



**India Meteorological Department
(Ministry of Earth Sciences)**

NATIONAL BULLETIN NO. 13 (BOB/05/2024)

TIME OF ISSUE: 0845 HOURS IST

DATED: 16.10.2024

FROM: INDIA METEOROLOGICAL DEPARTMENT

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Sub: Depression over southwest Bay of Bengal

The depression over southwest Bay of Bengal moved west-northwestwards with a speed of 12 kmph during past 6 hours and lay centered at 0530 hours IST of today, the 16th October 2024 over the same region near latitude 12.1° N and longitude 83.4° E, about 360 km east-southeast of Chennai (Tamil Nadu), 390 km east of Puducherry and 450 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 track and intensity are given in the following table:

Date/Time (IST)	Position (Lat. °N/ Long. °E)	Maximum Sustained Surface Wind Speed (Kmph)	Category of Cyclonic Disturbance
16.10.24/0530	12.1/83.4	40-50 gusting to 60	Depression
16.10.24/1730	12.8/82.0	40-50 gusting to 60	Depression
17.10.24/0530	13.2/80.5	40-50 gusting to 60	Depression
17.10.24/1730	13.6/79.0	25-35 gusting to 45	Well Marked Low Pressure Area

Warnings:

(i) Rainfall Warning:

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 to 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 to 17th October.

(ii) 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.

(iii) 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.

(iv) Fishermen Warning:

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.

(v) Flash Flood Guidance:

24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 17-10-2024:

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

Coastal Andhra Pradesh & Yanam - Guntur, Prakasam and Nellore districts.

Rayalaseema - Chittoor and Kadapa districts.

Tamil Nadu - Cuddalore, Dharampuri, Krishnagiri, Perambalur, Salem, Tiruchirappalli, Tiruvallur and Vellore 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.

❖ Impact Expected [Tamil Nadu (including Chennai) and Andhra Pradesh due to heavy rainfall]

- 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
- Likely disruption of marine and inland water transportation like small boats and trawlers.
- 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 Webpage of Central Water Commission)

❖ **Action Suggested [Tamil Nadu and Andhra Pradesh due to heavy rainfall]**

- 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.
- Judicious regulation of surface transports including railways and roadways and onshore/offshore activities.
- 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.

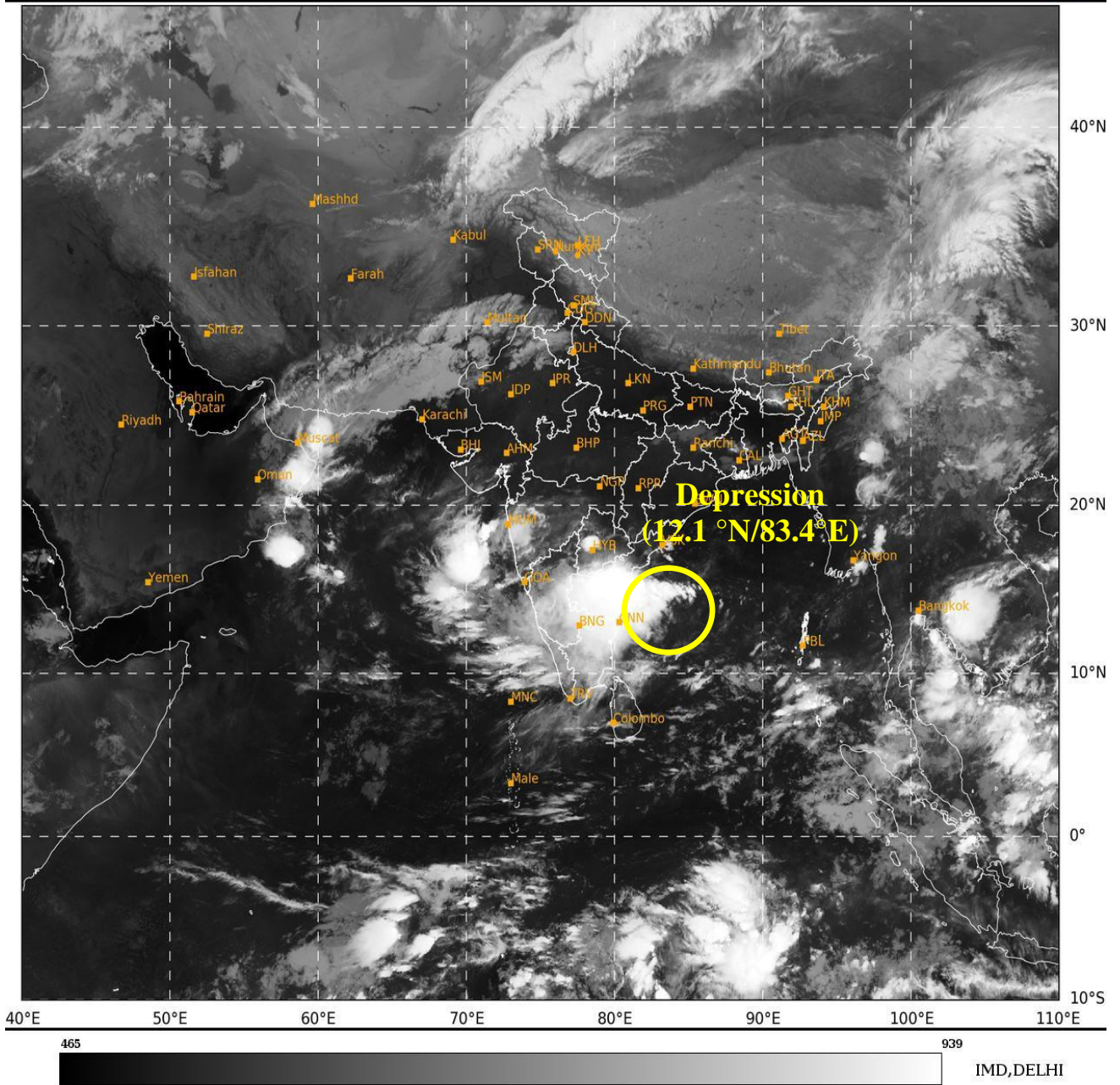
Agromet advisories for Heavy Rainfall

- Provide mechanical support to horticultural crops & staking to vegetables.
- Keep the harvested produce at safer place.

Next bulletin will be issued at 1230 hours IST of today, the 16th October, 2024.

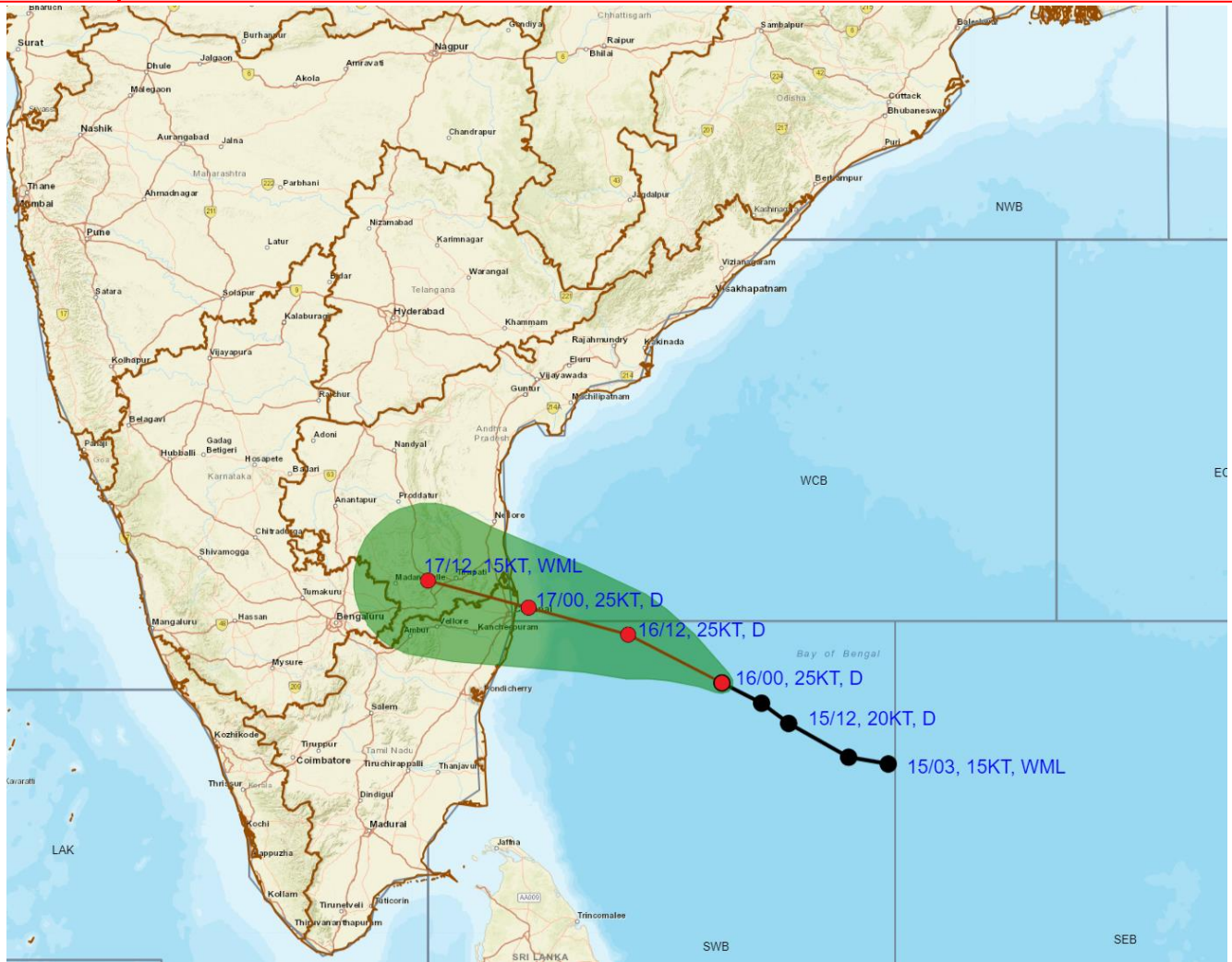
(Dr. Ananda Kumar Das)
Scientist-F, RSMC & IMD, New Delhi

Copy to: ACWC Kolkata/ACWC Mumbai/ACWC Chennai/CWC Ahmedabad/CWC Bhubaneswar/CWC Vishakhapatnam CWC, Thiruvananthapuram/ MC, Goa





OBSERVED AND FORECAST TRACK WITH CONE OF UNCERTAINTY (COU) OF DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0000 UTC (0530 Hrs. IST) OF 16th OCTOBER, 2024

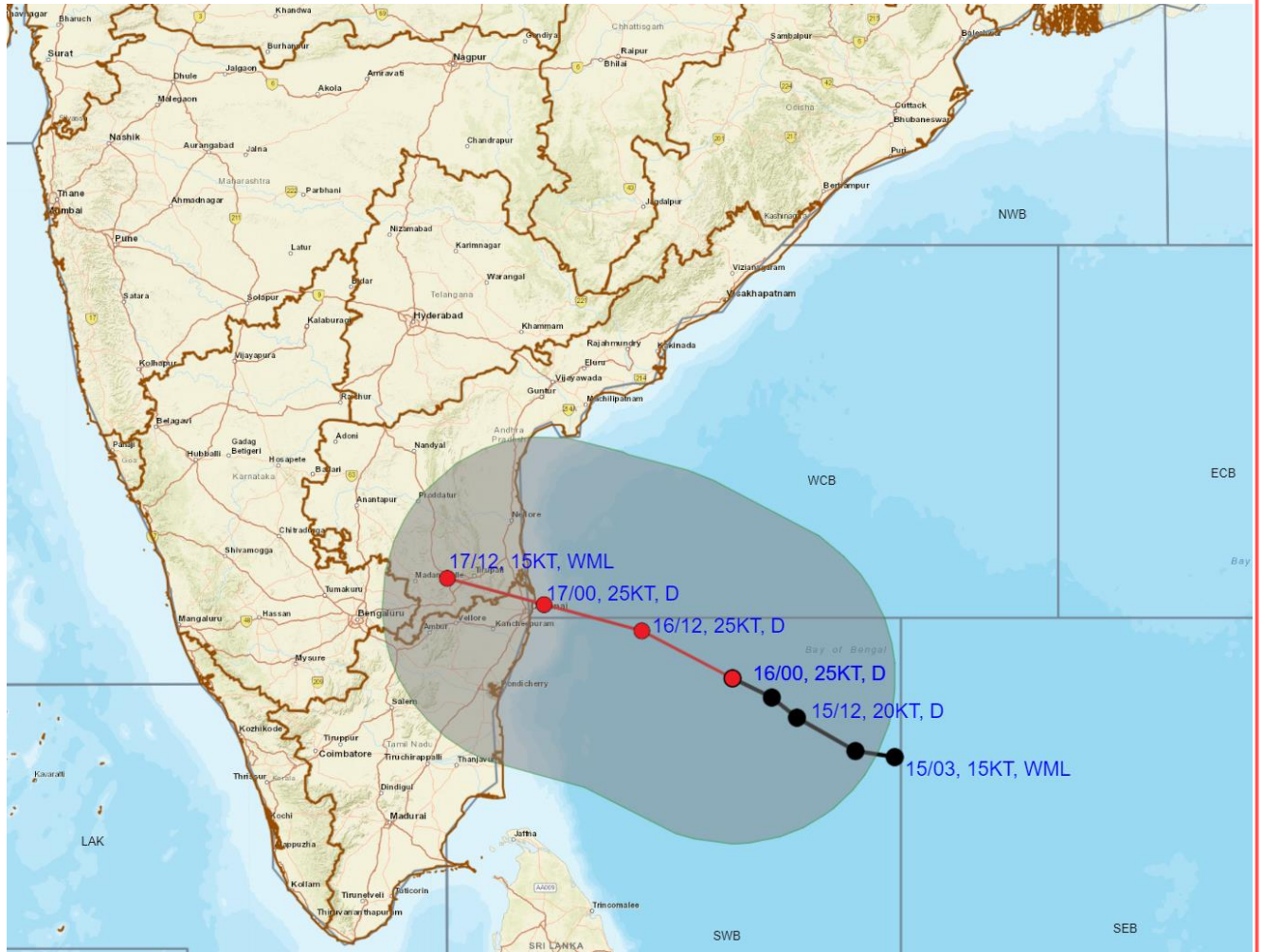


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

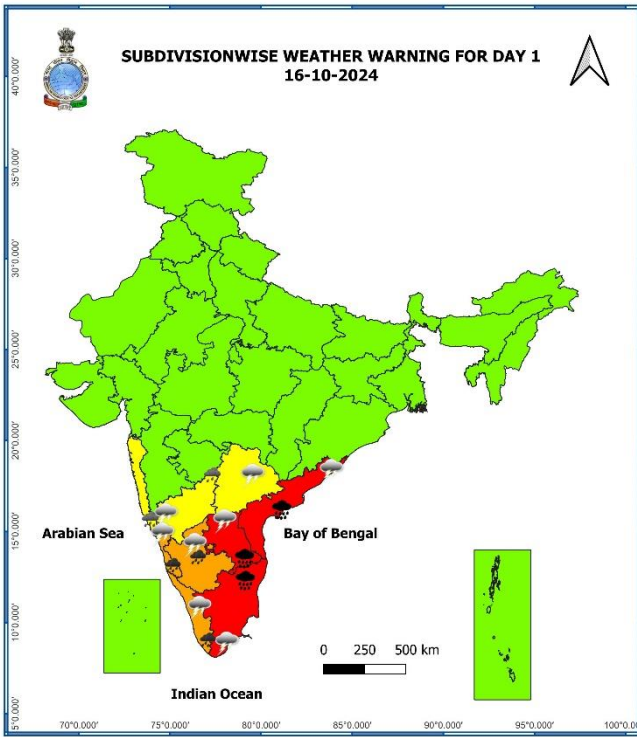


OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0000 UTC (0530 Hrs. IST) OF 16th OCTOBER, 2024



DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)

● LESS THAN 34 KT
 ○ 34-47 KT
 ● ≥ 48 KT
 ■ OBSERVED TRACK
 ■ FORECAST TRACK
 ▲ CONE OF UNCERTAINTY
 ■ AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 20-30 KT (35-55 KMPH)



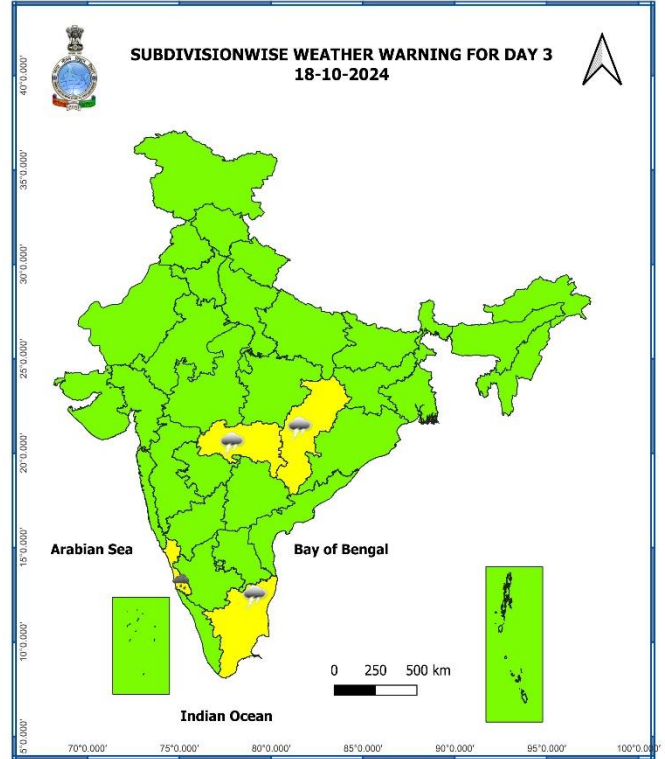
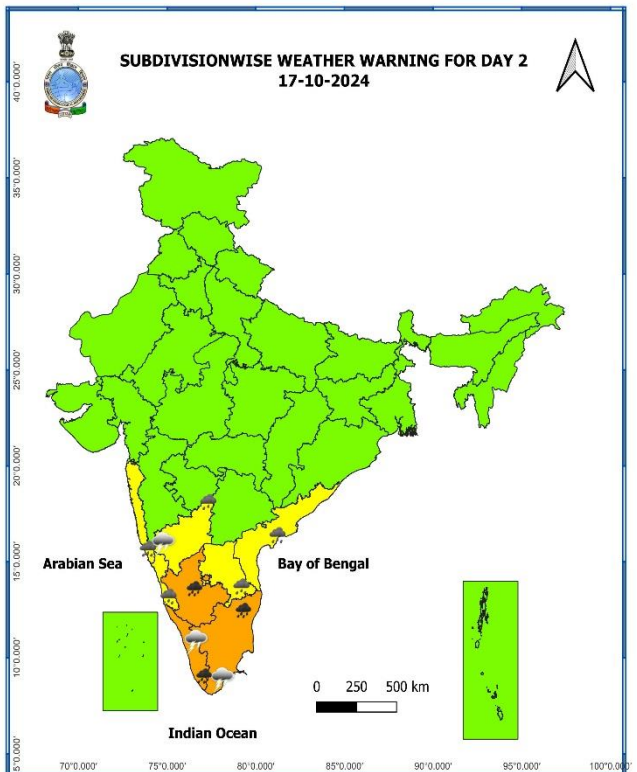
- ☁️ Fog
- ❄️ Heavy Snow
- 🌊 Cold Wave
- 🌧️ Heavy Rain
- 🌪️ Dust Storm
- 🌡️ Cold Day
- 🌧️ Very Heavy Rain
- 🔥 Heat Wave
- 🌱 Ground Frost
- 🌧️ Extremely Heavy Rain
- 🌡️ Warm Night
- 🌡️ Hot Day
- ⚡ Thunder & Lightning
- 🔥 Hot & Humid
- 🌪️ Strong Surface Winds
- 🌧️ Hailstorm
- 🌪️ Dust Raising Winds

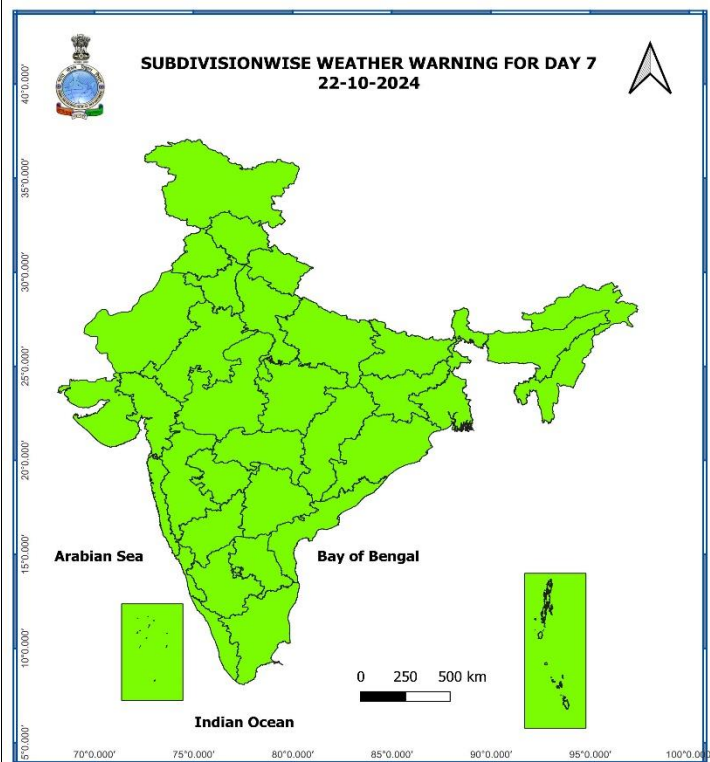
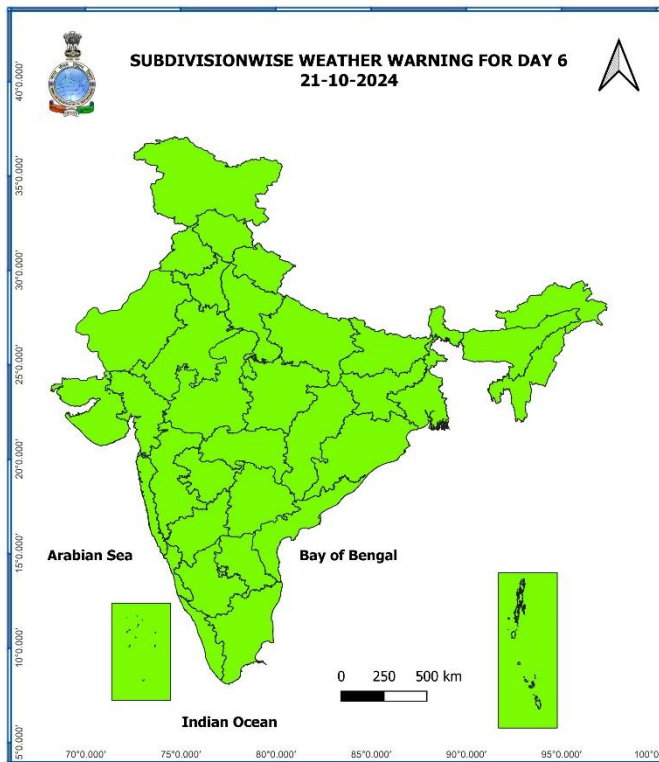
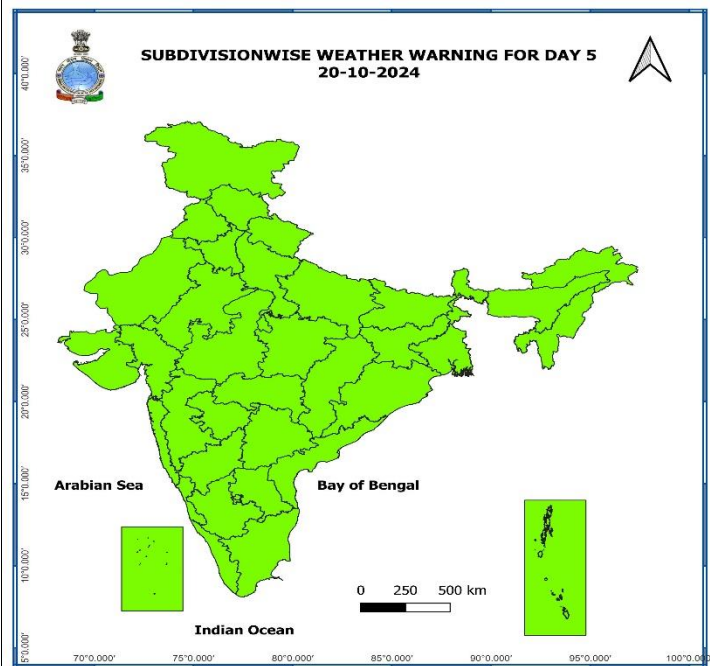
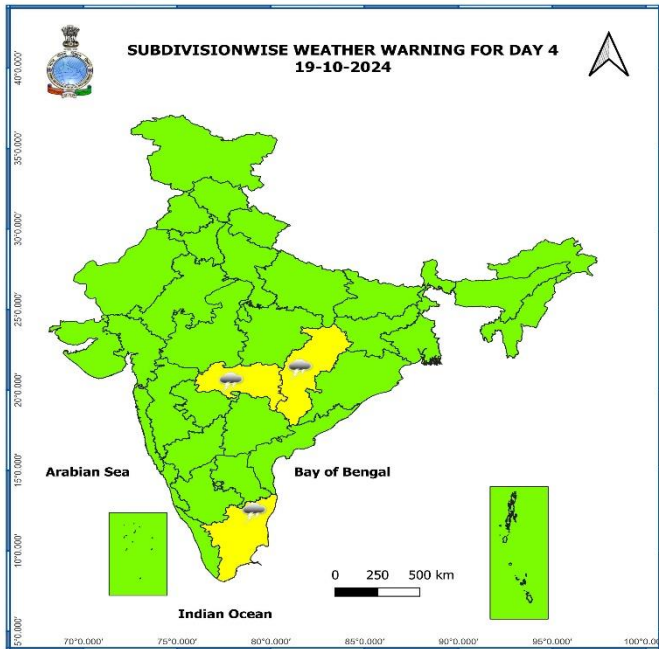
COLOUR CODED WARNING

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

Probabilistic Forecast

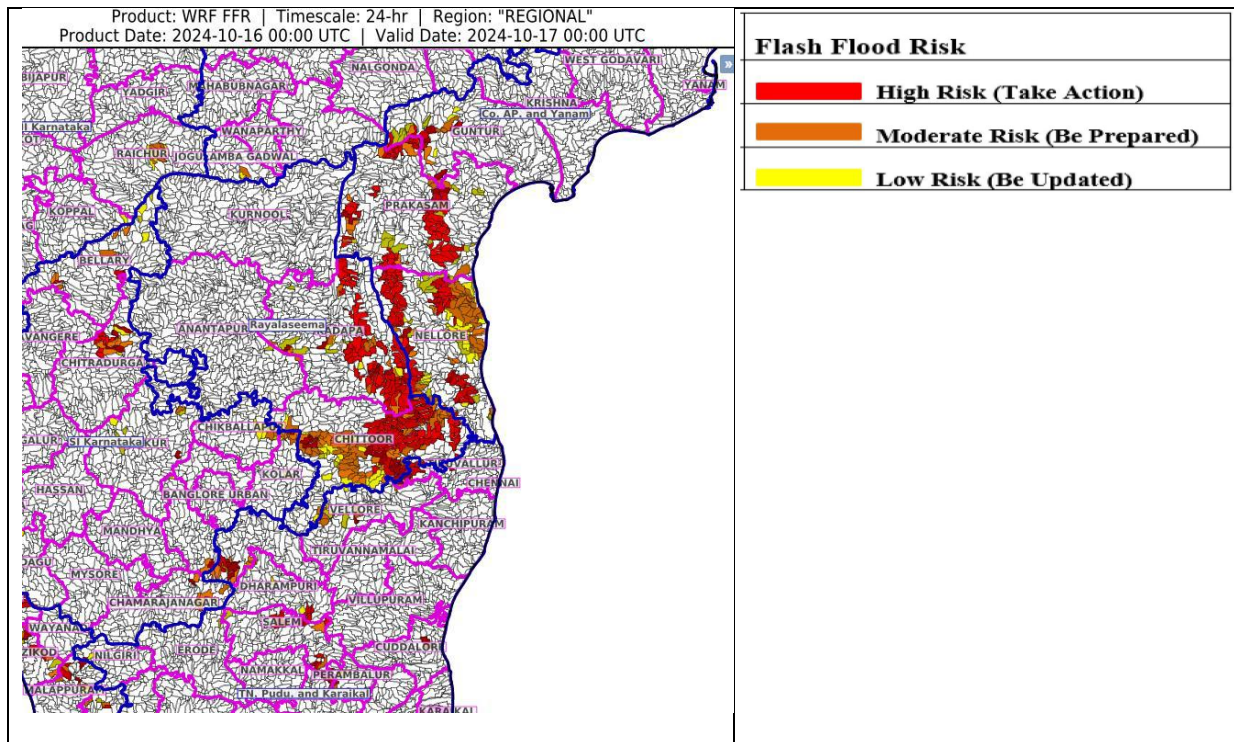
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75





- 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.

Flash Flood Guidance



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Tamil Nadu - Cuddalore, Dharampuri, Krishnagiri, Perambalur, Salem, Tiruchirappalli, Tiruvallur and Vellore districts.

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Fishermen Warning Graphics

