



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. 19 (ARB/01/2023)

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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: Very Severe Cyclonic Storm “Biparjoy” (pronounced as “Biporjoy”) over eastcentral Arabian Sea

The very severe cyclonic storm “**Biparjoy**” (pronounced as “**Biporjoy**”) over eastcentral Arabian Sea moved nearly northwards with a speed of 5 kmph during past 6 hours and lay centered at 1430 hours IST of today, the 08th June, 2023 over the same region near latitude 14.3°N and longitude 66.0°E, about 850 km west of Goa, 890 km southwest of Mumbai, 900 km south-southwest of Porbandar and 1180 km south of Karachi.

It would intensify further gradually during next 18 hours and move nearly north-northwestwards during next 3 days.

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
08.06.23/1430	14.3/66.0	135-145 gusting to 160	Very Severe Cyclonic Storm
08.06.23/1730	14.4/66.0	140-150 gusting to 165	Very Severe Cyclonic Storm
08.06.23/2330	14.7/65.9	145-155 gusting to 170	Very Severe Cyclonic Storm
09.06.23/0530	15.0/65.8	145-155 gusting to 170	Very Severe Cyclonic Storm
09.06.23/1130	15.3/65.7	145-155 gusting to 170	Very Severe Cyclonic Storm

09.06.23/2330	15.9/65.5	145-155 gusting to 170	Very Severe Cyclonic Storm
10.06.23/1130	16.6/65.3	140-150 gusting to 165	Very Severe Cyclonic Storm
10.06.23/2330	17.3/65.1	135-145 gusting to 160	Very Severe Cyclonic Storm
11.06.23/1130	18.0/64.9	135-145 gusting to 160	Very Severe Cyclonic Storm
11.06.23/2330	18.7/64.7	130-140 gusting to 155	Very Severe Cyclonic Storm
12.06.23/1130	19.4/64.5	125-135 gusting to 150	Very Severe Cyclonic Storm
12.06.23/2330	20.1/64.3	120-130 gusting to 145	Very Severe Cyclonic Storm
13.06.23/1130	20.8/64.1	115-125 gusting to 140	Very Severe Cyclonic Storm

(i) Wind warning:

8th June: Gale wind speed reaching 135-145 kmph gusting to 160 kmph is prevailing over eastcentral Arabian Sea and adjoining areas of westcentral Arabian Sea. It is likely to increase and become 145-155 kmph gusting to 170 kmph over the same area from night of 8th June over the same area. Gale wind speed reaching 90-100 kmph gusting to 110 kmph is likely to prevail over the adjoining areas of south Arabian Sea.

Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph is likely along & off Karnataka-Goa-Maharashtra coasts.

9th June: Gale wind speed reaching 145-155 kmph gusting to 170 kmph is likely to prevail over central Arabian Sea.

Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely over adjoining areas of South Arabian Sea. Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph is likely along & off Karnataka-Goa-Maharashtra coasts.

10th June: Gale wind speed reaching 145-155 kmph gusting to 170 kmph is likely to prevail over central Arabian Sea.

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely over adjoining areas of north & south Arabian Sea. Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph is likely along & off Goa-Maharashtra coasts.

11th June: Gale wind speed reaching 135-145 kmph gusting to 160 kmph is likely to prevail over central & adjoining north Arabian Sea.

Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph is likely along & off Maharashtra-Gujarat coasts.

12th June: Gale wind speed reaching 125-135 kmph gusting to 150 kmph is likely to prevail over central & adjoining north Arabian Sea and become 120-130 kmph gusting to 145 kmph from evening of 12th June.

Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph is likely along & off Maharashtra-Gujarat coasts.

13th June: Gale wind speed reaching 115-125 kmph gusting to 140 kmph is likely to prevail over north & adjoining central Arabian Sea.

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely along & off Maharashtra-Gujarat coasts.

(iii) Sea condition

8th June: Sea condition is likely to be phenomenal over eastcentral & adjoining westcentral Arabian Sea. Very rough to high sea condition is likely to prevail over the adjoining areas of

south Arabian Sea. Sea condition is likely to be rough along & off Karnataka-Goa-Maharashtra coasts.

9th June: Sea condition is likely to be phenomenal over central Arabian Sea. Very rough to rough sea condition is likely to prevail over the adjoining areas of south Arabian Sea. Sea condition is likely to be rough along & off Karnataka-Goa- Maharashtra coasts.

10th June: Sea condition is likely to be phenomenal over central Arabian Sea. Sea condition is likely to be rough to very rough over adjoining areas of north Arabian Sea and rough along & off Goa- Maharashtra coasts.

11th June & 12th June: Sea condition is likely to be phenomenal to very high over central & adjoining north Arabian Sea. Sea condition is likely to be rough along & off Maharashtra-Gujarat coasts.

13th June: Sea condition is likely to be phenomenal to very high over north & adjoining central Arabian Sea. Sea condition is likely to be rough to very rough along & off Maharashtra-Gujarat coasts.

(iv) Fishermen Warning (Graphics Attached)

- Total suspension of fishing operations over
 - eastcentral and adjoining westcentral & south Arabian Sea till 12th June.
 - north and adjoining central Arabian Sea during 12th -14th June
- Fishermen are advised not to venture into:
 - Central Arabian Sea till 13th June.
 - Adjoining areas of north Arabian Sea during 12th -14th June.
- Those out at sea are advised to return to coast.

The system is under continuous surveillance and the next message will be issued at 2030 hours IST of today, the 8th June, 2023.

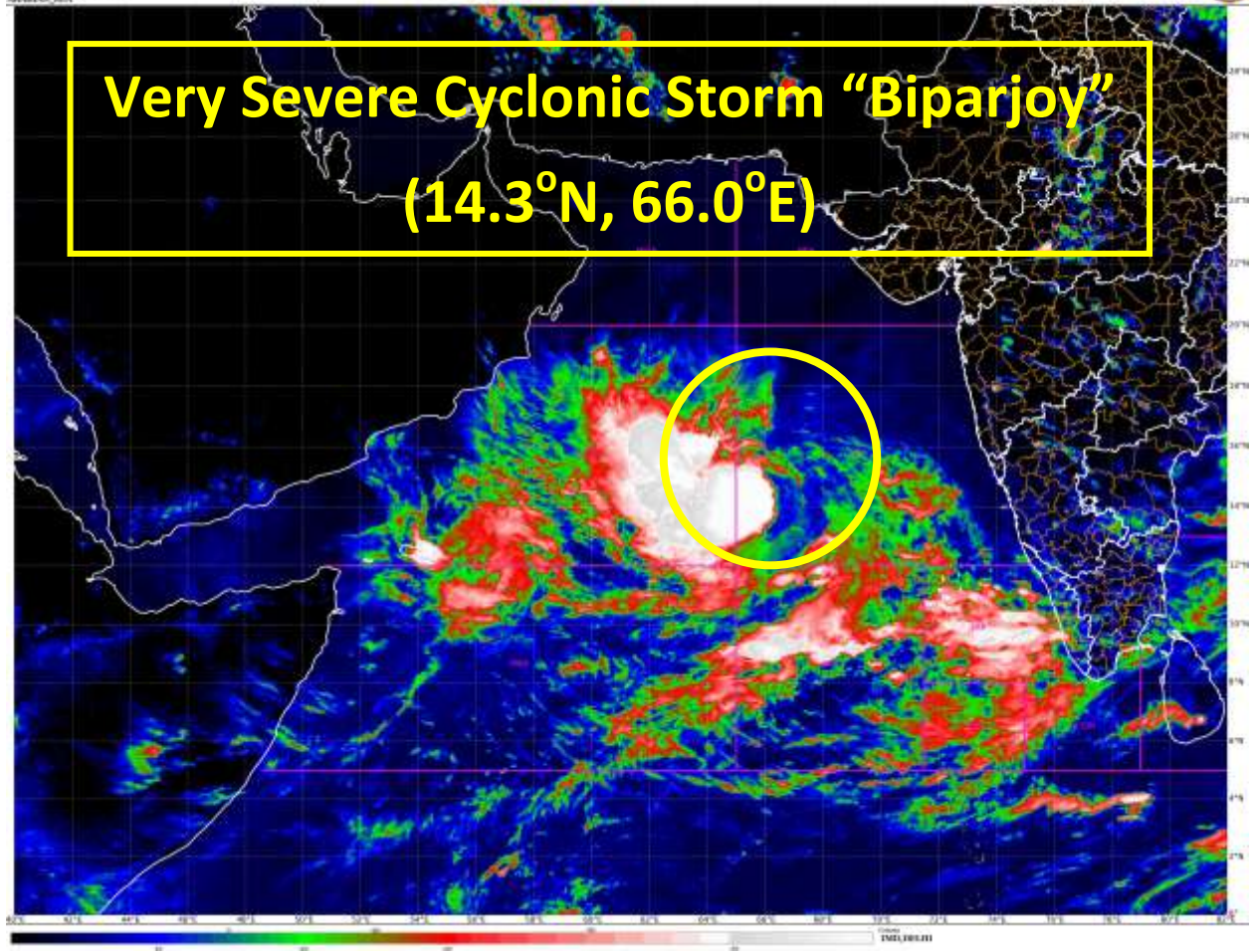
(Ananda Kumar Das)
Scientist F, Cyclone Warning Division, New Delhi

Copy to: ACWC Kolkata/ ACWC Chennai/ CWC Bhubaneswar/CWCVisakhapatnam/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

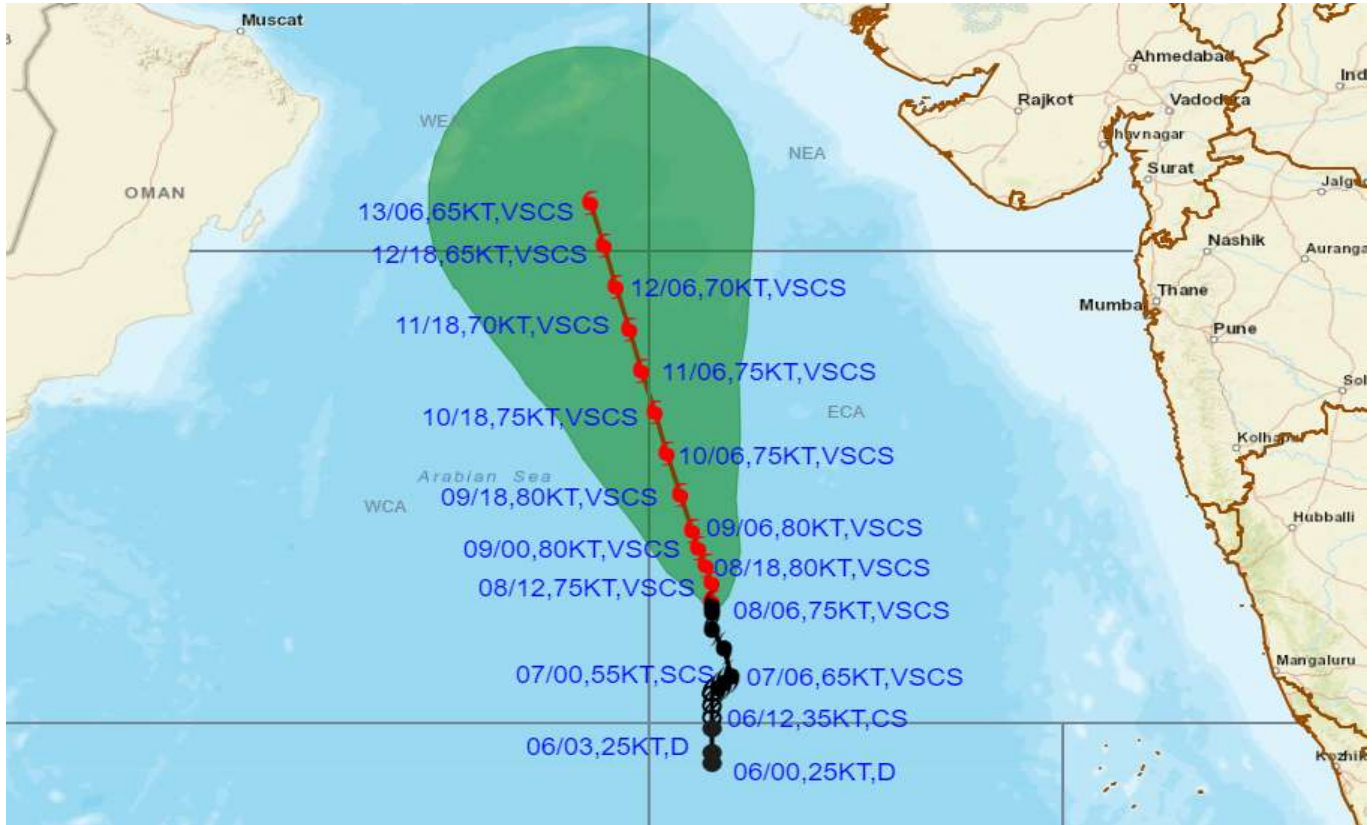


Very Severe Cyclonic Storm "Biparjoy"
(14.3°N, 66.0°E)





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM "BIPARJOY" OVER EASTCENTRAL ARABIAN SEA BASED ON 0600 UTC (1130 IST) OF 08TH JUNE 2023.



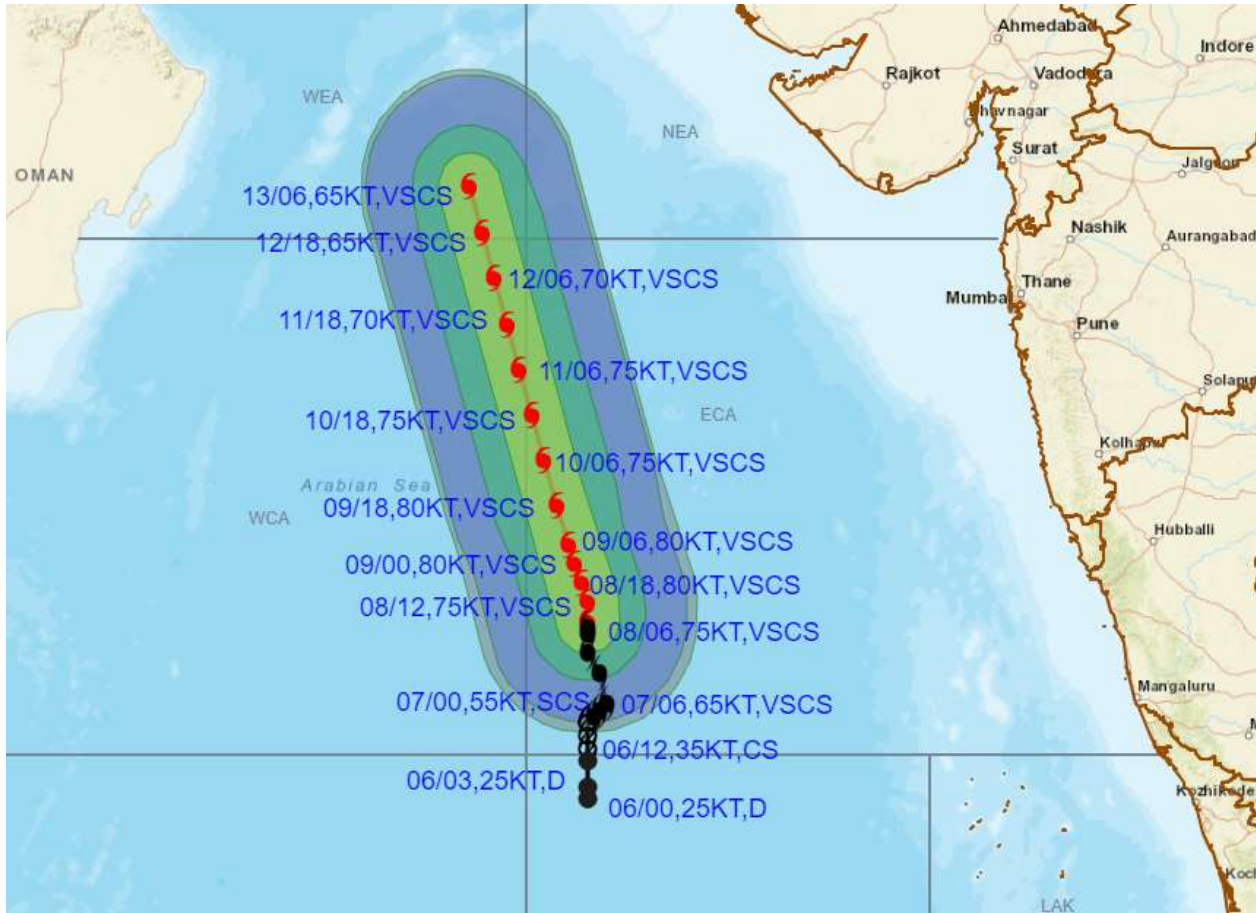
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

● LESS THAN 34 KT
 ○ 34-47 KT
 ○ ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ▲ CONE OF UNCERTAINTY

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	09.06.23/0600	10.06.23/0600	11.06.23/0600
PORBANDAR	820, SSW	720, SW	640, SW
BOMBAY / COLABA	850, WSW	840, WSW	840, W
GOA/PANJIM	880, W	920, W	990, WNW
KARACHI AIRPORT	1070, S	940, SSW	800, SSW
MASIRAH	930, SE	810, ESE	690, ESE



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM "BIPARJOY" OVER EASTCENTRAL ARABIAN SEA BASED ON 0600 UTC (1130 IST) OF 08TH 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 (≥ 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

Fishermen warning graphics

