

Pre-flight tests of Medium Energy Particle analysers (MEPs) for ERG

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ERG (Exploration of energization and Radiation in Geospace) is geospace exploration spacecraft, which is planned to be launched in FY2016. The mission goal is to understand the radiation belt dynamics especially during space storms. The key of this mission is the observations of electrons and ions in the medium-energy range (10-200 keV), since these particles excite various electromagnetic waves (e.g., EMIC waves, magnetosonic waves, and whistler waves), which are believed to play significant roles in the relativistic electron acceleration and loss. Proto-flight models (PFMs) of the medium-energy electron analyser and ion mass spectrometer have been fabricated and their environmental/performance tests are on-going. We report the latest results of these pre-flight tests.