

Interactive comment on “The Eurasian Modern Pollen Database (EMPD), Version 2” by Basil A. S. Davis et al.

Anonymous Referee #1

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This study provides an updated EMPD dataset (i.e., EMPD2), which contains more modern pollen samples and covers a larger spatial extent than EMPD1. Such dataset is very useful to reconstruct past vegetation and climate. The new map-based online data viewer is very interesting and can advance data sharing and quality checking. The manuscript falls well within the scope of the journal and provides a contribution to ESSD. However, its presentation and structure should be greatly improved to meet ESSD's requirement. Therefore, I recommend it could be accepted after a major revision or resubmission.

Two major concerns 1) As we are informed by the submission guidelines, ESSD is focused on how the data were processed, such as quality controlling, new technique used, and etc.. However, the authors ignored the issue. So I suggest the authors

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should strengthen the section 2.2 with more details (e.g. flowchart) on the data processing. Additionally, I think it will be better to combine 2.3 with 2.2. 2) The results and discussion should be deepened and extended since the contents has not acknowledged readers some new knowledge.

Specific comments: 1. P4L136-138: The sentence “although it is in fact more accurately described . . .” is complicated and not straightforward, please reword it. 2. P4L144-145: Please restructure the sentence “. . . interpret past change in land cover, land use and human impact . . .” 3. P5L177-179: “and compatibility with the EPD” - > which 4. P5L179-181: There is a lot of repetition, e.g., “it was collected”, please rewrite. 5. P6L231: add “loose” before “definition” and delete “was more loosely defined”. 6. P9L326: not clear to me how the Euclidean distance is calculated? Does “the climate of each of the pollen samples” refer to temperature or precipitation value? mean monthly or seasonal or annual value, which one did you choose? Did you calculate the Euclidean distance at grid scale with resolution of 30 second (Fig.5a)? Please improve the description and consider illustrate it in the method section. 7. P10L336: please reword “This will make possible more accurate reconstructions”. 8. The labels of X and Y in Figs. 4b and 5b should be enlarged.

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