



First Pressure Measurements on-board the ESA Rosetta Spacecraft

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The ESA spacecraft Rosetta was launched in March 2004 to encounter the comet Churyumov-Gerasimenko in 2014. On-board this spacecraft is the ROSINA instrument package consisting of three sensors, two mass spectrometers and the cometary pressure sensor COPS. COPS measures the total neutral particle density in the immediate vicinity of the spacecraft. Since the launch several pressure measurements of the spacecraft environment have been made including the recording of a few thruster firing events. An overall neutral particle density decrease around the spacecraft could be measured by COPS. Initial pressure conditions were around 2×10^{-9} mbar and close to 6×10^{-11} mbar after a flight time of 1.5 years. During the thruster firings a pressure increase by several orders of magnitude up to 10^{-5} mbar was recorded.