

HIGH ENERGY ELECTRON AND GAMMA-RAY DETECTION WITH ATIC

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The ATIC balloon borne ionization calorimeter is well suited to record and identify high energy cosmic ray electrons, and at very high energies gamma-ray photons as well. We have simulated the performance of the instrument, and compare the simulations with actual high energy electron exposures at the CERN accelerator. Simulations and measurements do not compare exactly, in detail, but overall the simulations have predicted actual measured behavior quite well. ATIC has had its first 16 day balloon flight at the turn of the year over Antarctica, and first results obtained using the analysis methods derived from simulations and calibrations will be reported.