

Monday, August 12, 2024
Time of Issue: 0745 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems

- ✓ A cyclonic circulation lies over northeast Rajasthan & neighbourhood extending upto middle tropospheric levels. A trough runs from this cyclonic circulation to Bangladesh in lower tropospheric levels.
- ✓ The **Monsoon trough** is near its normal position at mean sea level. It is likely to oscillate near its normal position during most days of the week.
- ✓ Another trough runs from South Interior Karnataka to Comorin area in lower tropospheric levels.
- ✓ Another **cyclonic circulation** over northeast Assam extending upto middle tropospheric levels.

Forecast & Warnings: (upto 7 days):

❖ Northwest India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Western Himalayan Region and Scattered to Fairly widespread over plains of northwest India during the week.
- ✓ Isolated **heavy rainfall** very likely over Himachal Pradesh, Uttarakhand, East Rajasthan, Uttar Pradesh during 12th-18th; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 14th-17th; West Rajasthan during 12th-14th; Haryana-Chandigarh during 12th-15th August.
- ✓ Isolated **very heavy rainfall** also very likely over East Rajasthan on 12th August.

❖ West & Central India

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over West & Central India during most days of the week.

❖ 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 Arunachal Pradesh, Assam & Meghalaya, Bihar during 12th-18th; Sub-Himalayan West Bengal & Sikkim on 14th & 16th; Nagaland, Manipur, Mizoram & Tripura and Gangetic West Bengal during 14th-16th; Jharkhand during 13th-15th; Odisha during 13th-15th August.
- ✓ **Very heavy rainfall** also very likely at isolated places over Assam & Meghalaya on 12th; Nagaland, Manipur, Mizoram & Tripura on 14th, Bihar on 12th August.

❖ South Peninsular India:

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over South Peninsular India during the week.
- ✓ Isolated **heavy rainfall** very likely over Kerala & Mahe, Tamil Nadu and North Interior Karnataka during 12th-15th; Rayalaseema on 14th & 15th August.
- ✓ Isolated **very heavy rainfall** also very likely over Tamil Nadu on 14th & 15th; Kerala & Mahe on 13th & 14th August.

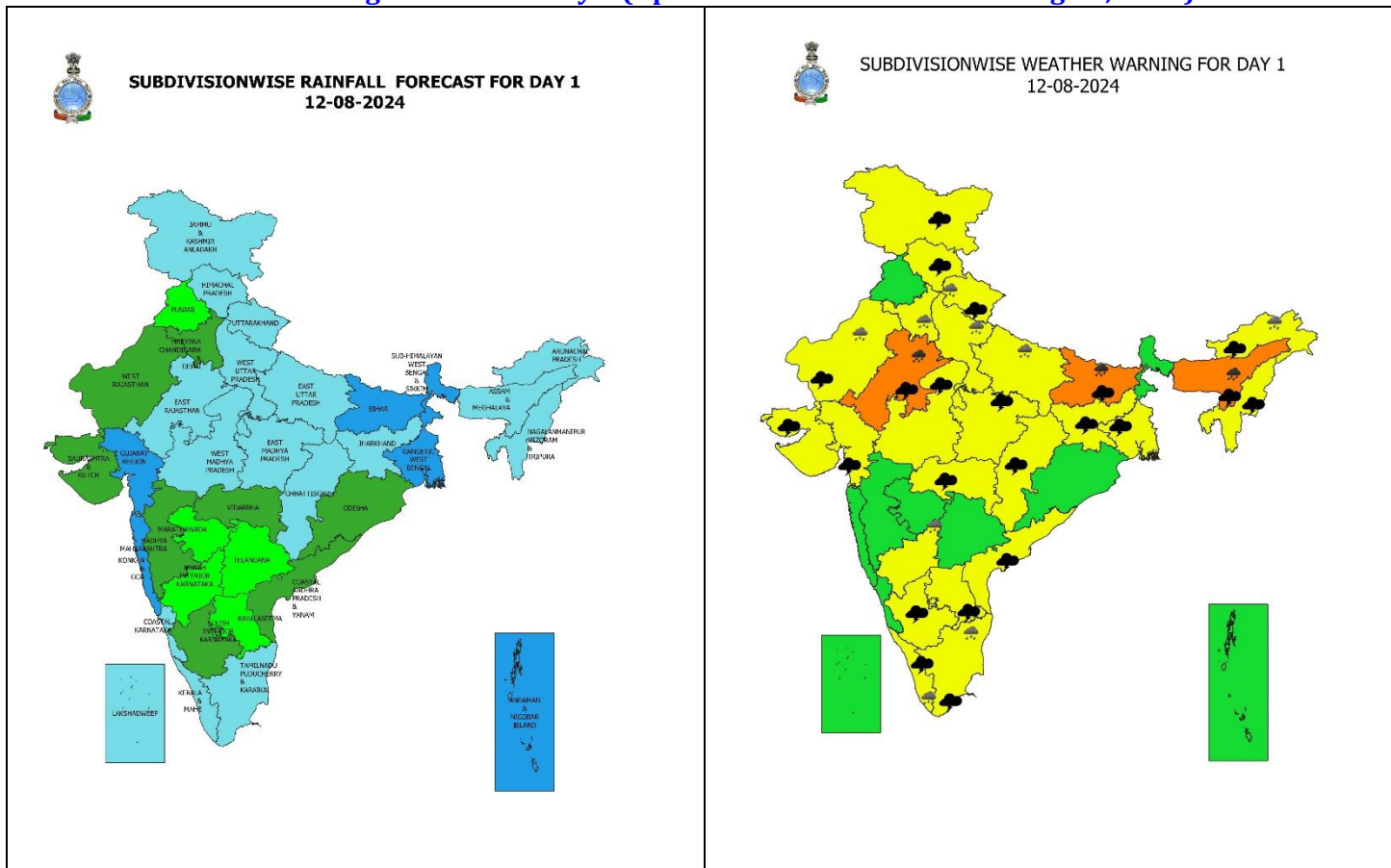
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Madhya Pradesh, East Rajasthan & Himachal Pradesh; **at a few places** over West Uttar Pradesh, West Bengal & Sikkim, Konkan & Goa and Gujarat Region; **at isolated places** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh-Delhi, Uttarakhand, East Uttar Pradesh, Jharkhand, Bihar, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh, Vidarbha, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Karnataka, Madhya Maharashtra and Saurashtra & Kutch.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy to very heavy rainfall** at isolated places over Chandigarh, East Rajasthan; **Heavy rainfall** at isolated places over Himachal Pradesh, Haryana & Punjab.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Chandigarh:** Chandigarh 13; **East Rajasthan:** Karanpur (Karauli) 12, Khandar (Sawai Madhopur) 11, Vajeerpur (Gangapur city) 10, Jaipur 6; **Himachal Pradesh:** Una 9; **Haryana:** Gurgaon & Ambala 8 each, Kurukshetra 4; **Punjab:** Adampur 7, Patiala, Balachar & Ludhiana 6 each; **Delhi:** SPS Mayur Vihar 6, Ayanagar 5, Palam 4, Lodhi Road & Safdarjung 3 each; **Jharkhand:** Daltonganj 6; **West Uttar Pradesh:** Jalesar 4, Sikandra Rao & Muzaffar Nagar 3 each; **East Uttar Pradesh:** Kanpur Dehat 4, Bahraich 3; **West Madhya Pradesh:** Hoshangabad 3, Khandwa & Betul 2 each; **East Madhya Pradesh:** Mandla 3; **Meghalaya:** Barapani/Shillong 3, Cherrapunji 2; **Kerala & Mahe:** Anayirankal, Enamakkal & Munderi 3 each.
- ❖ **Minimum Temperature Departures (as on 11-08-2024):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at a few places over Kerala & Mahe; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Odisha, Sub-Himalayan West Bengal & Sikkim, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Telangana. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Vidarbha, West Madhya Pradesh and Assam & Meghalaya and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature** of 18.0°C was reported at **Dehri (Bihar)** over the plains of the country (Fig.4).
- ❖ **Maximum Temperature Departures (as on 11-08-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over North Interior Karnataka, Coastal Andhra Pradesh & Yanam & Kerala & Mahe; **above normal (1.6°C to 3.0°C)** at most places over South Interior Karnataka; a few places over Madhya Maharashtra, Konkan & Goa & Telangana; at isolated places over Bihar, Vidarbha, Marathwada, Rayalaseema, Odisha & Tamil Nadu, Puducherry & Karaikal. These were **Markedly below normal (-5.1°C or less)** at isolated places over Himachal Pradesh & Punjab; **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Haryana & East Rajasthan; **below normal (-1.6°C to -3.0°C)** at isolated places over West Rajasthan, Uttar Pradesh, West Madhya Pradesh, West Rajasthan, Gangetic West Bengal, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature** of 36.8°C was reported at **Sri Ganganagar (West Rajasthan)** over the country (Fig. 2).

Meteorological Analysis (Based on 0530 hours IST)

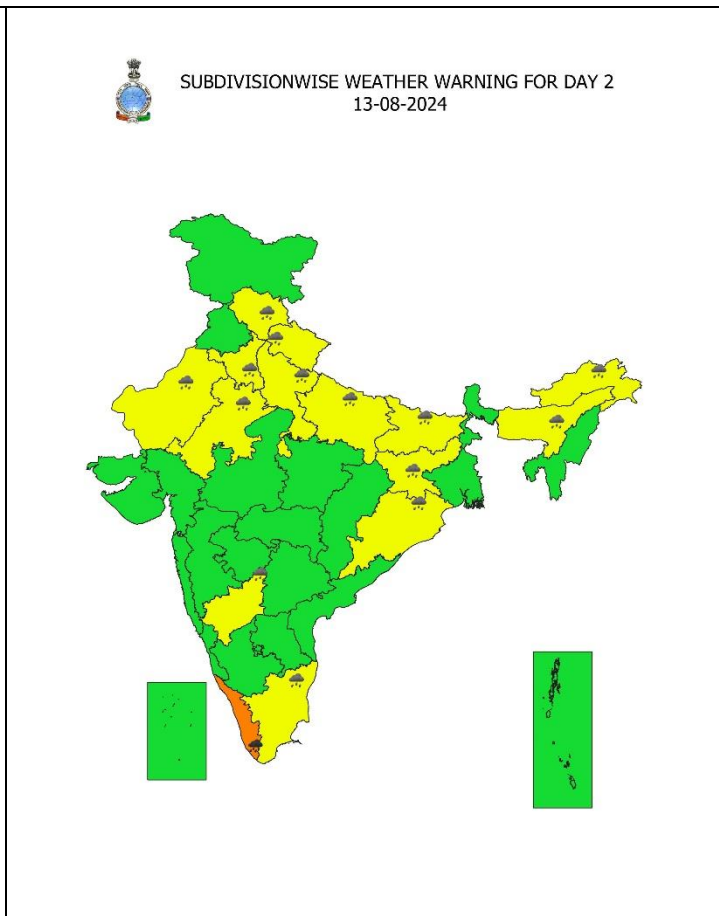
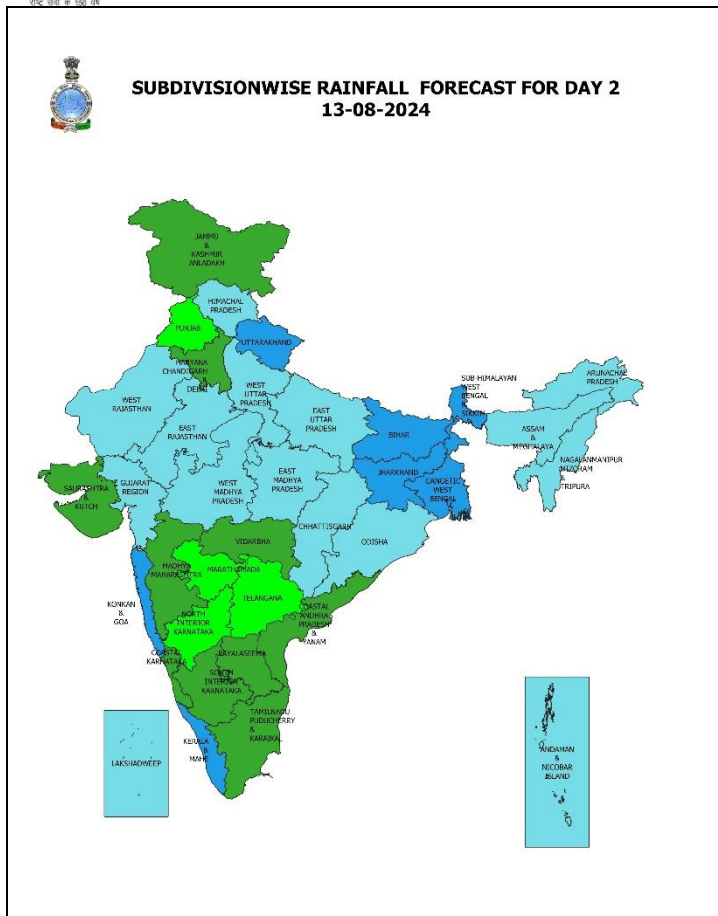
- ❖ The **Monsoon trough** at mean sea level now passes through Sri Ganganagar, Delhi, Gwalior, Satna, Daltonganj, Digha and thence east-southeastwards to northeast Bay of Bengal.
- ❖ The **cyclonic circulation** over northeast Rajasthan & neighbourhood extending upto 7.6 km above mean sea level persists.
- ❖ The **trough** from above cyclonic circulation over northeast Rajasthan to Bangladesh across Uttar Pradesh, Bihar and Sub-Himalayan West Bengal upto 3.1 km above mean sea level persists.
- ❖ The **cyclonic circulation** over northeast Assam extending upto 5.8 km above mean sea level persists.
- ❖ The **trough** from South Interior Karnataka to Comorin area at 0.9 km above mean sea level persists.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 19th August, 2024)



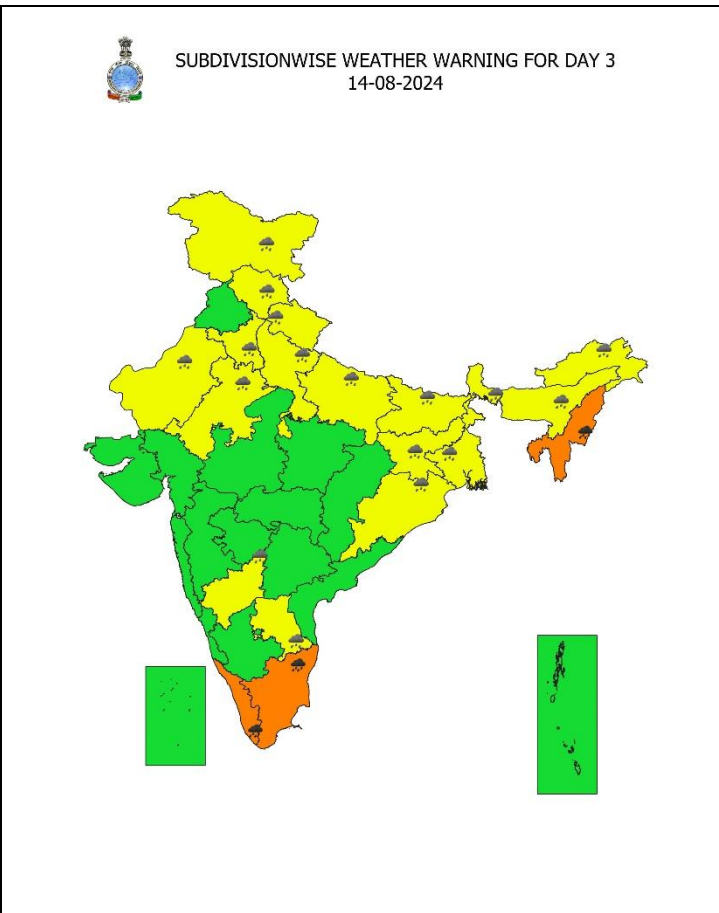
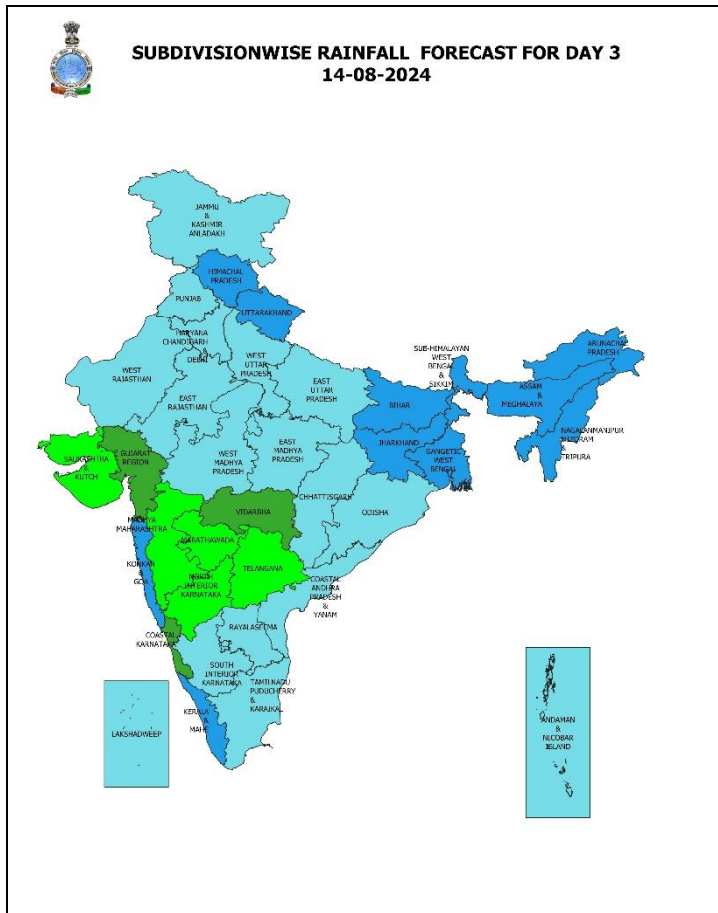
12 August (Day 1):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** very likely at isolated places over East Rajasthan, Bihar and Assam & Meghalaya; **Heavy rainfall (≥ 7 cm)** at isolated places over Uttarakhand, Haryana-Chandigarh-Delhi, Uttar Pradesh, West Rajasthan, Arunachal Pradesh, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph)** very likely at **isolated places over Kerala & Mahe; with lightning** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Rajasthan, Bihar, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and South Interior Karnataka.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over northeast and adjoining northwest Arabian sea, parts of eastcentral Arabian sea & westcentral Arabian sea, northern parts of southwest Arabian sea, along and off Gujarat & south Kerala coasts and adjoining Lakshadweep area, Gulf of Mannar, Comorin area, off Sri Lanka coast, southwest and adjoining southeast Bay of Bengal, many parts of central Bay of Bengal, southern parts of northwest Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over westcentral and adjoining eastcentral Arabian sea & adjoining areas of southwest Arabian sea, along & off Somalia, Yemen & Oman coasts. Fishermen are advised not to venture into these areas.



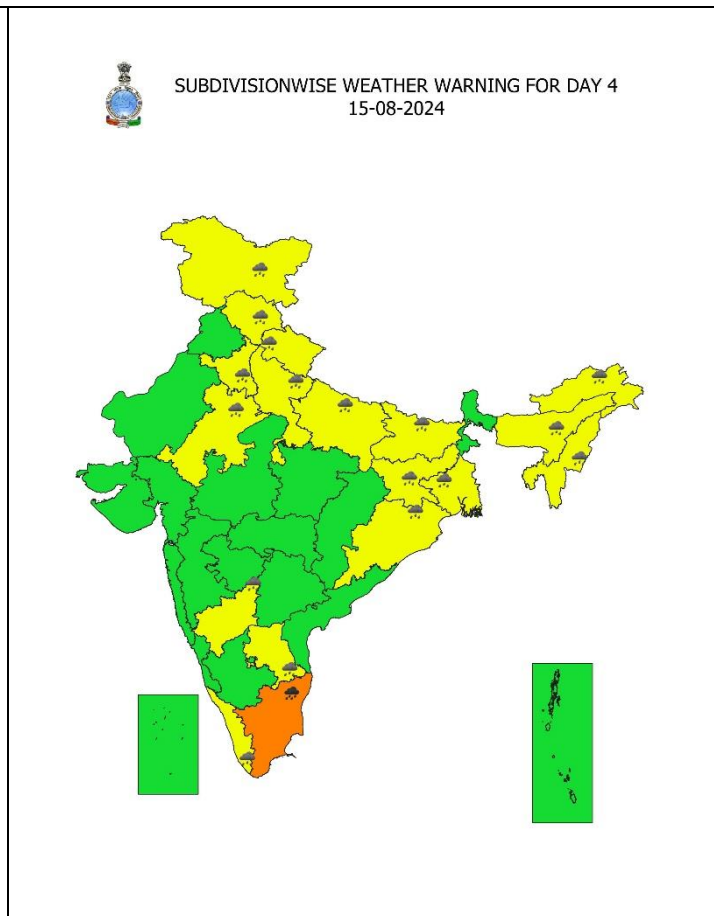
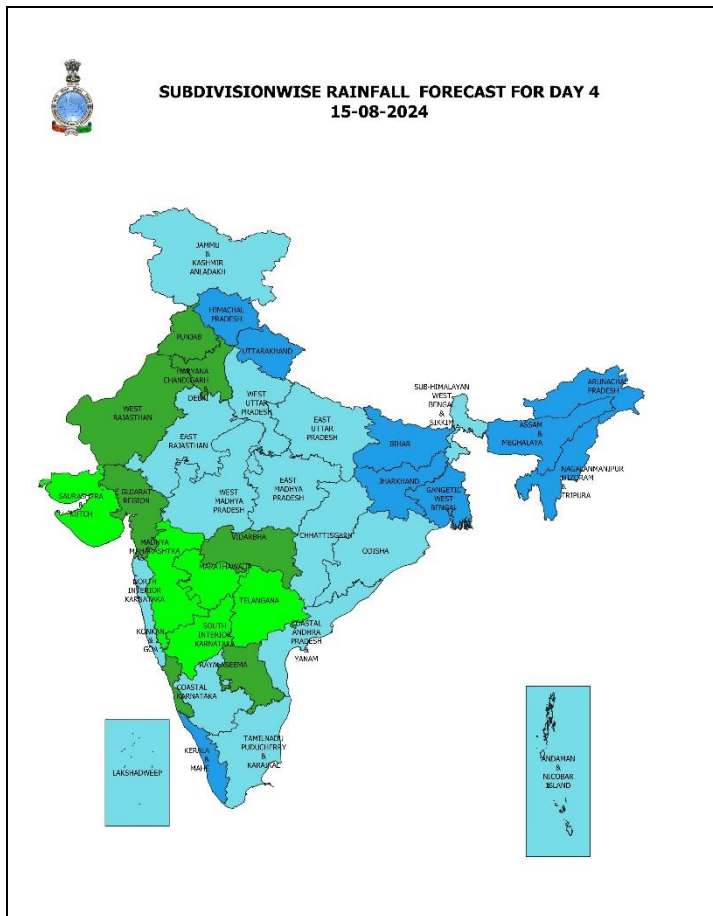
13 August (Day 2):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** very likely at isolated places over Kerala & Mahe; **Heavy rainfall (≥ 7 cm)** at isolated places over Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Arunachal Pradesh, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Kerala & Mahe; **with lightning** at isolated places over Haryana-Chandigarh-Delhi, Gangetic West Bengal, Bihar, Odisha, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and South Interior Karnataka.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over northeast and adjoining northwest Arabian sea, parts of eastcentral Arabian sea and many parts of westcentral Arabian sea, northern parts of southwest Arabian sea, along and off south Kerala coast and adjoining Lakshadweep area, Gulf of Mannar, Comorin area, off Sri Lanka coast, southwest and adjoining southeast Bay of Bengal, parts of central Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over west, central & adjoining areas of southwest Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.



14 August (Day 3):

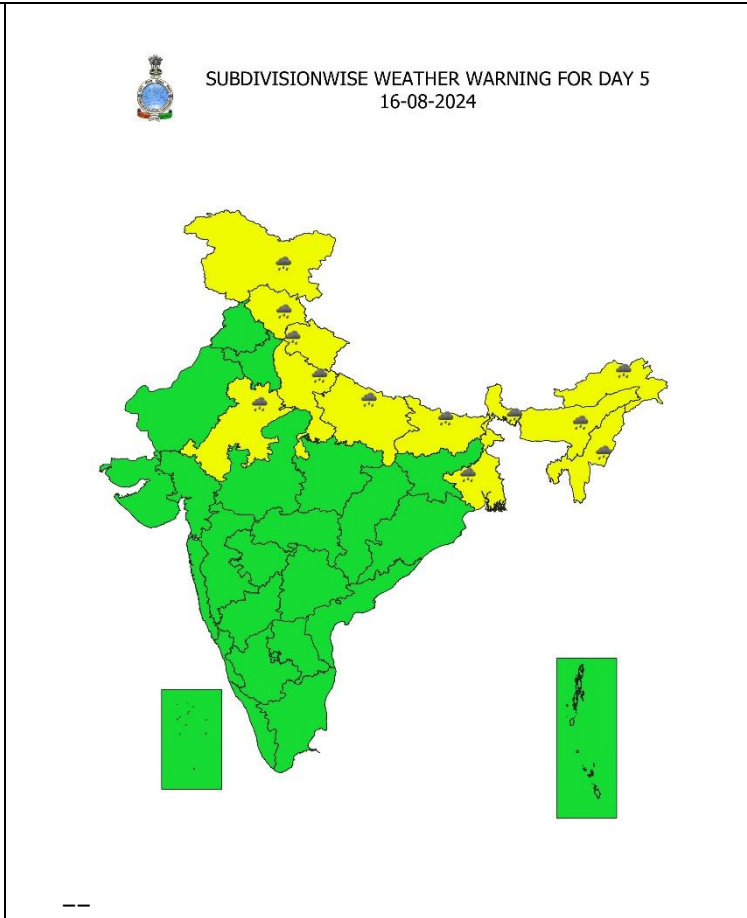
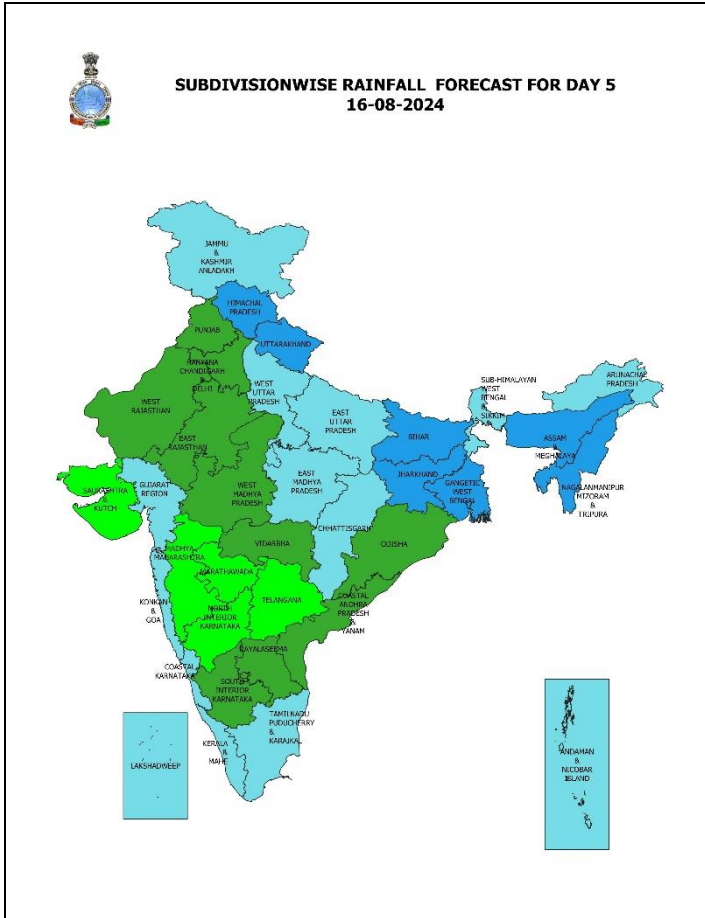
- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Uttarakhand, Nagaland, Manipur, Mizoram & Tripura, Uttarakhand, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Haryana-Chandigarh, Uttar Pradesh, Rajasthan, West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Arunachal Pradesh, North Interior Karnataka and Rayalaseema.
- ❖ **Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph)** likely at isolated places over Kerala & Mahe; **with lightning** at isolated places over Haryana-Chandigarh-Delhi, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and South Interior Karnataka.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over eastcentral Arabian sea and many parts of westcentral Arabian sea & adjoining areas of north Arabian sea, northern parts of southwest Arabian sea, along and off south Kerala coast and adjoining Lakshadweep area Gulf of Mannar, Comorin area, off Sri Lanka coast, central Bay of Bengal and adjoining south Bay of Bengal & northwest Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over westcentral & adjoining areas of southwest Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.



15 August (Day 4):

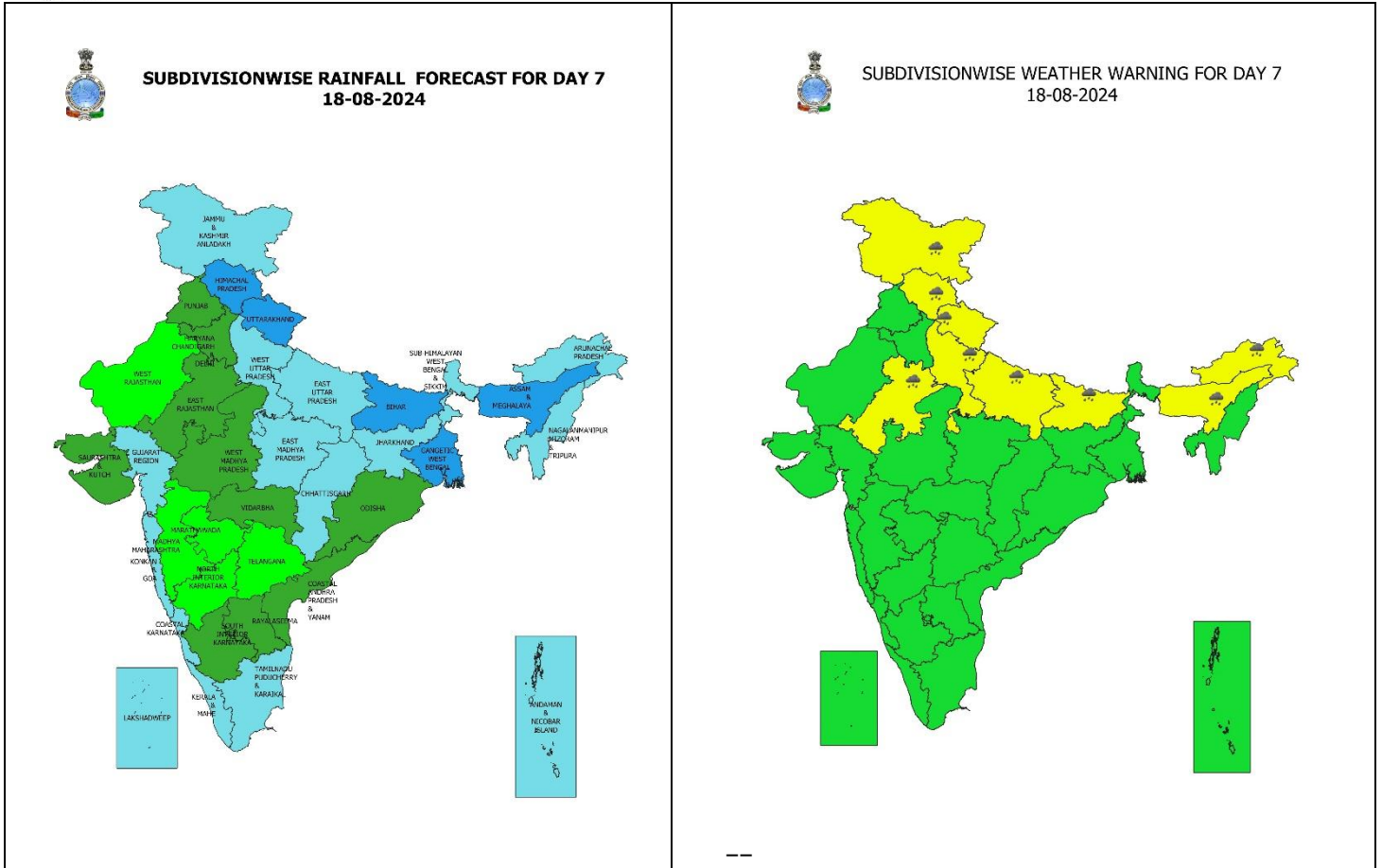
- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Tamil Nadu, Puducherry & Karaikal; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Uttar Pradesh, East Rajasthan, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe, Rayalaseema and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph)** likely at isolated places over Kerala & Mahe; **with lightning** at isolated places over Haryana-Chandigarh-Delhi, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and South Interior Karnataka.

Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over westcentral Arabian sea & adjoining areas of northwest & eastcentral Arabian sea, south Arabian sea, Lakshadweep area, along & off south Kerala coast, Gulf of Mannar, Comorin area, off Sri Lanka coast, central Bay of Bengal and adjoining south Bay of Bengal & northwest Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over westcentral & adjoining areas of southwest Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.



16 August (Day 5):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Assam & Meghalaya; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, West Bengal & Sikkim, Jharkhand, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura.



18 August (Day 7):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Assam & Meghalaya;
- Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, West Bengal & Sikkim, Jharkhand, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura.

Weather Outlook for subsequent 3 days (During 19th August - 21st August, 2024)

- ❖ Fairly widespread to widespread rainfall likely over most parts of the country except southwest Rajasthan, interior Maharashtra, Coastal & North Interior Karnataka 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.

Impact due to

- **Very heavy rainfall** at isolated places over East Rajasthan, Assam & Meghalaya on 12th; Nagaland, Manipur, Mizoram & Tripura on 14th, Bihar on 12th; Tamil Nadu on 14th & 15th; Kerala & Mahe on 13th & 14th August.
- **Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Kerala & Mahe, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Himachal Pradesh, Uttarakhand, East Rajasthan and East Madhya Pradesh Met Sub-divisions on 13th 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

- ✓ 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 Arunachal Pradesh, Assam & Meghalaya, Bihar, Himachal Pradesh, Uttarakhand, Punjab, Haryana, East Rajasthan, West Madhya Pradesh, Konkan & Goa, Tamil Nadu and Coastal Karnataka.
- Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Odisha, Uttar Pradesh, West Rajasthan, Kerala and South Interior Karnataka.
- Provide mechanical support to horticultural crops & staking to vegetables.
- In **Arunachal Pradesh**, make proper arrangements for runoff management in *Jhum* rice fields by putting obstacles across the slopes.
- In **Assam**, postpone sowing of sesame, green gram and black gram.
- In **Meghalaya**, withhold sowing of cowpea and millets.

FLASH FLOOD GUIDANCE:

Annexure-I

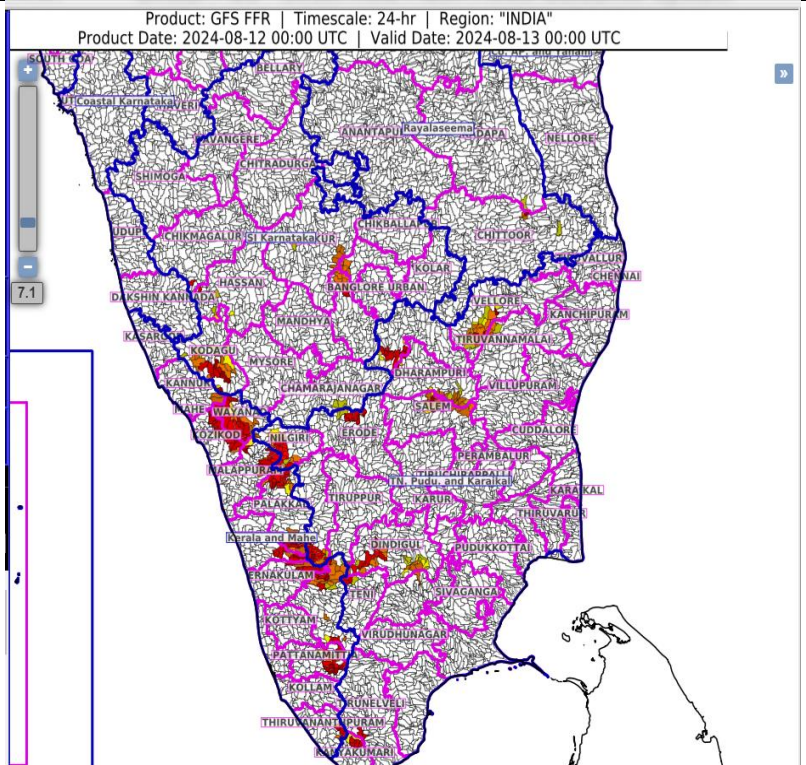
24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 13-08-2024 :

Low flash flood risk likely over few watersheds & neighbourhoods of **Kerala & Mahe** - Ernakulam, Idukki, Kozikod, Malappuram, Palakkad, Pattanamittia, Thiruvananthpuram, Trishur and Wayanad districts.

SI Karnataka - Bangalore Rural, Hassan and Kodagu districts.

Tamil Nadu - Pudu & Karaikal - Dindigul, Kanyakumari, Krishnagiri, Madurai, Salem, Tirunelveli and Vellore 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.

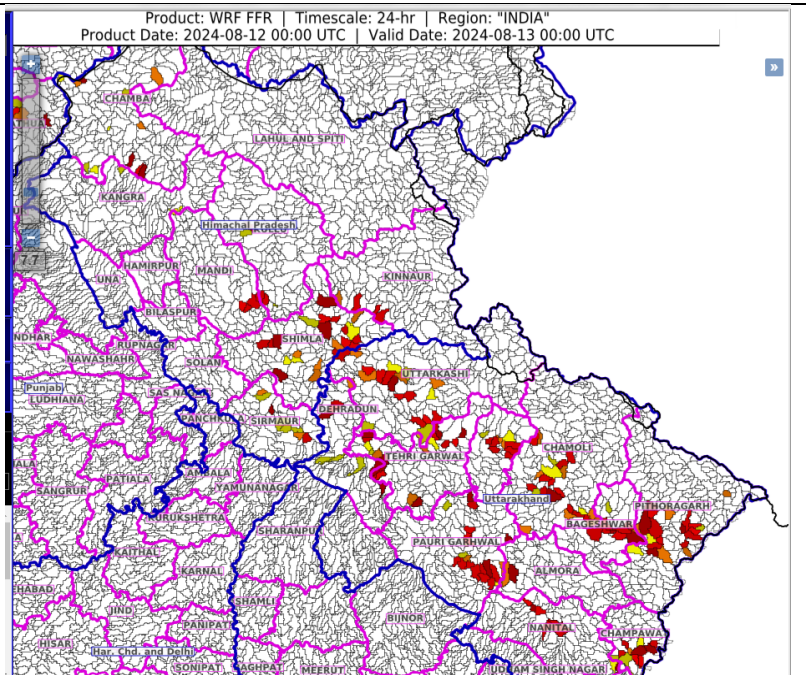


24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 13-08-2024 :

Low flash flood risk likely over few watersheds & neighbourhoods of **Himachal Pradesh** - Chamba, Kinnaur, Mandi, Shimla and Sirmaur districts.

Uttarakhand - Almora, Bageshwar, Chamoli, Champawat, Dehradun, Nanital, Pauri Garhwal, Pithoragarh, Tehri Garwal and Uttarkashi 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.



* 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 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 13-08-2024 :

Low flash flood risk likely over few watersheds & neighbourhoods of **East Rajasthan** - Baran, Bundi, Dausa, Jhalawar, Karauli, Kota and Swaimadhopur districts.

West Madhya Pradesh - Guna, Gwalior and Shivpuri 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.

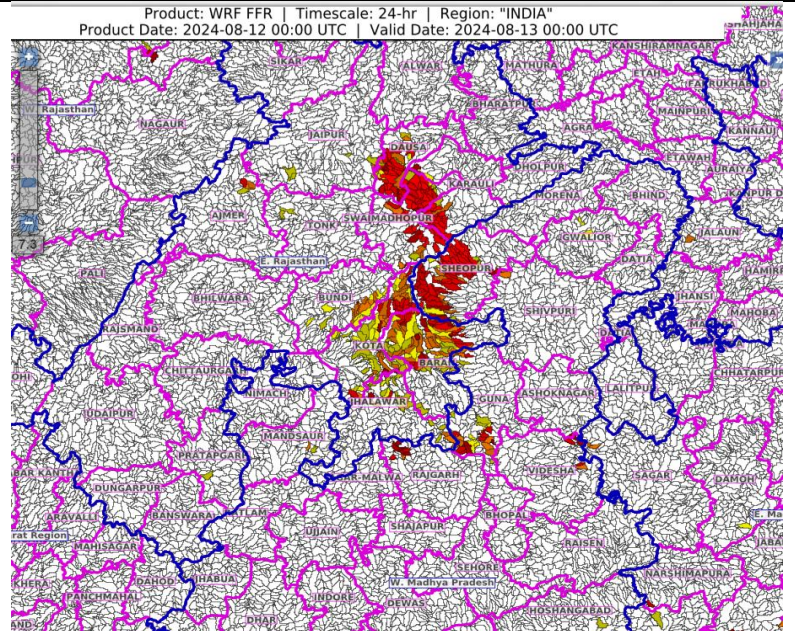


Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

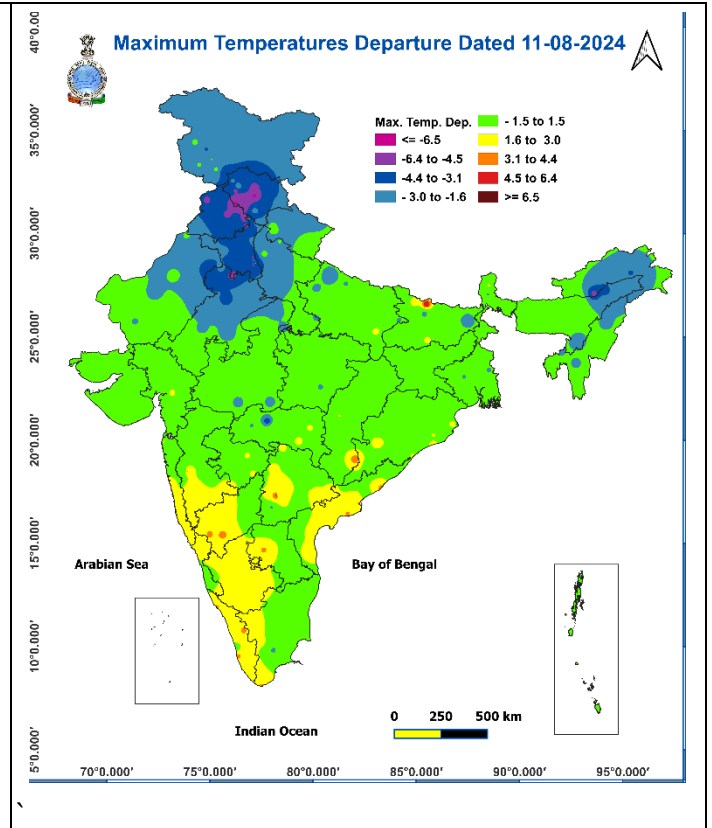
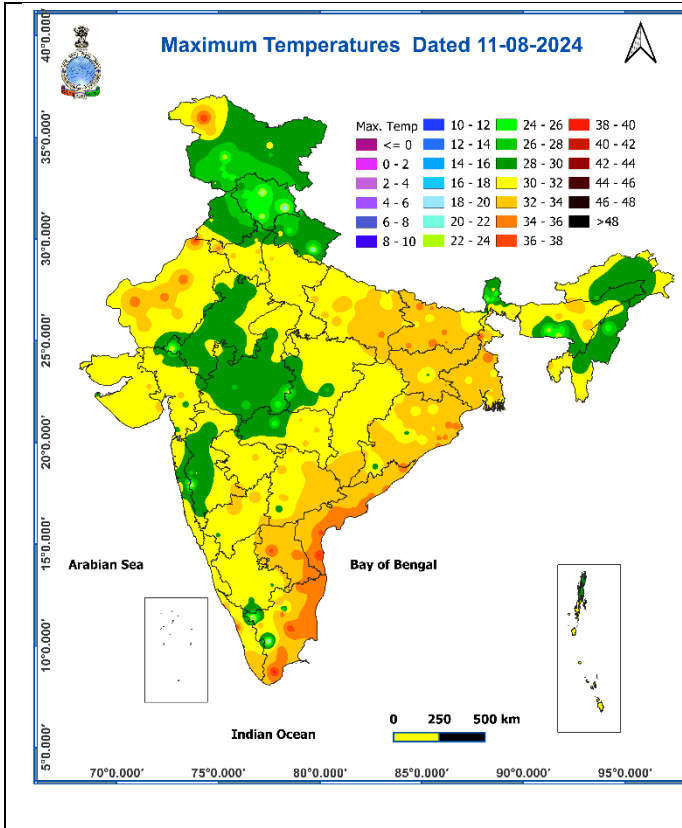


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

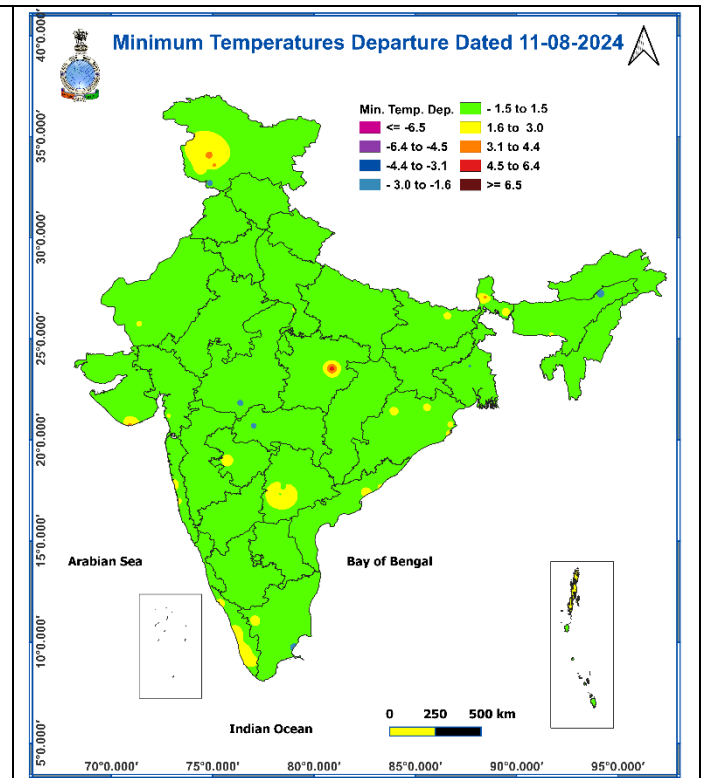
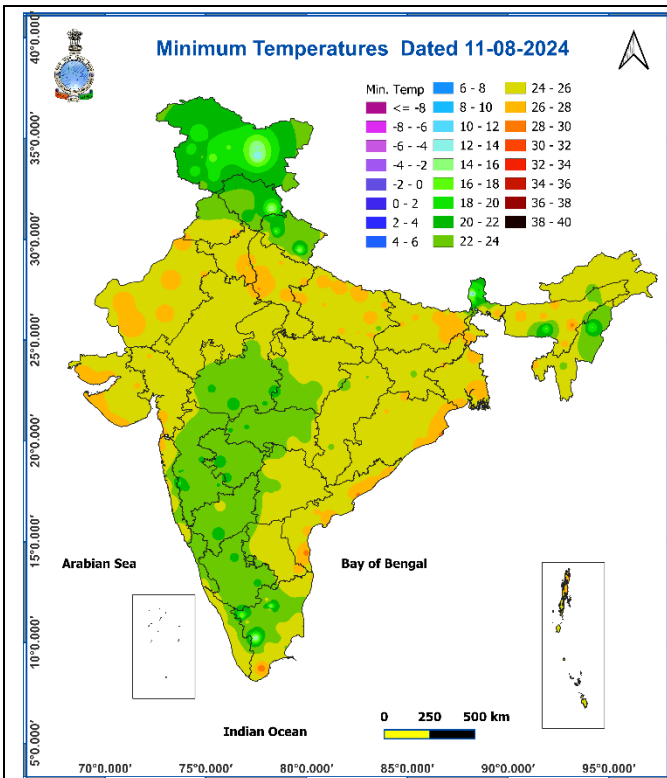
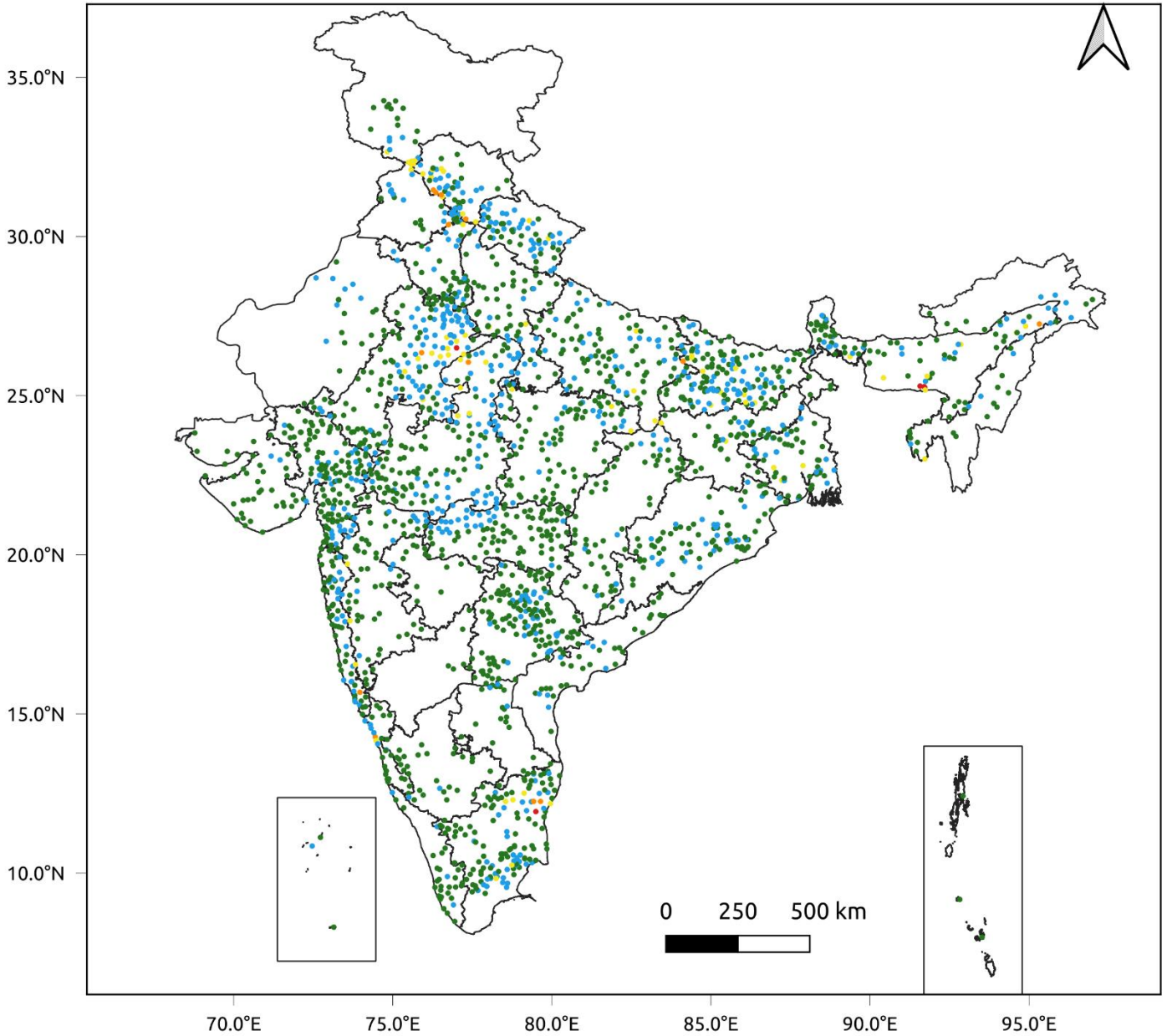


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



24 Hr cumulative rainfall recorded over different stations during 0830 IST of 10-8-2024 to 0830 IST of 11-8-2024

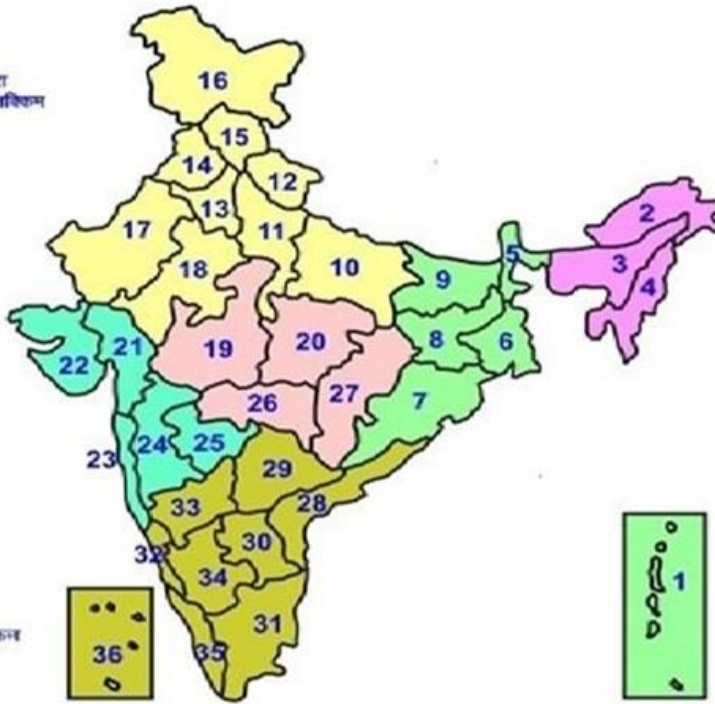


Legends

- 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 अंडमन और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा, चंडीगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 उत्तरीसगढ़
- 28 उत्तर आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 दक्षिण तेलंगाना
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 उत्तरी कर्नाटक
- 33 अंतरीक उत्तरी कर्नाटक
- 34 अंतरीक 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. 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) |

| | | | |
|--|--|--|--------------------|
| | | | Subdivision Colour |
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* 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)

LEGENDS

WARNING

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

Probabilistic Forecast

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



Rain/ Snow *

Heavy: 64.5 to 115.5 mm/cm *
Very Heavy: 115.6 to 204.4 mm/cm*
Extremely Heavy: > 204.4 mm/cm *



Heat Wave

When maximum temperature of a station reaches $\geq 40^{\circ}\text{C}$ for plains and $\geq 30^{\circ}\text{C}$ for hilly regions
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C .
Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$.
Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is $> 4.5^{\circ}\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^{\circ}\text{C}$



Warm Night

When maximum temperature remains 40°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°C .
Severe Warm Night: When minimum temperature departure $> 6.4^{\circ}\text{C}$.



Cold Wave

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions.

(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .
Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$
Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$



Cold Day

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions
Based on departure

Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C .
Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$



Fog

Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres
Dense Fog: when the visibility between 50- 200 metres
Very Dense Fog: when the visibility < 50 metres



Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)



Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.



Frost

Ice deposits on ground

Air temperature $\leq 4^{\circ}\text{C}$ (over Plains)



Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph
Severe: Wind speed 62-87 kmph
Very Severe: Wind speed > 87 kmph



Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre
High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre
Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre



Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)
Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)
Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)
Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)
Super Cyclone Storm: Wind speed > 220 kmph (> 119 knots)