



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

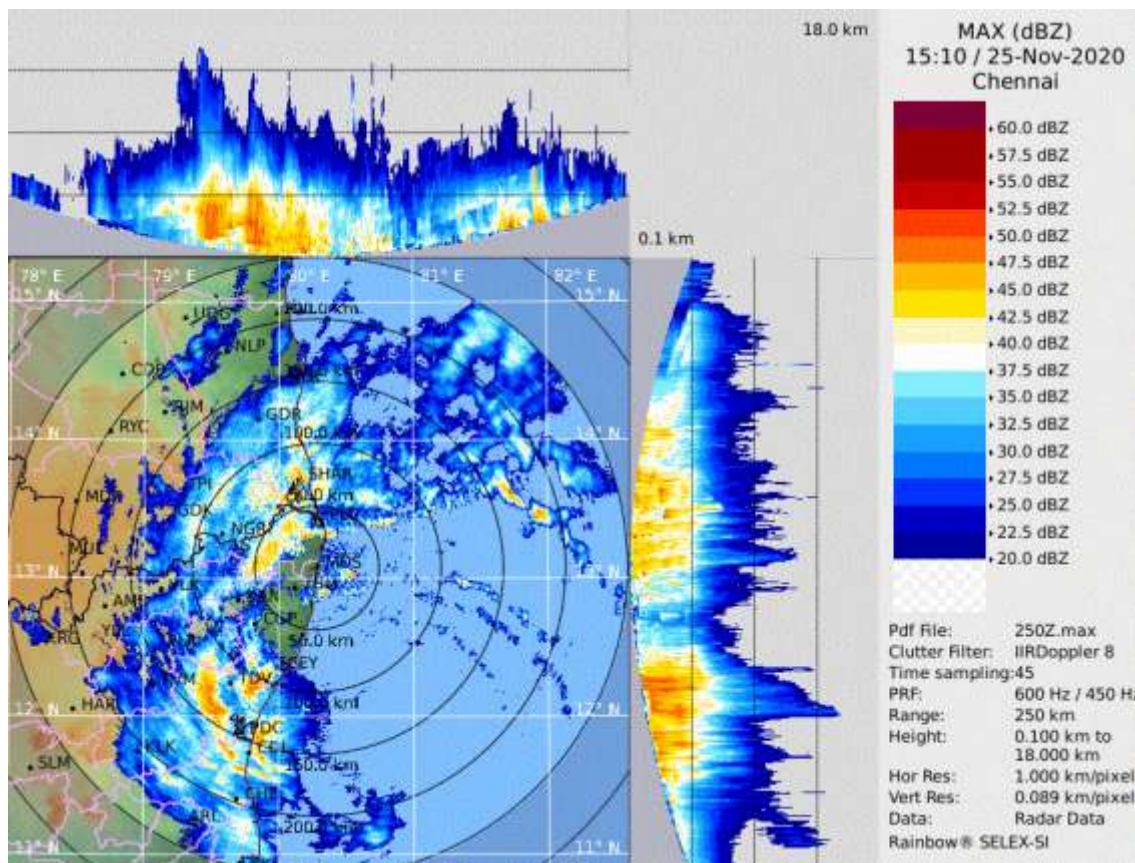
HOURLY UPDATE ON VERY SEVERE CYCLONIC STORM “NIVAR”

BULLETIN NO. 04

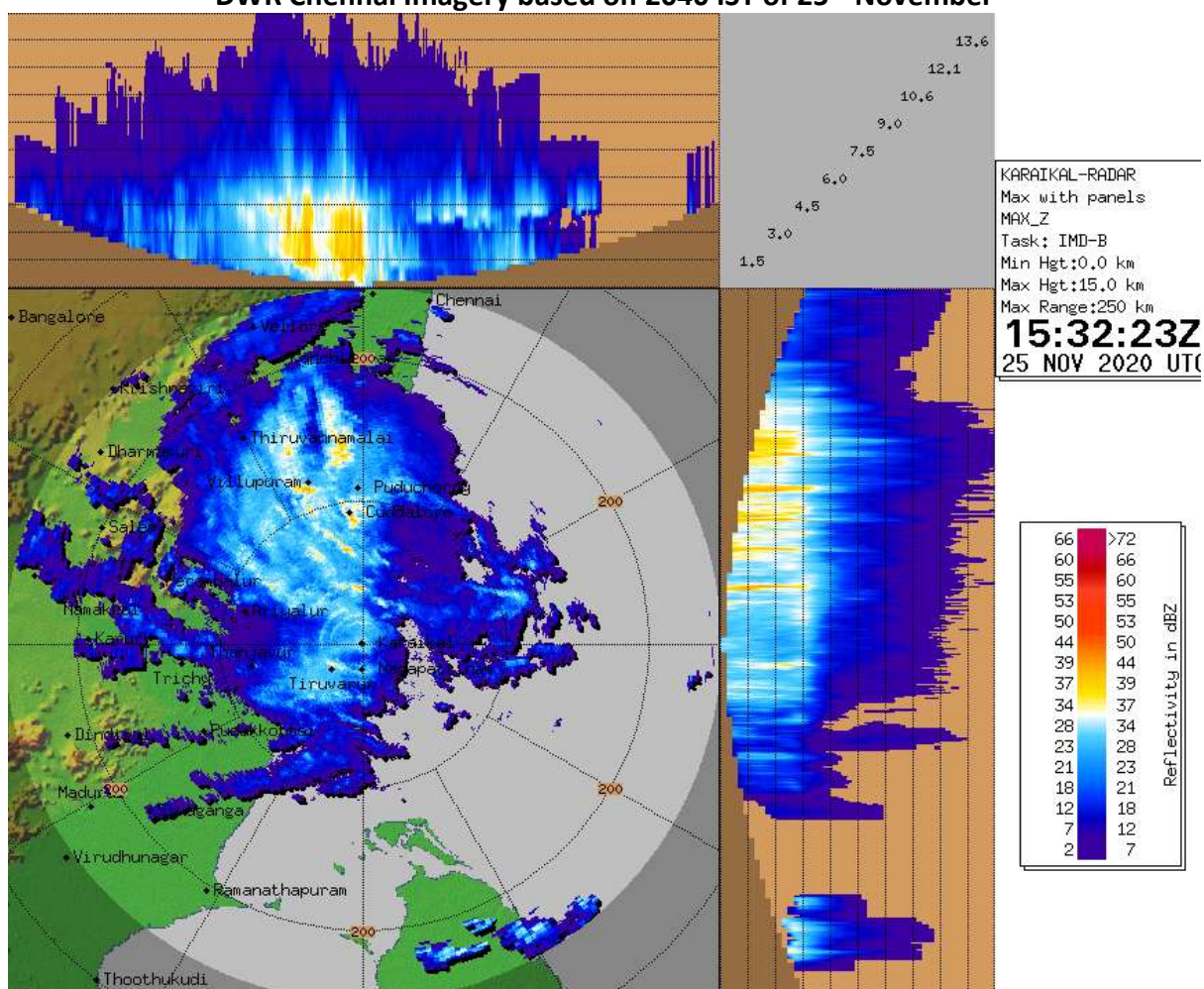
DATE: 25-11-2020

TIME OF ISSUE: 2130 HRS IST

DATE/TIME (IST) OF OBSERVATION	2030 HRS IST OF 25-11-2020 / 1500 UTC OF 25.11.2020
INTENSITY	VERY SEVERE CYCLONIC STORM WIND SPEED: 120-130 KMPH GUSTING TO 145 KMPH.
LOCATION LATITUDE/LONGITUDE	OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 11.8°N AND LONG. 80.3°E , ABOUT: <ul style="list-style-type: none">• 60 KM EAST OF CUDDALORE.• 55 KM EAST-SOUTHEAST OF PUDUCHERRY.• 130 KM SOUTH-SOUTHEAST OF CHENNAI.
PAST MOVEMENT	CENTRE MOVED NORTHWESTWARDS WITH A SPEED OF 16 KMPH DURING PAST 06 HOURS.
OBSERVATIONS FROM THE COAST	<u>WIND-SPEED (KMPH):</u> NAGAPATNAM-18, KARAİKAL-18, CUDDALORE-18, PUDUCHERRY-18 AND CHENNAI-18 KMPH. <u>RAINFALL (MM) DURING 08:30 TO 2030 HOURS IST OF 25TH NOVEMBER 2020:</u> NAGAPATNAM-56, KARAİKAL-74, CUDDALORE-123, PUDUCHERRY-115 AND CHENNAI-75
FORECAST MOVEMENT, INTENSITY AND LANDFALL	CYCLONE TO CROSS COAST CLOSE TO PUDUCHERRY AROUND MID NIGHT WITH WIND SPEED OF 120-130 KMPH GUSTING TO 145 KMPH. LANDFALL PROCESS WILL COMMENCE WITHIN 01 HOUR.
REMARKS	CONVECTIVE CLOUD BANDS LIES OVER COASTAL TAMILNADU AND CENTER IS APPROACHING TAMILNADU COAST.



DWR Chennai Imagery based on 2040 IST of 25th November

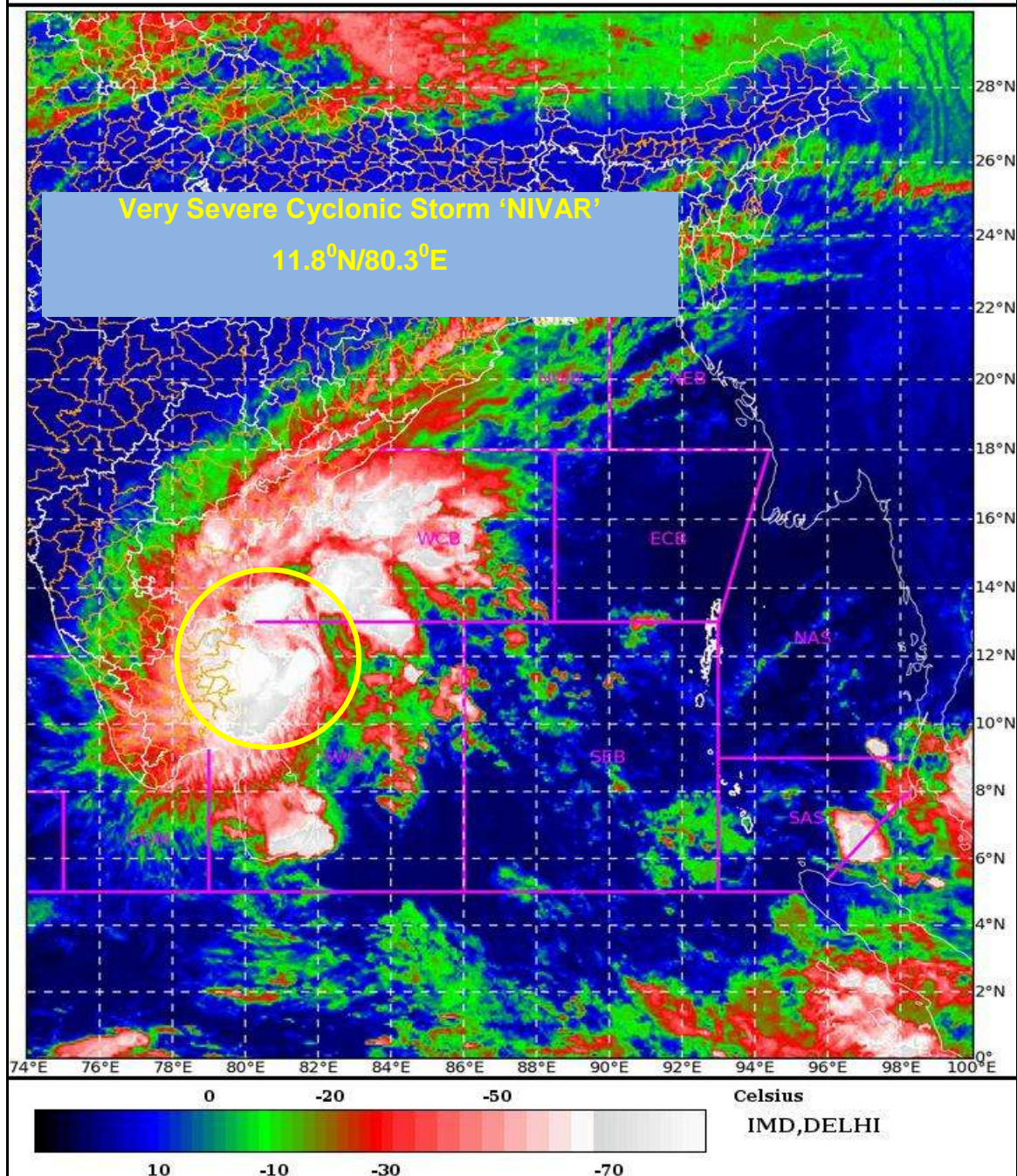


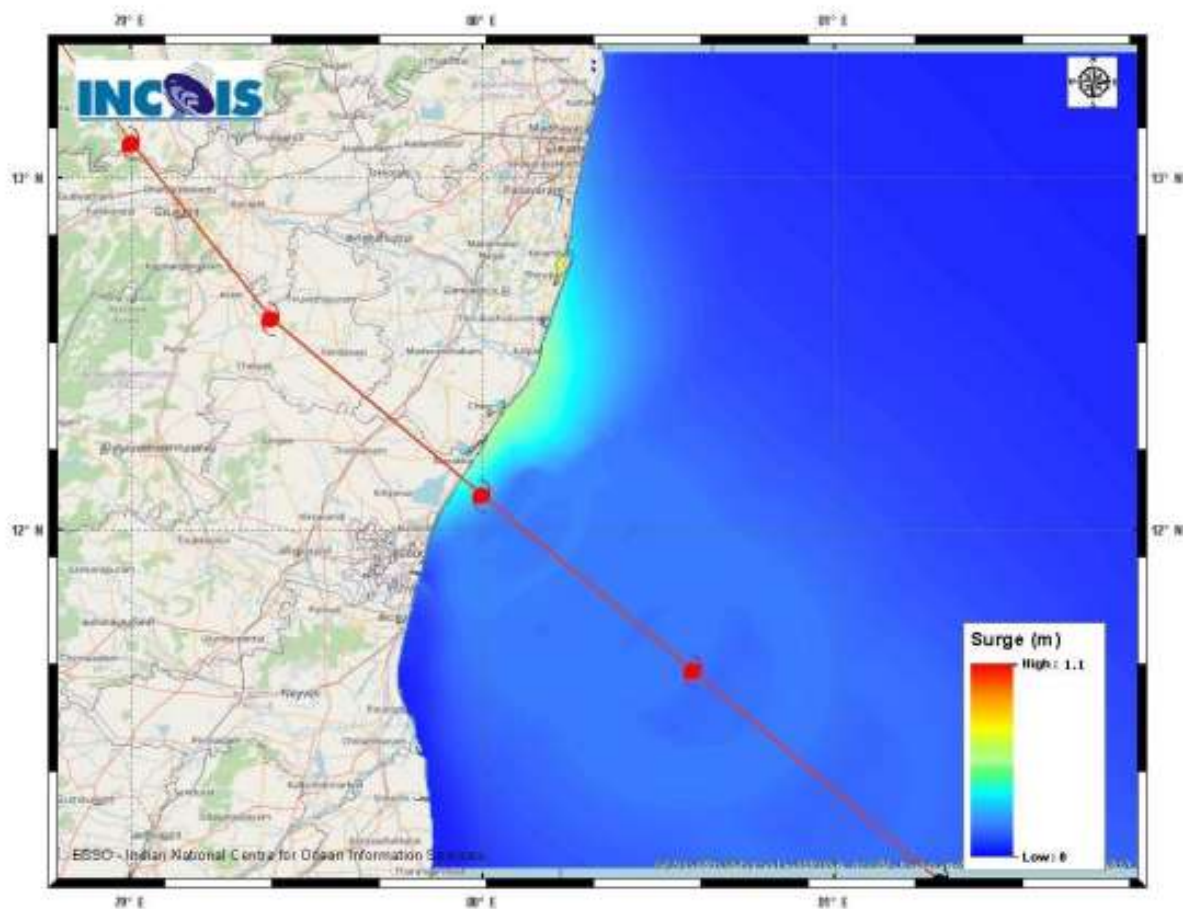
DWR Karaikal Imagery based on 2102 IST of 25th November

SAT : INSAT-3D IMG 25-11-2020/(1330 to 1356) GMT

IMG_TIR1_TEMP 10.8 um 25-11-2020/(1900 to 1926) IST

L1C Mercator





Expected Maximum Storm Surge * 1.1 m Near Kancheepuram, Tamil Nadu.
Expected Maximum Inundation Extent 0.2 Km near Kancheepuram.

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	0.5-1.1	Upto 0.2
Cheyyur	Kancheepuram	Tamil Nadu	Kadalur	0.4-0.9	Nil
Mannargudi	Thiruvarur	Tamil Nadu	Thiruvarur	0.2-0.5	Nil
Ponneri	Thiruvallur	Tamil Nadu	Karimanal	0.2-0.4	Nil
Tiruvottiyur	Thiruvallur	Tamil Nadu	Saidapet	0.2-0.5	Nil
Puducherry	Puducherry	Puducherry	Bahour Commune Panchayat	0.4-0.5	Nil
Tindivanam	Viluppuram	Tamil Nadu	Ozhukarai Municipality	0.5-0.7	Upto 0.1
Tirutturaippundi	Nagapattinam	Tamil Nadu	Vaimedu west	0.2-0.7	Nil



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM NIVAR OVER SOUTHWEST BAY OF BENGAL BASED ON 1200UTC OF 25TH



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 1200UTC 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)
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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