74-inch Change: SpUpNIC OFF

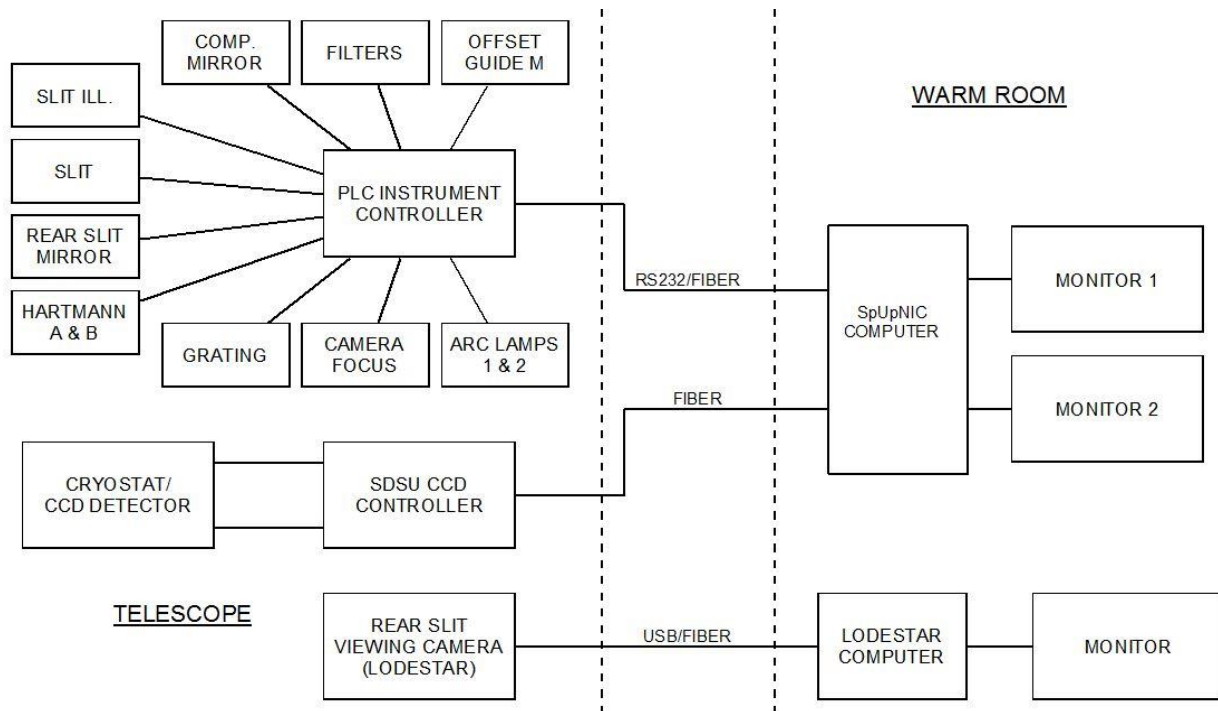|	
W. Koorts	11 December 2015
M. Rust	21 February 2016
A.C Mulaudzi	18 May 2016
D. Carter	6 July 2016
D. Carter	5 September 2016
W. Koorts	7 November 2016
P. Swanevelder	26 November 2018
K. Titus	03 October 2023

Instrument block diagram

Fig. 1: Overall Block Diagram

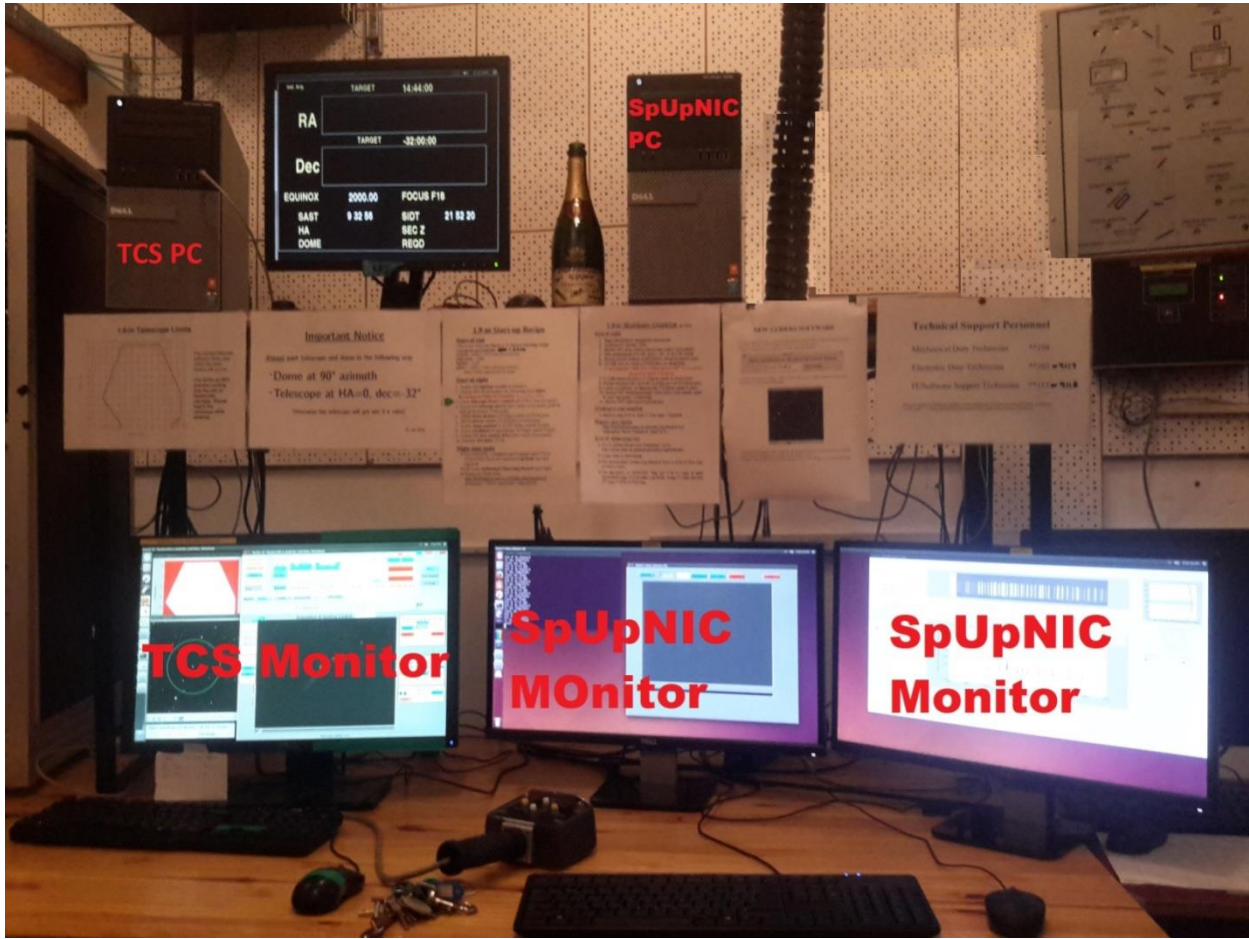Note in Fig. 1 - keyboard/mouse peripherals have been omitted for clarity
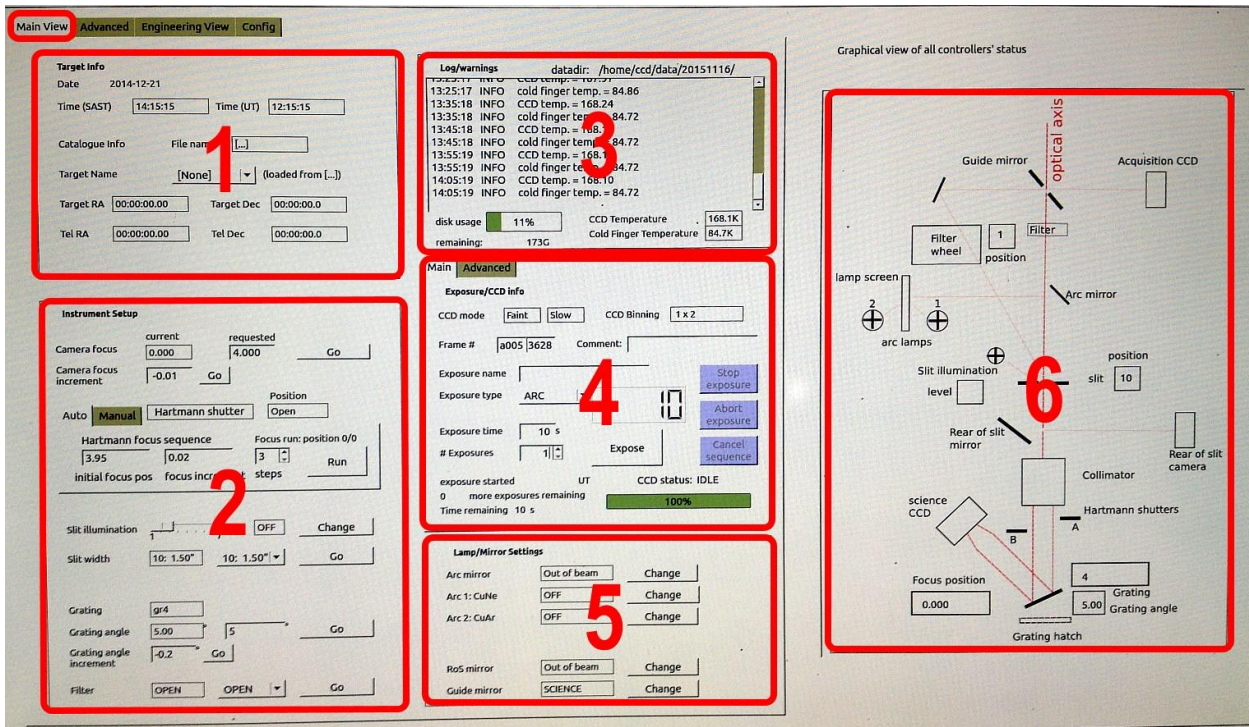
Fig. 2: Warm Room Workstation Layout

Fig. 3: MAIN VIEW tab of the SpUpNIC Instrument Control GUI

PLEASE NOTE:

Do not switch off and/or remove SpUpNIC from the telescope earlier than 09:00 on instrument change day!

This is to ensure that the auto data copy process finished copying the data from the SpUpNIC computer to the server, before taking SpUpNIC offline.

In the Warmroom

1. Ensure that **TCS** is locked out by turning the **TCS Lockout** switch on the mimic panel (refer to figure 4) to **ON** state. TCS Control indicator will flash as a warning that the TCS is locked out.
2. Ensure that the telescope is in the 'PARKED' position (usually done by the mechanical guys), and switch the Telescope OFF.

Figure 4: *TCS LOCKOUT SWITCH*

The following steps refer to Fig. 2 - computer systems and Fig. 3 - Instrument Control GUI, above. *At 21 Feb, TCS computer is on the shelf, on the left-hand side of the telescope co-ordinate display monitor.*

1. On the the SpUpNIC Instrument Control GUI, the grating angle is operated from the Main View tab, Panel 2 (Fig. 3). Set the grating angle to zero.
2. Shut down Instrument Control GUI using the Close button 'X' in the title bar (Fig. 3)
3. Open a terminal window and enter *stop_services*, confirm by entering the usual password.
4. Shutdown the SpUpNIC PC.

At the telescope

Fig. 5: SDSU Controller

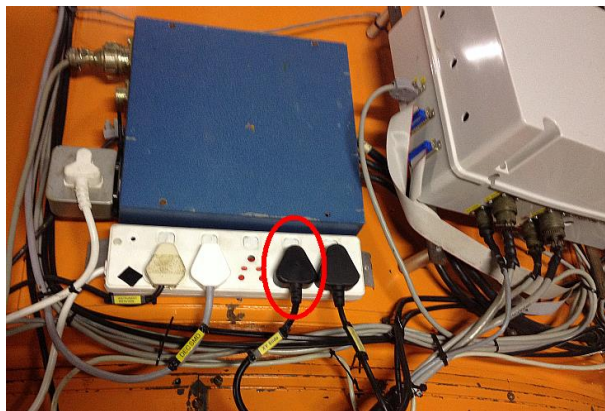Fig. 6: instrument services panel

Fig. 7: XY-Slides mains switch indicated

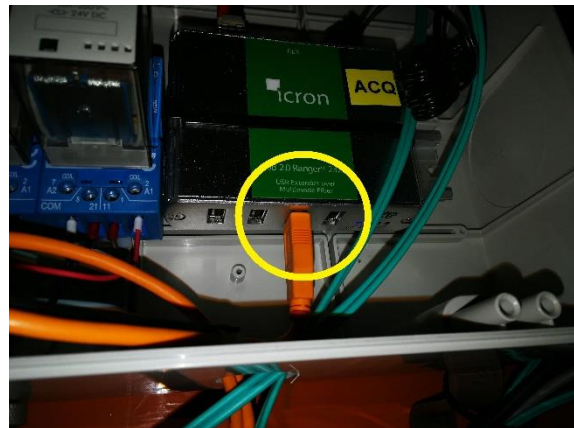

Fig. 8: Acq. Camera port on Icron device

Fig. 9: Instrument Selector auto-guider control box

The following is done at the telescope.

1. Power down:
   a. The SDSU PSU (Fig. 5) at the instrument.
   b. Check that the telescope is OFF, using the ON/OFF pushbutton control in the warm room.

2. Disconnect cabling and services:
   a. The instrument mains supply, compressed air feed and PLC RS232 comms cable, at the instrument services panel (Fig. 6).
   b. The USB cable at the Lodestar rear-of-slit camera.
   c. The USB cable at the on the auto-guidder.
   d. Swop the black cable (See Fig. 8) in the ROS & ACQ RESET BOX for the orange one on the Icron device labelled ACQ. It must go on the same port.
   e. The two cables (black circular conncectors) on the auto-guider.
   f. The dual optical fibre at the SDSU CCD controller (Fig. 5)
   g. The PLC RS232 cable at the connection point on the NW corner of the mirror cell.

3. Remove the following from the telescope:
   a. Instrument selector auto-guider control box (See Fig. 9).
   b. The SpUpNIC instrument (mechanical responsibility).

IN WARM ROOM:

NB!!! Ensure that **TCS Lockout** switch on the mimic panel is switched **OFF**. TCS Control indicator will stop flashing.