



Solar eruptions as triggers of earthquakes

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Investigations regarding the link of earthquakes to solar activity carried out during the last decade in different countries are based on the analysis of statistical data $SE(t)$ and $W(t)$. As established, the overall seismicity of the Earth and its separate regions depends of an 11-year long cycle of solar activity. There are no experimental data confirming cause-and-reason bonds between solar eruptions and earthquakes. As a matter of fact the data provided in the paper and based on experimental studies serve the first step on the way of experimental data on revealing cause-and-reason solar-terrestrials bonds in a series "solar eruption-lithosphere radon-earthquakes". They need further collection of experimental data. For the first time, through radon constituent of terrestrial radiation objectification has been made of elementary lattice of the Hartmann's network contoured out by biolocation method. Hartmann's lattice networks are attributed to the category of global energetically active ones which structuralization occurs at the level of force-fields - energetic, electromagnetic, radiation, and so on. Universally they are expressed at a landscape level and indoors. Hartmann's network is characterized by highest density on the earth's surface. The elementary cell of Hartmann's network sized $2 \times 2,5$ is oriented NS-WE. Like elementary cells of minerals crystal lattice, Hartmann's network is characterized by polarity of nodes. As calculations show, throughout the area of 1 km^2 200 000 elementary cells of Hartmann's network are singled out, thus making about 30×10^{12} cells all over continental surface only. As found out the ratio of the concentrations of radon in polarized node of Hartman's network - $CRn(+)/CRn(-)$ determine the dynamics of solar-earth relationships. Before solar eruption, during various geomagnetic situations, $CRn(+)/CRn(-) > 1$. After solar eruption, over a period of several days (from one to seven), the change of polar nodes is occurred and $CRn(+)/CRn(-) < 1$. However after some period it recovered to $CRn(+)/CRn(-) > 1$ again. Such kind of ratio changes attests short-run disequilibrium of cosmo-earth relationships in ionosphere, atmosphere and lithosphere. This

disequilibrium, along with long-run attack of upper part of lithosphere by corpuscular flow of energy from solar eruption, provokes natural disasters, which begin in a month after solar eruptions. Of the three types of rapidly running processes conditioned by solar-terrestrial bonds earthquakes are attributed to rapidly running destructive processes that occur in the most intense way at the juncture of tectonic massifs, along transformed and deep faults. The basic factors provoking the earthquakes are both magnetic-structural effects and a long-term (over 5 months) bombing of the surface of lithosphere by highly energetic particles of corpuscular solar flows, this being approved by photography. As a result of solar eruptions that occurred from 29 October to 4 November 2003, a sharply contrasting increase in soil radon was established which is an earthquake indicator on the territory of Yerevan City. A month and a half later, earthquakes occurred in San-Francisco, Iran, Turkey, on the territory of Armenia. These results were received during 2004 and 2005 years monitoring too. The results obtained allow considering solar eruptions as shooting mechanism for activation of terrestrial tectonic processes. They provoke global tension of the Earth's crust with centers of destructive processes that are the consequences of global occurrence of solar-terrestrial bonds. Findings allow considering the global energetic Hartman's network as a matrix of energy communicational system of the Earth.