



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 05.12.2021

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2045 UTC OF 05.12.2021 BASED ON 1800 UTC OF 05.12.2021.

SUB: DEPRESSION (REMNANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR NORTH ODISHA COAST

THE DEPRESSION (REMNANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR NORTH ODISHA COAST MOVED NORTHEASTWARDS WITH A SPEED OF 10 KMPH DURING PAST 06 HOURS, AND LAY CENTERED AT 1800 UTC OF 05TH DECEMBER 2021, OVER NORTHWEST BAY OF BENGAL CLOSE TO NORTH ODISHA COAST NEAR LAT. 20.6°N AND LONG. 87.3°E, ABOUT 70 KM EAST-NORTHEAST OF PARADIP ((42976), 65 KM EAST-SOUTHEAST OF CHANDBALI (42973) AND 140 SOUTH-SOUTHWEST OF DIGHA(42901)

IT IS LIKELY TO MOVE NORTHEASTWARDS, TOWARDS WEST BENGAL COAST AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 06 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
05.12.21/1800	20.6/87.3	40-50 GUSTING TO 60	DEPRESSION
06.12.21/0000	21.1/87.8	30-40 GUSTING TO 50	WELL MARKED LOW

AS PER SATELLITE IMAGERY BASED ON 1800 UTC OF 5TH DEC, THE INTENSITY OF THE SYSTEM IS CHARACTERIZED AS T1.5. ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER COASTAL GANGETIC WEST BENGAL, COASTAL BANGLADESH, NORTH BAY OF BENGAL, NORTH OF LAT 20.0N (MINIMUM CTT MINUS 85 DEG C) AND MODERATE TO INTENSE CONVECTION OVER REST GANGETIC WEST BENGAL AND REST BANGLADESH.

THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 20 KNOTS GUSTING TO 30 KNOTS. ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA. SEA CONDITION WOULD BE ROUGH TO VERY ROUGH OVER NORTHWEST BOB ALONG & OFF ODISHA-WEST BENGAL AND ADJOINING BANGLADESH COASTS DURING NEXT 06 HOURS.

REMARKS:

THE SEA SURFACE TEMPERATURE IS 28-29°C OVER WESTCENTRAL & ADJOINING NORTHWEST BOB AND IS SLIGHTLY LESS ABOUT 26-28°C TOWARDS NORTHWEST BOB ALONG THE FORECAST TRACK. TROPICAL CYCLONE HEAT POTENTIAL IS 60-80 KJ/CM² OVER WESTCENTRAL BOB AND IS GRADUALLY DECREASING TOWARDS COAST BECOMING LESS THAN 50 KJ/CM² OVER NORTHWEST BOB OFF NORTH ODISHA COAST TO BANGLADESH COAST. DEPTH OF 26°C ISOTHERM IS ABOUT 100M OVER NORTHWEST & ADJOINING WESTCENTRAL BOB. THE MADDEN JULIAN OSCILLATION INDEX BEING CURRENTLY IN PHASE 6 WITH AMPLITUDE MORE THAN 1 WILL NOT SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE BOB REGION.

WIND SHEAR IS HIGH AND IS ABOUT 20-25 KNOTS OVER THE SYSTEM AREA. IT IS FURTHER INCREASING TOWARDS NORTHWEST BOB ALONG THE TRACK. POSITIVE LOW LEVEL VORTICITY HAS DECREASED SLIGHTLY AND IS ABOUT $60-80 \times 10^{-6} \text{S}^{-1}$ TO THE SOUTH OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE HAS DECREASED AND IS ABOUT $05 \times 10^{-6} \text{S}^{-1}$ TO THE NORTHEAST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS DECREASED AND IS $10 \times 10^{-5} \text{S}^{-1}$ OVER NORTHWEST BOB AND IS EAST-WEST ORIENTED. UPPER TROPOSPHERIC RIDGE RUNS ALONG 18.5°N . THE SYSTEM IS EXPECTED TO MOVE NORTHEASTWARDS ALONG ODISHA COAST AS IT IS LYING CLOSE TO THE WESTERN PERIPHERY OF ANTICYCLONE OVER MYANMAR REGION.

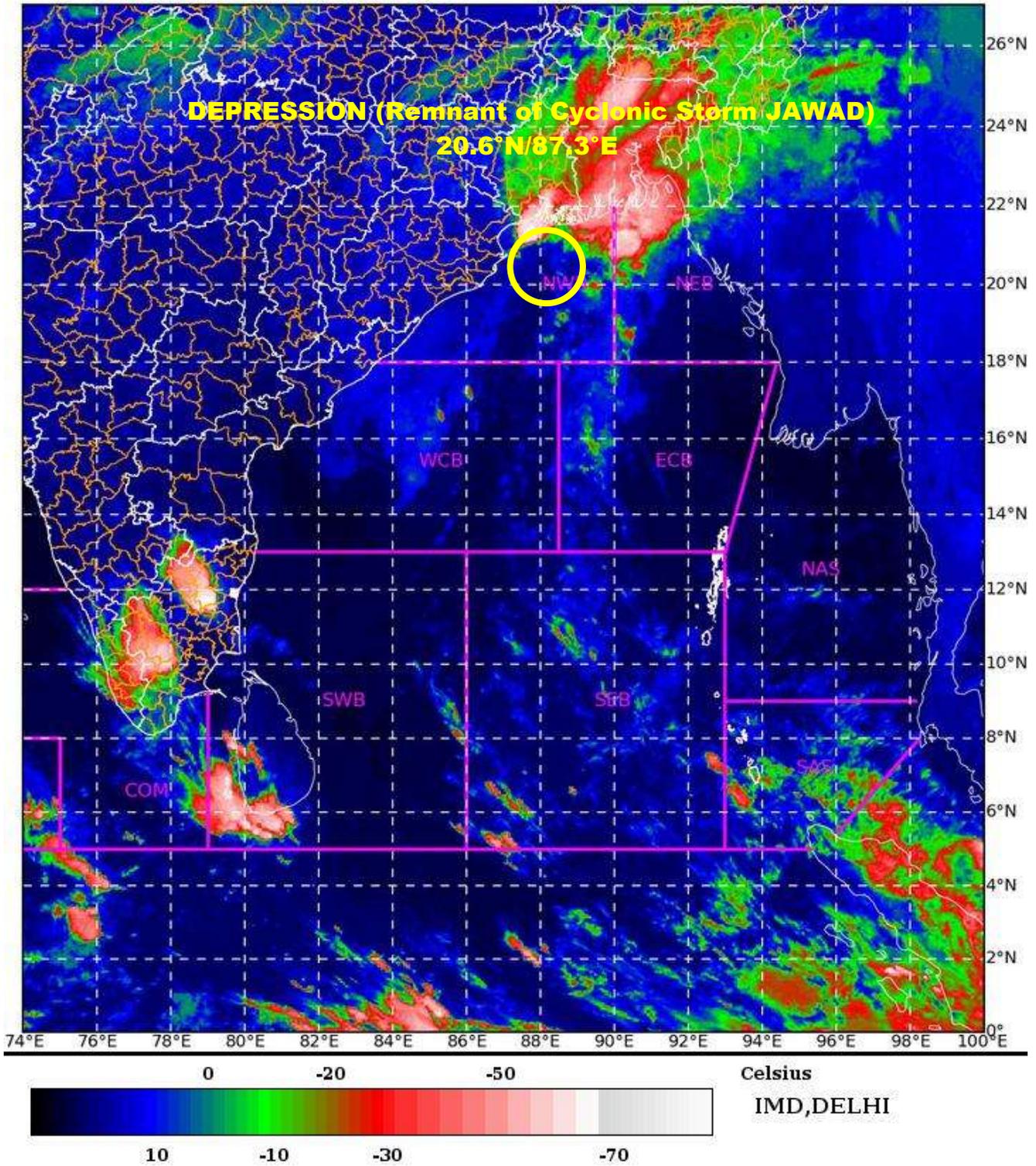
MOST OF THE NUMERICAL MODELS ARE INDICATING WEAKENING OF SYSTEM BY 0000 UTC OF 6TH DECEMBER. MODELS ARE ALSO INDICATING THE SYSTEM TO REACH CLOSE TO WEST BENGAL –BANGLADESH COAST AS A LOW PRESSURE AREA ON 6TH.

DUE TO UNFAVOURABLE ENVIRONMENTAL FEATURES INCLUDING ENHANCED VERTICAL WIND SHEAR, LAND INTERACTIONS, DECREASED OCEAN THERMAL ENERGY OVER NORTHWEST BOB AND UNFAVOURABLE MJO PHASE, THE SYSTEM WILL DISSIPATE GRADUALLY.

IN VIEW OF ABOVE, THE SYSTEM IS LIKELY TO CONTINUE TO MOVE NORTHEASTWARDS TOWARDS WEST BENGAL COAST AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 06 HOURS.

NEXT BULLETIN WILL BE ISSUED AT 0300 UTC OF 6TH DECEMBER 2021.

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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION (REMANANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR NORTH ODISHA COAST BASED ON 1800 UTC OF 5th DECEMBER, 2021



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 (\geq 120 KT)

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