



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL CYCLONE ADVISORY BULLETIN NO. 27

FROM: RSMC –TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)
OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 27 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0200 UTC OF 18.05.2021 BASED ON 0000 UTC OF 18.05.2021.

SUB: VERY SEVERE CYCLONIC STORM “TAUKTAE” (PRONOUNCED AS TAU’TE) OVER SAURASHTRA

THE **VERY SEVERE CYCLONIC STORM “TAUKTAE” (PRONOUNCED AS TAU’TE)** OVER SAURASHTRA MOVED NORTH-NORTHEAST WARDS WITH A SPEED OF ABOUT 11 KMPH DURING PAST 06 HOURS AND LAY CENTRED AT 0000 UTC OF TODAY, THE 18TH MAY, 2021 OVER SAURASHTRA NEAR LATITUDE 21.5°N AND LONGITUDE 71.2°E, ABOUT 95 KM NORTH-NORTHEAST OF DIU(42914) AND 10 KM SOUTH OF AMRELI AND 230 KM SOUTH-SOUTHWEST OF AHMEDABAD(42647). IT IS VERY LIKELY TO MOVE NORTH-NORTHEASTWARDS AND WEAKEN GRADUALLY INTO A SEVERE CYCLONIC STORM BY NEXT 03 HOURS.

Forecast track and intensity are given in the following table:

DATE/TIME(UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
18.05.21/0000	21.5/71.2	115-125 GUSTING TO 140	VERY SEVERE CYCLONIC STORM
18.05.21/0600	22.2/71.5	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
18.05.21/1200	23.0/71.8	60-70 GUSTING TO 80	CYCLONIC STORM
18.05.21/1800	23.8/72.1	50-60 GUSTING TO 70	DEEP DEPRESSION
19.05.21/0000	24.6/72.4	35-45 GUSTING TO 55	DEPRESSION

REMARKS:

AS PER INSAT-3D SATELLITE IMAGERY BASED ON 0000 UTC OF TODAY THE 18th MAY 2021, THE ASSOCIATED VORTEX IS NOW SEEN OVER OVER LAND(SOUTH GUJARAT). ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER EASTCENTRAL & ADJOINING NORTHEAST ARABIAN SEA (AS) BETWEEN LATITUDE 18 0°N & 22 5°N AND EAST OF LONG 68 0E AND ALSO OVER

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

GULF OF CAMBAY, GUJARAT, KONKAN GOA AND NORTH MADHYA MAHARASHTRA.
MINIMUM CLOUD TOP TEMPERATURE IS -93°C.

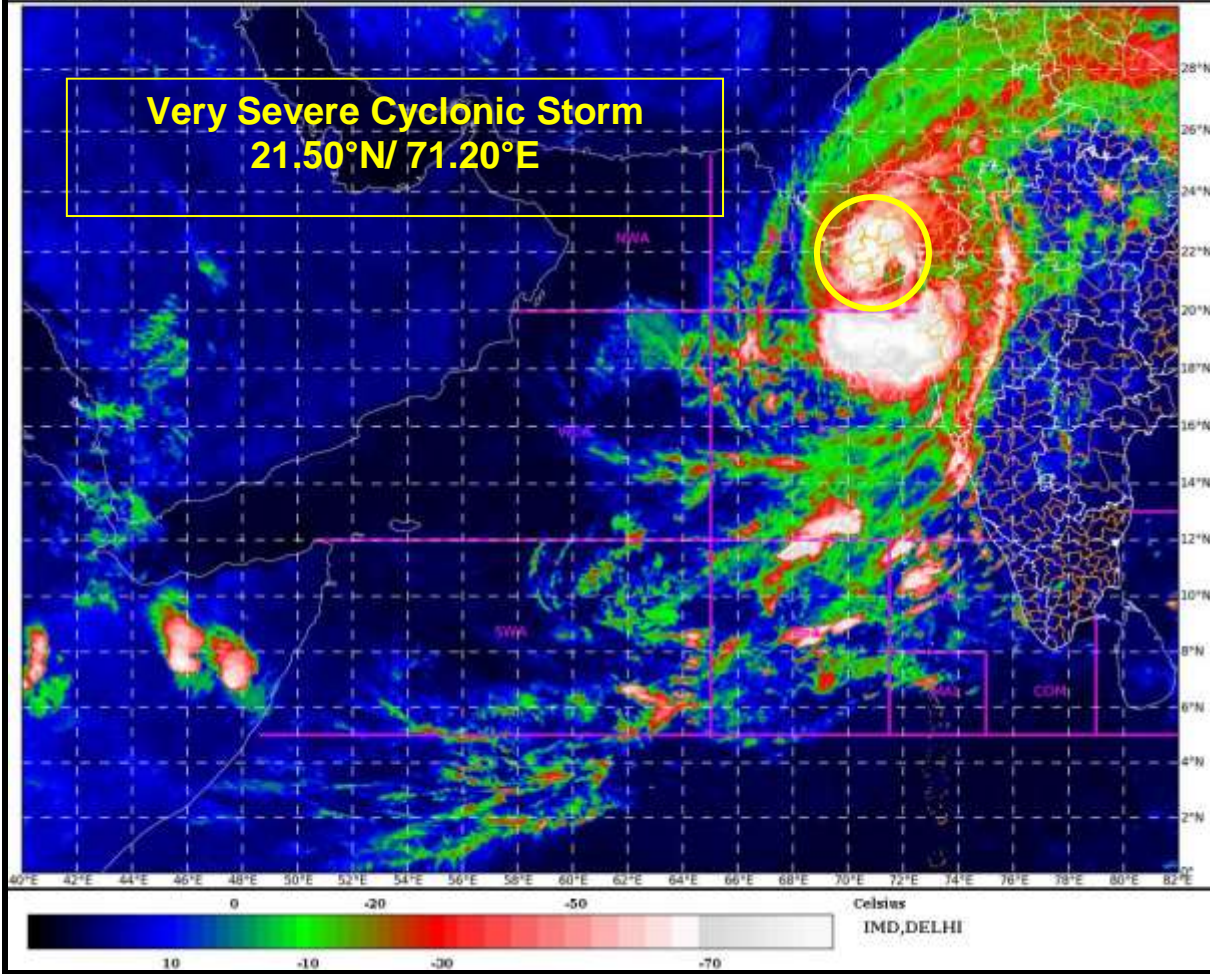
THE ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 65 KNOTS GUSTING TO 75 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 980HPA. SEA CONDITION IS PHENOMENAL.

THE LOW LEVEL CYCLONIC VORTICITY HAS REDUCED AND IS ABOUT $200-250 \times 10^{-6} \text{ S}^{-1}$ AROUND SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS ($40 \times 10^{-5} \text{ S}^{-1}$) TO THE SOUTH OF SYSTEM CENTRE. POSITIVE UPPER LEVEL DIVERGENCE IS ($30 \times 10^{-5} \text{ S}^{-1}$) AND LIES TO THE SOUTH OF THE SYSTEM CENTRE.. UPPER TROPOSPHERIC RIDGE RUNS ALONG 22°N AND LIES TO THE EAST OF THE SYSTEM.

(RK J ENAMANI)
SCIENTIST-F
RSMC, NEW DELHI

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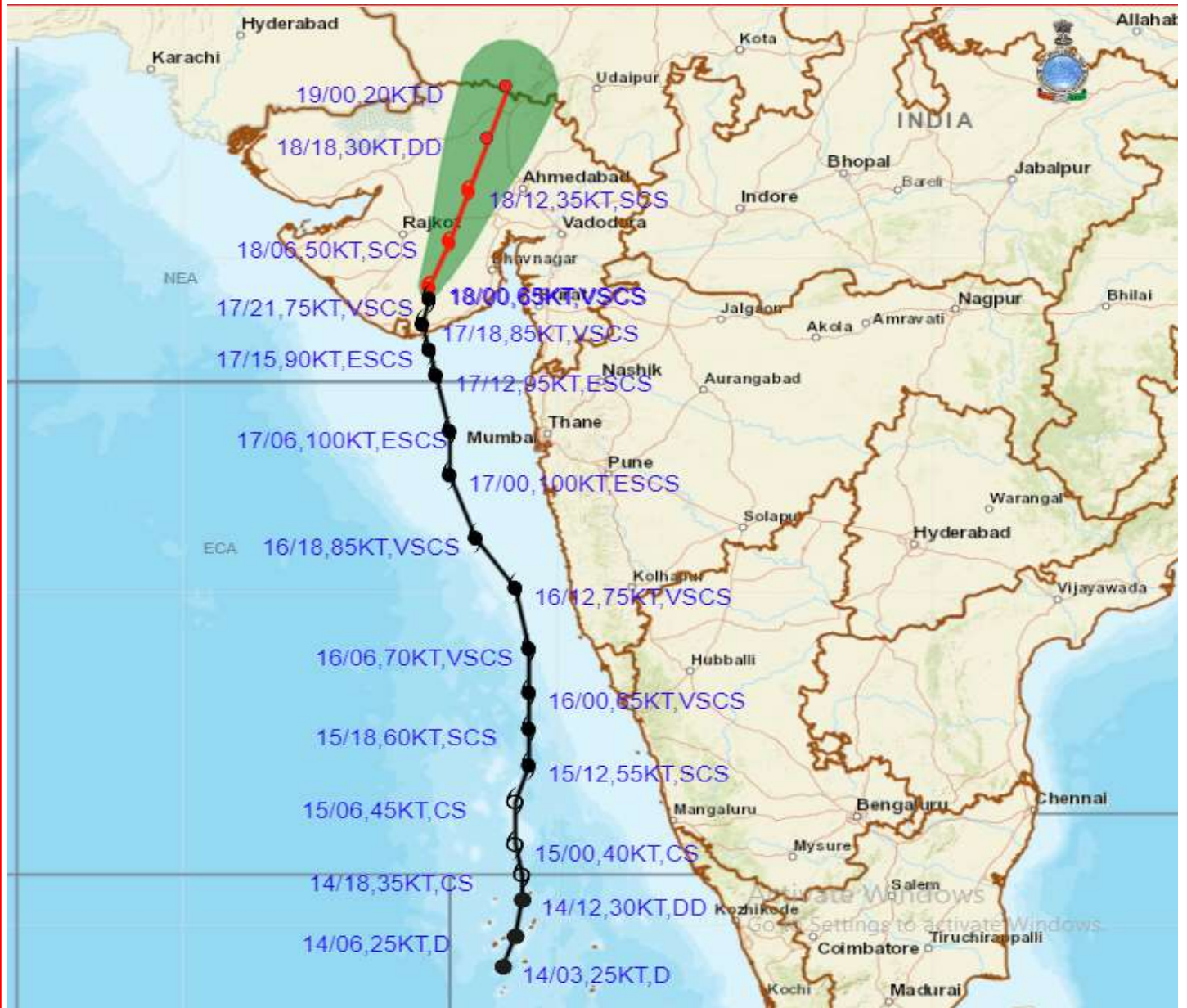


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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM "TAUKTAE" OVER SAURASHTRA BASED ON 0000 UTC OF 18TH MAY, 2021



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)

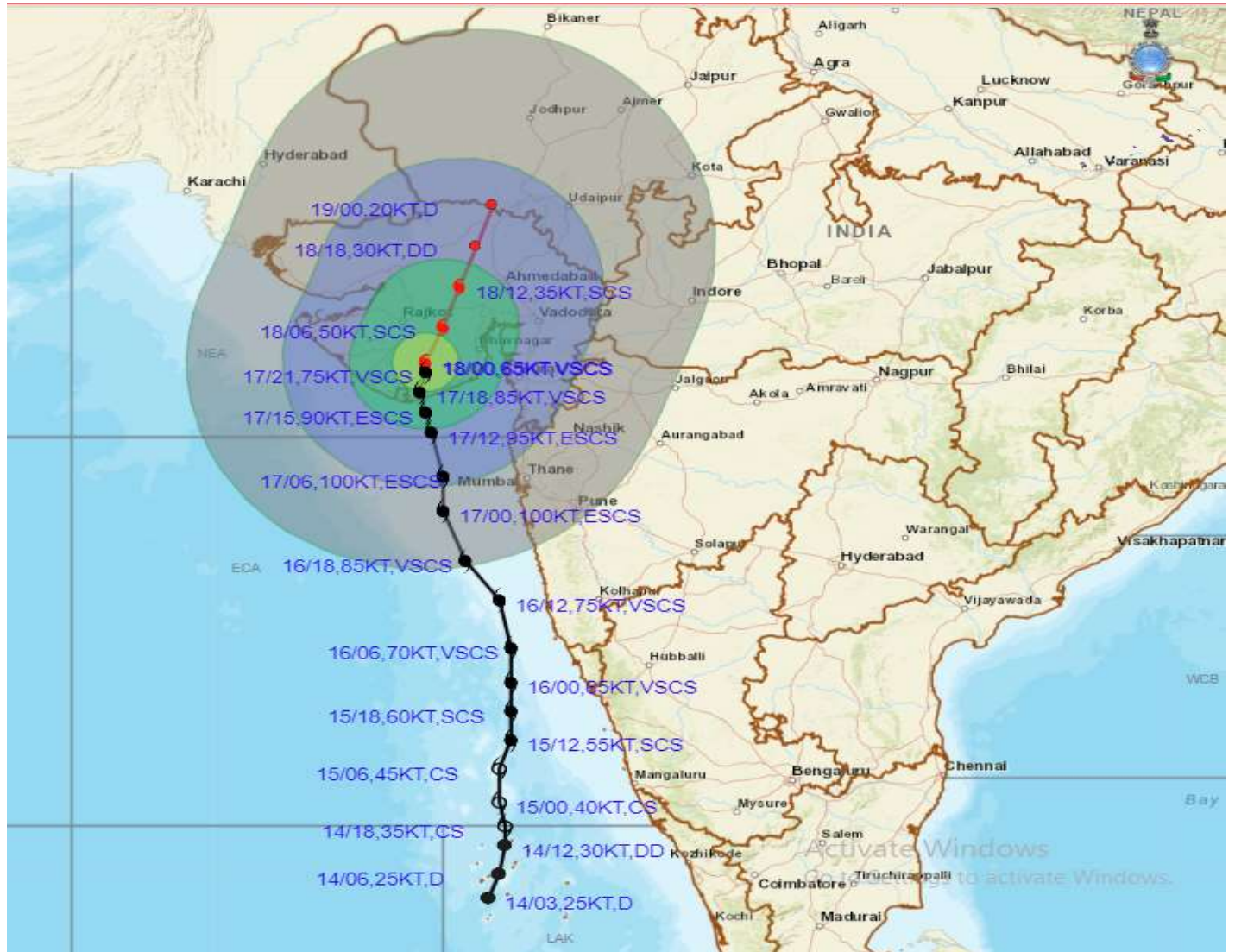
- LESS THAN 34 KT
- 34-47 KT
- \geq 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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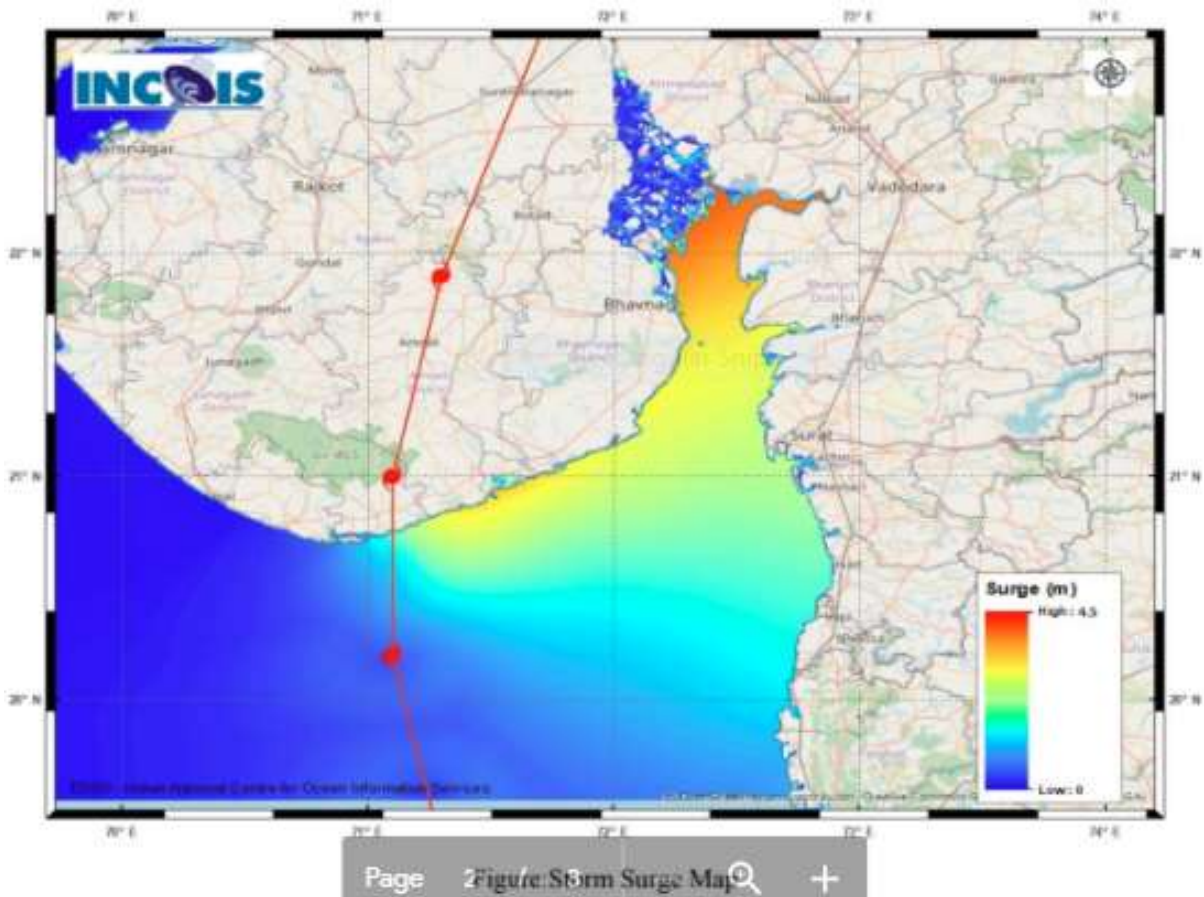
● LESS THAN 34 KT
 ○ 34-47 KT
 ● \geq 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ● CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ \geq 64 KT (\geq 118 KMPH)

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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STORM SURGE GUIDANCE FROM INCOIS BASED ON 0530 HRS IST OBSERVATIONS

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
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STORM SURGE HEIGHT INFORMATION:

Open with ▾

* The below listed surge heights are over and above actual surge heights.

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	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	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	Tadachukond	0.4-0.5	Upto 0.11
Mandangarh	Ratnagiri	Maharashtra	Danda	0.4-0.5	Nil

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