



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)
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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. 10 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0300 UTC OF 10.05.2022 BASED ON 0000 UTC OF 09.05.2022

SUB: SEVERE CYCLONIC STORM 'ASANI' OVER WESTCENTRAL AND ADJOINING SOUTH BAY OF BENGAL

THE **SEVERE CYCLONIC STORM 'ASANI' (PRONOUNCED AS ASANI)** OVER WESTCENTRAL AND ADJOINING SOUTH BAY OF BENGAL MOVED NEARLY WEST-NORTHWESTWARDS WITH A SPEED OF 25 KMPH DURING PAST 06 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 09TH MAY, OVER THE SAME REGION NEAR LATITUDE 14.0°N AND LONGITUDE 86.0°E, ABOUT 920 KM NORTHWEST OF CAR NICOBAR (43367), 770 KM WEST-NORTHWEST OF PORT BLAIR (43333), 500 KM SOUTHEAST OF VISAKHAPATNAM (43149) AND 650 KM SOUTH OF PURI (43053).

IT IS VERY LIKELY TO MOVE NORTHWESTWARDS TILL 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. IT IS LIKELY TO WEAKEN GRADUALLY INTO A CYCLONIC STORM DURING NEXT 36 HOURS.

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
09.05.22/0300	13.7/86.3	100-110 gusting to 120	Severe Cyclonic Storm
09.05.22/0600	13.2/86.0	100-110 gusting to 120	Severe Cyclonic Storm
09.05.22/1200	14.8/85.7	95-105 gusting to 115	Severe Cyclonic Storm
09.05.22/1800	15.3/85.4	90-100 gusting to 110	Severe Cyclonic Storm
10.05.22/0000	15.9/85.1	85-95 gusting to 105	Severe Cyclonic Storm
10.05.22/1200	16.7/84.9	75-85 gusting to 95	Cyclonic Storm
11.05.22/0000	17.7/85.3	70-80 gusting to 90	Cyclonic Storm
11.05.22/1200	18.3/85.8	60-70 gusting to 80	Cyclonic Storm
12.05.22/0000	18.8/86.4	50-60 gusting to 70	Deep Depression
12.05.22/1200	19.5/87.3	40-50 gusting to 60	Depression

THE INTENSITY OF THE SYSTEM IS T3.5. INSAT-3D IMAGERY INDICATES BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 10.0N & 15.0N AND LONGITUDE 81.0E & 87.0E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 55 KNOTS GUSTING TO 65 KNOTS. THE SEA CONDITION IS VERY HIGH OVER WESTCENTRAL & ADJOINING SOUTH BAY OF BENGAL. THE ESTIMATED CENTRAL PRESSURE IS 988 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 2 DAYS WITH AMPLITUDE BECOMING MORE THAN 1. HENCE, MJO WILL SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE BAY OF BENGAL (BOB) DURING NEXT 3-4 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 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 HAS DECREASED SLIGHTLY AND IS AROUND 20 X10⁻⁵ S⁻¹ TO THE SOUTHWEST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE (15-20 KNOTS) AROUND THE SYSTEM AREA. IT IS LIKELY TO BECOME LOW TO MODERATE (10-15 KNOTS) ALONG THE FORECAST TRACK OVER WESTCENTRAL & NORTHWEST BOB. STRONG WESTWARD OUTFLOW IS SEEN IN UPPER LEVELS. TOTAL PRECIPITABLE WATER IMAGERY IS INDICATING DECREASE IN WARM MOIST AIR FEEDING INTO THE SYSTEM AREA. THE SYSTEM IS EXPECTED TO TRACK NORTHWESTWARDS ALONG THE PERIPHERY OF SUB-TROPICAL RIDGE DURING NEXT 36 HOURS AND THEREAFTER RECURVE NORTH-NORTHEASTWARDS.

MOST OF THE NUMERICAL MODELS ARE IN GOOD AGREEMENT THAT THE SYSTEM WOULD MOVE NORTHWESTWARDS TILL 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. IT IS LIKELY TO WEAKEN GRADUALLY INTO A CYCLONIC STORM DURING NEXT 36 HOURS.

(MONICA SHARMA)
Scientist-D, RSMC, New Delhi

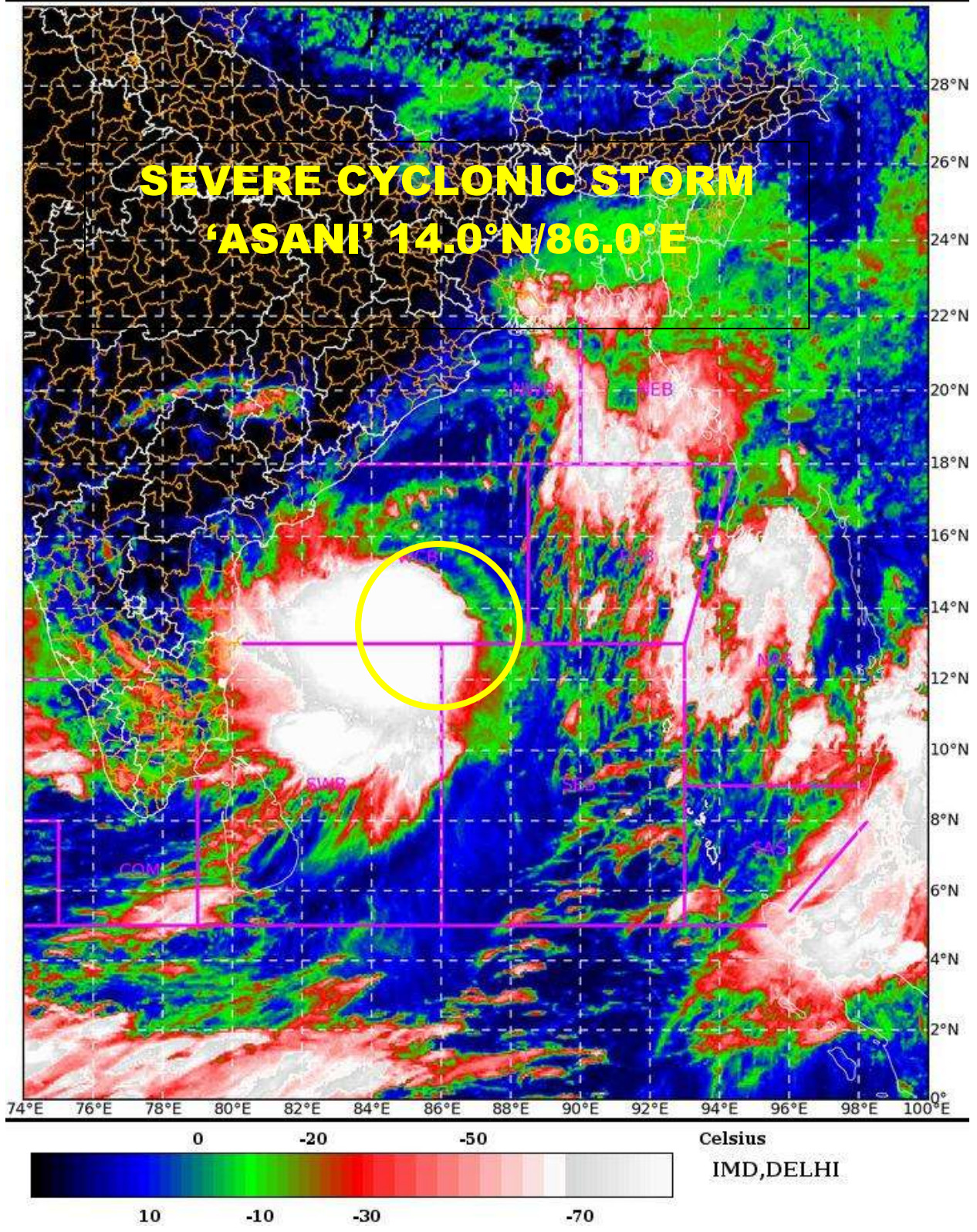
SAT : INSAT-3D IMG

09-05-2022/(0500 to 0526) GMT

IMG_TIR1_TEMP 10.8 um

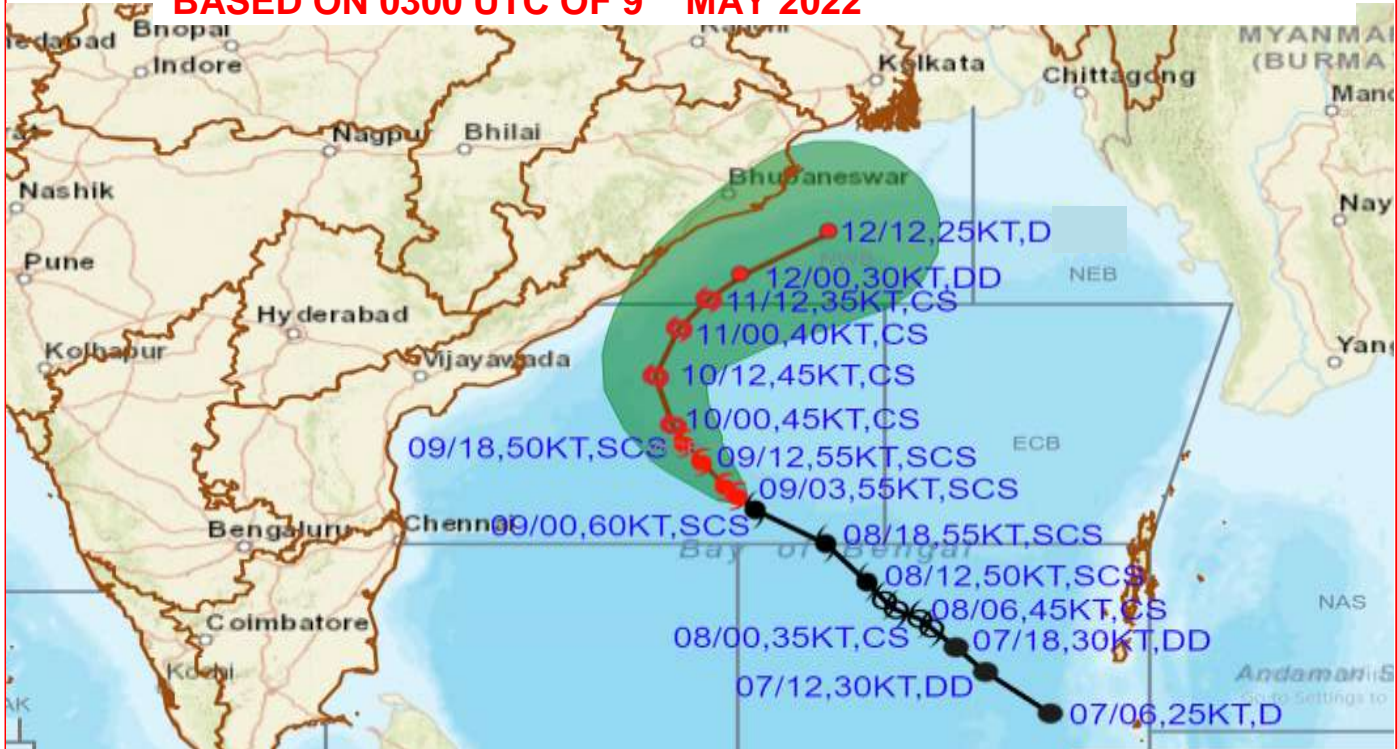
09-05-2022/(1030 to 1056) IST

L1C Mercator





FORECAST TRACK AND INTENSITY OF SEVERE CYCLONIC STORM 'ASANI' ALONGWITH CONE OF UNCERTAINTY OVER WESTCENTRAL AND ADJOINING SOUTH BAY OF BENGAL BASED ON 0300 UTC OF 9TH 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 (≥20 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

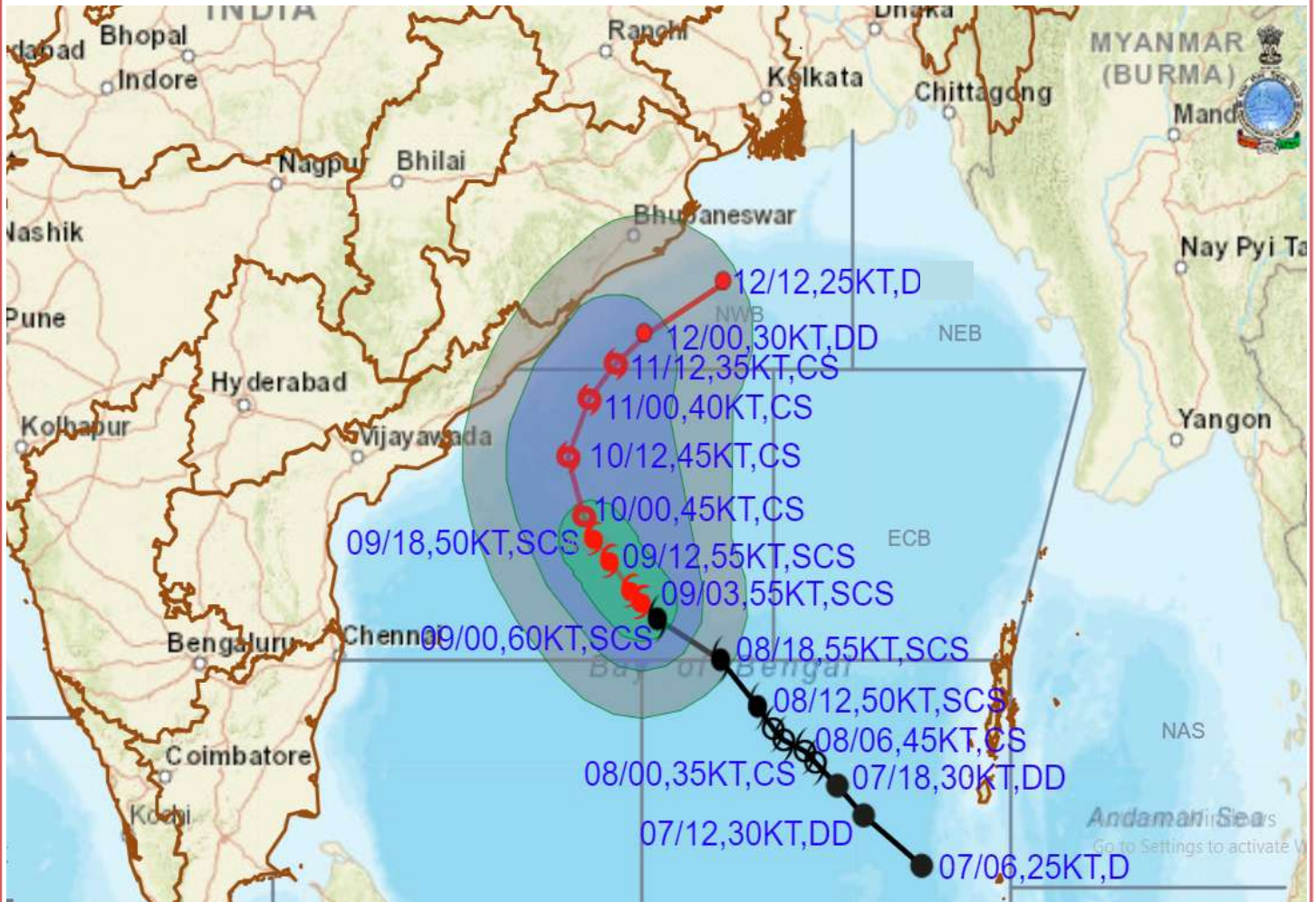
STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	10.05.22/0000	11.05.22/0000	12.05.22/0000
CAR NICOBAR	1120,NW	1260,NW	1270,NW
PORT BLAIR	950,WNW	1050,NW	1040,NW
VISHAKHAPATNAM	300,SE	190,E	310,ENE
PURI	480,S	270,SSW	130,SSE

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
09.05.22/0300	0	14.0	86.0	WALTAIR (502,SE)	VISHAKHAPATNAM (505,SE)	KAKINADA (521,SE)	KALINGAPATAM (522,SSE)	TUNI (525,SE)
10.05.22/0000	21	15.5	84.9	WALTAIR (297,SE)	VISHAKHAPATNAM (300,SE)	TUNI (325,SE)	KALINGAPATAM (326,SSE)	KAKINADA (328,ESE)
11.05.22/0000	45	17.5	85.0	KALINGAPATAM (131,SE)	WALTAIR (182,E)	VISHAKHAPATNAM (182,E)	GOPALPUR (197,S)	TUNI (261,E)
12.05.22/0000	69	18.6	86.1	PURI (137,SSE)	GOPALPUR (148,ESE)	BHUBANESHWAR (186,S)	PARADIP (CWR) (199,SSW)	CUTTACK (209,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 SEVERE CYCLONIC STORM 'ASANI' OVER WESTCENTRAL AND ADJOINING SOUTH BAY OF BENGAL BASED ON 0300 UTC OF 9TH 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 (≥20 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

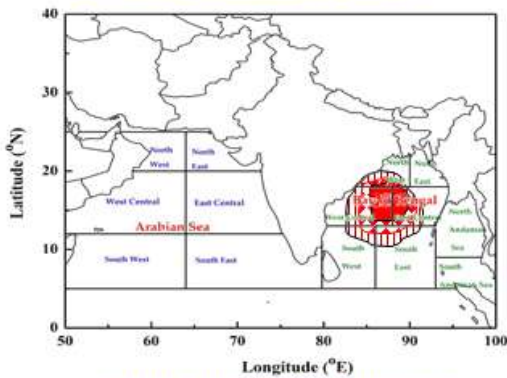
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

FISHERMAN WARNING GRAPHICS

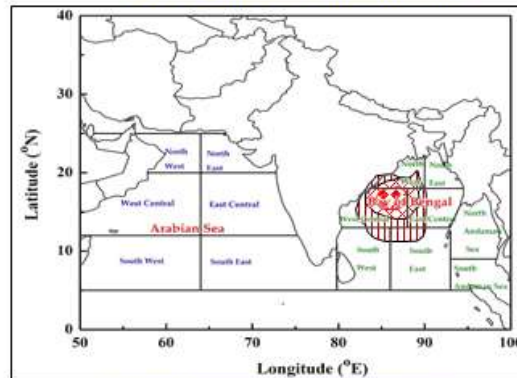
INDIA METEOROLOGICAL DEPARTMENT

FISHERMAN WARNING FOR BAY OF BENGAL AND ARABIAN SEA

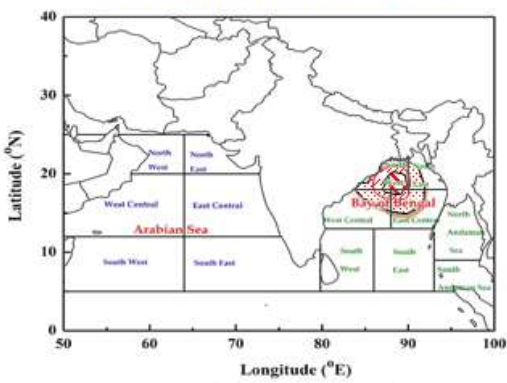
DAY-1: 09.05.2022/0600 UTC TO 10.05.2022/0600 UTC



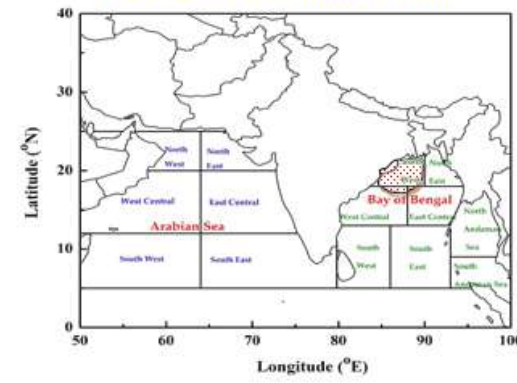
DAY-2: 10.05.2022/0600 UTC TO 11.05.2022/0600 UTC



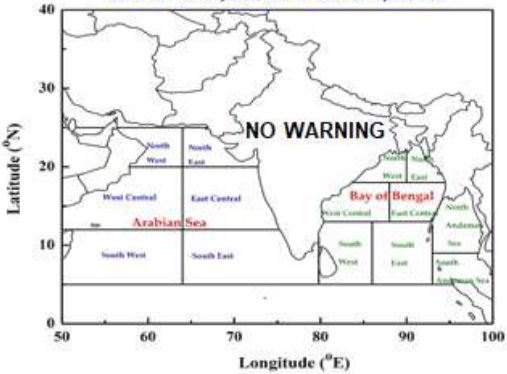
DAY-3: 11.05.2022/0600 UTC TO 12.05.2022/0600 UTC



DAY-4: 12.05.2022/0600 UTC TO 13.05.2022/0600 UTC



DAY-5: 13.05.2022/0600 UTC TO 14.05.2022/0600 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 110 KMPH
-  100-110 KMPH GUSTING TO 120 KMPH