



India Meteorological Department

(Ministry of Earth Sciences)

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Sub: Cyclonic Storm 'Burevi' over southwest Bay of Bengal (Cyclone Alert for South Tamilnadu and South Kerala coasts: **Yellow Message)**

The **Cyclonic Storm 'Burevi'** over southwest Bay of Bengal moved west-northwestwards with a speed of 15 kmph during past six hours and lay centered at 0530 hrs IST of today, the 02nd December 2020 over southwest Bay of Bengal near Lat. 8.4°N and Long. 83.4°E, about 240 km east-southeast of Trincomalee (Sri Lanka), 470 km east-southeast of Pamban (India) and 650 km nearly east-northeast of Kanniyakumari (India).

It is very likely to intensify further during next 12 hours. It is very likely to move west-northwestwards and cross Sri Lanka coast around latitude 9.0°N, close to north of Trincomalee during evening/night of 2nd December as a Cyclonic Storm with a wind speed of 80-90 kmph gusting to 100 kmph. It is very likely to move nearly west-northwestwards thereafter, emerge into Gulf of Mannar and adjoining Comorin area on 3rd December morning.

The Cyclonic Storm with wind speed of 70-80 gusting to 90 kmph would be centered very close to Pamban around noon of 3rd December. It would then move nearly west-southwestwards and cross south Tamilnadu coast between Kanniyakumari and Pamban around early morning of 4th December as a Cyclonic Storm with wind speed of 70-80 gusting to 90 kmph.

Forecast track and intensity are given below:

Date/Time(IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
02.12.20/0530	8.4/83.4	70-80 gusting to 90	Cyclonic Storm
02.12.20/1130	8.7/82.4	75-85 gusting to 95	Cyclonic Storm
02.12.20/1730	9.0/81.3	80-90 gusting to 100	Cyclonic Storm
02.12.20/2330	9.1/80.7	80-90 gusting to 100	Cyclonic Storm
03.12.20/0530	9.2/80.2	70-80 gusting to 90	Cyclonic Storm
03.12.20/1730	9.1/79.2	70-80 gusting to 90	Cyclonic Storm
04.12.20/0530	8.9/78.4	70-80 gusting to 90	Cyclonic Storm
04.12.20/1730	8.5/77.4	65-75 gusting to 85	Cyclonic Storm
05.12.20/0530	8.1/76.4	55-65 gusting to 75	Deep Depression

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

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

Warnings:

(i) Rainfall

- **Heavy to very heavy rainfall** at a few places with isolated **Extremely heavy falls** very likely over **south Tamilnadu (Kanniyakumari, Tirunelveli, Thoothukudi, Tenkasi, Ramanathapuram and Sivagangai)** on 2nd and 3rd December, 2020; **over south Kerala (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah)** on 3rd December and isolated heavy to very heavy rainfall likely over south Tamilnadu on 2nd & 4th December 2020 and south Kerala on 3rd & 4th December, 2020.
- Heavy to very heavy rainfall at isolated places very likely over north Tamilnadu, Puducherry, Mahe & Karaikal and north Kerala on 2nd & 3rd December, isolated heavy rainfall on 4th December.
- Heavy rainfall at isolated places very likely over south Coastal Andhra Pradesh on 2nd & 03rd December and over Lakshadweep on 03rd & 4th December, 2020.

Sub-Divisions	02 Dec 2020*	03 Dec 2020*	04 Dec 2020*
South Tamilnadu	Rainfall at most places with heavy to very heavy rainfall at few places and extremely heavy fall at isolated places	Rainfall at most places with heavy to very heavy rainfall at few places and extremely heavy fall at isolated places	Rainfall at many places with heavy to very heavy rainfall at isolated places
North Tamilnadu, Puducherry & Karaikal	Rainfall at many places with heavy to very heavy rainfall at isolated places	Rainfall at many places with heavy to very heavy rainfall at isolated places	Rainfall at many places with heavy fall at isolated places
South Kerala	Rainfall at most places with heavy to very heavy rainfall at isolated places	Rainfall at most places with heavy to very heavy rainfall at few places and extremely heavy fall at isolated places	Rainfall at many places with heavy to very heavy rainfall at isolated places
North Kerala & Mahe	Rainfall at many places with heavy to very heavy rainfall at isolated places	Rainfall at most places with heavy to very heavy rainfall at isolated places	Rainfall at a few places with heavy fall at isolated places
South Coastal Andhra Pradesh	Rainfall at a few places with heavy rainfall at isolated places	Rainfall at a few places with heavy rainfall at isolated places	Rainfall at a few places
Lakshadweep	Rainfall at most places	Rainfall at most places with heavy to very falls at isolated places	Rainfall at most places with heavy to very falls at isolated places

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

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

(ii) Wind warning

- Gale wind speed reaching 70-80 kmph gusting to 90 kmph prevails over southwest Bay of Bengal and along & off Sri Lanka coast. It is very likely to increase becoming 80-90 kmph gusting to 100 kmph from afternoon for subsequent 12 hours. It will gradually decrease thereafter.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph very likely over Comorin Area, Gulf of Mannar and along and off south Tamilnadu coast (**Kanniyakumari, Tirunelveli, Thoothukudi and Ramanathapuram districts**) and south Kerala coast (**Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzha districts**) from 2nd December forenoon. It will gradually increase becoming 55-65 kmph gusting to 75 kmph from 2nd December evening and 70-80 kmph gusting to 90 kmph from 3rd December forenoon for subsequent 24 hours and decrease thereafter.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph very likely over Lakshadweep-Maldives area and adjoining southeast Arabian Sea from 3rd December morning for next 48 hours.

(iii) Sea condition

- Sea conditions is very rough to high over southwest Bay of Bengal and along & off east Sri Lanka coast and the same will continue till night of 3rd December morning and gradually improve thereafter.
- It will be rough to very rough over Comorin Area, Gulf of Mannar, along & off south Tamilnadu-Kerala and west Sri Lanka coast on 2nd and very rough to high on 3rd and 4th December.
- Sea condition will be rough to very rough over Lakshadweep-Maldives area and adjoining southeast Arabian Sea during 3rd – 5th December.

(iv) Fishermen warning

- **Total suspension** of fishing operation **during 2nd to 5th December** over the areas as mentioned below.
- Fishermen are advised not to venture into southwest Bay of Bengal and along & off east Sri Lanka coast from **2nd to 3rd December**; Comorin Area, Gulf of Mannar and south Tamilnadu-Kerala and west Sri Lanka coasts from **2nd to 4th December**, over Lakshadweep-Maldives area & adjoining southeast Arabian Sea **from 3rd to 5th December**.

The next bulletin will be issued at 1130 hrs IST of 2nd December, 2020.

(D. R. Pattanaik)
Scientist-F, RSMC, New Delhi

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

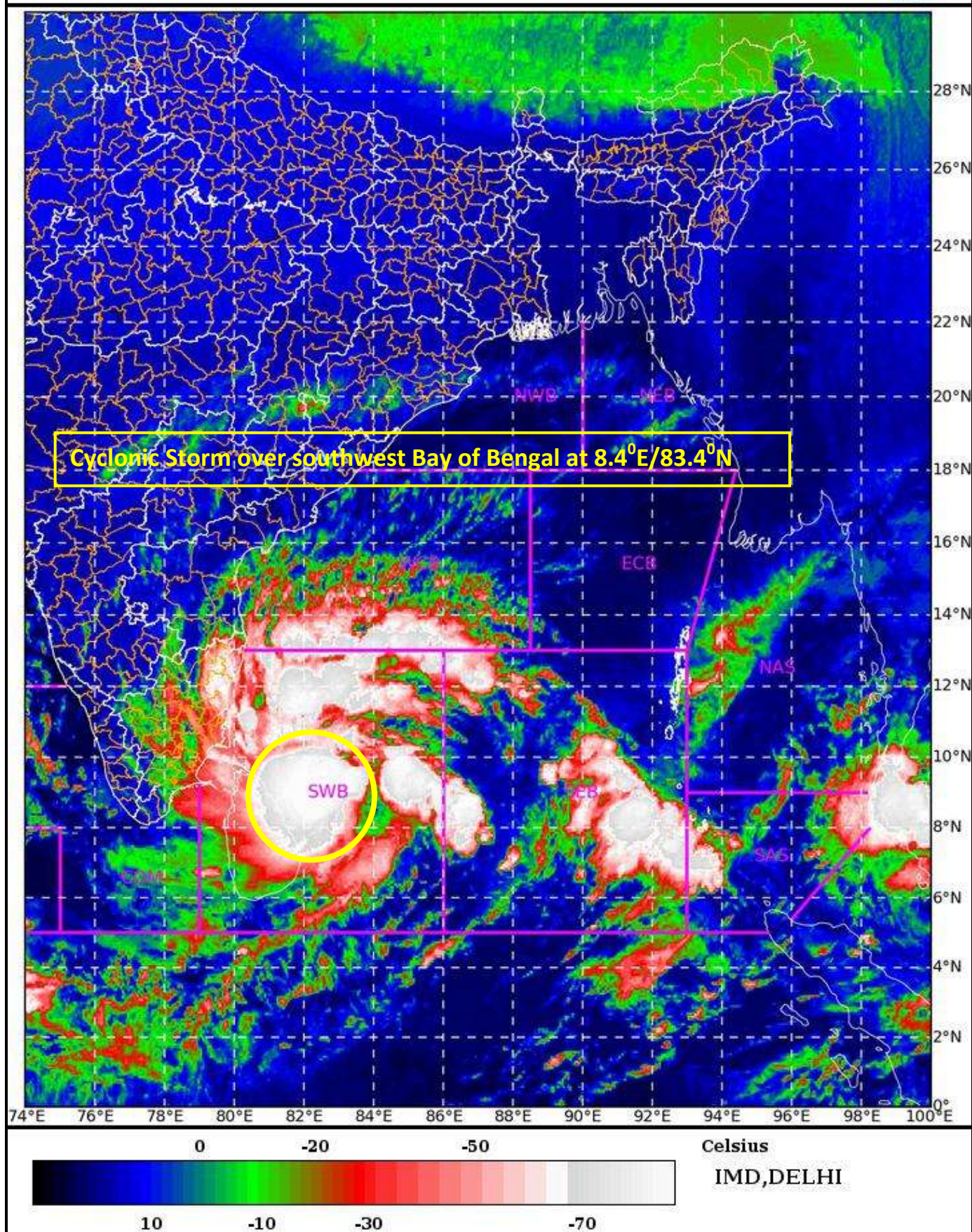
SAT : INSAT-3D IMG

02-12-2020/(0200 to 0227) GMT

IMG_TIR1_TEMP 10.8 um

02-12-2020/(0730 to 0757) IST

L1C Mercator



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

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY
OF CYCLONIC STORM “BUREVI” OVER SOUTHWEST BAY OF BENGAL
BASED ON 0000 UTC OF 02nd DECEMBER, 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 (\geq 120 KT)

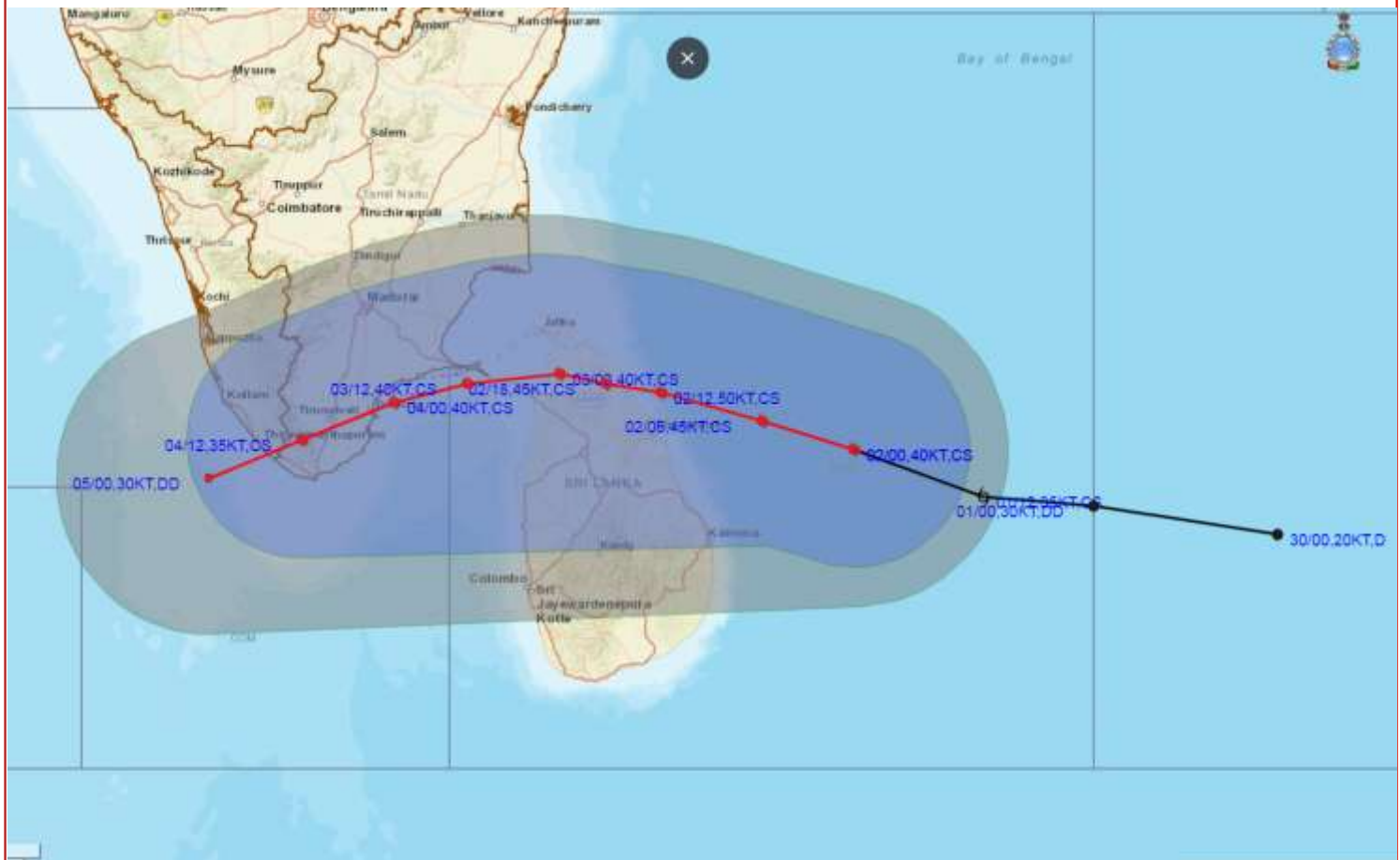
- LESS THAN 34 KT
- ⌀ 34.47 KT
- ⌀ \geq 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- ▲ CONE OF UNCERTAINTY

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

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 0000 UTC OF 02nd DECEMBER, 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
 6 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

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

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

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)
Ramanathapuram	Ramanathapuram	Tamil Nadu	Nagachi	0.7-0.9	Upto 0.31
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.5-0.6	Upto 0.69
Thoothukkudi	Tuticorin	Tamil Nadu	Hare Island	0.4-0.6	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Tuticorin Bay	0.4-0.6	Upto 0.2
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanammarudur	0.4-0.5	Nil
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.5	Upto 0.39
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.2-0.4	Upto 0.18
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.3-0.5	Nil
Srivaikuntam	Thoothukkudi	Tamil Nadu	Palayakkayal	0.4-0.5	Nil
Tiruchchendur	Thoothukkudi	Tamil Nadu	Kayalpattinam	0.3-0.5	Upto 0.28
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.3-0.6	Upto 0.8

Figure: Latest Track issued by IMD

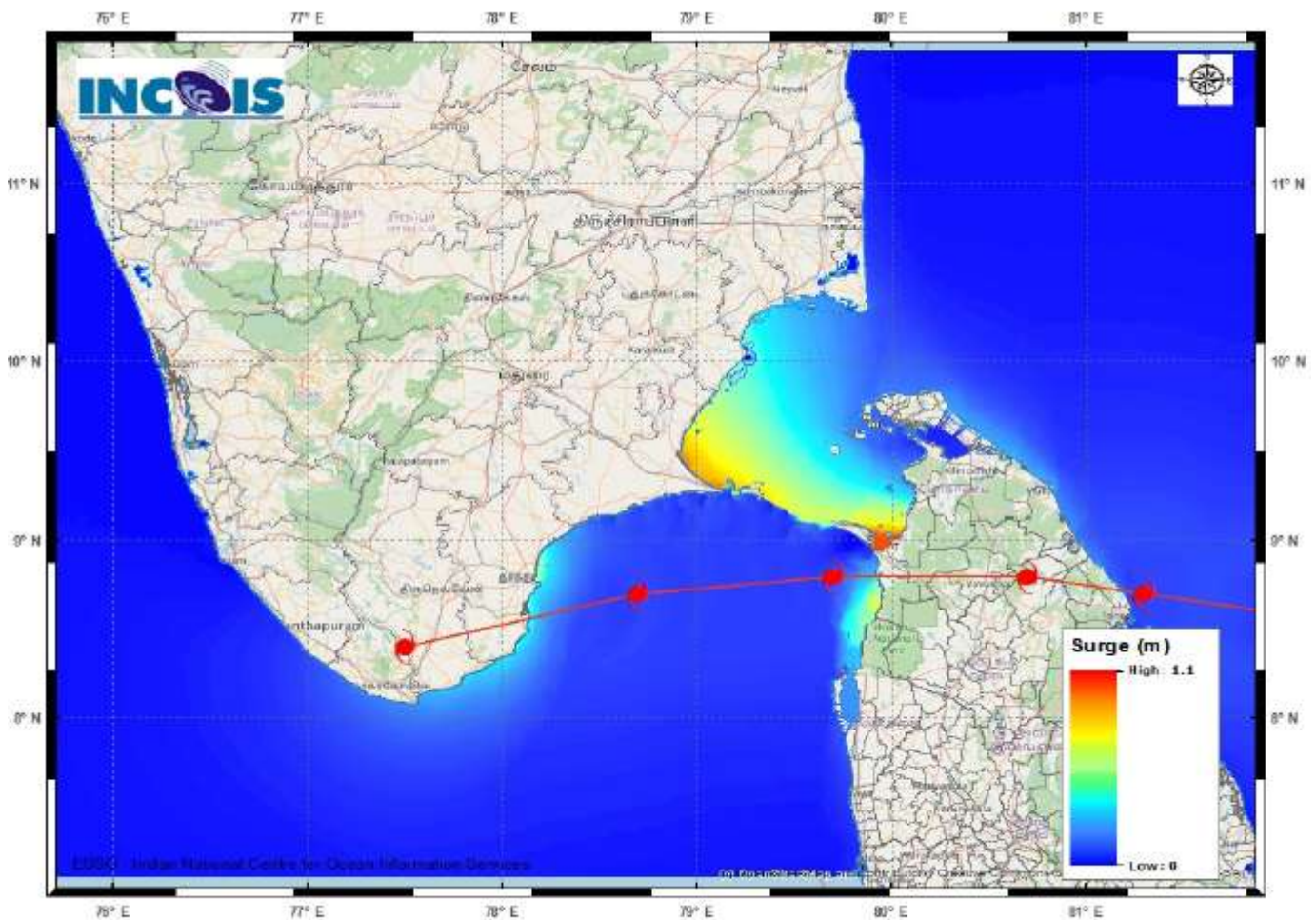


Figure:Storm Surge Map

Storm Surge Forecast by INCOIS Model

Spatial rainfall distribution: Isolated: $\leq 25\%$, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.