

E 110 115 120 125 130 135 140 E

N 35

108

30

25

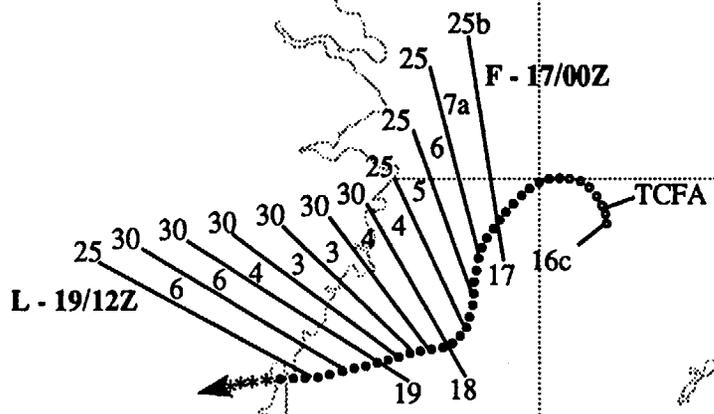
20

N 15

TROPICAL DEPRESSION 19W
BEST TRACK TC-19W
16 AUG-19 AUG 89
MAX SFC WIND 30KT
MINIMUM SLP 999MB

LEGEND

- /—/— 6-HOUR BEST TRACK POSIT
- a SPEED OF MOVEMENT
- b INTENSITY
- c POSITION AT XX/0000Z
- TROPICAL DISTURBANCE
- TROPICAL DEPRESSION
- TROPICAL STORM
- TYPHOON
- ◆ SUPER TYPHOON START
- ◇ SUPER TYPHOON END
- ⊕ EXTRATROPICAL
- ⊖ SUBTROPICAL
- *** DISSIPATING STAGE
- F FIRST WARNING ISSUED
- L LAST WARNING ISSUED



TROPICAL DEPRESSION 19W

Developing from a large area of low pressure and disturbed weather, this system was first detected on satellite imagery approximately 180 nm (335 km) northwest of Okinawa on 16 August. Initially, there was just a large cloud minimum area that was caused by subsidence beneath a mid-level low. Based on the expected movement of upper-level divergence into this area, JTWC forecast the development of Tropical Depression 19W. When strong upper-level divergence did move into this area, convection began to rapidly develop. This cloudiness began to coil beneath the mid-level low, and estimates of 20- to 25-kt (10- to 13-m/sec) surface winds from satellite data prompted the issuance of a Tropical Cyclone

Formation Alert at 160230Z. The first warning, at 170000Z, addressed further development of the tropical cyclone.

Tropical Depression 19W's unusual curved track to the north, west, and then south appears to coincide with the overall motion displayed by the larger, mid-level low. On 18 August, the mid-level low began to fill, weakening its influence on the tropical depression (Figure 3-19-1). The track of the cyclone straightened out, moving westward with the easterly steering flow. JTWC issued the final warning at 191200Z as the tropical depression approached the coast of China. No reports of damage were received.

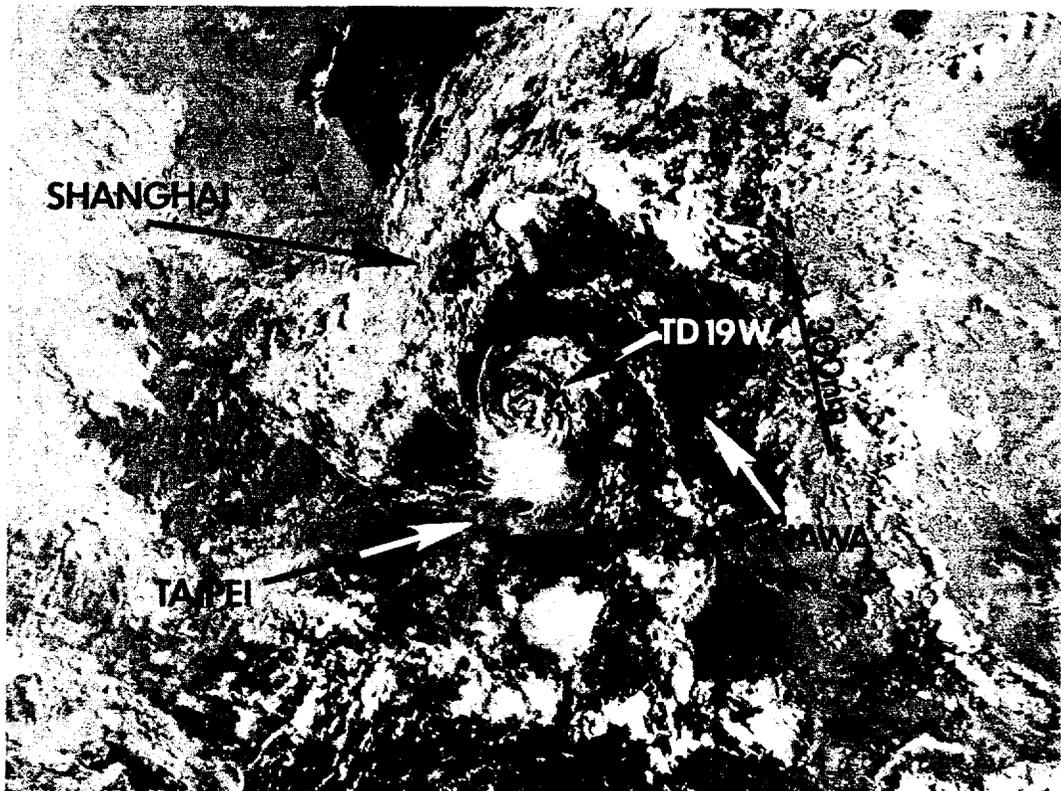


Figure 3-19-1. A tight spiral of low cloudiness is associated with the exposed low-level circulation of Tropical Depression 19W (172346Z August NOAA visual imagery).