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## Interactive comment on "Automatic parameterization for magnetometer zero offset determination" by M. A. Pudney et al.

## **Anonymous Referee #2**

Received and published: 26 June 2012

Using the second selection criterion of Leinweber et al. (2008) and the variance of the field magnitude to calculate mcs seems to be a good idea. The method is sensitive to the distance from the Sun, solar wind conditions and spacecraft generated fields. It would be nice to see this method applied to another mission as well. For example, Cassini magnetic field data that are much further away from the Sun would be nice. The overall increase of detection efficiency is not striking but having an automatic procedure for finding mcs is quite useful. However, the presented method is not foolproof, because for some cases it recommends tweaking (shortening) the window length for calculation of mcs which increases the risk of false calculation of mcs. In such cases it may still be better to have an experienced user to select mcs manually. The paper does not provide information on how often one should to expect to tweak the window length. I

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recommend the publication of the paper but it could be further improved by addressing my comments.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., 2, 245, 2012.