

Interactive comment on “Does Vegetation Parameterization from EO NDVI Data Capture Grazing induced Variations in Species Composition and Biomass in Semi-Arid Grassland Savanna?” by J. L. Olsen et al.

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This paper presents an original approach to disentangle rainfall effects to other factors such as the grazing on the vegetation dynamics, and particularly the greening trends of the Sahel. It aims to analyze if NDVI data are able to capture variations observed in in situ observations of vegetation caused by rainfall variability and differences in grazing regimes.

I noted that authors have taken into account most of the suggestions made during the

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first stage of the review process, so I have now just five comments:

- 1) For the definition of the SoS and EoS of the growing season, you used TIMESAT. You used the MODIS NDVI product, but it exists also the MODIS vegetation phenology product providing also estimates of the timing of vegetation phenology. So I wondered why you chosen TIMESAT rather than the existing product?
- 2) To found the best parameter for monitoring biomass, you test here each parameter separately. Why you don't test the combination of parameters?
- 3) You found for your site that the best parameter for monitoring biomass is the small integrated NDVI. Do you think that this will be the case for other Sahelian areas?
- 4) P11, L26 change 15 and 30% by 15% and 30%
- 5) Last comment, this paper benefits from an important database of field measurements, so it is quite “frustrating” that you used only 8 years of data. I understand the reasons why you don't use AVHRR data but however I wondered if you plan to test also the possibility of using AVHRR dataset.

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