

The current status and vision of coordinated services for seismology in Europe - EPOS Seismology

Florian Haslinger and the EPOS Seismology Team ETH Zürich, Schweizerischer Erdbebendienst, Zürich, Switzerland (haslinger@sed.ethz.ch)

The Thematic Core Service (TCS) for the seismology domain within the European Plate Observing System (EPOS), EPOS Seismology, is being implemented by the community based on and actioned by the existing European level initiatives: ORFEUS for waveform services, EMSC for seismological products services, and EFEHR for seismic hazard and risk services. Development of EPOS Seismology and its coordinated service portfolio is supported by various past and present EU funded projects (e.g. NERA, EPOS-PP, EPOS-IP, SERA) as well as national projects, institutional contributions, and community initiatives. The first services are now being integrated into the central EPOS IT infrastructure (EPOS Integrated Core Services, ICS) and are being tested and validated. Governance mechanisms are being adapted for EPOS and further developed for the interaction with EPOS-ERIC (officially established in late 2018), and the operational coordination with other EPOS domains and the ICS is increasing.

This presentation provides an update on the current status of EPOS Seismology with a focus on the service portfolio and governance implementation. We also discuss the ongoing efforts to increase FAIRness of data and products and the challenges encountered on the way. In particular we address the context of licensing, attribution and provenance tracking across the whole data lifecycle, long-term preservation, reproducibility, the harmonization of metadata and related vocabularies, and the overall sustainability of these distributed and federated community services operated largely in an academic research environment.