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Examples from data analysis integrating IMS/IDC data with local seismic data in SEISAN

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We demonstrate here the advantages of combining data from local seismographs with IMS data in the analysis of both local and distant events. The implementation of new IMS to SEISAN and IDC to SEISAN links makes the integration much easier than before. These links are the results of a project funded by the EU (CELEX 02018D0298-20200423) to facilitate the use of IMS and IDC data at NDCs using the SEISAN package for routine seismic analysis. In this presentation we show how to import parametric data in Nordic format and waveform data in SEED format for a combined analysis of three events: a) an earthquake in West Greenland on 2020-09-27. The regional seismograph network in Greenland is very sparse, and the addition of extra data is extremely valuable. b) an earthquake in Denmark on 2018-09-16 where distant phases can add extra information about the event, and finally c) the DPRK nuclear test on 2017-09-03 which was recorded on both seismographs in Denmark and Greenland. All three events are relocated using the data integration.

Promotional text

Demonstrate how the new SEISAN link can improve the ability of NDCs to use IMS/IDC data and participate in verification

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