

The ERG project: current progress and the mission strategy

MIYOSHI, Yoshizumi^{1*}; SHINOHARA, Iku²; TAKASHIMA, Takeshi²; ASAMURA, Kazushi²; HIRAHARA, Masafumi¹; MATSUMOTO, Haruhisa²; HIGASHIO, Nana²; KASAHARA, Satoshi²; MITANI, Takefumi²; YOKOTA, Shoichiro²; KAZAMA, Yoichi⁵; KASABA, Yasumasa³; MATSUOKA, Ayako³; KOJIMA, Hirotsugu⁴; KASAHARA, Yoshiya⁶; FUJIMOTO, Masaki²; SHIOKAWA, Kazuo¹; SEKI, Kanako¹; HORI, Tomoaki¹; MIYASHITA, Yukinaga¹; KEIKA, Kunihiko¹; SHOJI, Masafumi¹; OMURA, Yoshiharu⁴; EBIHARA, Yusuke⁴; NOSE, Masahito⁴; KATOH, Yuto²; ONO, Takayuki²

¹Solar-Terrestrial Environment Laboratory, Nagoya University, ²JAXA, ³Tohoku University, ⁴Kyoto University, ⁵National Cheng Kung University, Taiwan, ⁶Kanazawa University

The ERG (Exploration of energization and Radiation in Geospace) is Japanese geospace exploration project. The project focuses on relativistic electron acceleration mechanism of the outer belt in the context of the cross-energy coupling via wave-particle interactions. The ERG satellite will be launched in FY2016. In this presentation, we report the current progress of the ERG project including the development of the flight model of the satellite. Moreover, we present the strategy for the observations. Since the geospace phenomena strongly depend on the local time and L-shell, we have a plan for the campaign observations that focus on the specific phenomena. Possible coordinated observations with other geospace satellites and ground-based observations are also discussed.

Keywords: ERG project, international collaborations