Interactive comment on "The ACER pollen and charcoal database: a global resource to document vegetation and fire response to abrupt climate changes during the last glacial period" *by* Maria Fernanda Sánchez Goñi et al.

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The manuscript describes a global collection of pollen and charcoal data for the last glacial, which is a welcomed and much needed research tool. The benefit lies in the collection of nearly all available continues records spanning the period, and the efforts of the lead authors to produce standard age models facilitating further analysis. In addition to radiometric ages, the lead authors also used climatic events as control points, which improve the individual chronologies; however, this prohibits the use of the database for few particular questions, which would require independent dating.

I have missed a short discussion on this problem, mentioning which climate events were mainly used and which type of analysis may be affected. Giesecke et al. (2014 VHA 23: 75-86) had to deal with the same problem and discuss some of the caveats. When trying to download the database I found it restricted. I assume this restriction will be lifted with the acceptance for publication, otherwise, you should specify how researchers might gain access to the database.

Specific and technical comments:

L. 167: Could uncertainties not be estimated from the type of age control available? See Giesecke et al. 2014 VHA

L. 199: Do you mean MD95-2042 as above mentioned?

Table 1: I find the uncertainty for the onset of the Holocene and some other events rather small could you comment on how they were derived or which uncertainty they represent?

L. 321: It is a pity that no age model could be produced for 7 out of 93 sites. Given the overall small number of sites, I wonder if the listed problems could not be overcome.

L. 326: Other sites co-authored by Reille were digitized why not this one? Moreover, one co-author of this manuscript was able to access the data (possibly by accident) and republished it (Helmens 2014 QSR), thus could not the percentage data be made available here?

L. 338: I don't understand why you generated 774 age models and find no explanation in the text.

L. 401: In my PDF the pollen curves appear green.

L. 408 and elsewhere: Why don't you use BP since you defined earlier that you use 1950 AD as zero.

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