

= Cyclone Agni =

Severe Cyclonic Storm Agni was a tropical cyclone of the 2004 North Indian Ocean cyclone season notable for its record proximity to the equator . It was the second North Indian Ocean cyclone to receive a name , after Onil earlier in the year . Agni formed on November 28 well to the southwest of India in the Arabian Sea , and steadily intensified as it tracked northwestward . The Joint Typhoon Warning Center (JTWC) estimated peak 1 minute sustained winds of 120 km / h (75 mph) , while the India Meteorological Department (IMD) estimated peak 3 minute sustained winds of 100 km / h (65 mph) ; the IMD is the official warning center for the north Indian Ocean . After peaking , it weakened due to wind shear , dry air , and cooler waters , and the JTWC issued its final advisory on December 3 as it approached the coast of Somalia . The remnants of Agni moved along the Somalian coastline until dissipating on December 5 .

= = Meteorological history = =

A tropical disturbance was observed on November 19 about 800 km (500 mi) southeast of Colombo , Sri Lanka in the Bay of Bengal . The disturbance tracked westward , gradually organizing and prompting the JTWC to issue a Tropical Cyclone Formation Alert (TCFA) on November 22 . After passing south of Sri Lanka , it became disorganized and was no longer considered likely to develop into a tropical cyclone . The circulation associated with the system continued westward , reorganizing on November 26 in the Arabian Sea . Despite being located unusually close to the equator , the disturbance maintained convection , or thunderstorms , which was becoming organized around the weak low @-@ level circulation . With low wind shear and diffluence aloft , the JTWC remarked the system had a fair chance of developing .

While the system was organizing , the center crossed the equator to reach about 0 @.@ 5 ° S , thus becoming an anticyclonic circulation in the southern hemisphere . This was unusual , as the Coriolis effect is nonexistent along the equator ? the Coriolis effect refers to planetary vorticity , which provides the spin in a cyclone . The JTWC later assessed the system as remaining in the northern hemisphere , reaching as far south as 0 @.@ 7 ° N , or about 80 km (50 mi) from the equator . After the circulation organized further beneath the convection , the JTWC issued another TCFA at 0300 UTC on November 28 . Three hours later , the agency classified the system as Tropical Cyclone 05A about 1300 km (800 mi) southwest of the southern tip of India . In a post @-@ season analysis , the JTWC estimated the cyclone became a tropical storm six hours earlier . At around the same time , the IMD classified it as a " low pressure area ... likely to become well marked . "

Upon being classified , the tropical cyclone was moving northwestward under the influence of a ridge over India . Its outflow to the north and south became better defined , although its proximity to the equator limited its southerly outflow somewhat due to wind shear . Early on November 29 , the IMD classified the system as a depression , and throughout the day it rapidly intensified to become a cyclonic storm ; a cyclonic storm is a tropical cyclone with at least 65 km / h (40 mph) winds sustained for 3 minutes . Around that time , the JTWC assessed the cyclone as reaching peak winds of 120 km / h (75 mph) , sustained for 1 minute , along with gusts to 150 km / h (90 mph) . Late on November 29 , the cyclone weakened slightly , only to regain its peak intensity by November 30 ; at that time , it developed a banding eye , and was located about 1500 km (900 mi) southeast of the coast of Somalia . At 1200 UTC on November 30 , the IMD issued its first complete advisory on the cyclone , naming it Severe Cyclonic Storm Agni and estimating peak winds at 100 km / h (65 mph) ; the agency predicted the storm would continue northwestward and strengthen slightly before weakening . At its peak , the cyclone had a barometric pressure of 985 mbar .

After reaching peak intensity , an increase in wind shear caused the eye to disappear , and the convection decreased significantly . On December 1 , the IMD estimated Agni weakened to cyclonic storm status , around which time the center became exposed from the convection . The cyclone continued its steady weakening continued due to the wind shear , the presence of dry air , and cooler water temperatures , and by December 2 , the IMD downgraded Agni to depression status ,

which was its final warning on the system . As it approached the coast of Somalia , it turned westward due to the building of a ridge over Saudi Arabia . Despite unfavorable conditions , thunderstorms briefly reformed over the circulation , which allowed the storm to maintain its intensity . By late on December 3 , Agni weakened to below tropical storm status , and the JTWC issued its final warning while the storm was about 450 km (275 mi) south @-@ southeast of Cape Guardafui ? the easternmost point of the Horn of Africa . The circulation became difficult to locate by early on December 4 , by which time the system had little remaining convection . It turned southwestward and later to the south , moving ashore on eastern Somalia before dissipating on December 5 near Ceel Huur over water .

= = Records , naming , and impact = =

According to RSMC New Delhi , Cyclone Agni developed into a depression at 1 @.@ 5 ° N , which is the same latitude as where according to RSMC Tokyo , Tropical Storm Vamei formed during December 2001 . However , according to RSMC La Reunion , the precursor low to Cyclone Agni moved into the Southern Hemisphere and became an anticyclone as it had kept its counter @-@ clockwise circulation .

Agni was the second storm in the north Indian Ocean to receive a name , after the IMD began tropical cyclone naming in the middle of 2004 .

As the cyclone was weak when it moved over Somalia , no casualties or significant damage was reported .