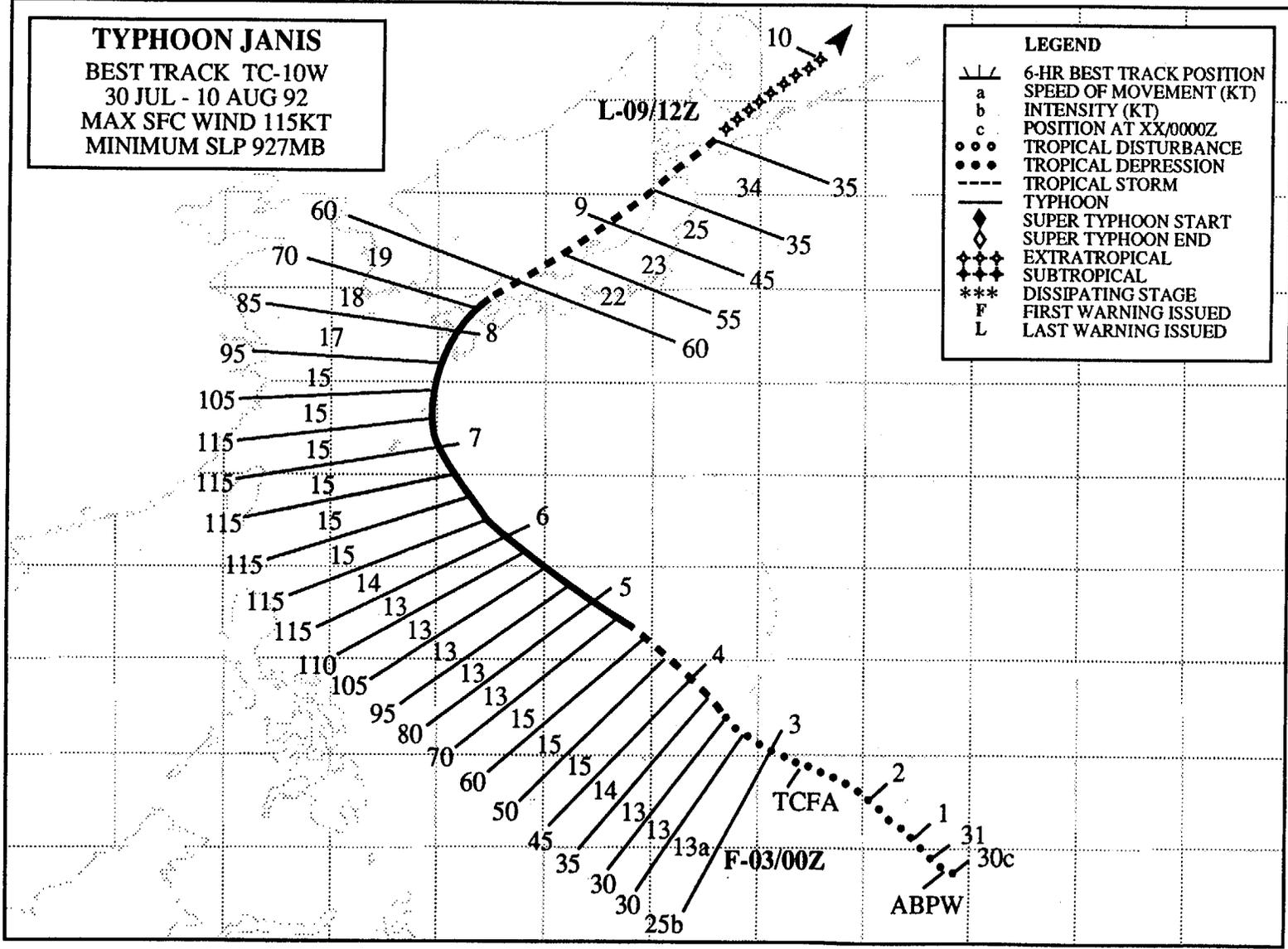


E 110 115 120 125 130 135 140 145 150 155 160 165 170 E
 N 50

TYPHOON JANIS
 BEST TRACK TC-10W
 30 JUL - 10 AUG 92
 MAX SFC WIND 115KT
 MINIMUM SLP 927MB

LEGEND

- 6-HR BEST TRACK POSITION
- a SPEED OF MOVEMENT (KT)
- b INTENSITY (KT)
- 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



67

EQ

TYPHOON JANIS (10W)

I. HIGHLIGHTS

Four days after Irving (09W) hammered Shukoku, Janis slammed into Kyushu. Janis began near Pohnpei in the Caroline Islands, took a northwestward track threatening Okinawa, then recurved, passed over Kyushu, and skirted the western coast of Honshu before transitioning to an extratropical low over Hokkaido.

II. TRACK AND INTENSITY

The tropical disturbance, that matured into Janis, formed near Pohnpei in the eastern Caroline Islands, and was first mentioned in the 300600Z July Significant Tropical Weather Advisory. Increased convective development led to the issuance of a Tropical Cyclone Formation Alert at 022130Z August. Intensification continued through the early morning hours, and at 030000Z, JTWC issued the first warning on Tropical Depression 10W. As the depression moved past Guam, it brought winds gusting to 30 kt (15 m/sec) and 2.5 inches (64 mm) of rain in 24 hours to the island, but caused no major damage.

Later that day, at 031439Z, aircraft reconnaissance assigned to the TCM-92 experiment explored the tropical depression and provided a center fix with a minimum 700 mb pressure height of 3081 m, which supported 30 kt (15 m/sec) at the surface. Moving into the Philippine Sea, the depression organized further and was upgraded to a tropical storm at 031800Z and to a typhoon 24 hours later. Janis reached a peak intensity of 115 kt (59 m/sec) at 060000Z, where it posed a major threat to Okinawa (Figure 3-10-1). Fortunately, the typhoon did not directly hit the island, but passed 90 nm (165 km) to the east. On Okinawa, Kadena AB (WMO 47931) reported maximum winds of 30 gusting to 50 kt (15 G 26 m/sec), the Marine Corps Air Station (WMO 47933) at Futenma observed peak winds of 36 gusting to 53 kt (19 G 27 m/sec), and the peak at Naha (WMO 47936) was 34 gusting to 55 kt (18 G 28 m/sec).

Passing near the airport on Amami-O-Shima (WMO 47872) which reported maximum winds of 69 gusting to 94 kt (36 G 48 m/sec), the typhoon began to weaken, recurved, and accelerated toward Kyushu. Over Kyushu, land interaction further weakened Janis to tropical storm intensity at 081500Z. As Janis passed 60 nm (110 km) east-southeast of Sasebo with an estimated intensity of 85 kt (44 m/sec), the base observed maximum winds of 28 gusting to 50 kt (14 G 26 m/sec). The tropical storm moved to the northeast, paralleling the western coast of Honshu. At 091200Z, Janis transitioned into an extratropical low over Hokkaido.

III. FORECAST PERFORMANCE

JTWC correctly forecast the recurvature path of Typhoon Janis. Overall, mean track forecast errors were 92, 182, and 336 nm (170, 337 and 620 km) for 24, 48, and 72 hours, respectively. The largest 72-hour mean position forecast errors occurred after recurvature and were primarily due to the rapid acceleration of Janis to speeds over 30 kt (55 km/hr).

JTWC forecast the intensity trend and period of rapid intensification well. However, with regard to the peak intensity, a procedural difference concerning the application of the Dvorak enhanced infrared technique eye adjustment factor to digital high resolution TIROS-N polar orbiting satellite data led to an overestimation of the raw intensity input to the warning. The analysis procedure was reviewed and adjusted to use the average of the warmest pixels within the eye, instead of the single warmest individual pixel, before determining the eye adjustment factor. This change more closely paralleled the val-

ues derived from the geostationary data , and resulted in the peak intensity being reduced from 125 to 115 kt (64 to 59 m/sec). The largest 72-hour mean intensity forecast errors occurred after recurvature when the system weakened more rapidly than anticipated.

IV. IMPACT

As Janis passed to the east of Taiwan, one fisherman was killed when 26 foot (8 m) waves sank five fishing boats. Only minor damage was reported when the typhoon passed just to the east of Okinawa. The passage of Janis over Kyushu resulted in the death of one person and injuries to at least 25 others. High winds and torrential rains caused the temporary loss of electricity to over 250,000 homes, and disrupted road, rail and air travel in Southwestern Japan.

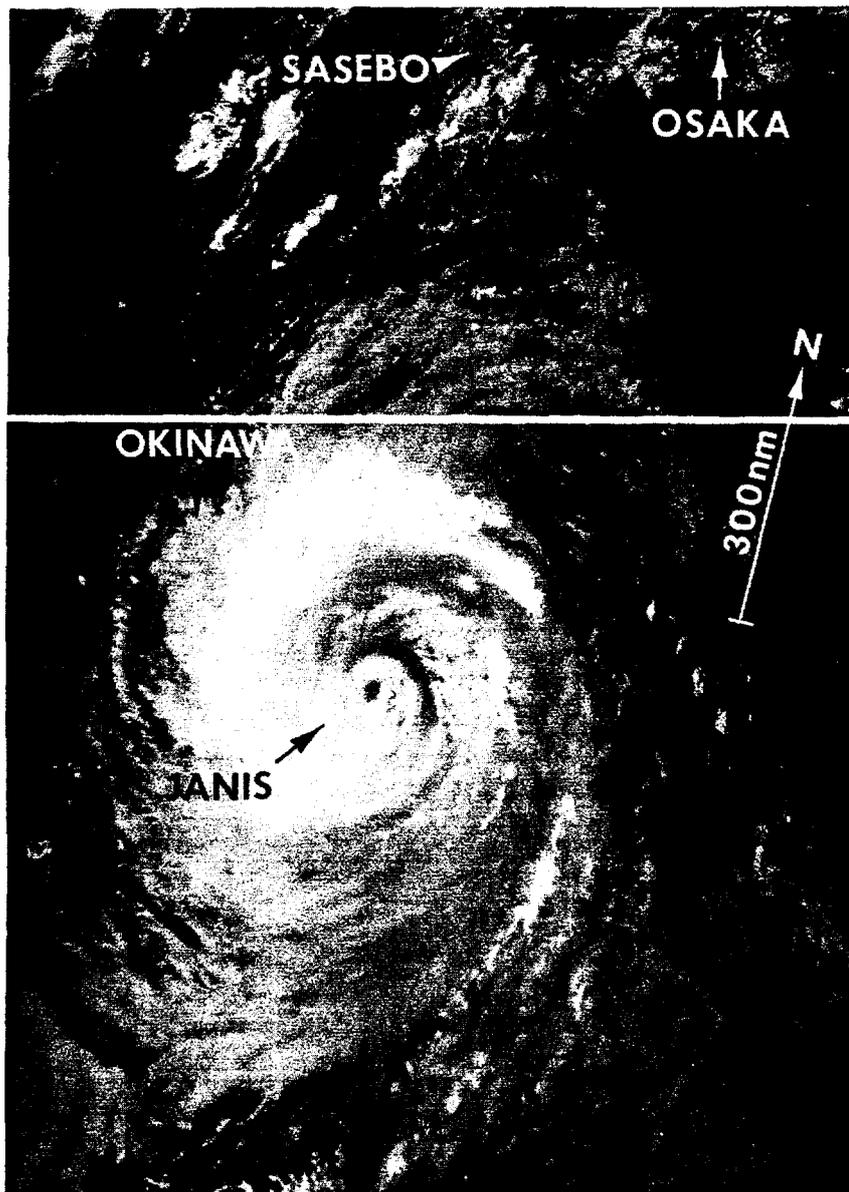


Figure 3-10-1. Typhoon Janis at peak intensity bears down on Okinawa (060533Z August NOAA visual imagery).