

Abstract number: S2-209 2. CRs at Earth and planets (GEO)
--

Upgrading of Apatity Neutron Monitor

Balabin, Yury¹, Vashenyuk, Eduard¹, Gvozdevsky, Boris¹ and Germanenko, Alexey¹

¹Polar Geophysical Institute of RAS, Apatity, Russia

Apatity neutron monitor (NM) has been deeply upgraded recently. New amplifier-discriminators developed in Polar Geophysical Institute were set. Also detecting tubes of NM were tested and calibrated with help of a weight magnitude analyzer. Due to this operation electric noise and interfering pulses are reduced. NM was equipped with a rapid registration system like in Barentsburg and Baksan. The system records time of a coming pulse with 1 microsecond accuracy. Having a "temporal snap shot" of sequence of NM pulses, it is possible to detect, separate and investigate different fast phenomena or transform the data to various forms. For example, the "large dead time" mode was saved and now realized via soft processing against hardware earlier. It is possible to get "a posteriori" NM data with any time resolution too.