Implementing FAIR Principles in the IPCC Assessment Process

Martin Juckes¹, Anna Pirani², Charlotte Pascoe¹, Robin Matthews², Martina Stockhause³, Bob Chen⁴, and Xing Xiaoshi⁴
¹STFC, RAL Space, Chilton, Didcot, Oxon, United Kingdom of Great Britain and Northern Ireland (martin.juckes@stfc.ac.uk)
²Université Paris-Saclay, France
³German Climate Computing Center, Hamburg, Germany
⁴Center for International Earth Science Information Network (CIESIN), Earth Institute, Columbia University, NY, USA.

The Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC) have provided the scientific basis underpinning far reaching policy decisions. The reports also have a huge influence on public debate about climate change. The IPCC is not responsible either for the evaluation of climate data and related emissions and socioeconomic data and scenarios or for the provision of advice on policy (reports must be “neutral, policy-relevant but not policy-prescriptive”). These omissions may appear unreasonable at first sight, but they are part of the well-tested structure which enables the creation of authoritative reports on the complex and sensitive subject of climate change. The responsibility for evaluation of climate data and related emissions and socioeconomic data and scenarios remains with the global scientific community. The IPCC has the task of undertaking an expert, objective assessment of the state of scientific knowledge as expressed in the scientific literature. The exclusion of responsibility for providing policy advice from the IPCC remit allows the IPCC to stay clear of discussions of political priorities.

These distinctions and limitations influence the way in which the findable, accessible, interoperable, and reusable (FAIR) data principles are applied to the work of the IPCC Assessment. There are hundreds of figures in the IPCC Assessment Reports, showing line graphs, global or regional maps, and many other displays of data and information. These figures are put together by the authors using data resources which are described in the scientific literature that is being assessed. The figures are there to illustrate or clarify points raised in the text of the assessment. Increasingly, the figures also provide quantitative information which is of critical importance for many individuals and organisations which are seeking to exploit IPCC knowledge.

This presentation will discuss the process of implementing the FAIR data principles within the IPCC assessment process. It will also review both the value of the FAIR principles to the IPCC authors and the IPCC process and the value of the FAIR data products that the process is expected to generate.

How to cite: Juckes, M., Pirani, A., Pascoe, C., Matthews, R., Stockhause, M., Chen, B., and Xiaoshi, X.: Implementing FAIR Principles in the IPCC Assessment Process, EGU General Assembly 2020,