



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN NO. 18

FROM: RSMC –TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)  
STORM WARNING CENTRE, BANGKOK (THAILAND)  
STORM WARNING CENTRE, COLOMBO (SRILANKA)  
STORM WARNING CENTRE, DHAKA (BANGLADESH)  
STORM WARNING CENTRE, KARACHI (PAKISTAN)  
METEOROLOGICAL OFFICE, MALE (MALDIVES)  
OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)  
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)  
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)  
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)  
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)  
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 18 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 26.05.2021 BASED ON 0300 UTC OF 26.05.2021.

SUB: THE VERY SEVERE CYCLONIC STORM 'YAAS' (PRONOUNCED AS 'YASS') OVER NORTHWEST BAY OF BENGAL– **(CYCLONE WARNING FOR ODISHA – WEST BENGAL COASTS)**

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 0300 UTC OF TODAY, THE 26<sup>TH</sup> MAY, 2021 OVER NORTHWEST BAY OF BENGAL, CLOSE TO NORTH ODISHA COAST, NEAR LATITUDE 21.2°N AND LONGITUDE 87.3°E, ABOUT 40 KM SOUTH-SOUTHEAST OF BALASORE (42895) AND 60 KM SOUTHWEST OF DIGHA (42901).

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(42976).

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION AT. °N/ LONG. °	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
26.05.21/0300	21.2/87.1	30-140 GUSTING TO 155	VERY SEVERE CYCLONIC STORM
26.05.21/0600	21.4/86.9	20-130 GUSTING TO 140	VERY SEVERE CYCLONIC STORM
26.05.21/1200	21.8/86.6	90-100 GUSTING TO 110	SEVERE CYCLONIC

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

**NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%**

			STORM
26.05.21/1800	22.3 /86.2	60-70 GUSTING TO 80	CYCLONIC STORM

THE MAXIMUM SUSTAINED WIND SPEED IS 70 KNOTS GUSTING TO 80 KNOTS AROUND SYSTEM CENTRE. SEA CONDITION IS VERY HIGH TO PHENOMENAL. THE ESTIMATED CENTRAL PRESSURE IS 974 HPA. MAXIMUM WINDS ARE OBSERVED IN THE NORTHEAST & SOUTHEAST SECTOR WITH LARGE AREAL EXTENSION. GALE WINDS EXCEEDING 50 KNOTS HAVE COMMENCED ALONG & OFF NORTH ODISHA & ADJOINING WEST BENGAL COASTS.

AS PER SATELLITE IMAGERY BASED ON 0300 UTC OF THE 26<sup>TH</sup> MAY, THE REGULAR AND COMPACT OUTER SPIRAL BANDS ARE ENTERING COASTAL ODISHA AND WEST BENGAL LEADING TO RAINFALL OVER THE AREA. THE INTENSITY OF THE SYSTEM IS CHARACTERISED AS T 4.0 AND CDO PATTERN. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIES OVER THE NORTHWEST AND BETWEEN LATITUDE 18.5° N TO 22.0° N AND LONG 85.0° E TO 88.5° E. MINIMUM CLOUD TOP TEMPERATURE IS 93°C.

#### REMARKS:

THE TROPICAL CYCLONE HEAT POTENTIAL (TCHP) OVER NORTHWEST BAY OF BENGAL ALONG & OFF NORTH ODISHA-WEST BENGAL COASTS IS ABOUT 90-110 KJ/CM<sup>2</sup>. SEA SURFACE TEMPERATURE (SST) IS AROUND 30-31°C OVER MAJOR PARTS OF BOB.

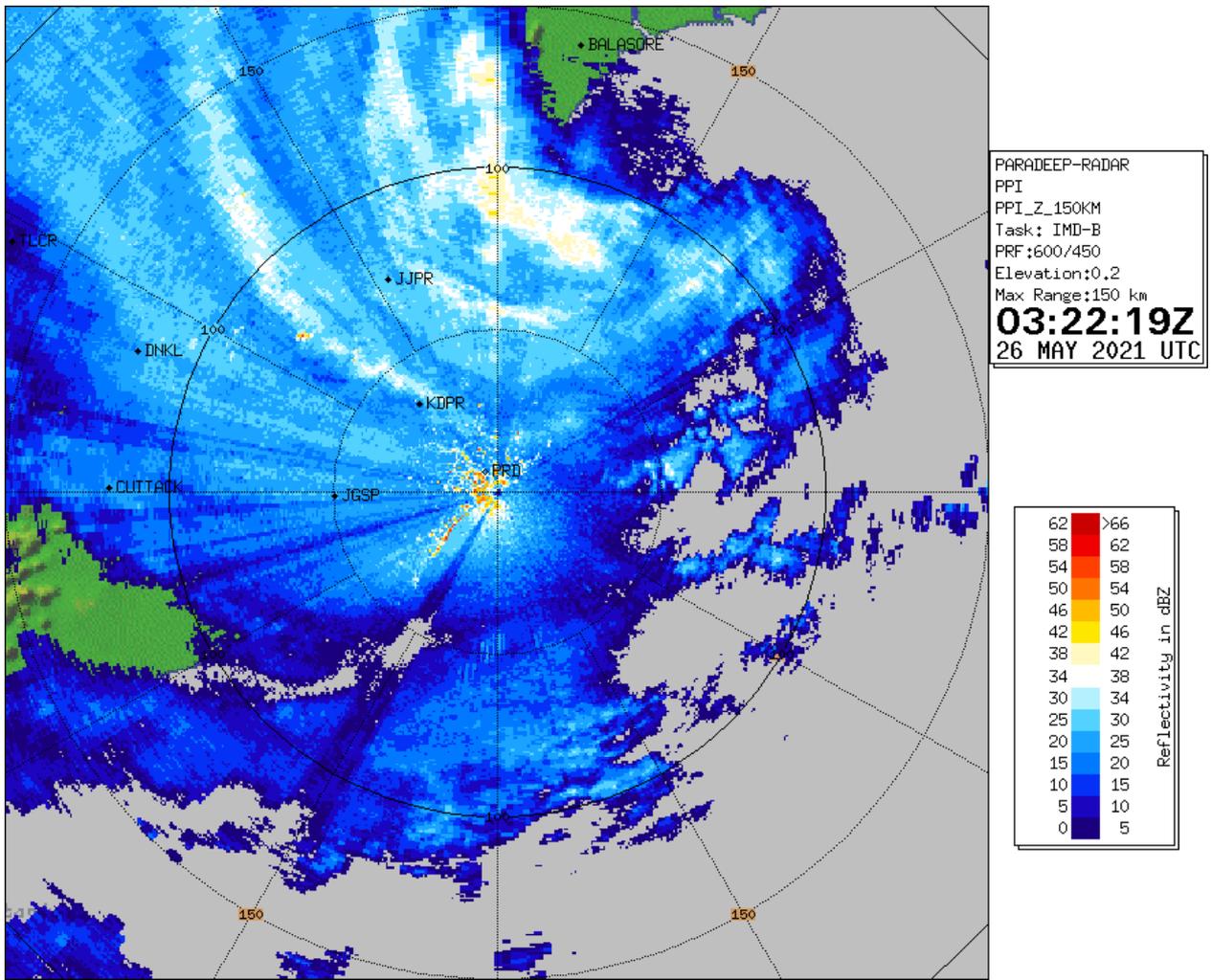
POSITIVE LOW LEVEL VORTICITY IS ABOUT 250 X10<sup>-6</sup> S<sup>-1</sup> OVER THE SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS ABOUT 20 X 10<sup>-5</sup> S<sup>-1</sup> LIES SOUTHWEST OF THE CENTER OF THE SYSTEM CENTRE. THE POSITIVE UPPER LEVEL DIVERGENCE IS 30x 10<sup>-5</sup> S<sup>-1</sup> LIES WEST OF THE SYSTEM CENTRE. MODERATE TO HIGH VERTICAL WIND SHEAR (VWS) (20-25 KTS) IS PREVAILING OVER THE SYSTEM CENTRE. THE SYSTEM IS MOVING NORTH-NORTHWESTWARDS ALONG THE WESTERN PERIPHERY OF THE SUB TROPICAL RIDGE TO THE NORTHEAST OF SYSTEM CENTRE THE SYSTEM WILL MAKE LANDFALL CLOSE TO NORTH OF DHAMRA AND SOUTH OF BALASORE AROUND NOON (0300-0600 UTC OF 26<sup>TH</sup> MAY). AFTER LANDFALL, MOST OF THE NUMERICAL MODELS ARE INDICATING ITS NORTHWESTWARD MOVEMENT AND THEN THE SYSTEM WILL WEAKEN GRADUALLY WHILE MOVING NORTHWESTWARDS ACROSS NORTH ODISHA TOWARDS JHARKHAND.

(RK JENAMANI)  
SCIENTIST-F RSMC NEWDELHI

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Latest imagery from Doppler Weather RADAR Paradip

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

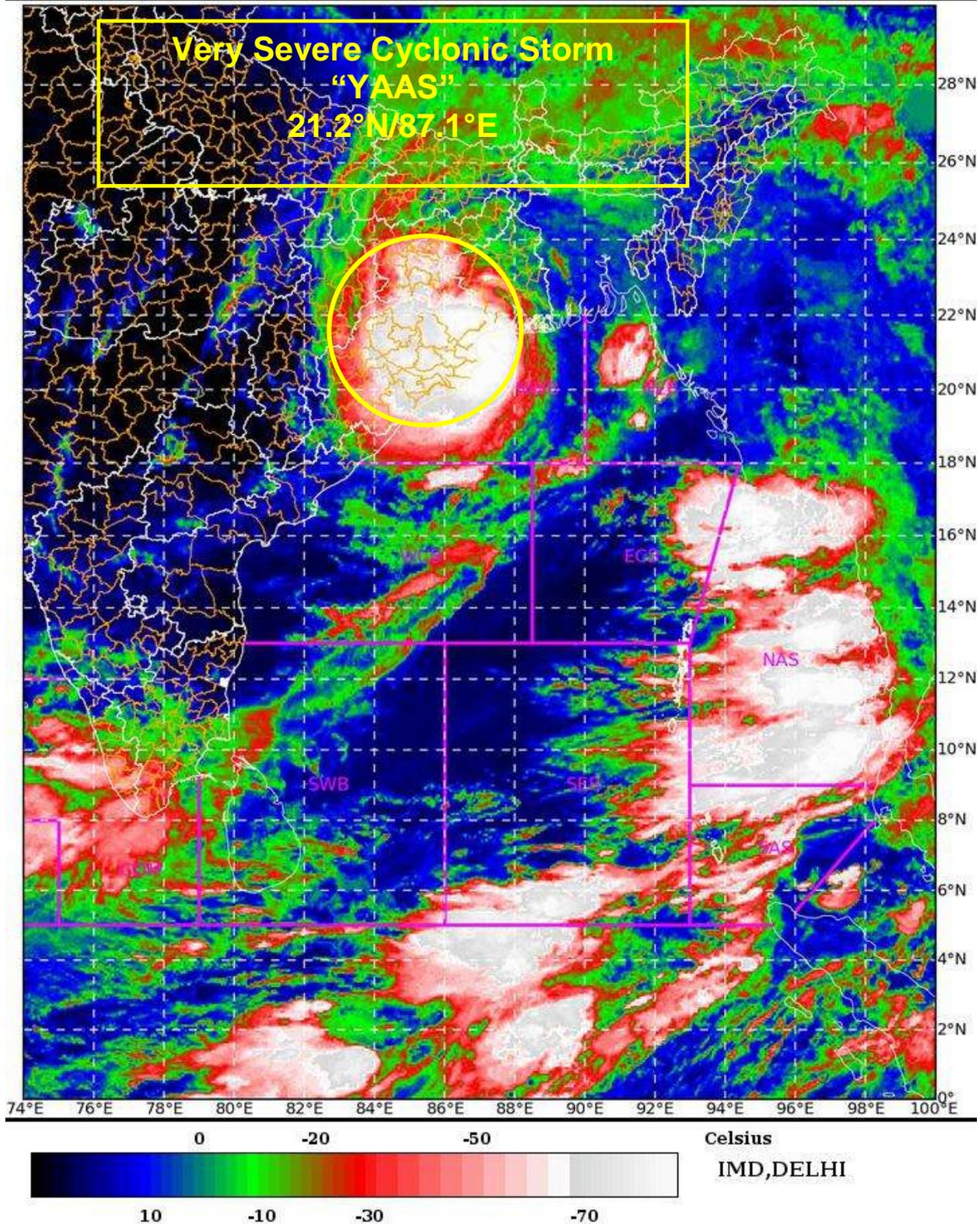
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SAT : INSAT-3D IMG 26-05-2021/(0300 to 0326) GMT

IMG\_TIR1\_TEMP 10.8 um 26-05-2021/(0830 to 0856) IST



L1C Mercator

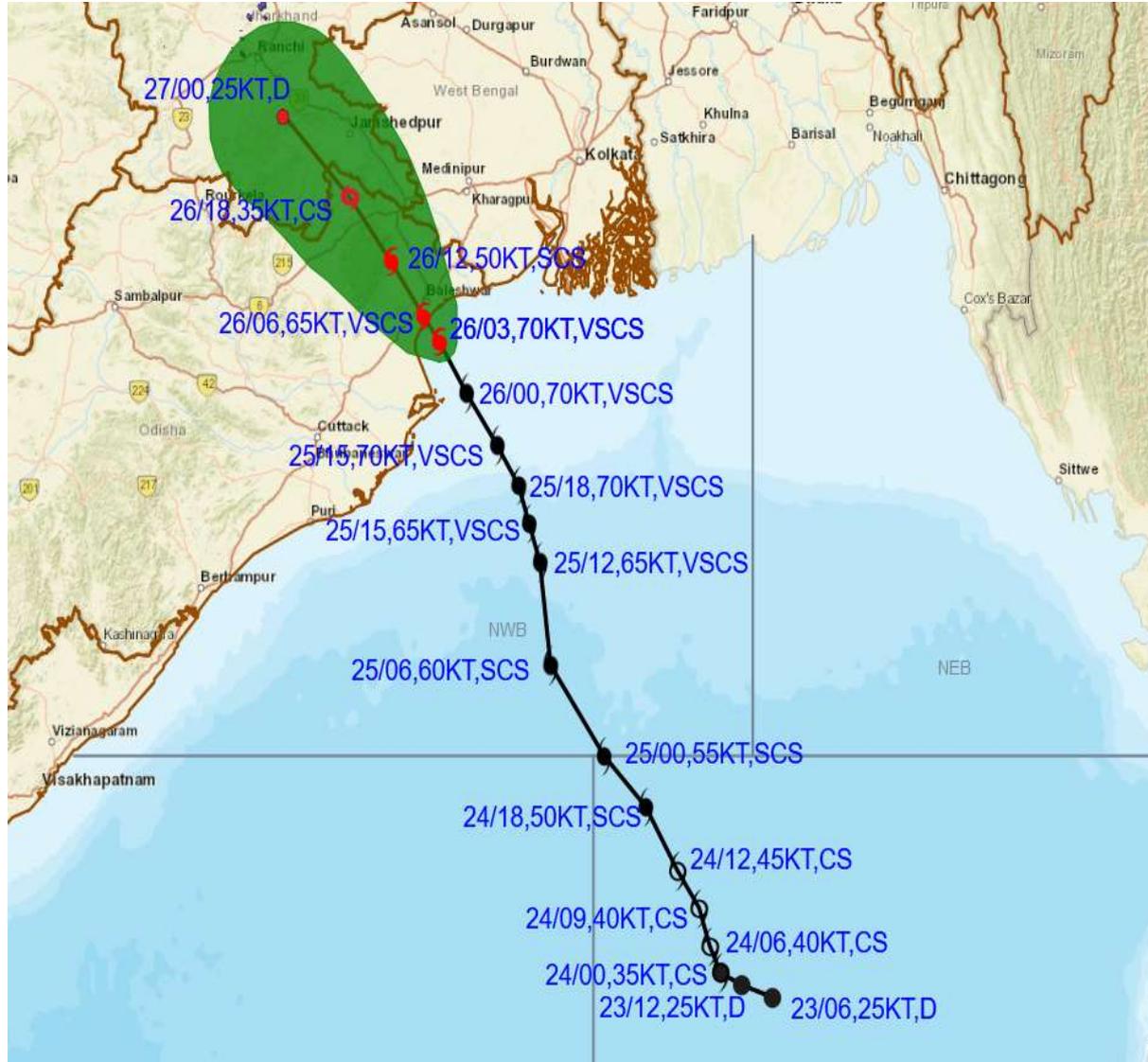


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# OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM "YAAS" OVER NORTHWEST BAY OF BENGAL BASED ON 0300 UTC OF 26th MAY 2021



**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

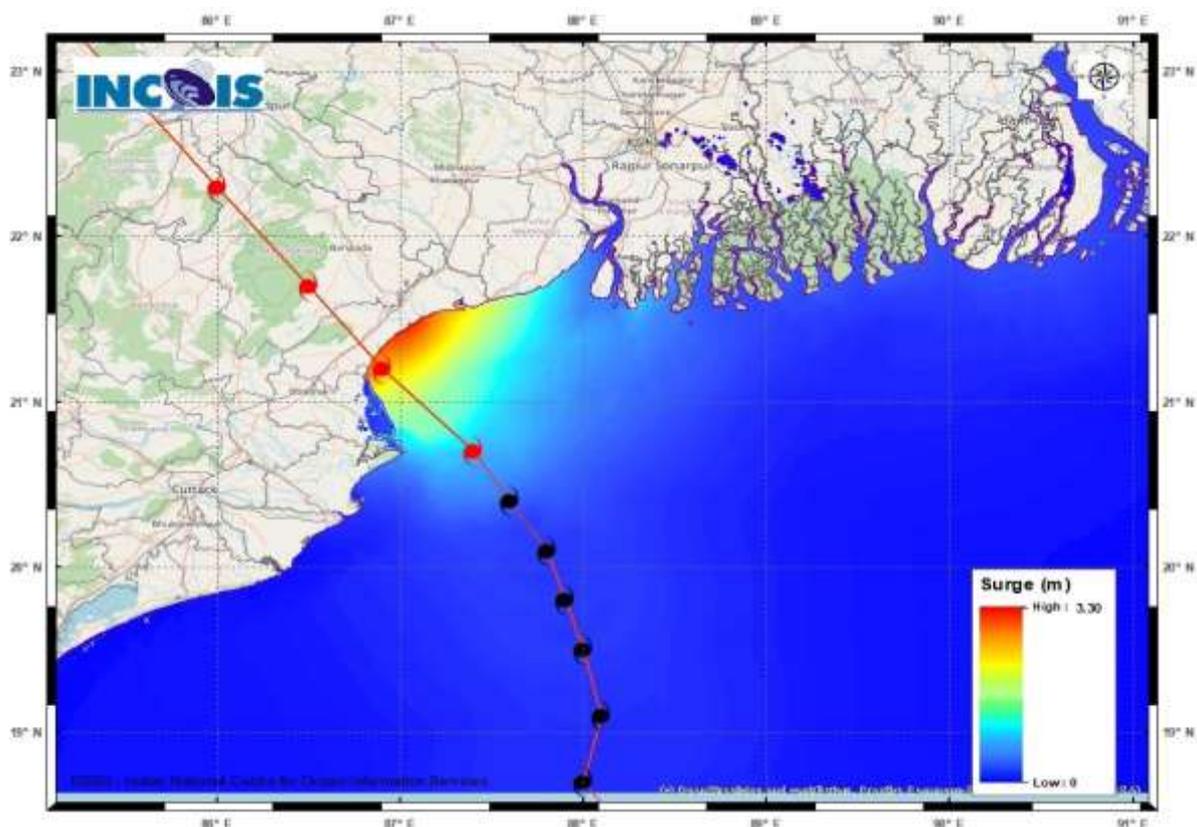
— FORECAST TRACK

▲ CONE OF UNCERTAINTY

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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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)
Baleswar	Baleswar	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
Kanthi	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

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