



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

BULLETIN NO. : 21 (BOB/02/2021)

TIME OF ISSUE: 1030 HOURS IST

DATED: 26.05.2021

FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)

**TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)
CONTROL ROOM NDMA (FAX.NO. 26701729)
CABINET SECRETARIAT (FAX.NO.23012284, 23018638)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)
DG COAST GUARD: (FAX NO :011- 23383196)
DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033-22144328)
CHIEF SECRETARY, GOVT. OF ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)
CHIEF SECRETARY, TAMIL NADU (FAX NO. 044-25672304)
CHIEF SECRETARY, PUDUCHERRY (FAX NO. 0413-2337575, 2334145)
CHIEF SECRETARY, SIKKIM (FAX NO. 3592-222851)
CHIEF SECRETARY, JHARKHAND (FAX NO. 0651-2400255)
CHIEF SECRETARY, BIHAR (FAX NO. 0612-22217083/ 2217085)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364-2225978)**

Sub: The Very Severe Cyclonic Storm 'Yaas' (pronounced as 'Yass') over northwest Bay of Bengal, close to north Odisha coast – (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 17 kmph during past 6 hours, and lay centred at 0830 hrs IST of today, the 26th May, 2021 over northwest Bay of Bengal, close to north Odisha coast, near latitude 21.2°N and longitude 87.3°E, about 45 km north-northeast of Dhamra, 40 km south-southeast of Balasore (Odisha) and 60 km southwest of Digha (West Bengal).

As per the latest observations, the landfall process has commenced. The system would cross north Odisha coast to the south of Balasore during next 3 hours as a **Very Severe Cyclonic Storm** with a maximum sustained wind speed of 130 -140 kmph gusting to 155 kmph.

The Cyclone is being tracked by the surface meteorological observatories over Odisha & West Bengal coasts as well as by Doppler Weather RADAR at Paradip.

As per the observations at 0830 hrs IST of today, the 26th May 2021, Balasore reported wind speed of 83 kmph, Chandbali- 56 kmph, Paradip – 44 kmph, Digha – 44 kmph and Bhubaneswar- 33 kmph.

The significant amount of rainfall during past 24 hours ending at 0830 hrs IST of today: Chandbali – 28.8 cm, Kendrapara – 25.1 cm, Jagatsinghpur – 22.6 cm. (**Annexure –I**)

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
26.05.21/0830	21.2/87.1	130-140 gusting to 155	Very Severe Cyclonic Storm
26.05.21/1130	21.4/86.9	120-130 gusting to 145	Very Severe Cyclonic Storm
26.05.21/1730	21.8/86.6	90-100 gusting to 110	Severe Cyclonic Storm
26.05.21/2330	22.3 /86.2	60-70 gusting to 80	Cyclonic Storm
27.05.21/0530	22.9/85.6	45-55 gusting to 65	Depression

Warnings:

(i) Rainfall:

Odisha: Light to moderate rainfall at many places with heavy to very heavy rainfall and **extremely heavy rainfall (≥ 20 cm)** 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 26th May and heavy falls at isolated places in north interior Odisha on 27th May.

West Bengal: Light to moderate rainfall at most places with heavy to very heavy rainfall extremely heavy rainfall at a few 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 26th May and heavy rain at isolated places in Jhargram, west Medinipur, Bankura, Purulia, west Bardhaman, Bhirbhum, Malda, Darjeeling, Kalimpong, Jalpaiguri on 27th May.

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

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

Assam & Meghalaya: Light to moderate rainfall at most places with heavy rainfall at isolated places on 26th May.

(ii) Wind warning:

- Gale wind speed reaching 130-140 kmph gusting 155 kmph is prevailing over Northwest Bay of Bengal and along & off north Odisha coast and adjoining West Bengal coast including Jagatsinghpur, Kendrapara, Bhadrak, Balasore districts of Odisha and east Medinipur and south 24 Parganas districts of West Bengal. Gale wind speed reaching 90-100 kmph gusting 110 kmph is prevailing along & off West Bengal coast including east Medinipur and south 24 Parganas districts of West Bengal.

- Squally wind speed reaching 100-110 kmph gusting 120 kmph would prevail over Ganjam, Khurda, Jajpur & Mayurbhanj Districts of Odisha and Howrah, Hooghly, north 24 Parganas Districts of West Bengal till 26th noon.
- Gale wind speed reaching 60-80 kmph gusting to 90 kmph would prevail over Puri, Cuttack, Khurda, Nayagarh, Dhenkanal and Keonjhar districts of Odisha till 26th noon. The wind speed reaching 55-65 kmph gusting to 75 kmph would prevail over remaining interior districts of north Odisha and Bankura, Purulia, Howrah, Hooghly, Nadia & Burdhaman districts of West Bengal during the same period.
- 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.
- Squally wind speed reaching 40-50 kmph gusting 60 kmph is very likely to prevail over south Jharkhand from 26th noon and increase gradually becoming 60-70 kmph gusting to 80 kmph over southeast Jharkhand and 40-50 kmph gusting to 60 kmph over southwest Jharkhand during 26th night to 27th forenoon.

(iii) Sea condition

- Sea condition would be Phenomenal over northwest Bay of Bengal along & off Odisha– West Bengal-Bangladesh coasts and High to very High over adjoining westcentral Bay of Bengal and rough to very rough along & off north Andhra Pradesh coast till 26th 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 Odisha-West Bengal– Bangladesh coasts till 27th May morning.

(v) Storm surge warning.

Tidal waves of height 2-3 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 27th 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 1430 hrs IST of today, the 26th May, 2021.

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

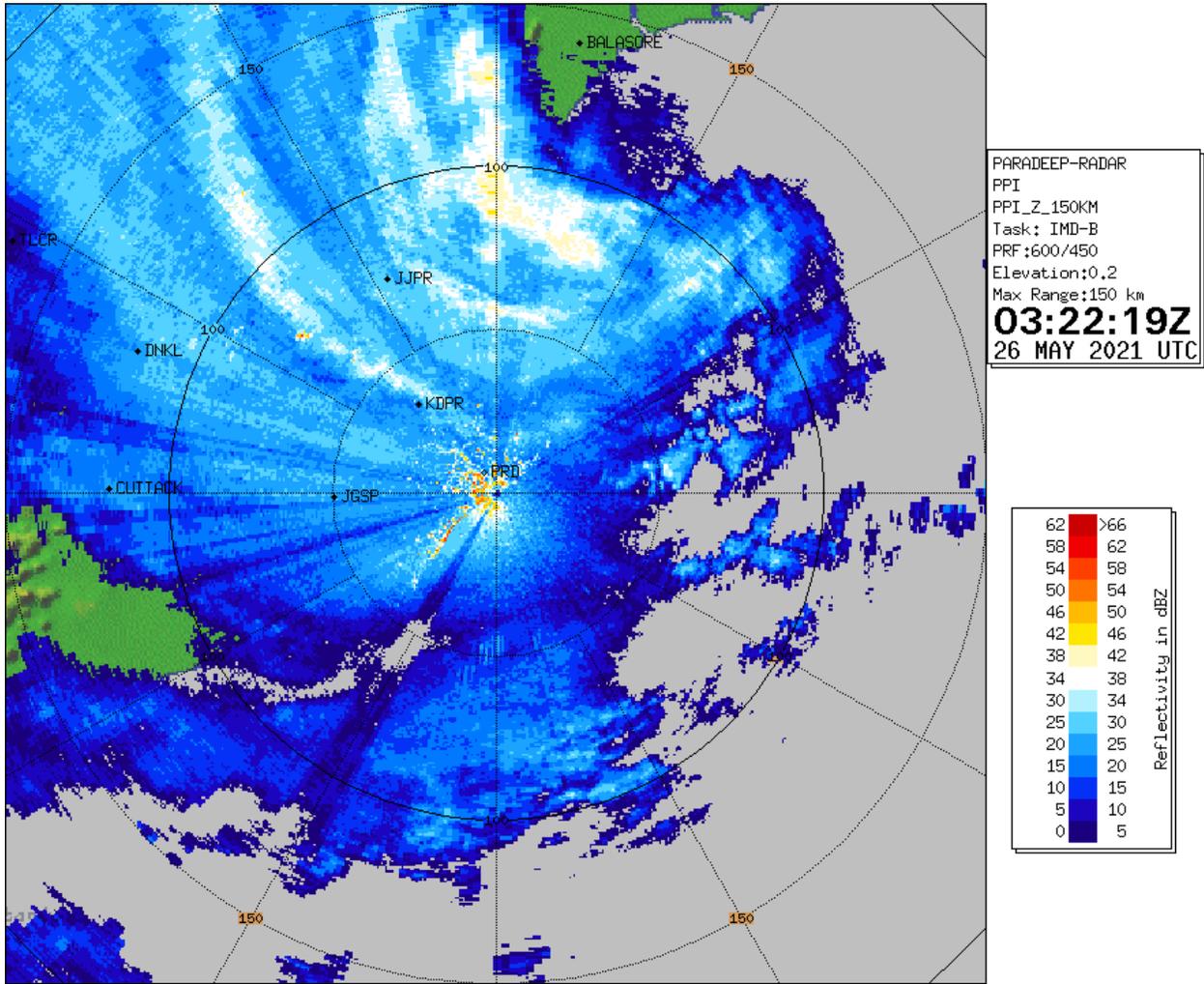
Copy to: ACWC Kolkata/ Chennai/ CWC Bhubaneswar/CWC Visakhapatnam

Annexure I

Realised rainfall (mm) over Odisha during past 24 hours ending at 0830 hrs IST of today the 26th May 2021.

MAJOR RAINFALL IN MM		26 May 2021	
REGION	DISTRICTS	STATION	RAINFALL
NCO	BHADRAK	CHANBALI	288.3
NCO	KENDRAPADA	RAJANIKA *	251.0
NCO	KENDRAPADA	GARADPUR	245.0
NCO	KENDRAPADA	MARSHAGHAI	229.0
NCO	JAGATSINGHPUR	KUJANGA	226.0
NCO	JAGATSINGHPUR	TIRTOL	207.0
NCO	JAJPUR	BINJHARPUR	206.0
NCO	JAGATSINGHPUR	PARADEEP	200.3
NCO	KENDRAPADA	PATAMUNDAI *	195.0
NCO	JAGATSINGHPUR	BALIKUDA	193.0
NCO	KENDRAPADA	DERABIS	185.0
SCO	PURI	ASTARANGA	180.0
NCO	BHADRAK	BHADRAK	167.0
NCO	KENDRAPADA	KENDRAPADA *	164.0
NCO	BALASORE	SORO	160.0
NCO	BHADRAK	DHAMNAGAR	160.0
NCO	JAGATSINGHPUR	JAGATSINGHPUR	150.0
NCO	BHADRAK	TIHIDI	142.0
NCO	JAJPUR	BARI	140.8
NCO	JAJPUR	JAJPUR	135.0
NCO	BALASORE	NILGIRI *	128.0
NCO	BHADRAK	AKHUAPADA	127.6
NCO	BHADRAK	BASUDEVPUR	125.0
NCO	JAJPUR	CHANDIKHOL	121.0
NCO	BHADRAK	BONTH	117.0
NCO	JAJPUR	KOREI	114.4
SCO	PURI	KAKATPUR *	110.1
NCO	JAJPUR	DANAGADI	96.0
NCO	JAJPUR	JENAPUR	93.0
NCO	CUTTACK	NISCHINTAKOILI	89.3
NCO	BALASORE	BHOGORAI	86.3
NCO	CUTTACK	NIALI	84.0
NIO	KEONJHAR	ANANDPUR	80.6
NIO	MAYURBHANJ	KAPTIPADA	78.0
NIO	MAYURBHANJ	JOSHIPUR *	75.1
NCO	BALASORE	JALESWAR	71.0
NCO	CUTTACK	MAHANGA	70.0
NCO	CUTTACK	SALIPUR	70.0
NIO	MAYURBHANJ	CHANDANPUR	69.2
NCO	BALASORE	NH-5,GOVINDPUR	69.0
NIO	MAYURBHANJ	BALIMUNDALI	67.2
NIO	MAYURBHANJ	BETANATI	66.0
NCO	BALASORE	BALASORE	65.0
NIO	KEONJHAR	JHUMPURA *	64.8

Legend: NCO – North Coastal Odisha;
 SCO – south Coastal Odisha
 NIO – North Interior Odisha



Latest imagery from Doppler Weather RADAR Paradip

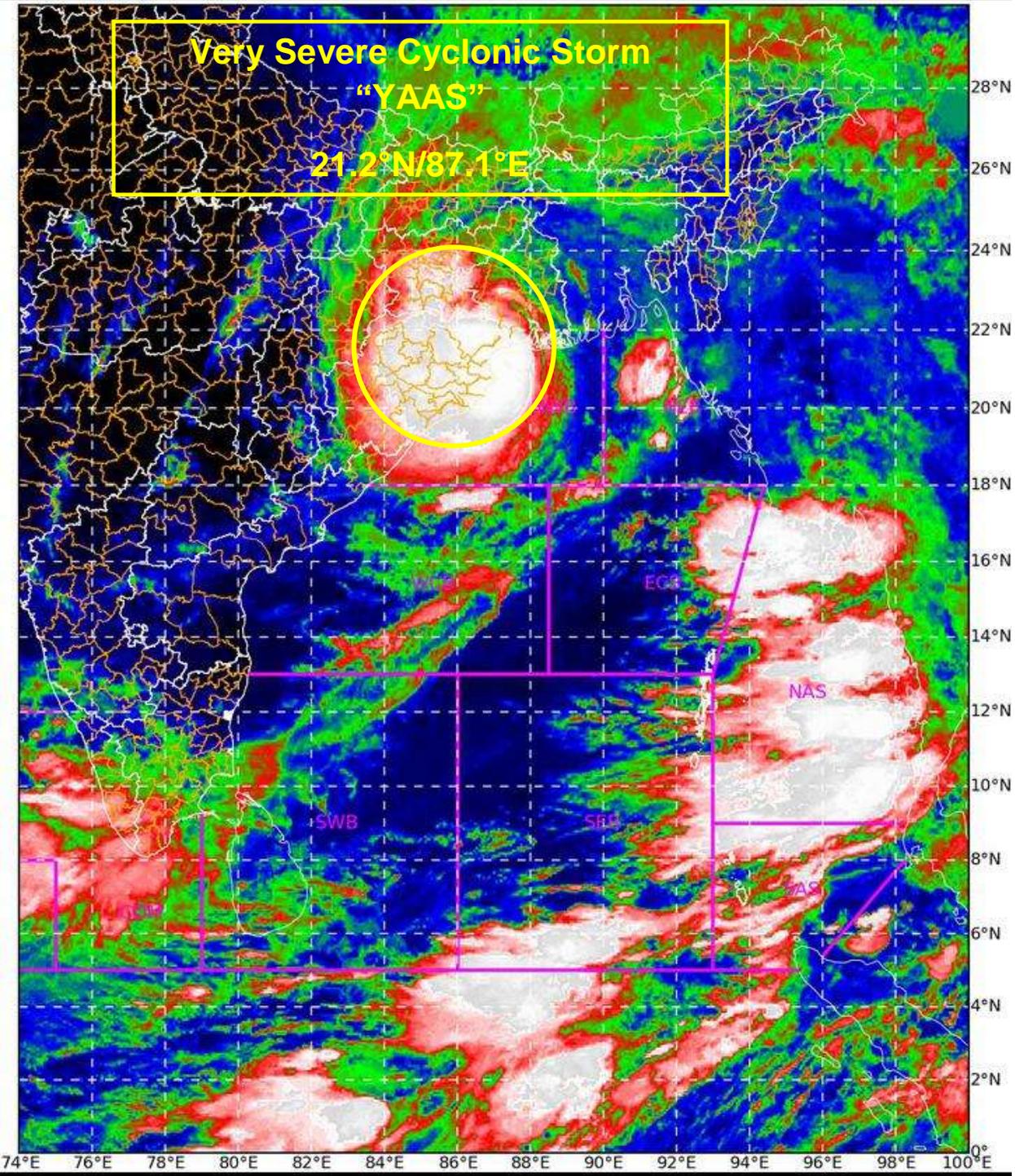
SAT : INSAT-3D IMG

26-05-2021/(0300 to 0326) GMT

IMG_TIR1_TEMP 10.8 um

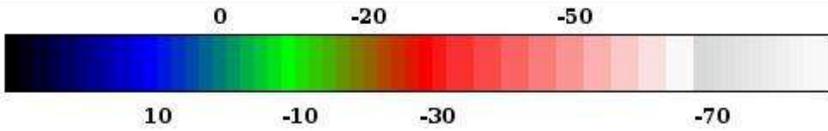
26-05-2021/(0830 to 0856) IST

L1C Mercator



Very Severe Cyclonic Storm
"YAAS"

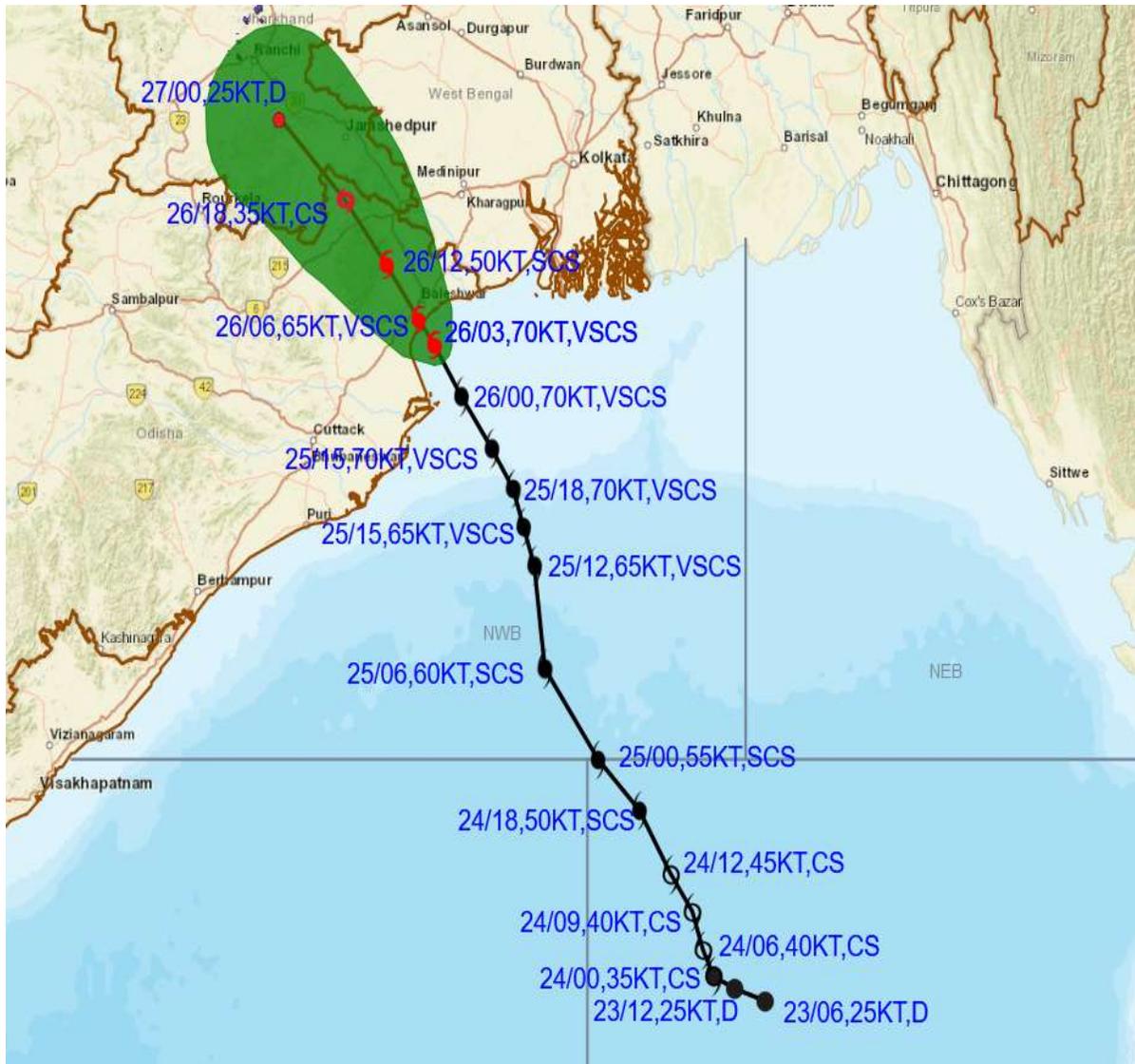
21.2°N/87.1°E



Celsius
IMD, DELHI



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM “YAAS” OVER NORTHWEST BAY OF BENGAL BASED ON 0300 UTC OF 26th MAY, 2021

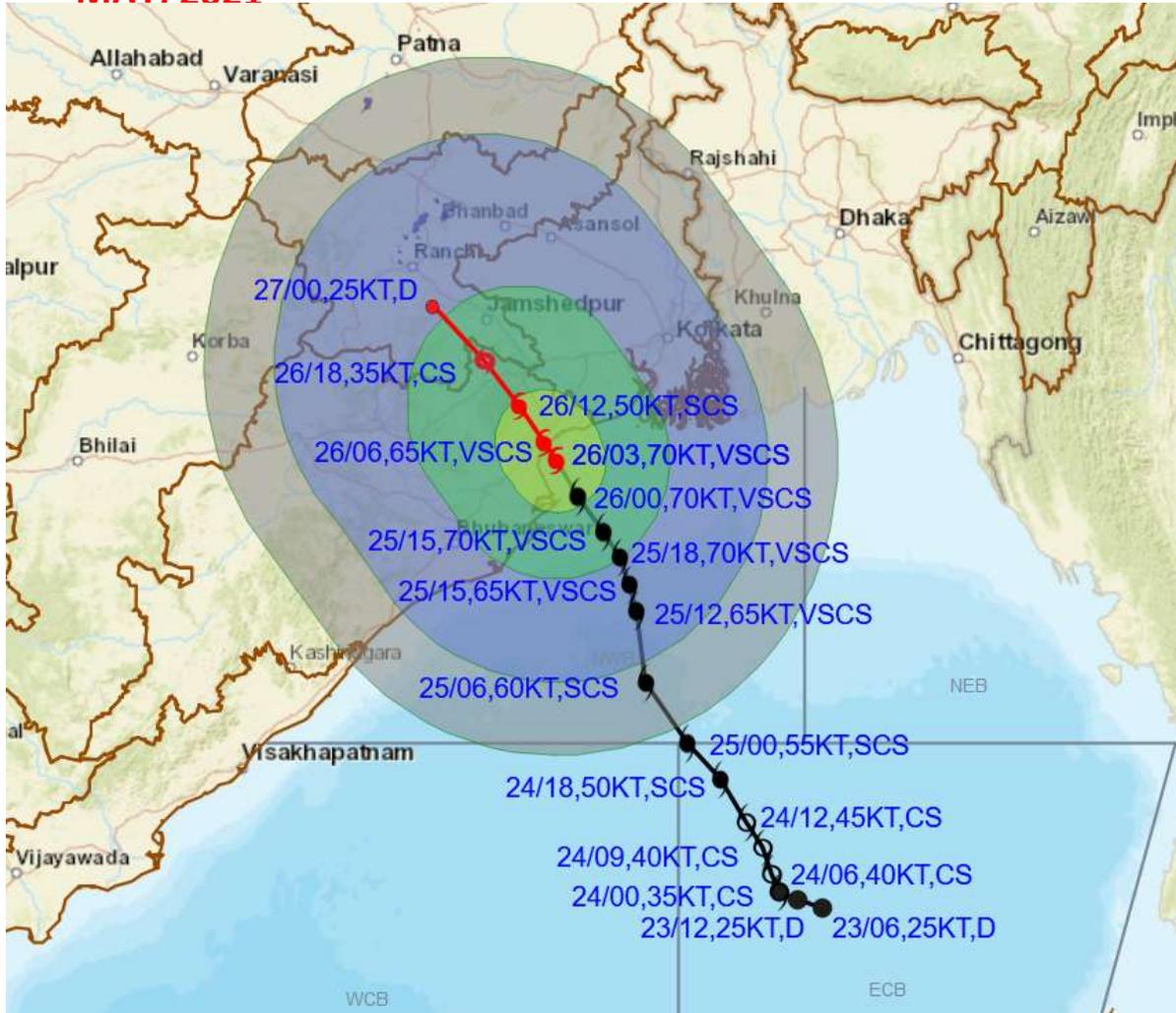


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 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 VERY SEVERE CYCLONIC STORM "YAAS" OVER NORTHWEST BAY OF BENGAL BASED ON 0300 UTC OF 26th MAY, 2021



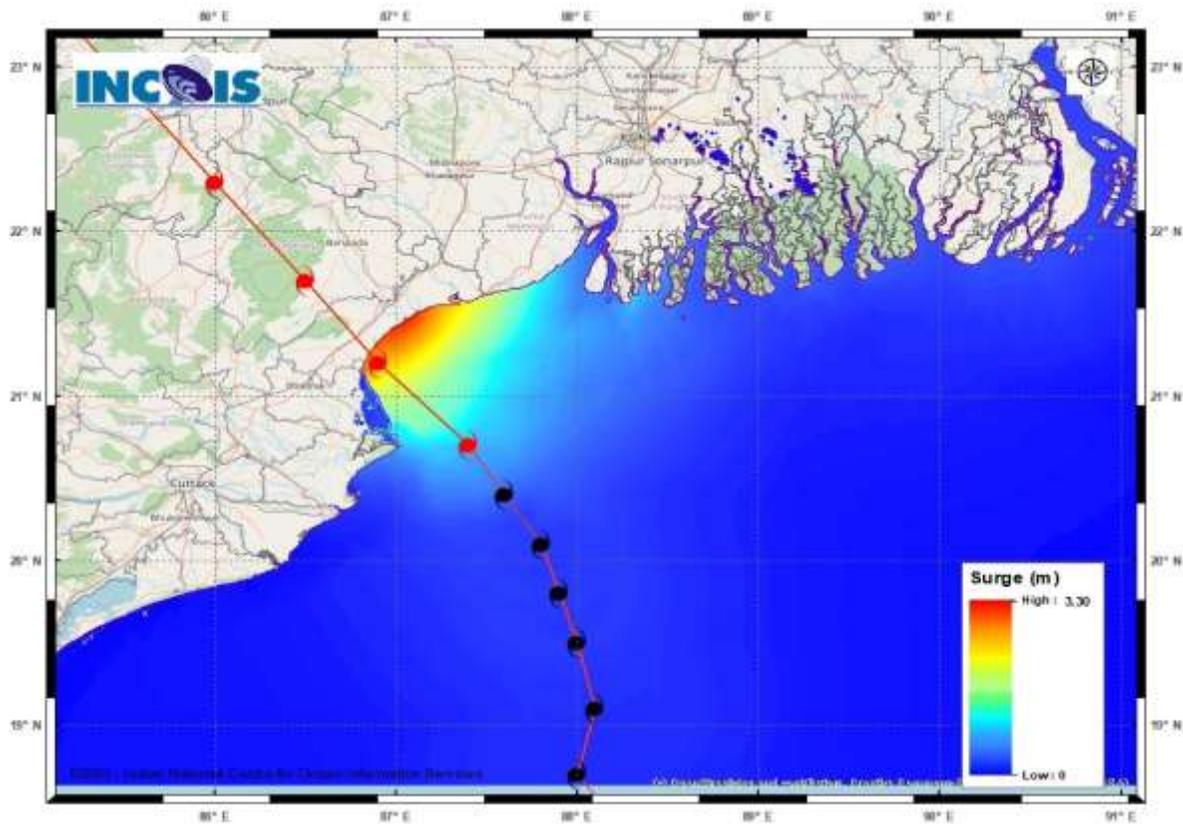
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (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

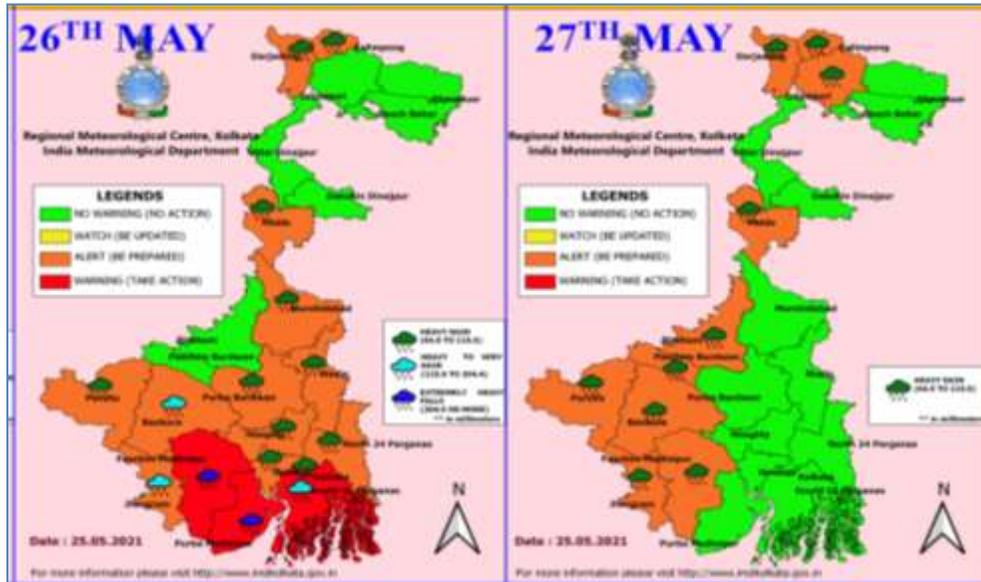
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

Storm Surge Forecast around the time of Landfall:

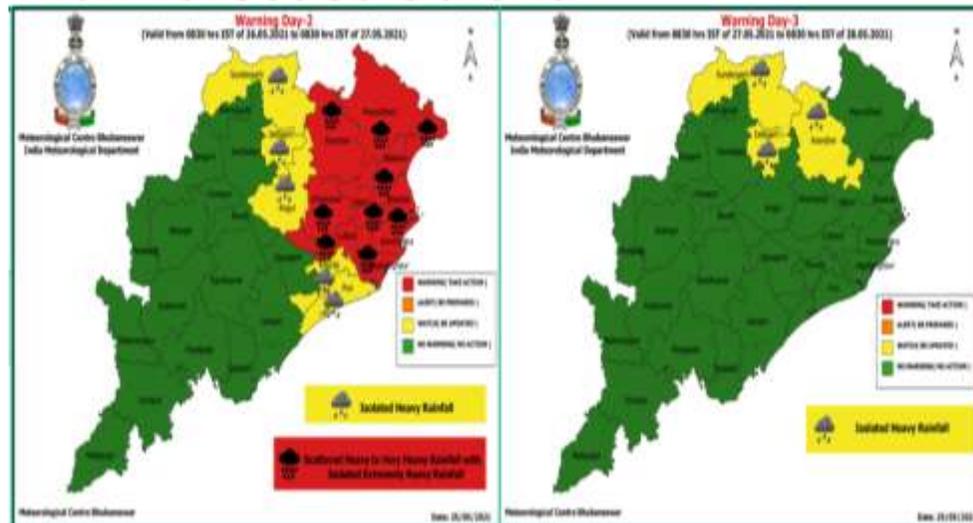


MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Baleshwar	Baleshwar	Odisha	Kumbhargari	1.2-3.3	Upto 2.00
Bhadrak	Bhadrak	Odisha	Mohanpur	1.0-2.9	Upto 7.50
Kendraparha	Kendrapara	Odisha	Tikayat Nagar	0.5-1.4	Upto 2.64
Kanathi	Purba Medinipur	West Bengal	Safar Chata	0.5-2.0	Upto 1.32
Basirhat	North 24 Parganas	West Bengal	Amlamethi	0.5-0.7	Upto 0.26
Diamond Harbour	South 24 Parganas	West Bengal	Chakloknath	0.5-0.6	Upto 0.78
Tamluk	Purba Medinipur	West Bengal	Jamitta	0.5-0.6	Upto 0.35

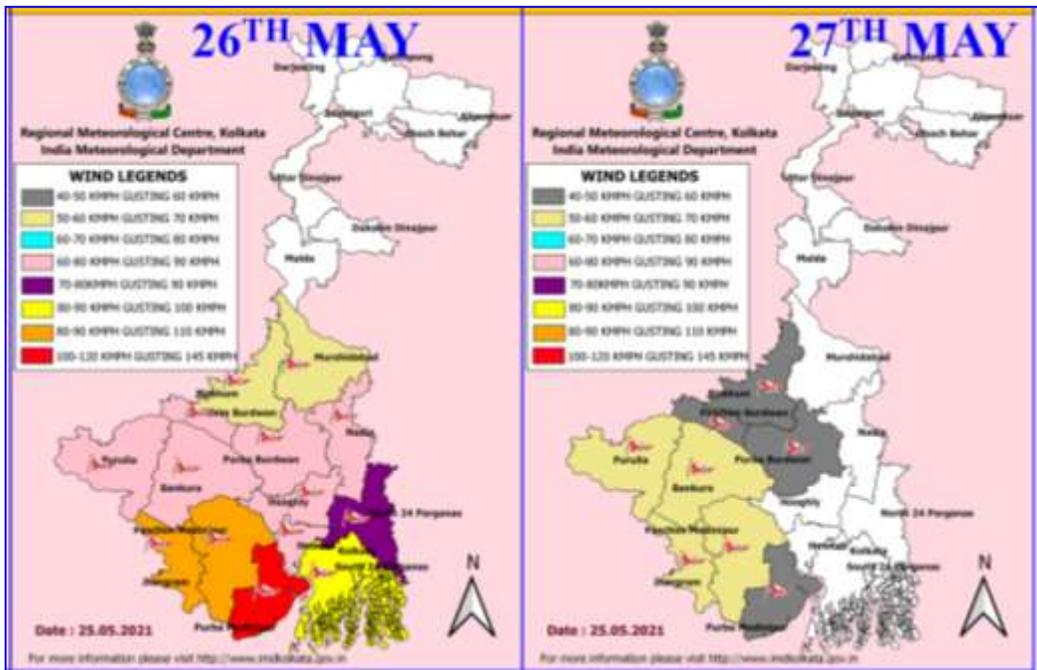
RAINFALL WARNING FOR WEST BENGAL



RAINFALL WARNING FOR ODISHA



WIND WARNING FOR WEST BENGAL



WIND WARNING FOR ODISHA

