MDS-1 Data base and radiation belt model

H. Matsumoto (1), K. Koshiishi (1), T. Goka (1)

(1) Japan Aerospace Exploration Agency (matsumoto.haruhsia@jaxa.jp Fax: +81-29-868-5956 Phone: +81-29-868-4176)

The Mission Demonstration test Satellite-1 (MDS-1), TUBASA, was launched by the Japan Aerospace Exploration Agency (JAXA) in 2002 into geostationary transfer orbit. We ware developed the radiation belt model using observation data from February, 2002 to September, 2003. The data range L-value and B/B0 for the models are L=1.07-10.0 and B/B0<10.0, respectively. The energy ranges are following :0.3-2.0MeV for electrons, 0.9- 210MeV for protons, 6 – 140 MeV for Helium ions. This paper describes comparison with the radiation belt models (AE8, AP8) and pitch angle distributions of radiation belt particles.