



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL WEATHER OUTLOOK**

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 06.05.2022

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 06.05.2022 BASED ON 0300 UTC OF 06.05.2022.

BAY OF BENGAL:

UNDER THE INFLUENCE OF CYCLONIC CIRCULATION OVER SOUTH ANDAMAN SEA & NEIGHBOURHOOD, A LOW PRESSURE AREA FORMED OVER SOUTH ANDAMAN SEA & ADJOINING SOUTHEAST BAY OF BENGAL AT 0000 UTC AND IT PERSISTED OVER THE SAME REGION AT 0300 UTC OF TODAY, THE 6TH MAY, 2022.

IT IS VERY LIKELY TO MOVE NORTHWESTWARDS, INTENSIFY INTO A DEPRESSION BY 1200 UTC OF 07TH MAY OVER SOUTHEAST BAY OF BENGAL AND FURTHER INTO A CYCLONIC STORM OVER EASTCENTRAL BAY OF BENGAL BY 1200 UTC OF 08TH MAY. IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS AND REACH WESTCENTRAL BAY OF BENGAL OFF NORTH ANDHRA-ODISHA COASTS BY 10TH MAY.

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 ANDAMAN SEA, SOUTHEAST BAY OF BENGAL, ANDAMAN & NICOBAR ISLANDS. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C. CONVECTION HAS INCREASED AND ORGANISED SLIGHTLY OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL & ANDAMAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHWEST BAY OF BENGAL AND WESTCENTRAL BAY OF BENGAL OFF NORTH ANDHRA PRADESH COAST.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 10-15 KNOTS GUSTING TO 25 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER ANDAMAN SEA & ADJOINING SOUTHEAST BAY OF BENGAL. THE ESTIMATED CENTRAL PRESSURE IS 1006 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
NIL	HIGH	HIGH	HIGH	HIGH

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA.

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 29-30⁰C OVER ENTIRE BOB. THE OCEAN HEAT CONTENT (OHC) IS >100 KJ/CM² OVER ENTIRE ANDAMAN SEA, CENTRAL BOB, SOUTH BOB & ADJOINING EIO AND 50-70 KJ/CM² OVER NORTHWEST BOB.

LOW LEVEL VORTICITY HAS INCREASED DURING PAST 24 HOURS AND IS AROUND 60-70 X10⁻⁶ S⁻¹ OVER SOUTH ANDAMAN SEA. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE HAS INCREASED DURING PAST 24 HOURS AND IS AROUND 40 X10⁻⁵ S⁻¹ OVER SOUTH ANDAMAN SEA. UPPER LEVEL DIVERGENCE IS AROUND 20 X10⁻⁵ S⁻¹ OVER SOUTH ANDAMAN SEA. POLEWARD OUTFLOW IS SEEN CURRENTLY. WIND SHEAR IS MODERATE (15-20 KNOTS) AROUND THE SYSTEM AREA. IT IS LIKELY TO INCREASE BECOMING HIGH OVER CENTRAL PARTS OF BOB AND MODERATE (15-20 KNOTS) OVER WESTCENTRAL & NORTHWEST BOB.

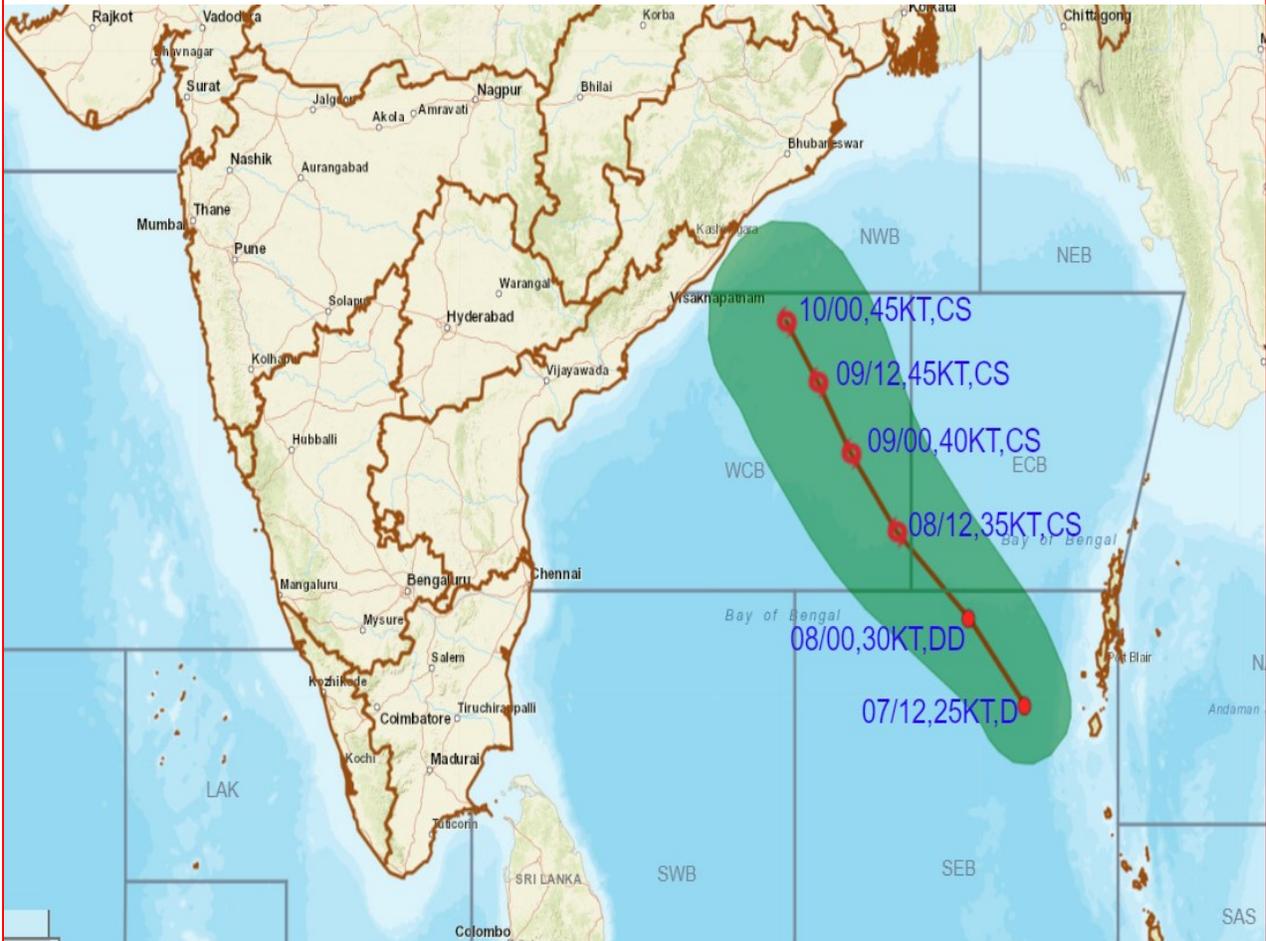
MOST OF THE NUMERICAL MODELS ARE INDICATING THAT THE SYSTEM WOULD MOVE NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION BY 1200 UTC OF 7TH MAY AND FURTHER INTO A CYCLONIC STORM BY 1200 UTC OF 8TH MAY. HENCE, IT IS CONCLUDED THAT THE SYSTEM IS IN A FAVOURABLE ENVIRONMENT AND THUS HIGH PROBABILITY OF CYCLOGENESIS IS ASSIGNED DURING NEXT 24-36 HOURS OVER BAY OF BENGAL.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE SYSTEM IS LIKELY TO MOVE NORTHWESTWARDS, INTENSIFY INTO A DEPRESSION BY 1200 UTC OF 07TH MAY OVER SOUTHEAST BAY OF BENGAL AND FURTHER INTO A CYCLONIC STORM OVER EASTCENTRAL BAY OF BENGAL BY 1200 UTC OF 08TH MAY. IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS AND REACH WESTCENTRAL BAY OF BENGAL OFF NORTH ANDHRA-ODISHA COASTS BY 10TH MAY.

(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 SOUTH ANDAMAN SEA AND ADJOINING
SOUTHEAST BAY OF BENGAL BASED ON 0300 UTC OF 6TH MAY 2022**

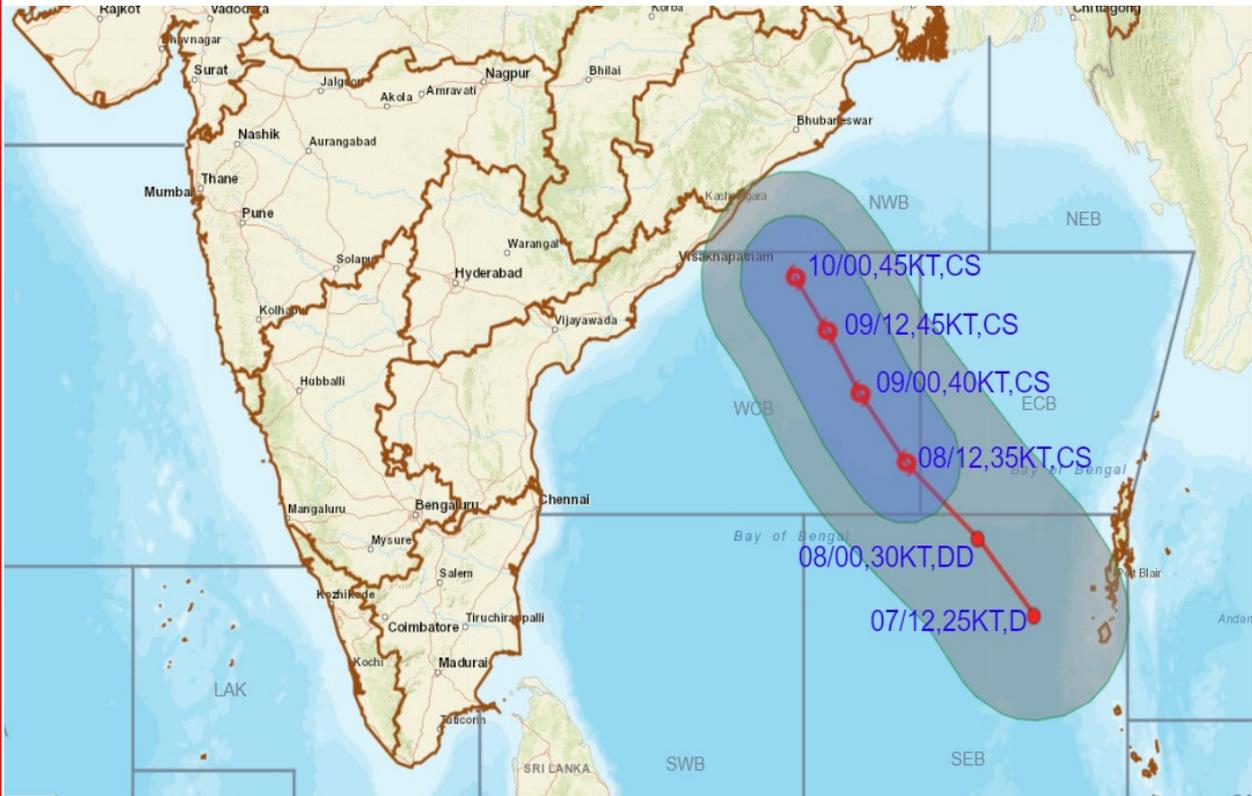


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 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 SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL ON 0300 UTC OF 6TH MAY 2022



DATE/TIME IN UTC
IST=UTC + 0530

L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
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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

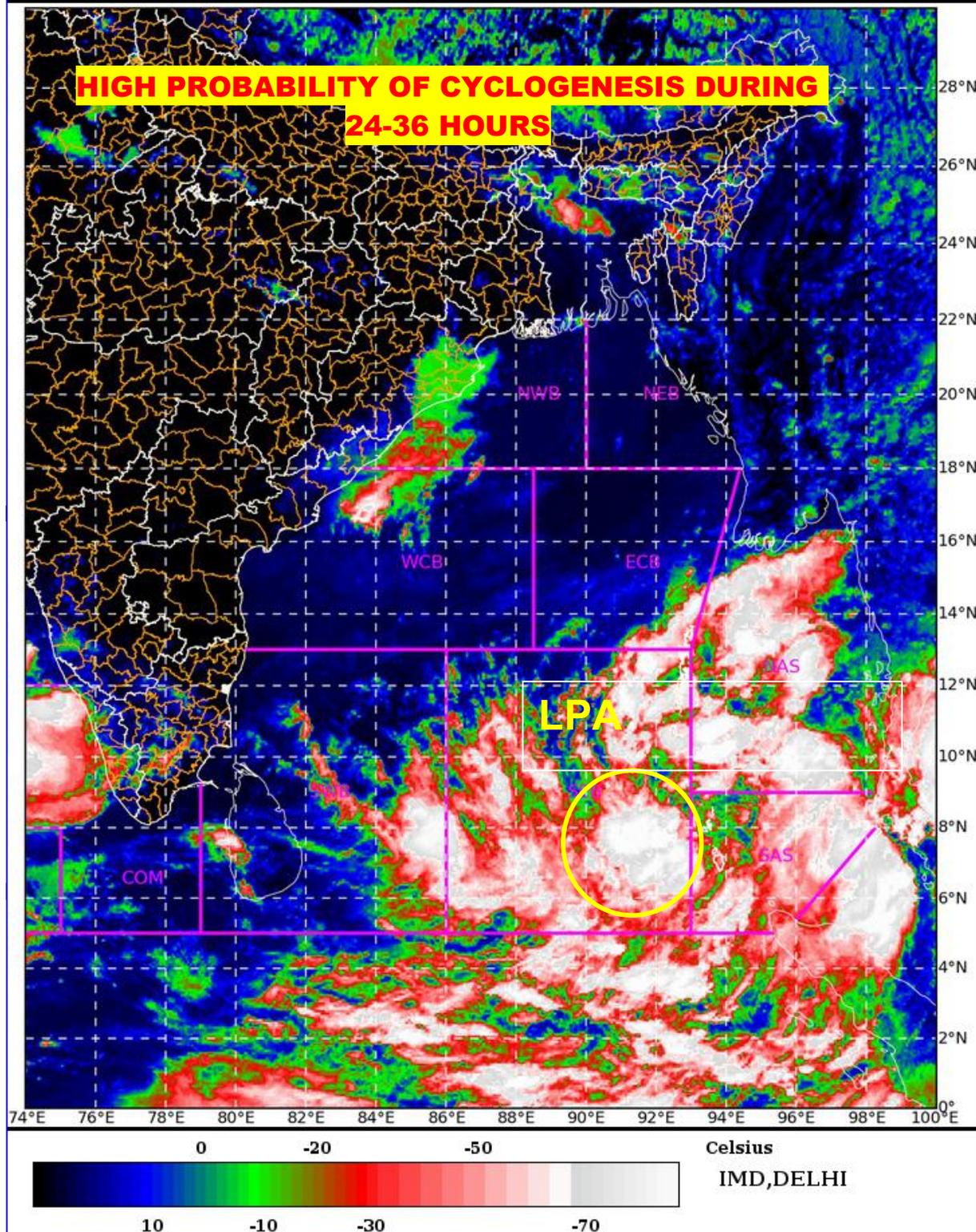
SAT : INSAT-3D IMG

06-05-2022/(0600 to 0626) GMT

IMG_TIR1_TEMP 10.8 um

06-05-2022/(1130 to 1156) IST

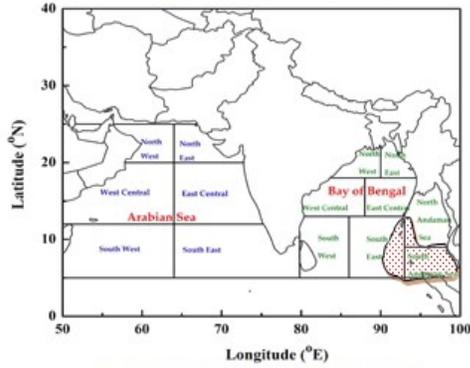
L1C Mercator



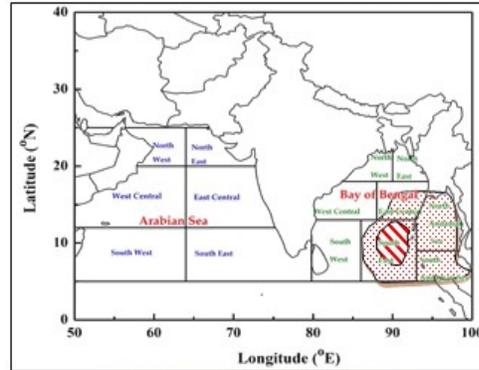
Fishermen Warning Graphics

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

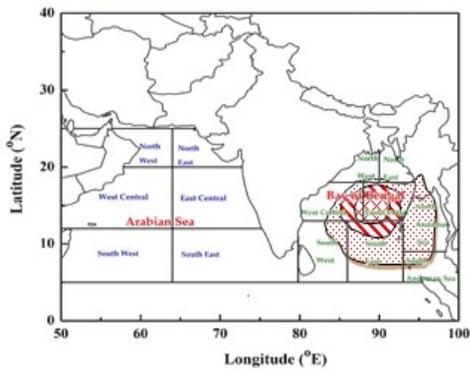
DAY-1: 06.05.2022/0600 UTC TO 07.05.2022/0600 UTC



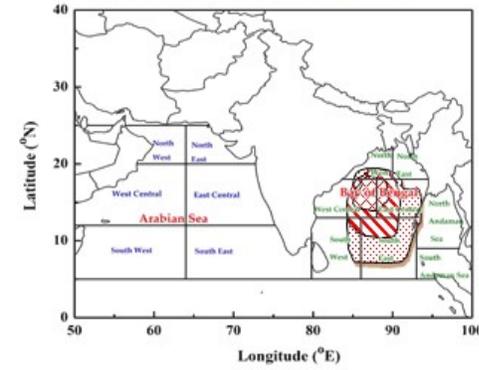
DAY-2: 07.05.2022/0600 UTC TO 08.05.2022/0600 UTC



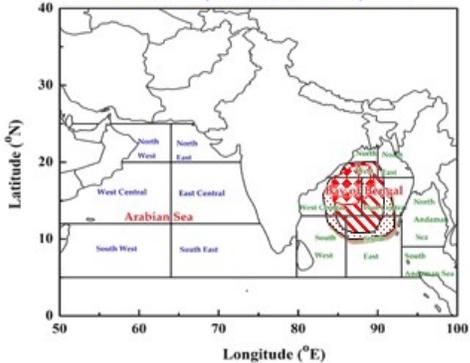
DAY-3: 08.05.2022/0600 UTC TO 09.05.2022/0600 UTC



DAY-4: 09.05.2022/0600 UTC TO 10.05.2022/0600 UTC



DAY-5: 10.05.2022/0600 UTC TO 11.05.2022/0600 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 70 KMPH
-  65-75 KMPH GUSTING TO 85 KMPH
-  70-80 KMPH GUSTING TO 90 KMPH