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PCG10-P14

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Final calibration results of MIA/MMO sensor characteristics

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The Mercury Ion Analyzer (MIA) on board Mercury Magnetospheric Orbiter (MMO) measures the velocity distribution of low-energy ions (5 eV to 30 keV) by using a top-hat electrostatic analyzer for half a spin period (2 s). By combining both the mechanical and electrical sensitivity controls, MIA has a wide dynamic range of count rates expected in the solar wind around 0.3 AU from the sun, and in the Mercury's magnetosphere. The entrance grid for the sensitivity control of ions is also expected to reduce significantly the contamination of solar UV radiation, whose intensity is about 10 times larger than that around Earth's orbit. In this presentation, we will summarize final results of the MIA sensor calibration experiment.

Keywords: MMO, sensor characteristics