

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13414 - L2 Version 2
Chandra X-Ray Center

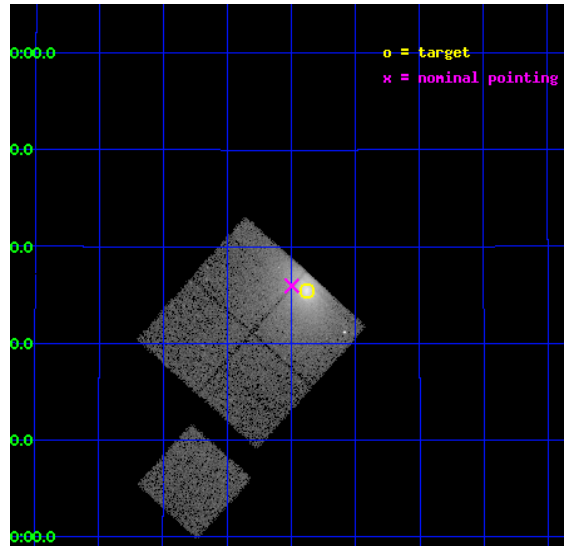
L2 Processing Date : Feb 10 2012

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1 Front

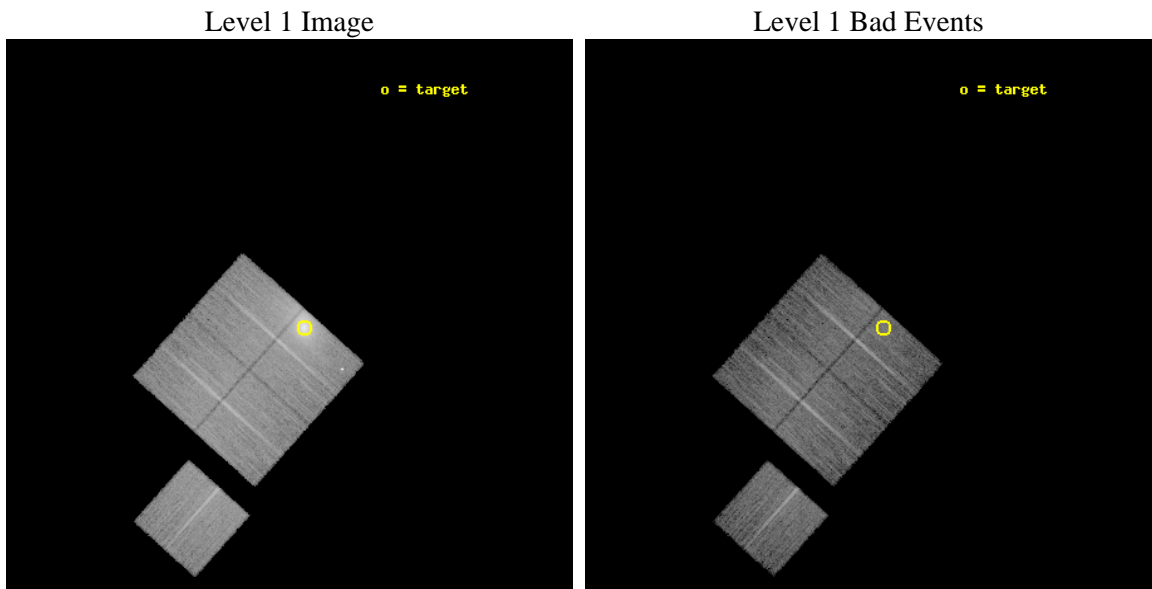
seq_num	890059	Sequence number
obs_id	13414	Observation id
title	Mapping the Spatial Distribution of the ACIS Contaminant	Proposal
observer	Dr. CXC Calibration	Principal investigator
object	Abell 1795	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219	Observer's specified target RA [deg]
dec_targ	26.591	Observer's specified target Dec [deg]
ra_nom	207.24904668217	Nominal RA [deg]
dec_nom	26.599389873787	Nominal Dec [deg]
roll_nom	221.89662193286	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14766.777491748	Sum of GTIs [s]
livetime	14573.838672675	Livetime [s]
ontime0	14766.777491748	Sum of GTIs [s]
ontime1	14773.100532353	Sum of GTIs [s]
ontime2	14770.000582039	Sum of GTIs [s]
ontime3	14773.18261236	Sum of GTIs [s]
ontime6	14773.018452346	Sum of GTIs [s]
l2events	127167	Number of level 2 events



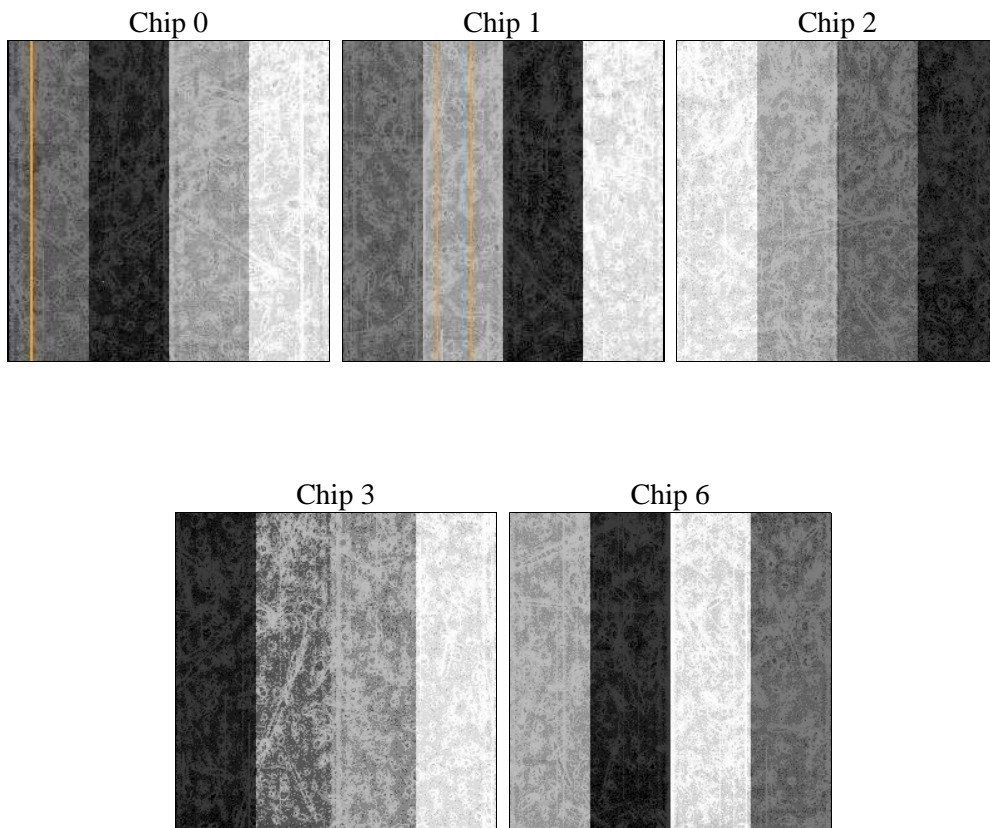
2 OBI

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	14766.777491748	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	14766.777491748	Sum of GTIs [s]
date	2012-02-11T01:15:21	Date and time of file creation	ontime1	14773.100532353	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	14770.000582039	Sum of GTIs [s]
			ontime3	14773.18261236	Sum of GTIs [s]
			ontime6	14773.018452346	Sum of GTIs [s]
			l1events	545806	Number of level 1 events

2.1.4 Events

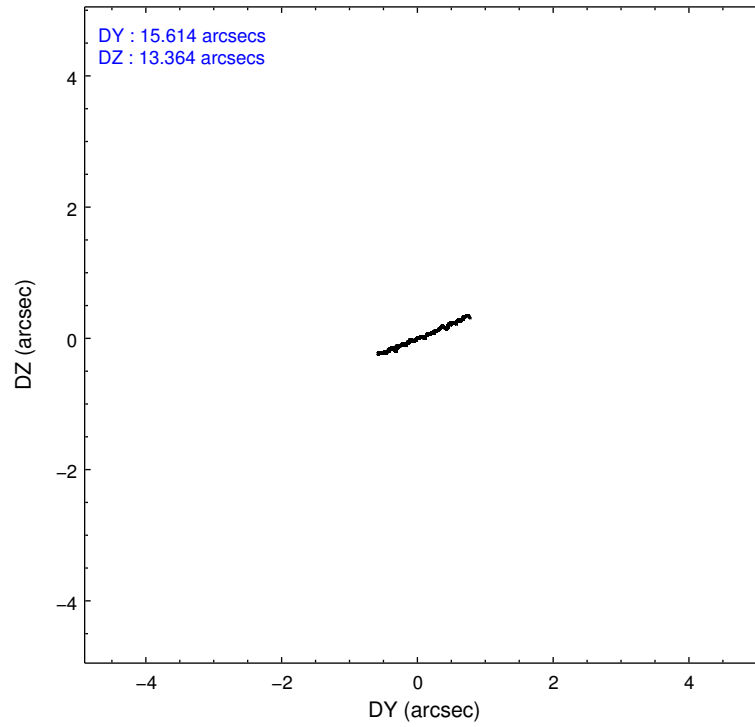
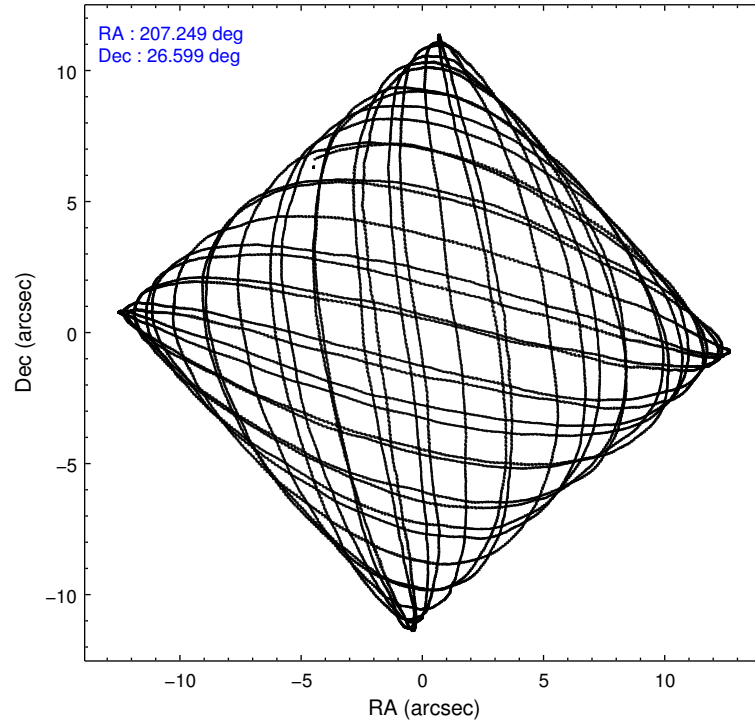
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	157333	105993	96217	92916	93347
rejected events	75703	78577	84880	82333	82612
rejected %	48%	74%	88%	88%	88%

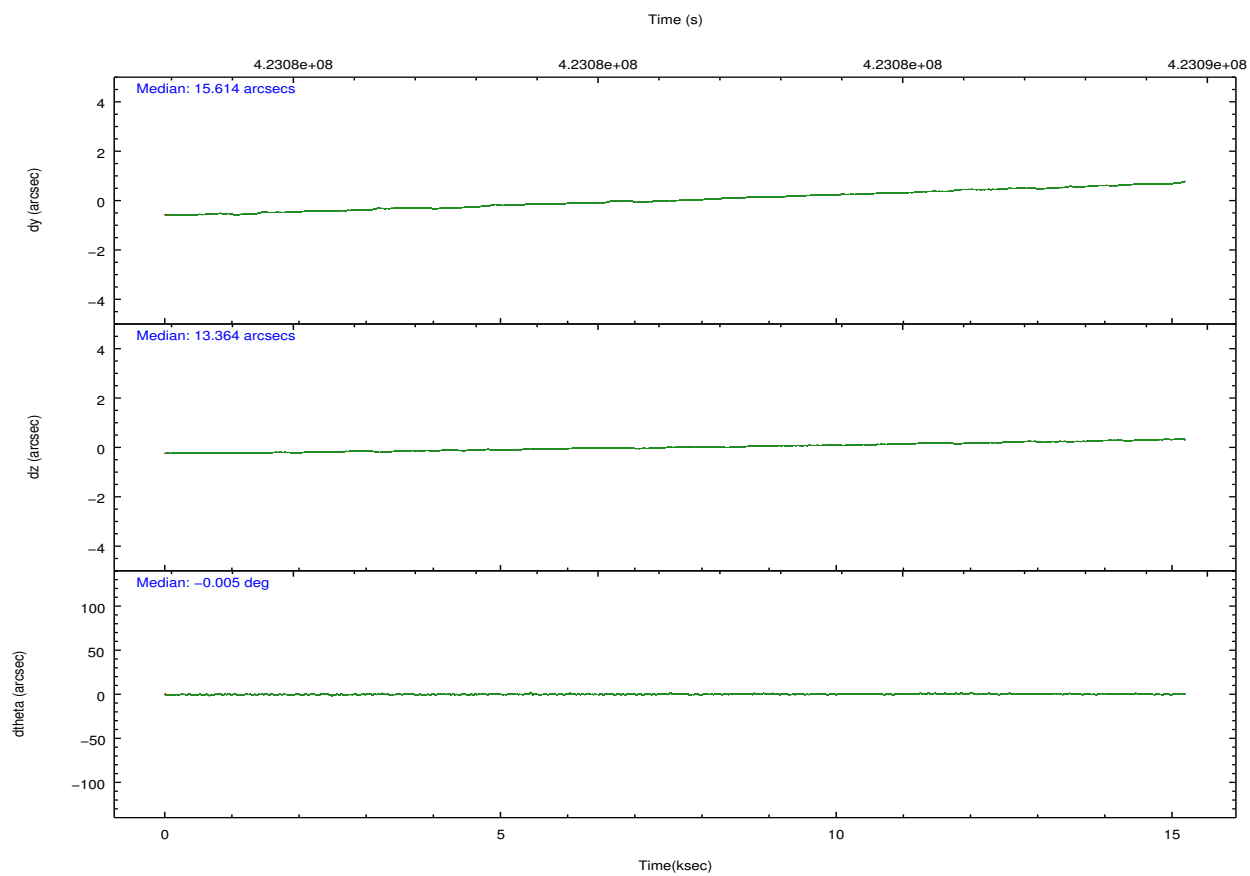
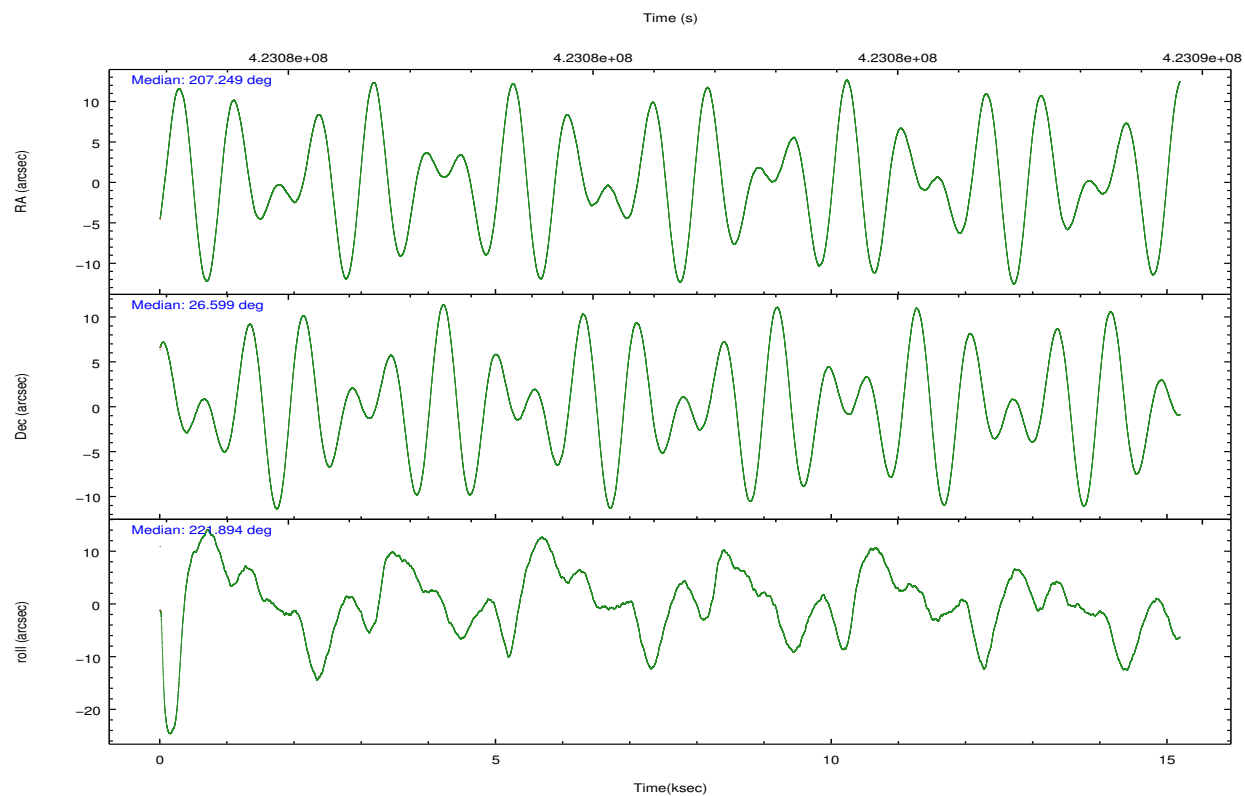
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	61209	16656	4505	4039	3644
	38%	15%	4%	4%	3%
grade 1 events	360	114	66	57	40
	0%	0%	0%	0%	0%
grade 2 events	9661	4428	2551	2319	2375
	6%	4%	2%	2%	2%
grade 3 events	3377	1661	1098	1113	1118
	2%	1%	1%	1%	1%
grade 4 events	3317	1717	1162	1050	1153
	2%	1%	1%	1%	1%
grade 5 events	4272	4358	3869	4418	4343
	2%	4%	4%	4%	4%
grade 6 events	4107	2969	2031	2064	2449
	2%	2%	2%	2%	2%
grade 7 events	71030	74090	80935	77856	78225
	45%	69%	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	207.258466	207.2490466821685	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.625555	26.59938987378707	Alternating exposures requested	N	N
[deg] Pointing Roll	221.683709	221.8966219328623	[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)	423073858.184000	423073481.6132			
Observation start date	2011-05-29T16:29:52	2011-05-29T16:24:41			
[s] Observation end time (MET)	423088858.184000	423088991.91401			
Observation end date	2011-05-29T20:39:52	2011-05-29T20:43:11			
Read mode	TIMED	TIMED			

2.3 Aspect



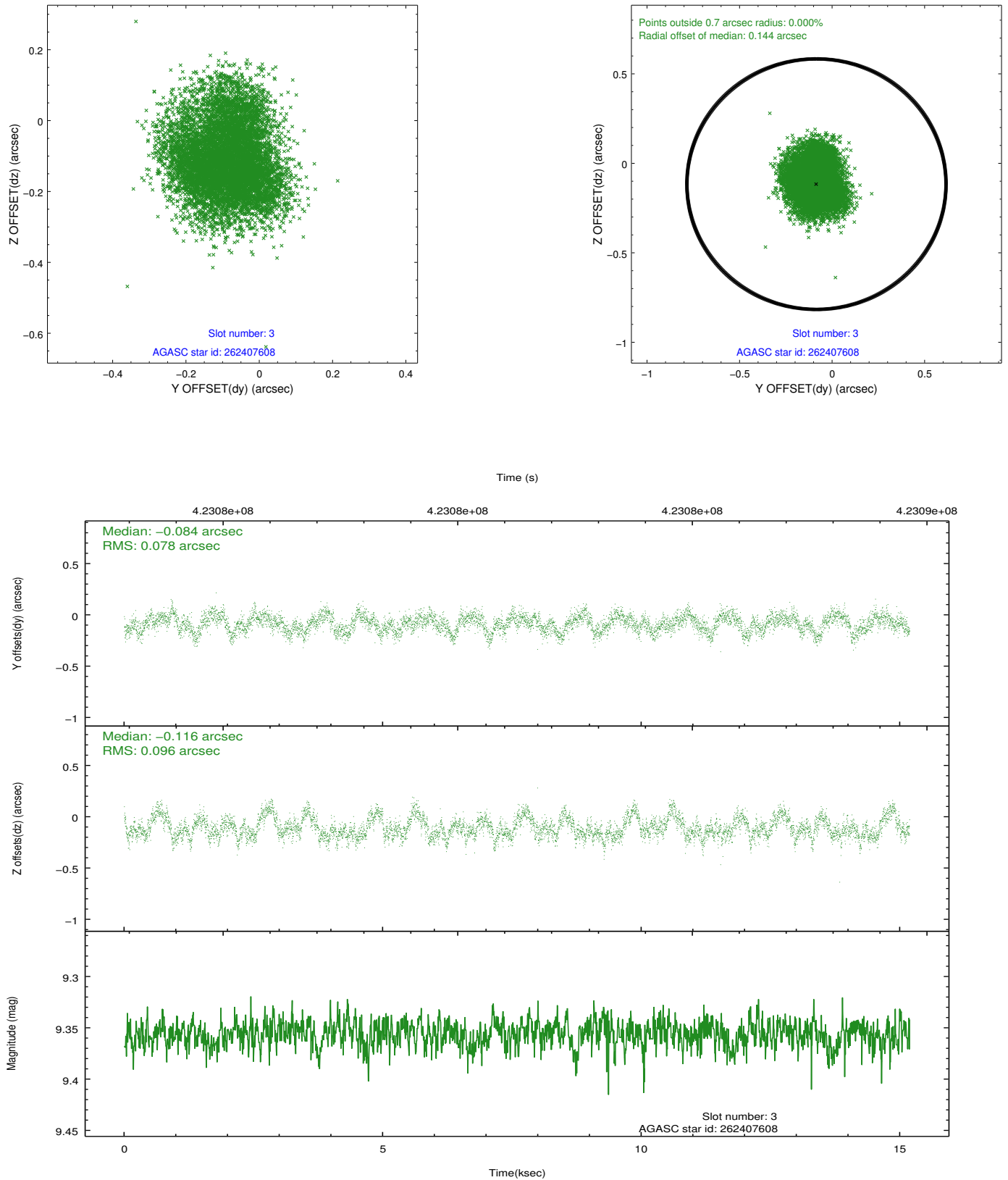


Slot Statistics

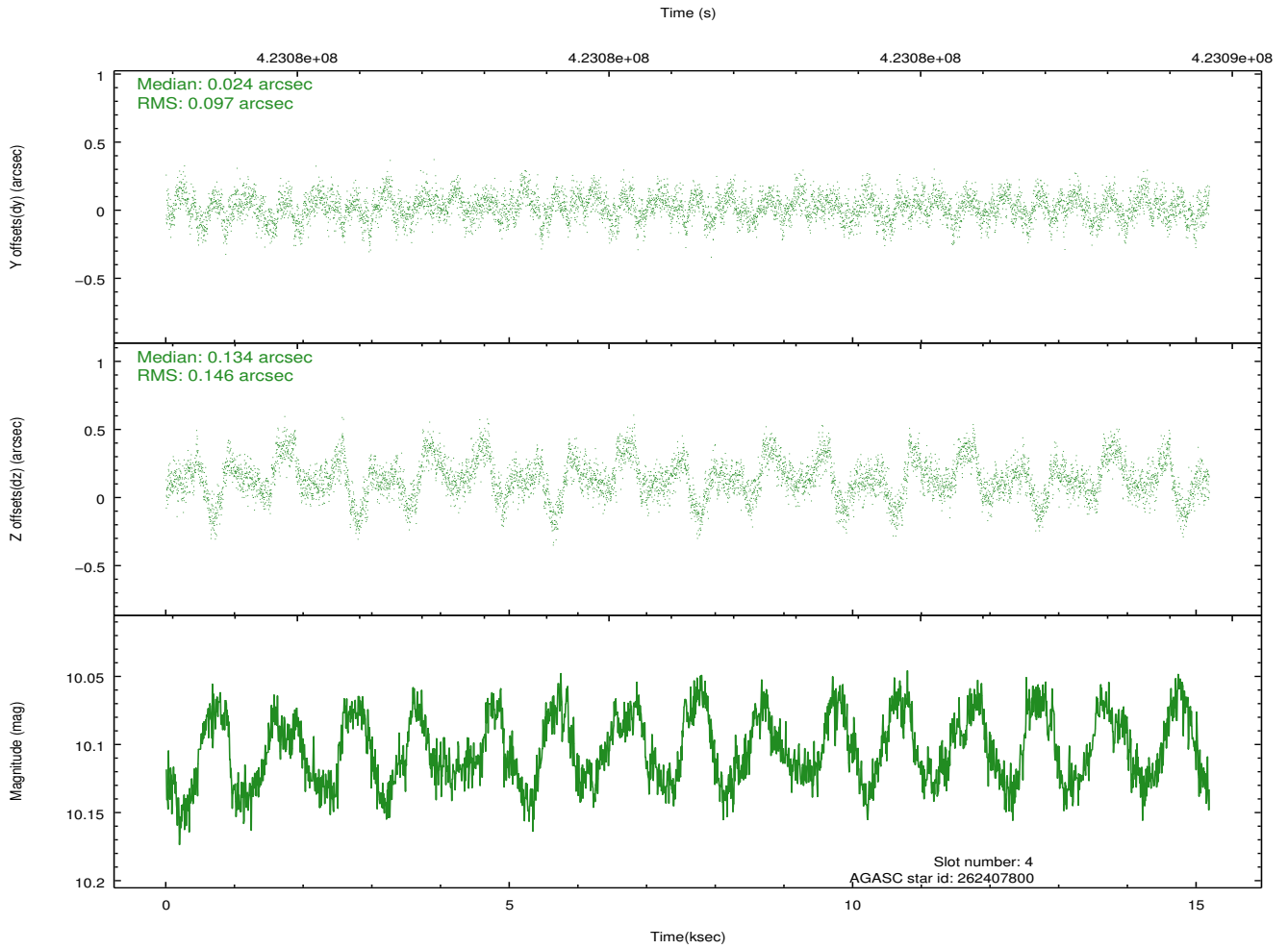
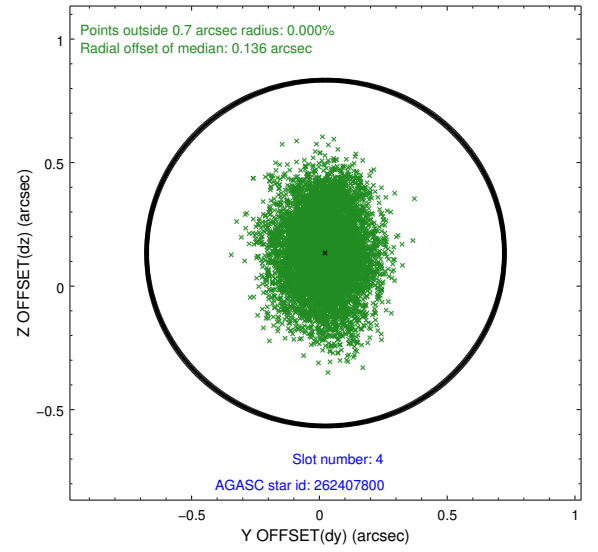
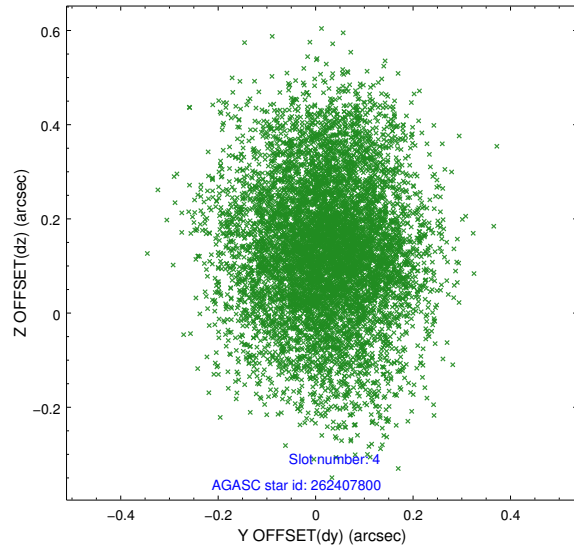
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.16	3705	-0.082	0.185	0.010	0.019	0.000000	0.000000	924.12	-409.87
1	FID	ACIS-I-5	7.05	3705	-0.098	-0.016	0.008	0.014	0.000000	0.000000	-1823.93	1487.24
2	FID	ACIS-I-6	7.04	3705	0.089	-0.100	0.009	0.014	0.000000	0.000000	389.39	2132.09
3	GUIDE	262407608	9.36	7395	-0.084	-0.116	0.133	0.210	207.378401	26.435507	166.35	768.14
4	GUIDE	262407800	10.11	7395	0.024	0.134	0.188	0.309	207.321181	27.251762	-1646.77	-1551.00
5	GUIDE	262408096	9.34	7346	0.173	0.055	0.155	0.249	207.011678	26.515421	857.44	-233.50
6	GUIDE	262409624	10.12	7402	-0.106	-0.091	0.179	0.285	207.610037	27.074851	-1917.88	-459.74
7	GUIDE	262411960	9.66	7402	0.012	0.028	0.175	0.334	207.327895	25.881727	1612.92	2149.55

2.4 Star Slots

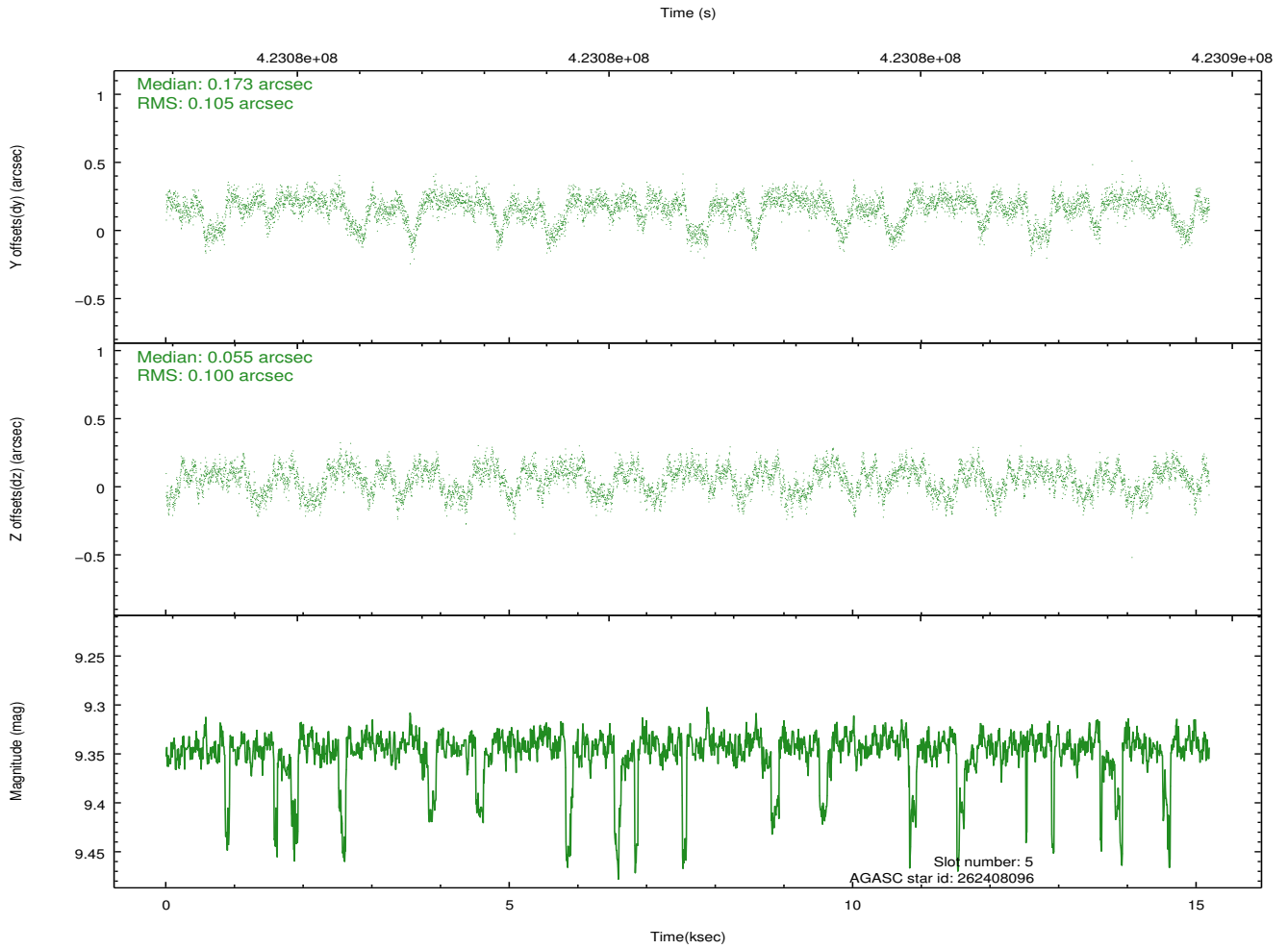
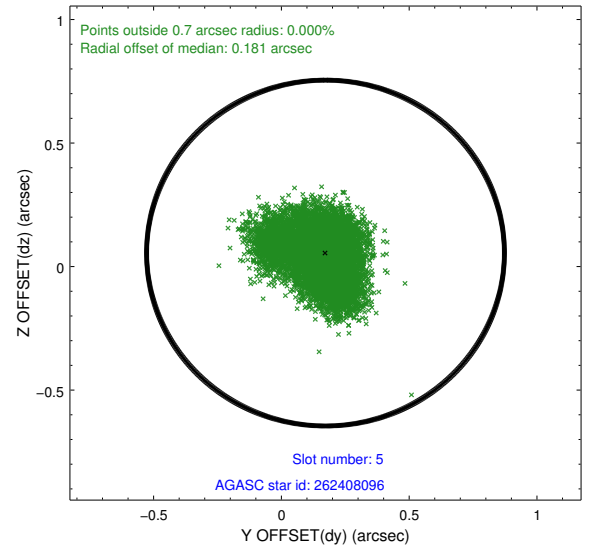
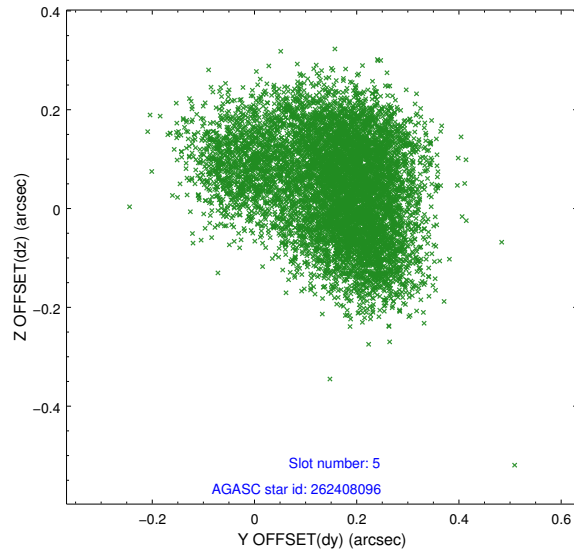
2.4.1 Slot 3



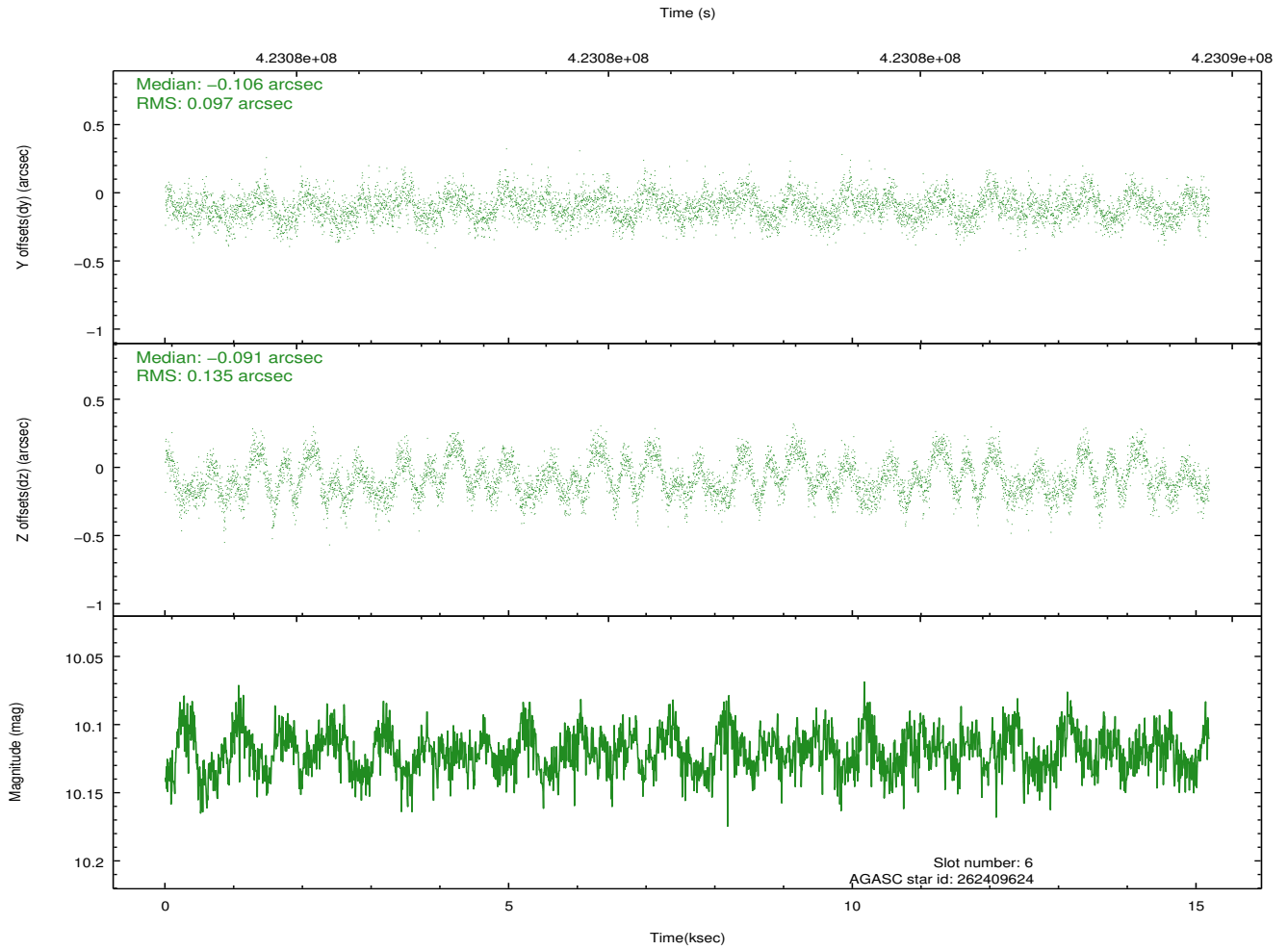
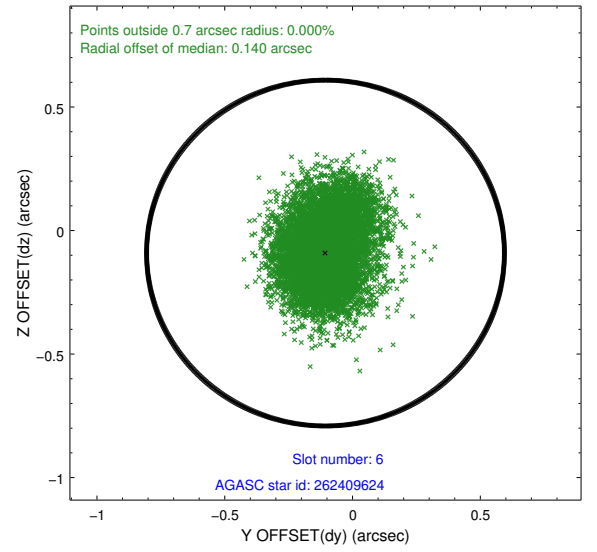
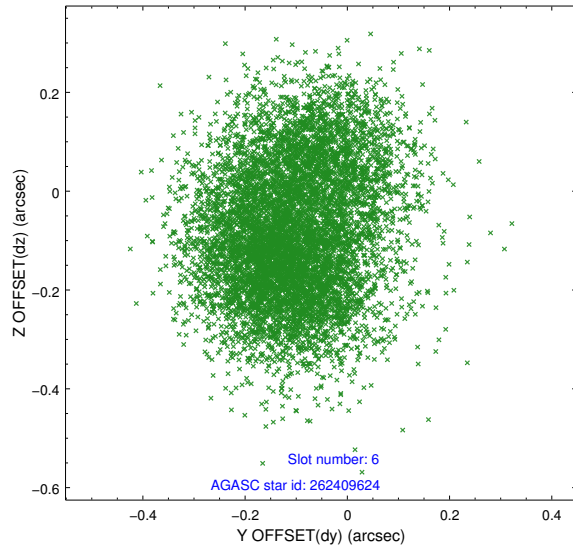
2.4.2 Slot 4



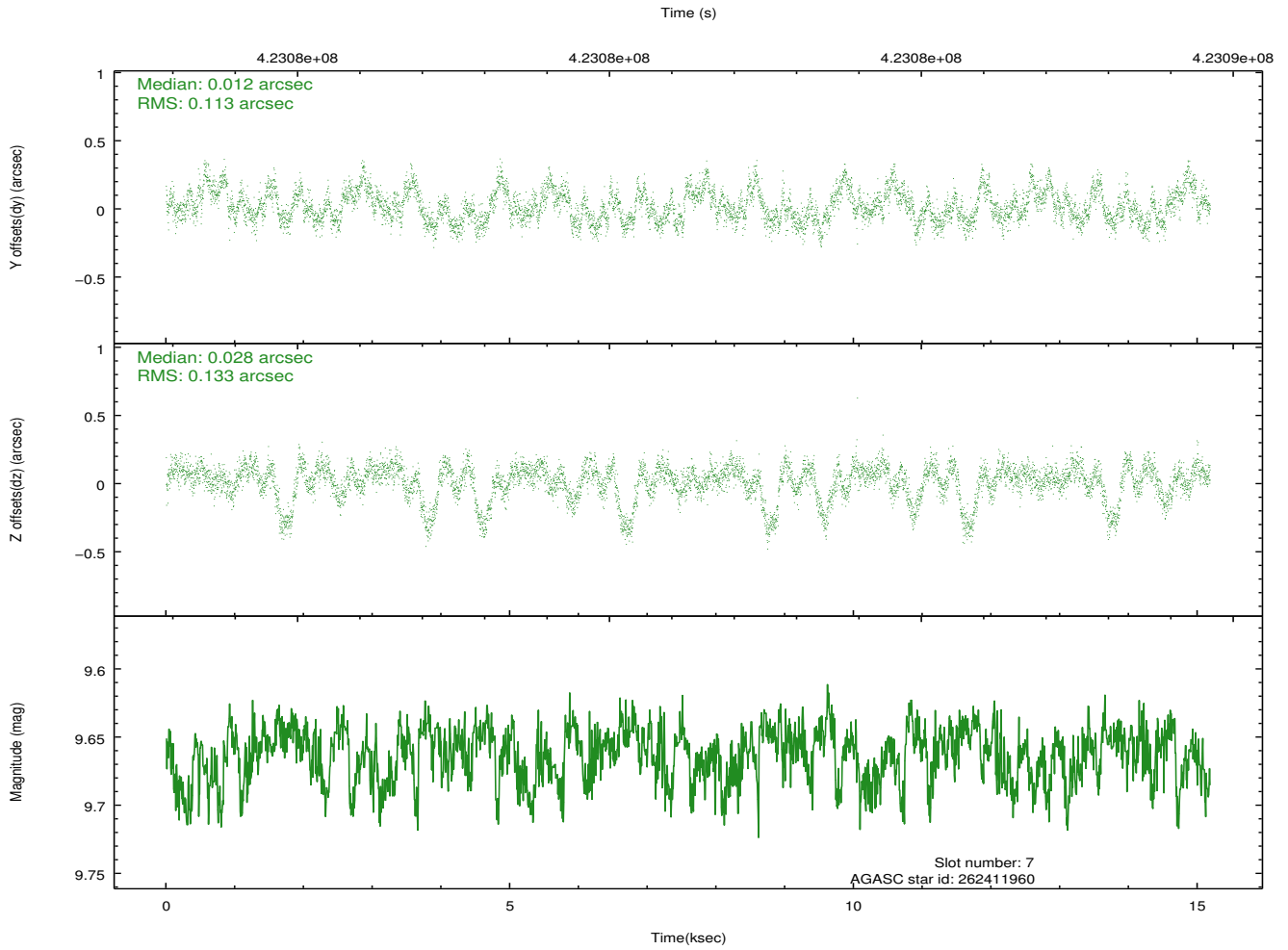
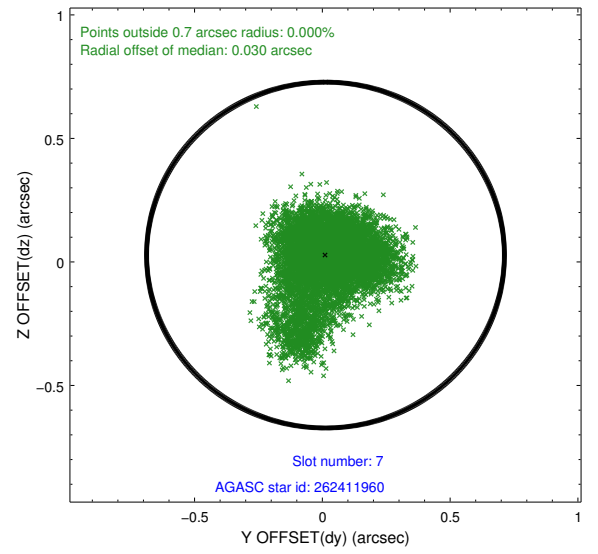
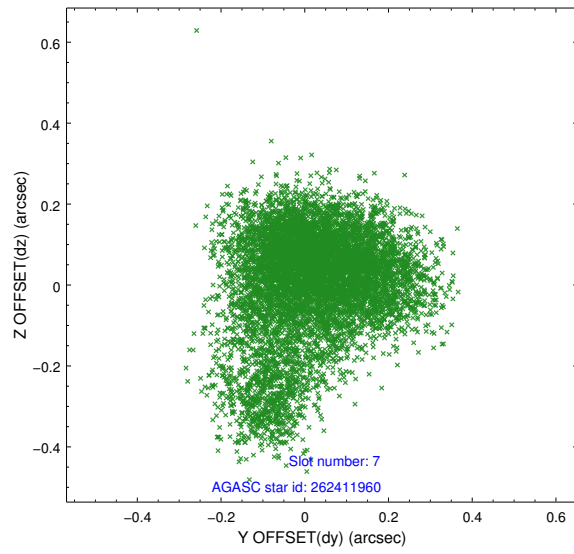
2.4.3 Slot 5



2.4.4 Slot 6

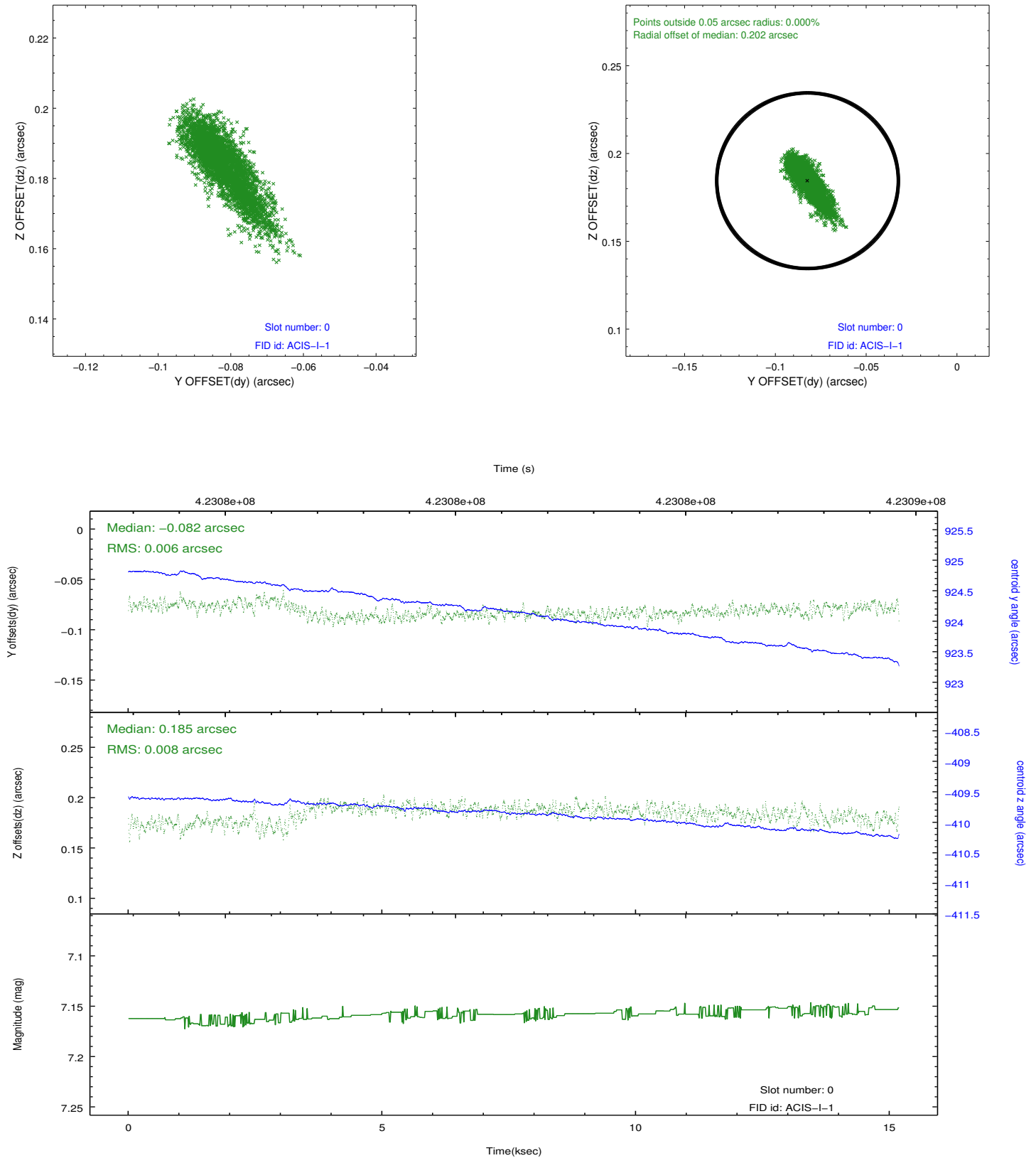


2.4.5 Slot 7

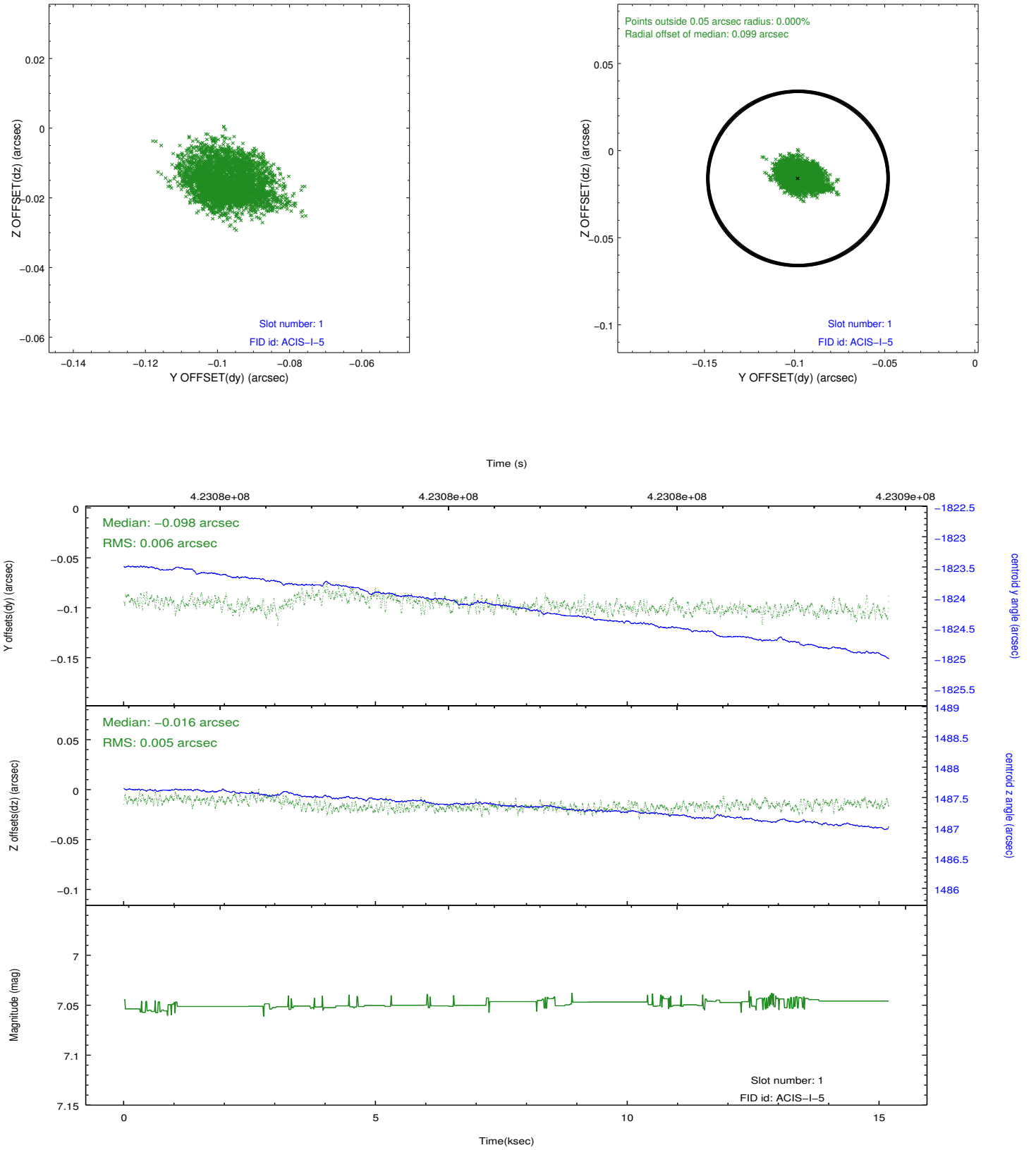


2.5 FID Slots

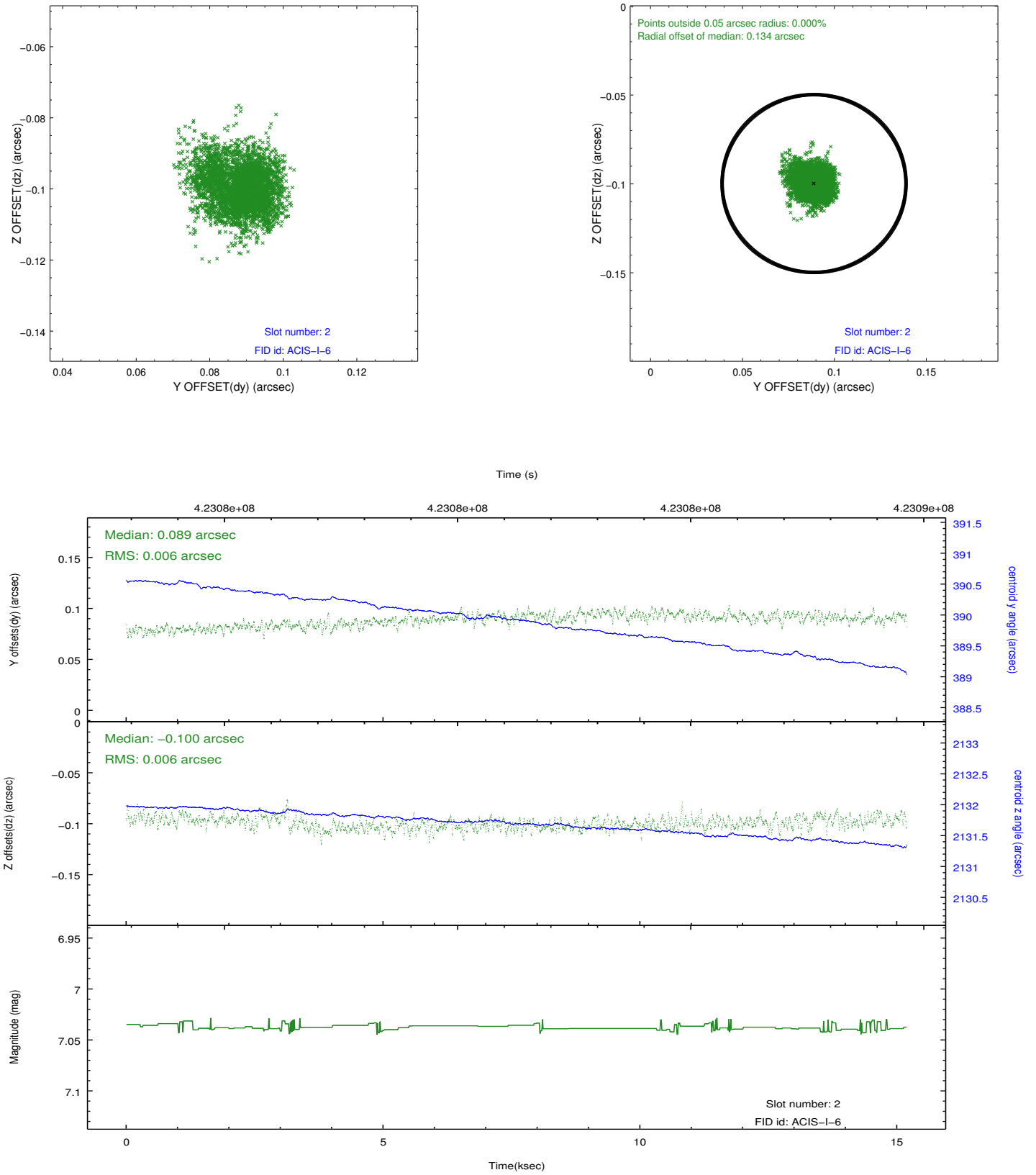
2.5.1 Slot 0



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	14.766777492464

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.