



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO.: 12 (ARB/01/2021)

TIME OF ISSUE: 2200 HOURS IST

DATED: 15.05.2021

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Sub: Severe Cyclonic Storm "Tauktae" (pronounced as Tau'Te) over Eastcentral Arabian Sea: Cyclone Alert for Gujarat & Diu coasts (Yellow message)

The **Severe Cyclonic Storm "Tauktae" (pronounced as Tau'Te)** over eastcentral Arabian Sea moved nearly northwards with a speed of about 13 kmph during past 06 hours and lay centred at 2030 hours IST of today, the 15th May, 2021 over eastcentral Arabian Sea near latitude 14.2°N and longitude 72.7°E, about 190 km southwest of Panjim-Goa, 550 km south of Mumbai, 780 km south-southeast of Veraval (Gujarat) and 910 km south-southeast of Karachi (Pakistan).

It is very likely to intensify into a Very Severe Cyclonic Storm during next 12 hours and intensify further. It is very likely to move north-northwestwards and reach Gujarat coast in the morning of 18th & cross Gujarat coast between Porbandar & Naliya around 18th May Afternoon / evening.

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
15.05.21/2030	14.2/72.7	100-110 gusting to 120	Severe Cyclonic Storm
15.05.21/2330	14.5/72.6	110-120 gusting to 130	Severe Cyclonic Storm
16.05.21/0530	15.3/72.3	115-125 gusting to 140	Very Severe Cyclonic Storm
16.05.21/1130	15.7/72.0	125-135 gusting to 150	Very Severe Cyclonic Storm
16.05.21/1730	16.4/71.5	135-145 gusting to 160	Very Severe Cyclonic Storm
17.05.21/0530	17.9/70.8	145-155 gusting to 170	Very Severe Cyclonic Storm
17.05.21/1730	19.4/70.1	150-160 gusting to 175	Very Severe Cyclonic Storm
18.05.21/0530	20.7/69.5	150-160 gusting to 175	Very Severe Cyclonic Storm
18.05.21/1730	22.3/69.4	145-155 gusting to 170	Very Severe Cyclonic Storm
19.05.21/0530	24.1/69.7	75-85 gusting to 95	Cyclonic Storm
19.05.21/1730	25.9/70.1	40-50 gusting to 60	Depression

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.

Warnings:

(i) Rainfall:

- **Lakshadweep Islands:** Light to moderate rainfall at most places with heavy to very heavy falls at isolated places over northern Islands on 15th May and heavy falls at isolated places on 16th May.
- **Kerala:** Light to moderate rainfall at many places with heavy to very heavy falls at isolated places during next 12 hours, heavy to very heavy falls at isolated places on 16th and heavy falls at isolated places on 17th May.
- **Tamil Nadu (Ghat districts):** Light to moderate rainfall at many places with heavy to very heavy falls at isolated places on 15th May.
- **Karnataka (coastal & adjoining Ghat districts):** Light to moderate rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at isolated places on 15th and heavy to very heavy falls at isolated places on 16th.
- **Konkan & Goa:** Light to moderate rainfall at most places with heavy to very heavy falls at a few places over south Konkan & Goa and heavy to very heavy falls at isolated places over north Konkan on 15th and heavy to very heavy falls at a few places over Konkan & Goa & adjoining Ghat areas on 16th and heavy falls at isolated places on 17th May over north Konkan.
- **Gujarat:** Light to moderate rainfall at many places very likely to commence over coastal districts of Saurashtra from 16th May afternoon, with heavy to very heavy falls at isolated places over Saurashtra & Kutch and Diu and extremely heavy falls at isolated places in Junagarh & Gir Somnath Districts on 17th and with heavy to very heavy falls at a few places over Saurashtra & Kutch and Diu with extremely heavy falls (≥ 20 cm) at isolated places of Porbandar, Devbhoomi Dwarka, Jamnagar & Kutch districts on 18th.
- **West Rajasthan:** Light to moderate rainfall at many places with heavy to very heavy falls at isolated places very likely on 18th & 19th May.

(ii) Wind warning

- Gale wind speed reaching 100–110 kmph gusting to 120 kmph is prevailing over east-central Arabian Sea. It is likely to increase over eastcentral Arabian Sea becoming 120-130 kmph gusting to 145 kmph from 16th May morning.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph along & off Kerala coast, southeast Arabian Sea and Lakshadweep area on 15th May and reduce gradually from tomorrow.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph likely along & off Karnataka south Maharashtra & Goa coasts on 15th and Gale winds speed reaching 60-70 kmph gusting to 80 kmph along & off Maharashtra –Goa coasts on 16th & 17th May.
- 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 on 17th morning and gradually increase becoming Gale winds speed reaching 150-160 kmph gusting to 175 kmph over northeast Arabian Sea from 18th morning and along & off Saurashtra & Kutch coasts (Devbhoomi Dwarka & Porbandar) and 120 -150 kmph gusting to 165 kmph over Kutch, Porbandar, Junagarh, Jamnagar districts of Gujarat from 18th May afternoon / evening for subsequent 06 hours.

(iii) Sea condition

- Sea conditions will be very rough over southeast Arabian Sea and adjoining Lakshadweep - Maldives area & equatorial Indian Ocean during next 12 hours.
- Sea condition over eastcentral Arabian Sea will be high to very high on 15th & very high to Phenomenal on 16th May and over northeast Arabian Sea on 17th & 18th May.
- Sea conditions will be rough to very rough over Comorin area and along & off Kerala coast on 15th, very rough to High over east central Arabian Sea along & off Karnataka coast on 15th May and Maharashtra – Goa coasts on 15th & 16th May. It is very likely to be very rough to High over

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northeast Arabian Sea along & off south Gujarat coast from 17th May morning and very high to Phenomenal from 18th morning.

(iv) Storm surge warning

Tidal wave of about 2- 3 m above astronomical tide is likely to inundate coastal areas of Morbi, Kutch, Devbhoomi Dwarka & Jamnagar districts and 1-2 meters along Porbandar, Junagarh, Diu, Gir Somnath, Amreli, Bhavnagar and 0.5 to 1m over the remaining coastal districts of Gujarat during the time of landfall..

(v) Fishermen Warning

- Total suspension of fishing operations over eastcentral and adjoining southeast Arabian Sea and along & off Kerala – 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 southeast Arabian Sea, Lakshadweep – Maldives areas, east central Arabian Sea along & off Karnataka coast, eastcentral Arabian Sea and along & off Maharashtra – Goa coasts and into eastcentral& adjoining 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 Devbhoomi Dwarka, Kutch, Porbandar, Junagarh, Gir Somnath & Jamnagar districts of Gujarat:

- 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 Amreli, Rajkot & Morbi 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:

- 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 next bulletin will be issued at 0230 hrs IST of tomorrow, the 16th May, 2021.

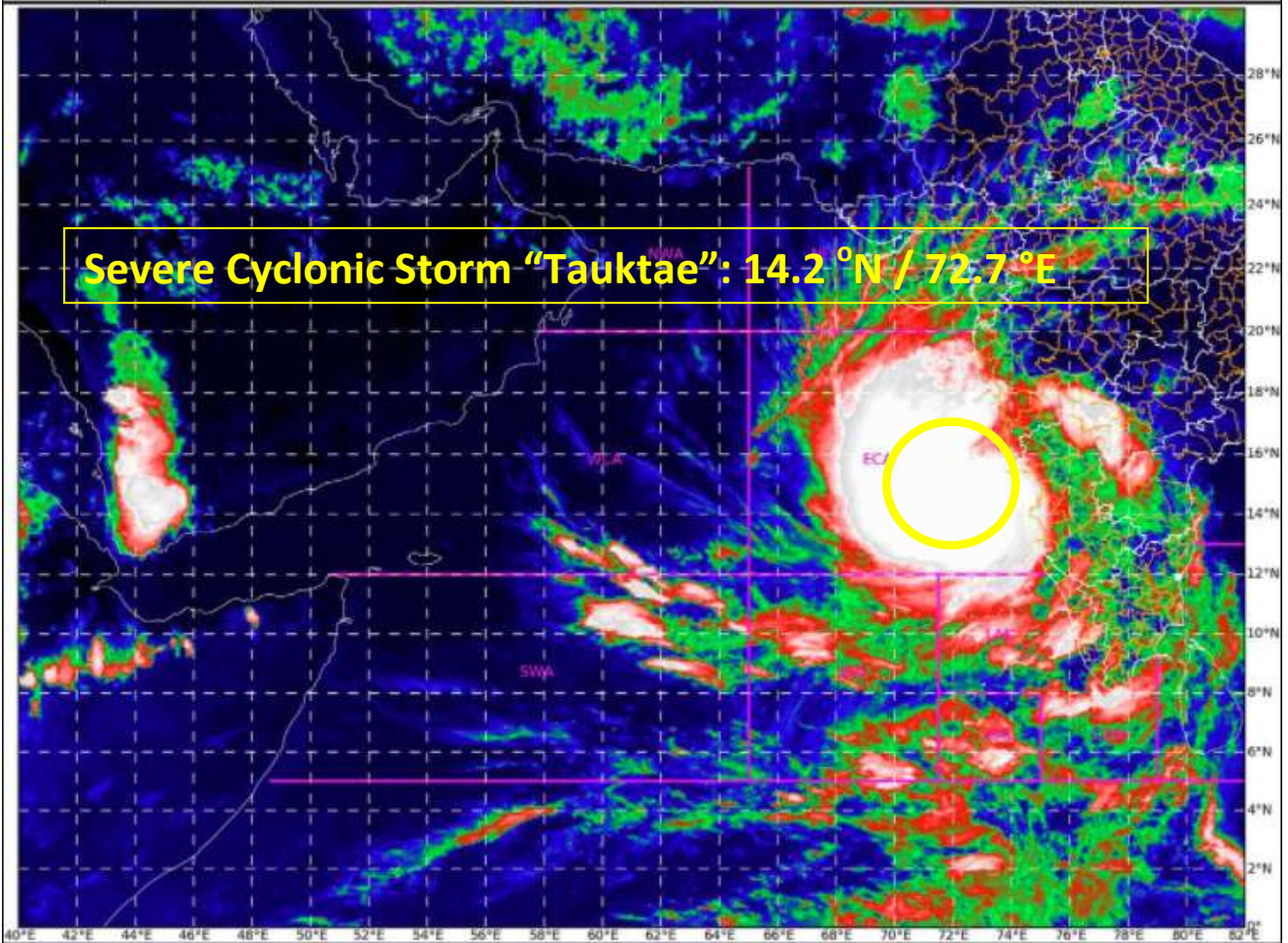
(DR Pattanaik)
Scientist-F, RSMC, New Delhi

Copy to: ACWC Chennai/ ACWC Mumbai/ MC Goa/ MC Bengaluru/ CWC Ahmedabad/ Thiruvananthapuram.

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SAT : INSAT-3D IMG
IMG_TIR1_TEMP 10.8 um
ARABIAN_SEA

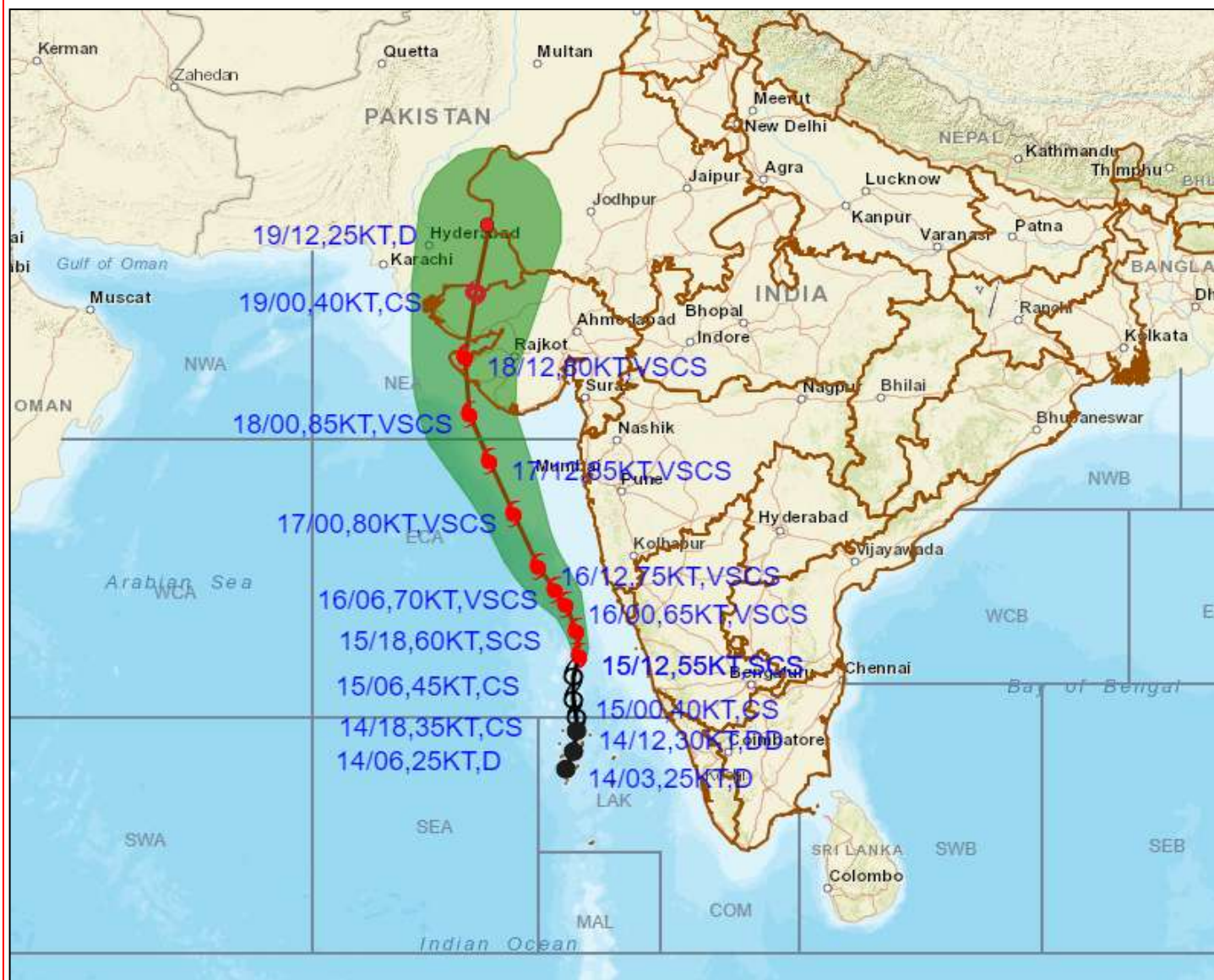
15-05-2021/(1530 to 1556) GMT
15-05-2021/(2100 to 2126) IST



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OBSERVED AND FORECAST TRACK OF SEVERE CYCLONIC STORM "TAUKTAE" OVER EASTCENTRAL ARABIAN SEA BASED ON 1200 UTC OF 15TH 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

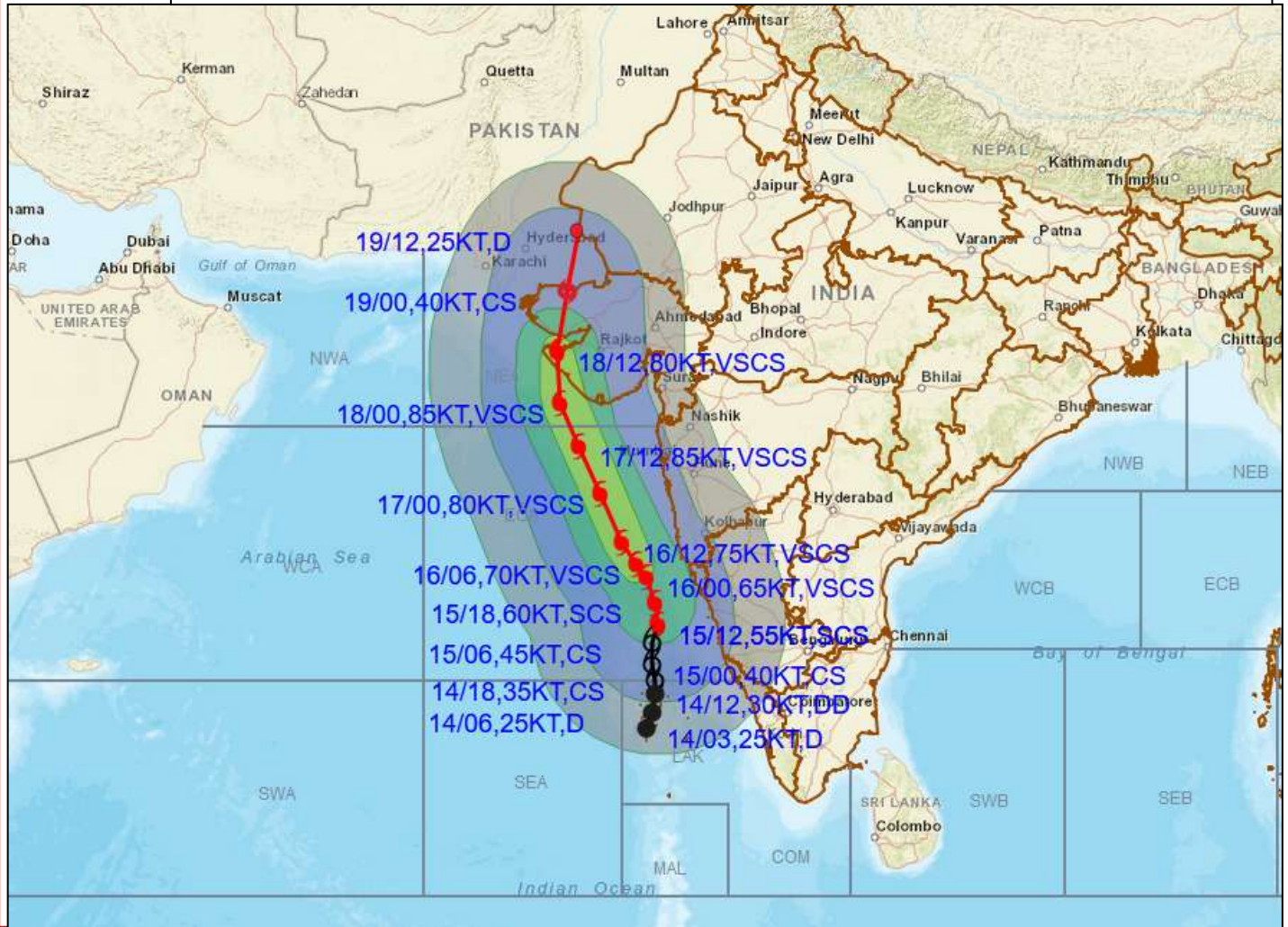
▲ CONE OF UNCERTAINTY

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



OBSERVED & FORECAST TRACK OF SEVERE CYCLONE 'TAUKTAE' WITH CONE OF UNCERTAINTY OVER EAST CENTRAL ARABIAN SEA AT 1200 UTC OF 15TH 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 (≥20 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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