

Thursday, July 25, 2024  
Time of Issue: 0800 hours IST  
(MORNING)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems

- ✓ A **cyclonic circulation** lies over Jharkhand & neighbourhood in lower & middle tropospheric levels tilting southwards with height.
- ✓ The **Monsoon trough** is active and lies near to its normal position. It is likely to continue to near its normal position during next 4-5 days.
- ✓ The **shear zone** lies in lower & middle tropospheric levels along 21°N tilting southwards with height.
- ✓ The **off-shore trough** at mean sea level along South Gujarat-north Kerala coasts.
- ✓ A **cyclonic circulation** lies over north Gujarat in lower tropospheric levels.

### Forecast & Warnings:

#### ❖ West & Central India

- ✓ Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm & lightning very likely over the region during next 5 days.
- ✓ **Isolated extremely heavy rainfall very likely over Madhya Maharashtra, Gujarat State and Konkan & Goa on 25<sup>th</sup> July.**
- ✓ **Very heavy rainfall very likely at isolated places over Madhya Pradesh on 25<sup>th</sup>; Konkan & Goa on 26<sup>th</sup> & 27<sup>th</sup>, Madhya Maharashtra on 26<sup>th</sup> & 27<sup>th</sup>; Gujarat State during 26<sup>th</sup> - 29<sup>th</sup> July.**
- ✓ **Heavy rainfall** very likely at isolated places over Marathwada on 25<sup>th</sup>; Vidarbha on 25<sup>th</sup> & 26<sup>th</sup>; Madhya Pradesh, Chhattisgarh, Konkan & Goa, Madhya Maharashtra during 25<sup>th</sup>-29<sup>th</sup> July.

#### ❖ Northwest India

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm & lightning** very likely over Himachal Pradesh, Uttarakhand and Scattered to fairly widespread rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh, Uttar Pradesh, Rajasthan during next 5 days.
- ✓ Isolated **heavy rainfall** very likely over Himachal Pradesh, Uttarakhand, East Rajasthan during 25<sup>th</sup>-29<sup>th</sup>; Punjab, Haryana-Chandigarh, southeast Uttar Pradesh on 25<sup>th</sup>; West Uttar Pradesh during 25<sup>th</sup>-27<sup>th</sup> July.

#### ❖ South Peninsular India:

- ✓ Scattered to fairly widespread light to moderate rainfall accompanied with thunderstorm & lightning very likely over Kerala & Mahe, Karnataka, Lakshadweep, Telangana and isolated to scattered rainfall over Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu, Puducherry & Karaikal during next 5 days.
- ✓ **Very heavy rainfall very likely at isolated places over Coastal Karnataka on 25<sup>th</sup> July.**
- ✓ **Heavy rainfall** very likely at isolated places over Telangana on 25<sup>th</sup>; north Coastal Andhra Pradesh & Yanam, Interior Karnataka on 25<sup>th</sup> & 26<sup>th</sup>; Kerala & Mahe, Coastal Karnataka during 25<sup>th</sup>-27<sup>th</sup> July.

#### ❖ East & Northeast India

- ✓ Fairly widespread to widespread light to moderate rainfall with **accompanied with thunderstorm, lightning** very likely over East & Northeast India during next 5 days.
- ✓ **Very heavy rainfall very likely at isolated places over Odisha on 25<sup>th</sup> & 26<sup>th</sup> July.**
- ✓ Isolated **heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim and Odisha during 27<sup>th</sup>-29<sup>th</sup> July.

## Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at most places** over Konkan & Goa, Vidarbha; **at many places** over Marathwada, Telangana, Madhya Pradesh, Andaman & Nicobar Islands, Gujarat state; **a few places** over Madhya Maharashtra, North Interior Karnataka, Odisha, East Uttar Pradesh, Bihar, Gangetic West Bengal; **at isolated places** over South Interior Karnataka, Coastal Karnataka, Coastal Andhra Pradesh & Yanam, West Uttar Pradesh, Rajasthan, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Jharkhand, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Haryana-Chandigarh-Delhi, Uttarakhand.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy to very heavy rainfall with extremely heavy falls at isolated places** over Gujarat Region; **Heavy rainfall** at isolated places over Madhya Maharashtra, Vidarbha, East Madhya Pradesh.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Gujarat Region:** Vadodara 35, Bulsar 3, Surat 3, Valsad 3; **Madhya Maharashtra:** Mahabaleshwar 9, Satara 3; **East Madhya Pradesh:** Tikamgarh 9, Sagar 6, Umaria 4; **Vidarbha:** Wardha 7, Chandrapur 4, Gadchiroli 3; **Konkan & Goa:** Dahanu 6, Matheran 3, Tibia 2, Harnai 2, Ratnagiri 2; Odisha: Koraput 5, Nabarangpur 5, Nuapada 3, Sambalpur 3, **West Uttar Pradesh:** Jhansi 4, Shahajanapur 4; **Chhattisgarh:** Durg 4, Bilaspur 3, Rajnandgaon 2; **Kerala & Mahe:** Kasaragod 3, Kannur 2;
- ❖ **Minimum Temperature Departures (as on 24-07-2024):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at most places over Andaman & Nicobar Islands; at a few places over West Bengal & Sikkim, Assam & Meghalaya and Coastal Andhra Pradesh & Yanam; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, Rajasthan, East Madhya Pradesh, Uttar Pradesh, Bihar, Kerala & Mahe and Rayalaseema. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Telangana and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature** of 18.0°C was reported at **Yeotmal (Vidarbha)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 24-07-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh, East Uttar Pradesh, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe; **above normal (1.6°C to 3.0°C)** at isolated places over Punjab, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim. These were **Markedly below normal (-5.1 or less)** at isolated places over Telangana; **appreciably below normal (-3.1°C to -5.0°C)** at **many places** over Vidarbha, Odisha; **at a few places** over Madhya Pradesh; at isolated places over Madhya Maharashtra, Gujarat state, North Interior Karnataka; **below normal (-1.6°C to -3.0°C)** at **a few places** over **Coastal Andhra Pradesh & Yanam, Rayalaseema**; at isolated places over North Interior Karnataka and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature** of 39.0°C was reported at **Jaisalmer (West Rajasthan)** over the country.

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

- ❖ The **cyclonic circulation** over Jharkhand & neighbourhood extending upto 7.6 km above mean sea level tilting southwards with height persists.
- ❖ The **Monsoon trough** at mean sea level continues to pass through Bikaner, Sikar, Gwalior, Khajuraho, Daltonganj, Canning and thence east-southeastwards to Northeast Bay of Bengal.
- ❖ The **cyclonic circulation** over Northeast Assam extending upto 1.5 km above mean sea level persists.
- ❖ The **shear zone** roughly along 21°N between 4.5 & 7.6 km above mean sea level tilting southwards with height persists.
- ❖ The **off-shore trough** at mean sea level along South Gujarat-north Kerala coasts persists.
- ❖ The **cyclonic circulation** over north Gujarat & neighbourhood at 3.1 km above mean sea level persists.

### Weather Forecast for next 7 days (Upto 0830 hours IST of 01<sup>st</sup> August, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Thunderstorm/lightning likely at isolated places over West, south Peninsular India and East & Northeast India region for next 4-5 days.
- ❖ No significant change in maximum temperatures very likely over most parts of the country.

### Weather Outlook for subsequent 3 days (During 01<sup>st</sup> August -03<sup>rd</sup> August, 2024)

- ❖ Fairly widespread to widespread rainfall likely over most parts of the country except Tamil Nadu, Puducherry & Karaikal and Rayalaseema where isolated to scattered rainfall likely.

Table-1

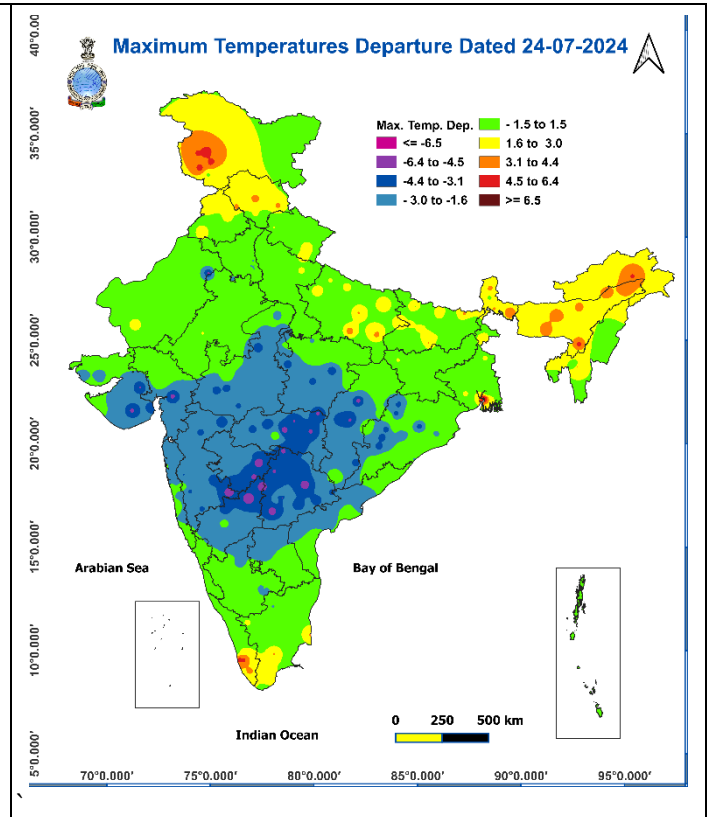
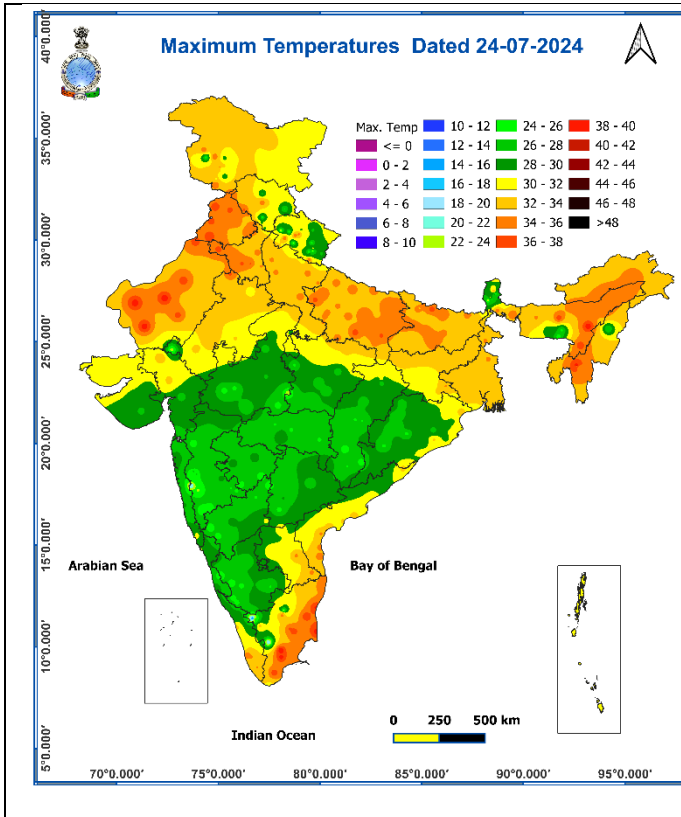
7 Days Rainfall Forecast								
S. No.	Subdivision	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	FWS	WS	WS	WS	WS	FWS	FWS
2	ARUNACHAL PRADESH	SCT	SCT	FWS	FWS	FWS	FWS	FWS
3	ASSAM & MEGHALAYA	SCT	SCT	FWS	FWS	FWS	SCT	SCT
4	NAGALAND,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

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**Fig. 1: Maximum Temperatures**

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



**Fig. 3: Minimum Temperatures**

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

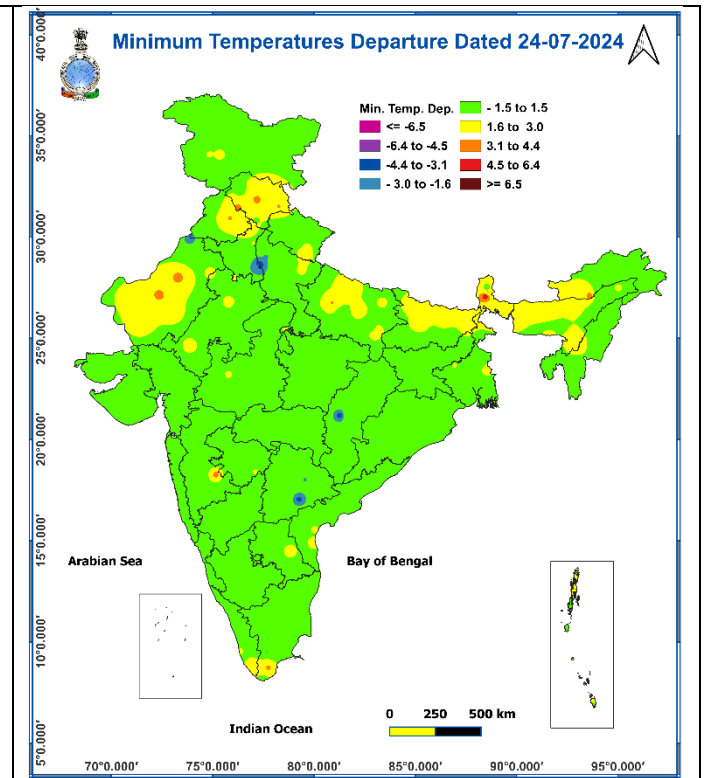
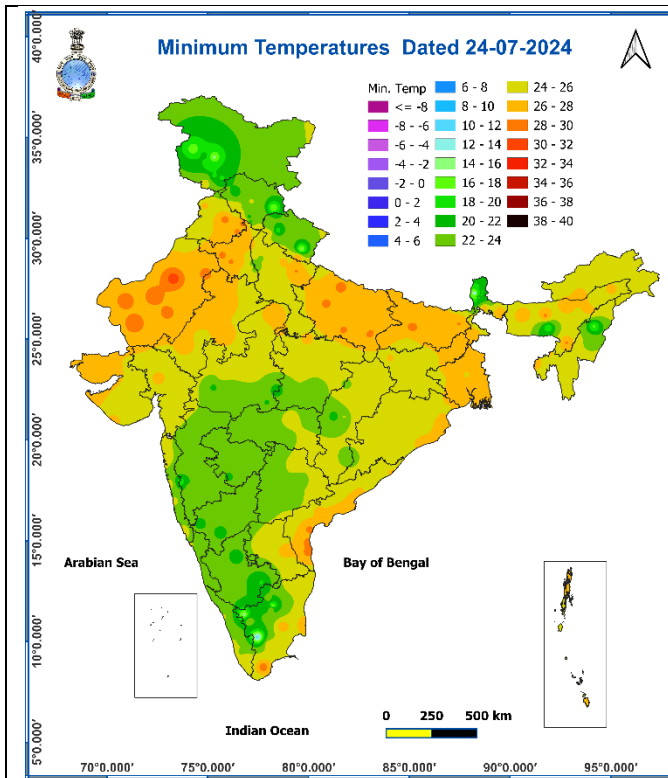
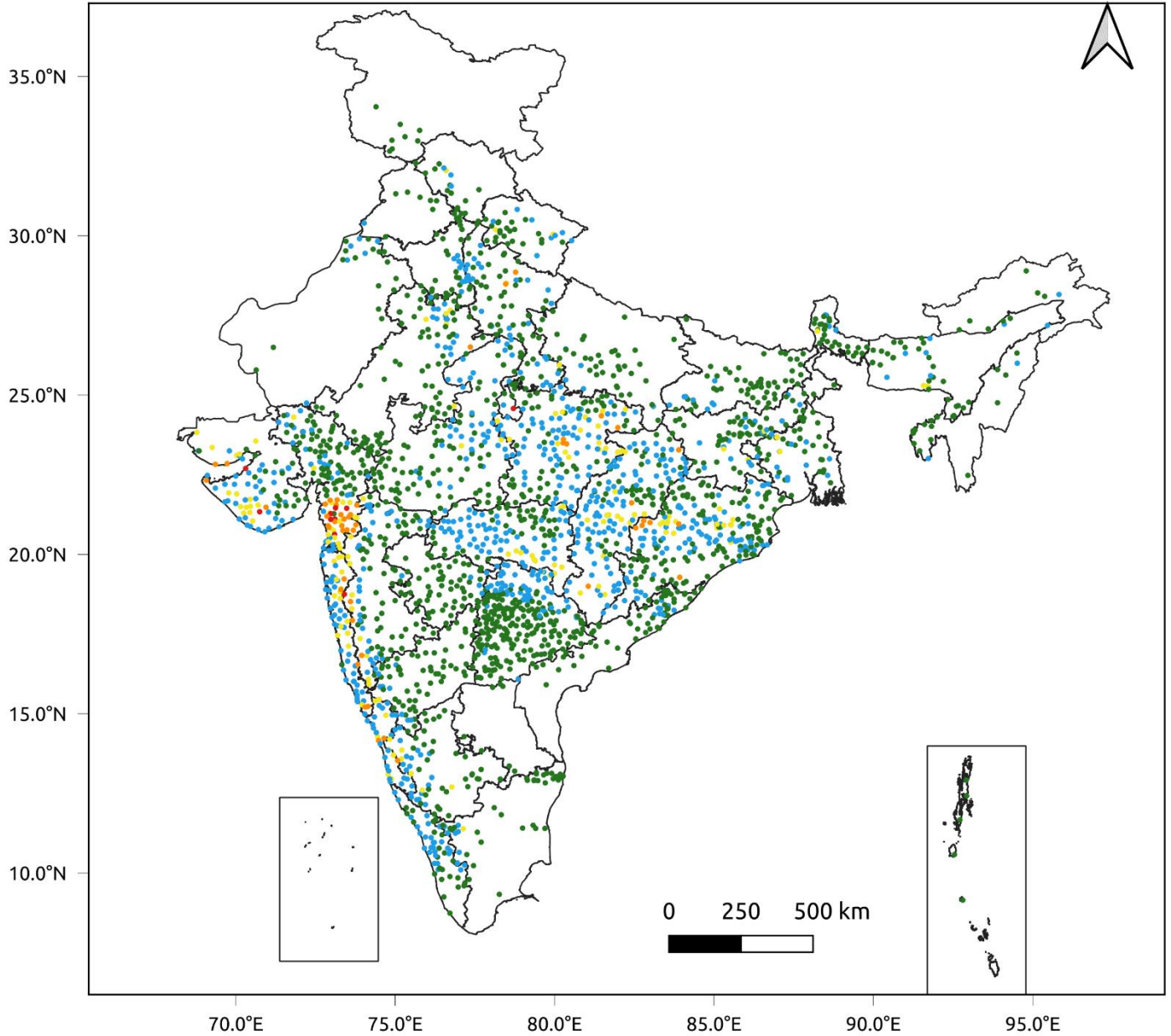


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

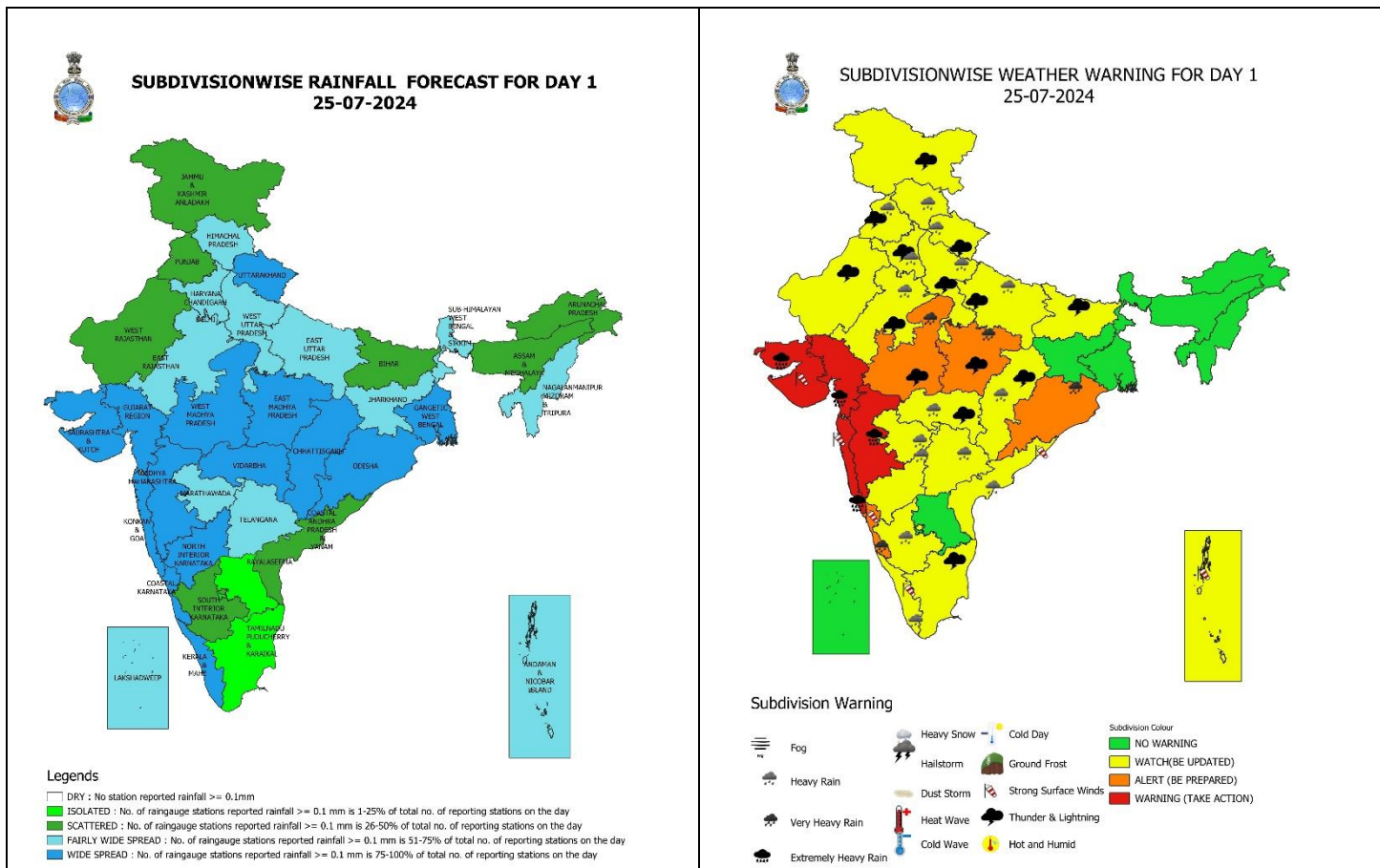


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 23-7-2024 to 0830 IST of 24-7-2024



## Legends

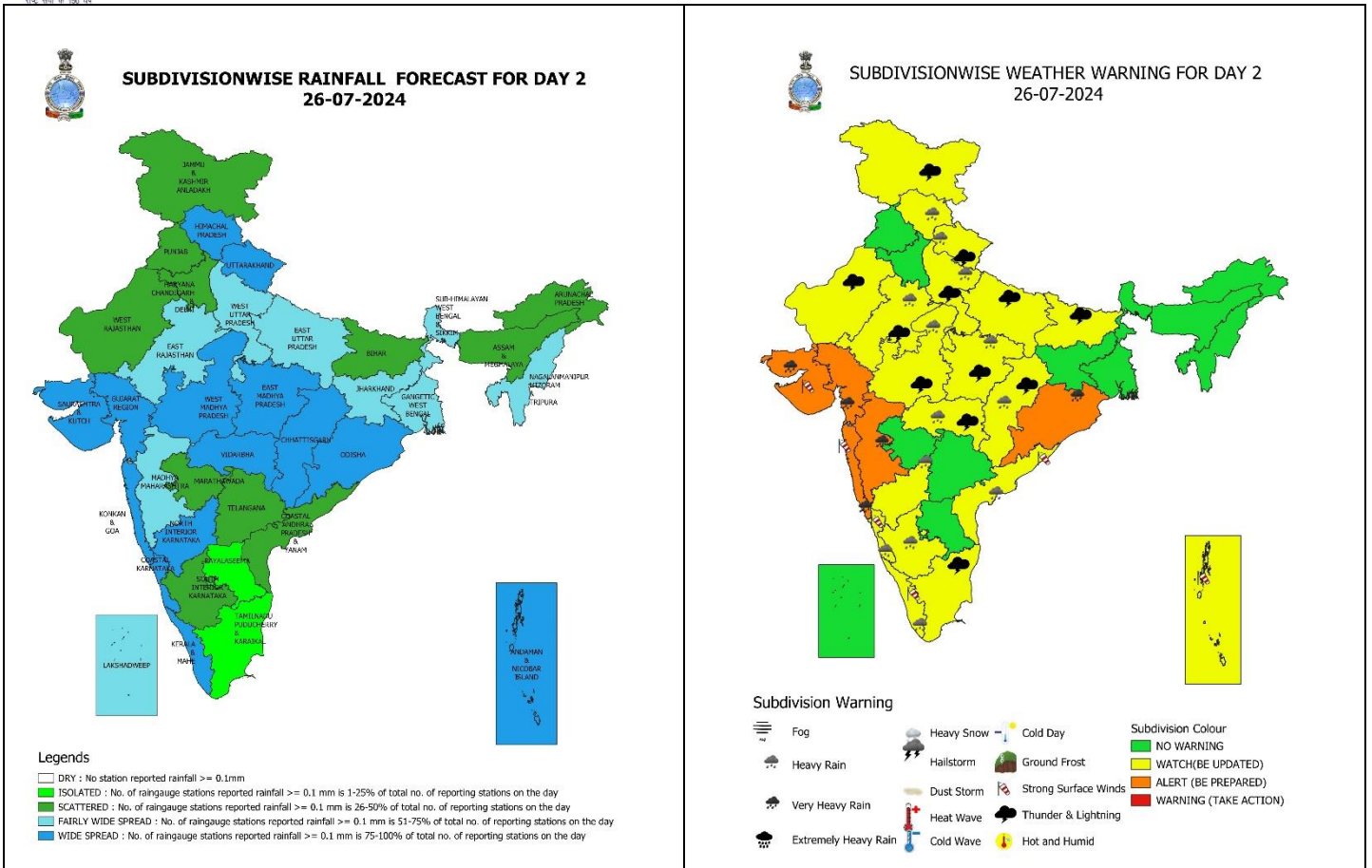
- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall ( $\geq 204.5$  mm)



**25 July (Day 1):**

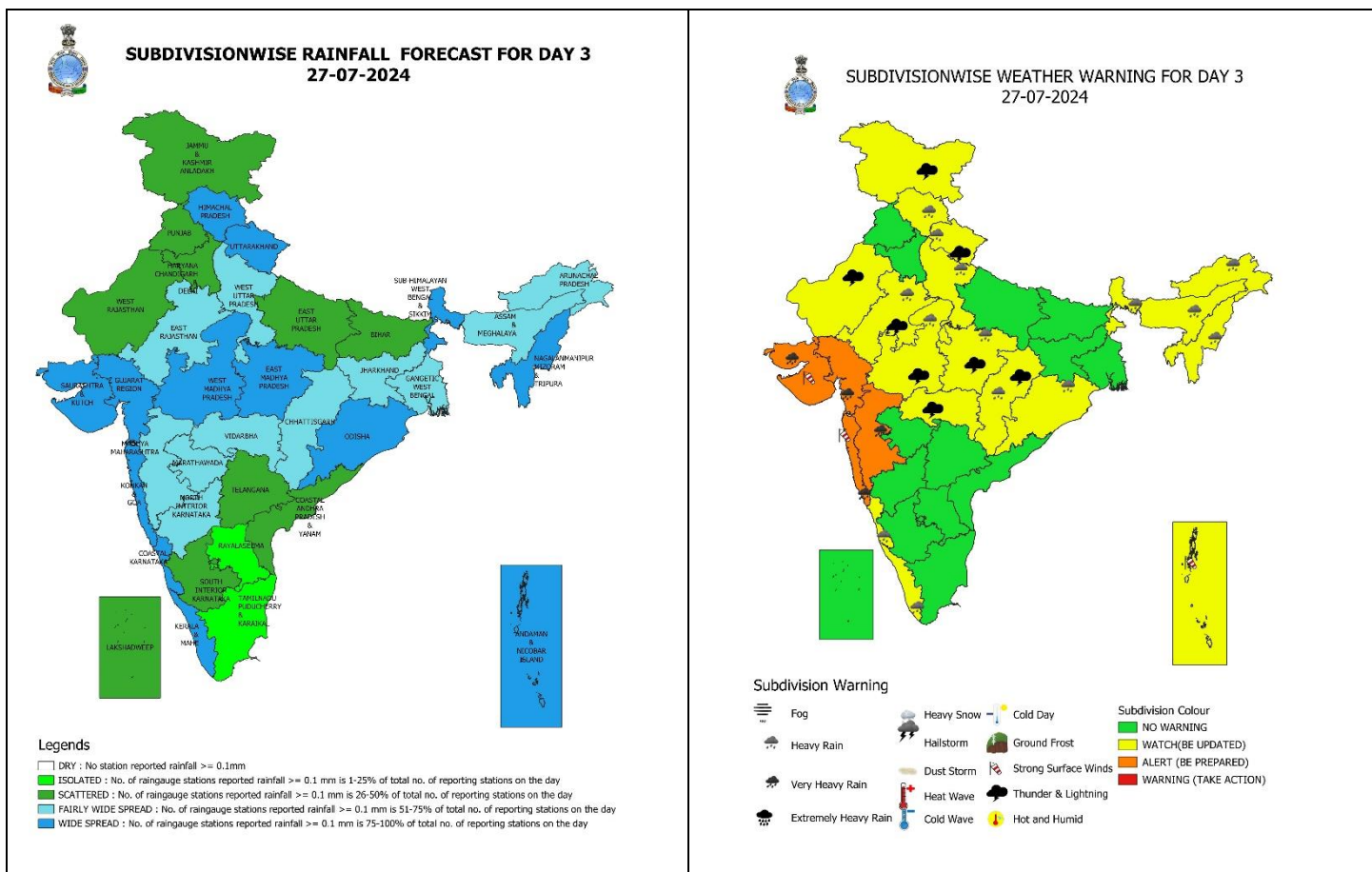
- ❖ **Heavy to very heavy rainfall with extremely heavy falls ( $\geq 20$  cm)** very likely at isolated places over Madhya Maharashtra, Gujarat state and Konkan & Goa; **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Madhya Pradesh, Odisha and Coastal Karnataka; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh, Uttar Pradesh, East Rajasthan, Vidarbha, Chhattisgarh, Marathwada, Kerala & Mahe, north Coastal Andhra Pradesh & Yanam, Telangana and Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over northeast and adjoining northwest Arabian sea, most parts of east central & many parts of west central Arabian sea, northern parts of southeast and southwest Arabian sea, along and off Karnataka, north Kerala coasts, over Lakshadweep area, gulf of Mannar, off Sri Lanka coast, over many parts of south & most parts of central Bay of Bengal & many parts of north Bay of Bengal, along and off north Andhra Pradesh coast, off Odisha coasts. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over most parts of central Bay of Bengal, northern parts of south Bay of Bengal, north Andaman Sea. **Squally weather with wind speed reaching 50 kmph to 60 kmph gusting to 70 kmph** very likely to prevail along and off Gujarat adjoining northeast Arabian sea, Maharashtra, Konkan, Goa, coasts. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over central Arabian sea & adjoining areas of southeast and southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

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**26 July (Day 2):**

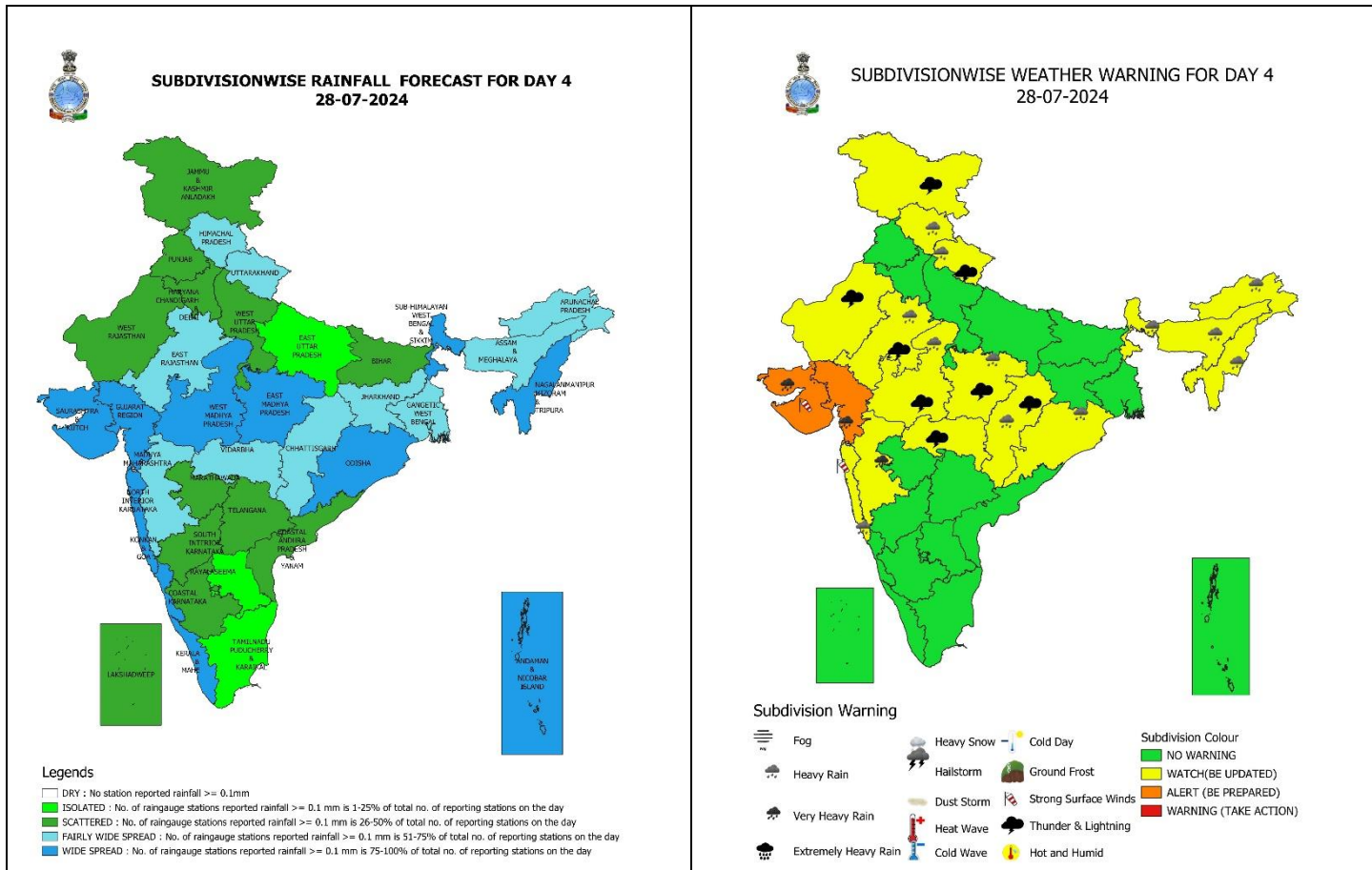
- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** very likely at isolated places over Odisha, Konkan & Goa, Madhya Maharashtra, and Gujarat State; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Kerala & Mahe, north Coastal Andhra Pradesh & Yanam and Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over northeast and adjoining northwest Arabian sea, most parts of east central & many parts of west central Arabian sea, northern parts of southeast and southwest Arabian sea, along and off Karnataka, north Kerala coasts, over Lakshadweep area, gulf of Mannar, off Sri Lanka coast, over many parts of south & most parts of central Bay of Bengal & southern parts of north Bay of Bengal, north Andaman sea, along and off north Andhra Pradesh, off Odisha coasts. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail along and off Gujarat coast adjoining northeast Arabian sea, along and off Maharashtra, Konkan, goa, coasts, many parts of central Bay of Bengal & southern parts of northwest Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over central Arabian sea & adjoining areas of southeast and southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.



**27 July (Day 3):**

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** very likely at isolated places over Konkan & Goa, Madhya Maharashtra and Gujarat State; Heavy rainfall ( $\geq 7$  cm) at isolated places over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe and Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Rajasthan, Madhya Pradesh and Chhattisgarh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over northeast and adjoining northwest Arabian sea, most parts of east central & many parts of west central Arabian sea, northern parts of southeast and southwest Arabian sea, along and off Gujarat coast adjoining northeast Arabian sea, along and off Karnataka coasts, gulf of Mannar, off Sri Lanka coast, over many parts of south & most parts of central Bay of Bengal & southern parts of northwest Bay of Bengal, north Andaman sea, off north Andhra Pradesh, Odisha coasts. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail along and off Gujarat coast adjoining northeast Arabian sea, along and off Maharashtra, Konkan, Goa coasts, over parts of central Bay of Bengal & southern parts of northwest Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over central Arabian sea & adjoining areas of southeast and southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

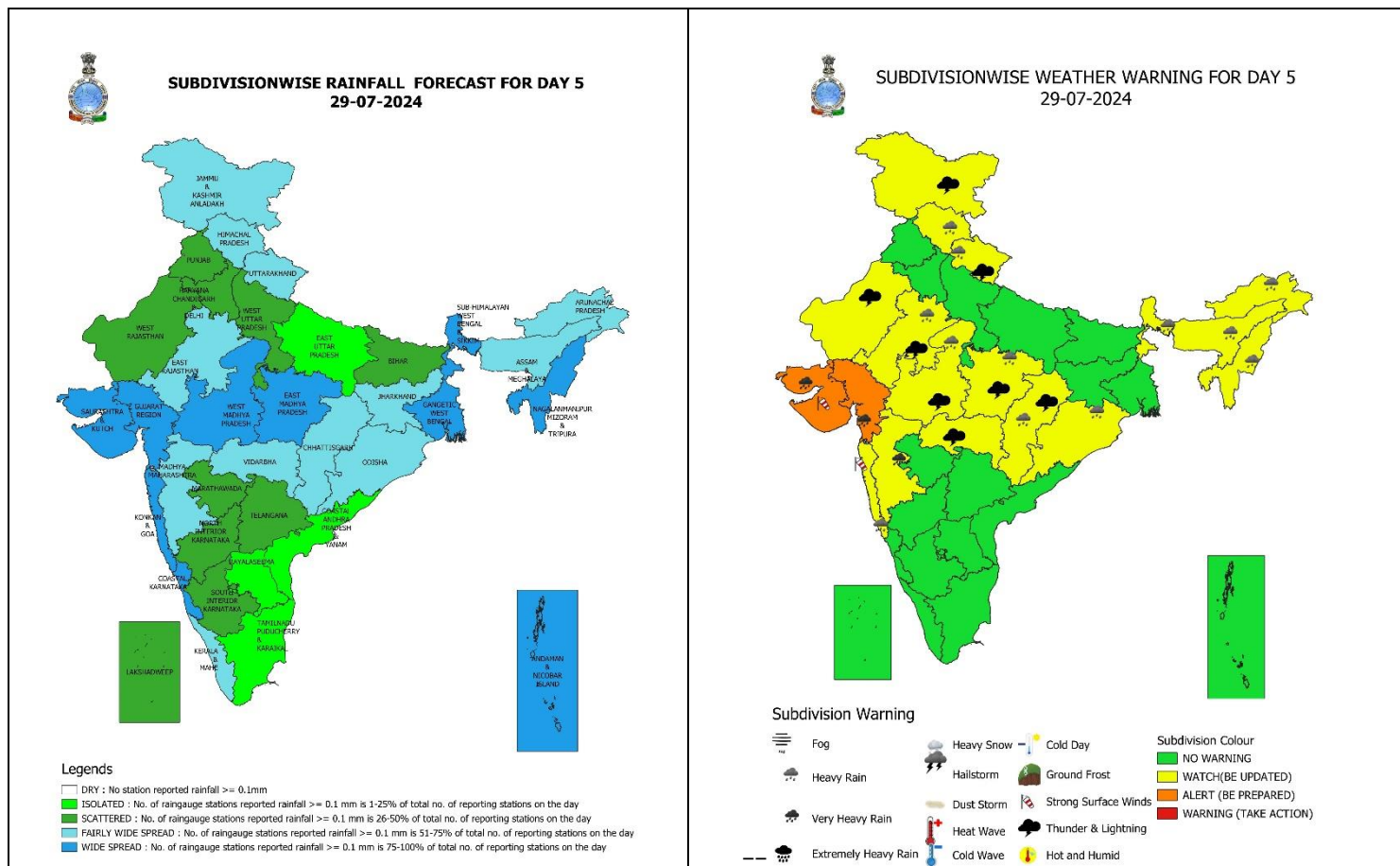
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**28 July (Day 4):**

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Gujarat State; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Himachal Pradesh, Uttarakhand, East Rajasthan, Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Konkan & Goa, Madhya Maharashtra, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Rajasthan, Madhya Pradesh, Vidarbha and Chhattisgarh.

**Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of east central & many parts of west central Arabian sea, northern parts of southeast and southwest Arabian sea, along and off Gujarat coast adjoining northeast Arabian sea, along and off Maharashtra, Konkan, Goa, Karnataka coasts, gulf of Mannar, off Sri Lanka coast, over many parts of south & most parts of central Bay of Bengal & southern parts of northwest Bay of Bengal, north Andaman sea, off north Andhra Pradesh, Odisha coasts. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over parts of central Bay of Bengal & southern parts of northwest Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southeast and southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

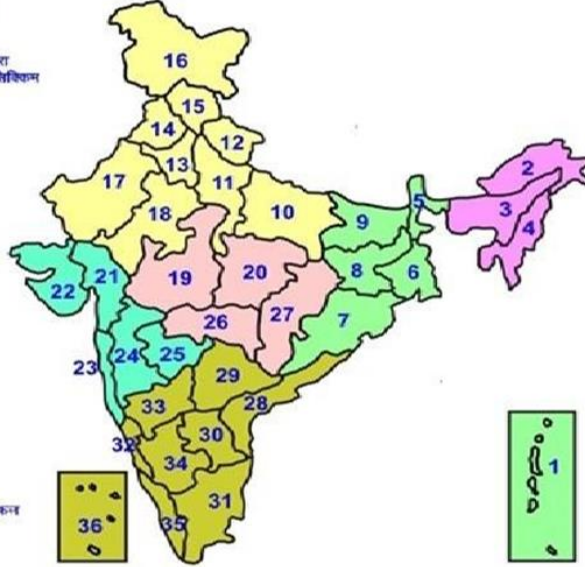


**29 July (Day 5):**

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Gujarat State; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Himachal Pradesh, Uttarakhand, East Rajasthan, Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Konkan & Goa, Madhya Maharashtra, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Rajasthan, Madhya Pradesh, Vidarbha and Chhattisgarh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of east central & many parts of west central Arabian sea, northern parts of southeast and southwest Arabian sea, along and off Gujarat coast adjoining northeast Arabian sea, along and off Maharashtra, Konkan, goa, Karnataka coasts, gulf of Mannar, off Sri Lanka coast, over many parts of south & most parts of central Bay of Bengal & southern parts of northwest Bay of Bengal, north Andaman sea, off north Andhra Pradesh, Odisha coasts. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over parts of central Bay of Bengal & southern parts of northwest Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southeast and southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. 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, मणिपुर, मिजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा, चंडीगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात
- 22 सौराष्ट्र
- 23 कोंकण एवं कच्छ
- 24 मध्य प्रदेश
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 उत्पी आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 रायलसेमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 उत्तर कर्नाटक
- 33 उत्तर कर्नाटक
- 34 दक्षिण कर्नाटक
- 35 केरल एवं माहे
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathwada
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. 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

## 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  $4.5^\circ\text{C}$  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 Storm: Wind speed  $> 220$  kmph ( $> 119$  knots)