

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

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

The **Severe Cyclonic Storm 'Yaas' (pronounced as 'Yass')** over northwest & Bay of Bengal intensified into a Very Severe Cyclonic Storm, moved northnorthwestwards with a speed of about 15 kmph during past 6 hours, and lay centred at 1730 hrs IST of today, the 25<sup>th</sup> May, 2021 over northwest Bay of Bengal near latitude 19.5°N and longitude 88.0°E, about 160 km east-southeast of Paradip (Odisha), 250 km south-southeast of Balasore (Odisha), 240 km south-southeast of Digha (West Bengal) and 230 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 26<sup>th</sup> 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 26<sup>th</sup> 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. <sup>0</sup> N/ long. <sup>0</sup> E	Maximum sustained Category of cyclonic surface disturbance wind speed (Kmph)	
25.05.21/1730	19.5/88.0	115-125 gusting to 140	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:

Odisha: Light to moderate rainfall at many places with heavy to very heavy rainfall and extremely heavy rainfall (≥ 20 cm) in Jagatsinghpur, Kendrapara, Bhadrak, Balasore districts, heavy to very heavy rainfall over Puri, Khurda, Cuttack, Jajpur, Mayurbhanj and heavy over Ganjam, Dhenkanal, Keonjhargarh districts on 25<sup>th</sup>, heavy to very heavy rains at a few places with extremely heavy falls at isolated places in Jagatsinghpur, Kendrapara, Jajpur, Bhadrak, Balasore, Mayurbhanj, Cuttack, Dhenkanal, Keonjhargarh and heavy falls at isolated places in Puri, Khurda, Angul, Deogarh, Sundergarh on 26<sup>th</sup> May and heavy falls at isolated places in north interior Odisha on 27<sup>th</sup> May.

**West Bengal:** Light to moderate rainfall at most places with heavy to very heavy rainfall over Medinipur, South 24 Parganas and heavy rainfall at isolated places in Howrah, Hooghly, Kolkata & north 24 Parganas districts on 25<sup>th</sup>, extremely heavy rainfall at isolated places over Medinipur and heavy to very heavy rainfall at isolated places over Jhargram, Bankura, south 24 Parganas and heavy falls at isolated places over Purulia, Nadia, Murshidabad, east Bardhaman, Howrah, Hooghly, Kolkata, north 24 Parganas, Haldia, Darjeeling, Kalimpong Districts on 26<sup>th</sup> May and heavy rain at isolated places in Jhargram, west Medinipur, Bankura, Purulia, west Bardhaman, Bhirbhum, Malda, Darjeeling, Kalimpong, Jalpaiguri on 27<sup>th</sup> May.

**Jharkhand:** Light to moderate rainfall at most places with heavy rainfall at isolated places on 25<sup>th</sup> May, heavy to very heavy rainfall and **extremely heavy falls** at isolated places on 26<sup>th</sup> & 27<sup>th</sup> May.

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

Assam & Meghalaya: Light to moderate rainfall at most places with heavy rainfall at isolated places on 25<sup>th</sup> & 26<sup>th</sup> May.

#### (ii) Wind warning:

- Gale winds speed reaching 115-125 kmph gusting to 140 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 26<sup>th</sup> May early morning.
- Squally wind speed reaching 60-70 kmph gusting 80 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 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 and east Medinipur, south 24 Parganas, Kolkata districts of West Bengal from tonight. Squally wind speed reaching 50-60 kmph gusting 70 kmph would prevail over Ganjam, Khurda, Cuttack, Jajpur & Mayurbhanj Districts of Odisha and Howrah, Hooghly, north 24 Parganas Districts of West Bengal from 26<sup>th</sup> 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 26<sup>th</sup> May and will extend to Balasore district of Odisha from the forenoon of 26<sup>th</sup> May, 120-130 kmph gusting to 145 kmph over Mayurbhanj district of Odisha from early morning of 26<sup>th</sup> May. Gale wind speed reaching 80-90 kmph gusting to 100 kmph would prevail over Puri, Cuttack, Khurda, Jajpur and Nayagarh 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 during the same period.
- 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
  & Burdhaman districts of Wet Bengal from 26<sup>th</sup> early hours. Squally wind speed reaching 5060 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.
- 40-50 kmph gusting 60 kmph is very likely to prevail over south Jharkhand from 26<sup>th</sup> 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 26<sup>th</sup> evening / night.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph would prevail over Kendrapara, Bhadrak, Balasore, Keonjhargarh, Mayurbhanj, Deogarh, Sundergarh Districts of Odisha and west Medinipur, Jhargram, Bankura, Purulia Districts of West Bengal on 27<sup>th</sup>.

#### (iii) Sea condition

Sea condition is Phenomenal over northwest & adjoining central Bay of Bengal along & off Odisha–West Bengal-Bangladesh coasts and High to very High over remaining parts of westcentral Bay of Bengal and along & off north Andhra Pradesh coasts till 26<sup>th</sup> Afternoon.

#### (iv) Fishermen Warning

• The fishermen are advised not to venture into central Bay of Bengal till 26th May afternoon and into north Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal-Bangladesh coasts during 25th – 26th May.

#### (v) 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 Medinipur, South 24 Parganas, Kendrapara & Jagatsinghpur Districts around the time of landfall.

### <u>Damage Expected for coastal districts of North Odisha, West Bengal and adjoining</u> 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 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

### Post landfall outlook for north interior districts of Odisha and interior districts of Gangetic West Bengal adjoining 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 27<sup>th</sup> May and thereafter it will weaken gradually into a Depression over Jharkhand.

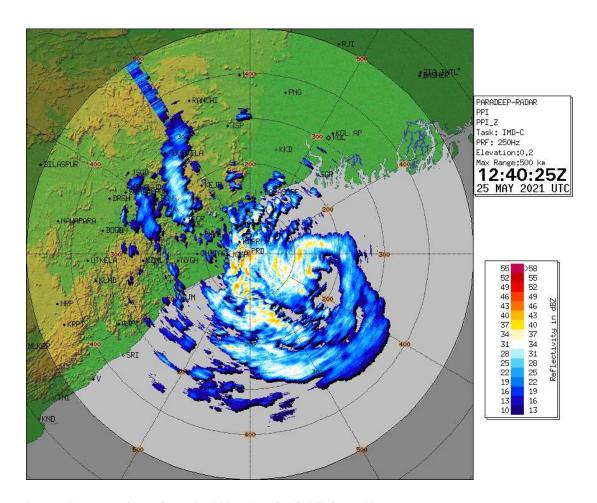
### <u>Damage expected over north interior districts of Odisha and interior districts of Gangetic</u> West Bengal adjoining Odisha:

- ➤ 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.

The next bulletin will be issued at 2330 hrs IST of today, the 25<sup>th</sup> May, 2021.

(Sunitha Devi. S) Scientist-F, RSMC, New Delhi

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

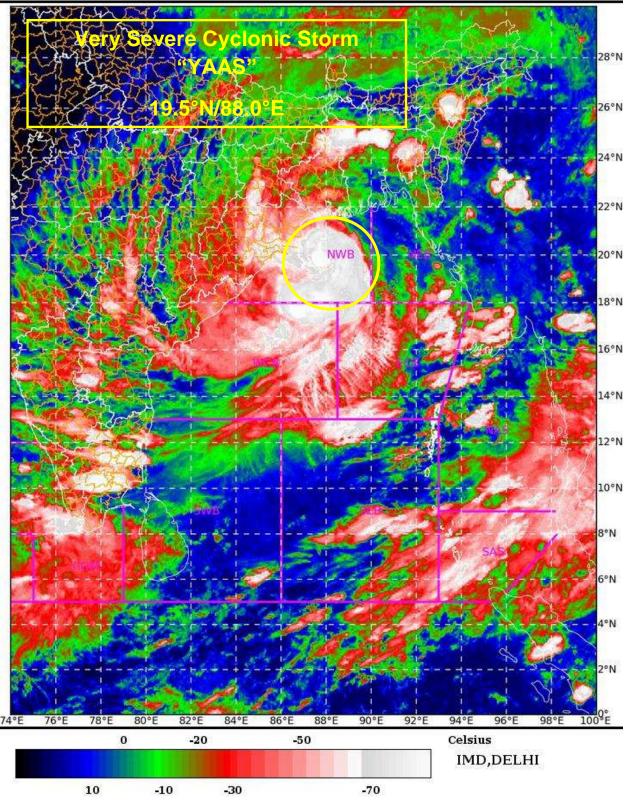


Latest imagery from Doppler Weather RADAR Paradip

SAT : INSAT-3D IMG IMG\_TIR1\_TEMP 10.8 um 25-05-2021/(1300 to 1326) GMT 25-05-2021/(1830 to 1856) IST

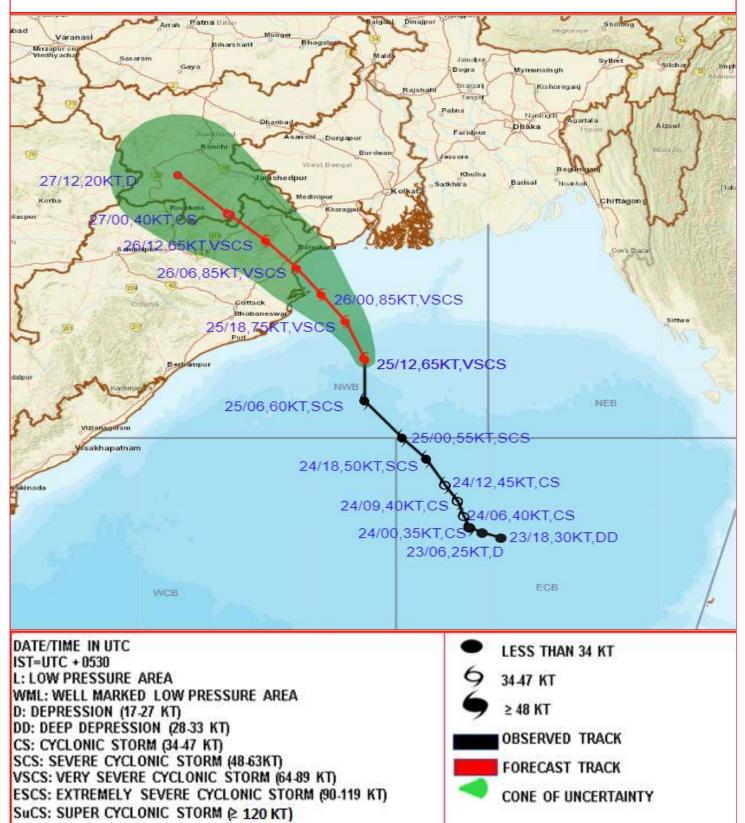


L1C Mercator



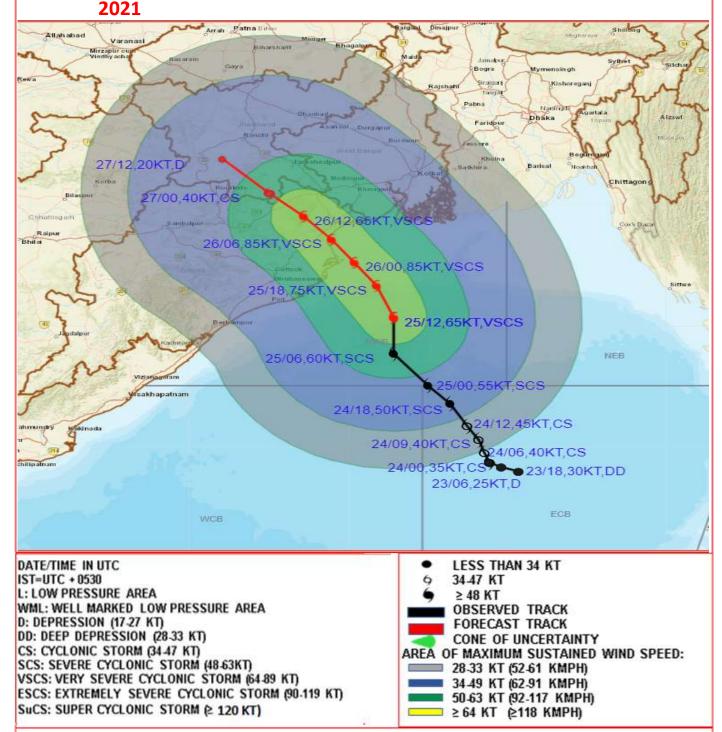


# OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF VERY SEVERE CYCLONIC STORM "YAAS" OVER NORTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 25th MAY, 2021

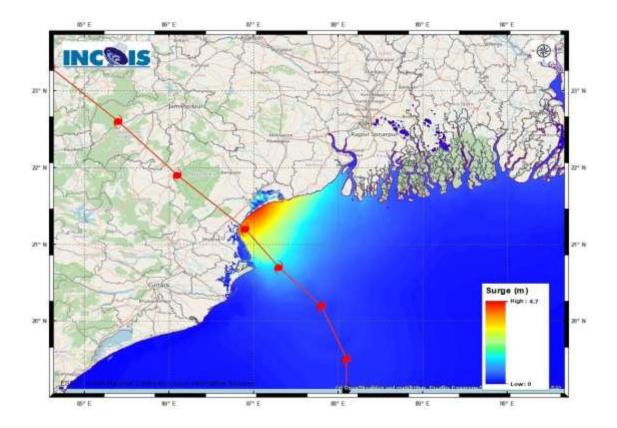




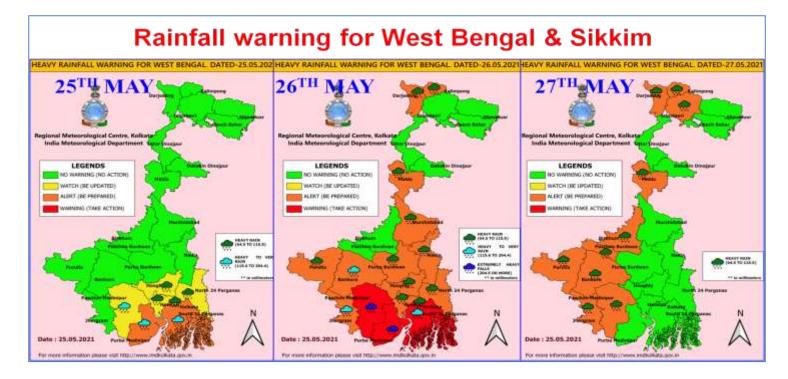
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM "YAAS" OVER NORTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 25<sup>th</sup> MAY,



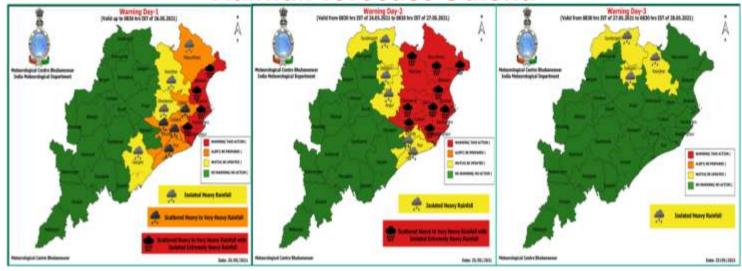
IMPACT OVER THE SEA						
MSW (knot/kmph)	Impact	Action				
28-33 (52-61)	Very rough seas	Total suspension of fishing operations				
34-49 (62-91)	High to very high seas	Total suspension of fishing operations				
50-63 (92-117)	Very high seas	Total suspension of fishing operations				
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations				



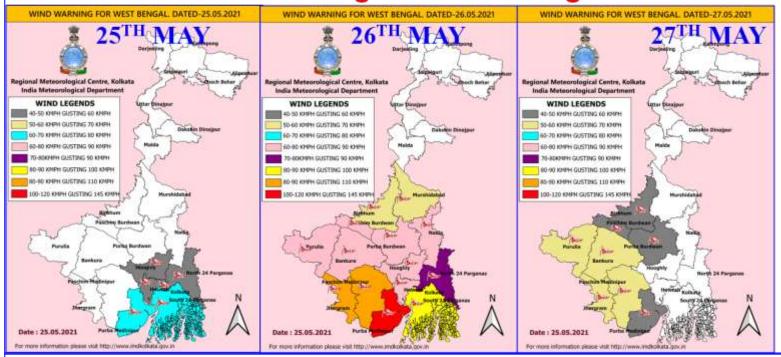
MANDAL/TALUK	DISTRICT	STATE / UNION TERRITO RY	NEAREST PLACEOF HABITATIO N	STORM SURGE (m)	EXPECTED INUNDATION EXTENT (km)
Baleshwar	Baleshwar	Odisha	Kumbhirgari	2.2-4.7	Upto 3.53
Bhadrak	Bhadrak	Odisha	Mohanpur	1.5-3.9	Upto 9.00
Jagatsinghpur	Jagatsinghapur	Odisha	Musadia	0.3-0.5	Upto 0.28
Kendraparha	Kendrapara	Odisha	Tikayat Nagar	0.2-1.7	Upto 5.47
Kanthi	Purba Medinipur	West Bengal	Safar Chata	0.5-2.9	Upto 1.50
Diamond Harbour	South 24 Parganas	West Bengal	Chakloknath	0.2-1.2	Upto 0.78
Basirhat	North 24 Parganas	West Bengal	Amlamethi	0.3-1.0	Upto 0.37
Tamluk	Purba Medinipur	West Bengal	Jamitta	0.3-1.3	Upto 0.42
Uluberiya	Haora	West Bengal	Denanchar OrphuliChar	0.3-0.5	Upto 0.42



### Rainfall forecast Odisha



### Wind warning for West Bengal



## Wind warning for Odisha

