The SARA Observatory Southeastern Association for Research in Astronomy



SARA-CTIO Observatory Director's Report

October 8, 2021 Todd Hillwig Valparaiso University

I. Introduction

The SARA-CTIO telescope this semester worked reliably. The primary loss of time was due to weather. Technical losses were mostly due to filter wheel operation issues. Once addressed the problem has not repeated. At this point we are waiting for Peter's trip down to install the spectrograph and perform routine maintenance.

II. Telescope Usage

The table below indicates that weather was the primary cause of nights lost with 19% of the reported time lost to weather. About 8% of reported time lost was due to any cause other than weather.

Month	Percentage of reported time	Percentage of time lost to	Percentage of time lost to technical
	observations were	weather	problems
	made		-
March	69.4	6.4	24.2
April	95.4	3.4	1.2
May	50.0	39.4	10.6
June	70.2	19.5	10.3
July	82.9	9.1	8.0
August	68.5	29.4	2.1
September	70.0	25.2	4.7

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, which is not installed yet.

IV. Observatory Problems

The two largest issues were the (continued) absence of a working spectrograph and some filter wheel issues. Once the belts were replaced and tightened the filter wheel has worked well.

The new Andor camera has been delivered to the observatory and installed on the telescope. This is primarily to confirm that the camera works properly while the warranty is still in effect. The existing camera has been working well after being returned from Andor last year.

V. Instrumentation

1. Science Camera

We need to decide which of the two Andor cameras we wish to use as the primary science camera and which to retain as the back-up camera. It may be too early to tell at this point, especially until a full characterization of the newest camera can be performed.

2. Spectrograph

The spectrograph should be installed upon Peter's next trip. 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.