
Determination of the Plasma Density in the Solar Wind Using Wave Data and Spacecraft Potential

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Abstract

We perform automatic determination of plasma peak when MMS is located in the solar wind. We combine the plasma peak data with the spacecraft potential to produce a high-resolution accurate estimate of the plasma density. We compare the obtained plasma density to the FPI ion and electrons moments, and find that FPI typically underestimates the density in particular for electrons.

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