



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

**HOURLY UPDATE ON SEVERE CYCLONIC STORM 'BIPARJOY'**

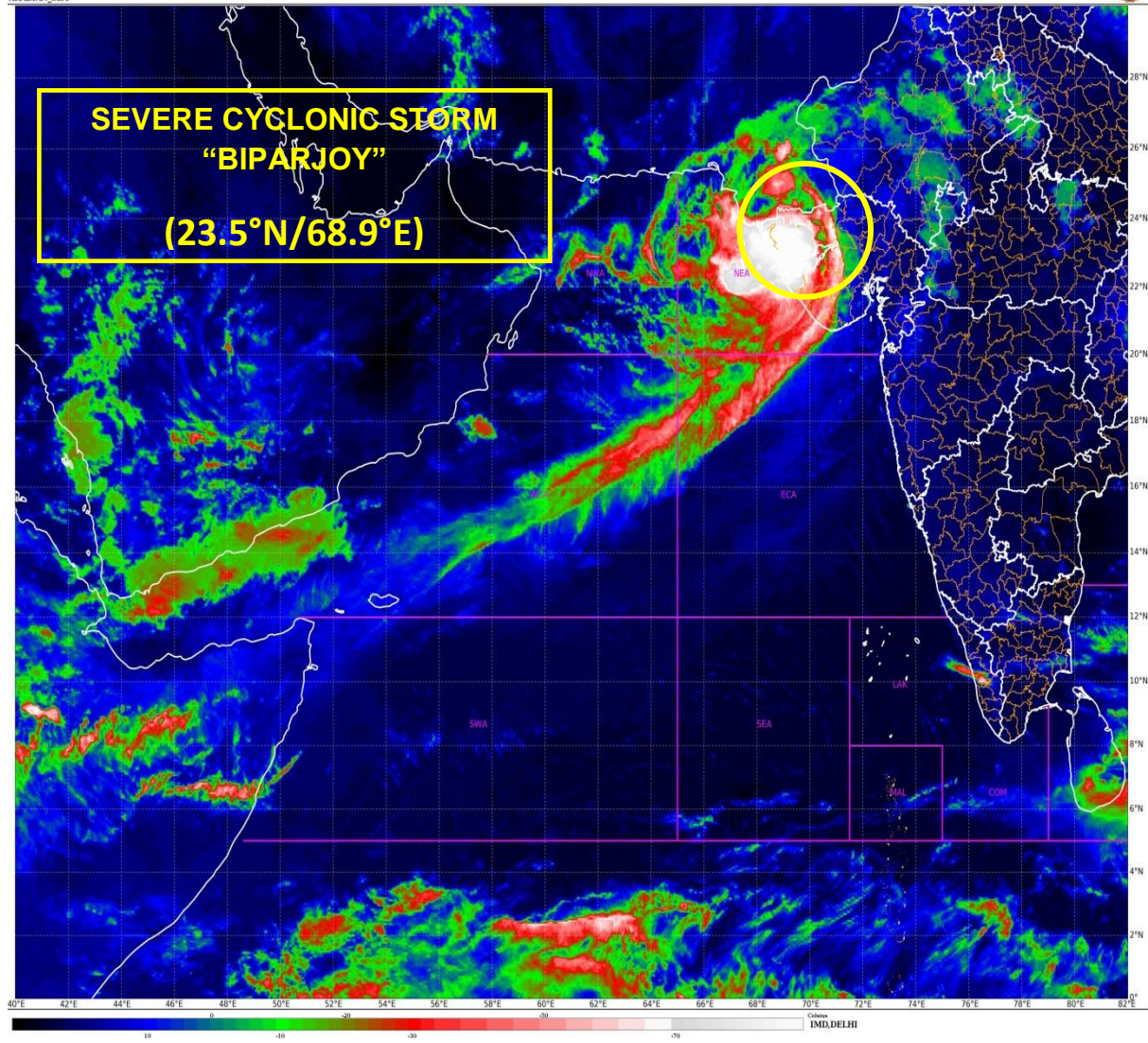
**BULLETIN NO. 16**

DATE: 16-06-2023

TIME OF ISSUE: 0330 HRS IST

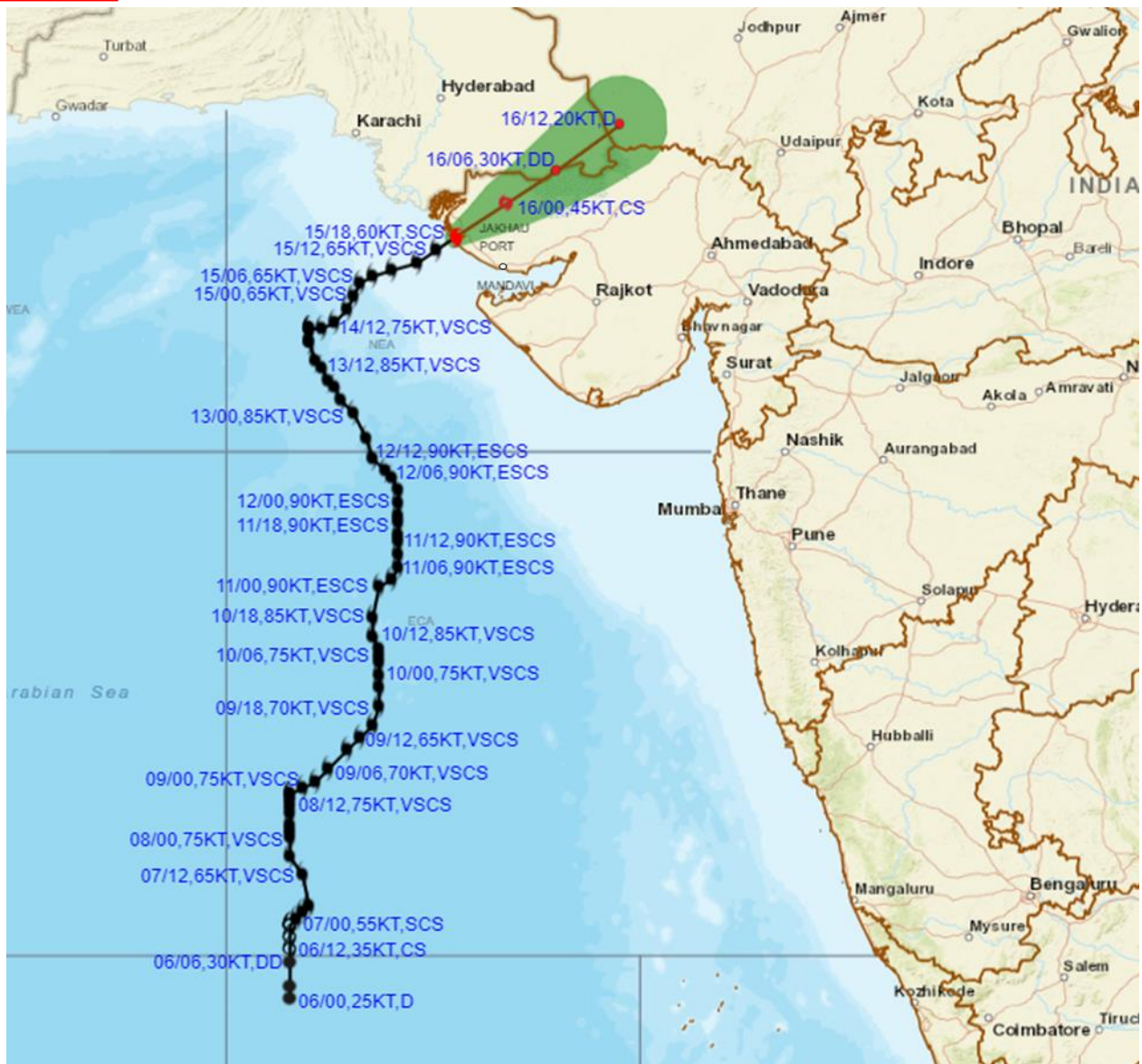
<b>DATE/TIME (IST) OF OBSERVATION</b>	<b>BASED ON 16-06-2023 (0230 HRS IST)</b>
CURRENT LOCATION (LATITUDE/LONGITUDE)	SAURASHTRA-KUTCH NEAR <b>LATITUDE 23.5°N AND LONGITUDE 68.9°E</b> , <ul style="list-style-type: none"><li>• 40 KM NORTHEAST OF JAKHAU PORT (GUJARAT),</li><li>• 30 KM NORTH OF NALIYA</li></ul>
CURRENT INTENSITY NEAR CENTRE	90-100 KMPH GUSTING TO 110 KMPH
FORECAST MOVEMENT AND INTENSITY	IT WOULD MOVE NORTHEASTWARDS AND WEAKEN INTO A CYCLONIC STORM BY EARLY MORNING OF 16 <sup>TH</sup> JUNE OVER SAURASHTRA-KUTCH WITH WIND SPEED OF 75-85 KMPH GUSTING 95 KMPH AND INTO A DEPRESSION BY THE EVENING OF 16 <sup>TH</sup> JUNE OVER SOUTH RAJASTHAN WITH WIND SPEED OF 40-50 KMPH GUSTING TO 60 KMPH.

**This is the last hourly bulletin for this system; however its National bulletin will continue.**





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

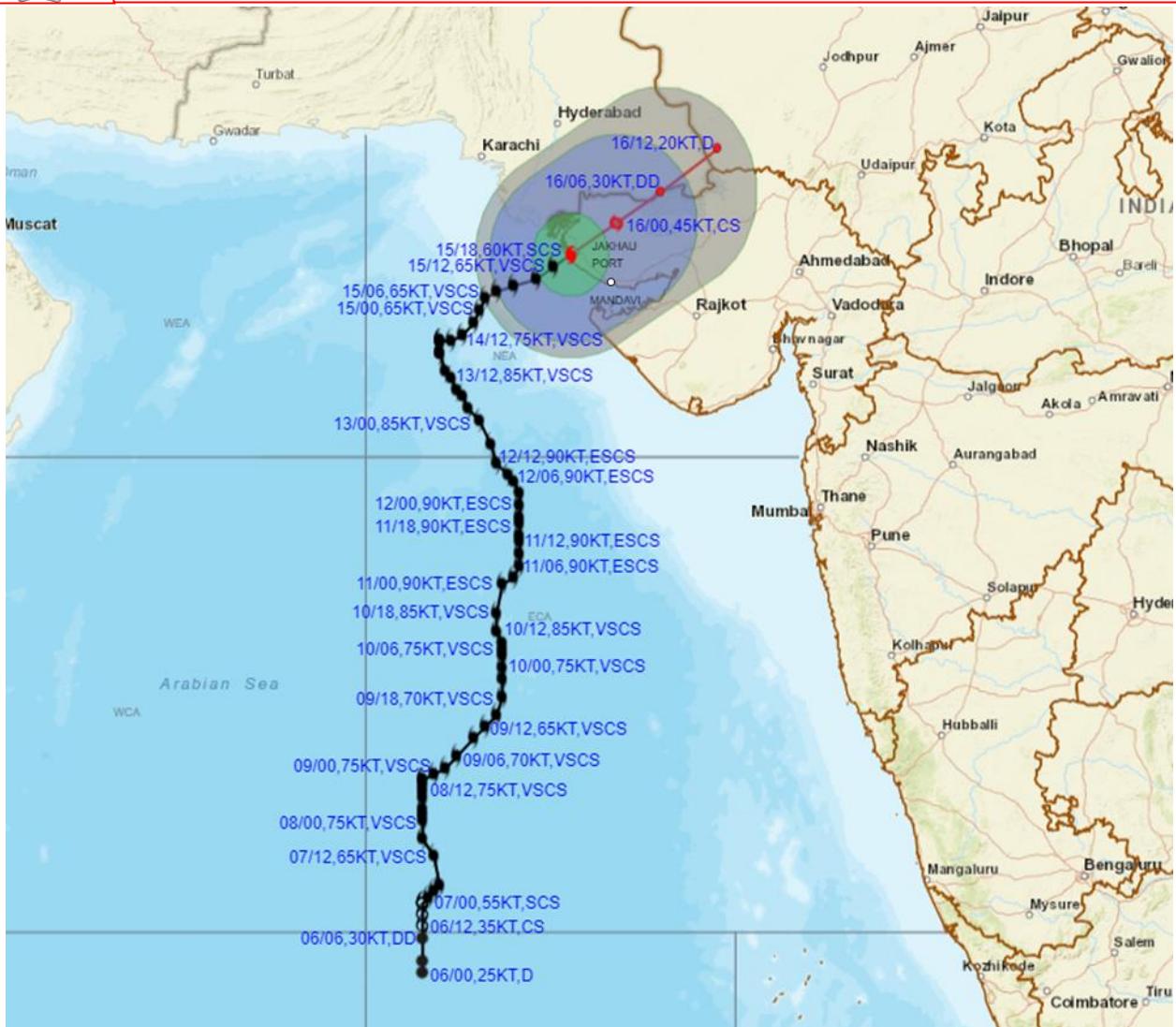


DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE 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 BASED ON 1800 UTC (2330 IST) OF 15<sup>TH</sup> JUNE 2023.**



DATE/TIME IN UTC  
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 L: LOW PRESSURE AREA  
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● 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

