





# REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI TROPICAL CYCLONE ADVISORY NO. 18

DEMS-RSMCSPECIAL TROPICAL CYCLONES NEW DELHI DATED 01.09.2024

FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO:

STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)

STORM WARNING CENTRE, DHAKA (BANGLADESH)

STORM WARNING CENTRE, KARACHI (PAKISTAN)

**METEOROLOGICAL OFFICE, MALE (MALDIVES)** 

OMAN METEOROLOGICAL DEPARTMENT,

**MUSCAT (THROUGH RTH JEDDAH)** 

YEMEN METEOROLOGICAL SERVICES,

REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)

NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)

PRESIDENCY OF METEOROLOGY AND ENVIRONMENT.

SAUDI ARABIA (THROUGH RTH JEDDAH)

IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)

**QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)** 

TROPICAL CYCLONE ADVISORY NO. 18 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1130 UTC OF 01.09.2024 BASED ON 0900 UTC OF 01.09.2024

SUB: (A) CYCLONIC STORM "ASNA" (PRONOUNCED AS AS-NA) OVER NORTHWEST ARABIAN SEA AND (B) DEPRESSION OVER SOUTH CHHATTISGARH AND ADJOINING SOUTH ODISHA

(A) CYCLONIC STORM "ASNA" (PRONOUNCED AS AS-NA) OVER NORTHWEST ARABIAN SEA

THE **CYCLONIC STORM "ASNA" (PRONOUNCED AS AS-NA)** OVER NORTHWEST ARABIAN SEA MOVED SOUTHWESTWARDS WITH A SPEED OF 13 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0900 UTC OF TODAY, THE 01<sup>ST</sup> SEPTEMBER, 2024 OVER THE SAME REGION NEAR LATITUDE 22.5°N AND LONGITUDE 61.80°E, ABOUT 210 KM EAST-NORTHEAST OF RAS AL HADD (41270), 350 KM SOUTH-SOUTHWEST OF PASNI (41780), 380 KM EAST-SOUTHEAST OF MUSCAT (41256).

IT IS LIKELY TO MOVE SOUTHWESTWARDS OVER NORTHWEST ARABIAN SEA AND WEAKEN GRADUALLY INTO A DEEP DEPRESSION BY 1200 UTC OF TODAY, THE  $1^{\rm ST}$  SEPTEMBER AND INTO A DEPRESSION BY 0000 UTC OF TOMORROW, THE  $2^{\rm ND}$  SEPTEMBER OVER THE SAME REGION.

AS PER INSAT 3DR IMAGERY, AT 0900 UTC OF 01<sup>ST</sup> SEPTEMBER, INTENSITY OF THE SYSTEM IS CHARACTERISED AS T 2.0/C.I. 2.5. THE CLOUD MASS SHOWS FURTHER DISORGANISATION. SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE CONVECTION LAY OVER NORTHWEST AND SOUTHEAST ARABIAN SEA, (MINIMUM CLOUD TOP TEMPERATURE IS MINUS 70°C). MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST IRAN, ADJOINING SOUTH PAKISTAN, GULF OF OMAN AND NORTH OMAN.

### FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME (UTC)	POSITION (LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
01.09.24/0900	22.5/61.8	60-70 GUSTING TO 80	CYCLONIC STORM
01.09.24/1200	22.3/61.6	50-60 GUSTING TO 70	DEEP DEPRESSION
01.09.24/1800	22.0/61.4	40-50 GUSTING TO 60	DEPRESSION
02.09.24/0000	21.6/61.1	35-45 GUSTING TO 55	DEPRESSION

# **WARNINGS:**

SEA CONDITION AND ADVISORY FOR FISHERMEN IN ASSOCIATION WITH CYCLONIC STORM ASNA OVER NORTHWEST ARABIAN SEA:

### WIND WARNING:

- SQUALLY WIND SPEED REACHING 35-45 KMPH GUSTING TO 55 KMPH IS LIKELY TO PREVAIL OVER CENTRAL PARTS OF NORTH ARABIAN SEA BY 1200 UTC OF 1<sup>ST</sup> SEPTEMBER AND DECREASE THEREAFTER.
- GALE WIND SPEED REACHING 60-70 KMPH GUSTING TO 80 KMPH ARE PREVAILING OVER NORTHWEST ARABIAN SEA. IT WOULD GRADUALLY DECREASE BECOMING SQUALLY WIND SPEED REACHING 50-60 KMPH GUSTING TO 70 KMPH BY 1200 UTC OF 1ST SEPTEMBER AND IMPROVE THEREAFTER.
- SQUALLY WIND SPEED REACHING 45-55 KMPH GUSTING TO 65 KMPH IS LIKELY TO PREVAIL OVER CENTRAL ARABIAN SEA TILL 2ND SEPTEMBER MORNING AND IMPROVE GRADUALLY THEREAFTER.
- STRONG WIND SPEED REACHING 30-40 KMPH GUSTING TO 50 KMPH IS LIKELY ALONG AND OFF GUJARAT, MAHARASHTRA AND KARNATAKA COAST BY 1200 UTC OF 1<sup>ST</sup> SEPTEMBER.

# **SEA CONDITION:**

- HIGH SEA CONDITIONS WOULD PREVAIL OVER NORTHWEST ARABIAN SEA TILL 1800 UTC OF 1<sup>ST</sup> SEPTEMBER AND WOULD GRADUALLY IMPROVE BECOMING VERY ROUGH TO ROUGH BY 0000 UTC OF 2<sup>ND</sup> SEPTEMBER AND IMRPOVE THEREAFTER.
- SQUALLY WEATHER WITH ROUGH TO MODERATE SEA CONDITIONS IS LIKELY ALONG & OFF SOUTH IRAN AND ADJOINING PAKISTAN COAST TILL 1200 UTC OF 1<sup>ST</sup> SEPTEMBER.
- VERY ROUGH TO ROUGH SEA CONDITION ARE LIKELY OVER CENTRAL PARTS OF NORTH ARABIAN SEA TILL 1200 UTC OF 1<sup>ST</sup> SEPTEMBER AND WOULD IMPROVE THEREAFTER.
- ROUGH SEA CONDITION IS LIKELY OVER ADJOINING WESTCENTRAL ARABIAN SEA TILL 2ND SEPTEMBER.
- ROUGH SEA CONDITION IS LIKELY OVER ADJOINING WESTCENTRAL ARABIAN SEA TILL  $2^{\rm ND}$  SEPTEMBER.

### FISHERMEN WARNING:

FISHERMEN ARE ADVISED NOT VENTURE INTO

• NORTHWEST ARABIAN SEA TILL 2<sup>ND</sup> SEPTEMBER.

- NORTH ARABIAN SEA AND ALONG & OFF PAKISTAN COASTS TILL 1200 UTC OF 1<sup>ST</sup> SEPTEMBER
- WESTCENTRAL ARABIAN SEA TILL 2ND SEPTEMBER.

### (B) DEPRESSION OVER SOUTH CHHATTISGARH AND ADJOINING SOUTH ODISHA

THE DEPRESSION OVER SOUTH ODISHA AND ADJOINING SOUTH CHHATTISGARH MOVED SLOWLY WESTWARDS WITH A SPEED OF 08 KMPH DURING THE PAST 6 HOURS AND LAY CENTERED AT 0900 UTC OF TODAY, THE 01ST SEPTEMBER, 2024 OVER SOUTH CHHATTISGARH AND ADJOINING SOUTH ODISHA NEAR LATITUDE 18.7°N AND LONGITUDE 82.4°E, ABOUT 40 KM SOUTH-SOUTHWEST OF JAGDALPUR (CHHATTISGARH), 40 KM NORTH OF MALKANGIRI (ODISHA), 180 KM NORTHWEST OF VISAKHAPATNAM (ANDHRA PRADESH), 240 KM WEST OF KALINGAPATNAM (ANDHRA PRADESH) AND 260 KM EAST OF RAMAGUNDAM (TELANGANA).

IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS SOUTH CHHATTISGARH & VIDARBHA AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 18 HOURS.

ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH COASTAL ANDHRA PRADESH, ADJOINING SOUTH ODISHA, AND NEIGHBOURHOOD AND MODERATE TO INTENSE CONVECTION LAY OVER TELANGANA, RAYALSEEMA, NORTH INTERIOR KARNATAKA, AND MAHARASHTRA. MINIMUM CTT IS MINUS 93 DEG CELSIUS.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 20-25 KTS GUSTING TO 35 KTS. ESTIMATED CENTRAL PRESSURE IS 997 HPA. AT 1200 UTC, JAGDALPUR (CHHATTISGARH) REPORTED MEAN SEA LEVEL PRESSURE (MSLP) OF 997.3 HPA, AND 24 HOURS PRESSURE CHANGE (P24) OF -0.9 HPA. BRAHMAPURI (VIDARBHA) REPORTED MSLP OF 997.4 HPA, AND P24 OF -0.8 HPA.

# SEA CONDITION AND ADVISORY FOR FISHERMEN IN ASSOCIATION WITH DEPRESSION OVER SOUTH ODISHA AND ADJOINING SOUTH CHHATTISGARH

### **WIND WARNING:**

- SQUALLY WEATHER WITH WIND SPEED REACHING 40-50 KMPH GUSTING TO 60 KMPH LIKELY OVER WESTCENTRAL AND ADJOINING NORTHWEST BAY OF BENGAL AND ALONG AND OFF NORTH ANDHRA PRADESH & SOUTH ODISHA COASTS TILL 1200 UTC OF 1<sup>ST</sup> SEPTEMBER AND GRADUALLY DECREASE THEREAFTER.
- SQUALLY WEATHER WITH WIND SPEED REACHING 35-45 KMPH GUSTING TO 55 KMPH IS LIKELY OVER NORTH ANDHRA PRADESH, SOUTH ODISHA, SOUTH CHHATTISGARH, TELANGANA TILL 0000 UTCOF 2<sup>ND</sup> SEPTEMBER.

### **SEA CONDITION:**

 ROUGH SEA CONDITION IS VERY LIKELY TO PREVAIL OVER WESTCENTRAL AND ADJOINING NORTHWEST BAY OF BENGAL AND ALONG & OFF NORTH ANDHRA PRADESH & SOUTH ODISHA COASTS ON 1<sup>ST</sup> SEPTEMBER.

## **FISHERMEN WARNING:**

 FISHERMEN ARE ADVISED NOT VENTURE INTO WESTCENTRAL & ADJOINING NORTHWEST BAY OF BENGAL AND ALONG & OFF SOUTH ODISHA AND NORTH ANDHRA PRADESH COASTS ON 1<sup>ST</sup> SEPTEMBER.

### **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 AS. TOTAL PRECIPITABLE WATER IMAGERY INDICATES WARM MOIST AIR INCURSION INTO THE CORE. HOWEVER, DRY COLD AIR INCURSION FROM NORTHWEST WILL GRADUALLY COMMENCE INTO THE SYSTEM AREA. WATER VAPOUR IMAGERY INDICATES MOISTURE UPTO MIDTROPOSPHERIC LEVELS.THE LOW LEVEL VORTICITY HAS DECREASED AND IS AROUND 100X10⁻⁵ S⁻¹ TO THE SOUTH OF THE SYSTEM AREA. LOW LEVEL CONVERGENCE IS 10X10⁻⁵ S⁻¹ TO THE SOUTHEAST OF THE SYSTEM CENTRE AND UPPER LEVEL DIVERGENCE IS ALSO 10X10⁻⁵ S⁻¹ TO THE SOUTH OF THE SYSTEM CENTRE. WIND SHEAR IS LOW TO MODERATE (15-20 KT) OVER SYSTEM AREA AND IS LIKELY TO BECOME HIGH OVER THE FORECAST PATH OF SYSTEM. THE NORTHEASTERLY WINDS IN THE UPPER LEVELS OVER SYSTEM AREA ARE STEERING THE SYSTEM SOUTHWESTWARDS.

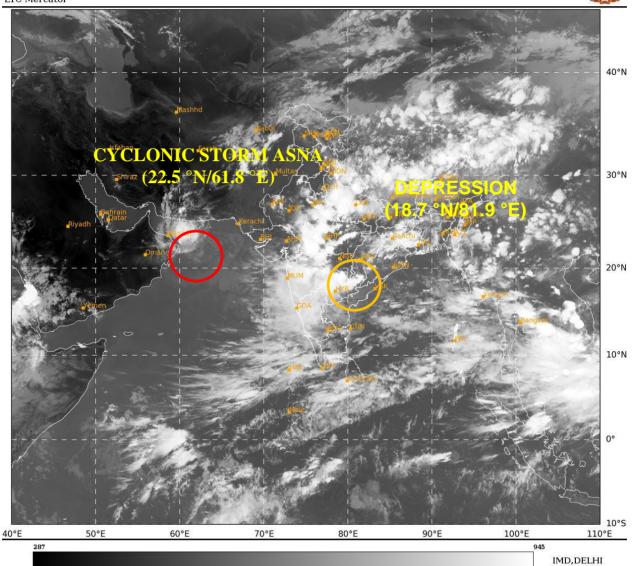
IN ASOCIATION WITH THE DEPRESSION OVER SOUTH ODISHA AND ADJOINING SOUTH CHHATTISGARH & NORTH ANDHRA PRADESH, THE LOW LEVEL VORTICITY IS POSITIVE AND IS AROUND 100X10<sup>-5</sup> S<sup>-1</sup> OVER COASTAL ANDHRA PRADESH WITH EXTENSION UPTO MID TROPOSPHERIC LEVELS. LOW LEVEL CONVERGENCE IS 30X10<sup>-5</sup> S<sup>-1</sup> TO THE SOUTHWEST OF SYSTEM AREA AND UPPER LEVEL DIVERGENCE IS 20X10<sup>-5</sup> S<sup>-1</sup> TO THE WEST OF SYSTEM AREA. WIND SHEAR IS MODERATE OVER THE SYSTEM AREA AND IS LIKELY TO BE HIGH ALONG THE PREDICTED PATH.

### CONSIDERING ALL THE ABOVE, IT IS INFERRED THAT:

- (1) CYCLONIC STORM "ASNA" (PRONOUNCED AS AS-NA) OVER NORTHWEST ARABIAN SEA IS LIKELY TO MOVE SOUTHWESTWARDS OVER NORTHWEST ARABIAN SEA, WEAKEN INTO A DEEP DEPRESSION BY 1200 UTC OF TODAY, THE  $1^{\rm ST}$  SEPTEMBER AND INTO A DEPRESSION BY 0000 UTC OF  $2^{\rm ND}$  SEPTEMBER OVER THE SAME REGION.
- (2) THE DEPRESSION OVER SOUTH CHHATTISGARH AND ADJOINING SOUTH ODISHA IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS SOUTH CHHATTISGARH AND VIDARBHA AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA BY 0000 UTC OF  $2^{\rm ND}$  SEPTEMBER.

(M SHARMA) SCIENTIST-D RSMC NEW DELHI

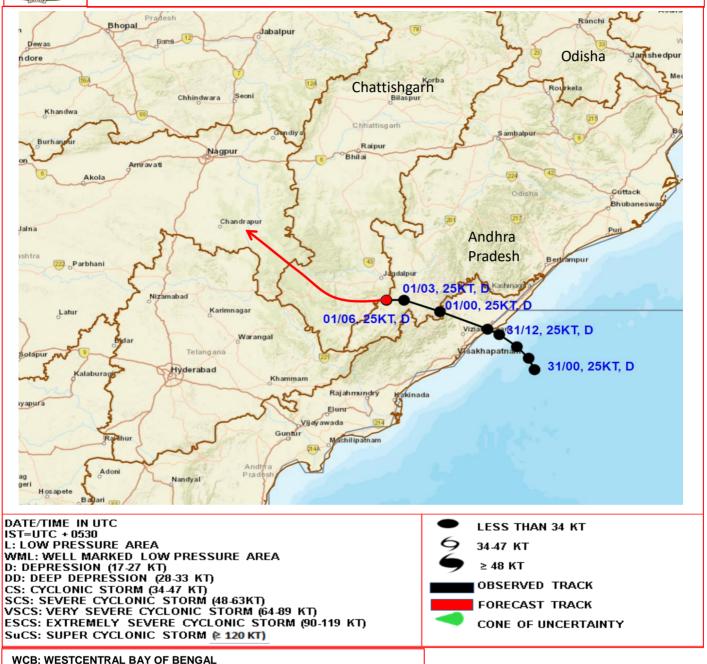






ECB: EASTCENTRAL BAY OF BENGAL NWB:NORTHWEST BAY OF BENGAL

# OBSERVED AND FORECAST TRACK OFDEPRESSION OVER SOUTH ODISHA AND ADJOINING SOUTH CHHATTISGARH BASED ON 0600 UTC (1130 IST) OF 1<sup>st</sup>SEPTEMBER, 2024.





OBSERVED AND FORECAST TRACK ALONGWITH CONE **UNCERTAINTY OF CYCLONIC STORM ASNAOVER NORTHWEST ARABIAN** SEABASED ON 0600 UTC (1130 IST) OF 1<sup>st</sup>SEPTEMBER, 2024.



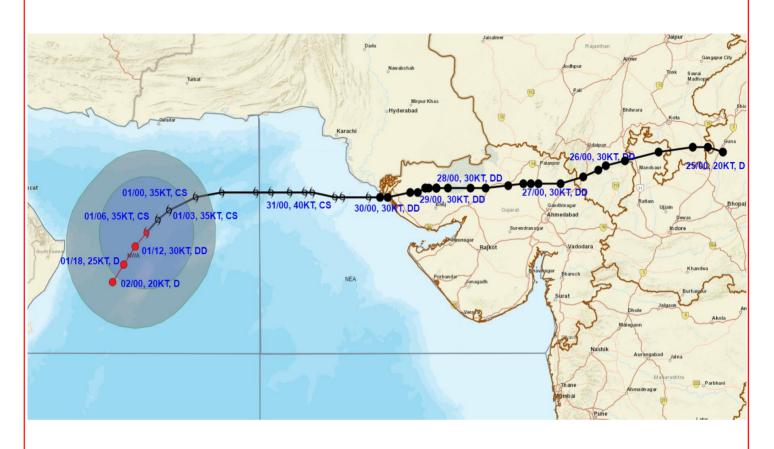
DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
S...CS: SUPER CYCLONIC STORM (90-119 KT) DATE/TIME IN UTC

SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT 34-47 KT ≥ 48 KT OBSERVED TRACK FORECAST TRACK CONE OF UNCERTAINTY



**OBSERVED AND FORECAST TRACK ALONGWITH WIND DISTRIBUTION** IN ASSOCIATION WITH CYCLONIC STORM ASNA OVER NORTHWEST ARABIAN SEA BASED ON 0600 UTC (1130 IST) OF 1st SEPTEMBER, 2024.



DATE/TIME IN UTC IST=UTC + 0530 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)



INFACT OVER THE SEA			
MSW (knot/kmph)	Impact	Action	
28-33 (52-61)	Very rough seas	Total suspension of fishing operations	
34-49 (62-91)	High to very high seas	Total suspension of fishing operations	
50-63 (92-117)	Very high seas	Total suspension of fishing operations	
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations	





