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The Cryosphere Discussions
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Interactive comment on "Significant mass loss in the accumulation area of the Adamello glacier indicated by the chronology of a 46 m ice core" *by* Daniela Festi et al.

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The paper by Festi et al. assesses the chronology if the ADA16 ice core drilled at 3100 m asl at Pian di Neve (Adamello Glacier). The chronological approach is based on the comparison of three independent dating methods and their lines of evidence, namely peaks in biological proxies concentration (palynomorphs and refractory BC), 137Cs and 210Pb geochronometry. Methods and results are correctly presented. Here below I list some points that need to be considered by the authors for an improvement of the manuscript (text + figures).

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how many of the 536 samples taken for palynology were actually analyzed? Looking at Fig. 2, it seems that they are way less than 536. 147-151: the information represented in the PCA plot seem to be important for the interpretation of the pollen signal stored in the ADA 16 ice core. Please add the PCA plot in the main text. 152: can you determine the time length of the multiple year signal condensed at 2.1 and 12.2 m w.e. equivalent? can pollen concentration help with this issue? 217: "The dating of the three independent dating methods ...". Please rephrase. 221: is it just pollen or pollen+spores? if so, use the term palynomorphs 295: Filipazzi instead of Filippazzi

Fig. 1: please add lat-long grids to the insets showing images of glaciers and surrounding mountains and some geographic names to help the readers in localizing the site

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