REGIONAL SPECIALISED METEOROLOGICAL CENTRE -TROPICAL CYCLONES, NEW DELHI
TROPICAL WEATHER OUTLOOK

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 22.10.2025
TROPICAL WEATHER OUTLOOK FOR THE NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR THE NEXT 168 HOURS ISSUED AT 0430 UTC OF 22.10.2025 BASED ON 0000 UTC OF 22.10.2025.

ARABIAN SEA:

Sub: (A) Depression over Southeast Arabian Sea
(B) Well Marked low pressure area over Southwest Bay of Bengal off Tamil Nadu coast

(A) Depression over Southeast Arabian Sea

The Well marked Low Pressure area over southeast Arabian Sea concentrated into a Depression and lay centered at 0000 UTC of today, the 22nd October 2025, over the same region, near latitude 8.6°N,67.6°E,about 630 km west-southwest of Aminidivi (Lakshadweep) and 1020 km southwest of Panjim (Goa). It is likely to move slowly nearly north-northwestwards during next 24 hours.

As per INSAT 3D imagery at 0000 UTC, vortex over southeast Arabian Sea & neighbourhood centered within half a degree of 09.0°N/66.5° E with Intensity T1.5. Associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over south & adjoining central Arabian Sea between latitude 5.0°N to 14.0° N and longitude 57.0° E to 71.0° E. The minimum cloud top temperature is minus 70 to 90 degree Celsius.

The associated maximum sustained wind speed (MSW) is 20 kt gusting to 30 kt. The estimated central pressure is 1003 hPa.

Scattered to broken low and medium clouds with embedded intense to very intense convection lay over central & adjoining south Arabian Sea, Lakshadweep Islands, Maldives and Comorin area.

BAY OF BENGAL:

(B) Well Marked low pressure area over Southwest Bay of Bengal off Tamil Nadu coast

The Well marked low pressure area over southwest Bay of Bengal off North Sri Lanka Coast moved northwestwards and lay over southwest Bay of Bengal off Tamil Nadu coast at 0000 UTC of today, the 22nd October2025. While moving northwestwards, there is a possibility for the intensification into a depression over southwest & adjoining westcentral Bay of Bengal off north Tamil Nadu & south Andhra Pradesh coasts during next 12 hours. Thereafter, it is likely to move across north Tamil Nadu, Puducherry & south Andhra Pradesh coasts during subsequent 12 hours.

As per INSAT 3D imagery at 0000 UTC, vortex over south west Bay of Bengal and neighbourhood centred within half a degree of 11.0°N and 80.6°E with intensity 1.0. Associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over Costal

Andhra Pradesh, Telengana, Rayelseema, interior Karnatka, Kerala, Tamil Nadu, southwest and west central Bay of Bengal. The minimum cloud top temperature is minus 70 to 90 degree Celsius.

Scattered to broken low and medium clouds with embedded intense to very intense convection lay over south & central Bay of Bengal and Andaman Sea.

***PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS**

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
HIGH	Nil	Nil	Nil	Nil	LOW	LOW

*****NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY

REMARKS:

The guidance from ECMM model indicates that Madden Julian Oscillation (MJO) index is presently in phase 4 & likely to remain in same phase till 28th with amplitude more than 1. Thereafter, it is likely to move across phase 5 with amplitude becoming less than 1.

Guidance from NCICS model indicates enhanced cross equatorial flow on 22nd October onwards leading to westerly wind burst over southern parts of Arabian Sea and Bay of Bengal and adjoining equatorial Indian Ocean during 22nd to 26th October. The Model indicates prevalence of equatorial Rossby wave (ERW) Kelvin wave (KW), MJO, Low frequency Background wave (LW), enhanced westerly wind Anomaly (>9mps) over the region during 21st to 26th October. The model is also indicating setting in of easterly winds anomaly (5-7 mps) over central and adjoining south Bay of Bengal during 21st to 26th October and over central parts of south & east Arabian Sea during 22nd – 23rd October. These features indicate a favourable environment for enhanced convective activity & cyclogenesis (formation of Depression) over Arabian Sea during 22nd – 23rd and over the Bay of Bengal during 22nd – 25th October.

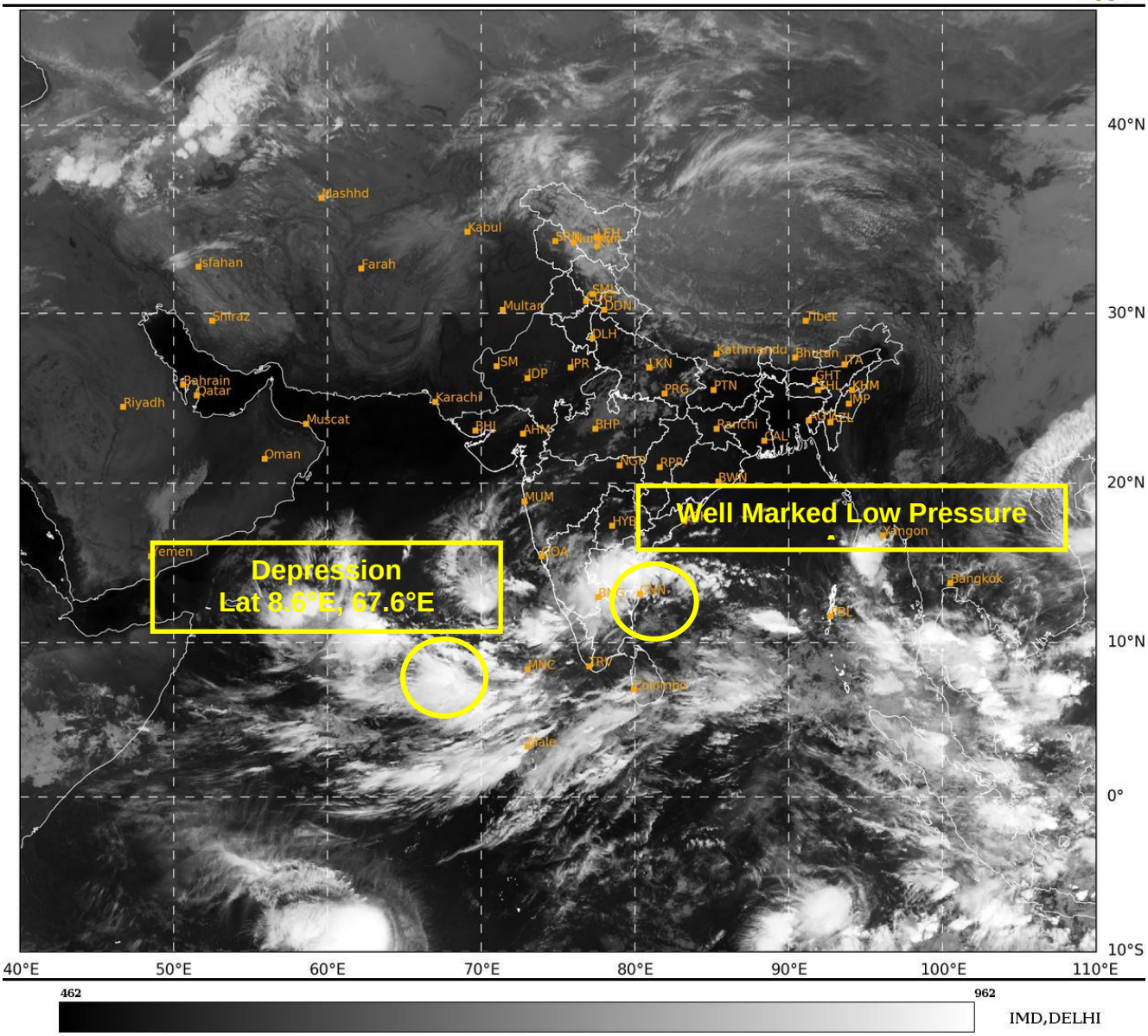
Over the Arabian Sea (AS), the guidance from CIMSS indicates, the low level vorticity at 850 hPa is east-west oriented & is about 50 X 10^{-6} s^{-1} around the system area. Vertically it is extending upto 500 hPa level. The upper level divergence is around 20 X 10^{-6} s^{-1} to the west and 30 X 10^{-6} s^{-1} to the east of system area. Low level convergence is about 10 X 10^{-6} s^{-1} to the southwest of system area and another zone of 40 X 10^{-6} s^{-1} to the east-northeast of system area. Mid-level vertical wind shear (VWS) of horizontal wind is anticyclonic & low (05-10 kt) over the system area and over central parts of south and eastcentral Arabian Sea along the predicted path. Upper tropospheric ridge runs along 17°N over the Arabian Sea.

Over the Bay of Bengal, the guidance from CIMSS indicates, positive low level vorticity at 850 hPa of about 50X 10^{-6} s^{-1} over southwest Bay of Bengal and adjoining Tamil Nadu coast. Another positive vorticity zone is seen over south Andaman Sea (50 X $10^{-6}s^{-1}$). Vertically, both are extending upto 500 hPa level. The upper level divergence is around 10 X 10^{-6} s^{-1} over the system area and is extending over entire south Bay of Bengal and southeast Arabian Sea. Low level convergence is about 5-10 X 10^{-6} s^{-1} over system area. Another zone of low level convergence 5-10 X 10^{-6} s^{-1} lay over south Andaman Sea and adjoining southeast Bay of Bengal (10 X 10^{-6} s^{-1}). Vertical wind shear (VWS) of horizontal wind is low to moderate (05-15 kt) over the system area and to the west of system area. Upper tropospheric ridge runs along 13°N over the Bay of Bengal in association with anticyclonic circulation over southeast & adjoining Andaman Islands.

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

SAT : INSAT-3DR IMG
IMG_TIR1 10.8 um
L1C Mercator

22-10-2025/(0245 to 0312) GMT
22-10-2025/(0815 to 0842) IST



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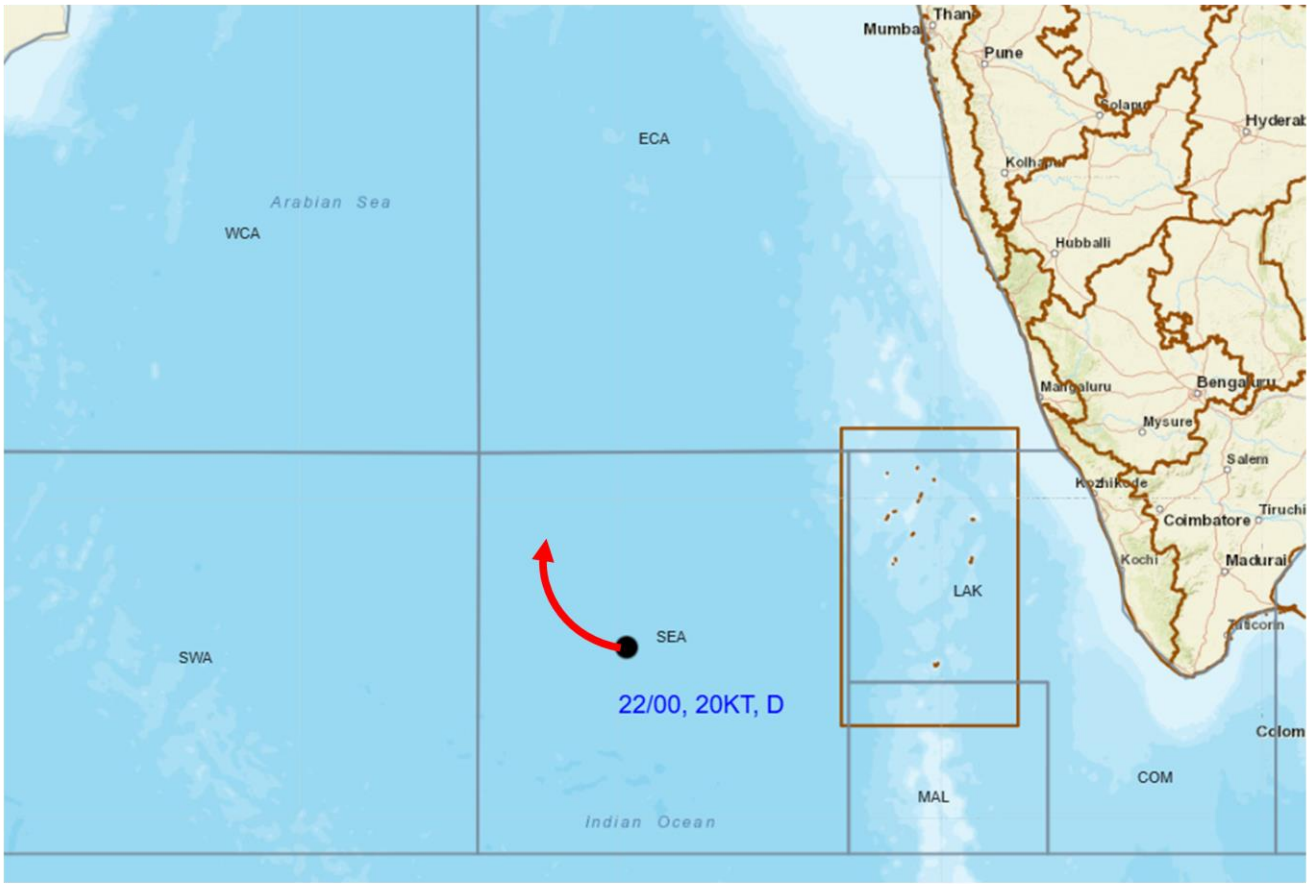
IMD,DELHI

OBSERVED AND FORECAST TRACK OF THE DEPRESSION OVER SOUTHEAST ARABIAN SEA BASED ON 0000 UTC (0530 IST) OF 22ND OCTOBER, 2025.

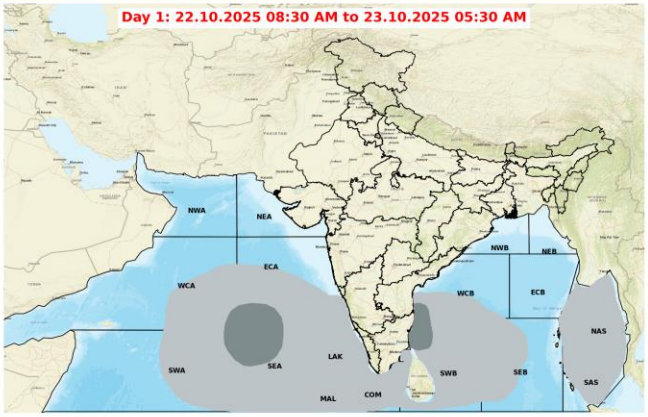


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119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

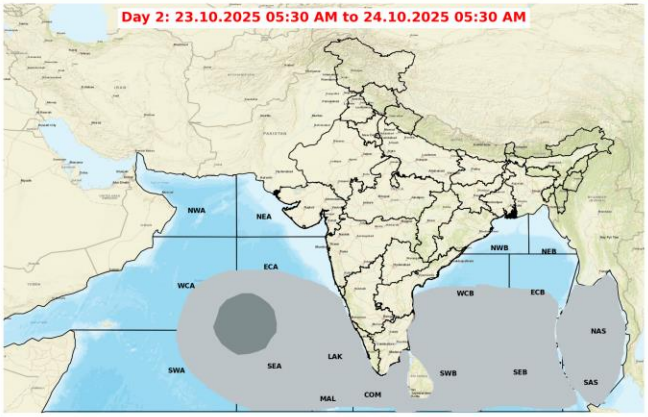
LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

Fishermen Warning Graphics

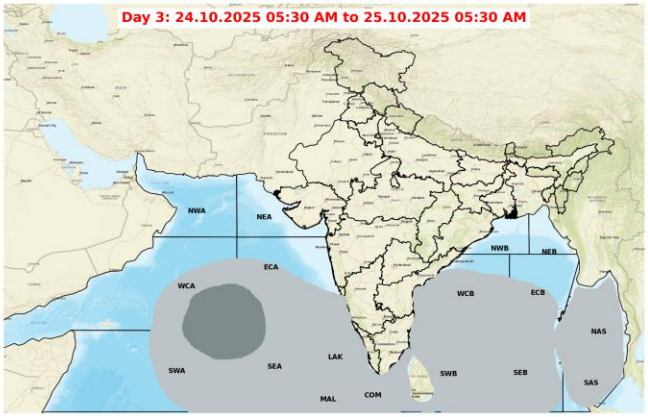
Day 1: 22.10.2025 08:30 AM to 23.10.2025 05:30 AM



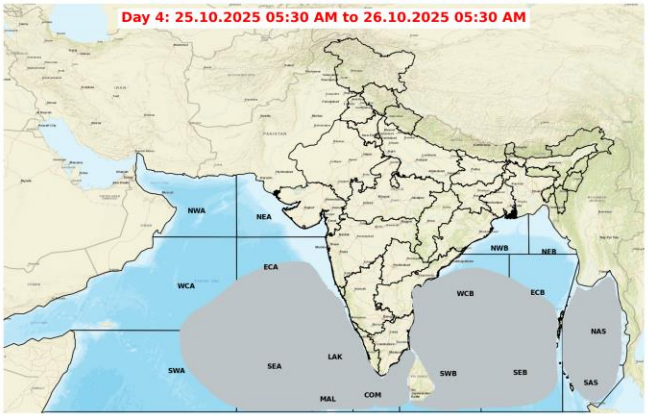
Day 2: 23.10.2025 05:30 AM to 24.10.2025 05:30 AM



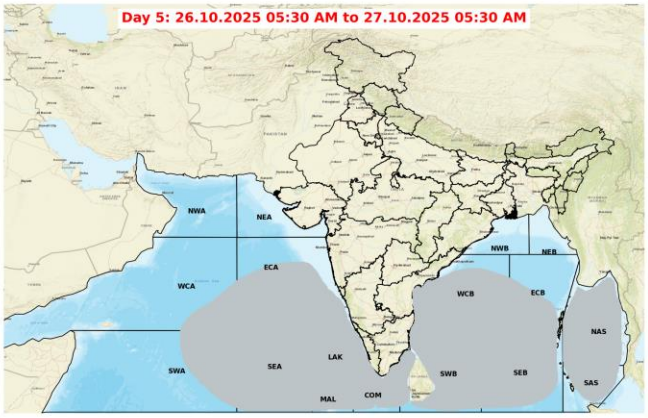
Day 3: 24.10.2025 05:30 AM to 25.10.2025 05:30 AM



Day 4: 25.10.2025 05:30 AM to 26.10.2025 05:30 AM



Day 5: 26.10.2025 05:30 AM to 27.10.2025 05:30 AM



Legend

- Squally Weather with wind speed 35-45 kmph gusting to 55 kmph
- Squally Weather with wind speed 40-50 kmph gusting to 60 kmph
- Squally Weather with wind speed 45-55 kmph gusting to 65 kmph
- Squally wind with speed 45-55 kmph gusting to 65 kmph
- Squally wind with speed 50-60 kmph gusting to 70 kmph
- Squally wind with speed 55-65 kmph gusting to 75 kmph
- CS with Gale winds with speed 60-80 kmph gusting to 90 kmph
- SCS with Gale wind speed 90-110 kmph gusting to 120 kmph
- VSCS with Gale wind speed 120-165 kmph gusting to 185 kmph
- ESCS with Gale wind speed 165-220 kmph gusting to 245 kmph

Fishermen are advised not to venture into the marked areas.