The Open Data Repository's Data Publisher. N. Stone[1], B. Lafuente[2], R. T. Downs[2], D. Blake[3], T. Bristow[3], M. Fonda[3] and A. Pires[2], [1]Open Data Repository, Gray, ME, [2]Geosciences, University of Arizona, Tucson, AZ, [3]NASA Ames Research Center, Mountain View, CA.

Data management and data publication are becoming increasingly important components of researcher's workflows. The complexity of managing data, publishing data online, and archiving data has not decreased significantly even as computing access and power has greatly increased. The Open Data Repository's Data Publisher software strives to make data archiving, management, and publication a standard part of a researcher's workflow using simple, web-based tools and commodity server hardware. The publication engine allows for uploading, searching, and display of data with graphing capabilities and downloadable files. Access is controlled through a robust permissions system that can control publication at the field level and can be granted to the general public or protected so that only registered users at various permission levels receive access. Data Publisher also allows researchers to subscribe to meta-data standards through a plugin system, embargo data publication at their discretion, and collaborate with other researchers through various levels of data sharing. As the software matures, semantic data standards will be implemented to facilitate machine reading of data and each database will provide a REST application programming interface for programmatic access. Additionally, a citation system will allow snapshots of any data set to be archived and cited for publication while the data itself can remain living and continuously evolve beyond the snapshot date. The software runs on a traditional LAMP (Linux, Apache, MySQL, PHP) server and is available on GitHub (http://github.com/opendatarepository) under a GPLv2 open source license. The goal of the Open Data Repository is to lower the cost and training barrier to entry so that any researcher can easily publish their data and ensure it is archived for posterity.