



Comparison of observations and a model of magnetic clouds

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Magnetic clouds are large interplanetary flux ropes propagating in the solar wind. Usually they are modeled as cylindrical flux ropes. The model determines their size, magnetic field strength, and axis orientation. Above mentioned parameters are commonly extracted from model fits of magnetic field measurements. However, a time-dependent model also yields velocity distributions inside model magnetic clouds. Comparison of profiles of velocity components between observations is a more strict test of the model used. The paper will present such comparisons.