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Temperature distribution of a non-flaring active region from simultaneous XRT and EIS data

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Abstract. We investigate thermal properties of coronal plasma in non-flaring active regions using simultaneous Hinode XRT and EIS observations which provide complementary diagnostics for the X-ray emitting plasma. The multi-filter XRT dataset together with EIS spectra, including its entire wavelength range, allow to accurately determine the thermal structure of the active region plasma, and to explore the presence of hot plasma in non-flaring regions. Independent temperature analysis from the two datasets provide a cross-check of the different temperature diagnostics techniques applicable to spectral and broad-band data respectively, and insights into cross-calibration of the two instruments.