

The new mobile Telescope at the CHARA array

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Status at last year's CHARA meeting



The new mobile
Telescope at the CHARA
array

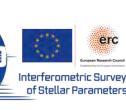




Telescope Installation

2024-03-19

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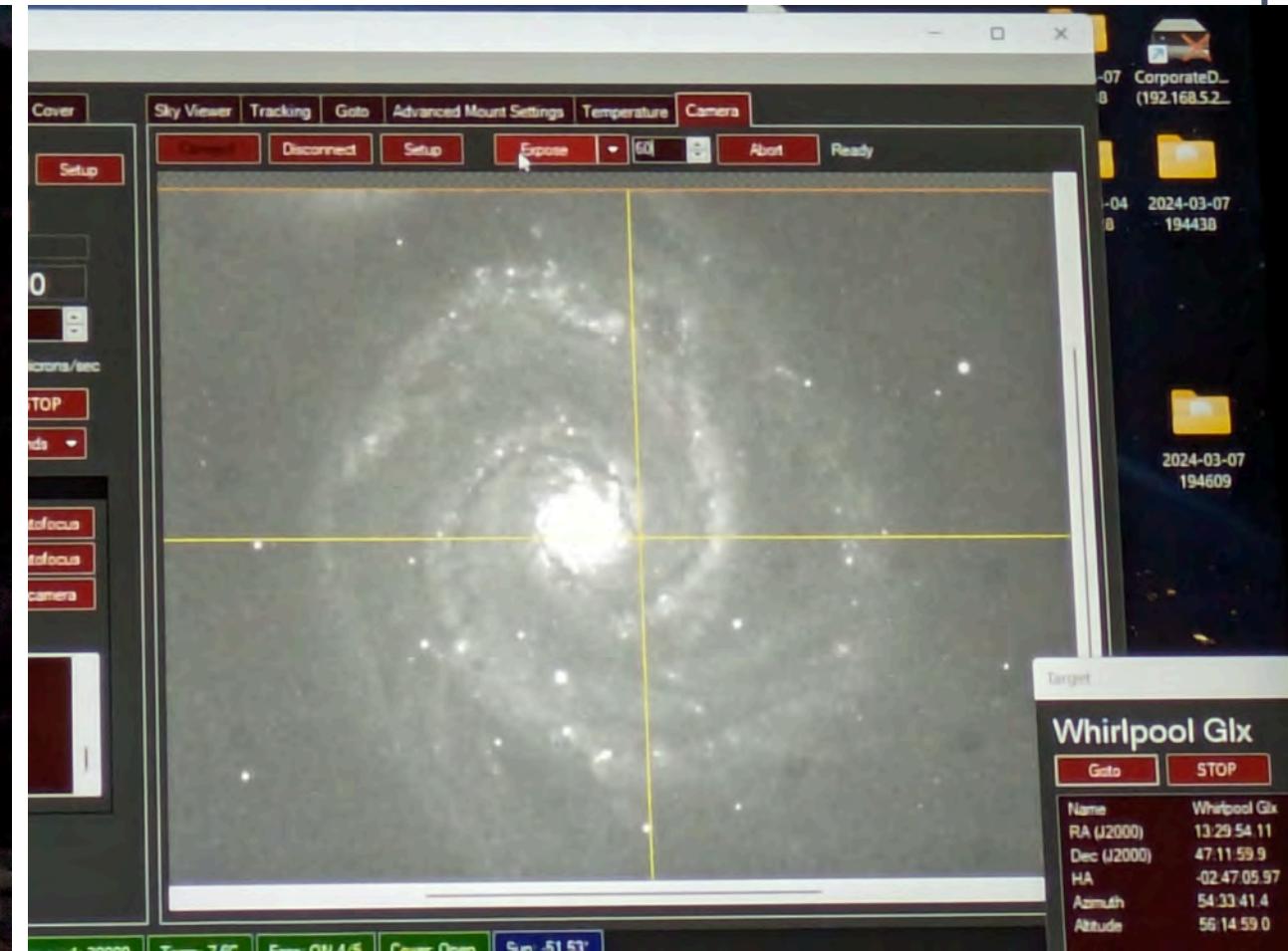


Australian
National
University





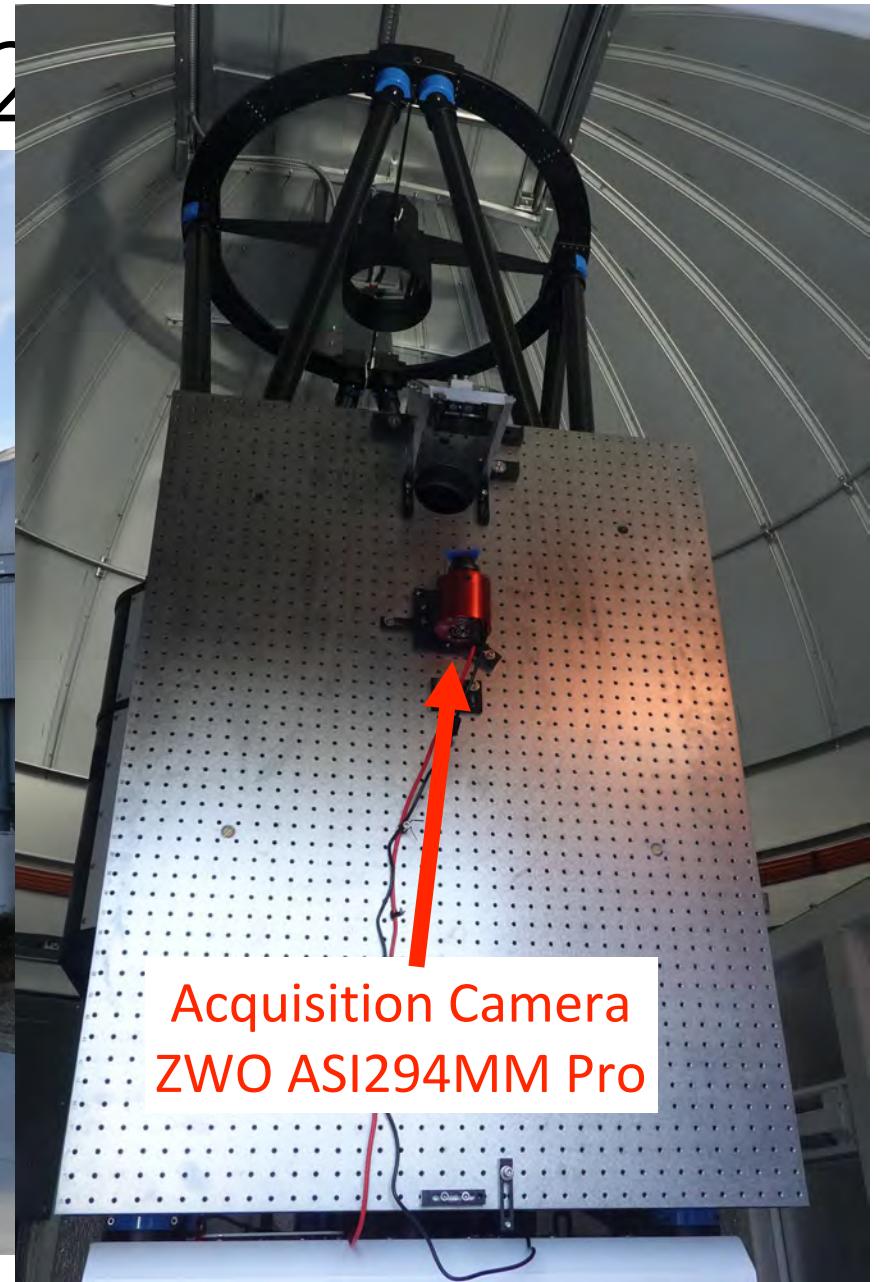
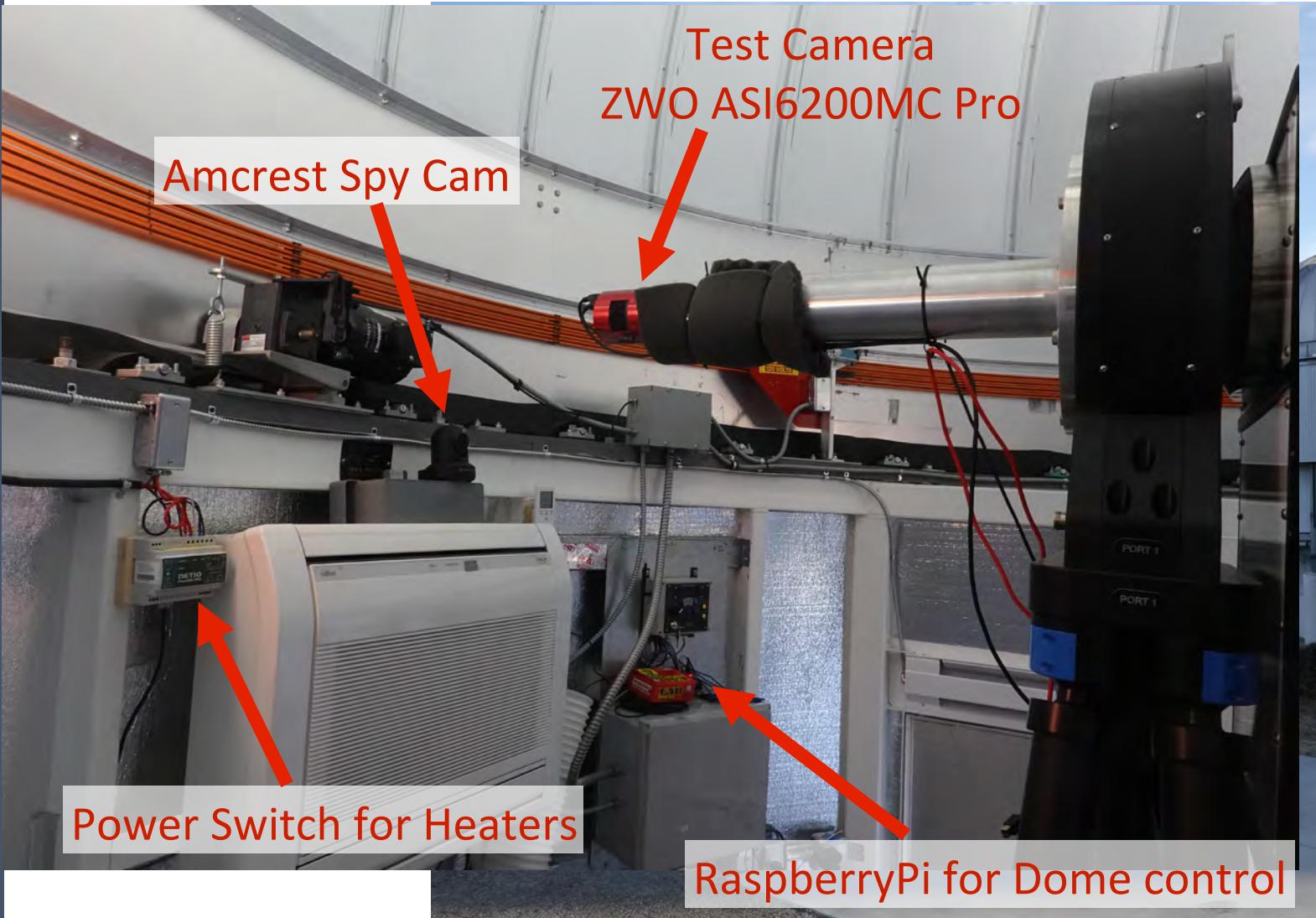
First light



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Status April 2025





Telescopes do not like it cold

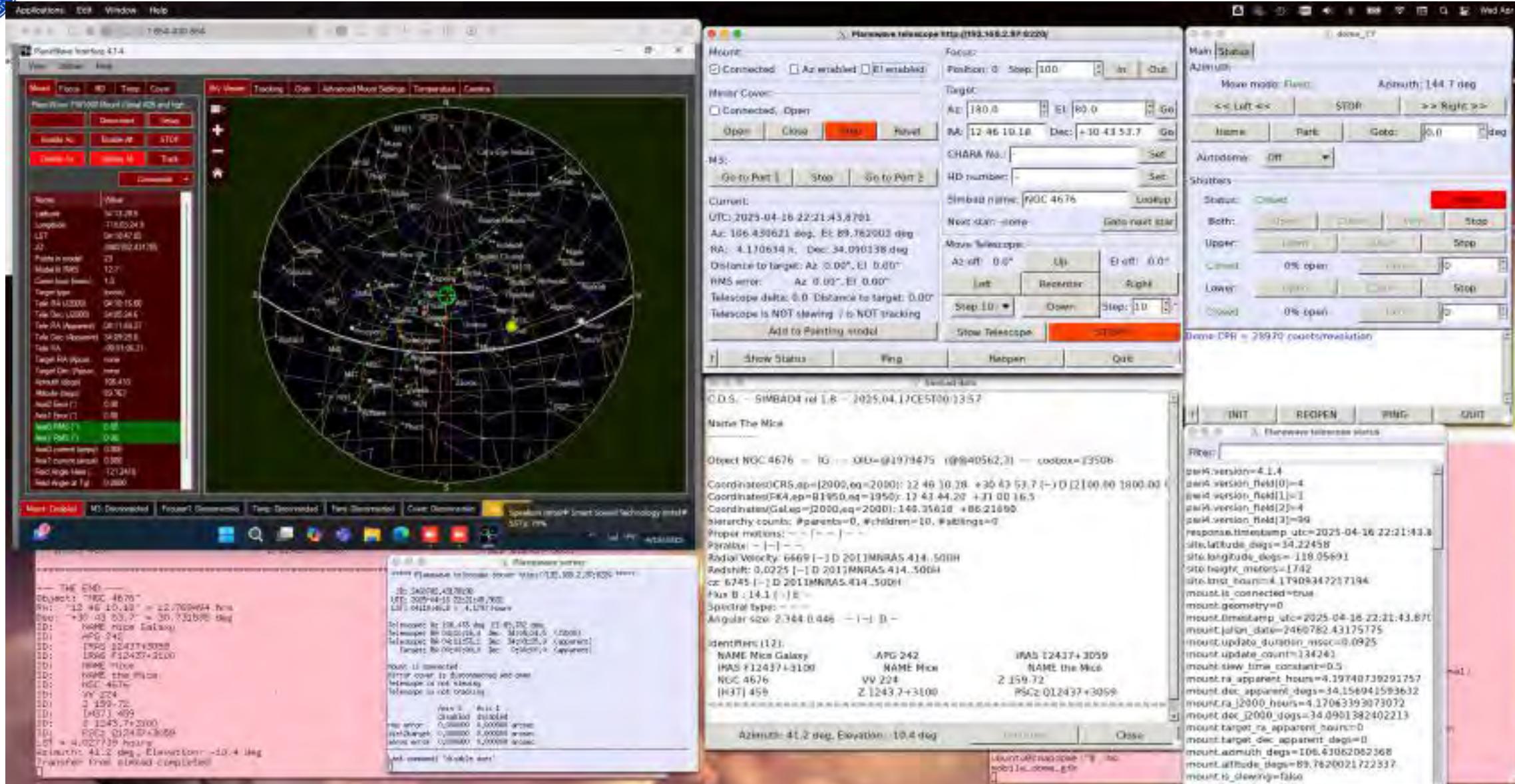


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Software



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Pointing Model

- Integrated in PlaneWave software
- Can work fully automatic:
Point telescope, find stars, solve for pointing direction
- Not an option for us: FoV about 1 arcmin
- Do it manually:
Point to bright star, center by hand, add point to model

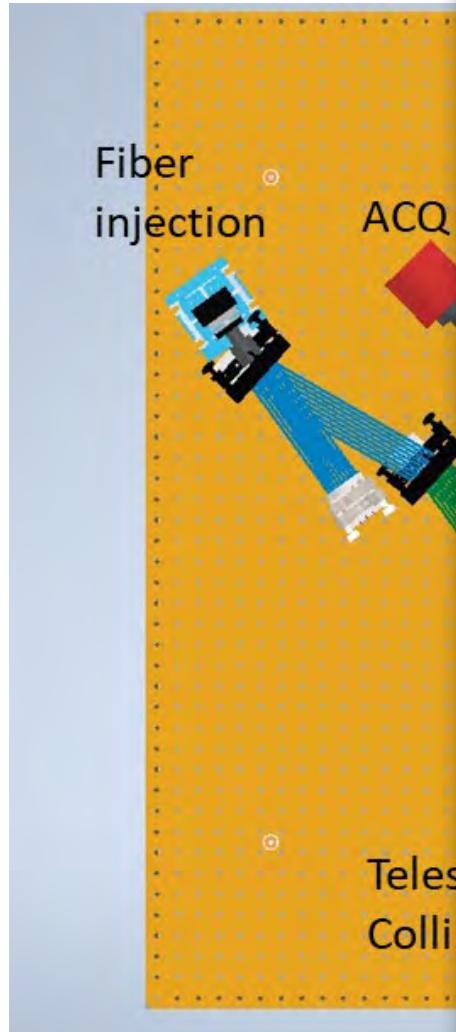


Pointing Model

The image displays two windows of the PlaneWave Interface software. The left window, titled 'PlaneWave Interface-81.0', shows a table of 'Calibration points' with columns for #, Timestamp, J2000 RA, J2000 Dec, Theta Encoder, Phi Encoder, Total Error, Use, RA Sky Error, Dec Error, Azimuth, Altitude, and Theta Error. The right window, also titled 'PlaneWave Interface-81.0', shows the 'PointXP 6' module. This module includes tabs for Mount, Focus, M3, Temp, Cover, Sky Viewer, Tracking, Goto, Advanced Mount Settings, Technical, and Camera. The 'PointXP 6' tab is active, showing various pointing parameters and a circular plot of calibration points. The status bar at the bottom of both windows indicates 'Mount: Disabled', 'M3: Disconnected', 'Focuser1: Disconnected', 'Temp: Disconnected', 'Fans: Disconnected', 'Cover: Disconnected', and 'Sun: 47.3°'.

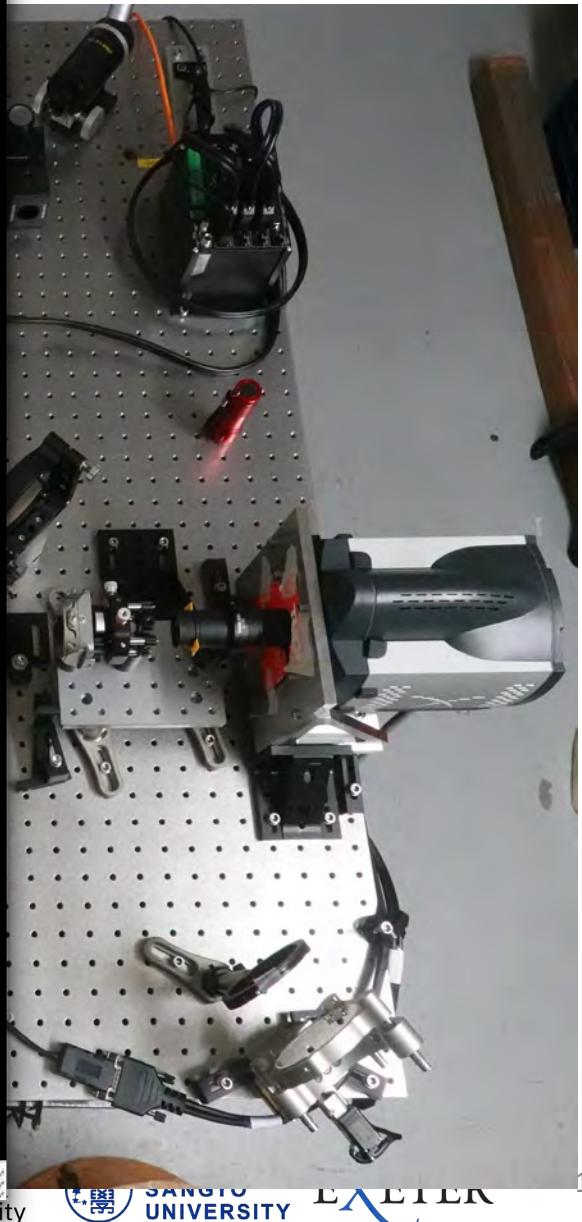
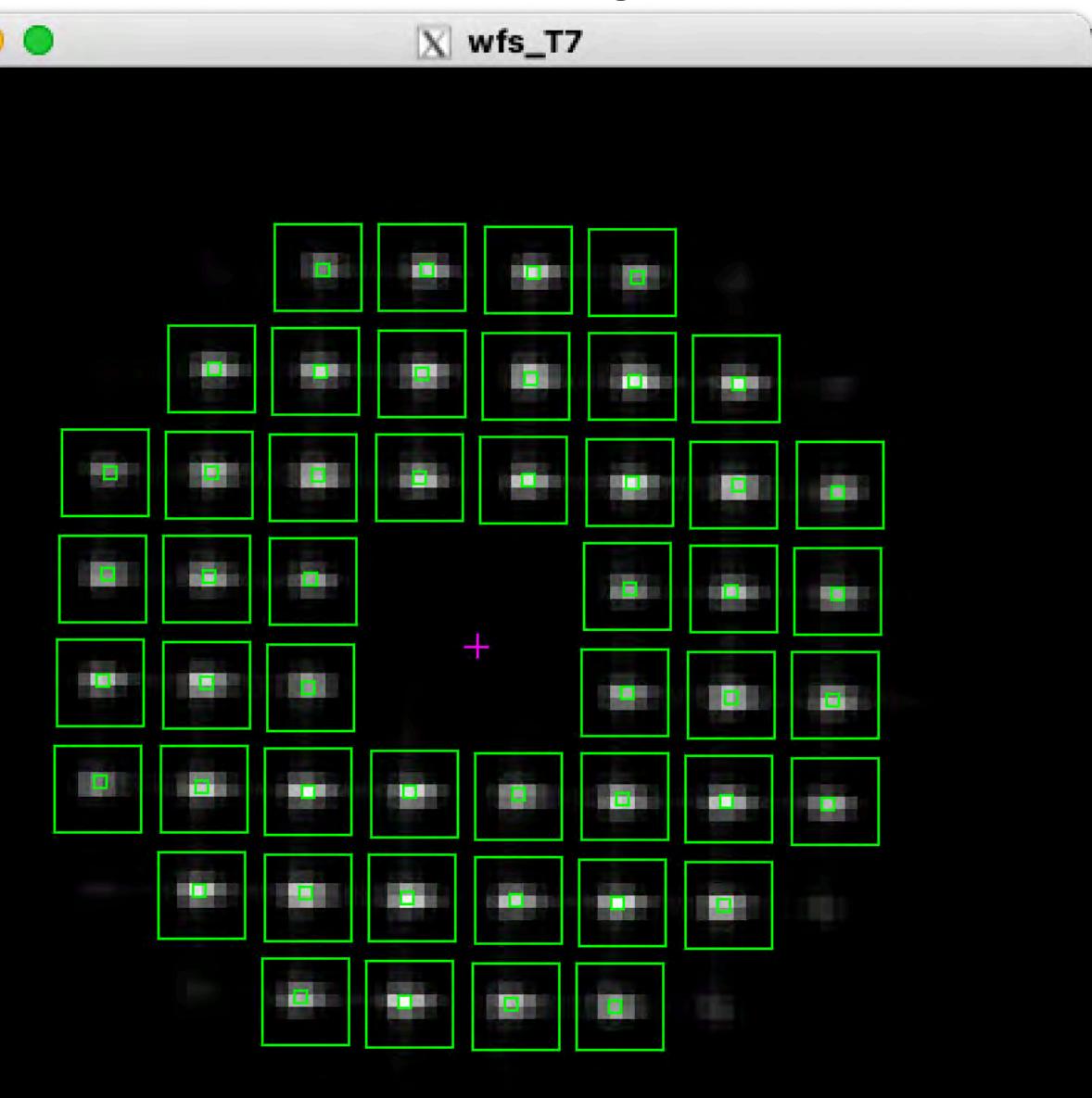
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WFS path ins

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Next Steps

- Connect DM
- Close AO loop
- Acquisition camera
- Mount NIB on telescope



Results so far: pretty pictures



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