CRIS MEASUREMENTS OF ELECTRON-CAPTURE DECAY ISOTOPES: ³⁷Ar, ⁴⁴Ti, ⁴⁹V, ⁵¹Cr, ⁵⁵Fe, and ⁵⁷Co

S.M. Niebur (1), W.R. Binns (1), E.R. Christian (2), A.C. Cummings (3), G.A. de Nolfo (2), J.S. George (3), P.L. Hink (4), <u>M.H. Israel</u> (4), R.A. Leske (3), R.A. Mewaldt (3), E.C. Stone (3), T.T. von Rosenvinge (2), M.E. Wiedenbeck (4), N.E. Yanasak (3) smahan@hbar.wustl.edu

(1) Washington University

(2) NASA/Goddard Space Flight Center

(3) California Institute of Technology

(4) Jet Propulsion Laboratory

The secondary electron-capture decay isotopic abundances of ³⁷Ar, ⁴⁴Ti, ⁴⁹V, ⁵¹Cr, ⁵⁵Fe, ⁵⁷Co and their decay products ³⁷Cl, ⁴⁴Ca, ⁴⁹Ti, ⁵¹V, ⁵⁵Mn, and ⁵⁷Fe have been measured by the Cosmic Ray Isotope Spectrometer (CRIS) with sufficient statistics to examine energy dependence of their abundances relative to nearby stable isotopes. We compare these abundances with galactic propagation model calculations and find that they are in qualitative agreement with electron-capture decay during propagation. These results can be used to set limits on the amount of reacceleration that may have occurred as the cosmic rays encountered supernova shocks or turbulent magnetic fields.