



Filamentary Structure of Neutral Atom Flows at Mars - Aspera Observations

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The NPD sensor on the Mars Express Aspera experiment measures energetic neutral atoms (ENAs) with energies between 0.1 and 10 keV. It has an angular resolution of 5×30 deg and can separate hydrogen and oxygen ENAs. When passing the Martian magnetosheath and upstream of Mars the sensor observed recurrent flux intensifications which can be interpreted as a filamentary structure of the ENA flow with a typical filament angular size of 5deg. At the times of measurement the sensor was pointing towards Mars. We discuss instrumental influences on the measurements and compare the observations with similar structures observed in cometary outflow and give some possible interpretations.