Geophysical Research Abstracts, Vol. 7, 09318, 2005 SRef-ID: 1607-7962/gra/EGU05-A-09318 © European Geosciences Union 2005



## First synoptic observations from the Cluster and Double Star PEACE instruments

A.N. Fazakerley (1) and the PEACE team and Cluster Colleagues

(1) Mullard Space Science Laboratory, Dorking, Surrey, RH5 6NT, U.K. (anf@mssl.ucl.ac.uk)

The four Cluster PEACE dual-sensor electron spectrometers have been collecting scientific data since 2001 and were joined in 2004 by single-sensor sister instruments carried aboard the two Double Star spacecraft, TC-1 and TC-2.

The TC-1 orbit is near-equatorial,  $13.4 \times 1.1$  Earth radii and gives good coverage of the magnetosphere, and in spring, of the magnetopause, magnetosheath and sometimes the bowshock. Later, in the summer, TC-1 visited the magnetotail including the current disruption region. TC-2 (launched in late July) is in a polar orbit,  $7.1 \times 1.1$  Earth radii, initially with a high latitude apogee and regularly crossed the near-Earth magnetotail in the early months of operations. The apogees of all six spacecraft have been arranged to lie at about the same magnetic local time, with a view to collecting data simultaneously from key interacting regions.

We introduce the Double Star PEACE instruments and present early results from the six PEACE instruments, supported by data from other instruments, illustrating the Cluster and Double Star synergy.