

## **Spatial and thermal study of an isolated loop with XRT and EIS**

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**Abstract.** We use multifilter contemporaneous XRT and EIS observations of a small active region to study the spatial and thermal properties of an isolated quiescent loop. We study the loop as a whole, in segments, in transverse cuts, and point-by-point, always with some form of “background” subtraction. We find the loop DEM is not-isothermal, but is also not extremely broad, with  $\sim 96\%$  of the EM between  $6.2 \leq \log T \leq 6.7$ , and an EM weighted average temperature of  $\langle \log T \rangle = 6.48 \pm 0.16$ . There is some evidence for a gradual change in temperature along the loop, with  $\langle \log T \rangle$  increasing by  $\sim 0.1$  from the footpoints to the peak. Including EIS data helps better constrain the EM at low temperatures. Future work includes combining the analysis with contemporaneous RHESSI data and to explore XRT-EIS-RHESSI cross-calibration at AR temperatures.