

Scientific Data – helping you publish, discover and reuse research data

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Objectives

Researchers, funders, community standards initiatives and learned societies alike are calling for new ways to make scientific data more available, citable, discoverable, interpretable, reusable and reproducible. Broader release and reuse of scientific data require credit mechanisms that reward scientists for releasing their data and peer evaluation mechanisms that evaluate data quality and ensure alignment with community standards.

Scientific Data is an online only open access product which aims to meet these needs through the publication of both Data Descriptors, which are peer-reviewed, scientific publications that provide detailed descriptions of experimental and observational datasets and associated experimental metadata files in an ISA-tab format. The associated metadata files will be harmonized by in-house curators for consistency and to aid discovery.

Scientific Data aims to compliment and collaborate with other data sharing initiatives, including the Research Data Alliance, to further the publication and reuse of research data.

Ongoing activities

Through a process of community consultation and editorial input the Data Descriptor article type and the associated experimental metadata has been developed for Scientific Data and are optimised to maximise data interpretation and reuse. Alongside the content development we have developed peer review guidelines and data deposition policies to support our publication criteria.

Results

The Data Descriptor is designed to provide detailed descriptions of experimental and observational datasets, including the methods used to collect the data and technical analyses supporting the quality of the measurements. Data Descriptors will not contain tests of new scientific hypotheses, extensive analyses aimed at providing new scientific insights, or descriptions of fundamentally new scientific methods. The actual data files will be stored in one or more public, community-recognized repositories, and full release of the data will be verified as part of the peer-review process. The experimental metadata associated with the Data Descriptors will use an ISA-tab format and be published as CC0 to promote maximum reuse.

Acceptance for publication will be based on the technical rigor of the procedures used to generate the data, the reuse value of the data, and the completeness of the data description. To support these publication aims the peer review criteria are based around evaluating

Experimental rigor and technical data quality

Completeness of the description

Integrity of the data files and repository record

Scientific Data is calling for submissions at the end of September 2013 and launching in the spring of 2014.

URL www.nature.com/scientificdata