

भारत सरकार
पृथ्वी विज्ञान मंत्रालय
भारत मौसम विज्ञान विभाग
प्रमुख - पूर्व क्षेत्र
प्रादेशिक मौसम केन्द्र
4, ड्यूएल एवेन्यू, अलीपुर,
कोलकाता - 700 027



Government of India
Ministry of Earth Sciences
India Meteorological Department
Head - Eastern Region
Regional Meteorological Centre
4, Duel Avenue, Alipore,
Kolkata-700 027

No.W-00102/IX /

Dated: 22-10-2024

Time:2100 Hrs IST

Special Bulletin No.-9

Subject: Deep Depression over Eastcentral Bay of Bengal (Cyclone Alert for Odisha and West Bengal coasts: Yellow Message)

The depression over Eastcentral Bay of Bengal moved west-northwestwards with a speed of 7 kmph during past 6 hours, intensified into a Deep Depression and lay centred at 1730 hrs IST of today, the 22nd October, over the same region near latitude 15.6° N and longitude 90.9°E, about 690 km southeast of Paradip (Odisha), 740 km south-southeast of Sagar Island (West Bengal) and 710 km south-southeast of Khepupara (Bangladesh).

It is very likely to move west-northwestwards and intensify into a cyclonic storm by 23rd October, 2024 over eastcentral Bay of Bengal. Thereafter, continuing to move northwestwards, it is very likely to intensify into a severe cyclonic storm over northwest Bay of Bengal by morning of 24th and cross north Odisha and West Bengal coasts between Puri and Sagar Island during 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.

Forecast track and intensity are given in the following table:

Date/Time (IST)	Position (Lat. °N/ Long. °E)	Maximum Sustained Surface Wind Speed (Kmph)	Category Of Cyclonic Disturbance
22.10.24/1730	15.6/90.9	50-60 gusting to 70	Deep Depression
22.10.24/2330	15.8/90.2	55-65 gusting to 75	Deep Depression
23.10.24/0530	16.1/89.7	60-70 gusting to 80	Cyclonic Storm
23.10.24/1130	16.7/89.0	70-80 gusting to 90	Cyclonic Storm
23.10.24/1730	17.2/88.6	80-90 gusting to 100	Cyclonic Storm
24.10.24/0530	18.6/87.9	95-105 gusting to 115	Severe Cyclonic Storm
24.10.24/1730	19.9/87.4	100-110 gusting 120	Severe Cyclonic Storm
25.10.24/0530	20.9/86.8	100-110 gusting 120	Severe Cyclonic Storm
25.10.24/1730	21.5/86.0	55-65 gusting to 75	Deep Depression
26.10.24/0530	21.7/85.0	40-50 gusting to 60	Depression

Rainfall Forecast & warnings:

23rd October 2024: Light to moderate rain/thundershowers at many places over East & West Mednipur and North & South 24 Parganas districts and a few places over rest districts of south Bengal with Heavy rainfall (07-11cm) very likely to occur at one or two places East & West Midnapore and North & South 24 Parganas districts.

24th October 2024: Light to moderate rain/thundershowers at most places with Heavy to very heavy rainfall (07-20cm) at a few places with extremely heavy rain (>20 cm) at one or two places very likely to occur over East Midnapore, West Midnapore, South 24 Parganas districts; Heavy to very heavy rainfall (07-20cm) at one or two places very likely to occur over Kolkata, Howrah, Hoogly, North 24 Parganas and Jhargram districts ; Heavy rainfall (07-11cm) at one or two places likely to occur over the rest districts of South Bengal.

25th October 2024: : Light to moderate rain/thundershowers at most places with Heavy to very heavy rainfall (07-20cm) at a few places very likely to occur over East Midnapore, West Midnapore, South 24 Parganas and Jhargram districts with extremely heavy rain (>20 cm) at one or places over West Midnapore and Jhargram districts ; Heavy to very heavy rainfall (07-20cm) at one or two places very likely to occur over Kolkata, Howrah, Hooghly, North 24 Parganas, Purulia and Bankura districts; Heavy rainfall (07-11cm at one or two places) likely to occur over the rest districts of South Bengal.

26th October 2024: : Light to moderate rain/thundershowers at many places over south Bengal with Heavy rainfall (07-11cm) likely to occur at one or two places over East & West Midnapore and Jhargram districts.

Wind Warning:

Eastcentral Bay of Bengal: Squally wind speed reaching 50-60 kmph gusting to 70 kmph is prevailing and likely to increase becoming 70-90 kmph gusting to 100 kmph from 23rd evening till 24th morning.

Adjoining areas of Westcentral Bay of Bengal: Squally wind speed reaching 40-50 gusting to 60 kmph is very likely on 22nd, 70-90 gusting to 90 kmph from 23rd morning to 24th afternoon.

Northwest Bay of Bengal: Squally wind speed reaching 40-50 gusting to 60 kmph is very likely to commence from 23rd morning. It would gradually increase becoming gale wind speed reaching 70-90 gusting to 100 kmph from 23rd night to 24th morning and 100-110 kmph gusting to 120 kmph from 24th Oct evening to 25th Oct morning and decrease gradually thereafter.

Adjoining areas of northeast Bay of Bengal: Squally wind speed reaching 40-50 gusting to 60 kmph is very likely to commence from 23rd night till 25th morning and decrease gradually thereafter.

Along & off Odisha-west Bengal coasts: Squally wind speed reaching 40-50 gusting to 60 kmph is very likely to commence from 23rd Oct evening. It would gradually increase becoming gale wind speed reaching 60-70 kmph gusting to 80 kmph from 24th morning and reaching 100-110 kmph gusting to 120 kmph from 24th night till 25th Oct morning and decrease gradually thereafter.

Wind warning for districts of south Bengal:

Squally wind speed reaching 40-50 Kmph gusting to 60 Kmph likely to commence from 23rd October, evening over coastal areas of East Midnapore & South 24 Parganas and becoming 60-70 kmph gusting to 80 kmph from 24th morning and further increase thereafter. During 24th evening to 25th morning gale wind speed reaching 100-110 Kmph gusting to 120 kmph likely to prevail over East Midnapore; gale wind speed reaching 80-90 Kmph gusting to 110 kmph likely to prevail over Sagar Island & Sundarban areas of South 24 Parganas; gale wind speed reaching 80-90 Kmph gusting to 100 kmph likely to prevail over West Midnapore, Jhargram & other areas of South 24 Parganas; squally wind speed reaching 60-70 Kmph gusting to 80 kmph likely to prevail over Kolkata, North 24 Parganas, Howrah, Hooghly & Bankura districts.

Sea Condition:

Eastcentral Bay of Bengal: Sea condition is likely to be Rough to Very Rough on 22nd October, becoming very rough to high from 23rd morning till 24th October morning.

Adjoining areas of Westcentral Bay of Bengal: Sea condition is likely to be Rough to Very Rough on 23rd and 24th October.

Northwest Bay of Bengal: Sea condition is likely to be Rough to Very Rough from 23rd morning and would become High to Very High from 23rd night till 25th morning and improve gradually thereafter.

Adjoining areas of northeast Bay of Bengal: Sea condition is likely to be Rough to Very Rough from 23rd night till 25th morning and improve gradually thereafter.

Along & off Odisha-west Bengal coasts: Sea condition is likely to be Rough to Very Rough from 23rd evening and would become High to Very High from 24th October evening to 25th Oct forenoon and improve gradually thereafter.

Fishermen Warning:

Fishermen are advised not to venture into deep sea over Eastcentral Bay of Bengal till 24th Oct adjoining areas of Westcentral Bay of Bengal on 23rd and 24th Oct.; North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts during 23rd to 25th October.

Port Warning : Distance Cautionary Signal No-1 (DC-1) hoisted at Hooghly Ports(Kolkata and Hadia) and Sectional Signal No-3 hoisted at Sagar Island.

*Warning maps are given attached for graphical information.

❖ **Impact Expected (South & North 24 Parganas, East & West Medinipur, Jhargram , Howrah, Hooghly, Kolkata & Bankura districts of West Bengal)**

- Major damage to thatched houses/ huts. Roof tops may blow off. Unattached metal sheets, temporary hoardings etc may fly.
- Water logging in low lying areas, localized flooding of roads, and closure of underpasses mainly in urban areas of the above region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic in major cities and roadways due to water logging in roads and poor visibility due to heavy rain leading to increased travel time and incidents
- Likely disruption of marine and inland water transportation like small boats and trawlers.
- Major damage to Kutchha and some damage to Pucca roads. Flooding of escape routes.
- Possibilities of damage to vulnerable structure. Breaking of tree branches and uprooting of trees. Moderate damage to banana and papaya trees. Large dead limbs blown from trees.
- Damage to power and communication lines.
- Damage to embankments/ salt pans.
- Damage to horticulture and standing crops in some areas due to inundation and wind.
- It may lead to riverine flooding in some river catchments (Viz, Kangasabati, Damodar lower valley etc)(for riverine flooding please visit Webpage of Central Water Commission)

Action Suggested (South & North 24 Parganas, East & West Medinipur, Jhargram, Howrah, Hooghly, Kolkata & Bankura districts of West Bengal)

Total suspension of fishing operations during 23rd to 25th Oct, 2024 over North Bay of Bengal.

- Judicious regulation of onshore/offshore, Port and maritime activities including shipping.
- Judicious regulation of surface transports including railways and roadways and Ferry Services.
- Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain indoors.
- Check for traffic congestion on your route before leaving for your destination.
- Avoid going to areas that face the water logging problems often.
- Harvest matured fruits and vegetables and crops(if any) and store in safe place.
- Avoid staying in vulnerable structure and houses.

N.B.: Spatial rainfall distribution: Isolated: $\leq 25\%$, A few: 26-50%, Many: 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 –115.5, Very heavy rain: 115.6 – 204.4, extremely heavy rain: 204.5 or more. Probabilistic forecast: Unlikely $\leq 25\%$, likely 26-50%, Very likely 51-75%, Most likely $> 75\%$

Colorcode for Warning:

No Warning (No Action)	Alert (Be Prepared To Take Action)
Watch (Be Aware)	Warning (Take Action)

Sd/-
(Dr. HR Biswas)
Scientist –F
For Head, RMC, Kolkata

Next Update on 23.10.2024.

Note: For detail information please visit our

Website: <https://mausam.imd.gov.in/kolkata/>

Facebook page: <https://www.facebook.com/WeatherOffice.Kolkata>

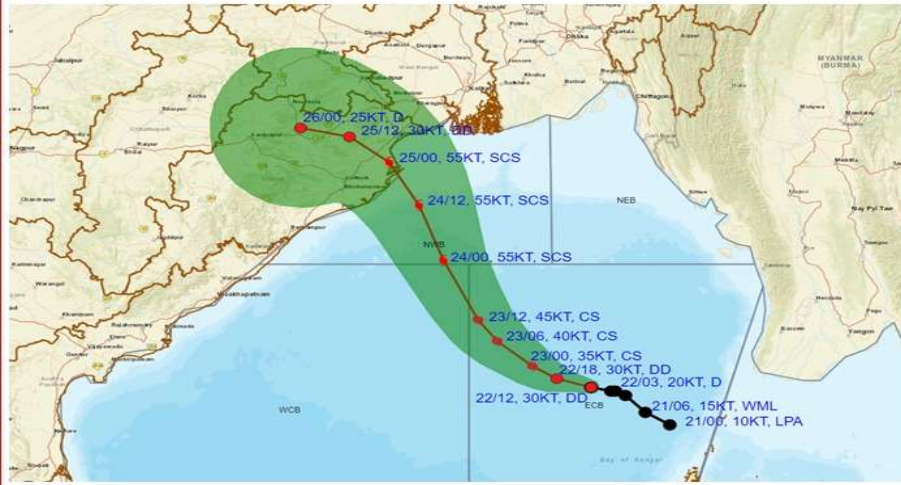
Twitter: <https://x.com/lmdkolkata>

WhatsApp channel: <https://whatsapp.com/channel/0029VaD6VGS3QxS9vKh3e13C>

Mausam App: <https://play.google.com/store/apps/details?id=com.imd.masuam>



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC (1730 Hrs. IST) OF 22ND OCTOBER 2024

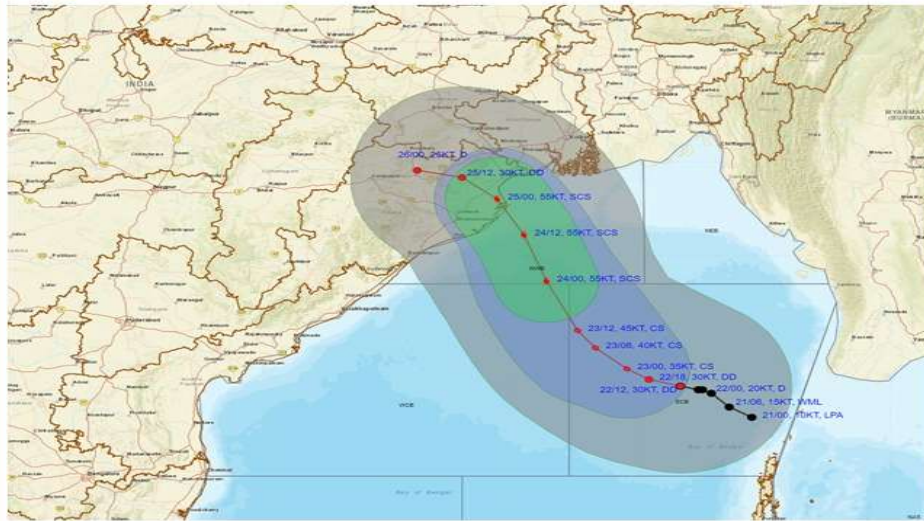


DATE/TIME	: IN UTC
IST	: UTC + 0530
KT	: NAUTICAL MILE/HOUR = 1.85 KM/HOUR
LPA	: LOW PRESSURE AREA
WML	: WELL MARKED LOW PRESSURE AREA
D	: DEPRESSION (17-27 KT)
DD	: DEEP DEPRESSION (28-33 KT)
CS	: CYCLONIC STORM (34-47 KT)
SCS	: SEVERE CYCLONIC STORM (48-63 KT)
VSCS	: VERY SEVERE CYCLONIC STORM (64-89 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



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC (1730 Hrs. IST) OF 22ND 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

