

## ***Interactive comment on “Volcanic synchronization of Dome Fuji and Dome C Antarctic deep ice cores over the past 216 kyr” by S. Fujita et al.***

**Anonymous Referee #5**

Received and published: 14 April 2015

The work presents a synchronization of two deep ice cores, the Dome Fuji (DF) and EPICA Dome C (EDC) cores. The results are rather technical and of interest only to a rather limited readership, but on the other hand, having good timescales for the two ice cores is an objective of considerable importance and of general interest that cannot be met without publishing the nitty-gritty details going into a time scale. Ways to make the manuscript more significant, and thus more strongly justify publication as a separate manuscript rather than as a technical section of another paper of, could be

- to make sure that both the data used and the synchronization tool is made accessible upon publication. Without the data, the reader cannot check the validity of the synchronization, and if the tool is not made available, it makes little sense to introduce it.

C223

- to extend the synchronization to the entire length of the cores
- to analyze the synchronized records

I will not go into details as the manuscript has already been reviewed thoroughly by several reviewers, but here some issues are mentioned:

- The manuscript would benefit greatly from thorough language revisions by a native speaker.
- "Age gap" is misleading. "Age difference" or "age offset" seems more appropriate
- If you want to use the marine-based MIS nomenclature to refer to ice core time intervals, which is rather illogical but also convenient, please define which ice-core interval you assign to each MIS, either in a table or by marking the boundaries between the different MIS on fig. 3.
- The authors seem biased towards mostly referencing their own work. While this is perfectly justified for the more specialized studies, the introduction would benefit from a broader selection of references.
- Section 2.2 is rather long but contain almost no quantitative information. It should either be shortened or (better) extended with quantitative details so that the workings of the synchronization tool is explained.

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Interactive comment on Clim. Past Discuss., 11, 407, 2015.

C224