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The density and temperature structure of active regions from Hinode/EIS

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Abstract. Several active regions studies have been carried out by the group at Cambridge University with Hinode/EIS. Using diagnostic spectral lines over a range of temperature $\text{Log}T = 5.8 - 7.0$ it has been possible to derive the physical properties (electron density, temperature and flows) for active region features: the hot core, warm (1MK) loops, moss areas and micro-flares. Supplementary observations are presented from Hinode/XRT. These new measurements enable some constraints to be placed on active region heating mechanisms.