



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL CYCLONE ADVISORY**

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 16.06.2023

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. 85 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 24 HOURS ISSUED AT 0600 UTC OF 17.06.2023 BASED ON 0300 UTC OF 17.06.2023

SUB: DEEP DEPRESSION (REMNANT OF CYCLONIC STORM 'BIPARJOY') OVER SOUTHWEST RAJASTHAN ADJOINING GUJARAT AND SOUTHEAST PAKISTAN

THE DEEP DEPRESSION (REMNANT OF CYCLONIC STORM 'BIPARJOY') OVER SOUTHWEST RAJASTHAN ADJOINING GUJARAT AND SOUTHEAST PAKISTAN MOVED NORTHEASTWARDS WITH A SPEED OF 10 KMPH DURING PAST 6-HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 17TH JUNE, 2023 OVER THE SAME REGION NEAR LATITUDE 25.0°N AND LONGITUDE 71.5°E, ABOUT 80 KM SOUTH OF BARMER (42435) AND 210 KM SOUTHWEST OF JODHPUR (42339).

IT IS VERY LIKELY TO MOVE EAST-NORTHEASTWARDS AND WEAKEN INTO A DEPRESSION DURING NEXT 06 HOURS. THEREAFTER, IT IS VERY LIKELY TO CONTINUE TO MOVE EAST-NORTHEASTWARDS AND MAINTAIN THE INTENSITY OF DEPRESSION DURING SUBSEQUENT 12 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
17.06.23/0300	25.0/71.5	50-60 Gusting To 70	Deep Depression
17.06.23/0600	25.3/72.0	50-60 Gusting To 70	Deep Depression
17.06.23/1200	25.5/72.5	45-55 Gusting To 65	Depression
17.06.23/1800	25.8/73.1	40-50 Gusting To 60	Depression
18.06.23/0000	26.1/73.8	35-45 Gusting To 55	Depression

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%
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AS PER INSAT 3D IMAGERY, ASSOCIATED SCATTERED TO BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHWEST RAJASTHAN, SOUTHEAST PAKISTAN AND KUTCH AREA. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 90°C. SCATTERED TO BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER NORTHEAST ARABIAN SEA. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 50°C. SCATTERED TO BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED WEAK TO MODERATE CONVECTION OVER REST RAJASTHAN, SAURASHTRA, GUJARAT REGION AND GULF OF KUTCH.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED (MSW) IS 30 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 990 HPA.

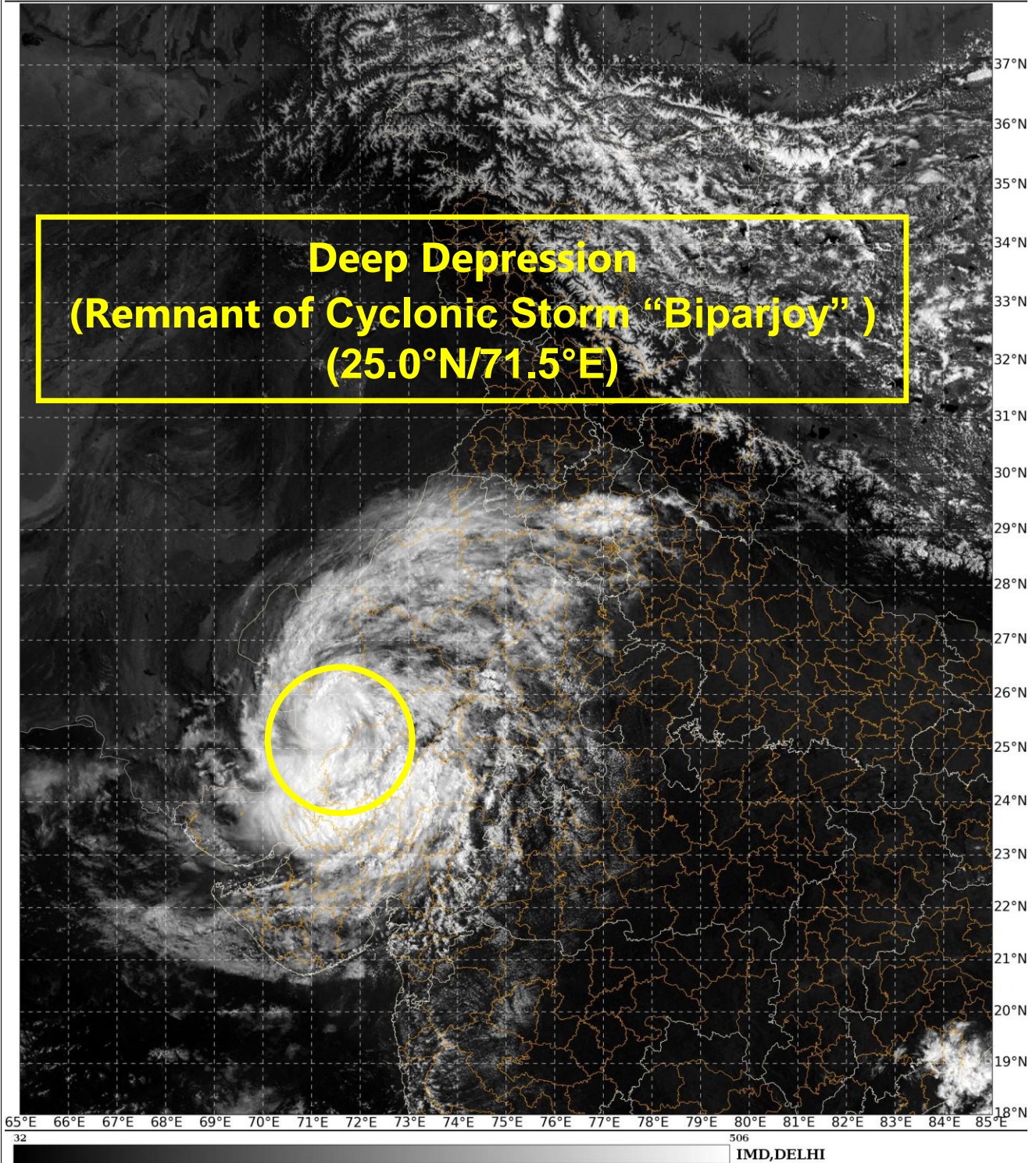
AT 0300 UTC, BARMER (42435) REPORTED MEAN SEA LEVEL PRESSURE (MSLP) OF 991.7 HPA, 24 HOUR PRESSURE FALL (P24) OF -9.1 HPA (MAXIMUM) AND MAXIMUM SUSTAINED WIND SPEED (MSW) OF 70°/10KT. DEESA (42539) REPORTED MSLP OF 995.8 HPA, P24 OF -3.3 HPA AND MSW OF 140°/19KT. JHODPUR (42339) REPORTED MSLP OF 997.5 HPA, P24 OF -3.6 HPA AND MSW OF 140°/04KT.

REMARKS:

THE LOW LEVEL VORTICITY IS AROUND $200-250 \times 10^{-6} \text{S}^{-1}$ & IS LOCATED TO THE SOUTHWEST OF THE SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS ABOUT $20-30 \times 10^{-5} \text{S}^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE AND UPPER LEVEL DIVERGENCE IS ABOUT $20 \times 10^{-5} \text{S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE. VERTICAL WIND SHEAR IS MODERATE (10-20 KNOTS) OVER THE SYSTEM AREA. THE SYSTEM IS STILL IN A MODERATELY FAVOURABLE ENVIRONMENT, THUS IT IS WEAKENING GRADUALLY.

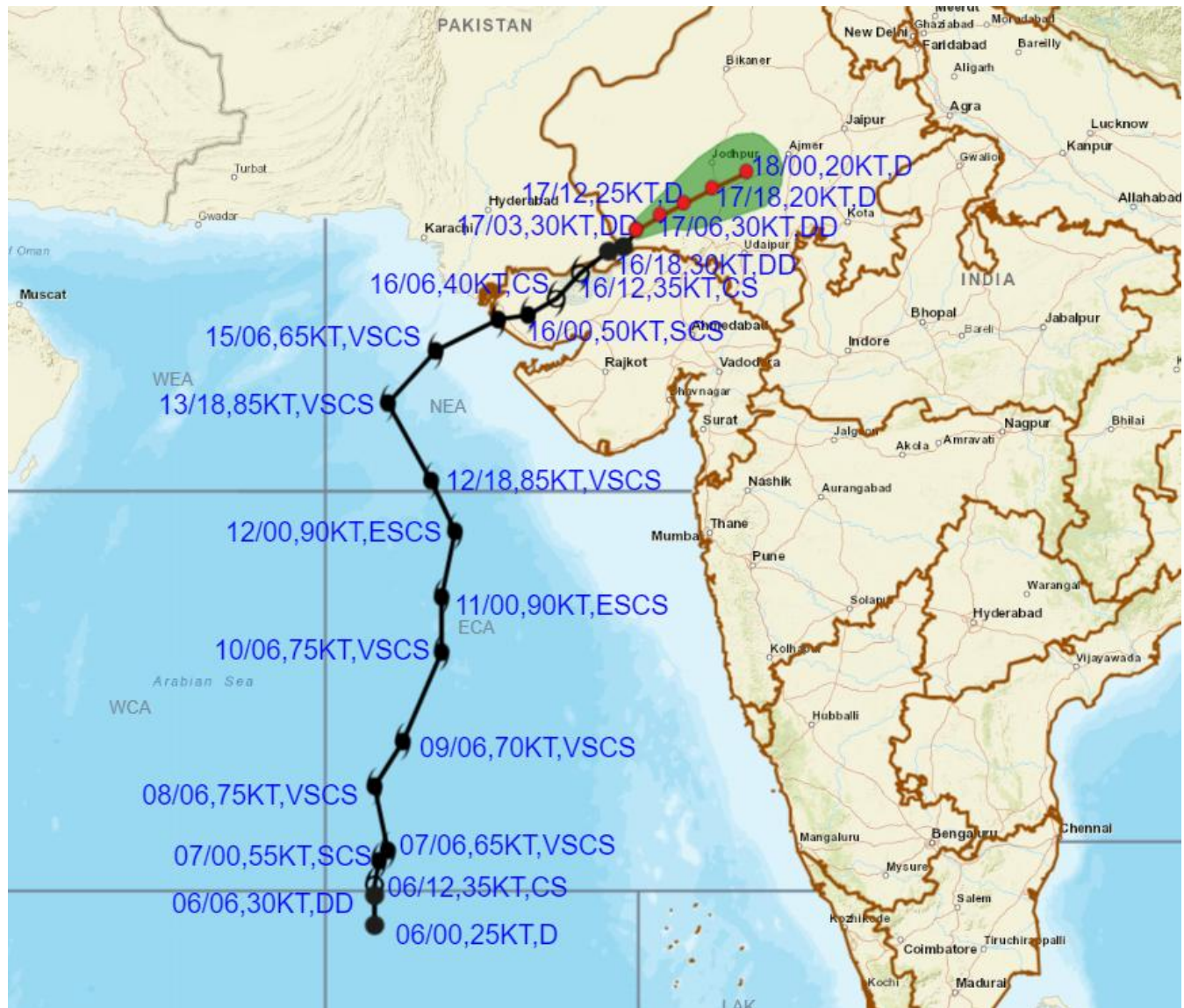
BASED ON ENVIRONMENTAL CONDITIONS AND NWP MULTI-MODEL FORECASTS THE SYSTEM IS VERY LIKELY TO MOVE NEARLY EAST-NORTHEASTWARDS AND WEAKEN GRADUALLY INTO A DEPRESSION DURING NEXT 06 HOURS AND MAINTAIN THE INTENSITY THE INTENSITY OF DEPRESSION DURING SUBSEQUENT 12 HOURS.

**M. SHARMA
SCIENTIST D
RSMC NEW DELHI**





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION (REMANANT OF CYCLONIC STORM BIPARJOY) OVER SOUTHWEST RAJASTHAN ADJOINING GUJARAT AND SOUTHEAST PAKISTAN BASED ON 0300 UTC (0830 IST) OF 17TH JUNE 2023.

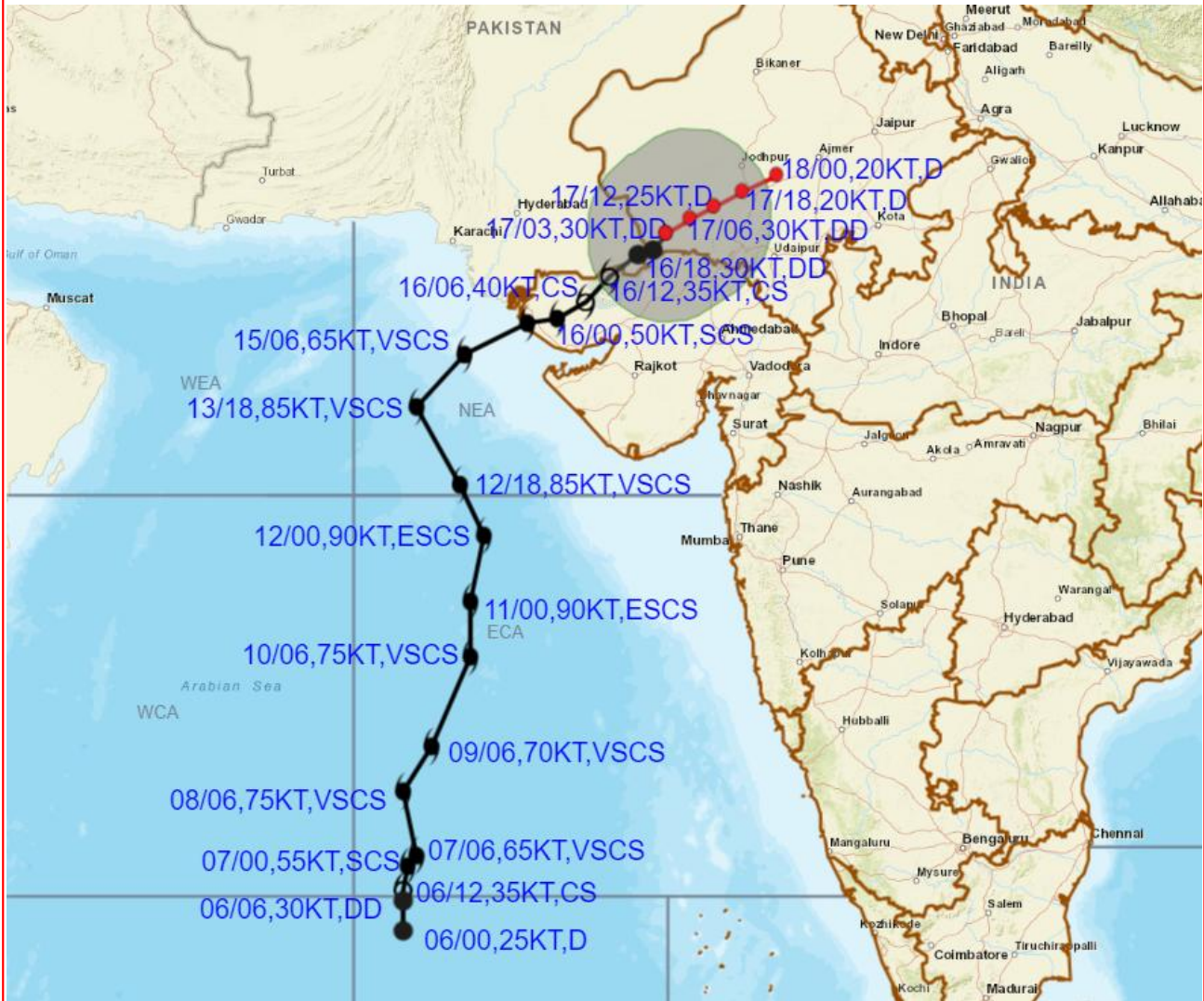


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (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 DEEP DEPRESSION (REMANANT OF CYCLONIC STORM BIPARJOY) OVER SOUTHWEST RAJASTHAN ADJOINING GUJARAT AND SOUTHEAST PAKISTAN BASED ON 0300 UTC (0830 IST) OF 17TH JUNE 2023.



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)

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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
- AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- \geq 64 KT (\geq 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
\geq 64 (\geq 118)	Phenomenal	Total suspension of fishing operations

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