Getting to the science quickly and effectively: An international collaboration in community radar software

Scott Collis (1), Jonathan Helmus (1), Maik Heistermann (2), and Daniel Michelson (3)

(1) Argonne National Laboratory, Environmental Science Division, Argonne, IL, United States, (2) University of Potsdam, Institute of Earth and Environmental Sciences, Potsdam, Germany, (3) Swedish Meteorological and Hydrological Institute, Norrköping, Sweden

The science of meteorology is full of duplicated effort. Actions such as reading in data, quality control and performing retrievals is repeated across institutions and while the traditional publication process helps in jumpstarting the development process details can be, some times deliberately, vague. Free and open software, specifically community software projects that are open to new contributions can help to alleviate this problem. This presentation will outline a growing international collaboration on the development of software for the reading, processing, retrieval from and output of weather radar data. Developers of the Python ARM Radar Toolkit, the Wradlib software package and the BALTRAD have been collaborating in order to improve the intercompatibility of the contributed code. This effort, coupled with running courses in open source software and sustainable programming practices is aimed at helping users cut through work that has been done before and get to using weather radar data to improve our understanding of the atmosphere and help decision makers make the best use of radar data. This will be an example driven presentation, code will be shown and examples worked through to give the audience a flavor of how work can be done with the various projects.