



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

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

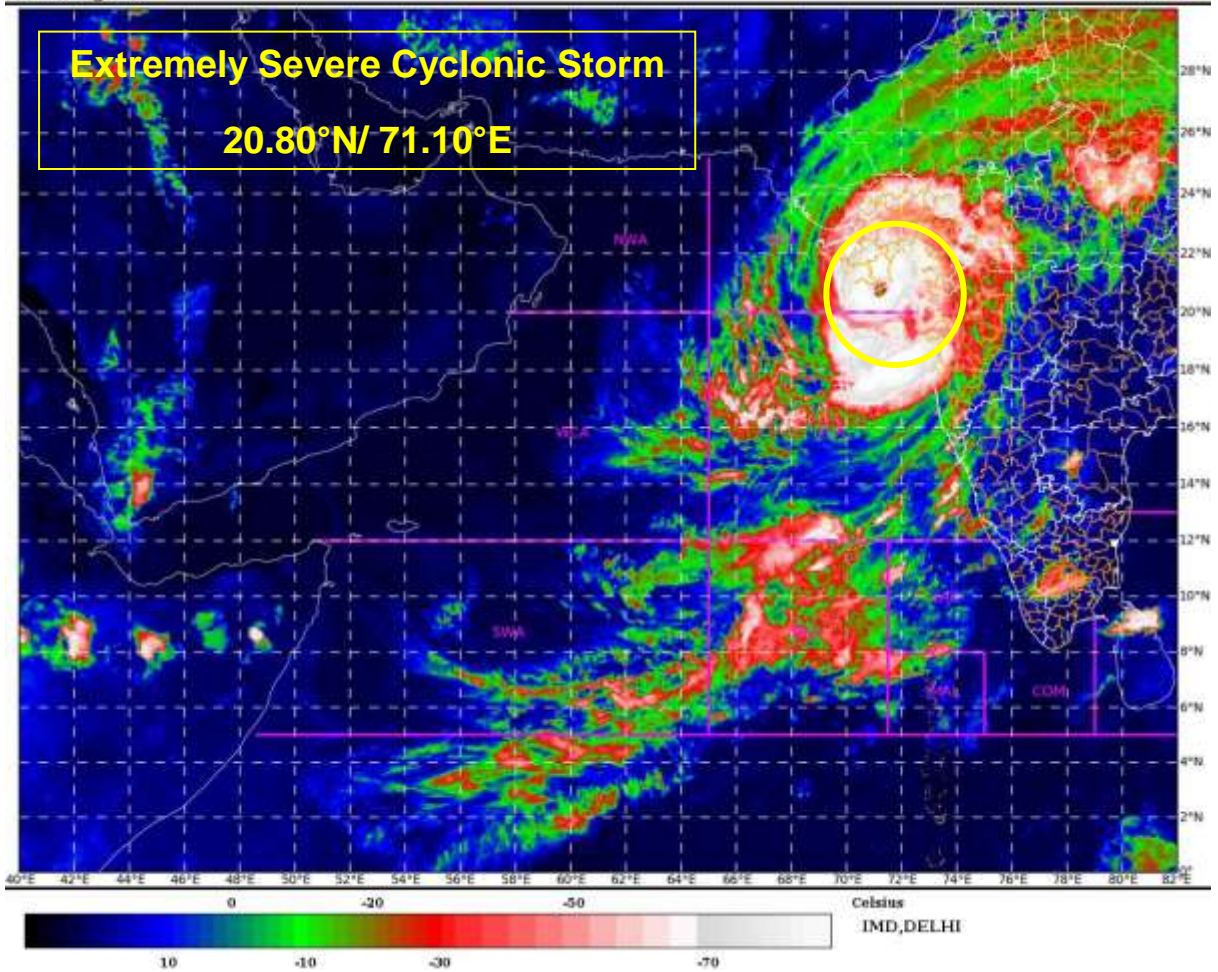
BULLETIN NO. 13

DATE: 17-05-2021

TIME OF ISSUE: 2330 HRS IST

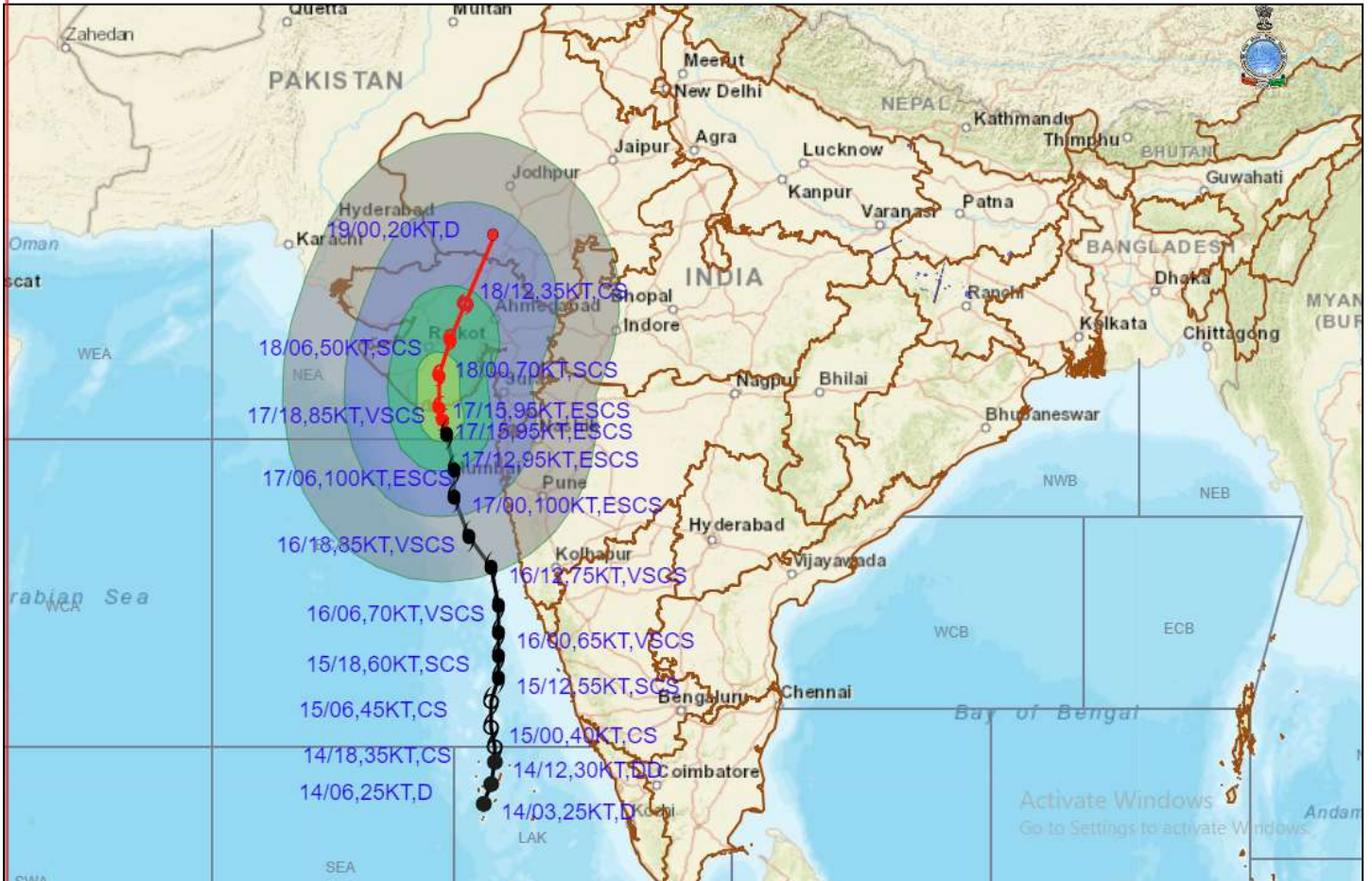
DATE/TIME (IST) OF OBSERVATION	BASED ON 17-05-2021 (2230 HRS IST)
LOCATION LATITUDE/LONGITUDE	THE EXTREMELY SEVERE CYCLONIC STORM 'TAUKTAE' LAY CENTRED AT 2230 HRS IST OF TODAY, THE 17TH MAY 2021 OVER SAURASHTRA, NEAR LAT. 20.8°N AND LONG. 71.10°E, ABOUT 20 KM EAST-NORTHEAST OF DIU.
CURRENT INTENSITY 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">• LANDFALL PROCESS IS CONTINUING.• IT WILL TAKE ANOTHER 02 HOURS TO COMPLETE THE LANDFALL PROCESS.
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 TH 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 TH 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 TH 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 TH early hours.
FORECAST STORM SURGE	TIDAL WAVE ABOVE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE COASTAL AREAS during next 06 hours, AS PER DETAILS BELOW: 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 THE TIME OF LANDFALL.
REALISED WEATHER COASTAL MAHARASHTRA	HEAVY TO VERY HEAVY RAINFALL IS CONTINUING OVER NORTH KONKAN INCLUDING MUMBAI. IT WILL CONTINUE FOR NEXT 12 HRS, <u>RAINFALL REPORTED DURING 0830 TO 2230 HOURS IST OF TODAY:</u> MUMBAI (COLABA): 20.4 CM, SANTACRUZ: 21.7 CM
REALISED WEATHER GUJARAT & DIU	HEAVY TO VERY HEAVY RAINFALL WILL CONTINUE OVER COASTAL DISTRICTS OF SAURASHTRA, SOUTH GUJARAT & DIU. <u>WIND REPORTED AT 2130 HOURS IST OF TODAY:</u> DIU: 152KMPH, BHAVNAGAR: 56 KMPH, PORBANDAR: 56 KMPH. AMRALI: 72 KMPH. HEAVY RAINFALL REPORTED: (SINCE 0830IST TODAY): VALSAD:15.2CM, GIR SOMNATH:6.5CM





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF EXTREMELY SEVERE CYCLONIC STORM "TAUKTAE" OVER NORTHEAST ARABIAN SEA BASED ON 1500 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 (≥ 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)

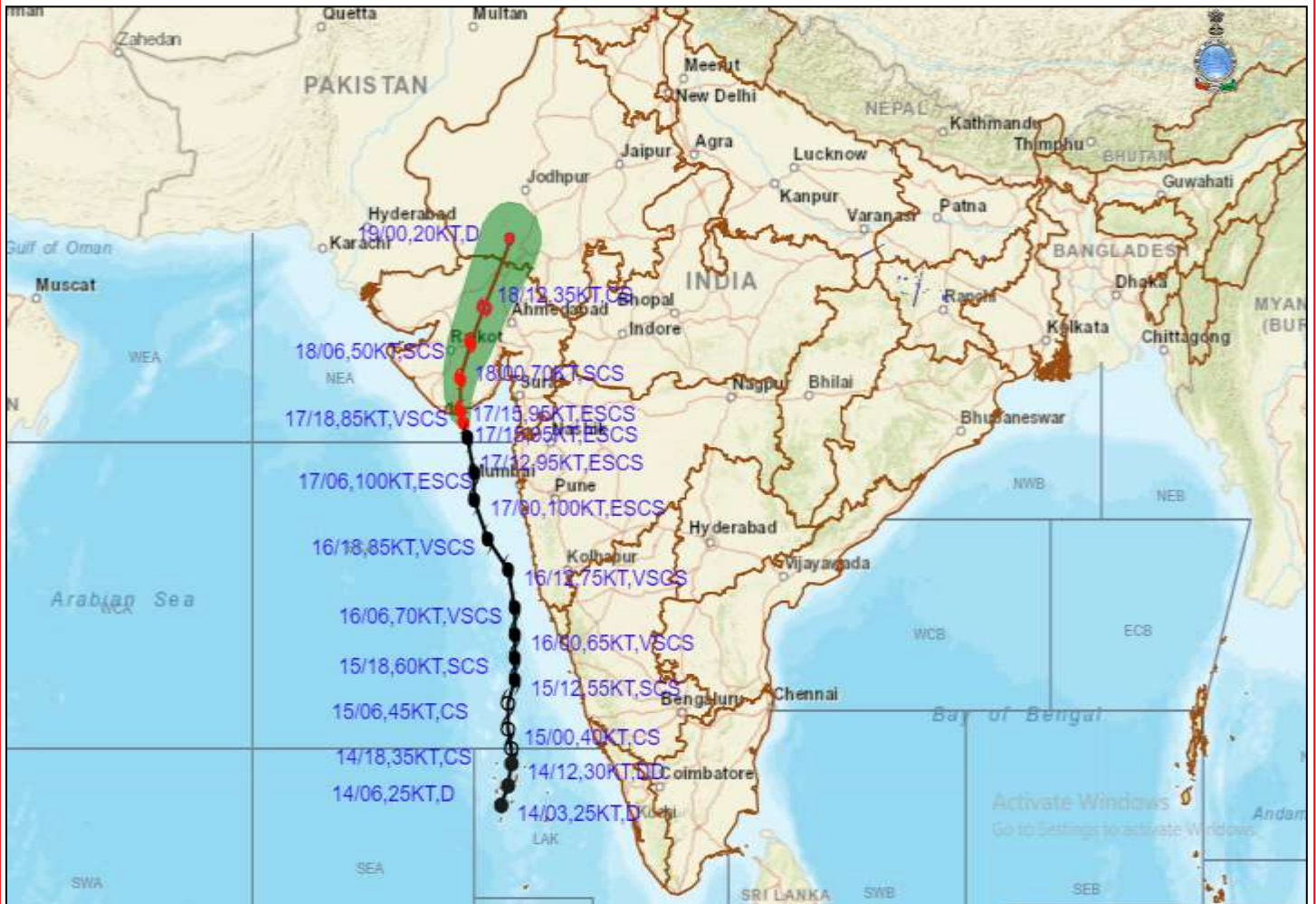
■ ≥ 64 KT (≥ 118 KMPH)

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

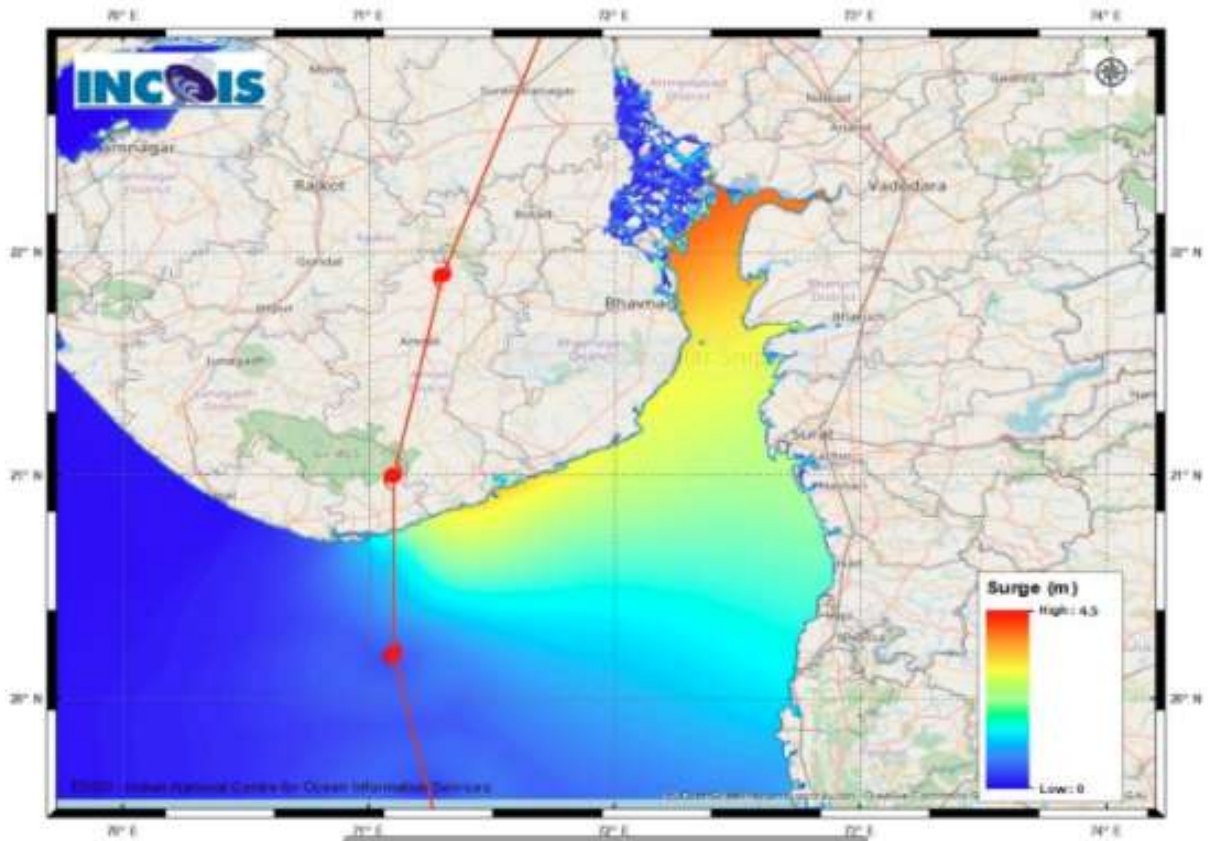


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SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

- 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 17TH AND 18TH MAY



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

