



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. : 21 (BOB/05/2020)

TIME OF ISSUE: 0830 HOURS IST

DATED: 03.12.2020

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Sub: Cyclonic Storm 'Burevi' over Sri Lanka (Cyclone Warning for South Tamilnadu and South Kerala coasts: Red Message)

The **Cyclonic Storm 'Burevi'** over Sri Lanka moved west-northwestwards with a speed of 11 kmph during past six hours and lay centered at 0530 hrs IST of 03rd December over Sri Lanka near Lat. 9.0°N and Long. 80.3°E, about 40 km east of Mannar, 120 km east-southeast of Pamban (India) and 320 km east-northeast of Kanniyakumari (India). It is very likely to move west-northwestwards and emerge into Gulf of Mannar near Mannar coast during next 3 hours.

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 across Pamban area by afternoon and cross south Tamilnadu coast between Pamban and Kanniyakumari during 3rd December night and 4th December early morning as a Cyclonic Storm with wind speed of 70-80 gusting to 90 kmph. Thus its impact on south Tamilnadu coastal districts is very likely to commence from 3rd December forenoon initially over Ramanathapuram district and gradually towards Kanniyakumari district.

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
03.12.20/0530	9.0/80.3	70-80 gusting to 90	Cyclonic Storm
03.12.20/1130	9.2/79.5	70-80 gusting to 90	Cyclonic Storm
03.12.20/1730	9.1/78.9	70-80 gusting to 90	Cyclonic Storm
03.12.20/2330	9.0/78.4	70-80 gusting to 90	Cyclonic Storm
04.12.20/1130	8.9/77.7	60-70 gusting to 80	Cyclonic Storm
04.12.20/2330	8.7/77.0	45-55 gusting to 65	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 (Ramanathapuram, Thoothukudi, Tirunelveli, Kanniyakumari, Tenkasi and Sivagangai districts) and over south Kerala (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah) on 3rd December and isolated heavy to very heavy rainfall likely over south Tamilnadu and south Kerala on 4th December, 2020.
- Heavy to very heavy rainfall at isolated places very likely over north Tamilnadu, Puducherry, Mahe & Karaikal and north Kerala on 3rd December, isolated heavy rainfall on 4th December.
- Heavy rainfall at isolated places very likely over south Coastal Andhra Pradesh and Lakshadweep on 3rd & 04th December.

Sub-Divisions	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 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 fall at isolated places
South Kerala	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 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
Lakshadweep	Rainfall at many places with heavy falls at isolated places	Rainfall at most places with heavy to very falls at isolated places

(ii) Wind warning

- Squally wind speed reaching 55-65 kmph gusting to 75 kmph very likely over Gulf of Mannar, Comorin Area and along and off south Tamilnadu coast (Ramanathapuram, Thoothukudi, Tirunelveli and Kanniyakumari districts) and south Kerala coast (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah districts) and west Sri Lanka coast. It will gradually increase becoming 70-80 kmph gusting to 90 kmph from 3rd December forenoon for subsequent 24 hours and decrease thereafter.
- Prevailing Gale wind speed reaching 55-65 kmph gusting to 75 kmph over southwest Bay of Bengal and along & off Sri Lanka coast will continue for next 12 hours and gradually decrease thereafter.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph very likely over Lakshadweep-Maldives area and adjoining southeast Arabian Sea on 3rd and 4th December.

(iii) Storm Surge:

- Storm surge of about 1.0 m height above astronomical tide is very likely to inundate low lying areas of south coastal Tamilnadu (Ramanathapuram, Thoothukudi, Tirunelveli and Kanniyakumari districts) and northwest Sri Lanka coast during the time of landfall.

(iii) Sea condition

-

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.

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

(iv) Damage expected over south Tamilnadu (Kanniyakumari, Tirunelveli, Thoothukudi and Ramanathapuram districts) and south Kerala (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah districts)

- Damage to thatched huts.
- Minor damage to power and communication lines due to breaking of branches.
- Major damage to Kutcha and minor damage to Pucca roads.
- Some damage to paddy crops, banana, papaya trees and orchards.
- Sea water inundation in low lying areas after erosion of Kutcha embankments.

(v) Fishermen warning and Action suggested

- Total suspension of fishing operation during 3rd 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 on 3rd December; Comorin Area, Gulf of Mannar and south Tamilnadu-Kerala and west Sri Lanka coasts from 3rd 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 3rd December, 2020.

**(Ananda Kumar Das)
Scientist-E, RSMC, New Delhi**

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

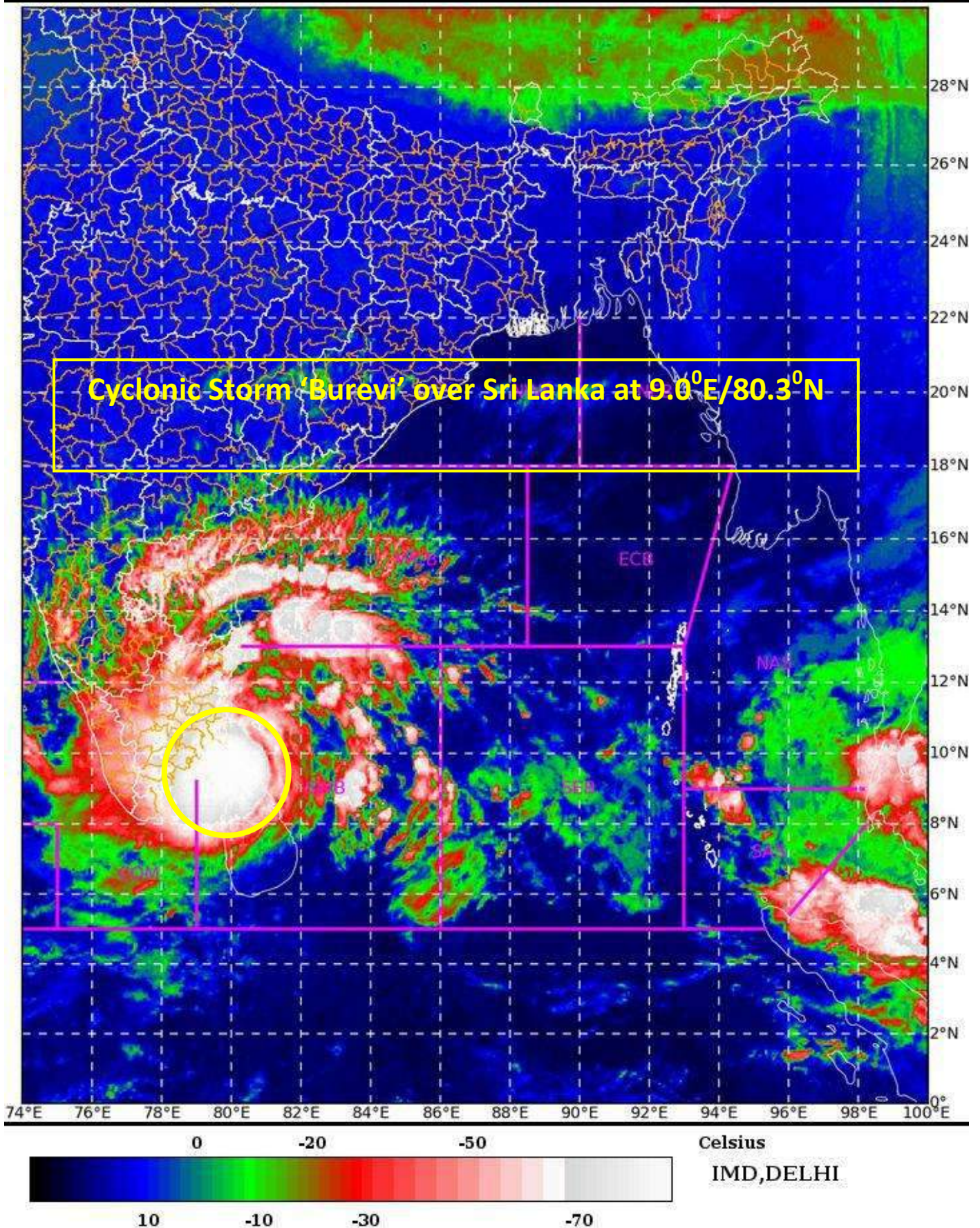
SAT : INSAT-3D IMG

03-12-2020/(0030 to 0057) GMT

IMG_TIR1_TEMP 10.8 um

03-12-2020/(0600 to 0627) IST

L1C Mercator

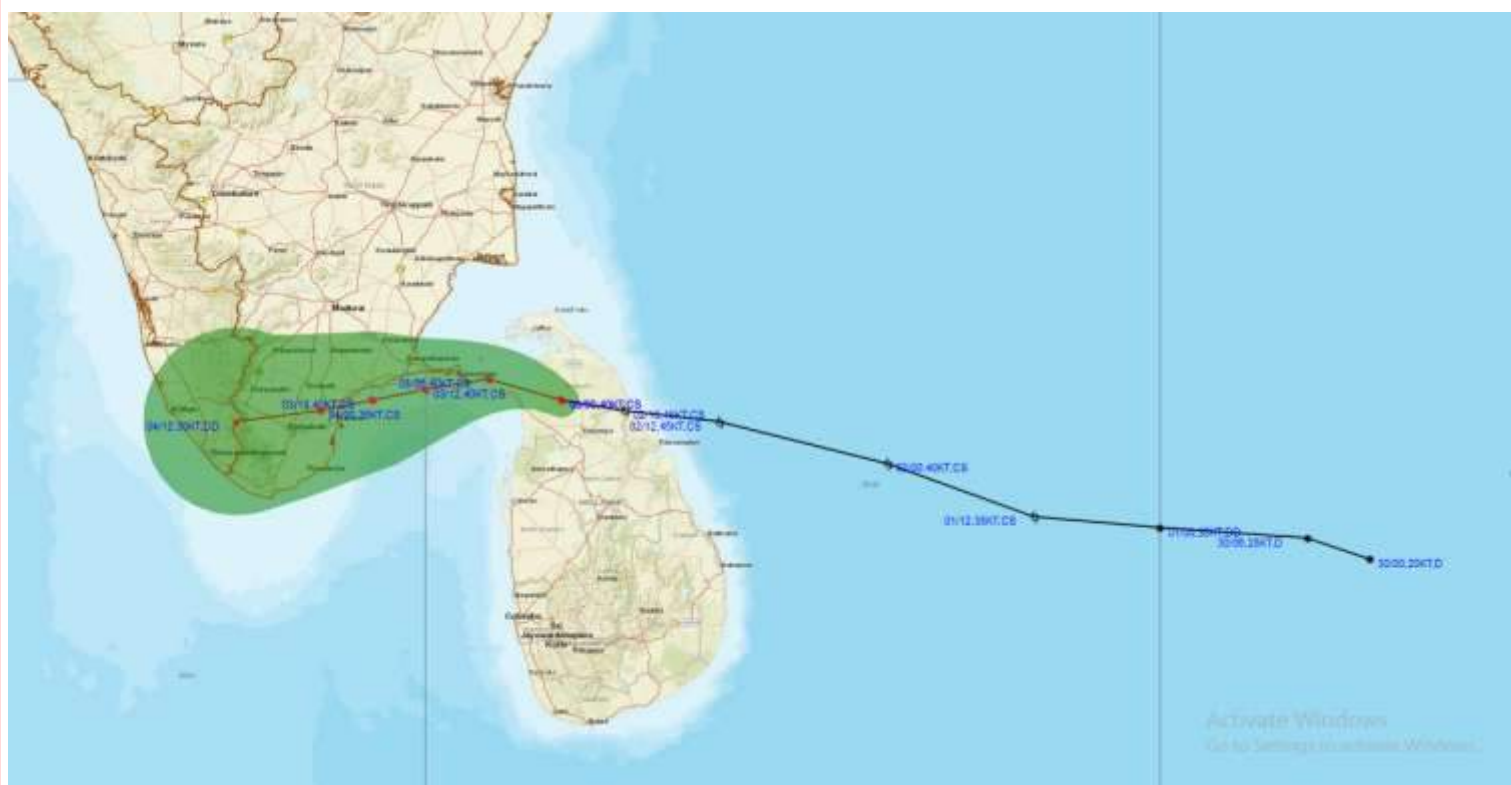


Spatial rainfall distribution: Isolated: ≤25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0000 UTC OF 3rd DECEMBER, 2020.



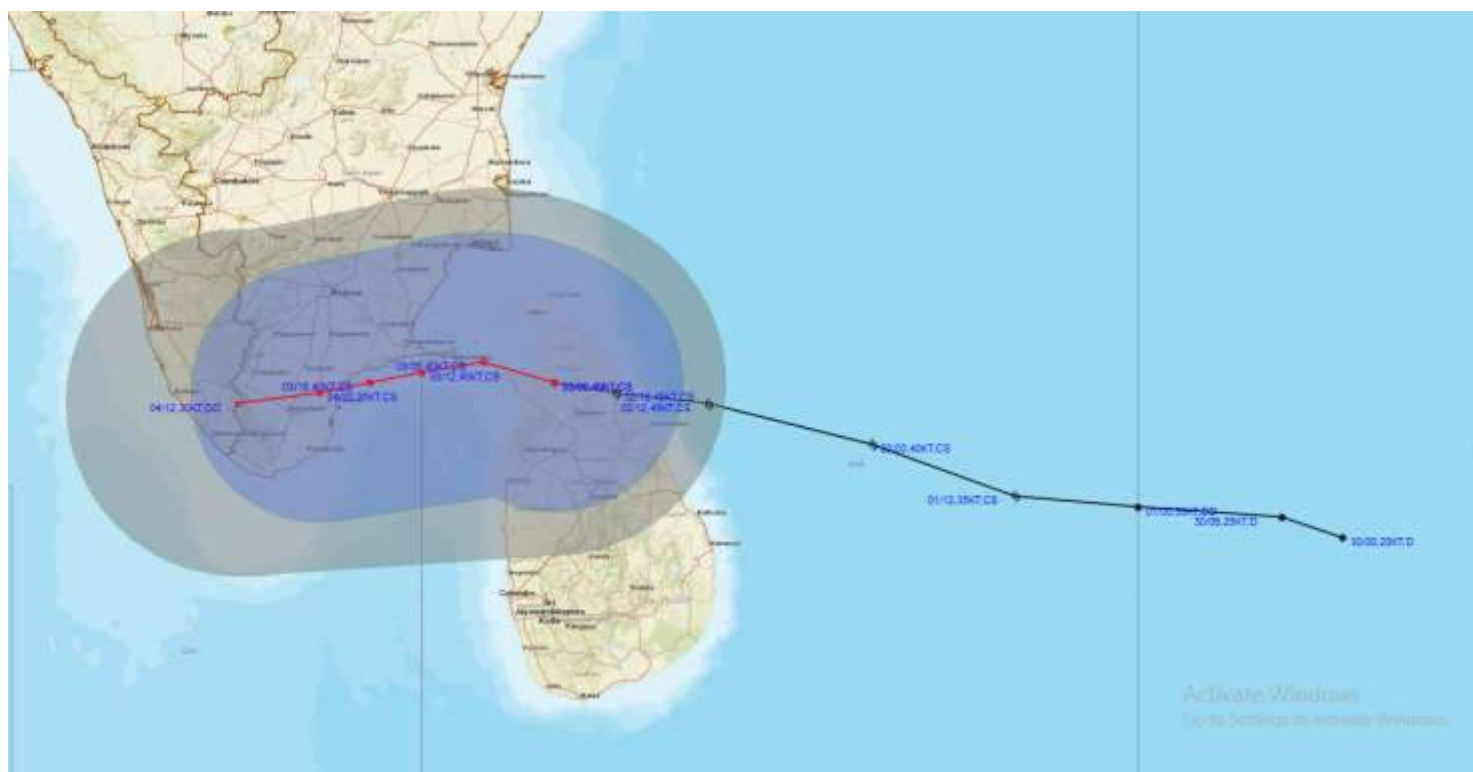
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (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 SRI LANKA BASED ON 0000 UTC OF 3rd 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

○ 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: ≤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 Forecast by INCOIS Model based on 1800 UTC of 2nd December

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)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.8-1.2	Upto 0.69
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.2-1.2	Upto 0.47
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.7	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.6	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamurudur	0.5-0.6	Upto 0.14
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.5	Upto 0.18
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.9
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil

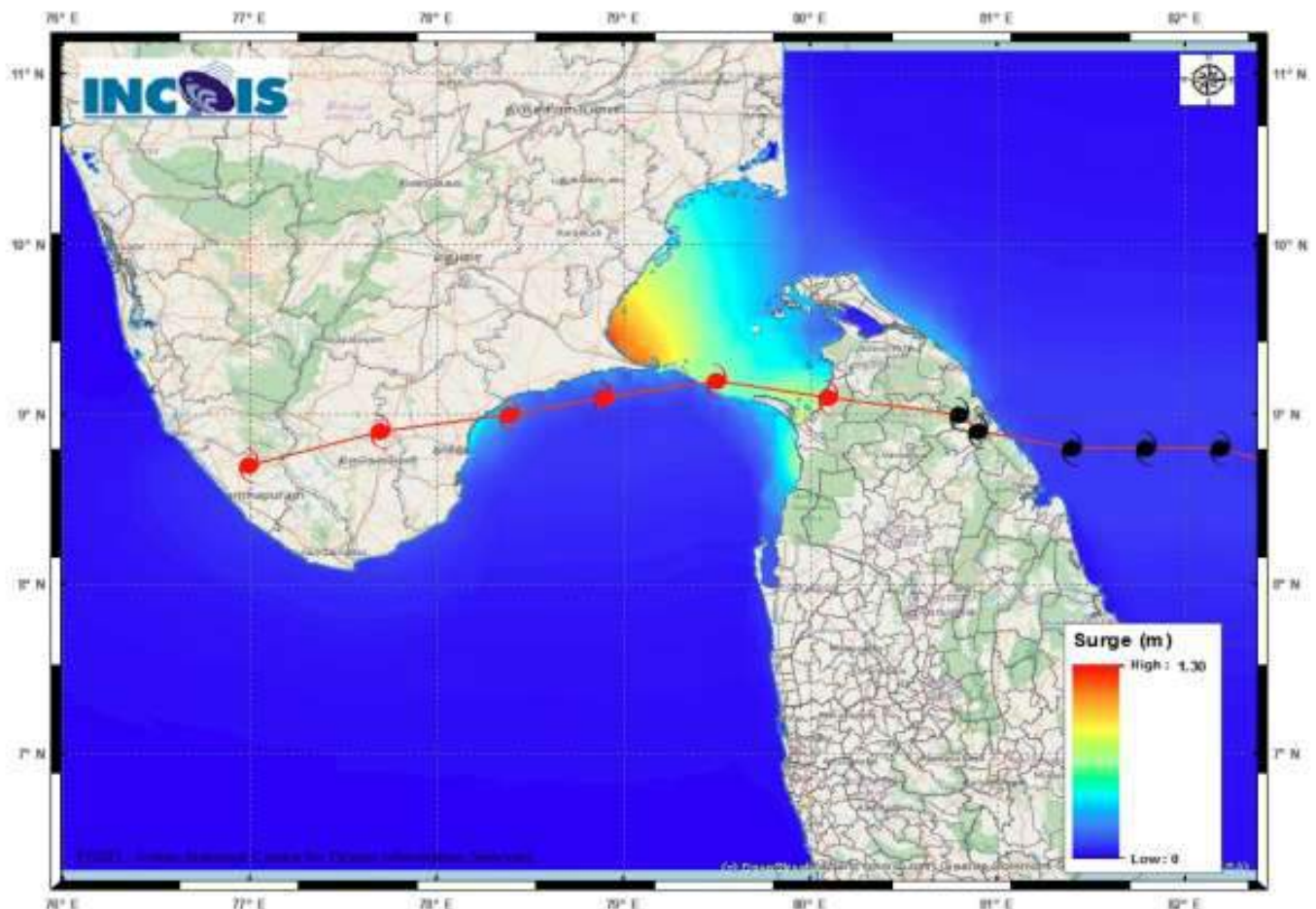


Figure: Storm Surge Map

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.