





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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 10.09.2024

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0930 UTC OF 10.09.2024 BASED ON 0600 UTC OF 10.09.2024.

SUB: DEPRESSION OVER NORTH CHHATTISGARH

THE DEPRESSION OVER NORTH CHHATTISGARH MOVED WESTWARDS WITH A SPEED OF 22 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 10TH SEPTEMBER, 2024 OVER THE SAME REGION NEAR LATITUDE 21.9°N AND LONGITUDE 82.1°E, 20 KM SOUTH-SOUTHWEST OF BILASPUR (42782), 90 KM NORTH-NORTHEAST OF RAIPUR (42875), 100 KM SOUTH-SOUTHEAST OF PENDRA ROAD (42779), 140 KM EAST OF MALANJKHAND (42715) AND 260 KM EAST-SOUTHEAST OF JABALPUR (42675).

IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH CHHATTISGARH AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA OVER EAST MADHYA PRADESH AND ADJOINING CHHATTISGARH AROUND 1200 UTC OF TODAY, THE 10TH SEPTEMBER. HOWEVER, THERE IS A POSSIBILITY OF RE-INTENSIFICATION OF THE SYSTEM INTO A DEPRESSION AROUND 1200 UTC OF 11TH SEPTEMBER OVER CENTRAL PARTS OF NORTH MADHYA PRADESH AND ADJOINING UTTAR PRADESH.

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
10.09.24/0600	21.9/82.1	35-45 gusting to 55	Depression
10.09.24/1200	22.1/80.7	25-35 gusting to 45	Well Marked Low Pressure Area

AS PER INSAT 3DR IMAGERY AT 0600 UTC, ASSOCIATED BROKEN LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WEST ODISHA, CHHATTISGARH, EAST MADHYA PRADESH, VIDHARBHA AND ADJOINING TELANGANA WITH MINIMUM CLOUD TOP TEMPERATURE OF -93°C AND MODERATE TO INTENSE CONVECTION LAY OVER TELANGANA AND NORTH COASTAL ANDHRA PRADESH.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED (MSW) IN ASSOCIATION WITH THE SYSTEM IS 20 KTS GUSTING TO 30 KTS. ESTIMATED CENTRAL PRESSURE IS 996 HPA.

AT 0600 UTC, BILASPUR REPORTED LOWEST MEAN SEA LEVEL PRESSURE (MSLP) OF 996.6 HPA, PRESSURE FALL OF -3.3 HPA AND MAXIMUM SUSTAINED WIND SPEED (MSW)

OF 90°/ 02KT. MANDLA (MADHYA PRADESH) REPORTED MSLP OF 996.9 HPA, PRESSURE FALL OF -26.8 HPA AND MSW OF 320°/ 01KT.

REMARKS

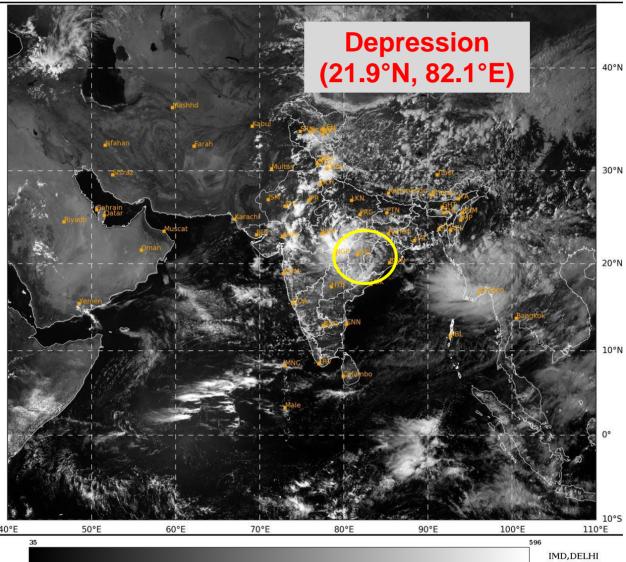
CURRENT ENVIRONMENTAL CONDITONS INDICATE THAT THE DEPRESSION OVER NORTH CHHATTISGARH IS LYING IN A MODERATELY FAVOURABLE ENVIRONMENT. MADDEN JULIAN OSCILLATION (MJO) INDEX IS CURRENTLY IN PHASE 5 WITH AMPLITUDE LESS THAN 1. IT IS LIKELY TO CONTINUE IN SAME PHASE DURING NEXT 2-3 DAYS. THUS, MJO WOULD 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 DURING NEXT 3-4 DAYS.

MOST OF THE MODELS ARE INDICATING THAT THE SYSTEM WILL MOVE ACROSS CHHATTISGARH AND CENTRAL PARTS OF NORTH MADHYA PRADESH. THEREAFTER, IT IS LIKELY TO RECURVE SOUTHEASTWARDS TOWARDS UTTAR PRADESH. THE SYSTEM IS LIKELY TO MOVE SLOW AS A WESTERLY TROUGH AT 400 HPA LEVEL IS APPROACHING FROM WEST. THIS APPROACHING TROUGH IS ALSO LIKELY TO PROVIDE ENHANCED DIVERGENCE IN UPPER LEVELS, LEADING TO REINTENSIFICATION OF SYSTEM AROUND 11TH SEPTMBER. MODELS ARE ALSO INDICATING INCREASED MOISTURE INCURSION INTO THE SYSTEM FROM ARABIAN SEA.

IN VIEW OF ALL THE ABOVE, THE DEPRESSION OVER NORTH CHHATTISGARH IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH CHHATTISGARH AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA OVER EAST MADHYA PRADESH AND ADJOINING CHHATTISGARH AROUND 1200 UTC OF TODAY, THE 10TH SEPTEMBER. HOWEVER, THERE IS A POSSIBILITY OF RE-INTENSIFICATION OF THE SYSTEM INTO A DEPRESSION AROUND 1200 UTC OF 11TH SEPTEMBER OVER CENTRAL PARTS OF NORTH MADHYA PRADESH AND ADJOINING UTTAR PRADESH.

(M. SHARMA) SC.-D, RSMC NEW DELHI SAT: INSAT-3DR IMG Visible Count 0.65 um L1C Mercator 10-09-2024/(0845 to 0912) GMT 10-09-2024/(1415 to 1442) IST







OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTH CHHATTISGARH BASED ON 0600 UTC (1130 IST) OF 10th SEPTEMBER, 2024.







