



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

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Sub: Cyclonic Storm 'Yaas' (pronounced as 'Yass') over Eastcentral Bay of Bengal – (Cyclone Warning for Odisha – West Bengal coasts-Orange Message).

The **Cyclonic Storm 'Yaas' (pronounced as 'Yass')** over Eastcentral Bay of Bengal moved north-northwestwards with a speed of about 12 kmph during past 6 hours, and lay centred at 2030 hrs IST of today, the 24th May, 2021 over Eastcentral Bay of Bengal near latitude 17.4°N and longitude 89.2°E, about 420 km south-southeast of Paradip (Odisha), 510 km south-southeast of Balasore (Odisha), 500 km south-southeast of Digha (West Bengal) and 520 kms nearly south of Khepupara.

It is very likely to move north-northwestwards, intensify further into a **Severe Cyclonic Storm** during next 06 hours and into a **Very Severe Cyclonic Storm** during subsequent 12 hours. It would continue to move north-northwestwards, intensify further and reach Northwest Bay of Bengal near north Odisha and West Bengal coasts by 26th May early morning. It is very likely to cross north Odisha-West Bengal coasts between Paradip and Sagar Island around Balasore, during noon of 26th May as a Very Severe Cyclonic Storm.

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
24.05.21/2030	17.4/89.2	80-90 gusting to 100	Cyclonic Storm
24.05.21/2330	17.6/89.0	90-100 gusting to 110	Severe Cyclonic Storm
25.05.21/0530	18.2/88.7	100-110 gusting to 120	Severe Cyclonic Storm
25.05.21/1130	18.9/88.3	120-130 gusting to 145	Very Severe Cyclonic Storm
25.05.21/1730	19.7/87.9	135-145 gusting to 160	Very Severe Cyclonic Storm
26.05.21/0530	20.9/87.3	155-165 gusting to 185	Very Severe Cyclonic Storm
26.05.21/1730	21.9/86.7	125-135 gusting to 150	Very Severe Cyclonic Storm
27.05.21/0530	22.5/86.3	70-80 gusting to 90	Cyclonic Storm
27.05.21/1730	23.2/85.6	40-50 gusting to 60	Depression

Warnings:

(i) Rainfall:

North Coastal Andhra Pradesh: Light to moderate rainfall at many places with heavy falls at isolated places on 24th May and heavy to very heavy falls at isolated places on 25th May.

Odisha: Light to moderate rainfall at many places with heavy falls at isolated places over Coastal Odisha on 24th, with heavy to very heavy rainfall in Puri, Jagatsinghpur, Khurda, Cuttack, Kendrapara, Jajpur, Bhadrak, Balasore districts and heavy over Ganjam, Dhenkanal, Mayurbhanj districts on 25th, heavy to very heavy rains at a few places with extremely heavy falls at isolated places in Jagatsinghpur, Cuttack, Kendrapara, Jajpur, Bhadrak, Balasore, Mayurbhanj, Dhenkanal, Keonjhar and heavy falls at isolated places in Puri, Khurda, Angul, Deogarh, Sundergarh on 26th May and heavy rainfall at isolated places in north interior Odisha on 27th May.

West Bengal & Sikkim: Light to moderate rainfall at most places with heavy falls at isolated places over coastal districts of West Bengal on 24th, heavy to very heavy rainfall over Medinipur, South 24 Parganas and heavy rainfall at isolated places in Howrah, Hooghly, & north 24 Parganas districts on 25th, extremely heavy rainfall at isolated places over Jhargram, Medinipur, south 24 Parganas and heavy to very heavy rainfall at a few places over Purulia, Bankura, Bardhaman, Howrah, Hooghly, Kolkata, north 24 Parganas, Bhirbhum and heavy falls at isolated places over Nadia, Murshidabad, Darjeeling Districts on 26th May and heavy to very heavy rain at isolated places in Malda & Darjeeling, Dinajpur, Kalimpong, Jalpaiguri, Sikkim and heavy rain at a few places over Bankura, Purulia, Bardhaman, Bhirbhum & Murshidabad on 27th May.

Jharkhand: Light to moderate rainfall at most places with heavy to very heavy rainfall and extremely heavy falls at isolated places on 26th & 27th May and isolated heavy falls on 28th May.

Bihar: Light to moderate rainfall at most places with heavy to very heavy rainfall and extremely heavy falls at isolated places on 27th May and isolated heavy to very heavy falls on 28th May.

Assam & Meghalaya: Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places on 26th & 27th May.

(ii) Wind warning:

- Squally wind speed reaching 50–60 kmph gusting to 70 kmph prevailing over eastcentral Bay of Bengal
- Gale winds speed reaching 80-90 kmph gusting to 100 kmph is prevailing over major parts of central Bay of Bengal and would increase gradually becoming 100-110 gusting to 120 kmph from 25th morning.
- Squally wind speed reaching 50-60 kmph gusting 70 kmph is prevailing over North Bay of Bengal and along and off north Andhra Pradesh-Odisha–West Bengal–Bangladesh coasts.
- It would further increase becoming gale wind speed 155-165 kmph gusting to 185 kmph over northwest Bay of Bengal and along & off north Odisha and adjoining West Bengal coasts including

Jagatsinghpur, Kendrapara, Bhadrak, Balasore districts of Odisha, 100-120 kmph gusting to 145 kmph over Mayurbhanj district of Odisha & East Medinipur & South 24 Parganas districts of West Bengal from early hours of 26th May. Gale wind speed reaching 80-90 kmph gusting to 110 kmph would prevail over Puri, Cuttack, Khurda, Jajpur districts of Odisha & Jhargram, West Medinipur, North 24 Parganas districts of West Bengal during same period. The wind speed reaching 60-80 kmph gusting to 90 kmph would prevail along and off Ganjam and remaining interior districts of north Odisha

- Squally wind speed reaching 60-80 kmph gusting to 90 kmph would prevail over Ganjam, Dhenkanal and Keonjhar districts of Odisha and Bankura, Purulia, Howrah, Hooghly, Nadia & Burdwan districts of West Bengal from 26th early hours. Squally wind speed reaching 50-60 kmph gusting to 70 kmph would prevail over Angul, Deogarh & Sundergarh districts of Odisha, Birbhum & Murshidabad districts of West Bengal and Srikakulam, Vijayanagaram & Vishakhapatnam districts of Andhra Pradesh during same period.
- Squally wind speed reaching 40-50 kmph gusting 60 kmph is very likely to prevail over south Jharkhand from on 26th forenoon and increase gradually becoming 90-120 kmph gusting to 130 kmph over southeast Jharkhand and 70-80 kmph gusting to 90 kmph over southwest Jharkhand during 26th evening / night.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph over Kendrapara, Bhadrak, Balasore, Mayurbhanj, Keonjhar, Sundergarh & Deogarh districts of Odisha and West Medinipur, Jhargram, Bankuda & Purulia districts of West Bengal on 27th.

(iii) Sea condition

- Sea condition is High to Very High over Westcentral & adjoining eastcentral Bay of Bengal. It is very likely to become Very High to Phenomenal over northern parts of central Bay of Bengal, north Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal-Bangladesh coasts during 25th – 26th May.

(iv) Fishermen Warning

- The fishermen are advised not to venture into central Bay of Bengal during 24th–25th May and into north Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal–Bangladesh coasts from 24th – 26th May.
- Those who are out in the Deep Sea of north and adjoining central Bay of Bengal are advised to return to the coast.

(v) Storm surge warning.

Tidal waves of height 2-4 meters above astronomical tide are likely to inundate low lying low laying areas of Medinipur, Balasore, Bhadrak and about 2 meters above astronomical tide are likely to inundate low lying low laying areas of South 24 Parganas, Kendrapara & Jagatsinghpur Districts around the time of landfall.

Damage Expected for coastal districts of North Odisha, West Bengal and adjoining interior districts of these states:

- ❖ Total destruction of thatched houses/ extensive damage to kutcha houses. Some damage to pucca houses.
- ❖ Potential threat from flying objects.
- ❖ Bending/ uprooting of power and communication poles.
- ❖ Major damage to Kutcha and Pucca roads.
- ❖ Flooding of escape routes.
- ❖ Disruption of railways, overhead power lines and signalling systems.
- ❖ Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds.
- ❖ Blowing down of bushy trees like mango.
- ❖ Small boats, country crafts may get detached from moorings.

❖ Visibility severely affected

Action Suggested for coastal districts of North Odisha, West Bengal and adjoining interior districts of these states:

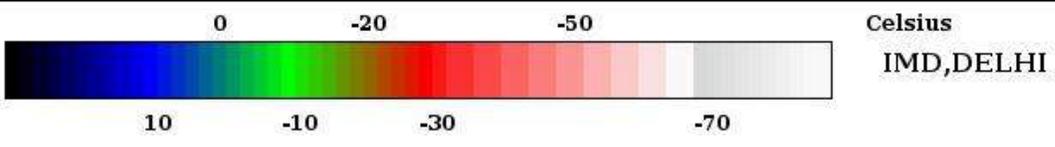
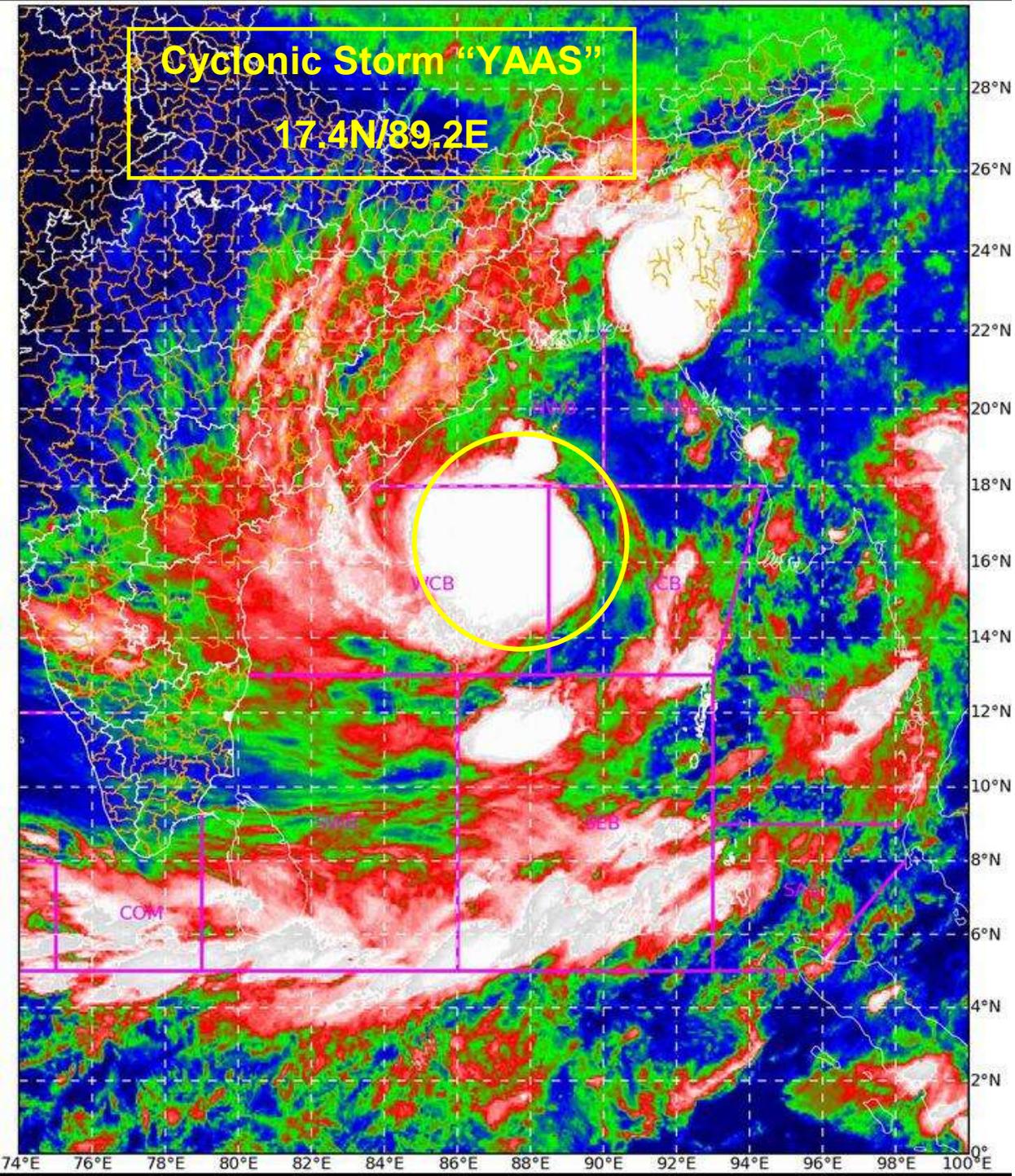
- Suspension of fishing operation and movement of ships in disturbed areas.
- Ports along the east coast of India may take necessary pre-cautions.
- Naval base operations may maintain necessary pre-cautions
- Tourism activities may be restricted over these areas.
- Mobilise evacuation from coastal areas of West Bengal & North Odisha.
- Judicious regulation of rail and road traffic.
- People in affected areas to remain indoors.
- Preparatory action before the cyclones

The next bulletin will be issued at 0230 hrs IST of today, the 25th May, 2021.

(D R PATTANAİK)
Scientist-F, RSMC, New Delhi

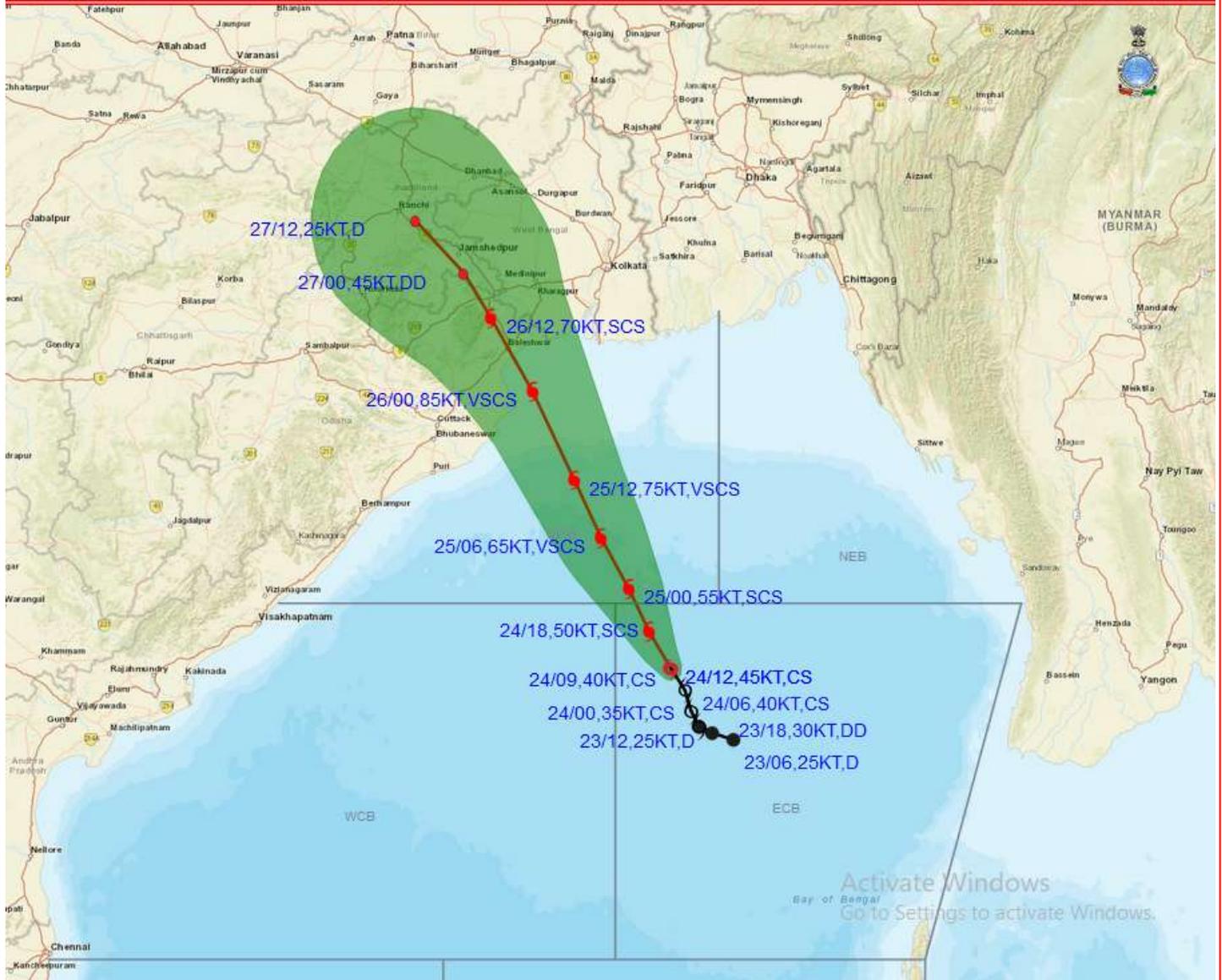
Copy to: ACWC Kolkata/ Chennai/ CWC Bhubaneswar/CWC Visakhapatnam

SAT : INSAT-3D IMG 24-05-2021/(1500 to 1526) GMT
IMG_TIR1_TEMP 10.8 um 24-05-2021/(2030 to 2056) IST
L1C Mercator





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM "YAAS" OVER EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC OF 24th MAY, 2021

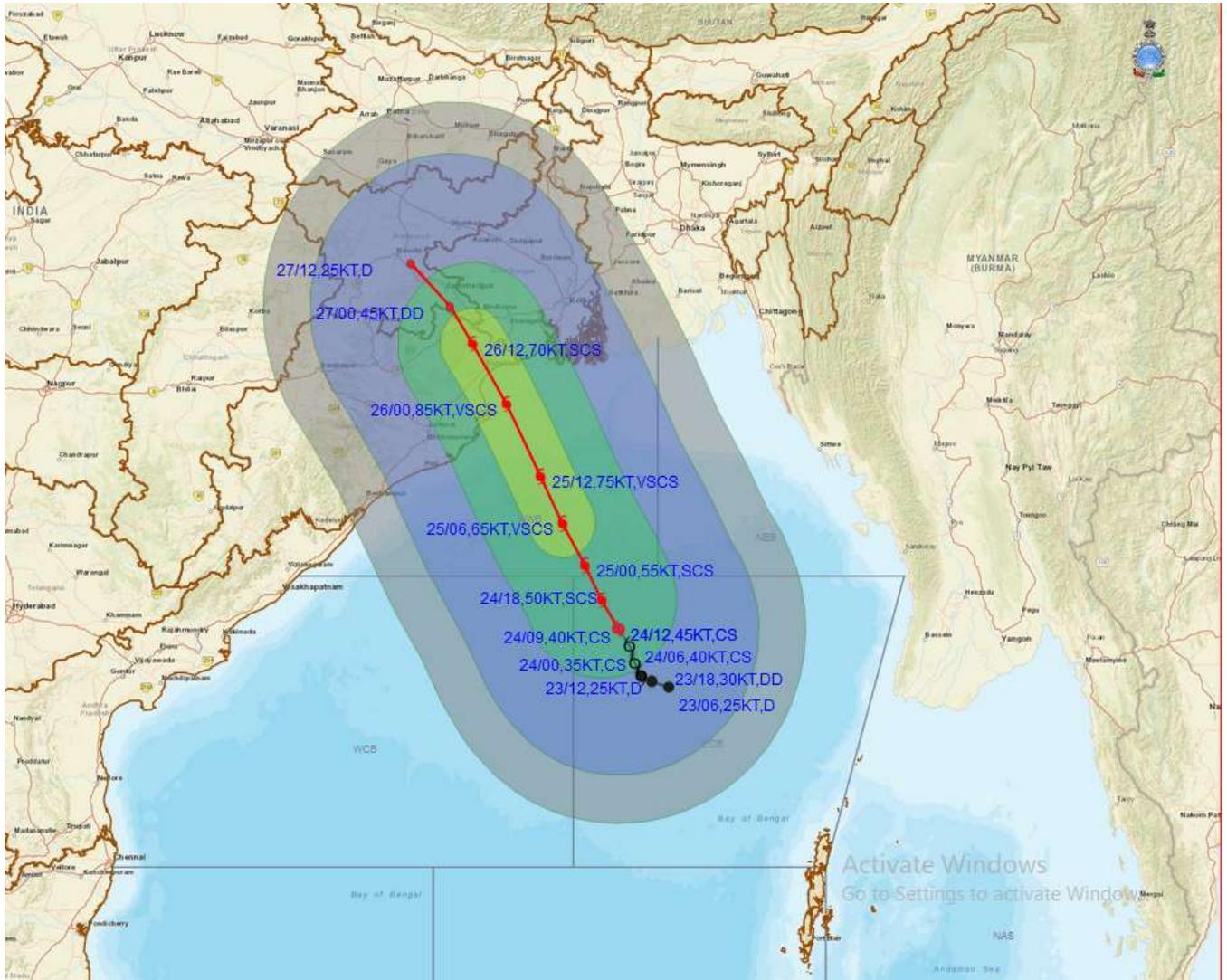


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 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



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "YAAS" OVER EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC OF 24th MAY, 2021



DATE/TIME IN UTC

IST=UTC + 0530

L: 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 (48-63KT)

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)

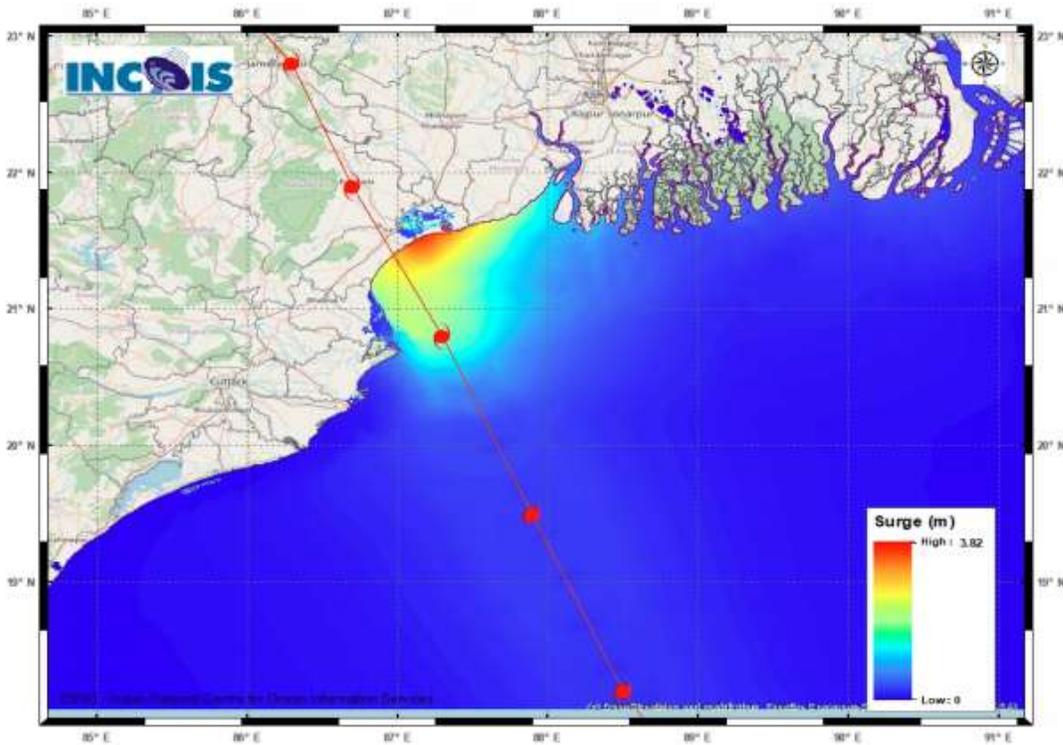
■ 50-63 KT (92-117 KMPH)

■ ≥ 64 (≥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

Storm Surge Forecast around the time of Landfall:

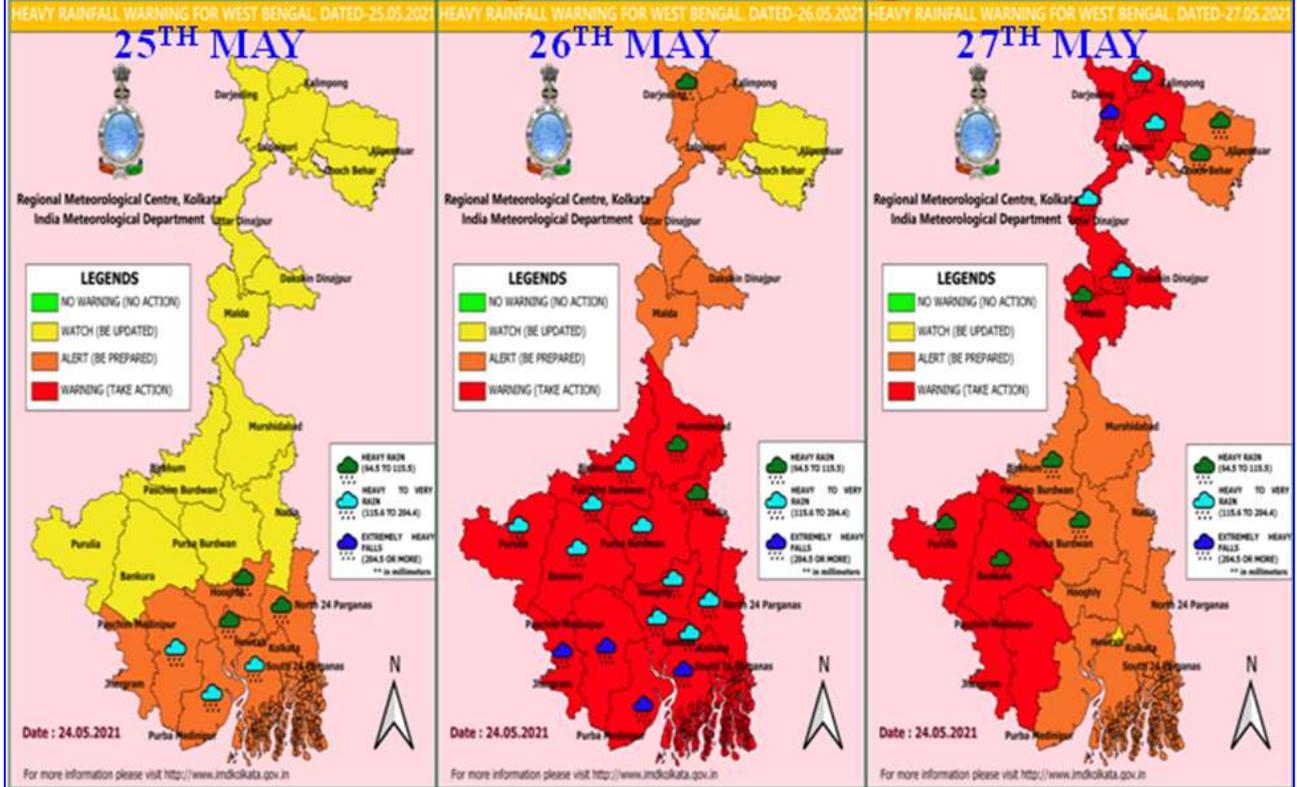


STORM SURGE HEIGHT INFORMATION:

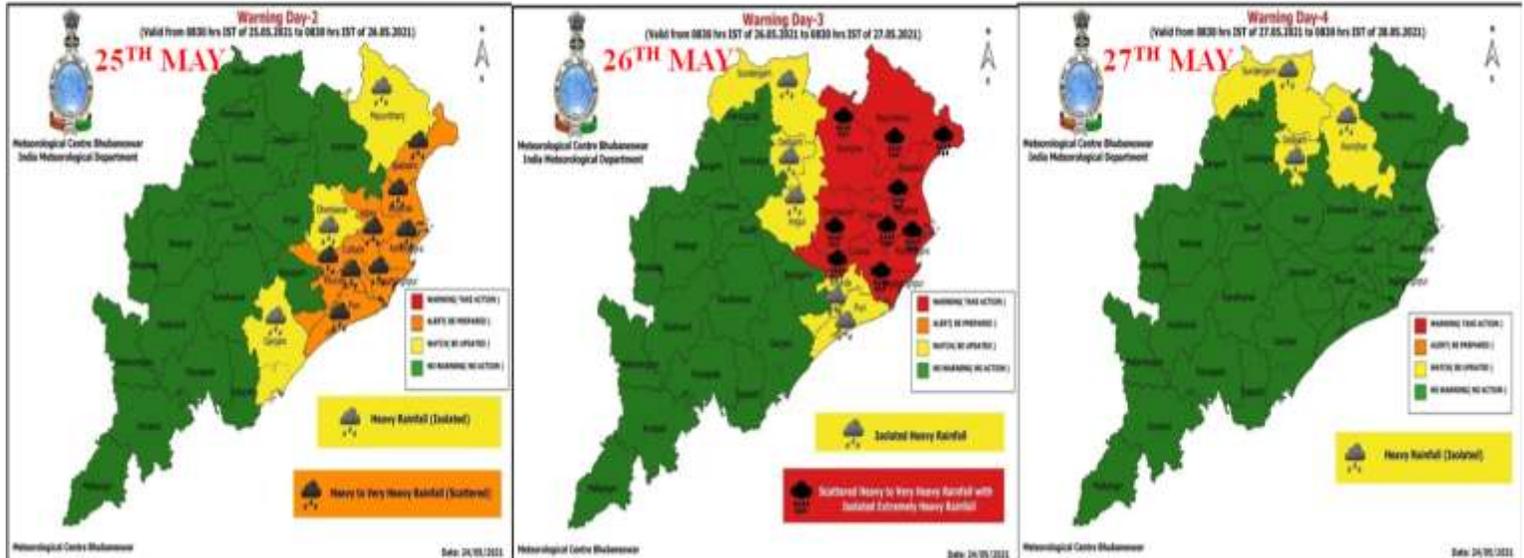
* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Baleshwar	Baleshwar	Odisha	Kumbhigari	2.1-3.8	Upto 2.33
Basirhat	North 24 Parganas	West Bengal	Amlamethi	0.5-0.9	Upto 0.37
Bhadrak	Bhadrak	Odisha	Mohanpur	0.9-2.1	Upto 7.02
Diamond Harbour	South 24 Parganas	West Bengal	Pashchim Bhabanipur	0.5-1.1	Upto 0.78
Kanthi	Purba Medinipur	West Bengal	Safar Chata	0.5-2.9	Upto 1.50
Kendraparha	Kendrapara	Odisha	Tikayat Nagar	0.5-1.5	Upto 2.64
Tamluk	Purba Medinipur	West Bengal	Jamitta	0.5-1.3	Upto 0.42
Uluberiya	Haora	West Bengal	Orphuli	0.5-0.8	Upto 0.44

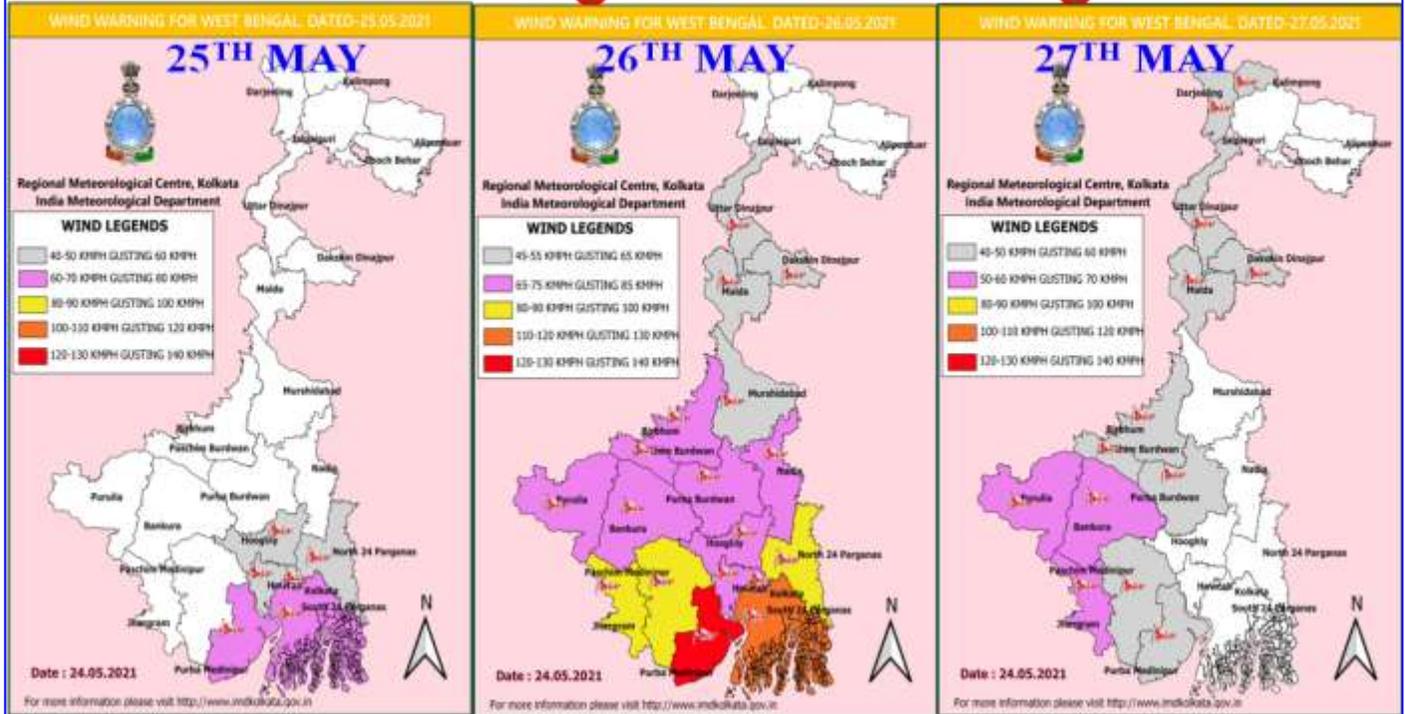
Rainfall warning for West Bengal & Sikkim



Rainfall forecast Odisha



Wind warning for West Bengal



Wind warning for Odisha

