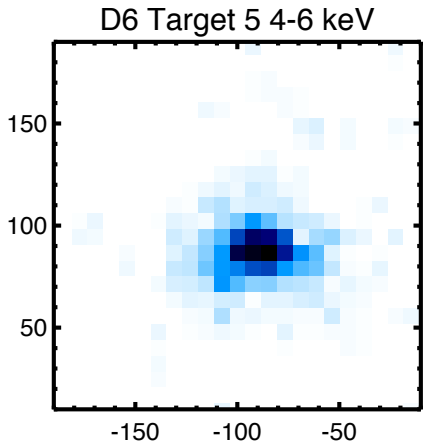
FOXSI-2 microflare imaging spectroscopy

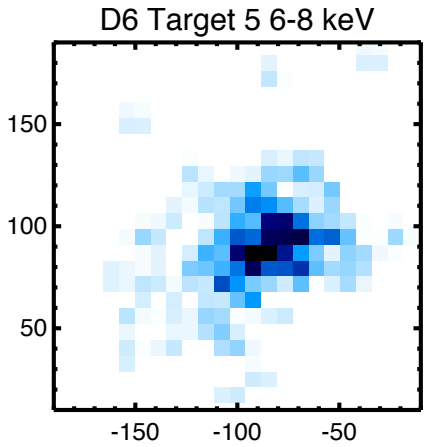
Lindsay

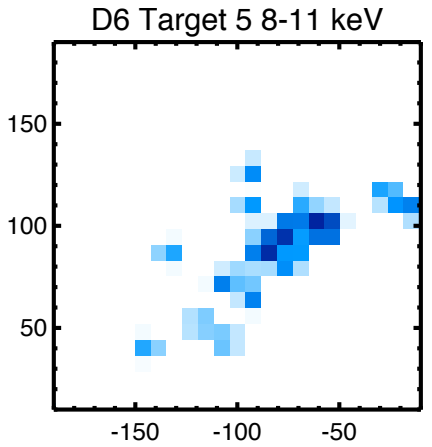
2015 Feb 24

Last target

- Detector 6 in different energy bands

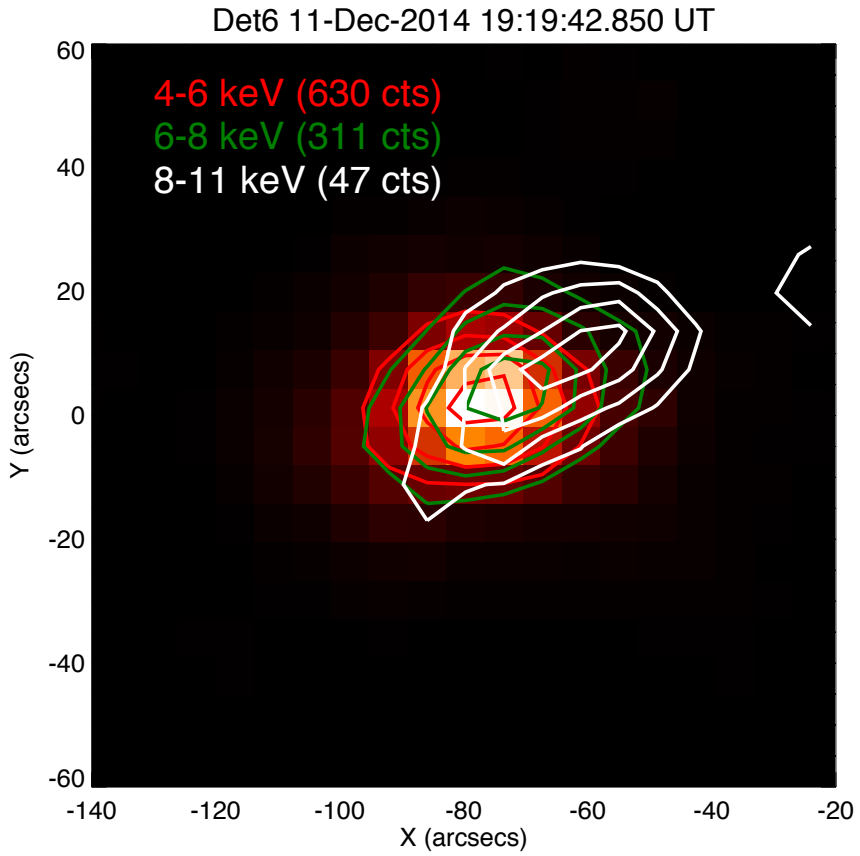






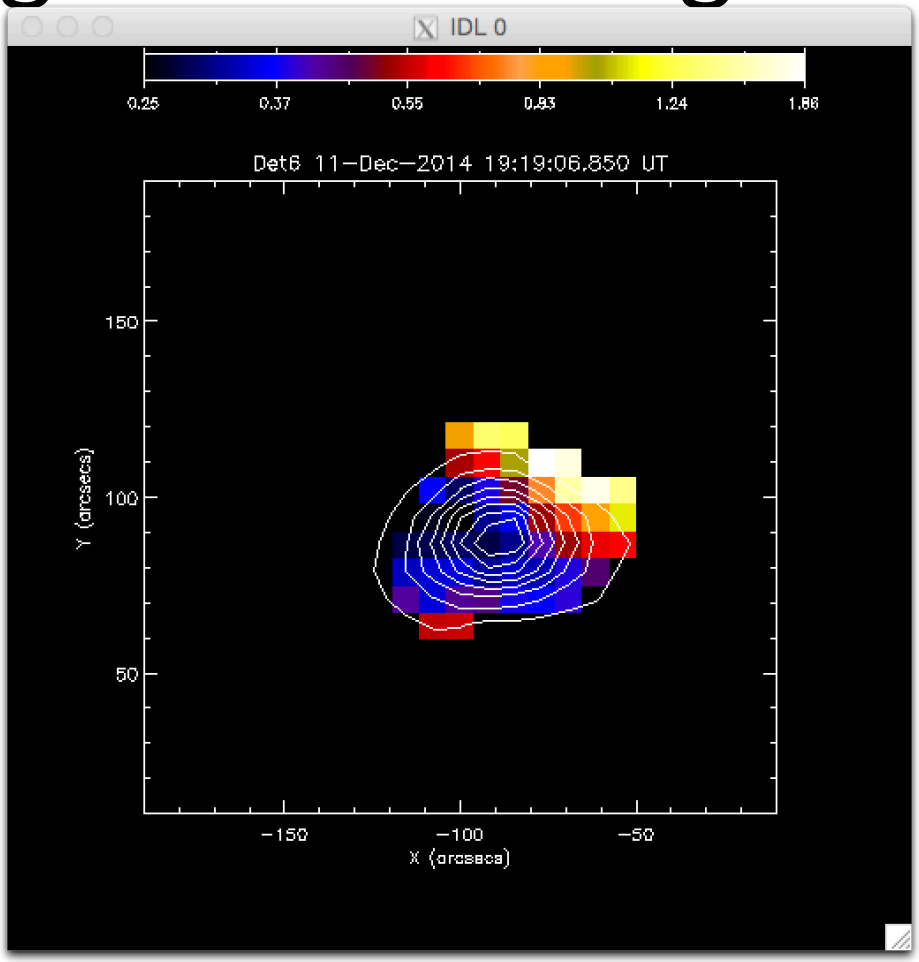
Detector 6 images of final target

- Smoothed images
  - Smoothed over 2 strips.
- Significant source location / shape change with energy.



Detector 6 images of final target

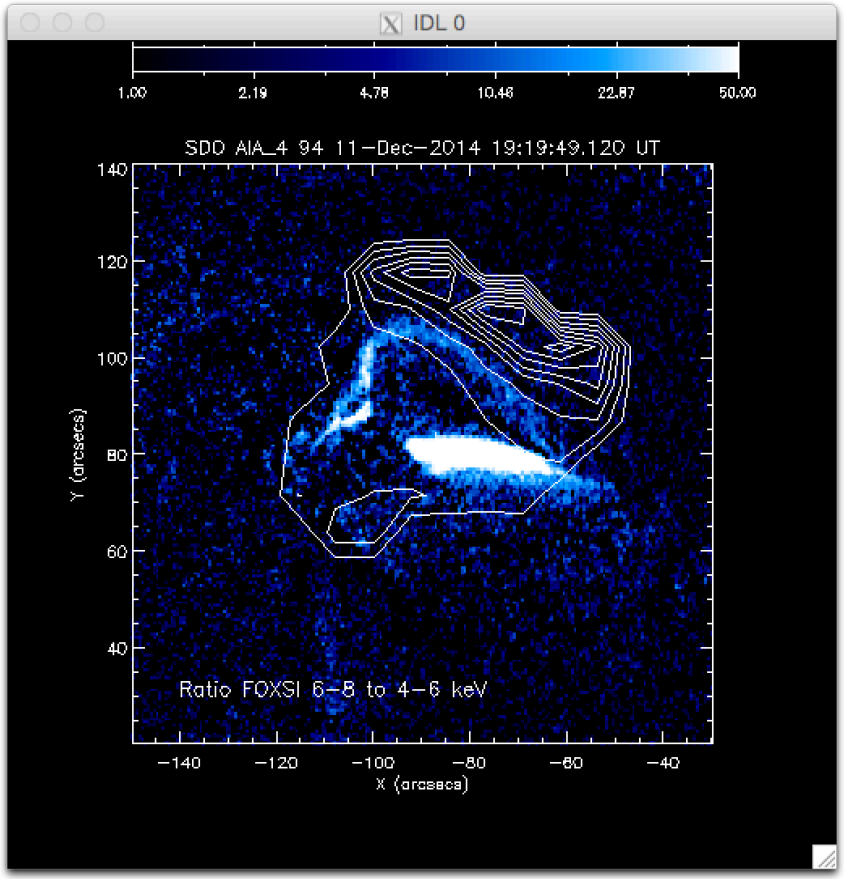
- Ratio of high-energy to low-energy emission is a measure of temperature.
- Not calculating actual temperatures yet; need solidified instrument response for that.
- Hot plasma (or nonthermal electrons) at one edge of source.



Ratio of 6-8 keV counts to 4-6 keV counts.

On top of AIA 94

- Alignment was done by lining up brightest points in FOXSI and AIA by eye. Could be wrong!
  - Co-aligning with RHESSI will help…
- A different alignment could put the high-temp plasma on the AIA ridge.
- Or perhaps the hot plasma is adjacent to, or above the ridge.



"Knottiness" is the pixel size. No, it's not nanoflares. ☺