

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10775 - L2 Version 2
Chandra X-Ray Center

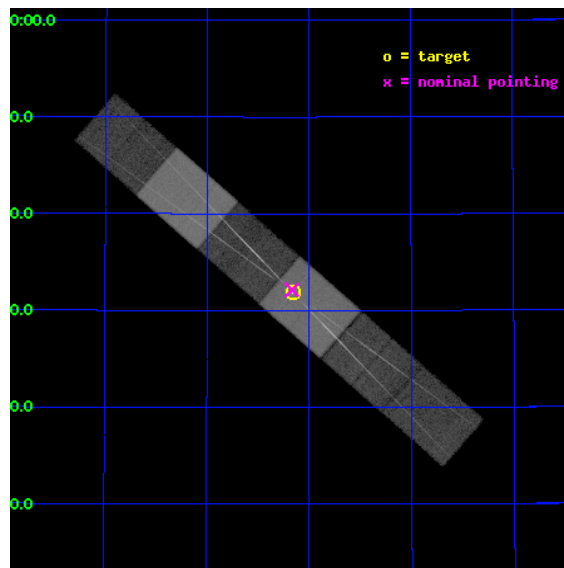
L2 Processing Date : May 23 2012

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1 Front

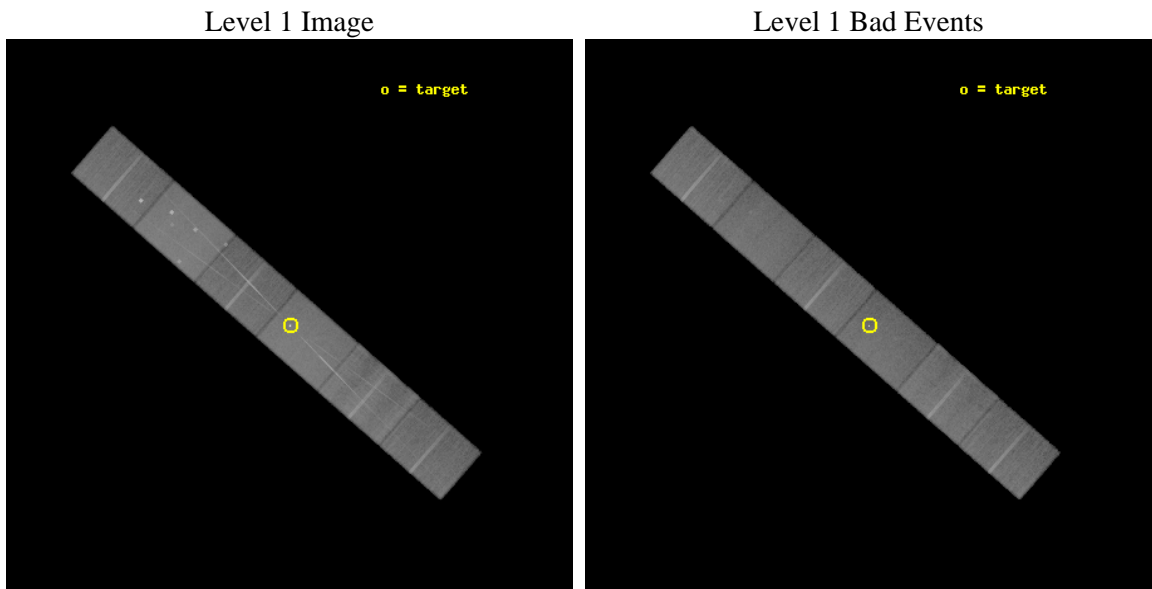
seq_num	701946	Sequence number
obs_id	10775	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79202442523	Nominal RA [deg]
dec_nom	44.535964576966	Nominal Dec [deg]
roll_nom	41.15521755431	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30880.0	Sum of GTIs [s]
liveltime	30381.26121588	Livetime [s]
ontime4	30880.0	Sum of GTIs [s]
ontime5	30880.0	Sum of GTIs [s]
ontime6	30880.0	Sum of GTIs [s]
ontime7	30880.0	Sum of GTIs [s]
ontime8	30880.0	Sum of GTIs [s]
ontime9	30880.0	Sum of GTIs [s]
l2events	452456	Number of level 2 events



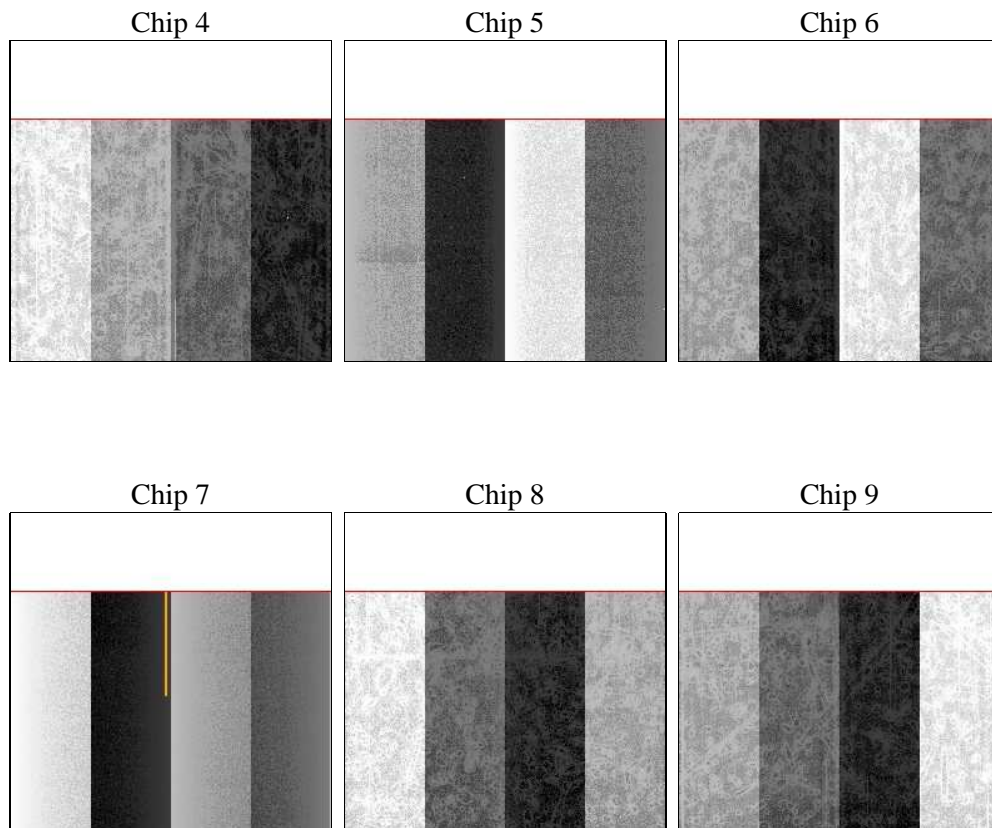
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30750.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	30880.0	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	30880.0	Sum of GTIs [s]
date	2012-05-23T13:57:11	Date and time of file creation	ontime5	30880.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	30880.0	Sum of GTIs [s]
			ontime7	30880.0	Sum of GTIs [s]
			ontime8	30880.0	Sum of GTIs [s]
			ontime9	30880.0	Sum of GTIs [s]
			l1events	1802925	Number of level 1 events

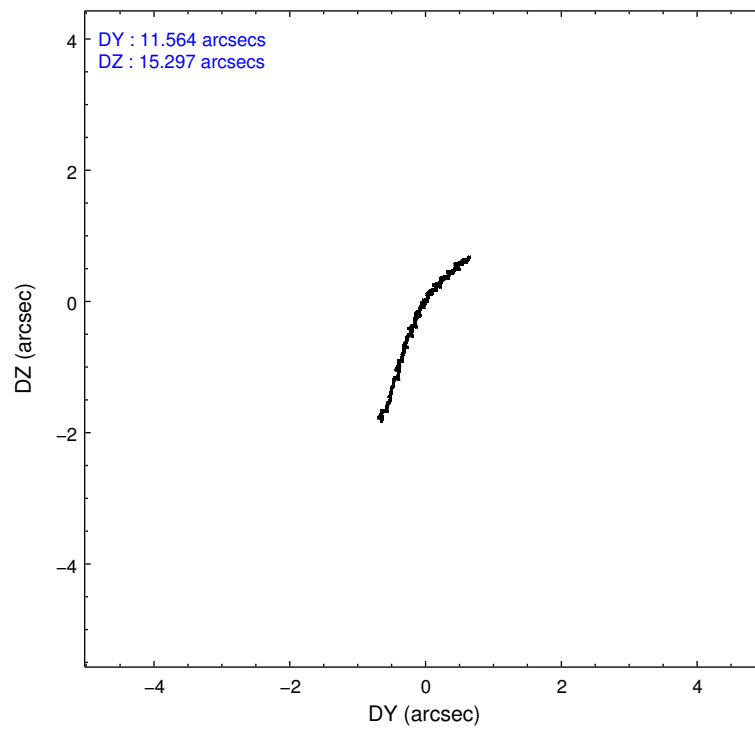
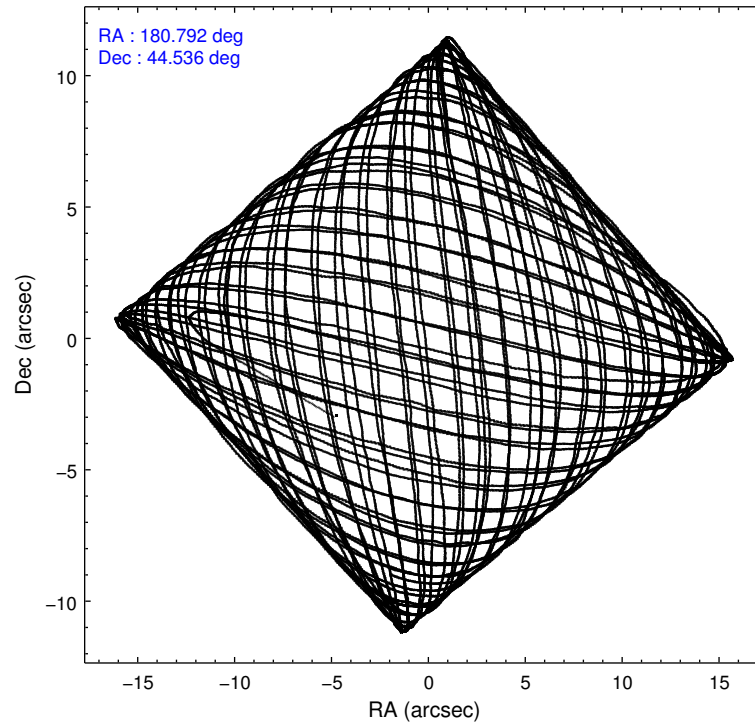
2.1.4 Events

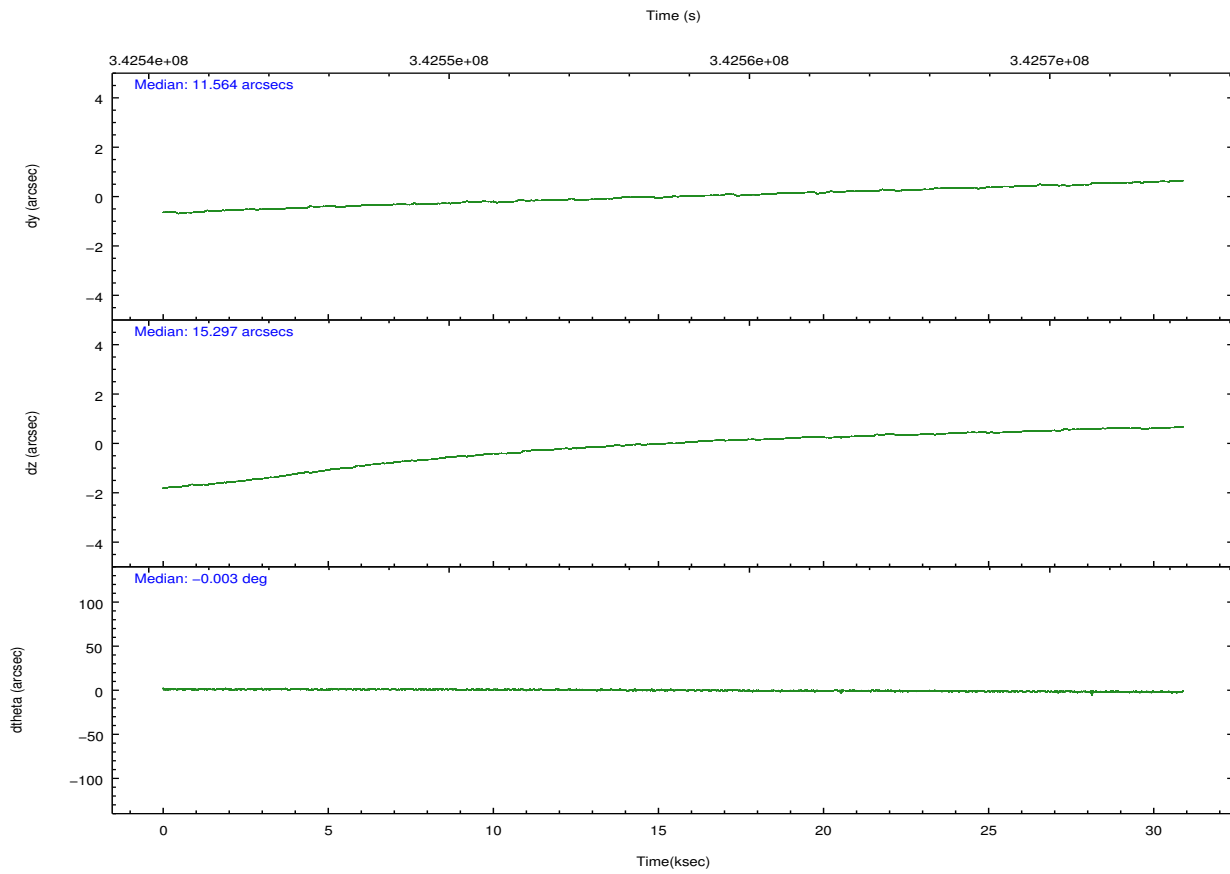
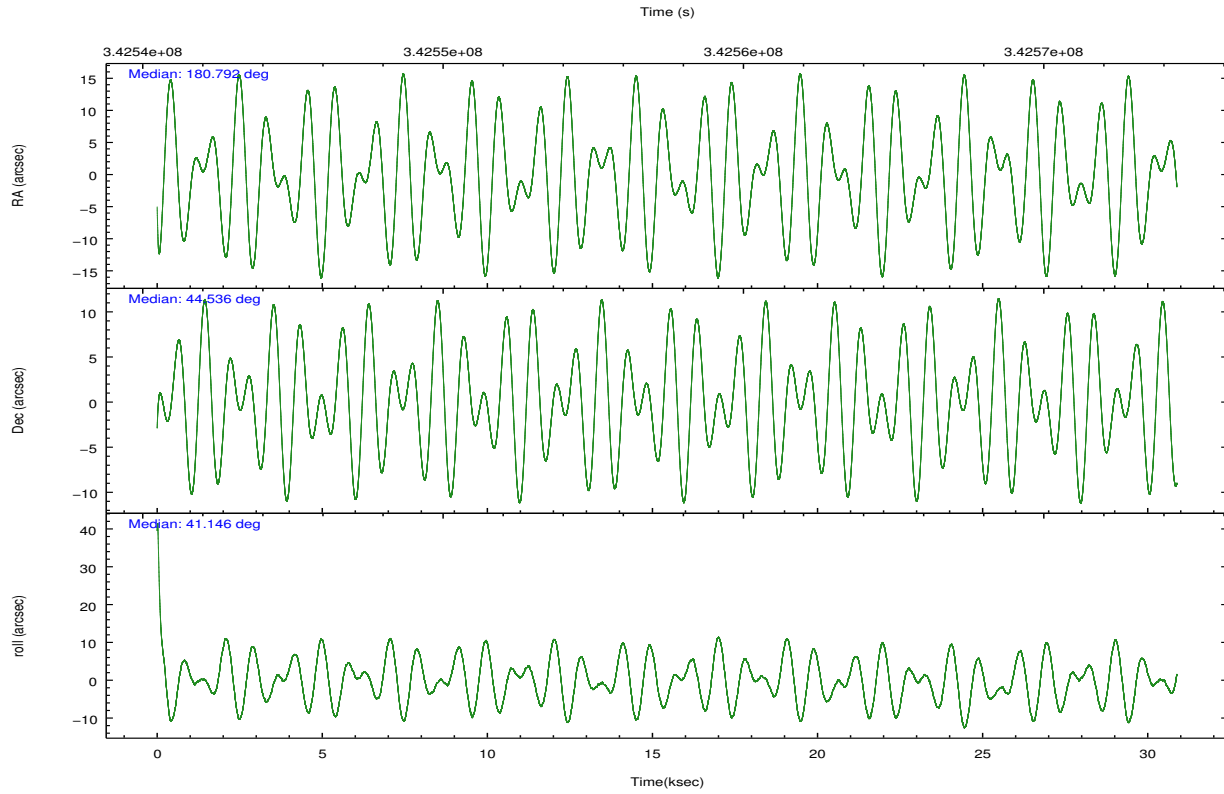
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	268202	378650	255244	354825	312788	233216	grade 0 events	20578	23294	24114	17075	29840	13859
rejected events	229977	199492	210206	196593	233925	201544		7%	6%	9%	4%	9%	5%
rejected %	85%	52%	82%	55%	74%	86%	grade 1 events	252	871	182	628	275	139
								0%	0%	0%	0%	0%	0%
							grade 2 events	6904	51967	8151	33663	16688	6454
								2%	13%	3%	9%	5%	2%
							grade 3 events	3213	8561	3458	14405	7669	3040
								1%	2%	1%	4%	2%	1%
							grade 4 events	3039	7924	3464	14130	7178	2960
								1%	2%	1%	3%	2%	1%
							grade 5 events	10907	27263	11095	32501	14937	11835
								4%	7%	4%	9%	4%	5%
							grade 6 events	5027	90165	6404	81074	18673	5827
								1%	23%	2%	22%	5%	2%
							grade 7 events	218282	168605	198376	161349	217528	189102
								81%	44%	77%	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	180.780120	180.7920244252304	CCD I2 on	N	N
[deg] Pointing Dec	44.509963	44.53596457696631	CCD I3 on	N	N
[deg] Pointing Roll	41.006923	41.15521755430952	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)	342542152.184000	342540918.78223	CCD S5 on	Y	Y
Observation start date	2008-11-08T14:34:47	2008-11-08T14:15:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	342572902.184000	342573782.33385	On-chip summing requested	N	N
Observation end date	2008-11-08T23:07:17	2008-11-08T23:23:02	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



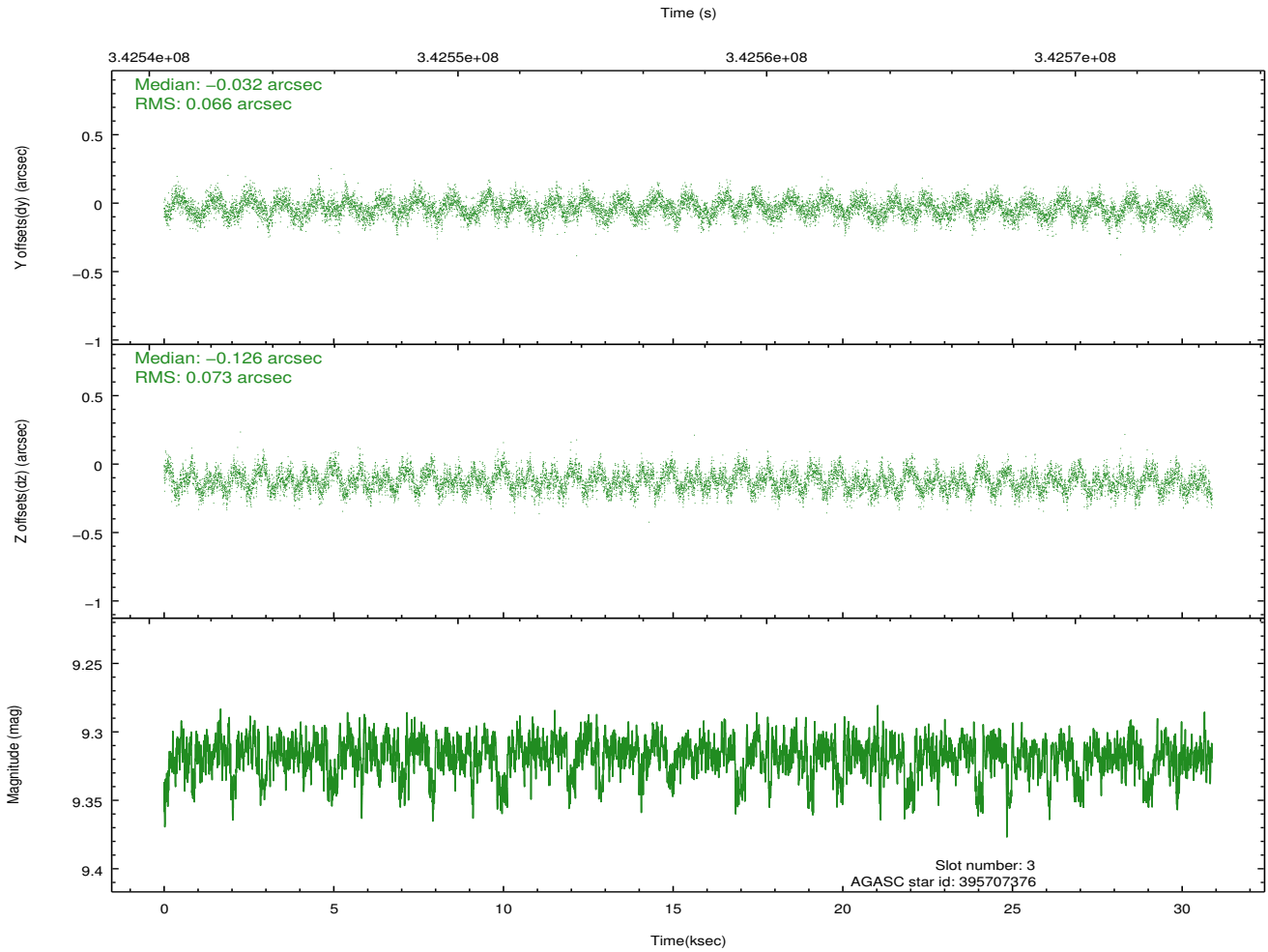
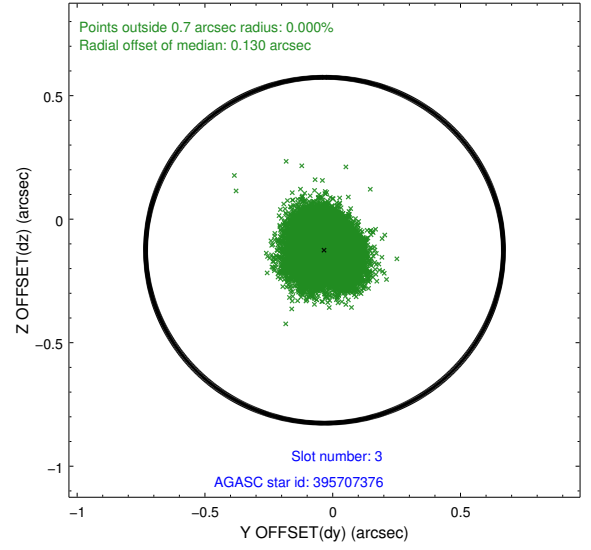
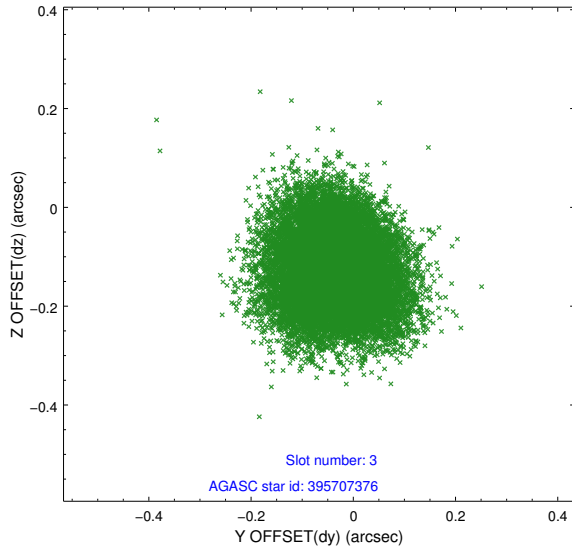


Slot Statistics

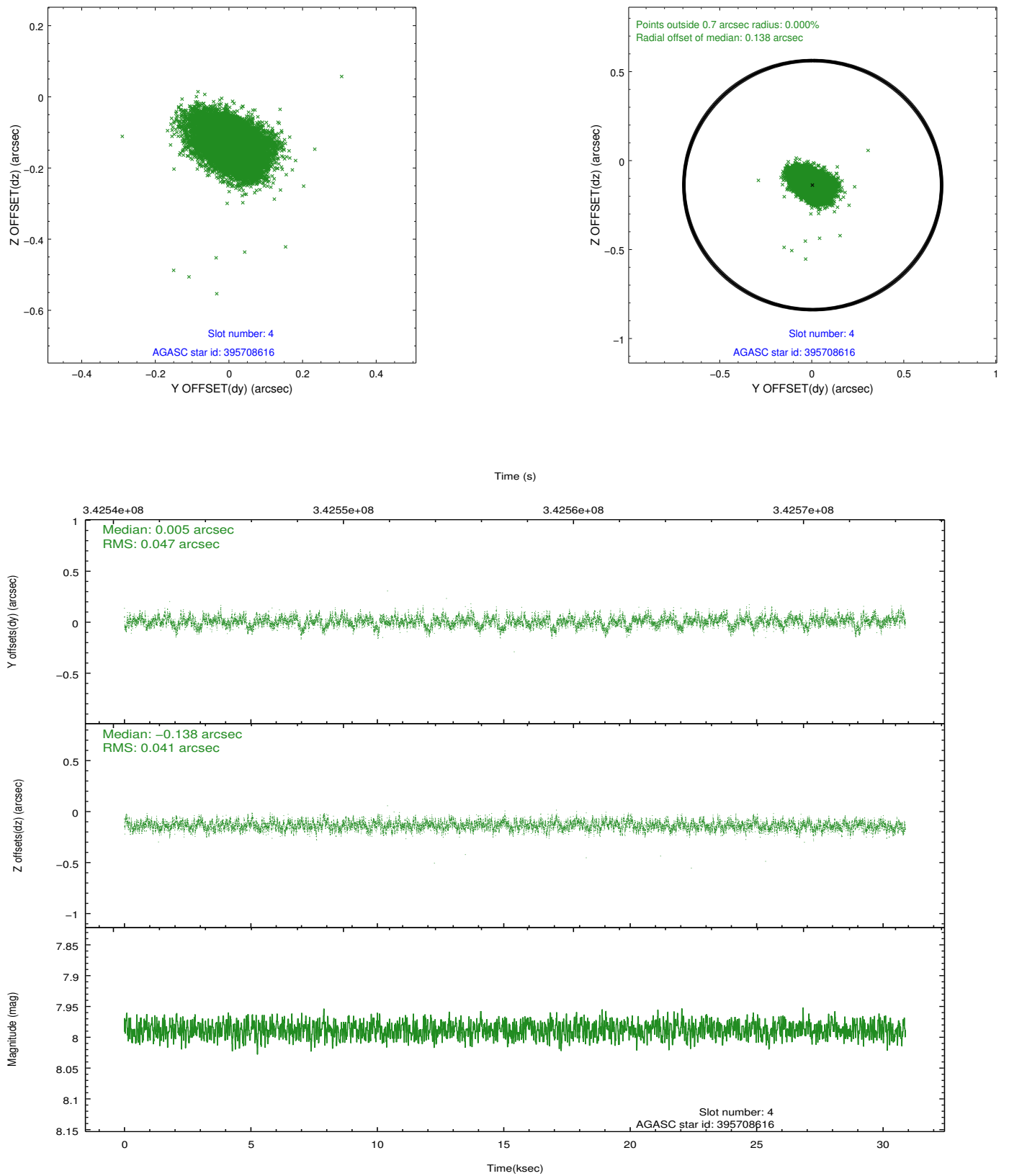
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.87	7533	-0.123	-0.087	0.015	0.024	0.000000	0.000000	-764.38	-1798.68
1	FID	ACIS-S-4	6.95	7533	0.114	0.066	0.009	0.016	0.000000	0.000000	2149.13	109.82
2	FID	ACIS-S-6	7.12	7532	-0.020	0.024	0.010	0.015	0.000000	0.000000	397.83	747.27
3	GUIDE	395707376	9.32	15051	-0.032	-0.126	0.107	0.166	180.967983	44.858789	1185.87	633.52
4	GUIDE	395708616	7.99	15065	0.005	-0.138	0.065	0.110	180.101872	44.630343	-1022.04	1472.48
5	GUIDE	395708696	8.88	15055	0.040	0.074	0.092	0.156	180.383726	44.624291	-494.73	979.09
6	GUIDE	395709608	8.36	15062	0.058	0.096	0.062	0.102	181.055130	44.450389	393.75	-624.32
7	GUIDE	395710032	8.79	15059	-0.069	0.097	0.081	0.129	181.512910	44.376001	1112.47	-1594.42

2.4 Star Slots

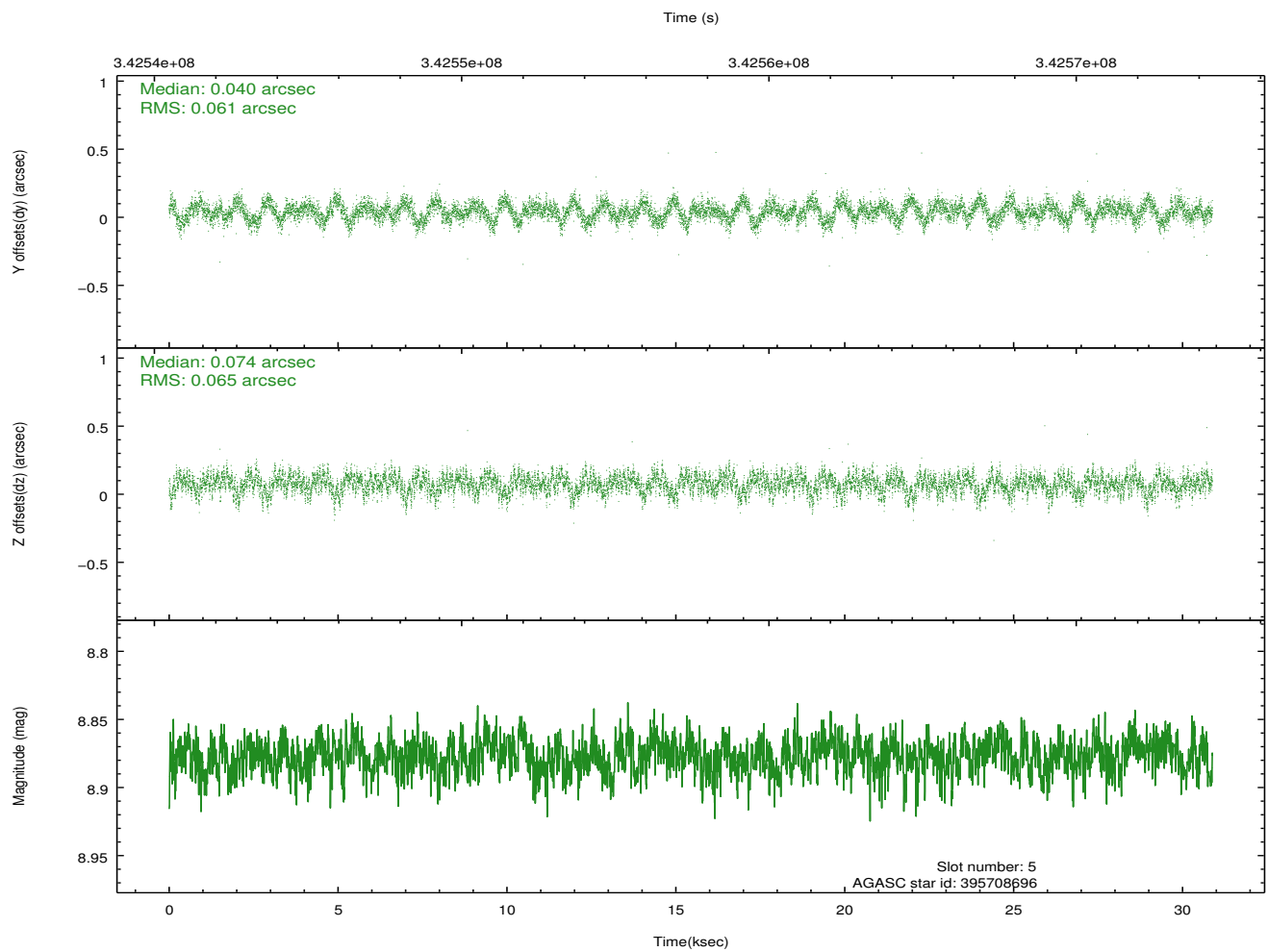
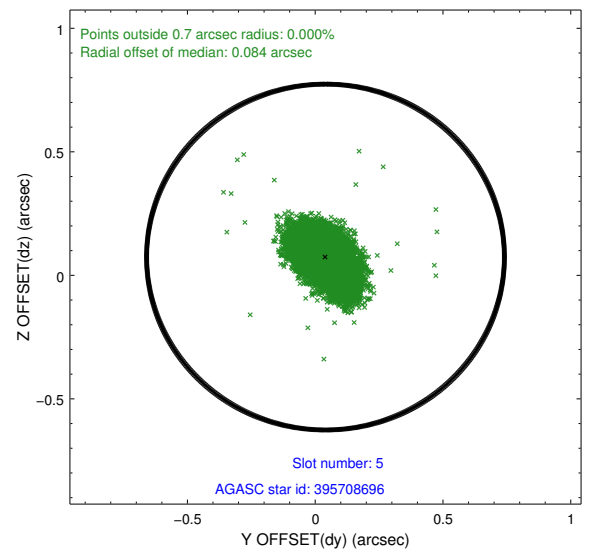
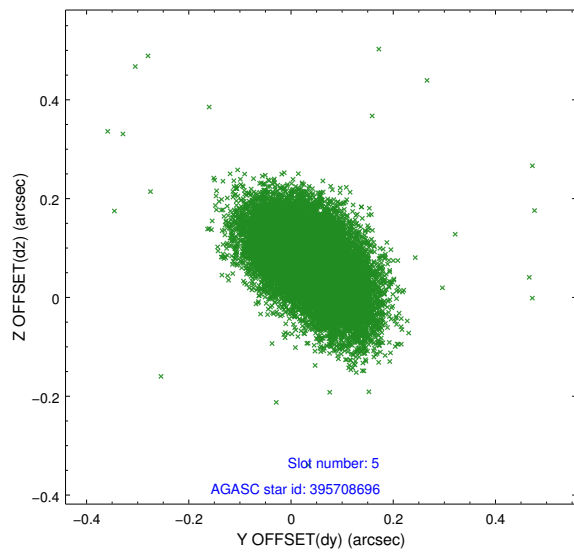
2.4.1 Slot 3



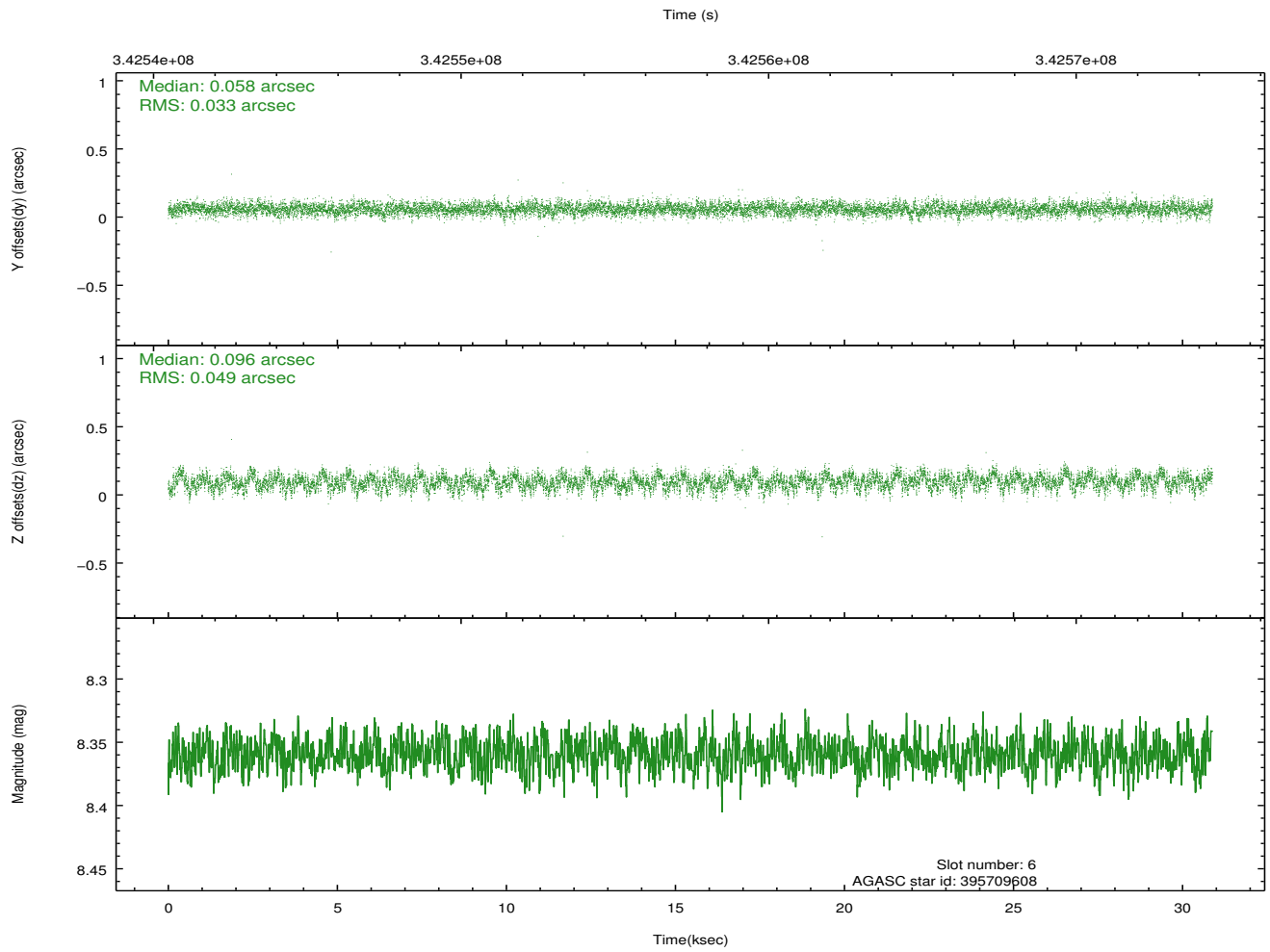
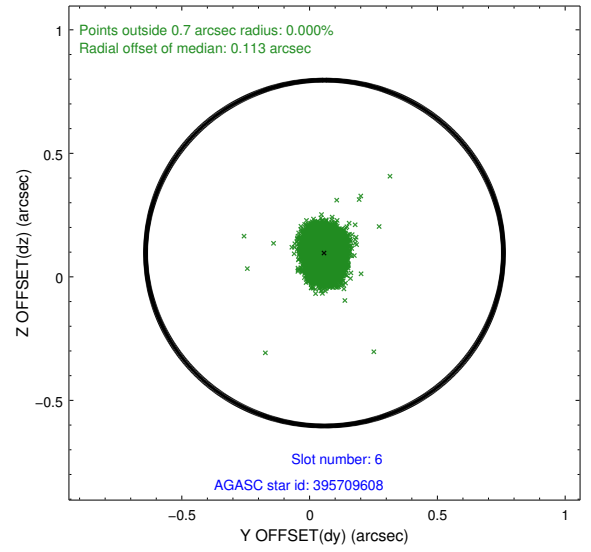
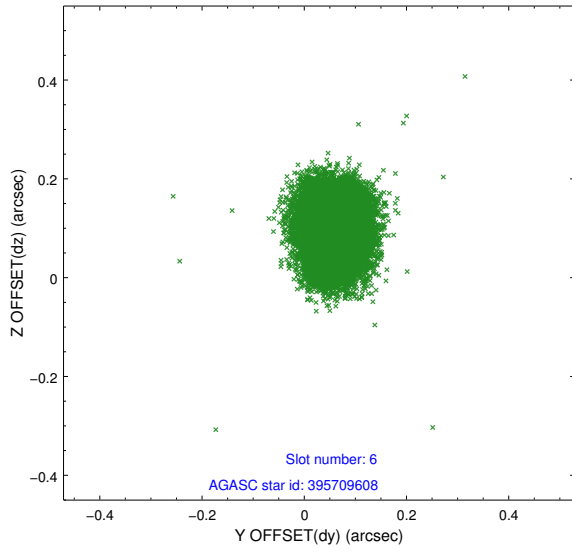
2.4.2 Slot 4



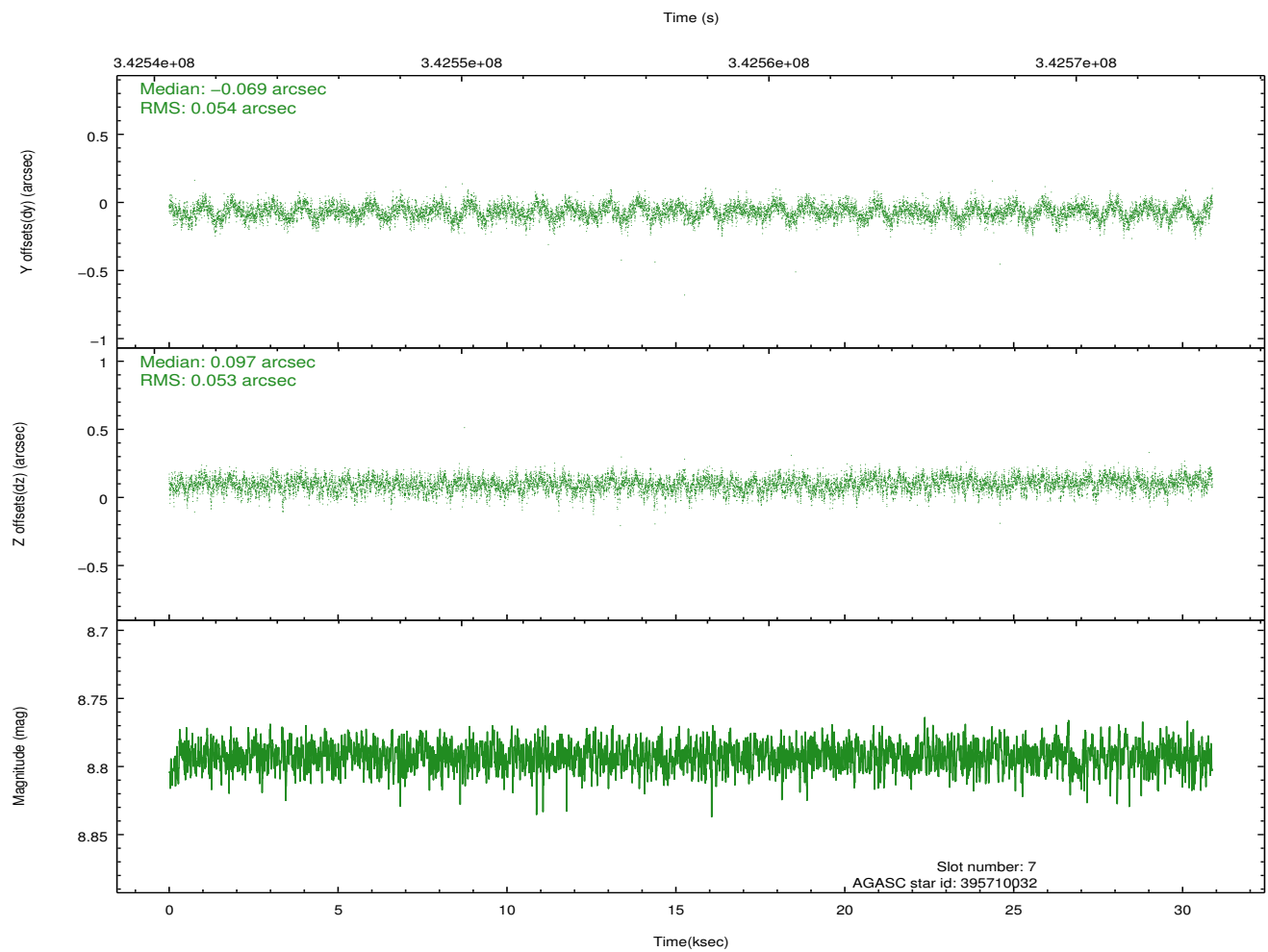
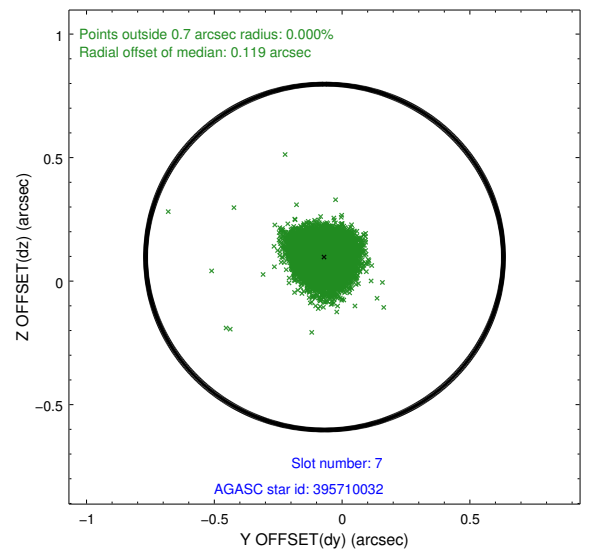
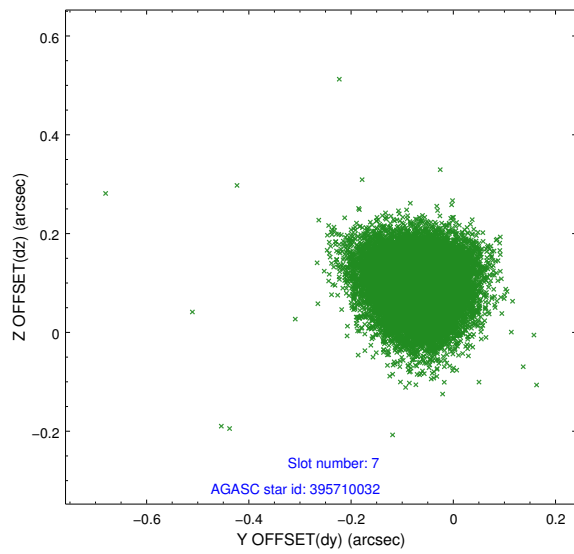
2.4.3 Slot 5



2.4.4 Slot 6

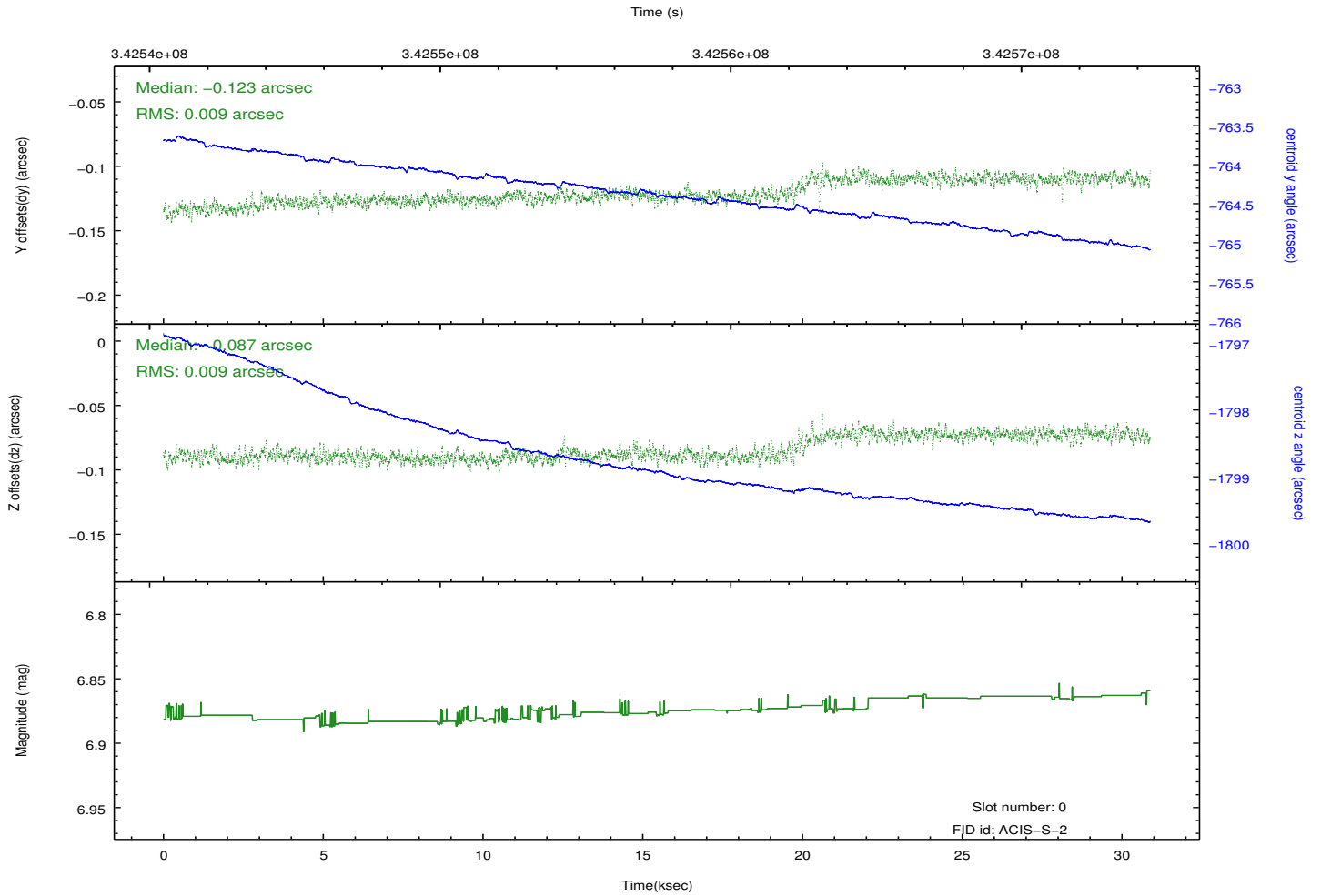
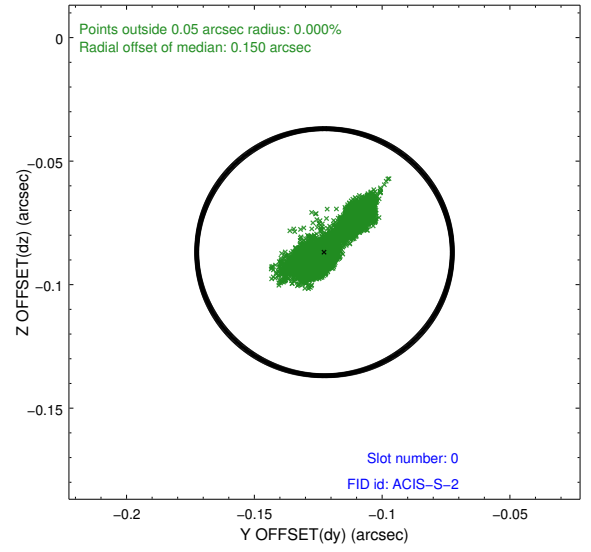
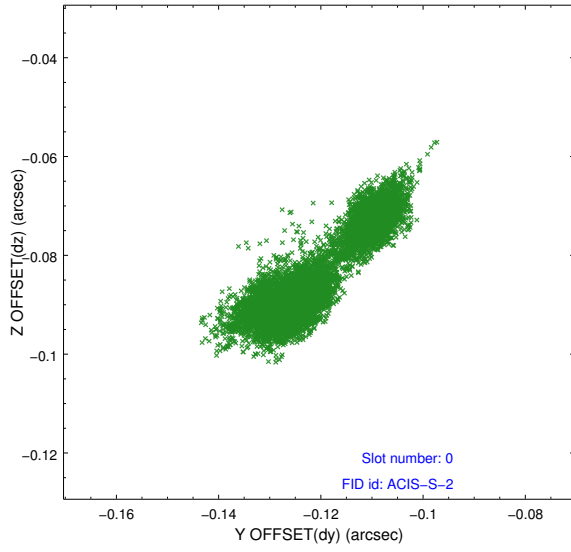


2.4.5 Slot 7

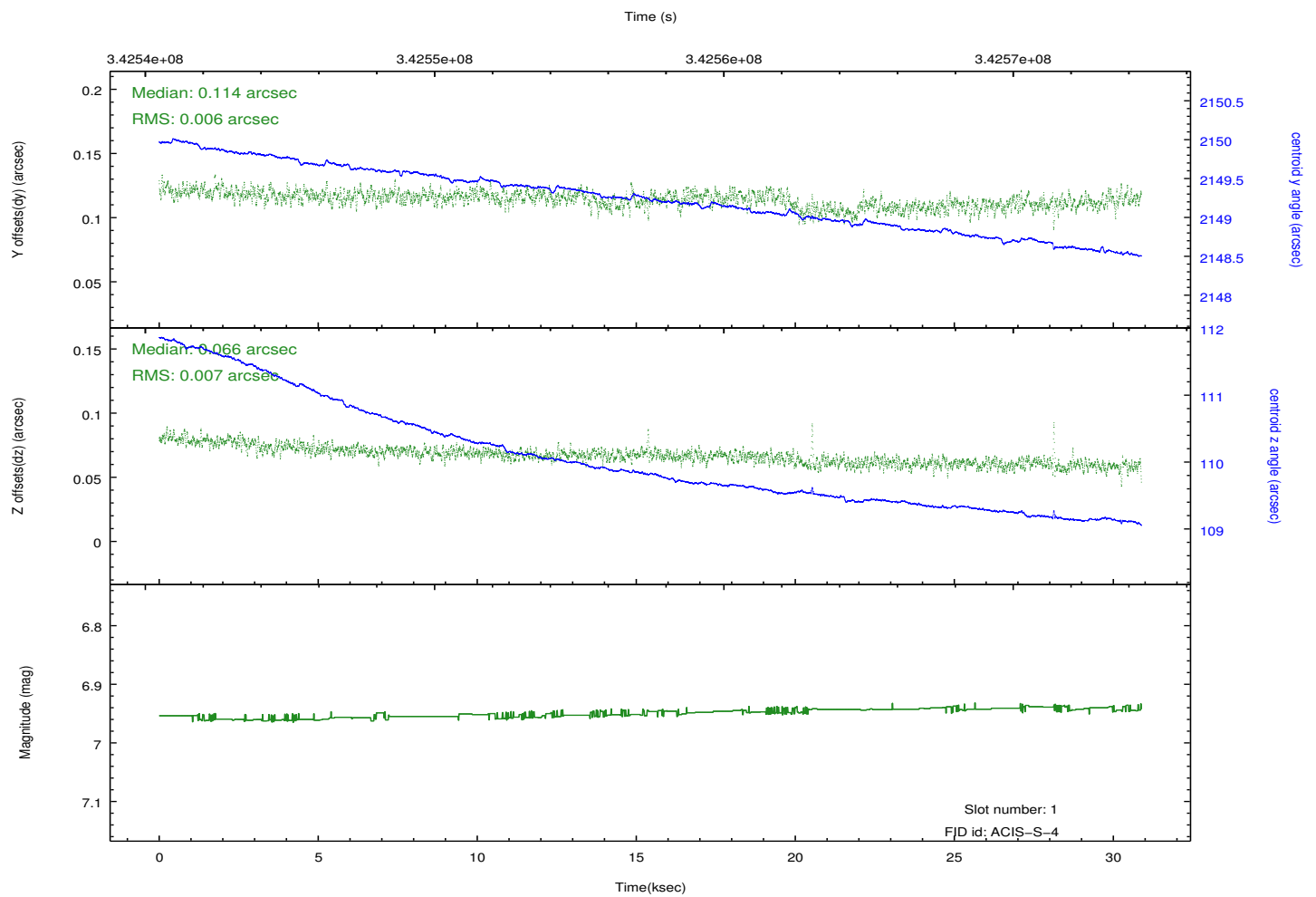
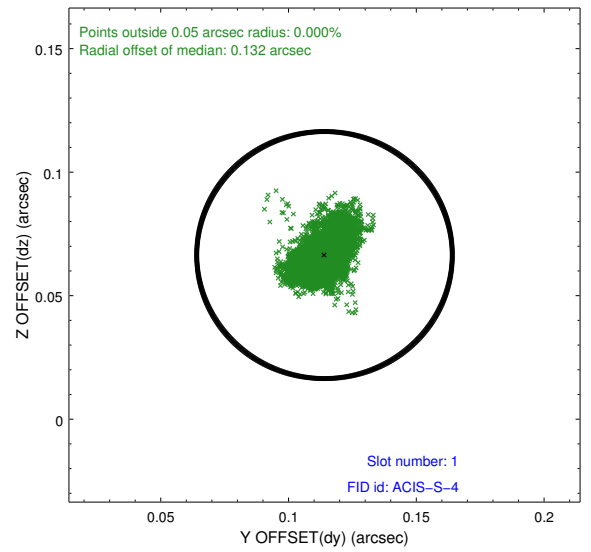
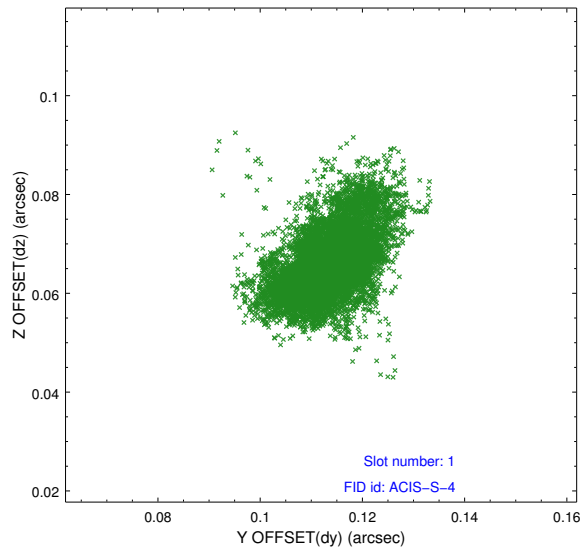


2.5 FID Slots

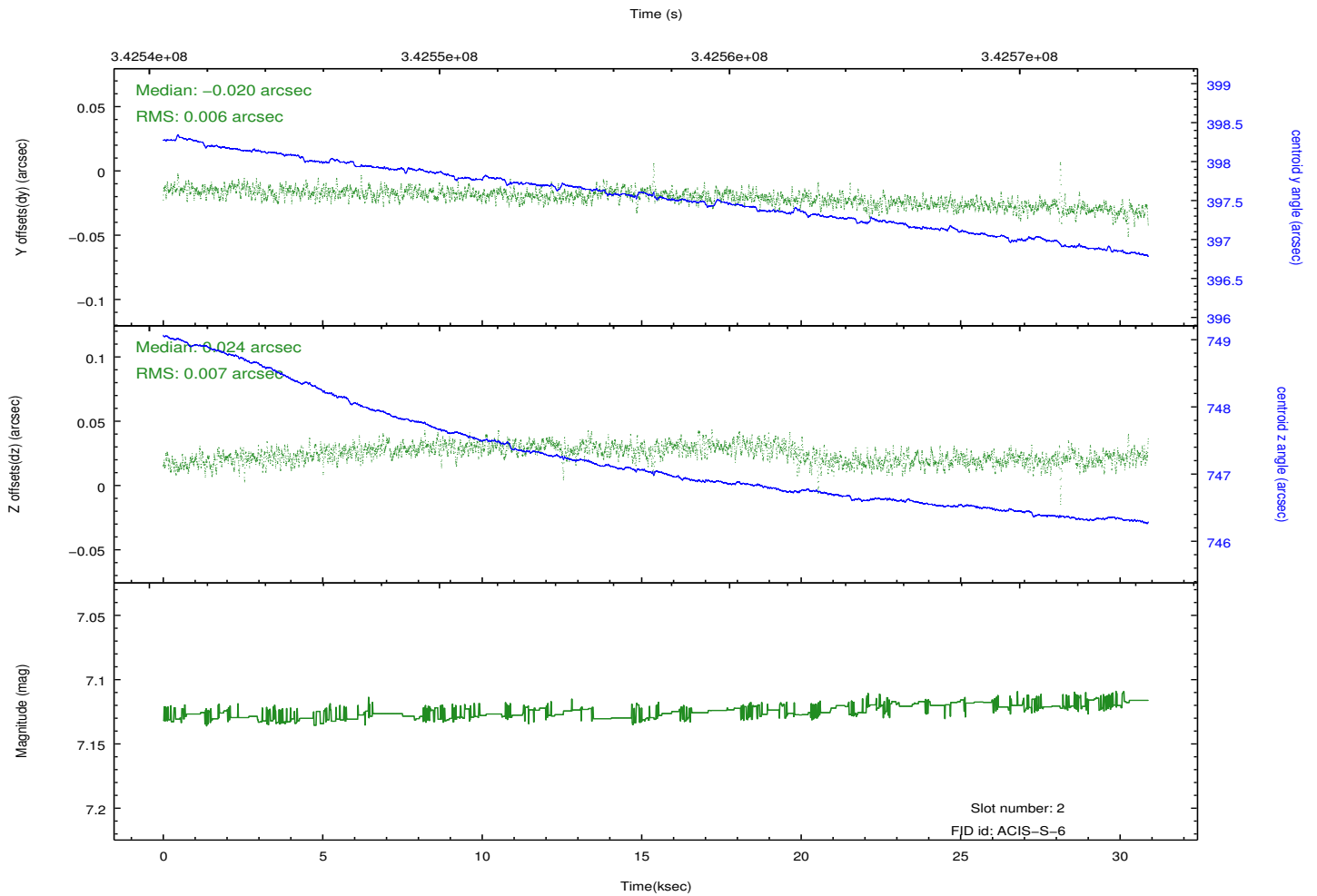
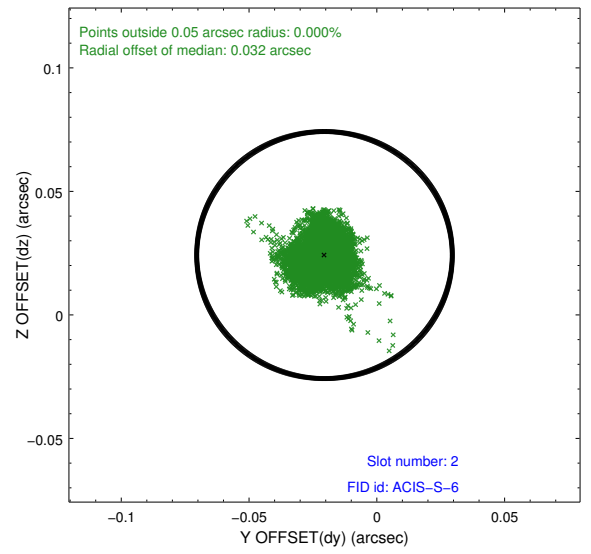
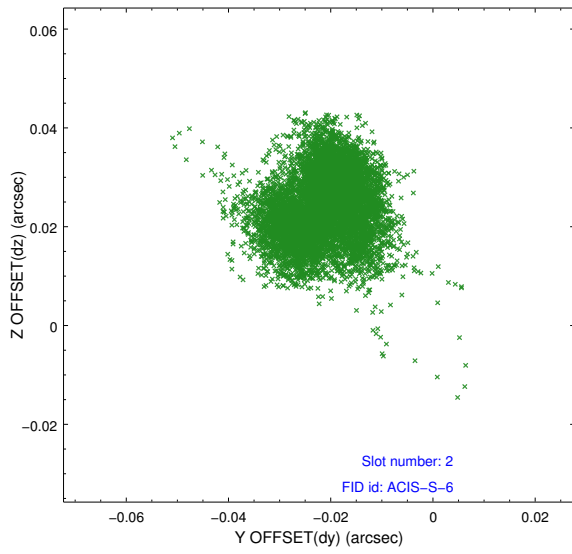
2.5.1 Slot 0



2.5.2 Slot 1

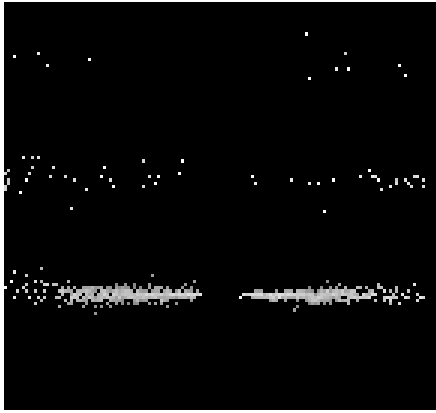


2.5.3 Slot 2

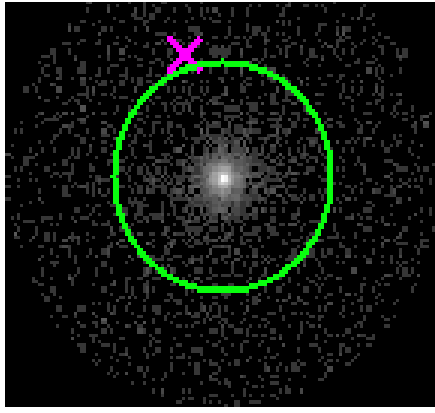


3 Gratings

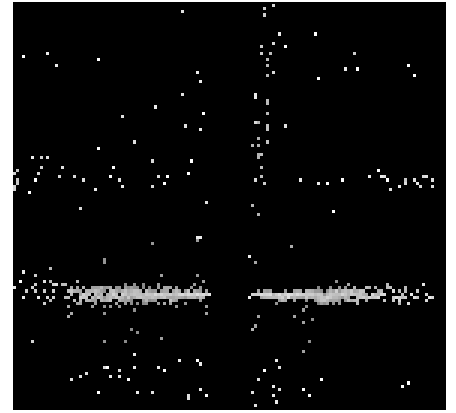
3.1 HEG Arm



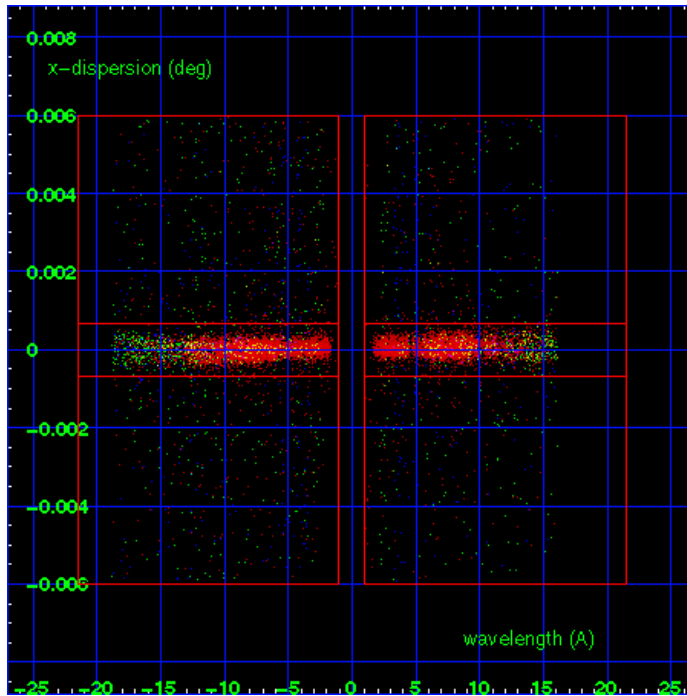
HEG Order Sort 123



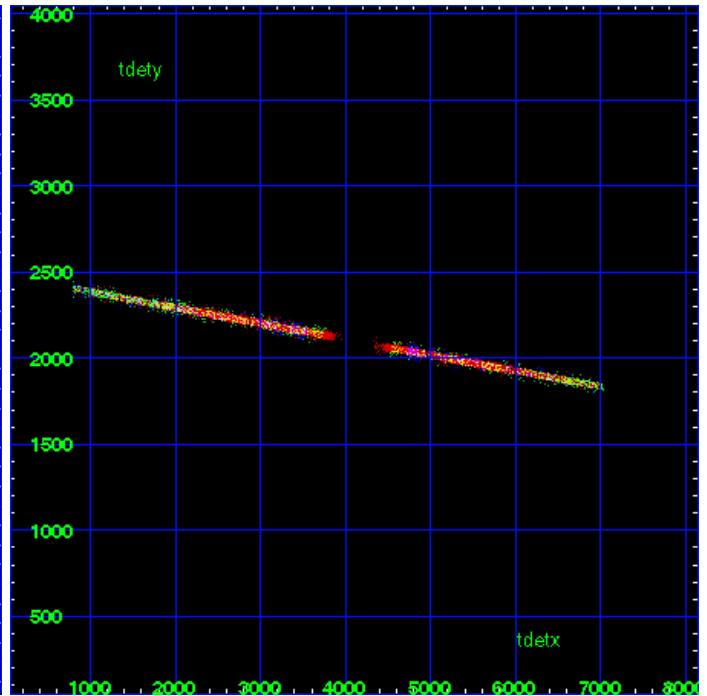
HEG Zero Order



HEG Order Sort ALL

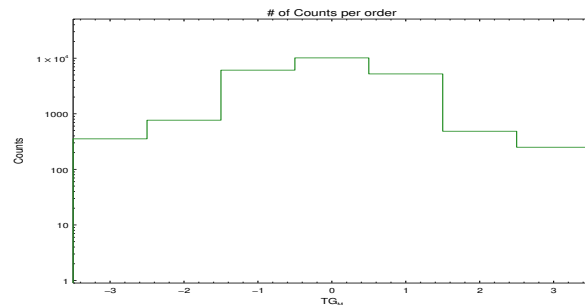


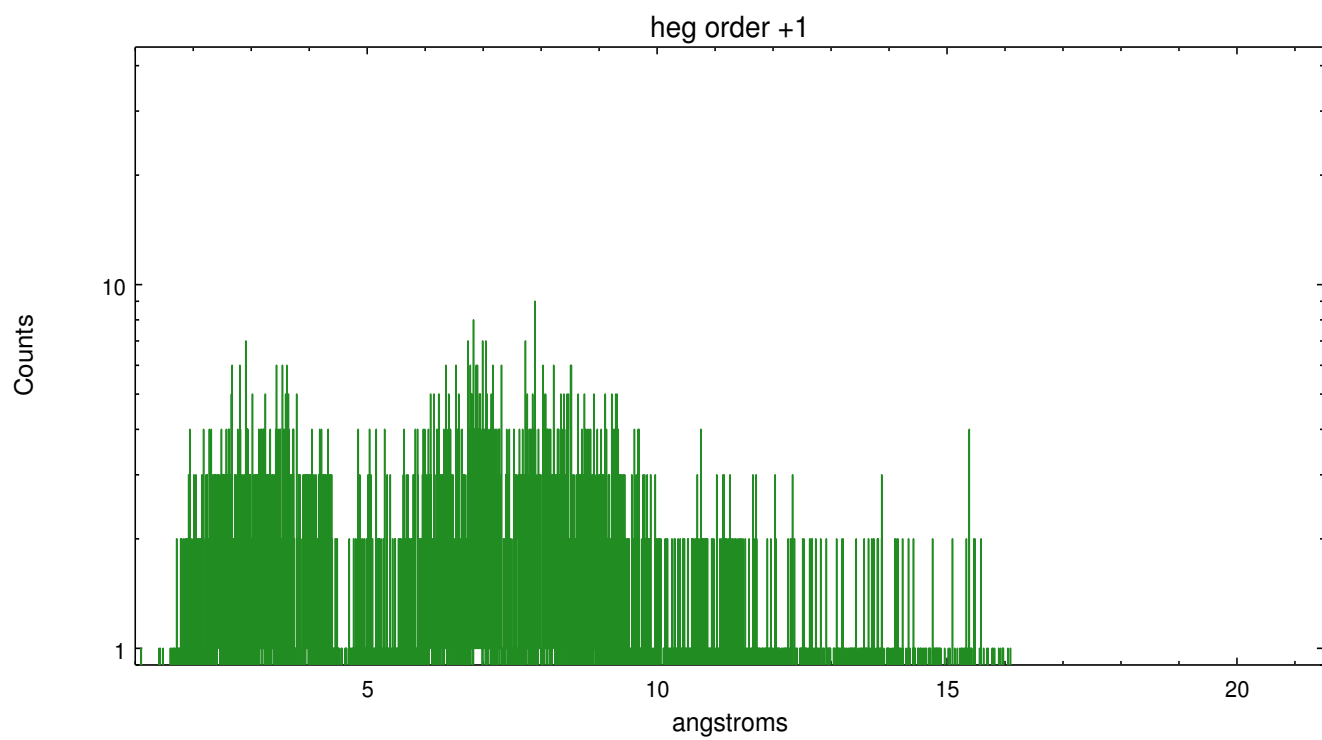
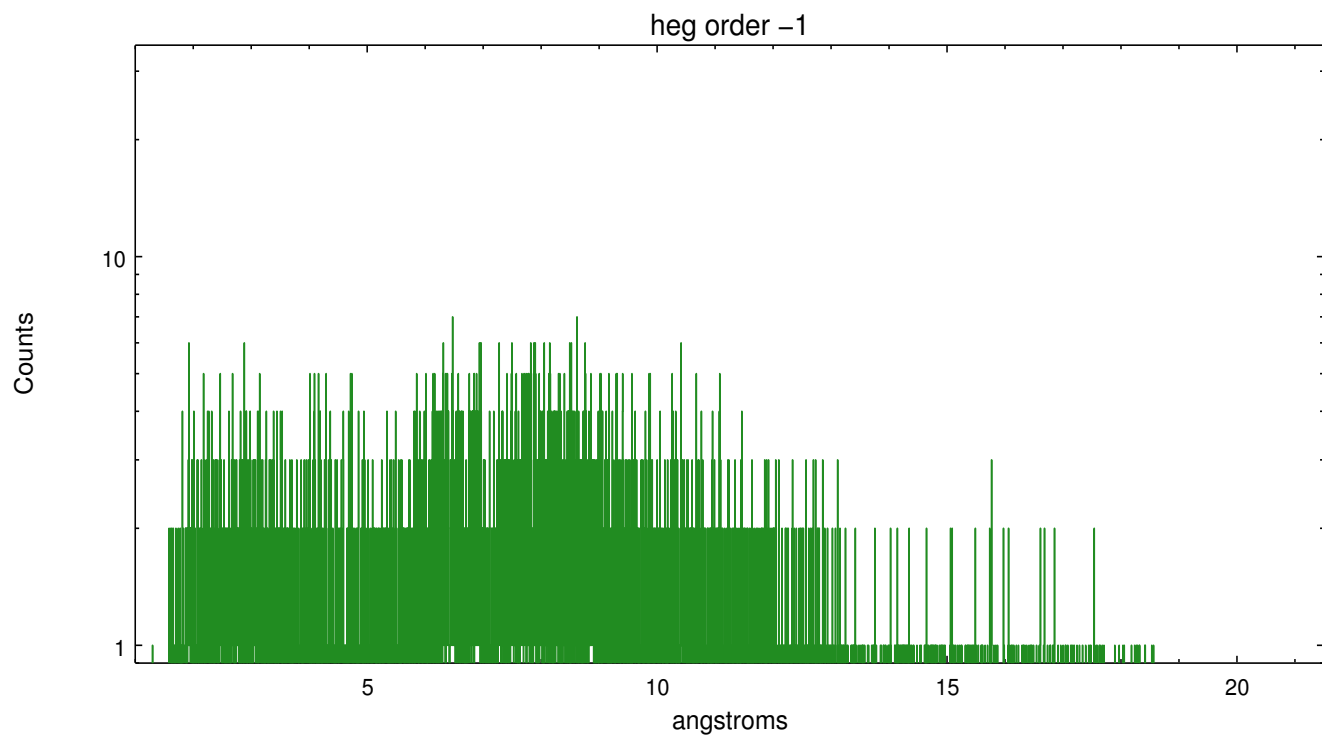
Spot Image HEG



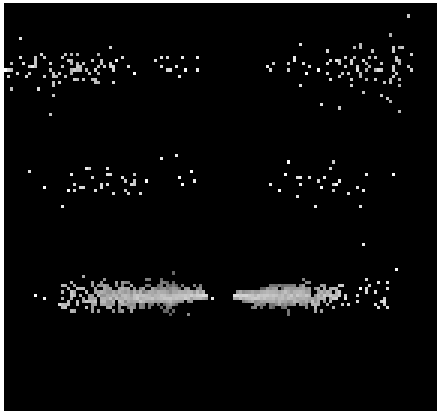
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	354	767	6097	10135	5217	485	250

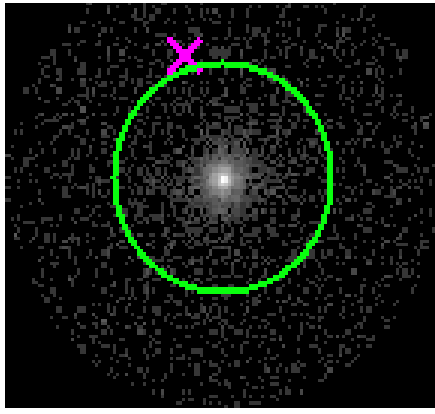




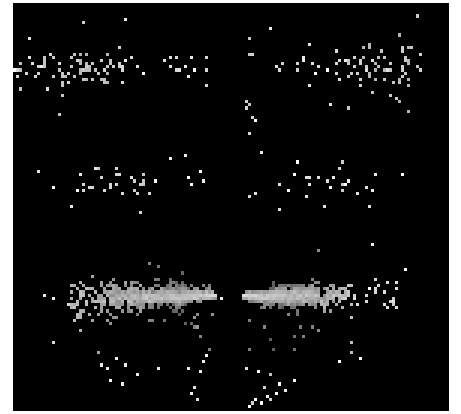
3.2 MEG Arm



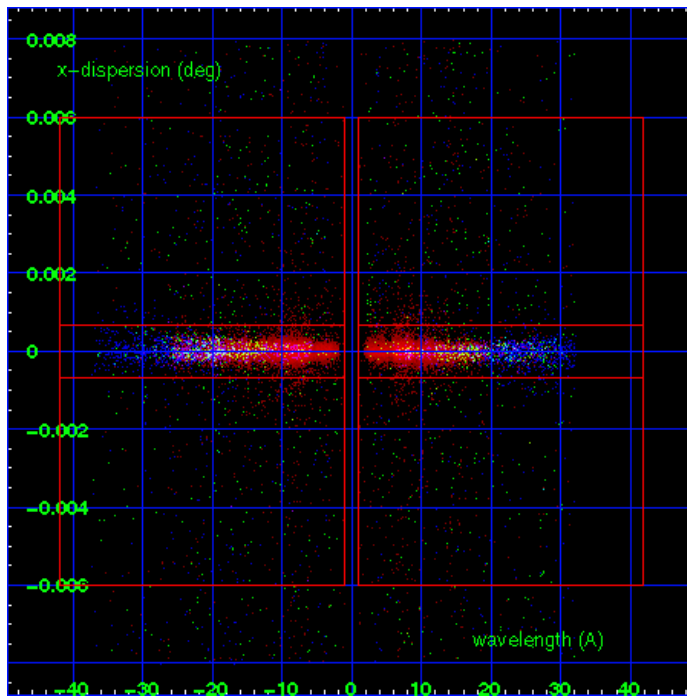
MEG Order Sort 123



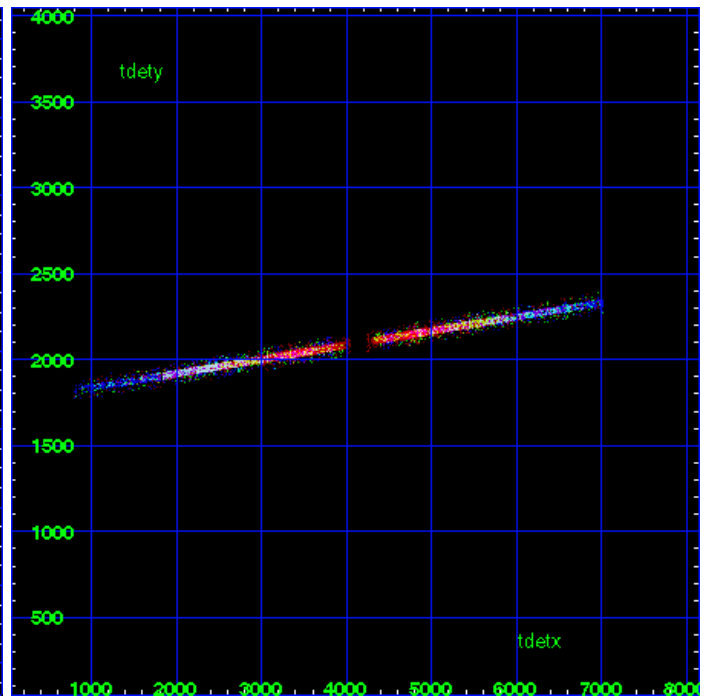
MEG Zero Order



MEG Order Sort ALL

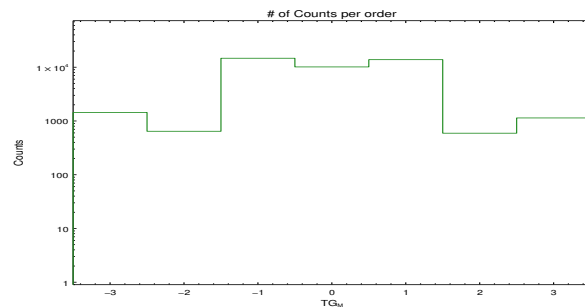


Spot Image MEG

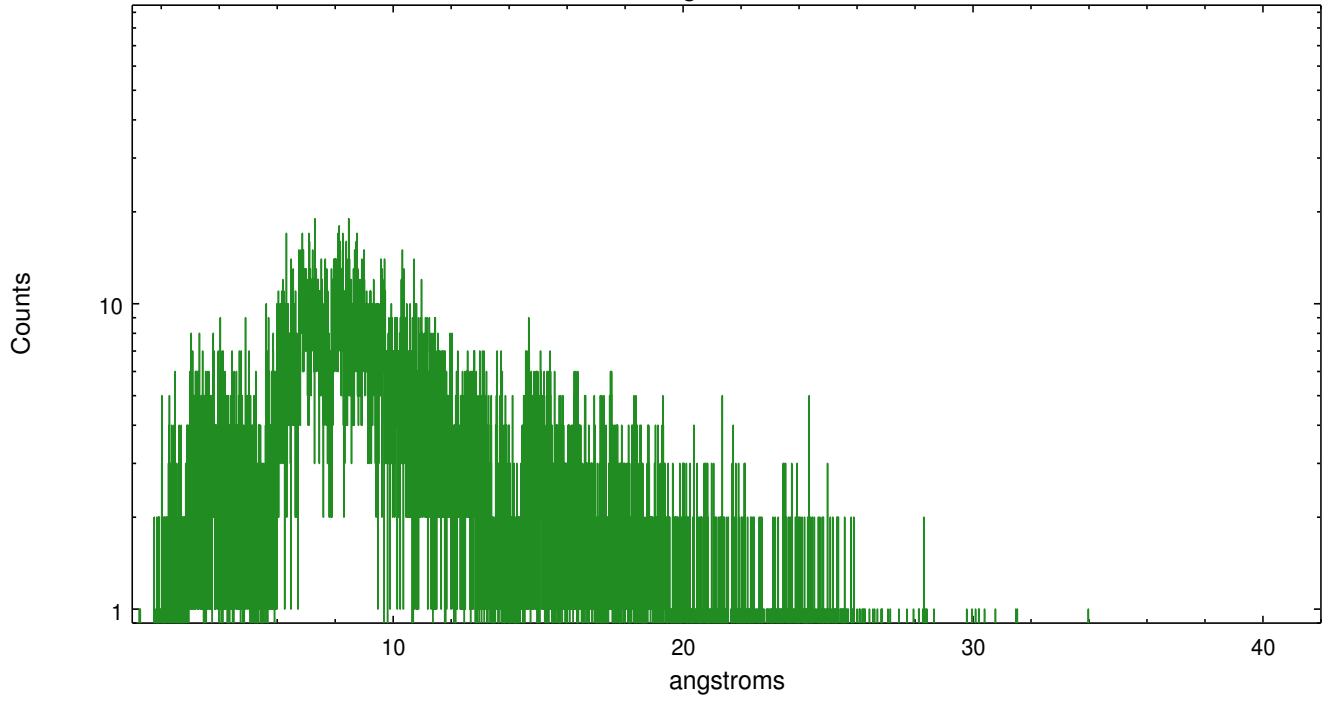


Full Detector MEG

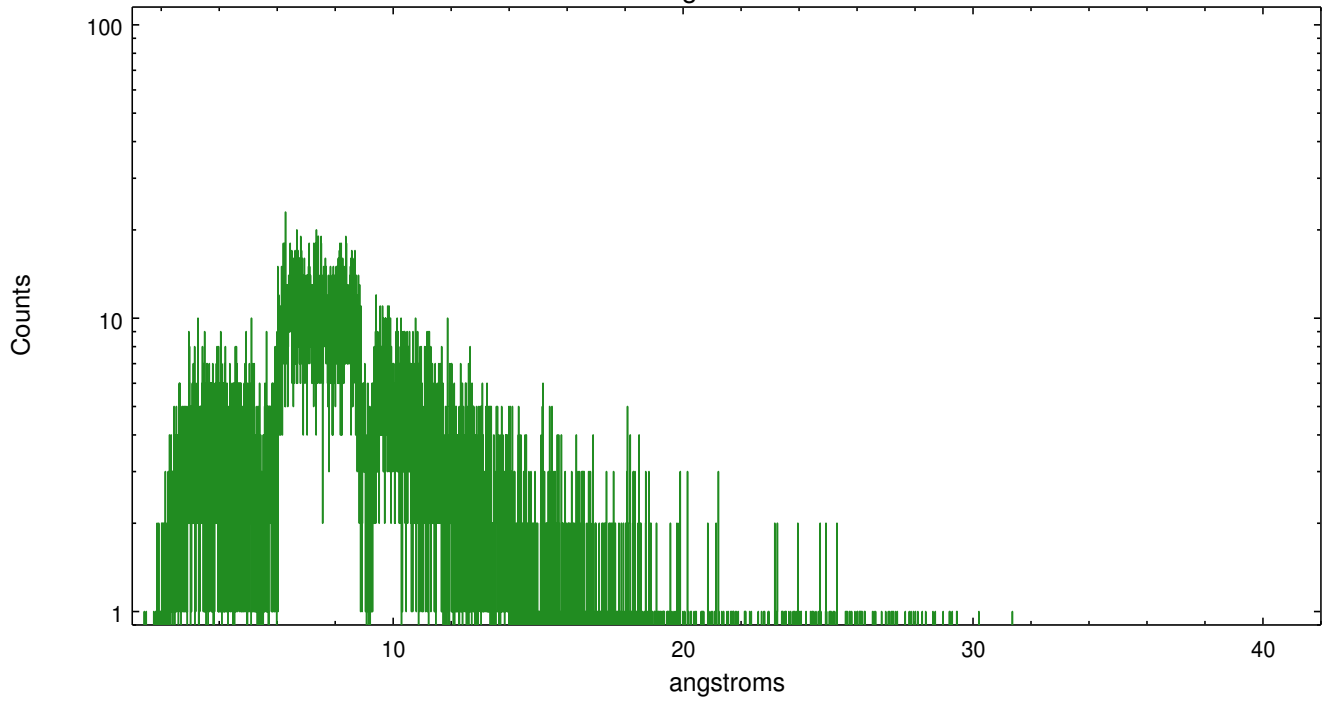
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1442	643	14686	10135	13834	592	1139



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Mike Nowak
V&V Date (YYYY-MM-DD)	2012.05.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.88

A.2 Comments