Earth System Documentation (ES-DOC) Preparations for CMIP6

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The Earth System Documentation (ES-DOC) is a multi-national, multi-institutional collaboration that supplies services in support of earth system documentation creation, analysis & dissemination. The ES-DOC project has been preparing for CMIP6 by enhancing existing documentation standards & tools, and by ensuring that a rich eco-system is in place so as to streamline document creation. Users will in due course be able to access CMIP6 documentation via the ES-DOC search, view & compare online tools.

1. WGCM Requirements
High-level requirements expressed at WGCM meeting
- Standardisation of model forcings
- Simplification of model components
- Streamlining of model documentation
- Automation of simulation documentation
- Closer coordination with modelling groups
- Adopting a narrative based approach

2. Documentation Standard Upgraded (CIM v2)
Enhancement of model forcings & process definitions

3. Controlled Vocabularies Upgraded
Model process documentation is standardized around

4. New Documentation Creation Tools
Spreadsheets and a new online questionnaires are available

5. Powerful Scripting Library = pyesdoc
Python library simplifies document lifecycle management
- Low level documentation management library
- Integrated into all ES-DOC tools & services
- Supports both CIM v1 & v2 ontologies
- Supports documentation creation, I/O, archival, validation, publishing, search.
- Integrated with controlled vocabularies
- Unit tested, open source & pip installable
- IPSL & MOHC committed to using it internally

6. Experimental Definitions Published
Draft CMIP6 experimental definitions are already published

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Atmosphere
Atmospheric Chemistry
Atmospheric Aerosols
Land
Land Ice
Sea Ice
Ocean
Ocean Bio-Geochemistry