Abstract. We investigated the properties of the interface between streamers and coronal holes at low heliocentric distances, observing the extended solar corona in the North-West quadrant by UVCS/SOHO. We measured the line profiles of the HI Ly α and OVI resonance doublet and the visible linearly polarized radiance at heliocentric distances ranging from 1.4 to 2.5 R \odot , and colatitudes spanning from the North pole to the West equator with steps of ~10°. The results show that both the line intensities and the line widths, in particular those of OVI, exhibit sharp variations across the streamer boundaries, with a clear anticorrelation between intensities and widths. We also notice a positive correlation for Ly α in the region close to the equator. The steep changes in OVI line profiles occur in a narrow transition region (5°–10°), right at the borders of the streamers, from 1.5 R \odot onwards. The OVI resonance doublet line ratio steeply increases outside of the streamer as well, but this occurs at higher heliocentric distances (above 2 R \odot). Hence the marked broadening of the OVI lines and the considerable rise of their intensity ratio are an evident signature of the transition from closed to open field lines in streamer magnetic field topologies. This behaviour also implies that a strong and preferential non-thermal heating of OVI ions in the direction coinciding with the line of sight and the turn-on of a significant outflow occur in the open magnetic field region near or just outside of the streamer edges.

Key words. Sun: corona - Sun: solar wind - Sun: UV radiation