



Government of India
Ministry of Earth Sciences



India Meteorological Department

PRESS RELEASE - 6

Time of issue: 1300 hours IST

Dated: 17-05-2021

Sub: Extremely Severe Cyclonic Storm “Tauktae” (pronounced as Tau’Te) over Eastcentral Arabian Sea: Cyclone Warning for Gujarat & Diu coasts & post landfall outlook for Gujarat & Rajasthan (Red message)

Yesterday’s very severe cyclonic storm over eastcentral Arabian Sea moved north-northwestwards and intensified into an extremely severe cyclonic storm in the early morning (0530 hrs IST) of today, the 17th May, 2021. It lay centred at 0830 hours IST over eastcentral Arabian Sea near latitude 18.8°N and longitude 71.5°E, about 150 km west of Mumbai, 220 km south-southeast of Diu, 260 km southeast of Veraval (Gujarat), and 490 km east-southeast of Karachi (Pakistan).

It is very likely to move north-northwestwards and reach Gujarat coast in the evening hours of 17th & cross Gujarat coast between Porbandar & Mahuva (Bhavnagar district) during the night (2000 – 2300 hrs IST) of 17th May with a maximum sustained wind speed 155-165 kmph gusting to 185 kmph.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
17.05.21/0830	18.8/71.5	180-190 gusting to 210	Extremely Severe Cyclonic Storm
17.05.21/1130	19.2/71.4	180-190 gusting to 210	Extremely Severe Cyclonic Storm
17.05.21/1730	20.2/71.1	170-180 gusting to 200	Extremely Severe Cyclonic Storm
17.05.21/2330	21.0/71.1	150-160 gusting to 175	Very Severe Cyclonic Storm
18.05.21/0530	21.9/71.3	110-120 gusting to 130	Severe Cyclonic Storm
18.05.21/1730	23.5/71.9	70-80 gusting to 90	Cyclonic storm
19.05.21/0530	25.2/72.8	40-50 gusting to 60	Depression

Warnings:

(i) Rainfall:

- **Konkan & adjoining Madhya Maharashtra:** Light to moderate rainfall at most places with heavy to very heavy falls and extremely heavy falls at isolated places on 17th May and isolated heavy rainfall over north Konkan on 18th May.
- **Gujarat:** 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 17th & heavy to very heavy falls at a few places over Gujarat region and heavy to very heavy falls at isolated places over Saurashtra on 18th May. Isolated heavy to very heavy rainfall also likely over Kutch during the same period.
- **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.

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.

(ii) Wind warning

- Gale wind speed reaching 180–190 kmph gusting to 210 kmph is likely to prevailing over eastcentral Arabian Sea during next six hours
- Gale winds speed reaching 80-90 kmph gusting to 100 kmph is likely to prevail along & off Maharashtra coast on 17th and gradually decrease thereafter.
- Gale wind speed reaching 90-100 kmph gusting to 110 kmph is prevailing over adjoining northeast Arabian Sea. It would gradually increase becoming 170–180 kmph gusting to 200 kmph from evening of 17th for subsequent 06 hrs and decrease thereafter
- Gale wind speed reaching 70-80 kmph gusting to 90 kmph is prevailing along and off south Gujarat & Daman and Diu coasts. It is likely to increase becoming Gale winds speed reaching 155-165 kmph gusting to 185 kmph 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 from tonight till 18th early morning. 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 from 17th evening till 18th morning.

(iii) Sea condition

- Sea conditions will be Phenomenal over eastcentral and adjoining northeast Arabian Sea till 18th morning and improve gradually thereafter.
- Sea conditions will be High to very High along & off Maharashtra coast during next 12 hours and improve thereafter.
- It is very likely to be High along & off south Gujarat, Daman, Diu, Dadra & Nagar Haveli coasts during next 6 hours becoming Phenomenal till 18th morning. It will improve gradually thereafter.

(iv) Storm surge warning

- Tidal wave above astronomical tide is likely to inundate coastal areas 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 – 1m over the remaining coastal districts of Gujarat during the time of landfall.(Details given in Annexure-I).

(v) Fishermen Warning

- Total suspension of fishing operations over eastcentral Arabian Sea, northeast Arabian Sea and along & off Gujarat, Daman, Diu, Dadra & Nagar Haveli coasts till the Noon of 18th May.
- The fishermen are advised not to venture into eastcentral Arabian Sea along & off Maharashtra - Goa coasts and into northeast Arabian Sea along & off Gujarat, Daman, Diu, Dadra & Nagar Haveli coast till the noon of 18th May.
- Those who are out at Sea over north Arabian Sea are advised to return to the coast.

(vi) (A) Damage Expected over Diu, 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.

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- 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.

(B) Damage Expected over Devbhoomi Dwarka, Porbandar, Kutch, Jamnagar, Rajkot & Morbi, Valsad, Surat, Vadodara, Bharuch, Navsari, Anand, Kheda and interior parts of Ahmedabad districts of Gujarat, Daman, Dadra & Nagar Haveli:

- 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.

(viii) Post Landfall Outlook for interior districts of Gujarat (Districts apart from those mentioned under warning above):

After the landfall the system is very likely to re-curve north-northeastwards, across Gujarat and weaken gradually. It is likely to maintain the intensity of Cyclonic Storm till the evening of 18th May and thereafter it will weaken gradually into a Depression over south Rajasthan.

Under its influence, light to moderate rainfall at most places with heavy to very heavy rainfall at a few places very likely over interior districts of Gujarat on 17th and upto 18th afternoon .and over south Rajasthan on 18th May.

Damage expected over interior districts of Gujarat (Districts apart from those mentioned under warning) on 18th May 2021.

- (i) Minor damage to power and communication lines. (ii) Major damage to Kutcha and some damage to Pucca roads. (iii) Breaking of tree branches, uprooting of small trees. (iv) Damage to banana and papaya trees. (v) People in affected areas to remain indoors.

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

Kindly visit www.rsmcnewdelhi.imd.gov.in and www.mausam.imd.gov.in for regular updates.

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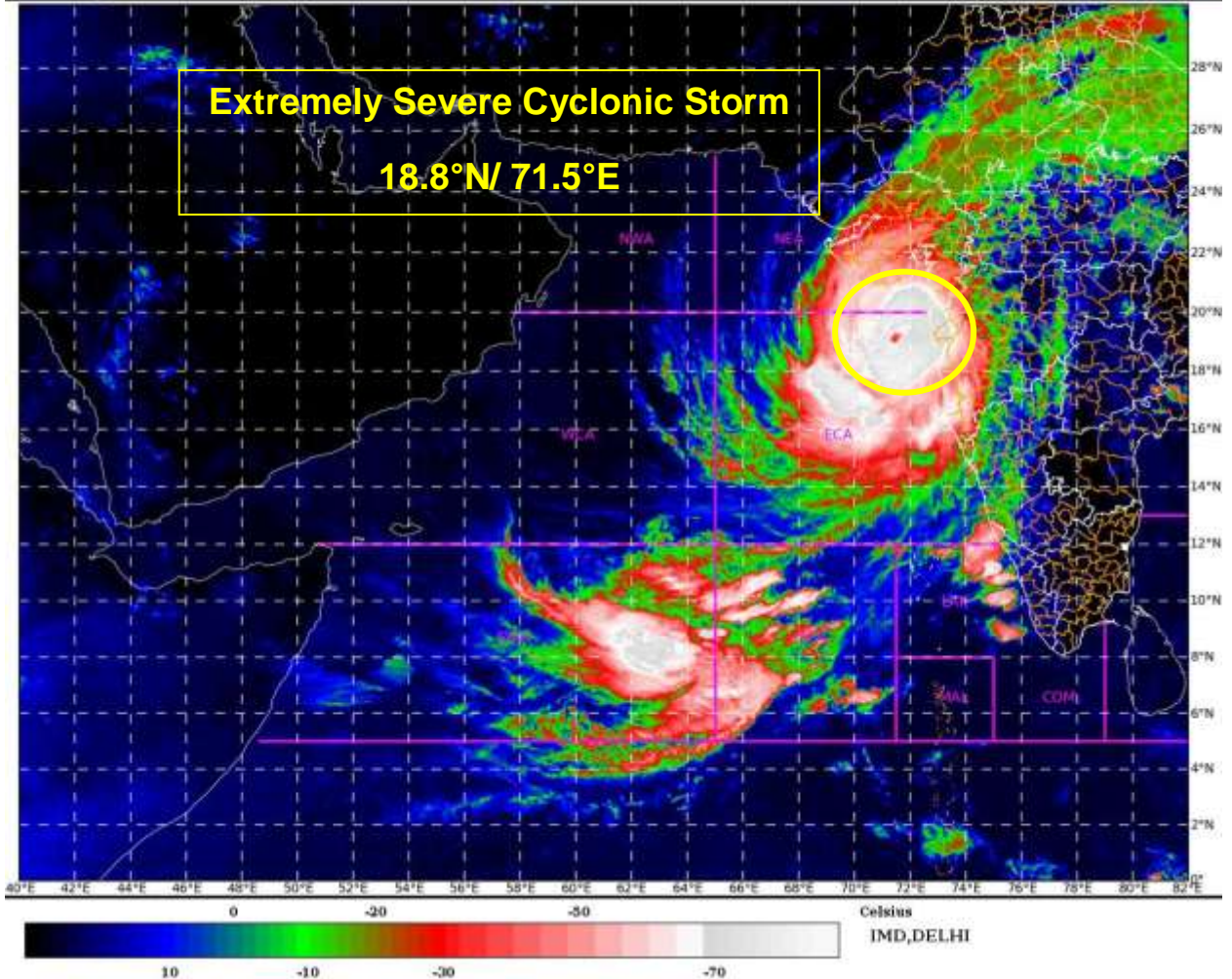
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SAT : INSAT-3D IMG
IMG_TIR1_TEMP 10.8 um
ARABIAN SEA

17-05-2021/(0430 to 0456) GMT
17-05-2021/(1000 to 1026) IST



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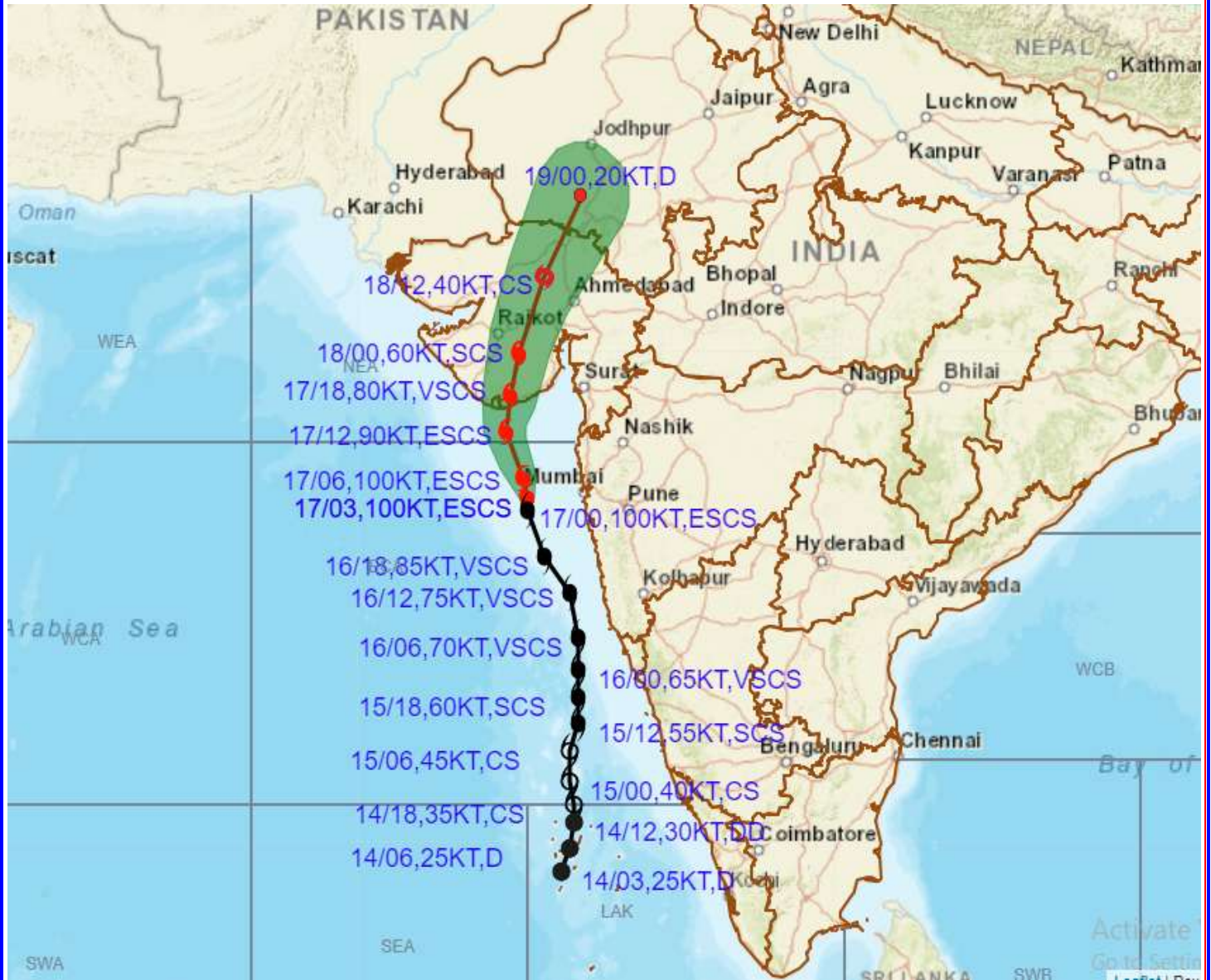
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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF EXTREMELY SEVERE CYCLONIC STORM "TAUKTAE" OVER EASTCENTRAL ARABIAN SEA BASED ON 0300 UTC OF 17TH MAY, 2021



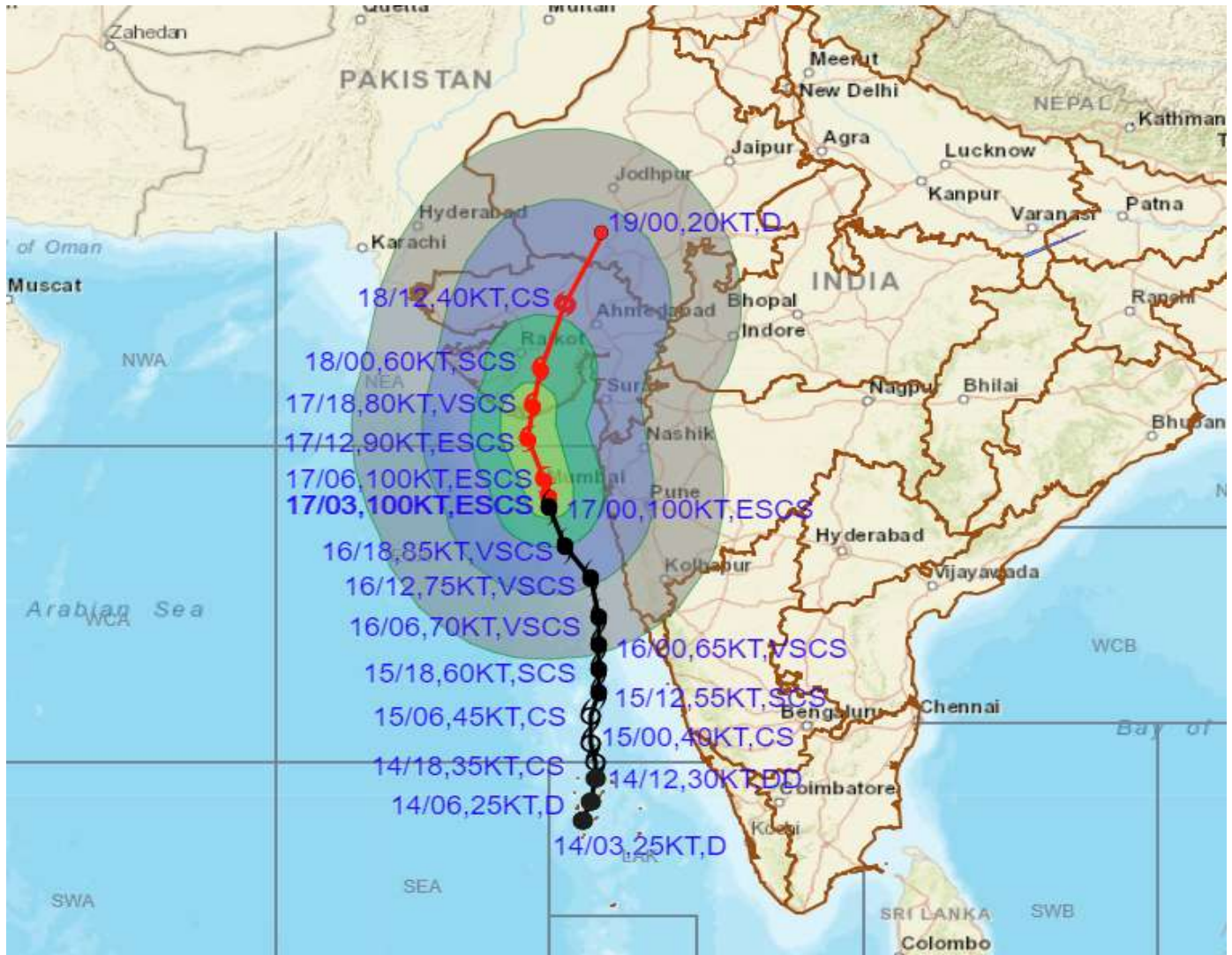
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

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

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DATE/TIME IN UTC

IST=UTC + 0530

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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

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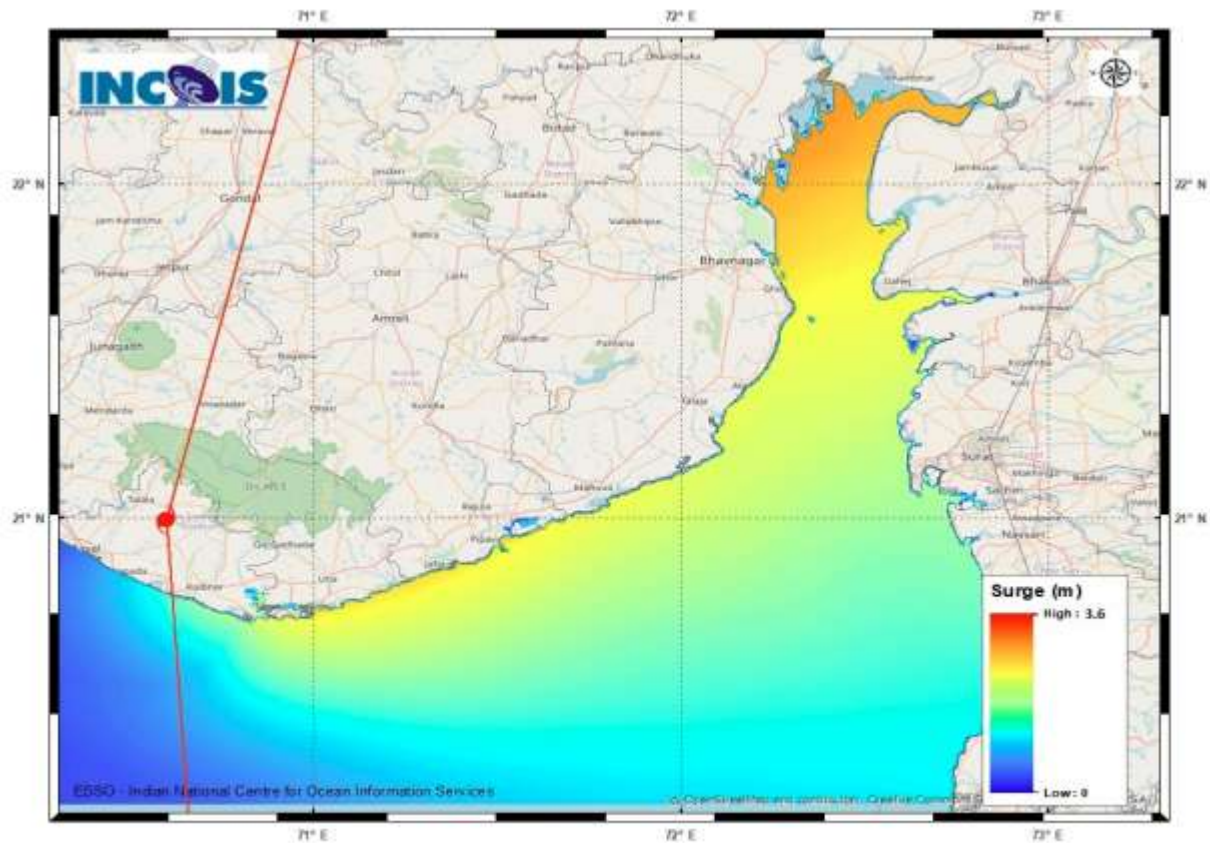


Figure: Storm Surge Map

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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	Mitli	0.8-3.3	Upto 4.3
Hansot Mahal	Bharuch	Gujarat	Kantivajal	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 Somnath	Gujarat	Kodinar	1.5-3.0	Upto 0.5
Mundra	Bhavnagar	Gujarat	Vadgam	2.4-2.4	Upto 0.9
Diu	Diu	Daman and Diu	Diu	1.6-2.9	Upto 0.7
Mahuva	Bhavnagar	Gujarat	Katpar (ct)	1.4-2.4	Upto 0.2
Bharuch	Bharuch	Gujarat	Kasva	1.3-2.3	Upto 0.1
Bhavnagar	Bhavnagar	Gujarat	Narbad	1.1-2.9	Upto 2.4
Borsad	Anand	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	Malvan	1.1-1.5	Upto 0.3
Gandevi	Navsari	Gujarat	Mendhar	0.8-1.6	Upto 1.2
Dahanu	Palghar	Maharashtra	Narpad	0.5-1.2	Upto 1.0
Daman	Daman	Daman and Diu	Daman	0.9-1.3	Nil
Navsari	Navsari	Gujarat	Borsi	0.9-1.8	Upto 0.4
Olpad	Surat	Gujarat	Vansva	1.5-2.1	Upto 0.6
Veraval	Gir Somnath	Gujarat	Mul Dwarka	0.5-1.8	Upto 0.2
Palghar	Palghar	Maharashtra	Akkarpatti	0.4-1.0	Upto 0.5
Panvel	Raigarh	Maharashtra	Gavhan	0.7-0.7	Upto 0.5
Rajula	Amreli	Gujarat	Patva	1.1-2.7	Upto 0.3
Talaja	Bhavnagar	Gujarat	Talaja	1.6-2.3	Upto 0.2
Umargam	Valsad	Gujarat	Umargam	1.2-1.3	Upto 0.2
Uran	Raigarh	Maharashtra	Sheva	0.6-0.7	Upto 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 Bombay	0.6-0.7	Nil
Alibag	Raigarh	Maharashtra	Ranjankhar Duvali	0.5-0.7	Upto 1.9
Maliya	Junagadh	Gujarat	Vadodra Dudiya	0.3-0.3	Upto 0.1
Mangaon	Raigarh	Maharashtra	Water Body	0.5-0.5	Upto 0.1

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Heavy rainfall Warning for Gujarat State for 17th and 18th May



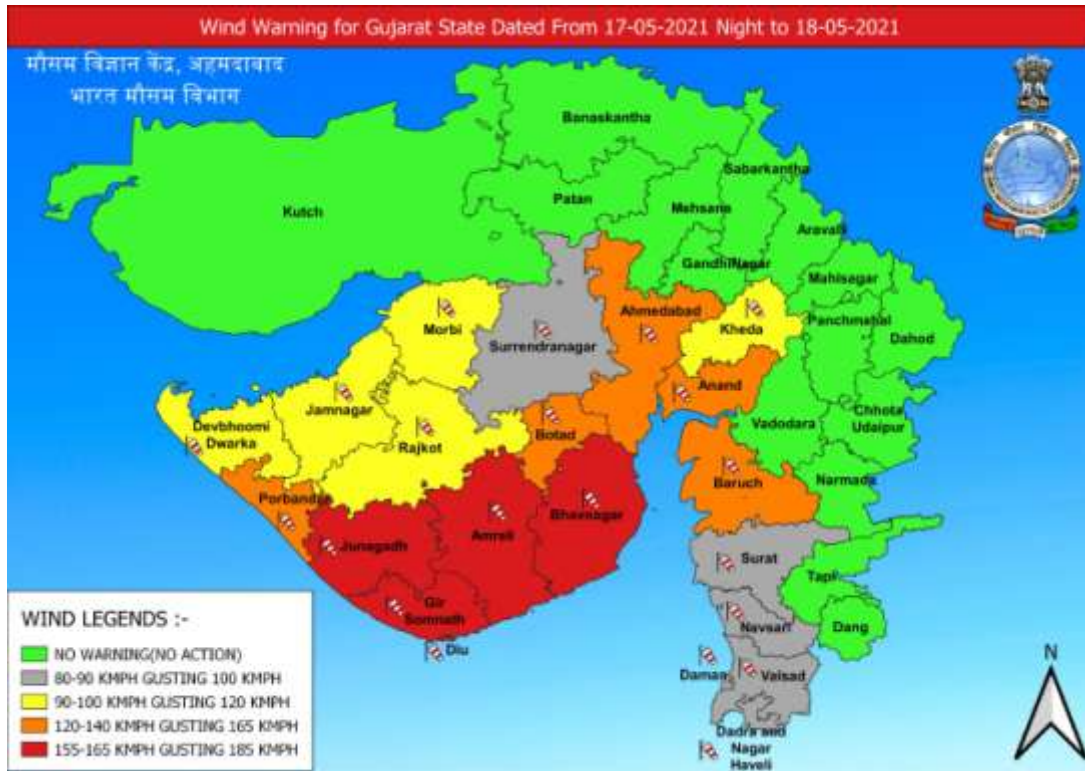
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Wind Warning for Gujarat State from 17th night to 18th May



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