



The internal density distribution of comet 67P/C-G based on 3D models

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The OSIRIS camera aboard the Rosetta spacecraft observed the nucleus of comet 67P/C-G from the mapping phase in summer 2014 until now. The images have allowed the reconstruction in three-dimension of nucleus surface with stereophotogrammetry (Preusker et al., *Astron. Astrophys.*) and stereophotoclinometry (Jorda et al., submitted to *Icarus*) techniques. We use the reconstructed models to constrain the internal density distribution based on: (i) the measurement of the offset between the center of mass and center of figure of the object, and (ii) the assumption that flat areas observed at the surface of the comet correspond to iso-gravity surfaces. The results of our analysis will be presented, and the consequences for the internal structure and formation of the nucleus of comet 67P/C-G will be discussed.