

Forecasting relativistic electron variation for alert system of satellite operating

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We have experimentally constructed the software in the SEES (Space Environment and Effects System) of JAXA (Japan Aerospace Exploration Agency) that forecasts the variation of the intensity of MeV electrons in the outer radiation belt for coming two days by using real time solar wind data. In this talk we will present details of the system and also provide related information including the accuracy between the forecast result and the observation data of DRTS (Data Relay Test Satellite; geostationary orbit) and MDS-1(Mission Demonstration test Satellite-1; geostationary transfer orbit). This system is successfully working about two years and providing the useful data to satellite operator. We also report the possibility of increasing the accuracy of forecast to use another index like ULF power, Sigma Kp or Dst, and extending the forecast region from GEO (Geostationary Earth Orbit) to low L-value.