





## 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 0900 UTC OF 02.09.2024 BASED ON 0600 UTC OF 02.09.2024.

**SUB:** (a) DEPRESSION (REMNANT OF CYCLONIC STORM "ASNA") WEAKENED INTO A WELL MARKED LOW PRESSURE AREA OVER NORTHWEST ARABIAN SEA AND (b) DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA

(A) DEPRESSION (REMNANT OF CYCLONIC STORM "ASNA") WEAKENED INTO A WELL MARKED LOW PRESSURE AREA OVER NORTHWEST ARABIAN SEA

THE DEPRESSION **(REMNANT OF CYCLONIC STORM "ASNA")** OVER NORTHWEST ARABIAN SEA MOVED SOUTH-SOUTHWESTWARDS, AND WEAKENED INTO A WELL MARKED LOW PRESSURE AREA OVER THE SAME REGION AT 0600 UTC OF TODAY, THE 02<sup>ND</sup> SEPTEMBER, 2024.

IT IS LIKELY TO CONTINUE TO MOVE FURTHER SOUTH-SOUTHWESTWARDS AND WEAKEN GRADUALLY INTO A LOW PRESSURE AREA OVER NORTHWEST ARABIAN SEA DURING NEXT 12 HOURS

AS PER INSAT 3DR IMAGERY, AT 0600 UTC OF 02<sup>ND</sup> SEPTEMBER, INTENSITY OF THE SYSTEM IS CHARACTERISED AS T1.0. 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<sup>O</sup>C).

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 15 KTS GUSTING TO 25 KTS. ESTIMATED CENTRAL PRESSURE (MSLP) IS 1000 HPA.

THIS IS THE LAST UPDATE IN ASSOCIATION WITH THE WELL MARKED LOW PRESSURE AREA (REMNANT CYCLONIC STORM ASNA) OVER NORTHWEST ARABIAN SEA.

### (B) DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA

THE DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 10 KMPH DURING THE PAST 6 HOURS AND LAY CENTERED AT 0600 UTC IST OF 02<sup>ND</sup> SEPTEMBER, 2024 OVER THE SAME REGION NEAR LATITUDE 19.8°N AND LONGITUDE 79.5°E, ABOUT 30 KM SOUTHEAST OF CHANDRAPUR (43029, MAHARASHTRA), 100 KM SOUTH SOUTH-WEST OF BRAMHAPURI (42946, MAHARASHTRA), 120 KM NORTH OF RAMAGUNDAM (43086, TELANGANA), AND 140 KM

SOUTHEAST OF WARDHA (42939, MAHARASHTRA).

IT IS LIKELY TO MOVE NEARLY WEST-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 72 DEG CELSIUS.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 20 KTS GUSTING TO 30 KTS. ESTIMATED CENTRAL PRESSURE IS 999 HPA. AT 0600 UTC, LOWEST MEAN SEA LEVEL PRESSURE (MSLP) IS REPORTED BY CHANDRAPUR (43029) REPORTED 1001.3 HPA, AND 24 HOURS PRESSURE CHANGE (P24) OF -1.1 HPA.

#### **REMARKS**:

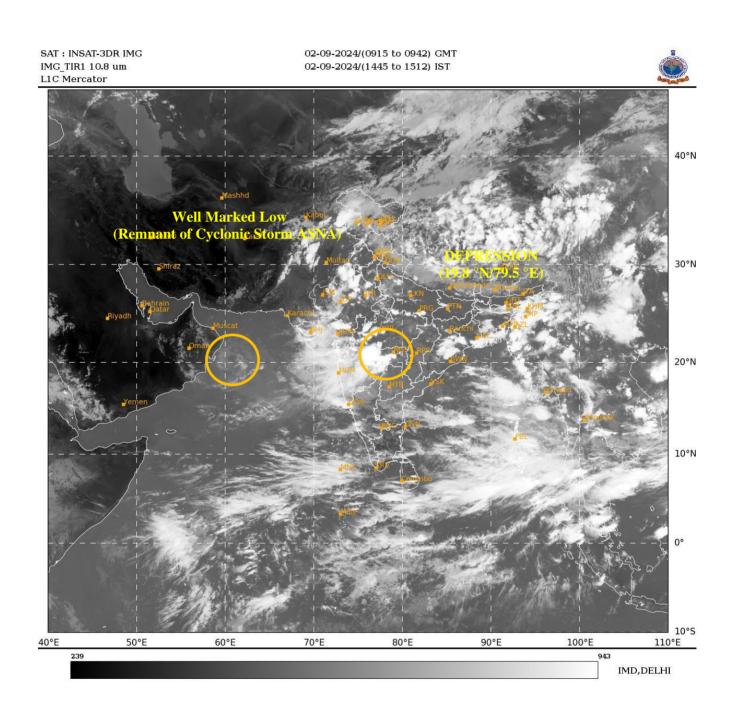
THE SYSTEM IS OVER COLDER SEA WITH SEA SURFACE TEMPERATURE IS  $<26^{\circ}$ C OVER WESTCENTRAL ARABIAN SEA. THE TROPICAL CYCLONE HEAT POTENTIAL IS LESS THAN 50 KJ/CM<sup>2</sup> OVER NORTHWEST ARABIAN SEA. THE LOW LEVEL VORTICITY HASFURTHER REDUCED AND IS AROUND 80-100X10<sup>-5</sup> S<sup>-1</sup> TO THE AROUND SYSTEM AREA. LOW LEVEL CONVERGENCE IS 5X10<sup>-5</sup> S<sup>-1</sup> TO THE WESTOF THE SYSTEM CENTRE AND UPPER LEVEL DIVERGENCE IS ALSO 5X10<sup>-5</sup> S<sup>-1</sup> 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 IS AROUND 60- $80\times10^{-5}$  S<sup>-1</sup> OVER VIDARBHA WITH EXTENSION UPTO MID TROPOSPHERIC LEVELS. LOW LEVEL CONVERGENCE IS 15- $20\times10^{-5}$  S<sup>-1</sup> TO THE SOUTHWEST OF SYSTEM AREA. UPPER LEVEL DIVERGENCE IS 05- $10\times10^{-5}$  S<sup>-1</sup> 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:

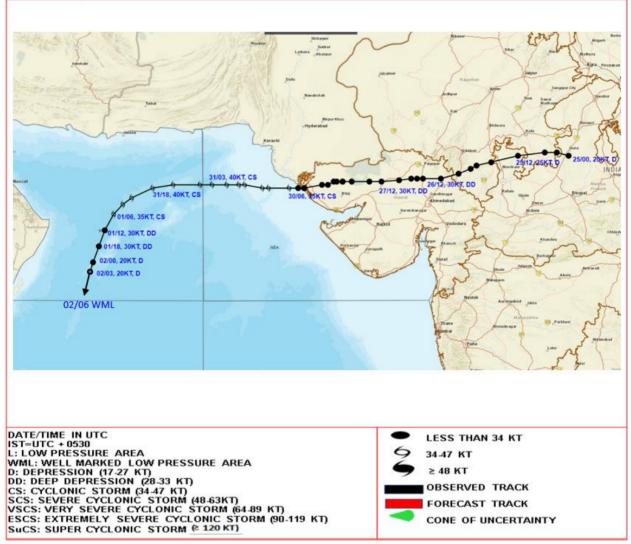
- (1) DEPRESION OVER NORTHWEST ARABIAN SEA IS LIKELY TO CONTINUE TO MOVE FURTHER SOUTH-SOUTHWESTWARDS AND WEAKEN GRADUALLY INTO A LOW PRESSURE AREA OVER NORTHWEST ARABIAN SEA DURING NEXT 12 HOURS
- (2) THE DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA IS LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS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

(M. T. BUSHAIR) SCIENTIST-C RSMC NEW DELHI





# OBSERVED TRACK OF CYCLONIC STORM ASNA OVER NORTH ARABIAN SEA DURING 25<sup>TH</sup> AUGUST-2<sup>ND</sup> SEPTEMBER, 2024.





## OBSERVED AND FORECAST TRACK OF DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA BASED ON 0600 UTC (1130 IST) OF 2<sup>nd</sup> SEPTEMBER, 2024.

