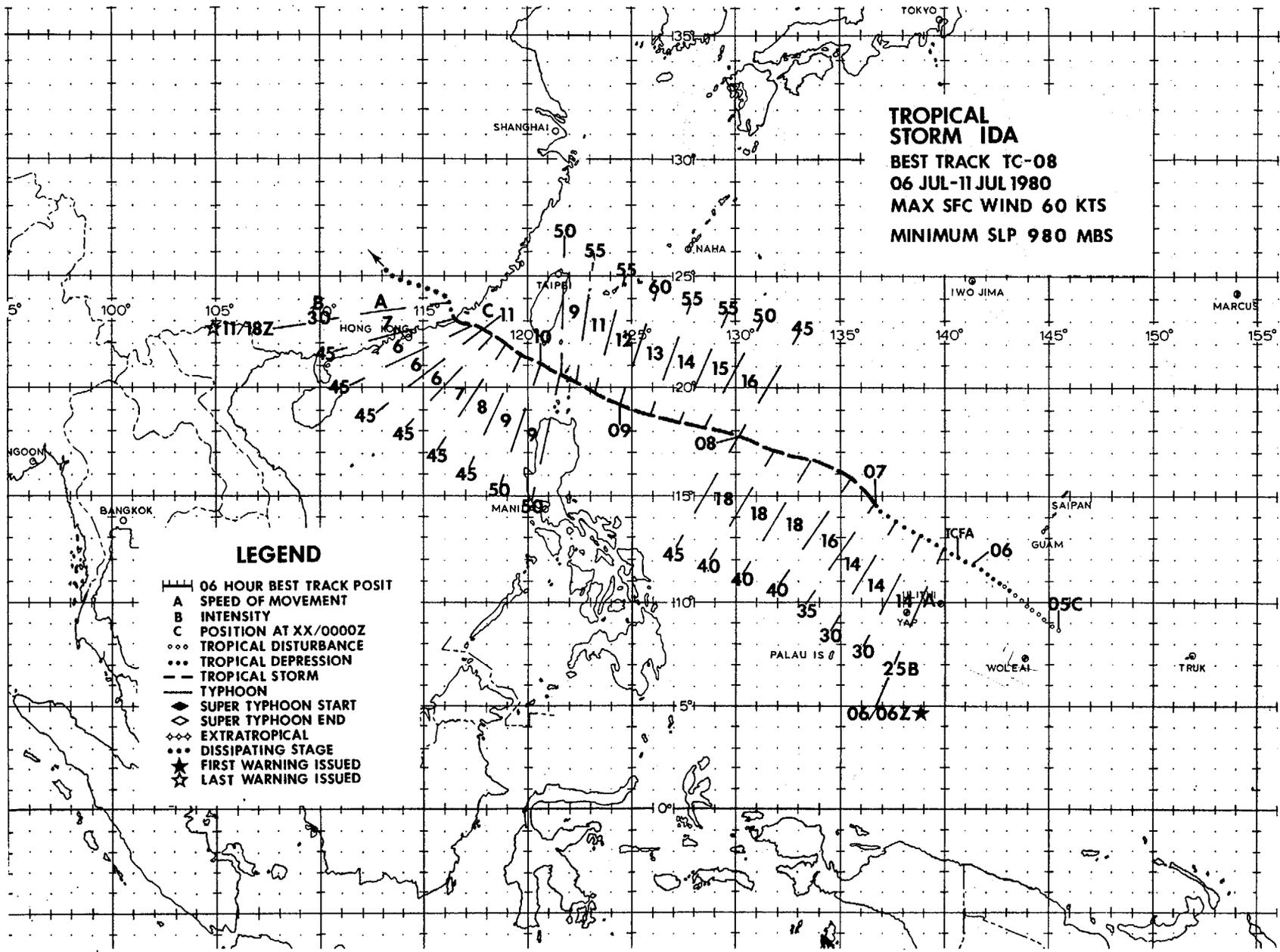


TROPICAL STORM IDA
BEST TRACK TC-08
06 JUL-11 JUL 1980
MAX SFC WIND 60 KTS
MINIMUM SLP 980 MBS



- 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



FIGURE 3-08-1. Tropical Storm Ida intensifying in the Philippine Sea. The discontinuous outer rainband (clockwise from the northwest to the east) was evident from the cyclone's initial development until weakening near the Bashi Channel, 6 July 1980, 2236Z. (NOAA visual imagery)

During the first three weeks of July, the monsoon trough extended eastward from the South China Sea to near 160E. Areas of active convection were common during that period with several disturbances eventually developing into significant tropical cyclones (Ida, Joe and Kim).

TD 08, the first of these disturbances which became organized, formed in the vicinity of two areas of active convection which JTWC had been tracking within the trough for several days. At 051800Z, satellite imagery indicated improved convective organization about a surface circulation near 12N 142E. Aerial reconnaissance at 060145Z located a surface center and observed maximum winds of 25 kt (13 m/sec). At 060300Z, a Tropical Cyclone Formation Alert (TCFA) was issued and the initial warning followed at 060600Z based on continued organization as indicated by satellite imagery.

Ida's track never posed a dilemma for JTWC forecasters. She initially tracked northwest before interacting with a persistent ridge, whose axis was along 28N. Maintenance of the ridge throughout Ida's lifespan was responsible for the cyclone's overall west-northwest track and the ability of JTWC to predict landfall within 35 nm (65 km) of the actual point as early as 77 hours prior to the occurrence. As Ida approached the western Philippine Sea, her forward movement slowed from a maximum of 18 kt (33 km/hr) to less than 10 kt (18 km/hr) in the Bashi Channel. During this period, Ida reached her maximum intensity of 60 kt (31 m/sec) and lowest sea level pressure of 980 mb. As Ida moved through the Bashi Channel, she weakened to 45 kt (23 m/sec) and then maintained this intensity until making landfall on the southeastern coast of mainland China, just south of Shan-t'ou (WMO 59316) at 1300Z on 11 July.

A predominate feature during all but the later stages of Ida's track was a strong and persistent rain or feeder band. Figure 3-08-1 shows this feature on NOAA satellite imagery. On 6 July, while Ida was organizing southwest of Guam, the Naval Air Station at Agana, Guam recorded 1.15 inches (29 mm) of rain in 3 hours and a peak gust of 31 kt (16 m/sec) as the band passed over the island. Subsequent aircraft reconnaissance in support of the 072130Z and 090735Z position fixes noted increases in the flight level winds and temperatures while transiting this outer band. These higher flight-level temperatures and winds were an apparent response to the release of latent heat of condensation from extensive convection within the band. The mission ARWO¹ on the 090735Z fix stated, "The 700 mb center was very weak with no strong wind band in any quadrant close to the center. It took us quite a while to locate a fairly broad area of light and variable winds...The northern end of this area was open, and to the northeast we observed a broad band of surface winds peaking at 85 kt (44 m/sec) situated about 25 nm (46 km) out." This was not an uncommon feature from aircraft reconnaissance data on Ida. Generally these maximum winds were located in the northeast quadrant, close to the rainband. However, the 85 kt (44 m/sec) wind was considered to be a transitory feature because all other indicators showed no reason for a sudden and short-lived intensification of the cyclone.

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