

Thanks for your comments and question. We agree that the cropping season is not completely in line with the calendar year. When detecting cropping intensity for a specific year, the result might be more biased due to the cross-year cycles, which is also addressed in Gray et al. (2014). To avoid such issue, our approach integrated three continuous calendar years to detect cropping cycles rather than one calendar year. This is the main reason in our manuscript to calculate 2016-2018 averaged cropping intensity to reduce the uncertainty resulted from cross-year growing cycles. Using the green chromatic coordinate (GCC) (Richardson et al. 2018) observations at the Shangqiu site (located in North China) as an example (Figure C1), the last growing cycle spans from Nov. 2018 through wintering period to early June 2019. Thus, adopting a multi-year metric would be “safer” to evaluate our outputs, although the CI information is not for a specific year.

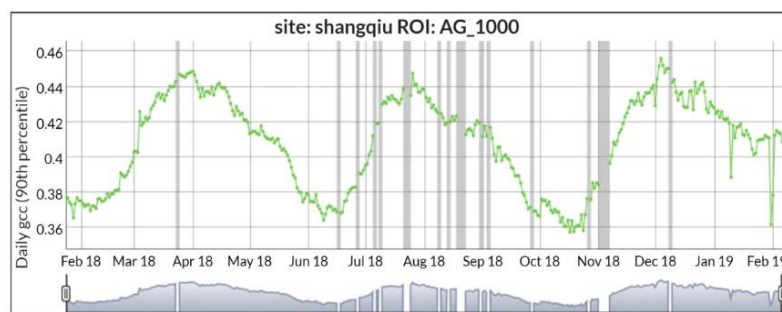


Figure C1. Daily GCC time series of Shangqiu site derived from the PhenoCam dataset.

#### Reference:

Gray, J., Friedl, M., Frohling, S., Ramankutty, N., Nelson, A. and Gumma, M.K., 2014. Mapping Asian cropping intensity with MODIS. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 7(8), pp.3373-3379.

Richardson, Andrew D., Koen Hufkens, Tom Milliman, Donald M. Aubrecht, Min Chen, Josh M. Gray, Miriam R. Johnston, et al. 2018. “Tracking Vegetation Phenology across Diverse North American Biomes Using PhenoCam Imagery.” *Scientific Data* 5 (1): 180028. <https://doi.org/10.1038/sdata.2018.28>.