



The heliosphere at low energies as seen by IBEX

André Galli (1), Peter Wurz (1), Stephen A. Fuselier (2,3), David J. McComas (2,3), Maciej Bzowski (4), Justyna M. Sokół (4), Marzena A. Kubiak (4), and Eberhard Möbius (5)

(1) Physics Institute, University of Bern, Bern, 3012, Switzerland (andre.galli@space.unibe.ch), (2) Southwest Research Institute, San Antonio, TX 78228, USA, (3) University of Texas, San Antonio, TX 78249, USA, (4) Space Research Centre, Polish Academy of Sciences, Warsaw, 00-716, Poland, (5) University of New Hampshire, Durham, NH 03824, USA

The first five years of observations with the Interstellar Boundary Explorer (IBEX) have radically changed our concept of the interaction between the solar wind and the local interstellar plasma environment. Before IBEX, heliospheric Energetic Neutral Atoms (ENAs) were expected to be distributed symmetrically around the inflow direction (259 degrees ecliptic longitude, 5 degrees ecliptic latitude) of the local interstellar matter into the heliosphere. IBEX revealed that the strongest ENA intensities at solar wind energies (typically 1 keV) occur in a meandering ribbon, whereas the region of lowest ENA intensities seems to be offset from the downwind direction by up to 40 degrees. The present study summarizes how this picture changes as we go to much lower ENA energies. We present maps, energy spectra, and annual changes of the heliospheric ENA signal for the lowest energies observable with IBEX-Lo (1.8 keV down to 0.02 keV).