Biogeosciences
Discussions

Open Access

EGU

[BGD]

Interactive
comment

Interactive comment on "Investigation of scale interaction between rainfall and ecosystem carbon exchange ofWestern Himalayan Pine dominated vegetation" *by* Sandipan Mukherjee et al.

Anonymous Referee #1

Received and published: 14 September 2018

Review comments on 'Investigation of scale interaction between rainfall and ecosystem carbon exchange of Western Himalayan Pine dominated vegetation' by Mukherjee et al.

Please see winter seasonal rainfall to Indian winter monsoon. There are three things mentioned scale interaction, seasonality and extremes. It seems authors don't have understanding of the same. What about orographic forcings over the Himalayas. Over Himalayas most of the precipitation is primarily controlled by orographic forcings. What are the changes in meteorology? It is repeatedly mentioned but not looked into and answered. There are many complex jargons are used in the introduction with lesser

relevance to link with which makes objective of the paper less defined and more complex to understand as what authors are inclined to mention about. ERA-interim forced model CASA-GFED3 is used to assess terrestrial carbon cycle. No sensitivity of the model and comparison with corresponding observations are made with to comment on models suitability. Point, Kosi Katarmal, study is linked with large scale model and fields- that is not advisable. A simple wavelet analysis is forced to justify the objective. Different bands highlighted using wavelet is than linked to the point flux observation. There is lot of lacunae is introduced in such analysis and thus corresponding results. Where is the scale interactions, meteorological changes, etc. finally?

I recommend rejection of the paper based on above main comments. I have not commented and seen this paper from physical processes point of view.

Interactive comment on Biogeosciences Discuss., https://doi.org/10.5194/bg-2018-299, 2018.