New Tools for Educational and Public Access to Seismic Data

Mladen Dordevic, Russ Welti, John Taber, and M. Hubenthal - IRIS Consortium

To address student and public interest in earthquakes and their effects, IRIS EPO has a suite of access and visualization tools that provide easy access to earthquake data and information about newsworthy events such as recent large earthquakes. The two newest tools in this suite allow users to view ground motions from stations near them, and to use seismic data to determine Earth structure. The tools access seismic data and images via web services from IRIS Data Services which allows for quick and flexible interactions.

The Station Monitor, which is both mobile and desktop friendly, allows users to easily answer the question "Did the ground move near me?" They can quickly find a station near them or search a global station map to explore recent ground motions, learn about recent earthquakes, and see recordings from past large earthquakes. Station hosts and anyone else who have an interest in a particular station from the Transportable Array and other networks can view and compare daily webicorder records from their station.

The Global Seismogram Viewer automatically creates clear seismic record sections from selected large earthquakes that are tablet-friendly and can also to be printed for use in a classroom without computers. The plots are designed to be appropriate for use with no parameters to set, but users can also modify the plots, such as including a recording station near a chosen location. A guided exercise is provided where students use the record section to discover the diameter of Earth's outer core. Students can pick and compare phase arrival times onscreen which is key to performing the exercise. A companion station map shows station locations and further information and is linked to the record section.

www.iris.edu/app/station monitor

ds.iris.edu/gsv/



