

The solar-geophysical events and changes of the meteorological parameters

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The results of different solar and climatological researches, show connection between solar geomagnetic activity changes (SGMA) and meteorological parameters (MP) changes. Changes of SGMA and MP could be seasonal, yearly or long periodic, cyclic changes. Long periodic changes live about 11 years, as Sun's cycles.

In today researching, Earth atmosphere is observed as complex and dynamic system. Processes in different levels of atmosphere are in interaction.

Observations are making on different detection methods from the Earth and from the Cosmos. Sun's activity appreciably affect on nature of upper atmosphere. Changes of Sun's ultraviolet (UV) radiation intensity, changes of Sun's wind speed, induce atmosphere parameters changes. Satellite researches show that during registration of intensive magnetic storm class, on sensors are registered changes of density and temperature of upper atmosphere levels.

In this work will be shown and analyzed geophysical processes which determinate the SGMA disturbances. Those are occurrences of intensive solar flares (Sun's hromospheric eruptions), solar and magnetic storms. In period 1986-2004, during 22nd and 23th Sun's cycle, class of intensive magnetic storms is registered (about ten storms). For months and days when intensive solar storms and intensive magnetic storms are registered, structure of meteorological parameters changes will be analyzed. Assignment of hours values of temperature air and Sun's interval number, before, during and after the SGMA disturbance will be observed.

The results of analyzes of the SGMA indices changes and meteorological parameters, will be applied in researching process of meteotropical weather situation arising. The way how the SGMA indices changes are induced in the structure of the meteotropical weather situation. The meteotropical situation has the influences on dynamic and structure of changes in the biosphere. Objects in biosphere (live/unlive matter, flora, fauna, people,...), "feel/detect" meteotropical changes. In environmental, biomagnetic, magnetobiological, biochemical and biophysical mechanism is produced.

It is validity that human organism as organisms of other live beings (plants, animals), register all anomalies of electromagnetic fields and least meteorological changes.

In this work we will try to show on results that we received in Serbia and Slovenia.