

= 2001 India cyclone =

The 2001 India cyclone was the second strongest tropical cyclone , in terms of barometric pressure , to form in the Arabian Sea on record ; only Cyclone Gonu in 2007 was stronger . The storm originated from a tropical disturbance that formed east of Somalia on May 18 . Over the following few days , the system gradually organized into a tropical depression . Tracking eastward , towards the coastline of southwestern India , the storm slowly intensified . Shortly before reaching shore , the system turned north and later west , away from land . After taking this turn , the storm intensified into a very severe cyclonic storm , attaining its peak intensity on May 24 with winds of 215 km / h ( 135 mph 3 @-@ minute winds ) and a barometric pressure of 932 mbar ( hPa ) . At the time , this ranked the cyclone as the strongest known storm in the Arabian Sea .

After stalling several hundred kilometres offshore , the storm weakened over cooler waters that it had upwelled . By May 27 , the system weakened to a cyclonic storm and by this time was approaching the northwestern coastline of India , near Gujarat . The following day , the storm made landfall in the Saurashtra region as a deep depression with winds of 55 km / h ( 35 mph 3 @-@ minute winds ) . The depression quickly weakened after moving inland and dissipated early on May 29 .

Although a powerful cyclone over water , the storm had relatively little impact over land . In the Valsad district , two coastal communities lost a combined 200 homes due to large swells produced by the storm . However , the losses were more extensive offshore . Between 120 and 900 fishermen were listed as missing after contact was lost with their vessels during the storm .

= = Meteorological history = =

The origins of the 2001 India cyclone can be traced to a tropical disturbance over the Arabian Sea on May 18 . The following day , the system was determined to be relatively stationary near the island of Socotra . Although deep convection was associated with the disturbance , there was no evidence of a low @-@ level circulation . By May 20 , the disturbance slowly moved towards the southeast in response to an upper @-@ level trough over India . The overall structure gradually improved as good outflow developed . A mid @-@ level circulation finally developed late on May 21 , prompting the Joint Typhoon Warning Center ( JTWC ) to issue a Tropical Cyclone Formation Alert . Several hours later , they began monitoring the system as a tropical depression with the identifier 01A ; however , operational advisories were not issued until the cyclone was estimated to have attained tropical storm intensity . By the morning of May 22 , the India Meteorological Department ( IMD ) also took notice of the system .

Situated in a region favoring tropical cyclone development about 650 km ( 400 mi ) southwest of Mumbai , India , the storm rapidly developed . By the afternoon of May 22 , the JTWC estimated that 01A attained winds of 120 km / h ( 75 mph ) , equivalent to a Category 1 hurricane on the Saffir ? Simpson Hurricane Scale . Additionally , a 22 km ( 14 mi ) wide eye developed within the center of circulation during this intensification phase . Throughout most of May 22 , the strengthening slowed considerably as it paralleled the southwestern coast of India . Initially , it was feared that the storm would move inland as a powerful cyclone ; however , a ridge over the northern Arabian Sea caused the storm to turn westward , back over open water . Once further away from land , the cyclone resumed intensification , becoming a rare , Category 3 equivalent storm by the morning of May 24 . Later that morning , 01A attained its peak intensity with winds of 205 km / h ( 125 mph ) , according to the JTWC . However , the IMD considered the storm to be slightly stronger , estimating that it attained winds of 215 km / h ( 135 mph ) by three @-@ minute sustained winds along with a barometric pressure of 932 mbar ( hPa ; 27 @. @ 52 inHg ) .

At the time of peak intensity , the cyclone displayed a well @-@ defined eye and excellent outflow . Although a powerful storm , it quickly weakened as conditions became hostile for tropical cyclone development . Strong wind shear tore convection away from the cyclone and caused it to become disorganized . Within 48 hours , the system had degraded to a tropical storm and was situated roughly 555 km ( 345 mi ) west @-@ southwest of Mumbai . The weakening trend lessened shortly

thereafter but still continued . Operationally , the JTWC issued their final advisory on the cyclone on May 28 as it weakened to a tropical depression over open waters . The once powerful cyclone , now devoid of all convection , tracked towards the northwestern coast of India . During the afternoon of May 29 , the cyclone rapidly regenerated as it made landfall in Gujarat . The JTWC estimated that it crossed the coastline with winds of 100 km / h ( 65 mph ) . Not long after moving overland , the system rapidly weakened and dissipated over India within several hours .

= = Preparations and impact = =

Ahead of the storm , all ports in Gujarat , including Kandla , one of the largest in the country , were closed as a precautionary measure . On May 25 , over 10 @, @ 000 people were evacuated from coastal areas in the threatened region . Throughout India , a total of 118 @, @ 800 people were evacuated and 100 @, @ 000 more were evacuated in Pakistan . The Indian military was placed on standby to undertake search @-@ and @-@ rescue missions immediately after the storms ' passage . Fourteen districts of Gujarat were placed on red alert , the highest level of preparedness . Seven emergency control centers were set up across the country and officials alerted hospitals and fire crews about the approaching storm .

Several relief agencies were already positioned in the region in response to a magnitude 6 @. @ 9 earthquake in January of that year that killed over 20 @, @ 000 people . Additional disaster relief teams were deployed to the region to further prepare residents for the cyclone . Food , water and other necessities were stored and ready to be provided to victims of the storm . Large swells produced by the storm affected a large portion of the western Indian coastline , especially in the city of Bombay . In the Valsad district , two coastal communities lost a combined 200 homes due to large swells produced by the storm . Offshore , between 1 @, @ 500 and 2 @, @ 000 fishing vessels had lost contact with the mainland . Later reports indicated that between 120 and 900 fishermen had gone missing as a result of the cyclone .

= = Records = =

Operationally , the cyclone was considered to be a Category 4 equivalent storm by the JTWC , with peak winds of 215 km / h ( 135 mph ) . This would have made the system the first recorded storm of that intensity on record in the Arabian Sea . However , in post @-@ storm analysis , it was discovered that 1 @-@ minute winds did not exceed 205 km / h ( 125 mph ) . The next storm to reach this intensity was Cyclone Gonu in 2007 North Indian Ocean cyclone season , which became the first known super cyclonic storm in the region . Upon attaining its peak intensity , the storm attained a barometric pressure of 932 mbar ( hPa ) , the lowest in the region at the time . The cyclone was ranked as the strongest in the Arabian Sea for six years until it was surpassed by Gonu in 2007 , which attained a minimum pressure of 920 mbar ( hPa ) . In 2010 , Cyclone Phet surpassed the 2001 cyclone as the second @-@ strongest storm in the region , attaining winds of 240 km / h ( 145 mph ) , according to the JTWC .