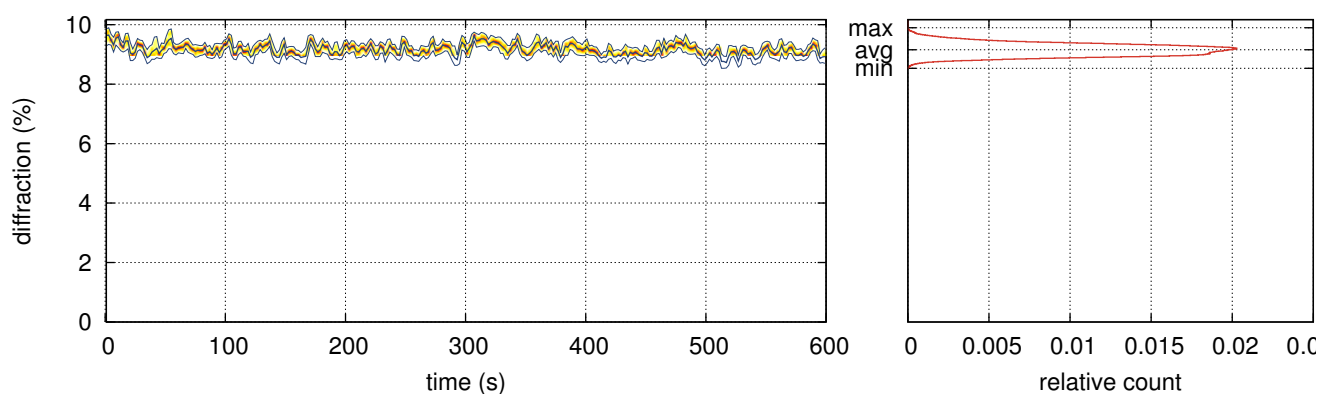
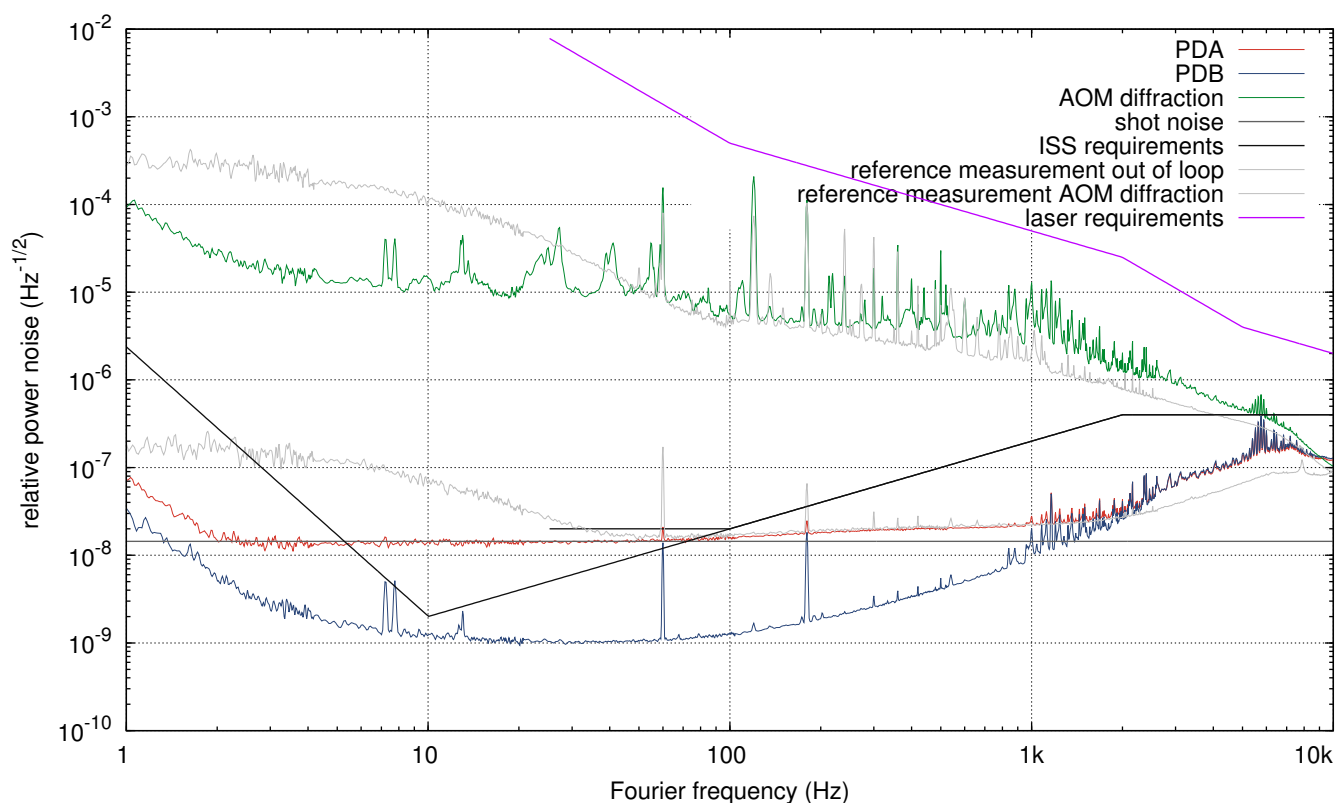
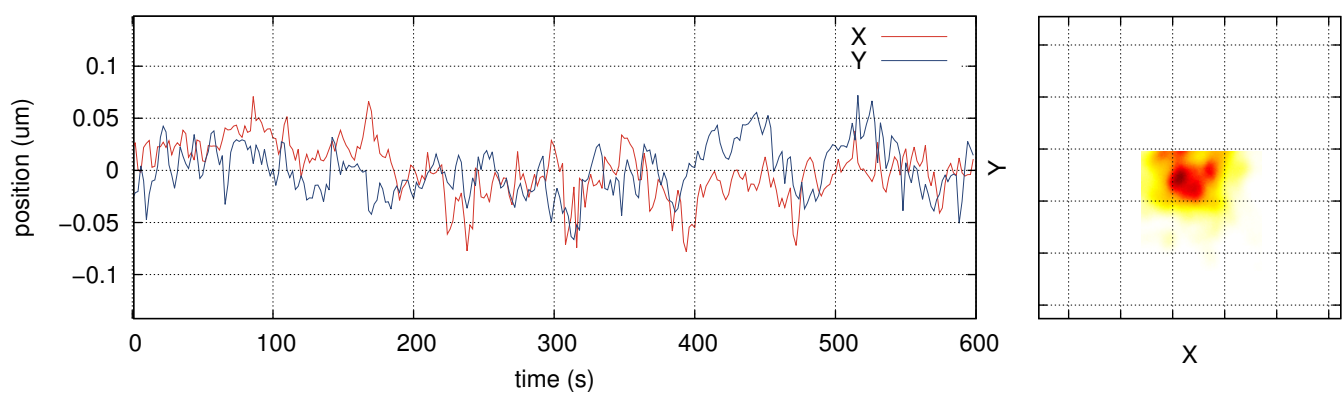
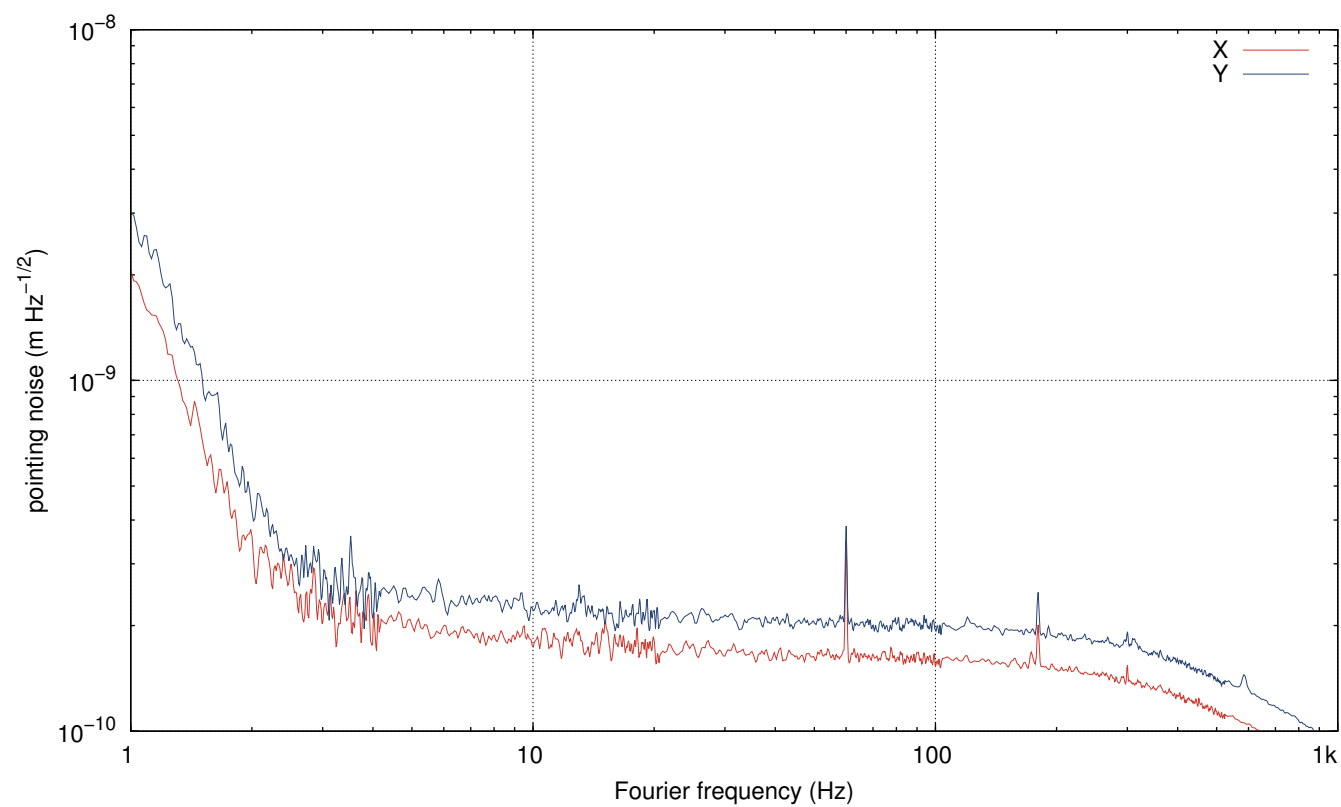




POWER STABILIZATION	
Measurement:	600 s = 10.0 min, 25. Mar 2015 10:23 PDT
Stabilization:	first loop closed, integrator on; second loop injection unknown
Reference signal:	-2.021 V
First-loop gain:	6.0 dB
Last saturation event:	0d 0h 48m
Average AOM diffraction:	9.16%
Diffraction signal range:	8.53% . . . 9.90% (1.37% peak-to-peak, 32768 Hz samplingrate)

POWER NOISE		
	Photodiode A (PDA)	Photodiode B (PDB)
Average DC signal:	10.150 V	10.329 V
FILT signal range:	2.022 V . . . 2.039 V (0.001 V _{rms})	2.060 V . . . 2.072 V (0.001 V _{rms})
FILT samplingrate:	32768 Hz	32768 Hz
Photocurrent:	3.1 mA	3.1 mA
Relative shot noise level:	1.02e-08 Hz ^{-1/2}	1.01e-08 Hz ^{-1/2}



POSITION FLUCTUATIONS	
X position:	$20.314 \pm 0.028 \mu\text{m}$, $20.191 \mu\text{m} \dots 20.462 \mu\text{m}$
Y position:	$-9.671 \pm 0.027 \mu\text{m}$, $-9.813 \mu\text{m} \dots -9.572 \mu\text{m}$
Samplingrate:	32768 Hz, 32768 Hz

D A Q	
Measurement duration:	600 s = 10.0 min
Measurement start:	25. Mar 2015 10:23 PDT (25. Mar 2015 17:23 UTC, 1111339411 GPS)
NDS:	h1nds1:8088 (v12r1)
User:	controls@opsws1
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>	