

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 16th October, 2024

Time of Issue: 1330 hours IST

Subject: In association with the Depression over southwest & adjoining westcentral Bay of Bengal, isolated very heavy to extremely heavy rainfall likely over Tamil Nadu, South Andhra Pradesh and very heavy rainfall over Kerala & South Interior Karnataka today, 16th October, 2024.

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

Heavy to very Heavy rainfall at a few places with isolated **extremely rainfall** over Tamil Nadu, Puducherry & Karaikal and Rayalaseema; **Heavy to very Heavy rainfall** at isolated places over south Coastal Andhra Pradesh; **Heavy rainfall** at isolated places over Karnataka, south Gujarat Region, Konkan, West Madhya Pradesh and Assam.

Weather Systems:

Yesterday's well marked low pressure area the central part of south Bay of Bengal intensified into a **depression** at 1730 hrs IST of yesterday, the 15th October over southwest Bay of Bengal. It moved west-northwestwards with a speed of 15 kmph during past 6 hours and lay centered at 0830 hours IST of today, the 16th October 2024 over southwest and adjoining westcentral Bay of Bengal near latitude 12.3° N and longitude 83.0° E, about 320 km east-southeast of Chennai (Tamil Nadu), 350 km east-northeast of Puducherry and 400 km southeast of Nellore (Andhra Pradesh). **It is likely to move west-northwestwards and cross north Tamil Nadu - South Andhra Pradesh coasts between Puducherry and Nellore, close to Chennai during early morning of 17th October.**

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

South Peninsular India

- ✓ **Tamil Nadu & Puducherry:** Light to moderate rainfall over most places with heavy to very heavy rainfall at a few places with extremely heavy rainfall at isolated places is very likely over north Tamil Nadu & Puducherry on 16th October and isolated heavy to very heavy rainfall over north interior Tamil Nadu on 17th October. Light to moderate rainfall over most places with heavy rainfall at isolated places is very likely over south Tamil Nadu during 16th - 17th October.
- ✓ **South Andhra Pradesh & Rayalaseema:** Light to moderate rainfall over most places with heavy to very heavy rainfall at a few places with extremely heavy rainfall at isolated places is likely on 16th October and heavy rainfall at isolated places is likely on 17th October.
- ✓ **Kerala & south Interior Karnataka:** Light to moderate rainfall over most places with heavy to very heavy rainfall at isolated places is likely over Kerala and south Interior Karnataka during 16th - 17th October.

Wind Warning:

- ✓ Squally wind speed reaching 40-50 kmph gusting 60 kmph is likely to prevail over southwest and adjoining westcentral Bay of Bengal and along & off Tamil Nadu, Puducherry and south Andhra Pradesh coasts till noon of 17th October and decrease gradually thereafter.

Sea Condition:

- ✓ Rough to very Rough Sea condition is likely to prevail over southwest & adjoining westcentral Bay of Bengal and along & off Tamil Nadu, Puducherry and south Andhra Pradesh coasts till noon of 17th October and improve gradually thereafter.

Fishermen Warning: (ANNEXURE IV)

- ✓ Fishermen are advised not to venture into Southwest and adjoining westcentral Bay of Bengal till 17th October. Fishermen out at sea are advised to return to coasts.

West India

- ✓ Scattered to Fairly widespread light to moderate rainfall very likely over Konkan & Goa, Madhya Maharashtra, Marathwada during next 5 days and isolated to scattered light to moderate rainfall during subsequent 2 days over the same region; Isolated light to moderate rainfall over Gujarat Region during the week; Isolated light to moderate rainfall over Saurashtra & Kutch during next 2 days and dry weather likely during the subsequent 5 days.
- ✓ **Isolated heavy rainfall** very likely Konkan & Goa and Madhya Maharashtra on 16th & 17th October.

East India

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over Andaman & Nicobar Islands; isolated light to moderate rainfall likely over the remaining region during the week.
- ✓ **Isolated heavy rainfall** very likely Andaman & Nicobar Islands during 19th-21st October.

Northwest, Central & Northeast India:

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

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forcast_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 16.10.2024 (in cm):**❖ Tamil Nadu, Puducherry & Karaikal:**

Extremely heavy rainfall (> 20 cm): Cholavaram (dist Tiruvallur) 30, Red Hills (dist Tiruvallur) 28, Avadi (dist Tiruvallur) 25, Zone 01 Kathivakkam (dist Chennai) 23, Zone 02 D15 Manali (dist Chennai) 21,

Very heavy rainfall (20 cm ≤ and ≥ 12cm): Zone 06 T.V.K Nagar (dist Chennai) 19, Zone 06 D65 Kolathur (dist Chennai), Zone 13 U39 Adyar (dist Chennai), Puzhal ARG (dist Tiruvallur), Zone 07 Ambattur (dist Chennai) 18 each, Zone 01 Thiruvottiyur (dist Chennai), Perungudi (dist Chennai), Zone 02 Manali (dist Chennai), Hindustan_University (dist Kancheepuram), Ennore AWS (dist Chennai) 17 each, Perambur (dist Chennai), Zone 08 Malar Colony (dist Chennai), Good Will School Villivakkam ARG (dist Tiruvallur), Zone 03 Puzhal (dist Chennai), Ayanavaram Taluk Office (dist Chennai), Anna University ARG (dist Chennai), Ponneri (dist Tiruvallur), Thamaraipakkam (dist Tiruvallur) 16 each, Ambathur (dist Chennai), Anna University (dist Chennai), MGR Nagar (dist Chennai), Sholinganallur (dist Chennai), Thiru-Vi-Ka Nagar (Chennai), Tondiarpet (dist Chennai), Zone 05 Royapuram (dist Chennai), Adayar (dist Chennai) 15 each, Zone 03 Madhavaram (dist Chennai), Zone 04 Tondiarpet (dist Chennai), Chennai(N) AWS (dist Chennai), Chennai (N) (dist Chennai), CD Hospital Tondiarpet (dist Chennai), YMCA Nandnam ARG (dist Chennai), Kodambakkam (dist Chennai) 14 each, Zone 08 Anna Nagar (dist Chennai), Anna Nagar (dist Chennai), Zone 07 U18 D81 Vanagaram (dist Chennai), Chennai Collector Office (dist Chennai), Zone 10 Kodambakkam (dist Chennai), DGP Office (dist Chennai), Royapuram (dist Chennai) 13 each, Zone 09 Ice House (dist Chennai), NIOT_Pallikaranai ARG (dist Chennai), Zone 09 Teynampet (dist Chennai), Teynampet (dist Chennai), Alandur (dist Chennai), Chennai (AP) (dist Chennai), Meenambakkam AWS (dist Chennai), Zone 11 U32 Maduravoyal (dist Chennai) 12 each,

Heavy rainfall (11 cm ≤ and ≥ 7cm): Zone 12 Meenambakkam (dist Chennai), Kolapakkam ARG (dist Kancheepuram), Zone 11 Valasaravakkam (dist Chennai), Zone 15 Uthandi (dist Chennai), Zone 05 GCC (dist Chennai), Thiruvottiyur (dist Chennai), Zone Adyar Eco Park (dist Chennai) 11 each, Zone 12 D156 Mugalivakkam (dist Chennai), Jaya Engg College AWS (dist Tiruvallur), Zone 14 Perungudi (dist Chennai), Zone 15 Sholinganallur (dist Chennai), Tiruppur IB PWD (dist Tiruppur) 10 each, Gummidipoondi (dist Tiruvallur), Zone 14 U41 Perungudi (dist Chennai), Uthukottai (dist Tiruvallur), Manimutharu Dam PWD (dist Kallakurichi), Tiruvallur (dist Tiruvallur), KCS Mill-2 Kachirayaopalayam (dist Kallakurichi), Mahabalipuram (dist Chengalpattu), Satyabama Uty ARG (dist Kancheepuram), Poonamallee (dist Tiruvallur), Chembarabakkam (dist Kancheepuram) 9 each, Zone Adyar (dist Chennai), ACS Medical College ARG (dist Kancheepuram), Bhuvanagiri (dist Cuddalore), VIT_Chennai AWS (dist Chengalpattu), RSCL-2 Valavanur (dist Villupuram), Mahabalipuram AWS (dist Chengalpattu), Koratur (dist Tiruvallur), RSCL-2 Koliyanur (dist Villupuram) 8 each, Uthangarai (dist Krishnagiri), Tiruttani (dist Tiruvallur), Pallipattu (dist Tiruvallur), Kundrathur (dist Kancheepuram), Tambaram (dist Chengalpattu), Tiruppur South (dist Tiruppur) 7 each;

❖ Rayalaseema: Sullurpeta (dist Tirupati) 22, Tada (dist Tirupati) 12, Tirupati Aero (dist Tirupati) 11, Satyavedu (dist Tirupati) 10, Porumamilla (dist Ysr District) 9, Srikalahasti (dist Tirupati) 8, Thottambedu (dist Tirupati) 8, Venkatagiri (dist Tirupati) 8, Penagaluru (dist Annamayya District) 8, Kodur (dist Ysr District) 8, Nagari (dist Chittoor) 8, Gudur (dist Tirupati) 7, Pullampeta (dist Annamayya District) 7;

❖ Coastal Andhra Pradesh: Kavali (dist Spsr Nellore) 18, Nellore (dist Spsr Nellore) 13, Kandukur (dist Spsr Nellore) 10, Seetharamapuram (dist Spsr Nellore) 10, Vinjamur (dist Spsr Nellore) 9, Udayagiri (dist Spsr Nellore) 9;

❖ Coastal Karnataka: Kundapur (dist Udipi) 9;

❖ South Interior Karnataka: Bengaluru Hal Ap Obsy (dist Bengaluru Urban) 9, Hesaraghatta (dist Bengaluru Urban) 7, Bellur (dist Mandya) 7, Bengaluru City Obsy (dist Bengaluru Urban) 7;

❖ Gujarat Region: Kaprada (dist Valsad) 9;

❖ Konkan: Sawantwadi (dist Sindhudurg) 9, Wakwali_agri (dist Ratnagiri) 8;

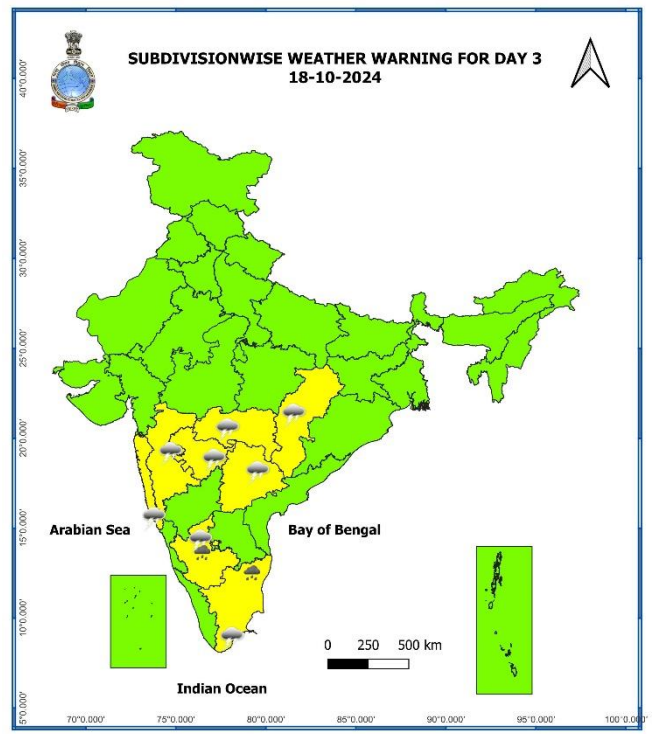
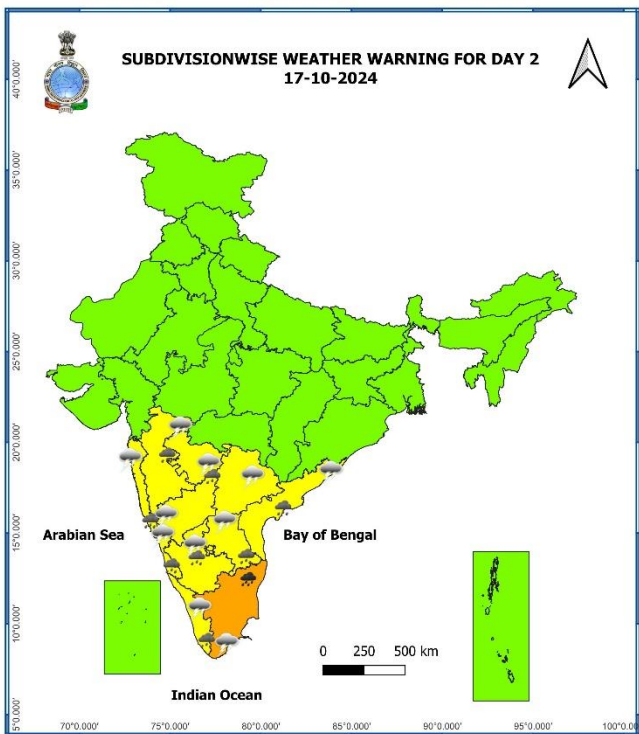
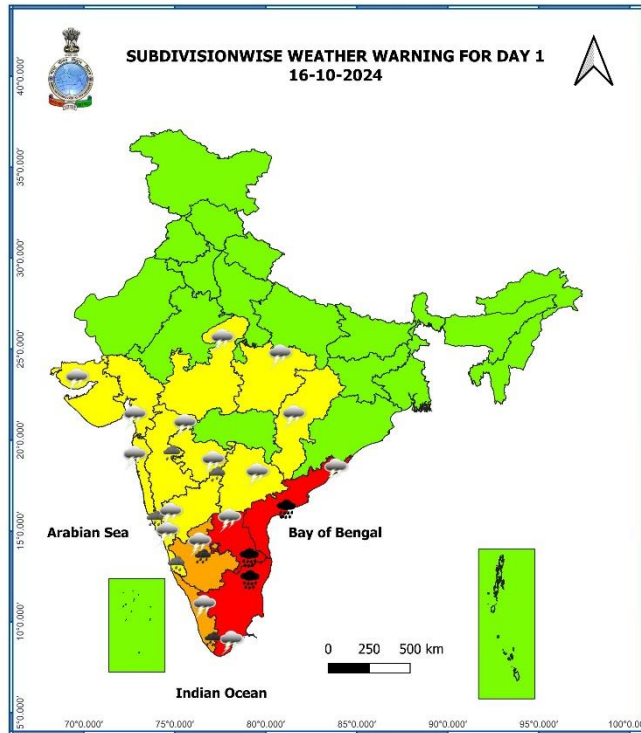
❖ West Madhya Pradesh: Pithampur (dist Dhar) 7;

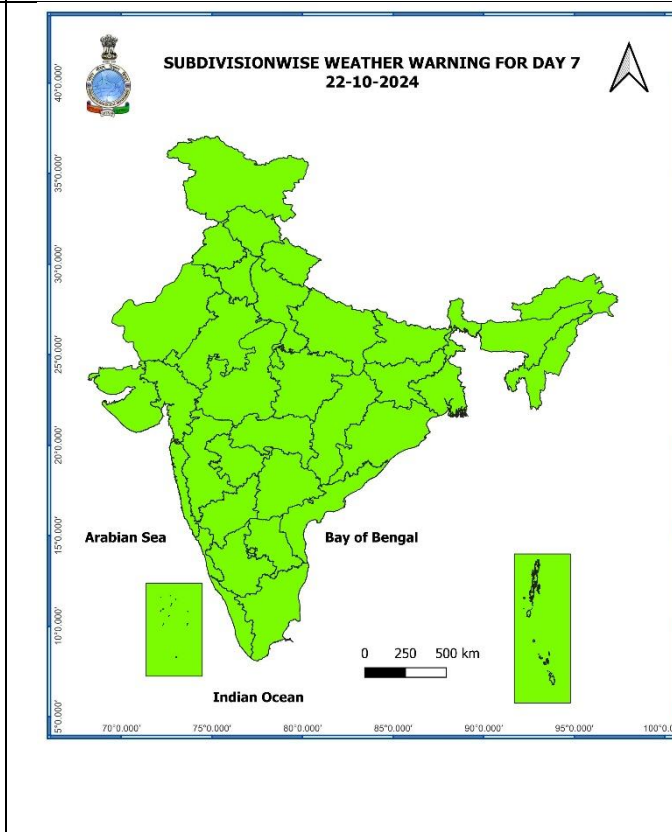
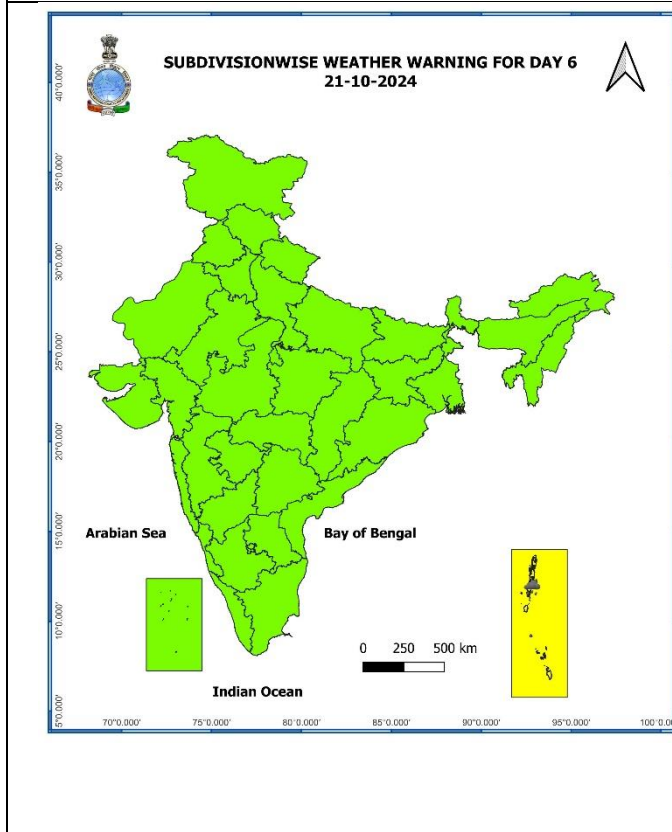
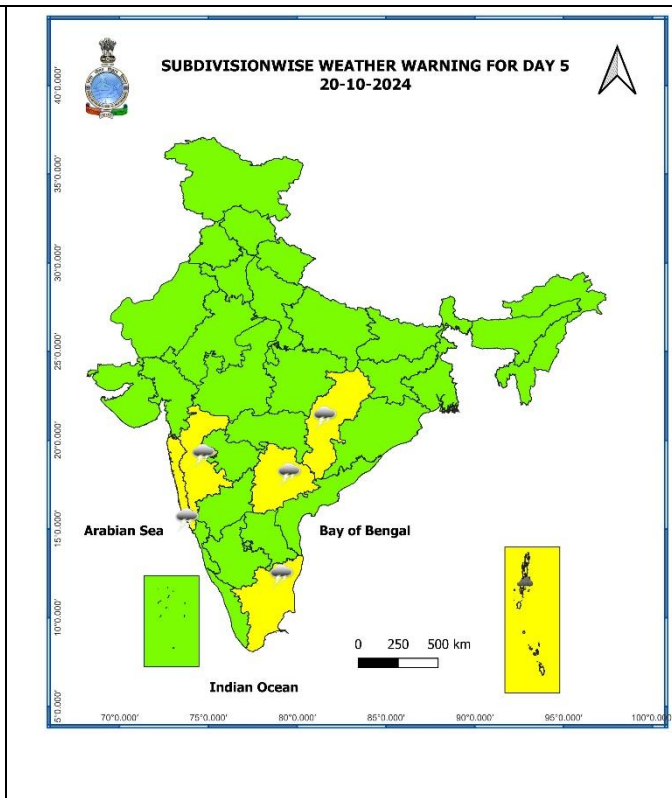
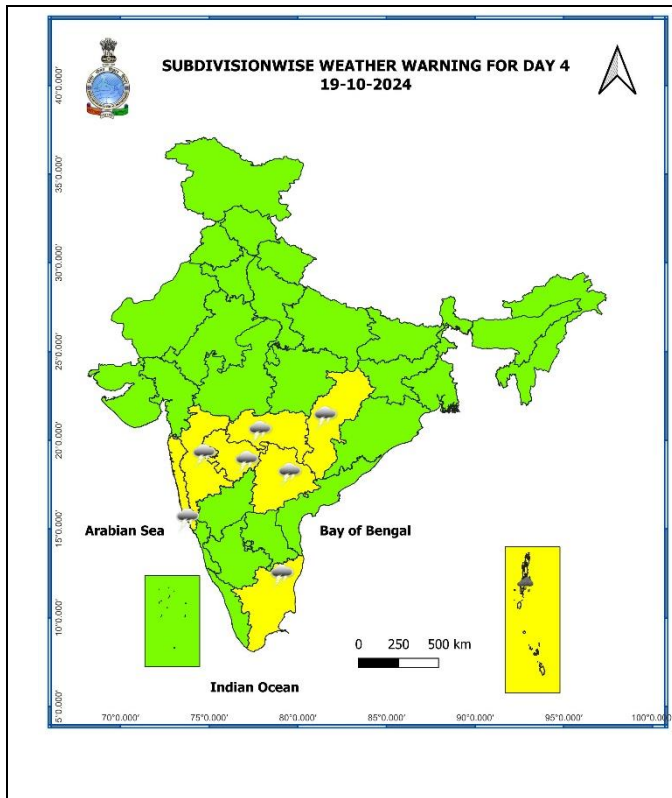
❖ North Interior Karnataka: Yedwad (dist Belagavi) 7;

❖ Assam: Dhubri_Cwc (dist Dhubri) 7;

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

- As the lead period increases forecast accuracy decreases.

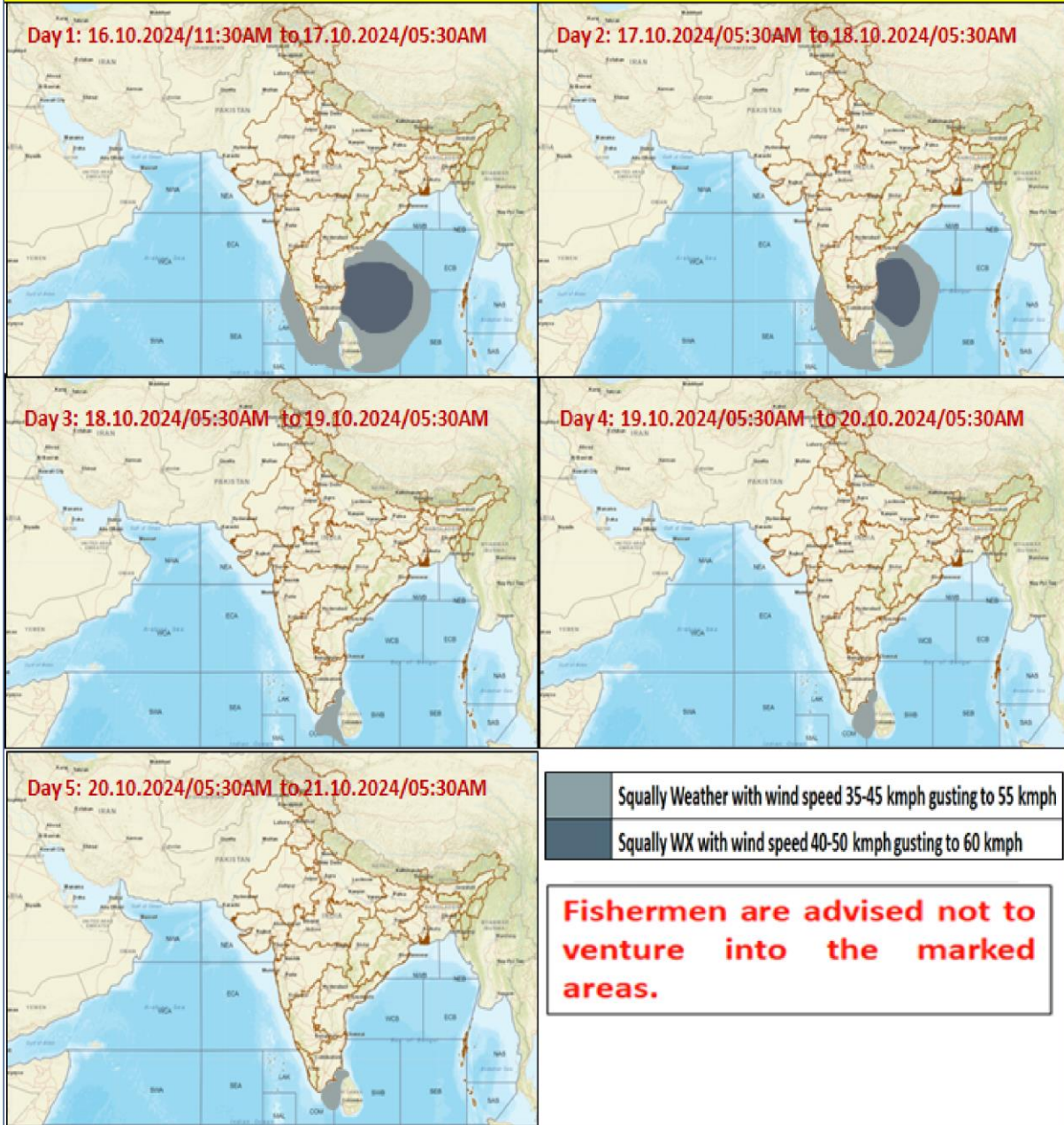




- Action may be taken based on **ORANGE AND RED COLOUR** warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



Fishermen Warning Graphics



Impact due to

- ✓ **Isolated extremely heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal, Rayalaseema, south Coastal Andhra Pradesh on 16th October.
- ✓ **Isolated very heavy rainfall** very likely over Kerala & Mahe and South Interior Karnataka on 16th; North Tamil Nadu on 17th October.
- ✓ **Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu, Puducherry & Karaikal during 16th -17th October.

(ANNEXURE V)

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.
- ✓ Disruption of traffic in major cities and roadways 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 and wind.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

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 **south Coastal Andhra Pradesh**, drain out excess water from cotton, pulses, maize and rice fields and postpone sowing of *rabi* pulses. Shift the harvested rice at safer places. In **north Coastal Andhra Pradesh**, postpone harvesting of groundnut and maize.
- In **Rayalaseema**, protect the harvested groundnut produce. Withhold sowing of *rabi* Bengal gram and groundnut.
- Drain out excess water from rice nurseries and fields of rice, maize, pepper, and newly planted turmeric in **Tamil Nadu** as well as from rice and other standing crops and vegetable fields in **Kerala**.
- Keep the harvested produce at safer places.
- Provide mechanical support to horticultural crops & staking to vegetables.

Flash Flood Warnings:**24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 17-10-2024:**

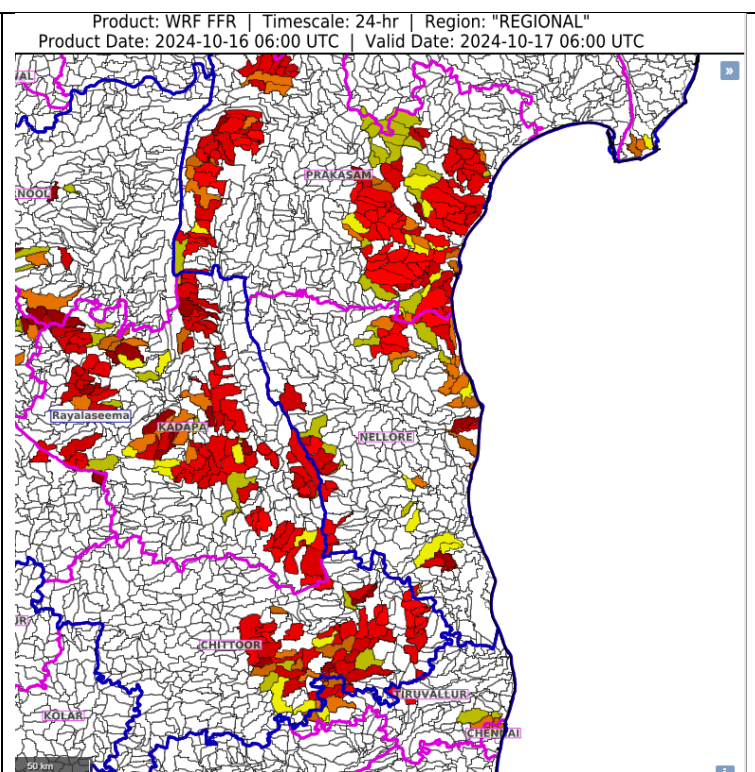
Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Coastal Andhra Pradesh & Yanam- Prakasam and Nellore districts.

Rayalaseema - Chittoor and Kadapa districts.

Tamil Nadu, Puducherry & Karaikal- Chennai and Tiruvallur districts.

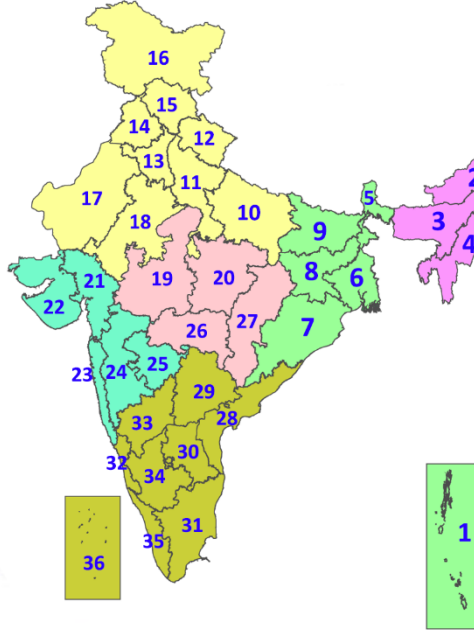
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over area of concern as shown in map due to expected rainfall occurrence in next 24 hours.

**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 Marathwada.
 - **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
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