



**India Meteorological Department
Earth System Science
Organisation
(Ministry of Earth Sciences)**

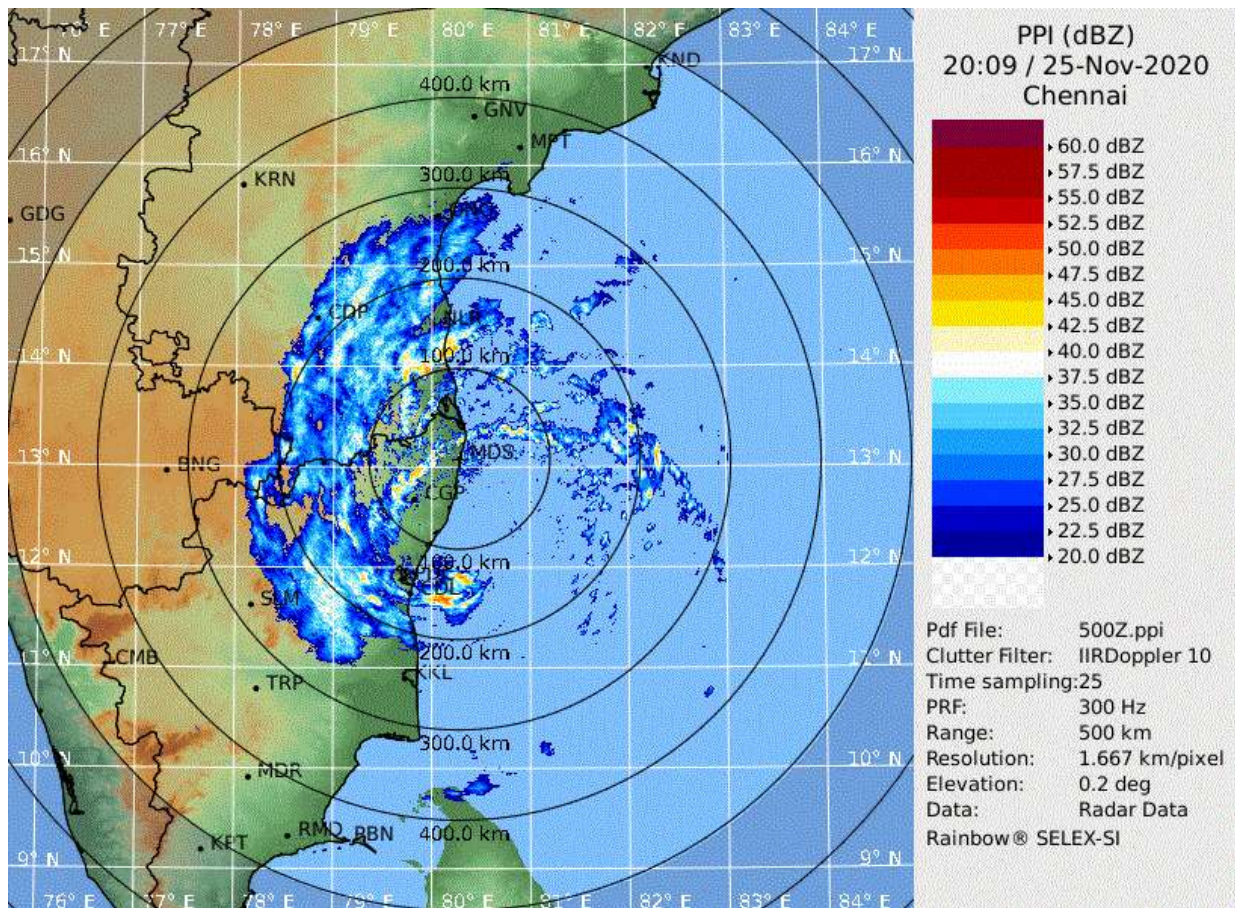
HOURLY UPDATE ON VERY SEVERE CYCLONIC STORM “NIVAR”

BULLETIN NO. 09

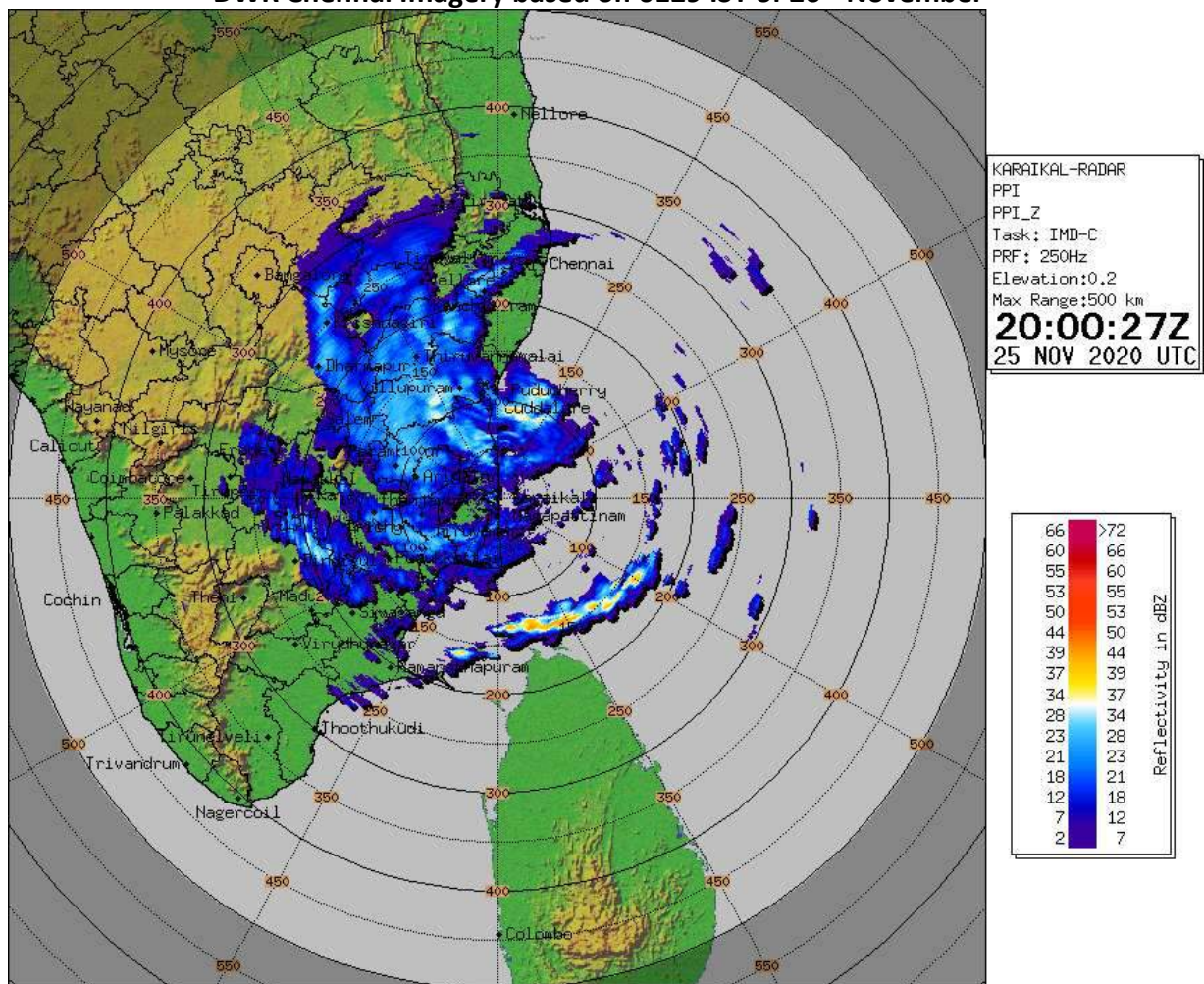
DATE: 26-11-2020

TIME OF ISSUE: 0220 HRS IST

DATE/TIME (IST) OF OBSERVATION	0130 HRS IST OF 26-11-2020 / 2000 UTC OF 25.11.2020
INTENSITY	VERY SEVERE CYCLONIC STORM WIND SPEED: 120-130 KMPH GUSTING TO 145 KMPH. WIND SPEED 90-100 KMPH GUSTING TO 110 KMPH IS PREVAILING ALONG & OFF NORTH TAMILNADU COAST.
LOCATION LATITUDE/LONGITUDE	OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 12.1°N AND LONG. 79.95°E , ABOUT: <ul style="list-style-type: none">• 20 KM EAST-NORTH EAST OF PUDUCHERRY.• 100 KM SOUTH-SOUTHWEST OF CHENNAI.
PAST MOVEMENT	CENTRE MOVED NORTHWESTWARDS WITH A SPEED OF 16 KMPH DURING PAST 06 HOURS.
OBSERVATIONS FROM THE COAST	<u>.RAINFALL (MM) DURING 08:30 HOURS IST OF 25TH NOV TO 0130 HOURS IST OF 26TH NOVEMBER 2020:</u> NAGAPATNAM-63, KARAİKAL-85, CUDDALORE-244, PUDUCHERRY-225 AND CHENNAI-89.
FORECAST MOVEMENT, INTENSITY AND LANDFALL	LANDFALL PROCESS CONTINUES. CENTRE OF CYCLONE TO CROSS COAST NEAR PUDUCHERRY WITHIN NEXT 1-2 HOURS WITH WIND SPEED OF 120-130 KMPH GUSTING TO 145 KMPH.
REMARKS	THE VERY INTENSE CONVECTIVE CLOUD CENTRED AROUND PUDUCHERRY IS RESULTING IN CONTINUOUS HEAVY RAIN FALL SPELL OVER THE REGION. PUDUCHERRY RECORDED 4 CM OF RAINFALL IN PAST 2 HOURS. SYSTEM IS INTERACTING WITH LAND SURFACE.



DWR Chennai Imagery based on 0129 IST of 26th November



DWR Karaikal Imagery based on 0130 IST of 26th November

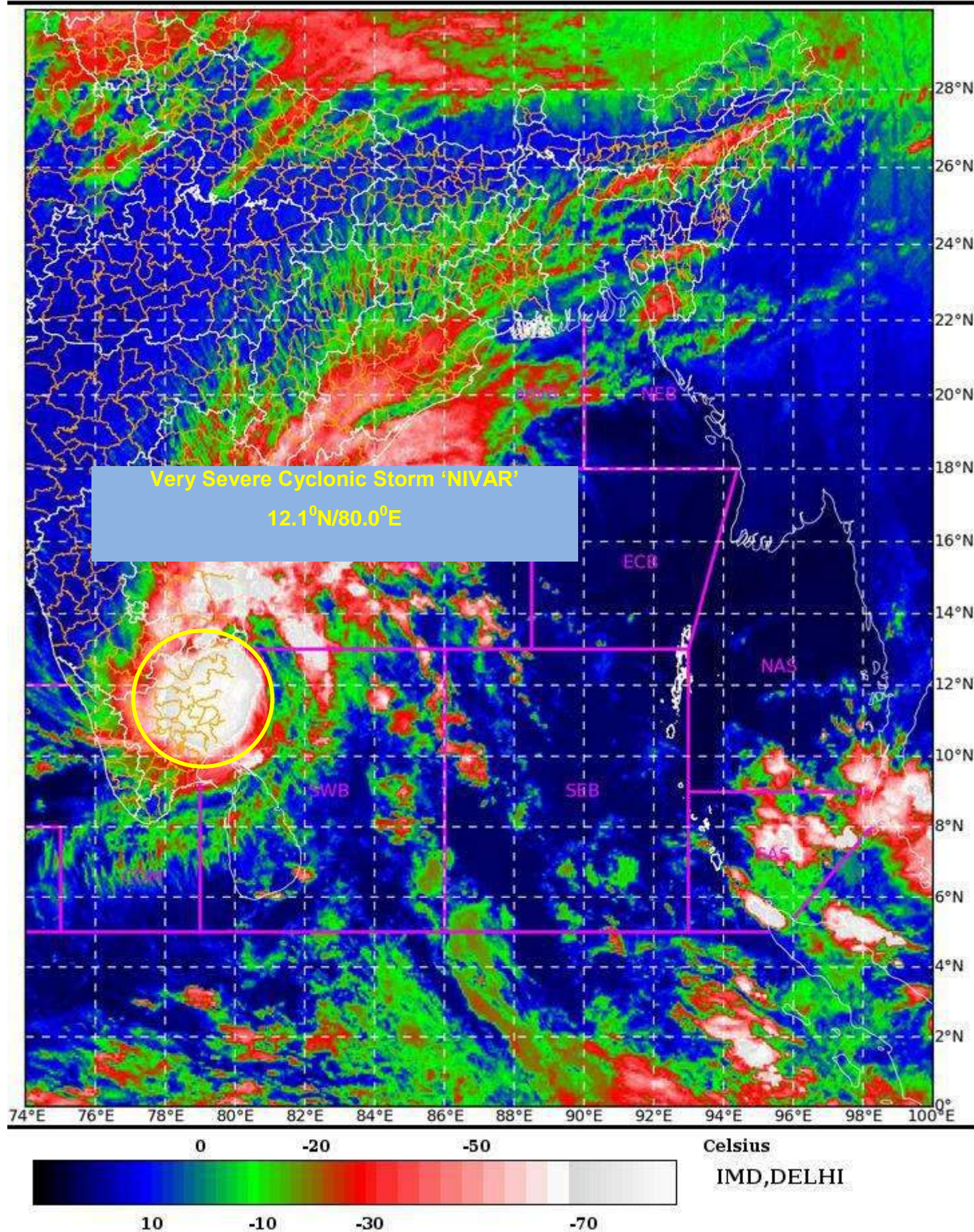
SAT : INSAT-3D IMG

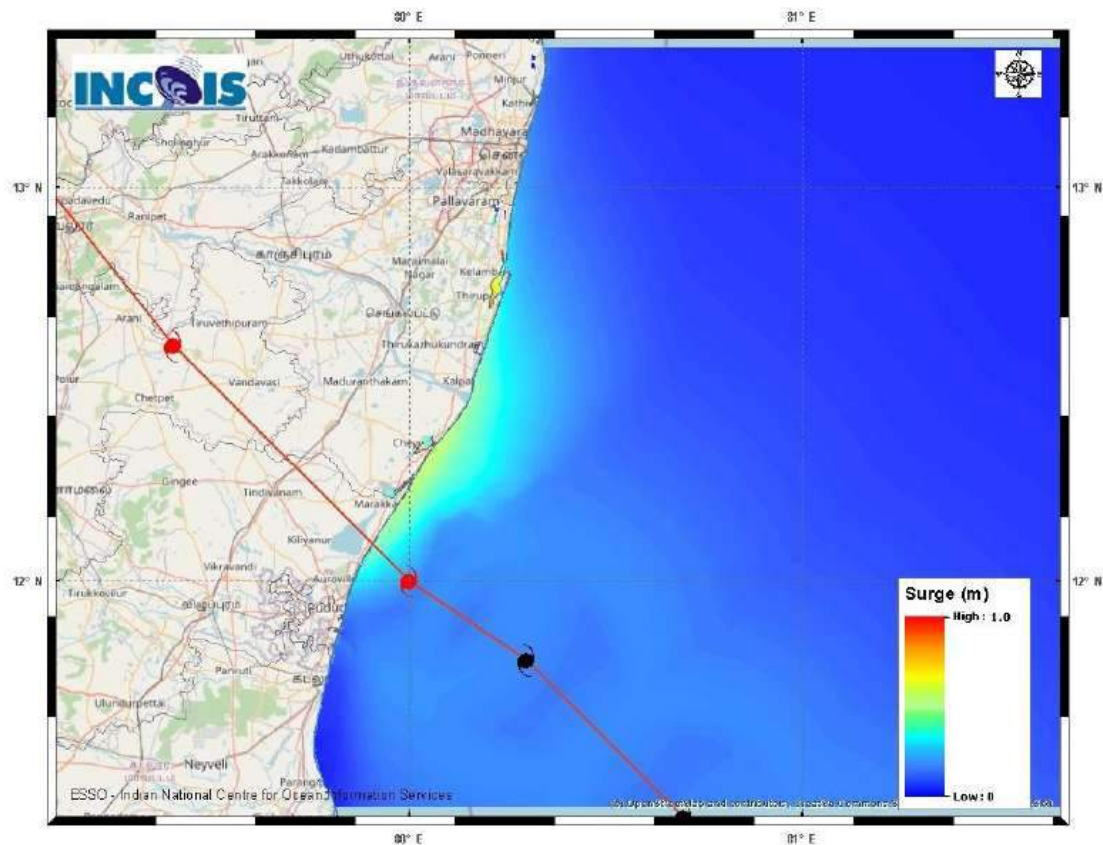
25-11-2020/(1930 to 1956) GMT

IMG_TIR1_TEMP 10.8 um

26-11-2020/(0100 to 0126) IST

L1C Mercator





Expected Maximum Storm Surge *
Expected Maximum Inundation Extent

1.0m Near Kancheepuram Tamil Nadu
0.2 Km Near Kancheepuram Tamil Nadu

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)
Chengalpattu	Kancheepuram	Tamil Nadu	Thiruporur	0.5-1.0	Upto 0.2
Cheyyur	Kancheepuram	Tamil Nadu	Kadalur	0.4-0.8	Nil
Mannargudi	Thiruvavur	Tamil Nadu	Thiruvavur	0.2-0.5	Upto 0.1
Tindivanam	Viluppuram	Tamil Nadu	Ozhukarai Municipality	0.5-0.6	Upto 0.1
Tirutturaippundi	Nagapattinam	Tamil Nadu	Vaimedu west	0.2-0.5	Upto 0.1



**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF
VERY SEVERE CYCLONIC STORM NIVAR OVER SOUTHWEST BAY OF BENGAL
BASED ON 1800UTC OF 25TH NOVEMBER, 2020.**



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

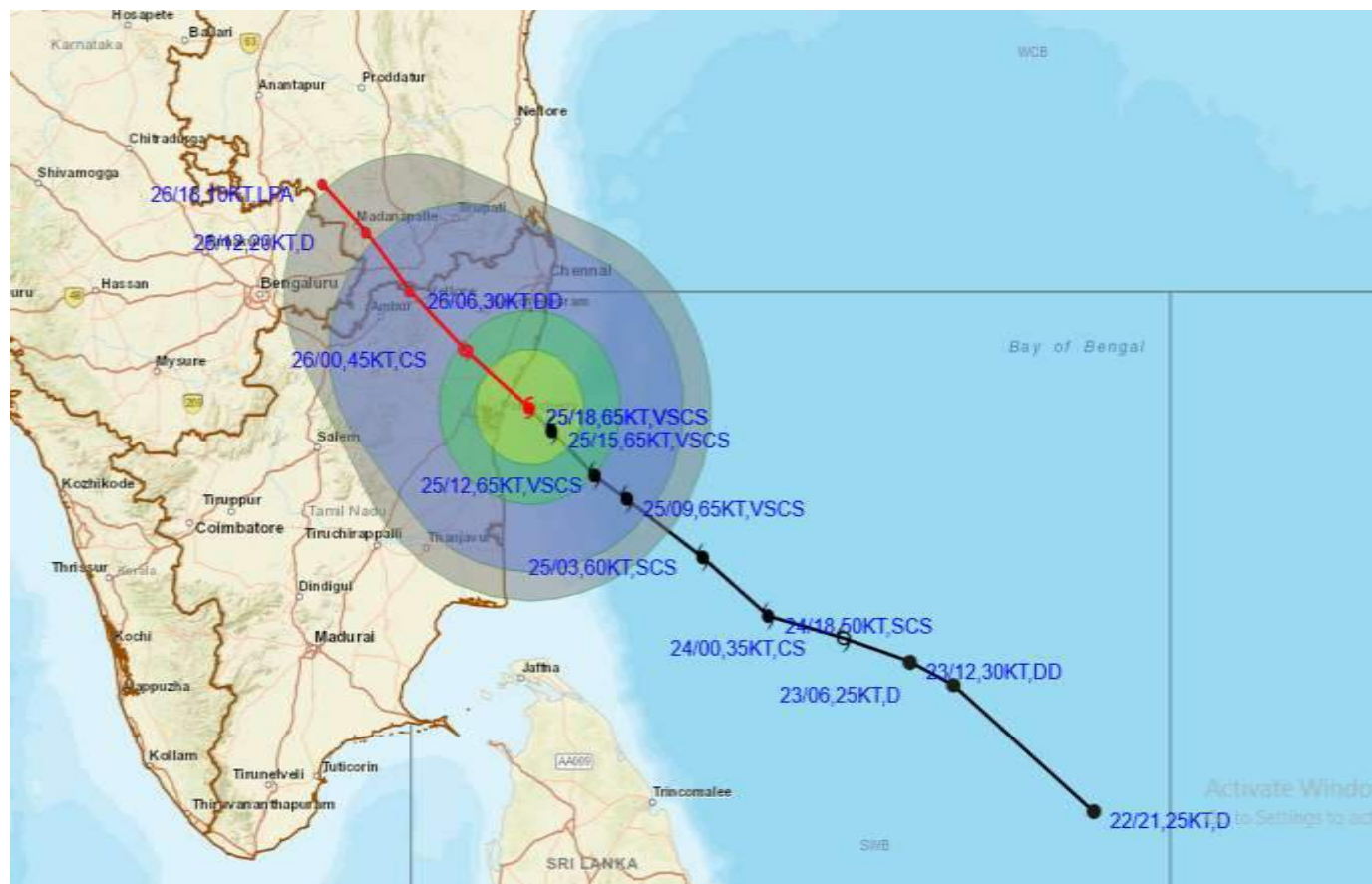
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM NIVAR OVER SOUTHWEST BAY OF BENGAL BASED ON 1800UTC OF 25TH NOVEMBER, 2020



DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
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● 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