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Initial Observations of Space Environment Data Acquisition Monitor (SEDA) on Board Himawari-8

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New Japanese meteorological satellite, Himawari-8, was successfully launched on October 7, 2014. Space environment data acquisition monitor (SEDA) is on board Himawari-8, as one of the housekeeping information for satellite operation. SEDA consists two sensors. One is proton sensor, which has 8 separate diode detectors. The energy range of the proton detectors are from 21.6 MeV to 81.4 MeV.

The other is electron sensor, which measures internal charging currents caused by energetic electrons. There are eight sensor plates arranged in a stack and each plate responds to a different energy range. As a result, energetic electrons whose energy range between 0.2 to 4.5 MeV can be measured by the electron sensors. The time resolution of each sensors is 10 sec. The field of view of SEDA is eastward. Thus, the specification of SEDA is suitable for monitoring the energetic electrons and protons above Japanese meridian of Geostationary orbit.

Himawari-8/SEDA has been operating since November 3, 2014. Based on the agreement between Japanese Meteorological Agency (JMA) and NICT, JMA is providing Himawari/SEDA data in near-real time since January 21. 2015. Currently we are checking the quality of Himawari-8/SEDA data. Results of initial observation by Himawari-8/SEDA will be introduced in our presentation.

Keywords: Space Weather Forecast, Geospace, Radiation Belts, Proton Event, High Energy Particles, Geostationary Orbit