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## investigation of the NPE2019

*Friday, 2 July 2021 10:30 (15 minutes)*

The NDC Preparedness Exercises (NPE) are regularly performed dealing with fictitious treaty violations to practice the combined analysis of CTBT verification technologies. These exercises should help to evaluate the effectiveness of analysis procedures applied at NDCs and the quality, completeness and usefulness of IDC products. The NPE2019 is a combined radionuclide-waveform scenario. The source region and time domain of a possible treaty violation activity was determined from ATM in backtracking mode with input data from fictitious particulate radionuclide and radioxenon measurements at stations of the IMS of the CTBTO. The seismicity of the determined source region was investigated in detail to identify events which cannot be classified as natural. An earthquake sequence could be identified within the specified source region and time frame from ATM analysis. The unusual shallow source depth of about 3 km and no mining activities in this region could classified these events as a possible treaty violation. Results were used to decide about the need of an OSI to answer this question.

### Promotional text

Investigation of seismic events within the NDC Preparedness Exercises 2019 (NPE2019) target area to identify the nature of these events and decide about a potential treaty violation

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