Chiba University Microsatellite for Ionospheric Monitoring

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Chiba University develops two microsatellites called GAIA-I (50 kg class) and GAIA-II (100 kg class). GAIA-I payload is GNSS Radio Occultation (RO) sensor and Electron Density - Temperature Probe (EDTP) for Ionosphere monitoring, and GAIA-II payload is Circularly Polarized Synthetic Aperture Radar (CP-SAR, Patent Pending 2014-214905) for global land deformation monitoring. In the near future, we will employ these microsatellites to investigate relationship of total electron content (TEC), electron density and temperature, and global land deformation to observe precursor of earthquake. This paper focuses to discuss the development progress of GAIA-I microsatellite.

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