



India Meteorological Department  
(Ministry of Earth Sciences)

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

The **Severe Cyclonic Storm 'Yaas' (pronounced as 'Yass')** over northwest & adjoining west-central Bay of Bengal moved north-northwestwards with a speed of about 15 kmph during past 6 hours, and lay centred at 1430 hrs IST of today, the 25<sup>th</sup> May, 2021 over northwest Bay of Bengal near latitude 19.1°N and longitude 88.1°E, about 200 km southeast of Paradip (Odisha), 290 km south-southeast of Balasore (Odisha), 290 km south-southeast of Digha (West Bengal) and 280 km south of Sagar Islands (West Bengal).

It is very likely to move north-northwestwards, intensify further into a **Very Severe Cyclonic Storm** during next 06 hours. It would continue 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 Island 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**.

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
25.05.21/1430	19.1/88.1	110-120 gusting to 130	Severe Cyclonic Storm
25.05.21/1730	19.5/88.1	125-135 gusting to 150	Very Severe Cyclonic Storm
25.05.21/2330	20.2/87.8	145-155 gusting to 170	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
26.05.21/2330	21.9/86.1	90-100 gusting to 110	Severe Cyclonic Storm
27.05.21/1130	22.6/85.4	55-65 gusting to 75	Deep Depression
27.05.21/2330	23.3/84.6	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 ( $\geq 20$  cm)** in Jagatsinghpur, Kendrapara, Bhadrak, Balasore districts, heavy to very heavy rainfall over Puri, Khurda, Cuttack, Jajpur, Mayurbhanj and heavy over Ganjam, Dhenkanal, Keonjhar 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, Keonjhar 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 110-120 kmph gusting to 130 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 55-65 kmph gusting 75 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 65-75 kmph gusting to 85 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 25<sup>th</sup> May evening. Squally wind speed reaching 40-50 kmph gusting 60 kmph would prevail over Ganjam, Khurda, Cuttack, Jajpur & Mayurbhanj Districts of Odisha and Howrah, Hooghly, north 24 Parganas Districts of West Bengal from 25<sup>th</sup> evening.

- 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
- 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 West Bengal from 26<sup>th</sup> 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.
- 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, Keonjhar, 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 High to Very High over northwest & adjoining central Bay of Bengal. It is very likely to become Very High to Phenomenal over north & adjoining central Bay of Bengal, and along & off north Andhra Pradesh-Odisha–West Bengal-Bangladesh coasts from 25<sup>th</sup> evening to 26<sup>th</sup> May evening.

### **(iv) Fishermen Warning**

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

### **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

**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.

**Damage expected over north interior districts of Odisha and interior districts of Gangetic West Bengal adjoining Odisha:**

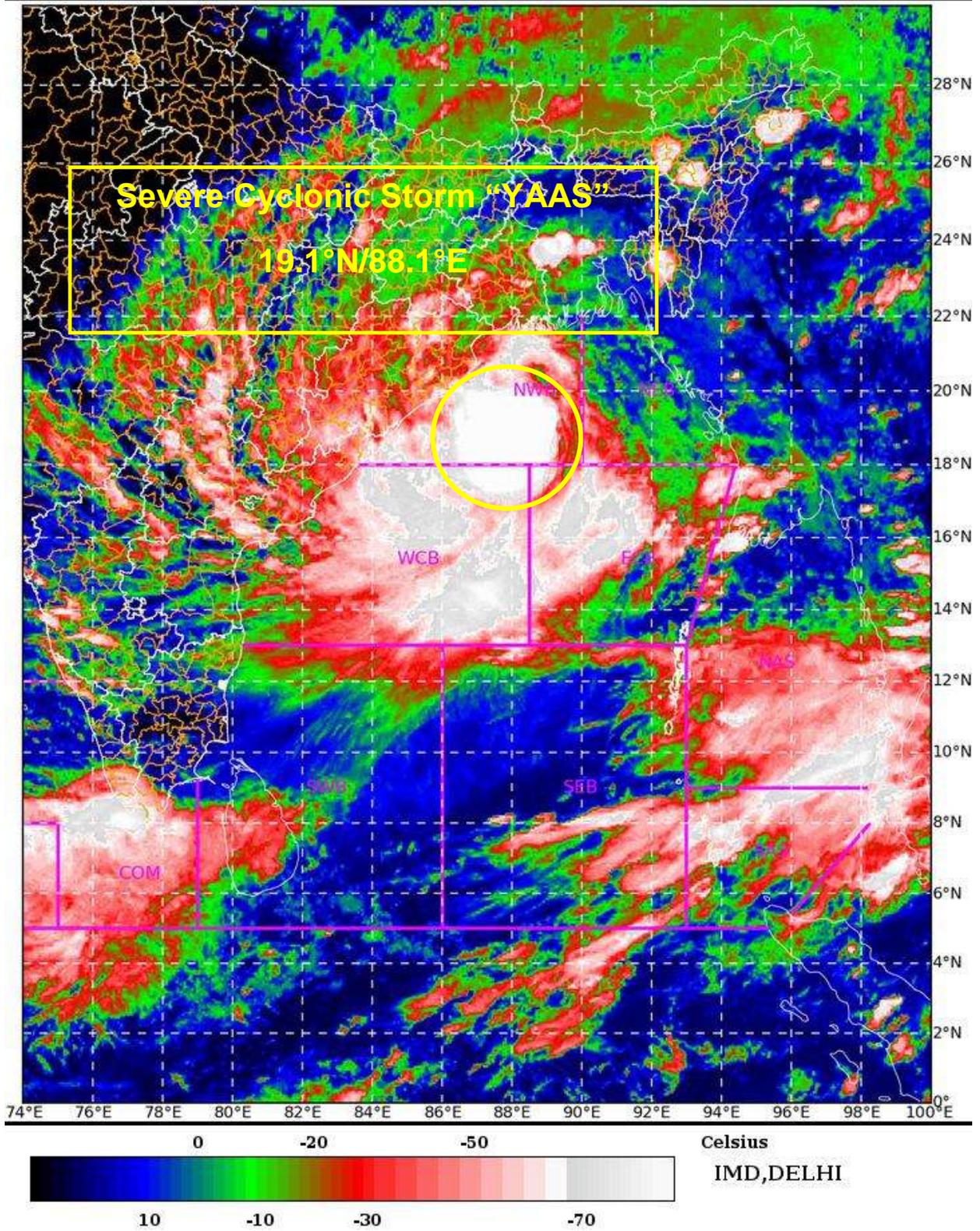
- Major damage to thatched houses/ huts. Roof tops may blow off. Unattached metal sheets may fly.
- Minor damage to power and communication lines.
- Major damage to Kutcha and some damage to Pucca roads. Flooding of escape routes.
- Breaking of tree branches, uprooting of trees. Damage to banana and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

*The next bulletin will be issued at 2030 hrs IST of today, the 25<sup>th</sup> May, 2021.*

**(R. Jenamani)**  
**Scientist-F, RSMC, New Delhi**

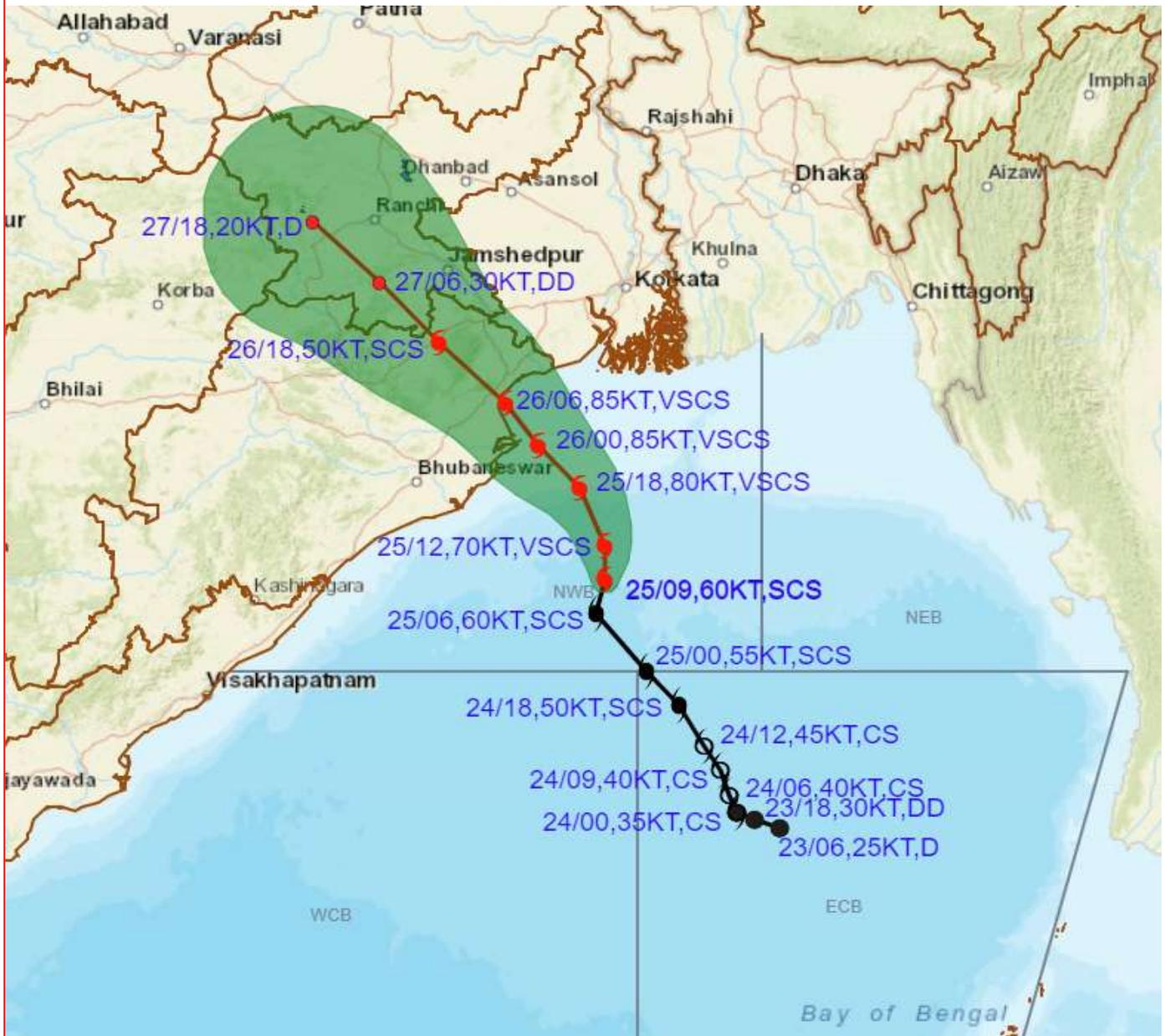
*Copy to: ACWC Kolkata/ Chennai/ CWC Bhubaneswar/CWC Visakhapatnam*

SAT : INSAT-3D IMG      25-05-2021/(0930 to 0956) GMT  
IMG\_TIR1\_TEMP 10.8 um    25-05-2021/(1500 to 1526) IST  
L1C Mercator





**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF SEVERE CYCLONIC STORM "YAAS" OVER NORTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL BASED ON 0900 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 ( $\geq$  120 KT)

● LESS THAN 34 KT

○ 34-47 KT

⦿  $\geq$  48 KT

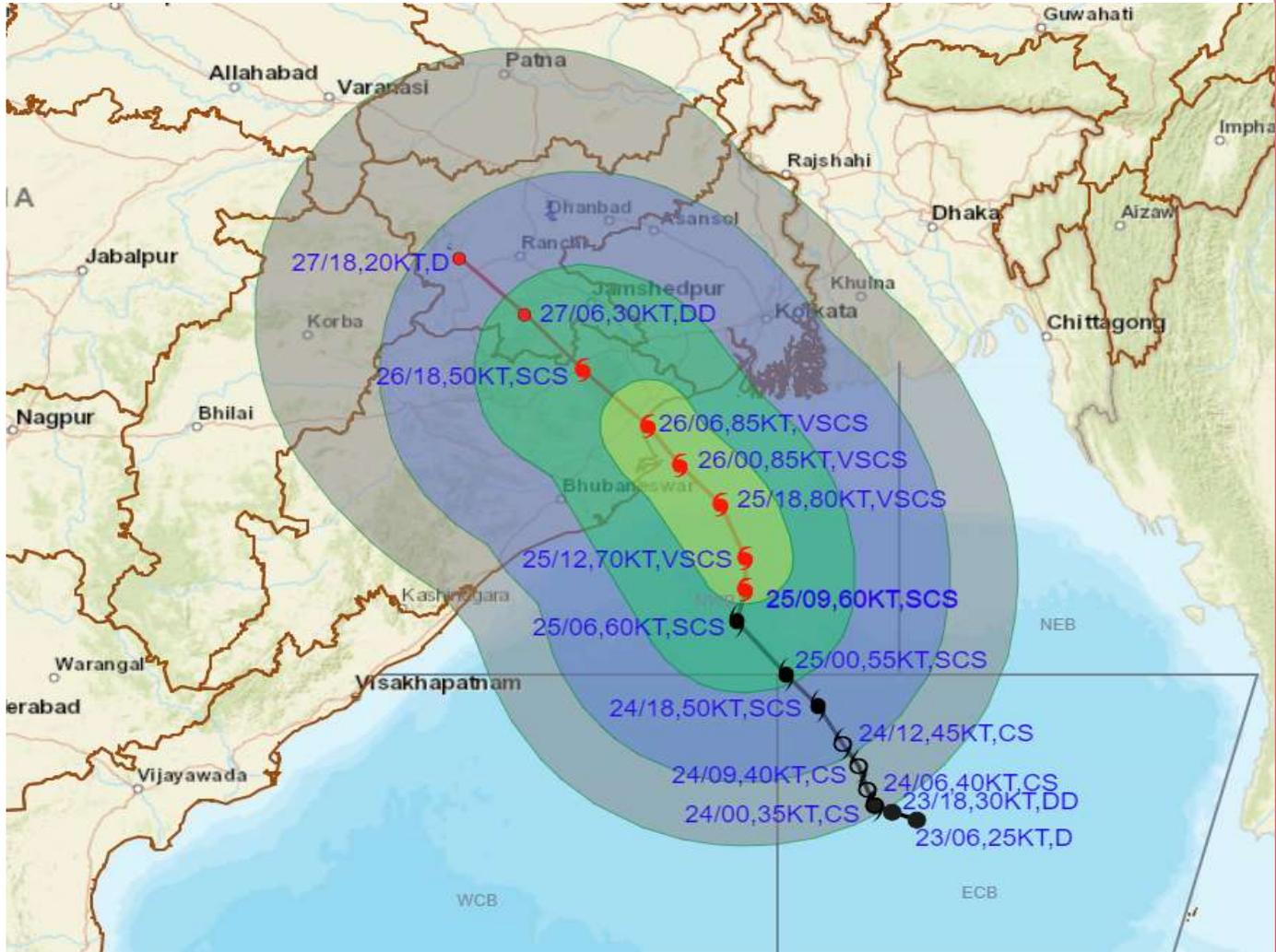
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



# OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF SEVERE CYCLONIC STORM "YAAS" OVER NORTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL BASED ON 0900 UTC OF 25<sup>th</sup> 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)

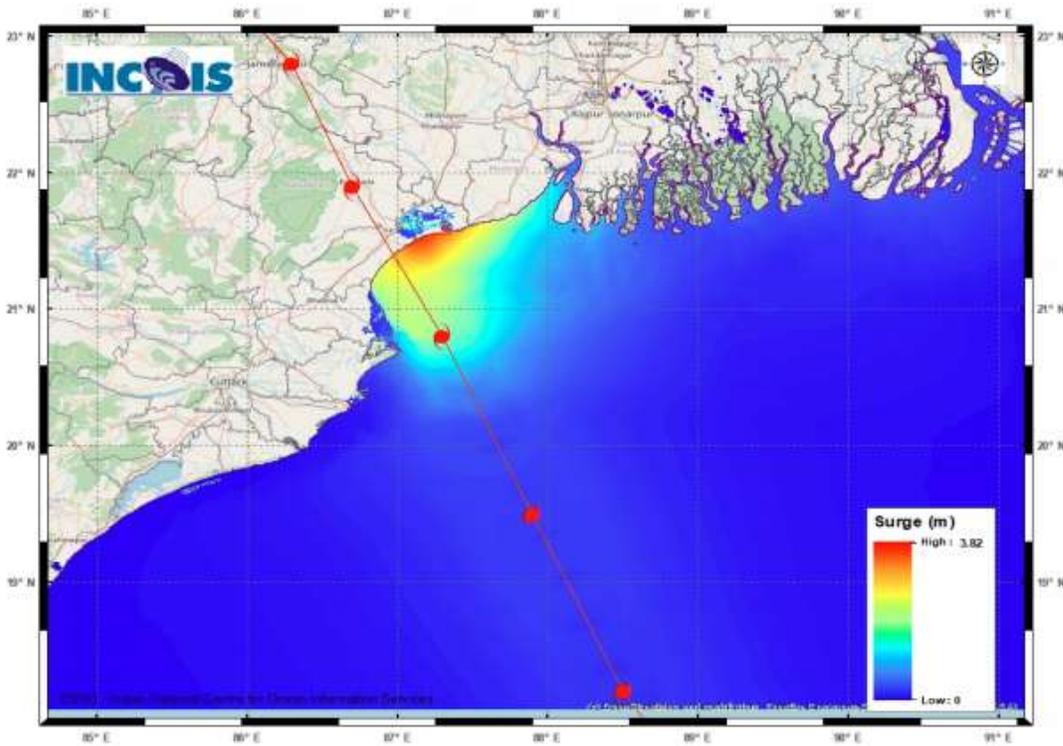
■ 50-63 KT (92-117 KMPH)

■ ≥ 64 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 Forecast around the time of Landfall:



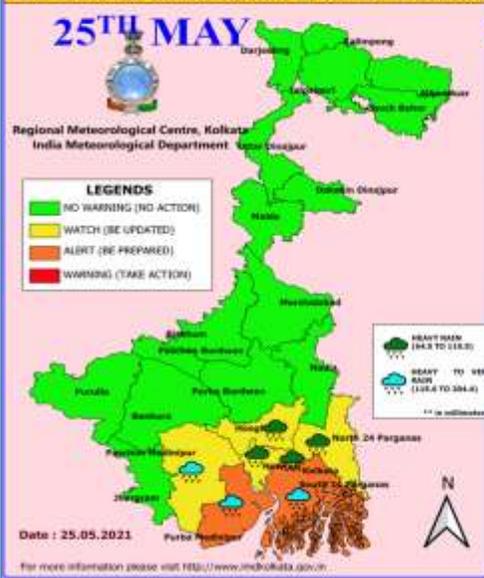
**STORM SURGE HEIGHT INFORMATION:**

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

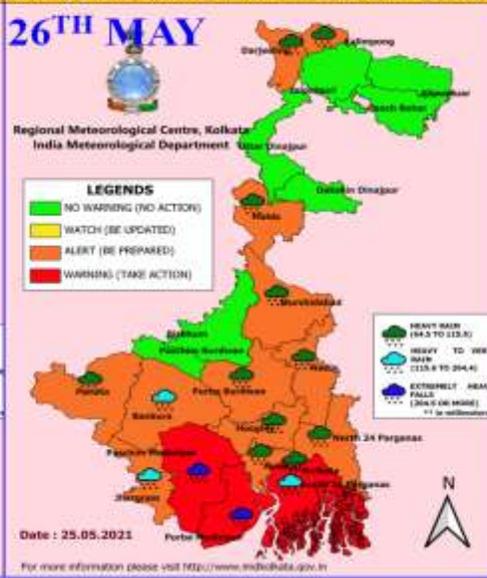
MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Baleshwar	Baleshwar	Odisha	Kumbhigari	2.1-3.8	Upto 2.33
Basirhat	North 24 Parganas	West Bengal	Amlamethi	0.5-0.9	Upto 0.37
Bhadrak	Bhadrak	Odisha	Mohanpur	0.9-2.1	Upto 7.02
Diamond 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

HEAVY RAINFALL WARNING FOR WEST BENGAL, DATED -25.05.2021



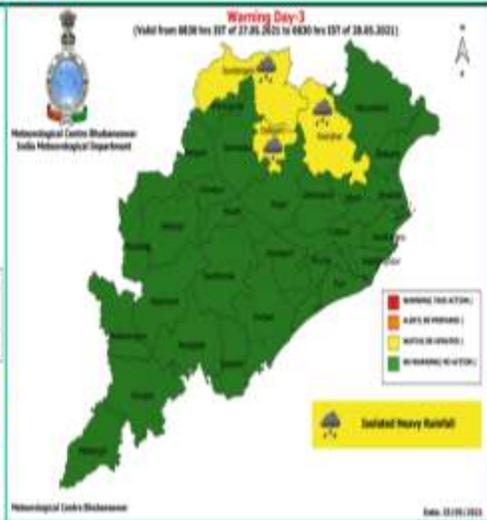
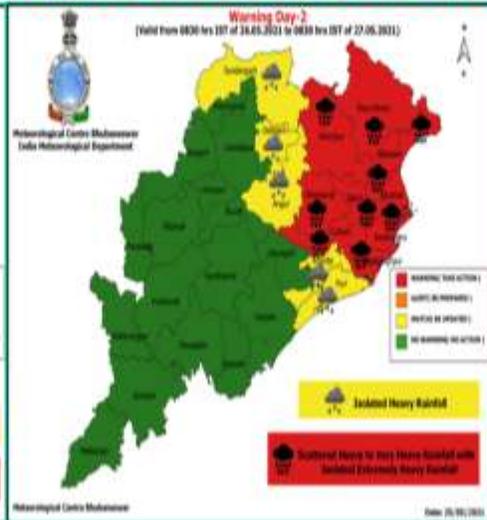
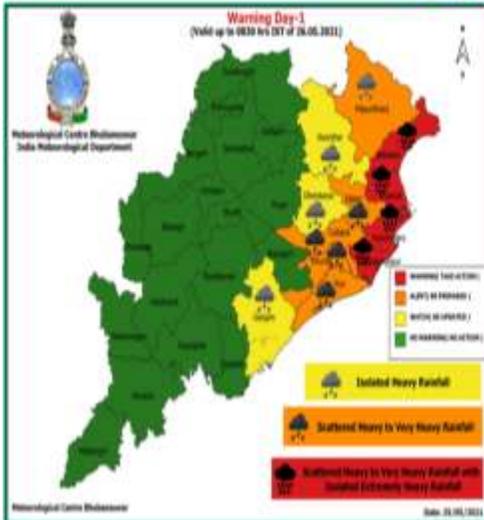
HEAVY RAINFALL WARNING FOR WEST BENGAL, DATED -26.05.2021



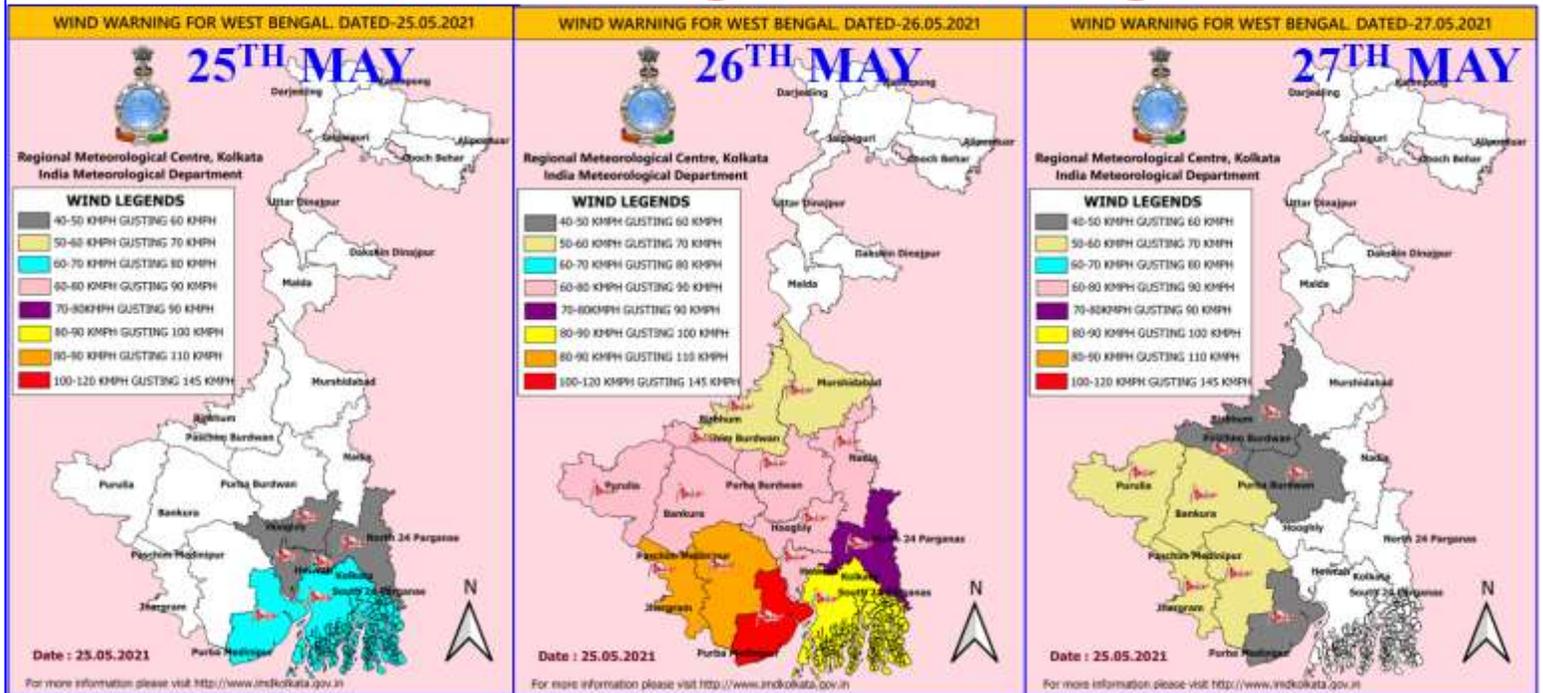
HEAVY RAINFALL WARNING FOR WEST BENGAL, DATED -27.05.2021



# Rainfall forecast Odisha



# Wind warning for West Bengal



# Wind warning for Odisha

