



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

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FROM: INDIA METEOROLOGICAL DEPARTMENT

(FAX NO. 24643965/24699216/24623220)

TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

CABINET SECRETARIAT (FAX.NO.23012284, 23018638)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MOES (FAX NO. 24629777)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

DIRECTOR GENERAL, DOORDARSHAN (23385843)

DIRECTOR GENERAL, AIR (23421105, 23421219)

PIB MOES (FAX NO. 23389042)

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)

DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)

CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)

CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)

CHIEF SECRETARY, DAMAN & DIU (FAX NO. 0260-2230775)

CHIEF SECRETARY, DADRA & NAGAR HAVELI (FAX NO. 0260-2645466)

CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)

CHIEF SECRETARY, KARNATAKA (FAX NO. 080-22258913)

CHIEF SECRETARY, KERALA (FAX NO. 0471-2327176)

CHIEF SECRETARY, LAKSHADWEEP (FAX NO. 04896-268124)

CHIEF SECRETARY, TAMIL NADU (FAX NO. 044-25672304)

CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029)

CHIEF SECRETARY, PUDUCHERRY (FAX NO. 0413-2334145)

Sub: (A) Depression over southwest Bay of Bengal and (B) Depression over westcentral Arabian Sea crossed Oman coast

(A) Depression over southwest Bay of Bengal

The depression over southwest Bay of Bengal moved northwestwards with a speed of 10 kmph during past 6 hours and lay centered at 2330 hours IST of yesterday, the 15th October 2024 over the same region near latitude 11.8° N and longitude 84.0° E, about 440 km east-southeast of Chennai (Tamil Nadu), 460 km east-southeast of Puducherry and 530 km east-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 as a depression.

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
15.10.24/2330	11.8/84.0	35-45 gusting to 55	Depression
16.10.24/1130	12.5/82.7	40-50 gusting to 60	Depression
16.10.24/2330	13.0/81.2	40-50 gusting to 60	Depression
17.10.24/1130	13.4/79.7	40-50 gusting to 60	Depression
17.10.24/2330	13.8/78.3	30-40 gusting to 50	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 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 weather with wind speed reaching 35-45 kmph gusting 55 kmph is prevailing over southwest and adjoining southeast & westcentral Bay of Bengal. It is likely to increase becoming squally wind speed reaching 40-50 kmph gusting to 60 kmph over southwest and adjoining westcentral Bay of Bengal and along & off Tamil Nadu, Puducherry and south Andhra Pradesh coasts till 17th October and decrease gradually thereafter.

(iii) Sea Condition:

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

(iv) Fishermen Warning:

Fishermen are advised not to venture into

- Southwest and adjoining westcentral Bay of Bengal from 16th to 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 1730 IST of 16-10-2024 :

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

Coastal AP & Yanam -Nellore district.

Rayalaseema – Chittoor and Kadapa districts.

Tamil Nadu - Chennai, Kanchipuram 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.

❖ 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
 - Southeast and adjoining central Bay of Bengal on 15th October.
 - Southwest and adjoining westcentral Bay of Bengal from 15th to 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.

(B) Depression over westcentral Arabian Sea crossed Oman coast

The Depression over westcentral Arabian Sea off Oman coast moved northwestwards with a speed of 23 kmph during past 6 hours, crossed Oman coast near latitude 19.35°N and longitude 57.7°E, close to Duqm (Oman) between 2230 hours IST and 2330 hours IST and lay as a well marked low pressure area over coastal Oman at 2330 hours IST of yesterday, the 15th October, 2024.

It is likely to move northwestwards and weaken gradually thereafter over Oman.

This is the last update about the system (B). However, regular tropical weather outlook and bulletins will continue from the Regional Specialized Meteorological Centre, New Delhi, National Weather Forecasting Centre and other regional Meteorological Centres and Meteorological Centres of IMD for relevant information about the remnant of the system. Warnings:

(i) Wind warning:

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail over westcentral Arabian Sea and along and off Oman coast till morning of 16th October and decrease gradually thereafter.

(ii) Sea condition:

Rough to very rough sea condition is likely to prevail only over westcentral Arabian Sea and along & off Oman coast till morning of 16th October and improve gradually thereafter.

(iii) Fishermen warning:

Fishermen are advised not venture into westcentral Arabian Sea and along & off Oman coast till morning of 16th October.

❖ **Impact Expected over Sea area**

- Reduction of visibility over sea area due to sea spray induced by strong wind and heavy rainfall.
- Impact expected for boats, motor boats, smaller ships and trawler used for fishing and other purposes.

❖ **Action Suggested**

Fishermen are advised not venture into westcentral Arabian Sea and along & off Oman coast till morning of 16th October.

This is the last update about the system (B). However, regular tropical weather outlook and bulletins will continue from the Regional Specialized Meteorological Centre, New Delhi, National Weather Forecasting Centre and other regional Meteorological Centres and Meteorological Centres of IMD for relevant information about the remnant of the system. Warnings:

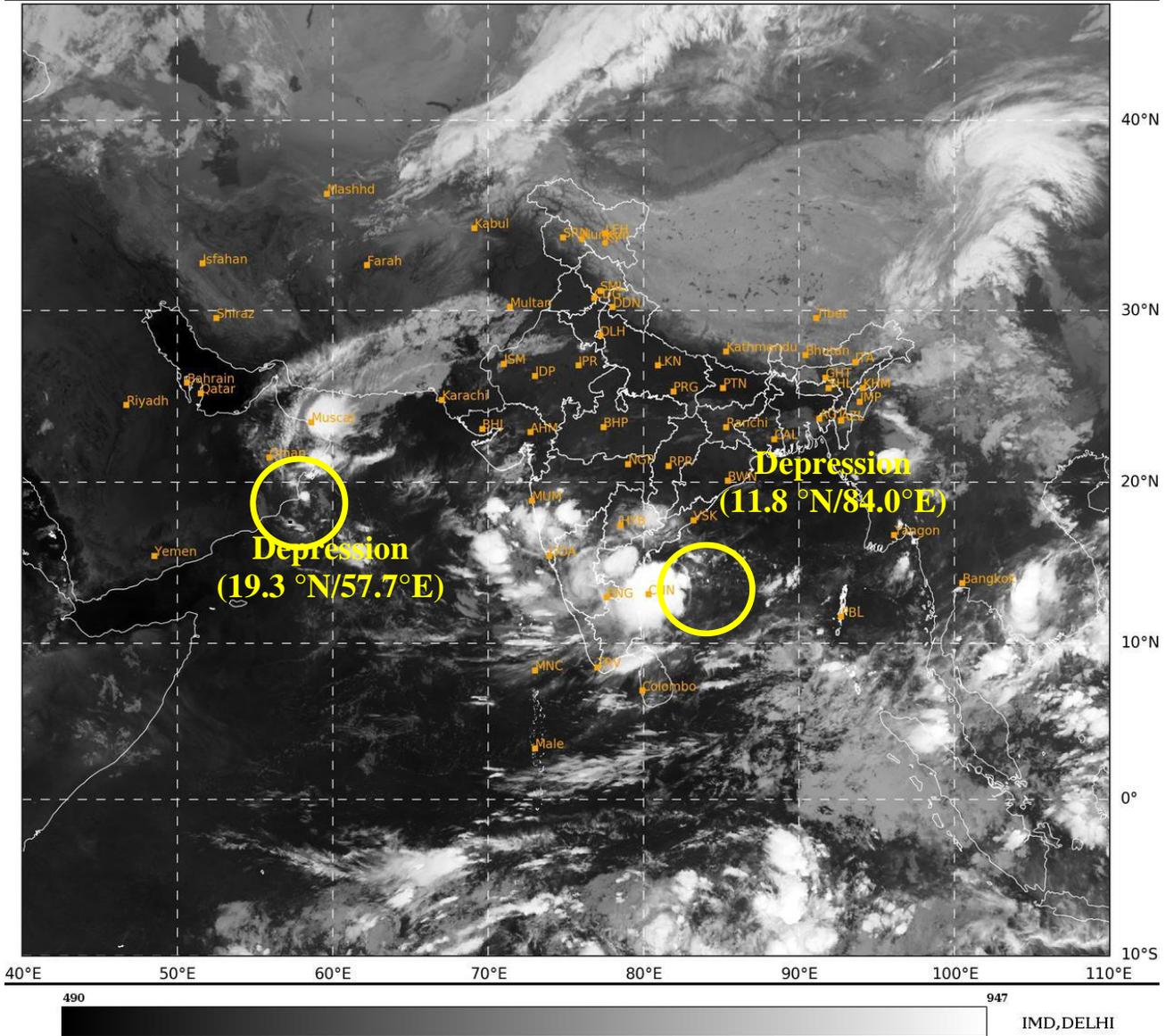
Next bulletin will be issued at 0830 hours IST of tomorrow, the 16th October, 2024.

(Dr. Trisanu Banik)
Scientist-D, RSMC & IMD, New Delhi

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

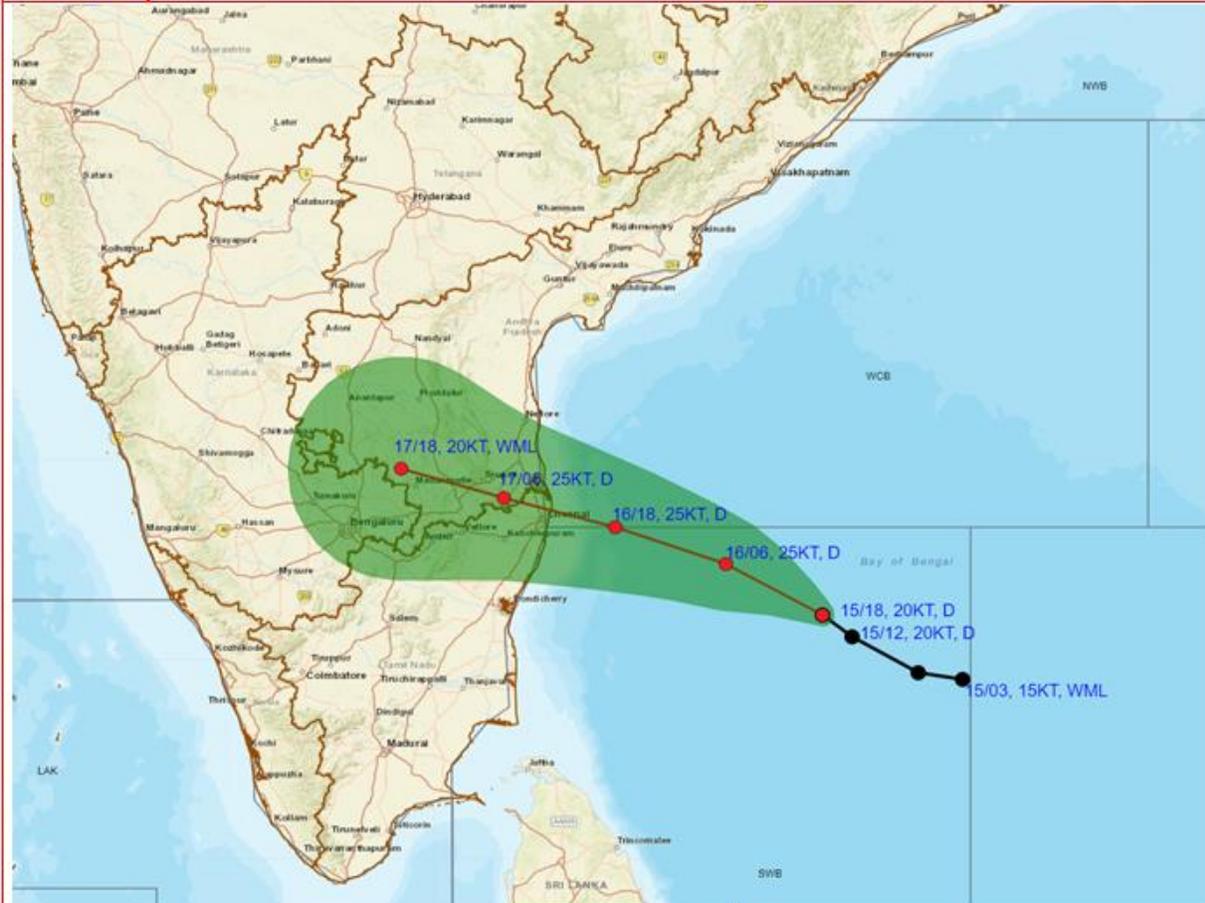
SAT : INSAT-3DR IMG
IMG_TIR1 10.8 um
LIC Mercator

15-10-2024/(2045 to 2112) GMT
16-10-2024/(0215 to 0242) IST





DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC (2330 Hrs. IST) OF 15th OCTOBER, 2024

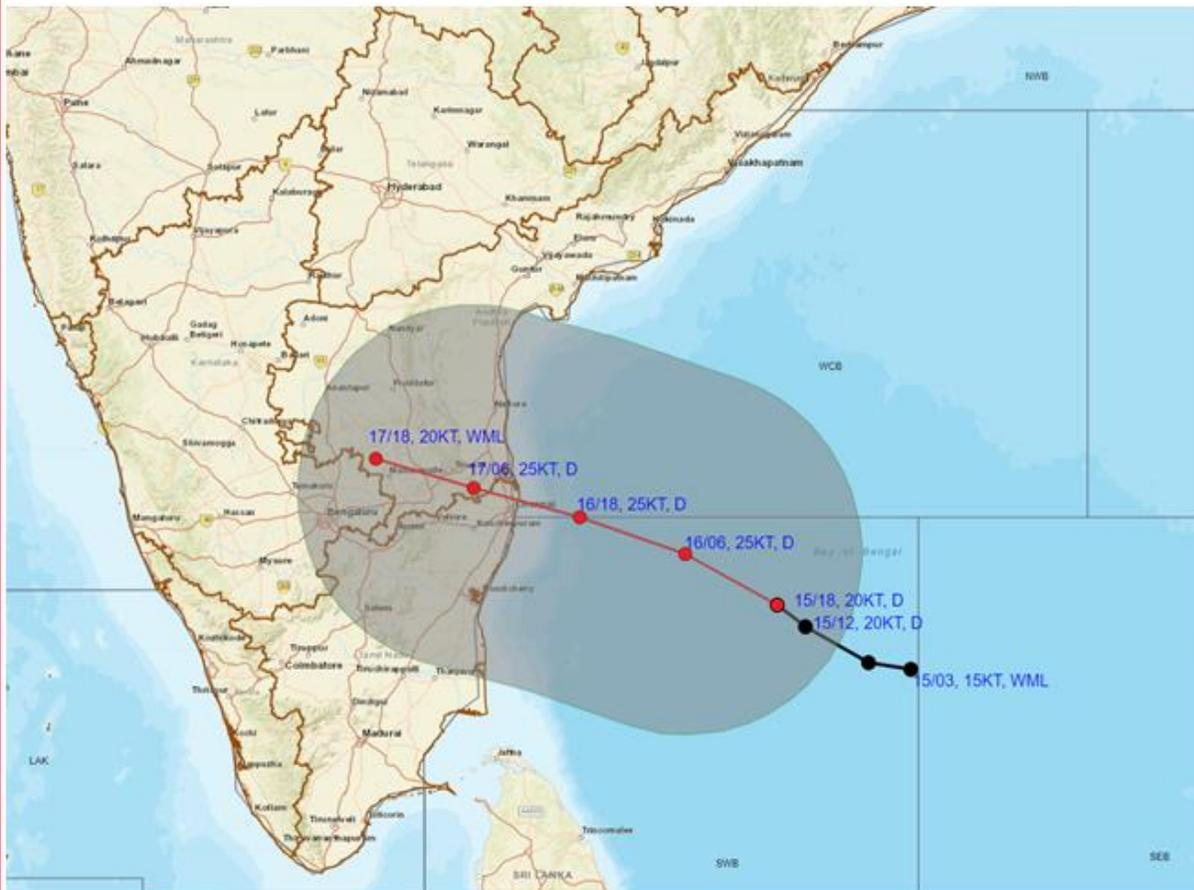


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119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

- LESS THAN 34 KT
- 34-47 KT
- \geq 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 1800 UTC (2330 Hrs. IST) OF 15th OCTOBER, 2024

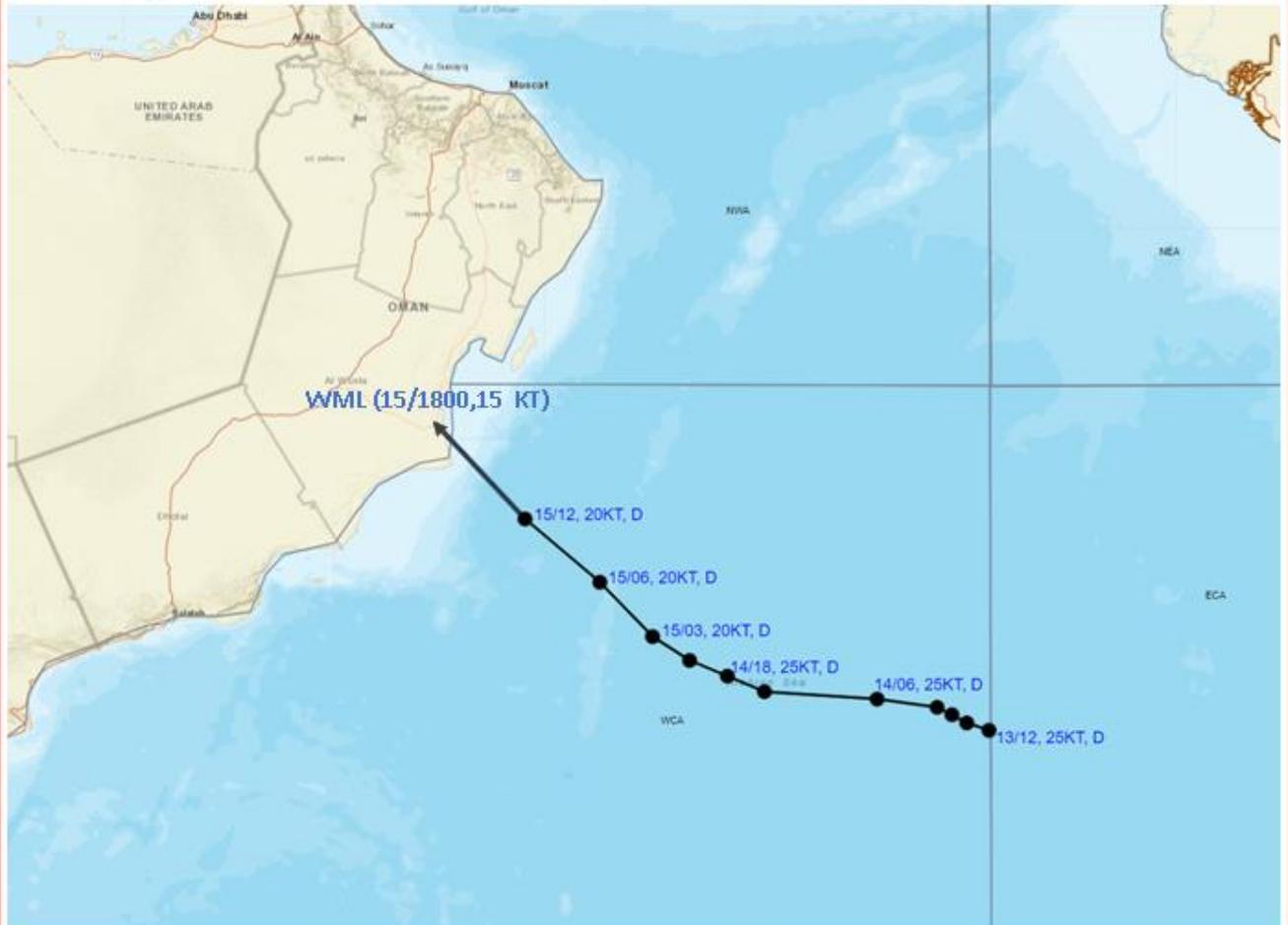


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)

● 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)

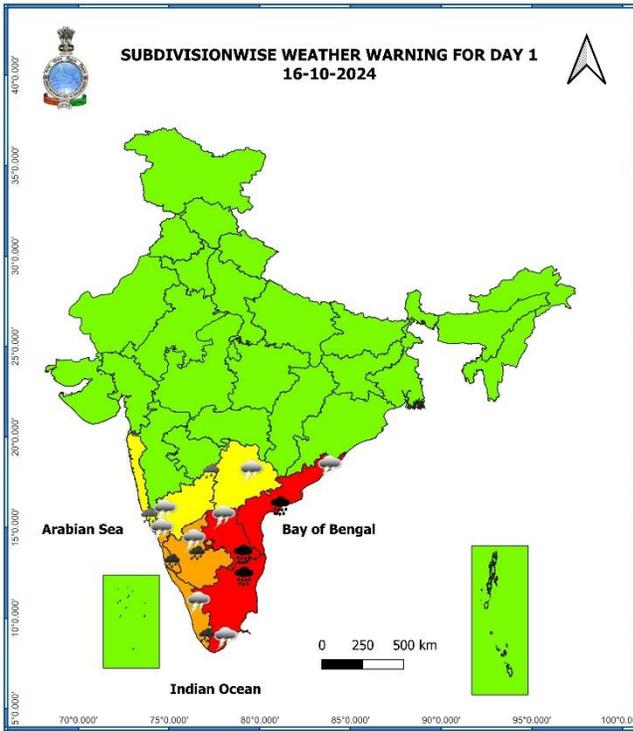


OBSERVED TRACK OF DEPRESSION OVER ARABIAN SEA DURING 13TH TO 15TH OCTOBER, 2024



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



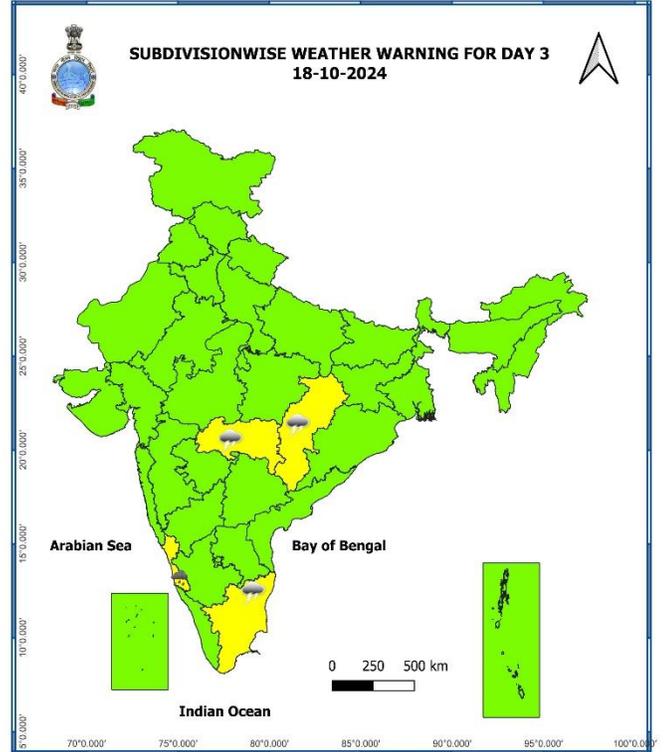
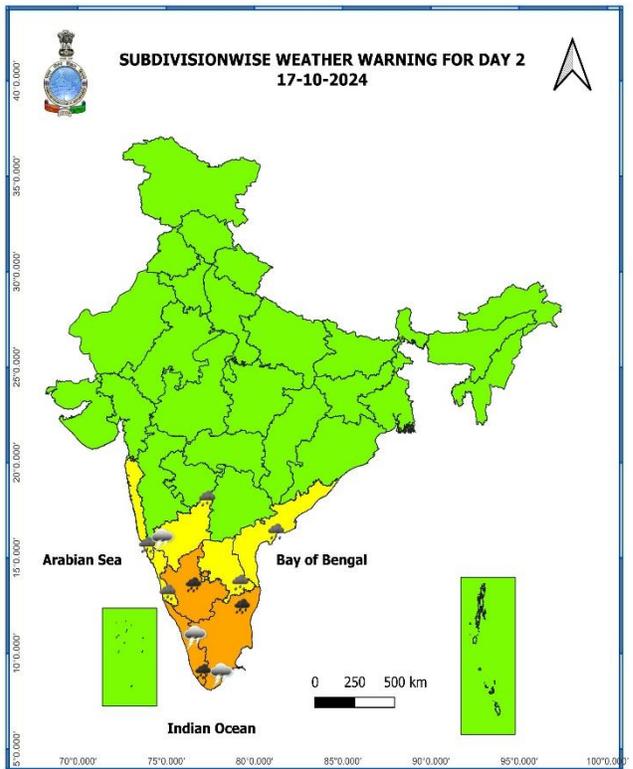
- Fog
- Heavy Rain
- Very Heavy Rain
- Extremely Heavy Rain
- Thunder & Lightning
- Hailstorm
- Dust Raising Winds
- Heavy Snow
- Dust Storm
- Heat Wave
- Warm Night
- Hot Day
- Hot & Humid
- Cold Wave
- Cold Day
- Ground Frost
- Strong Surface Winds

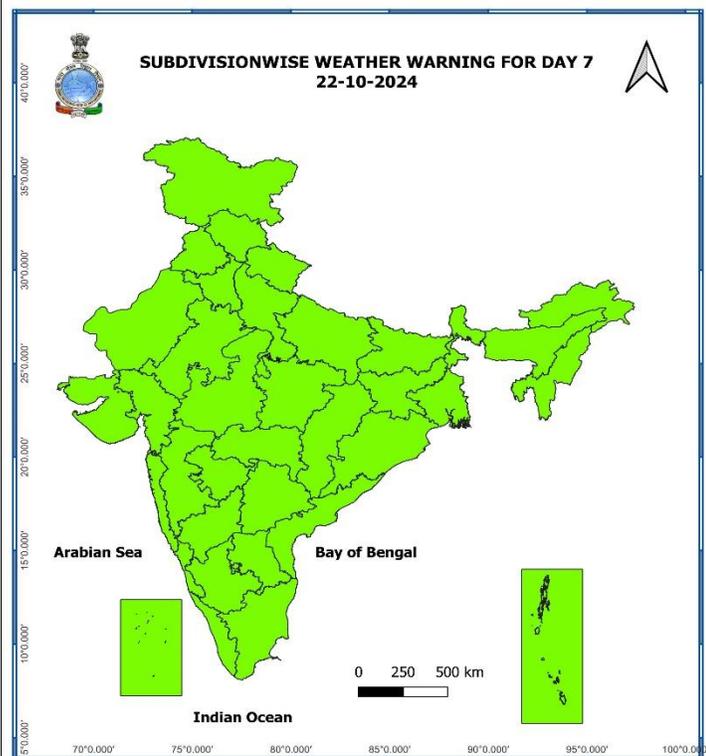
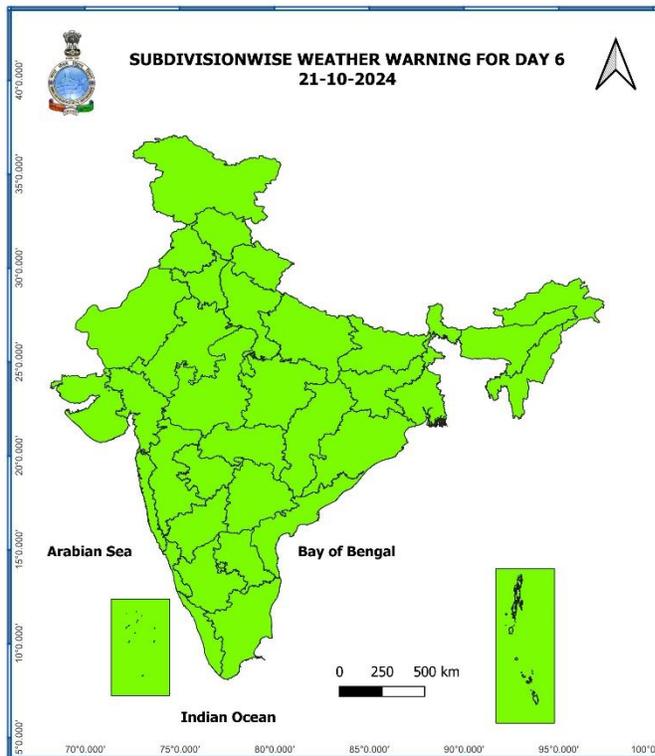
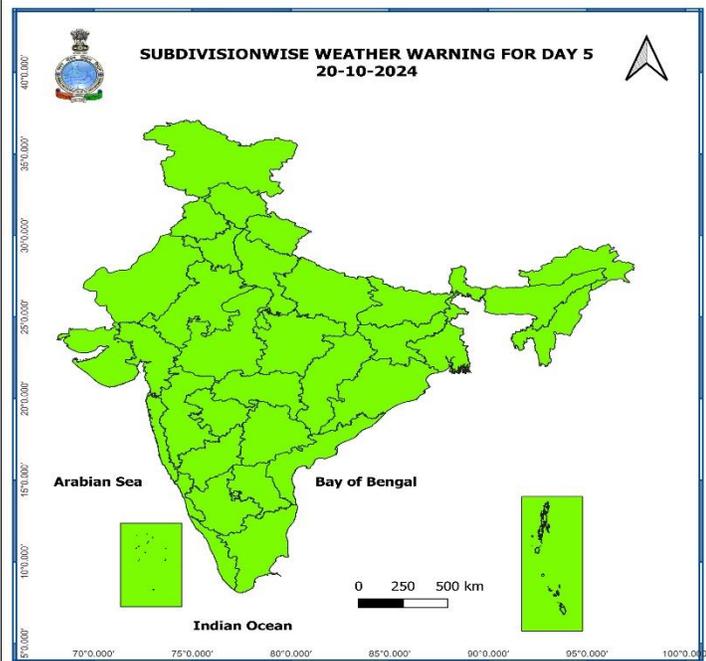
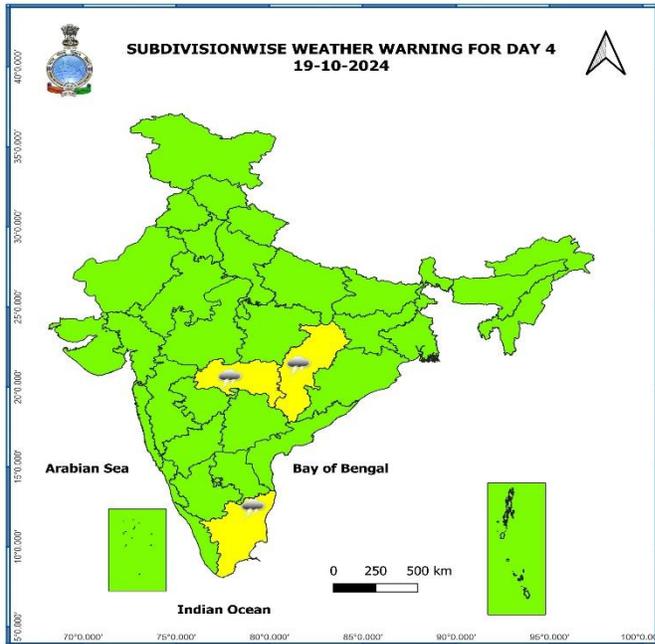
COLOUR CODED WARNING

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

Probabilistic Forecast

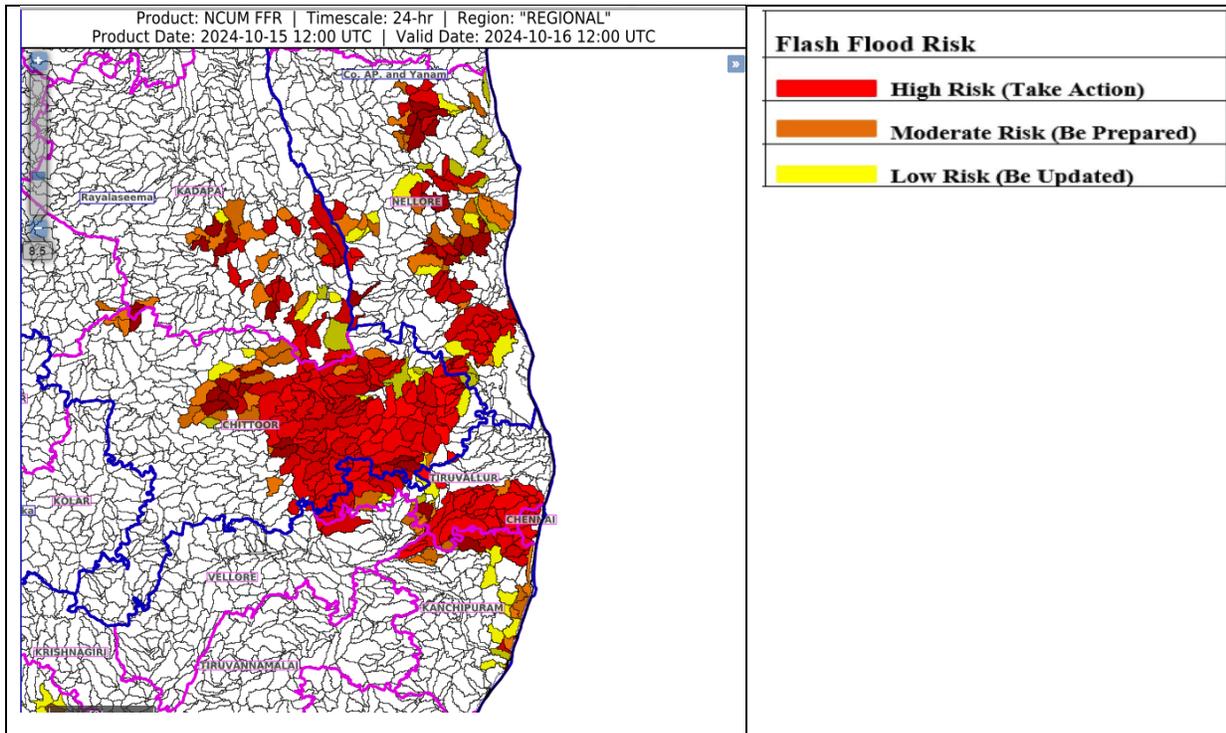
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75





- 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



24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 16-10-2024 :

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

Coastal AP & Yanam -Nellore district.

Rayalaseema – Chittoor and Kadapa districts.

Tamil Nadu - Chennai, Kanchipuram 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.

Fishermen Warning Graphics

