



**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 0600 UTC OF 05.03.2022 BASED ON 0300 UTC OF 05.03.2022.

DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL

THE DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED NORTHWARDS WITH A SPEED OF ABOUT 14 KMPH DURING LAST 06 HOURS AND LAY CENTERED AT 0300 UTC OF 5TH MARCH 2022, OVER THE SAME REGION NEAR LATITUDE 11.4°N AND LONGITUDE 82.6°E, ABOUT 350 KM NORTH-NORTHEAST OF TRINCOMALEE (43418), 310KM EAST-NORTHEAST OF NAGAPPATTINAM (43347), 300 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND ABOUT 300 KM OF CHENNAI (43279).

IT IS LIKELY TO MOVE NORTHWESTWARDS TILL 1200 UTC OF 5TH MARCH EVENING AND THEN WEST-SOUTHWESTWARDS 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
05.03.22/0300	00	11.4/82.6	55-65 GUSTING TO 75	DEEP DEPRESSION
05.03.22/1200	12	11.8/82.4	55-65 GUSTING TO 75	DEEP DEPRESSION
06.03.22/0000	24	11.6/81.8	50-60 GUSTING TO 70	DEEP DEPRESSION
06.03.22/1200	36	11.3/81.3	45-55 GUSTING TO 65	DEPRESSION
07.03.22/0000	48	10.8/80.6	35-45 GUSTING TO 55	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 8.5° N & 15.5° N AND LONG 80°E TO 87.5°E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 81 DEG C. INTENSE CONVECTION LIES OVER NORTH-EAST SECTOR OF THE SYSTEM CENTER.

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°C 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 $10 \times 10^{-5} \text{ S}^{-1}$ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT $20 \times 10^{-5} \text{ S}^{-1}$ SOUTHEAST OF THE SYSTEM CENTRE. WIND SHEAR IS MODERATE(10-15 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 WEST-SOUTHWESTWARDS AFTER 1200 UTC OF THE 5TH MARCH.

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 WEST-SOUTHWESTWARDS TOWARDS NORTH TAMILNADU COAST DURING NEXT 36 HOURS.

THE NEXT BULLETIN WILL BE ISSUED AT 0900UTC OF 05TH MARCH, 2022.

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

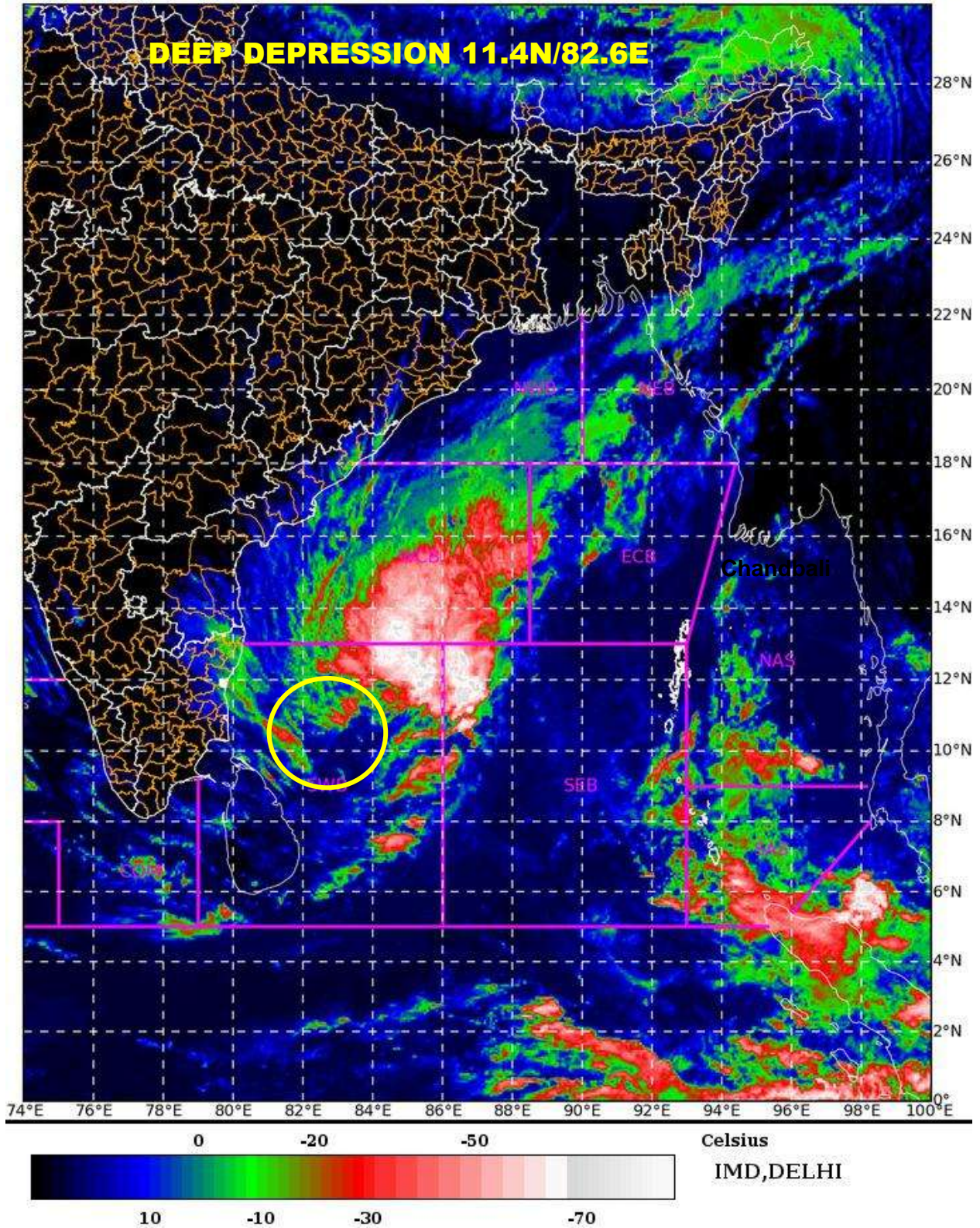
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05-03-2022/(0530 to 0557) GMT

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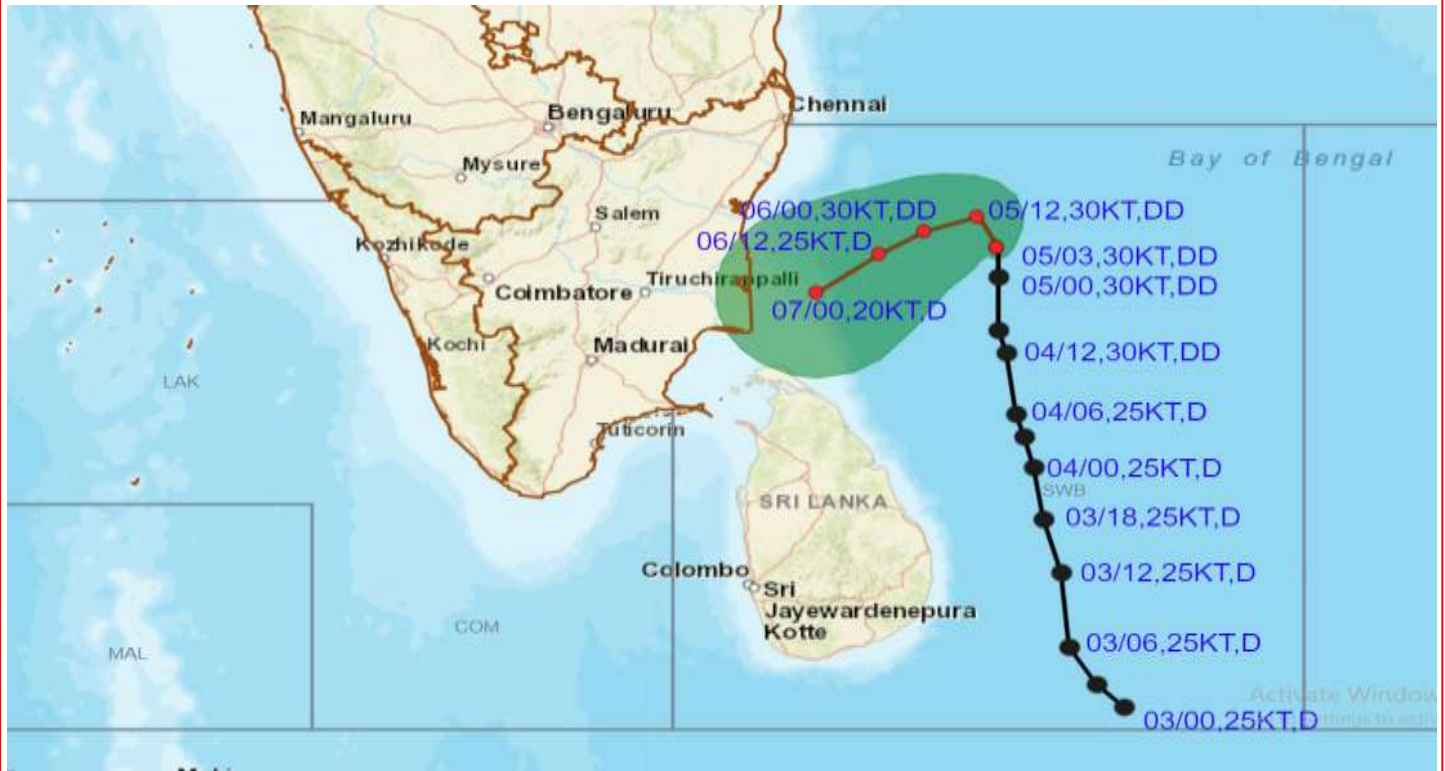
05-03-2022/(1100 to 1127) IST

L1C Mercator





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0300 UTC OF 5th 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

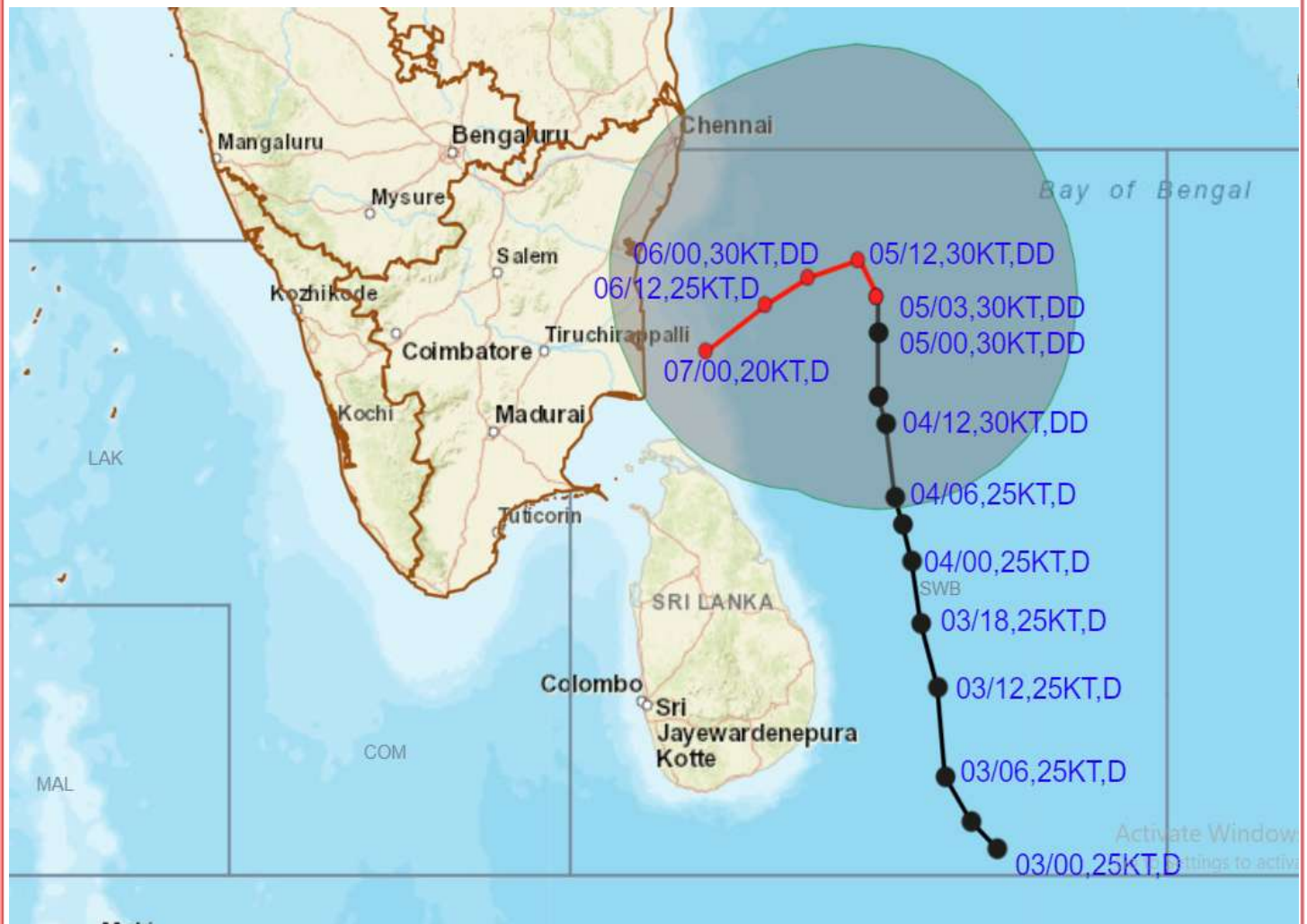
STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	05.03.22/0300	06.03.22/0000	07.03.22/0000
TRINCOMALEE	350,NNE	340,N	260,NNW
NAGAPATTINAM	310,ENE	230,ENE	80,E
PUDUCHERRY	300,ESE	220,E	160,SSE
CHENNAI	300,SE	230,SE	250,S

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
05.03.22/0300	Pudupattinam (290,ESE)	Tharangambadi (300,E)	Karaikal (310,E)	Kalapet (310,ESE)	Kottakuppam (310,ESE)
05.03.22/1200	Tharangambadi (260,ENE)	Karaikal (270,ENE)	Kalapet (270,E)	Kottakuppam (280,E)	Nagapattinam (280,ENE)
06.03.22/0000	Karaikal (210,ENE)	Kalapet (220,ESE)	Kottakuppam (220,E)	Nagapattinam (220,ENE)	Parangipettai (220,E)
06.03.22/1200	Kalapet (160,ESE)	Kottakuppam (170,ESE)	Nagapattinam (170,ENE)	Parangipettai (170,E)	Puducherry (170,ESE)
07.03.22/0000	Kottakuppam (80,SSE)	Nagapattinam (80,E)	Parangipettai (80,SE)	Puducherry (90,SSE)	Cuddalore (100,SE)



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0300 UTC OF 5th MARCH, 2022



DATE/TIME IN UTC

IST=UTC + 0530

L: LOW PRESSURE AREA

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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)

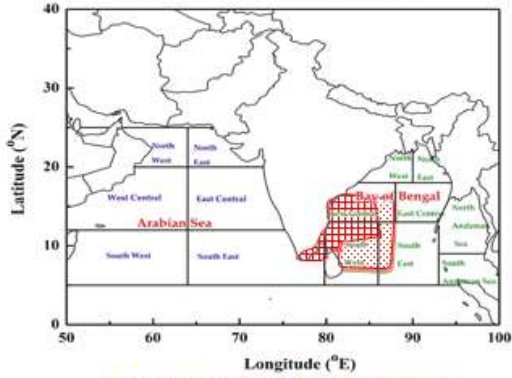
IMPACT OVER THE SEA

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

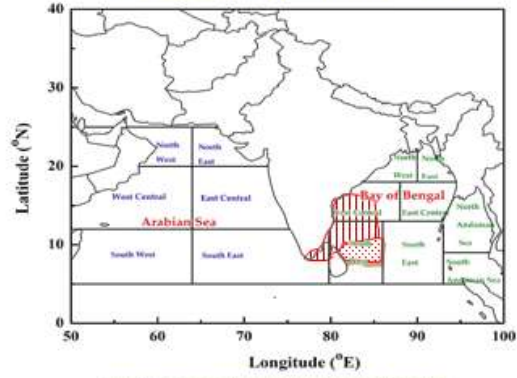
Fishermen Warning for North Indian Ocean

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

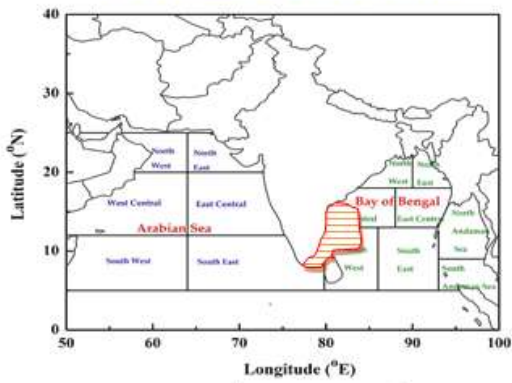
DAY-1: 05.03.2022/0600 UTC TO 06.03.2022/0600 UTC



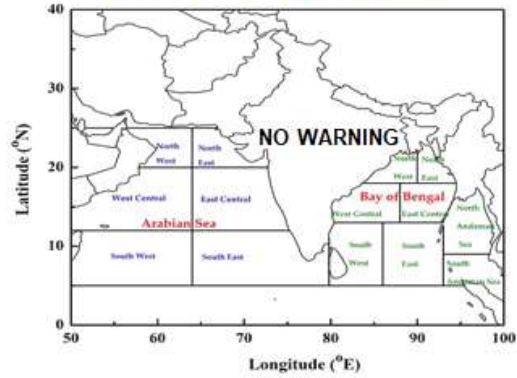
DAY-2: 06.03.2022/0600 UTC TO 07.03.2022/0600 UTC



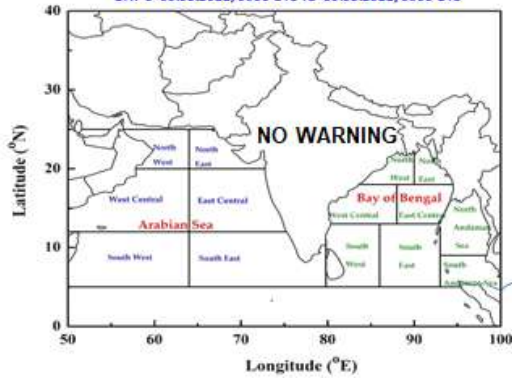
DAY-3: 07.03.2022/0600 UTC TO 08.03.2022/0600 UTC



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 80 KMPH
-  55-65 KMPH GUSTING TO 75 KMPH