Energy spectra variations of high energy electrons in the inner magnetosphere observed by HEP/XEP on ARASE and SEDA-e on HIMAWARI

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The relativistic electrons in the outer radiation belt were disappeared/increased and their energy spectra were changed dynamically in some storms observed by XEP/HEP onboard the ARASE spacecraft. In the same time, SEDA-e with energy range 200keV-4.5MeV for electron on board the HIMAWARI-8, Japanese weather satellite on GEO, observed increase of relativistic electron in different local time.

When comparing the energy spectra, there are times when the spectrum matches or does not match. It is also observed that the change in the slope of the energy spectrum differs with time. These phenomena are observed even when there are two satellites at the same local time.

We will report on energy spectra variations of high energy electrons including calibrations of differential flux between XEP and HEP and discuss comparisons with energy spectra between ARAE and HIMAWARI that observed each storm in different local time.

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