



Yearly and seasonal rainfall variability in the Iberian Peninsula from historical sources (16th-20th centuries)

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Reconstruction of rainfall patterns in long term scale over Iberian Peninsula is not easy due to confluence of different climatic factors and complex orography. Rainfall precipitation patterns show strong temporal variability producing frequently risk situations. Future scenarios of global warming only confirm an increasing variability. Consequently, reconstruction of proxy-data series in higher resolutions as be possible can be useful for improving characterization of pluviometric variability and its extremes. Historical documentary sources offer proxy-data information (rogation ceremonies, agricultural or economic problems) showing climatic anomalies. Present work is a contribution to improve methods to organize these proxy-data and to reconstruct calibrated instrumental series on yearly-seasonal resolutions for past 500 years in most representative climatic domains of Iberian Peninsula: mediterranean coast (Barcelona, Murcia), south Atlantic basin (Toledo and Seville), north Atlantic basin (Zamora and Bilbao). Precision of proxies is not perfect, overlapping periods with modern instrumental series are often very short, but possibility for identification of climatic anomalies produced on rainfall patterns over Iberian Peninsula in all main geographical areas is a positive step to improve the knowledge on this field of historical climatology.