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Energetic neutral atom fluxes from the heliosheath varying with the activity phase of the solar cycle

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Energetic neutral atoms (ENA s) are produced in the heliospheric interface, which can be used to remotely investigate this highly interesting, but poorly known region, where the interaction between the interstellar medium and the solar wind in the Outer Heliosphere takes place. Not only, ENAs produced in the heliosheath by the charge exchange processes between shocked solar wind protons and interstellar hydrogen are observed with a spacecraft at Earth, for example the upcoming IBEX mission. An additional contribution comes from the decharging of pickup ions and from the supersonic solar wind protons inside the termination shock. Here we will discuss on the basis of of the five-fluid Bonn model the time-dependent ENA fluxes that are connected with these three sources and compare them. We will show that the ENA fluxes from the heliosheath dominate at low energies in nearly all directions over the background contribution, while for higher energies the changes to disentangle the background contributions are in the up- and downwind direction at specific periods of the solar activity cycle.