GLOBAL MARITIME 241330 IST

DATE/TIME OF ISSUE: 24-10-2024/0800 UTC

GMDSS BULLETIN I 240900

ISSUED BY: INDIA METEOROLOGICAL DEPARTMENT, NEW DELHI

HIGH SEA FORECAST FOR MET. AREA VIII (N)

AREA OF COVERAGE: AREA OF THE INDIAN OCEAN ENCLOSED BY LINES FROM THE INDO-PAKISTAN FRONTIER AT 23°45'N 68 DEG E TO 00 DEG N 6 DEG E, THECE TO CAPE GARDAFUI; THE EAST AFRICAN COAST SOUTH TO THE EQUATOR, THENCE TO 95 DEG E, TO 6 DEG N, THENCE NORTH EASTWARDS TO MYANMAR/THAIL FRONTIER IN 10 DEG N 98 DEG 30'E NORTHWARDS COVERING ENTIRE BAY OF BENGAL.

VALID FROM 09 UTC OF 24<sup>TH</sup> OCTOBER 2024 TO 00 UTC OF 26<sup>TH</sup> OCTOBER 2024.

#### PART-I STORM WARNING:

SUBJECT: SEVERE CYCLONIC STORM "DANA" OVER NORTHWEST BAY OF BENGAL (CYCLONE WARNING FOR ODISHA AND WEST BENGAL COASTS: RED MESSAGE)

THE SEVERE CYCLONIC STORM "DANA" (PRONOUNCED AS DANA) OVER NORTHWEST & ADJOINING CENTRAL BAY OF BENGAL MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT 0300 UTC OF TODAY, THE 24<sup>TH</sup> OCTOBER, OVER NORTHWEST BAY OF BENGAL, NEAR LATITUDE 18.9 DEG N AND LONGITUDE 88.0 DEG E, ABOUT 210 KM SOUTHEAST OF PARADIP (ODISHA), 240 KM SOUTH-SOUTHEAST OF DHAMARA (ODISHA) AND 310 KM SOUTH OF SAGAR ISLAND (WEST BENGAL).

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.

FUTURE POSITION, DATE AND INTENSITY OF THE SYSTEM ARE GIVEN BELOW:

POSITION

21.2/85.3

|               | (LAT. 0N/LONG. | 0E) SURFACE WIND S     | SPEED (KMPH)          |
|---------------|----------------|------------------------|-----------------------|
| 24.10.24/0830 | 18.9/88.0      | 95-105 gusting to 115  | Severe Cyclonic Storm |
| 24.10.24/1130 | 19.2/87.9      | 100-110 gusting to 120 | Severe Cyclonic Storm |
| 24.10.24/1730 | 19.8/87.6      | 105-115 gusting to 125 | Severe Cyclonic Storm |
| 24.10.24/2330 | 20.4/87.3      | 100-110 gusting to 120 | Severe Cyclonic Storm |
| 25.10.24/0530 | 20.9/86.9      | 100-110 gusting to 120 | Severe Cyclonic Storm |
| 25.10.24/1730 | 21.1/86.2      | 70-80 gusting to 90    | Cyclonic Storm        |

30-40 gusting to 50

**MAXIMUM SUSTAINED** 

Depression

#### **QUADRANT WIND INFORMATION:**

#### 24.10.2024/0600:

26.10.24/0530

DATE/TIME (IST)

WINDSPEEDS REACHING 27 KT AT AROUND 100 NM RADIUS FROM THE CENTRE IN THE NW, NE QUADRANTS AND EXTENDING UP TO 140 NM IN THE SW, 190 NM IN THE SE QUADRANTS.

GALE WINDS REACHING 34 KT AT AROUND 80 NM RADIUS FROM THE CENTRE IN THE NW, QUADRANT, 70 NM IN THE SW QUADRANT, AND EXTENDING UP TO 90 NM IN THE NE, SE QUADRANTS.

GALE WINDS REACHING 50 KT AT AROUND 50 NM RADIUS FROM THE CENTRE IN THE NW, SW QUADRANTS, AND EXTENDING UP TO 60 NM IN THE SE. 70 NM IN THE NE QUADRANTS.

#### 24.10.2024/1200:

WINDSPEEDS REACHING 27 KT AT AROUND 110 NM RADIUS FROM THE CENTRE IN THE NW, NE QUADRANTS, EXTENDING UP TO 150 NM & 210 NM IN THE SW, SE QUADRANTS RESPECTIVELY.

GALE WINDS REACHING 34 KT AT AROUND 90 NM RADIUS FROM THE CENTRE IN THE NW, QUADRANT, 85 NM IN THE SW QUADRANT, AND EXTENDING UP TO 100 NM, 110 NM IN THE SE, NE QUADRANTS RESPECTIVELY.

GALE WINDS REACHING 50 KT AT AROUND 50 NM RADIUS FROM THE CENTRE IN THE NW, SW QUADRANTS, AND EXTENDING UP TO 60 NM, 70 NM IN THE SE, NE QUADRANTS RESPECTIVELY.

#### 25.10.2024/0000:

WINDSPEEDS REACHING 27 KT AT AROUND 100 NM RADIUS FROM THE CENTRE IN THE NW, NE QUADRANTS, EXTENDING UP TO 140 NM & 200 NM IN THE SW, SE QUADRANTS RESPECTIVELY.

GALE WINDS REACHING 34 KT AT AROUND 80 NM RADIUS FROM THE CENTRE IN THE NW, SW QUADRANTS, AND EXTENDING UP TO 90 NM, 100 NM IN THE SE, NE QUADRANTS RESPECTIVELY.

GALE WINDS REACHING 50 KT AT AROUND 50 NM RADIUS FROM THE CENTRE IN THE NW, SW QUADRANTS, AND EXTENDING UP TO 60 NM, 70 NM IN THE SE, NE QUADRANTS RESPECTIVELY.

#### 25.10.2024/1200:

WINDSPEEDS REACHING 27 KT AT AROUND 100 NM RADIUS FROM THE CENTRE IN THE NW, QUADRANT, 90 NM FROM THE CENTRE IN THE NE QUADRANT, EXTENDING UP TO 140 NM & 190 NM IN THE SW, SE QUADRANTS RESPECTIVELY.

GALE WINDS REACHING 34 KT AT AROUND 65 NM RADIUS FROM THE CENTRE IN THE SW QUADRANT, 70 NM RADIUS FROM THE CENTRE IN THE NW QUADRANTS, AND EXTENDING UP TO 80 NM IN THE SE, NE QUADRANTS.

#### PART-II SYNOPTIC WEATHER SYSTEM AT 0300 UTC:

THE UPPER AIR CYCLONIC CIRCULATION OVER COMORIN AREA NOW LIES OVER SOUTHEAST ARABIAN SEA & ADJOINING LAKSHADWEEP AREA AND EXTENDS UPTO 4.5 KM ABOVE MEAN SEA LEVEL.

#### **PART-III AREA FORECAST:**

AREA: ARB A1 (ARABIAN SEA)-EQUATOR TO 10 DEG N W OF 80 DEG E. ARB A1-FORECAST VALID FROM 09 UTC OF 24<sup>TH</sup> OCT 2024 TO 00 UTC OF 25<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: S/SW-LY 05/15 KTS BEC CYCLONIC 05/10 KTS AT 64 DEG E AND 7 DEGN.

II) WAVE HEIGHT: 1.0-1.5 M.

III) WEATHER: 1) E OF 54 DEG E: WIDESPREAD RA/TS.

2) REST AREA: FAIR.

IV) VISIBILITY: 1) E OF 54 DEG E: VERY POOR.

2) REST AREA: GOOD.

#### ARB A1-FORECAST VALID FROM 00 UTC OF 25<sup>TH</sup> OCT 2024 TO 00 UTC OF 26<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: 1) W OF 70 DEG E: SW-LY 05/10 KTS BEC CYCLONIC 05/10 KTS. AT 63 DEG E AND 7 DEG N.

3) REST AREA: W/SW-LY 05/15 KTS.

II) WAVE HEIGHT: 1.0-1.5 M.

III) WEATHER: 1) E OF 55 DEG E: WIDESPREAD RA/TS.

2) REST AREA: FAIR.

IV) VISIBILITY: 1) E OF 55 DEG E: VERY POOR.

2) REST AREA: GOOD.

### ARB A2-ARABIAN SEA:-23 DEG 45 MIN N 68 DEG E TO 00 DEG N 63 DEG E TO CAPE GARDAFUI TO N OF 10 DEG N. 55

ARB A2-FORECAST VALID FROM 09 UTC OF 24<sup>TH</sup> OCT 2024 TO 00 UTC OF 25<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: 1) N OF 20 DEG N: ANTI-CYCLONIC 05/10 KTS.

2) REST AREA: NE-LY 05/10 KTS.

II) WAVE HEIGHT: 1.0-1.5 M.

III) WEATHER: 1) S OF 18 DEG N: SCATTERED RA/TS.

2) REST AREA: FAIR.

IV) VISIBILITY: 1) S OF 18 DEG N: MODERATE.

2) REST AREA: GOOD.

#### ARB A2-FORECAST VALID FROM 00 UTC OF 25<sup>TH</sup> OCT 2024 TO 00 UTC OF 26<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: 1) N OF 5 DEG N: ANTI-CYCLONIC 05/10 KTS.

2) NE/N-LY 05/10 KTS.

II) WAVE HEIGHT: 1.0-1.5 M.

III) WEATHER: 1) S OF 16 DEG N: SCATTERED RA/TS.

2) REST AREA: FAIR.

IV) VISIBILITY: 1) S OF 16 DEG N: MODERATE.

2) REST AREA: GOOD.

## BOB A3-BAY OF BENGAL: EQUATOR TO 10 DEG N BETWEEN E OF 80 DEG E WEST OF 10 DEG N/98 DEG 30 MIN E TO 6 DEG N/95 DEG E THENCE S-WARDS TO EQUATOR. BOB A3-FORECAST VALID FROM 09 UTC OF 24<sup>TH</sup> OCT 2024 TO 00 UTC OF 25<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: 1) S OF 5 DEG N: ANTI-CYCLONIC 05/10 KTS.

2) REST AREA SW-LY 10/20 KTS BEC W/NW-LY 05/10 KTS TO THE E OF 90 DEG E.

II) WAVE HEIGHT: 1.5-2.5 M.

III) WEATHER: 1) N OF 7 DEG N: WIDESPREAD RA/TS.

2) REST AREA: ISOLATED RA/TS.

IV) VISIBILITY: ) N OF 7 DEG N: VERY POOR.

2) REST AREA: GOOD.

#### BOB A3-FORECAST VALID FROM 00 UTC OF 25<sup>TH</sup> OCT 2024 TO 00 UTC OF 26<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: 1) S OF 5 DEG N: ANTI-CYCLONIC 05/10 KTS.

2) REST AREA SW/W-LY 10/15 KTS BEC W/NW-LY 05/15 KTS TO THE E OF 90 DEG E.

II) WAVE HEIGHT: 1.0-2.5 M.

III) WEATHER: 1) N OF 7 DEG N: WIDESPREAD RA/TS.

2) REST AREA: ISOLATED RA/TS.

IV) VISIBILITY: 1) N OF 7 DEG N: POOR.

2) REST AREA: GOOD.

## BOB: A4: BAY OF BENGAL N OF 10 DEG N E OF 80 DEG E. BOB A4-FORECAST VALID FROM 09 UTC OF 24<sup>TH</sup> OCT 2024 TO 00 UTC OF 25<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: 1) N OF 15 DEG N: CYCLONIC 48/63 KTS AT 18.8 DEG N AND 88.0 DEG E. 2) REST AREA: SW-LY 15/25 KTS.

II) WAVE HEIGHT: 9.0-14.0 M.

III) WEATHER: FAIRLY WIDESPREAD RA/TS.

IV) VISIBILITY: POOR.

#### BOB A4-FORECAST VALID FROM 00 UTC OF 25<sup>TH</sup> OCT 2024 TO 00 UTC OF 26<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: 1) N OF 15 DEG N: CYCLONIC 48/63 KTS AT 21.2 DEG N AND 85.3 DEG E. 2) REST AREA: SW-LY 15/25 KTS.

II) WAVE HEIGHT: 9.0-14.0 M.

III) WEATHER: 1) N OF 18 DEG N: WIDESPREAD RA/TS.

2) S OF 13 DEG N: WIDESPREAD RA/TS.

3) REST AREA: ISOLATED RA/TS.

IV) VISIBILITY: 1) N OF 18 DEG N: VERY POOR

2) S OF 13 DEG N: VERY POOR

#### 3) REST AREA: GOOD.

ADVISORY: PLEASE BE AWARE. WIND WAVE FORECASTS ARE AVERAGES. WIND GUSTS CAN BE 40 PER CENT STRONGER THAN THE FORECAST. MAXIMUM WAVE HEIGHT CAN BE TWICE THE FORECAST WAVE HEIGHT.

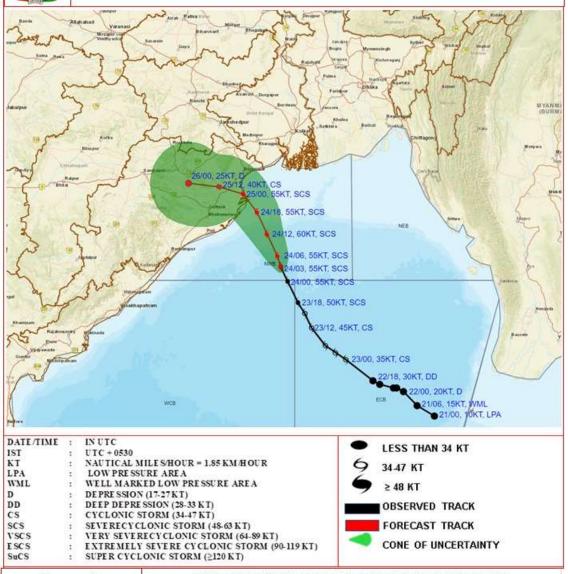
NEXT FORECAST WILL BE ISSUED AT 24/1700 UTC.

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TOO: 24/1330.



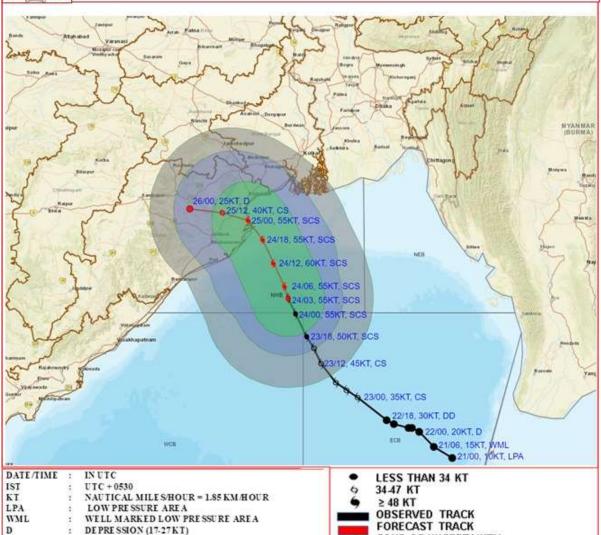
# OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF SEVERE CYCLONIC STORM 'DANA' OVER NORTHWEST BAY OF BENGAL BASED ON 0300 UTC (0830 Hrs. IST) OF 24<sup>th</sup> OCTOBER 2024



| Forecast            | DISTANCE (KM) AND DIRECTION FROM STATIONS |          |              |  |
|---------------------|---|----------|--------------|--|
| Date and Time (UTC) | PARADIP (CWR)                             | DHAMARA  | SAGAR ISLAND |  |
| 24.10.24/0300       | 210, SE                                   | 240, SSE | 300, S       |  |
| 25.10.24/0000       | 80, NNE                                   | 20, N    | 150, SW      |  |
| 26.10.24/0000       | 180, NW                                   | 180, WNW | 290, W       |  |



### OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF SEVERE CYCLONIC STORM 'DANA' OVER NORTHWEST BAY OF BENGAL BASED. ON 0300 UTC (0830 Hrs. IST) OF 24th OCTOBER 2024



DD DEEP DEPRESSION (28-33 KT) CS CYCLONIC STORM (34-47 KT)

SCS SEVERECY CLONIC STORM (48-63 KT) VSCS VERY SEVERECYCLONIC STORM (64-89 KT)

ESCS EXTREMELY SEVERE CYCLONIC STORM (90-119 KT) SuCS SUPER CYCLONIC STORM (≥120 KT)

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 |