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## An estimation of the diffusion coefficient of galactic cosmic rays in the heliosphere near the Earth.

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From the density gradient of galactic cosmic rays derived from the Swinson flow and the regression coefficients between the intensity variations of cosmic rays and the solar wind velocity, we have derived the diffusion coefficient and the scattering mean free path of galactic cosmic rays in the heliosphere near the Earth. In this analysis we have used the data obtained by the large area muon tracking detectors of GRAPES-3 and assumed the simplified diffusion-convection equation of cosmic rays in the heliosphere. We will explain the method we have adopted in the estimation of the diffusion coefficient and the scattering mean free path of galactic cosmic rays in this paper.

### Collaboration

– not specified –

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