



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

NATIONAL BULLETIN NO. 33 (ARB/03/2023)

TIME OF ISSUE: 2030 HOURS IST

DATED: 24.10.2023

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)

ADMINISTRATOR, LAKSHADWEEP ISLANDS (FAX NO. 0413-262184)

CHIEF SECRETARY, KERALA (FAX NO. 0471-2327176)

CHIEF SECRETARY, KARNATAKA (FAX NO. 080-22258913)

CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)

CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)

CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)

CHIEF SECRETARY, DAMAN & DIU (FAX NO. 0260-2230775)

CHIEF SECRETARY, DADRA & NAGAR HAVELI (FAX NO. 0260-2645466)

CHIEF SECRETARY, ODISHA (FAX NO. 0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX NO. 033-22144328)

CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)

CHIEF SECRETARY, TAMIL NADU (FAX NO 044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX NO 0413-2334145)

CHIEF SECRETARY, GOVT. OF TRIPURA (FAX NO. 0381-2414013, 2413200)

CHIEF SECRETARY, GOVT. OF MIZORAM (FAX NO. 0389-2322745, 2320588)

CHIEF SECRETARY, GOVT. OF MANIPUR (FAX NO. 0385-2452629)

CHIEF SECRETARY, GOVT. OF NAGALAND (FAX NO. 0370-2270057)

ADMINISTRATOR, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (A) Depression [Remnant of the Cyclonic Storm "Tej" (pronounced as Tej)] over Yemen and (B) Very Severe Cyclonic Storm "Hamoon" (pronounced as Hamoon) weakened into a Severe Cyclonic Storm over Northeast Bay of Bengal.

(A) Depression [Remnant of the Cyclonic Storm "Tej" (pronounced as Tej)] over Yemen

The Deep Depression [Remnant of the Cyclonic Storm "Tej" (pronounced as Tej)] over Yemen moved west-northwestward with a speed of 09 kmph during past 6 hours, weakened into a Depression and lay centered at 1730 hours IST of today, the 24th October over Yemen, near latitude 16.2°N and longitude 51.0°E, about 110 km west of Al Ghaidah (Yemen) and 340 km west-southwest of Salalah (Oman).

It is very likely to move further west-northwestwards and weaken into a Well Marked Low Pressure Area during next 06 hours.

Warnings:

(i) Wind warning (warning graphics enclosed):

- **Westcentral Arabian Sea:**

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail during next 06 hours and improve gradually thereafter.

- (ii) **Sea Condition**

- **Westcentral Arabian Sea:**

Rough condition is likely to prevail during next 06 hours and improve gradually thereafter.

- (iii) **Fishermen Warning (Graphics attached):**

Fishermen are advised not to venture into **Westcentral Arabian Sea** till night of 24th October.

(B) Very Severe Cyclonic Storm “Hamoon” (pronounced as Hamoon) weakened into a Severe Cyclonic Storm over Northeast Bay of Bengal

The Very Severe Cyclonic Storm “Hamoon” (pronounced as Hamoon) over Northwest and adjoining Northeast Bay of Bengal moved northeastwards with a speed of 19 kmph during past 6 hours, weakened into a **Severe Cyclonic Storm** and lay centered at 1730 hours IST of today, the 24th October over Northeast Bay of Bengal, near latitude 20.9°N and longitude 90.8°E, about 350 km east-southeast of Digha (West Bengal), 130 km south-southeast of Khepupara (Bangladesh) and 190 km south-southwest of Chittagong (Bangladesh).

It is likely to further weaken gradually into a Cyclonic Storm during next 12 hours. It is likely to continue to move northeastwards and cross Bangladesh coast close to south of Chittagong by early hours of 25th October as a **Cyclonic Storm with wind speed of 80 to 90 kmph gusting to 100 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
24.10.23/1730	20.9/90.8	105-115 gusting to 125	Severe Cyclonic Storm
24.10.23/2330	21.6/91.6	95-105 gusting to 115	Severe Cyclonic Storm
25.10.23/0530	22.2/92.2	80-90 gusting to 100	Cyclonic Storm
25.10.23/1130	22.8/92.7	60-70 gusting to 80	Cyclonic Storm
25.10.23/1730	23.4/93.2	40-50 gusting to 60	Depression
26.10.23/0530	24.6/94.2	25-35 gusting to 45	Well Marked Low

Warnings:

- (i) **Rainfall Warning:**

Manipur, Mizoram & Tripura and south Assam & Meghalaya: Light to moderate rainfall is very likely at most places with isolated heavy rainfall over Mizoram and Tripura on 24th and 25th and over south Assam & Meghalaya on 24th October. Light to moderate rainfall is likely at many places over Mizoram and Tripura on 26th October.

Light to moderate rainfall is very likely at many places over Nagaland and Manipur during 24-26th October and east Arunachal Pradesh on 25th & 26th October.

- (ii) **Wind warning (warning graphics enclosed):**

- **Northeast Bay of Bengal:**

Gale wind speed reaching **105-115 kmph gusting to 125 kmph** is prevailing and likely to continue during next 03 hours. It would decrease gradually thereafter becoming **Gale wind** speed reaching **95-105 kmph gusting to 115 kmph** by 24th midnight and **80-90 kmph gusting to 100 kmph** by 25th early morning and would decrease thereafter.

- **Northwest Bay of Bengal:**

Gale wind speed reaching **105-115 kmph gusting 125 kmph** is prevailing and likely to continue during next 03 hours. It would decrease gradually thereafter becoming **Gale wind** speed reaching **80-90 kmph gusting to 100 kmph** by 24th midnight, and **Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** by 25th evening and would decrease thereafter.

- **Adjoining eastcentral Bay of Bengal: Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** is prevailing and would gradually decrease from 25th forenoon.
- **Along & off West Bengal, Bangladesh and north Myanmar coasts: Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail along & off West Bengal coast till 25th morning.
Gale wind speed reaching 70-80 gusting to 90 kmph is prevailing along & off Bangladesh coast. It would gradually increase becoming **80-90 kmph gusting to 100 kmph** along & off Bangladesh and adjoining north Myanmar coast from midnight of today till early morning of 25th.
Squally wind speed reaching **55-65 kmph gusting to 75 kmph likely** along & off remaining parts of north Myanmar coast during the same period and decrease thereafter.

Mizoram, Tripura, south Assam and Manipur:

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail over Mizoram and Tripura and Strong wind speed reaching **30-40 kmph gusting to 50 kmph** over south Assam & Manipur on 25th October.

(iii) Sea Condition

- **Northeast Bay of Bengal and along & off Bangladesh & adjoining north Myanmar coasts: Very high sea conditions** are prevailing and likely to continue till early morning of 25th and would become high thereafter till 25th morning and very rough to rough till 25th October evening.
- **Northwest Bay of Bengal: High to Very high sea conditions** are prevailing and likely to continue till today midnight and would become very rough to rough thereafter till 25th morning and gradually improve thereafter.
- **Adjoining eastcentral Bay of Bengal: Very rough to rough** till 25th October forenoon. It is likely to improve gradually thereafter.
- **Along & off West Bengal coasts: Rough to very rough sea conditions** likely to prevail till 25th October morning.

(iv) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

- ❖ **North Bay of Bengal and along & off West Bengal, Bangladesh and north Myanmar coasts** till 25th October.
- ❖ **Adjoining areas of Eastcentral Bay of Bengal** till 25th October morning.

Both the systems are under continuous surveillance and the next bulletin will be issued at 2330 hours IST of 24th October, 2023.

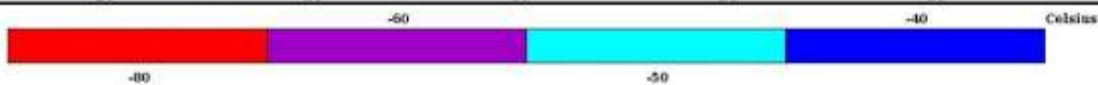
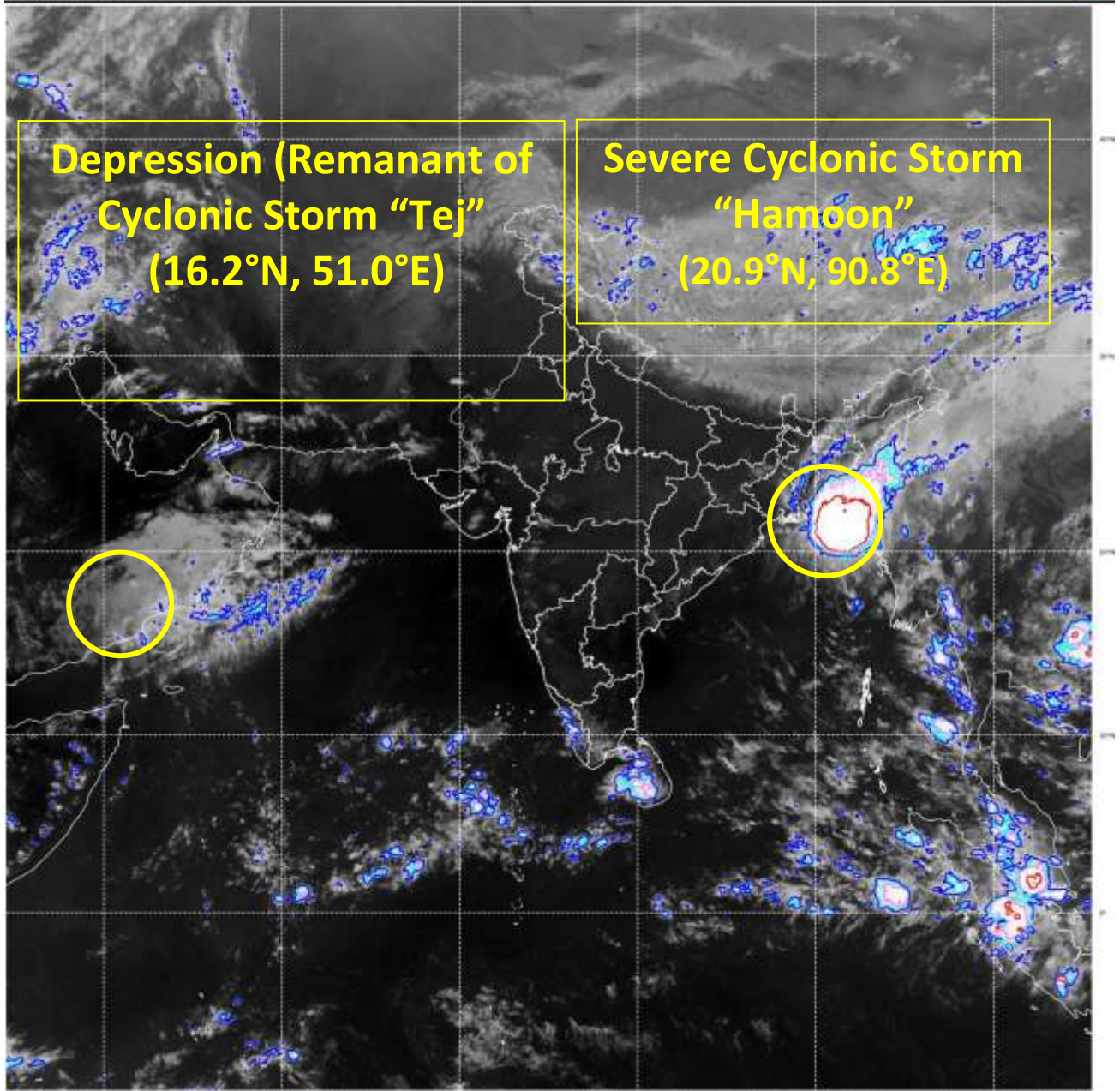
(Ananda Kumar Das)

Scientist F, Cyclone Warning Division, 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.





OBSERVED AND FORECAST TRACK OF DEPRESSION (REMNANT OF VERY SEVERE CYCLONIC STORM "TEJ") OVER YEMEN BASED ON 1200 UTC (1730 IST) OF 24TH 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 CONE OF UNCERTAINTY OF SEVERE CYCLONIC STORM "HAMOON" OVER NORTHEAST BAY OF BENGAL BASED ON 1200 UTC (1730 IST) OF 24TH 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)
 VS: 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 FROM STATIONS			
Date and Time	PARADIP (CWR)	DIGHA	KHEPUPARA	CHITTAGONG (AMBAGAN)
25.10.23/1200	760, ENE	620, ENE	350, ENE	190, NE
26.10.23/0000	910, ENE	760, ENE	500, NE	350, NE



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF SEVERE CYCLONIC STORM "HAMOON" OVER NORTHEAST BAY OF BENGAL BASED ON 1200 UTC (1730 IST) OF 24TH 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)

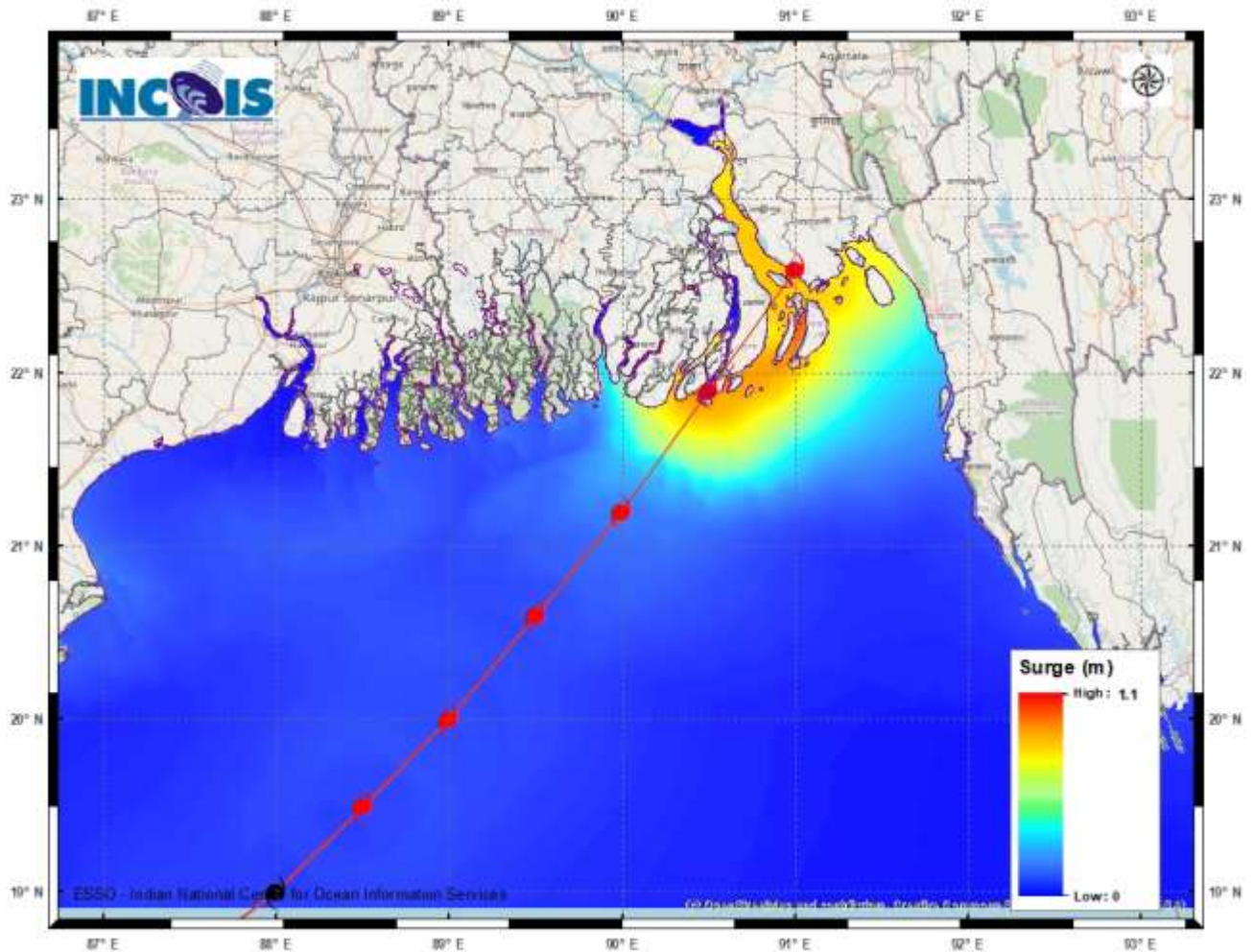
— ≥ 64 KT (≥ 118 KMPH)

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

STORM SURGE GUIDANCE FOR BANGLADESH:

Storm surge of about 1.0-1.5 metre height above the astronomical tide is likely to inundate low lying areas between Khepupara and Chittagong (Bangladesh) around the time of landfall.



Fishermen warning graphics

Day 1: 24.10.2023/17:30AM to 25.10.2023/05:30AM



Day 2: 25.10.2023/05:30AM to 26.10.2023/05:30AM



Day 3: 26.10.2023/05:30AM to 27.10.2023/05:30AM



Day 4: 27.10.2023/05:30AM to 28.10.2023/05:30AM



Day 5: 28.10.2023/05:30AM to 29.10.2023/05:30AM



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.

WEATHER WARNING GRAPHICS

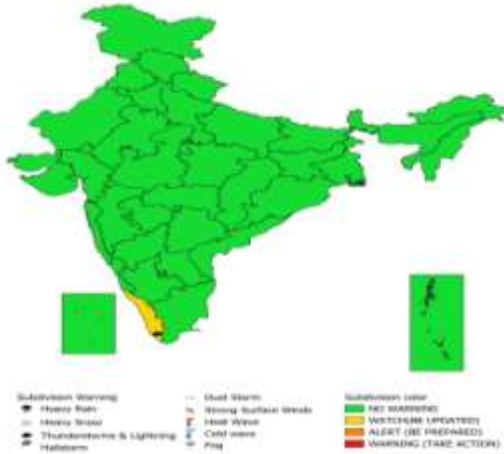
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(24-10-2023)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(25-10-2023)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(26-10-2023)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(27-10-2023)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
(28-10-2023)



WATCH(BE UPDATED)
 ALERT (BE PREPARED)
 WARNING (TAKE ACTION)