Geophysical Research Abstracts
Vol. 17, EGU2015-12760, 2015
EGU General Assembly 2015

Rosetta/OSIRIS - Nucleus morphology and activity of comet 67P/Churyumov-Gerasimenko

Holger Sierks (1), Cesare Barbieri (2), Philippe Lamy (3), Hans Rickman (4), Rafael Rodrigo (5), Detlef Koschny (6), and the OSIRIS Team

(1) Max Planck Institute for Solar System Research, Planetary Science, Göttingen, Germany (sierks@mps.mpg.de), (2) Centro di Ateneo di Studi e Attività Spazialei "Giuseppe Colombo" (CISAS), University of Padua, via Venezia 15, 35131 Padua, Italy, (3) Laboratoire d'Astrophysique de Marseille, France, (4) Department of Physics and Astronomy of Uppsala University, Sweden, (5) Instituto de Astrofisica de Andalucia, Granada, Spain, (6) Scientific Support Office of the European Space Agency, Noordwijk, The Netherlands

ESA's Rosetta mission arrived on August 6, 2014, at target comet 67P/Churyumov-Gerasimenko after 10 years of cruise. OSIRIS (Optical, Spectroscopic, and Infrared Remote Imaging System) is the scientific imaging system onboard Rosetta. It comprises a Narrow Angle Camera (NAC) for nucleus surface and dust studies and a Wide Angle Camera (WAC) for the wide field coma investigations.

OSIRIS imaged the nucleus and coma of the comet from the arrival throughout the mapping phase, PHI-LAE landing, early escort phase and close fly-by.

The overview paper will discuss the surface morpholo-gy and activity of the nucleus as seen in gas, dust, and local jets as well as small scale structures in the local topography.