EGU2020-21292
https://doi.org/10.5194/egusphere-egu2020-21292
EGU General Assembly 2020

Changes in Köppen-Geiger Climate Types in the Iberian Peninsula using the e-OBS dataset (1950-2018).

Enric Aguilar
Universitat Rovira i Virgili, Center for Climate Change, C3, Geografia, Vilaseca (Tarragona Province), Spain
(enric.aguilar@urv.cat)

The recent decades have been characterized by a noticeable warming over most of the globe. This warming has been accompanied by a global increase in precipitation, although many regions are projected to evolve towards a dryer climate. This is the case for the flanks of the subtropical dry regions, such as the Mediterranean and, more specifically, the Iberian Peninsula

In this contribution, we use climate normal extracted from the E-OBS 20.0 gridded temperature and precipitation datasets E-OBS 20.0, from the EU-FP6 project UERRA (http://www.uerra.eu) and the Copernicus Climate Change Service, and the data providers in the ECA&D project (https://www.ecad.eu), with a resolution of 0.1 deg, to assess the evolution across three 20-year periods (1951-1970; 1971-1990 and the slightly shorter 1991-2018) of the extension occupied by the Köppen-Geiger climate types. In consonance with the observed and projected climate change, we observe an increase in the Iberian Peninsula of the extension of the dry (B) types, as replacement of the colder varieties by warmer ones.

The analysis with the gridded dataset is compared to station records corresponding to the areas which swap climate-types for validation purposes.

This work has been funded by the INDECIS project. INDECIS is part of ERA4CS, an ERA-NET initiated by JPI Climate, and funded by FORMAS (SE), DLR (DE), BMWFW (AT), IFD (DK), MINECO (ES), ANR (FR) with co-funding by the European Union Grant 690462).