

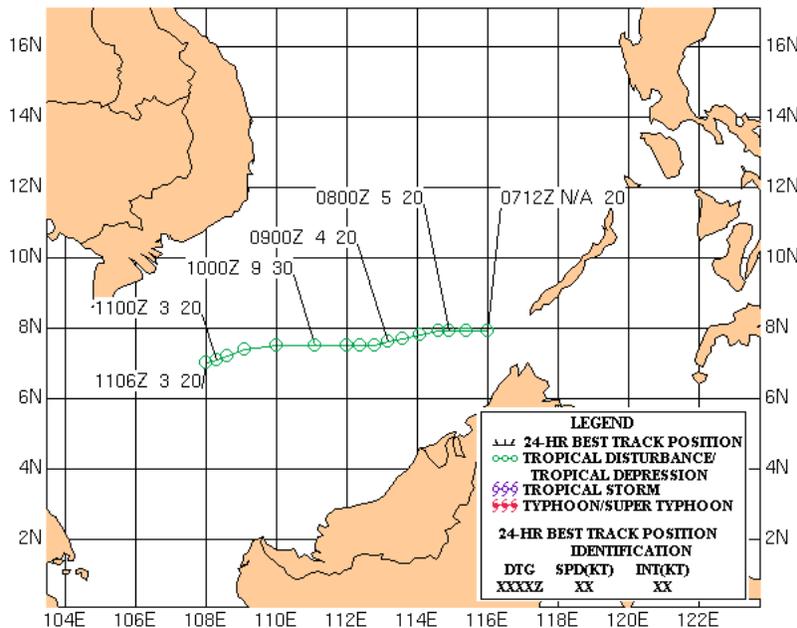
# Tropical Depression 32W

The second South China Sea tropical cyclone of 1999 formed in part due to wind shear produced by northeast monsoon flow and cross-equatorial westerly flow. Tropical Depression (TD) 32W developed between Palawan and Borneo then intensified slowly, moved westward, and dissipated over water south of Vietnam after 3 days.

TD 32W formed approximately 460 nm east-southeast of Cam Ranh Bay, Vietnam. JTWC issued the first warning on TD 32W at 092100Z December. By 100000Z December, the cyclone had attained a maximum intensity of 30 kt. Subsequently, vertical wind shear resulted in TD 32W becoming an exposed low-level circulation after 110000Z December.

TD 32W moved very slowly through the initial 48 hours, then began to accelerate westward to about 11 kt, before becoming vertically sheared, off the southern tip of Vietnam around 110000Z December. JTWC issued the sixth and final warning at 110300Z December.

This was the second of three very weak tropical depressions to form in early to mid December. JTWC relied heavily on scatterometry data from both the ERS-2 and the NASA QuickScatt for detection and positioning. Although the wind speeds had not been calibrated, the QuickScatt data was useful in providing an additional remotely sensed data set. Scatterometry coupled with SSM/I imagery and the judicious use of QuickScatt, allowed JTWC to better position and determine intensity of the three disorganized and weak tropical depressions.



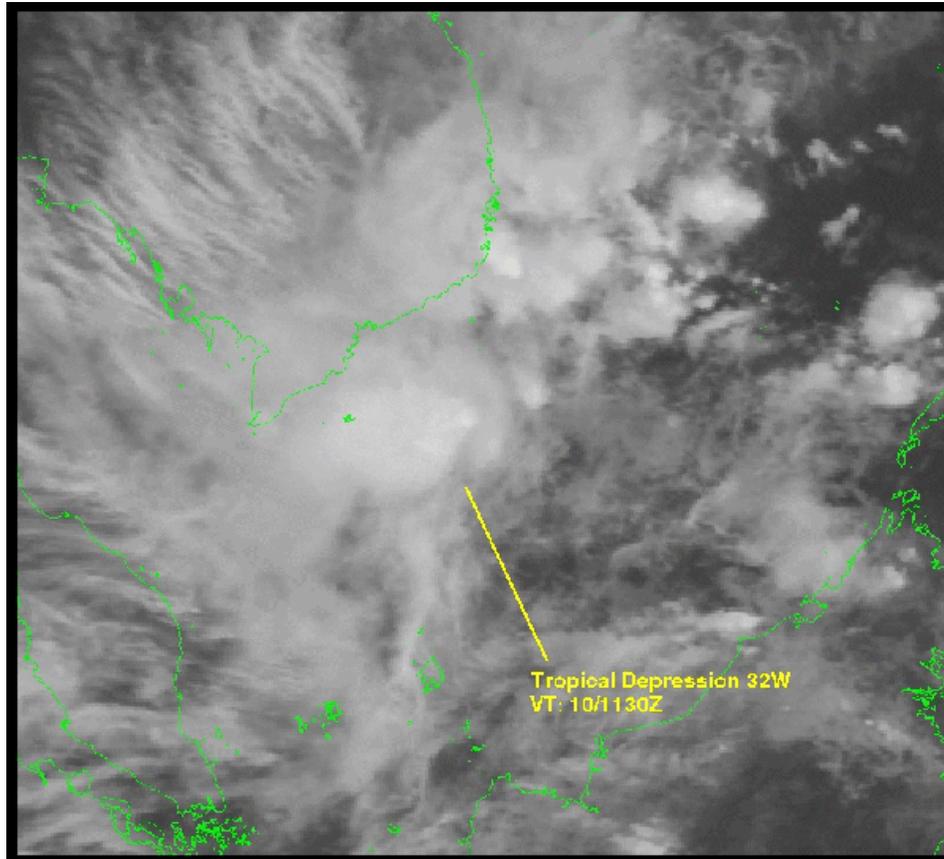


Figure 1-32-1. 101130Z December GMS-5 infrared satellite image of TD 32W at its peak intensity of 30 kt. The low-level circulation center (LLCC) is nearly indistinct in the image. This system once again showed the value of microwave satellites, passive and active, which can see through the upper-level clouds to pinpoint the LLCC.