



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 17.09.2024

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0530 UTC OF 17.09.2024 BASED ON 0300 UTC OF 17.09.2024.

DEPRESSION OVER NORTHEAST CHHATTISGARH AND ADJOINING JHARKHAND

THE DEPRESSION OVER JHARKHAND AND ADJOINING NORTH CHATTISGARH MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 17TH SEPTEMBER 2024, OVER NORTHEAST CHATTISGARH AND ADJOINING JHARKHAND NEAR LATITUDE 23.7°N AND LONGITUDE 83.7° E, AROUND 50 KM SOUTHWEST OF DALTONGANJ (42587, JHARKHAND), 80 KM NORTHEAST OF AMBIKAPUR (42693, CHHATTISGARH), 200KM EAST-SOUTHEAST OF SIDHI (42577, MADHYA PRADESH), 210 KM EAST-NORTHEAST OF PENDRA ROAD (42779, CHHATTISGARH) AND 290 KM EAST OF UMARIA (42577, MADHYA PRADESH).

IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH CHHATTISGARH, SOUTH UTTAR PRADESH AND ADJOINING NORTHEAST MADHYA PRADESH AND WEAKEN INTO A WELL-MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

AT 0300 UTC, AS PER INSAT 3DR IMAGERY, ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WEST BIHAR, EAST UTTAR PRADESH, EAST MADHYA PRADESH, JHARKHAND, NORTH CHHATTISGARH, NORTH ODISHA, WEST GANGETIC WEST BENGAL, NORTH BANGALADESH (MINIMUM CLOUD TOP TEMPERATURE MINUS 70-90 DEG CELSIUS) AND MODERATE TO INTENSE CONVECTION LAY OVER EAST GANGETIC WEST BENGAL & SUBHIMALAYAN WEST BENGAL. (MINIMUM CLOUD TOP TEMPERATURE MINUS 50-70 DEG CELSIUS).

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED (MSW) IN ASSOCIATION WITH THE SYSTEM IS 25 KT GUSTING TO 35 KT. ESTIMATED CENTRAL PRESSURE IS 997HPA.

AT 0300 UTC, CHURK REPORTED LOWEST MEAN SEA LEVEL PRESSURE (MSLP) OF 997.8 HPA, AND MAXIMUM WIND SPEED (MSW) OF 50°/05KT. RANCHI REPORTED MSLP OF 998.5 HPA. PENDRA ROAD REPORTED MSLP OF 999.8 HPA, PAST 24 HOUR PRESSURE CHANGE (P24) OF -3.7 HPA, AND MAXIMUM WIND SPEED (MSW) OF 360°/05KT.

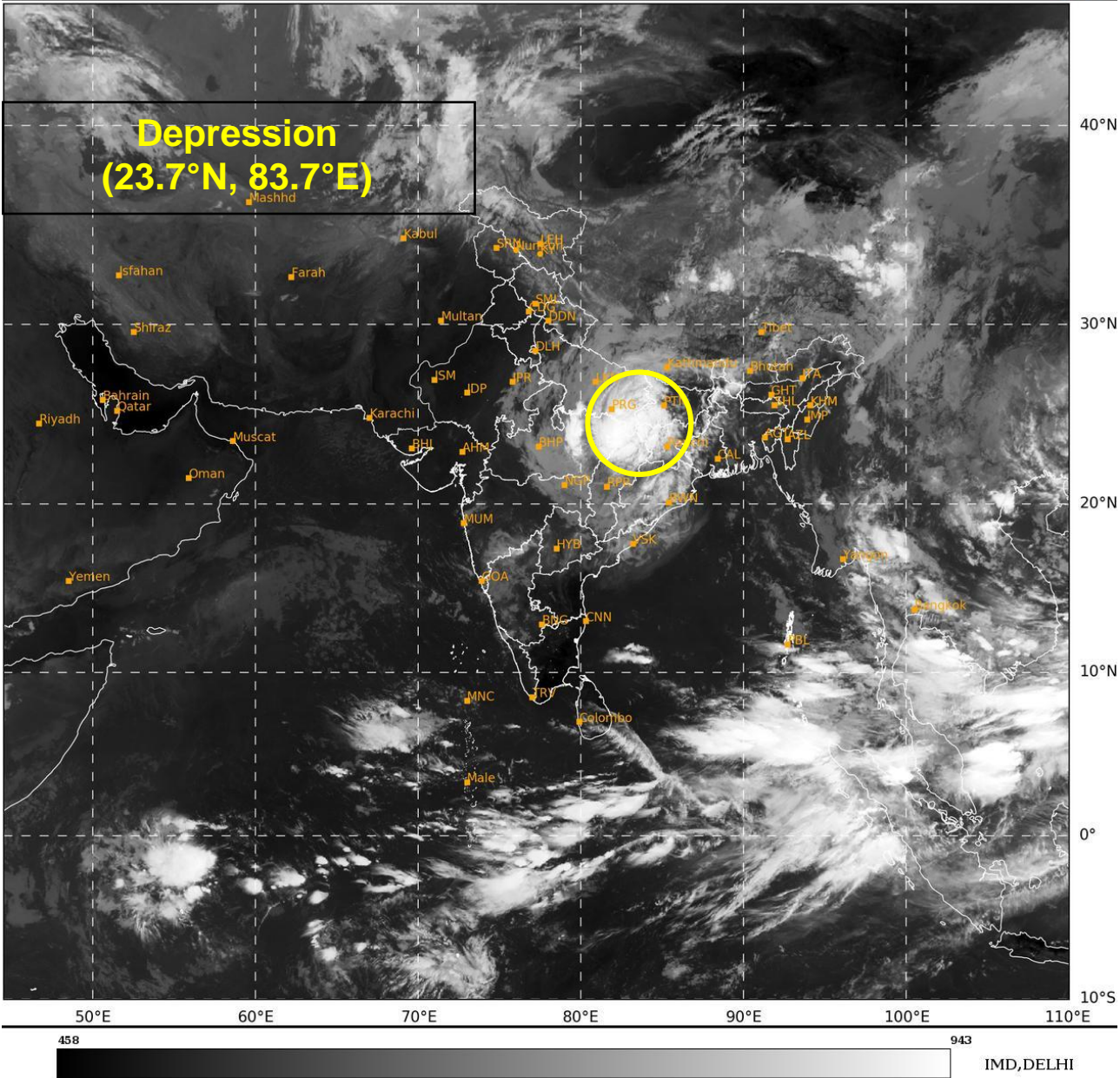
REMARKS:

MADDEN JULIAN OSCILLATION (MJO) INDEX HAS ENTERED PHASE 6 (UNFAVOURABLE). THE NCICS BASED FORECAST INDICATES PERSISTENCE OF WESTERLY WINDS (3-5 MPS) OVER CENTRAL PARTS OF INDIA WITH EASTERLY WINDS (3-5 MPS) OVER NORTHEASTERN PARTS OF INDIA. OTHER EQUATORIAL WAVES HAVE MOVED AWAY. THE LOW LEVEL CONVERGENCE HAS DECREASED AND IS AROUND $15 \times 10^{-5} \text{ S}^{-1}$ AROUND THE SYSTEM AREA. UPPER LEVEL DIVERGENCE HAS ALSO DECREASED TO $20 \times 10^{-5} \text{ S}^{-1}$ OVER SYSTEM AREA. THE WIND SHEAR IS MODERATE (10-15 KT) OVER SYSTEM AREA AND ALONG THE FORECAST TRACK. VORTICITY AT 850 HPA LEVEL IS AROUND $120 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTH OF SYSTEM CENTRE AND EXTENDS UP TO 500 HPA ($40-50 \times 10^{-5} \text{ S}^{-1}$), INDICATING DECREASE IN DEPTH OF CONVECTION. ENVIRONMENTAL FEATURES ARE INDICATING GRADUAL WEAKENING OF SYSTEM.

IMD MME IS INDICATING GRADUAL WEST-NORTHWESTWARDS MOVEMENT ACROSS NORTH CHHATTISGARH AND NORTHEAST MADHYA PRADESH AND GRADUAL WEAKENING INTO A WELL MARKED LOW PRESSURE AREA AROUND 1800 UTC OF 17TH SEPTEMBER OVER NORTHEAST MADHYA PRADESH.

IN VIEW OF ALL THE ABOVE, THE DEPRESSION OVER NORTHEAST CHHATTISGARH AND ADJOINING JHARKHAND IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS NORTH CHHATTISGARH, SOUTH UTTAR PRADESH & ADJOINING NORTHEAST MADHYA PRADESH AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

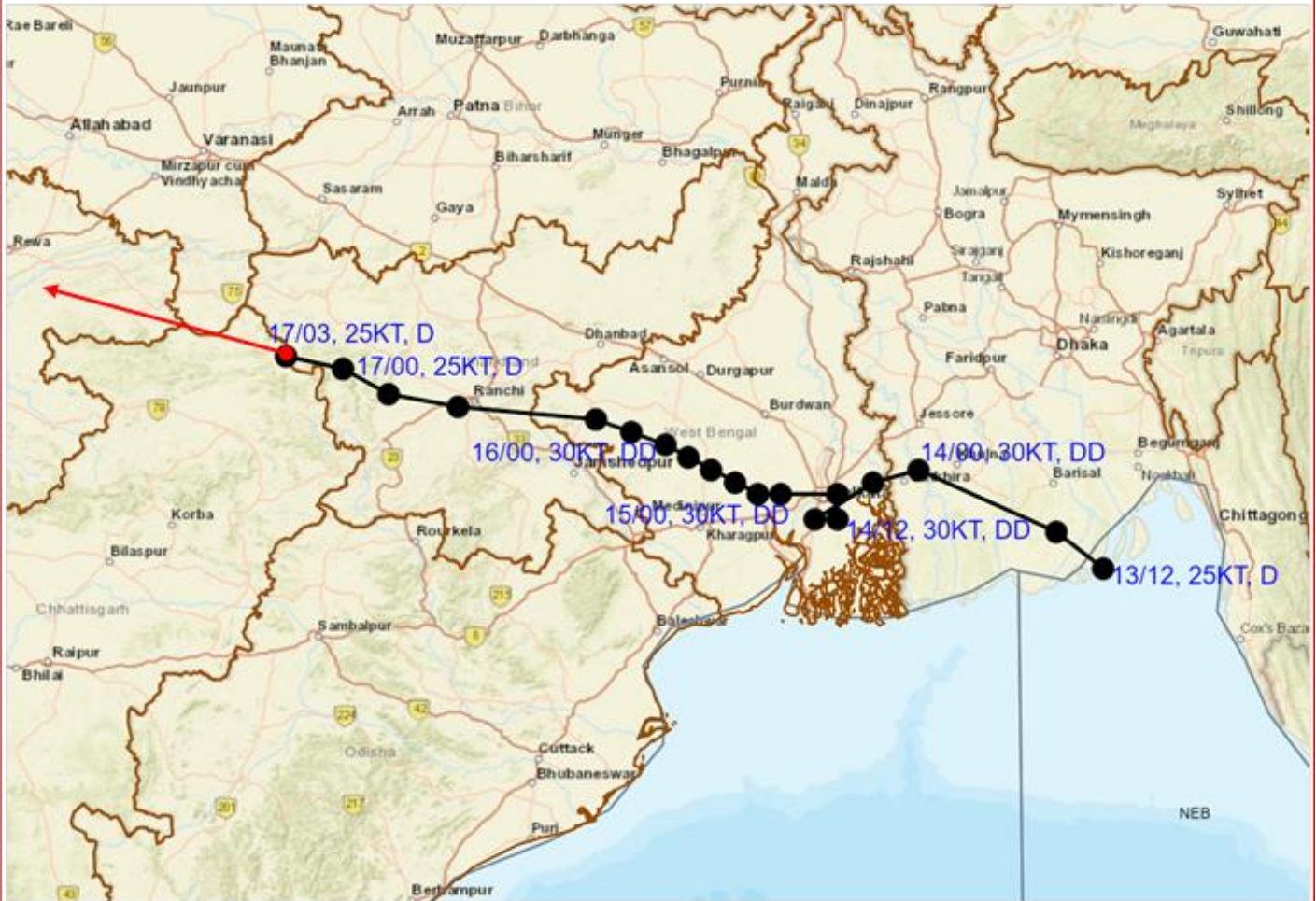
M. T. BUSHAIR
SC.-C, RSMC NEW DELHI



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%
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OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST CHHATTISGARH AND ADJOINING JHARKHAND BASED ON 0300 UTC (0830 IST) OF 17TH 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

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