



## SARA-CTIO Observatory Director's Report

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### I. Introduction

The SARA-CTIO telescope this semester worked reliably. The primary loss of time was due to issues with the Andor Camera. At this point we are waiting for Peter's trip down next month to realuminize the mirror, install the spectrograph, and bring the Andor camera back to return it to Andor for repair.

### II. Telescope Usage

The table below indicates that weather was the primary cause of nights lost with 22% of the reported time lost to weather. About 8% of reported time lost was due to any cause other than weather.

Month	Percentage of time observations were made	Percentage of time lost to weather	Percentage of time lost to technical problems
March	92.2	7.8	0
April	87.3	12.0	0.7
May	37.3	58.7	4.0
June	64.3	33.8	1.8
July	58.9	27.4	13.7
August	83.8	5.6	10.6
September	60.9	7.6	31.5

### III. Usage by others

Lowell and Chilean observers continue to make use of their time allotments. Though many Chilean observers this semester requested time with the spectrograph, so their time allotments are skewed strongly to mid-November and after in the hopes the spectrograph will be installed and working at that point.

## **IV. Observatory Problems**

Apart from the Andor camera, most issues this semester were relatively minor and were not persistent. The two largest issues were the (continued) absence of a working spectrograph and some pointing issues.

Peter was down at the telescope once this semester to re-install the Andor camera and complete some routine maintenance. He will return in November to install the spectrograph and for realuminizing of the primary.

The Andor camera failed after only about a month back on the telescope. The failure mode appears to be identical to what happened last time. If it *was* the chip, as Andor claimed, then the problem seems to be associated with the camera and not the chip itself. At this point we'll have to wait until we can get it back to Andor to see what they say, and what the timeline will be for repair (or replacement). Given their current schedule and response rates it seems unlikely that a replacement will save us any time.

Now that the FLI camera is back on the telescope, please be aware of the ongoing problem with the Abort button in the Observation window. When pressed it crashes the connection to the FLI CCD camera. Please see the document on the Telescope Computer desktop for re-establishing the camera connection in the fastest and most reliable way. In addition the FLI camera has noticeably more cosmetic issues and sensitivity than it did even when we removed it a short time ago. It still seems to be producing good science, but users should be aware of the limitations of the camera.

## **V. Instrumentation**

### **1. Science Camera**

The FLI CCD (purchase from ERAU) has been working reliably since being reinstalled.

Until Andor receives the camera and can take a look at it we will not have a timeline for return of the primary science camera.

### **2. Spectrograph**

Hopefully all is now working with the spectrograph and the previous issue(s) with the fiber that prevented installation on Peter's last two trips have been fixed. It should be mid- to late November before the spectrograph is ready for consistent use. Once it is installed, any users with significant experience on the SARA-KP spectrograph are welcomed to help commission this instrument.

### **3. Other**

No other significant issues.