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## The Aragats Data Acquisition System for Highly Distributed Particle Detecting Networks

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For the reliable and timely forecasts of dangerous conditions of Space Weather world-wide networks of particle detectors are located at different latitudes, longitudes and altitudes. To provide better integration of these networks the DAS (Data Acquisition System) is facing a challenge to establish reliable data exchange between multiple network nodes which are often located in hardly accessible locations and operated by the different research groups. In this article we want to present DAS for SEVAN (Space Environmental Viewing and Analysis Network) elaborated on the top of free open-source technologies.

Our solution is organized as a distributed network of the uniform components connected by standard interfaces. The main component is URCS (Unified Readout and Control Server) which controls frontend electronics, obtains data and makes preliminary analysis. The URCS operates fully autonomous. Essential characteristics of software components and electronics are remotely controllable via dynamic web interface, the data is stored locally for certain amount of time and distributed to other nodes over web service interface on a request. To simplify data exchange with collaborating groups we use extensible XML based format for the data dissemination. The DAS at ASEC (Aragats Space Environmental Center) in Armenia is in operation from November 2006. The reliability of the service was proved by continuous monitoring of incident cosmic ray flux with 7 particle monitors located at 2000 and 3200 meters above sea level on the distance of 40 and 60 km. from the data analysis servers in main lab.

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