

1. **Chilingarian**, K. Avakyan, A. Raymers, S. Tserunyan, M. Zazyan.

Alikhanyan Physics Institute, Yerevan, Armenia, Alikhanyan Brothers 2, Yerevan 375036, Armenia

(chili@crdlx5.yerphi.am/FAX: 374010-344377)

A network of middle to low latitude particle detectors called SEVAN (Space Environmental Viewing and Analysis Network) is planned in the framework of the International Heliophysical Year (IHY), to improve fundamental research of the solar accelerators and space weather conditions. The network will detect changing fluxes of the most of species secondary cosmic rays at different altitudes, latitudes and altitudes those constituting powerful integrated device in exploring solar modulation effects.

Surface detectors measure time series of secondary particles born in cascades originated in the atmosphere by primary ions. Studies of these particles shed light on the high-energy particle acceleration mechanisms by flares and Coronal Mass Ejection driven shocks.

Time series of intensities of high energy particles can also provide highly cost-effective information on the key characteristics of the interplanetary disturbances.

Recent results on of the detection of the extreme solar events (2003, 2005) by the monitors of the Aragats Space-Environmental Center (ASEC) will illustrate wide possibilities opening with introduction of new particle detectors measuring neutron, electron and muon fluxes with inherent correlations.