Interactive comment on “Documentary evidence of droughts in Sweden between the Middle Ages and c1800” by Dag Retsö and Lotta Leijonhufvud

Dag Retsö and Lotta Leijonhufvud
dag.retso@ekohist.su.se

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State of the art: We acknowledge the referee’s view that a proper “State of the art” at the beginning of the paper. However, we preferred to keep a natural discussion though out the paper. “References missing”. We agree and have tried to develop the discussion of method. The referee a genuine question to/delimitation of the paper, which we have provided in the new version: “Is it possible to distinguish periods of drought in Sweden through documentary sources from the 15th till the 18th century?” The referee asked for more details on the database, which we have tried to present in a better and more comprehensive way – where it comes from, how it was created and that it will soon be publicly available at the Bolin Centre for Climate Research. However, the database is in Swedish. We can’t see how that could be changed, since the documents underlying the excerpts of the database are in Swedish. Should we translate the database? Translations are very tricky and misunderstandings and anachronisms would be bound to occur. Historical descriptions and data are of course bound within their historical, political, religious, legal and geographical context. Translation of a database of more than 20,000 excerpts is out of limit for the authors. When it comes to famines and droughts in the 15th and 16th century, we do not associate famines with droughts. We try to make it clear that agricultural production does have some climatic signal, but it is very difficult – if at all – to assess the signal. We all know that grain production to a very large extent is susceptible to both drought and excessive rain: two different phenomenon, same result. We hope to make this clear in the text. However, we find the grain price data interesting and would like to include them, since they clearly depict some climatic variations. Also, grain prices are the longest series we have, and the catastrophic (rain) year of 1315 also shows up in the Swedish material. The referee criticises Fig 1 for odd scales (also that it ranged from -4 to 4, which we too found very odd, since our own figure ranged from -3 to 3). We have tried to fix this, as well as the other minor changes concerning not chronological drought periods. We are very grateful to the referee who has much improved the paper. Yours truly, Lotta Leijonhufvud Dag Retsö