

Saturday, August 31, 2024
Time of Issue: 2000 hours IST
(NIGHT)

All India Impact Based Weather Warning Bulletin

Weather Warnings for next 7 days is given below:

(Graphics for warnings & rainfall distribution (Table 1) are given below the text)

31 August (Day 1):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm) at a few places with extremely heavy falls (> 20 cm) very likely at isolated places over Coastal Andhra Pradesh & Yanam, Telangana; **Heavy to very heavy rainfall (≥ 12 cm) at isolated places over Odisha, Vidarbha, Chhattisgarh, Rayalaseema, Karnataka; **Heavy rainfall (≥ 7 cm) at isolated places over East Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Kerala & Mahe.******
- ❖ **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 likely to prevail over north, central Arabian sea and northern parts of south Arabian sea, along and off Gujarat, Maharashtra, Konkan, Goa, Karnataka, Kerala coasts, Lakshadweep area, and off Sri Lanka coast, many parts of south Bay of Bengal, Westcentral and adjoining east central Bay of Bengal, southern parts of northwest Bay of Bengal, along and off Andhra Pradesh, Odisha 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, most parts of north Arabian sea & adjoining parts of central Arabian sea, gulf of manner, most parts of Westcentral Bay of Bengal, few parts of south Bay of Bengal, along and off Andhra Pradesh coast. **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 50 kmph to 60 kmph gusting to 70 kmph** likely to prevail along and off Gujarat coast and adjoining Pakistan coast and adjoining northeast Arabian sea and adjoining areas. **Gale winds with speed reaching 70 kmph to 80 kmph gusting to 90 kmph** likely to prevail over parts of northwest and adjoining northeast Arabian sea. Fishermen are advised not to venture into these areas.

01 September (Day 2):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm) at a few places with extremely heavy falls (>20 cm) very likely at isolated places over Telangana; **Heavy to very heavy rainfall (≥ 12 cm) with extremely heavy falls (>20 cm) at isolated places over Vidarbha; **Heavy to very heavy rainfall (≥ 12 cm) at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Marathwada, West Madhya Pradesh; **Heavy rainfall (≥ 7 cm) at isolated places over East Rajasthan, East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, ghat areas of Madhya Maharashtra, Gujarat Region, Kerala & Mahe.********
- ❖ **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** likely to prevail over north, central Arabian sea and northern parts of south Arabian sea, along & off Gujarat, Maharashtra, Konkan, Goa, Karnataka, Lakshadweep area, off Sri Lanka coast; many parts of south Bay of Bengal, Westcentral and adjoining east central Bay of Bengal, southern parts of northwest Bay of Bengal, along and off Andhra Pradesh, Odisha coasts. **Squally weather with winds speed reaching 45 kmph to 55 kmph gusting to 65 kmph** over most parts of northwest Arabian sea & many parts of Westcentral Arabian sea, gulf of manner, parts of Westcentral Bay of Bengal, few parts of south Bay of Bengal, along and off Andhra Pradesh coast. **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 50 kmph to 60 kmph gusting to 70 kmph** northwest Arabian sea and adjoining northeast Arabian sea. **Gale winds with speed reaching 70 kmph to 80 kmph gusting to 90 kmph** over parts of northwest Arabian sea. Fishermen are advised not to venture into these areas.

02 September (Day 3):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** very likely at isolated places over West Madhya Pradesh, Vidarbha, Marathwada, Gujarat Region, Coastal Karnataka; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu division, Uttarakhand, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, East Rajasthan, East Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch, Interior Karnataka, Kerala & Mahe.
- ❖ **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** likely over north Arabian sea, central Arabian sea, along & off north Gujarat coast, Karnataka coast, southwest Arabian sea, off Sri Lanka coast; southwest & adjoining southeast Bay of Bengal, Westcentral & adjoining eastcentral Bay of Bengal. **Squally weather with winds speed reaching 45 kmph to 55 kmph gusting to 65 kmph** over Westcentral Bay of Bengal, Gulf of manner. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** over Westcentral & southwest Arabian sea, along and off Somalia, Yemen, south Oman coasts. Fishermen are advised not to venture into these areas.

03 September (Day 4):

- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Gujarat Region; **Heavy rainfall (≥ 7 cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Punjab, Rajasthan, Madhya Pradesh, Vidarbha, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch, Kerala & Mahe, Coastal 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** likely over Westcentral & adjoining eastcentral and southwest Arabian sea, Gulf of manner, off Sri Lanka coast, central Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** over westcentral & southwest Arabian sea, along & off Somalia, Yemen, south Oman coasts. Fishermen are advised not to venture into these areas.

04 September (Day 5):

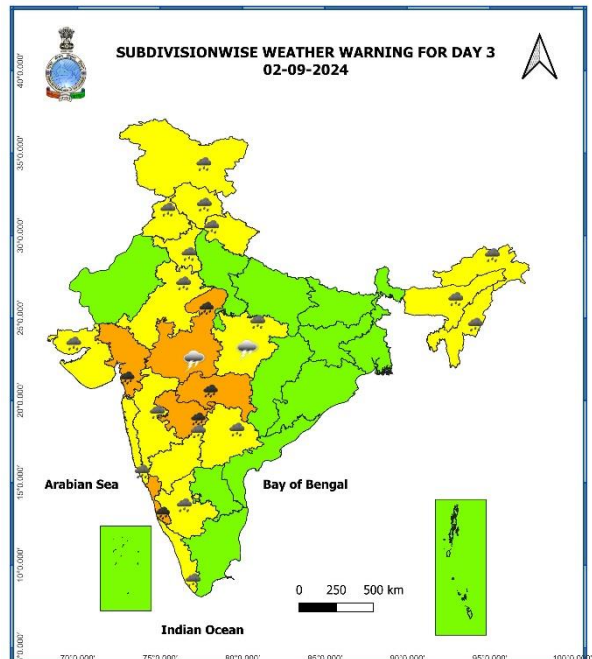
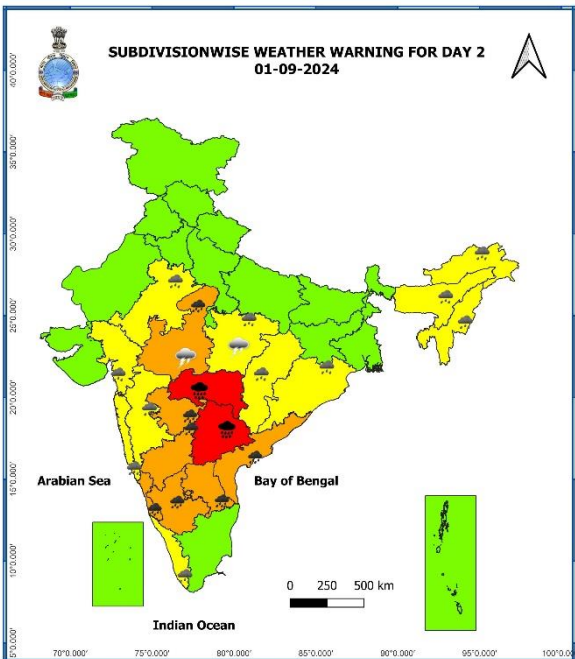
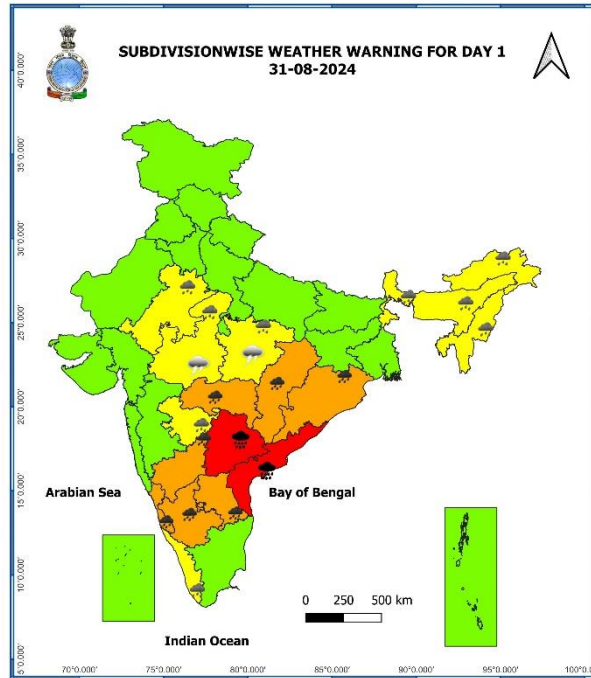
- ❖ **Heavy to very heavy rainfall (≥ 12 cm)** likely at isolated places over Gujarat Region; **Heavy rainfall (≥ 7 cm)** at isolated places over Rajasthan, Madhya Pradesh, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch, Kerala & Mahe, Coastal 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** likely over Westcentral & adjoining eastcentral Arabian sea, southwest Arabian sea, Gulf of manner, off Sri Lanka coast, central Bay of Bengal. **Squally winds speed reaching 45 kmph to 55 kmph gusting to 65 kmph** over Westcentral, southwest Arabian sea, along and off Somalia, Yemen, south Oman coasts. Fishermen are advised not to venture into these areas.

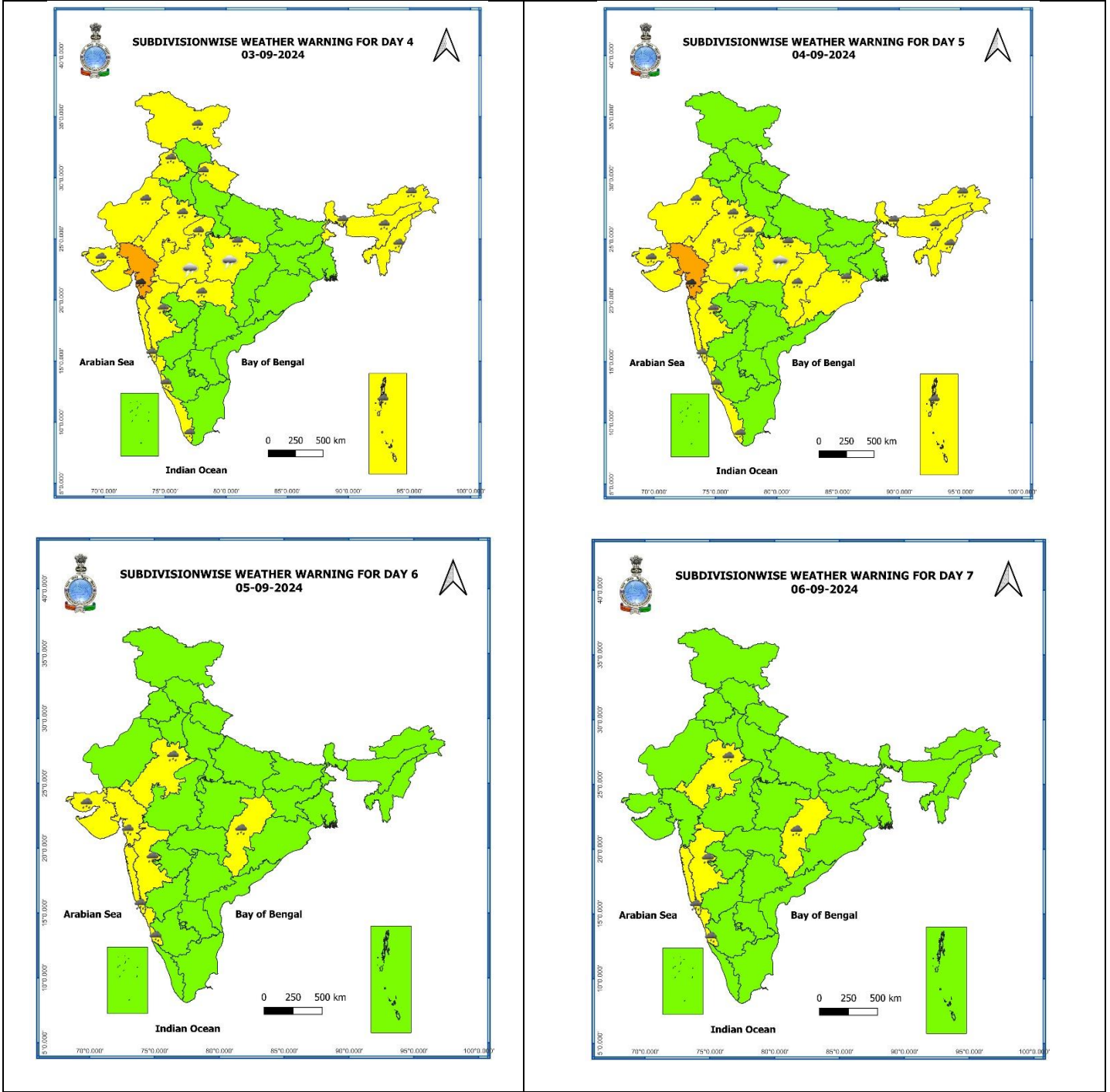
05 September (Day 6):

- ❖ **Heavy rainfall (≥ 7 cm)** likely at isolated places over East Rajasthan, Chhattisgarh, Konkan & Goa, Madhya Maharashtra, Gujarat state, Coastal Karnataka.

06 September (Day 7):

- ❖ **Heavy rainfall (≥ 7 cm)** likely at isolated places over East Rajasthan, Chhattisgarh, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka.





- 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.

Table-1

7 Days Rainfall Forecast

S. No.	Subdivision	31-Aug	01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	WS	WS	WS	WS	WS
2	ARUNACHAL PRADESH	WS	FWS	FWS	FWS	FWS	SCT	SCT
3	ASSAM & MEGHALAYA	FWS	FWS	FWS	FWS	FWS	FWS	FWS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS	FWS	FWS	FWS	FWS	FWS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	FWS	FWS	FWS	FWS	FWS	FWS	FWS
6	GANGETIC WEST BENGAL	FWS	SCT	SCT	SCT	SCT	FWS	FWS
7	ODISHA	WS	FWS	SCT	SCT	FWS	FWS	FWS
8	JHARKHAND	SCT	SCT	SCT	SCT	SCT	FWS	FWS
9	BIHAR	SCT	SCT	SCT	SCT	SCT	SCT	SCT
10	EAST UTTAR PRADESH	ISOL	SCT	SCT	SCT	FWS	FWS	FWS
11	WEST UTTAR PRADESH	ISOL	SCT	FWS	FWS	FWS	FWS	FWS
12	UTTARAKHAND	ISOL	SCT	FWS	FWS	FWS	SCT	SCT
13	HARYANA CHANDIGARH & DELHI	ISOL	ISOL	SCT	SCT	SCT	ISOL	ISOL
14	PUNJAB	ISOL	ISOL	SCT	SCT	SCT	ISOL	ISOL
15	HIMACHAL PRADESH	SCT	SCT	FWS	FWS	SCT	SCT	SCT
16	JAMMU & KASHMIR AND LADAKH	ISOL	ISOL	FWS	FWS	SCT	ISOL	SCT
17	WEST RAJASTHAN	ISOL	ISOL	SCT	FWS	FWS	SCT	SCT
18	EAST RAJASTHAN	SCT	FWS	FWS	FWS	FWS	FWS	FWS
19	WEST MADHYA PRADESH	FWS	WS	WS	WS	WS	FWS	FWS
20	EAST MADHYA PRADESH	FWS	FWS	FWS	FWS	FWS	FWS	FWS
21	GUJARAT REGION	FWS	WS	WS	WS	WS	WS	WS
22	SAURASHTRA & KUTCH	SCT	SCT	FWS	WS	WS	WS	FWS
23	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	SCT	FWS	FWS	WS	WS	WS	WS
25	MARATHAWADA	FWS	WS	WS	FWS	FWS	SCT	SCT
26	VIDARBHA	WS	WS	WS	WS	FWS	FWS	FWS
27	CHHATTISGARH	WS	FWS	FWS	FWS	FWS	FWS	FWS
28	COASTAL ANDHRA PRADESH & YANAM	WS	WS	FWS	FWS	SCT	SCT	FWS
29	TELANGANA	WS	WS	WS	FWS	SCT	SCT	SCT
30	RAYALASEEMA	WS	FWS	FWS	SCT	ISOL	ISOL	SCT
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	WS	WS	WS	WS	WS	WS	WS
33	NORTH INTERIOR KARNATAKA	WS	WS	FWS	SCT	SCT	SCT	SCT
34	SOUTH INTERIOR KARNATAKA	WS	FWS	SCT	SCT	SCT	SCT	SCT
35	KERALA & MAHE	WS	WS	WS	FWS	FWS	WS	WS
36	LAKSHADWEEP	WS	WS	FWS	FWS	SCT	SCT	SCT

- As the lead period increases forecast accuracy decreases.

Impact due to

- Scattered **heavy to very heavy with isolated extremely heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam on 31st August; Telangana on 31st August & 01st September.
- Isolated **heavy to very heavy with isolated extremely heavy rainfall** very likely over Vidarbha on 01st September.
- **Very heavy rainfall** at isolated over Rayalaseema, Interior Karnataka on 31st August to 02nd September; Coastal Karnataka, Vidarbha during 31st August & 02nd September. West Madhya Pradesh, Marathwada on 01st & 02nd; Chhattisgarh, Odisha on 31st; Gujarat Region during 02nd – 04th September.
- **Moderate to high flash flood risk** likely over few watersheds & neighbourhoods of Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Chhattisgarh, North Interior Karnataka, Vidarbha, Marathwada on 31st August & 01st September. **(ANNEXURE I)**

Impact Expected

- ✓ 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.
- ✓ Reduction of visibility over sea area due to sea spray induced by strong wind and 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

- ✓ Judicious regulation of offshore/onshore Operations
- ✓ Judicious regulation of surface transports including railways and roadways.
- ✓ 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, Odisha, East Rajasthan, Madhya Pradesh, Tamil Nadu, Kerala, Karnataka, Andhra Pradesh and Telangana.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Gujrat Region and NMMT.
- ✓ Drain out excess water from maize, groundnut, ragi, vegetables and banana in South Odisha; from rice, maize, sugarcane, red gram, cotton, groundnut, vegetables and horticultural crops in Andhra Pradesh; from rice, soyabean, red gram, maize, cotton and Turmeric in Telangana to prevent water logging.
- ✓ Store the harvested produce of black gram and green gram at safer places in Vidarbha, Marathwada and Ghat areas of Madhya Maharashtra.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

Flash Flood Guidance:

ANNEXURE I

24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 01-09-2024:

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

Coastal AP & Yanam - East Godavari, Guntur, Krishna, Prakasam and West Godavari districts.

NI Karnataka - Bidar, Bijapur, Gulbarga, Raichur and Yadgir districts.

Rayalaseema - Kurnool district.

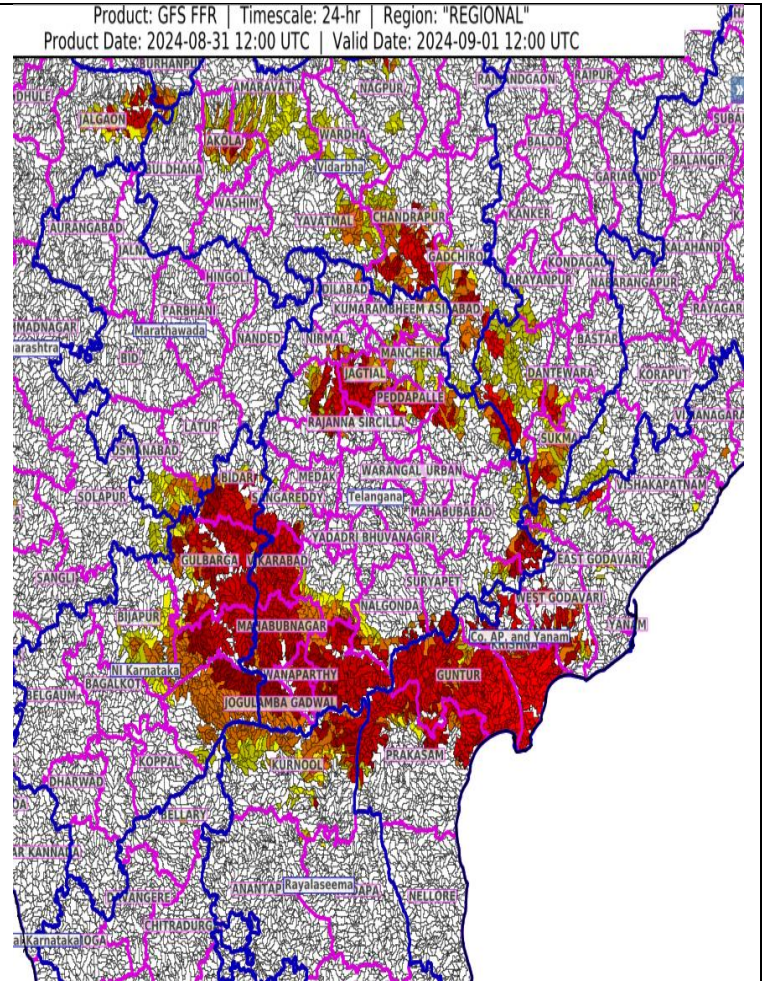
Telangana - B. Kothagudem, J. Bhupalpally, Jagtial, Jogulamba Gadwal, Khammam, Kumaram Bheem, Mahabubnagar, Mancherial, Nagarkurnool, Nalgonda, Nirmal, Nizamabad, Peddapalle, Rajanna Sircilla, Rangareddy, Sangareddy, Vikarabad and Wanaparthy districts.

Chhattisgarh - Bijapur, Dantewara, Narayanpur and Sukma districts.

Vidarbha - Akola, Amaravati, Chandrapur, Gadchiroli, Wardha and Yavatmal districts.

Marathawada - Latur and Osmanabad 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.



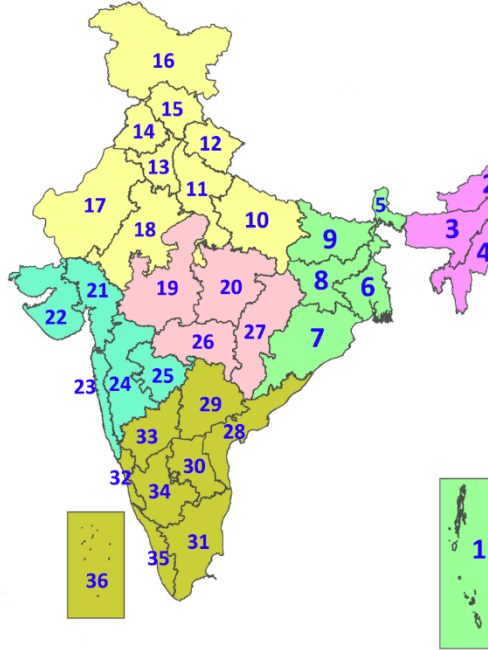
Legends & abbreviations:

- ❖ **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **ARG:** Automatic Rain Gauge; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office, **Aero:** Aerodrome, **IAF:** Indian Air Force.
- ❖ **Region wise classification of meteorological Sub-Divisions:**
 - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
 - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
 - **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
 - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
 - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathawada.
 - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.



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 |
| 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 | |

COLOUR CODED WARNING

No Warning (No Action)
Watch (Be Aware)
Alert (Be Prepared To Take Action)
Warning (Take Action)

Probabilistic Forecast

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

DEFINITION/CRITERIA

Rain/ Snow *	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Heavy: 64.5 to 115.5 mm/cm *</td> </tr> <tr> <td style="padding: 2px;">Very Heavy: 115.6 to 204.4 mm/cm*</td> </tr> <tr> <td style="padding: 2px;">Extremely Heavy: > 204.4 mm/cm *</td> </tr> </table>	Heavy: 64.5 to 115.5 mm/cm *	Very Heavy: 115.6 to 204.4 mm/cm*	Extremely Heavy: > 204.4 mm/cm *		
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	<p>When maximum temperature of a station reaches $\geq 40^\circ\text{C}$ for plains and $\geq 30^\circ\text{C}$ for hilly regions</p> <p>(a) Based on Departure from normal</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C.</td> </tr> <tr> <td style="padding: 2px;">Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$</td> </tr> </table> <p>(b). Based on Actual maximum temperature</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.</td> </tr> <tr> <td style="padding: 2px;">Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$</td> </tr> </table> <p>(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 $\geq 37^\circ\text{C}$</p>	Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C .	Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$	Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.	Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$	
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Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.						
Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$						
Warm Night	<p>When maximum temperature remains 40°C</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Warm Night: When minimum temperature departure 4.5°C to 6.4°C.</td> </tr> <tr> <td style="padding: 2px;">Severe Warm Night: When minimum temperature departure $>6.4^\circ\text{C}$.</td> </tr> </table>	Warm Night: When minimum temperature departure 4.5°C to 6.4°C .	Severe Warm Night: When minimum temperature departure $>6.4^\circ\text{C}$.			
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Cold Wave	<p>When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions.</p> <p>(a). Based on departure</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C.</td> </tr> <tr> <td style="padding: 2px;">Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</td> </tr> </table> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$</td> </tr> <tr> <td style="padding: 2px;">Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$</td> </tr> </table> <p>(c) For Coastal Stations When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$</p>	Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .	Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$	Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$	Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$	
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Thunderstorm	<p>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p>					
Dust/Sand Storm	<p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p>					
Frost	<p>Ice deposits on ground</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Air temperature $\leq 4^\circ\text{C}$ (over Plains)</td> </tr> </table>	Air temperature $\leq 4^\circ\text{C}$ (over Plains)				
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