



**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 1500 UTC OF 05.12.2021 BASED ON 1200 UTC OF 05.12.2021.**

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

THE DEPRESSION (REMNANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR ODISHA COAST MOVED NORTHEASTWARDS WITH A SPEED OF 25 KMPH DURING PAST 06 HOURS, AND LAY CENTERED AT 1730 HRS IST OF TODAY, THE 05<sup>TH</sup> DECEMBER 2021, OVER NORTHWEST BAY OF BENGAL CLOSE TO ODISHA COAST NEAR LAT. 20.1°N AND LONG. 86.9°E, ABOUT 30 KM SOUTHEAST OF OF PARADIP (42976), 120 KM EAST-NORTHEAST OF PURI (43053), 210 SOUTH-SOUTHWEST OF SAGAR ISLAND (42903)

IT IS LIKELY TO MOVE NORTHEASTWARDS, TOWARDS WEST BENGAL COAST AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 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
05.12.21/1200	20.1/86.9	45-55 gusting to 65	Depression
05.12.21/1800	20.7/87.5	40-50 gusting to 60	Depression
06.12.21/0000	21.3/88.1	30-40 gusting to 50	Well Marked Low

AS PER SATELLITE IMAGERY BASED ON 1200 UTC OF 5<sup>TH</sup> DEC, THE INTENSITY OF THE SYSTEM IS CHARACTERIZED AS T1.5. ASSOCIATED CLOUD MASS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION IS SEEN OVER NORTHEAST ODISHA AND MODERATE TO INTENSE CONVECTION IS SEEN OVER NORTHWEST ODISHA, JHARKHAND & SOUTH GANGETIC WEST BENGAL. ASSOCIATED SCATTERED TO BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHWEST BOB, NORTH OF LATITUDE 18.5°N AND WEST OF LONGITUDE 85.0°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 1004 HPA. SEA CONDITION WOULD BE 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/CM<sup>2</sup> OVER WESTCENTRAL BOB AND IS GRADUALLY DECREASING TOWARDS COAST

BECOMING LESS THAN 50 KJ/CM<sup>2</sup> OVER NORTHWEST BOB OFF NORTH ODISHA COAST TO BANGLADESH COAST. DEPTH OF 26<sup>0</sup>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 60-80x10<sup>-6</sup>S<sup>-1</sup> TO THE SOUTH OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE HAS DECREASED AND IS ABOUT 05x10<sup>-6</sup>S<sup>-1</sup> TO THE NORTHEAST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS DECREASED AND IS 10x10<sup>-5</sup>S<sup>-1</sup> OVER NORTHWEST BOB AND IS EAST-WEST ORIENTED. UPPER TROPOSPHERIC RIDGE RUNS ALONG 18.5<sup>0</sup>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 6<sup>TH</sup> DECEMBER WITH NORTH-NORTHEASTWARDS MOVEMENT OFF ODISHA COAST ON 5<sup>TH</sup>. MODELS ARE ALSO INDICATING THE SYSTEM TO REACH CLOSE TO WEST BENGAL –BANGLADESH COAST AS A LOW PRESSURE AREA ON 6<sup>TH</sup>.

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 12 HOURS.

NEXT BULLETIN WILL BE ISSUED AT 2100 UTC OF 5<sup>TH</sup> DECEMBER 2021.

**(R K JENAMANI)**  
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SAT : INSAT-3D IMG

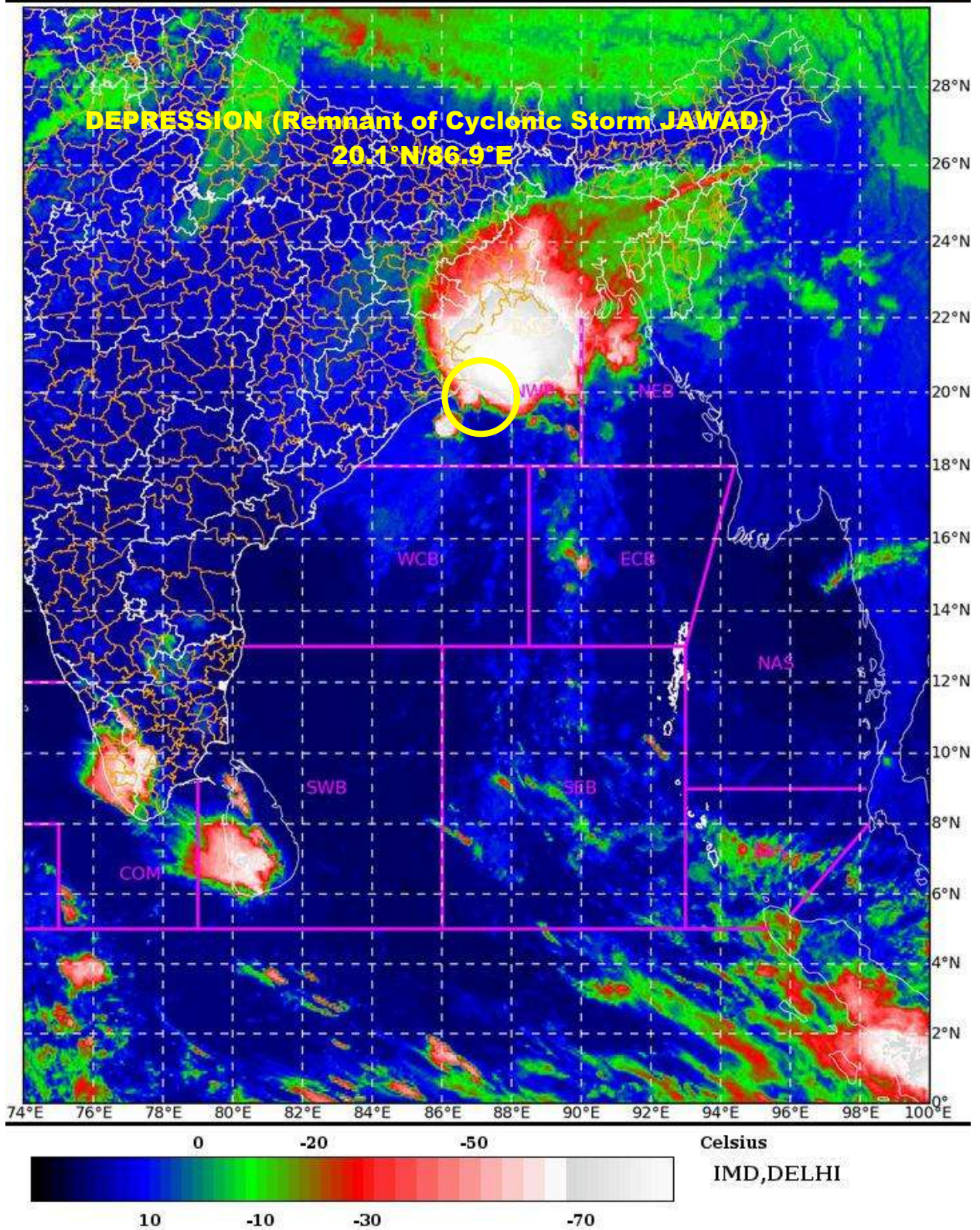
05-12-2021/(1330 to 1356) GMT

IMG\_TIR1\_TEMP 10.8 um

05-12-2021/(1900 to 1926) IST

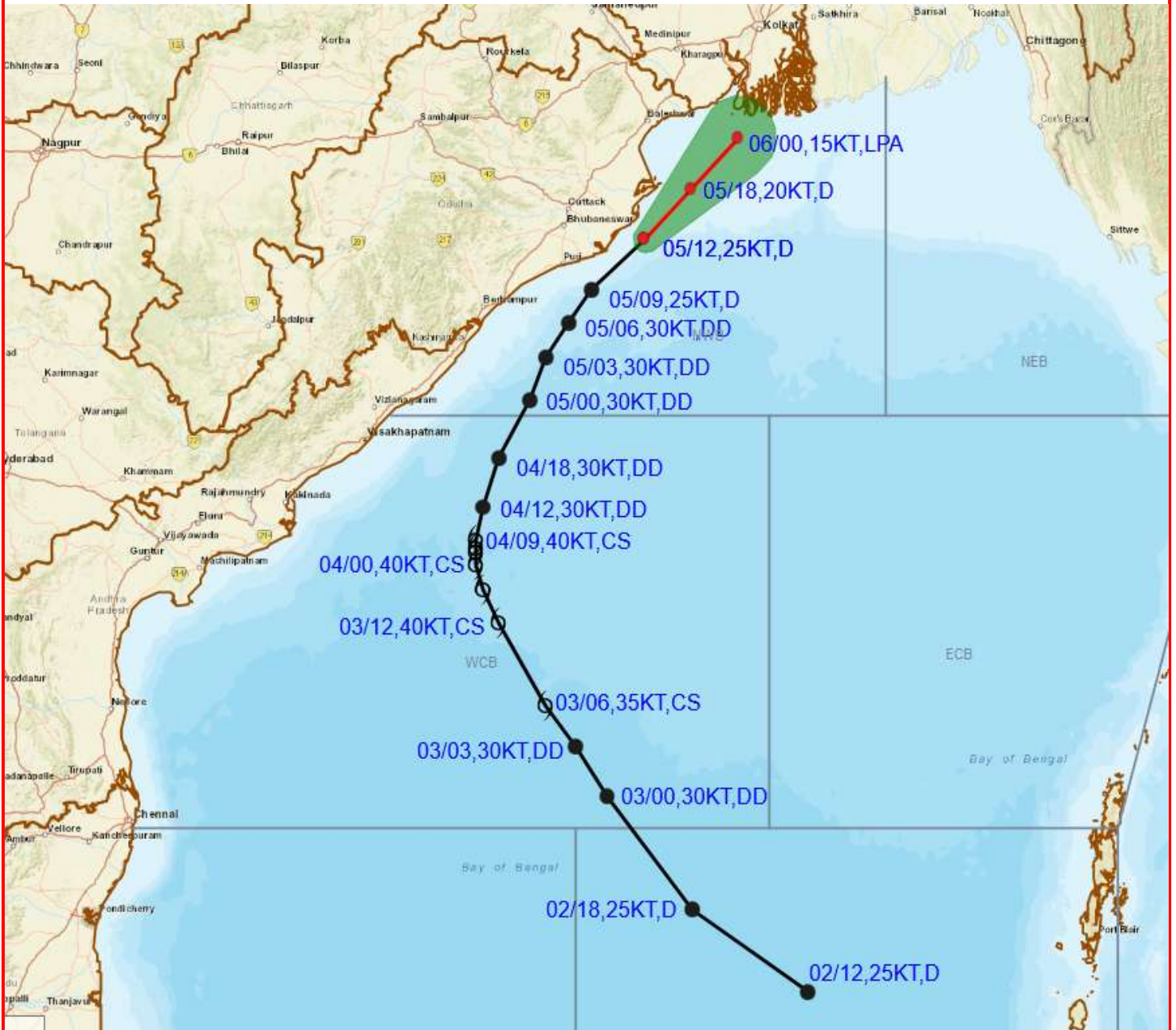


L1C Mercator





# OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION (REMANANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR ODISHA COAST BASED ON 1200 UTC OF 5<sup>th</sup> DECEMBER, 2021

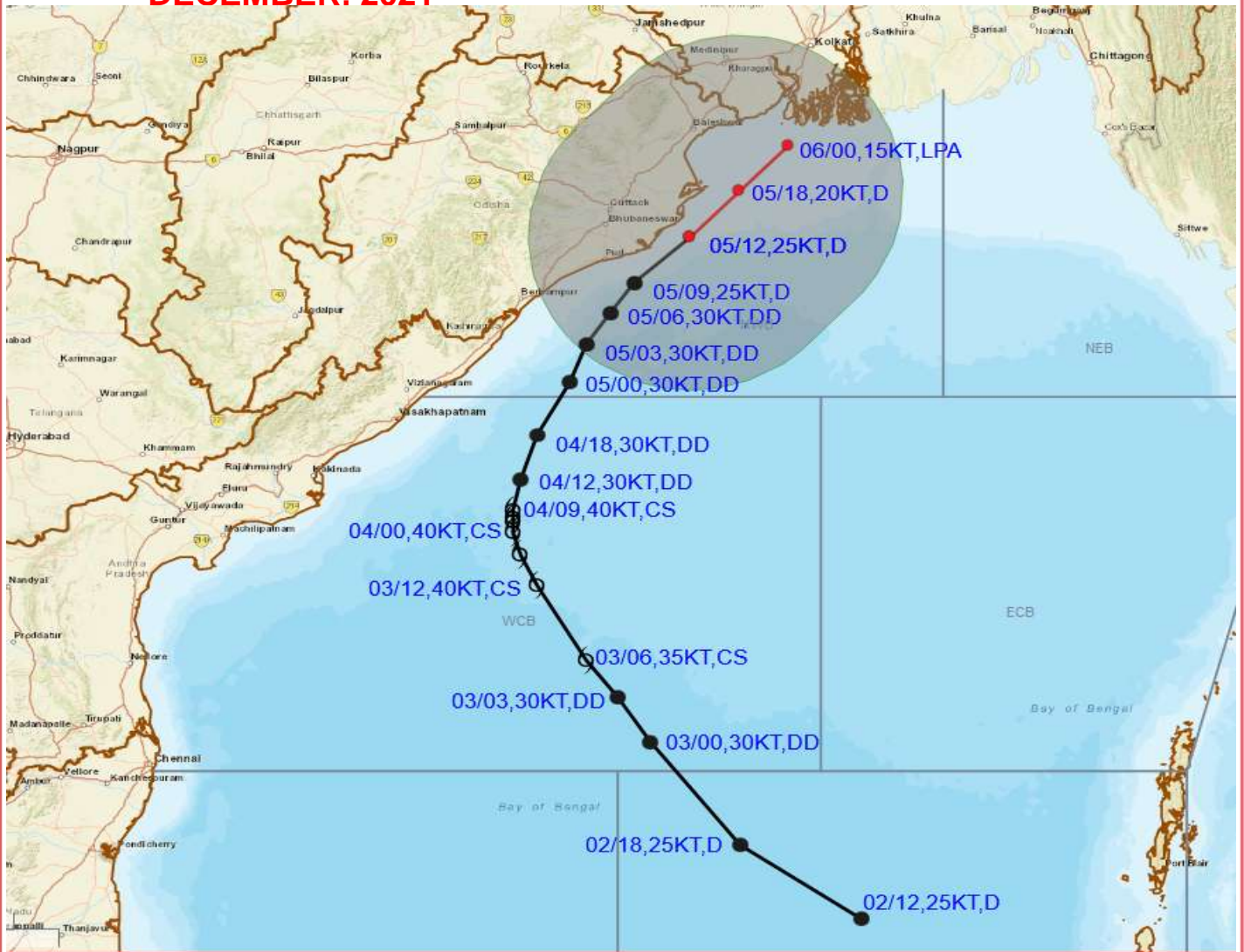


**DATE/TIME IN UTC**  
**IST=UTC + 0530**  
**L: LOW PRESSURE AREA**  
**WML: WELL MARKED LOW PRESSURE AREA**  
**D: DEPRESSION (17-27 KT)**  
**DD: DEEP DEPRESSION (28-33 KT)**  
**CS: CYCLONIC STORM (34-47 KT)**  
**SCS: SEVERE CYCLONIC STORM (48-63KT)**  
**VSCS: VERY SEVERE CYCLONIC STORM (64-89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



# OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION (REMANANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR ODISHA COAST BASED ON 1200 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