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Kelvin-Helmholtz instability on the dusk magnetopause: Cluster CIS observations.

M. B. Bavassano Cattaneo (1), M. F. Marcucci (1), H. Reme (2), L. M. Kistler(3), B. Klecker (4), C. W. Carlson (5), A. Korth (6), M. McCarthy (7), R. Lundin (8), and A. Balogh(9)

(1) Istituto di Fisica dello Spazio Interplanetario, INAF, Italy, (2) CESR, Toulouse, France, (3) University of New Hampshire, USA, (4) MPE, Garching, Germany, (5) University of California, Berkeley, USA, (6) MPS, Lindau, Germany, (7) University of Washington, USA, (8) Swedish Institute of Space Physics, Kiruna, Sweden, (9) Imperial College, London, UK

During a long lasting interval of northward interplanetary magnetic field and of high solar wind speed, on the dusk low latitude flank of the magnetosphere, the Cluster spacecraft have multiple encounters with the magnetopause in which all plasma parameters display quasi-periodic oscillations on both sides of the magnetopause. The fluid and kinetic aspects of the observations are analysed using plasma data from the CIS experiment: vortices are observed both in the magnetosheath and in the magnetosphere, suggesting to interpret the observations in terms of Kelvin-Helmholtz instability.