

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13213 - L2 Version 2
Chandra X-Ray Center

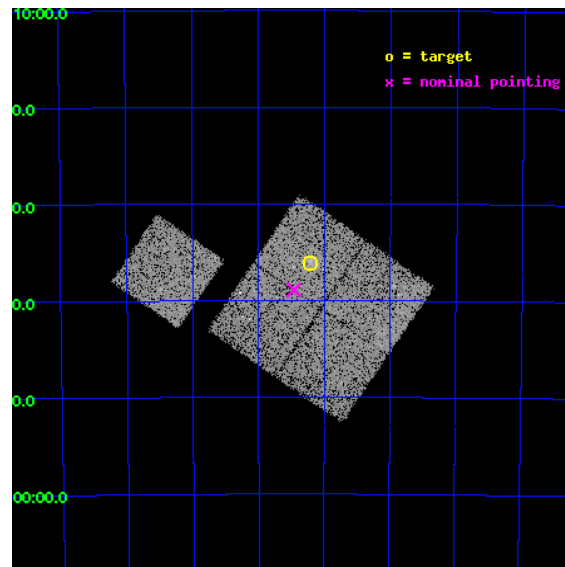
L2 Processing Date : Feb 2 2012

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1 Front

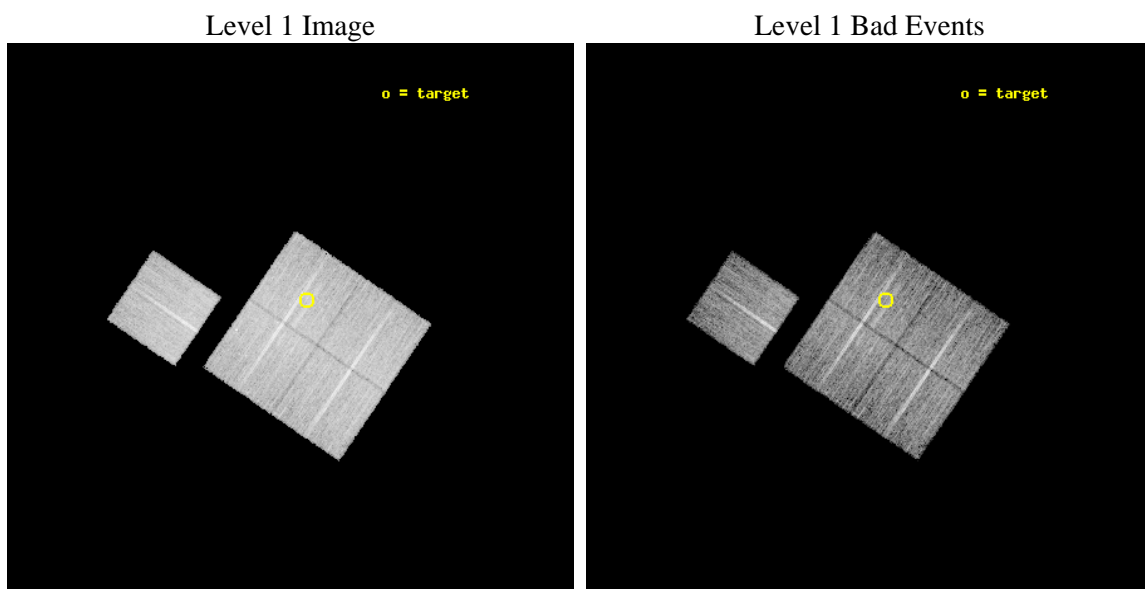
seq_num	801058	Sequence number
obs_id	13213	Observation id
title	Chandra Observations of a Sample of High Redshift SZE Selected Galaxy Clusters	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	SPT-CL 0324-6236	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	51.0525	Observer's specified target RA [deg]
dec_targ	-62.602111	Observer's specified target Dec [deg]
ra_nom	51.11560251667	Nominal RA [deg]
dec_nom	-62.648134978684	Nominal Dec [deg]
roll_nom	304.26473758872	Nominal Roll [deg]
revision	2	Processing version of data
ontime	11829.245978296	Sum of GTIs [s]
livetime	11674.688171025	Livetime [s]
ontime0	11829.122838378	Sum of GTIs [s]
ontime1	11832.304868579	Sum of GTIs [s]
ontime2	11829.204908311	Sum of GTIs [s]
ontime3	11829.245978296	Sum of GTIs [s]
ontime6	11832.222788572	Sum of GTIs [s]
l2events	40728	Number of level 2 events



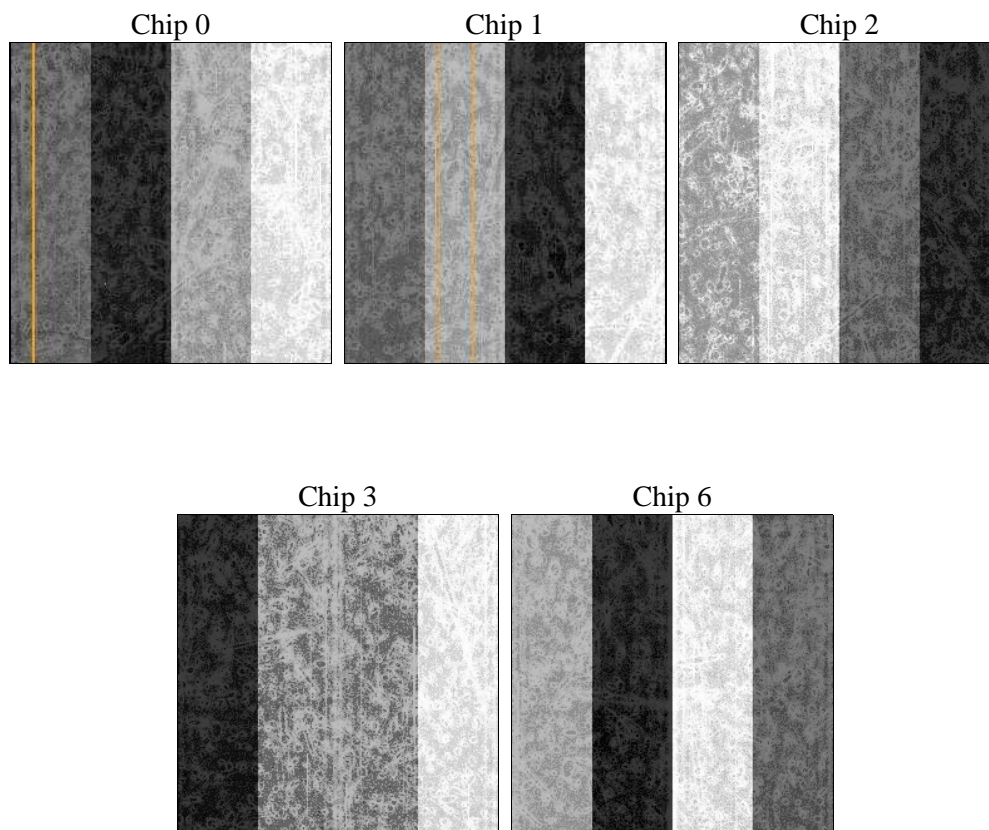
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12062.976000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	11829.245978296	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	11829.122838378	Sum of GTIs [s]
date	2012-02-02T03:55:17	Date and time of file creation	ontime1	11832.304868579	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	11829.204908311	Sum of GTIs [s]
			ontime3	11829.245978296	Sum of GTIs [s]
			ontime6	11832.222788572	Sum of GTIs [s]
			l1events	408443	Number of level 1 events

2.1.4 Events

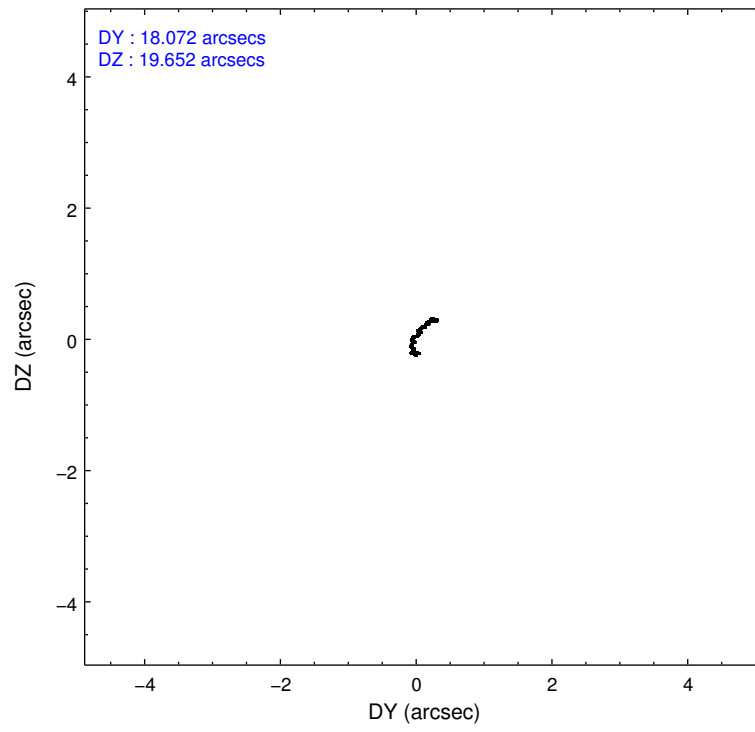
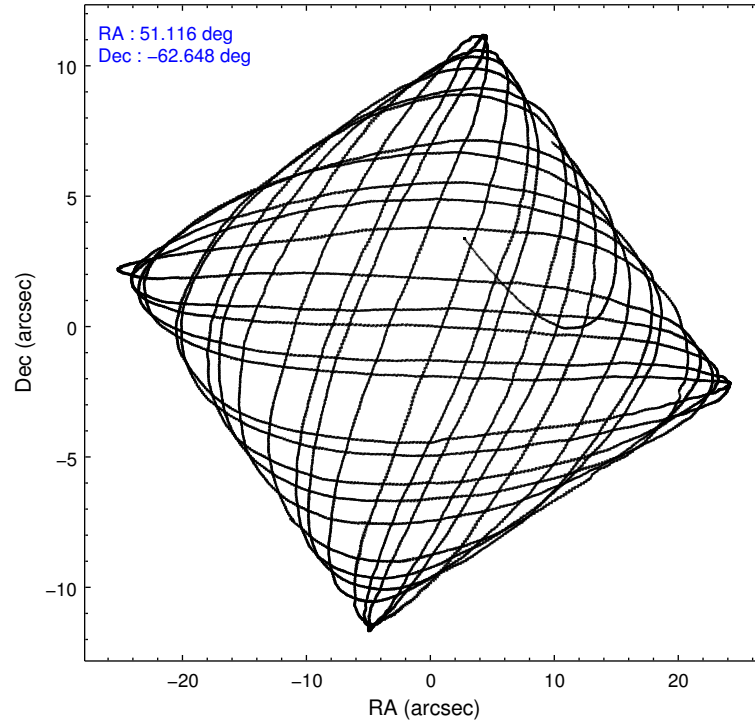
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	79708	78702	83990	82286	83757
rejected events	70267	68176	74326	73054	73995
rejected %	88%	86%	88%	88%	88%

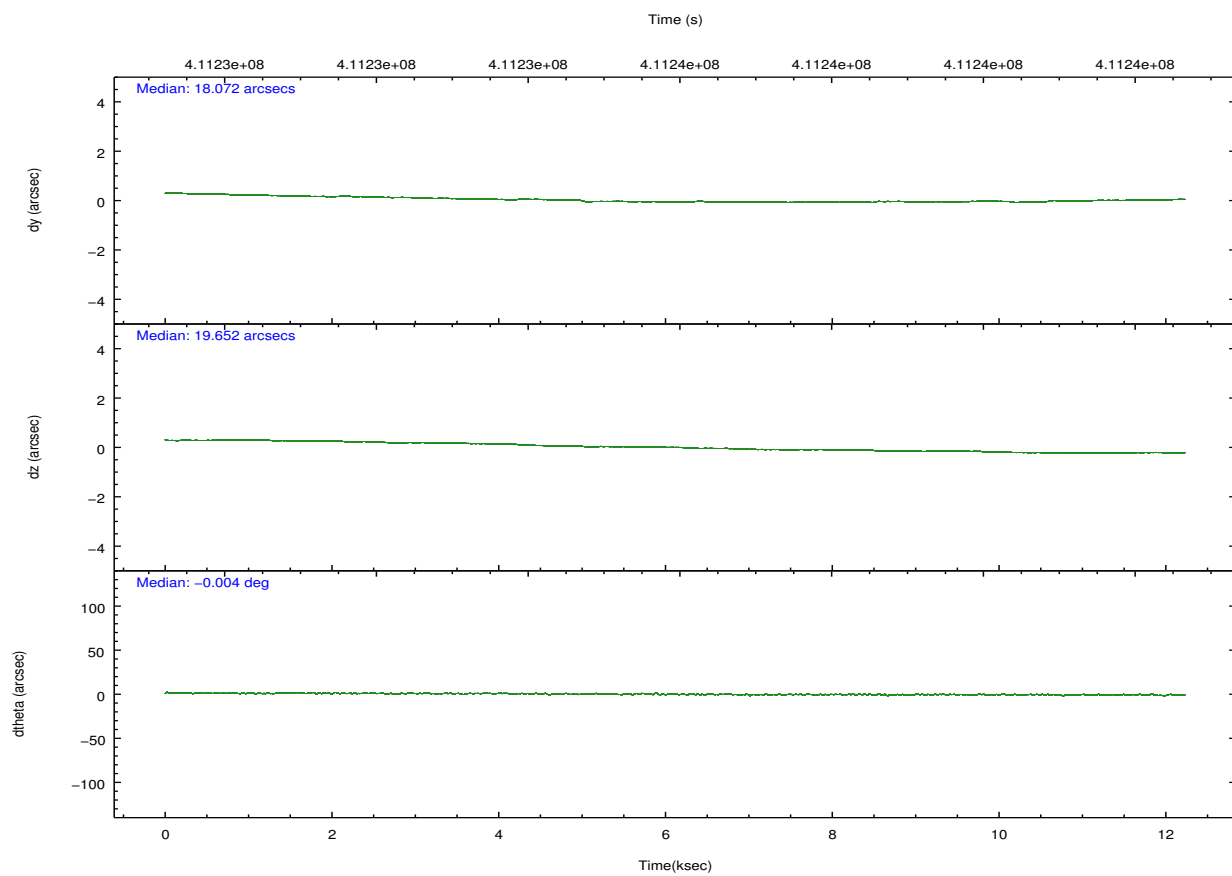
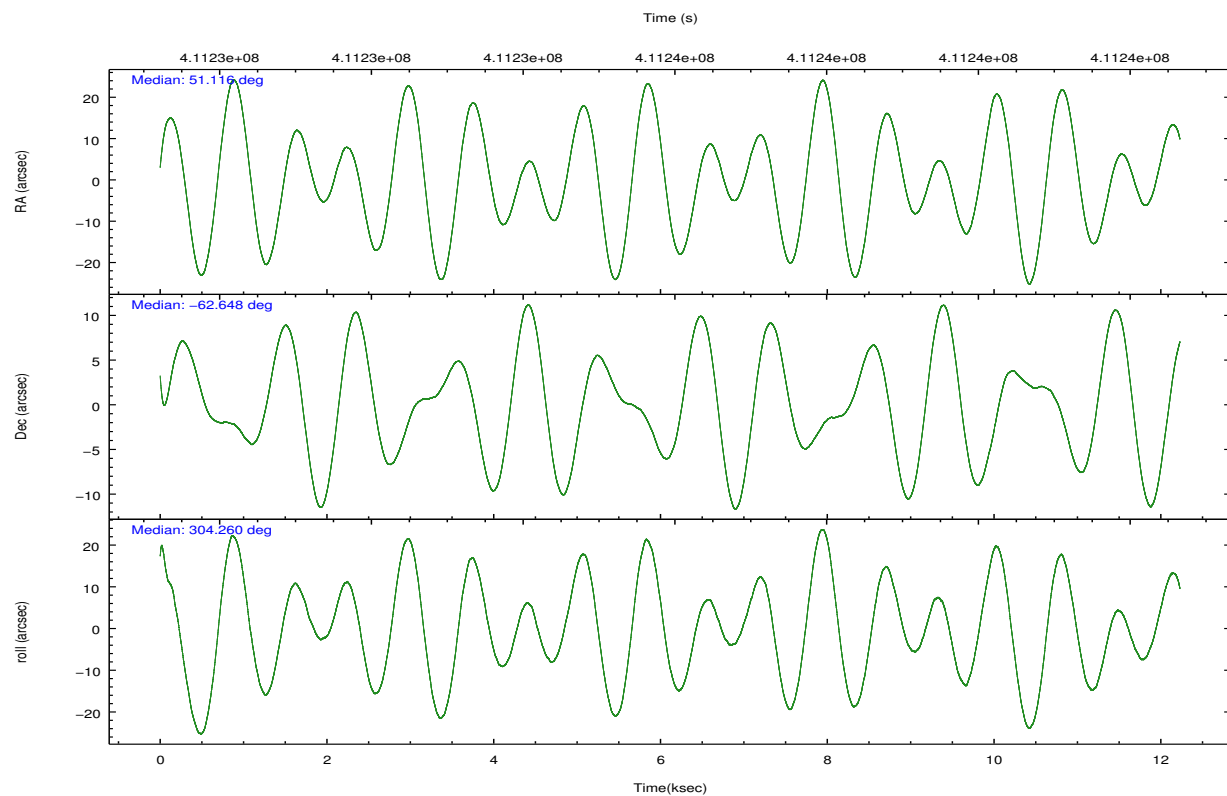
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3135	3848	3607	3513	3466
	3%	4%	4%	4%	4%
grade 1 events	46	45	65	54	32
	0%	0%	0%	0%	0%
grade 2 events	2406	2524	2343	2043	2100
	3%	3%	2%	2%	2%
grade 3 events	1070	995	970	960	1015
	1%	1%	1%	1%	1%
grade 4 events	980	1040	993	960	1038
	1%	1%	1%	1%	1%
grade 5 events	3530	3806	3459	3971	3919
	4%	4%	4%	4%	4%
grade 6 events	1858	2125	1755	1758	2144
	2%	2%	2%	2%	2%
grade 7 events	66683	64319	70798	69027	70043
	83%	81%	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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	51.061541	51.11560251667021	CCD I2 on	Y	Y
[deg] Pointing Dec	-62.636295	-62.64813497868355	CCD I3 on	Y	Y
[deg] Pointing Roll	304.008025	304.2647375887241	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-225.840463	-225.8458576473255	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.746595355604228	CCD S4 on	N	N
[s] Observation start time (MET)	411229990.184000	411228790.61183	CCD S5 on	N	N
Observation start date	2011-01-12T14:32:04	2011-01-12T14:13:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411242053.184000	411242287.81253	On-chip summing requested	N	N
Observation end date	2011-01-12T17:53:07	2011-01-12T17:58:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



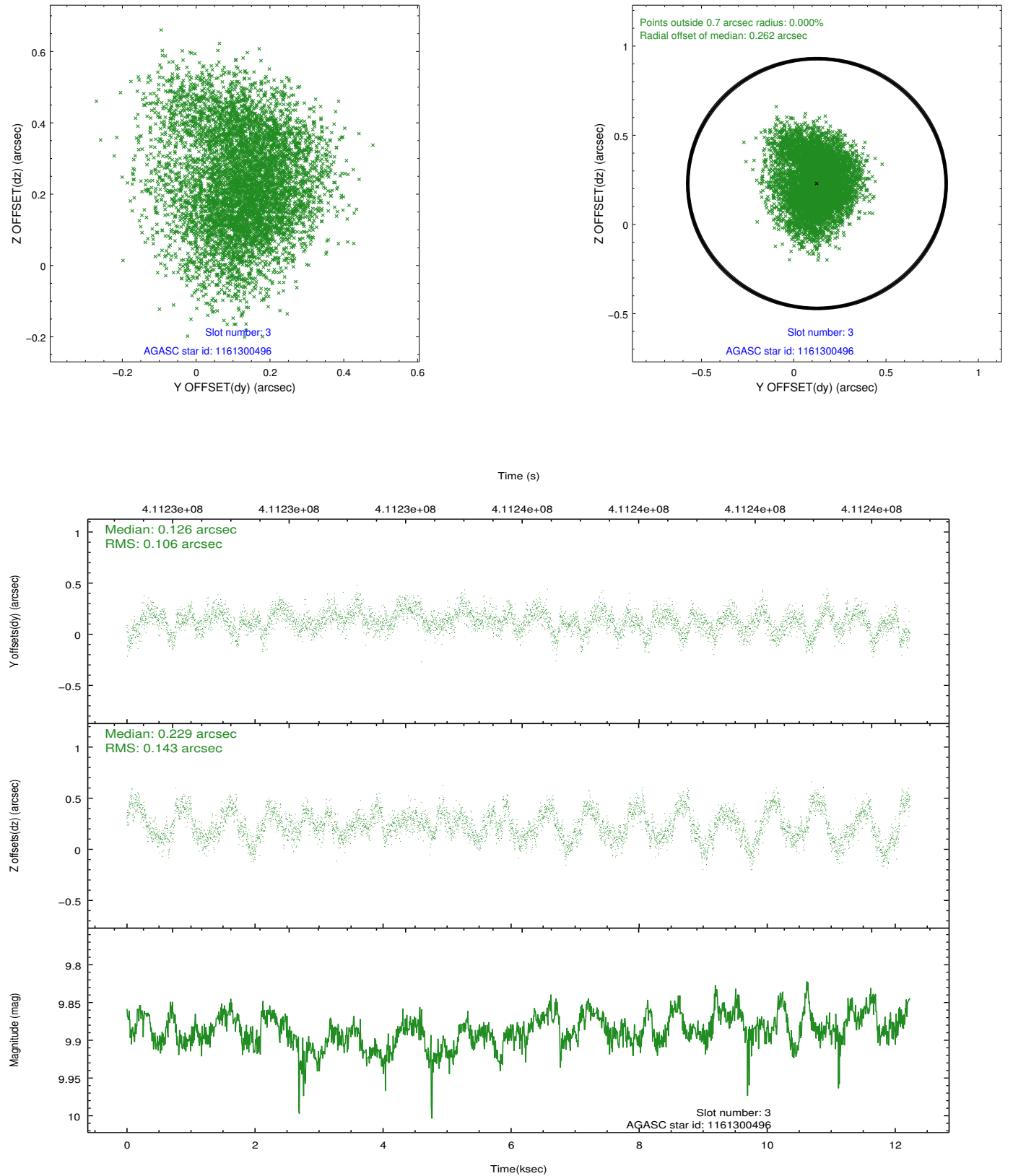


Slot Statistics

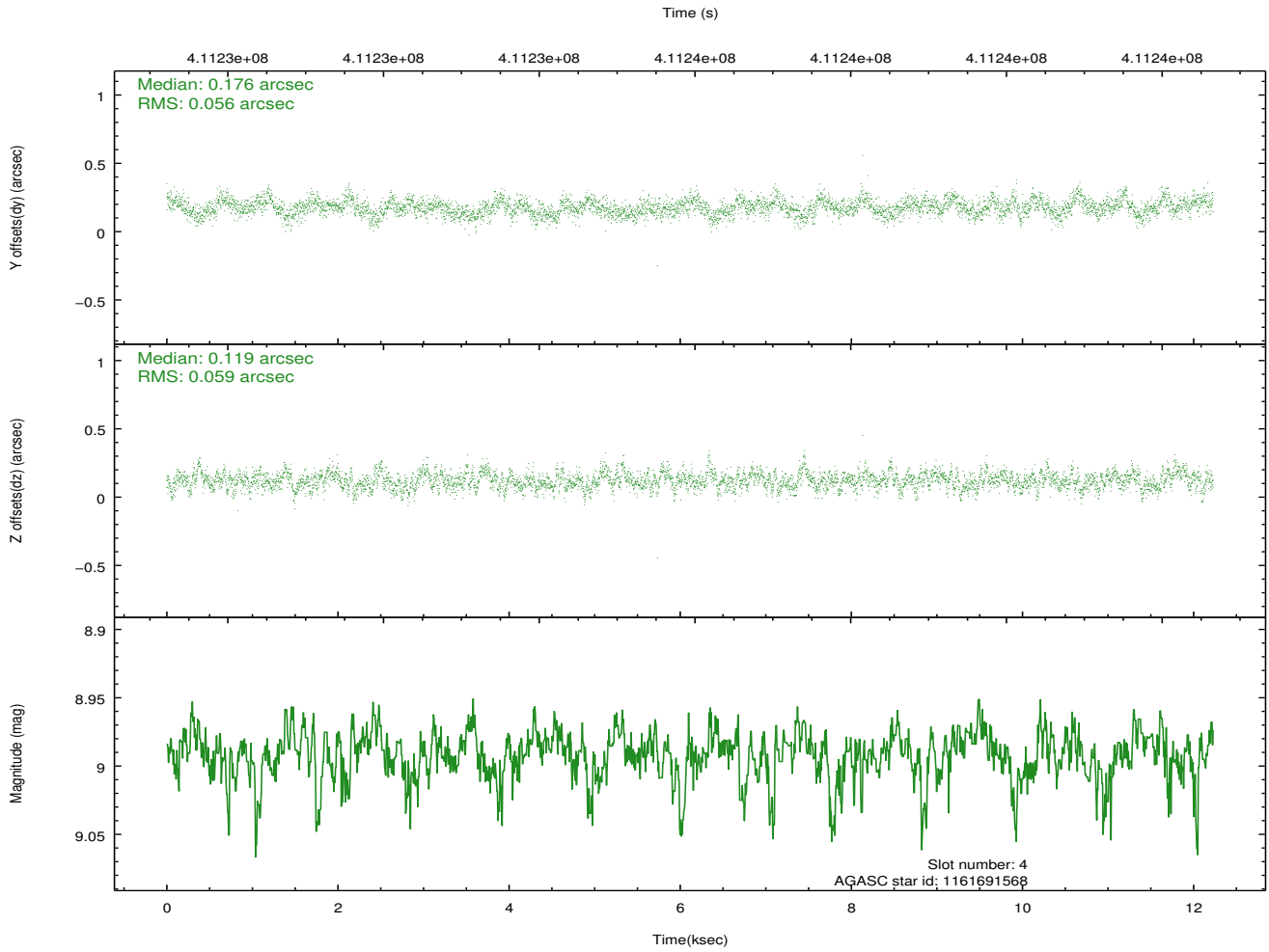
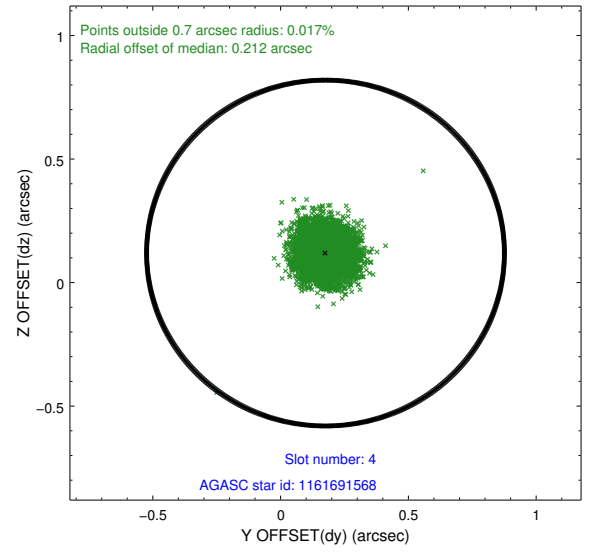
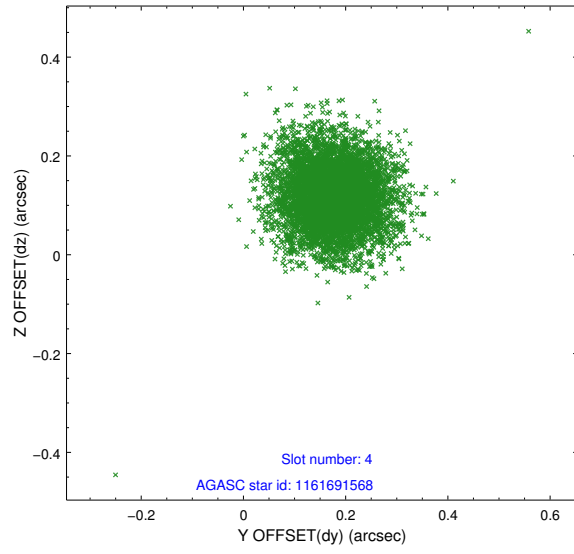
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.01	2983	0.102	-0.063	0.008	0.014	0.000000	0.000000	921.25	-1002.45
1	FID	ACIS-I-5	7.00	2983	-0.264	0.088	0.008	0.014	0.000000	0.000000	-1827.05	894.85
2	FID	ACIS-I-6	7.03	2983	0.071	0.046	0.007	0.013	0.000000	0.000000	386.25	1539.84
3	GUIDE	1161300496	9.89	5964	0.126	0.229	0.191	0.303	50.194363	-62.274473	-1882.39	-478.31
4	GUIDE	1161691568	8.99	5928	0.176	0.119	0.085	0.140	50.557270	-62.678745	-336.69	-777.89
5	GUIDE	1162608808	8.77	5962	-0.077	-0.102	0.087	0.141	51.680106	-62.824639	1134.84	461.11
6	GUIDE	1162608880	9.29	5946	-0.037	-0.193	0.160	0.234	52.292117	-62.532121	848.20	1892.45
7	GUIDE	1161298232	9.33	5957	-0.190	-0.059	0.112	0.184	51.136434	-61.825313	-2348.92	1739.57

2.4 Star Slots

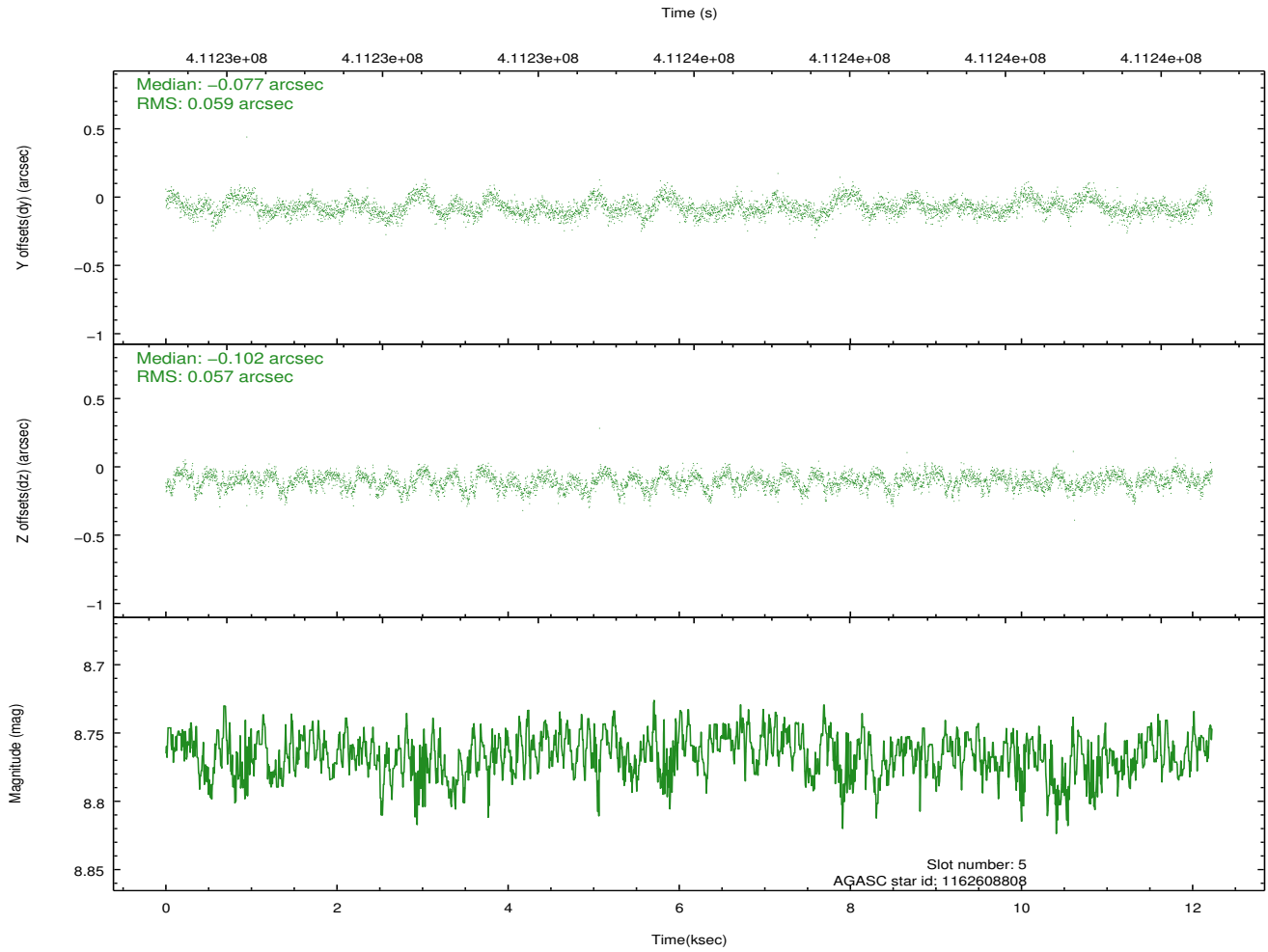
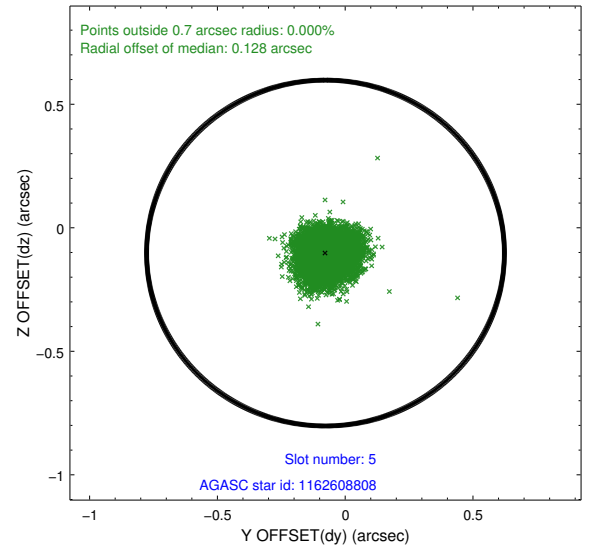
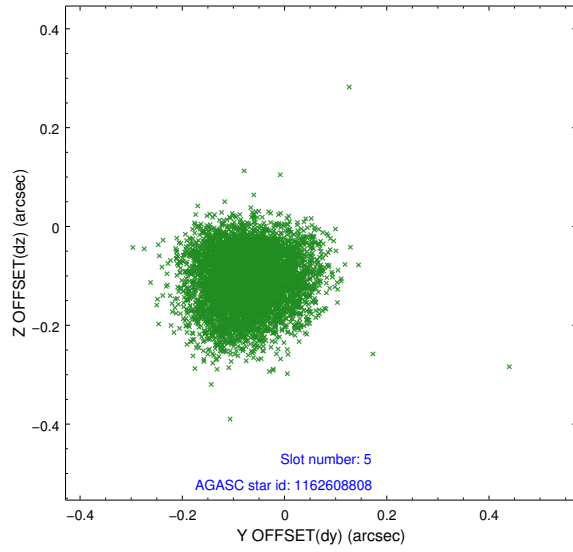
2.4.1 Slot 3



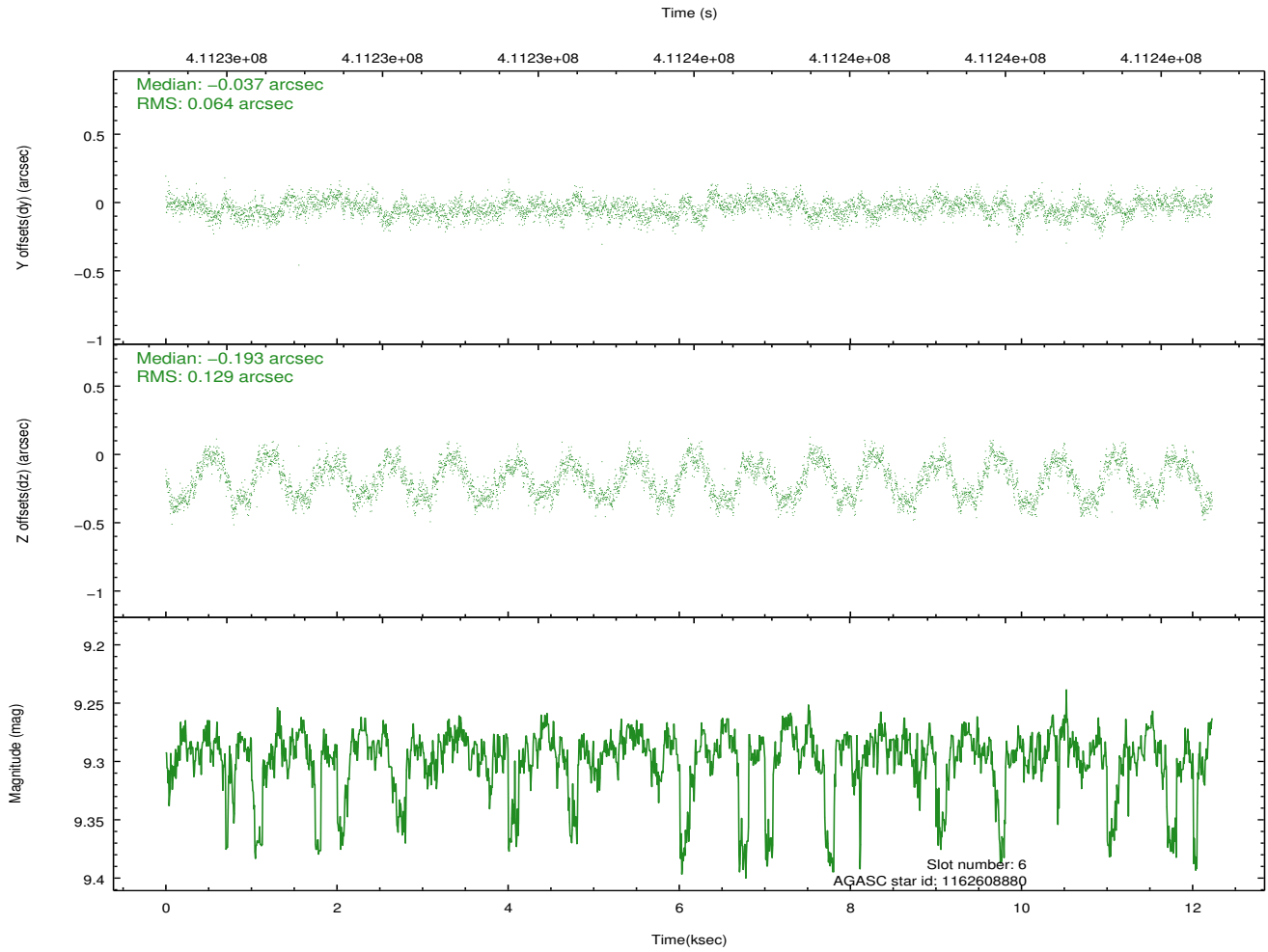
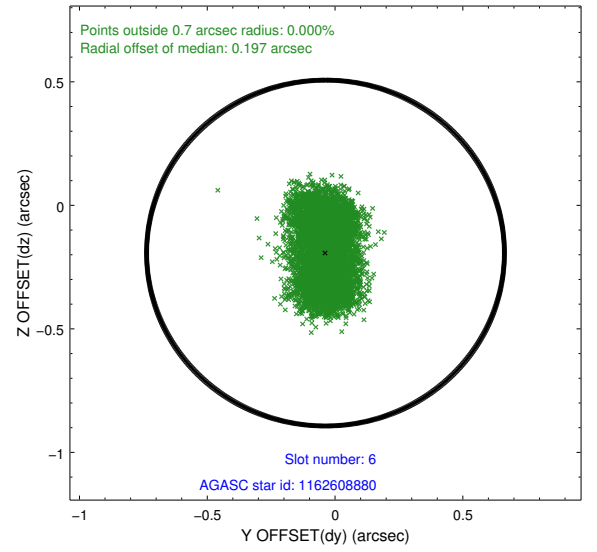
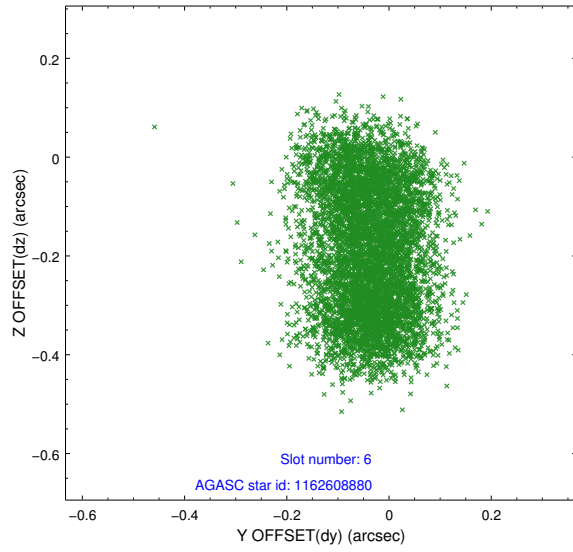
2.4.2 Slot 4



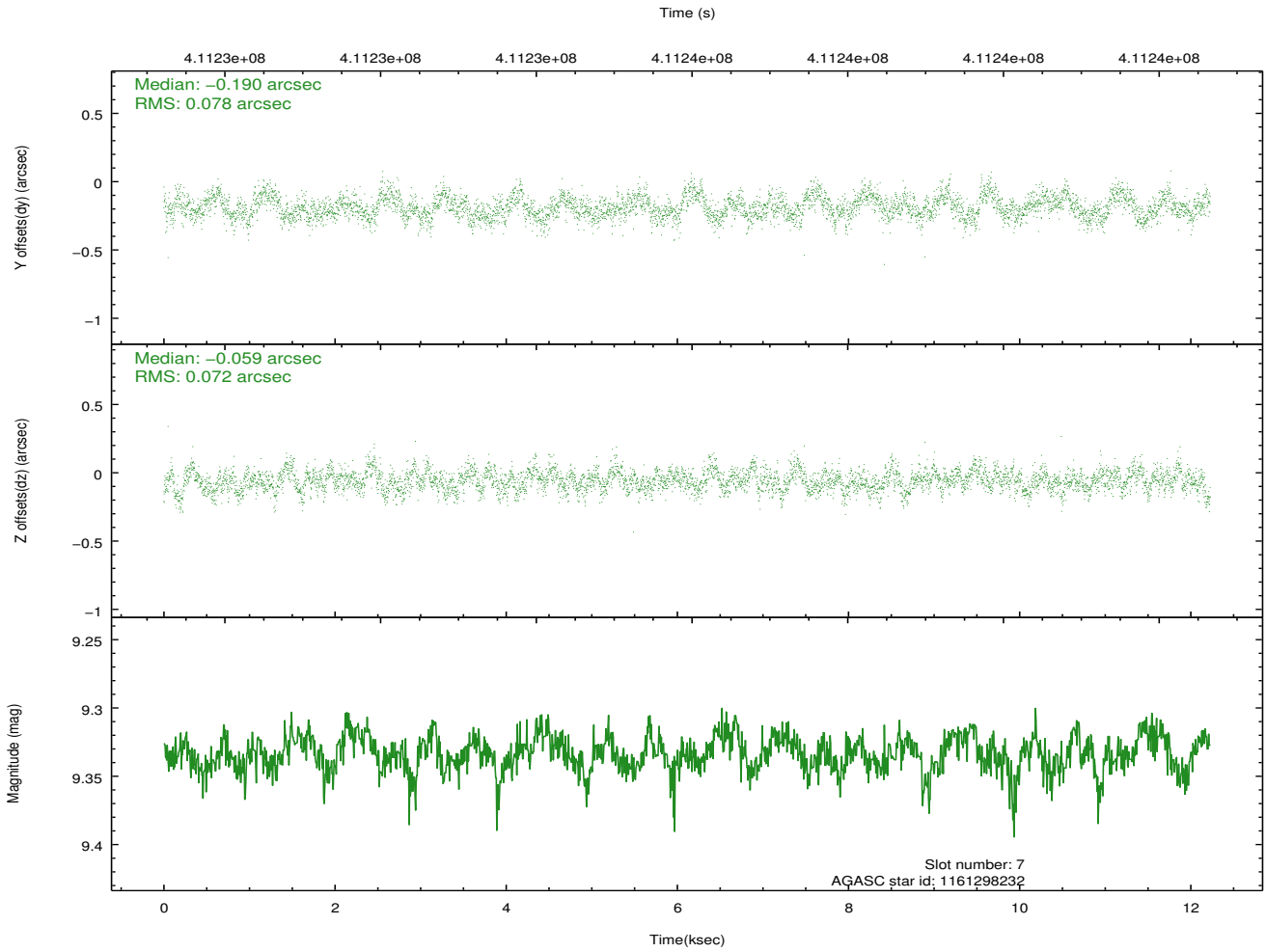
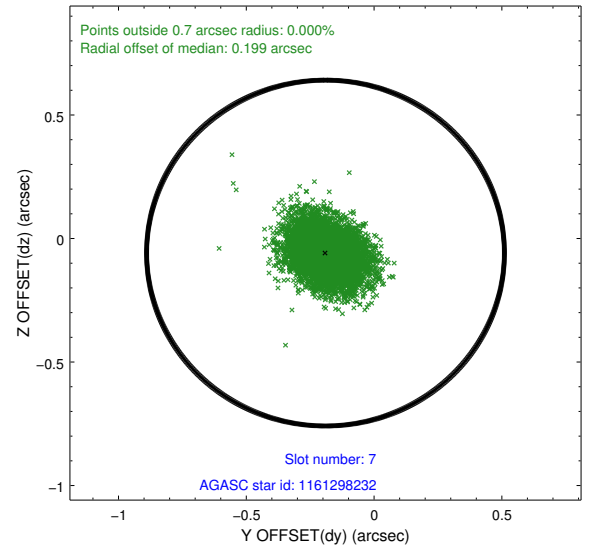
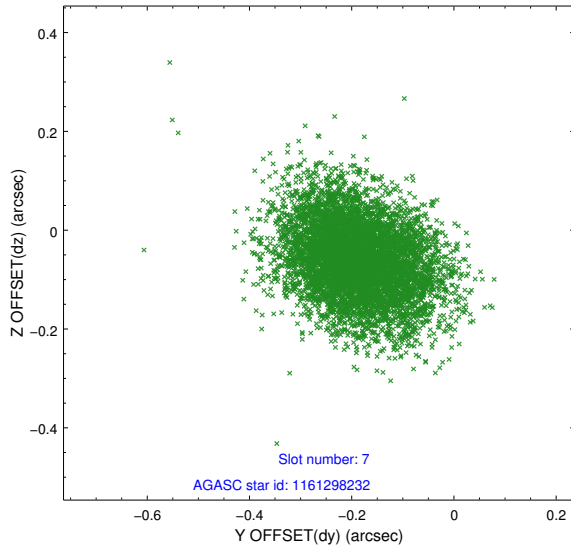
2.4.3 Slot 5



2.4.4 Slot 6

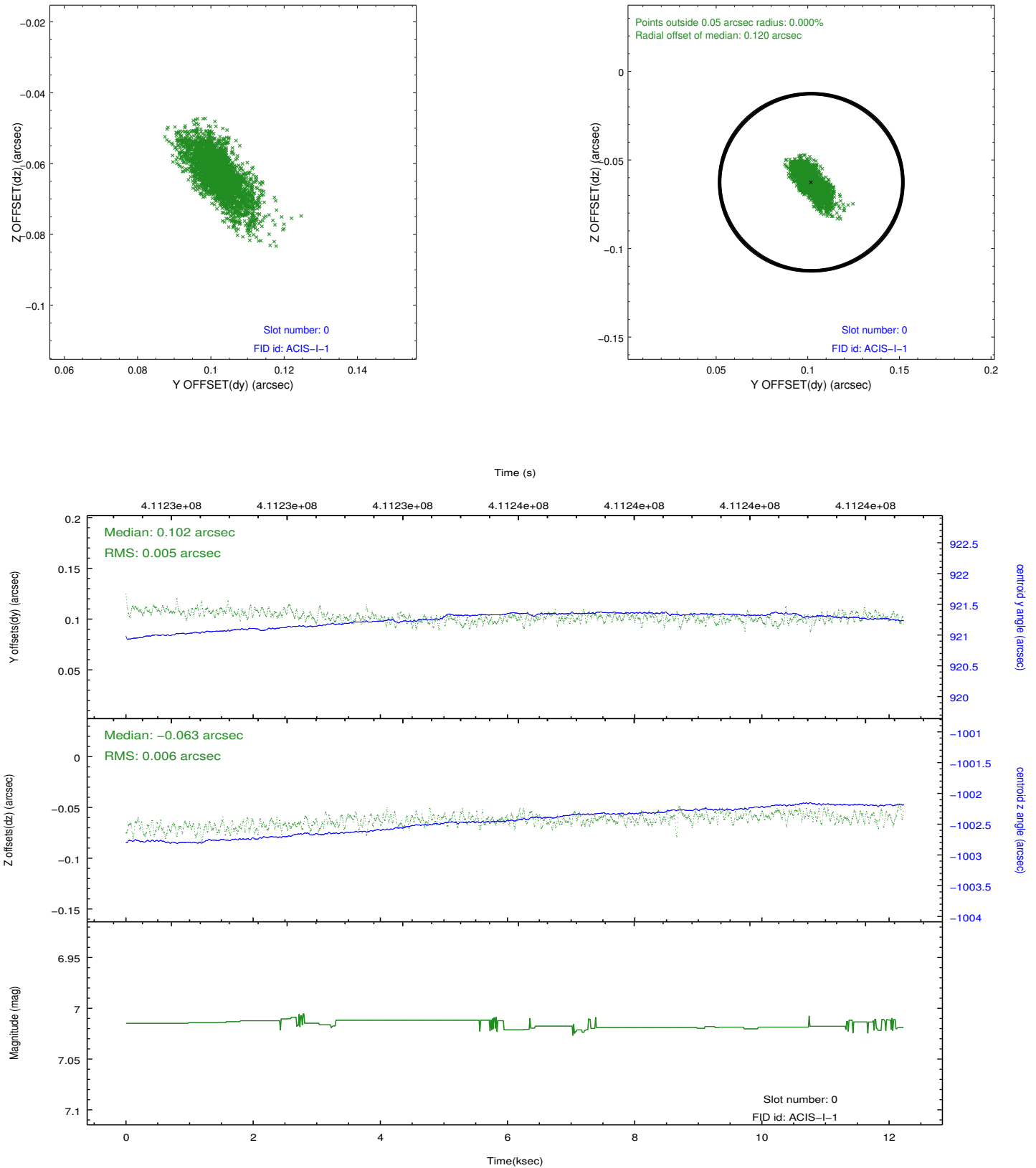


2.4.5 Slot 7

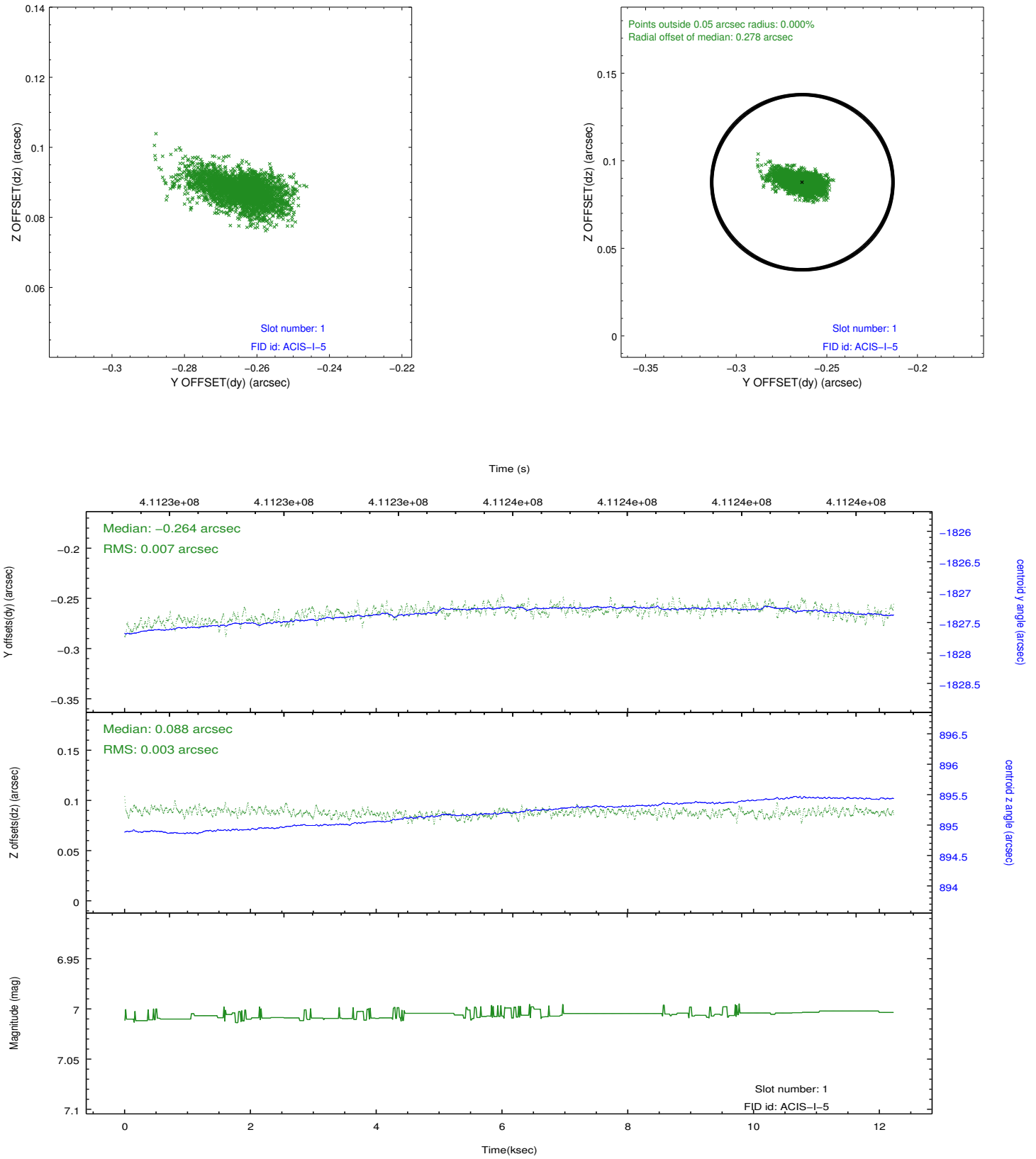


2.5 FID Slots

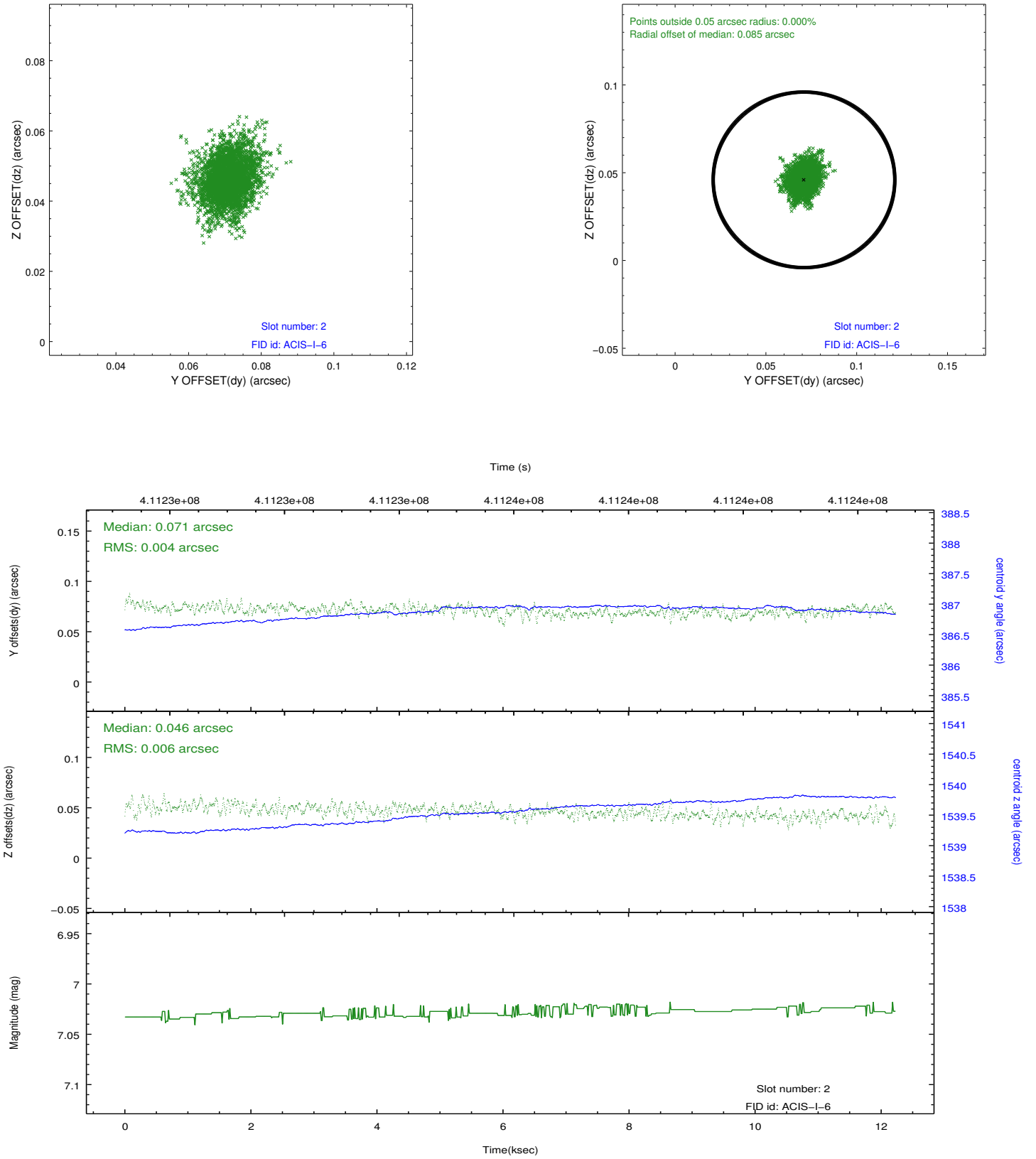
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.829245980084

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.