



Dynamics of microwave Emission Oscillations and Development of solar explosive Phenomenon

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A study of the conditions for appearance and development of the processes, which lead to great solar explosive phenomena require a special attention. Basic tools, with the aid of which it is possible the solution of the problems of flare energy release regions and coronal mass ejections (CMEs) formation should be the research of the spectral composition of emission, the study of the wave and fluctuating motions and the dynamics of magnetic field.

This work is devoted for studying the behavior of oscillations of solar radio emission during the period of extreme solar activity (January 2005). The analysis is based upon monitoring observations made with Radio telescopes in the out-of-town observatory NIRFI "Zimenki" in cm-dm frequency range: 9114, 2950, and 900 MHz.

As a results we have to mention the dynamics of long-period (more than 20 minutes) pulsations of solar radio emission in 1-3 days prior to powerful solar flares, spectral compositions and the dynamics of CMEs precursors in 2-hour interval just before the CMEs' registration, the increase of the amplitude of periodic components of microwave emission in the range of 14-22 seconds directly before the powerful flares.