

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3457 - L2 Version 3
Chandra X-Ray Center

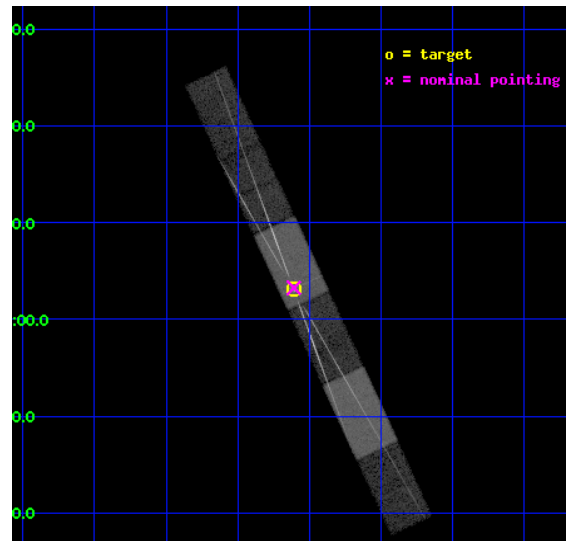
L2 Processing Date : Oct 9 2012

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1 Front

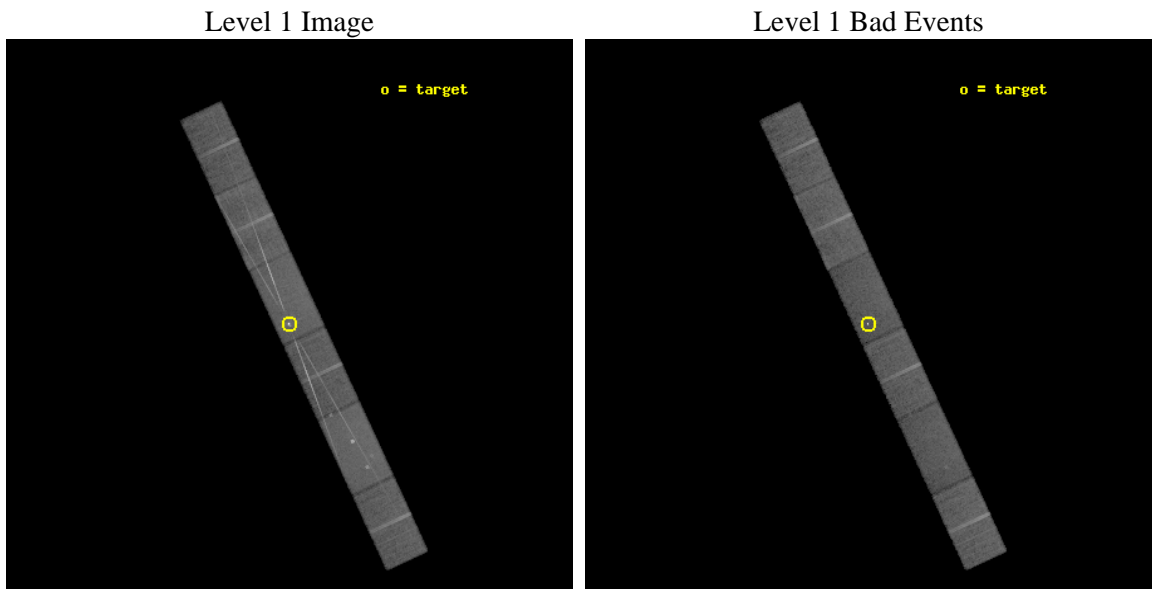
seq_num	790075	Sequence number
obs_id	3457	Observation id
title	MEASURING THE QE MAP FOR HETG/ACIS-S OBSERVATION AT DIFFERENT SIM_Z OFFSETS	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	3C273	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.277917	Observer's specified target RA [deg]
dec_targ	2.052389	Observer's specified target Dec [deg]
ra_nom	187.27703091879	Nominal RA [deg]
dec_nom	2.0544308688136	Nominal Dec [deg]
roll_nom	245.03214256963	Nominal Roll [deg]
revision	3	Processing version of data
ontime	25381.947062016	Sum of GTIs [s]
livetime	24845.28882343	Livetime [s]
ontime4	25380.047111839	Sum of GTIs [s]
ontime5	25381.906022012	Sum of GTIs [s]
ontime6	25379.923991829	Sum of GTIs [s]
ontime7	25381.947062016	Sum of GTIs [s]
ontime8	25381.823942006	Sum of GTIs [s]
ontime9	25381.782902032	Sum of GTIs [s]
l2events	216273	Number of level 2 events



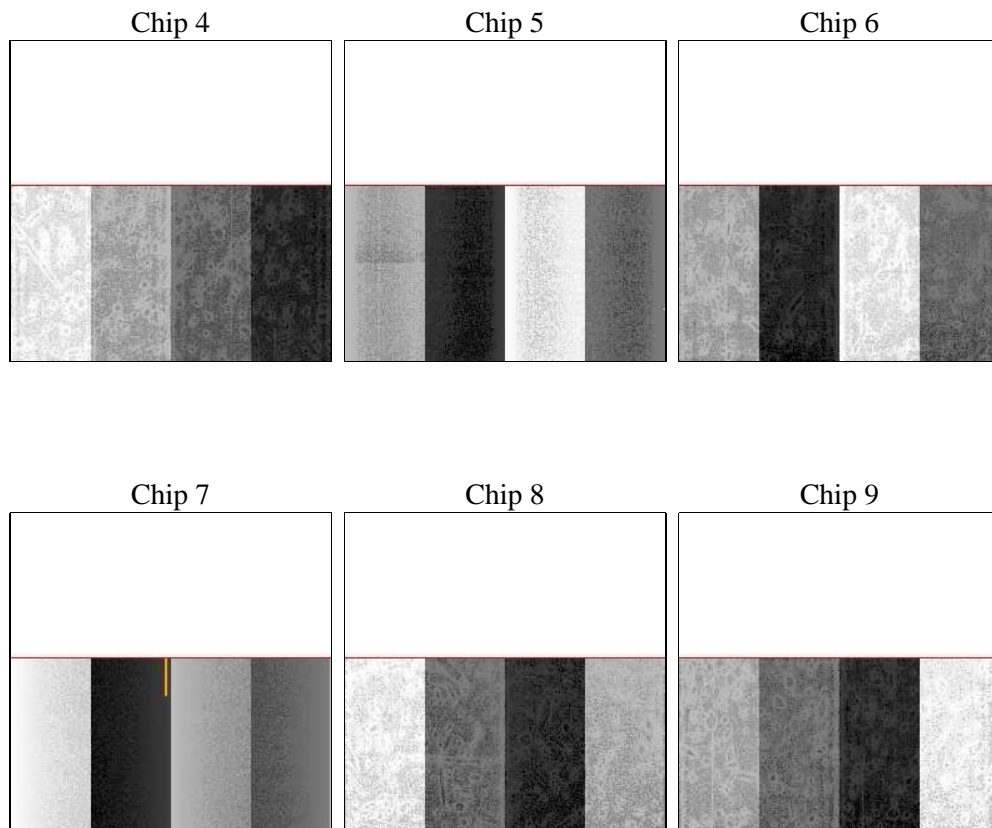
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	25381.947062016	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	25380.047111839	Sum of GTIs [s]
date	2012-10-09T02:39:16	Date and time of file creation	ontime5	25381.906022012	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	25379.923991829	Sum of GTIs [s]
			ontime7	25381.947062016	Sum of GTIs [s]
			ontime8	25381.823942006	Sum of GTIs [s]
			ontime9	25381.782902032	Sum of GTIs [s]
			l1events	751357	Number of level 1 events

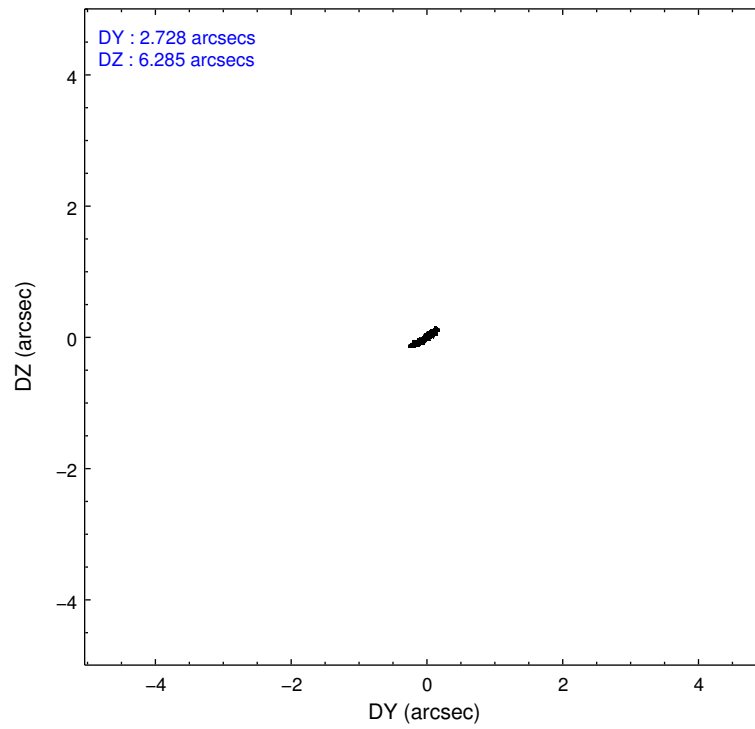
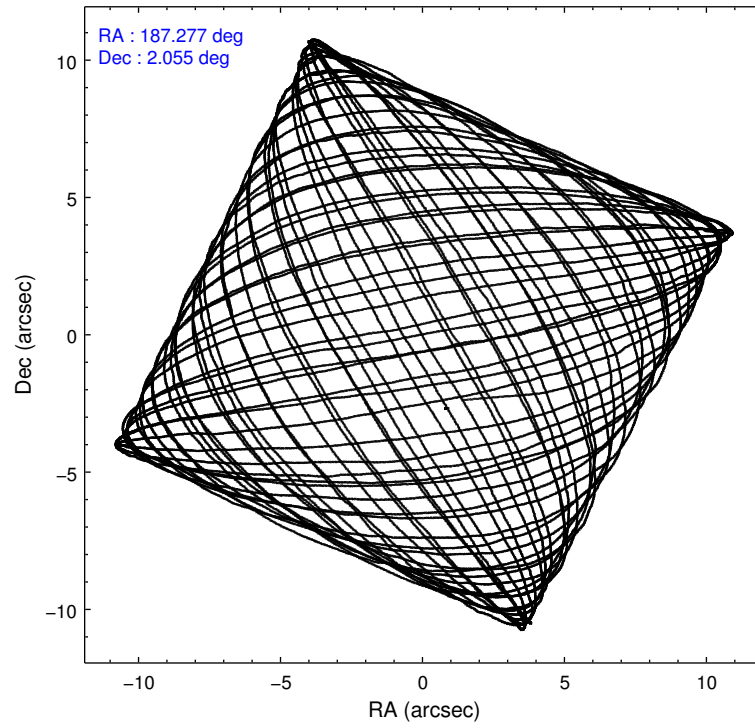
2.1.4 Events

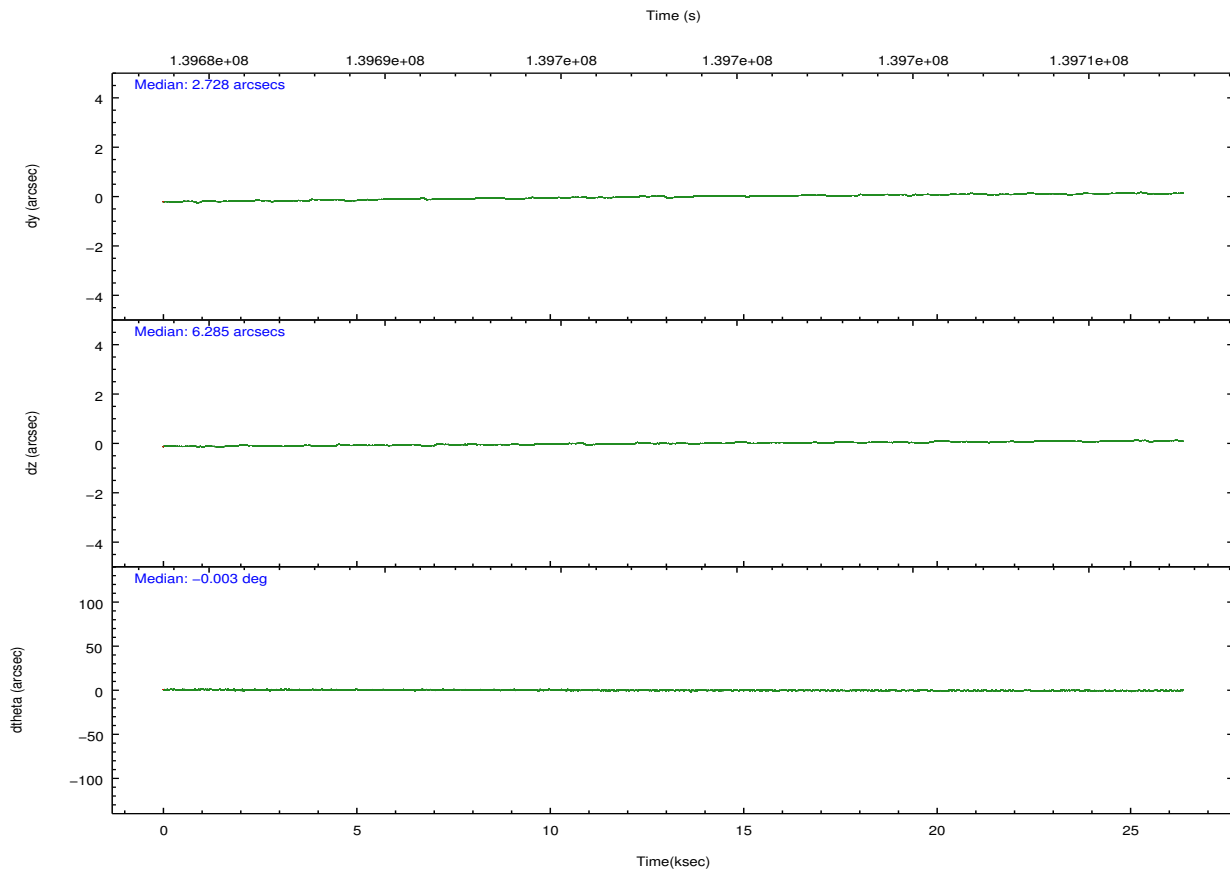
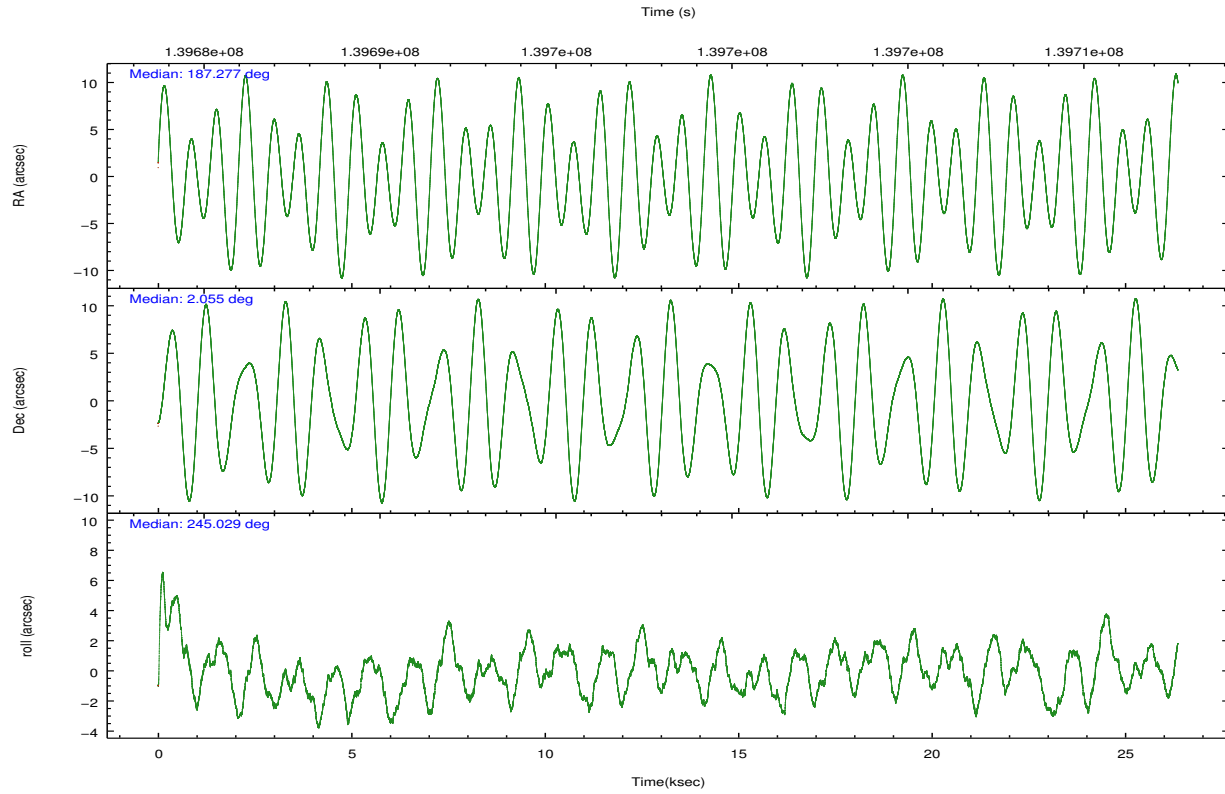
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	107185	140700	119129	156069	133682	94592	grade 0 events	5449	13444	22502	10690	17068	5474
rejected events	94514	69226	84513	75738	97295	81937		5%	9%	18%	6%	12%	5%
rejected %	88%	49%	70%	48%	72%	86%	grade 1 events	44	425	76	427	71	28
								0%	0%	0%	0%	0%	0%
							grade 2 events	2737	18666	5015	17018	6347	2334
								2%	13%	4%	10%	4%	2%
							grade 3 events	1281	4155	2145	8001	3168	1309
								1%	2%	1%	5%	2%	1%
							grade 4 events	1214	3990	2056	7921	3003	1294
								1%	2%	1%	5%	2%	1%
							grade 5 events	3327	10700	3882	12902	4968	4040
								3%	7%	3%	8%	3%	4%
							grade 6 events	1991	31224	2902	36709	6805	2245
								1%	22%	2%	23%	5%	2%
							grade 7 events	91142	58096	80551	62401	92252	77868
								85%	41%	67%	39%	69%	82%

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	187.274273	187.2770309187924	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	2.081528	2.054430868813559	Subarray start row	1	1
[deg] Pointing Roll	244.875616	245.0321425696294	Subarray row count	560	560
[s] Window start time (MET)	139276864.184000	139276864.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	141782464.184000	141782464.184000	[s] Primary exposure time	0.000000	1.9
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.032523	-182.036427832944			
[mm] SIM translation stage offset	-8.1	-8.096094750063799			
[s] Observation start time (MET)	139686361.184000	139684815.65706			
Observation start date	2002-06-05T17:44:57	2002-06-05T17:20:15			
[s] Observation end time (MET)	139711361.184000	139711495.38315			
Observation end date	2002-06-06T00:41:37	2002-06-06T00:44:55			
Read mode	TIMED	TIMED			

2.3 Aspect



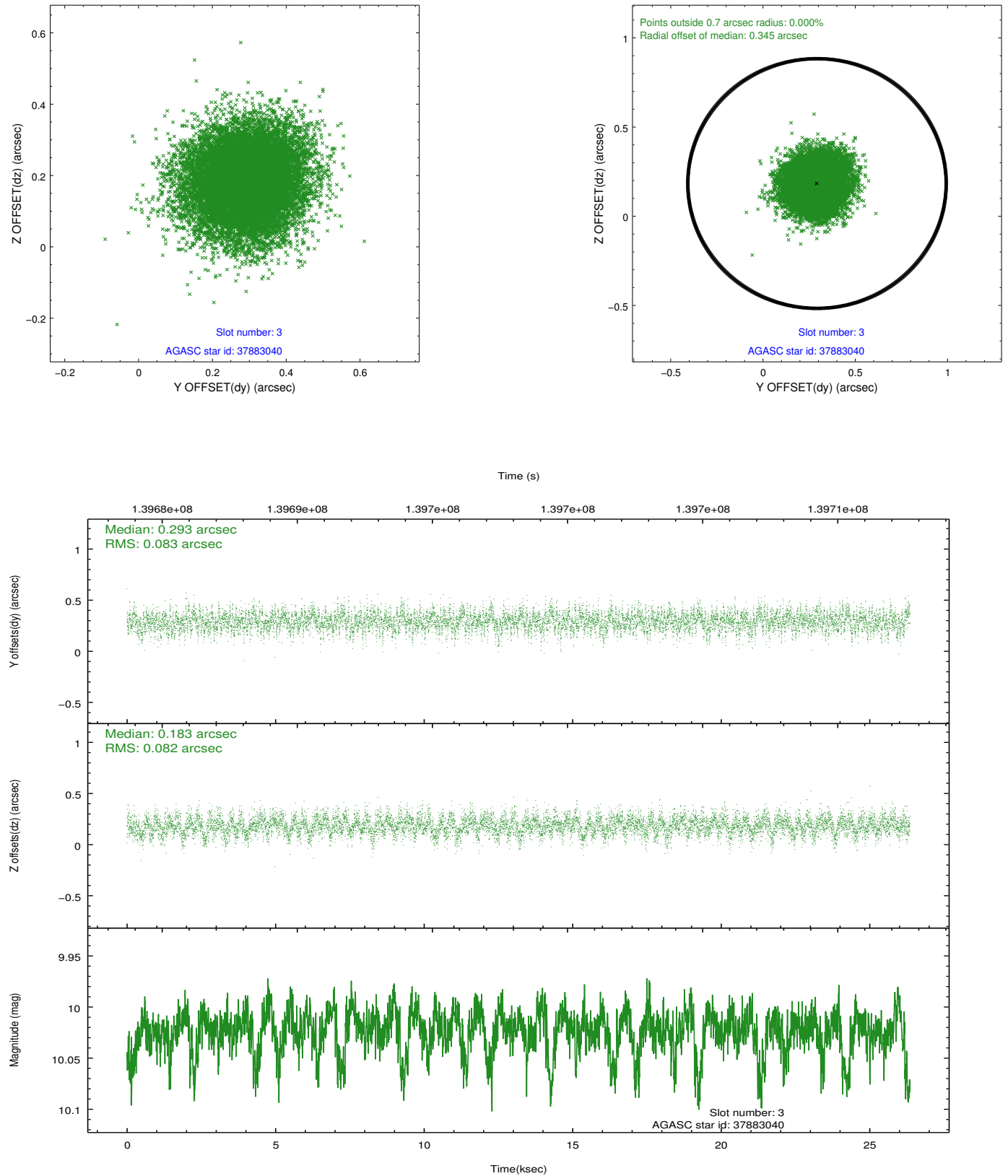


Slot Statistics

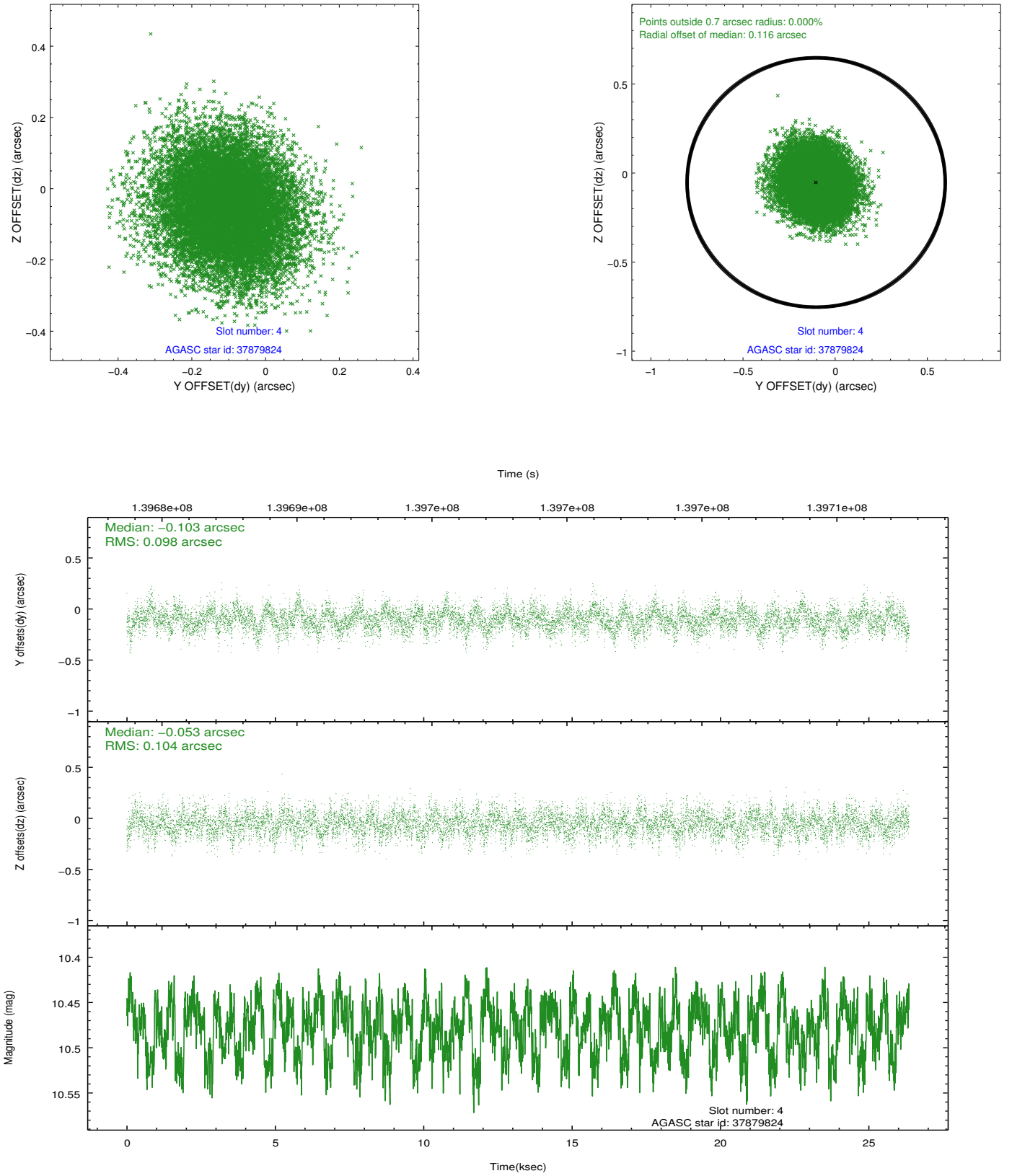
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	6430	-0.026	-0.115	0.007	0.012	0.000000	0.000000	-754.81	-1894.31
1	FID	ACIS-S-4	7.18	6430	0.040	0.043	0.006	0.011	0.000000	0.000000	2158.51	14.14
2	FID	ACIS-S-5	7.23	6430	-0.046	0.080	0.007	0.011	0.000000	0.000000	-1807.51	8.03
3	GUIDE	37883040	10.02	12838	0.293	0.183	0.124	0.200	187.575516	1.280402	2151.08	2207.17
4	GUIDE	37879824	10.48	12847	-0.103	-0.053	0.153	0.246	187.728661	2.497183	-2048.88	844.91
5	GUIDE	36965296	9.09	12856	0.054	-0.045	0.068	0.115	186.926292	1.837429	1327.05	-759.91
6	GUIDE	36965816	9.27	12852	0.013	-0.011	0.082	0.131	186.823353	1.771455	1699.53	-994.53
7	GUIDE	37356352	7.68	12856	-0.253	-0.073	0.058	0.089	187.433784	2.618460	-1993.78	-300.94

2.4 Star Slots

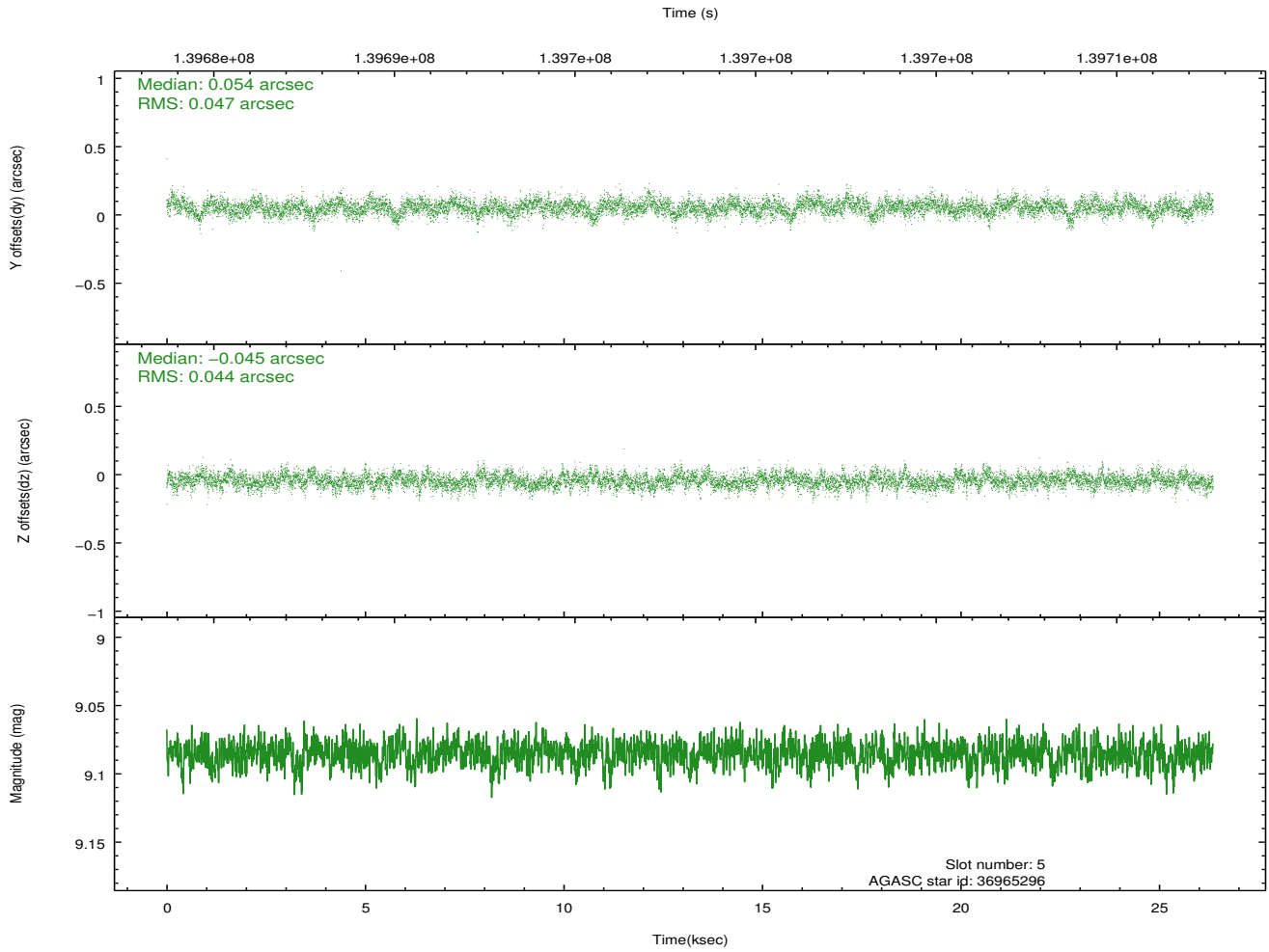
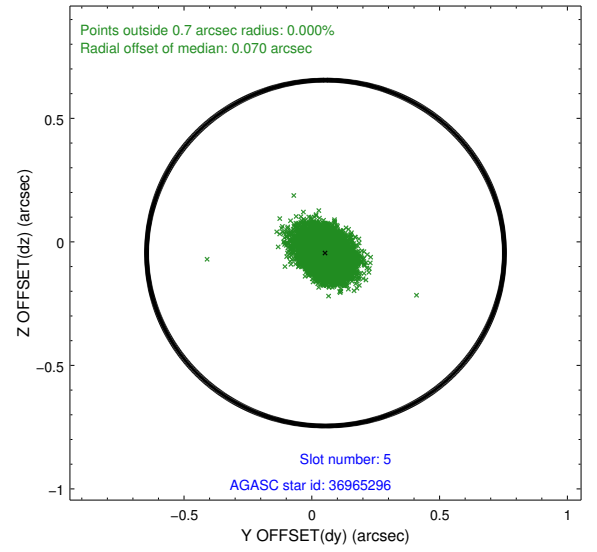
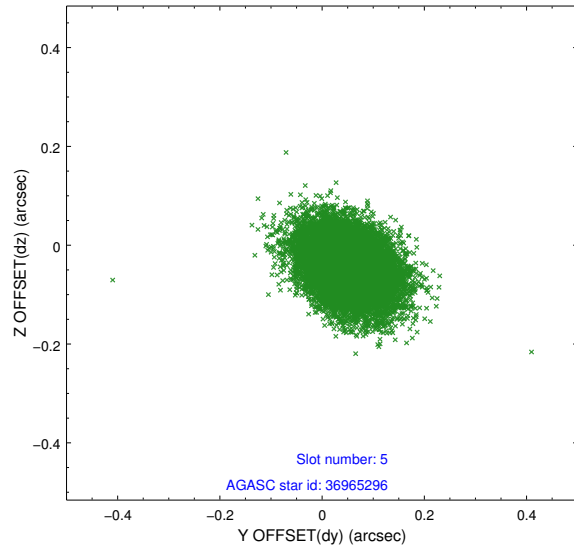
2.4.1 Slot 3



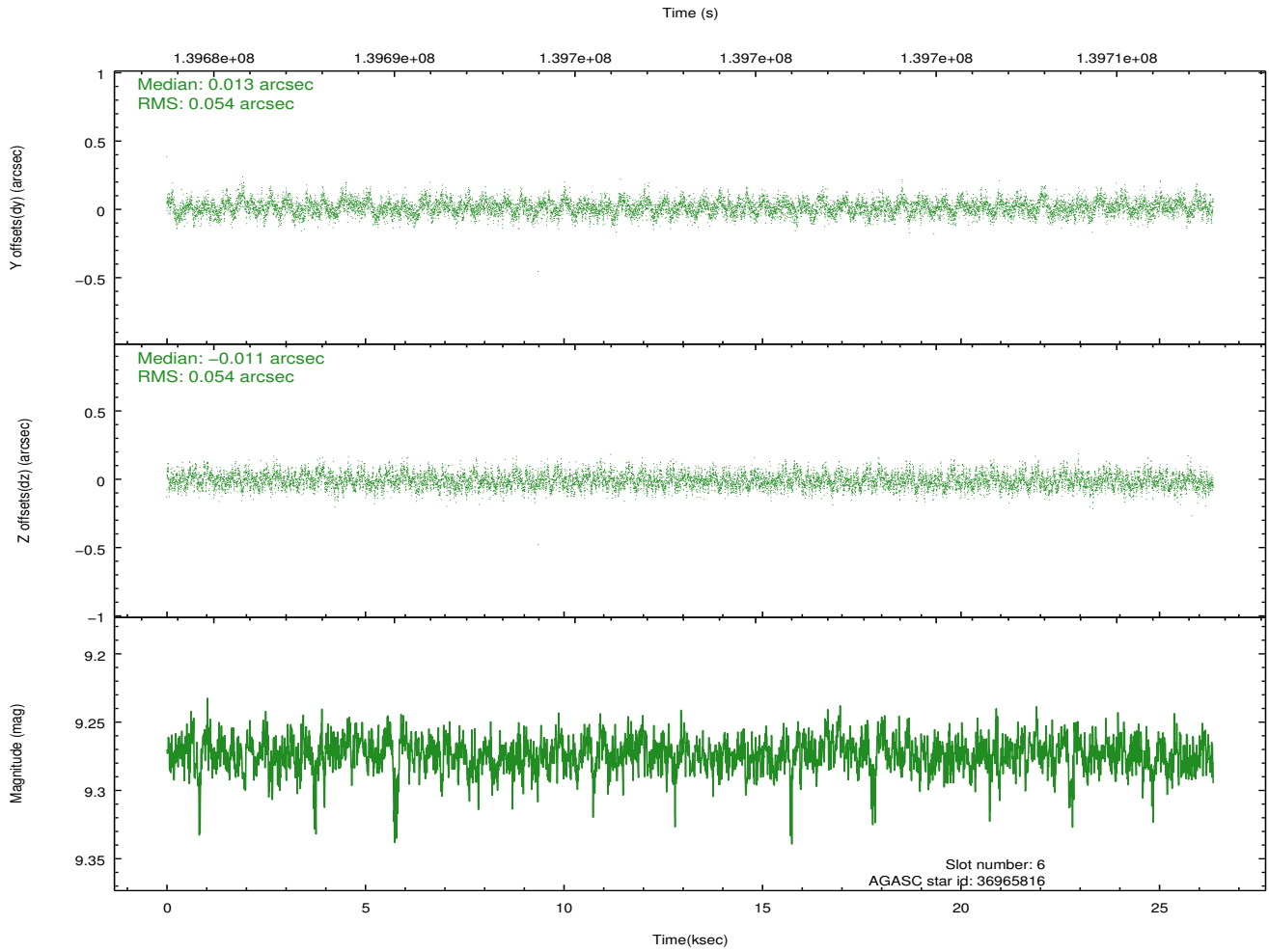
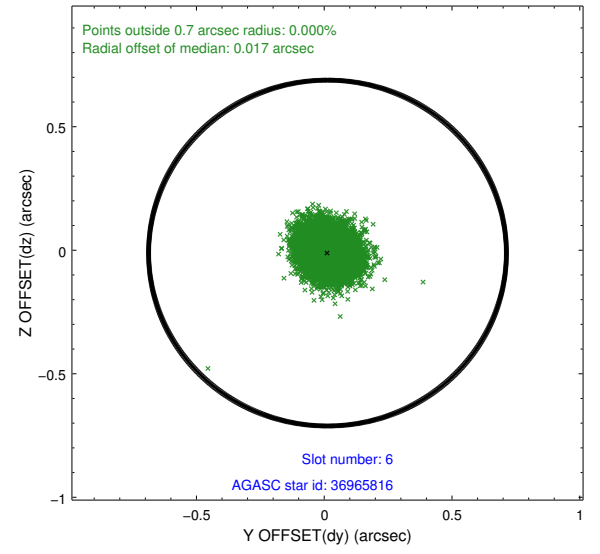
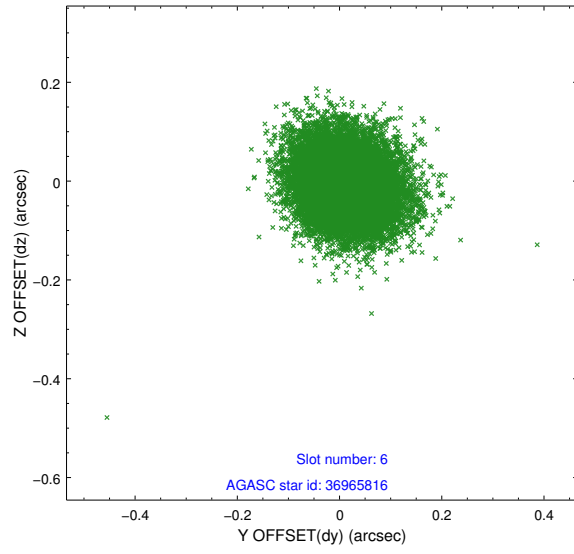
2.4.2 Slot 4



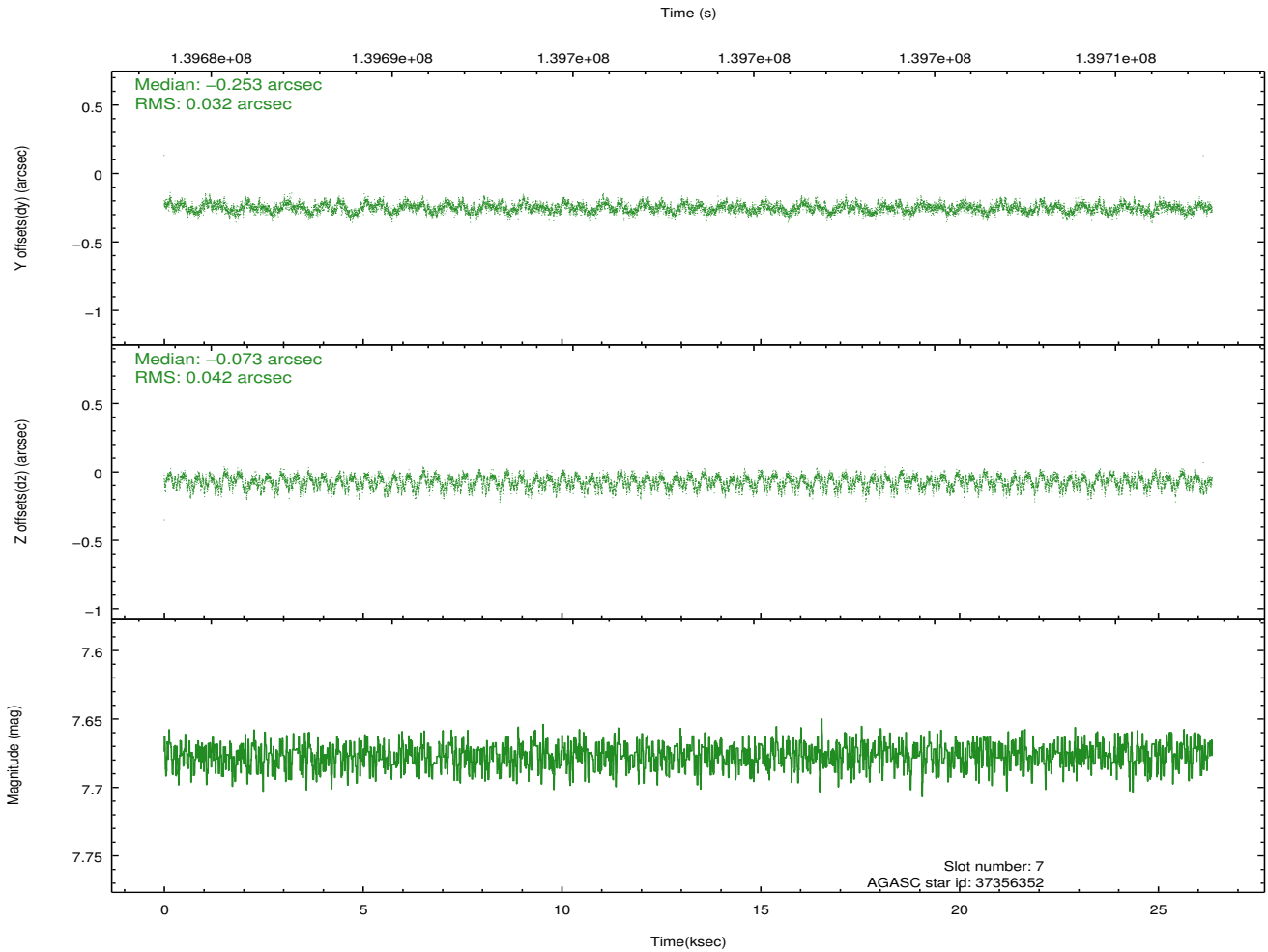
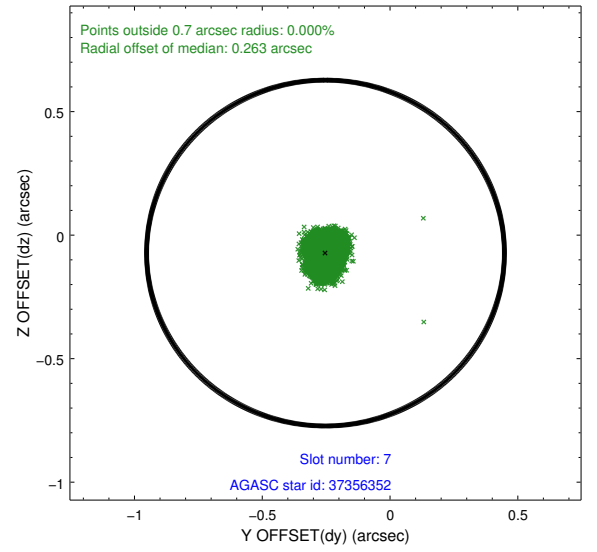
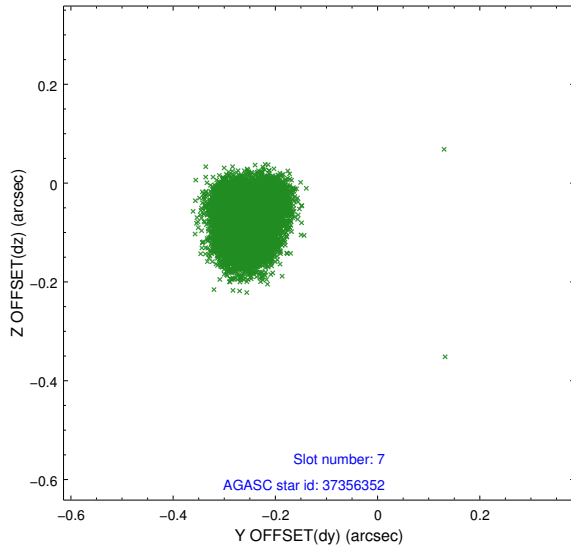
2.4.3 Slot 5



2.4.4 Slot 6

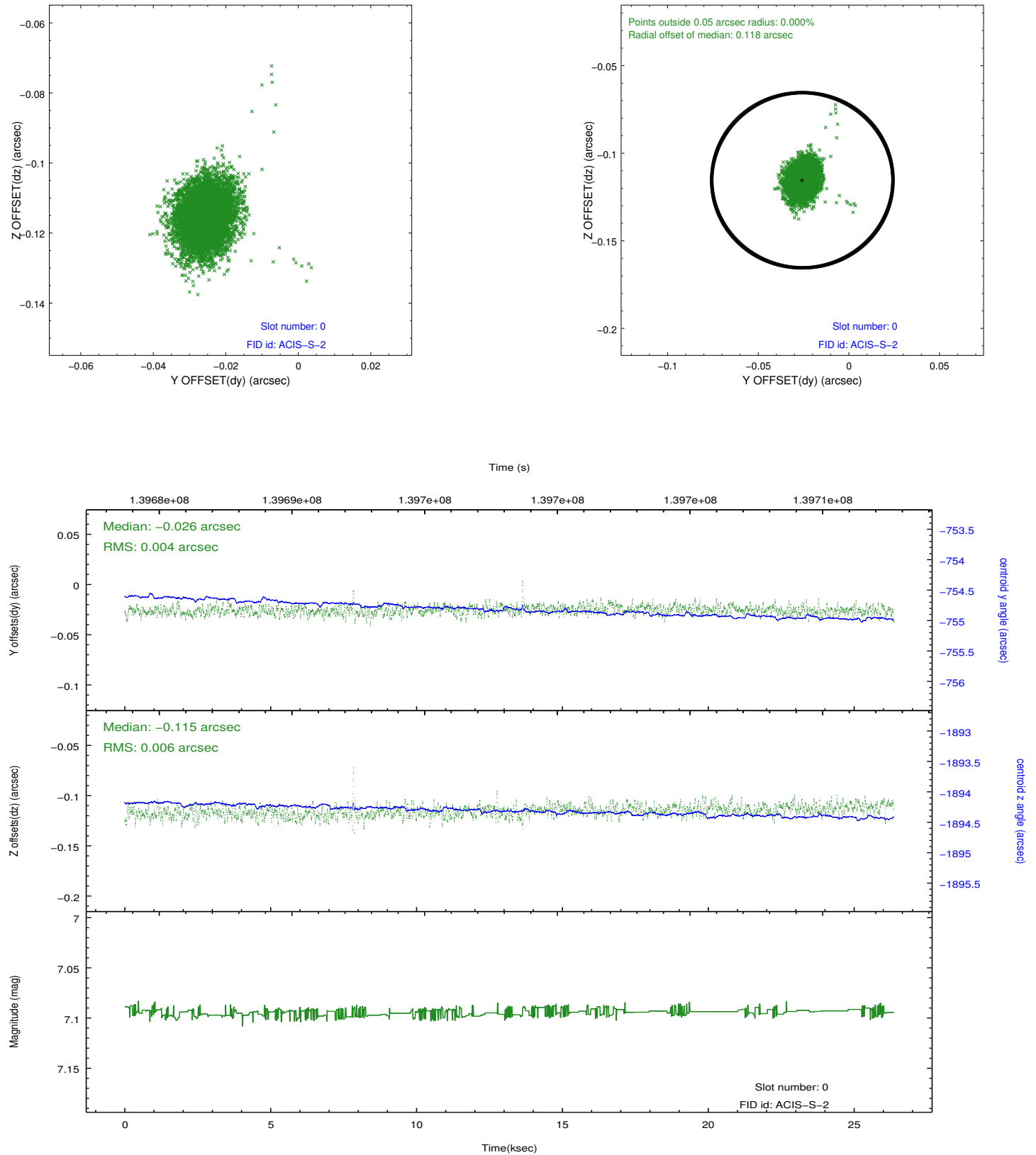


2.4.5 Slot 7

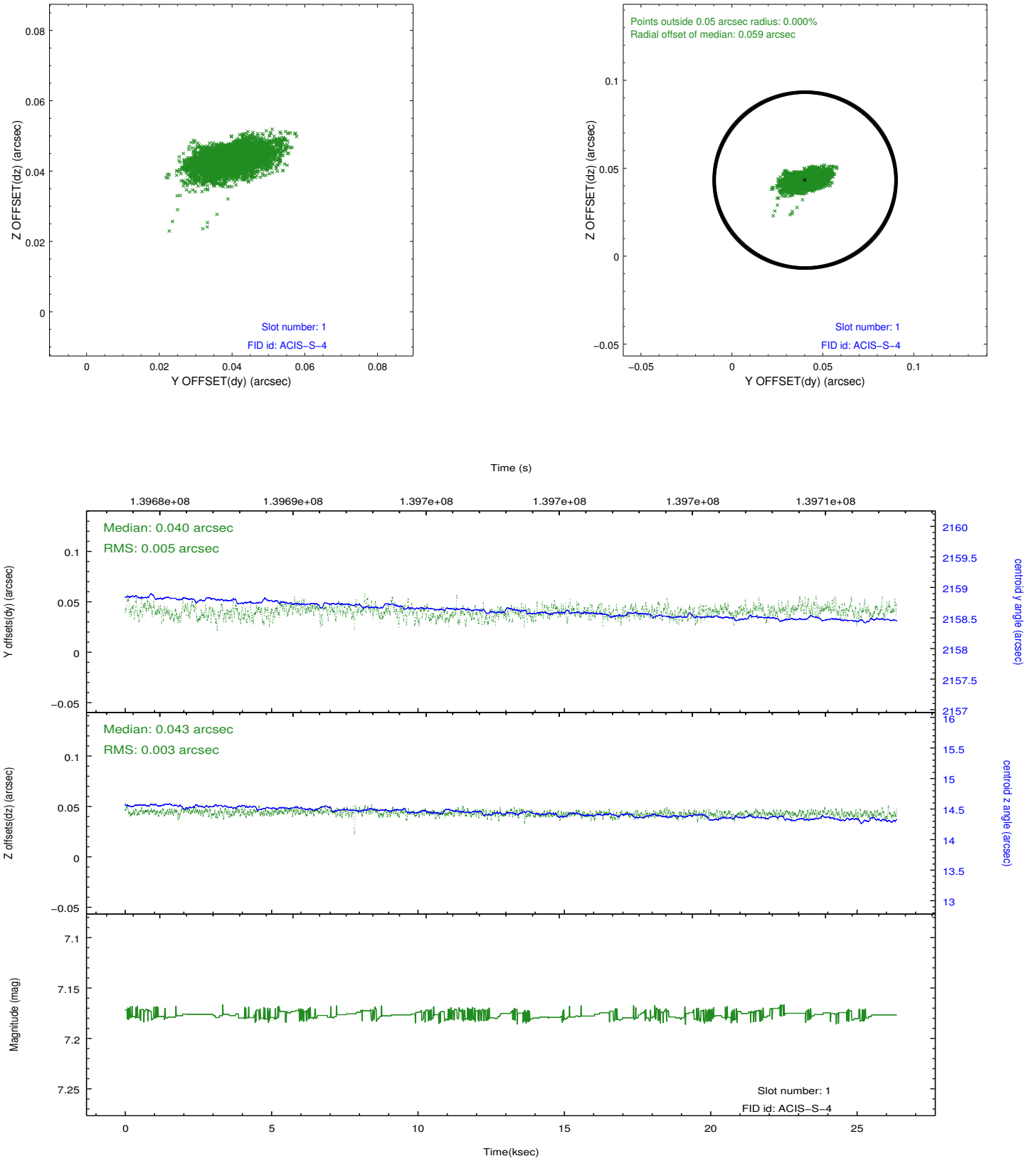


2.5 FID Slots

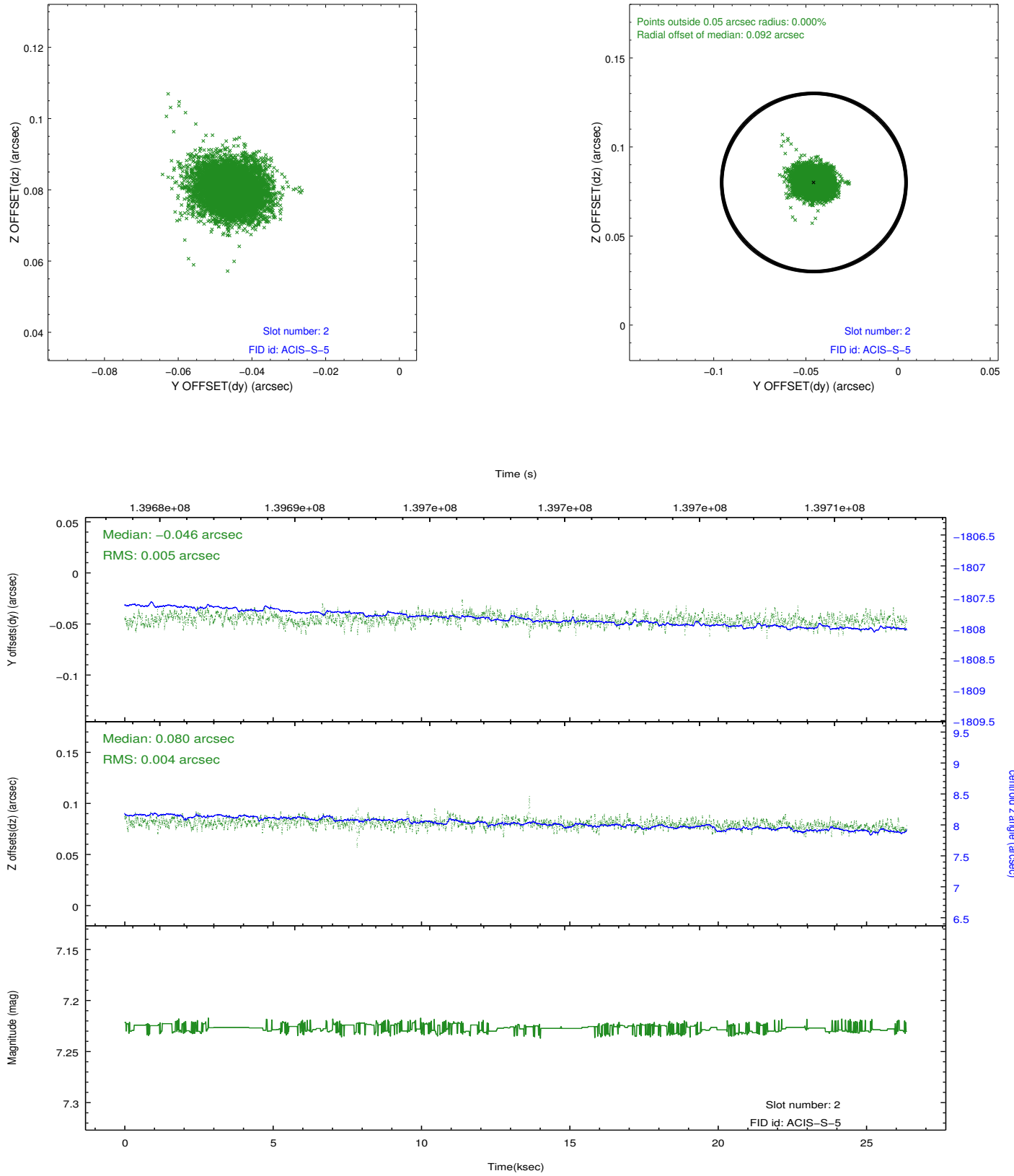
2.5.1 Slot 0



2.5.2 Slot 1

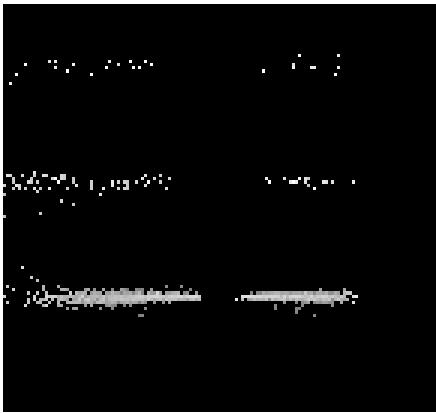


2.5.3 Slot 2

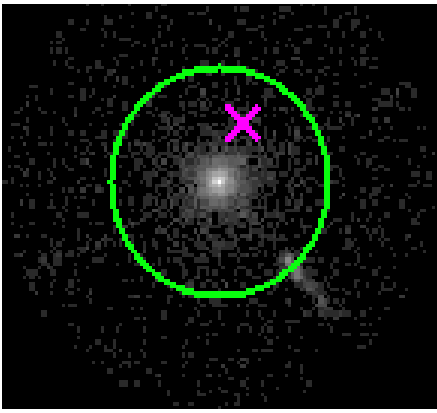


3 Gratings

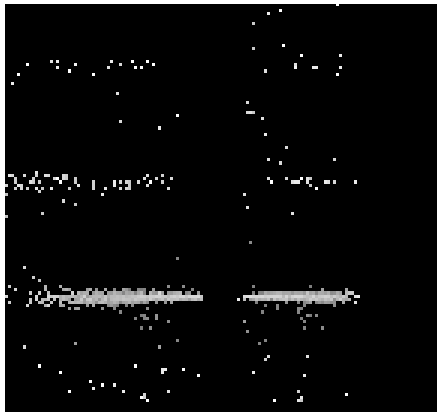
3.1 HEG Arm



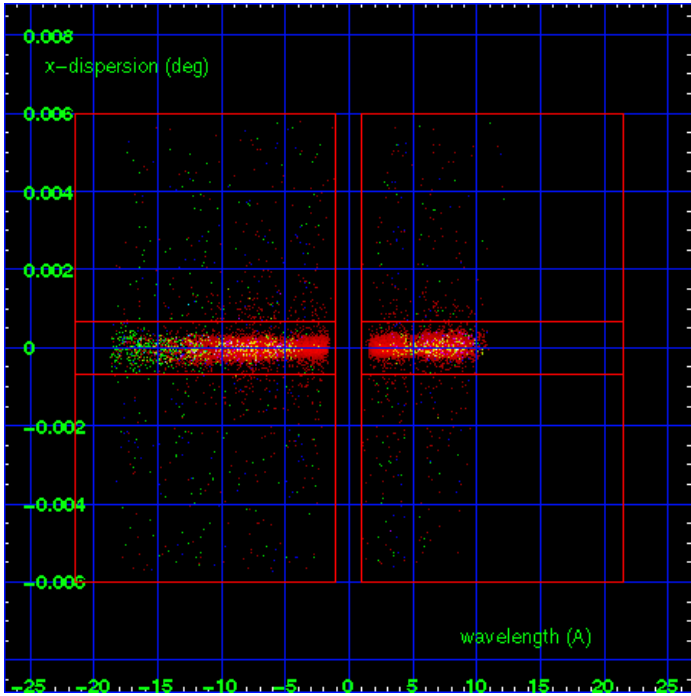
HEG Order Sort 123



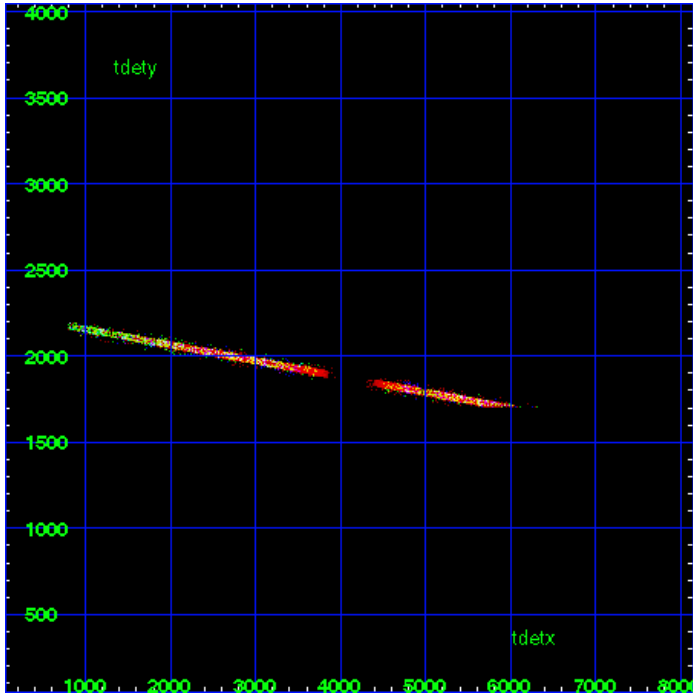
HEG Zero Order



HEG Order Sort ALL

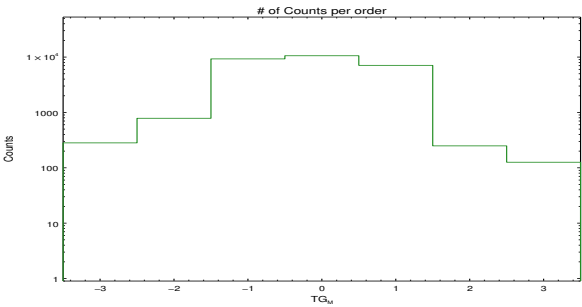


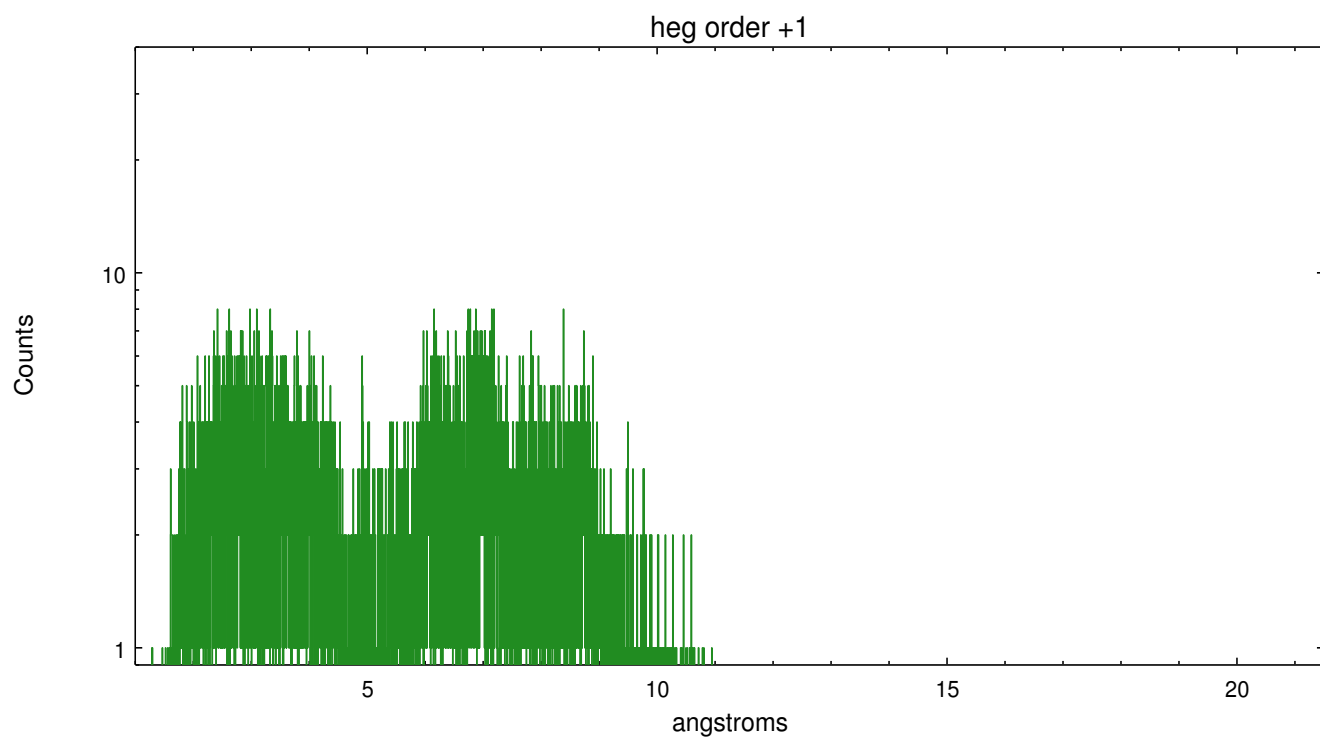
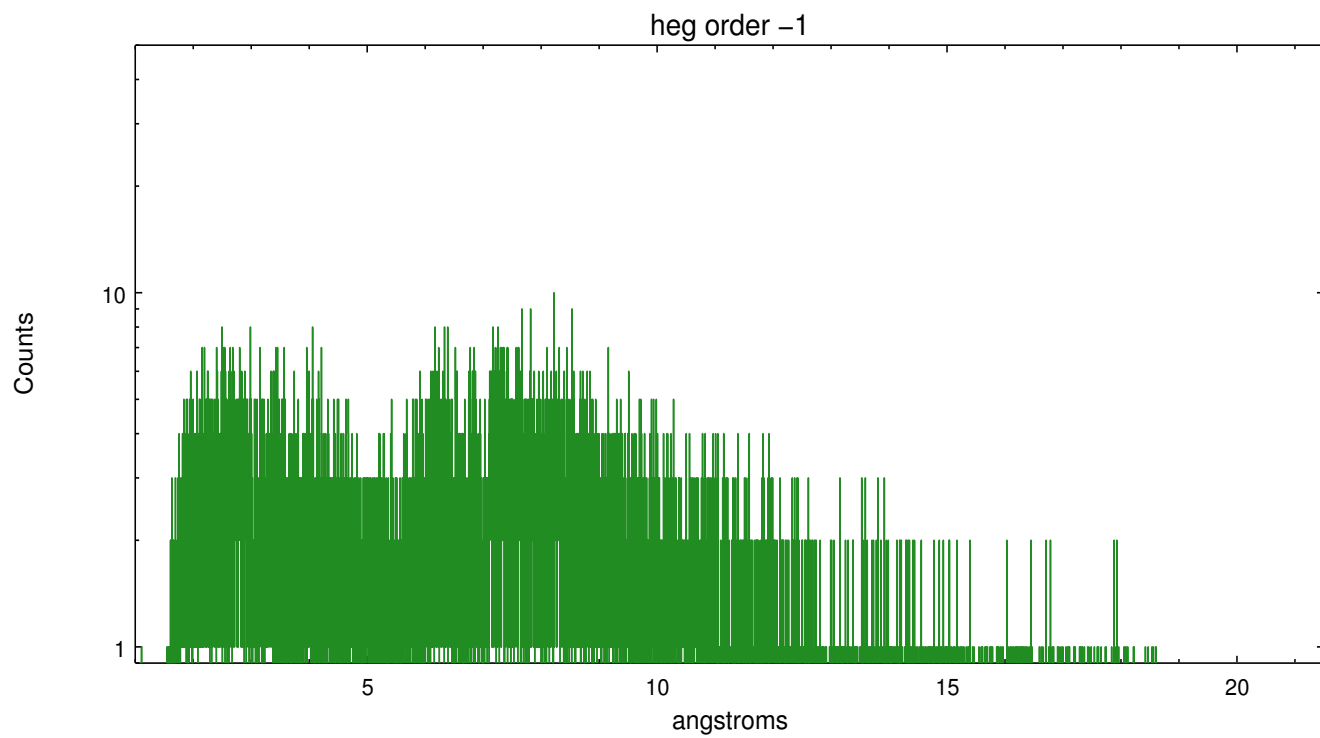
Spot Image HEG



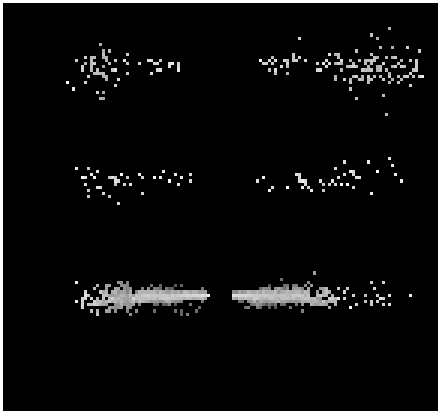
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	282	784	9273	10573	7087	249	126

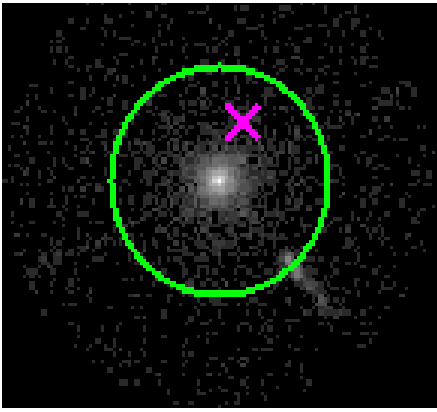




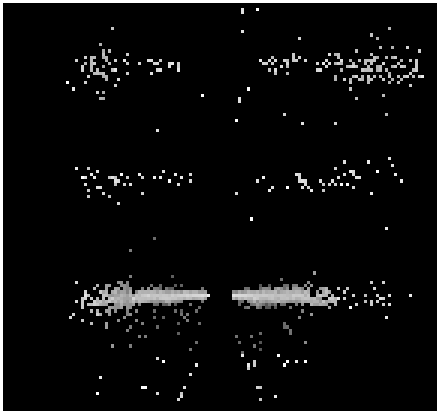
3.2 MEG Arm



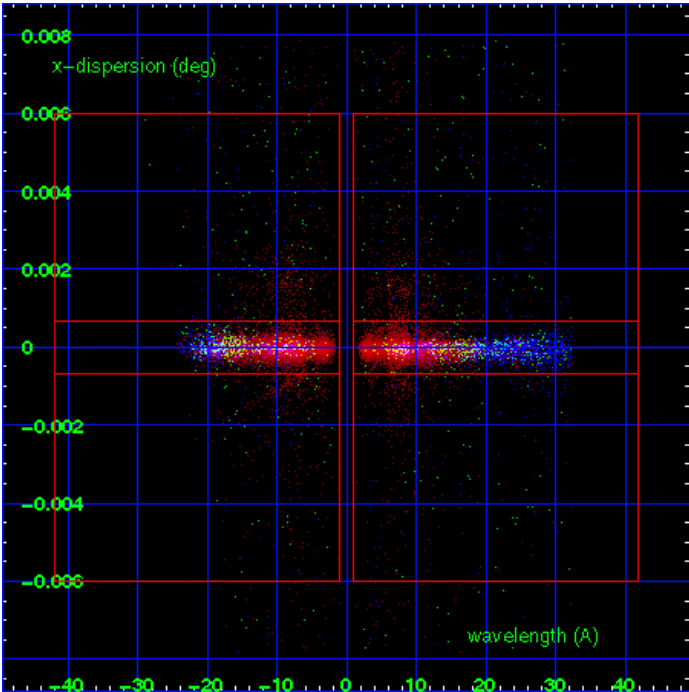
MEG Order Sort 123



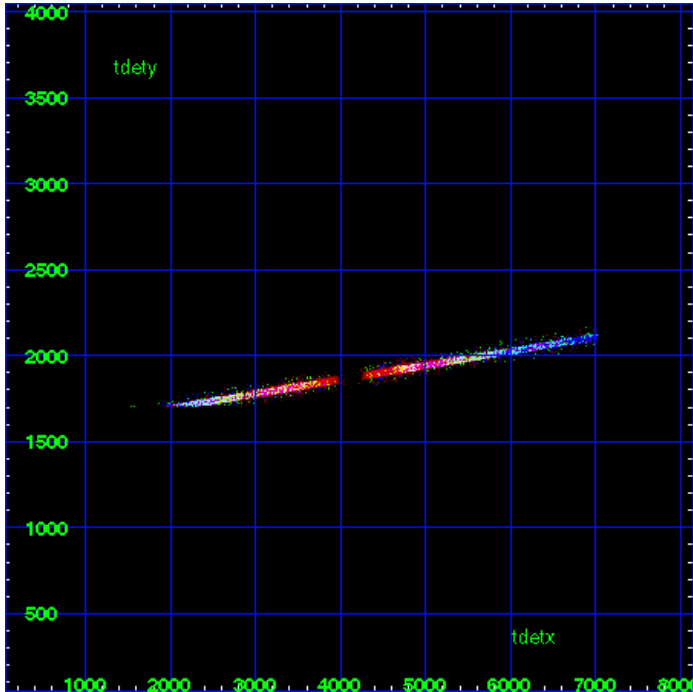
MEG Zero Order



MEG Order Sort ALL

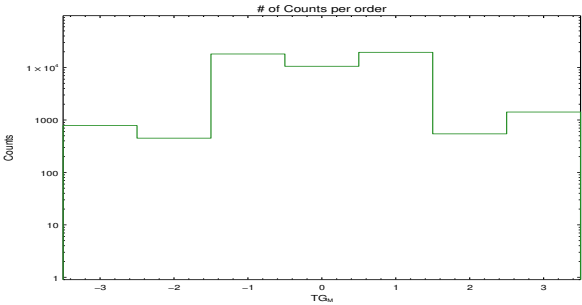


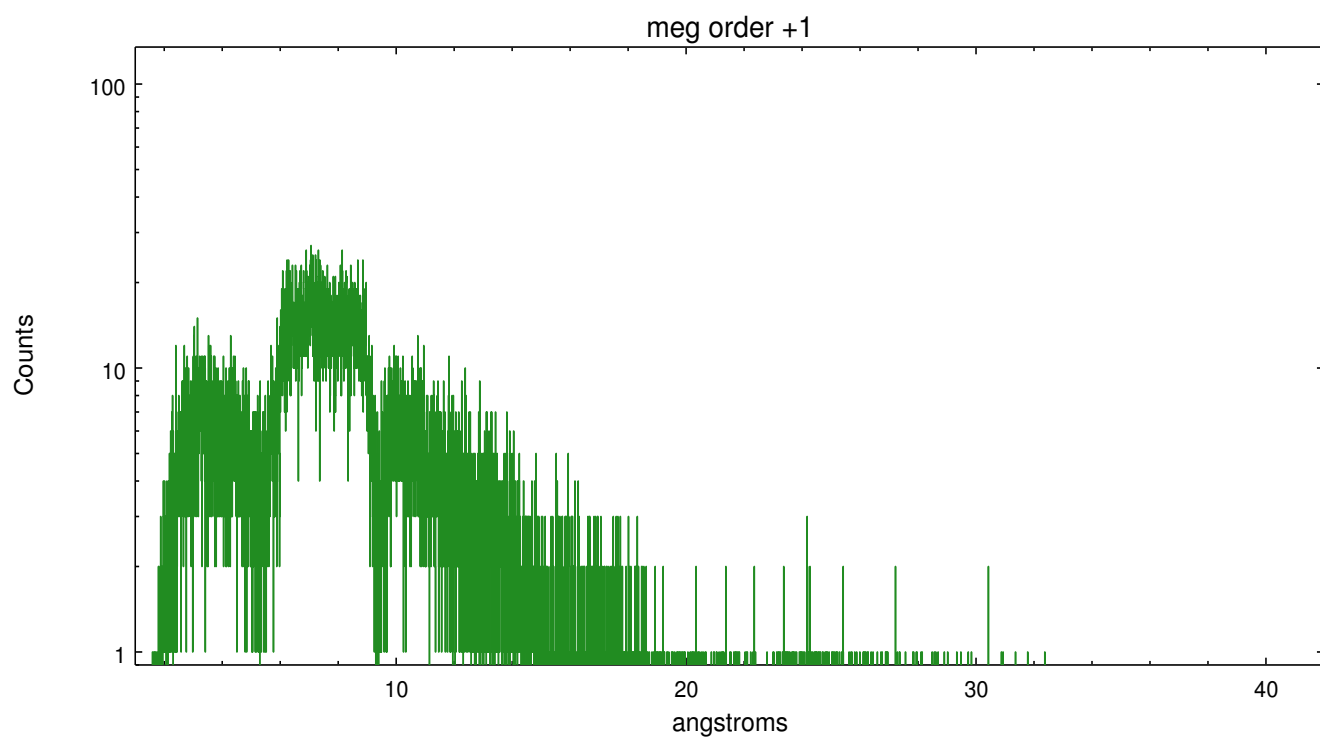
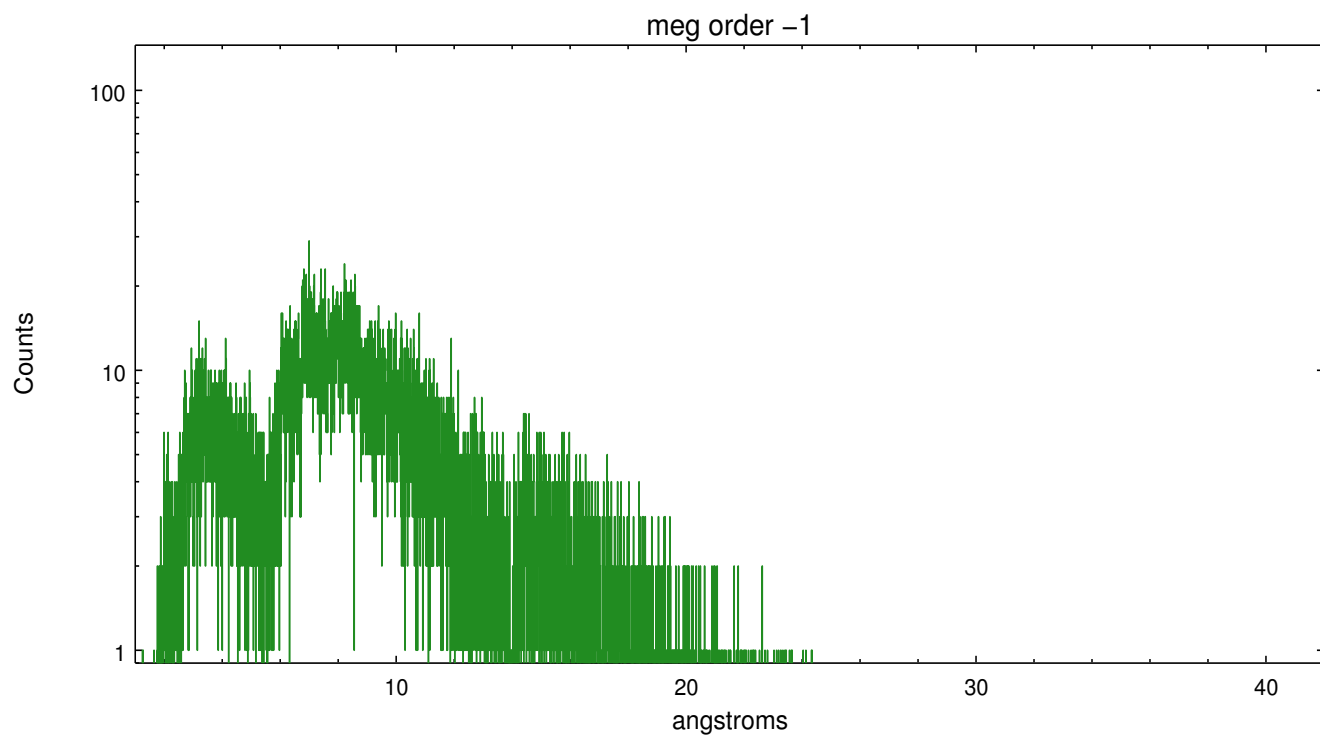
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	782	450	18157	10573	19514	544	1418





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.38

A.2 Comments

Source placed off-center on the CCD chip. Dispersed spectral arms for positive heg and negative meg are truncated by this placement.