Non-stationary plasma flow in the heliosheath

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The propagation and evolution of the solar wind fluctuations in the inner heliosheath is studied in the frame of the two-dimensional non-stationary kinetic-gasdynamic model of the interaction of solar wind with the local interstellar medium (Izmodenov et al., 2005, 2008). The calculations are performed with both idealistic model boundary conditions as well as with the realistic solar wind parameters measured at 1 AU.

The time-fluctuations of the termination shock and the heliopause induced by the solar wind fluctuations are presented.

The solar wind parameters along the trajectory of Voyager 2 are shown and compared with experimental data obtained on the board of Voyager.