





REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI TROPICAL CYCLONE ADVISORY NO. 15

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. 15 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0400 UTC OF 01.09.2024 BASED ON 0000 UTC OF 01.09.2024

SUB: (A) CYCLONIC STORM "ASNA" (PRONOUNCED AS AS-NA) OVER NORTHWEST ARABIAN SEA AND (B) DEPRESSION OVER SOUTH ODISHA AND ADJOINING NORTH ANDHRA PRADESH & SOUTH CHATTISGARH

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

THE **CYCLONIC STORM "ASNA" (PRONOUNCED AS AS-NA)** OVER NORTHWEST AND ADJOINING NORTHEAST ARABIAN SEA MOVED SOUTHWESTWARDS WITH A SPEED OF 13 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0000 UTC OF 1ST SEPTEMBER, 2024 OVER NORTHWEST ARABIAN SEA NEAR LATITUDE 23.2°N AND LONGITUDE 62.6°E, 250 KM SOUTH-SOUTHWEST OF PASNI (41759), 500 KM WEST-SOUTHWEST OF KARACHI (41780), 640 KM WEST OF NALIYA (42631) AND 440 KM EAST OF MUSCAT (41256).

IT IS LIKELY TO MOVE SOUTHWESTWARDS OVER NORTHWEST ARABIAN SEA WEAKEN INTO A DEEP DEPRESSION BY 12 UTC OF TODAY AND INTO A DEPRESSION BY 00 UTC OF $2^{\rm ND}$ SEPTEMBER OVER THE SAME REGION.

AS PER INSAT 3DR IMAGERY, AT 0000 UTC OF 01ST SEPTEMBER, INTENSITY OF THE SYSTEM IS CHARACTERISED AS T 2.5. SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHWEST ARABIAN SEA, (MINIMUM CLOUD TOP TEMPERATURE IS MINUS 90°C). MODERATE TO INTENSE CONVECTION LAY OVER OMAN, SOUTHEAST IRAN AND ADJOINING PAKISTAN. ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 40 KTS GUSTING TO 50 KTS. ESTIMATED CENTRAL PRESSURE (MSLP) IS 990 HPA.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME (UTC)	POSITION (LAT. ºN/ LONG. ºE)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
01.09.24/0000	23.2/62.6	65-75 GUSTING TO 85	CYCLONIC STORM
01.09.24/0600	22.8/62.1	60-70 GUSTING TO 80	CYCLONIC STORM
01.09.24/1200	22.4/61.7	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 CENTRAL PARTS OF NORTH ARABIAN SEA:

WIND WARNING:

- SQUALLY WIND SPEED REACHING 35-45 KMPH GUSTING TO 55 KMPH IS LIKELY TO PREVAIL ALONG & OFF PAKISTAN DURING NEXT 12 HOURS.
- SQUALLY WIND SPEED REACHING 35-45 KMPH GUSTING TO 55 KMPH IS LIKELY TO PREVAIL OVER CENTRAL PARTS OF NORTH ARABIAN SEA DURING NEXT 12 HOURS AND DECREASE THEREAFTER.
- GALE WIND SPEED REACHING 65-75 KMPH GUSTING TO 85 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 DURING NEXT 24 HOURS.

SEA CONDITION:

- HIGH SEA CONDITIONS WOULD PREVAIL OVER NORTHWEST ARABIAN SEA TILL 1800 UTC OF 1 SEPTEMBER AND WOULD BECOME VERY ROUGH TO ROUGH TILL 0000 UTC OF $2^{\rm ND}$ SEPTEMBER AND IMRPOVE THEREAFTER.
- SQUALLY WEATHER WITH ROUGH TO MODERATE SEA CONDITIONS IS LIKELY ALONG & OFF PAKISTAN COAST TILL DURING NEXT 12 HOURS.
- VERY ROUGH TO ROUGH SEA CONDITION ARE LIKELY OVER CENTRAL PARTS OF NORTH ARABIAN SEA DURING NEXT 12 HOURS 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 2ND SEPTEMBER.
- NORTH ARABIAN SEA AND ALONG & OFF PAKISTAN COASTS TILL 1200 UTC OF 1ST SEPTEMBER
- WESTCENTRAL ARABIAN SEA TILL 2ND SEPTEMBER.

(B) DEPRESSION OVER SOUTH ODISHA AND ADJOINING NORTH ANDHRA PRADESH AND SOUTH CHATTISGARH

THE DEPRESSION OVER NORTH ANDHRA AND SOUTH ODISHA COASTS MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0000 UTC OF THE 01ST SEPTEMBER OVER SOUTH ODISHA AND ADJOINING NORTH ANDHRA PRADESH AND SOUTH CHATTISGARH NEAR LATITUDE 18.5°N AND LONGITUDE 83.0°E, ABOUT 90 KM NORTH-NORTHWEST OF VISAKHAPATNAM (ANDHRA PRADESH), 120 KM WEST OF KALINGAPATNAM (ANDHRA PRADESH), 120 KM EAST OF MALKANGIRI (ODISHA), 120 KM EAST-SOUTHEAST OF JAGDALPUR (CHHATTISGARH) AND 220 KM WEST-SOUTHWEST OF GOPALPUR (ODISHA) AND 380 KM EAST OF RAMAGUNDAM (TELANGANA)

IT IS LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS ACROSS NORTH ANDHRA PRADESH & ADJOINING SOUTH ODISHA, CHHATISGARH AND TELANGANA DURING NEXT 24 HOURS.

ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH COASTAL ANDHRA PRADESH, TELANGANA, RAYALSEEMA, AND CHHATISGARH. MINIMUM CTT IS MINUS 93 DEG CELSIUS.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 20-25 KTS GUSTING TO 35 KTS. ESTIMATED CENTRAL PRESSURE IS 996 HPA. AT 0000 UTC, VISAKHAPATNAM REPORTED MSLP OF 1001.3 HPA. DEPARTURE FROM NORMAL IS -3.0 HPA

SEA CONDITION AND ADVISORY FOR FISHERMEN IN ASSOCIATION WITH DEPRESSION OVER WESTCENTRAL AND ADJOINING NORTHWEST BAY OF BENGALOVER THE BAY OF BENGAL

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 DURING NEXT 12 HOURS 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 DURING NEXT 24 HOURS.

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 1ST 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 1ST SEPTEMBER.

REMARKS:

THE MADDEN JULIAN OSCILLATION (MJO) INDEX IS CURRENTLY IN PHASE 5 WITH AMPLITUDE GREATER THAN 1. IT WILL MOVE ACROSS THE SAME PHASE DURING NEXT 5 DAYS WITH AMPLITUDE REMAINING HIGHER THAN 1 THROUGHOUT. MJO PHASE AND AMPLITUDE IS HIGHLY FAVOURABLE FOR ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE BAY OF BENGAL.

THE LOW LEVEL VORTICITY IS 150X10⁻⁵ S⁻¹ TO THE SOUTH OF THE SYSTEM AREA. LOW LEVEL CONVERGENCE IS 10X10⁻⁵ S⁻¹ TO THE SOUTH OF THE SYSTEM CENTRE AND UPPER LEVEL DIVERGENCE IS ALSO 10X10⁻⁵ S⁻¹ TO THE SOUTHWEST OF THE SYSTEM CENTRE. WIND SHEAR IS LOW TO MODERATE (15-20 KT) OVER CENTRAL PART OF NORTH AS. THE SYSTEM IS TRACKING WESTWARDS UNDER THE INFLUENCE OF EASTERLIES PREVAILING TO THE SOUTH OF RIDGE.

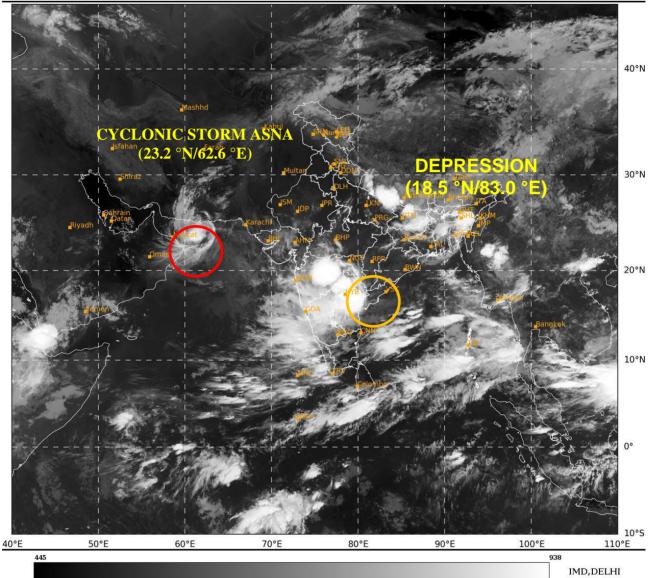
OVER THE BOB, THE LOW LEVEL VORTICITY IS POSITIVE AND IS AROUND 150×10^{-5} S⁻¹ OVER CENTRAL BOB WITH EXTENSION UPTO MID TROPOSPHERIC LEVELS. LOW LEVEL CONVERGENCE IS 20×10^{-5} S⁻¹ TO THE SOUTH OF LOW PRESSURE AREA AND UPPER LEVEL DIVERGENCE IS 30×10^{-5} S⁻¹ AROUND THE SYSTEM AREA EXTENDING UPTO SOUTHWEST BOB. WIND SHEAR IS LOW TO MODERATE OVER CENTRAL AND NORTH BOB..

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 12 UTC OF TODAY AND INTO A DEPRESSION BY 00 UTC OF $2^{\rm ND}$ SEPTEMBER OVER THE SAME REGION.
- (2) THE DEPRESSION OVER SOUTH ODISHA AND ADJOINING NORTH ANDHRA PRADESH AND SOUTH CHATTISGARH IS LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS ACROSS NORTH ANDHRA PRADESH & ADJOINING SOUTH ODISHA, CHHATISGARH AND TELANGANA DURING NEXT 24 HOURS.

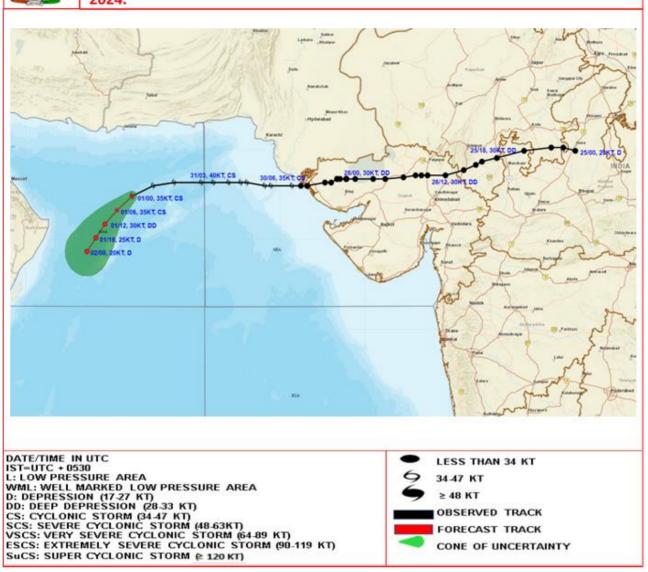
(SHIBIN B) SCIENTIST-D RSMC NEW DELHI

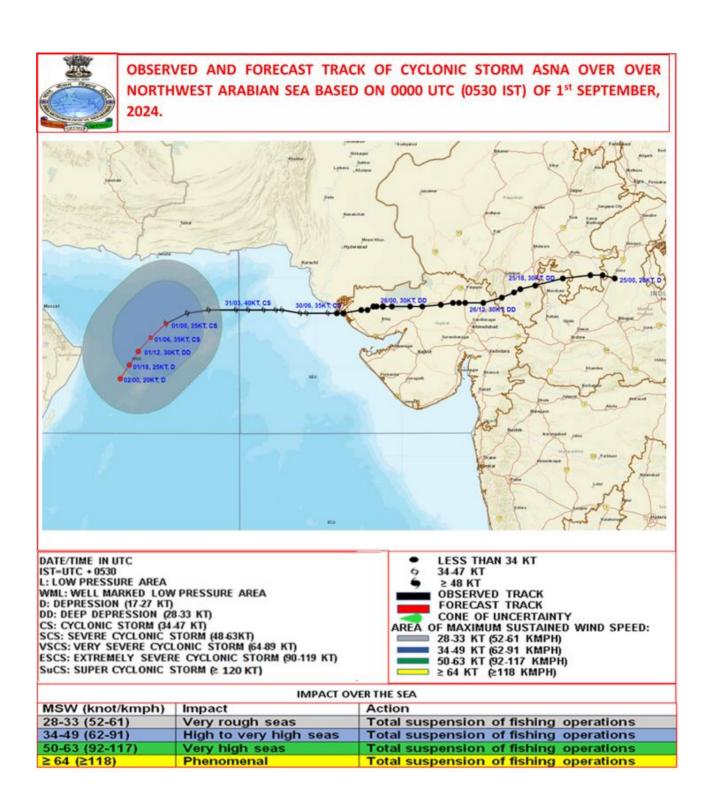


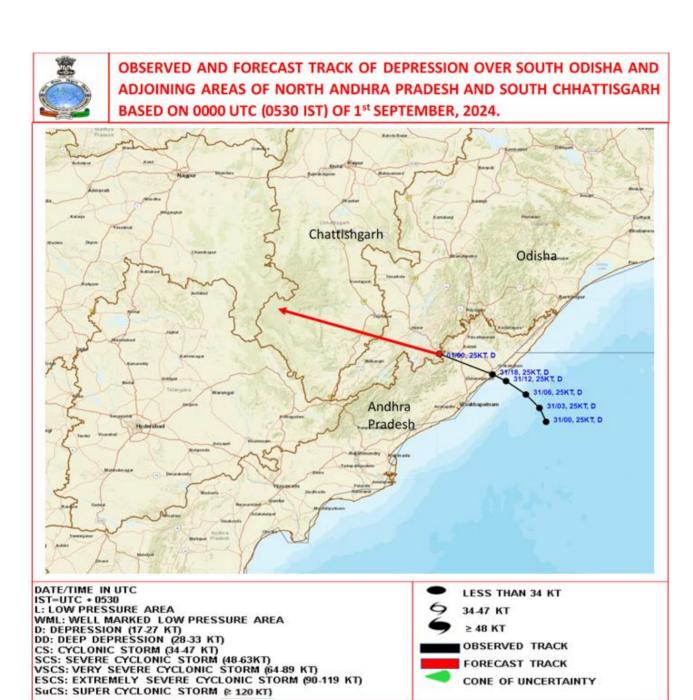




OBSERVED AND FORECAST TRACK OF CYCLONIC STORM ASNA OVER NORTHWEST ARABIAN SEA BASED ON 0000 UTC (0530 IST) OF 1st SEPTEMBER, 2024.







Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100% This is a guidance Bulletin for WMO/ESCAP Panel Member countries. Visit respective National websites for Country specific Bulletins

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





