

Wednesday, August 28, 2024
Time of Issue: 0815 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems:

- The **deep depression** over Saurashtra & Kachchh and adjoining north Gujarat moved westwards with a speed of 10 kmph during past 6 hours and lay centered at 0530 hours IST of today, the 28th August over Saurashtra & Kutch near latitude 23.7°N and longitude 70.0 °E, 50 km north-northeast of Bhuj (Gujarat), 120 km east-northeast of Naliya (Gujarat) and 320 km east-southeast of Karachi (Pakistan). It is likely to move slowly west-southwestwards across Saurashtra & Kachchh region and reach Saurashtra & Kachchh coast & adjoining areas of Pakistan and northeast Arabian Sea by morning of 29th August.
- The **Low Pressure** Area over northern parts of central Madhya Pradesh & adjoining south Uttar Pradesh became less marked. The low pressure area over northern parts of central Madhya Pradesh & adjoining south Uttar Pradesh became less marked at 0530 hours IST of today, the 28th August 2024.
- 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.
- A fresh low pressure area is likely to form over Eastcentral & adjoining North Bay of Bengal on 29th August, 2024. It is likely to move west-northwestwards close to south Odisha & north Andhra Pradesh coasts during subsequent 2 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 East Madhya Pradesh during 28th – 31st; West Madhya Pradesh on 31st; Vidarbha during 30th August – 02nd September; Chhattisgarh on 29th; Konkan & Goa, Madhya Maharashtra during 28th August- 01st September; Saurashtra & Kutch on 30th; Gujarat Region during 29th August- 02nd September; Marathwada on 01st & 02nd September.
- ✓ Isolated **very heavy rainfall** also very likely over Konkan & Goa, Madhya Maharashtra on 02nd September; Gujarat Region on 28th; Madhya Pradesh on 01st & 2nd September; Vidarbha on 31st August & 01st September; Chhattisgarh on 30th & 31st August.
- ✓ Isolated **extremely heavy rainfall also very likely** over Saurashtra & Kutch on 28th & 29th 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 Bihar, Jharkhand, Odisha on 28th August; Arunachal Pradesh on 28th and during 31st August- 02nd September; Assam & Meghalaya on 28th, 31st August & 01st September; Nagaland on 28th; Nagaland, Manipur, Mizoram & Tripura on 01st & 02nd September.
- ✓ Isolated **very heavy rainfall** also very likely over Andaman & Nicobar Islands on 28th; Odisha during 29th–31st 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 during next 7 days; Coastal Andhra Pradesh & Yanam during 29th August- 02nd September; Telangana during 30th August- 01st September; Interior Karnataka during 28th – 31st August.
- ✓ Isolated **very heavy rainfall** also very likely over Coastal Karnataka during 28th August- 02nd September; South Interior Karnataka during 28th – 31st; Telangana on 31st August & 01st September; Coastal Andhra Pradesh & Yanam during 29th – 31st; Kerala & Mahe on 29th & 30th 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 28th – 30th; Himachal Pradesh on 28th & 29th; Uttarakhand on 02nd September; Punjab, West Rajasthan on 28th; East Rajasthan on 28th August, 01st & 02nd September.
- ✓ Isolated **very heavy rainfall** also very likely over Southeast Rajasthan today.

* 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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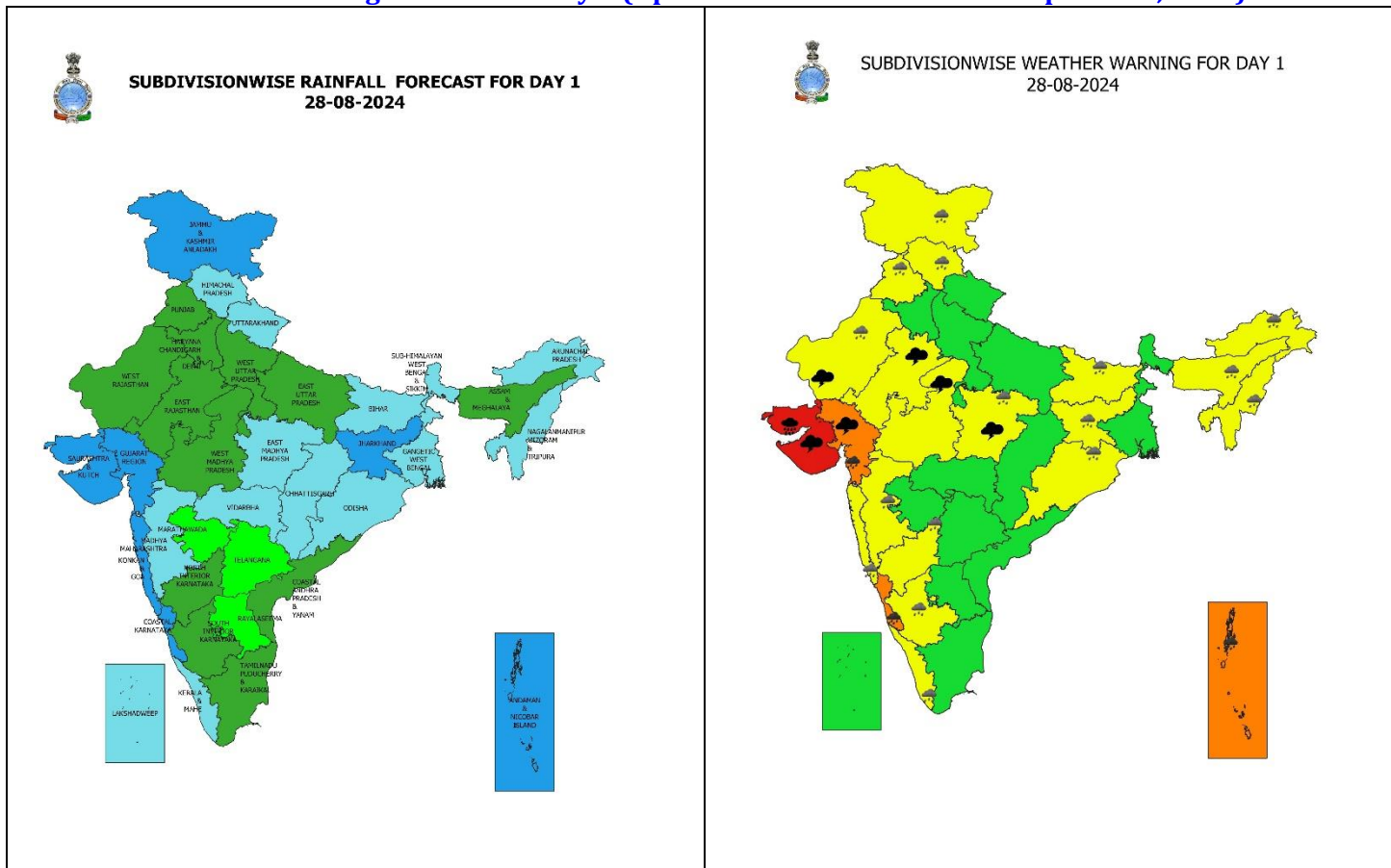
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at most places** over Jammu-Kashmir, Gujarat state and Gangetic West Bengal; **at many places** over East Uttar Pradesh, Odisha, Madhya Maharashtra, Konkan & Goa, North Interior Karnataka, Kerala & Mahe and Andaman & Nicobar Islands; **at a few places** over Himachal Pradesh, East Rajasthan, Bihar, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Telangana and Coastal Karnataka; **at isolated places** over Punjab, Uttarakhand, Haryana-Chandigarh-Delhi, West Uttar Pradesh, West Rajasthan, East Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jharkhand, Chhattisgarh, Vidarbha, Marathwada, South Interior Karnataka, Coastal Andhra Pradesh and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy to very heavy rainfall** at isolated places over Saurashtra & Kutch; **Heavy rainfall** at isolated places over Madhya Maharashtra and Andaman & Nicobar Islands.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday): (in cm): **Saurashtra & Kutch:** Porbandar 19, Jamnagar 18, Rajkot 17, Okha 10, Dwarka 9, Keshod 6, New Kandla 4, Naliya & Bhuj-Rudramata 3 each; **Madhya Maharashtra:** Mahabaleshwar 7, Bhore (dist Pune) 4, Lonavala 3; **Andaman & Nicobar Islands:** Long Island 7, Maya Bandar 6; **East Rajasthan:** Sirohi & Mount Abu 6 each, Alwar, Dungarpur & Venja 4 each; **East Uttar Pradesh:** Ghazipur 5, Prayagraj 4; **Odisha:** Bhubaneswar 5, Talcher 4, Cuttack 3; **West Rajasthan:** Barmer & Gudamalani 3 each; **West Uttar Pradesh:** Orai 3; **Coastal Karnataka:** Shirali 3.
- ❖ **Minimum Temperature Departures (as on 27-08-2024):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at a few places over Kerala & Mahe; at isolated places over Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Nagaland, Manipur, Mizoram & Tripura. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Gangetic West Bengal, Saurashtra & Kutch, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh-Delhi, Uttarakhand, West Uttar Pradesh and Assam & Meghalaya and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 19.8°C** was reported at **Dhar & Rajgarh (West Madhya Pradesh)** over the plains of the country. **(Fig.4)**
- ❖ **Maximum Temperature Departures (as on 27-08-2024):** Maximum temperatures were **markedly above normal (5.1°C or above)** at isolated places over Nagaland, Manipur, Mizoram & Tripura; **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Uttarakhand, Arunachal Pradesh, Assam & Meghalaya, Vidarbha, Coastal Andhra Pradesh & Yanam; **above normal (1.6°C to 3.0°C)** at isolated places over Himachal Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe. These were **markedly below normal (-5.1°C or less)** at a few places over Rajasthan and **Gujarat state**; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Gangetic West Bengal; **below normal (-1.6°C to -3.0°C)** at isolated places over Haryana-Chandigarh-Delhi, Uttar Pradesh, Madhya Pradesh, North Interior Karnataka, Odisha, Jharkhand, Chhattisgarh & Madhya Maharashtra and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature of 39.0°C** was reported at **Bapatla (Coastal Andhra Pradesh)** over the country. **(Fig. 2)**

Meteorological Analysis (Based on 0530 hours IST)

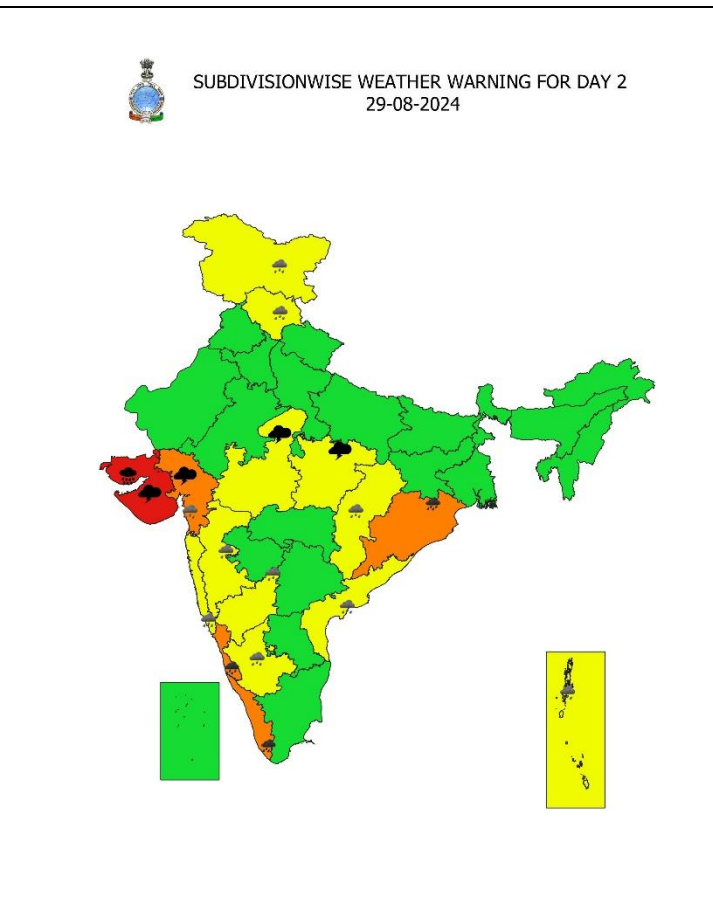
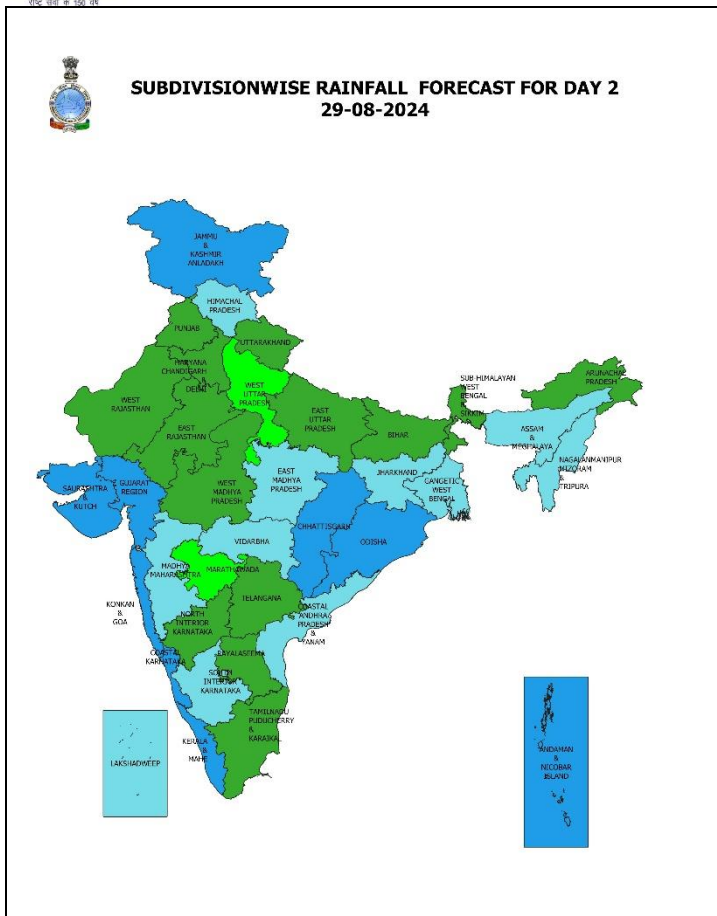
- ❖ The **deep depression** over Saurashtra & Kachchh and adjoining north Gujarat moved westwards with a speed of 10 kmph during past 6 hours and lay centered at 0530 hours IST of today, the 28th August over Saurashtra & Kutch near latitude 23.7°N and longitude 70.0 °E, 50 km north-northeast of Bhuj (Gujarat), 120 km east-northeast of Naliya (Gujarat) and 320 km east-southeast of Karachi (Pakistan). It is likely to move slowly west-southwestwards across Saurashtra & Kachchh region and reach Saurashtra & Kachchh coast & adjoining areas of Pakistan and northeast Arabian Sea by morning of 29th August.
- ❖ The **Low Pressure** Area over northern parts of central Madhya Pradesh & adjoining south Uttar Pradesh became less marked. The low pressure area over northern parts of central Madhya Pradesh & adjoining south Uttar Pradesh became less marked at 0530 hours IST of today, the 28th August 2024.
- ❖ The **Monsoon trough** at mean sea level now passes through centre of deep depression over Saurashtra & Kutch, Ratlam, Damoh, Sidhi, Churk, Jamshedpur, Digha and thence southeastwards to Eastcentral Bay of Bengal.
- ❖ A fresh **low pressure** area is likely to form over Eastcentral & adjoining North Bay of Bengal on 29th August, 2024. It is likely to move west-northwestwards close to south Odisha & north Andhra Pradesh coasts during next 2 days.
- ❖ The **offshore trough** from south Gujarat to central Kerala coast persists.
- ❖ The **Western Disturbance** as a cyclonic circulation over north Pakistan & neighbourhood at 3.1 km above mean sea level with trough aloft 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. 32°N persists.
- ❖ The **cyclonic circulation** over central Assam at 0.9 km above mean sea level persists.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 04th September, 2024)



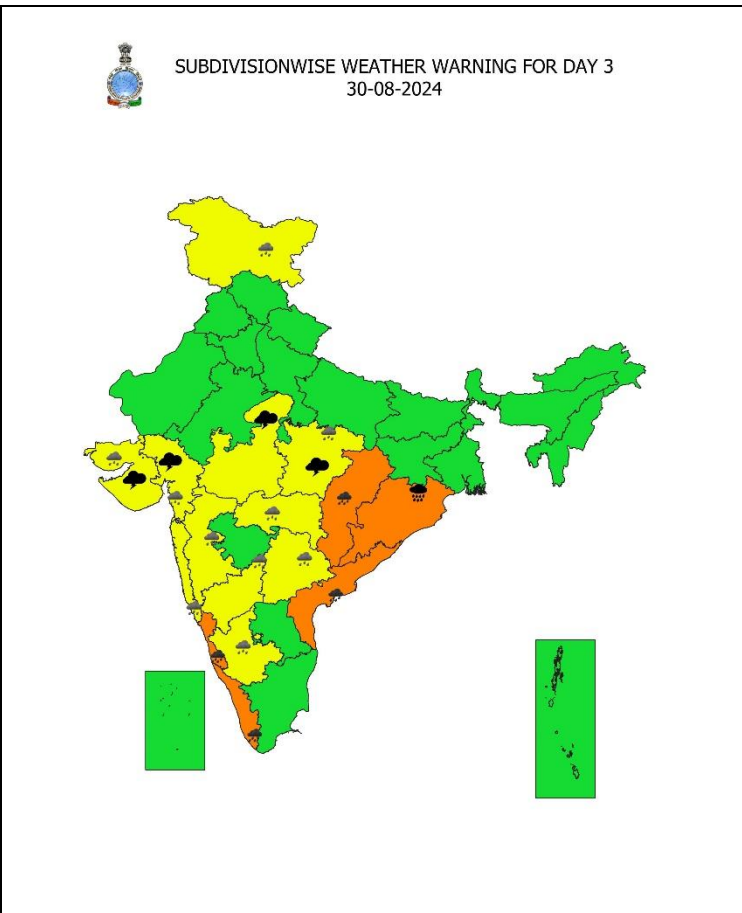
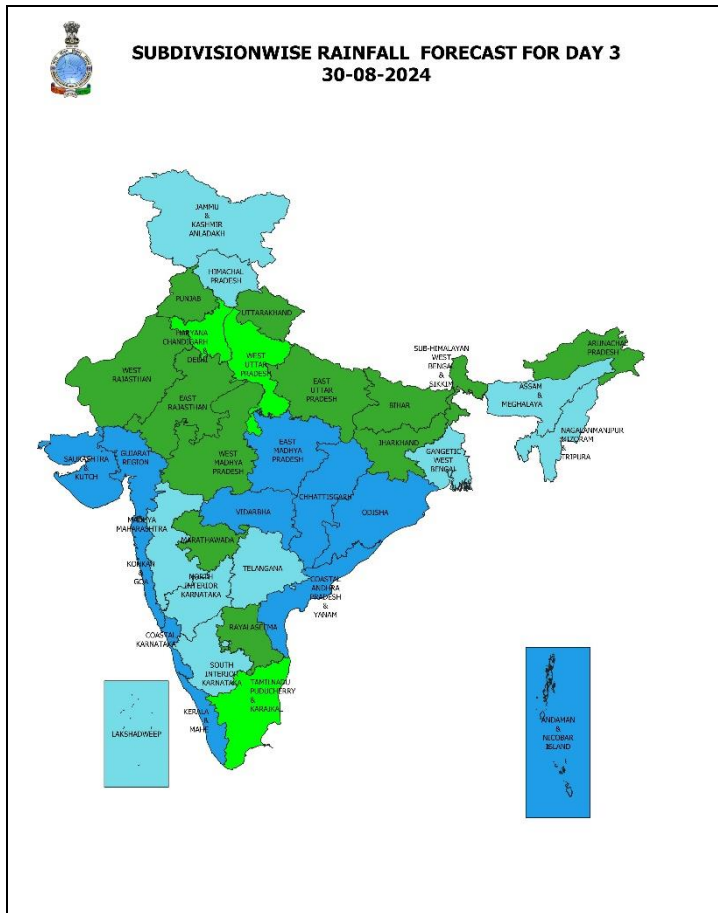
28 August (Day 1):

- ❖ **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 Gujarat Region, Andaman & Nicobar Islands and Coastal & South Interior Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, West Rajasthan, Punjab, East Madhya Pradesh, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Kerala & Mahe, North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting and gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over West Rajasthan; **with lightning** at isolated places over East Rajasthan, Madhya Pradesh, Gujarat state.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over northeast Arabian sea, most parts of 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 Sri Lanka coast; most parts of southwest Bay of Bengal & many parts of southeast Bay of Bengal, many 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, northeast Arabian sea, many parts of northwest Arabian sea, northern parts of eastcentral Arabian sea and adjoining westcentral 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, south Oman coasts. **Squally winds with speed reaching 55 kmph to 65 kmph gusting to 75 kmph** likely to prevail along and off Gujarat coasts & adjoining Pakistan coasts and northeast & adjoining eastcentral Arabian Sea.
- ❖ **Squally wind speed reaching 40-50 kmph gusting to 60 kmph** is very likely over north Maharashtra coast. **Squally wind speed reaching 45-55 kmph gusting to 65 kmph** is likely over the districts of South Gujarat Region and Saurashtra & Kutch.



29 August (Day 2):

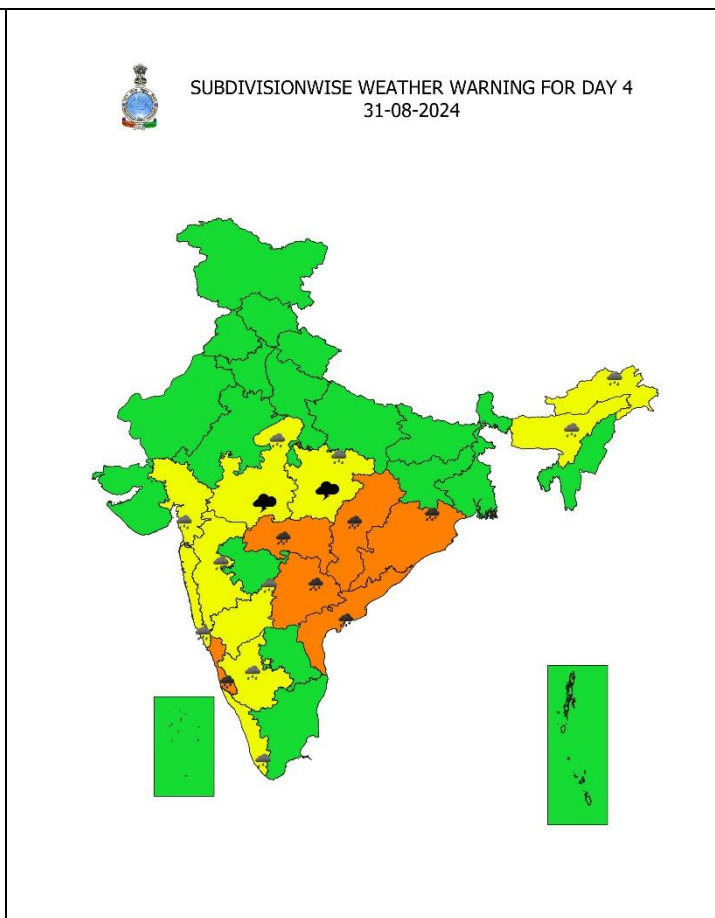
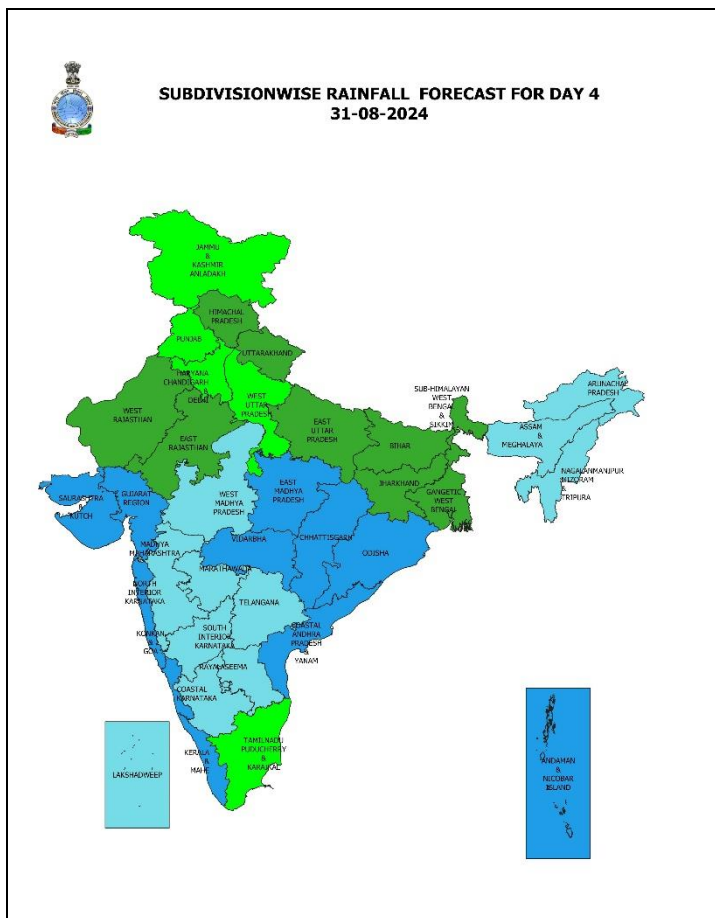
- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm)** very likely at isolated places over Saurashtra & Kutch; **Heavy to very heavy rainfall (≥ 12 cm)** at isolated places over Odisha, Kerala & Mahe, Coastal & South Interior Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Chhattisgarh, Andaman & Nicobar Islands, Gujarat Region, Coastal Andhra Pradesh & Yanam, North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting** very likely at isolated places over Madhya Pradesh, Gujarat state.
- ❖ **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, north Andaman Sea. **Squally weather with winds speed reaching 45 kmph to 55 kmph gusting to 65 kmph** 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** 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** along and off Gujarat coasts & adjoining Pakistan coasts and northeast & adjoining eastcentral Arabian Sea.
- ❖ **Squally wind speed reaching 40-50 kmph gusting to 60 kmph** is very likely over north Maharashtra coast. **Squally wind speed reaching 45-55 kmph gusting to 65 kmph** is likely over the districts of South Gujarat Region and Saurashtra & Kutch.



30 August (Day 3):

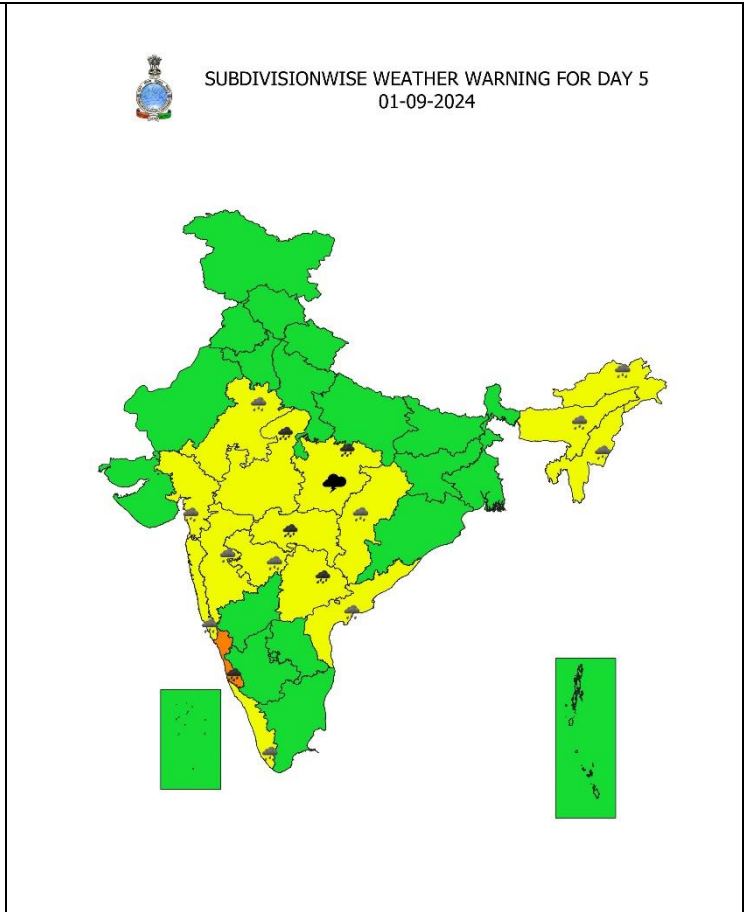
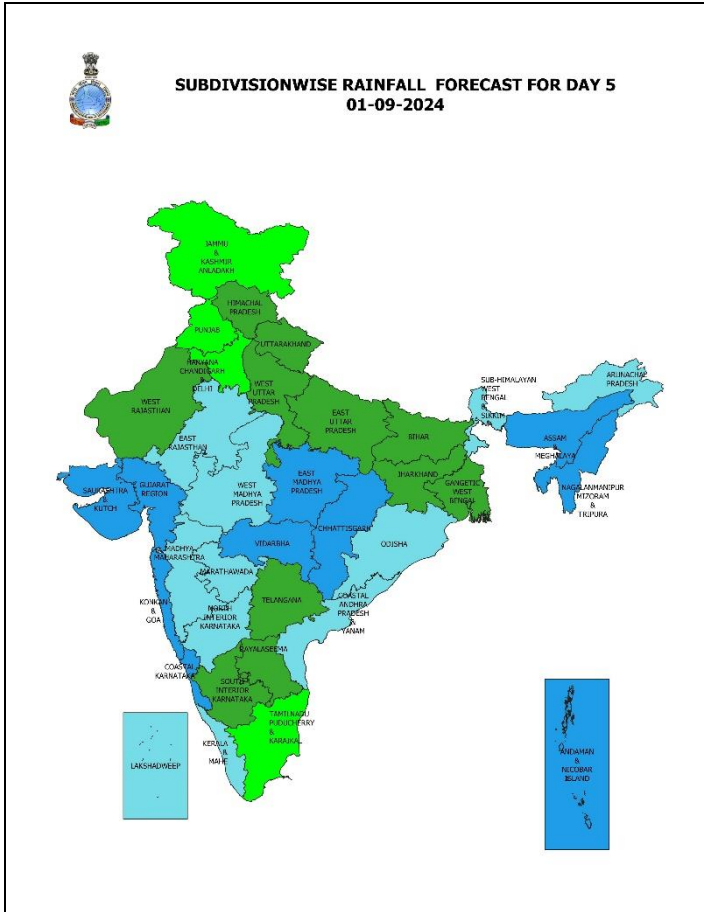
- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm)** likely at isolated places over Odisha; **Heavy to very heavy rainfall (≥ 12 cm)** at isolated places over Chhattisgarh, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Coastal Karnataka, South Interior Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over East Madhya Pradesh, Vidarbha, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa, Madhya Maharashtra, Gujarat state, Telangana, North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lighting** likely at isolated places over Madhya Pradesh.

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** 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, southeast Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** 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** along and off Gujarat coasts & adjoining Pakistan coasts and northeast & adjoining eastcentral Arabian Sea.



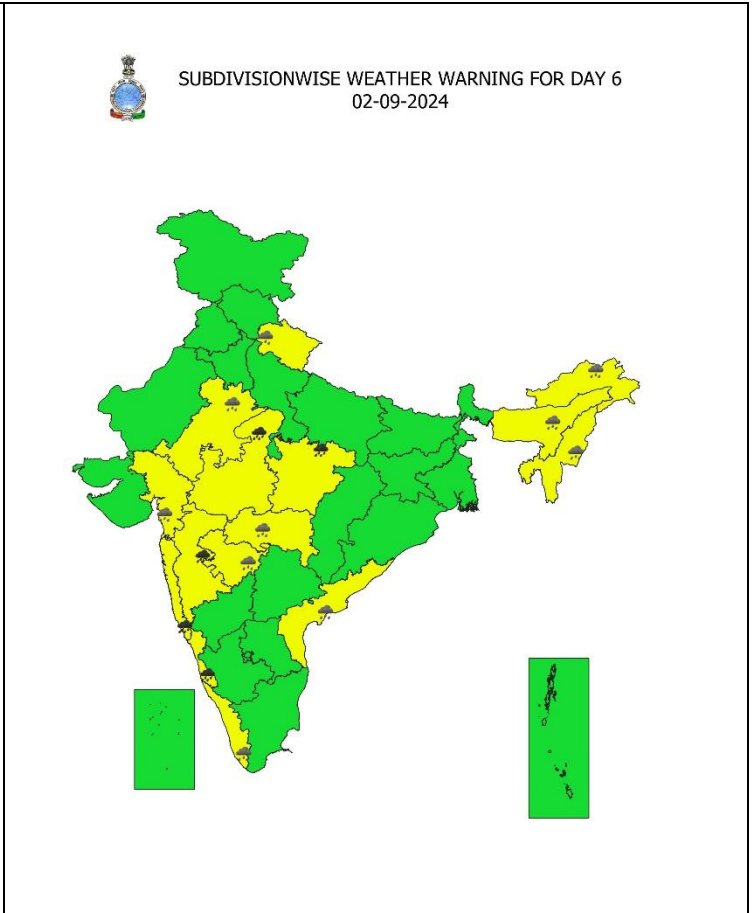
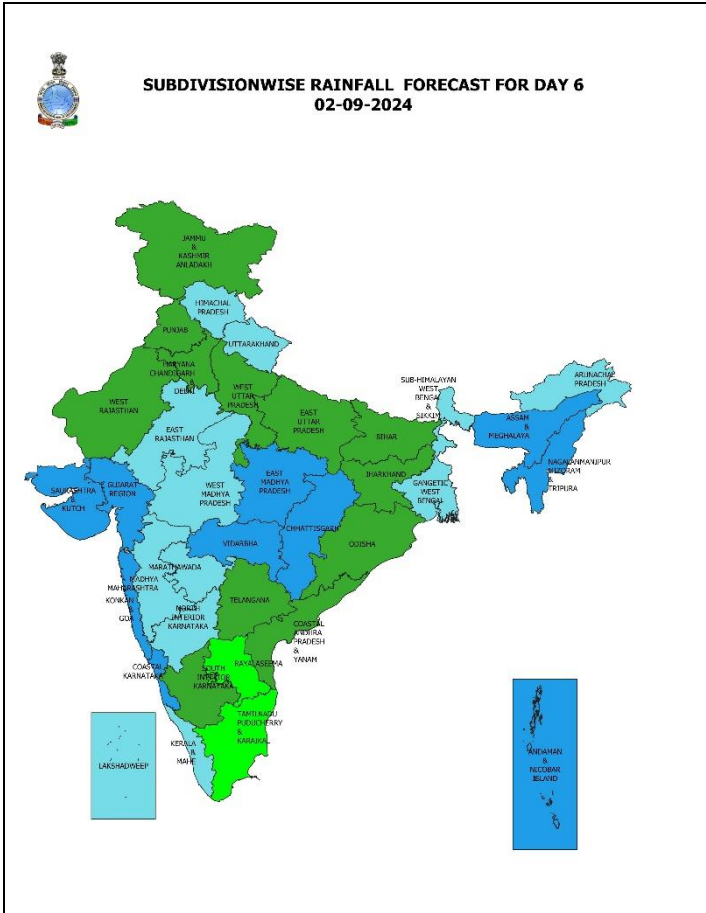
31 August (Day 4):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Vidarbha, Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka, South Interior Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Kerala & Mahe, North Interior Karnataka.
- ❖ **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** 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** 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** along and off Gujarat coast, most parts of northeast Arabian sea and adjoining areas of northwest & eastcentral Arabian sea.



01 September (Day 5):

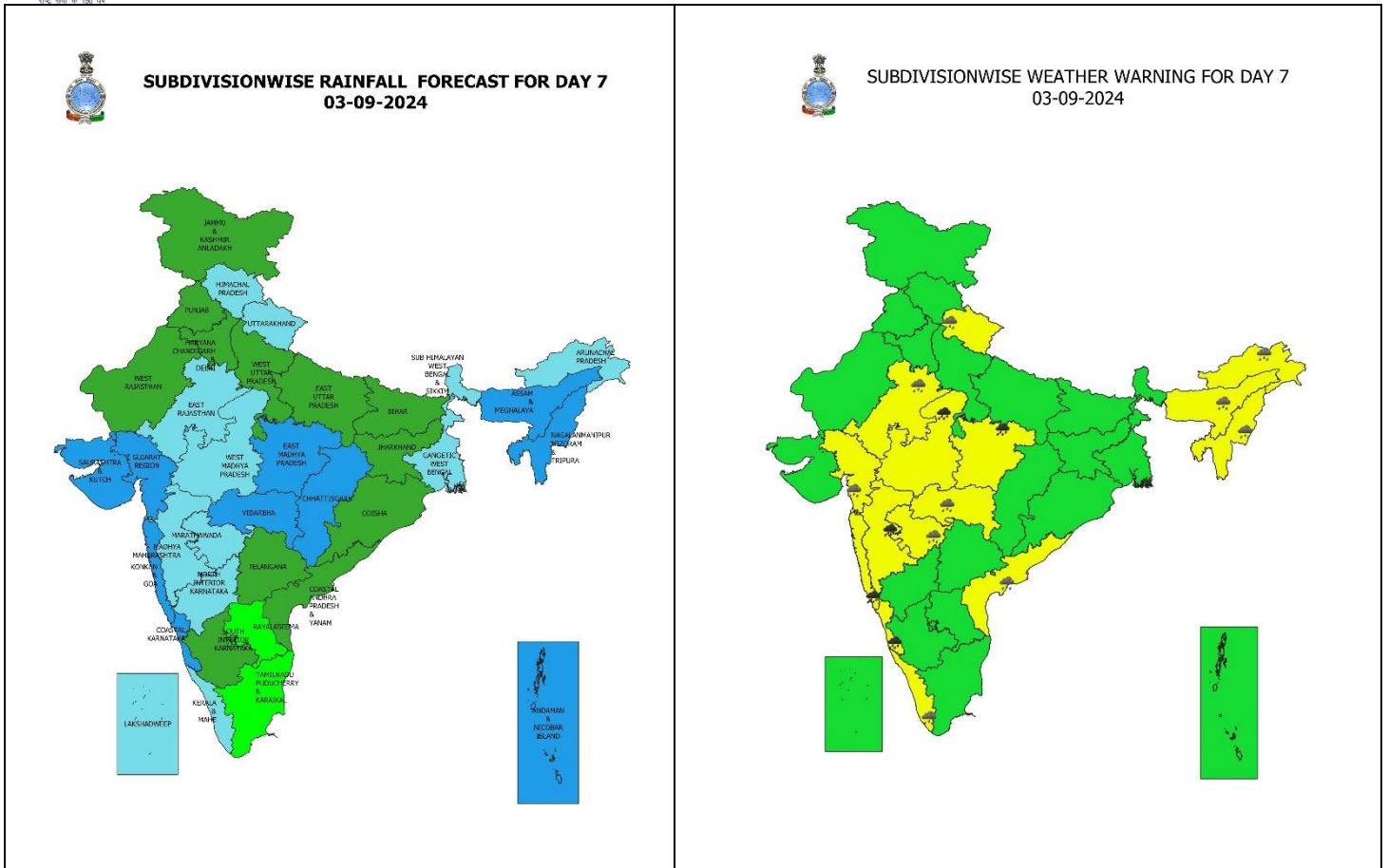
Heavy to very heavy rainfall (≥ 12 cm) likely at isolated places over Madhya Pradesh, Vidarbha, Telangana, Coastal Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over East Rajasthan, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya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



02 September (Day 6):

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

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03 September (Day 7):

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

Weather Outlook for subsequent 3 days (During 04th September– 06th 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.

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Impact due to

- **Isolated extremely heavy rainfall very likely over** Saurashtra & Kutch on 28th & 29th; Odisha on 30th August.
- **Very heavy rainfall** at isolated over Coastal Karnataka during 28th August- 02nd September; South Interior Karnataka during 28th – 31st; Telangana on 31st August & 01st September; Coastal Andhra Pradesh & Yanam during 29th – 31st; Kerala & Mahe on 29th & 30th August; Andaman & Nicobar Islands on 28th; Odisha during 29th-31st ; Konkan & Goa, Madhya Maharashtra on 02nd September; Gujarat Region on 28th; Madhya Pradesh on 01st & -2nd September; Vidarbha on 31st August & 01st September; Chhattisgarh on 30th & 31st August.
- **Moderate to High flash flood risk likely over** likely over Saurashtra & Kutch on 28th & 29th 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 Arunachal Pradesh, Assam & Meghalaya, West Madhya Pradesh, Chhattisgarh, Gujarat State, Andaman & Nicobar Islands, Gangetic West Bengal, Odisha, Jharkhand, Tamil Nadu and Karnataka.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Jammu & Kashmir, Himachal Pradesh, Uttarakhand and Punjab.
- ✓ 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 29-08-2024:

Moderate to High flash flood risk likely over few watersheds & neighbourhoods of **Saurashtra & Kutch** - Amreli, Bhavnagar, Botad, Devbhoomi Dwarka, 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 AoC as shown in map due to expected rainfall occurrence in next 24 hours.

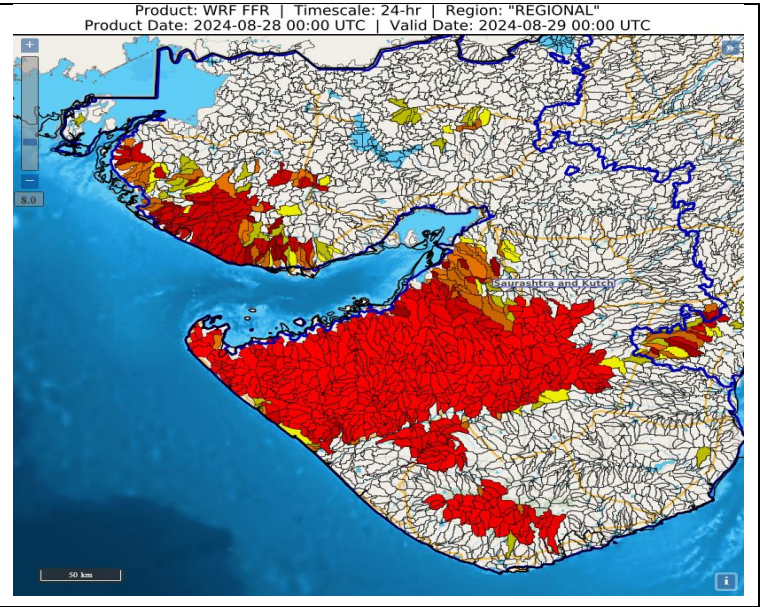


Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

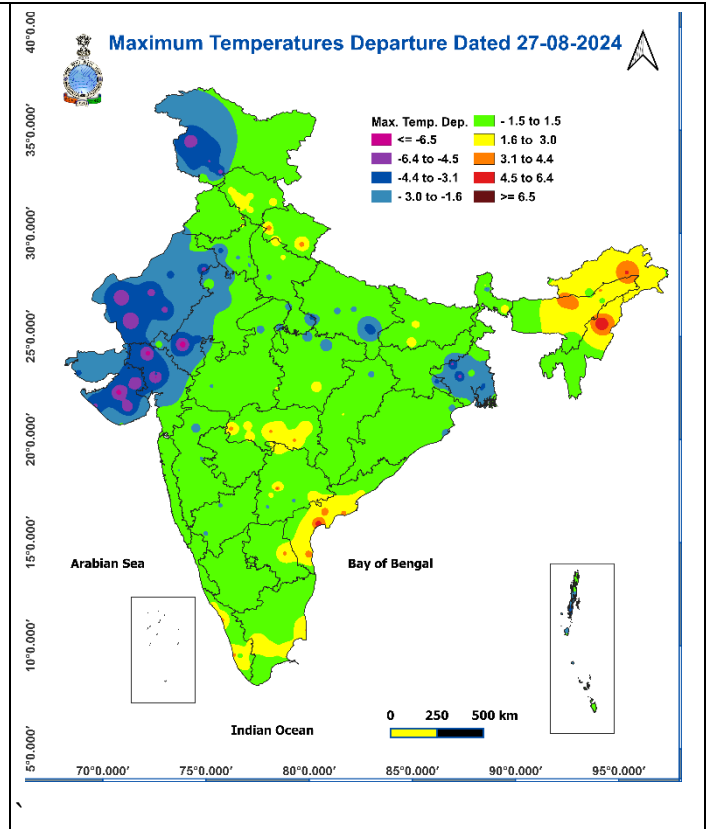
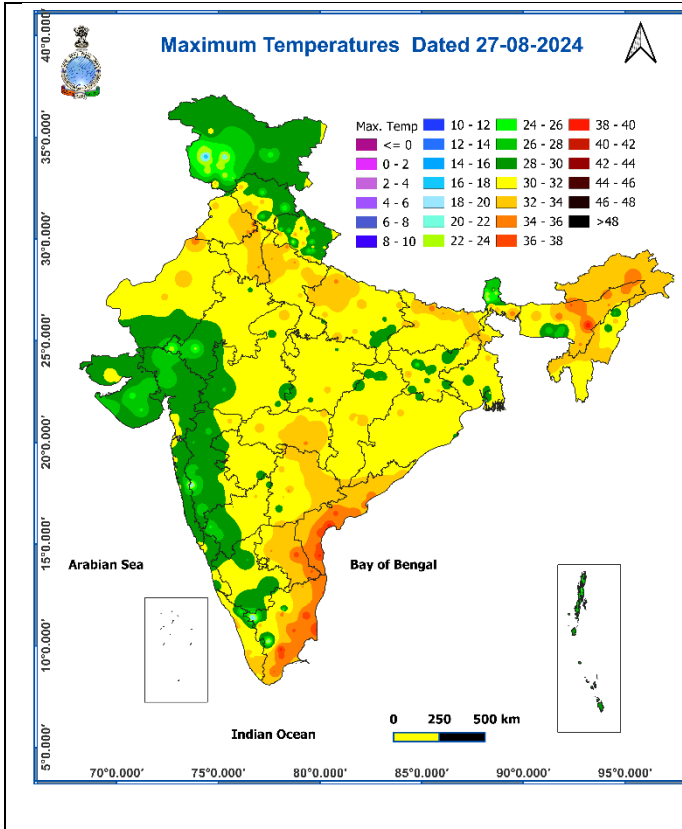


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

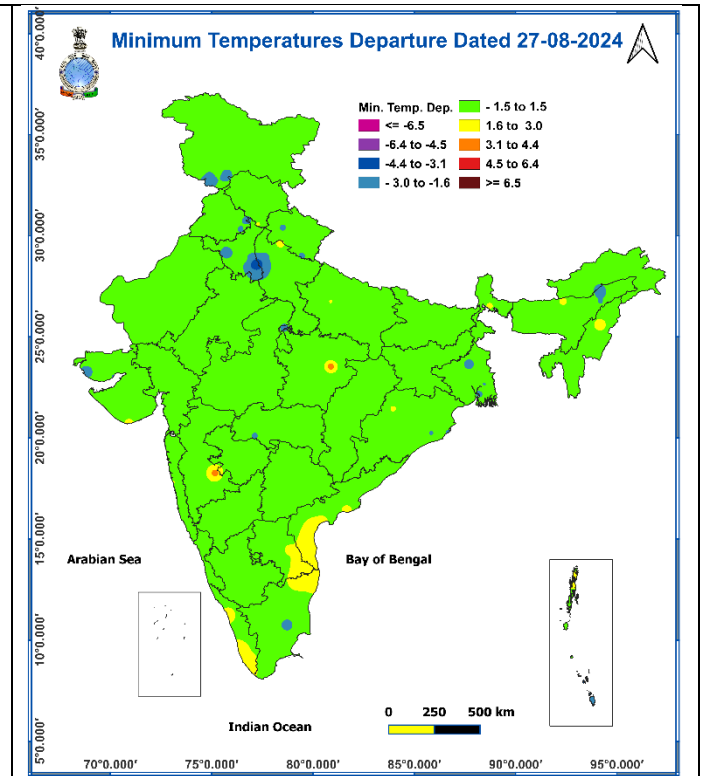
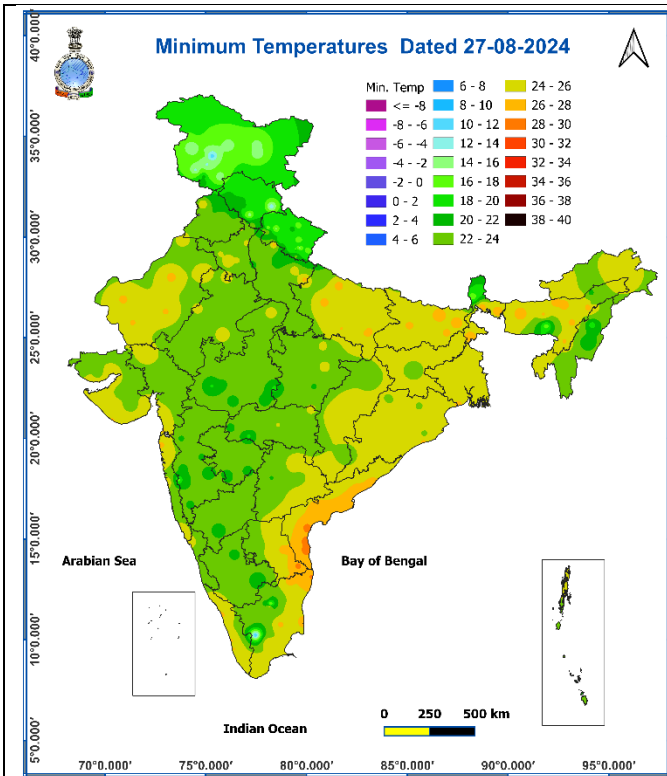
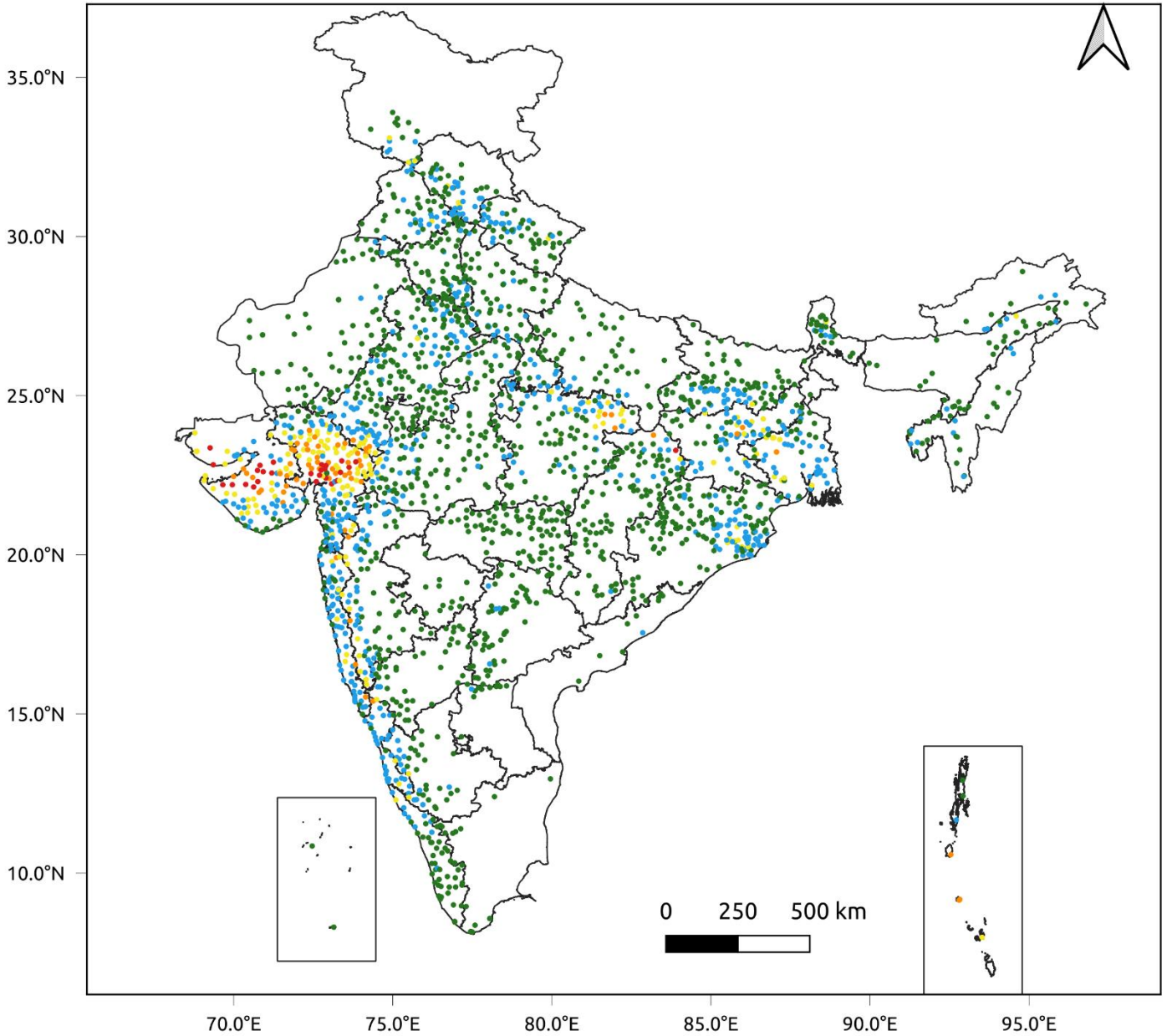


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

24 Hr cumulative rainfall recorded over different stations during 0830 IST of 26-8-2024 to 0830 IST of 27-8-2024

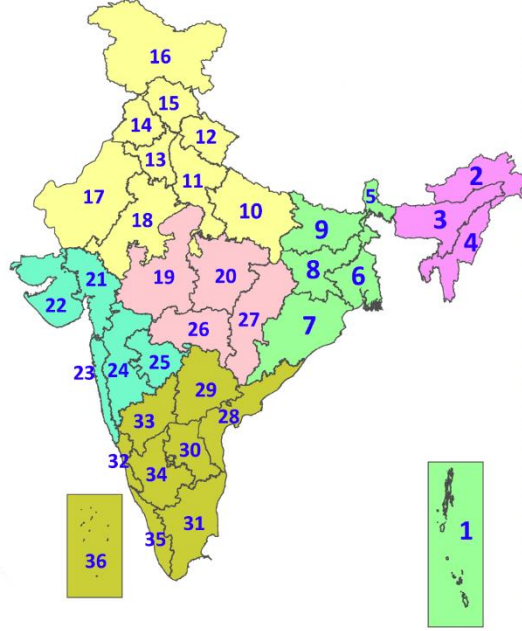


Legends

- 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)