DERORMATION OF THE HELIOSPHERIC CURRENT SHEET

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The analysis of neutron monitor data at McMurdo, Roma and Tokyo stations in the periods of negative (1982-1988) and positive (1992-1998) polarities of the general magnetic field of the Sun revealed the dependence of long-term cosmic ray modulation on the current sheet deformation as well as solar activity level. Thereby, at the positive polarity the solar activity level is of predominant influence, and at the negative polarity an angle of current sheet is dominant. It is found that the reason of this dependence is the magnetic drift of cosmic rays, the trajectory of which intersects the interaction region of fast and slow solar wind.