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Interactive comment on "Background subtraction for the Cluster/CODIF plasma ion mass spectrometer" *by* C. G. Mouikis et al.

C. G. Mouikis et al.

chris.mouikis@unh.edu

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A table (Table 1) that shows the cross species contamination from pre-flight calibration data is included. In addition, in Section 2 the following paragraph is included:

"In fact, the tails of the distribution of each species "spill" into the other species at a certain level. Table 1 shows the spillover fraction of the different species, for the two energies shown in Figure 2, from pre-flight calibration data obtained from the high sensitivity side of S/C4. In order to assess the significance of the contamination level between species, the spillover fraction and the relative species abundance has to be considered. For example, inside the magnetosphere the He++ is almost irretrievable because the spillover from H+ (∼1.1-5.1%) is large compared to the real He++ signal.

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In contrast, the H+ spillover into the O+ TOF window is much lower (∼0.1-0.3%) while the real O+ counts are much higher inside the magnetosphere, which results in a much lower contamination level."

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., 3, 567, 2013.

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