



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 11.05.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1500 UTC OF 11.05.2022 BASED ON 1200 UTC OF 11.05.2022.

SUB: CYCLONIC STORM 'ASANI' WEAKENED INTO A DEEP DEPRESSION OVER WESTCENTRAL BAY OF BENGAL CLOSE TO ANDHRA PRADESH COAST

THE CYCLONIC STORM 'ASANI' (PRONOUNCED AS ASANI) OVER WESTCENTRAL BAY OF BENGAL MOVED NEARLY NORTHWARDS WITH A SPEED OF 7 KMPH DURING PAST 06 HOURS, WEAKENED INTO A DEEP DEPRESSION AND LAY CENTERED AT, 1200UTC OF 11TH MAY OVER WESTCENTRAL BAY OF BENGAL CLOSE TO ANDHRA PRADESH COAST NEAR LATITUDE 16.3°N AND LONGITUDE 81.3°E, ABOUT 20 KM NORTHEAST OF MACHILIPATNAM (43185), 50 KM WEST-SOUTHWEST OF NARSAPUR(43187) AND 120 KM WEST-SOUTHWEST OF KAKINADA (43189).

IT IS VERY LIKELY TO MOVE NORTH-NORTHEASTWARDS ALONG YANAM, KAKINADA AND TUNI COASTS AND WEAKEN FURTHER INTO A DEPRESSION BY 0000 UTC OF 12TH MAY.

THE CYCLONIC STORM IS UNDER THE CONTINUOUS SURVEILLANCE OF DOPPLER WEATHER RADAR (DWR) AT MACHILIPATNAM (ANDHRA PRADESH).

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
11.05.22/1200	16.3/81.3	55-65 GUSTING TO 75	DEEP DEPRESSION
11.05.22/1800	16.4/81.4	55-65 GUSTING TO 75	DEEP DEPRESSION
12.05.22/0000	16.5/81.6	45-55 GUSTING TO 65	DEPRESSION
12.05.22/1200	16.6/82.0	35-45 GUSTING TO 55	DEPRESSION
13.05.22/0000	16.7/82.7	25-35 GUSTING TO 45	WELL MARKED LOW PRESSURE AREA

THE INTENSITY OF THE SYSTEM IS T2.0/2.5. INSAT-3D IMAGERY INDICATES BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 13.5N & 16.5N AND LONGITUDE 77.0E & 81.5E, RAYALSEEMA, SOUTH COASTAL ANDHRA PRADESH. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE SEA CONDITION IS VERY ROUGH TO ROUGH OVER WESTCENTRAL BAY OF BENGAL. THE ESTIMATED CENTRAL PRESSURE IS 994 HPA.

REMARKS:

SEA SURFACE TEMPERATURE (SST) IS AROUND 29°C OVER WESTCENTRAL BOB ALONG & OFF ANDHRA PRADESH AND ALONG THE FORECAST TRACK. THE OCEAN HEAT CONTENT (OHC) IS >100 KJ/CM² OVER

WESTCENTRAL & SOUTH BAY OF BENGAL (BOB) BECOMING 50-70 KJ/CM² OVER NORTHWEST BOB & ALONG & OFF ANDHRA PRADESH & ODISHA COASTS AND ADJOINING WESTCENTRAL BOB.

LOW LEVEL VORTICITY HAS DECREASED AND IS ABOUT $150 \times 10^{-6} \text{ S}^{-1}$ TO THE SOUTH OF SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE HAS SLIGHTLY INCREASED AND IS AROUND TO $20 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS $05 \times 10^{-5} \text{ S}^{-1}$ AROUND AND TO THE NORTHEAST OF SYSTEM CENTRE. WIND SHEAR IS LOW (15-20 KNOTS) AROUND THE SYSTEM AREA AND ALSO ALONG THE FORECAST TRACK. THE SYSTEM WEAKENED DUE TO LAND INTERACTIONS AND WILL WEAKEN FURTHER GRADUALLY. ALSO AS THE SYSTEM MOVED FURTHER NORTH-NORTHEASTWARDS, IT ENCOUNTERED LOWER SST, LOWER OHC AND HENCE WEAKENED. THE INCURSION OF COLD AND DRY WIND FROM INDIAN PENINSULA AT MIDDLE AND UPPER TROPOSPHERE ALSO CONTRIBUTED TO WEAKENING OF THE SYSTEM. IT IS LIKELY TO RECURVE NORTHEASTWARDS AND MOVE ALONG ANDHRA PRADESH COAST FOR NEXT 24 HOURS.

(DR RK JENAMANI)
SCIENTIST-F, RSMC, NEW DELHI

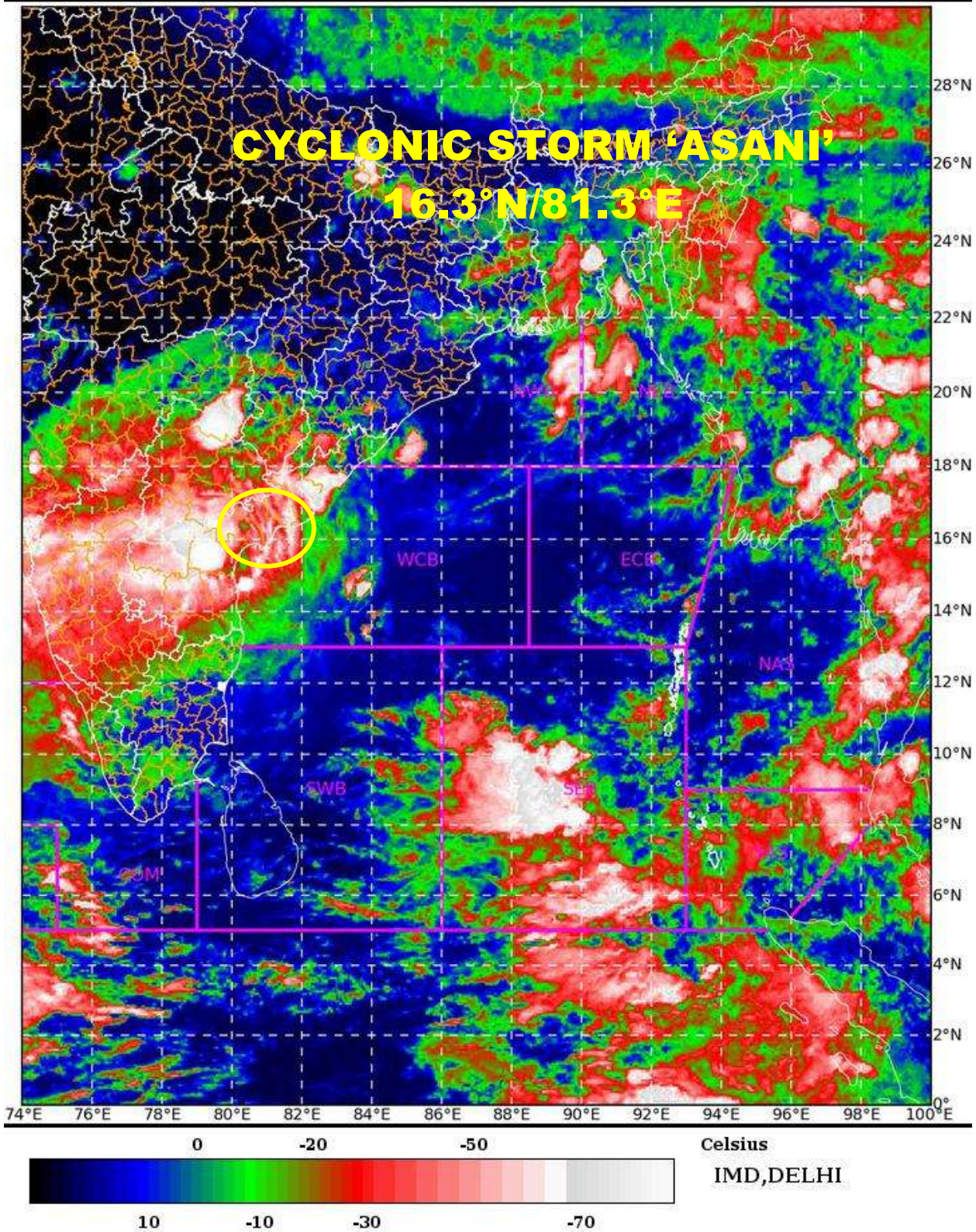
SAT : INSAT-3D IMG

11-05-2022/(1300 to 1326) GMT

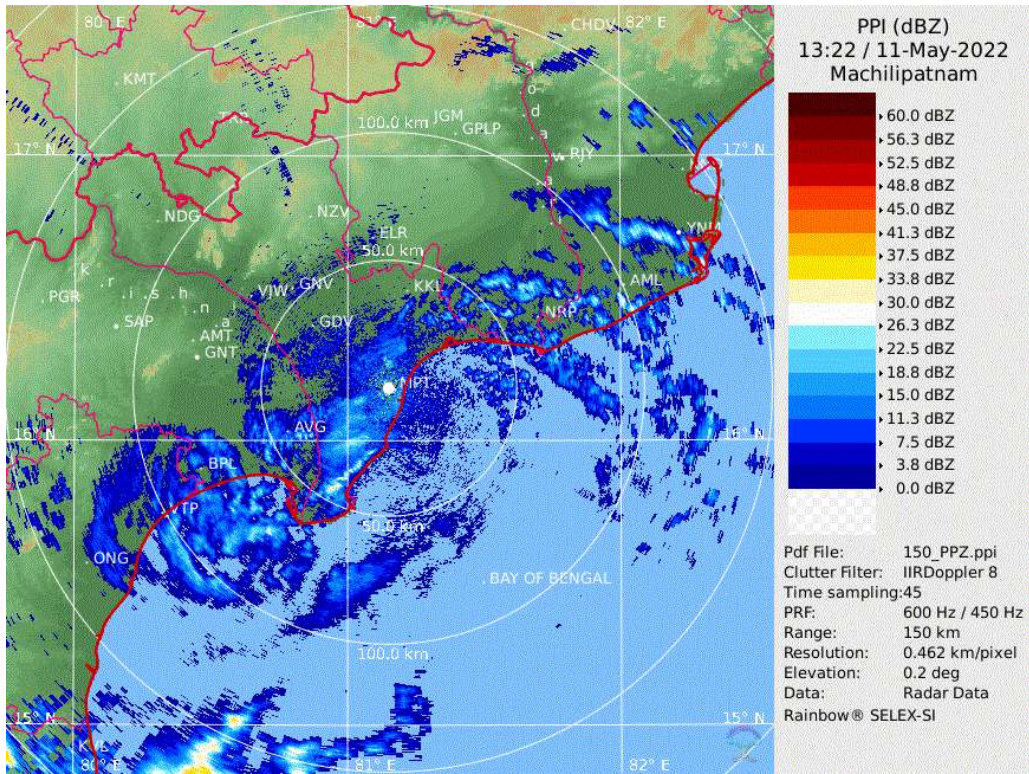
IMG_TIR1_TEMP 10.8 um

11-05-2022/(1830 to 1856) IST

L1C Mercator



CYCLONIC STORM "ASANI" VIEWED BY THE DWR AT MACHILIPATNAM





FORECAST TRACK AND INTENSITY OF DEEP DEPRESSION (REMNANT OF CYCLONIC STORM 'ASANI') ALONGWITH CONE OF UNCERTAINTY OVER WESTCENTRAL BAY OF BENGAL CLOSE TO ANDHRA PRADESH COAST BASED ON 1200 UTC OF 11TH 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

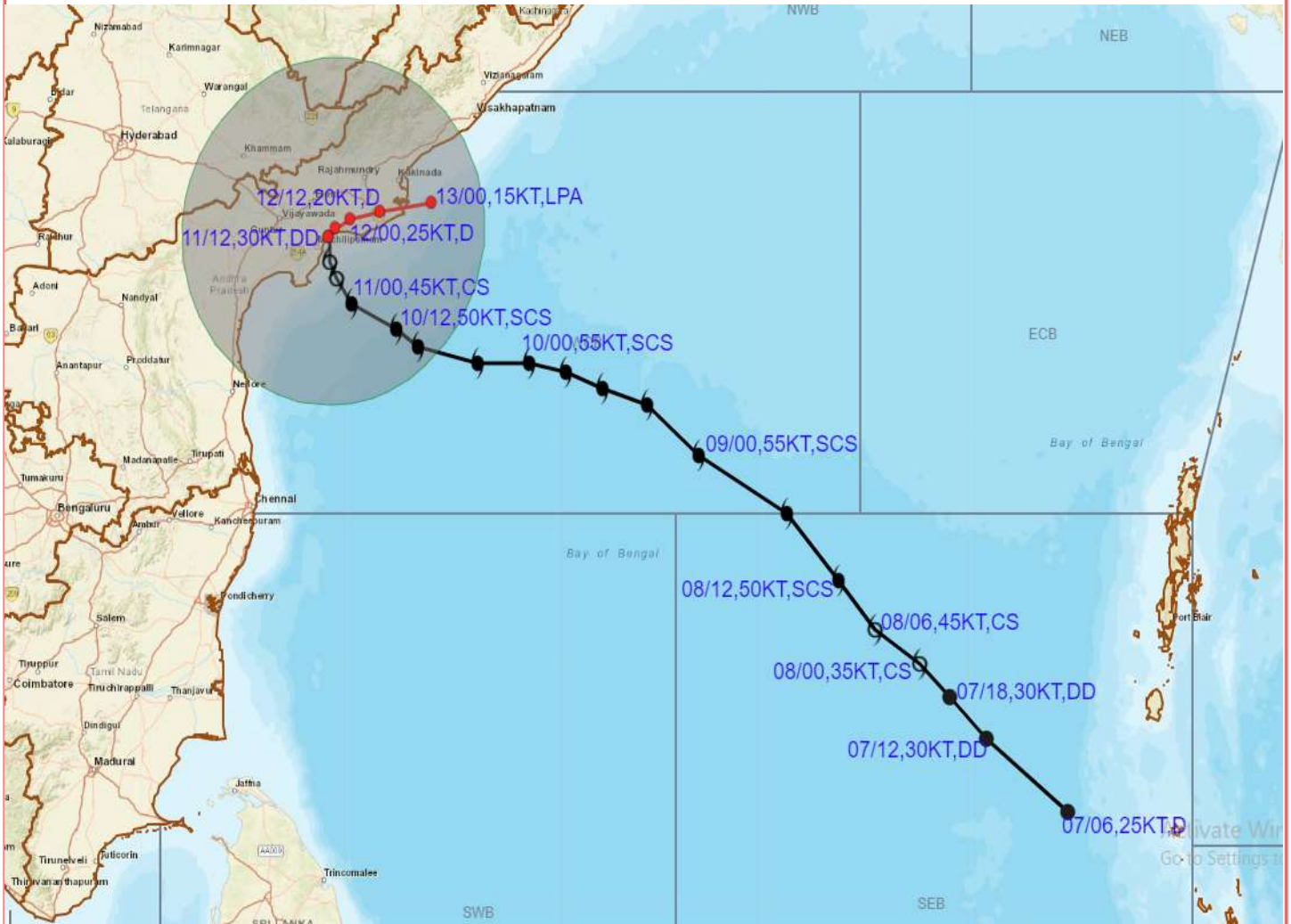
STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS	
	12.05.22/1200	
MACHILIPATNAM	100,ENE	
KAKINADA	50,SSW	
VISHAKHAPATNAM	190,SW	
GOPALPUR	430,SW	

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
11.05.22/1200	0	16.3	81.3	MACHILIPATNAM/ FRANCHPET (20,NE)	NARSAPUR (45,WSW)	VIJAYAWADA /GANNAVARAM (59,ESE)	NIDADAVOLE (67,SSW)	VIJAYAWADA (77,ESE)
11.05.22/1800	6	16.4	81.4	NARSAPUR (32,W)	MACHILIPATNAM/ FRANCHPET (35,NE)	NIDADAVOLE (52,SSW)	VIJAYAWADA /GANNAVARAM (66,ESE)	VIJAYAWADA (85,E)
12.05.22/0000	12	16.5	81.6	NARSAPUR (13,NW)	NIDADAVOLE (37,S)	MACHILIPATNAM/ FRANCHPET (59,NE)	KAKINADA (84,SW)	VIJAYAWADA /GANNAVARAM (85,E)
12.05.22/1200	24	16.6	82.0	NARSAPUR (37,ENE)	KAKINADA (46,SSW)	NIDADAVOLE (51,ESE)	MACHILIPATNAM/ FRANCHPET (101,ENE)	TUNI (102,SW)
13.05.22/0000	36	16.7	82.7	KAKINADA (57,ESE)	TUNI (74,SSE)	NARSAPUR (111,ENE)	NIDADAVOLE (120,E)	VISHAKHAPATNAM (130,SSW)

**N : NORTH NNE : NORTH-NORTHEAST NE : NORTHEAST ENE : EAST-NORTHEAST E : EAST
 ESE : EAST-SOUTHEAST 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 OF DEEP DEPRESSION (REMNANT OF CYCLONIC STORM 'ASANI') OVER WESTCENTRAL BAY OF BENGAL CLOSE TO ANDHRA PRADESH COAST BASED ON 1200 UTC OF 11TH MAY 2022



DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
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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

FISHERMEN WARNING GRAPHICS

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

