



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 09.09.2024

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 2100 UTC OF 09.09.2024 BASED ON 1800 UTC OF 09.09.2024.

SUB: DEPRESSION OVER INTERIOR ODISHA

THE DEEP DEPRESSION OVER INTERIOR ODISHA MOVED NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST 6 HOURS WEAKENED INTO A DEPRESSION OVER THE SAME REGION AND LAY CENTERED AT 1800 UTC OF THE 9TH SEPTEMBER, 2024 NEAR LATITUDE 21.4°N AND LONGITUDE 84.5°E ABOUT 70 KM SOUTHEAST OF JHARSUGUDA (42886), 60 KM EAST OF SAMBALPUR (42883), 250 KM EAST-SOUTHEAST OF BILASPUR (42782) AND 290 KM EAST OF RAIPUR (43053).

IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH CHHATTISGARH AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA OVER CHHATTISGARH AND ADJOINING EAST MADHYA PRADESH AROUND 1200 UTC OF 10TH SEPTEMBER.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

Date/Time (UTC)	Position (Lat. °N/ Long. °E)	Maximum Sustained Surface Wind Speed (Kmph)	Category Of Cyclonic Disturbance
09.09.24/1800	21.4/84.5	45-55 gusting to 65	Depression
10.09.24/0000	21.8/83.6	40-50 gusting to 60	Depression
10.09.24/0600	22.2/82.6	35-45 gusting to 55	Depression
10.09.24/1200	22.5/81.6	25-35 gusting to 45	Well Marked Low Pressure Area

AS PER INSAT 3DR IMAGERY AT 1800 UTC, ASSOCIATED SCATTERED TO BROKEN LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WEST ODISHA, CHHATTISGARH, EAST MADHYAPRADESH, VIDHARBHA WITH MINIMUM CLOUD TOP TEMPERATURE OF -93°C AND MODERATE TO INTENSE CONVECTION OVER TELANGANA, AND COASTAL ANDHRA PRADESH.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED (MSW) IN ASSOCIATION WITH THE SYSTEM IS 25 KTS GUSTING TO 35 KTS. ESTIMATED CENTRAL PRESSURE IS 995 HPA.

AT 1800 UTC, JHARSUGUDA REPORTED LOWEST MEAN SEA LEVEL PRESSURE (MSLP) OF 996.1 HPA, AND 24 HOUR PRESSURE CHANGE OF -5.0 HPA.

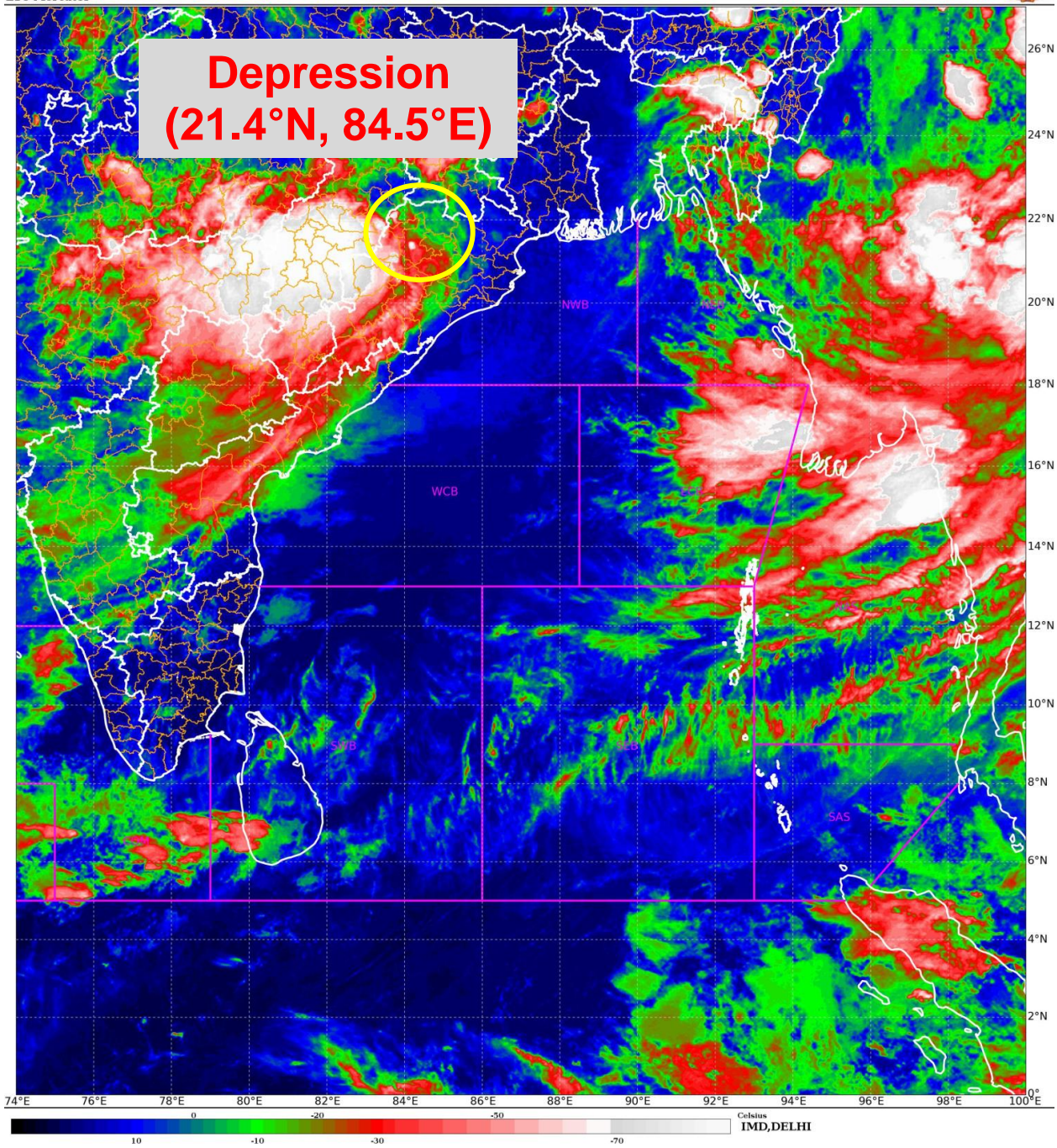
REMARKS:

CURRENT ENVIRONMENTAL CONDITIONS INDICATE THAT THE DEPRESSION OVER INTERIOR ODISHA IS LYING IN A FAVOURABLE ENVIRONMENT. MADDEN JULIAN OSCILLATION (MJO) INDEX IS CURRENTLY IN PHASE 5 WITH AMPLITUDE LESS THAN 1. IT IS LIKELY TO CONTINUE IN SAME PHASE DURING NEXT 2 DAYS. THUS, MJO WOULD SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER EAST & CENTRAL INDIA. NCICS BASED GUIDANCE ON EQUATORIAL WAVES INDICATE, STRONG WESTERLY WINDS (5-7 MPS) ALONGWITH ROSSBY WAVES OVER CENTRAL PARTS OF INDIA AND STRONG EASTERLY WINDS (5-7MPS) OVER NORTHERN PARTS OF INDIA.

THE LOW LEVEL CONVERGENCE IS AROUND $20 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND $20 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE. THE WIND SHEAR IS LOW (05-10 KT) OVER SYSTEM AREA AND ALONG THE FORECAST TRACK. VORTICITY AT 850 HPA LEVEL IS AROUND $100 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTH OF SYSTEM AREA AND EXTENDS UPTO 500 HPA LEVEL WITH A REDUCED VORTICITY OF $60 \times 10^{-5} \text{ S}^{-1}$. MID LEVEL SHEAR IS ANTICYCLONIC. THESE FEATURES INDICATE THAT THE SYSTEM IS STILL IN MODERATELY FAVOURABLE ENVIRONMENT.

THE DEPRESSION OVER INTERIOR ODISHA IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH CHHATTISGARH AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA OVER CHHATTISGARH AND ADJOINING EAST MADHYA PRADESH AROUND 1200 UTC OF 10TH SEPTEMBER.

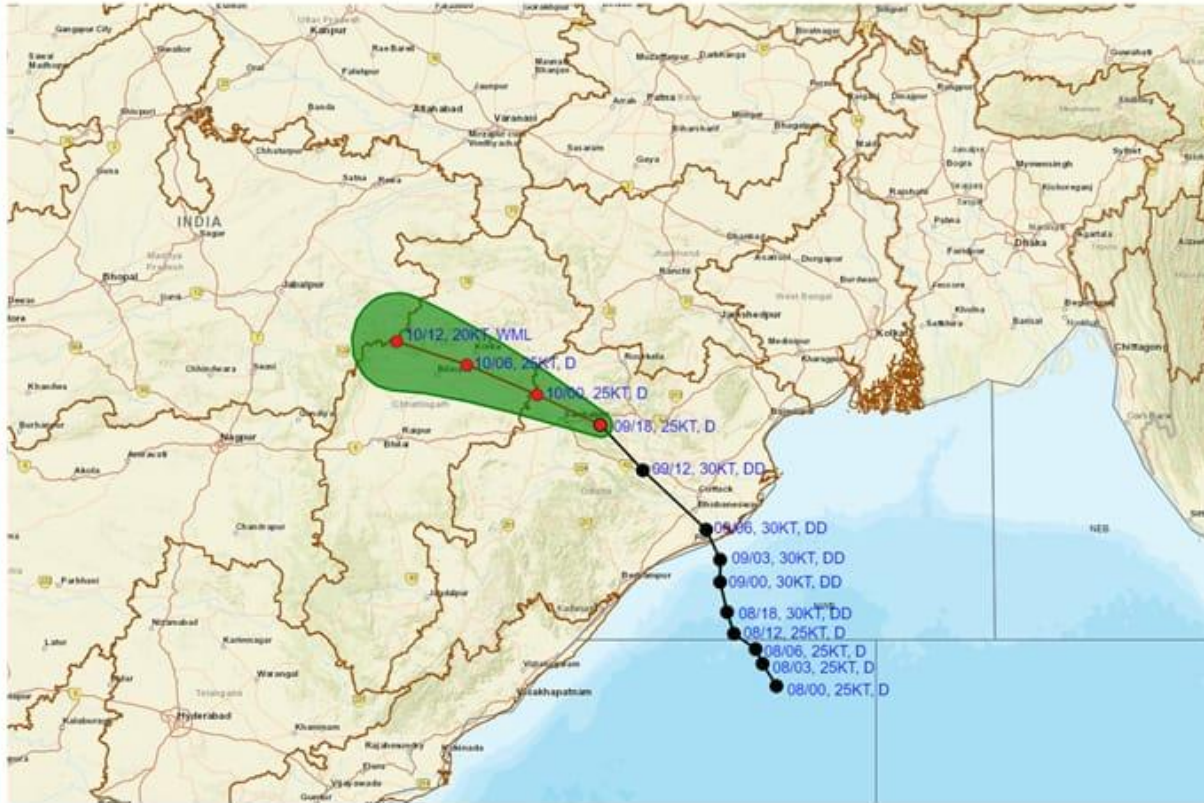
(JOHNY C J)
RSMC NEW DELHI



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



**OBSERVED AND FORECAST TRACK OF DEPRESSION OVER INTERIOR ODISHA
BASED ON 1800 UTC (2330 IST) OF 9th SEPTEMBER, 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