

Data acquisition system for Aragats Space Environmental Center Using Aragats Research Stations Facilities

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The Aragats Space Environmental Center start operation in December 1999. The point-to-point Ethernet connections of the on-line computers attached to installations located on altitude of 2000 and 3200 m. prove high level of reliability in spite of very severe climatic conditions. The continuously updated event display helps to detect in real time cosmic ray precursors to geomagnetic disturbances and compare data from satellite apparatus and surface installations.

Nor-Amberd and Aragats research stations located on Mt. Aragats, at altitudes of 2000 and 3200m a.s.l., are connected to the central server through radio-modems. Aragats LAN is connected to Yerevan via Aironet BR100 radio-modems (transfer rate at 1 Mbps). Nor-Amberd LAN is connected to Yerevan with Arlan 655 radio-modems (planned to be replaced with Aironet BR500 modems).

Aironet's BR100, BR500 series bridges uses Direct Sequence Spread Spectrum (DSSS) radio transmission type. These bridges supports several types of the radio modulation technique, which are different implementations of the phase shift keying (PSK). They have ability to support a reliable connection at 2 Mbps up to 40km.

Presentation: Poster - yes

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