Heliospheric ENAs from inner and outer heliosheath: discussion of the kinetic-gasdynamic model results

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Fluxes and full sky maps of energetic neutral atoms (ENAs) obtained in the frame of the global kinetic-gasdynamic models of the inner and outer heliosheath will be presented and compared with the full-sky ENA maps and spectra measured on board of Interstellar Boundary Explorer (IBEX). The differences and similarities between models and data will be discussed. Theoretical maps will be presented for various models of the solar wind interaction with the local interstellar medium and for the various scenarios of the pickup proton evolution in the inner and outer heliosheaths. The contribution of ENAs originated in the outer heliosheath beyond the heliopause (Izmodenov et al., 2009) will be examined. The role of the interstellar magnetic field will be explored. Finally, we will discuss theoretical validity of the “new concept” of the solar/interstellar wind interaction.