



India Meteorological Department
(Ministry of Earth Sciences)
BULLETIN NO. : 23 (BOB/05/2020)

TIME OF ISSUE: 1400 HOURS IST

DATED: 03.12.2020

FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)

TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

CABINET SECRETARIAT (FAX.NO.23012284, 23018638)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MOES, (FAX NO. 24629777)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

DIRECTOR GENERAL, DOORDARSHAN (23385843)

DIRECTOR GENERAL, AIR (23421105, 23421219)

PIB MOES (FAX NO. 23389042)

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)

DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)

CHIEF SECRETARY, KARNATAKA (FAX NO. 080-22256360, 22258913)

CHIEF SECRETARY, KERALA (FAX NO. 0471-233315)

CHIEF SECRETARY, LAKSHADWEEP ISLANDS (FAX NO. 04896-262184)

CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)

CHIEF SECRETARY, TAMIL NADU (FAX NO. 044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX NO. 0413-2337575, 2334145)

Sub: Cyclonic Storm 'Burevi' over 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 13 kmph during past six hours and lay centered at 1130 hrs IST of 03rd December over Gulf of Mannar near Lat. 9.2°N and Long. 79.6°E, about 40 km west-northwest of Mannar, 40km east-southeast of Pamban (India) and 260 km east-northeast of Kanniyakumari (India). **The associated wind speed is about 70-80 gusting to 90 kmph.**

The cyclonic storm '**Burevi**' would move nearly westwards across Pamban area by afternoon. It would then move west-southwestwards 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 would continue over Ramanathapuram, Thoothukudi, Tirunelveli and Kanniyakumari districts of south Tamilnadu and adjoining districts of south Kerala till early hours 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
03.12.20/1130	9.2/79.6	70-80 gusting to 90	Cyclonic Storm
03.12.20/1730	9.2/79.1	70-80 gusting to 90	Cyclonic Storm
03.12.20/2330	9.0/78.5	70-80 gusting to 90	Cyclonic Storm
04.12.20/0530	8.9/78.0	60-70 gusting to 80	Cyclonic Storm
04.12.20/1130	8.8/77.4	50-60 gusting to 70	Deep Depression
04.12.20/2330	8.7/76.3	40-50 gusting to 60	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 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	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 is very likely during next 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 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) 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 3rd and 4th 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 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 1730 hrs IST of 3rd December, 2020.

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

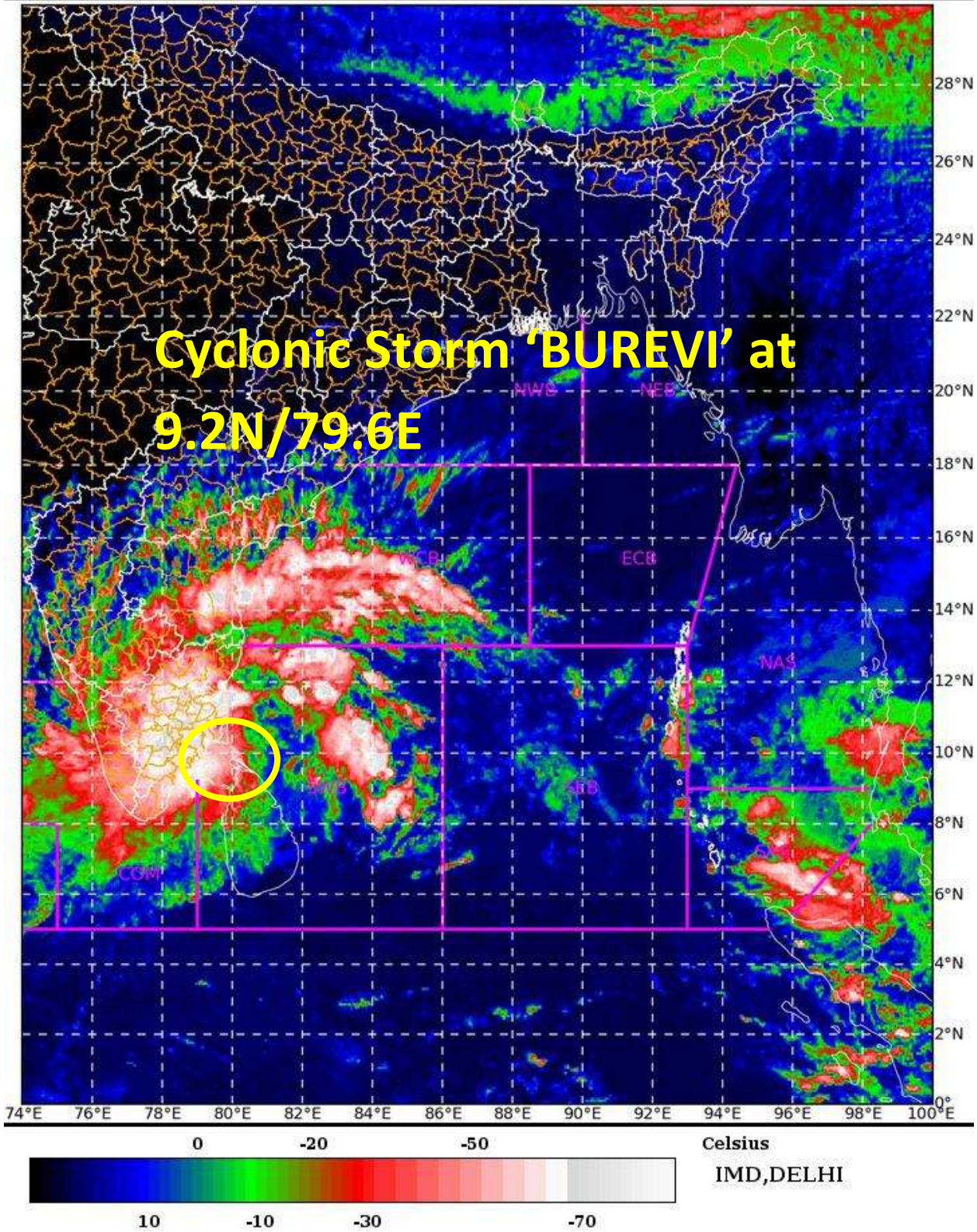
Copy to: ACWC Kolkata/Chennai/CWC Bhubaneswar/CWC Visakhapatnam/CWC Thiruvananthapuram

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/(0730 to 0757) GMT

IMG_TIR1_TEMP 10.8 um 03-12-2020/(1300 to 1327) 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 0600 UTC OF 3rd DECEMBER, 2020.



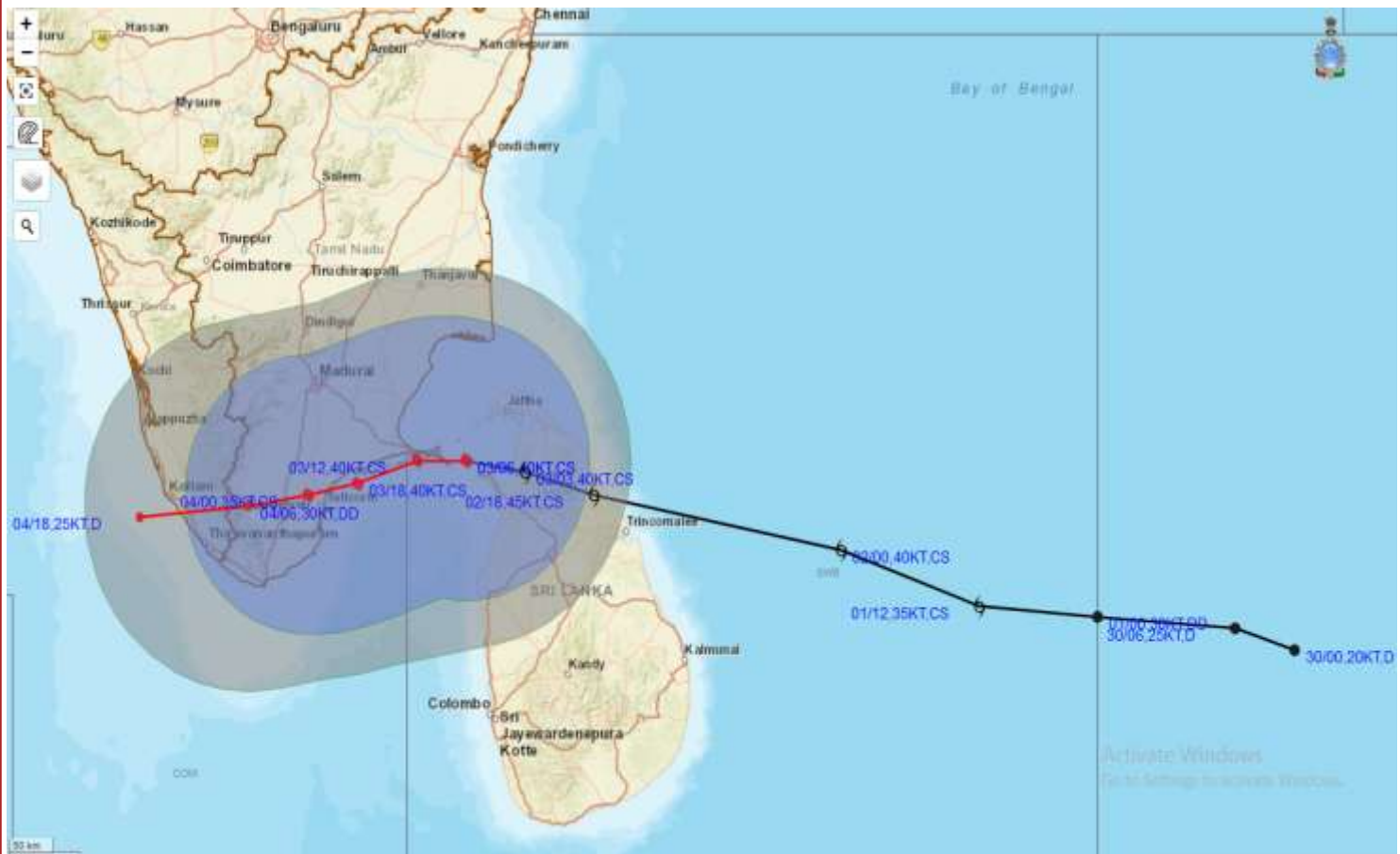
DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 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 0600 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
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ \geq 64 KT (\geq 118 KMPH)

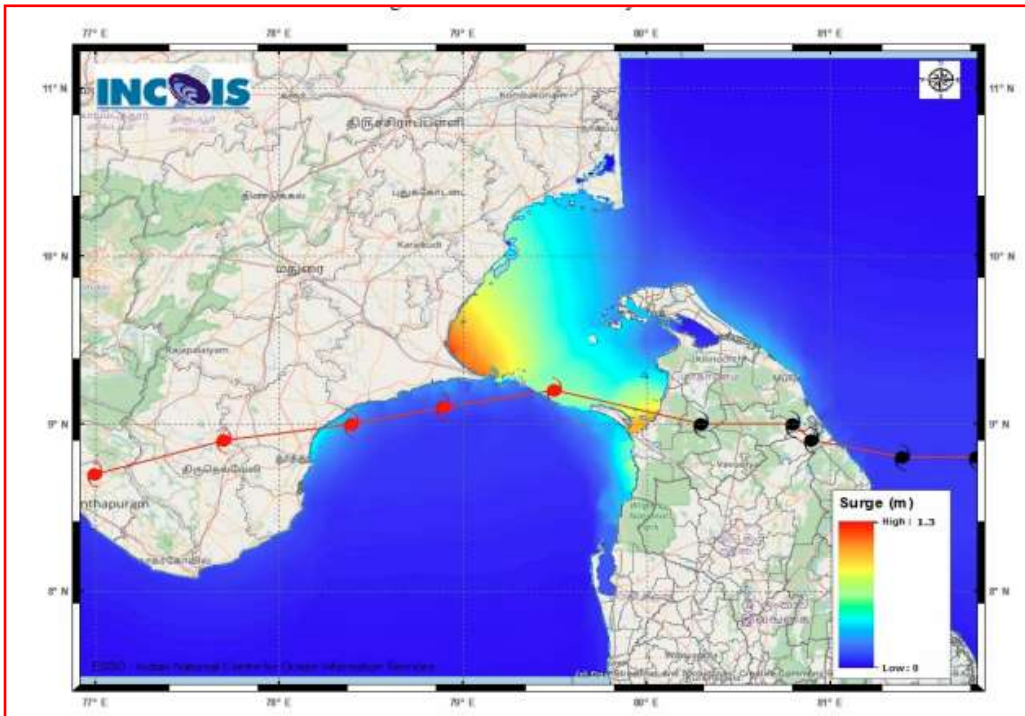
IMPACT OVER THE SEA

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
\geq 64 (\geq 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 Forecast by INCOIS Model based on 0000 UTC of 3rd 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)
Tiruvadana	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	Pattanamarudur	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.