

***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 #1**

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This technical report describes a very interesting reconstruction, based on sulfate records in Antarctic and Greenland ice cores. The article is well structured and has important findings of interest for linking climatic and volcanic episodes. The architecture of the paper is very clear, including three main chapters (with different subchapters), one table and eight figures. In my opinion, the technical report is scientifically and technically sound, and it matches well the scope of ESSD Discussions.

My only remarks are related to three points: 1) subchapter 1.1 (Determination of volcanic peaks) requires further explanation; 2) the use of sulfate records should be complemented with more data about current sulfur emissions from selected volcanic

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areas (incorporating a more detailed analysis), and 3) the connection of the volcanic activity and the possible variations of the atmospheric dynamics should be tackled more in depth and discussed by the authors.

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