Solar Cycle Variations of the Heliosphere

H.-R. Mueller (1,2)

(1) Dartmouth College, New Hampshire, USA (hans.mueller@dartmouth.edu), (2) IGPP-UCR, California, USA

Three-dimensional, self-consistent multi-fluid simulations of the interaction of the solar wind with the partially ionized local interstellar medium are presented. While magnetic fields are neglected, the emphasis lies on a detailed numerical capture of the solar wind variation through the 11 year solar activity cycle. The resulting transient features and asymmetries, also in the neutral hydrogen distributions, are discussed.