



## **Electron "holes" and crustal magnetic fields at Mars.**

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During the unique conjunctions of the terrestrial planets which occurred along the solar wind Parker spiral in early 2012, involving initially Mercury, Earth and Mars, and later Venus and Mars in perfect alignments, the Mars Express plasma instruments, ASPERA, MARSIS and MaRS, operated in a campaign mode to ensure the optimum coverage of the Martian plasma system. Subsequently an analysis of the ASPERA data has shown several interesting aspects during this campaign. The topic of this presentation will be the reduction in electron count rates in close association with the crustal magnetic fields in the terminator region. This signature is repeatable throughout the campaign and occurs over a number of different crustal magnetic field anomalies. We present the observations and discuss the causes of the electron drop outs.