



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

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

BULLETIN NO. 19

DATE: 18-05-2021

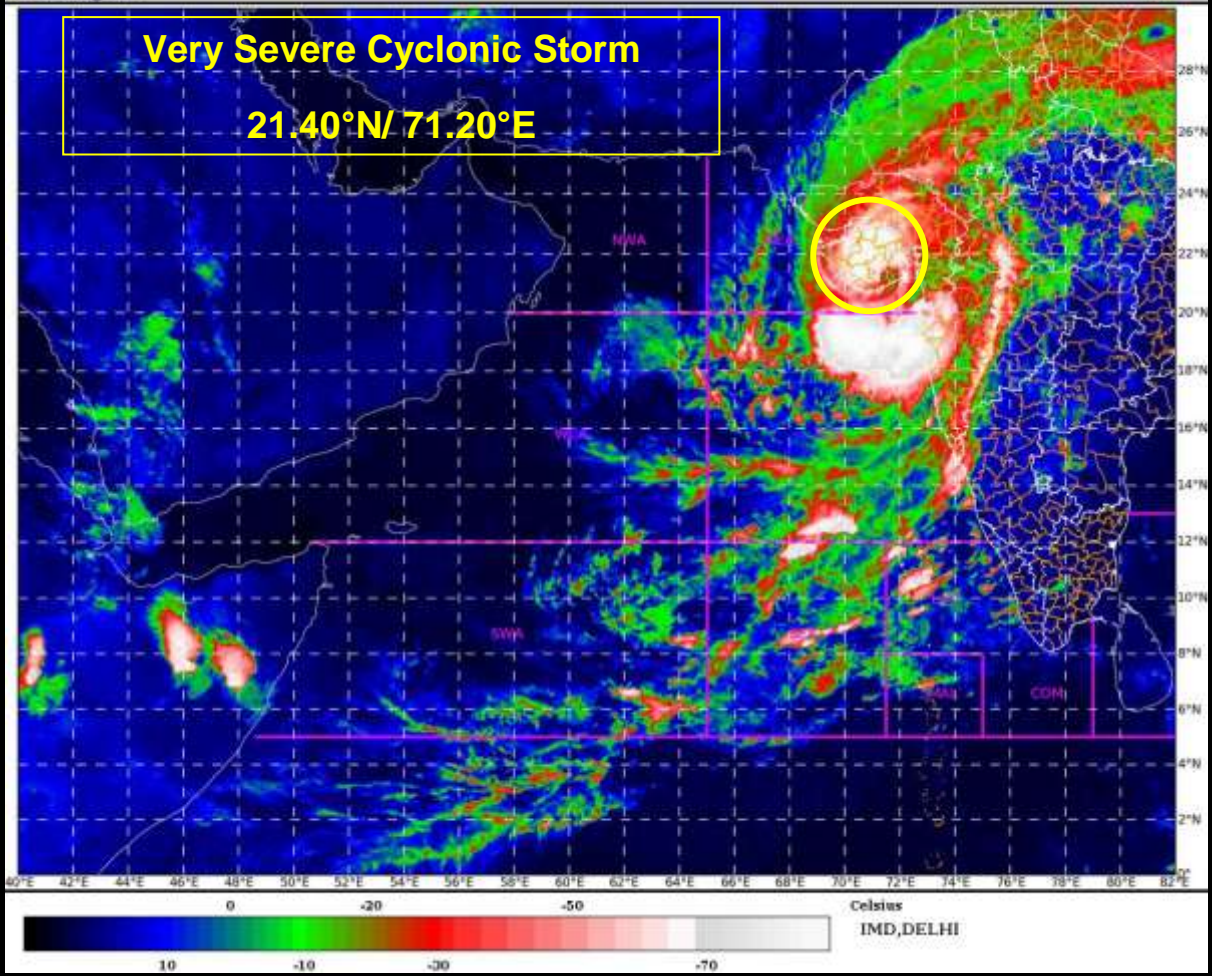
TIME OF ISSUE: 0530 HRS IST

DATE/TIME (IST) OF OBSERVATION	BASED ON 18-05-2021 (0430 HRS IST)
LOCATION LATITUDE/LONGITUDE	THE VERY SEVERE CYCLONIC STORM 'TAUKTAE' LAY CENTRED AT 0430 HRS IST OF 18 TH MAY 2021 OVER SAURASHTRA, NEAR LAT. 21.40°N AND LONG. 71.20°E, ABOUT 85 KM NORTH-NORTHEAST OF DIU AND 20 KM SOUTH OF AMRELI. THE CYCLONE CONTINUES TO SHOW WEAKENING TREND. EYE IS DISORGANISING, WALL CLOUD IS WEAKENING.
CURRENT INTENSITY NEAR CENTRE	120-130 KMPH GUSTING TO 140 KMPH
PAST MOVEMENT	VERY SEVERE CYCLONIC STORM ' TAUKTAE ' MOVED NORTH-NORTHEAST WARDS WITH A SPEED OF 11 KMPH DURING PAST 06 HOURS.
FORECAST MOVEMENT AND INTENSITY	IT WOULD MOVE NORTH-NORTHEAST WARDS AND WEAKEN GRADUALLY INTO A SEVERE 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 120-130 KMPH GUSTING TO 140 KMPH LIKELY TO PREVAIL ALONG & OFF GUJARAT COAST AMRELI, BHAVNAGAR, BOTAD; 110-120 KMPH GUSTING TO 130 KMPH OVER DIU, GIR SOMNATH, JUNAGARH, SURENDRA NAGAR, RAJKOT, KHEDA, BHARUCH, ANAND, SOUTH AHMEDABAD; 60-70 KMPH GUSTING TO 80 KMPH LIKELY TO PREVAIL ALONG & OFF DADRA, NAGAR HAVELI, DAMAN,

	VALSAD, NAVSARI, SURAT, SURENDRA NAGAR DISTRICTS AND SQUALLY WIND SPEED REACHING 50-60 KMPH GUSTING TO 70 KMPH OVER DEVBHOOMI DWARKA, JAMNAGAR, PORBANDAR, RAJKOT, MORBI, DISTRICTS OF GUJARAT TILL MORNING OF 18 TH AND GRADUALLY DECREASE THEREAFTER.
FORECAST STORM SURGE	TIDAL WAVE ABOVE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE COASTAL AREAS DURING NEXT 06 HOURS, AS PER DETAILS BELOW: ABOUT 2-3 METER (M) OVER ANAND & AMRELI, GIR SOMNATH, DIU, BHAVNAGAR, 1-2 M OVER BHARUCH, SOUTHERN PARTS OF AHMEDABAD, ABOUT 01 M OVER SURAT, NAVSARI, VALSAD, AND 0.5 M OVER THE REMAINING COASTAL DISTRICTS OF GUJARAT DURING NEXT 06 HOURS.
FORECAST FOR COASTAL MAHARASHTRA	ISOLATED HEAVY RAINFALL LIKELY OVER NORTH KONKAN DURING NEXT 06 HOURS. GALE WIND SPEED REACHING 60-70 GUSTING TO 80 KMPH ALONG & OFF EXTREME NORTH MAHARASHTRA COAST AND SPEED REACHING 50-60 GUSTING TO 70 KMPH ALONG & OFF REMAINING PARTS OF NORTH MAHARASHTRA COAST DURING NEXT 06 HOURS.
REALISED WEATHER GUJARAT & DIU	WIND REPORTED AT 0430 HOURS IST OF 18.05.2021: BHAVNAGAR: 78 KMPH, PORBANDAR: 74 KMPH AND AMRELI: 106 KMPH. RAINFALL IN CM (REPORTED DURING 0830 HOURS IST OF 17.05.2021 TO 0430 HOURS IST OF 18.05.2021): SURAT- 6.8, AMRELI – 8.9 AND BHAVNAGAR- 4.2.

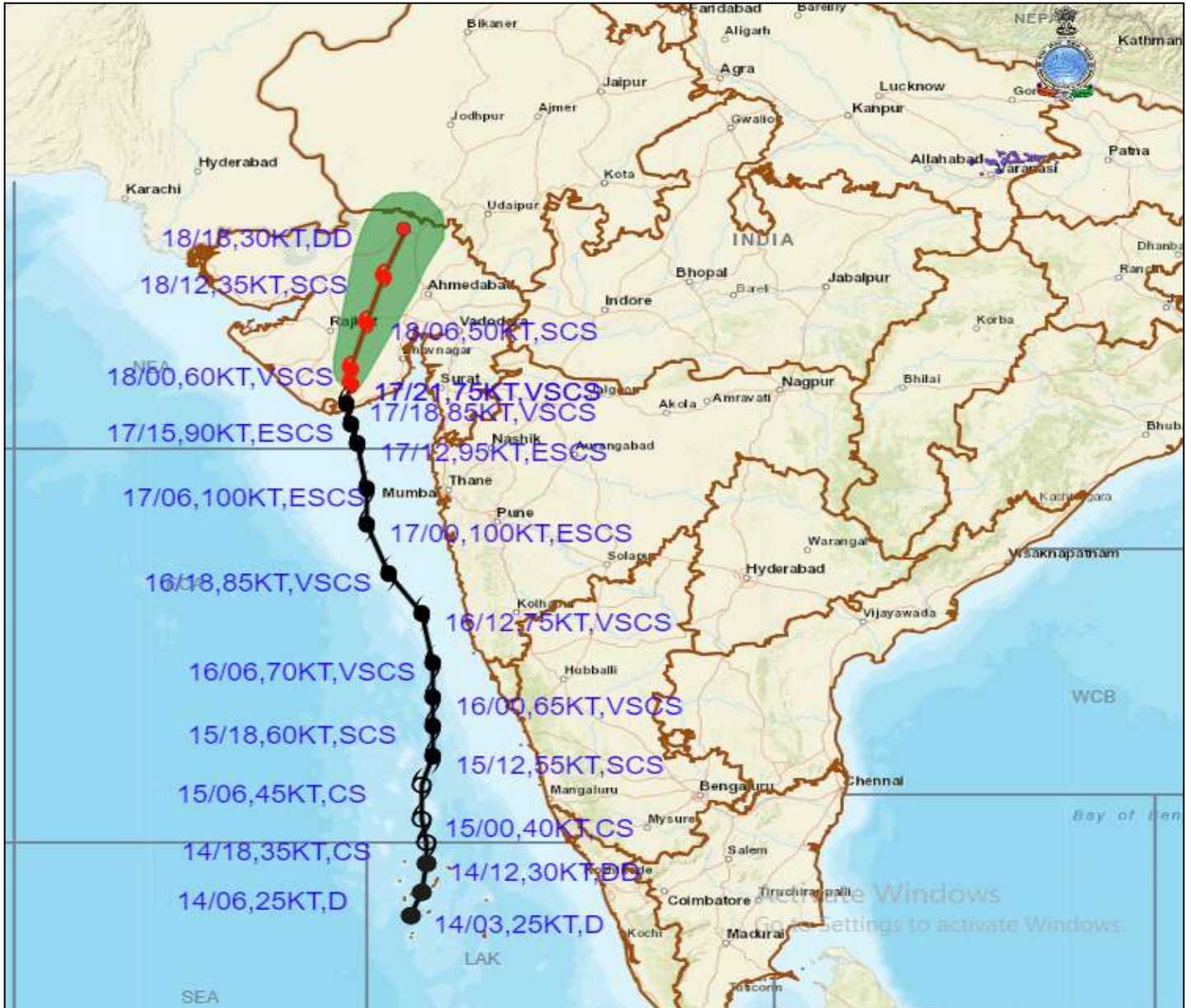
SAT : INSAT-3D IMG
IMG_TIR1_TEMP 10.8 um
ARABIAN SEA

17-05-2021/(2300 to 2326) GMT
18-05-2021/(0430 to 0456) IST





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM "TAUKTAE" OVER SAURASHTRA BASED ON 2100 UTC OF 17TH MAY, 2021

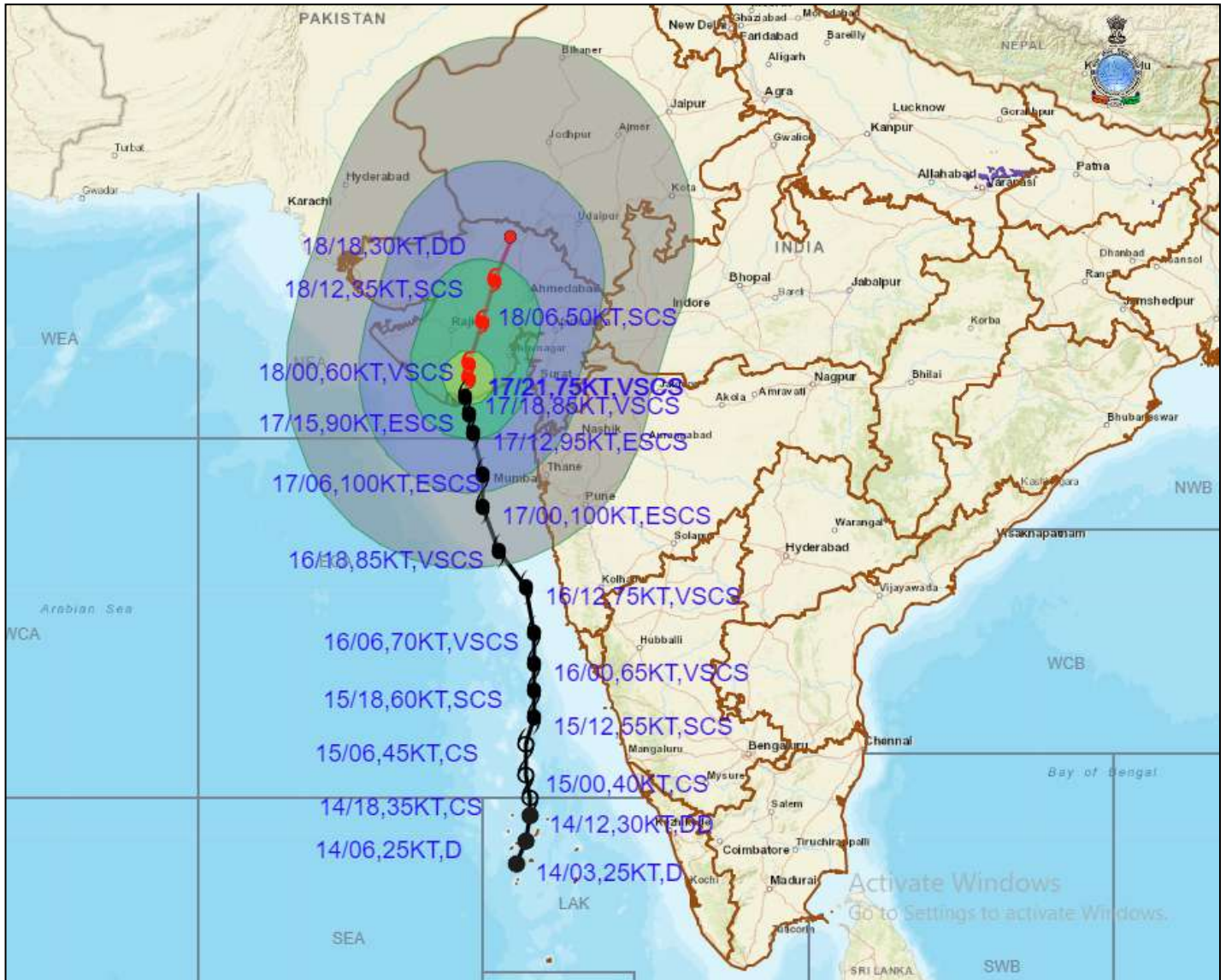


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ES: EXTREMELY SEVERE CYCLONIC STORM (90-119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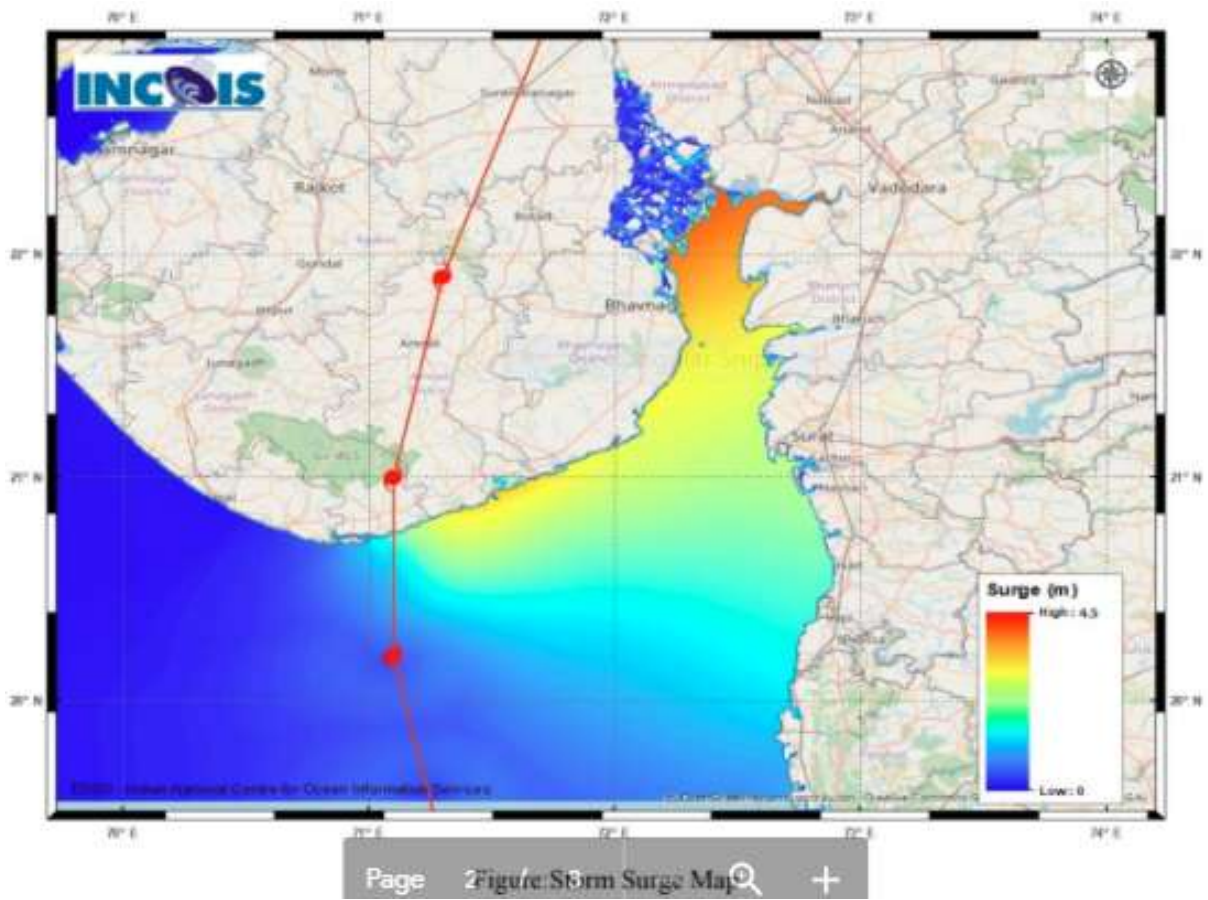


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● LESS THAN 34 KT
 ○ 34-47 KT
 ● \geq 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 — CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ \geq 64 KT (\geq 118 KMPH)

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



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	Bhimpur	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	Tadachukond	0.4-0.5	Upto 0.11
Mandangarh	Ratnagiri	Maharashtra	Danda	0.4-0.5	Nil

HEAVY RAINFALL WARNING FOR GUJARAT STATE TILL 0830 HOURS IST OF 18TH MAY



HEAVY RAINFALL WARNING FOR GUJARAT STATE FROM 0830 HOURS IST OF 18TH TO 0830 HOURS IST OF 19TH MAY



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

