

Abstract Submitted  
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**From CREAM to ISS-CREAM: A Next Step in the Direct Measurement of Cosmic Rays**<sup>1</sup> DAVID ANGELASZEK, Univ of Maryland-College Park, ISS-CREAM COLLABORATION — The balloon-borne Cosmic Ray Energetics and Mass (CREAM) Experiment has carried out six successful flights around the continent of Antarctica for a total exposure of over 160 days. The CREAM Data Acquisition (CDAQ) software system, utilized on all six balloon missions, is a crucial component of the CREAM instrument that facilitates data-taking, monitoring, commanding and calibration of the entire apparatus. Currently, a CREAM payload is being developed for integration on the International Space Station (ISS) in the spring of 2015. The shift from a balloon-borne experiment to a space mission required numerous hardware modifications and introduces a new command and data handling environment. New operational considerations are also needed to accommodate a multi-year mission. These hardware, environmental and operational modifications must be accommodated in CDAQ. The nature of these modifications and how they are reflected in the CDAQ software are discussed here.

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