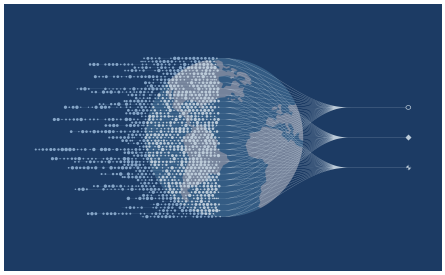

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# and utilization of synthetic seismograms with the Waveform Simulation Framework

The generation of synthetic seismograms through simulation is a fundamental tool of seismology required to run quantitative hypothesis tests. A variety of approaches have been developed throughout the seismological community and each has their own specific user interface based on their implementation. This causes a challenge to researchers who will need to learn new interfaces with each new software they wish to use and create substantial challenges when attempting to compare results from different tools. Here we provide a unified interface that facilitates inter-operability amongst several simulation tools through a modern containerized Python package. Further, this package includes post-processing analysis modules designed to facilitate end-to-end analysis of synthetic seismograms. In this contribution we present the conceptual guidance and an example implementation of the new Waveform Simulation Framework.

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