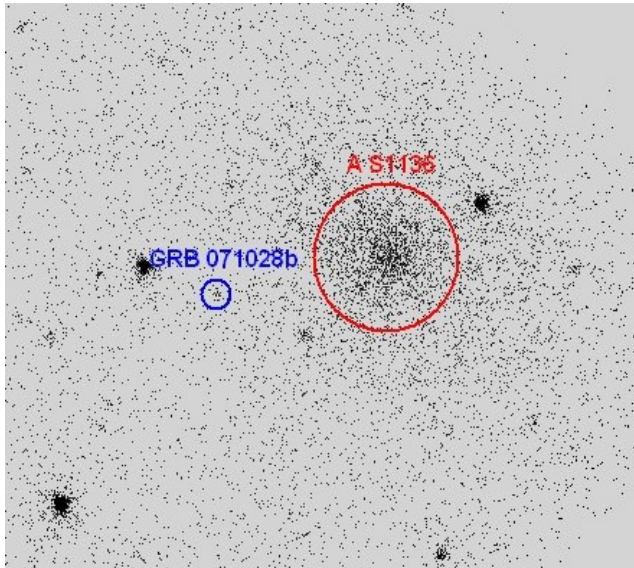


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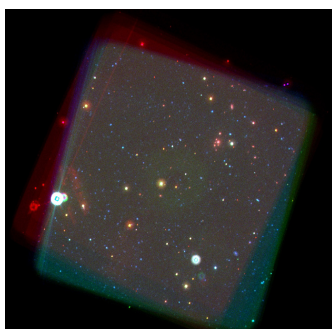
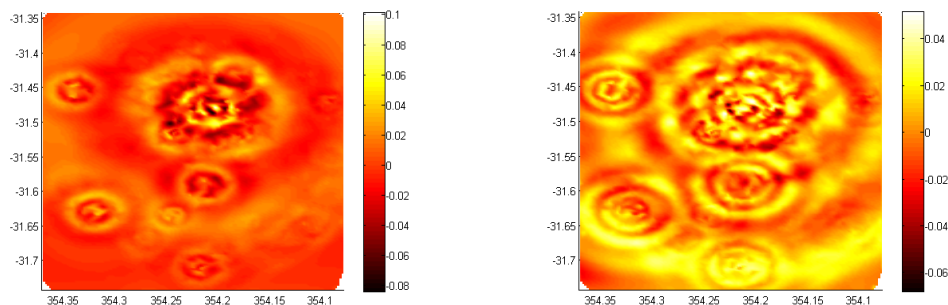
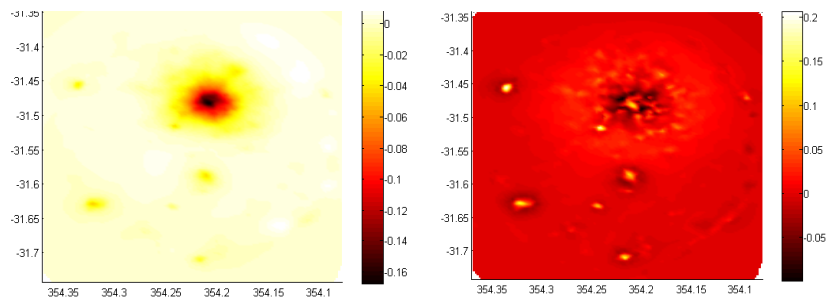


We present first results from observations of the galaxy cluster A S1136, performed in the X-ray and UV wavelength regimes using the Swift satellite.

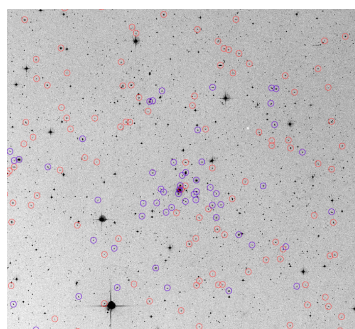
Extracting a spectrum for the whole cluster we are able to fit it with a MeKaL model. The fit gives a value for  $2.4 \pm 0.28$  keV for the temperature (metallicity fixed at a value of 0.3 solar units).

To study possible relations between any ongoing subcluster mergers and the star formation in the galaxies we apply a principal component analysis to the X-ray data. We find evidence for substructure in the ICM.

The X-ray map is convolved with Gaussian surfaces of increasing size. The covariance between convolved surfaces is taken and eigen decomposed. The more significant eigen vectors show more significant substructures, whereas the higher order eigen vectors highlight important but less obvious sub-structure.



UV image of A S1136



Galaxies in the field of view. Blue circles represent possible cluster members.

## Next Steps

We will compare the UV flux (as a measurement of the star formation rate in a galaxy) of the cluster member galaxies with the structure we see in the ICM. This can give evidence for a possible relation between any merger and star formation taking place in the affected galaxies.