## = Cyclone Kate ( 2006 ) =

Tropical Cyclone Kate was a short @-@ lived Category 2 cyclone that remained nearly stationary for its entire existence in the northwestern Coral Sea in February 2006 . Forming out of a monsoonal trough on 22 February , Kate rapidly intensified throughout the day . By 23 February , the system attained its peak intensity with winds of 95 km / h ( 60 mph 10 @-@ minute sustained ) and a barometric pressure of 985 hPa ( mbar ) . Shortly thereafter , increasing wind shear caused the storm to quickly weaken . By 24 February , the system dissipated over open waters near Queensland , Australia . Although Kate did not directly affect land , large swells produced by the storm impaced beaches in Papua New Guinea and Queensland . The waves injured six people in Australia , although no property damage was reported .

## = = Meteorological history = =

Cyclone Kate originated from an area of low pressure that was first identified on 22 February 2006, within a monsoonal trough . The system rapidly intensified throughout the day, with the Australian Bureau of Meteorology issuing their first advisory on the system that evening . Upon being classified, the system was immediately declared Tropical Cyclone Kate, skipping tropical low status. At the same time, the Joint Typhoon Warning Center ( JTWC ) also began issuing advisories on the system, designating it as Tropical Cyclone 13P. The storm had developed well @-@ defined, upper @-@ level outflow enhanced by diffluence over the system.

The system remained nearly stationary over the northwestern Coral Sea . Early on 23 February , the storm attained its peak intensity with winds of 95 km / h ( 60 mph 10 @-@ minute sustained ) and a barometric pressure of 985 hPa ( mbar ) . However , the JTWC assessed the system to have been slightly weaker , attaining peak winds of 85 km / h ( 50 mph 1 @-@ minute sustained ) . Further intensification was anticipated as Kate slowly tracked towards Queensland , Australia . However , Kate stalled shortly thereafter and began to weaken due to increasing wind shear . Rapid weakening took place throughout the day , and JTWC declared the system dissipated early on 24 February . The Bureau of Meteorology downgraded Kate to a tropical low around the same time , although they continued to monitor the storm for several more hours before reporting that it had dissipated over open waters .

## = = Preparations and impact = =

Upon the cyclone 's formation , the Bureau of Meteorology warned vessels to avoid the storm in anticipation of rough seas and winds gusting to 125 km / h ( 78 mph ) . Although the storm did not pose much of a threat to Queensland , officials urged residents to ensure their disaster kits were ready and that preparations for a moderate storm , such as storing lose outdoor objects and clearing gutters , had been completed .

While the storm had no direct impact on land , large swells affected most of the Queensland coastline . In the Shire of Noosa , six surfers sustained serious injuries after wading into turbulent waters . Waves up to 1 @.@ 8 m ( 5 @.@ 9 ft ) tossed the six surfers , leaving them with injuries ranging from broken noses and fractured ankles to head wounds from surfboards . The waves also caused additional beach erosion to parts of Papua New Guinea previously impacted by Cyclone Ingrid in March 2005 .