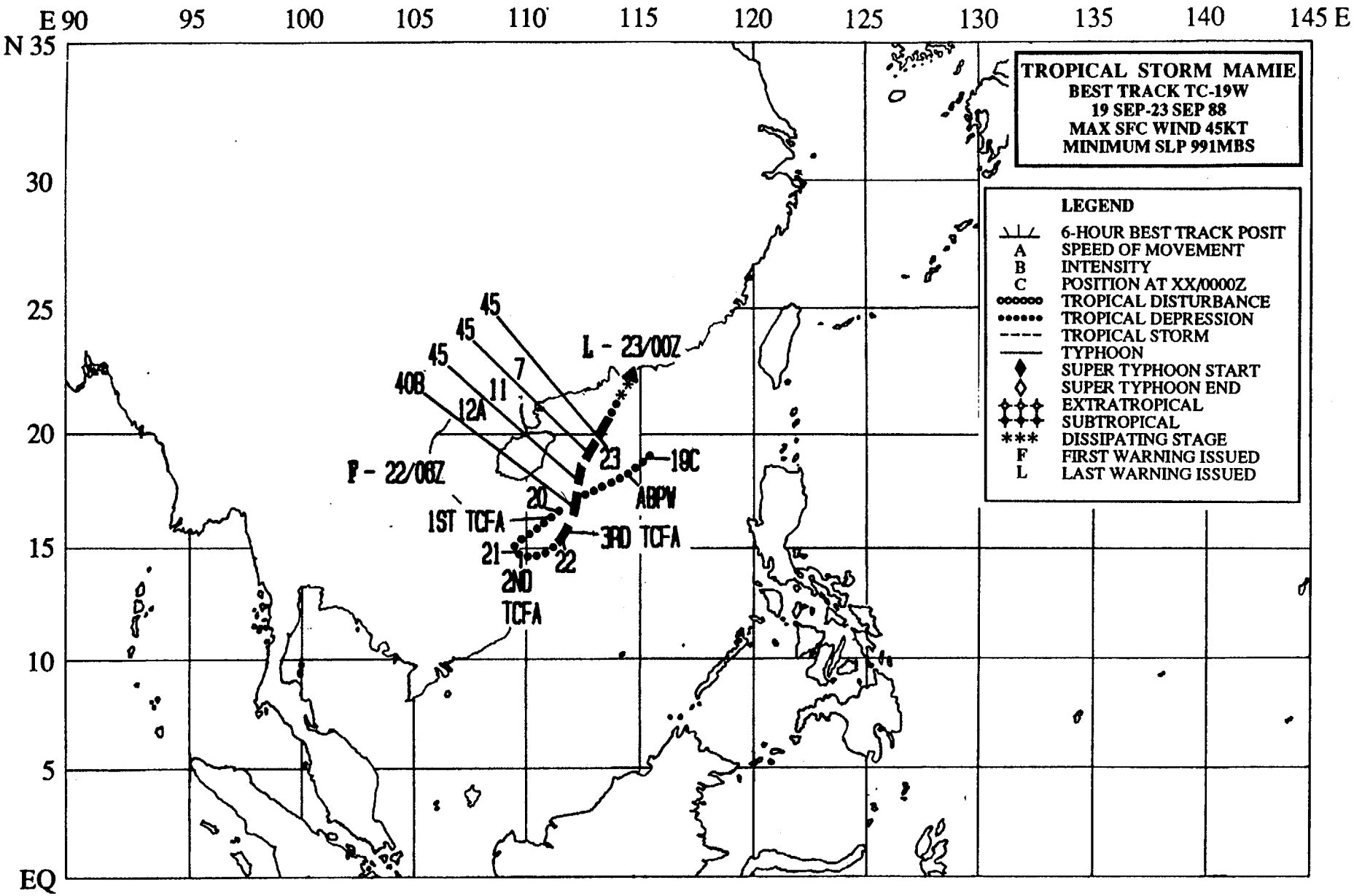
TROPICAL STORM MAMIE
BEST TRACK TC-19W
19 SEP-23 SEP 88
MAX SFC WIND 45KT
MINIMUM SLP 991MBS
LEGEND
6-HOUR BEST TRACK POSIT
A SPEED OF MOVEMENT
B INTENSITY
C POSITION AT XX/0000Z
TROPICAL DISTURBANCE
TROPICAL DEPRESSION
TROPICAL STORM
TYPHOON
SUPER TYPHOON START
SUPER TYPHOON END
EXTRATROPICAL
SUBTROPICAL
*** DISSIPATING STAGE
F FIRST WARNING ISSUED
L LAST WARNING ISSUED
E 90
95
100
105
110
115
120
125
130
135
140
145 E
N 35
30
25
20
15
10
5
EQ
L - 23/00Z
F - 22/06Z
45
45
45
40B
12A
11
7
23
19C
ABPW
20
1ST TCFA
3RD TCFA
21
22
2ND
TCFA

TROPICAL STORM MAMIE (19W)

Mamie was the second significant tropical cyclone of 1988 to develop in the South China Sea. It formed in tandem with Tropical Storm Kit (17W) in the monsoon tough and was slow to develop. Typical of monsoon depressions, Mamie proved to be a particularly difficult system to locate and forecast. Large fluctuations in its central convection within the larger synoptic scale trough contributed to this difficulty.

The disturbance that would become Tropical Storm Mamie formed in September, in the monsoon trough, 600 nm (1111 km) west-northwest of Kit (17W). Kit (17W) was at the eastern end of the monsoon trough. Mamie was first mentioned on the Significant Tropical Weather Advisory at 190600Z. During the next 18-hours, the disturbance moved southwestward at 10 kt (19 km/hr), most probably in response to binary interaction with Kit (17W). As Mamie became better organized, its deep convection began the first of several flare-ups. This prompted the first Tropical Cyclone Formation Alert at 200230Z, after satellite intensity analysis indicated 30 kt (15 m/sec) sustained surface winds. The system (Figure 3-19-1) continued southwestward until 210000Z, when it made a sharp turn to the east. The persistent central convection and potential for development required a second Alert at 210030Z.

Later, at 211800Z, the disturbance was headed northeastward along the trough axis — the opposite direction from its initial track, two days earlier. Apparently Mamie's track to the northeast was the result of increased low-level

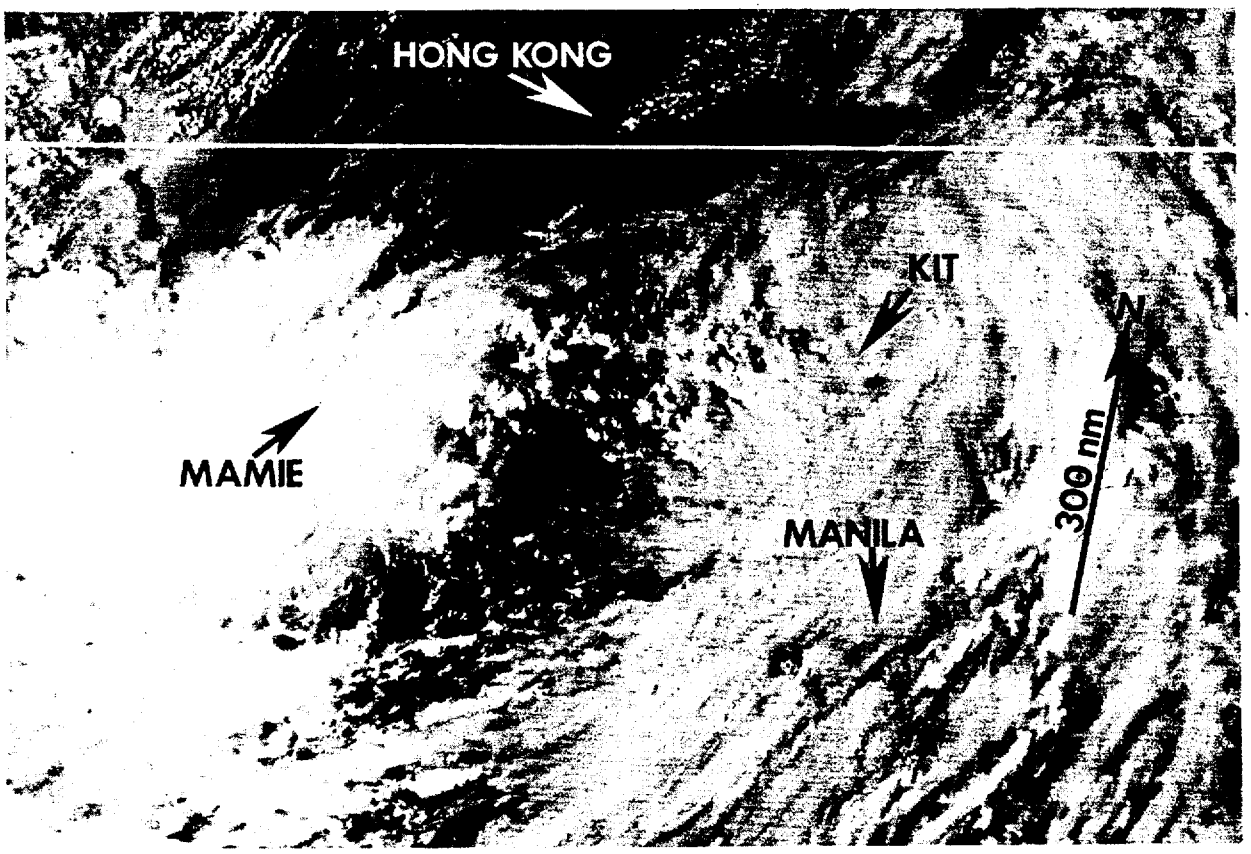

Figure 3-19-1. Mamie, the subject of a Tropical Cyclone Formation Alert, is on the left. To the right of Mamie is Tropical Storm Kit (17W) (200802Z September NOAA visual imagery).

southwesterly inflow into Kit (17W), which was now over water between Luzon and the southeastern coast of China. Mamie maintained its overall convective organization and a third Alert was issued at 220030Z. Based on a ship report of southeasterly surface winds of 40 kt (20 m/sec) and a minimum sea-level pressure of 991 mb, plus a satellite intensity analysis of 35 kt (18 m/sec), the first warning on Tropical Storm Mamie followed at 220600Z. Mamie continued up the monsoon trough axis towards Kit (17W), which had just made landfall in southeastern China. As vertical wind shear increased aloft over Mamie, JTWC issued its final warning at 230000Z. Mamie's remnants, and associated gales, then moved north-northeastward and dissipated on the coast of China northeast of Hong Kong. No reports of damage or loss of life were received.