

Earth Syst. Sci. Data Discuss., author comment AC2  
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## Reply on RC1

Xiaobin Guan et al.

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Author comment on "Fusing MODIS and AVHRR products to generate a global 1-km continuous NDVI time series covering four decades" by Xiaobin Guan et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-156-AC2>, 2021

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Dear Referee #1,

We are particularly grateful for your deep thoughts and valuable comments. Although the NDVI product presented in our study still has many problems that need further investigation, it is the first attempt to produce the global 1-km long-term NDVI dataset that is helpful for global change studies. According to your comments, we have tried our best to revise the manuscript to make it better, and an item-by-item response can be found in the Supplement. In the revised manuscript, we added some experiments to further assess the spatial patterns and data continuity of STFLNDVI, and added more discussions on the uncertainties in the process and results. Furthermore, we are also reproducing the STFLNDVI product by referring to the mean value of MODIS and AVHRR over the overlapping period, in order to reduce the risk caused by the selected one-year reference data.

Once again, we are particularly grateful for your careful reading and constructive comments. Thanks very much for your time.

Best regards,

Ph.D. Xiaobin Guan

Please also note the supplement to this comment:  
<https://essd.copernicus.org/preprints/essd-2021-156/essd-2021-156-AC2-supplement.pdf>