



On the interconnection of the magnetic turbulence in the solar wind and the Earth's plasma sheet

I. Dorotovič (1,2,3), Z. Vörös (4,5)

(1) Observatório Astronómico, GAUC, Coimbra, Portugal, (2) UNINOVA, Caparica, Portugal, id@uninova.pt, (3) Slovak Central Observatory, Hurbanovo, Slovak Republic, dorotovic@suh.sk, (4) Space Research Institute AAS, Austria, zoltan.voeroes@oeaw.ac.at, (5) Geophysical Institute SAS, Hurbanovo, Slovak Republic

It has already been demonstrated by Dorotovič and Vörös (2004), that the non-Gaussian characteristics of magnetic turbulence in the solar wind and the occurrence of intermittent magnetic turbulence in the Earth's plasma sheet can be interconnected. In this respect a comparative analysis of the solar wind magnetic and plasma parameters with the time evolution of the geomagnetic indices is insufficient.

In this paper we present a wider statistical study which includes the consideration of intermittency parameters during several coupling events during the period of 1996-97 (solar minimum), and 2000-2001 (solar maximum), respectively.