Biogeosciences
Open Access
Discussions

Interactive
Comment

Interactive comment on "Relationships between burned area, forest cover loss and land use change in the Brazilian Amazon based on satellite data" *by* T. Fanin and G. R. van der Werf

H. Müller (Referee)

hannes.mueller@geo.hu-berlin.de

Received and published: 13 July 2015

The authors invest the relationship between two deforestation products and one burned area product to better understand deforestation and fire dynamics in the Brazilia Amazon, addressing a highly relevant topic in the global environmental change research. They clearly show a decrease in post deforestation fire activity from 2002-2012 (Fig. 8) and localize most fires in shrubland and savanna areas. However, I see high potential for improving the manuscript by streamlining the general structure. Most important, the introduction should be better linked with the results and discussion part, by introducing clear research questions, which govern the following manuscript and allow to include

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

sub-sections in the results and discusssion part. This allows to emphasize the most important points. So far, there seems to be a lack of relevance of some points under discussion, especially in regard to the comparison between PRODES and GFC.

In addition, I am convinced that the land use and land cover analysis could be strongly improved by including the pasture class provided by the Land use/ land cover dataset TerraClaas 2008 and 2010 (Brazilian Institute of space research (INPE)). So far, the authors limit their stratification approach to three main land cover classes: broadleaf forest, cropland and low tree forest which do not allow to characterize post deforestation fire activity in relation to the most frequent land use type- cattle farming. In case the implementation of Terra Class datasets goes beyond the focus of this manuscript, I still recomment to better justify the use of the MODIS based Land cover product in the introduction and methods part and account for those limitations in the discussion section.

For the discussion, I think it is important to mention that the role of burning concessions and fiscalisation of illegal burning practices by IBAMA strongly increased after 2004. This could be one additional factor leading to the decreased fire activity during the study period.

Interactive comment on Biogeosciences Discuss., 12, 8235, 2015.