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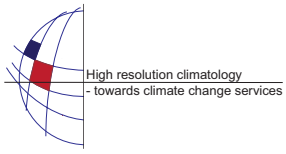

The SPEIbase: a new gridded product for the analysis of drought variability and drought impacts

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Recently a new drought indicator, the Standardised Precipitation-Evapotranspiration Index (SPEI), has been proposed to quantify the drought condition over a given area. The SPEI considers not only precipitation but also evapotranspiration (PET) data on its calculation, allowing for a more complete approach to explore the effects of climate change on drought conditions. The SPEI can be calculated at several time scales to adapt to the characteristic times of response to drought of target natural and economic systems, allowing determining their resistance to drought.

Following the formulation of the SPEI a global dataset, the SPEIbase, has been made available to the scientific community. The dataset covers the period 1901-2006 with a monthly frequency, and offers global coverage at a 0.5 degrees resolution. The dataset consists on the monthly values of the SPEI at the time scales from 1 to 48 months. A description of the data and metadata, and links to download the files, are provided at http://sac.csic.es/spei.

On this communication we will detail the methodology for computing the SPEI and the characteristics of the SPEIbase. A thorough discussion of the SPEI index, and some examples of use, will be provided in a companion comunication.