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## of the Austrian NDC in the NPE2019-Exercise

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Following the statement of the state of Raetia regarding an accident at a TRIGA reactor facility, the Austrian NDC started investigating a possible violation of the Test-Ban Treaty. Based on a list of IMS radionuclide detections a forward run was performed and Possible Source Regions were determined. However, the detections could not be traced back unambiguously to the location of the reactor. Especially, the forward simulation supported the hypothesis that radioxenon measurements from IMS station Schauinsland were not related to the TRIGA reactor. In agreement with atmospheric transport modeling (ATM) results radionuclide analysis revealed the possibility of two overlapping incidents. Possibly, a second event took place around three days before the announced reactor release.

Additional data was released over a three months period. The second release contained radionuclide records from the national station in Vienna. ATM in combination with radionuclide analysis supported the hypothesis of a second event.

The last data released, was seismic data from local non-IMS-networks. With the data and public available bulletins, analysis of the waveforms was started. Finally, a suspicious source, an explosion, was localized and identified. However, it was not possible to relate this event to the radionuclide measurements at Schauinsland and at Vienna via ATM.

### Promotional text

Participation of the Austrian NDC in the NPE2019-Exercise

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