

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13112 - L2 Version 3
Chandra X-Ray Center

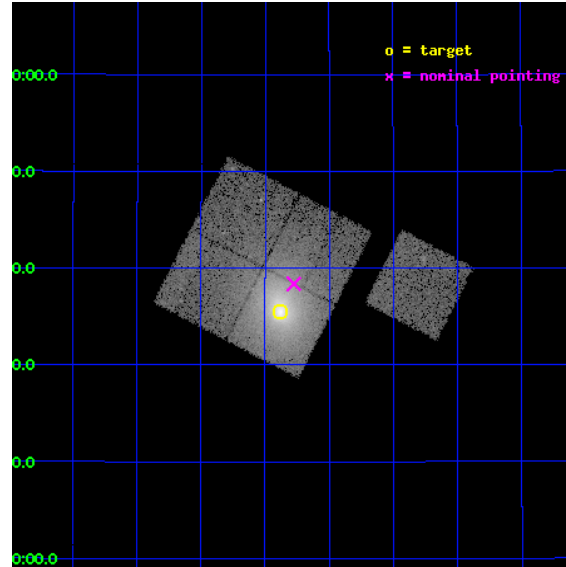
L2 Processing Date : Feb 6 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

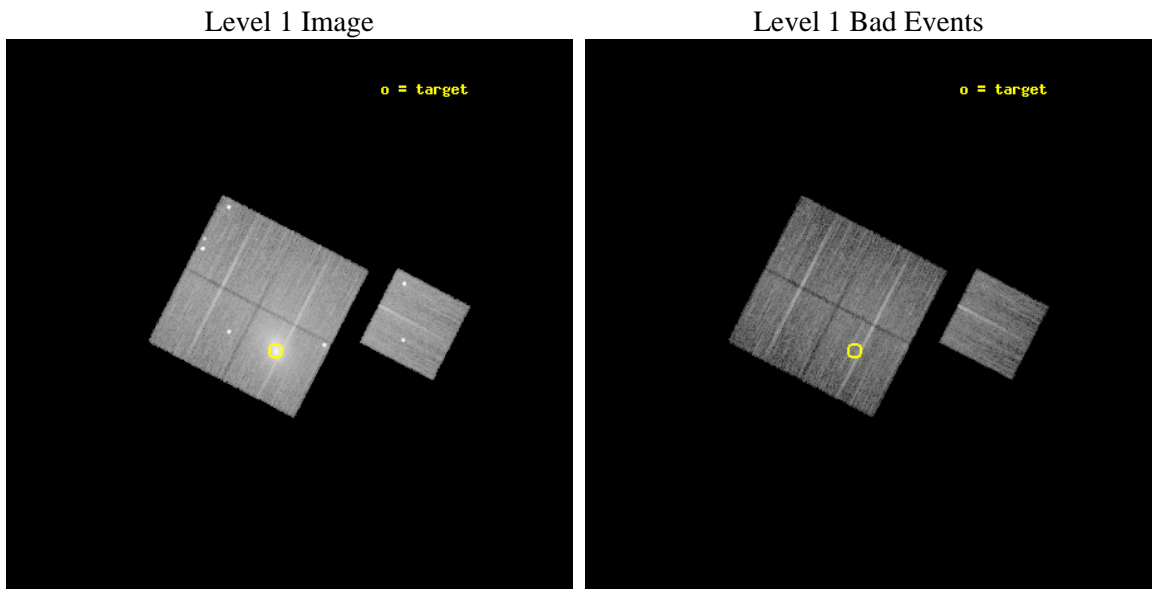
seq_num	890052	Sequence number
obs_id	13112	Observation id
title	AO-12 Calibration Observations of A1795	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	A1795	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219583	Observer's specified target RA [deg]
dec_targ	26.590833	Observer's specified target Dec [deg]
ra_nom	207.19382607028	Nominal RA [deg]
dec_nom	26.639732389367	Nominal Dec [deg]
roll_nom	117.25857343739	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14774.064146638	Sum of GTIs [s]
livetime	14581.030122054	Livetime [s]
ontime0	14773.941006899	Sum of GTIs [s]
ontime1	14777.123077393	Sum of GTIs [s]
ontime2	14767.74102658	Sum of GTIs [s]
ontime3	14774.064146638	Sum of GTIs [s]
ontime6	14773.899967015	Sum of GTIs [s]
l2events	160552	Number of level 2 events



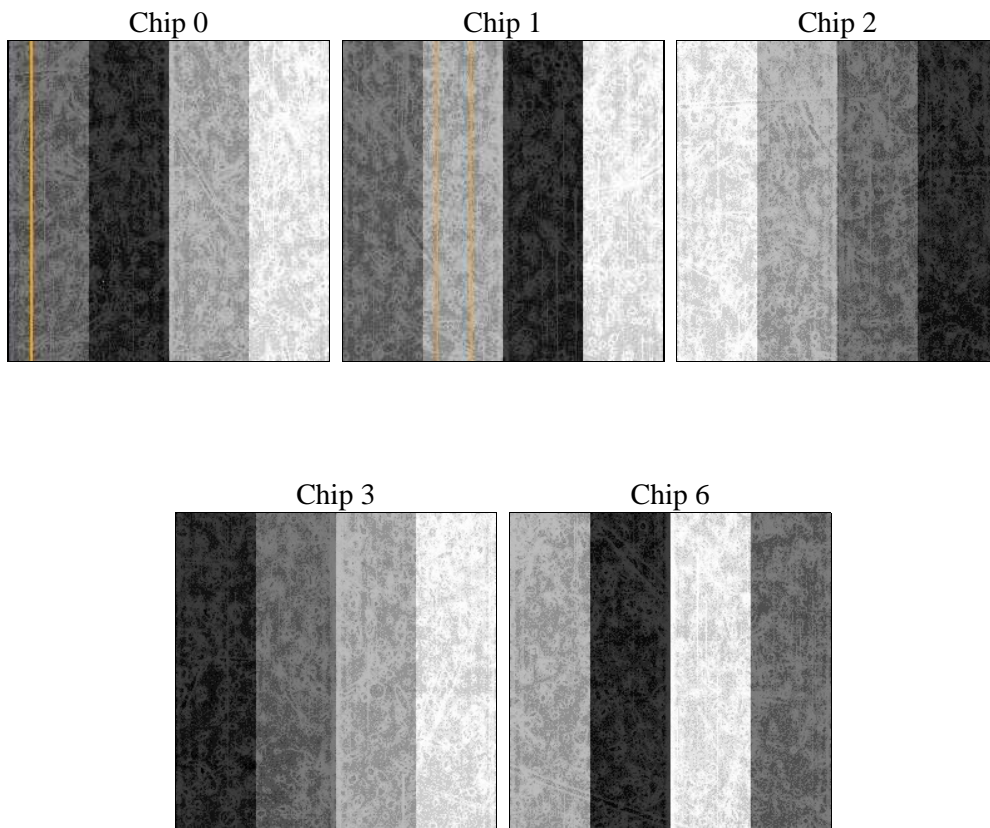
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	14774.064146638	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	14773.941006899	Sum of GTIs [s]
date	2012-02-06T15:02:14	Date and time of file creation	ontime1	14777.123077393	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	14767.74102658	Sum of GTIs [s]
			ontime3	14774.064146638	Sum of GTIs [s]
			ontime6	14773.899967015	Sum of GTIs [s]
			l1events	651945	Number of level 1 events

2.1.4 Events

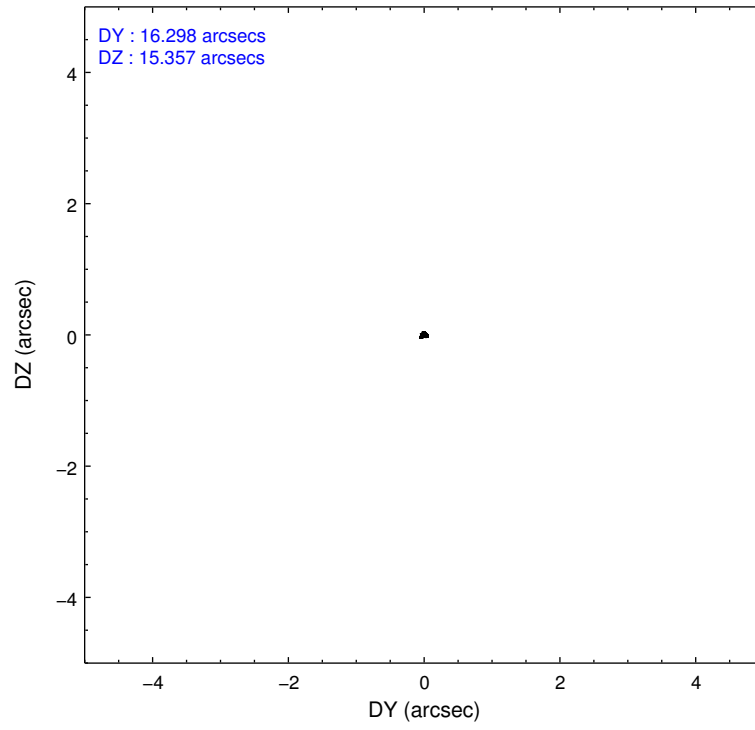
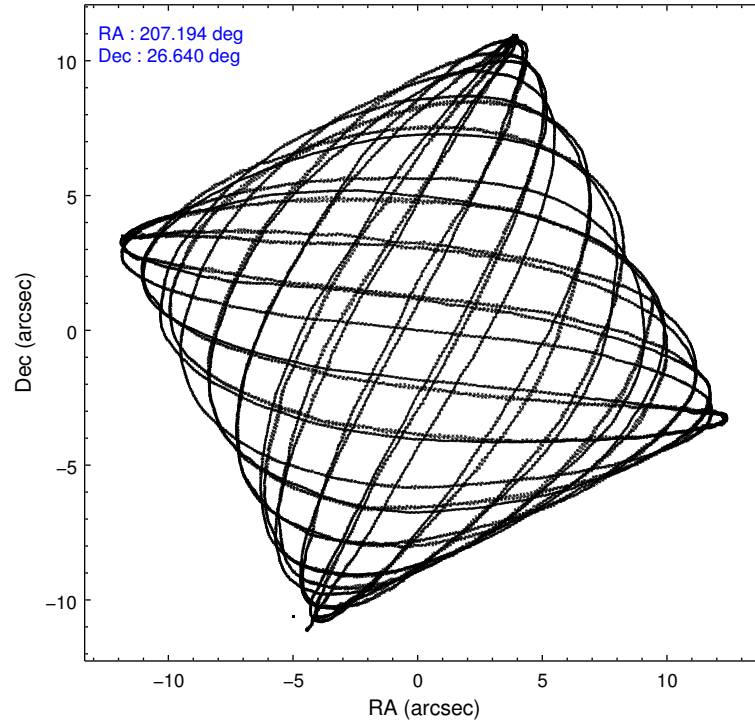
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	106615	107246	115558	208817	113709
rejected events	83174	85738	95277	92439	93504
rejected %	78%	79%	82%	44%	82%

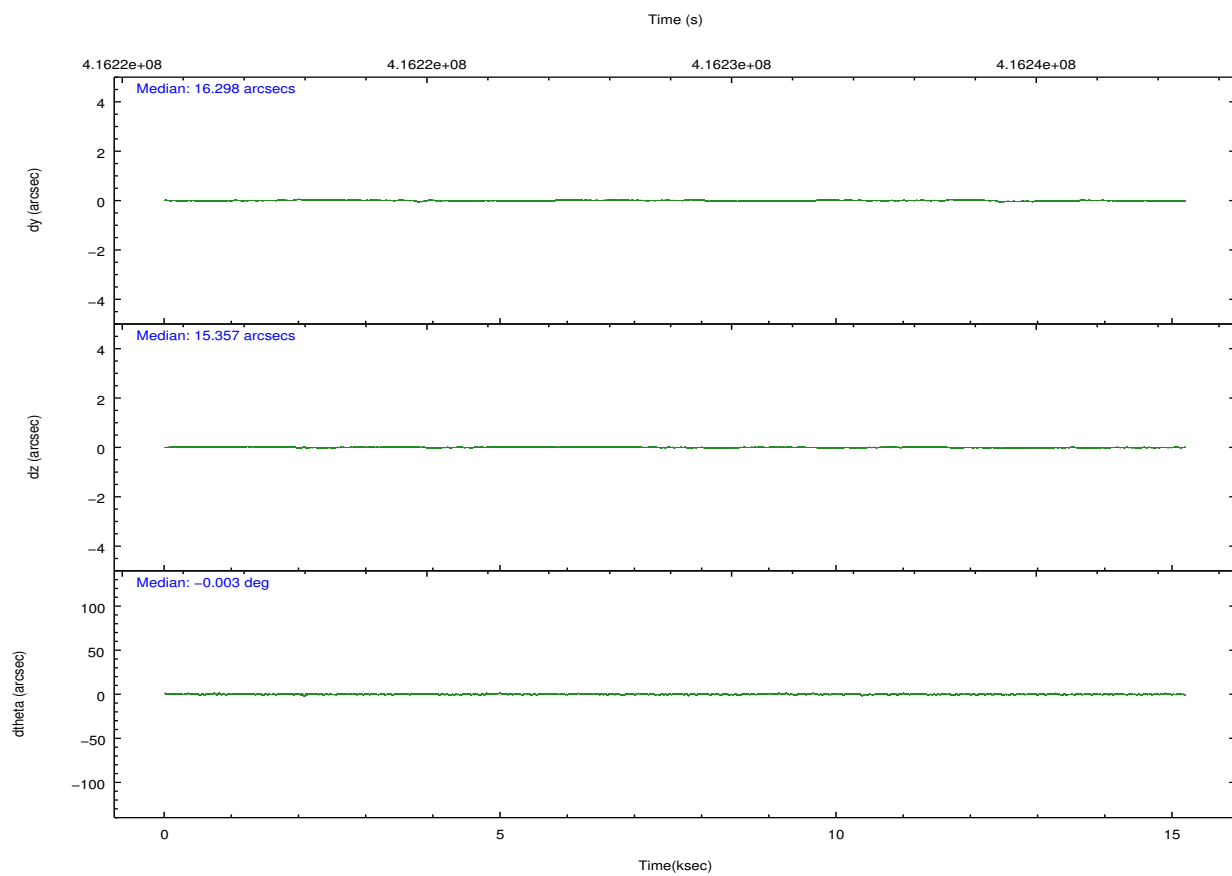
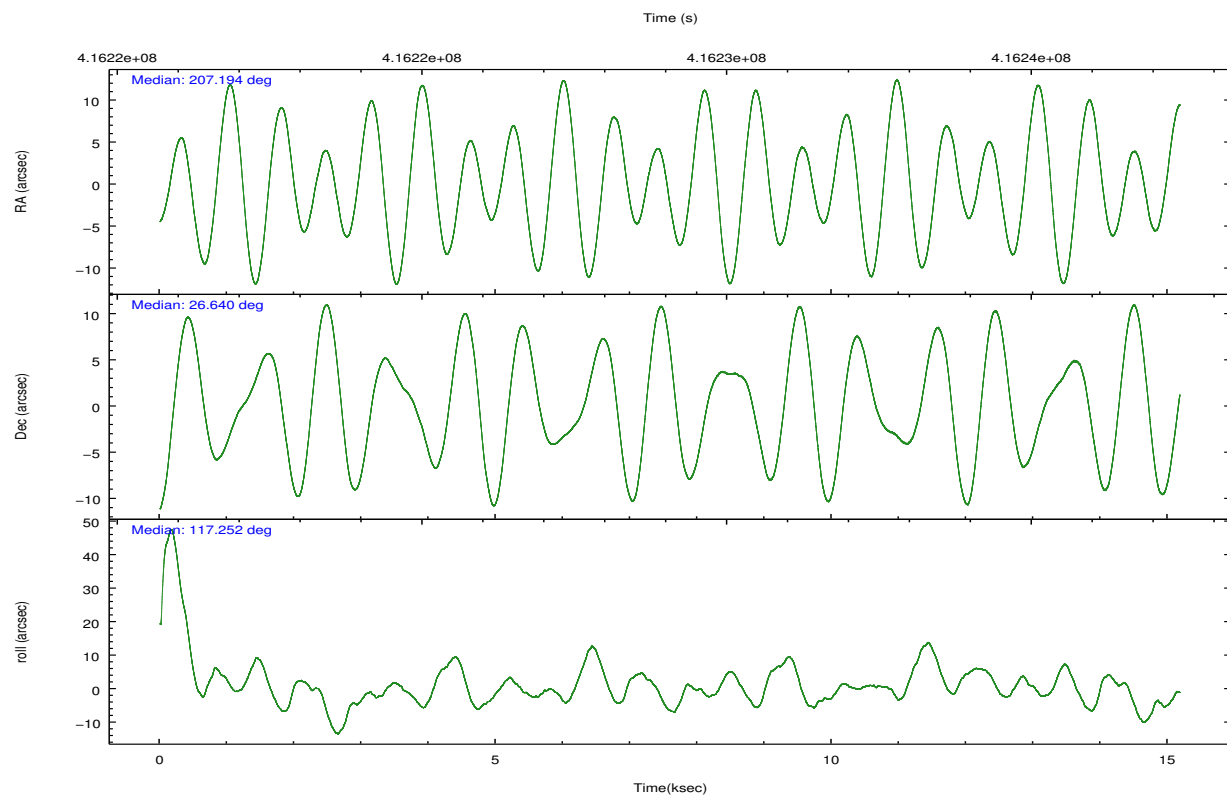
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	15547	12438	11245	91536	12494
	14%	11%	9%	43%	10%
grade 1 events	134	90	118	602	90
	0%	0%	0%	0%	0%
grade 2 events	3200	3604	3862	12179	2812
	3%	3%	3%	5%	2%
grade 3 events	1294	1402	1373	4093	1228
	1%	1%	1%	1%	1%
grade 4 events	1247	1422	1461	4143	1231
	1%	1%	1%	1%	1%
grade 5 events	4324	4365	3992	5019	4522
	4%	4%	3%	2%	3%
grade 6 events	2157	2645	2343	4452	2445
	2%	2%	2%	2%	2%
grade 7 events	78712	81280	91164	86793	88887
	73%	75%	78%	41%	78%

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	207.219766	207.1938260702835	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.624981	26.63973238936733	Alternating exposures requested	N	N
[deg] Pointing Roll	117.038264	117.2585734373916	[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	-224.862463	-224.8577317338124			
[mm] SIM translation stage offset	-8.73	-8.73472126911733			
[s] Observation start time (MET)	416221664.184000	416221288.60768			
Observation start date	2011-03-11T09:06:38	2011-03-11T09:01:28			
[s] Observation end time (MET)	416236664.184000	416236798.90848			
Observation end date	2011-03-11T13:16:38	2011-03-11T13:19:58			
Read mode	TIMED	TIMED			

2.3 Aspect



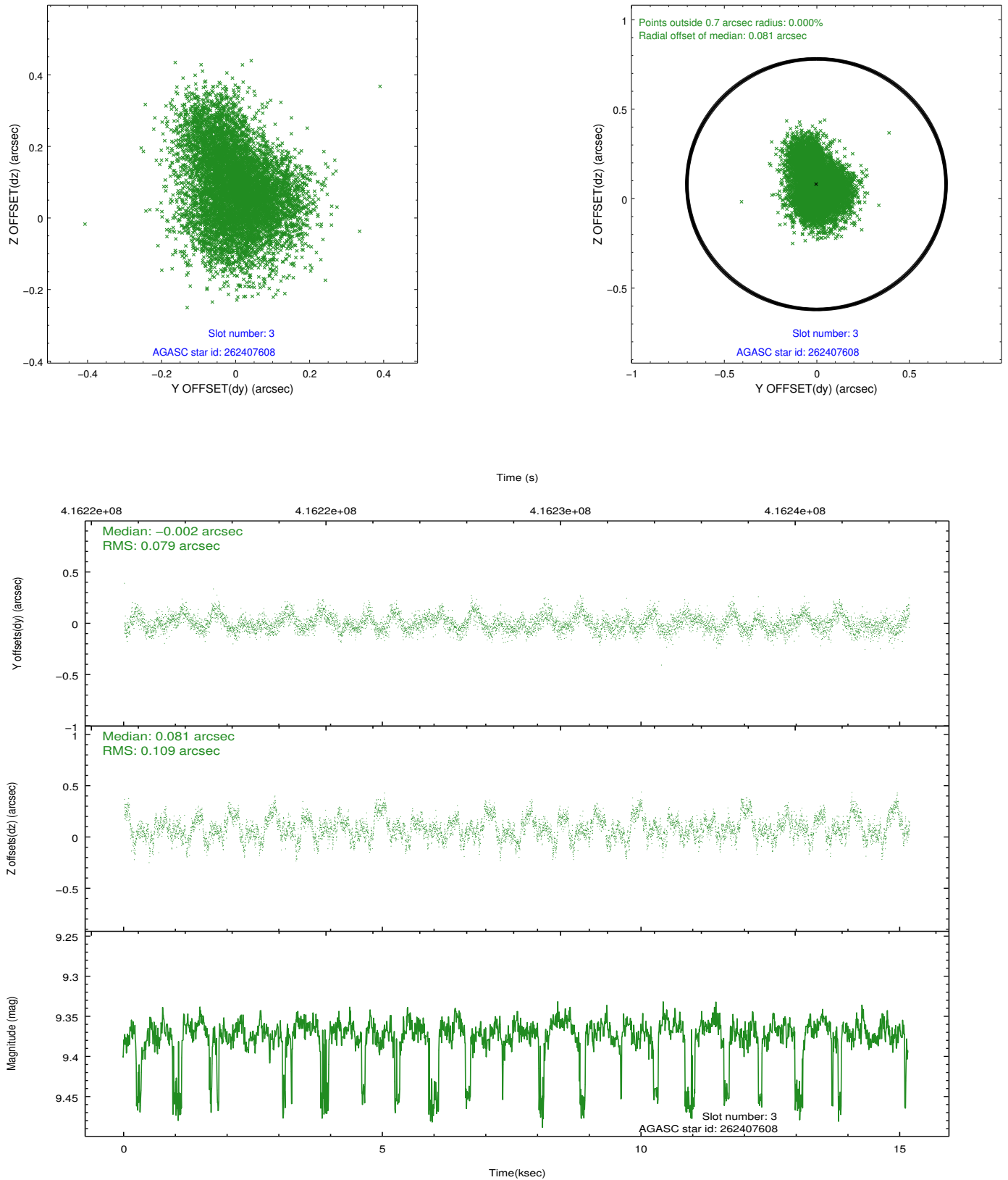


Slot Statistics

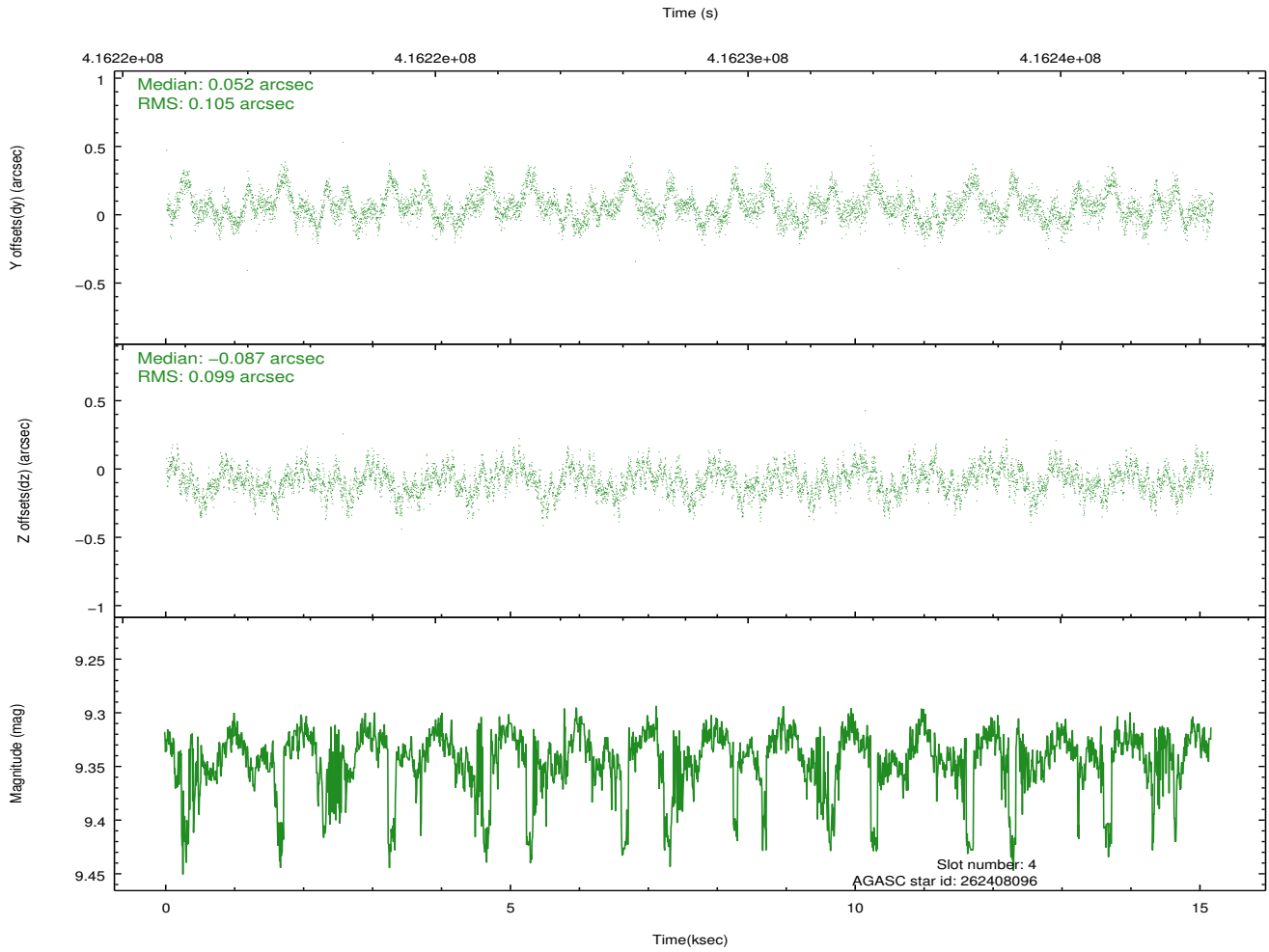
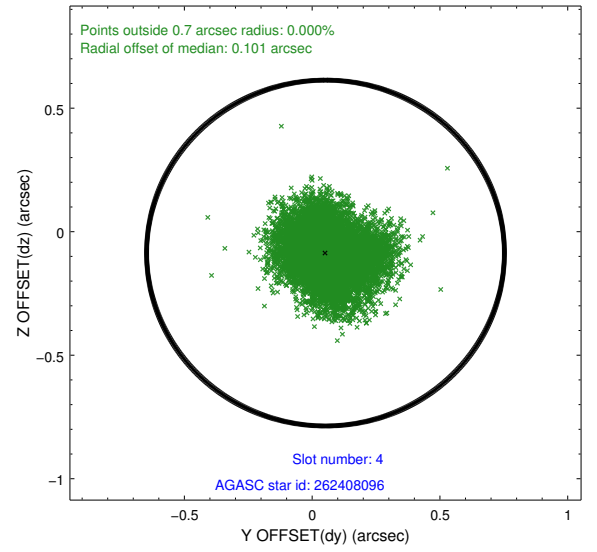
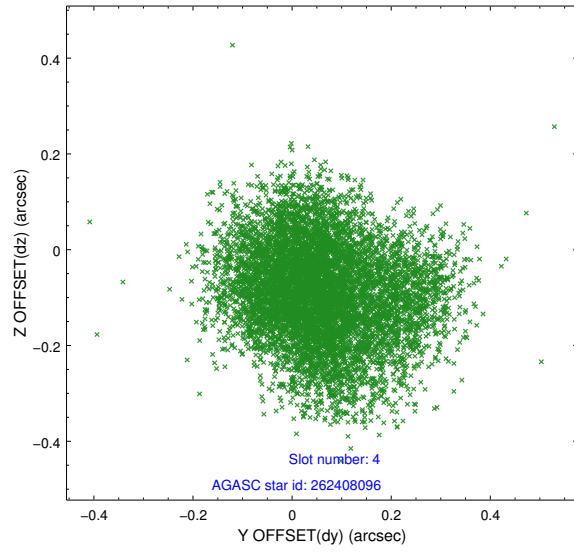
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.11	3702	0.171	-0.154	0.006	0.010	0.000000	0.000000	923.15	-1018.43
1	FID	ACIS-I-5	7.11	3701	-0.307	0.132	0.006	0.011	0.000000	0.000000	-1825.30	879.11
2	FID	ACIS-I-6	7.11	3702	0.045	0.092	0.007	0.011	0.000000	0.000000	388.21	1523.94
3	GUIDE	262407608	9.37	7358	-0.002	0.081	0.145	0.234	207.378401	26.435507	-839.43	-145.58
4	GUIDE	262408096	9.34	7373	0.052	-0.087	0.156	0.245	207.011678	26.515421	-45.51	776.33
5	GUIDE	262408936	9.71	7397	-0.070	-0.217	0.134	0.217	207.154731	26.726554	420.92	19.89
6	GUIDE	262409624	10.08	7358	0.017	0.202	0.214	0.378	207.610037	27.074851	876.22	-1850.99
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

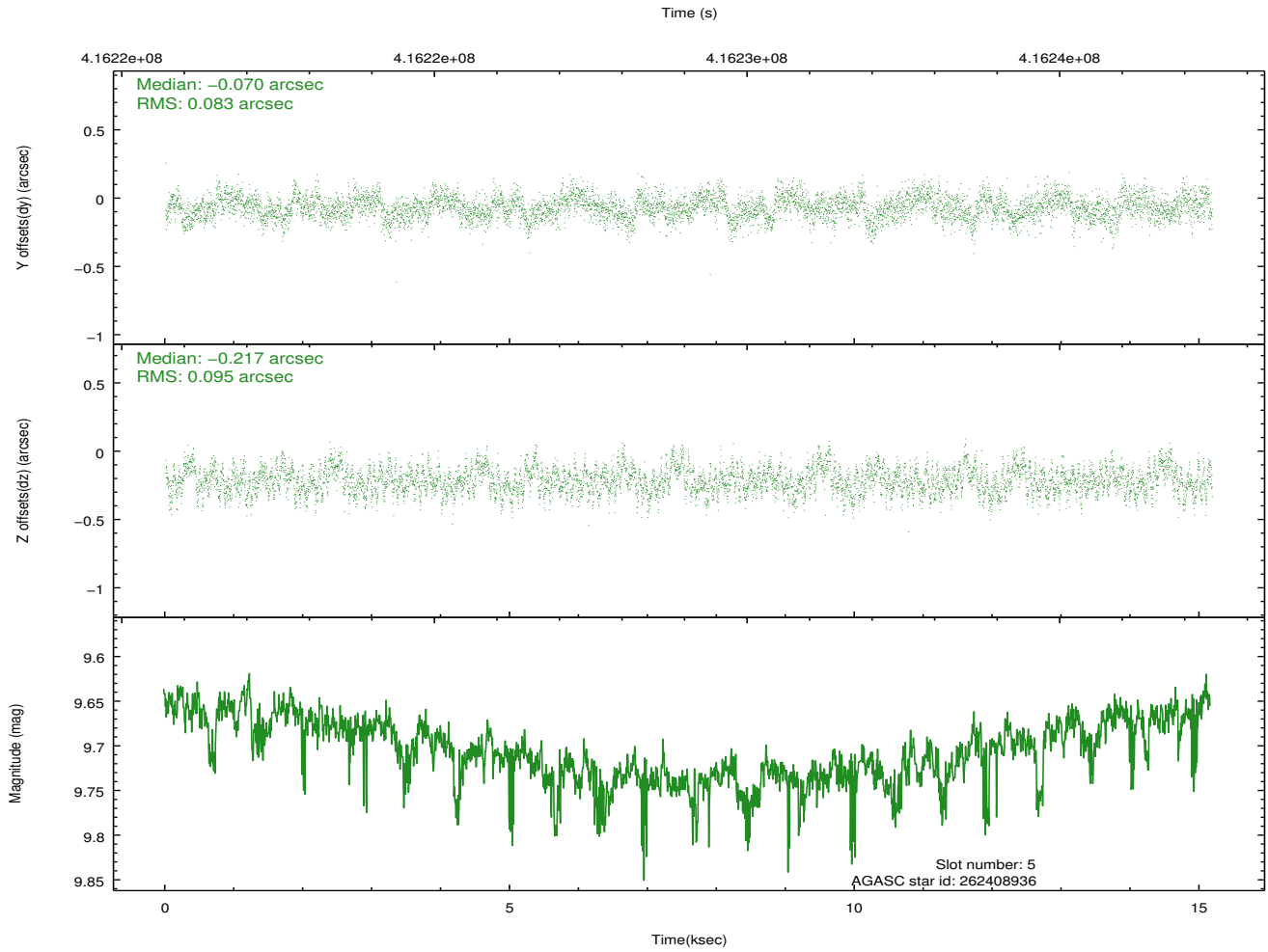
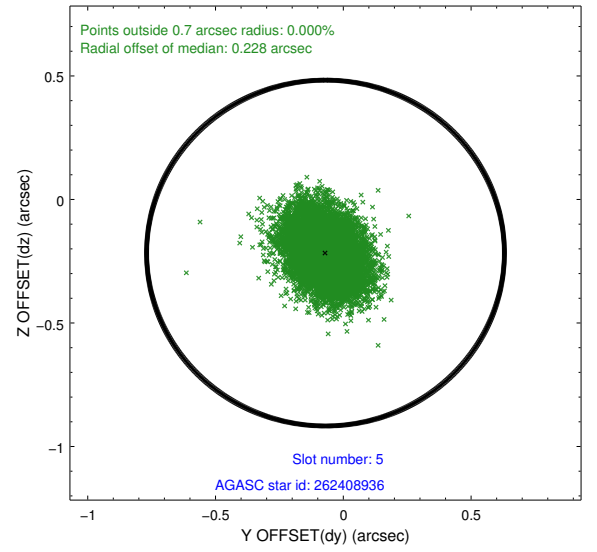
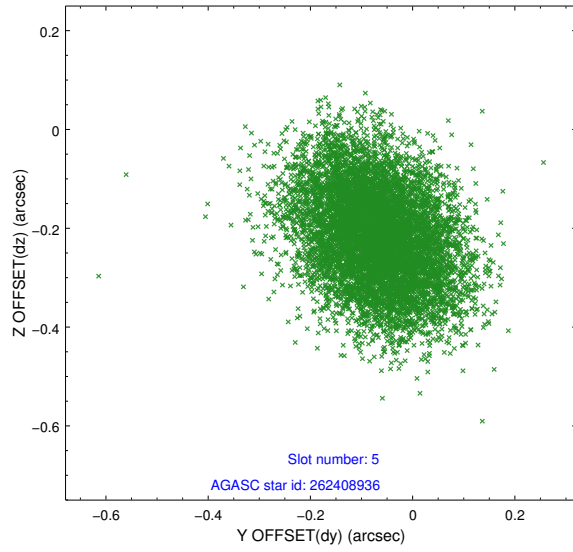
2.4.1 Slot 3



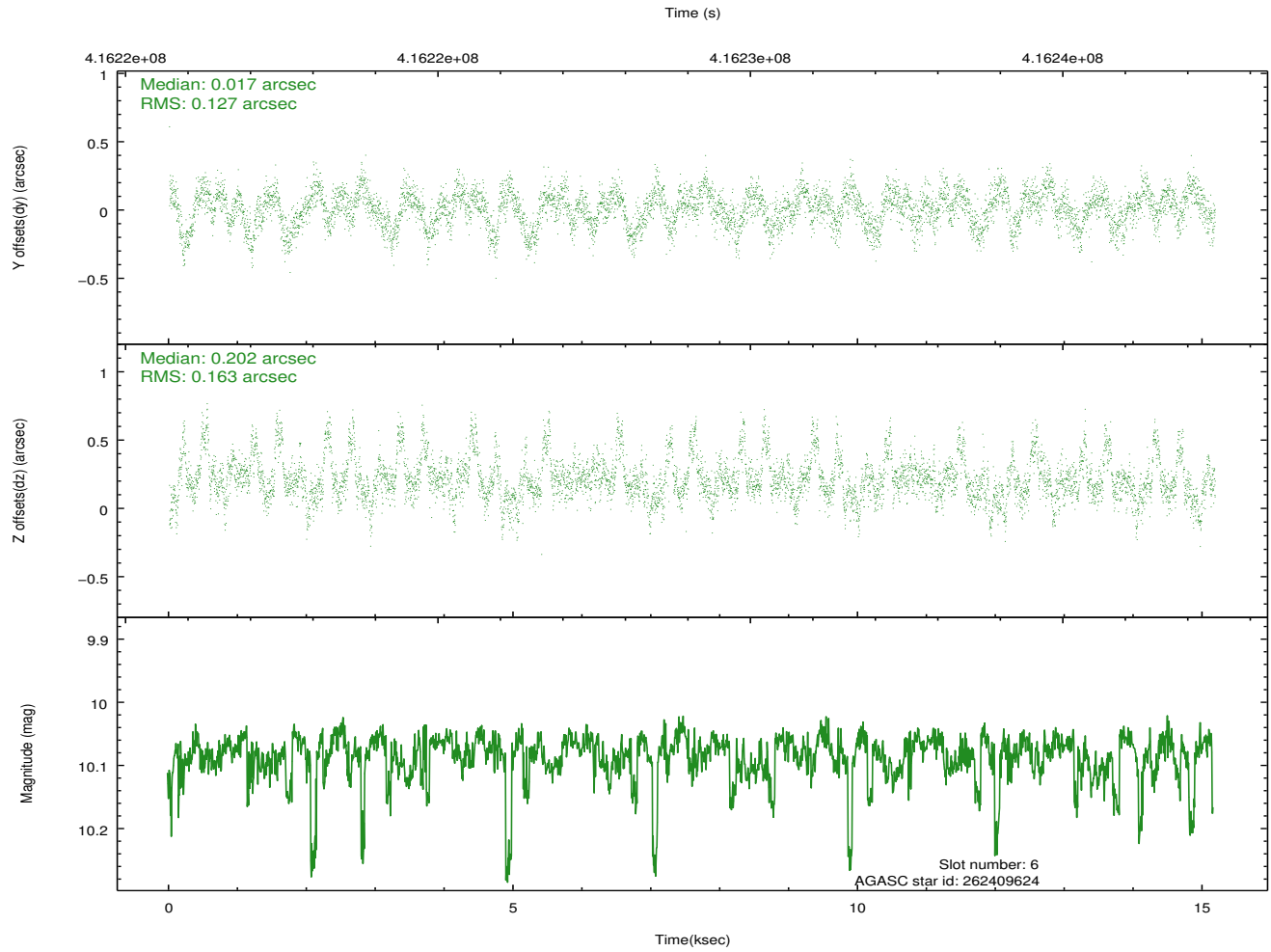
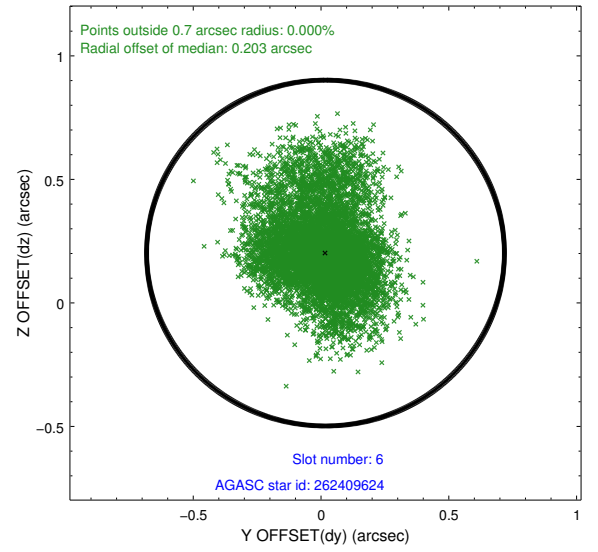
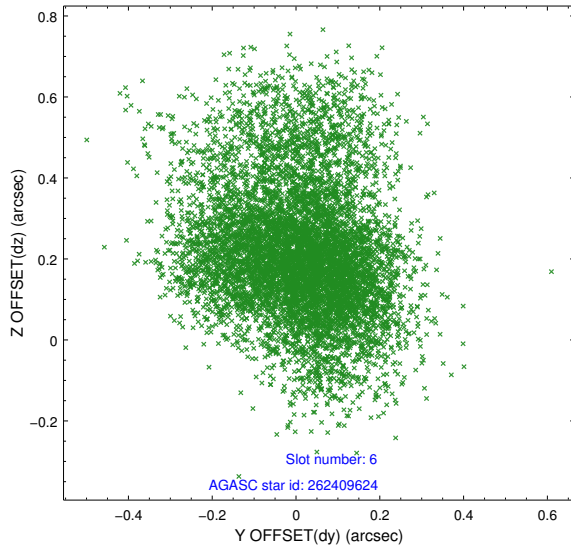
2.4.2 Slot 4



2.4.3 Slot 5

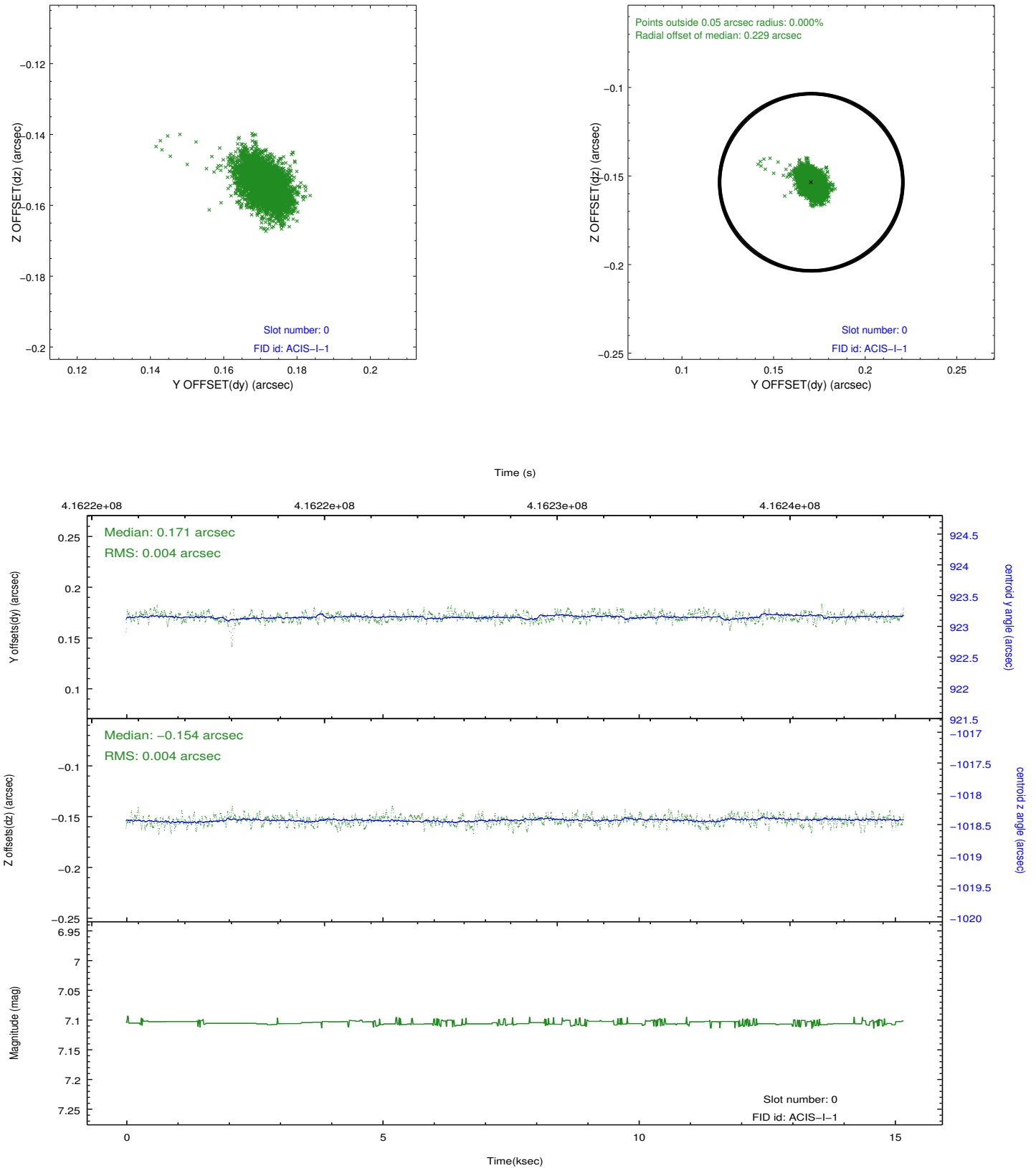


2.4.4 Slot 6

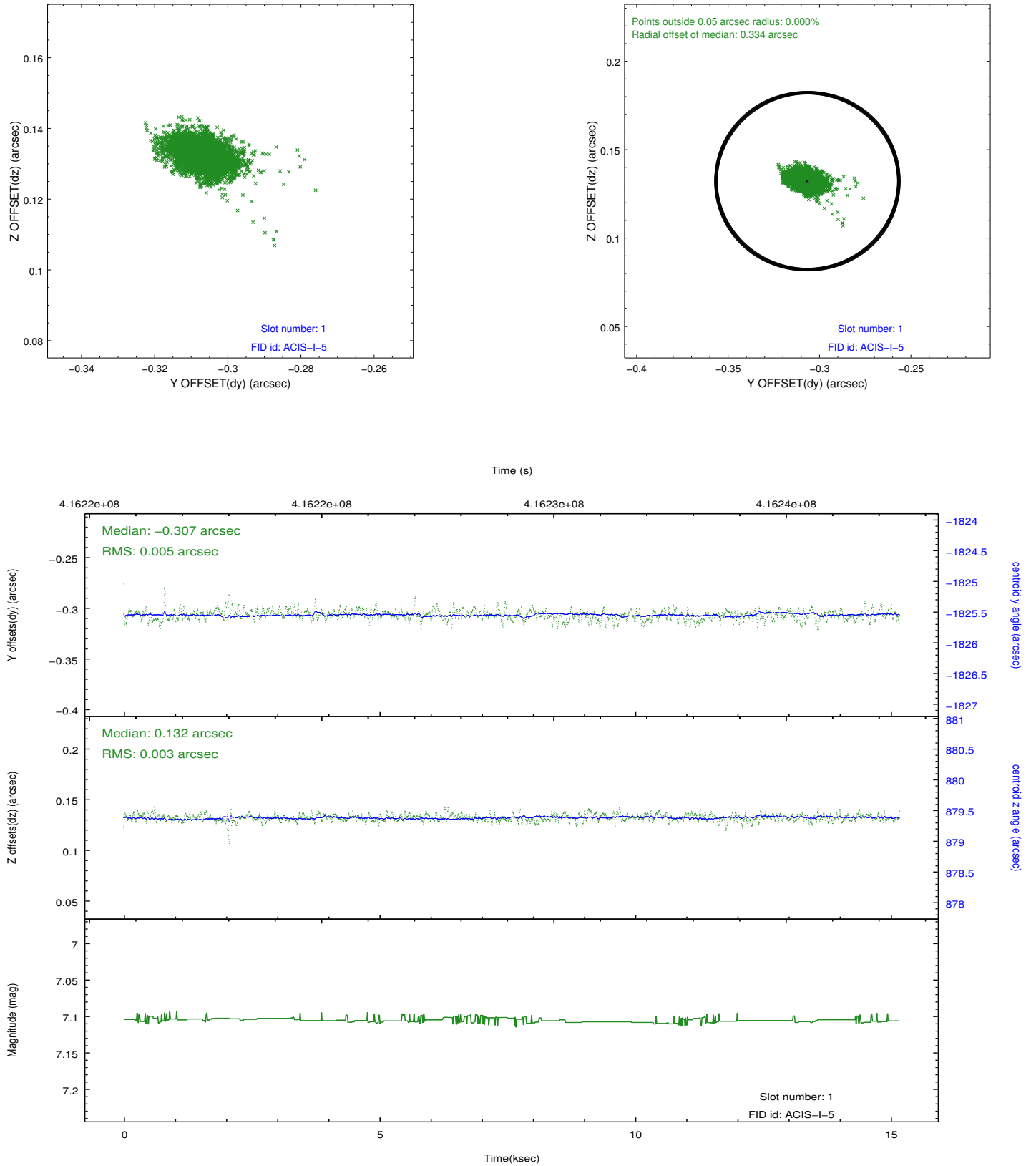


2.5 FID Slots

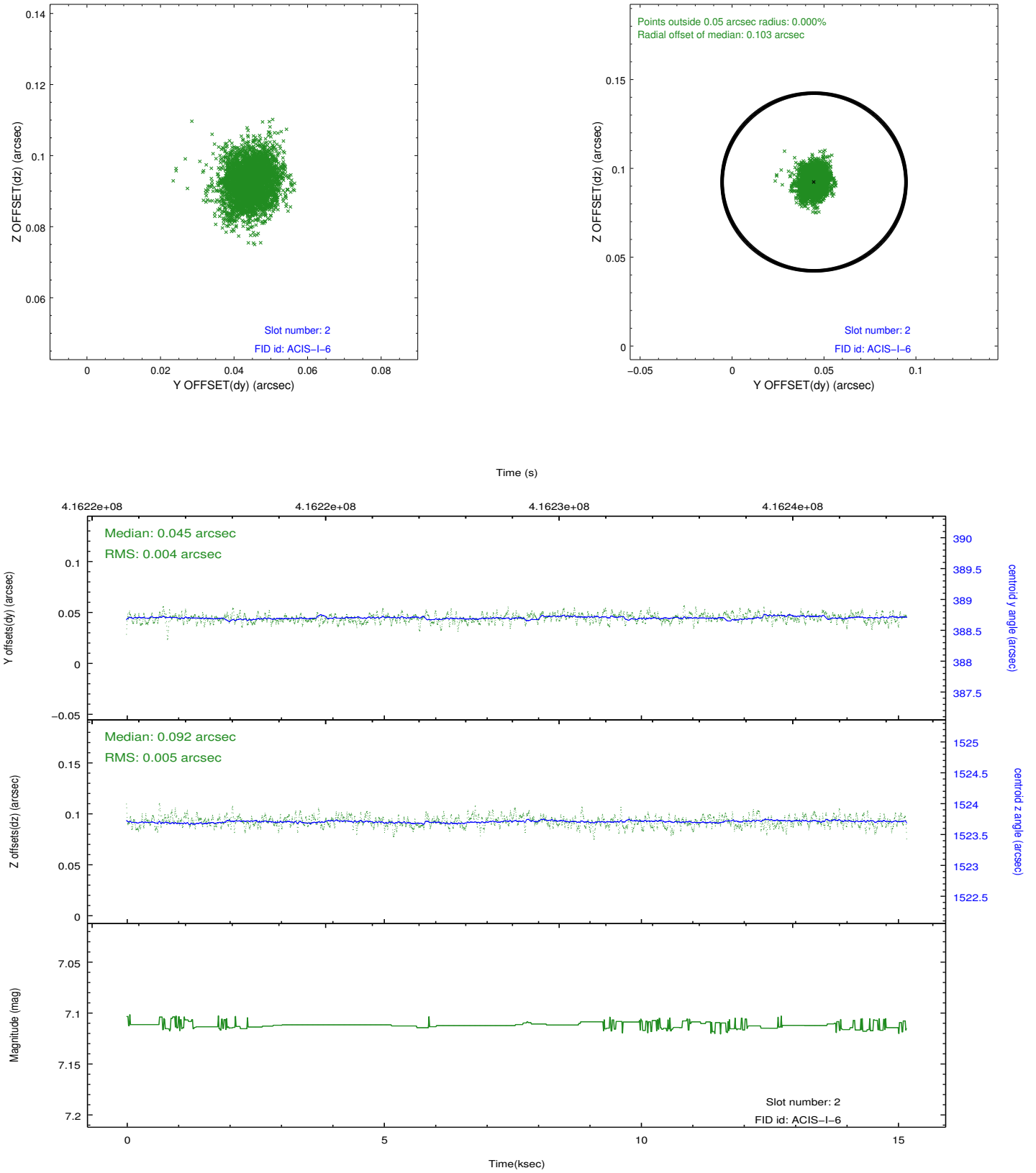
2.5.1 Slot 0



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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.774064144611

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.

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The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one guide star from the solution.