

Friday, October 25, 2024  
Time of Issue: 0900 hours IST  
(MORNING)

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:

**25 October (Day 1):**

- ❖ **Heavy to very heavy rainfall with extremely heavy falls ( $\geq 20$  cm)** very likely at isolated places over Odisha, Gangetic West Bengal; **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Jharkhand, Kerala & Mahe; **Heavy rainfall ( $\geq 7$ cm)** likely at isolated places over northeast Bihar, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka.
- ❖ **Gale wind speed reaching 100-110 kmph gusting to 80 kmph gusting to 120 kmph** along & off north Odisha and east Medinipur district of West Bengal. **Gale wind speed reaching 60-80 kmph gusting to 90 kmph** is likely along & off south Odisha and remaining districts of coastal West Bengal. **Squally wind speed reaching 50-60 kmph gusting to 70 kmph** is likely to prevail over adjoining areas of northeast Bay of Bengal. **Squally wind speed reaching 40-50 gusting to 60 kmph** is very likely to prevail over South Jharkhand.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail along and off Kerala coast and over Lakshadweep area.

**26 October (Day 2):**

- ❖ **Heavy rainfall ( $\geq 7$ cm)** very likely at isolated places over Gangetic West Bengal, Jharkhand, Odisha, Kerala & Mahe.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Vidarbha, Chhattisgarh, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam.
- ❖ **Squally wind speed reaching 40-50 gusting to 60 kmph** is very likely to prevail over South Jharkhand.

**27 October (Day 3):**

- ❖ **Heavy rainfall ( $\geq 7$ cm)** very likely at isolated places over Kerala & Mahe.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh.

**28 October (Day 4):**

- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over East Madhya Pradesh, Chhattisgarh.

**29 October (Day 5):**

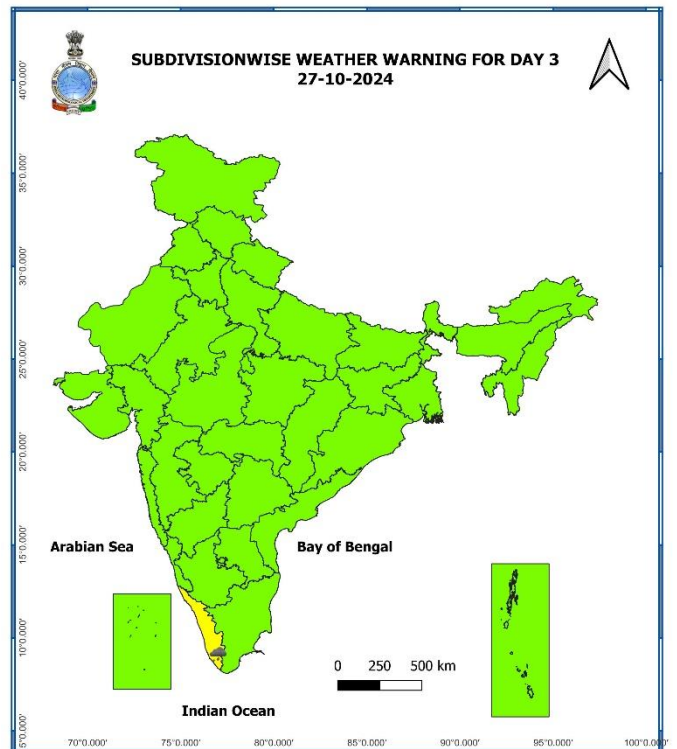
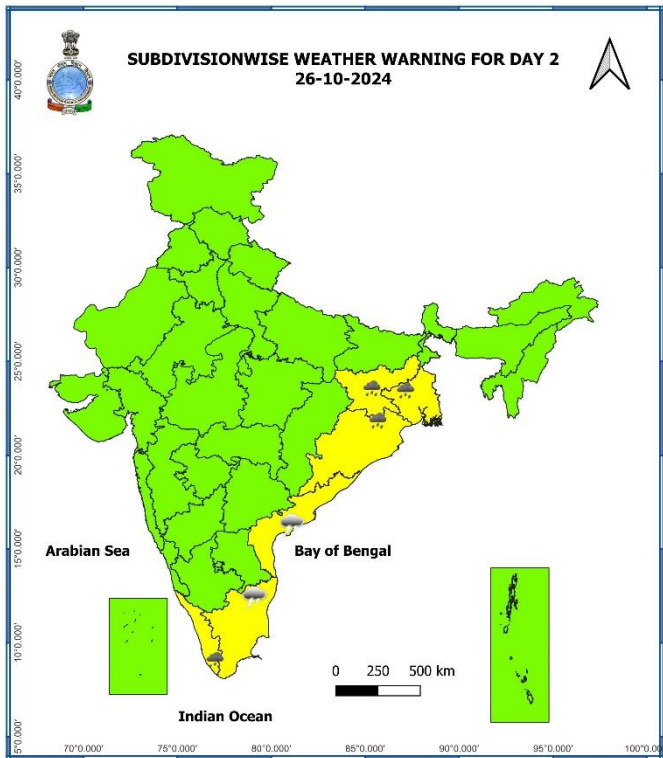
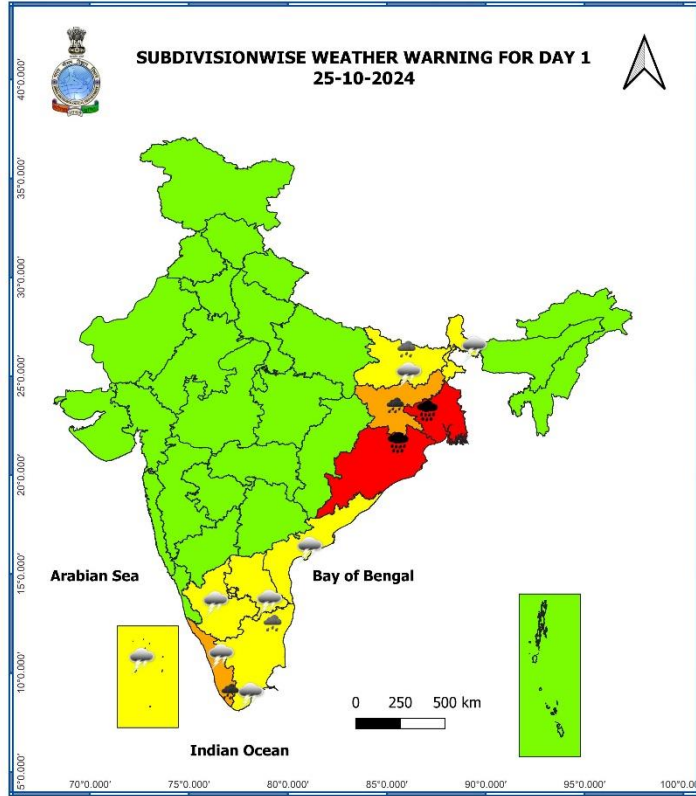
- ❖ **No weather warning.**

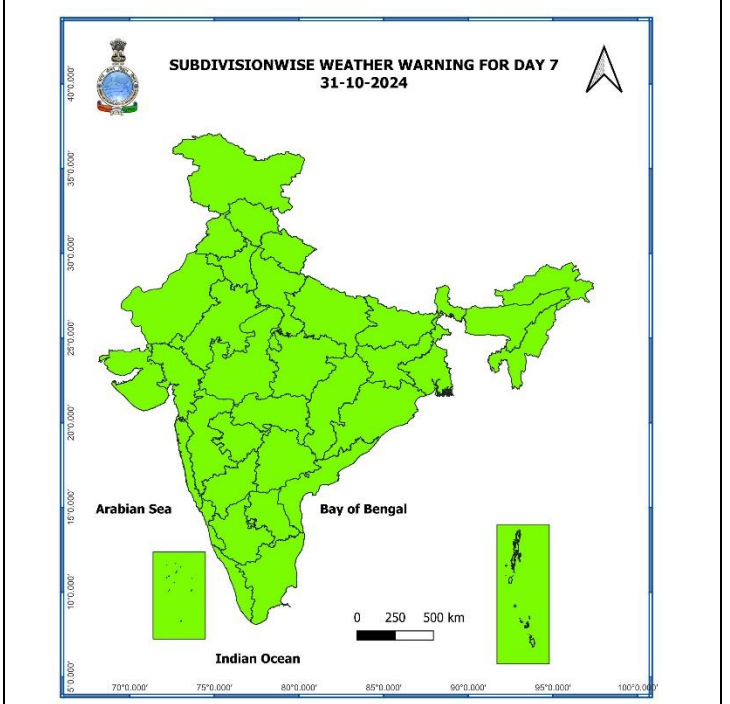
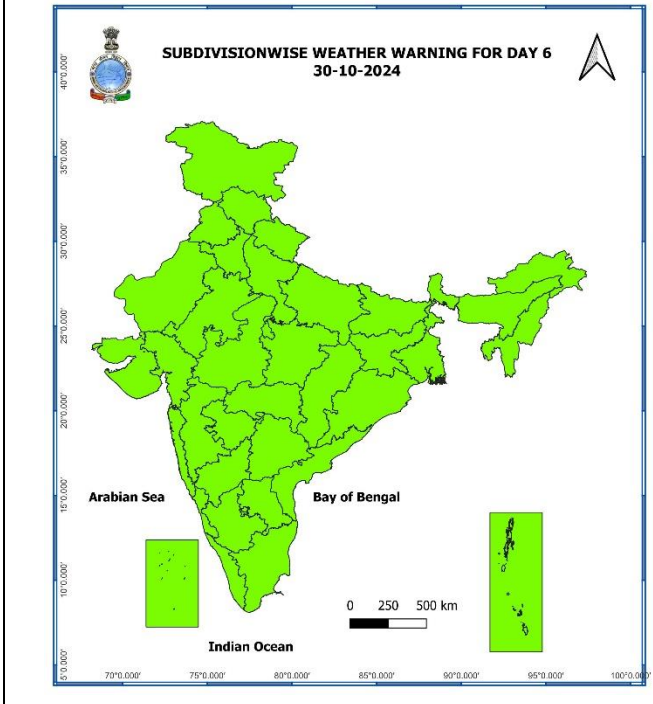
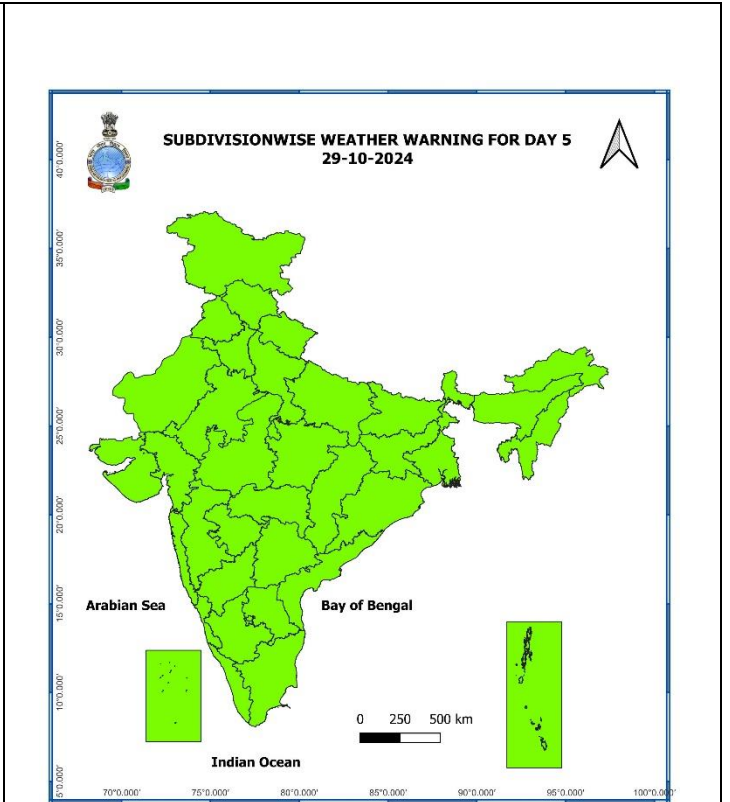
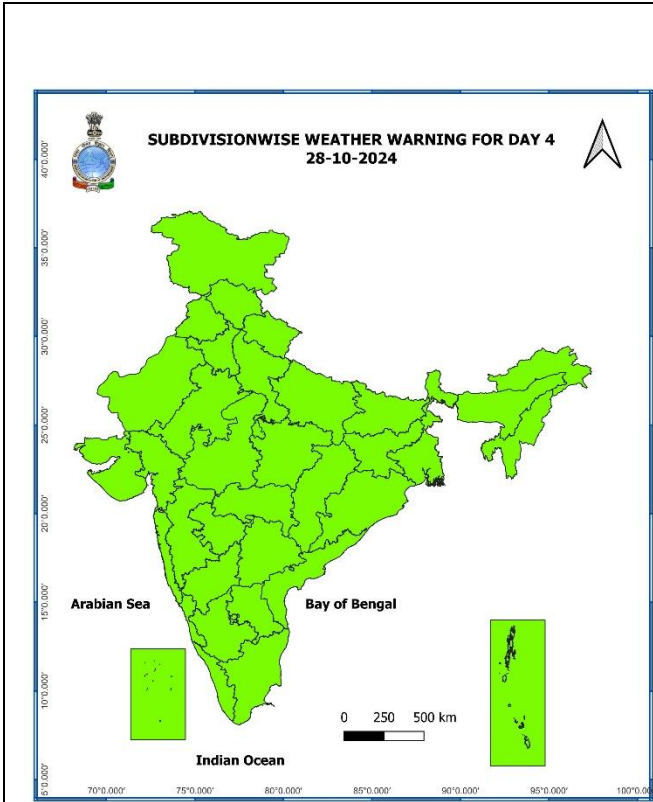
**30 October (Day 6):**

- ❖ **No weather warning.**

**31 October (Day 7):**

- ❖ **No weather warning.**





- 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	25-Oct	26-Oct	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	FWS	FWS	FWS	FWS	FWS	FWS
2	ARUNACHAL PRADESH	WS	WS	WS	FWS	FWS	FWS	FWS
3	ASSAM & MEGHALAYA	FWS	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	SCT	ISOL	ISOL	ISOL	ISOL	SCT	SCT
6	GANGETIC WEST BENGAL	WS	FWS	SCT	ISOL	ISOL	ISOL	ISOL
7	ODISHA	WS	FWS	SCT	ISOL	ISOL	ISOL	ISOL
8	JHARKHAND	WS	FWS	SCT	ISOL	DRY	DRY	DRY
9	BIHAR	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
10	EAST UTTAR PRADESH	ISOL	DRY	DRY	ISOL	ISOL	ISOL	ISOL
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
16	JAMMU & KASHMIR AND LADAKH	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
20	EAST MADHYA PRADESH	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
21	GUJARAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
24	MADHYA MAHARASHTRA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
25	MARATHAWADA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
26	VIDARBHA	DRY	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
27	CHHATTISGARH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
28	COASTAL ANDHRA PRADESH & YANAM	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	ISOL	DRY	DRY	SCT	SCT	SCT	SCT
33	NORTH INTERIOR KARNATAKA	DRY	DRY	ISOL	ISOL	SCT	FWS	FWS
34	SOUTH INTERIOR KARNATAKA	SCT	ISOL	ISOL	ISOL	SCT	SCT	SCT
35	KERALA & MAHE	WS	FWS	FWS	SCT	SCT	SCT	SCT
36	LAKSHADWEEP	WS	FWS	FWS	SCT	SCT	SCT	SCT

• As the lead period increases forecast accuracy decreases.

### Impact due to

- ✓ **Isolated extremely heavy rainfall** very likely over Odisha, Gangetic West Bengal on 25<sup>th</sup> October.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Kerala & Mahe & Jharkhand on 25<sup>th</sup> October.
- ✓ **Moderate flash flood** risk likely over few watersheds & neighbourhoods of Odisha, Gangetic West Bengal on 25<sup>th</sup> & 26<sup>th</sup> October. **(Annexure I)**

### Impact Expected

- ✓ Major damage to thatched houses/ huts. Roof tops may blow off. Unattached metal sheets may fly.
- ✓ Minor damage to power and communication lines.
- ✓ Major damage to Kutcha and some damage to Pucca roads. Flooding of escape routes.
- ✓ Possibilities of damage to vulnerable structure. Breaking of tree branches and uprooting of trees.
- ✓ Moderate damage to banana and papaya trees. Large dead limbs blown from trees.
- ✓ Damage to horticulture and standing crops in some areas due to inundation and wind.
- ✓ Damage to embankments/ salt pans.
- ✓ 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 and roadways due to water logging in roads and poor visibility due to heavy rain leading to increased travel time and incidents
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Likely disruption of marine and inland water transportation like small boats and trawlers.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Webpage of Central Water Commission)

### Action Suggested

- ❖ **For districts of Odisha (Baleswar, Bhadrak, Kendrapara, Jajpur, Jagatsinghpur, Puri, Khorda, Mayurbhanj, Kendujhar, Cuttack, Dhenkanal) and West Bengal (South & North 24 Parganas, East & West Medinipur, Jhargram, Howrah, Hooghly, Kolkata & Bankura)**
- ✓ Total suspension of fishing operations on 25<sup>th</sup> Oct over Central and North Bay of Bengal.
- ✓ Fishermen are advised not to venture into :
- ✓ **Northwest and adjoining northeast Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts** on 25<sup>th</sup> October morning.
- ✓ Movement in motor boats unsafe.
- ✓ Coastal hutment dwellers to be moved to safer places.
- ✓ People in affected areas to remain indoors.
- ✓ Judicious regulation of onshore/offshore, Port and maritime activities including shipping.
- ✓ Judicious regulation of tourism activities in coastal areas.
- ✓ 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 in view of Severe Cyclonic storm “DANA” over northwest Bay of Bengal (Cyclone Warning for Odisha and West Bengal coasts)

- ✓ Immediately shift the harvested produce to safer places.
- ✓ In **Odisha**, Postpone harvesting of rice, maize, black gram, green gram, groundnut, vegetables and fruits till the cessation of rains. Withhold sowing of pre-rabi pulses and winter vegetables. Provide propping in sugarcane by tying leaves from four to five plants together to prevent their lodging.
- ✓ In **Gangetic West Bengal**, drain out excess water from Aman rice, groundnut, pulses and vegetables. Postpone harvesting of kharif rice, vegetables, and fruits till the cessation of rains.
- ✓ In **Andaman & Nicobar Islands**, collect and safely dispose of fallen fruits and vegetables to prevent the spread of fungal diseases. Collect fallen coconuts and transport them to the market as soon as possible. For harvested rice, ensure proper sun-drying when the weather conditions are clear to minimize moisture retention and reduce the risk of mould or spoilage.
- ✓ Make arrangements for adequate drainage to avoid water logging in crop fields.
- ✓ Provide mechanical support to young fruit plants and staking in vegetables to prevent their lodging.

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

- ✓ In **Tamil Nadu**, drain out excess water from rice nurseries and fields of rice, maize, pepper and newly planted turmeric. Undertake detrashing and propping of more than five-months-old sugarcane to avoid lodging. Provide support to banana plantations.
- ✓ Make necessary arrangements to drain out excess water from standing crop fields and fruit orchards to avoid water stagnation in Kerala, South Interior Karnataka, Assam, Meghalaya and Nagaland.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

**Flash Flood Risk:**

**Annexure I**

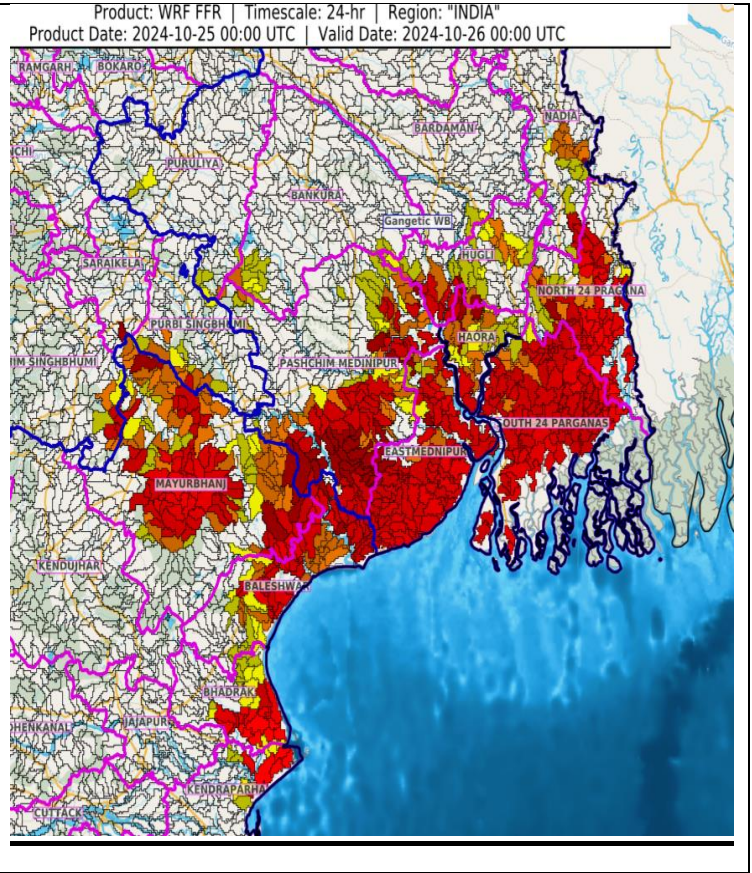
**24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 26-10-2024:**

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

**Odisha** - Baleshwar, Bhadrak, Kendraparha and Mayurbhanj districts.

**Gangetic West Bengal** - Bankura, Bardaman, Eastmednipur, Haora, Hugli, Nadia, North 24 Pragana, Puruliya, Pashchim Medinipur and South 24 Parganas 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.



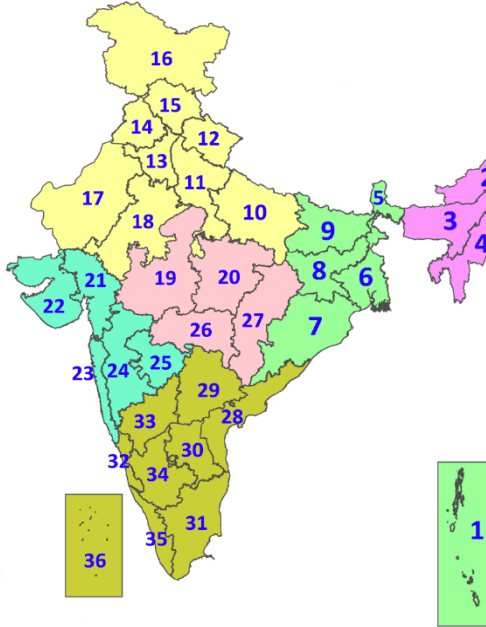


## Legends & abbreviations:

- ❖ **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

\* 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)

### DEFINITION/CRITERIA

<b>Rain/ Snow *</b>	<b>Heavy:</b> 64.5 to 115.5 mm/cm * <b>Very Heavy:</b> 115.6 to 204.4 mm/cm* <b>Extremely Heavy:</b> > 204.4 mm/cm *
<b>Heat Wave</b>	<b>When maximum temperature of a station reaches <math>\geq 40^{\circ}\text{C}</math> for plains and <math>\geq 30^{\circ}\text{C}</math> for hilly regions</b> <b>(a) Based on Departure from normal</b> <b>Heat Wave:</b> Maximum Temperature Departure from normal $4.5^{\circ}\text{C}$ to $6.4^{\circ}\text{C}$ . <b>Severe Heat Wave:</b> Maximum Temperature Departure from normal $\geq 6.5^{\circ}\text{C}$ <b>(b). Based on Actual maximum temperature</b> <b>Heat Wave:</b> When actual maximum temperature $\geq 45^{\circ}\text{C}$ . <b>Severe Heat Wave:</b> When actual maximum temperature $\geq 47^{\circ}\text{C}$ <b>(c). Criteria for heat wave for coastal stations</b> When maximum temperature departure is $>4.5^{\circ}\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^{\circ}\text{C}$
<b>Warm Night</b>	<b>When maximum temperature remains <math>40^{\circ}\text{C}</math></b> <b>Warm Night:</b> When minimum temperature departure $4.5^{\circ}\text{C}$ to $6.4^{\circ}\text{C}$ . <b>Severe Warm Night:</b> When minimum temperature departure $>6.4^{\circ}\text{C}$ .
<b>Cold Wave</b>	<b>When minimum temperature of a station <math>\leq 10^{\circ}\text{C}</math> for plains and <math>\leq 0^{\circ}\text{C}</math> for hilly regions.</b> <b>(a). Based on departure</b> <b>Cold Wave:</b> Minimum Temperature Departure from normal $-4.5^{\circ}\text{C}$ to $-6.4^{\circ}\text{C}$ . <b>Severe Cold Wave:</b> Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$ <b>(b) Based on actual Minimum Temperature (for Plains only)</b> <b>Cold Wave :</b> When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$ <b>Severe Cold Wave:</b> When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$ <b>(c) For Coastal Stations</b> When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$
<b>Cold Day</b>	<b>When minimum temperature of a station <math>\leq 10^{\circ}\text{C}</math> for plains and <math>\leq 0^{\circ}\text{C}</math> for hilly regions</b> <b>Based on departure</b> <b>Cold Day:</b> Maximum Temperature Departure from normal $-4.5^{\circ}\text{C}$ to $-6.4^{\circ}\text{C}$ . <b>Severe Cold Day:</b> Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$
<b>Fog</b>	<b>Phenomenon of small droplets suspended in air and the horizontal visibility <math>&lt; 1\text{km}</math></b> <b>Moderate Fog:</b> When the visibility between 500-200 metres <b>Dense Fog:</b> when the visibility between 50- 200 metres <b>Very Dense Fog:</b> when the visibility $< 50$ metres
<b>Thunderstorm</b>	Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)
<b>Dust/Sand Storm</b>	An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.
<b>Frost</b>	<b>Ice deposits on ground</b> Air temperature $\leq 4^{\circ}\text{C}$ ( over Plains)
<b>Squall</b>	<b>A strong wind that rises suddenly, lasts for atleast 1 minute.</b> <b>Moderate:</b> Wind speed 52-61 kmph <b>Severe:</b> Wind speed 62-87 kmph <b>Very Severe:</b> Wind speed $>87$ kmph
<b>Sea State</b>	<b>Effect of various waves in the sea over specific area</b> <b>Rough to very rough:</b> Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre <b>High to very high:</b> Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre <b>Phenomenal:</b> Wind speed $>117$ kmph ( $>63$ knots) & Wave height $>14$ metre
<b>Cyclone</b>	<b>Cyclonic Storm:</b> Wind speed 62-87 kmph (34-47 knots) <b>Severe Cyclonic Storm:</b> Wind speed 88-117 kmph (48-63 knots) <b>Very Severe Cyclonic Storm:</b> Wind speed 118-165 kmph (64 - 89 knots) <b>Extremely Severe Cyclonic Storm:</b> Wind speed 166-220 kmph (90 -119 knots) <b>Super Cyclone Strom:</b> Wind speed $>220$ kmph ( $>119$ knots)