



Contribution ID : 604

Type : **Poster**

Effect of albedo particles on charge measurements

Wednesday, 4 July 2007 14:45 (0:00)

Abstract content

The balloon-borne Cosmic Ray Energetics And Mass (CREAM) investigation is designed to make direct measurements of high energy cosmic-ray particles at the top of the atmosphere. The Silicon Charge Detector (SCD) provides charge measurements of all primary particles from protons to iron nuclei. As the SCD is mounted above the calorimeter, albedo particles backscattered from the calorimeter are one of the major background sources for charge measurements. The SCD with double layers of the silicon sensors in the calorimeter module was tested with high-energy electron and hadron beams at CERN in October 2006. The efficiency of the charge reconstruction is studied using the beam test data and GEANT based Monte Carlo simulation data. Effects of albedo particles on charge measurements will be discussed in this paper.

If this papers is presented for a collaboration, please specify the collaboration

Summary

Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 2 (OG part 1), pages 381-384

Primary author(s) : PARK, N.H. (Dept. of Physics, Ewha Womans University)

Co-author(s) : AHN, H.S. (Inst. for Phys. Sci. and Tech., University of Maryland); GANEL, O. (Inst. for Phys. Sci. and Tech., University of Maryland); HAN, J.H. (Inst. for Phys. Sci. and Tech., University of Maryland); JEON, J.A. (Dept. of Physics, Ewha Womans University); KIM, C.H. (Inst. for Phys. Sci. and Tech., University of Maryland); KIM, K.C. (Inst. for Phys. Sci. and Tech., University of Maryland); LEE, M.H. (Inst. for Phys. Sci. and Tech., University of Maryland); LUTZ, L. (Inst. for Phys. Sci. and Tech., University of Maryland); MALININ, A. (Inst. for Phys. Sci. and Tech., University of Maryland); NAM, S. (Dept. of Physics, Ewha Womans University); PARK, I.H. (Dept. of Physics, Ewha Womans University); PARK, J.H. (Dept. of Physics, Ewha Womans University); SEO, E.S. (Inst. for Phys. Sci. and Tech., University of Maryland; Dept. of Physics, University of Maryland); WALPOLE, P. (Inst. for Phys. Sci. and Tech., University of Maryland); WU, J. (Inst. for Phys. Sci. and Tech., University of Maryland); YANG, J. (Dept. of Physics, Ewha Womans University); YOO, J.H. (Inst.

for Phys. Sci. and Tech., University of Maryland); YOON, Y.S. (Dept. of Physics, University of Maryland); ZINN, S.Y. (Inst. for Phys. Sci. and Tech., University of Maryland)

Presenter(s) : YANG, J. (Dept. of Physics, Ewha Womans University)

Session Classification : Posters 1 + Coffee

Track Classification : OG.1.5