



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. 8 (BoB/02/2023)

TIME OF ISSUE: 0930 HOURS IST

DATED: 11.05.2023

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

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Sub: Deep Depression over southeast Bay of Bengal intensified into a cyclonic storm "Mocha" pronounced as "Mokha"

The deep depression over southeast Bay of Bengal moved north-northwestwards with a speed of 8 kmph during past 06 hours, intensified into a cyclonic storm "**Mocha**" pronounced as "**Mokha**" and lay centered at 0530 hours IST of 11th May 2023 over the same region near latitude 11.2°N and longitude 88.1°E, about 510 km west-southwest of Port Blair, 1210 km south-southwest of Cox's Bazar (Bangladesh) and 1120 km south-southwest of Sittwe (Myanmar).

It is very likely to move north-northwestwards and gradually intensify into a severe cyclonic storm around mid-night of today, the 11th May. Thereafter, it is likely to recurve gradually, move north-northeastwards from 12th May morning and intensify further into a very severe cyclonic storm around 12th May evening over central Bay of Bengal. It would reach its peak intensity around 13th May evening. Thereafter, it is likely to weaken slightly from 14th May morning and cross southeast Bangladesh and north Myanmar coasts between Cox's Bazar (Bangladesh) and Kyaukpyu (Myanmar) around forenoon of 14th May, 2023 with maximum sustained wind speed of 120-130 kmph gusting to 145 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
11.05.23/0530	11.2/88.1	60-70 gusting to 80	Cyclonic Storm
11.05.23/1130	11.7/88.0	70-80 gusting to 90	Cyclonic Storm
11.05.23/1730	12.2/87.9	80-90 gusting to 100	Cyclonic Storm
11.05.23/2330	12.7/87.9	90-100 gusting to 110	Severe Cyclonic Storm
12.05.23/0530	13.2/88.0	110-120 gusting to 130	Severe Cyclonic Storm
12.05.23/1730	14.3/88.5	120-130 gusting to 145	Very Severe Cyclonic Storm
13.05.23/0530	15.9/89.4	130-140 gusting to 155	Very Severe Cyclonic Storm
13.05.23/1730	17.5/90.6	140-150 gusting to 165	Very Severe Cyclonic Storm
14.05.23/0530	19.4/92.2	125-135 gusting to 150	Very Severe Cyclonic Storm
14.05.23/1730	22.0/94.4	60-70 gusting to 80	Cyclonic Storm

Warnings:

(i) Rainfall (warning graphics enclosed)

- ❖ **Andaman & Nicobar Islands:** Rainfall at most places with Heavy rainfall at isolated places is likely on 11th May & 12th May.
- ❖ **Tripura & Mizoram:** Rainfall at most places with Heavy rainfall at isolated places is likely on 13th May and 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:

- ❖ **Andaman & Nicobar Islands:**
Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail on 11th May.
- ❖ **Tripura, Mizoram & south Manipur:**
Squally wind speed reaching 50-60 kmph gusting to 70 kmph is very likely to prevail on 14th May.
- ❖ **Andaman Sea:**
Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail over North Andaman Sea till 12th May.
- ❖ **Southeast Bay of Bengal:**
Gale wind speed reaching 60-70 kmph gusting to 80 kmph is prevailing and likely to become 80-90 kmph gusting to 100 kmph from 11th May evening.
Gale wind speed reaching 100-110 kmph gusting to 120 kmph is likely by 12th May morning to evening and decrease thereafter becoming squally wind speed reaching 55-65 kmph gusting to 75 kmph on 13th May.
- ❖ **Adjoining areas of southwest Bay of Bengal:**
Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely on 11th May.
- ❖ **Eastcentral Bay of Bengal:**
Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph is prevailing and likely to become gale wind speed reaching 80-90 kmph gusting to 100 kmph by 11th May evening;
Gale wind speed reaching 110-120 kmph gusting to 135 kmph is likely on 12th May early morning, 130-140 kmph gusting to 155 kmph from 13th May morning and 140-150 kmph gusting to 165 kmph on 13th May evening, and then gradually decrease becoming 100-110 gusting to 120 kmph by 14th May morning.

- ❖ **Westcentral Bay of Bengal:**
Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph is prevailing and gradually increase becoming gale wind speed reaching 60-70 kmph gusting to 80 kmph from 11th May afternoon;
Gale wind speed reaching 110-120 kmph gusting to 130 kmph is likely on 12th May morning and 120-130 gusting to 145 kmph on 12th May evening and decrease thereafter from 13th May morning.
Gale wind speed reaching 100-110 kmph gusting to 120 kmph is likely on 13th May evening and significantly decrease thereafter.
- ❖ **Northeast Bay of Bengal:**
Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely on 12th May.
Gale wind speed reaching 80-90 kmph gusting to 100 kmph is likely to commence from 13th May morning and gradually increase and becoming 130-140 kmph gusting 155 kmph during 13th morning to night. Subsequently, it is likely to decrease to 125-135 kmph gusting to 150 kmph on 14th May forenoon and significantly decrease thereafter.
- ❖ **Adjoining areas of Northwest Bay of Bengal:**
Squally wind speed reaching 55-65 kmph gusting to 75 kmph is likely on 13th May and 14th May forenoon and decrease thereafter.

(iii) Sea condition

- ❖ **Andaman Sea:**
Very rough to high over Andaman Sea is likely to prevail on 11th May.
Very rough to rough over north Andaman Sea during 12th & 13th May.
- ❖ **Southeast Bay of Bengal:**
Very rough to high is likely to prevail till 11th May.
High to very high on 12th May.
Very rough to rough on 13th May.
- ❖ **Eastcentral Bay of Bengal:**
High to very high is prevailing and likely to become very High to phenomenal during 12th & 13th May and improve thereafter from 14th May morning.
- ❖ **Adjoining areas of Westcentral Bay of Bengal:**
Very rough to high is prevailing and likely to become very high to phenomenal on 12th May and improve gradually thereafter.
- ❖ **Northeast Bay of Bengal:**
Rough to very rough on 12th May.
Phenomenal to very high during 13th & 14th May.
- ❖ **Adjoining areas of Northwest Bay of Bengal:**
Rough to very rough during 13th & 14th May.

(iv) Fishermen Warning (warning graphics enclosed)

- ❖ Fishermen, ships, boats and trawlers are advised not to venture into southeast Bay of Bengal and adjoining Andaman Sea till 11th May, central Bay of Bengal and north Andaman Sea till 14th May morning, and into northeast Bay of Bengal during 12th-14th May.
- ❖ Those over central Bay of Bengal and north Andaman Sea are advised to return to coast.

(v) Advisory

- ❖ Regulation of tourism and offshore activities and shipping near Andaman & Nicobar Islands till 13th May.

- ❖ Regulation of shipping activity over the sea areas of southeast Bay of Bengal and Andaman Sea till 12th May, eastcentral Bay of Bengal till 14th May, and westcentral Bay of Bengal till 13th May.
- ❖ Regulation of shipping activity over the sea areas of northeast Bay of Bengal during 12th-14th May.

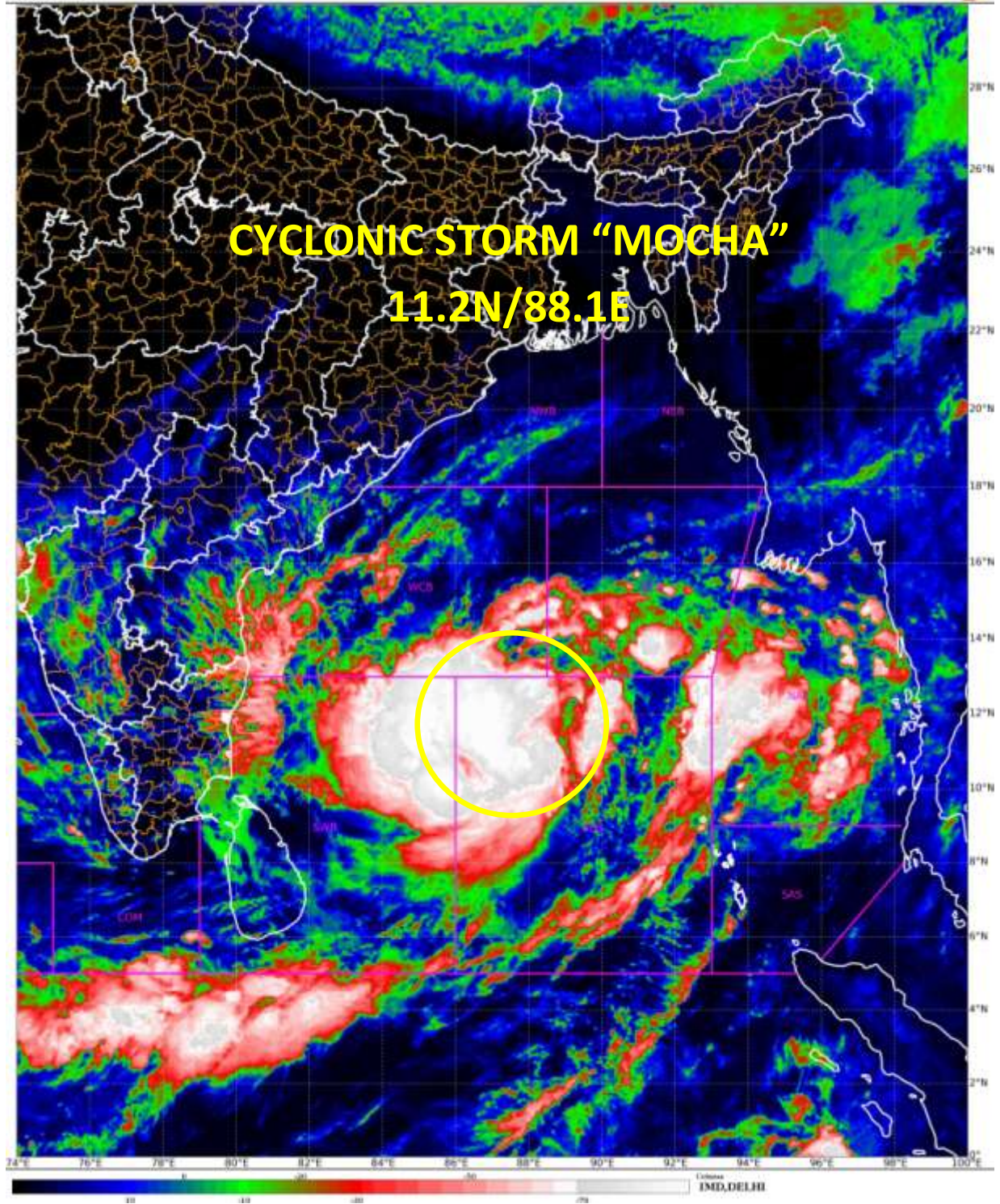
(vi) Damage expected over Mizoram, Tripura, and South Manipur

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

The system is under continuous surveillance and the next message will be issued at 1130 hours IST of today, the 11th May 2023.

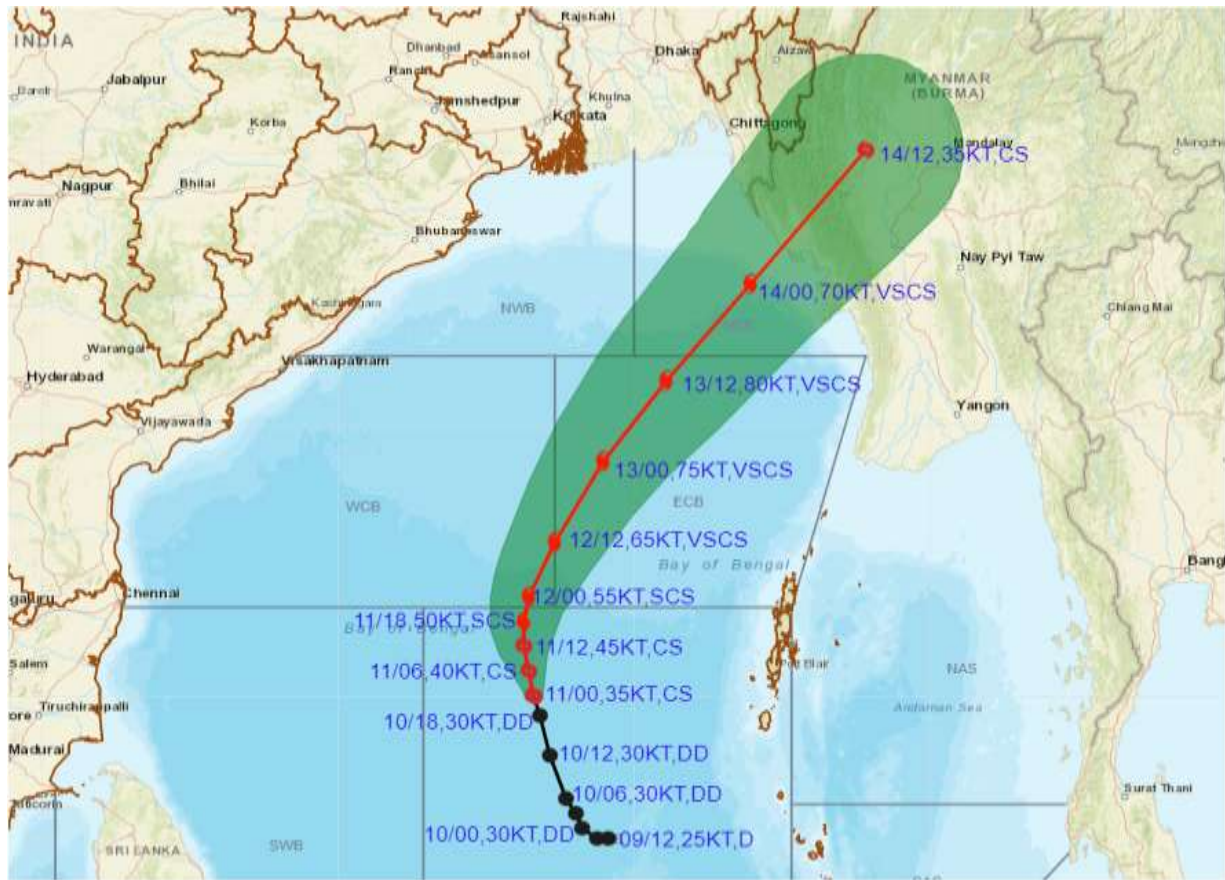
(Dr. Ananda Kumar Das)
Scientist F, Cyclone Warning Division, New Delhi

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





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONE MOCHA OVER SOUTHEAST BAY OF BENGAL BASED ON 0000 UTC (0530 IST) OF 11TH 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)

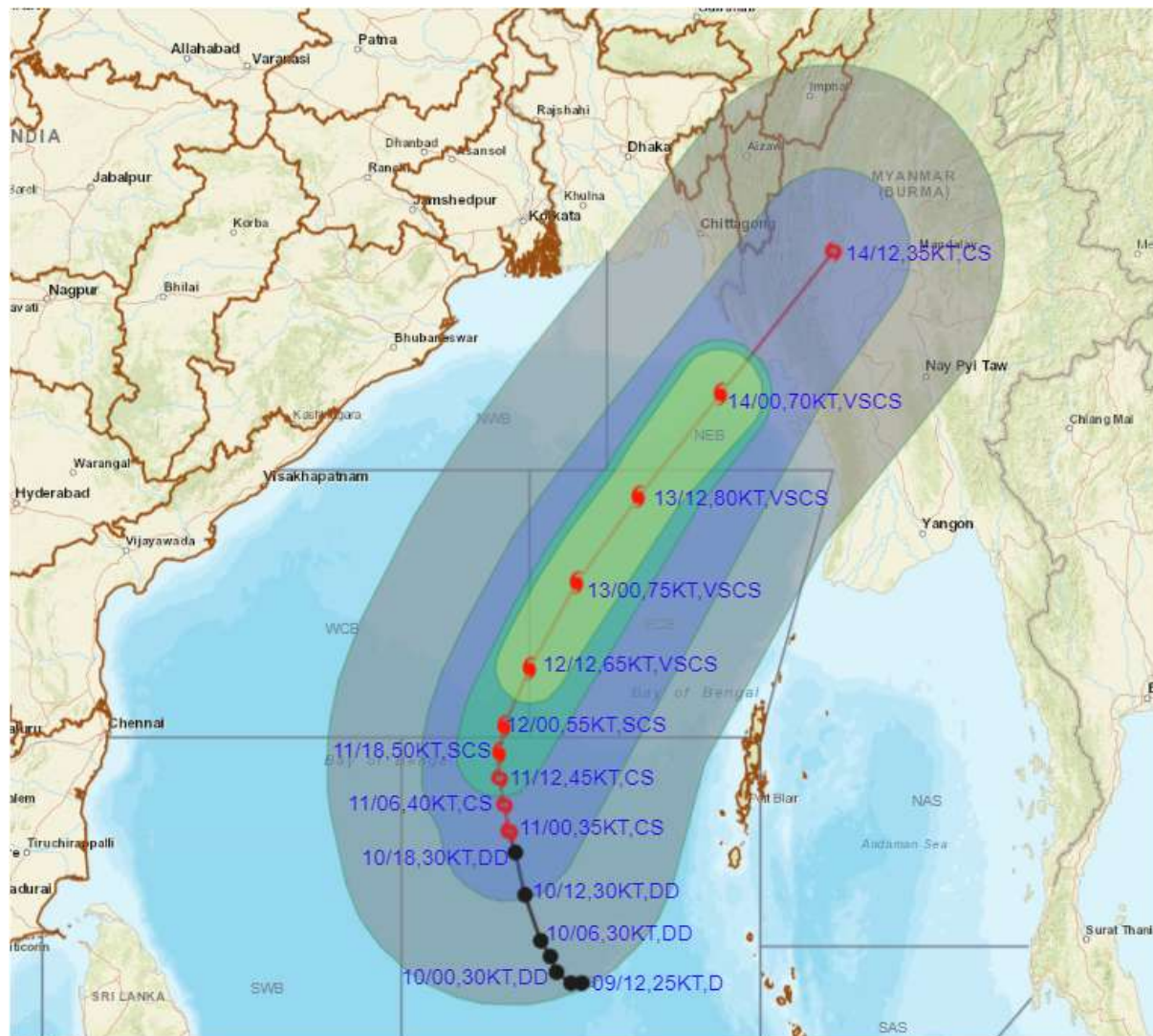
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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
11.05.23/0000	0	11.2	88.1	HUT BAY (491,W)	PORT BLAIR (506,W)	LONG ISLAND (544,WSW)	MAYA BANDAR (558,WSW)	CAR NICOBAR (566,WNW)
12.05.23/0000	24	13.2	88.0	MAYA BANDAR (534,W)	PORT BLAIR (540,WNW)	LONG ISLAND (543,W)	HUT BAY (575,WNW)	COCO ISLAND (589,W)
13.05.23/0000	48	15.9	89.4	COCO ISLAND (470,WNW)	MAYA BANDAR (504,NW)	LONG ISLAND (544,NW)	SANDHEADS (564,SSE)	MANAUNG (565,SW)
14.05.23/0000	72	19.4	92.2	SITTWE (109,SW)	KYAUKPYU (142,W)	TEKNAF (164,S)	KYAUKTAW (168,SSW)	MANAUNG (172,WNW)



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONE MOCHA OVER SOUTHEAST BAY OF BENGAL BASED ON 0000 UTC (0530 IST) OF 11TH 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)

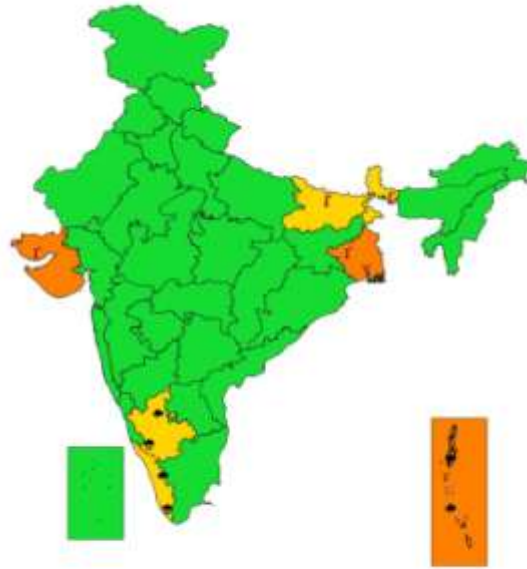
■ ≥ 64 KT (≥118 KMPH)

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
(11-5-2023)



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



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(12-5-2023)



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



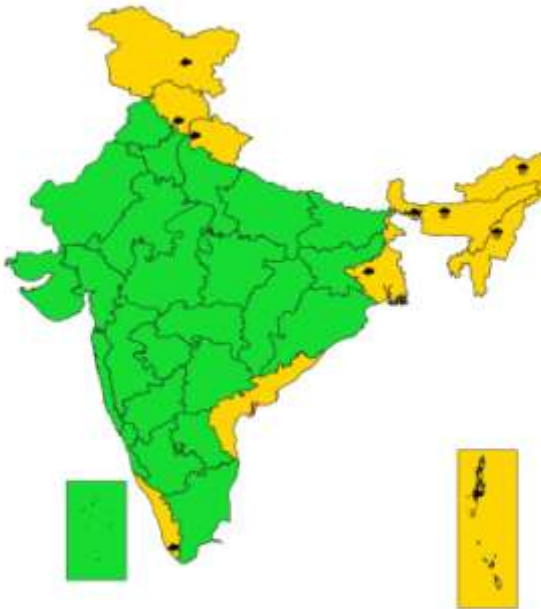
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(13-5-2023)



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



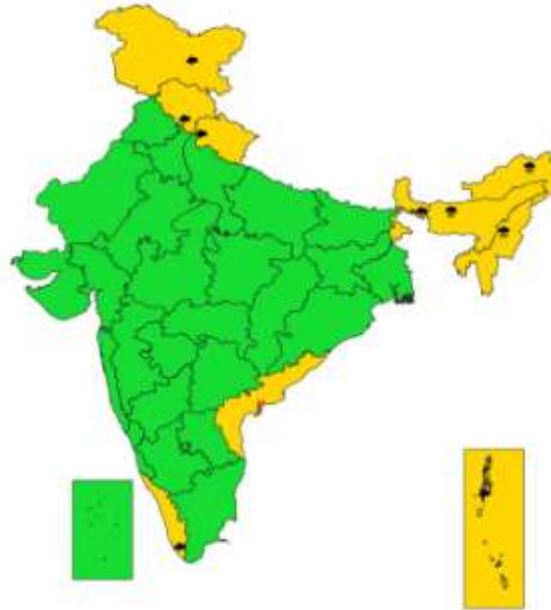
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(14-5-2023)**



- | | | |
|-----------------------------|------------------------|--------------------------|
| 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 5
(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) |

Fishermen warning graphics

