

Monday, June 24, 2024
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Advance of Southwest Monsoon:

- ❖ Northern Limit of Monsoon continues to pass through 20.5°N/60°E, 20.5°N/63°E, 20.5°N/70°E, Veraval, Rajpipla, Ujjain, Vidisha, Siddhi, Chaibasa, Haldia, Pakur, Sahibganj and Raxaul.
- ❖ Conditions are favourable for further advance of Southwest Monsoon into some more parts of North Arabian Sea and Gujarat State; some more parts of Madhya Pradesh; remaining parts of Chhattisgarh, West Bengal, Jharkhand and Bihar; some parts of Uttar Pradesh and Uttarakhand during next 3-4 days.

Weather Systems and Forecast & Warnings:

- ❖ A trough at mean sea level runs off Maharashtra-Kerala coasts. A cyclonic circulation lies over south Chhattisgarh in lower & middle tropospheric levels and a trough runs from this cyclonic circulation to south Maharashtra in lower levels. Under their influence:
 - Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 kmph)** very likely over Konkan & Goa, Madhya Maharashtra & Marathwada, Karnataka, Kerala & Mahe, Lakshadweep, Gujarat state; scattered to fairly widespread light to moderate rainfall over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Tamil Nadu, Puducherry & Karaikal during next 5 days.
 - Isolated **heavy to very heavy rainfall** very likely over Konkan & Goa, Ghat areas of Madhya Maharashtra, Karnataka during next 5 days; over Gujarat Region on 24th; Kerala & Mahe on 24th & 25th and Saurashtra & Kutch, Lakshadweep on 24th; Gujarat Region on 25th; Tamil Nadu on 24th & 25th; Kerala & Mahe on 26th & 27th and over Coastal Andhra Pradesh & Yanam during 25th-27th June, 2024.
 - Fairly widespread to widespread rainfall with **thunderstorm, lightning & gusty winds (40-50 kmph)** very likely over Madhya Pradesh, Vidarbha, Chhattisgarh during next 5 days.
 - Isolated **heavy rainfall** very likely over West Madhya Pradesh on 24th & 27th; East Madhya Pradesh, Chhattisgarh on 26th & 27th and Vidarbha on 27th June.
- ❖ Strong southerly/southwesterly winds prevail in the lower tropospheric levels from the Bay of Bengal into east & northeast India. In the lower tropospheric levels, a cyclonic circulation lies over central Rajasthan and a trough runs from this cyclonic circulation to south Chhattisgarh. Under influence of these systems;
 - Fairly widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Sub-Himalayan West Bengal & Sikkim on 24th; Gangetic West Bengal, Uttar Pradesh during 25th -27th; Bihar, Jharkhand, Odisha during next 5 days.
 - Isolated **heavy to very heavy rainfall** very likely over Andaman & Nicobar Islands on 24th & 25th; Sub-Himalayan West Bengal & Sikkim during 25th - 27th and isolated heavy rainfall over Uttarakhand, East Uttar Pradesh, Bihar, Jharkhand during 25th -27th; West Uttar Pradesh, East Rajasthan, Odisha on 26th & 27th; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 24th & 25th and Arunachal Pradesh on 24th & 26th June.
- ❖ **Maximum temperatures** were in the range of 40-43°C over many parts of Punjab and West Rajasthan; in some parts of Haryana and in isolated pockets of Saurashtra & Kutch and Uttar Pradesh and in the range of 38-40°C over many parts of Delhi; in some parts of East Rajasthan and in isolated pockets of northwest Madhya Pradesh, southwest Bihar, northwest Jharkhand and Coastal Andhra Pradesh & Yanam. **Maximum temperatures** were above normal by 2-4°C over many parts Punjab; over some parts of West Rajasthan, Saurashtra & Kutch, Haryana, Uttar Pradesh, Bihar, Jharkhand, Odisha, Gangetic West Bengal and in isolated pockets over Madhya Pradesh.

Heat Wave warning for next 5 days:

- ❖ **Heat wave conditions** very likely in isolated pockets of Punjab, Haryana, Chandigarh, West Uttar Pradesh on 24th & 25th June and **abate thereafter**.

Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at most places** over Andaman & Nicobar Islands; **at many places** over Delhi and Kerala & Mahe; **at a few places** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Odisha, Chhattisgarh, Vidarbha, Konkan & Goa, Madhya Maharashtra, Marathwada, Lakshadweep and Coastal Karnataka; **at isolated places** over East Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat state, Interior Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Andaman & Nicobar Islands:** Mayabandar-6, Port Blair-3, Hut Bay & Long Island-2 each, Car Nicobar & Nancowry-1 each; **Karnataka:** Mysore-6, Mangalore-4, Honavar-1; **Meghalaya:** Shillong-2; **Gangetic West Bengal:** Kolkata (Alipur)-2, Bagati-1; **Kerala & Mahe:** Kannur-2, Thrissur, Palakkad & Thiruvananthapuram-1 each; **Chhattisgarh:** Raipur-2; **Gujarat:** Keshod-2, Surat-1; **Konkan & Goa:** Matheran-2; **Odisha:** Chandbali-3; **Madhya Pradesh:** Satna-3, Shivpuri-2; **Himachal Pradesh:** Mandi-1; **Delhi-Palam-1;** **Madhya Maharashtra:** Ahmednagar-2, Nashik-1; **Marathwada:** Aurangabad & Bir-1 each; **East Uttar Pradesh:** Varanasi-1; **Lakshadweep:** Minicoy-2; **Tamil Nadu:** Yercaud & Tiruchirapalli-1 each; **Vidarbha:** Amraoti-4, Gondia-1.
- ❖ **Reported maximum wind speed (in knot)** (from 0830 hours IST to 1730 hours IST of yesterday): **Ladakh:** Nyoma-33, Upshi-27; **Uttar Pradesh:** Hamirpur-29, Chitrakoot-25; **Gujarat state:** Rajkot-25, Dhari-24, Dhorela-22; **Haryana:** Hathinkundberaj-26, Rohtak-22; **Madhya Pradesh:** Marukheda-27, Katni-26, Satna-25; **Rajasthan:** Karauli-28, Pratapgarh-25, Fatehpur-23; **Tamil Nadu, Puducherry & Karaikal:** Tuticorin Port-32, Paiyur-26, Thirupathisaram & Namakkal-25, Tirupur & Ramnadu-22 each.
- ❖ **Minimum Temperature Departures (as on 23-06-2024):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Himachal Pradesh, Punjab and Bihar; **above normal (1.6°C to 3.0°C)** at a few places over Gujarat state; at isolated places over Uttarakhand, East Madhya Pradesh, Uttar Pradesh, Haryana-Chandigarh-Delhi, Rajasthan, Gangetic West Bengal, Madhya Maharashtra, North Interior Karnataka, Assam & Meghalaya. These were **below normal (-1.6°C to -3.0°C)** at a few places over Telangana and Lakshadweep; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Madhya Pradesh, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 22.0°C** was reported at **Bulandshahr (West Uttar Pradesh)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 23-06-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at many places over Bihar; at a few places over Punjab, Sub-Himalayan West Bengal & Sikkim and Jharkhand; at isolated places over Gangetic West Bengal, Saurashtra & Kutch and West Rajasthan; **above normal (1.6°C to 3.0°C)** at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Himachal Pradesh, Haryana-Chandigarh, Odisha, Assam & Meghalaya and Arunachal Pradesh; at isolated places over East Rajasthan, Gujarat Region, Madhya Maharashtra and Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Chhattisgarh, East Madhya Pradesh, Vidarbha, Telangana and Coastal Andhra Pradesh & Yanam and **near normal** over rest parts of the country. yesterday, **the highest Maximum Temperature of 43.6°C** was reported at **Jodhpur (West Rajasthan)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ Northern Limit of Monsoon continues to pass through 20.5°N/60°E, 20.5°N/63°E, 20.5°N/70°E, Veraval, Rajpipla, Ujjain, Vidisha, Siddhi, Chaibasa, Haldia, Pakur, Sahibganj and Raxaul.
- ❖ Conditions are favourable for further advance of Southwest Monsoon into some more parts of North Arabian Sea and Gujarat State; some more parts of Madhya Pradesh; remaining parts of Chhattisgarh, West Bengal, Jharkhand and Bihar; some parts of Uttar Pradesh and Uttarakhand during next 3-4 days.
- ❖ The Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 70°E to the north of Lat. 28°N persists.
- ❖ The cyclonic circulation over north Haryana & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over southwest Rajasthan & neighbourhood at 3.1 km above mean sea level persists.
- ❖ The cyclonic circulation over central Rajasthan extending upto 1.5 km above mean sea level persists.
- ❖ The east-west trough from above cyclonic circulation over central Rajasthan to south Chhattisgarh across Madhya Pradesh extending upto 0.9 km above mean sea level persists.
- ❖ The other trough from above cyclonic circulation over central Rajasthan to northeast Arabian Sea at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over central Assam at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over south Chhattisgarh between 1.5 & 7.6 km above mean sea level tilting southwestwards with height persists.
- ❖ The trough from above cyclonic circulation over south Chhattisgarh to south Maharashtra coast at 3.1 km above mean sea level persists.
- ❖ The trough at mean sea level off Maharashtra- Kerala coasts persists.
- ❖ The cyclonic circulation over northeast & adjoining Eastcentral Bay of Bengal between 4.5 & 5.8 km above mean sea level persists.

Weather Forecast for next 7 days (Upto 0830 hours IST of 31st June, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
 - ❖ Thunderstorm accompanied with lightning, very likely at isolated places over south peninsular India during next 5 days.
 - ❖ Rise in maximum temperature by about 2°C very likely over most parts of West Uttar Pradesh, Haryana, Chandigarh, Delhi and Punjab during next 2 days and no significant change thereafter.
 - ❖ No significant change in maximum temperatures very likely over rest parts of the country.

Weather Outlook for subsequent 3 days (During 31st June-02nd July, 2024)

- ❖ Scattered to fairly widespread rainfall likely over Islands, Northeast India, East India, west coast and Peninsular India. Scattered rainfall likely over Northwest, Central India.
- ❖ Mainly dry weather likely to prevail over rest parts of the country.

Table-1

7 Days Rainfall Forecast

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

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

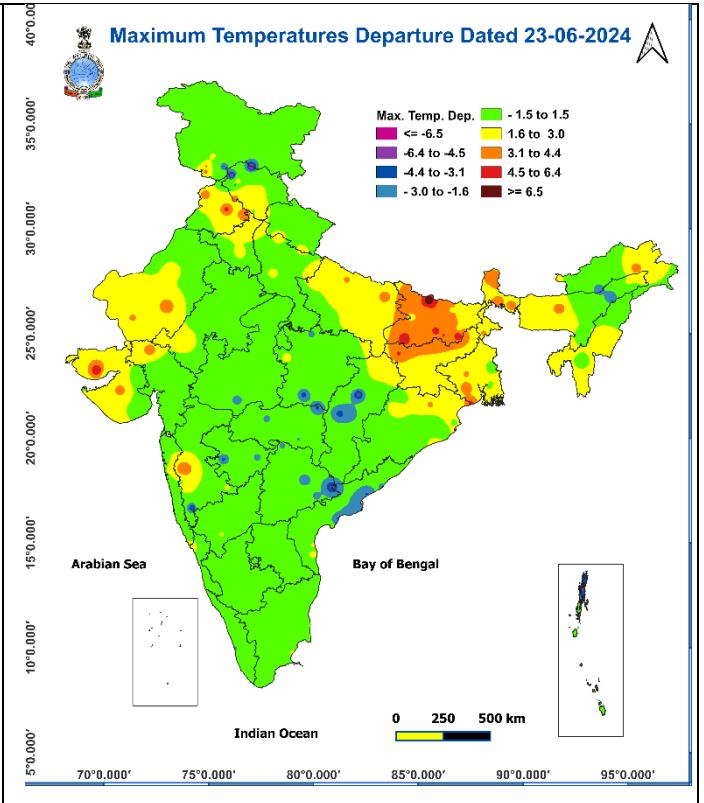
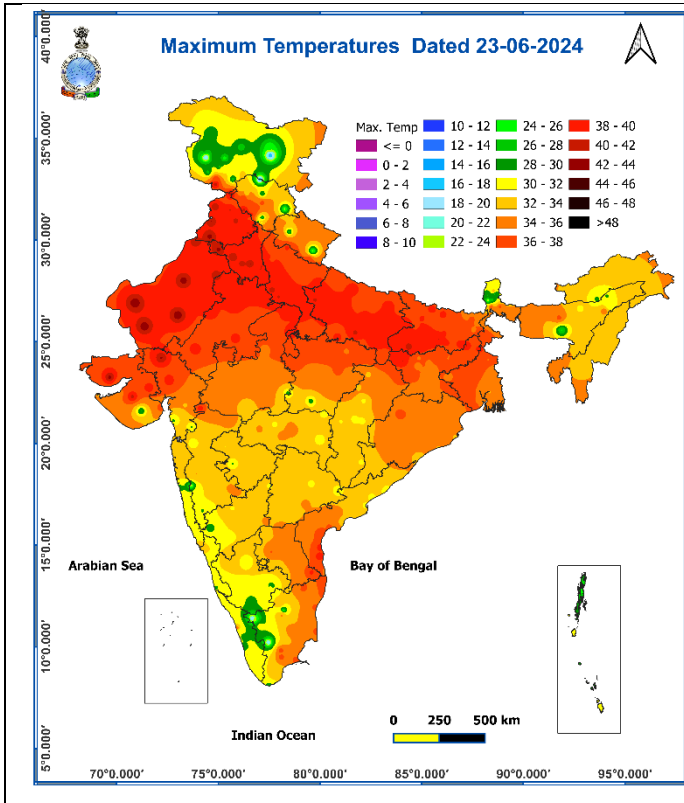


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

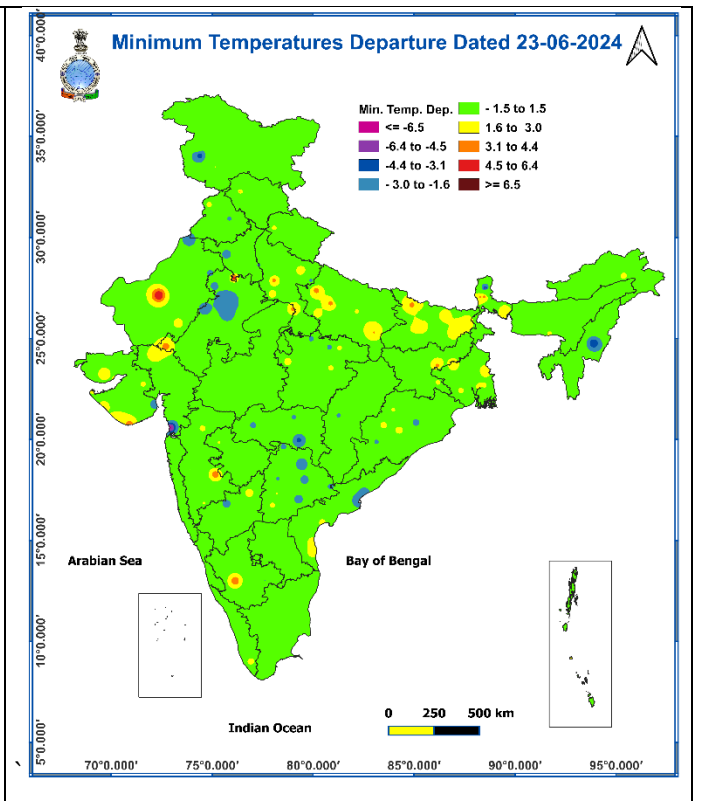
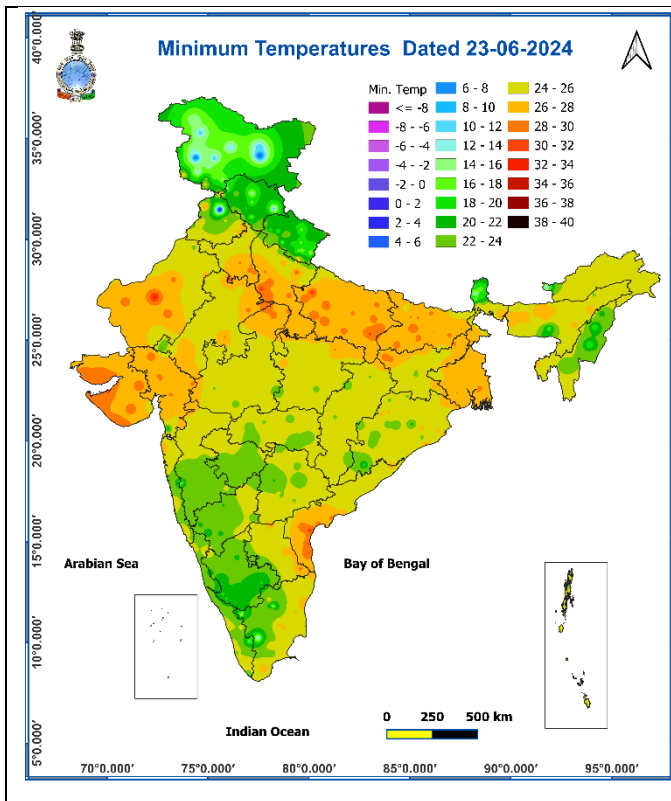
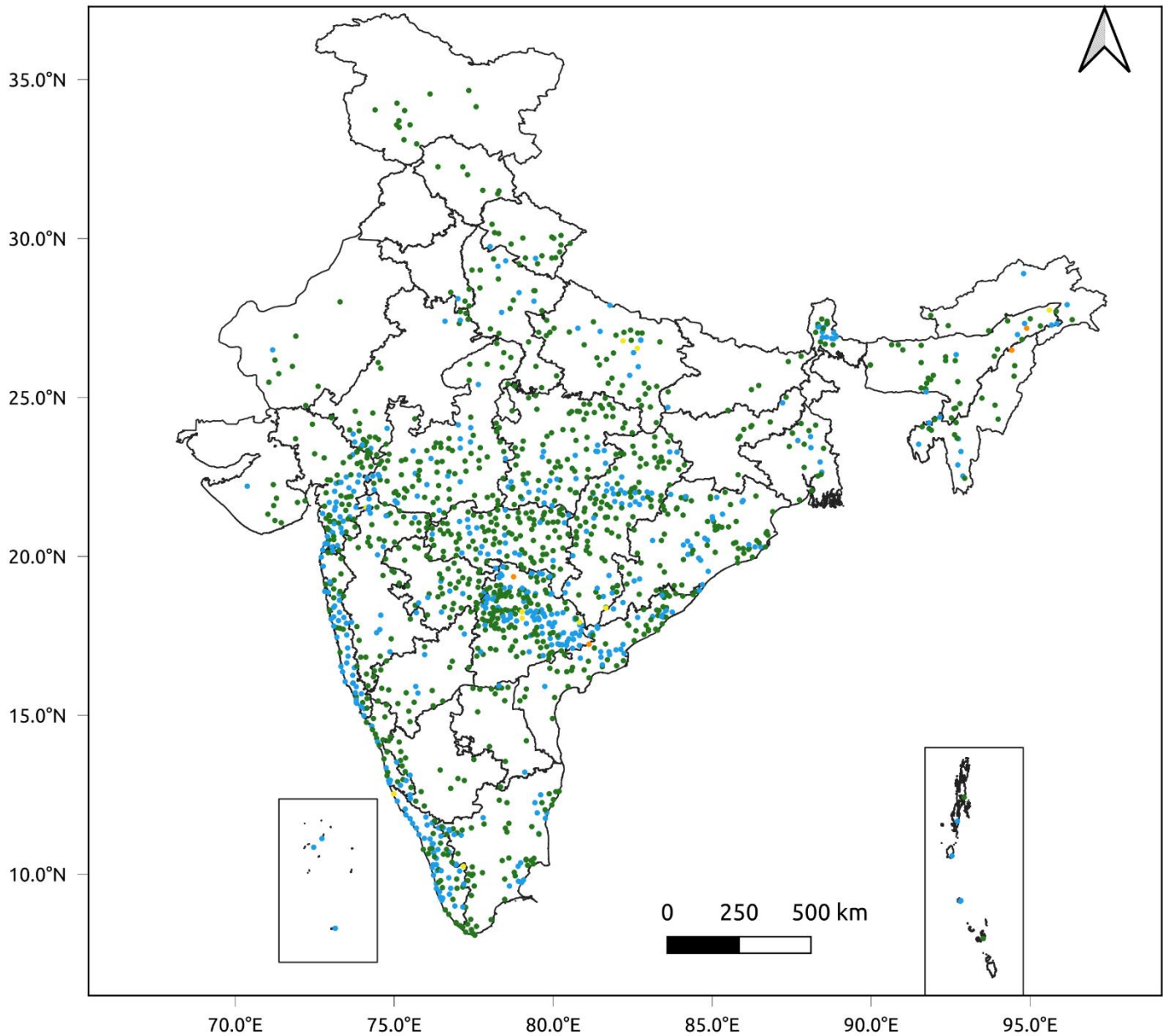


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



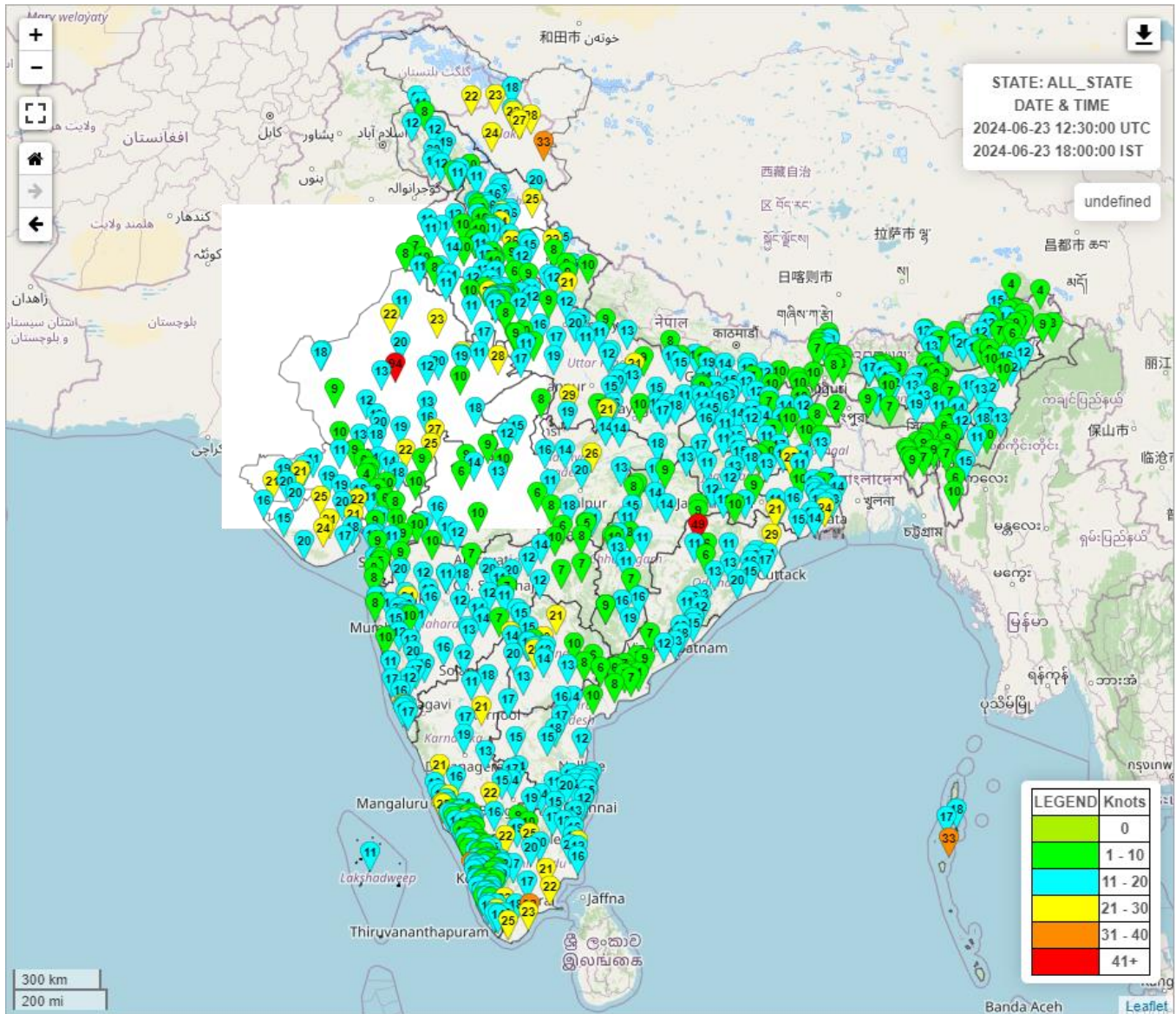
24 Hr cumulative rainfall recorded over different stations during 0830 IST of 22-6-2024 to 0830 IST of 23-6-2024



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 (≥ 204.5 mm)

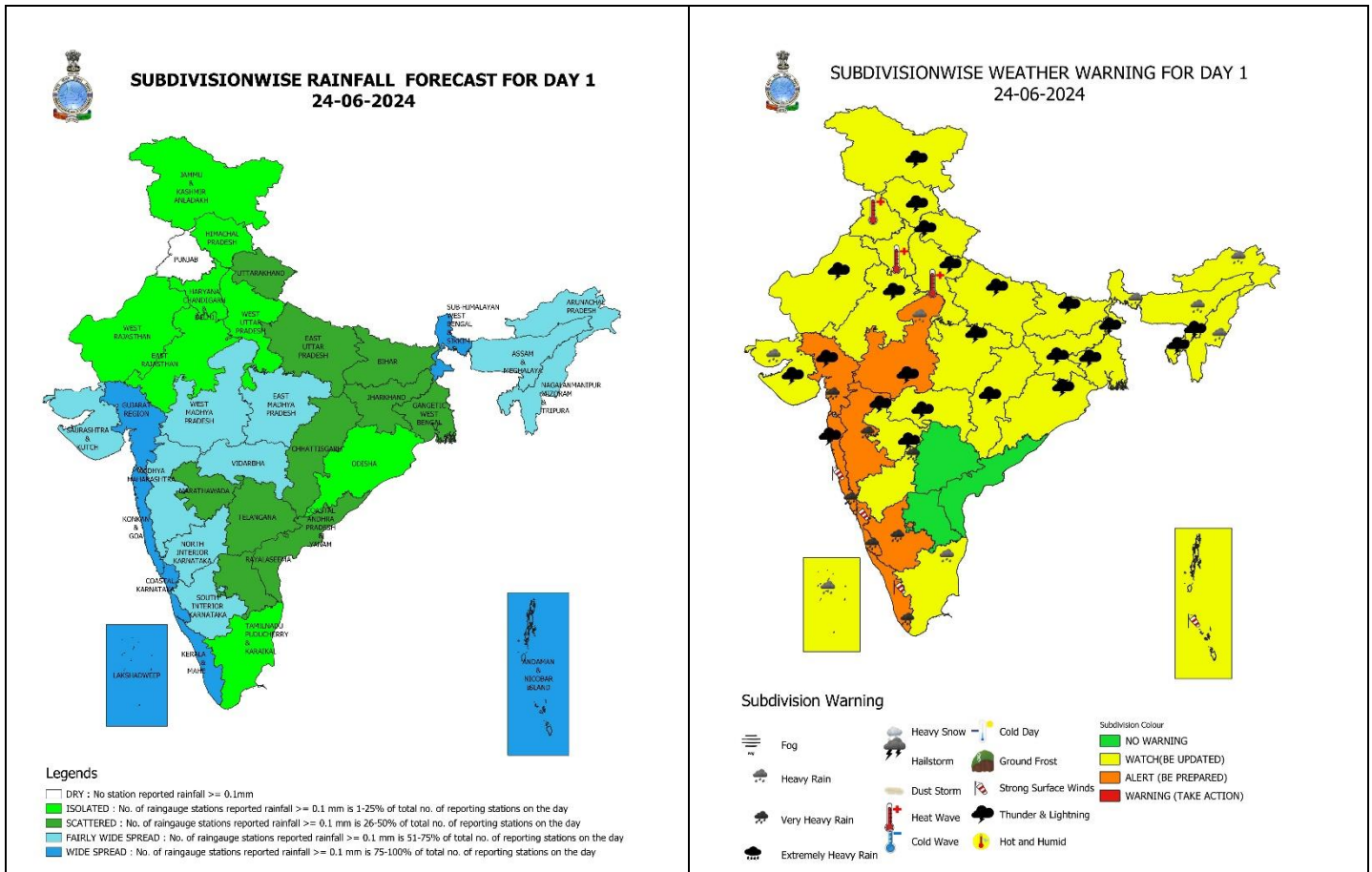
Fig. 7: Gusty winds reported over the country (in knots) from 0830 hours IST of 23.06.2024 to 1800 hours IST of 23.06.2024



1 Knot = 1.852 kmph

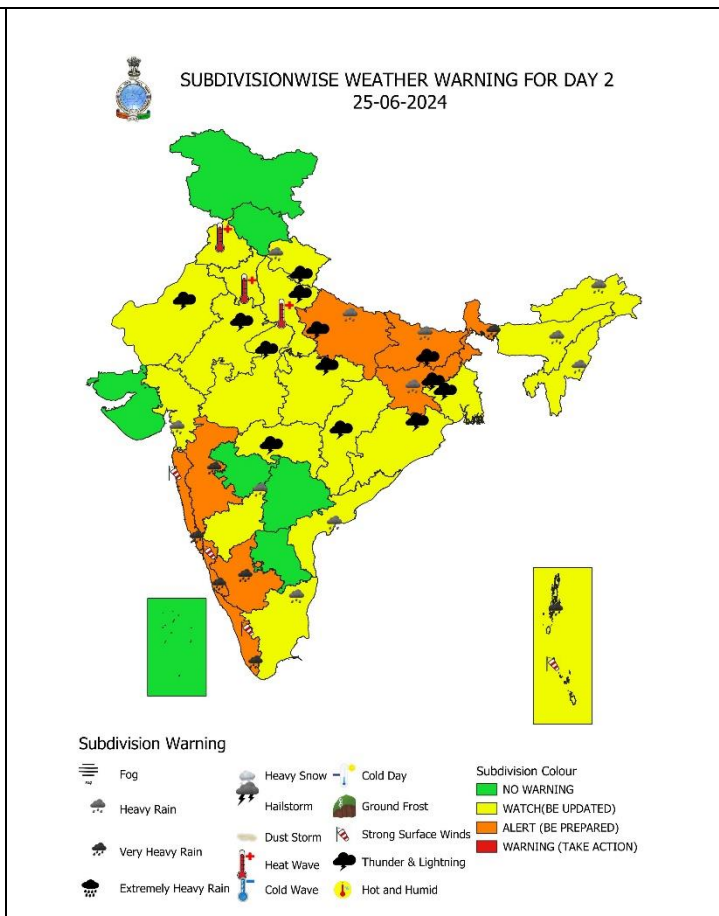
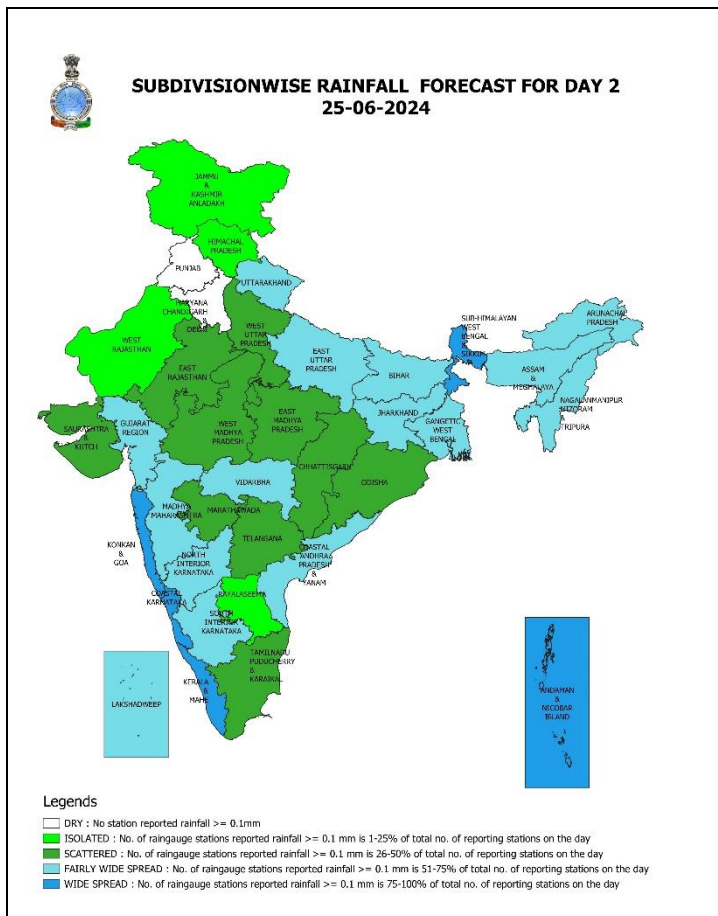
For more details, kindly refer: <http://aws.imd.gov.in:8091/>

* Red colour warning does not mean "Red Alert", Red colour 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)



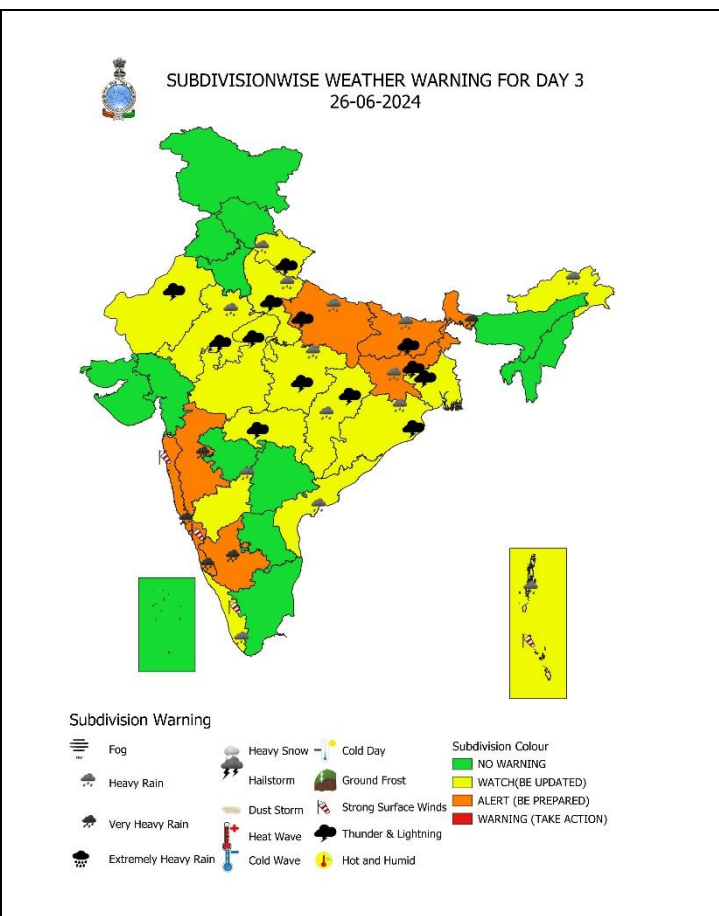
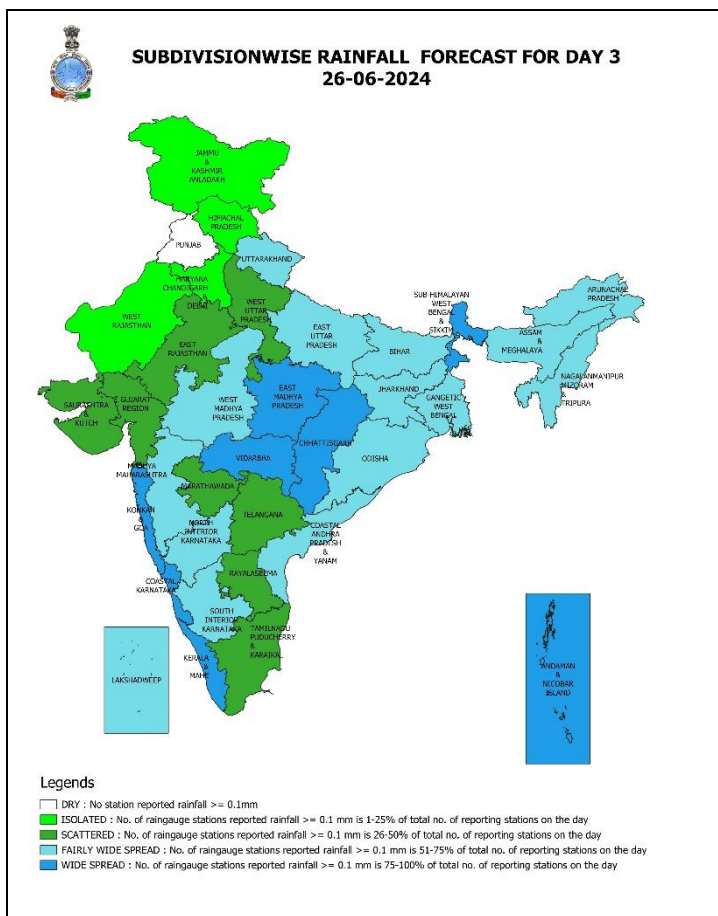
24 June (Day 1):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Kerala & Mahe and Karnataka; **heavy rainfall** at isolated places over West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Tamil Nadu, Puducherry & Karaikal, and Lakshadweep.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over West Madhya Pradesh, Konkan & Goa and Madhya Maharashtra; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Uttarakhand, Uttar Pradesh, Rajasthan, East Madhya Pradesh, Vidarbha, West Bengal & Sikkim, Bihar, Jharkhand, Odisha and Marathwada; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Gujarat state.
- ❖ **Heat wave conditions** very likely in isolated pockets over Punjab, Haryana, Chandigarh and West Uttar Pradesh.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over Lakshadweep area, adjoining Maldives area, along and off south Maharashtra, Konkan, goa, Karnataka, Kerala coasts, off Sri Lanka coast, gulf of Mannar, south and central Bay of Bengal, Andaman Sea. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail over gulf of Mannar, southwest adjoining southeast and west central Bay of Bengal; along and off Somalia coast, south and central Arabian sea, along and off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



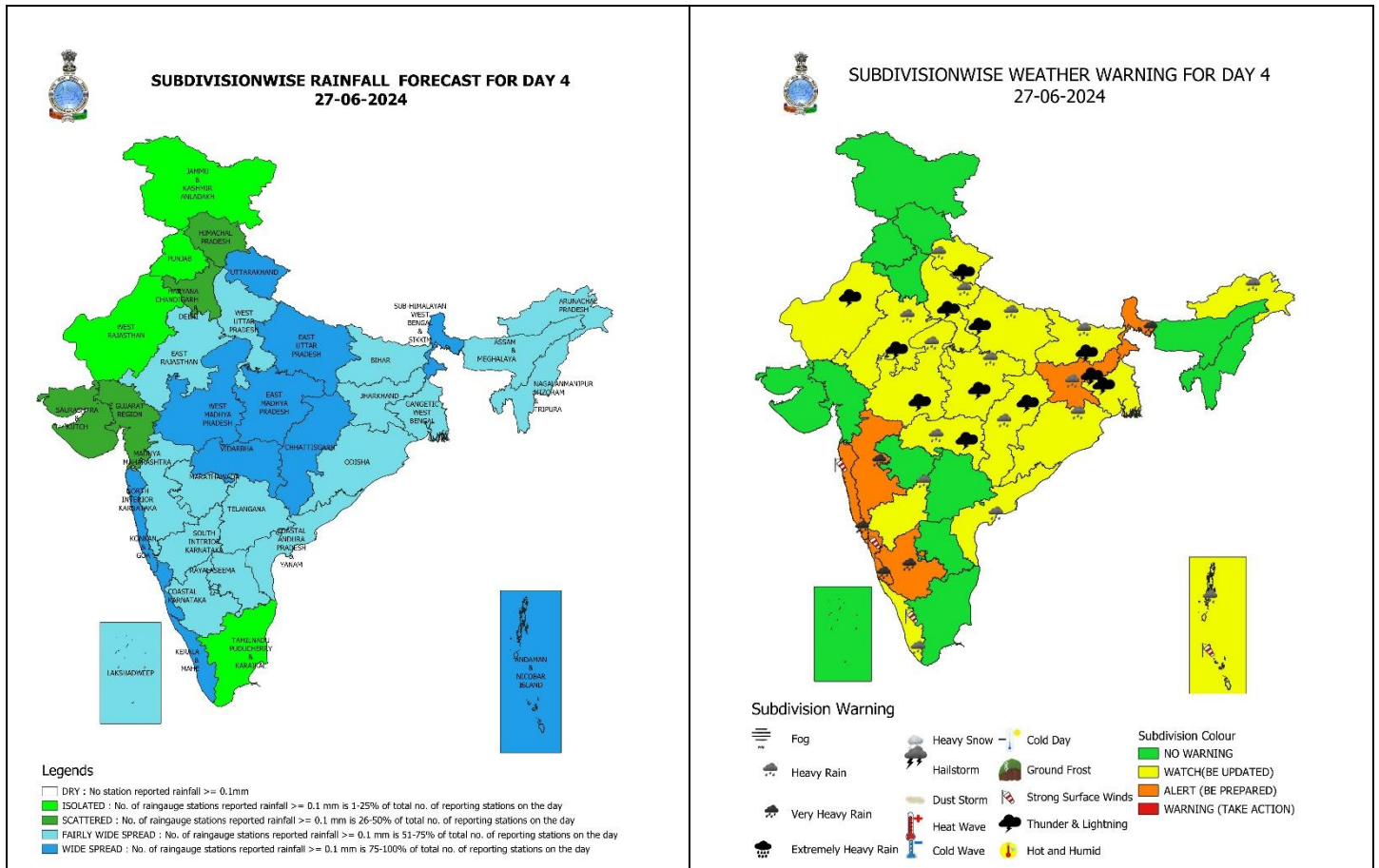
25 June (Day 2):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra, Kerala & Mahe, Coastal & South Interior Karnataka; **heavy rainfall** at isolated places over Uttarakhand, East Uttar Pradesh, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Uttar Pradesh, Bihar and Jharkhand; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Uttarakhand, Rajasthan, Madhya Pradesh, Vidarbha, Gangetic West Bengal and Odisha; **with lightning** at isolated places over Chhattisgarh and Madhya Maharashtra.
- ❖ **Heat wave conditions** very likely in isolated pockets over Punjab, Haryana, Chandigarh and West Uttar Pradesh.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over Lakshadweep area, adjoining Maldives area, along and off Maharashtra, Konkan, Goa, Karnataka, Kerala coasts, off Sri Lanka coast, gulf of Mannar, south and central Bay of Bengal, Andaman Sea. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail over gulf of Mannar, southwest Bay of Bengal and adjoining areas; along and off Somalia coast, southwest Arabian sea, central Arabian sea, northern parts of southeast Arabian sea, along and off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



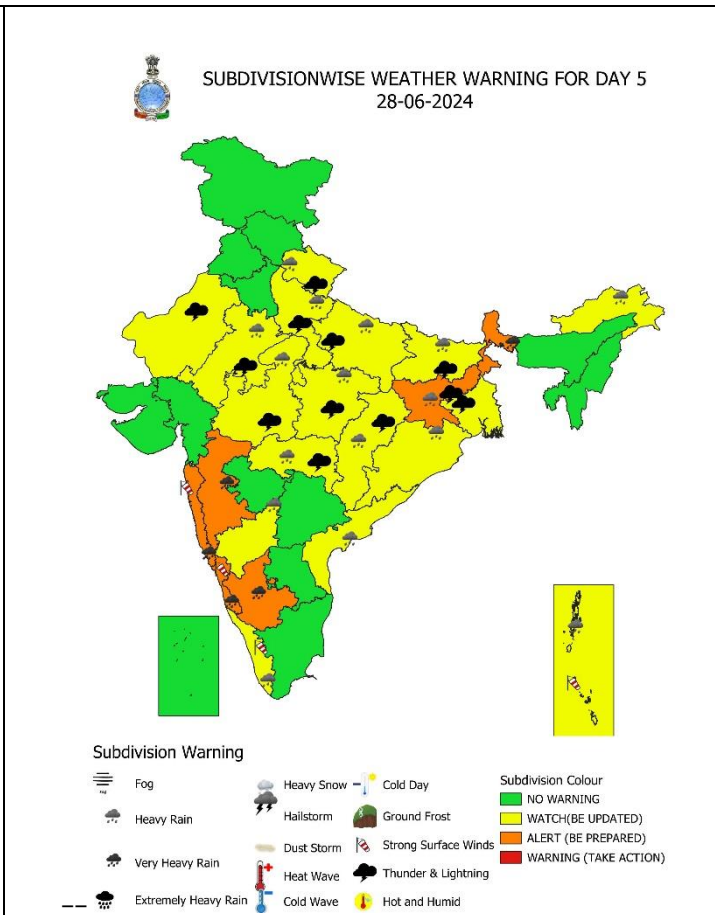
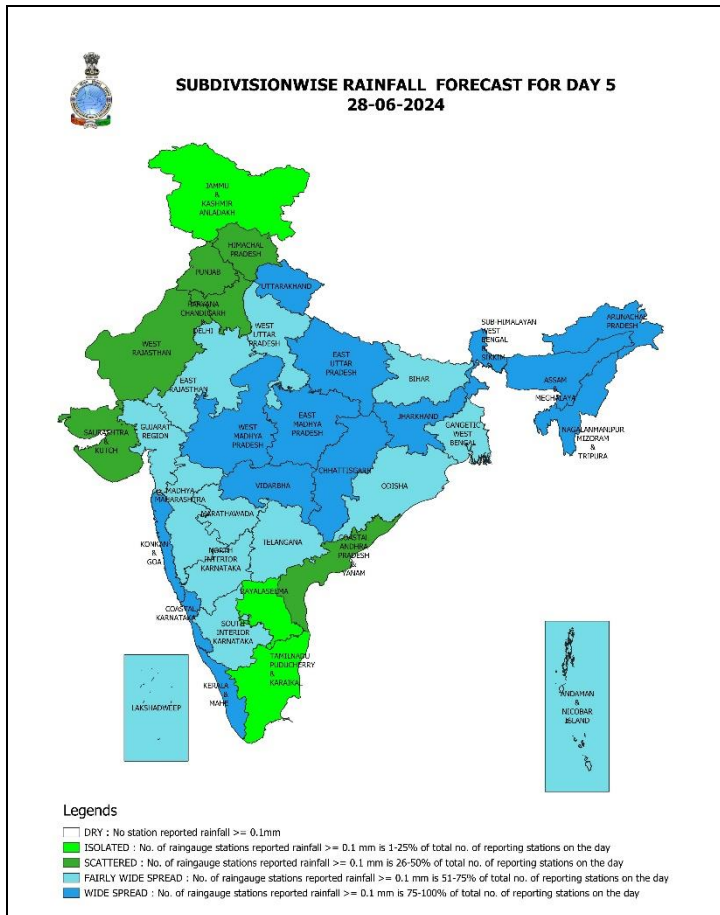
26 June (Day 3):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra, Coastal & South Interior Karnataka; **heavy rainfall** at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Chhattisgarh, Andaman & Nicobar Islands, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Uttar Pradesh, Bihar and Jharkhand; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Uttarakhand, Rajasthan, Madhya Pradesh, Vidarbha, Gangetic West Bengal and Odisha; **with lightning** at isolated places over Chhattisgarh.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over Lakshadweep area, adjoining Maldives area, along and off Maharashtra, Konkan, goa, Karnataka, Kerala coasts, off Sri Lanka coast, gulf of Mannar, south and central Bay of Bengal, Andaman Sea. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail over gulf of Mannar, southwest bob and adjoining areas; along and off Somalia coast, southwest Arabian sea, central Arabian sea, northern parts of southeast Arabian sea, along and off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



27 June (Day 4):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra, Coastal & South Interior Karnataka; **heavy rainfall** at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Uttar Pradesh and Jharkhand; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Uttarakhand, Rajasthan, Madhya Pradesh, Vidarbha and Bihar; **with lightning** at isolated places over Chhattisgarh and Gangetic West Bengal.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over Lakshadweep area, adjoining Maldives area, along and off Maharashtra, Konkan, goa, Karnataka, Kerala coasts, off Sri Lanka coast, gulf of Mannar, south and central Bay of Bengal, north Andaman Sea. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail over gulf of Mannar, southwest Bay of Bengal and adjoining areas; along and off Somalia coast, southwest Arabian sea, central Arabian sea, northern parts of southeast Arabian sea, along and off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.

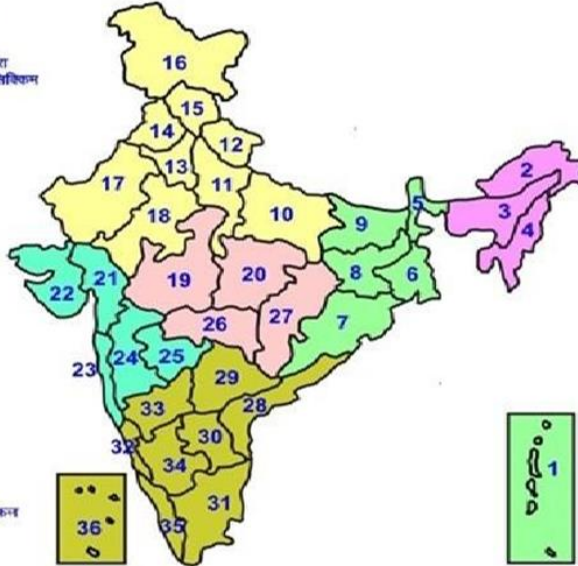


28 June (Day 5):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra, Coastal & South Interior Karnataka; **heavy rainfall** at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Uttar Pradesh and Jharkhand; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Uttarakhand, Rajasthan, Madhya Pradesh, Vidarbha and Bihar; **with lightning** at isolated places over Chhattisgarh and Gangetic West Bengal.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over Lakshadweep area, adjoining Maldives area, along and off Maharashtra, Konkan, goa, Karnataka, Kerala coasts, off Sri Lanka coast, gulf of Mannar, south and central Bay of Bengal, north Andaman Sea. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail over gulf of Mannar, southwest Bay of Bengal and adjoining areas; along and off Somalia coast, southwest Arabian sea, central Arabian sea, northern parts of southeast Arabian sea, along and off Yemen and 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 मनीपुर 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 क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 महाराष्ट्र
- 26 विदर्भ
- 27 उत्तरीमहाराष्ट्र
- 28 उड़ीसा आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 तमिलनाडु
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 उत्तर 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. 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. Tamilnada, 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)
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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 Storm: Wind speed > 220 kmph (> 119 knots)