

Data products of Medium Energy Particle analysers (MEPs) onboard ERG

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ERG (Exploration of energization and Radiation in Geospace) is the geospace exploration spacecraft, which is planned to be launched in FY2016. The mission goal is to unveil the physics behind the drastic radiation belt variability during space storms. One of key observations is the measurement of ions and electrons in the medium-energy range (10-200 keV), since these particles excite EMIC, magnetosonic, and whistler waves, which are theoretically suggested to play significant roles in the relativistic electron acceleration and loss. In previous space missions, however, the medium energy range has been the missing region due to the limitation of conventional particle instruments. We introduce these instruments in terms of specifications, observation modes, and data products.