

# **The Activities and Information Management System of Taiwan Ecological Research Network**

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## **Abstract**

The activities of the Taiwan Ecological Research Network (TERN) followed the original goals of 1990s to create the network and specific topics of each site. Recently, based on the past data collected, TERN focuses on cross-regional site comparisons including typhoon/hurricane and ecosystem dynamics, global weathering and climate change, ecology and management of forest plantation, and regional flux research topics. In addition to research activities, TERN has put efforts on ecological information management since 2004. Based on the progress of these efforts, we have hosted several international ecological information management workshops to share the experiences with member networks of EAP-ILTER. In the near future, TERN will continuously host some science conferences.

In terms of ecological information management system of TERN, we have collaborated with US LTER and adapted Ecological Metadata Language (EML) as the standard to develop our information management system. This system permits sharing of functionality across multiple systems. TERN IM team also devoted to develop a data checking tool based on EML documents stored on our metadata database. This tool allows researchers to access EML, upload data, check data quality, and then run R code on the server. Furthermore, the system links to scientific workflow system called Kepler as the automatically integrating tool for researchers who focus on ecological modeling.