

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10776 - L2 Version 2
Chandra X-Ray Center

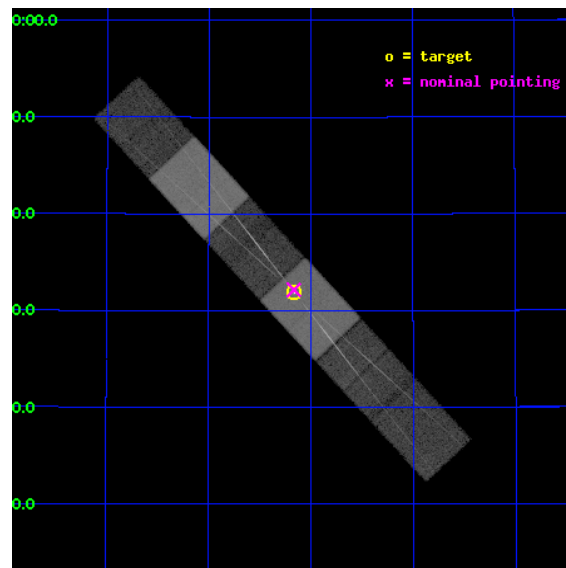
L2 Processing Date : May 24 2012

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1 Front

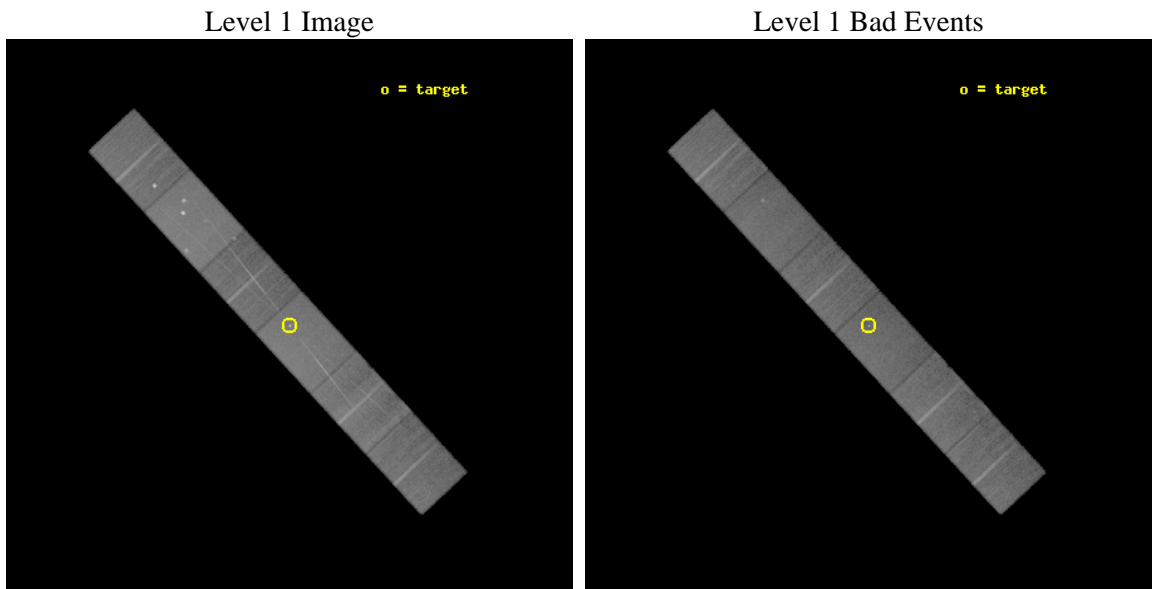
seq_num	701946	Sequence number
obs_id	10776	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79133604214	Nominal RA [deg]
dec_nom	44.536075663269	Nominal Dec [deg]
roll_nom	47.155711117028	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25152.5	Sum of GTIs [s]
livetime	24746.265308692	Livetime [s]
ontime4	25152.5	Sum of GTIs [s]
ontime5	25152.5	Sum of GTIs [s]
ontime6	25152.5	Sum of GTIs [s]
ontime7	25152.5	Sum of GTIs [s]
ontime8	25149.958999753	Sum of GTIs [s]
ontime9	25152.5	Sum of GTIs [s]
l2events	363153	Number of level 2 events



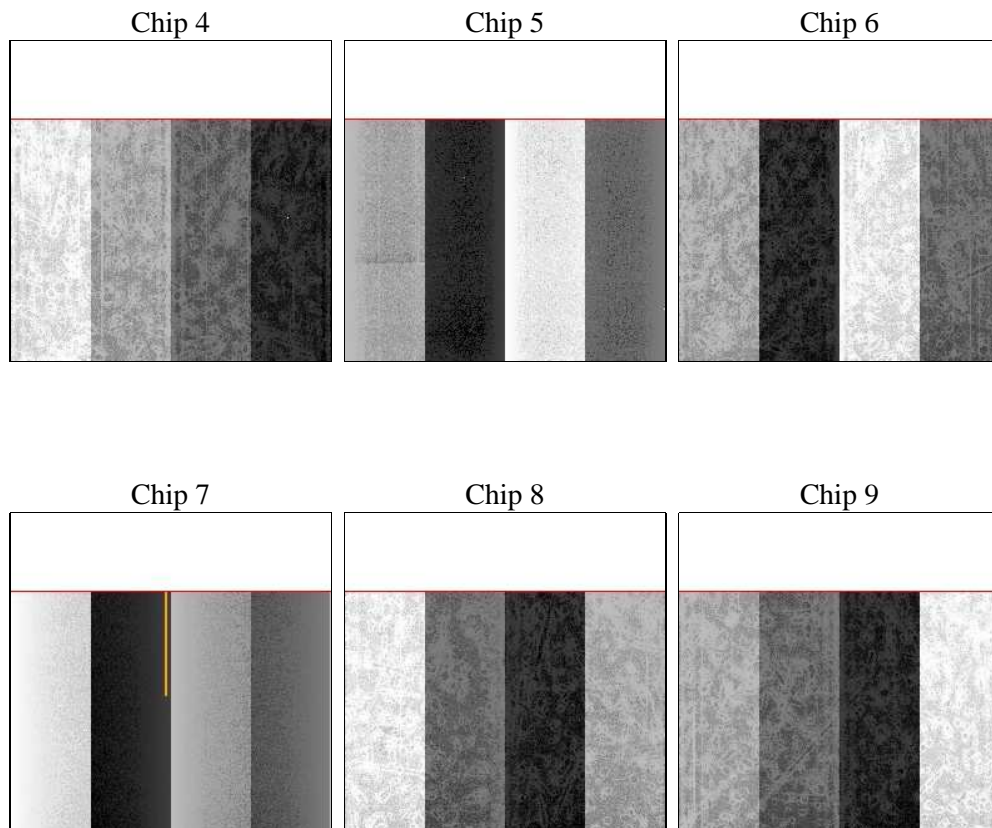
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	25152.5	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	25152.5	Sum of GTIs [s]
date	2012-05-24T02:30:54	Date and time of file creation	ontime5	25152.5	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	25152.5	Sum of GTIs [s]
			ontime7	25152.5	Sum of GTIs [s]
			ontime8	25149.958999753	Sum of GTIs [s]
			ontime9	25152.5	Sum of GTIs [s]
			l1events	1474694	Number of level 1 events

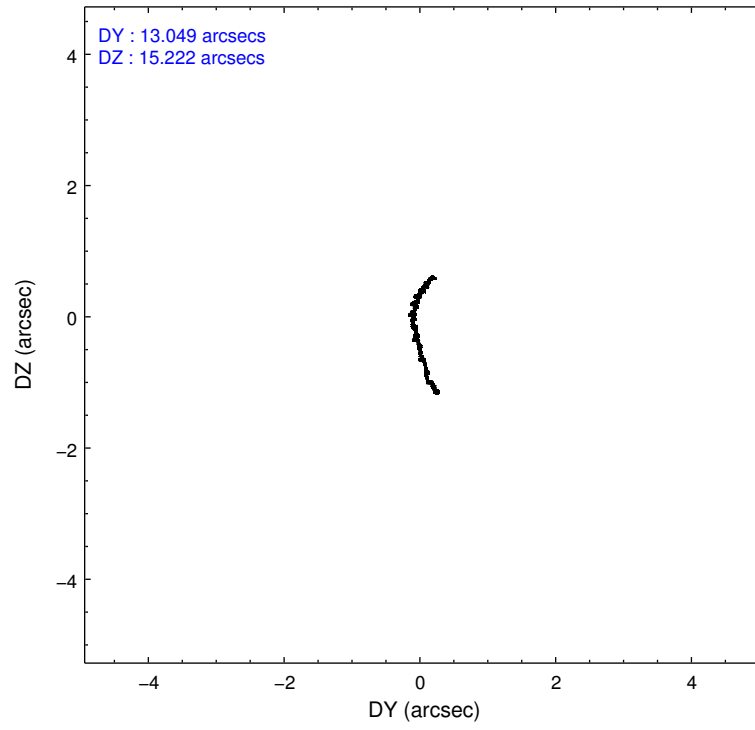
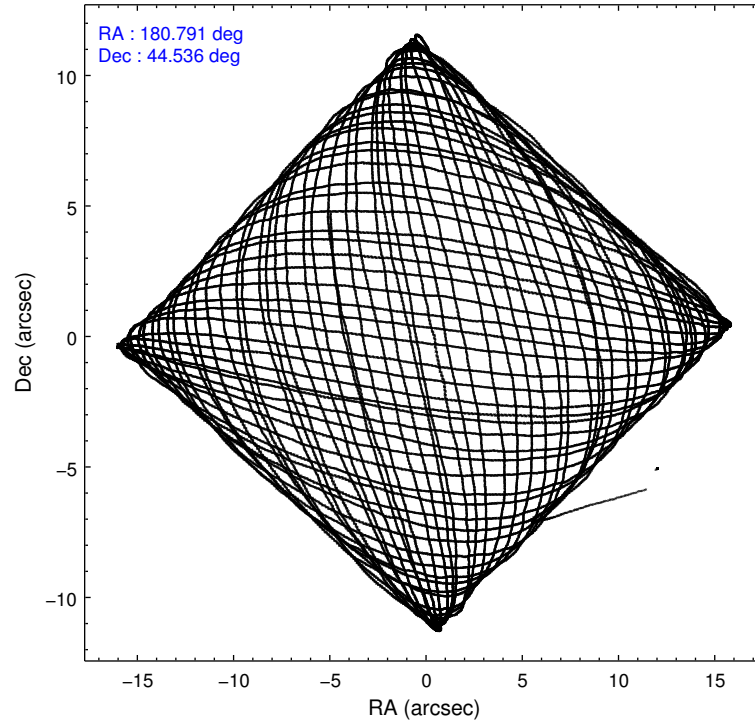
2.1.4 Events

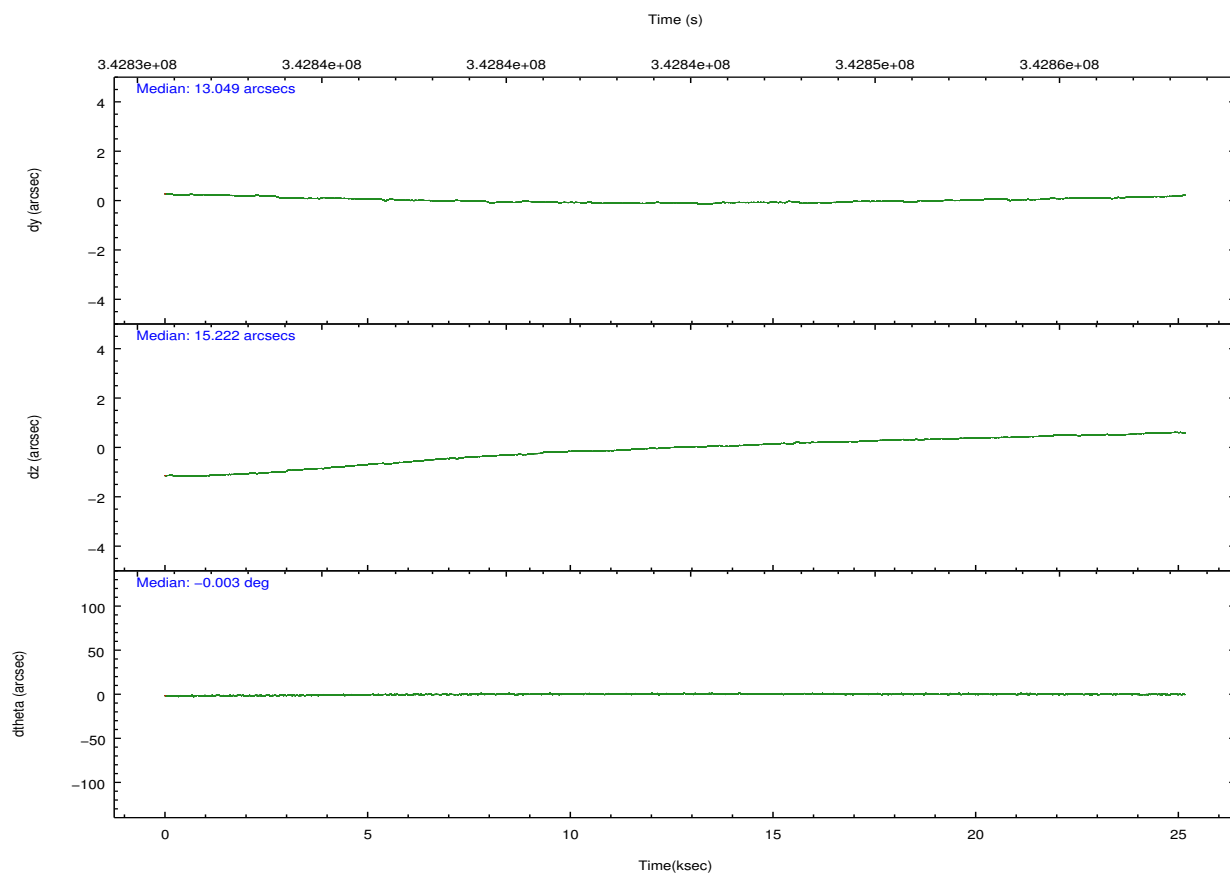
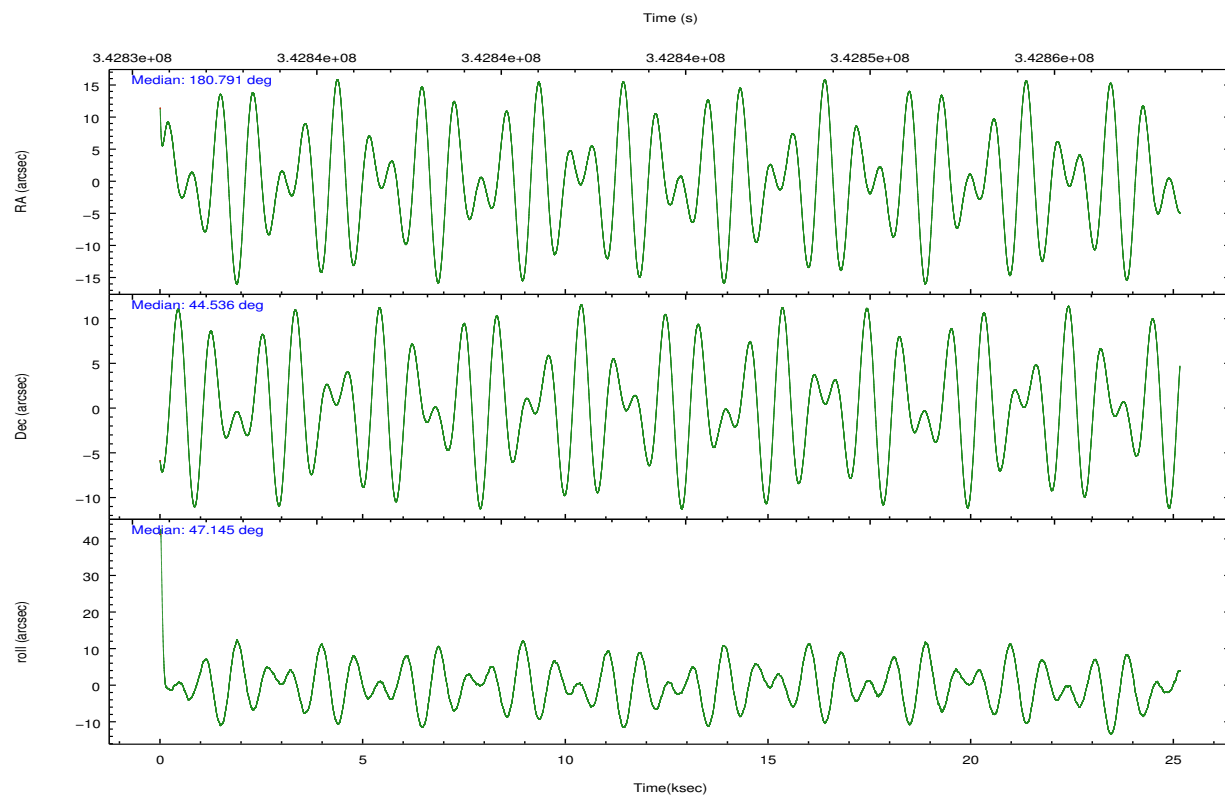
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	223048	315243	201562	288096	251510	195235	grade 0 events	17263	23778	16999	13013	22697	11163
rejected events	191340	163528	168169	160318	187965	169311		7%	7%	8%	4%	9%	5%
rejected %	85%	51%	83%	55%	74%	86%	grade 1 events	197	1021	124	460	233	114
								0%	0%	0%	0%	0%	0%
							grade 2 events	5656	43252	6166	26939	13643	5217
								2%	13%	3%	9%	5%	2%
							grade 3 events	2637	6496	2684	11438	6350	2506
								1%	2%	1%	3%	2%	1%
							grade 4 events	2500	6063	2746	11432	5932	2443
								1%	1%	1%	3%	2%	1%
							grade 5 events	9027	22501	9185	26112	12321	9835
								4%	7%	4%	9%	4%	5%
							grade 6 events	3970	73556	5083	66155	15522	4819
								1%	23%	2%	22%	6%	2%
							grade 7 events	181798	138576	158575	132547	174812	159138
								81%	43%	78%	46%	69%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	180.783309	180.7913360421393	CCD I2 on	N	N
[deg] Pointing Dec	44.509353	44.53607566326889	CCD I3 on	N	N
[deg] Pointing Roll	47.004694	47.15571111702771	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-187.132523	-187.1254020033014	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.007120579706367	CCD S4 on	Y	Y
[s] Observation start time (MET)	342832162.184000	342831034.28404	CCD S5 on	Y	Y
Observation start date	2008-11-11T23:08:17	2008-11-11T22:50:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	342857162.184000	342858047.64787	On-chip summing requested	N	N
Observation end date	2008-11-12T06:04:57	2008-11-12T06:20:47	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	774	774
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	2.5

2.3 Aspect



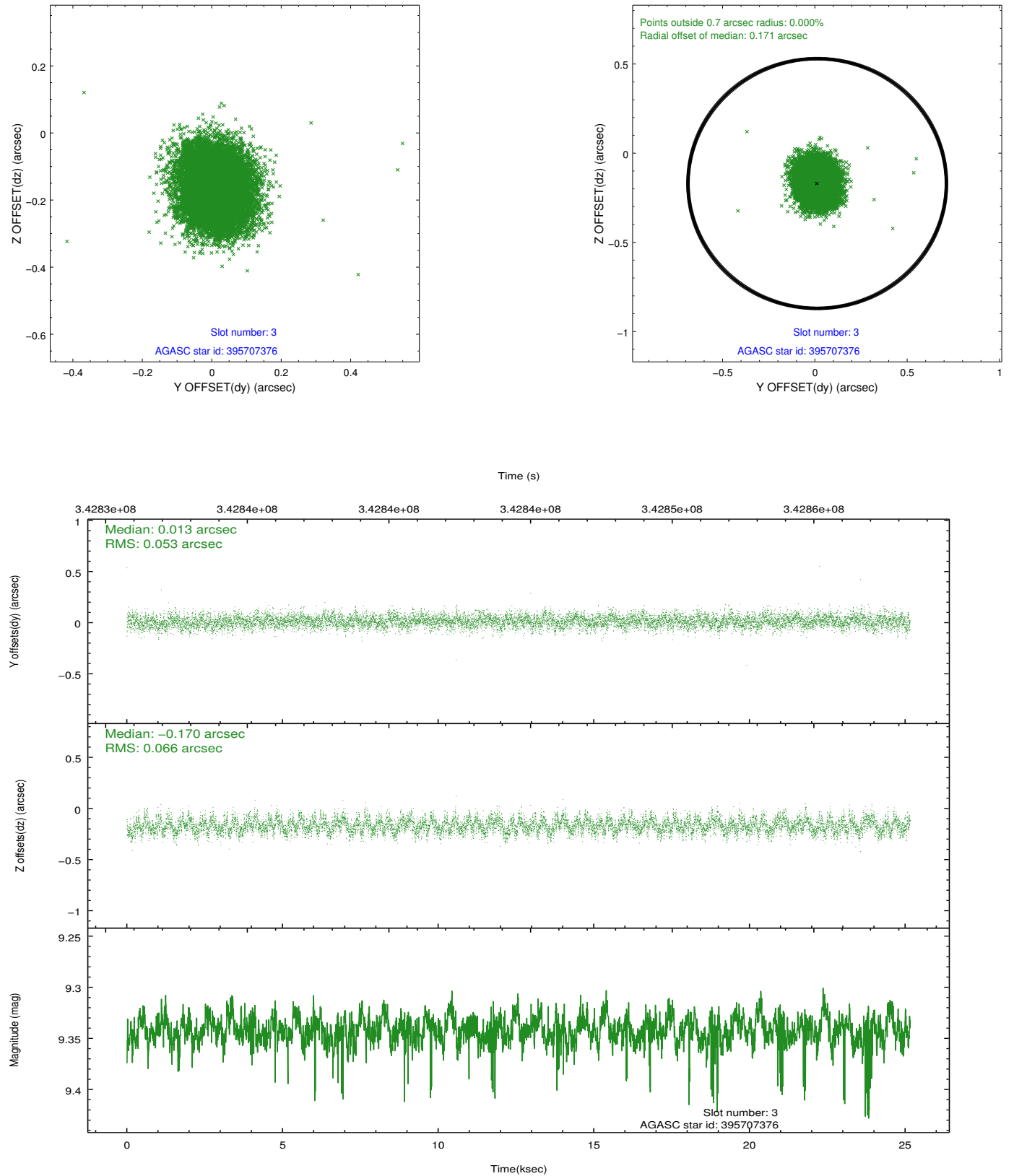


Slot Statistics

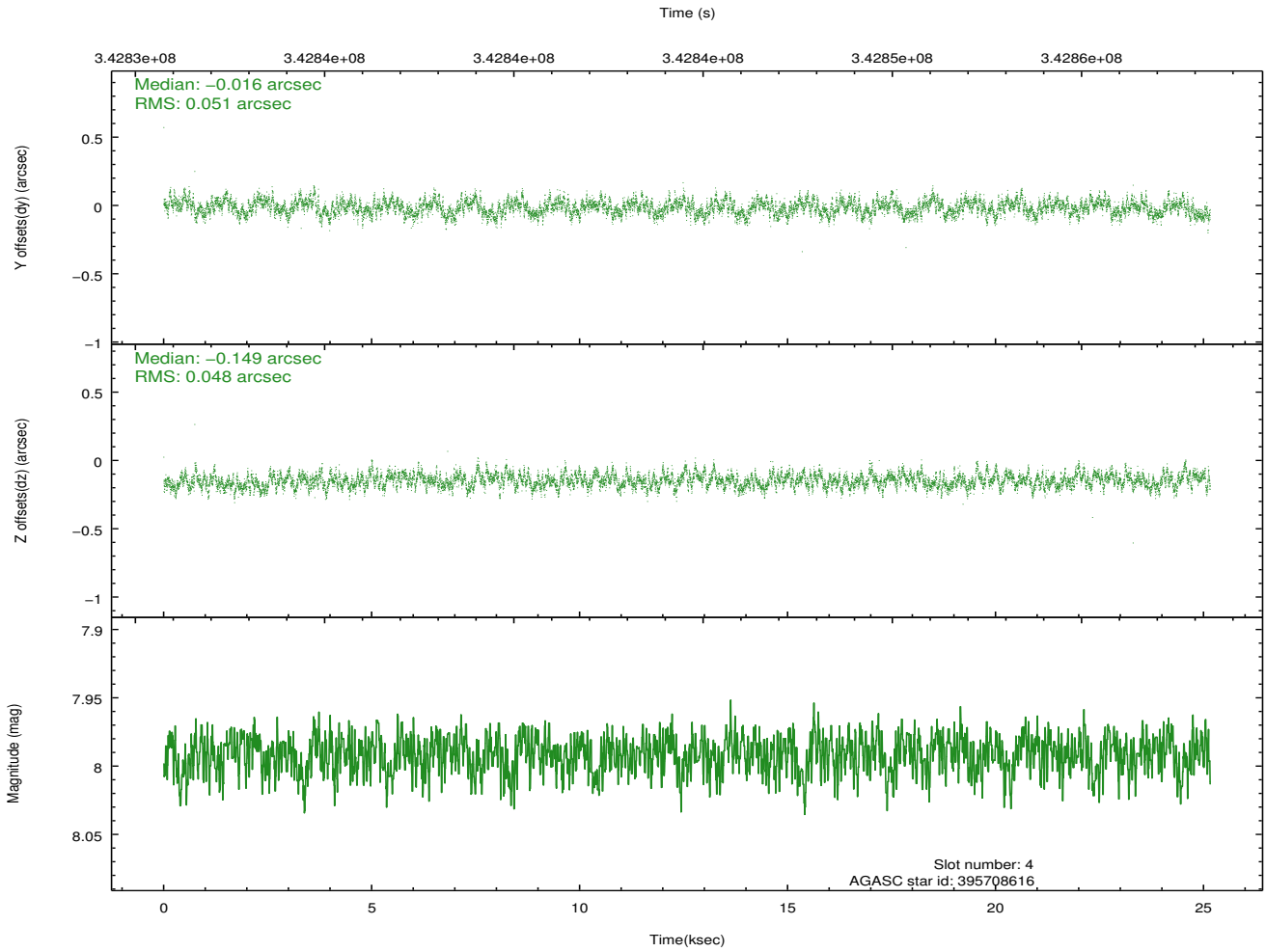
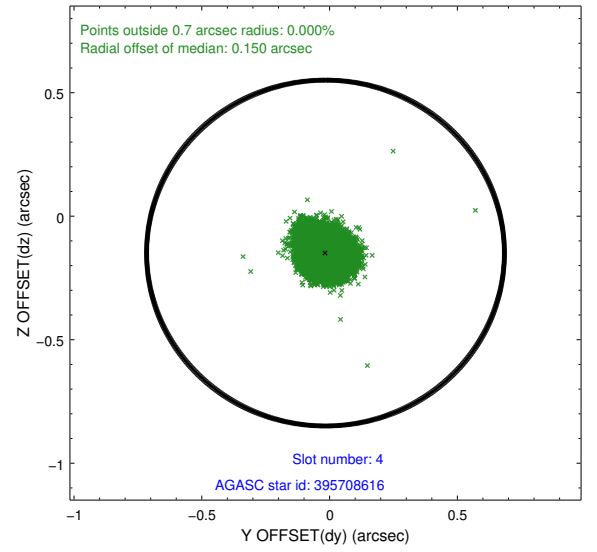
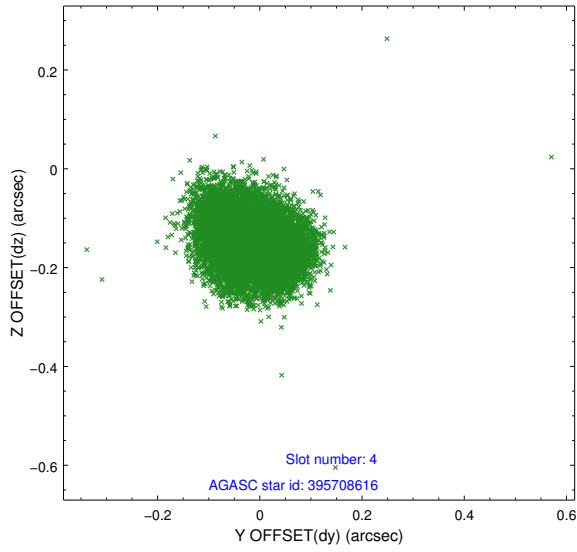
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	6137	-0.068	-0.083	0.012	0.048	0.000000	0.000000	-765.87	-1798.63
1	FID	ACIS-S-4	6.99	6136	0.155	0.054	0.010	0.016	0.000000	0.000000	2147.60	109.81
2	FID	ACIS-S-5	7.04	6137	-0.118	0.037	0.014	0.040	0.000000	0.000000	-1818.59	103.64
3	GUIDE	395707376	9.34	12248	0.013	-0.170	0.089	0.144	180.967983	44.858789	1241.71	513.67
4	GUIDE	395708616	7.99	12268	-0.016	-0.149	0.075	0.119	180.101872	44.630343	-866.48	1578.82
5	GUIDE	395708696	8.89	12265	0.005	0.087	0.072	0.119	180.383726	44.624291	-393.69	1033.07
6	GUIDE	395709608	8.36	12268	0.039	0.114	0.080	0.125	181.055130	44.450389	322.37	-654.40
7	GUIDE	395710032	8.79	12269	-0.042	0.115	0.075	0.120	181.512910	44.376001	935.85	-1694.33

2.4 Star Slots

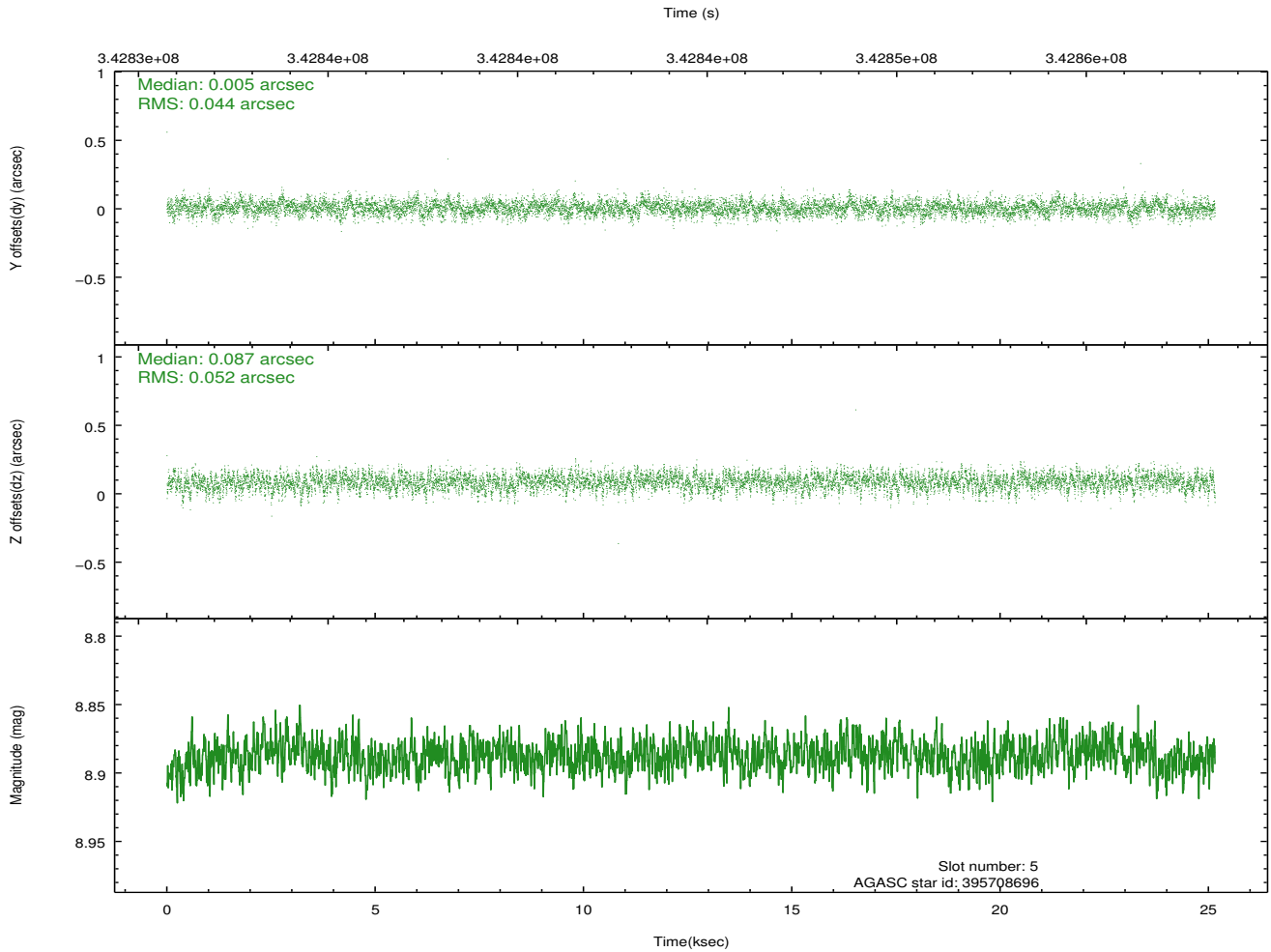
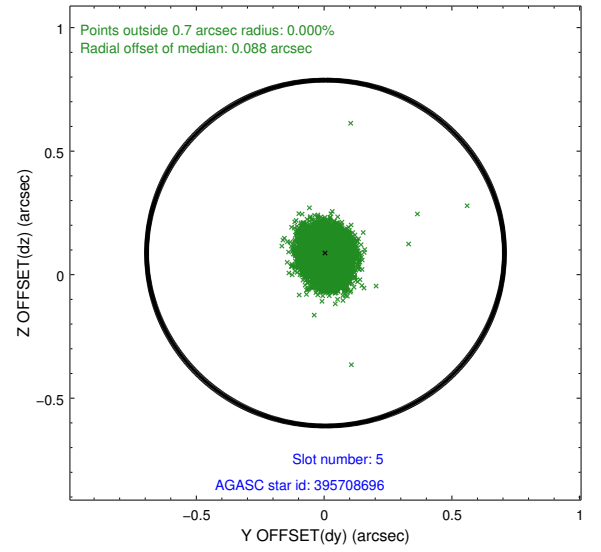
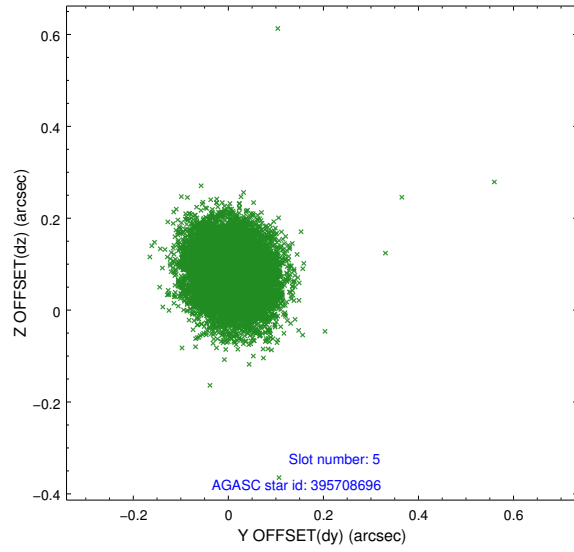
2.4.1 Slot 3



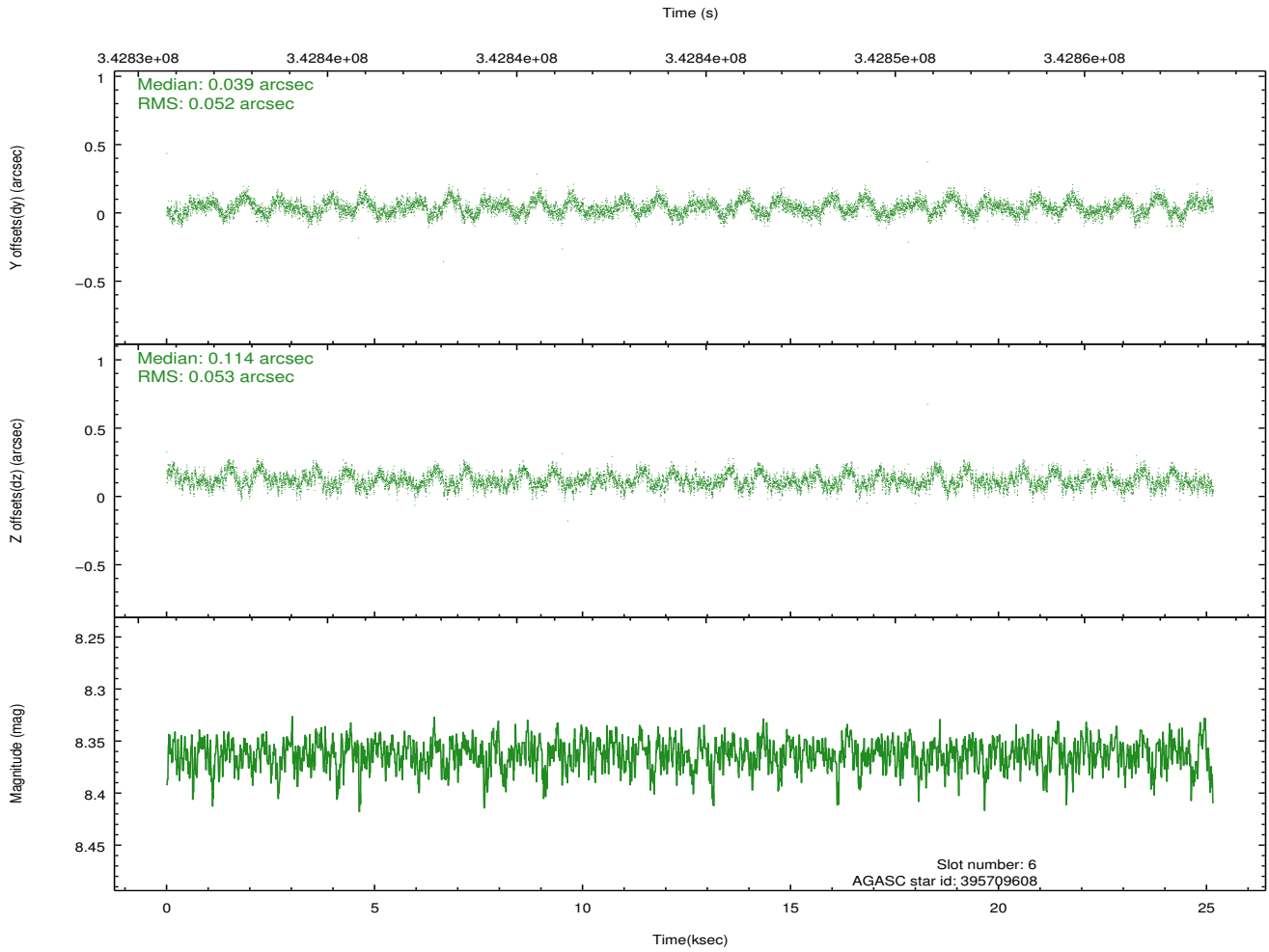
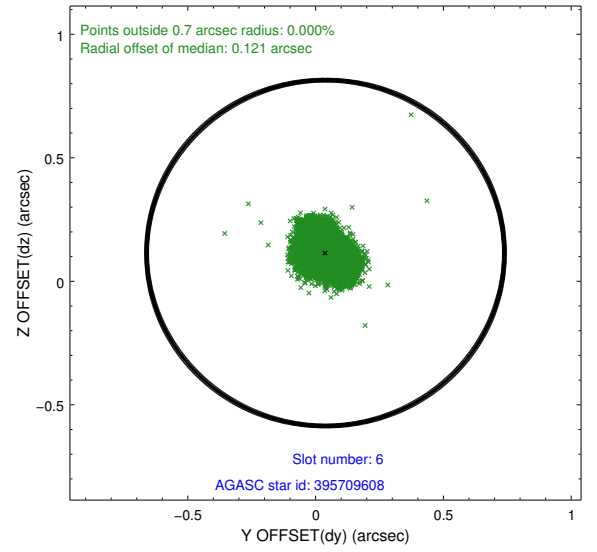
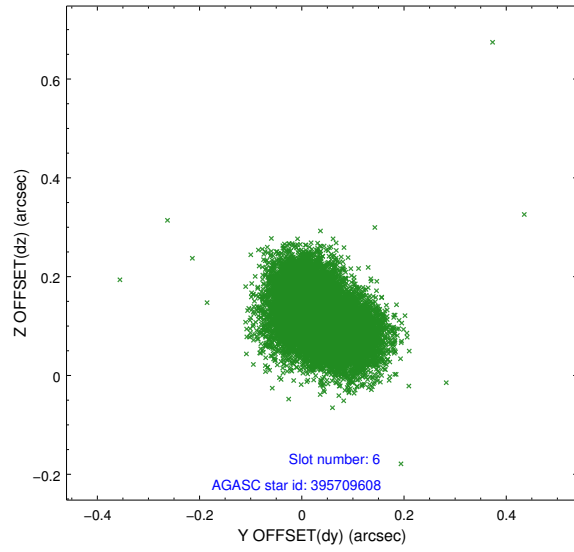
2.4.2 Slot 4



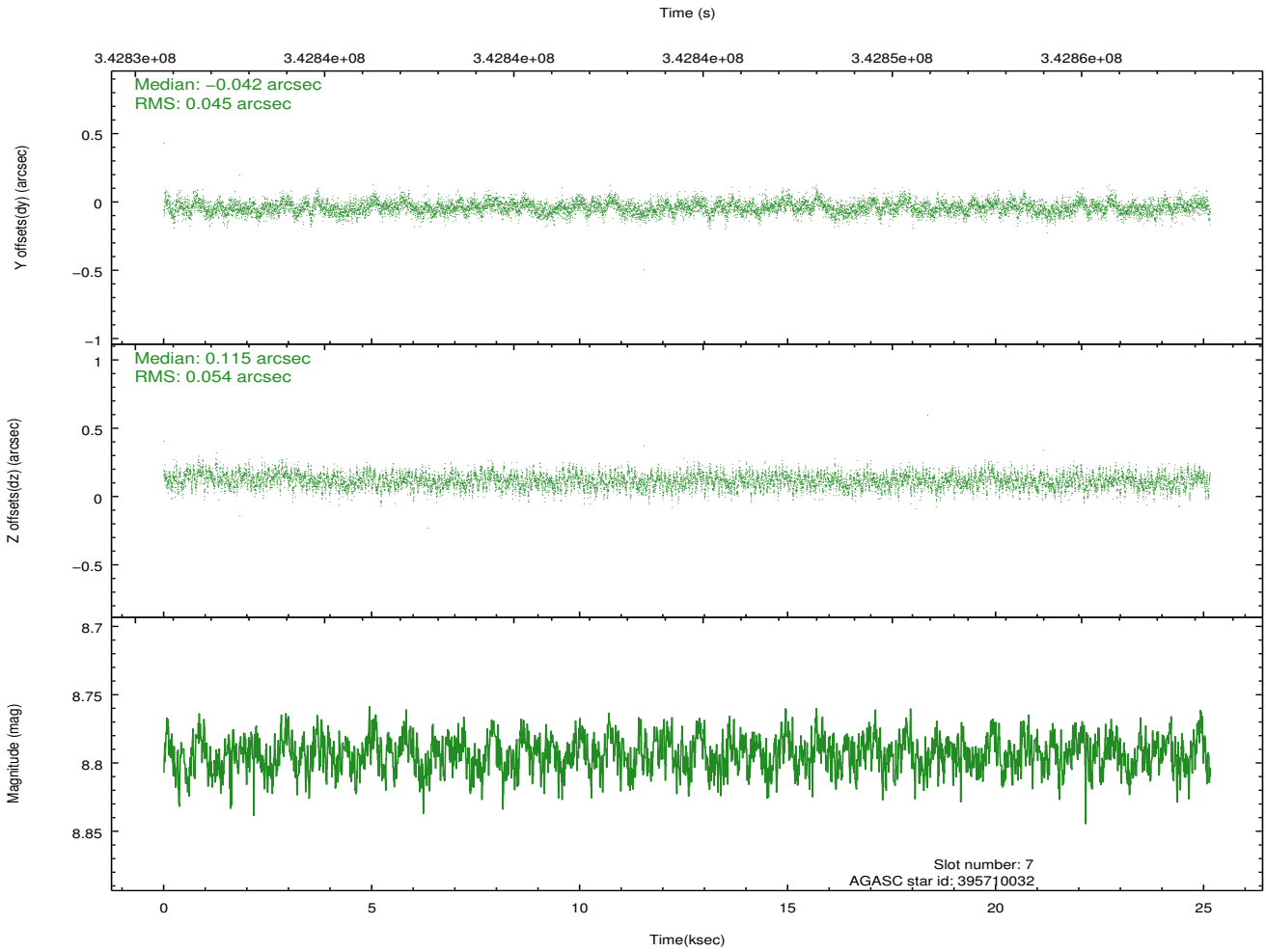
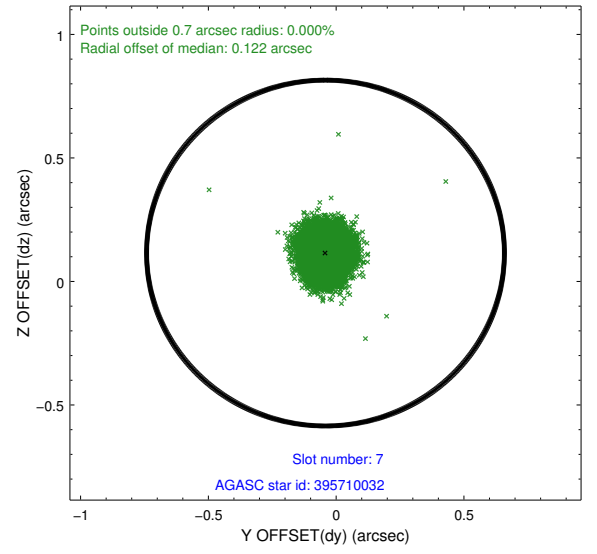
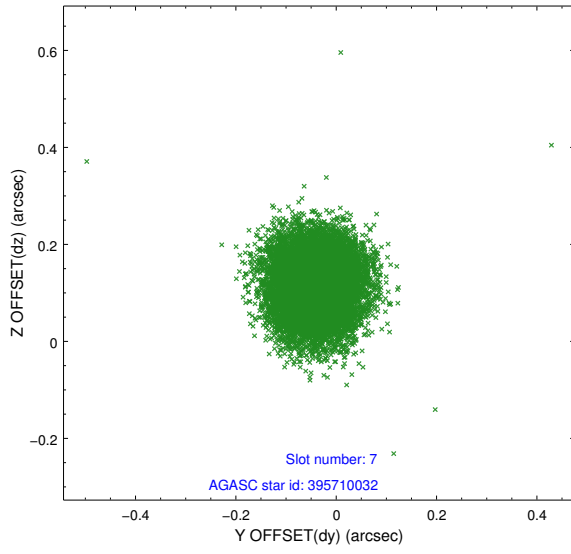
2.4.3 Slot 5



2.4.4 Slot 6

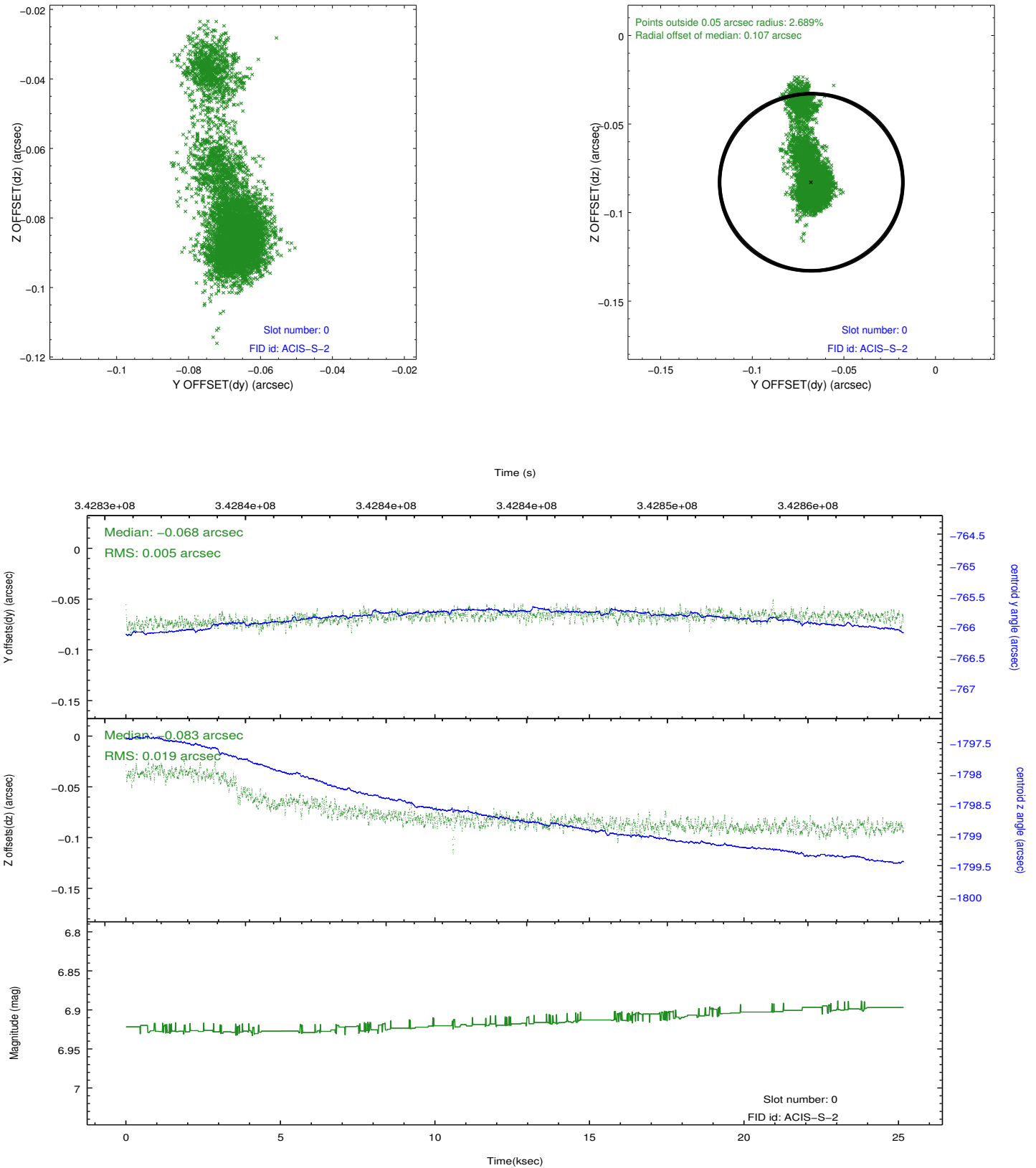


2.4.5 Slot 7

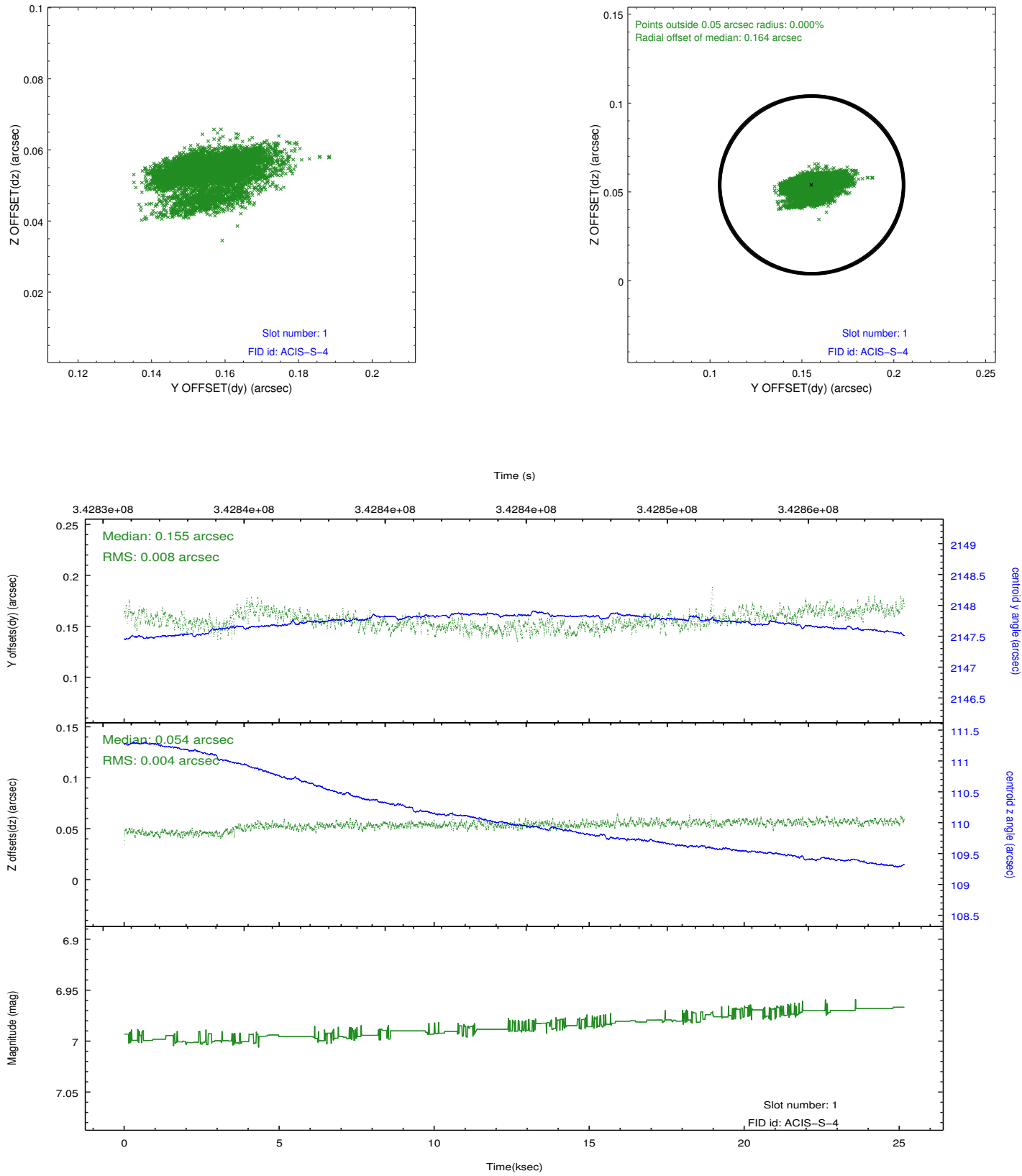


2.5 FID Slots

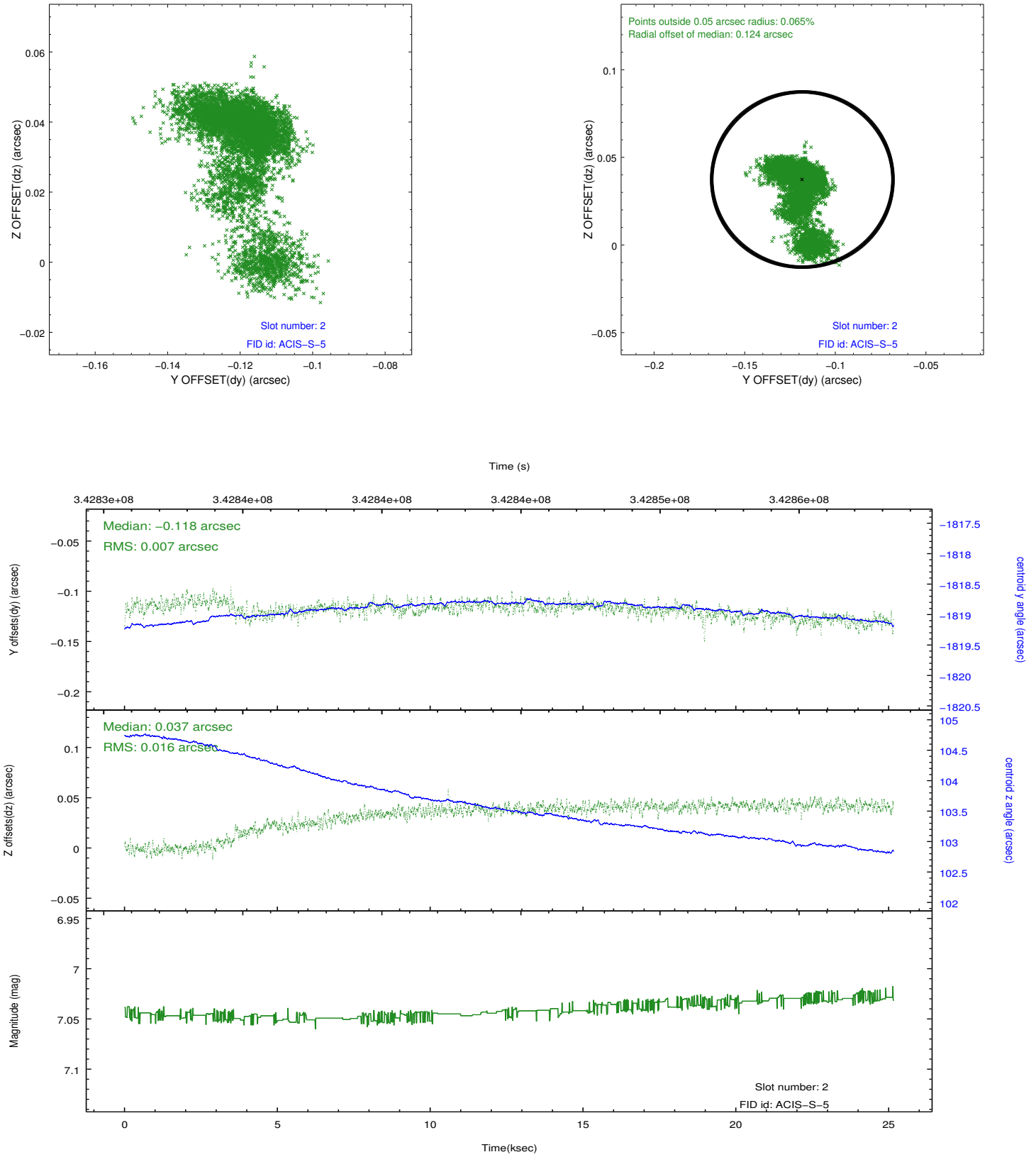
2.5.1 Slot 0



2.5.2 Slot 1

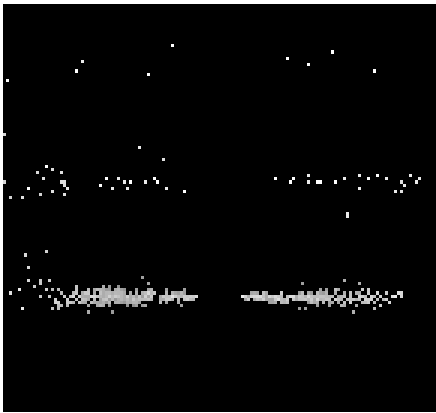


2.5.3 Slot 2

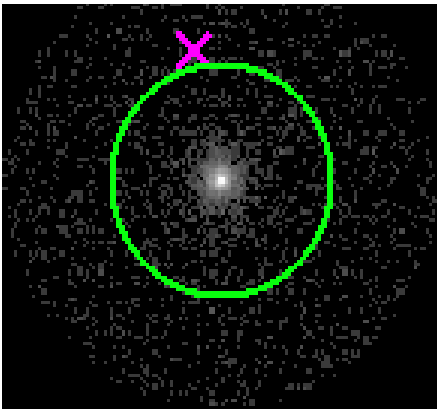


3 Gratings

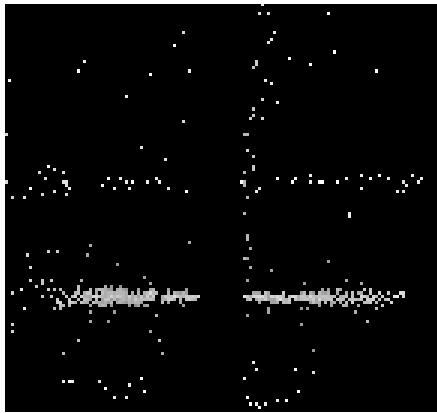
3.1 HEG Arm



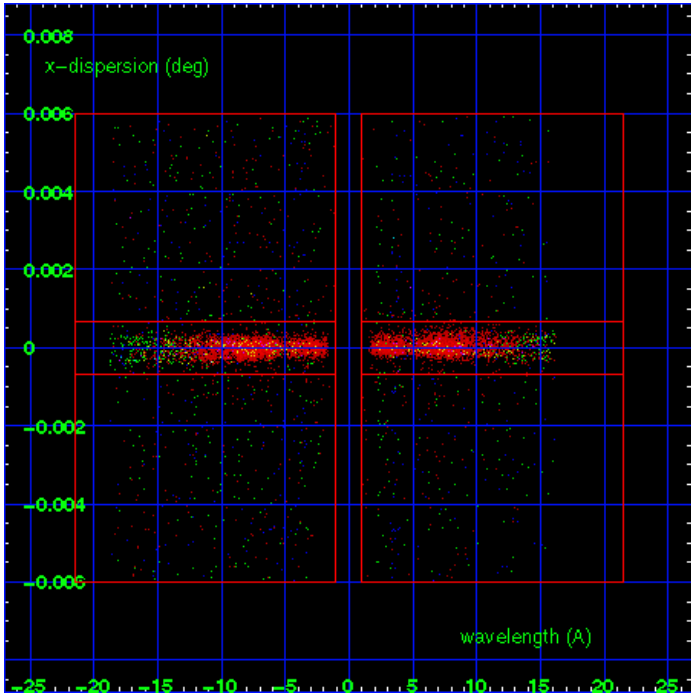
HEG Order Sort 123



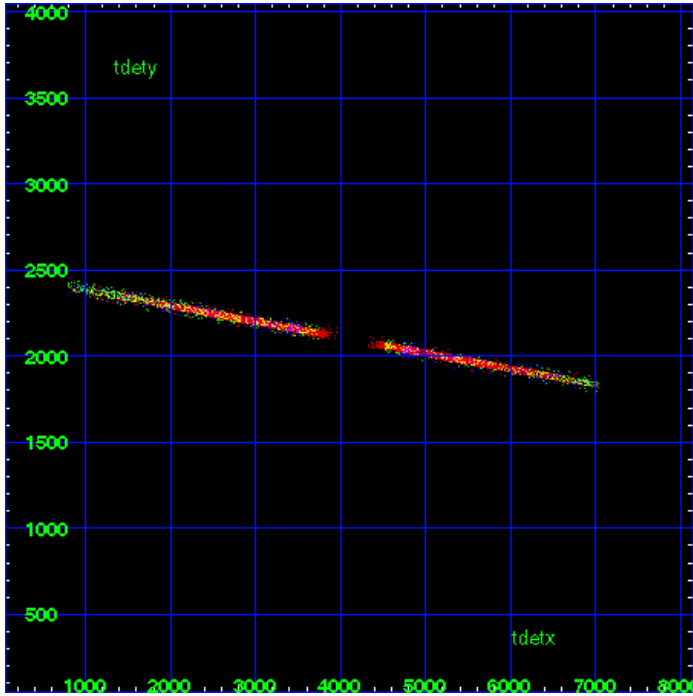
HEG Zero Order



HEG Order Sort ALL

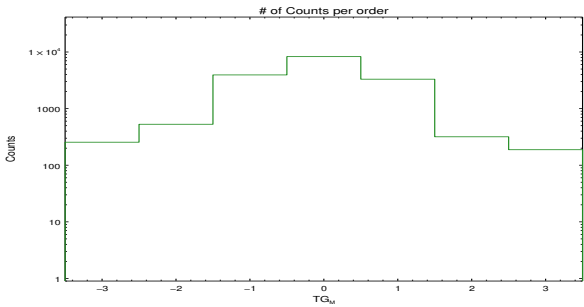


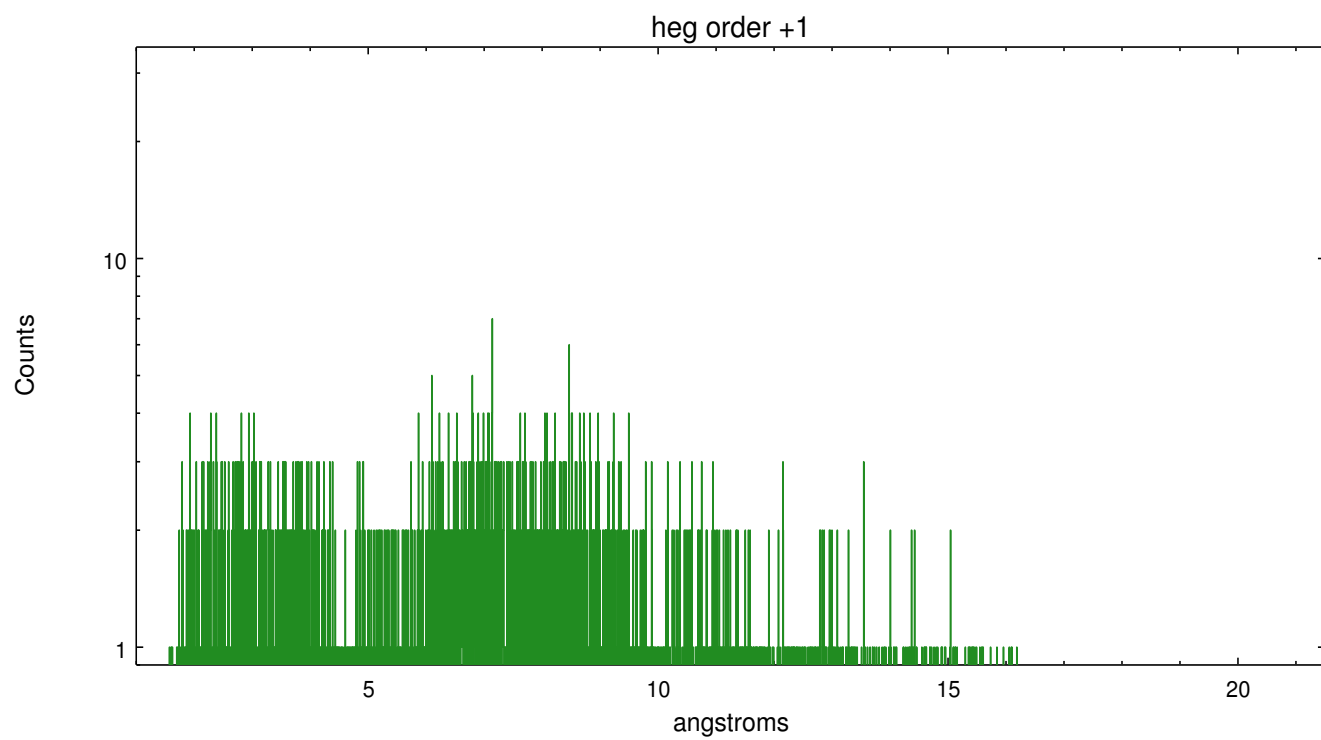
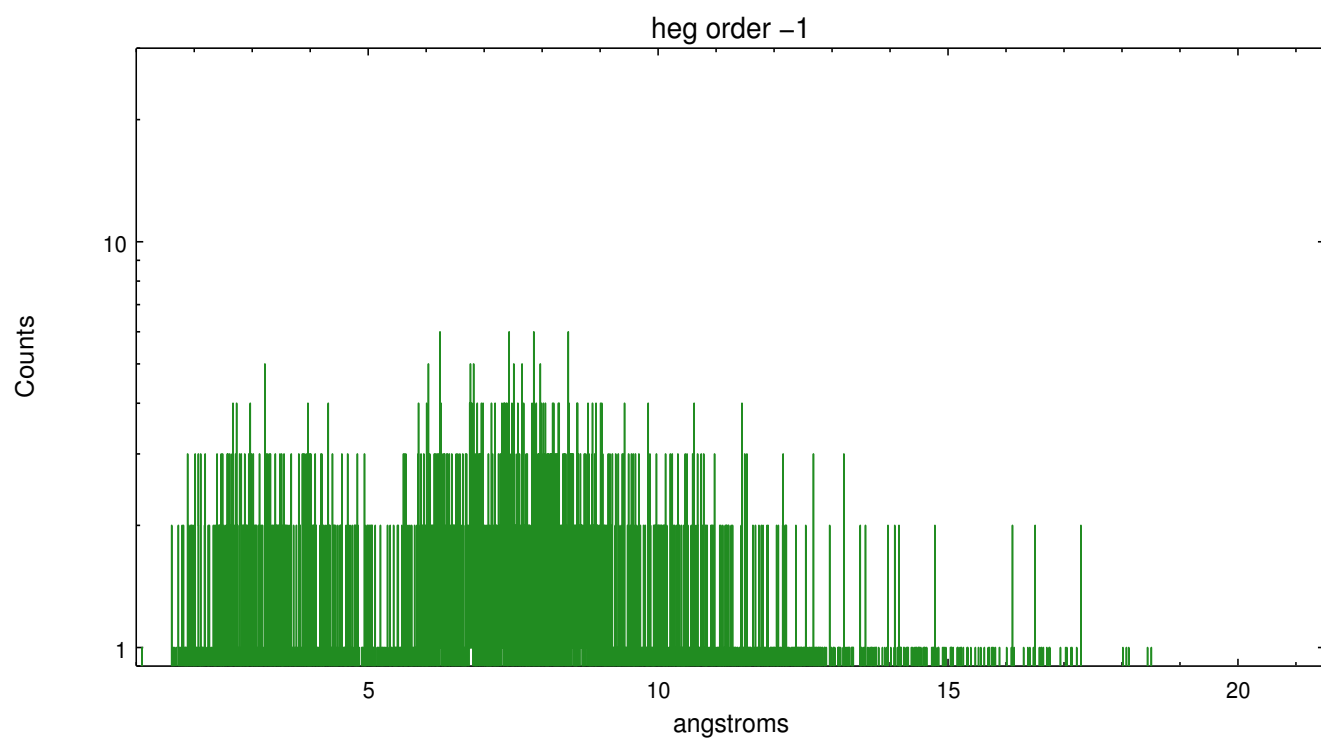
Spot Image HEG



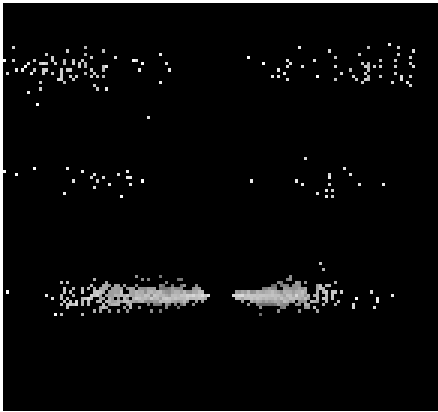
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	255	529	3938	8288	3308	318	188

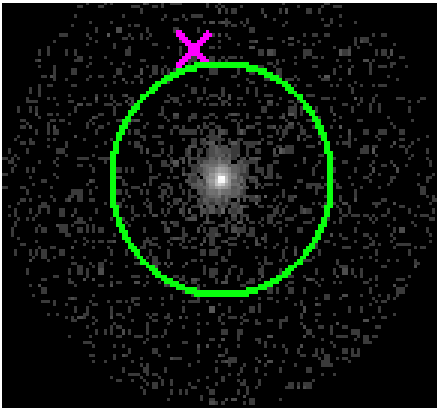




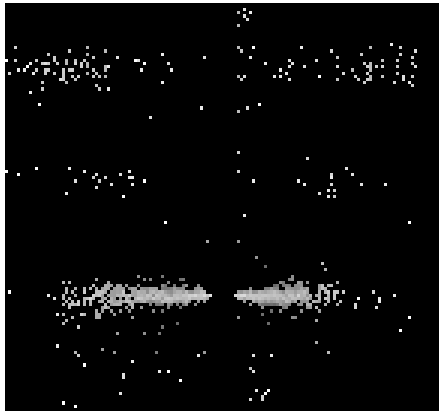
3.2 MEG Arm



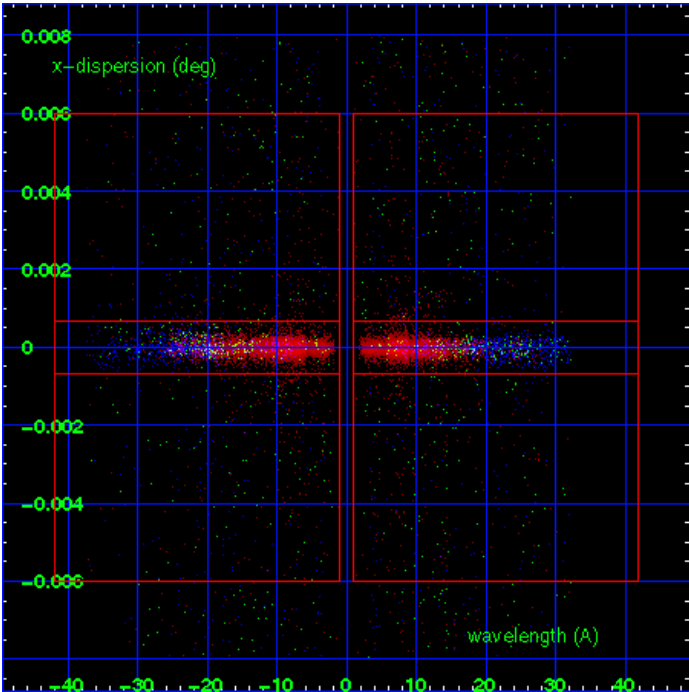
MEG Order Sort 123



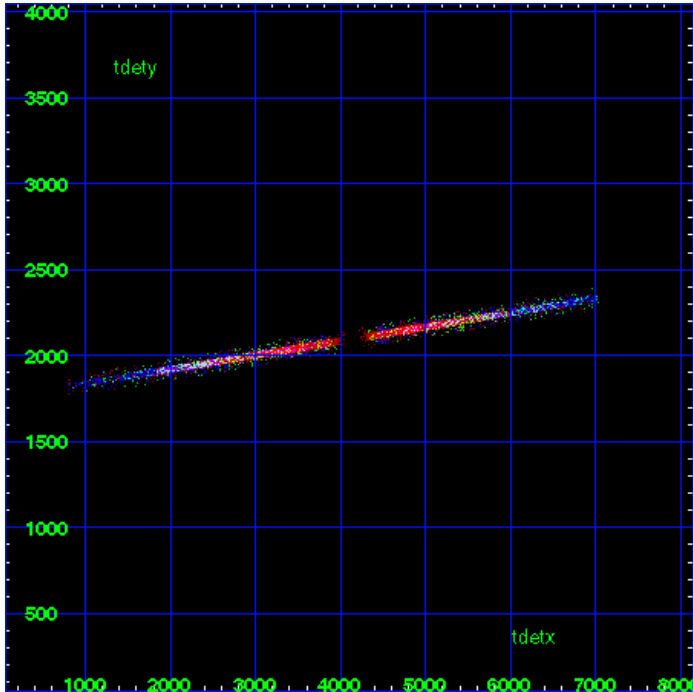
MEG Zero Order



MEG Order Sort ALL

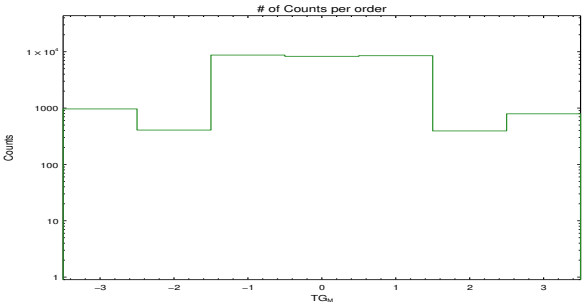


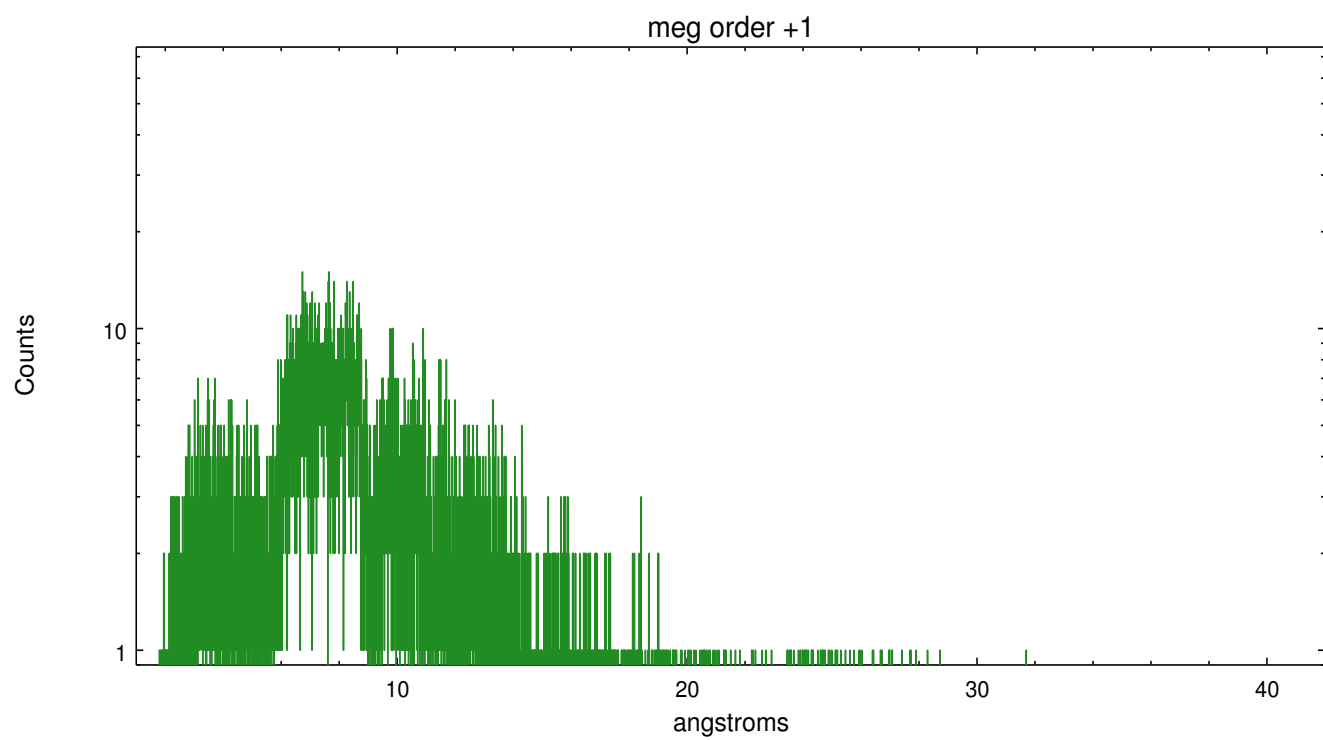
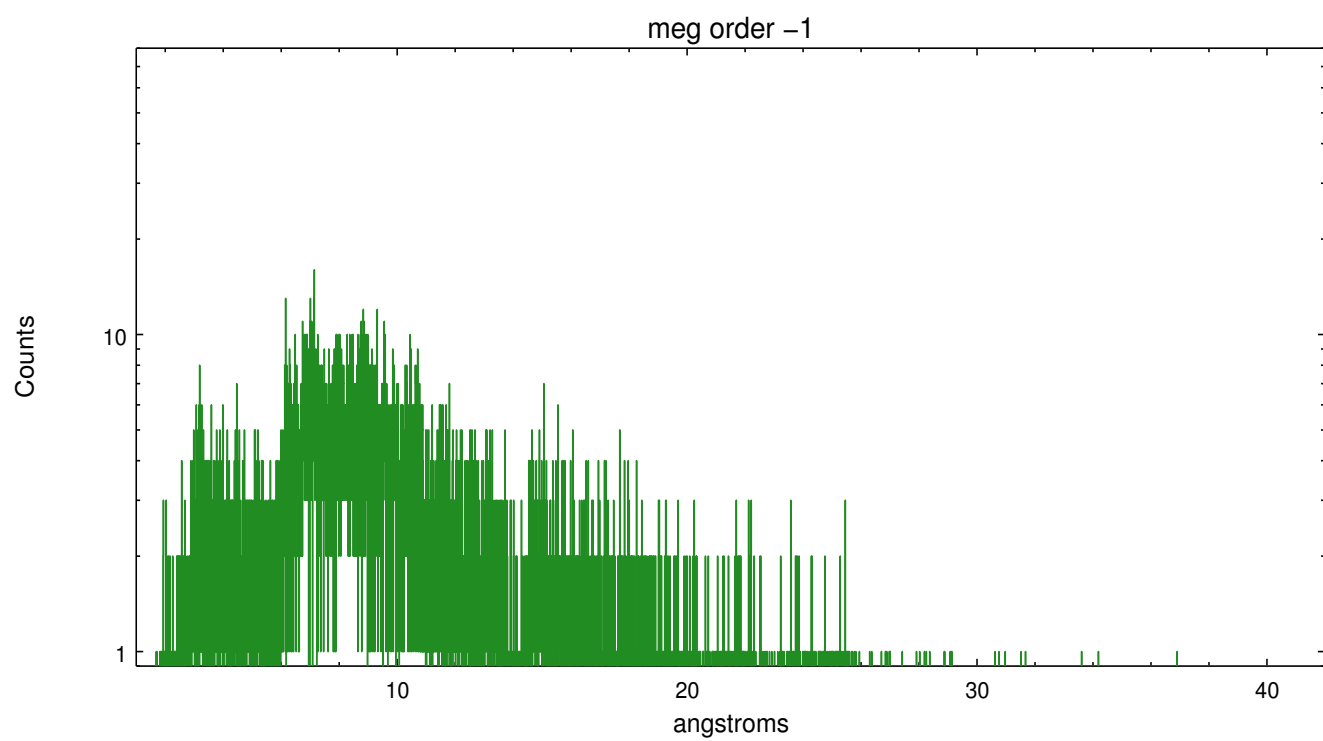
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	966	407	8725	8288	8503	393	791





A Summary

A.1 Status

V&V Scientist	John Houck
V&V Date (YYYY-MM-DD)	2012.05.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.1525

A.2 Comments

Joint proposal with HST.