



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. 30 (BoB/02/2023)

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Sub: Extremely Severe Cyclonic Storm “Mocha” (pronounced as “Mokha”) over Eastcentral Bay of Bengal

The **Extremely Severe Cyclonic Storm “Mocha”** (pronounced as “**Mokha**”) over Eastcentral Bay of Bengal moved nearly north-northeastwards with a speed of 18 kmph during past 06 hours and lay centered at 2330 hours IST of today, the 13th May 2023 over the same region near latitude 17.9°N and longitude 91.0°E, about 720 km north-northwest of Port Blair, 400 km south-southwest of Cox’s Bazar (Bangladesh) and 310 km southwest of Sittwe (Myanmar).

It is very likely to move north-northeastwards and cross southeast Bangladesh and north Myanmar coasts between Cox’s Bazar (Bangladesh) and Kyaukpyu (Myanmar), close to Sittwe (Myanmar) around noon of 14th May, 2023 as an Extremely Severe Cyclonic Storm with maximum sustained wind speed of 180-190 kmph gusting to 210 kmph.

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
13.05.23/2330	17.9/91.0	210-220 gusting to 240	Extremely Severe Cyclonic Storm
14.05.23/0530	19.1/91.6	200-210 gusting to 230	Extremely Severe Cyclonic Storm
14.05.23/1130	20.3/92.5	180-190 gusting to 210	Extremely Severe Cyclonic Storm
14.05.23/1730	21.5/93.4	120-130 gusting to 145	Very Severe Cyclonic Storm
14.05.23/2330	23.0./94.7	50-60 gusting to 70	Deep Depression
15.05.23/1130	26.3/97.4	25-35 gusting to 45	Low Pressure

Warnings:

(i) Rainfall (warning graphics enclosed)

- ❖ **Tripura & 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 & south Manipur:**
Squally wind speed reaching 50-60 kmph gusting to 70 kmph is very likely to prevail on 14th May.
- ❖ **North Andaman Sea:**
Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely to prevail till 14th May forenoon.
- ❖ **Eastcentral Bay of Bengal:**
Gale wind speed reaching 210-220 kmph gusting to 240 kmph is prevailing over the region. It would decrease gradually from 14th morning to become 150-160 kmph gusting to 175 kmph till noon. It would decrease rapidly thereafter.
- ❖ **Adjoining areas of Westcentral Bay of Bengal:**
Gale wind speed reaching 100-110 kmph gusting to 120 kmph is likely to prevail over the region till 14th May morning. It will decrease gradually thereafter becoming squally wind speed reaching 40-50 gusting to 60 kmph by 14th morning.
- ❖ **Northeast Bay of Bengal:**
Gale wind speed reaching 210-220 kmph gusting to 240 kmph is prevailing and it would continue till 14th May morning. It is likely to decrease thereafter to 180-190 kmph gusting to 210 kmph at the time of landfall. It is likely to decrease rapidly after the landfall.
- ❖ **Adjoining areas of Northwest Bay of Bengal:**
Gale wind speed reaching 60-70 kmph gusting to 80 kmph is likely to prevail over southeast sector of the region and 45-55 kmph gusting to 65 kmph over the remaining areas of northwest Bay of Bengal till 14th May morning and decrease gradually thereafter.

(iii) Sea condition

- ❖ **Andaman Sea:**
Very rough to rough over north Andaman Sea is likely to prevail till 14th May morning.
- ❖ **Southeast Bay of Bengal:**
Very rough to rough is likely to prevail till 14th May morning.
- ❖ **Eastcentral Bay of Bengal:**
Phenomenal sea condition is prevailing and would continue till 14th May morning. It will improve gradually thereafter.
- ❖ **Adjoining areas of Westcentral Bay of Bengal:**
Very rough to high sea condition is prevailing and would continue till 14th May morning. It will gradually improve thereafter.
- ❖ **Northeast Bay of Bengal:**
Phenomenal sea condition is prevailing and would continue till 14th May afternoon.

- ❖ **Adjoining areas of Northwest Bay of Bengal:**
Rough to very rough sea condition is likely till 14th May.

(iv) Fishermen Warning (warning graphics enclosed)

- ❖ Fishermen, ships, boats and trawlers are advised not to venture into eastcentral and adjoining westcentral Bay of Bengal and north Andaman Sea till 14th May and into northeast Bay of Bengal till 14th May.
- ❖ Those over central & northeast Bay of Bengal and north Andaman Sea are advised to return to coast.

(v) Damage expected & Action suggested: Mizoram, Tripura, 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, Andaman Sea & Andaman & Nicobar Islands)

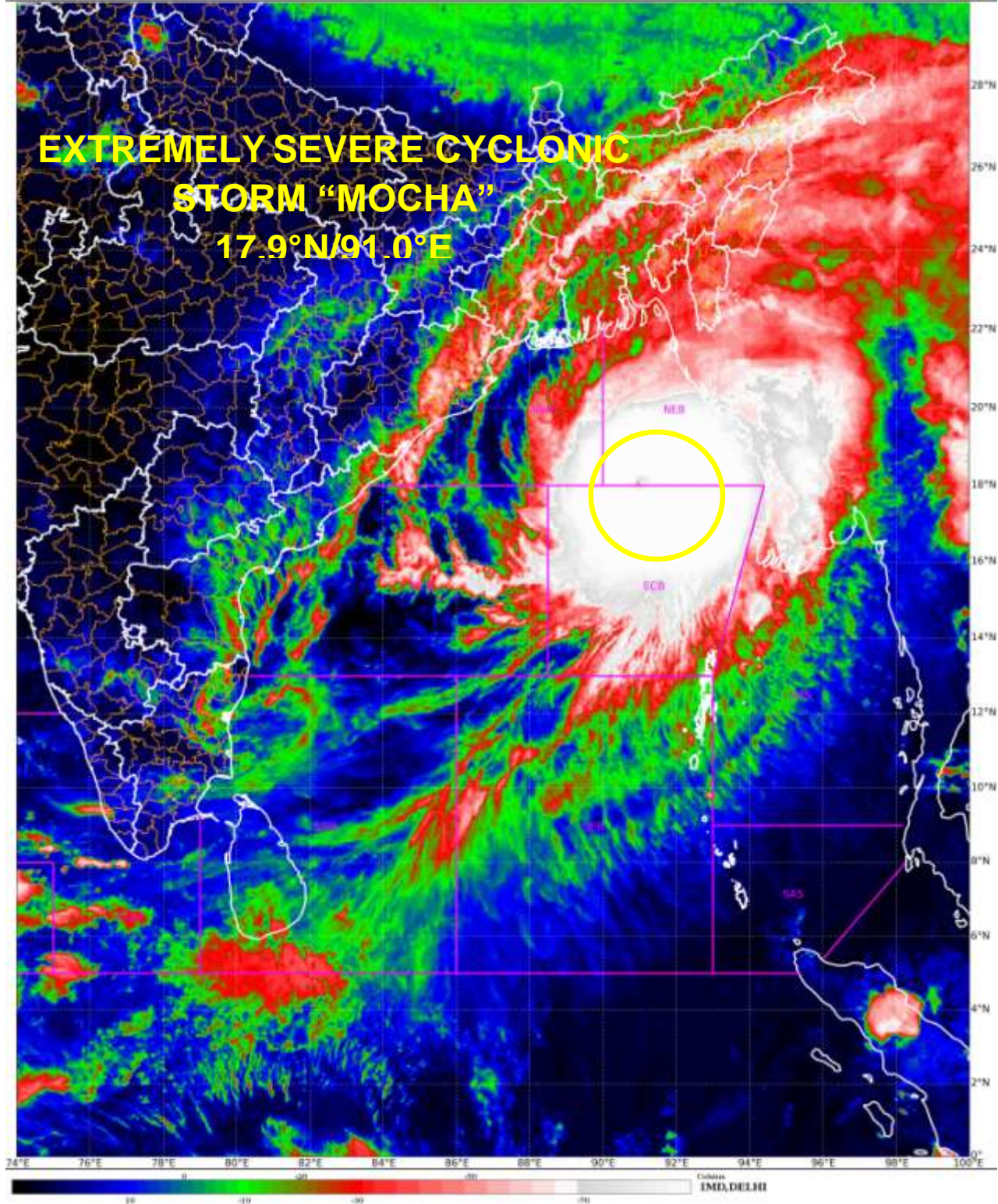
- ❖ Very rough to phenomenal sea could affect marine operation and offshore activities.
- ❖ Regulation of tourism and offshore activities and shipping near North Andaman Islands till 14th May.
- ❖ Regulation of shipping activity sea areas of northeast and adjoining eastcentral Bay of Bengal till 14th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

The system is under continuous surveillance and the next message will be issued at 0530 hours IST of today, the 14th May 2023.

Dr. Ananda Kumar Das

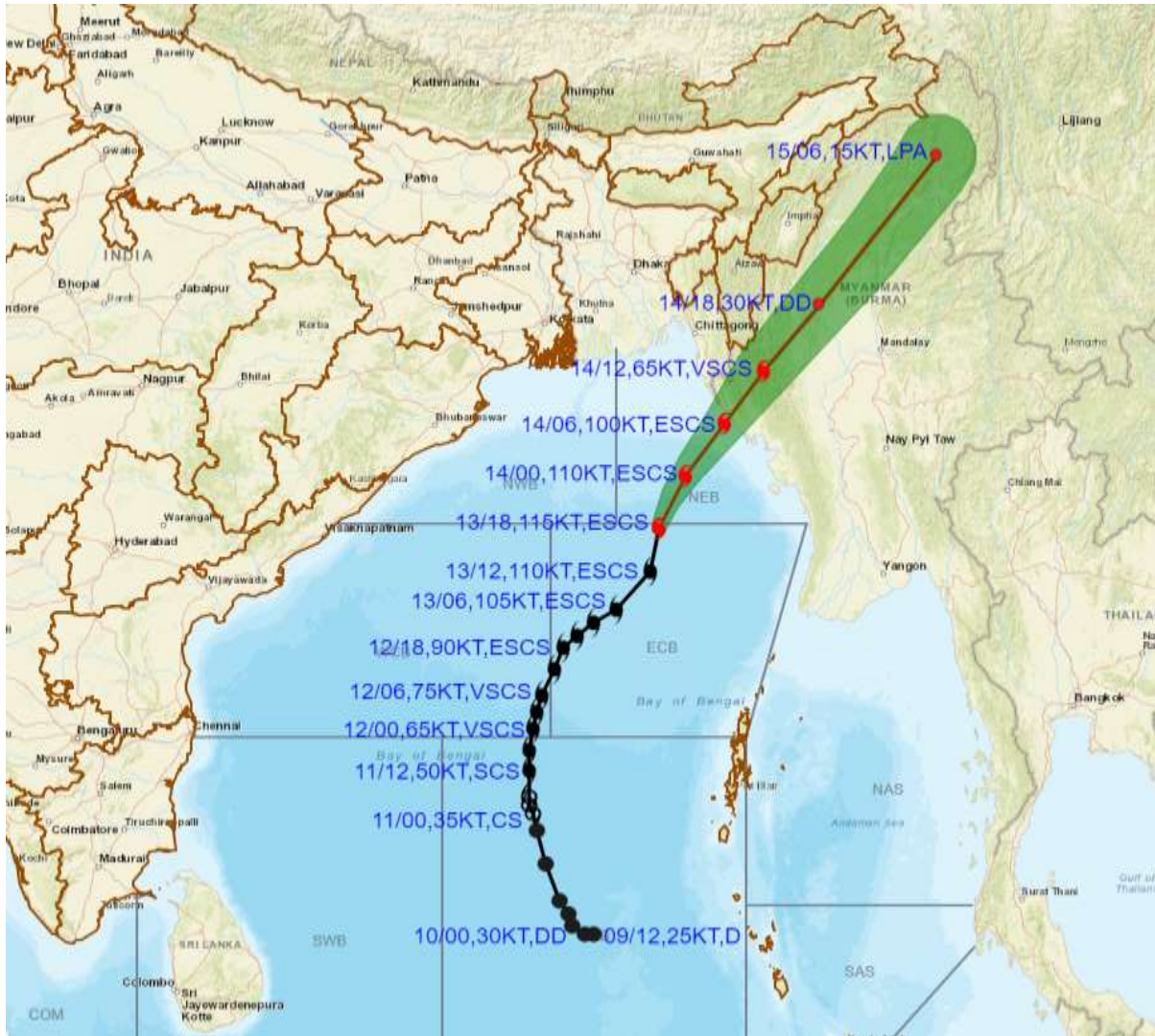
Scientist F, Cyclone Warning Division, New Delhi

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





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF EXTREMELY SEVERE CYCLONIC STORM MOCHA OVER EASTCENTRAL BAY OF BENGAL BASED ON 1800 UTC (2330 IST) OF 13TH 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

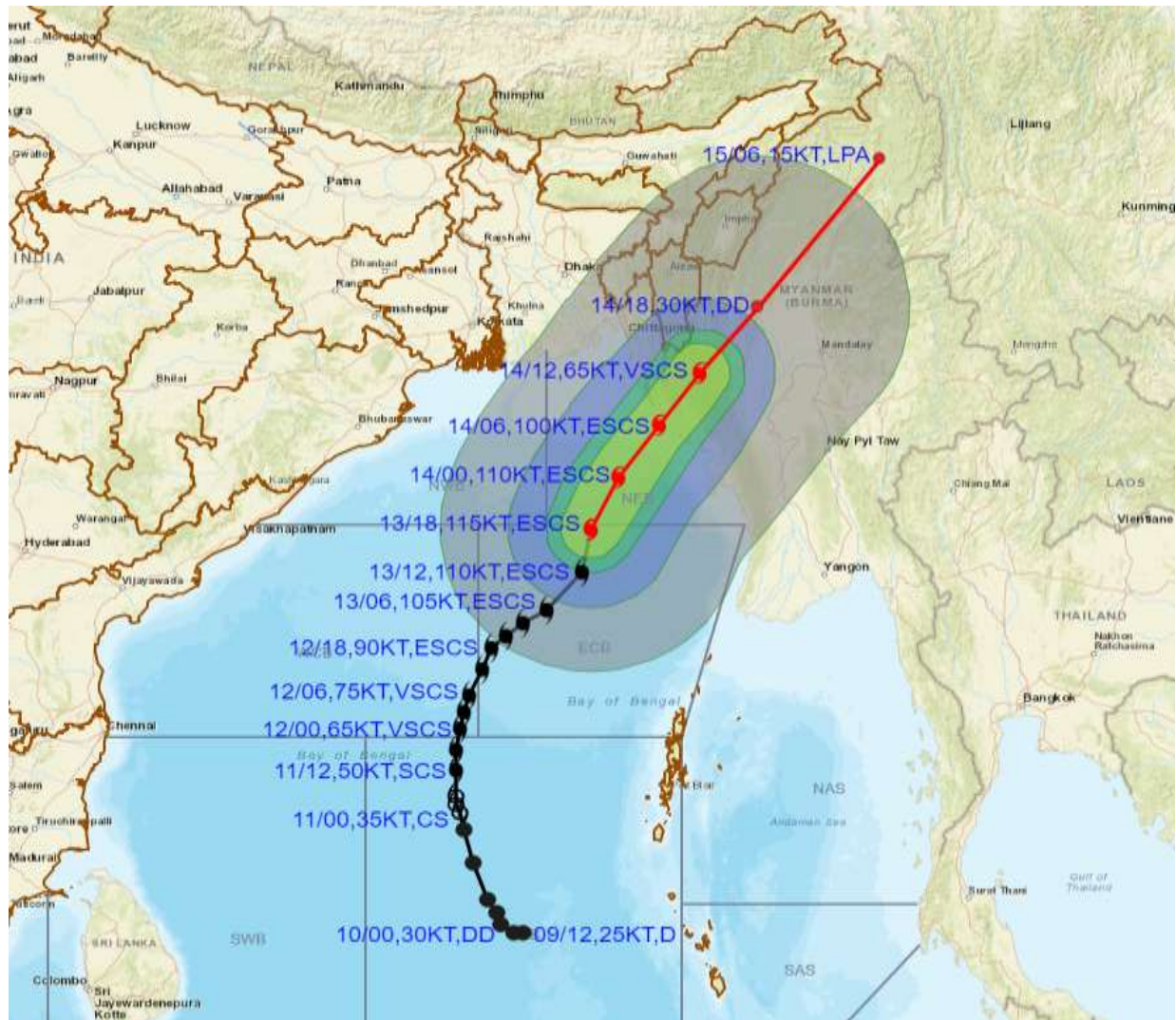
CONE OF UNCERTAINTY

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
13.05.23/1800	0	17.9	91.0	MANAUNG (308,WSW)	KYAUKPYU (318,WSW)	SITTWE (318,SW)	TEKNAF (357,SSW)	SANDOWAY (360,W)
14.05.23/1800	24	23	94.7	KALEWA (47,ESE)	KALEMYO (69,ESE)	MAWLAIK (76,SSE)	FALAM (105,E)	GANGAW (110,NNE)



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF EXTREMELY SEVERE CYCLONIC STORM MOCHA OVER EASTCENTRAL BAY OF BENGAL BASED ON 1800 UTC (2330 IST) OF 13TH 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

AREA OF MAXIMUM SUSTAINED WIND SPEED:

■ 28-33 KT (52-61 KMPH)

■ 34-49 KT (62-91 KMPH)

■ 50-63 KT (92-117 KMPH)

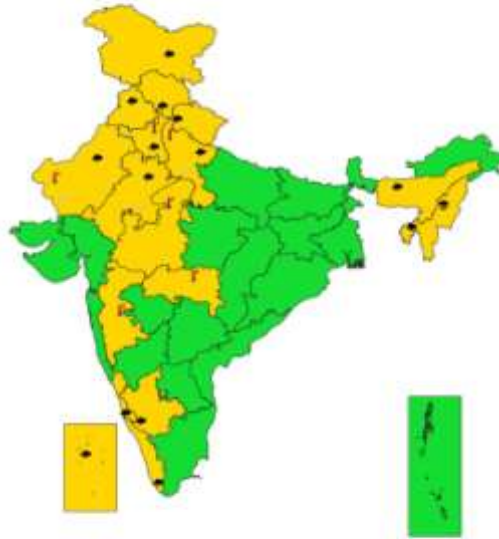
■ \geq 64 KT (\geq 118 KMPH)

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



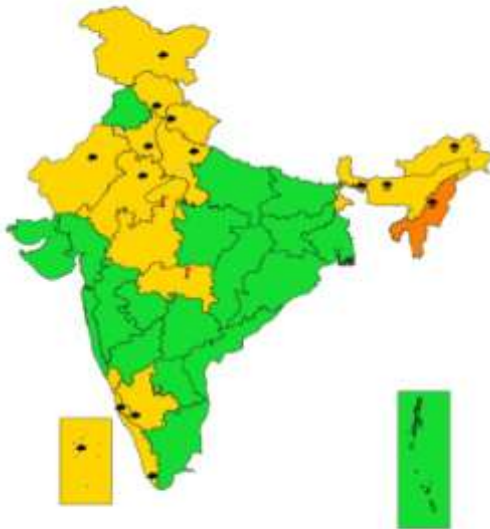
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(13-5-2023)



- | | | |
|-----------------------------|------------------------|--------------------------|
| 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 2
(14-5-2023)



- | | | |
|-----------------------------|------------------------|--------------------------|
| 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) |



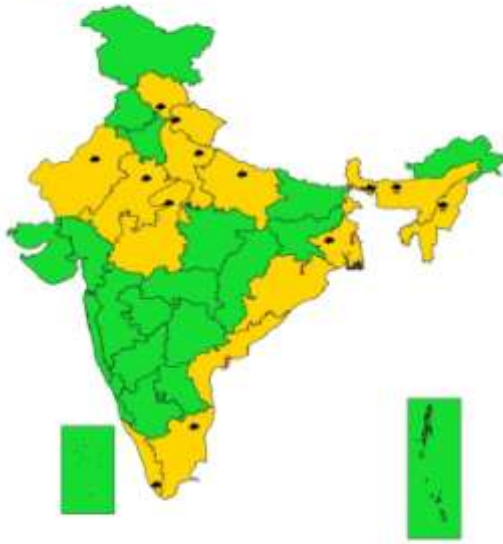
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(15-5-2023)



- | | | |
|-----------------------------|------------------------|--------------------------|
| 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) |



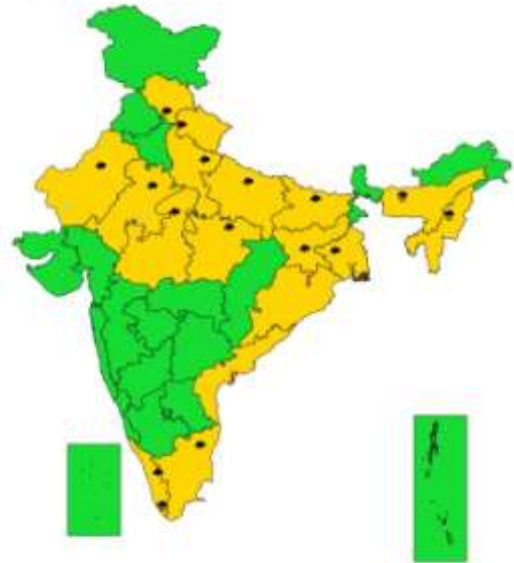
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(16-5-2023)**



- | | | |
|-----------------------------|------------------------|--------------------------|
| 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
(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) |

Fishermen warning graphics

