

Dynamical processes in the space and cosmic ray geophysical effects

S. Kavlakov

Bulgarian Academy of Science

Abstract. On the basis of long series of on ground and underground C.R. intensity measurements combined with data for the solar activity, interplanetary magnetic field and some geophysical phenomena, several interconnections between them were investigated.

Combination of Artificial Neural Network (ANN) and shifted correlation method was used.

Some peculiarities in the diurnal changes in multidirec-

tional telescopes C.R. data were treated with special attention to obtain a well-defined time shift between them and the beginning of some classes of magnetic storms.

These results could be used for predictions of specific geomagnetic events, accompanying the earth magnetic field disturbances.