

# **OSCILLATIONS OF SOLAR AND LUNAR ORIGIN IN SPACED MEASUREMENTS OF THE SOLAR WIND PARAMETERS AT NEAR EARTH ORBIT**

TAMARA KUZNETSOVA

Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation of Russian Academy of Sciences (IZMIRAN), Russia, email: [tvkuz@izmiran.ru](mailto:tvkuz@izmiran.ru)

Analysis of the spectra of the Interplanetary Magnetic Field (IMF) and the solar wind velocity (V) calculated on the basis of measurements near the Earth's orbit for the period 1964-present, and of the sunspot number (W) showed presence of the power spectral components not only solar but lunar origin. The IMF and W spectra both show the solar cycle at period  $T=10.8$  yr and its higher harmonics. We detected for the first time periods of the Moon's orbital motion (and its higher harmonics) in power components of the IMF and V spectra (statistical confidence level for the amplitudes is higher than 99.8%): period  $T=8.77$  yr from the IMF spectrum can be interpreted as rotation period of the Moon's perigee,  $T=9.3$  yr – as period of the second harmonics of the oscillations connected with rotation of the Moon's orbit with  $T=18.61$  yr. It is shown that the most power long-term component from the V spectrum with  $T=54$  yr is solar-lunar cycle includes whole number of the Moon's draconitic years, tropical solar years and also whole number of 10.8-yr solar cycles. We discuss the other spectral components from the spectra of possible lunar origin. Based on our analysis we come to conclusion that not only the Sun but and the Moon influence on the temporal changes of the solar wind V and the IMF near the Earth.

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Tamara Kuznetsova, IZMIRAN, Russia, 142190, Moscow region, Troitsk; tel. +74953340921; fax: +74953340124, email: [tvkuz@izmiran.ru](mailto:tvkuz@izmiran.ru)