





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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 20.07.2024

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 20.07.2024 BASED ON 0300 UTC OF 20.07.2024.

BAY OF BENGAL:

THE DEPRESSION OVER ODISHA COAST NEAR CHILIKA LAKE REMAINED PRACTICALLY STATIONARY DURING PAST 3 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 20TH JULY, 2024 OVER THE SAME REGION AT LATITUDE 19.6°N AND LONGITUDE 85.4°E, ABOUT 40 KM SOUTH-SOUTHWEST OF PURI (ODISHA, 43053) AND 70 KM EAST-NORTHEAST OF GOPALPUR (ODISHA, 43049).

IT IS LIKELY TO MOVE NORTHWESTWARDS ACROSS ODISHA & CHHATTISGARH AND WEAKEN GRADUALLY DURING NEXT 12 HOURS.

AS PER INSAT-3D IMAGERY, INTENSITY OF THE SYSTEM IS T1.5/C.I.1.5. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WESTCENTRAL AND ADJOINING NORTHWEST BAY OF BENGAL OFF SOUTH ODISHA & ADJOINING NORTH ANDHRA PRADESH COASTS AND SOUTH ODISHA & NORTH COASTAL ANDHRA PRADESH. MINIMUM CLOUD TOP TEMPERATURE IS -93°C.

AS PER OBSERVATIONS AT 0300 UTC, ESTIMATED CENTRAL PRESSURE IS 992 HPA AND THE PRESSURE DROP AT CENTRE IS 4 HPA. AT 0300 UTC, LOWEST MEAN SEA LEVEL PRESSURE (MSLP) OF 992.4 HPA IS OBSERVED AT PURI (43053) WITH PRESSURE CHANGE DURING PAST 24 HOURS (P24) OF -1.3 HPA AND DEPARTURE FROM NORMAL OF -9.6 HPA. BHUBANESWAR REPORTED MSLP OF 993.2 HPA, P24 OF -1.4 HPA AND DEPARTURE OF -8.3 HPA. GOPALPUR REPORTED MSLP OF 993.9 HPA AND DEPARTURE OF -8.4 HPA. CURRENT OBSERVATIONS FURTHER INDICATE WEAKENING OF SYSTEM.

WIND WARNING

SQUALLY WEATHER WITH WIND SPEED REACHING 40-50 KMPH GUSTING TO 55 KMPH IS VERY LIKELY TO PREVAIL OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL AND ALONG & OFF NORTH ANDHRA PRADESH, ODISHA, WEST BENGAL & ADJOINING BANGLADESH COASTS ON 20^{TH} JULY AND WOULD DECREASE GRADUALLY THEREAFTER.

SEA CONDITION: ROUGH TO VERY ROUGH SEA CONDITION IS VERY LIKELY TO PREVAIL OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL AND ALONG AND OFF NORTH ANDHRA PRADESH, ODISHA, WEST BENGAL & ADJOINING BANGLADESH COASTS ON 20^{TH} JULY AND WOULD IMPROVE GRADUALLY THEREAFTER.

Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100% This is a guidance Bulletin for WMO/ESCAP Panel Member countries. Visit respective National websites for Country specific Bulletins

FISHERMEN WARNING

FISHERMEN ARE ADVISED NOT TO VENTURE INTO NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL AND ALONG & OFF NORTH ANDHRA PRADESH, ODISHA, WEST BENGAL & ADJOINING BANGLADESH COASTS ON 20^{TH} JULY.

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER EAST ARABIAN SEA, LAKSHADWEEP ISLANDS AND COMORIN. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER REST OF ARABIAN SEA AND MALDIVES.

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

| 24 | 24-48 | 48-72 | 72-96 | 96-120 | 120-144 | 144-168 |
|-------|-------|-------|-------|--------|---------|---------|
| HOURS | HOURS | HOURS | HOURS | HOURS | HOURS | HOURS |
| NIL | NIL | NIL | NIL | NIL | NIL | |

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

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, LOW LEVEL VORTICITY IS ABOUT 100x10⁻⁵S⁻¹ OVER NORTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL TO THE EAST OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 200 HPA LEVELS. LOW LEVEL CONVERGENCE IS CIRCULAR AND IS ABOUT 30 X 10⁻⁵ S⁻¹ TO THE NORTHWEST OF THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE HAS DECREASED AND IS ABOUT 20X10⁻⁵S⁻¹ TO THE NORTHWEST OF SYSTEM CENTER. VERTICAL WIND SHEAR (VWS) IS HIGH (40 KT) ALONG THE PREDICTED PATH.

VARIOUS NUMERICAL MODELS ARE INDICATING THE SYSTEM TO MOVE ACROSS ODISHA AND WEAKEN GRADUALLY AROUND 1200 UTC OF 20TH JULY.

CONSIDERING ALL THE ABOVE, THE DEPRESSION OVER ODISHA COAST NEAR CHILIKA LAKE IS LIKELY TO MOVE NORTHWESTWARDS ACROSS ODISHA & CHHATTISGARH AND WEAKEN GRADUALLY DURING NEXT 12 HOURS.

MONICA SHARMA SCIENTIST D RSMC, NEW DELHI

IMD,DELHI



OBSERVED AND FORECAST TRACK OF DEPRESSION **OVER** ODISHA COAST BASED ON 0300 UTC OF 20TH JULY, 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)







