Author response to the referee comments to the paper by Kurganskiy et al.: Incorporation of pollen data in source maps is vital for pollen dispersion models

We would like to thank anonymous referee 3 for comments and suggestions led to improving the paper. They are addressed below with our responses in blue font.

Referee 3, Anonymous.

Dear authors,

Before the paper can be finally published, please carefully revise the manuscript according the referee's comments as follows:

1) in the Table 1 caption, it has not yet been clarified what the p-value means here. I think it's important to clarify which test was performed and which things were being compared, for example with a sentence like "The differences with the observations were statistically significant for all maps (p < 0.01 by a Student's t-test)"... or something similar.

Thank you! We have added the following sentence in the Table 1 caption:
"The results were statistically significant for all maps (p-value < 0.01 according to a Student's t-test)."

2) In Table A6, I found the definition of the Odds Ratio (OR) difficult to understand. I recommend it be rephrased for clarity.

Thank you! We have changed the OR definition from
"OR indicates how much higher are the chances to get pollen concentration > Cth than < Cth if the model prediction is > Cth."
into
"OR shows the likelihood to get concentrations > Cth compared to concentrations < Cth when the model prediction is > Cth, hence POD/POFD"