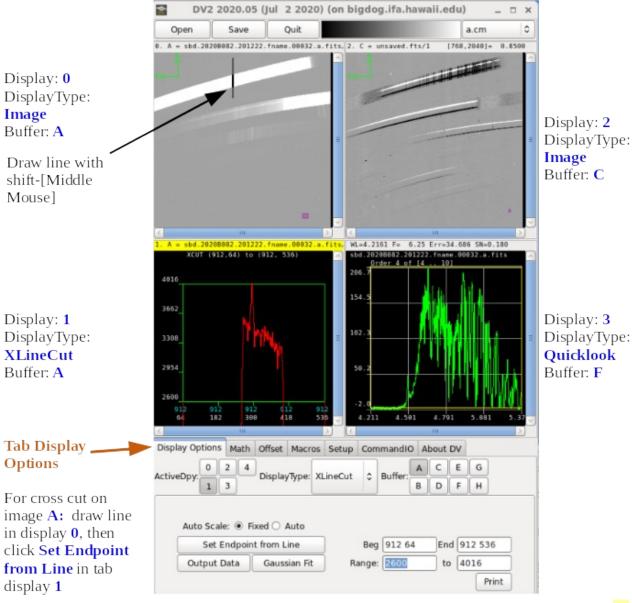# DV Cheat Sheet

1. Setup:

- Erase previous observer settings: before logging in to XUI, check **Reset DV on login**
- A commonly used setup (see Figure) is selected in the **Display Options tab** as follows:
  - *ActiveDpy* **0**, *DisplayType* **Image**, *Buffer* **A**
  - *ActiveDpy* **1**: *DisplayType* **XLineCut**, *Buffer* **A**
  - *ActiveDpy* **2**: *DisplayType* **Image**, *Buffer* **C**
  - *ActiveDpy* **3**, choose one of:
    - *DisplayType* **QuickLook**, *Buffer* **F**:  flux or S/N spectrum latest extracted A-B pair (S/N is per pixel, A-nod only).
      - *Buffer* **G** is for all A-B pairs combined.
    - *DisplayType* **Pointer**, *Buffer* **C**:  S/N based on photon count (per resolution element, A+B nod)
      - *Buffer* **D** is for all A-B pairs combined.

2. Mouse actions:

- Draw a line: shift-[Middle Mouse Button]
- Draw a box: [Middle Mouse Button]
- Move box: [Left Mouse Button]
- Change color scale: [Right Mouse Button]

3. Zooming and scaling on **Display Options tab**:

- zoom in: draw box → click *Box* **Zoom**
- zoom out: click **Full Image**

4. Make cross cut of, e.g., nod **A**, using **Display Options tab**:

- *ActiveDpy* **0**: *DisplayType* **Image**, *Buffer* **A**
- *ActiveDpy* **0**: draw line with shift-[Middle Mouse Button]
- *ActiveDpy* **1**: *DisplayType* **XLineCut**, *Buffer* **A**
- *ActiveDpy* **1**: click **Set Endpoint From Line**
- determine image quality: click **Gaussian Fit** (*ActiveDpy* **1**)

5. Move telescope using guider (Guidedog, Kyle, MORIS) images using **Offset tab**:

- draw line on image with shift-[Middle Mouse Button]
- click **Offset Telescope**

6. Estimate broad-band magnitude using guider (Guidedog, Kyle, MORIS) images, on **A** nod, using **Display Options tab**:

- *ActiveDpy* **0**: *DisplayType* **Image**, *Buffer* **A**

- *ActiveDpy* **0**: draw small box next to star with [Middle Mouse Button]

- *ActiveDpy* **1**: *DisplayType* **Stats**, *Buffer* **A**

- *ActiveDpy* **1**: click **Set Sky**

- *ActiveDpy* **0**: move box on top of star with [Left Mouse Button]

- *ActiveDpy* **1**: read broad-band magnitude in display

Display: **0**
DisplayType:
**Image**
Buffer: **A**

Draw line with
shift-[Middle
Mouse]

Display: **1**
DisplayType:
**XLineCut**
Buffer: **A**

**Tab Display
Options**

For cross cut on
image **A**: draw line
in display **0**, then
click **Set Endpoint
from Line** in tab
display **1**

Display: **2**
DisplayType:
**Image**
Buffer: **C**

Display: **3**
DisplayType:
**Quicklook**
Buffer: **F**



*DV is highly configurable. This shows a common set-up. In this example, Display **1** is active, as indicated by the yellow bar, and the darker **ActiveDpy** button.*