

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10782 - L2 Version 2
Chandra X-Ray Center

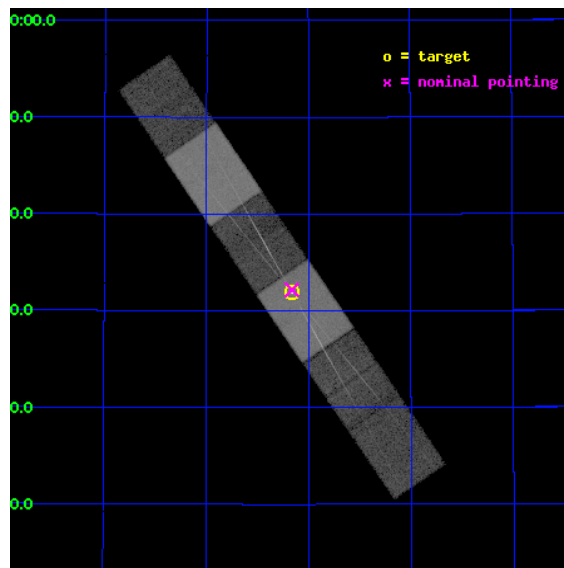
L2 Processing Date : May 24 2012

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1 Front

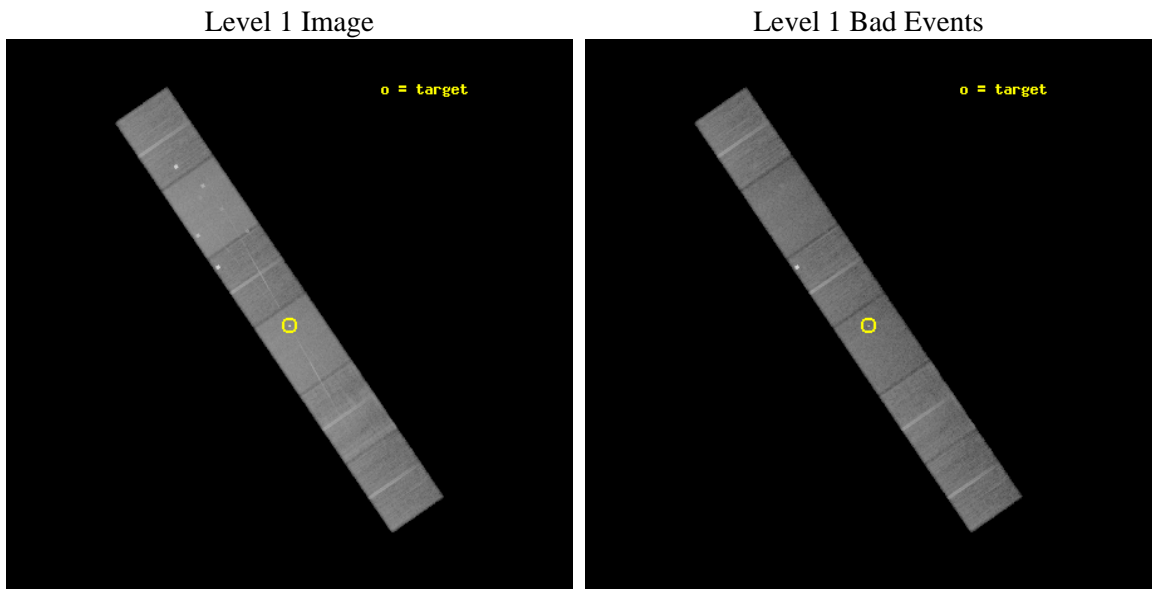
seq_num	701946	Sequence number
obs_id	10782	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79032085305	Nominal RA [deg]
dec_nom	44.53615664776	Nominal Dec [deg]
roll_nom	55.656432138415	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23652.5	Sum of GTIs [s]
liveltime	23270.491609734	Livetime [s]
ontime4	23652.5	Sum of GTIs [s]
ontime5	23652.5	Sum of GTIs [s]
ontime6	23652.5	Sum of GTIs [s]
ontime7	23652.5	Sum of GTIs [s]
ontime8	23649.958999753	Sum of GTIs [s]
ontime9	23647.418079257	Sum of GTIs [s]
l2events	325964	Number of level 2 events



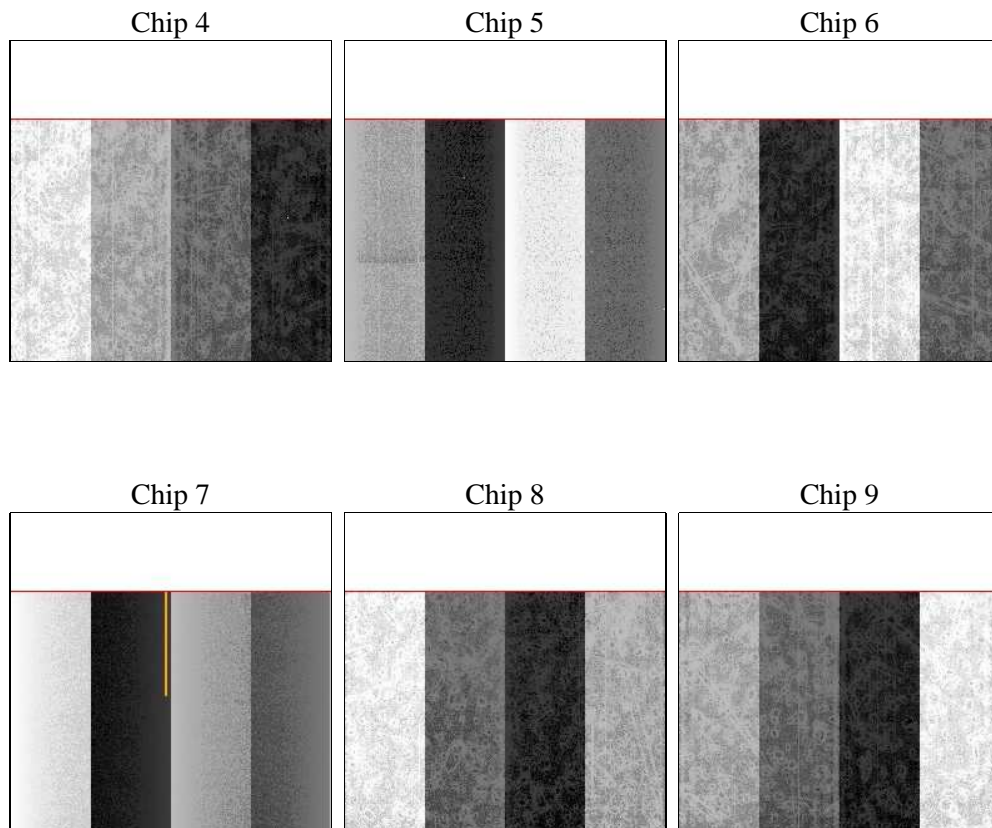
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	23652.5	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	23652.5	Sum of GTIs [s]
date	2012-05-24T17:37:41	Date and time of file creation	ontime5	23652.5	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	23652.5	Sum of GTIs [s]
			ontime7	23652.5	Sum of GTIs [s]
			ontime8	23649.958999753	Sum of GTIs [s]
			ontime9	23647.418079257	Sum of GTIs [s]
			l1events	1365486	Number of level 1 events

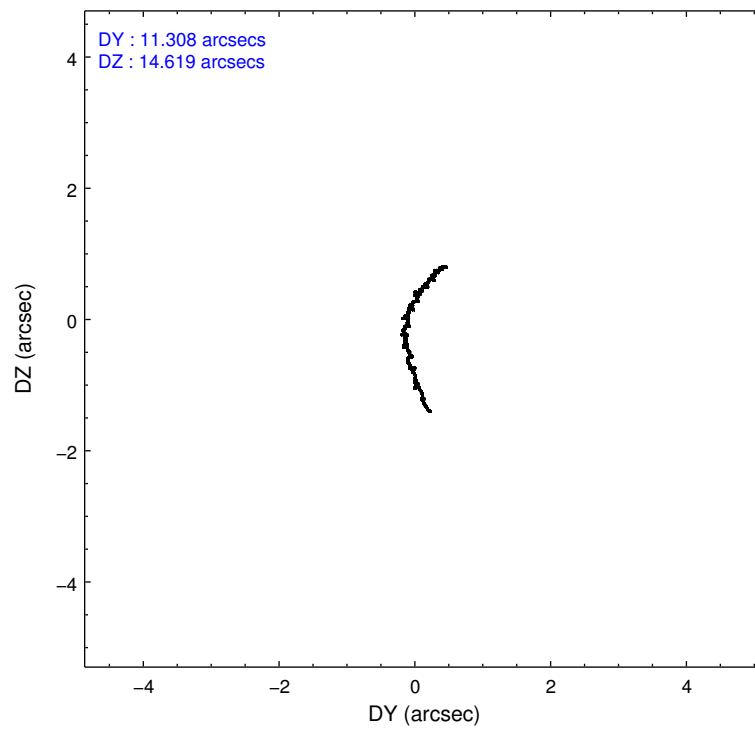
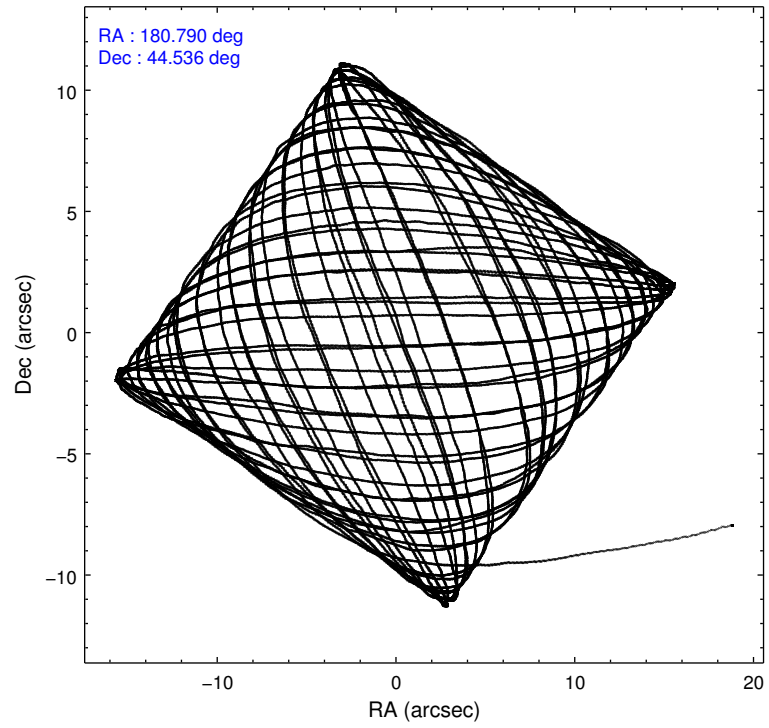
2.1.4 Events

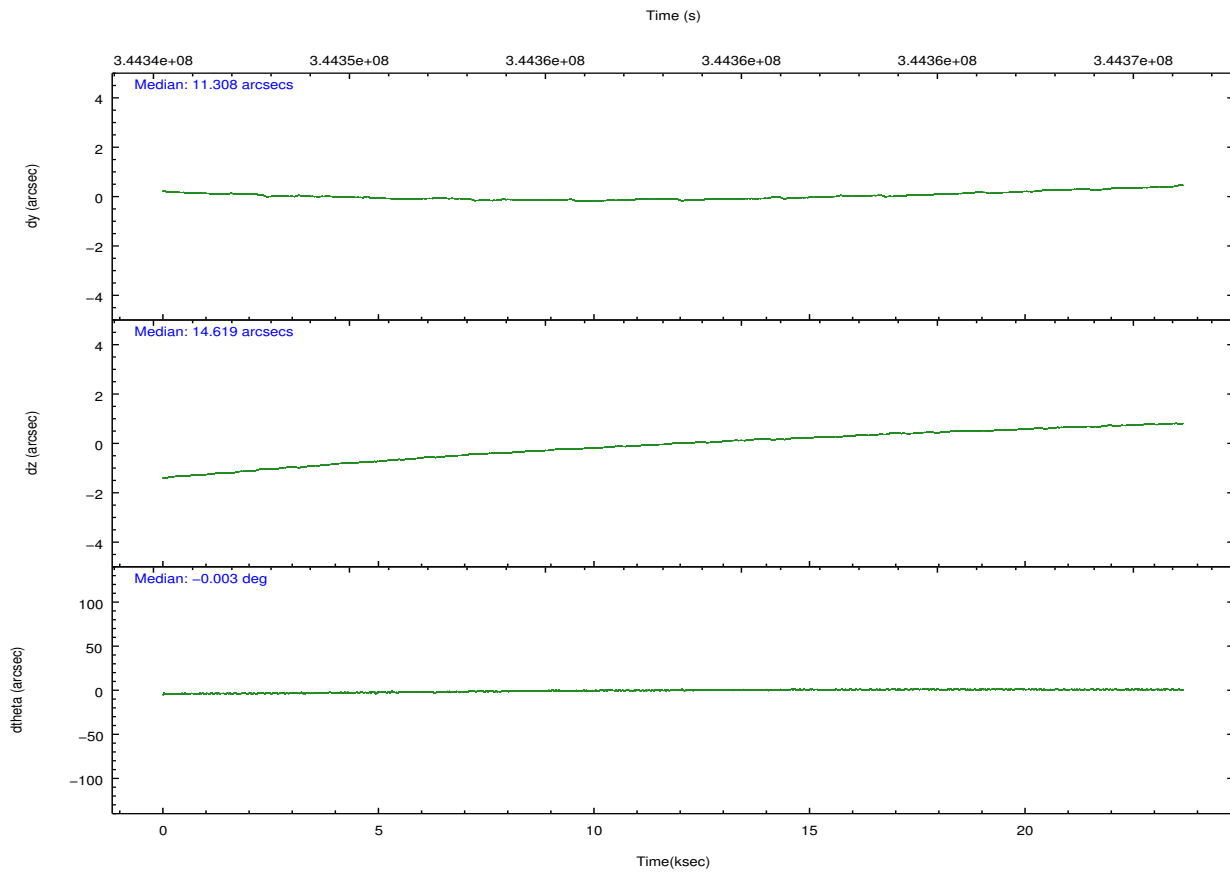
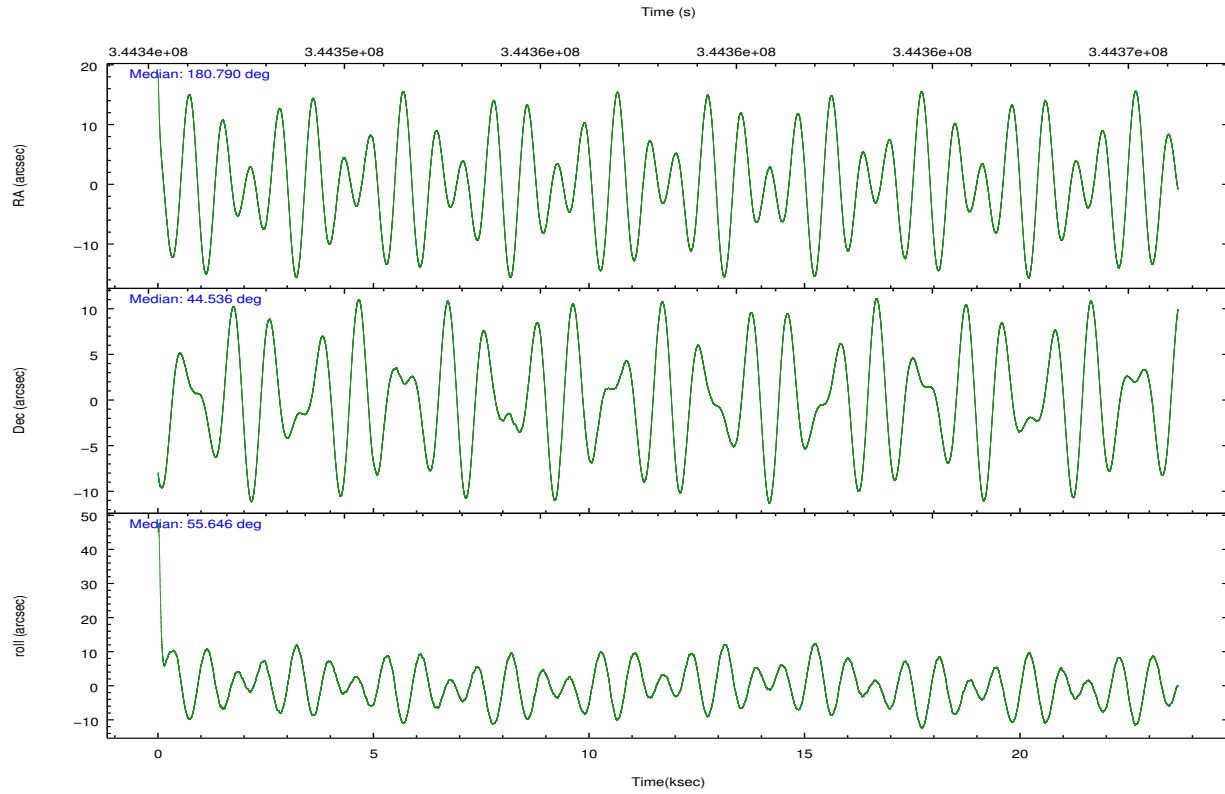
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	207645	284854	196684	261189	235553	179561	grade 0 events	18791	14536	12356	11267	18508	9683
rejected events	175292	151625	169637	146111	178881	156149		9%	5%	6%	4%	7%	5%
rejected %	84%	53%	86%	55%	75%	86%	grade 1 events	206	648	10193	377	174	91
								0%	0%	5%	0%	0%	0%
							grade 2 events	5163	39213	5340	23813	12427	4778
								2%	13%	2%	9%	5%	2%
							grade 3 events	2368	5430	2369	10073	6130	2279
								1%	1%	1%	3%	2%	1%
							grade 4 events	2307	5259	2392	10119	5554	2293
								1%	1%	1%	3%	2%	1%
							grade 5 events	8192	20770	8699	23677	11431	8949
								3%	7%	4%	9%	4%	4%
							grade 6 events	3794	69039	4639	60020	14154	4426
								1%	24%	2%	22%	6%	2%
							grade 7 events	166824	129959	150696	121843	167175	147062
								80%	45%	76%	46%	70%	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	180.7903208530506	CCD I2 on	N	N
[deg] Pointing Dec	44.508892	44.53615664776014	CCD I3 on	N	N
[deg] Pointing Roll	55.501456	55.65643213841462	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)	344346594.184000	344345558.47127	CCD S5 on	Y	Y
Observation start date	2008-11-29T11:48:49	2008-11-29T11:32:38	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	344370094.184000	344370668.41001	On-chip summing requested	N	N
Observation end date	2008-11-29T18:20:29	2008-11-29T18:31:08	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



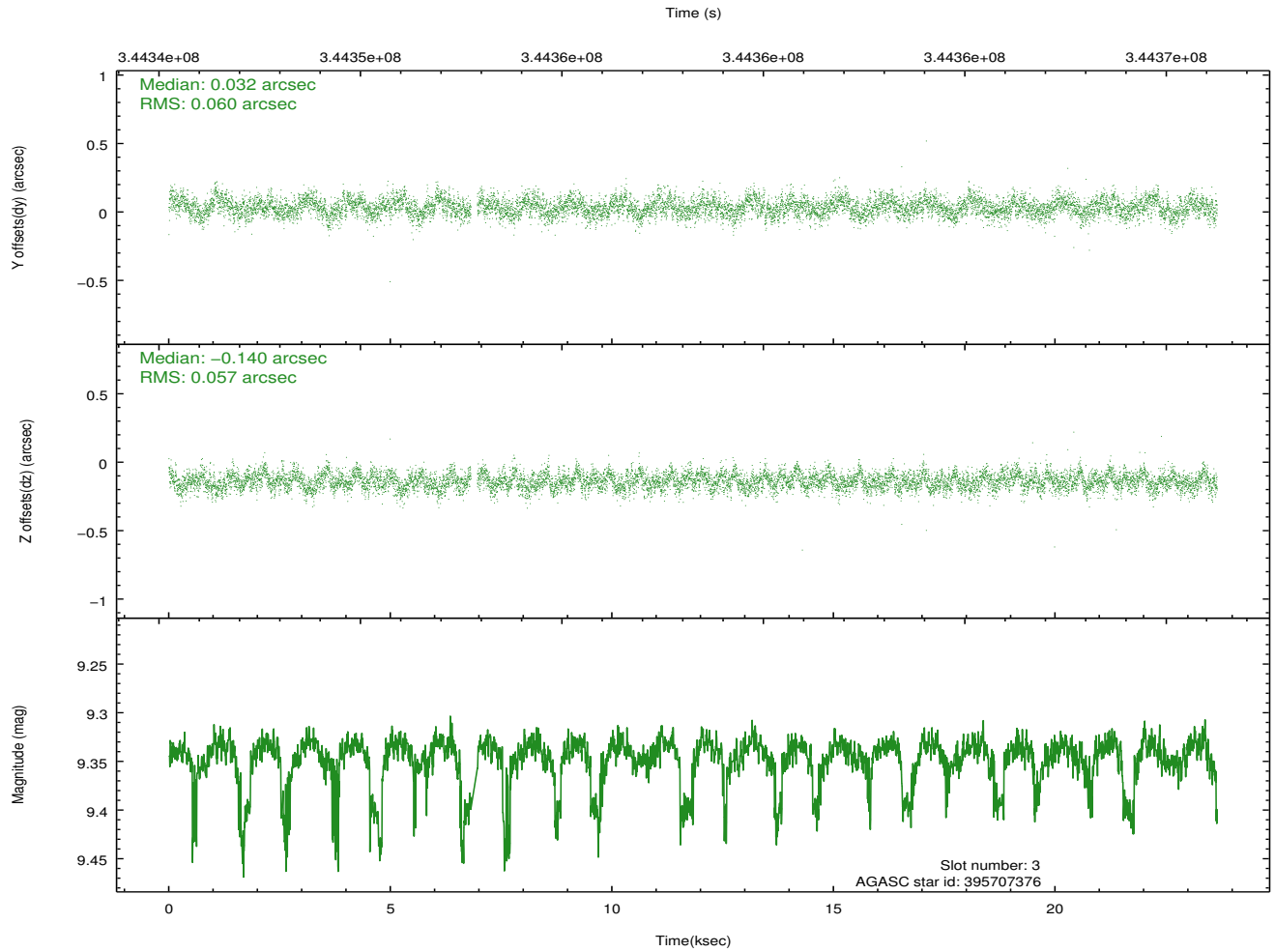
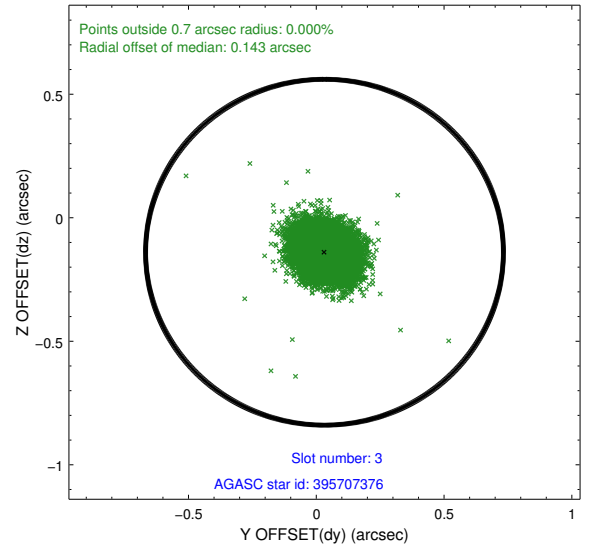
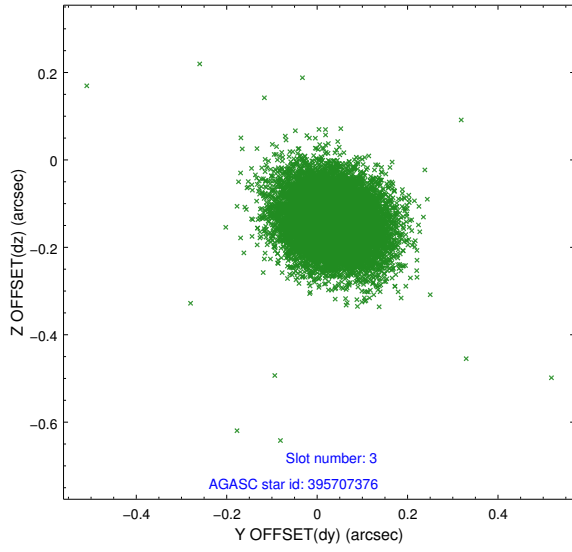


Slot Statistics

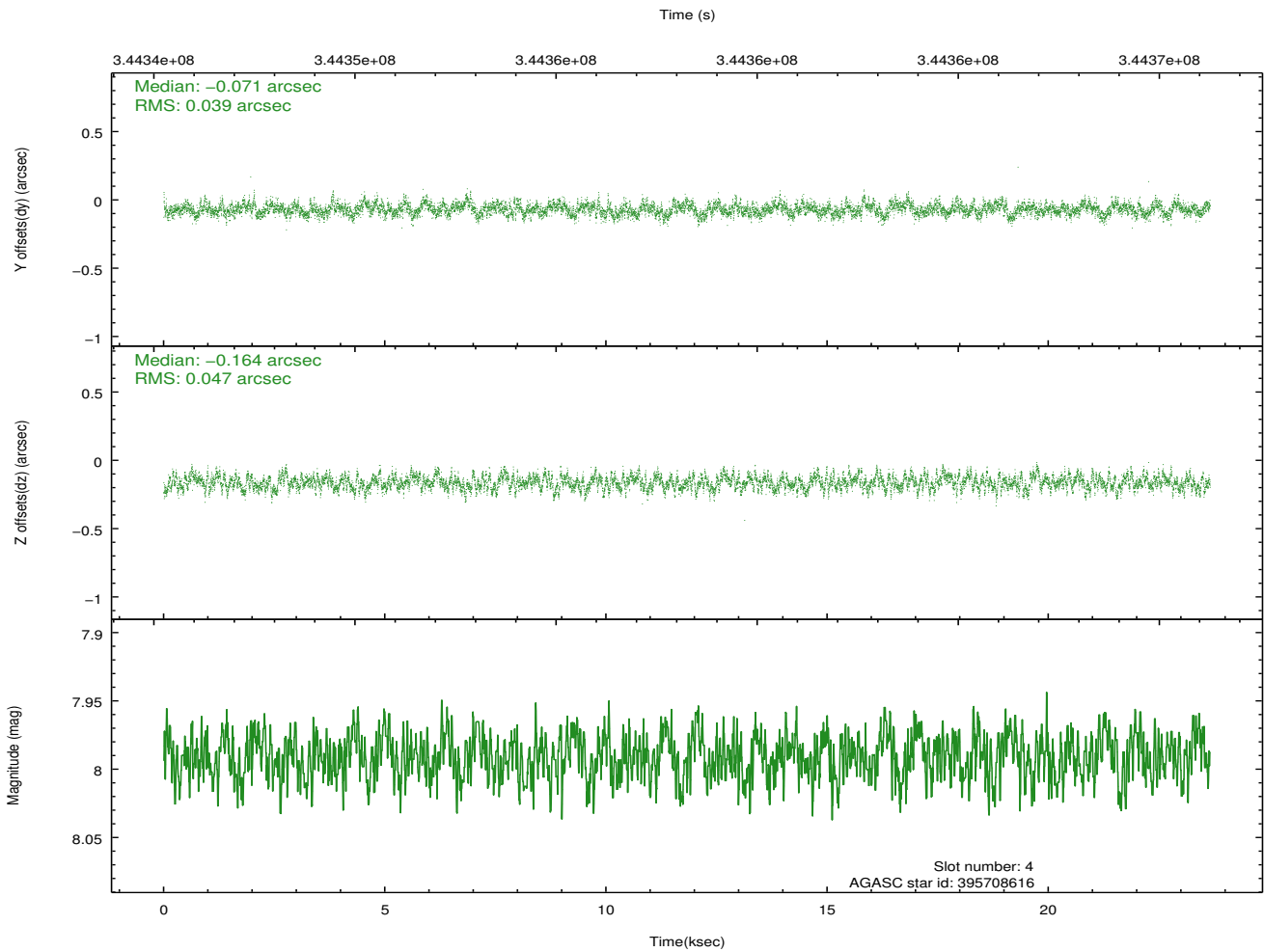
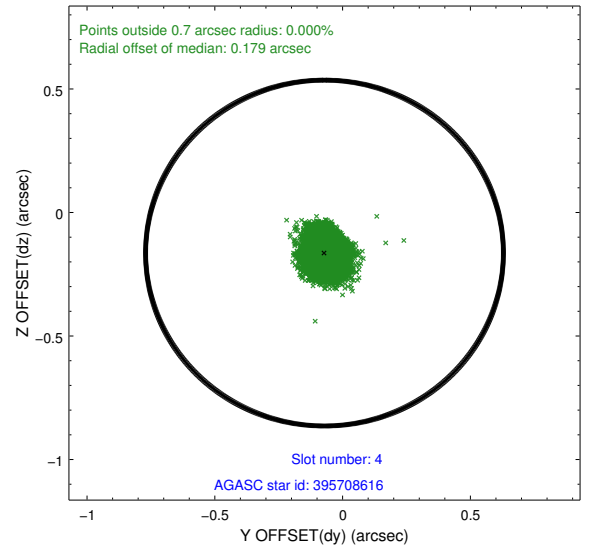
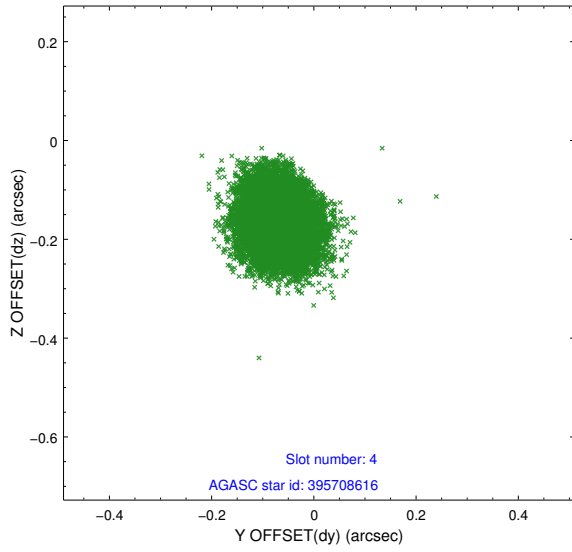
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.86	5770	-0.087	-0.059	0.021	0.032	0.000000	0.000000	-764.11	-1798.06
1	FID	ACIS-S-4	6.93	5770	0.151	0.058	0.011	0.024	0.000000	0.000000	2149.37	110.34
2	FID	ACIS-S-5	6.98	5770	-0.094	0.010	0.019	0.029	0.000000	0.000000	-1816.76	104.17
3	GUIDE	395707376	9.34	11440	0.032	-0.140	0.087	0.142	180.967983	44.858789	1298.70	335.27
4	GUIDE	395708616	7.99	11538	-0.071	-0.164	0.066	0.104	180.101872	44.630343	-628.98	1700.27
5	GUIDE	395708696	8.88	11529	0.043	0.084	0.068	0.111	180.383726	44.624291	-242.00	1090.67
6	GUIDE	395709608	8.36	11537	0.058	0.075	0.066	0.106	181.055130	44.450389	216.75	-684.16
7	GUIDE	395710032	8.80	11529	-0.065	0.144	0.075	0.123	181.512910	44.376001	669.73	-1803.28

2.4 Star Slots

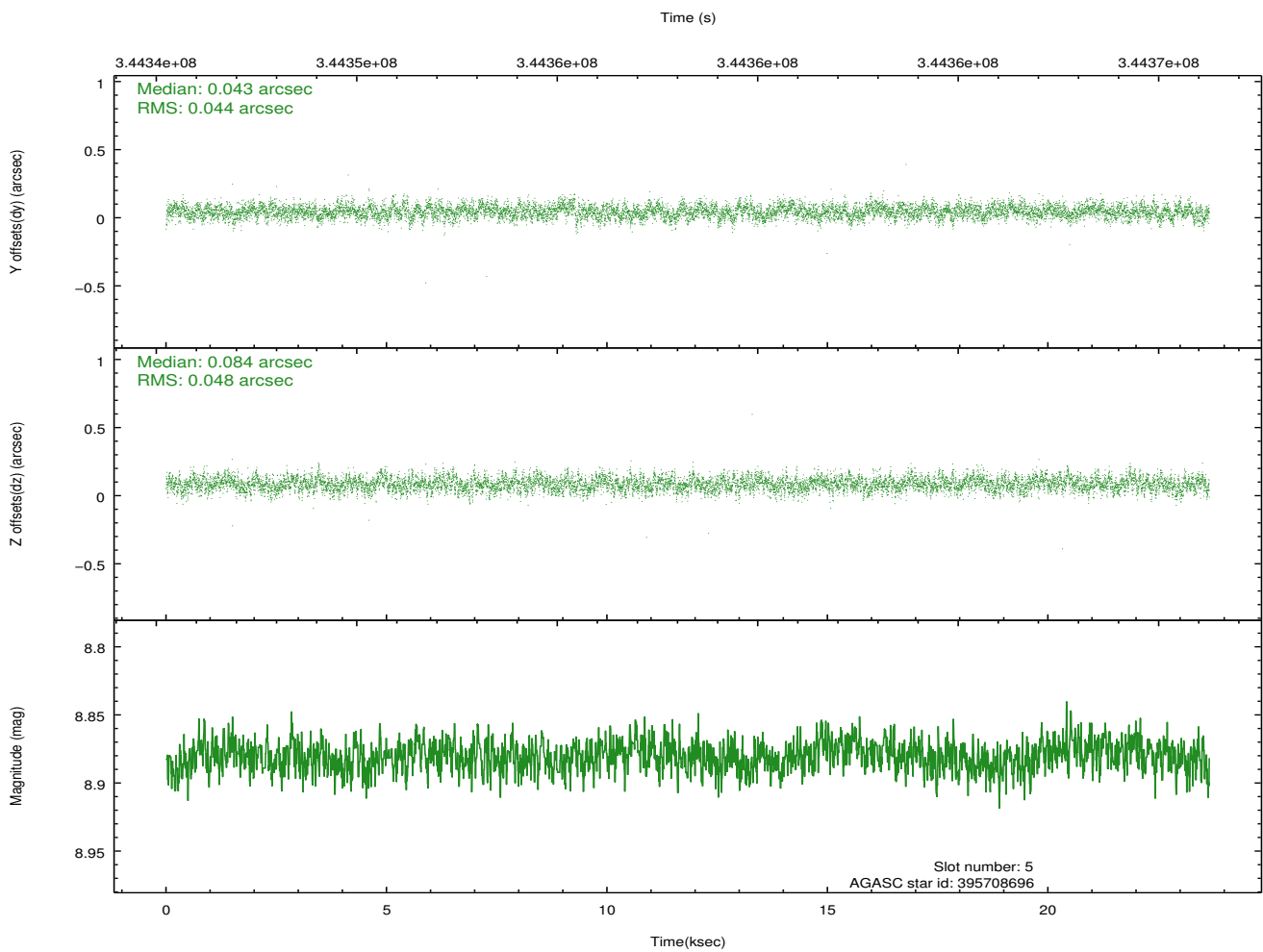
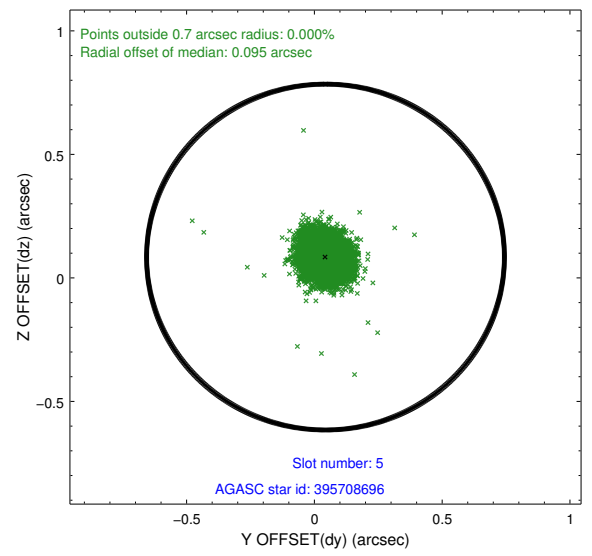
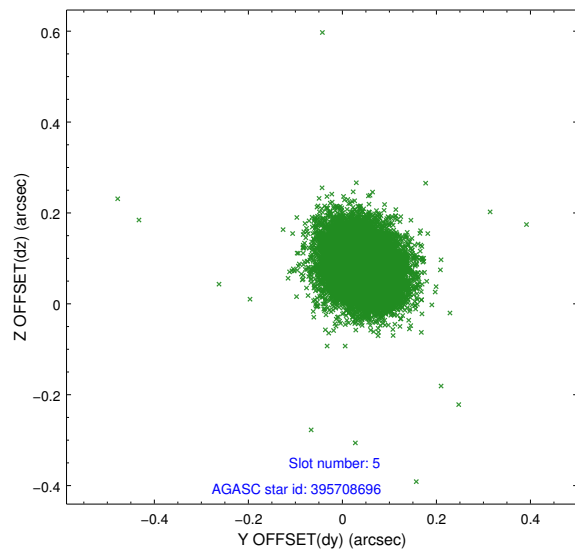
2.4.1 Slot 3



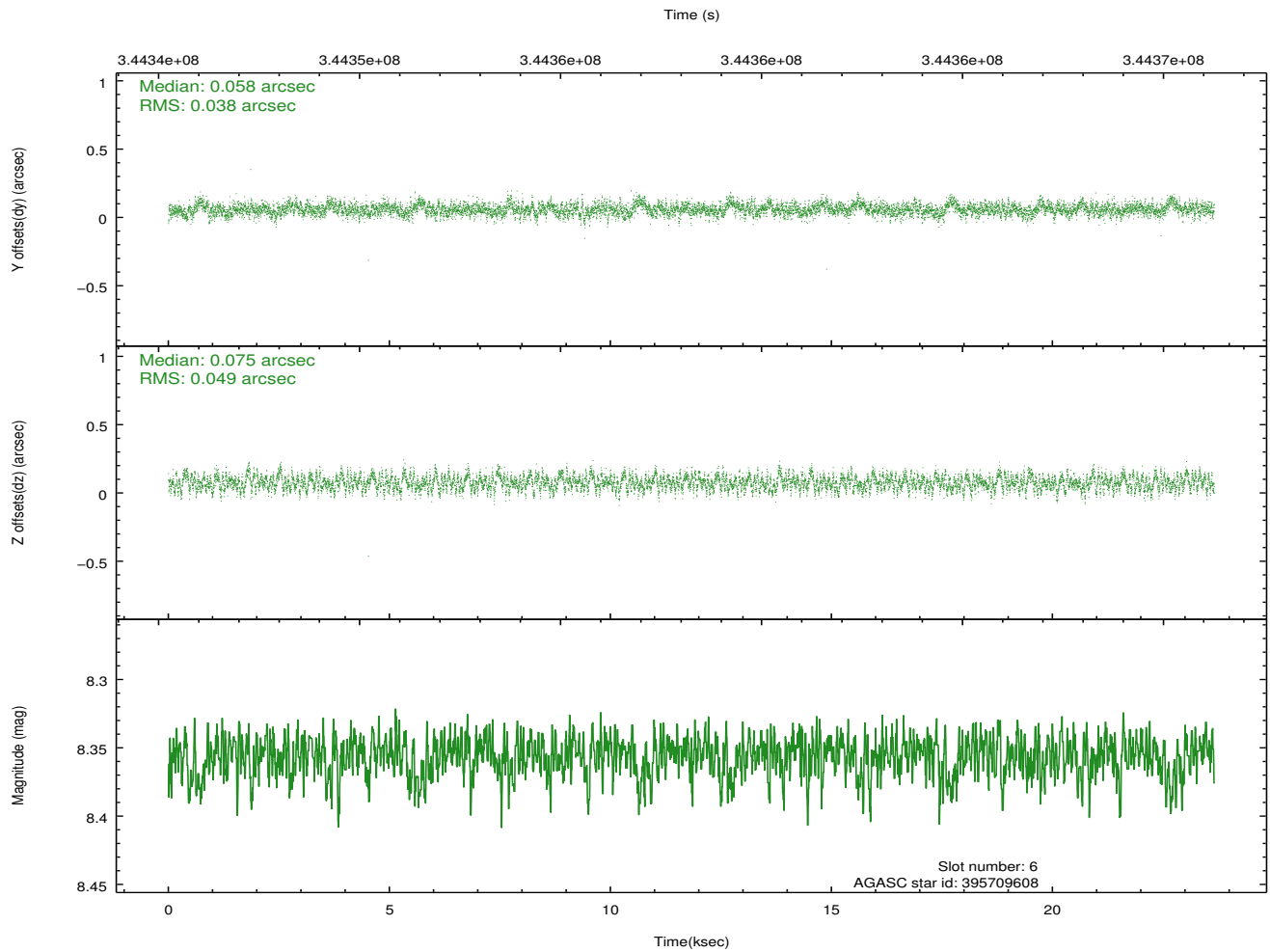
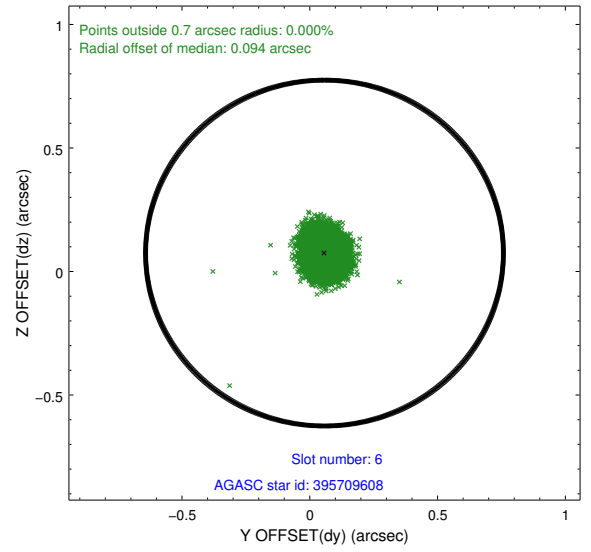
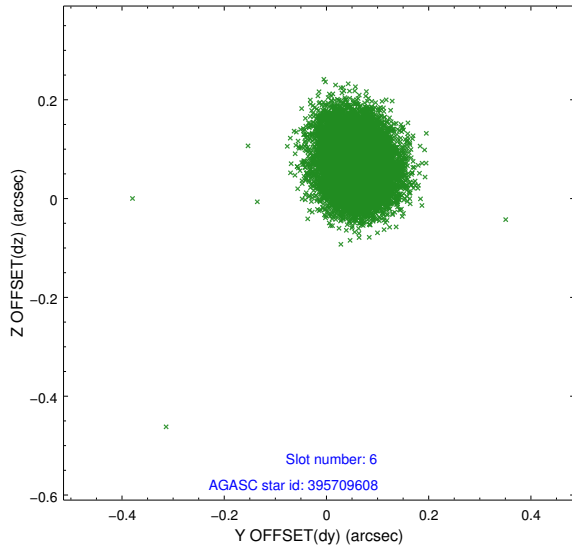
2.4.2 Slot 4



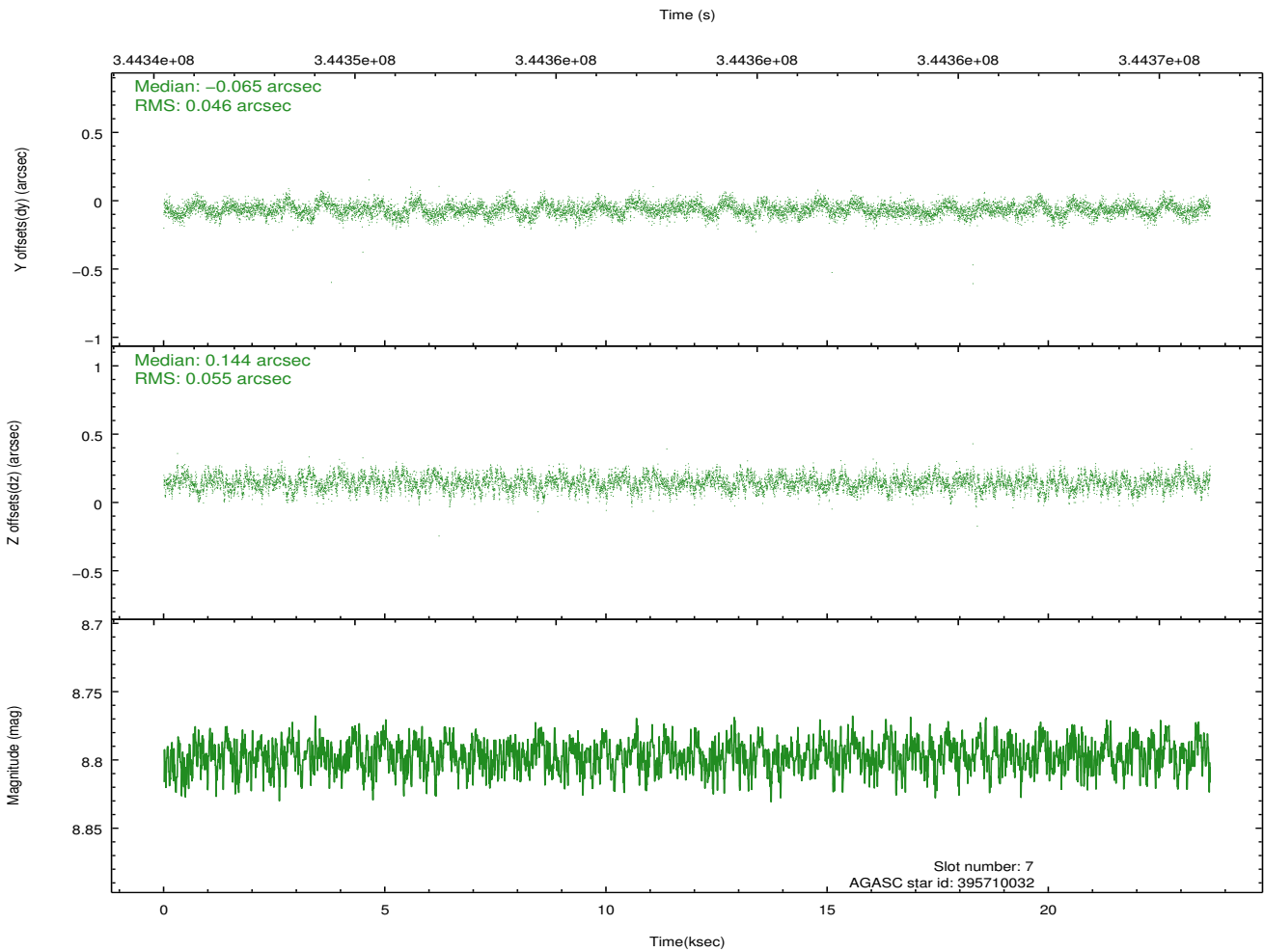
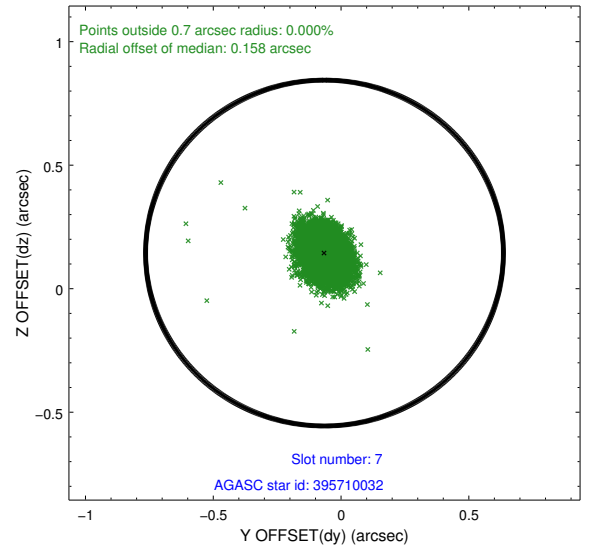
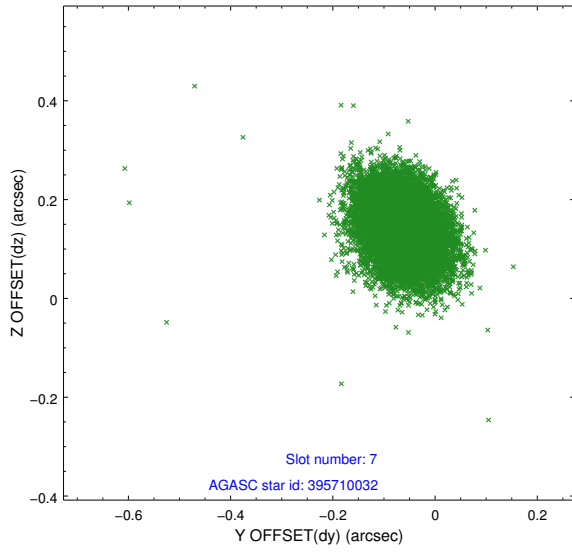
2.4.3 Slot 5



2.4.4 Slot 6

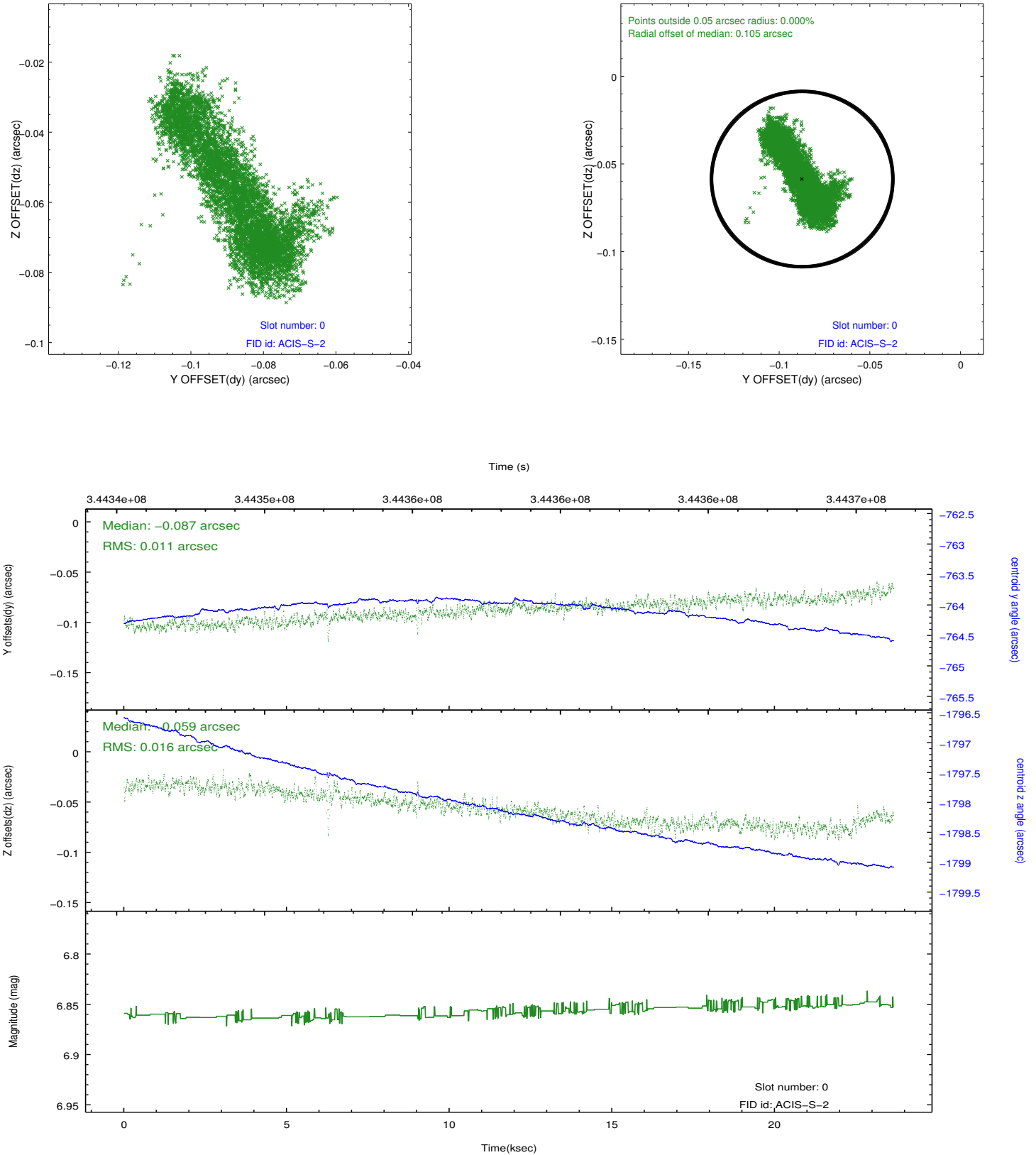


2.4.5 Slot 7

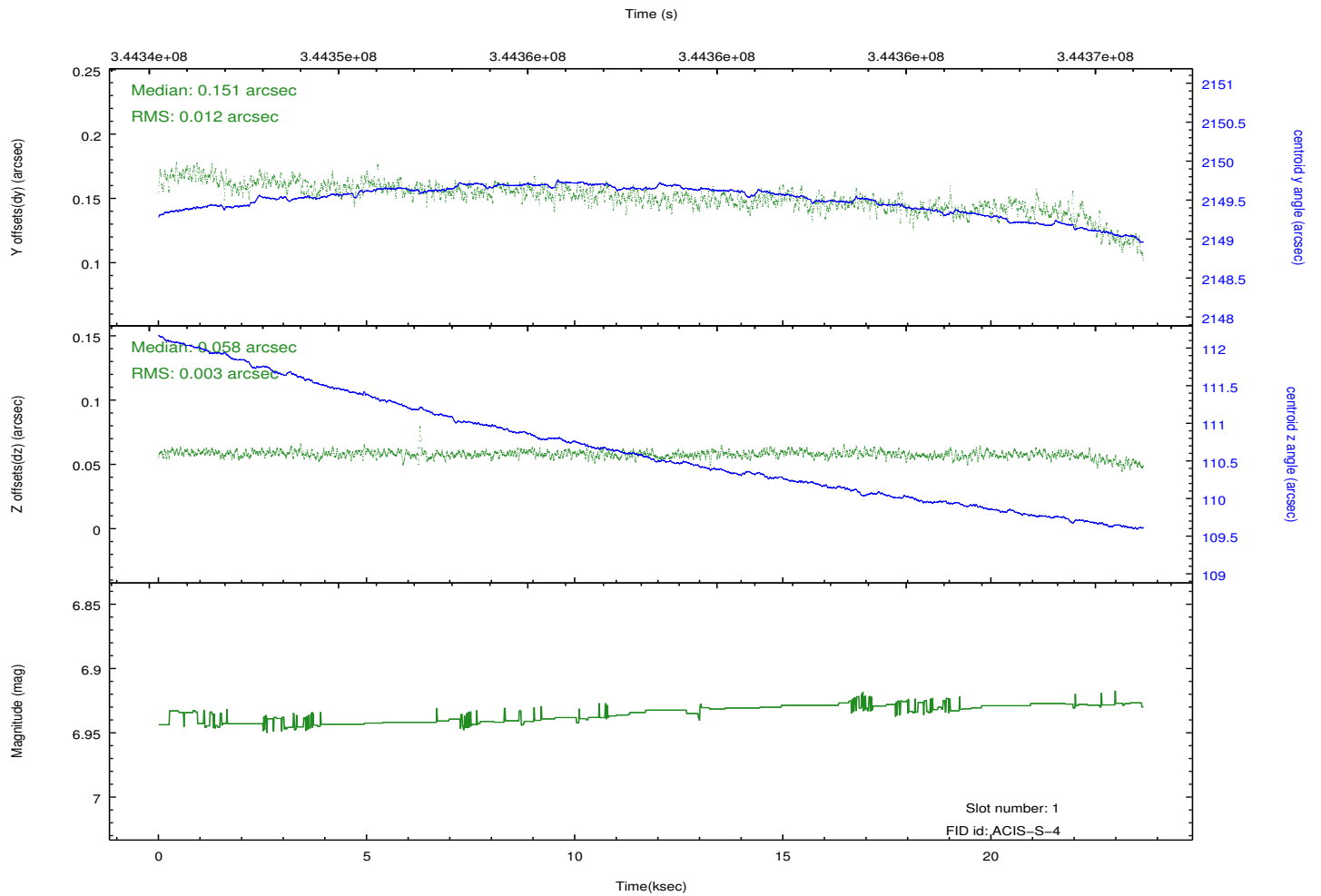
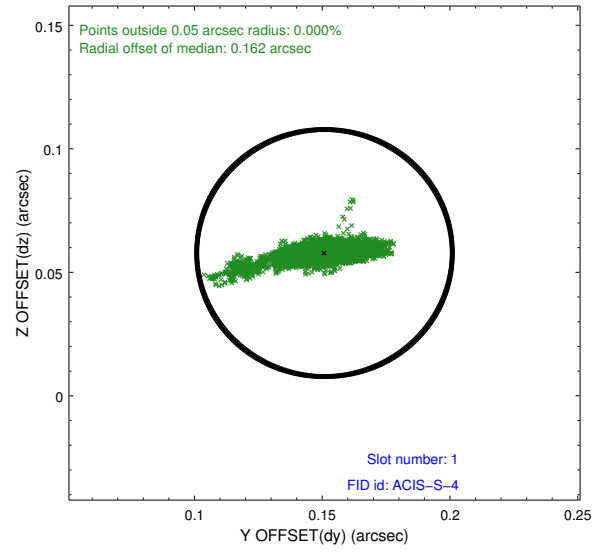
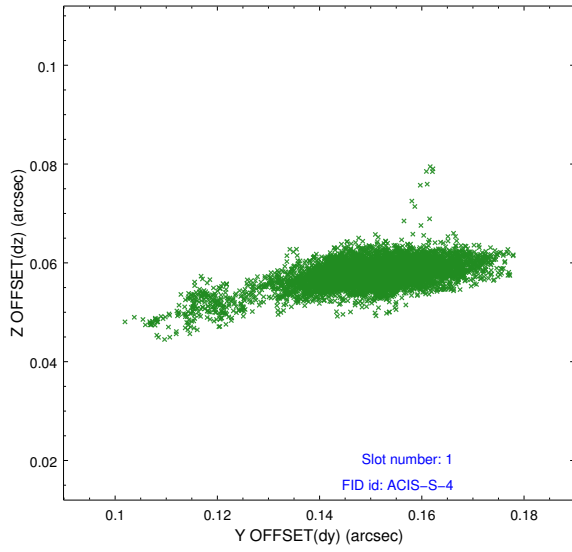


2.5 FID Slots

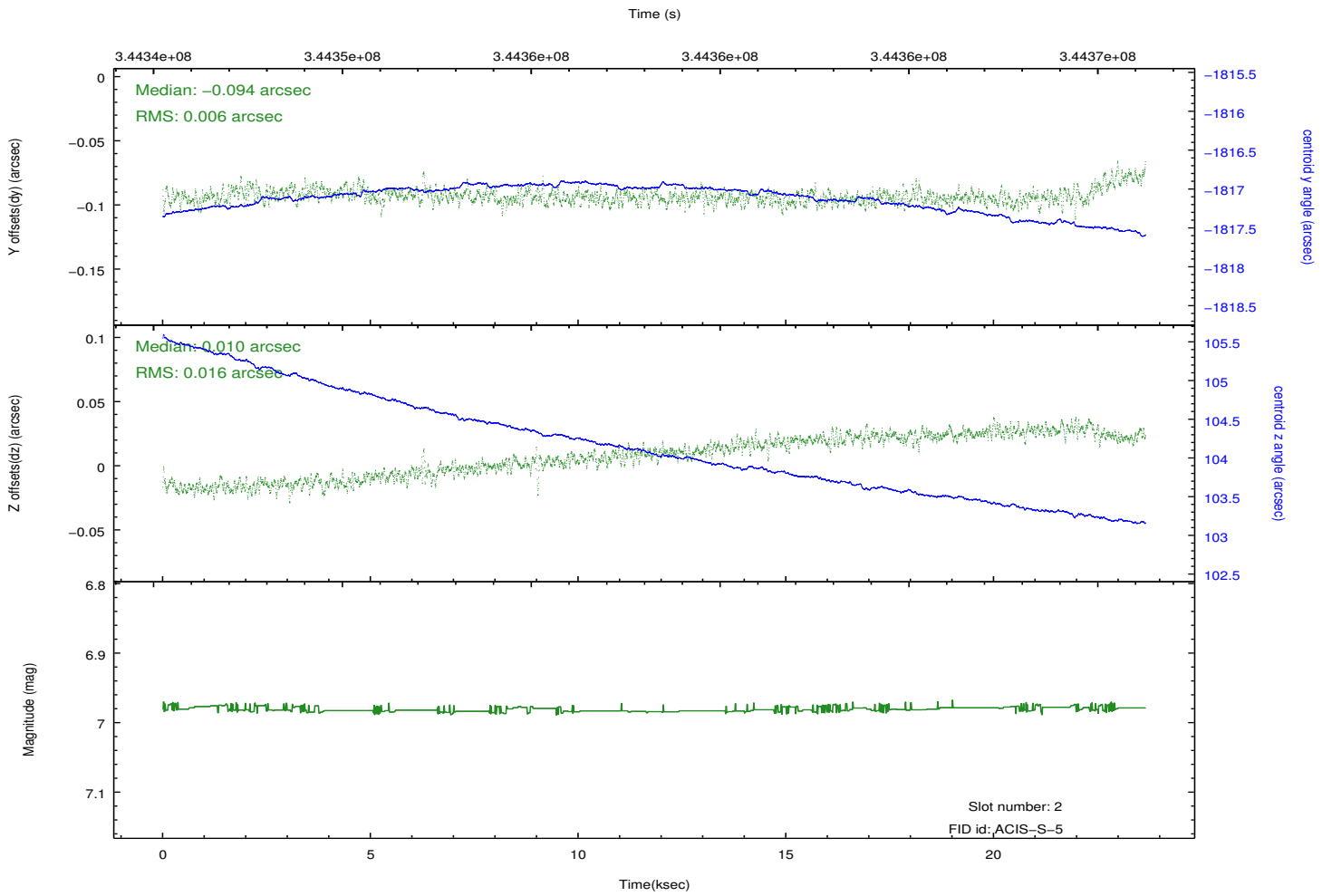
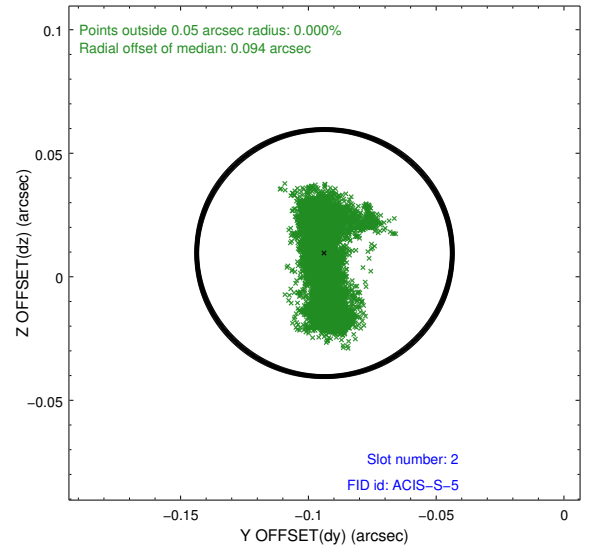
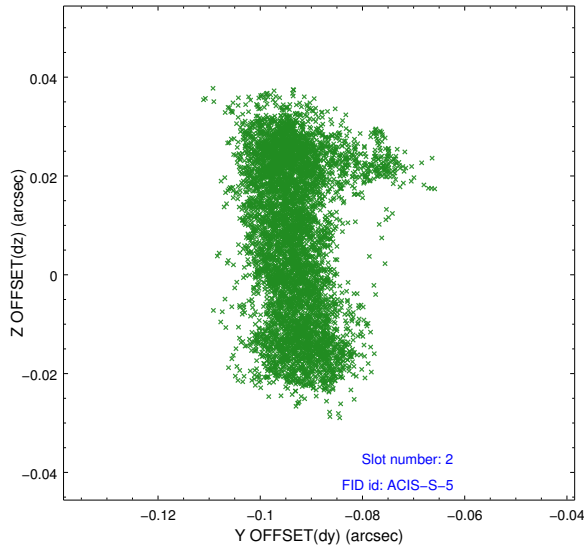
2.5.1 Slot 0



2.5.2 Slot 1

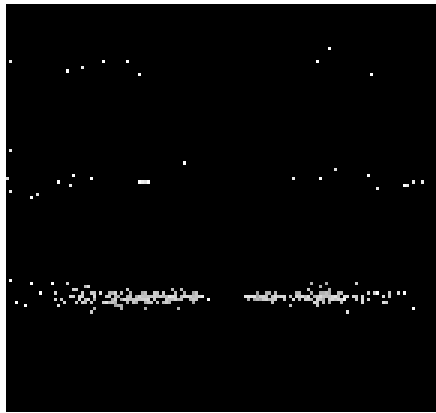


2.5.3 Slot 2

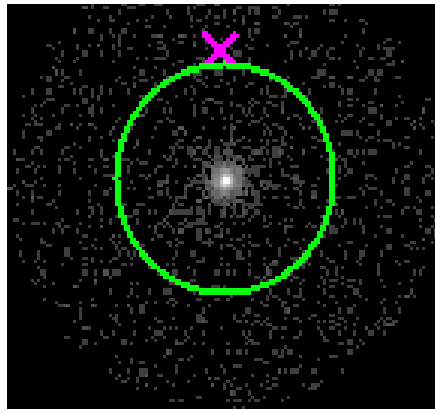


3 Gratings

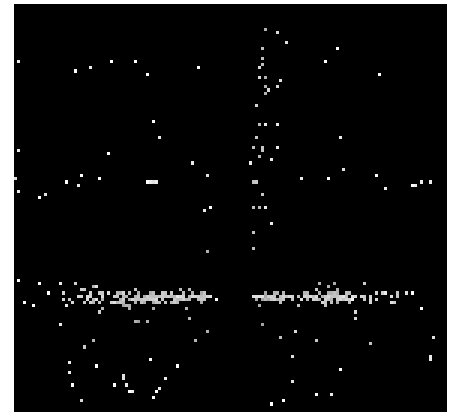
3.1 HEG Arm



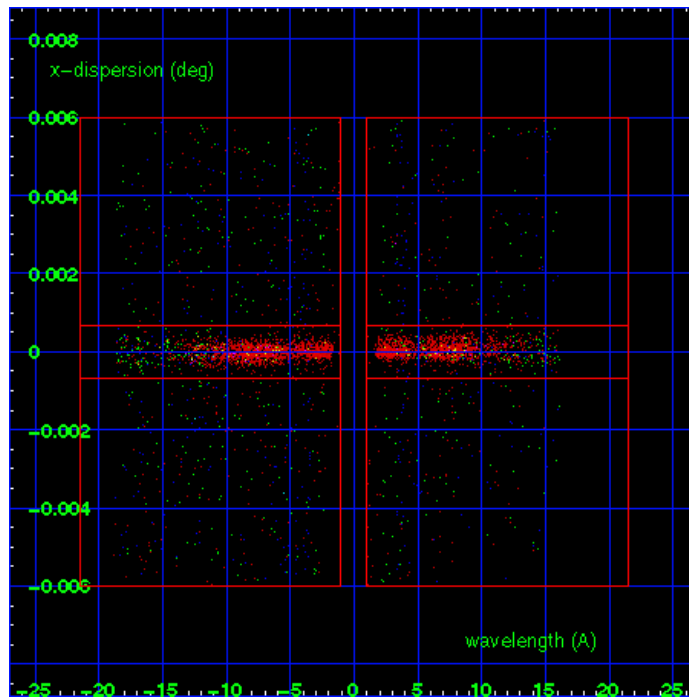
HEG Order Sort 123



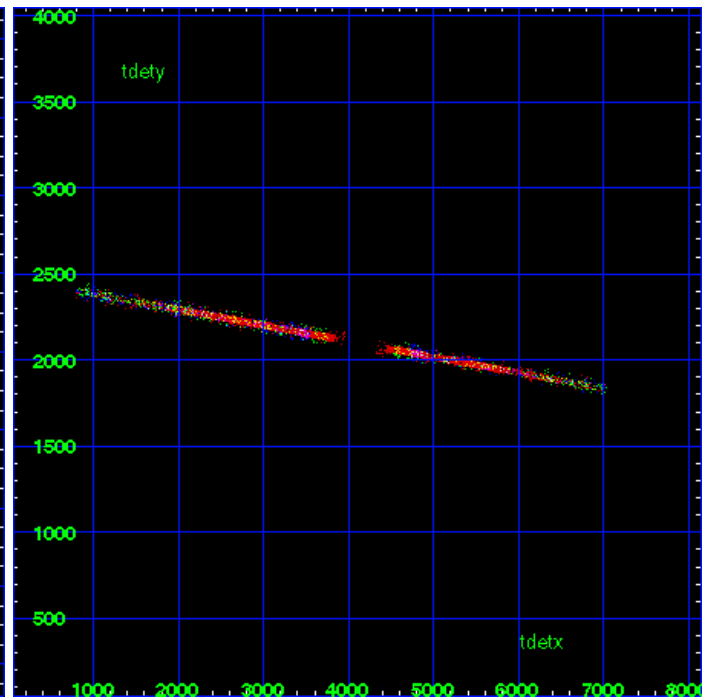
HEG Zero Order



HEG Order Sort ALL

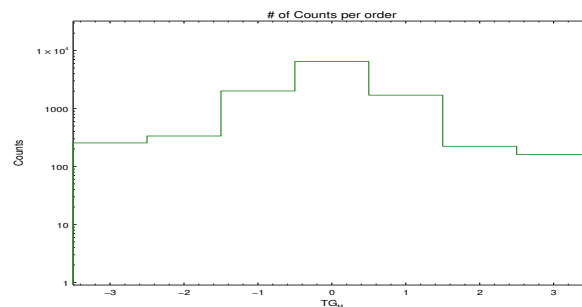


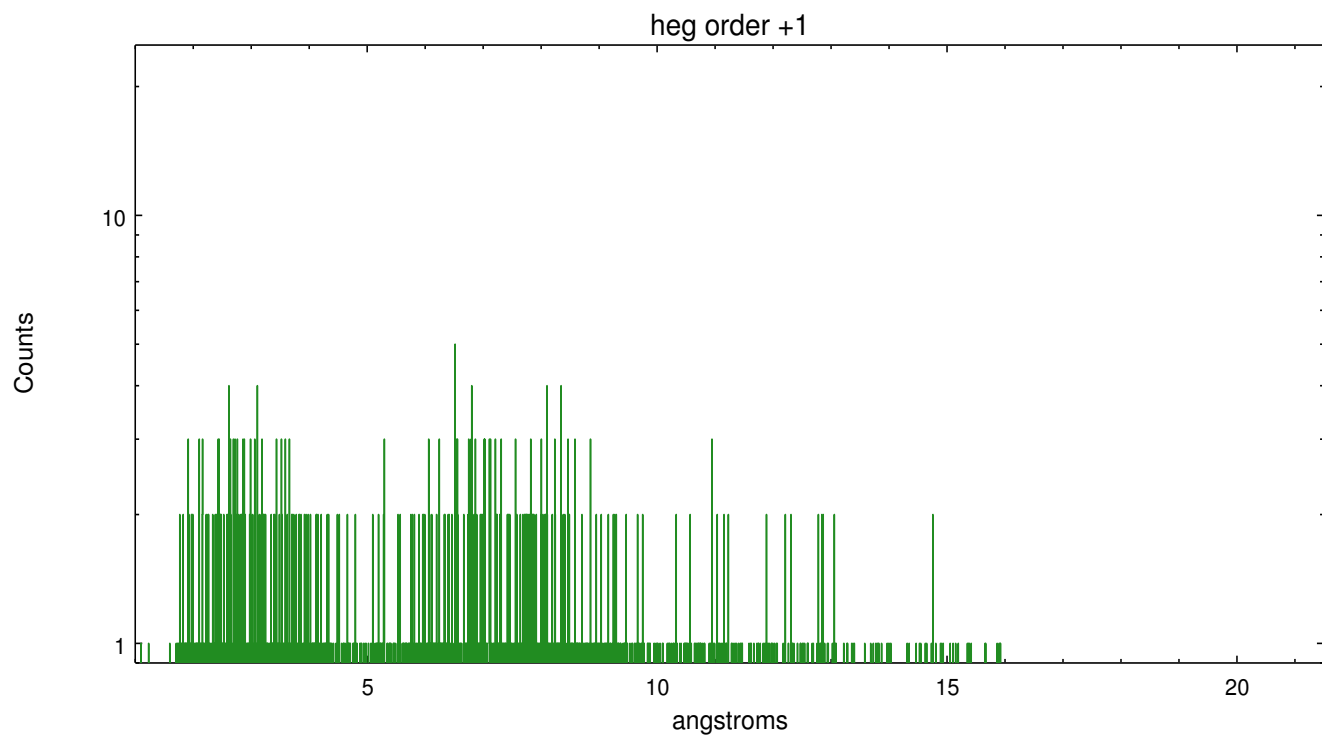
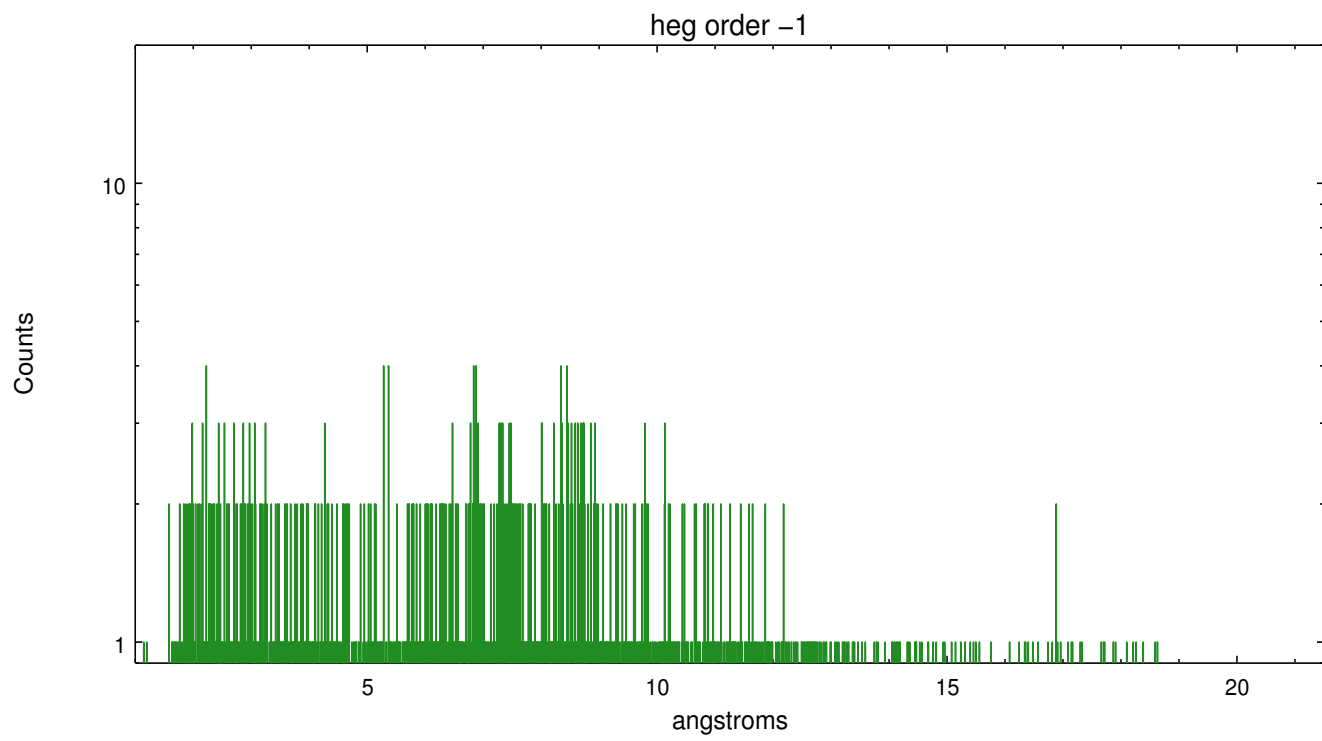
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	255	336	2010	6472	1701	223	161

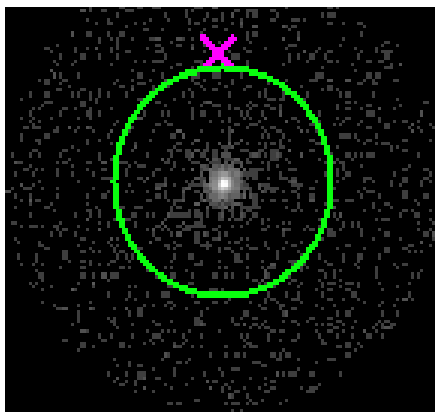




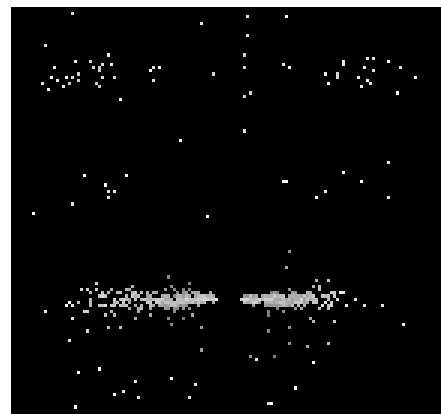
3.2 MEG Arm



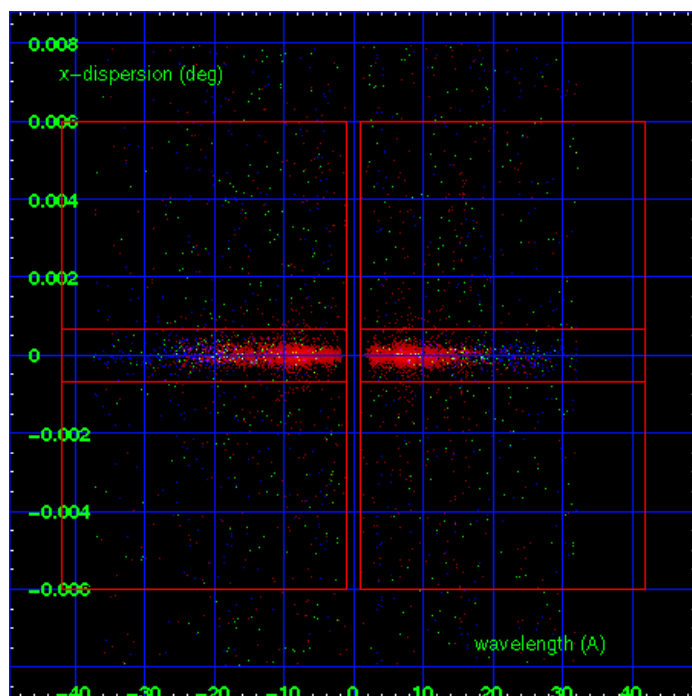
MEG Order Sort 123



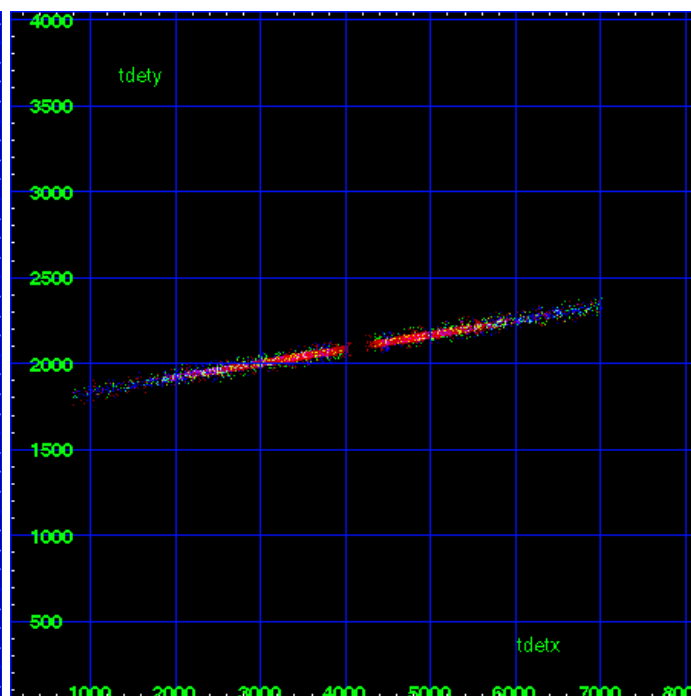
MEG Zero Order



MEG Order Sort ALL

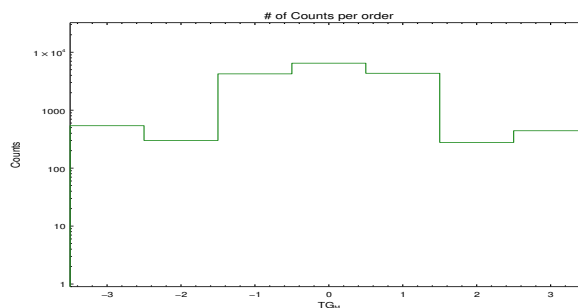


Spot Image MEG

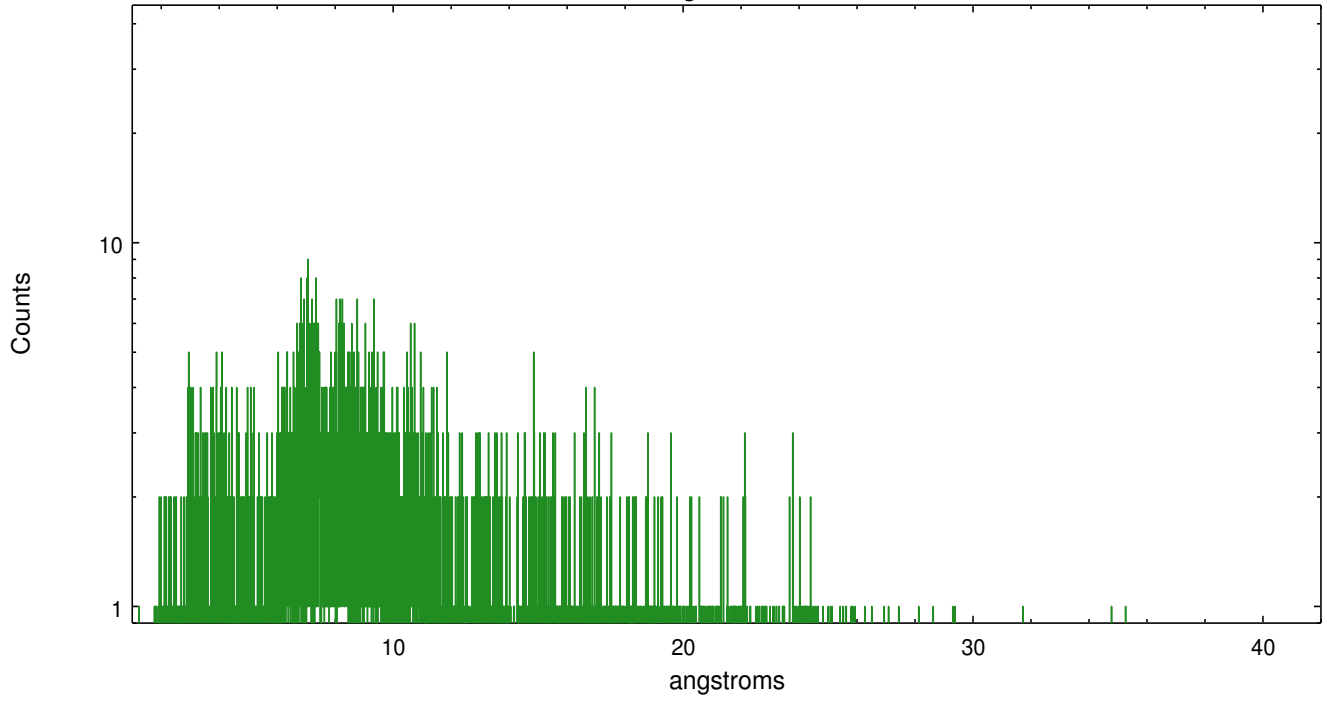


Full Detector MEG

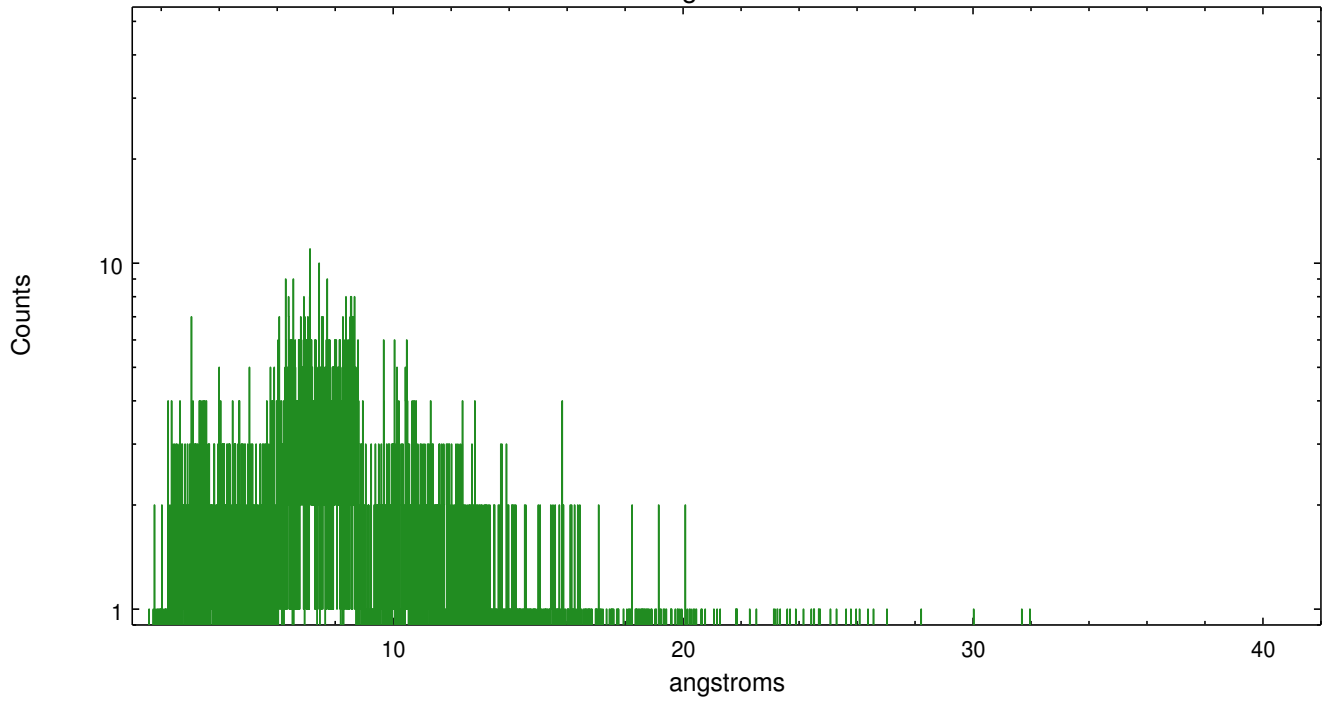
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	540	301	4236	6472	4330	278	442



meg order -1



meg order +1



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	23.6525

A.2 Comments