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Proton and Helium Spectra from the Third CREAM Flight YOUNG SOO YOON, University of Maryland, CREAM COLLABORATION — The balloon-borne Cosmic Ray Energetics And Mass (CREAM) experiment measures the composition and energy spectra of high energy cosmic rays. CREAM utilizes a tungsten/scintillator calorimeter to determine energy and identifies particle charge with a silicon pixel detector. To date the CREAM payload has already flown six times over Antarctica. During the 2007-2008 Antarctic season, it flew for 29 days on its third flight, which accumulated more data at lower energies than the two previous flights. This was due to its improved electronics readout range and reduced pedestal noise level. Also, the third flight has about twice as many events in the energy range above ~ 10 TeV as the first flight. The increased data reduced the statistical uncertainties of measured elemental energy spectra. The proton and helium fluxes from the CREAM-III flight will be presented.

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