Tracing of Magnetospheric Particles using the MSM and KRM Method

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The MSM uses an empirical electric field model sorted by Kp index. It is possible for the KRM algorithm, however, to provide temporal development of distribution of the electric potential using ground magnetic data, which is mapped along magnetic field lines into the equatorial plane of the magnetosphere.

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The results represented the temporal evolution of distribution of particle fluxes, which we could not derive in the case that the MSM used the empirical electric field model.