



## **The magnetosphere of Venus under unusual Solar Wind conditions**

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Due to its lack of an intrinsic magnetic field, the structure of the induced magnetosphere and associated plasma processes in and near Venus can be strongly influenced by the prevailing solar wind conditions. Examples include the shock structure/location, the occurrence of reconnection in the solar wind and tail and the occurrence of the Kelvin-Helmholtz instability at the ionopause. However, the interaction of the solar wind with Venus is a complex processes and with observations being limited to single spacecraft missions with restricted orbit, it can be difficult to link observations with particular solar wind conditions. To better understand this relationship, Venus Express magnetic field and plasma data is used to identify and analyse changes to the structure of the magnetosphere and local plasma processes that are related to unusual solar wind conditions. By examining Venus under unusual solar wind conditions the resulting changes, if out of the ordinary, can be more directly linked to particular solar wind conditions.