

40m to-do list

2 Sept 2014

ALS

- EQ, 2 Sept **Xend PDH checkout, why saturating??**
- EQ, 2-5 Sept **Ygreen modematching on PSL table**
- EQ, 2 Sept **UGF "servos" for phase trackers - fix up**
- EQ, 24 Aug **Should noise eaters be on for aux lasers? Are they already? Will this solve mystery 800MHz noise on Y beat PD?**
- JCD **PDH requirement from ALS noise requirement**
- EQ, 2-5 Sept **Triggering for end PDH boosts**
- JCD, 2 Sept **Set ALS control signal limits to about factor 5 larger than amount needed to hold lock. This should reduce the size of kick to mirrors at lock loss.**
- JCD, 2 Sept **Balance ETMs. Lock ALS diff, shake ETMs, adjust output matrix so they cancel.**
- JCD, RXA before 5 Sept **Fast find IR resonance script**
- EQ, before 5 Sept **ALS watch script change - look at displacement, not force**
- JCD, Sept **Check mode hopping temps for PSL, Aux lasers (after fiber beat hardware installed)**
- NS-L, before 5 Sept **X green mode matching**
- KA, Sept **X green ASS tune-up for new telescope**
- Y green remote PZT install**
- ALS BLRMS to monitor noise**

Optical levers

- JCD, 14 Aug (start) **PRM loop tune-up: Minimize motion in PRMI case, minimize fluctuations of POP 22/110 power**
- EQ, before 5 Sept **Spot size check on all QPDs - are the spots reasonable?**
- EQ, before 5 Sept **How to increase the range for ETMY?**

ASC

- JCD, before 5 Sept **Test POP QPD -> common ETMs**
- GV, before 5 Sept **Lock single arms, shake test masses, see effect at POP QPD to infer Gouy phase. Check with Gabriele's model, and move QPD to location where PRM effect is minimal.**
- EQ, KA 2-5 Sept **POP 22 razor blade test for yaw ASC**

LSC

- JD, 2 Sept **Try DARM on sqrtInvTrans**
- EQ, 2-5 Sept **Implement UGF servos for LSC loops**
- JCD, 2 Sept **Write a lockloss script that is run by the ALS watch scripts - print a PDF of error and control signals for every lockloss, and save it somewhere**
- EQ, before 5 Sept **Look at possibilities for engaging AO path**

MC / FSS

- RXA, before 5 Sept **Look at boards to compare with drawings - why doesn't model match measurement?**
- RXA, before 5 Sept **Where is the 1 MHz bump coming from? Get rid of it.**
- RXA, before 5 Sept **What is FSS mixer lowpass? Remove and replace if same as MC demos board.**
- RXA **Maybe remove z @ 70 kHz and p @ 140 kHz which are flattening out MC TF.**
- NS-L **MC WFS loop tune-up**

Soon - within 2 days

Pretty soon - within 1 week

When time - within 1 month

If time - within 1 year