DECM (C3S_51 Lot4) | Data Evaluation for Climate Models

Key Survey Results

Aim:

The aim of this survey was the identification of user requirements regarding technical needs and scientific quality of multi-model climate projection data and products that will be provided in the Copernicus Climate Change Service (C3S) Climate Data Store (CDS).

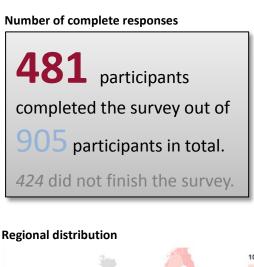
How:

Instead of collecting (again) information on required parameters of multi-model climate projection data and products, the focus of the survey lay on the quality aspect and the demands users pose to be able to assess the quality of the provided data and gain trust in the products.

What:

The survey analysis provides C3S with findings regarding the use of climate model data and climate information products, data structure but also regarding the users' view on data and product quality and their needs in terms of guidance and support. The analysis provides answers to the topics from the view of different user types but also from the view of the sectors water, energy, insurance, agriculture and forestry, infrastructure and health.

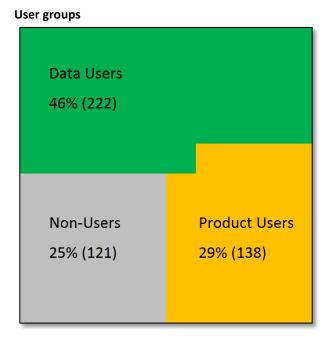
Purpose of Survey





Created with Datawrapper

+ 52 participants from outside of Europe (Argentina (1), Australia (2), Bermuda (2), Brazil (3), Cameroun (2), Canada (6), China (1), Dem. Rep. of Congo (3), Egynt (1), India (3), Iran (1), Japan (1), Xazakhstan (1), Malawi (1), Malii (1), Pakistan (1), Russia (1), Saudi-Arabia (1), South Africa (1), Tunisia (1), USA (7), N/A (11))



Data users work with raw and processed climate model data.

Product users work with information products based on climate model data (e.g. reports, tables, visualisations).

Non-users apply neither climate model data nor information products based on climate model data for their work.









Typical user profiles

... works at a university or a research facility.

... if she does not work in research and education, she is employed by the agriculture/ forestry sector or by water management.

recommendations for developing a platform that offers multi-model climate projections

The profiles for typical users summarize the most frequently occurring items chosen by the participants and draw an - admittedly general and stereotyped - picture of the three user groups. Even though this is a simplified representation of the users, lacking nuance and detail, it provides a good overview about the survey results and highlights the requirements on information about quality that can serve as a list of

. uses climate information for research and education.

. would appreciate online help (webinars, step-by-step-tutorials) and offline help (manuals available for download).

Donna Data the typical data user

.. often uses RCP8.5 and RCP4.5 data, provided by CMIP, CORDEX or in-house, that are freely available and of good quality.

... needs guidance to find the most suitable climate projection for her purposes and to access and download this data.

colleagues.

... has 250-1000

... and more.

... works at a research facility or in the private sector.

Nick Non the typical non-user

... has less than 250 colleagues.

works in the private sector.

> ... works in the field of research and education, cities or infrastructure.

... needs more guidance on where and how to access data.

> ... needs graphs that show the climatological development of certain parameters over very long past time periods to put current values in perspective.

> > ... and more.



water management.

... uses climate information for research and education or for providing it to others in a non-commercial way.

> .. needs quidance to visualise climate information, to find the most suitable climate projection for his purposes and to interpret climate information correctly.

> > ... and more.

The detailed analysis including a complete survey evaluation, the full user profiles and sector-specific results is available upon request.

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has less than 50 colleagues.

> usually obtains climate information from national meteorological and hydrological services.

... works in the field of research and education, agriculture/forestry or

... would appreciate online help (webinars, step-by-step-tutorials), offline help (manuals available for download) and use cases (examples, case studies).

> ... uses idealised scenarios with a 2°C or a 1.5°C global warming, or a doubling of the current CO₂ concentration level.