



**India Meteorological Department**  
**(Ministry of Earth Sciences)**

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**Sub: Cyclonic Storm 'Burevi' over north Sri Lanka and adjoining Gulf of Mannar**

**(Cyclone Warning for South Tamilnadu and South Kerala coasts: Red Message)**

The **Cyclonic Storm 'Burevi'** over north Sri Lanka moved west-northwestwards with a speed of 11 kmph during past six hours and lay centered at 0830 hrs IST of 03<sup>rd</sup> December over north Sri Lanka and adjoining Gulf of Mannar near Lat. 9.1°N and Long. 80.2°E, about 30 km east-northeast of Mannar, 110 km east-southeast of Pamban (India) and 310 km east-northeast of Kanniyakumari (India). It is very likely to move west-northwestwards and emerge into Gulf of Mannar 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 3<sup>rd</sup> December.** It would then move nearly west-southwestwards across Pamban area by afternoon and cross south Tamilnadu coast between Pamban and Kanniyakumari during 3<sup>rd</sup> December night and 4<sup>th</sup> 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 3<sup>rd</sup> December forenoon initially over Ramanathapuram district and gradually towards Kanniyakumari district.

Forecast track and intensity are given below:

| Date/Time(IST) | Position<br>(Lat. °N/ long. °E) | Maximum sustained surface<br>wind speed (Kmph) | Category of cyclonic disturbance |
|----------------|---------------------------------|--|----------------------------------|
| 03.12.20/0830  | 9.1/80.2                        | 70-80 gusting to 90                            | Cyclonic Storm                   |
| 03.12.20/1130  | 9.2/79.7                        | 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, Virudhunagar, Theni, Madurai and Sivagangai districts) and over south Kerala (Thiruvananthapuram, Kollam, Pathanamthitta, Idukki and Alappuzah) on 3<sup>rd</sup> December and isolated heavy to very heavy rainfall likely over south Tamilnadu and south Kerala on 4<sup>th</sup> December, 2020.
- Heavy to very heavy rainfall at isolated places very likely over north Tamilnadu, Puducherry, Mahe & Karaikal and north Kerala on 3<sup>rd</sup> December, isolated heavy rainfall on 4<sup>th</sup> December.
- Heavy rainfall at isolated places very likely over south Coastal Andhra Pradesh and Lakshadweep on 3<sup>rd</sup> & 04<sup>th</sup> 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

- Gale wind speed reaching 70-80 kmph gusting to 90 kmph prevails around the system centre covering extreme north Sri Lanka and adjoining areas of Gulf of Mannar & southwest Bay of Bengal.
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- Squally wind speed reaching 55-65 kmph gusting to 75 kmph prevails along and off south Tamilnadu coast (Ramanathapuram, Thoothukudi, Tirunelveli and Kanniyakumari districts) and 30-40 kmph gusting to 50 kmph prevails along & off south Kerala coast (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah districts).
- It will gradually increase becoming 70-80 kmph gusting to 90 kmph from 3<sup>rd</sup> December noon for subsequent 24 hours along and off south Tamilnadu coast (Ramanathapuram, Thoothukudi, Tirunelveli and Kanniyakumari districts) and 55-65 kmph gusting to 75 kmph prevails along & off south Kerala coast (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah districts). 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 on 3<sup>rd</sup> and 4<sup>th</sup> December.

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.

**(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) during the time of landfall and northwest Sri Lanka coast during next 06 hours.

**(iii) Sea condition**

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

**The next bulletin will be issued at 1430 hrs IST of 3<sup>rd</sup> December, 2020.**

**(R. K. Jenamani)**  
**Scientist-F, RSMC, New Delhi**

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

**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.**



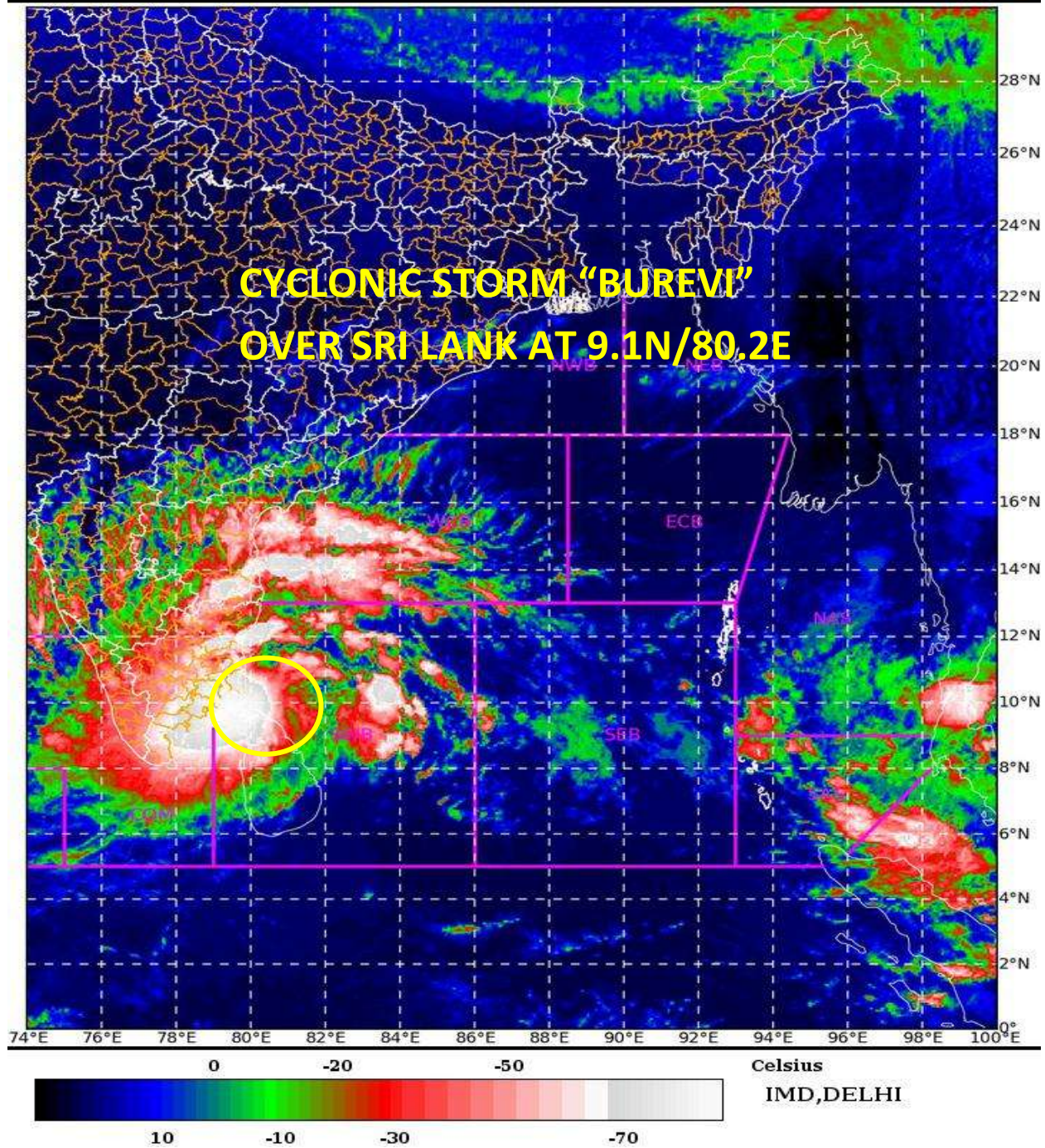
SAT : INSAT-3D IMG

03-12-2020/(0400 to 0427) GMT

IMG\_TIR1\_TEMP 10.8 um

03-12-2020/(0930 to 0957) IST

L1C Mercator

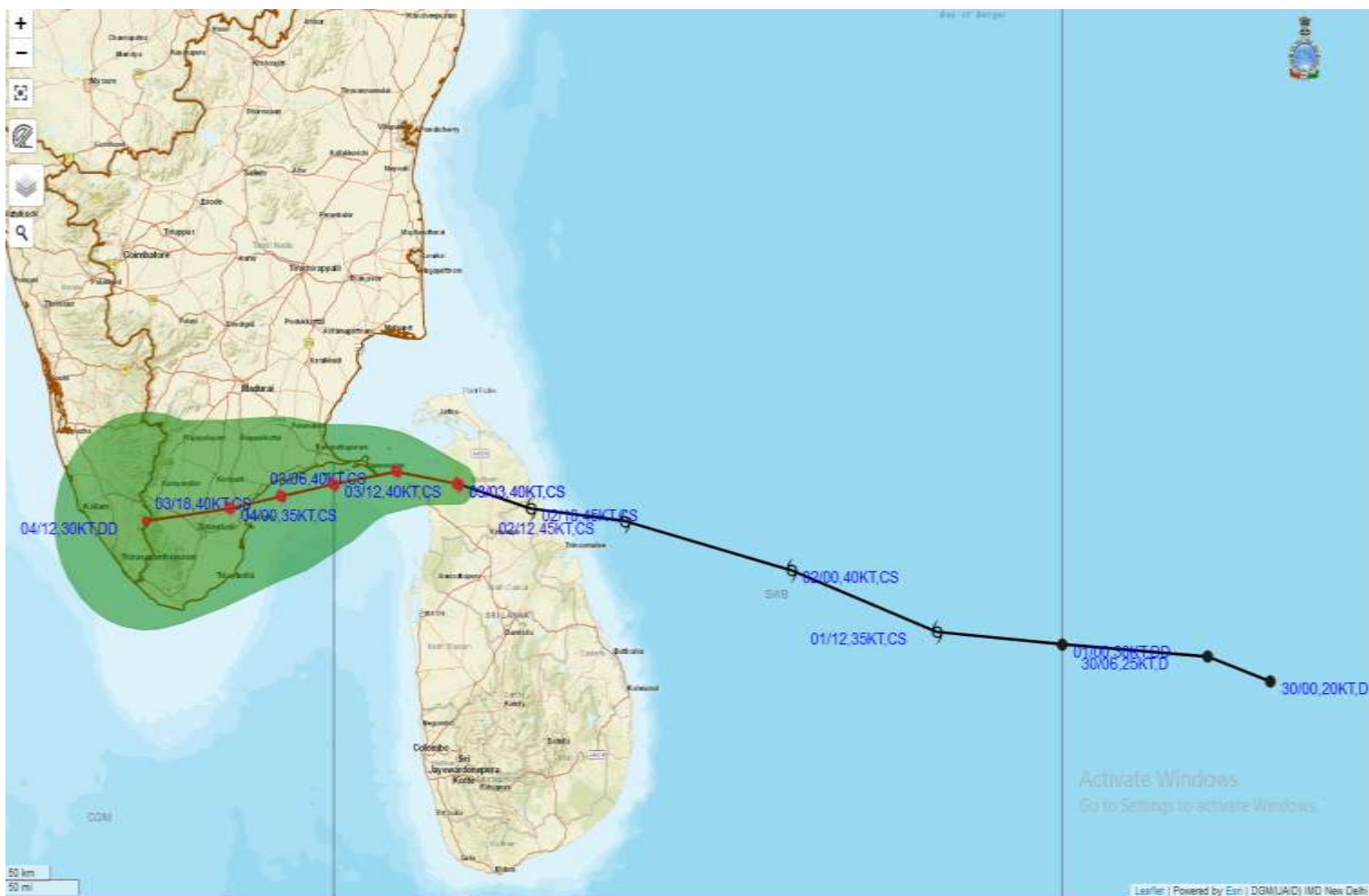


Spatial rainfall distribution: Isolated:  $\leq 25\%$ , A few: 26-50%, Many: 51-75%, Most: 76-100%

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 SRI LANKA BASED ON 0300 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

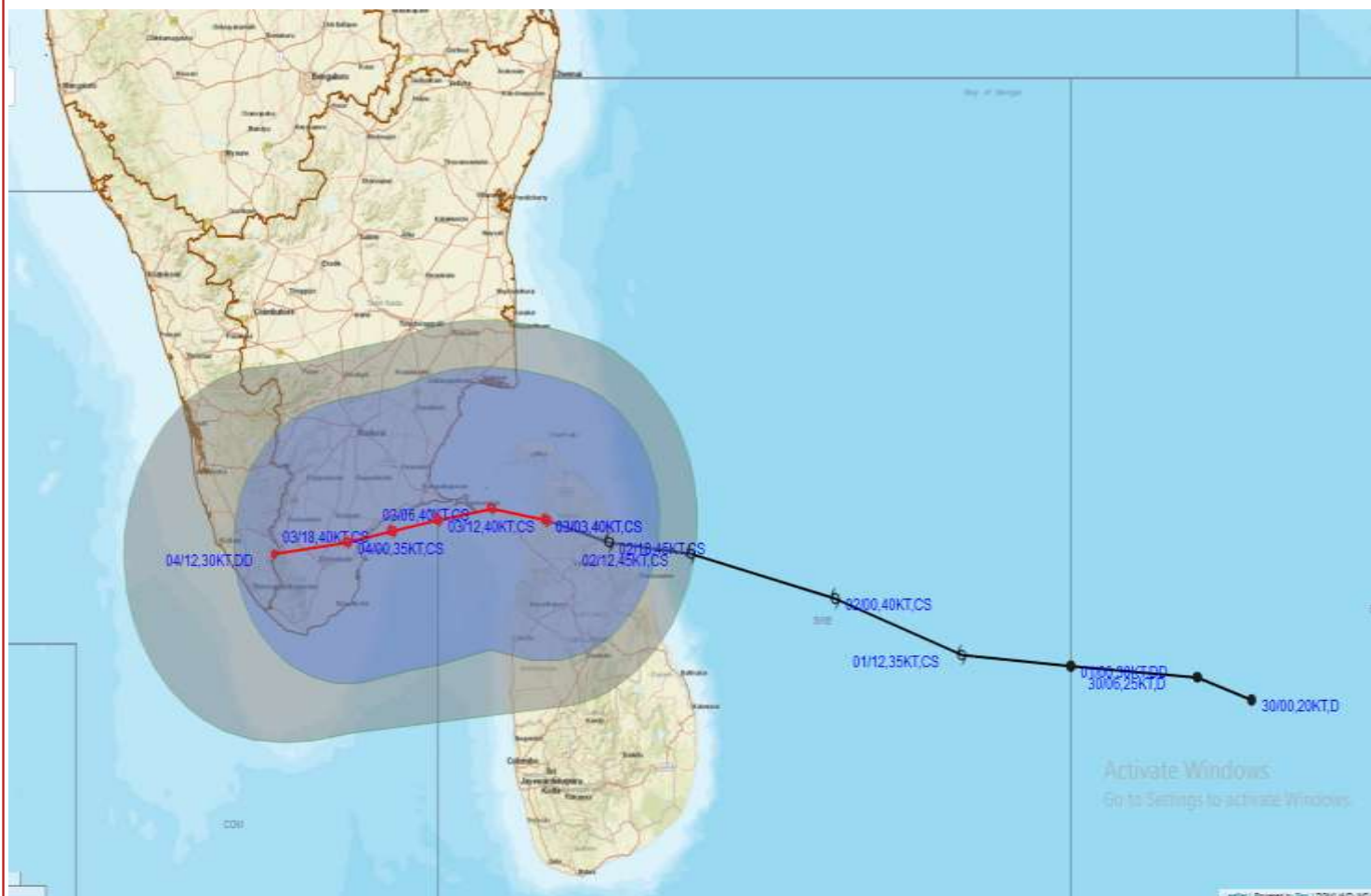
Spatial rainfall distribution: Isolated:  $\leq 25\%$ , A few: 26-50%, Many: 51-75%, Most: 76-100%

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 0300 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)

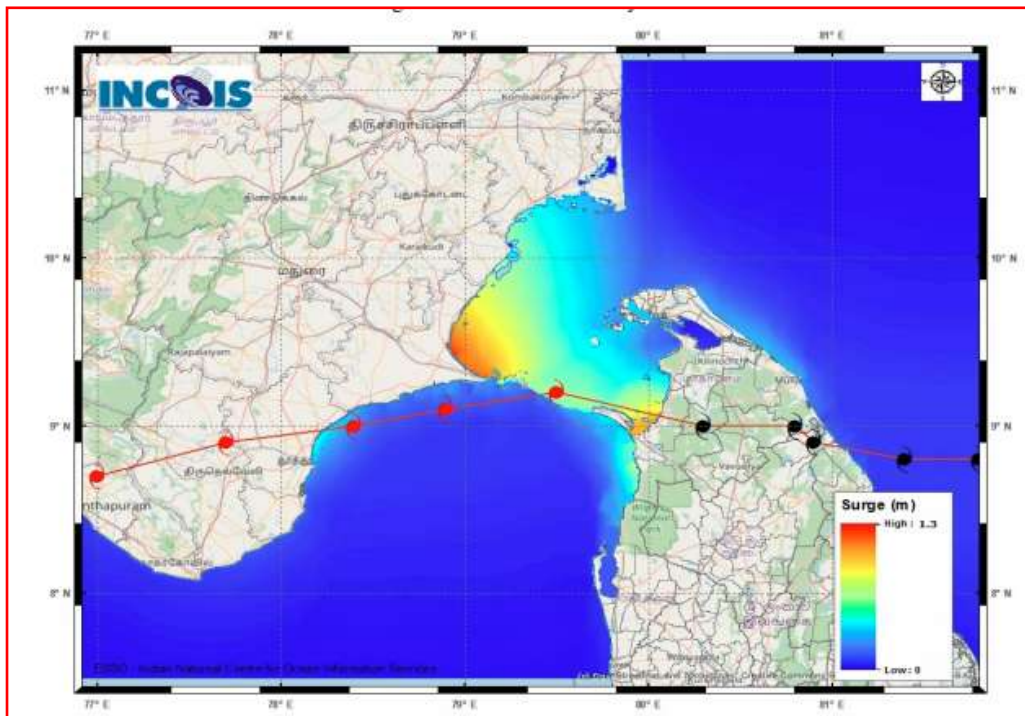
— ≥ 64 KT (≥118 KMPH)

## 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 |

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 0000 UTC of 3<sup>rd</sup> 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                    | 0.8-1.3         | 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              | Pattanamardur               | 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                             |

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.