

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 21st October, 2024

Time of Issue: 1445 hours IST

Subject: (i) A Low Pressure Area lay over Eastcentral Bay of Bengal & adjoining north Andaman Sea. It is very likely to move west-northwestwards and intensify into a depression by 22nd October morning and into a cyclonic storm by 23rd October, 2024 over Eastcentral Bay of Bengal.
(ii) Isolated extremely heavy rainfall very likely over Odisha, Gangetic West Bengal on 24th & 25th October 2024.

Realised rainfall during past 24 hours till 0830 hours IST of today (Annexure I)

- ❖ **Heavy to very Heavy rainfall** at isolated places over Tamil Nadu, Puducherry & Karaikal, Saurashtra & Kutch; **Heavy rainfall** at isolated places over Karnataka, Telangana, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Madhya Maharashtra.

Weather Systems:

- ❖ Under the influence of yesterday's cyclonic Circulation over north Andaman Sea, a **Low Pressure Area** formed over Eastcentral Bay of Bengal & adjoining north Andaman Sea. It is very likely to move west-northwestwards and intensify into a **depression** by 22nd October morning and into a **cyclonic storm** by 23rd October, 2024 over eastcentral Bay of Bengal. Thereafter, it is very likely to move northwestwards and reach northwest Bay of Bengal off Odisha-West Bengal coasts by 24th October morning.
- ❖ Yesterday's **Low Pressure area** over westcentral Arabian Sea persisted over the same region. It is very likely to move west-northwestwards away from Indian coast and weaken further during next 12 hours.
- ❖ An **upper air cyclonic circulation** lies over Tamil Nadu in lower and middle tropospheric levels.

Forecast & Warnings (upto 7 days) (Annexure II & III):

East India

- ✓ Light to moderate rainfall at most places with **heavy rainfall** at isolated places very likely over Andaman & Nicobar Islands on 21st October.
- ✓ Light to moderate rainfall at most places with **heavy rainfall** at isolated places very likely over Odisha on 23rd & 26th; **heavy to very heavy rainfall** at a few places with **extremely heavy rainfall** at isolated places on 24th & 25th October.
- ✓ **Light to moderate rainfall at most places with heavy rainfall** at isolated places very likely over Gangetic West Bengal on 23rd **heavy to very heavy rainfall** on 24th & 25th October.
- ✓ Light to moderate rainfall at a few places with **heavy rainfall** at isolated places very likely over Jharkhand on 24th October.

South Peninsular India

- ✓ Light to moderate rainfall at many places accompanied with isolated thunderstorm and lightning very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal & South Interior Karnataka; light to moderate rainfall at Isolated places very likely over rest of the region during the week.
- ✓ **Isolated very heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal on 21st October.
- ✓ **Isolated heavy rainfall** very likely over Kerala & Mahe, Coastal & South Interior Karnataka during 21st-23rd; North Interior Karnataka on 21st; Tamil Nadu, Puducherry & Karaikal on 22nd & 23rd; Coastal Andhra Pradesh & Yanam on 24th & 25th October.

West India

- ✓ Light to moderate rainfall at many places accompanied with isolated thunderstorm and lightning very likely over Konkan & Goa; light to moderate rainfall at Isolated places very likely over rest of the region during next 4 days and where dry weather is likely to prevail subsequent 3 days.
- ✓ **Isolated heavy rainfall** very likely over Konkan & Goa, Madhya Maharashtra, Marathwada, Gujarat State on 21st October.

Northeast, Central & Northwest India

- ✓ No significant rainfall likely over these regions during the week.

Wind Warning:

- ✓ **Andaman Sea:** Squally weather with wind speed reaching 35-45 gusting to 55 kmph is very likely over Andaman Sea on 21st October.
- ✓ **Eastcentral Bay of Bengal:** Squally wind speed reaching 35-45 gusting to 65 kmph is very likely on 21st October, 55-65 gusting to 75 kmph by 22nd evening , 70-90 kmph gusting to 100 kmph from 23rd evening till 24th morning.
- ✓ **Adjoining areas of Westcentral Bay of Bengal:** Squally wind speed reaching 45-55 gusting to 65 kmph is very likely on 23rd and 24th Oct.
- ✓ **North Bay of Bengal:** Squally wind speed reaching 40-50 gusting to 60 kmph is very likely to commence from 23rd morning. It would gradually increase becoming gale wind speed reaching 100-110 kmph gusting to 120 kmph from 24th Oct evening to 25th Oct morning and decrease thereafter.
- ✓ **Along & off Odisha-west Bengal coasts:** Squally wind speed reaching 40-50 gusting to 60 kmph is very likely to commence from 23rd Oct evening. It would gradually increase becoming gale wind speed reaching 100-110 kmph gusting to 120 kmph from 24th Oct night till 25th Oct morning.

Fishermen Warning (ANNEXURE IV):

Fishermen are advised not to venture into

- Andaman Sea till 21st October.
- Eastcentral Bay of Bengal during 21st-24th October.
- **Adjoining areas of Westcentral Bay of Bengal on 23rd and 24th Oct.**
- **North Bay of Bengal** and along & off Odisha, West Bengal and Bangladesh coasts during 23rd to 25th October.

Fishermen out at sea are advised to return to coasts by 21st Oct.

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

For District wise warnings refer:

<https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

For Fishermen warnings, kindly refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/51/51_bdf575_GRAPHIC.png

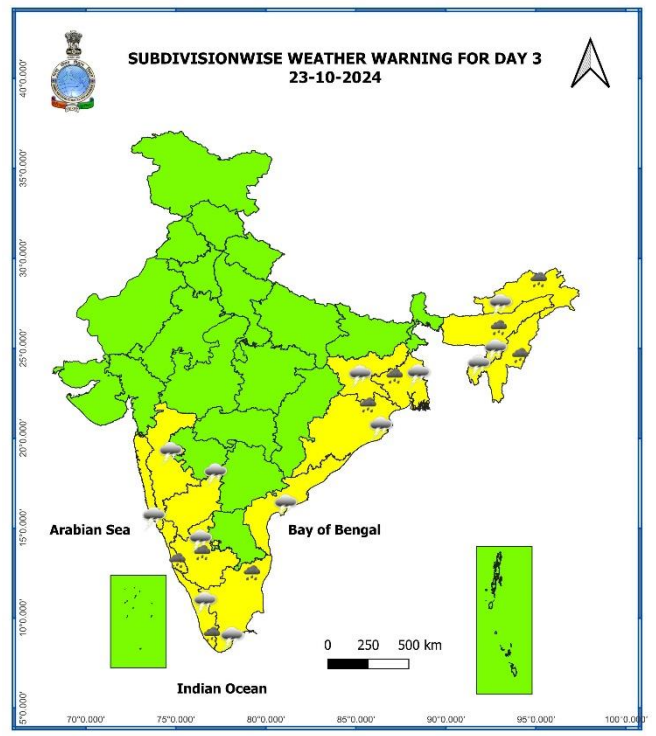
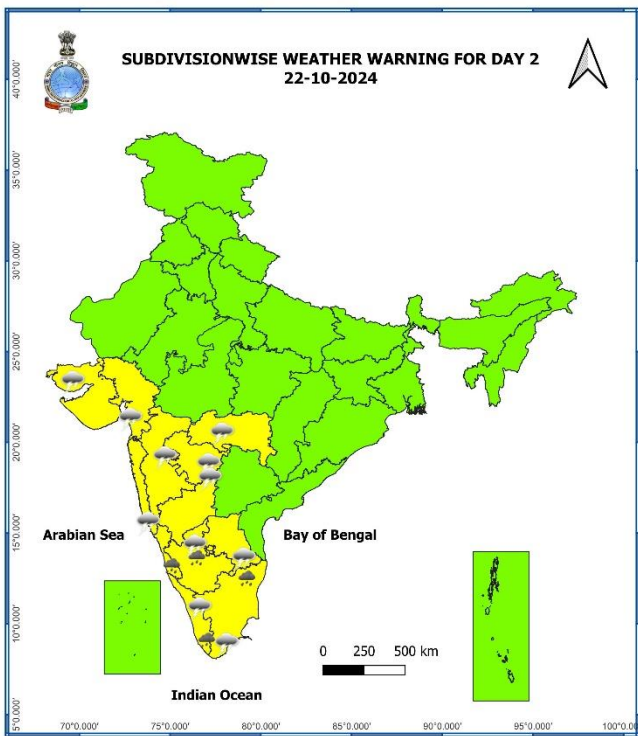
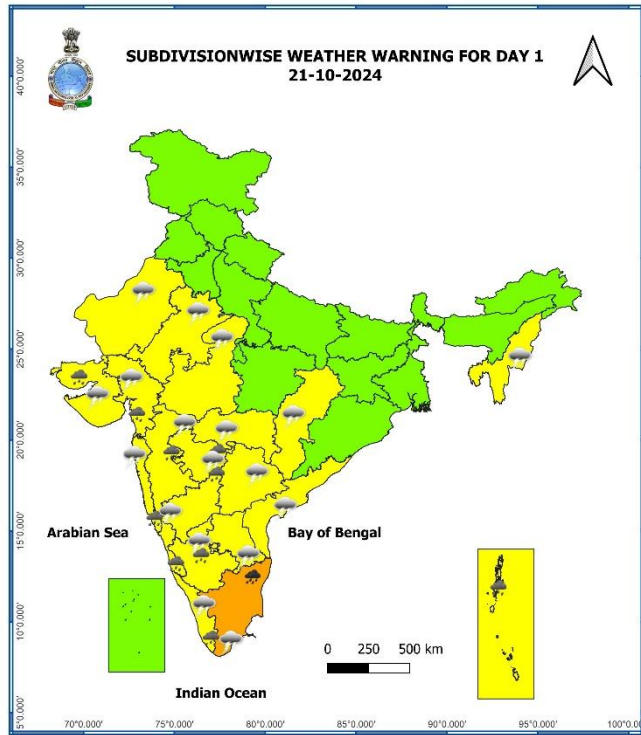
Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 21.10.2024 (in cm):

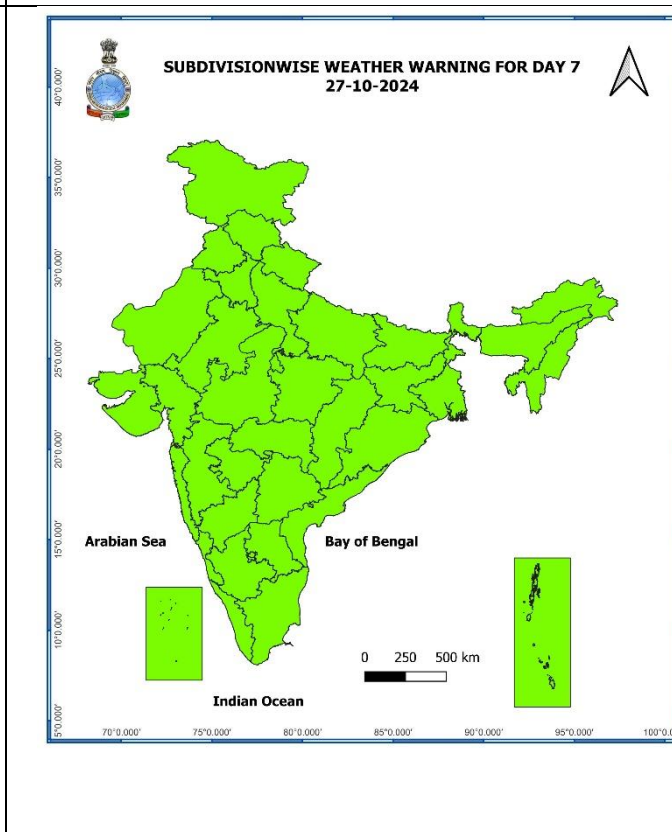
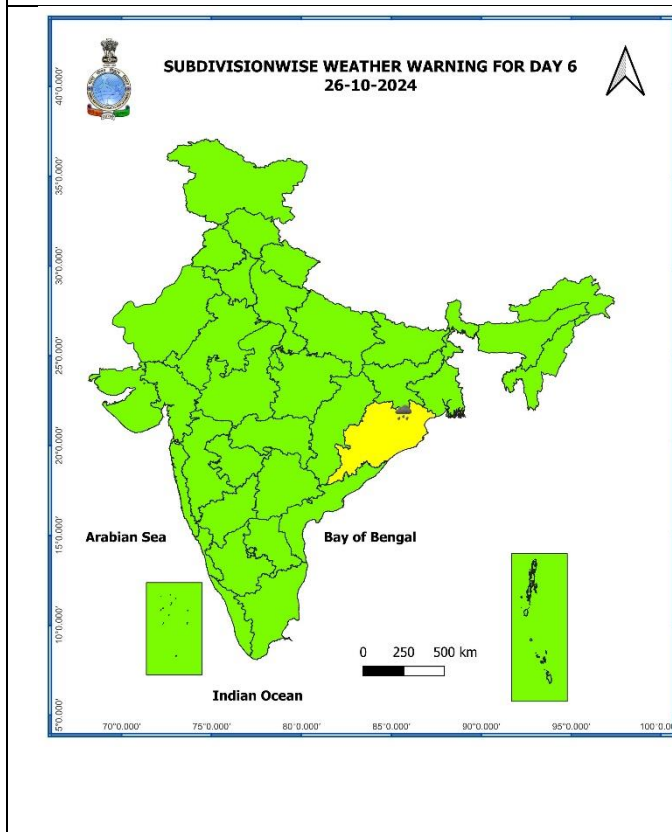
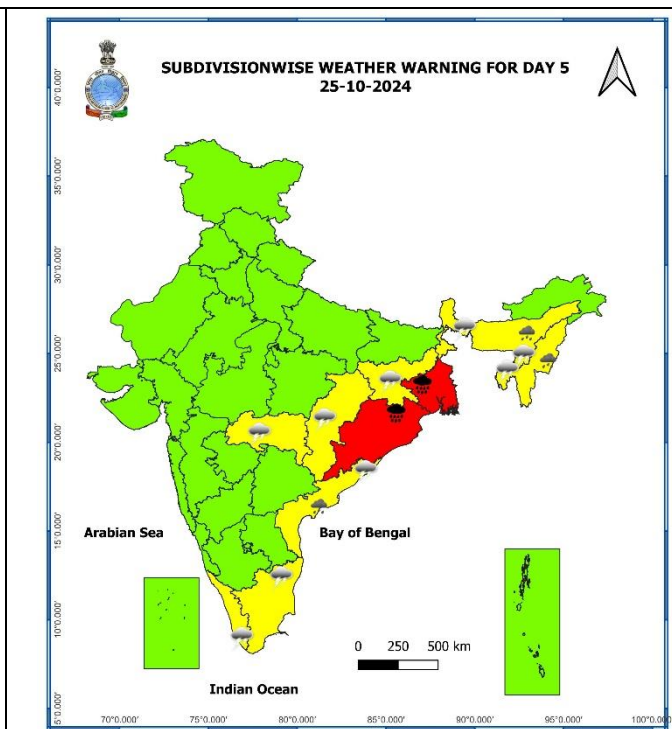
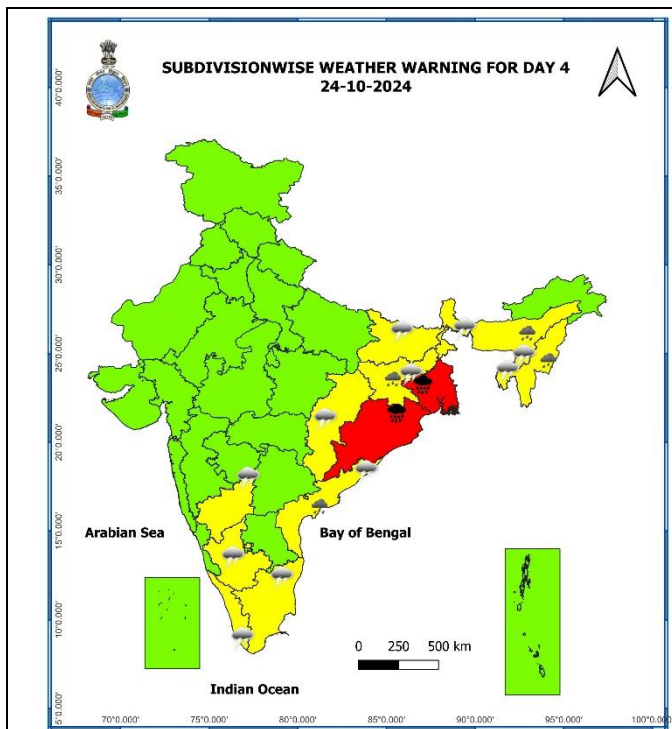
- ❖ **Tamil Nadu, Puducherry & Karaikal:** Mettur (dist Salem) 15, Udumalpet (dist Tiruppur) 12, Thirumoorthi Dam (dist Tiruppur) 11, Andipatti (dist Theni), Thirumoorthy IB (dist Tiruppur) 10 each, DC Office Tiruppur (dist Tiruppur), Kelavarapalli Dam (dist Krishnagiri) 9 each, Tiruppur IB PWD (dist Tiruppur), Valparai PTO (dist Coimbatore) 8 each, Maniyachi (dist Thoothukudi), Tallakulam (dist Madurai), Tiruppur North (dist Tiruppur), Modakkurichi (dist Erode), Chinnakalar (dist Coimbatore), Valparai PAP (dist Coimbatore), Mohanur (dist Namakkal), Valparai Taluk Office (dist Coimbatore) 7 each,
- ❖ **Saurashtra & Kutch:** Lodhika (dist Rajkot) 12, Morbi (dist Morbi) 9, Malia (dist Junagadh) 9, Mendarda (dist Junagadh) 8, Vadia (dist Amreli) 7, Keshod (dist Junagadh) 7,
- ❖ **Coastal Karnataka:** Kadra (dist Uttara Kannada) 11, Kundapur (dist Udupi) 9, Mundgod (dist Uttara Kannada) 8, Karwar Obsy (dist Uttara Kannada) 7,
- ❖ **Telangana:** Sadasivanagar (dist Kamareddy) 11,
- ❖ **North Interior Karnataka:** Shiggaon (dist Haveri) 10,
- ❖ **South Interior Karnataka:** Honnali (dist Davangere) 8, Shivamogga Pto (dist Shivamogga) 7, Chitradurga Obsy (dist Chitradurga) 7, Anavatti (dist Shivamogga) 7,
- ❖ **Kerala & Mahe:** Anayirankal Dam (dist Idukki) 8, Vadakkancherry (dist Thrissur) 8, Vellathooval (dist Idukki) 7, Lower Sholayar (dist Thrissur) 7,
- ❖ **Coastal Andhra Pradesh & Yanam:** Kandukur (dist Spsr Nellore) 7,
- ❖ **Madhya Maharashtra:** Daund (dist Pune) 7,

7 Days Rainfall Forecast

S. No.	Subdivision	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	FWS	FWS	FWS	FWS	FWS
2	ARUNACHAL PRADESH	ISOL	ISOL	SCT	SCT	SCT	ISOL	ISOL
3	ASSAM & MEGHALAYA	DRY	ISOL	FWS	FWS	FWS	SCT	ISOL
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	SCT	FWS	FWS	FWS	SCT	ISOL
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	SCT	SCT	SCT	SCT
6	GANGETIC WEST BENGAL	DRY	ISOL	FWS	WS	WS	FWS	SCT
7	ODISHA	ISOL	ISOL	SCT	WS	WS	FWS	SCT
8	JHARKHAND	DRY	DRY	ISOL	FWS	FWS	SCT	ISOL
9	BIHAR	DRY	ISOL	ISOL	SCT	SCT	ISOL	ISOL
10	EAST UTTAR PRADESH	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	ISOL	ISOL	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	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
21	GUJARAT REGION	SCT	ISOL	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	SCT	ISOL	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	WS	FWS	SCT	ISOL	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	SCT	ISOL	ISOL	ISOL	DRY	DRY	DRY
25	MARATHAWADA	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
26	VIDARBHA	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
27	CHHATTISGARH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
28	COASTAL ANDHRA PRADESH & YANAM	SCT	SCT	SCT	ISOL	SCT	ISOL	ISOL
29	TELANGANA	SCT	ISOL	ISOL	DRY	DRY	DRY	DRY
30	RAYALASEEMA	SCT	SCT	ISOL	SCT	SCT	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	FWS	FWS	FWS	SCT	SCT	ISOL	ISOL
32	COASTAL KARNATAKA	WS	FWS	FWS	FWS	SCT	ISOL	ISOL
33	NORTH INTERIOR KARNATAKA	FWS	SCT	SCT	SCT	ISOL	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	WS	WS	WS	FWS	SCT	ISOL	ISOL
35	KERALA & MAHE	FWS	FWS	FWS	FWS	FWS	SCT	SCT
36	LAKSHADWEEP	SCT	SCT	SCT	SCT	SCT	SCT	SCT

- As the lead period increases forecast accuracy decreases.

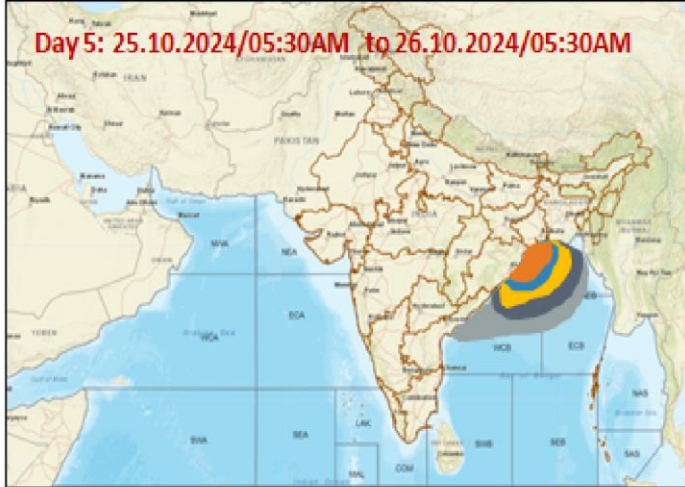
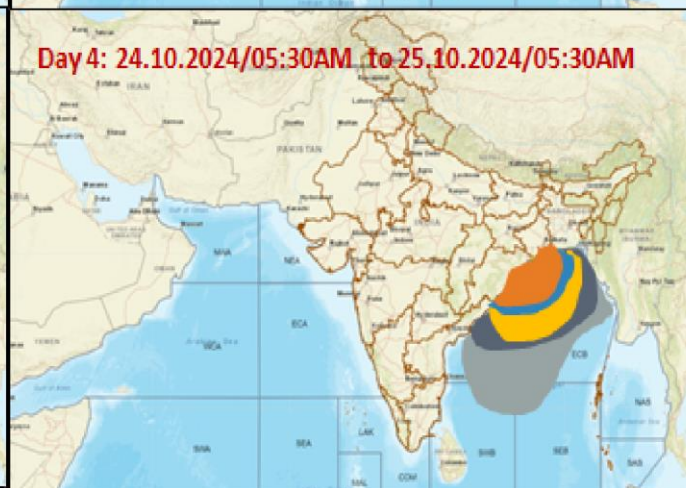
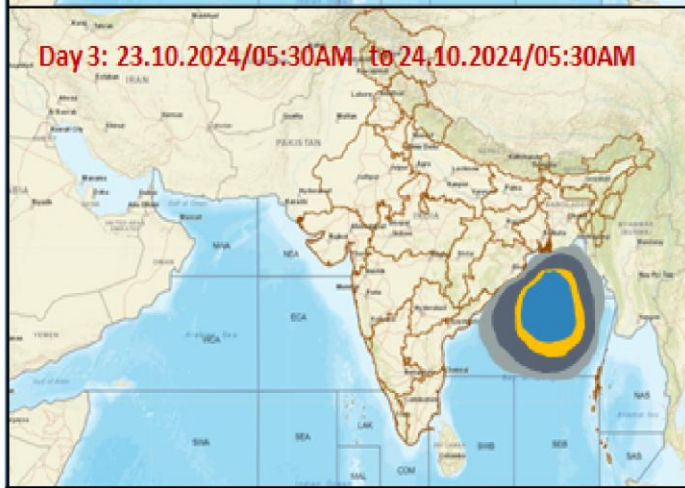
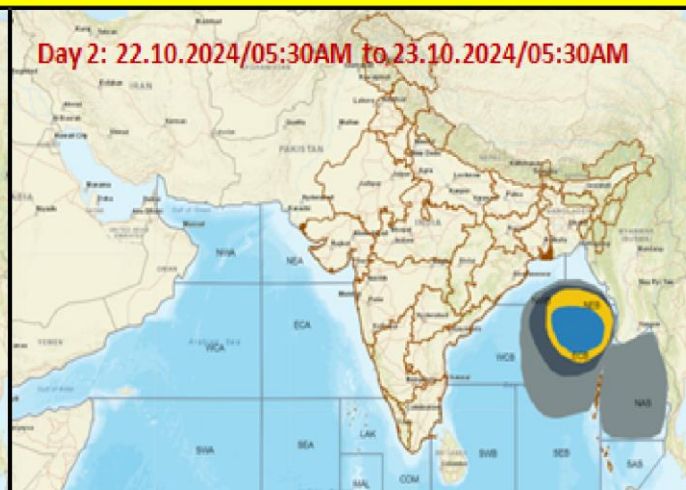
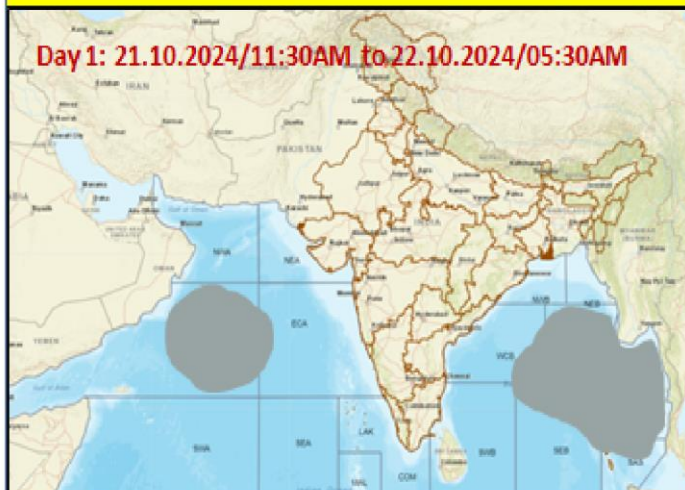




- Action may be taken based on ORANGE AND RED COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



Fishermen Warning Graphics



	Squally Weather with wind speed 35-45 kmph gusting to 55 kmph
	Squally wind with speed 45-55 kmph gusting to 65 kmph
	Strong wind with speed 50-60 kmph gusting to 70 kmph
	CS with Gale winds with speed 60-90 kmph gusting to 100 kmph
	SCS with Gale wind speed 90-110 kmph gusting to 120 kmph

Fishermen are advised not to venture into the marked areas.

Impact due to

- ✓ **Isolated extremely heavy rainfall** very likely over Odisha, Gangetic West Bengal on 24th & 25th October.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal on 21st October.

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 Kutchha 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

- ✓ 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

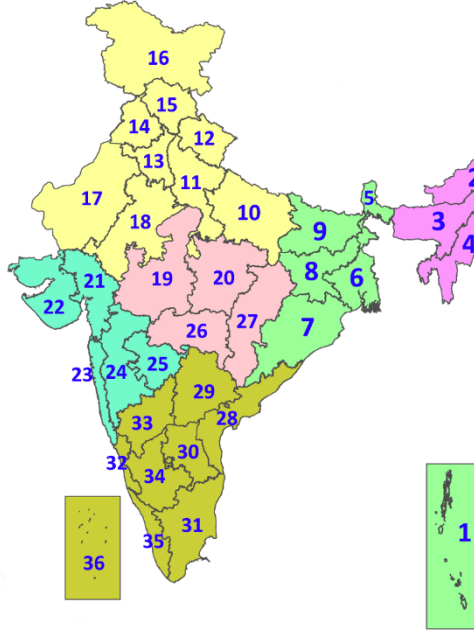
- ✓ In **Tamil Nadu**, drain out excess water from rice nurseries and fields of rice, maize, pepper and newly planted turmeric. Undertake detaching and propping of more than five-month-old sugarcane to avoid lodging. Provide support to banana plantations.
- ✓ In **Andaman and Nicobar Islands**, carry out harvesting of matured rice to avoid shattering loss and keep the harvested produce in safe places. To avoid water stagnation, provide adequate drainage in the rice fields (near physiological maturity).
- ✓ In **Odisha**, undertake harvesting of rice crop if 85% of grains are matured in a panicle and store them at safer places. Immediately harvest matured maize, black gram, green gram, groundnut, and vegetables and shift them to safe places.
- ✓ Make necessary arrangements to drain out excess water from standing crop fields and fruit orchards to avoid water stagnation in Gangetic West Bengal, Kerala, Karnataka and Saurashtra & Kutch.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

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. रायलसेमा
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

Rain/ Snow *	<p>Heavy: 64.5 to 115.5 mm/cm *</p> <p>Very Heavy: 115.6 to 204.4 mm/cm*</p> <p>Extremely Heavy: > 204.4 mm/cm *</p>
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> <p>Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C.</p> <p>Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$</p> <p>(b). Based on Actual maximum temperature</p> <p>Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.</p> <p>Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$</p> <p>(c). Criteria for heat wave for coastal stations</p> <p>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>
Warm Night	<p>When maximum temperature remains 40°C</p> <p>Warm Night: When minimum temperature departure 4.5°C to 6.4°C.</p> <p>Severe Warm Night: When minimum temperature departure $>6.4^\circ\text{C}$.</p>
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> <p>Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</p> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <p>Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$</p> <p>Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$</p> <p>(c) For Coastal Stations</p> <p>When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$</p>
Cold Day	<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>Based on departure</p> <p>Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</p>
Fog	<p>Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$</p> <p>Moderate Fog: When the visibility between 500-200 metres</p> <p>Dense Fog: when the visibility between 50- 200 metres</p> <p>Very Dense Fog: when the visibility < 50 metres</p>
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> <p>Air temperature $\leq 4^\circ\text{C}$ (over Plains)</p>
Squall	<p>A strong wind that rises suddenly, lasts for atleast 1 minute.</p> <p>Moderate: Wind speed 52-61 kmph</p> <p>Severe: Wind speed 62-87 kmph</p> <p>Very Severe: Wind speed >87 kmph</p>
Sea State	<p>Effect of various waves in the sea over specific area</p> <p>Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre</p> <p>High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre</p> <p>Phenomenal: Wind speed >117 kmph (>63 knots) & Wave height >14 metre</p>
Cyclone	<p>Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)</p> <p>Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)</p> <p>Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)</p> <p>Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)</p> <p>Super Cyclone Strom: Wind speed >220 kmph (>119 knots)</p>

* 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)