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## Interactive comment on "Relationship between climate change and wars between nomadic and farming groups from the Western Han Dynasty to the Tang Dynasty period" by Y. Su et al.

## **Anonymous Referee #2**

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In the paper, the authors used the reconstructed climate data and war data to analyze the influences of climate change on the wars between nomadic and farming groups during Chinese history. They concluded that warm climates corresponded to a high incidence of wars, most of which were won by the farming groups, and the battle zones usually located to the north. The authors did substantial and interesting work, and the results are clearly presented. However, I think some major revisions are needed. The detailed comments are listed below.

Major comments:

One of my major concerns is about the uncertainties of the data sets. How large the

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uncertainties are, and how could be they represented? More importantly, how will those uncertainties influence the results and conclusions?

Another issue within the analyses is the statistical significance level of the results. For most results, the authors did not apply any test of significance level on their results. For some results, they mentioned to be significant (Page 3577 Line 2) or non-significant (Page 3579 Line 15), but they did not mention what tests were applied and what significance levels were used?

When analyzing the mechanisms behind the war incidence and winning ratios between the warm and cold periods, it would be more robust if the authors can implement some statistical analyses on the historical data, like the population, economy, and productivity.

In Conclusions section, I wonder whether it is possible to evaluate the importance of climate change in the war relations, compared to other factors, such as political factors etc.

Interactive comment on Clim. Past Discuss., 11, 3567, 2015.