

## A model calculation of MIA sensor characteristics on board MMO

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MIA is an electrostatic analyzer, on board MMO. The objectives are studies of plasma environment around Mercury. According to the result of ground test, it has performance almost as designed. This analyzer design is axial symmetric. However, the characteristics are depending on angle of ions' incidence. Assuming that the dependence is caused by slight unexpected shift of cylindrical 3 parts; inner and outer plates, top-hat plate. In this paper, first of all, we calculate two-dimensional and three-dimensional sensor models with axial symmetry, and compare the results with the data of ground test. Then we simulate three-dimensional model with asymmetry. The study will lead to designing electrostatic analyzers with high accuracy.

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