

Geoscience Data Journal

Developing a workflow for cross-linking
between dataset and Data Paper

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University of
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British Atmospheric
Data Centre
NATIONAL CENTRE FOR ATMOSPHERIC SCIENCE
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Tim Roberts, Wiley and PREPARDE
www.geosciencedata.com



PREPARDE



- *Geoscience Data Journal* new Open Access journal by Wiley and RMetS
- Partners in PREPARDE project
- Working example of cross-linking between Data Paper and dataset

Purpose of data journal

Workflow

Citation – metadata details

Cross linking in Data Paper

Cross linking in dataset

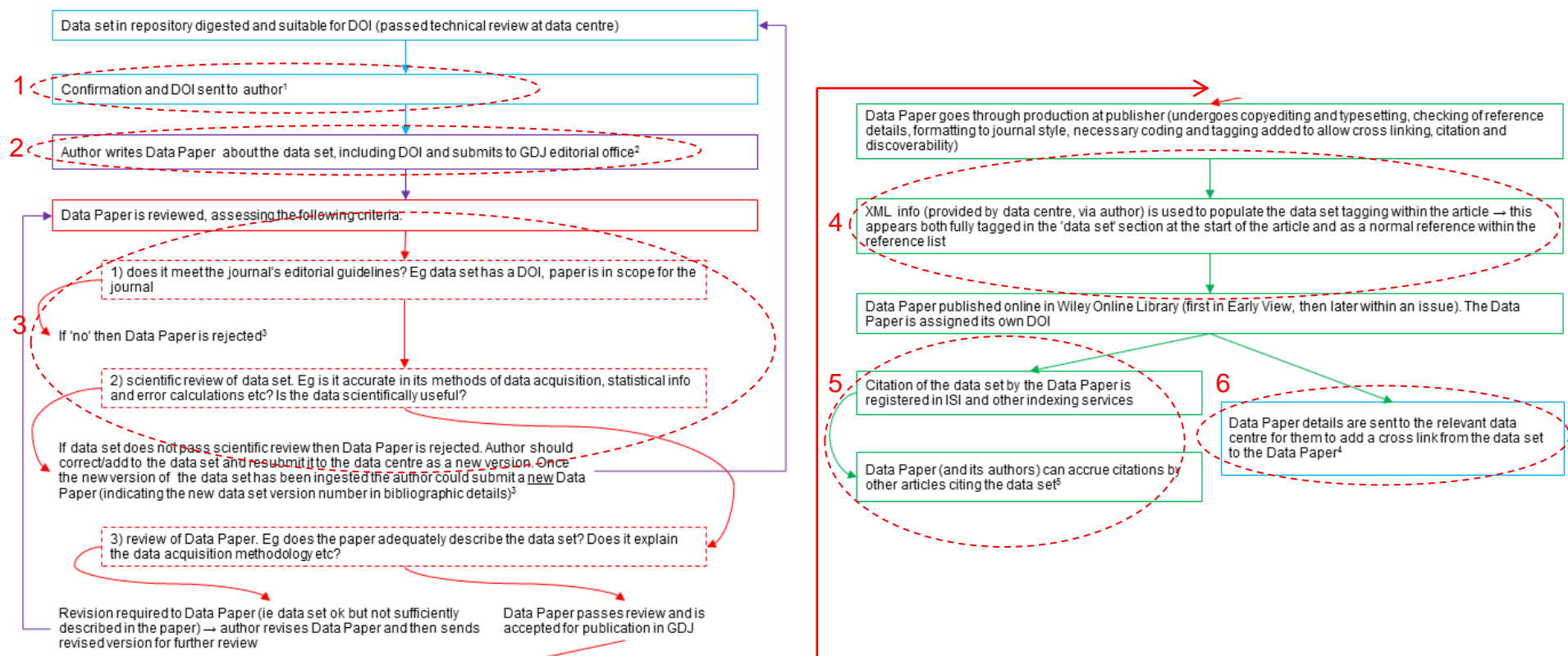
Future development



Purpose of data journal

- Publication of data
- Promote discoverability and re-use of data
- Explanation of data, methods of data creation, uses of data
- Recognition of value of data as a research output – authors recognized through citation
- Citation of data in academic research articles by citing Data Paper – measure impact
- Evaluation and review of data through peer review process

Geoscience Data Journal workflow



Citation of dataset

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Royal Meteorological Society

Geoscience Data Journal

Open Access

Data Paper
OPEN

The GBS dataset: measurements of satellite site diversity at 20.7 GHz in the UK

S. A. Callaghan[†], J. Waight, J. L. Agnew, C. J. Walden, C. L. Wrench, S. Ventouras

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Abstract
Article
References
Cited By

Dataset
Jump to...

The GBS (Global Broadcast Service) dataset comes as 3 separate data streams:

- Identifier: doi: [10.5285/639A3714-BC74-46A6-9026-64931F355E07](https://doi.org/10.5285/639A3714-BC74-46A6-9026-64931F355E07)
- Creator: Scienc... (Callaghan, S. A., J. Waight, C. J. Walden, C. L. Wrench, S. Ventouras) [UK Facility for Atmospheric and Radio Research](https://www.ukri.ac.uk/partnerships/uk-facility-for-atmospheric-and-radio-research), [Callaghan, S. A., J. Waight, C. J. Walden, C. L. Wrench, S. Ventouras]
- Title: GBS 20.7 GHz slant path radio propagation measurements, Chilbolton site
- publisher: NERC British Atmospheric Data Centre
- Publication year: 2009
- Resource type: Metadata document
- Version: 1.0

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Core elements of dataset metadata

Dataset

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Dataset metadata included in reference list

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Callaghan SA, Waight J, Agnew JL, Wrench CL. 2005. Medium and long range site diversity measurements from the three site GBS experiment in the UK, 3rd International Workshop Cost Action 280 PM9–101, June 2005.

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 [Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(663K\)](#) | [References](#)

Castanet L, Bolea-Alamañac A, Bousquet M. 2003. Interference and Fade Mitigation Techniques for Ka and Q/V Band Satellite Communication Systems, COST 272-280 Int'l. Wksp. Satellite Communication from Fade Mitigation to Service Provision, Noordwijk, The Netherlands, May 2003.

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[CrossRef](#), [ADS](#)

Panagopoulos AD, Arapoglou P-DM, Cottis PG. 2004. Satellite communications at KU, KA, and V bands: propagation impairments and mitigation techniques. *Communications Surveys & Tutorials, IEEE*, 6: 2–14.

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Cross-linking in Data Paper

Dataset

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Viewing GBS 20.7GHz slant ... X

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GBS 20.7GHz slant path radio propagation measurements, Chilbolton site

General Info

Title:	GBS 20.7GHz slant path radio propagation measurements, Chilbolton site
Type:	Activity
Sub-Type:	Deployment
Publication State:	Citable
URI:	http://badc.nerc.ac.uk/view/badc.nerc.ac.uk__ATOM__dep_11902119479621181

Summary

The GBS (Global Broadcast Service) dataset is a series of radio attenuation measurements made at three sites in the UK: Chilbolton and Sparsholt, both in southern UK, and Dundee in Scotland. The aim of the experiment was to make long term measurements of the signal strength received from a 20.7GHz beacon on the US Department of Defense satellite UFO-9 at multiple sites, in order to determine whether use of site diversity as a fade mitigation technique would be effective. The dataset spans a period of 3 years, from August 2003 to August 2006 with signal attenuation sampled once per second.

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This dataset is cited in:
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Author

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Cross-linking in dataset



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GBS 20.7GHz slant path radio propagation measurements, Sparsholt site

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Type: Activity
Sub-Type: Deployment
Publication State: Citable
URI: http://badc.nerc.ac.uk/view/badc.nerc.ac.uk__ATOM__dep_11902946270621452

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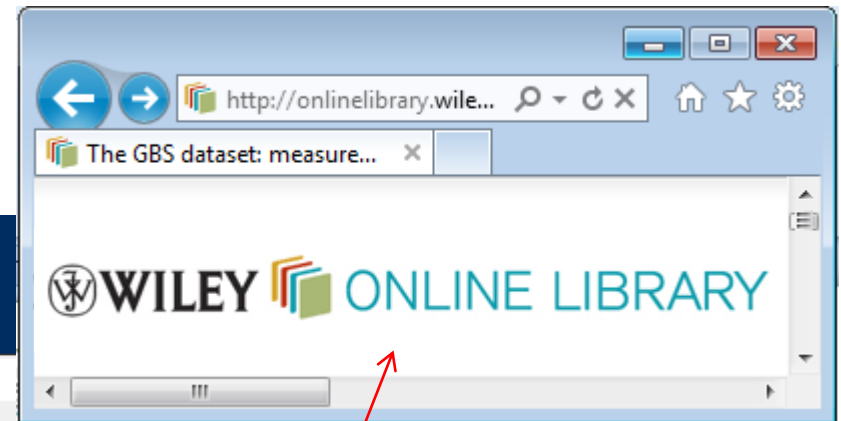
Author

Name	email
Science and Technology Facilities Council (STFC), Chilbolton Facility for Atmospheric and Radio Research, [S. A. Callaghan, J. Waight, C. J. Walden, J. Agnew and S. Ventouras]	

Online References

Relation	Title
Apply for access	Apply for access to GBS data from Sparsholt
Download	Data directory for GBS data from Sparsholt
Documentation	DOI for dataset:10.5285/E8F43A51-0198-4325-A926-FE69225D57DD
Documentation	Data article in Geoscience Data Journal doi:10.1002/gdj3.2

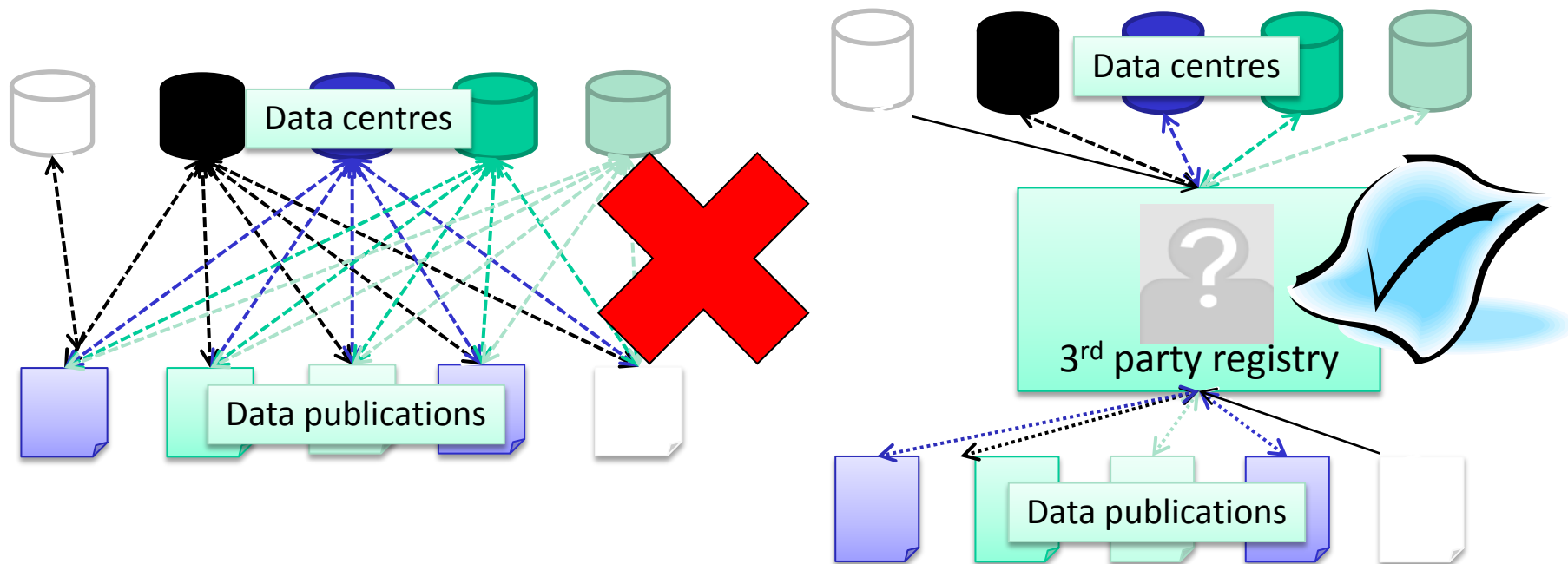
Associated Data





Future development ...

- Automation of metadata receipt at submission
- Automation of notification to Data Centre
- Widening of cross-linking to include more data centres
- Linking using other identifiers, eg accession numbers
- Scalable and sustainable process
- Third party intermediary, eg equivalent to CrossRef



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