

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4553 - L2 Version 3
Chandra X-Ray Center

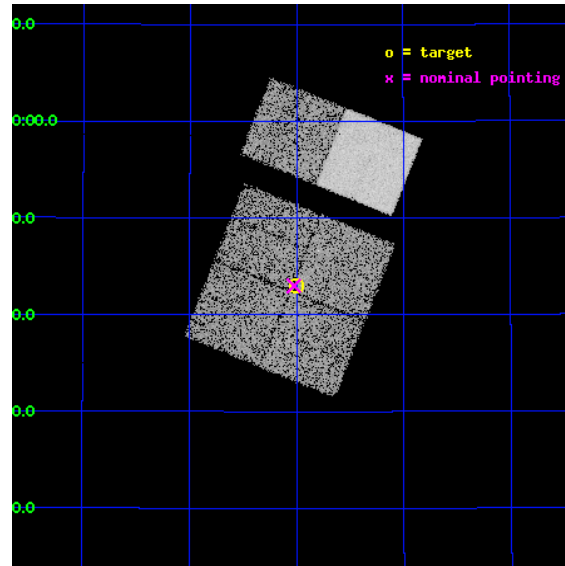
L2 Processing Date : Nov 11 2012

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1 Front

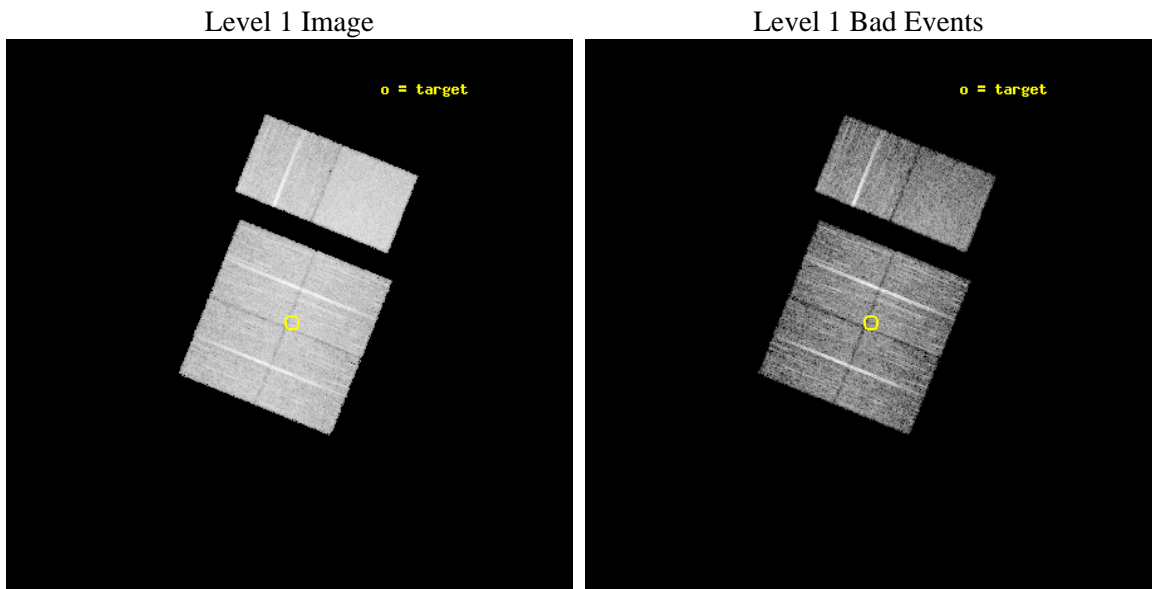
seq_num	400336	Sequence number
obs_id	4553	Observation id
title	Precise Localization of GRO J2058+42	Proposal title
observer	Dr. C. Wilson-Hodge	Principal investigator
object	GRO J2058+42	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	314.75	Observer's specified target RA [deg]
dec_targ	41.716667	Observer's specified target Dec [deg]
ra_nom	314.75616940113	Nominal RA [deg]
dec_nom	41.716626317267	Nominal Dec [deg]
roll_nom	21.919287502059	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10027.865264028	Sum of GTIs [s]
livetime	9900.8863959996	Livetime [s]
ontime0	10027.742144048	Sum of GTIs [s]
ontime1	10027.783184022	Sum of GTIs [s]
ontime2	10027.824224025	Sum of GTIs [s]
ontime3	10027.865264028	Sum of GTIs [s]
ontime6	10027.947344035	Sum of GTIs [s]
ontime7	10027.906304032	Sum of GTIs [s]
l2events	68969	Number of level 2 events



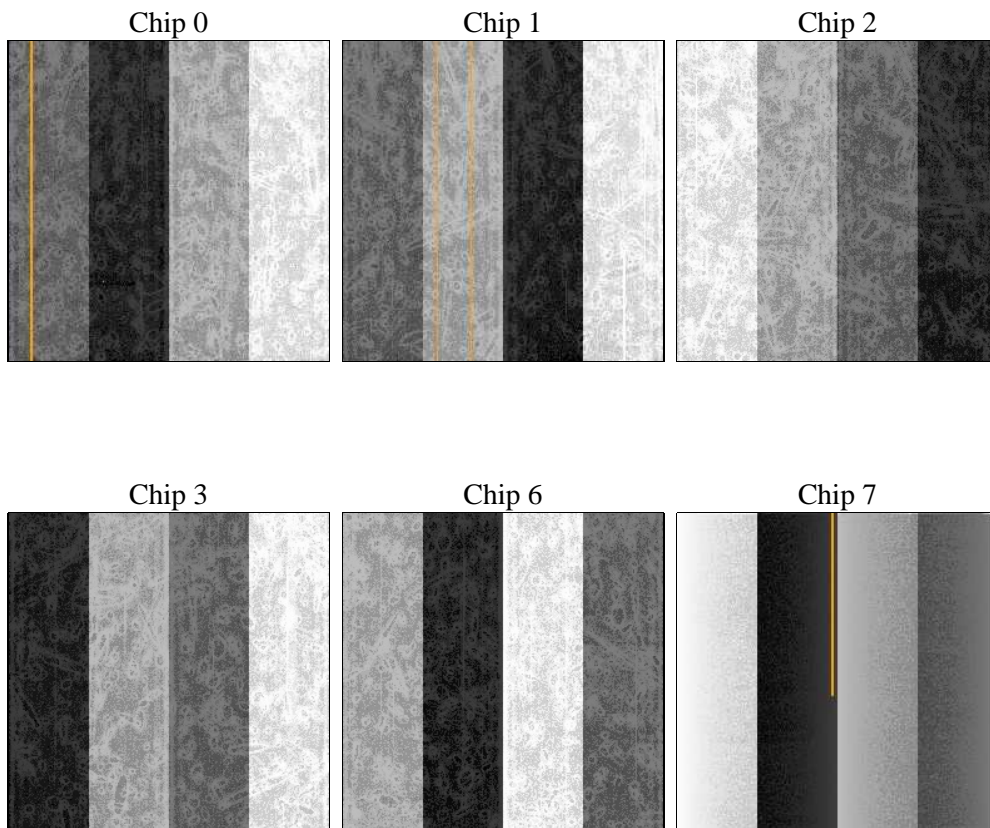
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10027.865264028	Sum of GTIs [s]
caldsver	4.5.2	 	ontime0	10027.742144048	Sum of GTIs [s]
date	2012-11-11T23:54:16	Date and time of file creation	ontime1	10027.783184022	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10027.824224025	Sum of GTIs [s]
			ontime3	10027.865264028	Sum of GTIs [s]
			ontime6	10027.947344035	Sum of GTIs [s]
			ontime7	10027.906304032	Sum of GTIs [s]
			l1events	414103	Number of level 1 events

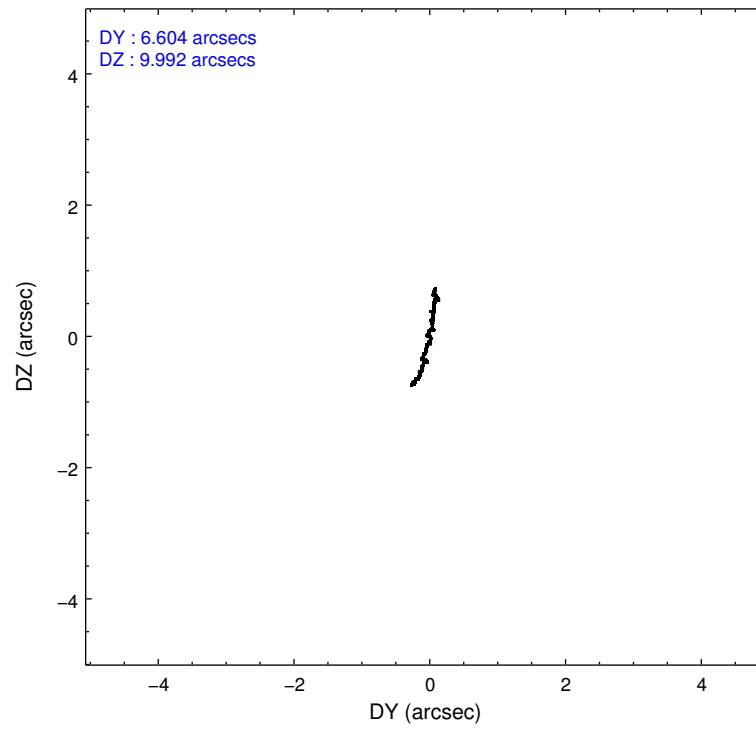
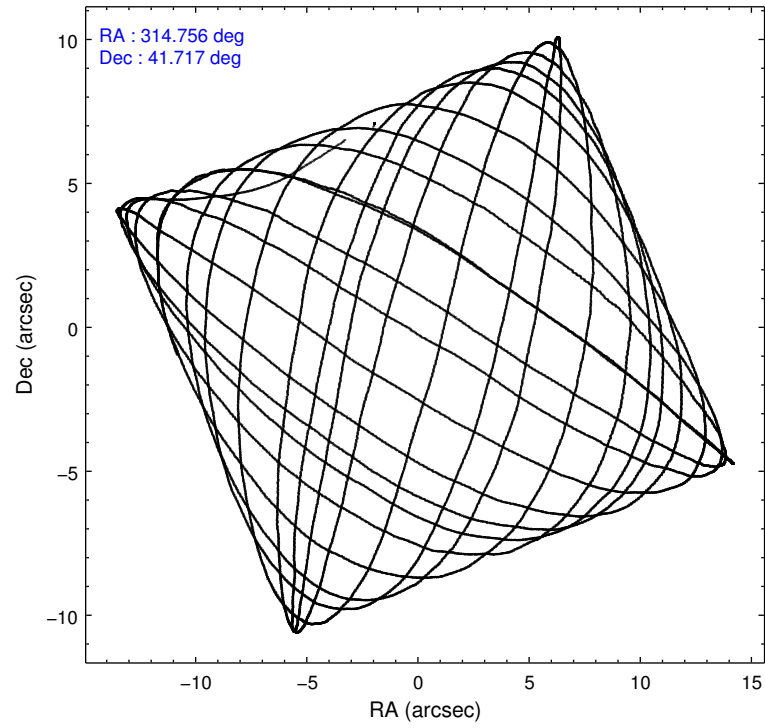
2.1.4 Events

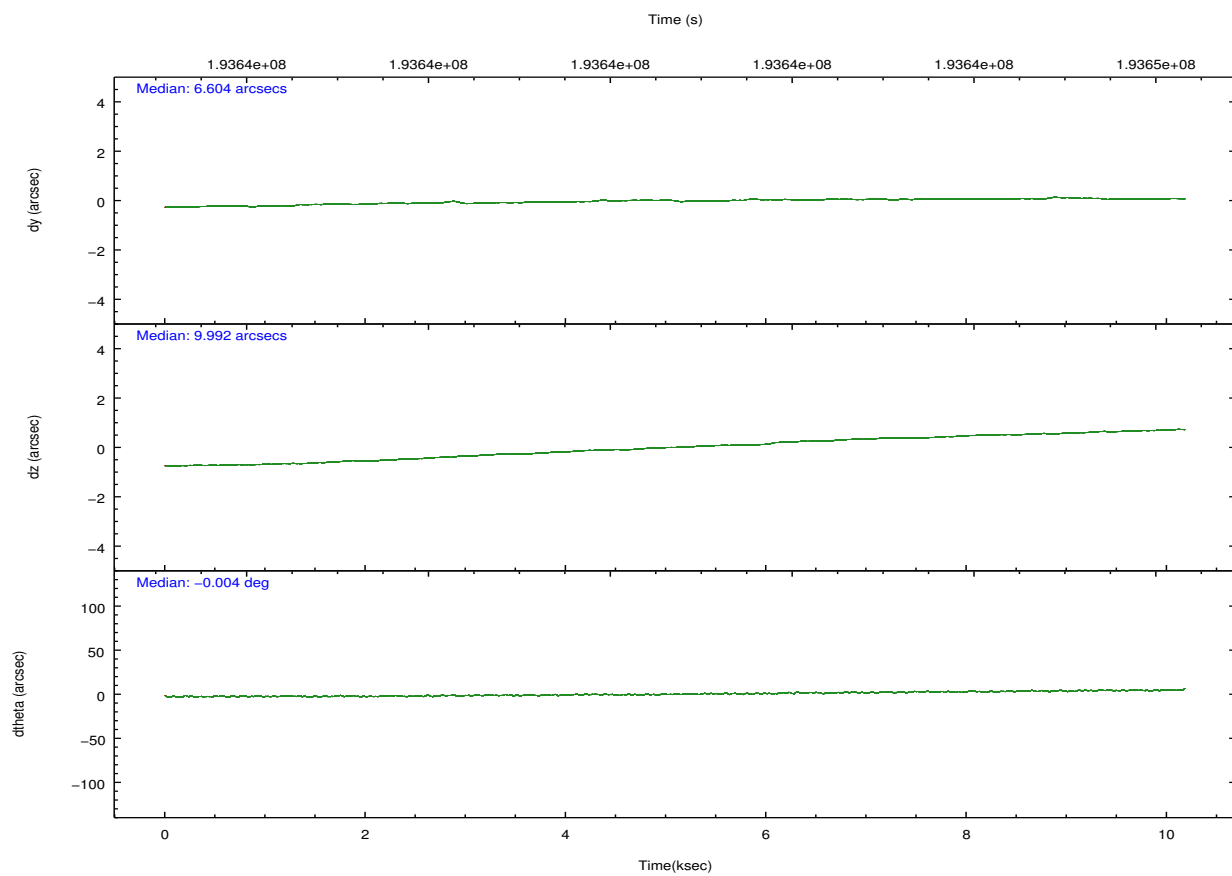
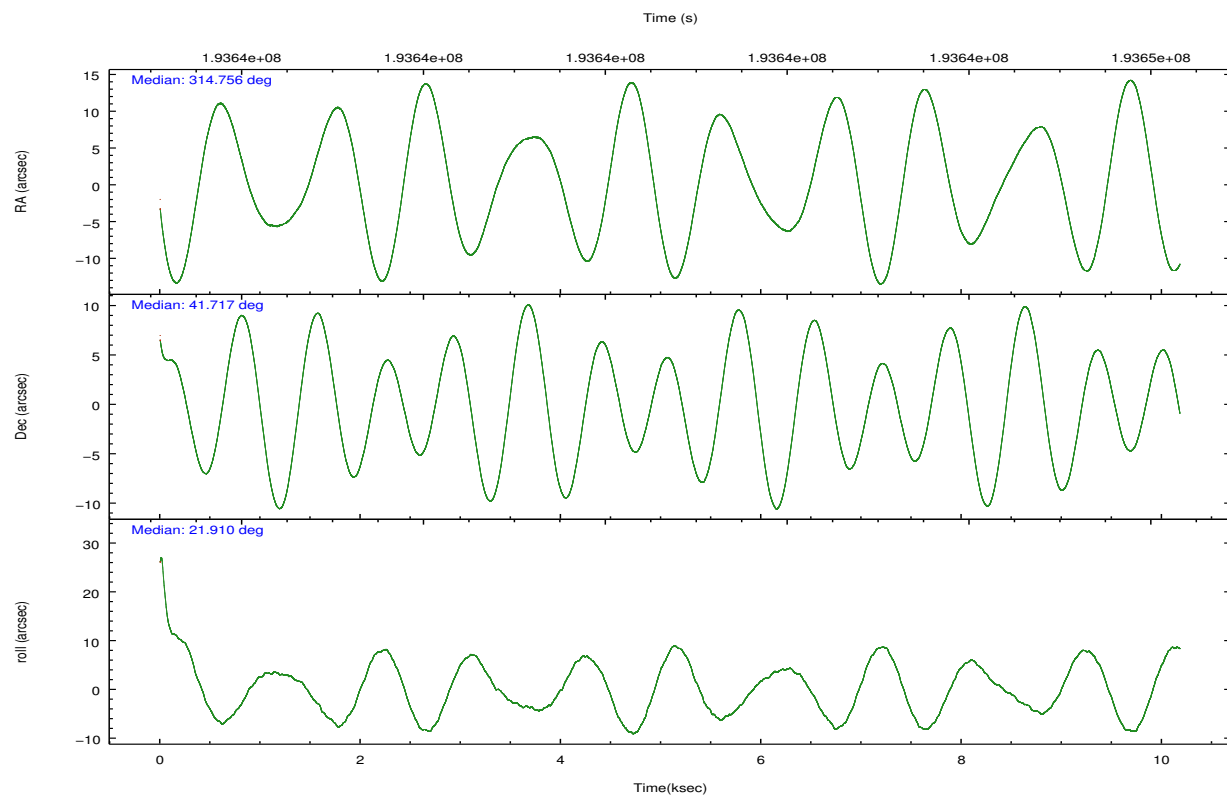
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	59485	60992	67768	68440	67567	89851	grade 0 events	3215	3066	3256	3222	2869	3069
rejected events	51678	52990	60233	60860	59728	53373		5%	5%	4%	4%	4%	3%
rejected %	86%	86%	88%	88%	88%	59%	grade 1 events	31	27	48	36	31	91
								0%	0%	0%	0%	0%	0%
							grade 2 events	1611	1767	1542	1482	1707	7186
								2%	2%	2%	2%	2%	7%
							grade 3 events	772	802	738	723	792	3239
								1%	1%	1%	1%	1%	3%
							grade 4 events	759	796	715	757	775	3219
								1%	1%	1%	1%	1%	3%
							grade 5 events	2694	2819	2631	2926	3228	8478
								4%	4%	3%	4%	4%	9%
							grade 6 events	1456	1579	1291	1398	1701	19791
								2%	2%	1%	2%	2%	22%
							grade 7 events	48947	50136	57547	57896	56464	44778
								82%	82%	84%	84%	83%	49%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	314.733706	314.7561694011256	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.694963	41.71662631726699	Alternating exposures requested	N	N
[deg] Pointing Roll	21.725530	21.91928750205922	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
Phase constraints	Y	Y			
[d] Phase period	55.030000	55.030000			
[d] Phase epoch (MJD)	52667.530000	52667.530000			
Phase start	0.900000	0.900000			
Phase end	0.110000	0.110000			
Phase start error	0.020000	0.020000			
Phase end error	0.020000	0.020000			
[s] Observation start time (MET)	193635801.184000	193634674.08704			
Observation start date	2004-02-20T03:42:17	2004-02-20T03:24:34			
[s] Observation end time (MET)	193645801.184000	193647202.66259			
Observation end date	2004-02-20T06:28:57	2004-02-20T06:53:22			
Read mode	TIMED	TIMED			

2.3 Aspect



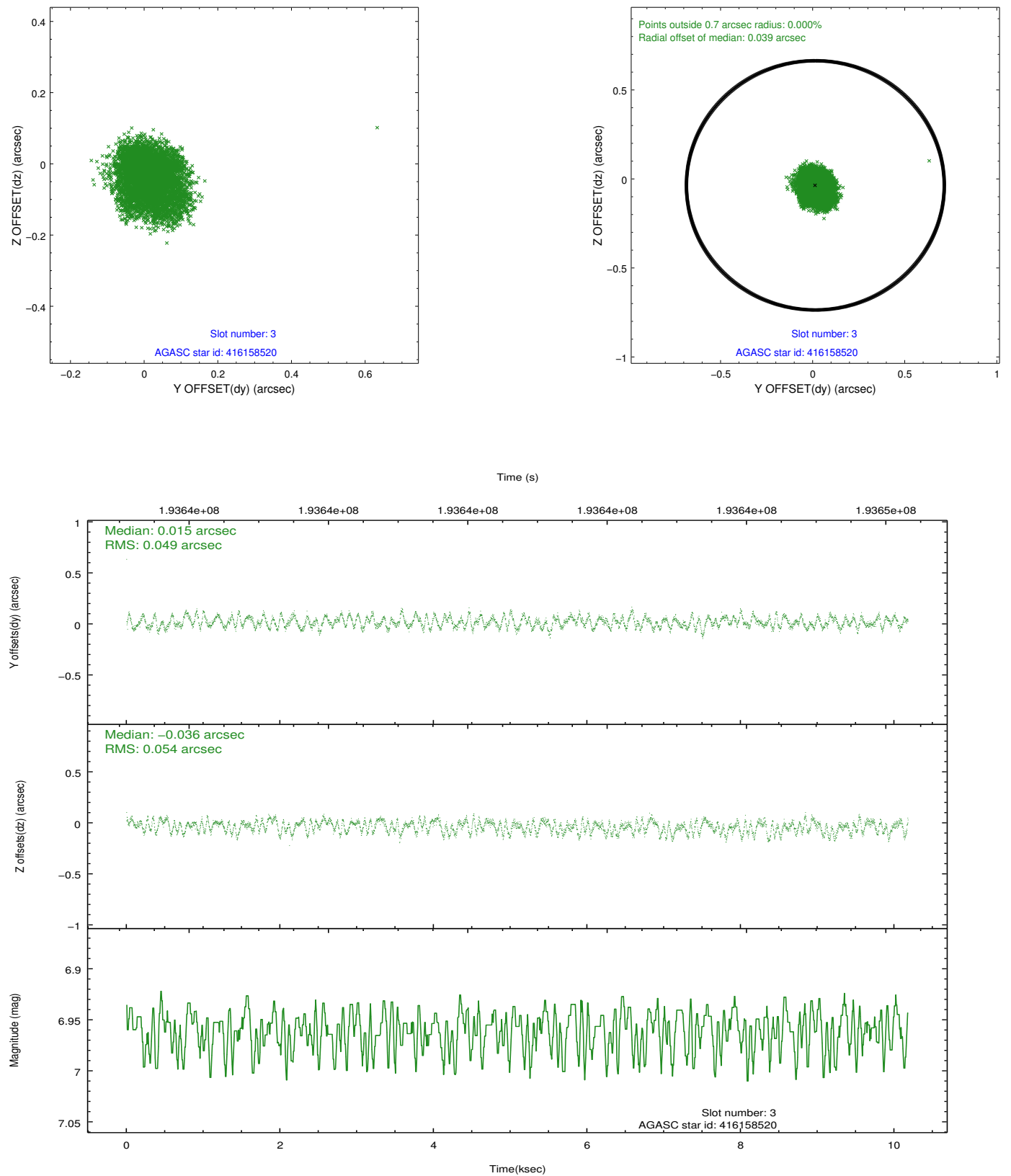


Slot Statistics

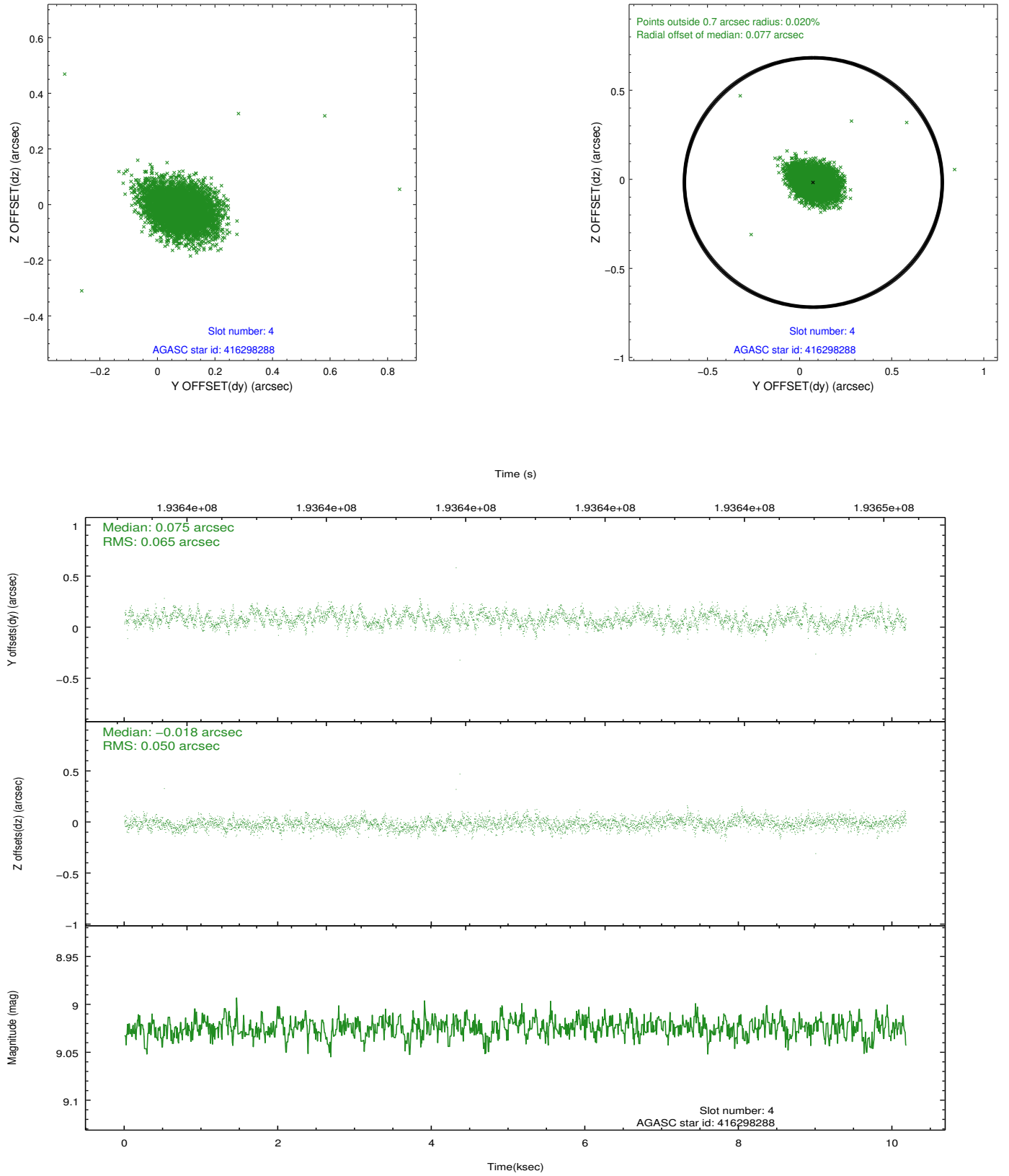
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	2484	0.035	-0.016	0.010	0.018	0.000000	0.000000	933.18	-833.44
1	FID	ACIS-I-5	7.23	2483	-0.053	0.081	0.017	0.030	0.000000	0.000000	-1814.78	1063.82
2	FID	ACIS-I-6	7.24	2484	-0.072	0.005	0.025	0.036	0.000000	0.000000	397.99	1708.89
3	GUIDE	416158520	6.96	4967	0.015	-0.036	0.079	0.121	314.852578	42.324470	1132.95	1988.37
4	GUIDE	416298288	9.02	4964	0.075	-0.018	0.084	0.138	315.665844	41.285867	1803.31	-2288.38
5	GUIDE	416299344	8.99	4967	-0.006	0.128	0.075	0.124	315.621297	41.414225	1857.40	-1814.70
6	GUIDE	415638136	8.86	4966	-0.110	0.075	0.096	0.159	314.508480	40.901228	-1625.83	-2427.59
7	GUIDE	416155792	8.59	4966	0.020	-0.153	0.073	0.117	314.056299	42.197523	-1006.43	2355.18

2.4 Star Slots

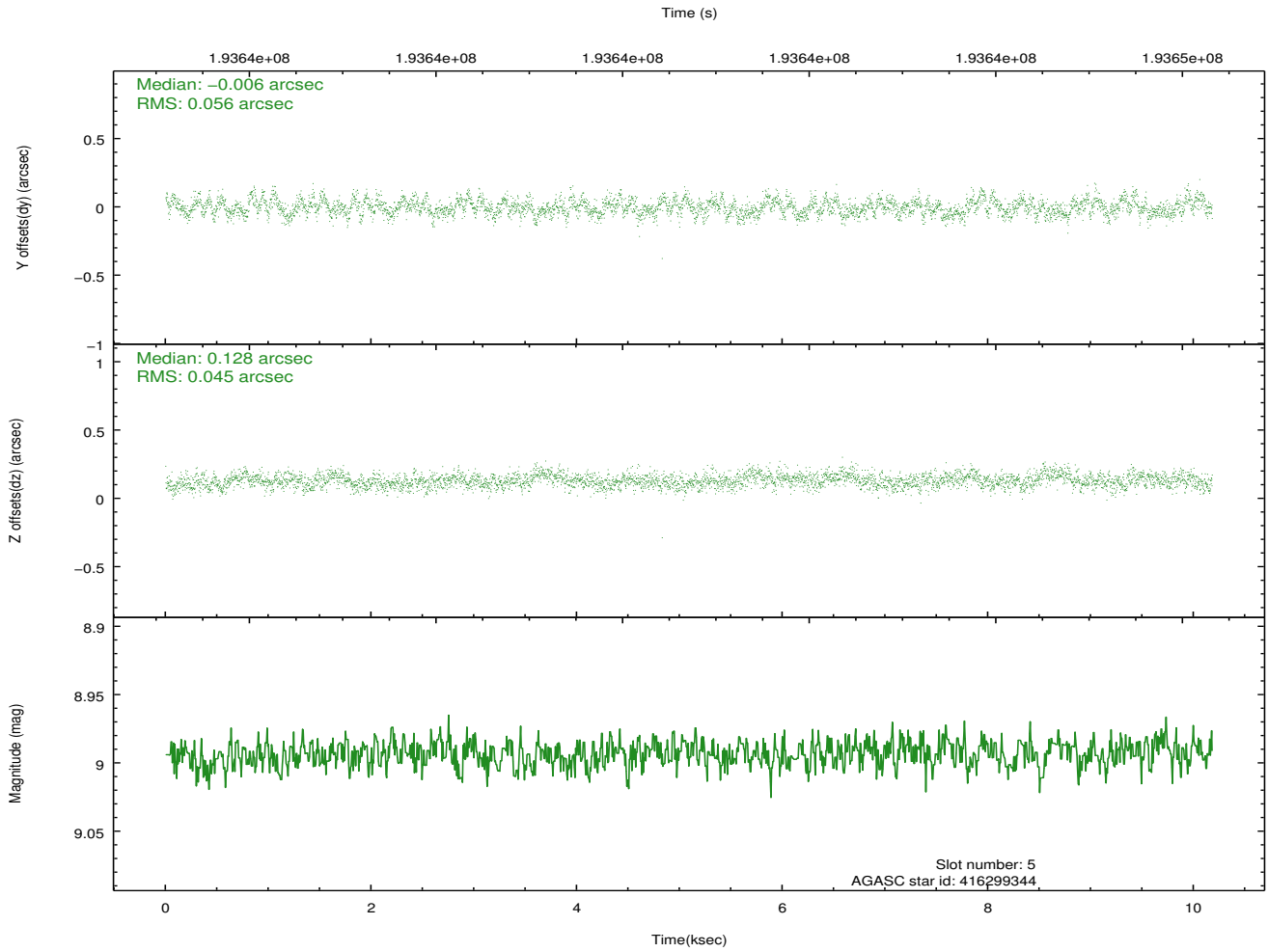
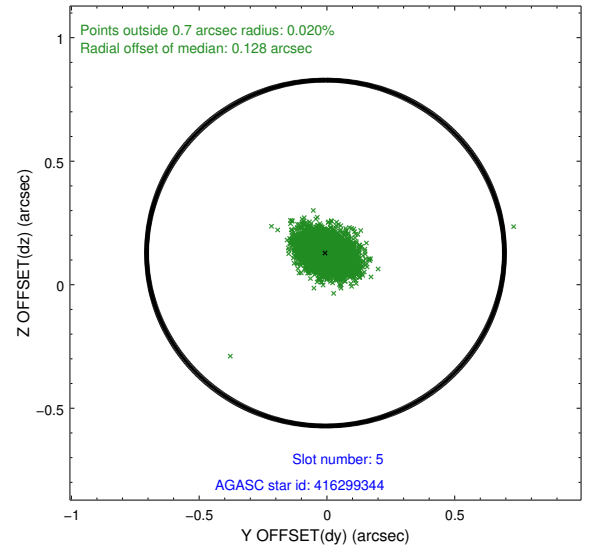
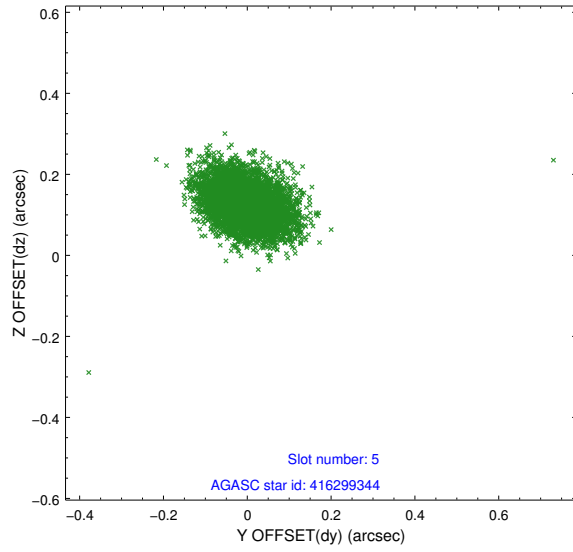
2.4.1 Slot 3



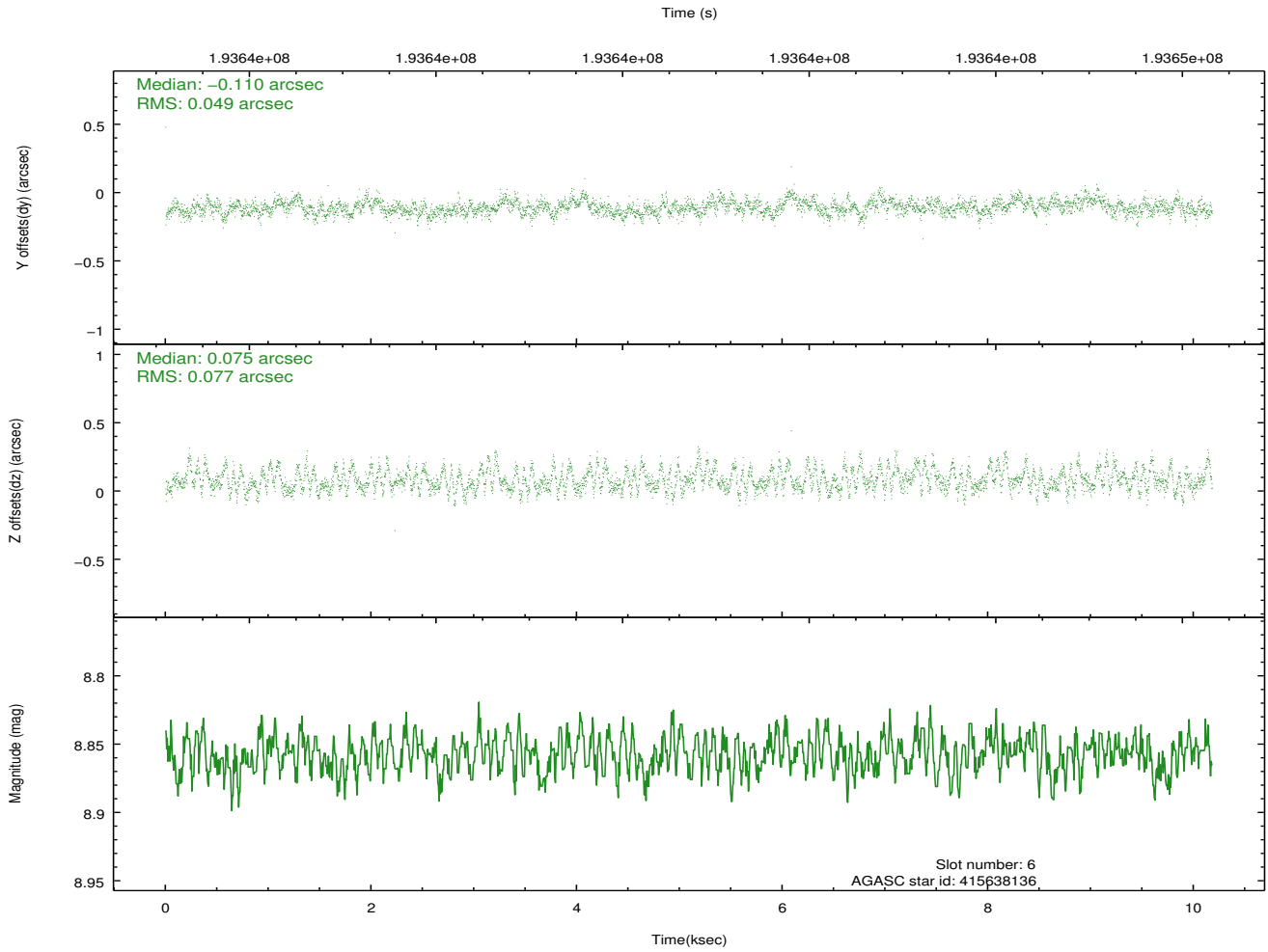
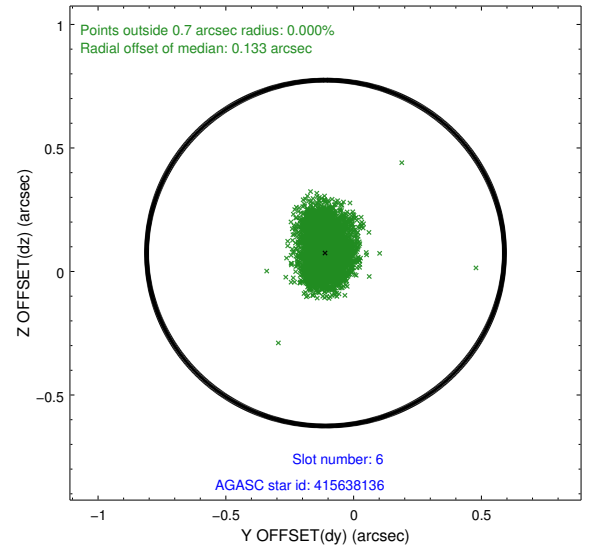
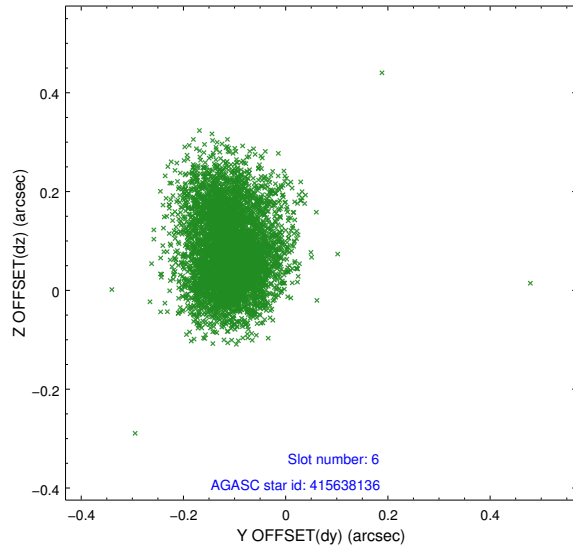
2.4.2 Slot 4



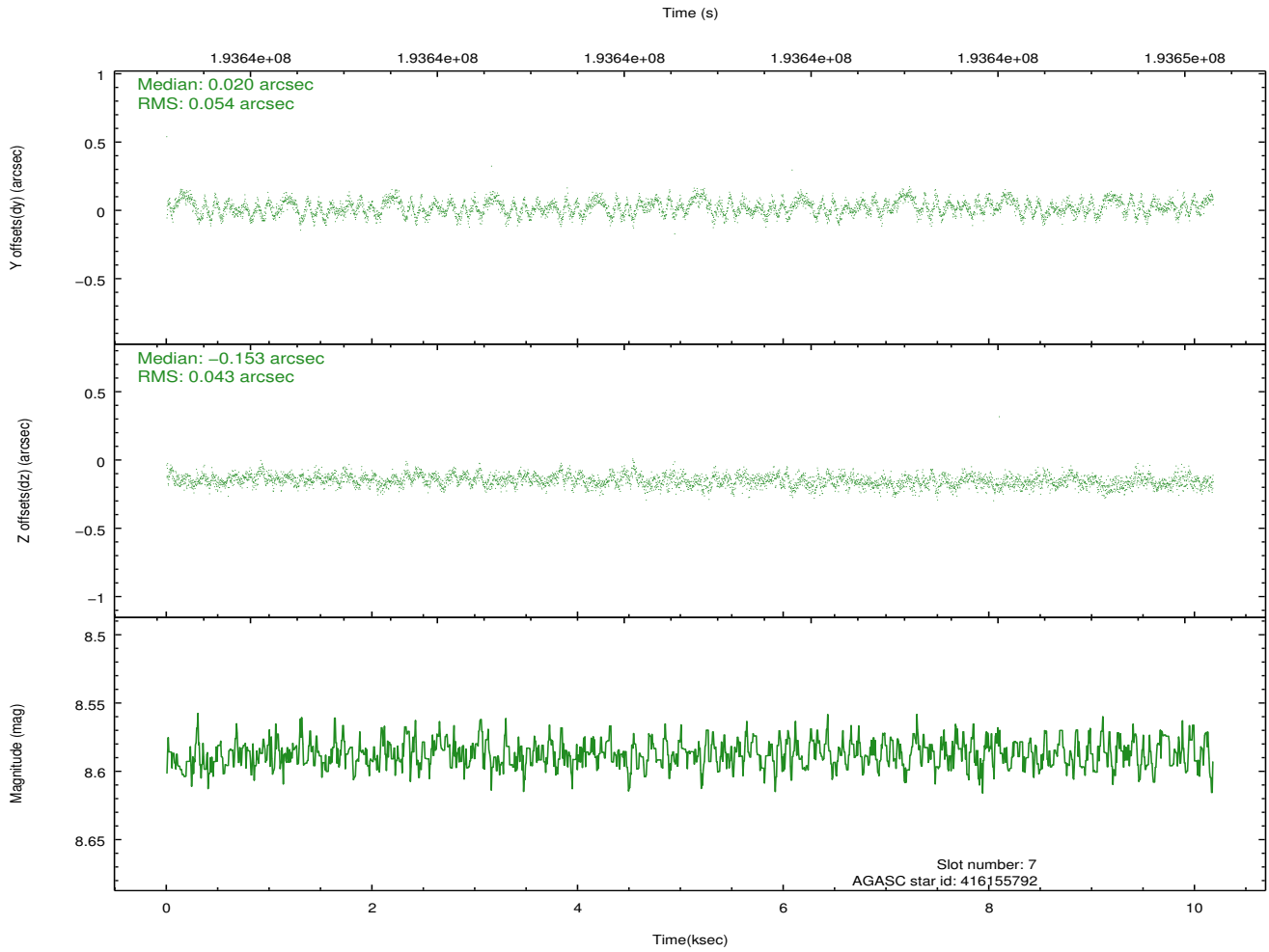
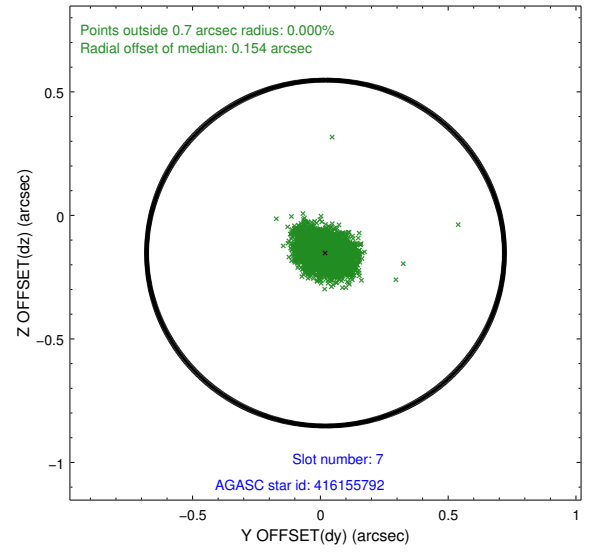
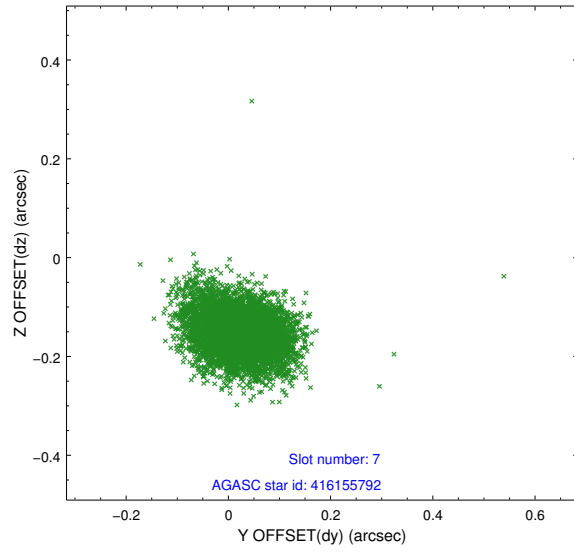
2.4.3 Slot 5



2.4.4 Slot 6

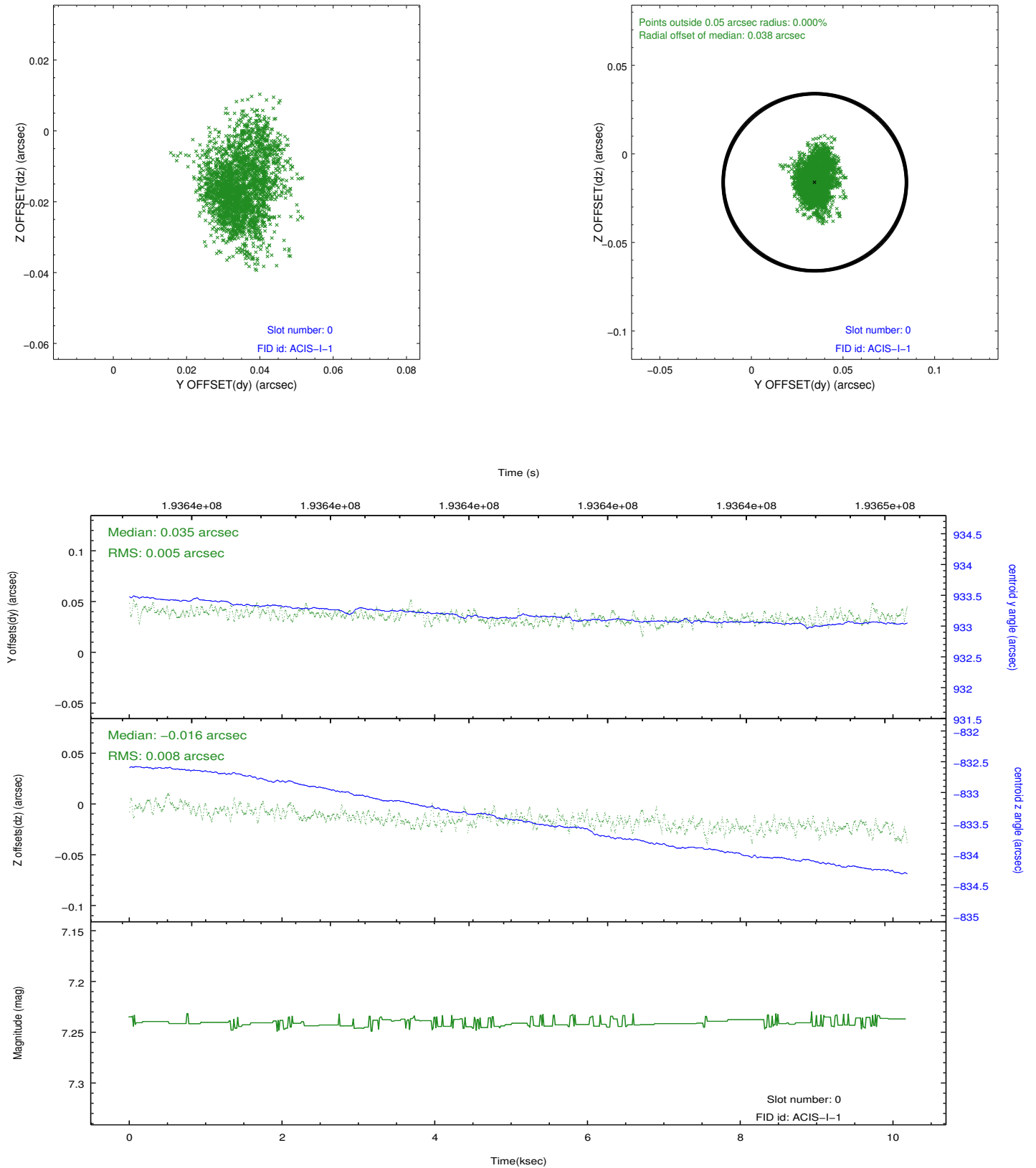


2.4.5 Slot 7

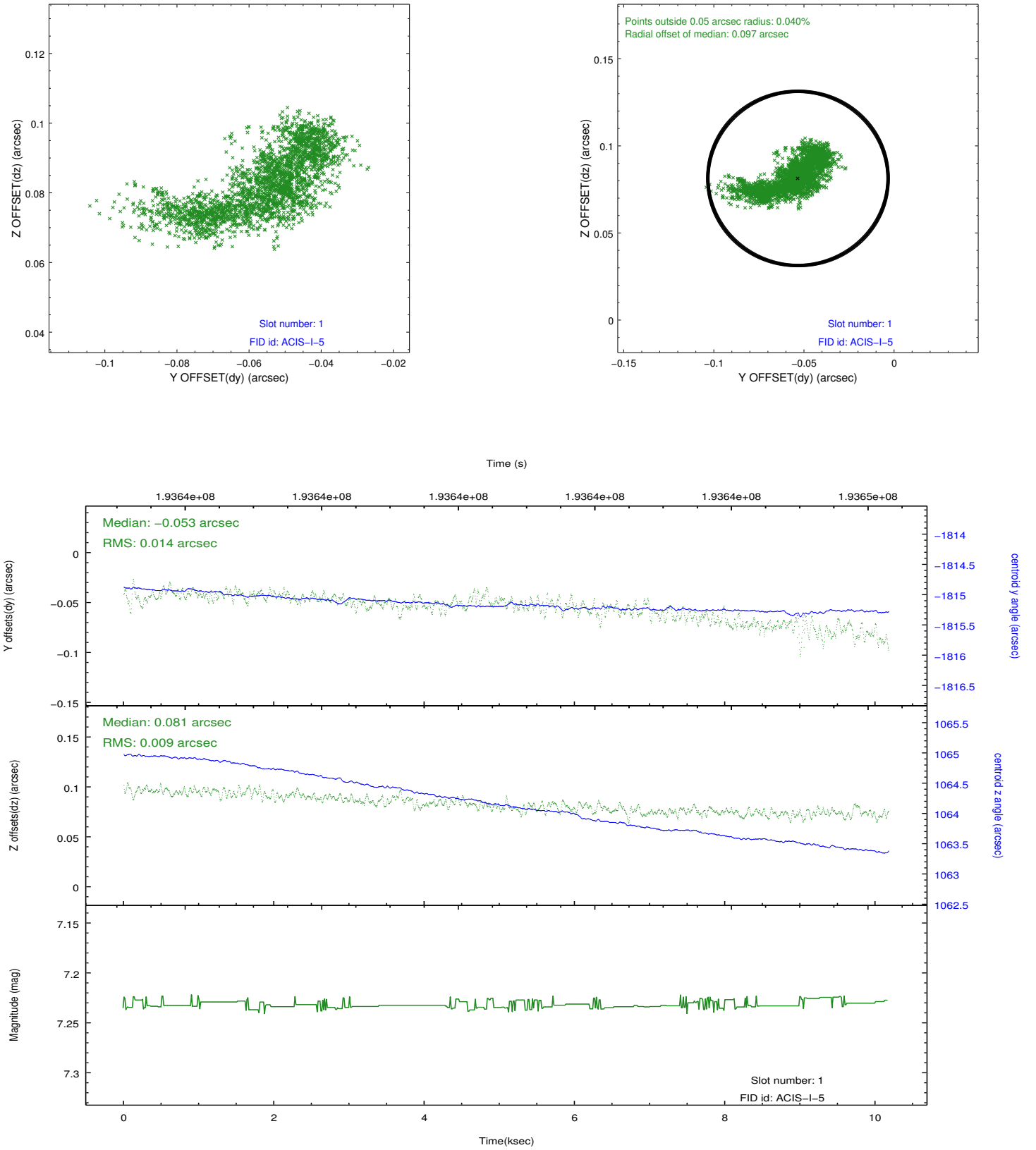


2.5 FID Slots

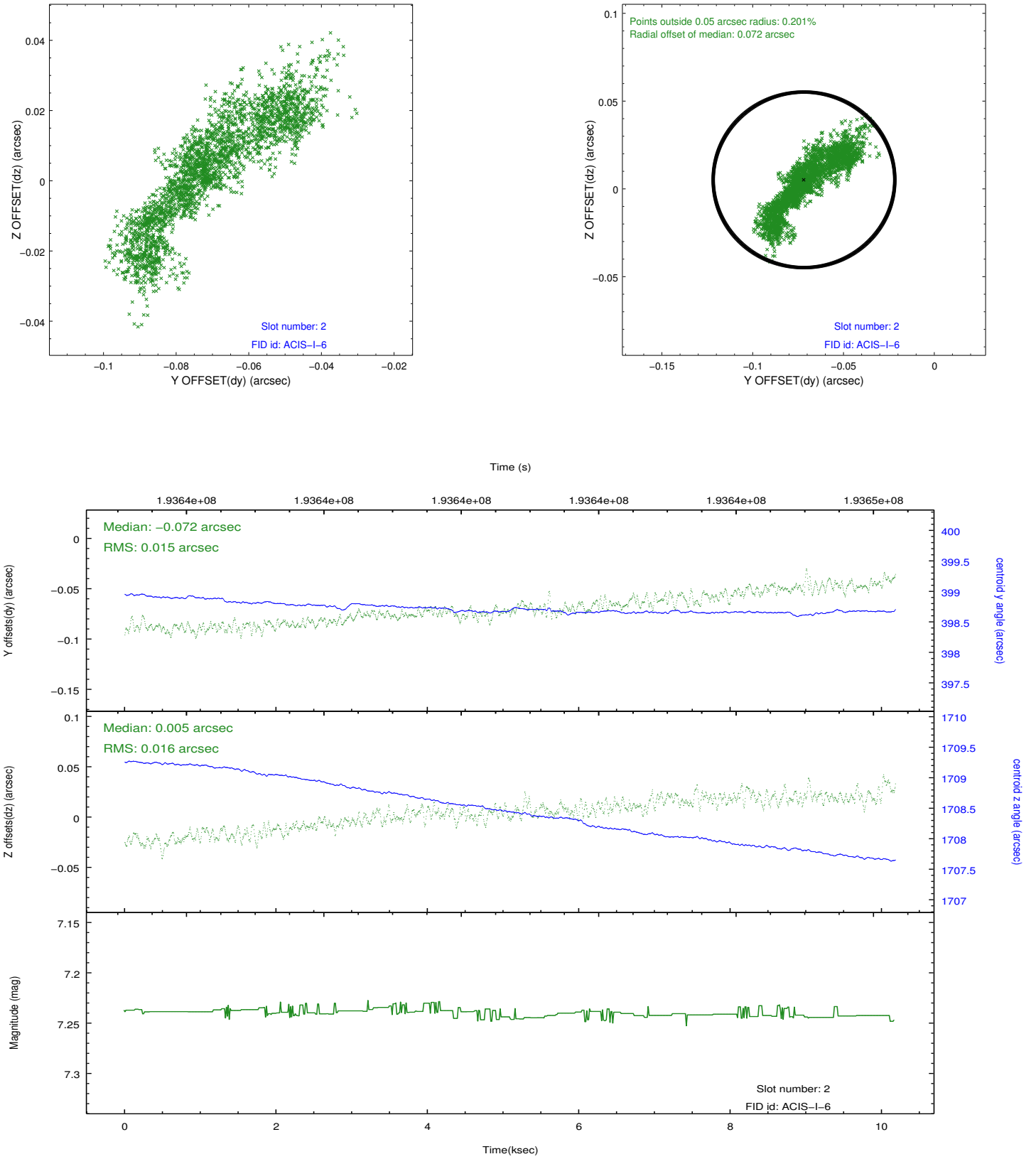
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

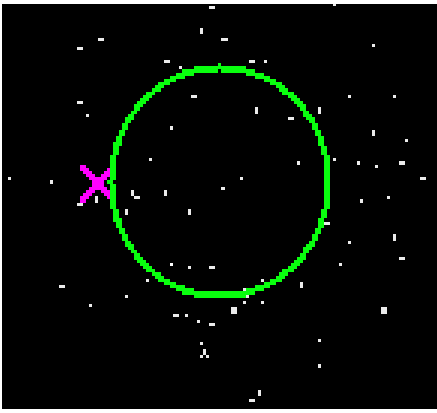


3 Gratings

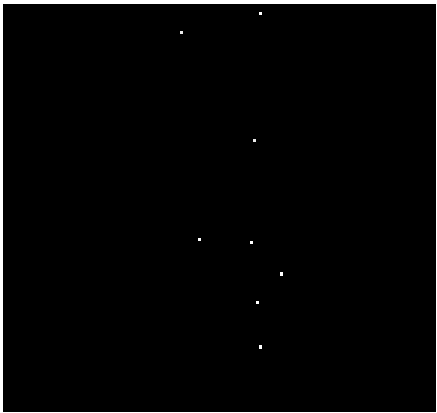
3.1 HEG Arm



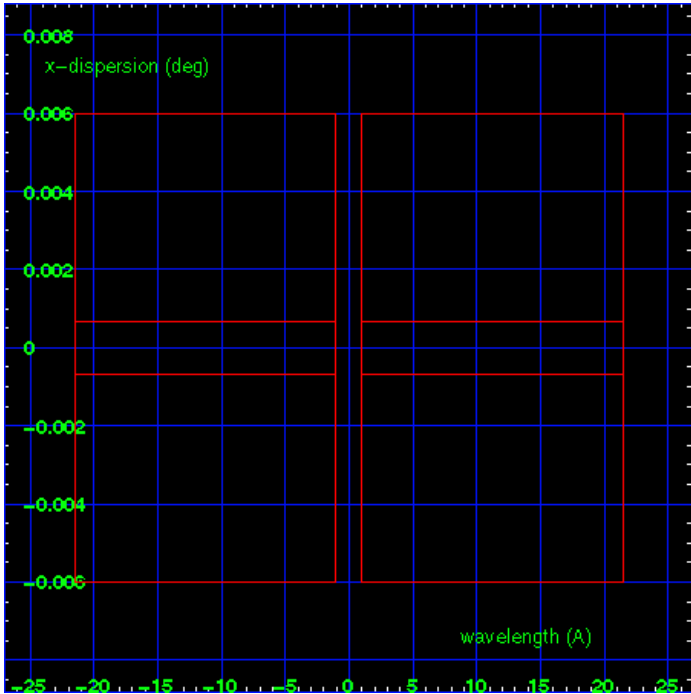
HEG Order Sort 123



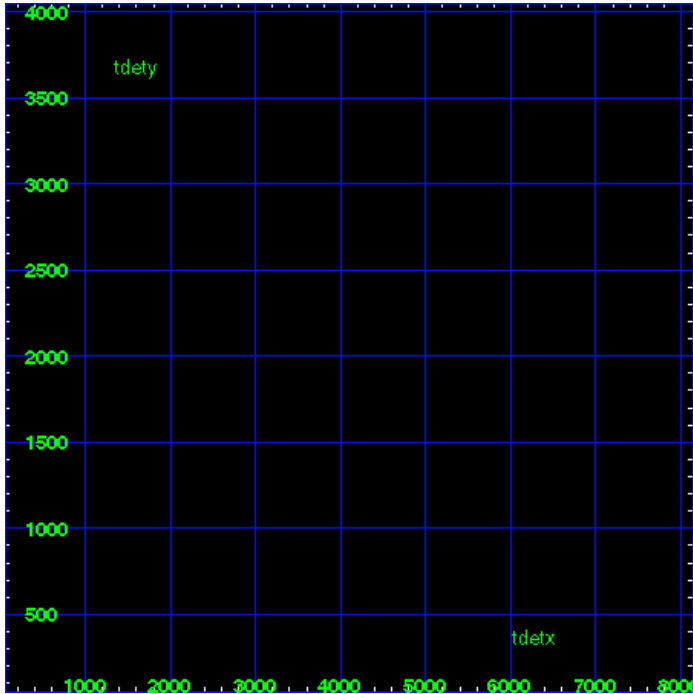
HEG Zero Order



HEG Order Sort ALL

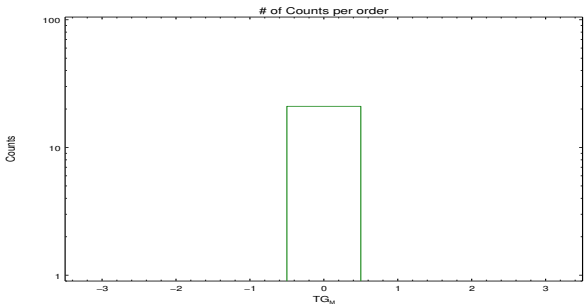


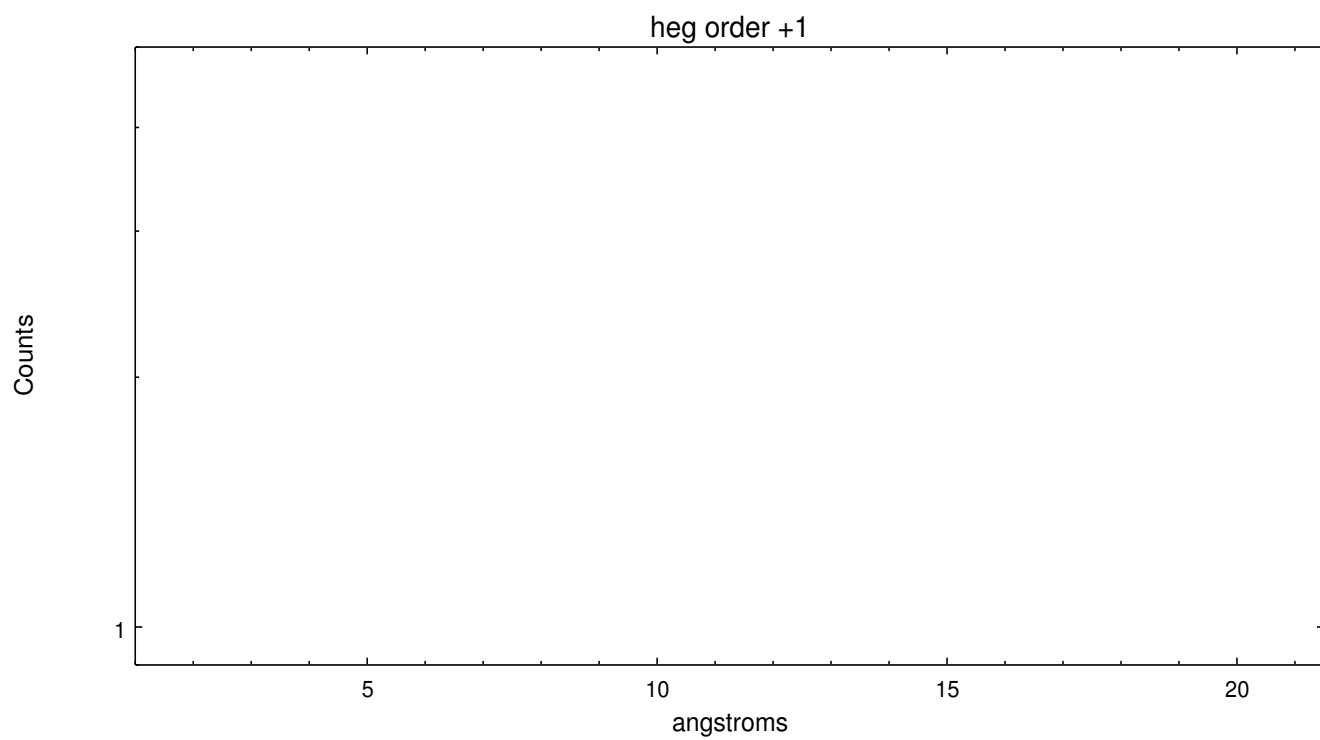
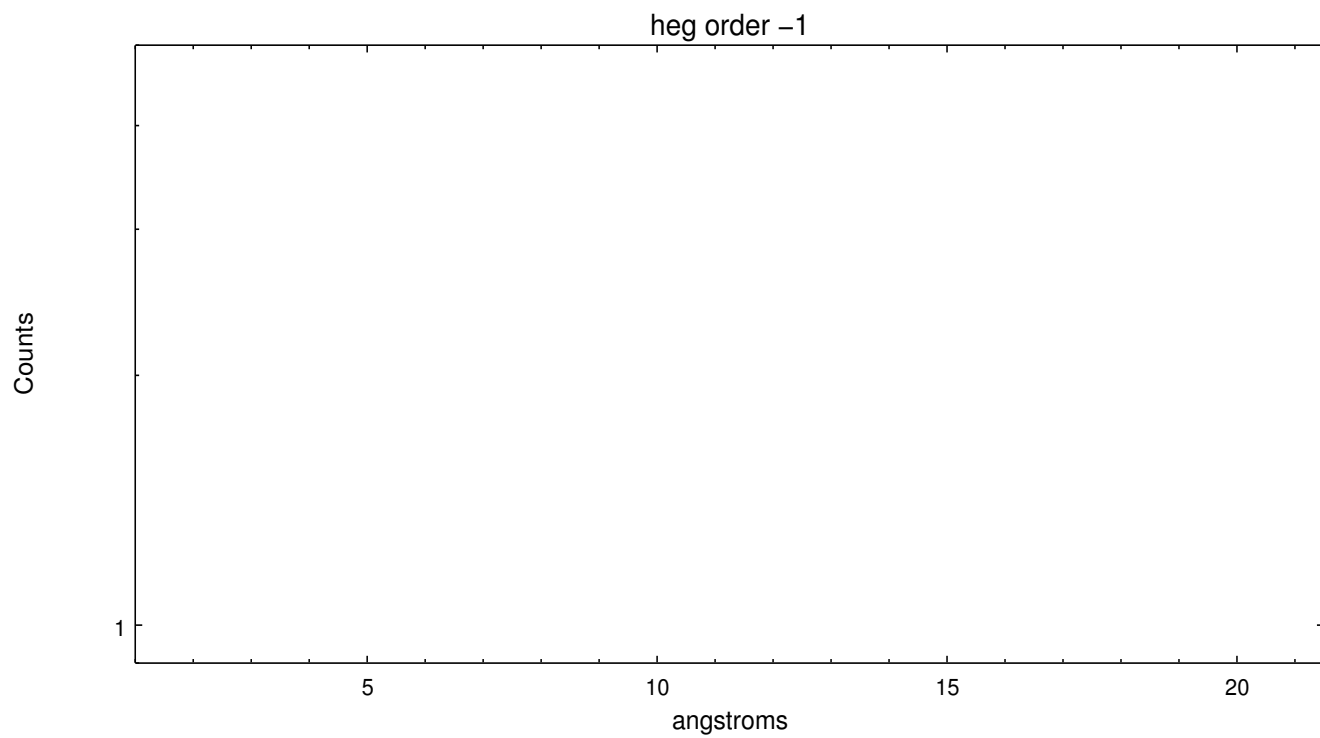
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	21	0	0	0

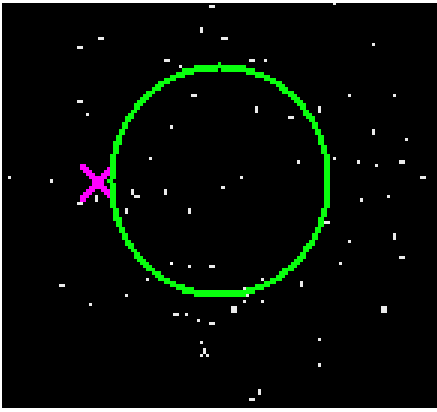




3.2 MEG Arm



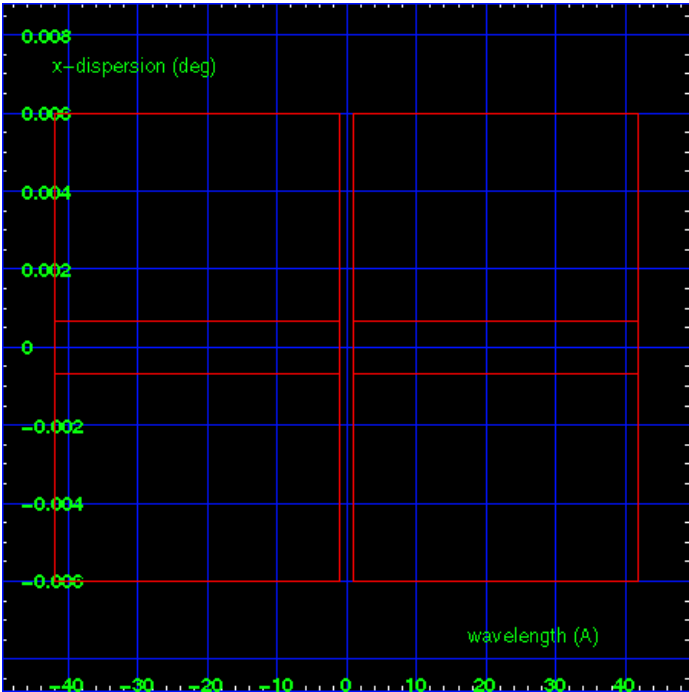
MEG Order Sort 123



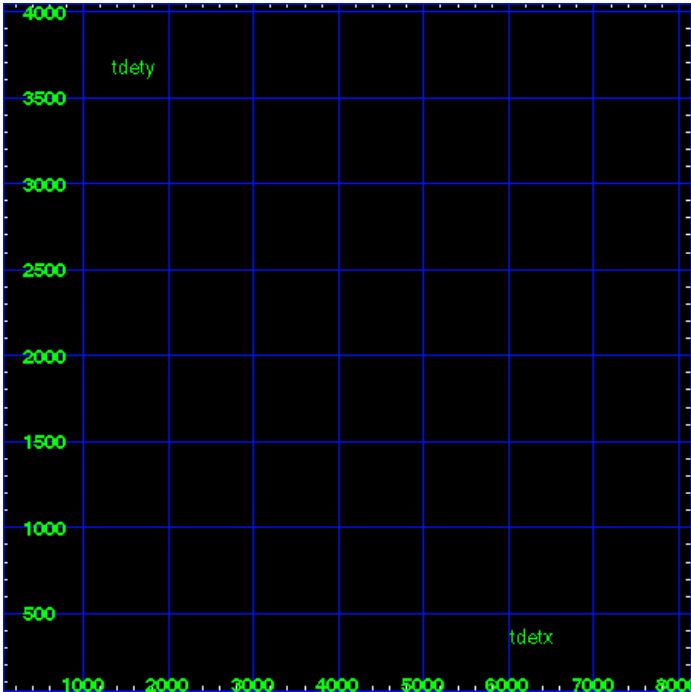
MEG Zero Order



MEG Order Sort ALL

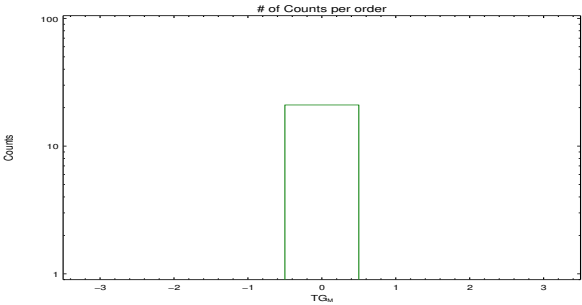


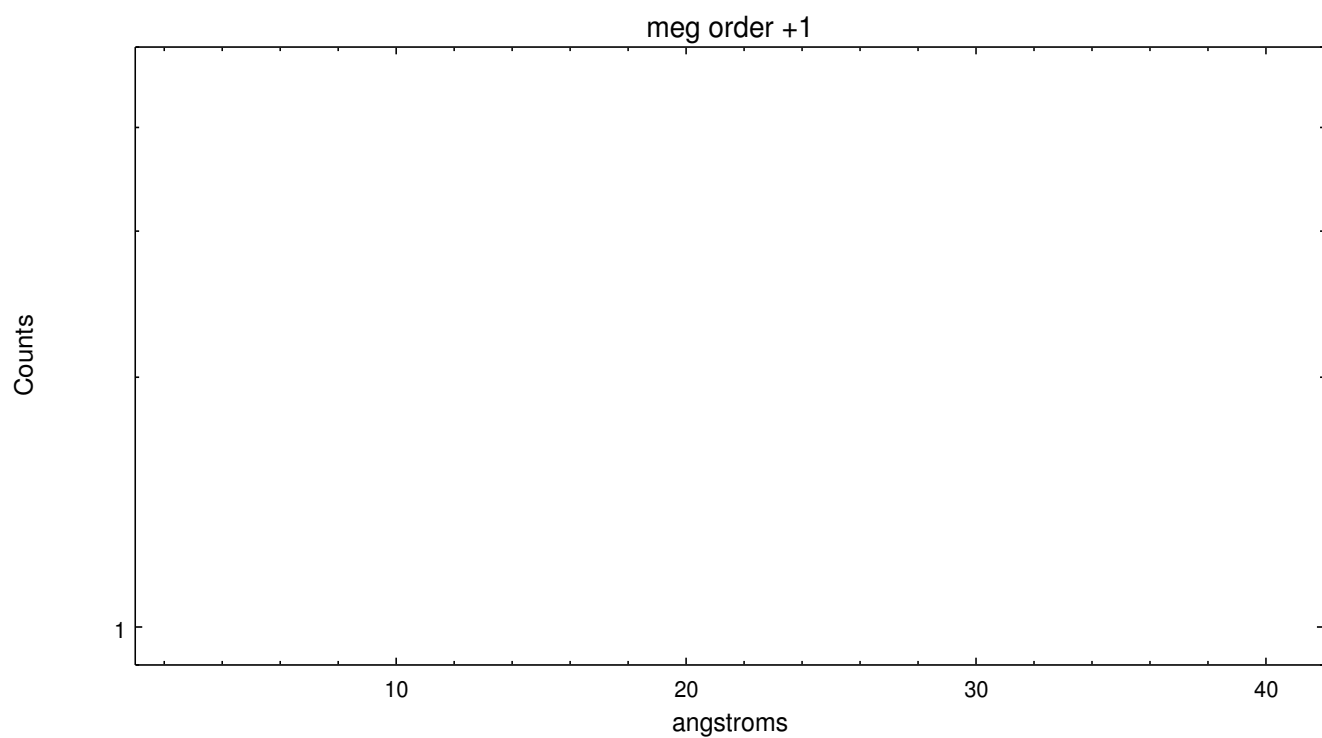
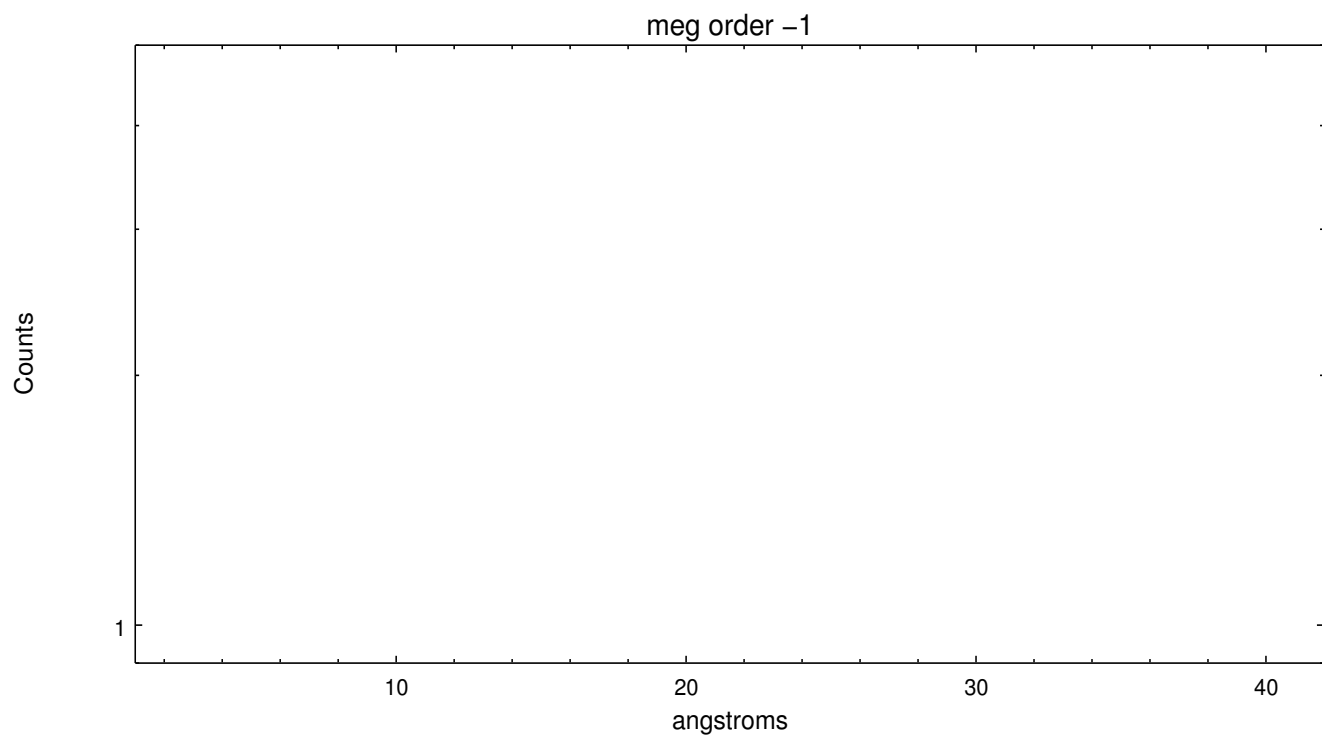
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	21	0	0	0





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.028

A.2 Comments

Requested coordinates poorly known and only accurate to a few arc min. The source is not at the requested position. The processing software defaulted to the coordinates supplied by the user for the position of the zeroth order for the grating spectral extraction. The source may be on the image several arc min away.

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Non-standard mode. Gratings used only as a neutral density filter, therefore standard Level 1.5 products not applicable (although generated by pipeline processing). Observation occurred at MJD 53055.1, which corresponds to a phase of 0.04 in the orbital ephemeris. This was within the allowed tolerance on the target forms: phase constraint met.