



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

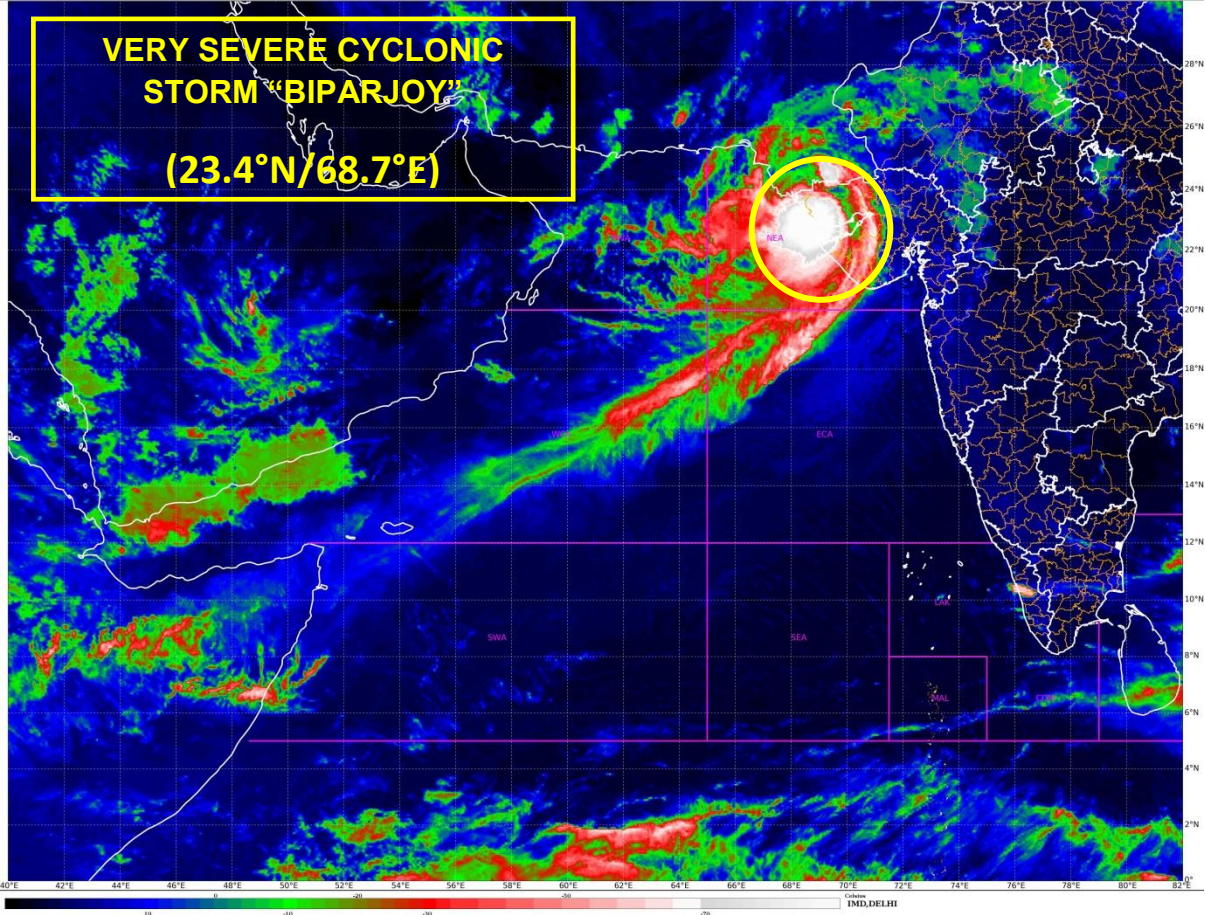
HOURLY UPDATE ON SEVERE CYCLONIC STORM 'BIPARJOY'

BULLETIN NO. 14

DATE: 16-06-2023

TIME OF ISSUE: 0130 HRS IST

DATE/TIME (IST) OF OBSERVATION	BASED ON 16-06-2023 (0030 HRS IST)
CURRENT LOCATION (LATITUDE/LONGITUDE)	SAURASHTRA-KUTCH NEAR LATITUDE 23.4°N AND LONGITUDE 68.7°E , <ul style="list-style-type: none">• 20 KM NORTH-NORTHEAST OF JAKHAU PORT (GUJARAT),• 20 KM NORTH-WEST OF NALIYA
CURRENT INTENSITY NEAR CENTRE	100-110 KMPH GUSTING TO 120 KMPH
FORECAST MOVEMENT AND INTENSITY	IT WOULD MOVE NORTHEASTWARDS AND WEAKEN INTO A CYCLONIC STORM BY EARLY MORNING OF 16 TH JUNE OVER SAURASHTRA-KUTCH WITH WIND SPEED OF 75-85 KMPH GUSTING 95 KMPH AND INTO A DEPRESSION BY THE EVENING OF 16 TH JUNE OVER SOUTH RAJASTHAN WITH WIND SPEED OF 40-50 KMPH GUSTING TO 60 KMPH.



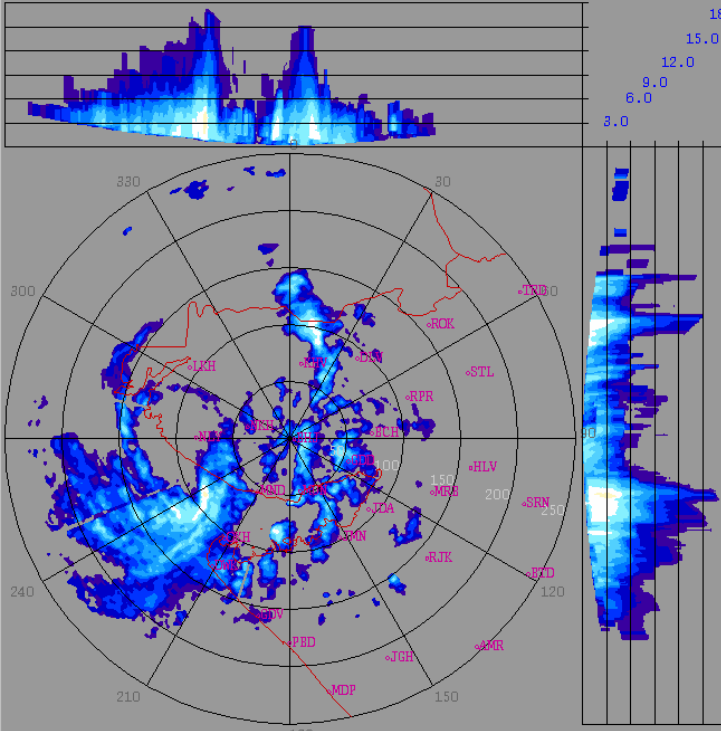
bhuj_weather_2023_06_15_18_21_37_hsfimd-b-bel.dwr

2023/06/15

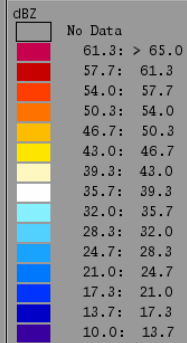
18:21:37 (UTC)

MAX(Z)

DWR BHUJ
 (23.2416N , 69.6458E , 100.00 mts)



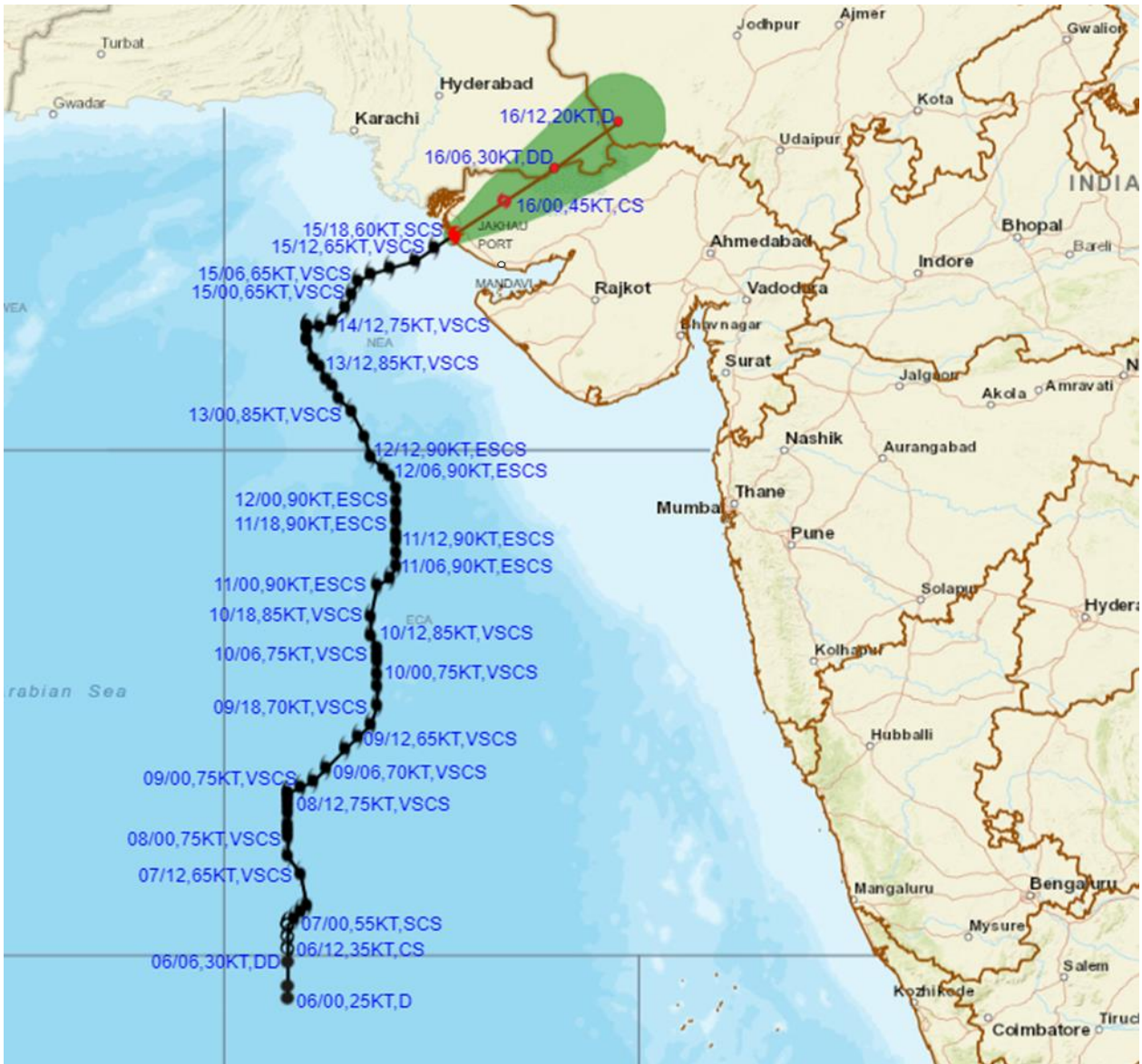
Height : 18.0 Km
 Layer Spacing : 0.100 Km
 Z (Lo, Hi) : -32.0, 95.0 dBZ
 Grid size : 1 Km
 Display Range : 250 Km
 Display Res : 1.0 Km/Pix
 DDR Enable : Yes
 Scan Elev (Lo, Hi) : 0.2, 21.0 Deg
 PRF (Lo, Hi) : 450, 600 Hz
 Scan Res : 150 mts
 Scan RPM : 2.0
 Log Threshold : 4 dB
 DTP : 42
 Pulse Width : 1.0
 Notch Width : 54.0 Hz
 SQI : 0.25
 CSR : 20
 Scan Range : 240 Km
 Preprocessings : NONE



Reflectivity imagery from Doppler weather Radar -Bhuj based on 2350 hrs IST of 15th June 2023.



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF SEVERE CYCLONIC STORM "BIPARJOY" OVER SAURASHTRA & KUTCH COAST BASED ON 1800 UTC (2330 IST) OF 15TH JUNE 2023.

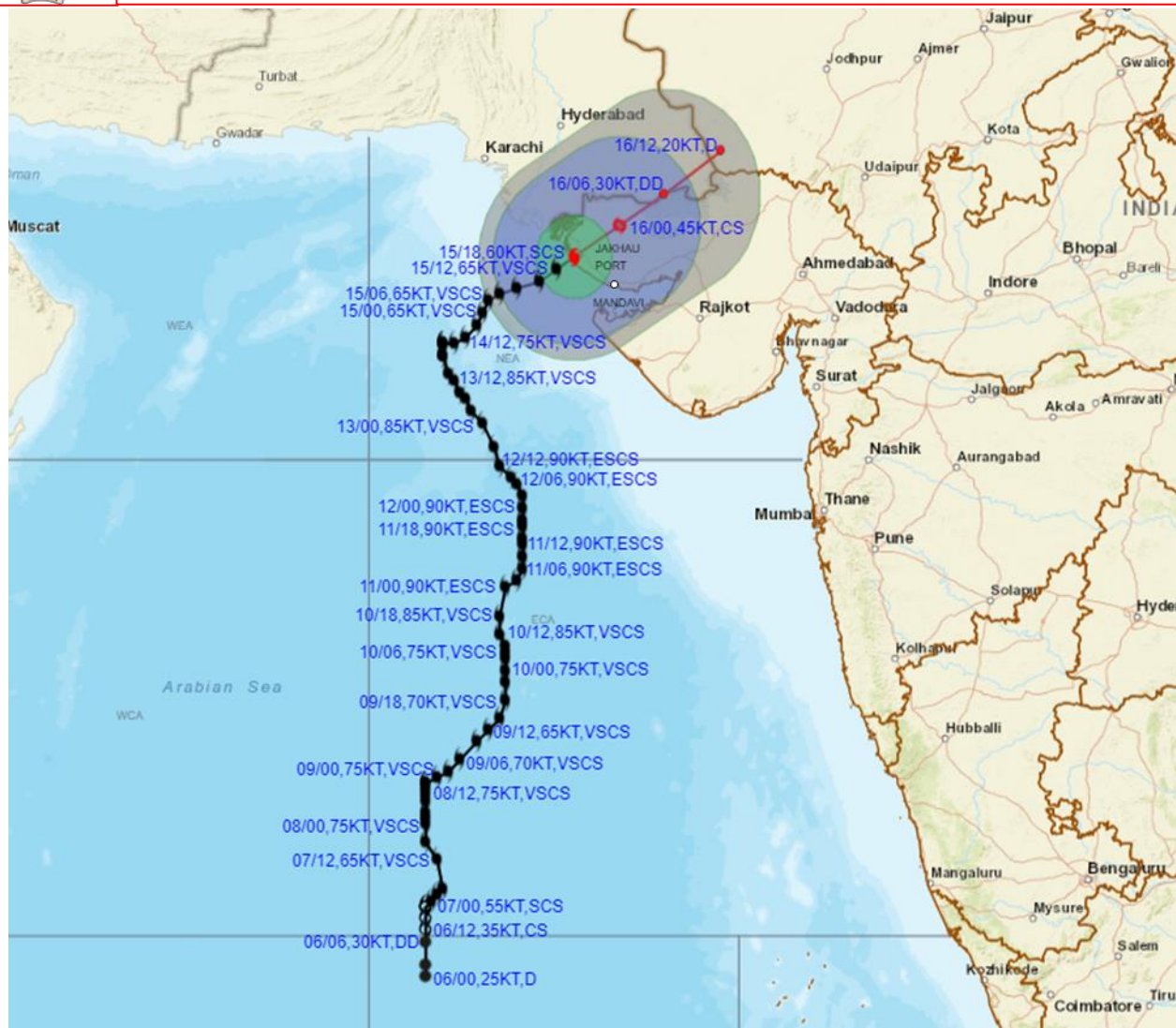


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (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 SEVERE CYCLONIC STORM "BIPARJOY" OVER SAURASHTRA & KUTCH COAST BASED ON 1800 UTC (2330 IST) OF 15TH 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)

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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

FISHERMEN WARNING GRAPHICS

