

INTERPLANETARY SHOCK PROPAGATION THROUGH DIFFERENT ENVIRONMENTS: MULTI-POINT MEASUREMENTS

A. Lynnyk, Z. Nemecek, J. Safrankova, K. Jelinek, L. Prech

*Charles University, Faculty of Mathematics and Physics,
V Holesovickach 2, 180 00 Praha 8, Czech Republic*

Several studies have been devoted to the interaction of interplanetary (IP) shocks with both characteristic Earth's magnetospheric boundaries: the bow shock and magnetopause. Non-stationarity of this interaction requires multi-spacecraft observations with good space and temporal coverages. In this contribution, we analyze two IP shocks generated by Corotating Interaction Region with the normal highly inclined from the solar wind velocity. These events were observed on both dawn and dusk magnetospheric flanks. For the analysis, we use a large set of the spacecraft orbiting in the solar wind (SOHO, Wind, ACE, GEOTAIL) and near the bow shock, in the magnetosheath, and in the magnetosphere at the magnetopause vicinity (Cluster II and Themis). We discuss in detail the IP shock interaction, changes of its orientation and speed as well as the interaction differences between both flank and the properties of a new discontinuity generated by the IP shock - bow shock interaction.