OSCARS

Open Science Clusters' Action for Research & Society

Funded Project

Regional State of the Climate

Presenter: Markel García-Díez, Predictia Intelligent Data Solutions, 0000-0002-4760-0527

Implemented by

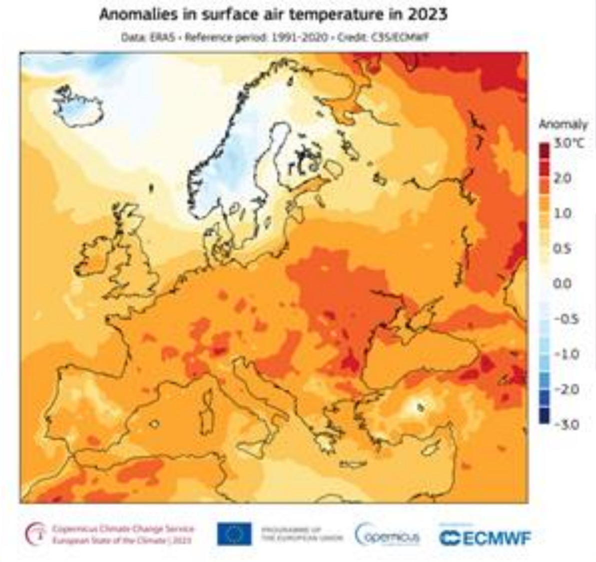
predictia

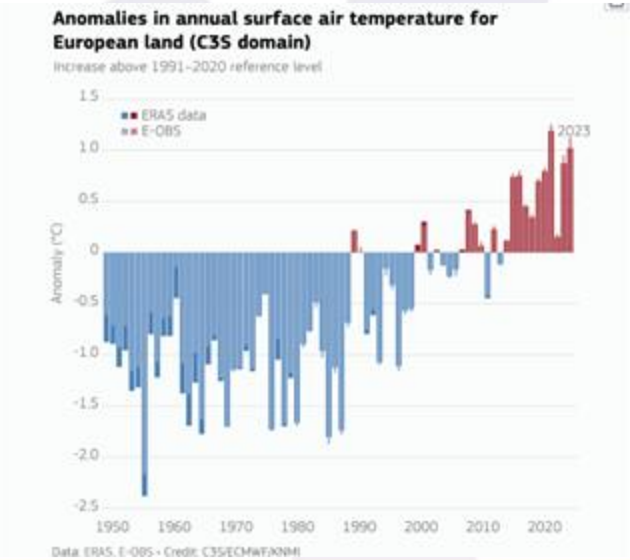
IFCA Instituto de Física de Cantabria

Funded by the European Union

What problem(s) are you going to solve?

While great, currently available "State of the climate" (SotC) reports **have limitations**. They don't usually follow the **FAIR principles** and are not available for **small socio-economic regions**.

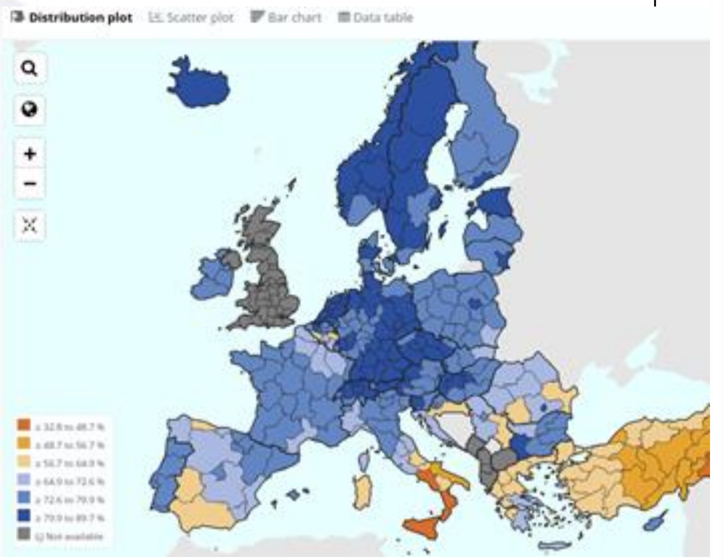




Copernicus Climate Change Service (C3S), 2024: European State of the Climate 2023, Summary: https://doi.org/10.24381/bs9v-8c66

What are you planning to do to solve the problem?

- We are developing FAIR by design **dashboard** that will enable the users to easily visualise a state of the climate for their regions of interest.
- We will develop an API to be included in the service catalog of **ENVRI** and integrated with the EOSC EU Node AAI and portal systems.
- The datasets used are the **ERA5 reanalysis, the E-OBS gridded dataset and the GPCC precipitation.**
- The regions are the **Nomenclature of Territorial Units for Statistics** (NUTS) European regions.



What will be the results and how do you plan to make them available to the broader community?

- RSotC dashboard and a **REST API** that will be contributed to the **ENVRI Catalogue of Services** as a Science Demonstrator. Analysis dimensions are:
  - The **physical parameter** (e.g. temperature and heat stress, precipitation)
  - The **product type** (e.g. map, time series, histogram).
  - **Period** to be displayed (start year, end year).
  - **Time filter** (season, month or full year)
  - The **region** to focus on (...etc)
- **Code** and **documentation** will be **publicly available**, together with the data and products, with an open license.

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What risks could limit the success of the project, and how can they be mitigated

- **Similar ongoing initiatives**
  Mitigation would be to add different, complementary features. The integration with ENVRI is also a big selling point.
- **Impact lower than expected**
  Mitigation would be to increase dissemination efforts planned in the DEC plan.

Who is doing it?

- Markel García-Díez (Predictia) - Scientific direction - garciam@predictia.es
- Daniel San-Martín (Predictia) - Coordination
- Antonio Pérez (Predictia) Data process pipeline and API
- Ivan Sánchez (Predictia) Frontend development
- Javier Triana (Predictia) Dissemination, Exploitation and Communication
- Álvaro López García (IFCA) Integration with ENVRI and EOSC