

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10781 - L2 Version 2
Chandra X-Ray Center

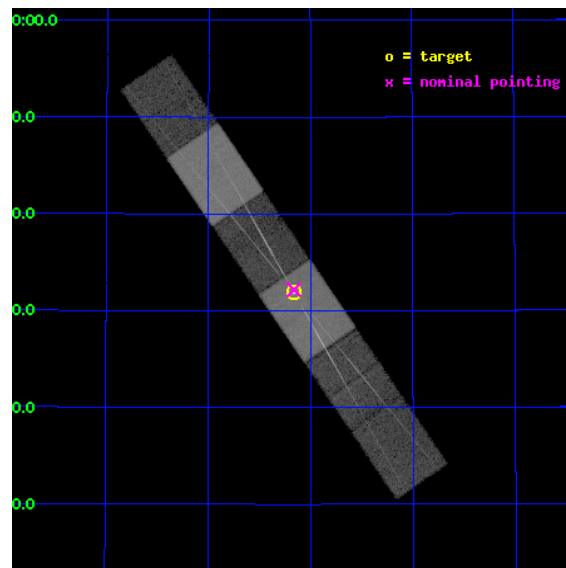
L2 Processing Date : May 24 2012

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1 Front

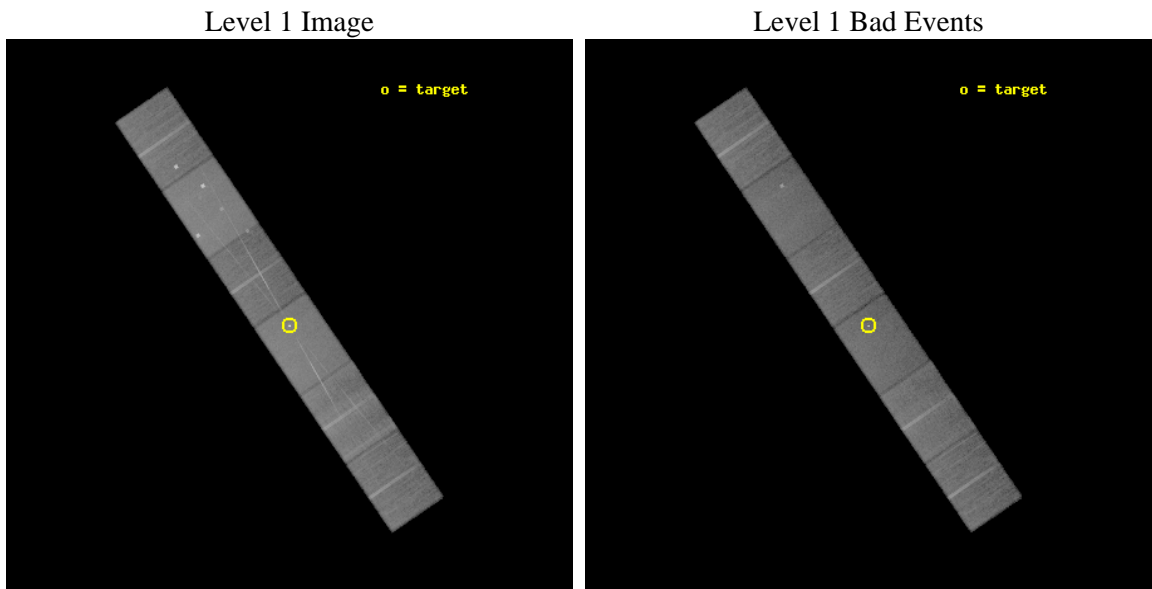
seq_num	701946	Sequence number
obs_id	10781	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79031574875	Nominal RA [deg]
dec_nom	44.536178338751	Nominal Dec [deg]
roll_nom	55.656446022323	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24125.0	Sum of GTIs [s]
livetime	23735.360324906	Livetime [s]
ontime4	24125.0	Sum of GTIs [s]
ontime5	24125.0	Sum of GTIs [s]
ontime6	24125.0	Sum of GTIs [s]
ontime7	24125.0	Sum of GTIs [s]
ontime8	24125.0	Sum of GTIs [s]
ontime9	24125.0	Sum of GTIs [s]
l2events	343958	Number of level 2 events



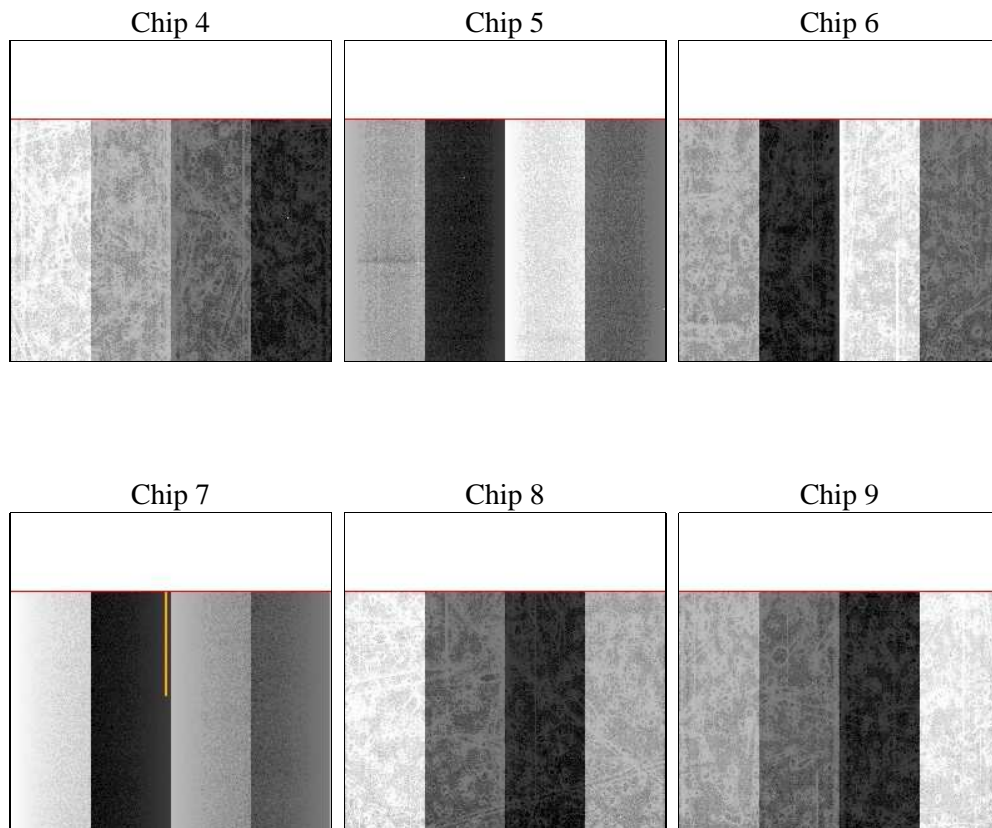
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	24125.0	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	24125.0	Sum of GTIs [s]
date	2012-05-24T16:43:48	Date and time of file creation	ontime5	24125.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	24125.0	Sum of GTIs [s]
			ontime7	24125.0	Sum of GTIs [s]
			ontime8	24125.0	Sum of GTIs [s]
			ontime9	24125.0	Sum of GTIs [s]
			l1events	1387396	Number of level 1 events

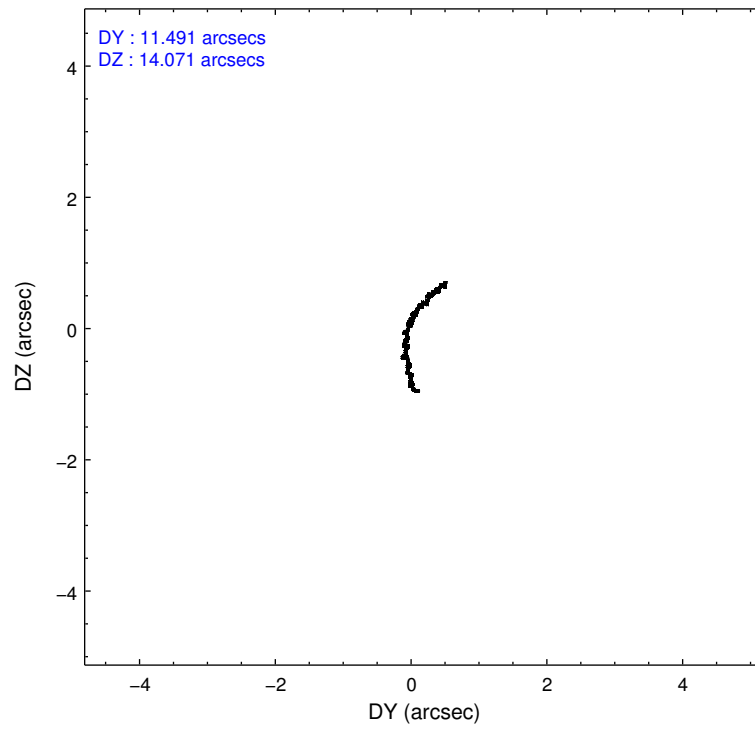
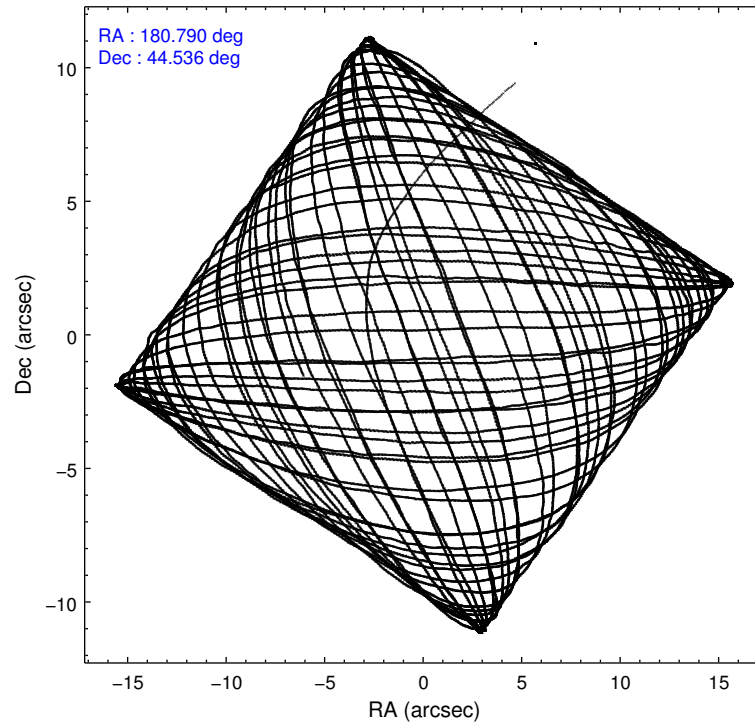
2.1.4 Events

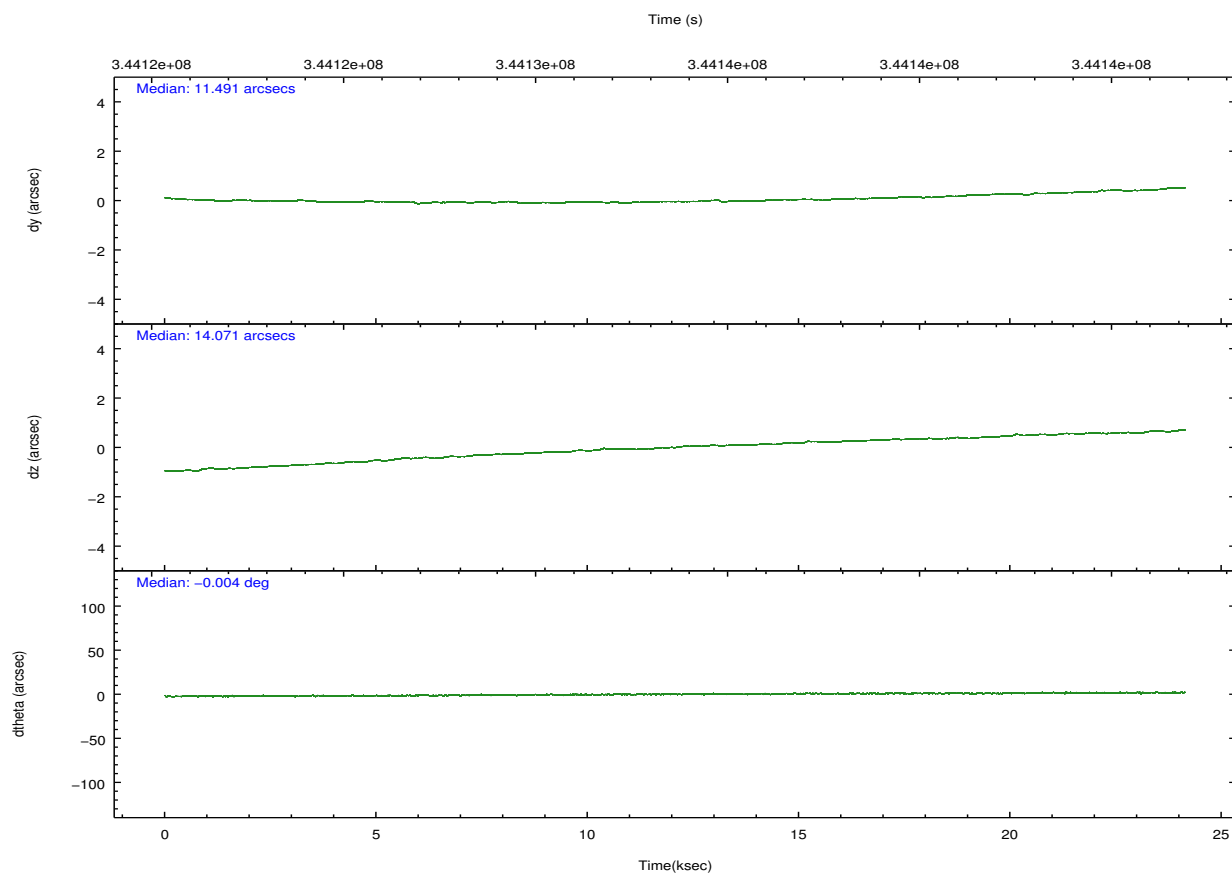
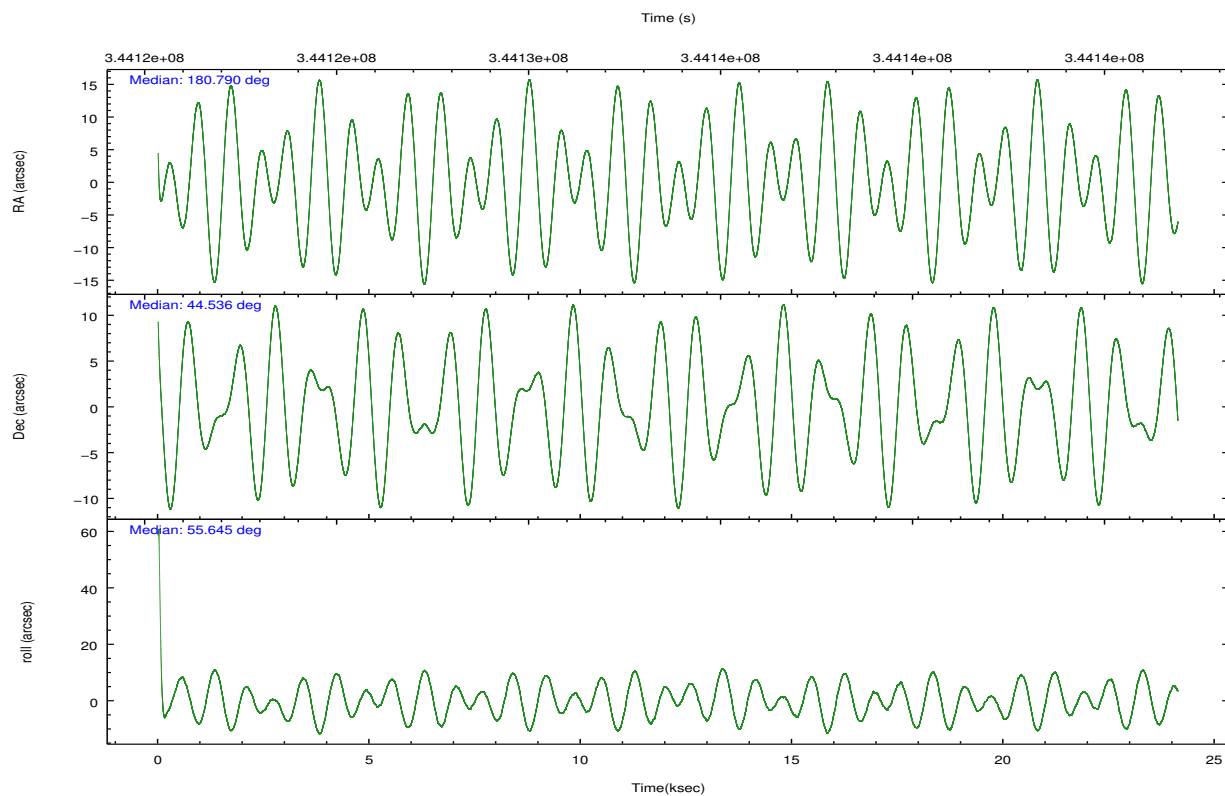
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	205264	296952	188466	272612	242737	181365	grade 0 events	16848	19858	16313	12157	21824	10570
rejected events	174538	155047	156480	151557	181837	156949		8%	6%	8%	4%	8%	5%
rejected %	85%	52%	83%	55%	74%	86%	grade 1 events	238	1748	137	433	176	112
								0%	0%	0%	0%	0%	0%
							grade 2 events	5484	42288	5955	25494	13331	4853
								2%	14%	3%	9%	5%	2%
							grade 3 events	2448	5941	2503	10894	6096	2359
								1%	2%	1%	3%	2%	1%
							grade 4 events	2302	5762	2548	10738	5719	2334
								1%	1%	1%	3%	2%	1%
							grade 5 events	8533	21397	8720	24755	11764	9275
								4%	7%	4%	9%	4%	5%
							grade 6 events	3888	69352	4900	62741	14478	4504
								1%	23%	2%	23%	5%	2%
							grade 7 events	165523	130606	147390	125400	169349	147358
								80%	43%	78%	45%	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	180.787928	180.7903157487467	CCD I2 on	N	N
[deg] Pointing Dec	44.508892	44.53617833875079	CCD I3 on	N	N
[deg] Pointing Roll	55.501456	55.65644602232346	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	-187.1228876879999	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.009634895007935	CCD S4 on	Y	Y
[s] Observation start time (MET)	344121711.184000	344120664.23517	CCD S5 on	Y	Y
Observation start date	2008-11-26T21:20:46	2008-11-26T21:04:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	344145711.184000	344146516.27395	On-chip summing requested	N	N
Observation end date	2008-11-27T04:00:46	2008-11-27T04:15:16	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



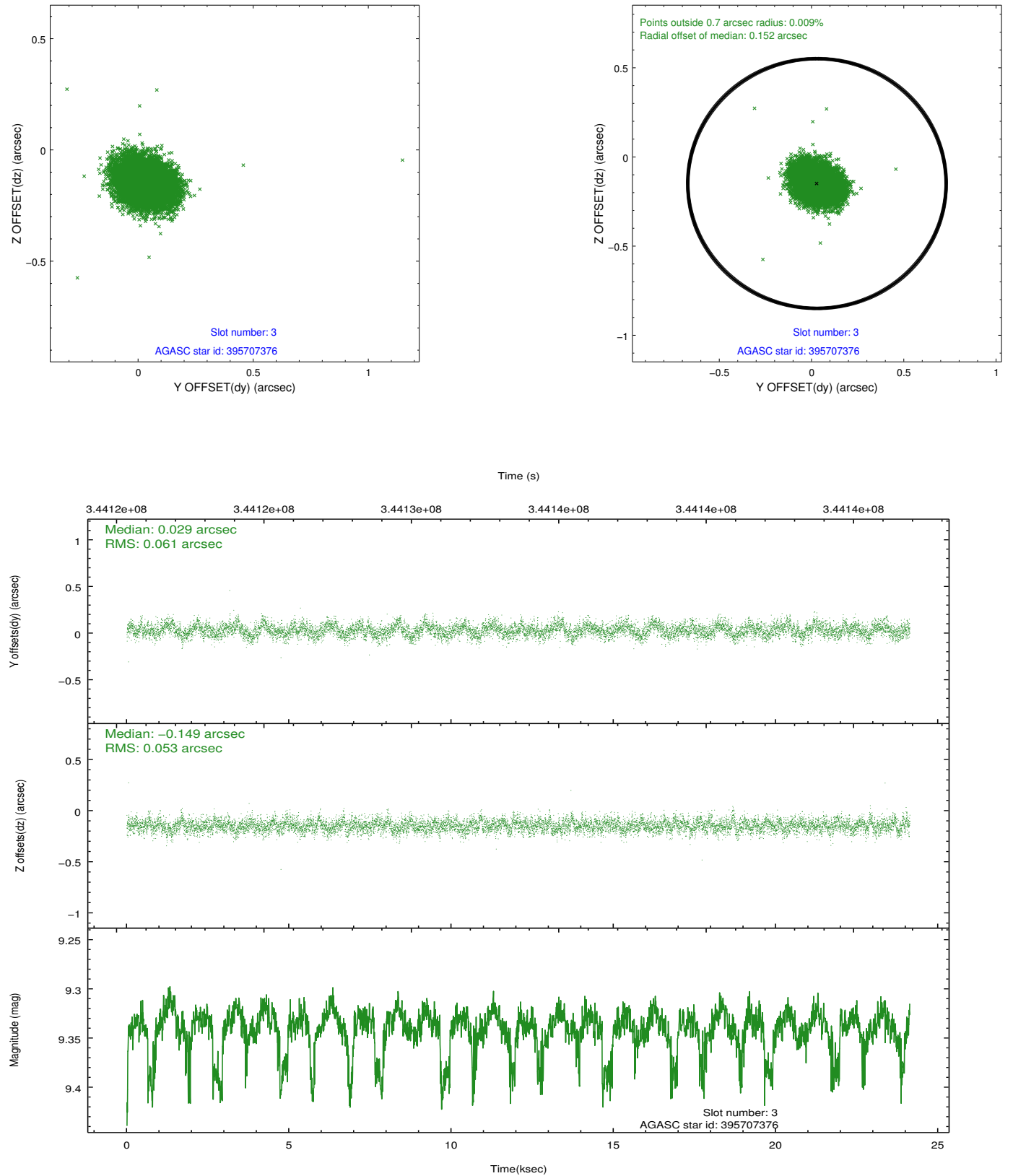


Slot Statistics

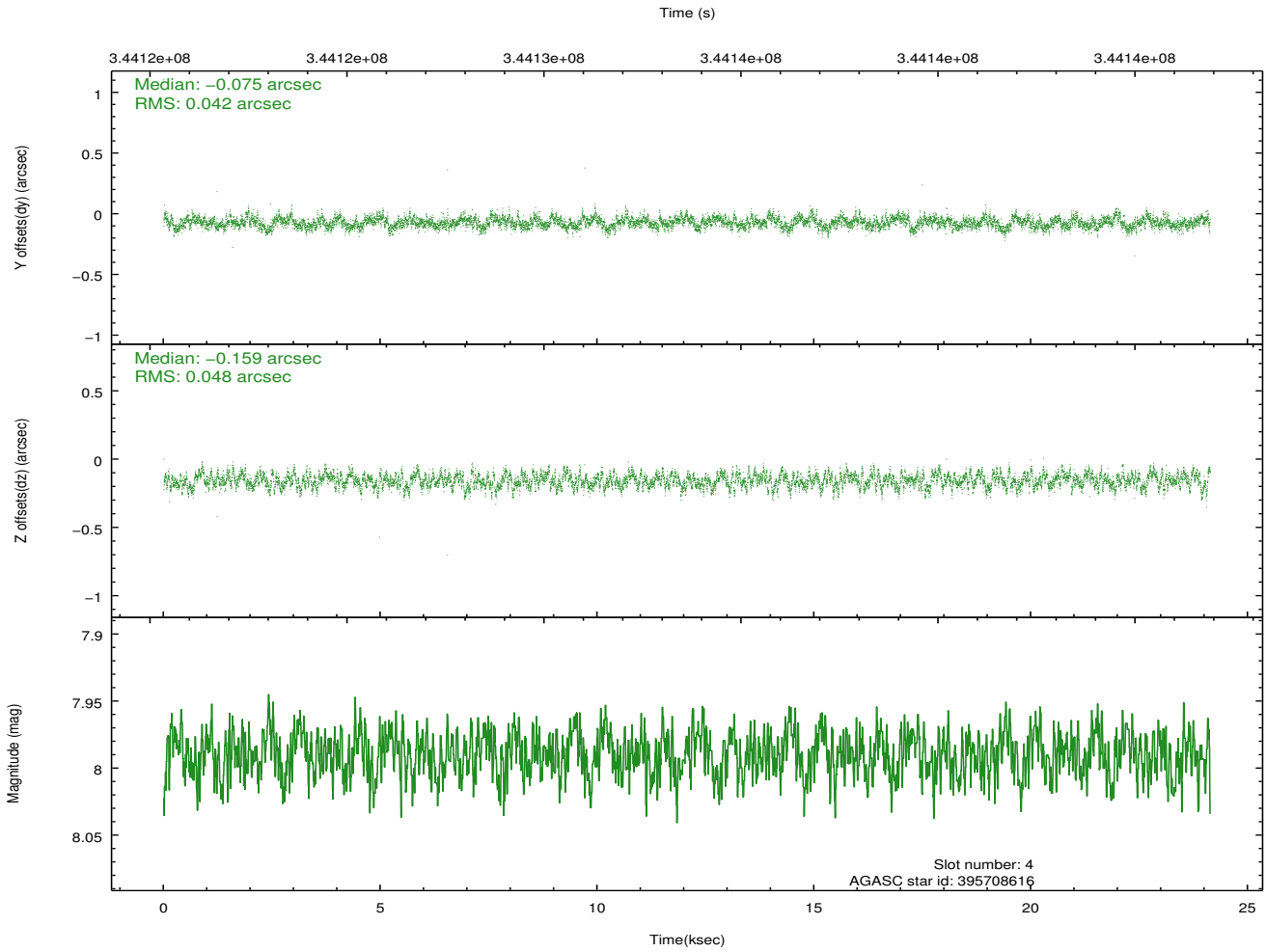
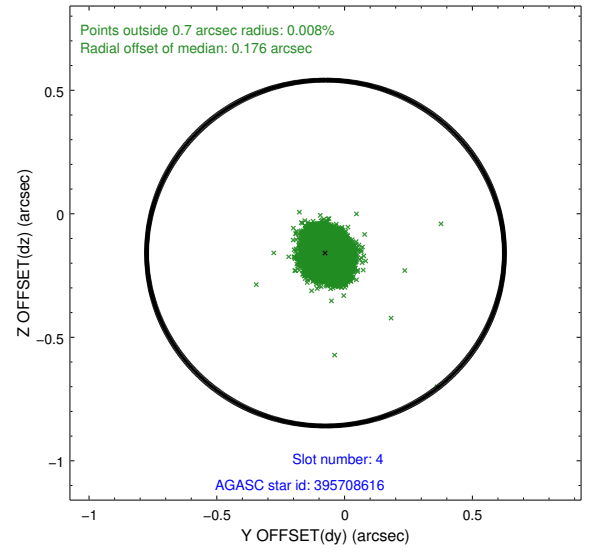
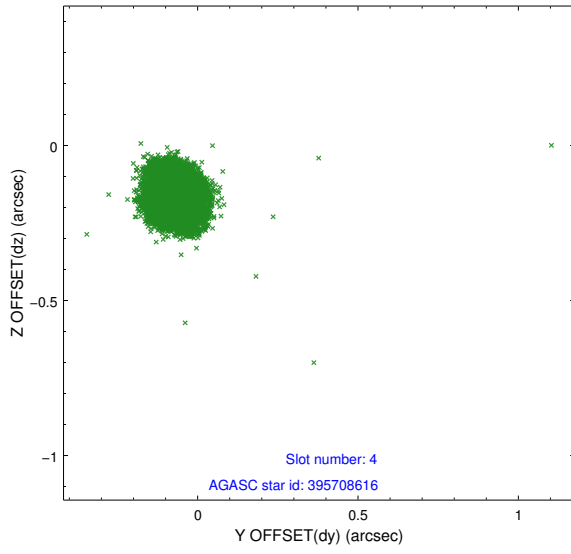
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.86	5885	-0.093	-0.045	0.016	0.026	0.000000	0.000000	-764.33	-1797.55
1	FID	ACIS-S-4	6.94	5886	0.152	0.057	0.010	0.018	0.000000	0.000000	2149.14	110.87
2	FID	ACIS-S-5	6.98	5886	-0.092	-0.003	0.015	0.024	0.000000	0.000000	-1817.00	104.65
3	GUIDE	395707376	9.34	11744	0.029	-0.149	0.085	0.139	180.967983	44.858789	1298.61	335.19
4	GUIDE	395708616	7.99	11770	-0.075	-0.159	0.066	0.107	180.101872	44.630343	-629.05	1700.21
5	GUIDE	395708696	8.88	11758	0.043	0.090	0.067	0.109	180.383726	44.624291	-242.06	1090.60
6	GUIDE	395709608	8.36	11766	0.061	0.078	0.065	0.103	181.055130	44.450389	216.69	-684.21
7	GUIDE	395710032	8.80	11767	-0.060	0.142	0.072	0.118	181.512910	44.376001	669.68	-1803.34

2.4 Star Slots

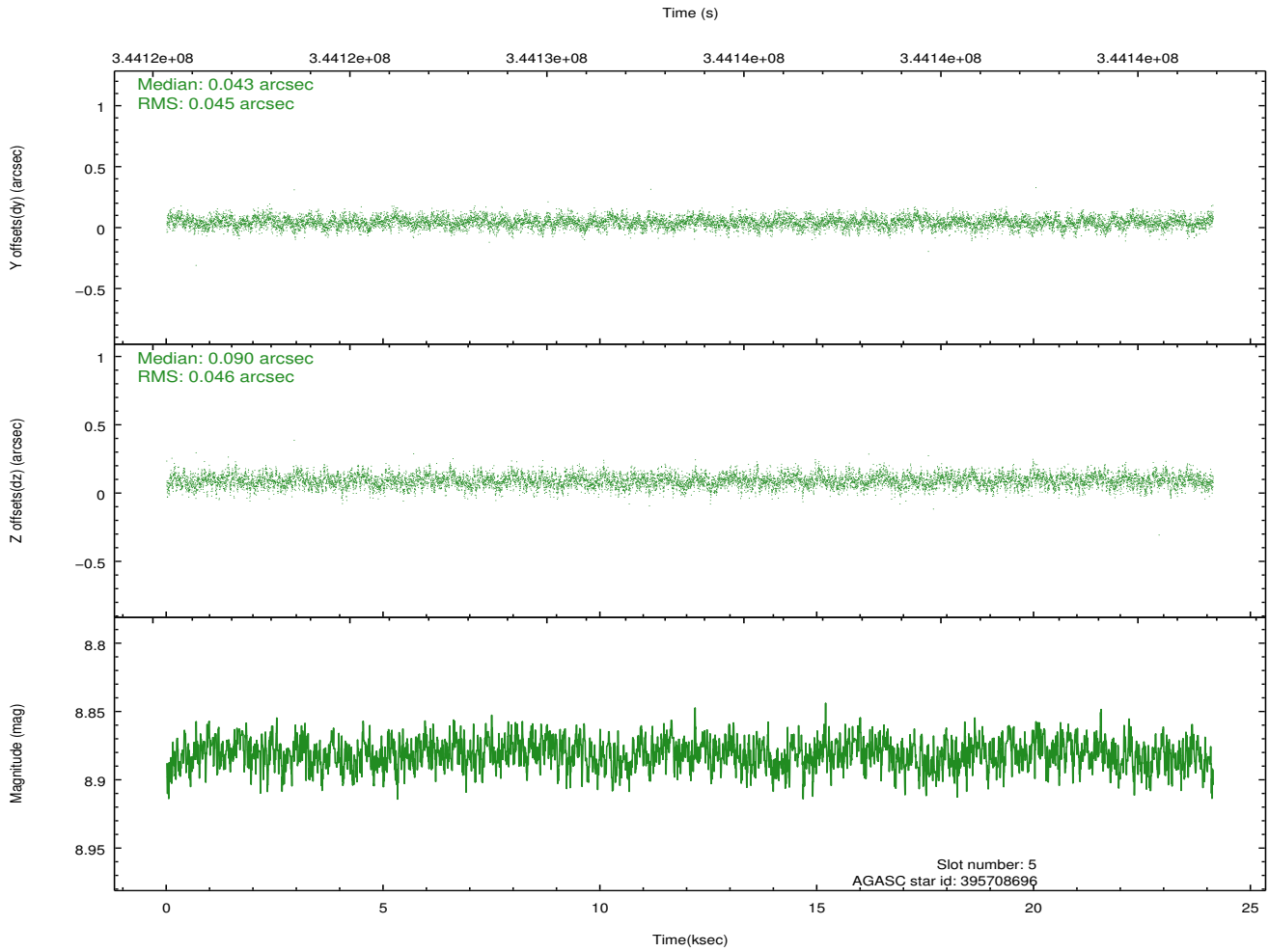
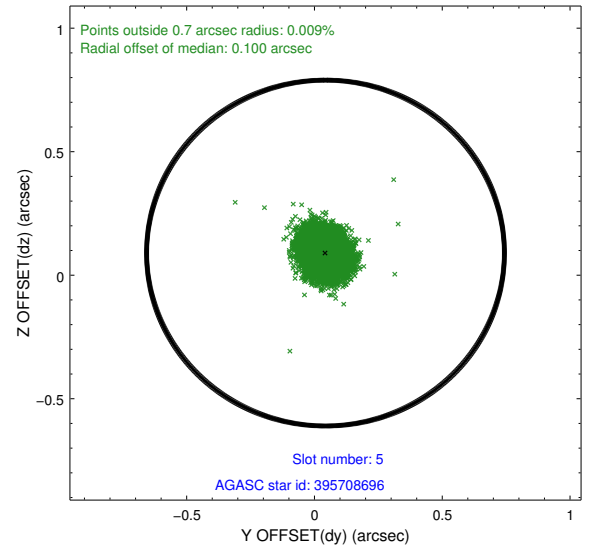
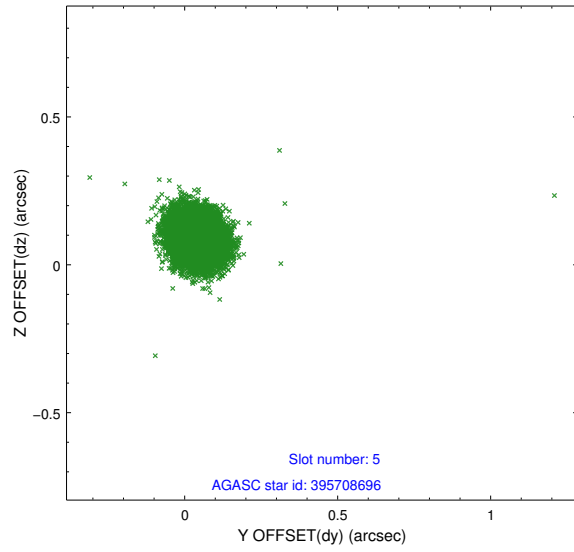
2.4.1 Slot 3



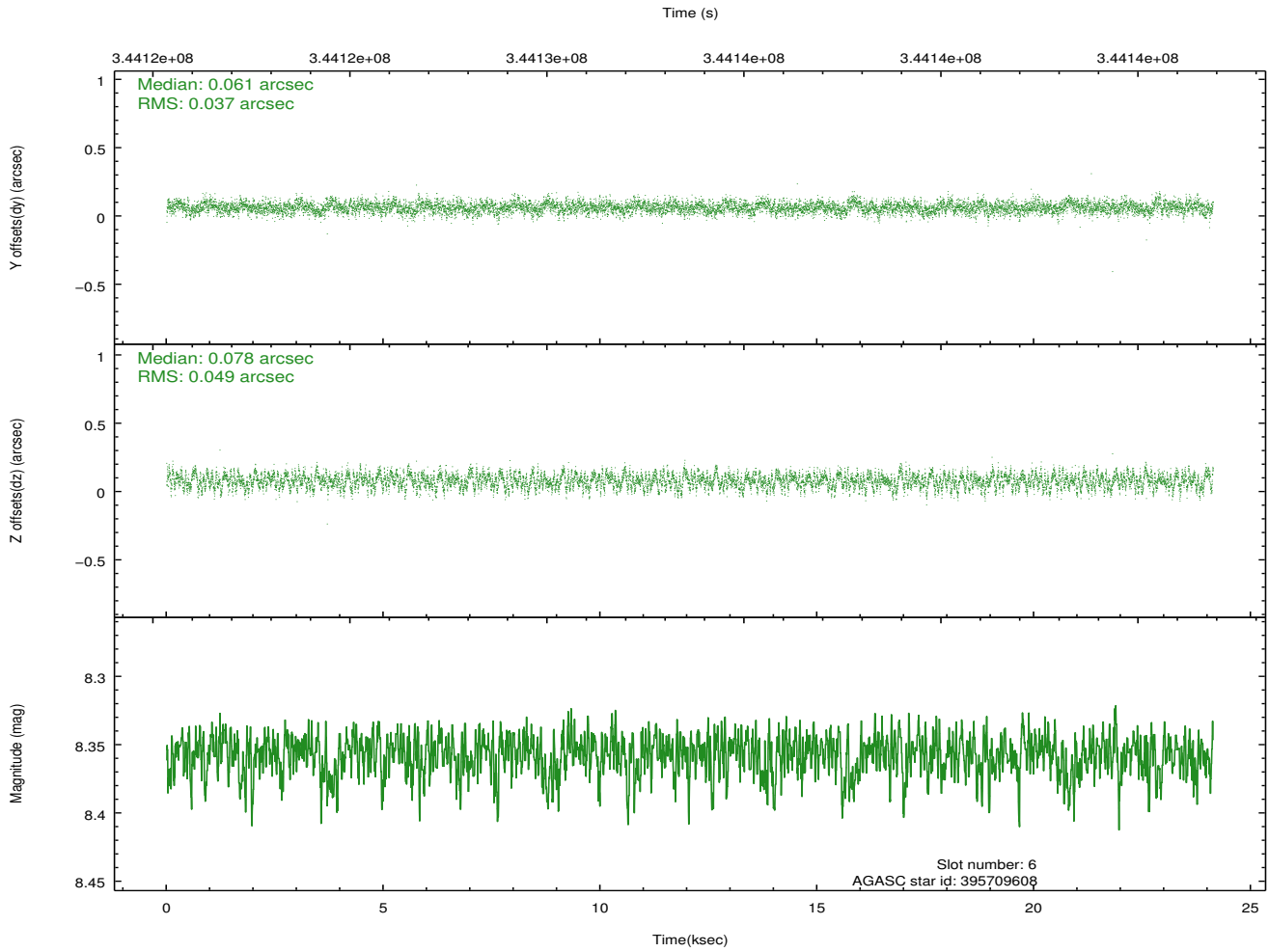
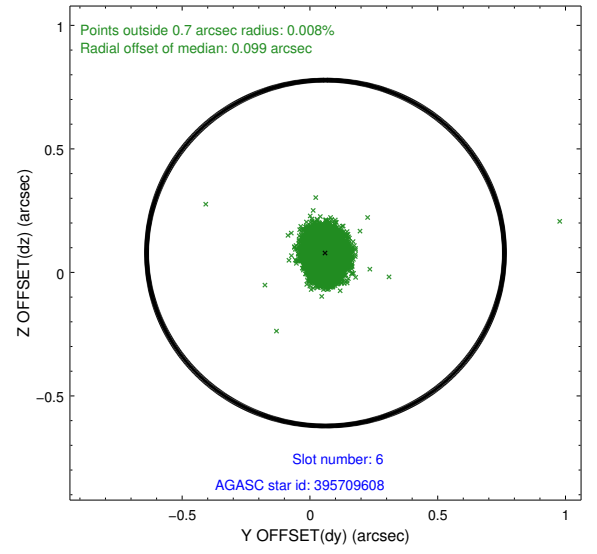
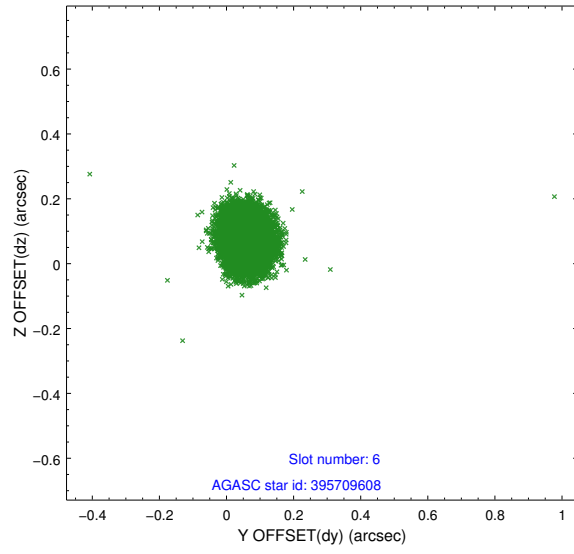
2.4.2 Slot 4



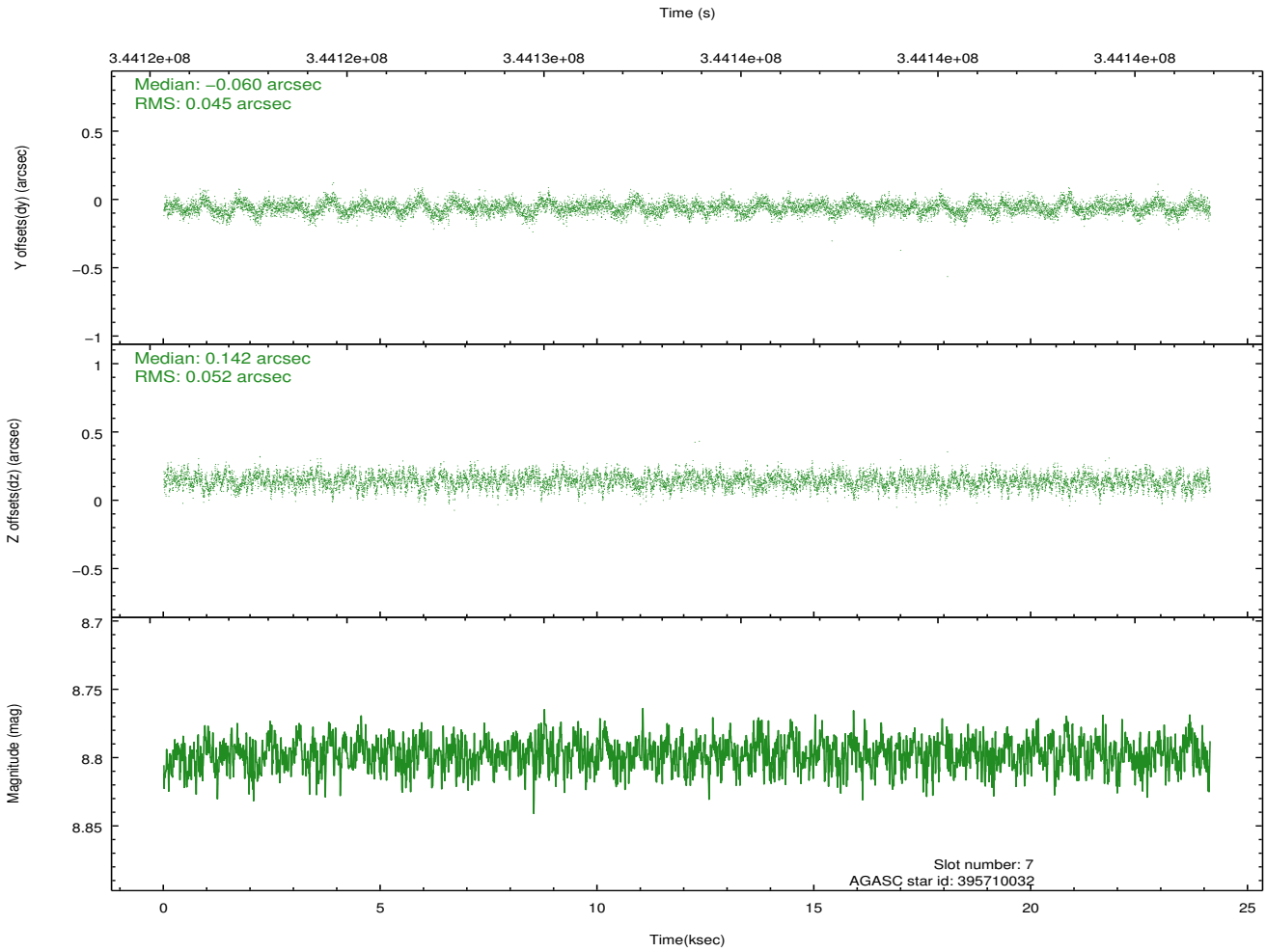
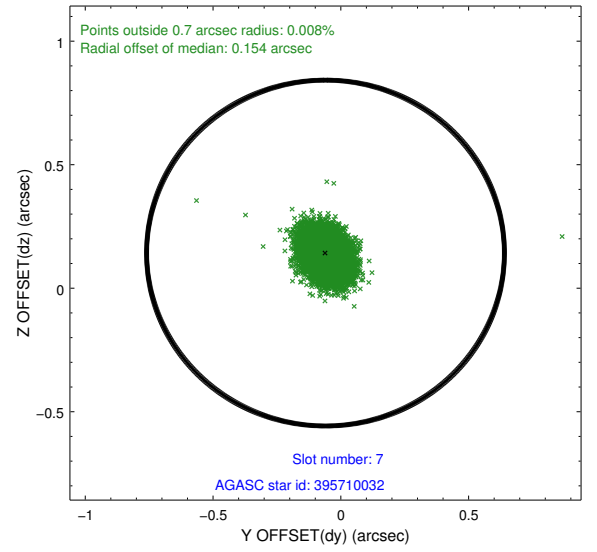
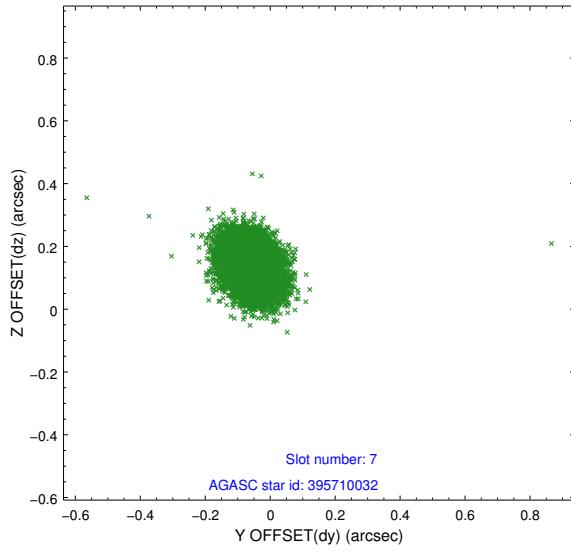
2.4.3 Slot 5



2.4.4 Slot 6

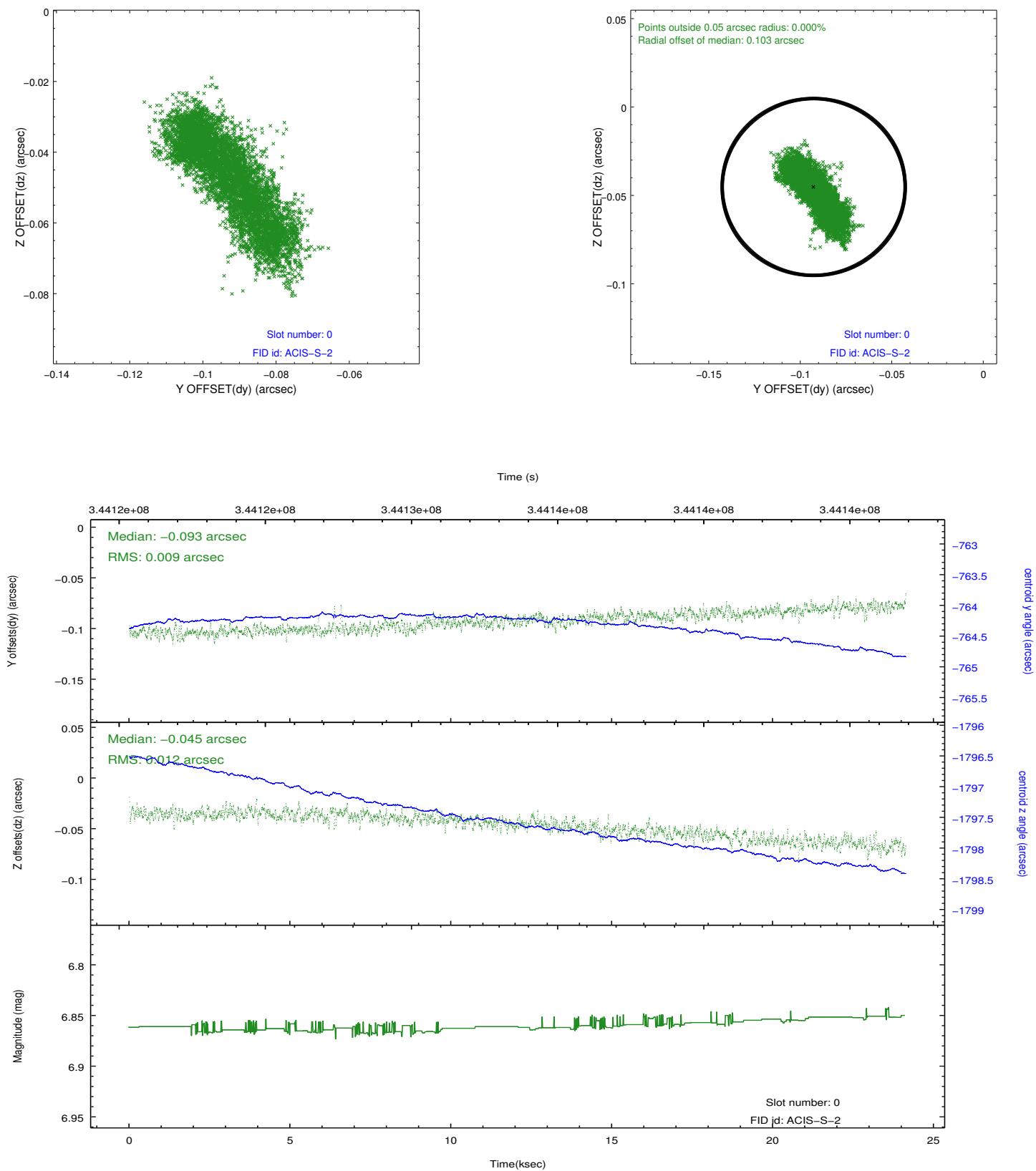


2.4.5 Slot 7

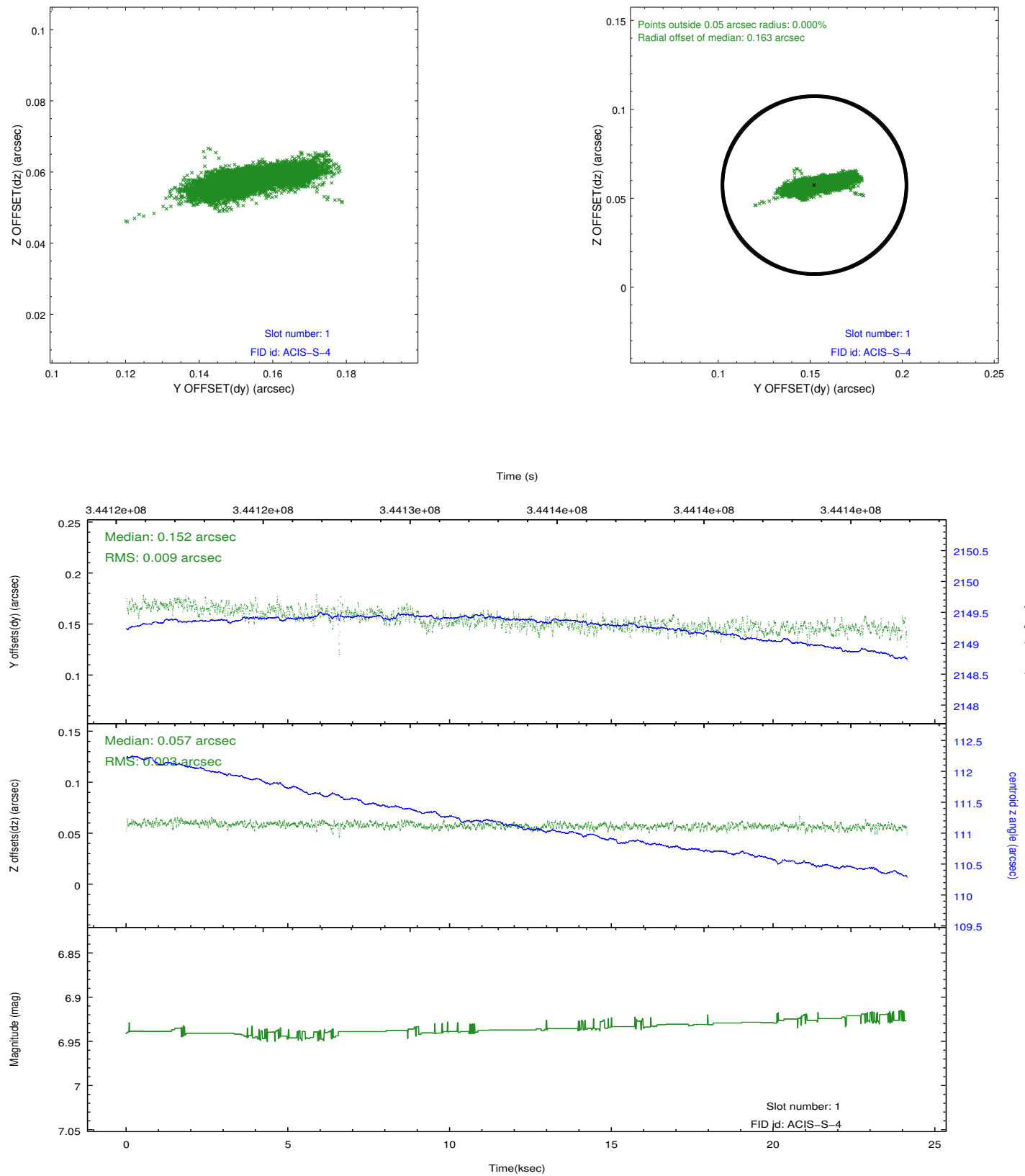


2.5 FID Slots

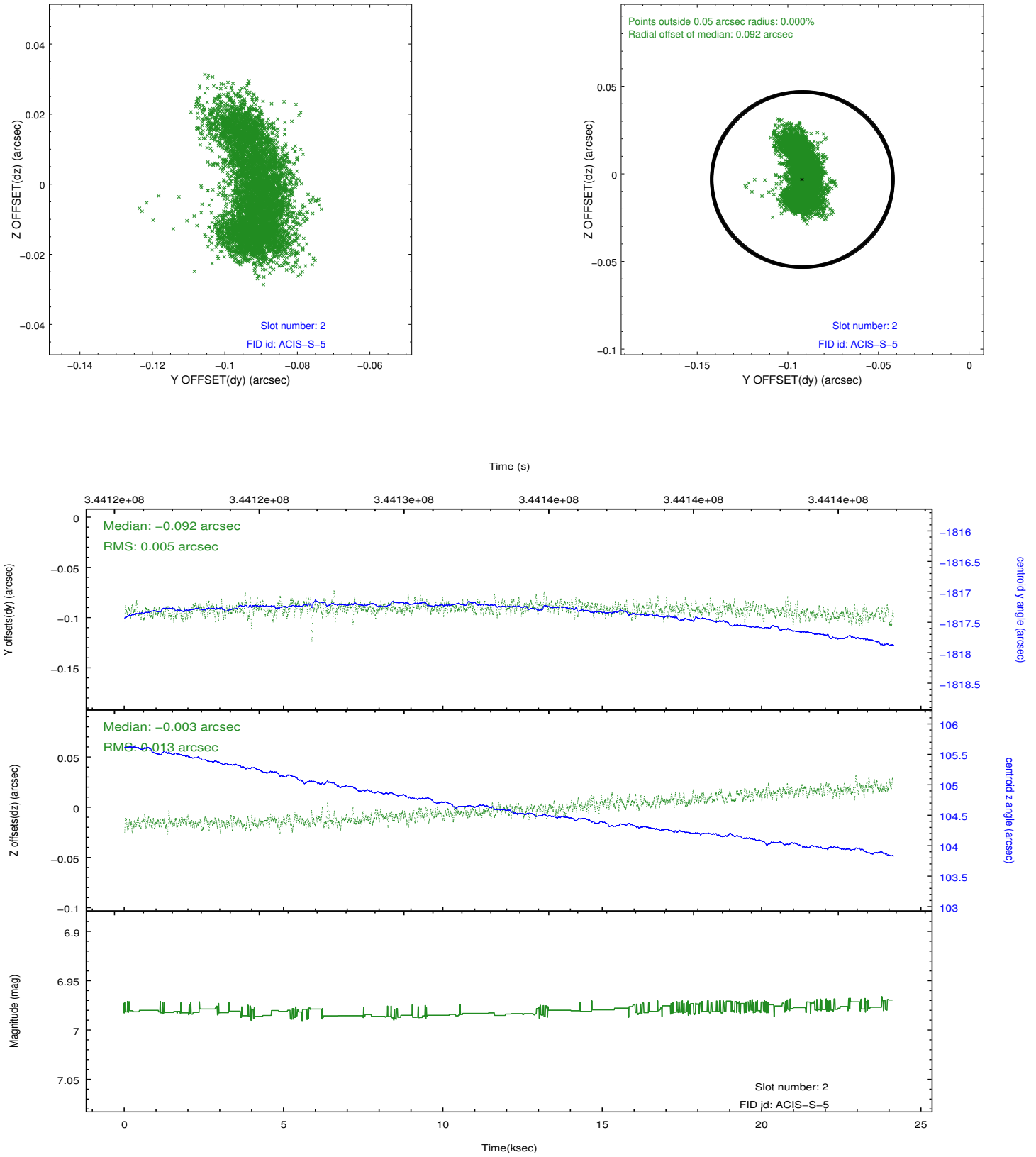
2.5.1 Slot 0



2.5.2 Slot 1

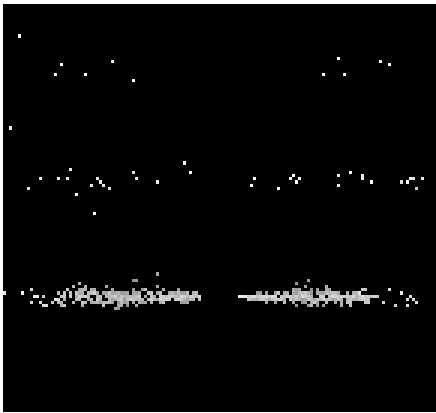


2.5.3 Slot 2

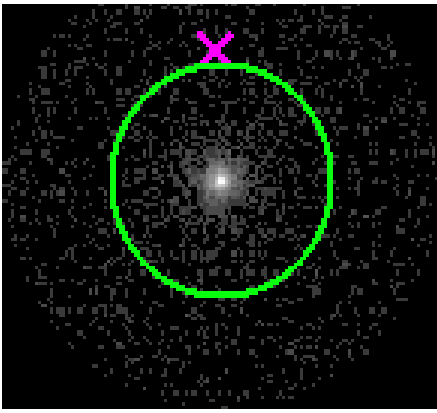


3 Gratings

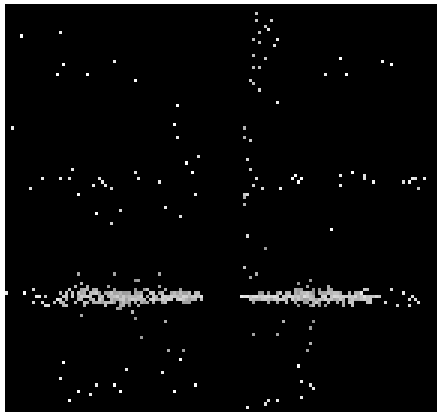
3.1 HEG Arm



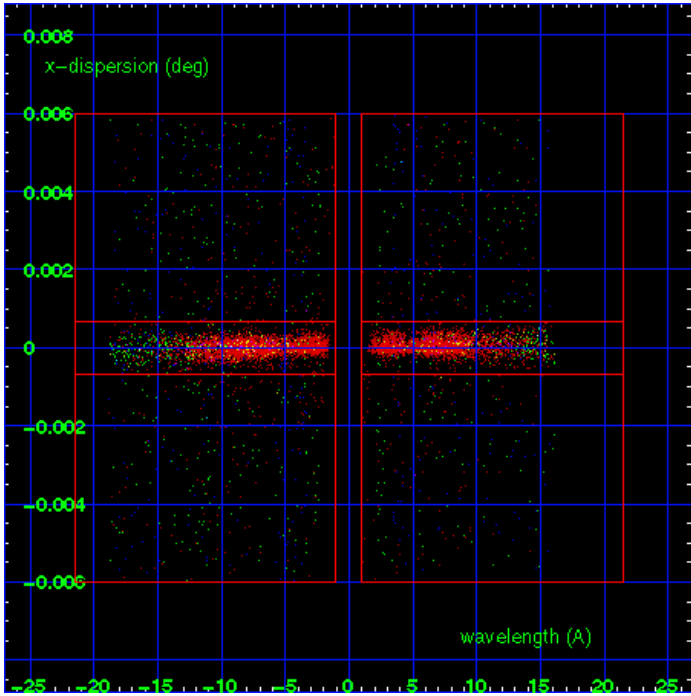
HEG Order Sort 123



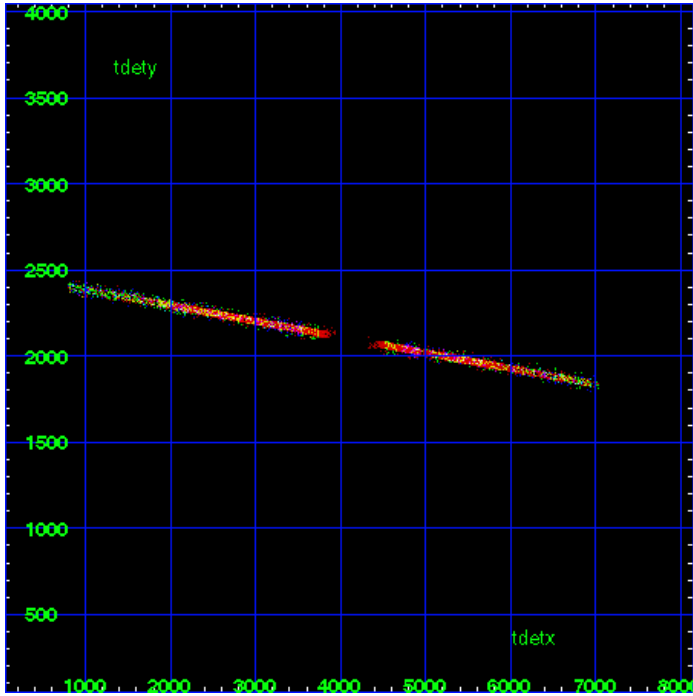
HEG Zero Order



HEG Order Sort ALL

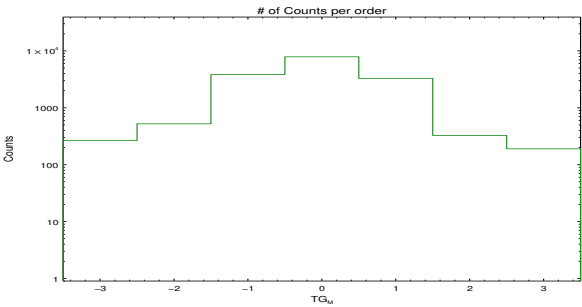


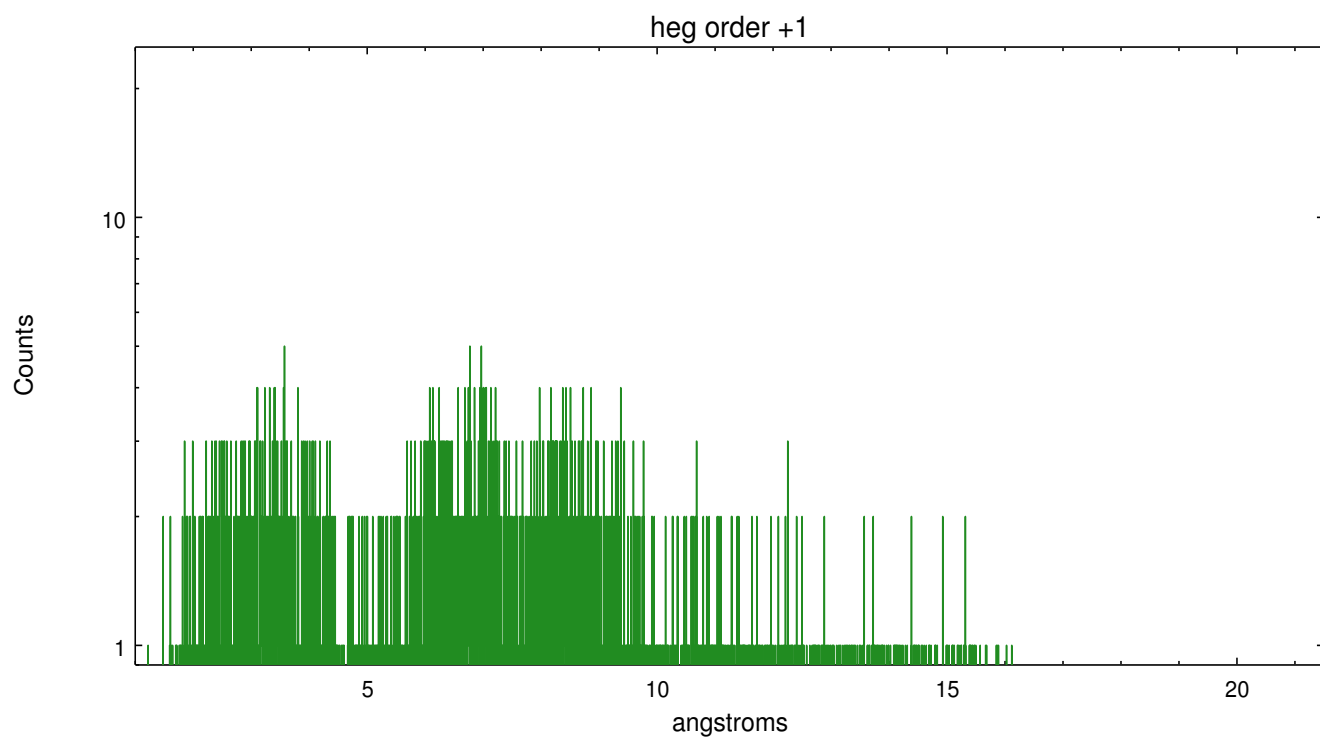
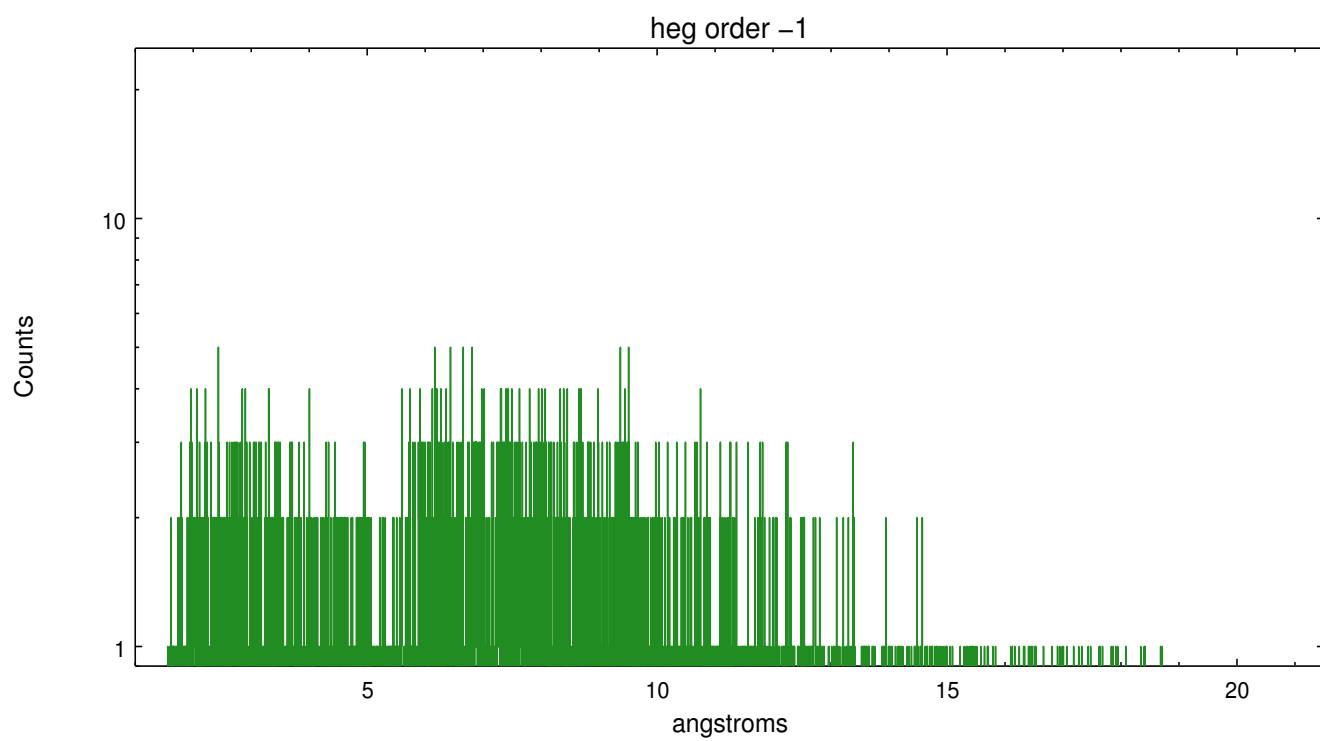
Spot Image HEG



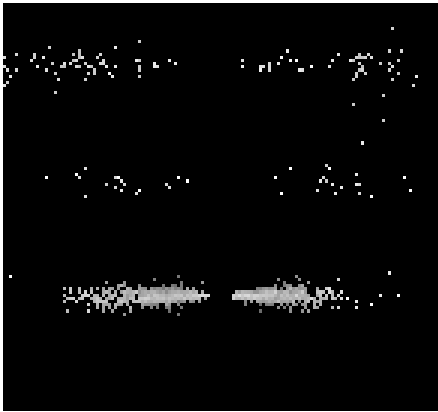
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	267	523	3833	7879	3289	326	190

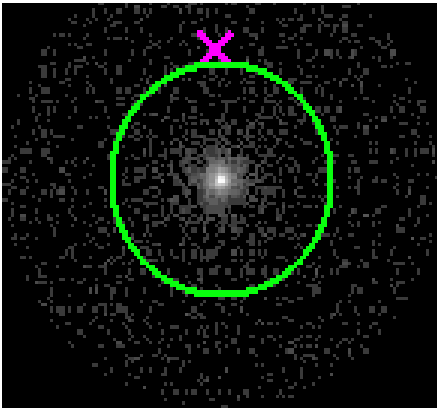




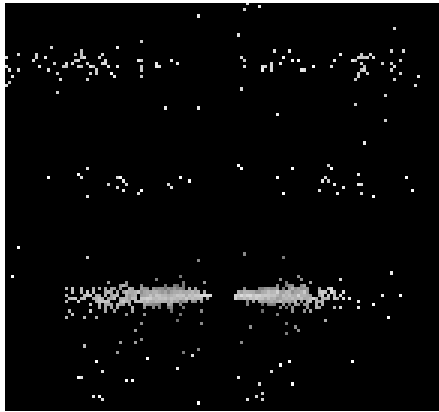
3.2 MEG Arm



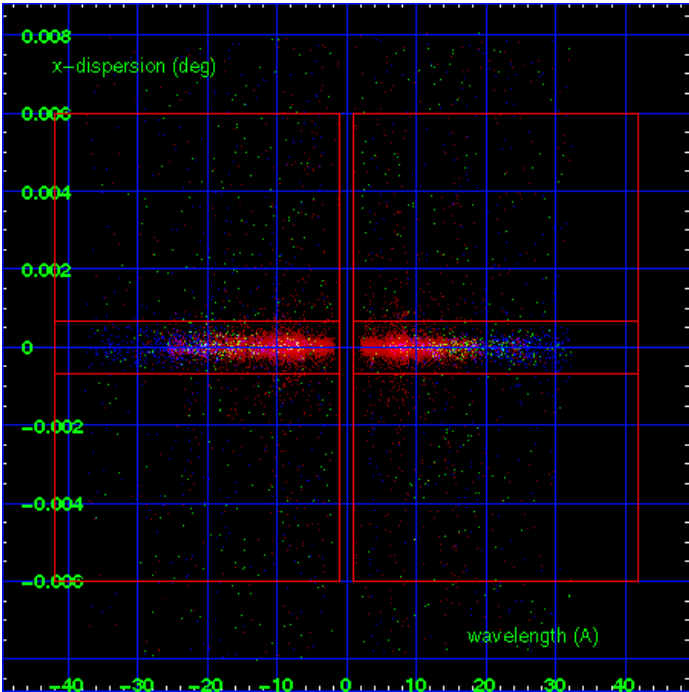
MEG Order Sort 123



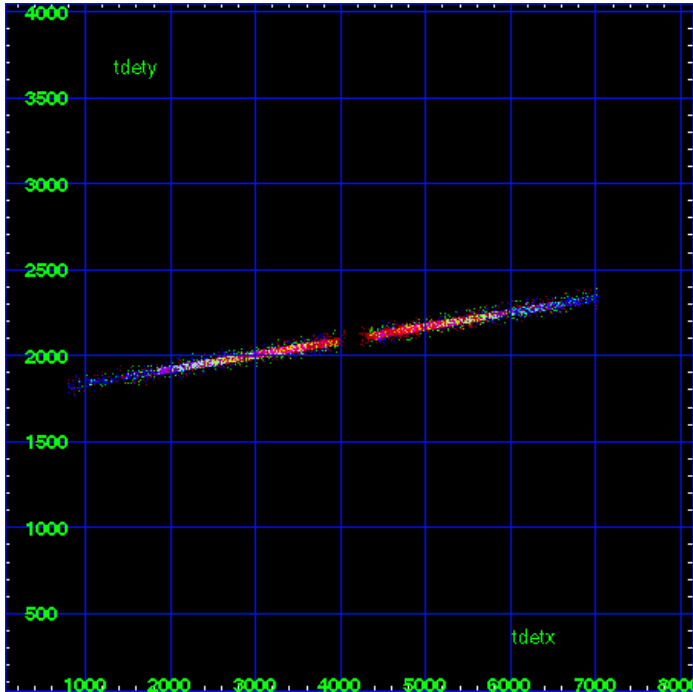
MEG Zero Order



MEG Order Sort ALL

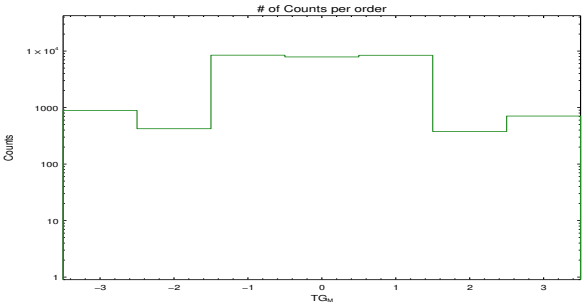


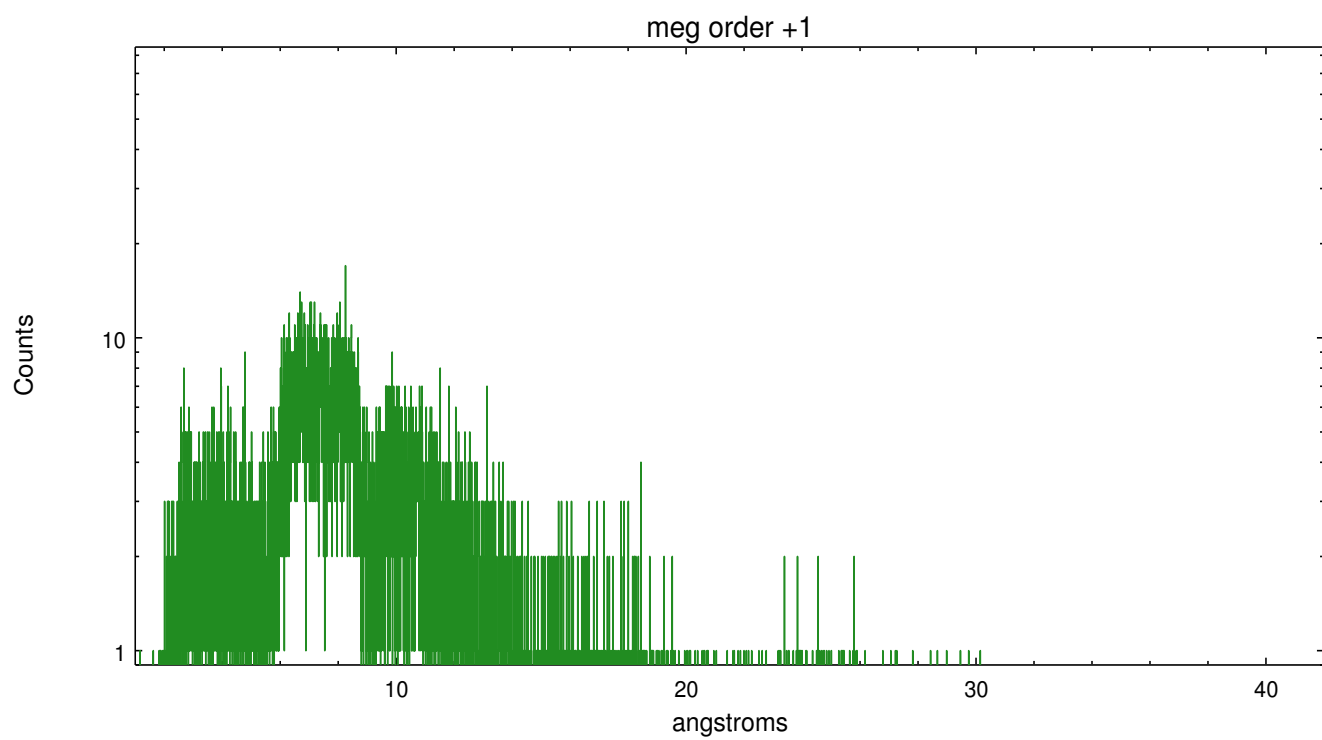
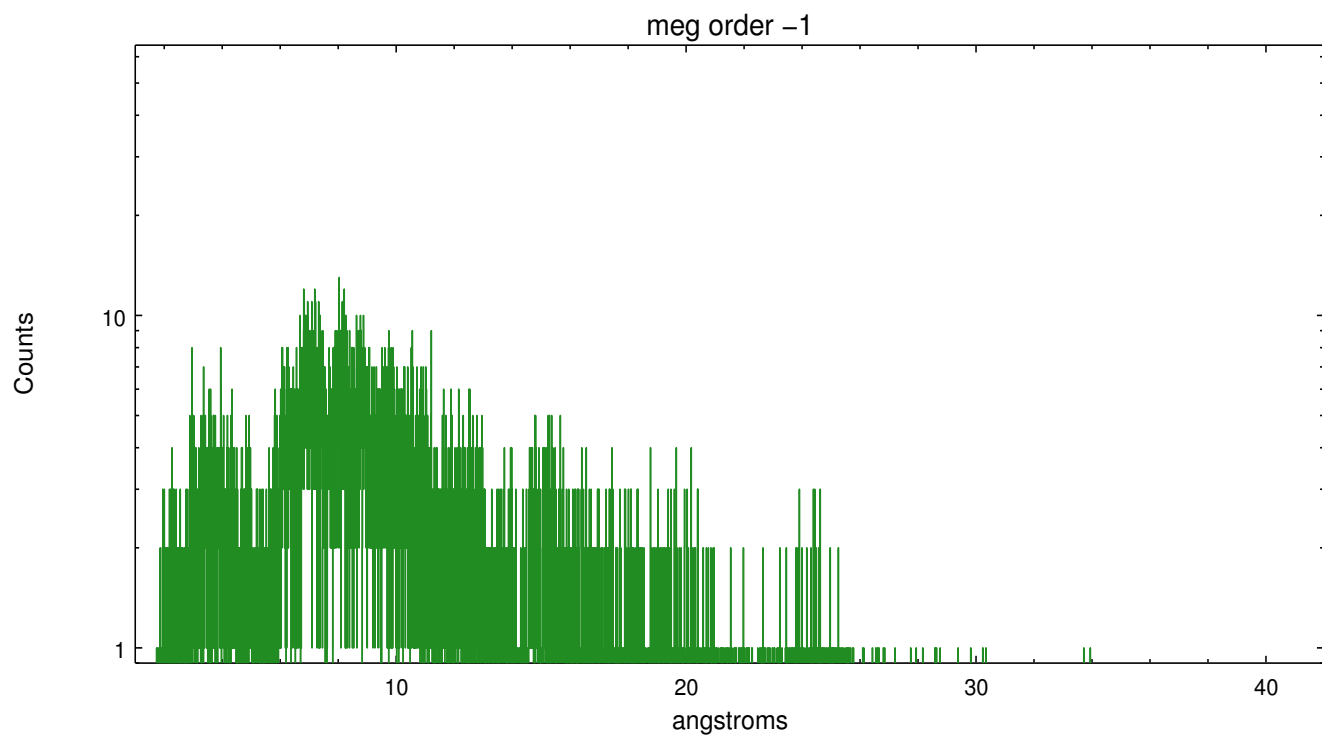
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	888	423	8459	7879	8419	377	708





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.125

A.2 Comments