

SPECIAL BULLETIN - 21

DATE: 25.05.2021

TIME: 2315 HRS IST

Sub: The Very Severe Cyclonic Storm 'Yaas' (pronounced as 'Yass') over northwest Bay of Bengal – (Cyclone Warning for Odisha – West Bengal coasts- **Red Message**)

The Very Severe Cyclonic Storm 'Yaas' (pronounced as 'Yass') over northwest & Bay of Bengal moved north-northwestwards with a speed of about 13 kmph during past 6 hours, and lay centred at 2030 hrs IST of today, the 25th May, 2021 over northwest Bay of Bengal near latitude 19.8°N and longitude 87.9°E, about 140 km east-southeast of Paradip (Odisha), 220 km south-southeast of Balasore (Odisha), 210 km south-southeast of Digha (West Bengal) and 210 km south of Sagar Islands (West Bengal).

It is very likely to move north-northwestwards, intensify further and reach near north Odisha coast close to 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 Islands close to north of Dhamra and south of Balasore, during noon of Wednesday, the 26th May as a Very Severe Cyclonic Storm.

The Cyclone is being tracked by Doppler Weather RADAR at Paradip.

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
25.05.21/2030	19.8/87.9	125-135 gusting to 150	VERY SEVERE CYCLONIC STORM
25.05.21/2330	20.2/87.7	135-145 gusting to 160	VERY SEVERE CYCLONIC STORM
26.05.21/0530	20.7/87.3	155-165 gusting to 185	VERY SEVERE CYCLONIC STORM
26.05.21/1130	21.2/86.9	155-165 gusting to 185	VERY SEVERE CYCLONIC STORM
26.05.21/1730	21.7/86.4	115-125 gusting to 140	VERY SEVERE CYCLONIC STORM
27.05.21/0530	22.2/85.8	70-80 gusting to 90	CYCLONIC STORM
27.05.21/1730	22.9/85.0	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, Khurdha & Puri. Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Keonjhar, Dhenkanal and Ganjam.
Day-2: Valid from 0830 Hrs IST of 26.05.21 to 0830 Hrs IST of	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 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. Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the

27.05.21		districts of Anugul, Deogarh, Khurdha, Puri and Sundergarh.
Day-3: 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 125-135 kmph gusting to 150 kmph is prevailing over major parts of north Bay of Bengal & adjoining central Bay of Bengal and would increase gradually becoming 155-165 gusting to 180 kmph from 26th May early morning.
- Squally wind speed reaching 60-70 kmph gusting 80 kmph is prevailing over North Bay of Bengal and along and off Odisha–West Bengal coasts. It would further increase becoming 75-85 kmph gusting to 95 kmph over northwest Bay of Bengal and along & off north Odisha and adjoining West Bengal coasts including Jagatsinghpur, Kendrapara, Puri, Bhadrak, Balasore of Odisha from tonight. Squally wind speed reaching 50-60 kmph gusting 70 kmph would prevail over Ganjam, Khurda, Cuttack, Jajpur & Mayurbhanj Districts of Odisha from 26th Morning.
- 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 district of Odisha from the forenoon of 26th May, 120-130 kmph gusting to 145 kmph over Mayurbhanj district of Odisha from early morning of 26th May. Gale wind speed reaching 80-90 kmph gusting to 100 kmph would prevail over Puri, Cuttack, Khurda, and 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 would prevail over Kendrapara, Bhadrak, Balasore, Keonjhar, Mayurbhanj, Deogarh, Sundergarh Districts of Odisha on 27th.

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

(iii) Sea condition

Sea condition is Phenomenal over northwest & adjoining central Bay of Bengal along & off Odisha–West Bengal coasts and High to very High over remaining parts of westcentral Bay of Bengal coasts till 26th Afternoon.

(iv) Fishermen Warning

The fishermen are advised not to venture into sea along and off Odisha coast and North Bay of Bengal till 27th May, 2021.

(v) Port Warning:

Keep hoisted Great Danger Signal No. 10(GD10) at Paradip and Dhamra Ports of Odisha, Great Danger Signal No. 8(GD8) at Puri Port and 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.
- ❖ 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.

Post landfall outlook for north interior districts of Odisha

After the landfall the system is very likely to move northwestwards across interior districts of Odisha and weaken gradually. It is likely to maintain the intensity of Cyclonic Storm till the early morning of 27th May and thereafter it will weaken gradually into a Depression over Jharkhand.

Damage expected over north interior districts of Odisha:

- Major damage to thatched houses/ huts. Roof tops may blow off. Unattached metal sheets may fly.
- Minor damage to power and communication lines.
- Major damage to Kutcha and some damage to Pucca roads. Flooding of escape routes.
- Breaking of tree branches, uprooting of trees. Damage to banana and papaya trees. Dead limbs blown from trees.
- Major damage to coastal crops.

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%

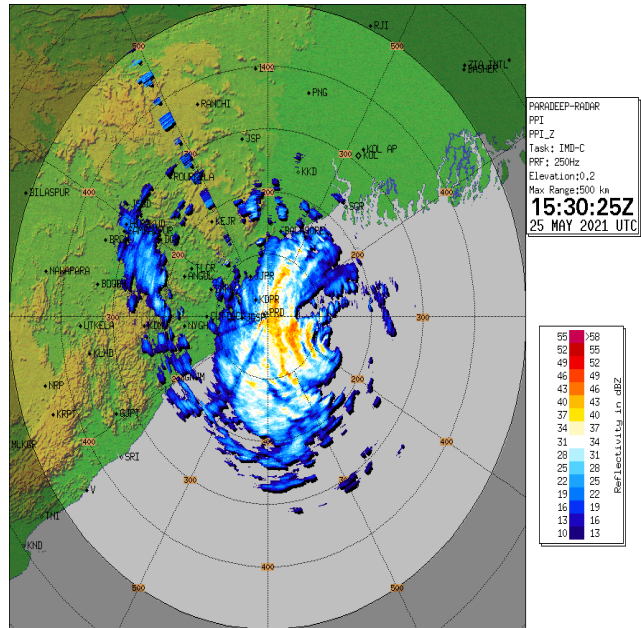
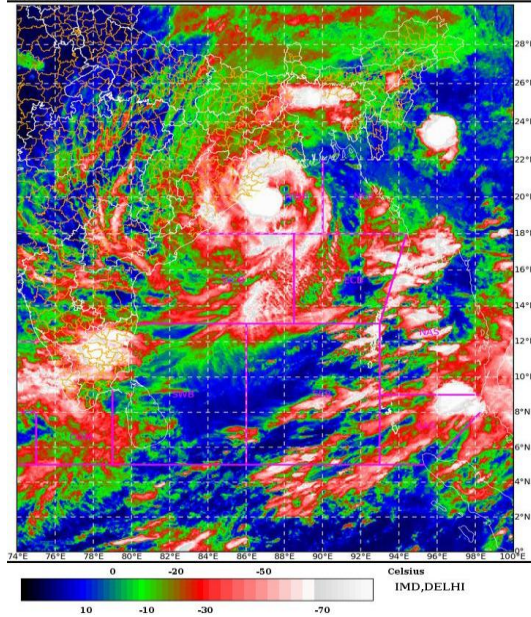
Dr.H.R. Biswas,
Head & Scientist-E,
Met .Centre Bhubaneswar

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.

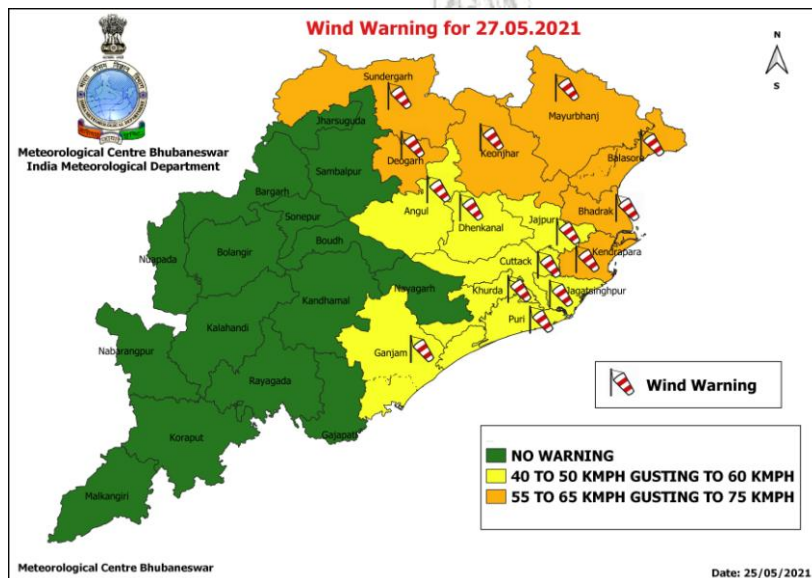
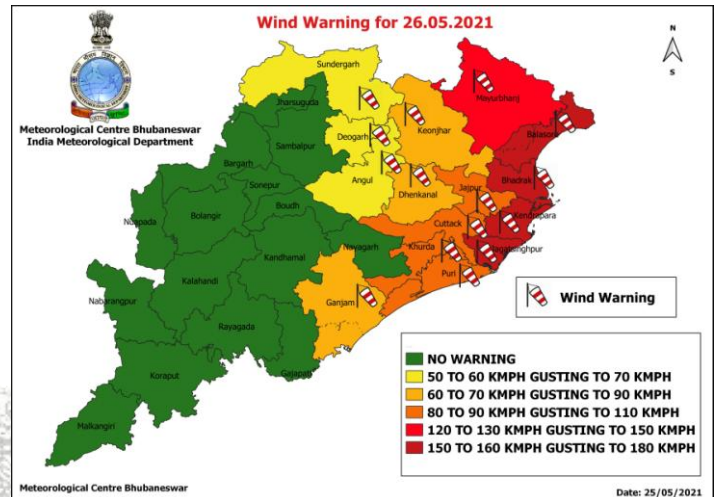
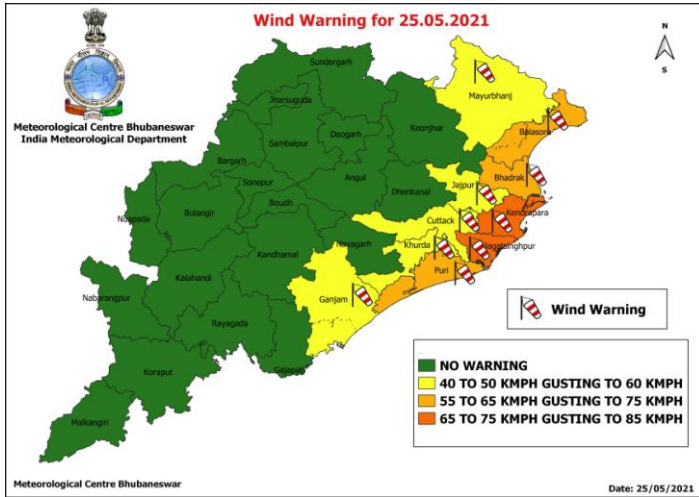
Latest imagery from Doppler Weather RADAR Paradip

SAT : INSAT-3D IMG 25-05-2021/(1530 to 1556) GMT
 IMG_TIR1_TEMP 10.8 um 25-05-2021/(2100 to 2126) IST
 L1C Mercator



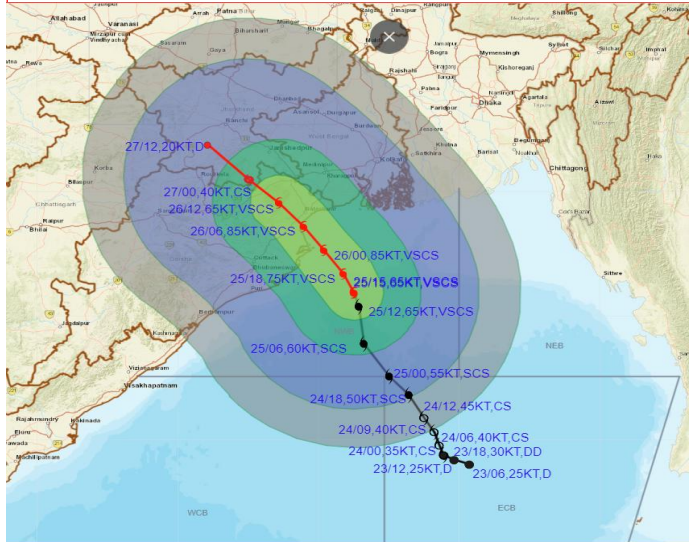


Wind warning for 25th to 27th May, 2021





OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM "YAAS" OVER NORTHWEST BAY OF BENGAL BASED ON 1500 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 (48-63 KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

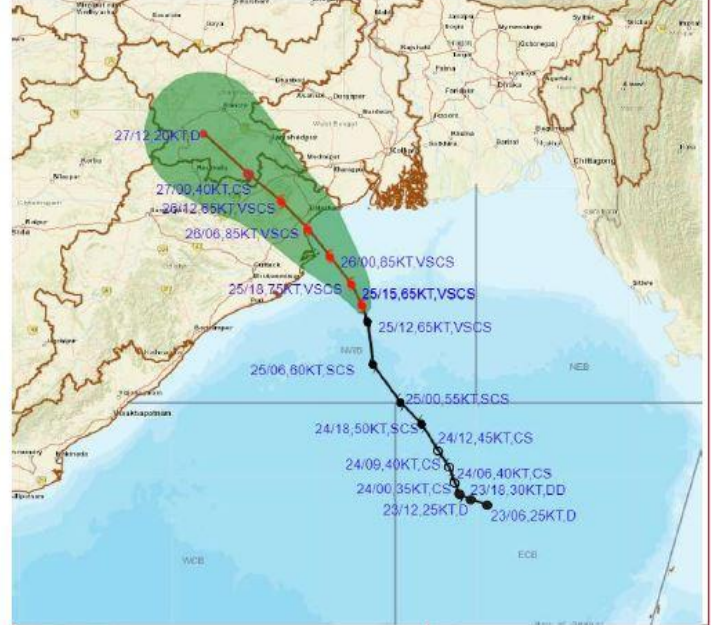
● LESS THAN 34 KT
○ 34-47 KT
○ ≥ 48 KT
— OBSERVED TRACK
— FORECAST TRACK
— CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
■ 28-33 KT (62-61 KMPH)
■ 34-49 KT (62-91 KMPH)
■ 50-63 KT (92-117 KMPH)
■ ≥ 64 KT (≥ 118 KMPH)

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



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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	Kumbhargari	2.2-4.7	Upto 3.53
Bhadrak	Bhadrak	Mohanpur	1.5-3.9	Upto 9.00
Kendrapada	Kendrapada	Tikayat Nagar	0.2-1.7	Upto 5.47
Jagatsinghpur	Jagatsinghpur	Musadia	0.3-0.5	Upto 0.28

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

