



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

HOURLY UPDATE ON CYCLONIC STORM "MANDOUS"

BULLETIN NO. 03

DATE: 09-12-2022

TIME OF ISSUE: 2130 HRS IST

DATE/TIME (IST) OF OBSERVATION	BASED ON 09-12-2022 (2030 HRS IST)
LOCATION LATITUDE/LONGITUDE	THE CYCLONIC STORM " MANDOUS " PRONOUNCED AS "MANDOUS" OVER SOUTHWEST BAY OF BENGAL MOVED NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 06 HOURS AND LAY CENTERED AT 2030 HOURS IST OF TODAY, THE 09 TH DECEMBER, 2022 OVER SOUTHWEST BAY OF BENGAL OFF NORTH TAMILNADU AND PUDUCHERRY COASTS NEAR LATITUDE 12.2°N AND LONGITUDE 80.60°E, ABOUT 65 KM SOUTHEAST OF MAMALLAPURAM AND ABOUT 100 KM SOUTH-SOUTHEAST OF CHENNAI.
CURRENT INTENSITY NEAR CENTRE	70-80 KMPH GUSTING TO 90 KMPH.
PAST MOVEMENT	MOVED NORTHWESTWARDS WITH A SPEED OF 14 KMPH DURING PAST 06 HOURS.
FORECAST MOVEMENT, INTENSITY AND LANDFALL	IT IS VERY LIKELY TO MOVE NEARLY NORTHWESTWARDS AND CROSS NORTH TAMILNADU, PUDUCHERRY AND ADJOINING SOUTH ANDHRA PRADESH COASTS BETWEEN PUDUCHERRY AND SRIHARIKOTA AROUND MAMALLAPURAM (MAHABALIPURAM) AS A CYCLONIC STORM WITH A MAXIMUM SUSTAINED WIND SPEED OF 65-75 KMPH GUSTING TO 85 KMPH DURING MIDNIGHT OF TODAY, THE 09 TH DECEMBER TO EARLY HOURS OF TOMORROW, THE 10 TH DECEMBER. THEREAFTER IT WOULD 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 65-75 KMPH GUSTING TO 85 KMPH VERY LIKELY TO PREVAIL TILL EARLY HOURS OF 10 TH DECEMBER. IT IS LIKELY TO REDUCE GRADUALLY THEREAFTER BECOMING 55-65 KMPH GUSTING TO 75 KMPH BY MORNING OF 10 TH DECEMBER AND THEN TO 30-40 KMPH GUSTING TO 50 KMPH BY 10 TH DECEMBER EVENING.
FORECAST RAINFALL	09TH DECEMBER: - LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH HEAVY TO VERY HEAVY RAINFALL AT A FEW PLACES VERY LIKELY OVER NORTH COASTAL TAMIL NADU, PUDUCHERRY AND ISOLATED HEAVY TO VERY HEAVY RAINFALL LIKELY OVER ADJOINING SOUTH COASTAL ANDHRA PRADESH AND NORTH INTERIOR TAMILNADU AND

	<p>RAYALASEEMA. 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.</p>
<p>FORECAST STORM SURGE</p>	<p>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.</p>

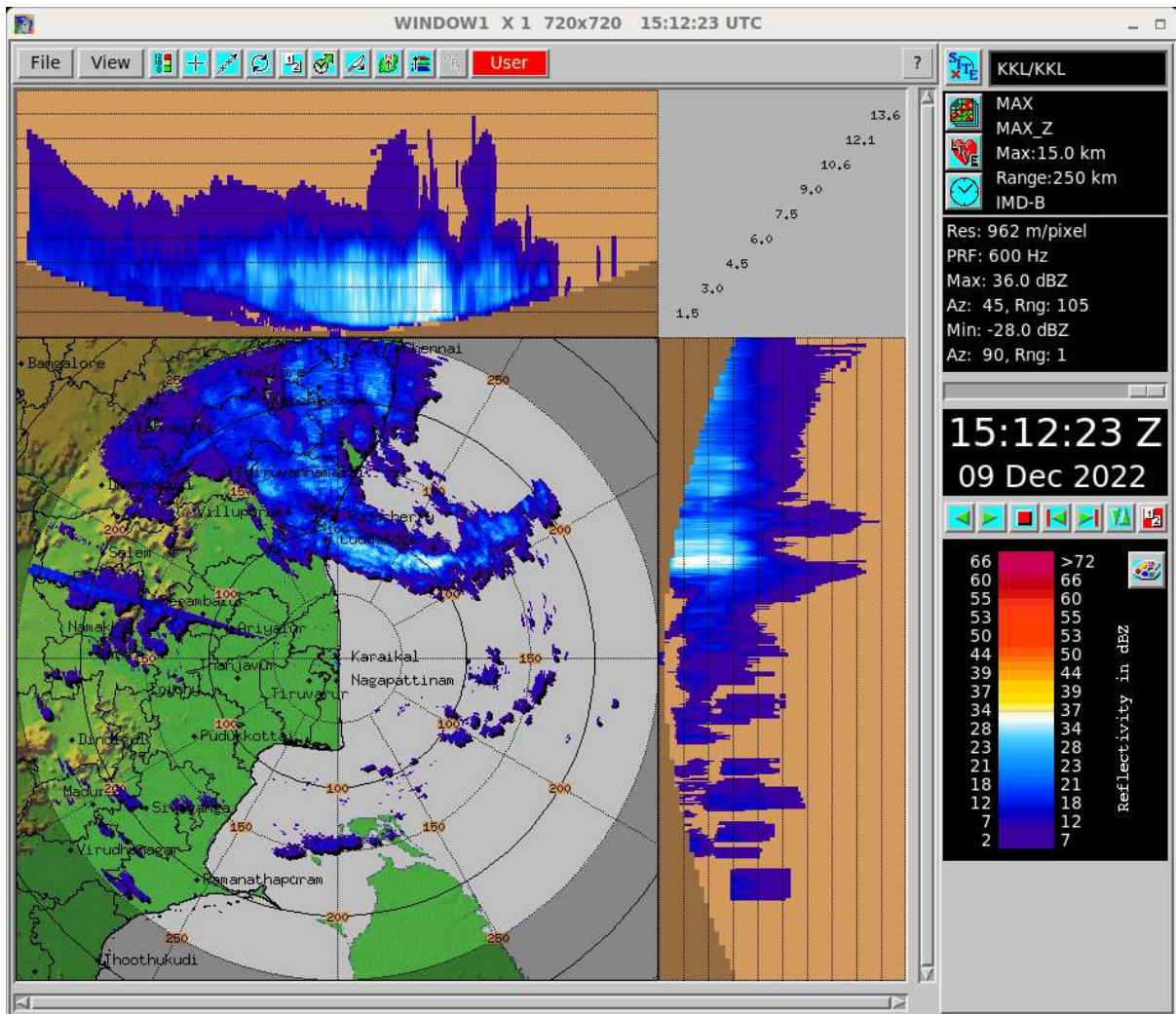
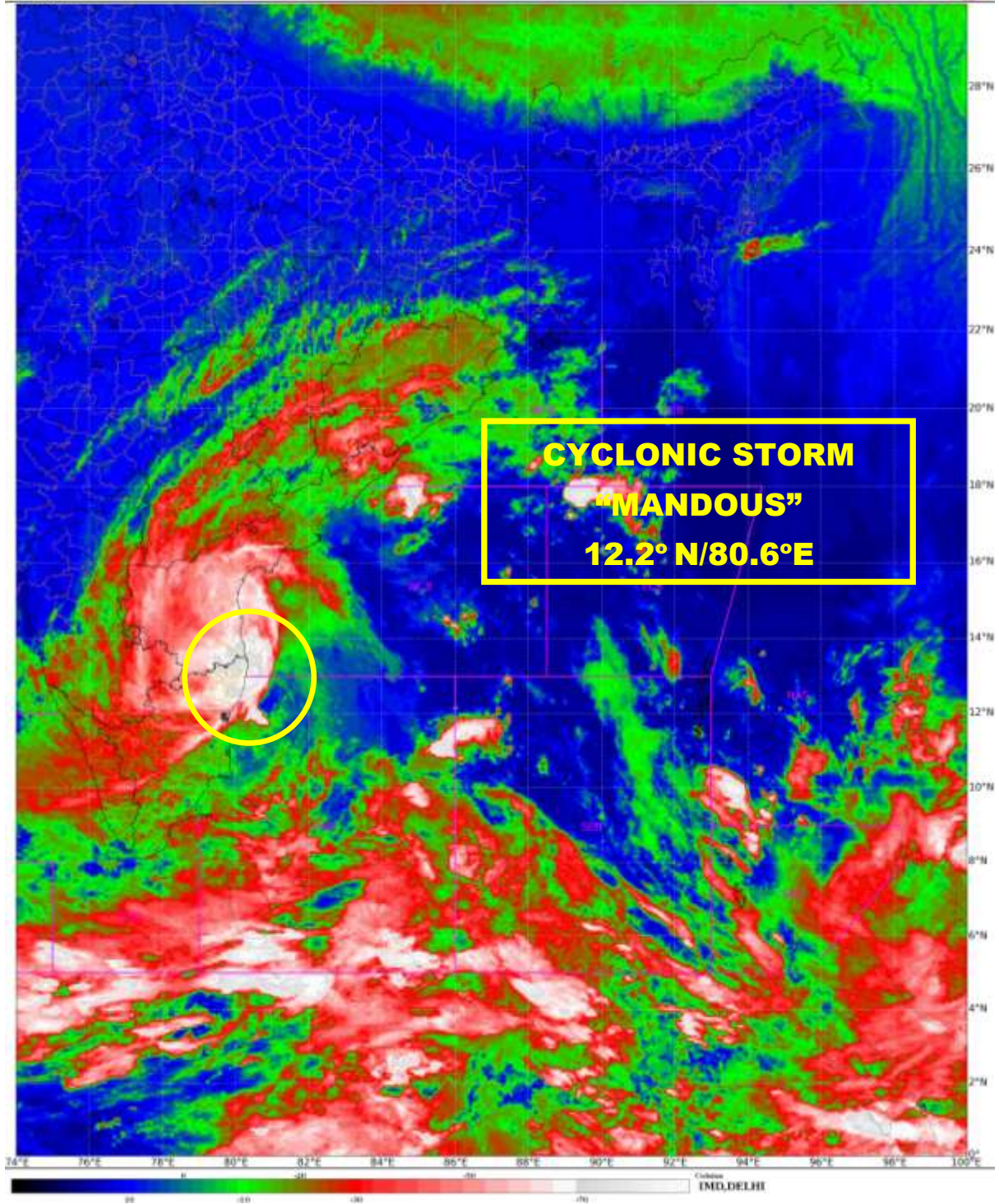
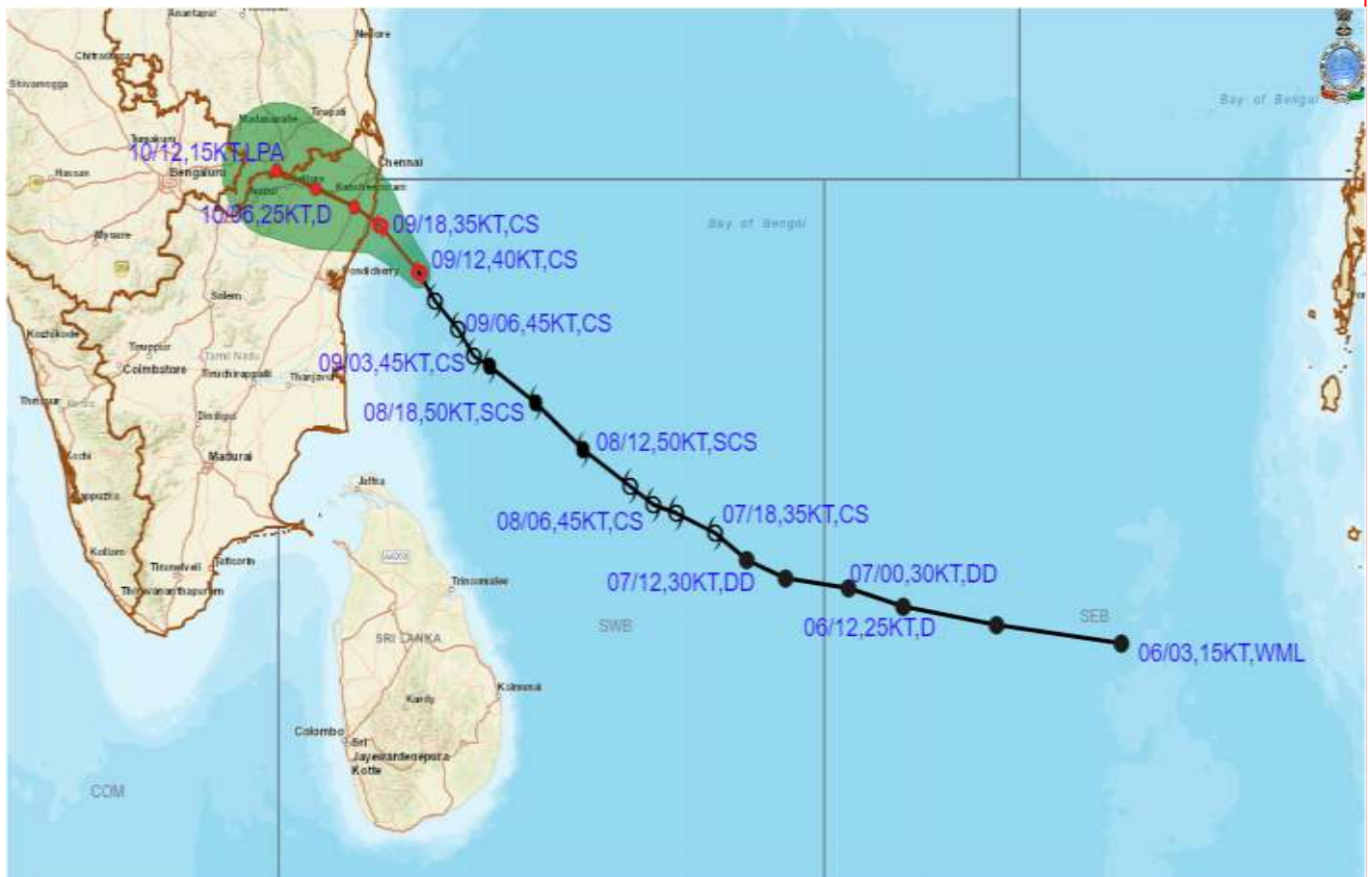


Image from Doppler Weather Radar Karaikal at 15 UTC.





OBSERVED AND FORECAST TRACK OF CYCLONIC STORM 'MANDOUS' OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 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 SOUTHWEST BAY OF BENGAL BASED ON 1200 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

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
09.12.22/0600	0	11.4	81.3	PARANGIPETTAI (170,E)	MAMALLAPURAM (180,SE)	CUDDALORE (170,ESE)	NAGAPPATTINAM (175,ENE)	MO PONDICHERRY (175,ESE)
09.12.22/1200	6	12.0	80.7	MO PONDICHERRY (95,E)	MAMALLAPURAM (85,SE)	PARANGIPETTAI (115,ENE)	MINAMBAKKAM (125,SSE)	NUMGAMBAKKAM (130,SSE)
09.12.22/1800	12	12.4	80.3	MINAMBAKKAM (70,S)	MAMALLAPURAM (25,SSE)	NUMGAMBAKKAM (75,S)	CUDDALORE (90,NE)	PARANGIPETTAI (115,NNE)
10.12.22/0000	18	12.7	80.0	MINAMBAKKAM (40,SSW)	MAMALLAPURAM (20,WNW)	TIRUTTANI (70,SE)	MO PONDICHERRY (85,NNE)	VELLORE (95,ESE)
10.12.22/0600	24	12.9	79.7	TIRUTTANI (35,SSE)	MAMALLAPURAM (60,WNW)	NUMGAMBAKKAM (55,WSW)	VELLORE (60,E)	TIRUPATHI (85,S)