



## **Towards a new quality-controlled daily climate dataset for the Pyrenees, 1950-2015**

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Previous works using lower-density datasets addressed warming rates with slight differences depending on the season and diffuse trends for precipitation. New and more accurate results in spatio-temporal variations of these climate variables are expected on behalf the development of the CLIM'PY project, which aims to: i) detect past trends with instrumental data and, ii) estimate future behaviours in climatic variables based on projected scenarios. Temperature, precipitation and snow cover in the Pyrenees will be analysed within the framework of the project. In this communication, we present the methodology we will follow to conduct the quality control analysis of daily temperature and precipitation, which will include 673 stations of Spain, France and Andorra, covering the period 1950-2015.

The data treatment will be divided in two main stages: i) quality control and reconstruction of daily data and ii) monthly homogenization of representative (reconstructed) series. This work will generate, respectively, two products: a high-resolution (1x1 km) daily gridded dataset from 1981 to 2015, and a set of climate change monitoring indices based on monthly data. The grid will be useful to assess the spatial and temporal distribution of extreme events, while the monthly approach will be used to evaluate changes in trends from the second half of the 20th century by the calculation of different Climate Change indices.

The results of the CLIM'PY project will be used for the Climate Change assessment of the Pyrenees, within the framework of the Pyrenees Climate Change Observatory (OPCC), managed by the Working Community of the Pyrenees (CTP).