



Initial Look at the Electron Slot and Inner Zone Regions with RBSP/MagEIS

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The electron content of inner radiation zone and slot region are two seldom studied regions of the magnetosphere because of lack of good access and the serious background conditions there. The backgrounds created by the high energy protons that exist in the inner radiation zone and extend into the slot region make it difficult to obtain good measurements of the electron distributions there. The RBSP satellites traverse the slot and inner zone regions twice an orbit near the magnetic equator. The MagEIS sensors on RBSP were designed to meet this challenge and provide clean electron measurements over a wide range of energies (0.03 to ~ 4 MeV). We will provide a new view of the electron fluxes in these seldom studied regions.