

Reply to Dr De Kraker

Dr De Kraker raises many interesting issues in his comments. As to the majority of the comments my general reply must be this. This paper must be seen as a first survey of historical documents covering a four centuries long period with an increasing amount of sources into which much more and deepened research still has to be carried out, as is stated in the last section. As such, it must be seen as a highly preliminary study requiring caution in conclusions. That is also the reason for the time being for not using a more detailed evaluation scale. Details on the damage caused by floods in towns also requires specific attention for which there is no room here, but I mention in passing that no great demographical changes, e g increased urbanization, were noticeable during this period. As to the section on harvest failures and their possible correlation with floods it really requires a special study by itself, and it could even be argued that it should be excluded here altogether until then. The possible connection mentioned by Prof De Kraaker on the timing of floods in relation to warfare, harvest failures and social stress is interesting; it is well known that Sweden was deeply engaged in warfare on the continent in the 17<sup>th</sup> century, for which increased flood frequency has been possible to detect. However, in connection with another of Prof De Kraaker's comments, I have chosen not to tie myself too tight to the chronology of the Little Ice Age, as this is constantly under discussion.

Flood marks in towns: there is only one flood mark to my knowledge in towns, that from the Söderköping church in 1684.

Increase in documentary sources from the 1520s is explained by the centralization of power beginning with King Gustavus Vasa (1521-1560). A mentioning of this should be included.

The reference on p 10090 will be corrected.

'Spatial scale' instead of 'spatial extension' is of course a better wording. Will be corrected.

Reply to J Parajka

As to Dr Parajka's three suggestions for improvement of the introduction and result sections, these suggestions are very reasonable and good. The additions suggested are very appropriate, although consideration needs to be taken not to deviate too much from the core issues. A separate discussion section would no doubt clarify and simplify the reading.

As to the specific comments, they will be addressed following the suggestions. Dr Parajka is rightly more explicit about the section on harvest failures. As mentioned in replies to other referees, this section is indeed problematic in this paper and could be considered to be left out for a separate article. As to figures 3 and 4 they contain different types of information and could be considered to be fused into one, provided it does not get too stuffed for the reader to understand.

## Reply to Anonymous referee #2

The referee has brought up some important points that needs consideration before finalizing this paper. For example, further confrontation with Central European reconstructions would certainly be fruitful. As stated in the reply to another referee, it might also be considered to leave out the section on harvest failures and dedicate a special paper on that topic. The discussion around the sources and their usefulness would be too extensive for this paper, I'm afraid, especially since the referee (like dr de Kraker) points out other possible correlations with societal damages that need to be checked against empirical material, e g the wars. As stated in the reply to the same referee, the reason behind the rise in documentary sources from the 1520s will be added.

As to the formal shortcomings, some of them have been caused by technical mistakes and will be adressed. A comment on some of them (P 10097, line 23): following a somewhat strict formalistic Swedish tradition I have reproduced exactly the edition information in the publication in order to facilitate searches in library databases; but it could of course be simplified