



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

NATIONAL BULLETIN NO. 2 (ARB/03/2023)

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Sub: (A) Depression over southwest Arabian Sea

(B) Low pressure Area over southwest and adjoining southeast Bay of Bengal

(A) Depression over southwest Arabian Sea

The depression over southwest Arabian Sea moved westwards with a speed of 7 kmph during past 3 hours and lay centered at 1130 hours IST of today, the 20th October over the same region, near latitude 9.3°N and longitude 61.5°E about 900 km east-southeast of Socotra (Yemen), 1170 km southeast of Salalah Airport (Oman) and 1260 km east-southeast of Al Ghaidah (Yemen).

It is likely to move west-northwestwards and intensify into a cyclonic storm over southwest Arabian Sea during next 24 hours. Continuing to move west-northwestwards, it is likely to intensify into a severe cyclonic storm in the evening of 22nd October. Thereafter, it would move north-northwestwards from 24th morning towards south Oman and adjoining Yemen coasts.

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
20.10.23/1130	9.3/61.5	45-55 gusting to 65	Depression
20.10.23/1730	9.4/61.2	50-60 gusting to 70	Deep Depression
20.10.23/2330	9.7/60.8	55-65 gusting to 75	Deep Depression
21.10.23/0530	10.0/60.3	60-70 gusting to 80	Cyclonic Storm
21.10.23/1130	10.4/59.6	70-80 gusting to 90	Cyclonic Storm
21.10.23/2330	11.4/58.1	75-85 gusting to 95	Cyclonic Storm
22.10.23/1130	12.5/56.7	80-90 gusting to 100	Cyclonic Storm
22.10.23/2330	13.6/55.4	90-100 gusting to 110	Severe Cyclonic Storm
23.10.23/1130	14.3/54.7	95-105 gusting to 115	Severe Cyclonic Storm
23.10.23/2330	15.0/54.2	105-115 gusting to 125	Severe Cyclonic Storm
24.10.23/1130	15.7/53.9	95-105 gusting to 115	Severe Cyclonic Storm
24.10.23/2330	16.5/53.8	85-95 gusting to 105	Severe Cyclonic Storm
25.10.23/1130	17.3/53.8	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Wind warning (warning graphics enclosed):

• **Southwest Arabian Sea:**

Squally wind speed reaching **45-55 kmph gusting to 65 kmph** is prevailing and likely to increase gradually becoming **60-70 kmph gusting to 80 kmph** by morning of 21st, **80-90 kmph gusting to 100 kmph** by morning of 22nd October. It is likely to decrease gradually thereafter.

• **Westcentral Arabian Sea:**

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is prevailing and likely to gradually increase becoming **50-60 kmph gusting to 70 kmph** on 21st.

Gale wind speed reaching 80-90 kmph gusting to 100 kmph is likely to prevail in the morning of 22nd becoming **95-105 kmph gusting to 115 kmph** by morning of 23rd and further **105-115 kmph gusting to 125 kmph** in the evening of 23rd October. Thereafter, it is likely to decrease gradually becoming **Gale wind speed reaching 85-95 kmph gusting to 115 kmph** and **70-80 kmph gusting to 90 kmph** in the morning of 25th October.

(ii) Sea Condition

• **Southwest Arabian Sea:**

Rough to very rough sea condition is prevailing and likely to become **very rough to phenomenal** from 21st to 23rd October. It is likely to improve gradually thereafter.

• **Westcentral Arabian Sea:**

Rough sea condition is prevailing and it is likely to become **rough to very rough** during 21st and **very rough to phenomenal** thereafter.

(iii) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

- ❖ **Southwest Arabian Sea** from 20th to 23rd October.
- ❖ **Westcentral Arabian Sea** from 20th October onwards.

Those out at sea are advised to return to coast.

(B) Low Pressure Area over southwest and adjoining southeast Bay of Bengal

The low pressure area over southwest and adjoining southeast Bay of Bengal persists and lay centered at 1130 hours IST of today, the 20th October, 2023 over the same region. It is likely to intensify into a depression over westcentral Bay of Bengal around 22nd October.

Warnings:

(i) Rainfall Warning

Nagaland, Manipur, Mizoram & Tripura:

Light to moderate rainfall at most places with isolated heavy rainfall is likely on 24th and 25th October.

Coastal Districts of Odisha: Light to moderate rainfall at a few places is likely on 23rd and at many places on 24th & 25th October.

Coastal Districts of West Bengal:

Light to moderate rainfall at many places is likely on 24th and 25th October.

(ii) Wind warning (warning graphics enclosed):

• Southwest and adjoining southeast Bay of Bengal:

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is prevailing near the system and it is likely to gradually increase becoming squally wind speed reaching **45-55 kmph gusting to 65 kmph** on 21st & 22nd and **50-60 kmph gusting to 70 kmph** on 23rd October. It is likely to decrease gradually thereafter.

• Westcentral Bay of Bengal:

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail on 21st October. It is likely to gradually increase becoming **45-55 kmph gusting to 65 kmph** on 22nd and **50-60 kmph gusting to 70 kmph** on 23rd & 24th October.

• North Bay of Bengal:

Squally wind speed reaching **45-55 kmph gusting to 65 kmph** is likely to prevail from 24th to 26th October.

(iii) Sea Condition

• Southwest and adjoining southeast Bay of Bengal:

Moderate to rough sea condition is likely to prevail near the system on 20th & 21st and it is likely to become **rough to very rough** on 23rd October. It is likely to improve gradually thereafter.

• Westcentral Bay of Bengal:

Rough sea condition is likely to prevail on 21st October. It is likely to become **rough to very rough** from 23rd October.

• North Bay of Bengal:

Rough to very rough sea condition is likely from 24th to 26th October.

(iv) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

- ❖ **Southwest and adjoining southeast Bay of Bengal** from 20th to 23rd October.
- ❖ **Westcentral Bay of Bengal** from 21st October onwards.
- ❖ **North Bay of Bengal** from 24th to 26th October.

Those out at sea are advised to return to coast.

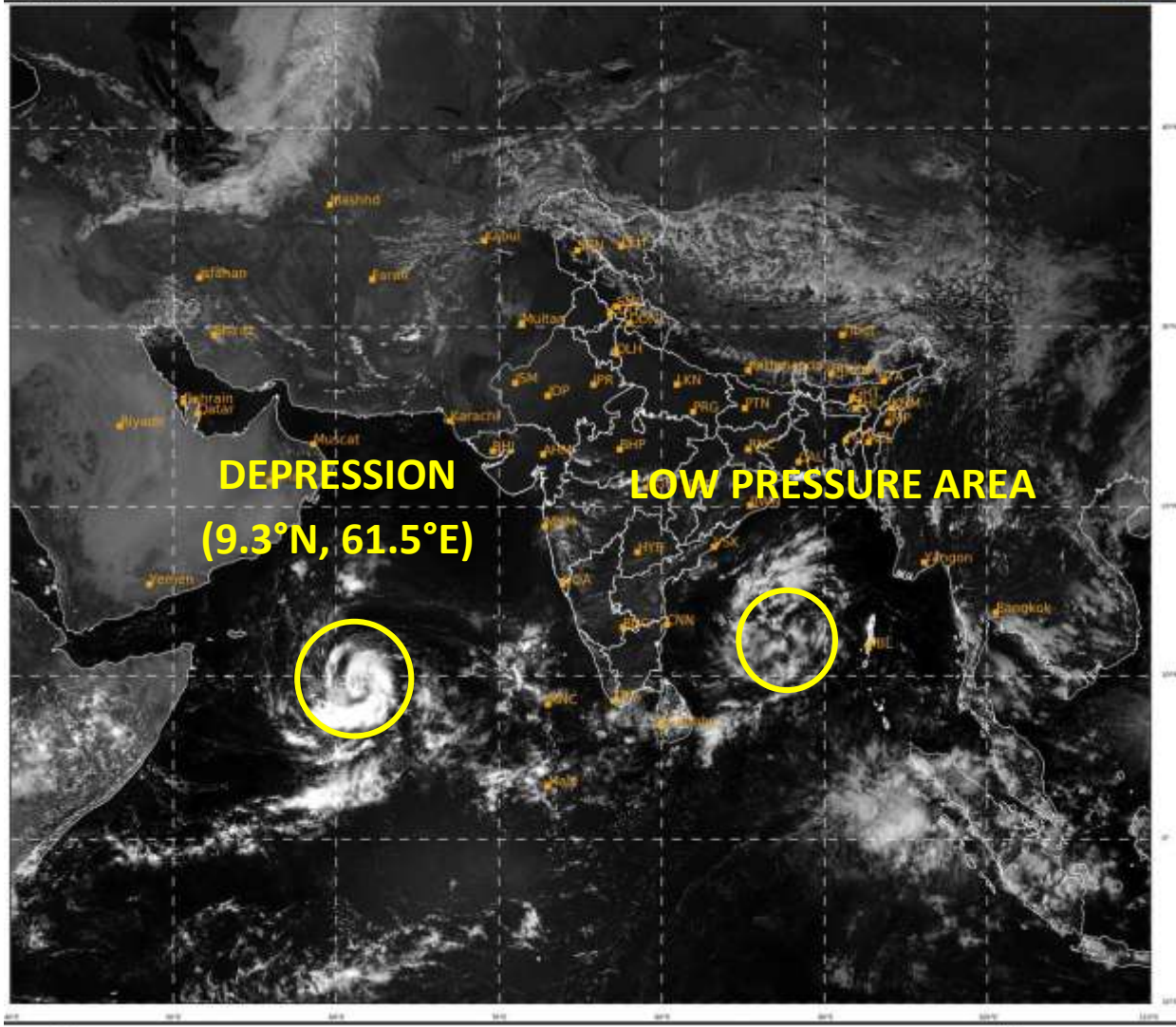
Both the systems are under continuous surveillance and the next bulletin will be issued at 2030 hours IST of today, the 20th October, 2023.

(Ananda Kumar Das)
Scientist F, Cyclone Warning, New Delhi

Copy to: ACWC Mumbai/ ACWC Chennai/ ACWC Kolkata/CWC Ahmedabad/CWC Bhubaneswar/CWC Vishakhapatnam/CWC Thiruvananthapuram/MC Goa

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.



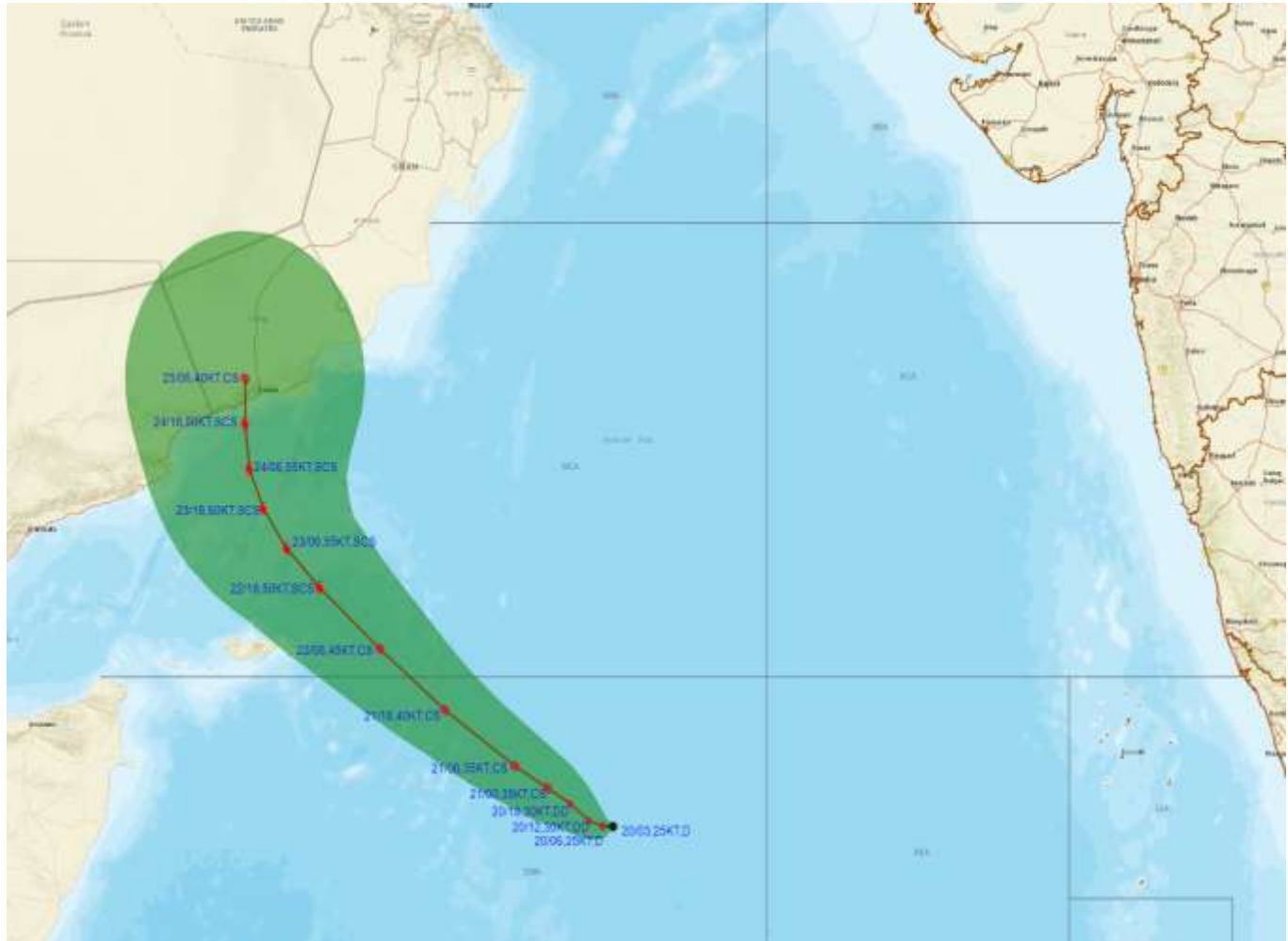
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495

IMD, DELHI



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER SOUTHWEST ARABIAN SEA BASED ON 0600 UTC (1130 IST) OF 20TH OCTOBER 2023.

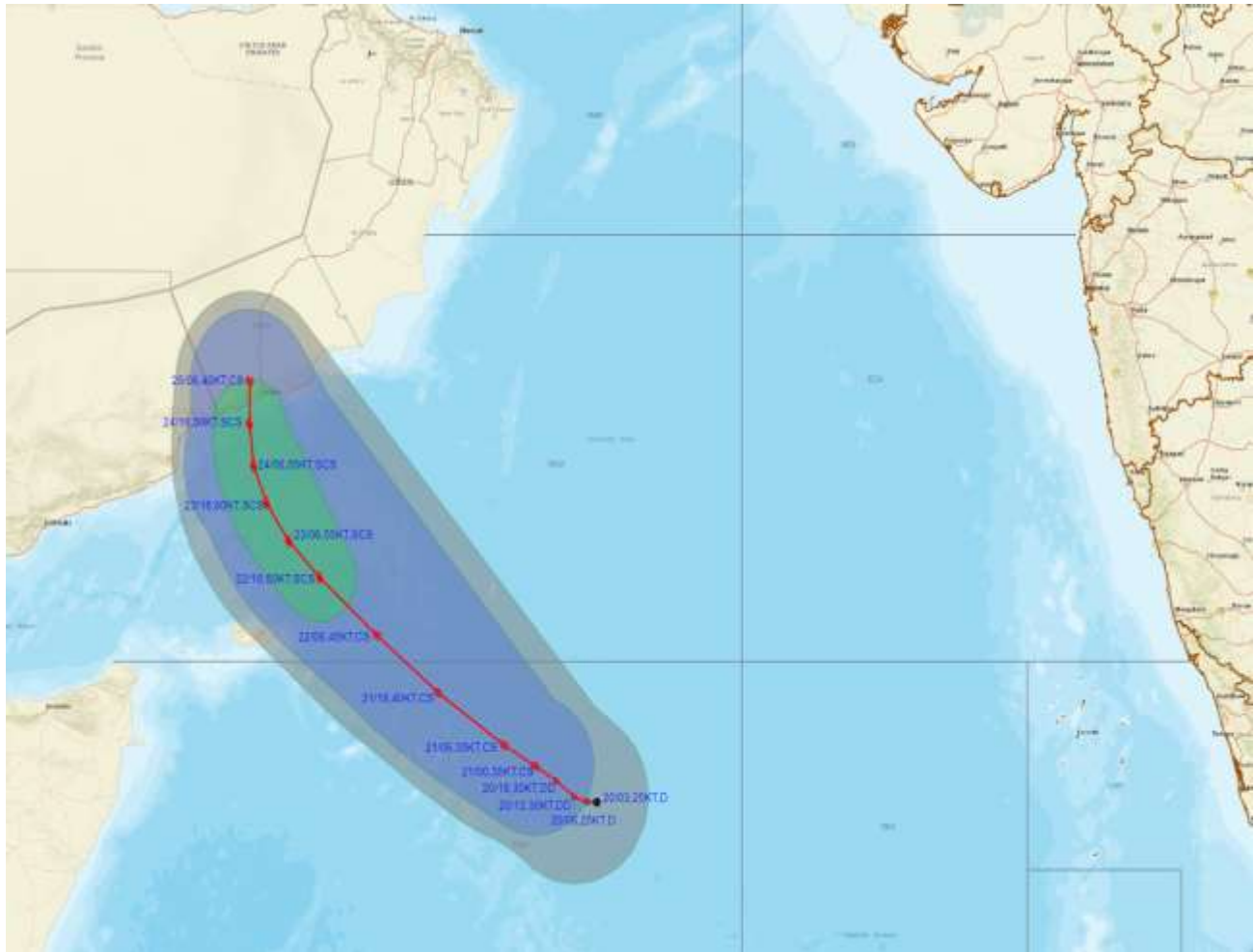


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM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



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHWEST ARABIAN SEA BASED ON 0600 UTC (1130 IST) OF 20TH OCTOBER 2023.



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)

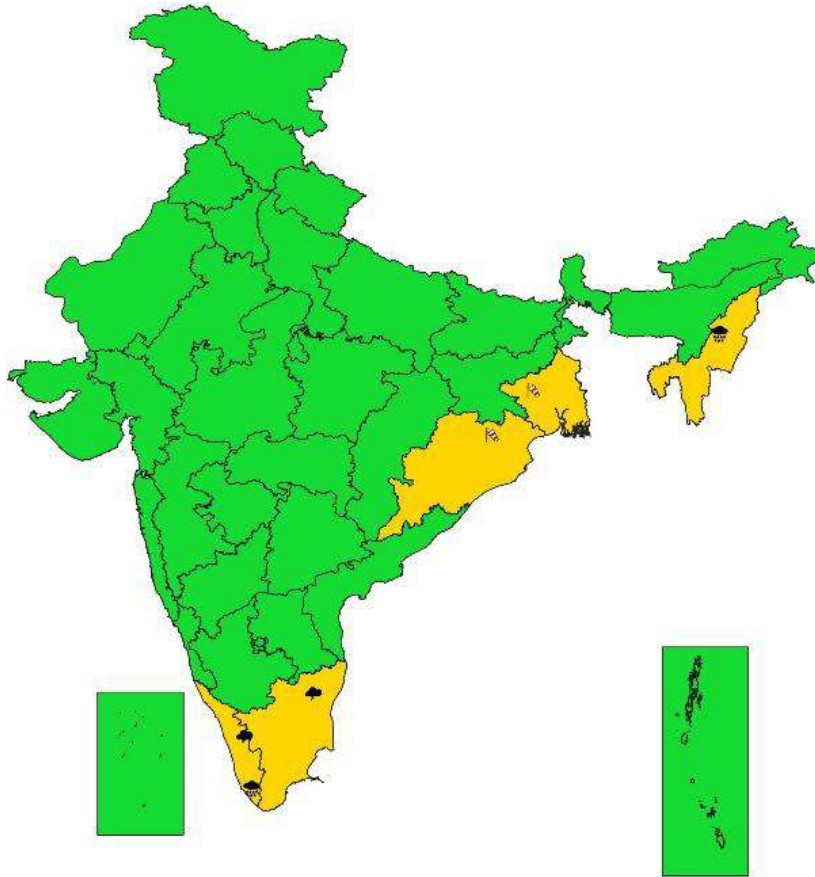
● LESS THAN 34 KT
 ○ 34-47 KT
 ⊙ ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 — CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ ≥ 64 KT (≥118 KMPH)

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



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5 (24-10-2023)



Subdivision Warning

- ☁ Heavy Rain
- ❄ Heavy Snow
- ⚡ Thunderstorms & Lightning
- 🌨 Hailstorm

Subdivision color

- ☁ Dust Storm
- 🌪 Strong Surface Winds
- 🔥 Heat Wave
- ❄ Cold wave
- 🌫 Fog

Subdivision color

- 🟢 NO WARNING
- 🟡 WATCH (BE UPDATED)
- 🟠 ALERT (BE PREPARED)
- 🔴 WARNING (TAKE ACTION)

Fishermen warning graphics

Day 1: 20.10.2023/11:30AM to 21.10.2023/05:30AM



Day 2: 21.10.2023/05:30AM to 22.10.2023/05:30AM



Day 3: 22.10.2023/05:30AM to 23.10.2023/05:30AM



Day 4: 23.10.2023/05:30AM to 24.10.2023/05:30AM



Day 5: 24.10.2023/05:30AM to 25.10.2023/05:30AM



Squally WX with wind speed 40-45 kmph gusting to 55 kmph

Squally WX with wind speed 45-55 kmph gusting to 65 kmph

Squally wind with speed 50-60 kmph gusting to 70 kmph

CS with Gale wind speed 60-90 kmph gusting to 110 kmph

SCS with Gale wind speed 90-110 kmph gusting to 120 kmph

Fishermen are advised not to venture into the marked areas.