ID: **O3.1-256**   Type: **Oral**

updates for integrating CSS3.0-like database tables and files into ObsPy workflows

Pisces (https://lanl-seismoacoustics.github.io/pisces/) is a python-based data management library designed to facilitate interaction with seismological databases utilizing CSS3.0-like schemas. Pisces leverages existing free and open source technologies maintained by the wider seismological community to incorporate information from these databases into python workflows. Recent additions to Pisces include support for CSS3.0-like instrument response files (PAZFIR files) and the conversion of database tables to ObsPy Catalog and Inventory objects. RESP and StationXML are the community standard, and open source packages, such as ObsPy, support these formats but not PAZFIR files, making them difficult to incorporate into modern workflows. PAZFIR read and write functionality has been incorporated into Pisces allowing researchers to translate CSS3.0-like tables and files into ObsPy Response and Inventory Objects and convert StationXML files to PAZFIR files and their corresponding database tables. Inventory and Catalog object support allows researchers to query these databases and output their results directly into ObsPy objects which can then be used in python workflows. The inclusion of these features facilitates the integration of data from CSS3.0-like databases into Python-based geophysical analysis workflows and provides database support for other software packages provided by Los Alamos researchers.

E-mail

cgammans@lanl.gov

In-person or online preference

Primary author: Ms GAMMANS, Christine (Los Alamos National Laboratory (LANL))

Co-authors: Dr MACCARTHY, Jonathan (Los Alamos National Laboratory (LANL));   SPEARS, Brady (Los Alamos National Laboratory (LANL))

Presenter: Ms GAMMANS, Christine (Los Alamos National Laboratory (LANL))

Session Classification: O3.1 Seismic, Hydroacoustic and Infrasound Technologies and Applications

Track Classification: Theme 3. Monitoring and On-Site Inspection Technologies and Techniques: T3.1 Seismic, Hydroacoustic and Infrasound Technologies and Applications