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## *Interactive comment on* "Technical details concerning development of a 1200-yr proxy index for global volcanism" *by* T. J. Crowley and M. B. Unterman

## Anonymous Referee #2

Received and published: 1 August 2012

This report shows an interesting reconstruction of the link between volcanic eruptions and climatic episodes. The reconstruction is based on integrated sulphate records from several Greenland and Antarctic ice cores and covers the last 1200 years. In my opinion the manuscript is clearly written and well structured and deserves publication on ESSD after few minor revisions. My only remarks are listed here:

Section 1.1. You should give some details on the "iterative approach" adopted for volcanic eruptions found in periods of high background variability.

Table 1: Is the Dome C record used in the study the one obtained from the EPICA drilling or is it the old Dome C perforation? If the old Dome C ice core is the one used

C124

in your study, why you didn't use the EPICA Dome C data?

Explicit the AOD abbreviation not only in the abstract but also in the text, the first time it appears.

Page 3 line 21: change to (Vinther et al. . . .)

Pag 10 line 10: change to "hemispheric"

Page 10 line 22: change to "it was"

Page 11 line 1: you write "biweekly-scale ECM measurement", but I think that the real resolution is bi-monthly as you write in the caption of figure 4. Please change the text accordingly.

Page 13 line 26: change to "Intercomparison"

In the list of references there is a paper by Castellano et al. (2005) that is not cited in the text, please find a place to insert the citation to this paper.

Interactive comment on Earth Syst. Sci. Data Discuss., 5, 1, 2012.