

Tuesday, August 27, 2024
Time of Issue: 0900 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems:

- The **deep depression** over north Gujarat moved slowly westwards with a speed of 4 kmph during past 6 hours and lay centered at 0530 hours IST of today, the 27th August over the same region near latitude 23.8°N and longitude 72.2 °E, close to Patan, about 40 km south of Deesa (Gujarat), 90 km north-northwest of Ahmedabad (Gujarat), 130 km north-northeast of Surendranagar (Gujarat) and 250 km east-northeast of Bhuj (Gujarat). It is likely to move slowly west-southwestwards across Gujarat region and reach Saurashtra & Kutch coast and adjoining areas of Pakistan and northeast Arabian Sea by morning of 29th August.
- The **well marked low pressure area** over Jharkhand and Neighbourhood moved west-northwestwards and lay as a **low pressure area** over the same region at 0530 hours IST of today, the 27th August 2024. It is likely to move west-northwestwards across Jharkhand, and north Chhattisgarh & adjoining southeast Uttar Pradesh and weaken gradually further during next 24 hours.
- Western end of the **monsoon trough** at mean sea level is south of its normal position while the eastern end is at its normal position and likely to continue to be so during next 3-4 days.

Forecast & Warnings (upto 7 days):

❖ West & Central India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West & Central India during the week.
- ✓ Isolated **heavy rainfall** very likely over Konkan & Goa, Madhya Maharashtra during 27th August-01st September; Gujarat Region on 29th & 30th; Vidarbha, Chhattisgarh on 29th & 30th August and 01st & 02nd September; Saurashtra & Kutch on 30th August & 01st September; West Madhya Pradesh on 02nd September.
- ✓ Isolated **very heavy rainfall** also very likely over East Madhya Pradesh during 29th August -02nd September; Konkan & Goa on 27th August & 02nd September; ghat areas of Madhya Maharashtra on 27th & 28th; Gujarat Region on 28th; Saurashtra & Kutch on 29th August & 02nd September; Vidarbha & Chhattisgarh on 31st August; Madhya Maharashtra on 02nd September.
- ✓ Isolated **extremely heavy rainfall also very likely** over Saurashtra & Kutch on 27th & 28th; Gujarat Region on 27th August.

❖ East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over East & Northeast India, during the week.
- ✓ Isolated **heavy rainfall** very likely over Odisha during 27th -29th & 31st August-02nd September; Andaman & Nicobar Islands on 27th, 29th & 30th; Gangetic West Bengal on 27th; Nagaland, Manipur, Mizoram & Tripura during 27th August - 01st September; Bihar, Jharkhand on 27th & 28th; Arunachal Pradesh on 28th; Assam & Meghalaya 27th -29th August & 01st September; Sub-Himalayan West Bengal & Sikkim on 02nd September.
- ✓ Isolated **very heavy rainfall** also very likely over Andaman Islands on 28th; Odisha on 30th August; Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 02nd September.

❖ South Peninsular India:

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam, Coastal Karnataka, Interior Karnataka; isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Rayalaseema & Telangana during the week.
- ✓ Isolated **heavy rainfall** very likely over Kerala & Mahe during 27th August -02nd September; Coastal Andhra Pradesh & Yanam on 29th; Interior Karnataka during 27th -30th; South Interior Karnataka during 27th -30th; Telangana during 29th August-02nd September; Coastal Karnataka on 31st August & 01st September.
- ✓ Isolated **very heavy rainfall** also very likely over Coastal Karnataka during 27th -30th August & 02nd September; North Coastal Andhra Pradesh on 30th & 31st August.

❖ Northwest India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Himachal Pradesh, Uttarakhand, Rajasthan; isolated to scattered rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Uttar Pradesh Haryana-Chandigarh-Delhi during the week.
- ✓ Isolated **heavy rainfall** very likely over East Uttar Pradesh on 27th; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 27th -29th; Punjab during 27th & 28th; West Rajasthan 28th August-02nd September; Himachal Pradesh, East Rajasthan on 02nd September.
- ✓ Isolated **very heavy rainfall** also very likely over Rajasthan on 27th August.

* 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

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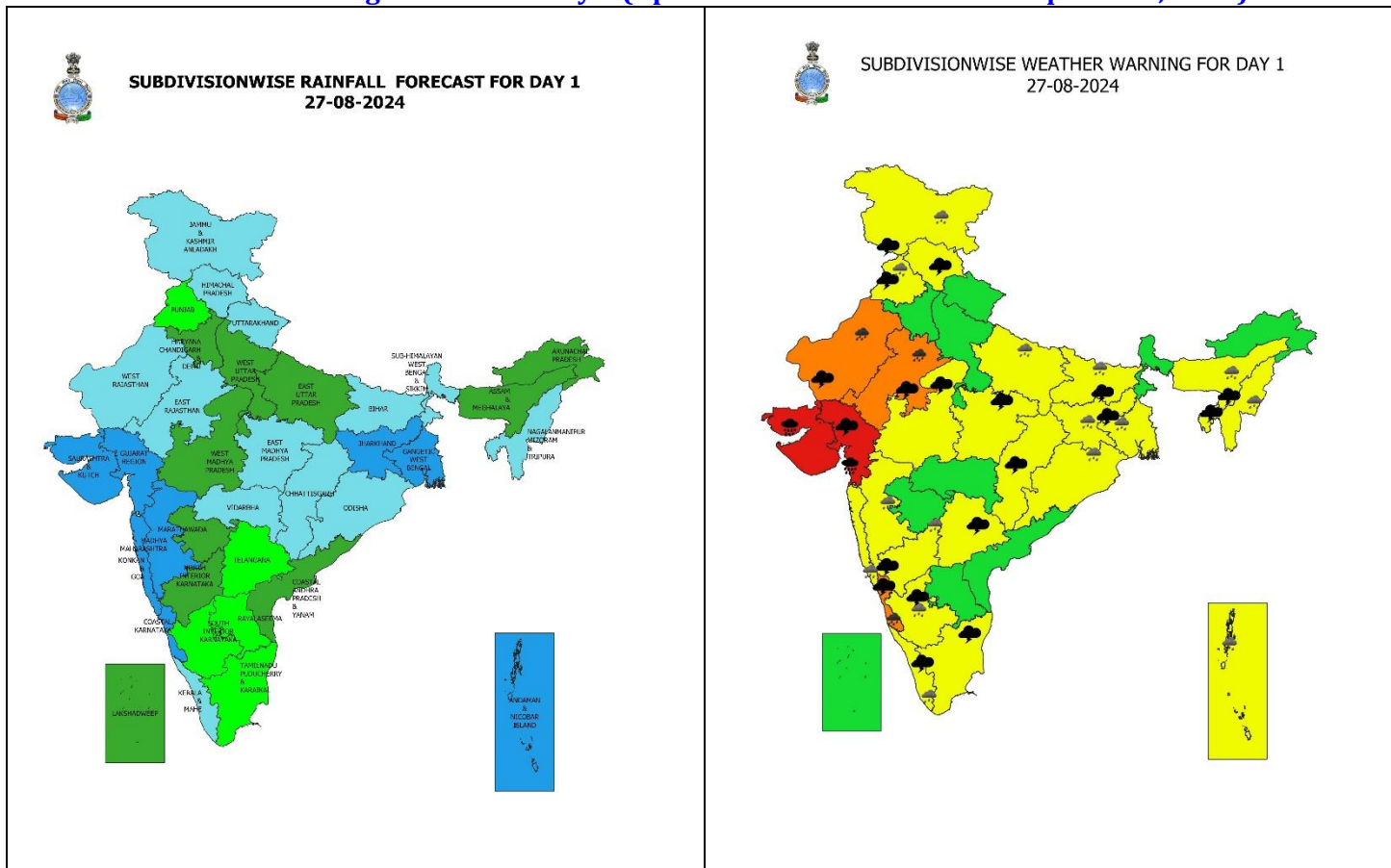
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Madhya Pradesh, Gujarat state, Konkan & Goa and Madhya Maharashtra; **at a few places** over Nagaland, Manipur, Mizoram & Tripura, West Bengal & Sikkim, Jharkhand, East Uttar Pradesh, Uttarakhand, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Rajasthan, and Saurashtra & Kutch; **at isolated places** over Assam & Meghalaya, West Uttar Pradesh, Himachal Pradesh, Punjab, East Rajasthan, Odisha, Chhattisgarh, Vidarbha, Karnataka, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema.
- ❖ **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 Odisha.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Gujarat Region:** Panchmahal-26; Barodara-24; Ananad-22; Kehda-17; Katch-14; Dahoda-13; Ahamdabad-11; Dangs-10; Mahisagar and Jamnagar-9 each; Gandhinagar-7; Bulshar-3; **Saurashtra & Kutch:** Bhuj & Rajkot-6 each; New Kandla-4; **Andaman & Nicobar Islands:** Nancowery-6; **East Rajasthan:** Alwar-3; Ajmer and Udaipur-1 each; **Sub-Himalayan West Bengal & Sikkim:** Gangtok-4; **Gangetic West Bengal:** Asansol-4; Midanapur-5; **Odisha:** Jagatsinghpur-8; Paradip-4.
- ❖ **Minimum Temperature Departures (as on 26-08-2024):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over East Uttar Pradesh; **above normal (1.6°C to 3.0°C)** at a few places over West Uttar Pradesh, Kerala & Mahe; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, West Rajasthan, Bihar, Odisha, Vidarbha, Madhya Maharashtra, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, Andaman & Nicobar Islands. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Gangetic West Bengal, Gujarat Region, Telangana and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature** of 17.8°C was reported at **Bulsar (Gujarat Region)** over the plains of the country (Fig.4).
- ❖ **Maximum Temperature Departures (as on 26-08-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at a few places over Arunachal Pradesh; at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and Rayalaseema; **above normal (1.6°C to 3.0°C)** at many places over Himachal Pradesh and Kerala & Mahe; at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab and Tamil Nadu, Puducherry & Karaikal; at isolated places over Haryana-Chandigarh-Delhi, Uttarakhand, Telangana, Bihar and Vidarbha. These were **markedly below normal (-5.1°C or less)** at many places over Saurashtra & Kutch and at isolated places over Gujarat Region, Gangetic West Bengal; **below normal (-1.6°C to -3.0°C)** at a few places over West Rajasthan; at isolated places over East Rajasthan, Madhya Maharashtra, West Madhya Pradesh, Odisha, Chhattisgarh, Konkan & Goa and Jharkhand and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature** of 38.9°C was reported at **Nellore (Coastal Andhra Pradesh)** over the country (Fig. 2).

Meteorological Analysis (Based on 0530 hours IST)

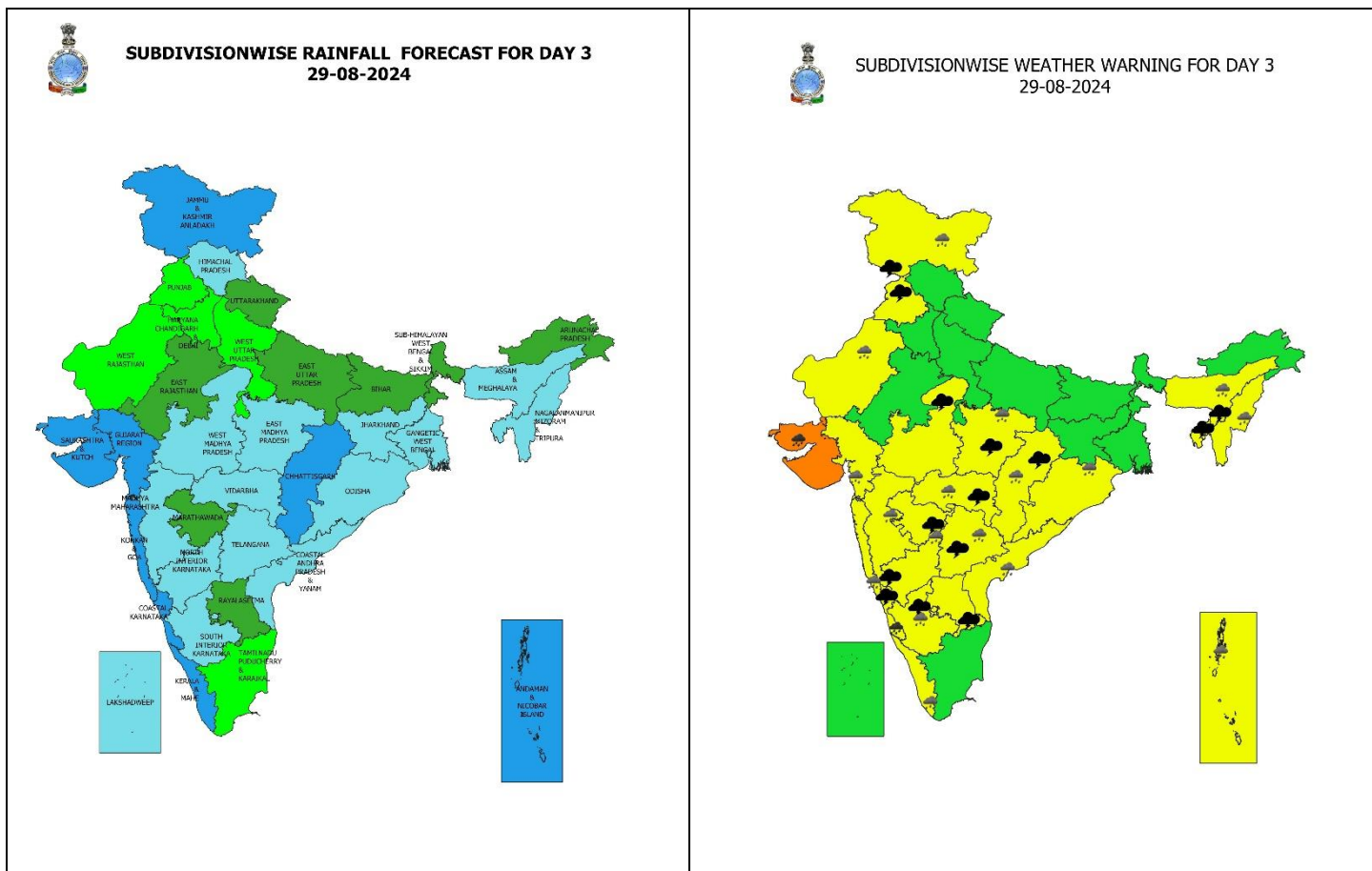
- ❖ The **deep depression** over north Gujarat moved slowly westwards with a speed of 4 kmph during past 6 hours and lay centered at 0530 hours IST of today, the 27th August over the same region near latitude 23.8°N and longitude 72.2 °E, close to Patan, about 40 km south of Deesa (Gujarat), 90 km north-northwest of Ahmedabad (Gujarat), 130 km north-northeast of Surendranagar (Gujarat) and 250 km east-northeast of Bhuj (Gujarat). It is likely to move slowly west-southwestwards across Gujarat region and reach Saurashtra & Kutch coast and adjoining areas of Pakistan and northeast Arabian Sea by morning of 29th August.
- ❖ The **well marked low pressure area** over Jharkhand and Neighbourhood moved west-northwestwards and lay as a **low pressure area** over the same region at 0530 hours IST of today, the 27th August 2024. It is likely to move west-northwestwards across Jharkhand, and north Chhattisgarh & adjoining southeast Uttar Pradesh and weaken gradually further during next 24 hours.
- ❖ The **Monsoon trough** at mean sea level now passes through centre of deep depression over north Gujarat, Sagar, centre of Low-Pressure Area over Jharkhand, Digha and thence southeastwards to northeast Bay of Bengal.
- ❖ A fresh **low pressure** area is likely to form over East central & adjoining North Bay of Bengal on 29th August, 2024
- ❖ The **offshore trough** from south Gujarat to north Kerala coast Persists.
- ❖ The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 7.6 km above mean sea level roughly along Long. 72°E to the north of Lat. 30°N persists.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 03rd September, 2024)



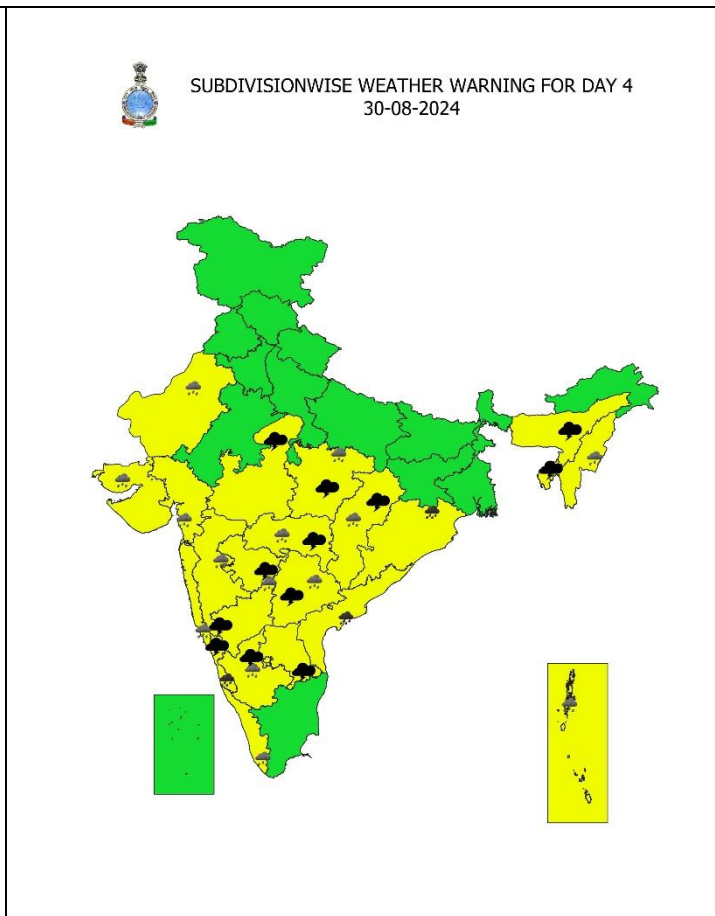
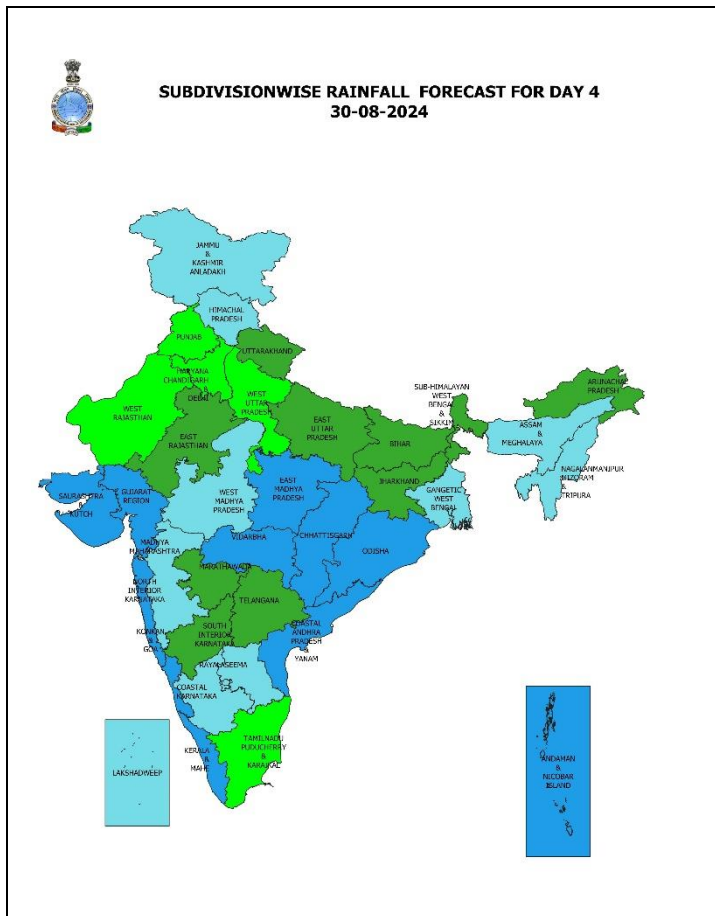
27 August (Day 1):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm) very likely** at isolated places over Gujarat state; **Heavy to very heavy rainfall (≥ 12 cm)** at isolated places over Rajasthan and Coastal Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, East Uttar Pradesh, Konkan & Goa, Madhya Maharashtra, Andaman & Nicobar Islands, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe, Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph) very likely** at isolated places over Karnataka, Kerala & Mahe; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Rajasthan, Bihar, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Telangana, Madhya Pradesh, Chhattisgarh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over north and adjoining northwest Arabian sea, most parts of central Arabian sea and northern parts of southwest Arabian sea, along and off Gujarat, Maharashtra, Konkan, Goa, Karnataka coasts, over gulf of Mannar, and off silence coast; most parts of southwest Bay of Bengal & many parts of southeast Bay of Bengal, most parts of central Bay of Bengal. **Squally weather with winds speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail off Maharashtra coast, northern parts of eastcentral Arabian sea and adjoining areas. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of westcentral, southwest Arabian sea, along and off Somalia, Yemen, south Oman coasts. **Squally wind speed reaching 55-65 kmph gusting to 75 kmph** is likely to prevail along & off Gujarat coasts & adjoining Pakistan coasts and northeast and adjoining eastcentral Arabian Sea.
- ❖ **Strong surface wind speed reaching 40-50 kmph gusting to 60 kmph** is very likely to prevail over South Rajasthan, north Gujarat region, along and off Gujarat & adjoining Pakistan and north Maharashtra coasts and northeast Arabian Sea.



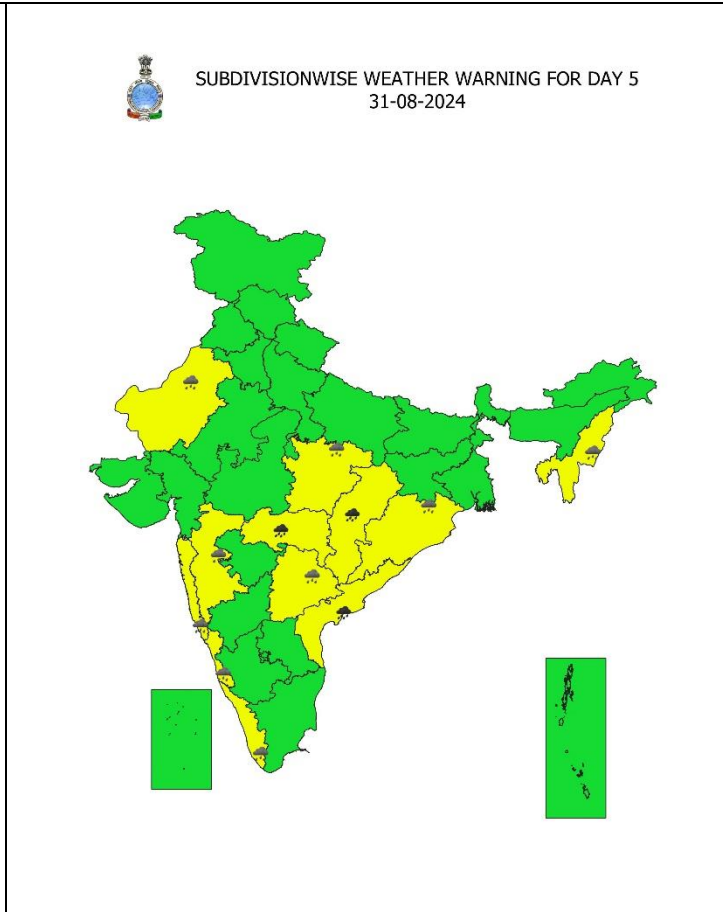
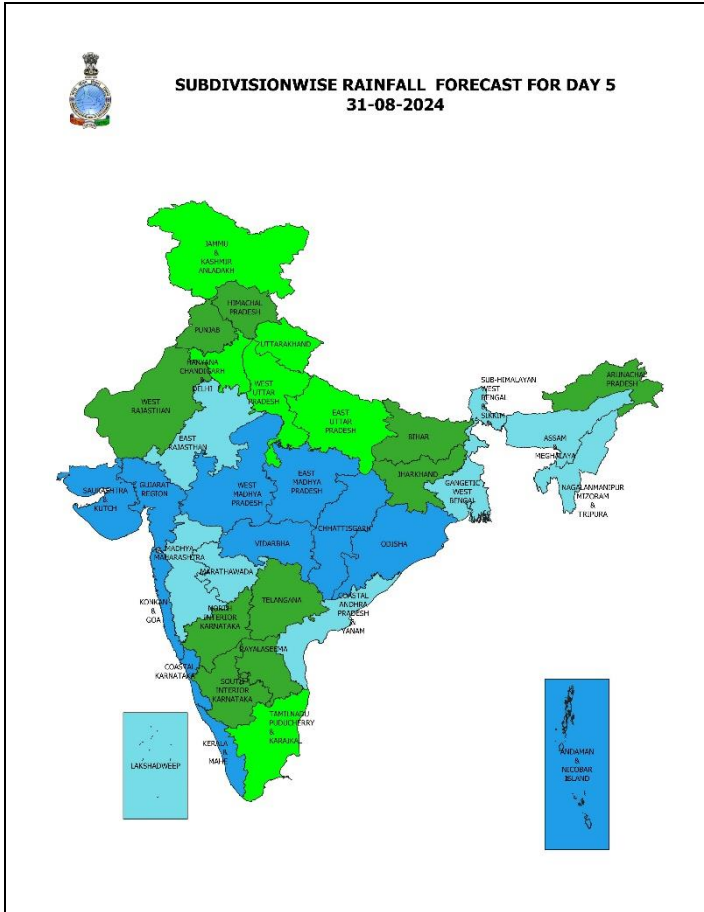
29 August (Day 3):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** very likely at isolated places over Saurashtra & Kutch; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Rajasthan, East Madhya Pradesh, Chhattisgarh, Andaman & Nicobar Islands, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Karnataka; **with lightning** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Assam & Meghalaya, Marathwada, Telangana, Madhya Pradesh, Vidarbha, Chhattisgarh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over north and adjoining northwest Arabian sea, most parts of central Arabian sea and northern parts of southwest Arabian sea, along and off Gujarat, Maharashtra, Konkan, goa coasts, over gulf of Mannar, and off Sri Lanka coast; most parts of southwest Bay of Bengal & many parts of southeast Bay of Bengal, most parts of central Bay of Bengal, north Andaman Sea. **Squally weather with winds speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail along and off Gujarat coast, off Maharashtra coast, northern parts of eastcentral Arabian sea and adjoining areas, parts of eastcentral Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of westcentral, southwest Arabian sea, along and off Somalia, Yemen, south Oman coasts. **Squally wind speed reaching 55-65 kmph gusting to 75 kmph** is likely to prevail along & off Gujarat & adjoining Pakistan coasts and northeast and adjoining eastcentral Arabian Sea. **Squally wind speed reaching 40-50 kmph gusting to 60 kmph** would prevail over interior districts of Gujarat state, along and off Gujarat & adjoining Pakistan, north Maharashtra coasts & northeast Arabian Sea, north Maharashtra coasts.
- ❖ **Strong surface wind speed reaching 45-55 kmph gusting to 65 kmph** is very likely over south Gujarat region, Saurashtra & Kutch, north Maharashtra coasts.



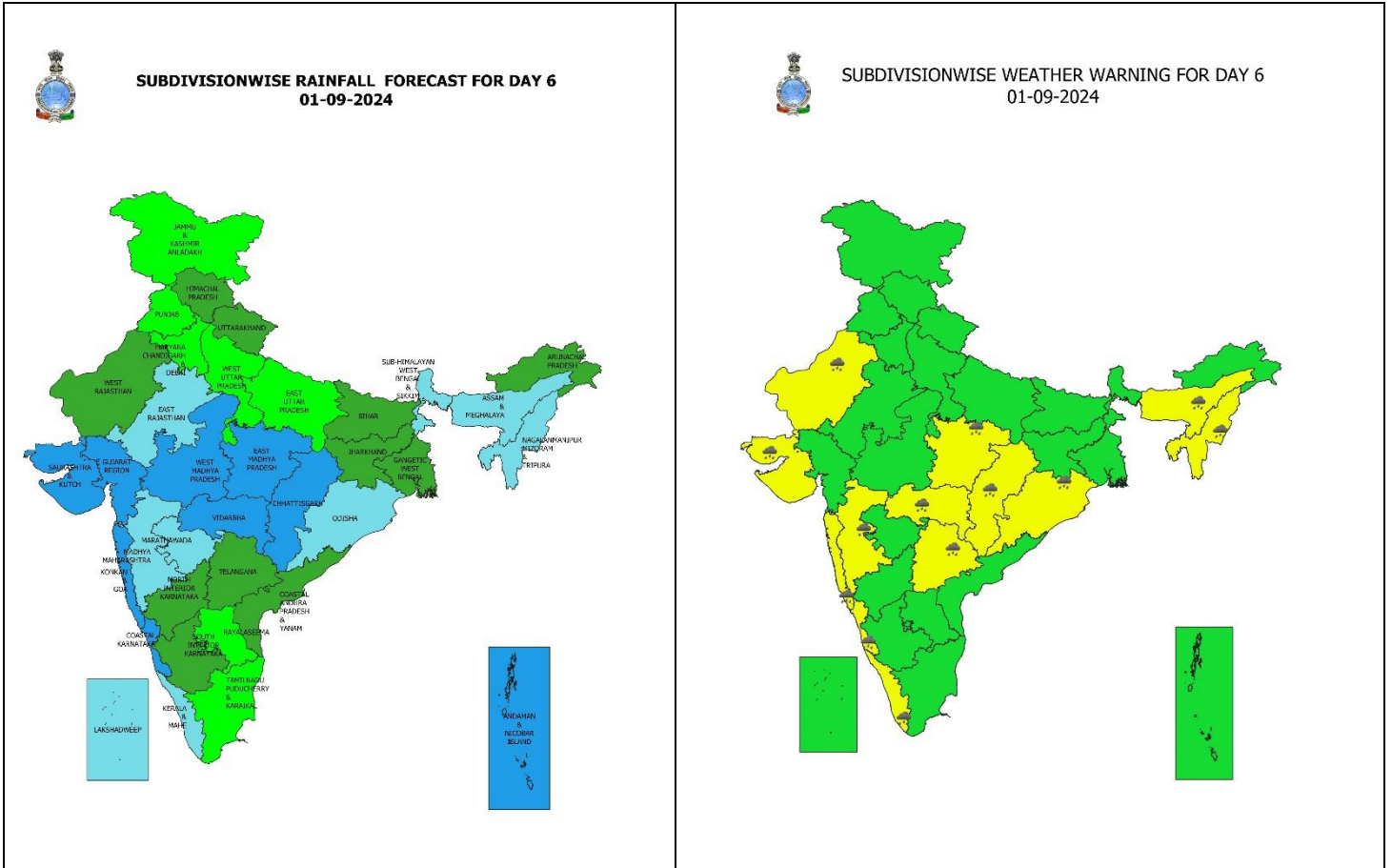
30 August (Day 4):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Odisha, Coastal Andhra Pradesh & Yanam, Coastal Karnataka; **Heavy rainfall (≥ 7 cm)** likely at isolated places over West Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat state, Kerala & Mahe, Telangana, Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Karnataka; **with lightning** very likely at isolated places over Assam & Meghalaya, Marathwada, Telangana, Madhya Pradesh, Vidarbha, Chhattisgarh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over north and adjoining northwest Arabian sea, most parts of central Arabian sea and northern parts of southwest Arabian sea, along and off Gujarat, Maharashtra, Konkan, goa coasts, over gulf of Mannar, and off Sri Lanka coast; most parts of southwest Bay of Bengal & many parts of southeast Bay of Bengal, most parts of central Bay of Bengal and north Andaman Sea. Squally weather with winds speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail along and off Gujarat coast, off Maharashtra coast, northern parts of eastcentral Arabian sea and adjoining areas, parts of eastcentral & westcentral Bay of Bengal. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of westcentral, southwest Arabian sea, along and off Somalia, Yemen, south Oman coasts. Squally wind speed reaching 55-65 kmph gusting to 75 kmph is likely to prevail along & off Gujarat & adjoining Pakistan coasts and northeast and adjoining eastcentral Arabian Sea.



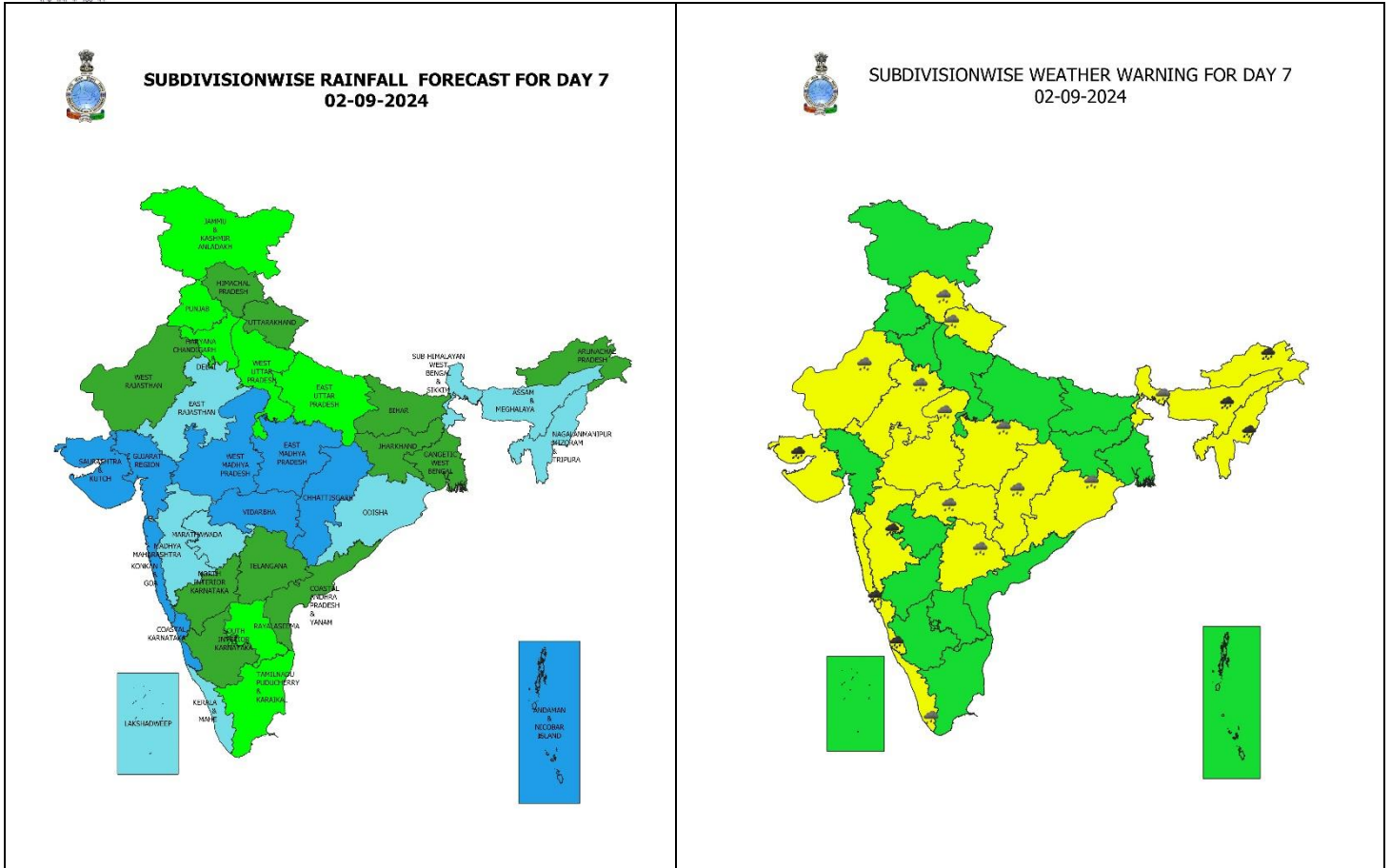
31 August (Day 5):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam; **Heavy rainfall (≥ 7 cm)** likely at isolated places over West Rajasthan, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Kerala & Mahe, Telangana, Coastal Karnataka, East Madhya Pradesh, Odisha, Madhya Maharashtra.



01 September (Day 6):

- ❖ **Heavy rainfall (≥ 7 cm)** likely at isolated places over West Rajasthan, East Madhya Pradesh, Chhattisgarh, Vidarbha, Saurashtra & Kutch, Assam & Meghalaya, Odisha, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Telangana, Kerala & Mahe, Coastal Karnataka.



02 September (Day 7):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Konkan & Goa, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh, Madhya Maharashtra, Coastal Karnataka, Saurashtra & Kutch; **Heavy rainfall (≥ 7 cm)** likely at isolated places over Rajasthan, Sub-Himalayan West Bengal & Sikkim, Odisha, Uttarakhand, Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Madhya Maharashtra, Vidarbha, Telangana, Kerala & Mahe.

Weather Outlook for subsequent 3 days (During 03rd September– 05th September, 2024)

- ❖ Fairly widespread to widespread rainfall likely over most parts of the country except Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Rajasthan, Punjab, Haryana-Chandigarh-Delhi and Tamil Nadu, Puducherry & Karaikal where isolated to scattered rainfall likely.

- Action may be taken based on **ORANGE AND RED COLOUR** warnings.
- **Vulnerable regions likely urban and hilly areas** action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

* 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.
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Impact due to

- ✓ **Isolated extremely heavy rainfall very likely over** Saurashtra & Kutch on 27th & 28th; Gujarat Region on 27th August.
- ✓ **Very heavy rainfall** at isolated over Konkan & Goa on 27th; ghat areas of Madhya Maharashtra on 27th & 28th; Gujarat Region on 28th; Saurashtra & Kutch on 29th; Vidarbha & Chhattisgarh on 31st; Andaman Islands on 28th; Odisha on 30th; Coastal Karnataka during 27th -30th; North Coastal Andhra Pradesh on 30th & 31st; South West Rajasthan 27th & 28th; East Rajasthan on 27th August.
- ✓ **Moderate flash flood risk** likely over Gujarat State; **Low flash flood risk** over Konkan & Goa on 27th & 28th August. **(ANNEXURE IV)**
- ✓ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ✓ Occasional reduction in visibility due to heavy rainfall.
- ✓ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutcha roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

Action Suggested

- ✓ Fishermen are advised not venture into Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat & adjoining Pakistan and north Maharashtra Coasts till 30th August.
- ✓ Judicious regulation of offshore/onshore Operations.
- ✓ Check for traffic congestion on your route before leaving for your destination.
- ✓ Follow any traffic advisories that are issued in this regard.
- ✓ Avoid going to areas that face the water logging problems often.
- ✓ Avoid staying in vulnerable structure.

Agromet advisories for Heavy Rainfall likely over various parts of the country

- Drain out excess water from field crops and horticultural crops in Rajasthan, West Madhya Pradesh, Chhattisgarh, Gujarat State, Gangetic West Bengal, Odisha, Jharkhand, Coastal and South Interior Karnataka Konkan & Goa, .
- Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Jammu & Kashmir, East Uttar Pradesh and Telangana.
- Drain out excess water from *kharif* rice, groundnut, sesame, soybean, ginger, turmeric and vegetables to prevent water logging in **Mizoram**; from pigeon pea, soybean, cotton and sesame crop fields in **Saurashtra & Kutch**; from rice, finger millet, groundnut, pulses and orchards in **Konkan & Goa**; from rice, pigeon pea, cotton, black gram, green gram, soybean, groundnut etc. in **North Madhya Maharashtra**; from rice, castor, cotton, pearl millet, groundnut, sesame and maize fields in **Gujarat**; from rice, maize, green gram, black gram, soybean, sesame and vegetable fields in **Rajasthan**.
- Due to prolonged heavy rainfall, transplanted *Aman* rice and vegetable crops in low-lying areas of **Tripura** are submerged, with young rice seedlings unlikely to recover. It is recommended to procure short-duration rice varieties for re-sowing after the cessation of rains, or alternatively, prepare in advance for winter vegetable cultivation.
- Provide mechanical support to horticultural crops & staking to vegetables.

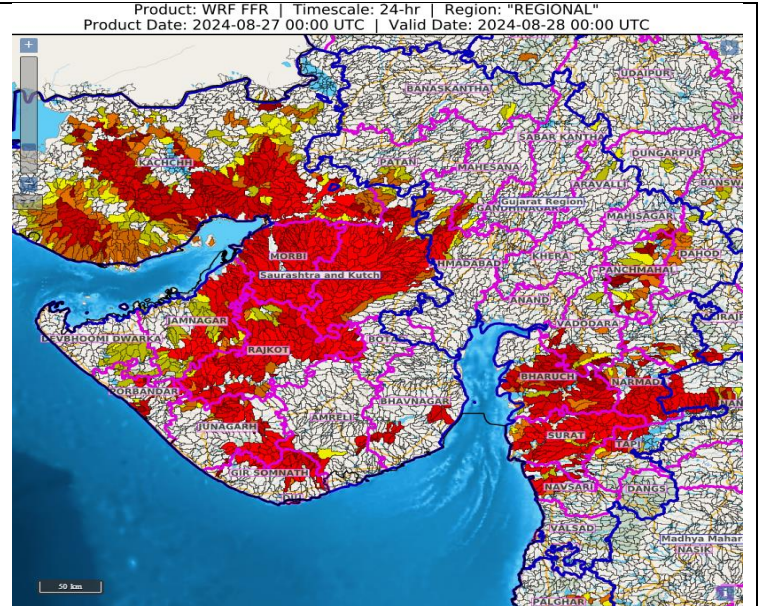
Flash Flood Guidance:

ANNEXURE I

24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 28-08-2024:

Moderate flash flood risk likely over few watersheds & neighbourhoods of **Gujarat Region** - Bharuch, Chhota Udepur, Narmada, Navsari, Surat, Tapi and Vadodara districts. **Saurashtra & Kutch** - Amreli, Bhavnagar, Botad, Diu, Gir Somnath, Jamnagar, Junagarh, Porbandar, Rajkot, Surendranagar, Morbi and Kachchh districts.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over Area of Concern as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 28-08-2024:

Low flash flood risk likely over few watersheds & neighbourhoods of **Konkan & Goa** - North Goa, South Goa, Mumbai City, Palghar, Raigarh, Ratnagiri, Sindhudurg and Suburban Mumbai districts.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over Area of Concern as shown in map due to expected rainfall occurrence in next 24 hours.

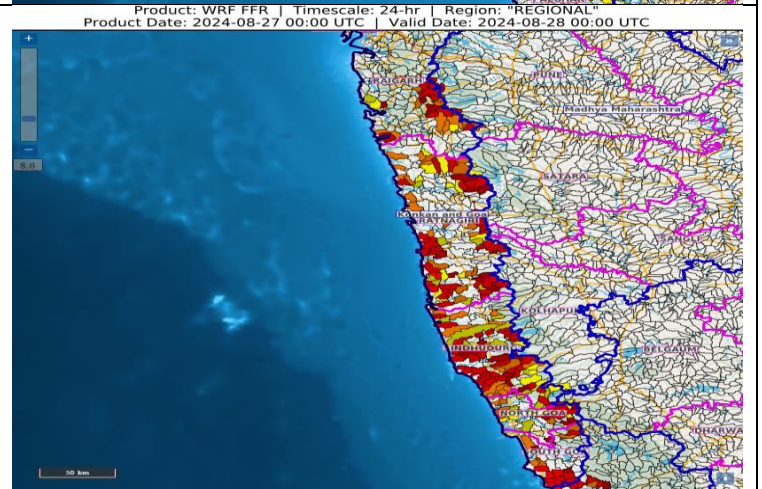


Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

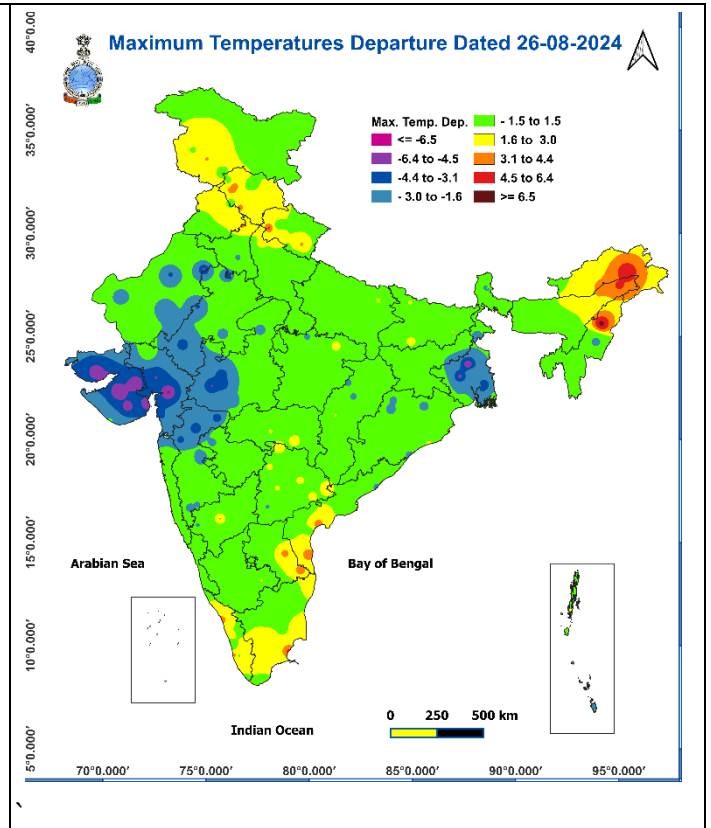
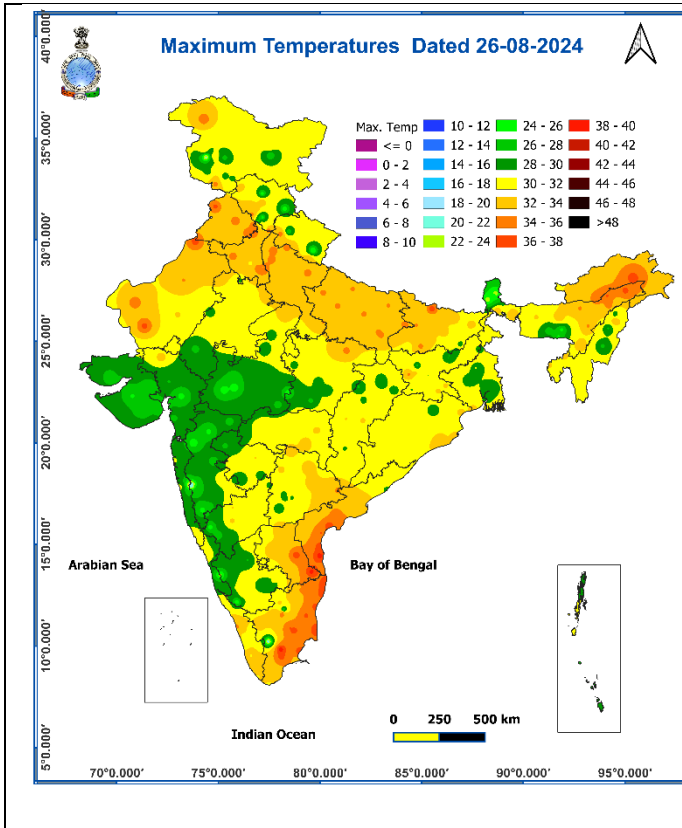


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

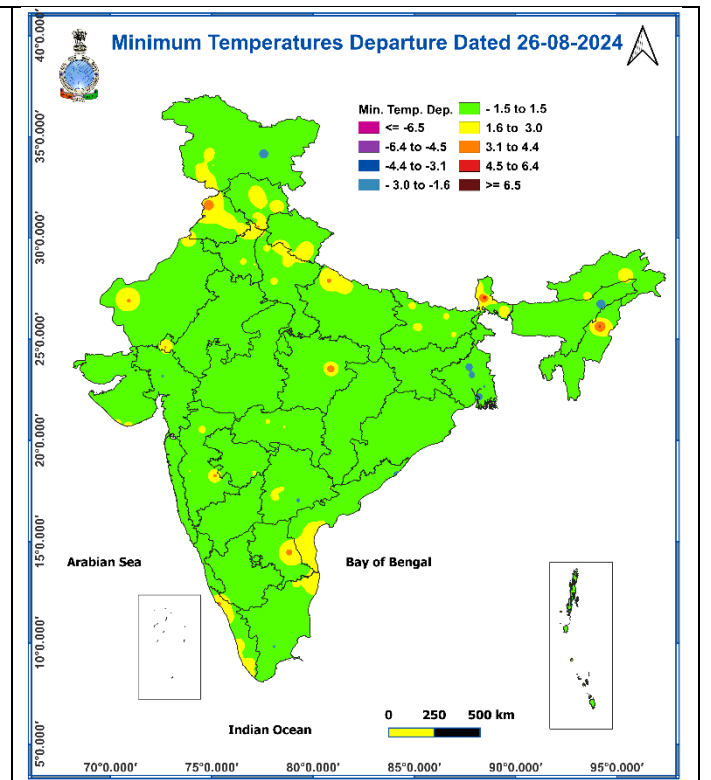
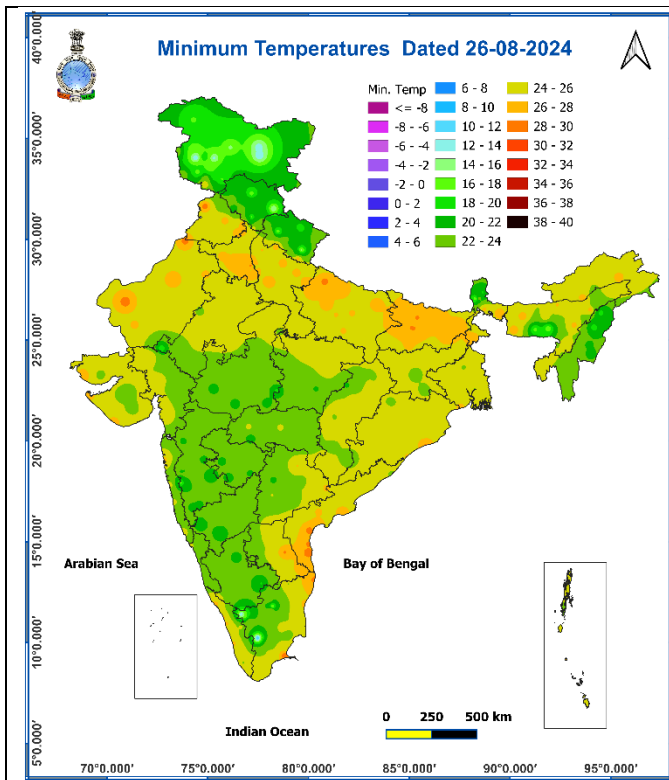
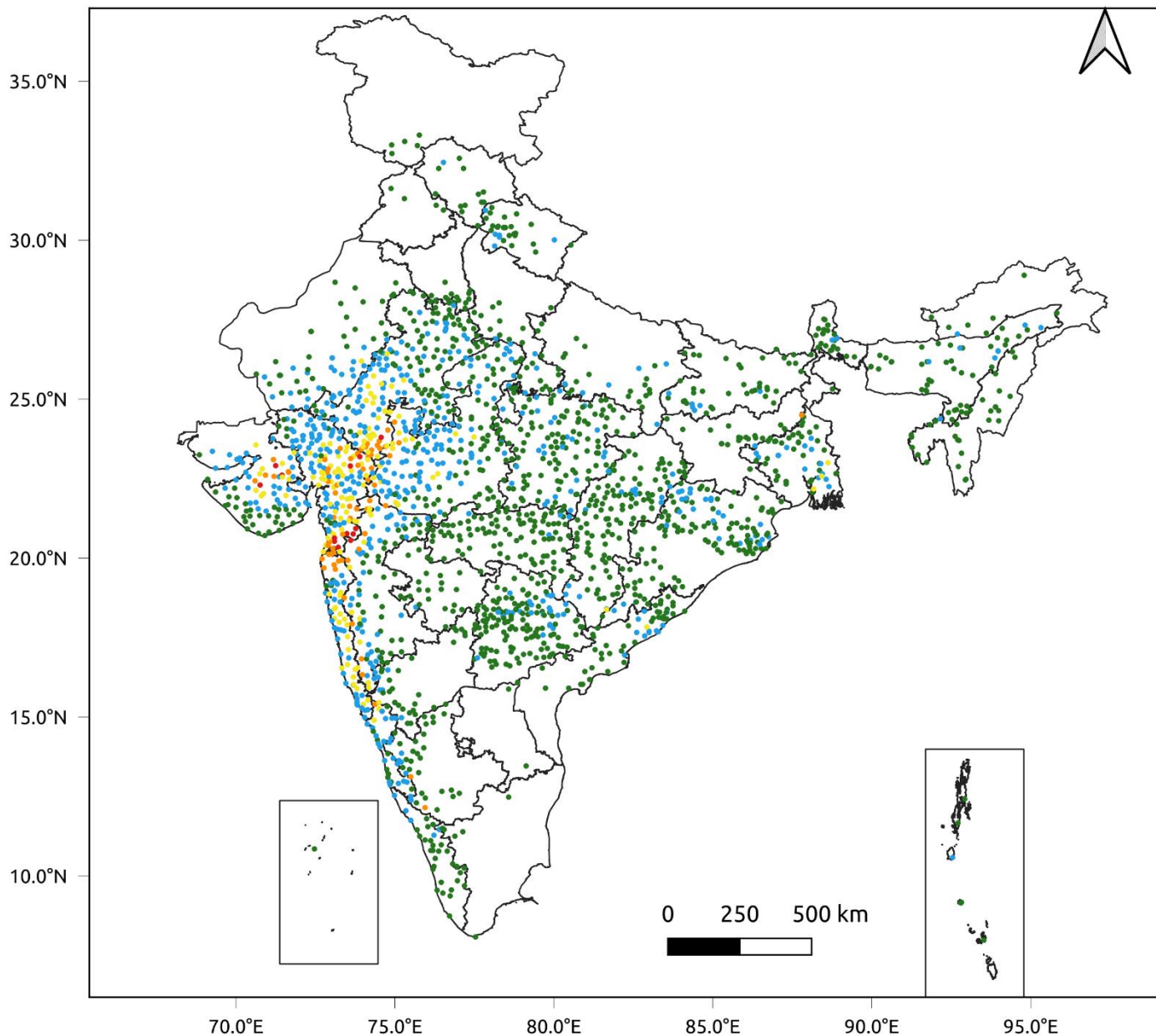


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

24 Hr cumulative rainfall recorded over different stations during 0830 IST of 25-8-2024 to 0830 IST of 26-8-2024

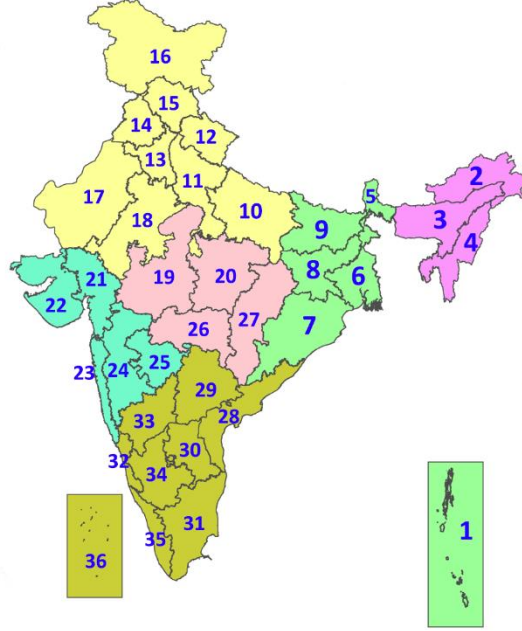


Legends

- 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)

LEGENDS

1. अंडमान और निकोबार द्वीपसमूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
6. गंगीय पश्चिम बंगाल
7. ओडिशा
8. झारखंड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखंड
13. हरियाणा, चंडीगढ़ और दिल्ली
14. पंजाब
15. हिमाचल प्रदेश
16. जम्मू और कश्मीर और लद्दाख
17. पश्चिम राजस्थान
18. पूर्वी राजस्थान
19. पश्चिम मध्य प्रदेश
20. पूर्वी मध्य प्रदेश
21. गुजरात
22. सौराष्ट्र
23. कोंकण और गोवा
24. मध्य महाराष्ट्र
25. मराठवाड़ा
26. विदर्भ
27. छत्तीसगढ़
28. तटीय आंध्र प्रदेश और यनम
29. तेलंगाना
30. रायलसीमा
31. तमिलनाडु, पुडुचेरी और कराईकल
32. तटीय कर्नाटक
33. आंतरिक उत्तरी कर्नाटक
34. आंतरिक दक्षिणी कर्नाटक
35. केरल और 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, Chandigarh & 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. Vidarbha
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)



Fog



Heavy Snow



Cold Wave

COLOUR CODED WARNING

No Warning (No Action)

Watch (Be Aware)

Alert (Be Prepared To Take Action)

Warning (Take Action)



Heavy Rain



Dust Storm



Cold Day



Very Heavy Rain



Heat Wave



Ground Frost



Extremely Heavy Rain



Warm Night



Thunder & Lightning



Hot Day



Hailstorm



Hot & Humid



Dust Raising Winds



Strong Surface Winds

Probabilistic Forecast

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

DEFINITION/CRITERIA

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)