



## **Investigating the surface brightness profiles, ejected mass and speed from the outburst events of comet 67P/Churyumov-Gerasimenko**

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The OSIRIS (Optical, Spectroscopic, and Infrared Remote Imaging System) WAC and NAC camera onboard the ESA Rosetta spacecraft orbiting 67P/Churyumov-Gerasimenko has captured a lot of outbursts since July, 2015. Most of their source regions were located at southern hemisphere of comet C-G. Including the March- and perihelion-outbursts, the detected events show a variety of morphological features (i.e. broad fan, collimated jet and so on). In this work, we investigate these events and characterize the physical properties, including the surface brightness profiles, ejected mass and speed if there were two or more images acquired by the same filter during the outburst timeframe.