Taiwan Earthquake Research Data Center (TECDC)

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Taiwan is located at the convergent plate boundary between the Eurasian and the Philippine Sea plates. As a result, intense earthquake activity and associated surface deformation are manifesting in this region. To implement and promote advanced seismological researches, the Taiwan Earthquake Research Center (TEC) program has been sponsored by the Ministry of Science and Technology (MOST) since 2005. Currently, TEC is a virtual organization that is hosted by the Institute of Earth Sciences, Academia Sinica. To serve the Taiwan seismological research community with high quality seismic data, we have constructed the TEC Data Center (TECDC) to archive and distribute station information, Taiwan event catalog, waveform datasets and focal mechanisms derived from various institutions in Taiwan. In addition, we also provide online visualization service for users who is in need of data viewing. A newly developed platform with a suite of web services for the direct access of the mentioned datasets has been online operated to support the seismological community. This facility enables users to request multiple datasets through a single interface, which is also friendly to users outside of the traditional academic community. In the past 5 years, we have developed a web-based Taiwan Earthquake Science Information System (TESIS), three crowdsourcing platforms, and a series of educational tools for teachers, students, and the general public to implement and promote citizen seismology in Taiwan. Our intention is to make the developed facilities work together as a framework to promote public involvement in earthquake science and hazard mitigation.