Session ID: GRM-3

Title
EXPLORING EARTHQUAKE DATA CENTERS AROUND THE WORLD

Convenors
L. Schleicher [1], L. Luzi [2], M. Naguit [3]

Description
The densification of seismic networks globally paired with technological advancements of seismic monitoring equipment and real-time communications offers a valuable opportunity for the earthquake engineering community to observe and measure earthquakes from a variety of magnitudes, distances, and tectonic environments on Earth. The collective existence of earthquake datasets from around the globe, along with continued monitoring efforts, offers a unique opportunity to advance our knowledge of the seismic source, ground motion attenuation, and site response components of the seismic hazard equation, and thus our ability to design earthquake resilient infrastructure.

We welcome presentations from data centers and data users from across the globe to share the status of existing repositories of earthquake data, modern signal processing workflows, data quality review techniques, and standards for site characterization. Topics of interest may include, but are not limited to data formats, waveform datasets for notable earthquake sequences, workflow modernization to keep up with state-of-the-art signal processing techniques, and strategies for sharing and dissemination of waveform data, station instrumentation metadata, and site characteristics information to the earthquake engineering community.

In this session, we aim to share and discover current workflows, inspire new data sharing and collaboration opportunities among strong motion data centers worldwide, explore modern signal processing methods, identify future data user needs, and highlight available datasets for use by the earthquake engineering community.

Invited Speakers
G. Lanzano [2], L. Hagos [4], J. Salichon [3]

Affiliations
[1] United States Geological Survey, Earthquake Science Center, Moffett Field, USA, [2] Istituto Nazionale di Geofisica e Vulcanologia, Milano, Italy, [3] Institute of Geological and Nuclear Sciences Limited, GNS Science, Lower Hutt, New Zealand, [4] California Geological Survey, California Strong Motion Instrumentation Project, Sacramento, USA