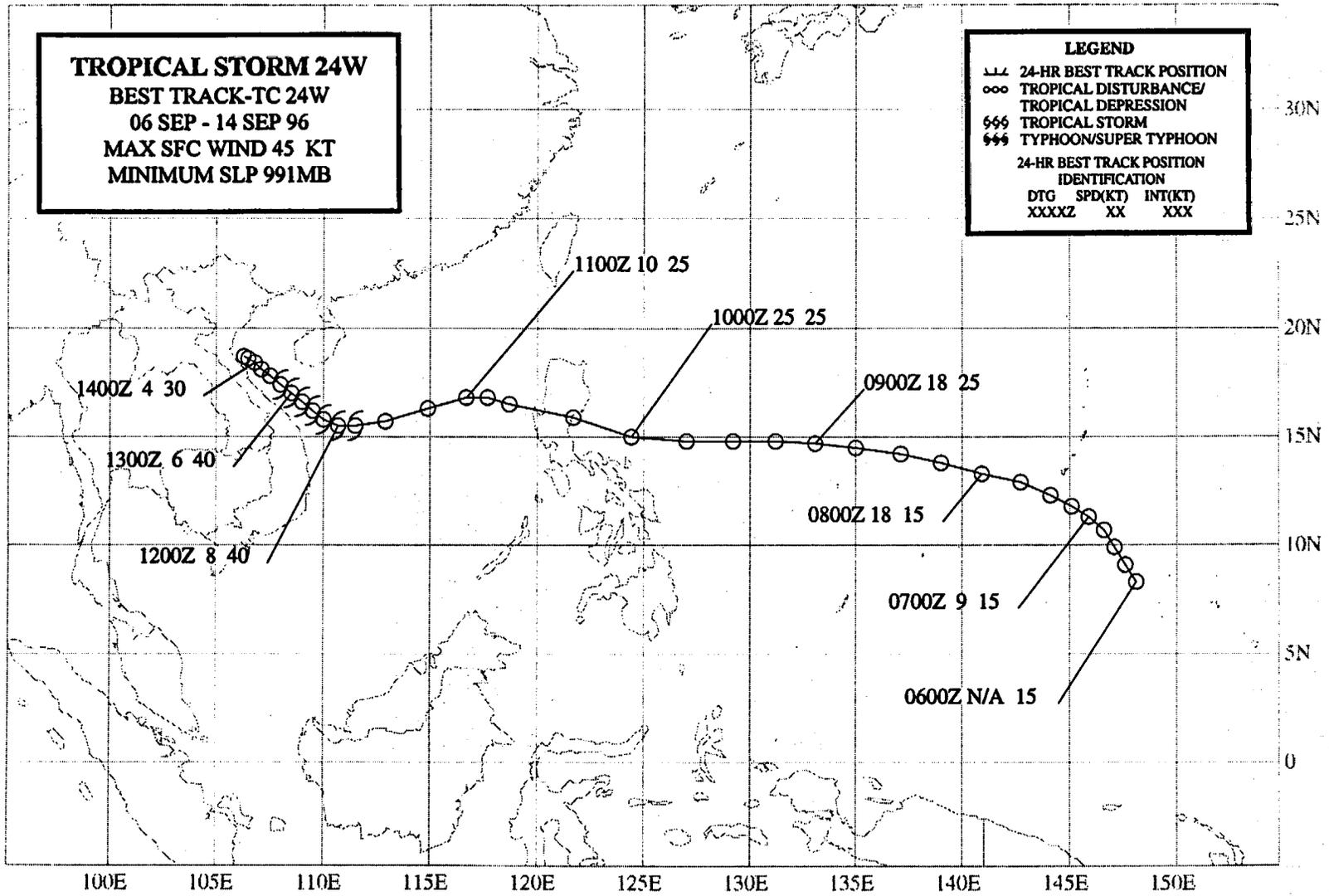


TROPICAL STORM 24W
BEST TRACK-TC 24W
06 SEP - 14 SEP 96
MAX SFC WIND 45 KT
MINIMUM SLP 991MB

LEGEND

- 24-HR BEST TRACK POSITION
- ooo TROPICAL DISTURBANCE/
TROPICAL DEPRESSION
- 666 TROPICAL STORM
- 888 TYPHOON/SUPER TYPHOON

24-HR BEST TRACK POSITION
IDENTIFICATION
DTG SPD(KT) INT(KT)
XXXXZ XX XXX



142

TROPICAL STORM 24W

As the long-lived Orson (19W) recurved at the beginning of September, the unusual monsoon flow pattern of August (see figure 3-13-4 in Kirk's summary) gave way to a pattern more in line with climatology: the maximum cloud zone and the axis of the monsoon trough extended from the Philippines east-southeastward into Micronesia. Tropical Storm 24W was the second of five significant TCs to form in this trough.

On 07 September, an area of deep convection began to consolidate into a discrete tropical disturbance located near Guam. First mentioned on the 071600Z September Significant Tropical Weather Advisory, this disturbance became a large monsoon depression in the Philippine Sea by the morning of 09 September (Figure 3-24-1). Although the definition of a monsoon depression includes large size, the disturbance which became Tropical Storm 24W was exceptionally large with its loosely organized ensemble of MCSs stretching nearly 25° (1500 nm; 2800 km) from the Philippines to Guam. Based upon consolidation of deep convection into a smaller area, the JTWC issued a Tropical Cyclone Formation Alert valid at 090500Z. Remarks on this alert included:

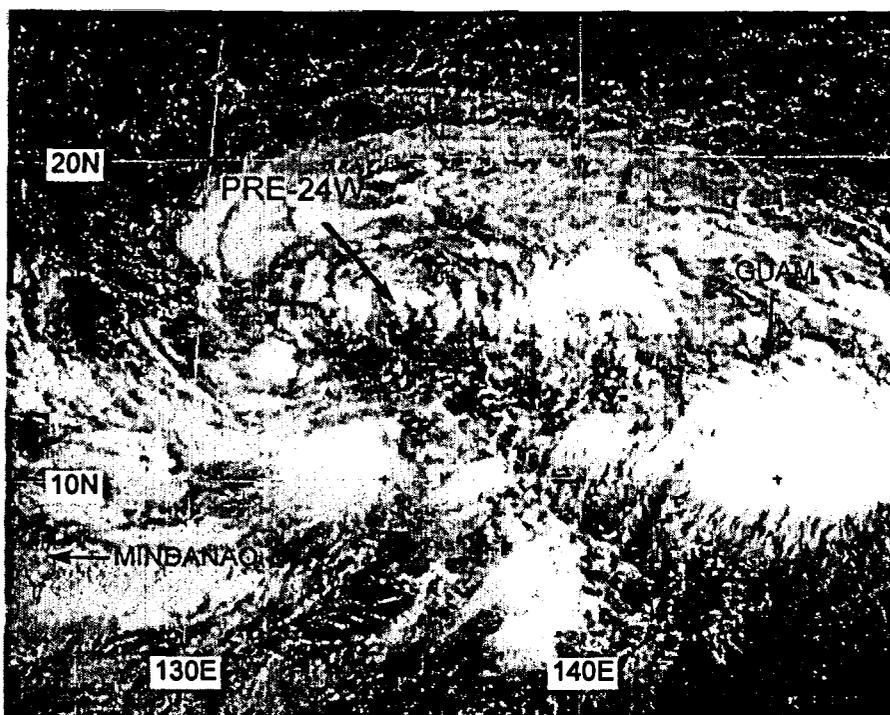


Figure 3-24-1 The cyclonic circulation center which became Tropical Storm 24W consolidated within a large monsoon depression. Another area of deep convection near Guam later detached from the monsoon depression and became Violet (26W) (082224Z September visible GMS imagery).

"Synoptic data and visible satellite imagery reveal the presence of a broad monsoon depression with the dominant circulation center [located near 15°N; 133°E]. Convection associated with this disturbance is limited to a broad ring approximately 600 nm in diameter. Maximum sustained winds are limited to the convective regions on the periphery of this system. . . ."

The first warning on Tropical Depression (TD) 24W was issued valid an hour later at 090600Z based upon ship reports of 20 to 25 kt (10-13 m/sec) in the convective regions approximately 120 nm (220 km) to the north and southwest of the LLCC.

The monsoon depression which became TD 24W had a complex evolution. Not only

did it lead to the formation of TD 24W, but another cyclonic circulation associated with it became Violet (26W). This complexity is described in remarks on the 100600Z Significant Tropical Weather Advisory:

"An area of convection [pre-Violet] is located near 13N 140E. Satellite imagery and synoptic data indicate this is a convective region formerly associated with Tropical Depression 24W that has separated from TD 24W and remained quasi-stationary as TD 24W moves west. . . ."

On 10 September, TD 24W crossed Luzon and entered the South China Sea. During the following three days it traversed the SCS, moved into the Gulf of Tonkin on 14 September, and weakened. The final warning, valid at 141200Z, was issued when the system dissipated near the coast of northern Vietnam.

TD 24W was upgraded to a tropical storm in postanalysis based on synoptic data which indicated sustained winds in the system reached a peak of 45 kt (23 m/sec) at 120600Z.