



Climate Change

C3S examples of applications in support of water resources management

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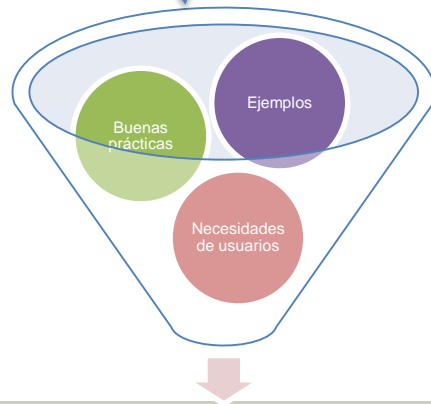


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Sectoral Information Systems (SIS)



Climate
Data



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WATER sector

Why the water sector?

- Climate change presents unavoidable threats and challenges for the water management sector.

Two proof-of-concept examples selected for the water sector:

- **SWICCA**: Service for Water Indicators in Climate Change Adaption
- **EDgE**: End-to-end Demonstrator for Improved Decision Making in the Water Sector in Europe.



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De los datos al 'decision making': AGUA

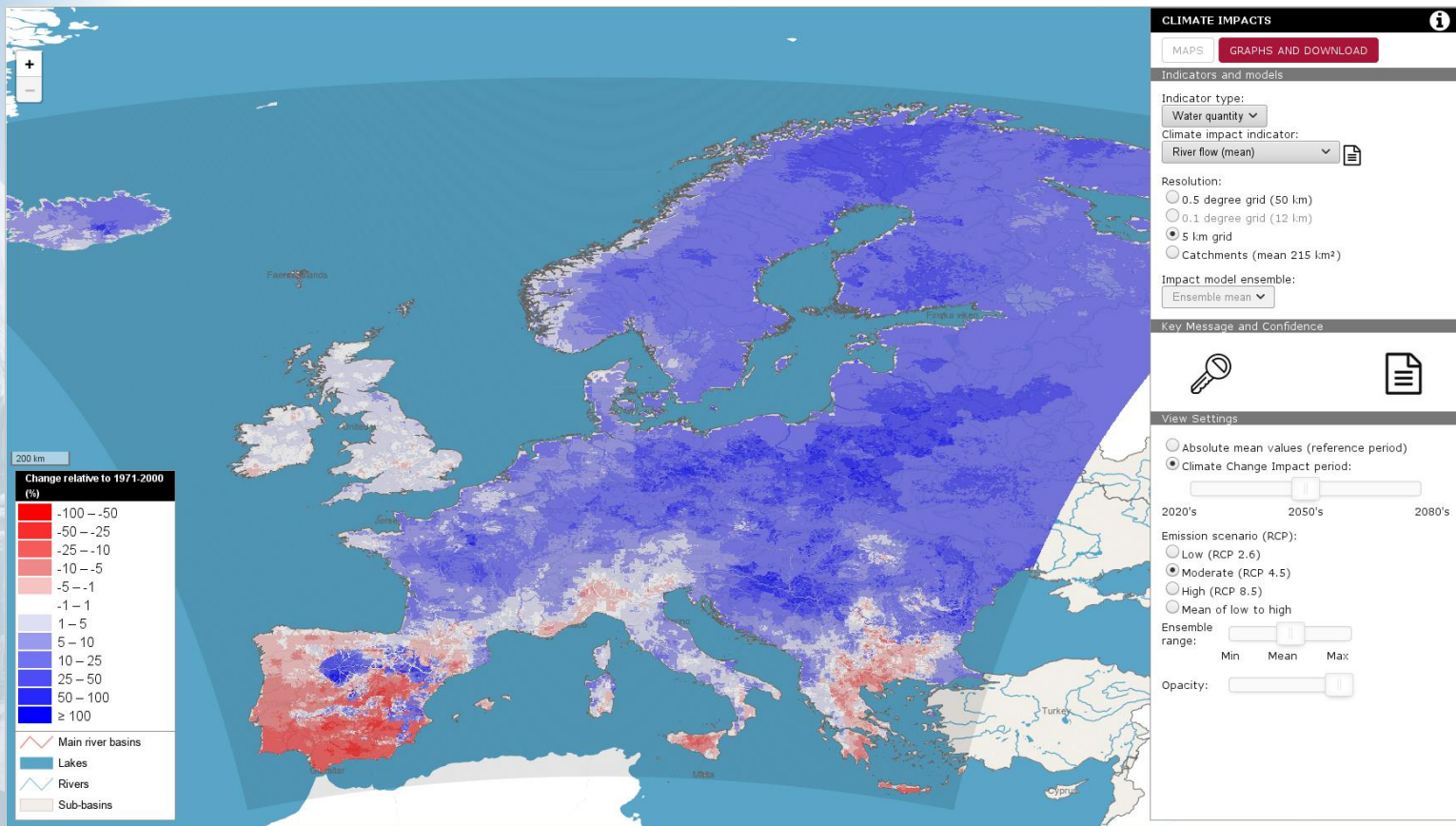


<http://swicca.climate.copernicus.eu/>



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De los datos al 'decision making': AGUA



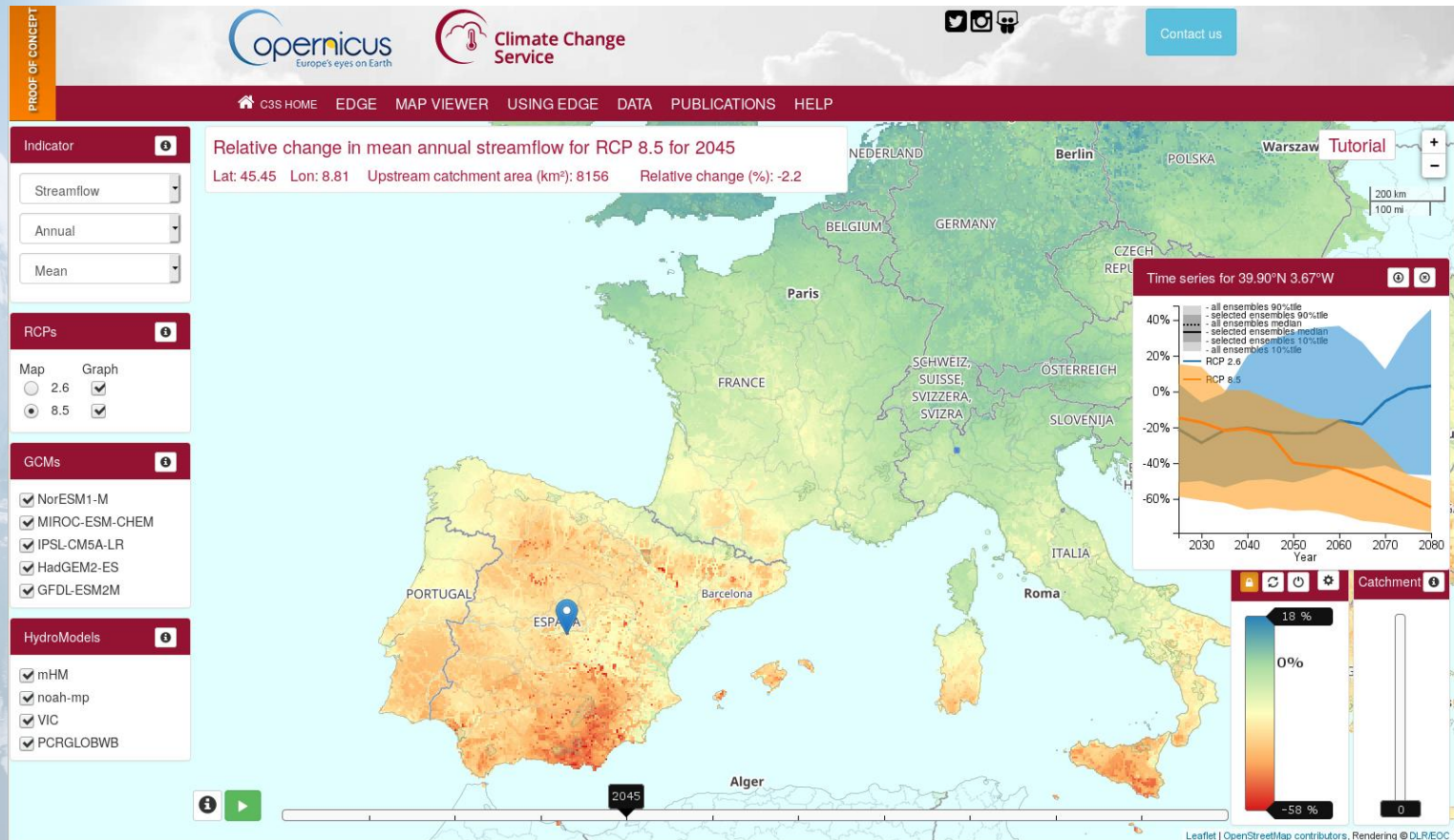
<http://swicca.climate.copernicus.eu/>





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De los datos al 'decision making': EDgE



<http://edge.climate.copernicus.eu/>



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Copernicus in a nutshell

How Copernicus data can transform the water sector

Companies in the water sector across Europe are already experiencing the effects of climate change. It will be essential for the industry to be able to plan in advance in order to adapt and grow.

1. A business recognises the changing climate could impact their revenue, facilities or long term plans and wants to know more.

2. They bring in an expert consultant to help them solve the problem, who recognises the need for data that can inform a business decision. The consultant knows about the Copernicus Climate Change Service which can provide both historic and predictive data across Europe.

3. The consultant accesses the Copernicus Climate Change Service's freely available data and tools to extract and visualise relevant information, tailoring and re-purposing it for the client's needs.

4. The consultant's analysis of the data and their modelling of potential scenarios enables companies to reduce risk and develop sustainable business plans.

5. The consultant's feedback helps the Copernicus Climate Change Service further develop climate indicators and tools for use by more businesses and sectors.



Copernicus can provide data and tools to ensure resilience, develop policy, protect health, unlock growth and understand the climate.



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Thanks



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Energy sector

ECEM: the European Climate Energy Mixes demonstrator

- World Energy & Meteorology Council (WEMC) partnership with Association pour la recherche et le développement des méthodes et processus industriels (ARMINES), Commissariat à l'énergie atomique et aux énergies alternatives (CEA), Électricité de France (EDF), Météo-France, and the Met Office.
- **Climate indicators**: Temperature, Precipitation, Wind (10 m and 100 m), Solar Radiation at surface, Mean Sea Level Pressure.
- **Energy indicators**: Electricity Demand, Hydro Power - Run-or-River, Hydro Power – Reservoirs, Solar PV Power, Wind Power – Onshore, Wind Power – Offshore.

<http://ecem.wemcouncil.org/>

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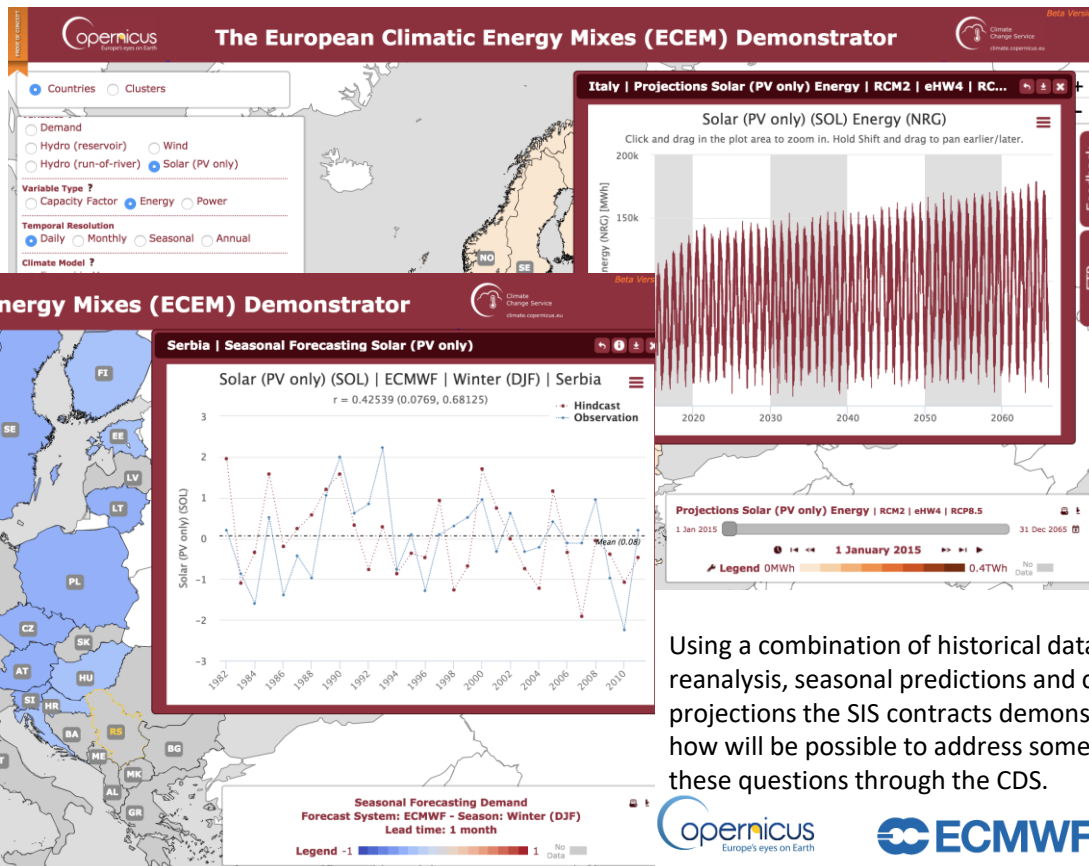




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De los datos al 'decision making': ENERGÍA

Integrating climate and energy scenarios to learn how well prepared our infrastructure is to cope with the climate of the future. Will the renewable dominated energy mix of the future able to cope with the expected change in the energy demand profile?



Using a combination of historical data, reanalysis, seasonal predictions and climate projections the SIS contracts demonstrated how will be possible to address some of these questions through the CDS.





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Copernicus in a nutshell

