



## Session 09

### Advancing the (Re)use and preservation of Analog Seismic Data

Conveners:

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Analog seismograms have formed the basis for seismological research for almost 100 years. These data contain unique earthquakes and almost all atmospheric nuclear tests. With the wide availability of digital seismic data, researchers have recognized nontraditional phenomena such as slow-slip events, storm surges, tectonic tremors, acoustic phases, landslides, icequakes, and avalanches. In addition, these newly recognized connections between Earth's systems – atmospheres, ocean, and cryosphere have increased the importance of contributions from seismology to understand and mitigate the threat from both natural and anthropogenic hazards. These and yet to be recognized phenomena have been recorded for decades on analog media but many of these records are underutilized due to their inaccessibility.

Analog seismograms are at risk from inadequate storage conditions or institutional neglect. A growing movement for their preservation alongside the development and adaptation of techniques to use them is gaining momentum worldwide as the value of old data is recognized. Better coordination, sharing experiences, definition of standards and applying FAIR (Findable, Accessible, Interoperable, Reusable) standards can greatly improve, even overturn, their precarious situation. If available, information on recordings of particular seismic events in digital form may become standard part of seismic event bulletins distributed by global, regional, and local agencies.

We invite abstracts on a wide range of topics related to the use and preservation of analog seismic data including: research using analog data; approaches, methods and lessons learned in preservation and digitization; issues, challenges, case studies in preservation and use; and vision and needs for preservation and standards.