



TROPICAL STORM NINA
BEST TRACK TC-09
22 JULY-23 JULY 1981
MAX SFC WIND 35 KTS
MINIMUM SLP 995 MBS

LEGEND

- 06 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
- ◇◇◇ DISSIPATING STAGE
- ★ FIRST WARNING ISSUED
- ★ LAST WARNING ISSUED

TROPICAL STORM NINA (09)

Tropical Storm Nina eventually formed from a leeside surface low in the wake of Tropical Storm Maury (08). The disturbance was first detected on 210000Z July synoptic charts near 24N 122E; to the east of Taiwan. The disturbance moved within the monsoonal flow from the southwest until the vertical development became entrained into the westward flow around a mid-level anticyclone to the east.

When the system began to drift northwestward around the northern tip of Taiwan, a Significant Tropical Weather Advisory was issued at 220003Z. The Tropical Cyclone Formation Alert was then transmitted at 220100Z when synoptic data indicated a surface circulation was located near 25N 123E. The first warning on Tropical Depression 09 was subsequently issued at 220600Z.

Nina maintained a northwest track

throughout the warning period. Initially moving at 12 kts (22 km/hr) as it rounded Taiwan, the storm slowed as it approached land. Nina had weakened to tropical depression strength when landfall was made at 221800Z, 30 nm (56 km) northwest of Hsia-p'u, China. The final warning was issued at 230000Z, when the system was 35 nm (65 km) inland and orographic effects were rapidly dissipating the system.

Nina started out as an exposed low-level circulation with convective activity to the east. During the warning process this tropical cyclone was not forecast to reach tropical storm strength; however, in post-analysis Nina was upgraded to tropical storm strength for the initial 12 hour period. A 35 kt (18 m/sec) ship report originally considered suspect was later verified by several other ship reports of similar wind speed, but not in time to be included on the second warning.