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Geoscientific Instrumentation Methods and Data Systems
Discussions

Interactive comment on "Tomography-like retrieval of auroral volume emission ratios for the 31 January 2008 Hotel Payload 2 event" *by* C.-F. Enell et al.

Anonymous Referee #1

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The manuscript describes an event study on the Hotel Payload 2 rocket launch. The ionospheric conditions before, during and after the launch have been analyzed and published in great detail in the author's previous article. The current study focusses on results of a tomography-like method, which uses auroral images to determine ionospheric emission rate ratio profiles of different auroral emissions.

The presentation is clear and well-written but lacks the aspect of substantially new. The tomography method has been used and tested in a number of earlier studies. The authors compare the tomography results to an ionospheric model and to EOS Aura satellite measurements but come to "a zero conclusion". Maybe the authors' suggestion

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Discussion Paper

for better absolute calibration is needed in order to bring up a meaningful comparison between the tomography results and the satellite data, and to determine whether the tomography is able to resolve the chemistry properties of the lower thermosphere.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., 2, 1, 2012.