



Monitoring Comet 67P/C-G Micrometer Dust Flux: GIADA onboard Rosetta.

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The MicroBalance System (MBS) is one of the three measurement subsystems of GIADA, the Grain Impact Analyzer and Dust Accumulator on board the Rosetta/ESA spacecraft (S/C). It consists of five Quartz Crystal Microbalances (QCMs) in roughly orthogonal directions providing the cumulative dust flux of grains smaller than 10 microns.

The MBS is continuously monitoring comet 67P/CG since the beginning of May 2014. During the first 4 months of measurements, before the insertion of the S/C in the bound orbit phase, there were no evidences of dust accumulation on the QCMs. Starting from the beginning of October, three out of five QCMs measured an increase of the deposited dust. The measured fluxes show, as expected, a strong anisotropy. In particular, the dust flux appears to be much higher from the Sun direction with respect to the comet direction.

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