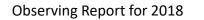


# Observing Report for 2018

Presented by Norm Vargas Lowell Observatory, Flagstaff, AZ

March 18, 2019

























## Observing and Weather Statistics New PoP Changes New Swiss Army Gui































### **Observing Statistics**

- 325 nights scheduled in 2018. We started in February again to support the NOAO observing.
- 221 nights with at least one object observation
- 68.0% success rate
- 104 nights without an object observation





















### Monthly Success

February 12/28 42.9% March 6/31 19.4% April 19/30 63.3% May 18/31 58.1% June 28/30 93.3% July 28/31 90.3%

August 29/31 93.5% September 29/30 96.7% October 17/31 54.8% November 19/29 65.5% December 16/23 69.6%











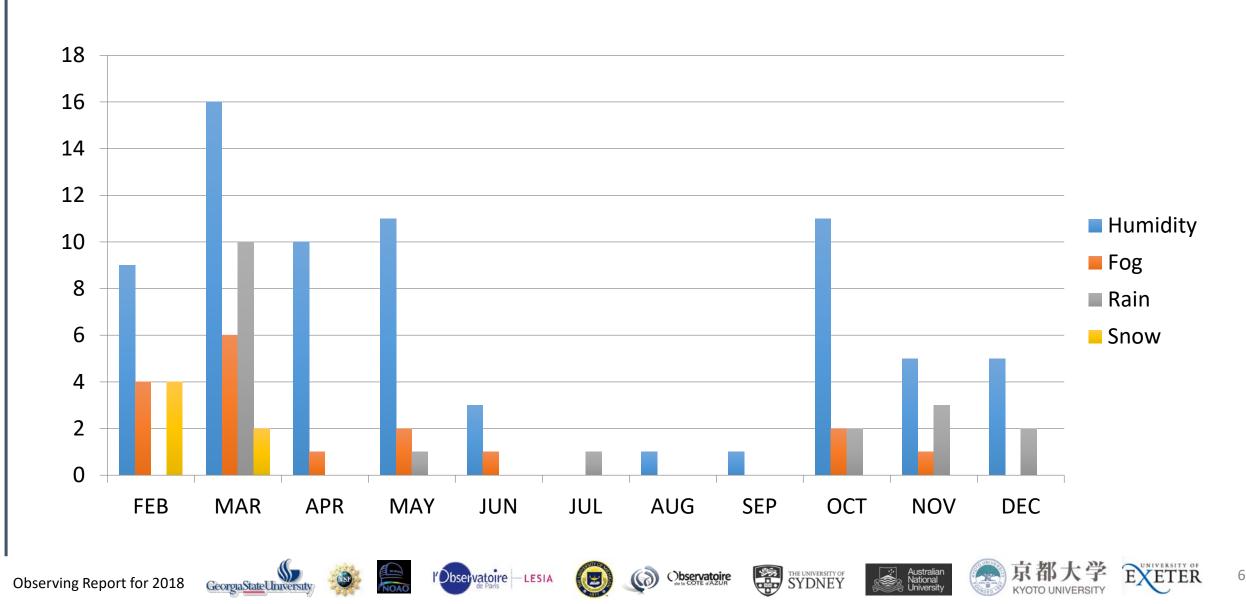








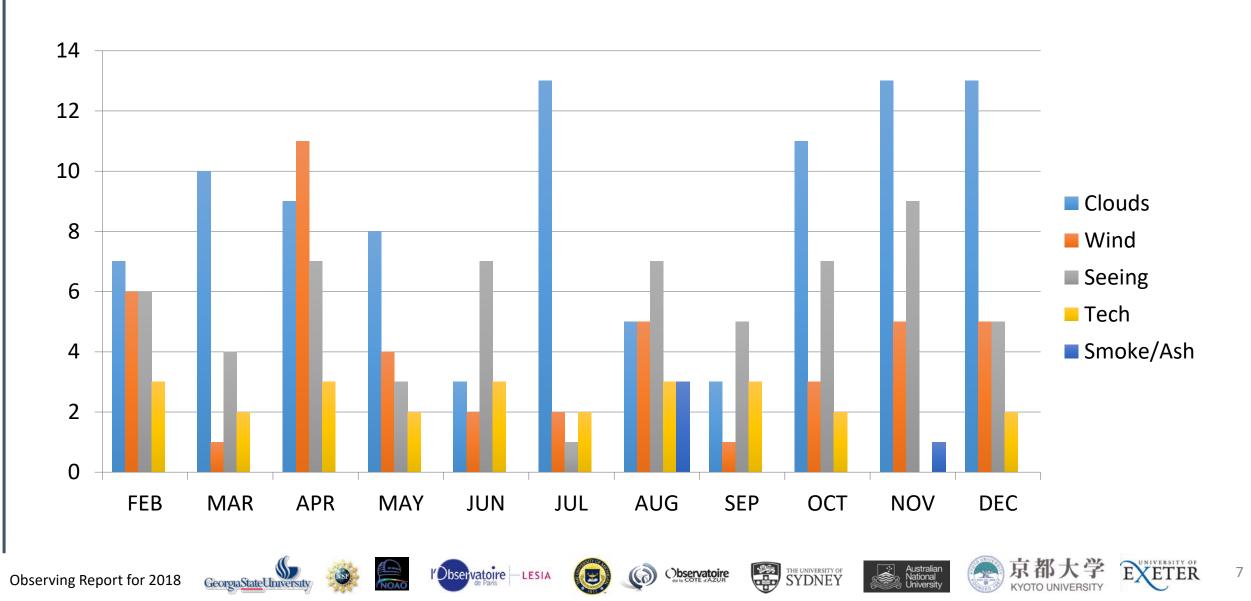
#### Hindrances to Data Collection







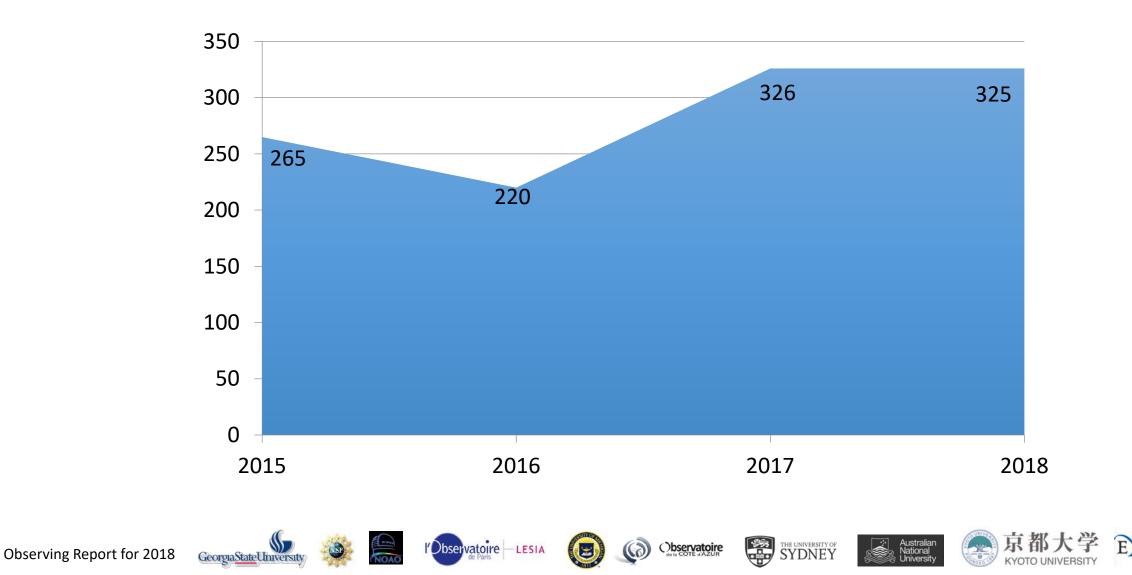
#### Hindrances to Data Collection







### Nights Attempted 2015-2018



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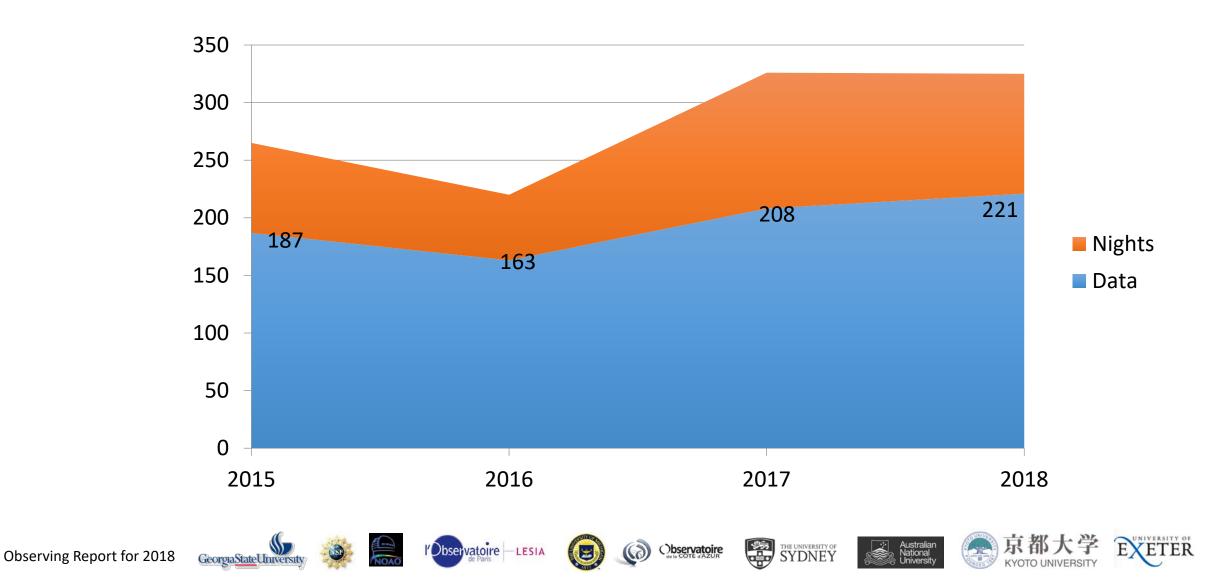






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### Nights with Data 2015-2018





### Something New for PoP changes

PoP changes will be quicker now with the new gui that will move the PoP mirrors in or out and also move the periscope to the correct position. It will then open a new Pico 2 M10 window so its position can be adjusted as well.

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#### The New Obsgtk



Observing Report for 2018











#### The New Obsgtk

- New telescope gui was needed to save screen space
- It incorporates functions of 7 guis, but includes only what is needed to observe
- Combines telescope, tiptilt, labao, telescope wfs, acquisition and finder guis
- Must communicate with 9 servers and perform at least 85 functions
- Displays 9 cameras and plots: ACQ, Finder, 2 Spy cams, M10 cam, TT or WFS plots, Telescope WFS, and Labao WFS
- Developed by Narsi Anugu with input from Theo, Chris, Judit, Olli and Norm over the last 5 months. Used on sky since November.
- Some room for new buttons, but already quite filled



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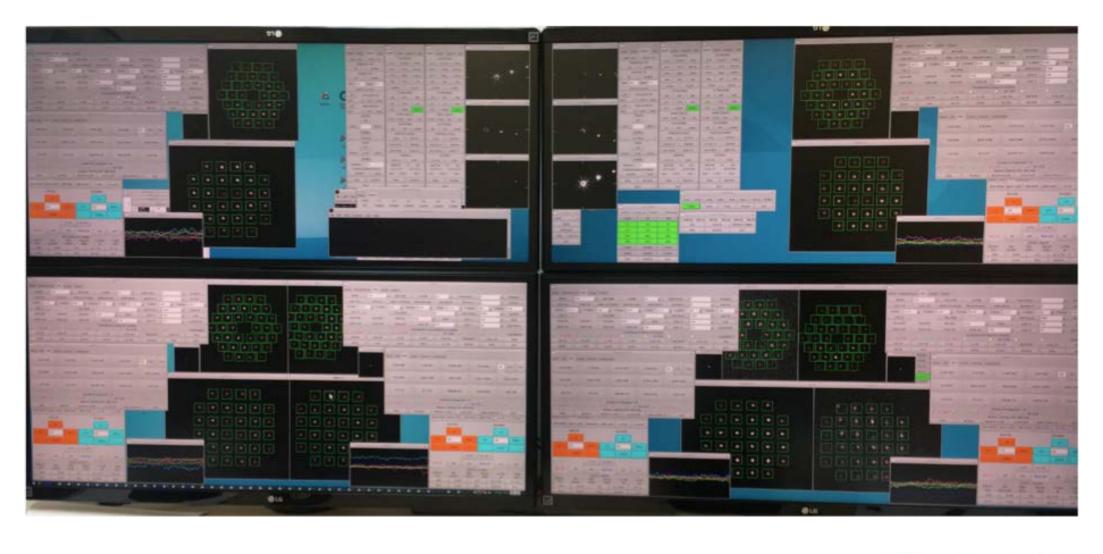








#### The Nightmare that Wasn't















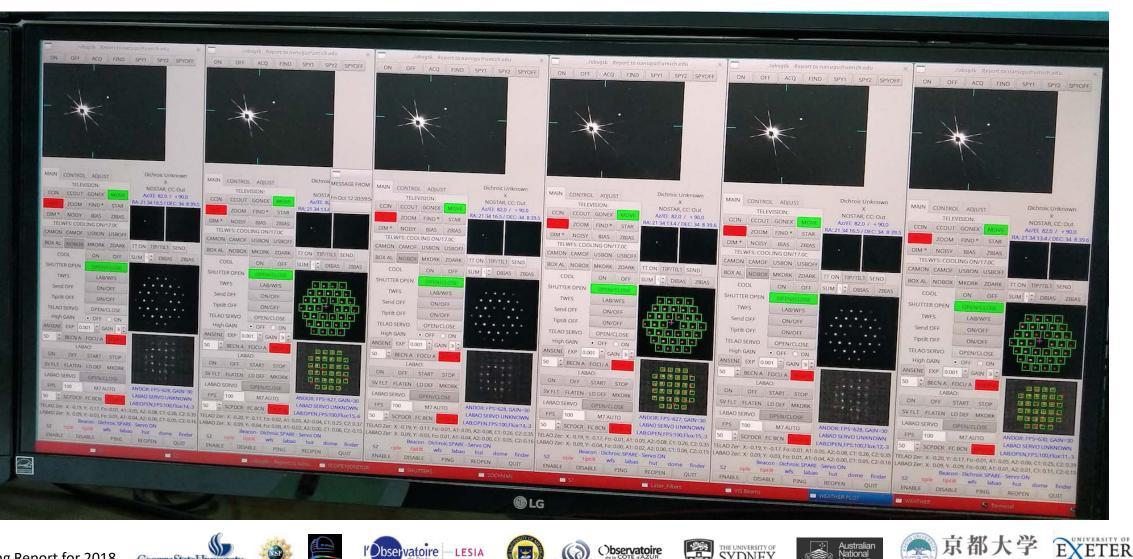






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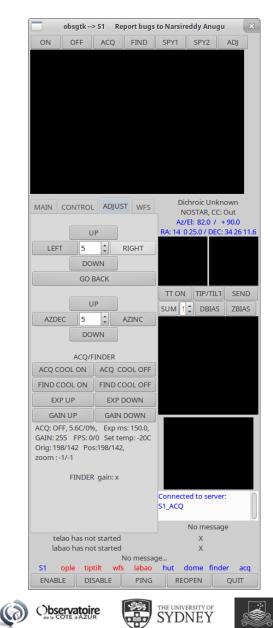
Observing Report for 2018

#### **Control Tab**

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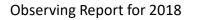
Vational





### Difficulties in Creating Obsgtk

- Integrating communications with all 9 servers: telescope, ople, tiptilt, telescope wfs, labao, hut, dome, acquisition and finder
- Handling error messages from each server Runaway pop ups!!!
- Integrating cameras into one window when output from each varies so much. Images are binned in the servers before being sent to guis.
- Integrating the MOVE button to work with new cameras
- Deciding where to put the buttons and what to call them, ie. too many cooks in the kitchen or trop de cuisiniers dans la cuisine.
- Deciding what do we really need and use and what is too much













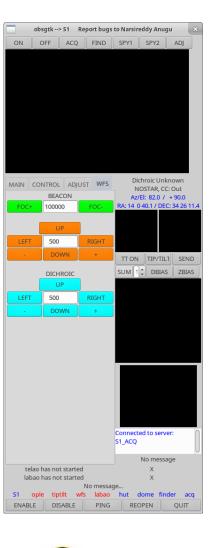
CHARA

The CHARA/NPOI Science Meeting 2019

#### Future expansion



# What do we put here in all this empty space?



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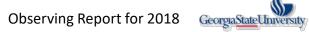






























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l'Observatoire - LESIA



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