

SPECIAL BULLETIN -16

DATE: 25.05.2021

TIME: 0930 HRS IST

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

The Severe Cyclonic Storm 'Yaas' (pronounced as 'Yass') over Eastcentral Bay of Bengal moved northwestwards with a speed of about 10 kmph during past 6 hours, and lay centred at 0530 hrs IST of today, the 25th May, 2021 over Eastcentral & adjoining Westcentral Bay of Bengal near latitude 18.0°N and longitude 88.6°E, about 320 km south-southeast of Paradip (Odisha), 430 km south-southeast of Balasore (Odisha) and 420 km south-southeast of Digha (West Bengal).

It is very likely to move north-northwestwards, intensify further into a **Very Severe Cyclonic Storm** during next 12 hours. It would continue to move north-northwestwards, intensify further and reach Northwest Bay of Bengal near north Odisha and West Bengal coasts very close to Chandbali-Dhamra port by the early morning of Wednesday, the 26th May. It is very likely to cross north Odisha-West Bengal coasts between Paradip and Sagar Island around Balasore, during noon of Wednesday, the 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
25.05.21/0530	18.0/88.6	100-110 gusting to 120	SEVERE CYCLONIC STORM
25.05.21/1130	18.7/88.2	105-115 gusting to 125	SEVERE CYCLONIC STORM
25.05.21/1730	19.5/87.9	125-135 gusting to 150	VERY SEVERE CYCLONIC STORM
25.05.21/2330	20.1/87.7	145-155 gusting to 170	VERY SEVERE CYCLONIC STORM
26.05.21/0530	20.7/87.4	155-165 gusting to 185	VERY SEVERE CYCLONIC STORM
26.05.21/1730	21.8/86.5	115-125 gusting to 140	VERY SEVERE CYCLONIC STORM
27.05.21/0530	22.5/85.6	60-70 gusting to 80	DEEP DEPRESSION
27.05.21/1730	23.2/84.7	35-45 gusting to 55	DEPRESSION

Warnings:

(i) Rainfall:

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

<p>Day-2: Valid from 0830 Hrs IST of 26.05.21 to 0830 Hrs IST of 27.05.21</p>	<p>Light to moderate rain or thundershower very likely to occur at most places over the districts of north Odisha, at a few over the districts of south Odisha.</p>	<p>Red Warning (Take Action) Heavy to very heavy rainfall at a few places with isolated extremely heavy fall very likely to occur over the districts of Balasore, Bhadrak, Jajpur, Kendrapada, Jagatsinghpur, Cuttack, Mayurbhanj, Keonjhar and Dhenkanal.</p> <p>Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Anugul, Deogarh, Khurdha, Puri and Sundergarh.</p>
<p>Day-3: Valid from 0830 Hrs IST of 27.05.21 to 0830 Hrs IST of 28.05.21.</p>	<p>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.</p>	<p>Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Sundergarh, Deogarh and Keonjhar.</p>

(ii) Wind warning

- Gale winds speed reaching 100-110 kmph gusting to 120 kmph is prevailing over major parts of central Bay of Bengal and would increase gradually becoming 125-135 gusting to 140 kmph from today evening.
- Squally wind speed reaching 50-60 kmph gusting 70 kmph is prevailing over North Bay of Bengal and along and off Odisha–West Bengal 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, from early morning of 26th May and will extend to Balasore districts of Odisha from the forenoon of 26th May, 100-120 kmph gusting to 145 kmph over Mayurbhanj district of from early hours of 26th May. Gale wind speed reaching 80-90 kmph gusting to 100 kmph would prevail over Puri, Cuttack, Khurda, Jajpur districts of Odisha 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 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

(iv) 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 & Odisha–West Bengal coasts from today, 25th evening to 26th May evening.

(v) Fishermen Warning

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

v) Port Warning:

Replace Local Warning Signal No. 4 (LW-4) by Great Danger Signal No. 10(GD10) at Paradip and Dhamra Ports of Odisha. Replace Local Cautionary Signal No. 3 (LC3) by Great Danger Signal No. 8(GD8) at Puri Port. Keep hoisted Local Cautionary Signal No. 3 (LC3) at Gopalpur Port 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
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ଭାରତସରକାର
ପୃଥିବୀବିଜ୍ଞାନମନ୍ତ୍ରାଳୟ
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:

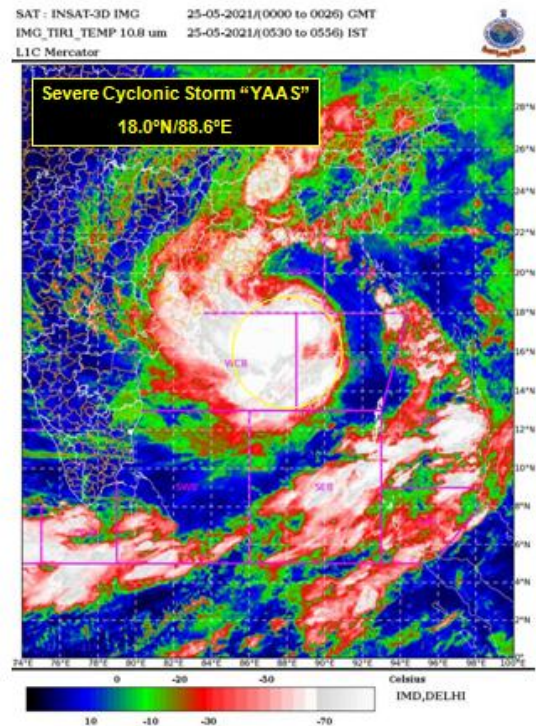
- Suspension of fishing operation and movement of ships in disturbed areas.
- Ports along the east coast of India may take necessary pre-cautions.
- Naval base operations may maintain necessary pre-cautions
- Tourism activities may be restricted over these areas.
- Mobilise evacuation from coastal areas 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%

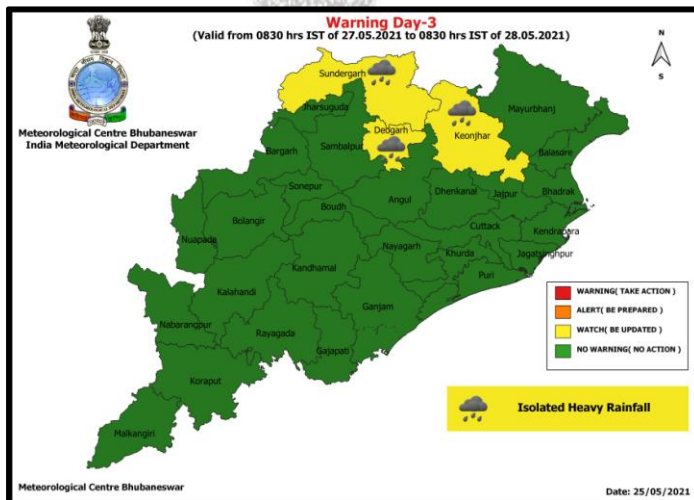
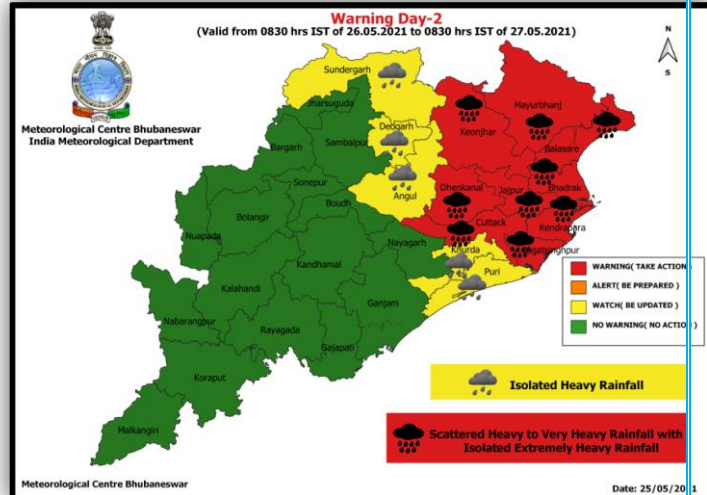
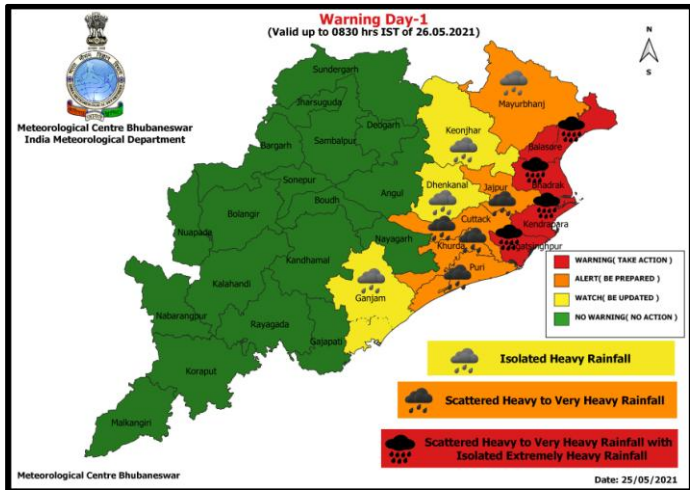
Dr.H.R. Biswas,
Head & Scientist-E,
Met .Centre Bhubaneswar

To

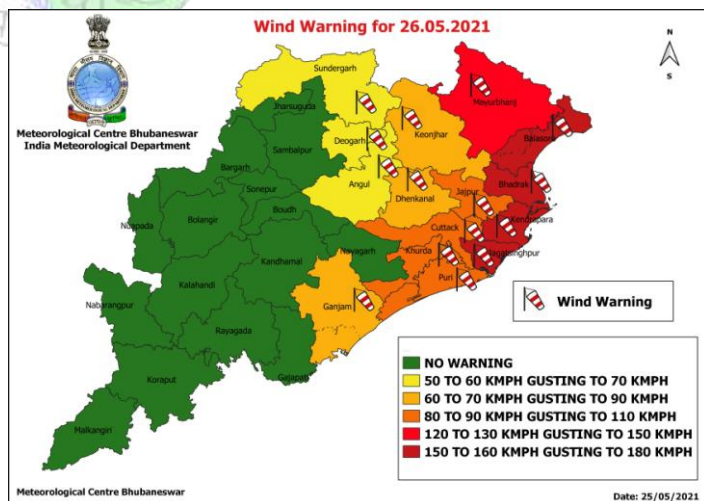
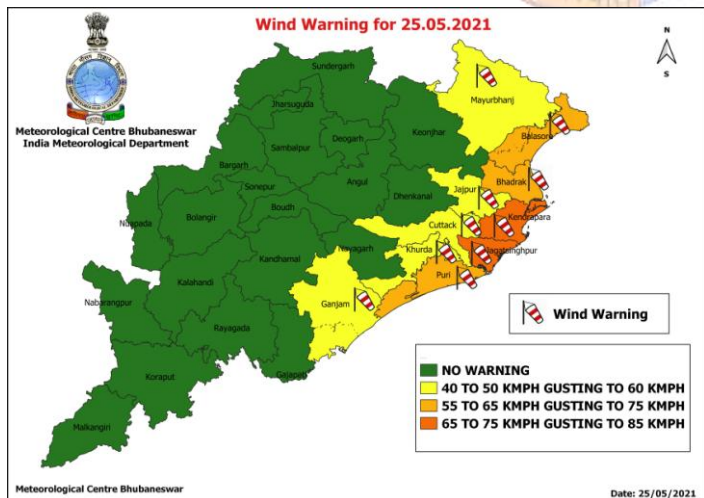
1. CHIEF SECRETARY, GOVT OF ODISHA.
2. PRINCIPAL SECRETARY, REVENUE & DISASTER MANAGEMENT, GOVT. OF ODISHA.
3. PRINCIPAL SECRETARY, DEPT. OF AGRICULTURE, GOVT. OF ODISHA.
4. PRINCIPAL SECRETARY, DEPARTMENT OF WATER RESOURCES, GOVT, OF ODISHA.
5. SPECIAL RELIEF COMMISSIONER (SRC), GOVT. OF ODISHA BHUBANESWAR.
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.

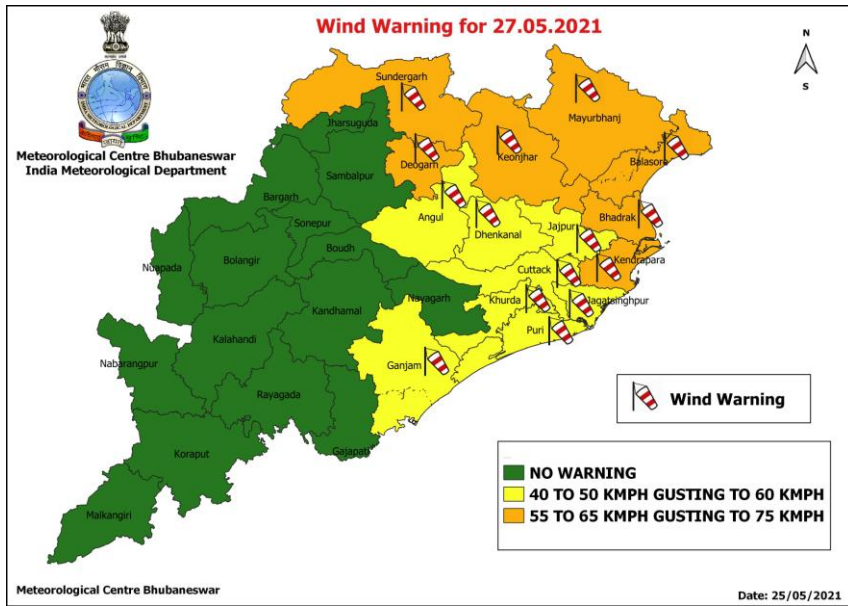


Rainfall Warning Maps for Day-1 to Day-4

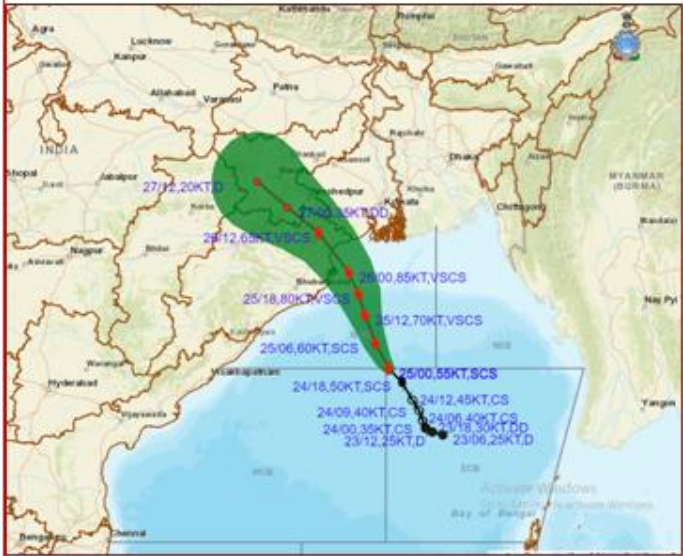


Wind warning for 25th to 27th May, 2021





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF SEVERE CYCLONIC STORM "YAAS" OVER EASTCENTRAL BAY OF BENGAL BASED ON 0000 UTC OF 25th MAY, 2021

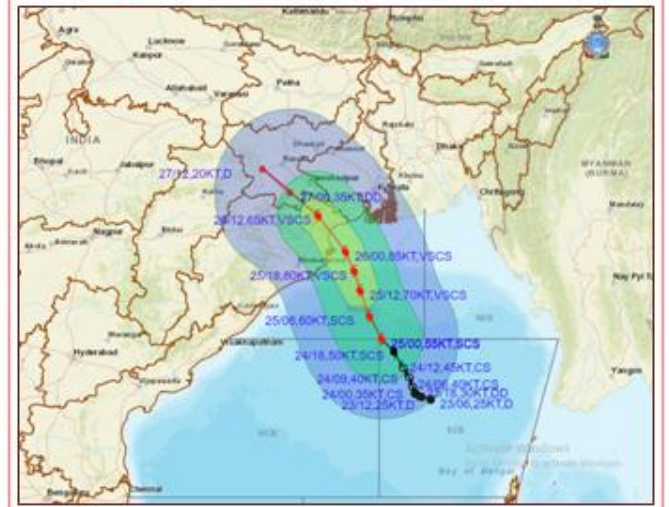


DATE/TIME IN UTC
 IST-UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (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 SEVERE CYCLONIC STORM "YAAS" OVER EASTCENTRAL BAY OF BENGAL BASED ON 0000 UTC OF 25th 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)
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 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

Storm surge information

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

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

