## **Square Use Cases**

## From Simon:

I had an interesting discussion with the SQuaRE team. It was an interesting exercise to go through the 4 contexts in each of two scales (small, single chip and large, bigger than single chip) scenarios.

The current situation is that we really haven't solved the large scale.

For small scale we have ds9, ds9+XPA, matplotlib, and firefly.

It would be nice to reduce the total number of those tools.

In the notebook, things have to be native JL. We don't have cycles to support ad hoc things.

Finally, I think we identified a set of minimum functionality + nice to haves.

Must haves:
Position of mouse in WCS and image coords
Pixel value under mouse
Color scale
Interactive (and responsive) modification of color stretch parameters
API for afwDisplay (including mask handling)
Snappy pan/zoom

Nice to haves: Stats on regions Callback to python Selection of catalogs in the image viewer Smoothing etc. (edited)