1.3m 4K Installation Procedure
Last Updated: 11/05/07 Steven Magee

Prerequisites

This procedure is used when installing the 4K instrument to the 1.3m telescope Multiple Instrument System (MIS). Instrument rotator needs to face North.

Equipment Needed

- Canned air.
- Allen wrenches.
- Adjustable wrench.

Hardware Installation

Put the handler onto the platform with the detector on the North side & dark slide on the north side. Wipe down the top of the filter wheel and remove the cover.

Remove the four nuts that hold it onto the cart.

Raise the filter wheel up to the MIS and bolt it on.
Change the guider lens to 135mm if needed.

Lower the platform with the cart & remove. Store the cart in the dome.

Plug in the three power cords for the head electronics, filter wheel & port server.

Plug in the network cable to the port server.

Connect the vacuum pump.
Power on the instrument power strip and the head electronics

Open the dark slide

Connect the fibers on the head electronics.

On Mcgraw, type “shutdown” to turn the computer off.

Install the IC monitor and restart McGraw
Install the fibers into the IC computer in the computer room. Turn the IC on.

Turn on the MIS if not already on.

On the IC monitor in the computer room, select “4” for the 4k instrument. The monitor should display all highlighted text on the last row on the monitor if everything is okay.

Balance the telescope according to the balance log.

Fill the detector with liquid nitrogen.

**Software Installation**
• On the guider PC, type “ctrl/alt/del” to reboot the computer.
• On the guider PC, type “cd tvguider”
• Log into McGraw.
• In an xterm type “telconfig” and follow the prompts.
• From the background menu, select “Telescope control – XTCS”.
• From the background menu, select “Telescope control – XMIS”.
• On both the XTCS and XMIS displays click on initialize.
• On the finder mirror box, move the switch to “in”.
• In the XMIS gui, turn on the flat lamp.
• In XMIS gui, select “Preset – Center”.
• Turn up the voltage on the guider image intensifier to see a guider image.
• In the XMIS gui, turn on each of the comparison lamps one at a time and make sure that you can see each lamp. This confirms that each lamp is working.
• From the background menu, select “Data Acquisition – Isis”.
• From the background menu, select “MDM TCS Agent”.
• In the MDM TCS Agent gui, type “tcinit”.
• In the MDM TCS Agent gui, type “tcstatus”.
• From the background menu, select “Data Acquisition – Caliban”.
• From the background menu, select “Data Acquisition – Prospero”.
• In the Prospero window, type “startup” and everything should come up green. Mirror will say “unknown” - this is normal.
• In the Prospero window, type “runinit”
• Click on the IRAF icon to bring up IRAF.
• Click on the DS9 icon to bring up DS9.
• Both of the above can also be brought up from the background menu on the Data Acquisition menu.
• In the XMIS gui, turn on the Neon lamps.
• In the Prospero window, type “movie” to see the image.