

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5400 - L2 Version 3
Chandra X-Ray Center

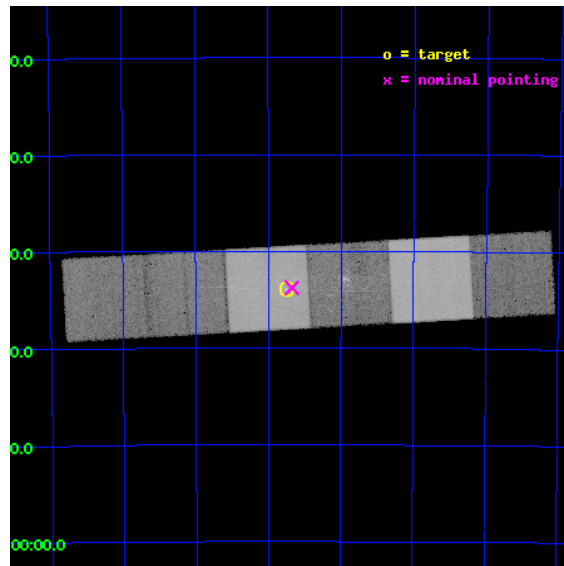
L2 Processing Date : Dec 28 2012

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1 Front

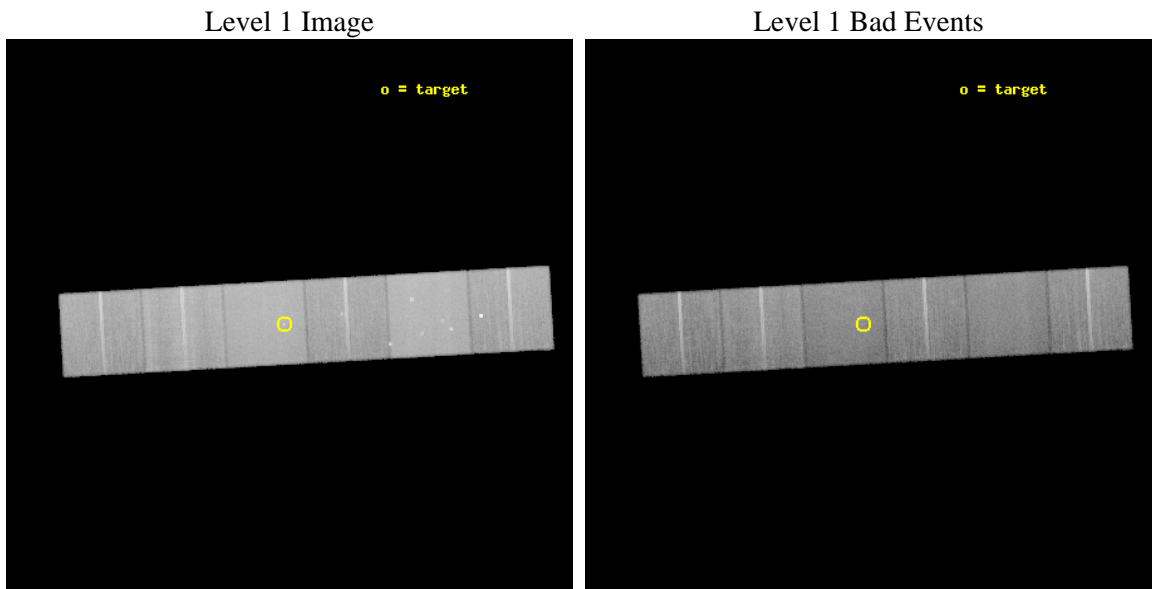
seq_num	200334	Sequence number
obs_id	5400	Observation id
title	A Chandra HETGS Survey of O-Stars	Proposal title
observer	Dr Wayne Waldron	Principal investigator
object	HD93250	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.1875	Observer's specified target RA [deg]
dec_targ	-59.565194	Observer's specified target Dec [deg]
ra_nom	161.16882574031	Nominal RA [deg]
dec_nom	-59.5629449299	Nominal Dec [deg]
roll_nom	176.71730041864	Nominal Roll [deg]
revision	3	Processing version of data
ontime	34159.958902419	Sum of GTIs [s]
livetime	33727.404934138	Livetime [s]
ontime4	34163.199872732	Sum of GTIs [s]
ontime5	34159.958902419	Sum of GTIs [s]
ontime6	34163.199872732	Sum of GTIs [s]
ontime7	34159.958902419	Sum of GTIs [s]
ontime8	34163.199872732	Sum of GTIs [s]
ontime9	34159.958902419	Sum of GTIs [s]
l2events	432730	Number of level 2 events



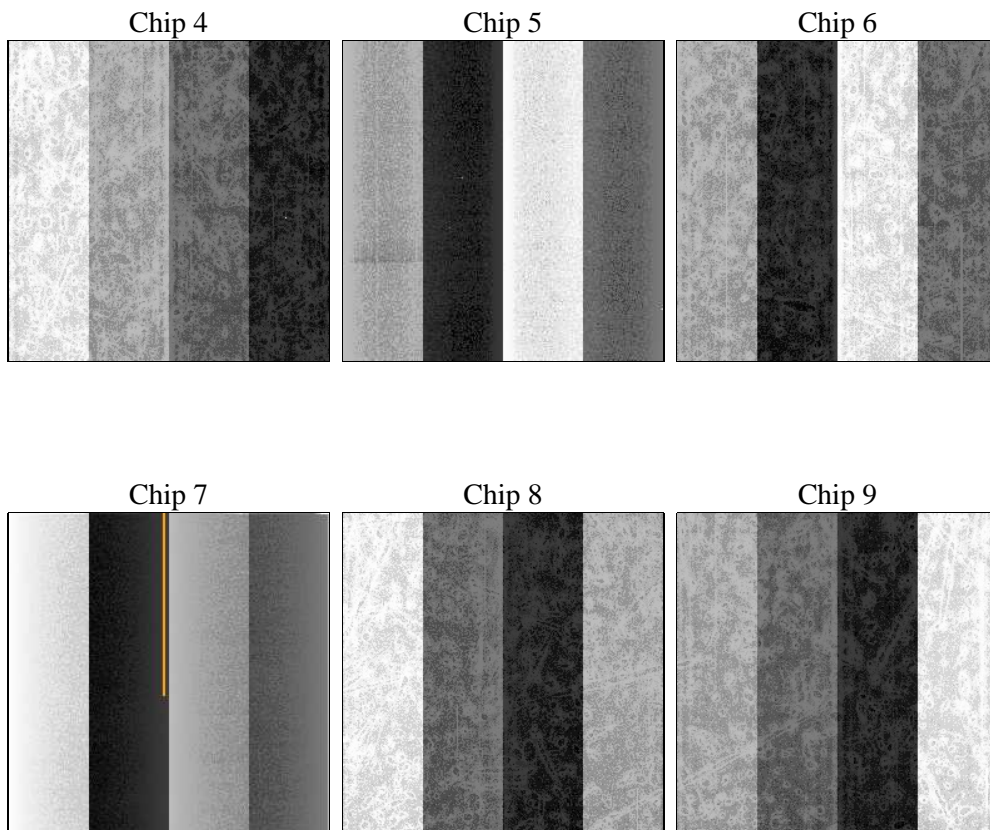
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	34159.958902419	Sum of GTIs [s]
caldbver	4.5.5	 	ontime4	34163.199872732	Sum of GTIs [s]
date	2012-12-28T21:14:10	Date and time of file creation	ontime5	34159.958902419	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	34163.199872732	Sum of GTIs [s]
			ontime7	34159.958902419	Sum of GTIs [s]
			ontime8	34163.199872732	Sum of GTIs [s]
			ontime9	34159.958902419	Sum of GTIs [s]
			l1events	1854865	Number of level 1 events

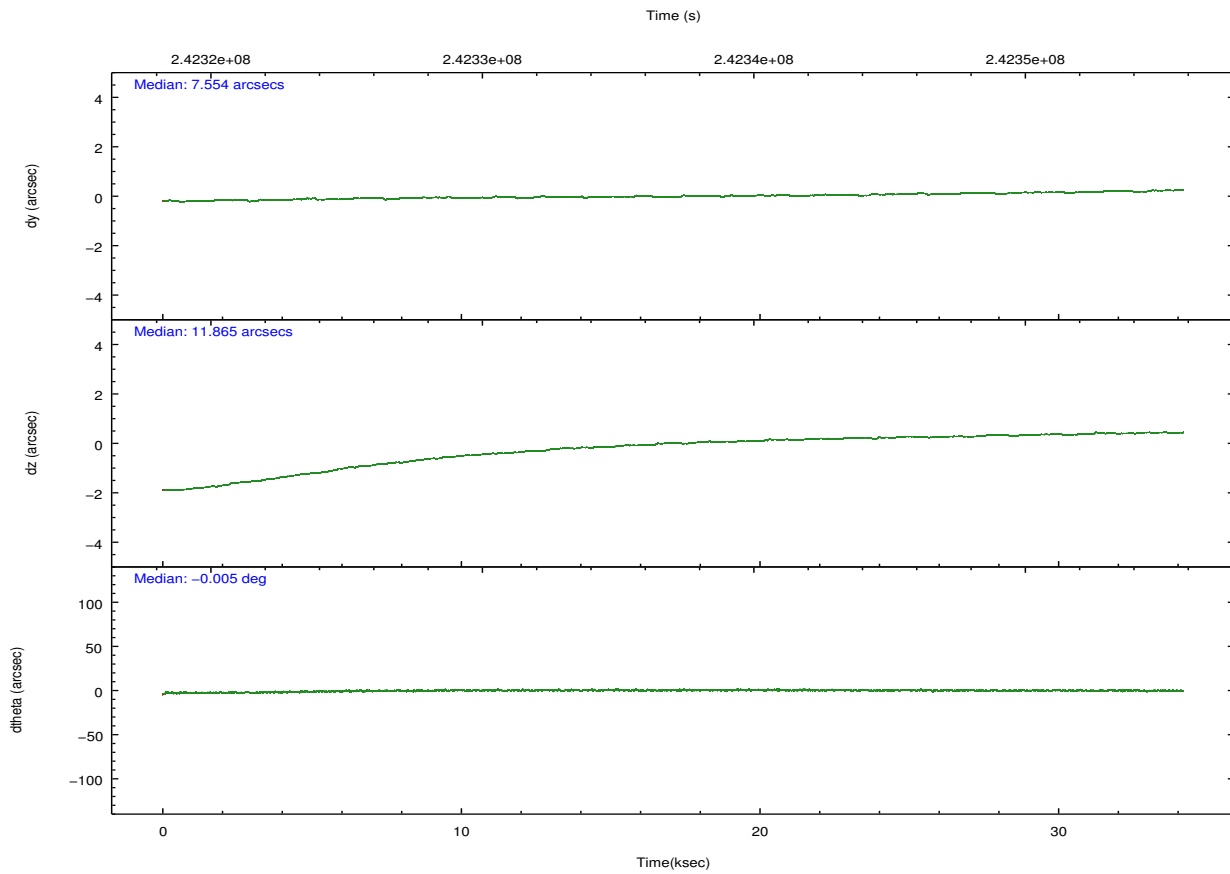
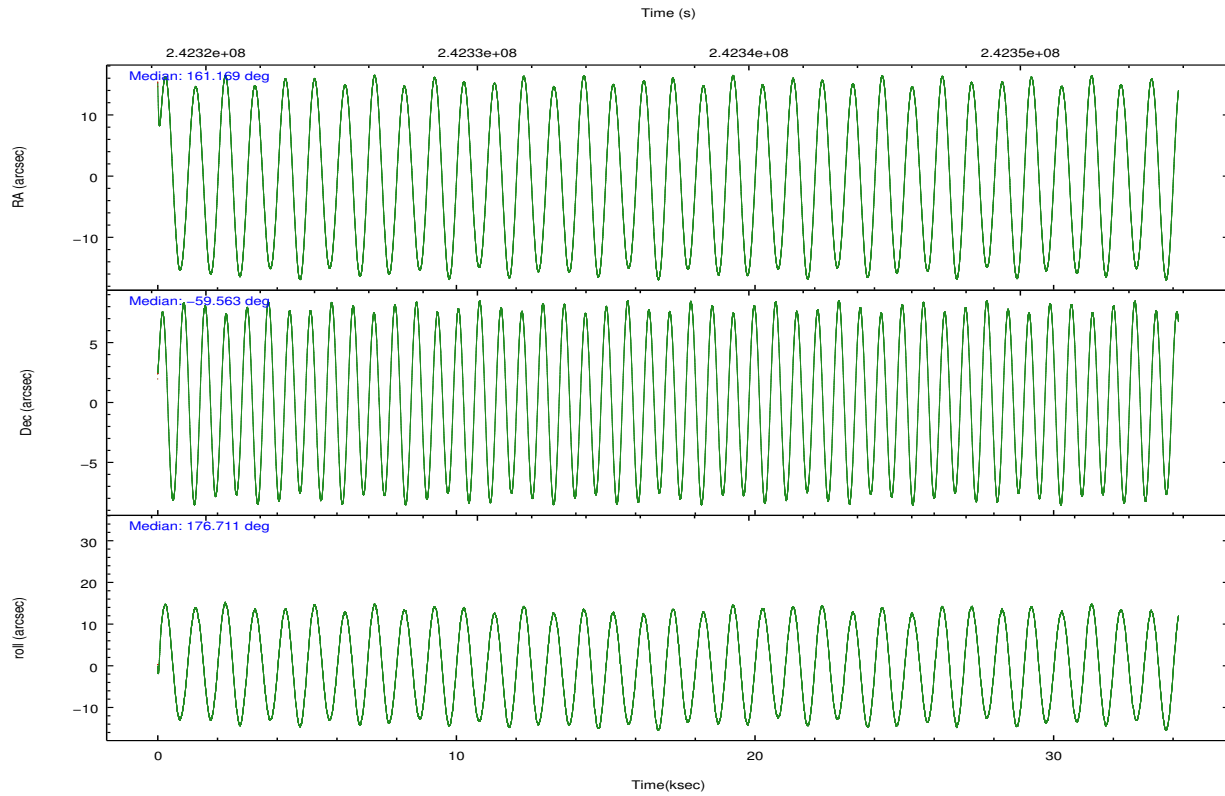
2.1.4 Events

	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	283137	380096	261409	349688	327028	253507	grade 0 events	21574	17021	17848	14388	24252	14563
rejected events	243598	205214	223810	200459	254937	220366		7%	4%	6%	4%	7%	5%
rejected %	86%	53%	85%	57%	77%	86%	grade 1 events	301	530	167	338	234	157
								0%	0%	0%	0%	0%	0%
							grade 2 events	6662	51666	7075	30266	15686	6242
								2%	13%	2%	8%	4%	2%
							grade 3 events	3173	7137	3220	13325	7656	3182
								1%	1%	1%	3%	2%	1%
							grade 4 events	3101	6821	3198	13368	6932	3026
								1%	1%	1%	3%	2%	1%
							grade 5 events	11335	27934	11838	32495	15615	12704
								4%	7%	4%	9%	4%	5%
							grade 6 events	5034	92269	6266	77901	17611	6131
								1%	24%	2%	22%	5%	2%
							grade 7 events	231957	176718	211797	167607	239042	207502
								81%	46%	81%	47%	73%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	161.216492	161.168825740307	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.550382	-59.56294492989965	Alternating exposures requested	N	N
[deg] Pointing Roll	176.601772	176.7173004186432	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	242320116.184000	242318996.21069			
Observation start date	2005-09-05T15:07:32	2005-09-05T14:49:56			
[s] Observation end time (MET)	242354116.184000	242354994.72484			
Observation end date	2005-09-06T00:34:12	2005-09-06T00:49:54			
Read mode	TIMED	TIMED			

2.3 Aspect

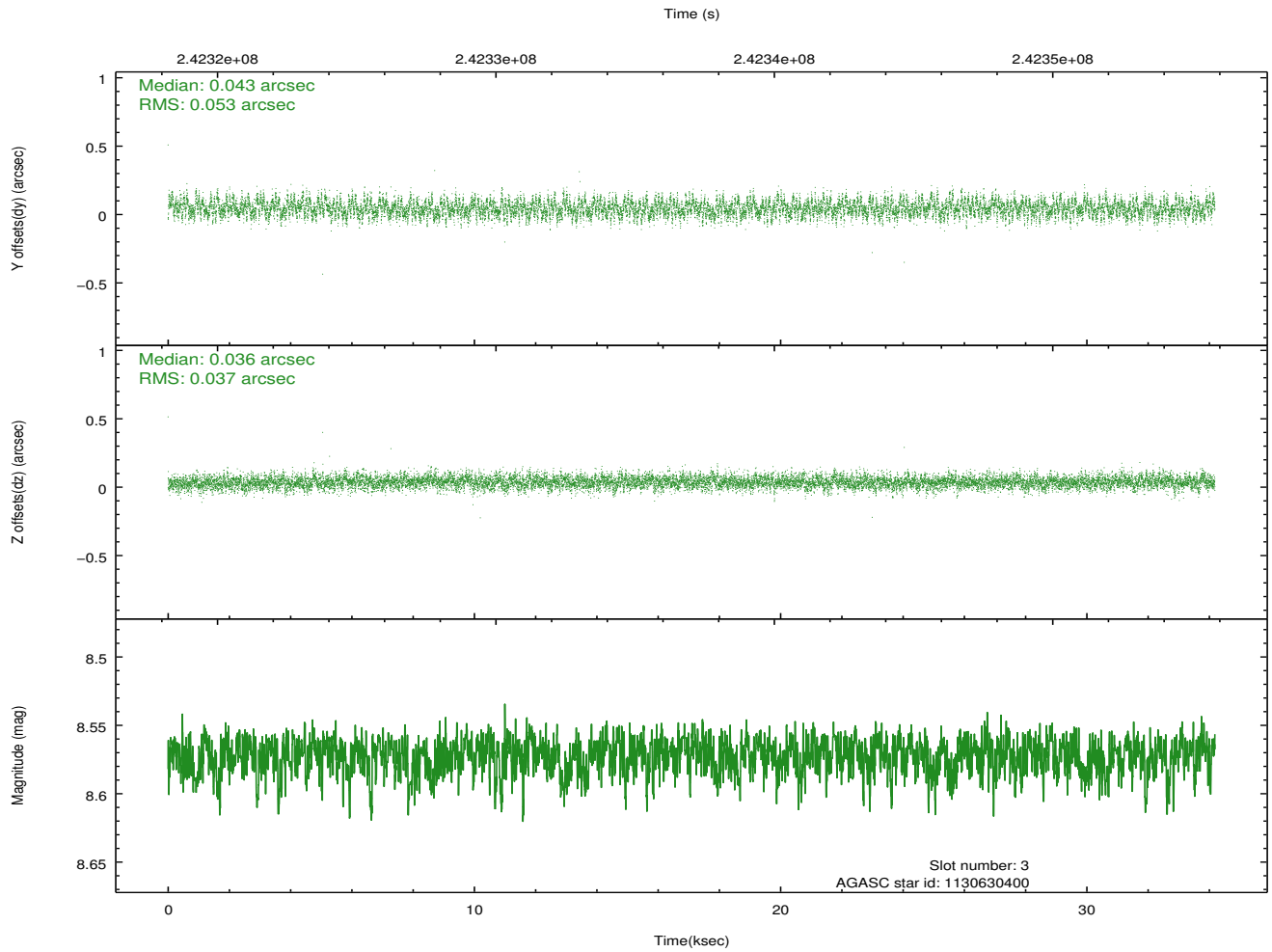
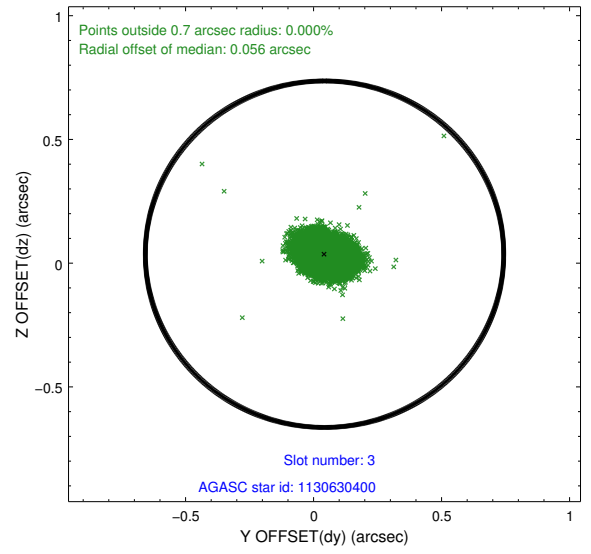
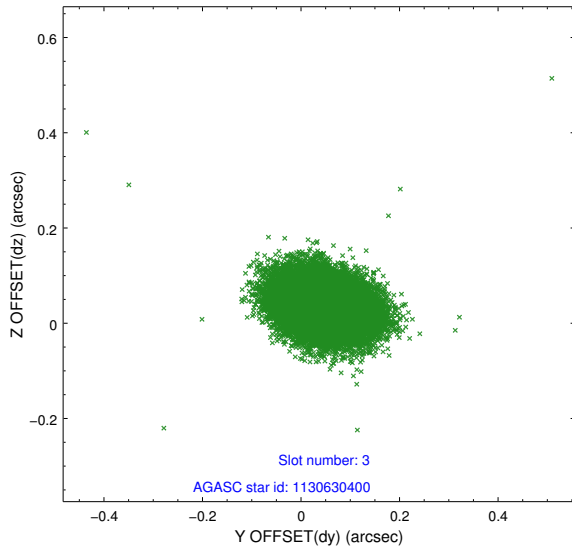


Slot Statistics

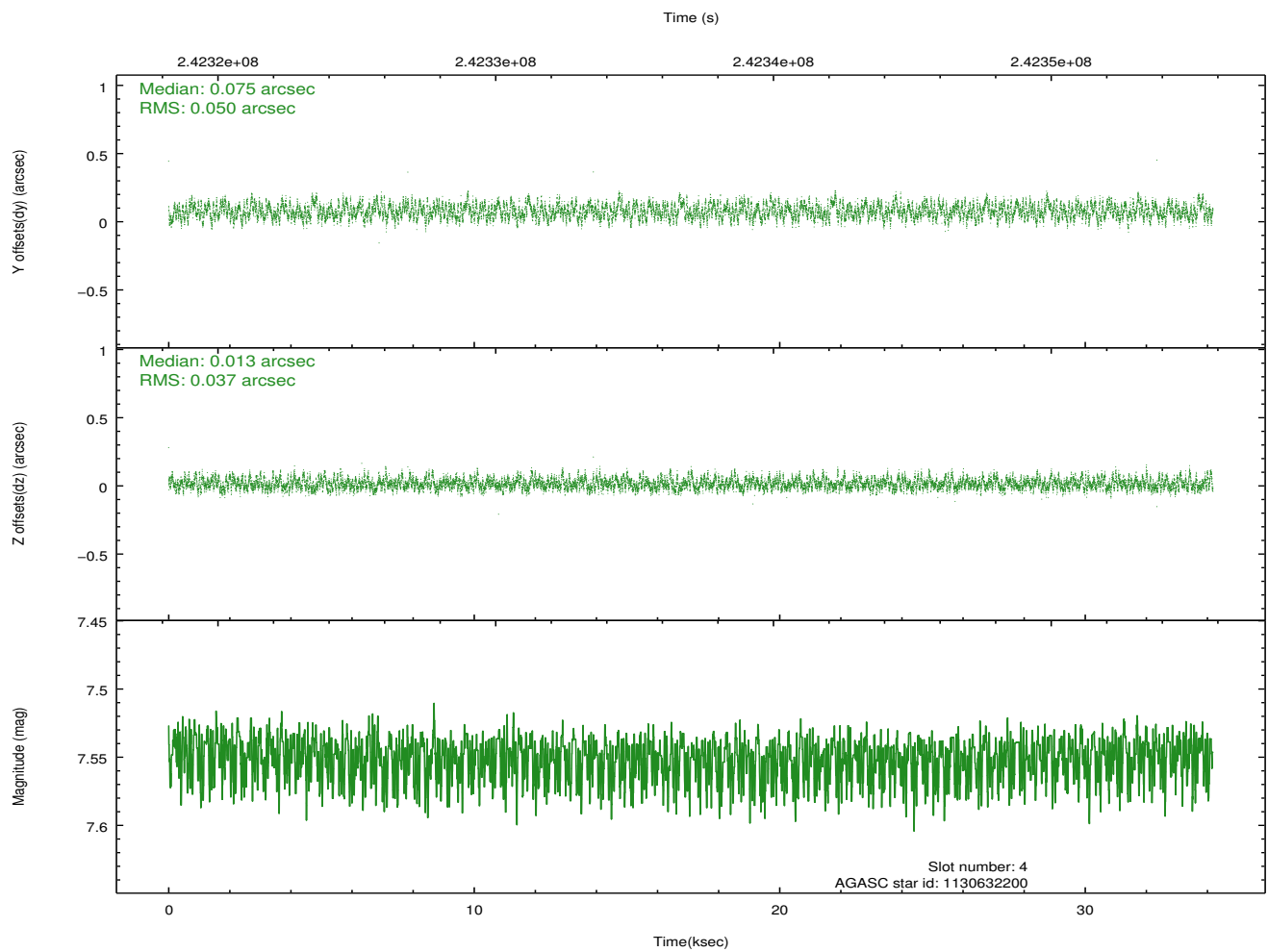
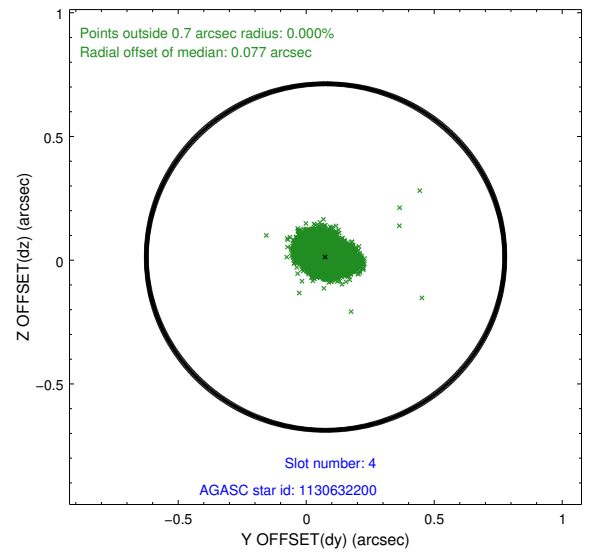
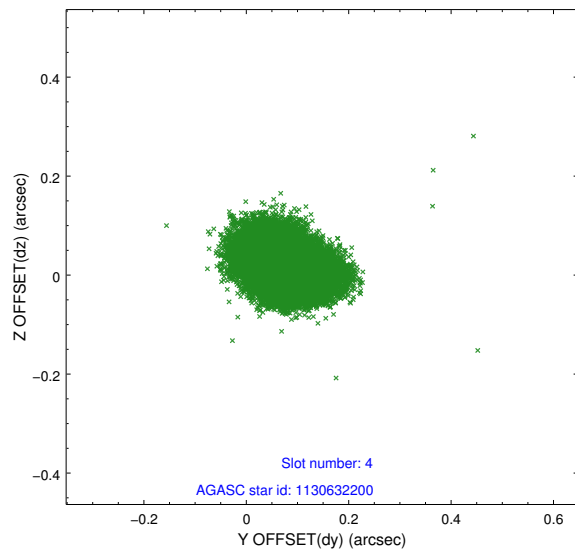
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	8336	0.048	-0.078	0.011	0.056	0.000000	0.000000	935.73	-1728.54
1	FID	ACIS-S-2	7.10	8334	-0.036	0.020	0.012	0.033	0.000000	0.000000	-760.23	-1733.02
2	FID	ACIS-S-6	7.35	8336	-0.034	0.061	0.014	0.035	0.000000	0.000000	401.33	812.89
3	GUIDE	1130630400	8.57	16662	0.043	0.036	0.068	0.111	160.235909	-58.888840	1961.78	-2255.45
4	GUIDE	1130632200	7.55	16669	0.075	0.013	0.067	0.104	161.433843	-59.407820	-366.70	-535.16
5	GUIDE	1130643264	6.65	16673	0.027	-0.144	0.055	0.088	160.322990	-59.676912	1593.58	562.14
6	GUIDE	1130640672	8.33	16667	-0.079	0.148	0.050	0.081	162.096044	-59.540805	-1600.62	-118.67
7	GUIDE	1174033752	8.47	16669	-0.074	-0.057	0.067	0.108	162.418977	-60.164599	-2282.34	2099.19

2.4 Star Slots

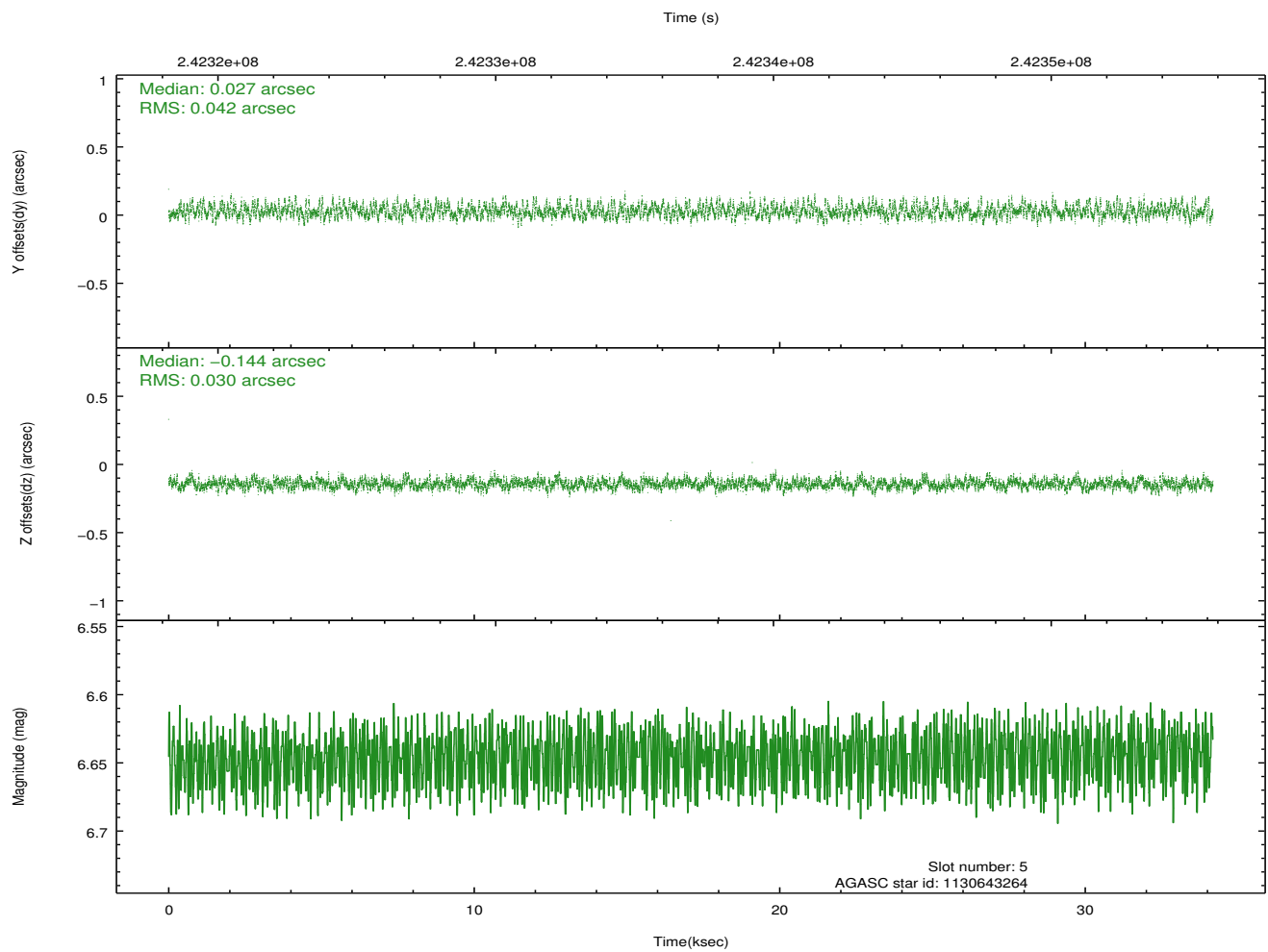
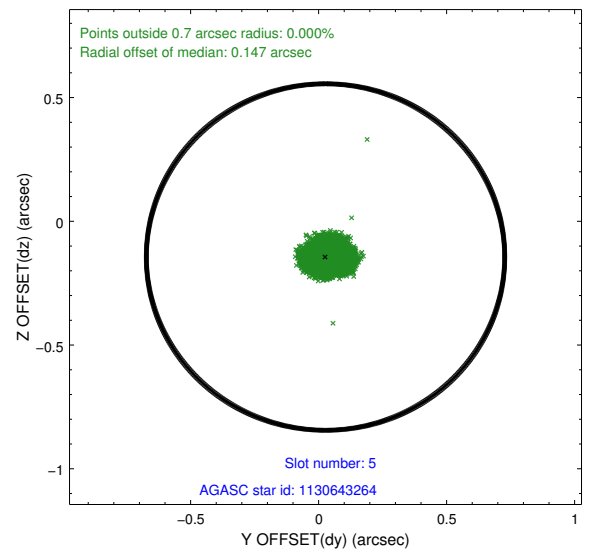
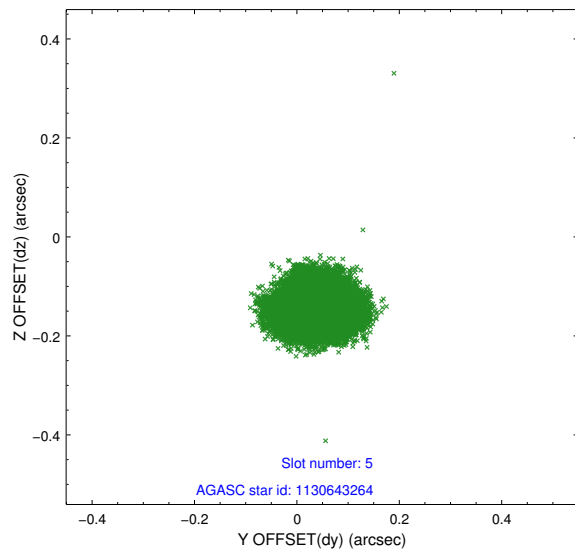
2.4.1 Slot 3



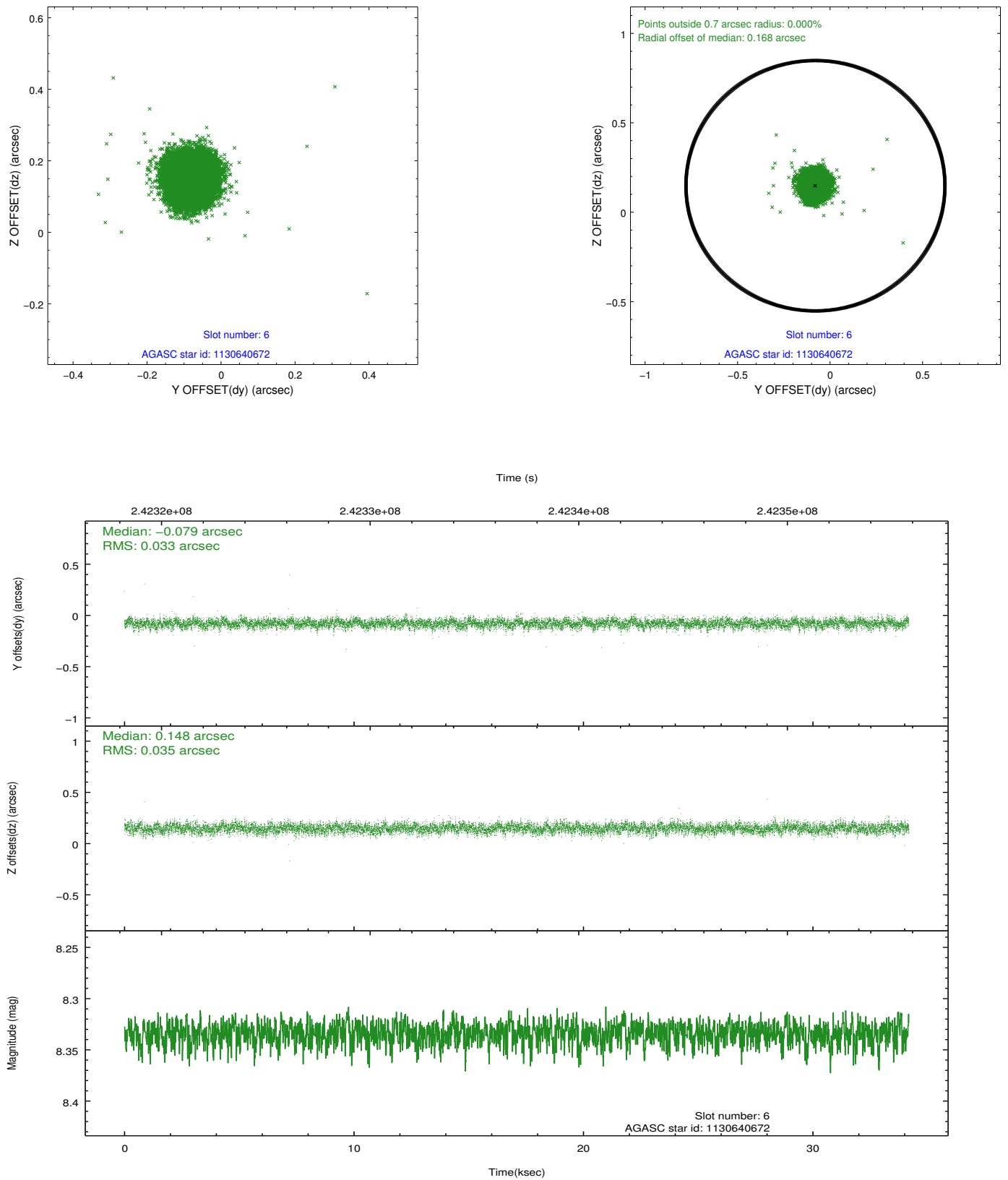
2.4.2 Slot 4



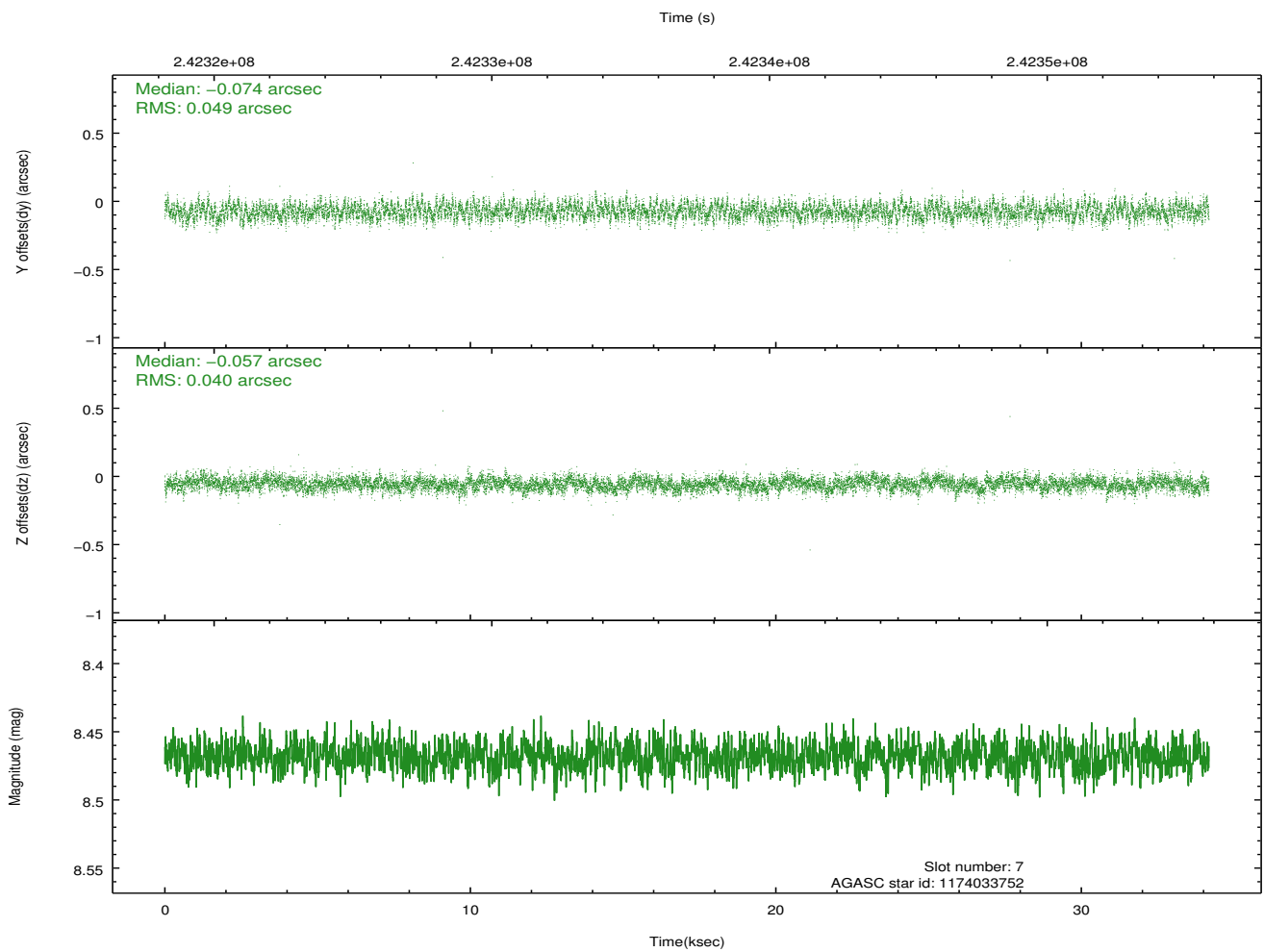
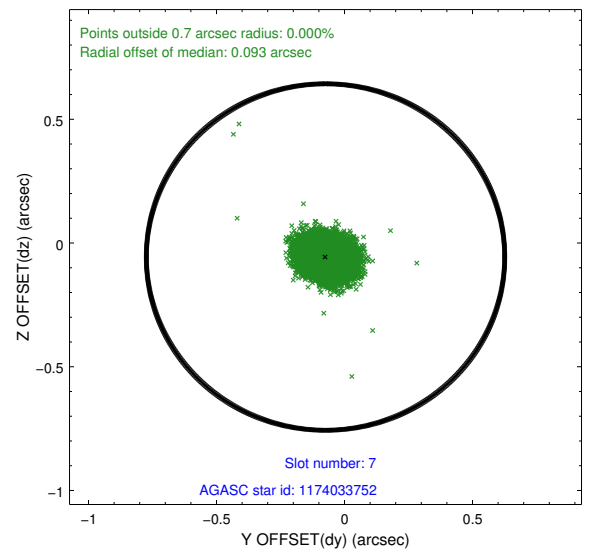
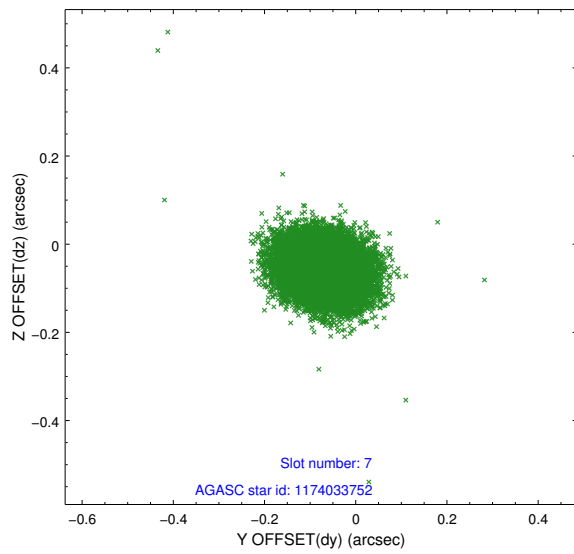
2.4.3 Slot 5



2.4.4 Slot 6

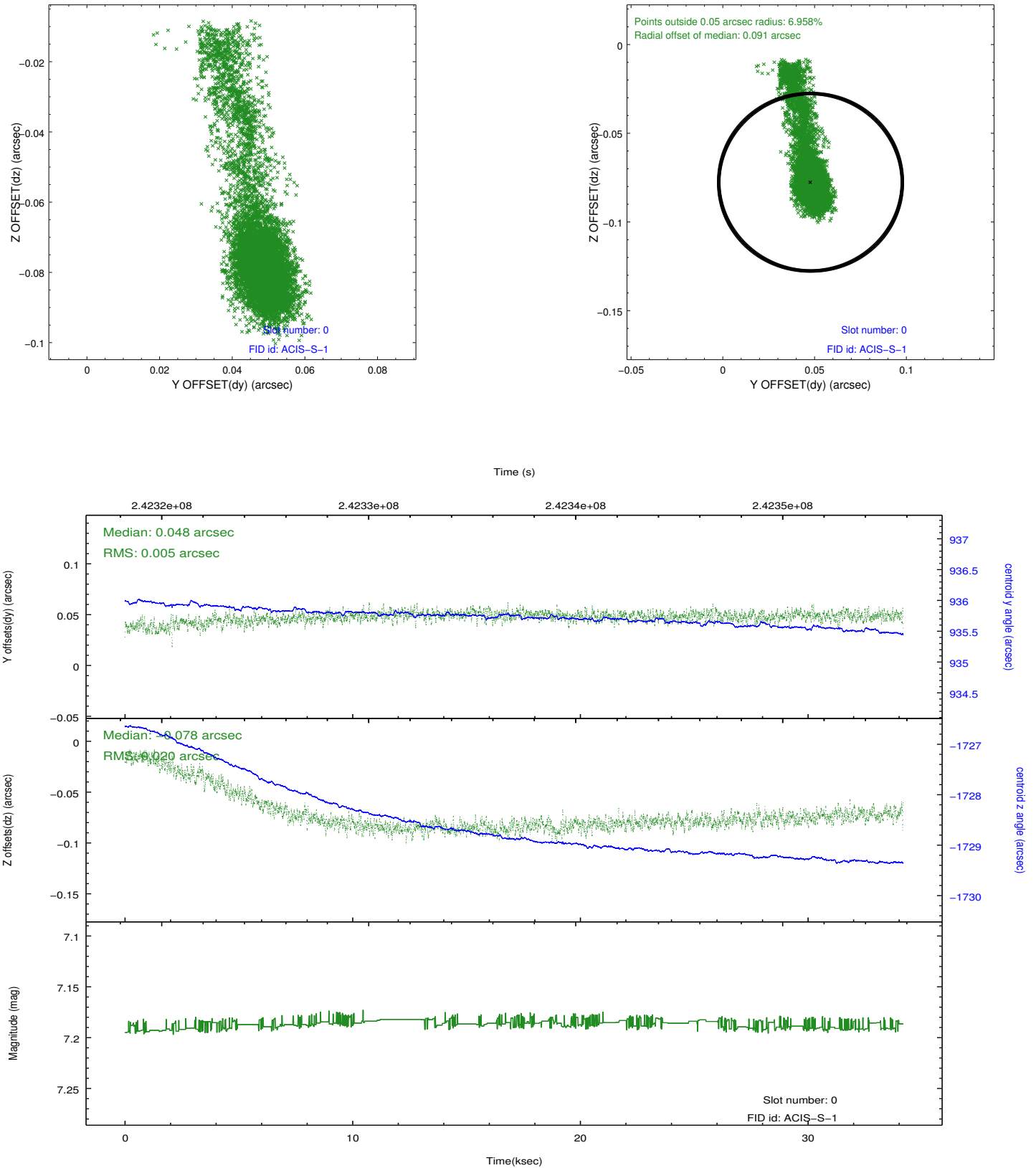


2.4.5 Slot 7

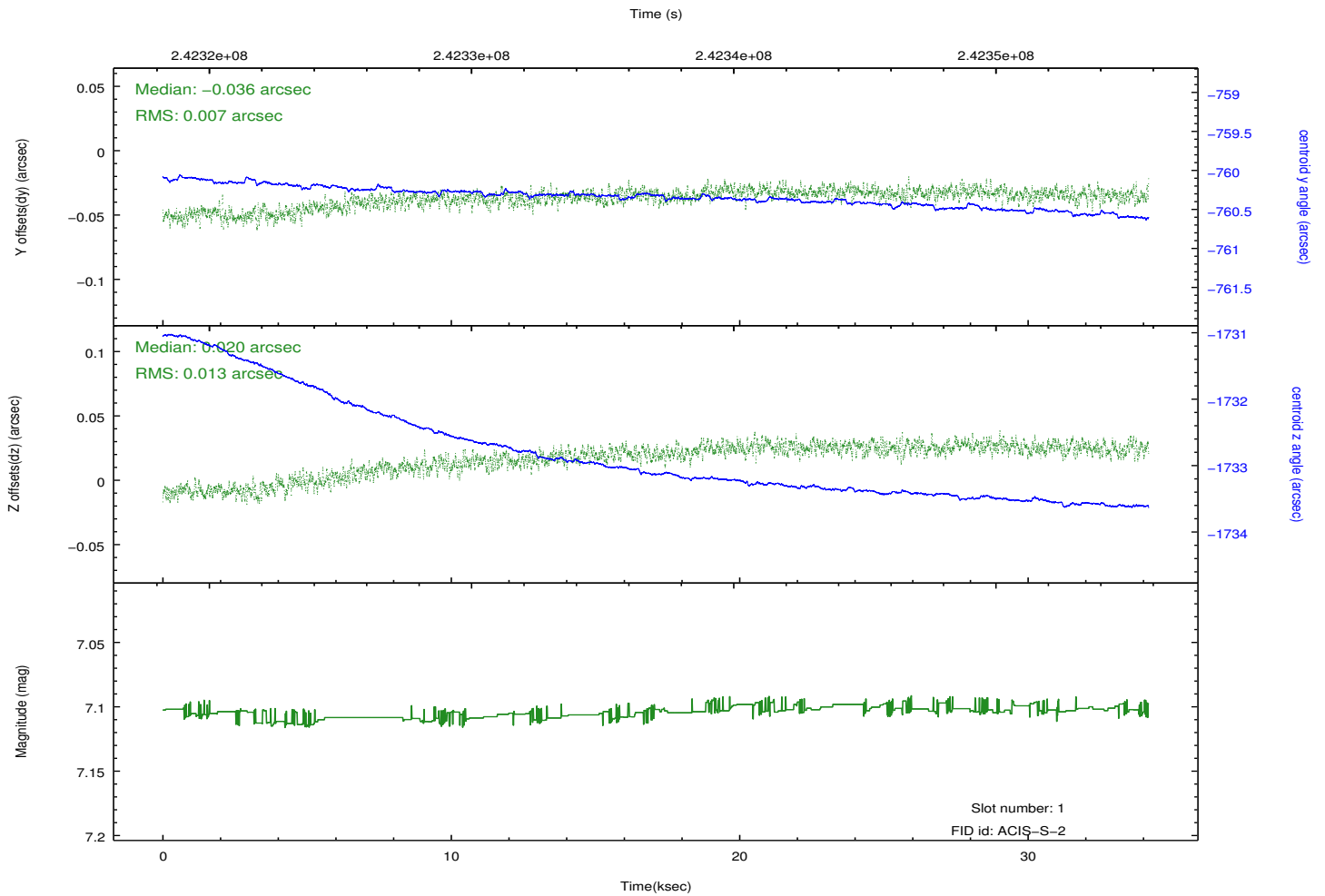
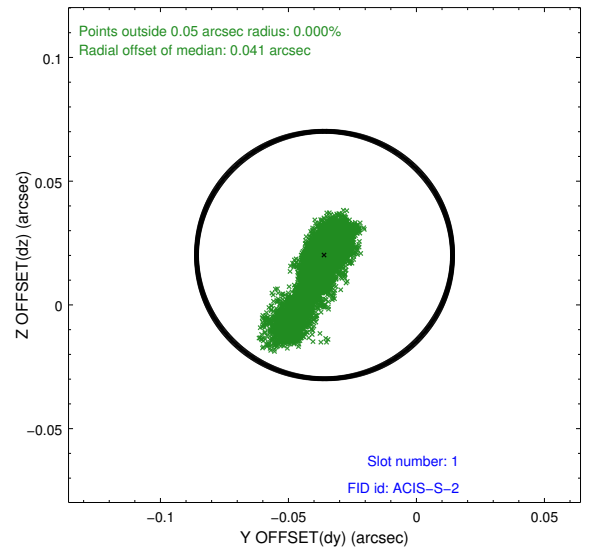
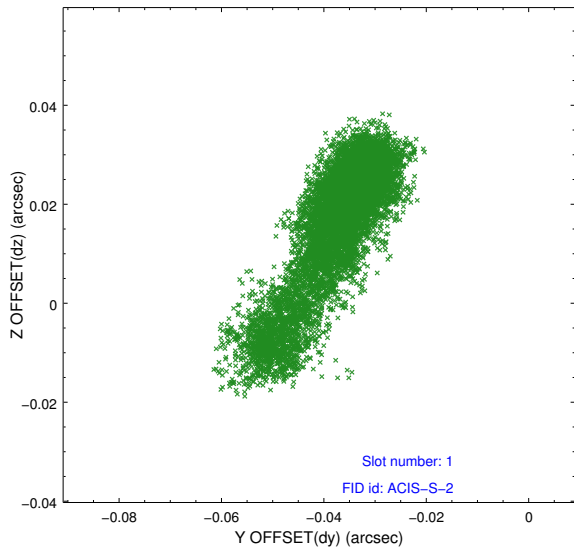


2.5 FID Slots

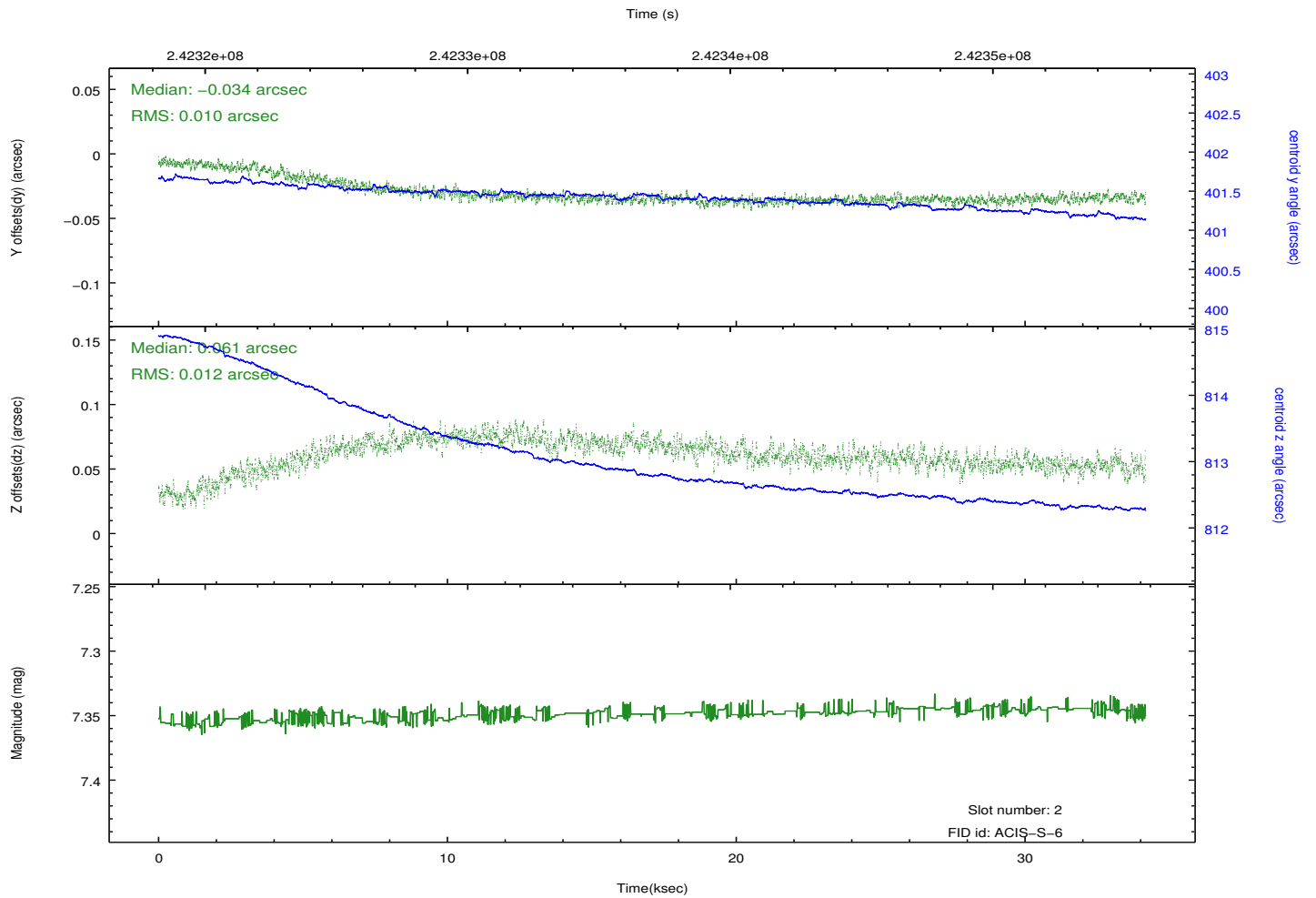
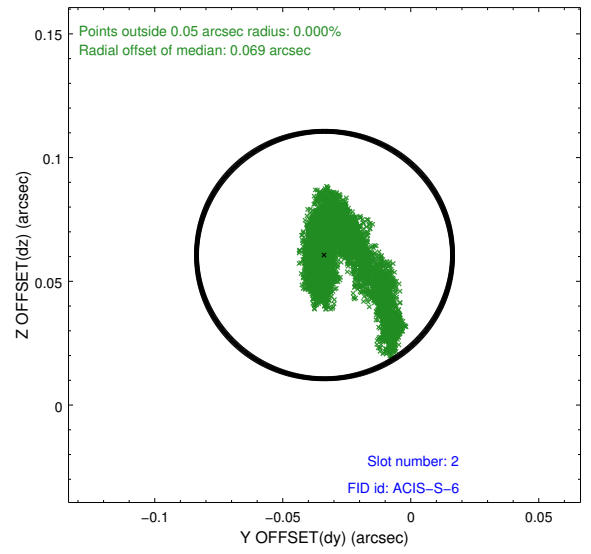
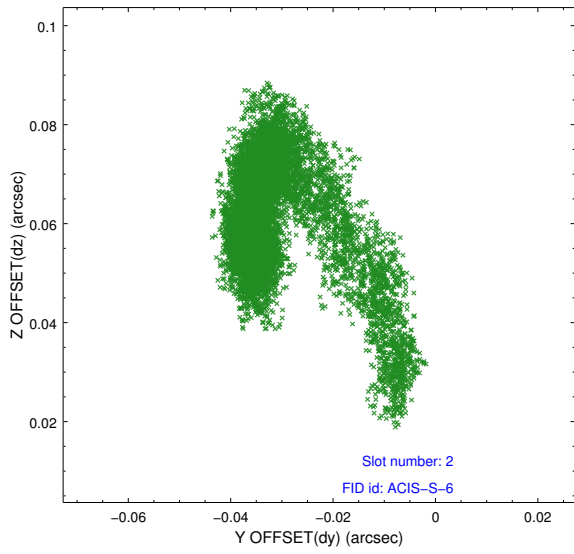
2.5.1 Slot 0



2.5.2 Slot 1

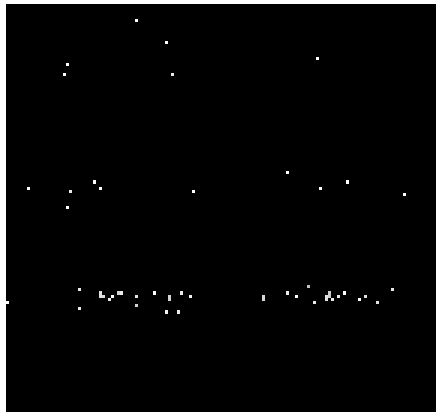


2.5.3 Slot 2

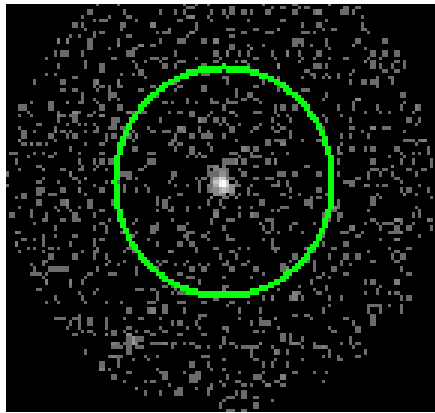


3 Gratings

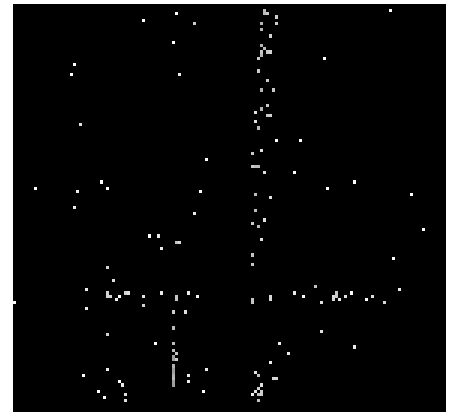
3.1 HEG Arm



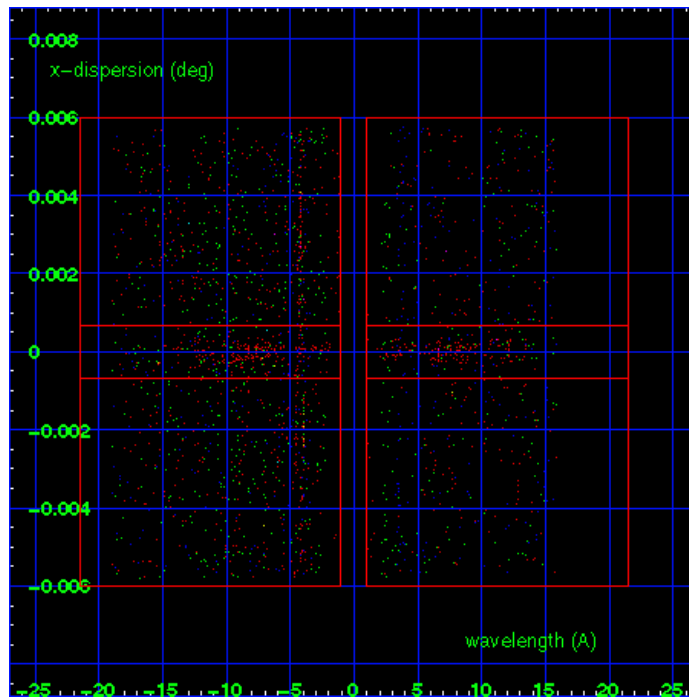
HEG Order Sort 123



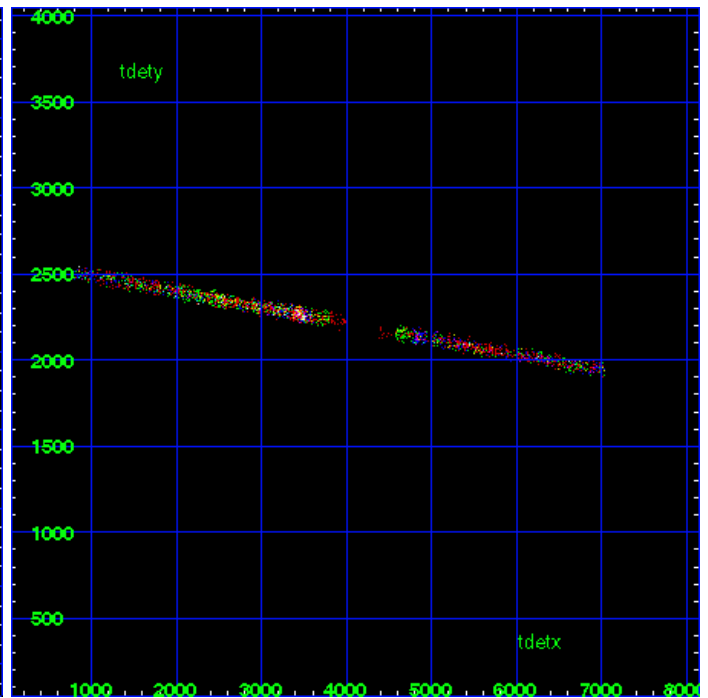
HEG Zero Order



HEG Order Sort ALL

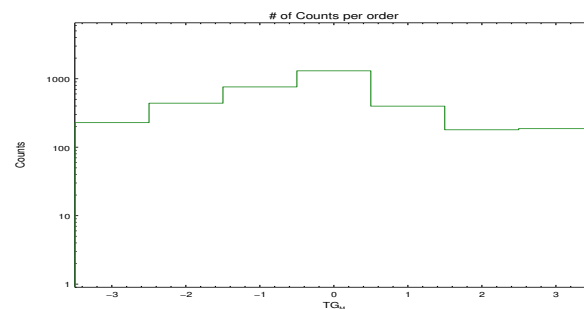


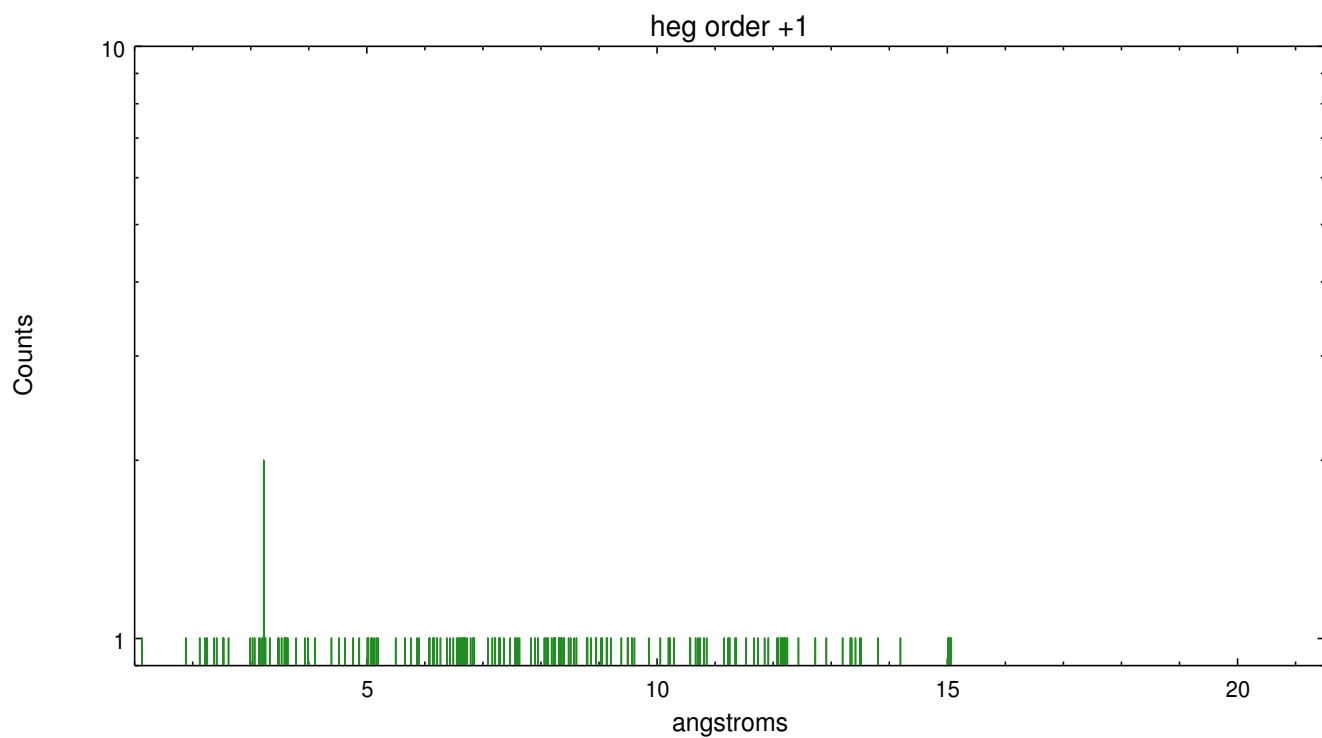
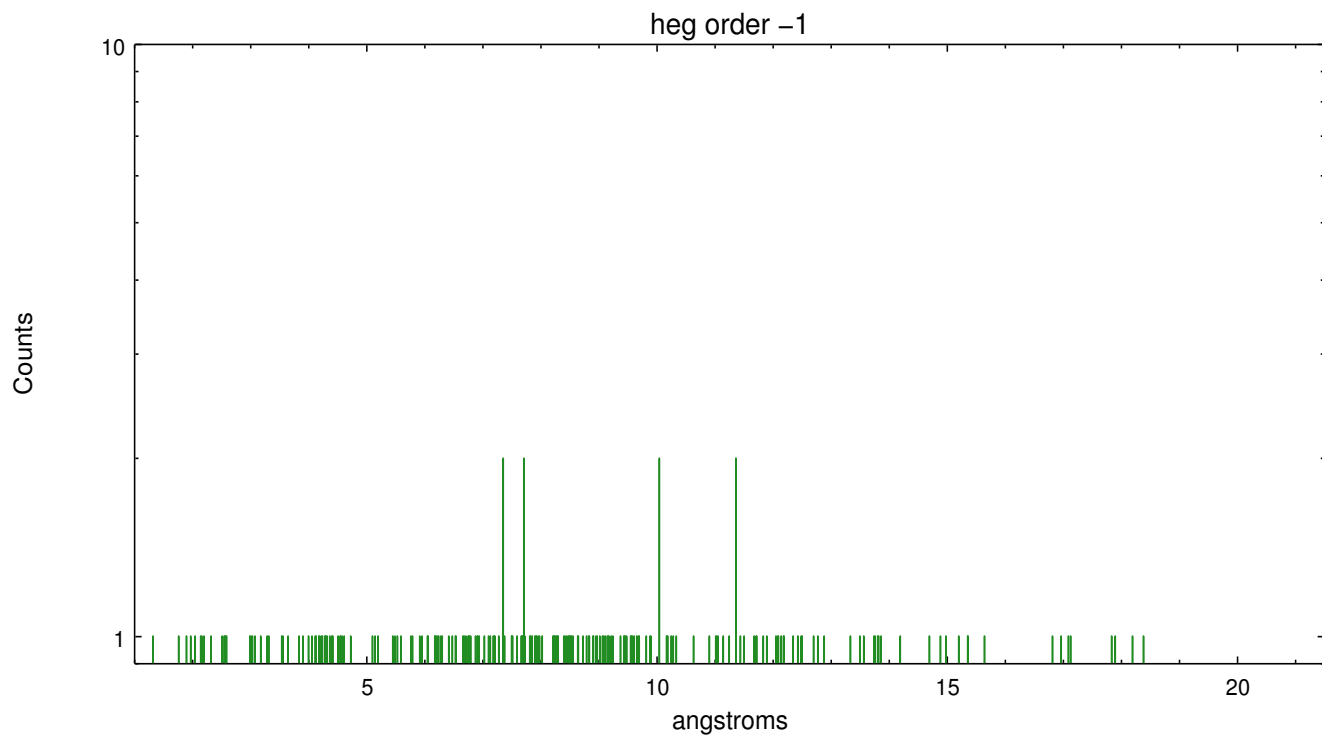
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	229	441	763	1312	399	180	187

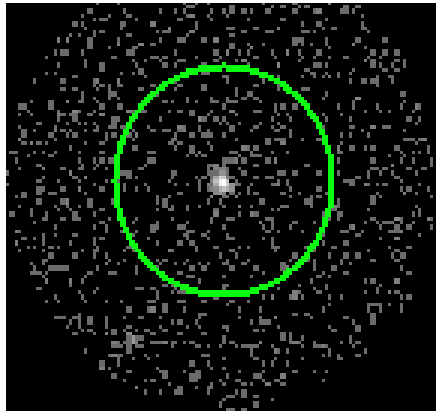




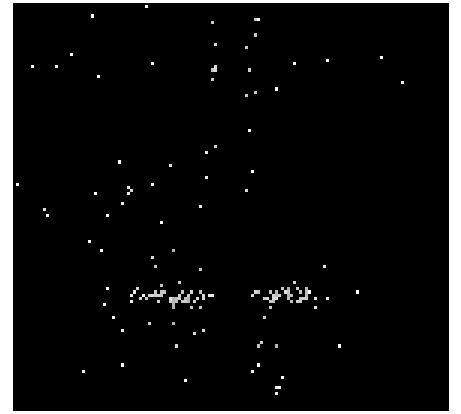
3.2 MEG Arm



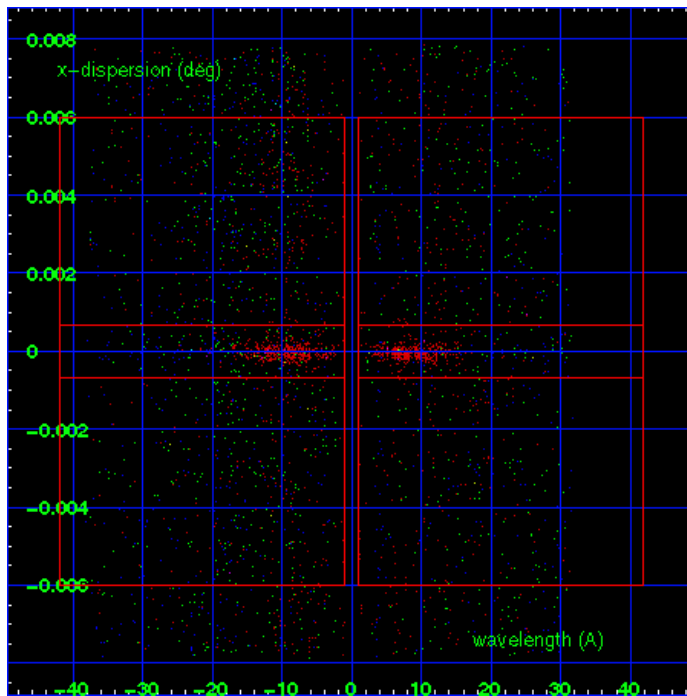
MEG Order Sort 123



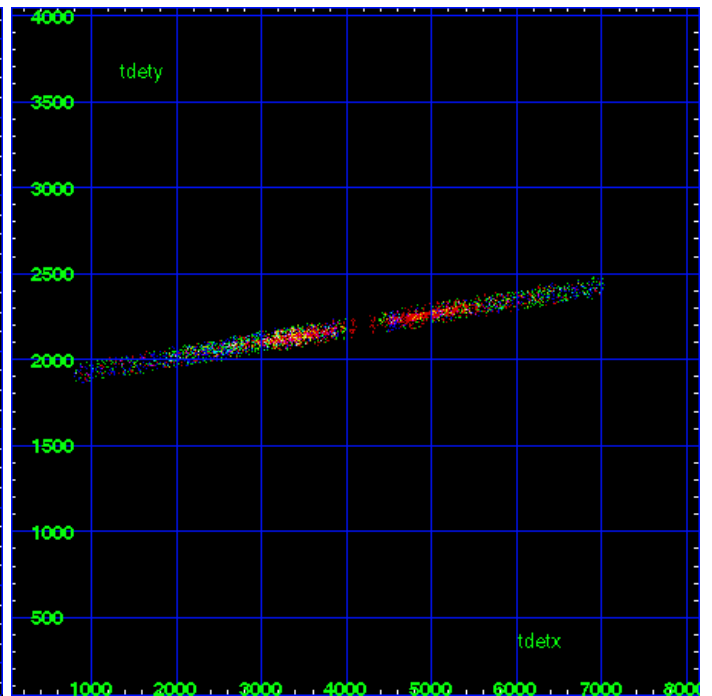
MEG Zero Order



MEG Order Sort ALL

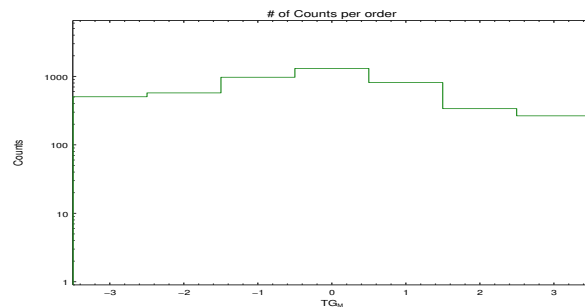


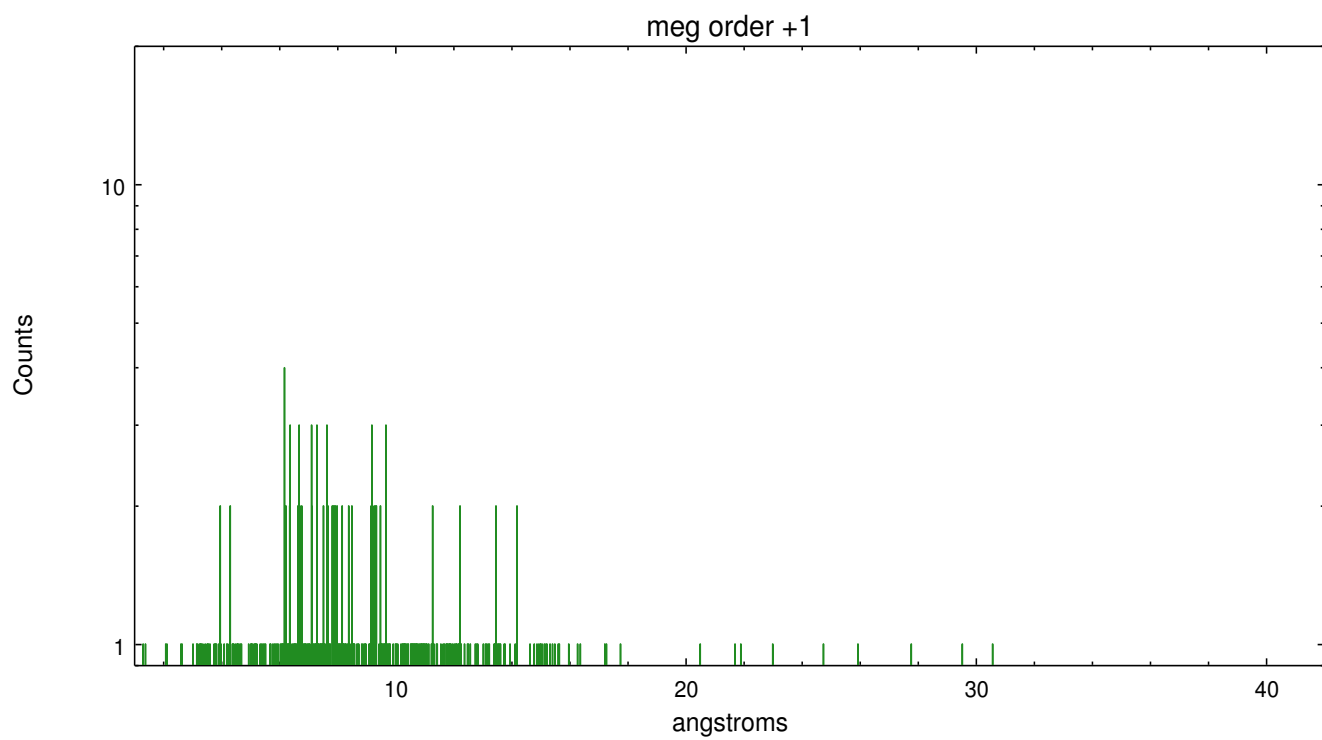
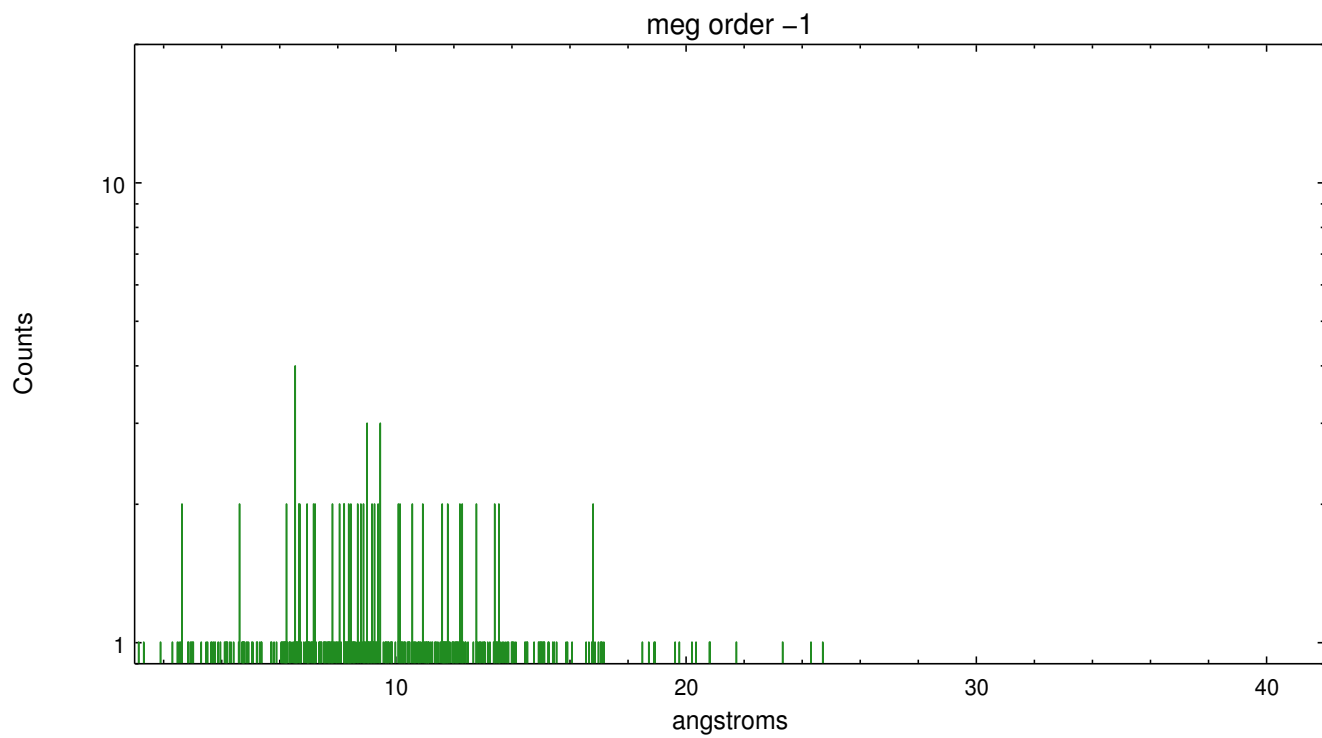
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	506	576	975	1312	815	339	266





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.15995

A.2 Comments

Warning: Multiple sources in the field may cause contamination of the primary extraction at some wavelengths. Extraction is of HD 93250.

Warning: HD 93129 complex is within the extraction region for the HEG minus arm at about 4-4.5 A. The background will be contaminated in this region, as well as the extracted spectrum.