

SPECIAL BULLETIN -12

DATE: 24.05.2021

TIME: 2145 HRS IST

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 1730 hrs IST of today, the 24th May, 2021 over Eastcentral Bay of Bengal near latitude 17.1°N and longitude 89.3°E, about 710 km north-northwest of Port Blair (Andaman Islands), 450 km south-southeast of Paradip (Odisha), 550 km south-southeast of Balasore (Odisha) and 540 km south-southeast of Digha (West Bengal).

It is very likely to move north-northwestwards, intensify further into a **Severe Cyclonic Storm** during next 12 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
24.05.21/1730	17.1/89.3	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:

Days	Forecast	Heavy Rainfall Warning
Day-1: Valid upto 0830 Hrs IST of 25.05.21	Light to moderate rain or thundershower very likely to occur at many places over the districts of coastal Odisha, Keonjhar, Mayurbhanj, Dhenkanal and at isolated places over the districts interior Odisha.	Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Kendrapada, Jagatsinghpur, Bhadrak, and Puri.
Day-2: Valid from 0830 Hrs IST of 25.05.21 to 0830 Hrs IST of 26.05.21	Light to moderate rain or thundershower very likely to occur at most places over the districts of coastal Odisha, at many places over the districts of north interior Odisha & at a few places over the districts of south interior Odisha.	Orange Warning (Be prepared) Heavy to very heavy rainfall very likely to occur at a few places over the districts of Balasore, Bhadrak, Jajpur, Kendrapada, Jagatsinghpur, Cuttack, Puri, Khurdha. Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Mayurbhanj, Dhenkanal and Ganjam.
Day-3: Valid from 0830	Light to moderate rain or thundershower very likely to occur at most places over	Red Warning (Take Action) Heavy to very heavy rainfall at a few places with

Hrs IST of 26.05.21 to 0830 Hrs IST of 27.05.21.	the districts of north Odisha, at a few over the districts of south Odisha	isolated extremely heavy fall very likely to occur over the districts of Balasore, Bhadrak, Jajpur, Kendrapada, Jagatsinghpur, Cuttack, Mayurbhanj, Keonjhar and Dhenkanal. Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Anugul, Deogarh, Khurdha, Puri and Sundergarh.
Day-4: Valid from 0830 Hrs IST of 27.05.21 to 0830 Hrs IST of 28.05.21	Light to moderate rain or thundershower very likely to occur at many places over the districts of north interior Odisha, at a few over the districts of north coastal Odisha and at one or two places over the districts of south Odisha.	Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Sundergarh, Deogarh and Keonjhar.

(ii) Wind warning

- Gale winds speed reaching 90 - 100 kmph gusting to 110 kmph prevailing over major parts of central Bay of Bengal and would decrease gradually from 25th Afternoon.
- Squally wind speed reaching 50-60 kmph gusting 70 kmph is prevailing over North Bay of Bengal and adjoining westcentral Bay of Bengal along and off Odisha–West Bengal coasts. It would increase gradually becoming 60-80 kmph gusting to 90 kmph over Jagatsinghpur, Kendrapara, Bhadrak, Balasore & Puri districts of Odisha from 25th forenoon. Squally wind speed reaching 40-50 kmph gusting to 60 kmph would prevail over Ganjam, Khurda, Cuttack, Jajpur, Mayurbhanj districts of Odisha during the same period.
- It would further increase becoming gale wind speed 60-80 kmph gusting to 90 kmph from 25th early hours over northwest Bay of Bengal and along and off West Bengal & north Odisha coasts It would gradually increase further becoming 90-100 gusting to 110 kmph from 25th afternoon hours, becoming 120-130 gusting to 140 kmph by night of 25th and increase thereafter becoming 155-165 kmph gusting to 185 kmph over northwest Bay of Bengal along & off West Bengal & north Odisha including Jagatsinghpur, Kendrapara, Bhadrak, Balasore districts of Odisha, 100-120 kmph gusting to 145 kmph over Mayurbhanj district of Odisha 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 during same period.
- Squally wind speed reaching 60-80 kmph gusting to 90 kmph would prevail over Ganjam, Dhenkanal and Keonjhar districts of Odisha from 26th early hours. Squally wind speed reaching 50-60 kmph gusting to 70 kmph would prevail over Angul, Deogarh & Sundergarh districts of Odisha during same period.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph over Kendrapara, Bhadrak, Balasore, Mayurbhanj, Keonjhar, Sundergarh & Deogarh districts of Odisha on 27th.

(Wind warning for different districts given in Map below).

(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 Odisha–West Bengal coasts during 25th – 26th May.

(iv) Fishermen Warning

The fishermen are advised not to venture into central Bay of Bengal till 25th May and into north Bay of Bengal and along & off Odisha coast till 27th May, 2021.

v) Port Warning:

Keep hoisted Local Warning Signal No. 4 (LW-4) at Paradip and Dhamra Ports and Local Cautionary Signal No. 3 (LC- 3) at Gopalpur and Puri Ports of Odisha.

(vi) Storm surge warning.

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

Damage Expected for coastal districts of North Odisha, and adjoining interior districts:

- ❖ 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.

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GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
INDIA METEOROLOGICAL DEPARTMENT
METEOROLOGICAL CENTRE
BHUBANESWAR, ODISHA-751020

ଭାରତସରକାର
ପୃଥ୍ବୀବିଜ୍ଞାନମନ୍ତ୍ରାଳୟ
ଭାରତପାଣିପାଗବିଜ୍ଞାନବିଭାଗ
ପାଣିପାଗବିଜ୍ଞାନକେନ୍ଦ୍ର
ଭୁବନେଶ୍ୱର, ଓଡ଼ିଶା-୭୫୧୦୨୦

- ❖ Disruption of railways, overhead power lines and signaling 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, and adjoining interior districts:

- 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 North Odisha.
- Judicious regulation of rail and road traffic.
- People in affected areas to remain indoors.
- Preparatory action before the cyclones.

N.B: SPATIAL RAINFALL DISTRIBUTION: ISOLATED :=< 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 =< 25%, LIKELY 26-50%, VERY LIKELY 51-75%, MOST LIKELY > 75%

Dr.H.R. Biswas,
Head & Scientist-E,
Met .Centre Bhubaneswar

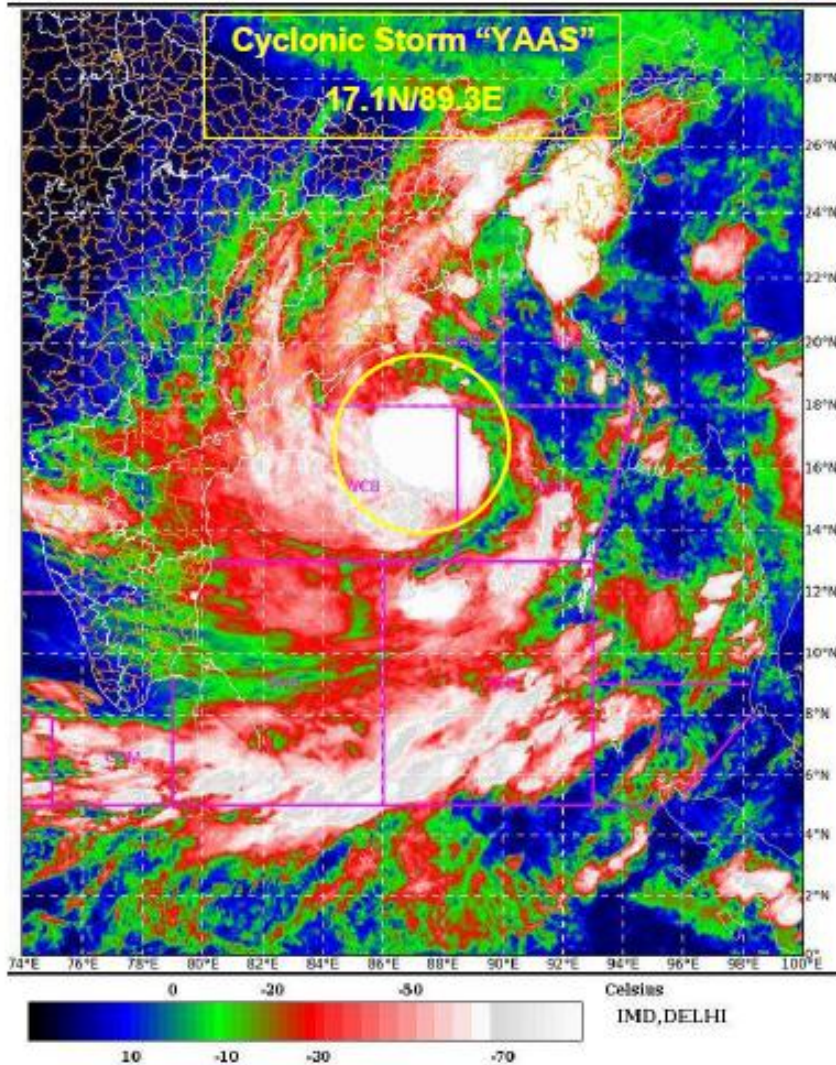
To

1. CHIEF SECRETARY, GOVT OF ODISHA.
2. PRINCIPAL SECRETARY, REVENUE & DISASTER MANAGEMENT, GOVT. OF ODISHA.
3. PRINCIPAL SECRETARY, DEPT. OF AGRICULTURE, GOVT. OF ODISHA.
4. PRINCIPAL SECRETARY, DEPARTMENT OF WATER RESOURCES, GOVT, OF ODISHA.
5. SPECIAL RELIEF COMMISSIONER (SRC), GOVT. OF ODISHA BHUBANESWAR.
6. REVENUE SECRETARY, GOVT. OF ODISHA, BHUBANESWAR.
7. M.D., OSDMA, GOVT. OF ODISHA, BHUBANESWAR.
8. RDC, CENTRAL DIVISION/ SOUTHERN DIVISION/ NORTHERN DIVISION.
9. AIR CUTTACK / DOORDARSHAN.

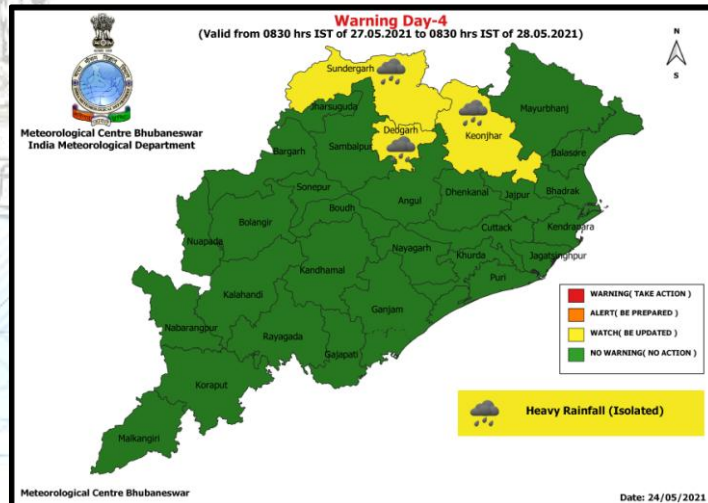
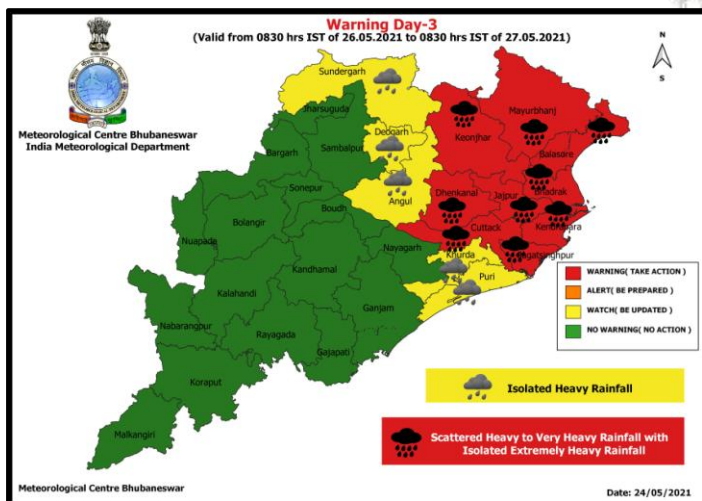
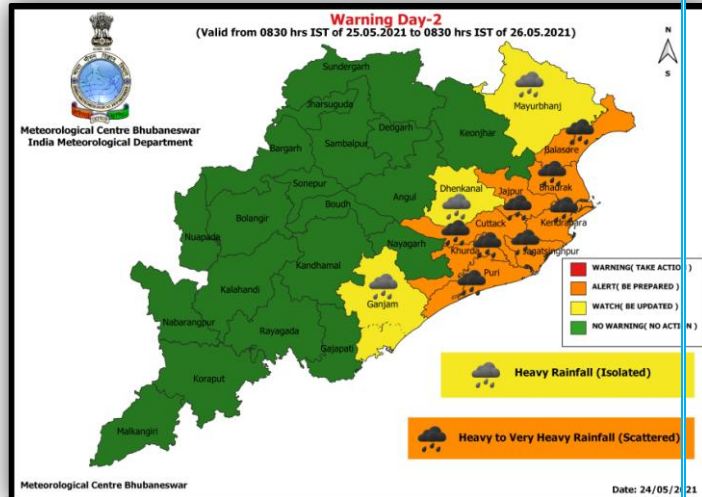
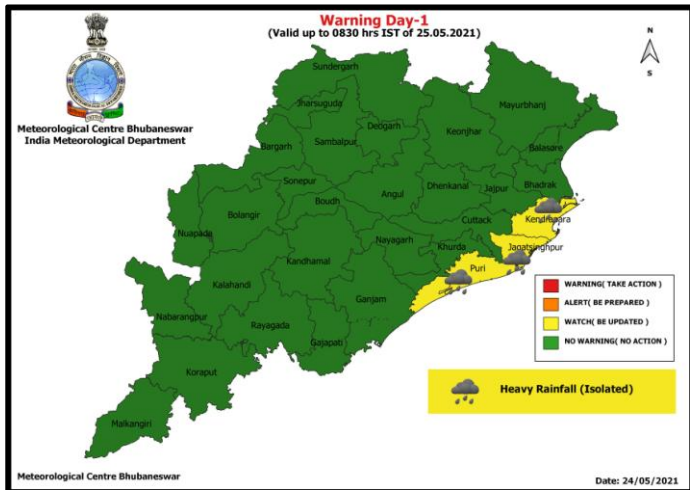
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IMG_TIR1_TEMP 10.8 um 24-05-2021/(1900 to 1926) IST

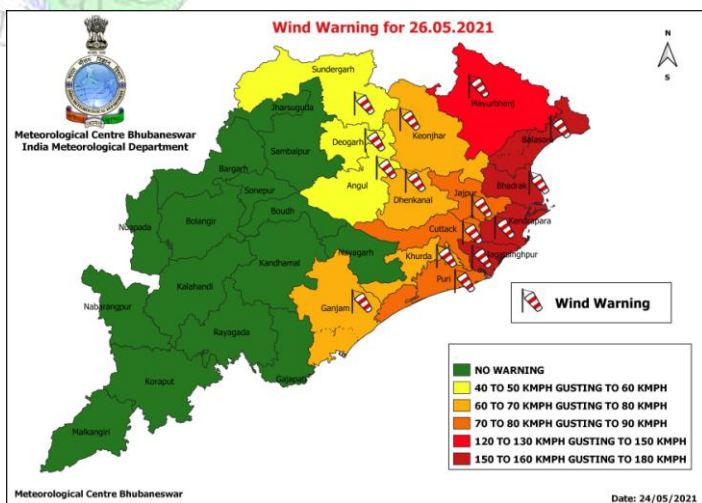
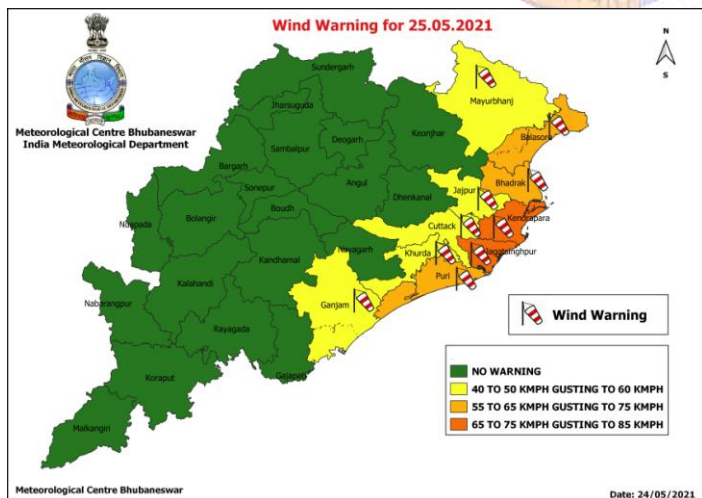
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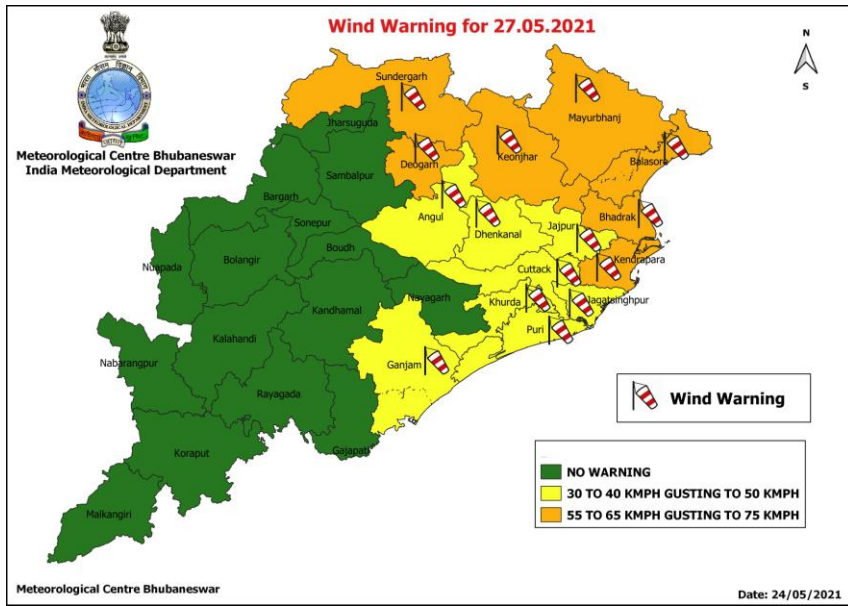


Rainfall Warning Maps for Day-1 to Day-4

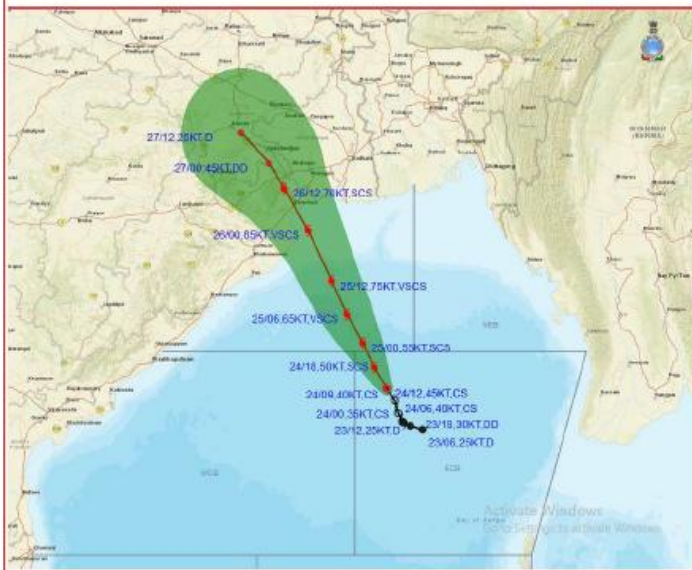


Wind warning for 25th to 27th May, 2021





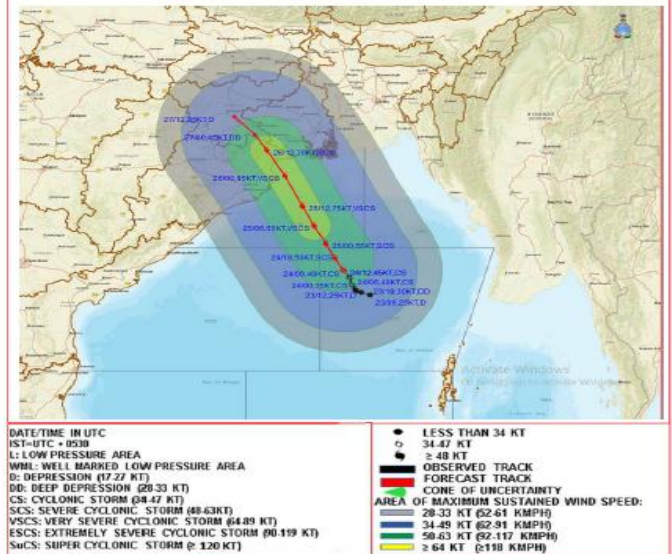
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM "YAAS" OVER EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC OF 24th MAY, 2021



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 (≥ 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 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)
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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



Storm surge information

MANDAL/ TALUK	DISTRICT	NEAREST PLACE OF HABITATION	STORM SURGE(M)*	EXPECTED INUNDATION EXTENT(KM)
Balasore	Balasore	Kumbhigari	2.1-3.8	Upto 2.33
Bhadrak	Bhadrak	Mohanpur	0.9-2.1	Upto 7.02
Kendrapada	Kendrapada	Tikayat Nagar	0.5-1.5	Upto 2.64

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

