ジオスペース探査ERGプロジェクト

小野 高幸 [1]; 三好 由純 [2]; 高島 健 [3]; 浅村 和史 [4]; 平原 聖文 [5]; 笠羽 康正 [6]; 松岡 彩子 [7]; 小嶋 浩嗣 [8]; 熊本 篤志 [9]; 塩川 和夫 [2]; 関 華奈子 [2]; 藤本 正樹 [3]; 長妻 努 [10]
[1] 東北大・理・地球物理; [2] 名大 STE 研; [3] 宇宙研; [4] 宇宙研; [5] 名大・STE 研; [6] 東北大・理; [7] JAXA 宇宙研; [8] 京大・生存圏; [9] 東北大・理・惑星プラズマ大気; [10] NICT

Geospace Exploration Project: ERG

Takayuki Ono[1]; Yoshizumi Miyoshi[2]; Takeshi Takashima[3]; Kazushi Asamura[4]; Masafumi Hirahara[5]; Yasumasa Kasaba[6]; Ayako Matsuoka[7]; Hirotsugu Kojima[8]; Atsushi Kumamoto[9]; Kazuo Shiokawa[2]; Kanako Seki[2]; Masaki Fujimoto[3]; Tsutomu Nagatsuma[10]
[1] Dept. Geophys., Grad. Sch. Sci., Tohoku Univ.; [2] STEL, Nagoya Univ.; [3] ISAS, JAXA; [4] ISAS/JAXA; [5] STEL, Nagoya Univ.; [6] Tohoku Univ.; [7] ISAS/JAXA; [8] RISH, Kyoto Univ.; [9] Planet. Plasma Atmos. Res. Cent., Tohoku Univ.; [10] NICT

The ERG (Energization and Radiation in Geospace) is a geospace exploration mission in Japan for the solar maximum and subsequent declining phase of solar cycle 24. The mission is especially focusing on the relativistic electron acceleration mechanism in the context of the cross-energy coupling via wave-particle interactions as well as the dynamics of space storms. The project consists of the satellite observation team, the ground-based observation team, and integrated-data analysis/simulation team, as well as the science working team and the project science team. The comprehensive instruments for plasma/particles, field and waves and wave-particle interaction analyzer are installed in the SPRING-B/ERG satellite to elucidate the electron acceleration/loss processes. The Japanese ground-network teams including magnetometer, SuperDARN radar, optical imager, VLF, etc. join the ERG project, which are very powerful tool for geospace remote sensing. The integrated data analysis and simulation team is now developing the simulation tools which can be compared directly with the observations. In this paper, we will present the current status of the ERG project.