

Feb. 22 2017 UIUC visualization status:

Documentation is up to date.

Black is complete. Green is written, but not tested. Red is not finished.

- Image display (all image display is done by Firefly):
 - Display latest image
 - Display an image by specifying its URI.
 - Multiple image display (in separate viewers).
- Image comparison
 - Blink images (interface to a Firefly function)
 - Display an image that is the pixel-by-pixel ratio of pixel values in two images.
 - Ditto, for pixel differences.
- Region specification and display:
 - By coordinates on the command line
 - Using the Firefly drawing tool.
 - HW regions: By name, or by mouse click. Single CCD images only.
 - Enable/disable overlay of amplifier/CCD boundaries.
 - Enable/disable display of mouse coordinates and HW region names.
- Command entry:
 - All commands can be entered on the command line.
 - Commands that take region parameters can also be entered from the Firefly tool bar.
 - Commands can have default parameters that are maintained in a configuration file.
- Commands implemented (details in the documentation).

Except as noted, all command output, if any, appears in a box.

 - Create, clear, and delete box.
 - Show and hide (*i.e.*, minimize) box.
 - Show and hide amplifier boundaries.
 - Create and delete viewer.
 - Pixel statistics in a region:
 - average_pixel
 - noise (square root of the second moment of pixel values)
 - hot_pixel (hot pixels are highlighted in the image viewer)
 - Color by region (*i.e.*, each region is one color) by analysis results (*e.g.*, average noise in each region). Probably in a separate viewer.
 - Histograms:

Histograms are displayed by Firefly, in a separate window.

 - graph_pixels (Pixel distribution in a region)
 - graph_noise (in each of a CCD's or raft's amplifiers)
 - graph_projection (Row projection of a pre- or post-scan region).