REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL WEATHER OUTLOOK

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 03.03.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0830 UTC OF 03.03.2022 BASED ON 0600 UTC OF 03.03.2022.

DEPRESSION OVER SOUTHWEST BAY OF BENGAL AND ADJOINING EQUATORIAL INDIAN OCEAN

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL AND ADJOINING EQUATORIAL INDIAN OCEAN MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF ABOUT 18 KMPH DURING LAST 06 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 3RD MARCH 2022, OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE 6.1°N AND LONGITUDE 83.4°E, ABOUT 360 KM SOUTH-SOUTHEAST OF TRINCOMALEE (43418), 700 KM SOUTH-SOUTHEAST OF NAGAPPATTINAM (43347), 760 KM SOUTH-SOUTHEAST OF PUDUCHERRY (43331) AND ABOUT 840 KM SOUTH-SOUTHEAST OF CHENNAI(43279).

IT IS LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 24 HOURS. IT IS LIKELY TO MOVE NORTHWESTWARDS ALONG AND OFF EAST COAST OF SRI LANKA TOWARDS NORTH TAMIL NADU COAST DURING NEXT 48 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.03.22/0600	6.1/83.4	45-55 gusting to 65	Depression
03.03.22/1800	7.4/82.6	45-55 gusting to 65	Depression
04.03.22/0600	8.8/81.8	50-60 gusting to 70	Deep Depression
04.03.22/1800	10.2/81.8	50-60 gusting to 70	Deep Depression
05.03.22/0600	11.6/80.4	50-60 gusting to 70	Deep Depression

THE INTENSITY OF THE SYSTEM IS T1.5. ASSOCIATED BROKEN LOW/MED CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BET LAT 6.0DEG N TO 14.0 DEGN LONG 80.0 DEG E TO 90.0E & SRILANKA. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 85 DEG C. CONVECTION IS MORE IN THE NORTHERN SECTOR OF THE SYSTEM.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER SOUTHWEST BAY OF BENGAL &

ADJOINING EQUATORIAL INDIAN OCEAN. THE ESTIMATED CENTRAL PRESSURE IS 1004 HPA.

REMARKS:

SEA SURFACE TEMPERATURE IS AROUND 28-29^{0}C OVER SOUTHWEST AND WESTCENTRAL BOB. TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 60-80 KJ/CM^2 OVER THE SAME REGION. THE MADDEN JULIAN INDEX (MJO) CURRENTLY LIES IN PHASE 6 WITH AMPLITUDE LESS THAN 1. IT IS LIKELY TO CONTINUE IN THE SAME PHASE FOR THE NEXT 2-3 DAYS WITH AMPLITUDE REMAINING LESS THAN 1. THE PHASE OF MJO IS NOT CONDUCIVE FOR ENHANCED CONVECTION DURING NEXT 2-3 DAYS.

LOW LEVEL VORTICITY IS AROUND 150 X10^{-6} S^{-1} AND LIES AROUND THE SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE IS SAME DURING PAST 24 HOURS AND IS AROUND 10 X10^{-5} S^{-1} TO THE NRTHEAST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND 30 X10^{-5} S^{-1} TO THE NORTHEAST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE TO HIGH (20-30 KNOTS) AROUND SYSTEM CENTRE AND IS INCREASE TOWARDS TAMILNADU COAST.

MOST OF THE NUMERICAL MODELS INCLUDING IMD GFS, ECMWF, GEFS, NCUM (G), NCUM (R) AND ECMWF ENSEMBLE ARE INDICATING SLIGHT INTENSIFICATION OF THE SYSTEM DURING NEXT 24 HOURS. HOWEVER, MODELS ARE UNANIMOUS W.R.T. MOVEMENT TOWARDS TAMILNADU COAST DURING NEXT 48 HOURS.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE DEPRESSION OVER SOUTHWEST BOB IS LIKELY TO INTENSIFY MARGINALLY DURING NEXT 24 HOURS INTO A DEEP DEPRESSION AND MOVE TOWARDS NORTH TAMILNADU COAST.

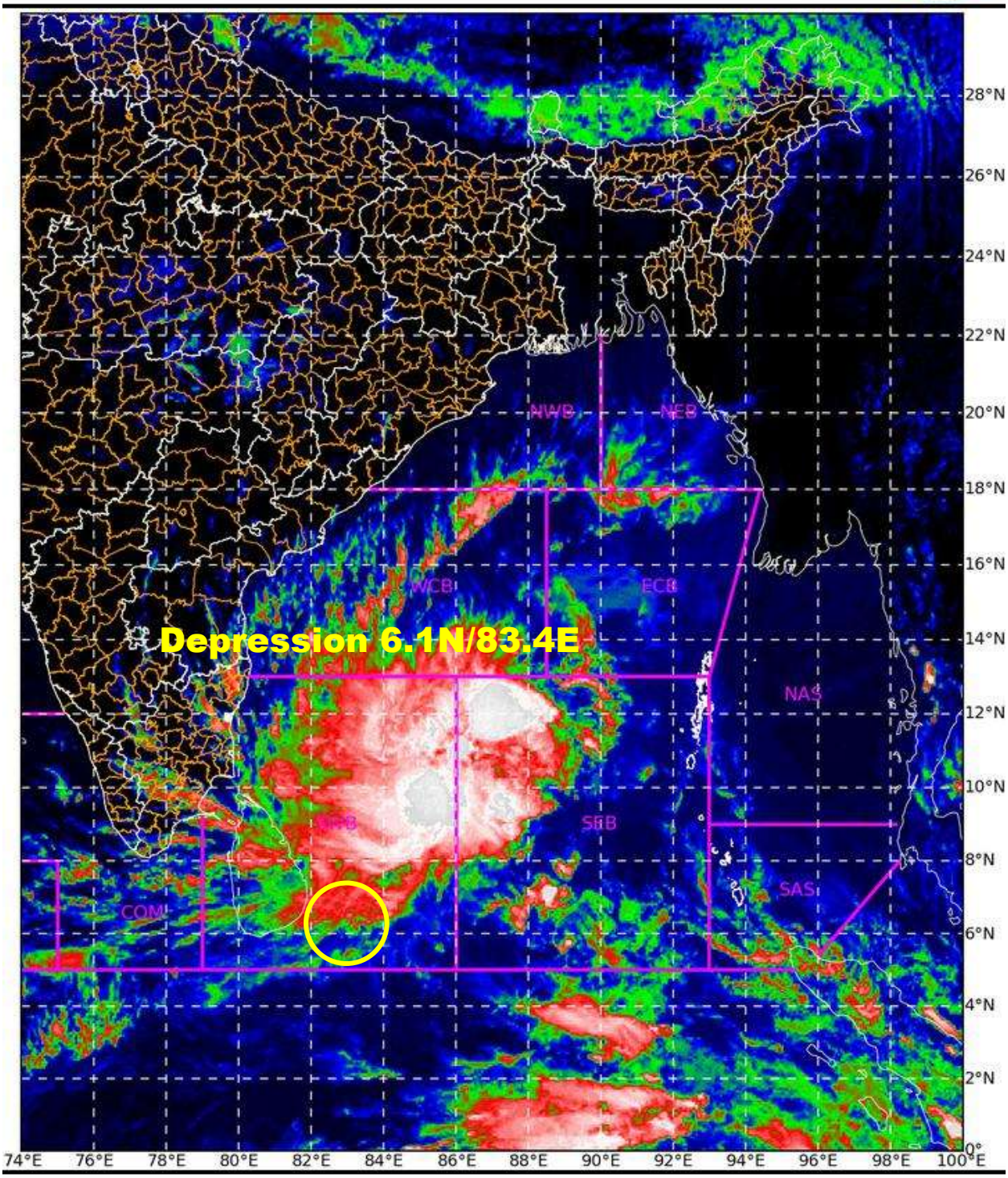
THE NEXT BULLETIN WILL BE ISSUED AT 1500 UTC OF 3rd MARCH, 2022.

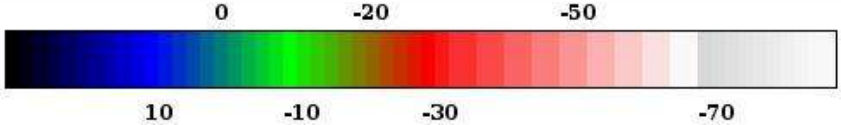
(DR RK JENAMANI)
SCIENTIST-F
RSMC NEW DELHI

SAT : INSAT-3D IMG 03-03-2022/(0730 to 0757) GMT

IMG_TIR1_TEMP 10.8 um 03-03-2022/(1300 to 1327) IST

L1C Mercator

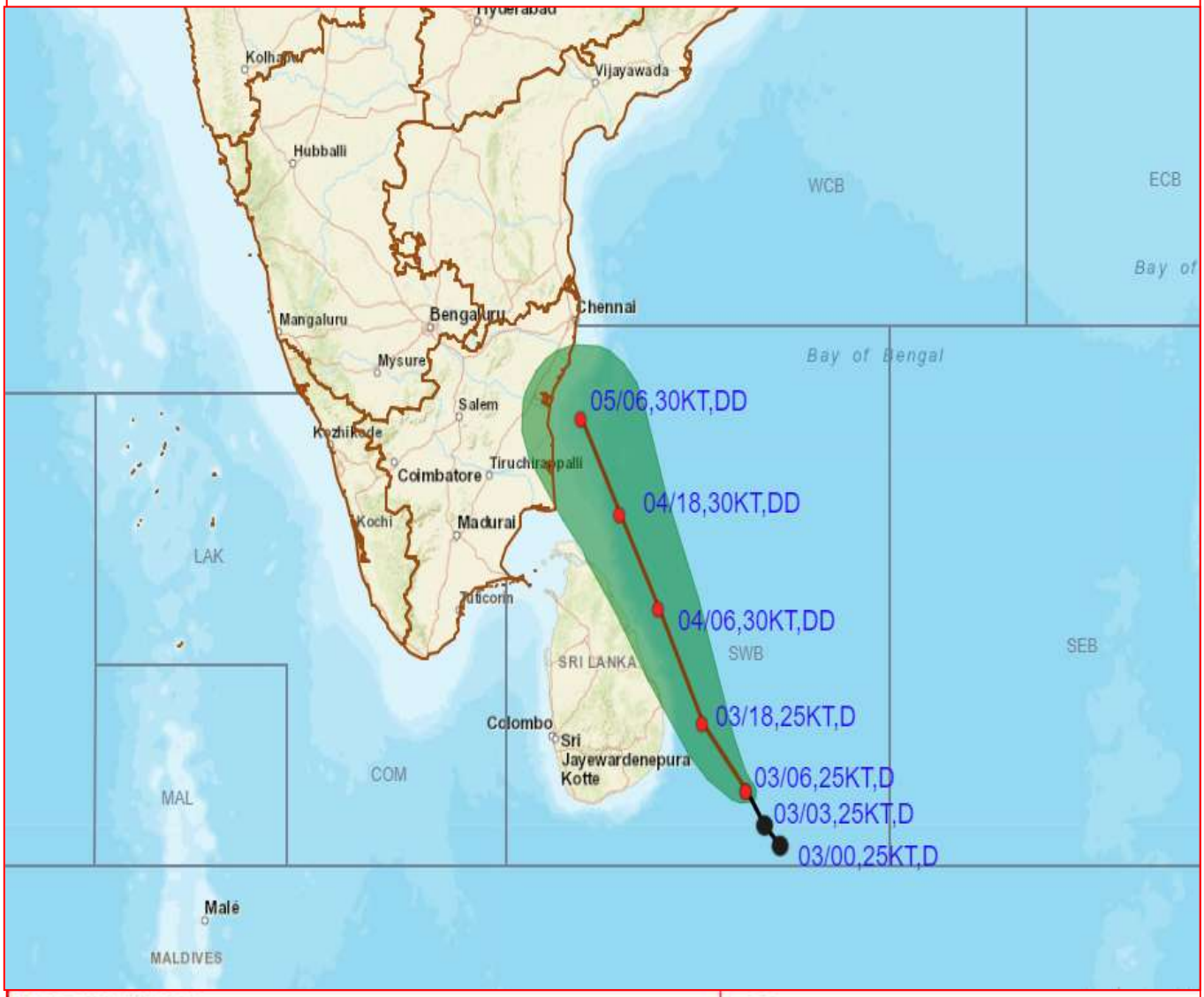




Celsius

IMD,DELHI

OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC OF 3RD 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

OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC OF 3RD 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

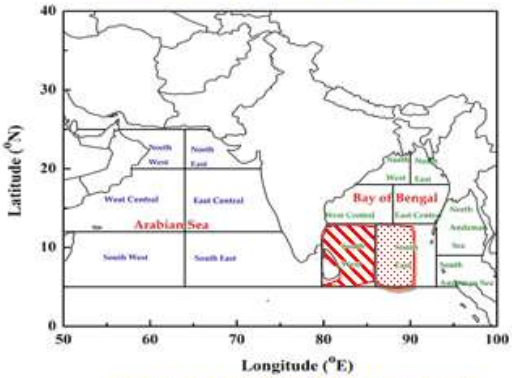
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

Fishermen Warning for North Indian Ocean

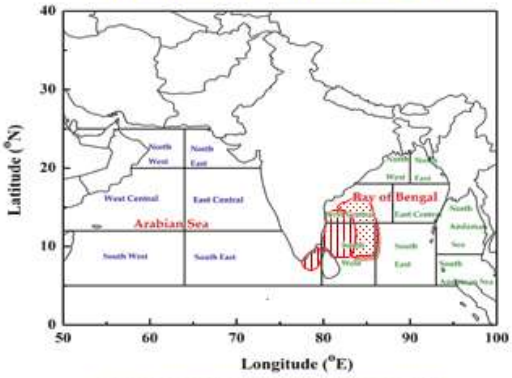
INDIA METEOROLOGICAL DEPARTMENT

FISHERMAN WARNING FOR BAY OF BENGAL AND ARABIAN SEA

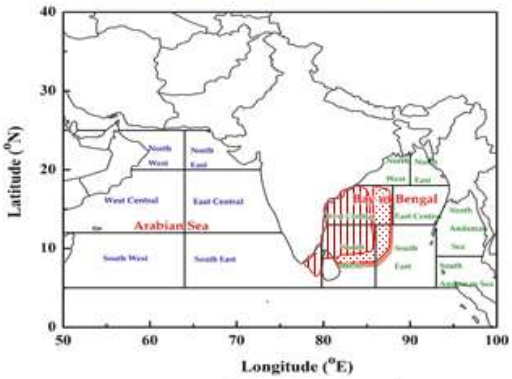
DAY-1: 03.03.2022/0600 UTC TO 04.03.2022/0600 UTC



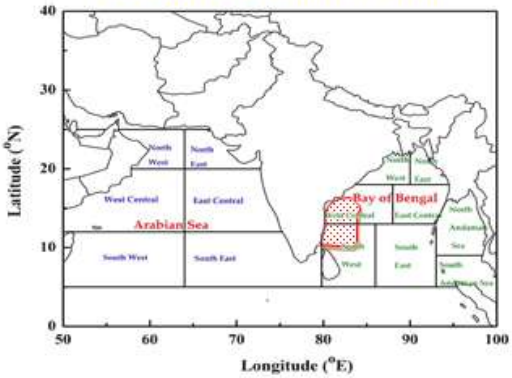
DAY-2: 04.03.2022/0600 UTC TO 05.03.2022 /0600 UTC



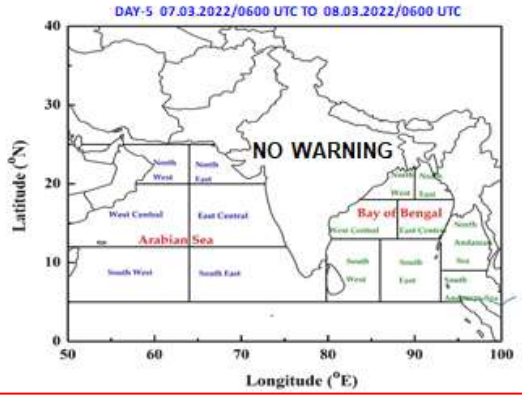
DAY-3-: 05.03.2022/0600 UTC TO 06.03.2022/0600 UTC



DAY-4 06.03.2022/0600 UTC TO 07.03.2022/0600 UTC



DAY-5 07.03.2022/0600 UTC TO 08.03.2022/0600 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
- 70-80 KMPH GUSTING TO 90 KMPH