



Statistical study of the Earth's distant magnetotail: Wind observations

K. Grygorov, L. Prech, J. Safrankova, and Z. Nemecek

Charles University, Faculty of Mathematics and Physics, Department of Surface and Plasma Science, Praha, Czech Republic
(grigorov88@gmail.com)

We present a statistical study of the distant Earth's magnetotail observations between November 2003 and January 2004. During this time, the Wind spacecraft voyaged behind -200 RE to the L2 point and recorded magnetotail dynamics as a response of solar wind activities. The main goal of this study is to compare the magnetotail dynamics with the solar wind monitor data near the L1 point (ACE spacecraft), identifying some distant magnetotail regions (magnetosheath, tail lobes, plasmashet, etc) and evaluating a probability of their observations along the Wind spacecraft orbit. We also correlate the plasma parameters in these regions with the parameters of the solar wind in front of the Earth.