



India Meteorological Department
(Ministry of Earth Sciences)
BULLETIN NO. : 29 (BOB/05/2020)

TIME OF ISSUE: 0800 HOURS IST

DATED: 04.12.2020

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

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Sub: Deep Depression over Gulf of Mannar

The **Deep Depression** over Gulf of Mannar close to Ramanathapuram District coast **remained practically stationary** during past three hours and lay centered at 0530 hrs IST of 04th December over Gulf of Mannar near Lat. 9.1°N and Long. 78.6°E close to Ramanathapuram District coast, about 40 km southwest of Ramanathapuram, 70 km west-southwest of Pamban and 160 km northeast of Kanniyakumari. **The associated wind speed is about 55-65 gusting to 75 kmph.**

The Deep Depression likely to move slowly west-southwestwards and cross Ramanathapuram and adjoining Thoothukudi districts during next 06 hours with wind speed of 50-60 gusting to 70 kmph. It is very likely to weaken further into a Depression (wind speed 45-55 kmph gusting to 65 kmph) during next 12 hours.

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
04.12.20/0530	9.1/78.6	55-65 gusting to 75	Deep Depression
04.12.20/1130	9.0/78.2	50-60 gusting to 70	Deep Depression
04.12.20/1730	8.9/77.8	45-55 gusting to 65	Depression
04.12.20/2330	8.8/77.4	25-35 gusting to 45	Low Pressure Area

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 very likely over south Tamilnadu and at isolated places over Kerala & Mahe during next 24 hours. Heavy to very heavy rainfall at isolated places very likely over north Tamilnadu, Puducherry & Karaikal during next 24 hours.
- Heavy rainfall at isolated places very likely over south Coastal Andhra Pradesh and Lakshadweep on 04th December.

Sub-Divisions	04 Dec 2020*
South Tamilnadu	Rainfall at most places with heavy to very heavy falls at a few places
North Tamilnadu, Puducherry & Karaikal	Rainfall at many places with heavy fall at isolated places
Kerala & Mahe	Rainfall at many places with heavy to very heavy rainfall at isolated places
South Coastal Andhra Pradesh	Rainfall at a few places with heavy rainfall at isolated places
Lakshadweep	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 is very likely during next 06 hours along and off south Tamilnadu coast (Ramanathapuram, Thoothukudi, Tirunelveli and Kanniyakumari districts) and it will gradually decrease to 45-55 kmph gusting to 65 kmph by evening of 4th December.
- Squally wind speed reaching 35-45 kmph gusting to 55 kmph very likely to prevail along & off south Kerala coast (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah districts) during next 24 hours.
- Squally wind speed reaching 35-45 kmph gusting to 55 kmph very likely over Lakshadweep-Maldives area and adjoining southeast Arabian Sea during next 24 hours.

(iii) Sea condition

- Sea condition is rough to very rough over Gulf of Mannar and adjoining southwest Bay of Bengal, along & off south Tamilnadu, west Sri Lanka coasts during next 12 hours and rough to very rough over Comorin Area, adjoining southeast Arabian Sea and along & off Kerala coast by evening of 4th December.

(v) Fishermen warning and Action suggested

- Fishermen are advised not to venture into Gulf of Mannar and adjoining southwest Bay of Bengal and along & off south Tamilnadu coast and north Sri Lanka coasts during next 12 hours and along and off Kerala coast, Lakshadweep-Maldives area & adjoining southeast Arabian Sea during next 24-hours.

The next bulletin will be issued at 1130 hrs IST of 4th December, 2020.

**(D.R. Pattanaik)
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

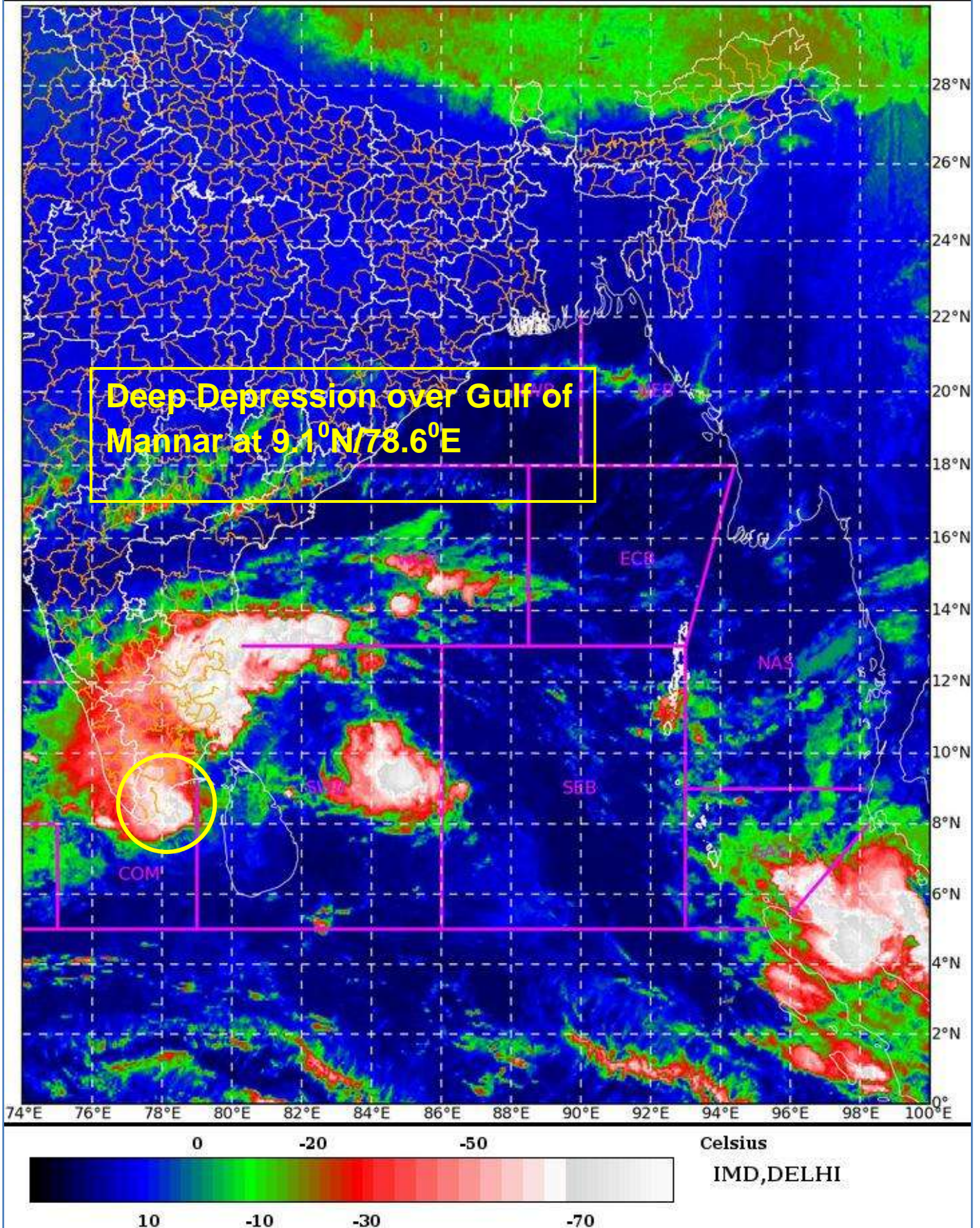
04-12-2020/(0130 to 0157) GMT

IMG_TIR1_TEMP 10.8 um

04-12-2020/(0700 to 0727) IST



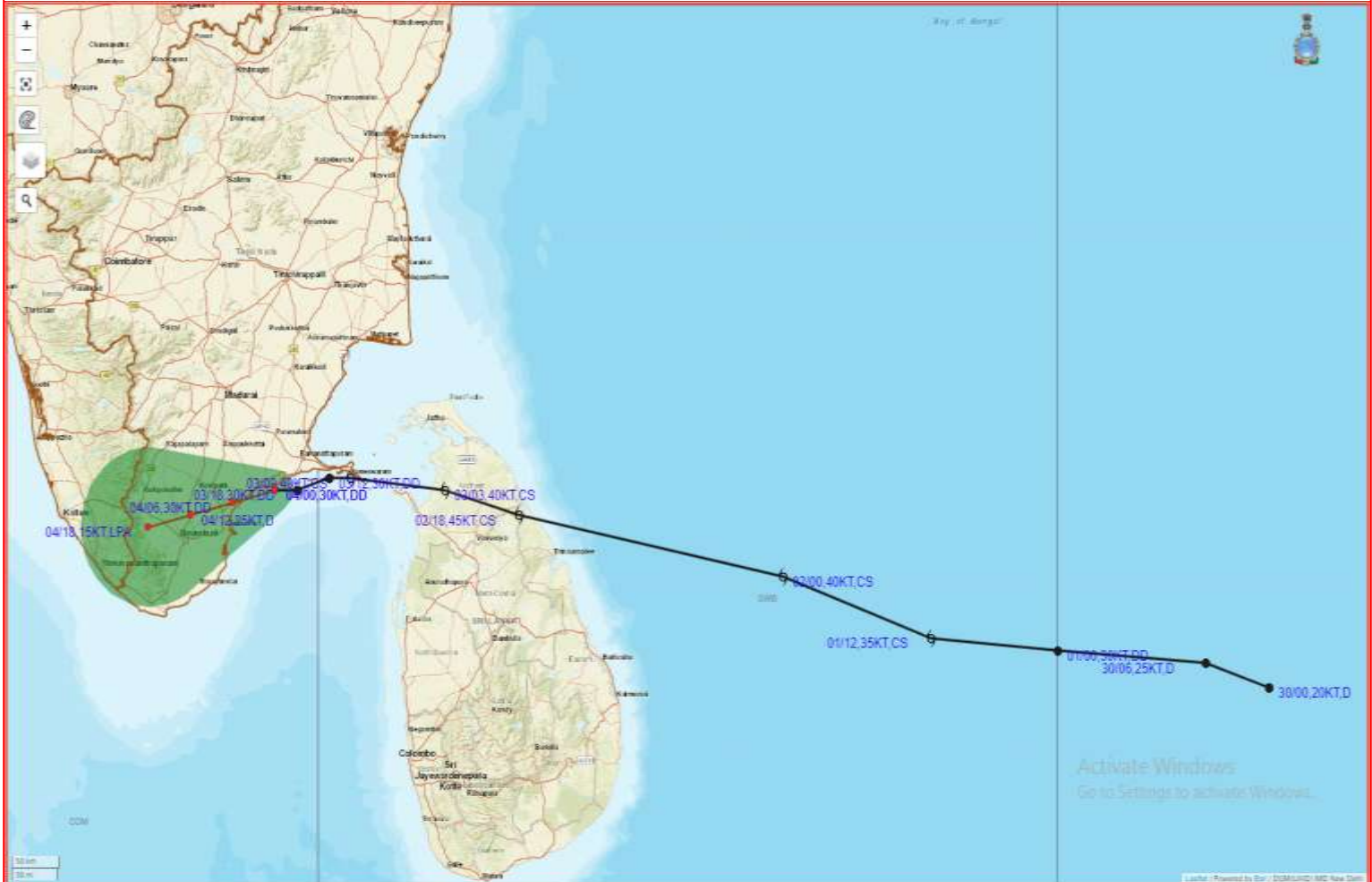
L1C Mercator



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 DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 0000 UTC OF 4TH DECEMBER, 2020.



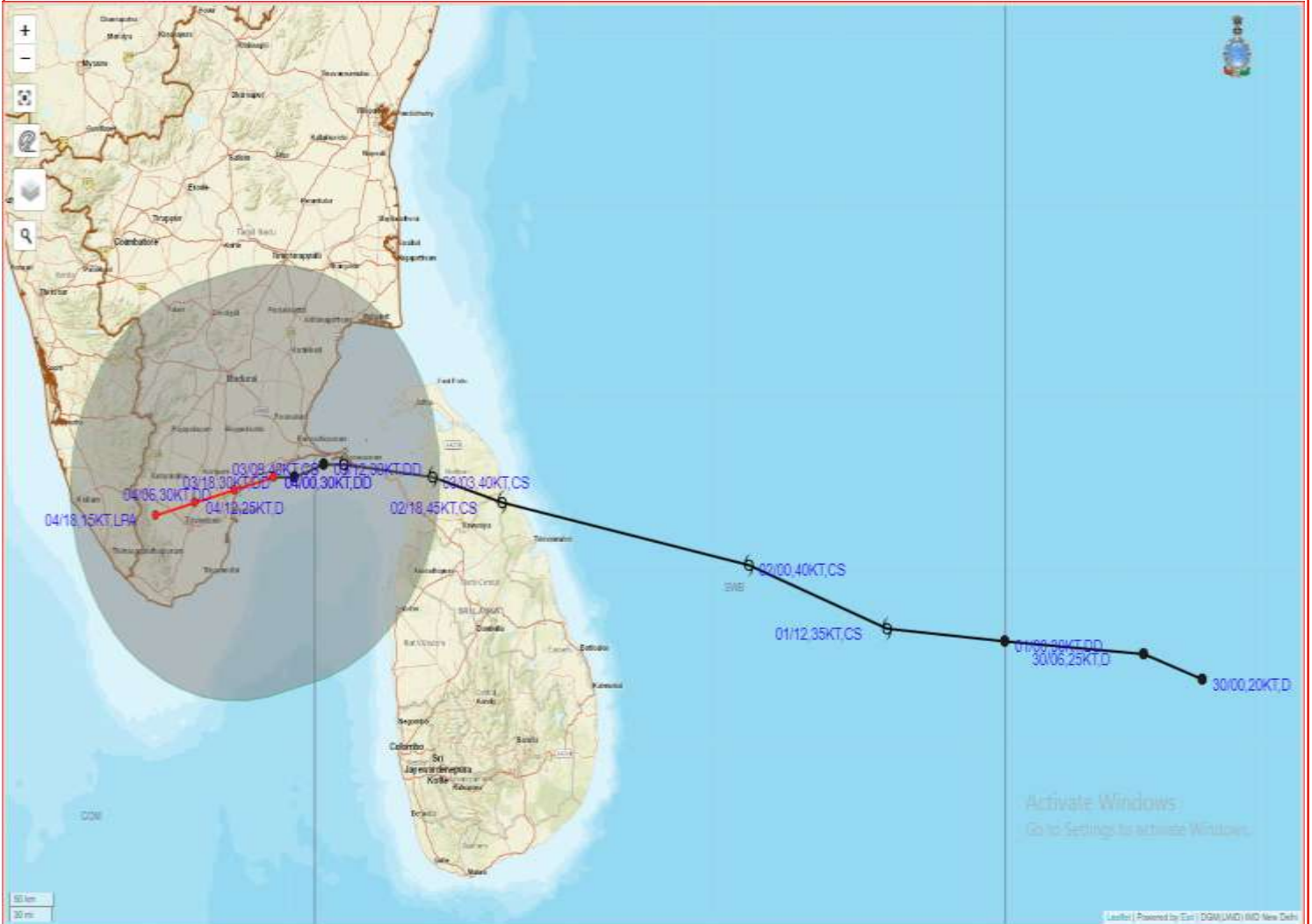
DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 20 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 DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 0000 UTC OF 4TH 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.