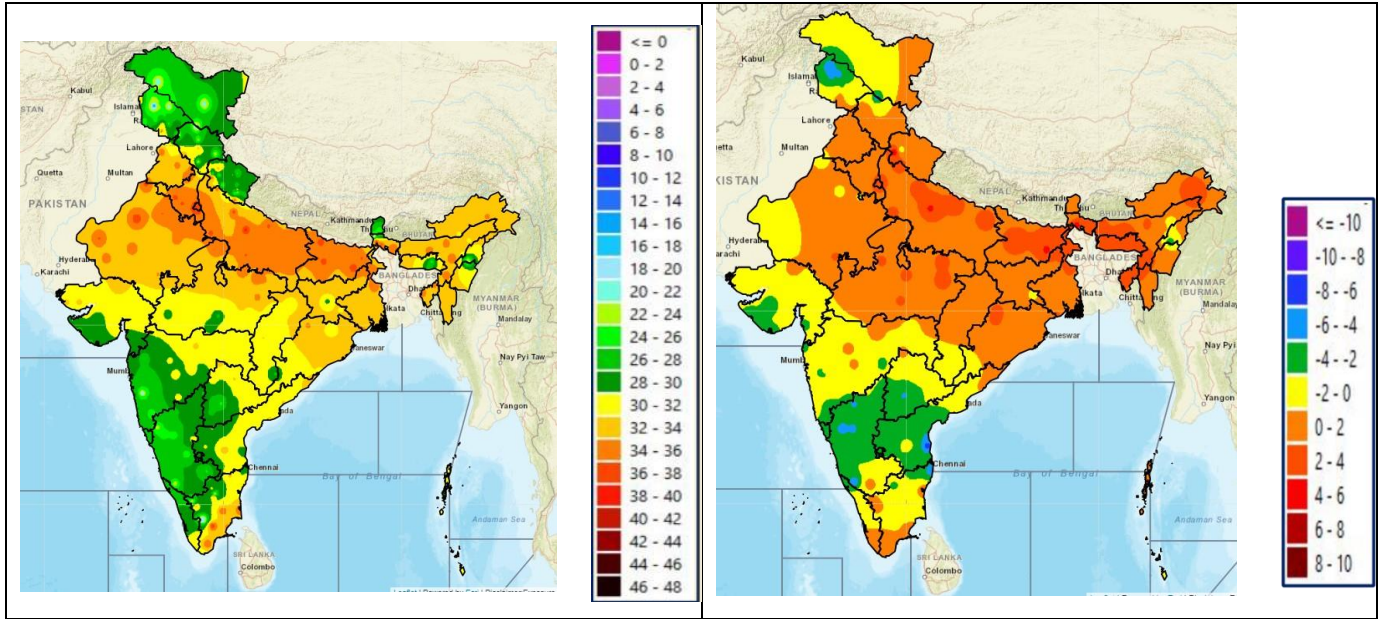
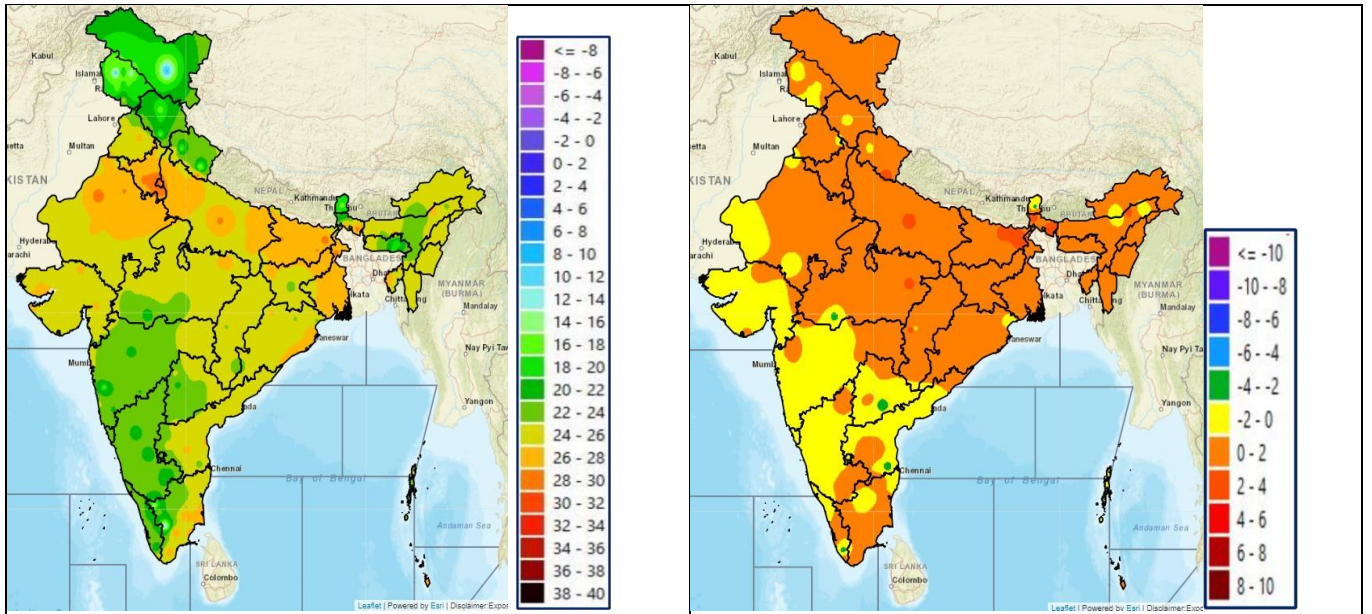


Fig. 3: Minimum Temperatures Dated 23.07.2023

Fig. 4: Departure of Minimum Temp. Dated 23.07.2023

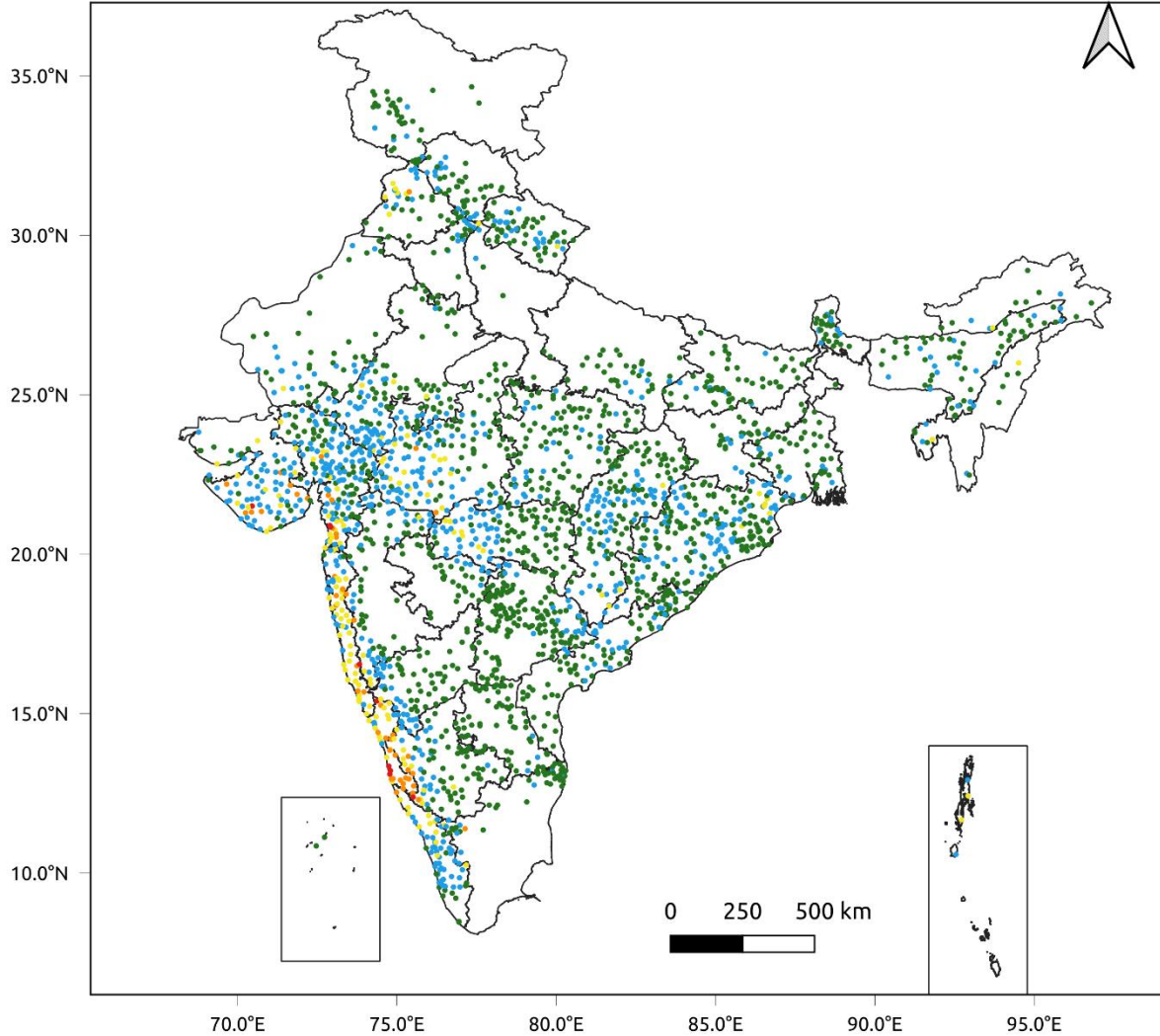


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Fig. 5: Accumulated Rainfall (mm) during past 24 hours

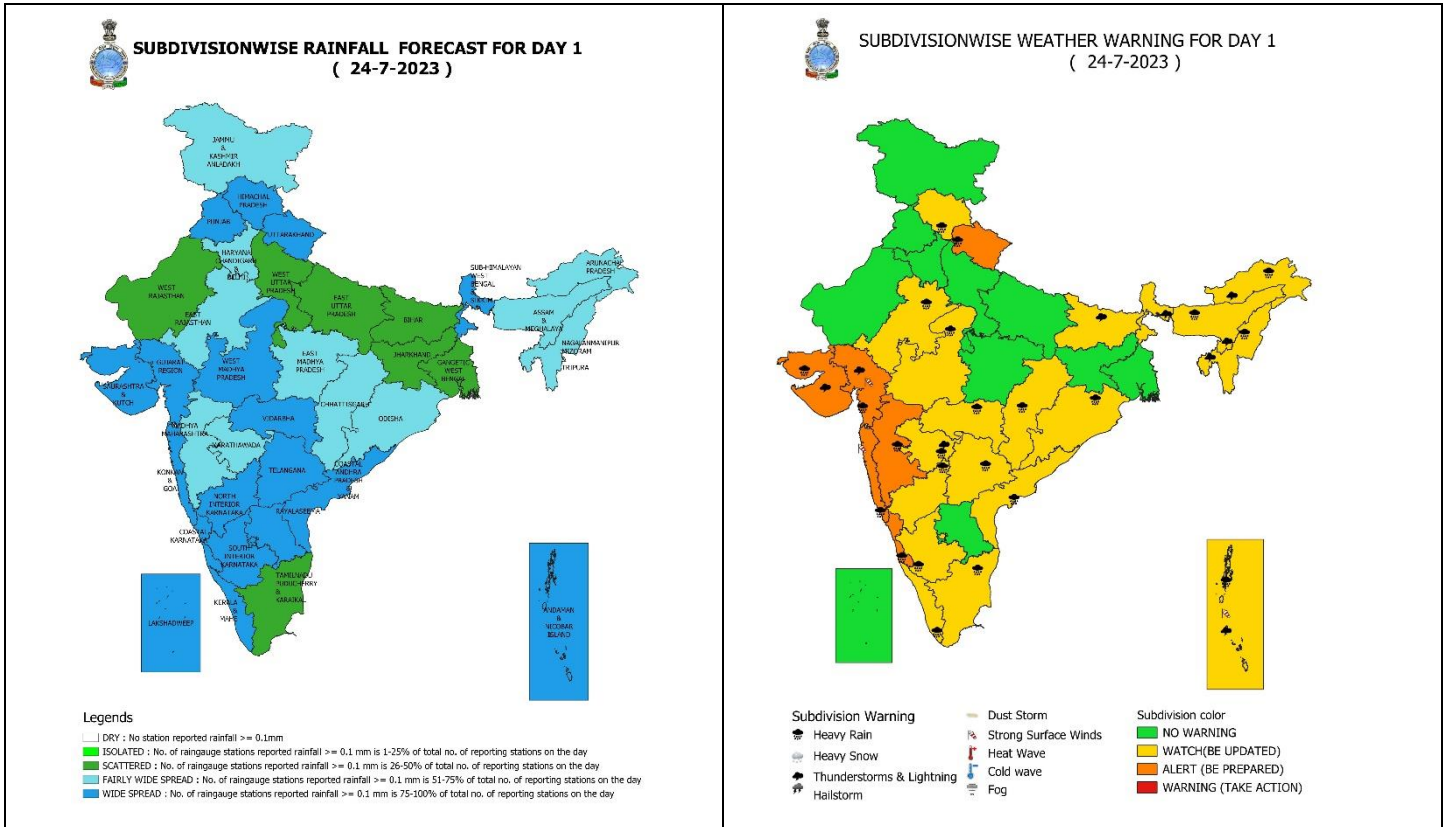


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 22-7-2023 to 0830 IST of 23-7-2023



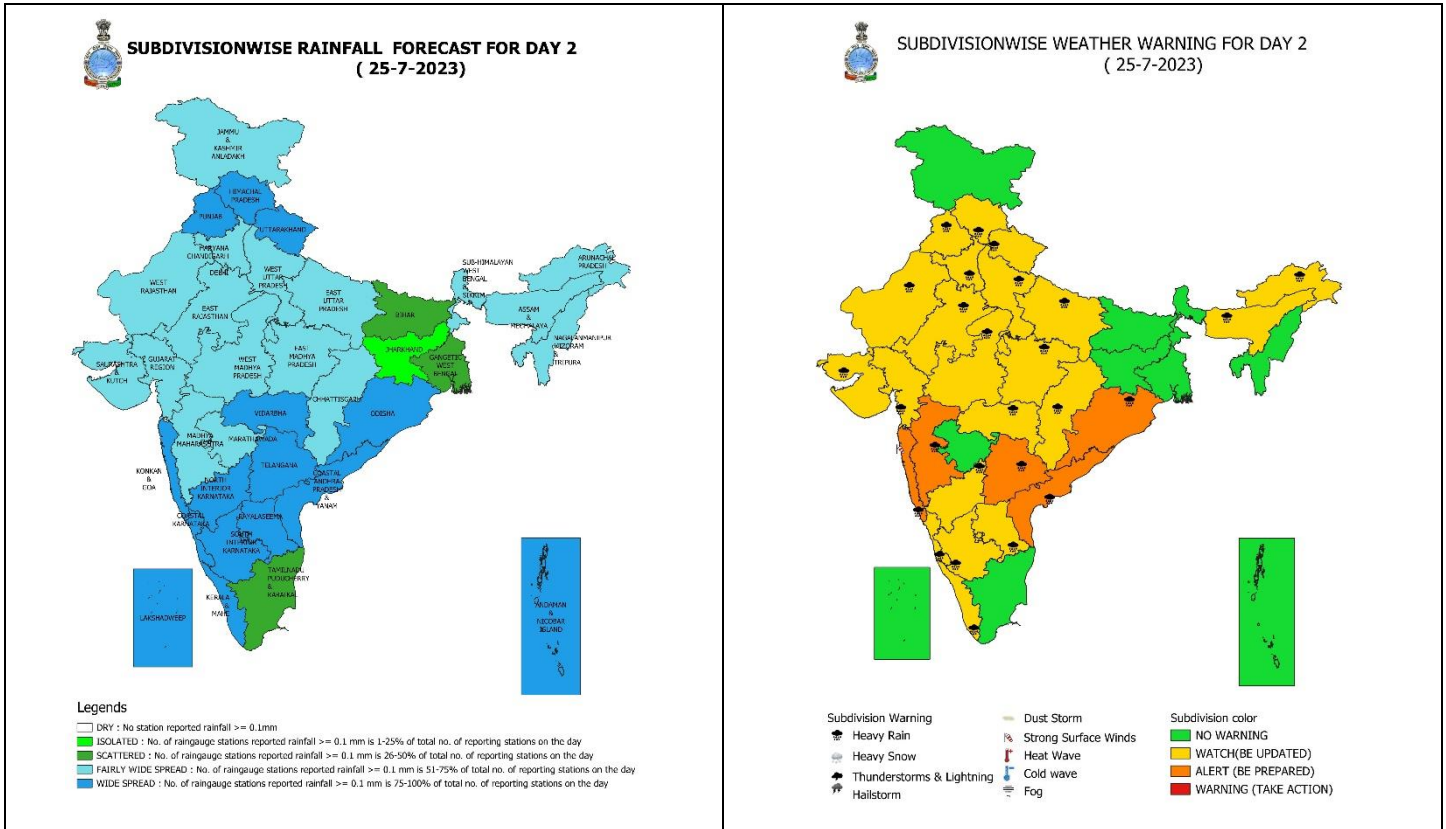
Legends

- 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)



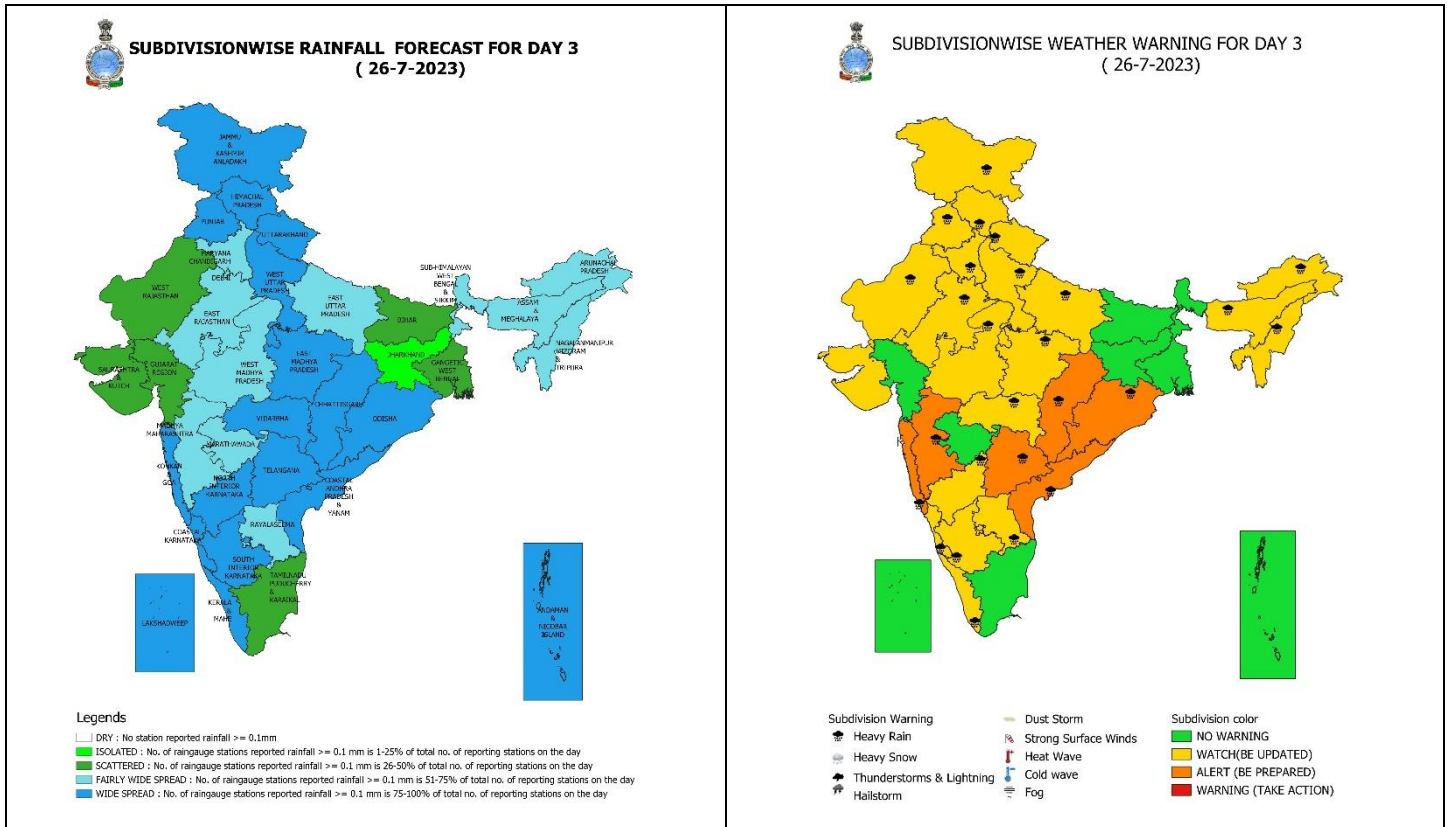
24 July (Day 1):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Uttarakhand, Konkan & Goa, Madhya Maharashtra, Gujarat state and Coastal Karnataka; **heavy rainfall** at isolated places over Himachal Pradesh, East Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Odisha, Arunachal Pradesh, Assam & Meghalaya, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Thunderstorm with Gusty winds speed 30-40 kmph** at isolated places over Andaman & Nicobar Islands; **with lightning** at isolated places over Sub-Himalaya West Bengal & Sikkim, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Gujarat state.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** over Central & adjoining Southwest Arabian Sea and wind speed reaching 55-65 kmph gusting to 75 kmph over Westcentral & adjoining Southwest Arabian Sea. **Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph** over Northeast & Eastcentral Arabian Sea along & off south Gujarat and Maharashtra coasts. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** along & off Kerala & Karnataka coasts and Gulf of Mannar. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** over Southwest, Westcentral & Northwest Bay of Bengal and along & off Tamil Nadu, Andhra Pradesh & adjoining south Odisha coasts.



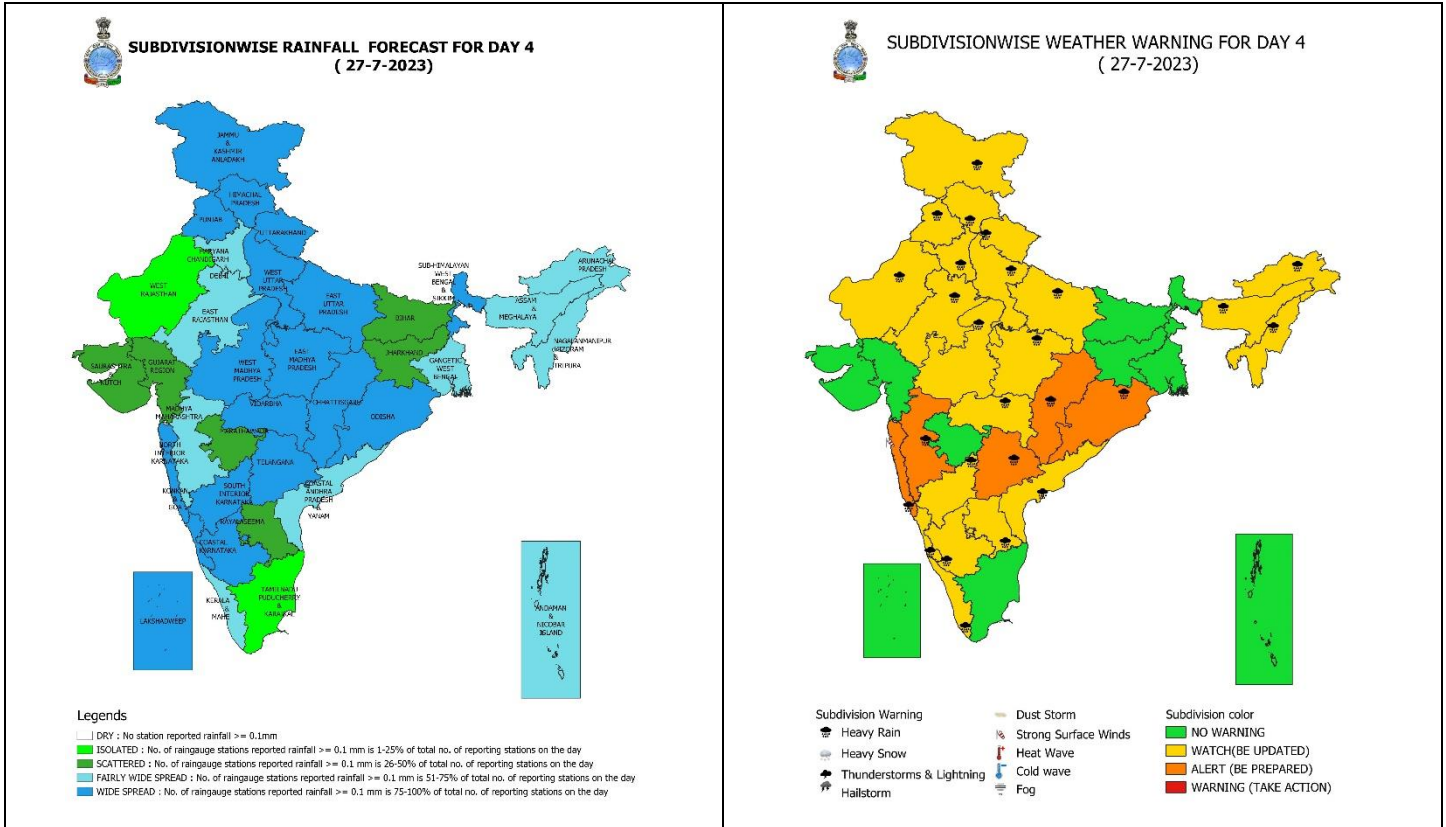
25 July (Day 2):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Odisha, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Telangana; **heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Gujarat state, Rayalaseema, Karnataka and Kerala & Mahe.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** over Central & adjoining Southwest Arabian Sea and wind speed reaching 55-65 kmph gusting to 75 kmph over Westcentral & adjoining Southwest Arabian Sea. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** along & off south Gujarat, Maharashtra, Karnataka & Kerala coasts and Gulf of Mannar. **Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph** over Westcentral Bay of Bengal and wind speed reaching 40-45 kmph gusting to 55 kmph over Southwest, Westcentral & Northwest Bay of Bengal and along & off Andhra Pradesh & adjoining south Odisha coasts.



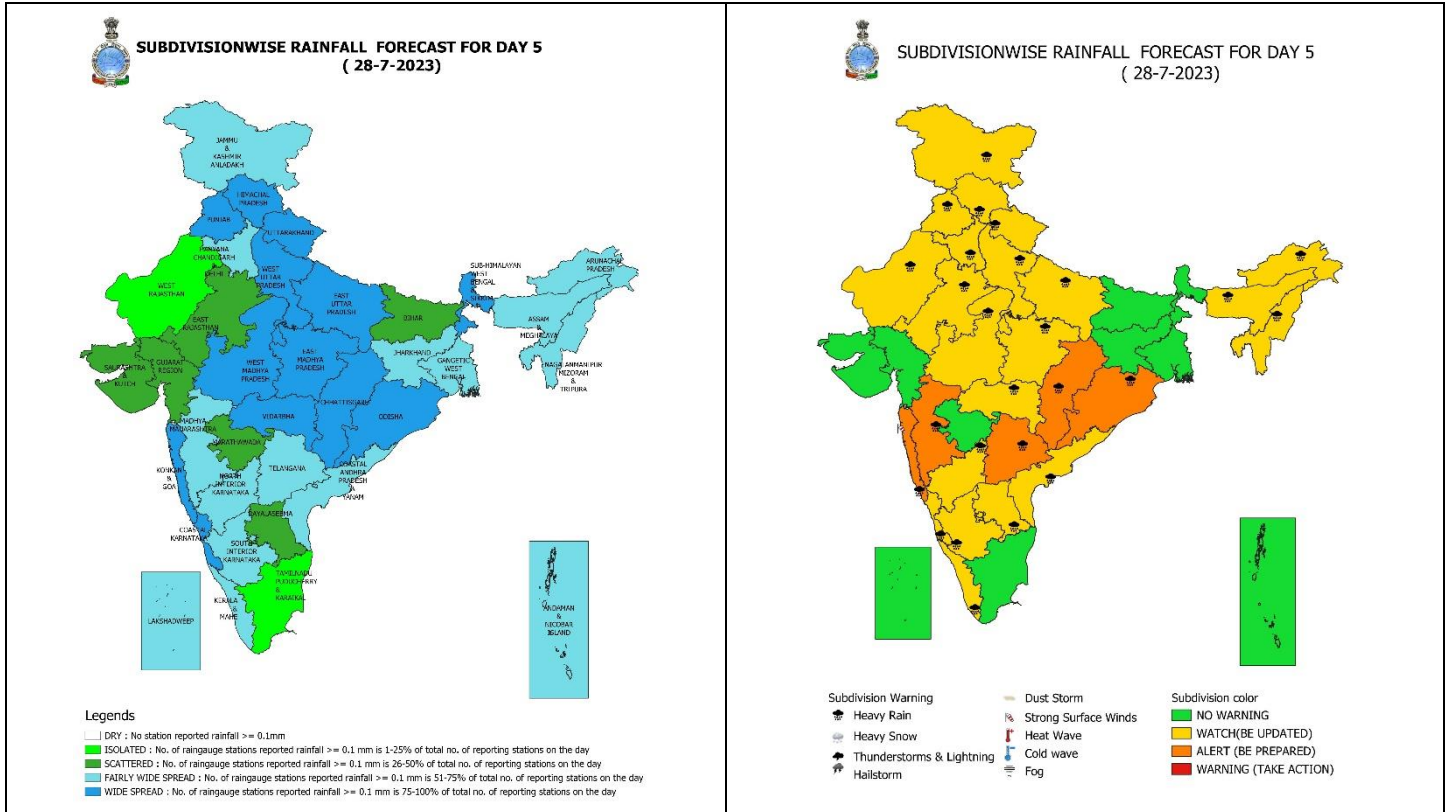
26 July (Day 3):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Chhattisgarh, Odisha, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Telangana; **heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Arunachal Pradesh, Assam & Meghalaya, Rayalaseema, Karnataka and Kerala & Mahe.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** over Central & adjoining Southwest Arabian Sea and wind speed reaching 55-65 kmph gusting to 75 kmph over Westcentral & adjoining Southwest Arabian Sea. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** along & off south Gujarat, Maharashtra, Karnataka & Kerala coasts and Gulf of Mannar. **Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph** over Westcentral & adjoining Northwest Bay of Bengal and wind speed reaching 40-45 kmph gusting to 55 kmph over Southwest, Westcentral & Northwest Bay of Bengal and along & off Andhra Pradesh & adjoining south Odisha coasts.



27 July (Day 4):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Chhattisgarh, Odisha, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Telangana; **heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Arunachal Pradesh, Assam & Meghalaya, Rayalaseema, Karnataka and Kerala & Mahe.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** over Central & adjoining Southwest Arabian Sea and wind speed reaching 55-65 kmph gusting to 75 kmph over Westcentral & adjoining Southwest Arabian Sea. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** along & off south Gujarat, Maharashtra, Karnataka & Kerala coasts and Gulf of Mannar. **Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph** over Westcental & adjoining Northwest Bay of Bengal and along & off Andhra Pradesh & adjoining south Odisha coasts and wind speed reaching 40-45 kmph gusting to 55 kmph over Southwest Bay of Bengal.



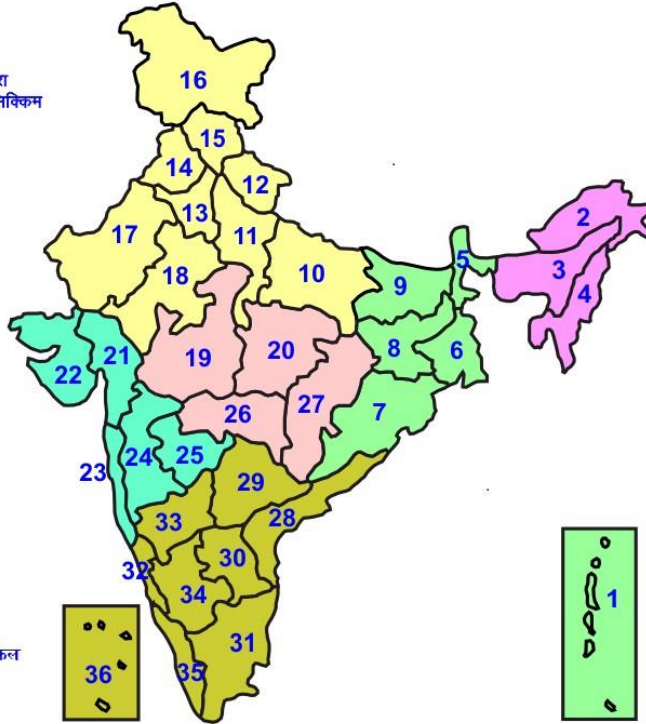
28 July (Day 5):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Chhattisgarh, Odisha, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Telangana; **heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Arunachal Pradesh, Assam & Meghalaya, Rayalaseema, Karnataka and Kerala & Mahe.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** over Central & adjoining Southwest Arabian Sea and wind speed reaching 55-65 kmph gusting to 75 kmph over Westcentral & adjoining Southwest Arabian Sea. **Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph** along & off south Gujarat, Maharashtra, Karnataka & Kerala coasts and Gulf of Mannar. **Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph** over Westcentral & adjoining Northwest Bay of Bengal and along & off Andhra Pradesh & adjoining south Odisha coasts and wind speed reaching 40-45 kmph gusting to 55 kmph over Southwest Bay of Bengal.



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 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

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

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LEGENDS

WARNING

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

Probabilistic Forecast

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



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 $< 1\text{km}$

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)