

Workshop title: Best practices in tephra collection, analysis, and reporting leading toward better tephra databases

Date of workshop: Saturday August 19, 9AM-5PM (post meeting workshop)

Registration Cost/participant: \$50

Capacity: 30 or 50 people

Workshop Location: Hilton Portland & Executive Tower, 921 SW Sixth Avenue, Portland Oregon, 97204.

Workshop conveners/affiliations/emails:

Kristi Wallace, U.S. Geological Survey/Alaska Volcano Observatory; kwallace@usgs.gov

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Description of workshop:

Following the Tephra 2014 Workshop where 1) major developments, 2) best practices, and 3) future directions/needs in tephra studies from both volcanological and tephrochronological perspectives were the main thrusts, this workshop aims to focus on the topics considered most pressing in the field by the attendees of the 2014 workshop (70 internationals). Two major themes will be considered: Theme 1) standardization of tephra field data collection, geochemical analysis, correlation, and data reporting, and Theme 2) databases to facilitate information access across disciplines.

Theme 1, standardization, will emphasize pushing forward the production of discipline-based best practice checklists that have been in development since the 2014 workshop. There will be a special focus on developing best practices for collecting tephra fall immediately after an eruption and calculating eruption volume and mass eruption rate, as well as improving datasets for use in tephra dispersion and fallout modelling.

Theme 2, tephra databases, will discuss the various databases and catalogs and the pros and cons of developing a universal tephra database versus regional databases. There will be discussion on how to link existing databases, on integrating tools and apps with databases, and on steps forward in data sharing. Since standardization is the first step toward greater use of databases, we hope that extensive discussion, presentations and consensus decisions on Theme 1 will inform the discussion of databases.

This workshop will include presentations from experts in tephra field studies, laboratory analysis, and databases. It will facilitate open discussion and will include hands-on breakout sessions. Concrete outcomes expected from this workshop include best practice training

materials, content for grant proposals for database development, and increased interdisciplinary collaboration and data sharing.

Requirements of participants:

If you are giving a presentation, please prepare your presentation in MS Power Point and save it on a thumb drive. If you prefer to bring your personal laptop to present, be sure to have the appropriate adapters for the overhead projector as we are unsure if the system will be a PC or Apple. There will be hands on activities where having a personal laptop computer will be beneficial.

Participant application process:

First come-first registered preference. (Limit of either 30 or 50 participants).

Travel Funding:

The workshop has been awarded "Skills Enhancement" funds from the International Union for Quaternary Research (INQUA) to subsidize travel and accommodation costs for early-career scientists, PhD students and researchers from developing countries. The conveners also have funds to subsidize general attendance to this workshop through support from outside sources. Please email the conveners directly to inquire.

INTAV Certificate to be offered:

We plan to offer a formal certificate to graduate students or any interested participants recognized by the International Focus Group on Tephrochronology and Volcanism (INTAV)