



**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 2100 UTC OF 04.03.2022 BASED ON 1800 UTC OF 04.03.2022.**

**DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL**

THE DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED NEARLY NORTH-NORTHWESTWARDS WITH A SPEED OF ABOUT 06 KMPH DURING LAST 06 HOURS AND LAY CENTERED AT 1800 UTC OF 4<sup>TH</sup> MARCH 2022, OVER THE SAME REGION NEAR LATITUDE 10.3°N AND LONGITUDE 82.6°E, ABOUT 240 KM NORTHEAST OF TRINCOMALEE (43418), 310KM EAST-SOUTHEAST OF NAGAPPATTINAM (43347), 360 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND ABOUT 450 KM SOUTHEAST OF CHENNAI (43279).

IT IS LIKELY TO MOVE NORTHWESTWARDS TILL 5<sup>TH</sup> MARCH MORNING 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(IST)	Forecast Lead Period	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic disturbance
04.03.22/1800	00	10.3 /82.6	50-60 GUSTING TO 70	DEEP DEPRESSION
05.03.22/0600	12	10.7/82.2	55-65 GUSTING TO 75	DEEP DEPRESSION
05.03.22/1800	24	10.9/81.7	55-65 GUSTING TO 75	DEEP DEPRESSION
06.03.22/0600	36	11.0/81.3	50-60 GUSTING TO 70	DEEP DEPRESSION
06.03.22/1800	48	10.8/80.7	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 7.0° N & 15.5° N AND LONG 80°E TO 88.0°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 28-29<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 2-3 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.

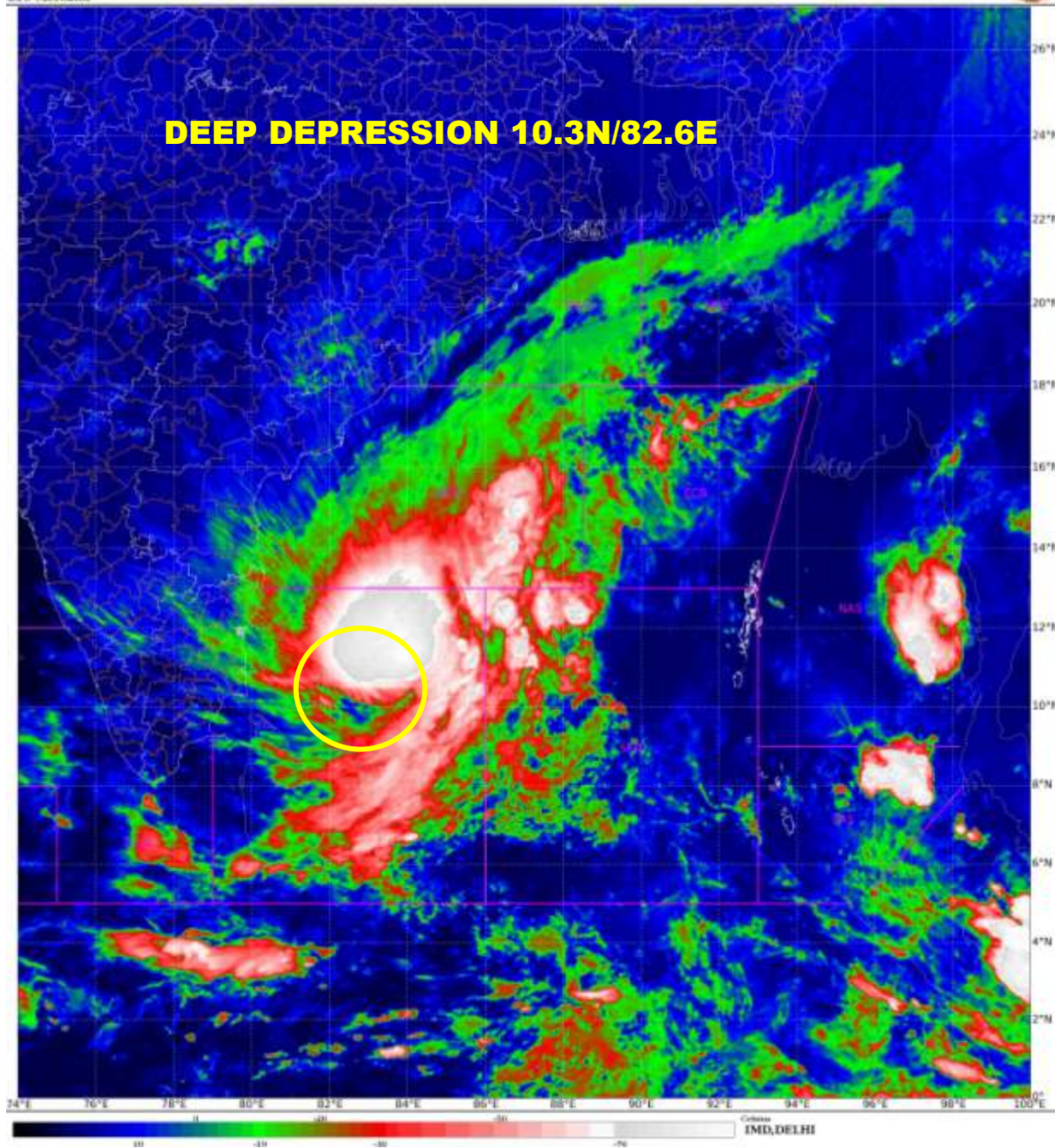
UPPER TROPOSPHERIC RIDGE RUNS ALONG LAT 13 DEG NORTH TO THE NORTH OF SYSTEM AREA. HENCE, EAST SOUTH-EASTERLY WINDS PERSIST OVER THE SYSTEM REGION.

MOST OF THE NUMERICAL MODELS ARE UNANIMOUS IN MOVEMENT OF THE SYSTEM TOWARDS NORTH TAMILNADU COAST DURING NEXT 36 HOURS AND ALTHOUGH 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 TOWARDS NORTH TAMILNADU COAST DURING NEXT 36 HOURS.

THE NEXT BULLETIN WILL BE ISSUED AT 0300UTC OF 05<sup>TH</sup> MARCH, 2022.

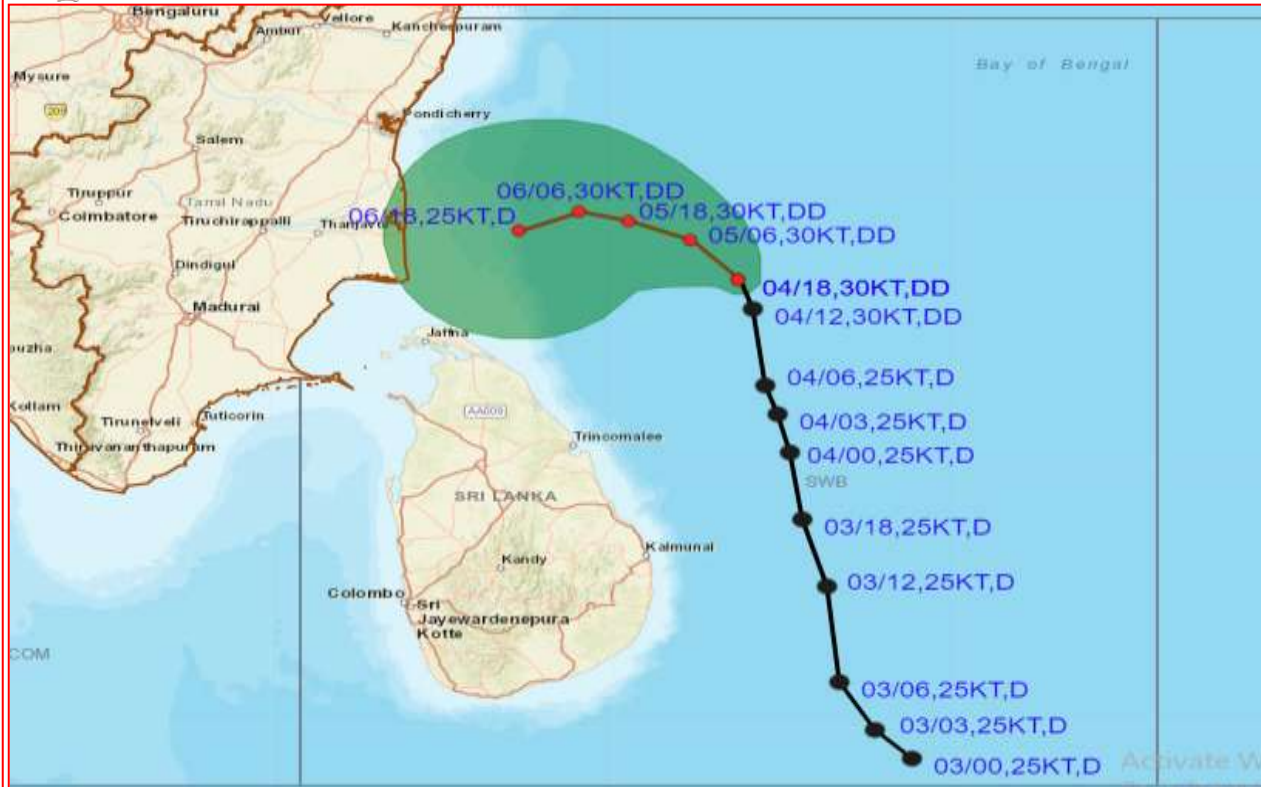
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**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 4<sup>th</sup> MARCH, 2022**



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

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	04.03.22/1800	05.03.22/1800	06.03.22/1800
TRINCOMALEE	240,NE	260,N	250,NNW
NAGAPATTINAM	310,ESE	200,E	90,E
PUDUCHERRY	360,ESE	240,ESE	160,SE
CHENNAI	450,SE	350,SSE	320,S

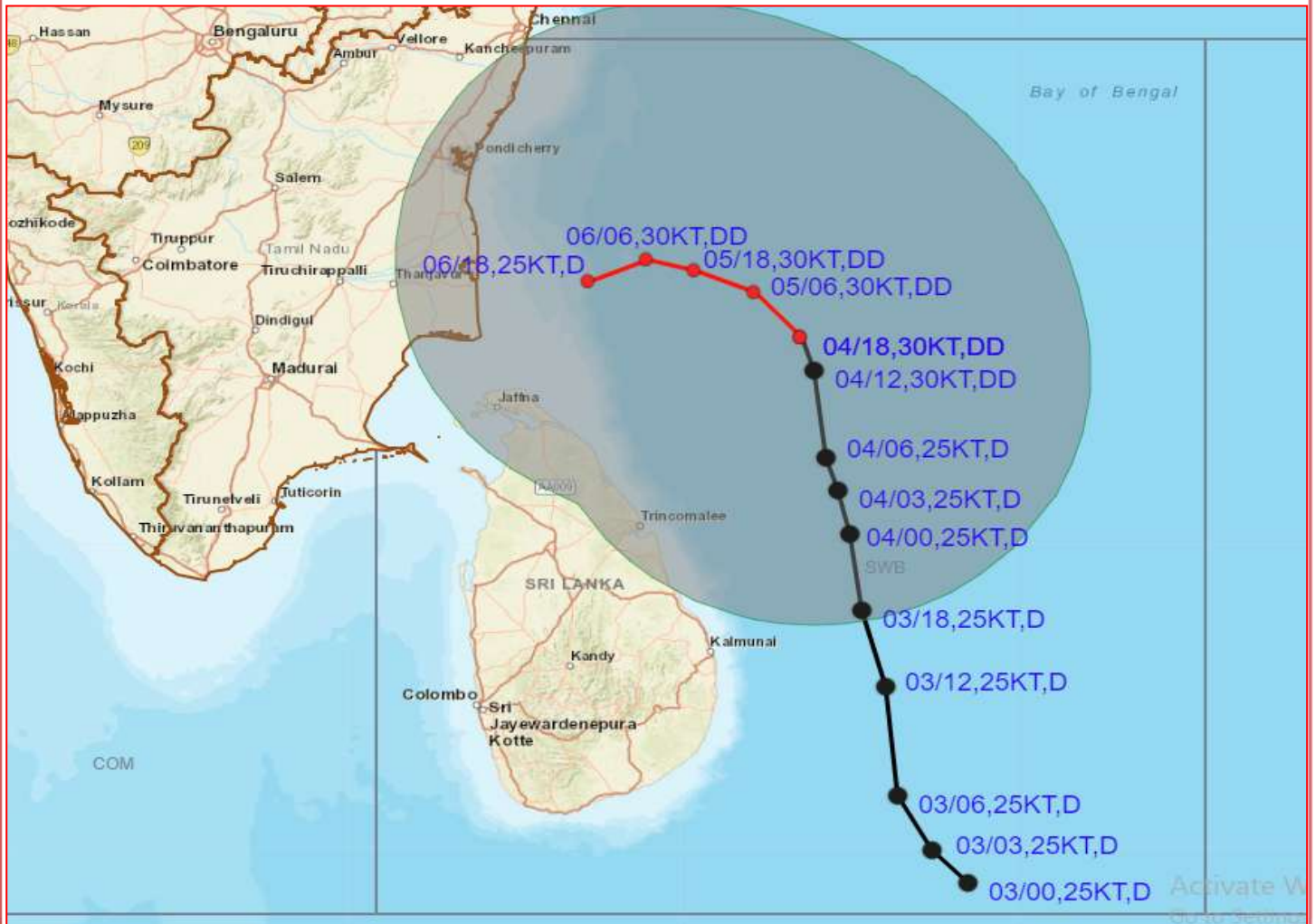
N:NORTH, NNE:NORTH-NORTHEAST, NE:NORTHEAST, ENE:EAST-NORTHEAST, E:EAST, SE:SOUTHEAST, SSE:SOUTH-SOUTHEAST, S:SOUTH, SSW:SOUTH-SOUTHWEST, SW:SOUTHWEST, WSW:WEST-SOUTHWEST, W:WEST, WNW:WEST-NORTHWEST, NW:NORTHWEST, NNW:NORTH-NORTHWEST

**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
04.03.22/1800	Trincomalee (240,NE)	Kankasanturai (280,ENE)	Vedaranyam (300,E)	Batticloa (300,NNE)	Velankanni (310,E)
05.03.22/0600	Kankasanturai (250,ENE)	Vedaranyam (260,E)	Batticloa (260,N)	Velankanni (260,E)	Nagapattinam (260,E)
05.03.22/1800	Vedaranyam (200,ENE)	Batticloa (200,N)	Velankanni (200,E)	Nagapattinam (200,E)	Karaikal (210,E)
06.03.22/0600	Batticloa (160,N)	Velankanni (160,ENE)	Nagapattinam (160,E)	Karaikal (160,E)	Tharangambadi (170,E)
06.03.22/1800	Velankanni (90,E)	Nagapattinam (100,E)	Karaikal (100,E)	Tharangambadi (100,ESE)	Mannar (100,NNE)



# OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 4<sup>th</sup> MARCH, 2022



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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

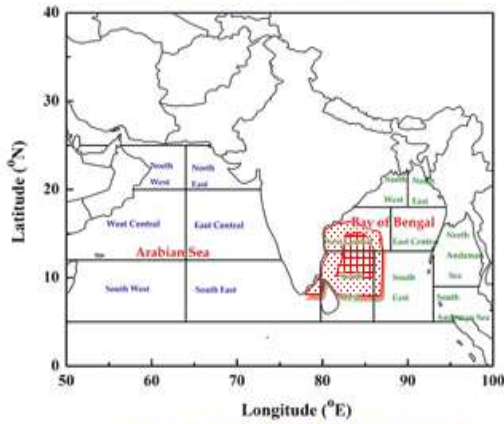
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥ 118)	Phenomenal	Total suspension of fishing operations



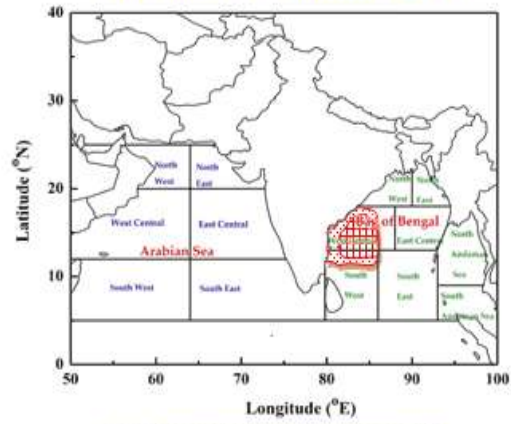
# Fishermen Warning for North Indian Ocean

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

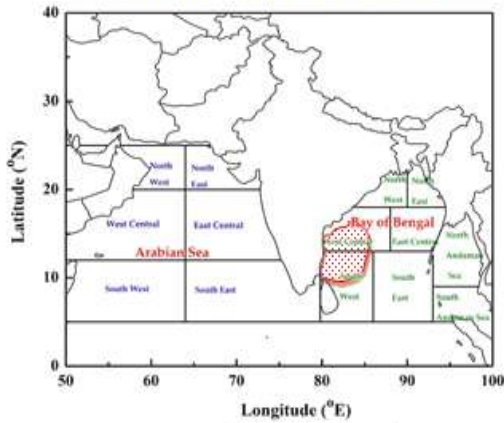
DAY-1: 04.03.2022/0600 UTC TO 05.03.2022/0600 UTC



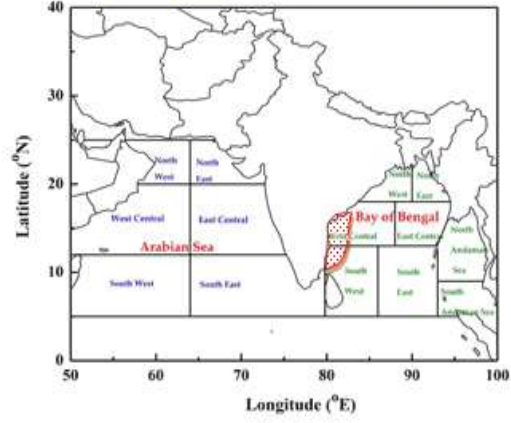
DAY-2: 05.03.2022/0600 UTC TO 06.03.2022/0600 UTC



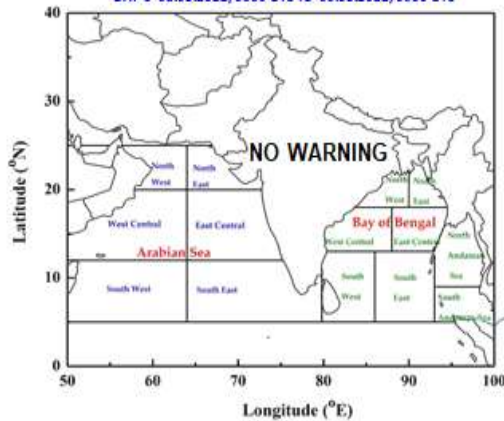
DAY-3: 06.03.2022/0600 UTC TO 07.03.2022/0600 UTC








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