

## **Symmetric and asymmetric line profiles in solar active regions**

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**Abstract.** Advancing our understanding of coronal heating is one of the primary Hinode science objectives. Perhaps the most important open question in coronal heating is the time scale for energy release. Some recent work with EIS has provided evidence for strong enhancements in the blue wing of many coronal lines, suggesting that the heating is impulsive and may be related to chromospheric dynamics. Other work has found that in the core of an active region, coronal line intensities, widths, and Doppler shifts are remarkably constant over long periods of time, suggesting steady heating. In this presentation we provide an overview of EIS line profiles observed in solar active regions. Our initial survey of several active regions indicates that strong blue wing enhancements are generally found at the periphery of active regions. These outflows appear to occur on open field lines that connect to the heliosphere and contribute to the solar wind. In contrast, coronal line profiles observed in the moss appear to be symmetric and show no blue-shifted component. More work will be required to reconcile these observations.