Geosci. Instrum. Method. Data Syst. Discuss., 3, C251–C252, 2014
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Geoscientific Instrumentation Methods and Data Systems Discussions
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Interactive comment on "In-flight calibration of Hot Ion Analyser onboard Cluster" *by* A. Blagau et al.

Anonymous Referee #1

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The approach is to require the integrated density of HIA to agree with Whisper Densities. This referee is concerned (i) about unmentioned role of composition in the intra comparison; (ii) the energy dependence of the response or its degradation, or MCP acceleration inappropriate for the epoch. Still the intervals look persuasive, so there must be relatively constant composition. If this is the explanation, this overall absolute calibration will be folding compositional changes into the absolute calibration.

A further test that would be suggested is to test the gyrotropy of the inferred pressure tensor in the computed bulk velocity frame. If composition is not important, the present work would have a "control". If this does not work out for routine intervals, there may be other factors involved in the calibration work.

Finally, there is no discussion about radiation or other time dependent effects in the en-

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ergy dependence of the assumed response. If radiation fatigue is under consideration, how can its effects be a priori localized in the assumed way?

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., 3, 407, 2013.

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