

Interactive comment on "Evolution of Vegetation System in Heihe River Basin in the last 2000 years" by Shoubo Li et al.

Anonymous Referee #2

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The manuscript used Remote sensing data and historical research results to studied vegetation change in Heihe River basin in past 2000 years. The topic of the manuscript is very creative as there aren't many researches on historical vegetation change, especially on natural vegetation. The results of historical natural vegetation study is useful, however there are too many uncertainties to study. The authors' methods were not very complicated but proved to be very effective. The results of the manuscript were also very interesting. Considering the principle of HESS, I suggest accept the article after micro modification. 1. Page 3. Legends should be added to Figure 3. 2. Page 5. Did you considered other data source instead of Landsat images? Landsat images are not very useful to study interannual variability. In the article, MODIS data was used to rectify Landsat. It is acceptable, however, it also increased error of the results. 3. Page 7. Need more explanation for the data you quoted. 4. Page 14. Figure 7 is not

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very clear to me. 5. In general view, natural vegetation and crops compete of water resources. Can you explain why in your results the natural vegetation and crops increase or decrease synchronously?

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