



Determination and spatio-temporal characterization of the droughts distribution in the Duero basin during the 1946-2005 period using the Standard Precipitación Index

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Using the monthly precipitation data of the surface synoptic stations we have determined the drought events in the Duero basin (Spain) during the period January 1945-October 2005 with the aid of the SPI (Standard Precipitation Index). We have found that the frequency of these episodes has increased in a notorious way during the last twenty years, to be concrete, they double those in the forty previous years. Later, analyzing data of the precipitation stations network with the GIS (Geographical Information System) we have characterized the extent and duration of these events. In particular, we have studied in detail the longest drought episode (December 1990-September 1993).