

Palomar Adaptive Optics Test Plan

Title	Acquisition Camera Calibration
Version	1.0
Date released	4/2/2007
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Time requested	20 min. NGS, 20 min. LGS
Required conditions	Partly cloudy OK.

Purpose

Calibrate the Acquisition camera NGS and LGS plate scale and orientation.

Test procedure

NGS:

1. Acquire a binary star with separation 10"-30", magnitudes <10 from the WDS Calibration Candidate catalogue: <http://ad.usno.navy.mil/wds/orb6/orb6c.html>.
2. Install HOWFS reflective spot, Acq fold mirror.
3. Center binary in Acq field of view.
4. Record 2 unsaturated images with the acquisition camera.
5. Acquire a second binary star and repeat steps 2-4.

LGS:

1. Install HOWFS reflective spot, Acq fold mirror.
2. Center bright (V=10) NGS on PHARO.
3. Project laser.
4. Center laser in Acq (*not* on reflective spot).
5. Record Acq image of LGS and a PHARO image of the NGS (integrate long enough to get ~10k peak counts)
6. Offset telescope N, S, E, W in a cross pattern with a throw of 7.5". At each position, record an Acq image and a PHARO image.

Results and conclusions