

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10780 - L2 Version 2
Chandra X-Ray Center

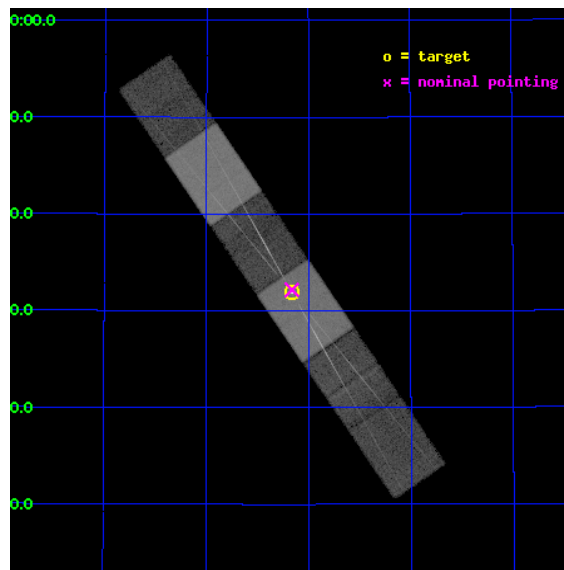
L2 Processing Date : May 24 2012

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1 Front

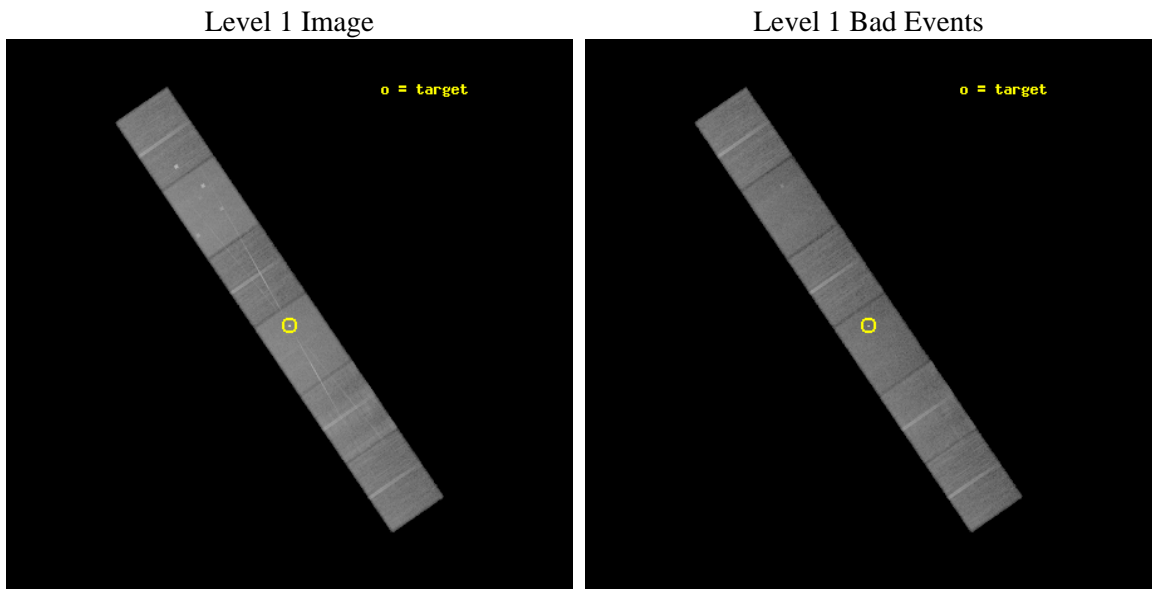
seq_num	701946	Sequence number
obs_id	10780	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79029275223	Nominal RA [deg]
dec_nom	44.536167519675	Nominal Dec [deg]
roll_nom	55.656444094401	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26427.5	Sum of GTIs [s]
livetime	26000.672952807	Livetime [s]
ontime4	26427.5	Sum of GTIs [s]
ontime5	26427.5	Sum of GTIs [s]
ontime6	26427.5	Sum of GTIs [s]
ontime7	26427.5	Sum of GTIs [s]
ontime8	26427.5	Sum of GTIs [s]
ontime9	26422.41800952	Sum of GTIs [s]
l2events	375750	Number of level 2 events



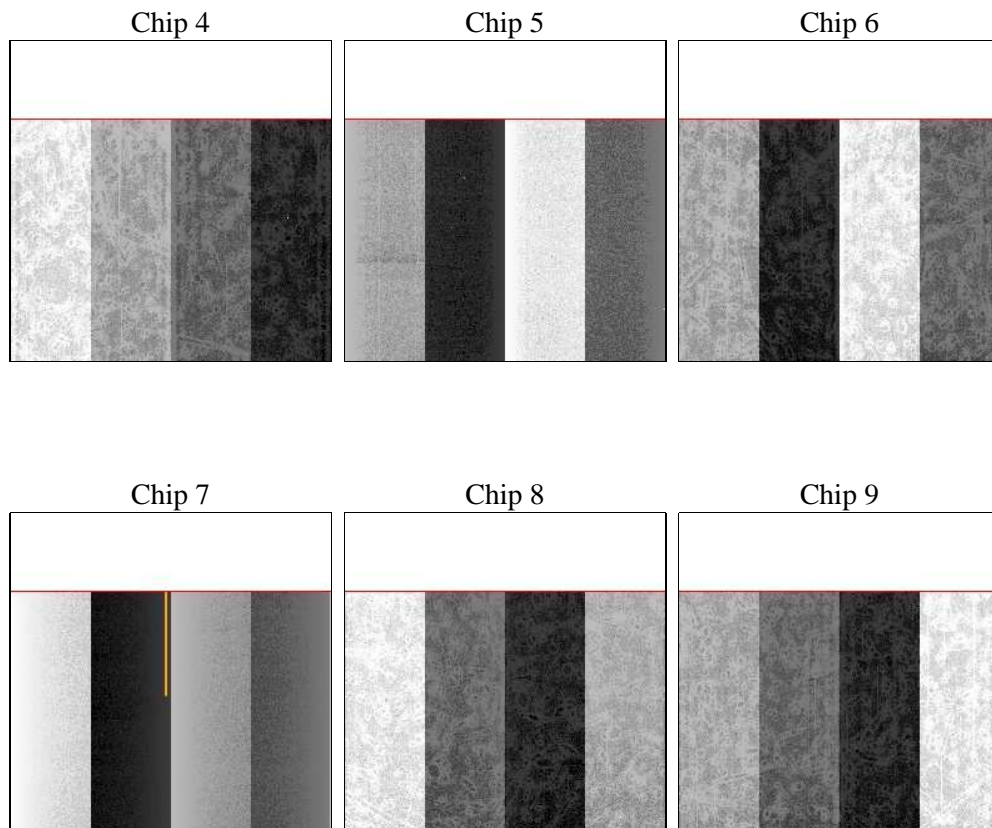
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26250.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	26427.5	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	26427.5	Sum of GTIs [s]
date	2012-05-24T16:12:30	Date and time of file creation	ontime5	26427.5	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	26427.5	Sum of GTIs [s]
			ontime7	26427.5	Sum of GTIs [s]
			ontime8	26427.5	Sum of GTIs [s]
			ontime9	26422.41800952	Sum of GTIs [s]
			l1events	1511331	Number of level 1 events

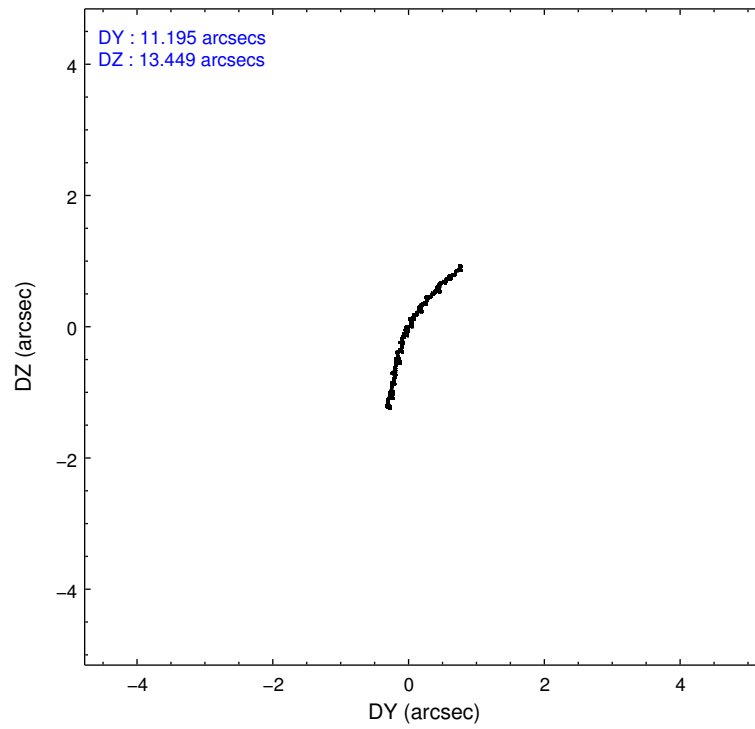
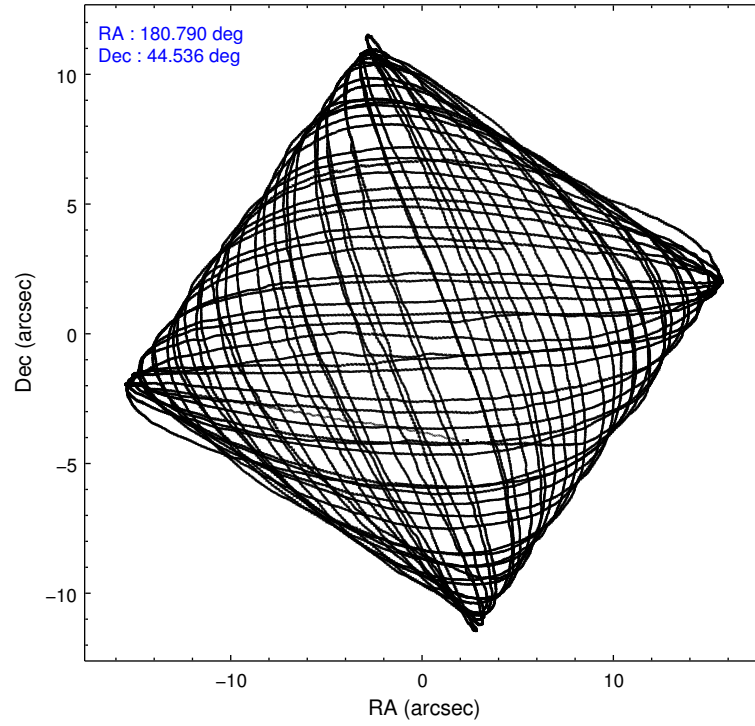
2.1.4 Events

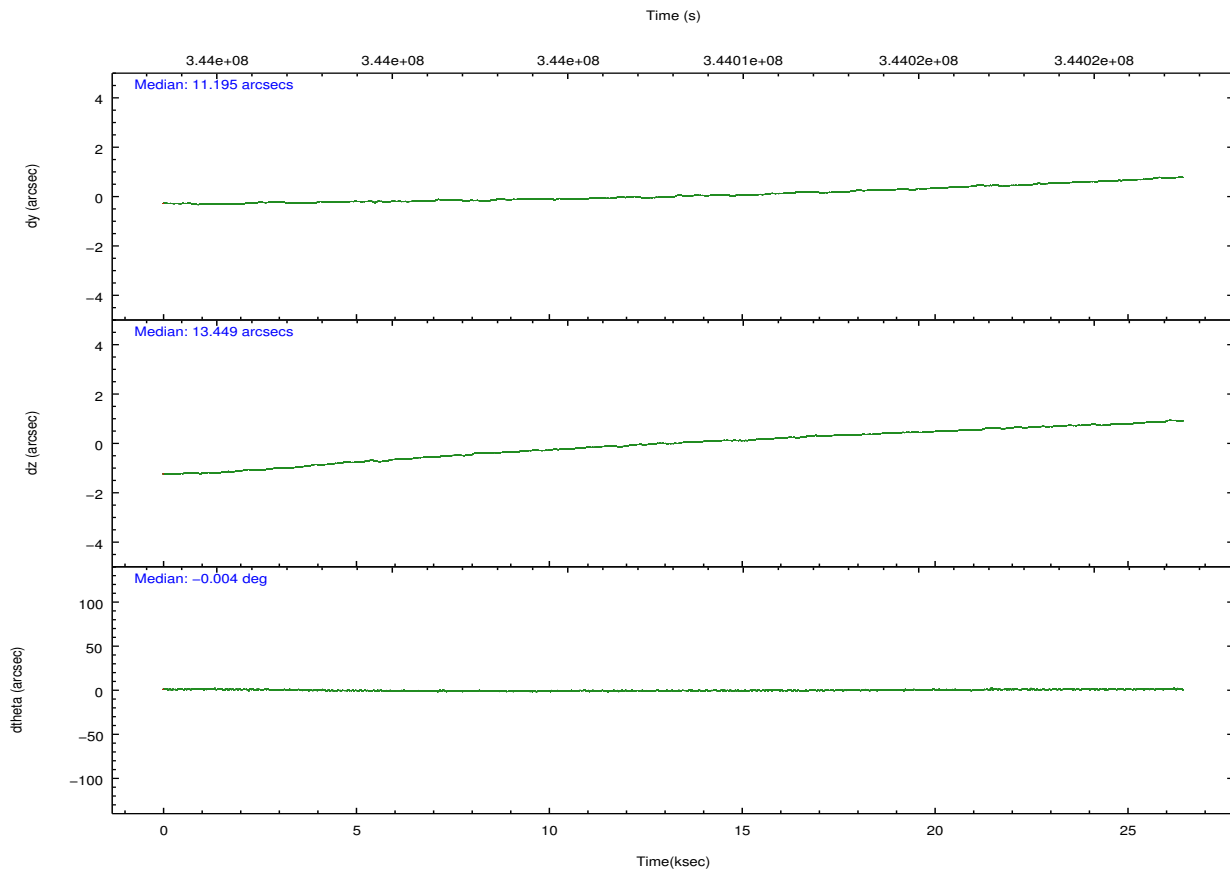
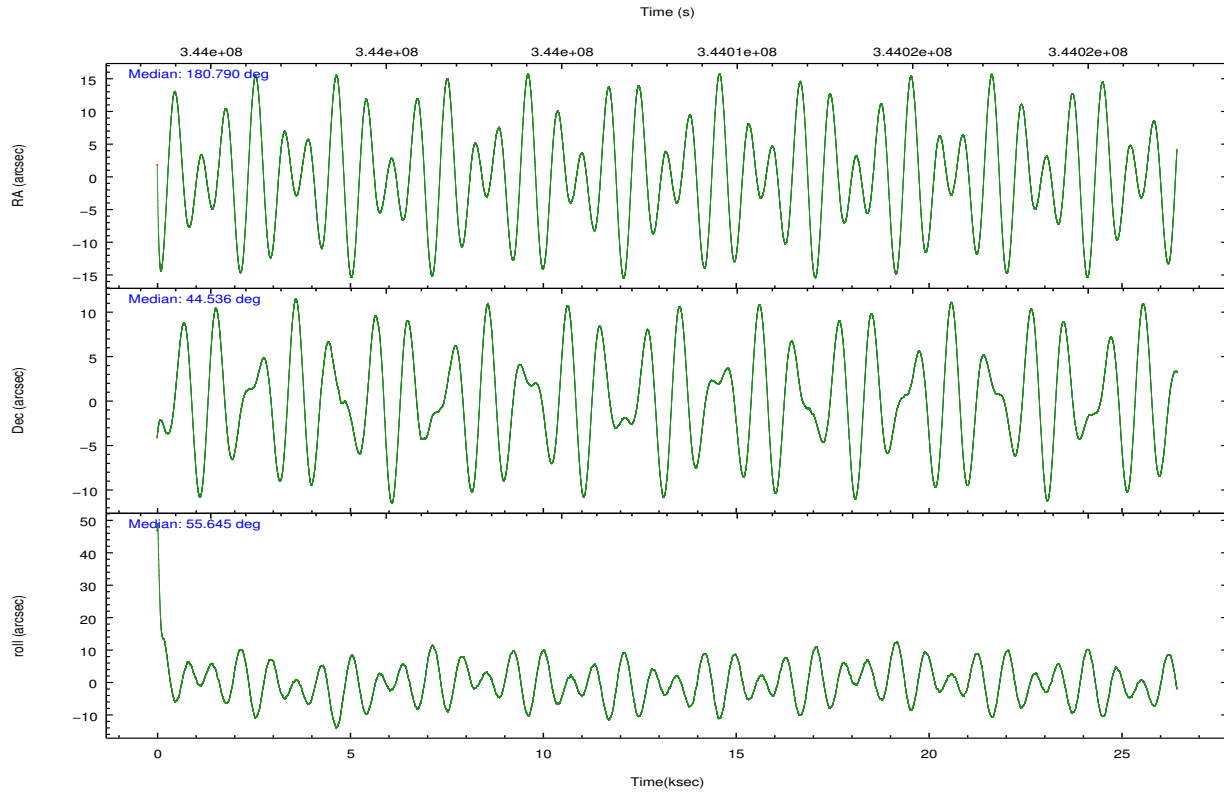
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	229674	314739	205929	296565	264735	199689	grade 0 events	15871	14633	16635	13258	22785	11118
rejected events	198410	167183	172521	163894	197763	173065		6%	4%	8%	4%	8%	5%
rejected %	86%	53%	83%	55%	74%	86%	grade 1 events	195	822	126	461	179	99
								0%	0%	0%	0%	0%	0%
							grade 2 events	5973	44379	6269	28138	14609	5314
								2%	14%	3%	9%	5%	2%
							grade 3 events	2694	6483	2684	11723	6760	2706
								1%	2%	1%	3%	2%	1%
							grade 4 events	2540	6230	2621	11733	6265	2510
								1%	1%	1%	3%	2%	1%
							grade 5 events	9118	23315	9434	26850	12767	10024
								3%	7%	4%	9%	4%	5%
							grade 6 events	4245	76114	5264	68097	16871	5032
								1%	24%	2%	22%	6%	2%
							grade 7 events	189038	142763	162896	136305	184499	162886
								82%	45%	79%	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	180.7902927522289	CCD I2 on	N	N
[deg] Pointing Dec	44.508892	44.5361675196749	CCD I3 on	N	N
[deg] Pointing Roll	55.501456	55.656444094401	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)	343994958.184000	343993906.57892	CCD S5 on	Y	Y
Observation start date	2008-11-25T10:08:13	2008-11-25T09:51:46	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	344021208.184000	344022019.25531	On-chip summing requested	N	N
Observation end date	2008-11-25T17:25:43	2008-11-25T17:40:19	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



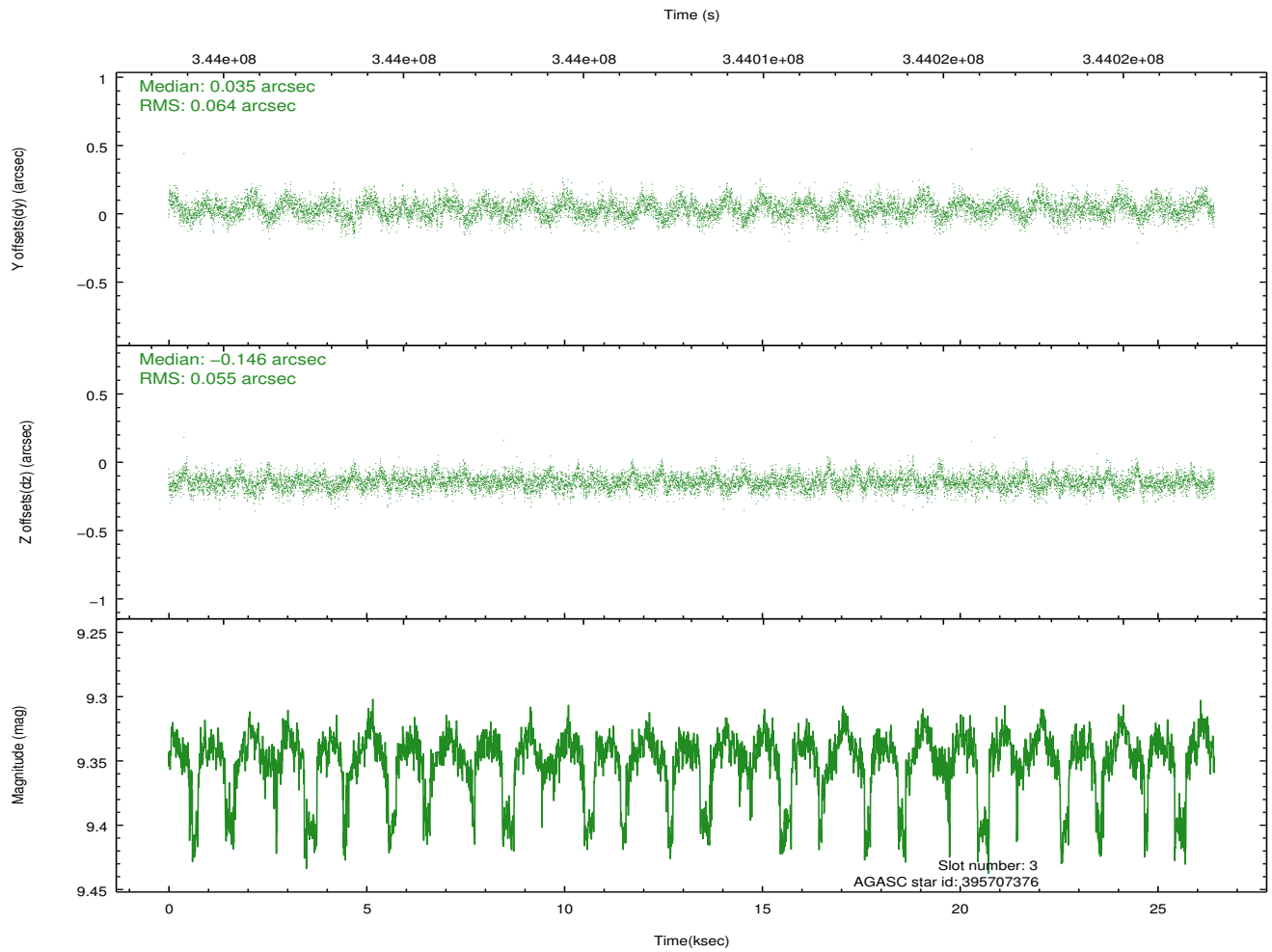
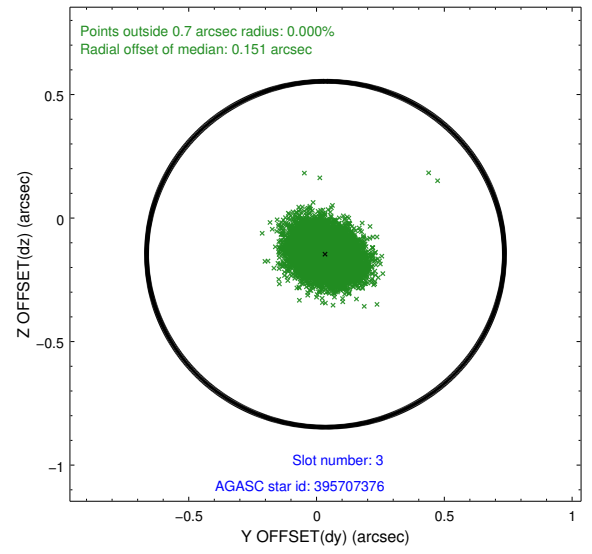
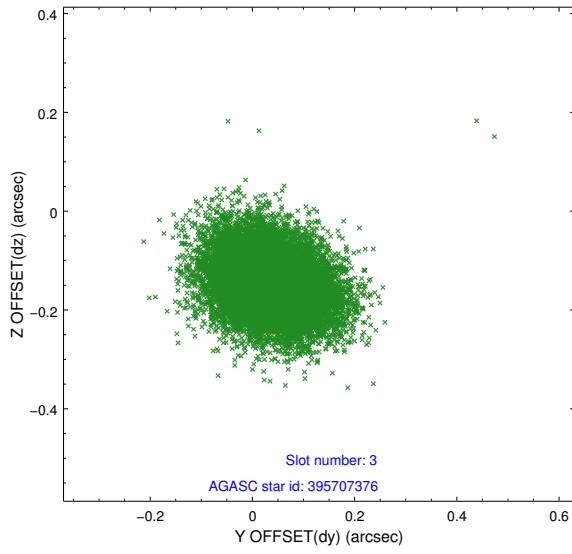


Slot Statistics

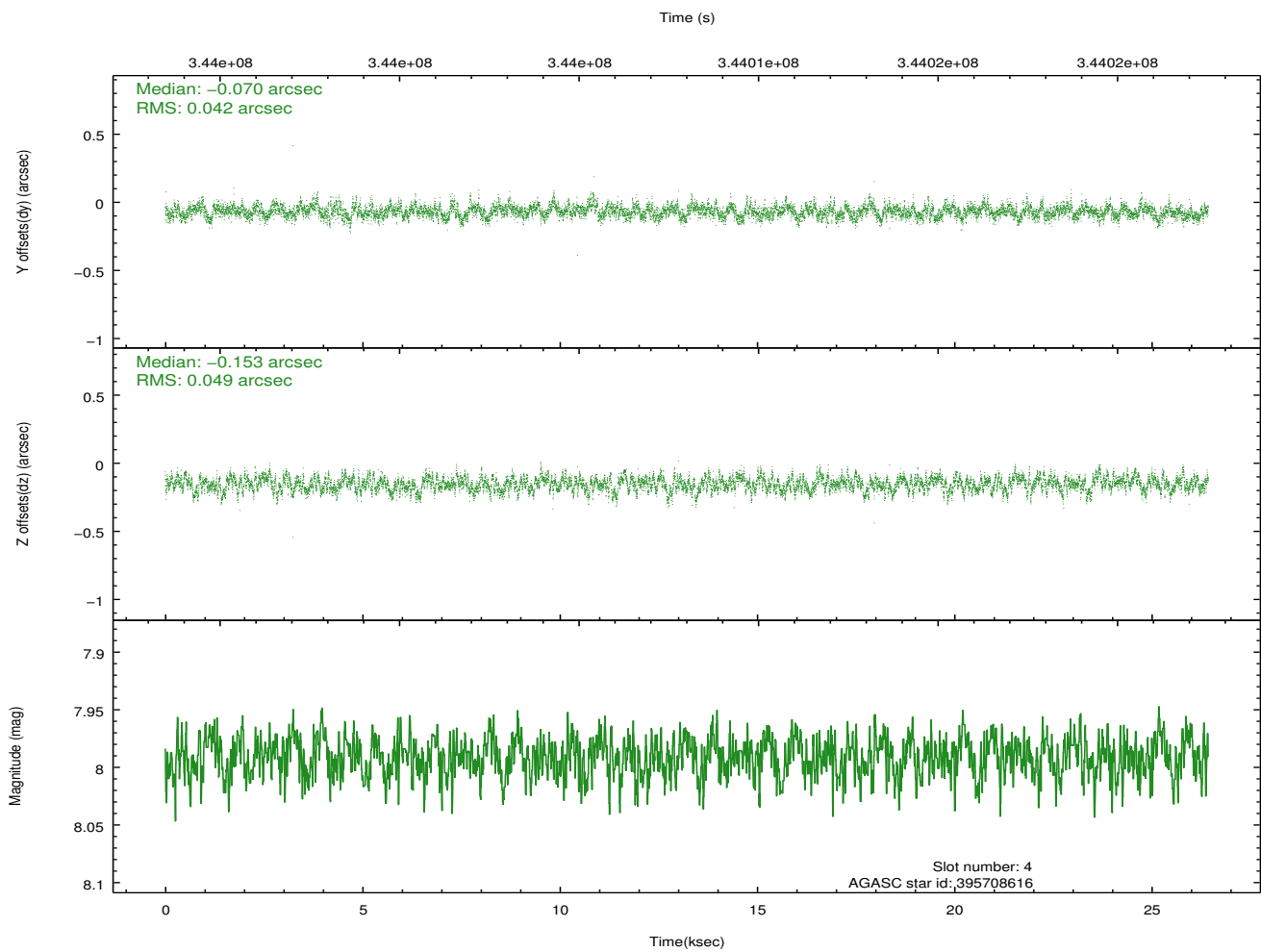
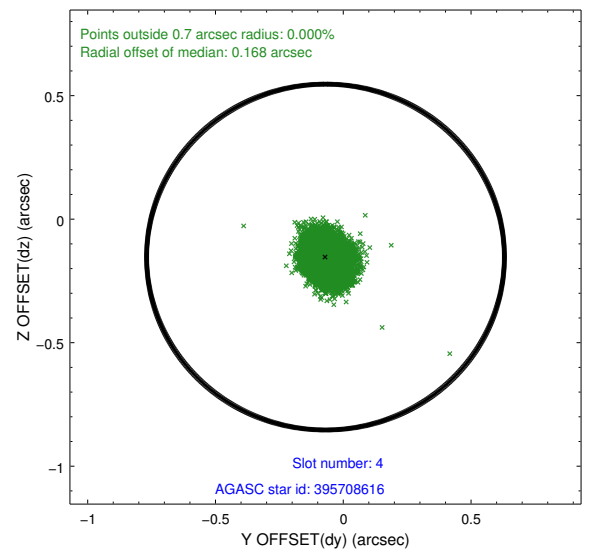
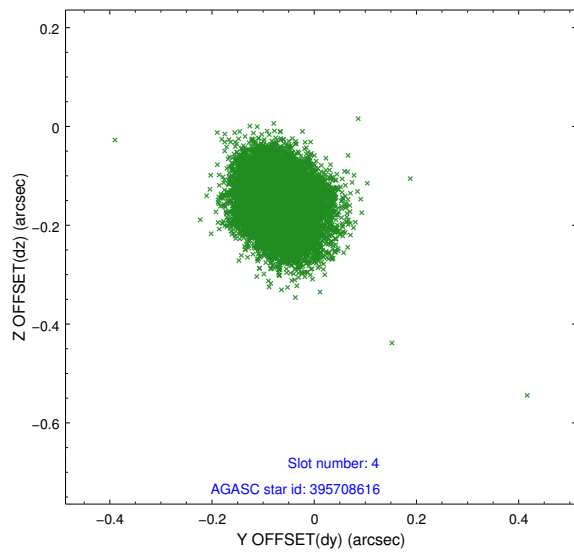
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	6448	-0.107	-0.057	0.012	0.021	0.000000	0.000000	-764.05	-1796.86
1	FID	ACIS-S-4	6.96	6448	0.186	0.067	0.012	0.019	0.000000	0.000000	2149.47	111.63
2	FID	ACIS-S-5	7.00	6448	-0.111	-0.002	0.013	0.022	0.000000	0.000000	-1816.77	105.35
3	GUIDE	395707376	9.35	12844	0.035	-0.146	0.089	0.147	180.967983	44.858789	1298.68	335.16
4	GUIDE	395708616	7.99	12892	-0.070	-0.153	0.068	0.110	180.101872	44.630343	-628.99	1700.18
5	GUIDE	395708696	8.87	12888	0.032	0.092	0.072	0.116	180.383726	44.624291	-242.00	1090.57
6	GUIDE	395709608	8.36	12884	0.060	0.075	0.066	0.106	181.055130	44.450389	216.75	-684.26
7	GUIDE	395710032	8.80	12888	-0.058	0.137	0.071	0.116	181.512910	44.376001	669.74	-1803.37

2.4 Star Slots

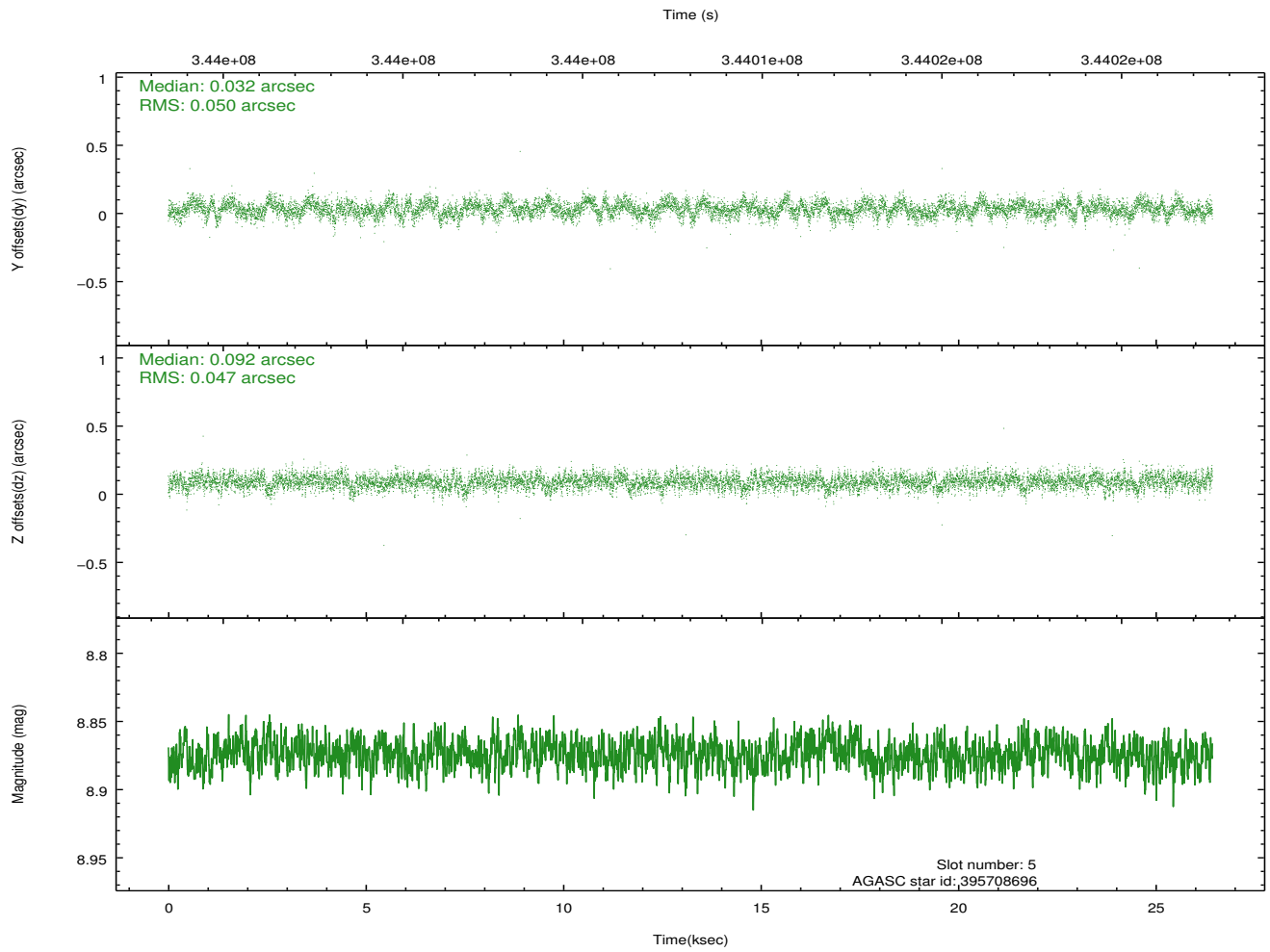
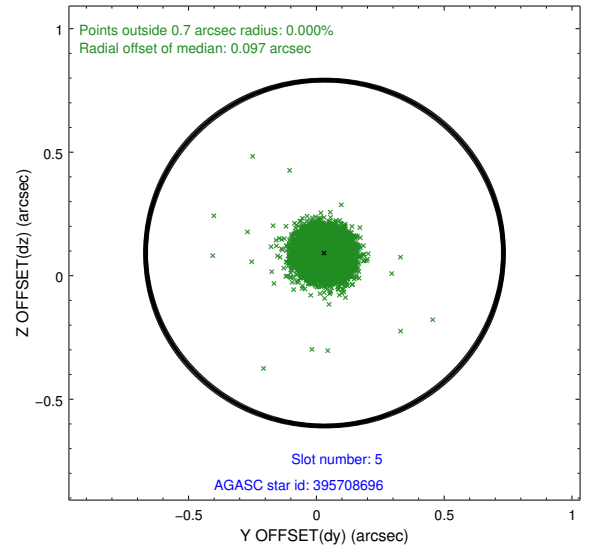
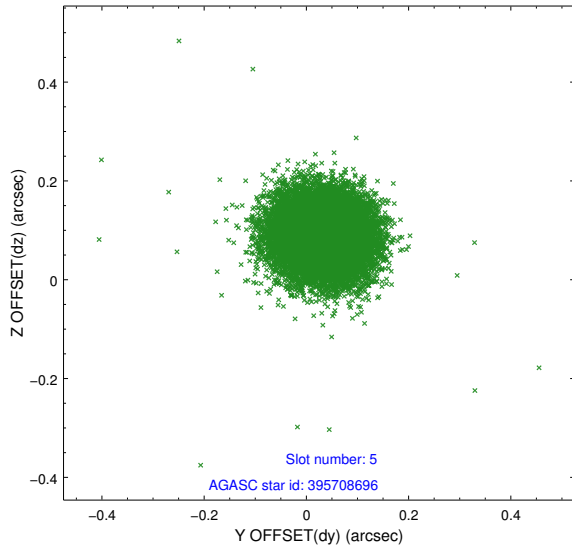
2.4.1 Slot 3



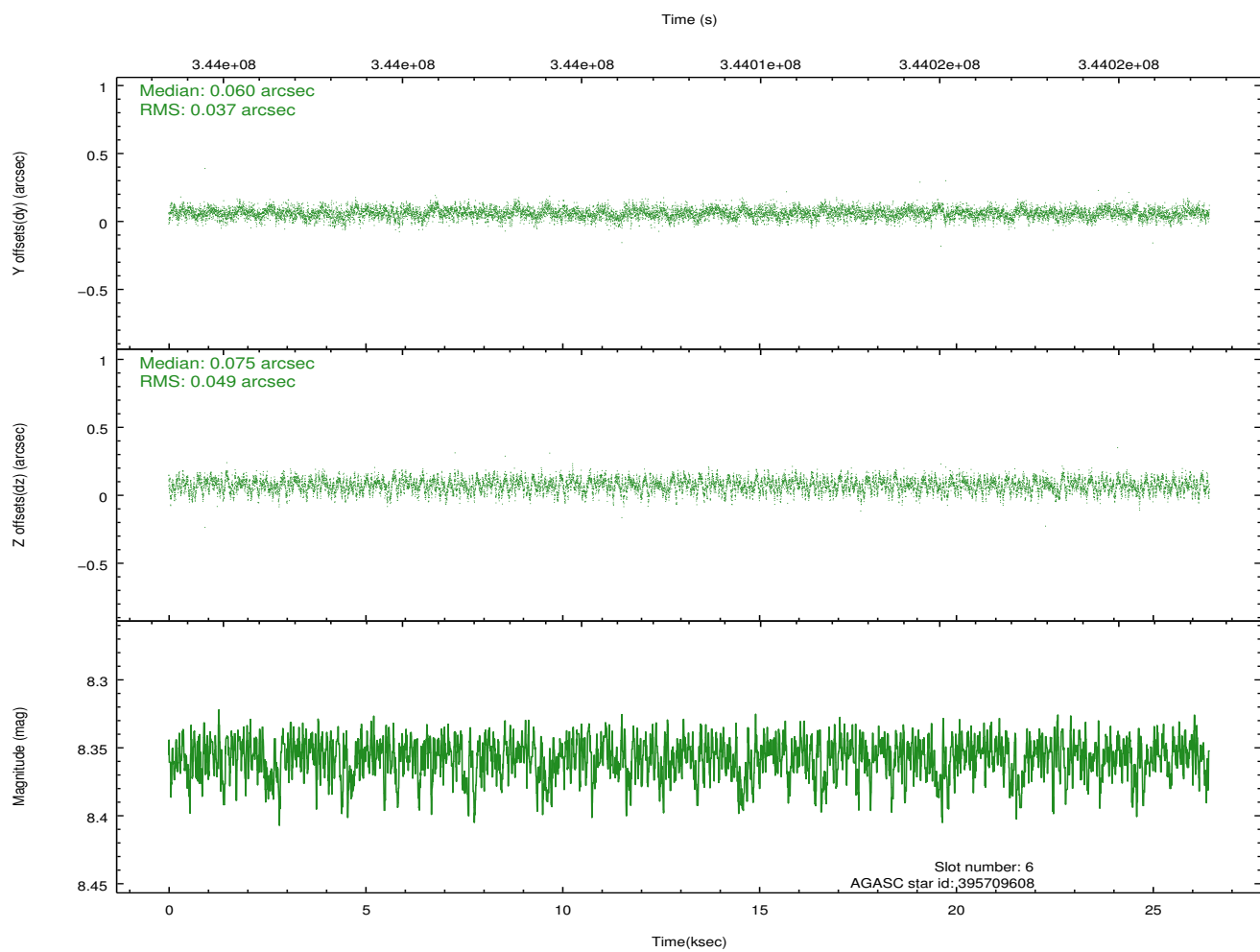
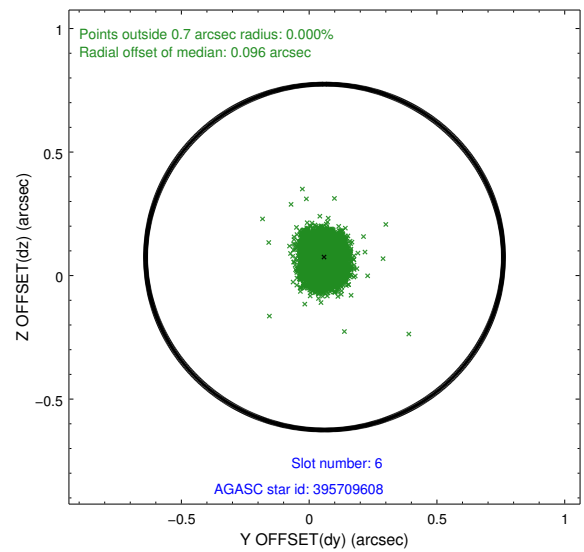
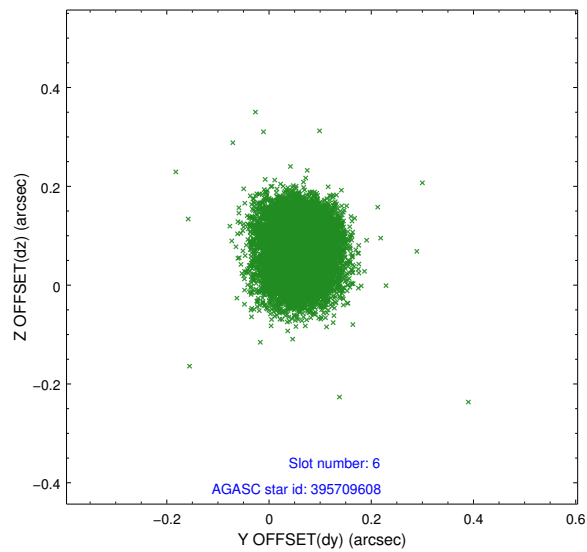
2.4.2 Slot 4



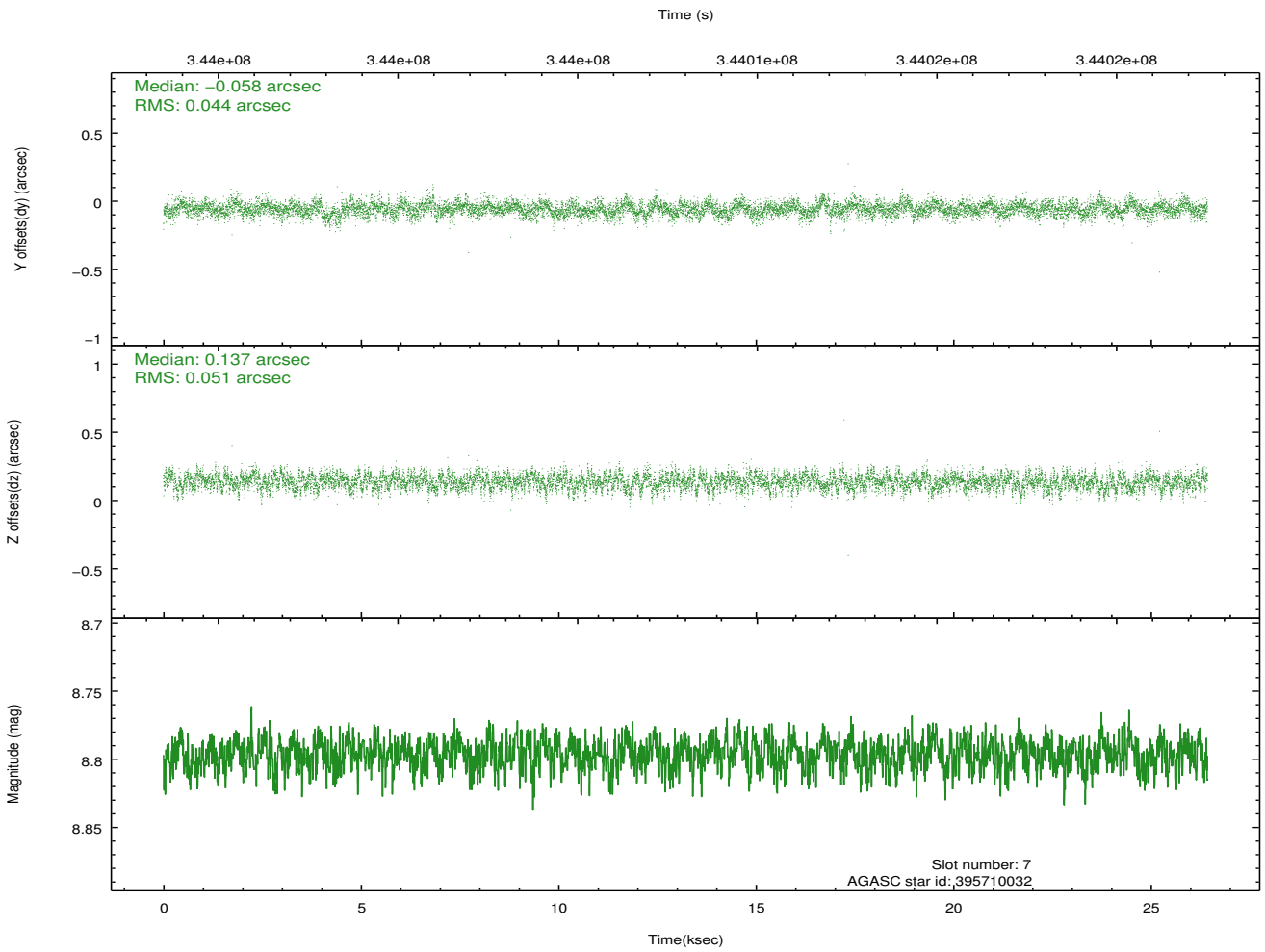
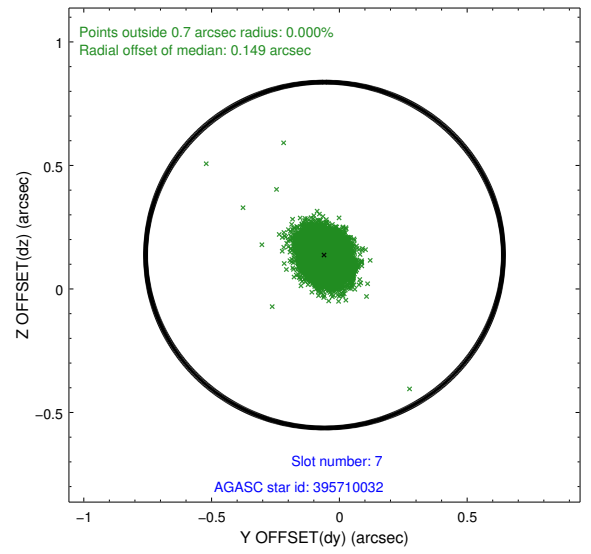
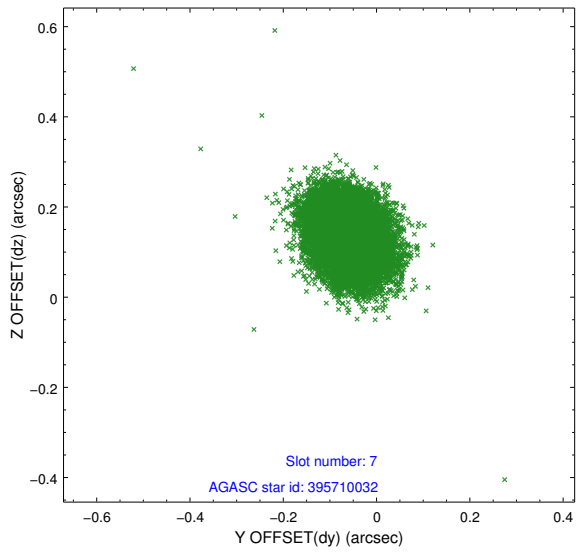
2.4.3 Slot 5



2.4.4 Slot 6

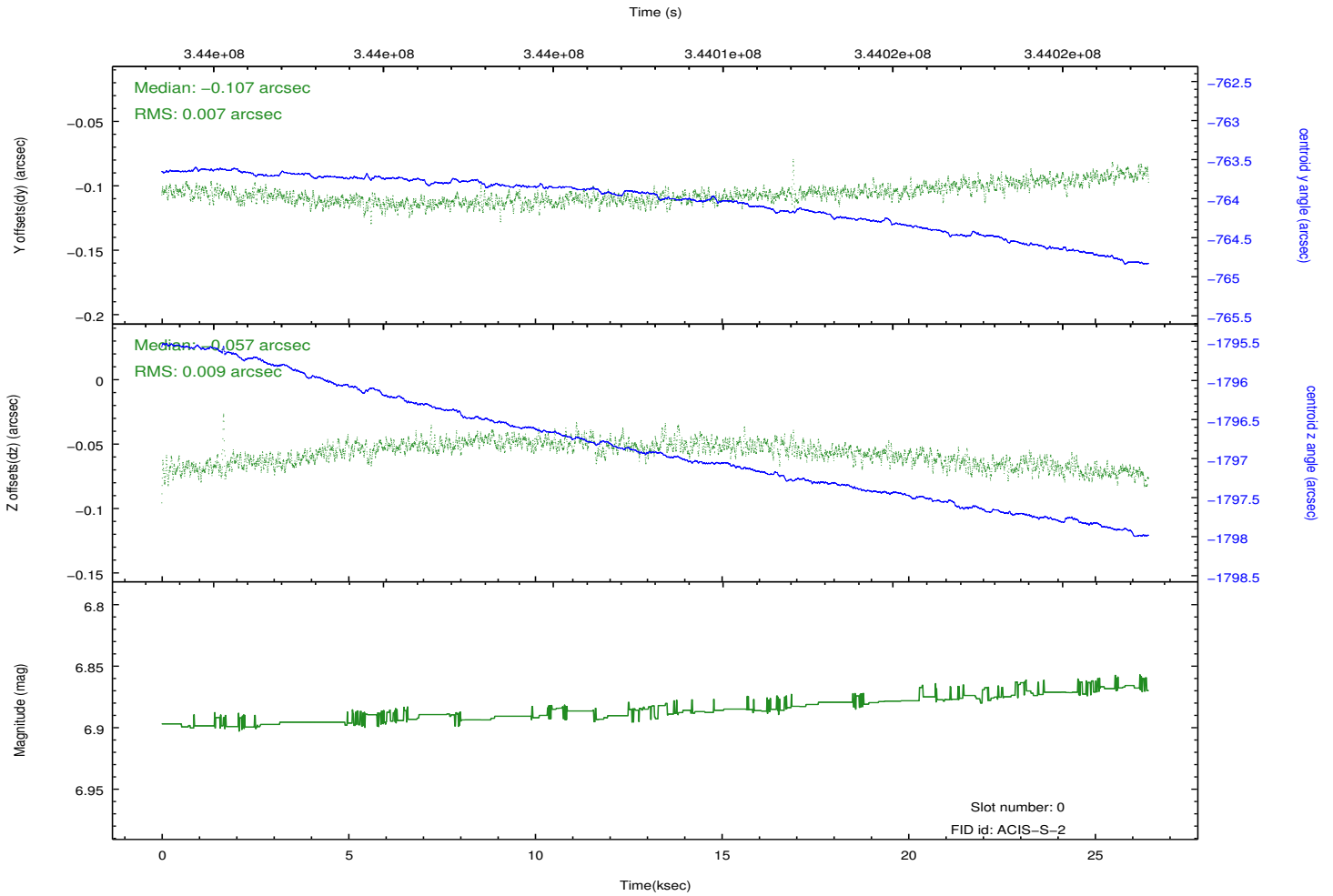
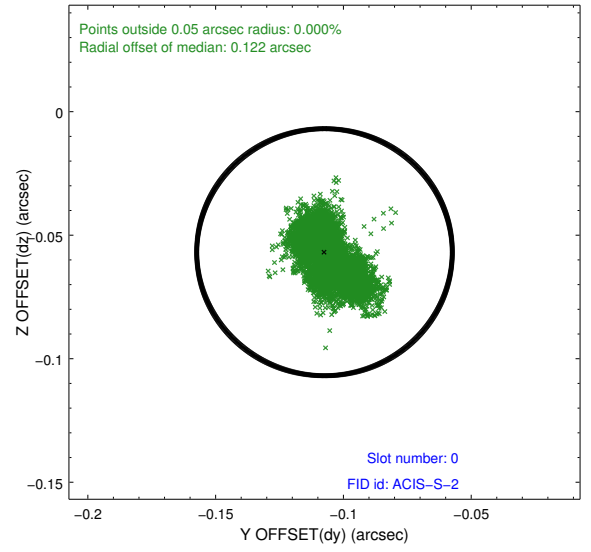
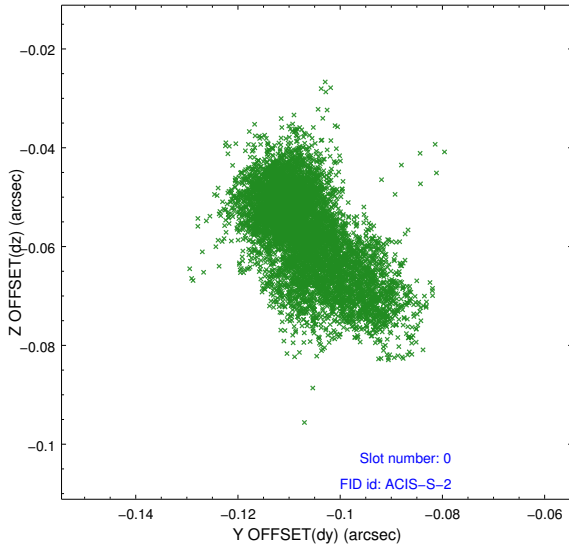


2.4.5 Slot 7

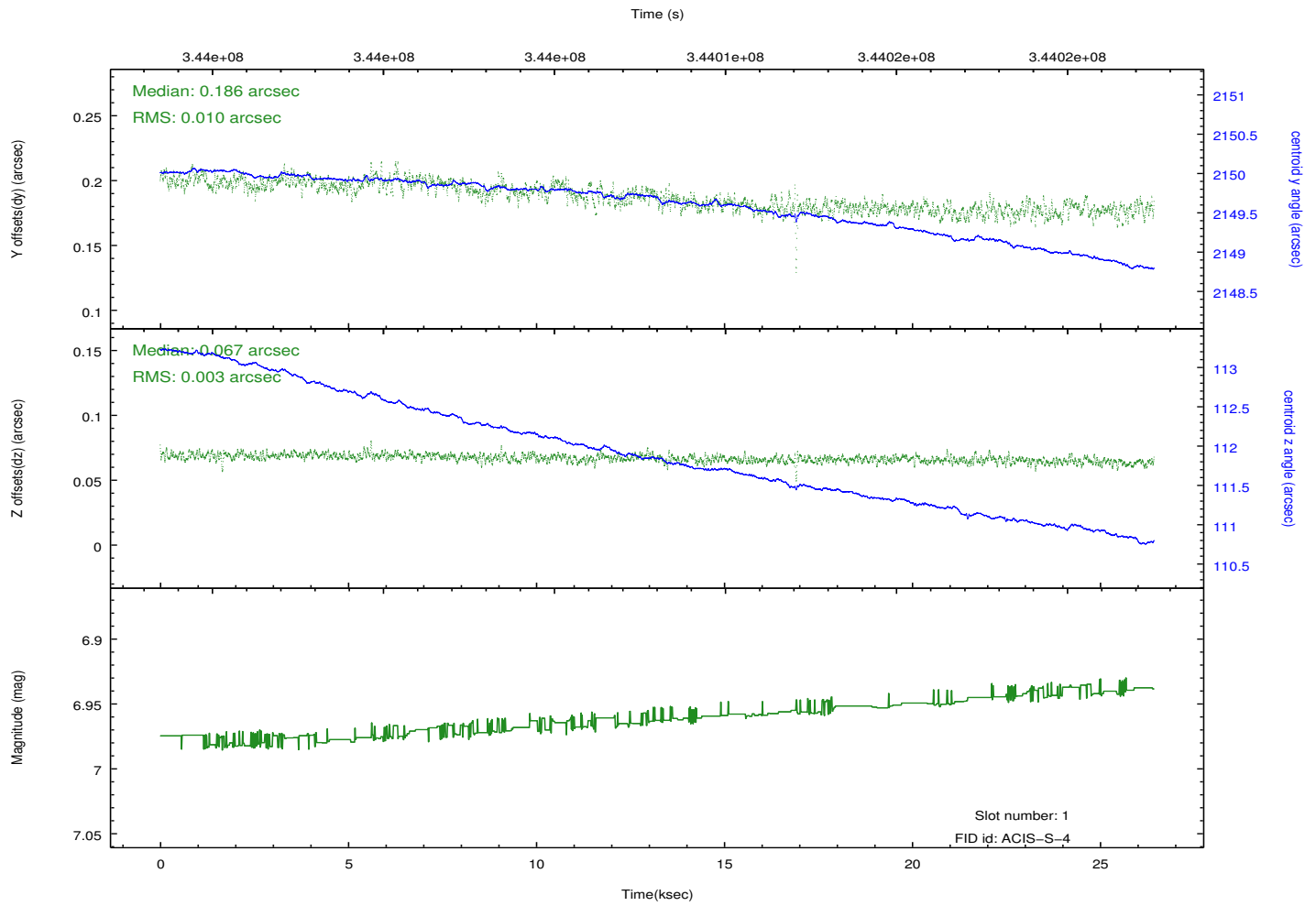
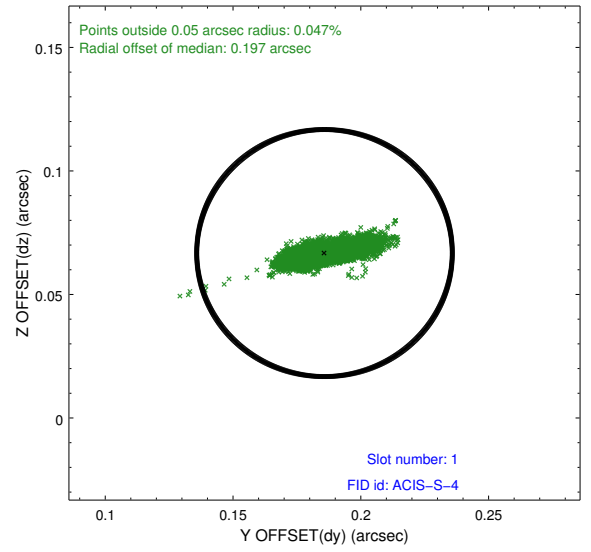
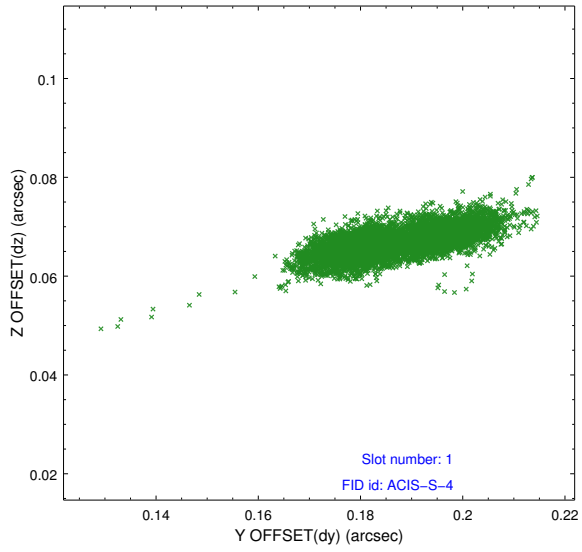


2.5 FID Slots

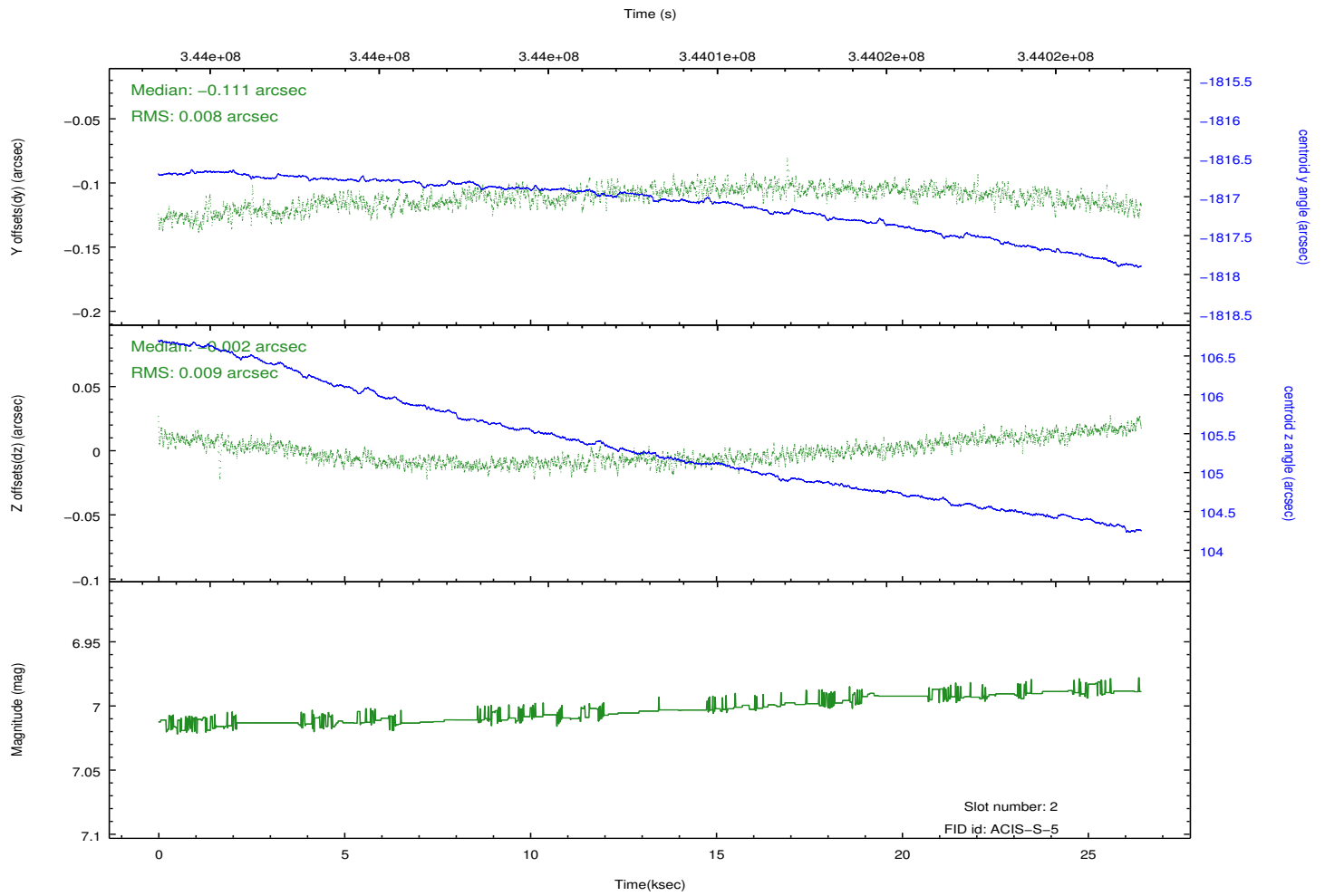
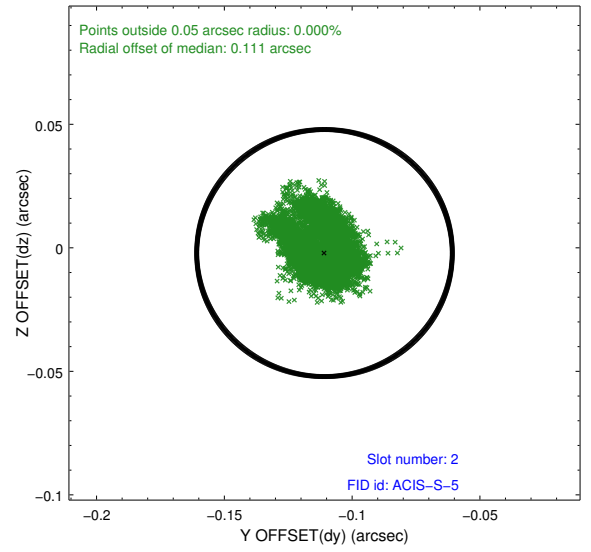
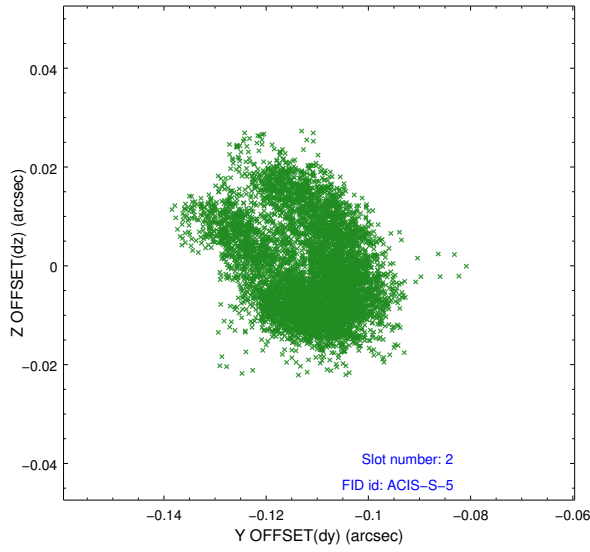
2.5.1 Slot 0



2.5.2 Slot 1

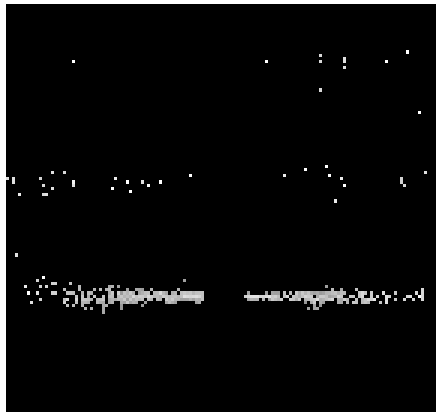


2.5.3 Slot 2

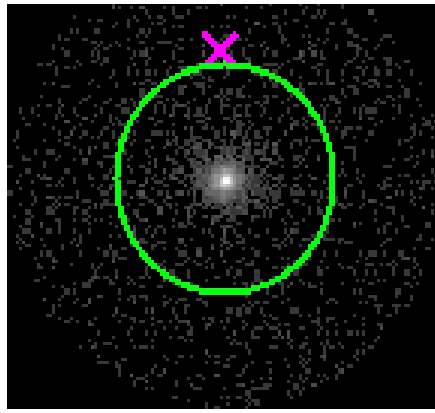


3 Gratings

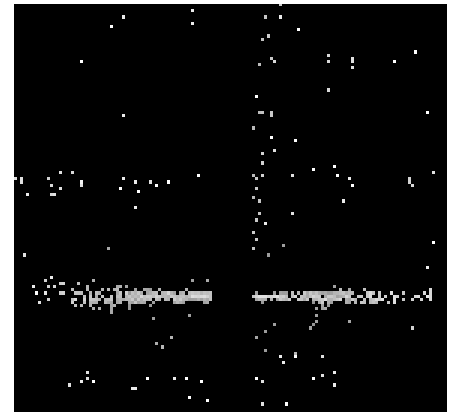
3.1 HEG Arm



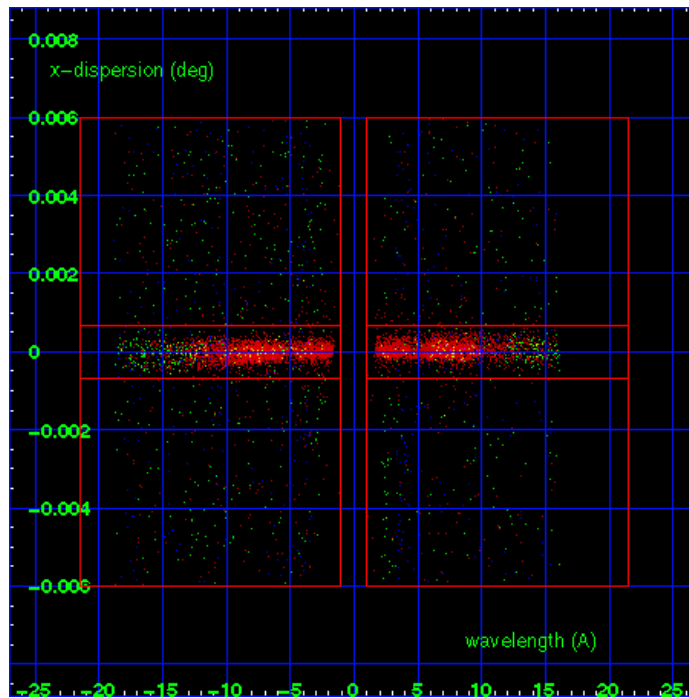
HEG Order Sort 123



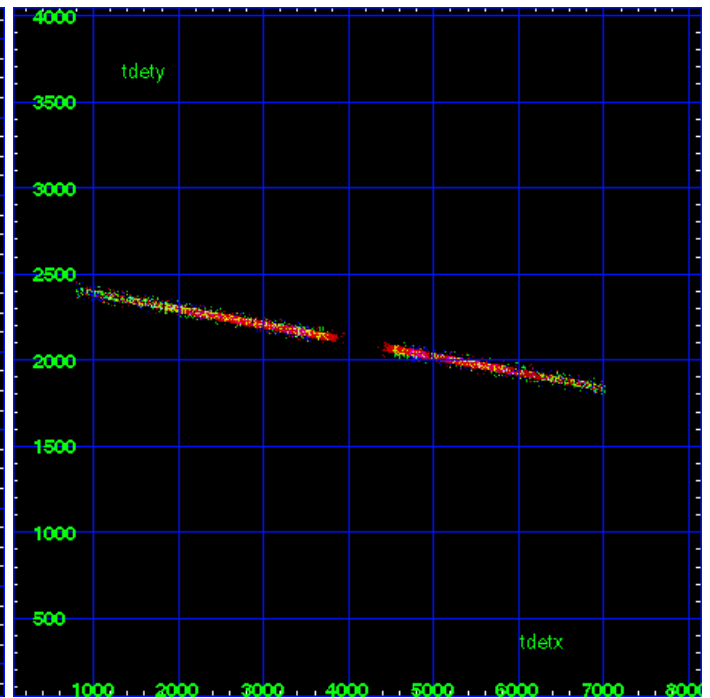
HEG Zero Order



HEG Order Sort ALL

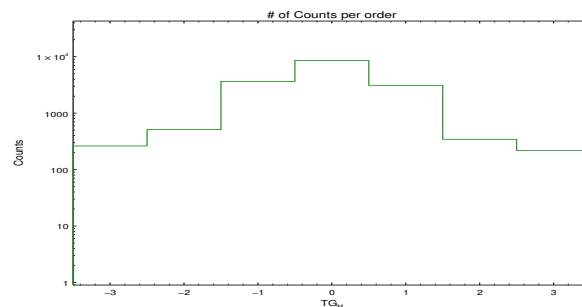


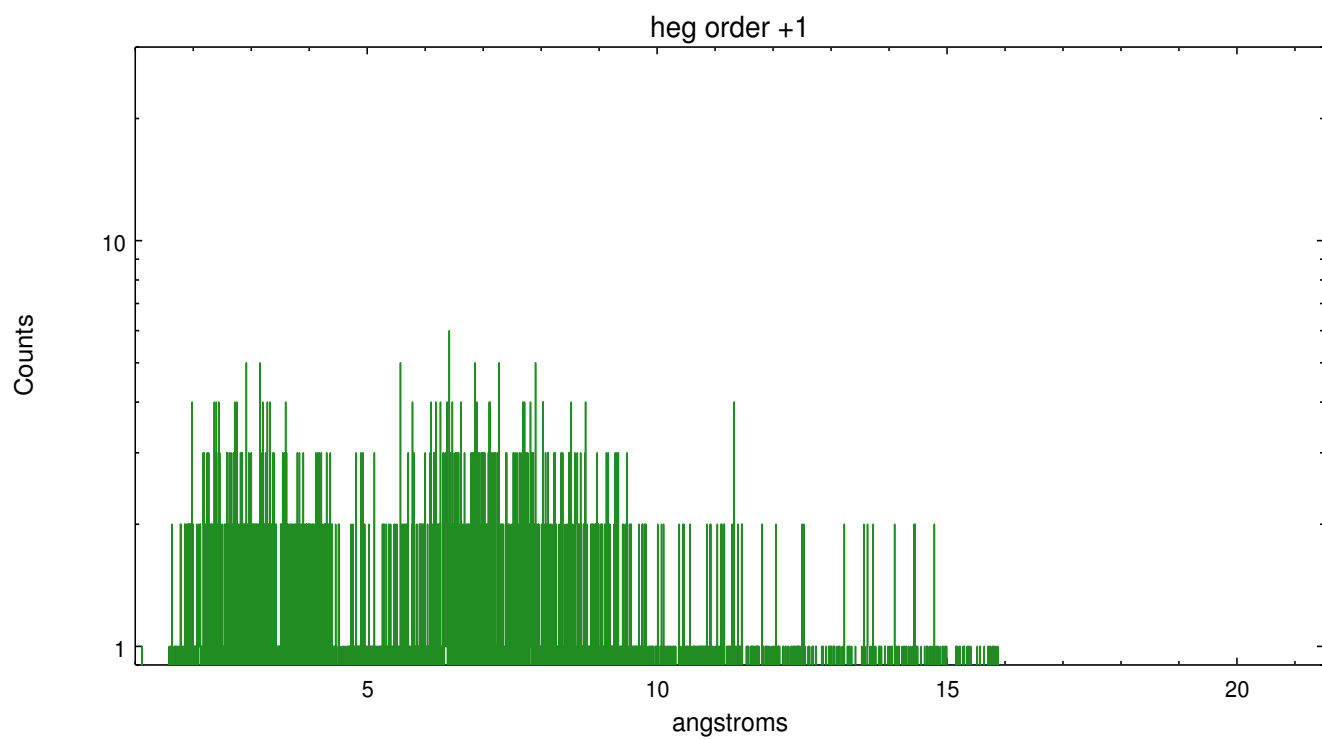
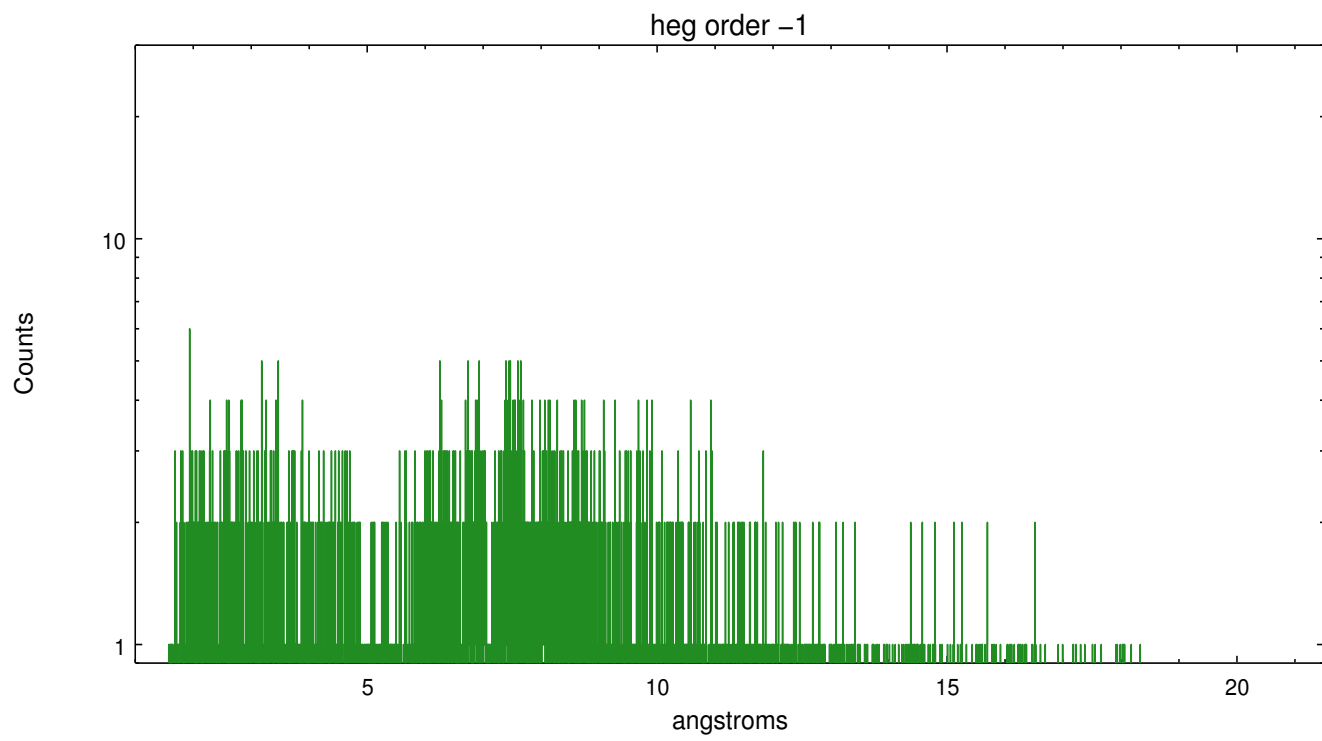
Spot Image HEG



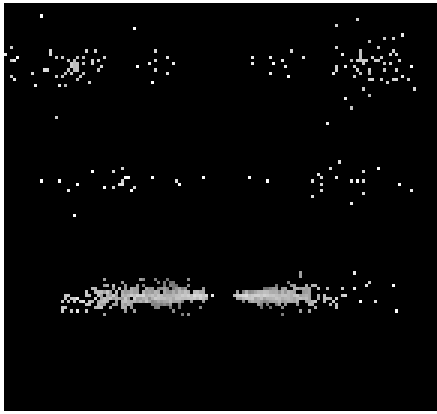
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	262	512	3650	8570	3111	344	217

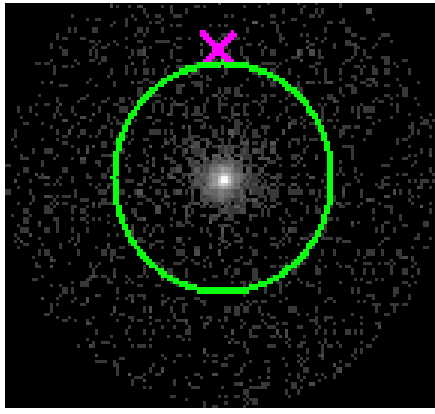




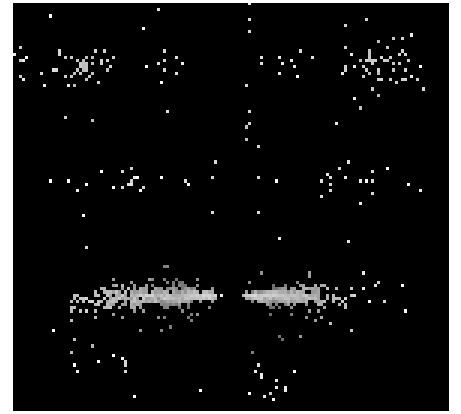
3.2 MEG Arm



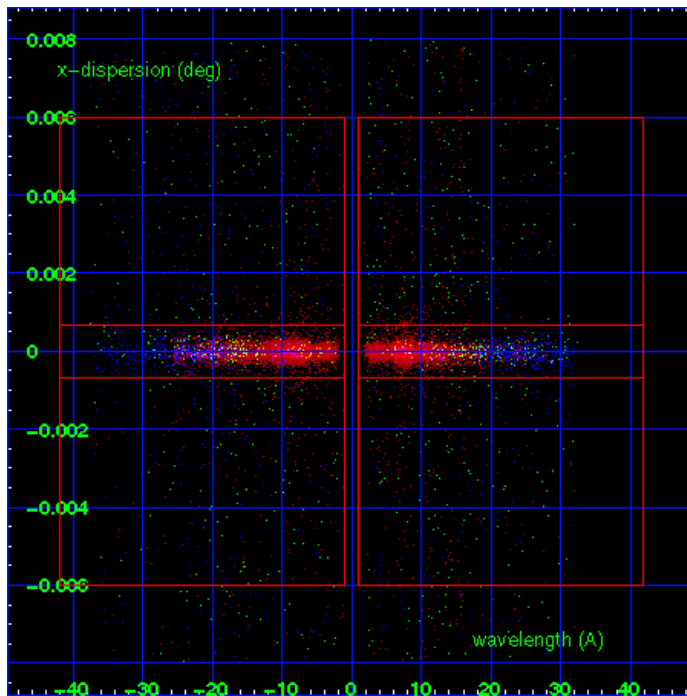
MEG Order Sort 123



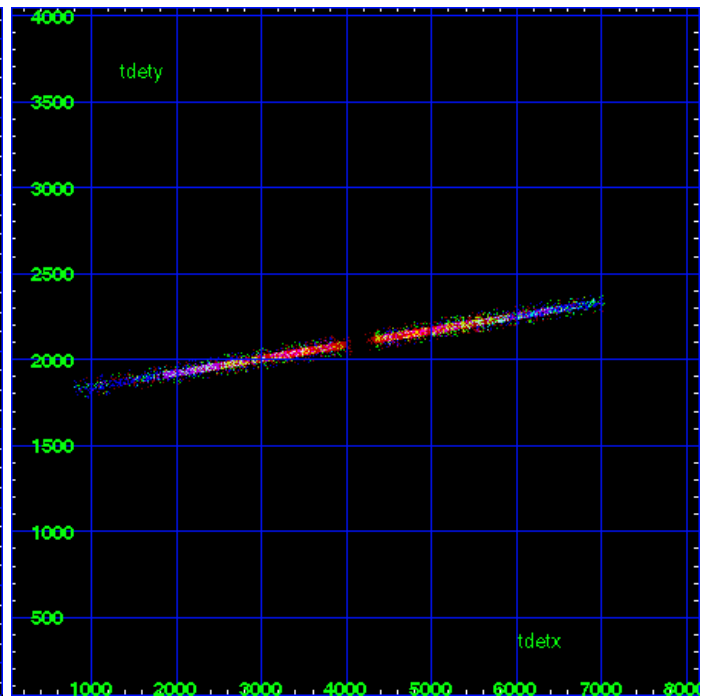
MEG Zero Order



MEG Order Sort ALL

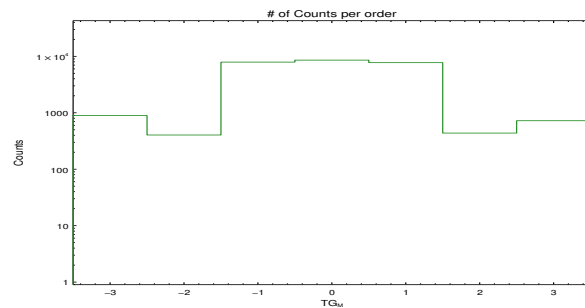


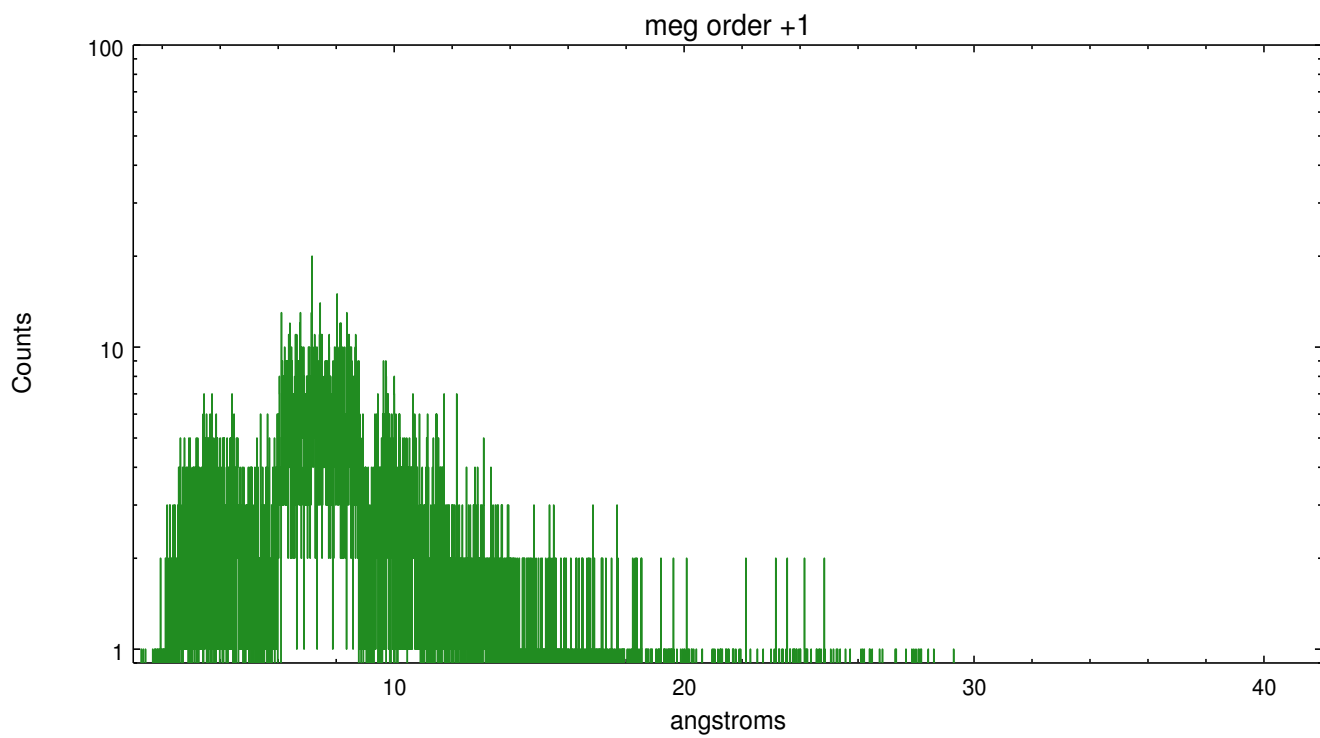
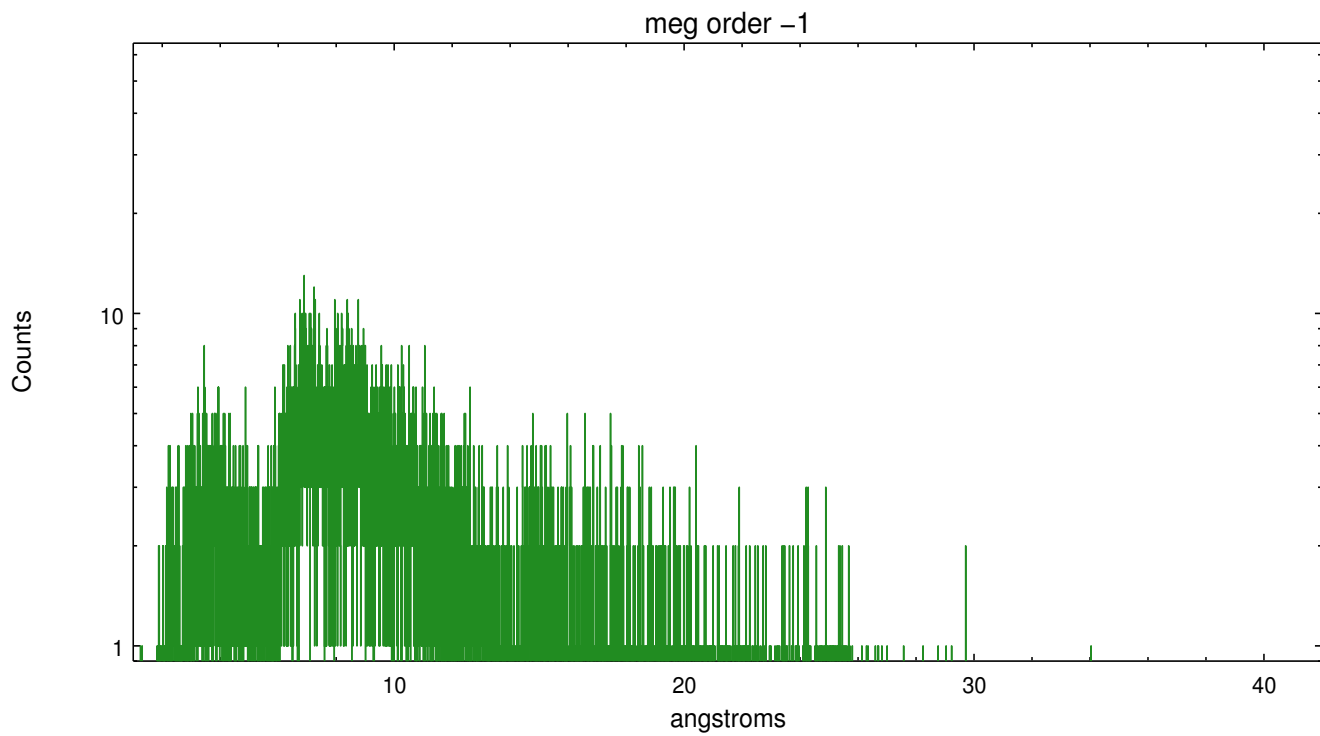
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	894	404	7905	8570	7736	437	724





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	26.4275

A.2 Comments