

## **ALERT SERVICE FOR EXTREME RADIATION STORMS**

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Violent explosions on the Sun, so called Solar Energetic Phenomena, including Solar Flares and Coronal Mass Ejections dominate the space weather conditions and happen frequently during the years of solar activity maximum. Some of them can be powerful enough to disrupt space-borne electronics and harm space station crew.

The Aragats Solar Environment Center (ASEC) located on Mt. Aragats will provide real-time monitoring and forecasting of the extreme Geomagnetic and Radiation Events. Two neutron monitors, a muon telescope and a Solar scintillation telescope operating on Aragats research stations are continuously measuring very low fluxes of Solar and Galactic Cosmic Rays.

Currently, detectors are monitoring for possible abrupt variations of count rate. "Strong Radiation Hazard" alert is issued if all 3 of 3-monitoring detectors demonstrate more than  $3 \cdot \sigma$  excess compared to predetermined variation coefficient ( $\sigma$  - mean square deviation) of each detector. "Cosmic Ray Flux Variation Alert" is issued if all 3 of 3 detector demonstrate more than 5% variation (positive or negative) in registered cosmic ray flux according to running mean averaged over last 24 hours.

In the future we plan to add additional registration channels from new installations of Cosmic Ray Division, and from space or ground based sensors available on-line in the Internet.