



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

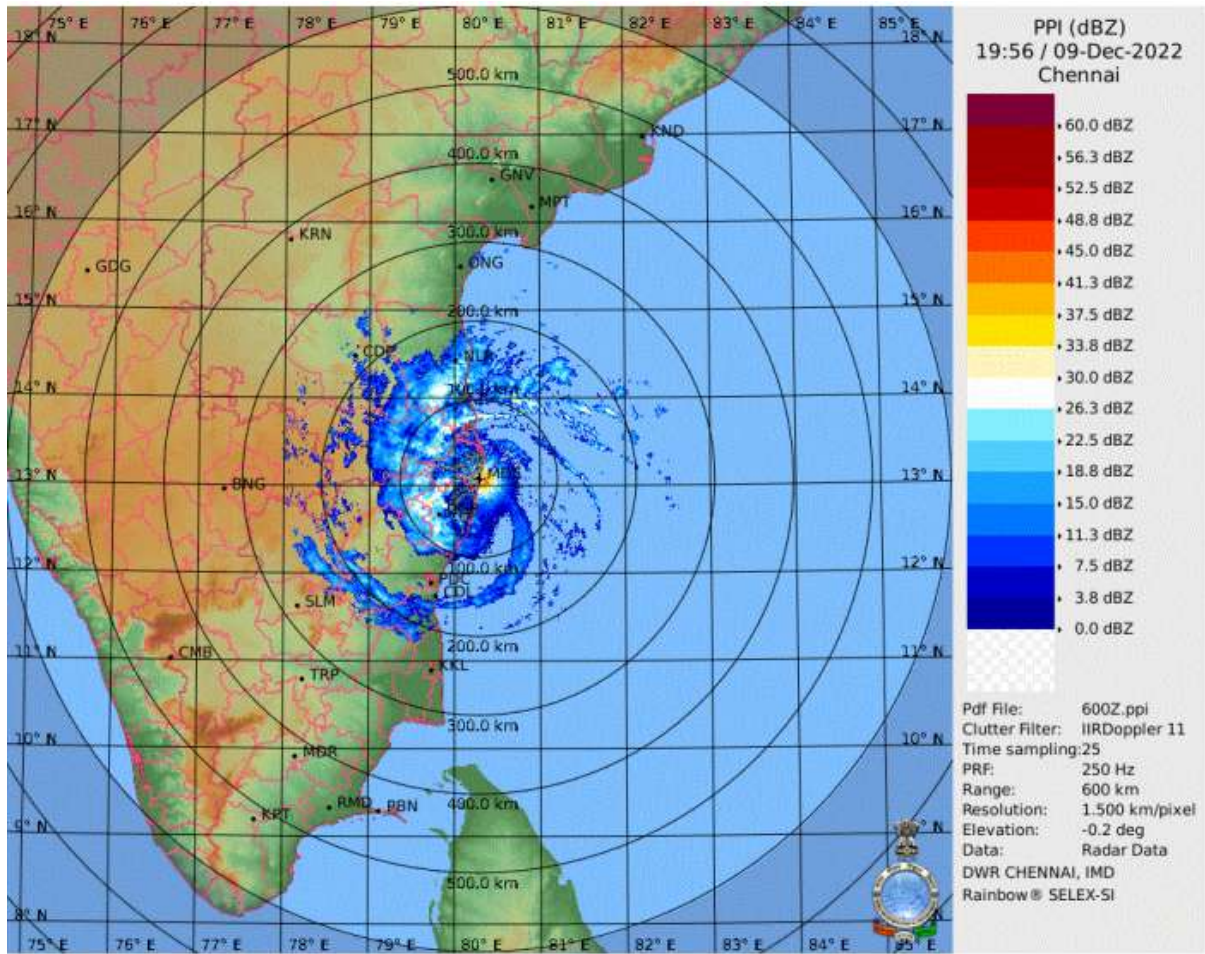
HOURLY UPDATE ON CYCLONIC STORM "MANDOUS"

**BULLETIN NO. 08**

DATE: 10-12-2022

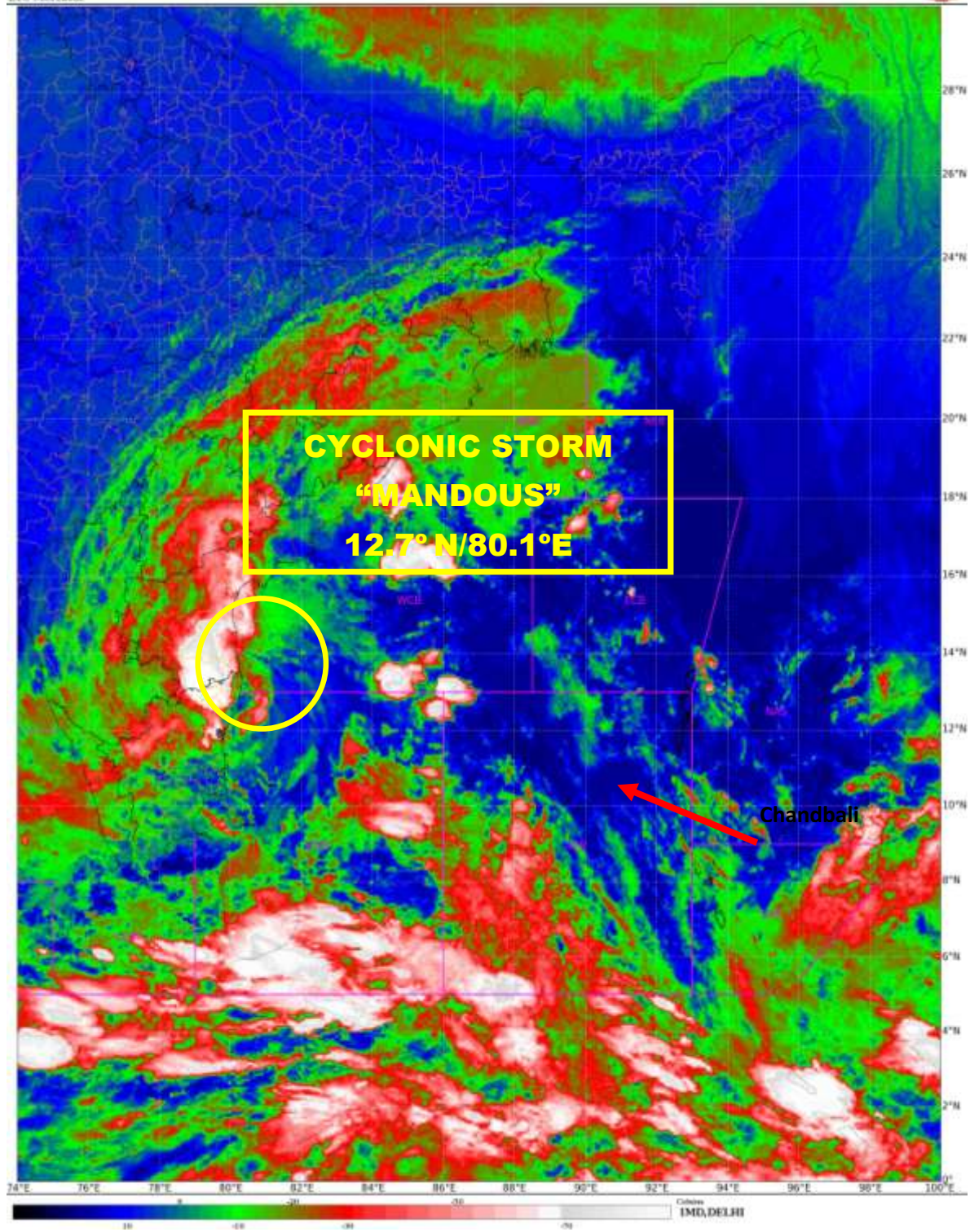
TIME OF ISSUE: 0230 HRS IST

<b>DATE/TIME (IST) OF OBSERVATION</b>	<b>BASED ON 10-12-2022 (0130 HRS IST)</b>
LOCATION LATITUDE/LONGITUDE	THE CYCLONIC STORM " <b>MANDOUS</b> " PRONOUNCED AS "MANDOUS" OVER SOUTHWEST BAY OF BENGAL MOVED FURTHER NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 06 HOURS AND CROSSED NORTH TAMILNADU COAST CLOSE TO MAHABALIPURAM AND LAY CENTERED AT 0130 HOURS IST OF 10 <sup>TH</sup> DECEMBER, 2022 NEAR LATITUDE 12.7°N AND LONGITUDE 80.10°E, 15 KM NORTHWEST OF MAMALLAPURAM (MAHABALIPURAM), AND ABOUT 30 KM SOUTH-SOUTHWEST OF CHENNAI. <b>THE REAR SECTOR OF THE CYCLONE IS MOVING TOWARDS LAND HENCE LANDFALL PROCESS WILL BE COMPLETED DURING NEXT 1 HOUR.</b>
CURRENT INTENSITY NEAR CENTRE	65-75 KMPH GUSTING TO 85 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 NORTHWESTWARDS AND GRADUALLY WEAKEN INTO A DEEP DEPRESSION BY EARLY MORNING AND INTO A DEPRESSION BY NOON OF 10 <sup>TH</sup> DECEMBER.
FORECAST WIND	<b>ALONG &amp; OFF TAMIL NADU, PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS:-</b> GALE WIND, SPEED REACHING 65-75 KMPH GUSTING TO 85 KMPH VERY LIKELY TO PREVAIL TILL EARLY HOURS OF 10 <sup>TH</sup> DECEMBER. IT IS LIKELY TO REDUCE GRADUALLY THEREAFTER BECOMING 55-65 KMPH GUSTING TO 75 KMPH BY MORNING OF 10 <sup>TH</sup> DECEMBER AND THEN TO 30-40 KMPH GUSTING TO 50 KMPH BY 10 <sup>TH</sup> DECEMBER EVENING.
FORECAST RAINFALL	<b>10<sup>TH</sup> DECEMBER:-</b> IT IS LIKELY TO REDUCE TO LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH <b>HEAVY TO VERY HEAVY RAINFALL</b> 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 20 UTC.**







**OBSERVED AND FORECAST TRACK OF CYCLONIC STORM 'MANDOUS' OVER SOUTHWEST BAY OF BENGAL CLOSE TO NORTH TAMILNADU COAST BASED ON 1800 UTC OF 09<sup>th</sup> DECEMBER, 2022.**



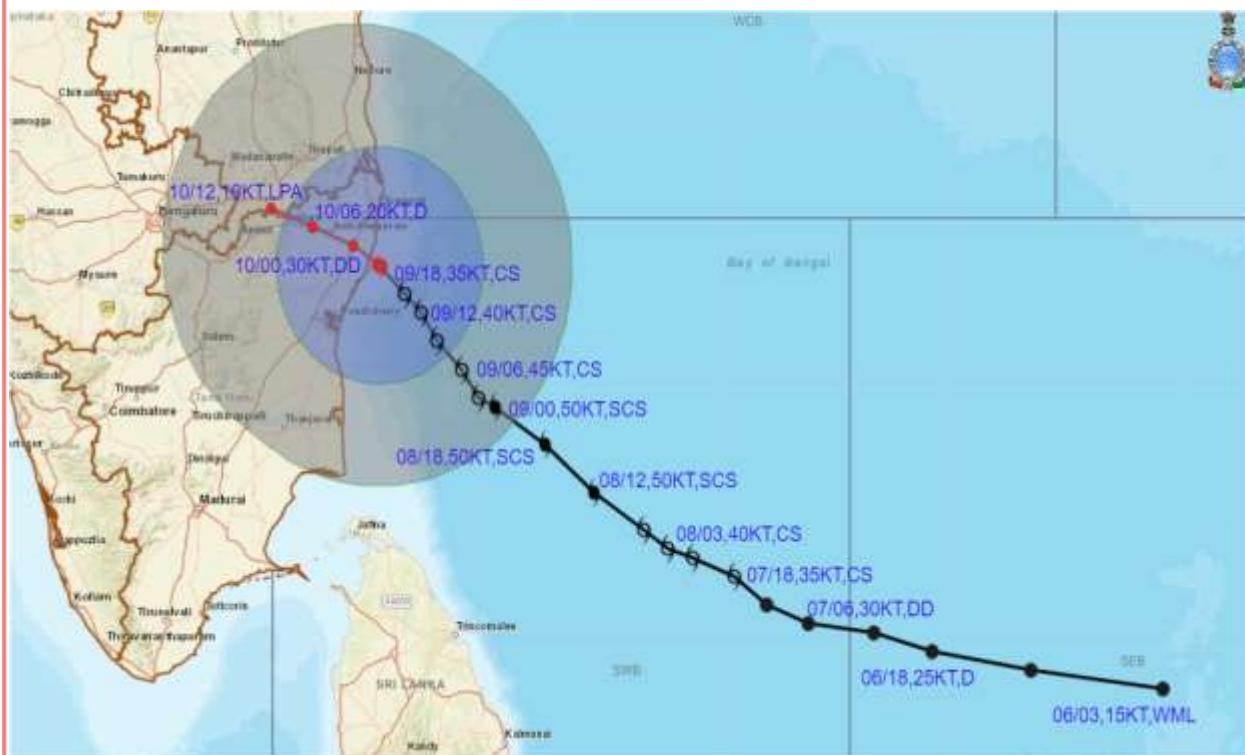
DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE 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 SOUTHWEST BAY OF BENGAL CLOSE TO NORTH TAMILNADU COAST BASED ON 1800 UTC OF 09<sup>th</sup> 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