



## REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI TROPICAL CYCLONE ADVISORY BULLETIN NO. 29

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. 29 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1500 UTC OF 18.05.2021 BASED ON 1200 UTC OF 18.05.2021.

SUB: CYCLONIC STORM "TAUKTAE" (PRONOUNCED AS TAU'TE) OVER GUJARAT REGION

THE **SEVERE CYCLONIC STORM "TAUKTAE" (PRONOUNCED AS TAU'TE)** OVER SAURASHTRA MOVED NORTH-NORTHEASTWARDS AND WEAKENED INTO A CYCLONIC STORM AT 0600 UTC OF TODAY, THE 18<sup>TH</sup> MAY OVER SAURASHTRA. CONTINUING TO MOVE NORTH-NORTHEASTWARDS, IT LAY CENTERED AT 1200 UTC OVER GUJARAT REGION NEAR LATITUDE 23.1°N AND LONGITUDE 72.3°E, ABOUT 120 KM SOUTH-SOUTHEAST OF DEESA (42539), AND 35 KM WEST OF AHMEDABAD (42647) AND 80 KM EAST-NORTHEAST OF SURENDRANAGAR (42740).

IT IS VERY LIKELY TO MOVE NORTH-NORTHEASTWARDS AND WEAKEN GRADUALLY INTO A DEEP DEPRESSION DURING NEXT 03 HOURS AND INTO A DEPRESSION DURING THE SUBSEQUENT 06 HOURS. THE REMNANT OF THE SYSTEM IS VERY LIKELY TO MOVE NORTHEASTWARDS ACROSS RAJASTHAN TO WEST UTTAR PRADESH DURING  $19^{\rm TH}$  &  $20^{\rm TH}$  MAY.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
18.05.21/1200	23.1/72.3	60-70 gusting to 90	Cyclonic Storm
18.05.21/1800	23.9/72.8	55-65 gusting to 75	Deep Depression
19.05.21/0000	24.7/73.5	40-50 gusting to 60	Depression
19.05.21/0600	25.5/74.2	20-30 gusting to 40	Well Marked Low

#### **REMARKS:**

AS PER INSAT-3D SATELLITE IMAGERY BASED ON 1200 UTC OF TODAY THE 18<sup>th</sup> MAY 2021, THE ASSOCIATED VORTEX IS OVER LAND. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH GUJARAT, NORTH KONKAN, GULF OF CAMBAY AND ADJOINING EASTCENTRAL ARABIAN SEA AND MODERATE TO INTENSE CONVECTION OVER SOUTH RAJASTHAN, GULF OF KUTCH, SOUTH KONKAN, MADHYA MAHARASHTRA, NORTHWEST VIDARBHA, SOUTHWEST

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

MADHYA PRADESH AND ADJOINING EASTCENTRAL & NORTHEAST ARABIAN SEA BETWEEN LATITUDE 18.0°N & 22.5°N AND EAST OF LONG 65.0E.

THE ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 35 KNOTS GUSTING TO 45 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 994 HPA.

THE LOW LEVEL CYCLONIC VORTICITY HAS REDUCED AND IS ABOUT 200 X10<sup>-6</sup> S<sup>-1</sup> AROUND SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS ABOUT (50 X10<sup>-5</sup> S<sup>-1</sup>) TO THE SOUTH OF SYSTEM CENTRE. POSITIVE UPPER LEVEL DIVERGENCE IS (30 X 10<sup>-5</sup> S<sup>-1</sup>) AND LIES TO THE SOUTH OF THE SYSTEM CENTRE.. UPPER TROPOSPHERIC RIDGE RUNS ALONG 23.0<sup>0</sup>N AND LIES TO THE EAST OF THE SYSTEM CENTRE.

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1500 UTC OF 18.05.2021 BASED ON 1200 UTC OF 18.05.2021.

#### **BAY OF BENGAL:**

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL (BOB), ADJOINING EQUATORIAL INDIAN OCEAN AND ANDAMAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHWEST BOB.

A LOW PRESSURE AREA IS LIKELY TO FORM OVER EASTCENTRAL BOB AROUND 23<sup>RD</sup> MAY, 2021.

### PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	NIL	NIL

#### **ARABIAN SEA:**

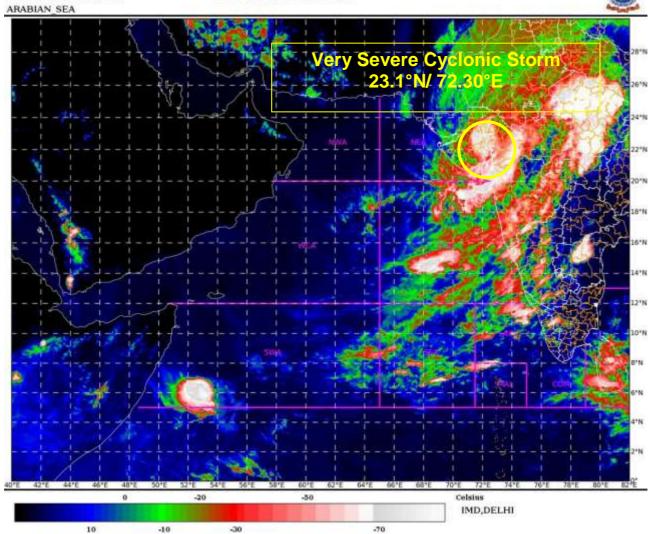
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER GULF OF CAMBAY, EASTCENTRAL ARABIAN SEA OFF NORTH KONKAN COAST & NEIGHBOURHOOD BETWEEN LATITUDE 18.0°N & 22.5°N AND EAST OF LONG 69.0E. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER REST EASTCENTRAL & ADJOINING NORTHEAST ARABIAN SEA AND SOUTHEAST ARABIAN SEA.

## PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	NIL	NIL

(SUNITHA DEVI) SCIENTIST-F RSMC, NEW DELHI







# OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM "TAUKTAE" OVER GUJARAT BASED ON 1200 UTC OF 18<sup>TH</sup> 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)

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

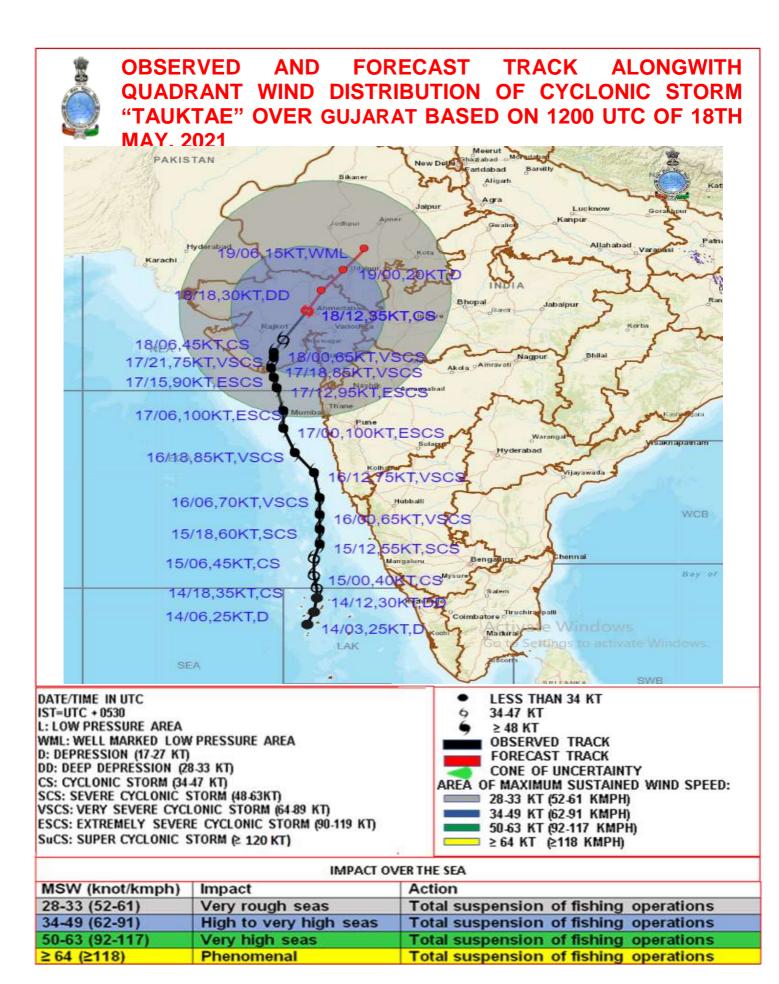
34.47 KT

≥ 48 KT

OBSERVED TRACK

FORECAST TRACK

CONE OF UNCERTAINTY



# HEAVY RAINFALL WARNING FOR GUJARAT STATE TILL 0830 HOURS IST OF 19<sup>TH</sup> MAY



## WIND WARNING FOR GUJARAT STATE FOR NEXT 06 HOURS

