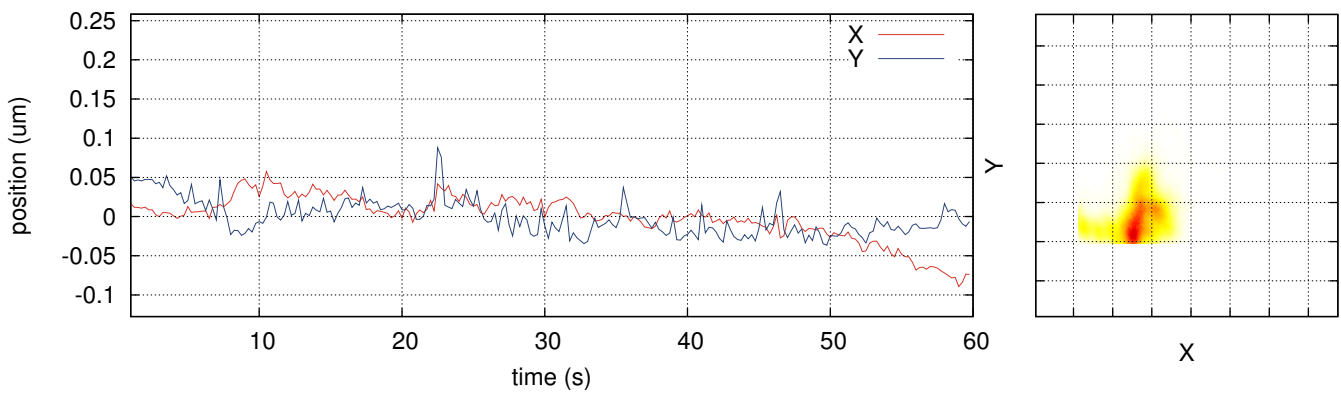
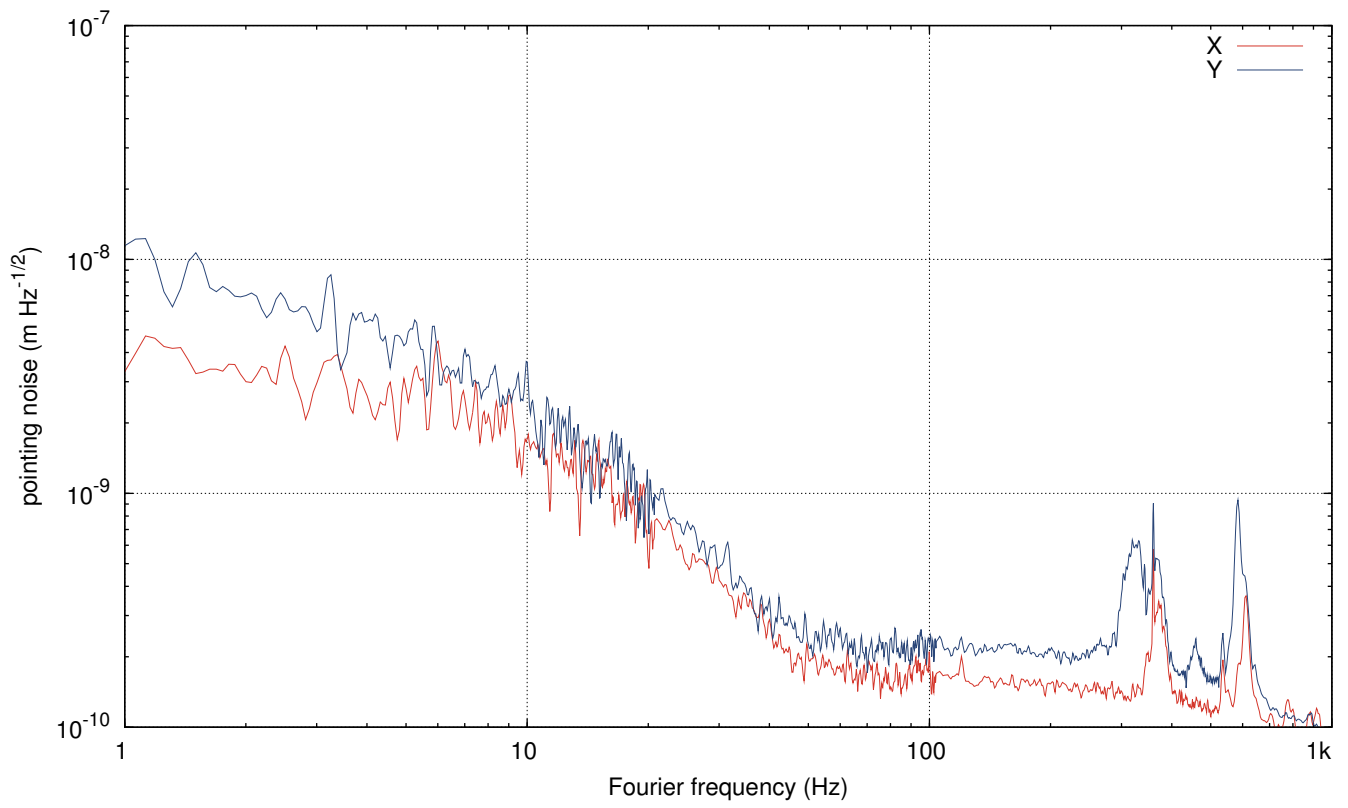


POWER STABILIZATION	
Measurement:	60 s = 1.0 min, 10. Jul 2012 15:29 PDT
Stabilization:	first loop closed, integrator on; second loop injection off
Reference signal:	-2.631 V
First-loop gain:	7.0 V
Last saturation event:	0d 0h 2m
Average AOM diffraction:	4.81%
Diffraction signal range:	4.50% . . . 4.96% (0.45% peak-to-peak, 32768 Hz samplingrate)

POWER NOISE		
	Photodiode A (PDA)	Photodiode B (PDB)
Average DC signal:	12.720 V	13.331 V
FILT signal range:	2.522 V . . . 2.562 V (0.004 V _{rms})	2.662 V . . . 2.671 V (0.001 V _{rms})
FILT samplingrate:	32768 Hz	32768 Hz
Photocurrent:	3.8 mA	4.0 mA
Relative shot noise level:	9.14e-09 Hz ^{-1/2}	8.93e-09 Hz ^{-1/2}



POSITION FLUCTUATIONS	
X position:	$30.579 \pm 0.030 \mu\text{m}$, $30.464 \mu\text{m} \dots 30.706 \mu\text{m}$
Y position:	$-4.318 \pm 0.028 \mu\text{m}$, $-4.446 \mu\text{m} \dots -4.060 \mu\text{m}$
Samplingrate:	32768 Hz, 32768 Hz

D A Q	
Measurement duration:	60 s = 1.0 min
Measurement start:	10. Jul 2012 15:29 PDT (10. Jul 2012 22:29 UTC, 1025994561 GPS)
NDS:	h1nds1:8088 (v12r0)
User:	psl@operator2
Channels:	H1:PSL-ISS_PDA_OUT 32768 Hz, H1:PSL-ISS_PDB_OUT 32768 Hz, H1:PSL-ISS_DIFFRACTION_OUT 32768 Hz, H1:PSL-ISS_QPD_DX_OUT 32768 Hz, H1:PSL-ISS_QPD_DY_OUT 32768 Hz, H1:PSL-ISS_LOOP_STATE_OUTPUT 16 Hz, H1:PSL-ISS_REFSIGNAL_MON_OUTPUT 16 Hz, H1:PSL-ISS_GAIN 16 Hz, H1:PSL-ISS_SECONDDLOOP_CLOSED 16 Hz, H1:PSL-ISS_SAT_MIN 16 Hz, H1:PSL-ISS_SAT_HOUR 16 Hz, H1: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>	