Large Binocular Telescope Observatory

Telescope Control System

Communication Paths

July 2009
Overview of Telescope Control

Astronomer / Commissioning Engineer

- IRAF, IDL, Scripting tool, IRTC GUI
- Instruments
- IRC Infra-red Test Camera Client
- IRS Infra-red Test Camera Server
- IRTC Infra-red Test Camera

TCS
- IIF Instrument Interface Subsystem
- other TCS Subsystems
- TCS controlled hardware

TEL Telemetry

Telescope Operator
GCS view of Hardware

- GCS Guiding Control Subsystem
  - AGw control
    - AGw Probe, Filter Wheel, etc. Hardware
  - AzCam Arizona Camera Server
    - "Little w" wave front sensor
    - Guiding sensor
AOS view of Hardware

- AOS Adaptive Optics Subsystem
- AO Adaptive Optics
  - Adaptive Optics "Big W" Sensors & other HW
  - M2 Adaptive Secondary Mirror
PMC view of Hardware

- ** PMC Primary Mirror Control Subsystem**
  - **VxWorks Computer**
  - **ECS Enclosure Subsystem**
  - **ECS PLC Enclosure PLC**

- ** Thermal Computer**
- ** M1 Mirror Cell Hardware**
- ** Temperature Sensors**
- ** Enclosure Building Hardware**