

Development of Light Particle Telescope for the Jason-2 Satellite

Tatsuto Komiyama[1]; Haruhisa Matsumoto[2]; tateo goka[3]

[1] IAT, JAXA; [2] JAXA; [3] IAT JAXA

Some accidents involving satellites have happened with irreversible damage since years ago. Because the space radiation environment is a major source of these accidents, a space radiation environment monitoring system should be implemented on a satellite. In addition, an estimation of the space radiation environment has become increasingly important in the satellite design phase. Our group has accumulated data on the space radiation environment since 1987. On the basis of these data, a radiation model has been developed, which will be proposed as an ISO standard.

We have developed a space radiation measurement instrument for the Jason-2 satellite, which is being developed by the Centre National D'études Spatiales (CNES), the French space agency, and will go around an orbit of altitude 1300km and inclination 66 degrees. The measurement instrument called the Light Particle Telescope (LPT) has been already integrated into the satellite and tested as a part of the space craft. The Jason-2 satellite will be launched in June 2008 and data acquired by LPT will be expected to be used by scientists in many fields as well as for our purpose. This presentation will introduce our plan on LPT for Jason-2 and show some specifications of the instrument.