

Detection, Localization and Characterization of the Seismicity: Deep Learning Methods for Accuracy Improvements of Regional Seismic Bulletins DERODE Benoit CEA DAM, Ile-de-France, France / IRAP, University of Toulouse, FRANCE



## **Objectives**

To develop protocols to automatically detect, locate and discriminate seismic events in various tectonic and instrumental contexts on a regional scale.

- We developed and used multiple methods, including new advances in deep learning-based approaches, to build an automated and operational protocol for processing and analyzing seismic data.
- Our workflow includes a seismic phase picker, a phase associator, a seismic event location algorithm, and an event discrimination algorithm.
- Our ready-to-run workflow, applied to local and regional contexts, allowed the construction of catalogues with more accurate locations.



If you want to learn more about this, come see my e-poster during session 1.2