REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL WEATHER OUTLOOK

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 07.05.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0700 UTC OF 07.05.2022 BASED ON 0300 UTC OF 07.05.2022.

BAY OF BENGAL:

SUB: WELL MARKED LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL AND ADJOINING SOUTH ANDAMAN SEA & IT'S LIKELY INTENSIFICATION INTO A CYCLONIC STORM BY 8TH MAY EVENING, 2022.

THE LOW PRESSURE AREA OVER SOUTH ANDAMAN SEA & NEIGHBOURHOOD BECAME WELL MARKED LOW PRESSURE AREA AND PERSISTED OVER SOUTHEAST BAY OF BENGAL AND ADJOINING SOUTH ANDAMAN SEA AT 0300 UTC OF TODAY, THE 7TH MAY, 2022.

IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION OVER SOUTHEAST BAY OF BENGAL DURING NEXT 3 HOURS AND FURTHER INTO A CYCLONIC STORM OVER EASTCENTRAL BAY OF BENGAL BY 8TH MAY.

IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS TILL 1200 UTC OF 10TH MAY EVENING AND REACH WESTCENTRAL & ADJOINING NORTHWEST BAY OF BENGAL OFF NORTH ANDHRA PRADESH & ODISHA COASTS. THEREAFTER, IT IS VERY LIKELY TO RECURVE NORTH-NORTHEASTWARDS AND MOVE TOWARDS NORTHWEST BAY OF BENGAL OFF ODISHA COAST.

THE INTENSITY OF THE SYSTEM IS T1.0. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 6.5N & 13.0N AND LONGITUDE 87.0E & 93.0E AND ANDAMAN & NICOBAR ISLANDS. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C. CONVECTION ORGANISED DURING PAST 24 HOURS OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 15-20 KNOTS GUSTING TO 30 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER SOUTHEAST BAY OF BENGAL & ADJOINING ANDAMAN SEA. THE ESTIMATED CENTRAL PRESSURE IS 1004 HPA.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
HIGH	HIGH	HIGH	HIGH	HIGH

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH ARABIAN SEA LATITUDE 10.0N AND COMORIN AREA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED WEAK CONVECTION

OVER EASTCENTRAL ADJOINING SOTHEAST ARABIAN SEA & LAKSHADWEEP ISLANDS AREA.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	NIL	NIL

REMARKS:

THE MADDEN JULIAN OSCILLATION INDEX (MJO) CURRENTLY LIES IN PHASE 2 WITH AMPLITUDE LESS THAN 1. IT WOULD MOVE ACROSS PHASES 3, 4 AND 5 DURING NEXT 5 DAYS WITH GRADUALLY INCREASING AMPLITUDE. HENCE, MJO WILL SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE BAY OF BENGAL (BOB) DURING NEXT 5 DAYS. BASED ON CFS FORECAST, EQUATORIAL ROSSBY WAVES (ERW), WESTERLY WINDS (3-5 MPS) OVER EQUATORIAL INDIAN OCEAN (EIO) & ADJOINING SOUTH BOB AND STRONG EASTERLY WINDS (5-7 MPS) ARE LIKELY TO PREVAIL OVER CENTRAL BOB DURING NEXT 3 DAYS. THUS, EQUATORIAL WAVES ARE LIKELY TO CONTRIBUTE TOWARDS ENHANCEMENT OF CONVECTIVE ACTIVITY OVER EIO AND ADJOINING SOUTH BOB & CENTRAL BOB DURING NEXT 3-5 DAYS.

SEA SURFACE TEMPERATURE (SST) IS AROUND 30-31^{0}C OVER ENTIRE BOB. THE OCEAN HEAT CONTENT (OHC) IS >100 KJ/CM^2 OVER ENTIRE ANDAMAN SEA, CENTRAL BOB, SOUTH BOB & ADJOINING EIO AND 50-70 KJ/CM^2 OVER NORTHWEST BOB.

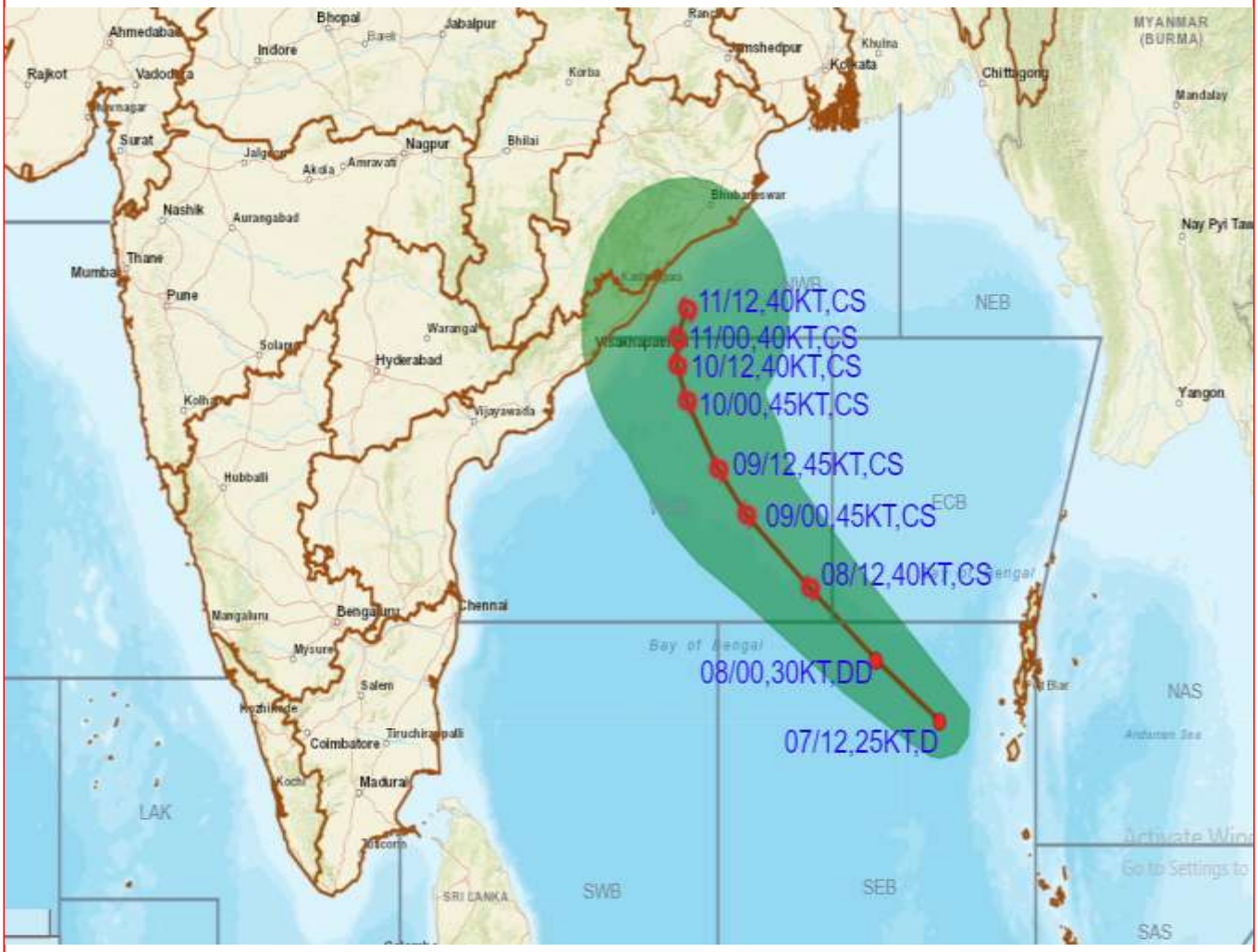
LOW LEVEL VORTICITY HAS INCREASED DURING PAST 24 HOURS AND IS AROUND 150 X10^{-6} S^{-1} TO THE SOUTHEAST OF SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS AROUND 30 X10^{-5} S^{-1} AROUND SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND 20 X10^{-5} S^{-1} TO THE NORTHWEST OF SYSTEM CENTRE. STRONG POLEWARD & WESTWARD OUTFLOW IS SEEN OVER THE SYSTEM AREA. WIND SHEAR IS MODERATE (15-20 KNOTS) AROUND THE SYSTEM AREA. IT IS LIKELY TO REMAIN MODERATE (15-20 KNOTS) ALONG THE FORECAST TRACK OVER WESTCENTRAL & NORTHWEST BOB.

MOST OF THE NUMERICAL MODELS ARE IN GOOD AGREEMENT THAT THE SYSTEM WOULD INTENSIFY INTO A DEPRESSION ON 7TH AND INTO A CYCLONIC STORM ON 8TH. MOST OF THE MODELS ARE INDICATING THAT THE SYSTEM WOULD MOVE MOVE NORTHWESTWARDS TILL 10TH MAY AND THEREAFTER RECURVE NORTH-NORTHEASTWARDS THEREAFTER.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION OVER SOUTHEAST BAY OF BENGAL DURING NEXT 3 HOURS AND FURTHER INTO A CYCLONIC STORM OVER EASTCENTRAL BAY OF BENGAL BY 8TH MAY. IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS TILL 1200 UTC OF 10TH MAY EVENING AND REACH WESTCENTRAL & ADJOINING NORTHWEST BAY OF BENGAL OFF NORTH ANDHRA PRADESH & ODISHA COASTS. THEREAFTER, IT IS VERY LIKELY TO RECURVE NORTH-NORTHEASTWARDS AND MOVE TOWARDS NORTHWEST BAY OF BENGAL OFF ODISHA COAST.

(MONICA SHARMA)
SCIENTIST-D
RSMC NEW DELHI

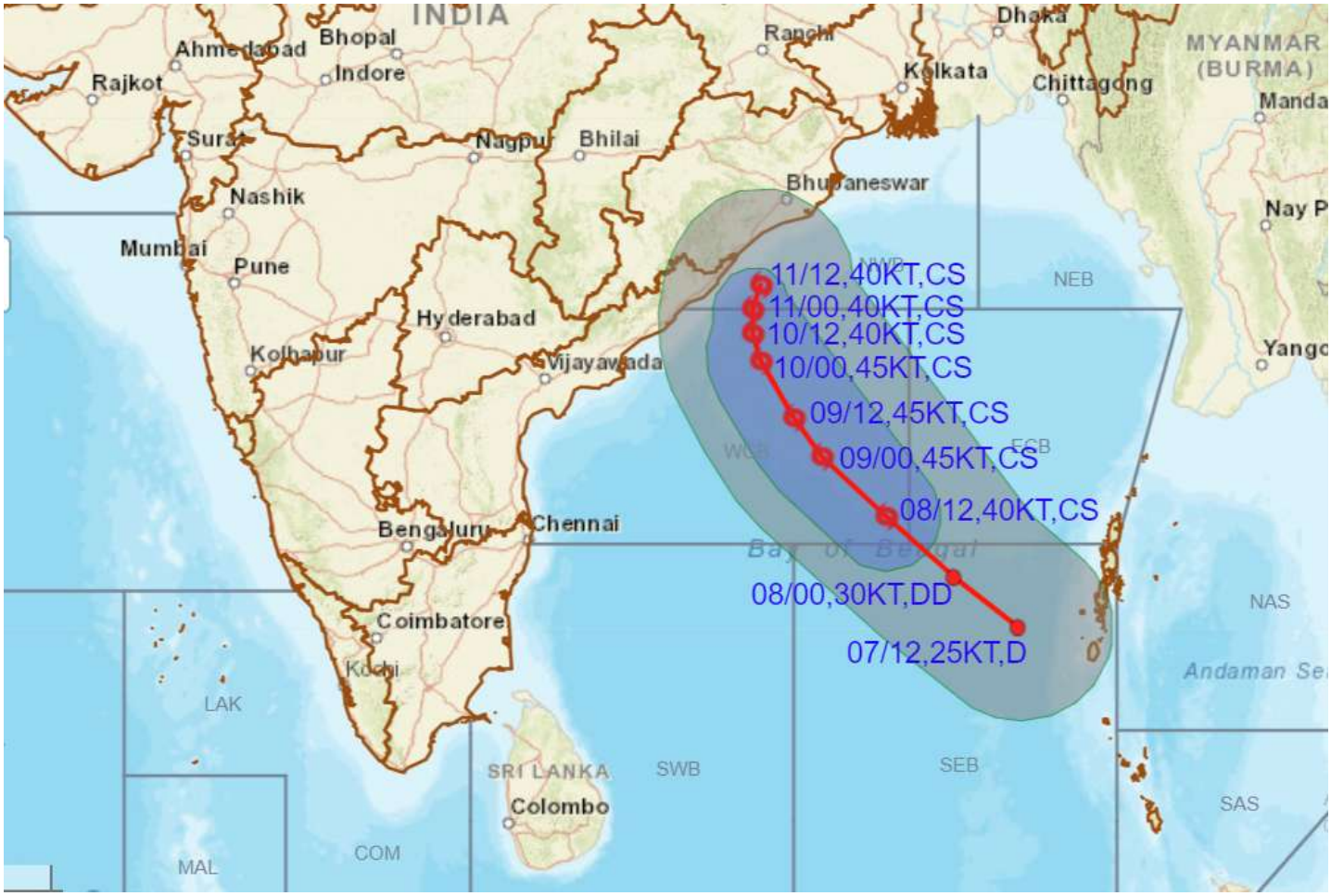
EXPERIMENTAL PRE-GENESIS TRACK AND INTENSITY FORECAST ALONGWITH CONE OF UNCERTAINTY ISSUED AT THE STAGE OF LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL AND ADJOINING SOUTH ANDAMAN SEA ON 0300 UTC OF 7TH MAY 2022



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

EXPERIMENTAL PRE-GENESIS TRACK AND INTENSITY FORECAST ALONGWITH QUADRANT WIND DISTRIBUTION ISSUED AT THE STAGE OF LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL & ADJOINING SOUTH ANDAMAN SEA ON 0300 UTC OF 7TH MAY 2022



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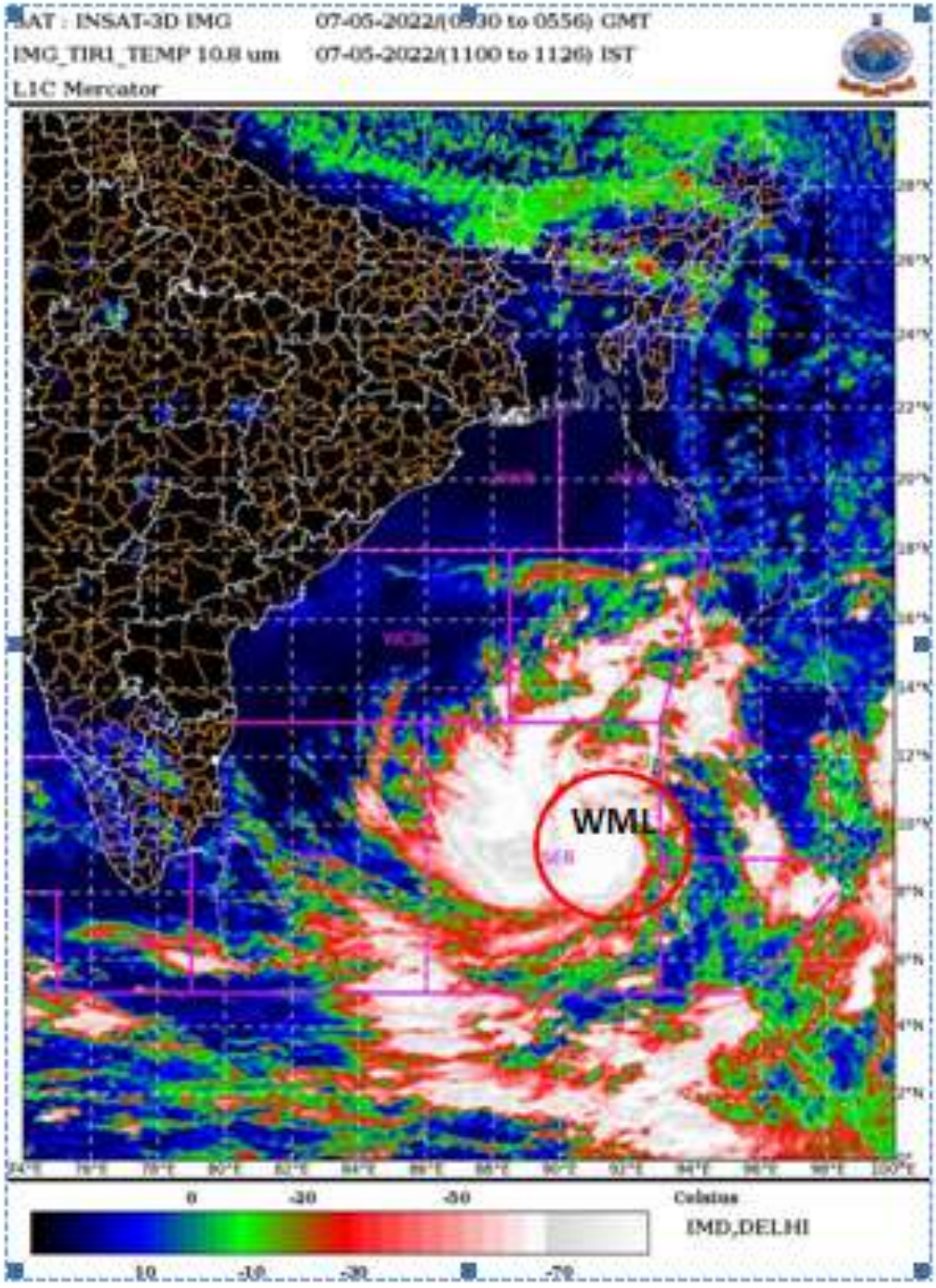
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

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

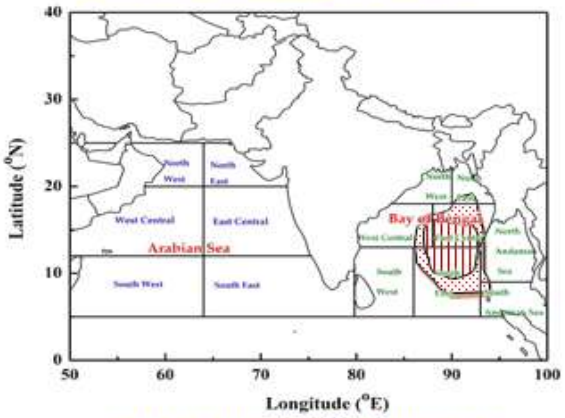
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations



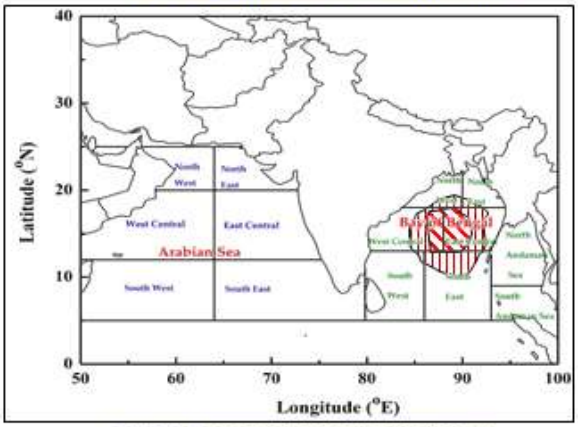
WML- Well-Marked Low Pressure Area

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

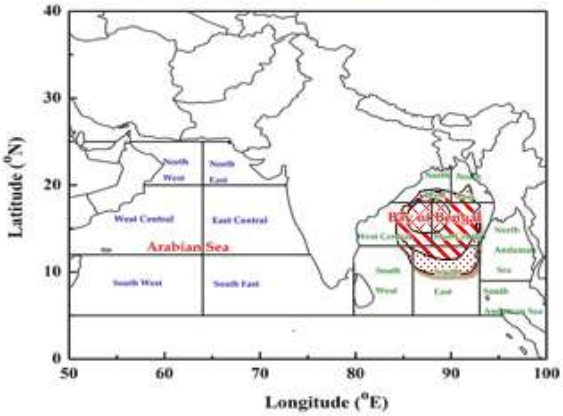
DAY-1: 07.05.2022/0600 UTC TO 08.05.2022/0600 UTC



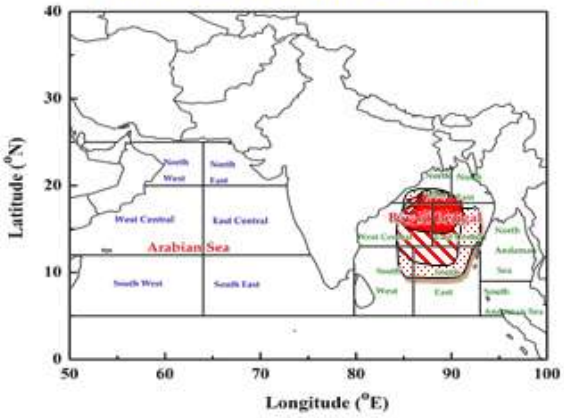
DAY-2: 08.05.2022/0600 UTC TO 09.05.2022/0600 UTC



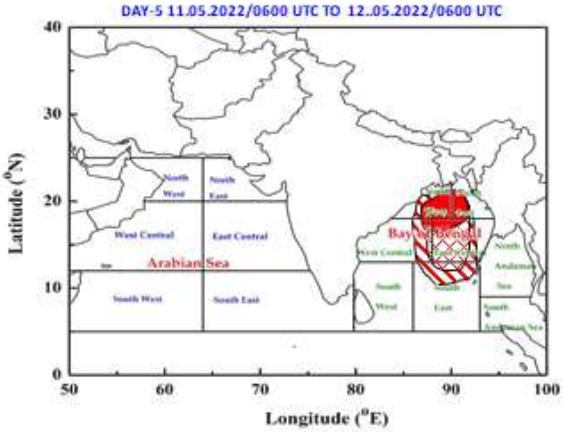
DAY-3-: 09.05.2022/0600 UTC TO 10.05.2022/0600 UTC



DAY-4 10.05.2022/0600 UTC TO 11.05.2022/0600 UTC



DAY-5 11.05.2022/0600 UTC TO 12..05.2022/0600 UTC



AREA UNDER FISHERMEN WARNING

- 40-50 KMPH GUSTING TO 60 KMPH (SQUALLY WEATHER)
- 45-55 KMPH GUSTING TO 65 KMPH (SQUALLY WEATHER)
- 55-65 KMPH GUSTING TO 75 KMPH
- 65-75 KMPH GUSTING TO 85 KMPH
- 70-80 KMPH GUSTING TO 90 KMPH
- 80-90 KMPH GUSTING TO 100 KMPH