

Interactive comment on “Distance Scaling Method for Accurate Prediction of Slowly Varying Magnetic Fields in Satellite Missions” by P. P. Zacharias et al.

Anonymous Referee #2

Received and published: 19 May 2016

This study presents a novel method to accurately determine the magnetic behavior of an equipment under test (EUT) with slowly (up to 1 mHz) varying fields. The authors also validates their proposed method by applying it to real measurements. While this manuscript has the potential to be published in GI, my major concern is that the authors did not clearly state under what conditions each of their proposed method (exponential interpolation and the smoothing technique) is applicable, or more suitable. Currently in the manuscript, the authors just showed the prediction accuracy of each technique in various tests, but did not properly summarize the advantage of each proposed method. More clarifications on this regard would improve the manuscript. I suggest they include some discussions/comparisons before Section 3.F (maybe using a table to list the ad-

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vantage of each technique with improvements from previous methods). Please find a list of my other minor comments below.

1. In the abstract, please include the full name before using the acronym (such as EUT and SNR).
2. In Line 2 of page 2, I believe the authors were trying to say “DC-1 mHz”, instead of DC to megahertz (MHz)?
3. In Line 4 of page 2, I suggest “at the specification points” be changed to “at specific points”.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., doi:10.5194/gi-2015-47, 2016.