

**A STATISTICAL STUDY OF GIANT MAGNETIC  
VORTICES OBSERVED IN THE VENUSIAN  
MAGNETOSHEATH.**

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Due to its lack of an intrinsic magnetic field, the fast flowing solar wind plasma interacts directly with the Venusian ionosphere. The velocity shear that occurs at the boundary may excite Kelvin-Helmholtz instability. The large vortex-like structures generated may eventually detach themselves from the ionopause forming either bubbles or filamentary structures and provide a mechanism for atmospheric escape processes. This paper provides a statistical study of a number of giant magnetic vortex like structures that have been observed in the Venusian magnetosheath by Venus Express.