

Tropical Cyclone 03A

Tropical Cyclone 03A, the most intense tropical cyclone to strike India in 25 years, formed off the southwest tip of India early in June. The storm tracked westward over the Arabian Sea, then turned north and moved inland near Porbandar, India. TC 03A attained a maximum intensity of 105 kt, just prior to making landfall.

JTWC issued a Tropical Cyclone Formation Alert at 030200Z June for an area of convection in the Lacadive Islands. This area of convection continued to organize, and JTWC issued the first warning on TC 03A at 040300Z June.

The cyclone initially tracked slowly west-northwestward away from the Indian coast in response to steering flow of a mid-level ridge located to the northeast. TC 03A accelerated and moved more northward in response to an approaching mid-level trough. The altered synoptic pattern enhanced the outflow from TC 03A and the cyclone intensified and reached maximum intensity of 105 kt as it turned north-northeastward toward India.

TC 03A made landfall in India's western state of Gujarat at 090130Z June. JTWC issued the final warning at 091500Z June due to rapid dissipation over land.

The damage caused by the most intense tropical cyclone to strike India in 25 years was extensive. The NASA sponsored Dartmouth Flood Observatory reported 1126 fatalities in the Gujarat, Kutch, Surashtra regions of India with heavy flooding of coastal highways. Homes near the Kandla port were submerged by a two meter tidal wave. The Dartmouth Flood Observatory further reported the drowning of many salt workers in these regions. Over 15,000 people were dislocated as thousands of houses were damaged or destroyed. Total damage estimates were nearly 290 million dollars.

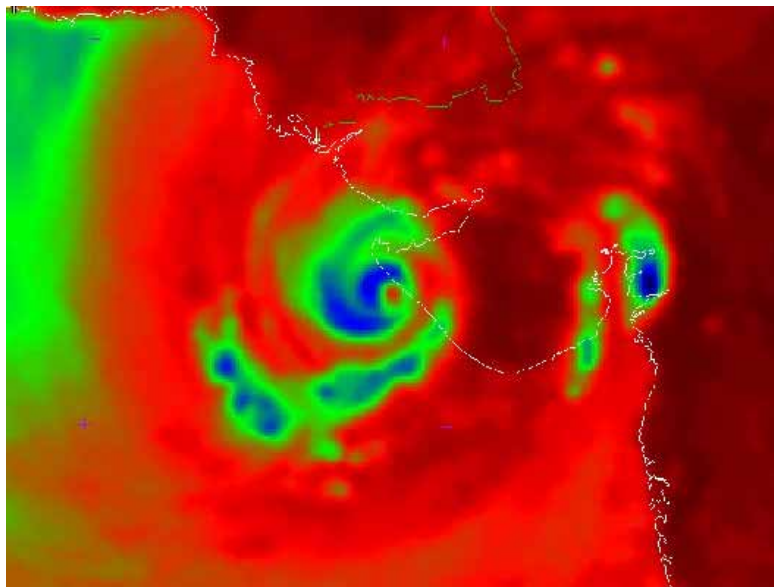


Figure 3-03A-1. An 0137Z Special Sensor Microwave Imager depiction of TC 03A as it made landfall over India as a 105 kt system on the 9th of June, 1998.

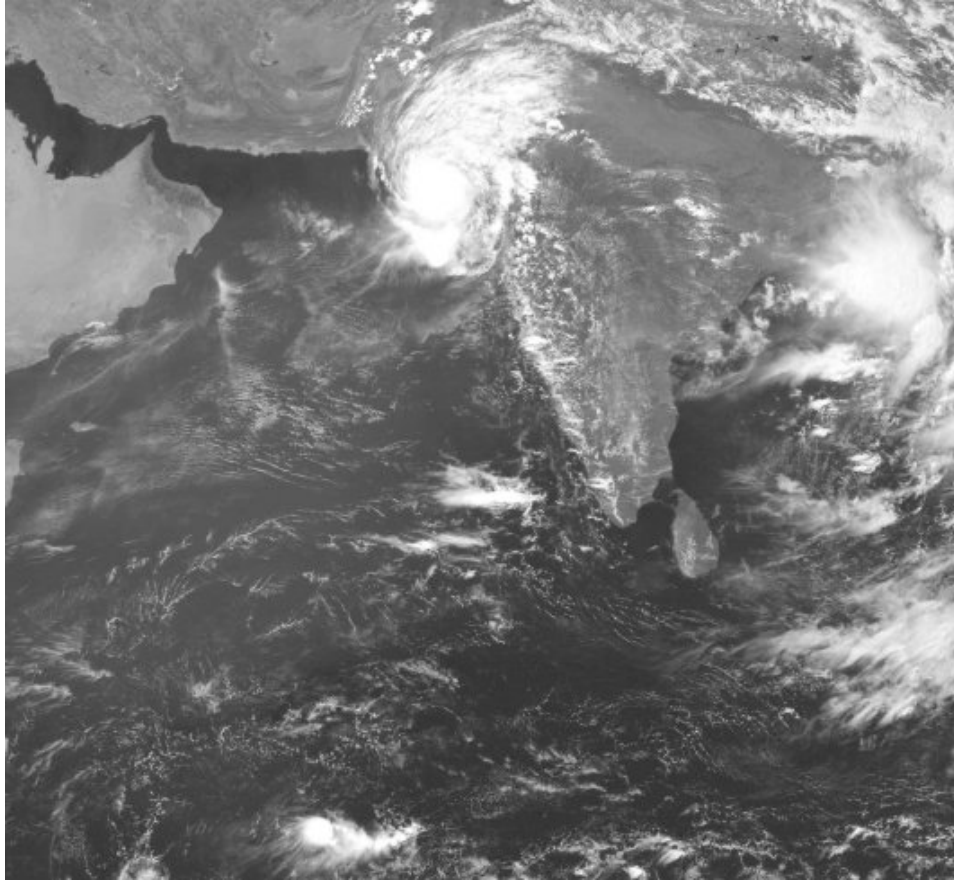


Figure 3-03A-2. An 0900Z visible satellite image of TC 03A just making landfall in Northwestern India on the 9th of June, 1998.

