

Interactive comment on “The Interactions Between Precipitation, Vegetation and Dust Emission Over Semi-Arid Mongolia” by Yuki Sofue et al.

Anonymous Referee #3

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The paper tried to clarify the interactions between precipitation, vegetation and dust emission over semi-arid Mongolia, however, as the authors said “the purpose of this study is to examine the relationship between the trend of vegetation variation and the effects of precipitation in the Gobi region”. I believe that the authors give a sound analysis and fair results on the relationship between vegetation and precipitation.

However, there are few materials or data to be used to analyze the relationship between the precipitation and dust emission, and vegetation and dust emission, except for a single regression analysis “between summer vegetation and number of days in which dust storms occurred in the next spring in Sainshand city shown in Fig. 7a, b”, although it is hard to be understand that the relationship was significant with such a low correlation coefficient, $R^2 = 0.22$. Furthermore, it is also hard to be understand the

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conclusion that “maintaining vegetation coverage during this period could reduce dust storm occurrence in the next spring” with the current single regression analysis with the data of only one site.

Based on my point of view, I suggest: 1) to focus on the relationship between vegetation and precipitation only and submit to other corresponded journals; or 2) to collect the more data of dust storm and analyze the relationship between the precipitation and dust emission, and vegetation and dust emission regionally. Anyway, I hope to rewrite and resubmit the paper with a native English check.

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