Japan Geoscience Union Meeting 2010
(May 23-28 2010 at Makuhari, Chiba, Japan)

PEM021-P19 Room: Convention Hall Time: May 24 17:15-18:45

Radiation Measurement by the Light Particle Telescope for the Jason-2 Satellite

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On June 20, 2008, the CNES satellite, Jason-2, was launched in the Vandenberg Air Force Base, California, USA. This satellite accommodates JAXA's radiation environment monitor, which is called the Light Particle Telescope (LPT). The altitude of Jason-2 orbit is 1,336km and its inclination is 66 degree. LPT consists of four sensors which can measure electrons with energy from 25keV to 20MeV, protons from 0.3MeV to 230MeV and 4He particles from 0.8MeV/n to 80 MeV/n totally. We expect that data measured by LPT will contribute to getting a new knowledge of the radiation belt and to making a new model of the radiation belt.
We have calculated calibration factors (energy dependent geometric factors) using a Monte-Carlo simulation and results of ground tests. In addition, we planned to make properties of obtaining data clear to get sanitized data for a space radiation modeling.
In this talk, we will make a presentation on the calibration method and properties (for example, contaminations) of data measured by this instrument and introduce some obtaining data.

Keywords: Jason-2, radiation measurement