

Interactive comment on "Taxation records as a source of information for the study of historical floods in South Moravia, Czech Republic" *by* R. Brázdil et al.

G. Demarée (Referee)

gaston.demaree@meteo.be

Received and published: 8 August 2014

The paper is brilliantly written. It combines the information of tax records and other documentary information on floods with the modern instrumental data in order to establish a long-term flood record for South Moravia. The authors are experts in historical climatology and hydrology, archivists and hydrometeorologists. It is only by bringing together these disciplines that such a high-level paper could be written. The paper recommends the taxation data records as a great potential for extending our flood data records for rivers in other European regions. At least, tax relief records due to climatological and hydrometeorological conditions such as floods or prolonged droughts

C3025

should be taken as documentary information and, consequently, included in long-term flood series. This reviewer hardly has any remark to be made. A minor comment deals with the use of ML technique for estimating the parameters of a GEV-distribution. In certain hydrological research the use of the method of moments is recommended to estimate the GEV-parameters in order to minimize the potential influence of an outlier (for this technique see Hosking, Wallis & Wood, 1985). In many European rivers important hydraulic works like dams and sluices were carried out in the 19th century in order to facilitate navigation. Those works influenced the occurrence of floods. Was this the case of the Morava river? Figure 6 which is according to this reviewer the main result of the study combining the documentary evidence, the water level data and the computed discharge data to produce long-term decadal flood frequency series. The area of South Moravia is not a large geographical area. May it be supposed that those river areas do belong to the same hydrometeorological / climatological region? In that case the decadal flood frequency curves may be expected to have the same bimodal appearance two peaks). This is more or less the case (however the Morava river seems to present a third peak in the discharge data information). This reviewer suggests the paper to be published as it stands as no significant remarks were made.

Gaston Demarée Royal Meteorological Institute of Belgium

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 7291, 2014.