

TROPICAL CYCLONE 05A

BEST TRACK - TC 05A

14 OCT - 02 NOV 96

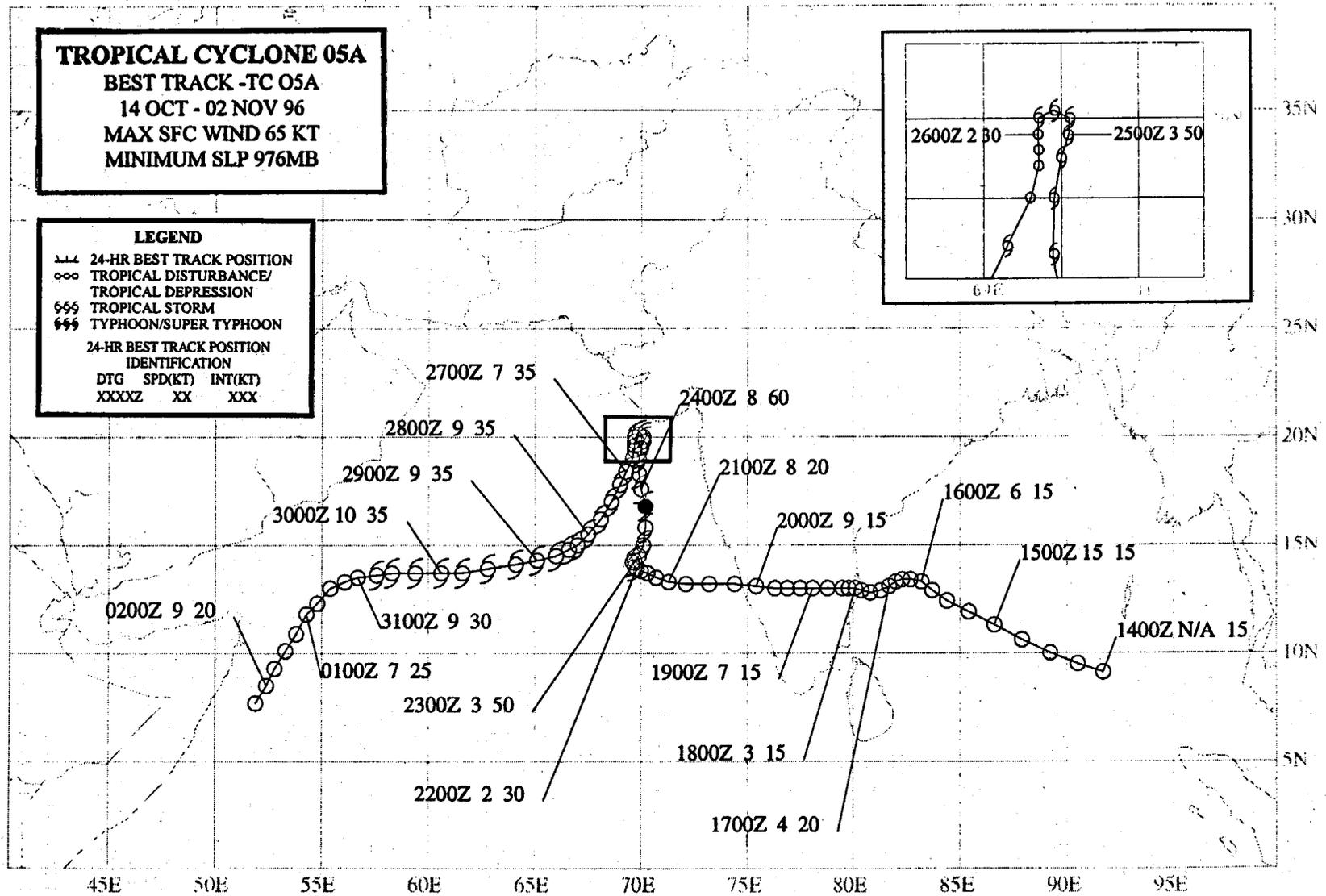
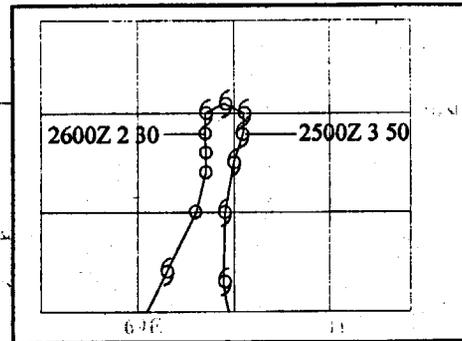
MAX SFC WIND 65 KT

MINIMUM SLP 976MB

LEGEND

- 24-HR BEST TRACK POSITION
- ooo TROPICAL DISTURBANCE/
TROPICAL DEPRESSION
- 666 TROPICAL STORM
- 666 TYPHOON/SUPER TYPHOON

24-HR BEST TRACK POSITION
IDENTIFICATION
DTG SPD(KT) INT(KT)
XXXXZ XX XXX



TROPICAL CYCLONE 05A

I. HIGHLIGHTS

Tropical Cyclone 05A (TC 05A), the third Arabian Sea cyclone of 1996, initially started as a mid-October disturbance in the Bay of Bengal, and had one of the most unusual tracks in North Indian Ocean cyclone history. It moved across southern India into the Arabian Sea, stopped, turned north, and intensified. Near 20°N 70°E, the system turned to the southwest, and remained on that track for nine days before dissipating near the Somalia coast. TC-05A was one of the longest-lived cyclones ever in the North Indian Ocean. The Arabian Sea generally averages about one cyclone per year.

II. TRACK AND INTENSITY

TC 05A was first observed as a suspicious area of convection in the southwest Bay of Bengal, about 350 nm (648 km) east of Madras (WMO 43279) on 14 October. After crossing the southern part of the Indian Peninsula and entering the Arabian Sea at speeds ranging from 3-13 kt (5.5-24 km/hr), the disturbance began to organize, and a Tropical Cyclone Formation Alert was issued at 211600Z based on an observed increase in convective curvature and low-level cloud lines in satellite imagery. Shortly thereafter, the disturbance abruptly stopped, began to intensify, and turned to the north near 70°E. The first warning was valid at 221200Z based on a Dvorak T-number of T2.5 (35 kt; 18 m/sec) (Figure 3-05A-1). The system reached an intensity of 65 kt (34 m/sec) (Figure 3-05A-2) on its northward track, then suddenly stopped its northward movement about 50 nm (93 km) south of the southern coast of Gujarat State of northwestern India, after running into strong northeasterly shear. Six hours later, the system began to rapidly weaken from the shear, and took a south-southward track. The final warning was issued at 260000Z, but the system was monitored for regeneration. Figure 3-05A-3 shows the remnants of the cyclone on microwave imagery. These remnants of TC 05A drifted south, away from the region of strong vertical wind shear which had blown away the deep convection. A second Tropical Cyclone Formation Alert was generated at 271600Z when a ship indicated the remnants of TC 05A had a central pressure of 996 mb and 35-kt (18-m/sec) sustained winds. At 280000Z, warnings were resumed for the regenerated cyclone. The system remained, on a southwestward track at minimal tropical-storm intensity. TC 05A finally weakened about two days later, and the final warning was issued at 311200Z while the depression was 60 nm (111 km) northeast of Socotra Island (Figure 3-05A-4).

III. IMPACT

No reports of injuries or damage were received at the JTWC.

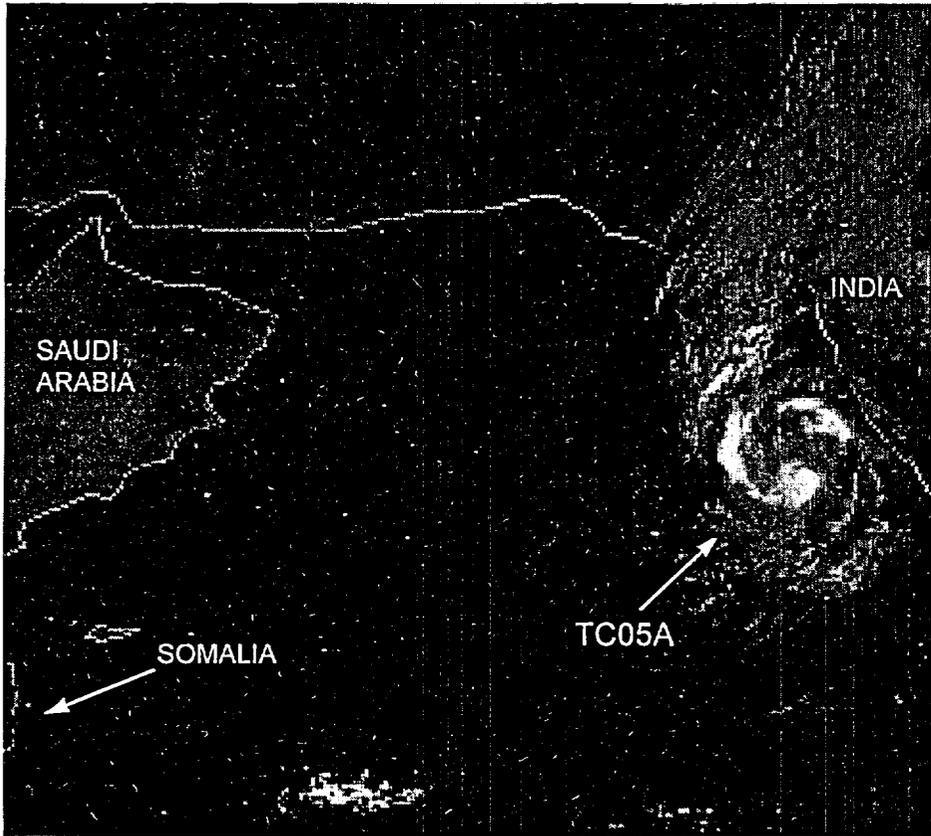


Figure 3-05A-1 TC-05A as deep convection begins to build over the LLCC. (230450Z October DMSP visible imagery). (Imagery downloaded from the Space Physics Interactive Data Resource (SPIDR) internet site maintained by NGDC).

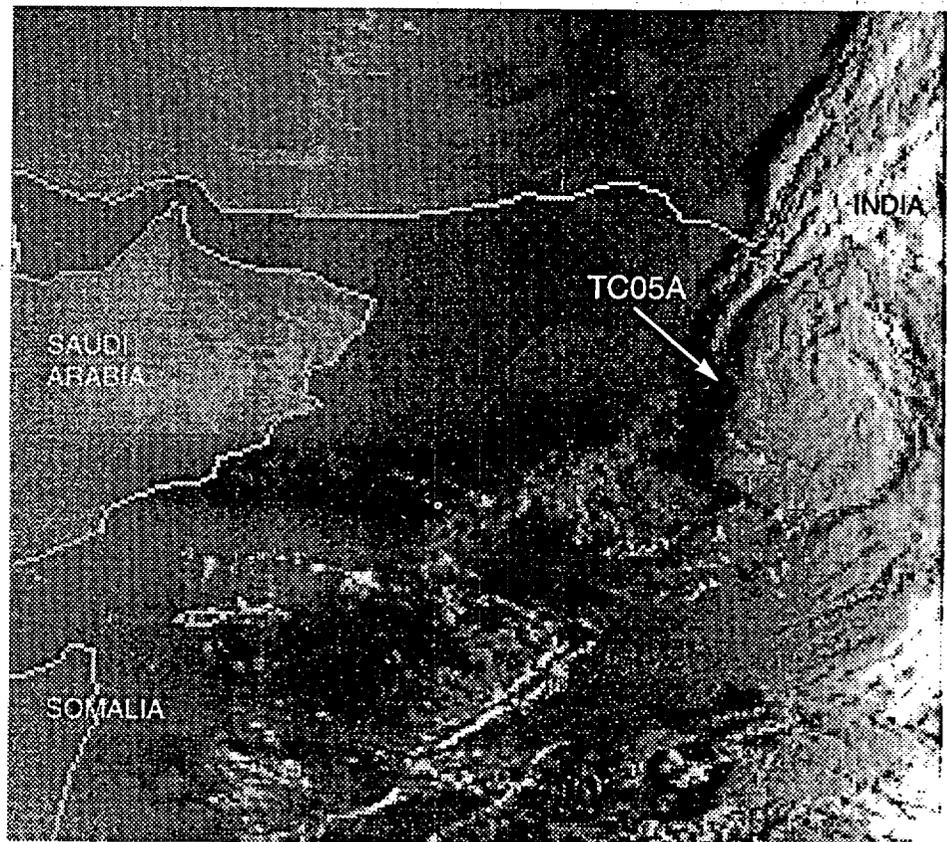


Figure 3-05A-2 TC-05A at a Dvorak T4.0 (240114Z October DMSP visible imagery). (Imagery downloaded from SPIDR).

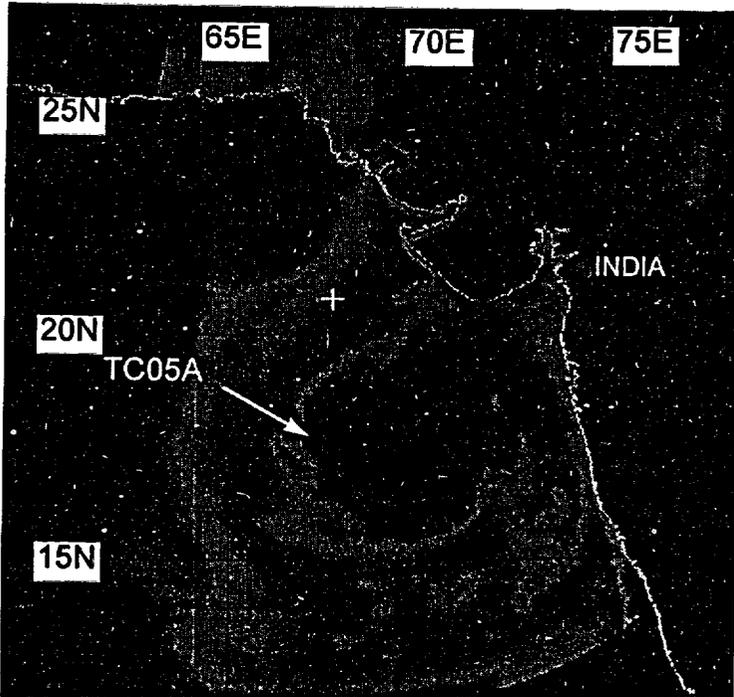


Figure 3-05A-3 The remnants of TC-05A after it had sheared from the convection. The dark circulation signifies low-and-middle-level clouds. (270127Z October DMSP microwave imagery).

Figure 3-05A-4 The remnant LLCC of TC-05A as it approached the Somali coast (020430Z November DMSP visible imagery). (Imagery downloaded from SPIDR).

