

## Three dimensional cosmic ray modulation in heliosphere

E. A. Chebakova, E. V. Kolomeets, G. T. Nagiev, and A.ZH. Naurzbaeva

Nuclear Physics Department, Kazakh National State University

**Abstract.** A numerical solutions of three dimensional cosmic ray transport equation taking into account the sector structure of interplanetary magnetic field (IMF) are considered. Nonstationary and stationary diffusion-convection equation including particle drift effect are solved using the local-one-dimensional scheme (LODS). Structure consisting of two sectors and angles of inclines of neutral current sheet for differ-

ent solar cycle epoch are considered. We assumed that diffusion coefficients are proportional to level and asymmetry of solar activity and used real data. On the basis of solution the characteristics of 11 years, annual, 27 days and duirnal variations are obtained and compared with experimental results of coresponding variations.