## Scott Nutter **ISS-CREAM:** Preliminary results Poster 696 **ICRC2021** protons All particles He • Flux vs particle total kinetic energy for selected charges using s GeV)<sup>-</sup> 10 conservative x6 scaling of CAL Reference fluxes 10 All particles energies. Protons Flux (m<sup>2</sup> sr 10 Helium • BSD calibration suggested factor of Carbon 10 6-8 solves many problems Oxygen 10 More agreement between MC and on-orbit Iron 10-10 • ISS-CREAM flux from CAL data 10-1 All particles 10-11 10-Reasonable fluxes/number of particle Protons detections log10(Energy) (GeV) log1 (L vergy) (GeV) log10(Energy) (GeV) Helium • Instrument threshold raised Carbon Fe Agreement between fluxes calculated with Oxvaen Iron BSD and with CAL ISS-CREAM flux from BSD • Future work: All particles $GeV)^{-1}$ Protons Refine BSD calibration of CAL • 10 Carbon 10 energy scale. $\mathbf{v}$ Oxygen $\mathbf{Sr}$ 10 Refine proton selection cuts (tricky!). 10 ٠ Flux (m<sup>2</sup> $10^{-10}$ Refine efficiency using on-orbit data ٠ 10-10 10-11 compared to simulated data.

10-11

10

• Estimate systematic errors.

 Iog10(Energy) (GeV)
 Iog10(Energy) (GeV)
 Iog10(Energy) (GeV)

 Flux vs total particle kinetic energy. Errors shown are statistical. Filled circles (squares) are reconstructed from the x6 scaled CAL (BSD) energy deposit. Open circles are the flux using the original CAL energy scaling as described in the proceedings. Dashed lines are reference fluxes from

10-13

Wiebel-Sooth, Biermann, and Meyer, Astron & Astrophys, v.330, p.389-398 (1998).