

AKVO: AN OPEN SOURCE SURFACE NMR WORKBENCH

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Akvo is a software project targeting processing, modelling, and inversion of surface nuclear magnetic resonance (sNMR) data which is being released as a resource for the community. Akvo is free. The code is written primarily in Python 3 with a Qt derived graphical user interface. The code optionally interfaces with Merlin, an open source sNMR modelling API written in C++. As such, there are no external dependencies on proprietary runtime environments. Akvo is open source. The code is managed in a git repository which is configured for anonymous read and is released under the GNU public license. Anyone can access, read, edit, and use the code--you don't need to get permission to download the code. Akvo is flexible. Akvo processing and modelling supports multiple channel data and arbitrary transmitter configuration. All processing steps are configurable so that they can be adapted to varying survey conditions. Akvo processing is reproducible and transparent. The processing workflow is documented along with the data in self-describing human readable YAML files. This encourages reproducible publications and reports. Akvo seeks community engagement. We are looking for new users and collaborators. This runs the gamut from code development, to testing and reporting of tickets for enhancements or bugs reports, and documentation.