Ionospheric Feedback effects for the current-voltage relationship

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Using the Akebono (EXOS-D) MGF and LEP data, we estimated the field-aligned current in three different methods, and investigated their special characteristics. The intensity of the field-aligned currents, in general, have been found to be larger at lower latitude. On the contrary, the parameters of particles at equator region had no special dependence. It is expected that the feedback interaction between the ionospheric dynamics and the field-aligned currents courses the latitudinal dependence of the field-aligned currents intensity.

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