

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12897 - L2 Version 2
Chandra X-Ray Center

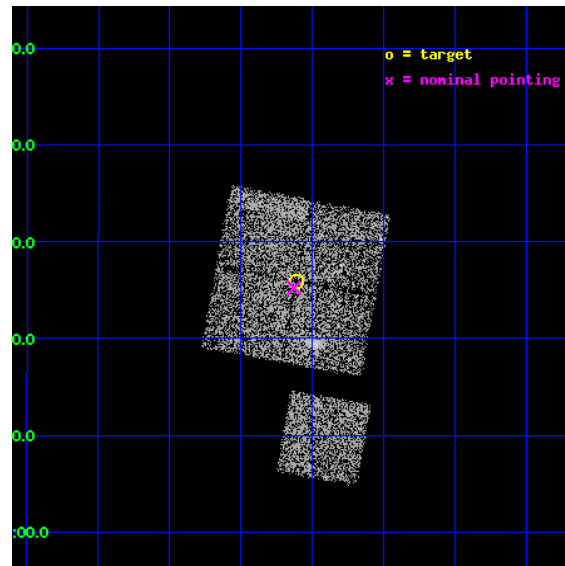
L2 Processing Date : Feb 11 2012

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1 Front

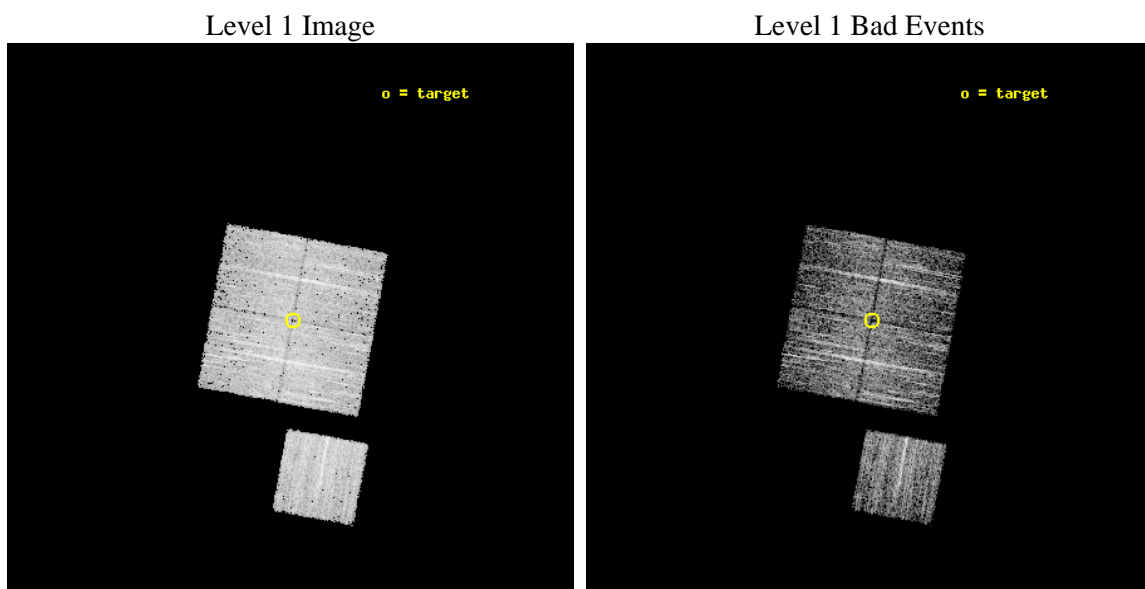
seq_num	801034	Sequence number
obs_id	12897	Observation id
title	The Outer Limits of Clusters with Chandra and Suzaku	Proposal titl
observer	Dr. Eric Miller	Principal investigator
object	A2204_Field3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	248.40303	Observer's specified target RA [deg]
dec_targ	5.431555	Observer's specified target Dec [deg]
ra_nom	248.40733784302	Nominal RA [deg]
dec_nom	5.4205893466942	Nominal Dec [deg]
roll_nom	190.48064546667	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5055.8093805313	Sum of GTIs [s]
livetime	4989.751508942	Livetime [s]
ontime0	5055.768340528	Sum of GTIs [s]
ontime1	5055.8093805313	Sum of GTIs [s]
ontime2	5052.7094301581	Sum of GTIs [s]
ontime3	5055.8914605379	Sum of GTIs [s]
ontime6	5055.7273005247	Sum of GTIs [s]
l2events	17548	Number of level 2 events



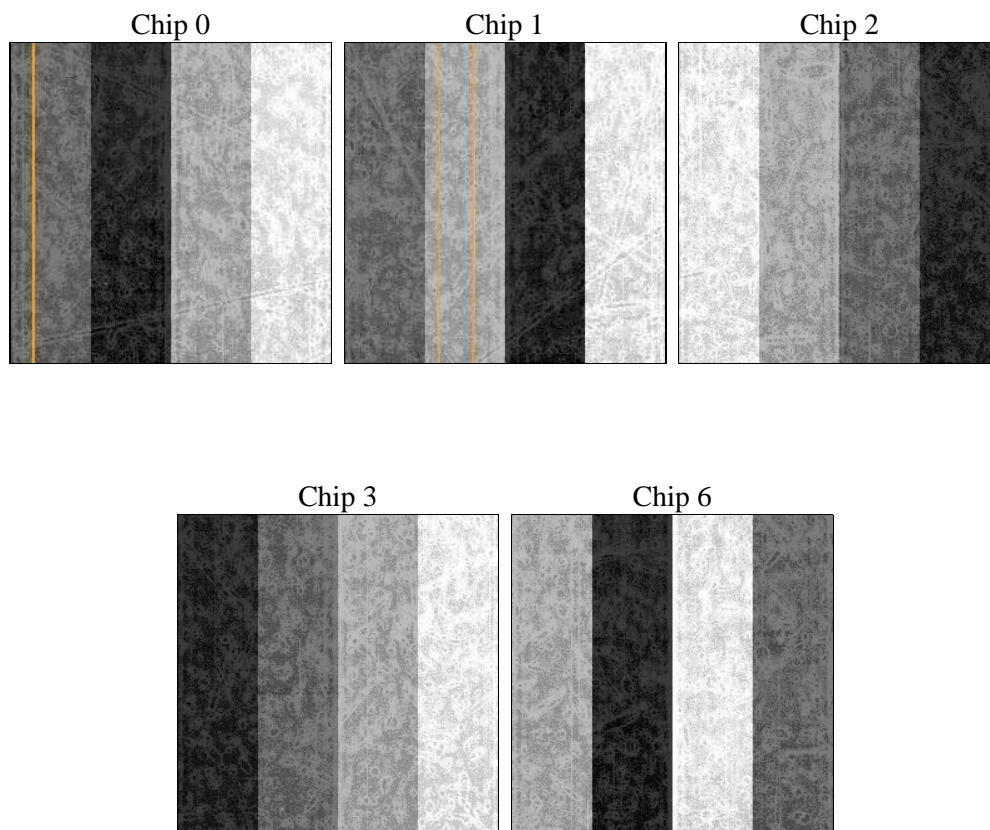
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5055.8093805313	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	5055.768340528	Sum of GTIs [s]
date	2012-02-11T16:57:21	Date and time of file creation	ontime1	5055.8093805313	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5052.7094301581	Sum of GTIs [s]
			ontime3	5055.8914605379	Sum of GTIs [s]
			ontime6	5055.7273005247	Sum of GTIs [s]
			l1events	163953	Number of level 1 events

2.1.4 Events

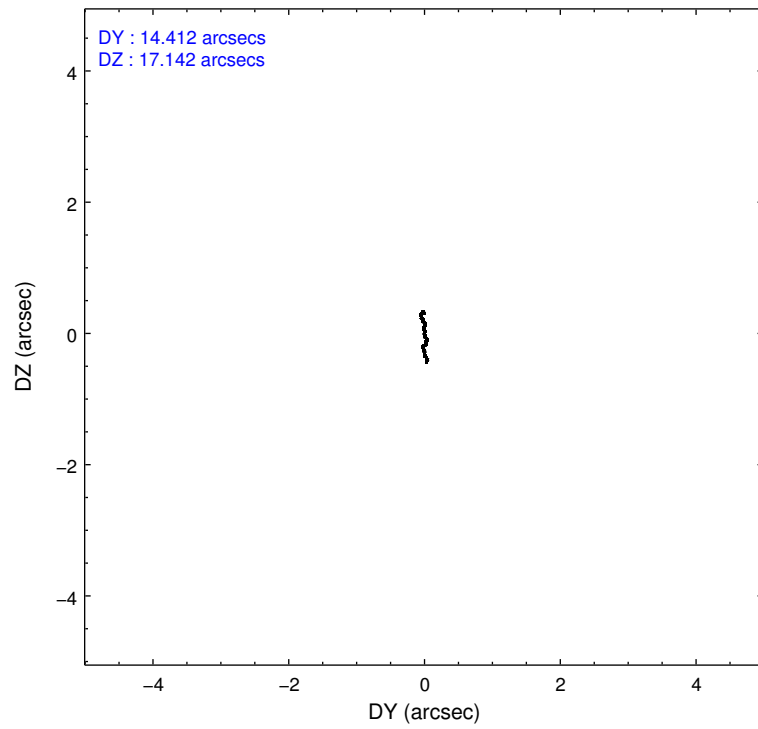
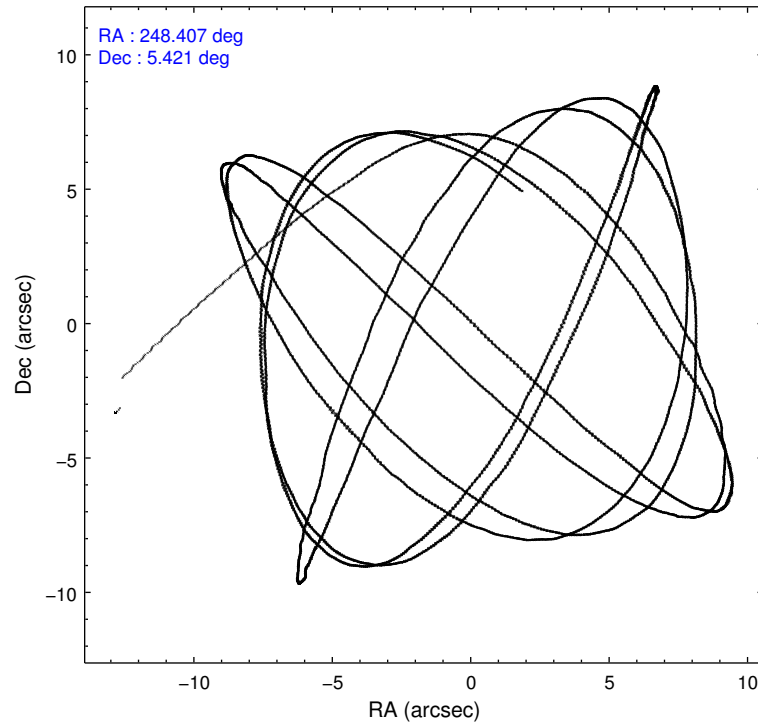
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	29457	29246	35628	33580	36042
rejected events	25373	24786	31154	30018	31814
rejected %	86%	84%	87%	89%	88%

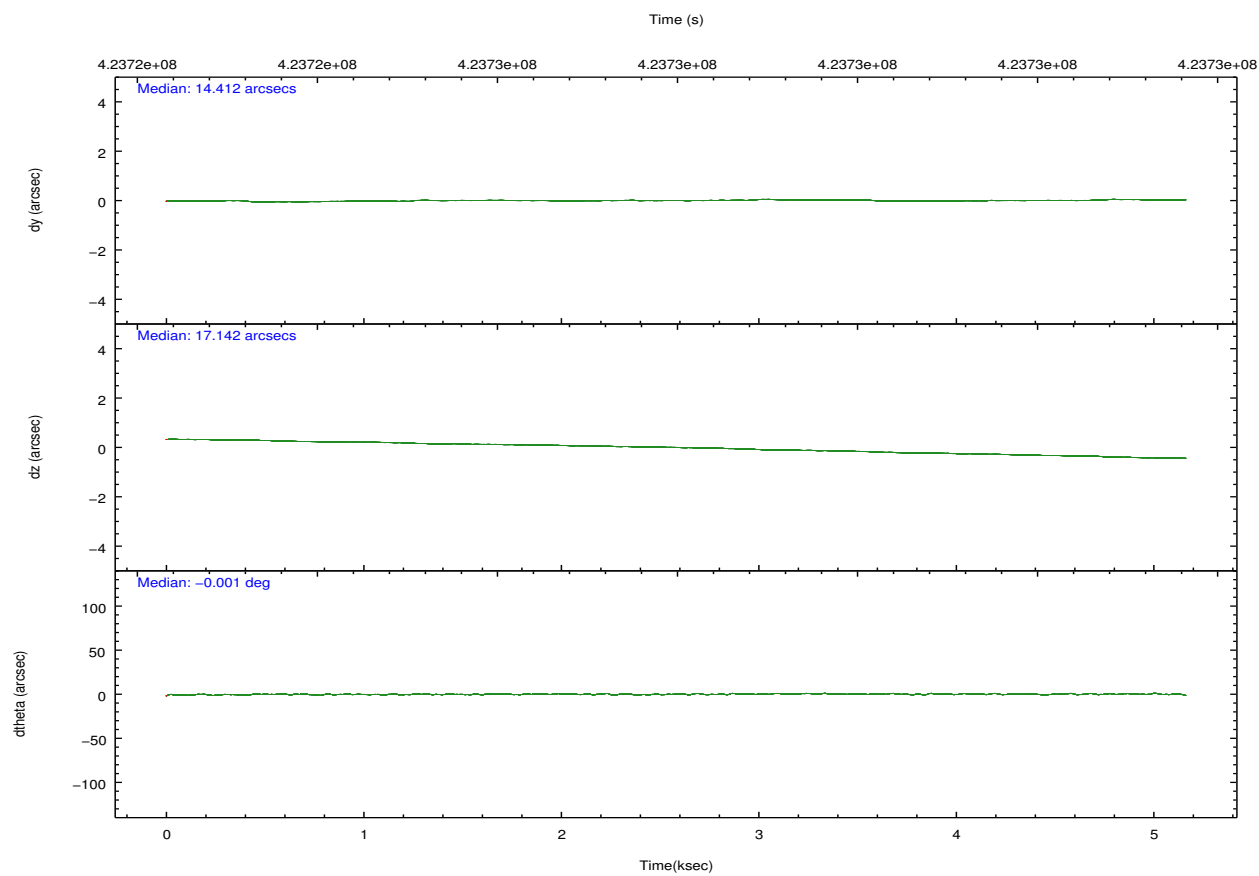
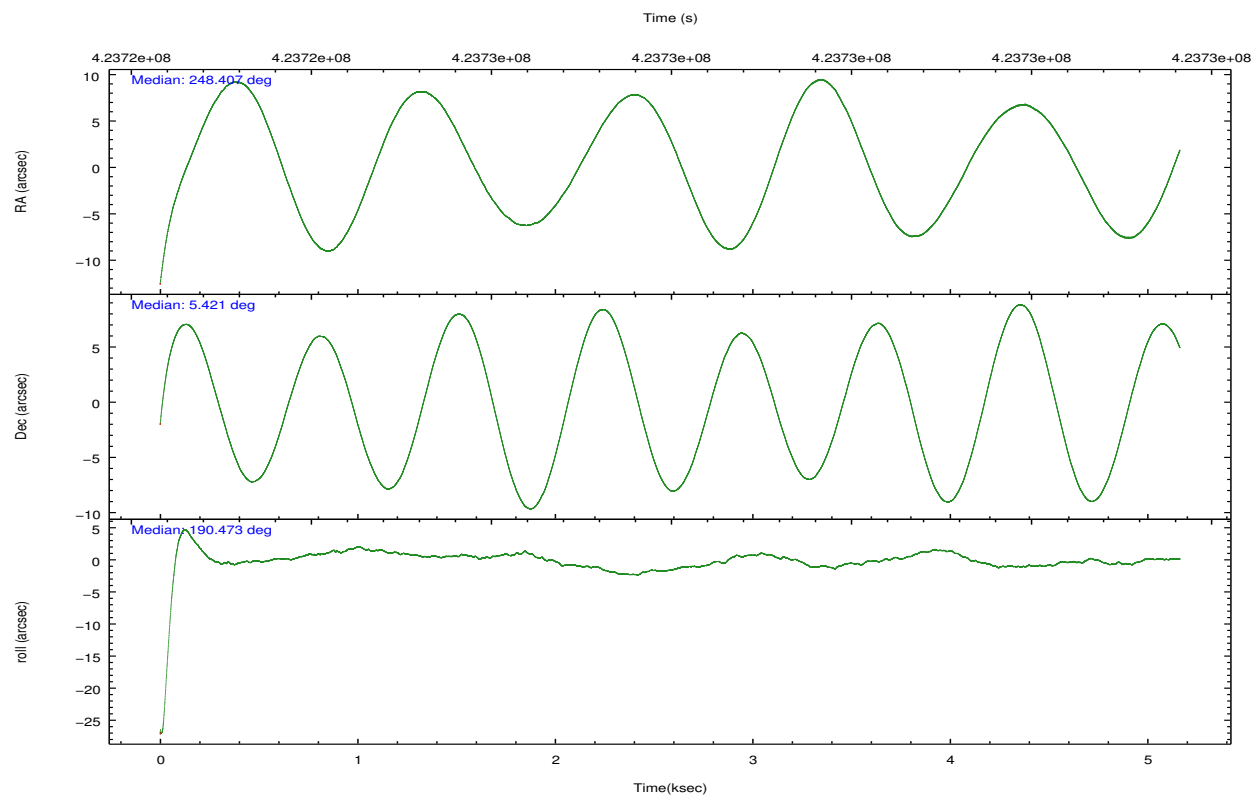
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1708	1803	2047	1391	1613
	5%	6%	5%	4%	4%
grade 1 events	21	22	26	22	17
	0%	0%	0%	0%	0%
grade 2 events	902	1023	947	772	922
	3%	3%	2%	2%	2%
grade 3 events	423	407	380	358	403
	1%	1%	1%	1%	1%
grade 4 events	331	396	388	351	406
	1%	1%	1%	1%	1%
grade 5 events	1290	1419	1265	1571	1432
	4%	4%	3%	4%	3%
grade 6 events	723	831	712	694	886
	2%	2%	1%	2%	2%
grade 7 events	24059	23345	29863	28421	30363
	81%	79%	83%	84%	84%

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	248.428306	248.4073378430209	CCD I2 on	Y	Y
[deg] Pointing Dec	5.438486	5.420589346694209	CCD I3 on	Y	Y
[deg] Pointing Roll	190.270050	190.4806454666722	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	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	423724579.184000	423723357.78449	CCD S5 on	N	N
Observation start date	2011-06-06T05:15:13	2011-06-06T04:55:57	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	423729579.184000	423730200.68484	On-chip summing requested	N	N
Observation end date	2011-06-06T06:38:33	2011-06-06T06:50:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



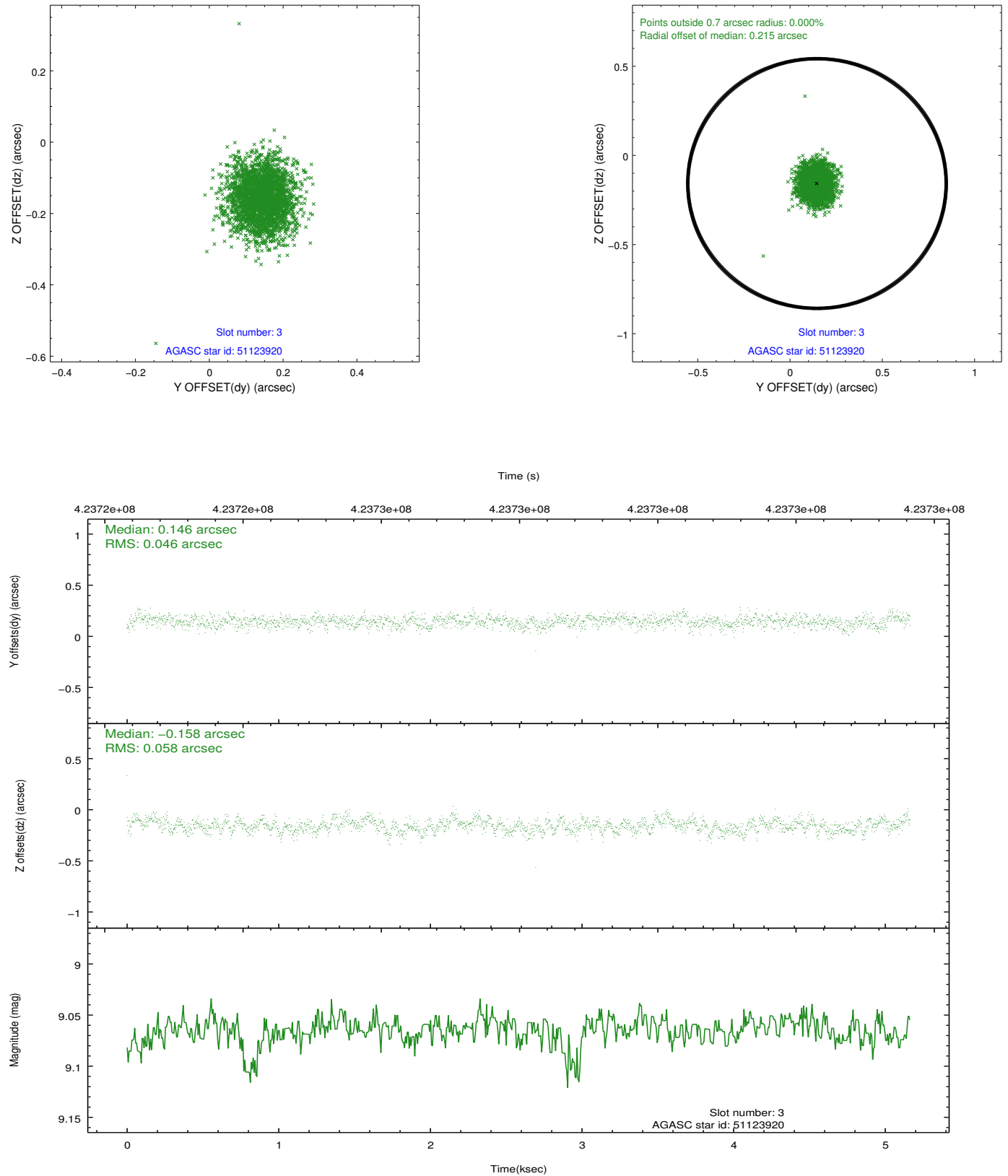


Slot Statistics

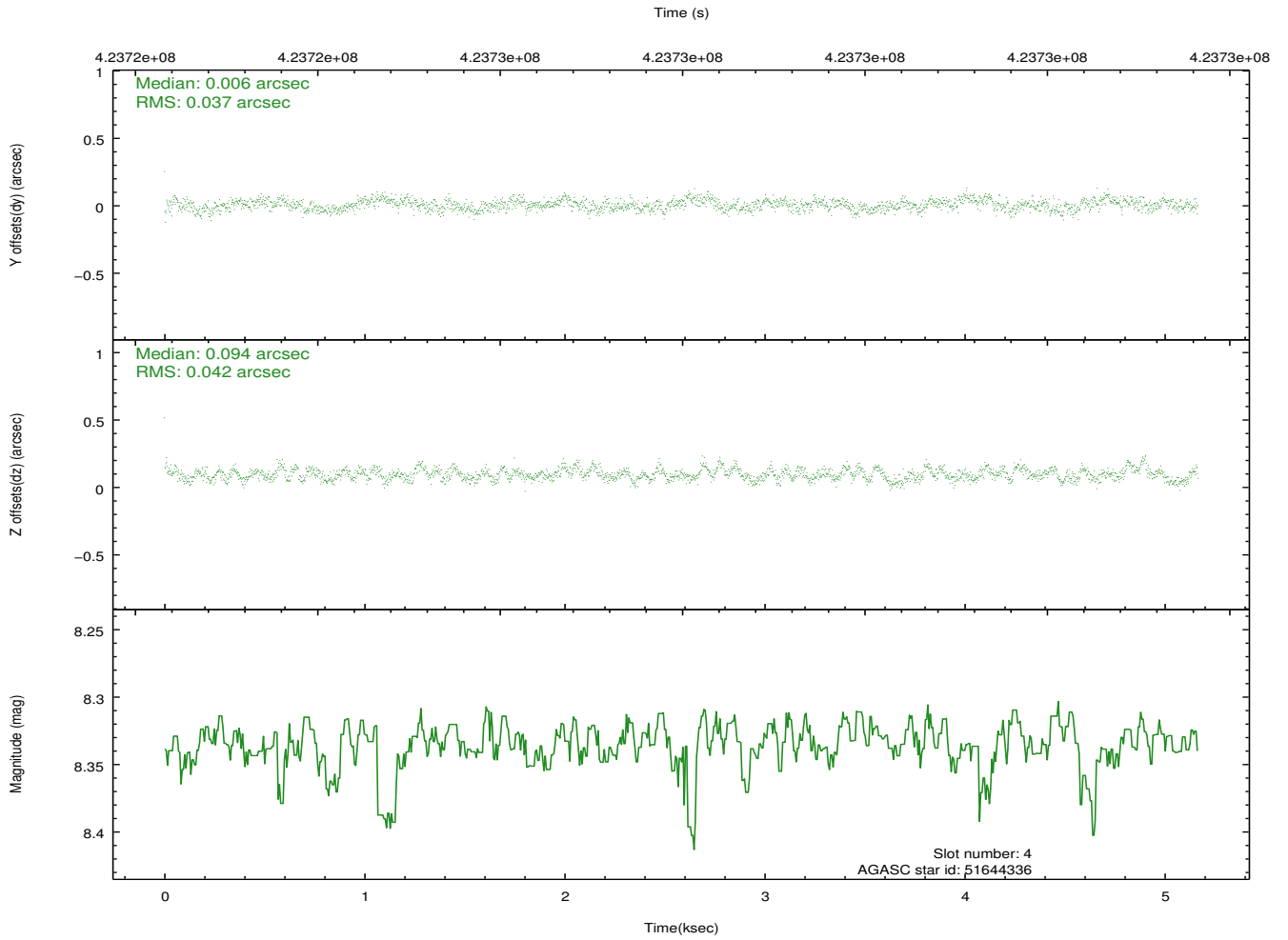
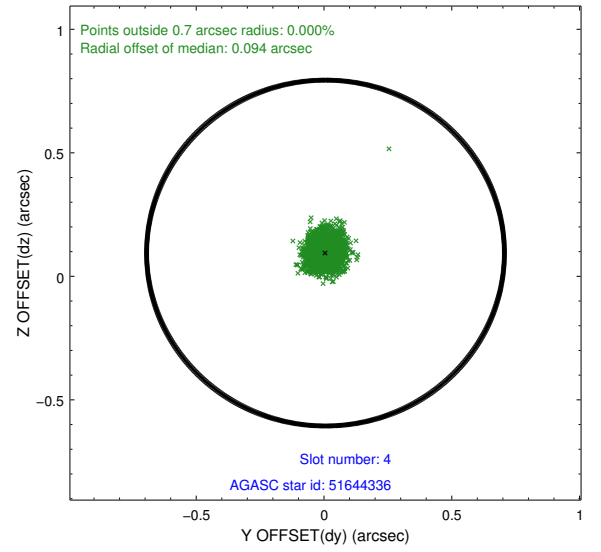
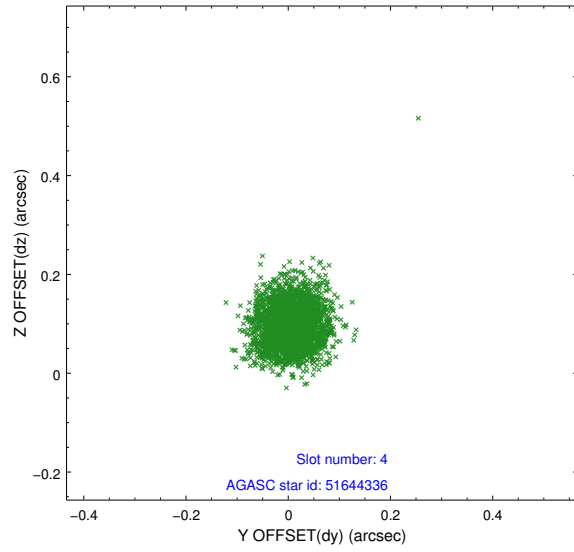
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.01	1260	0.073	-0.032	0.010	0.019	0.000000	0.000000	925.12	-840.81
1	FID	ACIS-I-5	7.01	1260	-0.223	0.074	0.006	0.010	0.000000	0.000000	-1822.61	1056.23
2	FID	ACIS-I-6	7.02	1260	0.058	0.027	0.011	0.018	0.000000	0.000000	389.41	1701.98
3	GUIDE	51123920	9.06	2519	0.146	-0.158	0.078	0.128	248.739818	5.153526	-916.19	1208.30
4	GUIDE	51644336	8.34	2520	0.006	0.094	0.059	0.094	248.956466	5.661447	-2005.14	-452.45
5	GUIDE	51653824	9.03	2515	-0.067	0.210	0.102	0.161	248.663501	6.113421	-1262.06	-2240.53
6	GUIDE	51654128	9.46	2517	-0.028	0.050	0.106	0.169	247.812718	5.709507	1995.54	-1354.38
7	GUIDE	51124384	6.50	2519	-0.054	-0.190	0.043	0.074	249.174457	5.017104	-2361.95	1968.07

2.4 Star Slots

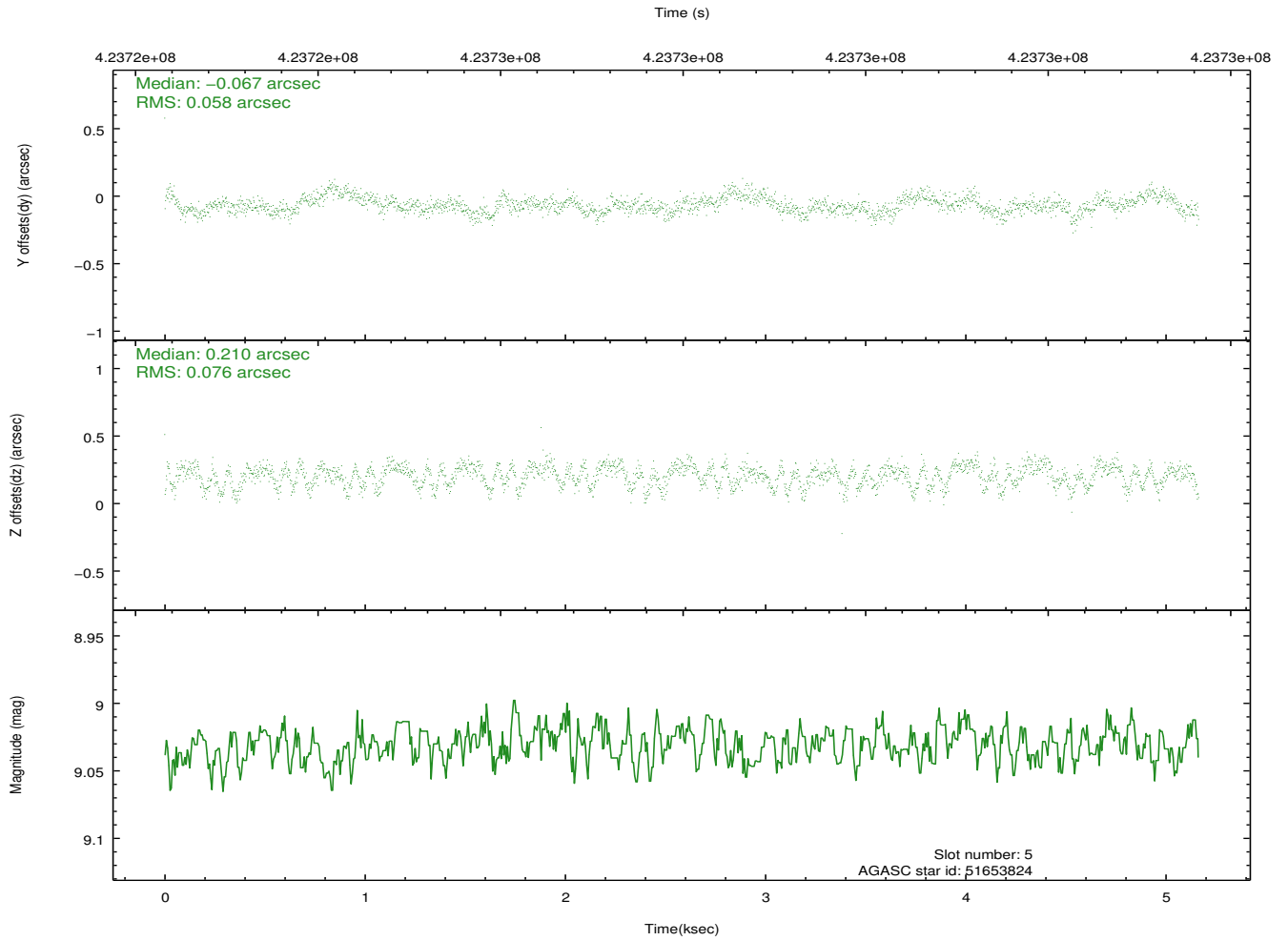
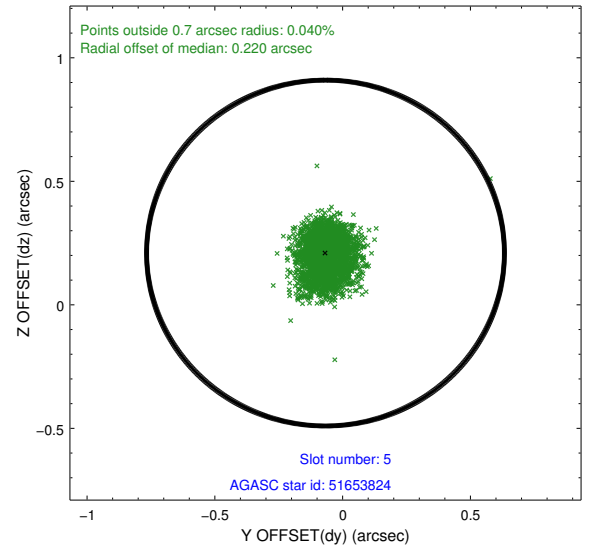
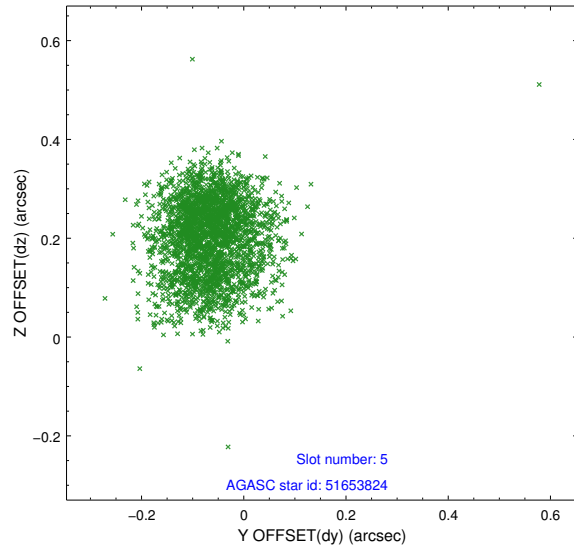
2.4.1 Slot 3



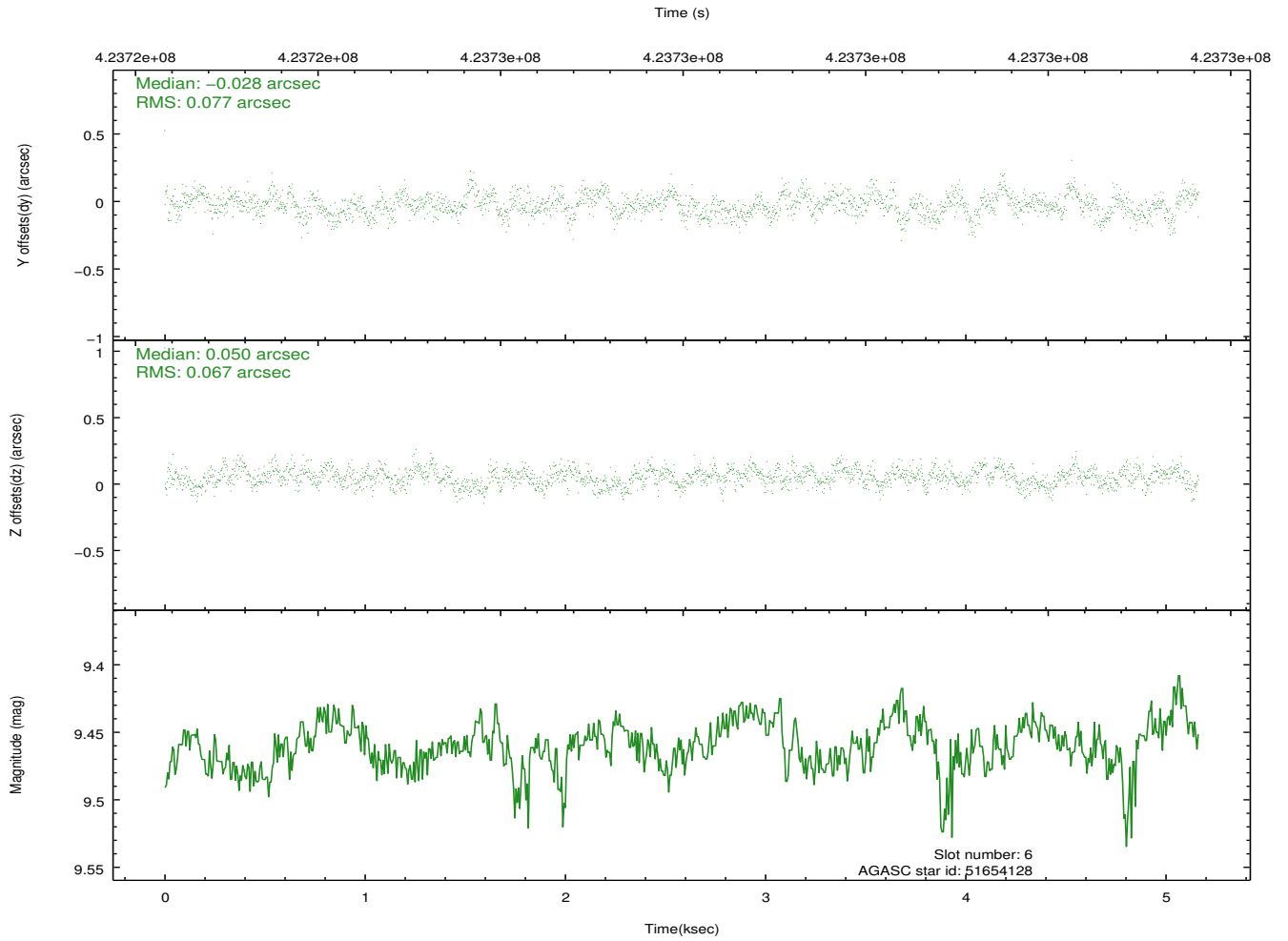
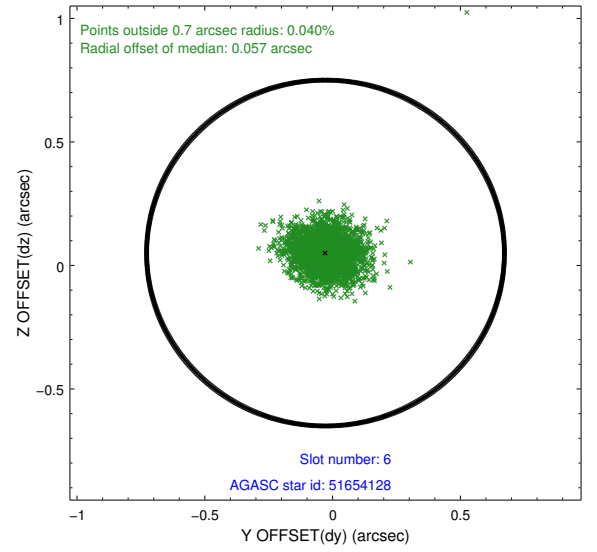
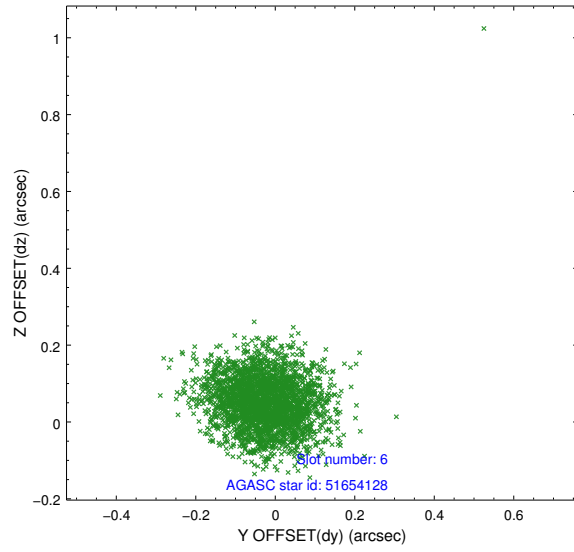
2.4.2 Slot 4



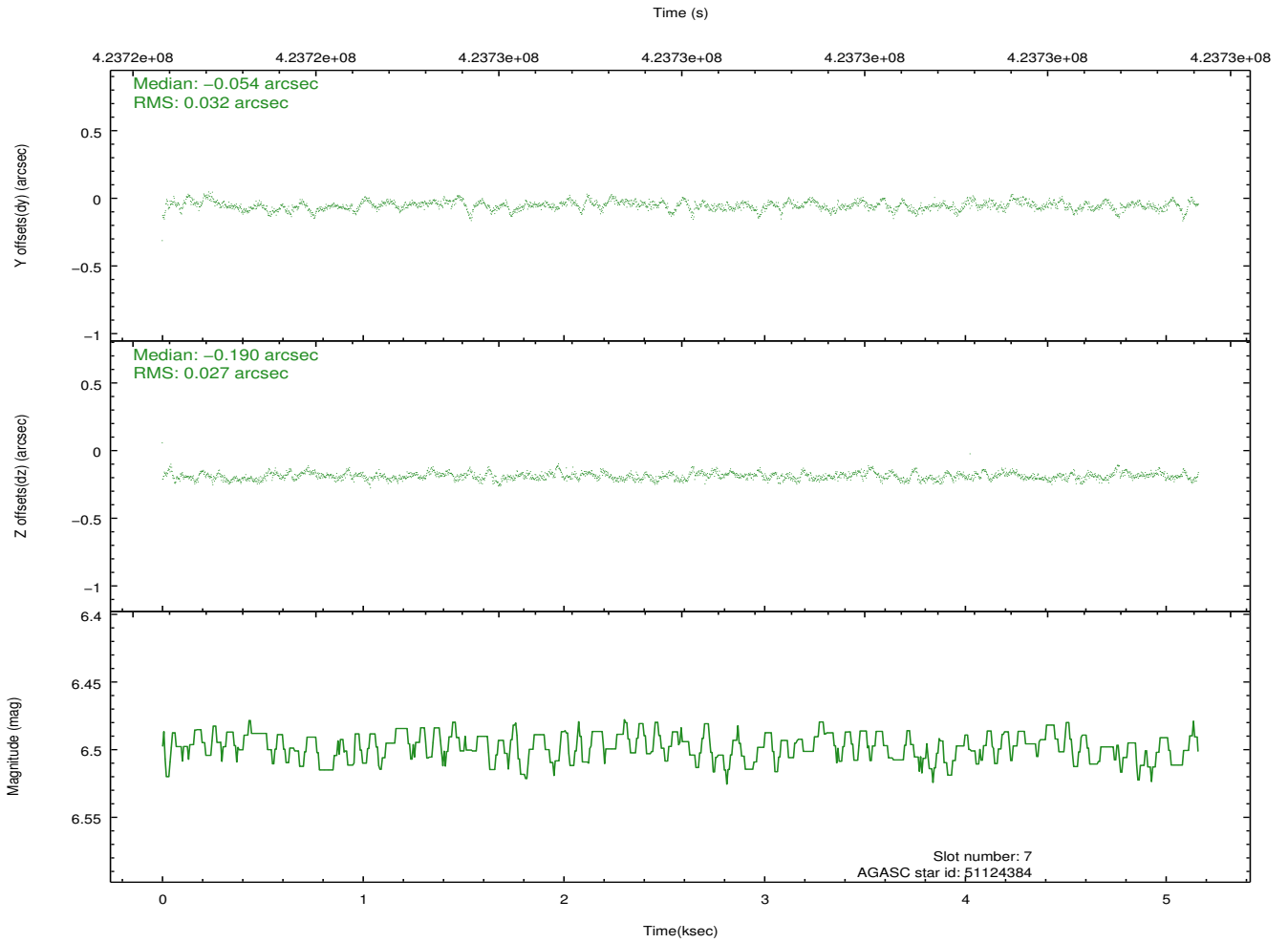
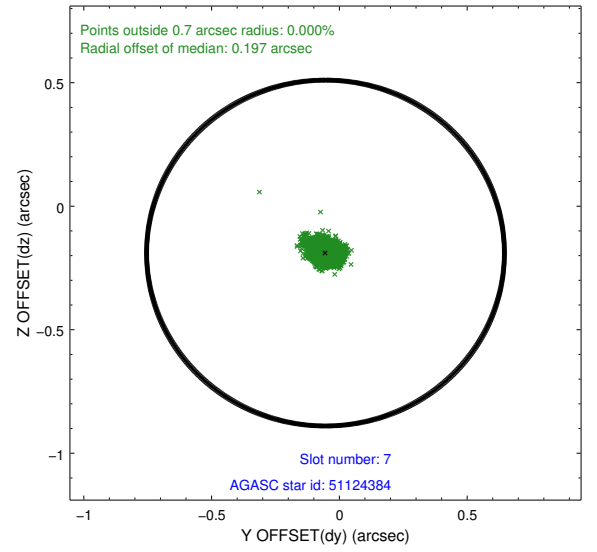
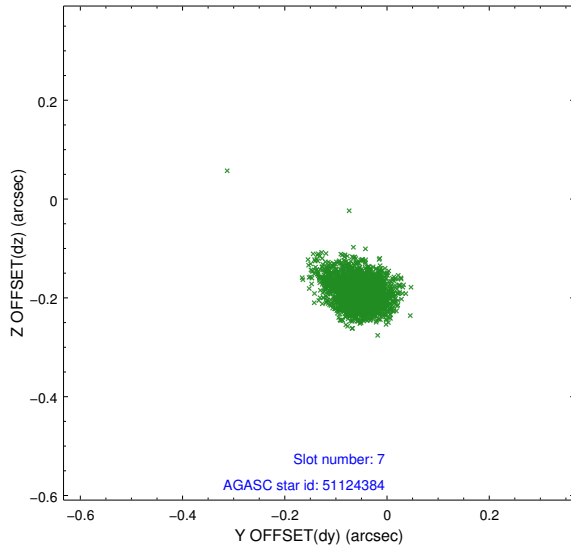
2.4.3 Slot 5



2.4.4 Slot 6

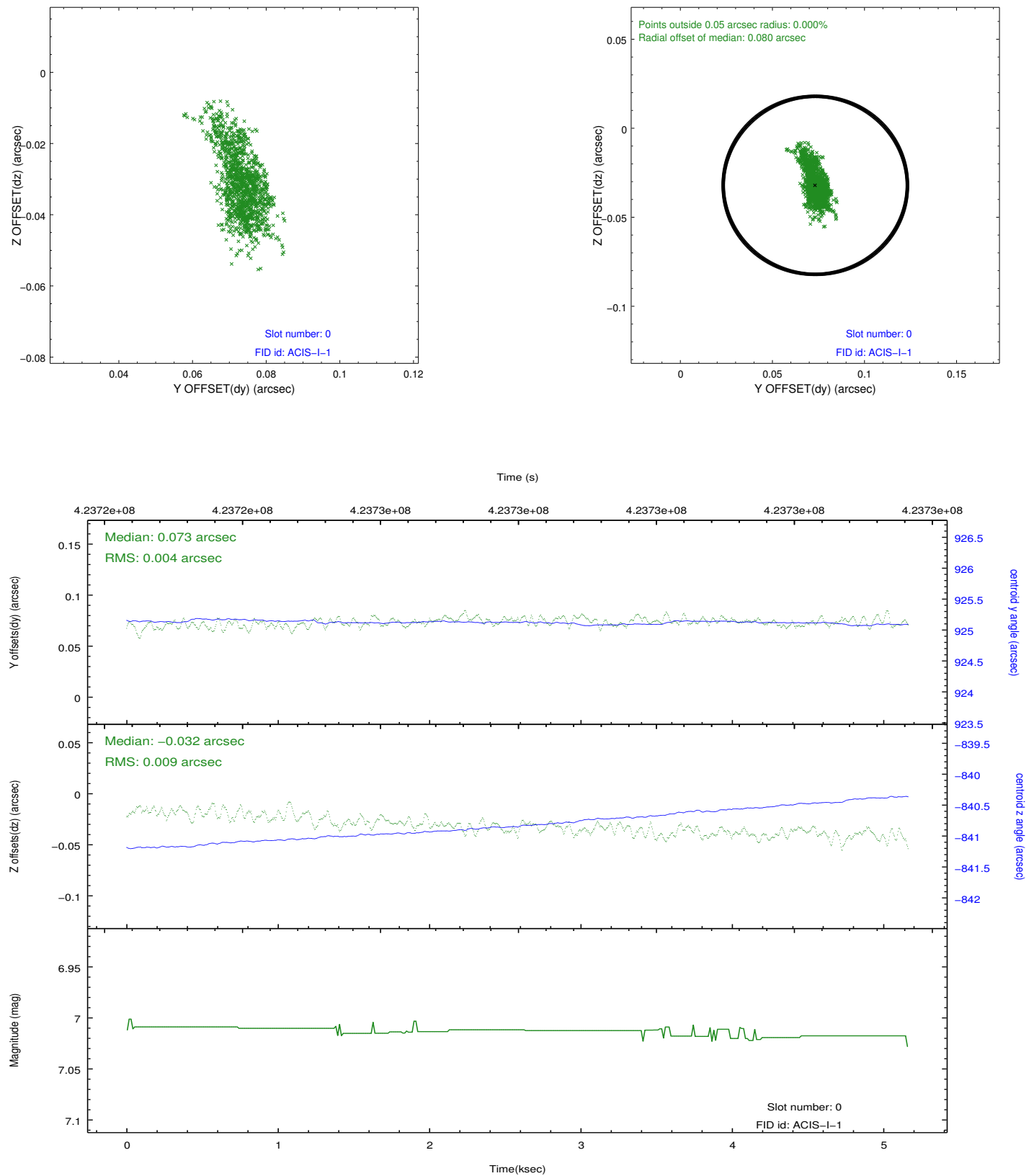


2.4.5 Slot 7

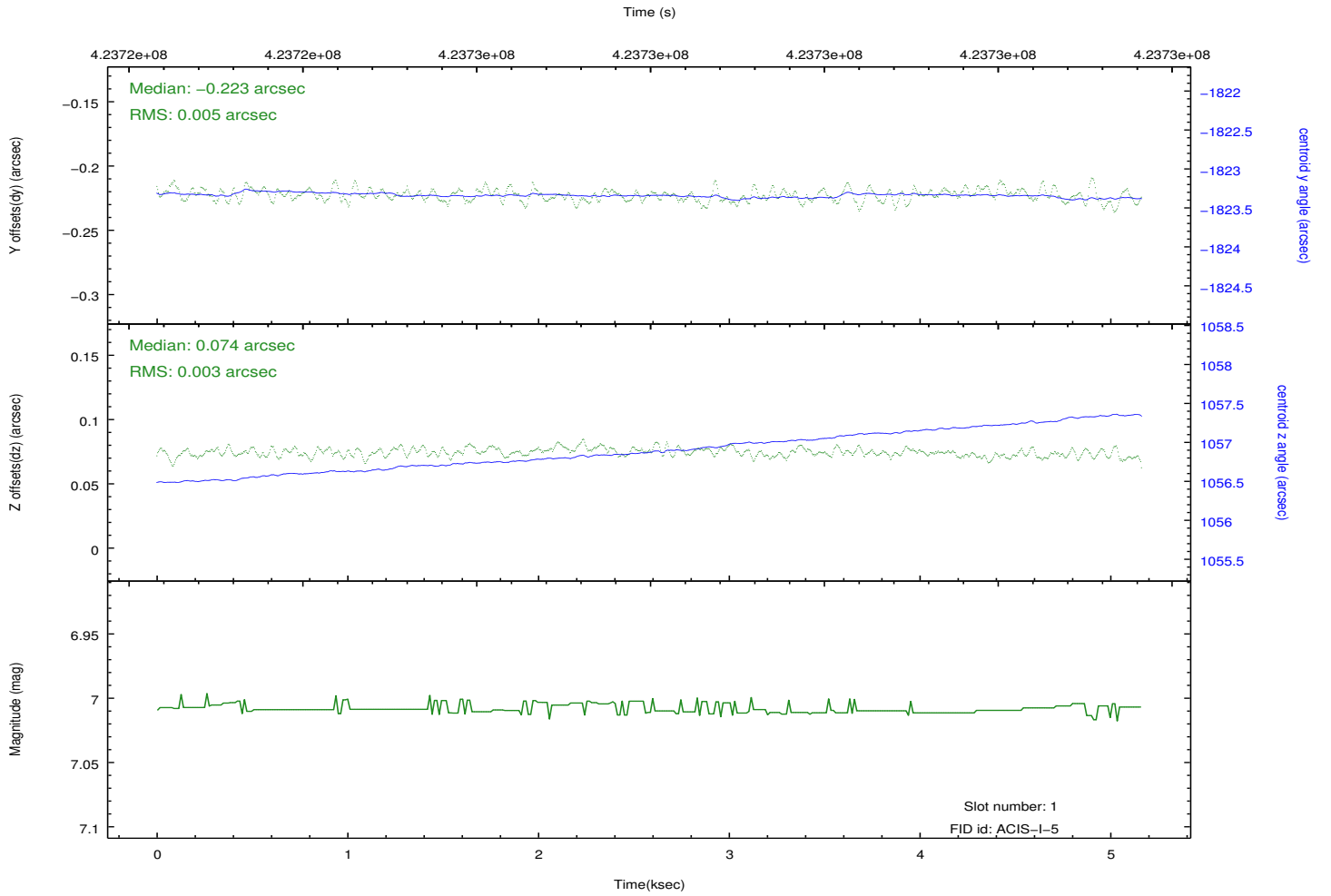
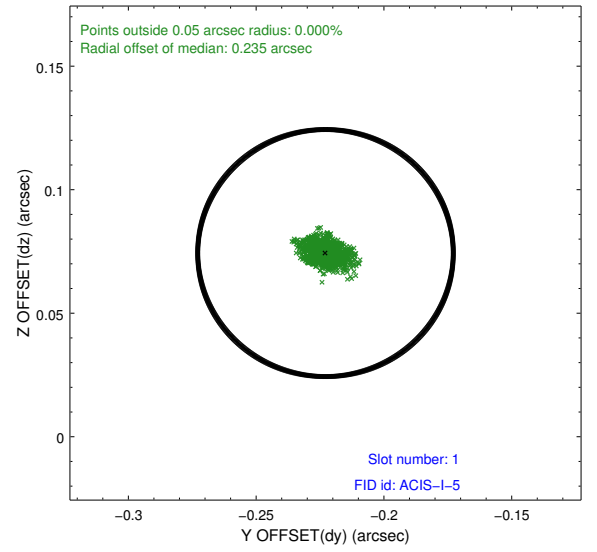
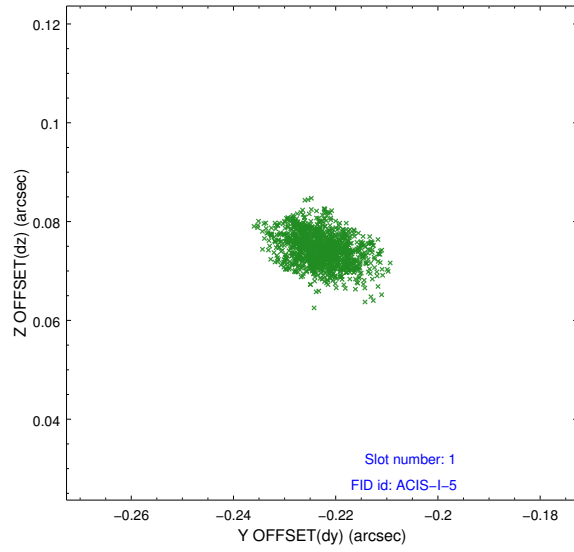


2.5 FID Slots

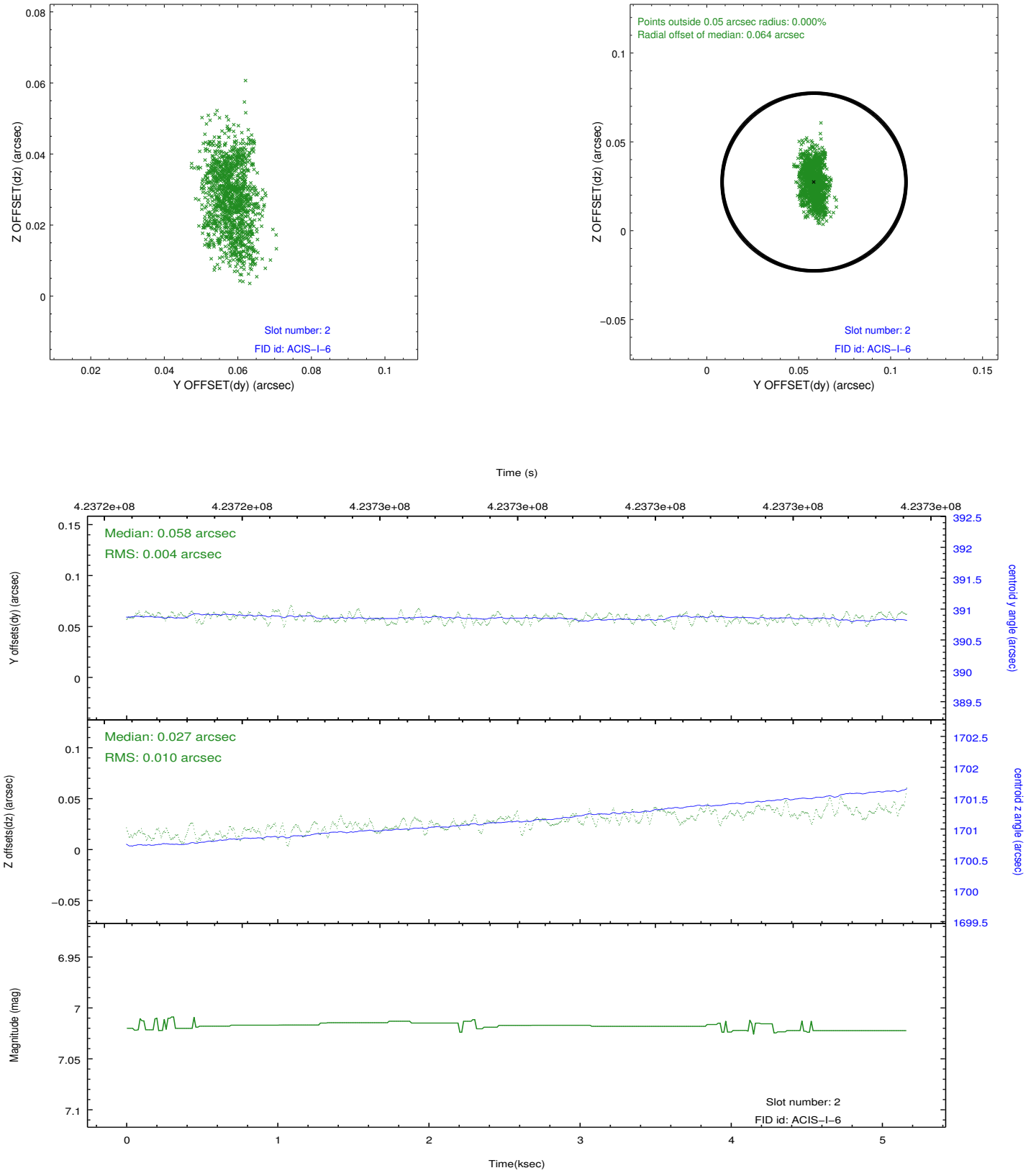
2.5.1 Slot 0



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)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0558093751669

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.