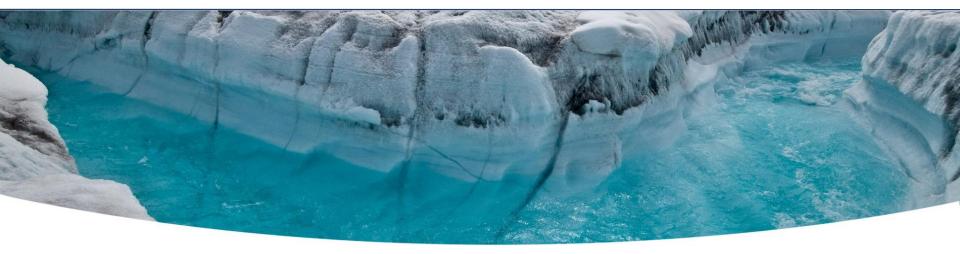


Climate Information Platform for Copernicus



CLIPC: User Expectations

Victoria Bennett, STFC User Requirements work led by Annemarie Groot, Alterra, with contributions from TEC, HZG and MetNo



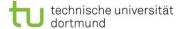


















































CLIPC Mission

- CLIPC will 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 provenance of science and policy relevant data products is thoroughly documented;
- Engage with user communities to inform development.



<u>UK</u>

STFC

Magellium Ltd.

Univeristy of Reading

UK Met Office

British Oceanographic

Data Centre

Netherlands:

Dutch Met Office

Alterra

Maris

Germany:

Technical Uni.

Dortmund

Potsdam Inst. for

Climate

Climate Services

Centre

France:

IPSL

CERFACS

TEC

Finland

Met Office

Environment Agency

(SYKE)

22 partners, 9 countries + 1 international

Sweden

SMHI

Linköping University

Norway

Met Office

Italy

CMCC

Spain

University of Barcelona

International

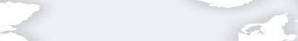
Joint Research Centre





Linköping University



































CLIPC is one of 5 projects funded in the last FP7 SPACE call to support the launch of the Copernicus Climate Change Service







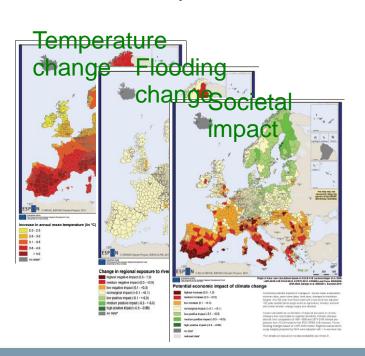


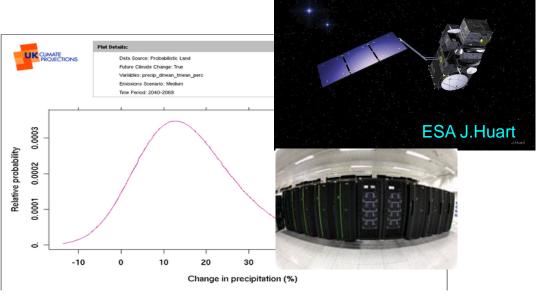




CLIPC

- Provide harmonised access to data from many sources;
- Information on data value and limitations;
- Indices of climate change and climate change impact;
- A knowledge base of authoritative information;
- A toolkit to update and extend the collection of indices.





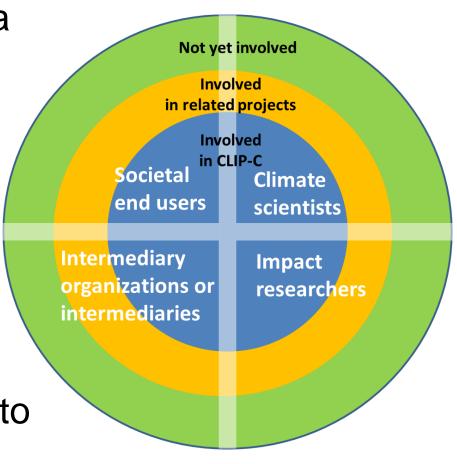




User involvement in CLIPC

 Important for developing a user-oriented portal

- Learning from past and ongoing project and networks
- Four different user categories
- Online survey and interviews: first insights into user requirements







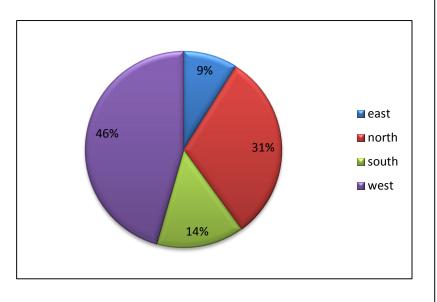
User consultation

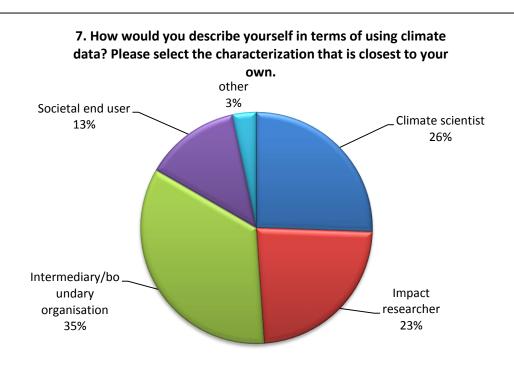
- 1. June 2014: survey of interested users
- 2. From September 2014: capturing user needs questionnaire and interviews (skype/tel)
- 3. February 2015: workshop on consolidating user needs and presentation beta-version portal
- 4. From October 2015: user panel periodically provides feedback on evolving portal





Summary user requirements: Online survey

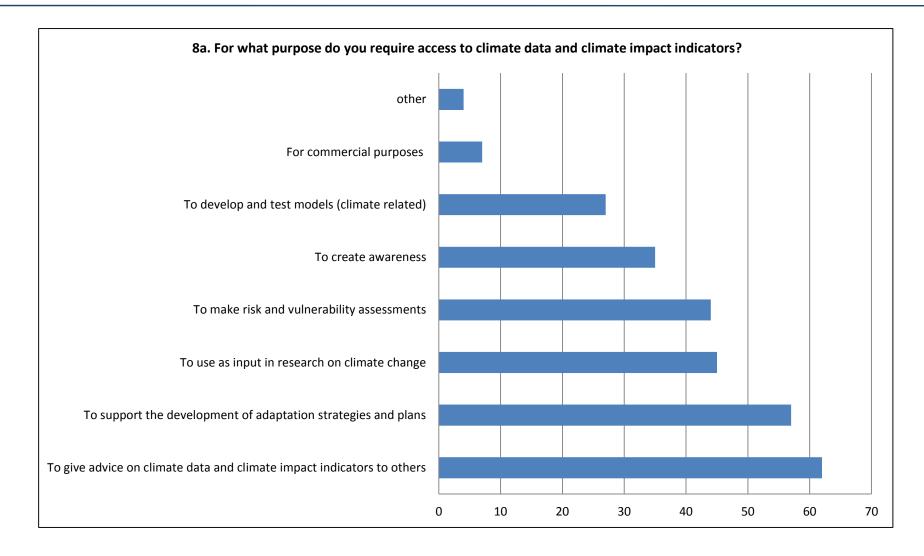






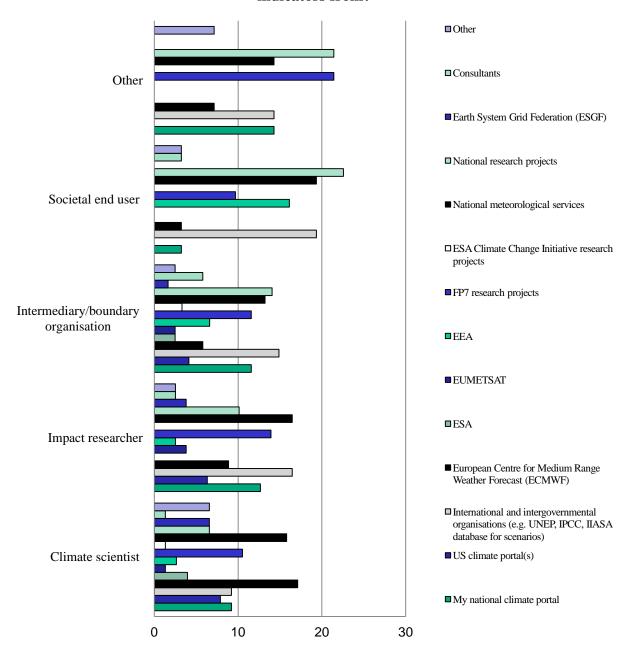


Purpose of data retrieval





Where do you currently retrieve climate data and climate impact indicators from?





User type	Top features ranked as very important
Climate scientist	Free open access Availability and quality of metadata
Impact researcher	Free open access Accessibility of data Information on uncertainty
Intermediary/ boundary organisation	Free open access Explanations of climate data and climate impact indicators Accessibility of data
Societal end user	Usage of understandable language Diversity of subjects Free open access





Qualitative Interviews

 Deepen understanding about requirements for data and impact indicators

	Climate scientists	Impact researchers	Intermediaries (or boundary workers)	Societal end users	Climate scientists/Inter mediaries	Impact researchers/ intermediaries
No. of respondents	8	8	4	2	2	1



User Requirements

User friendly and dynamic interfaces

- Supporting user to quickly retrieve data
- Connect data to relevant metadata
- Simple structure
- Control mechanism to prevent common mistakes
- Offer different search functions (eg sectors, regions) and include examples
- Flexible design adapt to evolving needs, development of new indicators, research finding and observations
- Sustained interaction with other users
- Facilitating training for users



User Requirements

Data – impact indicators (examples)

- Raw data, model data, observational data, long term and seasonal predictions, ground data and satellite data, historical data, processed data
- Extreme values are needed, not just means
- Ensure data quality
- Standardisation (data, tools, ...)
- Resolution need for high resolution data (impact researchers)
- Format: transformable, different formats provided
- Impact indicators: task at hand, economic impact indicators
- Metadata: important for all user categories
- Free access





User Requirements

Functionalities (examples)

Post processing

- Tools for simple calculations and visualising data
- Tools for grid and calendar harmonisation, downscaling and, spatial and temporal selection

Guided search

Support team, FAQ, case studies

Personalised selection and browsing

Possibility of personal bookmarks and saving personal queries





User Requirements Workshop 3 Feb 2015: objectives and focus

- To test, discuss and receive user feedback on components of the CLIPC portal
- To further specify and prioritise requirements for a data platform and climate impact toolkit
- To manage expectations
- To identify needs/opportunities for user consultation in the next 1.5 years





3 Feb 2015: User Requirements Workshop

- Three subgroups/topics for discussion:
 - Data format and access, finding the data
 - The CLIP-C Portal architecture and interface
 - Impact data processing and exploration tools

25 participants from 3 user groups (climate scientists, impact researchers and intermediary organisations)





Topic 1: Data

Key outcomes:

- Guidance, descriptive texts and explanations on both the data and on the impact indicators important for all users
- Bias correction: already done, or users can correct if needed – guidance useful
- Start at demand side what do users intend to do with the data
- Feedback system of users on data



Lipc Topic 2: Architecture and user interfaces

Key outcomes:

- Added value of CLIPC is in availability of processing tools
- Need global and regional model data
- User-user interaction to share experiences, and howto guidance
- Maps seen as illustrative also need trends in graphs
- Uncertainty information (in words) needed
- Involve end users in interface development







Interfaces for users from CLIPC homepage





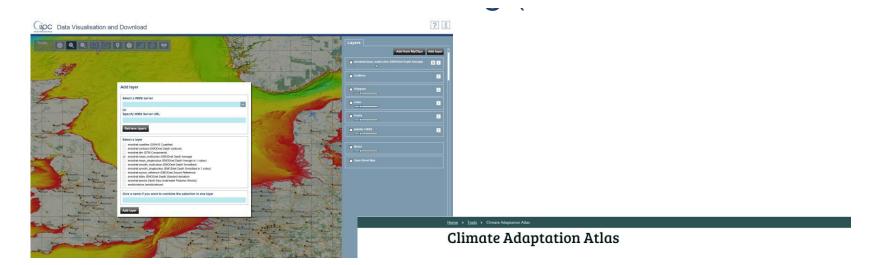
Cipc MyCLIPC data processing environment







Data Visualisation and Viewing (indicators)









Topic 3: Impact Data Processing and Exploration Tools

Key outcomes:

- Guidance on processing, and what you are doing
- Also for less experienced, or end user
- Standardisation to allow data sharing with other projects
- Full freedom of use? Can lead to poor outcomes some restrictions needed, e.g. what makes sense
- User-to-user interactions as real added value





Next steps..

- User requirements document available in March
- More information about CLIPC existing and developing systems in Martin Juckes' presentation on Thursday

Thank you

