



## Hydro-meteorological extreme events in the 18th century in Portugal

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The present work is carried out in the frame of the KLIMHIST PROJECT (“Reconstruction and model simulations of past climate in Portugal using documentary and early instrumental sources, 17<sup>th</sup>-19<sup>th</sup> century”), and is devoted to the study of hydro-meteorological extreme events during the last 350 years, in order to understand how they have changed in time and compare them with current analogues. More specifically, the results selected to this presentation will focus on some hydro-meteorological extreme events of the 18<sup>th</sup> century, like severe droughts, heavy precipitation episodes and windstorms. One of the most noteworthy events was the winterstorm Bárbara (3<sup>rd</sup> to 6<sup>th</sup> December 1739), already studied in prior investigations (Taborda et al, 2004; Pfister et al, 2010), a devastating storm with strong impacts in Portugal caused by violent winds and heavy rainfall. Several other extreme events were detected by searching different documentary archives, including individual, administrative and ecclesiastic sources. Moreover, a more detailed insight to the 1783-1787 period will be made with regard the Lisbon region, taking into consideration the availability of information for daily meteorological observations as well as documentary evidences, like descriptions from *Gazeta de Lisboa*, the periodic with more continuous publication in the 18<sup>th</sup> century.

Key-words: Instrumental data, Documentary data, Extreme events, Klimhist Project, Portugal

### References

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