



## **Mars Express observations of ions associated with magnetic anomalies**

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Using Mars Express ASPERA Ion Mass Analyzer data we investigate the observed ion signatures associated with Mars magnetic anomalies. Previous studies indicate a rather clear signature for electrons observed by the ASPERA ELS electron spectrometer, with intensified fluxes on the dayside and depleted regions on the nightside. We compare the ion data with these previous electron results and attempt to identify any mass-dependence of the magnetic-anomaly associated dynamics of the ions. The data is also compared with initial results from 3D multi-fluid simulations.