Dust Particle Tracking at Comet 67P/Churyumov–Gerasimenko

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We present the newest iteration of our particle tracking algorithm and highlight findings based on its application to different data sets. The intended use of the algorithm is to analyze image sequences taken by the Optical, Spectroscopic, and Infrared Remote Imaging System (OSIRIS) of the Rosetta spacecraft during the outbound periheion phase of comet 67P/Churyumov-Gerasimenko. During this active phase, a lot of material was being ejected, in part as relatively large, boulder-sized objects (dm to m). With our work, we hope to better understand the processes that are responsible for the ejection and those that might affect the flight path of the particles once they are lifted.