**GLOBAL MARITIME 241730 IST** 

DATE/TIME OF ISSUE: 24-10-2024/1200 UTC

SPL GMDSS BULLETIN NO-11 241200

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 12 UTC OF 24<sup>TH</sup> OCTOBER 2024 TO 12 UTC OF 26<sup>TH</sup> OCTOBER 2024.

#### **PART-I STORM WARNING:**

# SUBJECT: SEVERE CYCLONIC STORM "DANA" OVER NORTHWEST BAY OF BENGAL: RED MESSAGE)

THE SEVERE CYCLONIC STORM "DANA" (PRONOUNCED AS DANA) OVER NORTHWEST BAY OF BENGAL MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 10 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT 1430 HRS IST OF TODAY, THE 24<sup>TH</sup> OCTOBER, OVER THE SAME REGION, NEAR LATITUDE 19.4° N AND LONGITUDE 87.7°E, ABOUT 150 KM SOUTHEAST OF PARADIP (ODISHA), 180 KM SOUTH-SOUTHEAST OF DHAMARA (ODISHA) AND 250 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

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•	(LAT. 0N/LON	IG. 0E) SURFACE WIN	ID SPEED (KMPH)
24.10.24/1430	19.4/87.7	105-115 GUSTING TO 125	SEVERE CYCLONIC STORM
24.10.24/1730	19.7/87.5	105-115 GUSTING TO 125	SEVERE CYCLONIC STORM
24.10.24/2330	20.4/87.2	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
25.10.24/0530	20.8/86.8	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
25.10.24/1130	21.1/86.3	85-95 GUSTING TO 105	CYCLONIC STORM
25.10.24/2330	21.2/85.7	50-60 GUSTING TO 70	DEEP DEPRESSION

MAXIMUM SUSTAINED

### QUADRANT WIND INFORMATION:

DATE/TIME (IST)

## 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 2100 UTC:

THE UPPER AIR CYCLONIC CIRCULATION OVER COMORIN AREA & NEIGHBOURHOOD EXTENDING UPTO 5.8 KM ABOVE MEAN SEA LEVEL PERSISTS.

#### PART-III AREA FORECAST:

AREA: ARB A1 (ARABIAN SEA)-EQUATOR TO 10 DEG N W OF 80 DEG E.
ARB A1-FORECAST VALID FROM 12 UTC OF 24<sup>TH</sup> OCT 2024 TO 12 UTC OF 25<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: SW-LY 05/15 KTS BEC CYCLONIC 05/10 KTS AT 66 DEG E AND 8 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 12 UTC OF 25<sup>TH</sup> OCT 2024 TO 12 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: SW-LY 10/15 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 12 UTC OF 24<sup>TH</sup> OCT 2024 TO 12 UTC OF 25<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: NW/N-LY 05/10 KTS BEC NE-LY 05/10 KTS TO THE S OF 21 DEG N. II) WAVE HEIGHT: 1.0-1.5 M.

III) WEATHER: 1) S OF 15 DEG N TO THE E OF 58 DEG E: WIDESPREAD RA/TS.

2) REST AREA: FAIR.

IV) VISIBILITY: 1) S OF 15 DEG N TO THE E OF 58 DEG E: VERY POOR.

2) REST AREA: GOOD.

# ARB A2-FORECAST VALID FROM 12 UTC OF 25<sup>TH</sup> OCT 2024 TO 12 UTC OF 26<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: NW/N-LY 05/15 KTS BEC NE-LY 05/10 KTS TO THE S OF 20 DEG N.

- II) WAVE HEIGHT: 1.0-1.5 M.
- III) WEATHER: 1) S OF 15 DEG N TO THE E OF 60 DEG E: WIDESPREAD RA/TS.

2) REST AREA: FAIR.

- IV) VISIBILITY: 1) S OF 15 DEG N TO THE E OF 60 DEG E: VERY POOR.
  - 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 12 UTC OF 24<sup>TH</sup> OCT 2024 TO 12 UTC OF 25<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: SW-LY 10/20 KTS.

II) WAVE HEIGHT: 1.5-2.5 M.

III) WEATHER: 1) N OF 6 DEG N: WIDESPREAD RA/TS.

2) REST AREA: ISOLATED RA/TS.

IV) VISIBILITY: ) N OF 6 DEG N: VERY POOR.

2) REST AREA: GOOD.

# BOB A3-FORECAST VALID FROM 12 UTC OF 25<sup>TH</sup> OCT 2024 TO 12 UTC OF 26<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: SW/W-LY 05/15 KTS BEC NW/N-LY 05/10 KTS

TO THE E OF 90 DEG E.

II) WAVE HEIGHT: 1.0-2.5 M.

III) WEATHER: 1) N OF 7 DEG N: FAIRLY 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 12 UTC OF 24<sup>TH</sup> OCT 2024 TO 12 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 88.8 DEG E.

2) REST AREA: SW-LY 15/25 KTS.

II) WAVE HEIGHT: 9.0-14.0 M.

III) WEATHER: WIDESPREAD RA/TS.

IV) VISIBILITY: VERY POOR.

# BOB A4-FORECAST VALID FROM 12 UTC OF 25<sup>TH</sup> OCT 2024 TO 12 UTC OF 26<sup>TH</sup> OCT 2024.

I) WIND DIRECTION AND SPEED: 1) N OF 15 DEG N: CYCLONIC 45/55 KTS AT 21.1DEG N AND 86.3 DEG E.

2) REST AREA: SW-LY 15/25 KTS.

II) WAVE HEIGHT: 9.0-14.0 M.

III) WEATHER: 1) N OF 19 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 19 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.

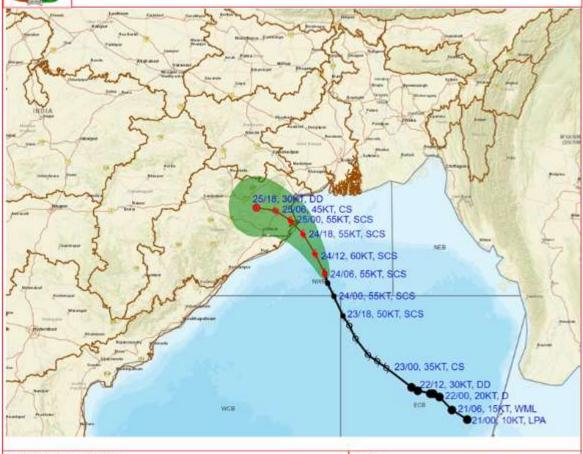
NEXT FORECAST WILL BE ISSUED AT 24/1800 UTC.

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TOO: 24/1730.



**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF SEVERE** CYCLONIC STORM 'DANA' OVER NORTHWEST BAY OF BENGAL BASED ON 0600 UTC (1130 Hrs. IST) OF 24th OCTOBER 2024



DATE/TIME IN UTC

IST UTC + 0530

NAUTICAL MILE S'HOUR = 1.85 KM/HOUR

KT LPA WML

LOW PRESSURE AREA
WELL MARKED LOW PRESSURE AREA

D DD

DE PRE SSION (17-27 KT) DE EP DE PRE SSION (28-33 KT) CYCLONIC STORM (34-47 KT) CS SEVERECYCLONIC STORM (48-63 KT) SCS

VSCS VERY SEVERECYCLONIC STORM (64-89 KT) ESCS EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

SuCS SUPER CYCLONIC STORM (2120 KT) LESS THAN 34 KT

34.47 KT ≥ 48 KT

OBSERVED TRACK

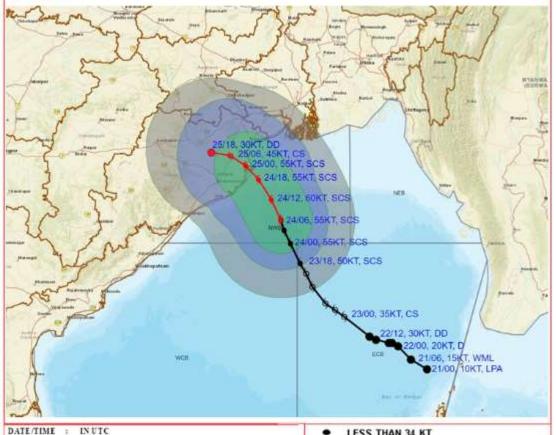
FORECAST TRACK

CONE OF UNCERTAINTY

Forecast	DISTANCE (KM) AND DIRECTION FROM STATIONS			
Date and Time (UTC)	PARADIP (CWR)	DHAMARA	SAGAR ISLAND	
24.10.24/0600	180, SE	210, SSE	270, S	
25.10.24/0600	100, NNW	70, WNW	190, WSW	



# OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF SEVERE CYCLONIC STORM 'DANA' OVER NORTHWEST BAY OF BENGAL BASED ON 0600 UTC (1130 Hrs. IST) OF 24<sup>th</sup> OCTOBER 2024



IST UTC + 0530 KT NAUTICAL MILE SHOUR - 1.85 KM/HOUR LPA WML LOW PRESSURE AREA
WELL MARKED LOW PRESSURE AREA D DEPRESSION (17-27 KT) DEEP DEPRESSION (28-33 KT) CYCLONIC STORM (34-47 KT) SEVERECY CLONIC STORM (48-63 KT) DD CS SCS VSCS ISCS VERY SEVERECYCLONIC STORM (64-89 KT) EXTREMELY SEVERE CYCLONIC STORM (90-119 KT) SuCS SUPER CYCLONIC STORM (≥120 KT)

LESS THAN 34 KT
34.47 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