



## **Solar wind parameters in 24-th solar cycle**

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Our catalog of large-scale solar wind phenomena during 1976-2016 (see website <ftp://ftp.iki.rssi.ru/pub/omni/> and description of catalog in paper [Yermolaev et al., 2009]), prepared on the basis of OMNI/OMNI2 dataset, identifies reliably 3 types of quasi-stationary streams of the solar wind (SW) (heliospheric current sheet (HCS), high speed streams from the coronal holes (HSS), and slow streams from the coronal streamers), and 5 disturbed types (compression regions before fast streams HSS (CIR), and interplanetary manifestations of coronal mass ejections (ICME) that can include magnetic clouds (MC) and Ejecta with the compression region Sheath (SHEMC and SHEEj) preceding them) as well as the interplanetary shock (IS). We calculate year- and cycle-averaged plasma and field parameters in different SW types. Our analysis shows that number of disturbed SW phenomena in 24-th cycle is low than in previous cycles and most average parameters in them are likely to be also less. So, their geoeffectiveness and efficiency are also less than during 21-23 cycles. The work is supported by the Russian Science Foundation, grant No 16-12-10062.

Reference:

Yermolaev, Yu. I., N. S. Nikolaeva, I. G. Lodkina, and M. Yu. Yermolaev (2009), Catalog of Large-Scale Solar Wind Phenomena during 1976-2000, *Cosmic Research*, Vol. 47, No. 2, pp. 81-94.