

MGI015-04

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Construction of database of ground-based observations at ERG Science Center

Yukinaga Miyashita^{1*}, Yoshizumi Miyoshi¹, Kanako Seki¹, Tomoaki Hori¹, Tomonori Segawa¹, Kazuo Shiokawa¹, Nozomu Nishitani¹, Takeshi Sakanoi², Tsutomu Nagatsuma³, Manabu Kunitake³, Yoshimasa Tanaka⁴, Masahito Nose⁵, Hideaki Kawano⁶, Akira Sessai Yukimatu⁴, Keisuke Hosokawa⁷, Ken T. Murata³, Kiyohumi Yumoto⁸, Natsuo Sato⁴, ERG Science Center Task Team¹

¹STEL, Nagoya Univ., ²PPARC, Tohoku Univ., ³NICT, ⁴NIPR, ⁵Graduate School of Science, Kyoto Univ., ⁶Graduate School of Science, Kyushu Univ., ⁷The Univ. of Electro-Communications, ⁸SERC, Kyushu Univ.

The ERG (Energization and Radiation in Geospace) mission aims to elucidate the mechanisms of acceleration, transport, and loss of charged particles during space storms in geospace. For this purpose, a small satellite will comprehensively observe magnetic and electric fields, waves, and particles with a wide energy range of 1 eV to 10 MeV at the magnetic equator in the inner magnetosphere. It is also essential to integrate ground-based observations and numerical modeling with satellite observations. To start the integrated studies immediately after the launch of the satellite, the ERG Science Center has been organized at Solar-Terrestrial Environment Laboratory, Nagoya University and begun to construct database of ground-based observations from magnetometers, radars, and all-sky cameras. We unify the data format into a Common Data Format, including the meta data, and incorporate analysis tools into a widely used analysis tool called TDAS. We report the current status in the presentation.

Keywords: ERG, inner magnetosphere, ground-based observations, geomagnetic field, radar, database