



**India Meteorological Department
(Ministry of Earth Sciences)**

HOURLY UPDATE ON CYCLONIC STORM "MANDOUS"

BULLETIN NO. 09

DATE: 10-12-2022

TIME OF ISSUE: 0330 HRS IST

DATE/TIME (IST) OF OBSERVATION	BASED ON 10-12-2022 (0230 HRS IST)
LOCATION LATITUDE/LONGITUDE	THE CYCLONIC STORM " MANDOUS " PRONOUNCED AS "MANDOUS" OVER NORTH TAMILNADU COAST MOVED FURTHER NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 06 HOURS AND LAY CENTERED AT 0230 HOURS IST OF 10 TH DECEMBER, 2022 OVER NORTH COASTAL TAMILNADU NEAR LATITUDE 12.8°N AND LONGITUDE 80.0°E, 30 KM NORTHWEST OF MAMALLAPURAM (MAHABALIPURAM), AND ABOUT 30 KM SOUTHWEST OF CHENNAI. THE REAR SECTOR OF THE CYCLONE HAS MOVED INTO LAND AND LIES OVER NORTH COASTAL TAMILNADU AND PUDUCHERRY. HENCE LANDFALL PROCESS IS NEARING COMPLETION.
CURRENT INTENSITY NEAR CENTRE	60-70 KMPH GUSTING TO 80 KMPH.
PAST MOVEMENT	MOVED NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 06 HOURS.
FORECAST MOVEMENT, INTENSITY AND LANDFALL	IT IS VERY LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS AND GRADUALLY WEAKEN INTO A DEEP DEPRESSION BY EARLY MORNING AND INTO A DEPRESSION BY NOON OF 10 TH DECEMBER.
FORECAST WIND	ALONG & OFF TAMIL NADU, PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS:- GALE WIND, SPEED REACHING 60-70 KMPH GUSTING TO 80 KMPH VERY LIKELY TO PREVAIL DURING NEXT 2 HOURS. IT IS LIKELY TO REDUCE GRADUALLY THEREAFTER BECOMING 55-65 KMPH GUSTING TO 75 KMPH BY EARLY MORNING OF 10TH DECEMBER AND THEN TO 30-40 KMPH GUSTING TO 50 KMPH BY 10TH DECEMBER AFTERNOON.
FORECAST RAINFALL	10TH DECEMBER:- IT IS LIKELY TO REDUCE TO LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH HEAVY TO VERY HEAVY RAINFALL AT ISOLATED PLACES OVER NORTH INTERIOR TAMIL NADU AND RAYALASEEMA AND ADJOINING SOUTH ANDHRA PRADESH.
FORECAST STORM SURGE	THE STORM SURGE OF ABOUT 0.5 M HEIGHT ABOVE THE ASTRONOMICAL TIDE LIKELY TO INUNDATE LOW LYING AREAS OF NORTH COASTAL TAMILNADU AND PUDUCHERRY DURING THE TIME OF LANDFALL.

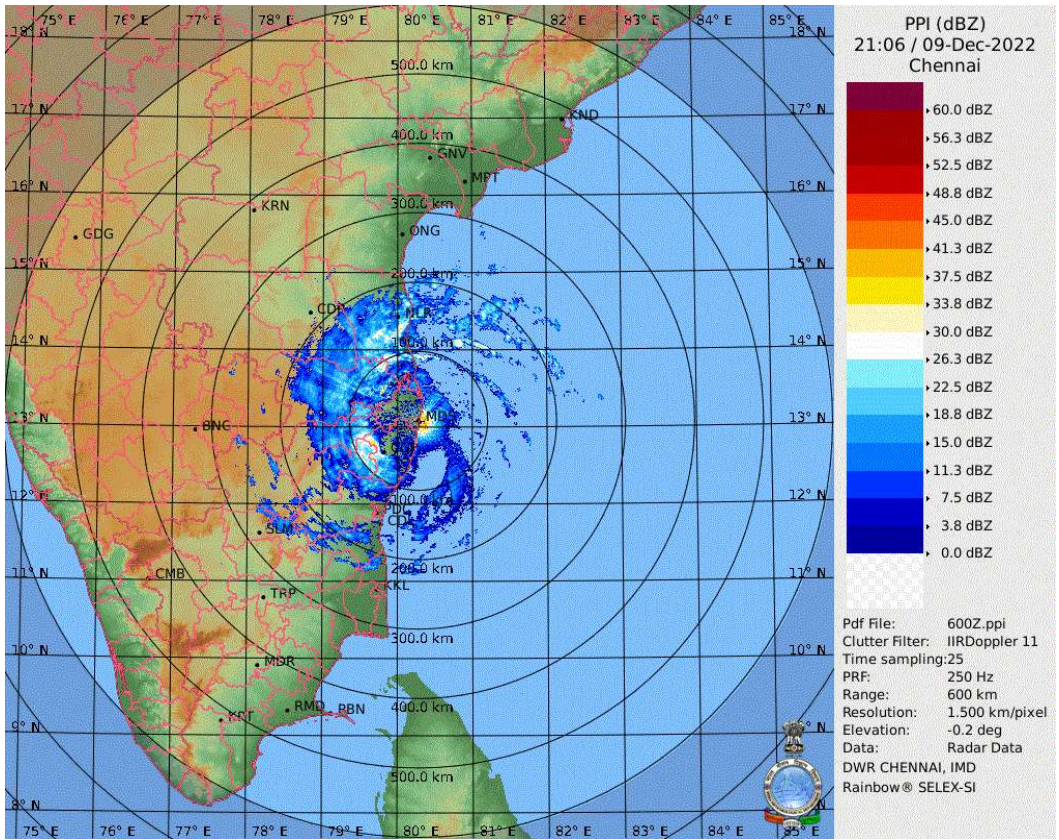
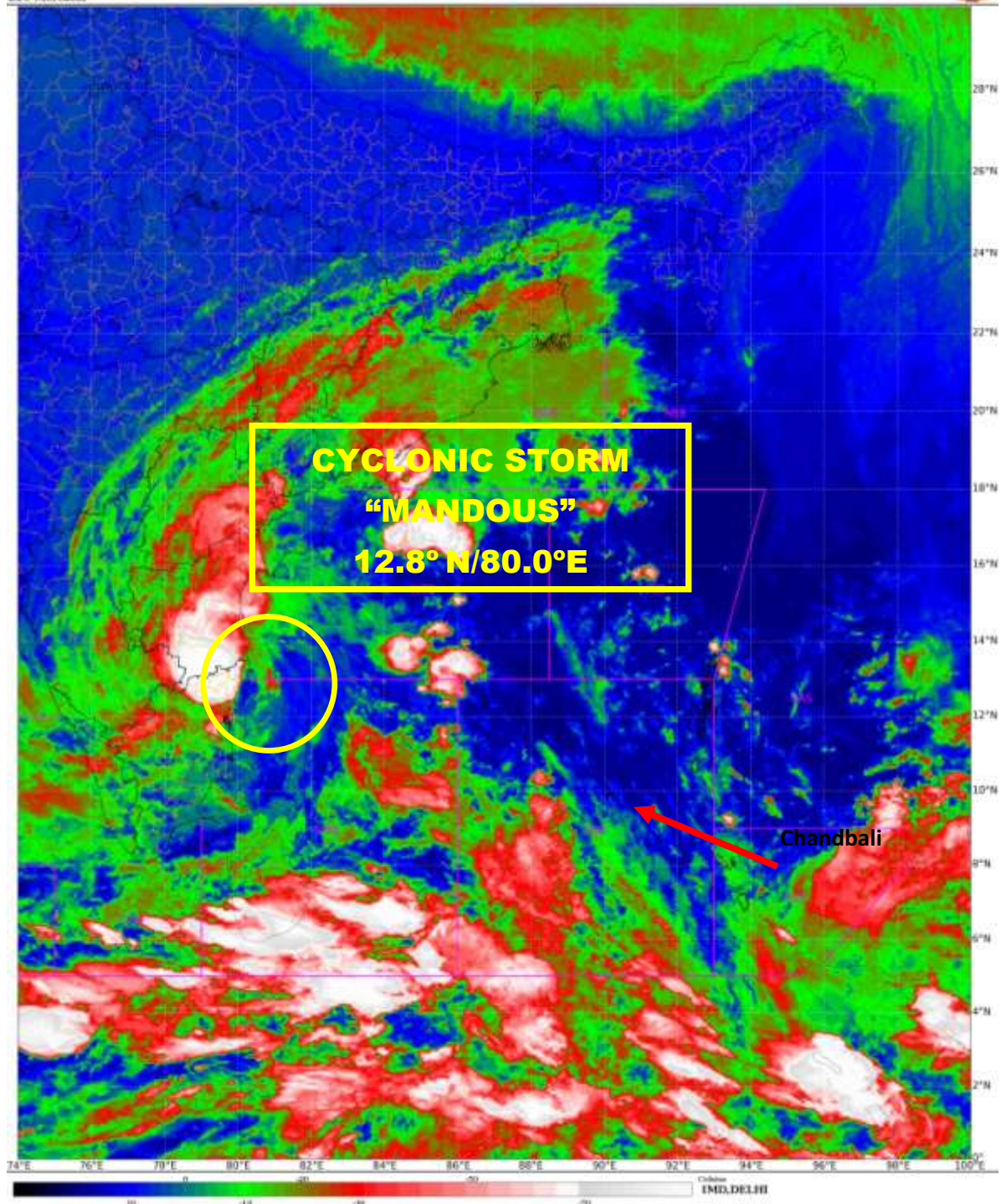


Image from Doppler Weather Radar Chennai at 0230 Hours IST of 10 December 2022.





OBSERVED AND FORECAST TRACK OF CYCLONIC STORM 'MANDOUS' OVER NORTH COASTAL TAMILNADU BASED ON 2100 UTC OF 09th DECEMBER, 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 (\geq 120 KT)

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



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM 'MANDOUS' OVER NORTH COASTAL TAMILNADU BASED ON 2100 UTC OF 09th DECEMBER, 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