

# Structures of the interaction region between Mars and the solar wind observed by ASPERA-3

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Since the Mars has very weak intrinsic magnetic field, the Martian ionosphere directly interacts with the solar wind. In addition to the bow shock (BS) in front of the Mars, there is a boundary called induced magnetosphere boundary (IMB) defined by the separation of the existence of solar wind ions. We statistically analyzed BSs and IMBs using the Ion Mass Analyzer aboard Mars Express to investigate the three dimensional boundary structures.