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## Before and after Tambora: Extreme floods in the mid-1810s in Hungary

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Either considering the eruption among the potential causes or not, the vicissitudinous times around the year of the Tambora eruption, with a great number of extreme weather events and serious socio-economic consequences, gained and gain relatively great attention among historians in Hungary. Even if in 1816 and partly already in 1815, different areas of the country were affected in different ways (and partly in different times), the number of extraordinary weather-related extremes with great damages, harvest failures and the great food shortage/famine in large areas made these years (combined with preceding bad years) exceptionally difficult.

In the presentation 3 main subject areas are addressed:

Based on scientific literature and contemporary documentary evidence, a country-wise overview of the presently known evidence mentioning unusual atmospheric phenomena (e.g. dry fog), extreme weather and related events (with special emphasis on great floods) as well as their immediate consequences (e.g. casualties, damages, food-shortage) are provided concerning the years of 1815 and 1816.

In the second part of the presentation, through local case studies (from West-, Central-, and Southeast Hungary), floods occurred in the period individual extremes as well as their short- and (if available) long-term consequences are discussed. While short-term consequences mainly appear in the form of casualties and material damages in all study areas, some of the extreme events, for example the great flood of the Tisza river at Szeged (7 months constant flooding btw. Dec. 1815-June 1816, and then an extraordinary huge flood in June 1816), clearly had long-term effects in the area (e.g. in terms of flood protection issues).

The years of 1815 and 1816 were part of a multi-annual crisis period in Hungary which - with an increased number of weather extremes, bad harvests, food shortage and in some areas even severe famine as a consequence - can be already detected (at least) from the year 1813 onwards. In the third part of the presentation an overview is provided about some areas where the crisis clearly started earlier, and the extremes of 1815 and 1816 only made the situation even more difficult, but were not primarily responsible for the outbreak of the crisis.