



## **The DSLP Langmuir Probe experiment on-board Proba2: first observations and preliminary scientific results**

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The experiment Dual Segmented Langmuir Probe (DSLP) is one of the four scientific instruments on board the mini-satellite Proba-2 of the European Space Agency. The Proba 2 satellite was successfully launched on 2nd November 2009. First three months of the mission has been dedicated to overall commissioning phase of the Proba 2 payload including all scientific instruments. The main operational phase focused on nominal scientific data acquisition has started in February 2010. As a part of the Plasma Measurement Equipment, the DSLP instrument aims at mapping and studying characteristic macroscopic properties (e.g. density, temperature or flow dynamics) of ionospheric plasmas and their temporal and spatial variations. Furthermore, with use of Sun observations provided by SWAP and LYRA instruments, the DSLP experiment intends to identify observed ionospheric irregularities with possible solar-terrestrial connections related to sudden space weather events. Here we present first data samples acquired during the main operational phase and their preliminary scientific analysis.