



India Meteorological Department

(Ministry of Earth Sciences)

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Sub: Depression over southeast Bay and adjoining southwest Bay of Bengal & neighbourhood (Pre-Cyclone Watch for South Tamilnadu and South Kerala coasts)

The **Depression** over southeast Bay of Bengal moved nearly westwards with a speed of 7 kmph during past six hours and lay centered at 2330 hrs IST of 30th November 2020 over southeast and adjoining southwest Bay of Bengal near Lat. 7.8° N and Long. 86.6°E, about 590 km east-southeast of Trincomalee (Sri Lanka) and 1000 km east of Kanniyakumari (India). It is very likely to intensify further into a Deep Depression during next 06 hours and into a cyclonic storm during subsequent 12 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. It is very like to move nearly westwards thereafter, emerge into Comorin area on 3rd December morning and move westward towards south Tamilnadu coast.

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
30.11.20/2330	7.8/86.6	45-55 gusting to 65	Depression
01.12.20/0530	8.0/86.0	50-60 gusting to 75	Deep Depression
01.12.20/1130	8.1/85.3	60-70 gusting to 80	Cyclonic Storm
01.12.20/1730	8.2/84.6	65-75 gusting to 85	Cyclonic Storm
01.12.20/2330	8.3/83.9	70-80 gusting to 90	Cyclonic Storm
02.12.20/1130	8.5/82.5	75-85 gusting to 95	Cyclonic Storm
02.12.20/2330	8.5/80.8	60-70 gusting to 80	Cyclonic Storm
03.12.20/1130	8.4/79.5	65-75 gusting to 85	Cyclonic Storm
03.12.20/2330	8.3/78.4	70-80 gusting to 90	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 1st and 4th December 2020 and south Kerala on 2nd and 4th December, 2020.
- Heavy to very heavy rainfall at Isolated places very likely over north Tamilnadu, Puducherry, Mahe & Kariakal and north Kerala during 2nd and 3rd December, 2020 and isolated heavy rainfall on 1st and 4th December.
- Heavy rainfall at isolated places very likely over south Coastal Andhra Pradesh during 2nd & 03rd December and over Lakshadweep during 03rd and 4th December, 2020.

Sub-Divisions	01 Dec 2020*	02 Dec 2020*	03 Dec 2020*	04 Dec 2020*
South Tamilnadu	Rainfall at many places with 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 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 a few places with heavy rainfall at isolated places	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 many places with heavy rainfall at isolated places	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 rainfall at isolated places	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 isolated places	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 a few places	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 45-55 kmph gusting to 65 kmph very likely over central parts of South Bay of Bengal during next 6 hours.
- It would gradually increase becoming 55-65 kmph gusting to 75 kmph over southeast and adjoining southwest Bay of Bengal from 1st December morning. It would gradually increase becoming gale wind speed reaching 70-80 kmph gusting to 90 kmph over southwest Bay of Bengal, along & off Sri Lanka coast from 2nd December morning for subsequent 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph very likely over Comorin Area, Gulf of Mannar and south Tamilnadu-Kerala coasts from 2nd December forenoon. It will gradually increase becoming 55-65 kmph gusting to 75 kmph over Gulf of Mannar, along & off south Tamilnadu & Kerala coasts, over Comorin Area, Lakshadweep-Maldives area and adjoining southeast Arabian Sea from 3rd December morning for subsequent 48 hours.

(iii) Sea condition

- Prevailing rough to very rough sea condition over southeast Bay of Bengal will continue during 1st December and very rough to high over southwest & adjoining southeast Bay of Bengal and along & off east Sri Lanka coast during 1st & 2nd December, and rough to very rough over Comorin Area, Gulf of Mannar & along & off south Tamilnadu-Kerala coasts from 2nd to 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 30th November to 4th December** over the areas as mentioned below.
- Fishermen are advised not to venture into southeast Bay of Bengal during 1st December, southwest Bay of Bengal and along & off east Sri Lanka coast from **1st to 3rd December**; Comorin Area, Gulf of Mannar and south Tamilnadu-Kerala 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 by today.

The next bulletin will be issued at 0830 hrs IST of 01 December, 2020.

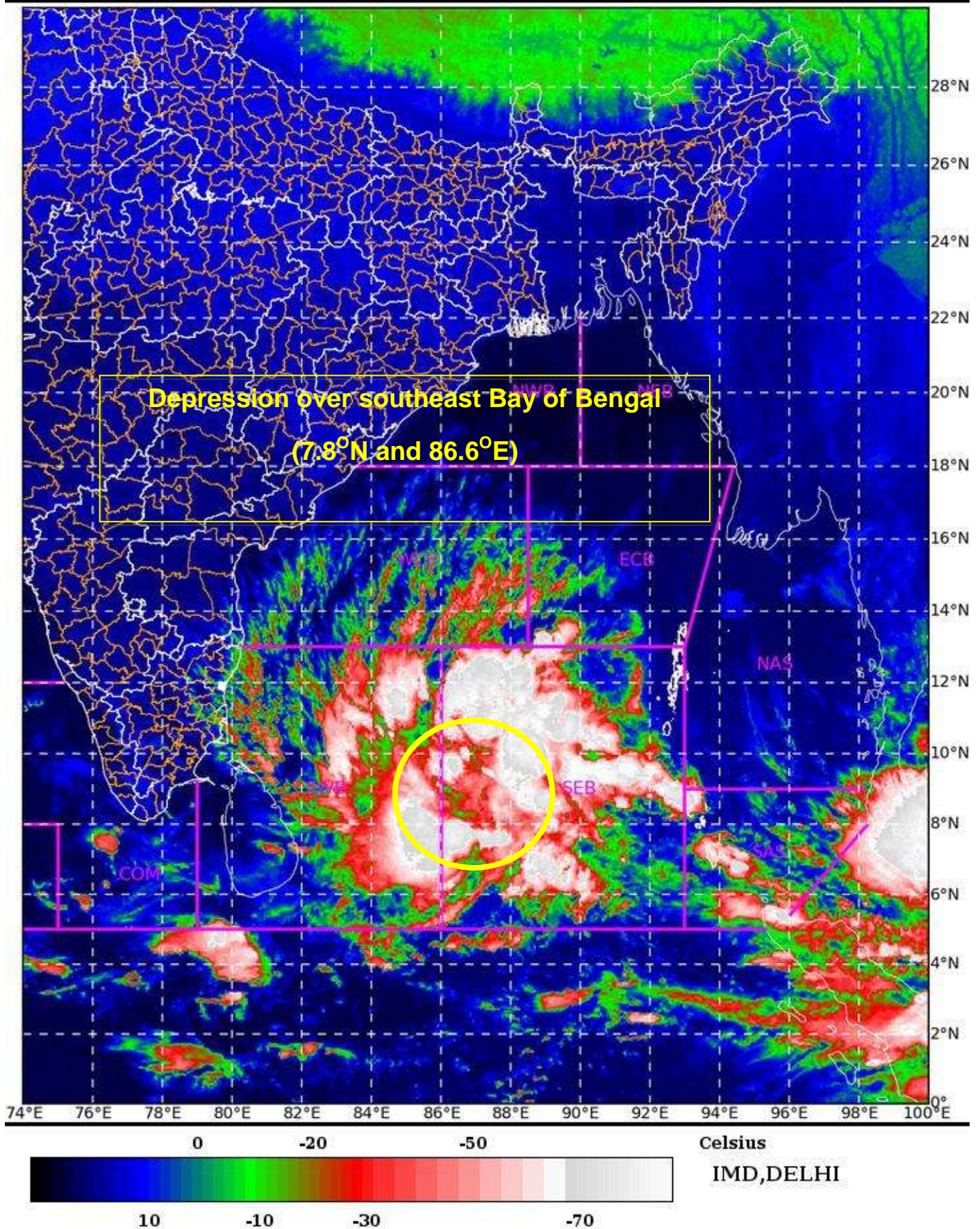
(A.K. Das)
Scientist-E, RSMC, New Delhi

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

SAT : INSAT-3DR IMG 30-11-2020/(1945 to 2011) GMT

IMG_TIR1_TEMP 10.8 um 01-12-2020/(0115 to 0141) IST

L1C Mercator

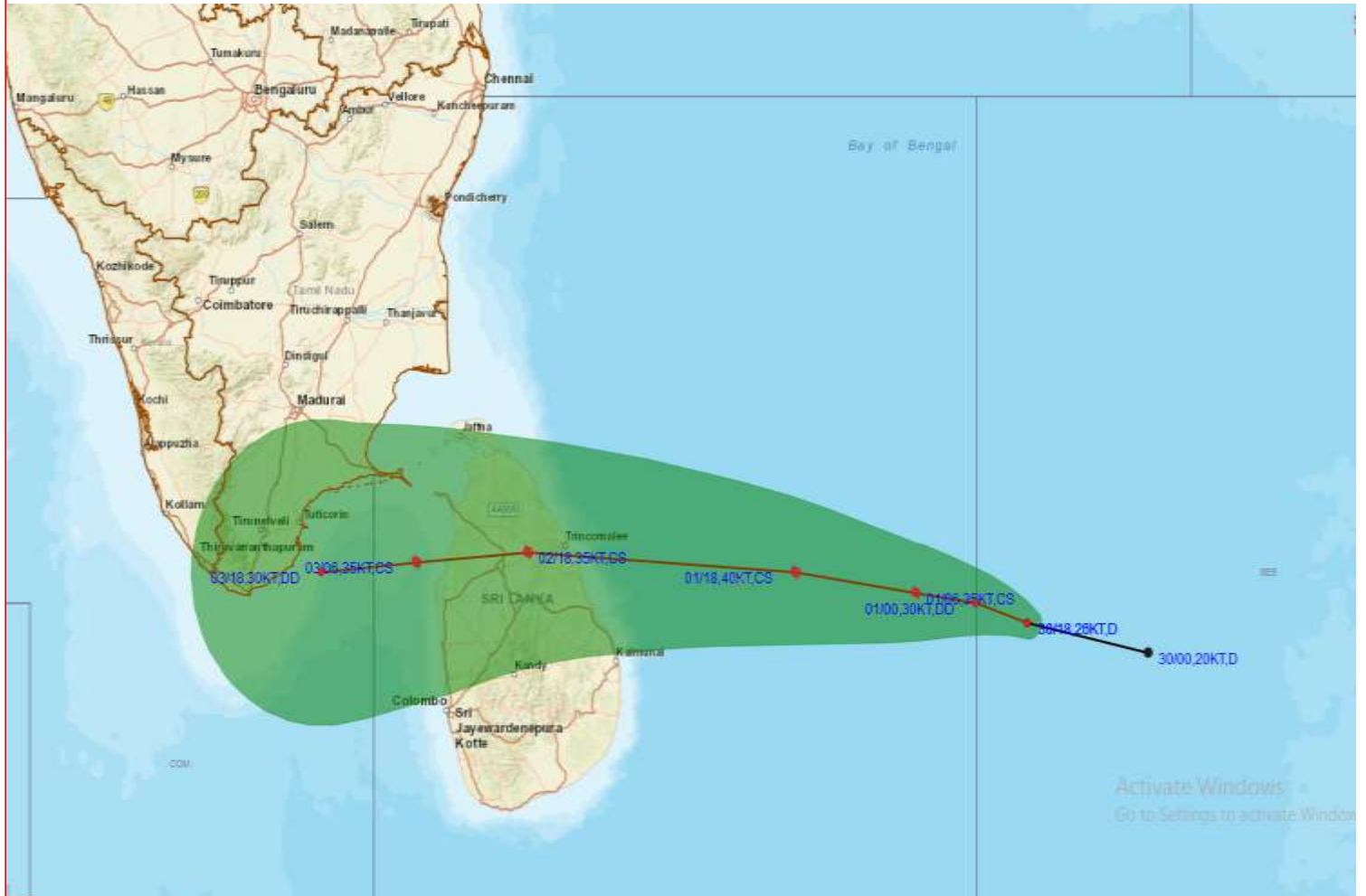


Spatial rainfall distribution: Isolated: $\leq 25\%$, A few: 26-50%, Many: 51-75%, Most: 76-100%

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 DEPRESSION OVER SOUTHEAST AND ADJOINING SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 30TH NOVEMBER, 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



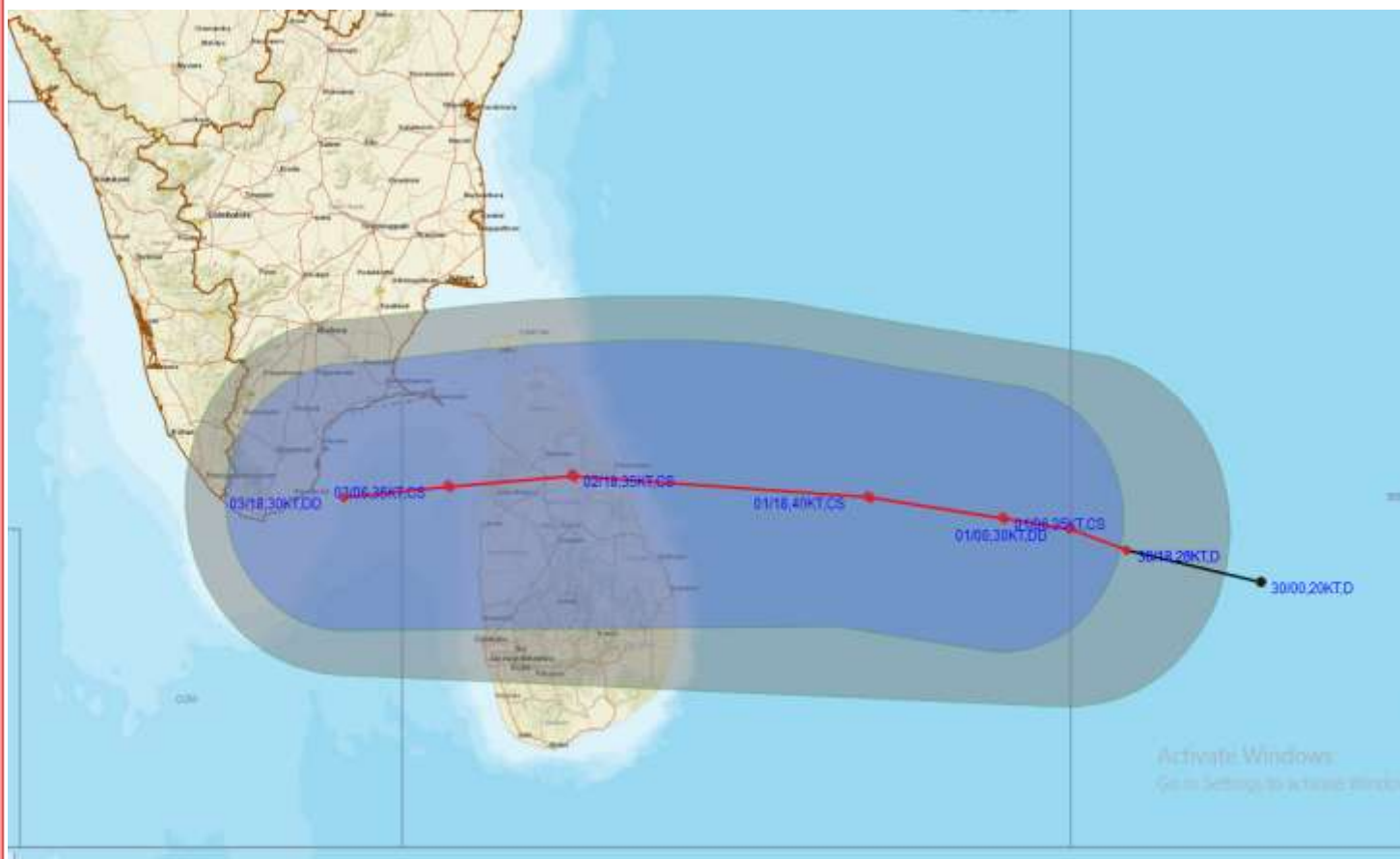
CONE OF UNCERTAINTY

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 DEPRESSION OVER SOUTHEAST AND ADJOINING SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 30TH NOVEMBER, 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)

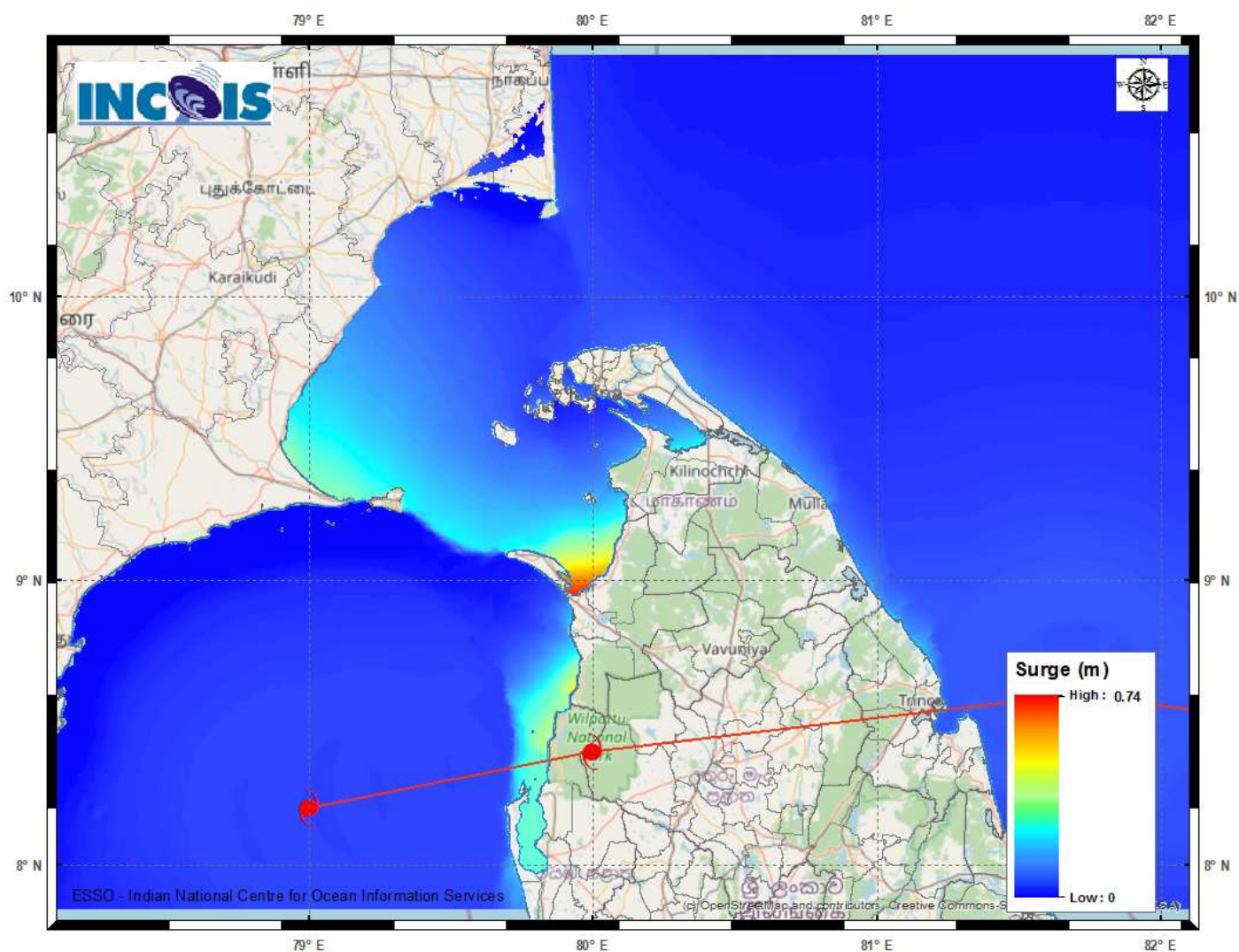
■ \geq 64 KT (\geq 118 KMPH)

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

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.