

Thursday, August 29, 2024
Time of Issue: 0915 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems:

- The **deep depression** over Saurashtra & Kachchh moved slowly westwards with a speed of 3 Kmph during past 6 hours and lay centered at 0530 hours IST of today, the 29th August over the same region near latitude 23.7°N and longitude 69.5 °E, 60 km north-northwest of Bhuj (Gujarat), 80 km northeast of Naliya (Gujarat) and 270 km east-southeast of Karachi (Pakistan). It is likely to move west-southwestwards, emerge into northeast Arabian Sea off Kachchh and adjoining Saurashtra & Pakistan coasts and intensify into a Cyclonic Storm on 30th August. Thereafter, it would continue to move nearly west-southwestwards over northeast Arabian Sea away from Indian coast during subsequent 2 days.
- A fresh low pressure area is likely to form over Eastcentral & adjoining North Bay of Bengal during next 12 hours. It is likely to move west-northwestwards close to south Odisha & north Andhra Pradesh coasts during next 2 days.
- A cyclonic circulation lies over southeast Uttar Pradesh and an east-west trough runs from it to the cyclonic circulation over Eastcentral Bay of Bengal in lower tropospheric levels.
- Western end of the monsoon trough at mean sea level lies to the south of its normal position while the eastern end runs at its normal position.

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 **extremely heavy rainfall** very likely over Saurashtra & Kutch on 29th August.
- ✓ Isolated **very heavy rainfall** very likely over Saurashtra & Kutch on 30th; Chhattisgarh on 30th & 31st; Vidarbha on 31st August; Gujarat Region on 01st & 02nd September; Konkan & Goa, Madhya Maharashtra on 02nd & 03rd September.
- ✓ Isolated **Heavy rainfall** very likely over Konkan & Goa, Madhya Maharashtra during next 7 days; Gujarat Region on 31st August & 03rd September; Saurashtra & Kutch on 31st; Madhya Pradesh during 30th August-03rd September; Vidarbha during 30th August- 02nd September; Chhattisgarh during 29th August – 02nd September; Marathwada on 01st & 02nd September.

❖ 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 Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during next 7 days; Arunachal Pradesh during 31st August – 03rd September; Andaman & Nicobar Islands during 29th – 30th; Jharkhand on 29th; Odisha during 29th-31st August.
- ✓ Isolated **very heavy rainfall** also very likely over Odisha during 29th -30th August.
- ✓ Isolated **extremely heavy rainfall** also very likely over Odisha on 30th August.

❖ 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, Interior Karnataka, Coastal Andhra Pradesh & Yanam during 29th August-01st September; Telangana on 02nd September; Coastal Karnataka during 29th August-03rd September.
- ✓ Isolated **very heavy rainfall** also very likely over Coastal Karnataka during 29th – 31st; South Interior Karnataka on 29th & 30th Kerala & Mahe on 30th; Coastal Andhra Pradesh & Yanam on 30th & 31st; Telangana on 01st September.
- ✓ Isolated **extremely heavy rainfall** also very likely over Telangana on 30th & 31st August.

❖ Northwest India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Rajasthan; isolated to scattered rainfall over Punjab, Uttar Pradesh Haryana-Chandigarh-Delhi during the week.
- ✓ Isolated **heavy rainfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 29th -30th; Uttarakhand on 29th August & 03rd September; Himachal Pradesh, Punjab, Haryana-Chandigarh on 29th; West Uttar Pradesh on 29th, 02nd & 03rd; East Uttar Pradesh during 01st -03rd September; West Rajasthan on 03rd September; East Rajasthan during 01st – 03rd September.
- ✓ Isolated **very heavy rainfall** also very likely over Southeast Rajasthan on 02nd & 03rd September.

* 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)

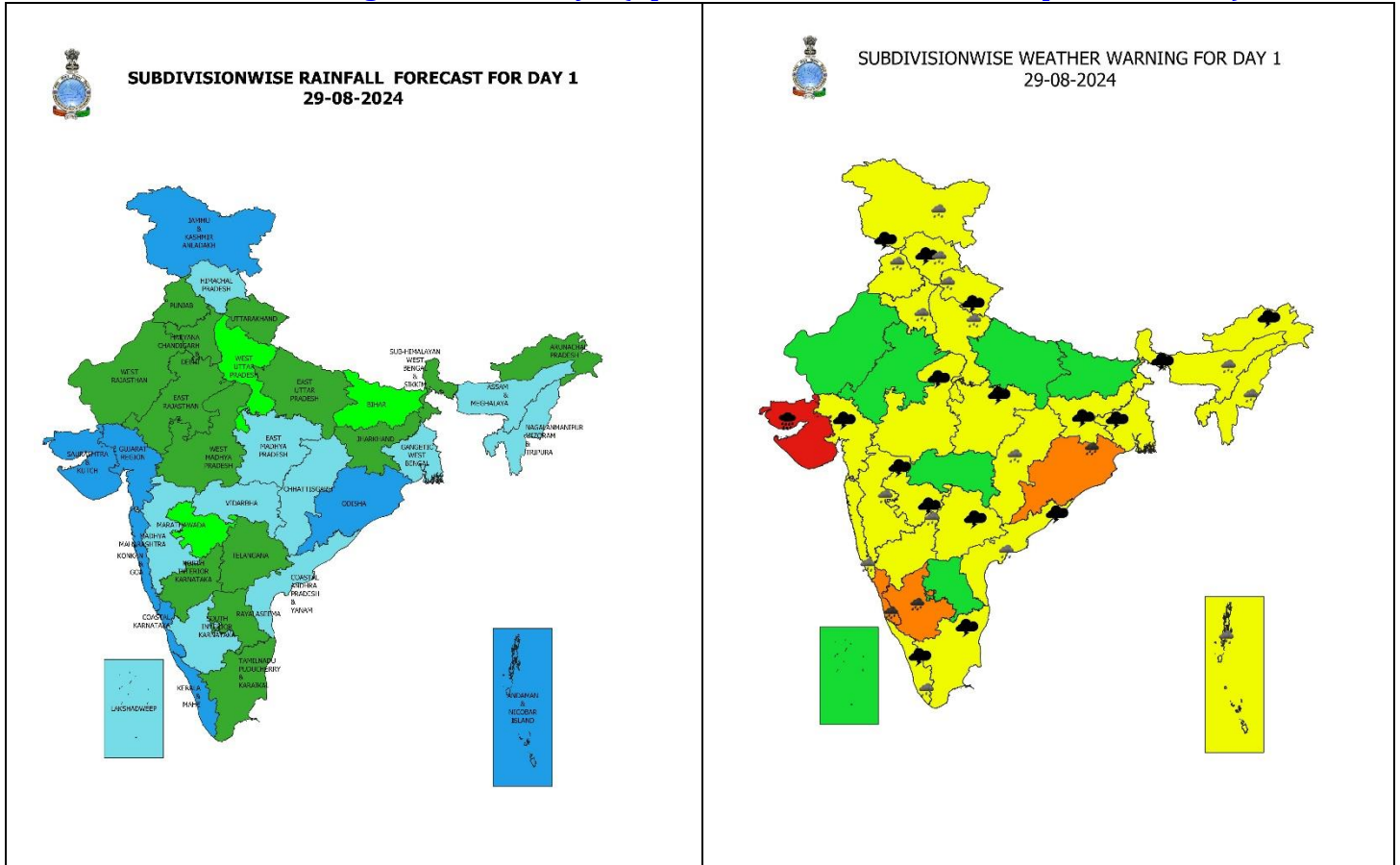
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Andaman & Nicobar Islands, **at many places** over Jammu Division, Konkan & Goa, Gujarat state, Coastal Karnataka; **at a few places** over Uttar Pradesh, Odisha, Kerala & Mahe; **at isolated places** over Punjab, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Rajasthan, Madhya Pradesh, Bihar, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Vidarbha, Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy to very heavy rainfall** at isolated places over Saurashtra & Kutch.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Saurashtra & Kutch:** Dwarka-17, Rajkot & Porbandar -6 each, Kandla-5, Naliya-3, Bhuj-2; **East Rajasthan:** Alwar-3; **West Uttar Pradesh:** Shahjahanpur-2; **East Uttar Pradesh:** Kanpur-5; **East Madhya Pradesh:** Umaria-3; **Odisha:** Jajpur & Bolangir-3 each, Malkangiri-2; **Assam & Meghalaya:** Barapani-2; **Madhya Maharashtra:** Mahabaleshwar-4; **Coastal Karnataka:** Honavar-2; **Kerala & Mahe:** Kannur-2.
- ❖ **Minimum Temperature Departures (as on 28-08-2024):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at a few places over Kerala & Mahe; at isolated places over Uttarakhand, Uttar Pradesh, East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh, Odisha, Chhattisgarh, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Punjab, Haryana-Chandigarh-Delhi, Rajasthan, Gangetic West Bengal & Gujarat state and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 18.0°C** was reported at **Bulsar (Gujarat Region)** over the plains of the country. (Fig.4)
- ❖ **Maximum Temperature Departures (as on 28-08-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Vidarbha, East Madhya Pradesh, Assam & Meghalaya; **above normal (1.6°C to 3.0°C)** at isolated places over Himachal Pradesh, West Uttar Pradesh, West Bengal & Sikkim, Odisha, Chhattisgarh, West Madhya Pradesh and Konkan & Goa. These were **markedly below normal (-5.1°C or less)** at isolated places over Saurashtra & Kutch, West Rajasthan and Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **appreciably above normal (-3.1°C to -5.0°C)** at isolated places over Telangana, Tamil Nadu, Puducherry & Karaikal and East Uttar Pradesh; **below normal (-1.6°C to -3.0°C)** at isolated places over Haryana-Chandigarh-Delhi, East Rajasthan and Nagaland, Manipur, Mizoram & Tripura and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature of 37.6°C** was reported at **Rentachintala (Coastal Andhra Pradesh)** over the country. (Fig. 2)

Meteorological Analysis (Based on 0530 hours IST)

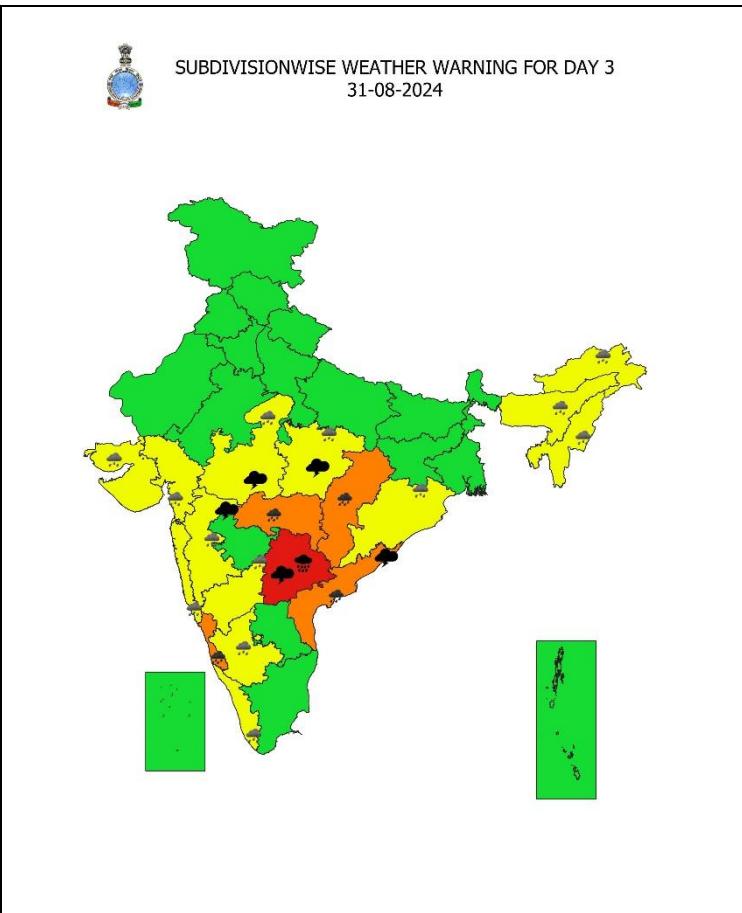
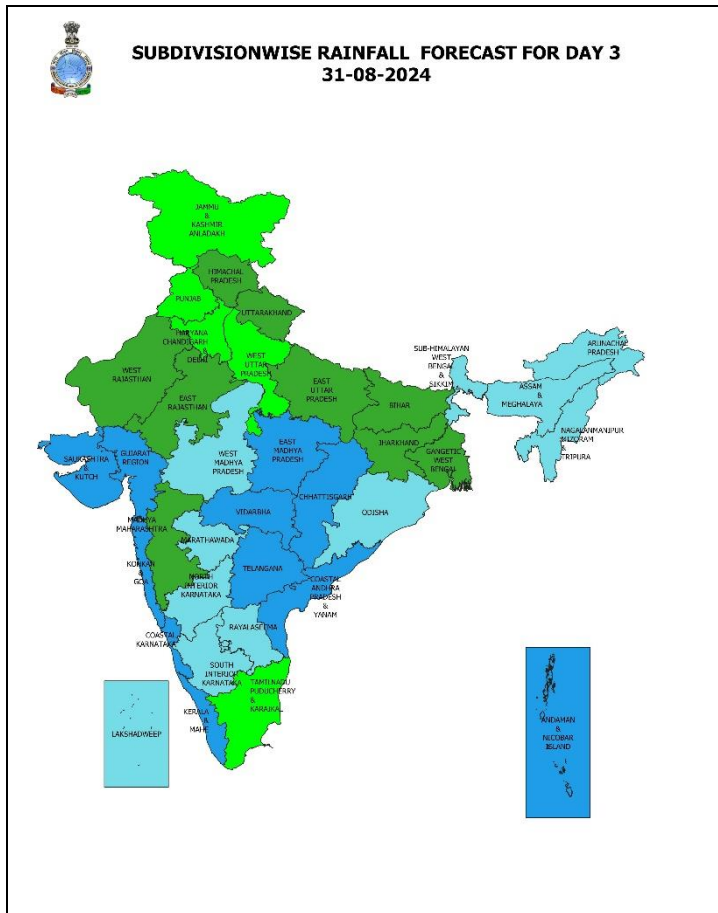
- ❖ The **deep depression** over Saurashtra & Kachchh moved slowly westwards with a speed of 3 Kmph during past 6 hours and lay centered at 0530 hours IST of today, the 29th August over the same region near latitude 23.7°N and longitude 69.5 °E, 60 km north-northwest of Bhuj (Gujarat), 80 km northeast of Naliya (Gujarat) and 270 km east-southeast of Karachi (Pakistan). It is likely to move west-southwestwards, emerge into northeast Arabian Sea off Kachchh and adjoining Saurashtra & Pakistan coasts and intensify into a Cyclonic Storm on 30th August. Thereafter, it would continue to move nearly west-southwestwards over northeast Arabian Sea away from Indian coast during subsequent 2 days.
- ❖ The **cyclonic circulation** over Eastcentral Bay of Bengal & neighbourhood extending upto 5.8 km above mean sea level tilting southward with height persists. Under its influence, a fresh **low pressure area** is likely to form over Eastcentral & adjoining North Bay of Bengal during next 12 hours. It is likely to move west-northwestwards close to south Odisha & north Andhra Pradesh coasts during next 2 days.
- ❖ The **cyclonic circulation** over southeast Uttar Pradesh extending upto 3.1 km above mean sea level persists.
- ❖ The **east-west trough** from above cyclonic circulation over southeast Uttar Pradesh to the cyclonic circulation over Eastcentral Bay of Bengal extending upto 3.1 km above mean sea level persists.
- ❖ The **Monsoon trough** at mean sea level now passes through centre of deep depression over Saurashtra & Kutch, Guna, Sagar, Jamshedpur, Digha and thence southeastwards to Eastcentral Bay of Bengal.
- ❖ The **offshore trough** at mean sea level from south Gujarat to central Kerala coast persists.
- ❖ The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along Long. 67°E to the north of Lat. 30°N.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 05th September, 2024)



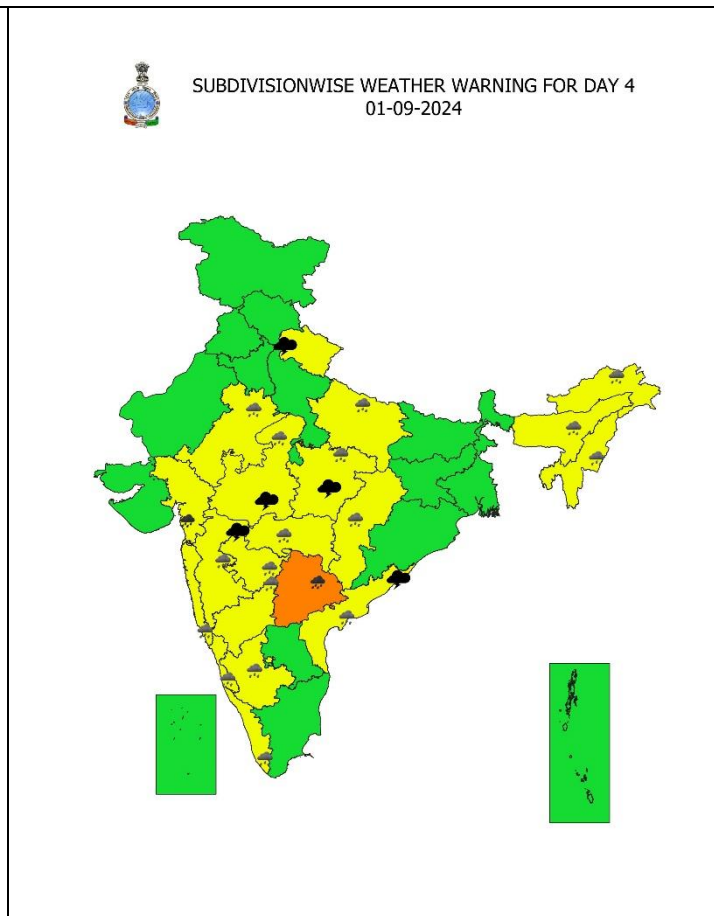
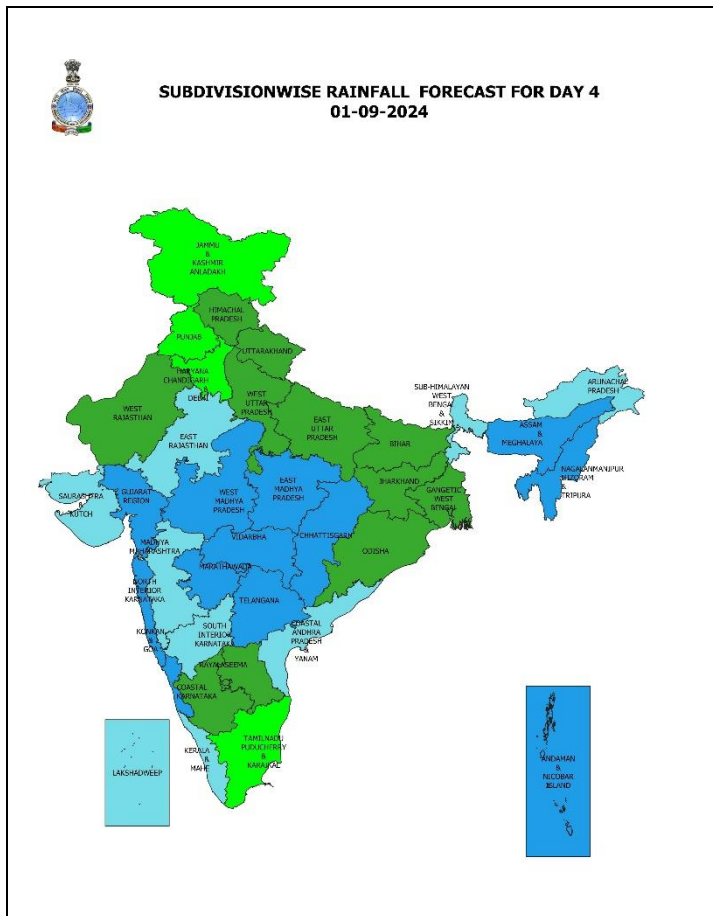
29 August (Day 1):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm)** very likely at isolated places over Saurashtra & Kutch; **Heavy to very heavy rainfall (≥ 12 cm)** at isolated places over Odisha, Coastal & South Interior Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, Chhattisgarh, Andaman & Nicobar Islands, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting** very likely at isolated places over Madhya Pradesh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is very likely to prevail over north Arabian sea, most parts of central Arabian sea and northern parts of southwest Arabian sea, along and off Gujarat, Maharashtra, Konkan, goa, Karnataka, Kerala coasts, Lakshadweep area, over gulf of Mannar, and off Sri Lanka coast; northern parts of south Bay of Bengal, most parts of central Bay of Bengal, and southern parts of north Bay of Bengal, along and off north Andhra Pradesh 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, northeast Arabian sea, many parts of northwest, eastcentral Arabian sea, adjoining westcentral Arabian sea, few parts of eastcentral and westcentral Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over most parts of westcentral, western parts of southwest Arabian sea, along and off Somalia, Yemen, Oman coasts. **Squally winds with speed reaching 55 kmph to 65 kmph gusting to 75 kmph** likely to prevail along and off Gujarat coast and adjoining Pakistan coasts and adjoining northeast and eastcentral Arabian sea. Fishermen are advised not to venture into these areas.



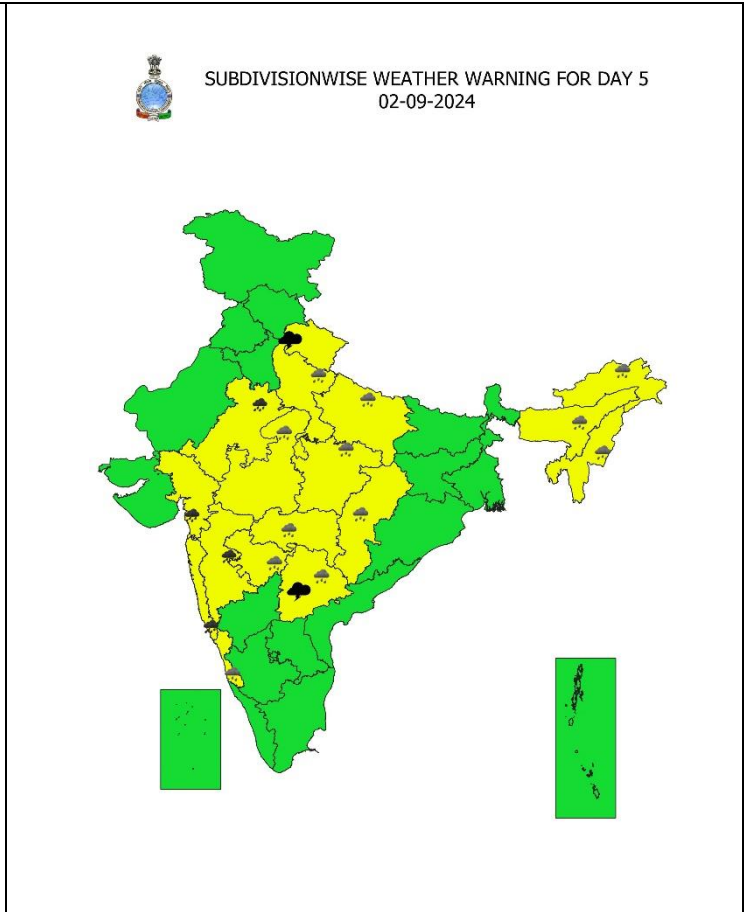
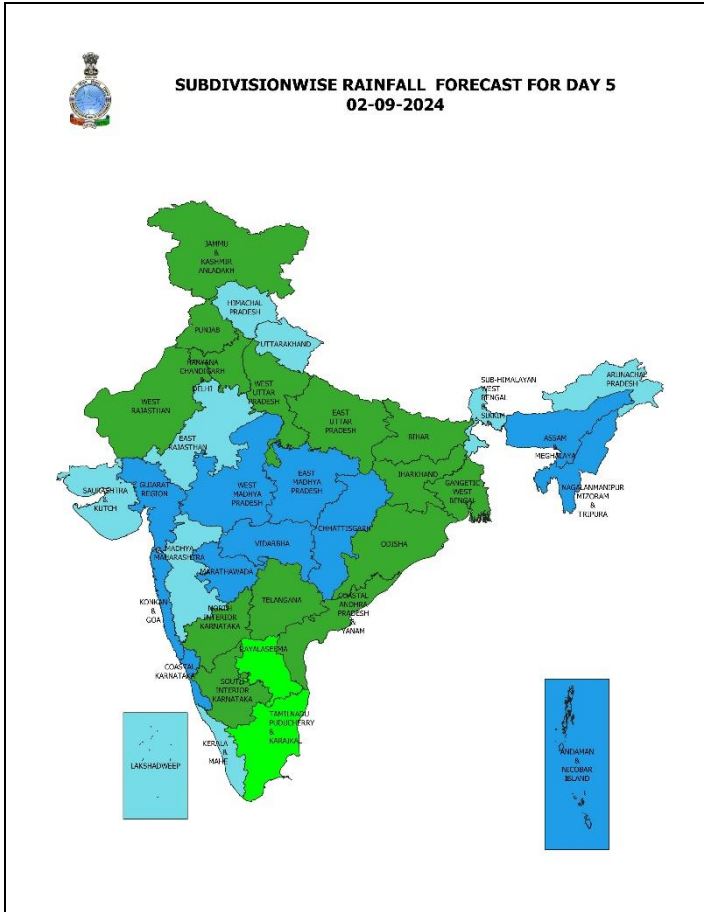
31 August (Day 3):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm)** likely at isolated places over Telangana; **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Coastal Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over Madhya Pradesh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat state, Kerala & Mahe, Karnataka.
- ❖ **Thunderstorm accompanied with lighting** very likely at isolated places over 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 Arabian sea, most parts of central Arabian sea and northern parts of southwest Arabian sea, along and off Gujarat, Maharashtra, Konkan, goa, Karnataka, Kerala coasts, Lakshadweep area, over gulf of Mannar, and off Sri Lanka coast; northern parts of south Bay of Bengal, most parts of central Bay of Bengal, northwest and adjoining northeast Bay of Bengal, along and off north Andhra Pradesh, Odisha, west Bengal coasts, 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, northeast Arabian sea, many parts of northwest, eastcentral Arabian sea, adjoining westcentral Arabian sea, few parts of eastcentral and westcentral Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over most parts of westcentral, western parts of southwest Arabian sea, along and off Somalia, Yemen, Oman coasts. **Squally winds with speed reaching 55 kmph to 65 kmph gusting to 75 kmph** likely to prevail along and off Gujarat coast and adjoining Pakistan coasts and adjoining northeast and eastcentral Arabian sea. Fishermen are advised not to venture into these areas.



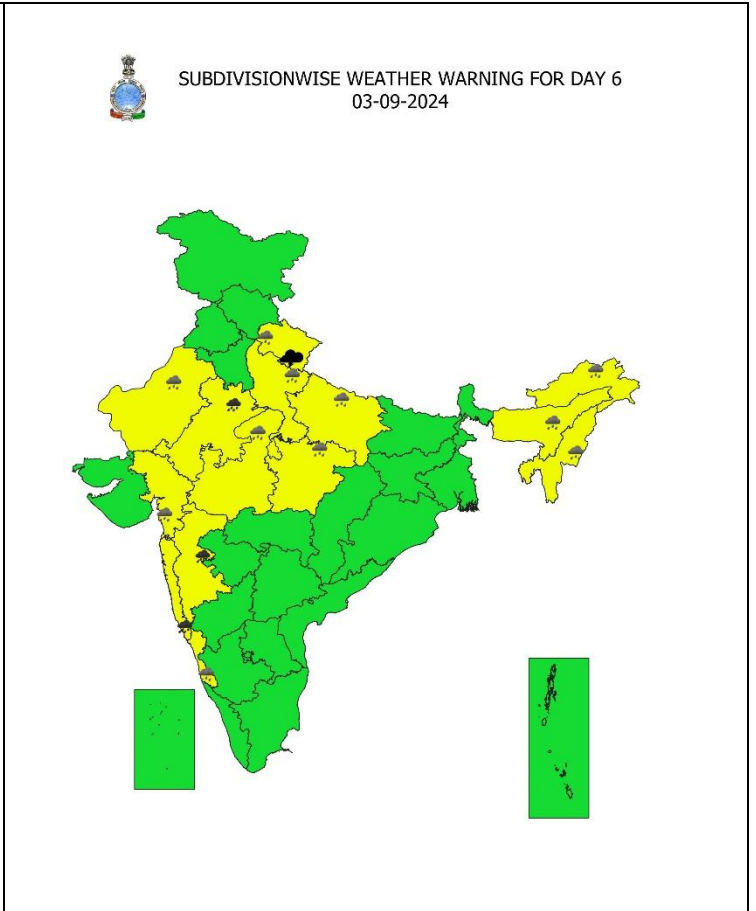
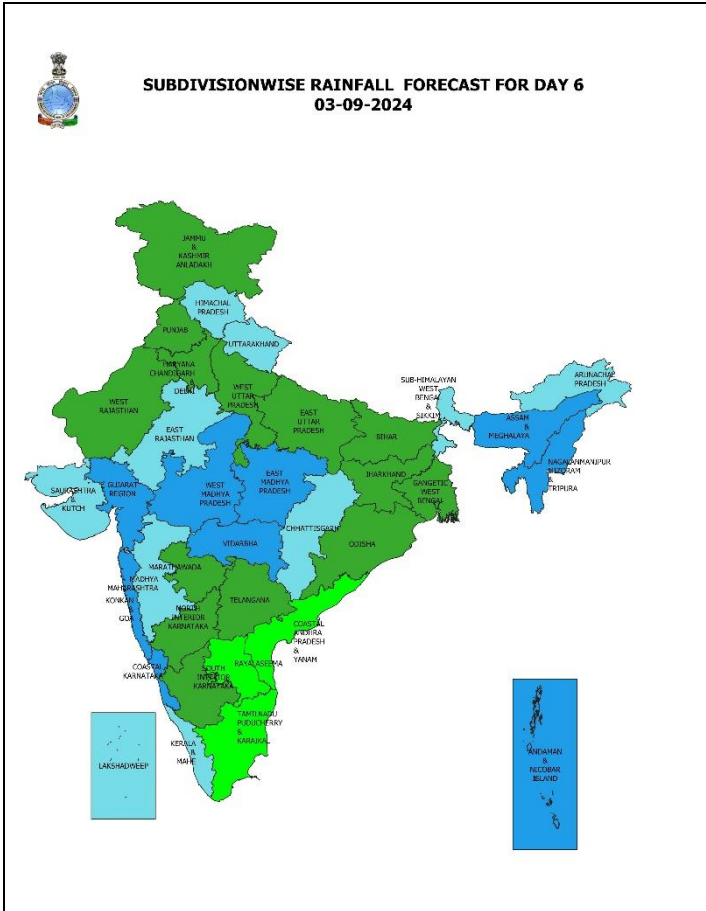
01 September (Day 4):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Gujarat Region, Telangana; **Heavy rainfall (≥ 7 cm)** at isolated places over East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Karnataka.
- ❖ **Thunderstorm accompanied with lighting** very likely at isolated places over 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 Arabian sea, most parts of central Arabian sea and northern parts of southwest Arabian sea, along and off Gujarat, Maharashtra, over gulf of Mannar, and off Sri Lanka coast; northern parts of south Bay of Bengal, most parts of central Bay of Bengal, northwest and adjoining northeast Bay of Bengal, along and off north Andhra Pradesh. **squally weather with winds speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over some parts of north Arabian sea, westcentral adjoining eastcentral Arabian sea. **squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over most parts of westcentral, western parts of southwest Arabian sea, along and off Somalia, Yemen, Oman coasts. Fishermen are advised not to venture into these areas.



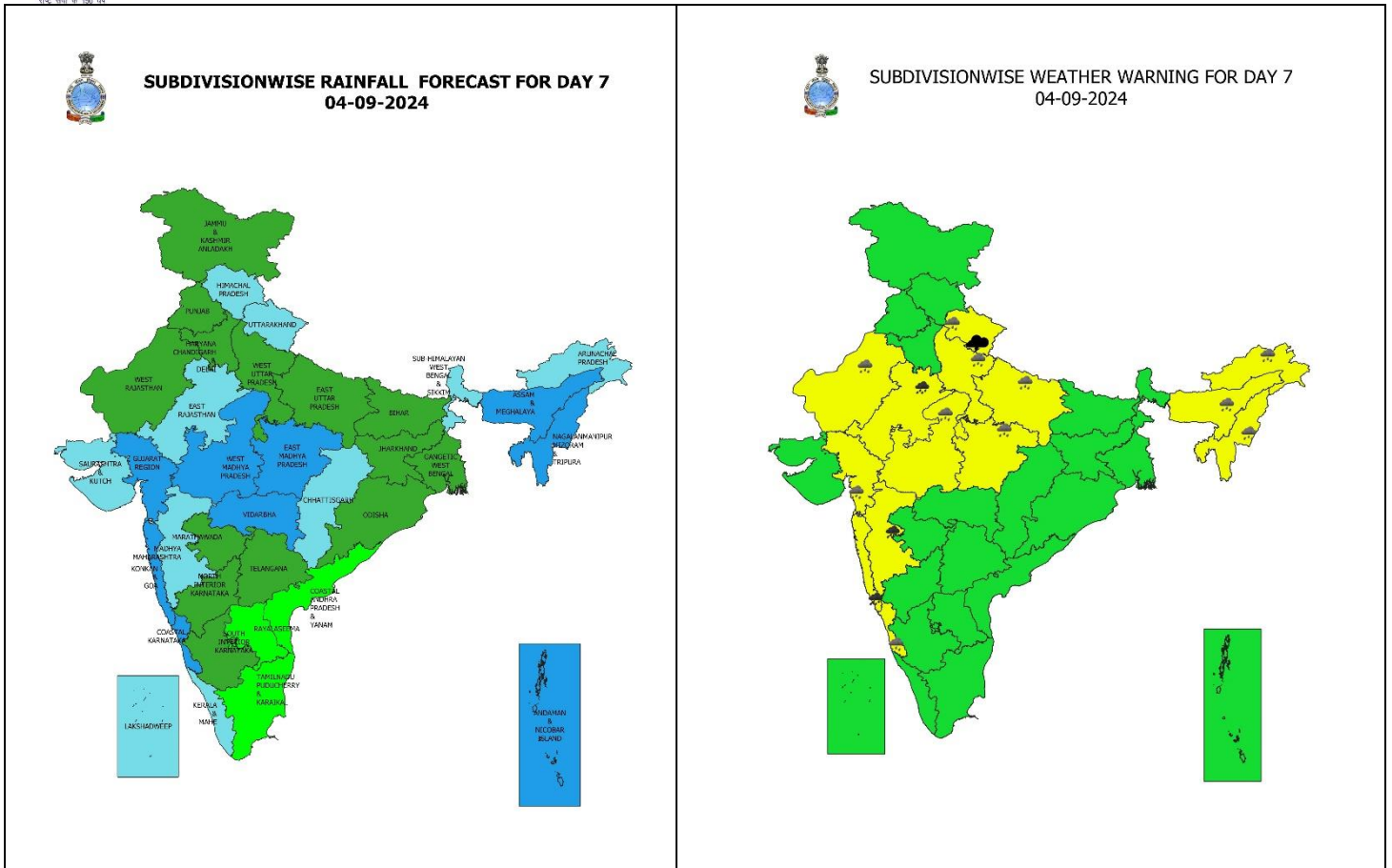
02 September (Day 5):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Konkan & Goa, Madhya Maharashtra, East Rajasthan, Gujarat Region; **Heavy rainfall (≥ 7 cm)** at isolated places over Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Coastal Karnataka.



03 September (Day 6):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over East Rajasthan, Madhya Maharashtra, Konkan & Goa; **Heavy rainfall (≥ 7 cm)** at isolated places over Uttarakhand, Uttar Pradesh, West Rajasthan, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Coastal Karnataka.



04 September (Day 7):

❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over East Rajasthan, Madhya Maharashtra, Konkan & Goa; **Heavy rainfall (≥ 7 cm)** at isolated places over Uttarakhand, Uttar Pradesh, West Rajasthan, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Coastal Karnataka.

Weather Outlook for subsequent 3 days (During 05th September– 07th 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.
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599
(Service to the Nation since 1875)

Impact due to

- **Isolated extremely heavy rainfall** very likely over Saurashtra & Kutch on 29th; Odisha on 30th August.
- **Very heavy rainfall** at isolated over Coastal Karnataka during 29th August- 02nd September; South Interior Karnataka, Coastal Andhra Pradesh & Yanam during 29th-31st; Odisha on 29th; Kerala & Mahe on 29th & 30th August; Andaman & Nicobar Islands, Konkan & Goa, Madhya Maharashtra on 02nd September; Gujarat Region, Madhya Pradesh on 01st & 02nd September; Vidarbha, Telangana on 31st August & 01st September; Chhattisgarh on 30th & 31st August.
- **Moderate flash flood risk** likely over Saurashtra & Kutch; **Low to Moderate flash flood risk** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 29th & 30th August.
(ANNEXURE I)

- ✓ 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.
- ✓ Fishermen are advised not to venture into North Bay of Bengal and along & off North Odisha, West Bengal, Bangladesh coasts on 26th 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 Gujarat State, Konkan & Goa, Madhya Maharashtra, Uttarakhand, Uttar Pradesh, Andaman & Nicobar Islands Odisha, Jharkhand and Karnataka.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Jammu & Kashmir, Punjab, Haryana, Madhya Pradesh Chhattisgarh, Kerala and Coastal Andhra Pradesh.
- ✓ 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, castor, cotton, pearl millet, groundnut, sesame and maize fields in Gujarat.
- ✓ 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:

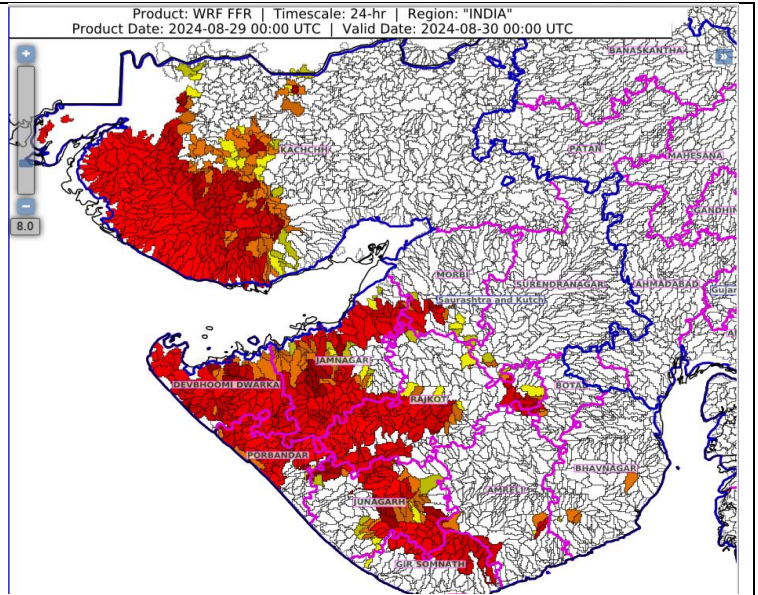
ANNEXURE I

24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 30-08-2024 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Saurashtra & Kutch - Amreli, Bhavnagar, Botad, Devbhoomi Dwarka, 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 AoC 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 30-08-2024 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Himachal Pradesh - Chamba, Kangra, Kullu, Shimla and Sirmaur districts.

Jammu & Kashmir & Ladakh - Anantnag, Badgam, Bandipore, Baramula, Doda, Ganderwal, Kathua, Kistwar, Kulgam, Kupwara, Punch, Ramban, Riasi, Udhampur, Kargil and Leh And Ladakh districts.

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

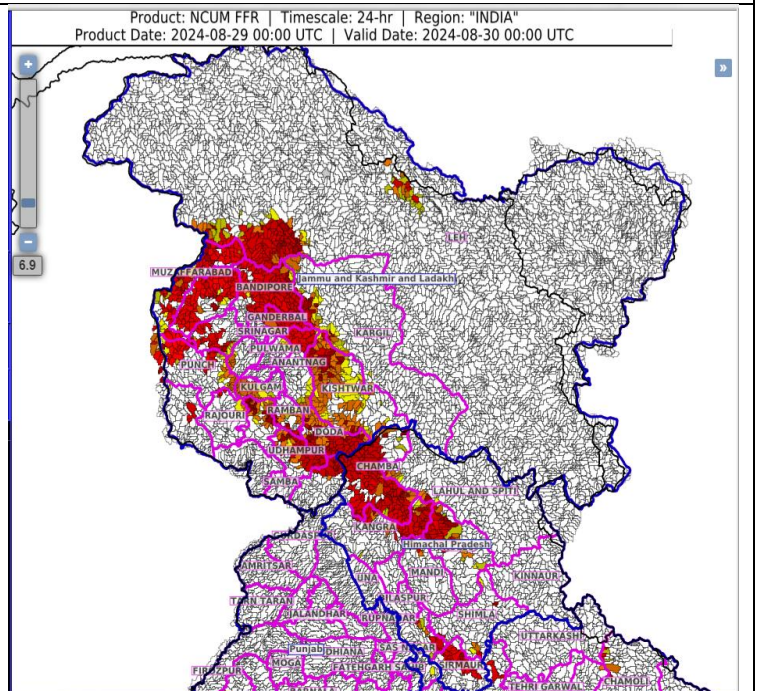


Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

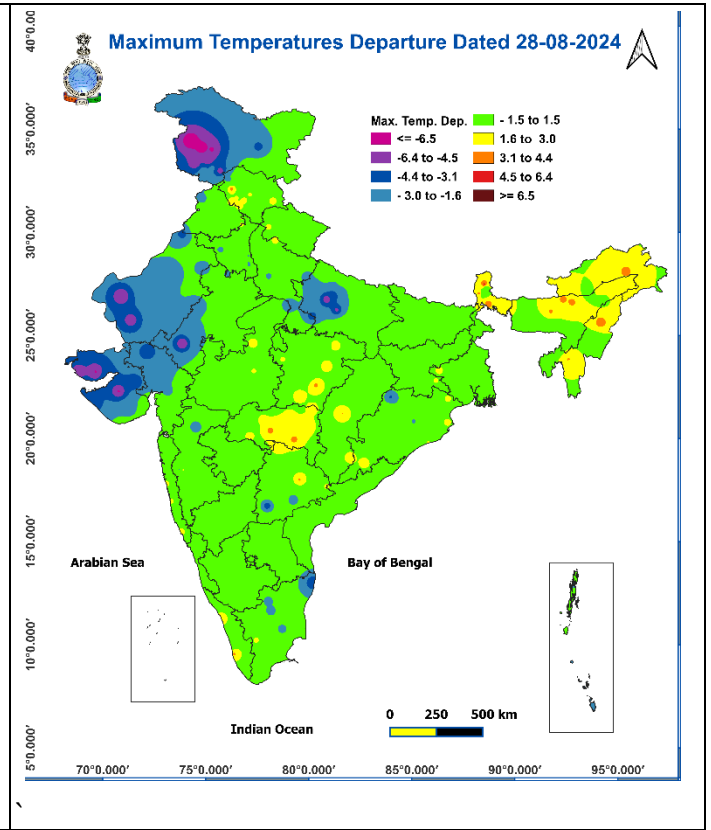
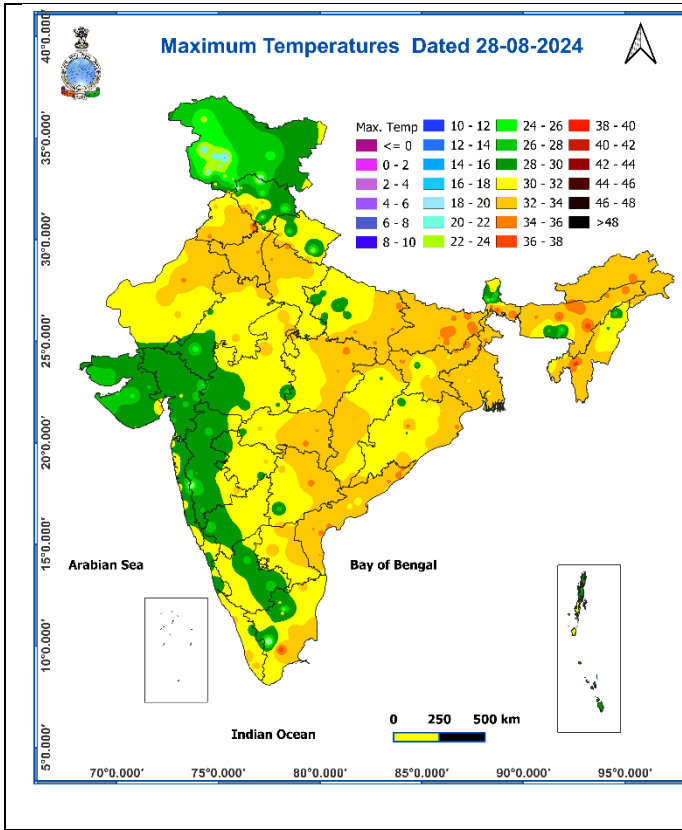


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

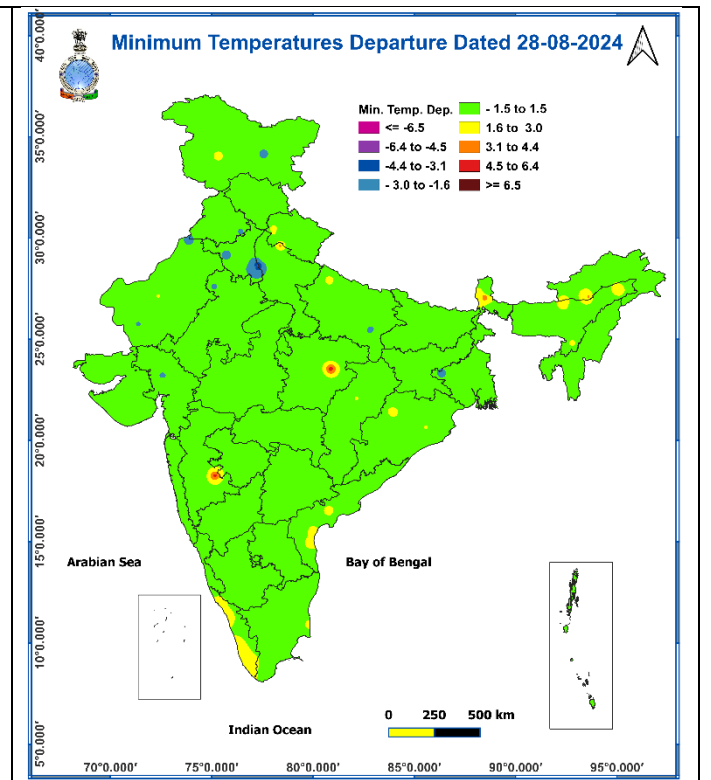
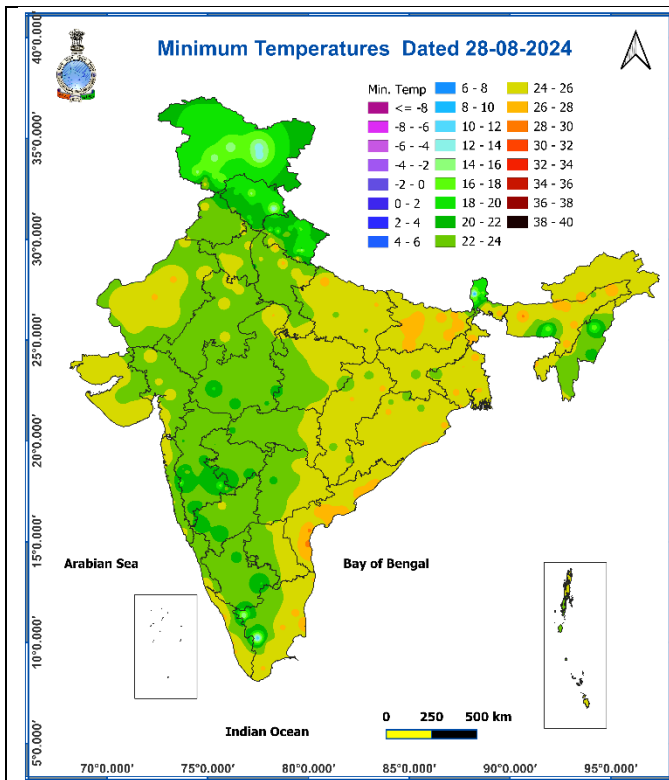
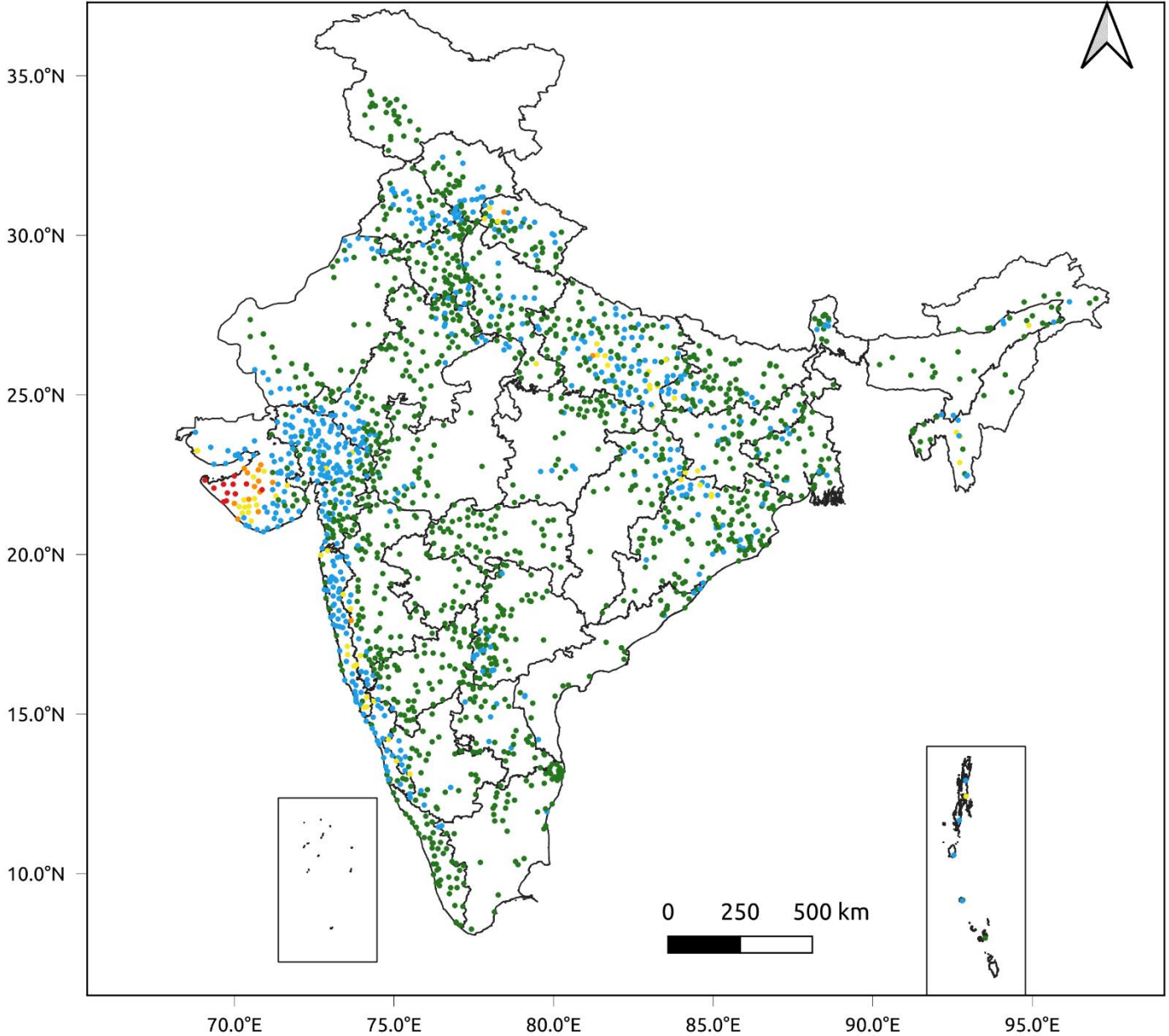


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

24 Hr cumulative rainfall recorded over different stations during 0830 IST of 27-8-2024 to 0830 IST of 28-8-2024

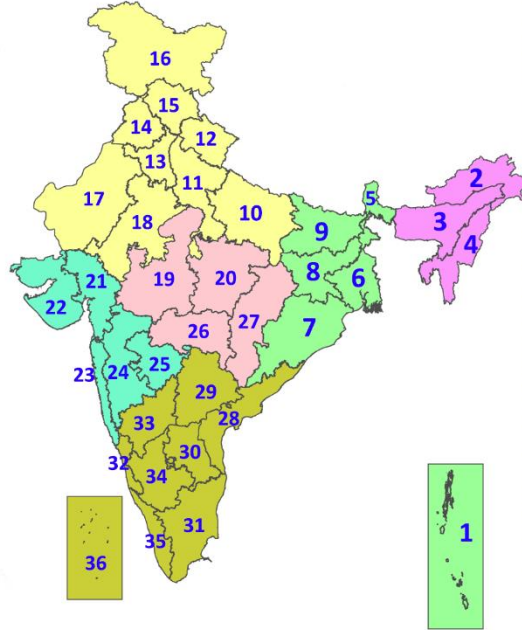


Legends

- 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)