

# **SARA-CTIO Observatory Director's Report**

April 20, 2024 Todd Hillwig Valparaiso University

## I. Introduction

The SARA-CTIO telescope operation this semester has had significant issues. Beginning with the network shutdown, due to the network intrusion at Gemini South, SARA-CT has had new, but more limited VPN connection. There is an increasing number of institutions which do not allow the required registry hacks to Windows machines to allow them to use the VPN (or do not allow secure connections to that type of system). Other issues are described below.

# II. Telescope Usage

The majority of time lost this semester has been to the network issues mentioned above. Other time has been lost to the lack of a working CCD on the spectrograph.

### III. Usage by others

Lowell and Chilean observers continue to make use of their time allotments.

### **IV. Observatory Problems**

The network issue is our primary problem at this point. Peter and I have been playing phone/e-mail tag to work out where we stand at this point. Hopefully he can tell us more today...

There are two other current issues with the telescope. First, we have a new guide camera, but it can't see any stars. The reason for this is unclear. Frankly I think that Peter and Brian have been too busy to get to this issue and that it slips off the top page of their to-do list. I have also not reminded them regularly, so that is probably largely my fault. The second issue is the spectrograph camera. I have no idea what the status of this issue is (see phone/e-mail tag comment above).

### V. Instrumentation

#### 1. Science Camera

There was a brief issue with the Andor camera power. It seems to have been running fine since then. However, I did recently find that some photometry I took two days after that has very large scatter (on the order of a few tenths of a magnitude for peak counts around 45k in 6 second exposures of a bright star). If anyone else has done photometry with data since then we should make sure this is not a problem with the camera electronics. I have no idea what could have caused the scatter in this particular data.

#### 2. Spectrograph

So note above on spectrograph camera.

#### 3. Other

Mirror re-aluminization is still an issue. However, it appears the internal insurance issues at CTIO have been resolved and that we will be able to have it done there...once they can get us in the schedule.