



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 04.03.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1430 UTC OF 04.03.2022 BASED ON 1200 UTC OF 04.03.2022.

DEPRESSION INTENSIFIED INTO A DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED NEARLY NORTHWARDS WITH THE SPEED OF ABOUT 15 KMPH DURING PAST 06 HOURS, INTENSIFIED INTO A DEEP DEPRESSION AND LAY CENTERED AT 1200 UTC OF TODAY, THE 4TH MARCH 2022, OVER THE SAME REGION NEAR LATITUDE 10.0°N AND LONGITUDE 82.7°E, ABOUT 220 KM NORTHEAST OF TRINCOMALEE (43418), 320 KM EAST-SOUTHEAST OF NAGAPATTINAM (43347), 380 KM EAST-SOUTHEAST OF PUDUCHERRY (43331), 420 KM SOUTH-SOUTHEAST OF CHENNAI (43279).

IT IS LIKELY TO MOVE NORTHWESTWARDS OFF EAST COAST OF SRI LANKA TILL 00 UTC OF 5TH MARCH AND THEN MOVE WEST-NORTHWESTWARDS TOWARDS NORTH TAMIL NADU COAST DURING SUBSEQUENT 36 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	FORECAST LEAD PERIOD	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
04.03.22/1200	00	10.0/82.7	50-60 GUSTING TO 70	DEEP DEPRESSION
05.03.22/0000	12	10.6/82.4	55-65 GUSTING TO 75	DEEP DEPRESSION
05.03.22/1200	24	10.9/81.9	55-65 GUSTING TO 75	DEEP DEPRESSION
06.03.22/0000	36	11.0/81.5	50-60 GUSTING TO 70	DEEP DEPRESSION
06.03.22/1200	48	11.0/81.1	45-55 GUSTING TO 65	DEPRESSION

THE INTENSITY OF THE SYSTEM IS T2.0. ASSOCIATED BROKEN LOW/MED CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BET LAT 6.0° N & 16.5° N AND LONG 80°E TO 88.5°E & SRILANKA. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE SEA CONDITION IS VERY ROUGH OVER SOUTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA.

REMARKS:

SEA SURFACE TEMPERATURE IS AROUND 28-29⁰C OVER SOUTHWEST AND WESTCENTRAL BOB. TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 60-80 KJ/CM² OVER THE SAME REGION. THE MADDEN JULIAN INDEX (MJO) CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE LESS THAN 1. IT IS LIKELY TO CONTINUE IN THE SAME PHASE FOR NEXT 2-3 DAYS WITH AMPLITUDE REMAINING LESS THAN 1. THE PHASE OF MJO IS CONDUCIVE FOR ENHANCED CONVECTION DURING NEXT 2-3 DAYS.

LOW LEVEL VORTICITY IS AROUND $150 \times 10^{-6} \text{ S}^{-1}$ TO THE SOUTH OF THE SYSTEM CENTRE. VERTICALLY, IT IS EXTENDING UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE IS AROUND $20 \times 10^{-5} \text{ S}^{-1}$ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS IS ABOUT $30 \times 10^{-5} \text{ S}^{-1}$ TO THE NORTHEAST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE TO HIGH (10-20 KNOTS) AROUND THE SYSTEM CENTRE AND INCREASES WESTWARDS TOWARDS TAMILNADU COAST.

UPPER TROPOSPHERIC RIDGE RUNS ALONG LAT 13 DEG NORTH TO THE NORTH OF SYSTEM AREA. HENCE, EAST SOUTH-EASTERLY WINDS PERSIST OVER THE SYSTEM REGION.

MOST OF THE NUMERICAL MODELS ARE UNANIMOUS IN MOVEMENT OF THE SYSTEM TOWARDS NORTH TAMILNADU COAST DURING NEXT 36 HOURS AND ALTOUGH NO CONCENSUS ABOUT THE FORECAST INTENSITY OF THE SYSTEM.

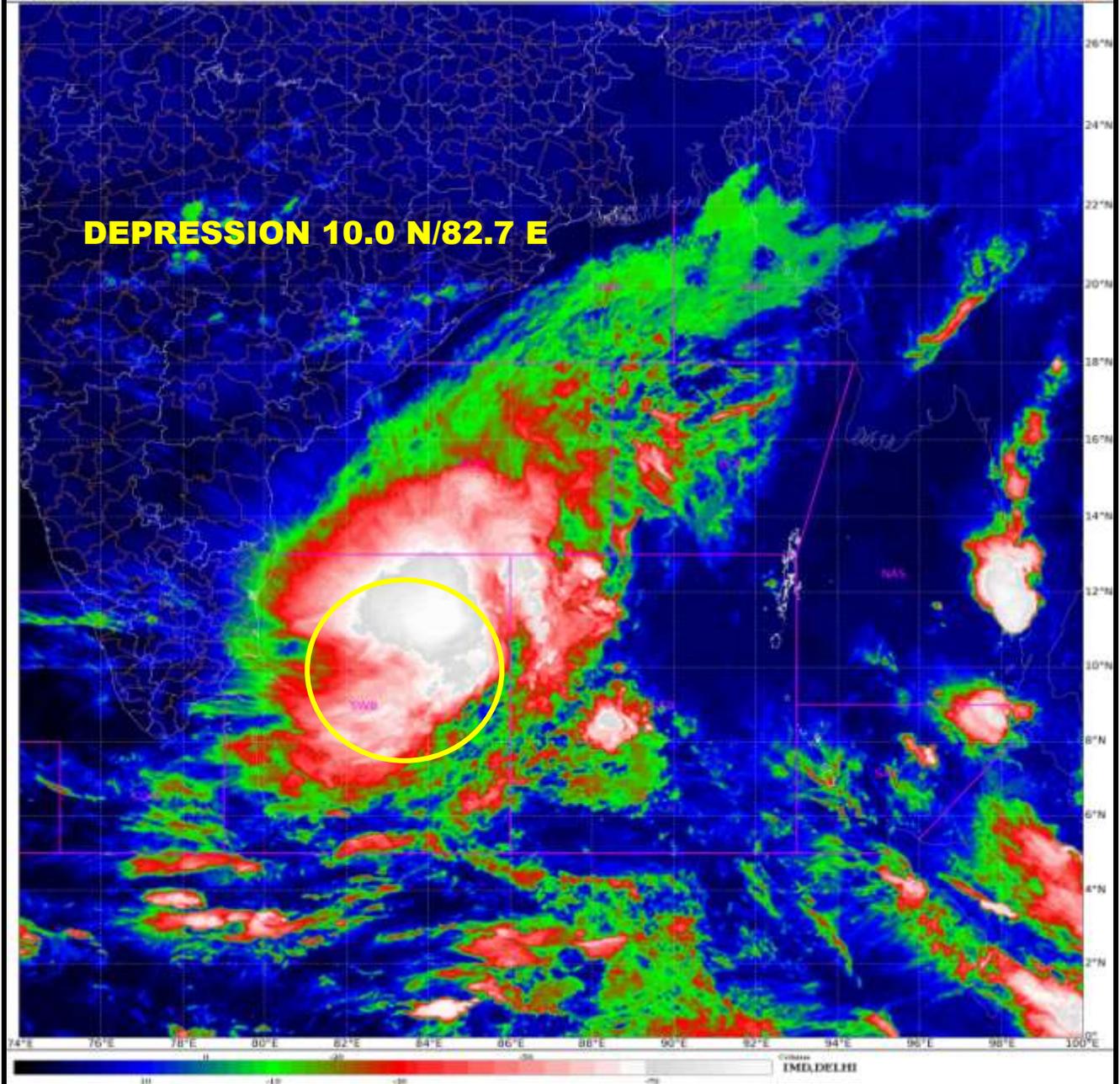
IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE DEEP DEPRESSION OVER SOUTHWEST BOB IS LIKELY TO MOVE NORTHWESTWARDS OFF EAST COAST OF SRILANKA TOWARDS NORTH TAMILNADU COAST DURING NEXT 36 HOURS.

THE NEXT BULLETIN WILL BE ISSUED AT 2100 UTC OF TODAY, THE 04TH MARCH, 2022.

(R.K. JENAMANI)
SCIENTIST-F
RSMC NEW DELHI

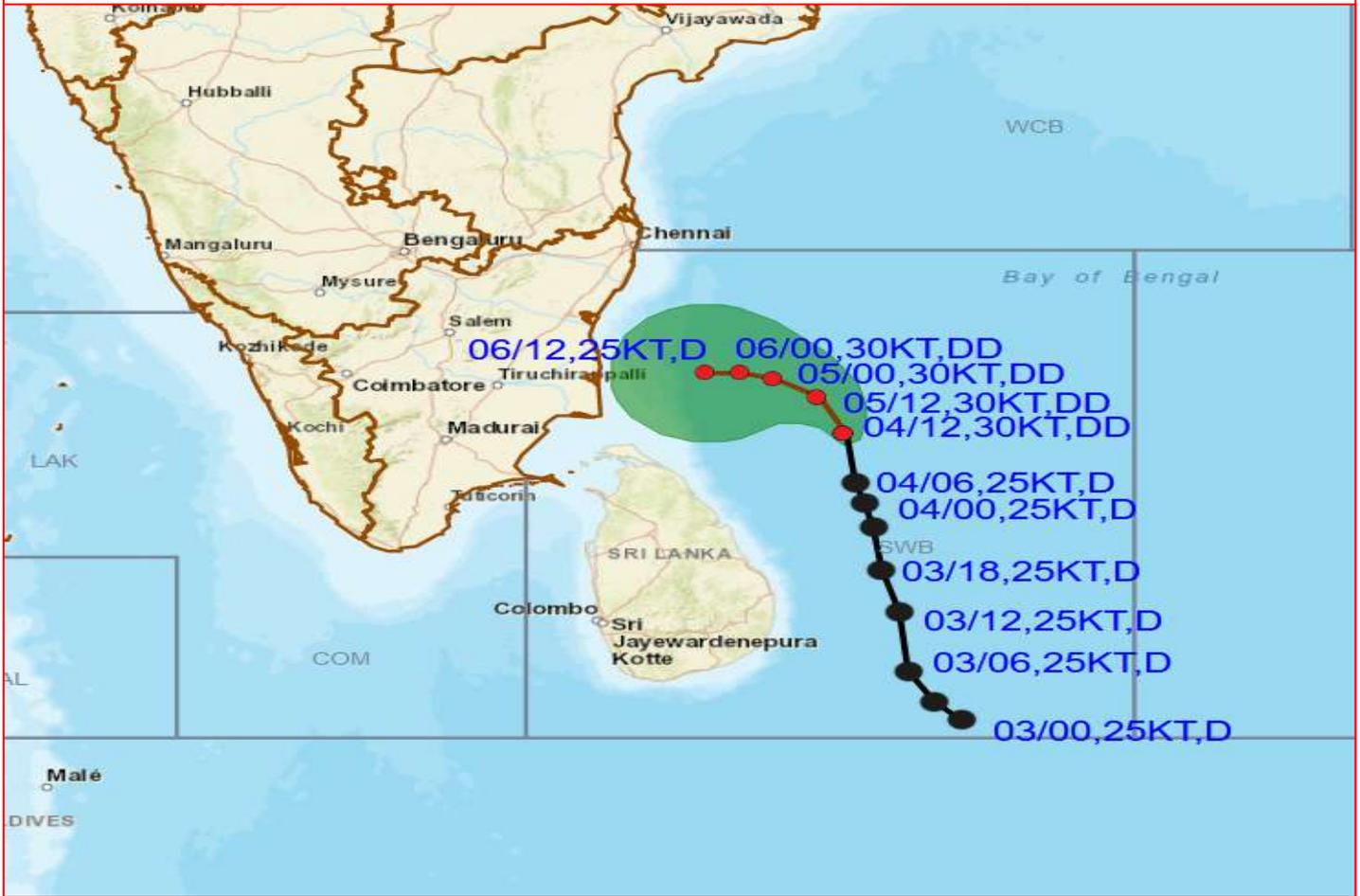


DEPRESSION 10.0 N/82.7 E





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 4th 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

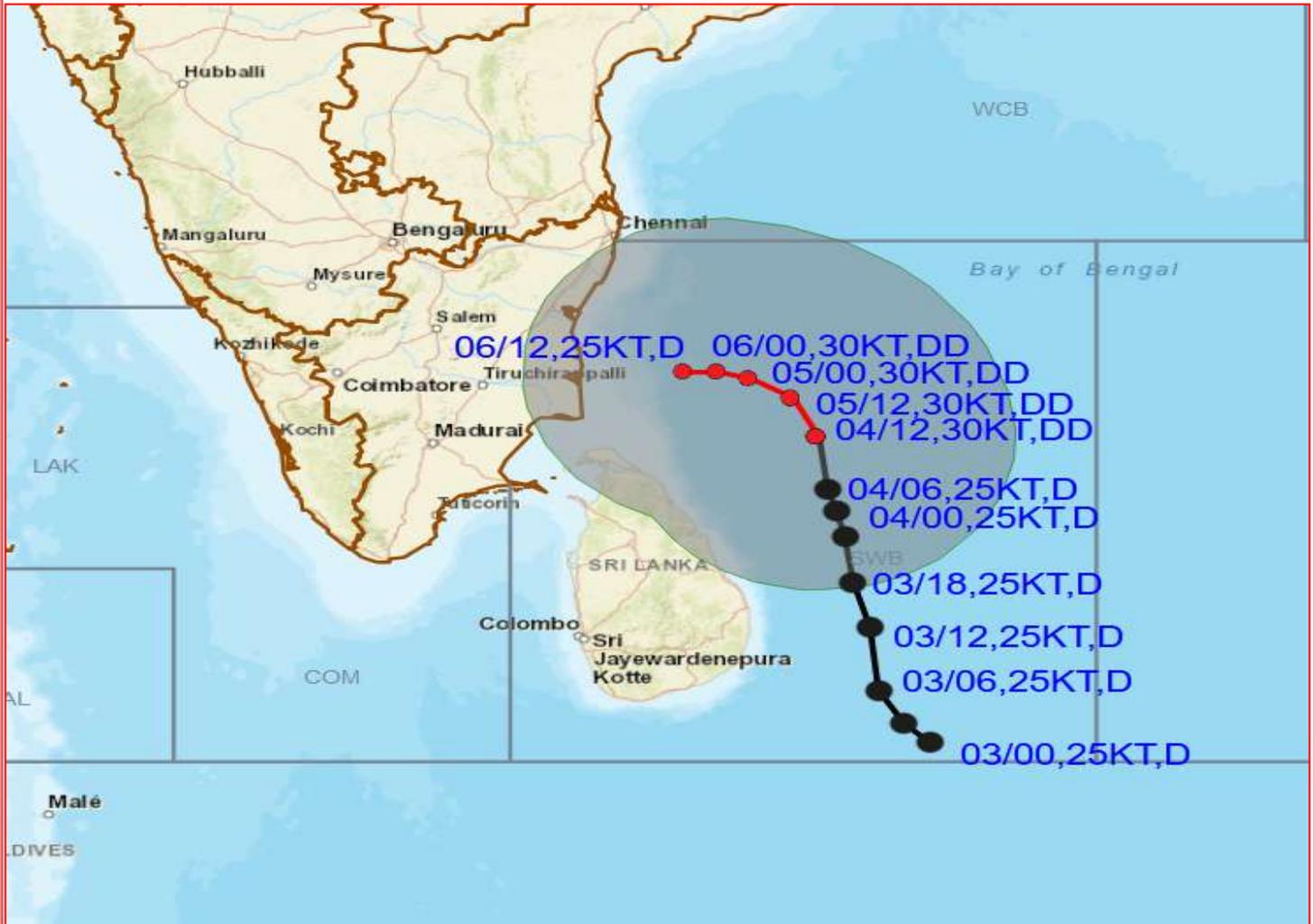
Forecast Date/Time	Station 1	Station 2	Station 3	Station 4	Station 5
04.03.22/1200	Trincomalee (220,NE)	Batticloa (280,NNE)	Kankasanturai (290,E)	Vedaranyam (310,E)	Velankanni (320,ESE)
05.03.22/0000	Batticloa (260,NNE)	Kankasanturai (270,ENE)	Vedaranyam (280,E)	Velankanni (280,E)	Nagapattinam (280,E)
05.03.22/1200	Kankasanturai (220,ENE)	Vedaranyam (220,ENE)	Velankanni (230,E)	Nagapattinam (230,E)	Mannar (230,NE)
06.03.22/0000	Vedaranyam (180,ENE)	Velankanni (180,ENE)	Nagapattinam (180,E)	Mannar (180,NE)	Karaikal (190,E)
06.03.22/1200	Velankanni (140,ENE)	Nagapattinam (140,E)	Mannar (140,NNE)	Karaikal (140,E)	Tharangambadi (150,E)

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	04.03.22/1200	05.03.22/1200	06.03.22/1200
TRINCOMALEE	220,NE	270,NNE	270,N
NAGAPATTINAM	320,ESE	220,E	140,E
PUDUCHERRY	380,SE	260,ESE	180,SE
CHENNAI	420,SSE	360,SSE	310,SSE

This is...
 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 DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 4th MARCH, 2022



DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
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 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
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 SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

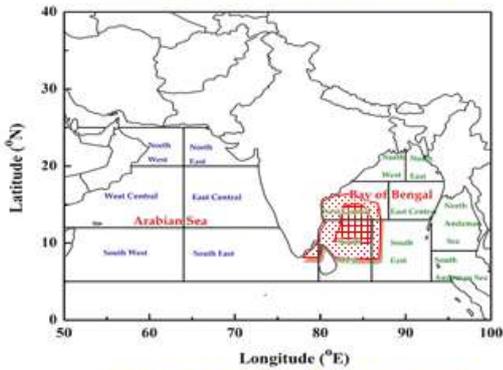
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- ▲ CONE OF UNCERTAINTY
- AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

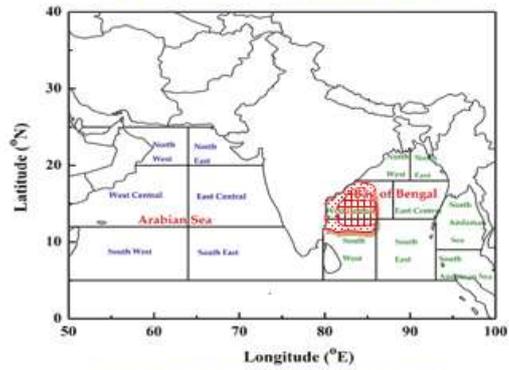
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

**INDIA METEOROLOGICAL DEPARTMENT
FISHERMAN WARNING FOR BAY OF BENGAL AND ARABIAN SEA**

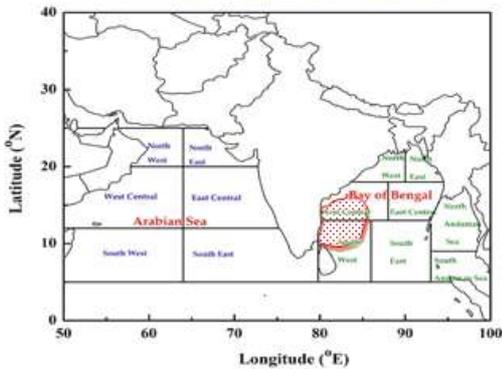
DAY-1: 04.03.2022/0600 UTC TO 05.03.2022/0600 UTC



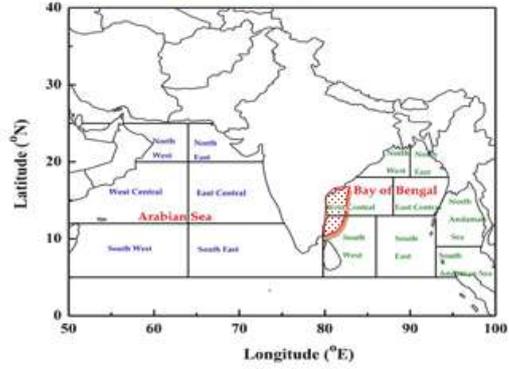
DAY-2: 05.03.2022/0600 UTC TO 06.03.2022 /0600 UTC



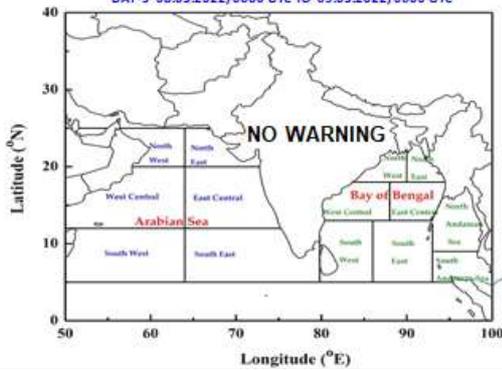
DAY-3: 06.03.2022/0600 UTC TO 07.03.2022/0600 UTC



DAY-4: 07.03.2022/0600 UTC TO 08.03.2022/0600 UTC



DAY-5: 08.03.2022/0600 UTC TO 09.03.2022/0600 UTC



AREA UNDER FISHERMEN WARNING

-  40-50 KMPH GUSTING TO 60 KMPH (STRONG WIND)
-  40-50 KMPH GUSTING TO 60 KMPH (SQUALLY WEATHER)
-  45-55 KMPH GUSTING TO 65 KMPH
-  50-60 KMPH GUSTING TO 80 KMPH
-  55-65 KMPH GUSTING TO 75 KMPH