



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

**DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 05.03.2022**

**SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2030 UTC OF 05.03.2022 BASED ON 1800 UTC OF 05.03.2022.**

**DEEP DEPRESSION WEAKENED INTO A DEPRESSION OVER SOUTHWEST BAY OF BENGAL**

THE DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED NEARLY SOUTHWESTWARDS WITH A SPEED OF ABOUT 04 KMPH DURING PAST 06 HOURS, WEAKENED INTO A DEPRESSION AND LAY CENTERED AT 1800 UTC OF 5<sup>TH</sup> MARCH 2022, OVER THE SAME REGION NEAR LATITUDE 11.5°N AND LONGITUDE 82.4°E, ABOUT 350 KM NORTH-NORTHEAST OF TRINCOMALEE (43418), 290 KM EAST-NORTHEAST OF NAGAPPATTINAM (43347), 290 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND ABOUT 280 KM EAST-SOUTHEAST OF CHENNAI (43279).

IT IS LIKELY TO MOVE SOUTHWESTWARDS TOWARDS NORTH TAMIL NADU COAST AND WEAKEN GRADUALLY INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 24 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
05.03.22/1800	00	11.5/82.4	45-55 GUSTING TO 65	DEPRESSION
06.03.22/0600	12	11.3/82.2	40-50 GUSTING TO 60	DEPRESSION
06.03.22/1800	24	11.0/81.8	30-40 GUSTING TO 50	WELL MARKED LOW PRESSURE AREA

THE INTENSITY OF THE SYSTEM IS T1.5. INTENSE CONVECTIVE CLOUD MASS HAS SHEARED TO THE NE OF THE SYSTEM CENTRE. INTENSITY OF THIS CONVECTION HAS ALSO DECREASED MARGINALLY IN LAST 3 HRS. ASSOCIATED BROKEN LOW/MED CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BET LAT 10.5° N & 16.5° N AND LONG 82°E TO 90.0°E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C. INTENSE CONVECTION LIES OVER NORTHEAST SECTOR OF THE SYSTEM CENTER.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER SOUTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL. THE ESTIMATED CENTRAL PRESSURE IS 1003 HPA.

**REMARKS:**

SEA SURFACE TEMPERATURE IS AROUND 28-29<sup>0</sup>C OVER SOUTHWEST AND WESTCENTRAL BOB. TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 60-80 KJ/CM<sup>2</sup> 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 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  $100 \times 10^{-6} \text{ S}^{-1}$  AROUND THE SYSTEM CENTRE. VERTICALLY, IT IS EXTENDING UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE HAS DECREASED AND IS AROUND  $10 \times 10^{-5} \text{ S}^{-1}$  TO THE NORTHEAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT  $10 \times 10^{-5} \text{ S}^{-1}$  TO THE EAST OF THE SYSTEM CENTRE. WIND SHEAR IS MODERATE(20 KNOTS) AROUND THE SYSTEM CENTRE AND INCREASES WESTWARDS TOWARDS TAMILNADU COAST.

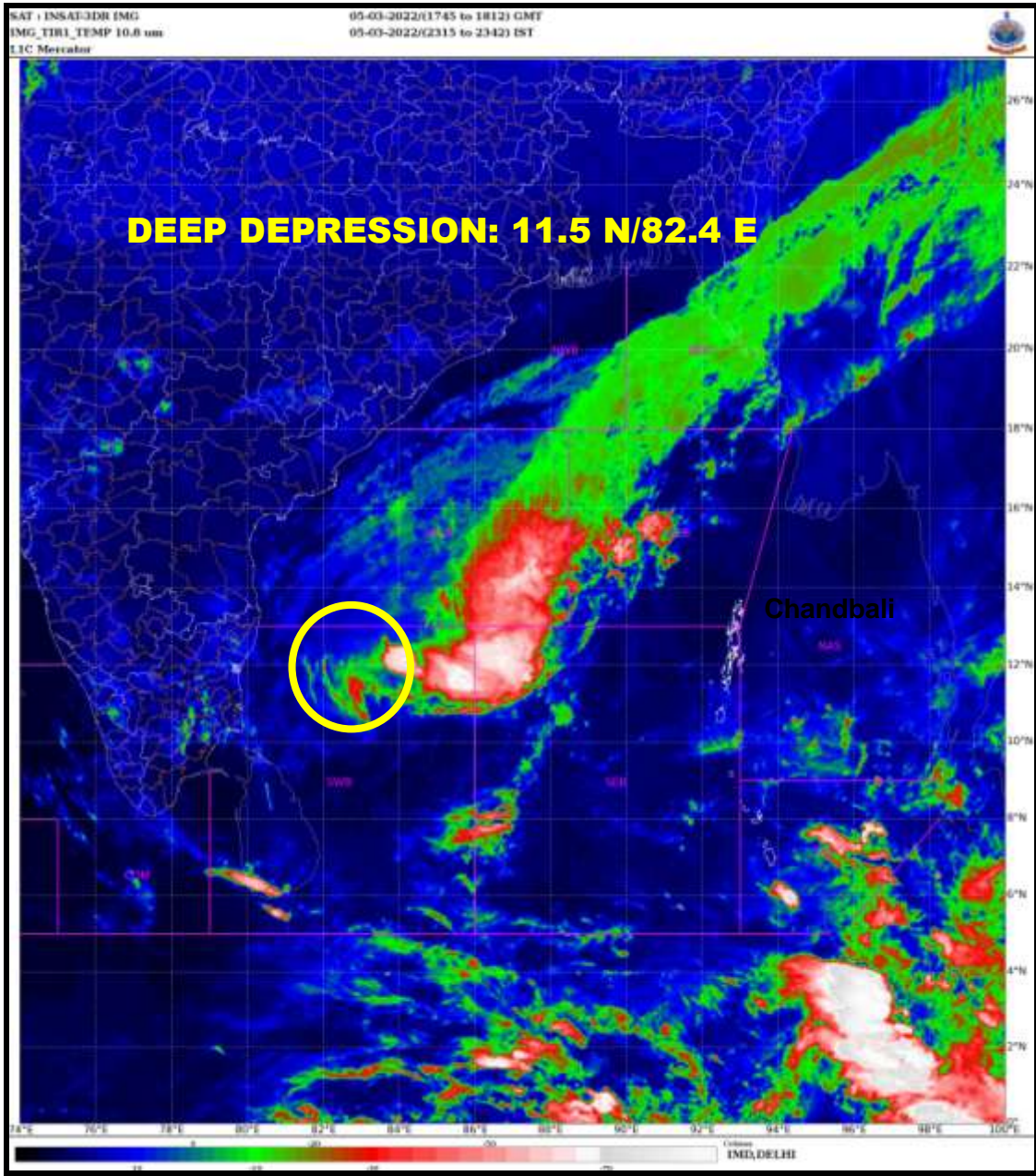
UNDER THE INFLUENCE OF THE RIDGE IN MID-TROPOSPHERIC LEVEL OVER SOUTH PENINSULAR INDIA AND ADJOINING ARABIAN SEA, TO THE NORTHWEST OF THE SYSTEM, THE SYSTEM WOULD MOVE SOUTHWESTWARDS AND DUE TO DRY AIR INCURSION FROM SOUTHWEST SECTOR, DECREASED CORIOLOIS PARAMETER, THE SYSTEM WOULD START WEAKENING GRADUALLY.

MOST OF THE NUMERICAL MODELS ARE UNANIMOUS THAT THE SYSTEM WOULD MOVE SOUTHWESTWARDS DURING NEXT 24 HOURS.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE DEPRESSION OVER SOUTHWEST BOB IS LIKELY TO MOVE TOWARDS NORTH TAMILNADU COAST AND WEAKEN GRADUALLY INTO A WELL MARKED LOW PRESURE AREA DURING NEXT 24 HOURS.

THE NEXT BULLETIN WILL BE ISSUED AT 0300 UTC OF 06<sup>TH</sup> MARCH, 2022.

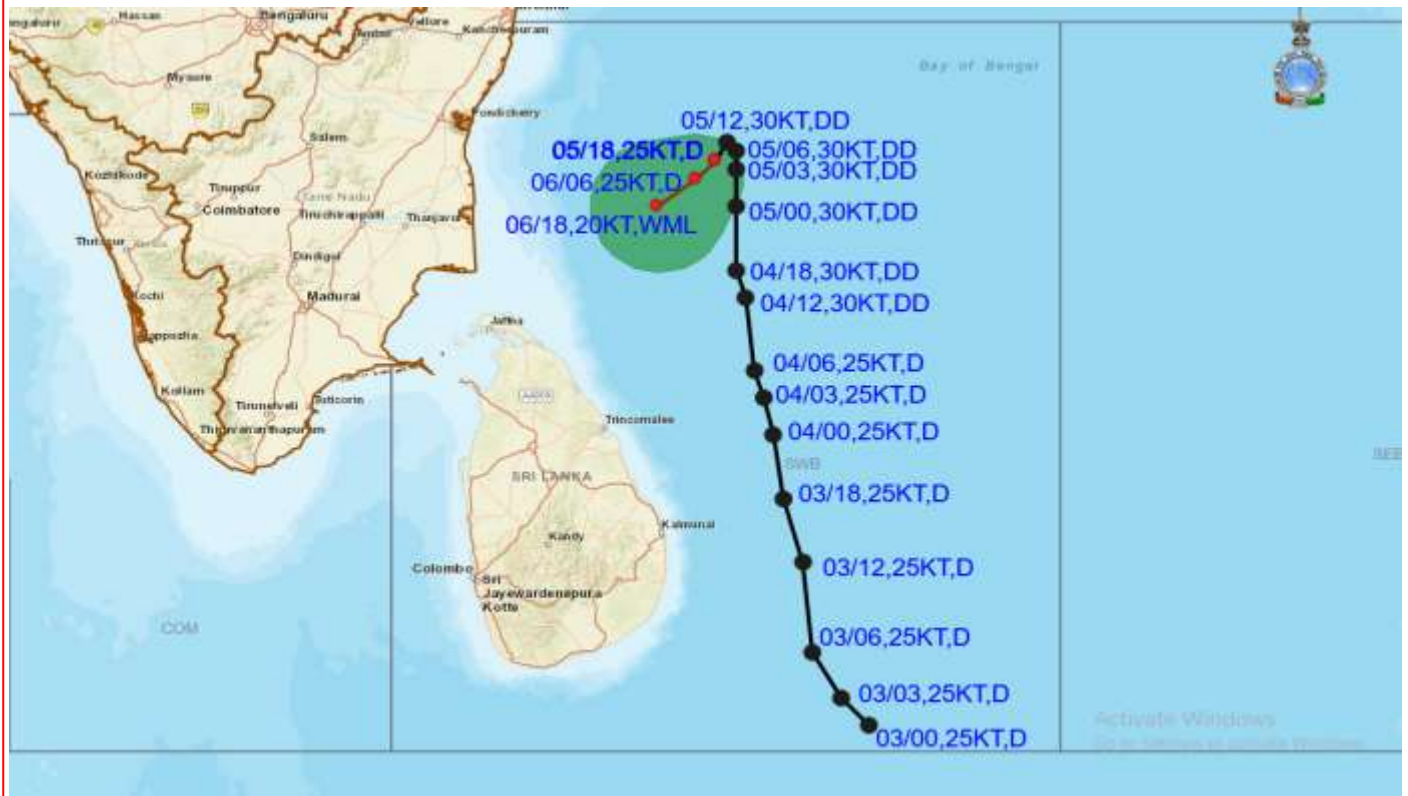
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## OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 5<sup>th</sup> MARCH, 2022



**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

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS	
	05.03.22/1800	06.03.22/1800
TRINCOMALEE	350, NNE	280, NNE
NAGAPATTINAM	290, ENE	210, E
PUDUCHERRY	290, E	240, ESE
CHENNAI	280, ESE	270, SE

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

Forecast Date/Time	Station 1	Station 2	Station 3	Station 4	Station 5
05.03.22/1800	Pudupattinam (270,ESE)	Kalpet (280,ESE)	Tharangambadi (280,E)	Kottakuppam (280,E)	Puducherry (290,E)
06.03.22/0600	Kalpet (260,ESE)	Tharangambadi (260,E)	Kottakuppam (260,ESE)	Puducherry (260,ESE)	Parangipettai (270,E)
06.03.22/1800	Tharangambadi (210,E)	Kottakuppam (210,ESE)	Puducherry (220,ESE)	Parangipettai (220,ESE)	Karaikal (220,E)

**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 1800 UTC OF 5<sup>th</sup> 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)

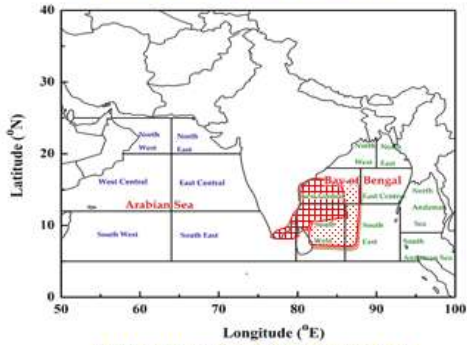
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- ▲ CONE OF UNCERTAINTY
- AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

### IMPACT OVER THE SEA

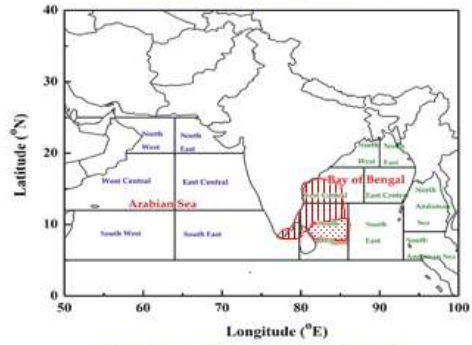
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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

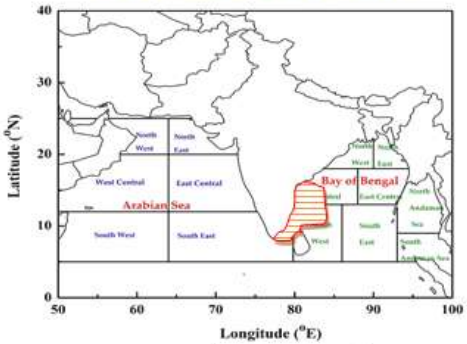
DAY-1: 05.03.2022/0600 UTC TO 06.03.2022/0600 UTC



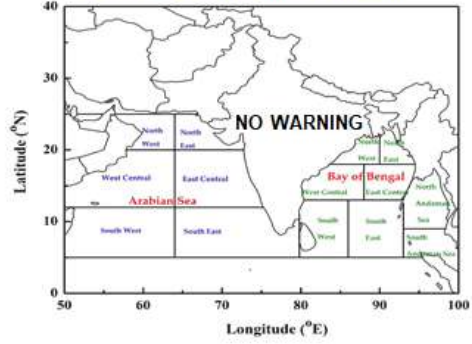
DAY-2: 06.03.2022/0600 UTC TO 07.03.2022 /0600 UTC



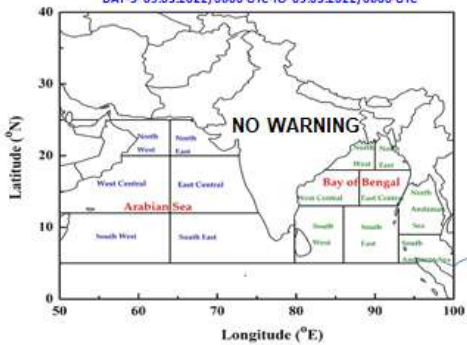
DAY-3: 07.03.2022/0600 UTC TO 08.03.2022/0600 UTC



DAY-4: 08.03.2022/0600 UTC TO 09.03.2022/0600 UTC



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



**AREA UNDER FISHERMEN WARNING**

-  35-45 KMPH GUSTING TO 55 KMPH (STRONG WIND)
-  40-50 KMPH GUSTING TO 60 KMPH (STRONG WIND)
-  45-55 KMPH GUSTING TO 65 KMPH
-  50-60 KMPH GUSTING TO 70 KMPH
-  55-65 KMPH GUSTING TO 75 KMPH

## Fishermen Warning for North India Ocean



# Weather Warning for India

