

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13415 - L2 Version 2
Chandra X-Ray Center

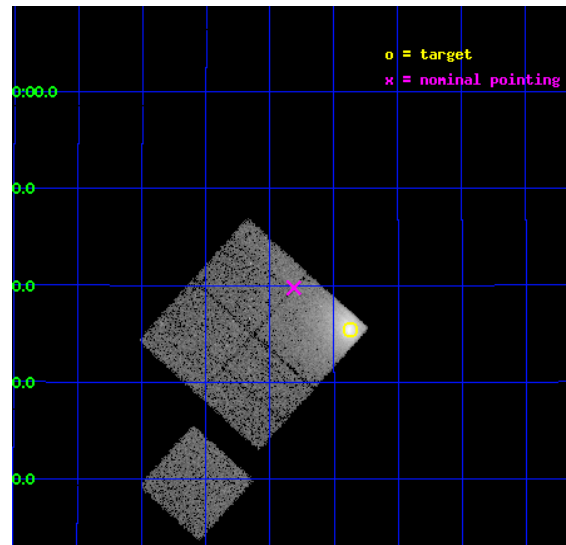
L2 Processing Date : Feb 10 2012

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1 Front

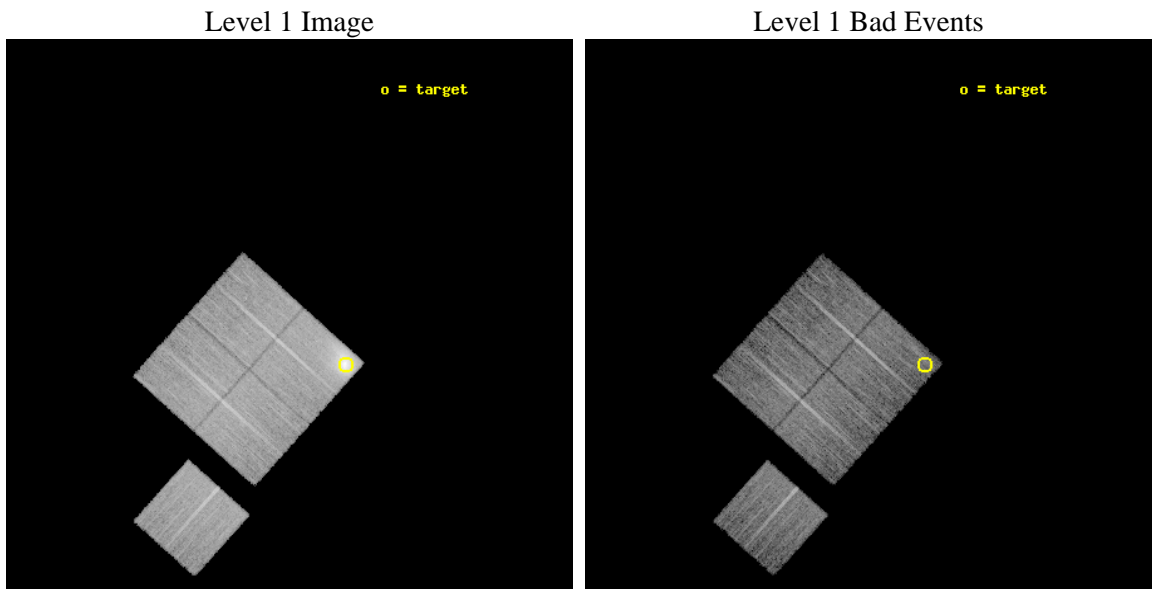
seq_num	890060	Sequence number
obs_id	13415	Observation id
title	Mapping the Spatial Distribution of the ACIS Contaminant	Proposal
observer	Dr. CXC Calibration	Principal investigator
object	Abell 1795	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219	Observer's specified target RA [deg]
dec_targ	26.591	Observer's specified target Dec [deg]
ra_nom	207.32828489649	Nominal RA [deg]
dec_nom	26.662664126473	Nominal Dec [deg]
roll_nom	221.93513496988	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14777.226436555	Sum of GTIs [s]
livetime	14584.151094326	Livetime [s]
ontime0	14777.226436555	Sum of GTIs [s]
ontime1	14777.267476559	Sum of GTIs [s]
ontime2	14777.308516562	Sum of GTIs [s]
ontime3	14774.208566248	Sum of GTIs [s]
ontime6	14777.185396552	Sum of GTIs [s]
l2events	105531	Number of level 2 events



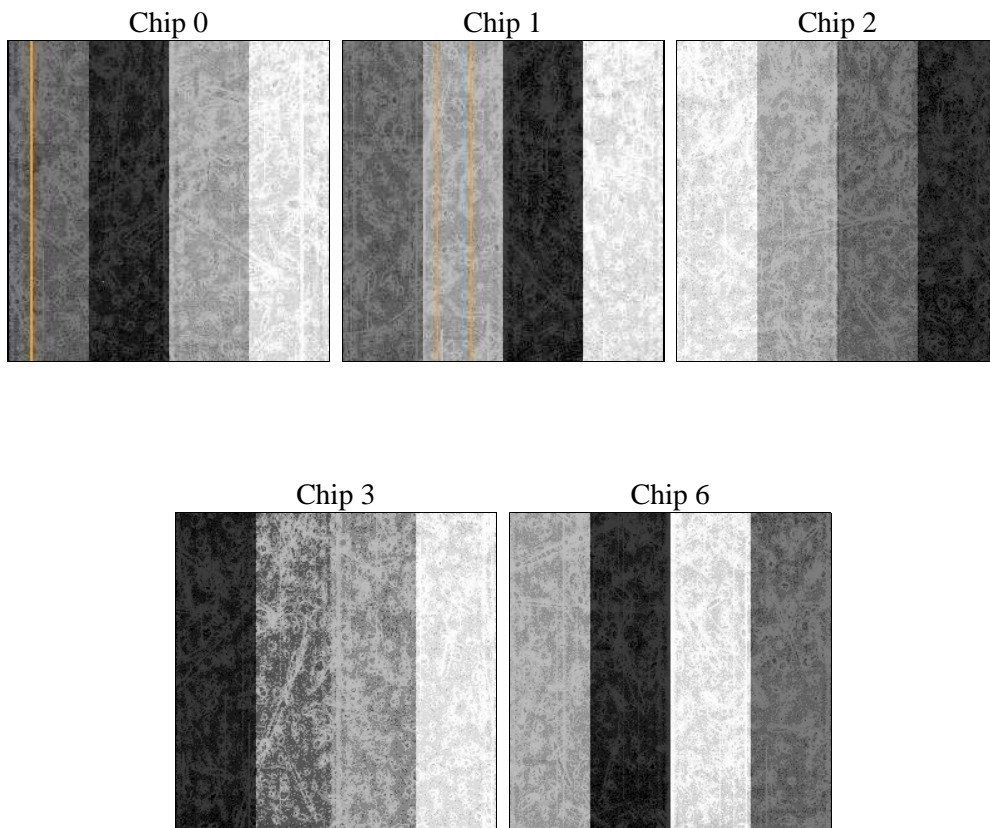
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	14777.226436555	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	14777.226436555	Sum of GTIs [s]
date	2012-02-11T00:53:21	Date and time of file creation	ontime1	14777.267476559	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	14777.308516562	Sum of GTIs [s]
			ontime3	14774.208566248	Sum of GTIs [s]
			ontime6	14777.185396552	Sum of GTIs [s]
			l1events	522884	Number of level 1 events

2.1.4 Events

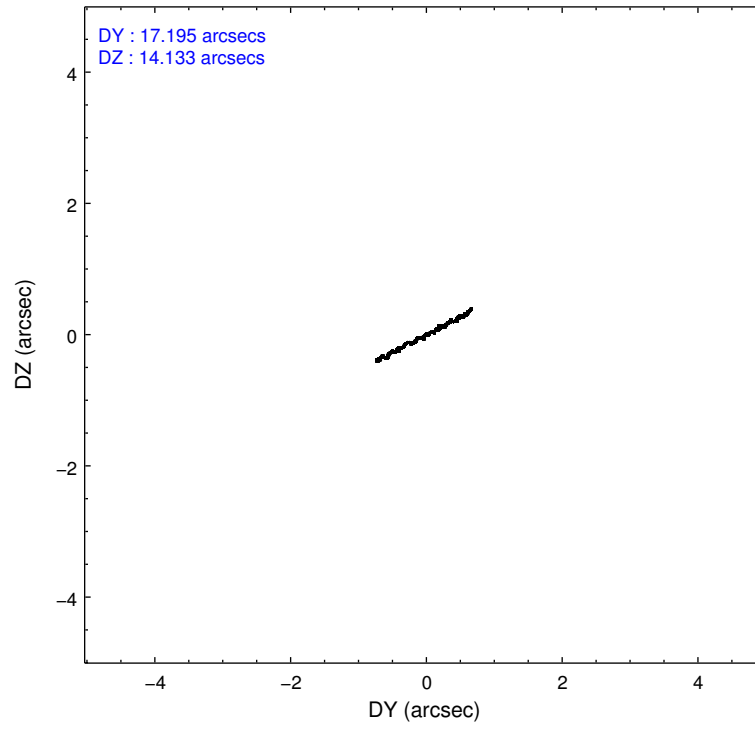
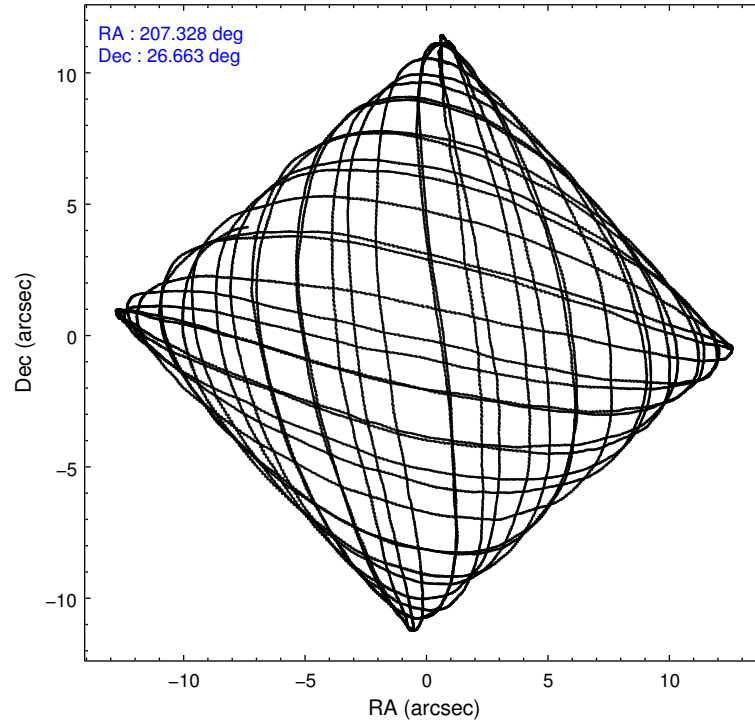
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	153943	89004	96257	91406	92274
rejected events	80327	75723	85101	81236	81417
rejected %	52%	85%	88%	88%	88%

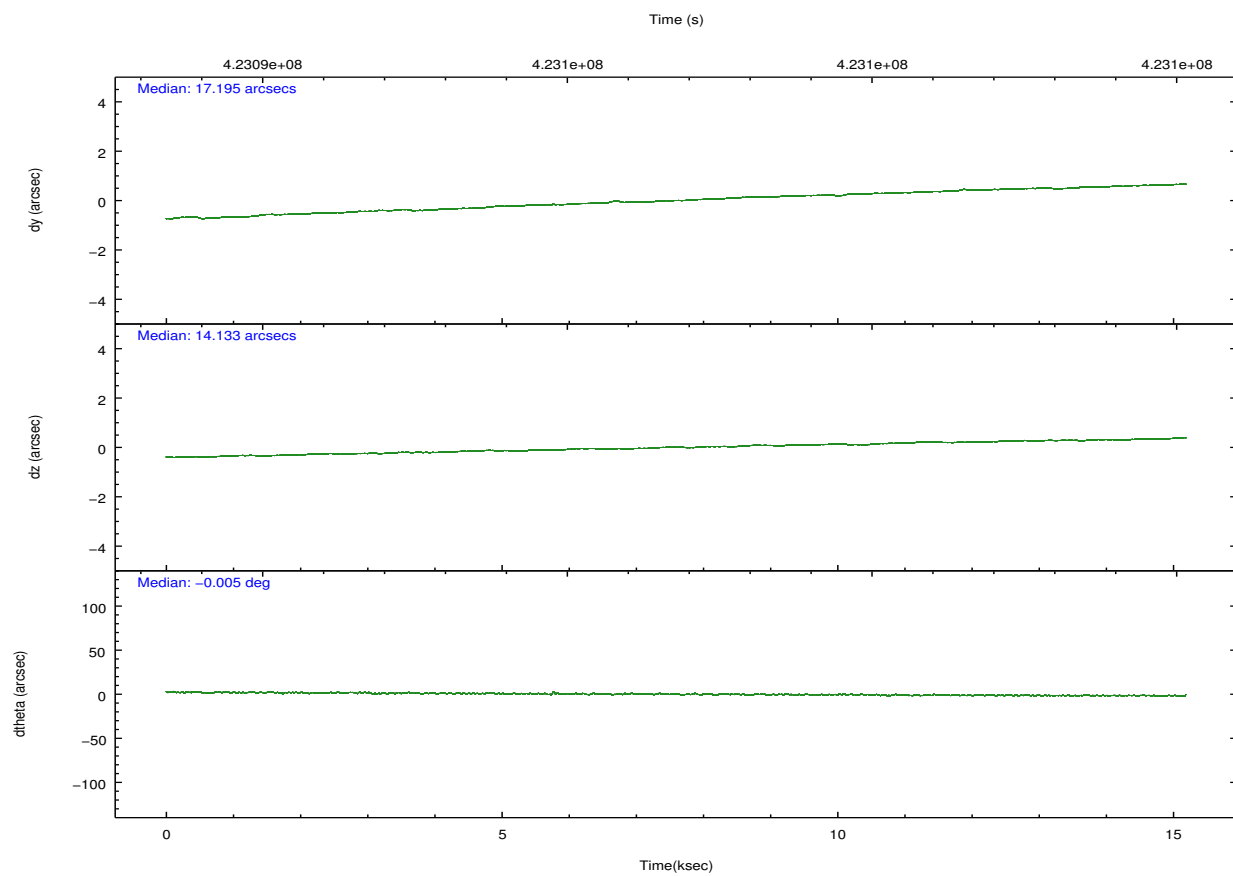
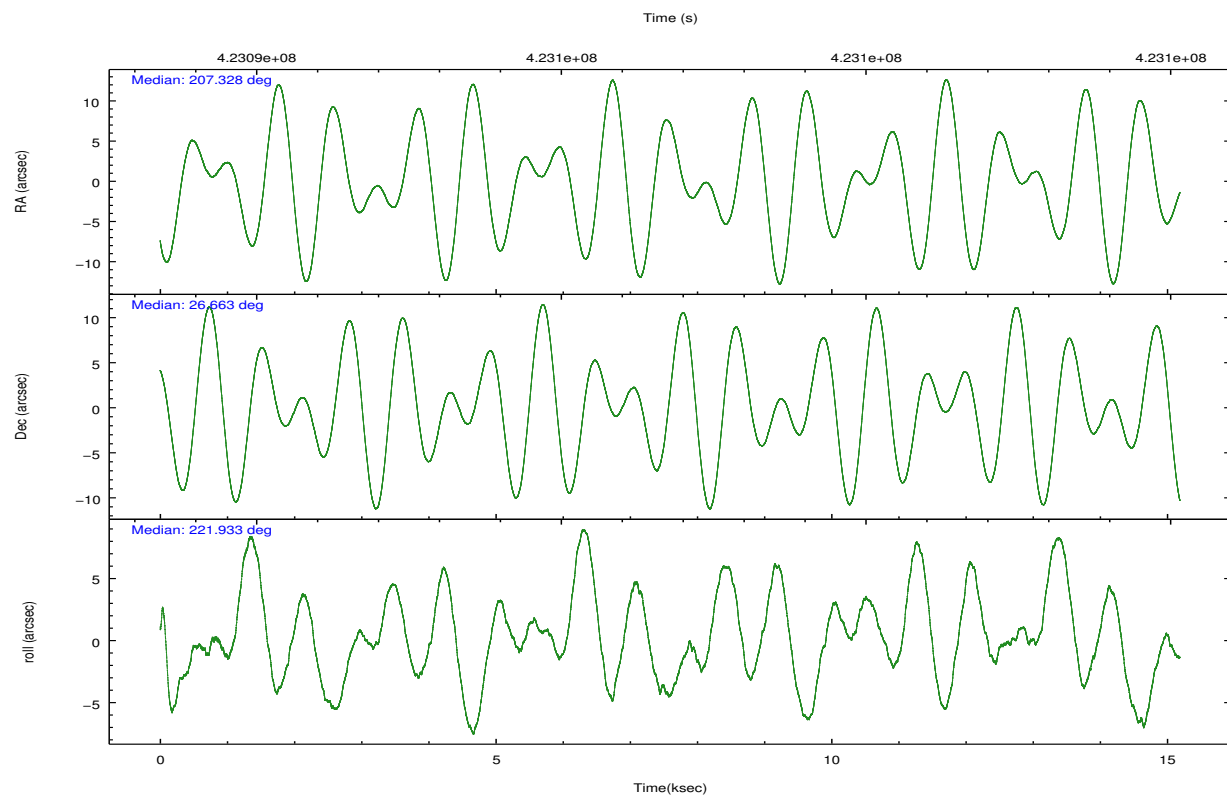
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	53764	5392	4349	3731	3602
	34%	6%	4%	4%	3%
grade 1 events	276	54	77	45	48
	0%	0%	0%	0%	0%
grade 2 events	9439	2904	2552	2223	2437
	6%	3%	2%	2%	2%
grade 3 events	3266	1225	1100	1093	1183
	2%	1%	1%	1%	1%
grade 4 events	3119	1161	1118	1101	1143
	2%	1%	1%	1%	1%
grade 5 events	4104	4230	3756	4591	4310
	2%	4%	3%	5%	4%
grade 6 events	4046	2601	2038	2025	2492
	2%	2%	2%	2%	2%
grade 7 events	75929	71437	81267	76597	77059
	49%	80%	84%	83%	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	207.337738	207.3282848964928	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.688849	26.66266412647282	Alternating exposures requested	N	N
[deg] Pointing Roll	221.722202	221.9351349698769	[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	-254.359963	-254.3657361129205			
[mm] SIM translation stage offset	20.7675	20.77328310999084			
[s] Observation start time (MET)	423089368.184000	423088991.91401			
Observation start date	2011-05-29T20:48:22	2011-05-29T20:43:11			
[s] Observation end time (MET)	423104368.184000	423104502.21482			
Observation end date	2011-05-30T00:58:22	2011-05-30T01:01:42			
Read mode	TIMED	TIMED			

2.3 Aspect



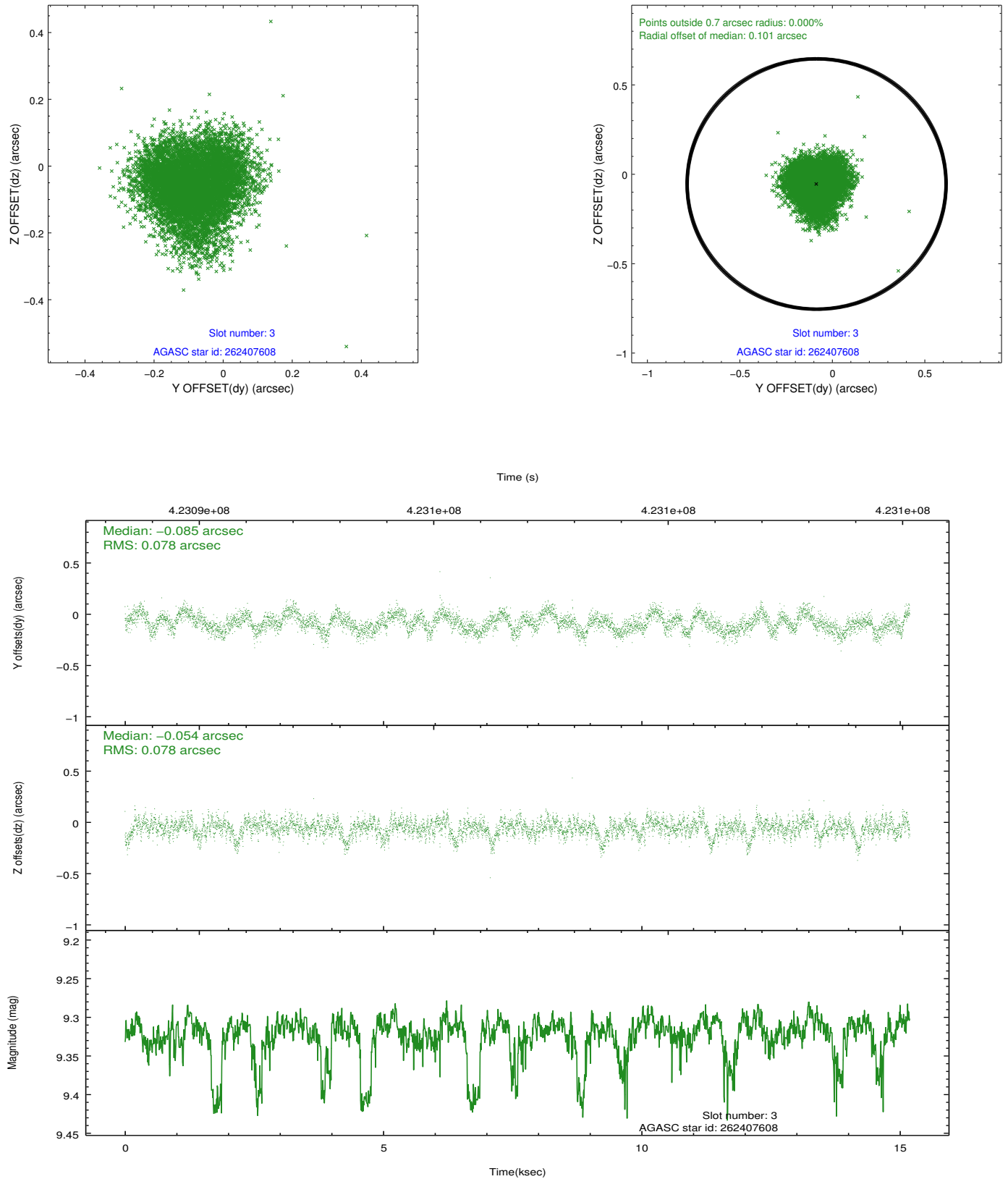


Slot Statistics

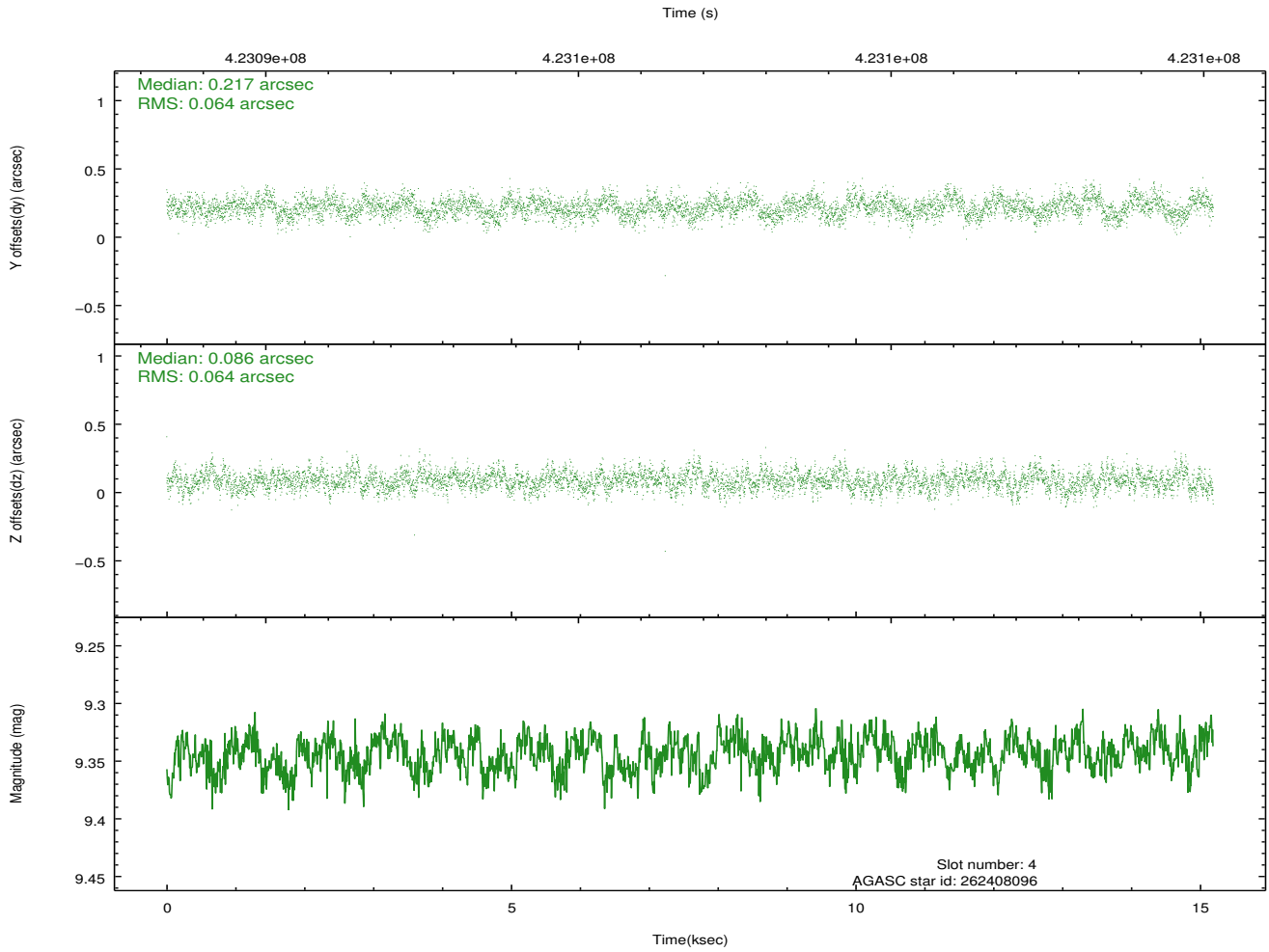
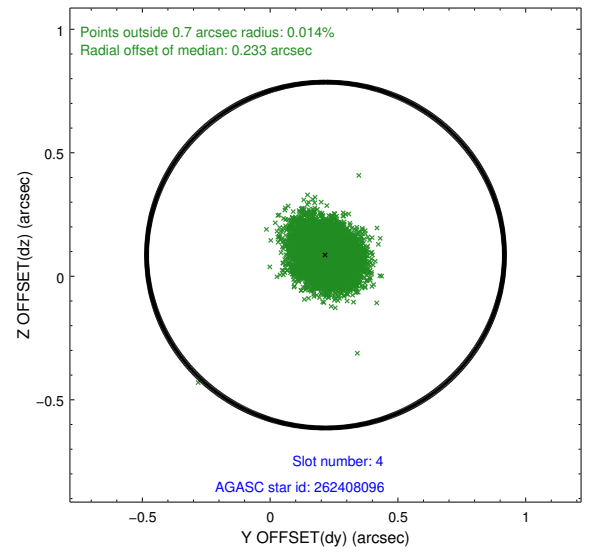
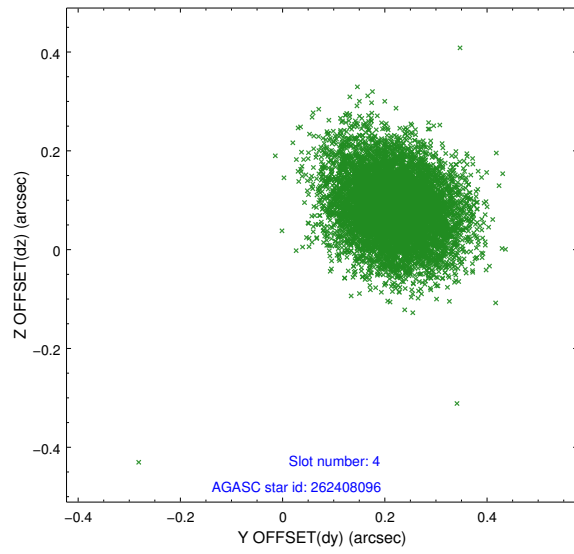
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.15	3705	-0.077	0.174	0.013	0.023	0.000000	0.000000	922.55	-410.64
1	FID	ACIS-I-5	7.06	3705	-0.072	-0.006	0.011	0.023	0.000000	0.000000	-1825.50	1486.47
2	FID	ACIS-I-6	7.03	3705	0.058	-0.099	0.015	0.025	0.000000	0.000000	387.76	2131.32
3	GUIDE	262407608	9.32	7396	-0.085	-0.054	0.118	0.187	207.378401	26.435507	509.13	768.26
4	GUIDE	262408096	9.34	7405	0.217	0.086	0.096	0.157	207.011678	26.515421	1199.23	-233.98
5	GUIDE	262408512	8.01	7404	-0.170	0.036	0.073	0.114	207.800210	27.128796	-2161.62	-197.88
6	GUIDE	262411960	9.67	7336	0.141	0.074	0.156	0.244	207.327895	25.881727	1957.60	2147.85
7	GUIDE	262800360	8.57	7405	-0.107	-0.139	0.089	0.142	207.437814	27.569136	-2347.20	-2152.79

2.4 Star Slots

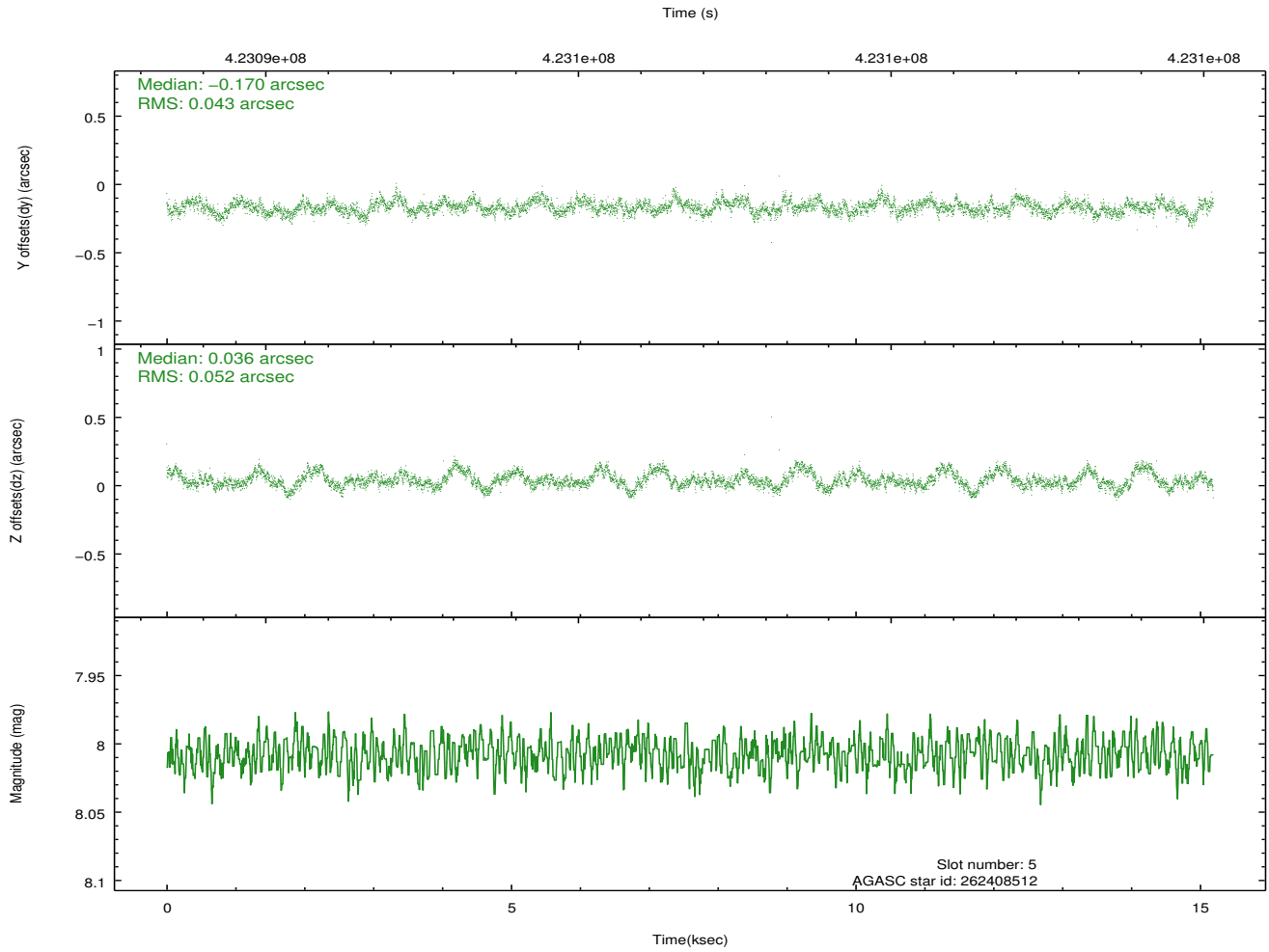
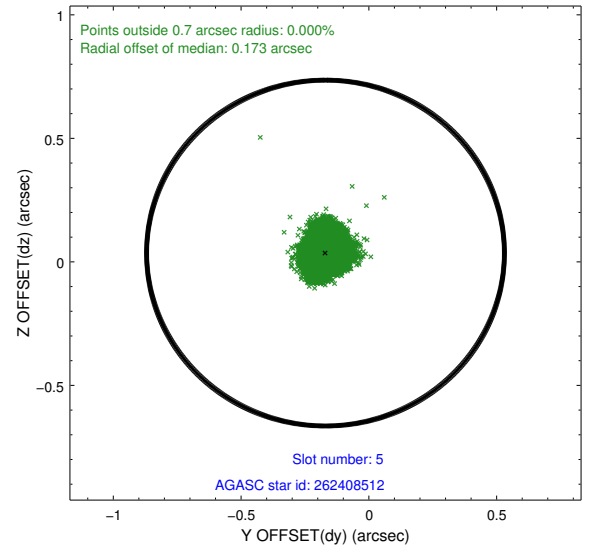
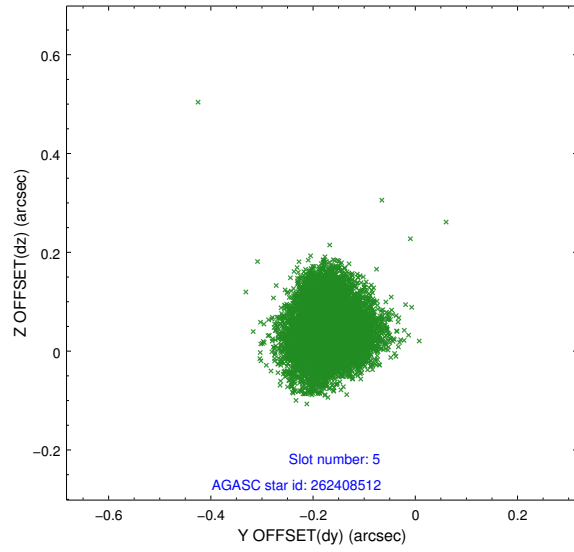
2.4.1 Slot 3



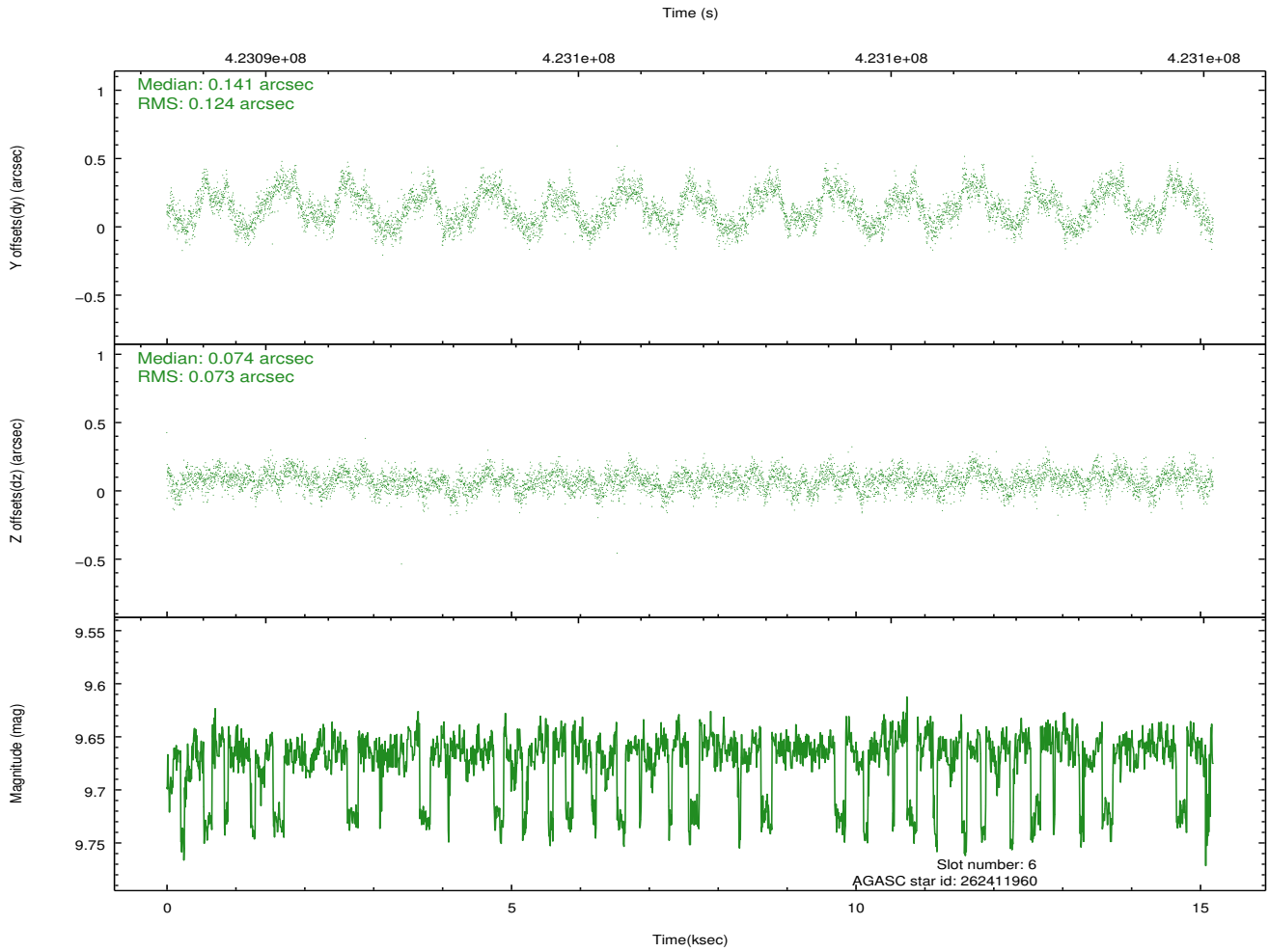
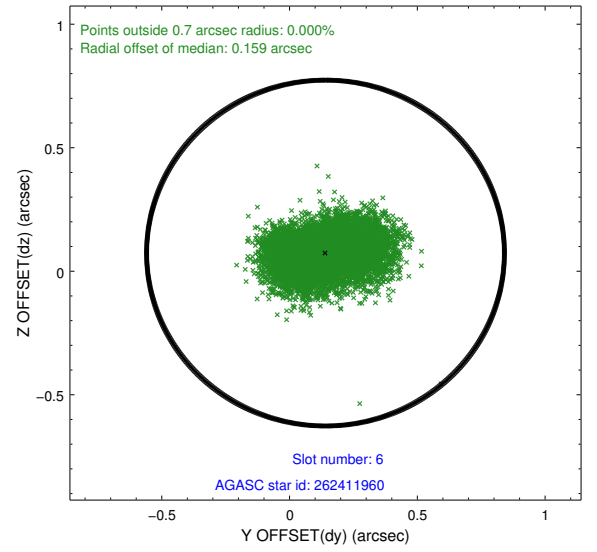
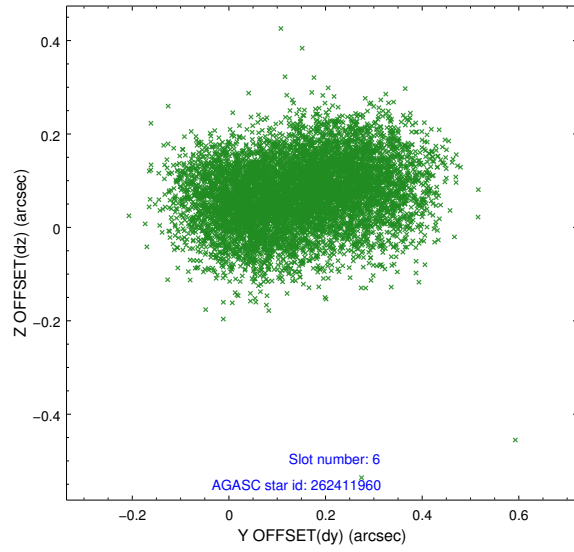
2.4.2 Slot 4



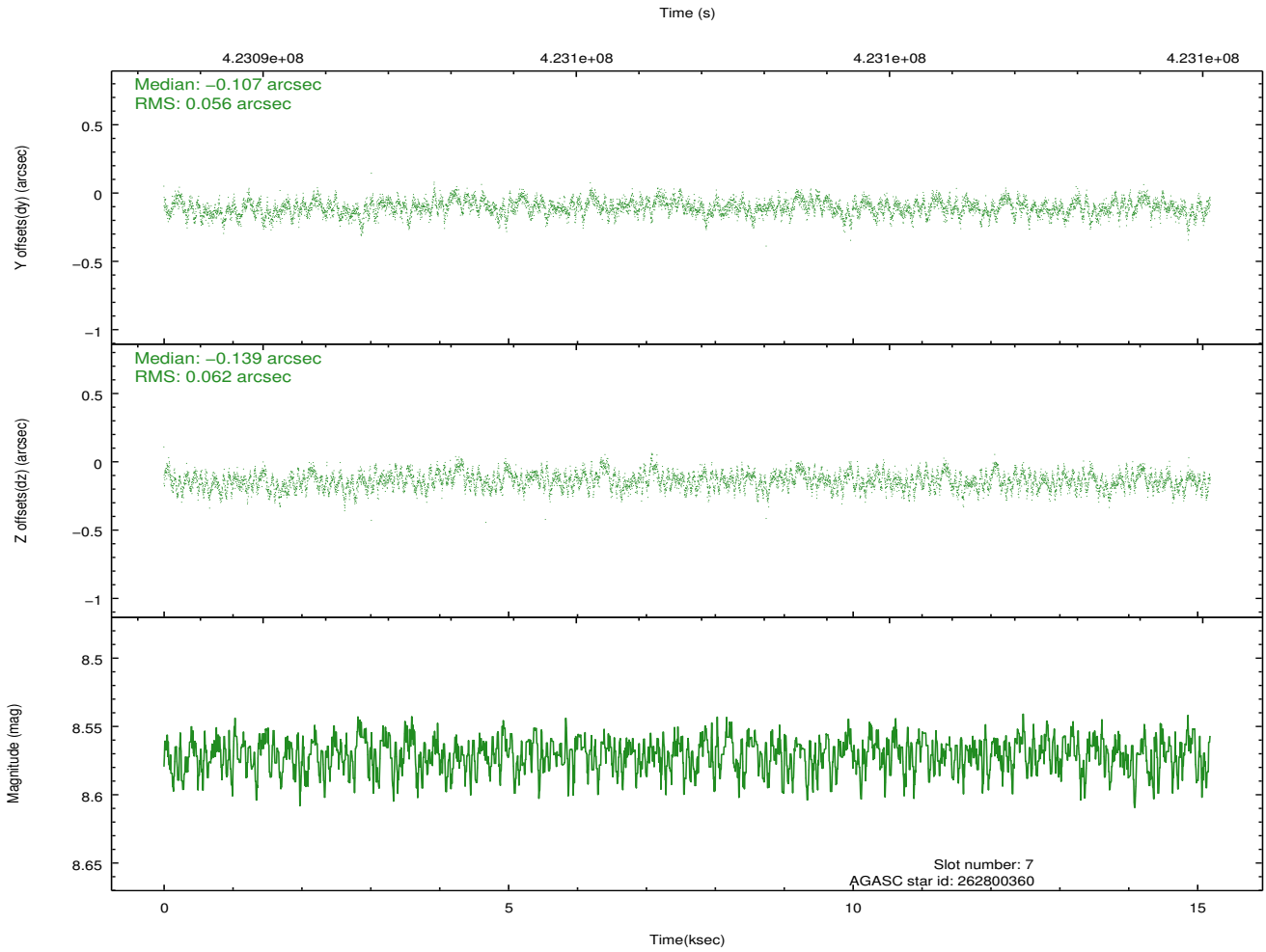
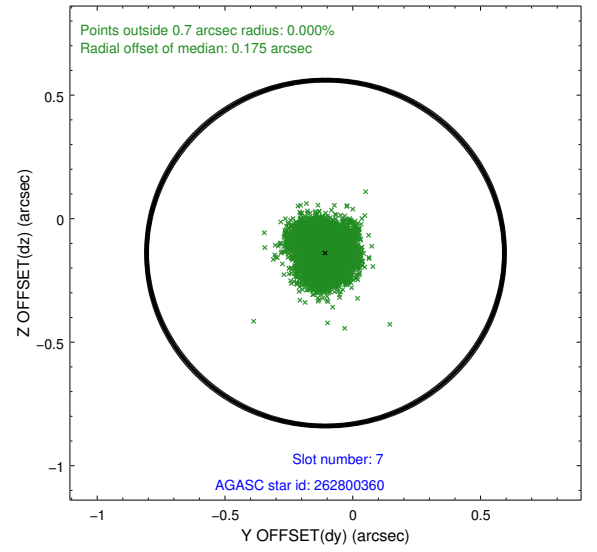
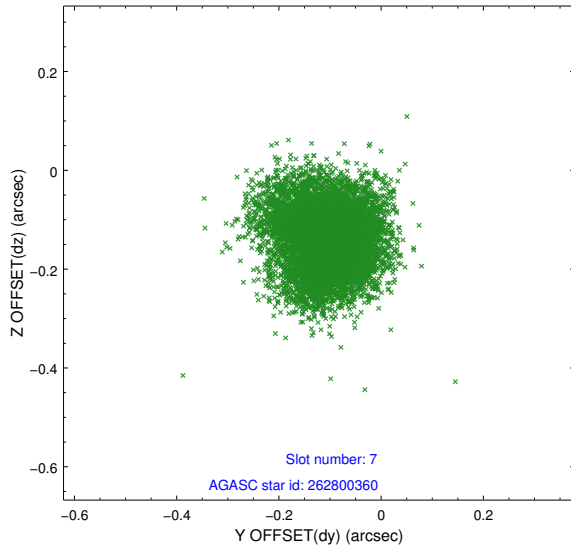
2.4.3 Slot 5



2.4.4 Slot 6

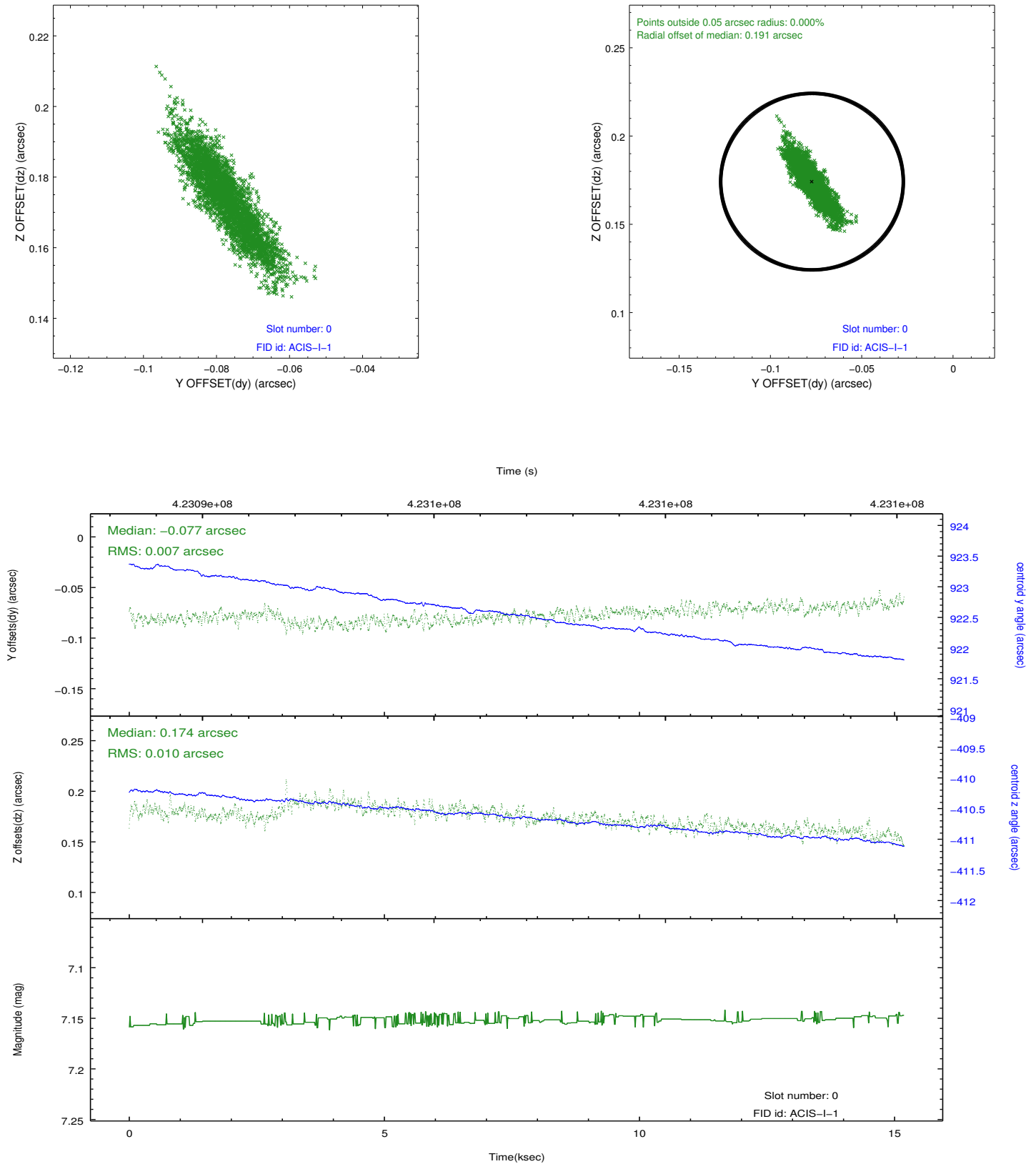


2.4.5 Slot 7

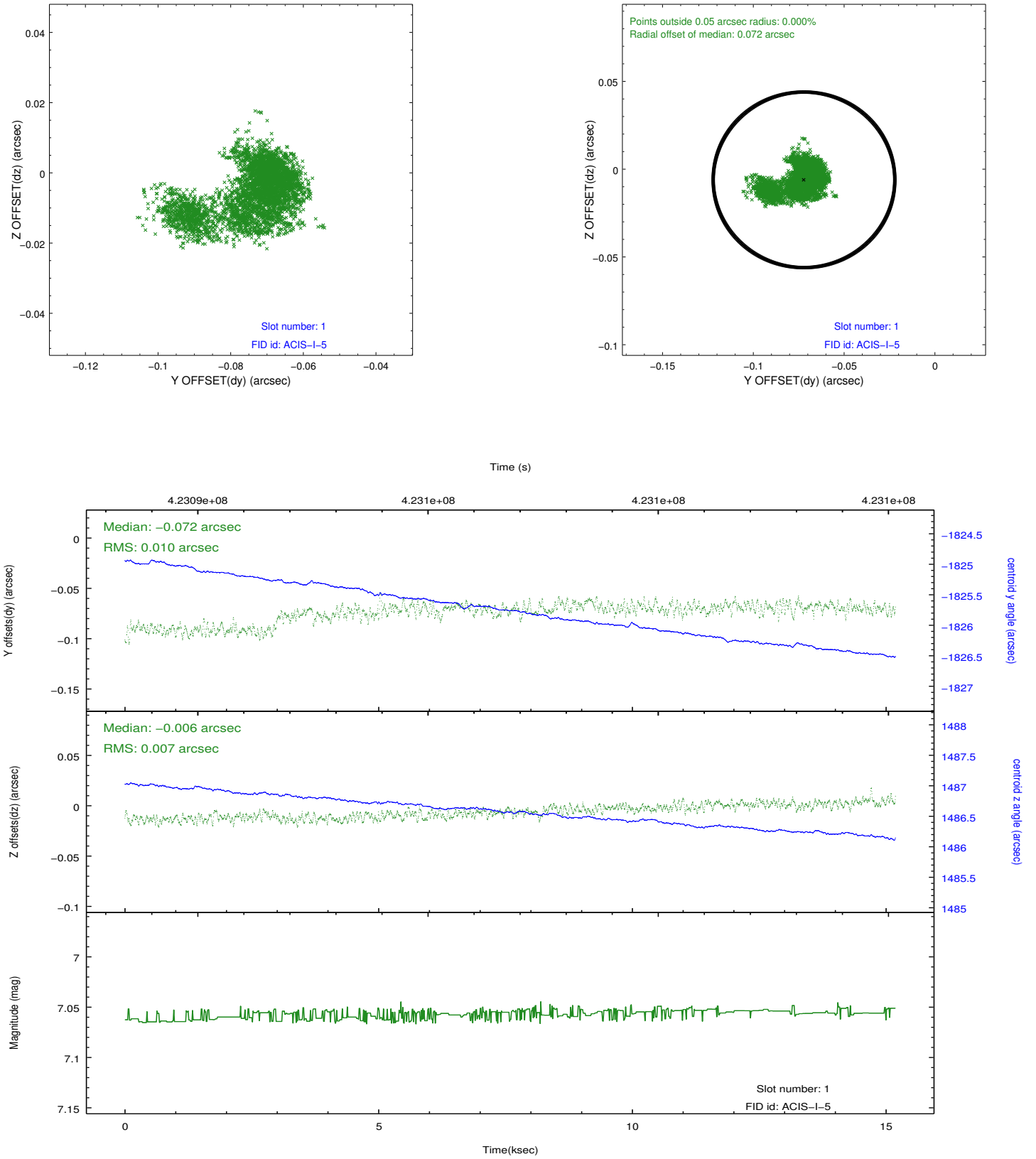


2.5 FID Slots

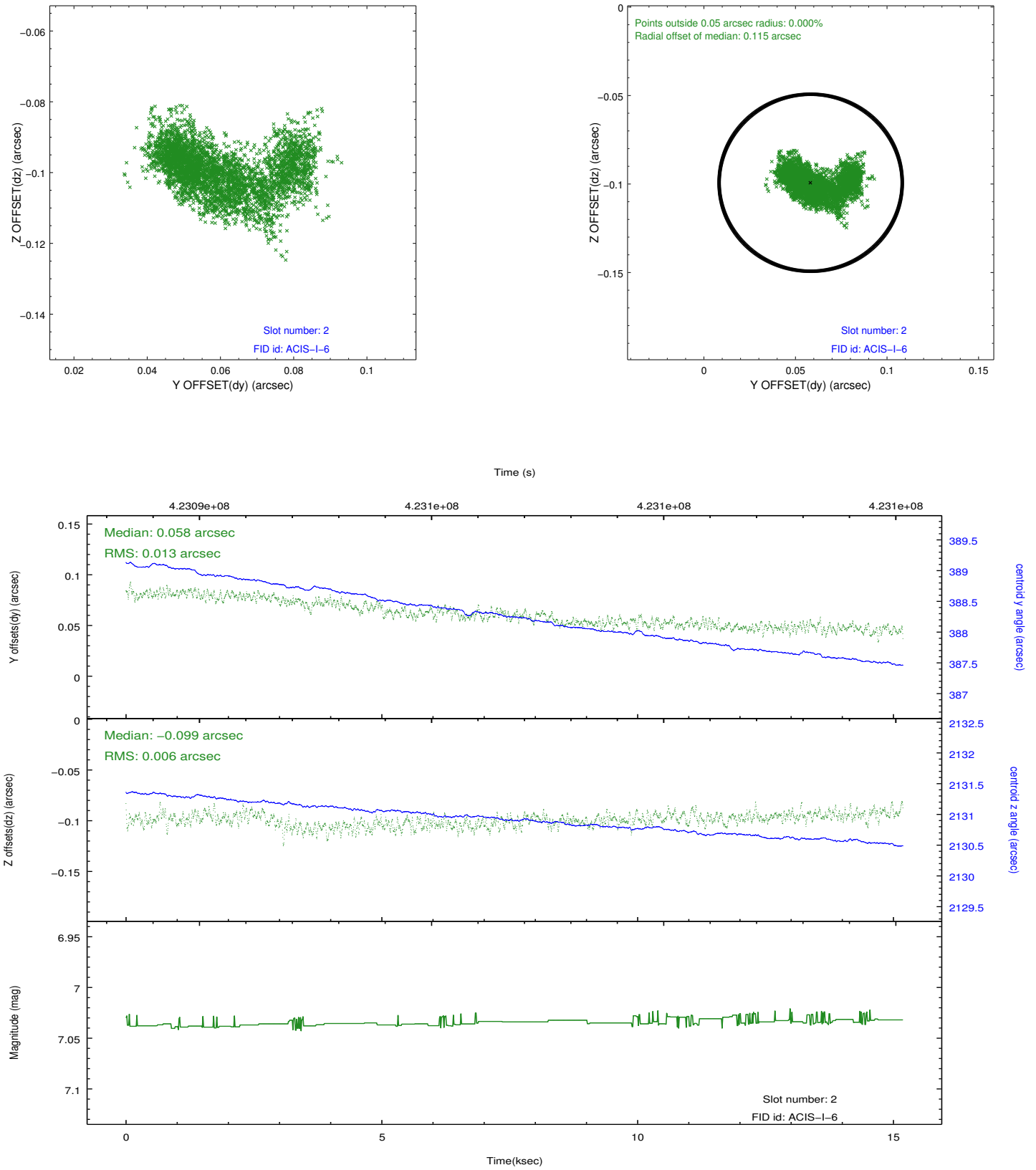
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.777226437926

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.