

Palomar Adaptive Optics Test Plan

Title	LGS-AO Science Night Checklist
Version	1.1
Date released	12/11/2008
Lead	A. Bouchez
Time requested	N/A
Required conditions	N/A

Purpose

- Provide a schedule and checklist of science night tasks.

Procedure

First night tasks indicated in blue.

Before 4:00pm

1. AO bench LGS setup and checkout.
2. Cofocus AO wavefront sensors and science instrument.
3. Verify LOWFS-Acquisition camera mapping. Recalibrate if necessary.
4. Start up laser. Bring to full power without optimization to allow temperature to stabilize.
5. Perform first half of BTO setup procedure (no stimulus laser)
Subsequent nights, start up BTO as follows:
 - 5.1. ssh -Y aousr@198.202.125.152
 - 5.2. bto_ctrl
 - 5.3. Uncover LLT primary mirror cover.

After 4:00pm

6. Remove Coude block.
7. Test laser interlock system.
8. Perform second half of BTO setup procedure (using stimulus laser).
9. Check laser power. Optimize power and wavelength tuning.
10. Perform BTO checkout procedure.
(Abbreviated checkout procedure on subsequent nights)

Sunset

11. Perform NGS checkout.
12. Perform LGS checkout.
13. Optimize laser as necessary throughout night.

Science Observations

14. Follow LGS Target Acquisition procedure.

End-of-night

15. Close and lock Coude block.
16. Power down laser.
17. Install LLT primary mirror cover (Cover all BTO optics on final night)

Notes