

## COSMIC RAY ELEMENTAL SOURCE COMPOSITION: OBSERVATIONS WITH THE *ULYSSES* HIGH ENERGY TELESCOPE

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We present new and revised measurements of cosmic ray source abundances from boron to nickel. The High Energy Telescope (HET) on the *Ulysses* spacecraft provides high resolution measurements of cosmic rays, separating elements from hydrogen to nickel for energies ranging from 40 to 400 MeV/u. We determine cosmic ray source abundances by comparing *Ulysses* observations in the heliosphere, corrected for solar modulation, with the results of propagation calculations. We use a weighted slab approximation to the "leaky box" model for the interstellar propagation calculations. The path length distribution is constrained by secondary to primary elemental ratios, including these HET observations. An accurate determination of cosmic ray elemental source composition is essential in understanding the origins of cosmic rays.