

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12857 - L2 Version 2
Chandra X-Ray Center

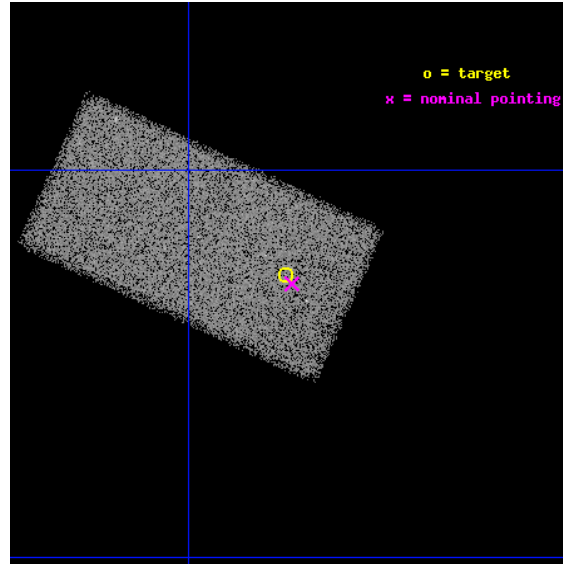
L2 Processing Date : Feb 4 2012

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1 Front

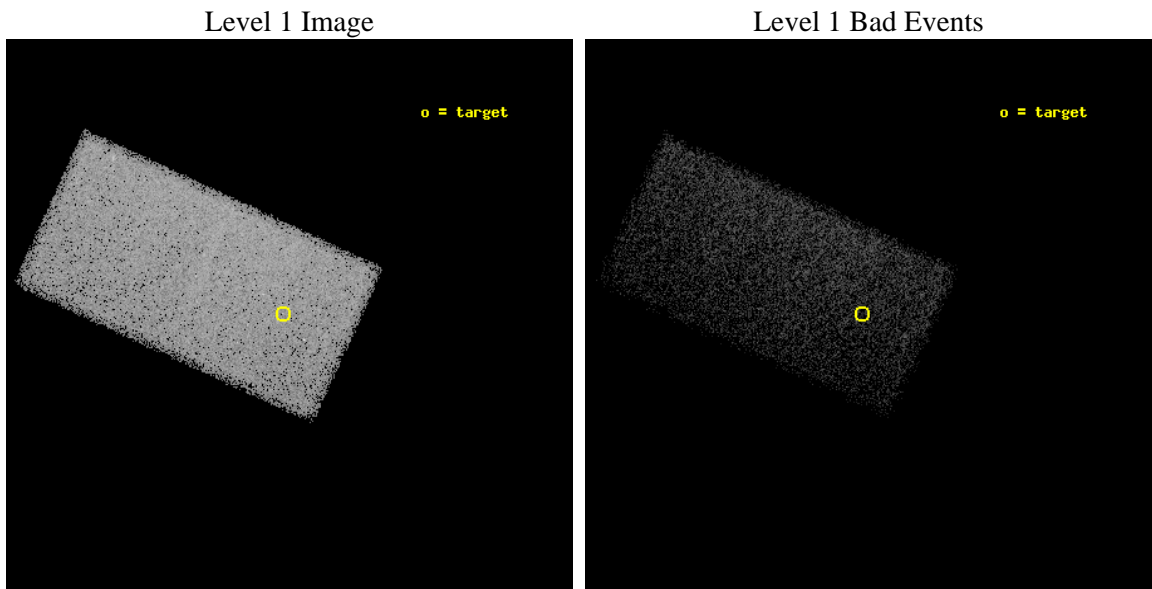
seq_num	702490	Sequence number
obs_id	12857	Observation id
title	Extreme Velocity Quasar Outflows and the Role of X-Ray Shielding	P
observer	Fred Hamann	Principal investigator
object	J094646.94+392719.02	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	146.695417	Observer's specified target RA [deg]
dec_targ	39.455278	Observer's specified target Dec [deg]
ra_nom	146.69192079533	Nominal RA [deg]
dec_nom	39.451247635188	Nominal Dec [deg]
roll_nom	204.63752041156	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28048.5	Sum of GTIs [s]
livetime	27301.530135493	Livetime [s]
ontime7	28048.5	Sum of GTIs [s]
l2events	58230	Number of level 2 events



2 OBI

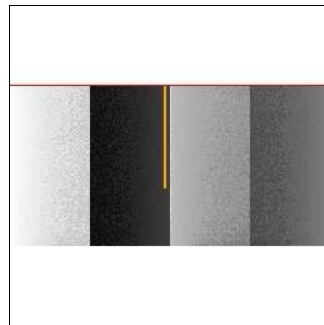
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	28048.5	Sum of GTIs [s]
caldbver	4.4.7	 	ontime7	28048.5	Sum of GTIs [s]
date	2012-02-04T21:40:58	Date and time of file creation	l1events	126103	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

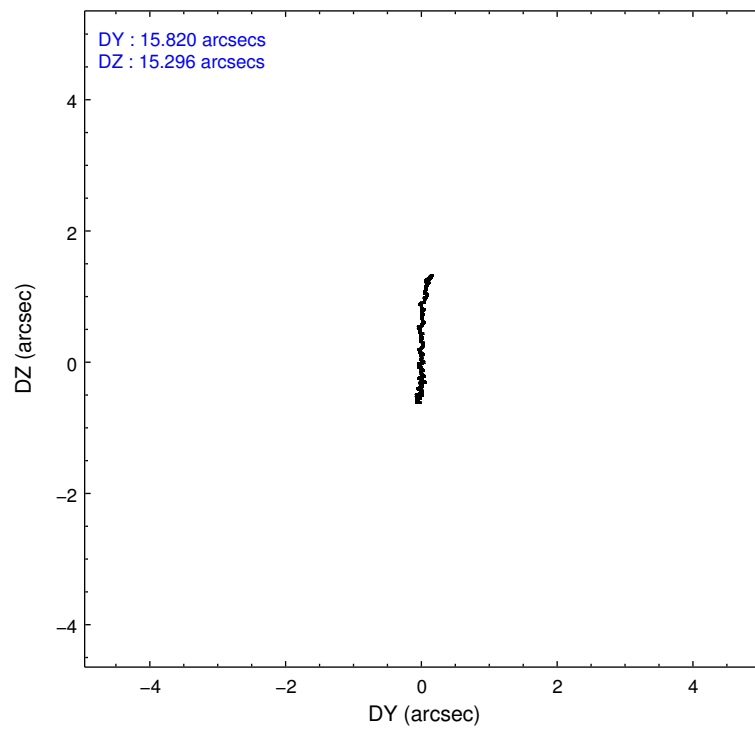
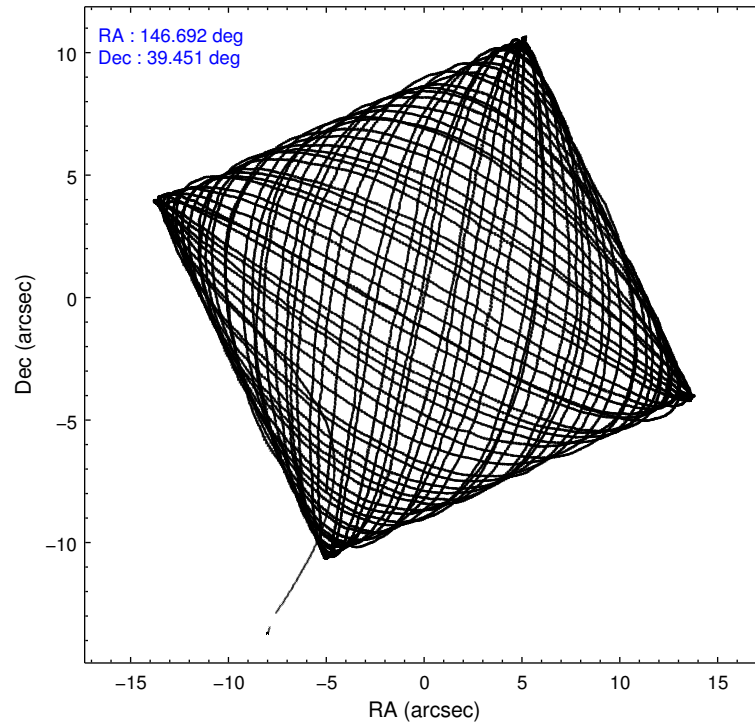
	ccd 7
level 1 events	126103
rejected events	66114
rejected %	52%

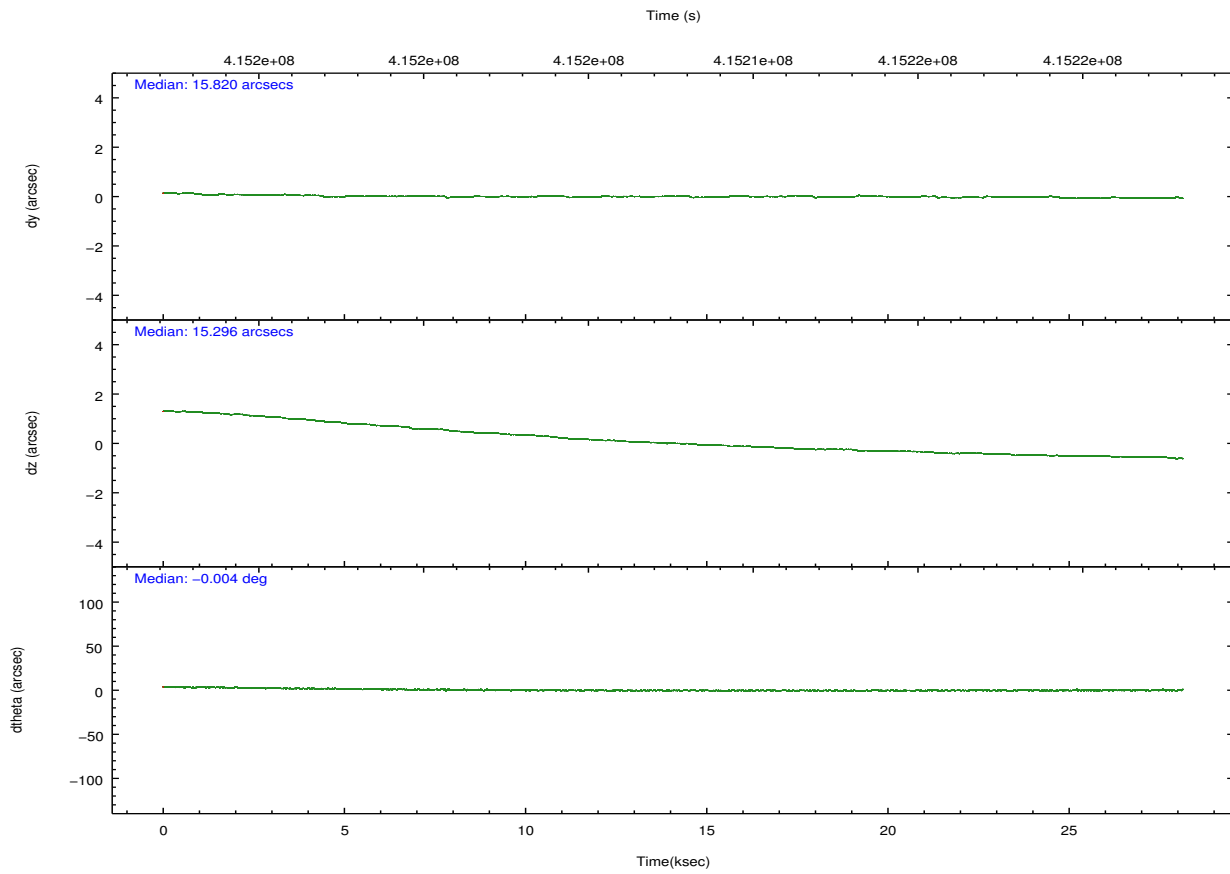
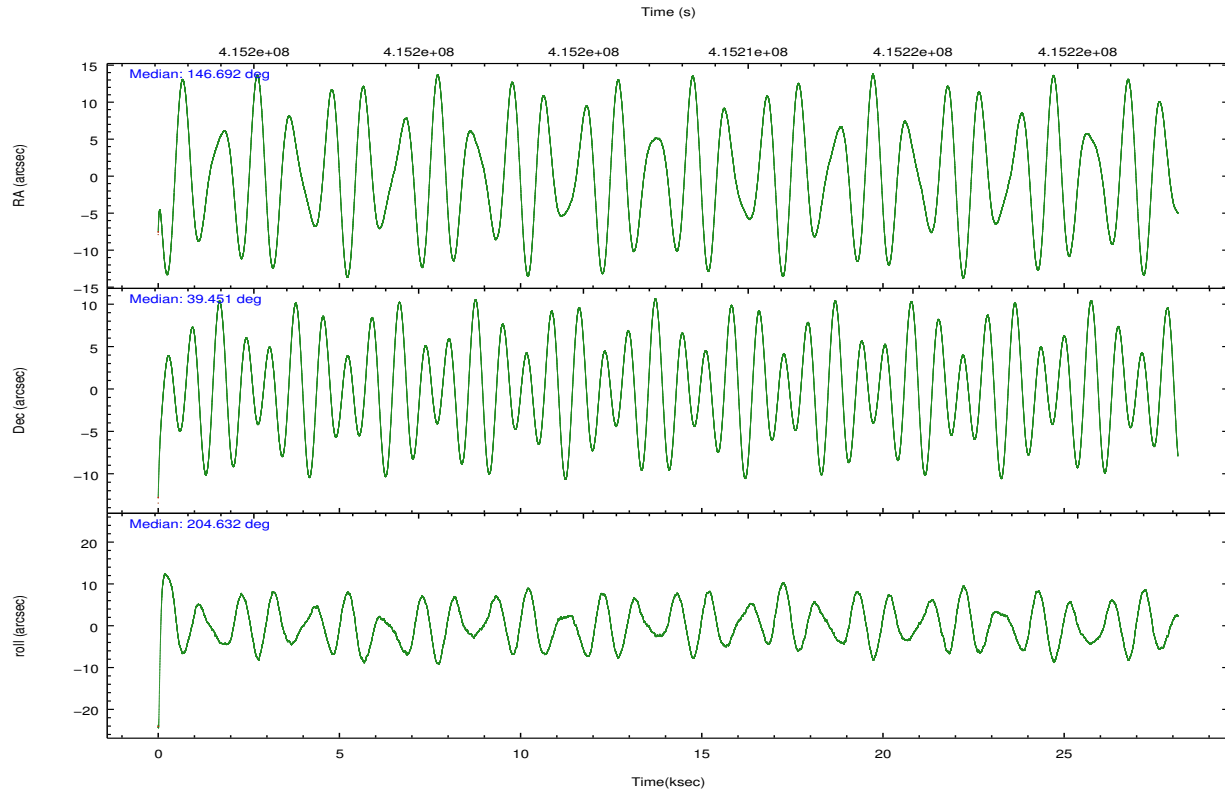
	ccd 7
grade 0 events	5850
	4%
grade 1 events	139
	0%
grade 2 events	12455
	9%
grade 3 events	6167
	4%
grade 4 events	5977
	4%
grade 5 events	13467
	10%
grade 6 events	29548
	23%
grade 7 events	52500
	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	146.712033	146.6919207953349	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	39.473751	39.45124763518819	Subarray start row	257	257
[deg] Pointing Roll	204.468129	204.6375204115615	Subarray row count	512	512
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1.5
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	415193643.184000	415192458.12939			
Observation start date	2011-02-27T11:32:57	2011-02-27T11:14:18			
[s] Observation end time (MET)	415221643.184000	415222181.08093			
Observation end date	2011-02-27T19:19:37	2011-02-27T19:29:41			
Read mode	TIMED	TIMED			

2.3 Aspect



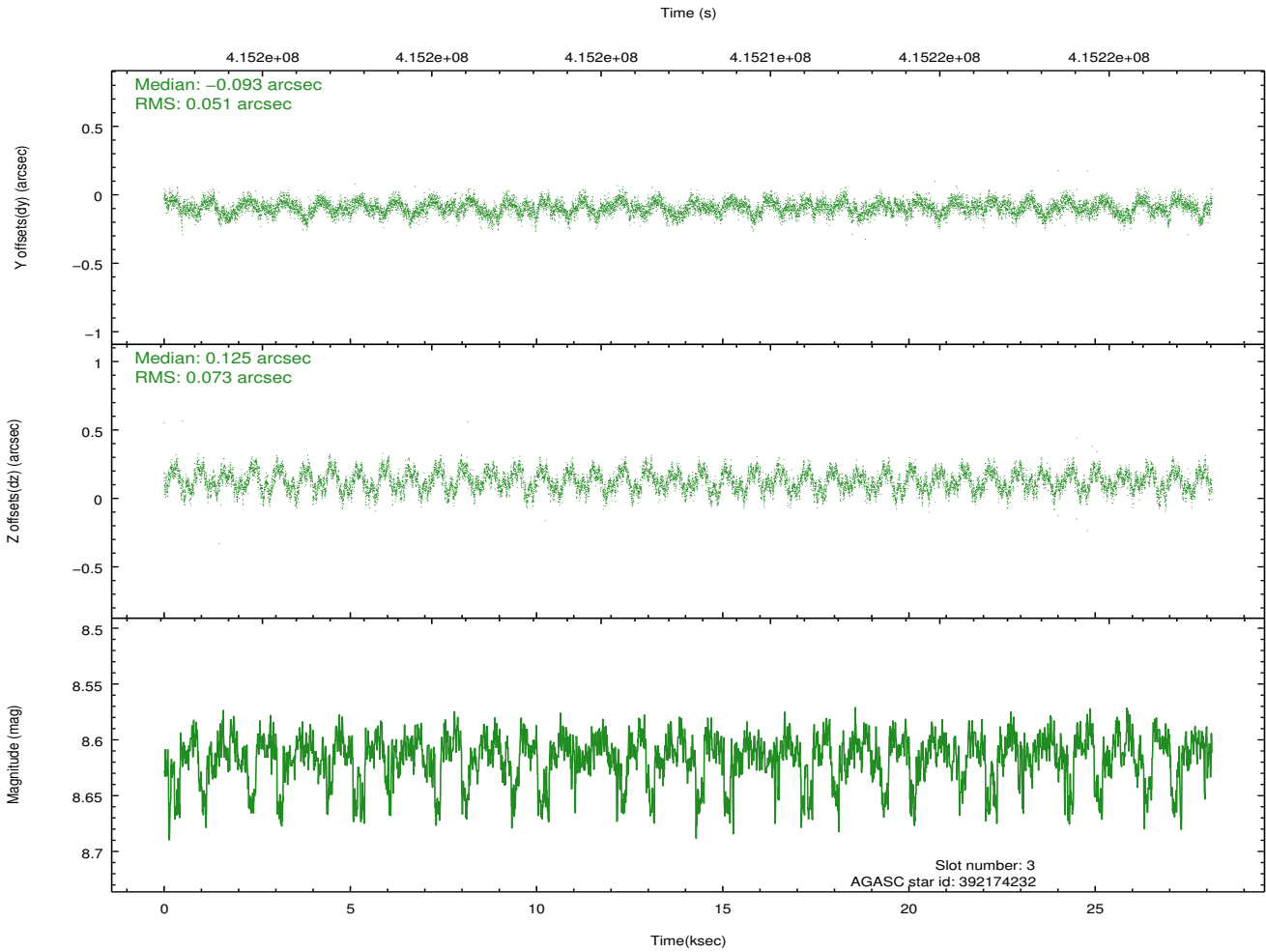
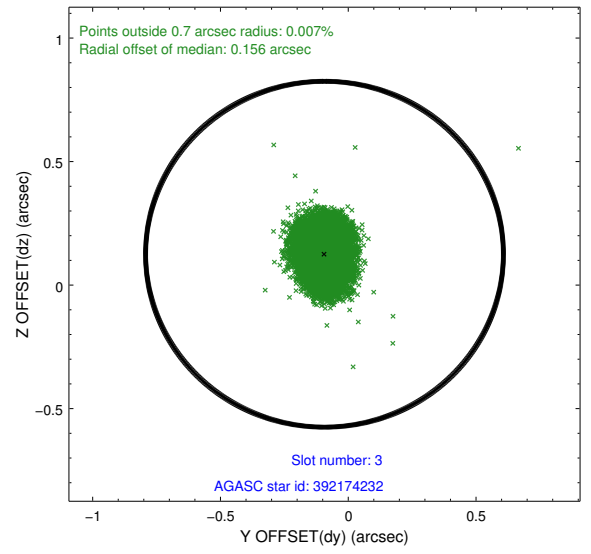
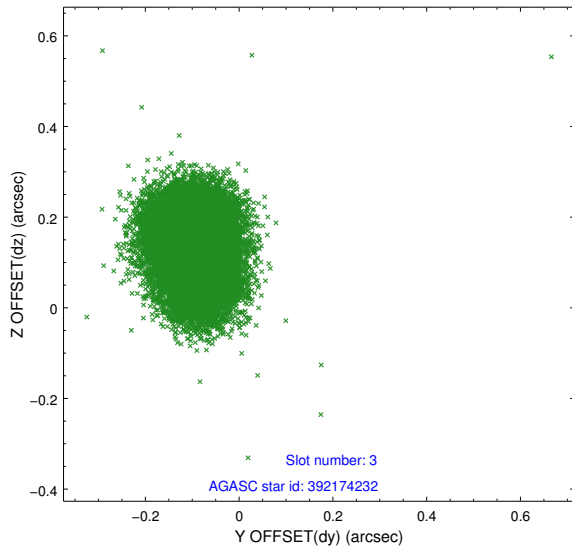


Slot Statistics

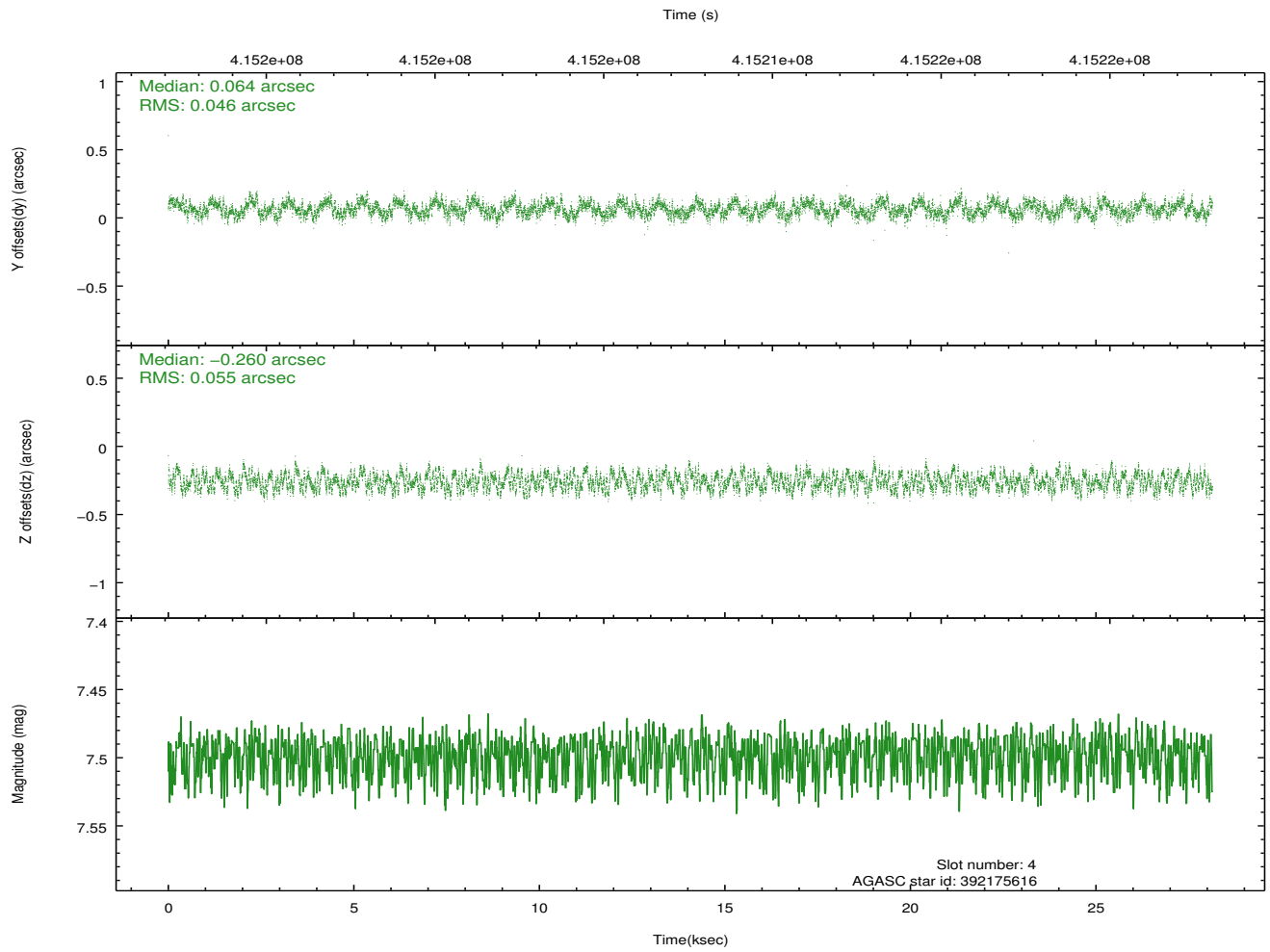
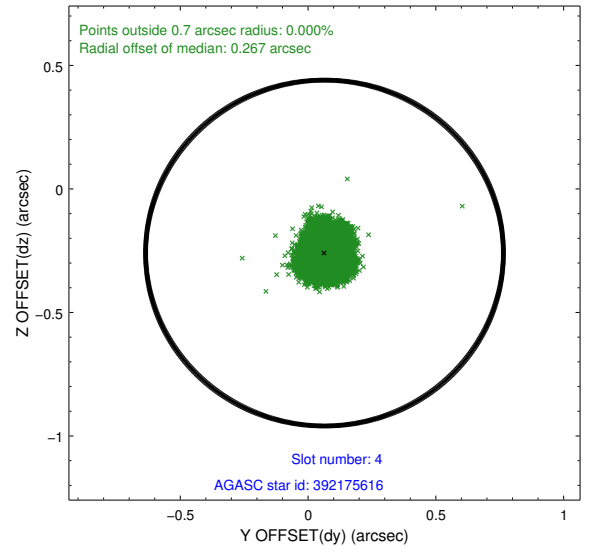
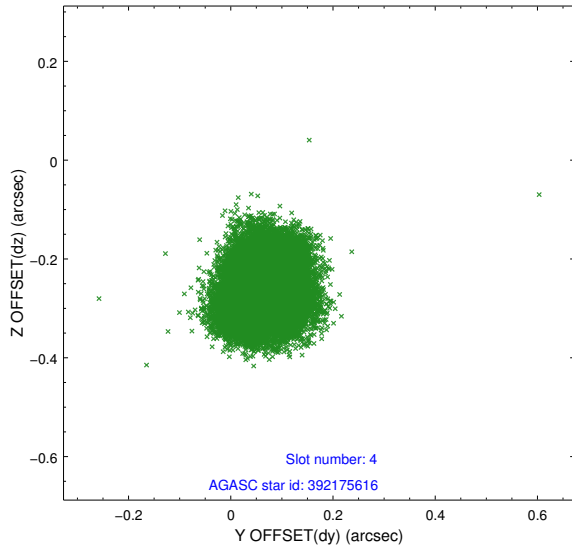
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	6864	-0.098	-0.011	0.009	0.015	0.000000	0.000000	-768.91	-1736.85
1	FID	ACIS-S-4	6.96	6863	0.173	0.050	0.006	0.011	0.000000	0.000000	2144.59	171.61
2	FID	ACIS-S-5	6.99	6863	-0.107	-0.030	0.008	0.014	0.000000	0.000000	-1821.65	165.29
3	GUIDE	392174232	8.61	13704	-0.093	0.125	0.096	0.148	146.112490	39.925394	831.36	-2169.91
4	GUIDE	392175616	7.50	13727	0.064	-0.260	0.079	0.117	146.522669	39.838061	-66.49	-1411.09
5	GUIDE	392309080	8.63	13723	-0.108	-0.032	0.084	0.138	146.870719	39.102402	149.98	1400.41
6	GUIDE	392703032	9.76	13705	0.011	0.190	0.219	0.327	146.962419	40.259917	-1798.35	-2291.53
7	GUIDE	392176472	8.81	13712	0.146	-0.036	0.111	0.170	146.520922	39.870946	-109.21	-1521.47

2.4 Star Slots

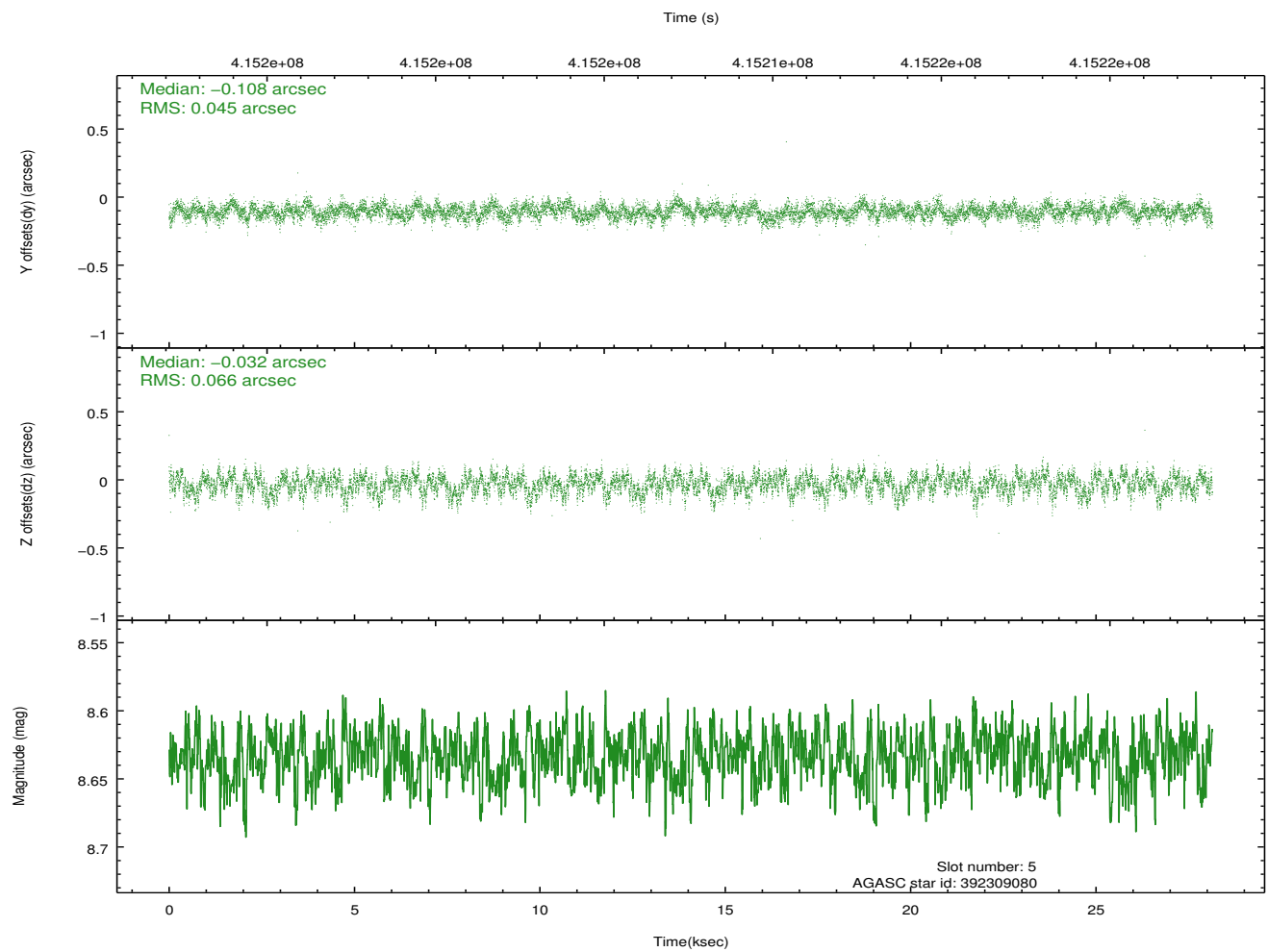
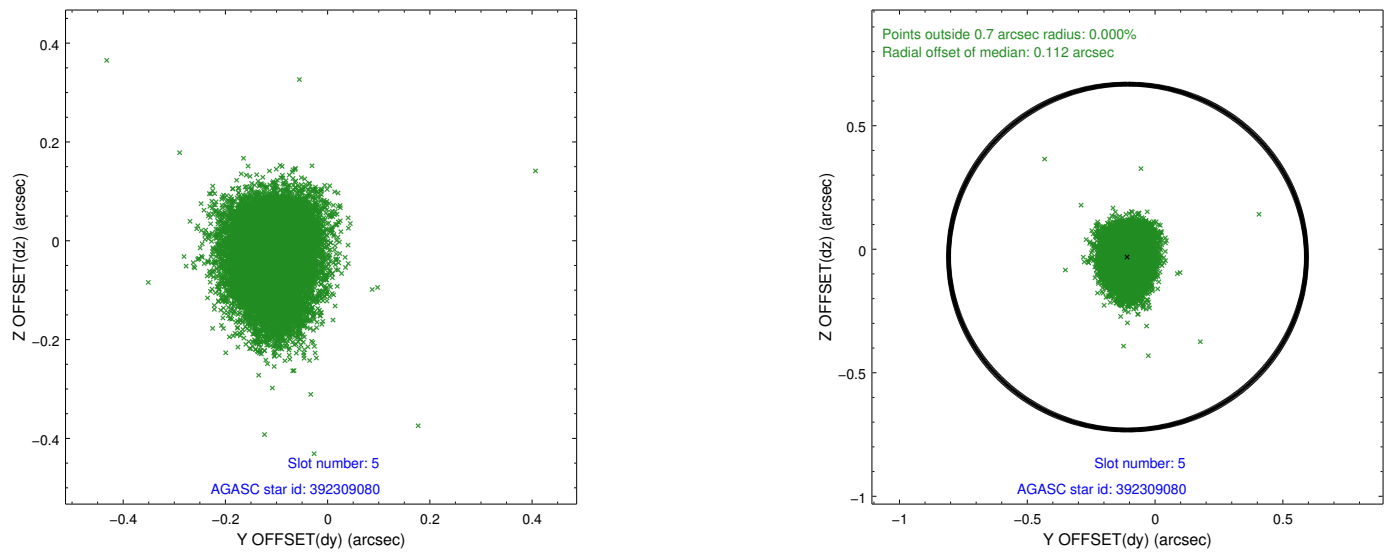
2.4.1 Slot 3



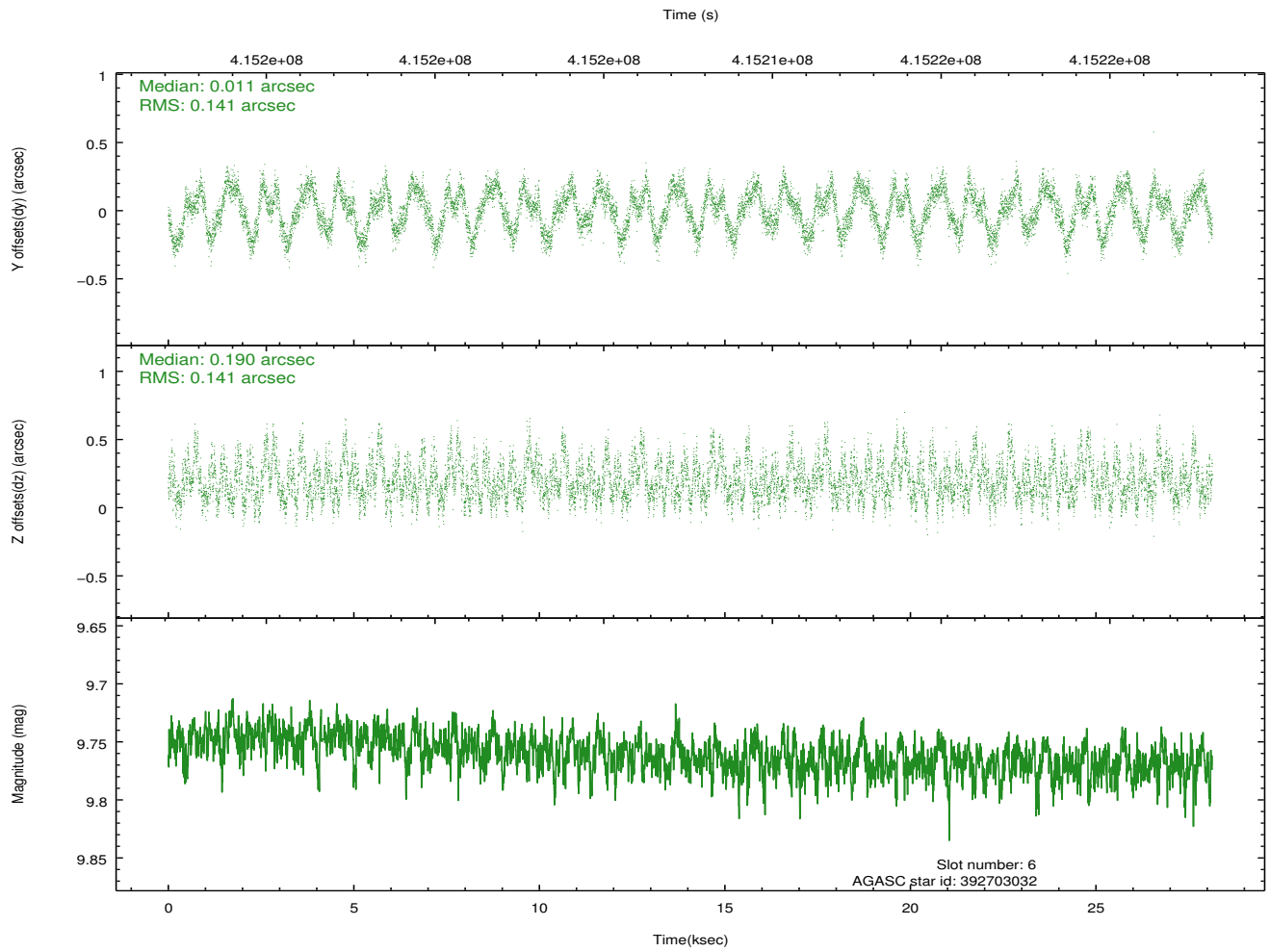
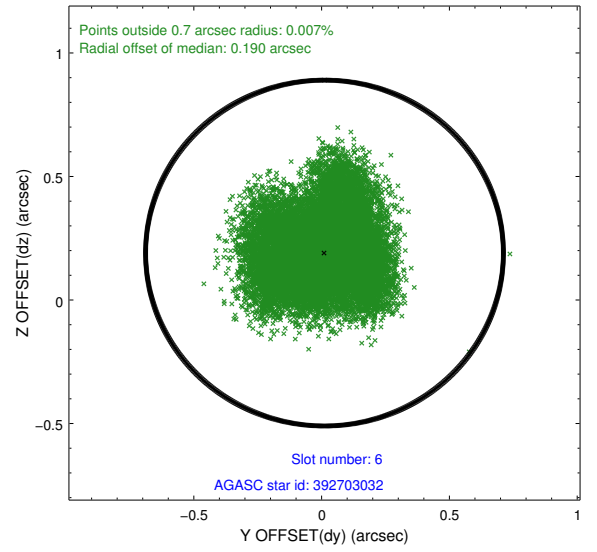
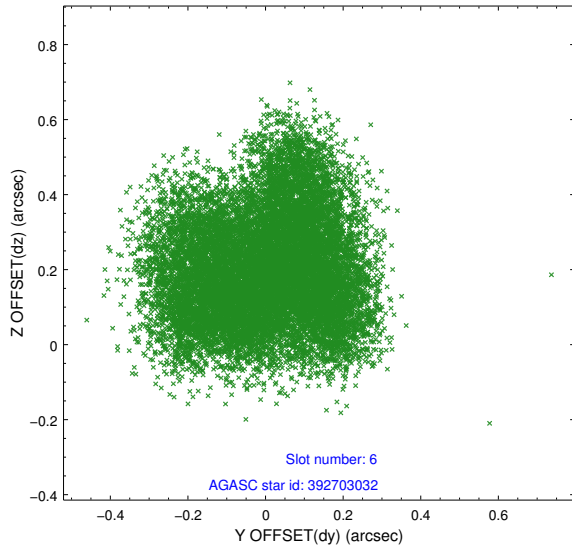
2.4.2 Slot 4



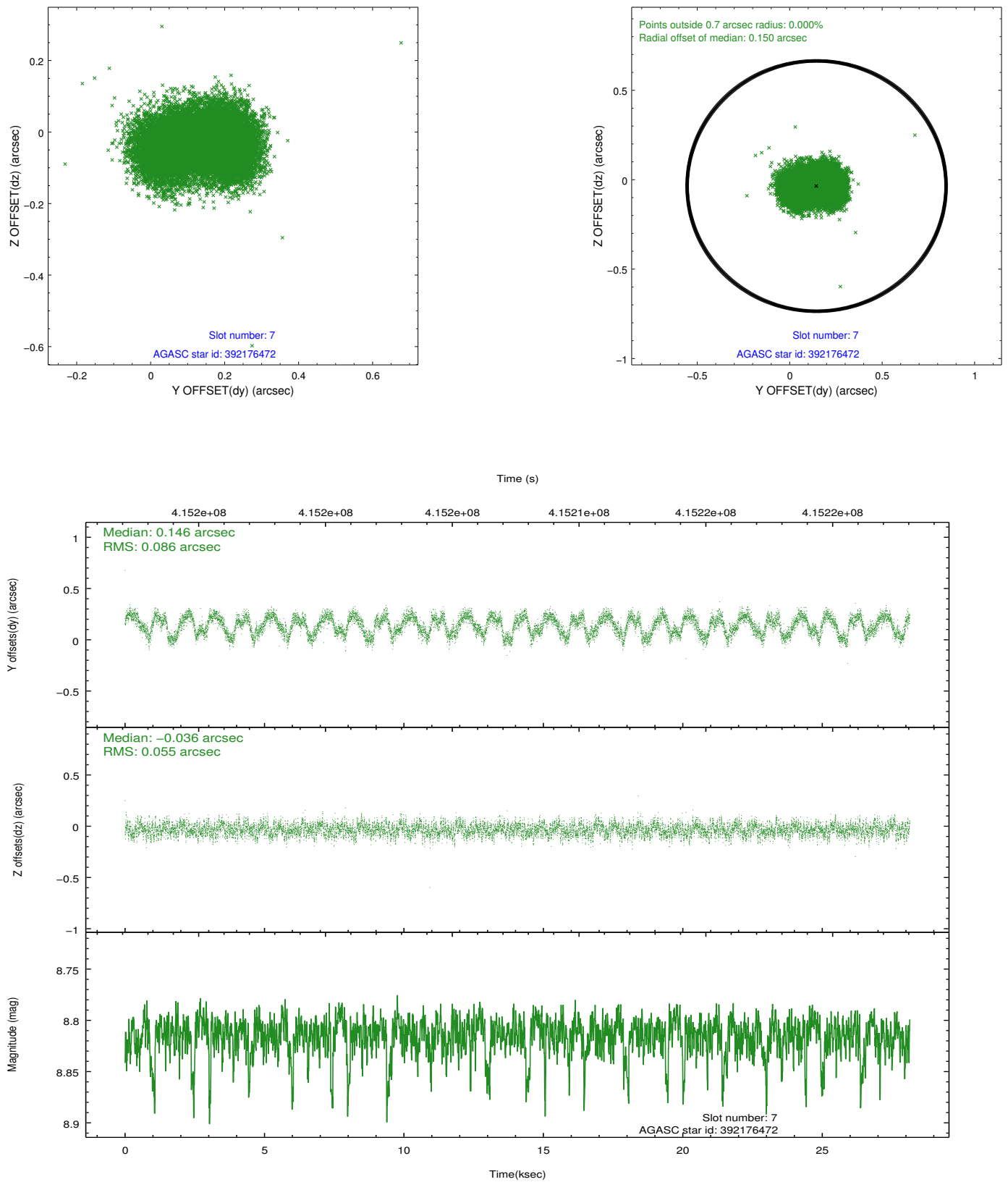
2.4.3 Slot 5



2.4.4 Slot 6

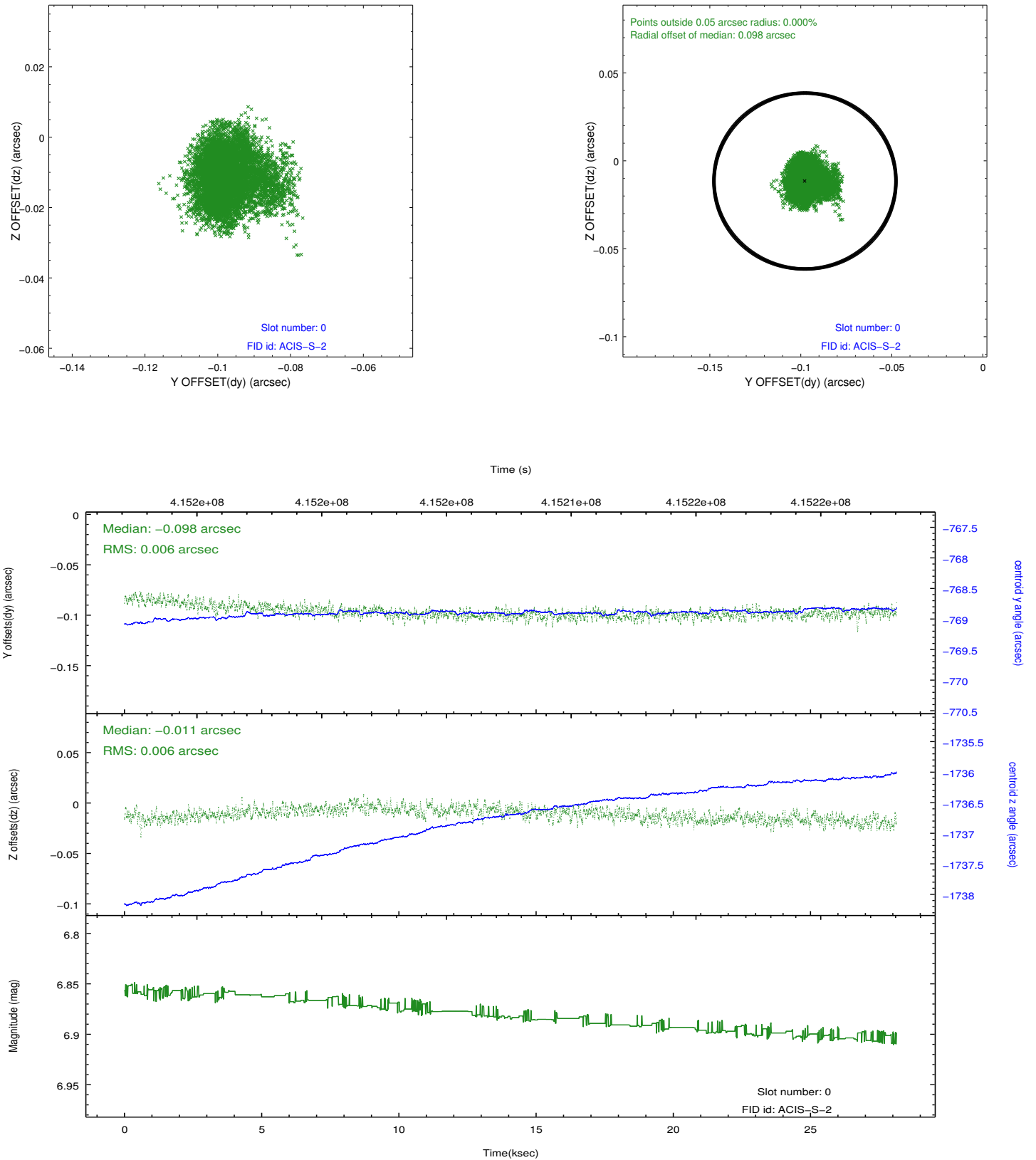


2.4.5 Slot 7

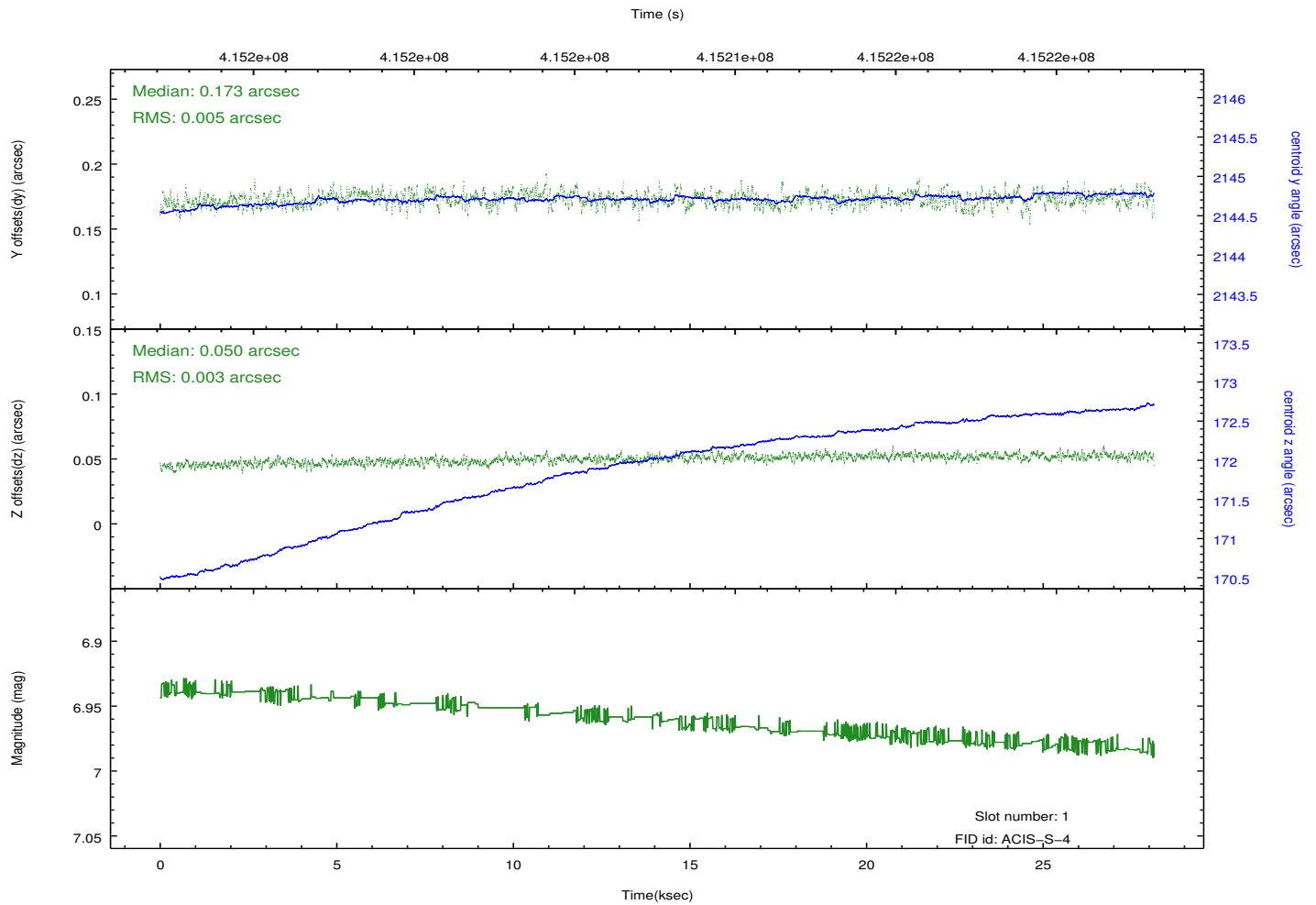
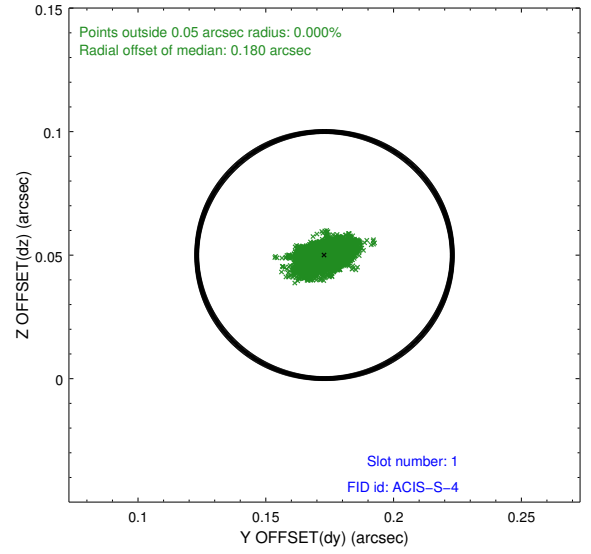
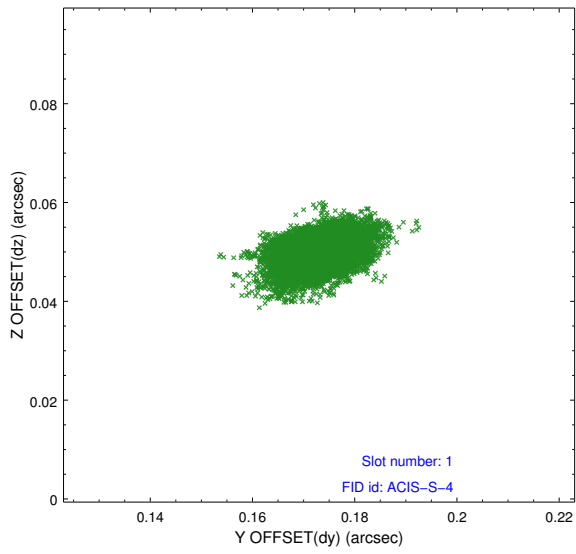


2.5 FID Slots

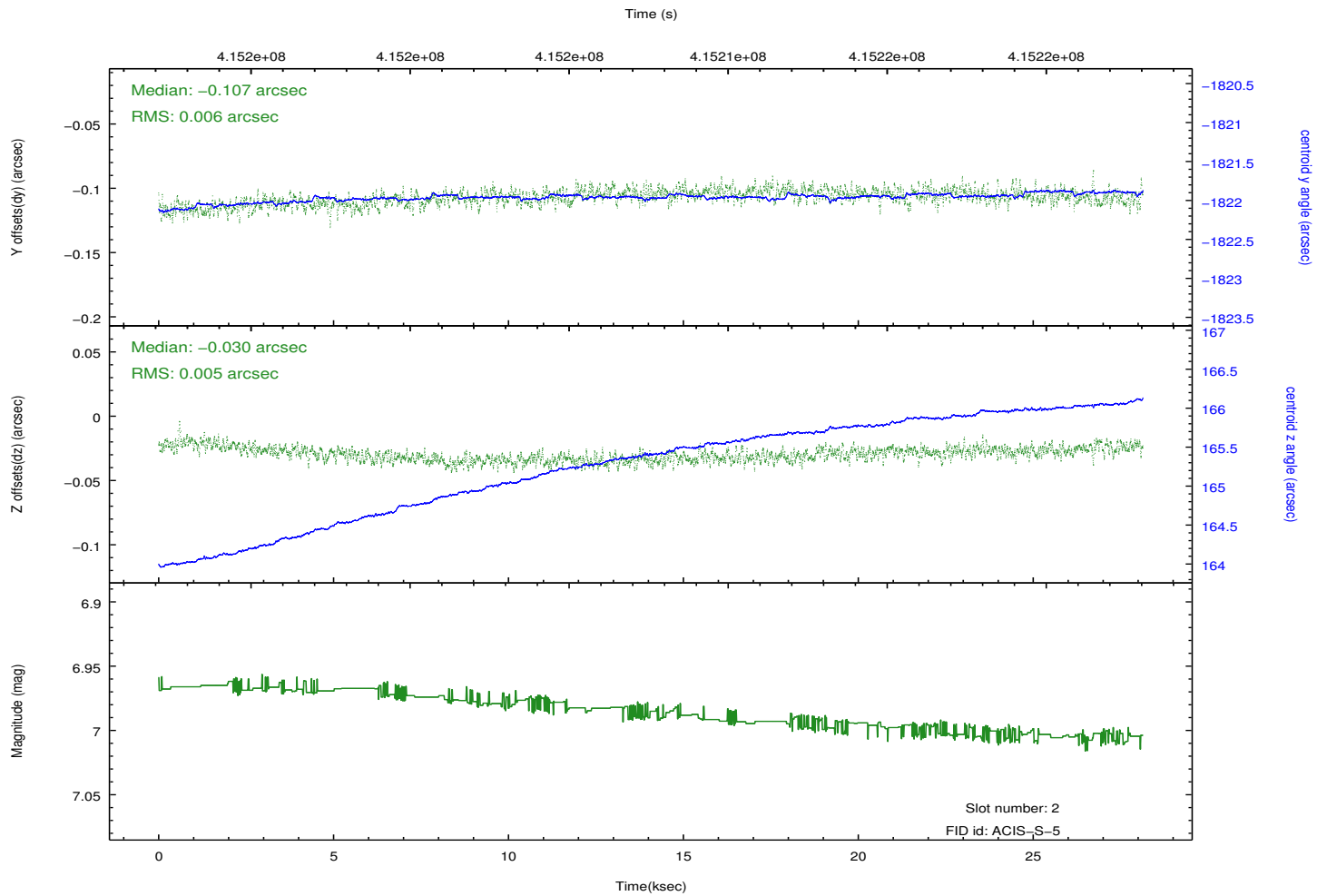
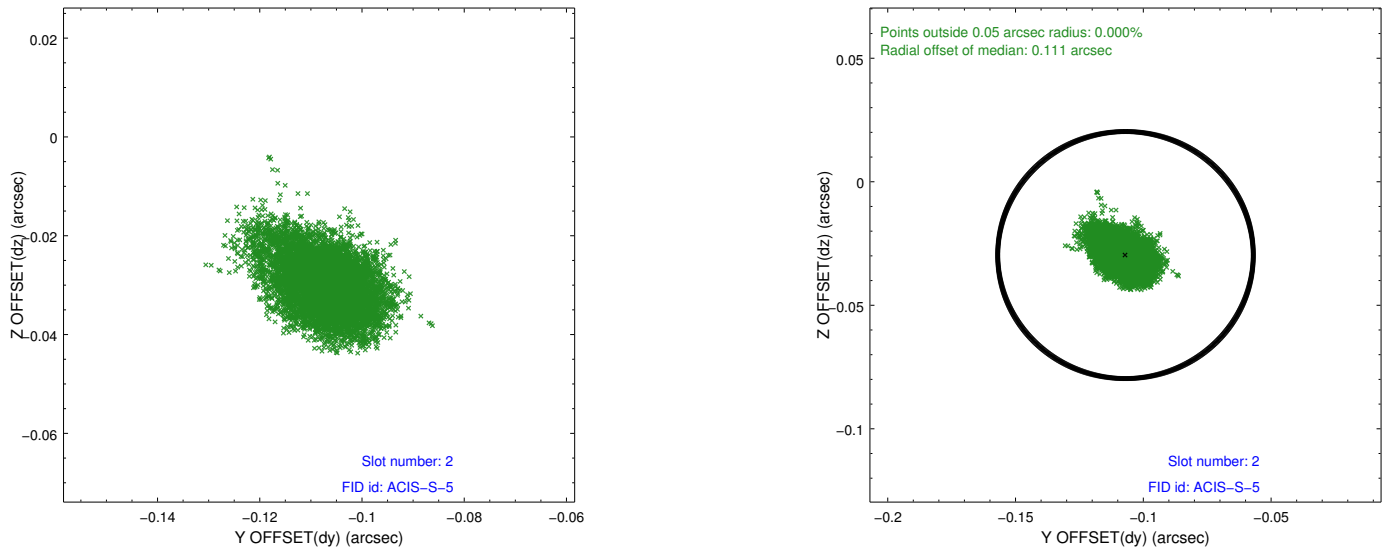
2.5.1 Slot 0



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)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.0485

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.