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## **A cool active region structure observed with EIS**

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**Abstract.** A bright point located at the footpoints of active region loops and observed by EIS on 2007 February 21 exhibited an unusual spectrum with emission lines from the upper transition region,  $10^5$ – $10^6$  K, enhanced by an order of magnitude or more. A complete spectral atlas of the feature has been prepared and has been used to test atomic data parameters contained in the CHIANTI atomic database. The electron density is found to be around  $10^9$  cm<sup>-3</sup> and the differential emission measure shows a distinctive peak at  $\log T=5.6$ . The spectrum is extremely valuable for testing the atomic models of the iron ions Fe VII–IX, and new and revised data following our analysis are found to significantly modify the response functions of EUV imaging instruments such as TRACE, SOHO/EIT, STEREO/EUVI and SDO/AIA.