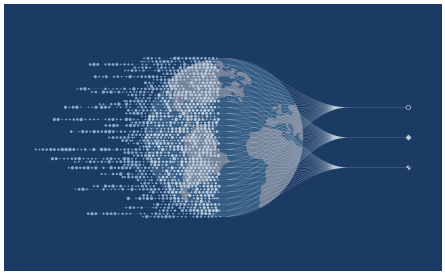

ID: **P3.5-628** Type: **E-poster**

Seismic event processing using the IMS FDSN webservice and SEISAN

Thursday 11 September 2025 11:00 (1 hour)

In this presentation, we demonstrate how to use the IMS FDSN web service to download and analyze seismic data. Specifically, we show how to integrate IMS waveforms and phase-picking data with locally collected datasets, and how to process this information to determine event locations and magnitudes.
For our analysis, we utilize the seismic analysis software package SEISAN. SEISAN (see http://seisan.info) is widely used, particularly by smaller seismic networks, students and researchers, for processing data from both permanent and temporary seismic networks. It is also employed by several National Data Centers (NDCs).
The following topics are covered in the presentation:
• Requesting parametric data in QuakeML format for different events.
• Adding parametric data in QuakeML format from IDC FDSN web services into a SEISAN database.
• Requesting metadata in StationXML format from the FDSN web service.
• Integrating metadata in StationXML format from VDMS into a SEISAN database.
• Requesting data availability information from the FDSN web service and using this information for event selection.
• Requesting seismic data in MiniSEED format from the FDSN web service.
• Visualizing MiniSEED data from the IDC FDSN web service using SEISAN.
These topics are also available as presentations on the NDC Forum.

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In-person or online preference

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Session Classification: P3.5 Analysis of Seismic, Hydroacoustic and Infrasound Monitoring Data

Track Classification: Theme 3. Monitoring and On-Site Inspection Technologies and Techniques: T3.5 Analysis of Seismic, Hydroacoustic and Infrasound Monitoring Data