



The mixed third-order structure functions in the solar wind: convergence and scaling

L. Sorriso-Valvo (1), R. Marino (2,3), V. Carbone (2), R. Bruno (4), and A. Noullez (3)

(1) LICRYL - INFM/CNR, Rende (CS), Italy (sorriso@fis.unical.it), (2) Dipartimento di Fisica, Universita della Calabria, Rende (CS), Italy, (3) Observatoire de la Cote d'Azur, Nice, France, (4) Istituto di Fisica edlo Spazio Interplanetario - INAF, Roma, Italy

Recent experimental results have shown that solar wind displays a clear scaling of the mixed third-order structure function, in the framework of magnetohydrodynamic turbulent cascade. Here we review the results from Ulysses data of ecliptic and polar solar wind, focusing on the accuracy of the moments estimate. We discuss the dataset size necessary for the convergence of the moments as a compromise among nonstationarity, local conditions and statistical requirements.