Advances in Collaborative Documentation Support for CMIP6

Charlotte Pascoe¹, David Hassell², Martina Stockhause³, and Mark Greenslade⁴

¹NCAS, Centre for Environmental Data Analysis, Harwell, United Kingdom (charlotte.pascoe@ncas.ac.uk)
²NCAS, Computational Modelling Service, University of Reading, United Kingdom (david.hassell@ncas.ac.uk)
³DKRZ, German Climate Computing Centre, Hamburg, Germany (stockhause@dkrz.de)
⁴IPSL, Institut Pierre Simon Laplace, Paris, France (momipsl@ipsl.jussieu.fr)

The Earth System Documentation (ES-DOC) project aims to nurture an ecosystem of tools & services in support of Earth System documentation creation, analysis and dissemination. Such an ecosystem enables the scientific community to better understand and utilise Earth system model data.

The ES-DOC infrastructure for the Coupled Model Intercomparison Project Phase 6 (CMIP6) modelling groups to describe their climate models and make the documentation available on-line has been available for 18 months, and more recently the automatic generation of documentation of every published simulation has meant that every CMIP6 dataset within the Earth System Grid Federation (ESGF) is now immediately connected to the ES-DOC description of the entire workflow that created it, via a “further info URL”.

The further info URL is a landing page from which all of the relevant CMIP6 documentation relevant to the data may be accessed, including experimental design, model formulation and ensemble description, as well as providing links to the data citation information.

These DOI landing pages are part of the Citation Service, provided by DKRZ. Data citation information is also available independently through the ESGF Search portal or in the DataCite search or Google's dataset search. It provides users of CMIP6 data with the formal citation that should accompany any use of the datasets that comprise their analysis.

ES-DOC services and the Citation Service form a CMIP6 project collaboration, and depend upon structured documentation provided by the scientific community. Structured scientific metadata has an important role in science communication, however it's creation and collation exacts a cost in time, energy and attention. We discuss progress towards a balance between the ease of information collection and the complexity of our information handling structures.
CMIP6: https://pcmdi.llnl.gov/CMIP6/

ES-DOC: https://es-doc.org/

Further Info URL: https://es-doc.org/cmip6-ensembles-further-info-url

Citation Service: http://cmip6cite.wdc-climate.de