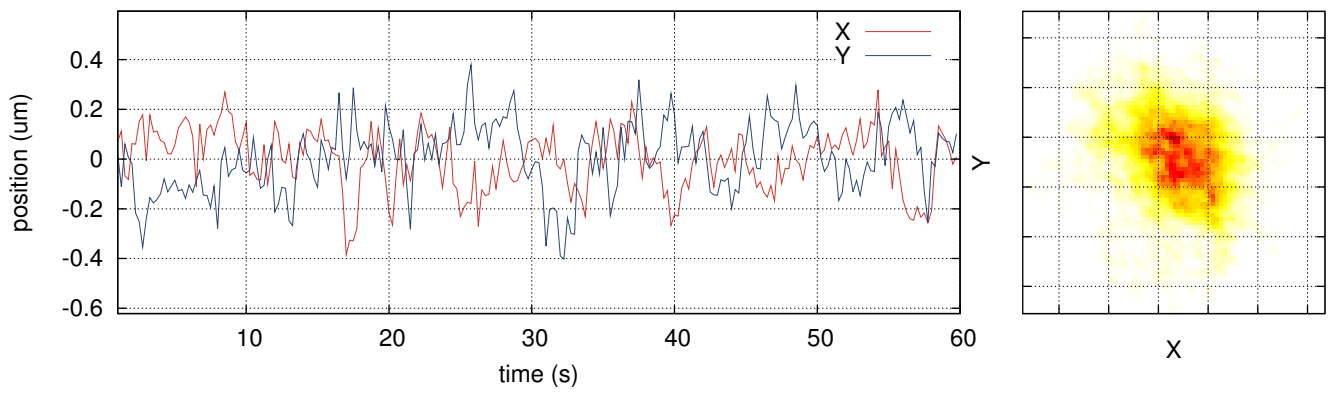
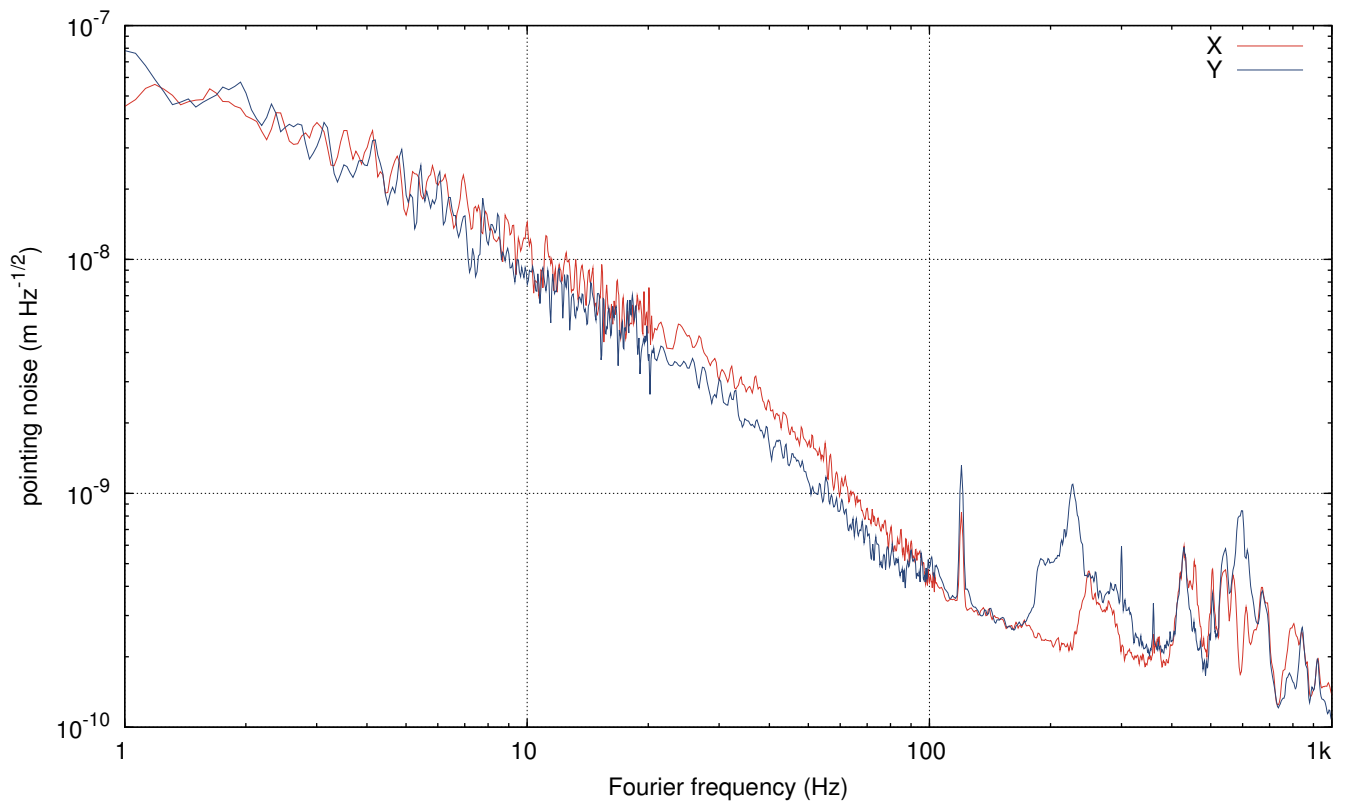


| POWER STABILIZATION | |
|---------------------------|---|
| Measurement: | 60 s = 1.0 min, 07. Mar 2012 10:08 PST |
| Stabilization: | first loop closed, integrator on; second loop injection off |
| Reference signal: | -2.459 V |
| First-loop gain: | -3.2 V |
| Last saturation event: | 6d 19h 36m |
| Average AOM diffraction: | 3.92% |
| Diffraction signal range: | 2.19% . . . 5.97% (3.78% peak-to-peak, 32768 Hz samplingrate) |

| POWER NOISE | | |
|----------------------------|---|---|
| | Photodiode A (PDA) | Photodiode B (PDB) |
| Average DC signal: | 12.507 V | 12.455 V |
| FILT signal range: | 0.875 V . . . 3.802 V (0.204 V _{rms}) | 2.443 V . . . 2.543 V (0.011 V _{rms}) |
| FILT samplingrate: | 32768 Hz | 32768 Hz |
| Photocurrent: | 3.8 mA | 3.8 mA |
| Relative shot noise level: | 9.22e-09 Hz ^{-1/2} | 9.24e-09 Hz ^{-1/2} |



| POSITION FLUCTUATIONS | |
|-----------------------|---|
| X position: | 26.875 ± 0.145 um, 26.271 um . . . 27.396 um |
| Y position: | -20.688 ± 0.160 um, -21.309 um . . . -20.094 um |
| Samplingrate: | 32768 Hz, 32768 Hz |

| D A Q | |
|-----------------------|--|
| Measurement duration: | 60 s = 1.0 min |
| Measurement start: | 07. Mar 2012 10:08 PST (07. Mar 2012 18:08 UTC, 1015178923 GPS) |
| NDS: | h2nds0:8088 (v12r0) |
| User: | controls@h2pslws0 |
| Channels: | H2:PSL-ISS_PDA_OUT 32768 Hz, H2:PSL-ISS_PDB_OUT 32768 Hz, H2:PSL-ISS_DIFFRACTION_OUT 32768 Hz, H2:PSL-ISS_QPD_DX_OUT 32768 Hz, H2:PSL-ISS_QPD_DY_OUT 32768 Hz, H2:PSL-ISS_LOOP_STATE_OUTPUT 16 Hz, H2:PSL-ISS_REFSIGNAL_MON_OUTPUT 16 Hz, H2:PSL-ISS_GAIN 16 Hz, H2:PSL-ISS_SECONDDLOOP_CLOSED 16 Hz, H2:PSL-ISS_SAT_MIN 16 Hz, H2:PSL-ISS_SAT_HOUR 16 Hz, H2:PSL-ISS_SAT_DAY 16 Hz |
| Raw data: | rawdata.zip (attached to this .pdf file, use Adobe Reader) |
| Calibration: | default.cali (embedded), 01. Jan 1970 00:00 UTC |
| Report source files: | report.zip (attached to this .pdf file, use Adobe Reader) |
| Program: | iss_rpn.py v0.6, Patrick Kwee, patrick.kwee@aei.mpg.de |

| I N F O | |
|---|--|
| Measurement method: The power noise downstream of the PMC is measured with two low-noise 2 mm InGaAs photodetectors. One of the photodetectors is used as sensor in the ISS first feedback control loop. The signal to the AOM driver is used to estimate the free-running power noise of the laser system. | |
| <i>no comment</i> | |