



ATMOSUV-CanSat (Atmospheric Thunderstorms's Monitor Optical Signal & UV)

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The ATMOSUV-CanSat is a small instrument aimed to study the Optical and UV signal in a TGF (Terrestrial Gamma-ray Flash) process, as a complementary ground monitor facility in the study of thunderstorms at high altitude in the atmosphere. The main goal is to take complementary data to that of the MXGS/ASIM (Modular X-ray and Gamma-ray Sensor in the Atmosphere-Space Interactions Monitor) mission, taken from the ISS (International Space Station). The detector is planned to be launched in a balloon during severe thunderstorms and take measurements of air conditions and to perform fast imaging with high temporal accuracy. We expect to measure UV emission, optical signal, temperature, pressure, and accurate 3D location, with FPGA controlled high velocity imaging devices and sensors.