

Infuences on Polar Particle Precipitation

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Atmospheric ozone chemistry is influenced by solar energetic particles. Visible depletion of ozone has been shown to follow solar energetic particle (SEP) events. A basic assumption for chemistry models is that the flux signal over the polar caps corresponds to the interplanetary flux (possibly varying with the interplanetary magnetic field) and that particles precipitate homogeneously throughout the polar cap.

We test this assumptions and the influence of the interplanetary magnetic field, using particle data from the polar-orbiting POES satellites and interplanetary magnetic field data provided by ACE. Spacial as well as hemispheric differences will be examined and possible other influencing factors discussed.