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Climate of the Reformation: droughts and anomalous weather in the 1500s-1510s in Europe

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In the 1500s-1510s an unusually high number of significant droughts in Central and Western, and partly in Southern Europe; the years 1502-1504, 1506-1507, 1513-1514 and 1516-1518 were dry particularly in Central and Western Europe. Droughts, interspersed with wet years marked even by significant floods and other weather-related extremes, and frequent hard winters were mainly responsible for the reduced or poor crop and hay harvests in multiple years. These circumstances, in combination with other socio-economic factors, contributed to the increased social tension of the period, manifesting itself in major peasant uprisings, and might have acted as a catalyst in the timing and rapid spread of the Reformation.

The first part of the presentation is concentrated on the reconstruction and spatial-temporal analysis of the droughts (and hard winters) using documentary evidence – in comparison with the tree-ring based hydroclimate reconstruction (OWDA: Cook et al. 2015) and the multiproxy-based reconstruction of Central European precipitation (Pauling et al. 2006).

The most significant groups of socio-economic consequences are analysed in the second part of the presentation, with special emphasis on discussing the possible cumulative effects of the anomalous weather conditions during the period on the ongoing transformation of the late-medieval society and economy and the Reformation itself.