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Speaker Abstracts and Biographies

Chairing the Webinar

Katherine Royse, Chief Digital Officer, British Geological Survey



Biography: Dr Katherine Royse is BGS first Chief Digital officer. She is responsible for the development of BGS digital, its data and digital technology strategies, ensuring organisational evolution and efficient and effective exploitation of BGS digital assets to create new scientific insight and impact. She also holds an honorary professorship at Nottingham University. Her research focuses on the development of novel methods and techniques to gain added-value from BGS's data holdings.

Up until June 2020, Katherine was a Member of Council and Secretary for professional matters of the Geological Society of London. Katherine is now working with the Royal Meteorological Society as a co-Editor-in-Chief for *Geoscience Data Journal*.

Using FAIR Data Principles to Accelerate Scientific Discovery in the Ocean and Atmospheric Sciences

Douglas Schuster, Manager for the Data Engineering and Curation Section, National Center for Atmospheric Research (NCAR)

Abstract: Software and data are essential components in driving scientific and technical advances in Geoscience research. In order to build upon and further the knowledge that has been characterized within data products and software tools, the community now needs to produce and curate software and data that are more accessible and easier to be reused by others in alignment with the principles of the Enabling FAIR Data Project. This presentation will provide an introduction on how FAIR data principles are used to support these goals in the Ocean and Atmospheric Sciences, and how researchers can benefit from fulfilling open science expectations.



Biography: Doug leads the Data Engineering and Curation Section which develops and maintains the Research Data Archive (RDA; <https://rda.ucar.edu>) at NCAR. The RDA provides open access to a large and diverse collection of meteorological and oceanographic observations, simulation outputs, and researcher submitted datasets to support Atmospheric and Geoscience research. Doug also chairs the American Meteorological Society (AMS) Board on Data Stewardship which advises and serves the AMS in matters related to data stewardship, including the coordination of activities and services to enhance access to and use of data, and education.

FREE WEBINAR | How and Why You Should Publish Your Geoscience Dataset



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Challenges and Options for Publishing your Dataset and the Differing Data Repositories

Garry Baker, Head of National Geoscience Data Centre, British Geological Survey

Abstract: Scientists have historically disseminated their research in papers or articles published in a variety of journals, magazines, web sites and recently sometimes within social media channels. The productivity and impact from papers is evaluated and encapsulated within the 'H-index', this has long helped with future careers, collaboration, grants or funding. The funders of research and journal publishers are now keen that the scientific data created by the research they fund (or publish) is also made available, ensuring the transparency and peer-review of current science and scientific processes while also encouraging future data re-use. The data is no longer the hidden element of the research process and is an output in its own right, considering how and where you publish are essential aspects of disseminating your research and can also support your career with additional data citation metrics. This presentation will review the options and challenges faced in publishing data with a specific focus upon the environmental domain.



Biography: I started my career building databases to hold scientific data captured by the many differing projects within British Geological Survey (BGS) before moving onto Project and Programme Management (specifically within digital/data domain) for the research centre as well as a range of clients, both national and international. This foundation I have always considered prepared me for the roles and tasks I have undertaken in later years. I managed corporate database, development and data science groups for BGS before finally taking on the mantle of the Head of National Geoscience Data Centre (NGDC). The NGDC is a commissioned activity, part of the UKRI-NERC "Environmental Data Service" and the national data centre for the geosciences and sub-surface. In this period I have witnessed the digital and data landscape change immensely. Data volumes and complexity have grown, large IT infrastructures developed and new capabilities implemented and data initiatives such as 'open/FAIR' have become strong drivers and policy within the UK. Adapting to the changing landscape has been immensely rewarding as well as being extremely challenging. (Link: <https://www.bgs.ac.uk/geological-data/national-geoscience-data-centre/>)

The Basics and Benefits of Writing a Data Paper

Luca Brocca, Research Institute for Geo-Hydrological Protection, National Research Council for Italy

Abstract: A Data Paper is a scholarly journal publication whose primary purpose is to describe a dataset. It allows the authors: (1) to provide a citable journal publication that brings them scholarly credit, (2) to describe the data in a structured form, and (3) to bring the existence of the data to the attention of the scholarly community. Writing a Data Paper has multiple benefits: e.g., to contribute to reproducible science, to get (potentially) many citations, and to expand significantly the research network. Other benefits will be discussed in the presentation with examples and suggestions for writing a good data paper.

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Biography: Luca Brocca received his Masters degree in 2003 and his PhD degree in Civil Engineering in 2008. In 2009 he started working as a researcher and in 2019 became the Director of Research at the National Research Council, Research Institute for Geo-Hydrological Protection, Perugia. He is author and co-author of 140+ journal papers (8500+ citations, H-index=47). He is PI and co-PI in national and international research projects (LIFE+, ESA; EUMETSAT, NASA). In 2018 he won the Copernicus Masters “BayWa Smart Farming Challenge”, and in 2019 he was nominated “Highly Cited Researchers” by WoS. His research addresses the development of innovative methods (e.g., SM2RAIN) for exploiting satellite observations for hydrological applications (floods, landslides, rainfall, drought, irrigation).