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# The magnetopause motion during magnetic storms

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On the basis of the magnetopause crossings detected by INTERBALL-1 satellite during 1995 – 1997 we investigate the amplitude of the magnetopause motion as function of phases of the magnetic storms and intensity of ring current and auroral electrojet. The phases of magnetic storms were determined by the data of Dst index. The amplitude of the magnetopause motion was estimated by an empirical magnetopause model (Shue et al, 1997). During initial phase of the magnetic storm the magnetospheric boundary was moved slightly inward with amplitude 0.6Re. During the main phase of the magnetic storm the magnetopause was shifted outward, and the amplitude of motion was twice lower than during recovery phase of the magnetic storm (-0.3 and -0.7Re, respectively). In quiet time the magnetospheric boundary was near the model prediction. The work was supported, in part, by the RFBR, project no 07-02-00042.