

India Meteorological Department (Ministry of Earth Sciences)

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FROM: INDIA METEOROLOGICAL DEPARTMENT

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

(A) Depression over southwest Bay of Bengal

The well marked low pressure area over southwest and adjoining southeast Bay of Bengal moved west-northwestwards, intensified in to a Depression and lay centered at 1730 hours IST of today, the 15th October 2024 over southwest Bay of Bengal near latitude 11.4° N and longitude 84.4° E, about 490 km east-southeast of Chennai (Tamil Nadu), 500 km east-southeast of Puducherry and 590 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 as a depression.

Forecast track and intensity are given in the following table:

| Date/Time (IST) | Position | Maximum Sustained Surface Wind | Category of Cyclonic |
|-----------------|---------------------|--------------------------------|-------------------------------|
| | (Lat. °N/ Long. °E) | Speed (Kmph) | Disturbance |
| 15.10.24/1730 | 11.4/84.4 | 35-45 gusting to 55 | Depression |
| 16.10.24/0530 | 11.9/83.0 | 40-50 gusting to 60 | Depression |
| 16.10.24/1730 | 12.6/81.5 | 40-50 gusting to 60 | Depression |
| 17.10.24/0530 | 13.2/80.4 | 40-50 gusting to 60 | Depression |
| 17.10.24/1730 | 13.7/79.7 | 40-50 gusting to 60 | Depression |
| 18.10.24/0530 | 14.3/78.5 | 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 isolated places over Tamil Nadu & Puducherry and extremely heavy rainfall at isolated places over north Tamil Nadu on 15th October.

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 15th to 17th October.

South Andhra Pradesh & Rayalaseema Light to moderate rainfall over most places with heavy to very heavy rainfall at isolated places is very likely on 15th; 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 15th 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

- 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.

(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
- o Likely disruption of marine and inland water transportation like small boats and trawlers.

- o Minor damage to kutcha roads.
- o Possibilities of damage to vulnerable structure.
- o Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- o Damage to horticulture and standing crops in some areas due to inundation and wind.
- o It may lead to riverine flooding in some river catchments (for riverine flooding please visit Webpage of Central Water Comission)

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

- o 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.
- o Check for traffic congestion on your route before leaving for your destination.
- o Follow any traffic advisories that are issued in this regard.
- o Avoid going to areas that face the water logging problems often.
- o Avoid staying in vulnerable structure.

Agromet advisories for Heavy Rainfall

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

(B) Depression over westcentral Arabian Sea off Oman coast

The Depression over westcentral Arabian Sea off Oman coast moved northwestwards with a speed of 23 kmph during past 6 hours, and lay centred at 1730 hours IST of today, the 15th October, 2024 over the same region near latitude 18.3°N and longitude 58.8°E, about 180 km southeast of Duqm (Oman), 260 km south of Masirah (Oman) and 520 km east-northeast of Salalah (Oman).

It is likely to move nearly north-westwards and cross Oman coast close to Duqm (Oman) during early hours of tomorrow, the 16th October.

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 16^{th} 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.

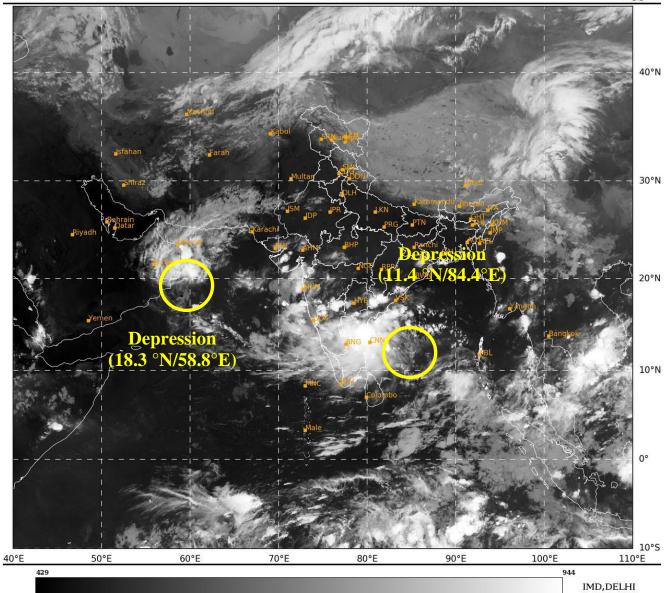
❖ Action Suggested

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

Next bulletin will be issued at 0230 hours IST of tomorrow, the 16th October, 2024.

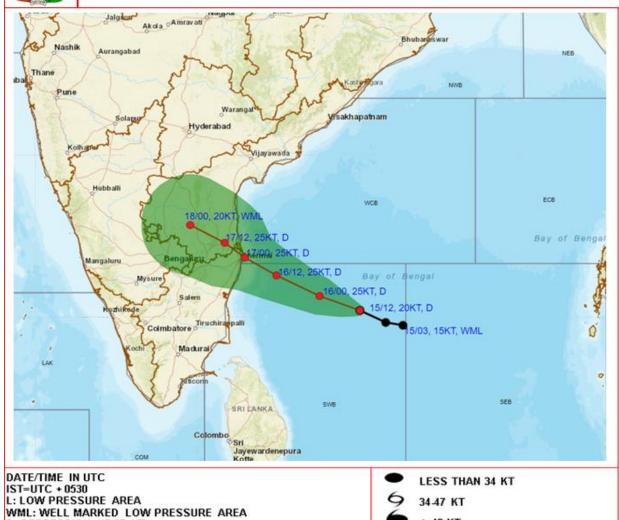
(Dr. Ananda Kumar Das) Scientist-F, RSMC & IMD, New Delhi







DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC (1730 Hrs. IST) OF 15th OCTOBER, 2024



D: DEPRESSION (17-27 KT)
DD: 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)

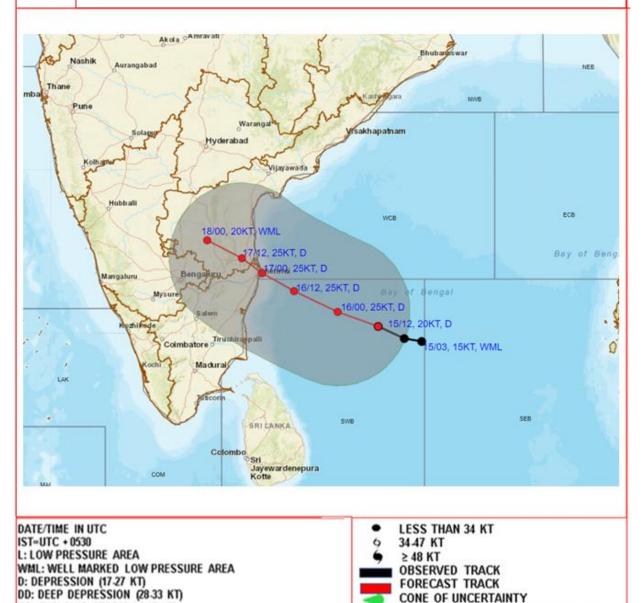
≥ 48 KT OBSERVED TRACK FORECAST TRACK CONE OF UNCERTAINTY



CS: CYCLONIC STORM (34.47 KT)

SCS: SEVERE CYCLONIC STORM (48-63KT)

OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC (1730 Hrs. IST) OF 15th OCTOBER, 2024

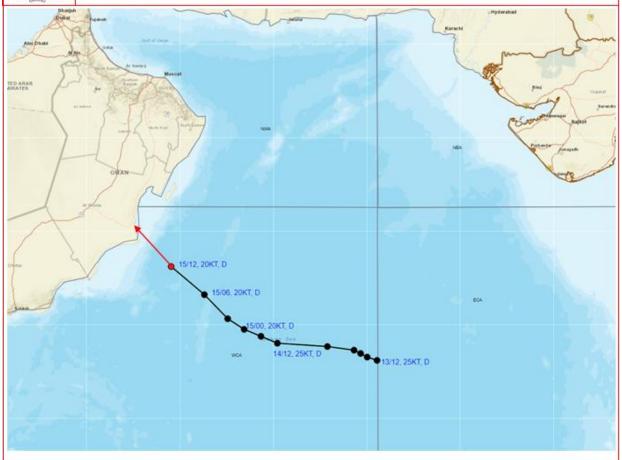


AREA OF MAXIMUM SUSTAINED WIND SPEED:

20-30 KT (35-55 KMPH)



OBSERVED AND FORECAST TRACK OF DEPRESSION OVER WESTCENTRAL ARABIAN SEA BASED ON 1200 UTC (1730 Hrs. IST) OF 15th OCTOBER, 2024



DATE/TIME IN UTC IST=UTC + 0530 L: LOW PRESSURE AREA

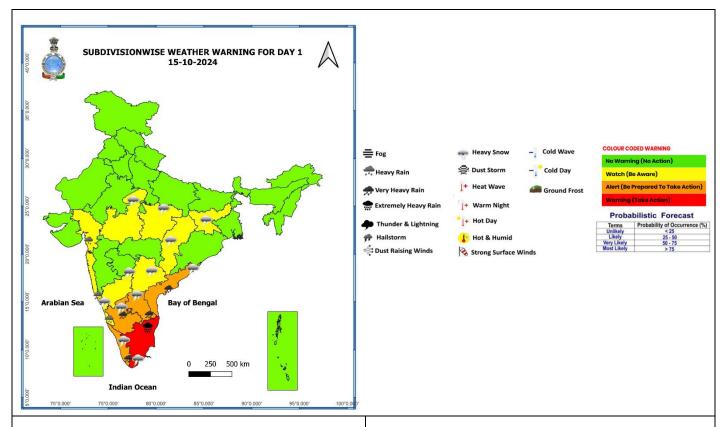
WML: WELL MARKED LOW PRESSURE AREA

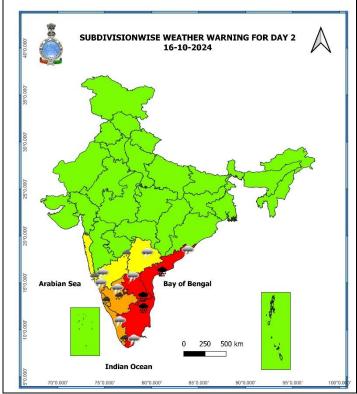
D: DEPRESSION (17-27 KT) DD: DEEP DEPRESSION (28-33 KT) CS: CYCLONIC STORM (34.47 KT)
SCS: SEVERE CYCLONIC STORM (48.63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64.89 KT)

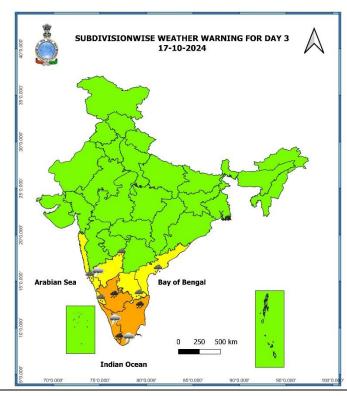
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

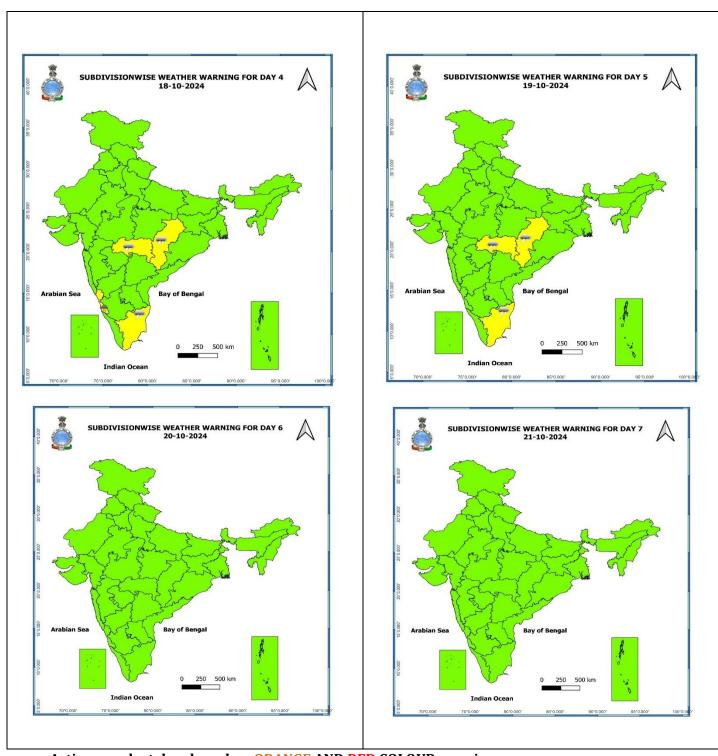
SuCS: SUPER CYCLONIC STORM № 120 KT)

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



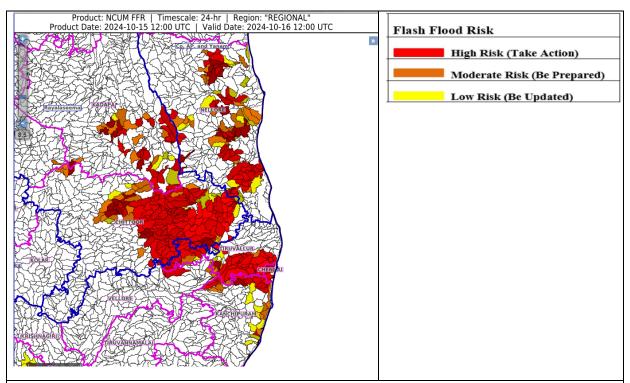






- Action may be taken based on ORANGE AND RED COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

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.

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Rayalaseema – Chittoor and Kadapa districts.

Tamil Nadu - Chennai, Kanchipuram and Tiruvallur districts.

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