



**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 1500 UTC OF 05.03.2022 BASED ON 1200 UTC OF 05.03.2022.

DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL

THE DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL REMAINED PRACTICALLY STATIONARY AND LAY CENTERED AT 1200 UTC OF 5TH MARCH 2022, OVER THE SAME REGION NEAR LATITUDE 11.7°N AND LONGITUDE 82.5°E, ABOUT 370 KM NORTH-NORTHEAST OF TRINCOMALEE (43418), 320KM EAST-NORTHEAST OF NAGAPPATTINAM (43347), 290 KM EAST OF PUDUCHERRY (43331) AND ABOUT 270 KM EAST-SOUTHEAST OF CHENNAI (43279).

IT IS LIKELY TO MOVE WEST-SOUTHWESTWARDS TOWARDS NORTH TAMIL NADU COAST AND WEAKEN GRADUALLY INTO A DEPRESSION TILL 0000 UTC OF 06TH MARCH AND INTO A WELL MARKED LOW PRESSURE AREA TILL 0000 UTC OF 07TH MARCH.

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
05.03.22/1200	00	11.7/82.5	50-60 GUSTING TO 70	DEEP DEPRESSION
06.03.22/0000	12	11.6/82.1	45-55 GUSTING TO 65	DEPRESSION
06.03.22/1200	24	11.4/81.7	40-50 GUSTING TO 60	DEPRESSION
07.03.22/0000	36	10.9/81.0	30-40 GUSTING TO 50	WELL MARKED LOW PRESSURE AREA

THE INTENSITY OF THE SYSTEM IS T2.0. 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. ASCAT PASS PARTIALLY COVERING THE SYSTEM SHOWS WINDS OF ABOUT 30KTS IN THE NW SECTOR CLOSER TO THE SYSTEM CENTRE AT 0430UTC. ASSOCIATED BROKEN LOW/MED CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BET LAT 8.5° N & 17.0° N AND LONG 81°E TO 90.0°E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 73 DEG C. INTENSE CONVECTION LIES OVER NORTHEAST 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 28-29⁰C 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 $10 \times 10^{-5} \text{ S}^{-1}$ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT $10 \times 10^{-5} \text{ S}^{-1}$ SOUTHEAST OF THE SYSTEM CENTRE. WIND SHEAR IS MODERATE(10-15 KNOTS) AROUND THE SYSTEM CENTRE AND INCREASES WESTWARDS TOWARDS TAMILNADU COAST.

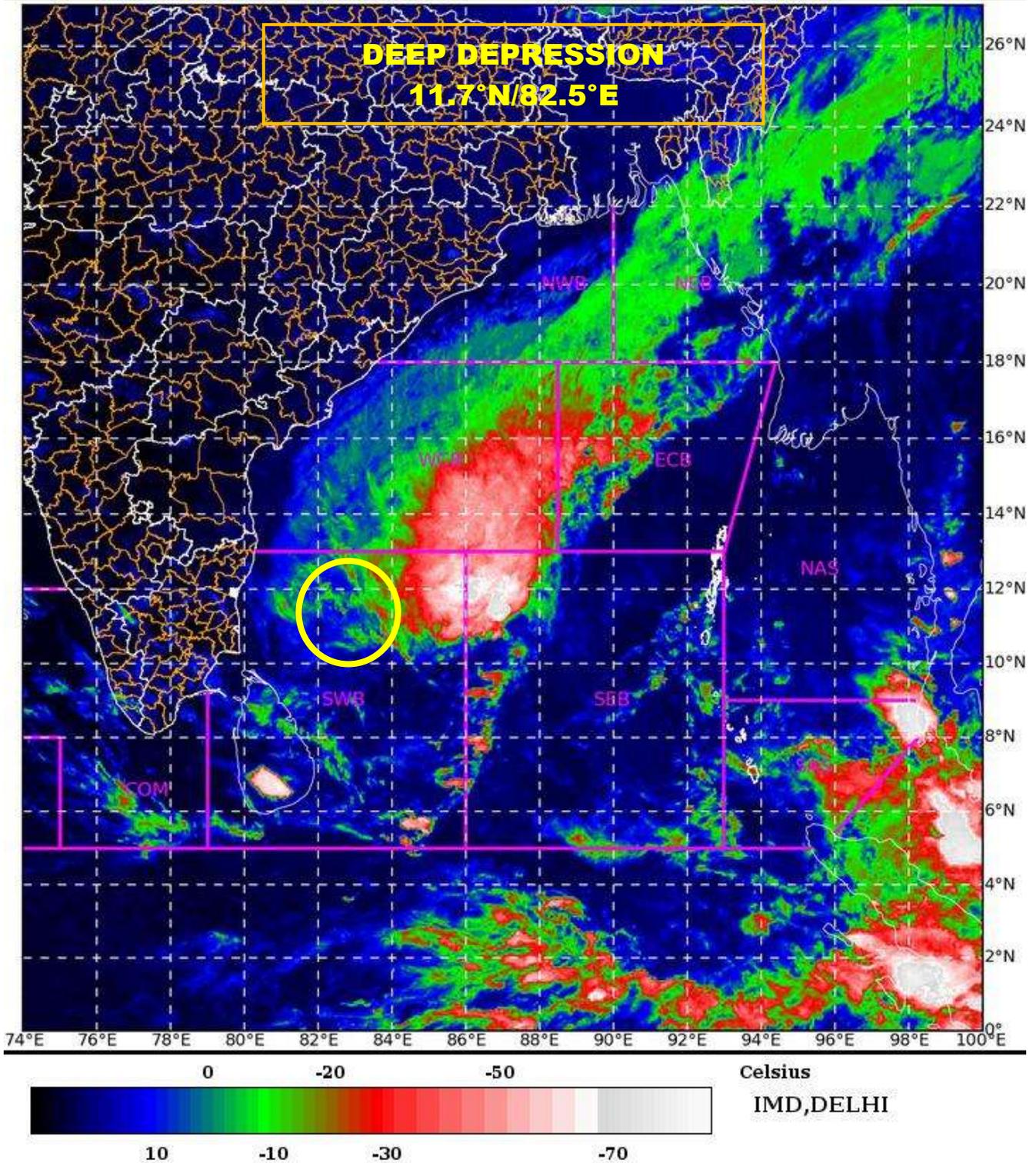
UNDER THE INFLUENCE OF THE RIDGE IN MID-TROPOSPHERIC LEVEL OVER SOUTH PENINSULAR INDIA AND ADJOINING ARABIAN SEA, TO THE NORTHWEST OF THE SYSTEM, THE SYSTEM WOULD MOVE WEST-SOUTHWESTWARDS AFTER 1200 UTC OF THE 5TH MARCH. FOR NEXT 24 HOURS, THE OCEAN HEAT CONTENT, SEA SURFCAE AND WIND SHEAR WOULD SUPPORT THE SYSTEM TO MAINTAIN IT'S INTENSITY. THEREAFTER, 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 NORTHWESTWARDS TILL 1200 UTC OF 5TH MARCH AND THEN WEST-SOUTHWESTWARDS DURING SUBSEQUENT 36 HOURS.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE DEEP DEPRESSION OVER SOUTHWEST BOB IS LIKELY TO MAINTAIN IT'S INTENSITY FOR NEXT 12 HOURS AND WEAKEN GRADUALLY WITH INITIAL NORTHWESTWARDS MOVEMENT AND THEN WEST-SOUTHWESTWARDS TOWARDS NORTH TAMIL NADU COAST DURING SUBSEQUENT 36 HOURS.

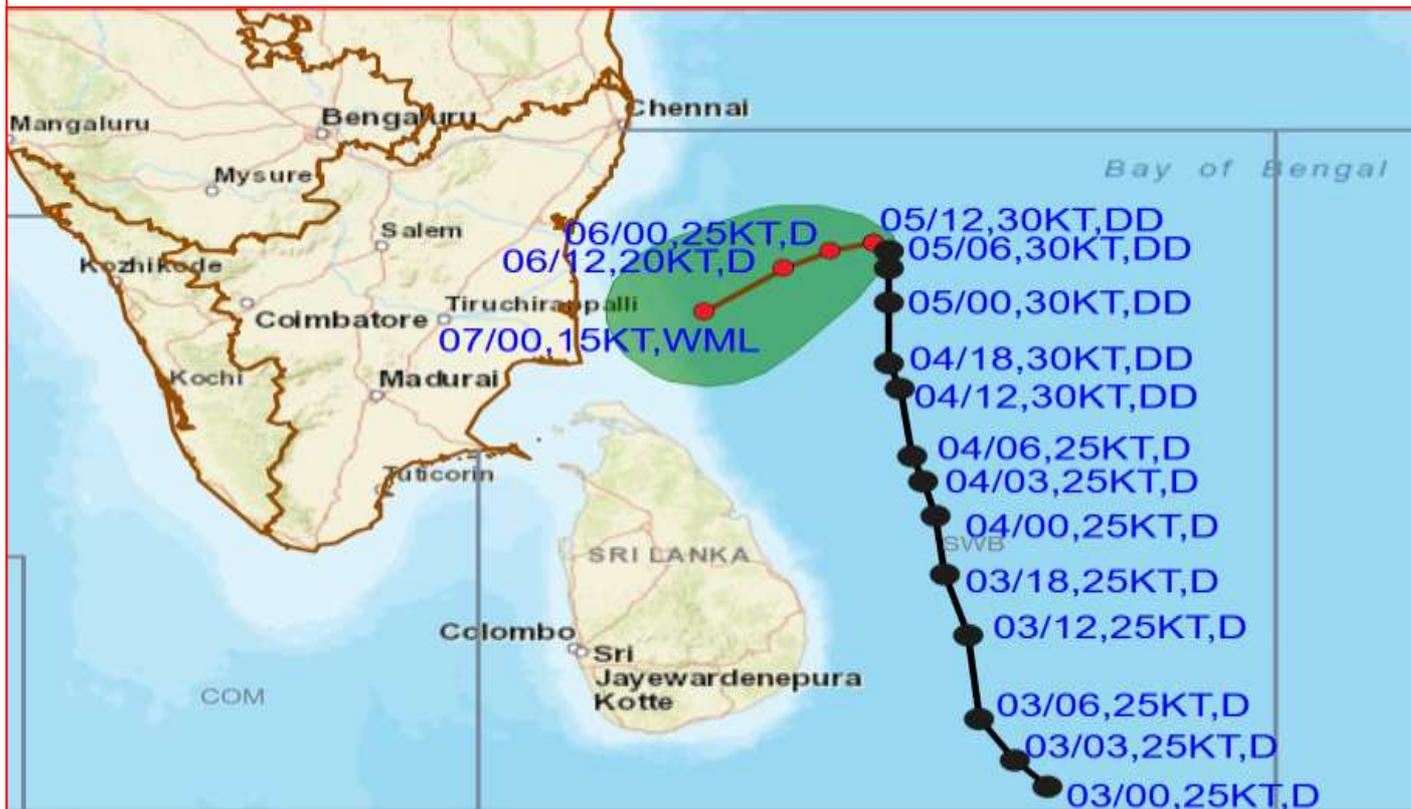
THE NEXT BULLETIN WILL BE ISSUED AT 2100UTC OF 05TH MARCH, 2022.

(R.K JENAMANI)
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RSMC, NEW DELHI





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

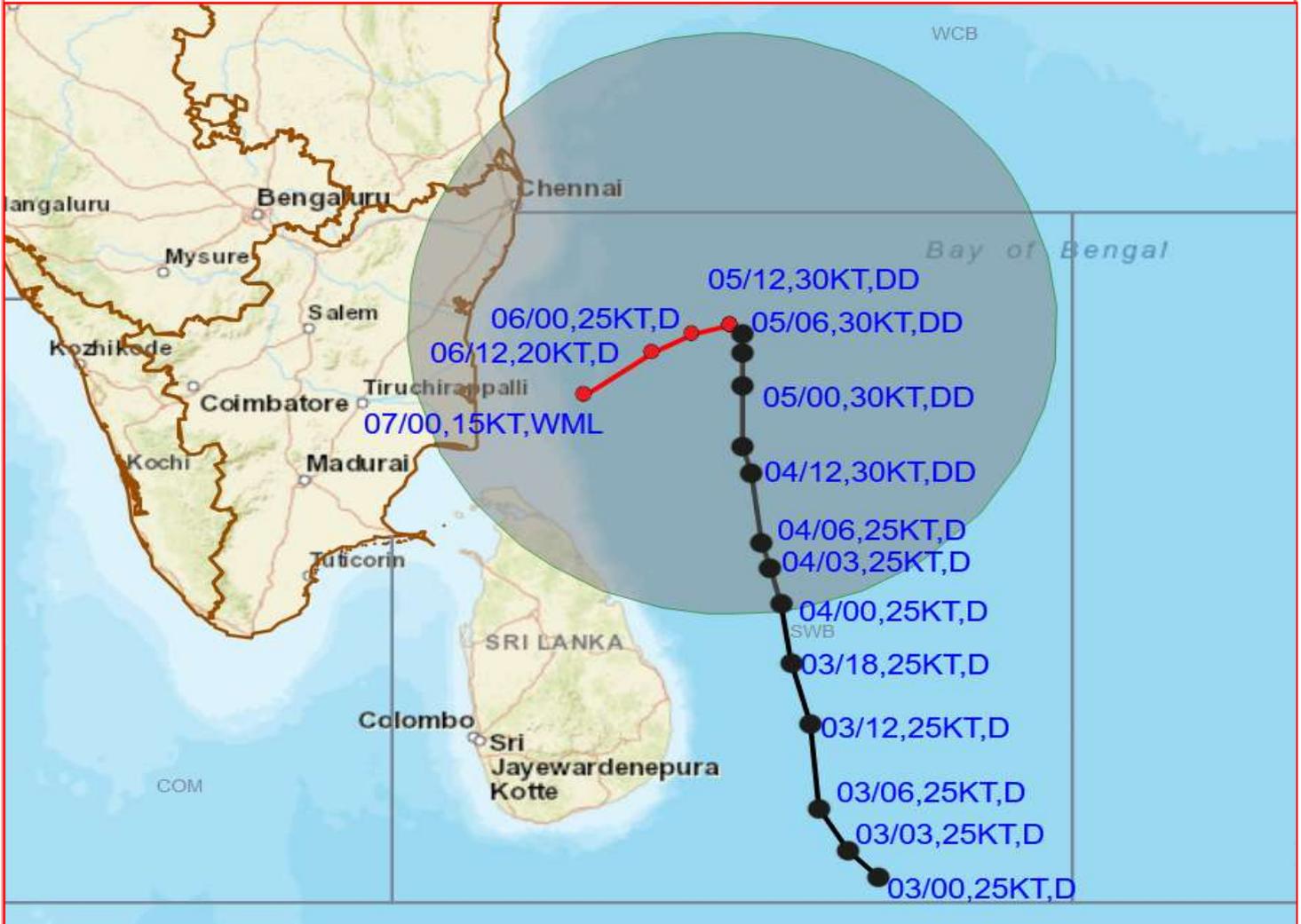
STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS	
	05.03.22/1200	06.03.22/1200
TRINCOMALEE	370,NNE	320,N
NAGAPATTINAM	310,ENE	210,ENE
PUDUCHERRY	290,E	210,ESE
CHENNAI	270,SE	300,SSE

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
05.03.22/1200	Pudupattina m (270,ESE)	Ennore (280,SE)	Minambakkam (290,ESE)	Kalapet (290,E)	Kottakuppam (290,E)
06.03.22/0000	Ennore (230,SE)	Minambakka m (250,SE)	Kalapet (250,E)	Kottakuppam (250,E)	Puducherry (250,E)
06.03.22/1200	Minambakka m (210,SE)	Kalapet (210,ESE)	Kottakuppam (210,ESE)	Puducherry (210,ESE)	Nungambakkam (210,SE)
07.03.22/0000	Kalapet (130,SE)	Kottakuppam (130,SE)	Puducherry (130,SE)	Nungambakka m (130,SSE)	Kattupalli (140,SSE)

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 DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 5th MARCH, 2022

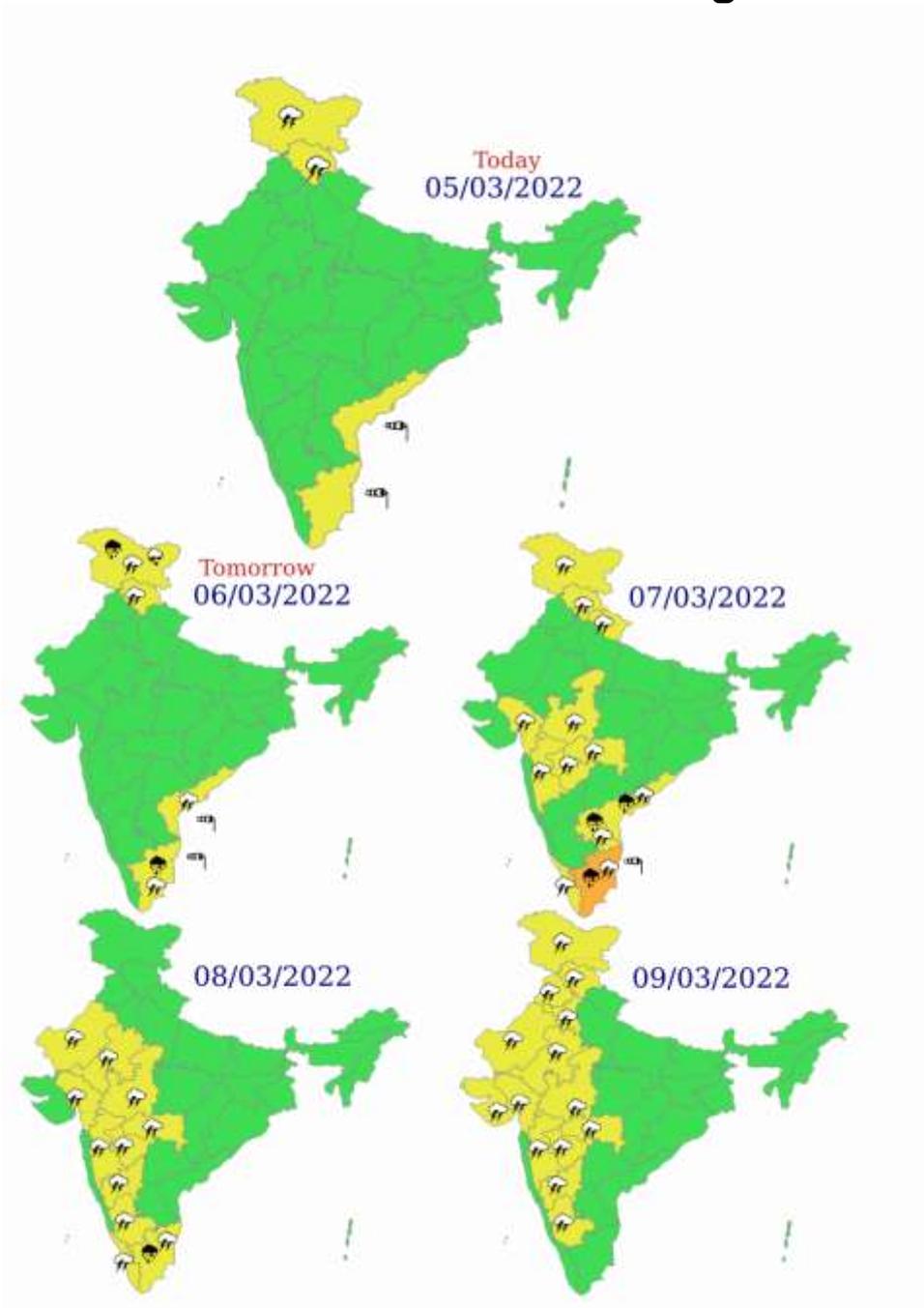


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
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 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- 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

Weather Warning for India



WARNING

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

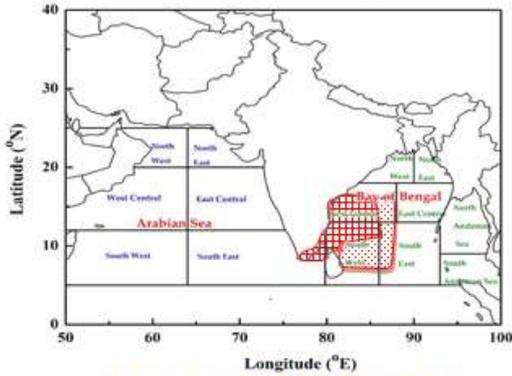
 Heavy Rain

 Strong Winds

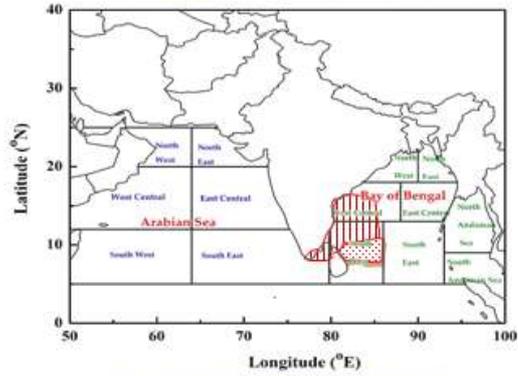
Fishermen Warning for North Indian Ocean

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

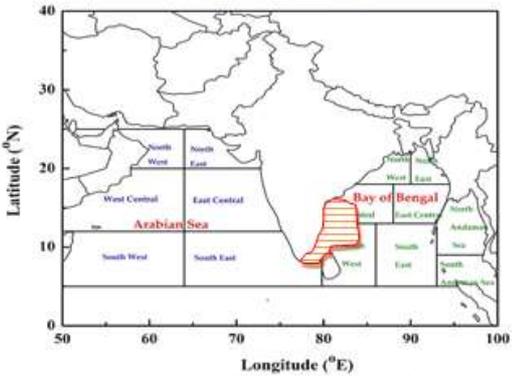
DAY-1: 05.03.2022/0600 UTC TO 06.03.2022/0600 UTC



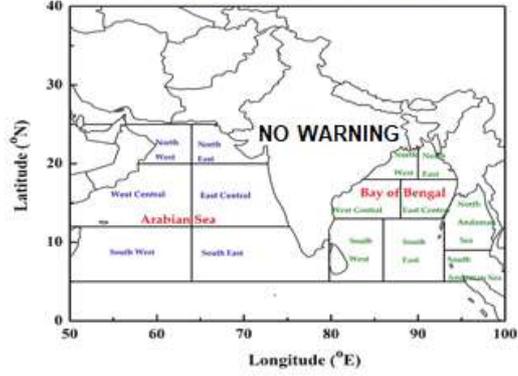
DAY-2: 06.03.2022/0600 UTC TO 07.03.2022/0600 UTC



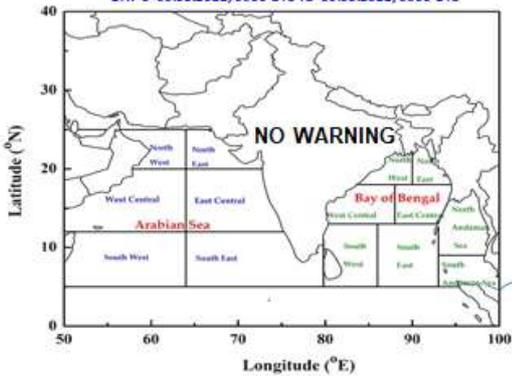
DAY-3: 07.03.2022/0600 UTC TO 08.03.2022/0600 UTC



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