



India Meteorological Department

(Ministry of Earth Sciences)

BULLETIN NO. : 12(BOB/05/2020)

TIME OF ISSUE: 0530 HOURS IST

DATED: 02.12.2020

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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 12 kmph during past six hours and lay centered at 0230 hrs IST of today, the 02nd December 2020 over southwest Bay of Bengal near Lat. 8.2°N and Long. 83.9°E, about 300 km east-southeast of Trincomalee (Sri Lanka), 530 km east-southeast of Pamban (India) and 700 km nearly east of Kanniyakumari (India).

It is very likely to intensify further during next 06 hours. It is very likely to move west-northwestwards and cross Sri Lanka coast between latitude 7.5°N and 9.0°N, close to Trincomalee during evening/night of 2nd December as a Cyclonic Storm with a wind speed of 75-85 kmph gusting to 95 kmph. It is very likely to move nearly westwards thereafter, emerge into Gulf of Mannar and adjoining Comorin area on 3rd December morning. It would then move nearly west-southwestwards and cross south Tamilnadu coast between Kanniyakumari and Pamban around early morning of 4th December.

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 |
|----------------|---------------------------------|--|----------------------------------|
| 02.12.20/0230 | 8.2/83.9 | 65-75 gusting to 85 | Cyclonic Storm |
| 02.12.20/0530 | 8.3/83.4 | 70-80 gusting to 90 | Cyclonic Storm |
| 02.12.20/1130 | 8.5/82.6 | 75-85 gusting to 95 | Cyclonic Storm |
| 02.12.20/1730 | 8.7/81.3 | 75-85 gusting to 95 | Cyclonic Storm |
| 02.12.20/2330 | 8.8/80.7 | 70-80 gusting to 90 | Cyclonic Storm |
| 03.12.20/1130 | 8.8/79.7 | 70-80 gusting to 90 | Cyclonic Storm |
| 03.12.20/2330 | 8.7/78.7 | 70-80 gusting to 90 | Cyclonic Storm |
| 04.12.20/1130 | 8.4/77.5 | 65-75 gusting to 85 | Cyclonic Storm |

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

- Squally wind speed reaching 65-75 kmph gusting to 85 kmph very likely over southwest and adjoining Southeast Bay of Bengal during next 06 hours.
- It would gradually increase and becoming 70-80 kmph gusting to 90 kmph over southwest Bay of Bengal, along & off Sri Lanka coast from morning to night of 2nd December and 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 Alappuzah 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 evening of 3rd December for subsequent 12 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 and adjoining Southeast Bay of Bengal during next 06 hours and gradually improve thereafter over Southeast Bay of Bengal.
- 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 2nd December 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 – 4th December.

(iv) Fishermen warning

- **Total suspension** of fishing operation **during 2nd to 4th December** over the areas as mentioned below.
- Fishermen are advised not to venture into southeast Bay of Bengal during 06 hours, 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 4th December**.
- Fishermen out at Sea are advised to return to the coast.

The next bulletin will be issued at 0830 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

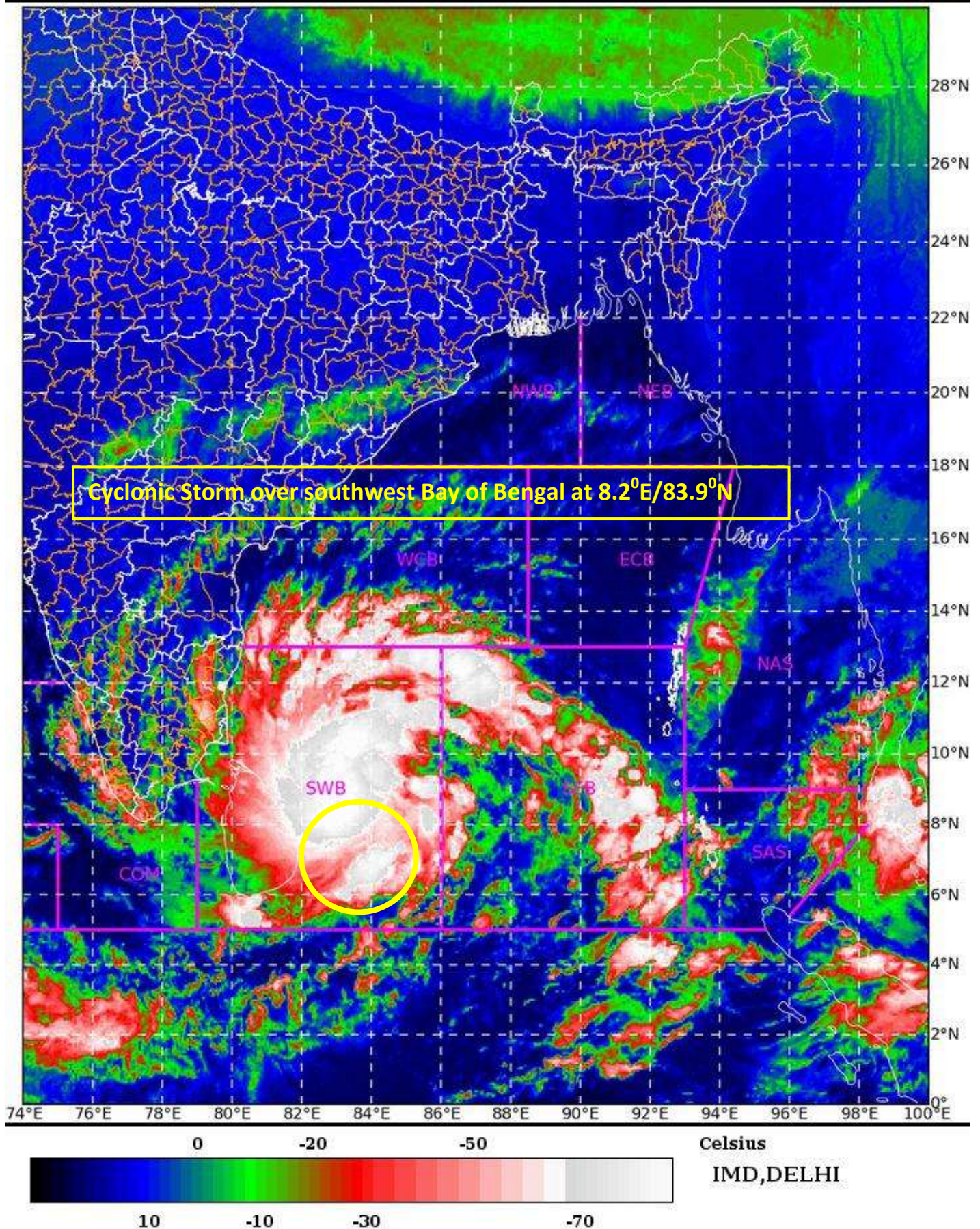
SAT : INSAT-3D IMG

01-12-2020/(2300 to 2326) GMT

IMG_TIR1_TEMP 10.8 um

02-12-2020/(0430 to 0456) IST

L1C Mercator

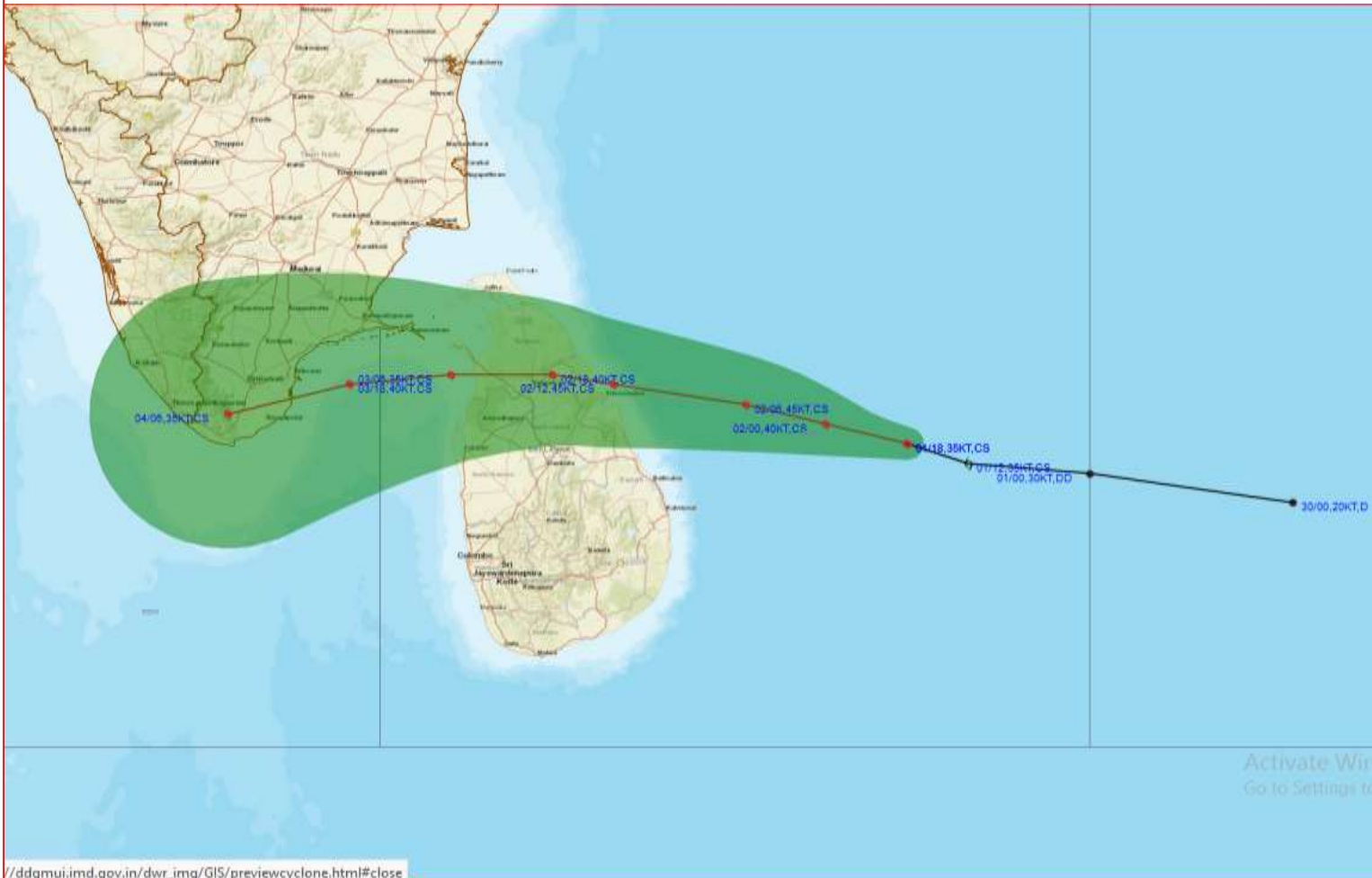


Spatial rainfall distribution: Isolated: $\leq 25\%$, A few: 26-50%, Many: 51-75%, Most: 76-100%

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 1800 UTC OF 1st DECEMBER, 2020.



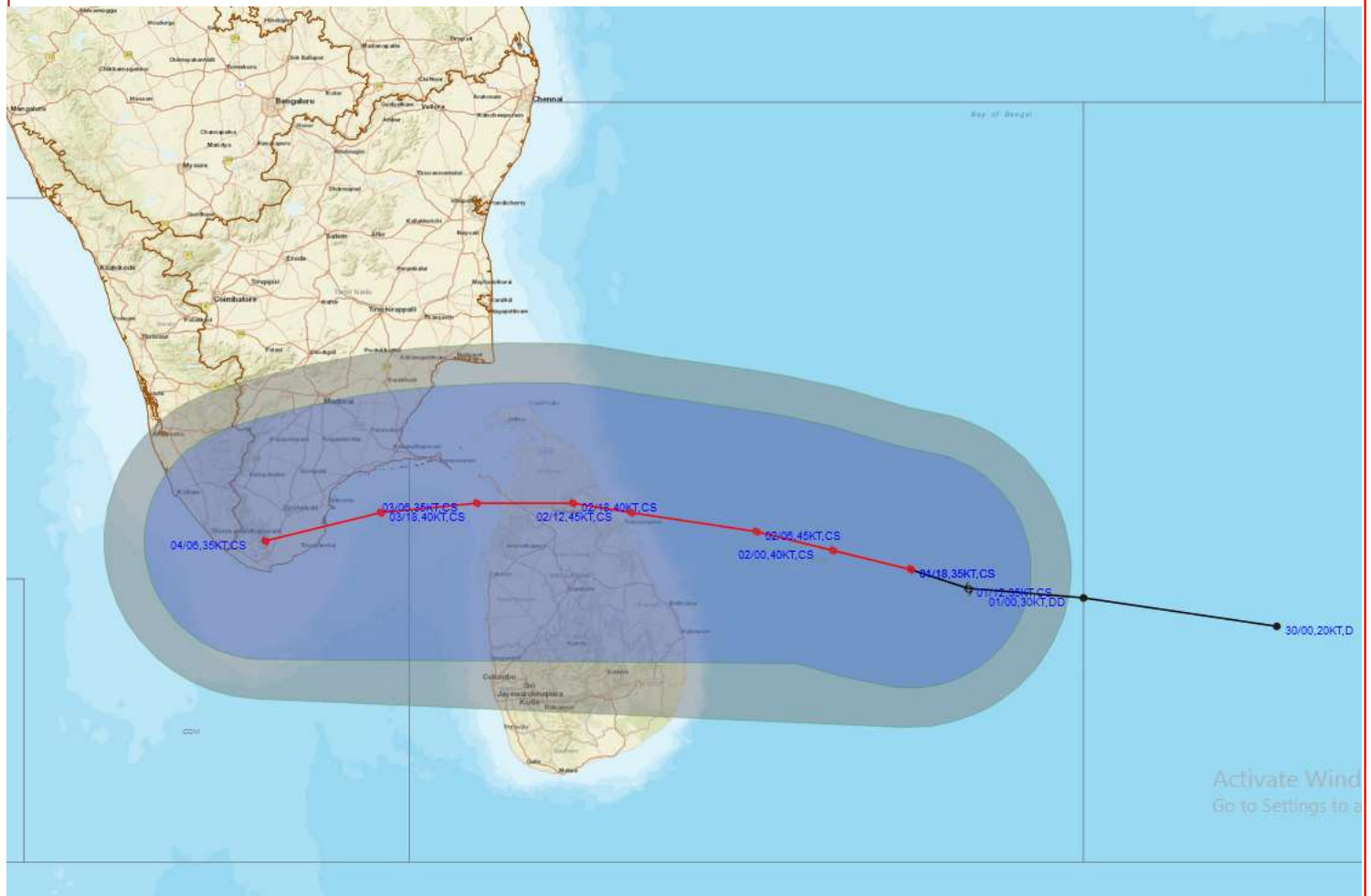
DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

● LESS THAN 34 KT
⌀ 34-47 KT
⌀ ≥ 48 KT
— OBSERVED TRACK
— FORECAST TRACK
▲ CONE OF UNCERTAINTY

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 1800 UTC OF 1st 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: $\leq 25\%$, 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) |
|----------------|----------------|-------------------------|-----------------------------|-----------------|---------------------------------|
| Arantangi | Pudukkottai | Tamil Nadu | Manamelkudi | 0.2-0.3 | Nil |
| Peravurani | Thanjavur | Tamil Nadu | Adaikkathevan | 0.2-0.3 | Nil |
| Ramanathapuram | Ramanathapuram | Tamil Nadu | Devipattinam | 0.2-0.6 | Upto 0.57 |
| Tiruvadanai | Ramanathapuram | Tamil Nadu | Vattanam | 0.3-0.5 | Upto 0.12 |

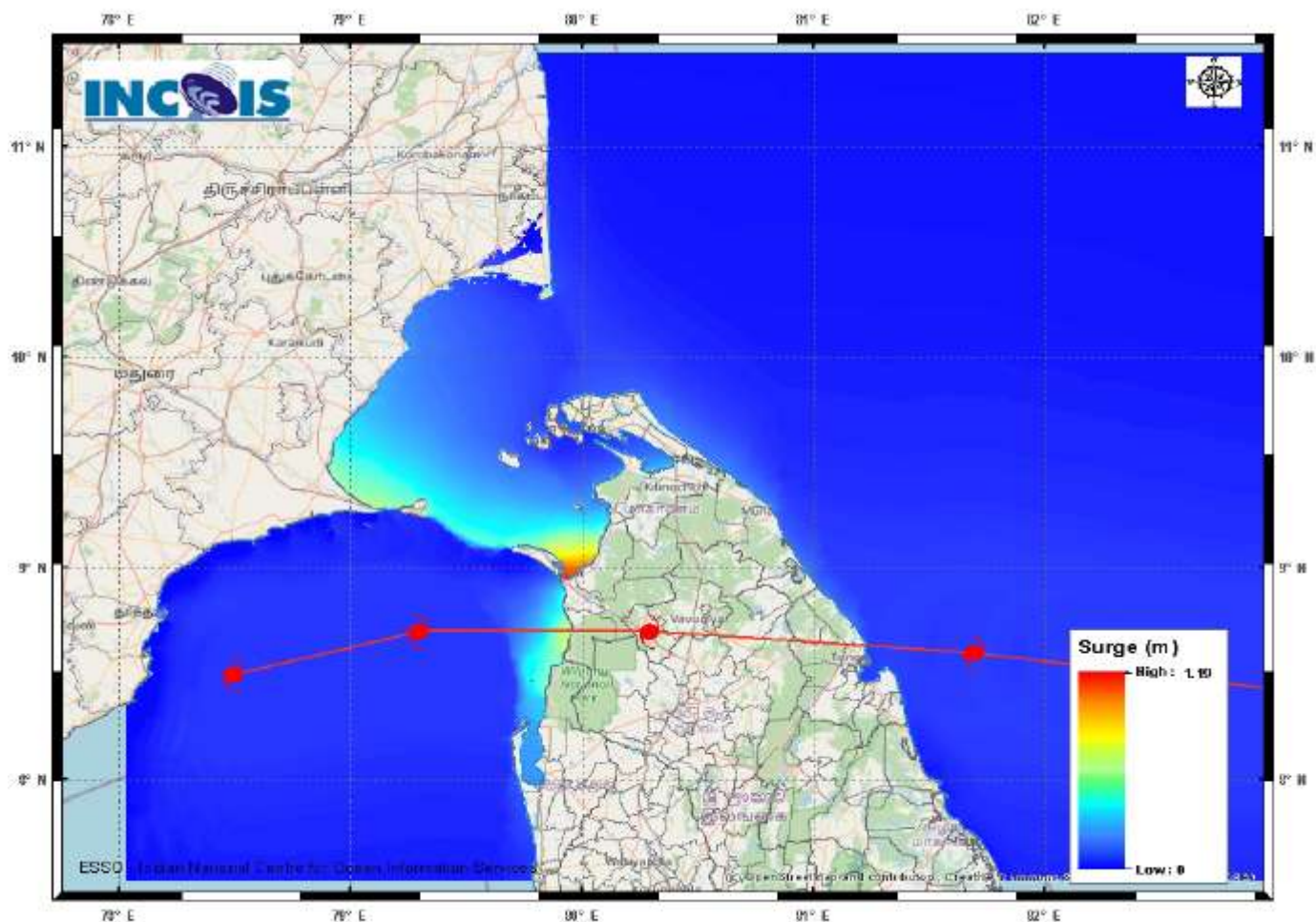


Figure: Storm Surge Map

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.