SPLASH AND REENTRANT ALBEDO OBSERVATIONS OF ELECTRONS AND POSITRONS AT A 4.5 GV VERTICAL MAGNETIC CUTOFF

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The HEAT-pbar balloon magnet spectrometer was used to measure the rigidity spectra of splash and reentrant albedo particles. Although the primary objective of the HEAT-pbar instrument is the measurement of antiproton abundances at high energy, a large sample of events below local geomagnetic cutoff was also collected. The top-bottom symmetry of the detector configuration and the excellent particle identification required for antiproton measurements allowed for clean measurements of the electron and positron albedos. These measurements are important in understanding the detailed properties and model dependencies of extensive air showers at small atmospheric depths.