



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. 87 (ARB/01/2023)

TIME OF ISSUE: 0900 HOURS IST

DATED: 17.06.2023

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, KERALA (FAX NO. 0471-2327176)

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

CHIEF SECRETARY, TAMILNADU (FAX NO. 044-25672304)

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

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

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)

Sub: Deep Depression (Remnant of Cyclonic Storm 'Biparjoy') over Southwest Rajasthan adjoining Gujarat and Southeast Pakistan

The Deep Depression (Remnant of Cyclonic Storm 'Biparjoy') over Southeast Pakistan adjoining Southwest Rajasthan and Kutch moved east-northeastwards with a speed of 05 kmph during past 6-hours and lay centered at 0530 hours IST of today, the 17th June, 2023 over Southwest Rajasthan adjoining Gujarat and Southeast Pakistan near latitude 24.7°N and longitude 71.2°E, about 130 km northeast of Dholavira, 120 km west-northwest of Deesa and 110 km south-southwest of Barmer.

It is very likely to move east-northeastwards and weaken into a Depression during next 06 hours. Thereafter, it is very likely to continue to move east-northeastwards and maintain the intensity of Depression during subsequent 18 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
17.06.23/0530	24.7/71.2	50-60 Gusting To 70	Deep Depression
17.06.23/1130	24.9/71.6	45-55 Gusting To 65	Depression
17.06.23/1730	25.2/72.1	40-50 Gusting To 60	Depression
17.06.23/2330	25.5/72.7	35-45 Gusting To 55	Depression
18.06.23/0530	25.8/73.4	30-40 Gusting To 50	Depression

Warnings:

(i) Heavy Rainfall warning:

- Light to moderate rainfall at most places with isolated heavy to extremely heavy rainfall is likely over south Rajasthan and isolated heavy to very heavy rainfall over adjoining north Gujarat region & Kutch on 17th June.

(ii) Wind warning:

Northeast Arabian Sea: Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail during next 06 hours.

Wind warning for along & off Saurashtra & Kutch coasts, interior districts and Gulf of Kutch:

- Squally wind speed reaching 40-50 kmph gusting to 50 kmph is prevailing over Kutch and northern districts of Saurashtra till 17th June afternoon.

Wind Warning for South Rajasthan

- Squally wind speed reaching 45-55 kmph gusting to 65 kmph during next 12 hours and decrease thereafter becoming 35-45 kmph gusting to 55 kmph.

(iii) Sea condition

Rough sea conditions prevailing over northeast Arabian Sea and along & off Saurashtra & Kutch coasts is likely to continue for next 6 hours.

(iv) Damage expected over Kachchh and North Saurashtra districts during next 06 hours:

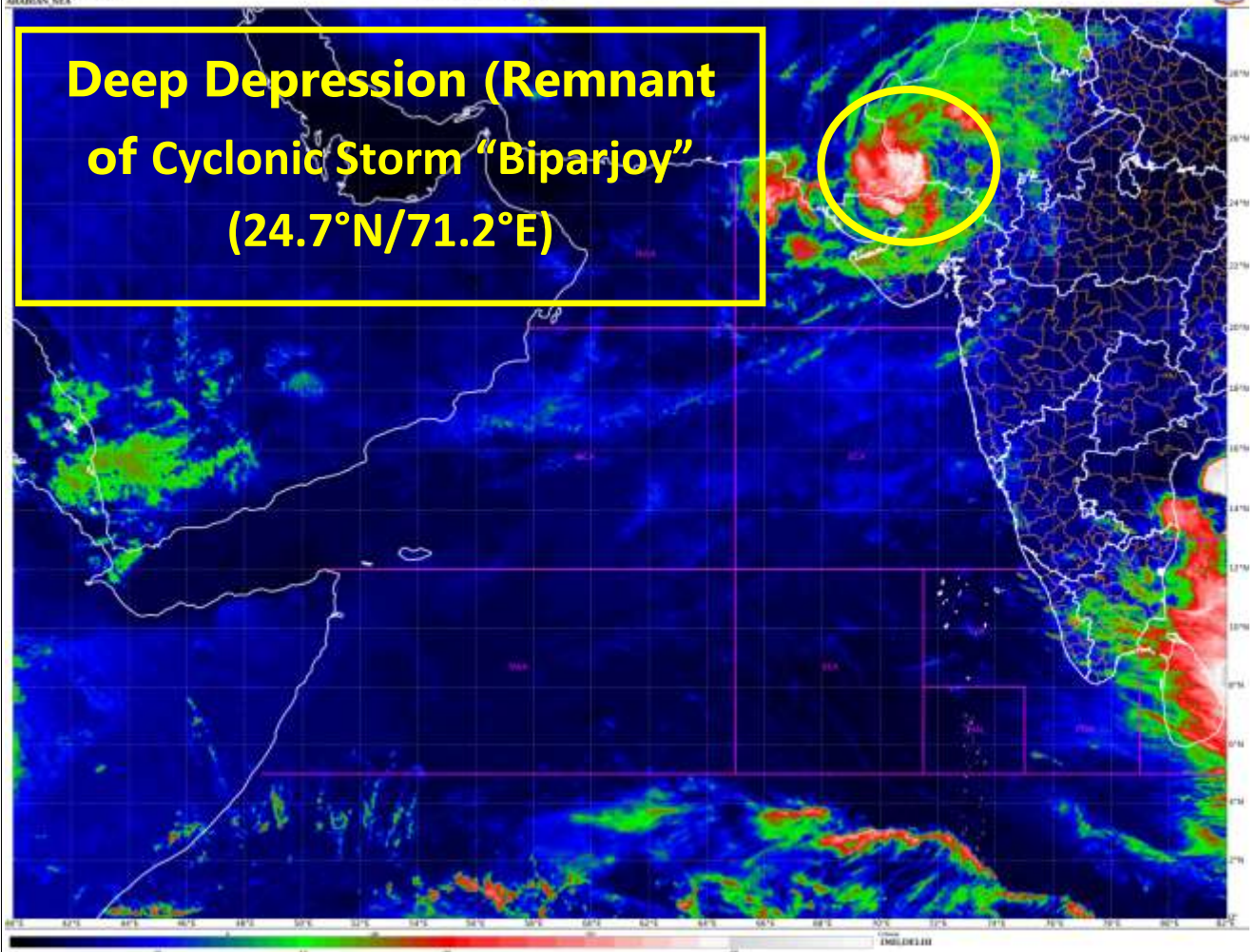
- Minor damage to loose / unsecured structures.
- Some breaches in Kutcha road due to flooding.
- Minor damage to Banana trees and near coastal agriculture due to salt spray. Damage to ripe paddy crops.
- Minor damage to Kutcha embankments.

The system is under continuous surveillance and the next message will be issued at 1130 hours IST of today, the 17th June, 2023.

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

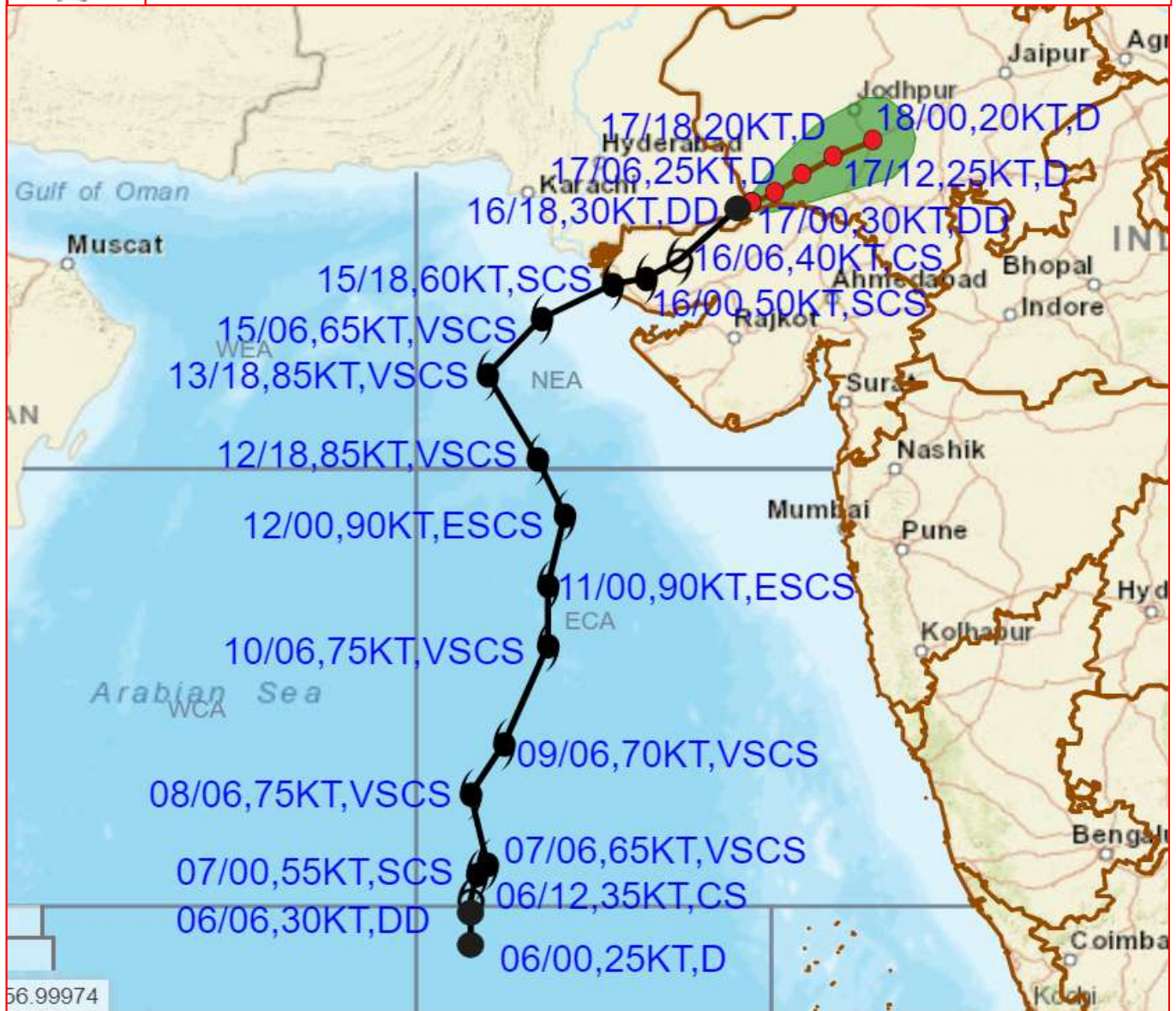
Copy to: ACWC Kolkata/ ACWC Chennai/ CWC Bhubaneswar/CWC Visakhapatnam/CWC Ahmedabad/ MO Port Blair/MC Raipur/MC Bhopal/MC Hyderabad/RMC Nagpur

LEGEND: Heavy Rainfall: 64.5 to 115.5mm, **Very Heavy Rainfall:** 115.6 to 204.4mm **Most Places:** more than 76% of total stations, **Isolated Places:** Less than 25% of total





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION (REMANANT OF CYCLONIC STORM BIPARJOY) OVER SOUTHWEST RAJASTHAN ADJOINING GUJARAT AND SOUTHEAST PAKISTAN BASED ON 0000 UTC (0530 IST) OF 17TH JUNE 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

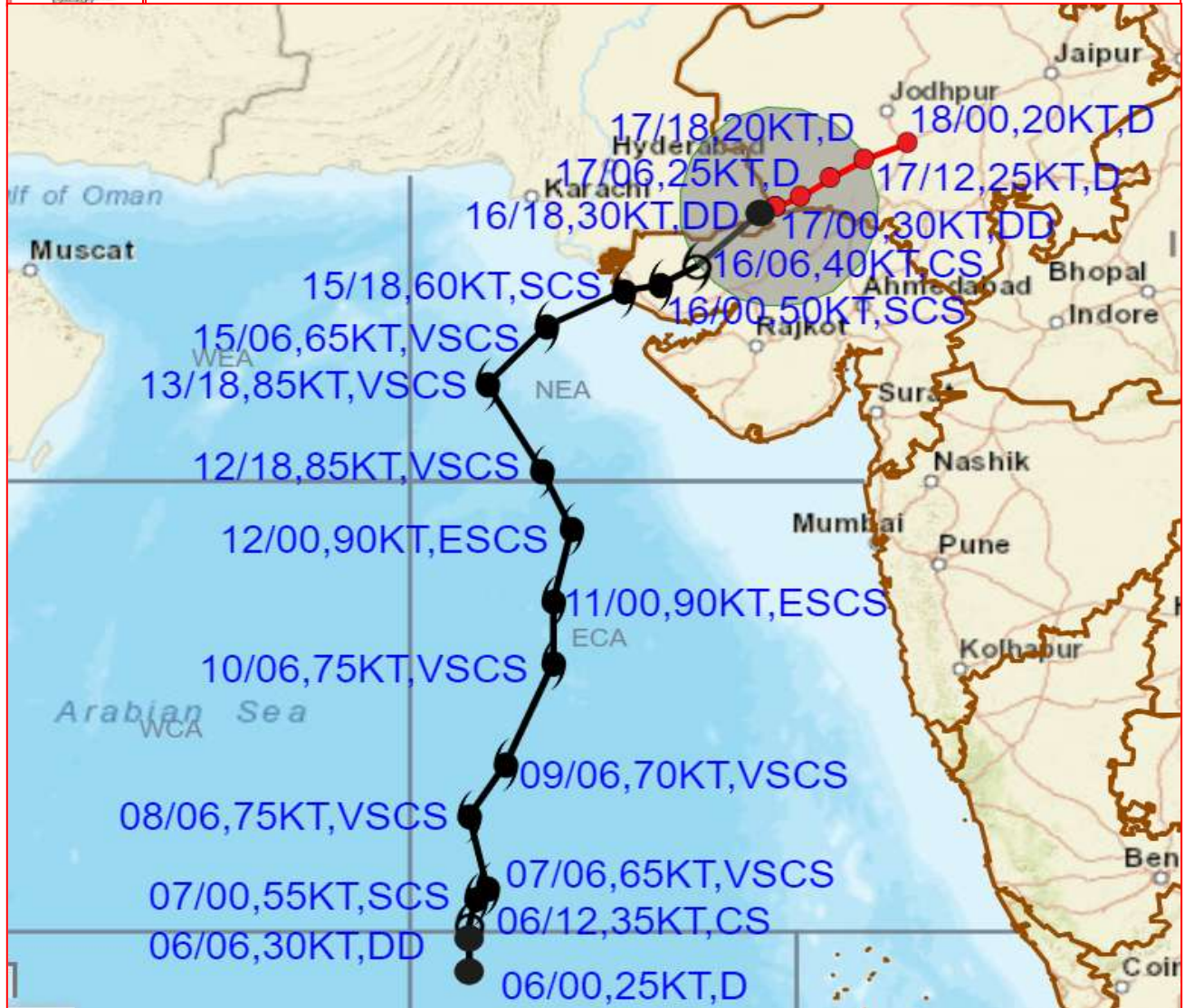
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION (REMANANT OF CYCLONIC STORM BIPARJOY) OVER SOUTHWEST RAJASTHAN ADJOINING GUJARAT AND SOUTHEAST PAKISTAN BASED ON 0000 UTC (0530 IST) OF 17TH JUNE 2023..



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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)

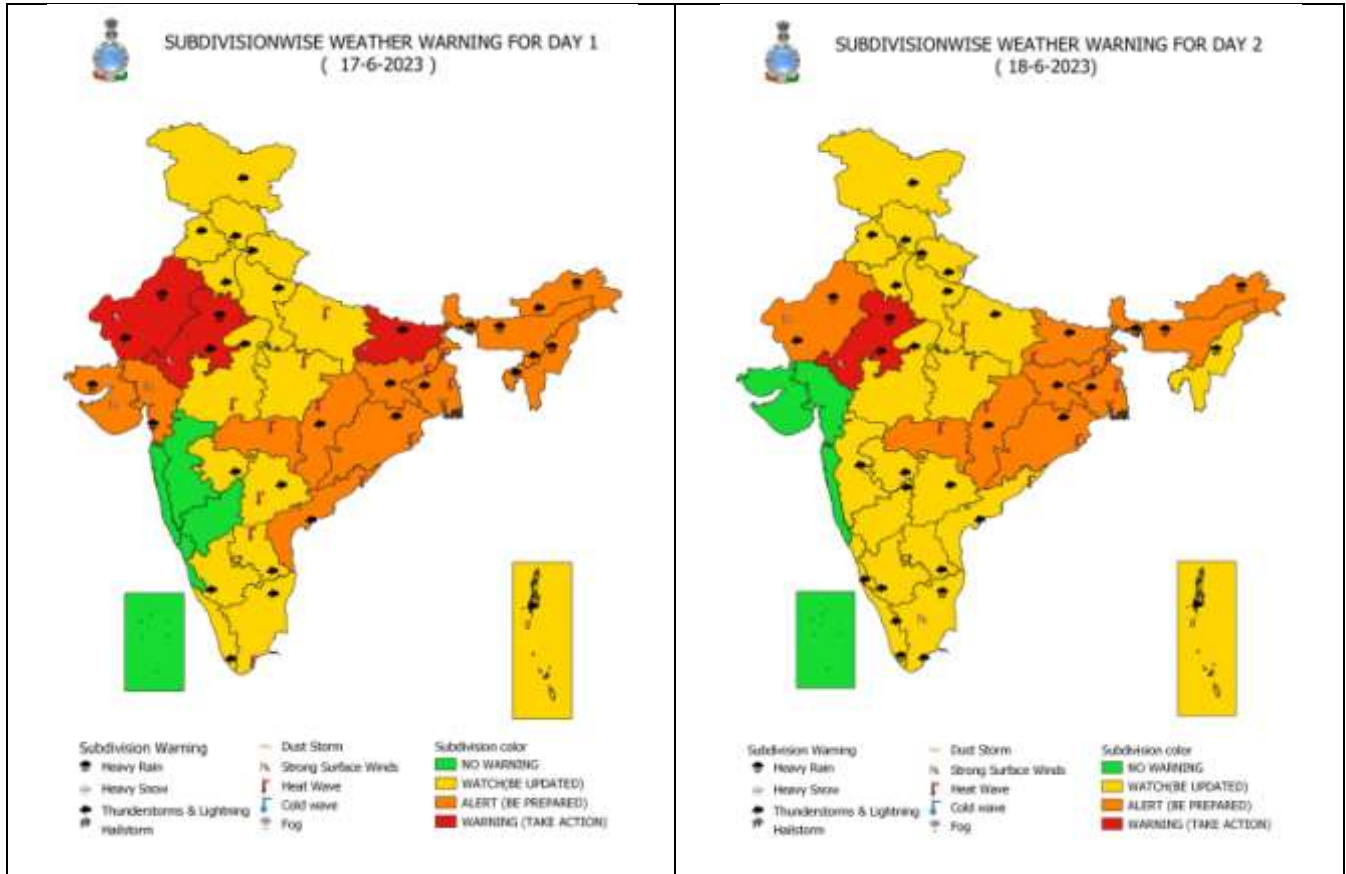
■ 50-63 KT (92-117 KMPH)

■ ≥ 64 (≥ 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

All India Heavy Rainfall Warning for 17th to 18th June 2023



District-wise Heavy Rainfall Warning Maps for 17th June



Fishermen warning graphics

