



**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 1200 UTC OF 05.12.2021 BASED ON 0900 UTC OF 05.12.2021.

SUB: DEEP DEPRESSION (REMNANT OF CYCLONIC STORM 'JAWAD') WEAKENED INTO A DEPRESSION OVER NORTHWEST BAY OF BENGAL NEAR ODISHA COAST

THE DEEP DEPRESSION (REMNANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL MOVED NORTH-NORTHEASTWARDS WITH A SPEED OF 18 KMPH DURING PAST 06 HOURS, WEAKENED INTO A DEPRESSION AND LAY CENTERED AT 0900 UTC OF TODAY, THE 05TH DECEMBER 2021, OVER NORTHWEST BAY OF BENGAL CLOSE TO ODISHA COAST NEAR LAT. 19.5°N AND LONG. 86.2°E, ABOUT 50 KM SOUTHEAST OF PURI (43053), 100 KM SOUTH-SOUTHWEST OF PARADIP (42976), 130 KM EAST-NORTHEAST OF GOPALPUR (43049), AND 370 KM NORTH-NORTHEAST OF VISHAKHAPATNAM (43149).

IT IS LIKELY TO CONTINUE TO MOVE NORTH-NORTHEASTWARDS, ALONG ODISHA COAST TOWARDS WEST BENGAL COAST AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA AROUND 1800 UTC OF 5TH DECEMBER 2021.

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
05.12.21/0900	19.5/86.2	45-55 gusting to 65	Depression
05.12.21/1200	19.9/86.6	45-55 gusting to 65	Depression
05.12.21/1800	20.6/87.3	30-40 gusting to 50	Well Marked Low

AS PER SATELLITE IMAGERY BASED ON 0900 UTC OF 5TH DEC, THE INTENSITY OF THE SYSTEM IS CHARACTERIZED AS T1.5/C.I.1.5. ASSOCIATED CLOUD MASS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION IS SEEN OVER EAST ODISHA AND MODERATE TO INTENSE CONVECTION IS SEEN OVER WEST ODISHA, JHARKHAND & GANGETIC WEST BENGAL. ASSOCIATED SCATTERED TO BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WESTCENTRAL & NORTHWEST BOB, NORTH OF LATITUDE 17.5°N AND WEST OF LONGITUDE 89.0°E. THE MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. ESTIMATED CENTRAL PRESSURE IS ABOUT 1006 HPA. SEA CONDITION IS ROUGH TO VERY ROUGH OVER NORTHWEST BOB ALONG & OFF ODISHA-WEST BENGAL COASTS DURING NEXT 12 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 MODERATE AND IS ABOUT 15-20 KNOTS OVER THE SYSTEM AREA. IT IS BECOMING SLIGHTLY HIGHER (20-25 KNOTS) OVER NORTHWEST BOB. POSITIVE LOW LEVEL VORTICITY HAS DECREASED SLIGHTLY AND IS ABOUT 60-80x10⁻⁶S⁻¹ TO THE SOUTH OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE HAS DECREASED AND IS ABOUT 05x10⁻⁶S⁻¹ TO THE NORTHEAST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS DECREASED AND IS 10x10⁻⁵S⁻¹ OVER NORTHWEST BOB AND IS EAST-WEST ORIENTED. UPPER TROPOSPHERIC RIDGE RUNS ALONG 18.5°N. THE SYSTEM IS EXPECTED TO MOVE NORTH-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 WITH NORTH-NORTHEASTWARDS MOVEMENT OFF ODISHA COAST ON 5TH. 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 NORTH-NORTHEASTWARDS, ALONG ODISHA COAST TOWARDS WEST BENGAL COAST AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA AROUND 1800 UTC OF 5TH DECEMBER 2021.

NEXT BULLETIN WILL BE ISSUED AT 1500 UTC OF 5TH DECEMBER 2021.

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SAT : INSAT-3D IMG

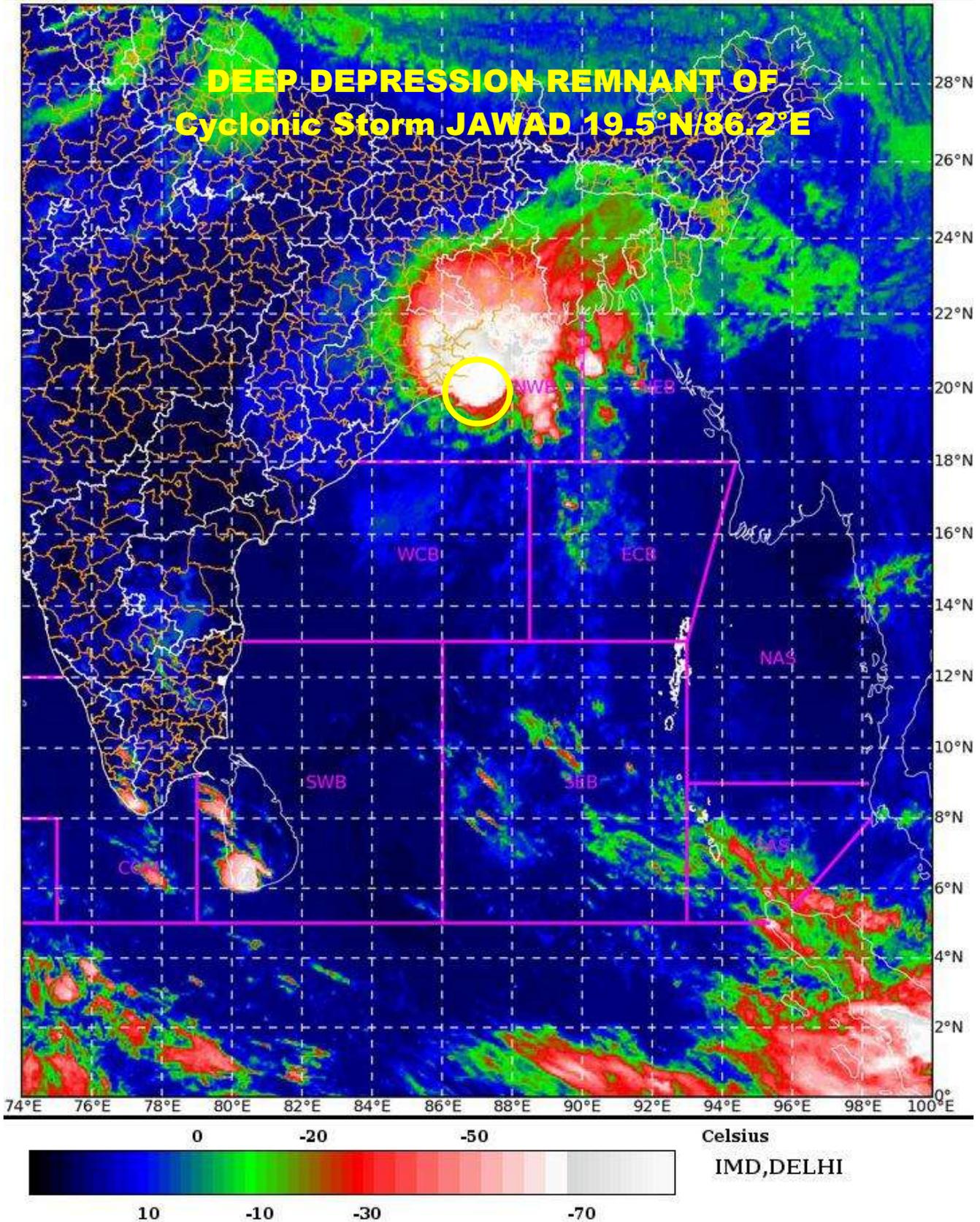
05-12-2021/(1000 to 1026) GMT

IMG_TIR1_TEMP 10.8 um

05-12-2021/(1530 to 1556) IST



L1C Mercator





OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION (REMANANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR ODISHA COAST BASED ON 0600 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 (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- ▲ CONE OF UNCERTAINTY
- AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥ 118 KMPH)

IMPACT 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

