



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. 34 (BoB/02/2023)

TIME OF ISSUE: 1330 HOURS IST DATED: 14.05.2023
FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)

TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)
CONTROL ROOM NDMA (FAX.NO. 26701729)
CABINET SECRETARIAT (FAX.NO.23012284, 23018638)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES (FAX NO. 24629777)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)
DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, GOVT. WEST BENGAL (FAX NO. 033-22144328)
CHIEF SECRETARY, GOVT. OF ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)
CHIEF SECRETARY, GOVT. OF TAMIL NADU (FAX NO. 044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO. 0413-2337575, 2334145)
CHIEF SECRETARY, GOVT. OF TRIPURA (FAX NO. 0381-2414013, 2413200)
CHIEF SECRETARY, GOVT. OF MIZORAM (FAX NO. 0389-2322745, 2320588)
CHIEF SECRETARY, GOVT. OF ASSAM (FAX NO. 0361-2260900)
CHIEF SECRETARY, GOVT. OF MANIPUR (FAX NO. 0385-2452629)
CHIEF SECRETARY, GOVT. OF NAGALAND (FAX NO. 0370-2270057)

Sub: Extremely Severe Cyclonic Storm "Mocha" (pronounced as "Mokha") is making landfall over Myanmar-Bangladesh coasts: Landfall process started.

The **Extremely Severe Cyclonic Storm "Mocha"** (pronounced as "**Mokha**") over Northeast and adjoining East central Bay of Bengal moved nearly north-northeastwards with a speed of 28 kmph during past 06 hours and lay centered at 1130 hours IST of today, the 14th May 2023 over Northeast Bay of Bengal close to north Myanmar & southeast Bangladesh coasts near latitude 19.9°N and longitude 92.5°E, about 40 km southwest of Sittwe (Myanmar) and 170 km south-southeast of Cox's Bazar (Bangladesh).

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) within a few hours as an Extremely Severe Cyclonic Storm with maximum sustained wind speed of 180-190 kmph gusting to 210 kmph.

The landfall process has commenced. The heavy rainfall along with the gale wind is occurring over the north Myanmar-Bangladesh coasts and forward sector of the eye wall is entering into these coastal areas.

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
14.05.23/1130	19.9/92.5	180-190 gusting to 210	Extremely Severe Cyclonic Storm
14.05.23/1730	21.1/93.5	130-140 gusting to 155	Very Severe Cyclonic Storm
14.05.23/2330	22.9/94.8	50-60 gusting to 70	Deep Depression
15.05.23/0530	24.5/96.1	40-50 gusting to 60	Depression

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.
- ❖ **Eastcentral Bay of Bengal:**
Gale wind speed reaching 110-120 kmph gusting to 130 kmph is prevailing over the region. It would decrease gradually to become 80-90 kmph gusting to 100 kmph till evening of 14th May. It would decrease rapidly thereafter.
- ❖ **Northeast Bay of Bengal:**
Gale wind speed reaching 180-190 kmph gusting to 210 kmph would continue to prevail till afternoon and it is likely to decrease rapidly thereafter.
- ❖ **Adjoining areas of Northwest Bay of Bengal:**
Squally wind speed reaching 50-60 kmph gusting to 70 kmph would prevail over southeast sector of the region till afternoon and 45-55 kmph gusting to 65 kmph thereafter till night.

(iii) Sea condition

- ❖ **Northeast Bay of Bengal:**
Phenomenal sea condition is prevailing and would continue till 14th May evening and improve gradually thereafter.
- ❖ **Eastcentral Bay of Bengal:**
High to Very High sea condition would continue to prevail till afternoon and it will improve gradually thereafter.
- ❖ **Adjoining areas of Northwest Bay of Bengal:**
Rough to Very Rough condition is prevailing and would continue till night of 14th May.

(iv) Fishermen Warning (warning graphics enclosed)

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

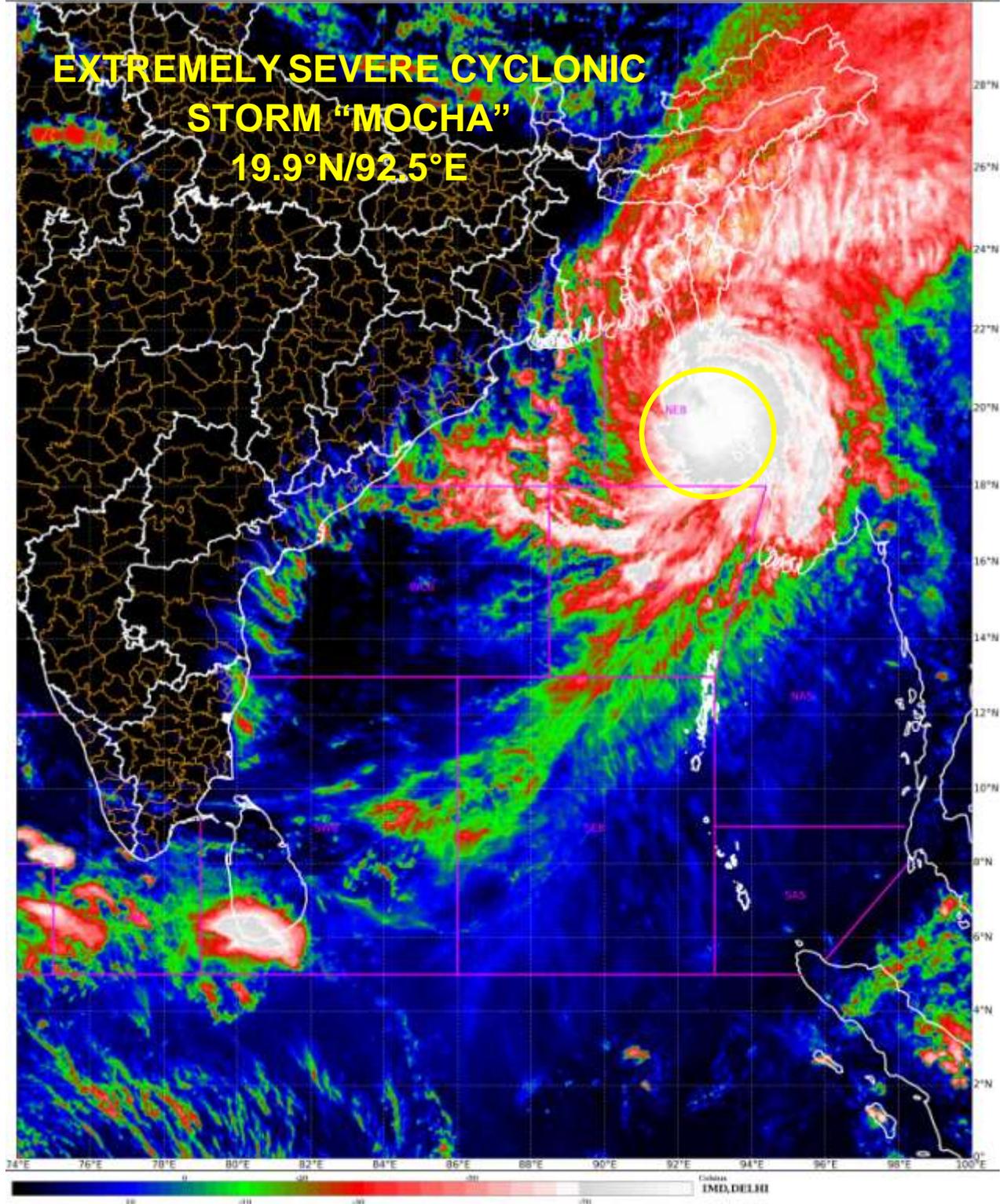
- ❖ Very rough to phenomenal sea could affect marine operation and offshore activities.
- ❖ Regulation of tourism and offshore activities and shipping near North Andaman Islands till 14th May.
- ❖ Regulation of shipping activity sea areas of northeast and adjoining eastcentral Bay of Bengal till 14th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

The system is under continuous surveillance and the next message will be issued at 1730 hours IST of today, the 14th May 2023.

(Dr. Ananda Kumar Das)

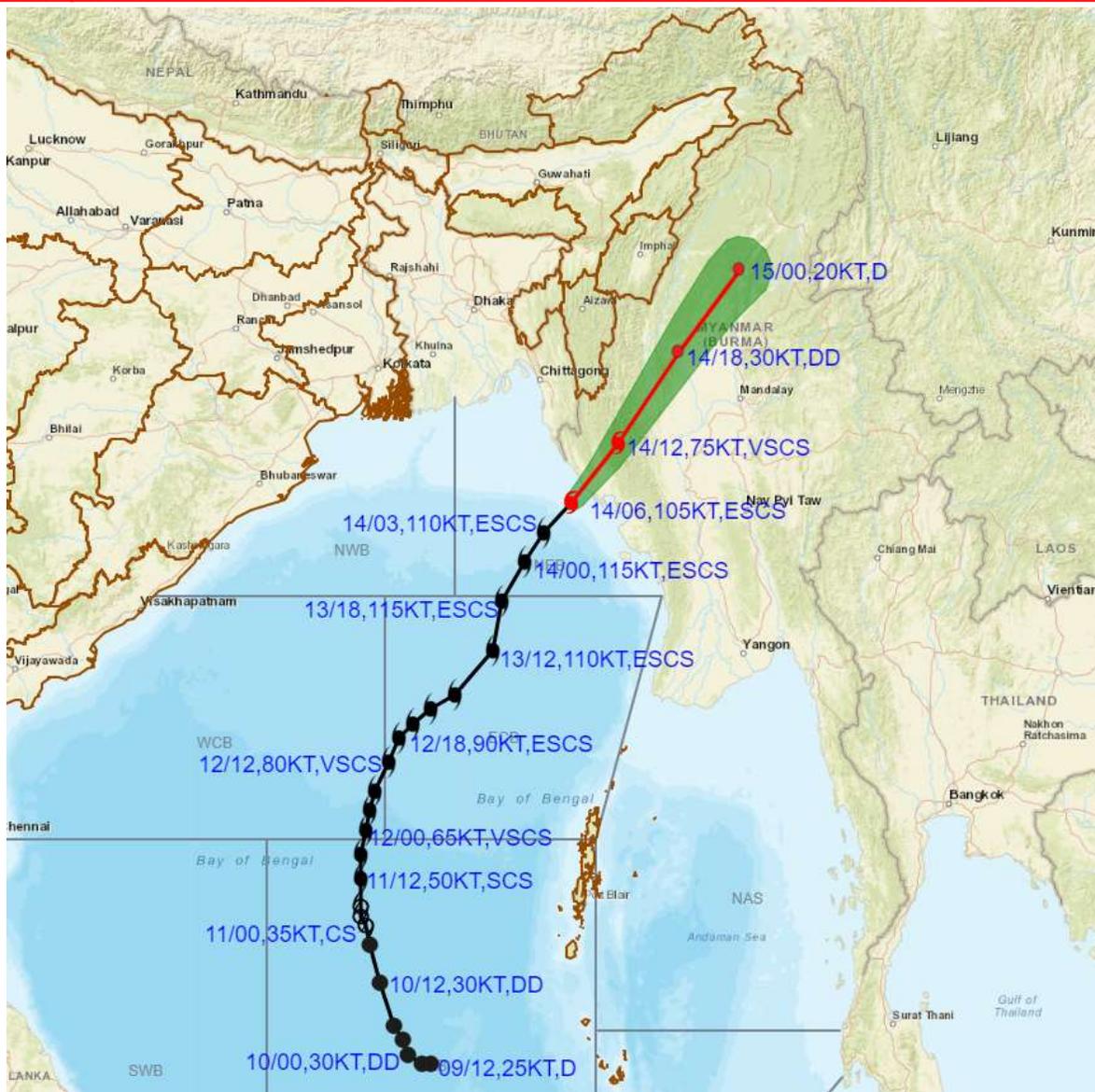
Scientist F, Cyclone Warning Division, New Delhi

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 NORTHEAST BAY OF BENGAL BASED ON 0600 UTC (1130 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

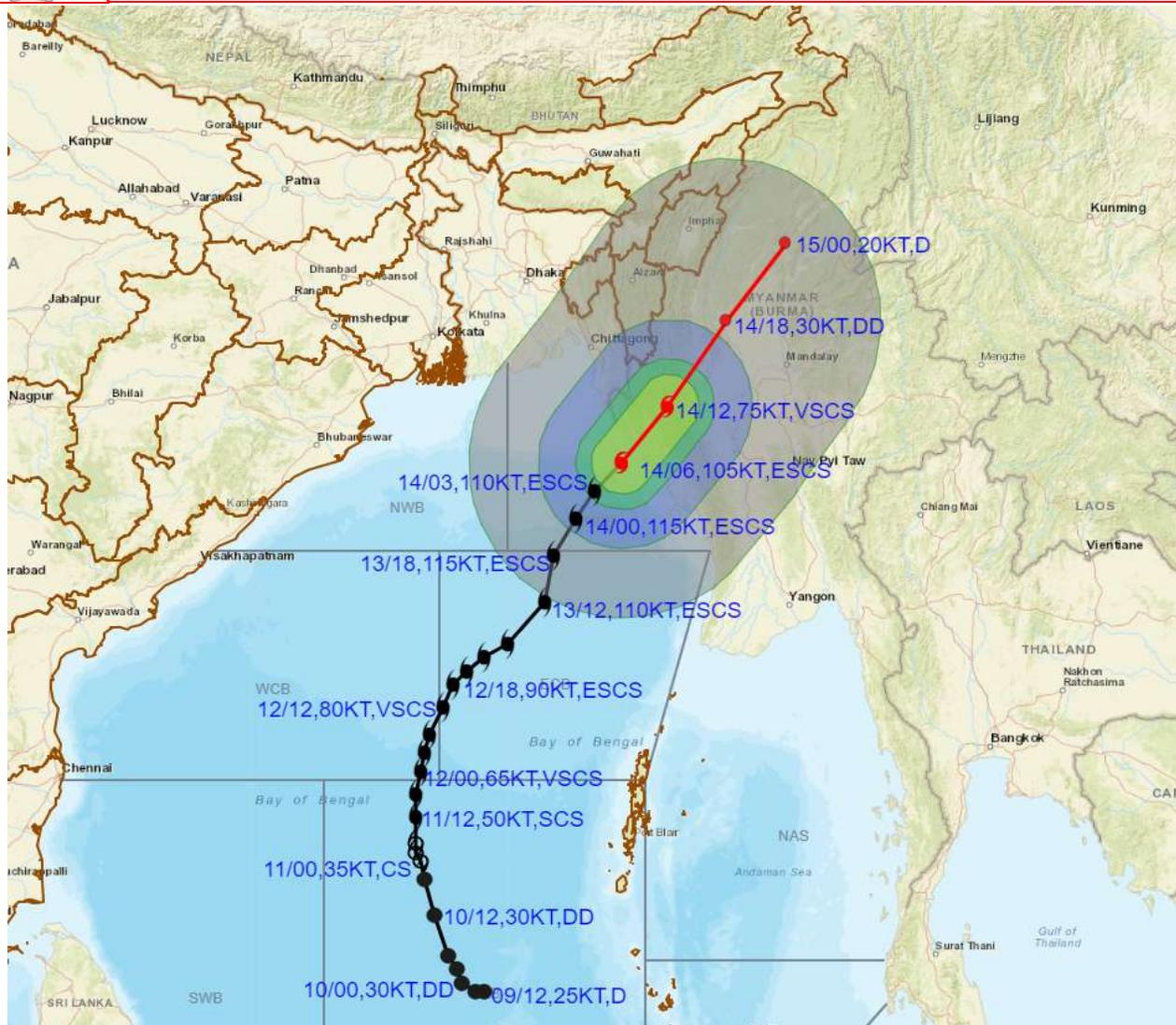
▲ CONE OF UNCERTAINTY

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
14.05.23/0600	0	19.9	92.5	SITTWE (48,WSW)	KYAUKTAW (107,S)	TEKNAF (110,S)	KYAUKPYU (123,WNW)	MANAUNG (174,NW)



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF EXTREMELY SEVERE CYCLONIC STORM MOCHA OVER NORTHEAST BAY OF BENGAL BASED ON 0600 UTC (1130 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)

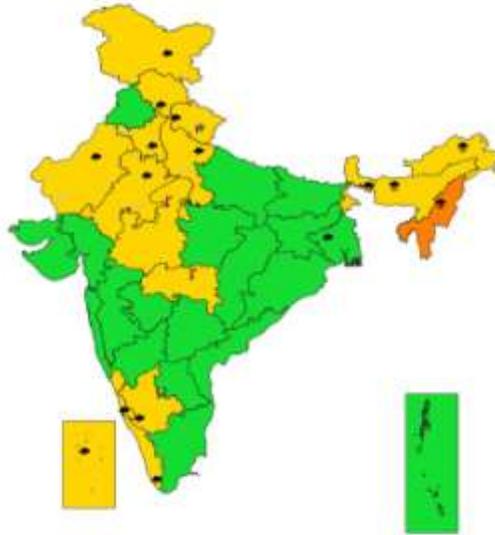
● LESS THAN 34 KT
 ○ 34-47 KT
 ⊙ \geq 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ○ CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ \geq 64 KT (\geq 118 KMPH)

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
(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) |



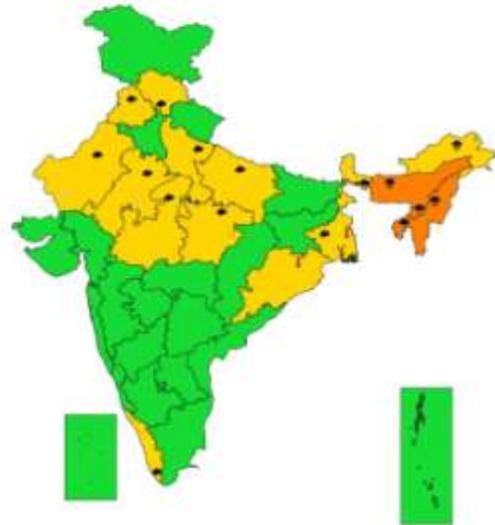
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(15-5-2023)**



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



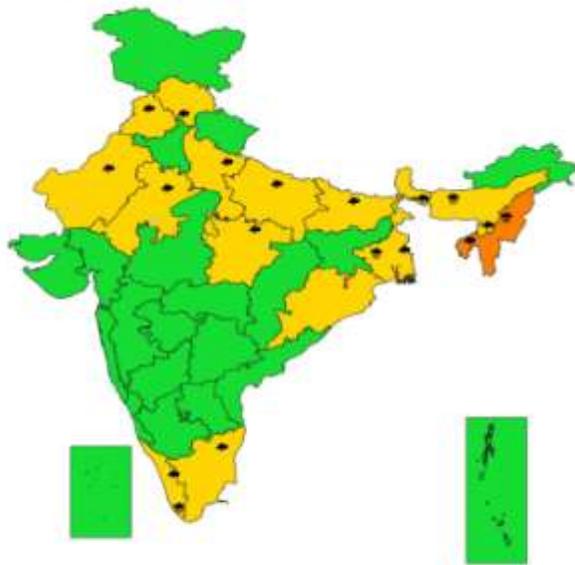
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(16-5-2023)**



- | | | |
|-----------------------------|------------------------|--------------------------|
| 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 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 wind 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 60-70 kmph gusting to 80 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