

**\* Tropical Cyclone Rainfall over Taiwan and the Morakot Typhoon  
Rainfall Forecast**

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Among natural disasters, tropical cyclones cause the most losses in Taiwan. The losses were mainly due to flooding, mudslides, and debris flows induced by the heavy rainfall of the tropical cyclones. Reports showed that the tropical cyclone center position is a dominated factor to determine the rainfall distribution over Taiwan. An 11-year data set, starting from 1998, of rainfall reports from 287 rain gauges over Taiwan was collected, studied and analyzed to show the characteristics of tropical cyclone rainfall over Taiwan. Discussions on the rainfall distribution will be presented in the conference. Based on the climatology typhoon rainfall data, typhoon rainfall forecast model was developed. We will also introduce the model and show the model rainfall forecast verification of Typhoon Morakot (2009), which induced daily rainfall more than 1,000 mm and 4-day accumulated rainfall more than 2,500 mm over central and southern portion of Taiwan.

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