

Joseph H. Kennedy



**Postdoctoral Research Associate and Computational
Glaciologist**

Computational Earth Sciences Group

Climate Change Science Institute

Oak Ridge National Laboratory

Joe Kennedy is a Postdoctoral Research Associate and Computational Glaciologist with the Earth System Modeling group in the Climate Change Science Institute. Attending Western Washington University for undergraduate work (BS in Physics) and the University of Alaska Fairbanks for graduate work, Joe received Ph.D. while working on a computational project to establish a link between ice crystalline fabric evolution and climate history. His thesis was entitled "Linking climate history and ice crystalline fabric evolution in polar ice sheets."

Currently, Joe's focus has been on the development of LIVVkit, a Land Ice Validation and Verification toolkit, designed to test output from the Community Ice Sheet Model (CISM), a component of the Community Earth System Model (CESM). The ability to verify (does the model work?) and validate (is this the right model?) CISM is integral to getting robust conclusion of past and future ice sheet characteristics; which CESM depends upon for its description of past and future global climate. While LIVVkit is primarily focused on CISM, it is designed to be easily extensible to other models, none of which currently include a comprehensive validation and verification test suite. LIVVkit aims to not only give the ice-sheet model developers a way to evaluate changes to the code base, but to give glaciologist and climate scientist the tools to evaluate the performance and accuracy of large parallel ice sheet models.

Email: kennedyjh@ornl.gov
Phone: 865-574-7321

One Bethel Valley Road
P.O. Box 2008, MS-6301
Oak Ridge, TN 37831-6301