ATIC FLIGHT DATA PROCESSING

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The first flight of the Advanced Thin Ionization Calorimeter (ATIC) experiment from McMurdo, Antarctica lasted for 16 days, starting in December, 2000. The ATIC instrument consists of a fully active 320-crystal, 960-channel Bismuth Germanate (BGO) calorimeter, 202 scintillator strips in 3 hodoscopes interleaved with a graphite target, and a 4480-pixel silicon matrix charge detector. We have developed an Object Oriented data processing package based on ROOT. In this paper, we will describe the data processing scheme used in handling the accumulated 45 GB of flight data. We will discuss trigger issues, comparing the measured energy-dependent trigger efficiency with simulations, and calibration issues, particularly the time-dependence of housekeeping information.