



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

FROM: RSMC –TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)
OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 1 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0330 UTC OF 08.05.2022 BASED ON 0000 UTC OF 08.05.2022

SUB:DEEP DEPRESSION INTENSIFIED INTO A CYCLONIC STORM 'ASANI' OVER SOUTHEAST BAY OF BENGAL

THE DEEP DEPRESSION OVER SOUTHEAST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 16 KMPH DURING PAST 6 HOURS, INTENSIFIED INTO A **CYCLONIC STORM 'ASANI' (PRONOUNCED AS ASANI)** AND LAY CENTERED AT 0000 UTC OF TODAY, THE 08TH MAY, OVER SOUTHEAST BAY OF BENGAL NEAR LATITUDE 11.2°N AND LONGITUDE 89.3°E, ABOUT 450 KM WEST-NORTHWEST OF CAR NICOBAR (43367), 380 KM WEST OF PORT BLAIR (43333), 970 KM SOUTHEAST OF VISAKHAPATNAM (43149) AND 1030 KM SOUTH-SOUTHEAST OF PURI (43053).

IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND INTENSIFY FURTHER INTO A **SEVERE CYCLONIC STORM** OVER EAST CENTRAL BAY OF BENGAL DURING NEXT 24 HOURS. IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS TILL 1200 UTC OF 10TH MAY AND REACH WESTCENTRAL AND 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.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
08.05.22/0000	11.2/89.3	60-70 GUSTING TO 80	CYCLONIC STORM
08.05.22/0600	11.9/88.9	70-80 GUSTING TO 90	CYCLONIC STORM
08.05.22/1200	12.6/88.4	90-100 GUSTING 110	SEVERE CYCLONIC STORM
08.05.22/1800	13.3/88.0	95-105 GUSTING 115	SEVERE CYCLONIC STORM
09.05.22/0000	14.1/87.3	105-115 GUSTING TO 125	SEVERE CYCLONIC STORM
09.05.22/1200	15.4/86.4	105-115 GUSTING TO 125	SEVERE CYCLONIC STORM
10.05.22/0000	16.3/85.8	95-105 GUSTING TO 115	SEVERE CYCLONIC STORM
10.05.22/1200	17.2/85.4	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM

11.05.22/0000	18.0/85.3	80-90 GUSTING TO 100	CYCLONIC STORM
11.05.22/1200	18.4/85.5	70-80 GUSTING TO 90	CYCLONIC STORM
12.05.22/0000	18.9/85.9	60-70 GUSTING TO 80	CYCLONIC STORM
12.05.22/1200	19.3/86.5	50-60 GUSTING TO 70	DEEP DEPRESSION

THE INTENSITY OF THE SYSTEM IS T2.5. INTENSE CONVECTIVE CLOUD MASS ASSOCIATED WITH SYSTEM HAS INCREASED DURING LAST 06 HRS. CENTRE LIES WITHIN THE CONVECTIVE CLOUD MASS MAKING IT A CDO PATTERN SYSTEM. MICROWAVE PASS OF SSMIS AT 22:41UTC SHOWS INTENSE CONVECTIVE CLOUD MASS TO THE WEST OF THE SYSTEM CENTRE. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 8.5N & 16.0N AND LONGITUDE 84.0E & 93.0E AND ANDAMAN & NICOBAR ISLANDS. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 35 KNOTS GUSTING TO 45 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER SOUTHEAST BAY OF BENGAL & ADJOINING ANDAMAN SEA. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA.

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 30-31⁰C 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 IS AROUND 150 X10⁻⁶ S⁻¹ AROUND THE SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS AROUND 20 X10⁻⁵ S⁻¹ AROUND SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND 30 X10⁻⁵ S⁻¹ TO THE SOUTHWEST 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 **SEVERE CYCLONIC STORM** OVER EAST CENTRAL BAY OF BENGAL BY 1200UTC OF 8TH MAY. 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 **SEVERE CYCLONIC STORM** OVER EAST CENTRAL BAY OF BENGAL BY 1200UTC OF 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.

(RK JENAMANI)
SCIENTIST-F
RSMC NEW DELH

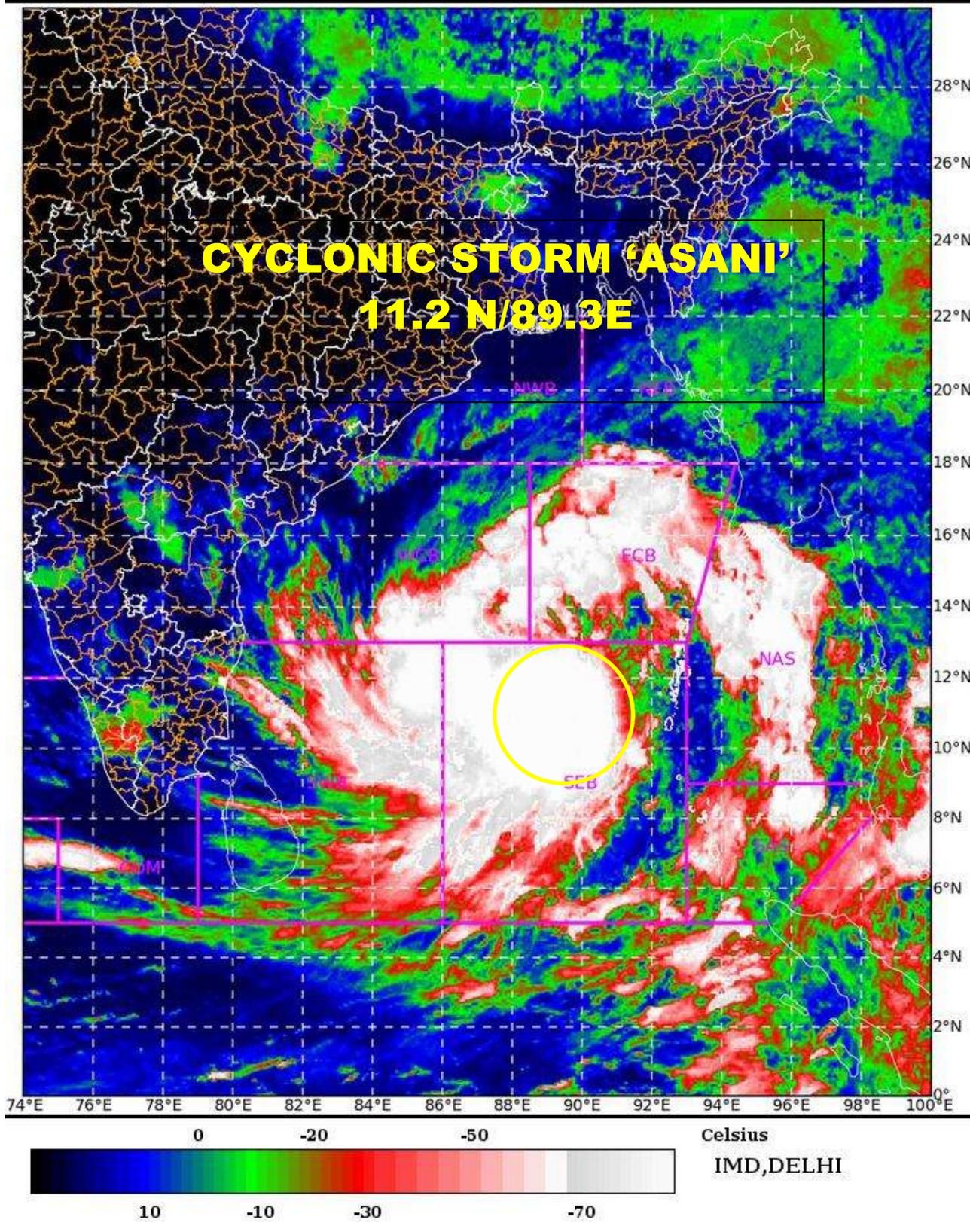
SAT : INSAT-3D IMG

08-05-2022/(0230 to 0256) GMT

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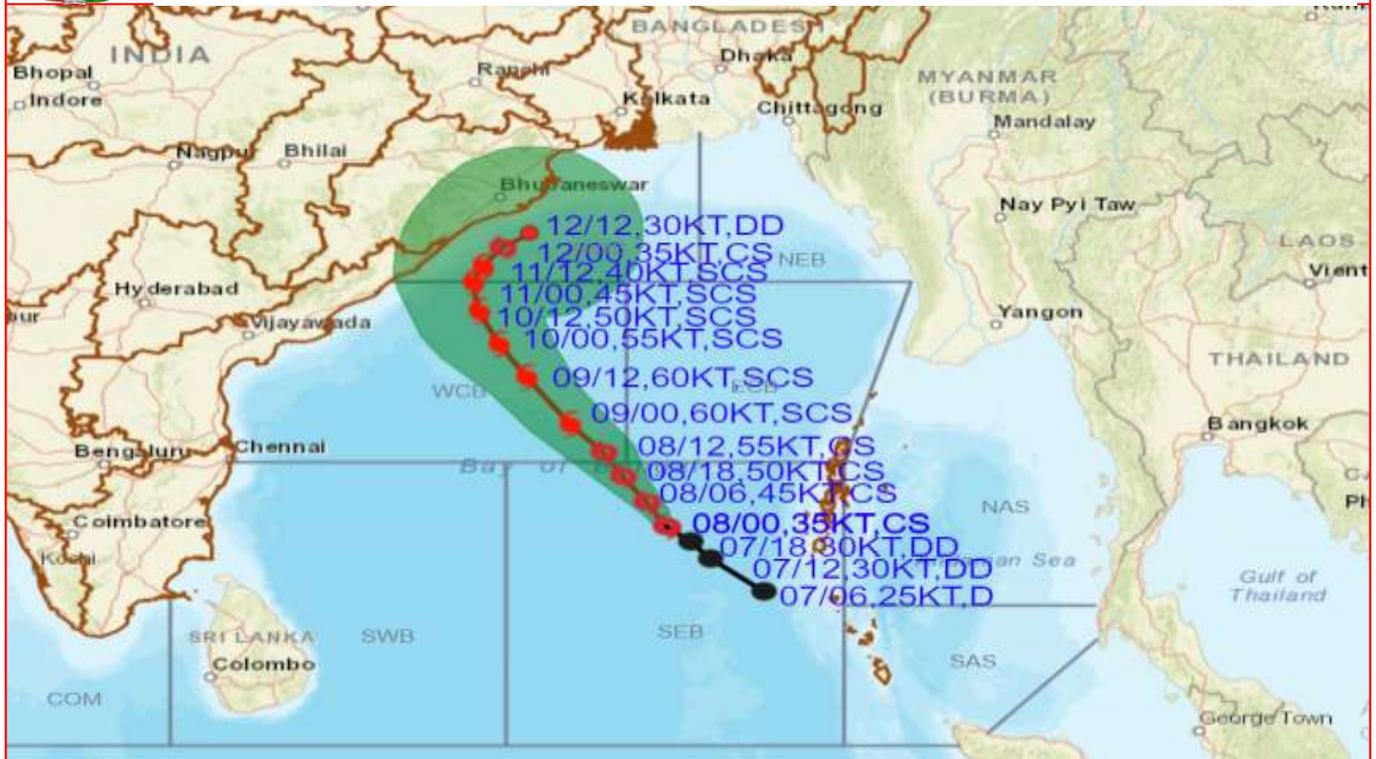
08-05-2022/(0800 to 0826) IST

L1C Mercator





FORECAST TRACK AND INTENSITY OF CYCLONIC STORM ASANI ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM ASANI OVER SOUTHEAST BAY OF BENGAL BASED ON 0000 UTC OF 8TH 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

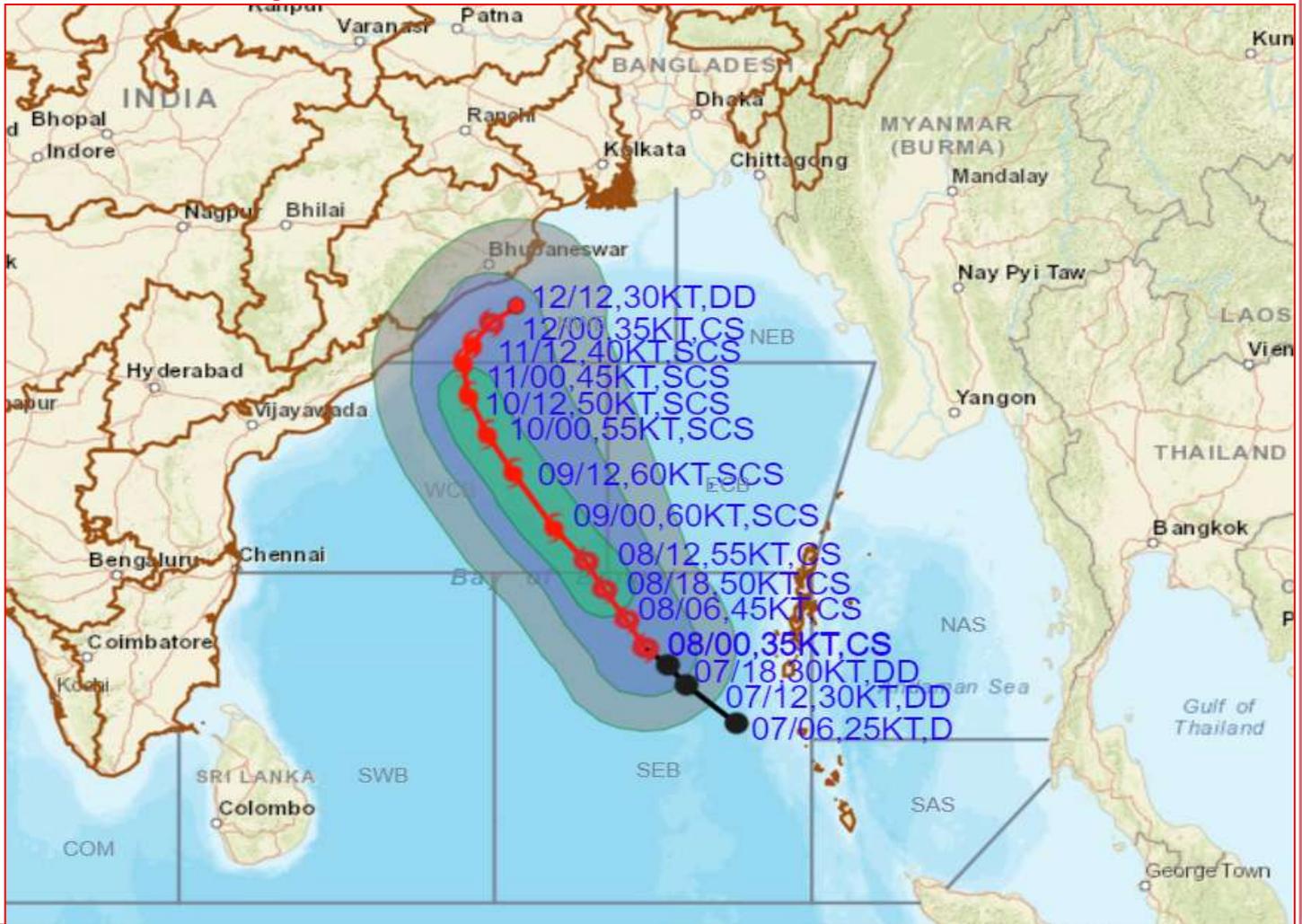
STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	08.05.22/0000	09.05.22/0000	10.05.22/0000
CAR NICOBAR	450,WNW	820,NW	1100,NW
PORT BLAIR	380,W	650,WNW	910,NW
VISHAKHAPATNAM	970,SE	590,SE	310,ESE
PURI	1030,SSE	650,SSE	390,S

Forecast distance (km) and direction of the centre from nearest 5 coastal stations								
Forecast Date and Time	Lead Period	Lat	Lon	Station 1	Station 2	Station 3	Station 4	Station 5
08.05.22/0000	0	11.2	89.3	HUT BAY (362,W)	PORT BLAIR (376,W)	LONG ISLAND (418,WSW)	MAYA BANDAR (438,WSW)	CAR NICOBAR (448,WNW)
08.05.22/0600	6	11.9	88.9	PORT BLAIR (417,W)	LONG ISLAND (425,W)	MAYA BANDAR (443,WSW)	CAR NICOBAR (451,NW)	NANCOWRY (527,NW)
08.05.22/1800	12	12.6	88.4	LONG ISLAND (481,W)	MAYA BANDAR (492,W)	CAR NICOBAR (493,NW)	NANCOWRY (505,NW)	KONDUL (617,NW)
08.05.22/1201	18	13.3	88	MAYA BANDAR (535,W)	CAR NICOBAR (544,NW)	NANCOWRY (544,NW)	KONDUL (580,NW)	PATHEIN (697,WSW)
09.05.22/0000	24	14.1	87.3	CAR NICOBAR (580,NW)	NANCOWRY (585,NW)	KONDUL (588,NW)	PATHEIN (622,WSW)	YANGON (624,WSW)
09.05.22/1200	36	15.4	86.4	NANCOWRY (406,NW)	KONDUL (417,NW)	PATHEIN (419,W)	YANGON (460,W)	VISHAKHAPATNAM/ WALTAIR (465,SE)
10.05.22/0000	48	16.3	85.8	KONDUL (287,NW)	PATHEIN (307,W)	YANGON (309,W)	VISHAKHAPATNAM/ WALTAIR (344,ESE)	KALINGAPATAM (365,SE)
10.05.22/1200	60	17.2	85.4	PATHEIN (184,W)	YANGON (229,W)	VISHAKHAPATNAM/ WALTAIR (148,E)	KALINGAPATAM (236,SE)	VISHAKHAPATNAM (293,ESE)
11.05.22/0000	72	18	85.3	YANGON (129,W)	VISHAKHAPATNAM/ WALTAIR (148,E)	KALINGAPATAM (208,ESE)	VISHAKHAPATNAM (214,E)	SANDOWAY (215,W)
11.05.22/1200	84	18.3	85.4	VISHAKHAPATNAM (184,W)	KALINGAPATAM (134,E)	VISHAKHAPATNAM (173,ENE)	SANDOWAY (222,W)	KAKINADA (232,ENE)
12.05.22/0000	96	18.7	85.6	M/ WALTAIR (184,W)	KALINGAPATAM (125,ENE)	SANDOWAY (160,W)	KAKINADA (174,ENE)	TUNI (200,ENE)

This 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 TRACK AND INTENSITY OF CYCLONIC STORM ASANI ALONGWITH QUADRANT WIND DISTRIBUTION OVER SOUTHEAST BAY OF BENGAL BASED ON 0000 UTC OF 8TH 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)

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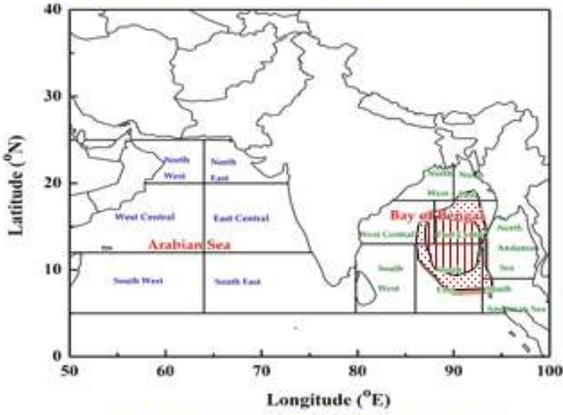
- LESS THAN 34 KT
- 34-47 KT
- ⦿ ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY
- AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

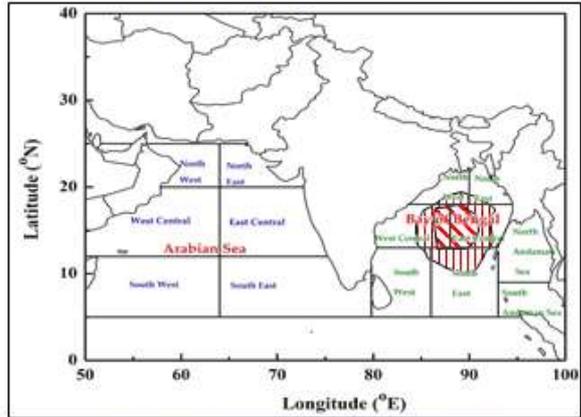
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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

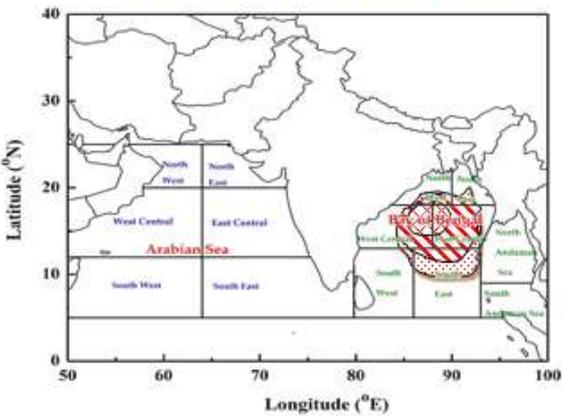
DAY-1: 07.05.2022/0600 UTC TO 08.05.2022/0600 UTC



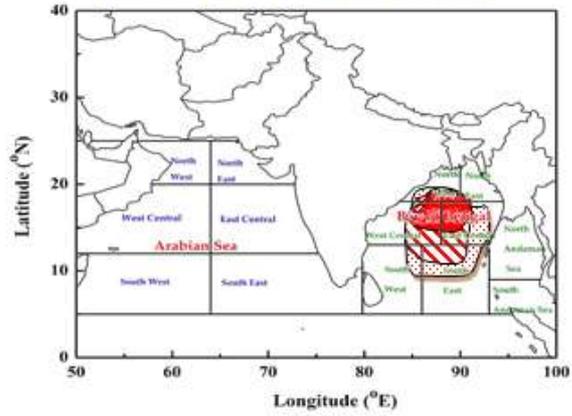
DAY-2: 08.05.2022/0600 UTC TO 09.05.2022/0600 UTC



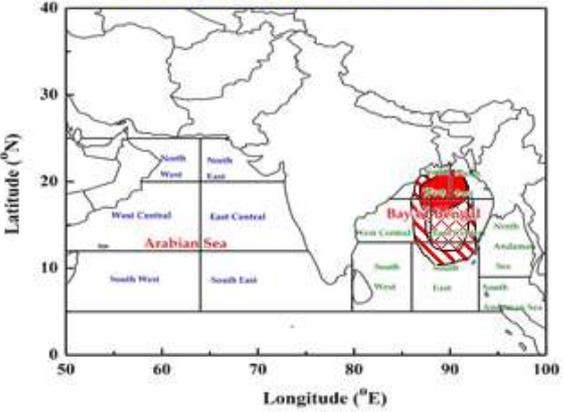
DAY-3: 09.05.2022/0600 UTC TO 10.05.2022/0600 UTC



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