



New open global service for easy access to climate data, information and know-how

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In 2016, ambitious efforts to combat climate change and adapt to its effects were undertaken by 176 countries when ratifying the convention of the Paris Agreement. It also encompassed enhanced support to assist developing countries to combat and adapt. This global climate effort demands raising awareness and assessment of adaptation needs based on high-quality data. Therefore, the Copernicus Climate Change Services (C3S) operated by ECMWF on behalf of the European Union, was set up to provide open data, information and user guidance/support. The C3S brings together expertise from across Europe to deliver the service with open data and information to a broad user community in multiple sectors. The current C3S_422_Lot1_SMHI contract will provide key indicators on climate change drivers and impacts at the global scale. The aim of these indicators will be to support climate adaptation world-wide, and the service is therefore developed using co-design from each continent.

The C3S_422_Lot1_SMHI contract runs from September 2017 to February 2019 by the Swedish Meteorological and Hydrological Institute (SMHI) together with 8 champion users operating globally and 12 regional or local users from across the globe. We provide climate impact indicators and seasonal forecasts, based on meteorological and hydrological variables, using a production chain of some 20 global circulation models, which have been bias adjusted and downscaled to 50 km and applied in global hydrological impact modelling at 1000 km² resolution. This new scientific data can be downloaded as NetCDF or Excel format and is easily visualized by various menu choices and zooming in maps of the web interface. All data comes with metadata as well as information on confidence and robustness, key-messages on spatial patterns and trends, guidance to users on further tailoring to local conditions and communications with decision-makers. In addition, the web presence demonstrates showcases on each populated continent for inspiration and provides data with guidance in best practices for climate-change adaptation. The overall aim is to ensure user uptake of relevant and high-impact climate information world-wide, addressing sectors such as health, safety, water-security, transport, biodiversity, tourism, agriculture and food production.

In summary, this poster will show the various components of the service and explain how it provides:

- Easy access and user guidance to state-of-the-art scientific data on climate-change impact.
- Tailoring of information based on user requests and co-design with climate experts.
- Maps, graphs and downloads of readily available climate impact indicators world-wide.
- Showcases from site-specific indicator production, merging global data with local data/tools.