



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

**HOURLY UPDATE ON SEVERE CYCLONIC STORM “DANA”**

**BULLETIN NO. 4**

DATE: 24-10-2024

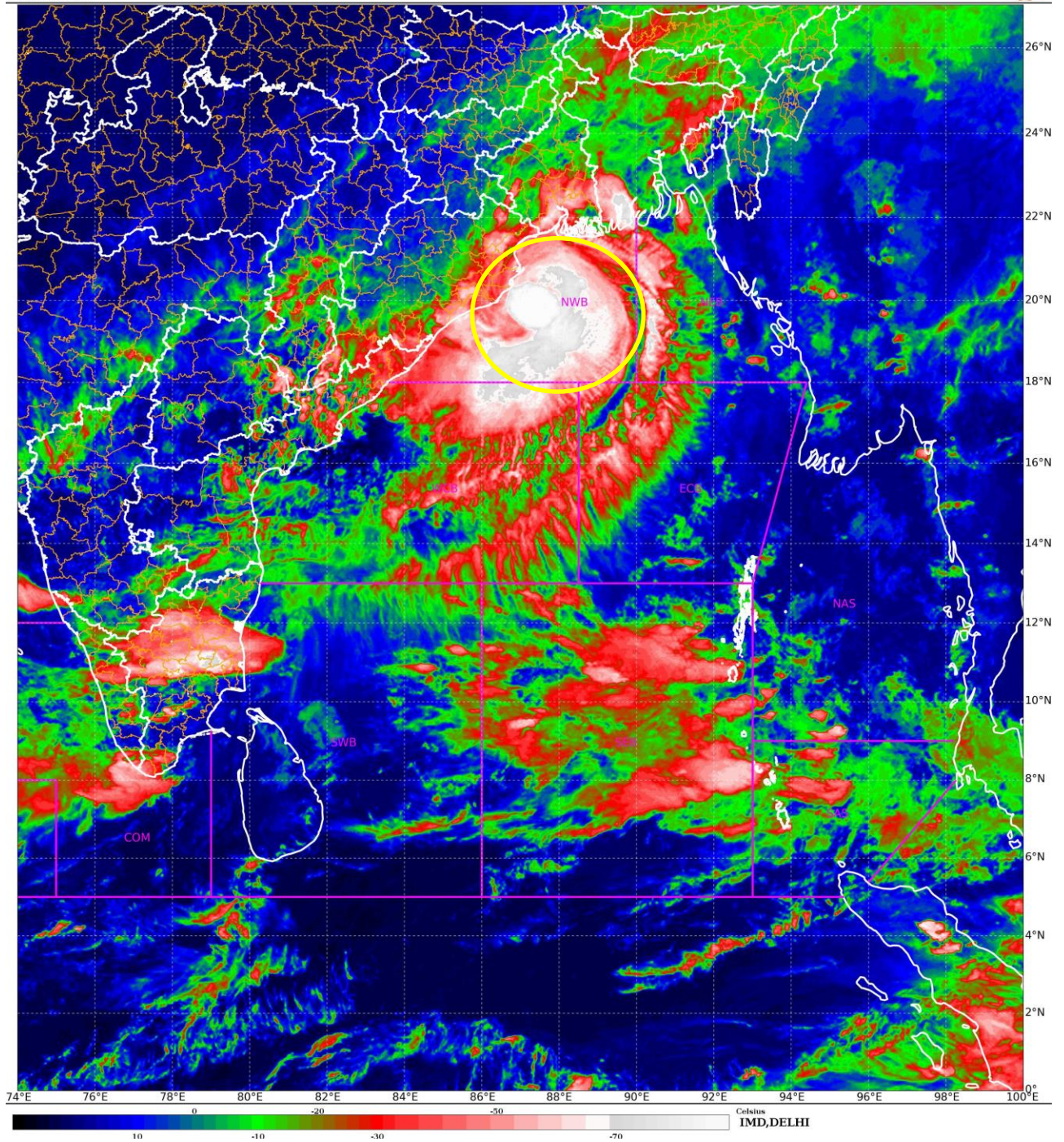
TIME OF ISSUE: 2115 HRS IST

| <b>DATE/TIME (IST) OF OBSERVATION</b>   | <b>BASED ON 24-10-2024 (2030 HRS IST)</b>   |
|---|---|
| LOCATION<br>LATITUDE/LONGITUDE  | THE SEVERE CYCLONIC STORM “DANA” (PRONOUNCED AS DANA) OVER NORTHWEST BAY OF BENGAL MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT 2030 HRS IST OF TODAY, THE 24TH OCTOBER, OVER THE SAME REGION, NEAR LATITUDE 20.10° N AND LONGITUDE 87.30°E, ABOUT 70 KM EAST-SOUTHEAST OF PARADIP (ODISHA), 90 KM SOUTH-SOUTHEAST OF DHAMARA (ODISHA) AND 190 KM SOUTH-SOUTHWEST OF SAGAR ISLAND (WEST BENGAL). |
| CURRENT INTENSITY<br>WIND SPEED   | SEVERE CYCLONIC STORM<br>105-115 KMPH GUSTING TO 125 KMPH   |
| FORECAST  | IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND CROSS NORTH ODISHA AND WEST BENGAL COASTS BETWEEN PURI AND SAGAR ISLAND CLOSE TO BHITARKANIKA AND DHAMARA (ODISHA) DURING MID-NIGHT OF 24TH TO MORNING OF 25TH OCTOBER, 2024 AS A SEVERE CYCLONIC STORM WITH A WIND SPEED OF 100-110 KMPH GUSTING 120 KMPH.  |
| OBSERVED RAINFALL FROM 0830 HRS IST TO 2030 HRS IST (0300-1500 UTC) OF 24 <sup>TH</sup> OCT. (mm) | BHUBANESWAR-15.1, BALASORE-18.8, CHANDBALI-29.6, PARADIP-33.2, PURI-15<br>HALDIA-23.0, DIGHA-24.0, DIAMOND HARBOUR-14, DUMDUM-8   |
| OBSERVED WINDSPEED AT 2030 HRS IST (1500 UTC) OF 24 <sup>TH</sup> OCT. (KNOTS)                    | PARADIP- 12KT/ NNWLY, BHUBANESWAR-06 KT/NWLY, BALASORE-08 KT/NELY, CANNING & DUMDUM 08 & 10 KT/NELY<br>HALDIA-5/ELY, DIGHA-6/ESELY, CANNING-5/NLY, PURI-10/NNWLY  |

# SATELLITE IMAGERY

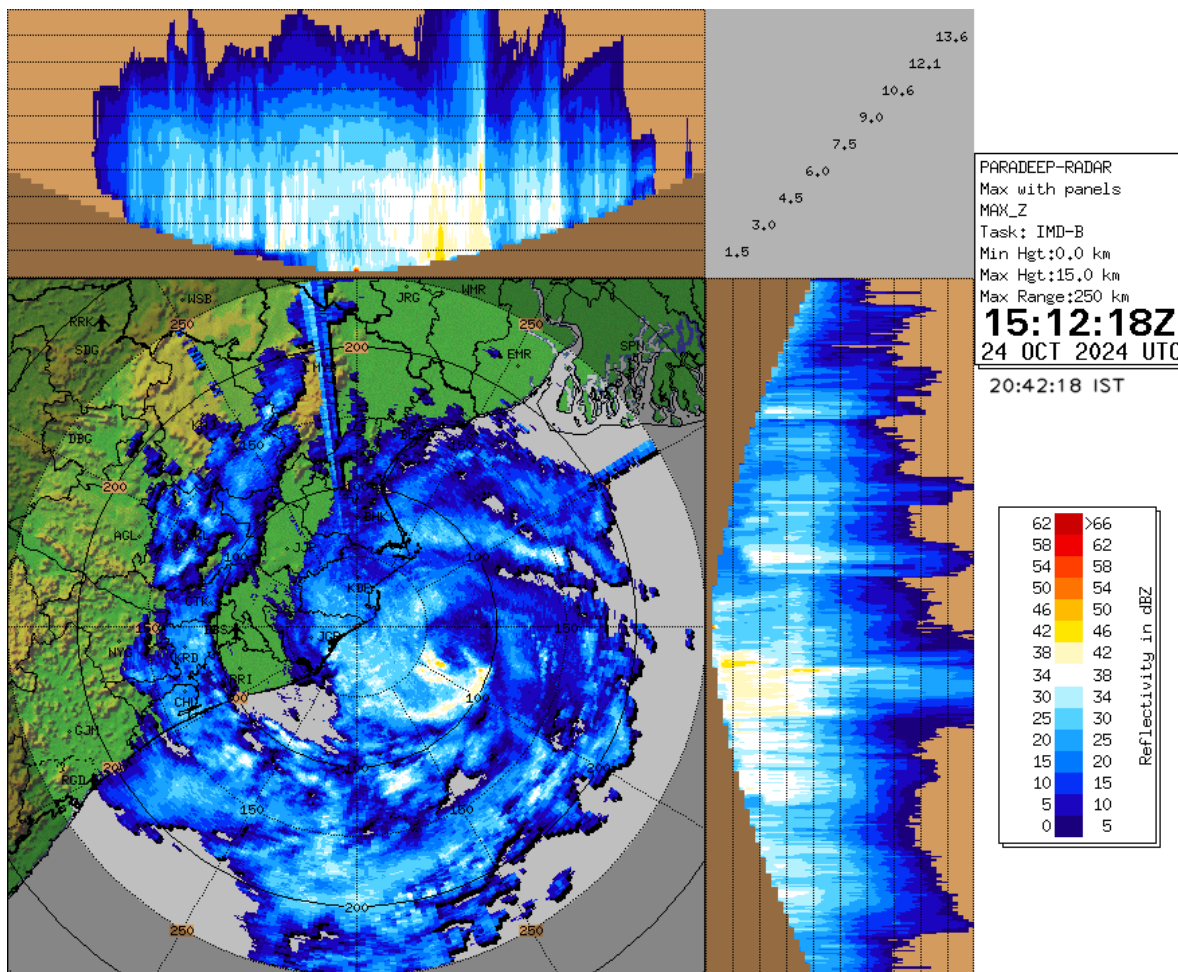
SAT : INSAT-3DR IMG  
IMG\_TIR1\_TEMP 10.8 um  
LIC Mercator

24-10-2024/(1415 to 1442) GMT  
24-10-2024/(1945 to 2012) IST

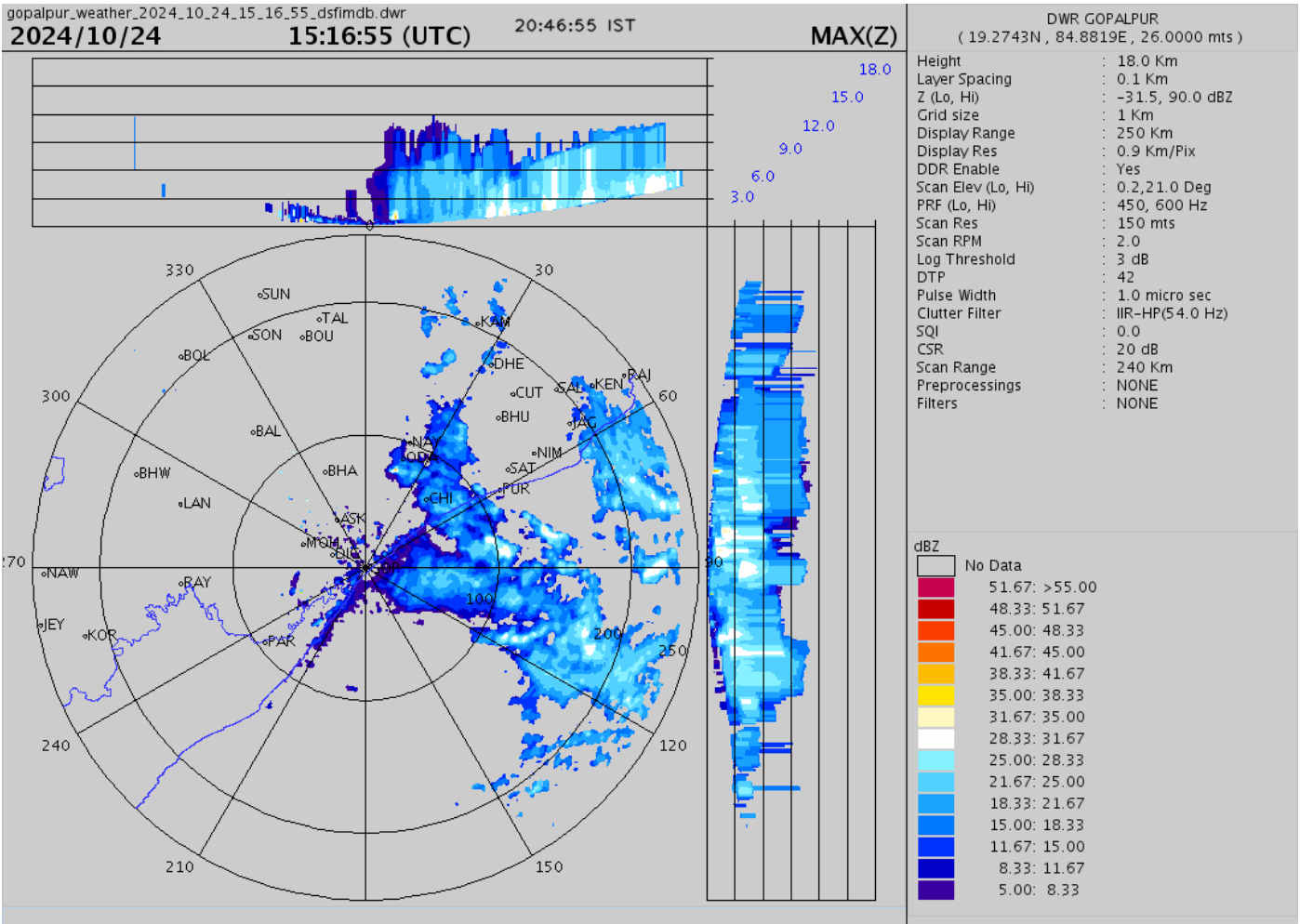




### RADAR OBSERVATIONS (MAX\_Z) OF DWR PARADIP

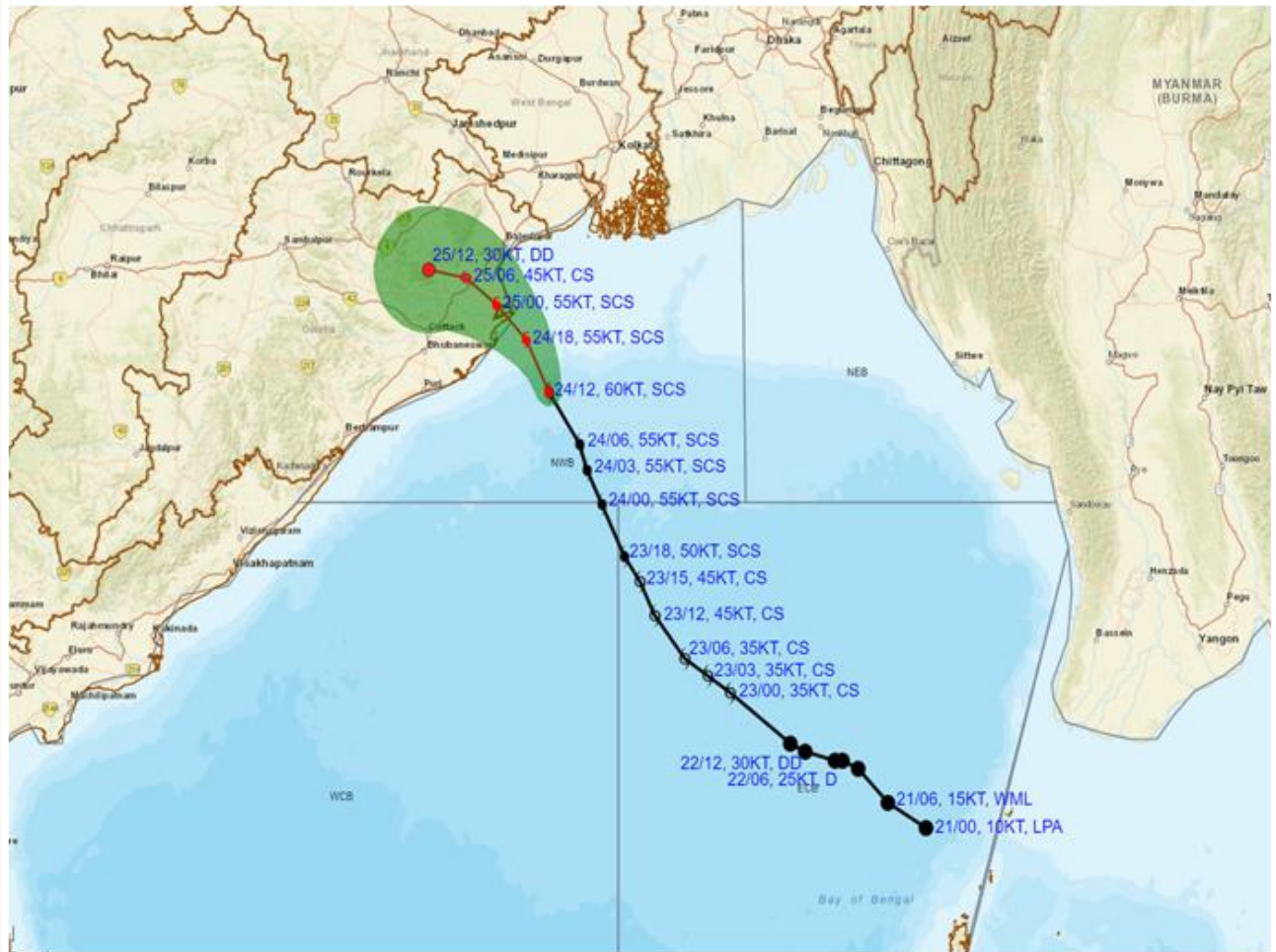


### RADAR OBSERVATIONS (MAX\_Z) OF DWR GOPALPUR





**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF SEVERE CYCLONIC STORM 'DANA' OVER NORTHWEST BAY OF BENGAL BASED ON 1200 UTC (1730 Hrs. IST) OF 24<sup>th</sup> OCTOBER 2024**



DATE/TIME : IN UTC  
 IST : UTC + 0530  
 KT : NAUTICAL MILE S/HOUR = 1.85 KM/HOUR  
 LPA : 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 (48-63 KT)  
 VSCS : VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS : EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS : SUPER CYCLONIC STORM ( $\geq 120$  KT)

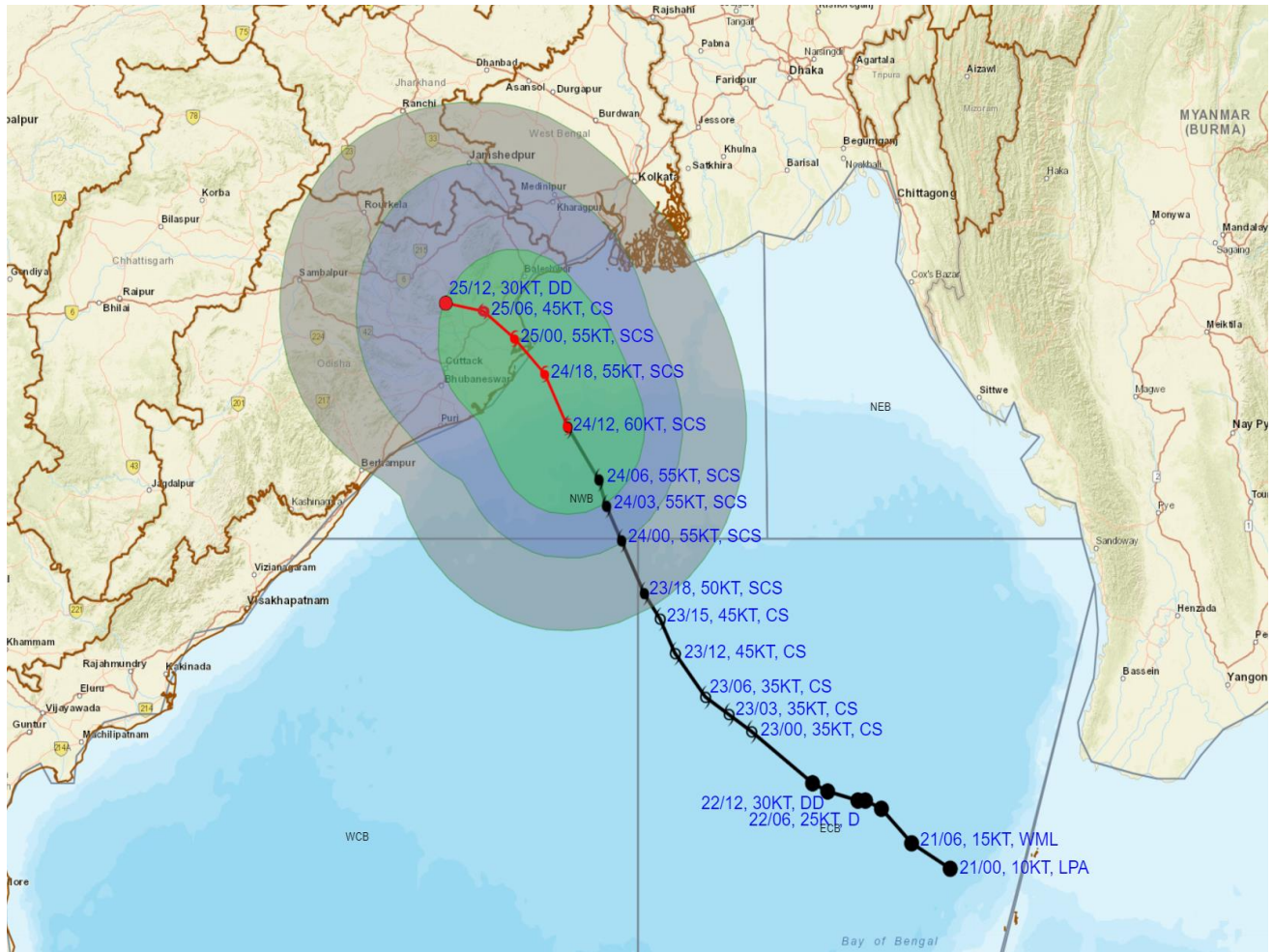
● LESS THAN 34 KT  
 ○ 34-47 KT  
 ○  $\geq 48$  KT  
 — OBSERVED TRACK  
 — FORECAST TRACK  
 ▲ CONE OF UNCERTAINTY

| Forecast            | DISTANCE (KM) AND DIRECTION FROM STATIONS |          |              |
|---------------------|---|----------|--------------|
| Date and Time (UTC) | PARADIP (CWR)                             | DHAMARA  | SAGAR ISLAND |
| 24.10.24/1200       | 100, ESE                                  | 130, SSE | 210, SSW     |
| 25.10.24/1200       | 130, NW                                   | 110, WNW | 230, WSW     |





## OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF SEVERE CYCLONIC STORM 'DANA' OVER NORTHWEST BAY OF BENGAL BASED ON 1200 UTC (1730 Hrs. IST) OF 24<sup>th</sup> OCTOBER 2024



**DATE/TIME** : IN UTC  
**IST** : UTC + 0530  
**KT** : NAUTICAL MILE S/HOUR = 1.85 KM/HOUR  
**LPA** : 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 (48-63 KT)  
**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  
**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 |