



LEND Experiment Onboard LRO: Estimation of neutron flux in the lunar exosphere according to the data of omnidirectional detectors

Igor Nuzhdin (1), Igor Mitrofanov (1), Bill Boynton (2), Gordon Chin (3), Larry Evans (3), Fedor Fedosov (1), Dmitry Golovin (1), James Garvin (3), Karl Harshman (2), Aleksander Kozyrev (1), Maxim Litvak (1), Timothy McClanahan (3), Aleksey Malakhov (1), Gennadiy Milikh (4), Maxim Mokrousov (1), Sergey Nikiforov (1), Anton Sanin (1), Richard Starr (3), Roald Sagdeev (1), and Vlad Tretyakov (1)

(1) Institute for Space Research of the Russian Academy of Science, 117997 Moscow, Russia., (2) University of Arizona, Tucson, AZ, USA, (3) NASA Goddard Space Flight Center, Greenbelt, MD, USA, (4) Department of Physics, University of Maryland, College Park, MD, USA

LEND experiment is a neutron telescope, which consists the set of 9 detectors: four collimated proportional He3 counters, one collimated scintillation detector based on stylbene crystal and four omni-directional He3 detectors. The LEND measurements onboard LRO allow us to estimate the neutron flux in exosphere of the Moon. The absolute value of neutron flux on Lunar exosphere will be presented for the epoch of LRO flight, which is based on LEND experimental data, on the mathematical model of LRO satellite and also on the ground calibrations.