

Abstract

Plasma boundaries at Mars and Venus

C. Martinecz, M. Fraenz, E. Dubinin, E. Roussos, J. Woch and the ASPERA Team

The Aspera-3 experiment on Mars Express and the Aspera-4 experiment on Venus Express have the capability to determine ion boundaries for electrons, protons and heavy ions. We investigate whether the different ion species have different boundary locations at Mars and whether these locations are different from the magnetic pile-up boundary. Then we discuss what is known about the boundary build-up at Venus and what we can expect from the respective measurements of the Aspera-4 experiment.