Dear Editor,

Thank you for giving us the opportunity of a reply. We hope that we have satisfactorily addressed all concerns.

Best regards

Pierre Sicard

Referee comments

All requested technical and typographical corrections were carried out.

Line 17: yes, temperature change can enhance, but there is also a threshold for this. We cannot generalize this.

I quite agree with this comment, however the term "enhance plant growth" was used by Nemani et al. (2003) and Zhu et al. (2016) and seems appropriated.

Line 96 & Line 188: Please make a complete sentence to introduce the table in the article, not in the bracket.

We have introduced Tables and Figures, see lines 185-189

Line 134: "cannot predict" at all? Or "problems in predicting"? Give a reference too

This statement was proposed and deeply discussed by Anav et al. (Global Change Biol., 2017). Currently, the chemistry models do not take into account the shifts in plant phenology and in start and end date of the growing season.

Line 417: do these models have stratospheric chemistry?

Yes, this is explained in the SI. For stratospheric O_3 projections, the models are grouped into 2 categories: the first group includes models with interactive or semi-offline chemistry and the second group includes models with prescribed O_3. Some models (e.g. GFDL-AM3, GISS-E2-R, MIROC-CHEM and MOCAGE) include full stratospheric chemistry schemes, while CESM-CAM is based on a linearized O_3 chemistry (i.e. LINOZ scheme) and UM-CAM uses the CMIP5 dataset to prescribe offline O_3 in the stratosphere.