



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL CYCLONE ADVISORY NO. 29

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 14.05.2023

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. 29 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1400 UTC OF 14.05.2023 BASED ON 1200 UTC OF 14.05.2023

SUBJECT: EXTREMELY SEVERE CYCLONIC STORM “MOCHA” WEAKENED INTO A VERY SEVERE CYCLONIC STORM OVER MYANMAR

THE **EXTREMELY SEVERE CYCLONIC STORM “MOCHA”** (PRONOUNCED AS **“MOKHA”**) OVER COASTAL MYANMAR MOVED NORTH-NORTHEASTWARDS WITH A SPEED OF 26 KMPH DURING PAST 6 HOURS, WEAKENED INTO A VERY SEVERE CYCLONIC STORM AND LAY CENTRED AT 1200 UTC OF TODAY, THE 14TH MAY OVER MYANMAR NEAR LATITUDE 21.1°N AND LONGITUDE 93.3°E ABOUT 120 KM NORTH-NORTHEAST OF SITTWE (MYANMAR, 48062), 160 KM OF WEST OF NYAUNG-U (MYANMAR, 48049), 360 KM NORTHWEST OF NAY PYI TAW (MYANMAR, 48117) AND 140 KM EAST-SOUTHEAST OF COX’S BAZAR (BANGLADESH, 41992).

THE SYSTEM IS CONTINUING THE WEAKENING TREND AND WILL BECOME A CYCLONIC STORM DURING NEXT 6 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
14.05.23/1200	21.1/93.3	130-140 GUSTING TO 155	VERY SEVERE CYCLONIC STORM
14.05.23/1800	22.4/94.3	70-80 GUSTING TO 90	CYCLONIC STORM
15.05.23/0000	23.6/95.5	40-50 GUSTING TO 60	DEPRESSION

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIO LAY OVER NORTHEAST AND ADJOINING EASTCENTRAL BAY OF

BENGAL BETWEEN LATITUDE 18.0N & 25.0N AND LONGITUDE 91.0E TO 97.0E, ARAKAN COAST AND SOUTH MYANMAR. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG CELSIUS.

THE MAXIMUM SUSTAINED SURFACE WIND SPEED (MSW) IS 75 KNOTS GUSTING TO 85 KNOTS. THE ESTIMATED CENTRAL PRESSURE (ECP) IS ABOUT 974HPA. SEA CONDITION IS HIGH OVER NORTHEAST BAY OF BENGAL UPTO 1800 UTC OF 14TH MAY AND VERY ROUGH TO ROUGH THEREAFTER TILL 0000 UTC OF 15TH MAY. VERY ROUGH TO ROUGH OVER ADJOINING AREAS OF EASTCENTRAL BAY OF BENGAL TILL 1800 UTC OF 14TH MAY AND IMPROVE THEREAFTER.

AT 1200 UTC, NYAUNG-U (48048) REPORTED LOWEST MSLP OF 992.2 HPA AND MSW OF 220⁰/01 KTS IN THE REGION. KYAUKPYU (48071) REPORTED MSLP OF 997.5 HPA AND MSW OF 230⁰/22 KTS. TEKNAF (41998) REPORTED MSLP OF 993.1 HPA AND MSW OF 030⁰/04 KTS.

STORM SURGE GUIDANCE (GRAPHICS ATTACHED) FOR NORTH MYANMAR AND ADJOINING SOUTHEAST BANGLADESH COASTS:

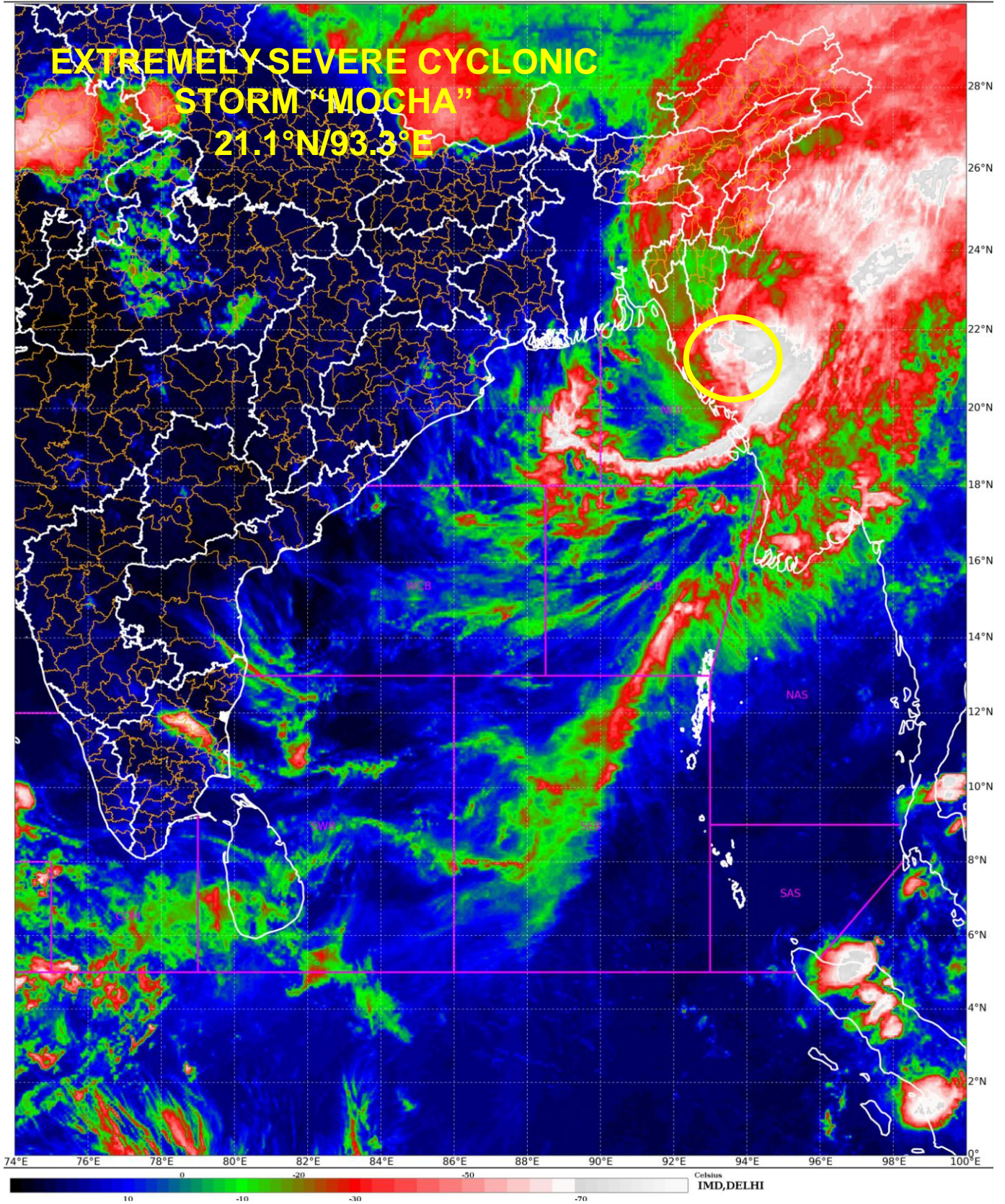
STORM SURGE WITH HEIGHT OF ABOUT 0.5-1.0 M ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTH MYANMAR AND ADJOINING SOUTHEAST BANGLADESH COASTS DURING NEXT SIX HOURS.

REMARKS:

DUE TO RUGGED TERRAINS AND HIGH WIND SHEAR OVER MYANMAR, THE SYSTEM WOULD WEAKEN RAPIDLY DURING NEXT 12 HOURS BECOMING A DEPRESSION AROUND 0000 UTC OF 15TH MAY.

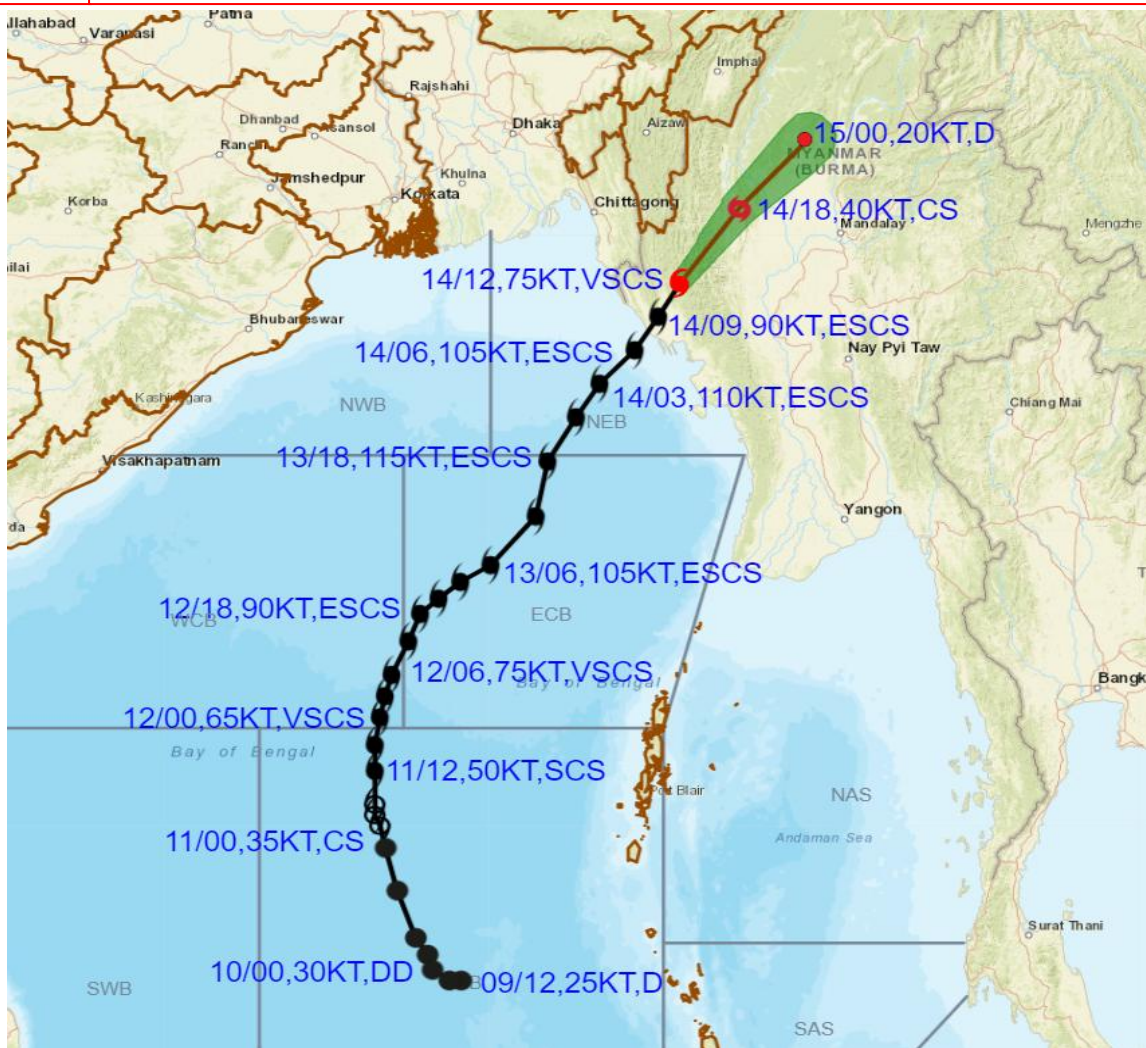
THE LOW LEVEL VORTICITY AT 850 HPA HAS REDUCED AND IS AROUND $250 \times 10^{-6} \text{S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 200 HPA LEVELS. LOW LEVEL CONVERGENCE IS AROUND $50 \times 10^{-5} \text{S}^{-1}$ TO THE SOUTHEAST OF SYSTEM CENTRE. THE UPPER LEVEL DIVERGENCE IS AROUND $40 \times 10^{-5} \text{S}^{-1}$ TO THE NORTHEAST OS SYTEM CENTRE. THE VERTICAL WIND SHEAR IS HIGH (30-40 KNOTS) OVER SYSTEM AREA AND IS INCREASING ALONG THE FORECAST TRACK. POLEWARD & EQUATORWARD OUTFLOW IS STILL SEEN. THE ENVIRONMETAL CONDITIONS INCLUDING POLEWARD OUTFLOW, HIGHER VALUES OF LOW LEVEL VORTICITY, CONVERGENCE AND DIVERGENCE WOULD FAVOUR THE SYSTEM TO MAINTAIN ITS INTENSITY OF CYCLONIC STORM DURING NEXT 6-9 HOURS. HOWEVER, AS THE SYSTEM IS MOVING OVER RUGGED TERRAINS OF MYANMAR HILLS AND WIND SHEAR IS HIGH OVER THE REGION, WEAKENING OF THE SYSTEM INTO A DEPRESSION IS LIKELY AROUND 0000 UTC OF 15TH MAY.

(M. SHARMA)
SCIENTIST-D
RSMC NEW DELHI





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM MOCHA OVER MYANMAR BASED ON 1200 UTC (1730 IST) OF 14TH MAY 2023.



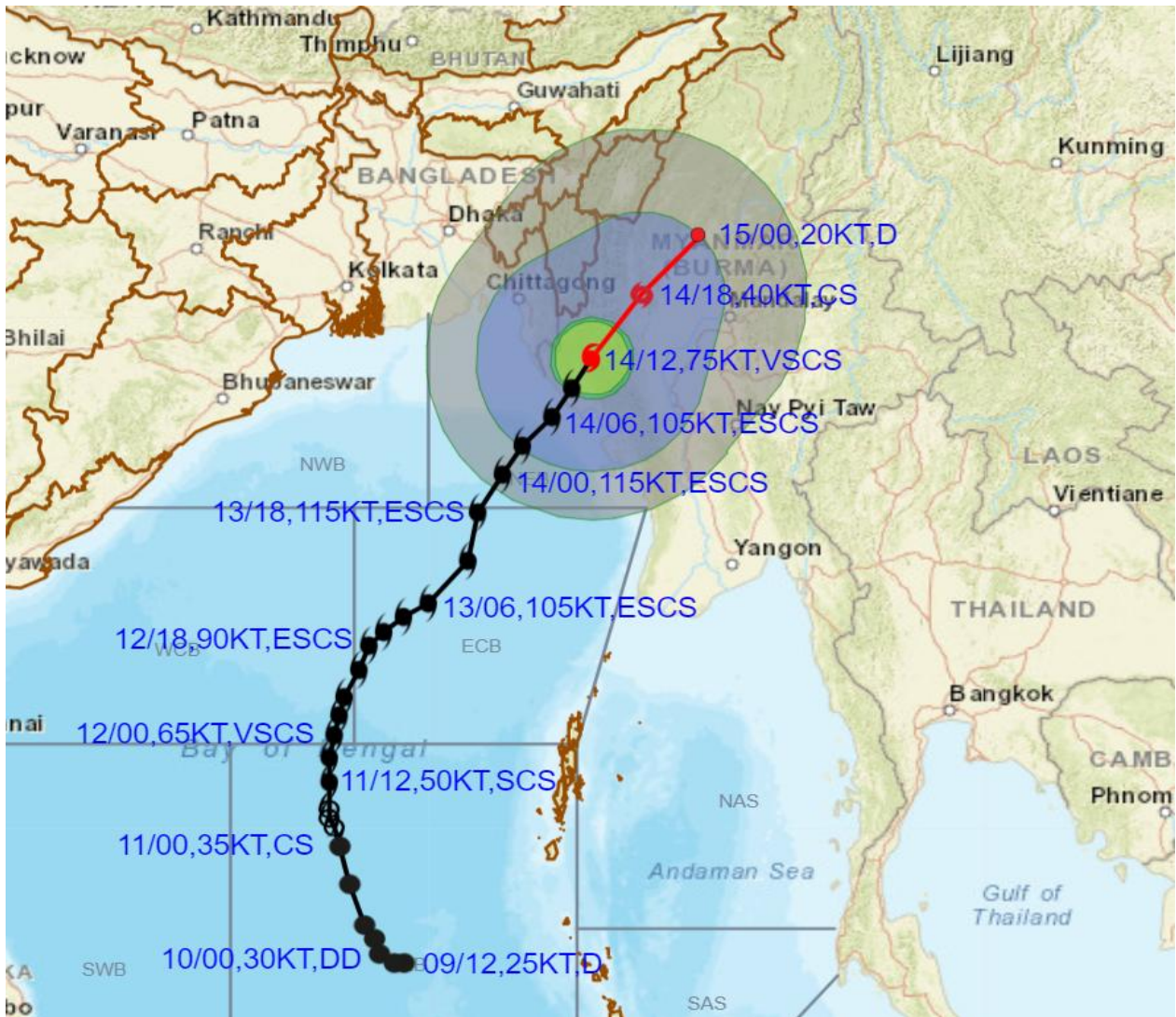
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- ▲ CONE OF UNCERTAINTY

Forecast distance (km) and direction of the centre from nearest 5 coastal stations

Forecast Date and Time	Lead Period	Lat	Lon	Station 1	Station 2	Station 3	Station 4	Station 5
14.05.23/1200	0	21.1	93.3	MINDAT (74,WSW)	KYAUKTAW (75,ENE)	TEKNAF (107,ENE)	SITTWE (116,NNE)	COX'S BAZAR (147,ESE)

OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM MOCHA OVER MYANMAR BASED ON 1200 UTC (1730 IST) OF 14TH MAY 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
 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

Fishermen warning graphics

