

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

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

#### **BULLETIN NO. 12**

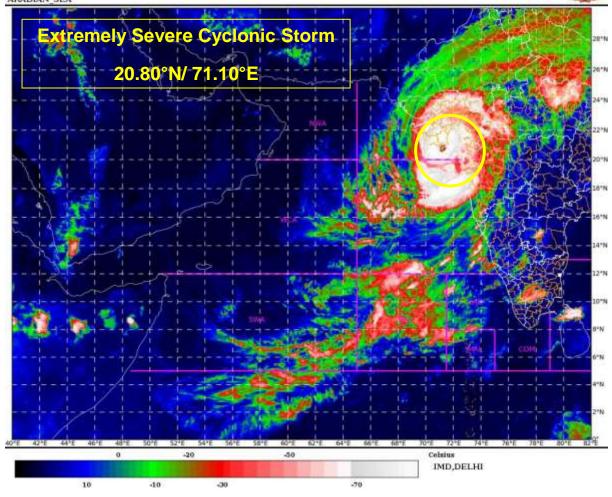
DATE: 17-05-2021 TIME OF ISSUE: 2330 HRS IST

| DATE/TIME (IST) OF  | TIME (IST) OF BASED ON 17-05-2021 (2230 HRS IST)                  |  |  |
|---------------------|---|--|--|
| OBSERVATION         | DAGED GIV 17-03-2021 (2230 TIKG 101)                              |  |  |
| LOCATION            | THE EXTREMELY SEVERE CYCLONIC STORM 'TAUKTAE' LAY                 |  |  |
| LATITUDE/LONGITUDE  | CENTRED AT 2230 HRS IST OF TODAY, THE 17TH MAY 2021               |  |  |
|                     | OVER SAURASHTRA, NEAR LAT. 20.8°N AND LONG. 71.10°E,              |  |  |
|                     | ABOUT <b>20 KM EAST-NORTHEAST OF DIU</b> .                        |  |  |
|                     |   |  |  |
| CURRENT INTENSITY   | 160-170 KMPH GUSTING TO 190 KMPH                                  |  |  |
| NEAR CENTRE         |   |  |  |
| PAST MOVEMENT       | EXTREMELY SEVERE CYCLONIC STORM 'TAUKTAE' MOVED                   |  |  |
|                     | NORTH-NORTHWESTWARDS WITH A SPEED OF 16 KMPH                      |  |  |
|                     | DURING PAST 06 HOURS  |  |  |
| FORECAST MOVEMENT,  | LANDFALL PROCESS IS CONTINUING.                                   |  |  |
| INTENSITY AND       | • IT WILL TAKE ANOTHER 02 HOURS TO COMPLETE THE                   |  |  |
| LANDFALL            | LANDFALL PROCESS.   |  |  |
|                     |   |  |  |
|                     | LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH                    |  |  |
| FORECAST RAINFALL   | 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 | GALE WINDS SPEED REACHING 160-170 KMPH GUSTING TO                 |  |  |
| (KMPH)              | 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<br>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        | HEAVY TO VERY HEAVY RAINFALL IS CONTINUING OVER NORTH KONKAN INCLUDING MUMBAI. IT WILL CONTINUE FOR NEXT 12 HRS,   |
| COASTAL                 | RAINFALL REPORTED DURING 0830 TO 2230 HOURS IST OF   |
| MAHARASHTRA             | TODAY: MUMBAI (COLABA): 20.4 CM, SANTACRUZ: 21.7 CM  |
| REALISED WEATHER        | HEAVY TO VERY HEAVY RAINFALL WILL CONTINUE OVER COASTAL DISTRICTS OF SAURASHTRA, SOUTH GUJARAT & DIU.  |
| GUJARAT & DIU           | WIND REPORTED AT 2130 HOURS IST OF TODAY: DIU: 152KMPH, BHAVNAGAR: 56 KMPH, PORBANDAR: 56 KMPH. AMRALI: 72 KMPH. HEAVY RAINFALL REPORTED: (SINCE 0830IST TODAY): VALSAD:15.2CM, GIR SOMNATH:6.5CM  |

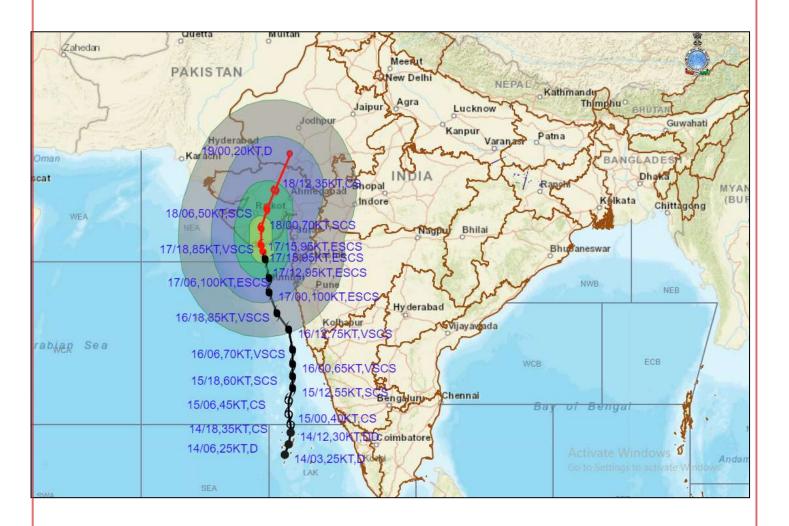
SAT: INSAT-3D IMG IMG\_TIR1\_TEMP 10.8 um ARABIAN\_SEA

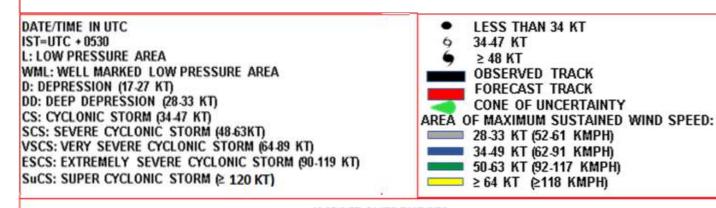






# OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF EXTREMELY SEVERE CYCLONIC STORM "TAUKTAE" OVER NORTHEAST ARABIAN SEA BASED ON 1500 UTC OF 17<sup>TH</sup> MAY, 2021

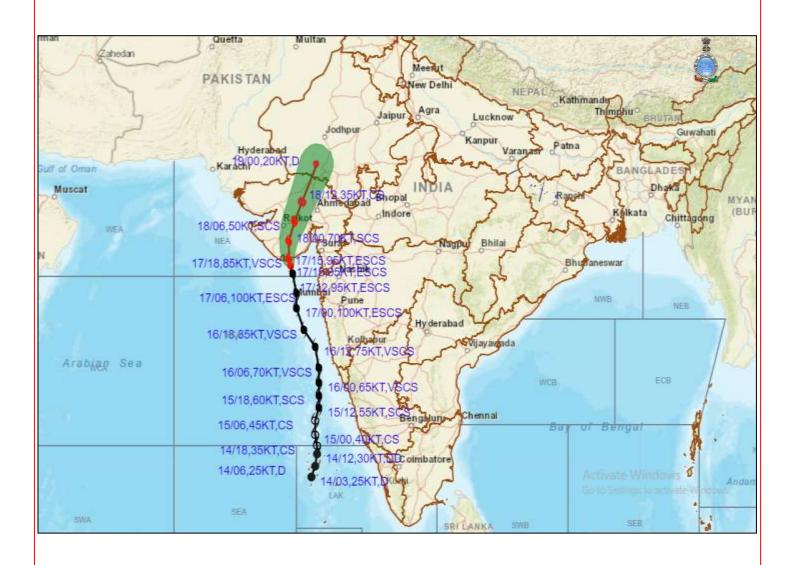




| IMPACT OVER THE SEA           |                        |  |  |  |
|-------------------------------|------------------------|--|--|--|
| MSW (knot/kmph)               | Impact                 | Action                                 |  |  |
| 28-33 (52-61)                 | Very rough seas        | 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 |  |  |



## 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





L: LOW PRESSURE AREA

WML: WELL MARKED LOW PRESSURE AREA

D: DEPRESSION (17-27 KT)

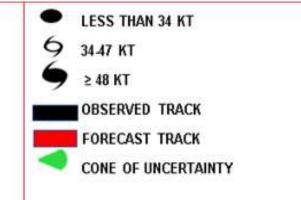
DD: DEEP DEPRESSION (28-33 KT) CS: CYCLONIC STORM (34-47 KT)

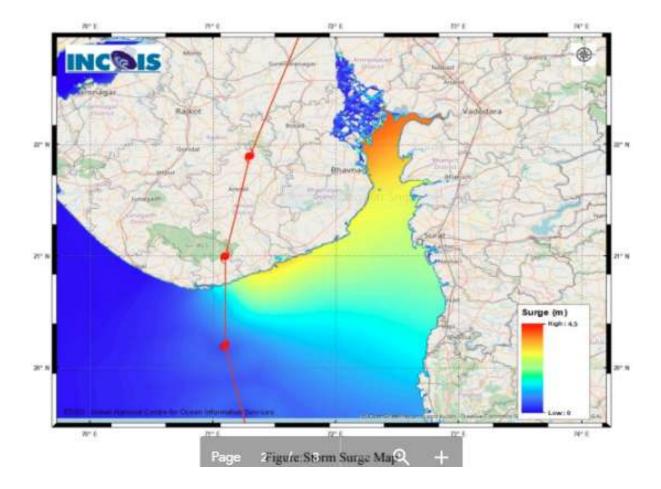
SCS: SEVERE CYCLONIC STORM (48-63KT)

VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)

ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

Sucs: SUPER CYCLONIC STORM (2 120 KT)





STORM SURGE GUIDANCE FROM INCOIS BASED ON 0530 HRS IST OBSERVATIONS

### STORM SURGE HEIGHT INFORMATION:

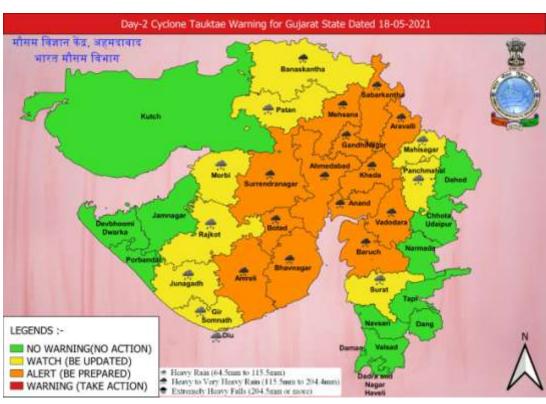
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\* The below listed surge heights are over and above ast

| MANDAL/TALUK | DISTRICT    | STATE / UNION<br>TERRITORY | NEAREST PLACE<br>OF HABITATION | STORM SURGE (m) | EXPECTED<br>INUNDATION<br>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                             |
| Jafarahad    | 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                             |
| Hanset Mahal | Bharuch     | Gujarat                    | Kantiyajal                     | 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                | Akkarputti                     | 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       | Raigath     | Maharashtra                | Ranjankhar Davali              | 0.3-0.9         | Upto 1.90                             |
| Bombay       | Mumbai City | Maharashtra                | Greater Bombay                 | 0.7-0.9         | Nil                                   |
| Kodinar      | Gir Somnath | Gujarnt                    | Chhara                         | 0.4-0.8         | Upto 0.32                             |
| Panvel       | Raigarh     | Maharashtra                | Gavhan                         | 0.7-0.8         | Upto 0.72                             |
| Uran         | Raigath     | Maharashtra                | Jasai                          | 0.7-0.8         | Upto 2.40                             |
| Murud        | Raigarh     | Maharashtra                | Borti                          | 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 $17^{\text{TH}}$ NIGHT TO $18^{\text{TH}}$ MAY

