

## **The monitoring of atmospheric pressure variations by neutron monitor data.**

V. L. Yanchukovsky (1), G. Y. Philimonov (1), R. Z. Khisamov (2).

Geophysical Survey Siberian Branch of RAS, Novosibirsk,

Siberian District Gosatomnadsor of Russia, Novosibirsk.

[cosmic@gs.nsc.ru](mailto:cosmic@gs.nsc.ru)

Atmospheric variations of neutron components registered by the network of neutron monitors, are reduced basically to barometric effect, caused by pressure change. Variations of an atmospheric origin are taken into account by means of introduction the corresponding amendments into pressure changes in initial observation data. When realizing multichannel registration of cosmic rays by neutron monitor an opportunity not only to exclude a procedure of introduction the amendments but also to find atmospheric pressure changes from the monitor data appears. As an example the Forbush-decrease in March, 1991 is considered. As a result of the analysis of the multichannel registration data the parameters of a primary variation spectrum, a change of geomagnetic cut-off rigidity and a change of atmospheric pressure are found.