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. 5 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1500 UTC OF 08.05.2022 BASED ON 1200 UTC OF 08.05.2022

SUB: CYCLONIC STORM 'ASANI' OVER SOUTHEAST BAY OF BENGAL INTENSIFIED INTO A SEVERE CYCLONIC STORM OVER SOUTHEAST AND ADJOINING EASTCENTRAL 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, **INTENSIFIED INTO A SEVERE CYCLONIC STORM** AND LAY CENTERED AT 1200 UTC OF TODAY, THE 08TH MAY, OVER SOUTHEAST AND ADJOINING EASTCENTRAL BAY OF BENGAL, NEAR LATITUDE 12.2°N AND LONGITUDE 88.2°E, ABOUT 610 KM NORTHWEST OF CAR NICOBAR (43367), 500 KM WEST OF PORT BLAIR (43333), 810 KM SOUTHEAST OF VISAKHAPATNAM (43149) AND 880 KM SOUTH-SOUTHEAST OF PURI (43053).

IT IS VERY LIKELY TO MOVE NORTHWESTWARDS TILL 10TH MAY NIGHT 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. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFAC WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
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	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
09.05.22/0600	14.9/86.8	105-115 GUSTING TO 125	SEVERE CYCLONIC STORM
09.05.22/1200	15.4/86.5	105-115 GUSTING TO 125	SEVERE CYCLONIC STORM

10.05.22/0000	16.4/85.9	95-105 GUSTING TO 115	SEVERE CYCLONIC STORM
10.05.22/1200	17.2/85.5	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
11.05.22/0000	17.9/85.4	80-90 GUSTING TO 100	CYCLONIC STORM
11.05.22/1200	18.4/85.6	70-80 GUSTING TO 90	CYCLONIC STORM
12.05.22/0000	18.9/86.0	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. MICROWAVE IMAGERY OF 1100 UTC SHOWS THE SYSTEM CENTRE IN THE NE PART OF THE CONVECTION WITH MAXIMUM CONVECTION IN THE SE QUADRANT OF THE SYSTEM CENTRE. 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 50 KNOTS GUSTING TO 60 KNOTS. THE SEA CONDITION IS HIGH TO VERY HIGH OVER SOUTHEAST BAY OF BENGAL & ADJOINING ANDAMAN SEA. THE ESTIMATED CENTRAL PRESSURE IS 994 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 30-31^{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.

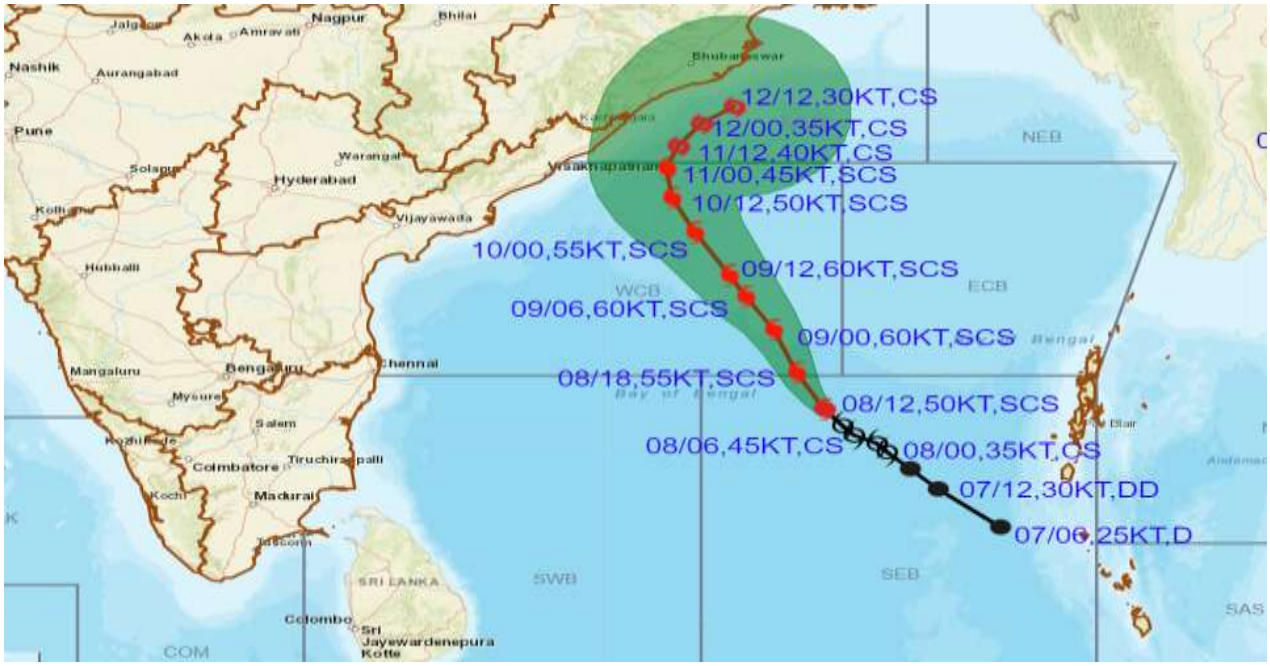
LOW LEVEL VORTICITY HAS INCREASED TO 250 X10^{-6} S^{-1} AROUND SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS AROUND 30 X10^{-5} S^{-1} TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND 30 X10^{-5} S^{-1} TO THE SOUTHWEST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE (20-25 KNOTS) AROUND THE SYSTEM AREA. IT IS LIKELY TO REMAIN MODERATE (20-25 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 SUSTAIN THE PRESENT INTENSITY OF THE SYSTEM AS SEVERE CYCLONIC STORM DURING THIS PERIOD.

MOST OF THE NUMERICAL MODELS ARE IN GOOD AGREEMENT THAT THE SYSTEM WOULD CONTINUE TO REMAIN AS **SEVERE CYCLONIC STORM** AND LIKELY TO MOVE NORTHWESTWARDS DURING NEXT 48 HOURS TILL 10TH MAY EVENING AND THEREAFTER RECURVE NORTH-NORTHEASTWARDS.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE SYSTEM WOULD CONTINUE TO REMAIN AS **SEVERE CYCLONIC STORM** AND LIKELY TO MOVE NORTHWESTWARDS DURING NEXT 48 HOURS 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.

RK JENAMANI
SCIENTIST-F
RSMC NEW DELHI

FORECAST TRACK AND INTENSITY OF CYCLONIC STORM 'ASANI' ALONGWITH CONE OF UNCERTAINTY OVER SOUTHEAST AND ADJOINIG EASTCENTRAL BAY OF BENGAL BASED ON 1200 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

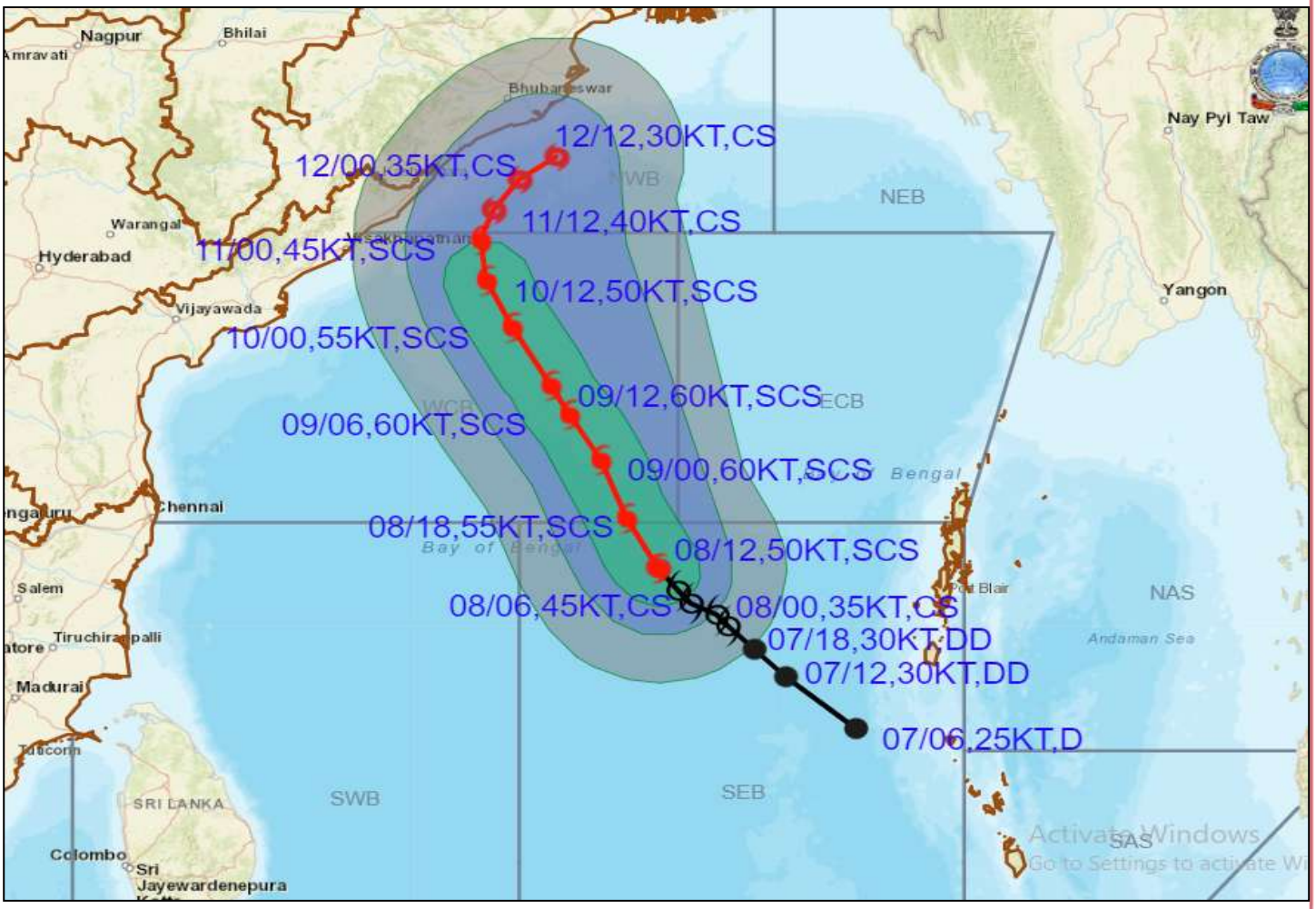
STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	08.05.22/1200	09.05.22/1200	11.05.22/1200
CAR NICOBAR	610,NW	960,NW	1250,NW
PORT BLAIR	500,W	770,WNW	1040,NW
VISHAKHAPATNAM	810,SE	410,SE	240,ENE
PURI	880,SSE	480,S	150,S

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
08.05.22/1200	0	12.2	88	PORT BLAIR (495,W)	HUT BAY (508,WNW)	LONG ISLAND (515,W)	MAYA BANDAR (519,W)	CAR NICOBAR (609,NW)
08.05.22/1800	6	13.1	88	MAYA BANDAR (566,W)	PORT BLAIR (568,WNW)	LONG ISLAND (573,W)	HUT BAY (598,WNW)	VISHAKHAPATNAM/ WALTAIR (695,SE)
09.05.22/0000	12	14.1	87	KALINGAPATAM (580,SE)	VISHAKHAPATNAM/ WALTAIR (585,SE)	VISHAKHAPATNAM (588,SE)	MAYA BANDAR (622,WNW)	TUNI (624,SE)
09.05.22/0600	18	14.9	87	KALINGAPATAM (476,SE)	VISHAKHAPATNAM/ WALTAIR (486,SE)	VISHAKHAPATNAM (488,SE)	GOPALPUR (527,SSE)	TUNI (530,ESE)
09.05.22/1200	24	15.4	87	KALINGAPATAM (413,SE)	VISHAKHAPATNAM/ WALTAIR (426,SE)	VISHAKHAPATNAM (428,SE)	GOPALPUR (463,SSE)	TUNI (474,ESE)
10.05.22/0000	36	16.4	86	KALINGAPATAM (286,SE)	VISHAKHAPATNAM/ WALTAIR (311,ESE)	VISHAKHAPATNAM (313,ESE)	GOPALPUR (337,SSE)	TUNI (372,ESE)
10.05.22/1200	48	17.2	86	KALINGAPATAM (192,SE)	GOPALPUR (239,SSE)	VISHAKHAPATNAM/ WALTAIR (240,ESE)	VISHAKHAPATNAM (241,ESE)	PURI (291,S)
11.05.22/0000	60	17.9	85	KALINGAPATAM (142,ESE)	GOPALPUR (162,SSE)	PURI (216,SSW)	VISHAKHAPATNAM (224,E)	VISHAKHAPATNAM/ WALTAIR (224,E)
11.05.22/1200	72	18.4	86	GOPALPUR (123,SE)	KALINGAPATAM (155,E)	PURI (158,S)	BHUBANESHWAR (207,S)	CUTTACK (233,S)
12.05.22/0000	84	18.9	86	PURI (102,S)	GOPALPUR (124,ESE)	BHUBANESHWAR (151,S)	PARADIP (CWR) (172,SSW)	CUTTACK (175,S)
12.05.22/1200	96	19.3	87	PURI (99,SE)	PARADIP (CWR) (112,S)	BHUBANESHWAR (133,SE)	CUTTACK (147,SSE)	CHANDBALI (166,S)

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 AND ADJOINING EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC OF 8TH 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)

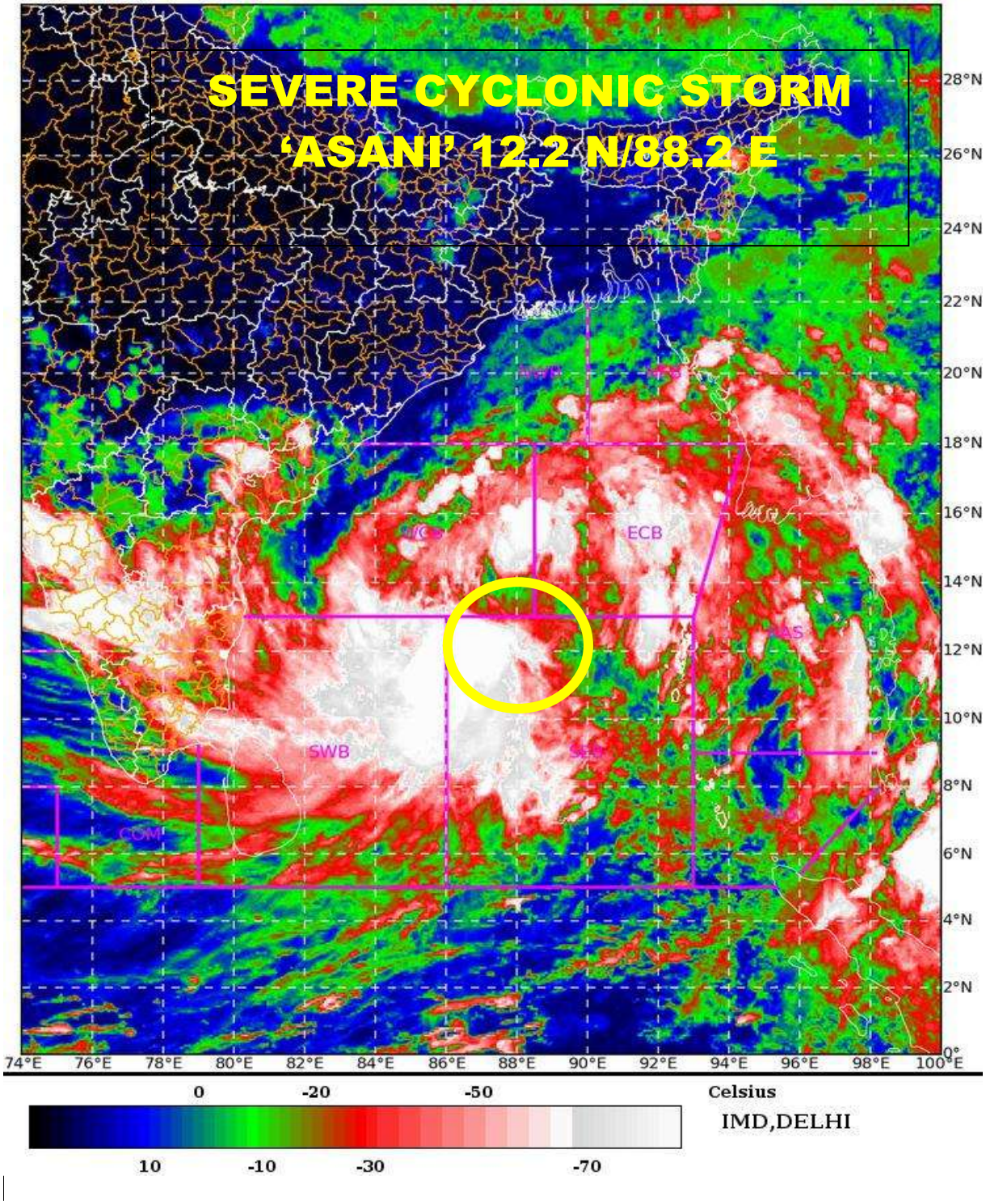
IMPACT OVER THE SEA

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

SAT : INSAT-3D IMG 08-05-2022/(1330 to 1356) GMT

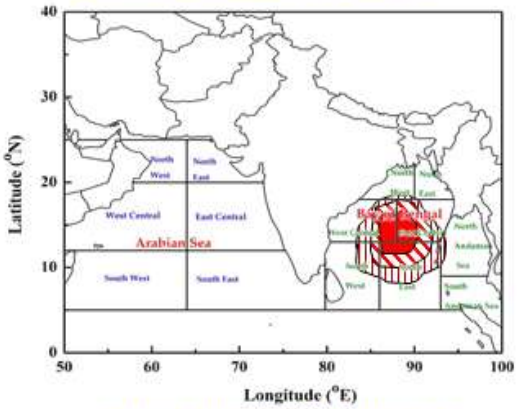
IMG_TIR1_TEMP 10.8 um 08-05-2022/(1900 to 1926) IST

L1C Mercator

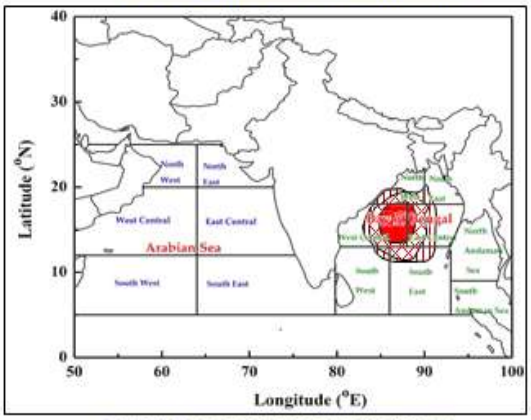


INDIA METEOROLOGICAL DEPARTMENT
FISHERMAN WARNING FOR BAY OF BENGAL AND ARABIAN SEA

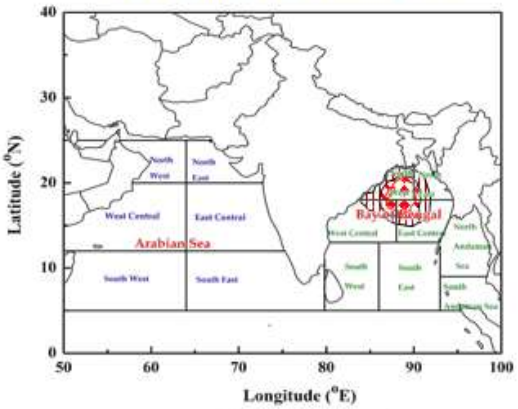
DAY-1: 08.05.2022/0600 UTC TO 09.05.2022/0600 UTC



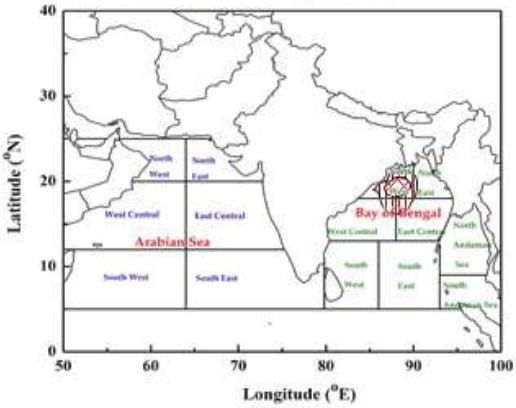
DAY-2: 09.05.2022/0600 UTC TO 10.05.2022/0600 UTC



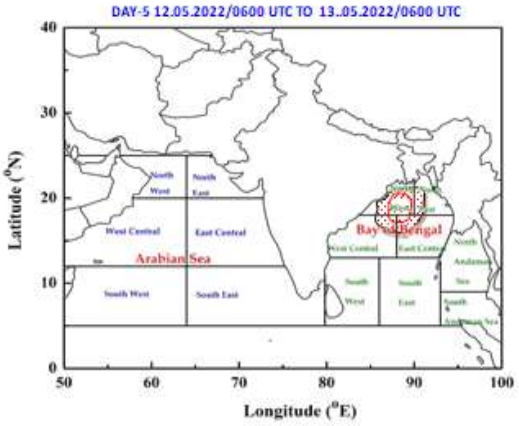
DAY-3-: 10.05.2022/0600 UTC TO 11.05.2022/0600 UTC



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