

Palomar LGSAO Engineering Summary 04/25/07 UT

Afternoon:

- Found North diode module of 1.06 laser to be underperforming. Swapping it out with spare with Merle, Steve E., and John H. help.
- HOWFS-DM registration problem diagnosed and solved. Will test tonight.
- PHARO Phase retrieval problem solved.

Night log:

1915 Opening for twilight flats.  
1945 Moving to HD 59509 for AO checkout.  
2000 AO connection to TCS failed.  
2005 Strehl ~70%, V seeing = 0.70"  
2010 TCS connection failed again. Rebooting TCS.  
2025 TCS connection failed again. Restarting older version of TCS.  
2035 Taking data on HD 59509 again.  
2055 HO DSP crash.  
2110 Back on target.  
2112 AOCPC crash.  
2124 Back on target.  
2148 Moving to SAO 80207 as PSF calibrator.  
2211 Moving to SAO 62608 for pupil registration experiment.  
2245 Moving to Titan/Saturn.  
2330 Starting LOWFS background test. 50Hz backgrounds, saved in /data/25apr07/bkg/  
Targ timetag  
5 83335  
7 83885  
8 84199  
12 84425  
15 84652  
19 84858  
14 85164  
13 85396

Note: LOWFS counts when in 'acq' position are ~100 at 50Hz.

0015 Moving to SN2007af for faint NGS testing.  
Found SN 10" off (?)  
Acquired: 30 cts @ 50 Hz.  
Imaged in Ks, H, J. FWHM in K ~0.12".  
0135 Moving to M57 for faint-star NGS demo.  
took ring 30s acq integ. and sky.  
0209 AO crash - DSPs not responding. Restarting AO system.  
0216 Recovered, restarting on M57.  
0225 Restarting on a star. SSMS had moved 5".  
0245 Moving to NGC6659 for LOWFS performance test.  
0425 Completed 3 stars, V=14.0 to V=17.2.  
0430 Attempted to close HO loop only - did not do what I thought...  
0445 Taking images of M20 cluster.  
0530 Parking telescope and closing dome.