

# **RELATIONSHIP BETWEEN BZ MAGNETIC FIELD COMPONENTS IN THE SOLAR WIND AND MAGNETOSHEATH: STATISTICAL STUDY**

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In this short statistical study, we discuss a probability of observations of the same  $B_z$  sign in the solar wind and magnetosheath. The analysis is based on three data sets from three spacecraft operated in different phases of the solar cycle. As results, we can conclude that the probability of such observation is very low for the IMF  $B_z$  close to zero being a rising function of the IMF  $B_z$  value but the probability close to unity is reached only for very high values of the IMF  $B_z$  magnitude. The probability slightly changes through the solar cycle.

IMF orientation, solar cycle

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