

Solar wind interaction with Venus: Venus Express magnetic field experiment initial results

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The launch of Venus Express provides a new opportunity to study the solar wind interaction with Venus. Although a wealth of knowledge about the interaction of Venus and the solar wind has been obtained from earlier missions, notably the long lasting PVO mission, Venus Express will greatly improve our view of the Venus plasma environment due to many unique characteristics of the mission such as the improved capability of the onboard instrumentation, the unique orbital trajectory and the solar minimum observations at a low altitude compared with PVO. In many aspects of the solar wind interaction with Venus, Venus Express will provide us the measurement information for the first time. It is the purpose of this paper to illustrate some of the new science to be obtained by the Venus Express.