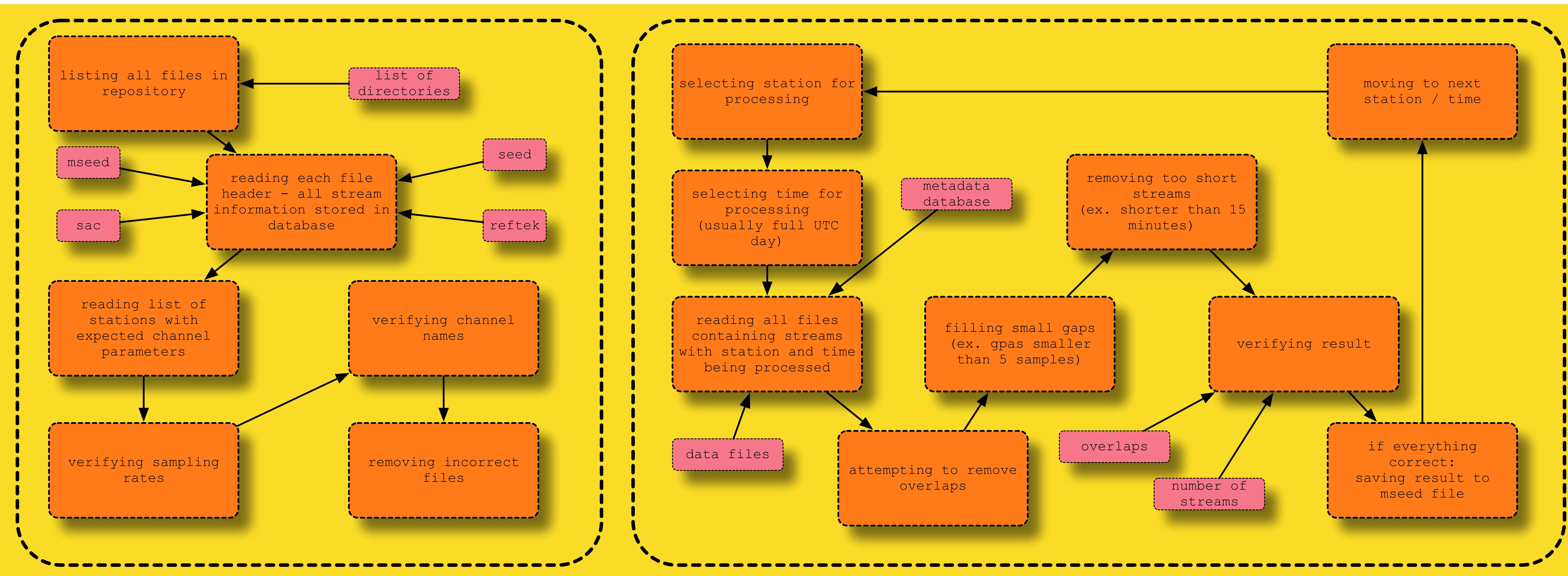


pySeismicDQA: open source post experiment data quality assessment and processing

Marcin POLKOWSKI

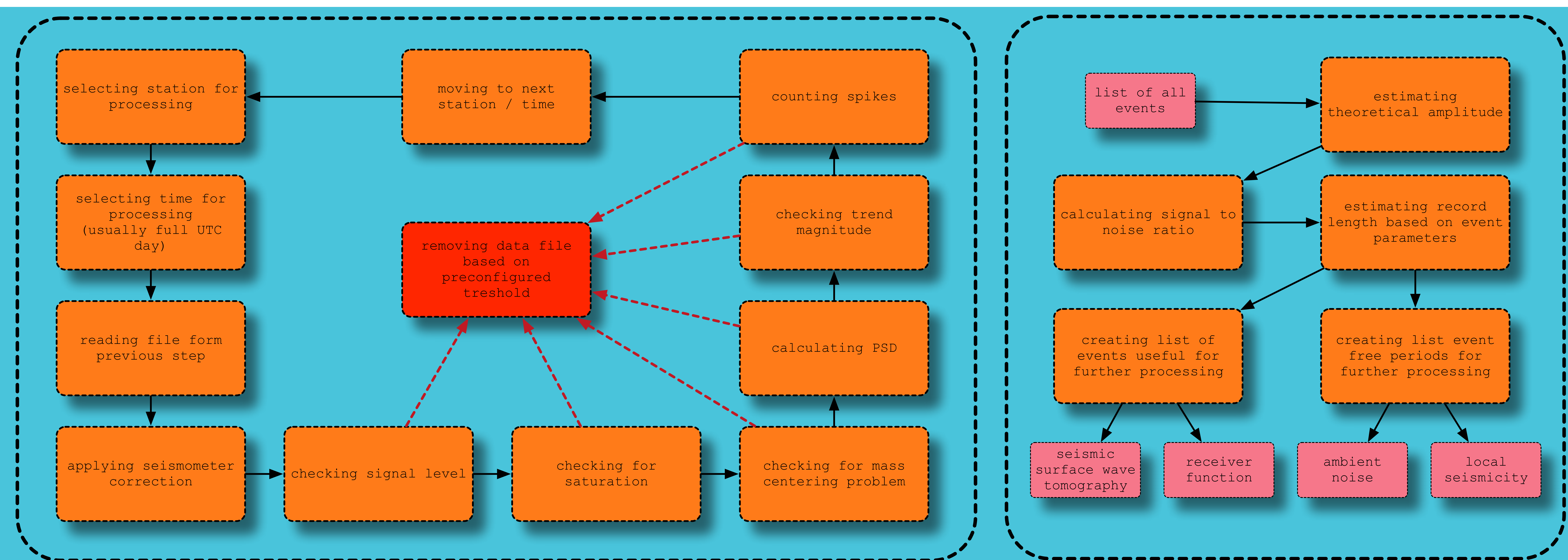
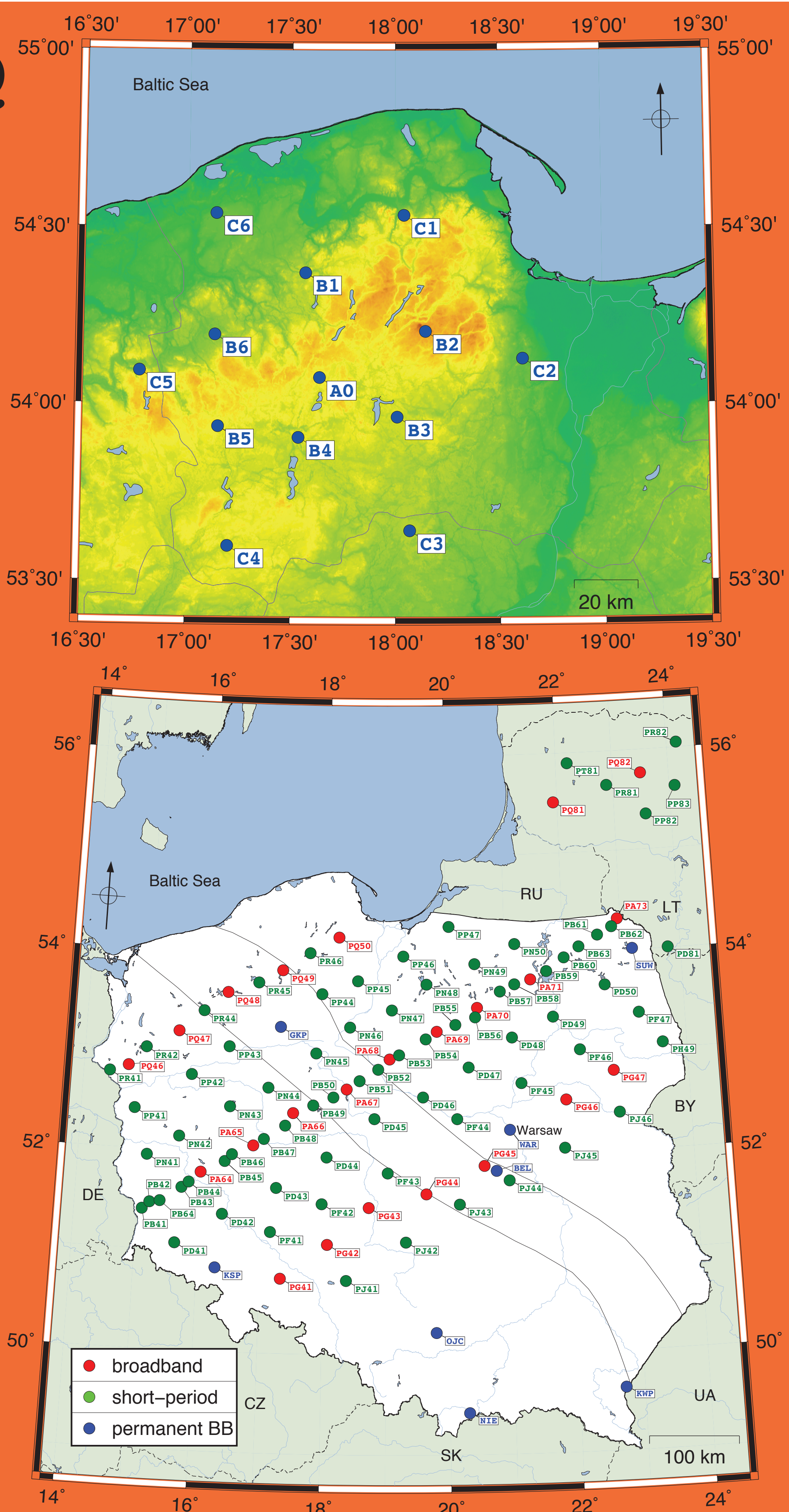
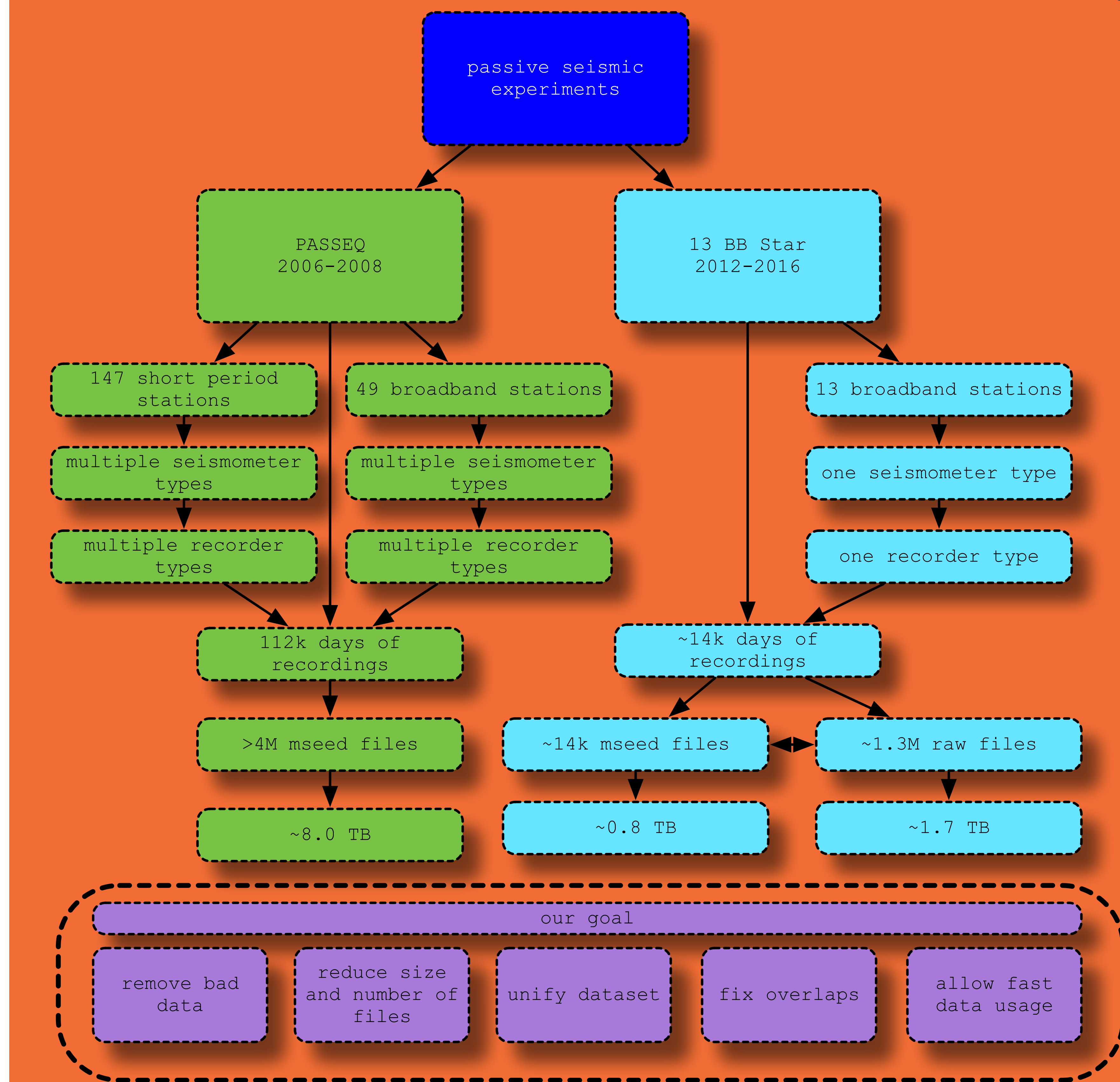
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Abstract

Seismic Data Quality Assessment is python based, open source set of tools dedicated for data processing after passive seismic experiments. Primary goal of this toolset is unification of data types and formats from different dataloggers necessary for further processing. This process requires additional data checks for errors, equipment malfunction, data format errors, abnormal noise levels, etc. In all such cases user needs to decide (manually or by automatic threshold) if data is removed from output dataset. Additionally, output dataset can be visualized in form of website with data availability charts and waveform visualization with earthquake catalog (external). Data processing can be extended with simple STA/LTA event detection. pySeismicDQA is designed and tested for two passive seismic experiments in central Europe: PASSEQ 2006-2008 and "13 BB Star" (2013-2016). National Science Centre Poland provided financial support for this work via NCN grant DEC-2011/02/A/ST10/00284.

Our test case: 13BB and PASSEQ



pySeismicDQA is currently under development and is expected to be released for public as open source solution in Q4 2017. Contact me for updates: <http://marcinpolkowski.com/>

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SM7.1 New developments in open source and academic seismic software

