Initiatives toward Climate Services in France and in the European Communities

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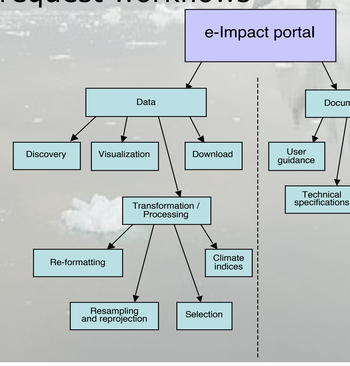
TH244B

Session C4

I A Pan-European Initiative

IS-ENES FP7 EC European project

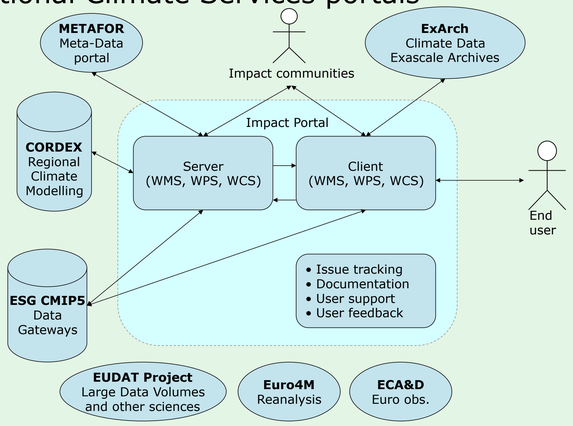
- Infrastructure for pan-European climate data access: 18 partners, 10 European countries, including 6 European Global Climate Models
- Bridge gaps between climate data producers & impact communities/stakeholders
- Streamline impact climate generic data request workflows



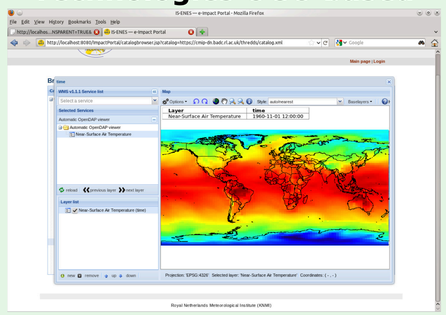
II Portal Architecture: Standardization & OGC Services

e-impact portal architecture

- Server/client architecture based on OGC standards
- Interactions with other European related initiatives and projects
- Common tools and generic standardized workflows: **reusable building blocks** for use in National Climate Services portals

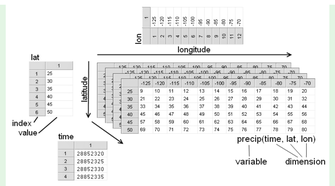


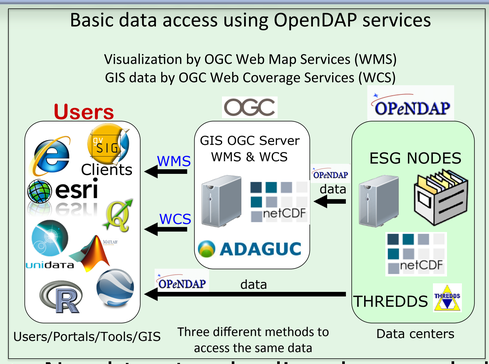
ADAGUC project: Technologies OGC-based



Used data format: NetCDF4-CF

- NetCDF4 with Climate and Forecast conventions (CF conventions)
  - Standard names, standard units (http://cf-pcmdi.llnl.gov/documents/cf-standard-names/)
  - Identify and compare data
  - Locate data in space–time as a function of other independent coordinate variables (time, latitude and longitude):



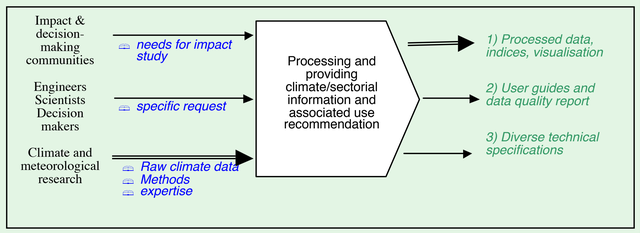


- Need to standardize downscaled data to NetCDF CF-1.x conventions
- Visualization services based on ADAGUC interface
- Interoperability for technologies of data servers ESG, CORDEX, METAFOR, and eventually others like ECA&D, Euro4M, etc.

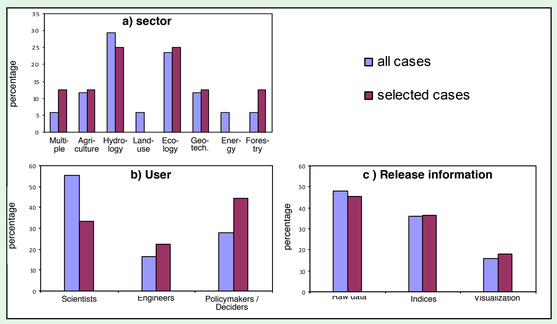
III Impact Communities needs

Expertise is strongly needed by users

- Dealing with climate data
- Mapping downscaling output variables to impact variables
- Significant Data Volumes are involved
- Advice and help on data format and technical aspects expertise (e.g. NetCDF)
- Computing power access for data processing and analysis
- Help on scientific aspects
- Multi-scenarios as opposed to single scenario
  - Uncertainties



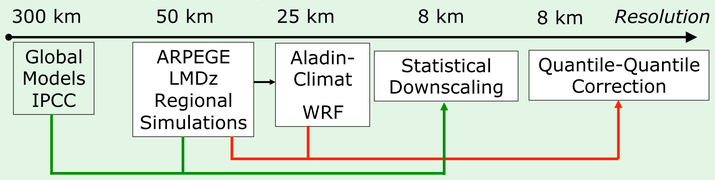
Generic Workflow for data provision.



IS-ENES project Use Cases for e–impact portal prototype.

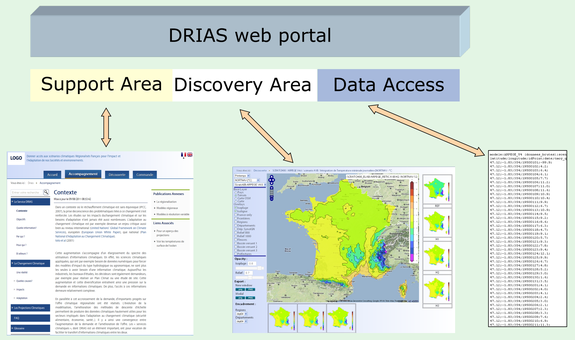
IV Climate Services in France: the DRIAS project

A variety of outputs available ➔ harmonization



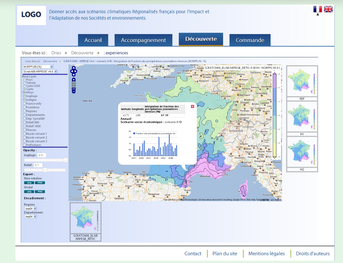
Portal separated in three main areas

- Support and Discovery areas accessible for all
- Data Access area requires registration
  - Aimed at impact modellers and experts



OGC technologies

- OpenLayers based Visualization interface
- Feeds from e-impact portal standardizations. WMS for now, later with further technologies and tools.



From Data to Products: 3 levels of Data

- Raw: native model grids
- Corrected: bias correction
- Elaborated: indices (e.g. Selected Stardex)

REFERENCES

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