Citizen Earthquake Science in Taiwan

Thursday, 9 March 2017 15:00 (30 minutes)

Taiwan is located at seismically highly active area that geologists called the convergent plate boundary between the Eurasian plate and the Philippine Sea plate. To bring seismology in a simple way to citizens at school and home, we are incorporating the research-based Quake-Catcher Network (QCN) program into an educational seismic network that is maintained by teachers in tens of high schools in the whole island of Taiwan. We established a web-based educational platform so that users are encouraged to interact with these collected seismic waveform data and even to conduct further signal analysis on their own.

In addition, to collect field observations for any earthquake-induced ground damages, such as surface fault rupture, landslide, rock fall, liquefaction, and landslide-triggered dam or lake, etc., we are developing an earthquake damage reporting system for public but particularly relying on trained volunteers who have taken a series of workshops, organized by this project. This Taiwan Earthquake Scientific Report (TSER) system is based on the Ushahidi mapping platform, which has been widely used for crowdsourcing.

Some online games and materials for educational purposes on learning earthquakes will be ready in a near real-time manner for students and teachers. All These constructed products are now operated at the Taiwan Earthquake Research Center (TEC). With these newly developed platforms and materials, we are aiming not only to raise the earthquake awareness and preparedness, but also to encourage public participation in earthquake science in Taiwan.

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