



**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 0300 UTC OF 05.03.2022 BASED ON 0000 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 13 KMPH DURING LAST 06 HOURS AND LAY CENTERED AT 0000 UTC OF 5TH MARCH 2022, OVER THE SAME REGION NEAR LATITUDE 11.0°N AND LONGITUDE 82.6°E, ABOUT 310 KM NORTH-NORTHEAST OF TRINCOMALEE (43418), 300KM EAST-NORTHEAST OF NAGAPPATTINAM (43347), 320 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND ABOUT 390 KM SOUTHEAST OF CHENNAI (43279).

IT IS LIKELY TO MOVE NORTHWESTWARDS TILL 1200 UTC OF 5TH MARCH AND THEN MOVE WEST-SOUTHWESTWARDS 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
05.03.22/0000	00	11.0 /82.6	55-65 GUSTING TO 75	DEEP DEPRESSION
05.03.22/1200	12	11.5/82.4	55-65 GUSTING TO 75	DEEP DEPRESSION
06.03.22/0000	24	11.4/81.9	55-65 GUSTING TO 75	DEEP DEPRESSION
06.03.22/1200	36	11.0/81.3	45-55 GUSTING TO 65	DEPRESSION
07.03.22/0000	48	10.7/80.8	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 8.0° N & 15.5° N AND LONG 80°E TO 87.5°E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 88 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 SOUTH OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT $20 \times 10^{-5} \text{ S}^{-1}$ AROUND THE SYSTEM CENTRE. WIND SHEAR IS MODERATE(10-15 KNOTS) AROUND THE SYSTEM CENTRE AND INCREASES WESTWARDS TOWARDS TAMILNADU COAST.

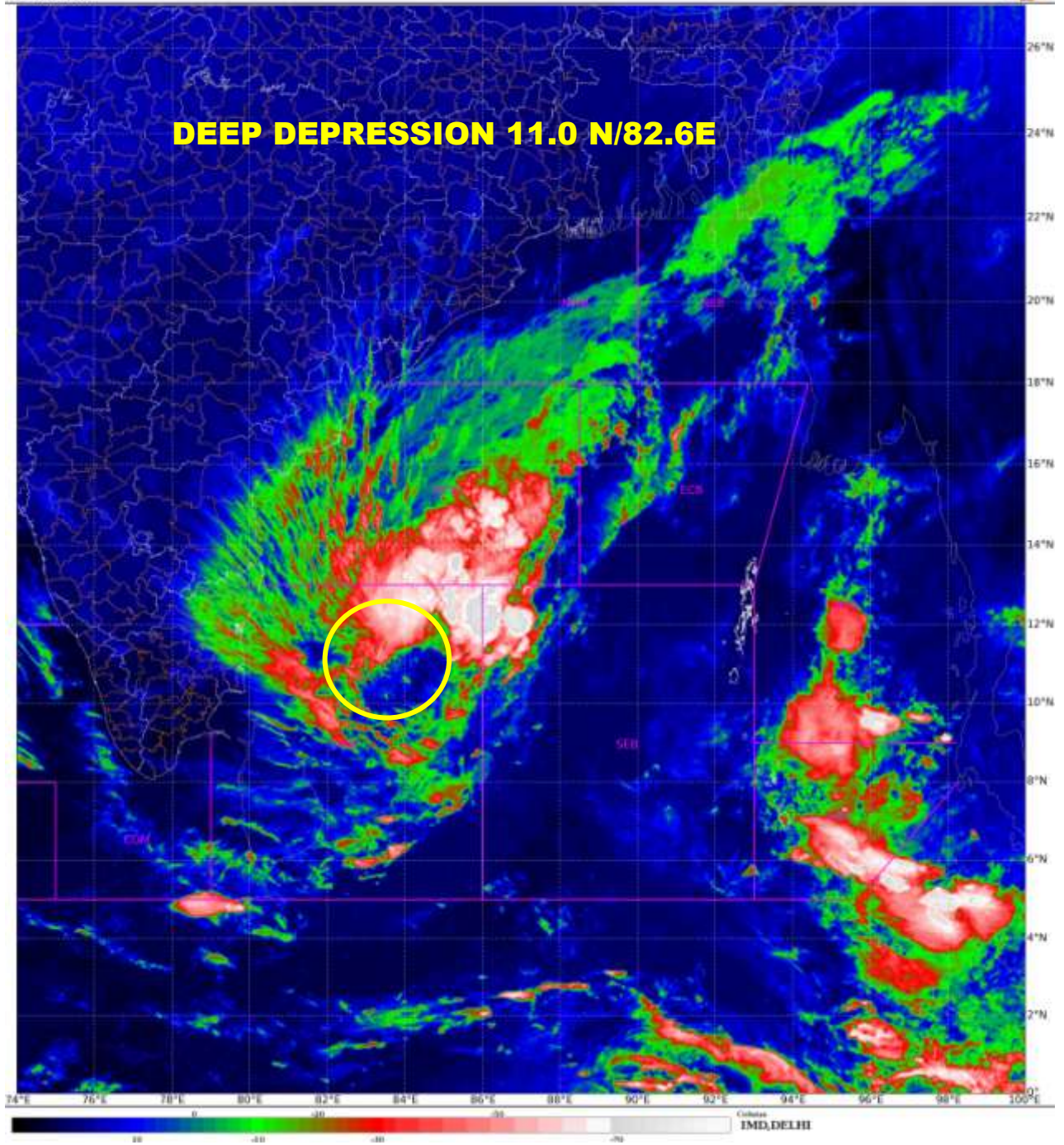
UPPER TROPOSPHERIC RIDGE RUNS ALONG LAT 13 DEG NORTH TO THE NORTH OF SYSTEM AREA. HENCE, EAST SOUTH-EASTERLY WINDS PERSIST OVER THE SYSTEM REGION.

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

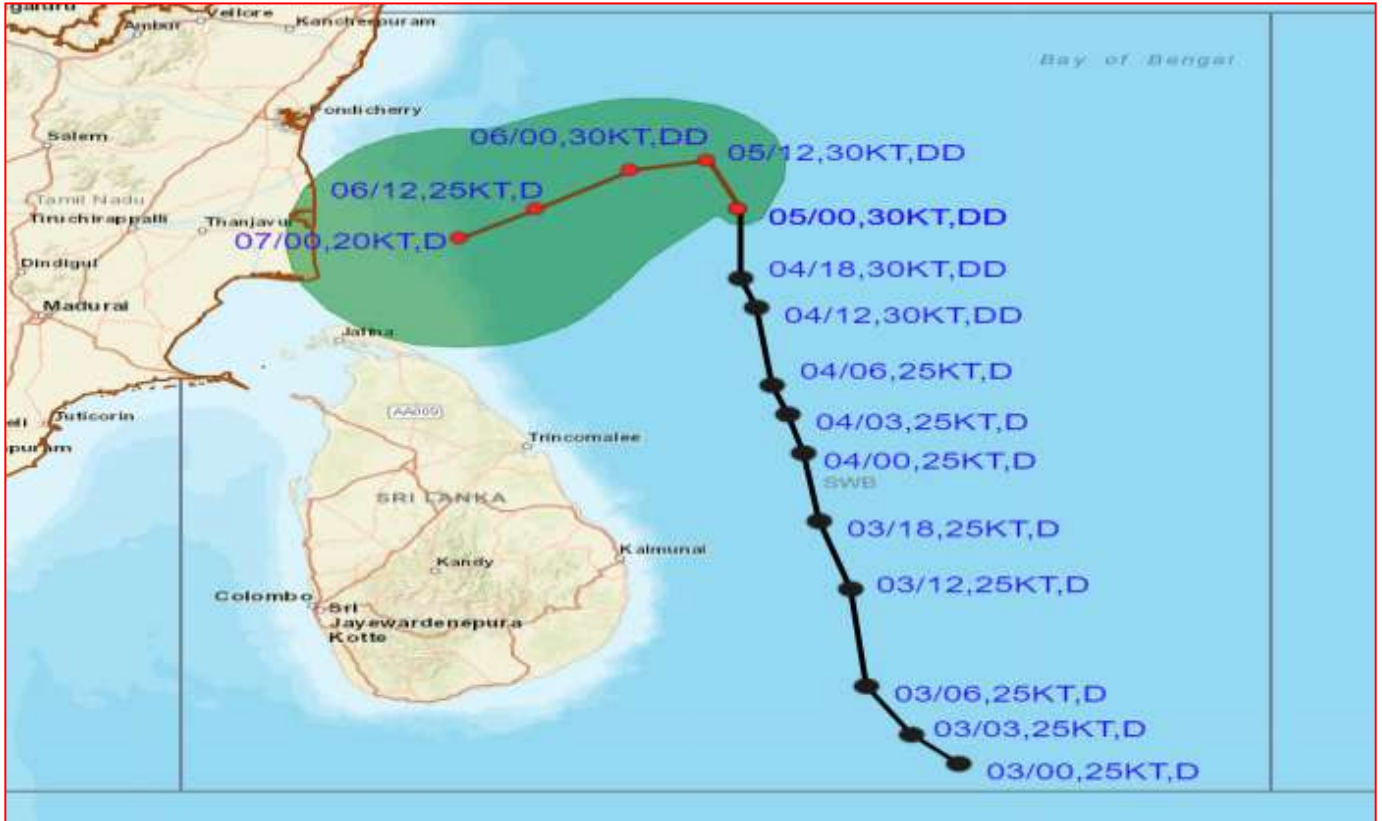
THE NEXT BULLETIN WILL BE ISSUED AT 0600UTC OF 05TH MARCH, 2022.

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





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0000 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 (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

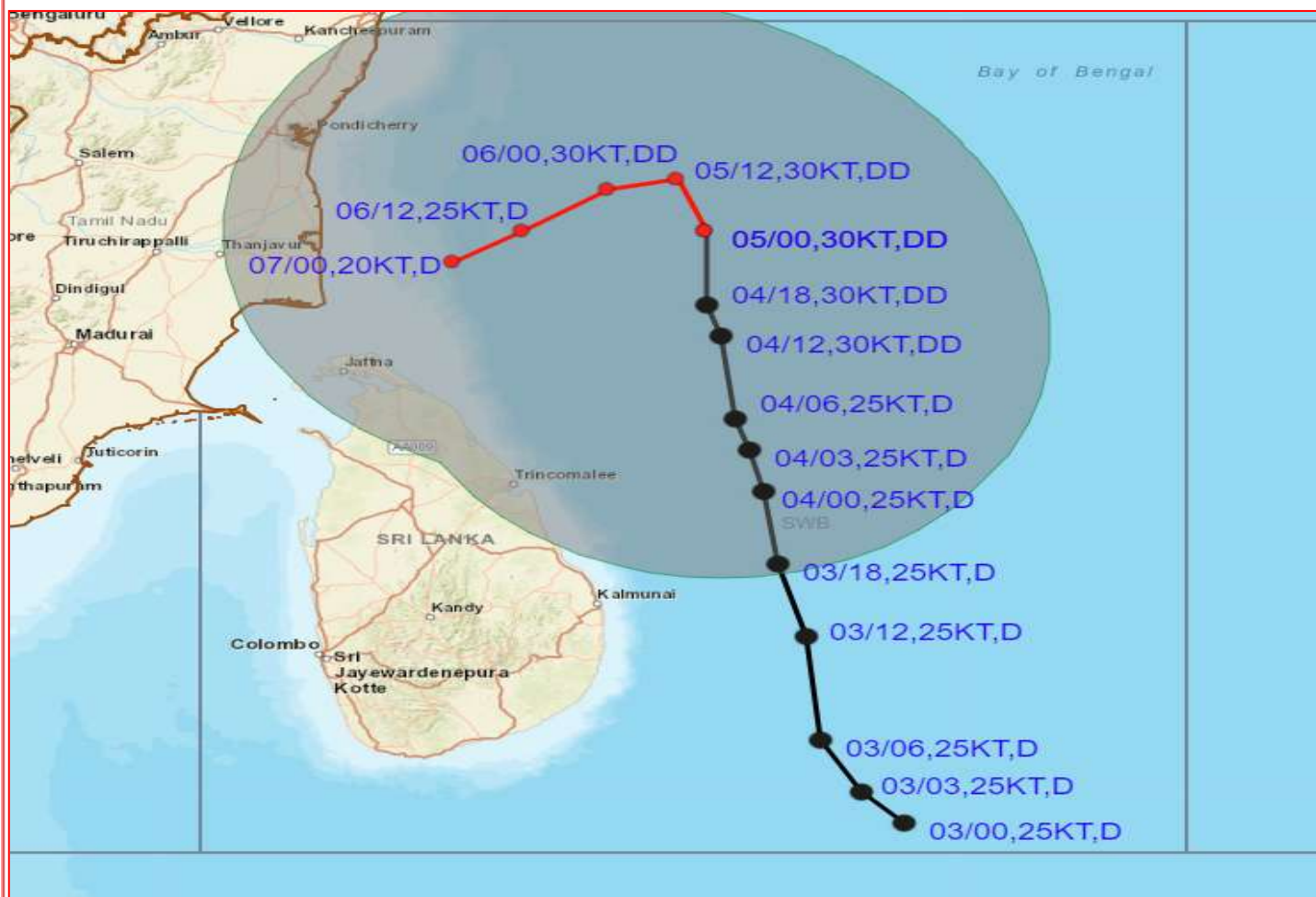
STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	05.03.22/0000	06.03.22/0000	07.03.22/0000
TRINCOMALEE	310,NNE	320,NNE	240,NNW
NAGAPATTINAM	300,E	230,ENE	100,E
PUDUCHERRY	320,ESE	240,ESE	180,SE
CHENNAI	390,SE	310,SE	330,S

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
05.03.22/0000	Tharangambadi (300,E)	Nagapattinam (300,E)	Karaikal (300,E)	Velankanni (300,E)	Trincomalee (310,NNE)
05.03.22/1200	Nagapattinam (270,ENE)	Karaikal (280,ENE)	Velankanni (280,ENE)	Trincomalee (280,NNE)	Kankasanturai (290,NE)
06.03.22/0000	Karaikal (230,ENE)	Velankanni (230,ENE)	Trincomalee (230,NNE)	Kankasanturai (230,NE)	Vedaranyam (230,ENE)
06.03.22/1200	Velankanni (160,ENE)	Trincomalee (160,N)	Kankasanturai (160,NE)	Vedaranyam (160,ENE)	Parangipettai (170,ESE)
07.03.22/0000	Trincomalee (100,NNW)	Kankasanturai (110,NE)	Vedaranyam (110,ENE)	Parangipettai (110,SE)	Pudupattinam (110,SSE)



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0000 UTC OF 5th MARCH, 2022



DATE/TIME IN UTC
 IST=UTC + 0530
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● 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