The Open Data Repository’s Data Publisher

N. Stone1, B. Lafuente2, R.T. Downs3, D. Blake1, T. Bristow3, M. Fonda3, A. Pires2

1Open Data Repository, Gray, ME USA 2Department of Geosciences, University of Arizona, Tucson, AZ, USA 3NASA Ames Research Center, Mountain View, CA, USA

HISTORY

University of Arizona Geosciences created the RRUFF (http://rruff.info) database in 2004.

The database has received over 400 million accesses making it one of the most successful databases in the field.

Many researchers in the field wished to have a similar web-based database capability, but the available tools could not match the performance or capabilities of the custom-programmed solution used by RRUFF.

The Open Data Repository was created to generalize the RRUFF toolset as an open source framework for data publication.

Funded by NASA Ames Research Center through the Mars Curiosity Rover’s CheMin team, the data publication system aims to make data publication a simple task with powerful plugins and tools to support data sharing and analysis.

THE OPEN DATA REPOSITORY

• Inspired by Wordpress and the WikiPedia.
• Goal is to create an open source platform for managing and publishing scientific data.
• Fully open source utilizing various open source technologies.

PHASE 1 - DATA MANAGEMENT TOOLS AND PUBLICATION SYSTEM

DRAG AND DROP TOOLS

Designers utilize drag and drop editing tools to design the web form and the underlying database structure.

When records are added, plugins render graphs, image galleries, custom search views, and custom export tools.

The system comes with an expression based search capability that can be extended by developing a custom search plugin.

ACKNOWLEDGEMENTS

We gratefully acknowledge the support for this study by the Science-Enabling Research Activity (SERA), and NASA NNX11AP82A, Mars Science Laboratory Investigations and University of Arizona Geosciences.

Contact: Nate Stone
Open Data Repository nate.stone@opendatarepository.org
http://www.opendatarepository.org

Abscicon 2015, June 14-19, 2015, Chicago, IL, USA