

Earth Syst. Sci. Data Discuss., community comment CC1  
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## Reply on RC1

Esther Githumbi

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Community comment on "European pollen-based REVEALS land-cover reconstructions for the Holocene: methodology, mapping and potentials" by Esther Githumbi et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-269-CC1>, 2021

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Thank you for your comments, we are grateful that you have taken the time to go through the manuscript. I will respond to the questions and comments in the same order.

### **Q1: Why the British had sparse distribution of Evergreen Trees (such as Pinus and Picea) during the Holocene?**

The REVEALS uses the pollen counts of the taxa in the reconstruction and so the simple answer is that the sparse distribution observed is because of the low evergreen tree taxa pollen counts in the records. However if you are asking from an ecological point of view then I have passed the question to collaborators who are experts about the British Isles Holocene land-cover.

### **line 114: What does the "reliable number of sites" mean in Figure 1B? Please provide detailed description for Figure 1.**

Reliable number of sites means grid cells that have multiple large lakes\bogs, we explain this further in section 4.1 from line 422 but we will provide a detailed description of the figure as requested.

### **line 127: Does the "j" represent for the total number of species included for pollen proportion calculation?**

yes

### **line 296: There has only 3 PFTs which are composed 12 taxa in Summer green trees (ST); and 3 PFTs which are composed 10 taxa Open land (OL), see Table 1. \line 322: Evergreen Trees**

The mistakes have been noted and will be corrected.

### **line 410: The mean count size across all samples is 3550. Is that right?**

Yes, most (77%) of the counts are above 1000 (line 409). Each sample is an aggregation of counts for a time window in order to obtain a large enough count for a reliable REVEALS reconstruction (lines 205, 405). We will also discuss that sentence to see if there is a way to clarify it further in the text.

