

Palomar LGSAO Engineering Summary 08/26/07 UT

Afternoon:

- Laser 8.5W, power steady.
- BTO aligned and ready.
- AO A-OK.

Night log:

1945 Starting NGS on SAO 67129
Strehl=58%, open-loop FWHM=0.60" in K.
1955 NGS checkout complete. Waiting for FAA clearance.
2010 Preparing for laser propagation towards TYC 2632-0614-1.
2019 Projecting 10deg. east of zenith.
Chopper no responding.
2s background: 1188098633
7150 pk=99, FWHM=13x13, Pk=99
9150 pk=80
7150 pk=95
5150 pk=82
2s LGS images: 98895, 98911.
2032 Found chopper cable disconnected. Reconnected and fixed problem.
2035 Back on sky, HOWFS 150cts @ 100 Hz.
Backgrounds: 9-11
Star (triple): 12-14 25%
Optimizing LOWFS focus zeropoint:
+0.5mm 26%
+1.0mm 28%
0.0 28%
-1.0mm 20%; Leaving at 0mm offset.
Optimizing HOWFS CO file:
co_default2 & zero gave lower Strehl than co_default4
Calibration images through PHARO frame 47.
2057 Handing over system to observers.
2104 Slewing to first science target.
2130 Acquisition complete.
2135 Switching to NGS backup program due to thickening clouds.
2200 Clouds clearing; sending spotters back out.
2220 Calling spotters back in.
2318 Sending spotters back out.
0000 Calling spotters back in.
0015 Sending spotters back out.
0045 Calling spotters back in.
0107 Sending spotters back out.
0130 Acquisition complete on science target 2.
0210 Shuttering due to clouds, bringing spotters in. 30 minutes of successful observations.
0420 Calling night due to clouds. Final laser power: 7.8W.