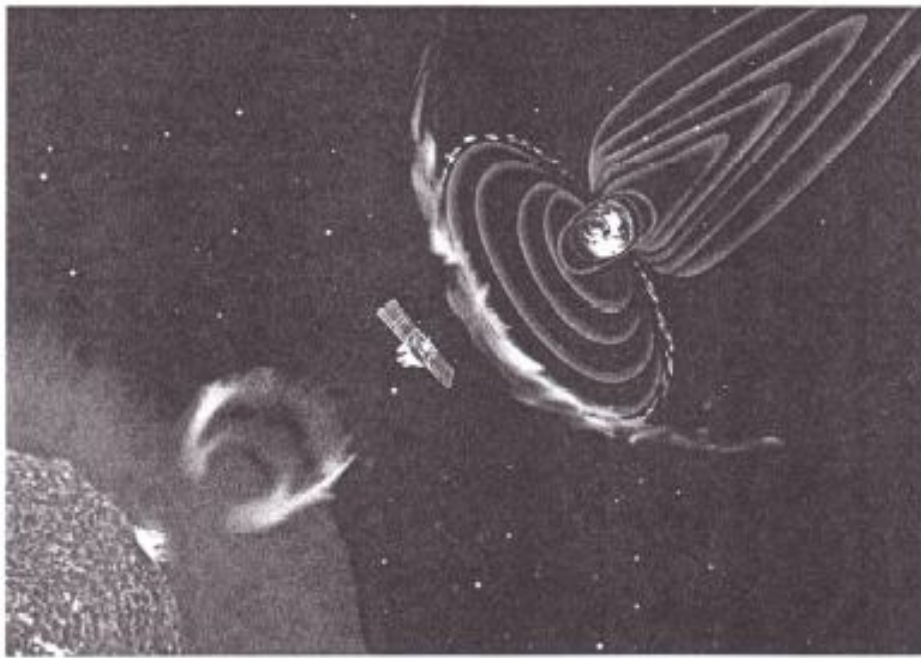


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# Effects of the April, 1994 Forbush events on the fluxes of the energetic charged particles measured on board of CORONAS-I: their connection with conditions in the interplanetary medium

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## Abstract

The *SONG* instrument on board of *CORONAS - I* satellite (fluxes of protons  $E_p > 70$  MeV and electrons  $E_e > 55$  MeV) observed the effects of the Forbush events caused by IMF sector boundary crossing and magnetic storms during the month of April 1994. We analyzed latitude dependence of these effects and compared it with data from ground-based neutron monitor at stations of different latitudes. It was found that the measurements of the *SONG* detector over the polar caps are in a good agreement with the data of the neutron monitor at polar latitudes. But at the middle latitudes during  $D_{st}$  decreases, the cut-off rigidity variations were so strong that instead of the usual Forbush decrease the *SONG* instrument detected a significant enhancement of particles fluxes. The influence of the conditions in the interplanetary medium on the cosmic ray flux have been analyzed and discussed.