





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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 02.09.2024

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0630 UTC OF 02.09.2024 BASED ON 0300 UTC OF 02.09.2024.

SUB: (A) DEPRESSION (REMNANT OF CYCLONIC STORM "ASNA") OVER NORTHWEST ARABIAN SEA AND (B) DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA

(A) DEPRESSION (REMNANT OF CYCLONIC STORM "ASNA") OVER NORTHWEST ARABIAN SEA

THE DEPRESSION (REMNANT OF CYCLONIC STORM "ASNA") OVER NORTHWEST ARABIAN SEA MOVED SOUTH-SOUTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 02ND SEPTEMBER, 2024 OVER THE SAME REGION NEAR LATITUDE 20.9°N AND LONGITUDE 61.2°E, ABOUT 210 KM SOUTHEAST OF RAS AL HADD (41270) AND 420 KM SOUTHEAST OF MUSCAT (41256).

IT IS LIKELY TO CONTINUE TO MOVE FURTHER SOUTH-SOUTHWESTWARDS OVER NORTHWEST ARABIAN SEA AND WEAKEN GRADUALLY INTO A WELL MARKED LOW PRESSURE AREA OVER THE SAME REGION DURING NEXT 6 HOURS.

AS PER INSAT 3DR IMAGERY, AT 0300 UTC OF 02^{ND} SEPTEMBER, INTENSITY OF THE SYSTEM IS CHARACTERISED AS T 1.0/C.I.1.5. SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH WEAK CONVECTION LAY OVER NORTHWEST AND ADJOINING WESTCENTRAL ARABIAN SEA, GULF OF OMAN AND NORTH OMAN, (MINIMUM CLOUD TOP TEMPERATURE IS MINUS 20° C).

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 20 KTS GUSTING TO 30 KTS. ESTIMATED CENTRAL PRESSURE (MSLP) IS 999 HPA.

(B) DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA

THE DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA MOVED NORTHWESTWARDS WITH A SPEED OF 8 KMPH DURING THE PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF 02ND SEPTEMBER, 2024 OVER THE SAME REGION NEAR LATITUDE 19.8°N AND LONGITUDE 79.9°E, ABOUT 70 KM EAST-SOUTHEAST OF CHANDRAPUR (43029, MAHARASHTRA), 90 KM SOUTH OF BRAMHAPURI (42946, MAHARASHTRA), 130 KM NORTH-NORTHEAST OF RAMAGUNDAM (43086, TELANGANA), AND 170 KM SOUTHEAST OF WARDHA (42939, MAHARASHTRA).

IT IS LIKELY TO MOVE NEARLY NORTHWESTWARDS ACROSS VIDARBHA AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY

INTENSE CONVECTION OVER WEST VIDARBHA, MARATHWADA, MADHYA MAHARASHTRA AND KONKAN. MINIMUM CTT IS MINUS 80 DEG CELSIUS.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 20 KTS GUSTING TO 30 KTS. ESTIMATED CENTRAL PRESSURE IS 999 HPA. AT 0300 UTC, LOWEST MEAN SEA LEVEL PRESSURE (MSLP) IS REPORTED BY BRAMHAPURI (42946) REPORTED 1000.4 HPA, DEPARTURE OF -0.4HPA AND 24 HOURS PRESSURE CHANGE (P24) OF -3.8 HPA.

REMARKS

THE SYSTEM IS OVER COLDER SEA WITH SEA SURFACE TEMPERATURE IS <26 $^{\circ}$ C OVER WESTCENTRAL ARABIAN SEA. THE TROPICAL CYCLONE HEAT POTENTIAL IS LESS THAN 50 KJ/CM 2 OVER NORTHWEST ARABIAN SEA. THE LOW LEVEL VORTICITY HASFURTHER REDUCED AND IS AROUND 80-100X10 $^{-5}$ S $^{-1}$ TO THE AROUND SYSTEM AREA. LOW LEVEL CONVERGENCE IS 5X10 $^{-5}$ S $^{-1}$ TO THE WESTOF THE SYSTEM CENTRE AND UPPER LEVEL DIVERGENCE IS ALSO 5X10 $^{-5}$ S $^{-1}$ AROUND SYSTEM CENTRE. VERY HIGH WIND SHEAR IS (40-50 KT) OVER THE SYSTEM AREA. SYSTEM IS LIKELY TO WEAKEN INNTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 6 HOURS UNDER THESE UNFAVOURABLE CONDITIONS.

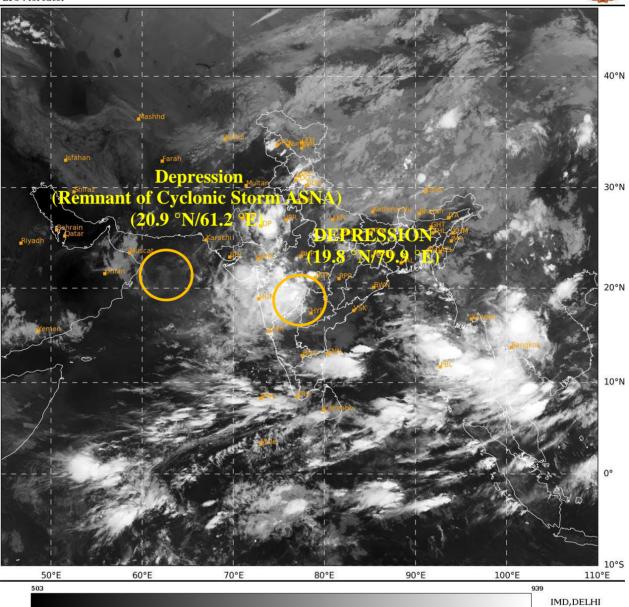
IN ASSOCIATION WITH THE DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA, THE LOW LEVEL VORTICITY HAS DECREASED AND IS AROUND $60-80\times10^{-5}$ S $^{-1}$ OVER VIDARBHA WITH EXTENSION UPTO MID TROPOSPHERIC LEVELS. LOW LEVEL CONVERGENCE IS $15-20\times10^{-5}$ S $^{-1}$ TO THE SOUTHWEST OF SYSTEM AREA. UPPER LEVEL DIVERGENCE IS $05-10\times10^{-5}$ S $^{-1}$ TO THE WEST OF SYSTEM AREA. WIND SHEAR IS MODERATE (15-20) OVER SYSTEM AREA AND ALONG FORECAST TRACK.

CONSIDERING ALL THE ABOVE, IT IS INFERRED THAT:

- (1) DEPRESION OVER NORTHWEST ARABIAN SEA IS LIKELY TO MOVE FURTHER SOUTH-SOUTHWESTWARDS OVER NORTHWEST ARABIAN SEA AND WEAKEN GRADUALLY INTO A WELL MARKED LOW DURING NEXT 6 HOURS OVER THE SAME REGION.
- (2) THE DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA IS LIKELY TO MOVE NEARLY NORTHWESTWARDS ACROSS VIDARBHA AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

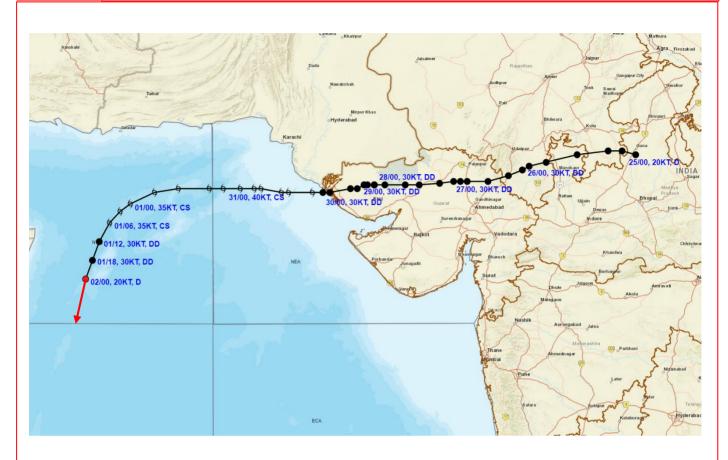
(M SHARMA) SCIENTIST-D RSMC NEW DELHI







OBSERVED AND FORECAST TRACK OF DEPRESSION (REMNANT OF CYCLONIC STORM ASNA) OVER NORTHWEST ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 2nd SEPTEMBER, 2024.



DATE/TIME IN UTC IST=UTC + 0530 L: LOW PRESSURE AREA 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

