

**MONITORING OF SPACE WEATHER EFFECTS WITH  
THE USE OF MOSCOW UNIVERSITY SOZVEZDIE-270  
NANO-SATELLITE CONSTELLATION**

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Space project Sozvezdie-270 of the Moscow University is realized now. It means the deployment of a cubesat nano-satellites constellation. To the present 18 satellites were launched, 9 of them continue to function in orbit, two satellites will be launched in the nearest future. Instruments were elaborated specifically for use on spacecraft of the cubesat format, providing measurements of fluxes and spectra of charged particles, primarily electrons of relativistic and subrelativistic energies, as well as gamma quanta. Along with the space constellation, a network of ground receiving stations is also being created. A multi-satellite constellation provides a number of advantages when studying dynamic processes in radiation fields in near-Earth space. In particular, it makes possible to carry out simultaneous measurements of particle and quantum fluxes using the same type of instruments at different points in near-Earth space. Such measurements provide unique information about the sub-relativistic electron flux dynamics, including variations due to precipitation, which is of great importance for understanding the mechanisms of trapped and quasi-trapped electron acceleration and losses. Various recent space weather effects associated with increased solar flare activity are discussed. Among such effects are the filling of the polar caps with particles of solar cosmic rays, dynamic processes in the outer radiation belt during magnetic storms, rapid variations in electron fluxes due to precipitation.