



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL WEATHER OUTLOOK**

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 21.03.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2100 UTC OF 21.03.2022 BASED ON 1800 UTC OF 21.03.2022.

SUB: DEEP DEPRESSION OVER NORTH ANDAMAN SEA AND ADJOINING AREAS OF SOUTHEAST AND EASTCENTRAL BAY OF BENGAL

THE DEEP DEPRESSION OVER NORTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL, MOVED NORTHWARDS WITH A SPEED OF 13 KMPH DURING LAST 06 HOURS, AND LAY CENTERED AT 1800 UTC OF THE 21ST MARCH, OVER NORTH ANDAMAN SEA AND ADJOINING AREAS OF EASTCENTRAL AND SOUTHEAST BAY OF BENGAL, NEAR LATITUDE 14.0°N AND LONGITUDE 94.0°E, ABOUT 170 KM EAST-NORTHEAST OF MAYABUNDAR (ANDAMAN ISLANDS), 290 KM NORTH-NORTHEAST OF PORT BLAIR (ANDAMAN ISLANDS), 390 KM SOUTHWEST OF YANGON (MYANMAR) AND 500 KM SOUTH OF THANDWE (MYANMAR).

IT WOULD CONTINUE TO MOVE NEARLY NORTHWARDS AWAY FROM ANDAMAN ISLANDS, WEAKEN GRADUALLY AND CROSS MYANMAR COAST AS A DEPRESSION BETWEEN LATITUDE 16°N & 18°N AROUND AFTERNOON OF 22ND MARCH.

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
21.03.22/1800	14.0/94.0	55-65 GUSTING TO 75	DEEP DEPRESSION
22.03.22/0000	15.1/94.0	50-60 GUSTING TO 70	DEEP DEPRESSION
22.03.22/0600	15.9/94.1	45-55 GUSTING TO 65	DEPRESSION
22.03.22/1200	16.7/94.4	40-50 GUSTING TO 60	DEPRESSION

AS PER INSAT 3D IMAGERY, INTENSITY OF THE SYSTEM IS CHARACTERISED AS T 2.0. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL BETWEEN LATITUDE 13.0°N & 16.0°N AND LONGITUDE 92.0°E & 94.5°E AND ANDAMAN & NICOBAR ISLANDS. MINIMUM CLOUD TOP TEMPERATURE IS AROUND MINUS 93 °C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA.

STORM SURGE GUIDANCE

THE STORM SURGE OF 0.3M TO 0.5M OVER AND ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE THE LOW LYING AREAS OF COASTAL MYANMAR.

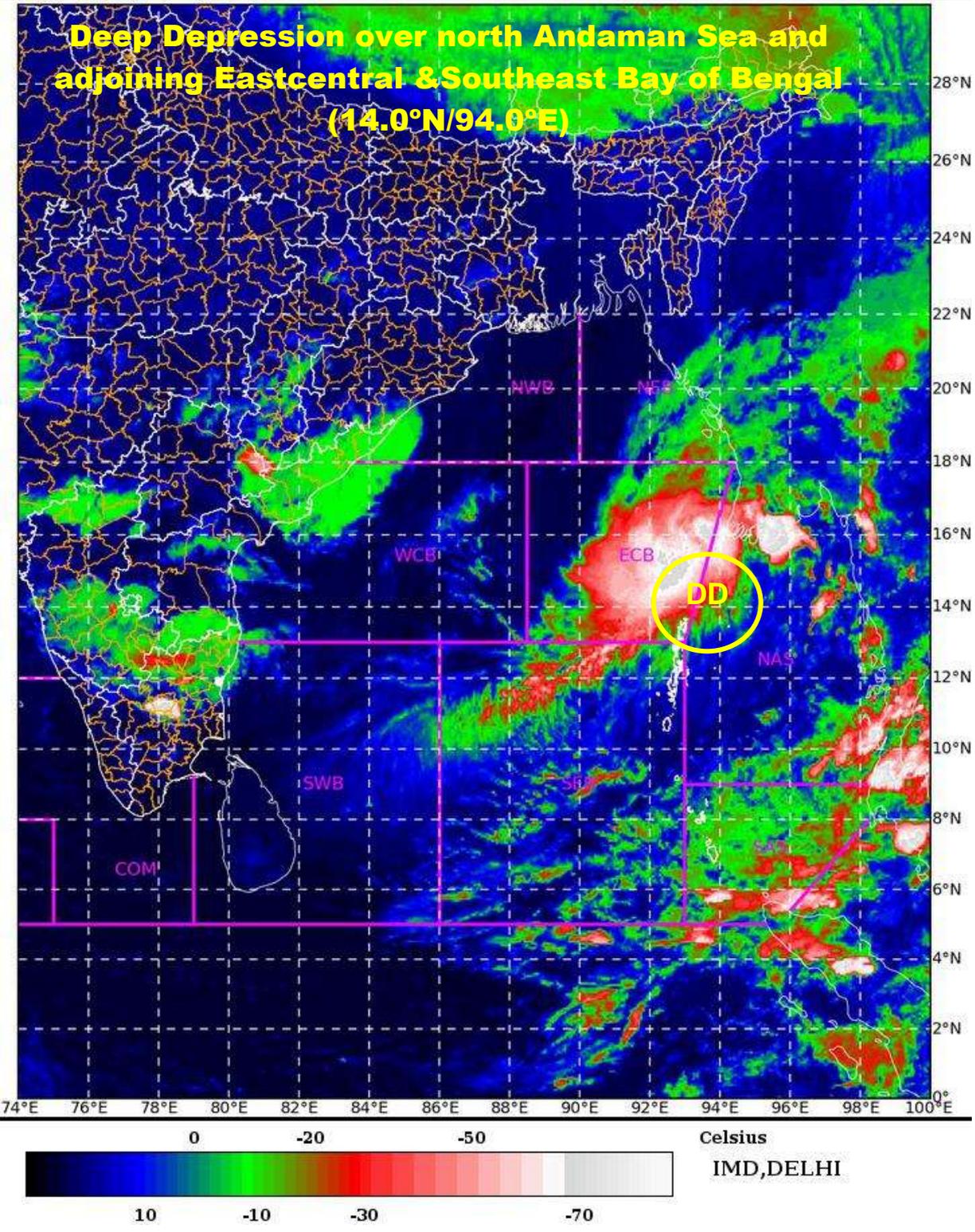
REMARKS:

SEA SURFACE TEMPERATURE IS AROUND 29-30⁰C OVER ANDAMAN SEA, SOUTHEAST AND ADJOINING EASTCENTRAL BAY OF BENGAL (BOB). TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 60-80 KJ/CM² OVER THE SAME REGION BECOMING LESS THAN 50 KJ/CM² OVER NORTH BOB. THE MADDEN JULIAN OSCILLATION (MJO) INDEX CURRENTLY LIES IN PHASE 3 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE FOR NEXT 2 DAYS AND MOVE TO PHASE 4 WITH AMPLITUDE REMAINING MORE THAN 1.

LOW LEVEL VORTICITY IS AROUND $150 \times 10^{-6} \text{ S}^{-1}$ NEAR SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS $20 \times 10^{-5} \text{ S}^{-1}$ TO THE NORTHEAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND $10 \times 10^{-5} \text{ S}^{-1}$ TO THE NORTH-NORTHEAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS MODERATE TO HIGH (20-25 KNOTS) AROUND THE SYSTEM CENTRE WITH DECREASING TREND (BECOMING 10-15 KNOTS) ALONG THE EXPECTED TRACK OF THE SYSTEM. THE SYSTEM IS TRACKING NORTHWARDS ALONG THE PERIPHERY OF ANTICYCLONE LYING TO IT'S NORTHEAST OVER MYANMAR & ADJOINING THAILAND. UPPER TROPOSPHERIC RIDGE IS SEEN NEAR 17⁰N.

(SHIBIN BALAKRISHNAN)
SCIENTIST-C
RSMC NEW DELHI

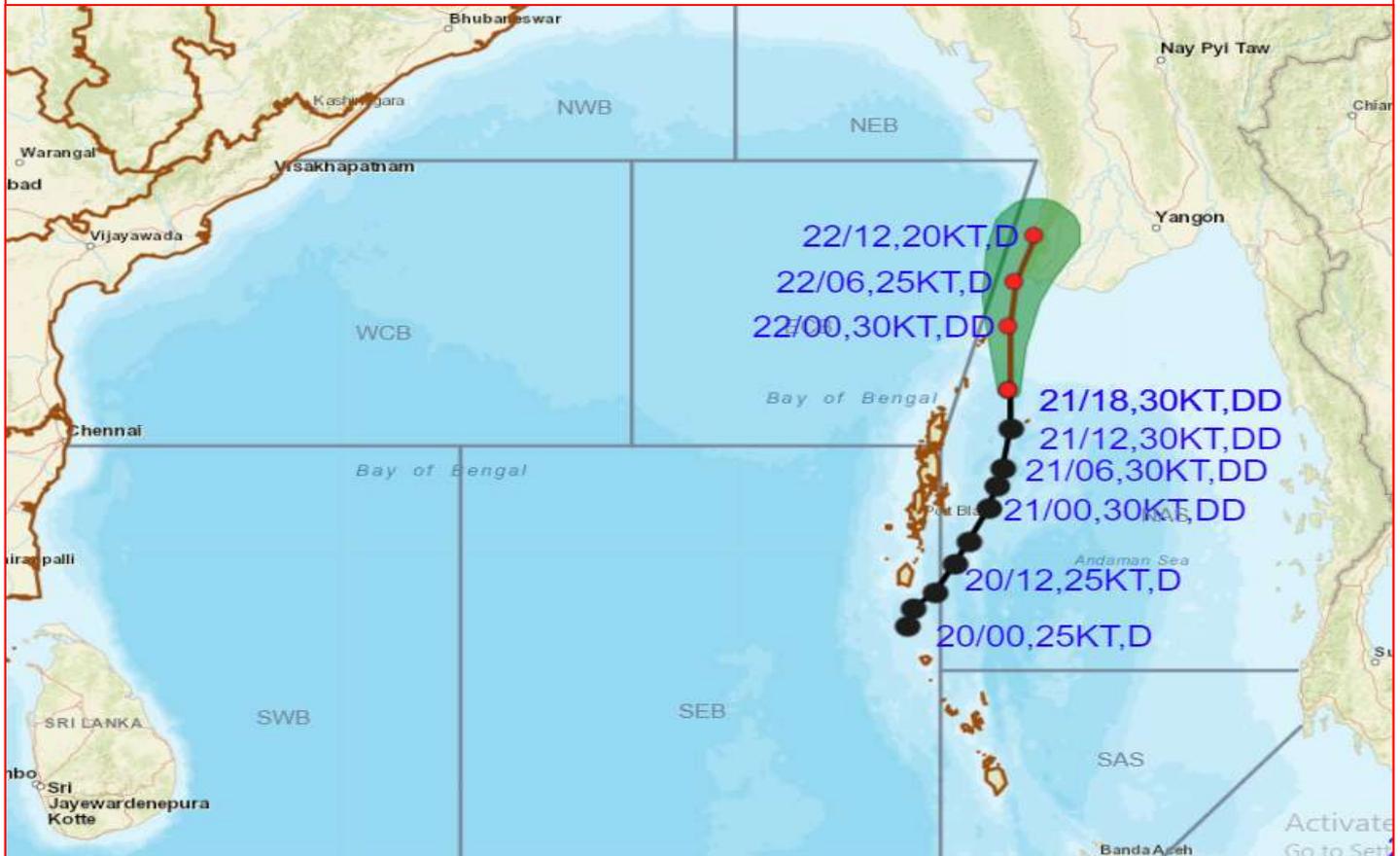
SAT : INSAT-3D IMG 21-03-2022/(1700 to 1726) GMT
IMG_TIR1_TEMP 10.8 um 21-03-2022/(2230 to 2256) IST
L1C Mercator



DD: Deep Depression



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER NORTH ANDAMAN SEA AND ADJOINING AREAS OF EASTCENTRAL & SOUTHEAST BAY OF BENGAL BASED ON 1800 UTC OF 21st MARCH 2022



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)

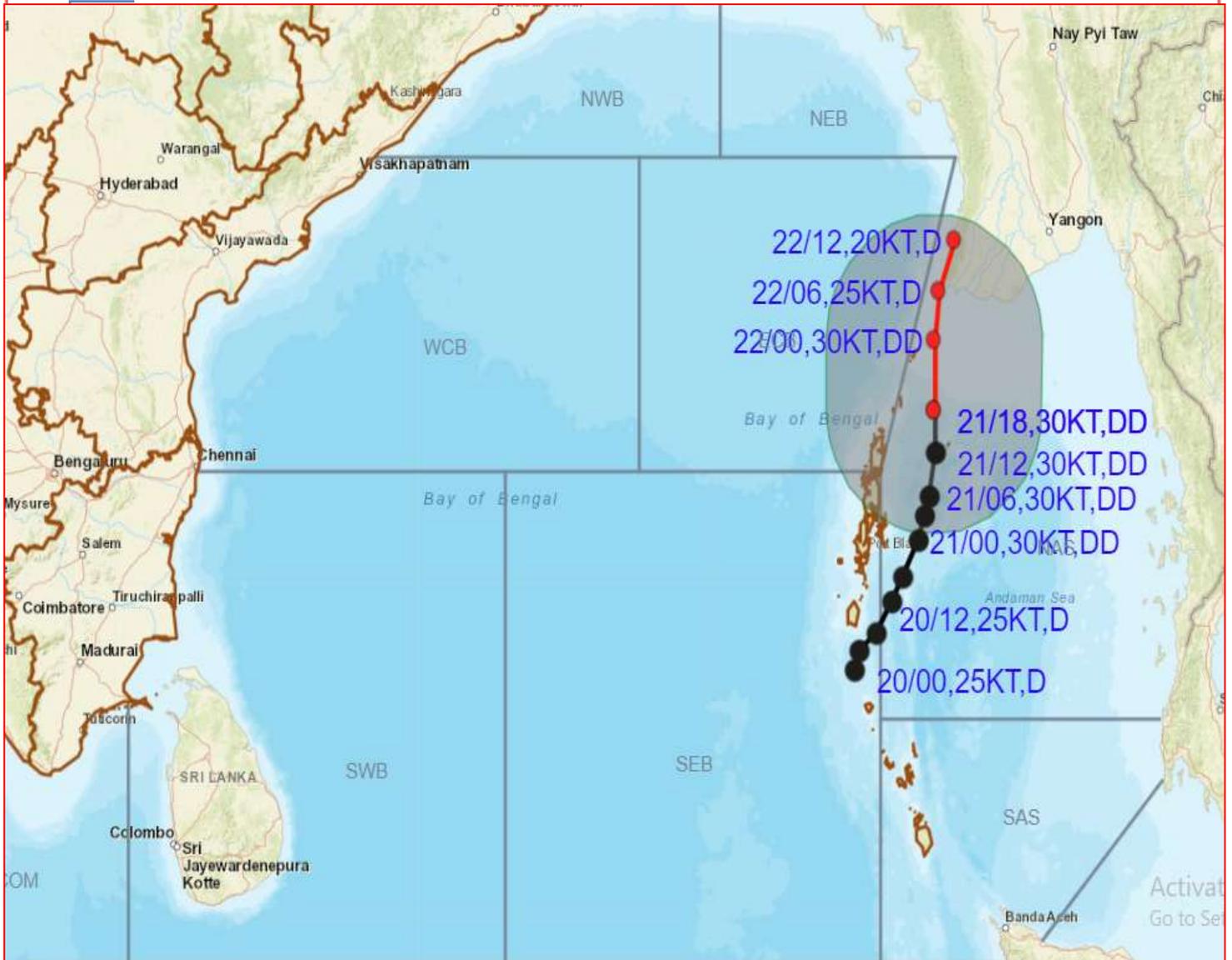
● LESS THAN 34 KT
 ○ 34.47 KT
 ⊙ ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ▲ CONE OF UNCERTAINTY

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS	
	21.03.22/1800	22.03.22/0600
Yangon	390,SW	240,WSW
Tandwe	500,S	290,S
Hut bay	410,NNE	620,NNE
Portblair	290,NNE	490,NNE
Maya bundar	170,ENE	360,NNE

N:NORTH, NNE:NORTH-NORTHEAST, NE:NORTHEAST, ENE:EAST-NORTHEAST, E:EAST, SE:SOUTHEAST, SSE:SOUTH-SOUTHEAST, S:SOUTH, SSW:SOUTH-SOUTHWEST, SW:SOUTHWEST, WSW:WEST-SOUTHWEST, W:WEST, WNW:WEST-NORTHWEST, NW:NORTHWEST, NNW:NORTH-NORTHWEST



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER NORTH ANDAMAN SEA AND ADJOINING AREAS OF EASTCENTRAL & SOUTHEAST BAY OF BENGAL BASED ON 1800 UTC OF 21st MARCH 2022



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