Geophysical Research Abstracts Vol. 15, EGU2013-5420-2, 2013 EGU General Assembly 2013 © Author(s) 2013. CC Attribution 3.0 License.



Cosmophysical factors and their impacts on terrestrial life

Maria Ragulskaya, Vladimir Obridko, Olga Khabarova, and Evgeny Rudenchik

Direct and non-direct influence of the early and modern Sun on the origin and development of life on the Earth is discussed. We consider solar-terrestrial relations and their impacts on biodiversity and biological processes at different time scales. Impacts of cosmic rays, ultraviolet and geomagnetic field on early life have their signs in modern biospheric processes due to atavistic reactions of bioobjects. These reactions may be experimentally studied and give important information about both modern and historical solar-biospheric relations. IZMIRAN's experimental bio-medical data as well as paleo-databases are used for the analysis.

The research is supported by the RAS in the frame of Program 28 "Origin of live and the biosphere development".