



**India Meteorological Department** 

# **PRESS RELEASE - 4**

Time of issue: 1800 hours IST Dated: 25-11-2020

Sub: Very Severe Cyclonic Storm "NIVAR" over southwest Bay of Bengal—(Cyclone Warning for Tamilnadu and Puducherry coasts- Red Message)

Yesterday's cyclonic storm "NIVAR" over southwest Bay of Bengal (BoB) moved west-northwestwards and intensified into a severe cyclonic storm in the midnight of yesterday, the 24th November, 2020. Moving further northwestwards, it further intensified into a very severe cyclonic storm in the afternoon (1430 hours IST) of today, the 25th November, 2020 and lay centered over southwest BoB near latitude 11.2°N and longitude 81.0°E, about 90 km east-southeast of Cuddalore, about 150 km east southeast of Puducherry and 220 km south southeast of Chennai.

It is very likely to move northwestwards and cross Tamil Nadu and Puducherry coasts between Karaikal and Mamallapuram around Puducherry during mid-night of 25<sup>th</sup> and early hours of 26<sup>th</sup> November 2020 as a very severe cyclonic storm with a wind speed of 120-130 kmph gusting to 145 kmph.

The Cyclone is being monitored by Doppler Weather Radar at Chennai, Karaikal and Sriharikota.

Forecast track and intensity are given below:

Date/Time(IST)	Position	Maximum sustained surface	Category of cyclonic
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (Kmph)	disturbance
25.11.20/1430	11.2/81.0	115-125 gusting to 140	Very Severe Cyclonic Storm
25.11.20/1730	11.5/80.6	120-130 gusting to 145	Very Severe Cyclonic Storm
25.11.20/2330	12.0/80.0	120-130 gusting to 145	Very Severe Cyclonic Storm
26.11.20/0530	12.5/79.4	90-100 gusting to 110	Severe Cyclonic Storm
26.11.20/1130	13.0/79.0	55-65 gusting to 75	Deep Depression
26.11.20/2330	13.7/78.5	35-45 gusting to 55	Depression

### Warnings:

### (i) Rainfall

Fairly widespread to widespread rainfall/thunderstorm activity very likely over coastal and north interior Tamilnadu, Puducherry & Karaikal, south coastal Andhra Pradesh and Rayalaseema during 25<sup>th</sup> and 26<sup>th</sup> November and southeast Telangana during 26<sup>th</sup> November, 2020. Isolated extremely heavy rainfall activity also very likely over coastal & north interior Tamilnadu & Puducherry (Thanjavur, Tiruvarur, Nagapattinam, Cuddalore, Chennai, Kanchipuram, Chengalpattu, Myladuthirai, Ariyalur, Perambalur, Kallakurchi, Villupuram, Tiruvannamalai, Puducherry and Karaikal districts) during 25<sup>th</sup>; over Nellore and Chittoor districts of Andhra Pradesh on 25<sup>th</sup> and over Ranipet, Tiruvannamalai, Tirupattur, Vellore districts of Tamilnadu; Chittoor, Kurnool, Prakasam and Cuddappa districts of Andhra Pradesh and adjoining southeast Telangana on 26th November, 2020.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology,

India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: <u>rsmcnewdelhi.imd.gov.in</u>

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

<b>Sub-Divisions</b>	25 Nov 2020*	26 Nov 2020*	27 Nov 2020*
South Coastal Andhra Pradesh	Rainfall at most places with isolated heavy to very heavy and extremely heavy falls	Rainfall at most places with isolated heavy to very heavy and extremely heavy falls	Rainfall at many places
Coastal & North Interior Tamilnadu, Puducherry & Karaikal	Rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy falls at isolated places	Rainfall at many places with heavy rainfall at isolated places	Rainfall at many places
South Interior Karnataka	Rainfall at many places with heavy rainfall at isolated places	Rainfall at many places with heavy rainfall at isolated places	Rainfall at many places
Rayalaseema	Rainfall at most places with heavy to very heavy rainfall with extremely heavy falls at isolated places	Rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy falls at isolated places	Rainfall at many places
Telangana	Rainfall at a few places	Rainfall at most places with heavy to very heavy rainfall and extremely heavy falls at isolated places over southeast Telangana	Rainfall at many places

# (ii) Wind warning

- Gale wind speed reaching 115-125 kmph gusting to 140 kmph is prevailing over Southwest Bay of Bengal. It would further increase becoming 120-130 kmph gusting to 145 kmph from evening of 25<sup>th</sup> to early hours of 26<sup>th</sup> November.
- Gale wind speed reaching 60-70 kmph gusting to 80 kmph is prevailing along & off north Tamil Nadu, and Puducherry Karaikal coast and squally wind speed reaching 30-40 kmph gusting to 50 kmph along and off south Tamilnadu and south Andhra Pradesh coast and over Gulf of Mannar. It will gradually increase and become gale wind speed reaching 120-130 kmph gusting to 145 kmph along & off coastal districts of north Tamil Nadu and Puducherry (Nagapattinam, Karaikal, Myladuthurai, Cuddalore, Puducherry, Villupuram & Chengalpattu) and 80-90 gusting to 100 kmph very likely over Tiruvarur, Kanchipuram, Chennai, Tiruvallur districts during night of 25<sup>th</sup> to early hrs of 26<sup>th</sup> November, 2020.
- Gale wind speed reaching 65-75 kmph gusting to 85 kmph very likely over adjoining westcentral Bay of Bengal and along & off South Andhra Pradesh (Nellore & Chittoor districts), Gulf of Mannar and along and off south coastal districts of Tamil Nadu during night of 25<sup>th</sup> to early hrs of 26<sup>th</sup> November, 2020.

#### (iii) Sea condition

Sea condition is very high over Southwest Bay of Bengal and very rough to high along & off
 Tamil Nadu, Puducherry, south Andhra Pradesh coasts and over Gulf of Mannar. It would

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

gradually become phenomenal over Southwest Bay of Bengal and along & off north Tamil Nadu, Puducherry coasts during afternoon of 25<sup>th</sup> to early hrs of 26<sup>th</sup> November, 2020.

(iv) Strom Surge Warning

• Tidal wave of about 1-1.5m height above the astronomical tide is very likely to inundate the low lying areas of north coastal districts of Tamilnadu & Puducherry near the place of landfall.

# (v) (a) Damage expected over Nagapattinam, Myladuthurai, Cuddalore, , Villupuram & Chengalpattu districts of Tamilnadu and Karaikal & Puducherry:

- ➤ Total destruction of thatched houses/ extensive damage to kutcha houses. Some damage to old 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 powerlines 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.
  - (b) Damage expected over Tiruvarur, Kanchipuram, Chennai, Tiruvallaur districts of Tamilnadu and adjoining Andhra Pradesh:
- Damage to thatched houses/ huts with possibility of roof tops being blown off and unattached metal sheets may fly.
- Damage to power and communication lines.
- Damage to Kutcha and some damage to Pucca roads. Flooding of escape routes.
- ➤ Breaking of tree branches, uprooting of trees. Severe damage to banana and papaya trees, horticulture and crops & orchards. Large dead limbs blown from trees.
- ➤ Major damage to coastal crops. Damage to embankments/ salt pans.

## (vi) Fishermen Warning & Action Suggested:

- Total suspension of fishing operations.
- ➤ Mobilise evacuation from coastal areas. Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain in safe places and indoors.
- Judicious regulation of rail, road and air traffic.
- Movement in motor boats and small ships unsafe.

# (vii) POST LANDFALLOUTLOOK FOR INTERIOR DISTRICTS (RANIPET, TIRUVANNAMALAI, TIRUPATTUR, VELLORE AND CHITTOOR)

- 1. Even after landfall, the system is likely to maintain its cyclone intensity for about 6 hours and weaken gradually.
- 2. Under its influence rainfall at most/many places with heavy to very heavy falls at a few places with isolated extremely heavy falls likely to occur over Ranipet, Tiruvannamalai, Tirupattur, Vellore districts of Tamilnadu and Chittoor, Kurnool, Prakasam; Cuddappa districts of Andhra Pradesh and adjoining southeast Telangana on 26.th Nov. Heavy to very heavy rainfall at isolated paces likely over remaining districts of north interior Tamilnadu, south Andhra Pradesh and southeast Telangana.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

- 3. Gale wind speed reaching 65-75 kmph gusting to 85 kmph very likely to prevail over interior districts (Ranipet, Tiruvannamalai, Tirupattur, Vellore) of Tamilnadu and Chittoor district of Andhra Pradesh during 26th Nov early morning to forenoon.
- 4. Damage expected over Ranipet, Tiruvannamalai, Tirupattur, Vellore districts of Tamilnadu and Chittoor, Kurnool, Prakasam and Cuddappa districts of Andhra Pradesh:
- Partial damage to thatched houses/ huts with possibility of roof tops being blown off and unattached metal sheets may fly.
- Partial damage to power and communication lines.
- Damage to Kutcha and some damage to Pucca roads. Flooding of escape routes.
- Breaking of tree branches, uprooting of small trees. Damage to banana and papaya trees, horticulture and crops & orchards.
- 5. People are advised to remain indoors/in safe places and cooperate with state government officials and disaster management agencies.

The system is under continuous surveillance and the concerned state governments are being informed regularly.

For details kindly visit www.rsmcnewdelhi.imd.gov.in, www.mausam.imd.gov.in

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences.

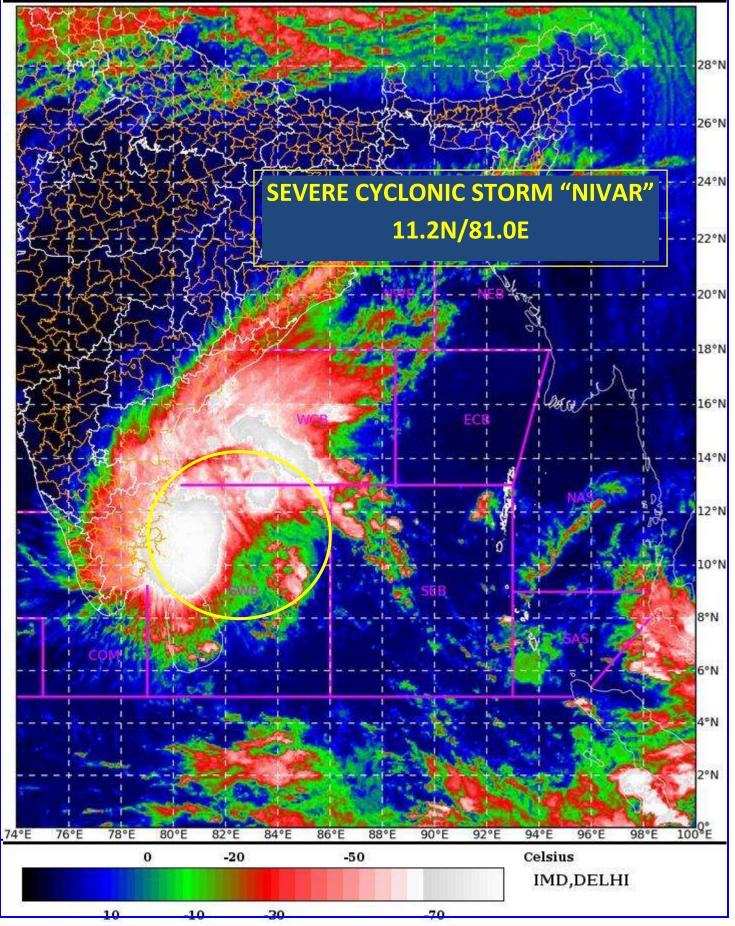
Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

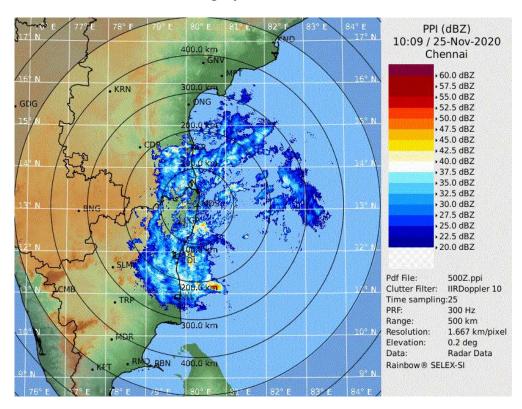
SAT : INSAT-3D IMG IMG\_TIR1\_TEMP 10.8 um 25-11-2020/(1000 to 1026) GMT 25-11-2020/(1530 to 1556) IST



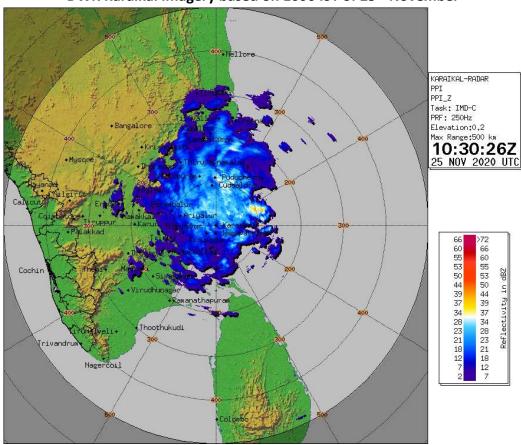
L1C Mercator



# DWR Chennai Imagery based on 1539 IST of 25<sup>th</sup> November



DWR Karaikal Imagery based on 1600 IST of 25<sup>th</sup> November



Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences.

Di .... (04) 44 04050 404 54V (04) 44 04040400 04000000 5

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: <a href="mailto:rsmcnewdelhi.imd.gov.in">rsmcnewdelhi.imd.gov.in</a> Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF VERY SEVERE CYCLONIC STORM NIVAR OVER SOUTHWEST BAY OF BENGAL BASED ON 0900UTC OF 25<sup>TH</sup> 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 (2 120 KT)

LESS THAN 34 KT

34.47 KT

≥ 48 KT

OBSERVED TRACK

FORECAST TRACK

CONE OF UNCERTAINTY

Contact: Cyclone Warning Division, Office of the Director General of Meteorology,

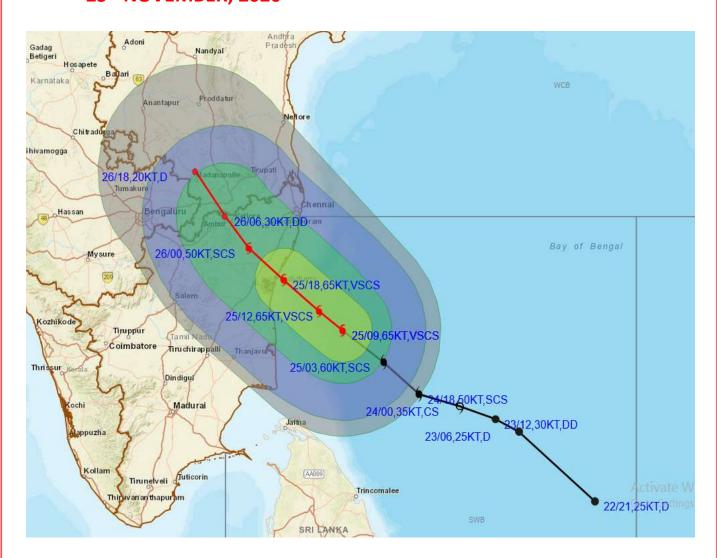
India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: <u>rsmcnewdelhi.imd.gov.in</u>

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM NIVAR OVER SOUTHWEST BAY OF **BASED** BENGAL ON 0900UTC OF 25<sup>TH</sup>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)

- LLSS THAN ST KI	•	LESS	THAN	34	KT
-------------------	---	------	------	----	----

34-47 KT ≥ 48 KT

OBSERVED TRACK FORECAST TRACK CONE OF UNCERTAINTY

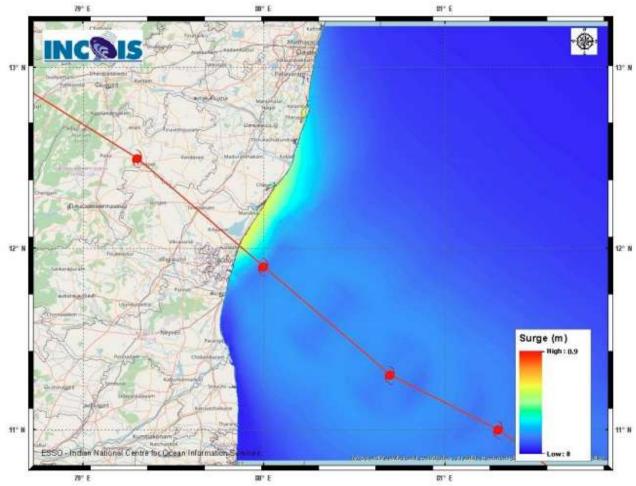
AREA OF MAXIMUM SUSTAINED WIND SPEED:

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

Impact	Action
Very rough seas	Total suspension of fishing operations
High to very high seas	Total suspension of fishing operations
Very high seas	Total suspension of fishing operations
Phenomenal	Total suspension of fishing operations
	Very rough seas High to very high seas Very high seas

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%



Expected Maximum Storm Surge  $\star$  0.9m Near Kancheepuram & Villupuram, Tamil Nadu Expected Maximum Inundation Extent 0.3 Km near Nagapattinam.

#### 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	0.4-0.9	Upto 0.2
Cheyyur	Kancheepuram	Tamil Nadu	Kadalur	0.4-0.6	Nil
Cuddalore	Cuddalore	Tamil Nadu	Cuddalore	0.3-0.5	Nil
Mannargudi	Thiruvarur	Tamil Nadu	Thiruvarur	0.2-0.5	Upto 0.14
Puducherry	Puducherry	Puducherry	Bahour Commune Panchayat	0.4-0.5	Nil
Tindivanam	Viluppuram	Tamil Nadu	Ozhukarai Municipality	0.5-0.7	Upto 0.2
Tirutturaippundi	Nagapattinam	Tamil Nadu	Vaimedu west	0.2-0.7	Upto 0.3

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: <a href="mailto:rsmcnewdelhi.imd.gov.in">rsmcnewdelhi.imd.gov.in</a> Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%