Geophysical Research Abstracts,
Vol. 10, EGU2008-A-10632, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-10632
EGU General Assembly 2008

Plasma waves near the ionopause of Venus

H. Y. Wei (1), **C. T. Russell** (1), T. L. Zhang (2), R. J. Strangeway (1), J. G. Luhmann (3), M. Delva (2)

(1) Institute of Geophysics and Planetary Physics, University of California, Los Angeles, CA 90095-1567, USA, (2) Space Research Institute, Austrian Academy of Sciences, OEAW, 8042 Graz, Austria, (3) Space Sciences Laboratory, University of California, Berkeley, CA 94720, USA. (email: hwei@igpp.ucla.edu; ph: 1-310-206-1208; fax: 310-206-8042)

Due to lack of intrinsic magnetic field at Venus, the Venus ionosphere acts as the obstacle to the solar wind flow. Induced currents flowing on the ionopause shield the upstream magnetic field from the ionosphere. The Venus Express magnetometer occasionally observes plasma waves near the ionopause and clearly associated with it. We examine one pass on September 11th 2006 when ionopause waves peaked in frequency about 0.6 Hz and propagated obliquely to the magnetic field with a propagation angle over 55 degrees on both the inbound and outbound passes. They were circular polarized and right-handed. They probably are providing current sheet dissipation. This paper discusses these waves' properties and their possible effects at the ionopause.