

P483 setup notes - updated March 2013

Observing startup, Part 1

- Locate VNC session "pksvnc1", to be found on (usually) the left-most screen of the 4-headed control room machine. Go to the left-most of the 4 virtual desktops on this VNC session and look for the GUI "TCS Primary instance". Click on the green "antenna" widget and select "disable", to turn this widget orange, releasing control of the antenna.
- Go to the next virtual desktop to the right and look for the "Focus Cabin Switches" panel.

→ * turn on "SX Rx" and "F/C synthesisers" → * On the "Cal Control Unit" panel ensure all the buttons in the "Off" column are selected to the OFF (right-most) column. → * Go upstairs to Rack 8 and turn on the "HPIB Extender" unit, checking that the red LEDs do not stay lit. Return to the main control room.

- Go to the third virtual desktop on this VNC session and find the "operfcc" GUI. Select the SX receiver from the radio button list at the left, then click "place selected receiver on axis".

Observing startup, Part 2

On the machine "pisces" (immediately to the left of the four-headed displays) find any old xterm and connect to the VNC session pictor:2, using the vlbi VNC password. This should bring up a NC session headed "Mk5B".

- On the leftmost desktop in this session find the "oprin" window and type;

→ > status

to see what the system is doing. It will say "no schedule currently active" or indicate where in the schedule it is up to. To start a new observing schedule type the following;

→ > schedule=p483bpa,#1 → > mk5relink

wait a few seconds and then type;

→ > status

again to ensure that the system is waiting for the first observation. You can start the recorder schedule as above at any time without affecting the other observers.

- Go one workspace to the right and in the xterm there type;

→ % cd ~observer/lba → % atsnap p483b.psn

to start the antenna following the schedule. You should hear the antenna start moving.

- Go to the third workspace. In the upper xterm type;

→ % cd ~observer/smssetup → % smrun -s glenlivet MK-V_geo.cmd

- In the lower xterm type;

→ % cd ~observer/losetup → % lorun sx.cmd

Observing startup, Part 3

- Head to the upstairs control room. Double-check that the “HPIB Extender” in Rack 8 is turned on with no red lights showing.
- At the large blue Mark-V rack look for the panel labelled “VLBI delay calibrator”

Ensure the left hand toggle switched labelled “OFF/Rem PCAL” is in the UP position with the green LED lit.

- Check the CRO in Rack 4 and ensure you can see a clear stable sinusoid (cal tone).
- Check the voltages showing on each of the 14 VCs (videoconverters) in the Mk-V rack. They should be between 0.5 and 2.5 Volts. Note VC13 has a display which is almost unreadable!

Observing close/handover

Just few of the startup steps needs to be undone to hand over cleanly to the next observing team.

- The “atsnap” program (2nd workspace in the “Mk5B” VNC session) should terminate cleanly at the end of the schedule, reporting “antenna deallocated”. If it hasn't, kill it with control-C.
- On the “pksvnc1” VNC session use the “Focus Cabin Switches” panel to turn OFF the S/X receiver and “F/C synthesisers”.
- Go upstairs to Rack 8 and turn the “HPIB Extender” unit OFF.
- While upstairs go over to the Mark-V (blue) rack and locate the panel labelled “VLBI delay calibrator”, find the left hand toggle switch, labelled “OFF/Rem PCAL”,

and turn it down to the OFF position so that the green LED goes out. This avoids any chance of it interfering with the other observers.

The rest of the configuration (selecting receiver, restarting TCS etc) can be safely left to the next observing team.

- If there is no other team in sight when you finish, and you want to leave the dish be sure to stow it first, following the instructions at the MCP, and confirm the the safety timer has stopped (gone blank).

Additional P483 setup notes - August 2013

Observing startup, Part 1

- This is as above, and should already be taken care of.

Observing startup, Part 2

The second of the four connected displays (on “bourbon”) is displaying the VNC session “vlbi's PkMk5B”, which is running on pictor:2 using the vlbi VNC password. The session shows the Mk5 recorder.

- On the leftmost desktop in this session find the “oprin” window and type;

→ > status

to see what the system is doing. It will say “no schedule currently active” or indicate where in the schedule it is up to.

- Starting schedule for rd1306. At 3:30am on Thursday morning 22nd Aug (17:30UT), the schedule for t2091 ends and set-up for rd1306 commences. To start the new observing schedule type the following;

→ > schedule=rd1306pa,#1 → > mk5relink

wait a few seconds and then type;

→ > status

again to ensure that the system is waiting for the first observation. You can start the recorder schedule as above at any time without affecting the other observers. The first recording starts at 4:03am (18:03 UTC).

- Go one screen to the right to “pksvnc1” VNC session, and in the upper xterm type;

→ % atsnap rd1306.psn

to start the antenna following the schedule. You should hear the antenna start moving.

- There is some recabling required at the back of the Mk5 rack for rd1306. This will be documented separately. After completing the recabling re-check the displayed voltages on the 14 active VCs on the front of the Mk5 rack.

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