

TYPHOON

IDA

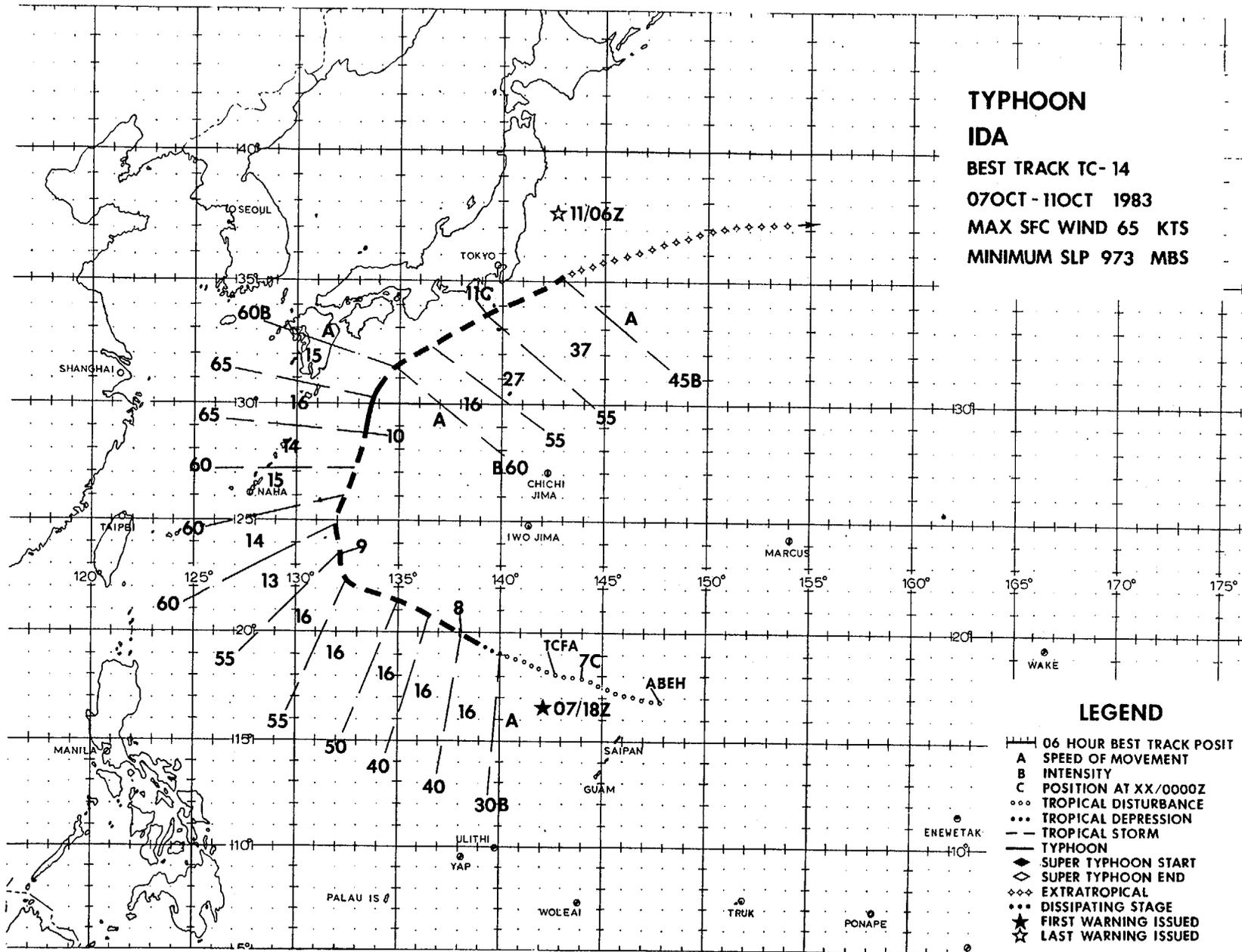
BEST TRACK TC-14

07OCT - 11OCT 1983

MAX SFC WIND 65 KTS

MINIMUM SLP 973 MBS

88



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

TYPHOON IDA (14W)

The origins of Ida can be traced to an inverted trough which was first detected near Saipan (WMO 91232) using synoptic data on 6 October. Although this is the earliest point at which a reliable track can be established, there appears to be a linkage between the inverted trough and a convective cloud mass which developed approximately one week earlier in the center of a TUTT cell.

After Super Typhoon Forrest underwent extratropical transition in the vicinity of Japan, a TUTT cell located about 270 nm (500 km) west of Johnston Island (WM 91275) appeared to expand and intensify. As the frontal system, containing the extratropical remains of Forrest, passed to the north, the TUTT cell moved westward at about 10 kt (19 km/hr) and intensified. By 3 October, a mass of convective cloudiness had developed in the center of the TUTT cell near Wake Island (WMO 91245).

Over the next three days, the disturbance moved generally westward but fluctuated radically in position and intensity to the extent that it could not be reliably tracked as the same disturbance. During this period, the passage of another frontal system to the north and the formation of another TUTT cell to the southeast contributed to the confused state of the atmosphere in the area.

The inverted trough which was located near Saipan at 060000Z rapidly developed and became a closed circulation with 20 kt (10 m/s) winds by 061200Z. Signs of continued development, pressure falls in the

area and increasing winds at nearby stations, led to the issuance of a TCFA at 070745Z.

The first warning on Ida as a tropical depression was issued at 071800Z when it became evident from satellite imagery that a central convective feature was forming. Upgrade to tropical storm status followed on the subsequent warning after reconnaissance aircraft revealed that maximum sustained winds associated with Ida had risen to 40 kt (21 m/s) and MSLP had dropped to 1000 mb.

Initial forecasts called for continued northwestward movement and intensification prior to recurvature south of Japan. Ida moved northwestward as expected and intensified, reaching a maximum intensity of 65 kt (33 m/s) on the 10th after turning north-northeastward (Figure 3-14-1). Shortly after reaching maximum intensity, Ida began to interact with a frontal system to the north. This resulted in a weakening and acceleration to the northeast as Ida underwent extratropical transition. Ida's track south of Japan was well documented by timely reports from Japanese radar stations which proved invaluable in positioning the rapidly moving system.

Although Ida passed close to the island of Honshu, approximately 80 nm (148 km) southeast of Tokyo, there were no reports of storm related damage in Japan. The small radius of high winds associated with Ida and the fact that it was weakening as it passed Japan were fortunate circumstances.

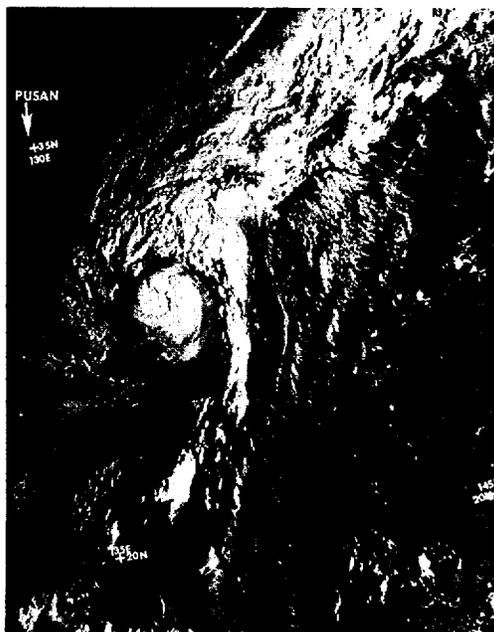


Figure 3-14-1. Ida near maximum intensity. Interaction with the frontal system to the north led to the extratropical transition and rapid acceleration of the system (092258Z October NOAA 8 visual imagery).