



METAFOR will take the first step in doing for climate data and models what search engines have done for the Internet: it will put users of the climate data in touch with the information they need.

At a time when climate change is a rising challenge to society, unlocking existing and future climate data repositories and descriptions of climate models for new communities will provide new and exciting opportunities for scientific research, policy making, and private sector competitiveness.

<http://metaforclimate.eu>
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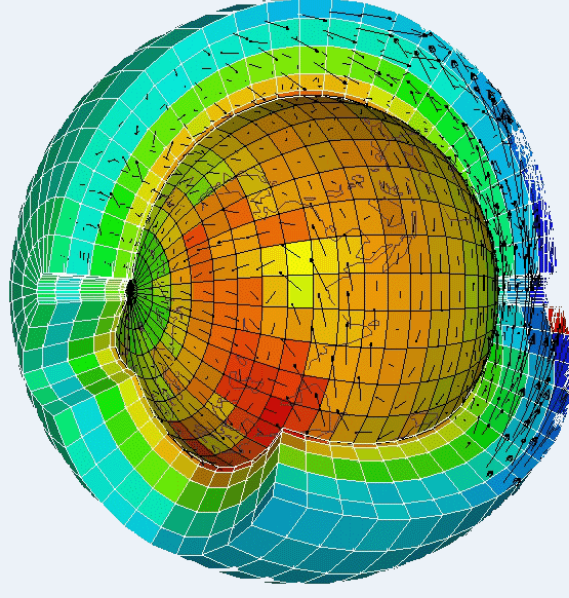
We are building on and using the expertise being developed within the European Community and worldwide through our project participants:



Image: Numerical grid of an atmosphere model
Courtesy Laurent Fairhead (IPSL)



Common Metadata for Climate Modelling
Digital Repositories



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METAFOR – Developing a Common Information Model (CIM)

The METAFOR Common Information Model opens the way to:

Data Discovery

- enhance data discovery across worldwide climate data repositories.

Understanding

- develop a greater understanding of the complex processes involved in generating climate data.

Developing tools

- enable the building of sophisticated software and tools to use and interpret the climate data.

Automating

- automate the process of climate data retrieval, storage, sharing and preservation as data volumes increase.

Expanding existing standards

- evolve metadata standards to satisfy future requirements in climate research.

The principle aim of METAFOR

is to develop an open standard - a Common Information Model (CIM) – which will provide comprehensive metadata for all stages of the production of climate data, from the initial experiment design to the resulting numerical model.

Much of the confidence we have in predictions of global warming is based on repositories of scientific data.

In METAFOR, we will build on the expertise being developed both within the European Community and worldwide to:

- ❖ build standards that allow essential data and model distinctions to be understood and shared between users of different scientific repositories;
- ❖ develop, deploy, and evaluate a prototype infrastructure that will allow key data and model types to be discovered and compared between holdings at partner sites.
- ❖ generate plans for long-term development and sustainability of the standard and tools with specific attention to
 - supporting INSPIRE objectives within Europe;
 - supporting an internationally distributed architecture; and
 - supporting other national infrastructures.

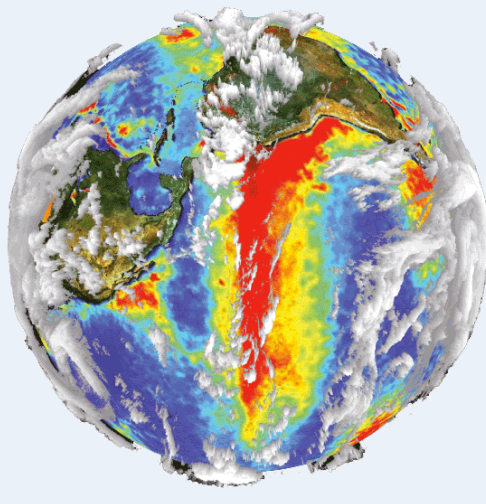


Image by R. Houser, Washington University, St. Louis, Mo. land layer from SeaWiFS project; fire maps from the European Space Agency; sea-surface temperature from the Visualization Laboratory, Naval Oceanographic Office, U.S. Navy; cloud layer cover from SEEC, University of Wisconsin, Madison.

