



## SARA-CTIO Observatory Director's Report

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Todd Hillwig  
Valparaiso University

### I. Introduction

The SARA-CTIO telescope operation this semester went relatively smoothly. The primary loss of time was due to weather with the next greatest loss of time due to poor telescope pointing. The main issues at this point are getting the Andor camera back in service and getting the spectrograph installed. A few other issues are described below.

### II. Telescope Usage

The table below indicates that weather was the primary cause of nights lost. Only about 5% of reported time lost was due to technical issues.

Month	Fraction of time observations were made	Fraction of time lost to weather	Fraction of time lost to technical problems
September	0.44	0.46	0.10
October	0.655	0.315	0.03
November	0.885	0.035	0.08
December	0.93	0.02	0.05
January	0.79	0.18	0.03
February	0.90	0.05	0.05
Averages (% of reported nights)	77%	18%	5%

### III. Usage by others

Lowell and Chilean observers continue to make use of their time allotments. About two or three new Chilean observers are trained each semester.

### IV. Observatory Problems

With only about 5% of reported time lost this semester due to technical problems, weather is once again the source of the greatest losses of time, averaging almost exactly the same percentage as the same semester last year.

However, despite the small loss of time to technical problems, there have been two major issues and several smaller problems.

The primary issue has been the loss of the Andor camera for the entire semester. There was over a month-long delay in shipping the camera back to the states, then Andor determined that the detector needed to be replaced entirely. The detector was not in stock and a new shipment was expected in late March. We have yet to confirm that the new detector is now available, but Andor predicted a mid-April shipment of the repaired camera back to ACE. We are waiting to hear if that timeline is still valid.

A remaining issue is the non-installed spectrograph. That is an issue for Peter's next trip to CTIO, along with reinstalling a repaired Andor camera.

A low-signal source of noise is visible in the FLI camera. It is unclear what the source of the noise is.

The dome cameras need to have a new driver installed. I will be doing that in the next few days. Hopefully no issues will arise related to the new drivers.

## **V. Instrumentation**

### **1. Science Camera**

The FLI CCD (which was purchased from ERAU and now belongs to the consortium) has been continuing as the workhorse instrument for the telescope. There are the low-signal noise issues mentioned above that need to be tracked down, but in general the camera has continued to work reliably.

### **2. Spectrograph**

No new information here. The goal is for the spectrograph to be up and running as of Peter's next trip to CITO (date TBA).

### **3. Other**

Peter installed new web cameras during his trips down late last year. They were working for some time, though not widely advertised for several months. The software requires new drivers to be installed. I will be doing that today and hopefully all will go smoothly.

The guider has worked pretty reliably this semester. There have been a few scattered issues with it, but it has worked reliably the majority of the time.