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COMET 67P/CHURYUMOV-GERASIMENKO – A MAIN TARGET OF ROSETTA SPACE MISSION: DISCOVERY AND GROUNBASED EXPLORATION IN 1969-2016

Abstract

Comet 67P was discovered by the Kyiv astronomers Klim Churyumov and Svitlana Gerasimenko on 22 October 1969 on the five photographic plates exposed with the help of 50-cm Maksutov's reflector of the Alma-Ata Astrophysical Institute on 9, 11 and 21 Sept. 1969. First 5 exact positions of comet were sent to Dr Brian Marsden. Dr B.Marsden showed it was new shortperiodic comet. Rosetta, a European space vehicle was head to the icy nucleus of the short period comet 67P/Churyumov-Gerasimenko on 2 March, 2004 from cosmodrome Kouru. On 12 Nov. 2014 the Philae probe of Rosetta landed successfully the nucleus of comet 67P and in the first in human civilization became to study in situ the relict matter of the Solar system. Scientific results of observations and exploration of comet 67P, obtained by the Kyiv astronomers in 1969-2016 are discussed and compared with the results obtained by Rosetta and Philae in 2014-2016.