

Palomar Observatory Phase 4 Remote Operations: Observer Information

CMH+ v01 November 2020

Your remote observing run will be supported by a telescope operator and a support astronomer. The telescope operator will be present at the dome and arrive in the evening. The support astronomer will work remotely and will not be at the dome. Below is some general information regarding your run.

Before You Observe

Contact the Palomar night staff via email at palomar-setups@lists.astro.caltech.edu to let us know who will be observing during your night(s). **You must provide the IP addresses you will be connecting from at least 4 days before your run.** Once we allow access for your computer, we recommend scheduling a connection test sometime before your run. An easy way to determine your public IP address is by visiting this site: <https://www.whatismyip.com/>

The telescope schedule has been updated on the reservation and maintenance site:

https://mons.palomar.caltech.edu/observing_schedule/p200

Please submit any instrument settings for your run here.

Afternoon of Your Observations

The support astronomer will set up the instrument software for you in the early afternoon. Let the support astronomer know if you would like instrument software training, which can be done that afternoon.

Afternoon calibrations will be limited since the support astronomer is not physically present in the dome. This is because the mirror cover and secondary mirror configuration cannot be operated remotely. Any calibrations requiring the mirror cover to be open (such as dome flats) will have to be completed after the telescope operator arrives at the dome.

Night of Your Observations

The telescope operator will arrive at the beginning of the night and will be available to complete your calibrations prior to observations. The support astronomer will also be available at the start of the evening to help you.

If the telescope, dome, or instrument fails during the night and the telescope operator is unable to resolve the problem, the support astronomer will be available to troubleshoot remotely. If the problem requires personnel inside the dome, then observations will be stopped until observatory management can create an entry plan the following morning.

Communication

You will communicate with the support astronomer and the telescope operator using Zoom. The support staff will provide the meeting ID number.

If you are unable to use Zoom, let the support staff know.

Software Control

You will need to have a VNC viewer installed on your computer. Some options for this include:

- **RealVNC viewer:** <https://www.realvnc.com/en/connect/download/viewer/>
- **TightVNC Viewer:** <https://www.tightvnc.com/download.php>
- **Remmina:** <https://remmina.org/>

The following virtual desktops will be used (password will be provided by staff):

- **portal.palomar.caltech.edu:10**
- **portal.palomar.caltech.edu:11**
- **portal.palomar.caltech.edu:12**

Data Retrieval

You can download your images by connecting to user1@observer1.palomar.caltech.edu with scp or sftp. The support staff will provide the password and directory location for your run.