

40m to-do list

14 Aug 2014

ALS

- JCD, 14 Aug **Check noise spectra. Still okay after everyone's touching? Make template and reference spectra.**
- JCD, 14 Aug **Balance ALS input matrix. Lock ALS comm/diff, drive MC frequency, set coefficients so no signal in diff.**
- JCD, 18-22 Aug **Check mode hopping temps for PSL, Aux lasers**
- JCD, 15 Aug **Balance ETMs. Lock ALS diff, shake ETMs, adjust output matrix so they cancel.**
- Should noise eaters be on for aux lasers? Are they already? Will this solve mystery 800MHz noise on Y beat PD?**
- JCD, RXA 18-22 Aug **Fast find IR resonance script**
- JCD, 15 Aug **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.**
- EQ, before 29 Aug **ALS watch script change - look at displacement, not force**
- EQ, before 29 Aug **End PDH checkout, incl. post-mixer lowpass**
- NS-L, before 5 Sept **X green mode matching**
- KA, 1st week Sept **X green ASS tune-up for new telescope**
- Y green remote PZT install**

Optical levers

- JCD, 14 Aug (start) **PRM loop tune-up: Minimize motion in PRMI case, minimize fluctuations of POP 22/110 power**
- EQ, before 29 Aug **Spot size check on all QPDs - are the spots reasonable?**
- EQ, before 29 Aug **How to increase the range for ETMY?**

ASC

- JCD, 14-15 Aug **Wire ASC model so POP QPD signal can go to ETMs.**
- GV, before 5 Sept **Lock single arms, shake test masses, see effect at POP QPD to infer Gouy phase. Check with Garbiele's model, and move QPD to location where PRM effect is minimal.**
- EQ, KA **POP 22 razor blade test for yaw ASC**

LSC

- EQ, 14 Aug **With measured arm losses, when do we start to see REFL DC dip? At what arm buildup powers?**
- EQ, 14 Aug **Include new AO path TFs into CM model
Look at possibilities for engaging AO path**
- EQ, before 29 Aug **Confirm arm loss measurement**

MC / FSS

- RXA, before 22 Aug **Look at boards to compare with drawings - why doesn't model match measurement?**
- RXA, before 22 Aug **Where is the 1 MHz bump coming from? Get rid of it.**
- RXA, before 22 Aug **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.**
- Check response of MC REFL PD**

Soon - within 2 days

Pretty soon - within 1 week

When time - within 1 month

If time - within 1 year