Software

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SAO Software Toolbox

- CCD/IR data acquisition servers
- “msg” ASCII client/server protocol
- Generic PMAC motion server
- GUIs built with TCL/TK

Required Components

- IR Array Data Acquisition
- MMIRS Motion Control
- Guider/WFS Camera Data Acquisition
- Guider/WFS Motion Control (x2)
- Monitoring Software

IR Array Data Acquisition

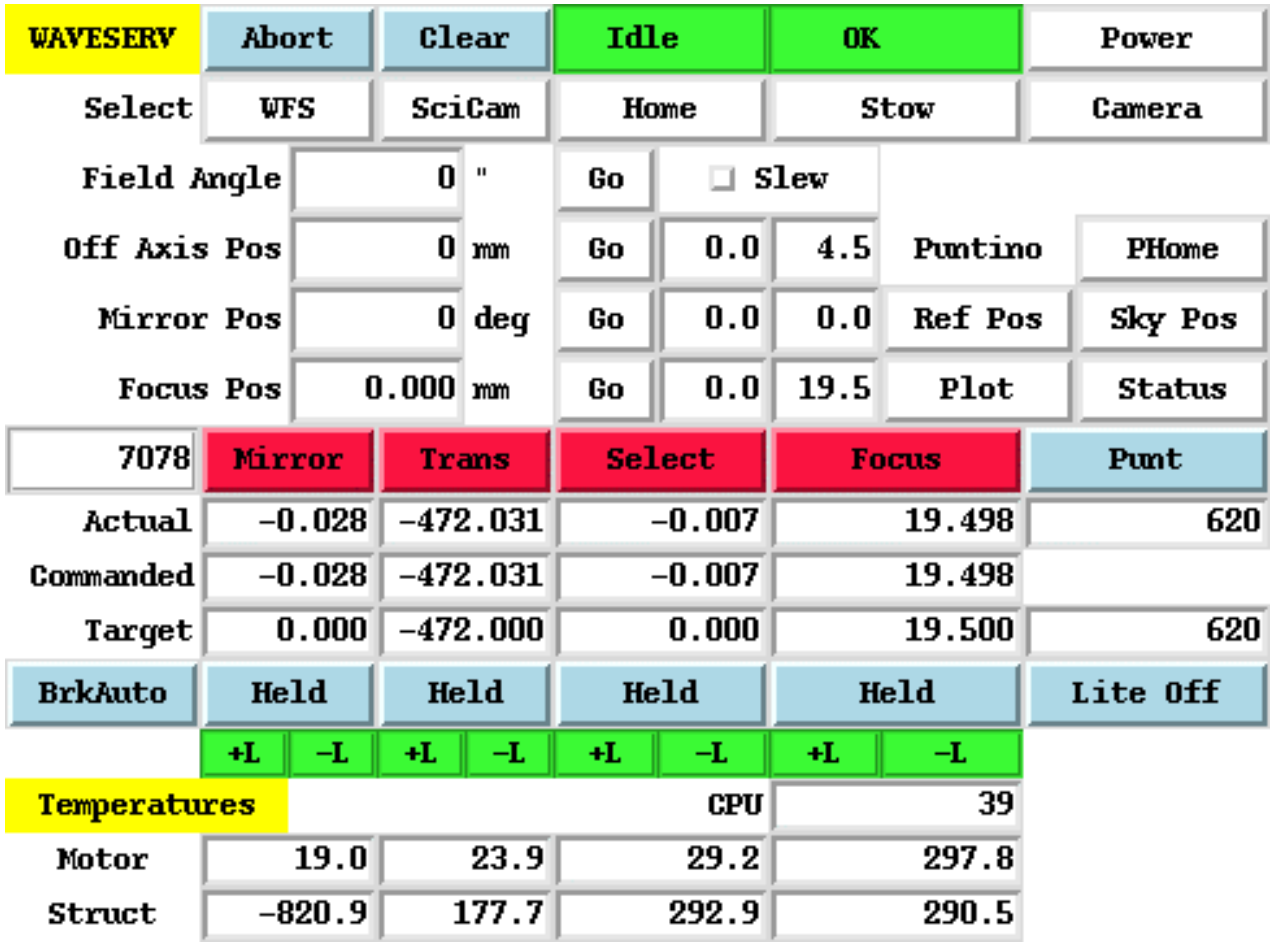
- Based on MMT CCD Camera server using EDT PCI/RCI Linux device driver
- Based around ICE with our own GUI (or standard IRAF client)
- IR Camera Extensions already developed for SWIRC

Data Acquisition GUI

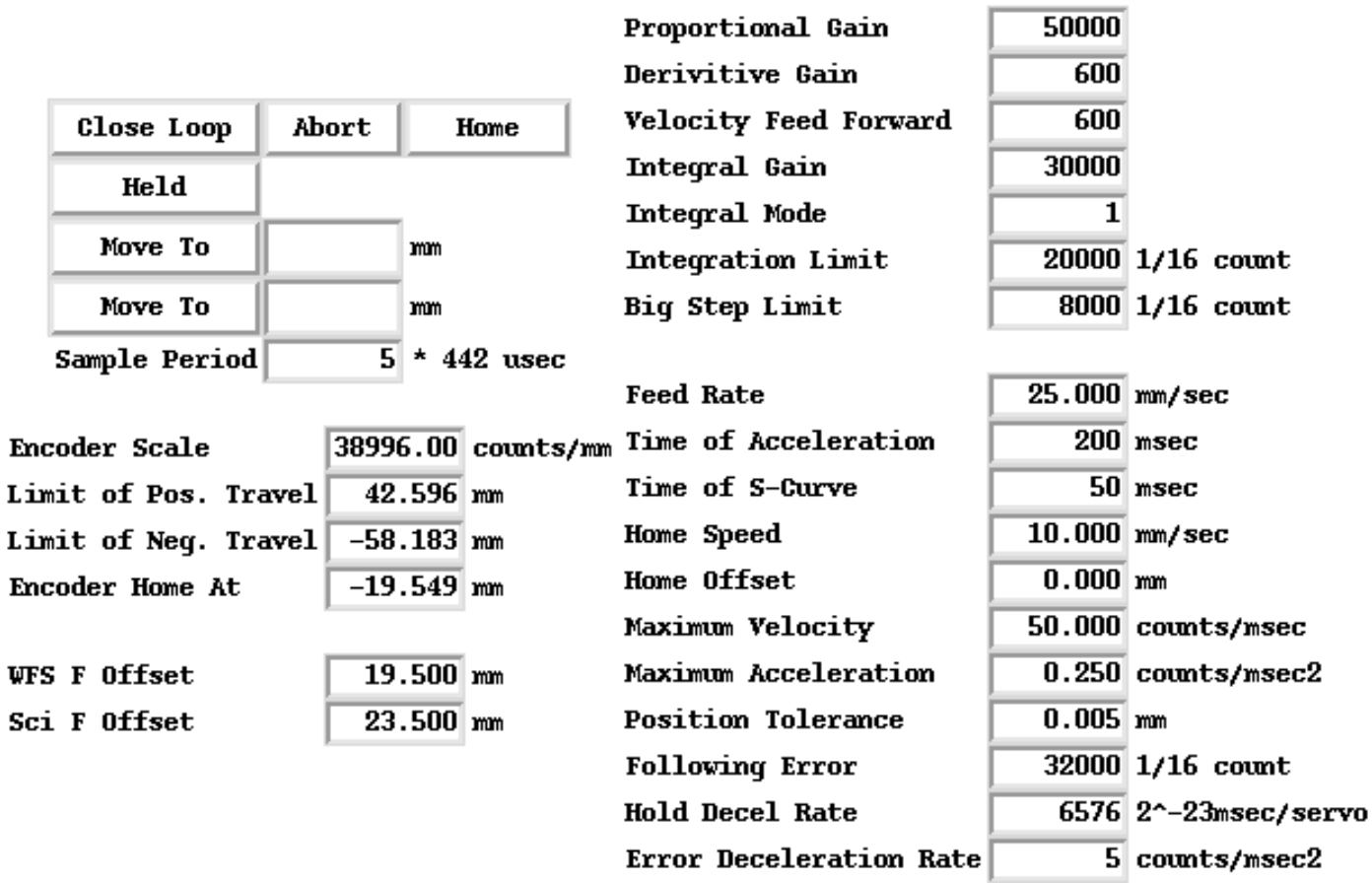
MMIRS Motion Control

- Cryo axes
  - Dekker wheel
  - MOS wheel
  - Filter wheel x2
  - Grism wheel
  - Detector focus (LVDT)
  - Isolation gate valve
- Guider axes
  - Focus
  - X,Y
  - WFS insert/remove
- Server will run on rack Linux computer
- Delta Tau PMAC stepper/servo controller
- Software based on MMT WFS software
  - MSG protocol
  - Standard Engineering user interface
  - Motion control server framework

MMT WFS Engineering GUI



Generic Axis Engineering GUI



Guide Camera Controller

- Uses custom PCI interface card
- Plan to use existing Magellan software
- Will write additional interface to MMT guider/WFS software

Auxilliary Software

- Cryostat temperatures and heaters
- Vacuum interlock system
- Motor temperatures, currents and voltages
- AC power control

Software block diagram