

- *** EXTRATROPICAL

- FIRST WARNING ISSUED



Tropical Storm Kim was the only tropical cyclone of 1983 to move from the South China Sea, across Indochina, and into the Bay of Bengal. This unusual meteorological event was permitted by the extremely low topographical resistance encountered along the storm's track across Indochina.

Tropical Storm Kim was initially detected on 9 October as a weak tropical dis-turbance located near 9N 153E. This disturbance was mentioned daily in the Significant Tropical Weather Advisory (ABEH PGTW) as it moved westward over the next four days. Although the disturbance was a persistent feature on satellite imagery, it showed no signs of development and was expected to dissipate over the southern Philippines. On the 14th of October, it appeared that the disturbance was dissipating in the vicinity of the Sulu Sea. At this point, the disturbance had lost its convective signature on satellite imagery and was no longer identifiable as a disturbance. However, on the following day, the system emerged in the South China Sea, developed rapidly into a tropical depression, and moved west-ward at speeds of 11 to 14 kt (6 to 7 m/s). The southwest monsoon was well-developed over the South China Sea at this time, providing an environment favorable for continued development. In view of Kim's position and the fact that several previous depressions had intensified in this environment, a TCFA was issued at 1604592.

Kim intensified while transitting the South China Sea, reaching tropical storm intensity at 1612002. Figure 3-16-1 shows Kim just prior to achieving tropical storm intensity near the coast of Vietnam. The first warning on Kim was issued at 1618002, five hours prior to landfall on the coast of Vietnam.

Although Kim was a relatively weak



Figure 3-16-1. Kim as a tropical depression just prior to reaching tropical storm intensity off the coast of Vietnam (1607082 October NOAA 7 visual imagery).

tropical storm, its rapid development just prior to landfall resulted in much human suffering. Preliminary reports indicated that more than 200 people, most of them fishermen, died or were lost. Property damage was also unusually high, with 300 boats and ships, 3,000 houses, and 19,750 acres (8,000 hectares) of rice destroyed.

Warnings on Kim were suspended shortly after landfall as the circulation weakened rapidly over land. Kim was downgraded to a tropical depression at 170600Z as it crossed the border from Vietnam into Kampuchea. Six hours later it was classified as a tropical disturbance.

Kim continued tracking across Indochina with a great deal of associated convection and some indications of a middle to lower level circulation apparent in visual satellite imagery. Kim's ability to maintain its intensity during this period may be attributed to the flat terrain encountered along its track and the fact that it was never more than 100 nm (185 km) from water.

A second TCFA was issued for Kim at 1813592 when it became apparent that the disturbance would move into the Andaman Sea where regeneration was considered likely. Warnings for Kim were resumed on the following day as tropical depression intensity was achieved over the Andaman Sea (Figure 3-16-2). At this time, Kim was expected to cross the southern tip of Burma and further intensify in the Bay of Bengal. Kim moved across southern Burma as expected but never actually got out over open water in the Bay of Bengal. Instead, Kim moved northward along the coast of Burma, parallel to the axis of the Arakan Mountain Range, and weakened steadily. The final warning was issued as the system dissipated on the 20th at 12002.



Figure 3-16-2. Tropical Cyclone 16W (Kim) after regeneration in the Andaman Sea (1908212 October NOAA 7 visual imagery).