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Interactive comment on "Characterization of the radiative impact of aerosols on CO_2 and energy fluxes in the Amazon deforestation arch using Artificial Neural Networks" *by* Renato Kerches Braghiere et al.

Anonymous Referee #2

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Description about the data sets and methods are not provided clearly in the beginning of the manuscript. Reader will only find part of the information in the conclusion section.

ANN technique explained in the "method" section should be focused in relation to the current manuscript.

Some key references are not cited: 1. Aerosols and their influence on radiation partitioning and productivity in northern Australia May 2009, Theoretical and Applied Climatology 100(3):423-438 2. Exploring the link between clouds, radiation, and canopy pro-

ductivity of tropical savannas December 2013, Agricultural Meteorology 182(183):304-313 3. Advantages of diffuse radiation for terrestrial ecosystem productivity, JOURNAL OF GEOPHYSICAL RESEARCH,VOL.107,NO.D6, 4050 4. Fires increase Amazon forest productivity through increases in diffuse radiation, Geophysical Research Letters, 10.1002/2015GL063719 5. Enhancement of crop photosynthesis by diffuse light: quantifying the contributing factors, Ann Bot. 2014 Jul; 114(1): 145–156

The use of MODIS AOD (10 km x 10 km) is not justified well

A very long conclusion. Well, it is not really a conclusion, but rather mixed with the scope of the study, methods and summary of the results. These components should be separated and placed under Introduction, Methods and Results sections respectively.

Interactive comment on Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2019-167, 2019.