



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

HOURLY UPDATE ON SEVERE CYCLONIC STORM “DANA”

BULLETIN NO. 19

DATE: 25-10-2024

TIME OF ISSUE: 1230 HRS IST

DATE/TIME (IST) OF OBSERVATION	BASED ON 25-10-2024 (1130 HRS IST)
LOCATION LATITUDE/LONGITUDE	THE CYCLONIC STORM “DANA” (PRONOUNCED AS DANA) MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 07 KMPH AND LAY CENTRED NEAR LATITUDE 21.4° N AND LONGITUDE 86.6°E AT 1130 HRS IST OF TODAY, THE 25TH OCTOBER, OVER NORTH COASTAL ODISHA, ABOUT 40 KM NORTH-NORTHEAST OF BHADRAK AND 70 KM NORTH-NORTHWEST OF DHAMARA.
CURRENT INTENSITY WIND SPEED	CYCLONIC STORM 65-75 KMPH GUSTING TO 85 KMPH
FORECAST	<i>IT IS LIKELY TO MOVE NEARLY WESTWARDS ACROSS NORTH ODISHA AND WEAKEN GRADUALLY INTO A DEEP DEPRESSION DURING NEXT 06 HOURS.</i> THE SYSTEM IS UNDER CONTINUOUS SURVEILLANCE OF THE DOPPLER WEATHER RADAR AT PARADIP.

- ❖ **Maximum Storm Surge height of 1-2m height above astronomical tide inundated low lying areas of Kendrapara, & Bhadrak districts of Odisha during the time of landfall.**
- ❖ **Rainfall (in mm) during last 03hours from 0830IST to 1130IST over Odisha & West Bengal:**
 1. Chandbali – 77.8mm
 2. Balasore – 26.6mm
 3. Haldia – 23mm
 4. Diamond Harbour – 21mm
 5. Alipore (Kolkatta) – 58.8mm, Dum-Dum – 35mm & Salt Lake – 29mm

Rainfall during past 24hours till 0830IST of today, 25.10.2024 over Odisha & West Bengal is attached below.

DISTRICTS	STATION	RAINFALL
BHADRAK	CHANDBALI	158.6
KENDRAPADA	RAJKANIKA *	156.0
BHADRAK	BASUDEVPUR	110.0
KENDRAPADA	MARSHAGHAI	110.0
BALASORE	OUPADA	109.0
KENDRAPADA	RAJNAGAR	100.0
KENDRAPADA	MOHAKALAPADA	90.0
KENDRAPADA	AUL	80.0
JAGATSINGHPUR	PARADEEP	76.4
KENDRAPADA	DERABIS	72.0
BHADRAK	BHADRAK	70.2
BALASORE	BALASORE	68.8
JAJPUR	JAJPUR (PTO)	68.2
KENDRAPADA	KENDRAPADA (PTO)	67.2
BALASORE	NILGIRI *	67.0
KENDRAPADA	KENDRAPADA *	66.0
KENDRAPADA	PATAMUNDAI *	65.9
BALASORE	SORO	63.0
JAJPUR	BINJHARPUR	60.0
JAJPUR	JAJPUR	60.0
MAYURBHANJ	UDALA *	60.0
MAYURBHANJ	KUSUMI	57.0
BHADRAK	TIHIDI	56.0
BALASORE	BAHANGA	53.0
JAJPUR	BARI	52.0
KENDRAPADA	GARADPUR	52.0
ANGUL	TALCHER	52.0

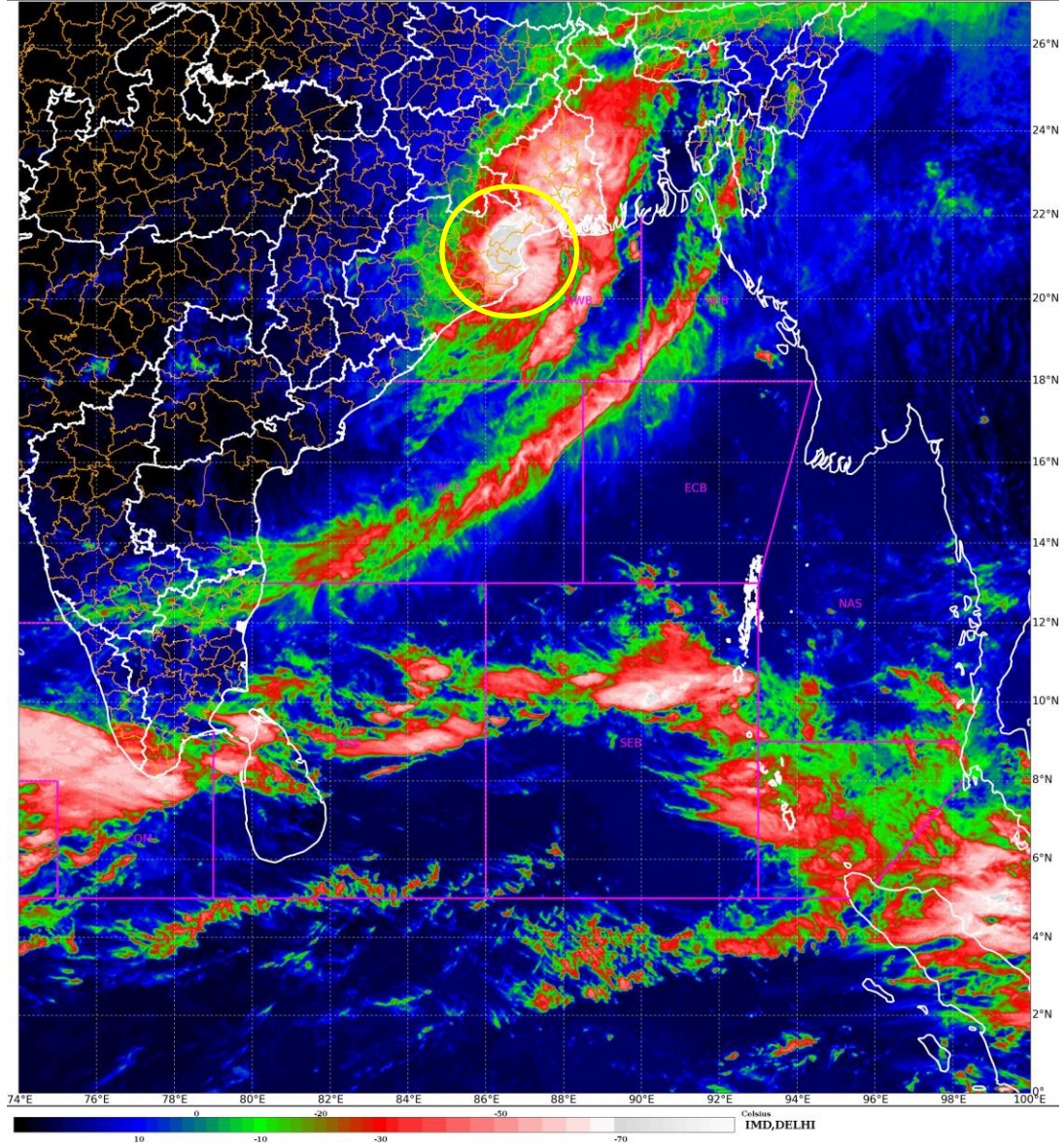
Rainfall during past 24hours till 0830IST of today, 25.10.2024 over West Bengal is attached below.

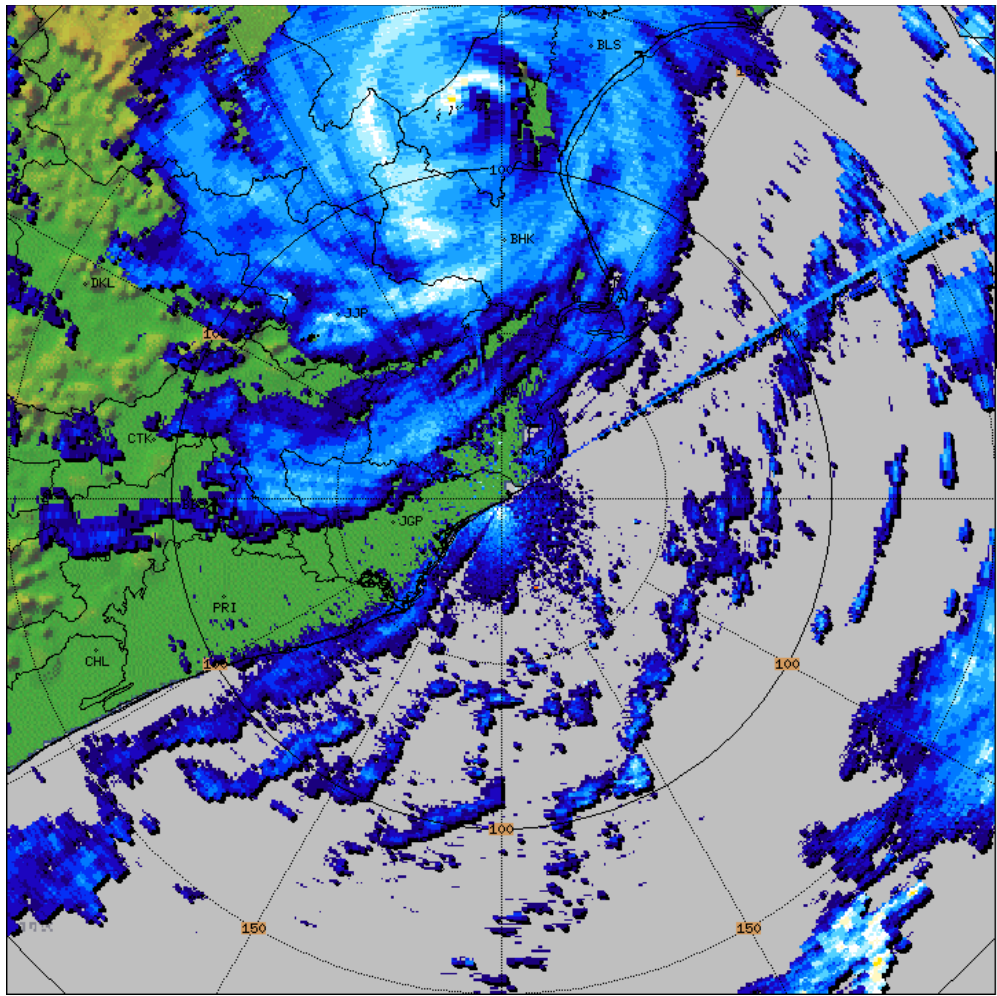
Diamond Harbour	93
Kalaikunda	91
Sagar Island	90
AMFU KHARAGPUR	88
Haldia	80
MOHANPUR	69
Jhargram	67
Uluberia	65
AMFUKAKDWIP	58
MEDINIPUR	56
Midnapore City	52
Alipore	43
LALGARH	42
Digha	37
FULBERIA	35
Basirhat	30
Contai	29

SATELLITE IMAGERY

SAT : INSAT-3DR IMG
IMG_TIR1_TEMP 10.8 um
LIC Mercator

25-10-2024/(0545 to 0612) GMT
25-10-2024/(1115 to 1142) IST





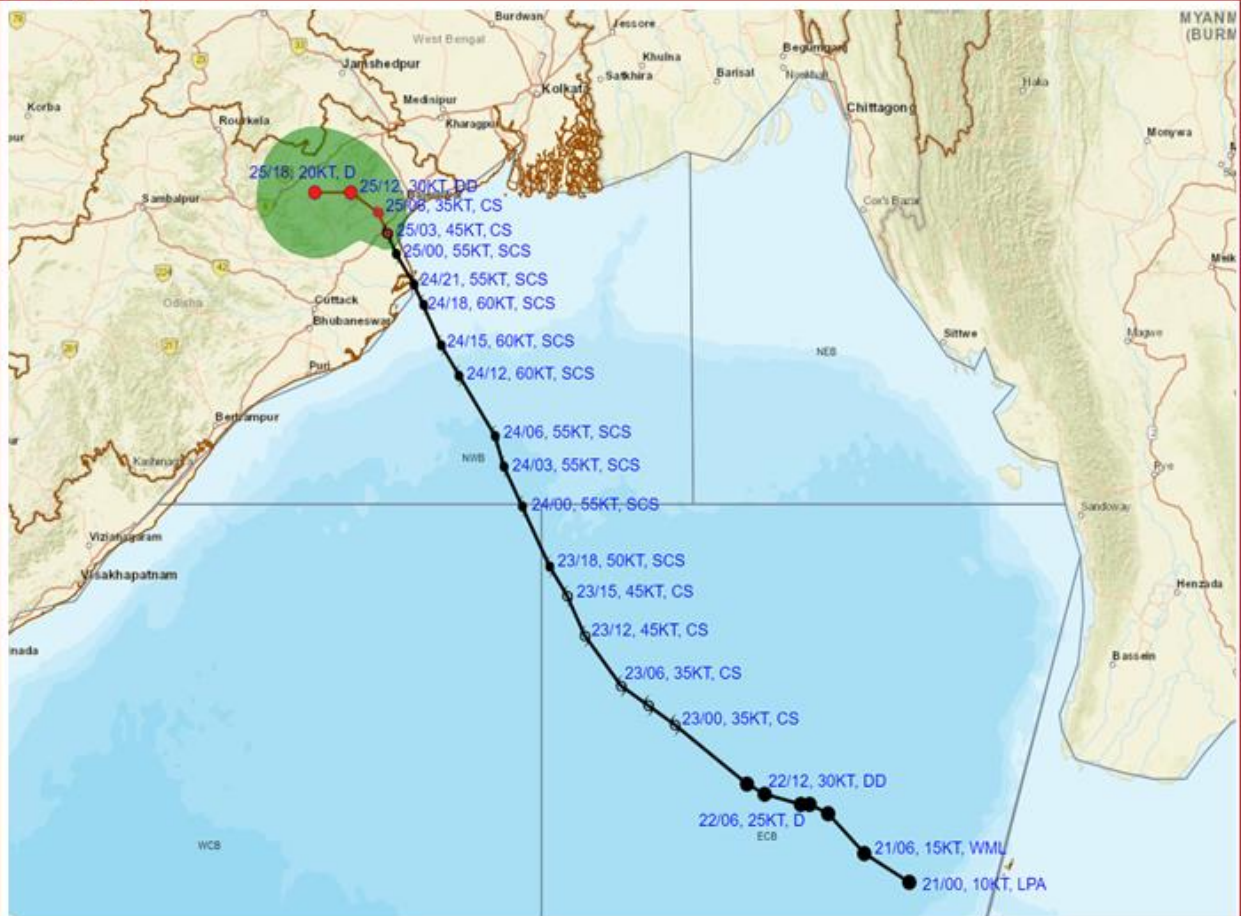
PARADEEP-RADAR
 PPI
 PPI_Z_150KM
 Task: IMD-B
 PRF:600/450
 Elevation:0,5
 Max Range:150 km
06:02:23Z
25 OCT 2024 UTC
 11:32:23 IST

62	>66	Reflectivity in dBZ
58	62	
54	58	
50	54	
46	50	
42	46	
38	42	
34	38	
30	34	
25	30	
20	25	
15	20	
10	15	
5	10	
0	5	

RADAR OBSERVATIONS (MAX_Z) OF DWR PARADIP



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM 'DANA' OVER NORTH COASTAL ODISHA BASED ON 0300 UTC (0830 Hrs. IST) OF 25th OCTOBER 2024



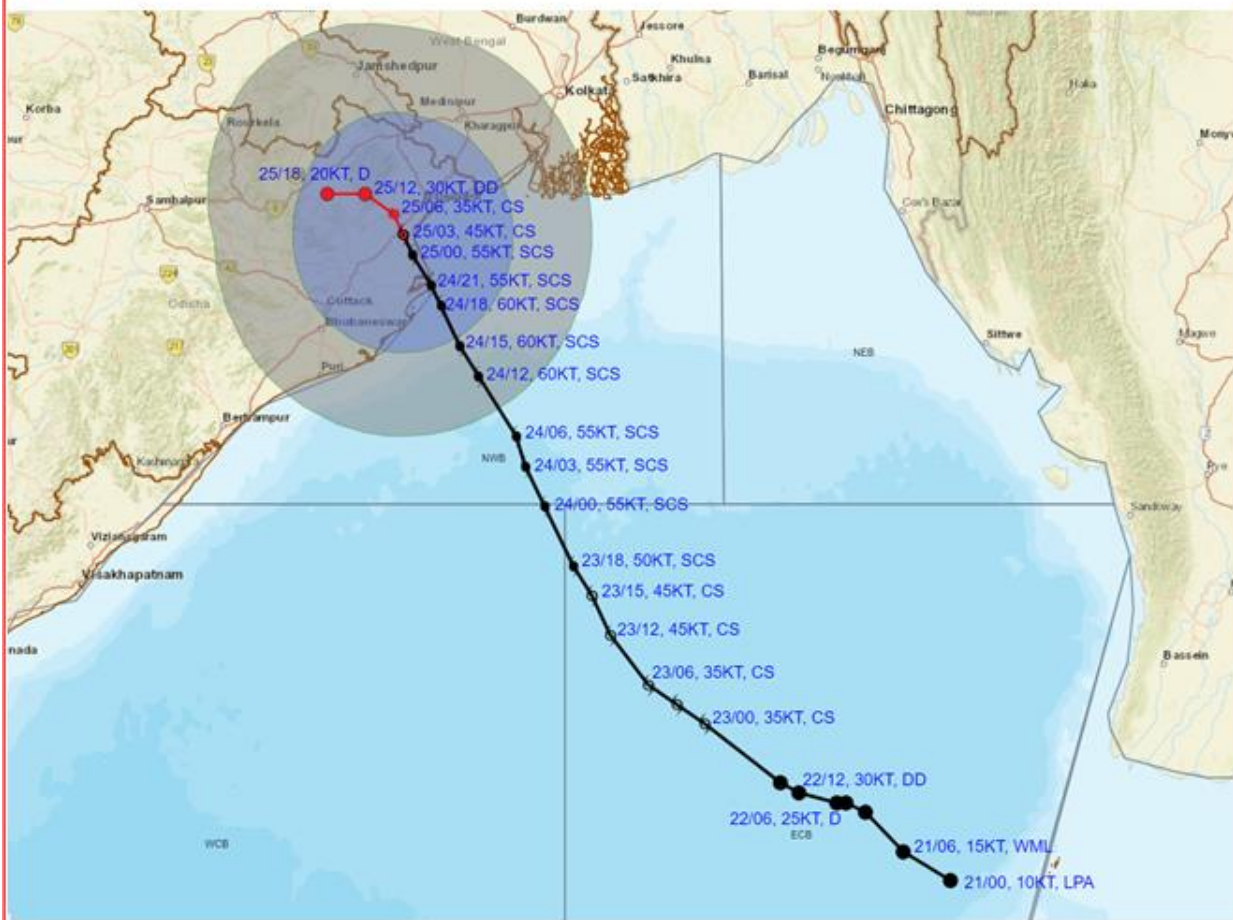
DATE/TIME : IN UTC
 IST : UTC + 0530
 KT : NAUTICAL MILE S/HOUR = 1.85 KM/HOUR
 LPA : LOW PRESSURE AREA
 WML : WELL MARKED LOW PRESSURE AREA
 D : DEPRESSION (17-27 KT)
 DD : DEEP DEPRESSION (28-33 KT)
 CS : CYCLONIC STORM (34-47 KT)
 SCS : SEVERE CYCLONIC STORM (48-63 KT)
 VSCS : VERY SEVERE CYCLONIC 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

Forecast	DISTANCE (KM) AND DIRECTION FROM STATIONS	
Date and Time (UTC)	BHADRAK	DHAMARA
25.10.24/0300	30, ENE	50, NNW



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM 'DANA' OVER NORTH COASTAL ODISHA BASED ON 0300 UTC (0830 Hrs. IST) OF 25th OCTOBER 2024



DATE/TIME : IN UTC
 IST : UTC + 0530
 KT : NAUTICAL MILE/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)

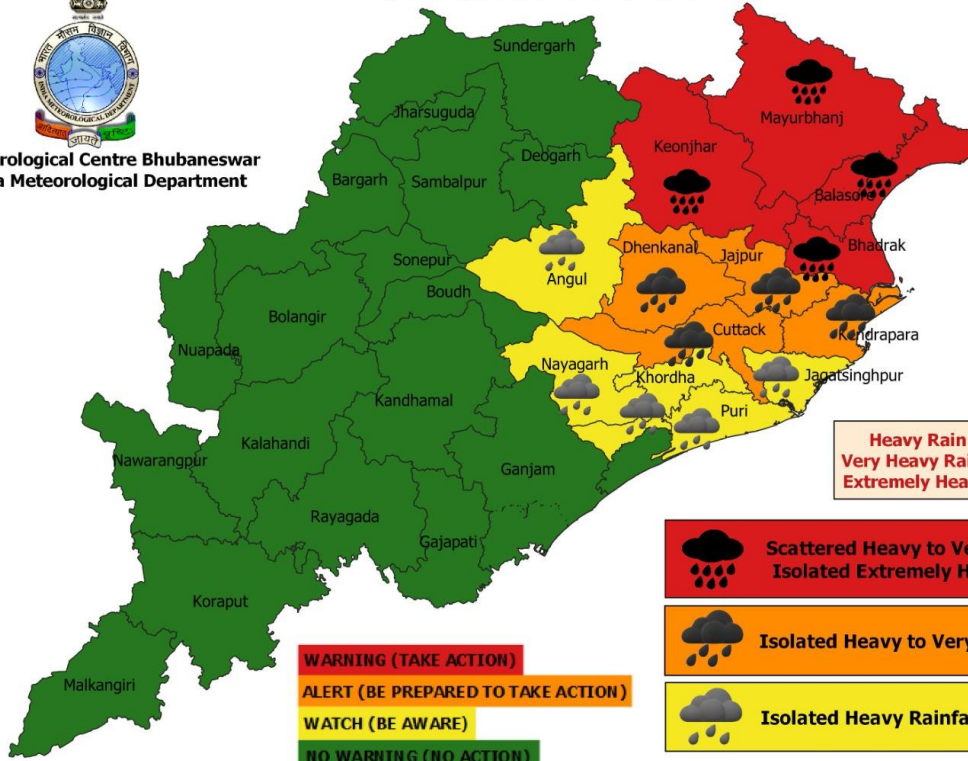
IMPACT OVER THE SEA

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



Meteorological Centre Bhubaneswar
India Meteorological Department

Warning Day-1 (Valid upto 0830 hrs IST of 26.10.2024)



Heavy Rain (7 cm - 11 cm)
 Very Heavy Rain (12 cm - 20 cm)
 Extremely Heavy Rain (> 20 cm)

- Scattered Heavy to Very Heavy with Isolated Extremely Heavy Rainfall
- Isolated Heavy to Very Heavy Rainfall
- Isolated Heavy Rainfall

WARNING (TAKE ACTION)
ALERT (BE PREPARED TO TAKE ACTION)
WATCH (BE AWARE)
NO WARNING (NO ACTION)

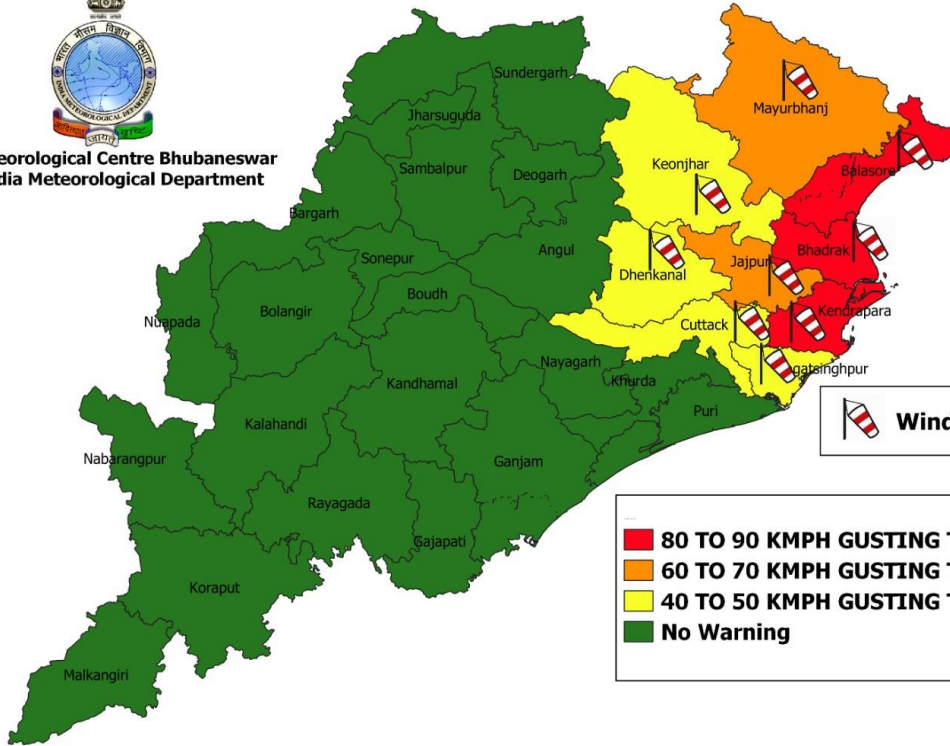
Meteorological Centre Bhubaneswar

Date: 25/10/2024



Meteorological Centre Bhubaneswar
India Meteorological Department

Wind Warning for 25.10.2024



Wind Warning

80 TO 90 KMPH GUSTING TO 100 KMPH
60 TO 70 KMPH GUSTING TO 80 KMPH
40 TO 50 KMPH GUSTING TO 60 KMPH
No Warning

Meteorological Centre Bhubaneswar

Date: 25/10/2024