



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. 37 (BoB/02/2023)

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Sub: Very Severe Cyclonic Storm "Mocha" weakened into a severe cyclonic storm over Myanmar

The **Very Severe Cyclonic Storm "Mocha"** (pronounced as "**Mokha**") over Myanmar moved north-northeastwards with a speed of 28 kmph during past 6 hours, weakened into a Severe Cyclonic Storm and lay centred at 2030 hours IST of today, the 14th May over Myanmar near latitude 21.8°N and longitude 93.8°E about 210 km north-northeast of Sittwe (Myanmar), 130 km of west-northwest of Nyaung-U (Myanmar), 390 km northwest of Nay Pyi Taw (Myanmar) and 200 km east-northeast of Cox's Bazar (Bangladesh).

The system is continuing the weakening trend and will become a cyclonic storm during next few 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
14.05.23/2030	21.8/93.8	110-120 gusting to 130	Severe Cyclonic Storm
14.05.23/2330	22.4/94.3	70-80 gusting to 90	Cyclonic Storm
15.05.23/0530	23.6/95.5	40-50 gusting to 60	Depression

Warnings:

(i) Rainfall (warning graphics enclosed)

- ❖ **Mizoram:** Rainfall at most places with heavy to very heavy rainfall at isolated places on 14th May.
- ❖ **Nagaland, Manipur & south Assam:** Rainfall at many places with Heavy rainfall at isolated places is on 14th May.

(ii) Wind warning:

❖ **Tripura, Mizoram & Manipur:**

Squally wind speed reaching 50-60 kmph gusting to 70 kmph over Mizoram and 40-50 kmph gusting to 60 kmph over Tripura till 14th May midnight; 40-50 kmph gusting to 60 kmph over Mizoram thereafter 45-55 kmph gusting to 65 kmph till 15th morning.

Squally wind speed reaching 45-55 kmph gusting to 65 kmph over Manipur till 15th May morning.

❖ **Eastcentral Bay of Bengal:**

Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely to prevail till midnight of 14th May and decrease gradually thereafter.

❖ **Northeast Bay of Bengal:**

Gale wind speed reaching 60-70 kmph gusting to 80 kmph would continue to prevail till midnight of 14th May and 50-60 kmph gusting to 70 kmph till morning of 15 May. It is likely to decrease gradually thereafter.

(iii) Sea condition

❖ **Northeast Bay of Bengal:**

High to very rough sea condition is likely to prevail till midnight of 14th May and improve to very rough to rough till morning of 15th May.

❖ **Eastcentral Bay of Bengal:**

Very rough to rough sea condition is likely to prevail till 15th morning.

(iv) Fishermen Warning (warning graphics enclosed)

- ❖ Fishermen, ships, boats and trawlers are advised not to venture into northeast and adjoining eastcentral Bay of Bengal till 15th May morning.

(v) Damage expected & Action suggested: Mizoram and South Manipur

- ❖ Minor Damage to loose/unsecured structures
- ❖ Some breaches in kutcha road due to heavy rain with the possibility of landslide, in vulnerable areas
- ❖ Uprooting of small trees and breaking of tree branches.
- ❖ Damage to small trees like Banana, Drum stick and Papaya etc.
- ❖ Damage to standing crops

Action Suggested

- ❖ Immediately harvest mature fruits and crops.
- ❖ Provide staking and cover to vegetables nurseries, fruit orchards.
- ❖ Avoid application of fertilizers and pesticides.
- ❖ Keep livestock inside sheds

(vi) Damage expected & Action suggested: Marine community (shipping, offshore industries, Tourism etc. over Bay of Bengal)

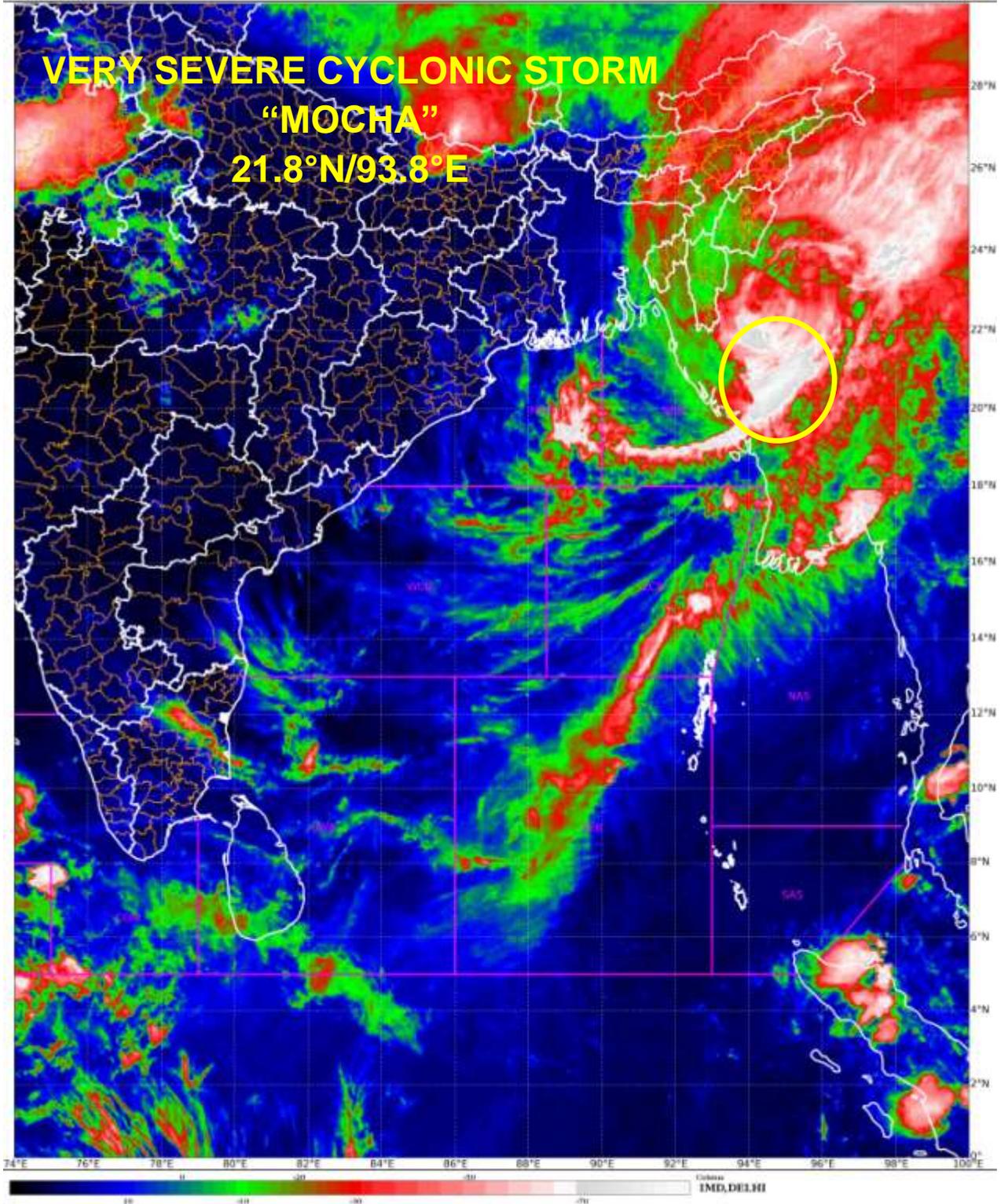
- ❖ Very rough to phenomenal sea could affect marine operation and offshore activities.
- ❖ Regulation of shipping activity sea areas of northeast and adjoining eastcentral Bay of Bengal till 14th May.

The system is under continuous surveillance and the next message will be issued at 0230 hours IST of 15th May 2023.

(Dr. M. T. Bushair)

Scientist C, Cyclone Warning Division, New Delhi

Copy to: ACWC Kolkata/ ACWC Chennai/ CWC Bhubaneswar/CWCVisakhapatnam/MO Port Blair





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM MOCHA OVER MYANMAR BASED ON 1500 UTC (2030 IST) OF 14TH MAY 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

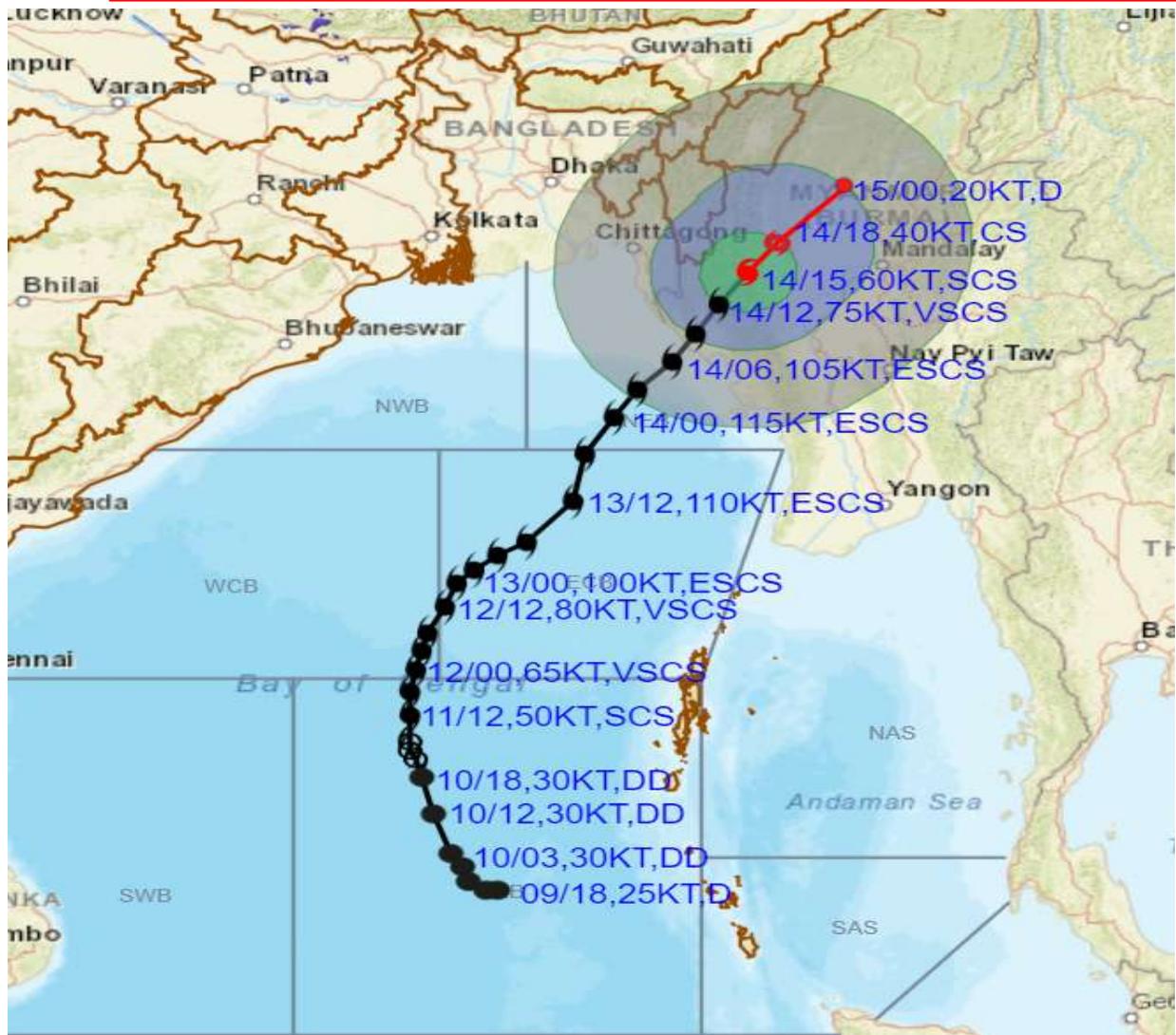
— FORECAST TRACK

▲ CONE OF UNCERTAINTY

Forecast distance (km) and direction of the centre from nearest 5 coastal stations

Forecast Date and Time	Lead Period	Lat	Lon	Station 1	Station 2	Station 3	Station 4	Station 5
14.05.23/1500	0	21.8	93.8	MINDAT (49,NNW)	GANGAW (53,SW)	HAKHA (96,SSE)	FALAM (125,S)	NYAUNG-U (134,WNW)

OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM MOCHA OVER MYANMAR BASED ON 1500 UTC (2030 IST) OF 14TH MAY 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)

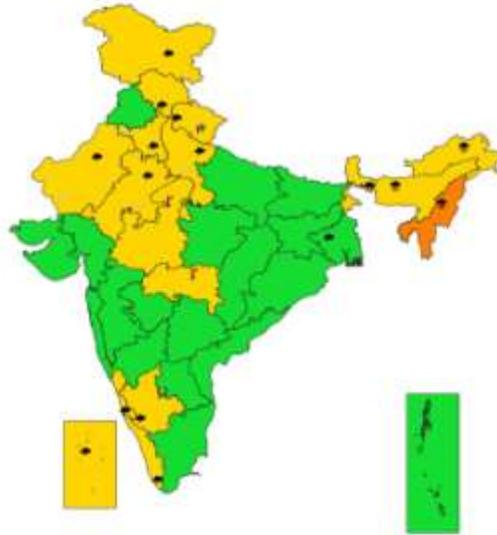
■ ≥ 64 KT (≥118 KMPH)

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 1
(14-5-2023)**



- | | | |
|-----------------------------|------------------------|--------------------------|
| Subdivision Warning | Dust Storm | Subdivision color |
| ● Heavy Rain | ⚡ Strong Surface Winds | 🟢 NO WARNING |
| ❄️ Heavy Snow | ☀️ Heat Wave | 🟡 WATCHME UPDATED |
| ⚡ Thunderstorms & Lightning | ❄️ Cold wave | 🟠 ALERT (BE PREPARED) |
| 🌧️ Hailstones | 🌫️ Fog | 🔴 WARNING (TAKE ACTION) |



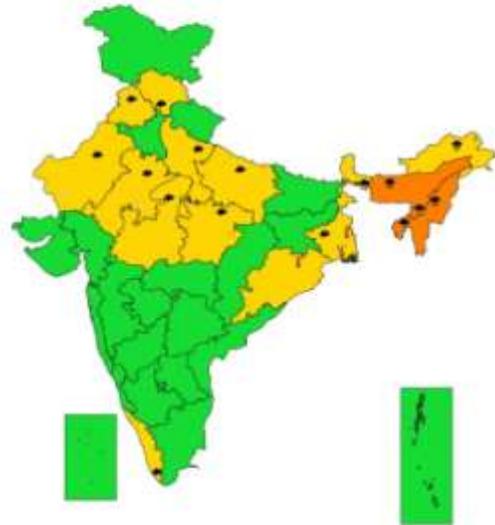
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(15-5-2023)**



- | | | |
|-----------------------------|------------------------|--------------------------|
| Subdivision Warning | Dust Storm | Subdivision color |
| ● Heavy Rain | ⚡ Strong Surface Winds | 🟢 NO WARNING |
| ❄️ Heavy Snow | ☀️ Heat Wave | 🟡 WATCHME UPDATED |
| ⚡ Thunderstorms & Lightning | ❄️ Cold wave | 🟠 ALERT (BE PREPARED) |
| 🌧️ Hailstones | 🌫️ Fog | 🔴 WARNING (TAKE ACTION) |



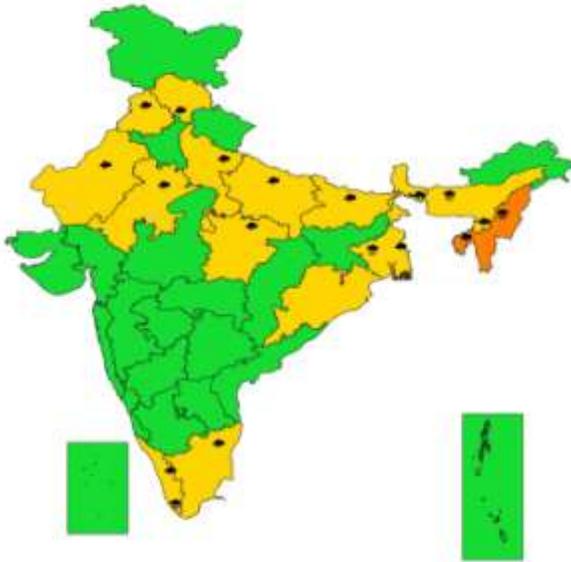
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(16-5-2023)**



- | | | |
|-----------------------------|------------------------|--------------------------|
| Subdivision Warning | Dust Storm | Subdivision color |
| ● Heavy Rain | ⚡ Strong Surface Winds | 🟢 NO WARNING |
| ❄️ Heavy Snow | ☀️ Heat Wave | 🟡 WATCHME UPDATED |
| ⚡ Thunderstorms & Lightning | ❄️ Cold wave | 🟠 ALERT (BE PREPARED) |
| 🌧️ Hailstones | 🌫️ Fog | 🔴 WARNING (TAKE ACTION) |



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(17-5-2023)**



- | | | |
|-----------------------------|------------------------|--------------------------|
| Subdivision Warning | — Dust Storm | Subdivision color |
| ☁ Heavy Rain | 🌪 Strong Surface Winds | 🟢 NO WARNING |
| ❄ Heavy Snow | 🔥 Heat Wave | 🟡 WATCH/BE UPDATED |
| ⚡ Thunderstorms & Lightning | ❄ Cold wave | 🟠 ALERT/BE PREPARED |
| 🌨 Hailstorm | 🌫 Fog | 🔴 WARNING (TAKE ACTION) |

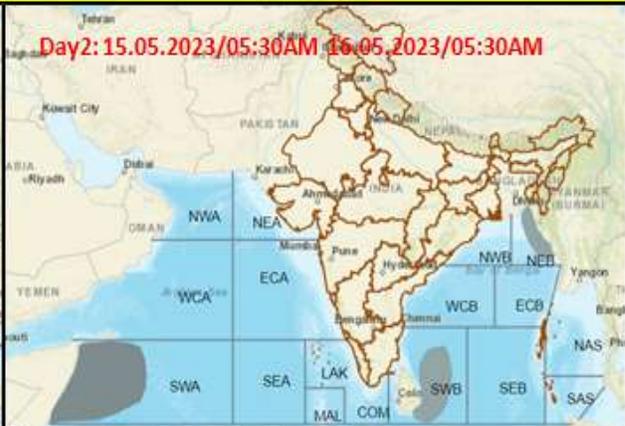


**SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
(18-5-2023)**



- | | | |
|-----------------------------|------------------------|--------------------------|
| Subdivision Warning | — Dust Storm | Subdivision color |
| ☁ Heavy Rain | 🌪 Strong Surface Winds | 🟢 NO WARNING |
| ❄ Heavy Snow | 🔥 Heat Wave | 🟡 WATCH/BE UPDATED |
| ⚡ Thunderstorms & Lightning | ❄ Cold wave | 🟠 ALERT/BE PREPARED |
| 🌨 Hailstorm | 🌫 Fog | 🔴 WARNING (TAKE ACTION) |

Fishermen warning graphics



	Squally WX with wind speed 40-50 kmph gusting to 60 kmph
	Squally WX with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind with wind speed 50-60 kmph gusting to 70 kmph
	Gale wind speed 60-80 kmph gusting to 90 kmph
	Gale wind with wind speed 80-100 kmph gusting to 110 kmph
	Gale wind with wind speed 100-120 kmph gusting to 135 kmph
	Gale wind with wind speed 120-140 kmph gusting to 155 kmph
	Gale wind with wind speed 140-160 kmph gusting to 180 kmph
	Gale wind with wind speed 160-180 kmph gusting to 200 kmph
	Gale wind with wind speed 180-200 kmph gusting to 220 kmph
	Gale wind with wind speed 200-220 kmph gusting to 240 kmph

FISHERMEN ARE ADVISED NOT TO VENTURE INTO THE MARKED AREAS