





# 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 0900 UTC OF 17.09.2024 BASED ON 0600 UTC OF 17.09.2024.

## SUB: DEPRESSION OVER NORTH CHHATTISGARH AND ADJOINING NORTHEAST MADHYA PRADESH

THE DEPRESSION OVER NORTHEAST CHHATTISGARH AND ADJOINING JHARKHAND MOVED WESTWARDS WITH A SPEED OF 25 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 17TH SEPTEMBER 2024, OVER NORTH CHHATTISGARH AND ADJOINING NORTHEAST MADHYA PRADESH NEAR LATITUDE 23.7° N AND LONGITUDE 82.7° E, AROUND 80 KM NORTHWEST OF AMBIKAPUR (42693, CHHATTISGARH), 120 KM SOUTHEAST OF SIDHI (42577,MADHYA PRADESH), 130 KM NORTHEAST OF PENDRA ROAD (42779, CHHATTISGARH), 140 KM WEST-SOUTHWEST OF DALTONGANJ (42587, JHARKHAND) AND 190 KM EAST OF UMARIA (42679, MADHYA PRADESH).

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

AT 0600 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 CONVETION 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 20 KT GUSTING TO 30 KT. ESTIMATED CENTRAL PRESSURE IS 999HPA.

AT 0600 UTC, PENDRA ROAD REPORTED LOWEST MEAN SEA LEVEL PRESSURE (MSLP) OF 999.9 HPA, AND MAXIMUM WIND SPEED (MSW) OF 360°/05KT. AMBIKAPUR REPORTED MSLP OF 1001.9 HPA AND MSW 140°/05KT. BILASPUR REPORTED MSLP OF 1001.4 HPA, MSW OF 240°/05KT.

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

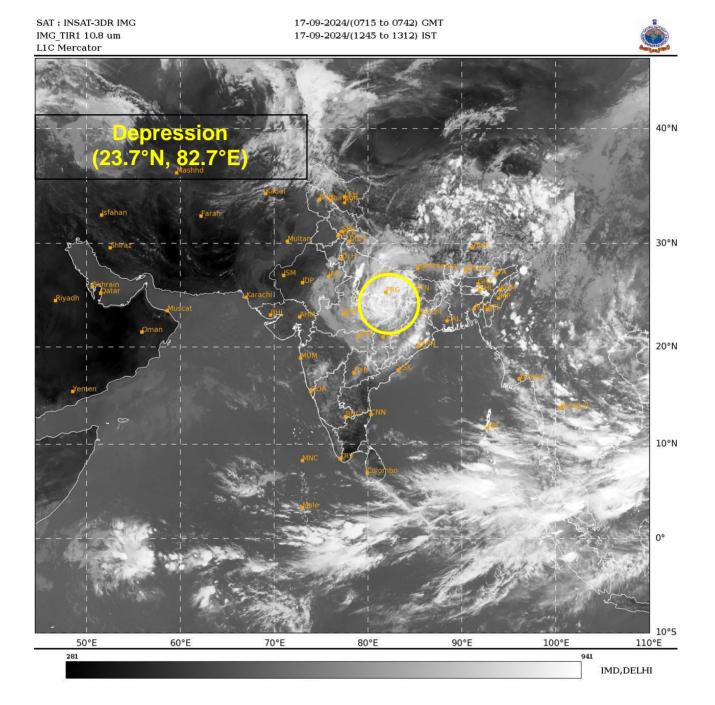
#### **REMARKS**:

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 IS AROUND 15X10<sup>-5</sup> S<sup>-1</sup> AROUND THE SYSTEM AREA. UPPER LEVEL DIVERGENCE IS AROUND 20X10<sup>-5</sup> S<sup>-1</sup> OVER SYSTEM AREA. THE WIND SHEAR IS MODERATE (10-15 KT) OVER SYSTEM AREA AND ALONG THE FORECAST TRACK. VORTICITY AT 850 HPA LEVEL HAS FURTHER DECREASED & IS AROUND 120X10<sup>-5</sup> S<sup>-1</sup> TO THE SOUTH OF SYSTEM CENTRE. THE VORTICITY AT UPPER LEVELS HAS ALSO DECREASED. DEPTH OF CONVECTION HAS ALSO DECREASED. 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 17<sup>TH</sup> SEPTEMBER OVER NORTHEAST MADHYA PRADESH.

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

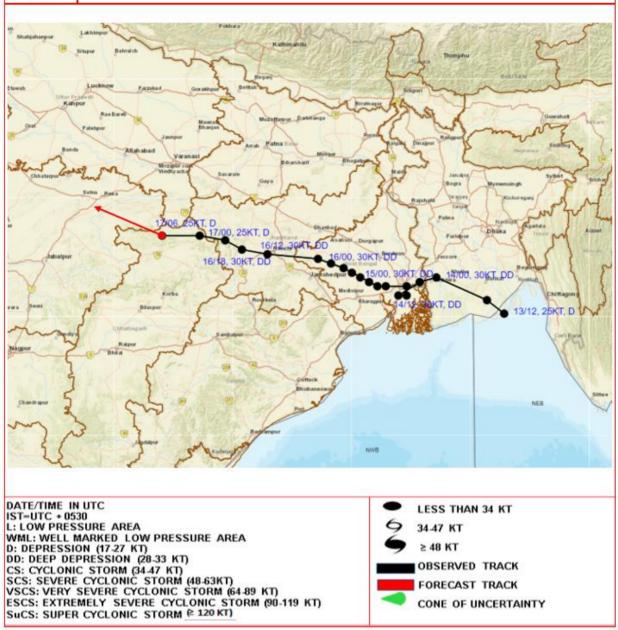
> M. T. BUSHAIR SC.-C, RSMC NEW DELHI



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OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTH CHHATTISGARH AND ADJOINING NORTHEAST MADHYA PRADESH BASED ON 0600 UTC (1130 IST) OF 17<sup>TH</sup> SEPTEMBER 2024.



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