

REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL CYCLONE ADVISORY NO. 3

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. 3 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1515 UTC OF 03.12.2021 BASED ON 1200 UTC OF 03.12.2021

SUB: CYCLONIC STORM ‘JAWAD’ OVER WESTCENTRAL BAY OF BENGAL

THE **CYCLONIC STORM ‘JAWAD’** (PRONOUNCED AS JOWAD) OVER WESTCENTRAL BAY OF BENGAL CONTINUED TO MOVE NORTH-NORTHWESTWARDS WITH A SPEED OF 20 KMPH DURING PAST 06 HOURS AND LAY CENTERED AT 1200 UTC OF TODAY, THE 3RD DECEMBER 2021, OVER WESTCENTRAL BAY OF BENGAL NEAR LAT. 15.5N AND LONG. 85.0°E, ABOUT 300 KM SOUTH-SOUTHEAST OF VISHAKHAPATNAM (43149), 420 KM NEARLY SOUTH OF GOPALPUR (42049), 480 KM SOUTH-SOUTHWEST OF PURI (42053) AND 560 KM SOUTH-SOUTHWEST OF PARADIP (42976).

IT IS LIKELY TO MOVE NORTH-NORTHWESTWARDS, INTENSIFY FURTHER AND REACH WEST-CENTRAL BAY OF BENGAL OFF NORTH ANDHRA PRADESH – SOUTH ODISHA COASTS BY TOMORROW, THE 4TH DECEMBER MORNING. THEREAFTER IT IS LIKELY TO RECURVE NORTH-NORTHEASTWARDS AND MOVE ALONG ODISHA COAST REACHING NEAR PURI AROUND 5TH DECEMBER 0600UTC. SUBSEQUENTLY IT IS LIKELY TO CONTINUE TO MOVE NORTH-NORTHEASTWARDS ALONG COASTAL ODISHA TOWARDS WEST BENGAL COAST.

DATE/TIME(UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.21/1200	15.5/85.0	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.21/1800	15.9/84.7	75-85 GUSTING TO 95	CYCLONIC STORM
04.12.21/0000	16.5/84.4	80-90 GUSTING TO 100	CYCLONIC STORM
04.12.21/0600	17.1/84.3	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
04.12.21/1200	17.9/84.5	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
05.12.21/0000	19.2/85.3	85-95 GUSTING TO 105	CYCLONIC STORM
05.12.21/1200	20.1/86.3	70-80 GUSTING TO 90	CYCLONIC STORM
06.12.21/0000	21.0/87.4	55-65 GUSTING TO 75	DEEP DEPRESSION
06.12.21/1200	21.9/88.5	45-55 GUSTING TO 65	DEPRESSION

AS PER SATELLITE IMAGERY BASED ON 1200 UTC OF 3 DEC, THE INTENSITY OF THE SYSTEM IS CHARACTERIZED AS T 2.5. THE CLOUD MASS CONTINUES TO ORGANIZE IN NORTHERN SECTOR CLOSE TO THE LLC AND EXHIBITS SHEAR PATTERN. THE SYSTEM MOVED NORTH- NORTHWESTWARDS DURING LAST 6 HOURS ABOUT A SPEED OF 20KMPH AND CONSOLIDATED FURTHER. INTENSE TO VERY INTENSE CONVECTION LIES IN THE NORTHERN SECTOR.. OUTFLOW CLOUD BANDS EMBEDDED WITH INTENSE CONVECTIVE CELLS ARE OBSERVED OVER NORTH ANDHRA PRADESH AND ODISHA AND GANGETIC WEST BENGAL. ASSOCIATED BROKEN LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WEST CENTRAL AND NORTHWEST BOB BETWEEN LATITUDE 15.0⁰N & 22.5⁰N AND LONGITUDE 81.0⁰E & 92.0⁰E, NORTH COASTAL ANDHRA PRADESH AND ODISHA AND SOUTHERN PARTS OF GANGETIC WEST BENGAL .

THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 999 HPA. SEA CONDITION IS HIGH OVER WESTCENTRAL BAY OF BENGAL AROUND THE SYSTEM CENTRE.

AT 1200 UTC, THREE BUOYS: NEAR 16.3°N/88.0°E, 13.4°N/84.2°E AND 14.0°N/86.9°E REPORTED MAXIMUM SUSTAINED WIND OF 140°/19KTS, 310°/16KTS AND 190°/19KTS , MEAN SEA LEVEL PRESSURE OF 1007.5 HPA, 1007.3 HPA AND 1006.8 HPA AND SEA SURFACE TEMPERATURE 28.9°C, 28.7 °C AND 28.9 °C RESPECTIVELY.

REMARKS:

THE SEA SURFACE TEMPERATURE IS 28-29°C OVER WESTCENTRAL BOB AND THEN OF 27-28°C TOWARDS NORTHWEST BOB. TROPICAL CYCLONE HEAT POTENTIAL IS 80-100 KJ/CM² OVER WESTCENTRAL BOB AND GRADUALLY DECREASING TOWARDS EXTREME NORTHWEST BECOMING 50-60. DEPTH OF 26⁰C ISOTHERM IS 100-120 M OVER WESTCENTRAL & ADJOINING NORTHWEST BOB. THE MADDEN JULIAN OSCILLATION INDEX IS CURRENTLY IN PHASE 6 WITH AMPLITUDE MORE THAN 1 AND IS NOT FAVOURABLE FOR INTENSIFICATION. IT WILL CONTINUE IN SAME PHASE DURING NEXT 5 DAYS. WIND SHEAR IS MODERTE 15-20 KNOTS OVER THE SYSTEM AREA. IT IS BECOMING HIGHER TOWARDS NORTHWEST BOB. POSITIVE LOW LEVEL VORTICITY IS ABOUT 150x10⁻⁶S⁻¹ AROUND THE SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE IS 10-20x10⁻⁶S⁻¹ TO THE NORTHEAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS 30x10⁻⁵S⁻¹ TO THE NORTH OF SYSTEM CENTRE. THUS, ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR SLIGHT INTENSIFICATION OF SYSTEM. UPPER TROPOSPHERIC RIDGE RUNS ALONG 16⁰N. THE TROUGH IN MID & UPPER TROPOSPHERIC WESTERLIES NOW RUNS ALONG LONG. 73.0⁰E TO THE NORTH OF LAT. 20⁰N. AS THE SYSTEM COMES CLOSER TO THE RIDGE, AT NEARLY AROUND 0000UTC OF 4TH NOV. IT WILL CROSS THE RIDGE AND WILL BE STEERED NORTH-NORTHEASTWARDS, UNDER THE INFLUENCE OF SOUTH-SOUTHWESTERLIES PREVAILING IN THE NORTHERN PERIPHERY OF RIDGE AND THE APPROACHING TROUGH IN WESTERLIES AT MIDDLE AND UPPER TROPOSPHERIC LEVELS.

MOST OF THE MODELS ARE INDICATING THAT THE CURRENT CYCLONIC STORM OVER WESTCENTRAL BOB WOULD INTENSIFY SLIGHTLY FURTHER DURING NEXT 24 HOURS. MOST OF THE MODELS INDICATE THAT IT IS LIKELY TO RECURVE NORTH-NORTHEASTWARDS AND MOVE ALONG ODISHA

NEXT BULLETIN WILL BE ISSUED AT 1800 UTC OF 3RD DECEMBER 2021.

(RK JENAMANI)
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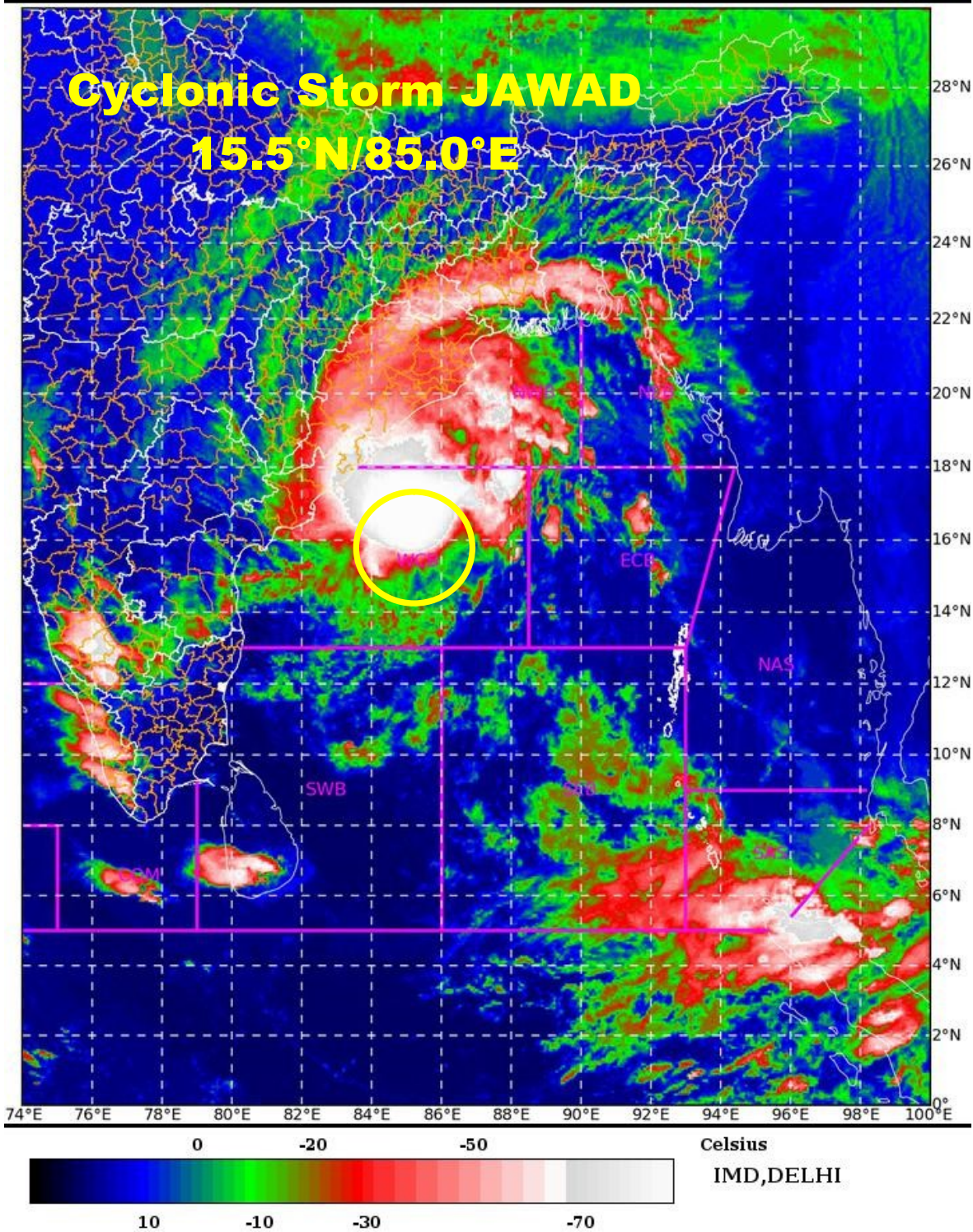
SAT : INSAT-3D IMG

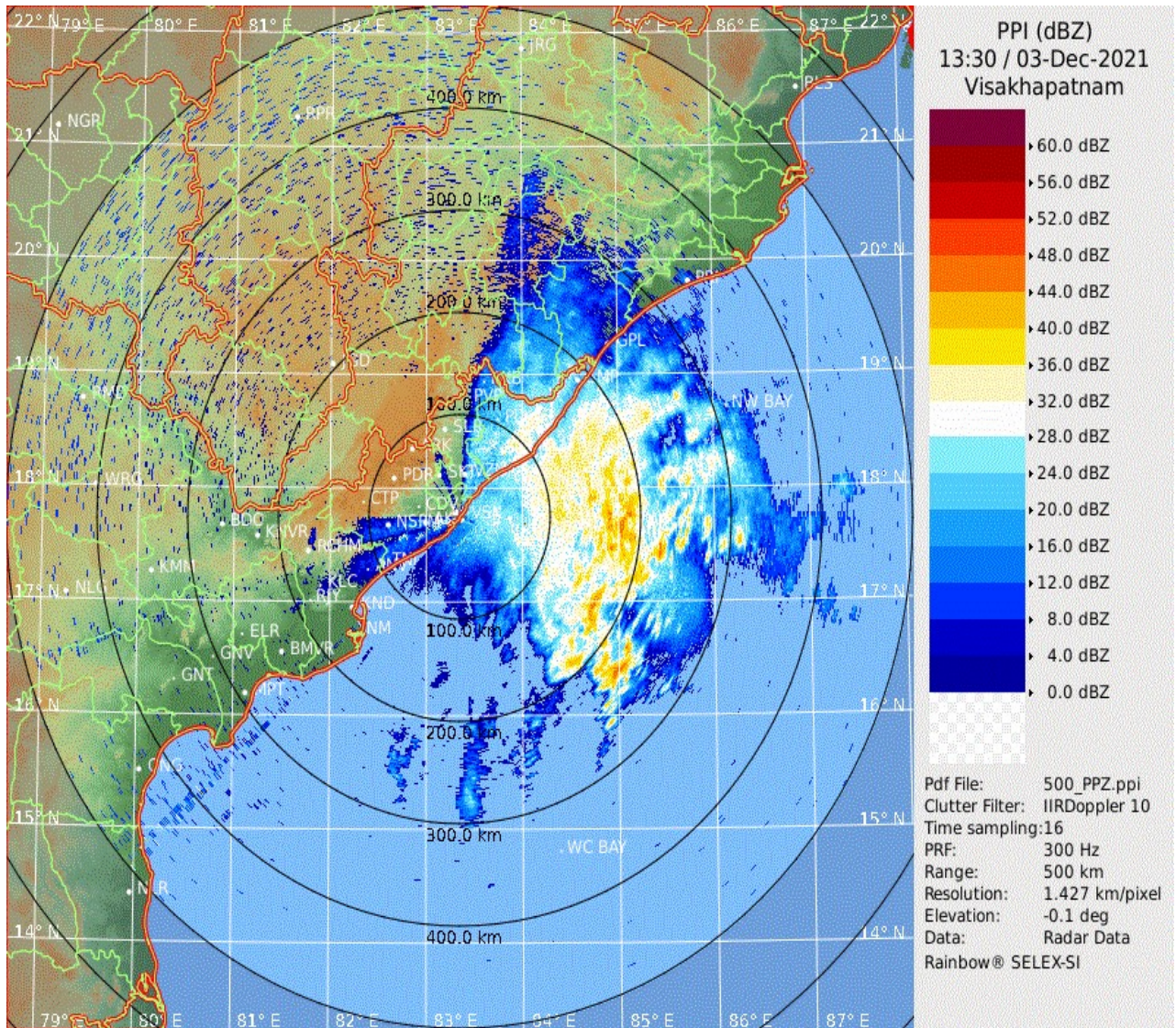
03-12-2021/(1230 to 1256) GMT

IMG_TIR1_TEMP 10.8 um

03-12-2021/(1800 to 1826) IST

L1C Mercator





Doppler Weather RADAR imagery from Vishakhapatnam, depicting the approaching convective cloud towards north Andhra Pradesh coast.



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM 'JAWAD' OVER WESTCENTRAL BAY OF BENGAL BASED ON 1200 UTC OF 3rd DECEMBER, 2021

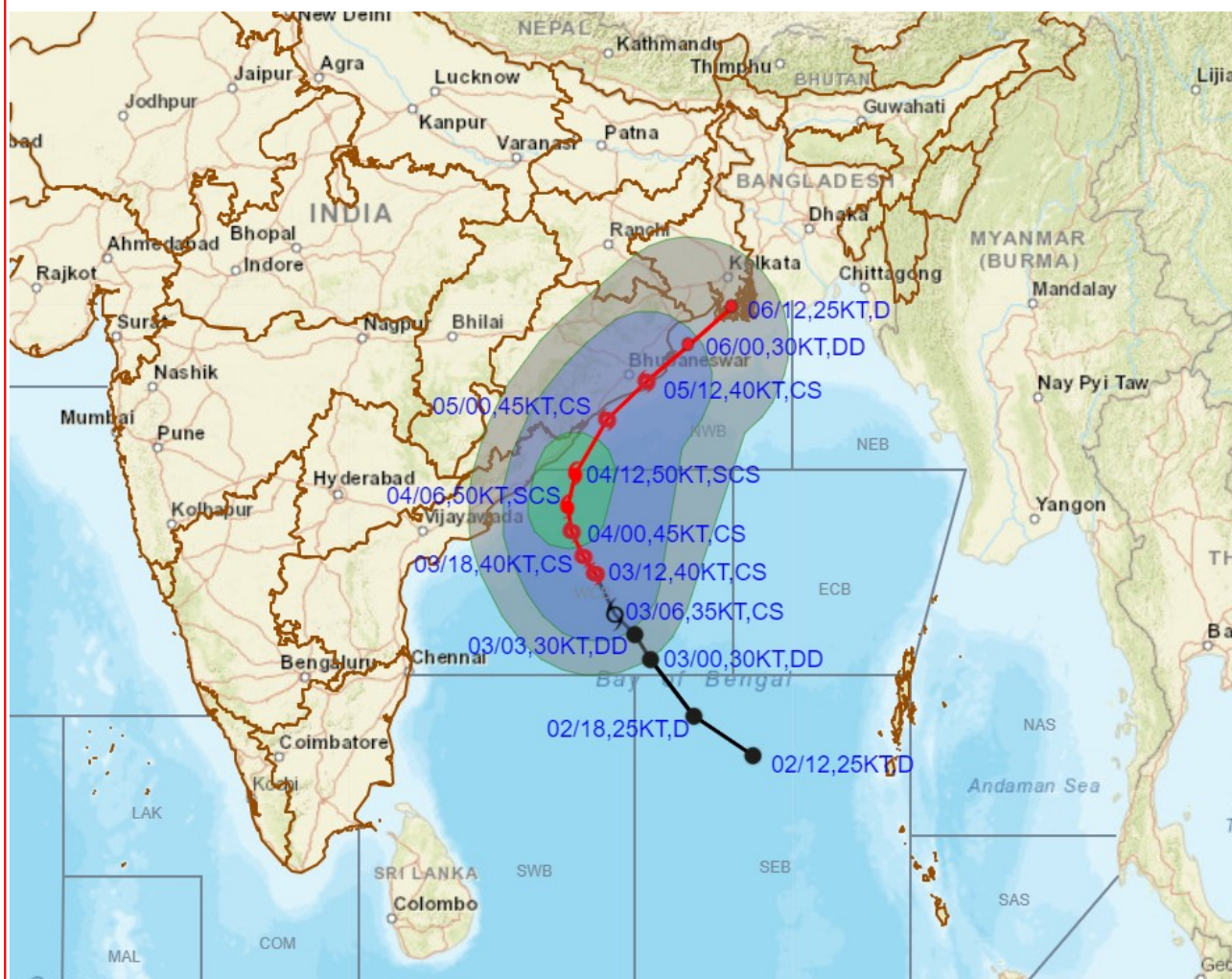


DATE/TIME IN UTC
 IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ECS: EXTREMELY SEVERE CYCLONIC STORM (90-119 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 CYCLONIC STORM 'JAWAD' OVER WESTCENTRAL BAY OF BENGAL BASED ON 1200 UTC OF 3rd 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