



Typhoon Cecil was one of several tropical cyclones to hit Vietnam during the autumn of 1985. In its wake, more than 700 were left dead and half-a-million homeless. The dollar value of the damage caused by Cecil has been estimated to be in excess of 65 million dollars.

Typhoon Cecil began innocently enough as an area of increased convective activity south of the Caroline Islands on the 8th of October. Satellite imagery at 080600Z showed a large area of strong, slightly curved convection extending along 04N from 136E to 145E. Supporting synoptic data showed convergent cross-equatorial flow. Over the next 72-hours, the tropical disturbance tracked to the west-northwest towards northern Mindanao, passing just south of the Belau (Palau) Islands late on the 9th. It maintained good upper-level outflow, enhanced by upper-level troughing to the north, and became more organized at the lower levels. Aircraft reconnaissance first located a surface circulation east of Mindanao at 110222Z. Maximum sustained winds at that time were 15 to 20 kt (8 to 10 m/s) and the MSLP was estimated to be 1006 mb.

Further organization of the low-level center was slowed as the disturbance passed through the islands of the southern Philippines. With continued development considered likely once the disturbance crossed the Philippines, a TCFA was issued at 120330Z for the northern Sulu Sea westward into the South China Sea. By 121200Z the disturbance had moved west of Palawan Island into the South China Sea. Little damage was sustained in the southern Philippines due to its passage. By then, satellite imagery indicated that the system had begun to consolidate over water, prompting JTWC to issue the first warning on Tropical Depression 20W at 121200Z. Initially, Cecil was expected to consolidate rapidly and traverse the South China Sea making landfall within 72-hours of the first warning over southern Vietnam.

Post-analysis indicated that Cecil was already at tropical storm intensity upon emerging into the South China Sea. It then turned to a more north-westerly heading and tracked along the southern edge of a ridge over eastern China and the East China Sea. Cecil steadily intensified as it moved northwest, reaching typhoon intensity by 131800Z. By that time satellite imagery showed that Cecil was slowing to 7 kt (13 km/hr) and developing an eye. The slower movement and a slightly more northward track meant that Cecil would not make landfall as early as previously expected. Aircraft reconnaissance at 130824Z confirmed the presence of a 20 nm (37 km) diameter eye and a minimum sea-level pressure of 984 mb.

Cecil took three days to cross the South China Sea. During the latter half of this transit, Cecil maintained an eye and continued to intensify at a steady rate. The low- to mid-level ridge was not as strong as forecast, so Cecil maintained a track to the northwest. As Cecil passed south of Hainan Island on the 15th (Figure 3-20-1), it was at its maximum intensity of 100 kt (51 m/s). By 151200Z, interaction with the topography of Vietnam and Hainan was preventing further intensification by hampering low-level inflow. The mid-level subtropical ridge remained across the island of Taiwan and mainland China. This turned Cecil on a more westerly track, resulting in landfall about 40 nm (74 km) north of Hue (WMO 48852) at 152200Z. Cecil continued to move west and weaken, dissipating over the Laos/Thailand border on the 16th. The final warning was issued at 160600Z.

Officials in Binh Tri Thien Province in central Vietnam described Typhoon Cecil as "the worst natural disaster yet in central Vietnam...causing... damage worth more than 65 million dollars". At least 702 people were confirmed dead with 128 still missing and 560,000 left homeless. In addition to destroying or damaging 200,000 or more homes, Cecil also destroyed about 850 fishing boats and other small vessels. Winds of up to 90 kt (46 m/s) combined with flooding to ruin 70,000 hectares (172,900 acres) of rice and other crops. A 200 bed hospital was destroyed, five other hospitals damaged, and 250 dispensaries swept away, along with almost 9,000 classrooms with accompanying school equipment and textbooks. Dikes, canals, and pumping stations sustained almost one million dollars in damage. Telephone lines, electricity service, and roadways were cut, bringing business to a halt and hampering relief efforts. It will be many years before this province, one of Vietnam's poorest, recovers from the accumulated affects of this and the other tropical cyclones which affected Vietnam in 1985.

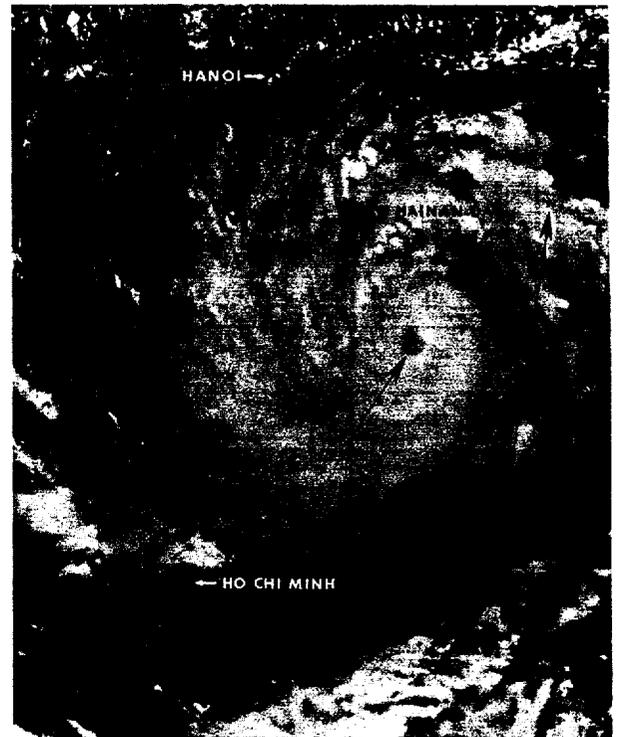


Figure 3-20-1. Typhoon Cecil at maximum intensity passing south of Hainan Island (150735Z October NOAA visual imagery).