

Typhoon Gloria (30W)

Typhoon Gloria (30W) developed in the Philippine Sea, east of Samar Island, and slowly intensified into a weak tropical storm while moving northward. Typhoon Gloria eventually turned northeastward and began to accelerate. It passed just north of Iwo Jima and then rapidly intensified and reached minimal typhoon intensity just prior to extratropical transition.

A Tropical Cyclone Formation Alert was issued at 120700Z November, as a persistent area of convection at the tail-end of a shear line. The first warning was issued at 130900Z November as a 25 kt cyclone, with stronger gradient winds to the north associated with the northeast monsoon. The developing tropical depression was difficult to locate, and as development continued, a more northerly track quickly became evident.

Typhoon Gloria (30W) reached tropical storm intensity at 140900Z November while moving on a north-northwestward track. Meanwhile, a pronounced band of mid-latitude westerlies continued to slowly press toward the south and was expected to increase and inhibit intensification to moderate tropical storm intensity and eventually cause dissipation over water. Instead, the westerly flow actually caused or influenced continued intensification, acceleration, northeastward movement, and eventual extratropical transition.

As Typhoon Gloria (30W) began to move and accelerate under the increasingly northeastward steering flow, the cyclone fluctuated in overall appearance but maintained its intensity. As acceleration continued, the westerly flow appeared to extend deep into the mid levels preventing a quick shearing of the circulation. The cyclone intensified to typhoon intensity at 152100Z November for a very short period and reached a forward speed of 48 kt. Typhoon Gloria became fully extratropical and JTWC issued the 13th and final warning on 160900Z November.

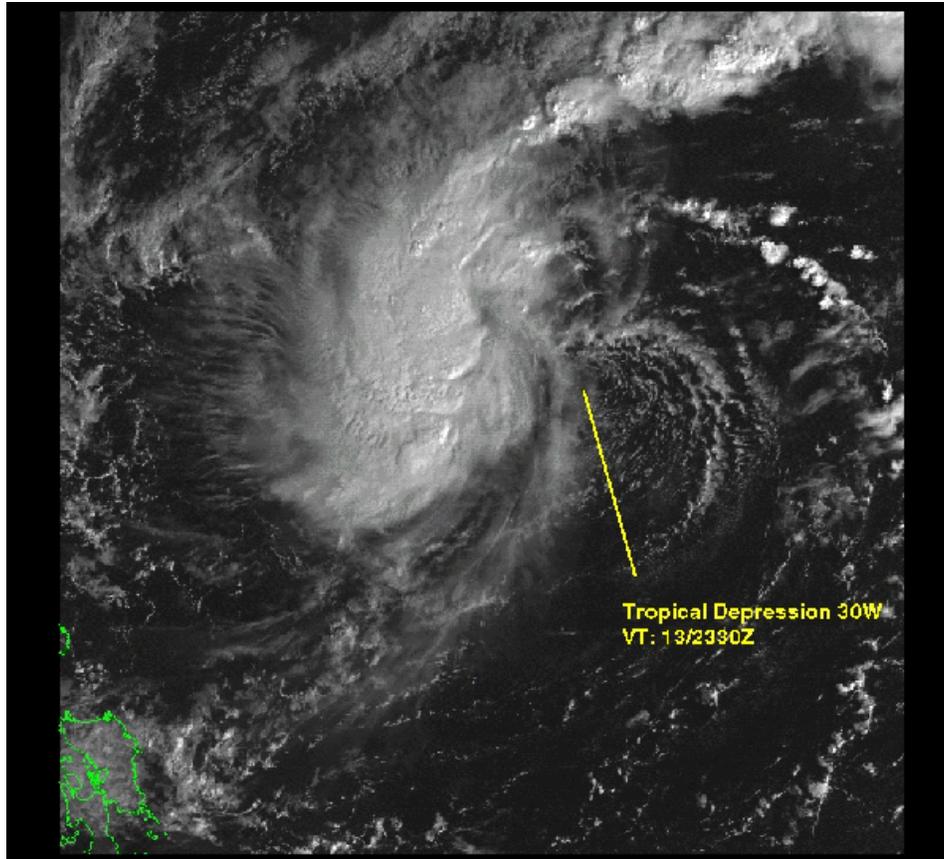


Figure 1-30-1. This visible image was taken 18 hours after the initial warning on TY Gloria (30W) at 132330Z November. A defined low-level circulation center (LLCC) remains completely exposed in the central Philippine Sea.

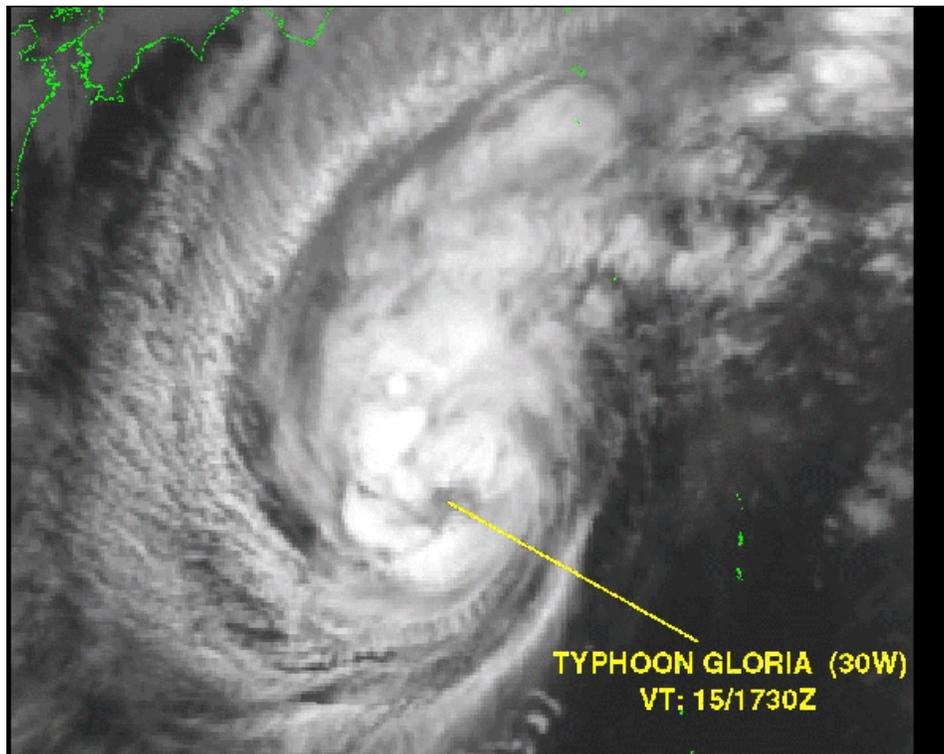


Figure 1-30-2. 151730Z November GMS-5 infrared image as Typhoon Gloria (30W) passed east of Iwo Jima. The short-term rapid intensification was just beginning as the system began extratropical transition and accelerated northeastward.

