

**Solar wind magnetic holes can cross the bow shock and enter the magnetosheath**

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Description of Table T1.

**Additional Supporting Information (Files uploaded separately)**

Table of full list of magnetic hole events used in the main paper, in Excel format (Table T1.xls).

**Introduction**

The table gives information of all magnetic hole events used for the statistical results shown in Figure 6 in the main paper, where calculation of all properities are described.

The table contains the following columns:

Year:	Manually determined time for the solar wind magnetic hole
Month:	- “ -
Day:	- “ -
Hour:	- “ -
Minute:	- “ -
S/C_SW:	Cluster spacecraft used for the solar wind observations
S/C_MSh:	Cluster spacecraft used for the magnetosheath observations
Rotation_SW:	Rotation across the solar wind magnetic holes (degrees)
Rotation_MSh:	Rotation across the magnetosheath magnetic holes (degrees)
dB/B0_SW:	Minimum relative magnetic field decrease of solar wind magnetic holes
dB/B0_MSh:	Minimum relative magnetic field decrease of magnetosheath

	magnetic holes
dt_SW:	Temporal scale size of solar wind magnetic holes (s)
dt_MSh:	Temporal scale size of magnetosheath magnetic holes (s)
smooth_SW:	Smoothing window size for solar wind magnetic holes (s)
smooth_MSh:	Smoothing window size for magnetosheath magnetic holes (s)
x_SW:	X component of solar wind magnetic hole position in GSE coordinates ( $R_E$ )
y_SW:	Y component of solar wind magnetic hole position in GSE coordinates ( $R_E$ )
z_SW:	Z component of solar wind magnetic hole position in GSE coordinates ( $R_E$ )
x_MSh:	X component of magnetosheath magnetic hole position in GSE coordinates ( $R_E$ )
y_MSh:	Y component of magnetosheath magnetic hole position in GSE coordinates ( $R_E$ )
z_MSh:	Z component of magnetosheath magnetic hole position in GSE coordinates ( $R_E$ )