



India Meteorological Department

PRESS RELEASE - 5

Time of issue: 1530 hours IST

Dated: 16-05-2021

Sub: Very Severe Cyclonic Storm "Tauktae" (pronounced as Tau'Te) over eastcentral Arabian Sea: <u>Cyclone Warning for Gujarat & Diu coasts (Orange Message)</u>

Yesterday's **Cyclonic Storm "Tauktae" (pronounced as Tau'Te)** over eastcentral and adjoining southeast Arabian Sea moved nearly northwards and intensified into a severe cyclonic storm in the same afternoon (1430 hrs IST of 15th May). Continuing to move further northwards, it intensified into a very severe cyclonic storm in the early hours (0230 hrs IST) of today, the 16th May, 2021.

Continuing to move northwards, it lay centered at 1130 hours IST over eastcentral Arabian Sea near latitude 15.7°N and longitude 72.7°E, about 120 km west-northwest of Panjim-Goa, 380 km south-southwest of Mumbai, 620 km south-southeast of Veraval (Gujarat) and 790 km southeast of Karachi (Pakistan).

It is very likely to intensify further during next 24 hours. It is very likely to move northnorthwestwards and reach Gujarat coast in the evening hours of 17th & cross Gujarat coast between Porbandar & Mahuva (Bhavnagar district) around 18th May early morning.

The System is being monitored by Doppler weather RADAR Goa.

Date/Time(IST)	Position (Lat. ⁰N/ long. ⁰E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
16.05.21/1130	15.7/72.7	135-145 gusting to 160	Very Severe Cyclonic Storm
16.05.21/1730	16.5/72.4	140-150 gusting to 165	Very Severe Cyclonic Storm
16.05.21/2330	17.4/71.8	145-155 gusting to 170	Very Severe Cyclonic Storm
17.05.21/0530	18.2/71.3	150-160 gusting to 175	Very Severe Cyclonic Storm
17.05.21/1130	19.0/71.0	155-165 gusting to 185	Very Severe Cyclonic Storm
17.05.21/2330	20.2/70.8	155-165 gusting to 185	Very Severe Cyclonic Storm
18.05.21/1130	21.7/71.0	110-120 gusting to 135	Severe Cyclonic Storm
18.05.21/2330	23.4/71.6	50-60 gusting to 70	Deep Depression
19.05.21/1130	24.9/72.2	35-45 gusting to 55	Depression

Forecast track and intensity are given in the following table:

Warnings:

- (i) Rainfall:
 - **Kerala:** Light to moderate rainfall at many places with heavy to very to very heavy falls at isolated places on 16th and heavy falls at isolated places on 17th May.
 - Karnataka (coastal & adjoining Ghat districts): Light to moderate rainfall at most places with heavy to very heavy falls at isolated places on 16th.
 - South Konkan & Goa: Light to moderate rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at isolated places over south Konkan & Goa and adjoining Ghat areas on 16th and heavy to very heavy falls at isolated places on 17th May.
 - North Konkan: Light to moderate rainfall at most places with heavy to very heavy falls at isolated places on 16th and 17th May.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

- Gujarat: Light to moderate rainfall at many places very likely to commence over coastal districts of Saurashtra from today afternoon, with heavy to very heavy falls at isolated places over Saurashtra & Kutch, Diu and southern most Gujarat region with extremely heavy falls at isolated places on 17th and with heavy to very heavy falls at a few places over Saurashtra & Kutch and Diu & south Gujarat region with extremely heavy falls (≥ 20 cm) at isolated places on 18th.
- **Rajasthan:** Light to moderate rainfall at many places with heavy to very heavy falls & extremely heavy falls at isolated places very likely over south Rajasthan on 18th & heavy to very heavy falls at isolated places over Rajasthan on 19th May.

(ii) Wind warning

- Gale wind speed reaching 135–145 kmph gusting to 160 kmph is prevailing over eastcentral Arabian Sea. It is likely to increase over eastcentral Arabian Sea becoming 145-155 kmph gusting to 170 kmph from 16th May mid-night.
- Gale winds speed reaching 80-90 kmph gusting to 100 kmph along & off south Maharashtra Goa and adjoining Karnataka coasts on 16th, 50-60 kmph gusting to 70 kmph along & off north Maharashtra coast on 16th. It is likely to become 65- 75 kmph gusting to 85 kmph along & off north Maharashtra coast from 17th till 18th morning.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely over northeast Arabian Sea and along & off south Gujarat & Daman and Diu coasts from 16th morning and gradually increase becoming Gale winds speed reaching 150-160 kmph gusting to 175 kmph over northeast Arabian Sea and along & off Gujarat coast (Porbandar, Junagarh, Gir Somnath, Amreli, Bhavnagar) and 100 -120 kmph gusting to 135 kmph over Bharuch, Anand, south Ahmedabad, Botad, Surendranagar, 90 -100 kmph gusting to 120 kmph over Devbhoomi Dwarka, Jamnagar, Rajkot, Morbi districts of Gujarat from early hours of 18th. Gale winds speed reaching 70-90 kmph gusting to 100 kmph likely to prevail along & off Dadra, Nagar Haveli, Daman, Valsad, Navsari, Surat, Kheda districts from 17th mid-night till 18th morning.

(iii) Sea condition

- Sea condition over eastcentral Arabian Sea will be very high to Phenomenal on 16th May and over northeast Arabian Sea on 17th & 18th May.
- Sea conditions will be very rough to High along & off Maharashtra–Goa coasts on 16th May and along & off north Maharashtra coast on 17th Morning. It is very likely to be very rough to High along & off south Gujarat coast from 17th May morning and very high to Phenomenal from 17th midnight.

(iv) Storm surge warning

Tidal wave above astronomical tide is likely to inundate coastal areas as per details below:

About 3 meter (m) over Amreli, Gir Somnath, Diu, Bhavnagar, 2-3 m over Bharuch, Amreli, Anand, southern parts of Ahmedabad, 1-2 m over Surat, Navsari, Valsad, and 0.5 – 1m over the remaining coastal districts of Gujarat during the time of landfall.(Details given in Annexure-I).

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(v) Fishermen Warning

- Total suspension of fishing operations over eastcentral Arabian Sea and along & off Karnataka-Goa–Maharashtra coasts.
- Total suspension of fishing operations over northeast Arabian Sea and along & off Gujarat coast from 17th May.
- The fishermen are advised not to venture into eastcentral Arabian Sea along & off Karnataka coast till 17th Morning and into eastcentral Arabian Sea and along & off Maharashtra–Goa coasts and into northeast Arabian Sea along & off Gujarat coast till 18th May.
- Those who are out at Sea over north Arabian Sea are advised to return to the coast.

(vi) (A) Damage Expected over Porbandar, Amreli Junagarh, Gir Somnath Botad & Bhavnagar and coastal areas of Ahmedabad:

- Total destruction of thatched houses/ extensive damage to kutcha houses. Some damage to pucca houses. Potential threat from flying objects.
- Bending/ uprooting of power and communication poles.
- Major damage to Kutcha and Pucca roads. Flooding of escape routes. Minor disruption of railways, overhead power lines and signaling systems.
- > Widespread damage to salt pans & standing crops,. Blowing down of bushy trees.
- Small boats, country crafts may get detached from moorings.
- Visibility severely affected.

(vi) (B) Damage Expected over Devbhoomi Dwarka, Kutch, Jamnagar, Rajkot & Morbi, Valsad, Surart, Vadodara, Bharuch, Navsari, Anand, Ahmedabad districts of Gujarat:

- Major damage to thatched houses/ huts. Roof tops may blow off. Unattached metal sheets may fly.
- Minor damage to power and communication lines.
- > Major damage to Kutcha and some damage to Pucca roads. Flooding of escape routes.
- Breaking of tree branches, uprooting of large avenue trees. Moderate damage to banana and papaya trees. Large dead limbs blown from trees.
- Major damage to coastal crops.
- Damage to embankments/ salt pans.

(vii) Action Suggested:

- Mobilise evacuation in vulnerable areas.
- > Total suspension of fishing operations.
- > Judicious regulation of rail and road traffic.
- > People in affected areas to remain indoors.
- > Movement in motor boats and small ships unsafe.

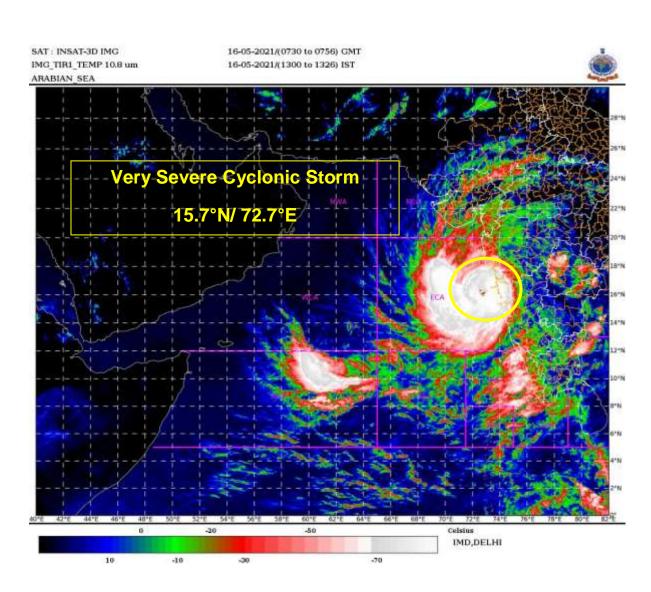
The system is under continuous surveillance and the concerned state governments are being informed regularly.

Kindly visit <u>www.rsmcnewdelhi.imd.gov.in</u> and <u>www.mausam.imd.gov.in</u> for regular updates.

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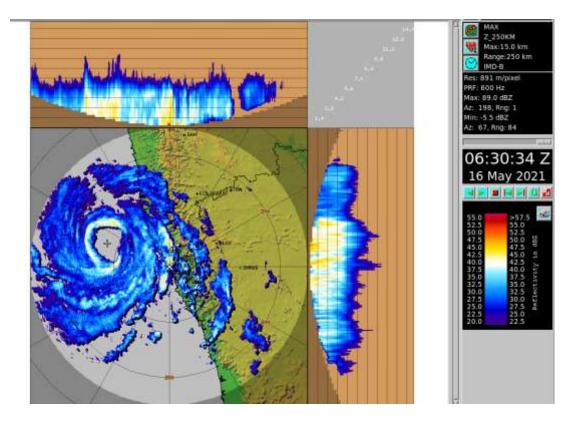
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INSAT-3D Enhanced Colored imagery based on 0730 UTC of 16th May, 2021

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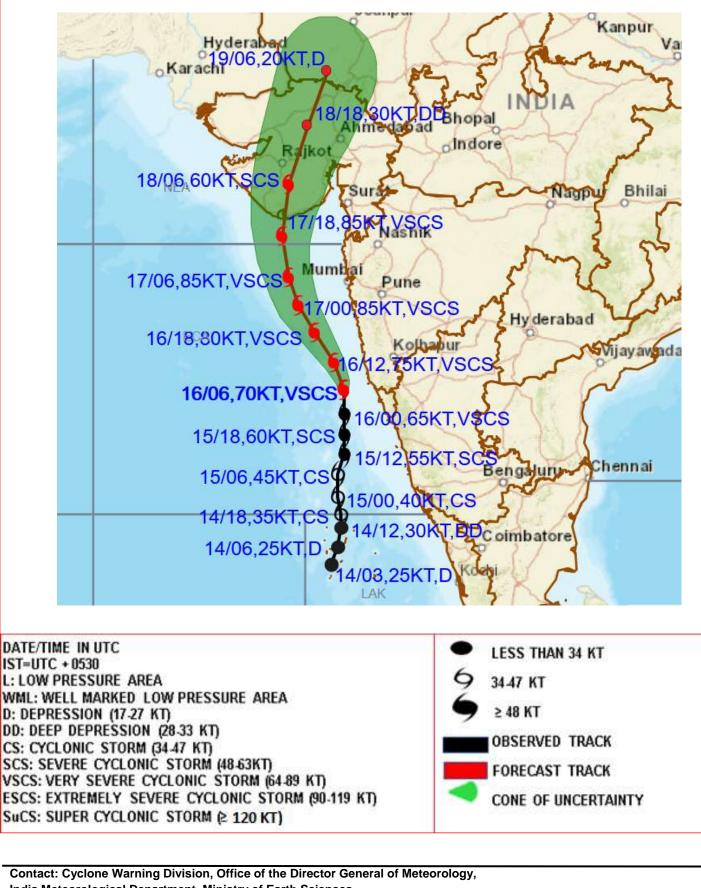


Reflectivity product from Doppler weather RADAR Goa at 0630 UTC of 16th May

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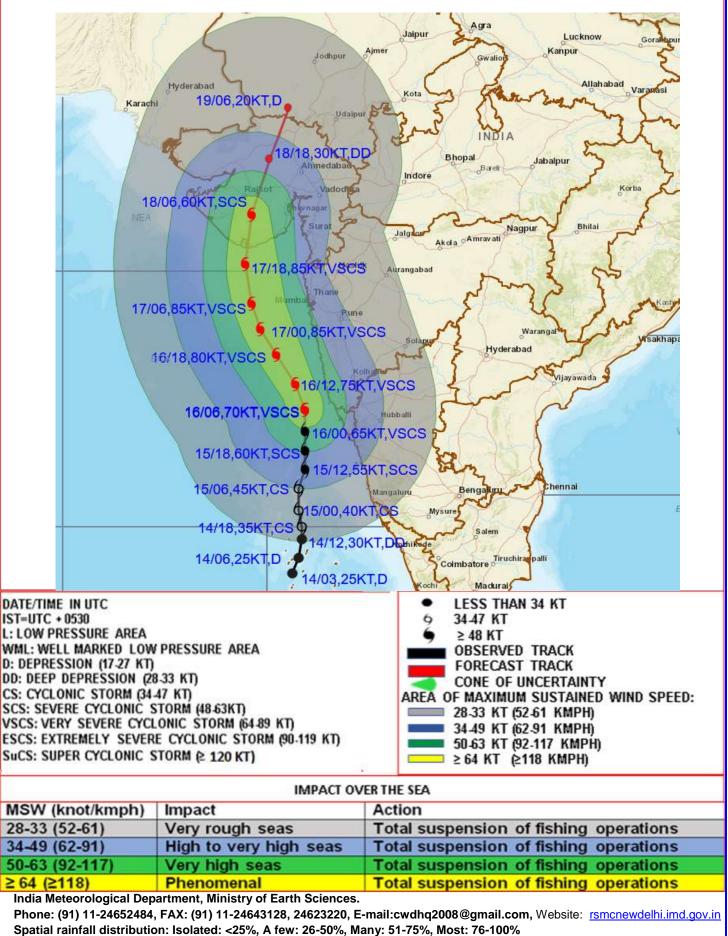
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM "TAUKTAE" OVER EASTCENTRAL ARABIAN SEA BASED ON 0600 UTC OF 16TH MAY, 2021



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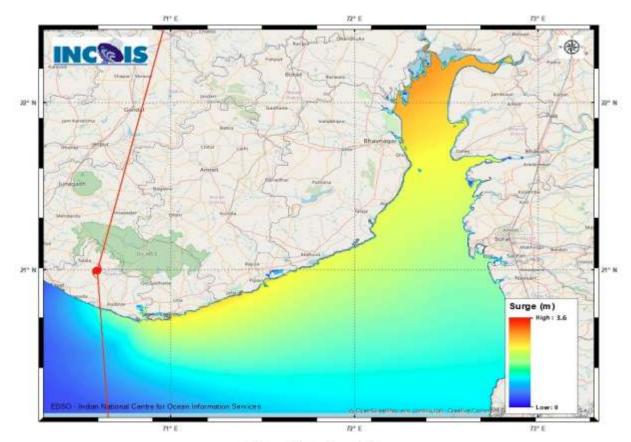


Figure:Storm Surge Map

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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m)	EXPECTED INUNDATION EXTENT (km)
Una	Junagadh	Gujarat	Una	1.2-3.6	Upto 0.9
Dhandhuka	Ahmadabad	Gujarat	Mithi	0.8-3.3	Lipto 4.3
Hansot Mahul	Bharuch	Gujarat	Kantiyajal	1.0-2.3	Upto 3.3
Jafarabad	Amreli	Gujarat	Rohisa	2.5-2.6	Upto 0.1
Hazira	Surat	Gujarat	Hajira Ina (ina)	1.2-2.0	Upto 1.0
Kodinar	Gir Sonnath	Gujarat	Kodinar	1.5-3.0	Upto 0.5
Mundra	Bhavnagar	Gujarat	Vadgam	2.4-2,4	Upto 0.9
Diu	Dia	Daman and Diu	Diu	1.6-2.9	Upto 0.7
Mahuya	Bhaynagar	Gujarat	Katpur (ct)	1.4-2.4	Upto 0.2
Bharuch	Bharuch	Gujarat	Kasya	1.3-2.3	Upto 0.1
Bhavnagar	Bhavnagar	Gujarat	Narbad	1.1-2.9	Upto 2.4
Borsad	Anmd	Gujarat	Tithor	1.9-2.7	Upto 0.3
Chorasi	Surat	Gujarat	Bhimpor	1.4-1.8	Upto 1.0
Vagra	Bharuch	Gujarat	Harinagar	1.7-2.5	Upto 0.5
Valsad	Valsad	Gujarat	Malyan	1.1-1.5	Upto 0.3
Gandevi	Navsari	Gujarat	Mendhar	0.8-1.6	Upto 1.2
Dahanu	Pnighar	Maherashtra	Narpad	0.5-1.2	Upto 1.0
Daman	Daman	Daman and Diu	Daman	0.9-1.3	Nil
Navsari	Navsen	Gujarat	Borsi	0.9-1.8	Lipto 0.4
Olpad	Surat	Gujarat	Vansva	1.5-2.1	Upto 0.6
Veraval	Gir Sonnath	Gujarat	Mul Dwarka	0.5-1.8	Upto 0.2
Palghat	Palghar	Maharashtra	Akkarpatti	0.4-1.0	Upto 0.5
Panvel	Raigath	Maharashtra	Gavhan	0.7-0.7	Upto 0.5
Rajula	Amreli	Gujarat	Patya	1.1-2.7	Upto 0.3
Talaja	Bhavnagar	Gujarat	Talaja	1.6-2.3	Upto 0.2
Umargam	Valsed	Gujarat	Umargam	1.2-1.3	Upto 0.2
Unin	Raigath	Maharashtra	Sheva	0.6-0.7	Lipto 2.2
Vasai	Palghar	Maharashtra	Jalsar	0.8-0.9	Upto 1.1
Wada	Thane	Maharashtra	Juchandra	0.8-0.8	Upto 0.2
Bombay	Mumbai City	Maharashtra	Greater Bomhay	0.6-0.7	Nil
Alibag	Raigath	Maharashtra	Ranjankhar Duvali	0.5-0.7	Upto 1.9
Maliya	Junagadh	Gujarat	Vadodra Dodiya	0.3-0.3	Upto 0.1
Mangaon	Raigarh	Maherashtra	Water Body	0.5-0.5	Upto 0.1

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