

Observing with the AAT from Home

13 October 2020 – Chris Lidman

1. Some important reminders first

- Do not share your visitor account details with anyone else
- Access is allowed from 3pm AEST/AEDT on the first day of your run
- Make verbal contact (e.g. using zoom) with the afternoon shift technician before trying to access the instrument

2. Contacting site on the day of your run

With up to six remote observing sites connecting to the telescope console from across Australia, and several more to come, communication is key for a successful remote observing run. **You are required to contact Site at 3pm on the afternoon of each night (4pm during daylight saving time).**

A good time at which to notify the afternoon technician of your plans for the next day is when the afternoon technician signs off for the night. You can also contact the afternoon technician using the technician call button, the AAT building PA system (6842 6351), or the **SSO emergency mobile** (0427 685 288). If you use the PA system, wait for the beep to end before speaking. The SSO emergency mobile is carried by the afternoon shift technician during the day and the night assistant at night.

Additional information on remote observing is available from the [AAT web pages](https://aat.anu.edu.au/science/observing/remote-observations):
<https://aat.anu.edu.au/science/observing/remote-observations>

3. Important Numbers, Addresses and Locations

AAT console Polycom IP: 192.231.166.51

AAT console phone: 6842 6279

AAT observer's desk: 6842 6276

AAT public address system (wait for the beep to end before speaking): 6842 6351

SSO emergency mobile: 0427 685 288

AAT VPN: aat-vpn.anu.edu.au

VNC desktop used for observing: aatxdb1.aao.gov.au, IP 10.88.80.26¹

aatlx: 10.88.90.24

aatlxh: 10.88.90.25

Weather: <http://aat-ops.anu.edu.au/AATdatabase/met.html>

Robot viewer: <http://10.88.90.80/view>. We advise against running this from a browser that is started on aatlxy, as this seems to slow down the VNC connection.

¹ IP addresses that start with 10 (e.g. 10.88.90.80) are only available within the AAT network.

4. Setting up yourself before the run

- Send us a request that you wish to observe remotely from home using the [AAT Visitor Form](https://aat.anu.edu.au/science/observing/travel/overview): <https://aat.anu.edu.au/science/observing/travel/overview>
- Once approved, you will receive the details of an account that will enable you to VPN into the AAT network and ssh into AAT computers. (Note that these functions have the same account name usually of the form 'visitor[n]', VPN access has been added to the system that has been in use for many years.)
- Install VPN and VNC clients on your laptops. We recommend that you use Cisco's AnyConnect Security Mobility Client and Real VNC's [VNC viewer](#).
- When using 2dF, screen real-estate is an important factor. At the very least, you should have two screens. This will enable you to see half of the four screens. One can then scroll to see the other half as required. Recall that 2dF windows can pop up in unexpected places.
- If you are using the NBN, check that there are no [scheduled maintenance activities](#) that might affect your connection.
- If you have access to two computers it is recommended that you set Zoom up on a different machine to the one you use for controlling the instrument. This is because Zoom will be piped through the VPN otherwise, which will slow the connection somewhat.

5. Connecting

Follow the following sequence.

- Establish communication with the afternoon shift technician via zoom (the polycom is unlikely to be a realistic option if you are observing remotely from home). SSO staff will establish one zoom link per scheduled run. You will be informed of the details once the visitor form is submitted.
- VPN into the AAT network: aat-vpn.anu.edu.au, using the account details you have been given. (If you later have trouble logging in, returning to this page and logging in again serves as a test of the validity of your credentials.)
- VNC into aatxdb1.aao.gov.au, IP 10.88.80.26. If you do not know the password, the afternoon shift technician will give it to you.

6. The end of the night

- Close the VNC window². Under no circumstances, should you log out of aatlxx to aatlxy. The consequences could be grave.
- Log out of the VPN session if you do not plan to run reductions on aatlxx, for example.

² The VNC session will be killed by a cron job at 9am, but it is best to close it manually to prevent any unauthorised access.

7. Installing Cisco's AnyConnect Security Mobility Client

We recommend that you use Cisco's AnyConnect Security Mobility Client to connect to the AAT network using VPN. To do this

- Point your browser to <https://aat-vpn.anu.edu.au>
- Ignore the security warnings
- Login with your AAT account details that you were given.
- Follow the instructions to download the software for your operating system³.
- Once installed, bring up the application and enter aat-vpn.anu.edu.au, the AAT VPN address
- Click on the settings button in the bottom corner and make sure that "Block connections to untrusted servers" is not ticked. You will only need to do this on first use – the setting will be remembered for subsequent connections.
- You may see another security warning. Press unclick anyway.

8. After the Run

Even though your observing has been from home, we still need you to fill in a Run Report. Please report any unresolved difficulties with remote observing in addition to the other comments you might have. The Run Report is submitted via an online form located here: <https://aat.anu.edu.au/science/observing/after-run>

9. Further Information

The information in this document relates specifically to observing from home; it is not a substitute for the information available on the AAT webpages, which all Observers should be familiar with: <https://aat.anu.edu.au/science/observing>

Changelog:

27 October 2020: Added list item to Section 4. Created Sections 8 and 9. -- DC

³ The VPN client is not compatible with macOS 10.15 Catalina. Please contact [Chris Ramage](#) if you need access to this client for this version of the mac OSX operating system.