

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 14041 - L2 Version 1
Chandra X-Ray Center

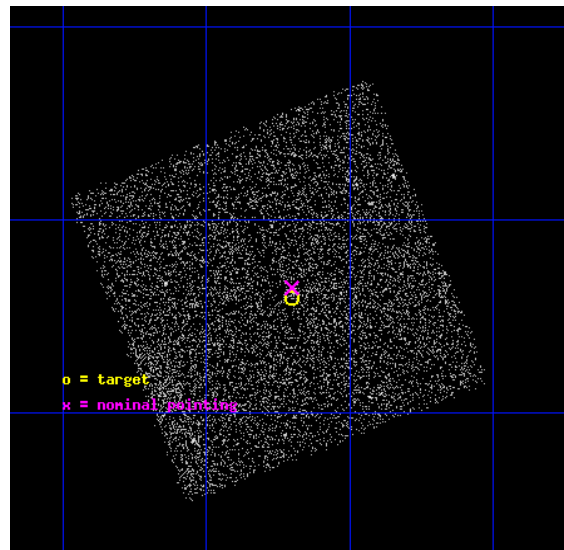
L2 Processing Date : Feb 7 2012

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1 Front

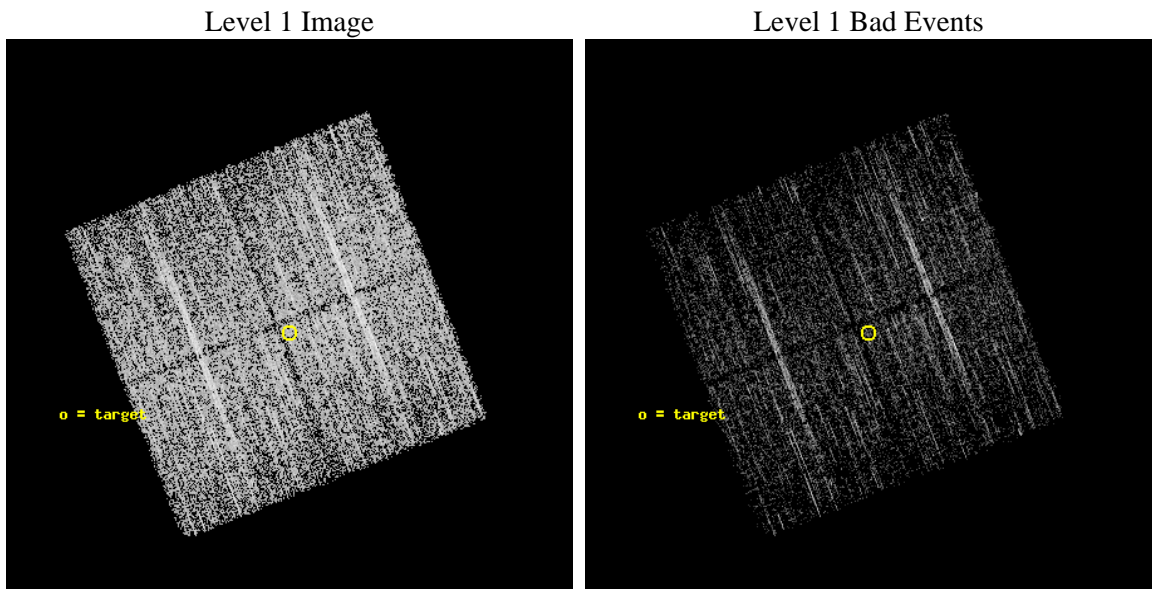
seq_num	901007	Sequence number
obs_id	14041	Observation id
title	BAT, Chandra, NuSTAR and The origin of the Cosmic X-ray Background	
observer	Dr. marco ajello	Principal investigator
object	J1139.2+0336	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	174.8	Observer's specified target RA [deg]
dec_targ	3.6	Observer's specified target Dec [deg]
ra_nom	174.80053334685	Nominal RA [deg]
dec_nom	3.6081414673662	Nominal Dec [deg]
roll_nom	68.439266429815	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5085.8438466787	Sum of GTIs [s]
livetime	5019.3935526781	Livetime [s]
ontime0	5082.5797364116	Sum of GTIs [s]
ontime1	5085.7617666721	Sum of GTIs [s]
ontime2	5082.6618363261	Sum of GTIs [s]
ontime3	5085.8438466787	Sum of GTIs [s]
l2events	12033	Number of level 2 events



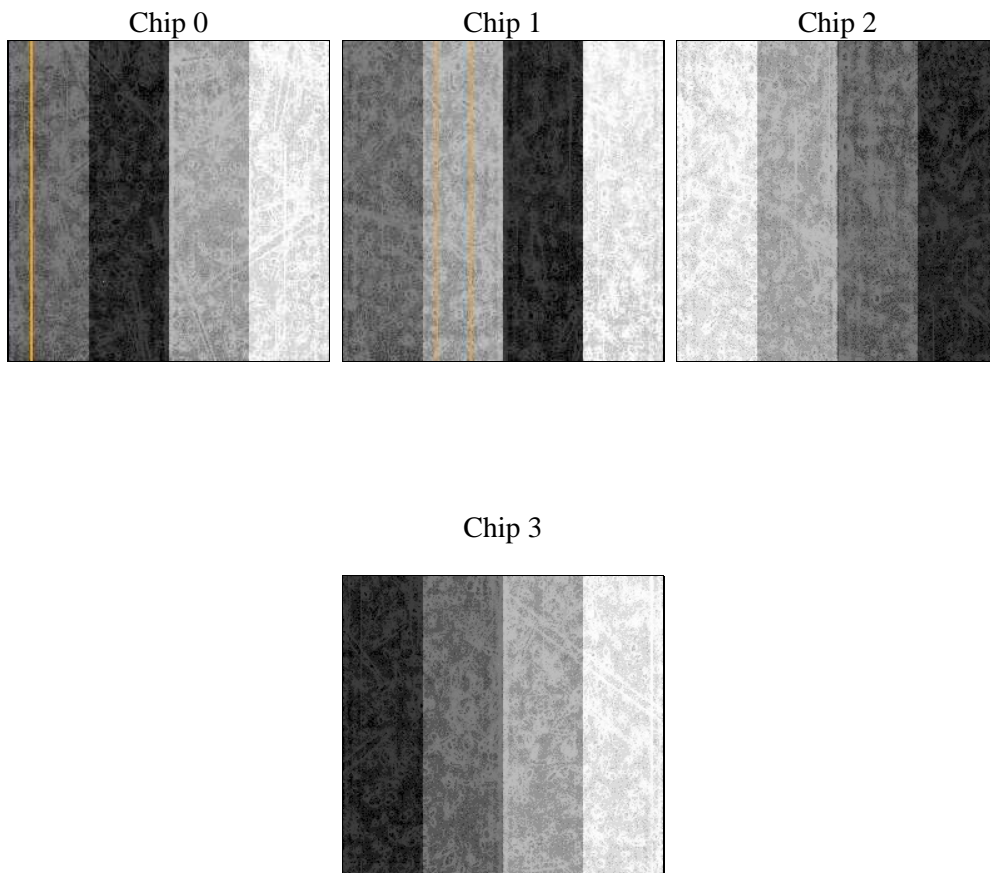
2 OBI

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	5085.8438466787	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	5082.5797364116	Sum of GTIs [s]
date	2012-02-07T05:29:37	Date and time of file creation	ontime1	5085.7617666721	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5082.6618363261	Sum of GTIs [s]
			ontime3	5085.8438466787	Sum of GTIs [s]
			l1events	120605	Number of level 1 events

2.1.4 Events

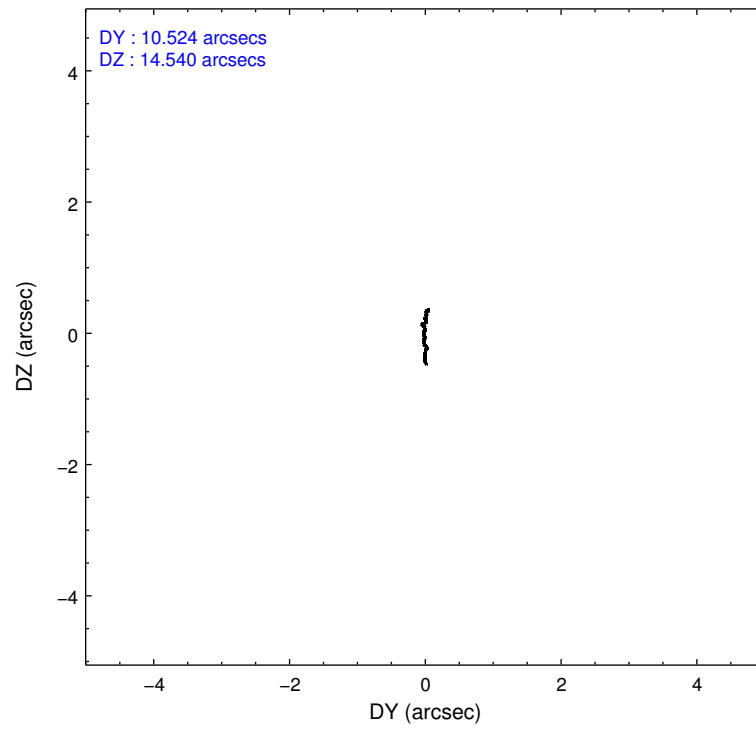
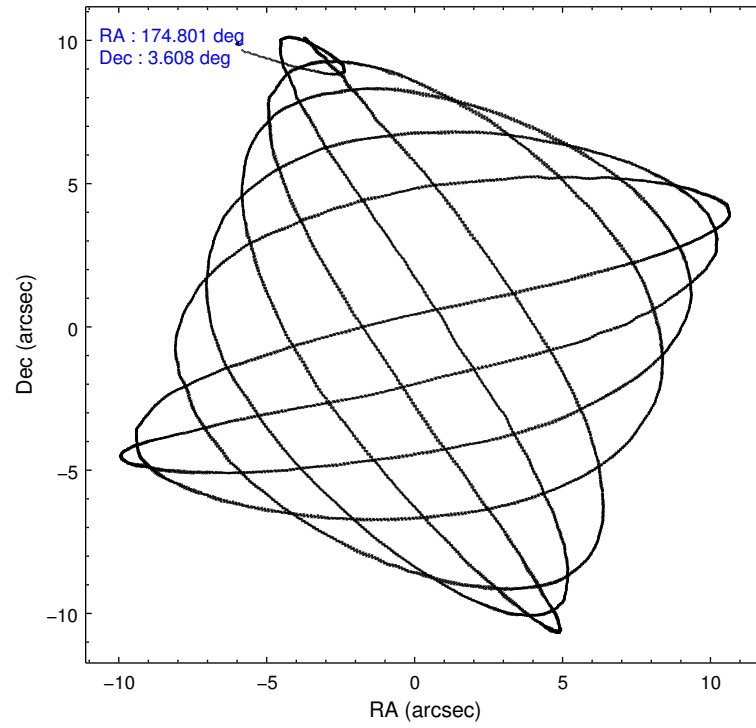
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	27913	29864	32003	30825
rejected events	24512	25832	28311	27479
rejected %	87%	86%	88%	89%

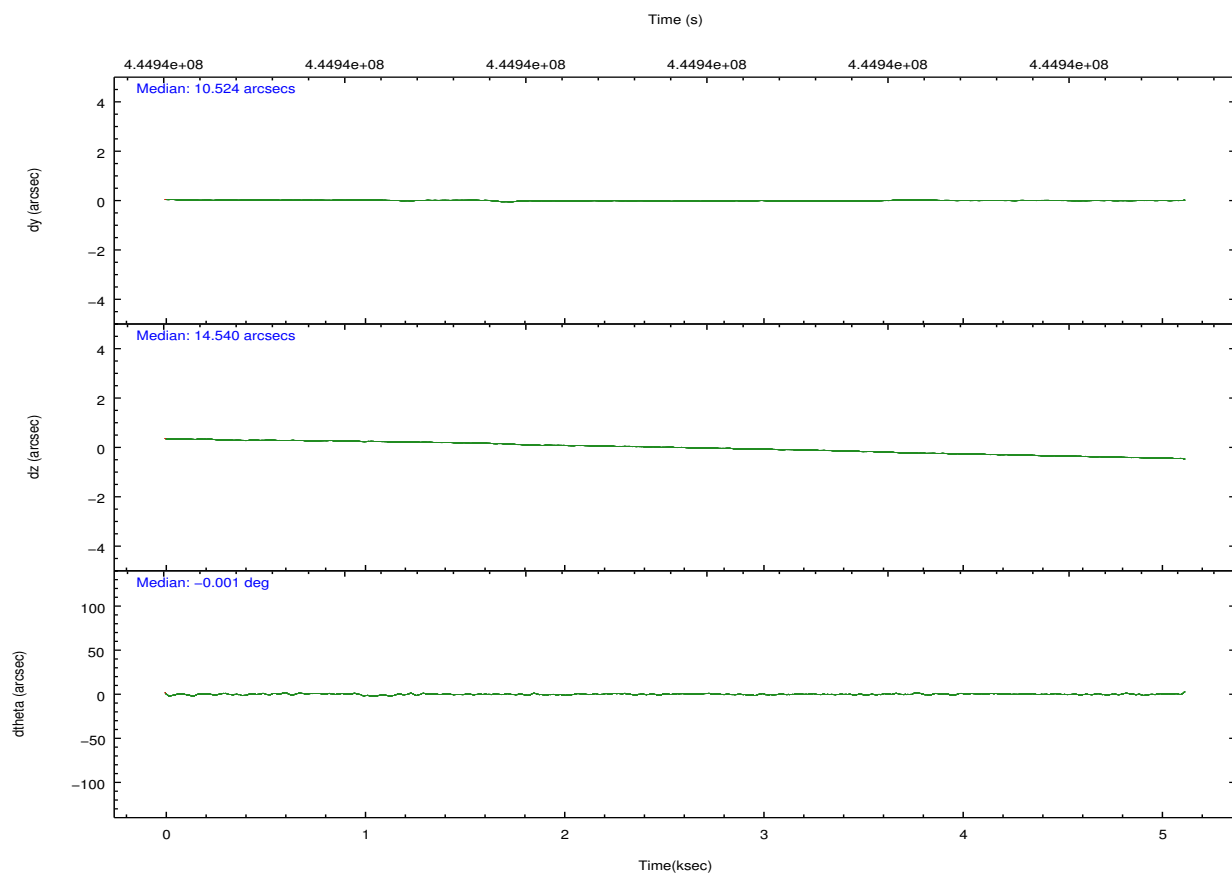
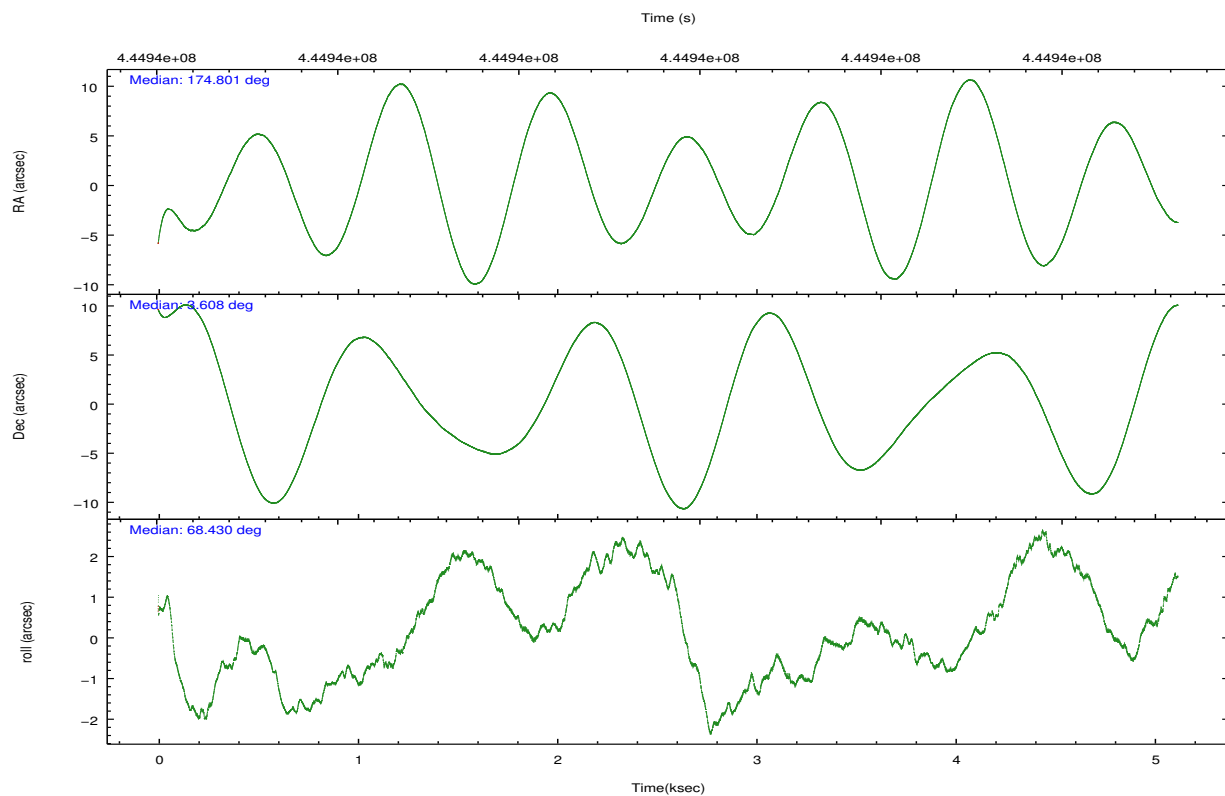
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	1166	1471	1242	1161
	4%	4%	3%	3%
grade 1 events	19	10	22	20
	0%	0%	0%	0%
grade 2 events	809	941	962	772
	2%	3%	3%	2%
grade 3 events	374	418	356	351
	1%	1%	1%	1%
grade 4 events	352	386	372	343
	1%	1%	1%	1%
grade 5 events	1332	1397	1361	1572
	4%	4%	4%	5%
grade 6 events	704	819	768	724
	2%	2%	2%	2%
grade 7 events	23157	24422	26920	25882
	82%	81%	84%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	174.804756	174.8005333468481	Subarray requested	NONE	NONE
[deg] Pointing Dec	3.580877	3.608141467366201	Alternating exposures requested	N	N
[deg] Pointing Roll	68.230309	68.43926642981494	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	444939378.184000	444938170.76371			
Observation start date	2012-02-06T18:15:12	2012-02-06T17:56:10			
[s] Observation end time (MET)	444944378.184000	444945921.81412			
Observation end date	2012-02-06T19:38:32	2012-02-06T20:05:21			
Read mode	TIMED	TIMED			

2.3 Aspect



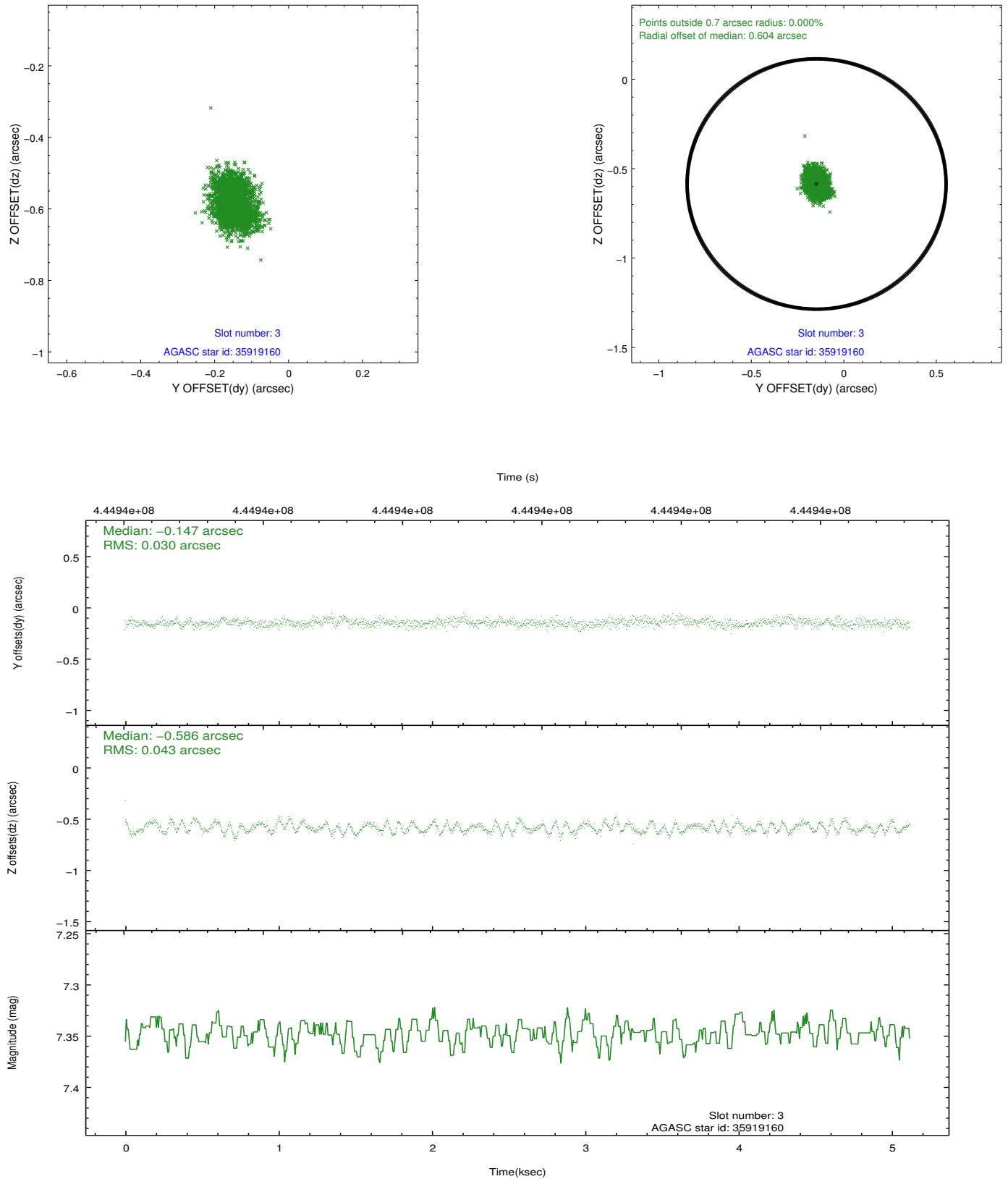


Slot Statistics

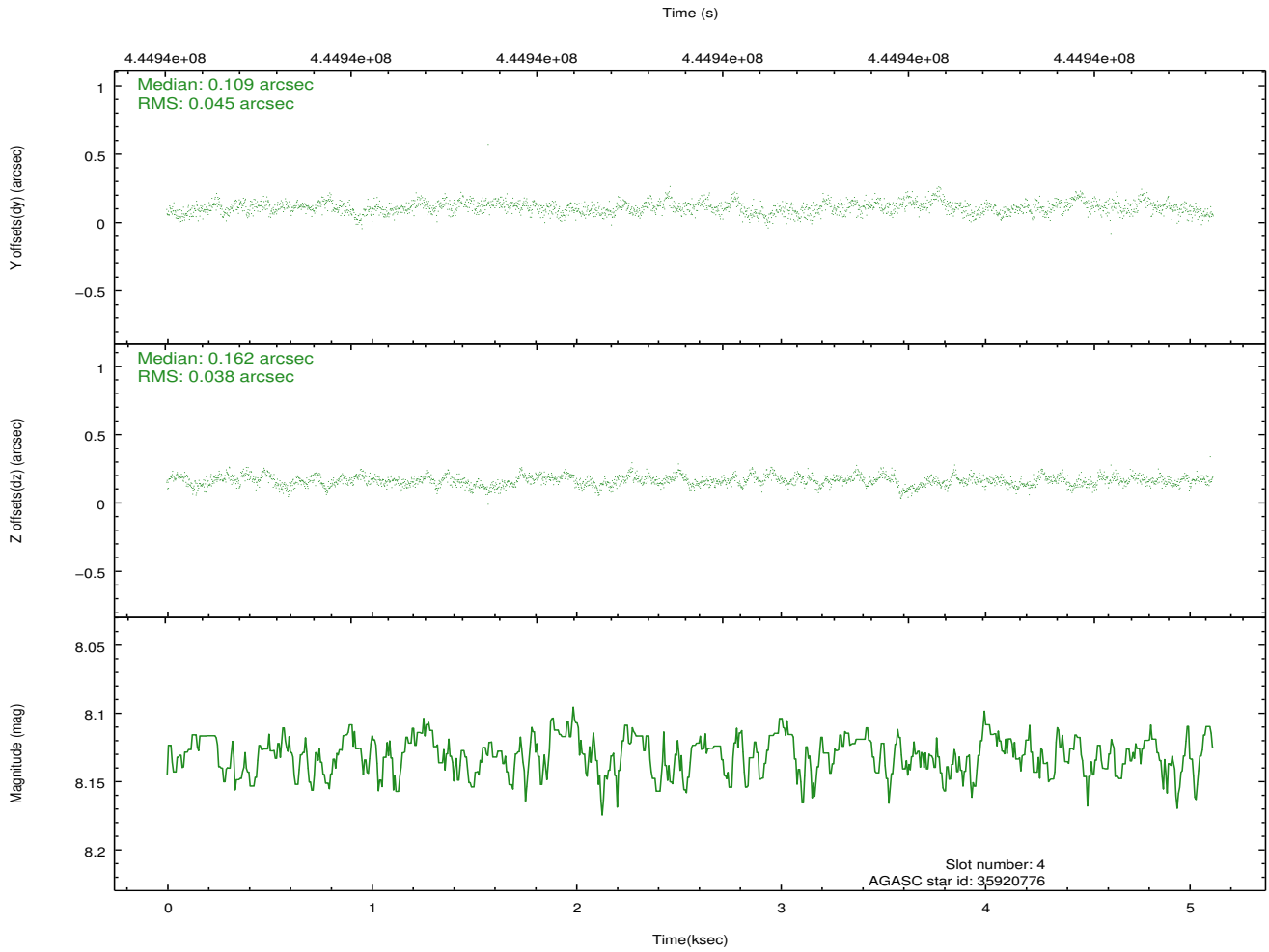
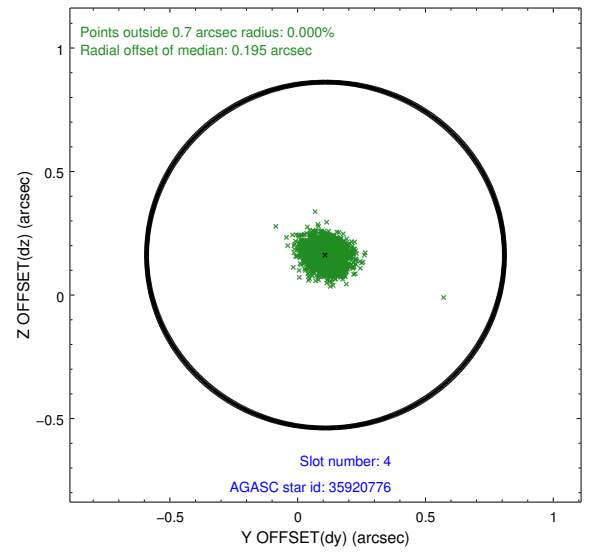
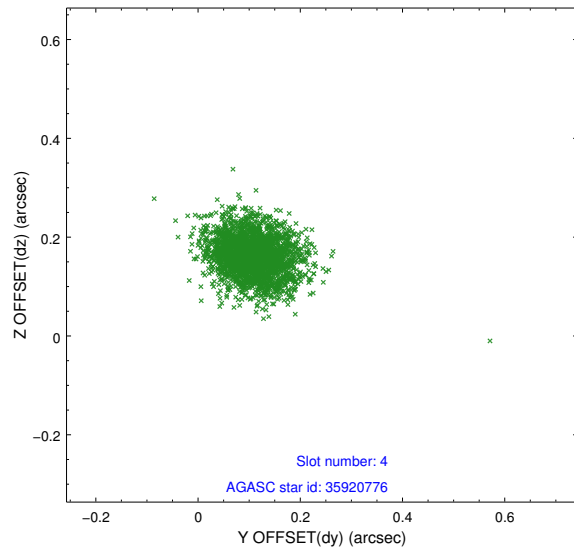
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	6.93	1249	-0.081	-0.104	0.009	0.016	0.000000	0.000000	-765.21	-844.57
1	FID	ACIS-I-4	6.95	1249	0.158	0.078	0.007	0.012	0.000000	0.000000	2148.58	1061.15
2	FID	ACIS-I-5	6.99	1249	-0.179	0.095	0.009	0.015	0.000000	0.000000	-1817.58	1060.42
3	GUIDE	35919160	7.35	2498	-0.147	-0.586	0.056	0.088	174.450191	4.323281	2009.71	2173.23
4	GUIDE	35920776	8.13	2497	0.109	0.162	0.062	0.103	174.521142	3.621906	-239.93	1002.15
5	GUIDE	35922112	7.11	2498	0.314	-0.392	0.066	0.111	174.060884	3.301117	-1926.74	2109.66
6	GUIDE	36049352	8.50	2498	0.143	-0.065	0.069	0.117	175.128538	3.654121	675.72	-983.58
7	GUIDE	36051208	8.80	2497	-0.415	0.879	0.080	0.137	175.389157	3.850504	1680.66	-1588.39

2.4 Star Slots

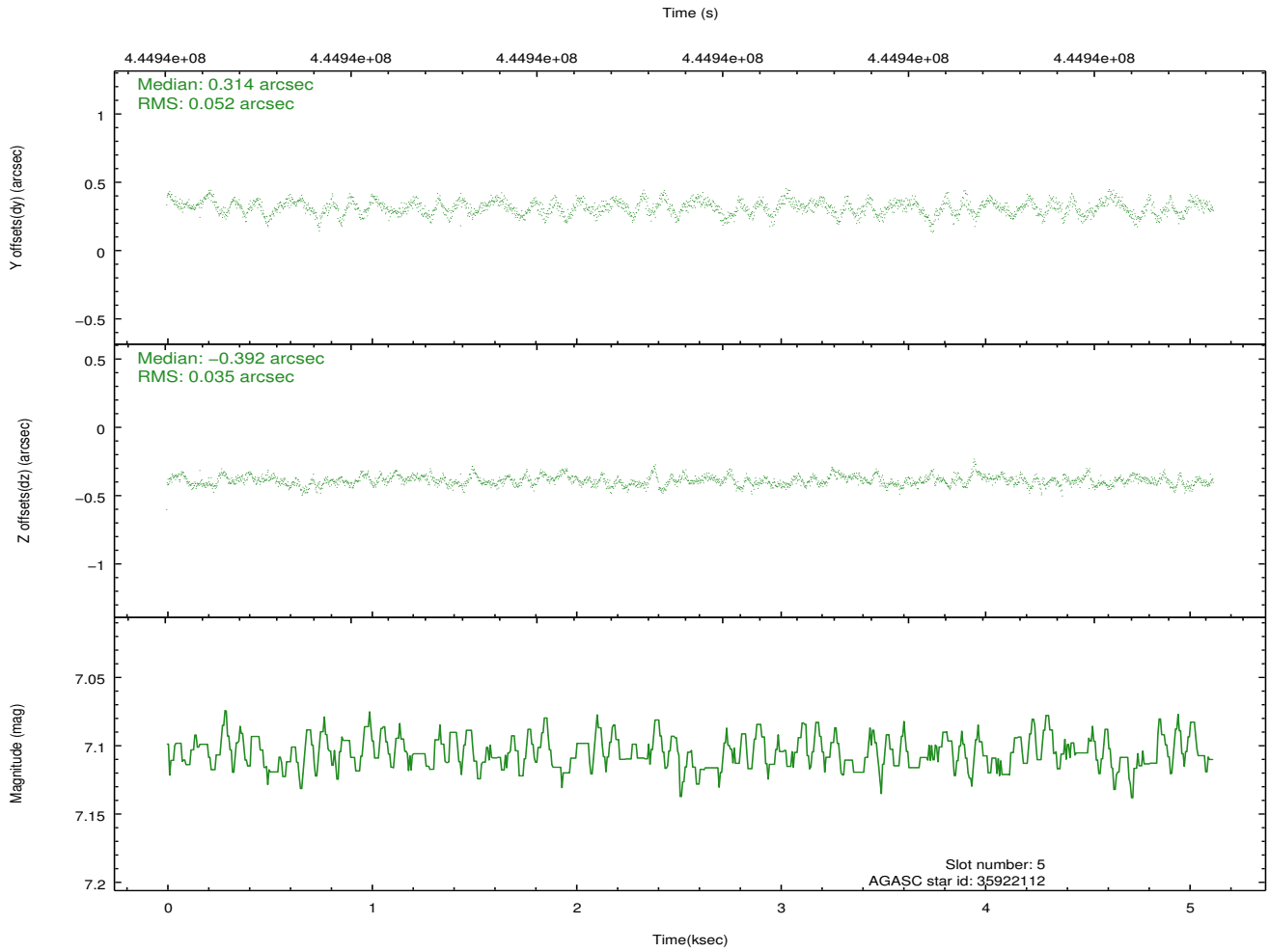
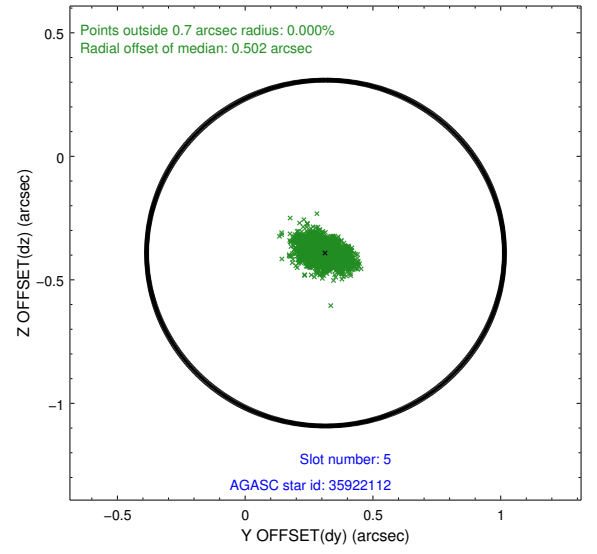
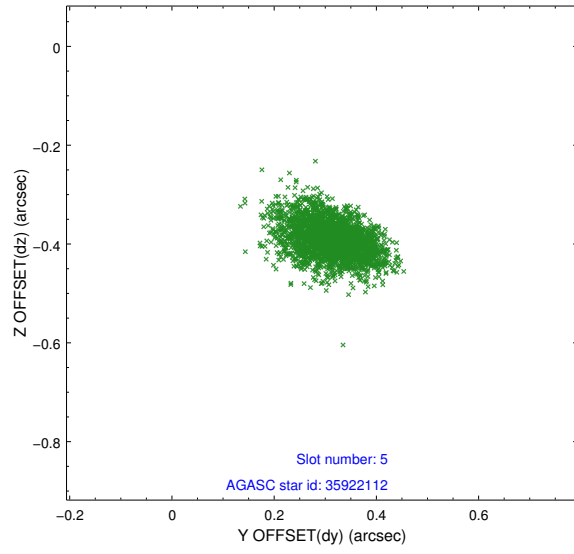
2.4.1 Slot 3



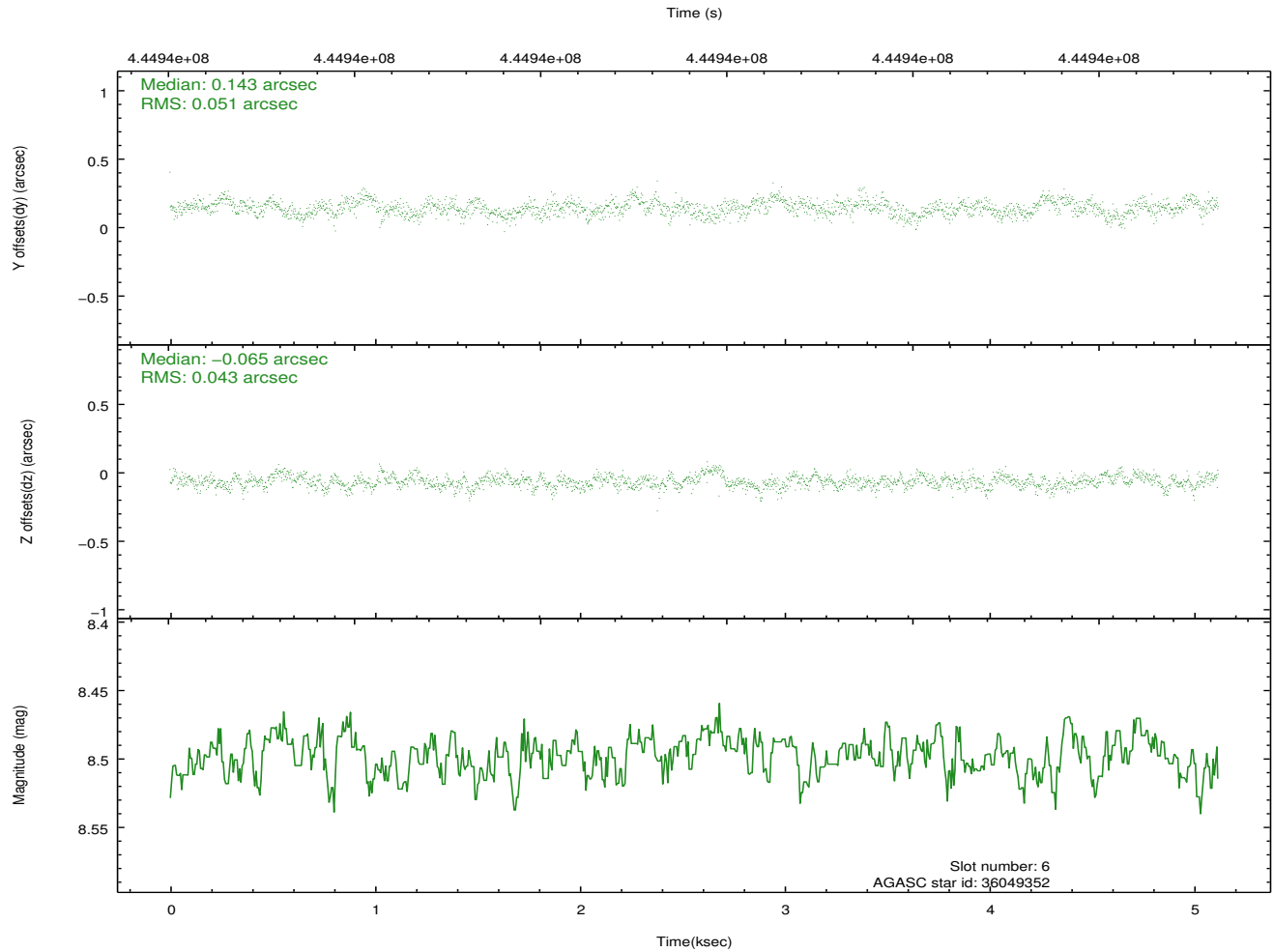
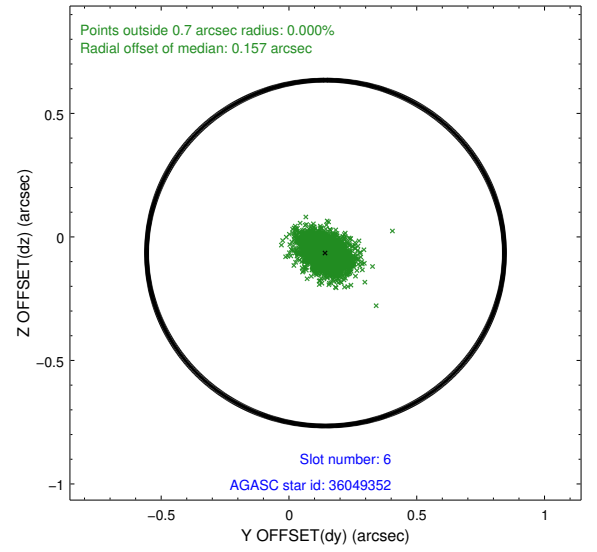
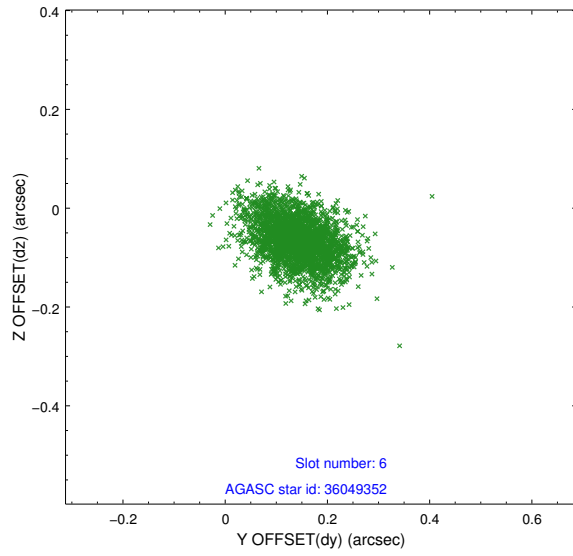
2.4.2 Slot 4



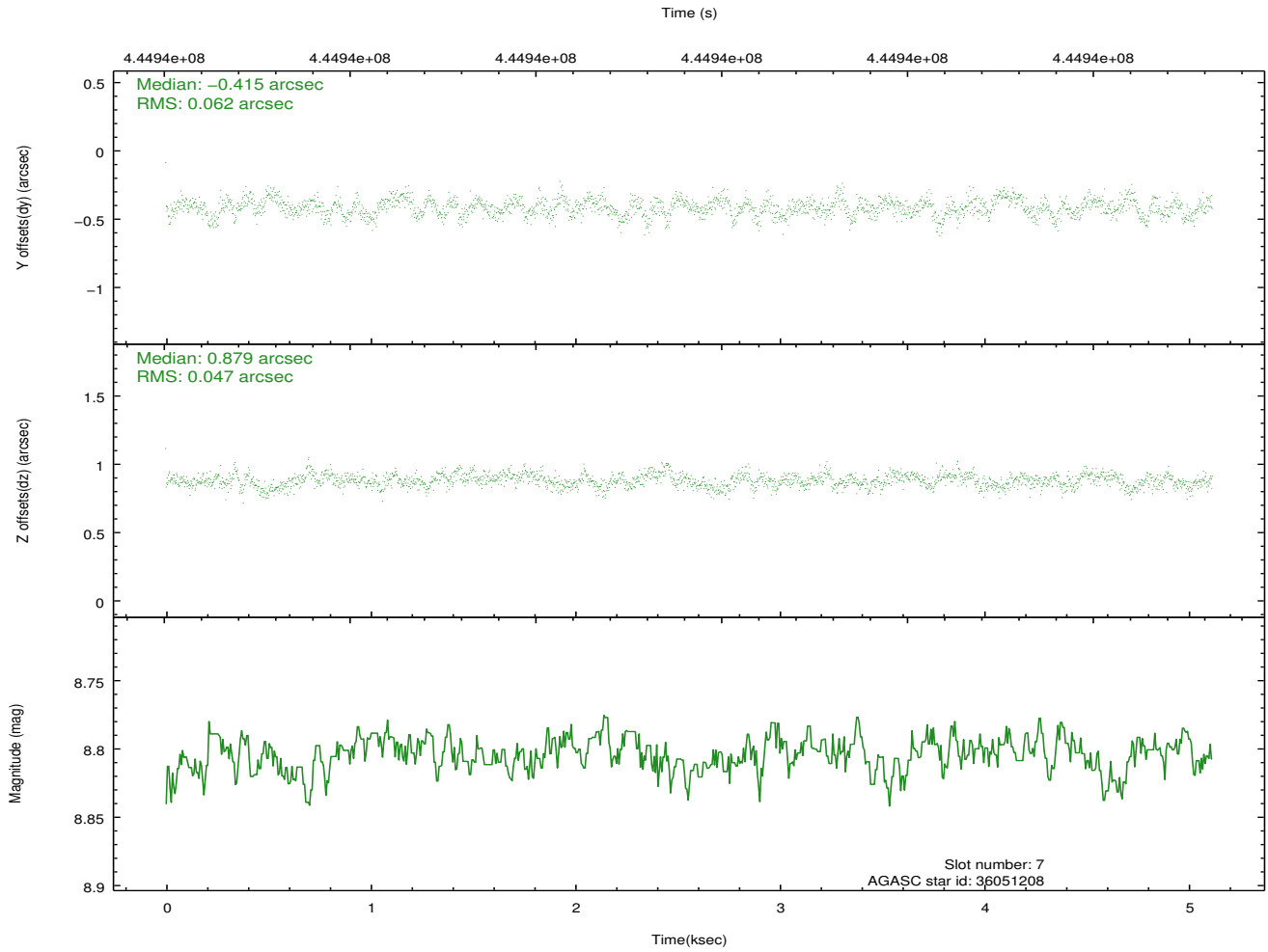
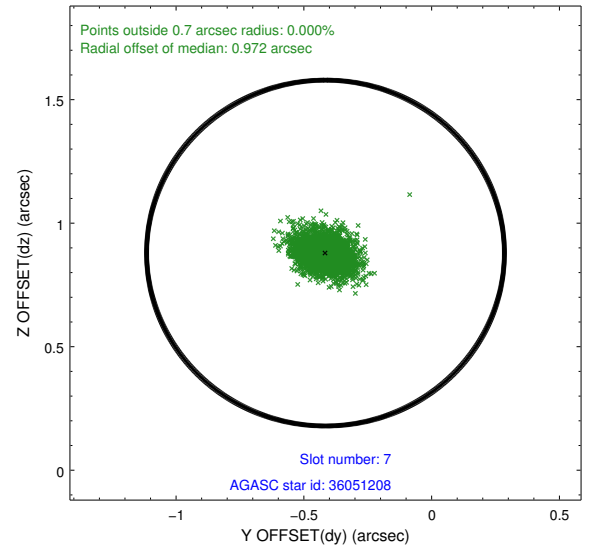
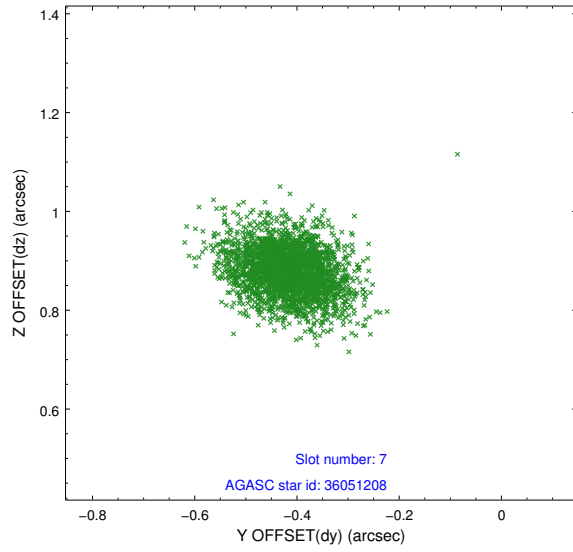
2.4.3 Slot 5



2.4.4 Slot 6

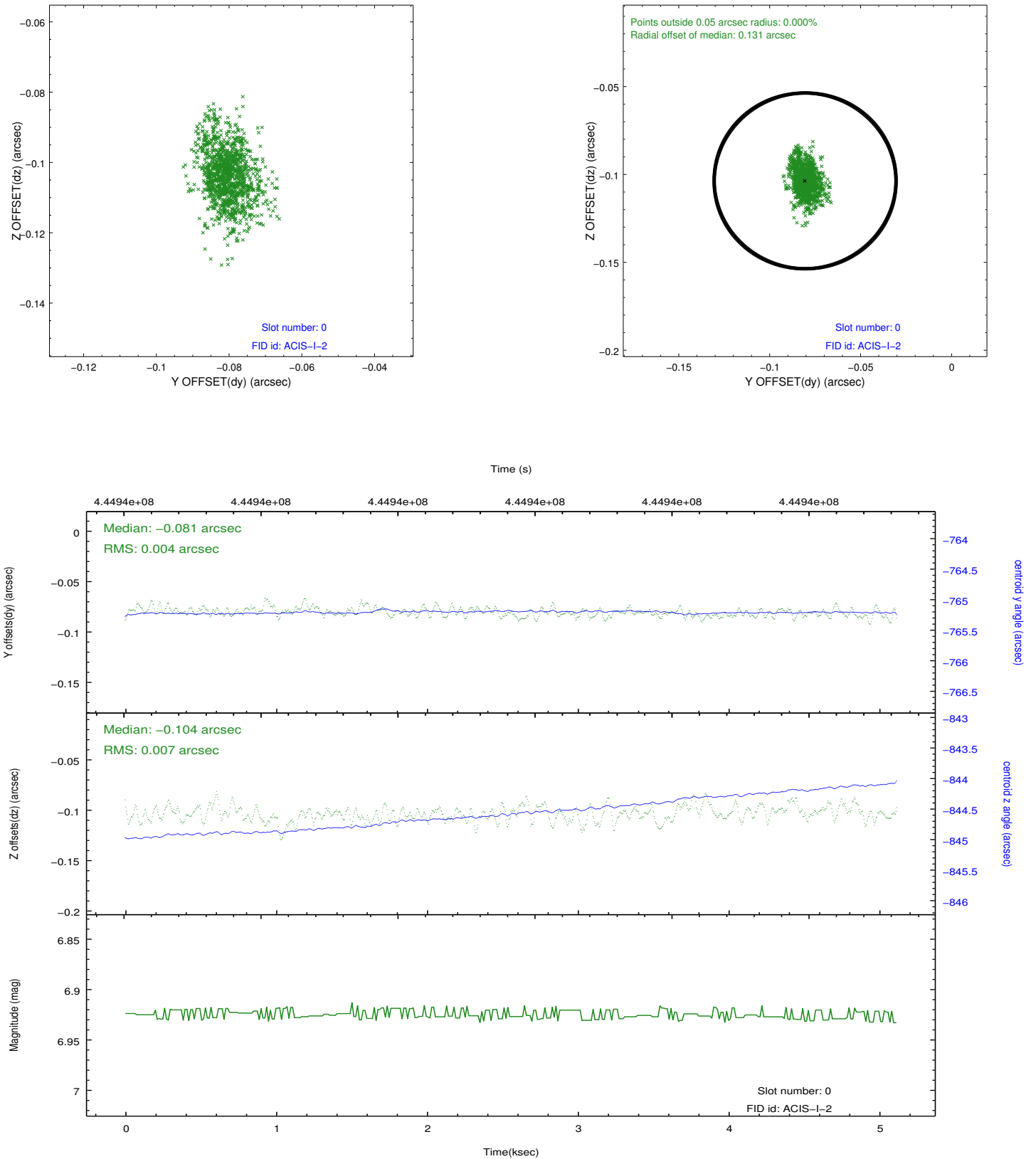


2.4.5 Slot 7

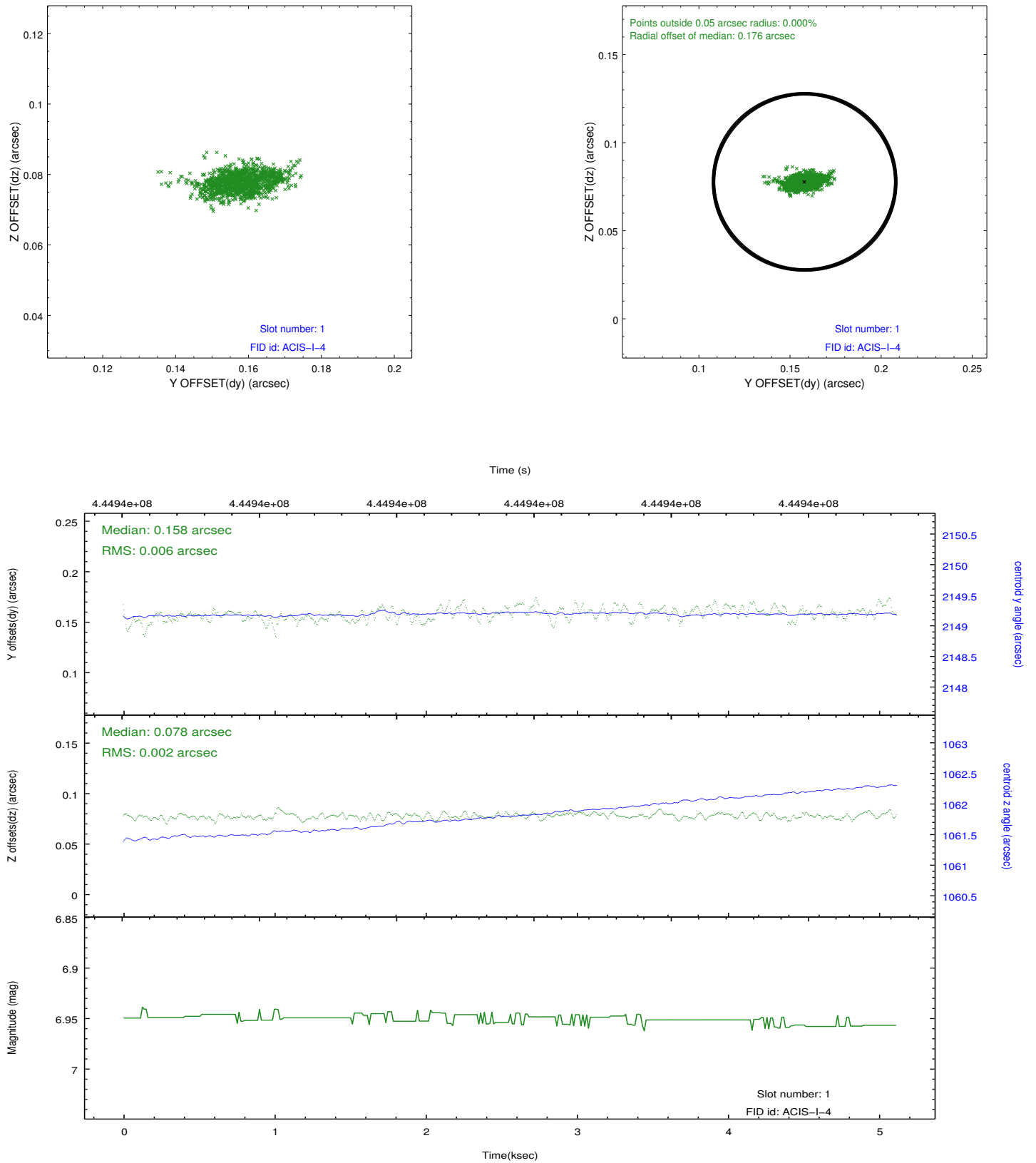


2.5 FID Slots

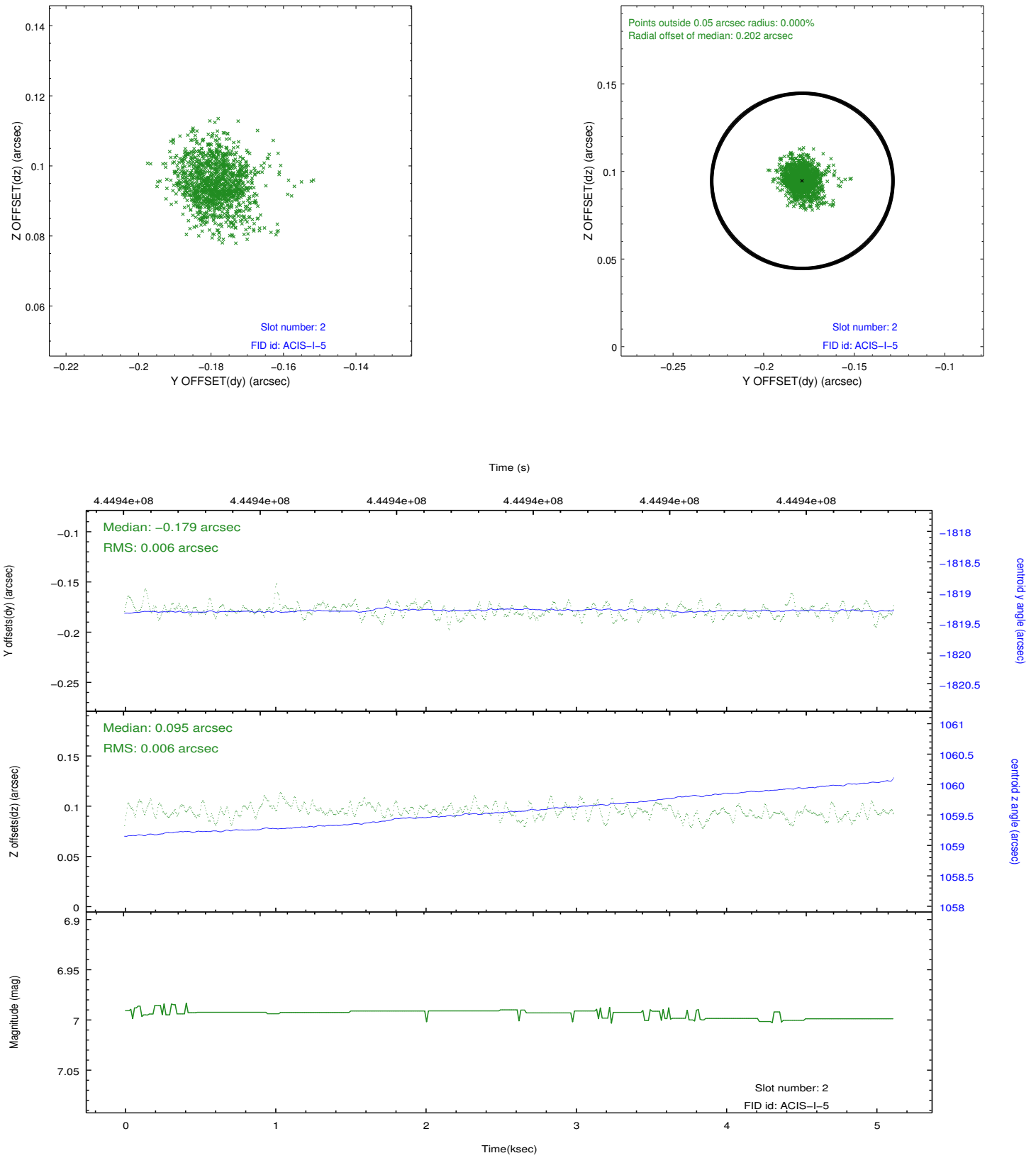
2.5.1 Slot 0



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)	2012.02.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0858438466787

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.