

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13416 - L2 Version 2
Chandra X-Ray Center

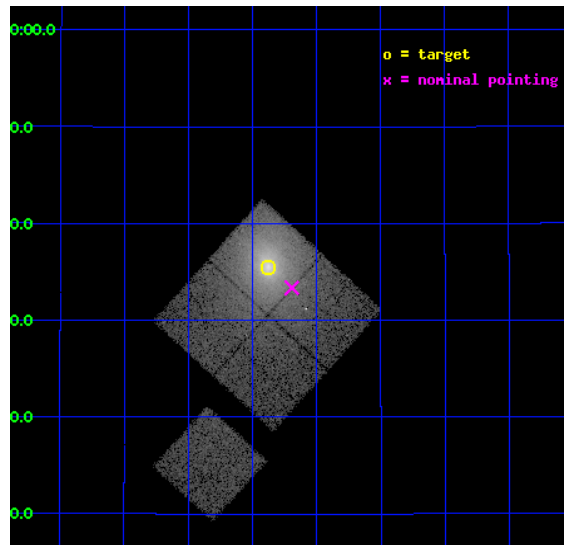
L2 Processing Date : Feb 11 2012

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1 Front

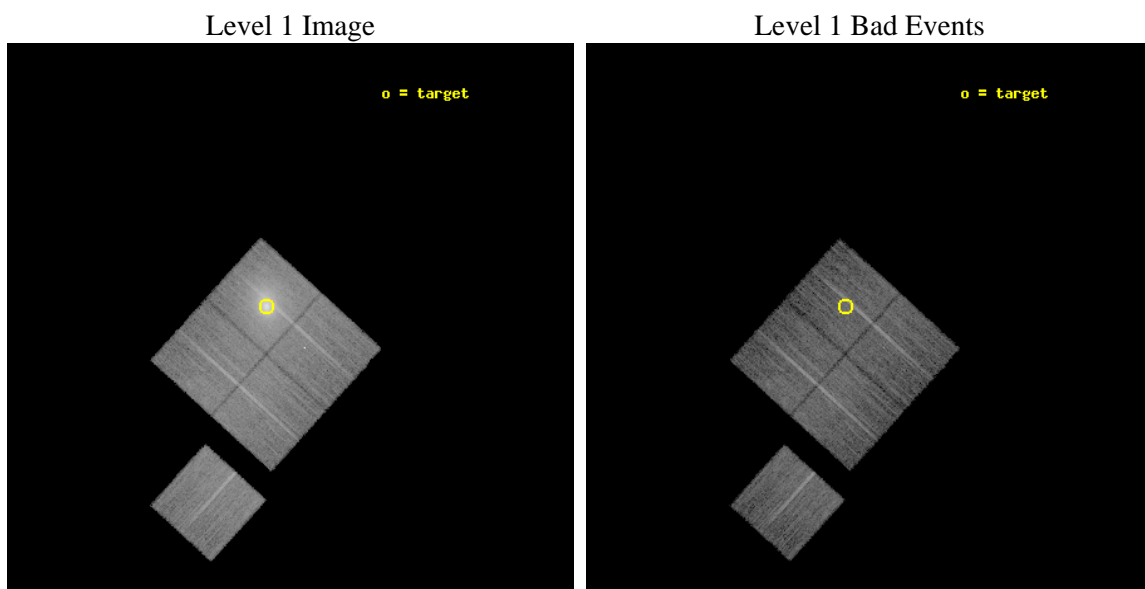
seq_num	890061	Sequence number
obs_id	13416	Observation id
title	Mapping the Spatial Distribution of the ACIS Contaminant	Proposal
observer	Dr. CXC Calibration	Principal investigator
object	Abell 1795	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219583	Observer's specified target RA [deg]
dec_targ	26.590833	Observer's specified target Dec [deg]
ra_nom	207.1733837469	Nominal RA [deg]
dec_nom	26.555986914551	Nominal Dec [deg]
roll_nom	222.22554100534	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14771.360089779	Sum of GTIs [s]
livetime	14578.361395689	Livetime [s]
ontime0	14777.601020515	Sum of GTIs [s]
ontime1	14771.360089779	Sum of GTIs [s]
ontime2	14774.54210031	Sum of GTIs [s]
ontime3	14777.700113654	Sum of GTIs [s]
ontime6	14777.559980512	Sum of GTIs [s]
l2events	152217	Number of level 2 events



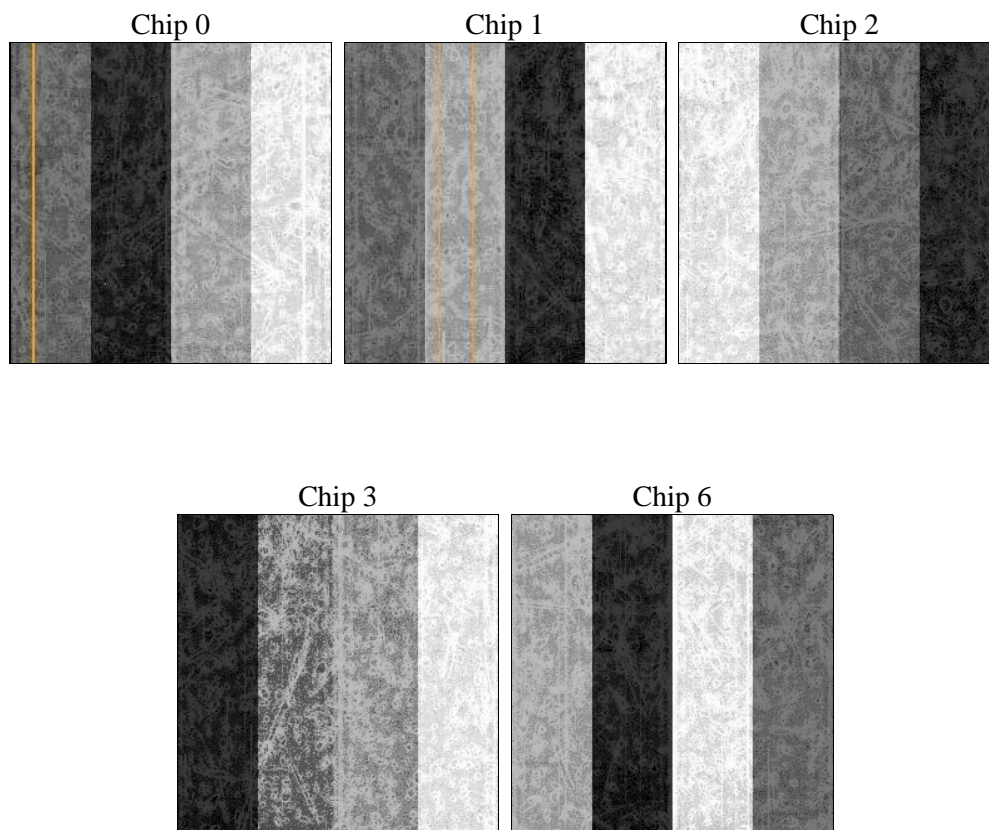
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.746000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	14771.360089779	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	14777.601020515	Sum of GTIs [s]
date	2012-02-11T03:03:26	Date and time of file creation	ontime1	14771.360089779	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	14774.54210031	Sum of GTIs [s]
			ontime3	14777.700113654	Sum of GTIs [s]
			ontime6	14777.559980512	Sum of GTIs [s]
			l1events	566533	Number of level 1 events

2.1.4 Events

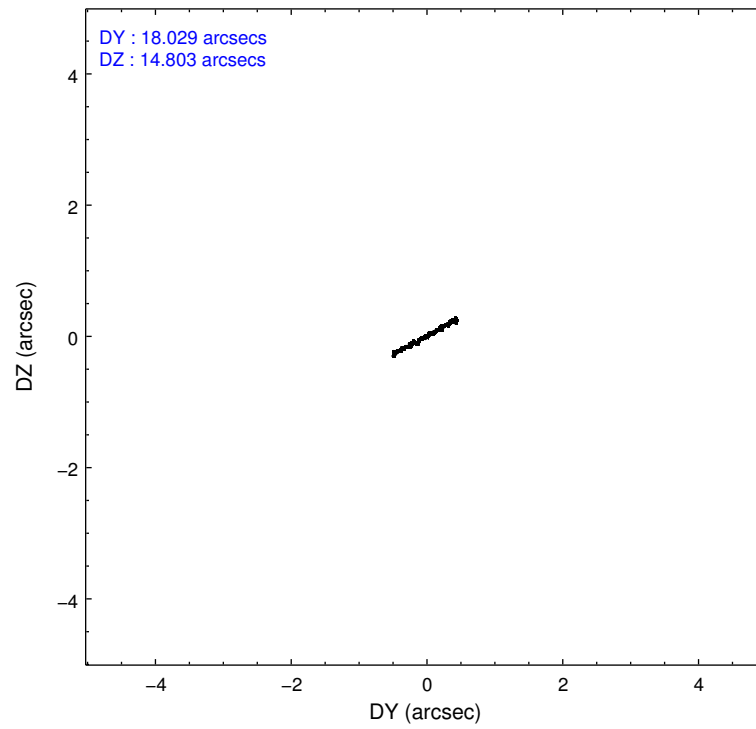
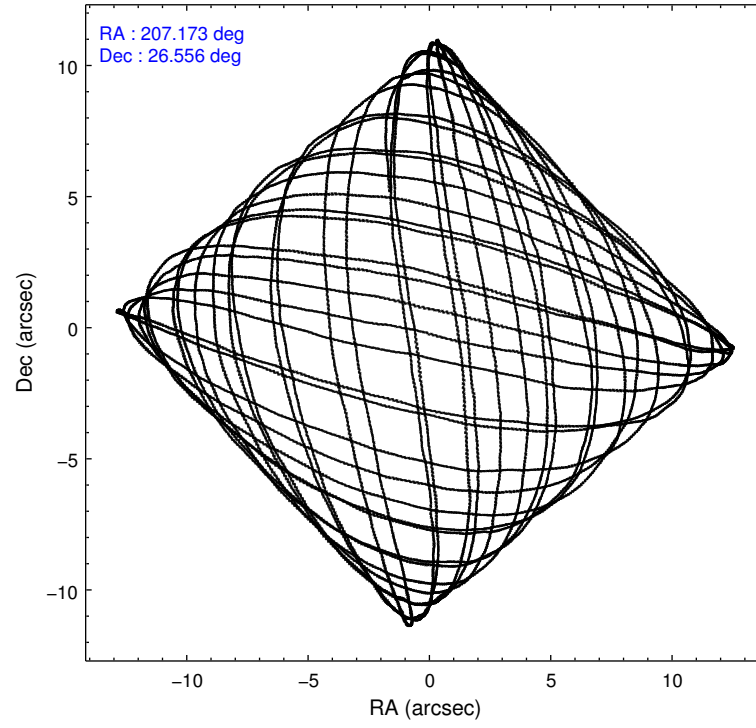
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	94220	189494	95324	94736	92759
rejected events	75516	76451	83244	80072	82114
rejected %	80%	40%	87%	84%	88%

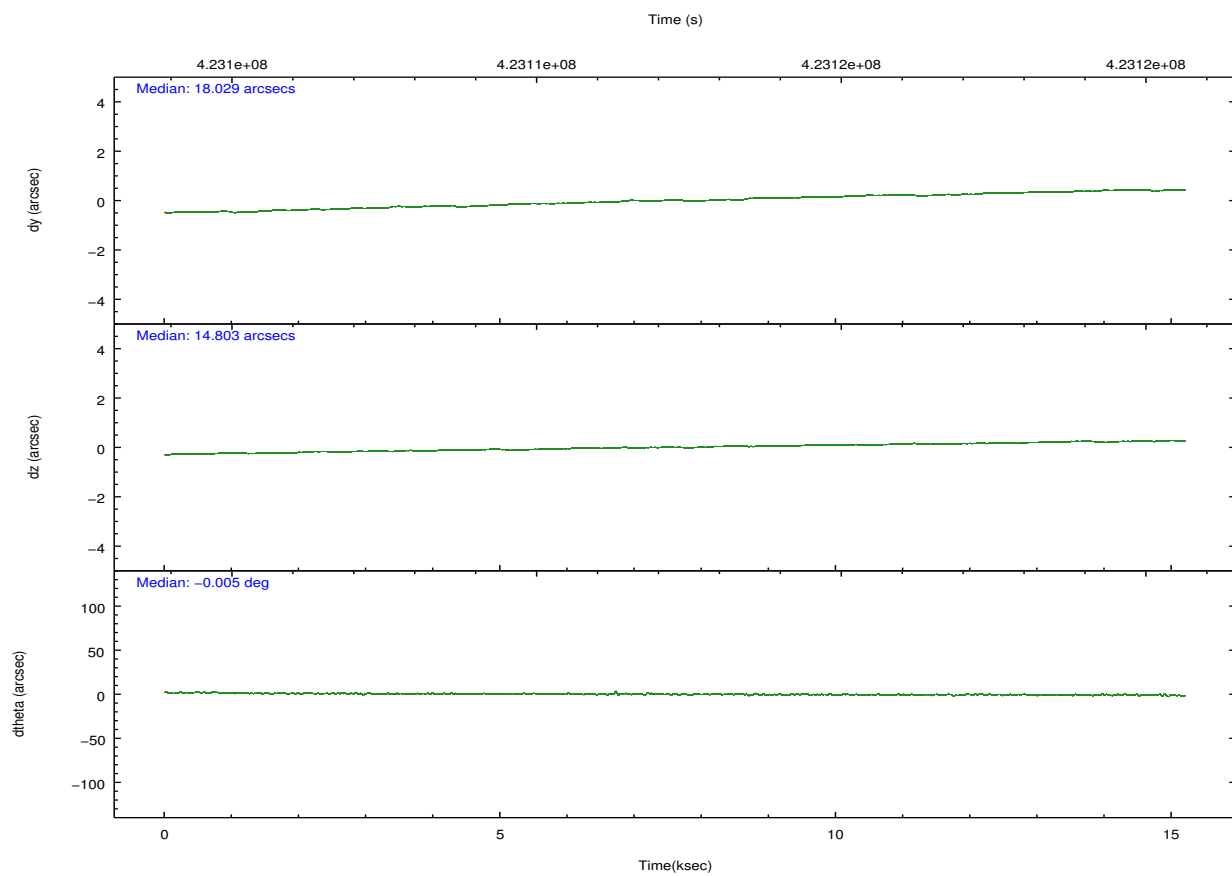
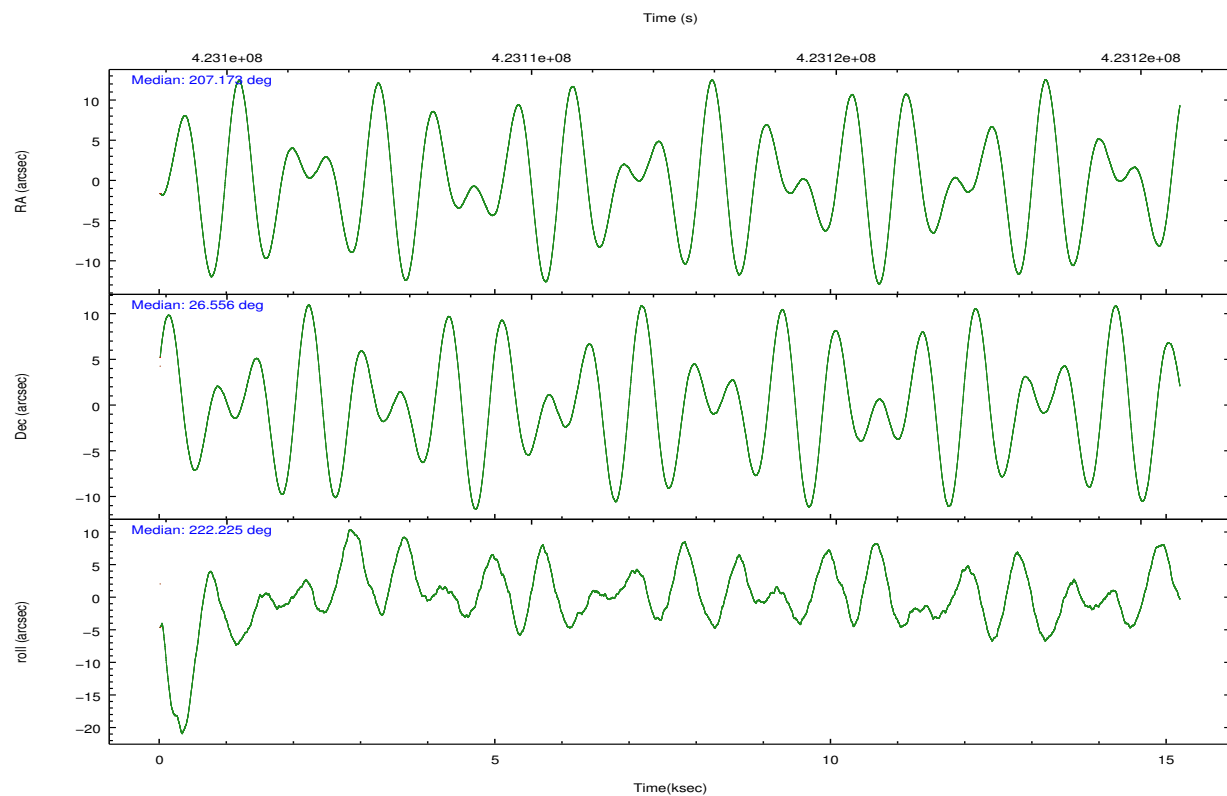
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10394	86191	5168	7347	3664
	11%	45%	5%	7%	3%
grade 1 events	163	423	67	64	38
	0%	0%	0%	0%	0%
grade 2 events	3326	13281	2659	2689	2437
	3%	7%	2%	2%	2%
grade 3 events	1386	4241	1142	1239	1089
	1%	2%	1%	1%	1%
grade 4 events	1317	4276	1122	1177	1099
	1%	2%	1%	1%	1%
grade 5 events	3928	4651	3770	4529	4300
	4%	2%	3%	4%	4%
grade 6 events	2282	5076	1992	2215	2358
	2%	2%	2%	2%	2%
grade 7 events	71424	71355	79404	75476	77774
	75%	37%	83%	79%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	207.182654	207.1733837469033	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.582184	26.55598691455119	Alternating exposures requested	N	N
[deg] Pointing Roll	222.012710	222.225541005339	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-246.722463	-246.7247319114797			
[mm] SIM translation stage offset	13.13	13.13227890855001			
[s] Observation start time (MET)	423104878.184000	423104502.21482			
Observation start date	2011-05-30T01:06:52	2011-05-30T01:01:42			
[s] Observation end time (MET)	423119878.184000	423120119.11563			
Observation end date	2011-05-30T05:16:52	2011-05-30T05:21:59			
Read mode	TIMED	TIMED			

2.3 Aspect



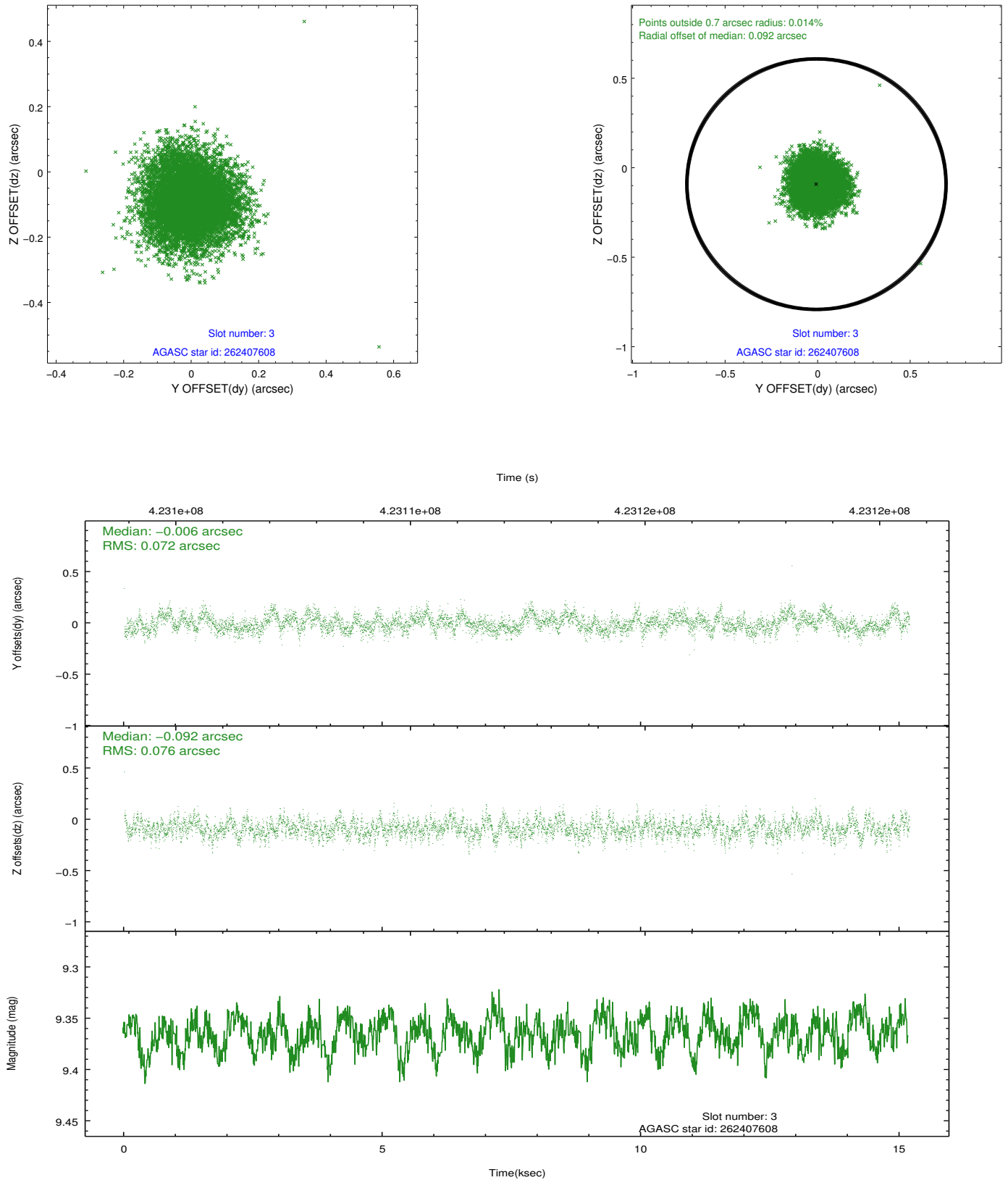


Slot Statistics

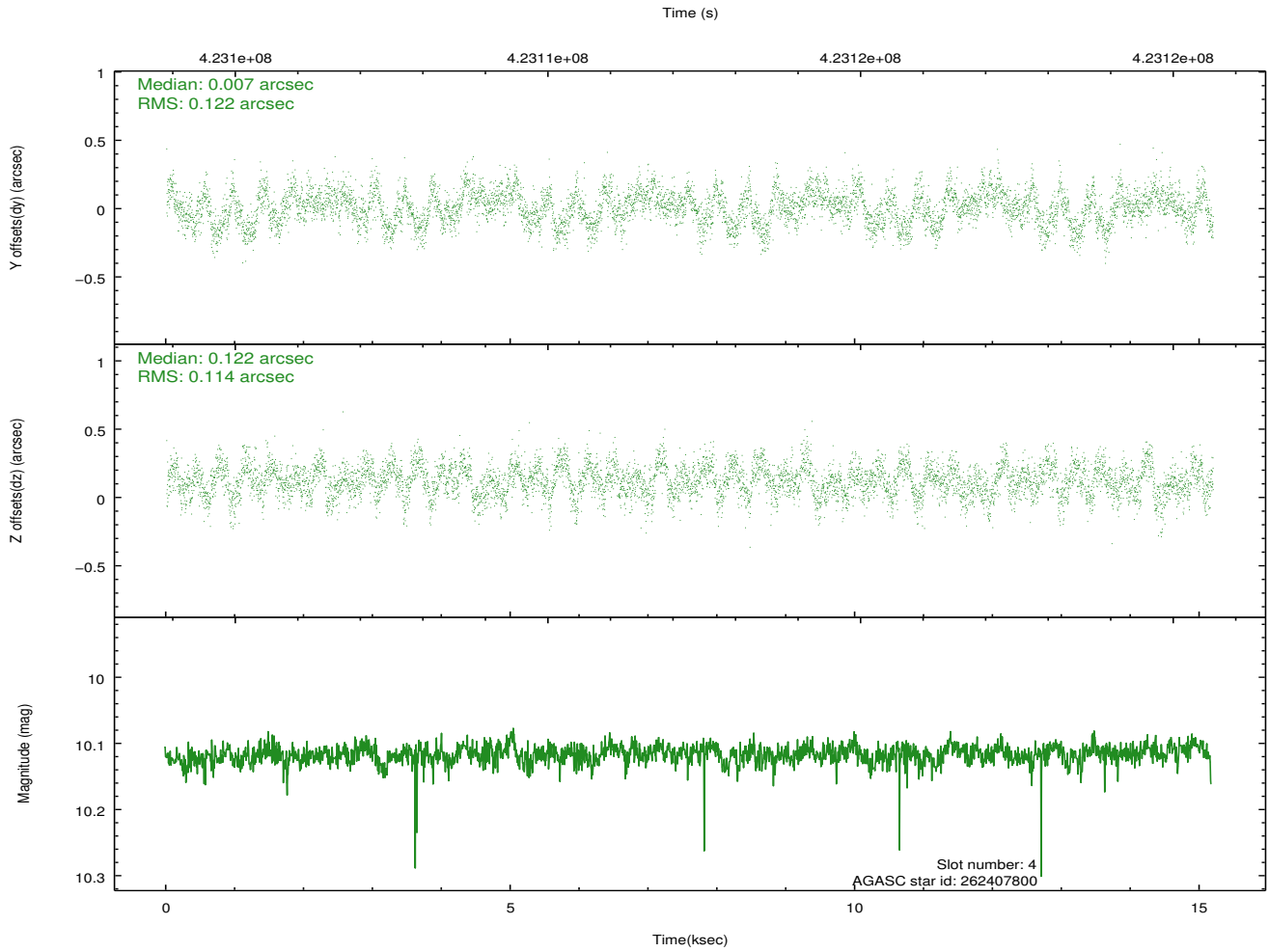
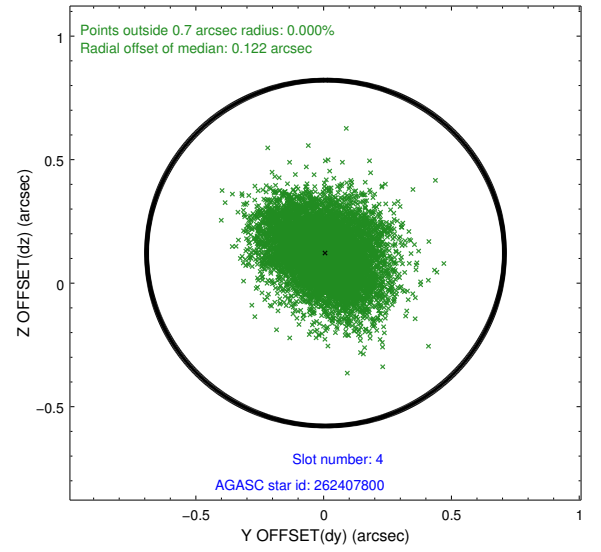
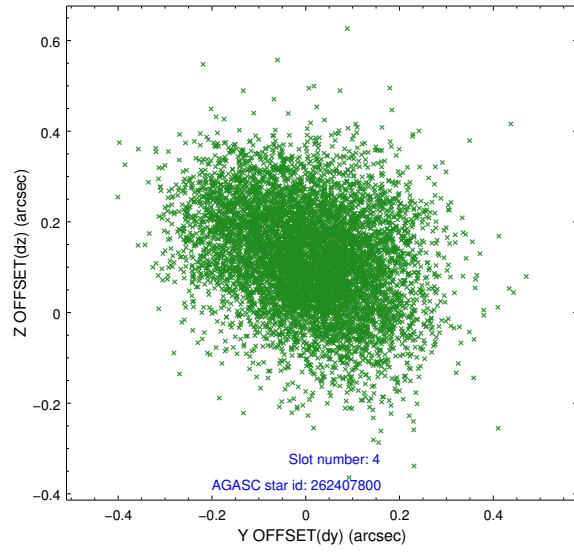
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.12	3706	-0.035	0.119	0.009	0.021	0.000000	0.000000	921.60	-568.36
1	FID	ACIS-I-5	7.05	3706	-0.083	0.027	0.007	0.015	0.000000	0.000000	-1826.49	1328.81
2	FID	ACIS-I-6	7.03	3705	0.028	-0.077	0.008	0.016	0.000000	0.000000	386.75	1973.65
3	GUIDE	262407608	9.37	7397	-0.006	-0.092	0.111	0.177	207.378401	26.435507	-115.45	814.69
4	GUIDE	262407800	10.12	7394	0.007	0.122	0.180	0.286	207.321181	27.251762	-1940.71	-1495.06
5	GUIDE	262408096	9.34	7382	0.039	0.076	0.127	0.214	207.011678	26.515421	570.15	-190.51
6	GUIDE	262408936	9.66	7399	0.087	-0.003	0.151	0.236	207.154731	26.726554	-280.67	-445.70
7	GUIDE	262411960	9.68	7387	-0.130	-0.102	0.151	0.240	207.327895	25.881727	1338.25	2188.44

2.4 Star Slots

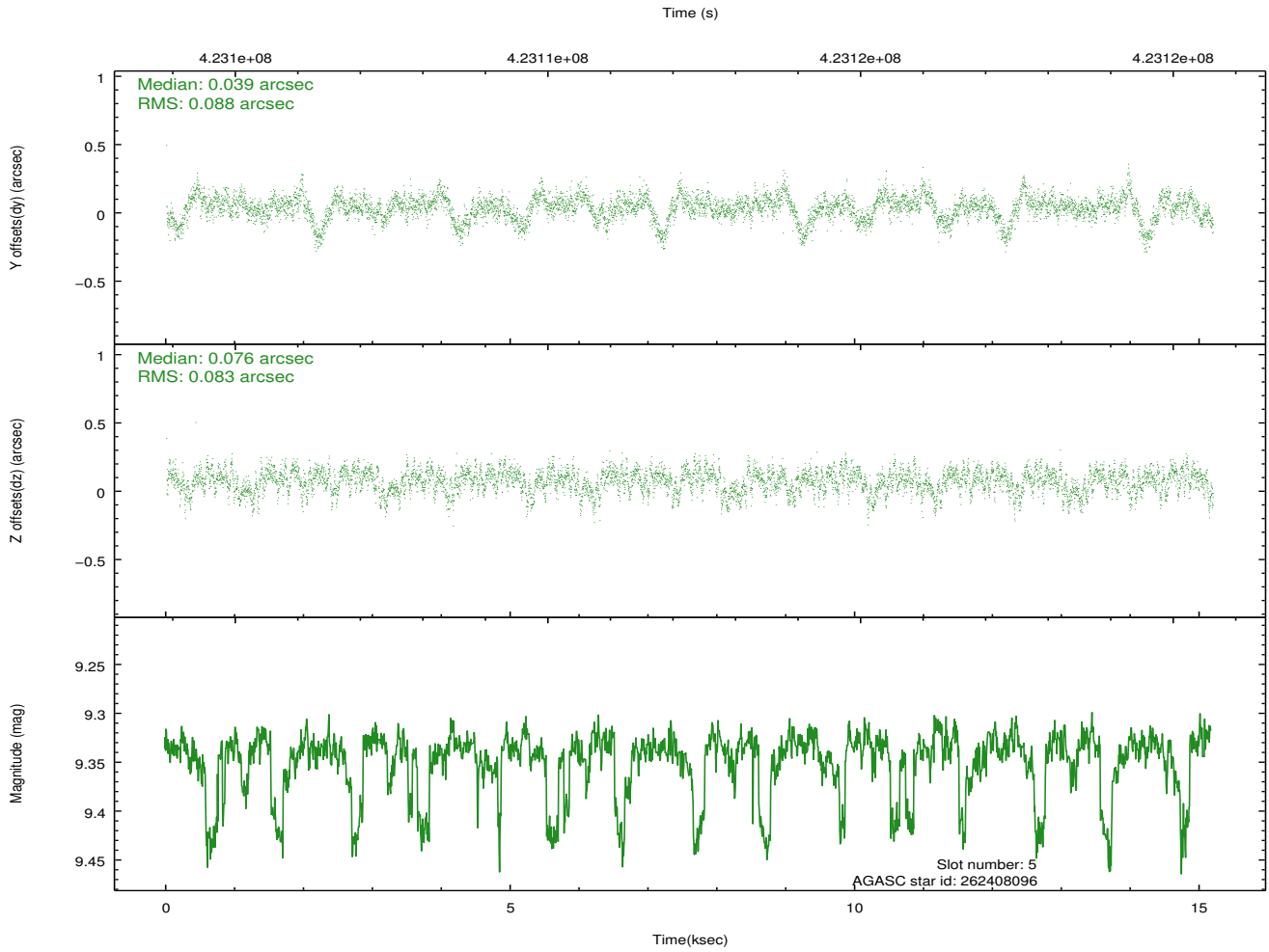
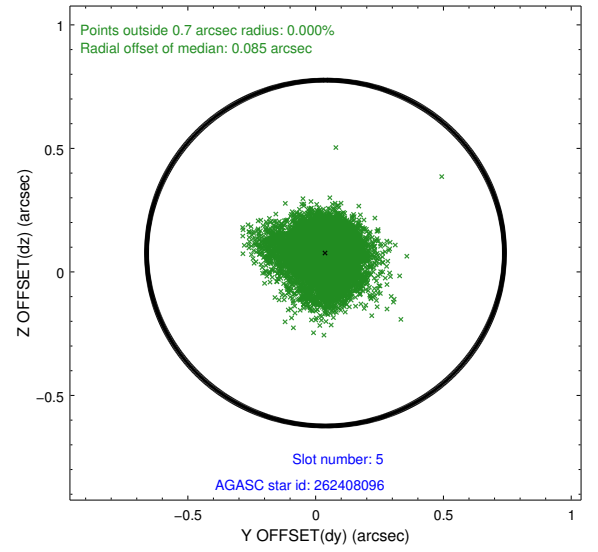
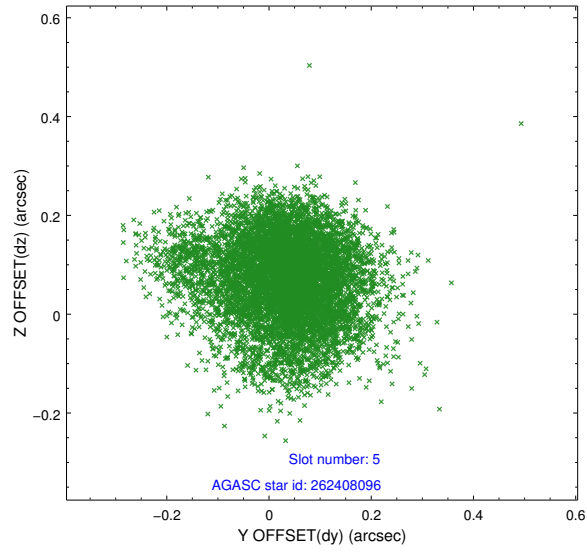
2.4.1 Slot 3



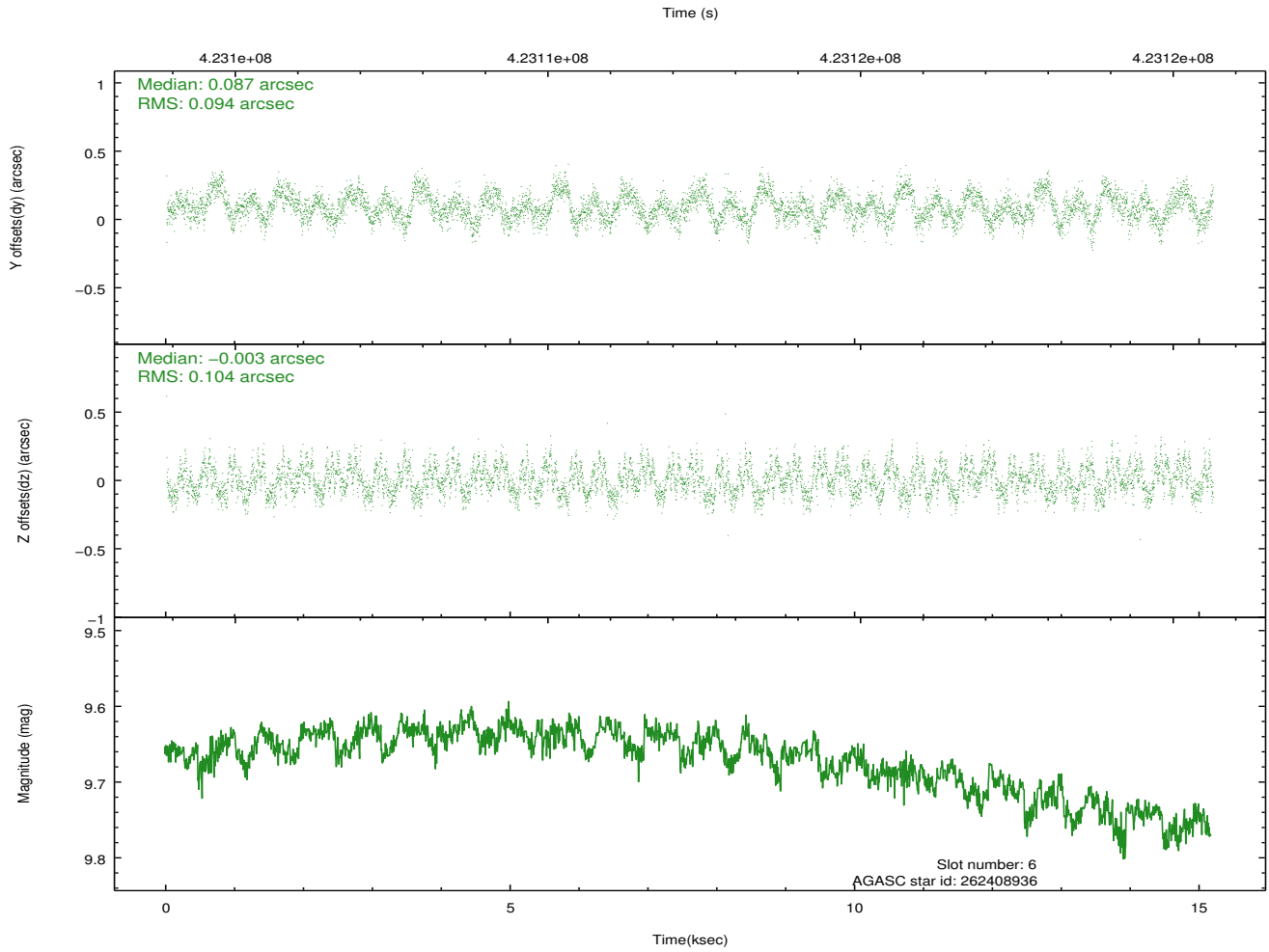
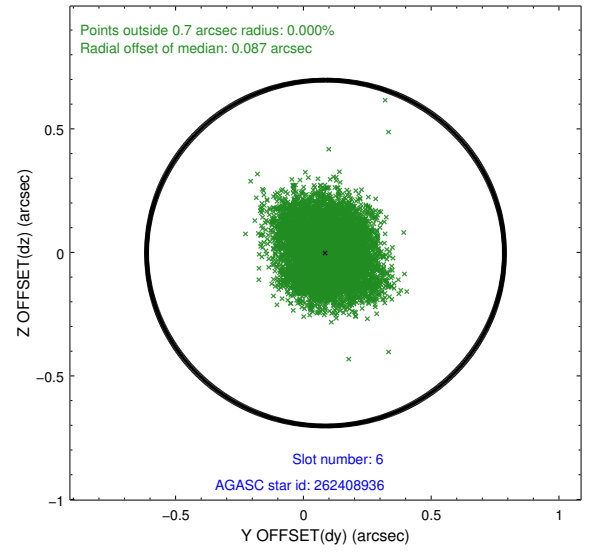
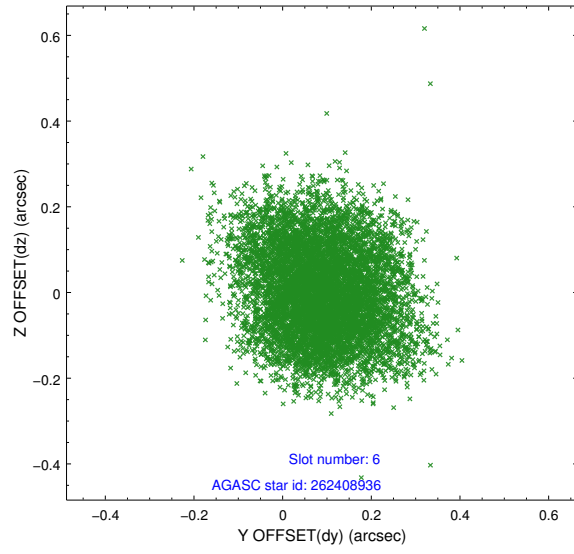
2.4.2 Slot 4



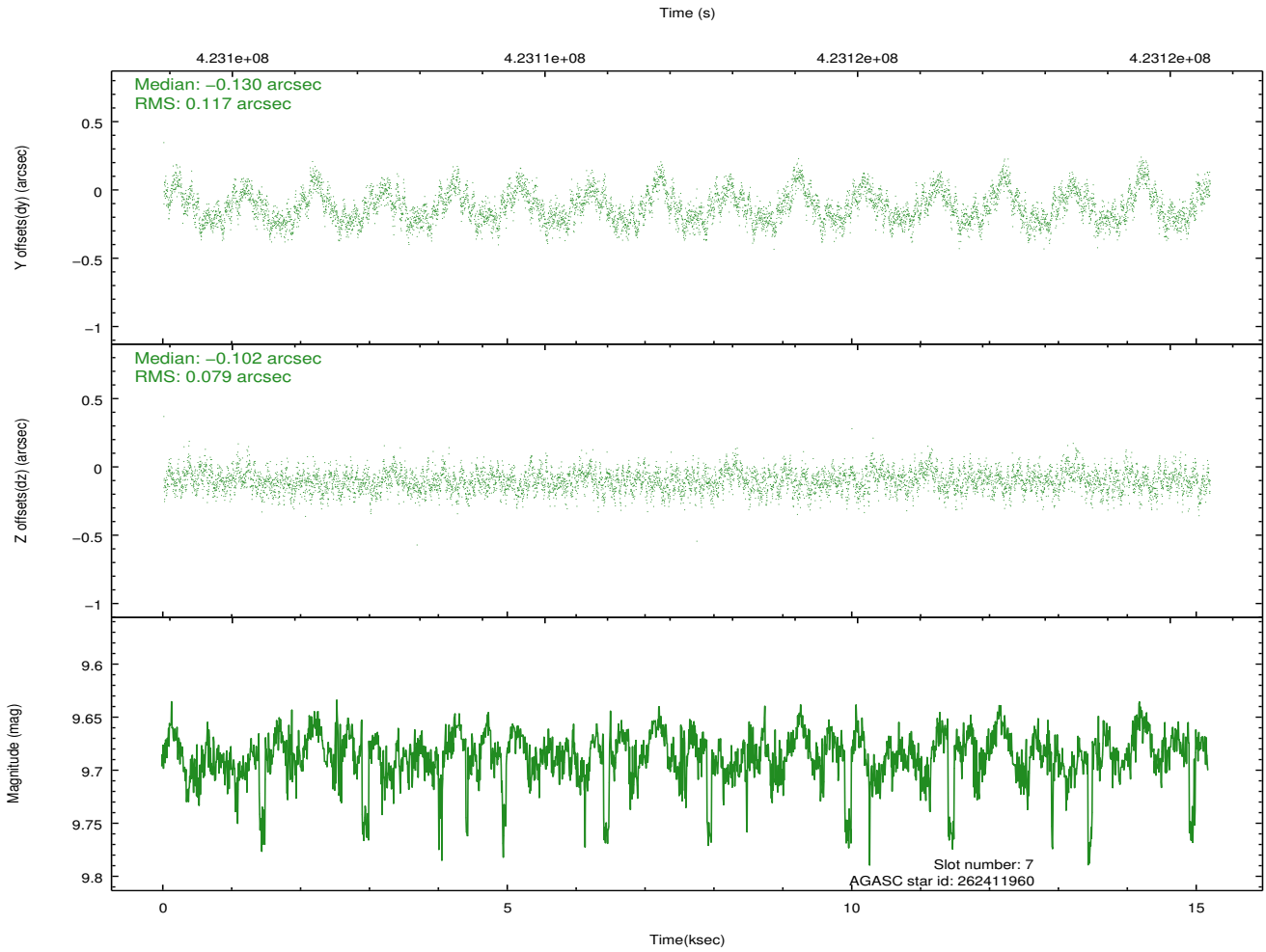
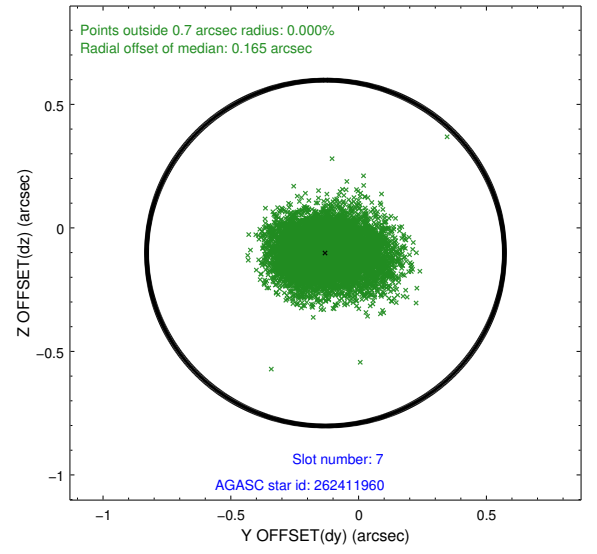
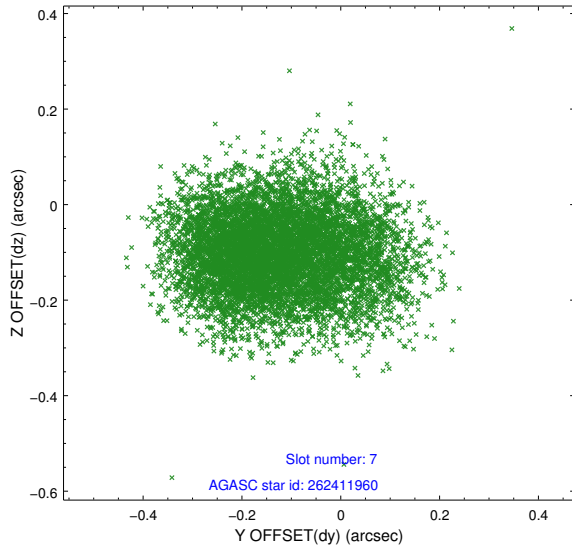
2.4.3 Slot 5



2.4.4 Slot 6

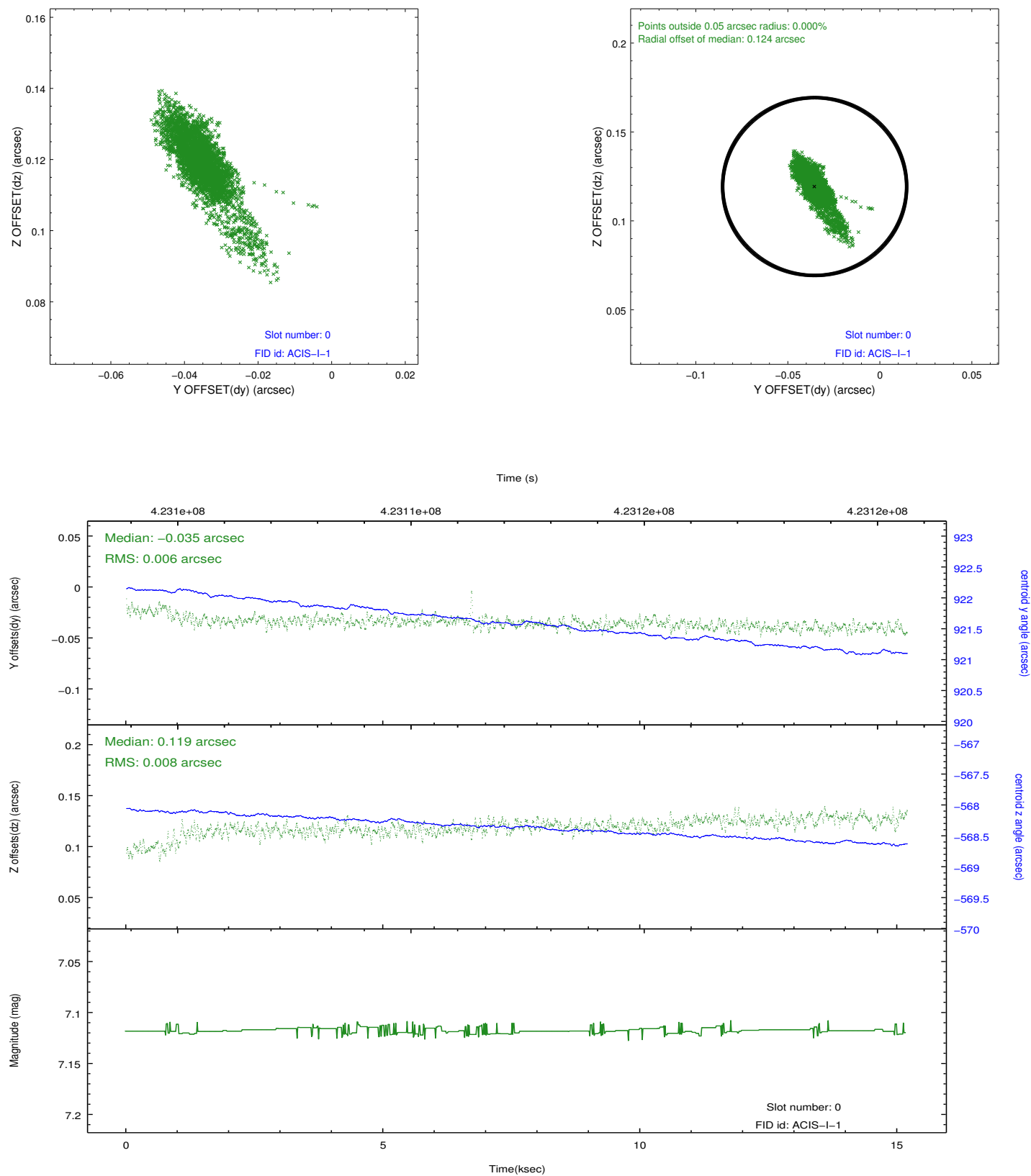


2.4.5 Slot 7

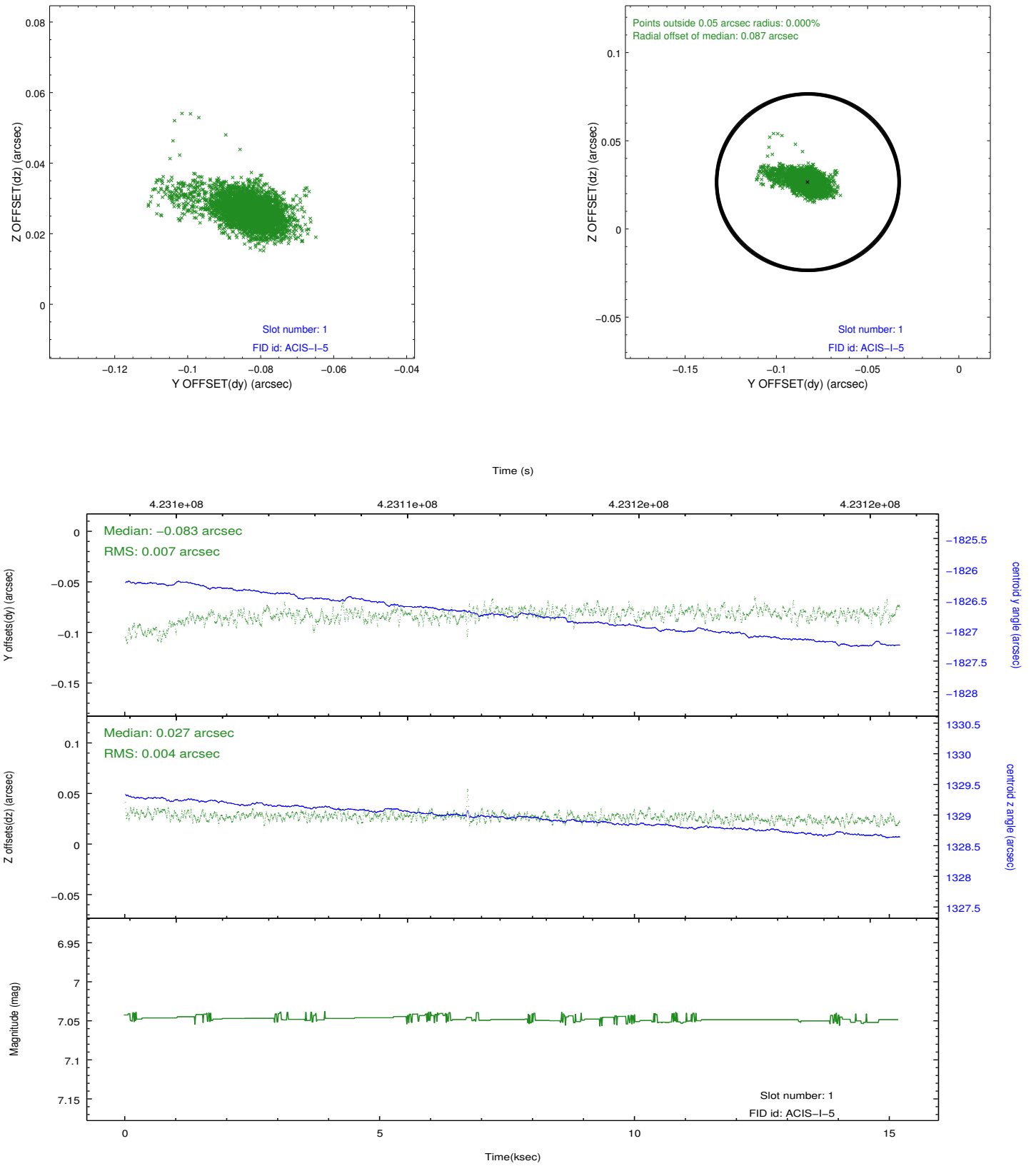


2.5 FID Slots

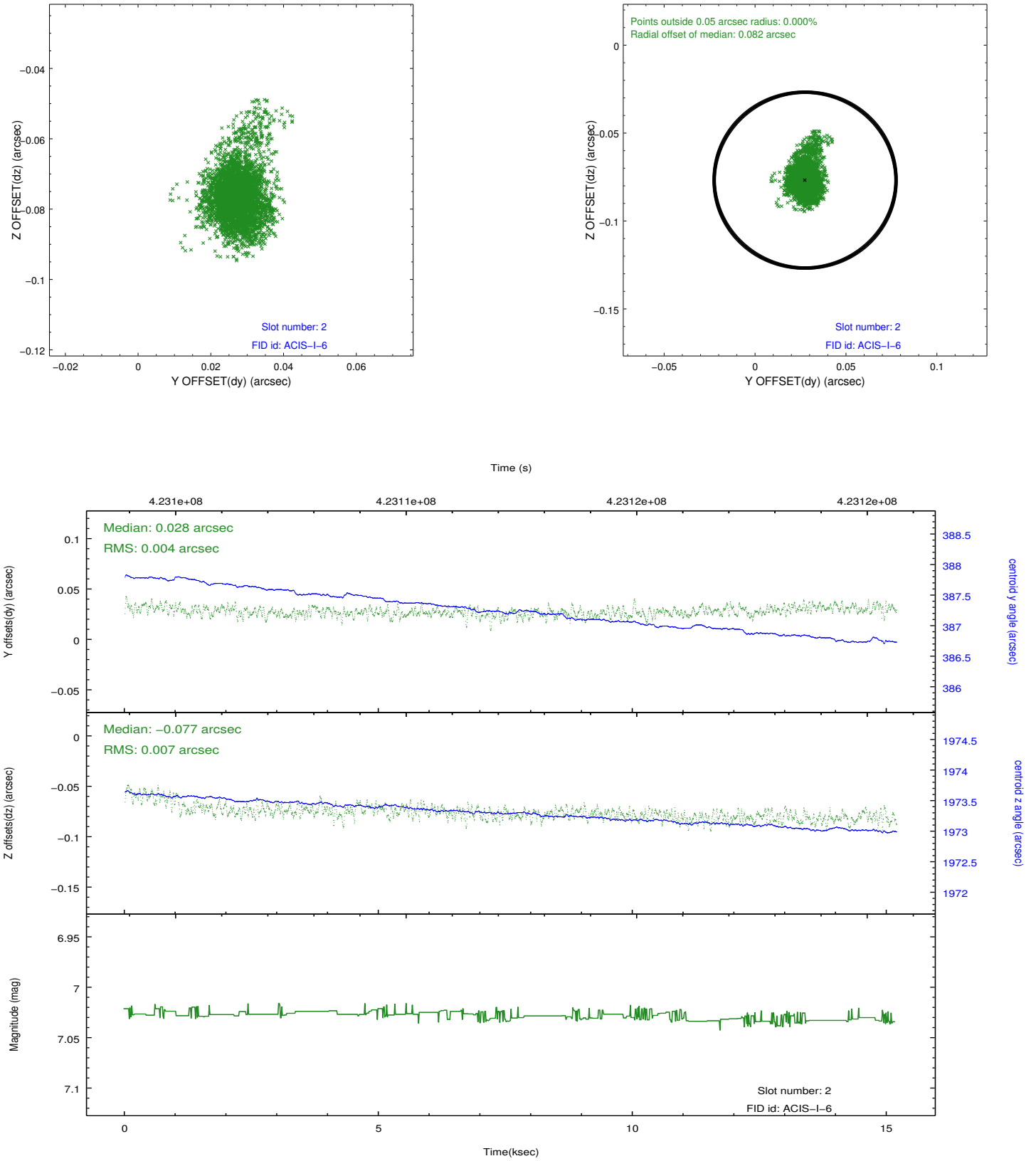
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.771360081792

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.