



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

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. 4 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1200 UTC OF 08.05.2022 BASED ON 0900 UTC OF 08.05.2022

SUB: CYCLONIC STORM 'ASANI' OVER SOUTHEAST BAY OF BENGAL

THE **CYCLONIC STORM 'ASANI' (PRONOUNCED AS ASANI)** OVER SOUTHEAST BAY OF BENGAL MOVED NEARLY NORTHWESTWARDS WITH A SPEED OF 14 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0900 UTC OF TODAY, THE 08TH MAY, OVER THE SAME REGION NEAR LATITUDE 11.8°N AND LONGITUDE 88.4°E, ABOUT 560 KM NORTHWEST OF CAR NICOBAR (43367), 470 KM WEST OF PORT BLAIR (43333), 850 KM SOUTHEAST OF VISAKHAPATNAM (43149) AND 930 KM SOUTH-SOUTHEAST OF PURI (43053).

IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND INTENSIFY INTO A **SEVERE CYCLONIC STORM** OVER SOUTHEAST BAY OF BENGAL DURING NEXT 06 HOURS. IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS TILL 10TH MAY EVENING 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
08.05.22/0900	11.8/88.4	80-90 gusting to 100	Cyclonic Storm
08.05.22/1200	12.2/88.2	90-100 gusting to 110	Severe Cyclonic Storm
08.05.22/1800	13.1/87.7	95-105 gusting to 115	Severe Cyclonic Storm
09.05.22/0000	14.1/87.3	105-115 gusting to 125	Severe Cyclonic Storm
09.05.22/0600	14.9/86.8	105-115 gusting to 125	Severe Cyclonic Storm
09.05.22/1800	15.9/86.1	105-115 gusting to 125	Severe Cyclonic Storm
10.05.22/0600	16.8/85.6	95-105 gusting to 115	Severe Cyclonic Storm
10.05.22/1800	17.6/85.3	90-100 gusting to 110	Severe Cyclonic Storm
11.05.22/0600	18.2/85.4	80-90 gusting to 100	Cyclonic Storm

11.05.22/1800	18.6/85.7	70-80 gusting to 90	Cyclonic Storm
12.05.22/0600	19.1/86.2	60-70 gusting to 80	Cyclonic Storm
12.05.22/1200	19.3/86.6	50-60 gusting to 70	Deep Depression

THE INTENSITY OF THE SYSTEM IS T3.0. MULTISAT WINDS INDICATE STRONGER WINDS IN THE NORTHEAST SECTOR. INSAT-3D IMAGERY INDICATES SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 7.0N & 18.0N AND LONGITUDE 82.0E & 91.5E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE SEA CONDITION IS HIGH TO VERY HIGH OVER SOUTHEAST BAY OF BENGAL & ADJOINING ANDAMAN SEA. THE ESTIMATED CENTRAL PRESSURE IS 996 HPA.

REMARKS:

THE MADDEN JULIAN OSCILLATION INDEX (MJO) CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE LESS THAN 1. IT WOULD CONTINUE IN SAME PHASE 5 DURING NEXT 4 DAYS WITH GRADUALLY INCREASING AMPLITUDE. HENCE, MJO WILL SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE BAY OF BENGAL (BOB) DURING NEXT 4-5 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 200 X10⁻⁶ S⁻¹ AROUND SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS AROUND 40 X10⁻⁵ S⁻¹ TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND 30 X10⁻⁵ S⁻¹ TO THE SOUTHWEST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE (20 KNOTS) AROUND THE SYSTEM AREA. IT IS LIKELY TO REMAIN MODERATE (15-20 KNOTS) ALONG THE FORECAST TRACK OVER WESTCENTRAL & NORTHWEST BOB. STRONG POLEWARD AND WESTWARD FLOW IS SEEN IN UPPER LEVELS. TOTAL PRECIPITABLE WATER IMAGERY INDICATE WARM MOIST AIR FEEDING INTO THE SYSTEM AREA. THE SYSTEM IS EXPECTED TO TRACK NORTHWESTWARDS ALONG THE PERIPHERY OF SUB-TROPICAL RIDGE DURING NEXT 48HOURS. THUS FAVOURABLE SEA & ENVIRONMENTAL CONDITIONS WILL LEAD TO FURTHER INTENSIFICATION OF SYSTEM.

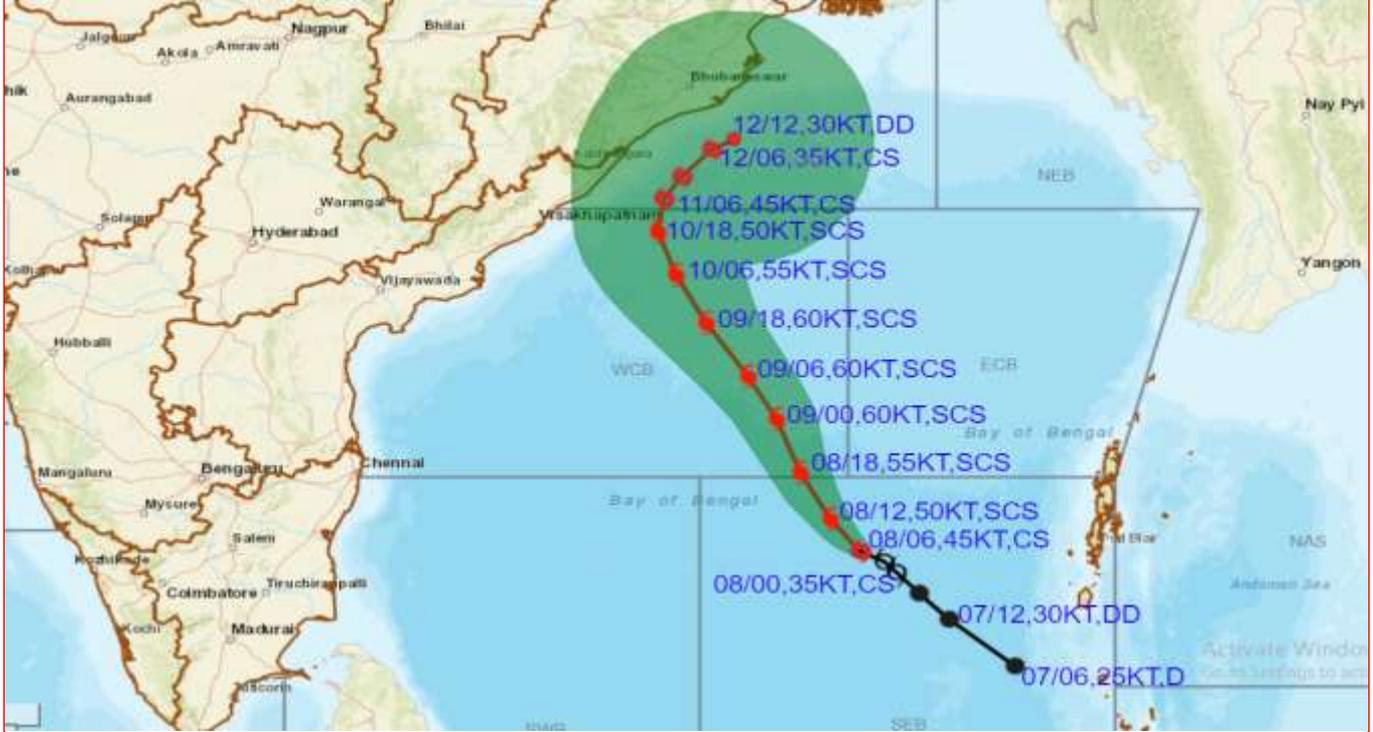
MOST OF THE NUMERICAL MODELS ARE IN GOOD AGREEMENT THAT THE SYSTEM WOULD INTENSIFY INTO A **SEVERE CYCLONIC STORM** OVER EASTCENTRAL BAY OF BENGAL BY 1200 UTC OF 8TH MAY. MOST OF THE MODELS ARE ALSO UNANIMOUS THAT THE SYSTEM WOULD MOVE MOVE NORTHWESTWARDS TILL 10TH MAY EVENING AND THEREAFTER RECURVE NORTH-NORTHEASTWARDS.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE SYSTEM IS VERY LIKELY TO MOVE NORTHWESTWARDS AND INTENSIFY FURTHER INTO A **SEVERE CYCLONIC STORM** OVER SOUTHEAST BAY OF BENGAL DURING NEXT 06 HOURS. IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS TILL 1200 UTC OF 10TH MAY 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



FORECAST TRACK AND INTENSITY OF CYCLONIC STORM 'ASANI' ALONGWITH CONE OF UNCERTAINTY OVER SOUTHEAST BAY OF BENGAL BASED ON 0600 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

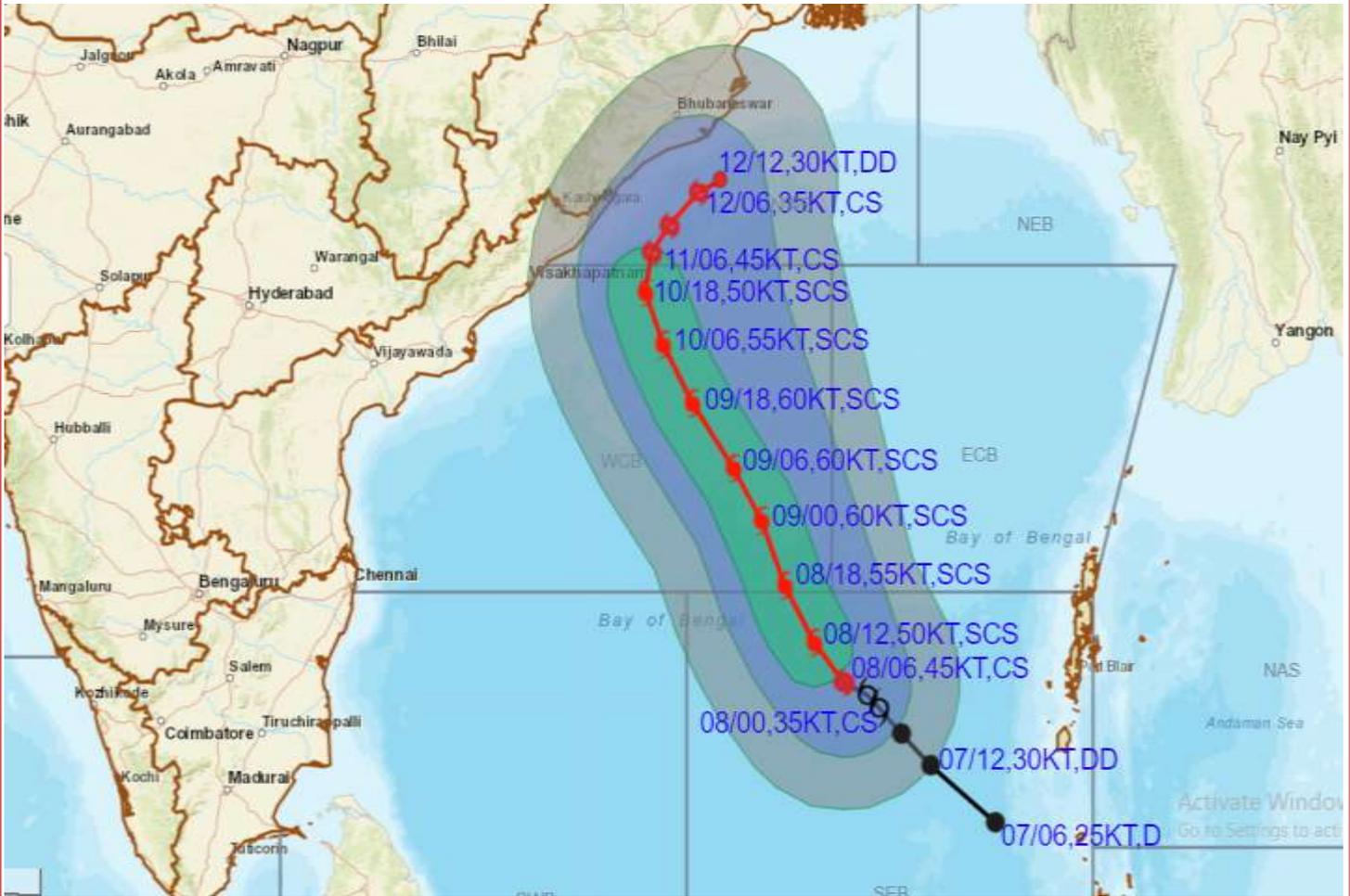
STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	09.05.22/0600	10.05.22/0600	11.05.22/0600
CAR NICOBAR	890,NW	1130,NW	1250,NW
PORT BLAIR	720,WNW	940,NW	1040,NW
VISHAKHAPATNAM	470,SE	250,ESE	220,ENE
PURI	530,S	320,S	170,SSW

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
08.05.22/0600	0	11.6	88.7	HUT BAY (436,WNW)	PORT BLAIR (438,W)	LONG ISLAND (470,W)	MAYA BANDAR (482,WSW)	CAR NICOBAR (527,WNW)
08.05.22/1200	6	12.2	88.2	PORT BLAIR (495,W)	HUT BAY (508,WNW)	LONG ISLAND (515,W)	MAYA BANDAR (519,W)	CAR NICOBAR (609,NW)
08.05.22/1800	12	13.1	87.7	MAYA BANDAR (566,W)	PORT BLAIR (568,WNW)	LONG ISLAND (573,W)	HUT BAY (598,WNW)	VISHAKHAPATNAM/ WALT AIR (695,SE)
09.05.22/0000	18	14.1	87.3	KALINGAPATAM (580,SE)	VISHAKHAPATNAM/ WALT AIR (585,SE)	VISHAKHAPATNAM (588,SE)	MAYA BANDAR (622,WNW)	TUNI (624,SE)
09.05.22/0600	24	14.9	86.8	KALINGAPATAM (476,SE)	VISHAKHAPATNAM/ WALT AIR (486,SE)	VISHAKHAPATNAM (488,SE)	GOPALPUR (527,SSE)	TUNI (530,ESE)
09.05.22/1800	36	15.9	86.1	KALINGAPATAM (342,SE)	VISHAKHAPATNAM/ WALT AIR (358,ESE)	VISHAKHAPATNAM (360,ESE)	GOPALPUR (396,SSE)	TUNI (412,ESE)
10.05.22/0600	48	16.8	85.6	KALINGAPATAM (231,SE)	VISHAKHAPATNAM/ WALT AIR (264,ESE)	VISHAKHAPATNAM (265,ESE)	GOPALPUR (285,SSE)	TUNI (330,E)
10.05.22/1800	60	17.6	85.3	KALINGAPATAM (148,ESE)	GOPALPUR (191,SSE)	VISHAKHAPATNAM/ WALT AIR (212,E)	VISHAKHAPATNAM (213,E)	PURI (251,SSW)
11.05.22/0600	72	18.2	85.4	GOPALPUR (131,SSE)	KALINGAPATAM (135,E)	PURI (183,SSW)	VISHAKHAPATNAM (229,ENE)	VISHAKHAPATNAM/ WALT AIR (230,ENE)
11.05.22/1800	84	18.6	85.7	GOPALPUR (114,SE)	PURI (134,S)	KALINGAPATAM (168,E)	BHUBANESHWAR (184,S)	CUTTACK (209,S)
12.05.22/0600	96	19.1	86.2	PURI (88,SSE)	BHUBANESHWAR (134,SSE)	GOPALPUR (140,E)	PARADIP (CWR) (143,SSW)	CUTTACK (155,S)
12.05.22/1200	102	19.3	86.6	PURI (99,SE)	PARADIP (CWR) (112,S)	BHUBANESHWAR (133,SE)	CUTTACK (147,SSE)	CHANDBALI (166,S)

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 ALONGWITH QUADRANT WIND DISTRIBUTION CYCLONIC STORM 'ASANI' OVER SOUTHEAST BAY OF BENGAL BASED ON 0600 UTC OF 8TH MAY 2022



DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
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 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
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 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

● LESS THAN 34 KT
 ○ 34-47 KT
 ● \geq 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)
 ■ \geq 64 KT (\geq 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
\geq 64 (\geq 118)	Phenomenal	Total suspension of fishing operations

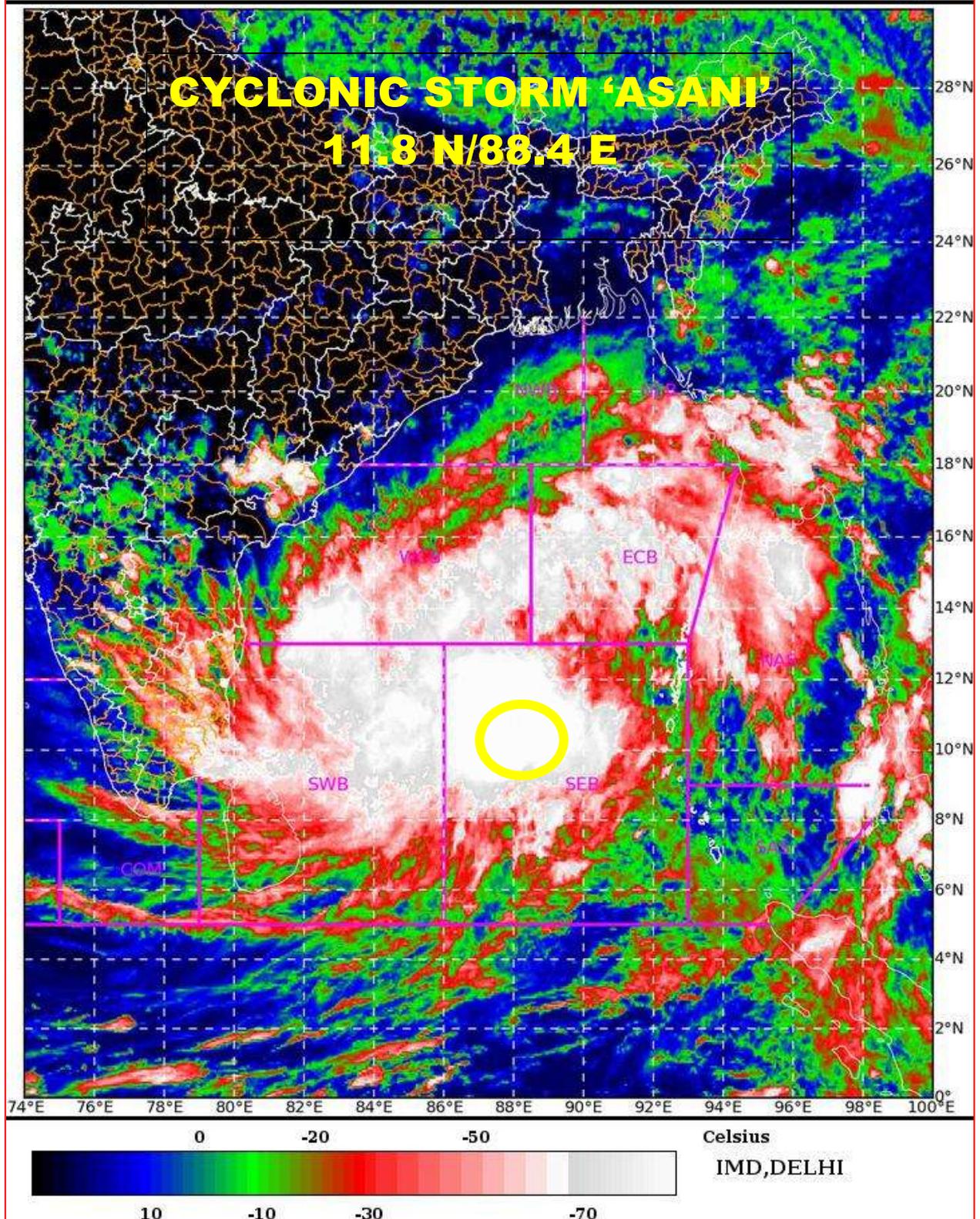
SAT : INSAT-3D IMG

08-05-2022/(1000 to 1026) GMT

IMG_TIR1_TEMP 10.8 um

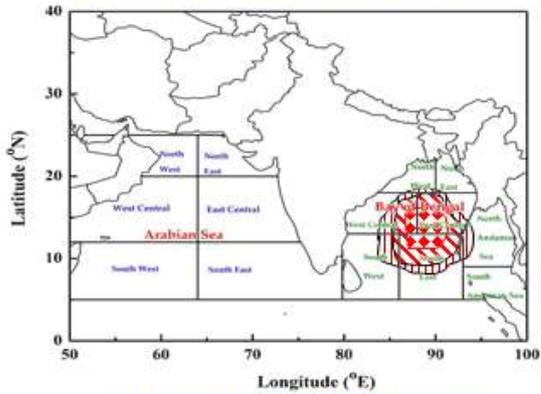
08-05-2022/(1530 to 1556) IST

L1C Mercator

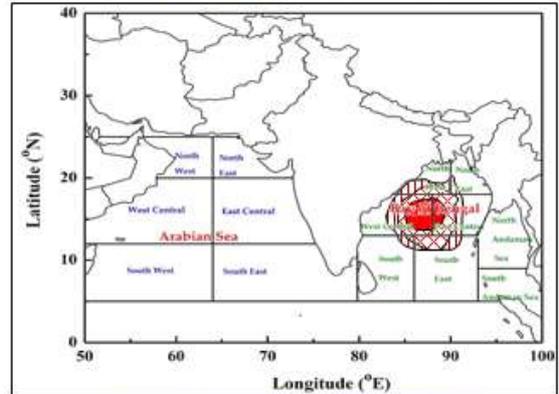


INDIA METEOROLOGICAL DEPARTMENT
FISHERMAN WARNING FOR BAY OF BENGAL AND ARABIAN SEA

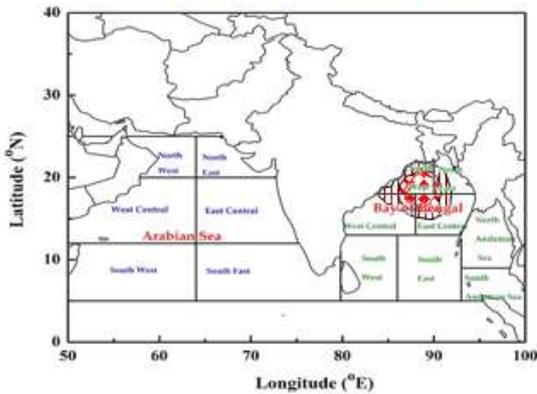
DAY-1: 08.05.2022/0600 UTC TO 09.05.2022/0600 UTC



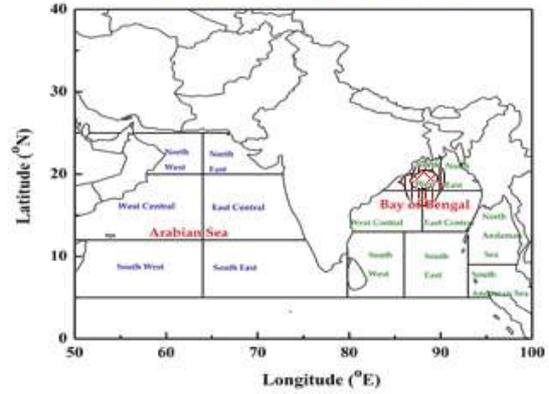
DAY-2: 09.05.2022/0600 UTC TO 10.05.2022/0600 UTC



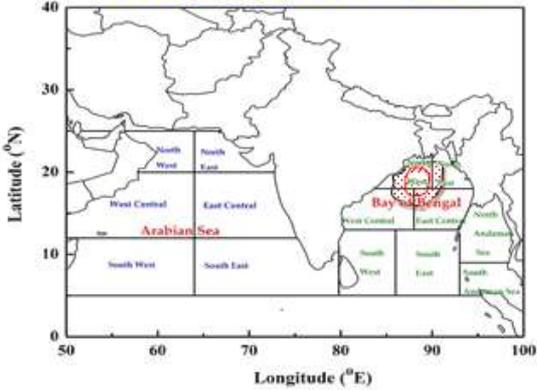
DAY-3: 10.05.2022/0600 UTC TO 11.05.2022/0600 UTC



DAY-4: 11.05.2022/0600 UTC TO 12.05.2022/0600 UTC



DAY-5: 12.05.2022/0600 UTC TO 13.05.2022/0600 UTC



AREA UNDER FISHERMEN WARNING

-  40-50 KMPH GUSTING TO 60 KMPH (SQUALLY WEATHER)
-  45-55 KMPH GUSTING TO 65 KMPH
-  50-60 KMPH GUSTING TO 70 KMPH
-  60-70 KMPH GUSTING TO 80 KMPH
-  70-80 KMPH GUSTING TO 90 KMPH
-  90-100 KMPH GUSTING TO 90 KMPH
-  105-115 KMPH GUSTING TO 125 KMPH