

This is my second review of this paper. In the re-submitted version the authors substantially improve the readability of the text. They have considered my initial comments, deepening the methods section and discussing the possible confounding effect of solar radiation on the results. The latter was investigated comparing the frequency distribution of meteorological variables such as solar radiation, temperature and VPD (figure 6) for the dataset on which they assumed an O<sub>3</sub> effect over GPP and the dataset on which an O<sub>3</sub> effect over GPP is not expected.

Histograms reported in figure 6 show that the frequency distributions of meteorological variables in the two dataset are not the same. The discrepancy between the two distributions is strongly noticeable for solar radiation (figure 6 a), confirming my initial concern on the possible confounding effect of this variable. Figure 6 a shows that solar radiation is usually high during high O<sub>3</sub> events, so that a model parameterized under low O<sub>3</sub> condition would be also parameterized under low irradiation, leading to a GPP underestimation that would mask a possible negative effect of O<sub>3</sub> over GPP.

In my opinion, the main conclusion, stated as “No O<sub>3</sub> effects were detected on the carbon uptake by the Scots pine stand”, is not supported by a valid method, which need to be revisit.

However this work is interesting , a good amount of data are presented and I believe that the paper could be a useful addition to the literature of O<sub>3</sub> forest damage if authors take on such an effort in revisiting the data analysis in order to avoid confounding effect of meteorological variables. I strongly encourage authors to resubmit it.