





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 0230 UTC OF 02.09.2024 BASED ON 0000 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

DEEP DEPRESSION (REMNANT OF CYCLONIC STORM "ASNA") OVER NORTHWEST ARABIAN SEA MOVED SOUTH-SOUTHWESTWARDS WITH A SPEED OF 10 KMPH DURING PAST 6 HOURS AND WEAKENED INTO A DEPRESSION AND LAY CENTERED AT 0000 UTC OF 02nd SEPTEMBER, 2024 OVER THE SAME REGION NEAR LATITUDE 21.2°N AND LONGITUDE 61.3°E, ABOUT 200 KM SOUTHEAST OF RAS AL HADD (41270) AND 410 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 SAME REGION DURING NEXT 6 HOURS.

AS PER INSAT 3DR IMAGERY, AT 0000 UTC OF 02^{ND} SEPTEMBER, INTENSITY OF THE SYSTEM IS CHARACTERISED AS T 1.5. WEEK CONVECTION 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 998 HPA.

WARNINGS:

SEA CONDITION AND ADVISORY FOR FISHERMEN IN ASSOCIATION WITH DEPRESSION (REMNANT OF CYCLONIC STORM ASNA) OVER NORTHWEST ARABIAN SEA:

WIND WARNING:

- SQUALLY WIND SPEED REACHING 45-55 KMPH GUSTING TO 65 KMPH IS LIKELY TO PREVAIL OVER NORTHWEST ARABIAN SEA TILL 0600 UTC OF 2ND SEPTEMBER.
- SQUALLY WIND SPEED REACHING 40-50 KMPH GUSTING TO 60 KMPH IS LIKELY TO PREVAIL OVER CENTRAL ARABIAN SEA TILL 0600 UTC OF 2ND SEPTEMBER.

SEA CONDITION:

 ROUGH SEA CONDITION IS LIKELY TO PREVAIL OVER NORTHWEST ADJOINING WESTCENTRAL ARABIAN SEA DURING NEXT 6 HOURS AND WOULD IMPROVE THEREAFTER.

FISHERMEN WARNING:

FISHERMEN ARE ADVISED NOT VENTURE INTO NORTHWEST ARABIAN SEA AND ADJOINING WESTCENTRAL ARABIAN SEA TILL 0600 UTC OF $2^{\rm ND}$ SEPTEMBER.

(B) DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA

THE DEPRESSION OVER SOUTHEAST VIDARBHA AND NEIGHBOURHOOD MOVED WEST-NORTHWETWARDS WITH A SPEED OF 8 KMPH DURING THE PAST 6 HOURS AND LAY CENTERED AT 0000 UTC OF 02ND SEPTEMBER, 2024 OVER EAST VIDARBHA AND ADJOINING TELANGANA NEAR LATITUDE 19.6°N AND LONGITUDE 80.0°E, ABOUT 220 KM WEST-NORTWEST OF JAGDALPUR (43041, CHHATTISGARH), 110 KM NORTH-NORTHEAST OF RAMAGUNDAM (43086,TELANGANA), 110 KM SOUTH OF BRAMHAPURI (42946,MAHARASHTRA) AND 80 KM EAST-SOUTHEAST OF CHANDRAPUR (43029,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 VIDARBHA. MINIMUM CTT IS MINUS 80 DEG CELSIUS.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 20 KTS GUSTING TO 30 KTS. ESTIMATED CENTRAL PRESSURE IS 1000 HPA. AT 0000 UTC, AKOLA (VIDARBHA) REPORTED MEAN SEA LEVEL PRESSURE (MSLP) OF 1000.4 HPA, AND 24 HOURS PRESSURE CHANGE (P24) OF -1.7 HPA. NAGPUR SONEGAON (VIDARBHA) REPORTED MSLP OF 1000.9 HPA, AND P24 OF -0.3 HPA.

REMARKS:

SEA SURFACE TEMPERATURE IS 28-29°C OVER WESTCENTRAL ARABIAN SEA AND IS LIKELY TO DECREASE ALONG THE FORECAST PATH OF SYSTEM. THE TROPICAL CYCLONE HEAT POTENTIAL IS LESS THAN 50 KJ/CM² OVER NORTHWEST ARABIAN SEA. THE LOW LEVEL VORTICITY IS AROUND 100X10⁻⁵ S⁻¹ TO THE SOUTH OF THE SYSTEM AREA. LOW LEVEL CONVERGENCE IS 5X10⁻⁵ S⁻¹ TO THE SOUTH OF THE SYSTEM CENTRE AND UPPER LEVEL DIVERGENCE IS ALSO 5X10⁻⁵ S⁻¹ TO THE NORTHWEST OF THE SYSTEM CENTRE. VERY HIGH WIND SHEAR IS (40-50 KT) OVER THE SYSTEM AREA. THE NORTHEASTERLY WINDS IN THE UPPER LEVELS OVER SYSTEM AREA ARE STEERING THE SYSTEM SOUTHWESTWARDS.

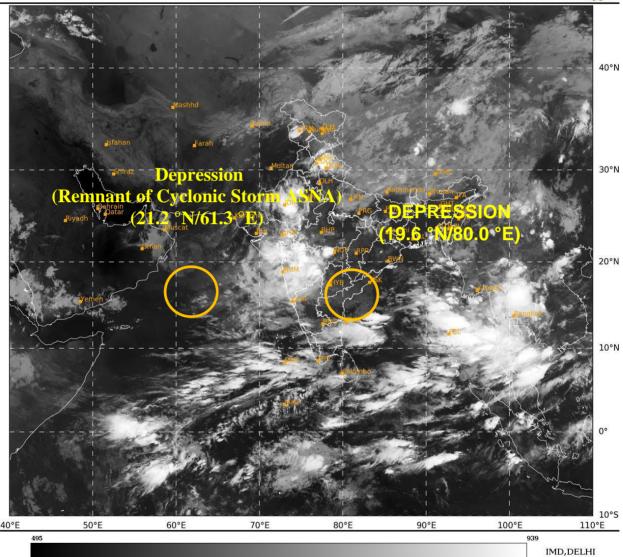
IN ASOCIATION WITH THE DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA, THE LOW LEVEL VORTICITY IS POSITIVE AND IS AROUND 80-100X10 $^{-5}$ S $^{-1}$ OVER VIDARBHA WITH EXTENSION UPTO MID TROPOSPHERIC LEVELS. LOW LEVEL CONVERGENCE IS 15-20X10 $^{-5}$ S $^{-1}$ AND IS NORTH-SOUTH ORIENTED AND UPPER LEVEL DIVERGENCE IS 10-20X10 $^{-5}$ S $^{-1}$ AND IS WEST-EAST ORIENTED OVER MAHARASHTRA AND 5-10 X10 $^{-5}$ S $^{-1}$ OVER GUJARAT. WIND SHEAR IS 10-15 ALONG THE 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 BY 0600 UTC OF 2ND SEPTEMBER 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.

(JOHNY C J) SCIENTIST-D RSMC NEW DELHI SAT: INSAT-3DR IMG IMG_TIR1 10.8 um L1C Mercator 02-09-2024/(0045 to 0112) GMT 02-09-2024/(0615 to 0642) IST





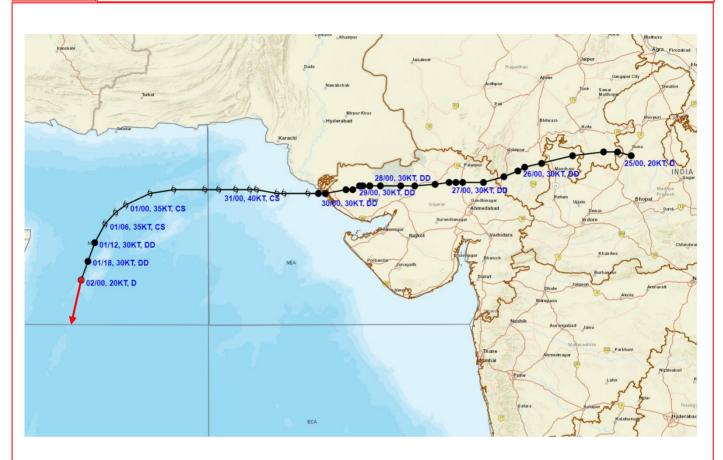


OBSERVED AND FORECAST TRACK OF DEPRESSION OVER EAST VIDARBHA AND ADJOINING TELANGANA BASED ON 0000 UTC (0530 IST) OF 2nd SEPTEMBER, 2024.





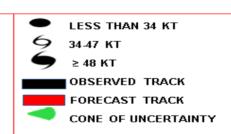
OBSERVED AND FORECAST TRACK OF DEPRESSION (REMNANT OF CYCLONIC STORM ASNA) OVER NORTHWEST ARABIAN SEA BASED ON 0000 UTC (0530 IST) OF 2nd SEPTEMBER, 2024.



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)



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