Editorial Note: This manuscript has been previously reviewed at another journal that is not operating a transparent peer review scheme. This document only contains reviewer comments and rebuttal letters for versions considered at *Nature Communications*.

REVIEWERS' COMMENTS:

Reviewer #1 (Remarks to the Author):

The authors have addressed my concerns in this version. I am in favor of publishing the manuscript.

Reviewer #3 (Remarks to the Author):

Compared to the previous version, the authors have made significant efforts to improve their study. In this revision, they demonstrated the validity of their vegetation model. They also provided strong evidences to show how the reductions in fire activity contribute to the increased GPP or vegetation index. I would be happy to see the publication of this study, which brings new insights to the carbon cycle community.