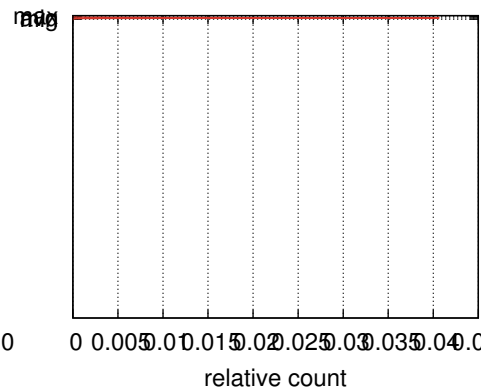
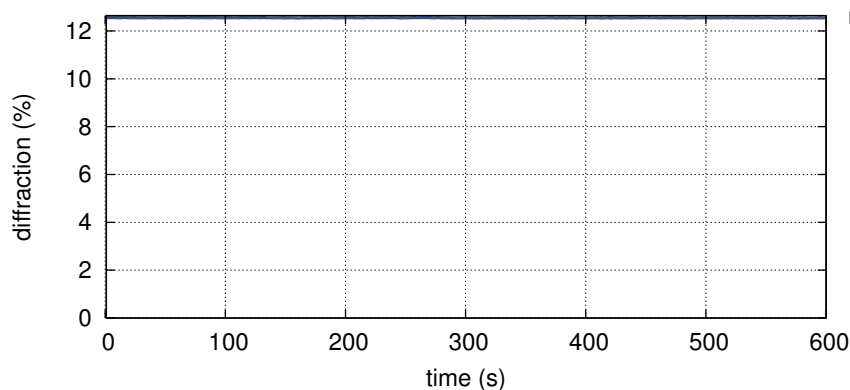
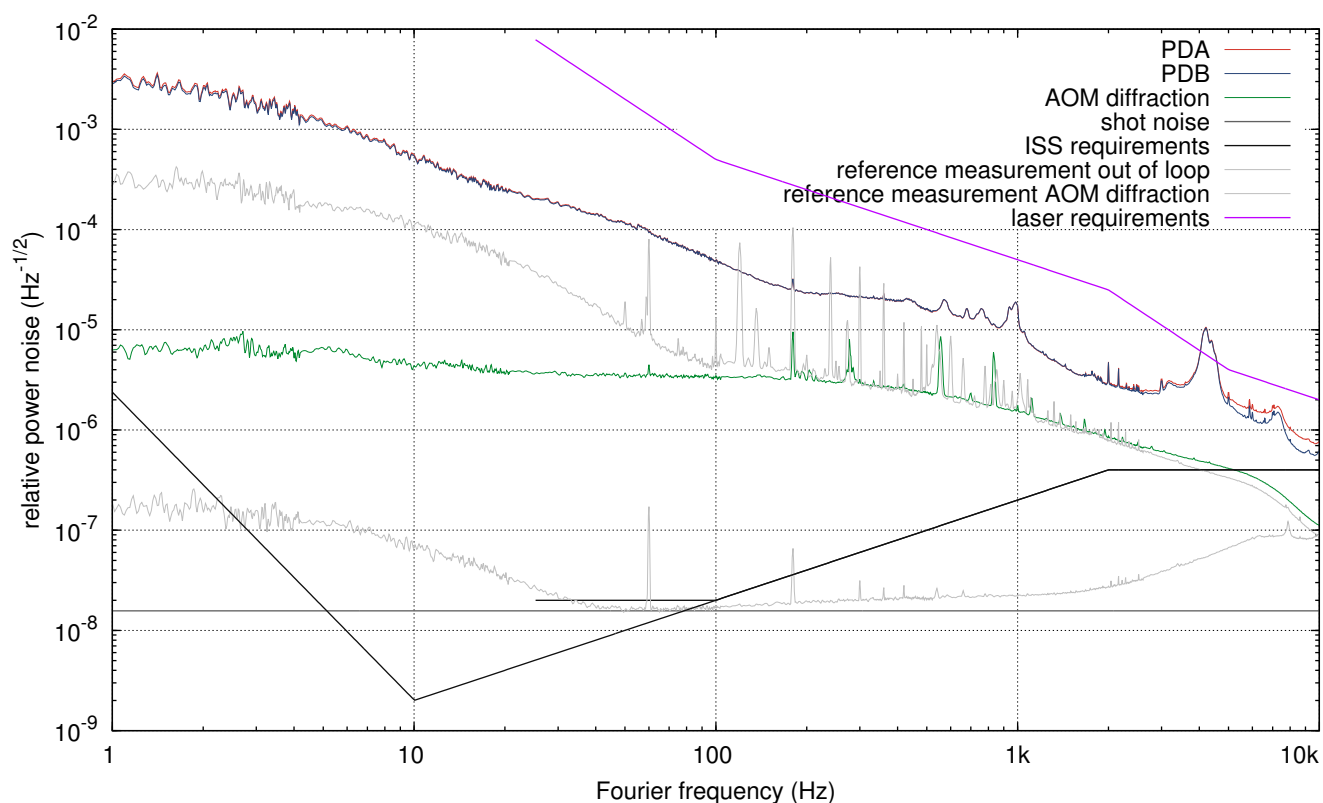


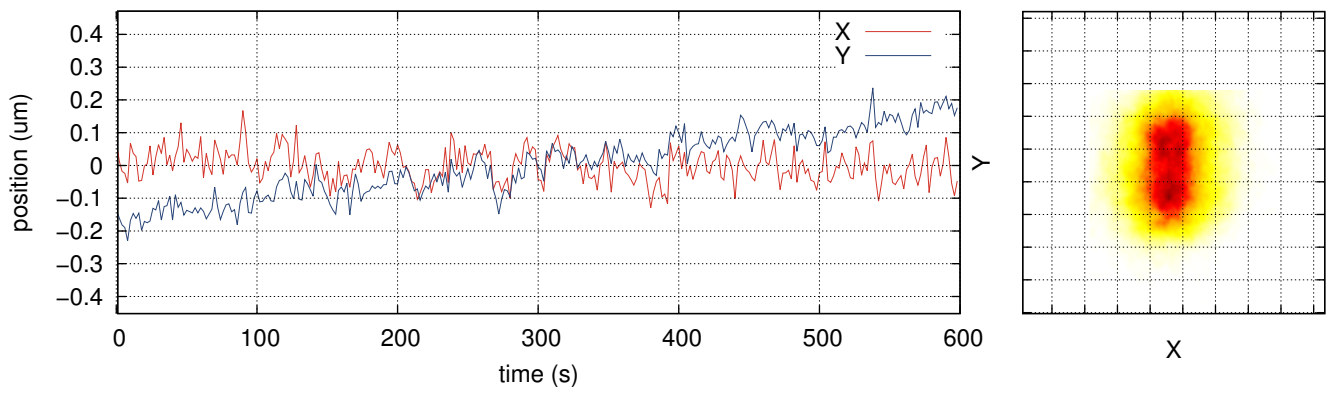
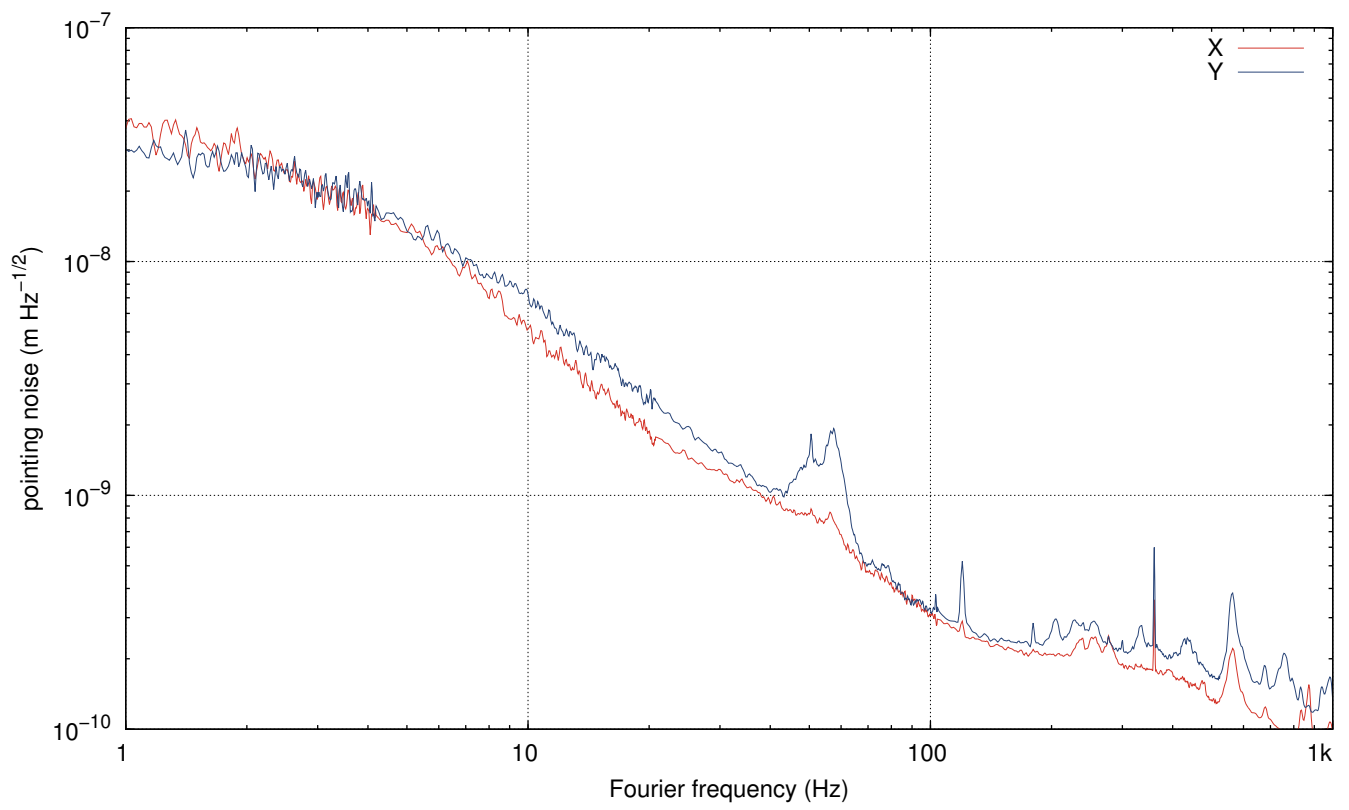


POWER STABILIZATION

Measurement:	600 s = 10.0 min, 06. May 2016 13:54 PDT
Stabilization:	first loop open; second loop injection off
Reference signal:	-2.285 V
First-loop gain:	6.0 dB
Last saturation event:	0d 0h 0m
Average AOM diffraction:	12.55%
Diffraction signal range:	12.49%...12.61% (0.13% peak-to-peak, 32768 Hz samplingrate)

POWER NOISE

	Photodiode A (PDA)	Photodiode B (PDB)
Average DC signal:	8.618 V	8.674 V
FILT signal range:	-13.501 V...13.263 V (9.543 V _{rms})	-12.912 V...12.806 V (9.295 V _{rms})
FILT samplingrate:	32768 Hz	32768 Hz
Photocurrent:	2.6 mA	2.6 mA
Relative shot noise level:	1.11e-08 Hz ^{-1/2}	1.11e-08 Hz ^{-1/2}



POSITION FLUCTUATIONS	
X position:	$2.163 \pm 0.085 \text{ μm}$, $1.832 \text{ μm} \dots 2.513 \text{ μm}$
Y position:	$-1.151 \pm 0.119 \text{ μm}$, $-1.603 \text{ μm} \dots -0.680 \text{ μm}$
Samplingrate:	32768 Hz, 32768 Hz

D A Q	
Measurement duration:	600 s = 10.0 min
Measurement start:	06. May 2016 13:54 PDT (06. May 2016 20:54 UTC, 1146603257 GPS)
NDS:	h1nds1:8088 (v12r2)
User:	edmond.merilh@opsws8
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 v0.7, 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>	