

Multi-instrument observations of outbursts on comet 67P

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During its 2.5 year mission near comet 67P/Churyumov-Gerasimenko, Rosetta witnessed many outbursts on various scales. Outbursts are sudden and short manifestations of dust and/or gas activity that do not repeat during every comet rotation. A variety of processes have been proposed to cause cometary outbursts, and it is possible that different types of outbursts exist that are caused by different processes. Particularly valuable data were obtained when Rosetta serendipitously crossed the cloud of ejected material and several instruments collected data on both the outburst site at the surface and on the material arriving at the spacecraft. This talk will summarise the findings of multi-instrument observations of the outbursts on 19 February 2016 and 3 July 2016, and present preliminary results on the event of 5 September 2016.

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