



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

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

**BULLETIN NO. 12**

DATE: 17-05-2021

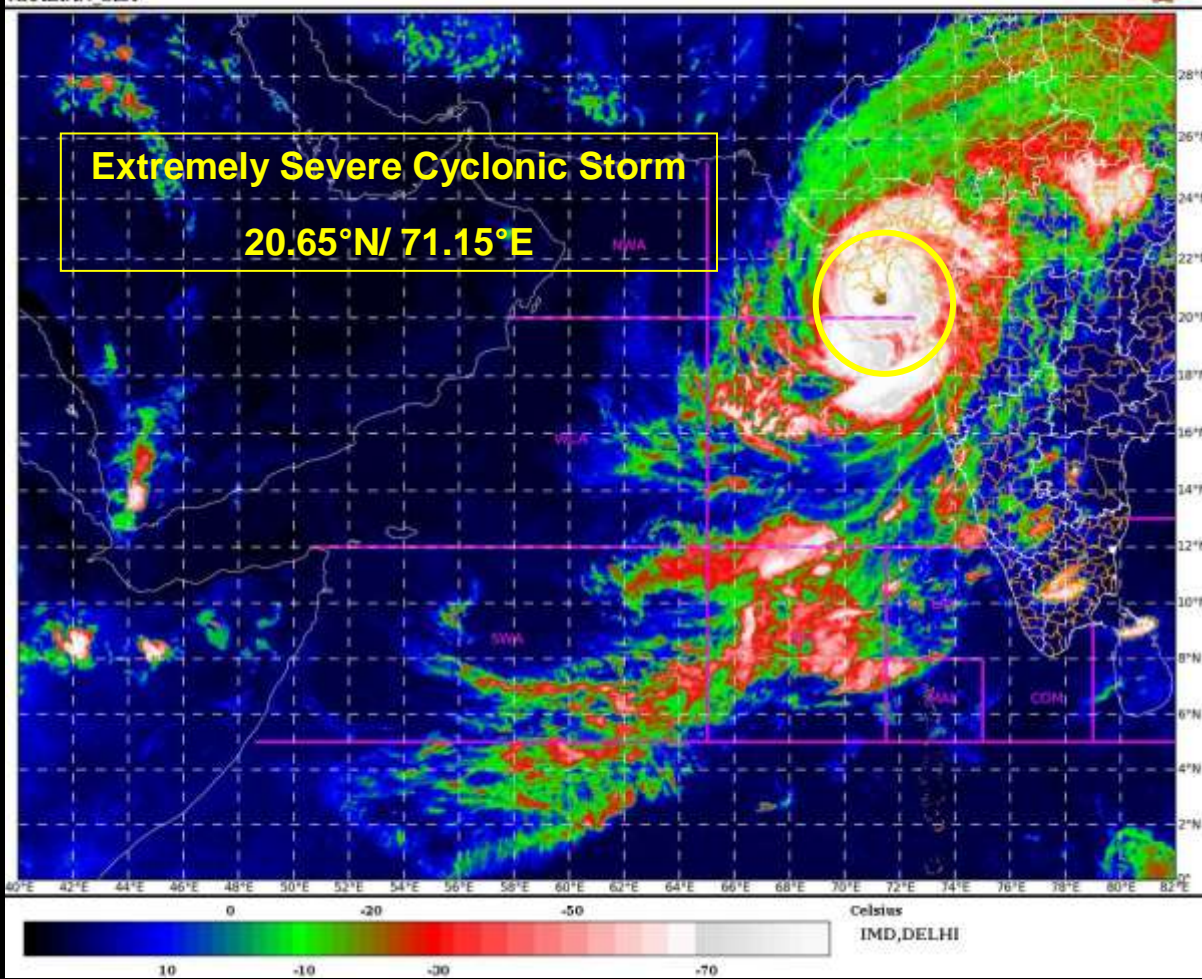
TIME OF ISSUE: 2230 HRS IST

<b>DATE/TIME (IST) OF OBSERVATION</b>	<b>BASED ON 17-05-2021 (2130 HRS IST)</b>
LOCATION LATITUDE/LONGITUDE	THE EXTREMELY SEVERE CYCLONIC STORM 'TAUKTAE' LAY CENTRED AT 2130 HRS IST OF TODAY, THE 17TH MAY 2021 OVER NORTHEAST ARABIAN SEA, NEAR LAT. 20.65°N AND LONG. 71.15°E, ABOUT <b>25 KM EAST OF DIU.</b>
CURRENT INTENSITY NEAR CENTRE	160-170 KMPH GUSTING TO 190 KMPH
PAST MOVEMENT	EXTREMELY SEVERE CYCLONIC STORM 'TAUKTAE' MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 16 KMPH DURING PAST 06 HOURS
FORECAST MOVEMENT, INTENSITY AND LANDFALL	<ul style="list-style-type: none"><li>• <b>LANDFALL PROCESS IS CONTINUING.</b></li><li>• <b>IT WILL TAKE ANOTHER 02 HOURS TO COMPLETE THE LANDFALL PROCESS.</b></li><li>• <b>FORWARD SECTOR OF EYE IS ENTERING INTO THE LAND. OUTER CLOUD BAND LIES OVER SAURASHTRA.</b></li><li>• <b>THE CENTRE OF THE CYCLONE WILL CROSS SAURASHTRA COAST TO THE EAST OF DIU WITHIN NEXT 02 HOURS.</b></li></ul>
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 SAURASHTRA, DIU AND ADJOINING GUJARAT REGION ON 17 <sup>TH</sup> AND HEAVY TO VERY HEAVY FALLS AT A FEW PLACES OVER GUJARAT REGION AND HEAVY TO VERY HEAVY FALLS AT ISOLATED PLACES OVER SAURASHTRA ON 18 <sup>TH</sup> MAY. ISOLATED HEAVY TO VERY HEAVY RAINFALL ALSO LIKELY OVER KUTCH DURING THE SAME PERIOD.
FORECAST WIND SPEED (KMPH)	GALE WINDS SPEED REACHING 160-170 KMPH GUSTING TO 190 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,

	RAJKOT, MORBI, KHEDA DISTRICTS OF GUJARAT TILL 18 <sup>TH</sup> 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 18 <sup>TH</sup> early hours.
FORECAST STORM SURGE	TIDAL WAVE ABOVE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE COASTAL AREAS during next 06 hours, AS PER DETAILS BELOW: <b>ABOUT 3 - 4 METER (M) OVER ANAND &amp; 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 THE TIME OF LANDFALL.</b>
<b>REALISED WEATHER</b>  COASTAL MAHARASHTRA	HEAVY TO VERY HEAVY RAINFALL IS CONTINUING OVER NORTH KONKAN INCLUDING MUMBAI. IT WILL CONTINUE FOR NEXT 12 HRS, <b><u>RAINFALL REPORTED DURING 0830 TO 2130 HOURS IST OF TODAY:</u></b> MUMBAI (COLABA): 20.3 CM, SANTACRUZ: 21.5 CM
<b>REALISED WEATHER</b>  GUJARAT & DIU	HEAVY TO VERY HEAVY RAINFALL WILL CONTINUE OVER COASTAL DISTRICTS OF SAURASHTRA, SOUTH GUJARAT & DIU. <b><u>WIND REPORTED AT 2130 HOURS IST OF TODAY:</u></b> DIU: 133 KMPH, BHAVNAGAR: 46 KMPH, PORBANDAR: 35 KMPH.

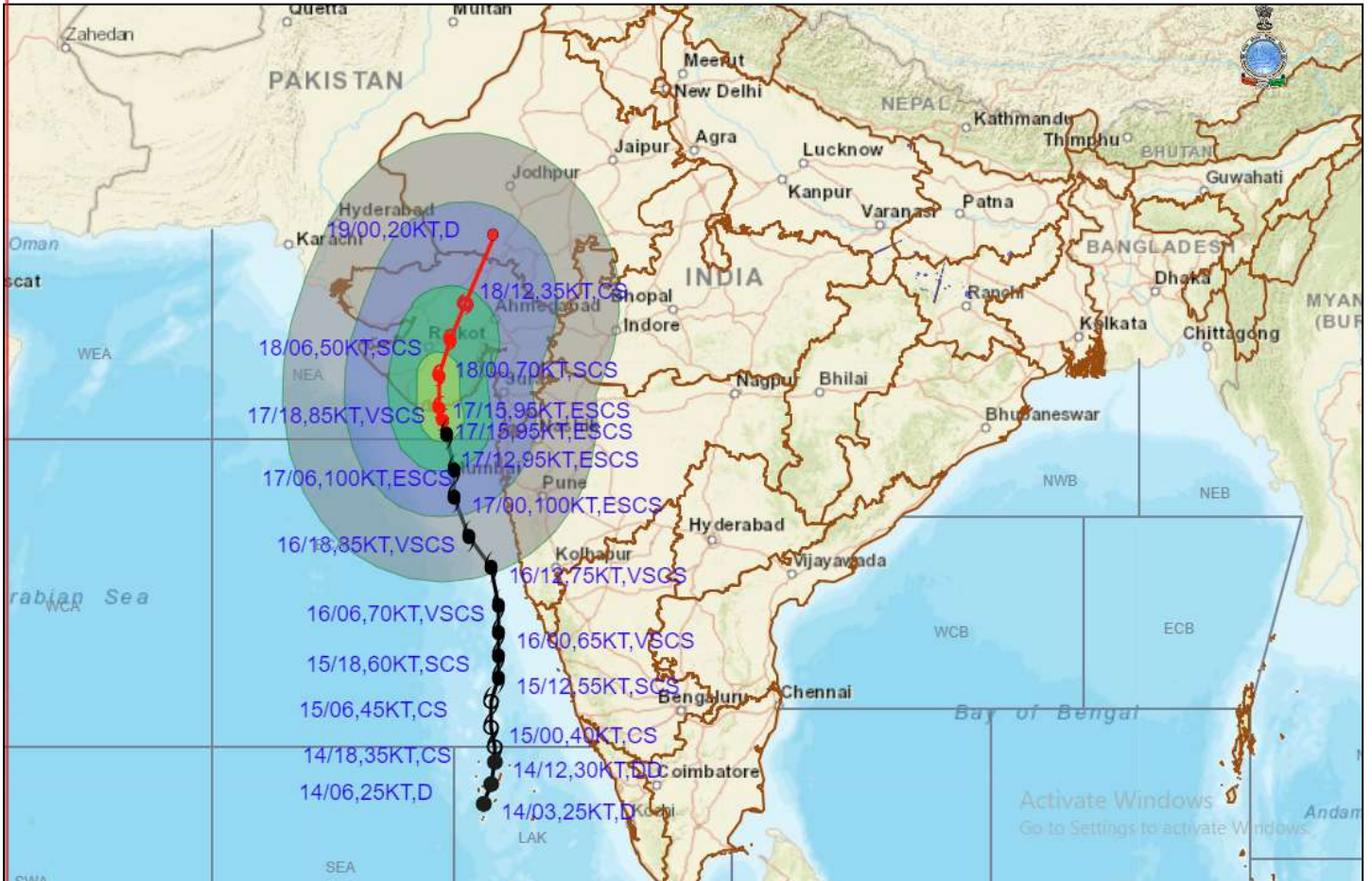
SAT : INSAT-3D IMG  
IMG\_TIR1\_TEMP 10.8 um  
ARABIAN SEA

17-05-2021/(1600 to 1626) GMT  
17-05-2021/(2130 to 2156) IST





## OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF EXTREMELY SEVERE CYCLONIC STORM "TAUKTAE" OVER NORTHEAST ARABIAN SEA BASED ON 1500 UTC OF 17<sup>TH</sup> 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 (≥ 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)

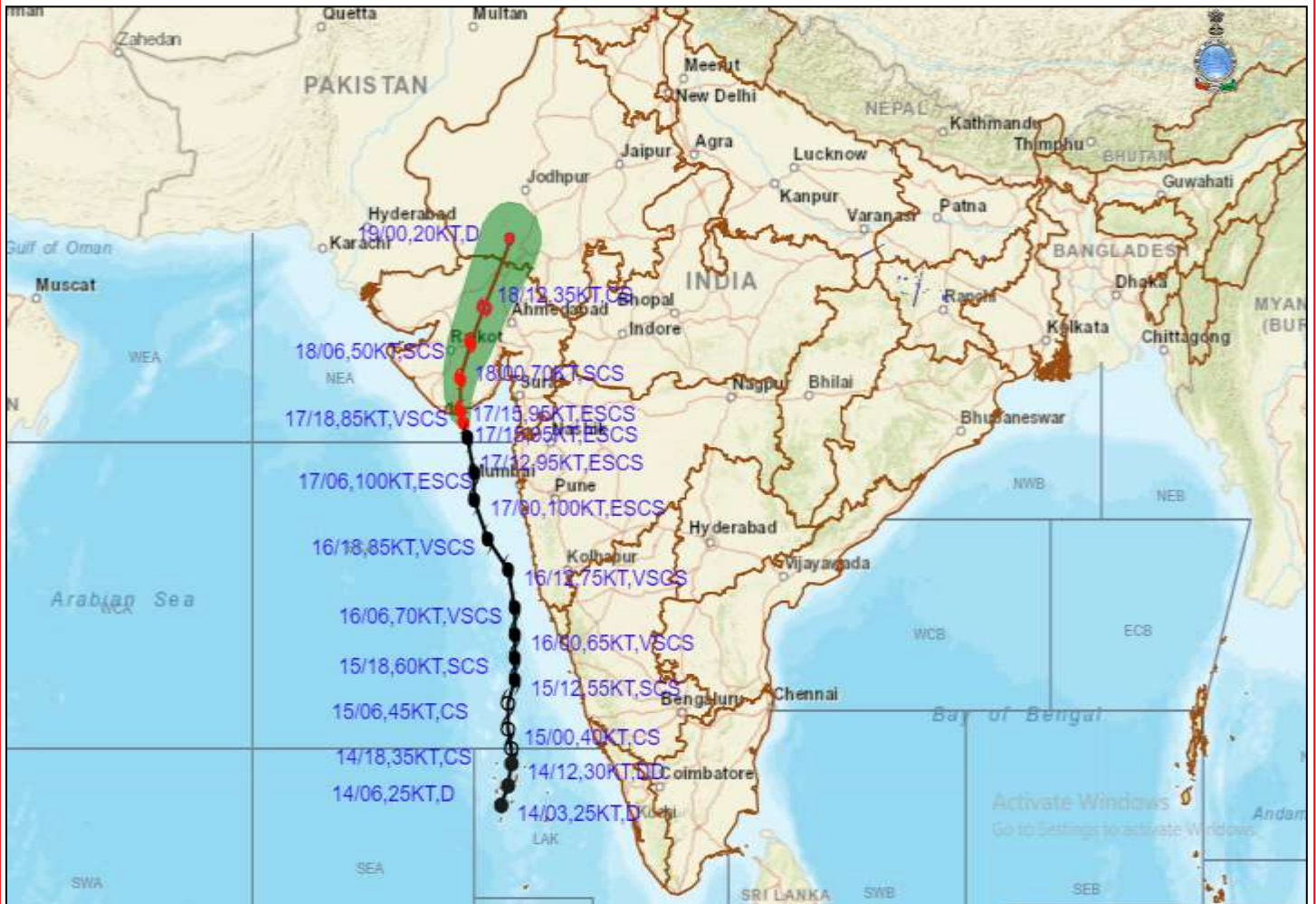
■ ≥ 64 KT (≥118 KMPH)

### 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

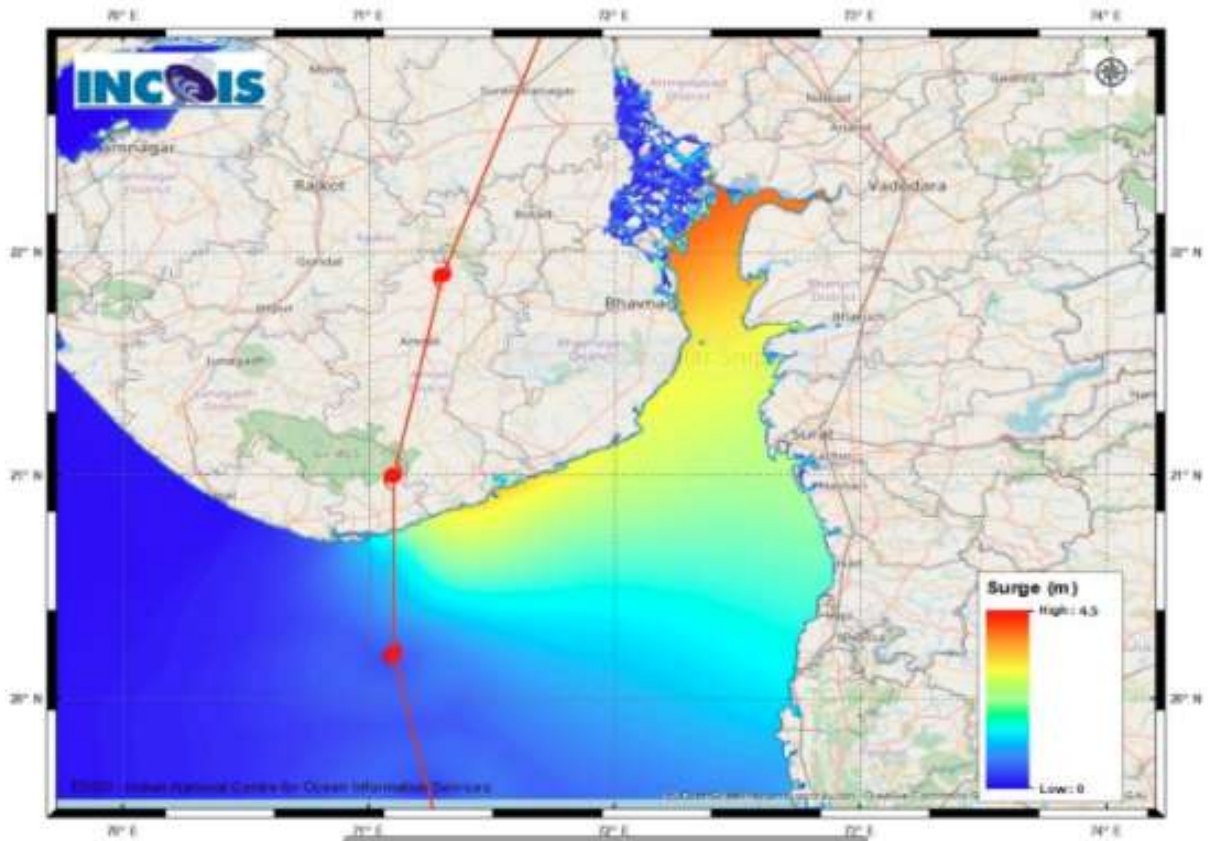


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 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS: SUPER CYCLONIC STORM ( $\geq$  120 KT)

- LESS THAN 34 KT
- 34-47 KT
- $\geq$  48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY



Page 2 Figure: Storm Surge Map

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	Janagadh	Gujarat	Una	0.8-2.7	Upto 0.56
Hazira	Surat	Gujarat	Haira 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

# HEAVY RAINFALL WARNING FOR GUJARAT STATE FOR 17<sup>TH</sup> AND 18<sup>TH</sup> MAY





## WIND WARNING FOR GUJARAT STATE FROM 17<sup>TH</sup> NIGHT TO 18<sup>TH</sup> MAY

