

EUREC4A-OA

Data Collection

What data will you collect or create?

Observational and modelling data will be collected or created in the project.

How will the data be collected or created?

The observational data collection has been outlined in Stevens et al. (to be submitted).

Documentation and Metadata

What documentation and metadata will accompany the data?

Examples of well-established formats and protocols that may be used during EUREC4A-OA are OGC (Open Geospatial Consortium), CF (Climate Format), WMO-TD No 1186, OASIS etc.

- 1) OGC: Standards that are made through a consensus process and are freely available for anyone to use to improve sharing of the world's geospatial data. They are used in a wide variety of domains including Environment, Defense, Health, Agriculture, Meteorology, Sustainable Development and many more.
- 2) CF: Originally framed as a standard for data written in netCDF format, with model-generated climate forecast data particularly in mind. However, it is equally applicable to observational datasets, and can be used to describe other formats. It is a standard for "use metadata" that aims both to distinguish quantities (such as physical description, units, and prior processing) and to locate the data in space-time
- 3) WMO-TD No 1186: Document provides a series of guidelines on climate metadata and homogenization
- 4) OASIS: OASIS promotes industry consensus and produces worldwide standards for security, Internet of Things, cloud computing, energy, content technologies, emergency management, and other areas. OASIS open standards offer the potential to lower cost, stimulate innovation, grow global markets, and protect the right of free choice of technology

Ethics and Legal Compliance

How will you manage any ethical issues?

Data preservation and sharing has been defined in the EUREC4A-OA data policy

How will you manage copyright and Intellectual Property Rights (IP/IPR) issues?

EU JPI-Climate initiative¹, adopted the so-called "transparency principle", committing itself with the growing demand on more openness in many aspects of public life (politics, economics, culture, and also science and research). The Guidelines on Open Knowledge [3] contribute to increase climate (change) research activities' societal impact and credibility by making them more transparent. They establish a set of recommendations to boost a more effective climate knowledge management policy in terms of openness (and particularly accessibility). These recommendations are thought for the JPI community in its widest sense.

In summary these are:

- 1) Internal accessibility.
- 2) Open licensing, based on the use of the Creative Commons (CC) "public domain" license (CC0) Open formats.
- 3) Open Access publishing.

- 4) Open Data.
- 5) Publishing costs

Storage and Backup

How will the data be stored and backed up during the research?

Question not answered.

How will you manage access and security?

Question not answered.

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

Question not answered.

What is the long-term preservation plan for the dataset?

Question not answered.

Data Sharing

How will you share the data?

We will make data products available through the EUREC4A-OA website, and we plan to lodge data syntheses created during the project with the EUREC4A and national/European databases (e.g., CORIOLIS, AERIS, ODATIS,...) – these are the major data repositories for the scientific community potentially interested in the EUREC4A-OA new developments.

Model outputs created during the project will be archived in a dedicated data clouds following the FAIR rules. The results from the experiments performed with the NorESM will be archived on the UNINETT Norwegian national resource which follows the FAIR data archiving policy and will be accessible to the whole community. For the regional simulation the nomenclature and request will follow the HiResMIP PRIMAVERA protocol and be accessible first to the project members and then to the whole community. Reference simulations will be completed by the end of the second year of the project, and fully archived with these repositories by month 30. All the experiments will be archived by month 36. A documentation of the simulations performed by the different groups in EUREC4A-OA will also be available.

Are any restrictions on data sharing required?

Question not answered.

Responsibilities and Resources

Who will be responsible for data management?

All partners will be responsible for sharing their data

What resources will you require to deliver your plan?

Resources have been already included in the project staff time.