

Abstract Submitted
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Time variations of cosmic-ray helium isotopes NICOLAS PICOT-CLEMENTE, Institute for Physical Science and Technology, University of Maryland, College Park MD 20742, BESS COLLABORATION — The Balloon-born Experiment with Superconducting magnet Spectrometer (BESS) is a Japan-U.S. program that carried out 11 successful flights from 1993 to 2007. The BESS instrument includes various particle detectors, such as plastic scintillator hodoscopes and a central jet-type drift chamber surrounded by a superconducting solenoid magnet. Measurements provided by these detectors allow precise identification of cosmic-ray helium isotopes. The long-duration flight of the BESS-Polar I instrument, about 8.5 days over Antarctica in 2004, allows measurements of time variations of isotope fluxes for the first time. The time variation of the helium isotope flux is presented for rigidities from 1.2 GV to 2.5 GV, and the results are compared with previously reported proton data and neutron monitor data.

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