

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10905 - L2 Version 2
Chandra X-Ray Center

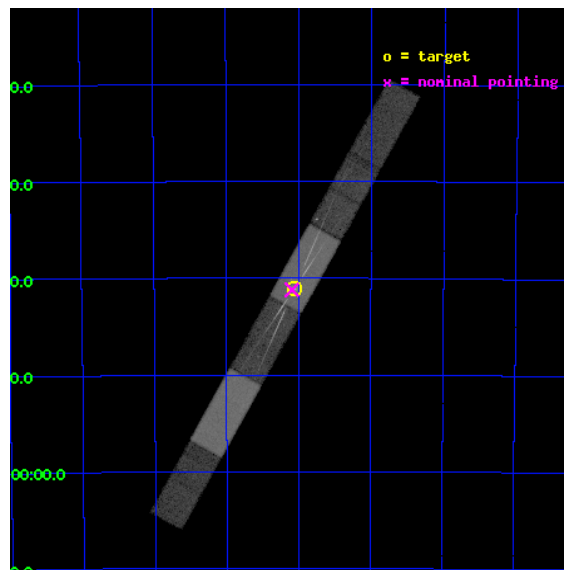
L2 Processing Date : Jun 6 2012

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1 Front

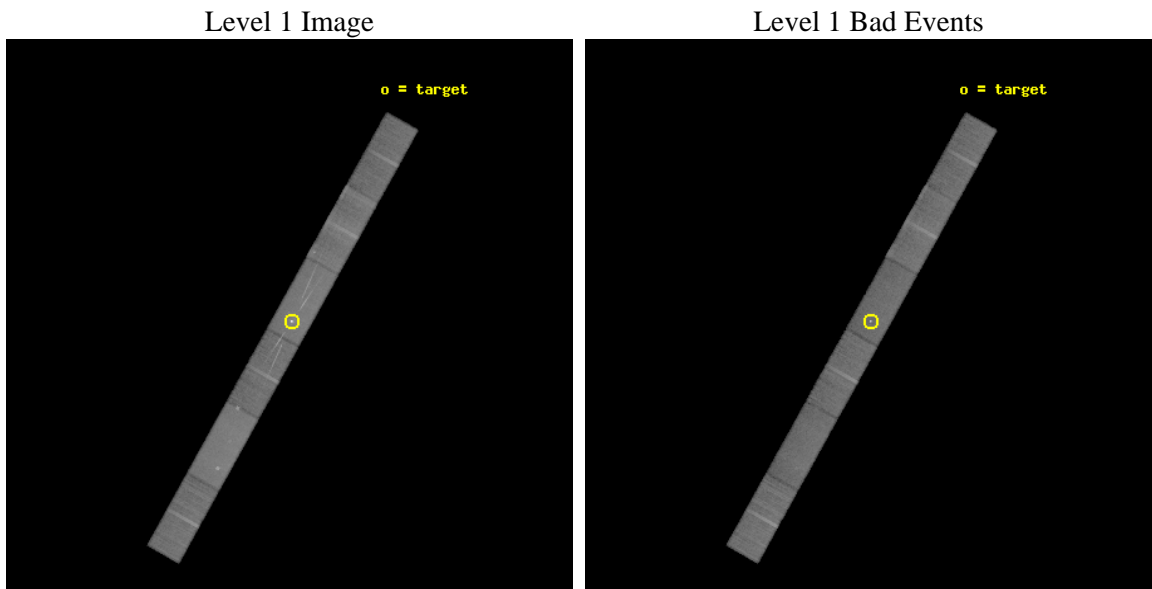
seq_num	200558	Sequence number
obs_id	10905	Observation id
title	Testing Shock Dynamics in Eta Carinae with HETGS After the 2009 Periastron Passage	Proposal title
observer	Dr Michael Corcoran	Principal investigator
object	Eta Car, Post-Minimum	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.265	Observer's specified target RA [deg]
dec_targ	-59.684528	Observer's specified target Dec [deg]
ra_nom	161.27336833477	Nominal RA [deg]
dec_nom	-59.686871498539	Nominal Dec [deg]
roll_nom	299.16385588421	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27018.0	Sum of GTIs [s]
livetime	26298.473757982	Livetime [s]
ontime4	27018.0	Sum of GTIs [s]
ontime5	27018.0	Sum of GTIs [s]
ontime6	27018.0	Sum of GTIs [s]
ontime7	27018.0	Sum of GTIs [s]
ontime8	27018.0	Sum of GTIs [s]
ontime9	27018.0	Sum of GTIs [s]
l2events	262606	Number of level 2 events



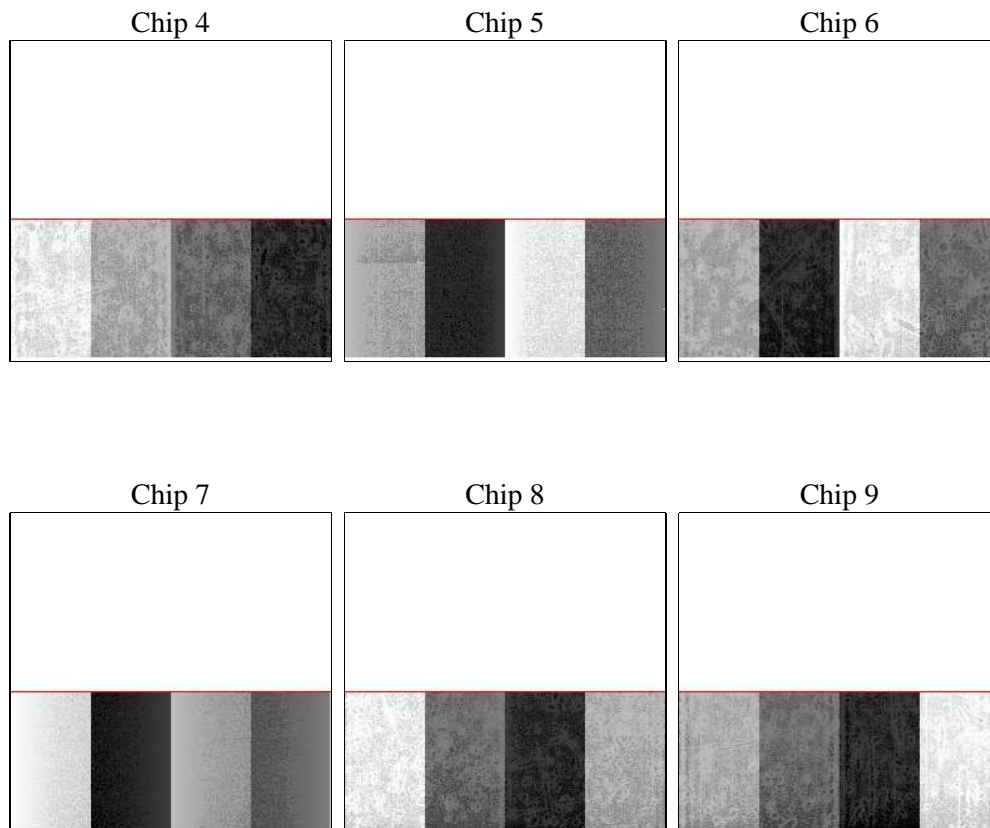
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26930.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	27018.0	Sum of GTIs [s]
caldsver	4.4.10	 	ontime4	27018.0	Sum of GTIs [s]
date	2012-06-06T03:55:42	Date and time of file creation	ontime5	27018.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	27018.0	Sum of GTIs [s]
			ontime7	27018.0	Sum of GTIs [s]
			ontime8	27018.0	Sum of GTIs [s]
			ontime9	27018.0	Sum of GTIs [s]
			l1events	992352	Number of level 1 events

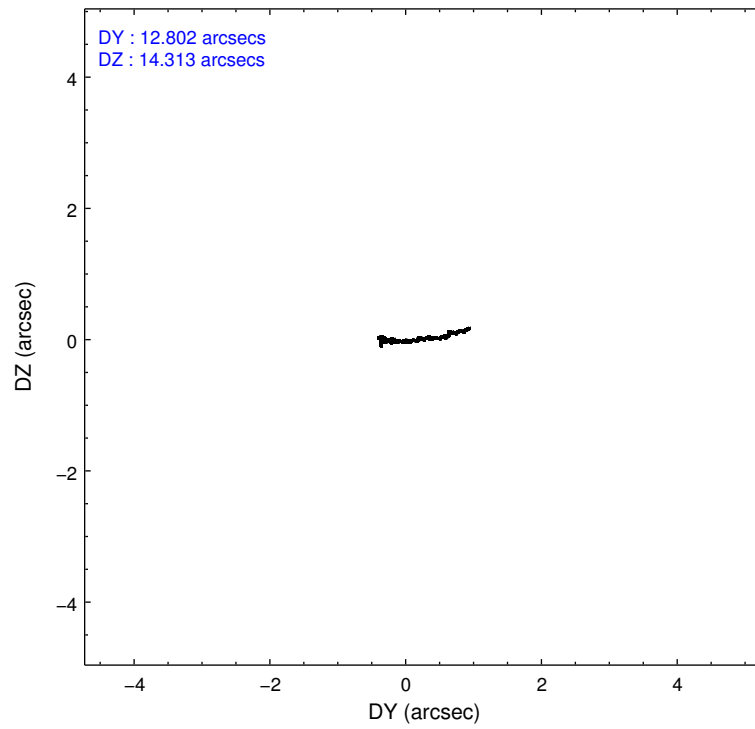
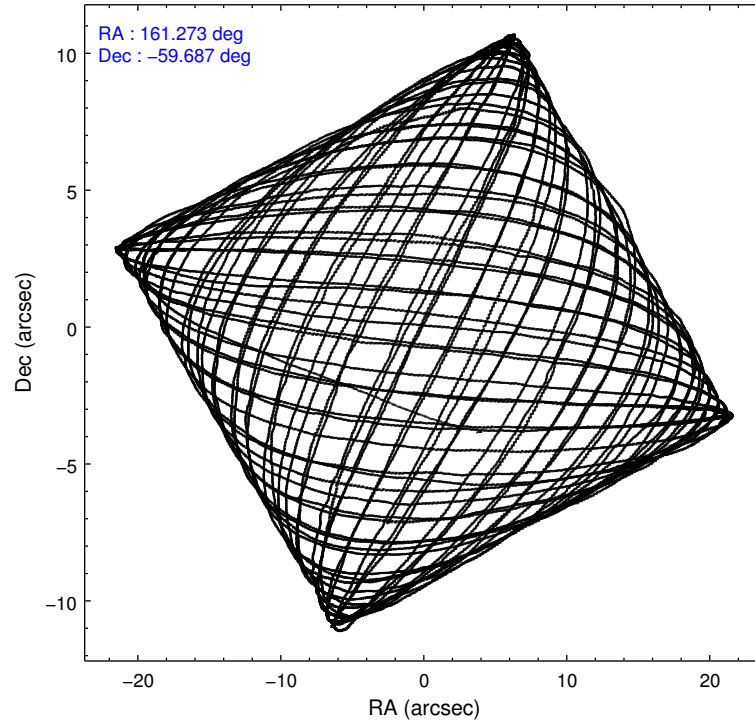
2.1.4 Events

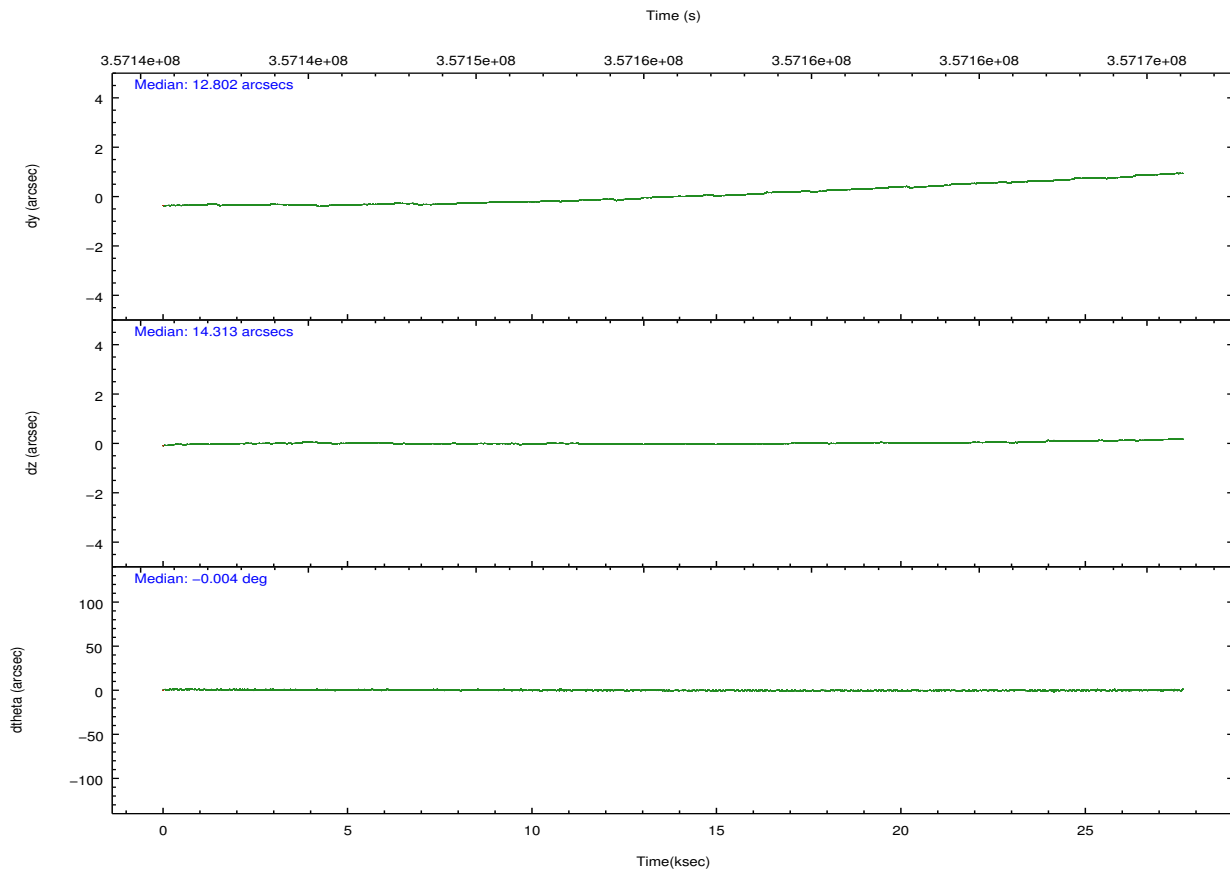
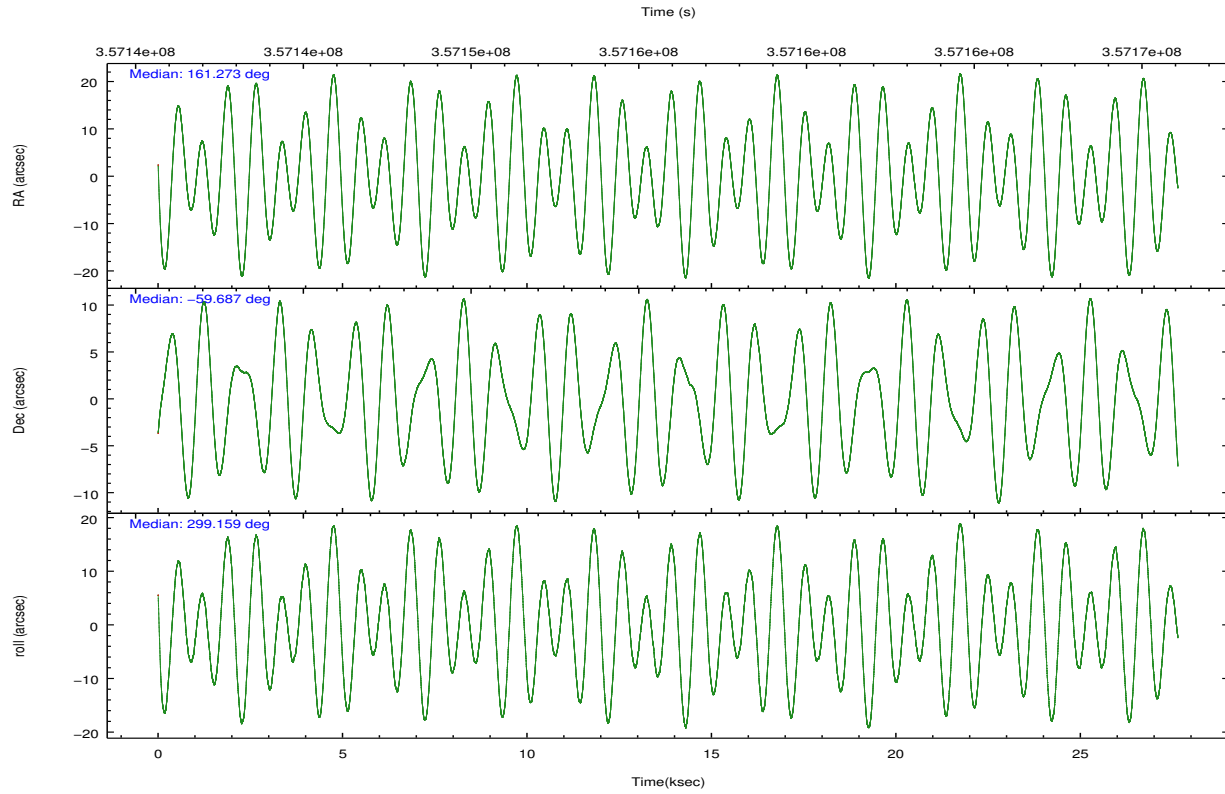
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	145214	197263	142484	205386	175896	126109	grade 0 events	7863	10558	14218	11905	15153	7410
rejected events	126883	103268	114706	103018	130468	108511		5%	5%	9%	5%	8%	5%
rejected %	87%	52%	80%	50%	74%	86%	grade 1 events	76	624	72	458	116	57
								0%	0%	0%	0%	0%	0%
							grade 2 events	3879	26757	4895	21488	9582	3422
								2%	13%	3%	10%	5%	2%
							grade 3 events	1984	5063	2370	9707	4643	1869
								1%	2%	1%	4%	2%	1%
							grade 4 events	1861	4965	2408	9635	4395	1820
								1%	2%	1%	4%	2%	1%
							grade 5 events	5536	15158	5826	17387	7812	6129
								3%	7%	4%	8%	4%	4%
							grade 6 events	2746	46658	3889	49643	11656	3078
								1%	23%	2%	24%	6%	2%
							grade 7 events	121269	87480	108806	85163	122539	102324
								83%	44%	76%	41%	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	161.226515	161.2733683347715	CCD I2 on	N	N
[deg] Pointing Dec	-59.673196	-59.68687149853923	CCD I3 on	N	N
[deg] Pointing Roll	298.966787	299.1638558842091	CCD S0 on	O1	Y
[s] Window start time (MET)	356572866.184000	356572866.184000	CCD S1 on	Y	Y
[s] Window stop time (MET)	357436866.184000	357436866.184000	CCD S2 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S4 on	Y	Y
[mm] SIM translation stage pos	-183.332523	-183.3212429520412	CCD S5 on	O2	Y
[mm] SIM translation stage offset	-6.8	-6.811279630966652	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	357142763.184000	357141409.51831	On-chip summing requested	N	N
Observation start date	2009-04-26T14:18:17	2009-04-26T13:56:49	Subarray requested	CUSTOM	CUSTOM
[s] Observation end time (MET)	357169693.184000	357170225.34474	Subarray start row	15	15
Observation end date	2009-04-26T21:47:07	2009-04-26T21:57:05	Subarray row count	440	440
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.5

2.3 Aspect



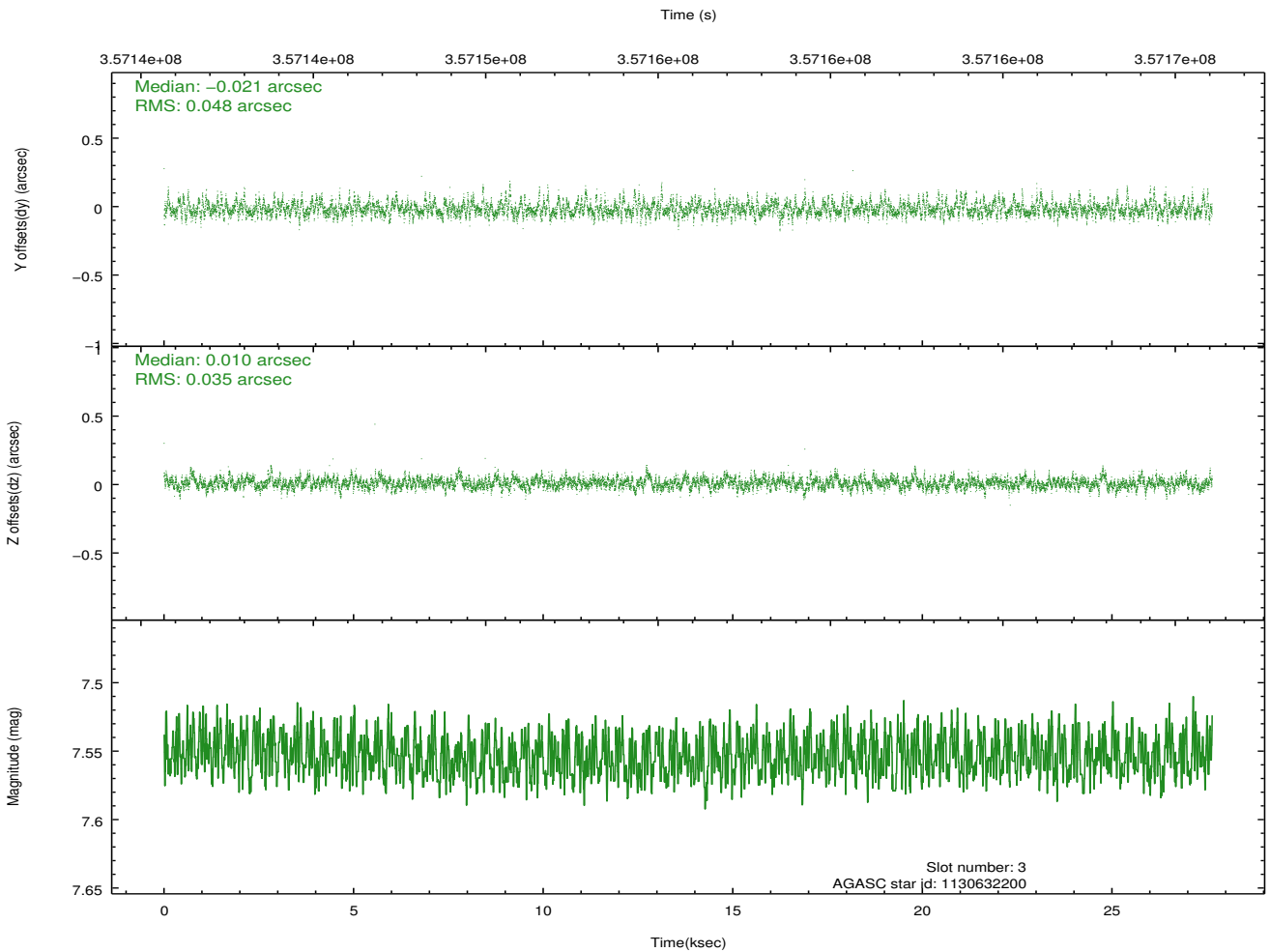
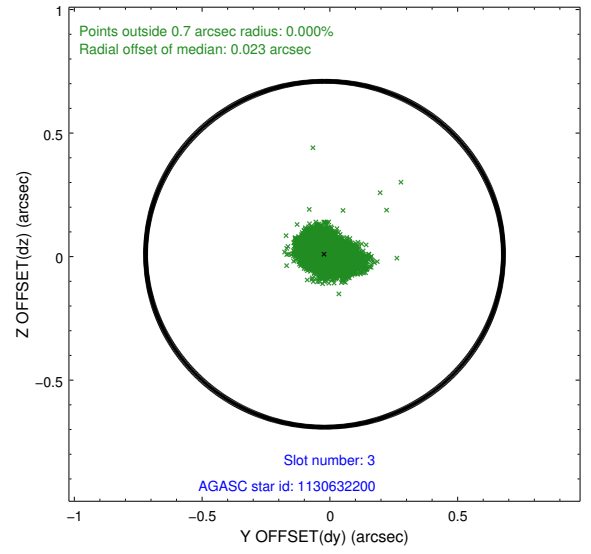
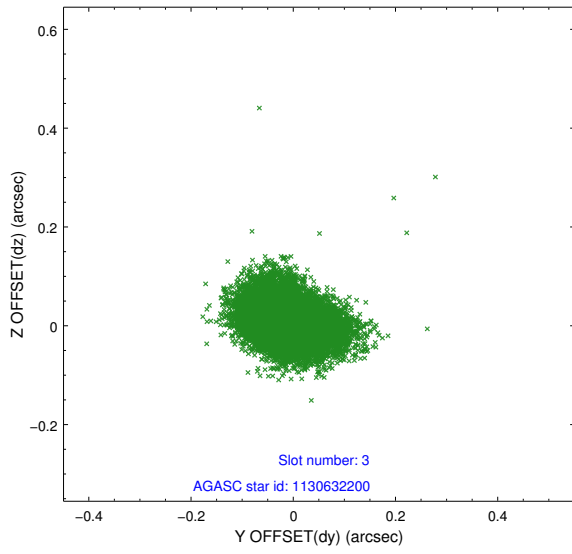


Slot Statistics

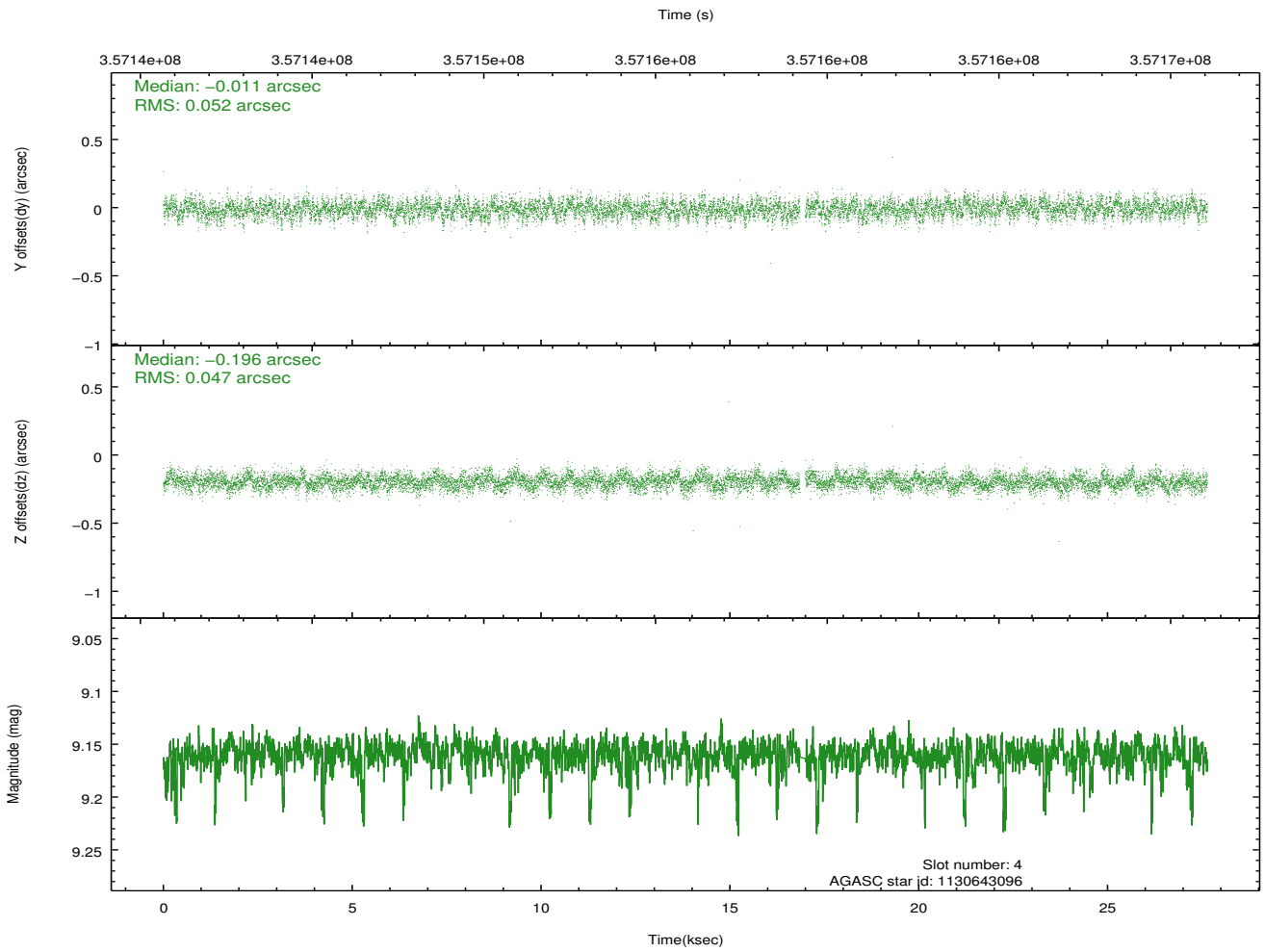
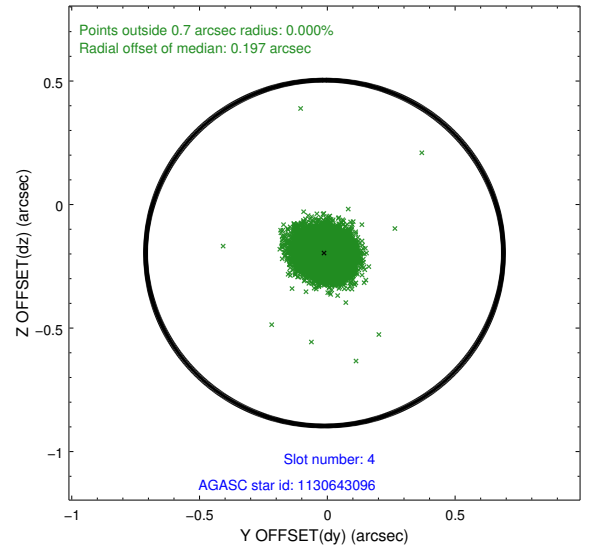
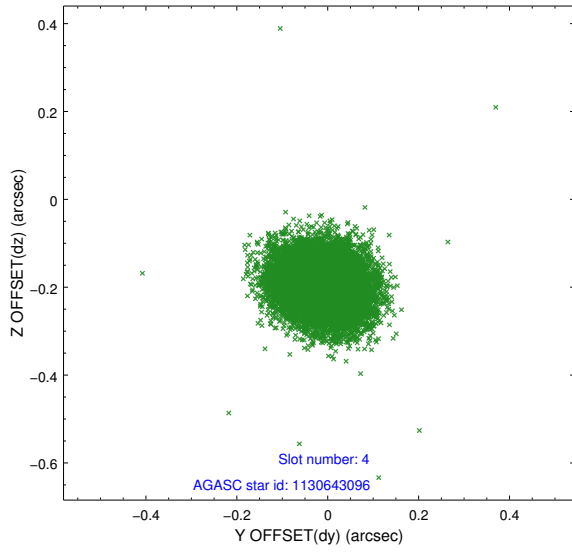
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	6743	-0.086	-0.067	0.009	0.015	0.000000	0.000000	-765.39	-1876.12
1	FID	ACIS-S-4	6.96	6743	0.172	0.059	0.007	0.014	0.000000	0.000000	2148.09	32.38
2	FID	ACIS-S-5	7.02	6742	-0.117	0.015	0.009	0.015	0.000000	0.000000	-1818.16	26.08
3	GUIDE	1130632200	7.55	13481	-0.021	0.010	0.061	0.106	161.433843	-59.407820	-651.20	794.73
4	GUIDE	1130643096	9.16	13392	-0.011	-0.196	0.074	0.120	161.501095	-59.121086	-1492.28	1405.78
5	GUIDE	1130647960	8.62	13471	0.085	0.124	0.069	0.112	160.287471	-59.247776	-2166.10	-776.42
6	GUIDE	1130642000	7.94	13479	0.030	-0.027	0.064	0.104	162.836255	-59.743891	1667.63	2414.15
7	GUIDE	1174012960	7.18	13482	-0.084	0.083	0.053	0.089	160.855674	-60.332270	1757.90	-1727.72

2.4 Star Slots

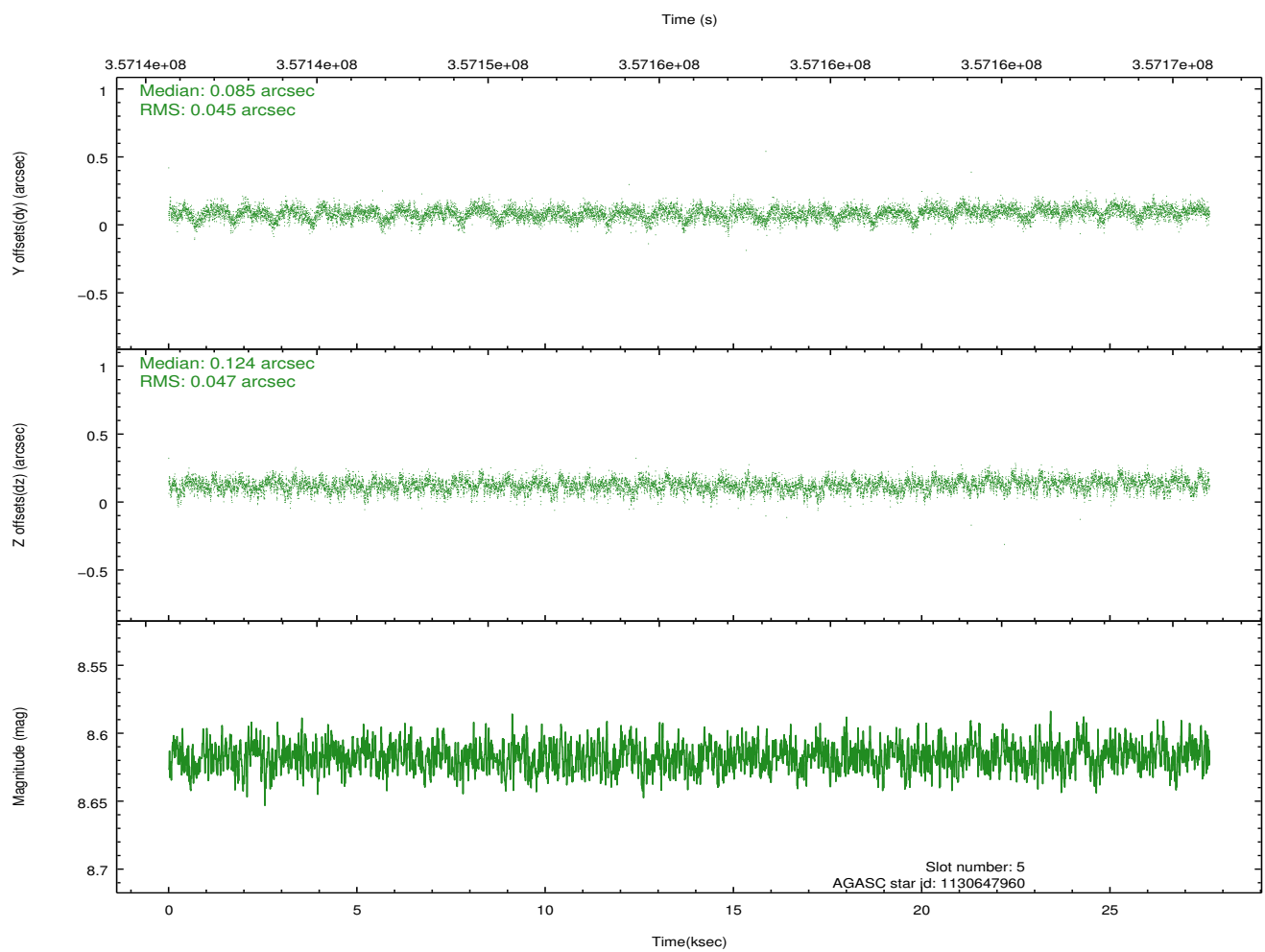
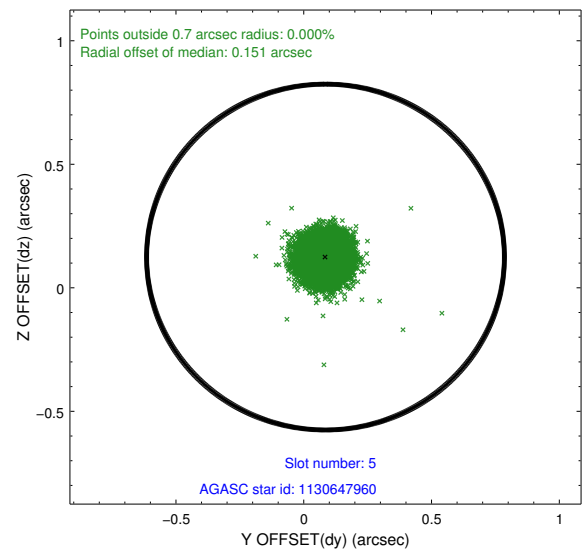
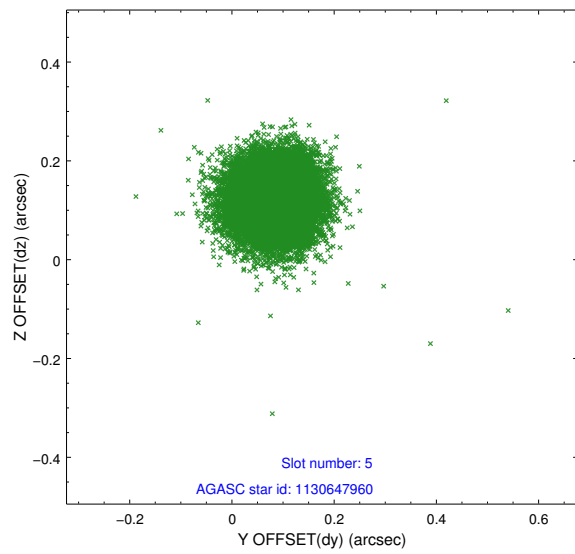
2.4.1 Slot 3



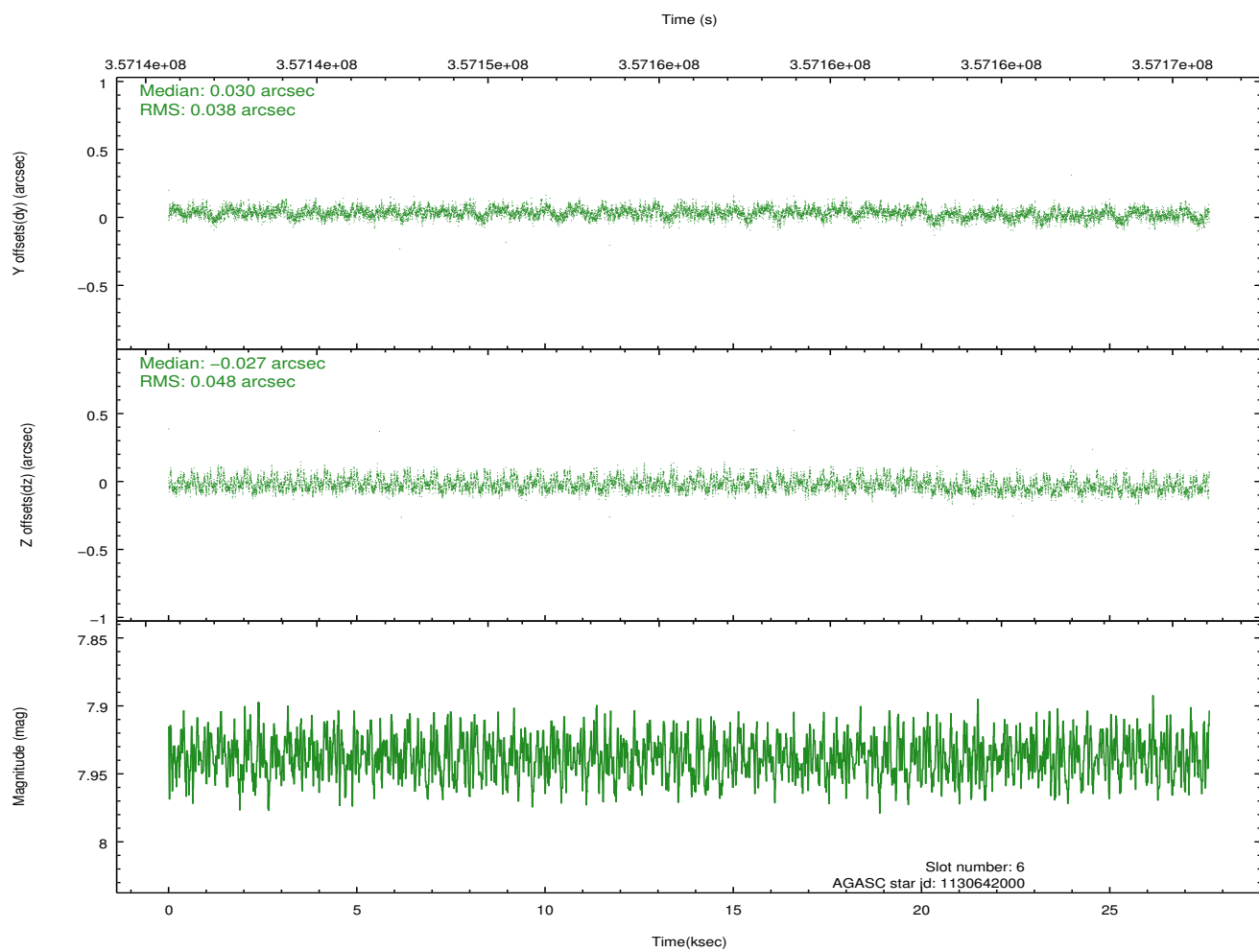
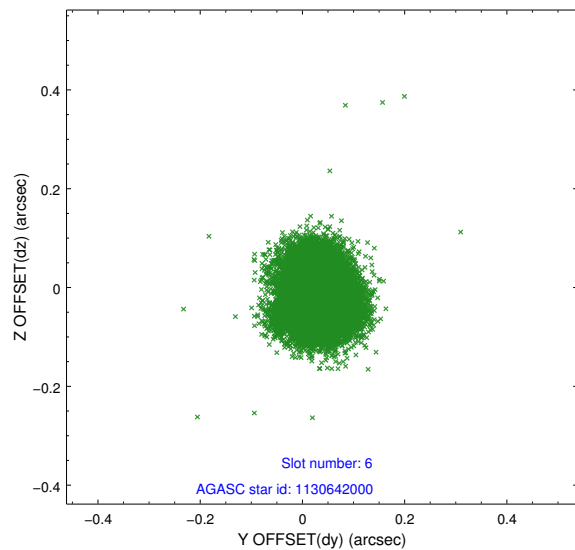
2.4.2 Slot 4



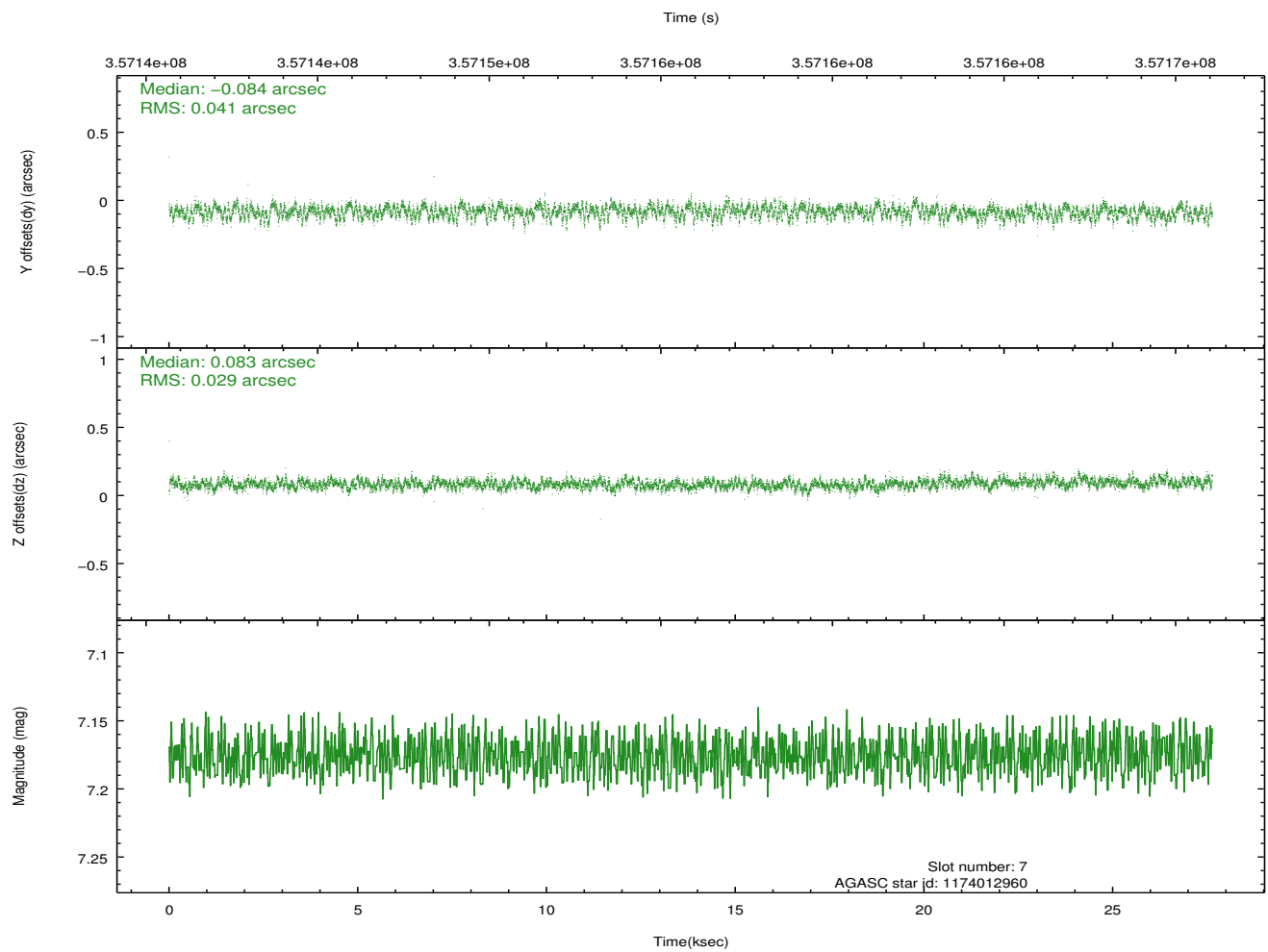
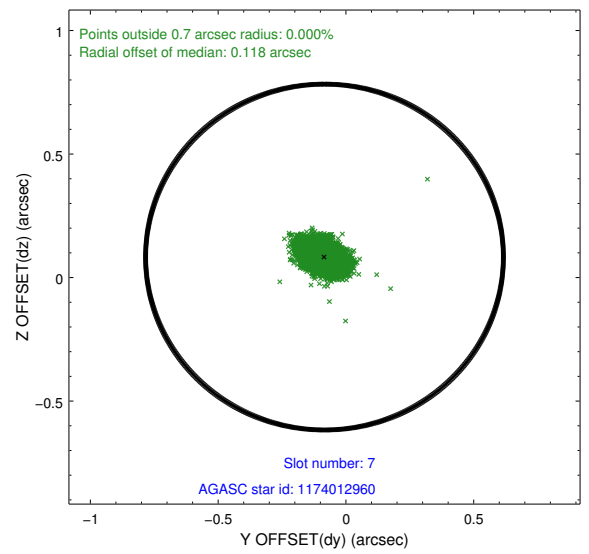
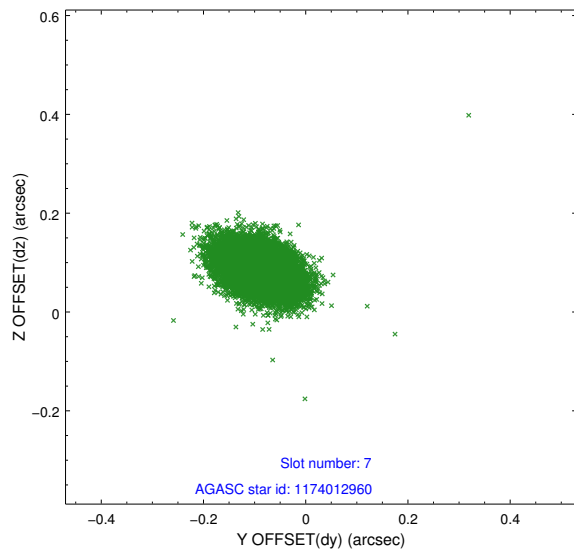
2.4.3 Slot 5



2.4.4 Slot 6

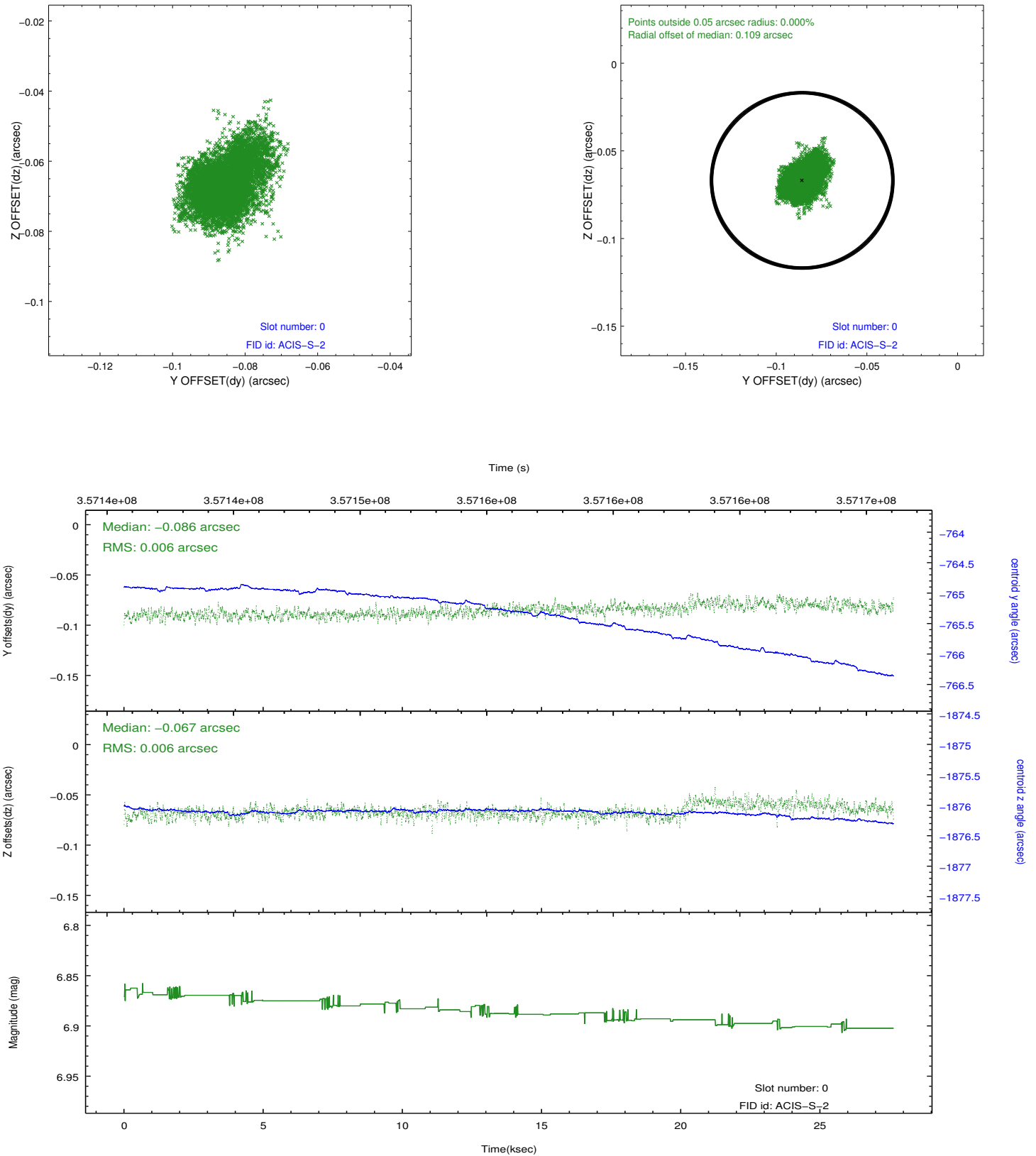


2.4.5 Slot 7

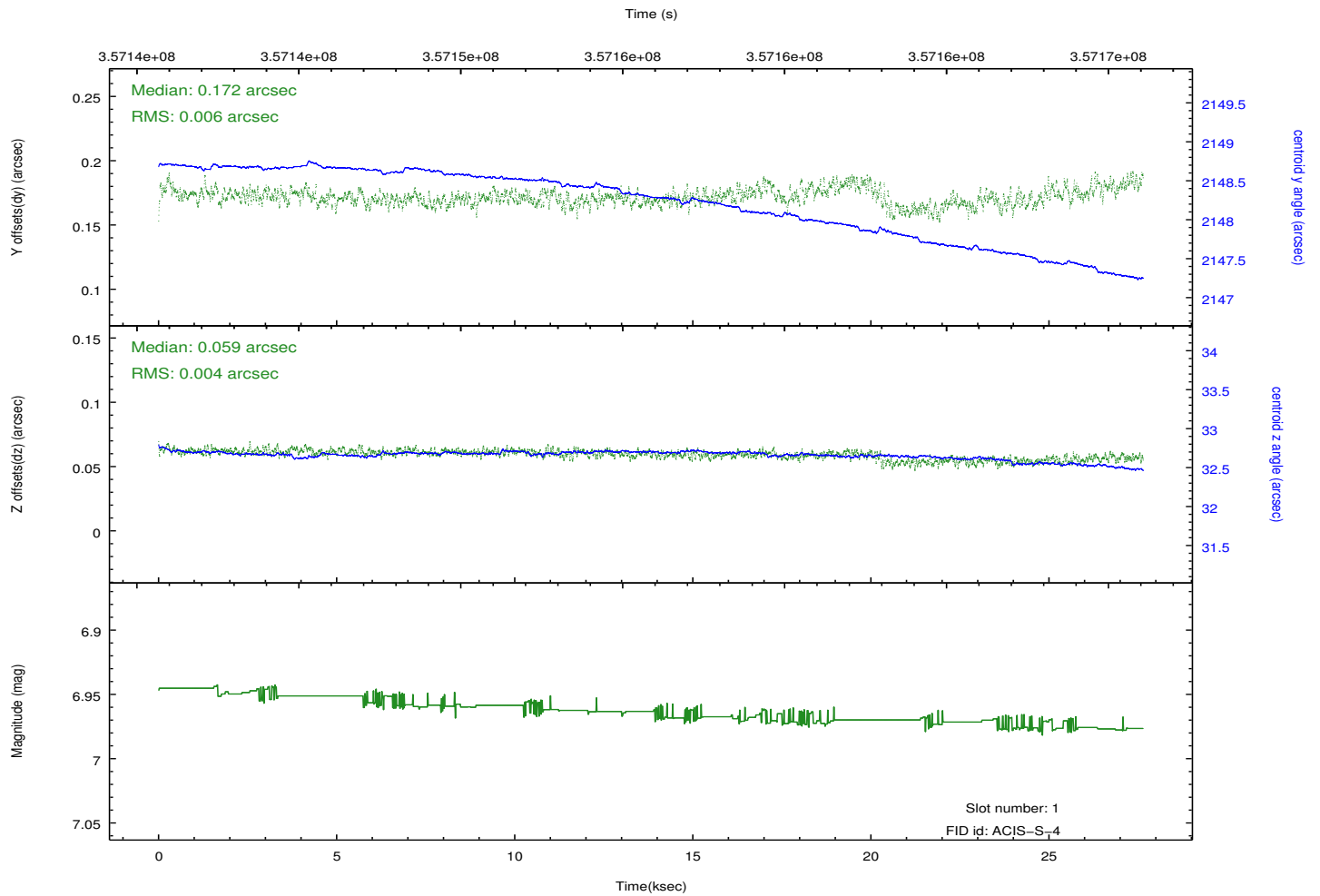
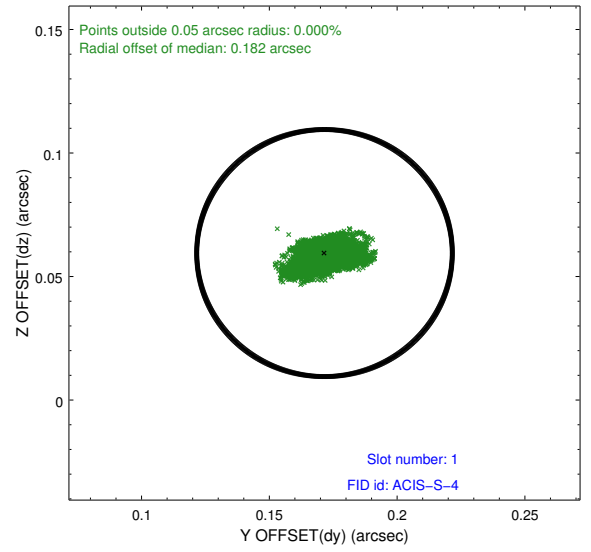
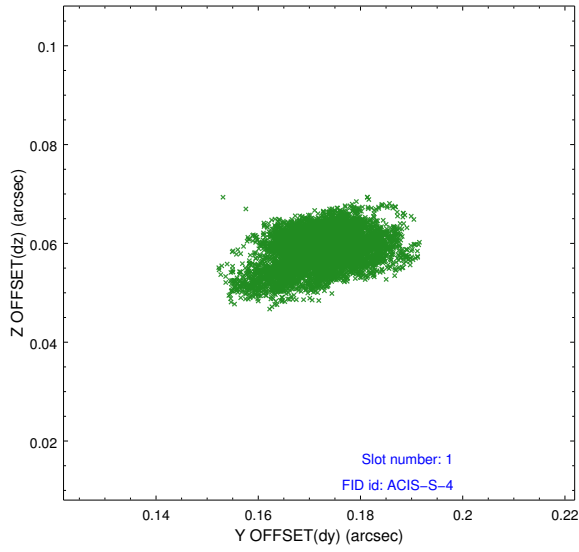


2.5 FID Slots

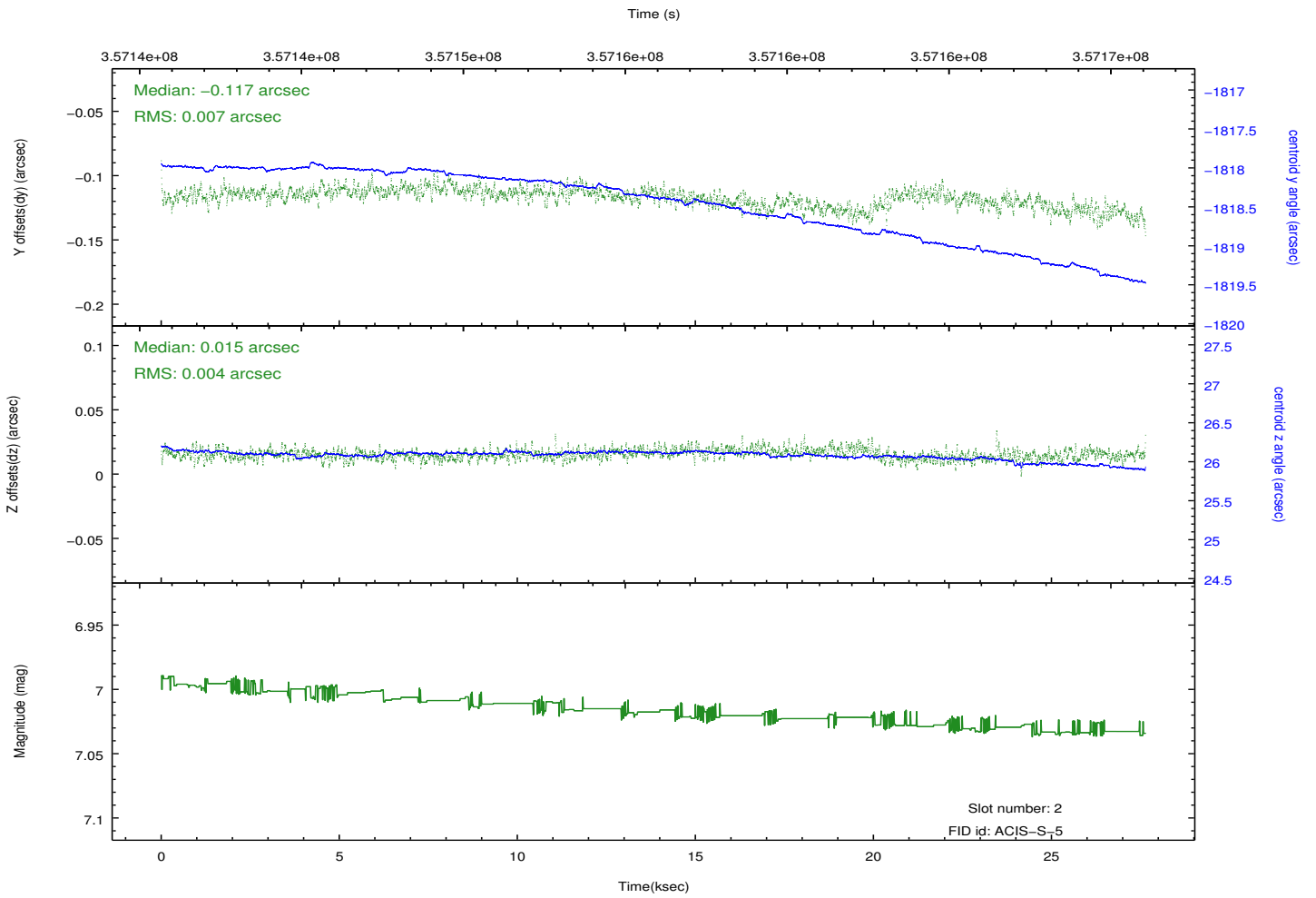
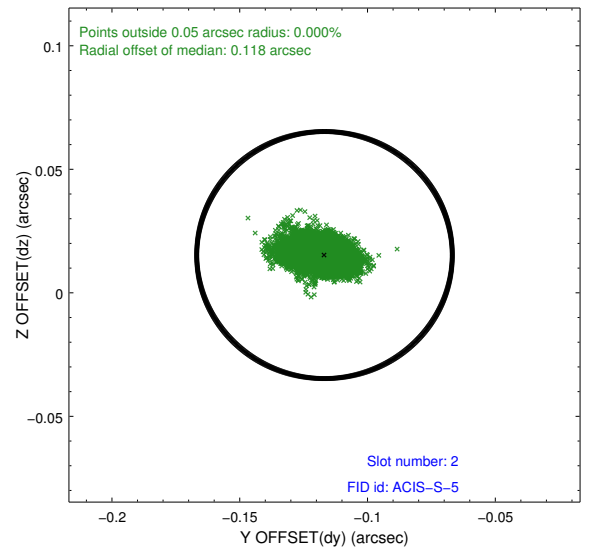
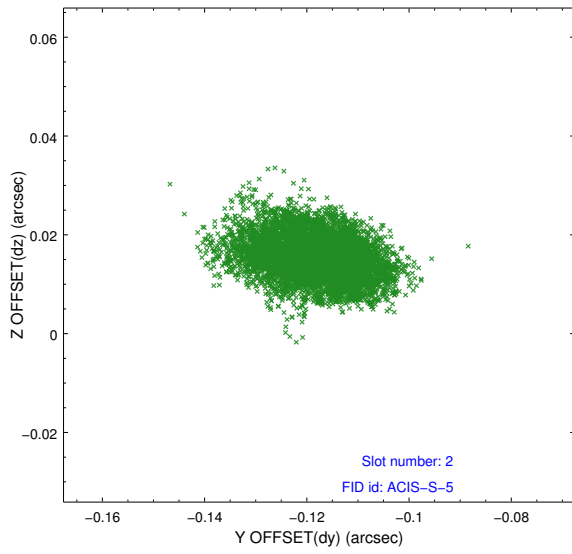
2.5.1 Slot 0



2.5.2 Slot 1

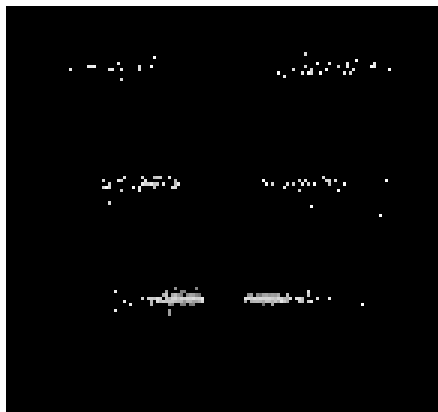


2.5.3 Slot 2

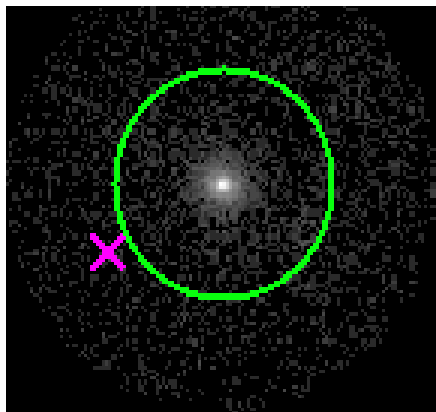


3 Gratings

3.1 HEG Arm



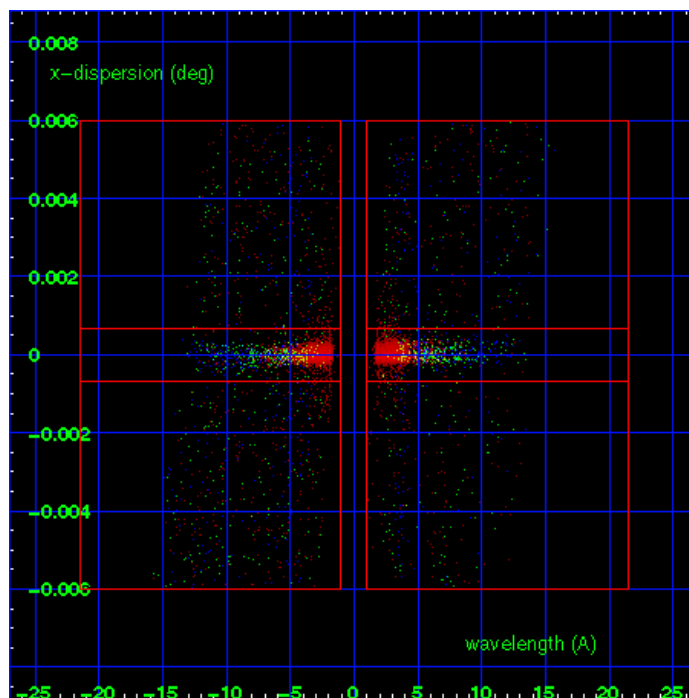
HEG Order Sort 123



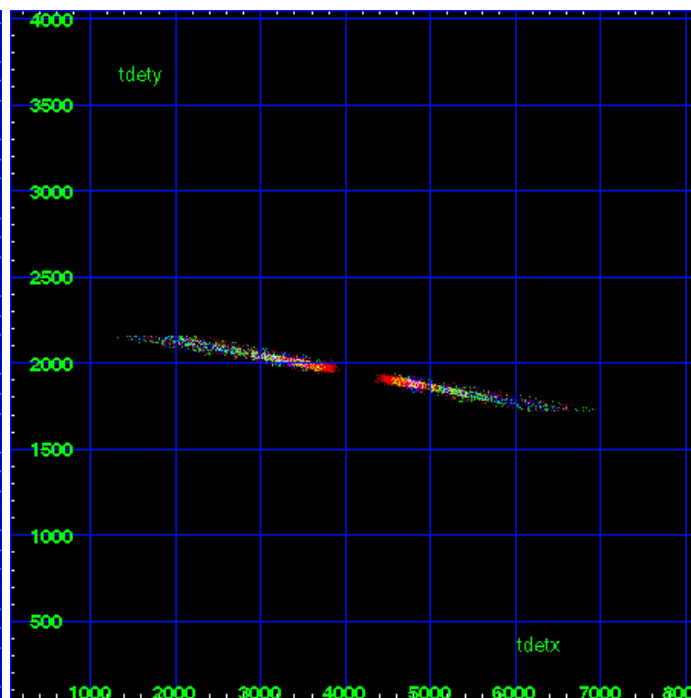
HEG Zero Order



HEG Order Sort ALL

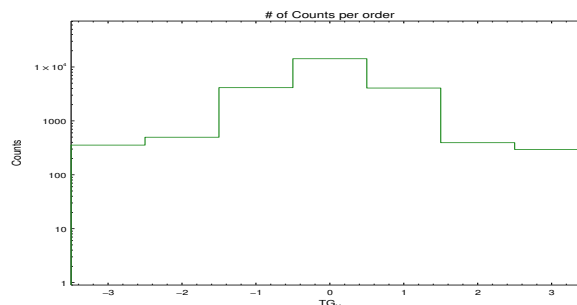


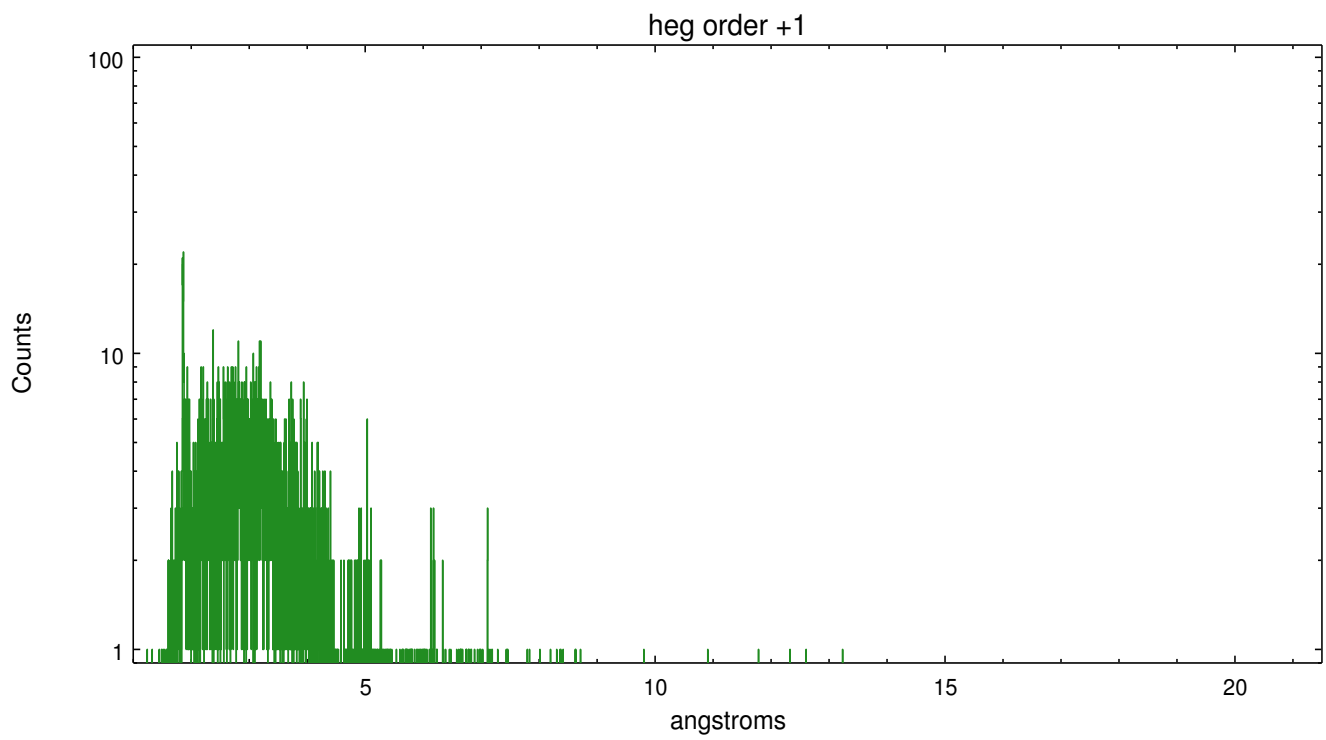
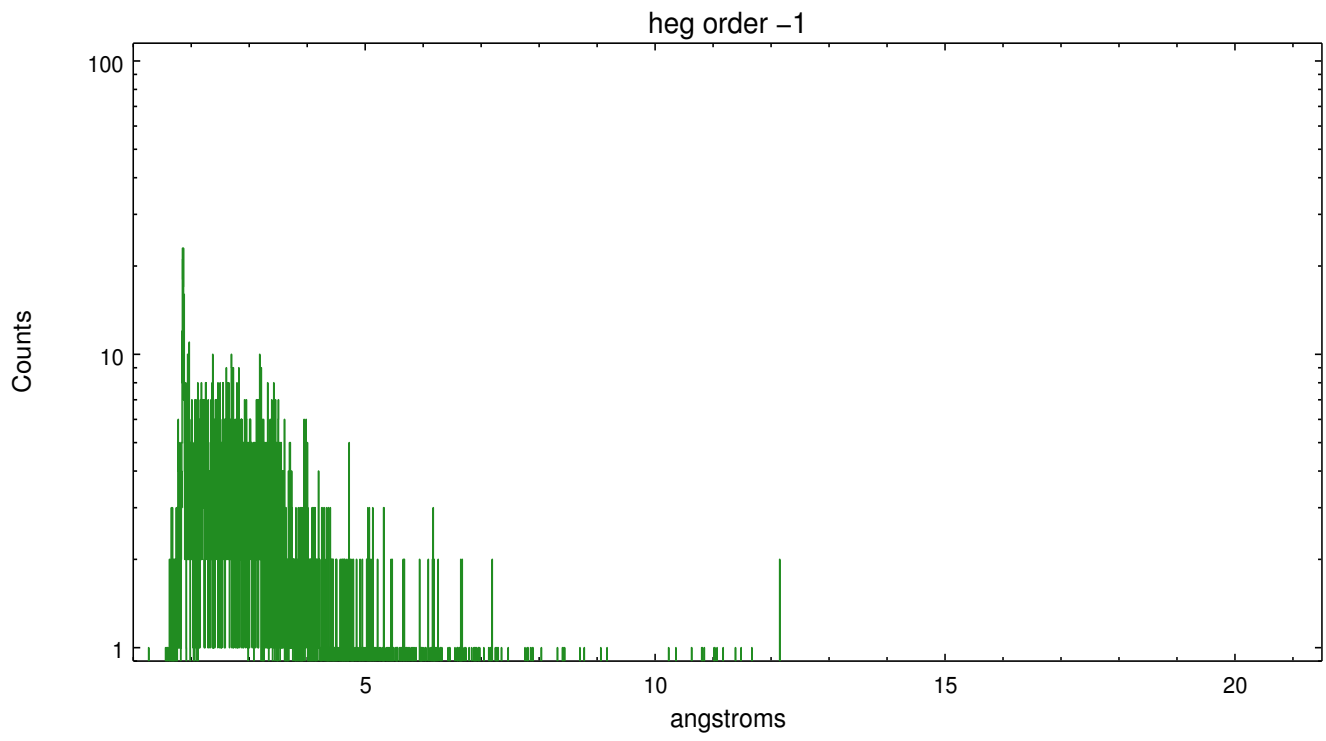
Spot Image HEG



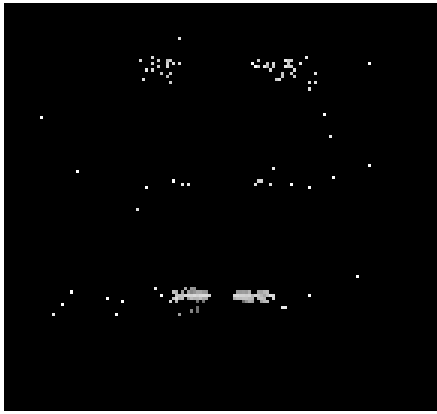
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	355	497	4135	14224	4064	394	295

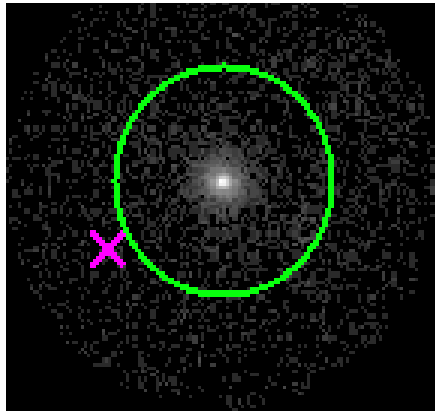




3.2 MEG Arm



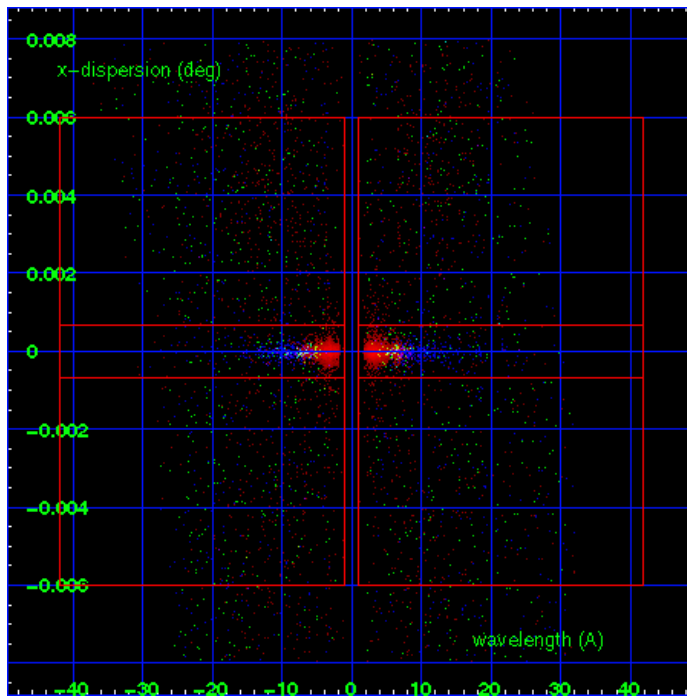
MEG Order Sort 123



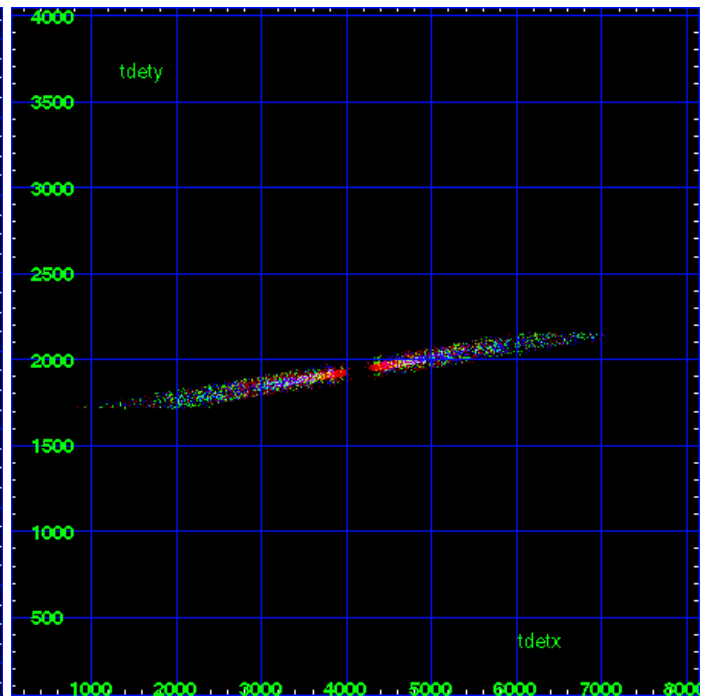
MEG Zero Order



MEG Order Sort ALL

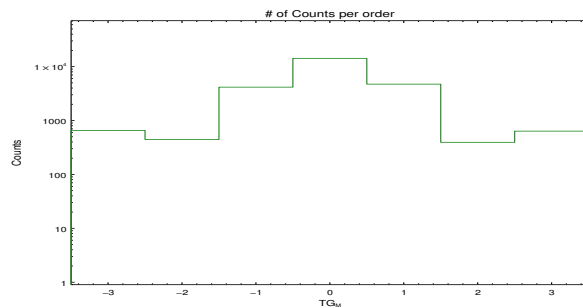


Spot Image MEG

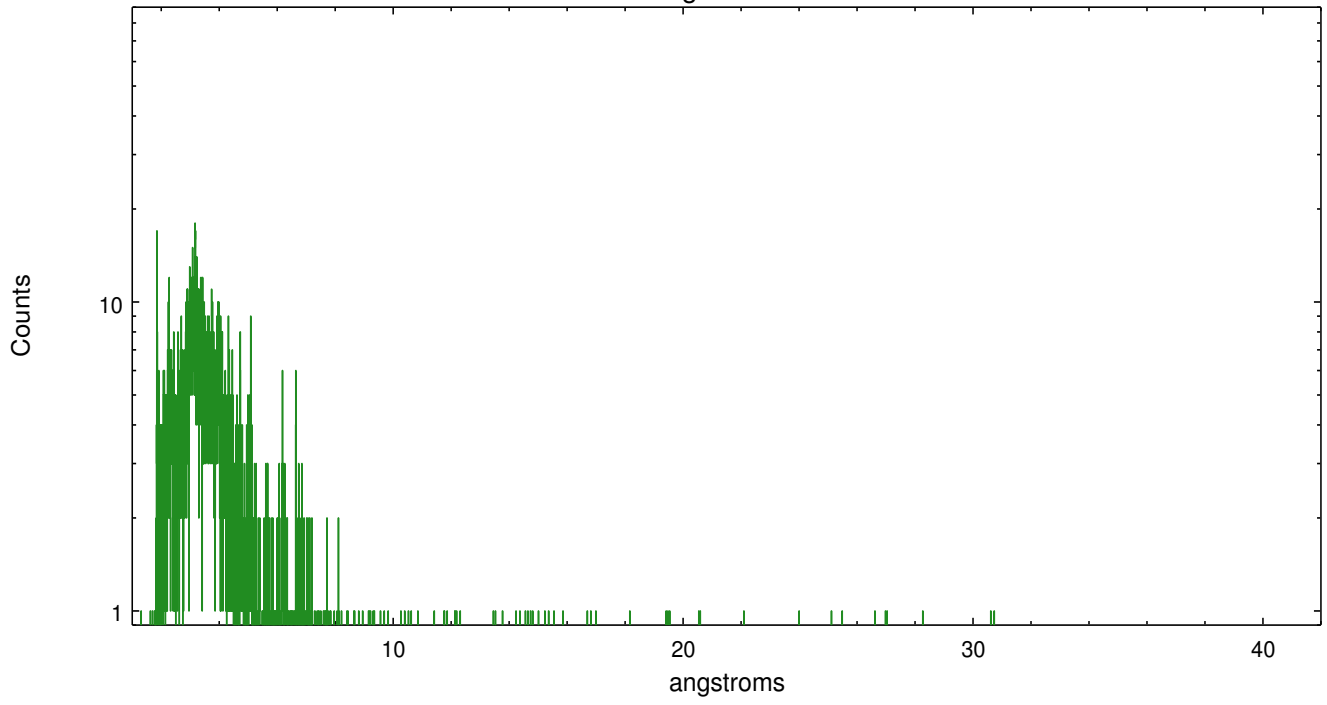


Full Detector MEG

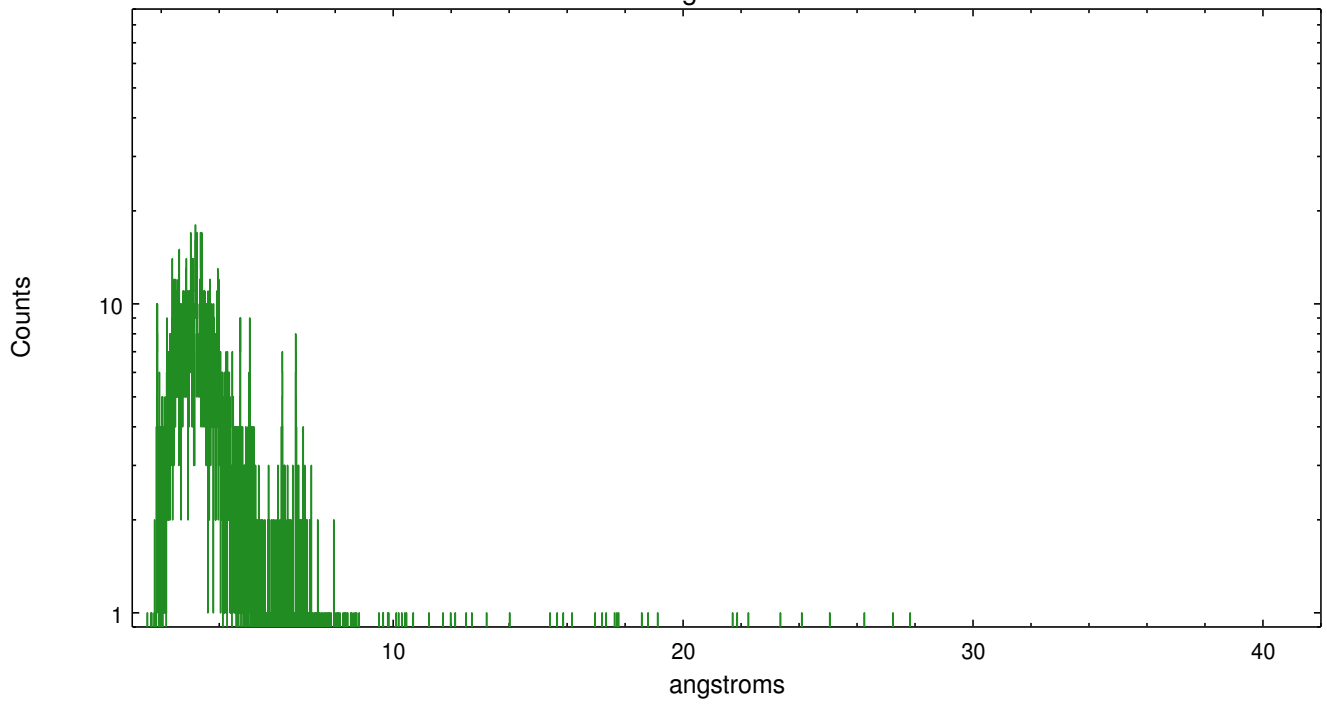
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	654	445	4158	14224	4727	394	635



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.018

A.2 Comments

Spatially complex source; Products are for standard (point source) extraction (tgdetect, tgextract) which is adequate for the brightest, central source.