



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

HOURLY UPDATE ON EXTREMELY SEVERE CYCLONIC STORM '**TAUKTAE**'
OVER NORTHEAST ARABIAN SEA

BULLETIN NO. 16

DATE: 18-05-2021

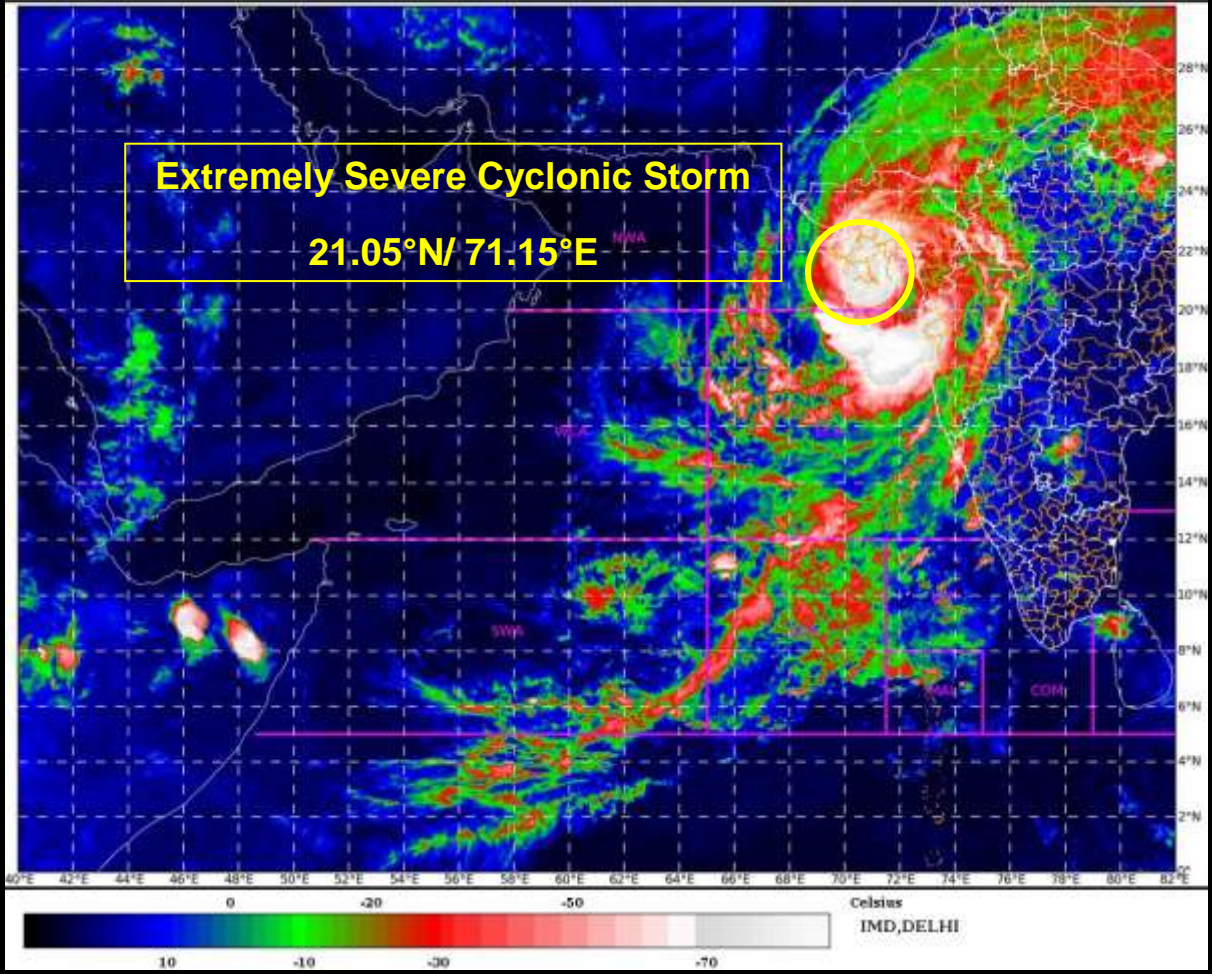
TIME OF ISSUE: 0230 HRS IST

DATE/TIME (IST) OF OBSERVATION	BASED ON 18-05-2021 (0130 HRS IST)
LOCATION LATITUDE/LONGITUDE	THE VERY SEVERE CYCLONIC STORM 'TAUKTAE' LAY CENTRED AT 0130 HRS IST OF 18 TH MAY 2021 OVER SAURASHTRA, NEAR LAT. 21.05°N AND LONG. 71.15°E, ABOUT 45 KM NORTH-NORTHEAST OF DIU AND 60 KM SOUTH-SOUTHEAST OF AMRELI. REAR SECTOR EYE WALL LIES OVER LAND WITH NORTHWARD MOVEMENT OF THE CYCLONE. THE CYCLONE CONTINUES TO SHOW WEAKNING TREND.
CURRENT INTENSITY NEAR CENTRE	135-145 KMPH GUSTING TO 160 KMPH
PAST MOVEMENT	VERY SEVERE CYCLONIC STORM ' TAUKTAE ' MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 14 KMPH DURING PAST 06 HOURS.
FORECAST MOVEMENT AND INTENSITY	IT WOULD MOVE NORTH-NORTHEAST WARDS AND WEAKEN GRADUALLY INTO A SEVRE CYCLONIC STORM BY TODAY MORNING.
FORECAST RAINFALL	LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH HEAVY TO VERY HEAVY FALLS AT A FEW PLACES AND EXTREMELY HEAVY FALLS AT ISOLATED PLACES VERY LIKELY OVER GUJARAT REGION AND HEAVY TO VERY HEAVY FALLS & EXTREMELY HEAVY FALLS AT ISOLATED PLACES VERY LIKELY OVER SAURASHTRA ON 18 TH MAY. ISOLATED HEAVY TO VERY HEAVY RAINFALL ALSO LIKELY OVER KUTCH DURING THE SAME PERIOD.
FORECAST WIND SPEED (KMPH)	GALE WINDS SPEED REACHING 135-145 KMPH GUSTING TO 160 KMPH LIKELY TO PREVAIL ALONG & OFF GUJARAT COAST (AMRELI, BHAVNAGAR) JUNAGARH, GIR SOMNATH AND 120-140 KMPH GUSTING TO 165 KMPH OVER BHARUCH, ANAND, SOUTH AHMEDABAD, BOTAD, 90-100 KMPH GUSTING TO 120 KMPH OVER DEVBHOOMI DWARKA, JAMNAGAR, PORBANDAR,

	<p>RAJKOT, MORBI, KHEDA DISTRICTS OF GUJARAT TILL 18TH EARLY HOURS. GALE WINDS SPEED REACHING 80-90 KMPH GUSTING TO 100 KMPH LIKELY TO PREVAIL ALONG & OFF DADRA, NAGAR HAVELI, DAMAN, VALSAD, NAVSARI, SURAT, SURENDRANAGAR, DISTRICTS TILL 18TH EARLY HOURS.</p>
<p>FORECAST STORM SURGE</p>	<p>TIDAL WAVE ABOVE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE COASTAL AREAS DURING NEXT 03 HOURS, AS PER DETAILS BELOW:</p> <p>ABOUT 3 - 4 METER (M) OVER ANAND & AMRELI, GIR SOMNATH, DIU, BHAVNAGAR, 2-3 M OVER BHARUCH, SOUTHERN PARTS OF AHMEDABAD, 1-2 M OVER SURAT, NAVSARI, VALSAD, AND 0.5-1 M OVER THE REMAINING COASTAL DISTRICTS OF GUJARAT DURING NEXT 03 HOURS.</p>
<p>FORECAST FOR COASTAL MAHARASHTRA</p>	<p>HEAVY TO VERY HEAVY RAINFALL IS CONTINUING OVER NORTH KONKAN INCLUDING MUMBAI. IT WILL CONTINUE FOR NEXT 06 HRS.</p> <p>GALE WIND SPEED REACHING 60-70 GUSTING TO 80 KMPH ALONG & OFF NORTH MAHARASHTRA COAST DURING NEXT 03 HOURS AND SPEED REACHING 50-60 GUSTING TO 70 KMPH DURING SUBSEQUENT 06 HOURS.</p>
<p>REALISED WEATHER</p> <p>GUJARAT & DIU</p>	<p>WIND REPORTED AT 0130 HOURS IST OF 18.05.2021: BHAVNAGAR: 57 KMPH AND AMRALI: 56 KMPH.</p> <p>HEAVY RAINFALL (IN CM REPORTED DURING 0830 HOURS IST OF 17.05.2021 TO 0130 HOURS IST OF 18.05.2021): SURAT- 5.5, AMRELI - 5.1 AND BHAVNAGAR- 2.9.</p>

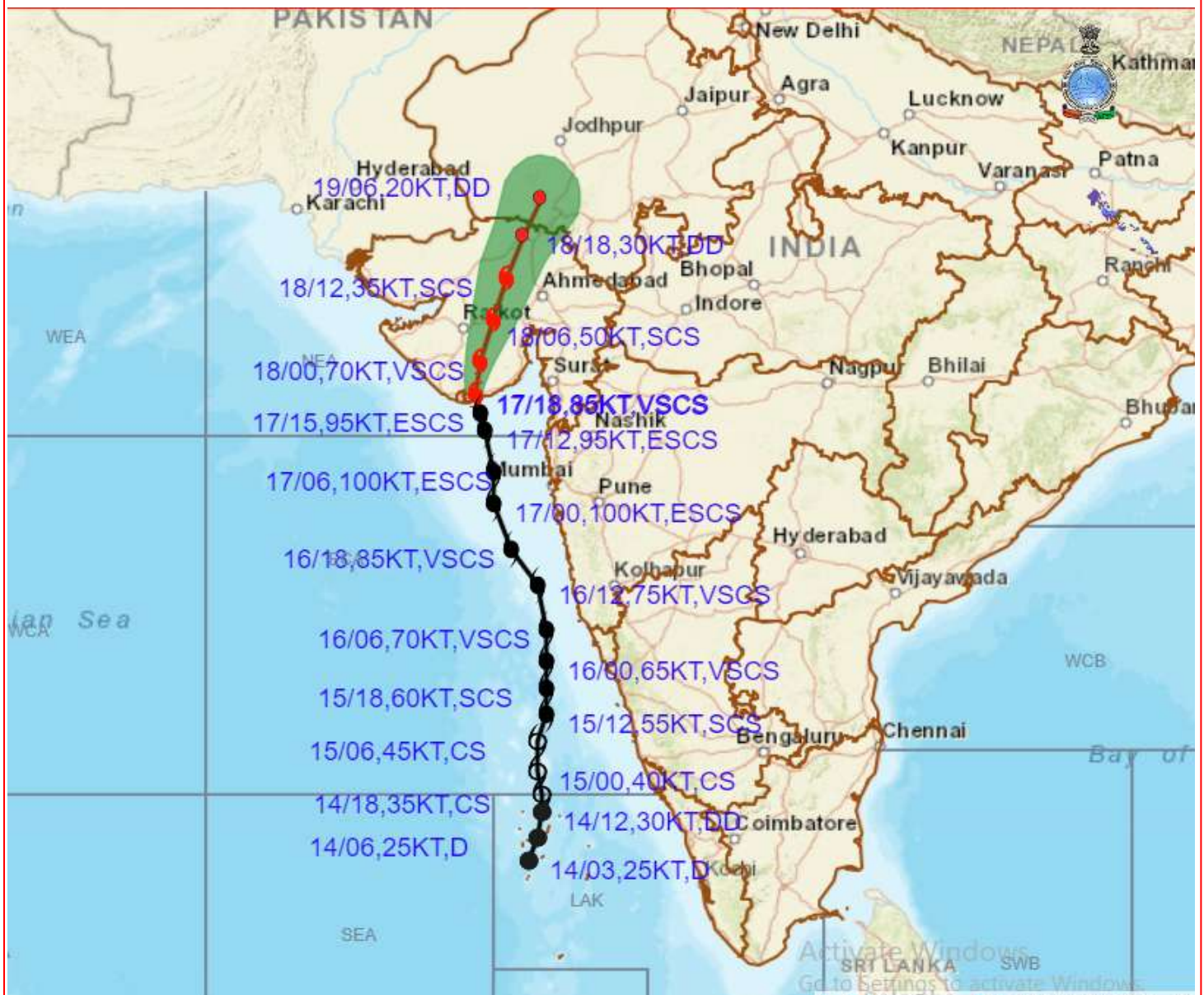
SAT : INSAT-3D IMG
IMG_TIR1_TEMP 10.8 um
ARABIAN SEA

17-05-2021/(2000 to 2026) GMT
18-05-2021/(0130 to 0156) IST





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM "TAUKTAE" OVER SAURASHTRA BASED ON 1800 UTC OF 17TH MAY, 2021

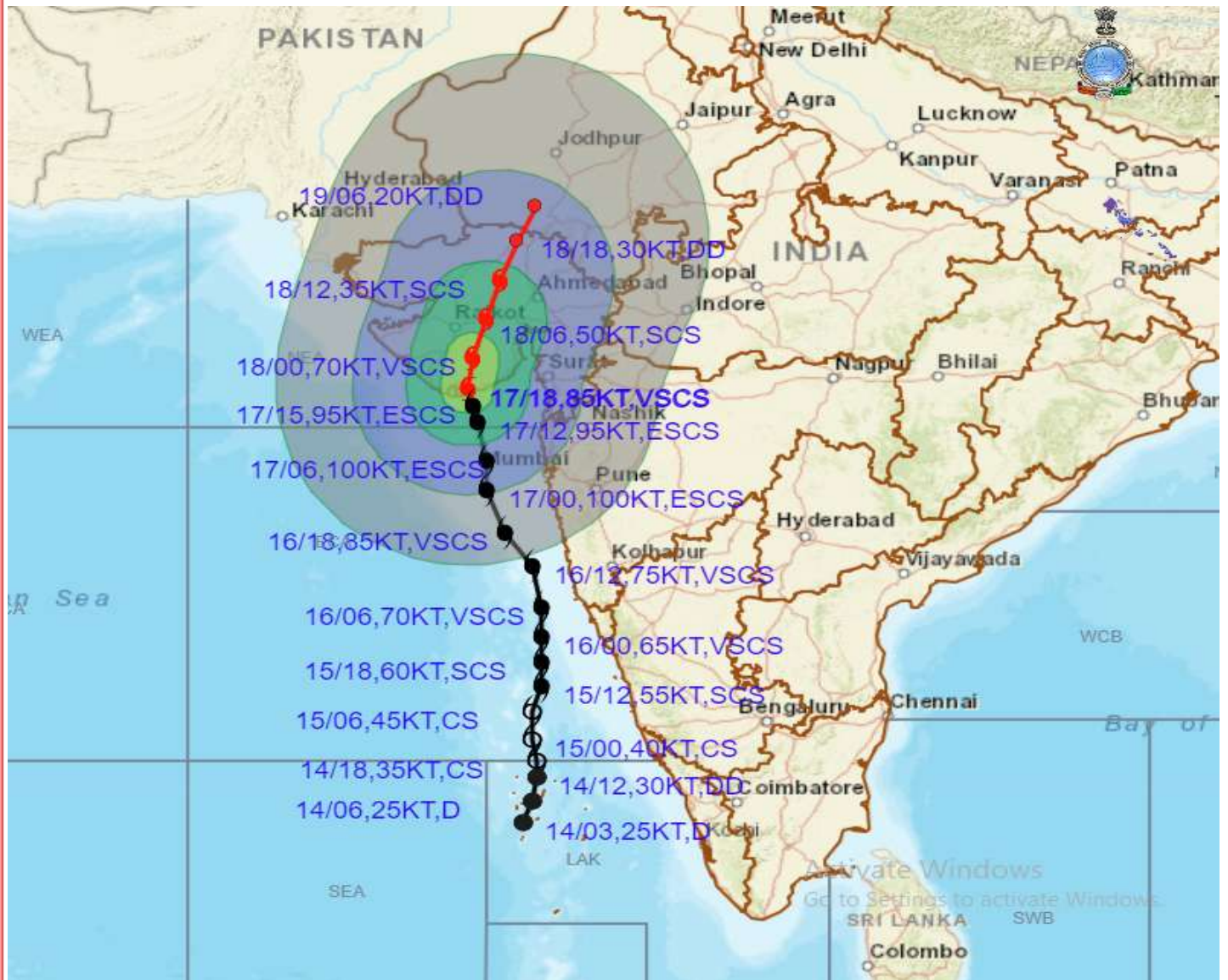


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM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



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● 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)

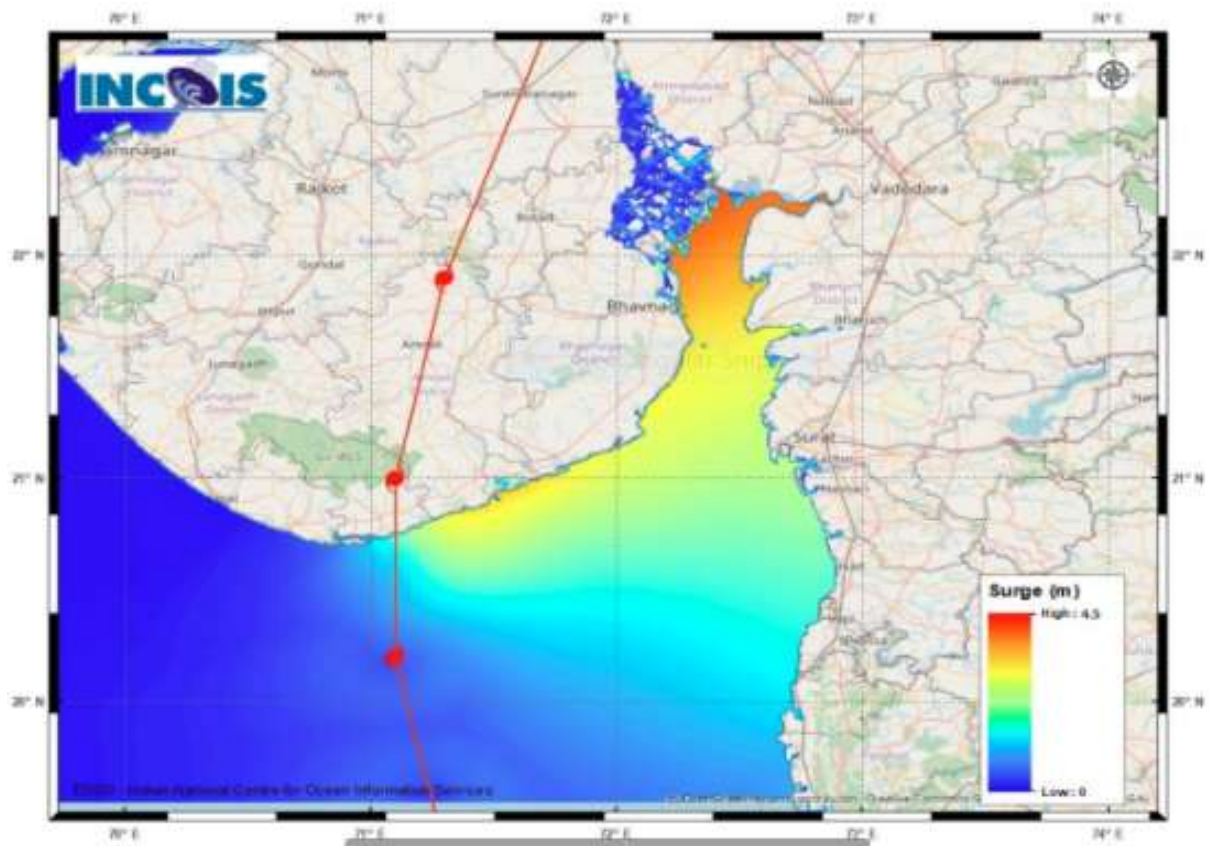
■ 34-49 KT (62-91 KMPH)

■ 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 FROM INCOIS BASED ON 0530 HRS IST OBSERVATIONS

STORM SURGE HEIGHT INFORMATION:

Open with ▼

* The below listed surge heights are over and above ast

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Khambhat	Anand	Gujarat	Mitli	3.0-4.5	Upto 9.15
Bhavnagar	Bhavnagar	Gujarat	Narbad	3.0-4.2	Upto 2.90
Rajula	Amreli	Gujarat	Patva	2.1-3.8	Upto 1.08
Mundra	Bhavnagar	Gujarat	Vadgam	3.5-3.7	Upto 1.36
Jafarabad	Amreli	Gujarat	Rohisa	1.9-3.5	Upto 0.23
Vagra	Bharuch	Gujarat	Harinagar	1.8-3.4	Upto 0.88
Mahuva	Bhavnagar	Gujarat	Gadhada	1.6-3.3	Upto 0.31
Talaja	Bhavnagar	Gujarat	Talaja	1.6-3.2	Upto 0.39
Bharuch	Bharuch	Gujarat	Kasva	1.9-3	Upto 0.19
Hansot Mahal	Bharuch	Gujarat	Kantivajal	1.7-3	Upto 4.41
Olpad	Surat	Gujarat	Vansva	2.1-2.7	Upto 1.16
Una	Junagadh	Gujarat	Una	0.8-2.7	Upto 0.56
Hazira	Surat	Gujarat	Hajira Ina (ina)	1.8-2.6	Upto 1.33
Chorasi	Surat	Gujarat	Bhimpor	0.8-2.5	Upto 2.31
Navsari	Navsari	Gujarat	Borsi	1.5-2.4	Upto 0.64
Gandevi	Navsari	Gujarat	Mendhar	1.9-2.1	Upto 1.26
Valsad	Valsad	Gujarat	Malvan	1.6-2.1	Upto 0.51
Daman	Daman	Daman and Diu	Daman	1.4-1.8	Upto 0.12
Umargam	Valsad	Gujarat	Umargam	1.6-1.7	Upto 0.21
Dahanu	Palghar	Maharashtra	Narpad	0.7-1.5	Upto 1.05
Palghar	Palghar	Maharashtra	Akkarpatti	0.5-1.2	Upto 0.75
Diu	Diu	Daman and Diu	Diu	0.9-1.1	Upto 0.32
Vasai	Palghar	Maharashtra	Jalsar	0.6-1.1	Upto 1.13
Wada	Thane	Maharashtra	Juchandra	1.1-1.1	Upto 0.21
Borsad	Anand	Gujarat	Tithor	1.4-1.5	Upto 0.52
Alibag	Raigarh	Maharashtra	Ranjankhar Davali	0.3-0.9	Upto 1.90
Bombay	Mumbai City	Maharashtra	Greater Bombay	0.7-0.9	Nil
Kodinar	Gir Somnath	Gujarat	Chhara	0.4-0.8	Upto 0.32
Panvel	Raigarh	Maharashtra	Gavhan	0.7-0.8	Upto 0.72
Uran	Raigarh	Maharashtra	Jasai	0.7-0.8	Upto 2.40
Murud	Raigarh	Maharashtra	Borli	0.5-0.7	Upto 0.21
Dapoli	Ratnagiri	Maharashtra	Tadachakond	0.4-0.5	Upto 0.11
Mandangarh	Ratnagiri	Maharashtra	Danda	0.4-0.5	Nil

WIND WARNING FOR GUJARAT STATE FROM 17TH NIGHT TO 18TH MAY NOON.

