

PRELIMINARY RESULTS FROM THE FIRST FLIGHT OF ATIC

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The Advanced Thin Ionization Calorimeter (ATIC) instrument is designed to measure the composition and energy spectra of $Z = 1$ to 28 cosmic rays over the energy range ~ 10 GeV - 100 TeV. The instrument was calibrated in September 1999 at CERN using accelerated electron, proton and pion beams. ATIC was launched as a long duration balloon test flight on 12/28/00 local time from McMurdo, Antarctica. After flying successfully for about 16 days the payload was recovered in excellent condition. Absolute calibration of the detector response was made using cosmic-ray muons. The data analysis algorithm which was developed with Monte Carlo simulations and validated with the CERN beam test will be used for the flight data analysis. Preliminary results of the proton and helium spectra will be reported in this paper.