

PEM024-08

Room: Function Room A

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Geospace Mission: ERG

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In order to investigate acceleration mechanisms of relativistic particles of the radiation belts and dynamics of geospace during space storms, the ERG (Energization and Radiation in Geospace) project has been proposed. The small satellite ERG will be launched around 2013-2014 in which many space storms tend to occur. The planned apogee altitude is about 4 Re, which is essential to measure the heart of the outer radiation belt, and the mission life will be longer than 1 year. The ERG satellite is currently designed to have a comprehensive set of plasma/particle sensor as well as field and wave instruments. These sensors can cover wide energy ranges of plasma/particles and frequency ranges of waves, which are important to understand the cross-energy coupling to generate relativistic electrons. The project consists of satellite observation team, ground-network observation team, and simulation/integrated studies team. There are also science coordination team and project science center in the ERG project. In this presentation, we will talk about the current status of the project and the science center activity.

Keywords: inner magnetosphere, radiation belt, future mission