Nor Amberd Declaration

Discussed and accepted by participants of the International Symposium "Solar Extreme Events 2005," Nor Amberd, Armenia, September 26-30, 2005

Today, when humanity evidenced so many natural disasters, including the recent Asian tsunami and the New Orleans tragedy, international community should recognize that it is crucial to establish an effective global warnings system to deliver advance warnings against impending catastrophic events. Available technologies should be put to better use to save lives, health and property.

People and governments around the world have not only right to get up-to-date information about the state of the environment, earth and the sun, but, taking into account new emerging possibilities of Information Communication Technologies (ICT), should be entitled to receive timely fast warnings about impending natural disasters to be ready to encounter them.

Today, advances of science allow effective gathering of large amounts of critical data. Examples of scientific projects amassing large amounts of data on the state and current conditions of Earth and Sun are abound. Scientific networks monitor environment for natural and man-made hazards, such as the atomic bomb testing monitoring, or solar activity monitoring. These existing networks already have enormous possibilities to warn against such hazards as impending earthquakes or solar storms. Humanity has developed also infrastructure for quick and efficient information delivery.

What is missing is the global system that will timely deliver to end users information obtained by scientists, informing people and governments about hazards, and allowing them take steps to avoid or minimize their risks. The humanity needs to make this step urgently.

Taking into account the severity of solar conditions toward the end of the current solar cycle, moreover, realizing that severe outbreaks of solar activity might happen any time, regardless of the solar cycle phase, signatories of this declaration urge world governments to take immediate steps to create the global network of solar detectors registering the solar activity and providing with the real-time monitoring of our star.

Fundamental physics of our Sun is largely unknown, and scientists in various countries collaborate to study these fundamental processes. Prototype detectors for regional networks to register and study solar activity are being developed. The coming International Heliophysics Year 2007, and multiple networks of solar detectors, built by scientists in many countries, provide the best opportunity to develop a forecasting service. The service will use available methodologies and regional networks of solar detectors to register changes in solar activity. The goal of such forecasting service will be to monitor solar activity in order to be able well in advance produce warnings to crew of cosmic stations and people on Earth.

Signatories of this declaration will not spare any effort to use available channels of communication in order to maximize the effectiveness of the system, and increase coverage of the warnings. People of the Earth should not only have opportunity to access the information from the system, but they need to be able to do that effectively, using all available means that ICT put at our disposal: from web-interface and

RSS feeds[*] from the real-time warnings system, to possibility of being updated on the dynamics of solar activity and dangerous developments through cellular phones (SMS broadcast).

Creation of such a system should be considered as a first step toward development of a global comprehensive system of instant warnings about natural disasters. The system should be open for organizations and individuals alike.

Signatories agree to take all necessary steps to train users of the system in order to use it effectively, and be able to quickly react with all possible means to the advanced warnings.

[*]RSS stands for "RDF Site Summary, Rich Site Summary, or Really Simple Syndication" see <http://en.wikipedia.org/wiki/RSS_%28file_format%29>.