A Climate Information Platform for Copernicus

www.clipc.eu

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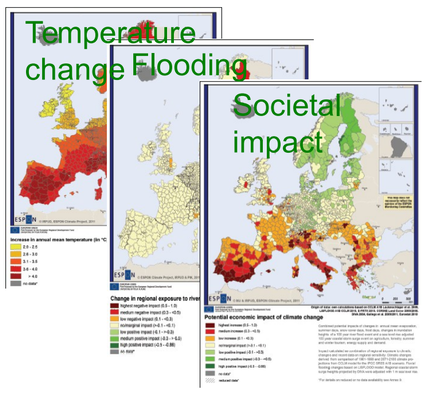
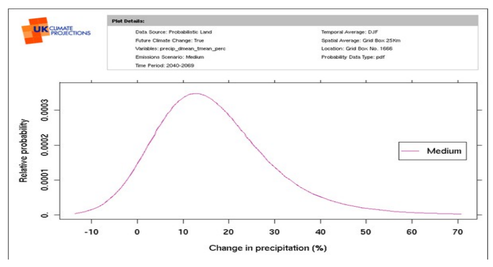
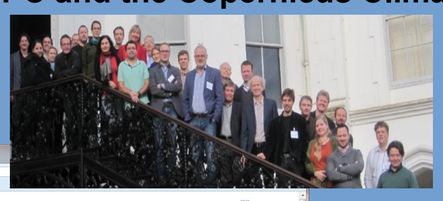
CLIPC Mission

- CLIPC will design a platform to provide access to climate information of direct relevance to a wide variety of users, from scientists to policy makers and private sector decision makers;
- The “one-stop-shop” platform will provide data and information on climate and climate impacts, and ensure that the providence of science and policy relevant data products is thoroughly documented;
- Engage with user communities to inform development.





CLIPC and the Copernicus Climate Change Service (C3S)



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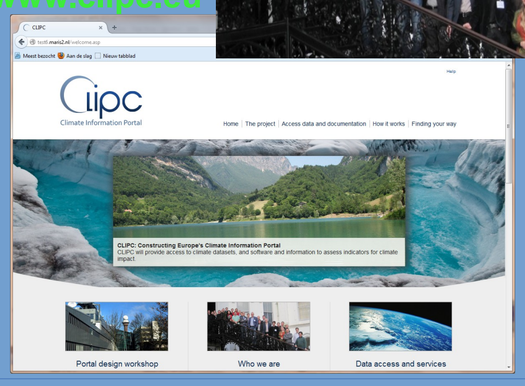


Data

Requirements

Tools

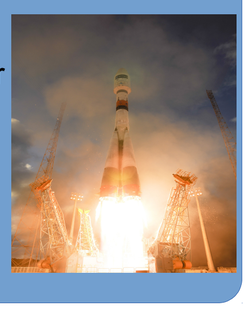
Standards

Networks

People

www.copernicus-climate.eu

C3S will provide operational services, making the final link in the chain between the Copernicus funded Sentinel space missions and the user communities.



CLIPC is a research project developing a data service infrastructure to support dissemination of climate knowledge

User requirements

I want a list of datasets relevant to me

User interfaces

Flexible search options, driven by vocabularies

Data services

Exploit standards for flexibility, robustness, and meeting user expectations

Structured archives and repositories

Earth System Grid Federation

Standards for data and meta-data

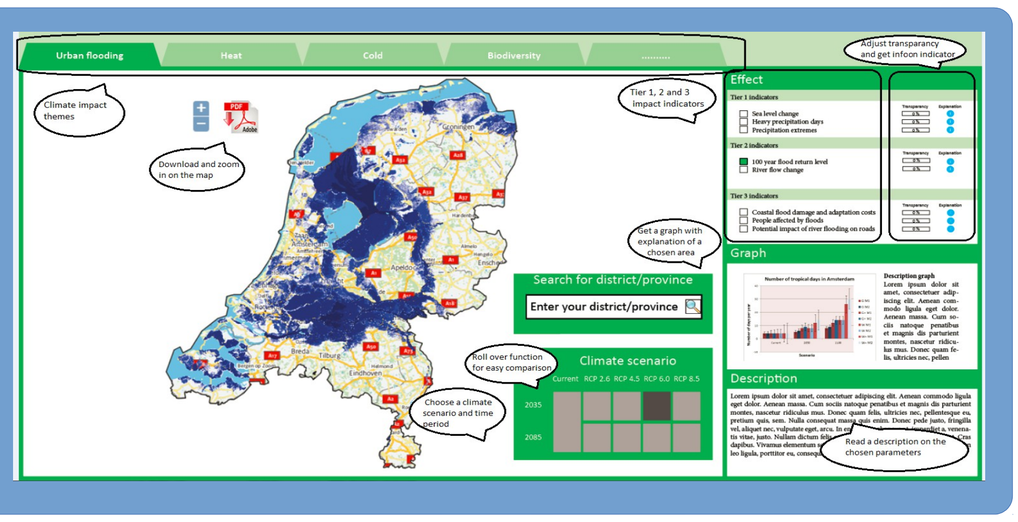
INSPIRE and ISO 19115 compliant catalogues; well known file formats; interdisciplinary data format standards; well documented data format protocols.

Structured lists of keywords

All terms defined in trans-disciplinary W3C standard documents, including definitions of relations between terms.

Visualisation and transformation

A dedicated visualisation portal, building on generic data standards and Web Map Services, will provde users with a flexible and intuitive tool for navigation of climate impact indicators.
Additional interfaces will support access to climate data and a toolbox for ranking and aggregating indicators.



Exploring uncertainty

Ross Salawitch Research Group

While projections of global mean surface temperature are now well understood, substantial uncertainty remains in many areas of more direct relevance to climate service users.

Daintree Rainforest, Queensland, Australia, Wikipedia

Standards

European Commission

- **INSPIRE: Infrastructure for Spatial Information in the European Community**

International Standards Organisation

- ***ISO 19115 for catalogue meta-data***

World Wide Web Consortium

- ***SKOS for knowledge organisation***
- ***PROV for provenance information***
- ***PRO for publishing roles***

Open Geospatial Consortium

- ***WMS, WPS for visualisation and transformation services.***

Global Climate Observing System

- ***Essential Climate Variables***

Domain standards

- ***Climate Forecast Conventions (CF) – for scientific data***
- ***Gridded Binary format for re-analysis (GRIB)***
- ***CMIP conventions for climate scenario data***
- ***Expert Team on Climate Change Detection Indices (ETCCDI)***

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Centre for Environmental Data Archival

SCIENCE AND TECHNOLOGY FACILITIES COUNCIL
NATURAL ENVIRONMENT RESEARCH COUNCIL