

We warmly thank again the editor for this final review of our paper and of our answers to the referee's comments.

In particular, please address the following points in your revisions:

1. The author responses to Reviewer 1, comments 9 & 10 contain important information, which should be incorporated into the manuscript (in summary form) so that it is available to readers.

REPLY: The following sentence, page 11, line 15-20, has been added:

“The main assumption made to calculate the *Pinus* mass fraction is that the pollen mixture is assumed to be made only from *Pinus* and *Platanus* taxa, whereas *Cladosporium* and Cupressaceae were also present (Sicard et al., 2016a). However, in terms of number concentration, one sees from Sicard et al. (2019) that *Pinus* and *Platanus* represent more than 90 % of the number of total pollen. Our assumption is equivalent to neglecting the remaining ~10 %. As *Cladosporium* and Cupressaceae are much smaller in size than *Pinus*, our assumption is equivalent to neglecting in terms of mass probably less than 1 % of the total mass.”

2. With respect to Reviewer 1, comment 11 - a model should be termed skillful only if it has been shown to outperform a reference model according to objective metrics. Please revise accordingly.

REPLY: There is no *Pinus* reference model to which our results can be compared. The word “skill” has been deleted in the text and we now talk about model performances.