

Interactive comment on “A Prequel to the Dantean Anomaly: The Water Seesaw and Droughts of 1302–1307 in Europe” by Martin Bauch et al.

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Thank you very much for this constructive and informative review. We could easily agree upon all your revision proposals with regard to terminology (weather vs. climate, MCA, LIA) and the research literature we could still add (Kiss 2019).

We agreed that it is better to describe the drought event as "supra-regional event, maybe even of transcontinental scale", as data certainly covers mainly Central Europe, France and Italy, with some indications from England, but - and this we added newly - also from the Middle East: 1304-06 CE are drought years in Syria and Egypt, with rogation processions for rain from Damascus (see on this Vogt et al. 2016, p. 91; Raphael 2013, 96-96)) and low-water levels of the Nile (Chalyan-Daffner 2013, pp. 565, 668;

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Vogt et al. 2016, p. 91). While documentary data for the Byzantine area in between Italy and the Middle East remains silent on drought between 1302-07 (Telelis 2004, vol. 2, No. 626-627), proxy data from the Aegean can help: An annual precipitation reconstruction from North Aegean tree rings (Griggs et al. 2007) demonstrates that the years 1302-04 are among the five driest periods in the 13th and 14th century in this region.

Raphael, Sarah Kate (2013): *Climate and Political Climate. Environmental Disasters in the Medieval Levant*. Leiden, Boston: Brill.

Chalyan-Daffner, Kristine (2013): *Natural disasters in Mamlūk Egypt (1250 - 1517). perceptions, interpretations and human responses*. Ruprecht-Karls-Universität, Heidelberg.

Vogt, Steffen; Glaser, Rüdiger; Kahle, Michael; Hologa, Rafael; Münch, L.; Erfurt, M. et al. (2016): *The Grotzfeld Data Set - Coded Environmental, Climatological and Societal data for the Near and Middle East from AD 801 to 1821*. In: Rüdiger Glaser, Michael Kahle und Rafael Hologa (Hg.): *tambora.org data series. vol. I*. Online verfügbar unter [doi:10.6094/tambora.org/2016/c156/serie.pdf](https://doi.org/10.6094/tambora.org/2016/c156/serie.pdf).

Telelis, Ioannis G. (2004): *ἸΙΣΤΕΩΙΣ ΛΙΞΥΚΙΝῆ ΦΑΙΝΙΜΕΝΑ ΚΑΙ ΚΛΙΜΑ ΣΤΙΣ ἸΣΟΥΖΙΝΤΙΣ*. 2 vols, Athens: Akademia Athinon.

Griggs, Carol; DeGaetano, Arthur; Kuniholm, Peter; Newton, Maryanne (2007): *A regional high-frequency reconstruction of May-June precipitation in the north Aegean from oak tree rings, A.D. 1089-1989*. In: *Int. J. Climatol.* 27 (8), S. 1075-1089. DOI: 10.1002/joc.1459.

With this further information and bibliography added, we'd like to adapt our formulation and speak of a supra-regional, maybe trans-continental drought event in 1302-04.

We couldn't find evidence if low water levels led to an increased use of ship mills, but the hypothesis seems plausible and worth further research in the future, but probably on

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periods with a denser record on mill construction.

Furthermore, we fully agree with the more technical corrections on language, style and formal requirements. We'll change the text accordingly and have it proof-read by a professional native speaker.

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