

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12169 - L2 Version 2
Chandra X-Ray Center

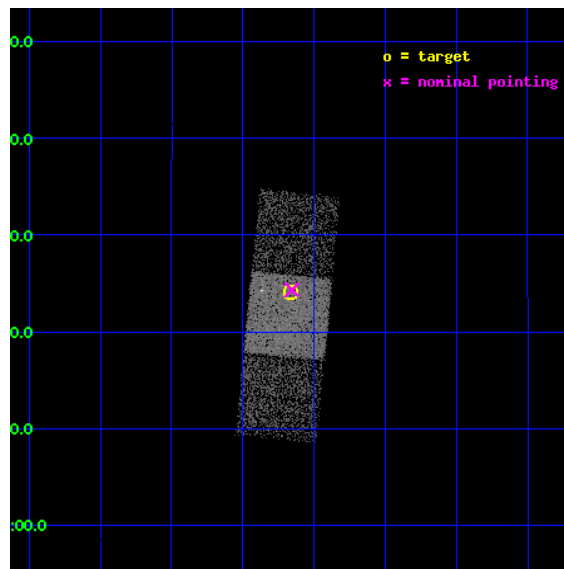
L2 Processing Date : Feb 6 2012

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1 Front

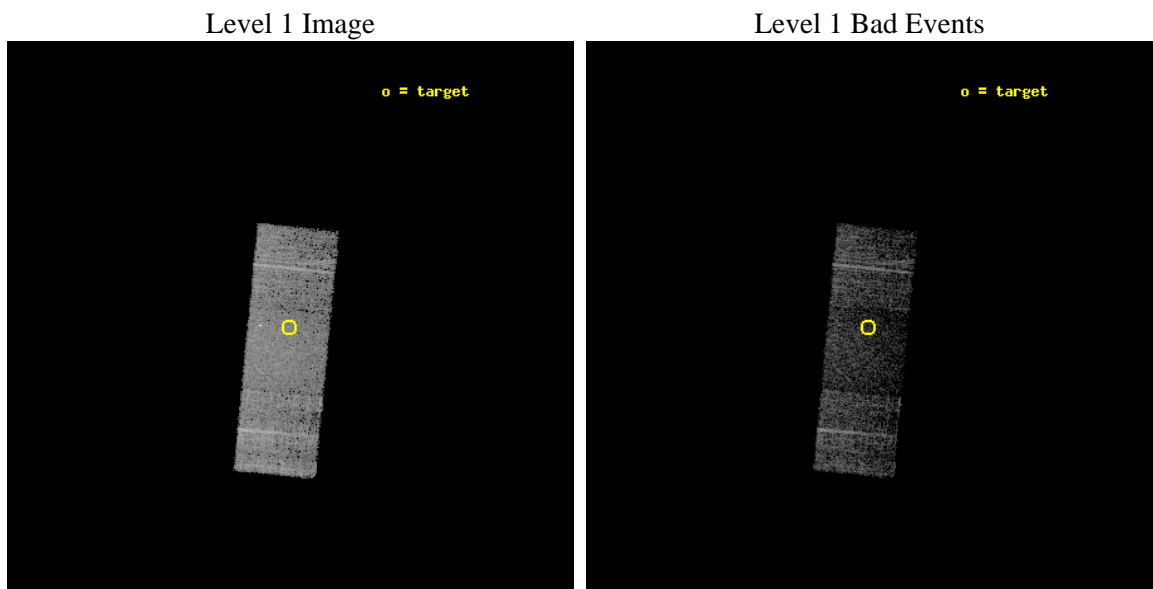
seq_num	702333	Sequence number
obs_id	12169	Observation id
title	Remarkable High-Redshift Quasars from the Sloan Digital Sky Survey	
observer	Prof. Gordon Garmire	Principal investigator
object	SDSS J1412+0624	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	213.041667	Observer's specified target RA [deg]
dec_targ	6.401917	Observer's specified target Dec [deg]
ra_nom	213.0387216686	Nominal RA [deg]
dec_nom	6.4057298738876	Nominal Dec [deg]
roll_nom	95.592657408277	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4061.0000312328	Sum of GTIs [s]
livetime	4007.94007616	Livetime [s]
ontime6	4061.0000312328	Sum of GTIs [s]
ontime7	4061.0000312328	Sum of GTIs [s]
ontime8	4057.8590608835	Sum of GTIs [s]
l2events	18558	Number of level 2 events



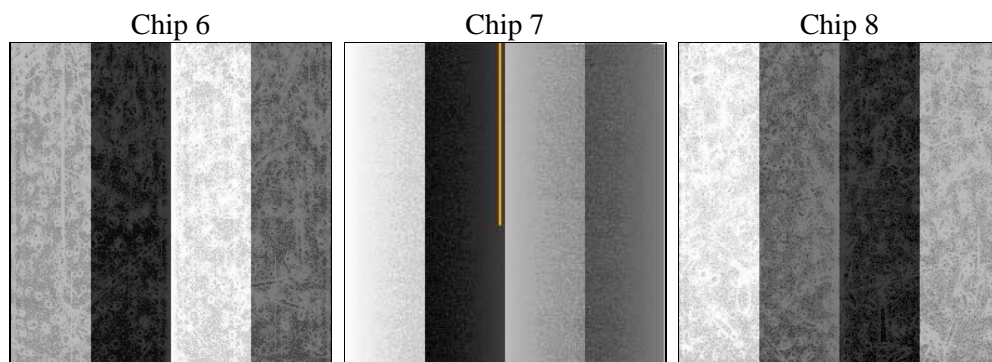
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	4061.0000312328	Sum of GTIs [s]
caldsver	4.4.7	 	ontime6	4061.0000312328	Sum of GTIs [s]
date	2012-02-06T06:40:59	Date and time of file creation	ontime7	4061.0000312328	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	4057.8590608835	Sum of GTIs [s]
			l1events	82393	Number of level 1 events

2.1.4 Events

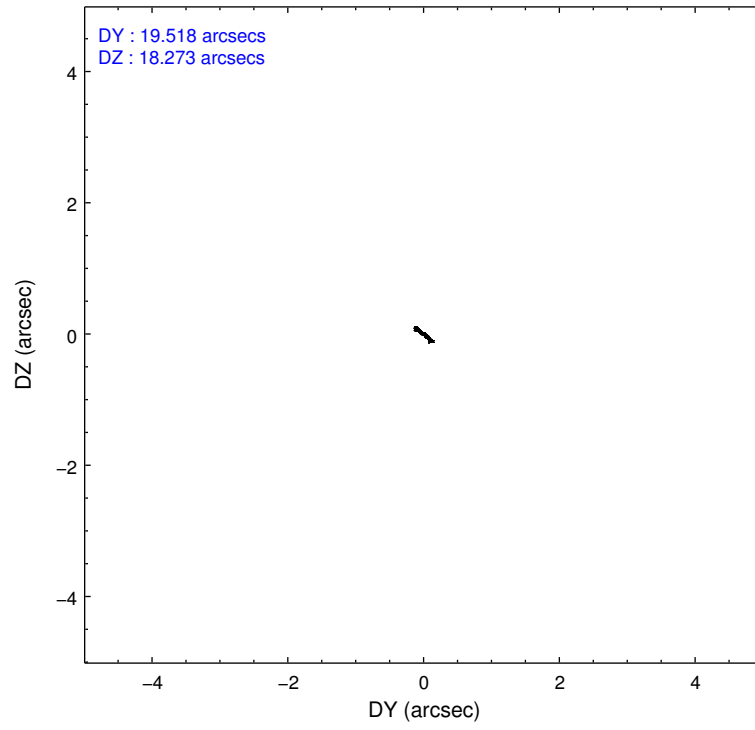
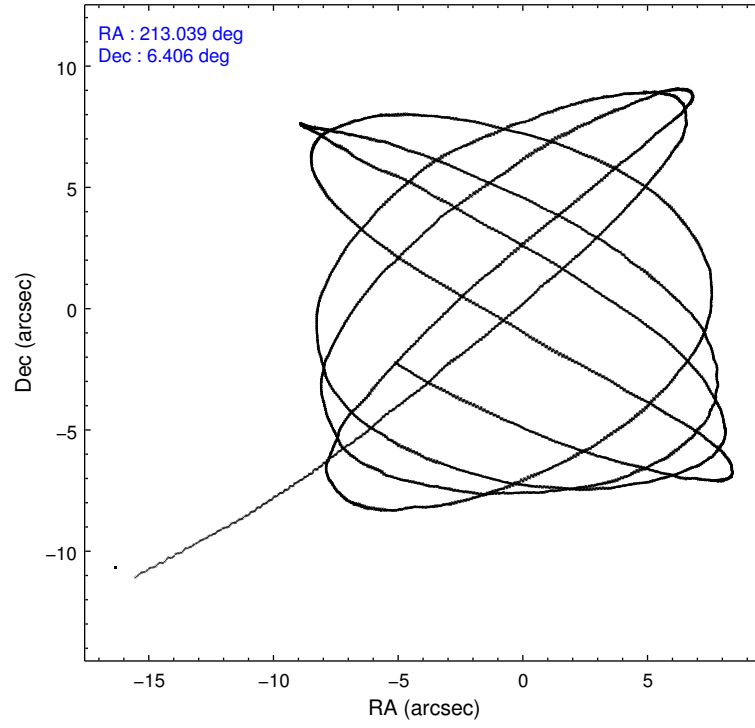
	ccd 6	ccd 7	ccd 8
level 1 events	24655	27278	30460
rejected events	21885	13451	22736
rejected %	88%	49%	74%

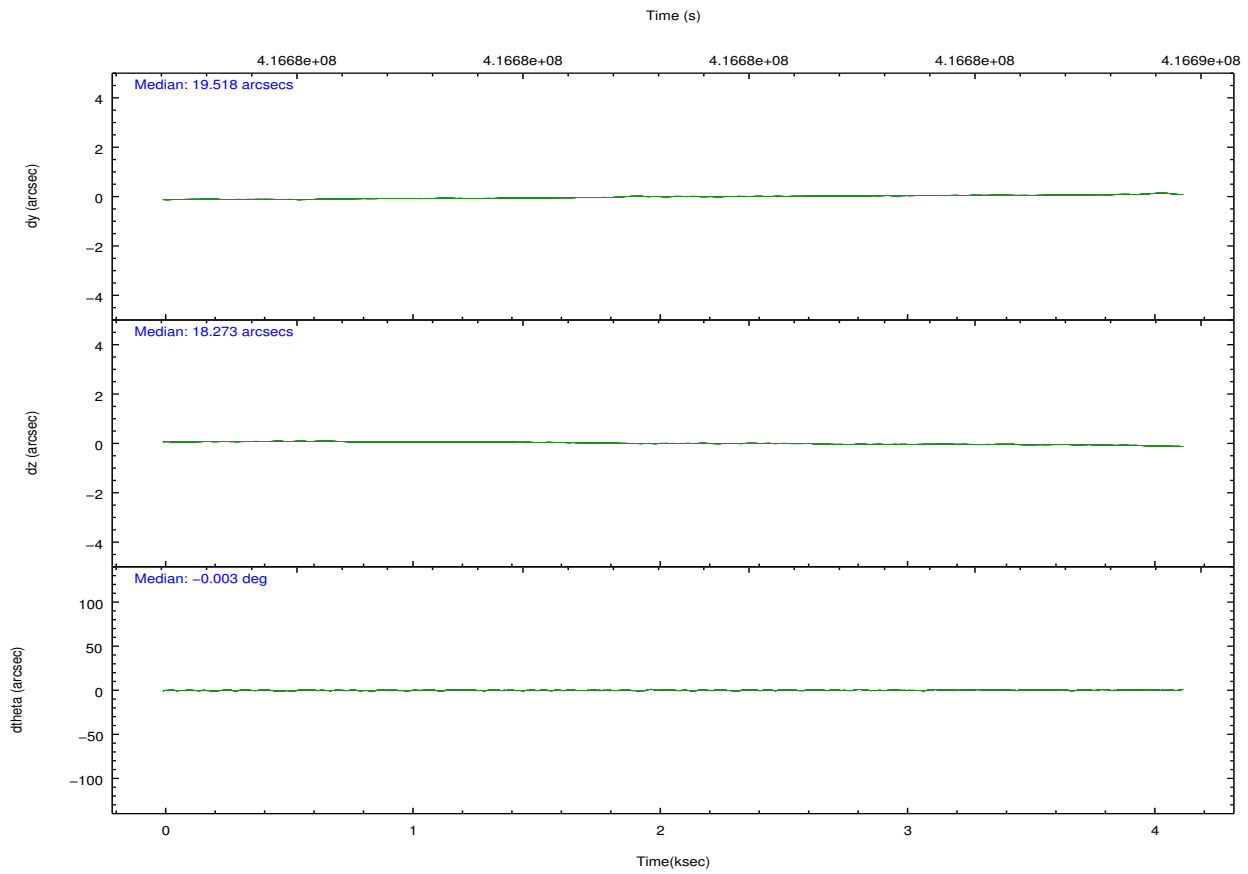
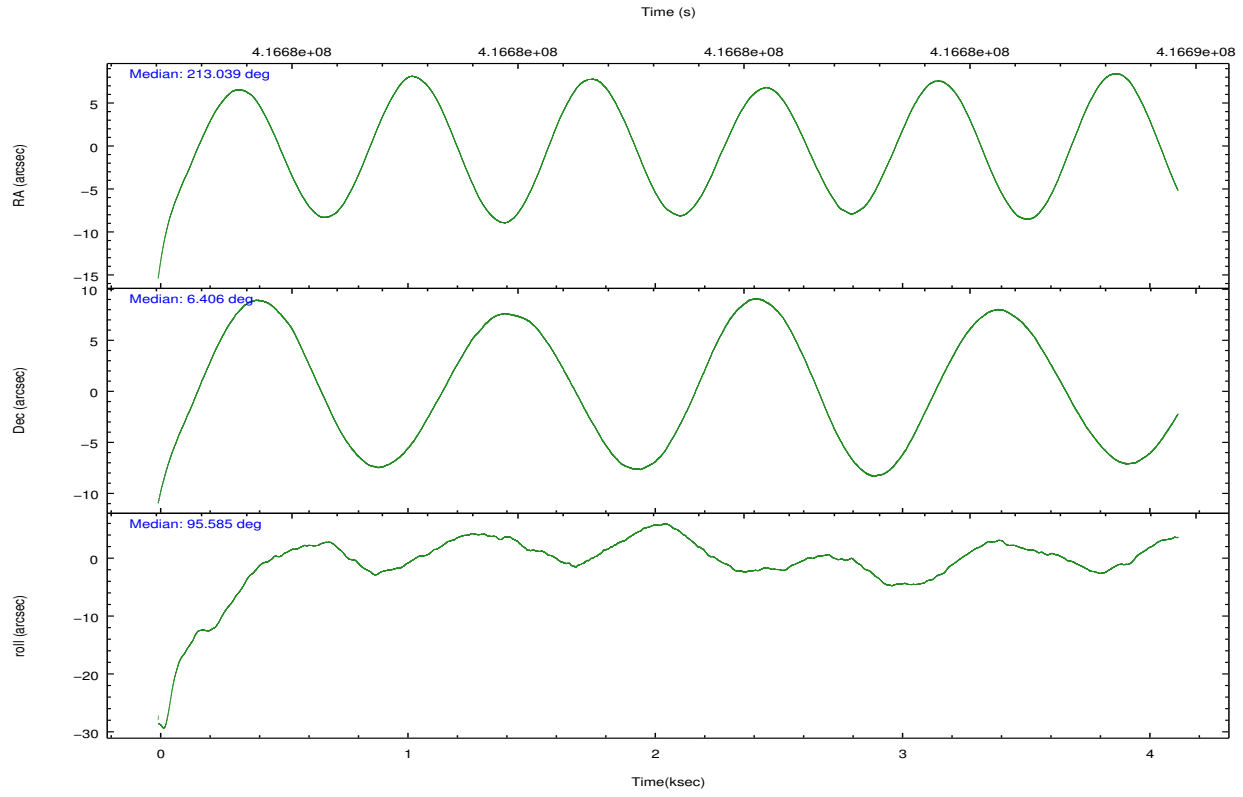
	ccd 6	ccd 7	ccd 8
grade 0 events	1071	1633	2253
	4%	5%	7%
grade 1 events	17	44	17
	0%	0%	0%
grade 2 events	560	3010	1903
	2%	11%	6%
grade 3 events	304	1217	861
	1%	4%	2%
grade 4 events	276	1296	803
	1%	4%	2%
grade 5 events	1021	2783	1476
	4%	10%	4%
grade 6 events	561	6679	1906
	2%	24%	6%
grade 7 events	20845	10616	21241
	84%	38%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	213.055033	213.0387216686007	Subarray requested	NONE	NONE
[deg] Pointing Dec	6.383760	6.40572987388758	Alternating exposures requested	N	N
[deg] Pointing Roll	95.434259	95.59265740827692	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	416681713.184000	416680617.78148			
Observation start date	2011-03-16T16:54:07	2011-03-16T16:36:57			
[s] Observation end time (MET)	416685713.184000	416686151.75676			
Observation end date	2011-03-16T18:00:47	2011-03-16T18:09:11			
Read mode	TIMED	TIMED			

2.3 Aspect



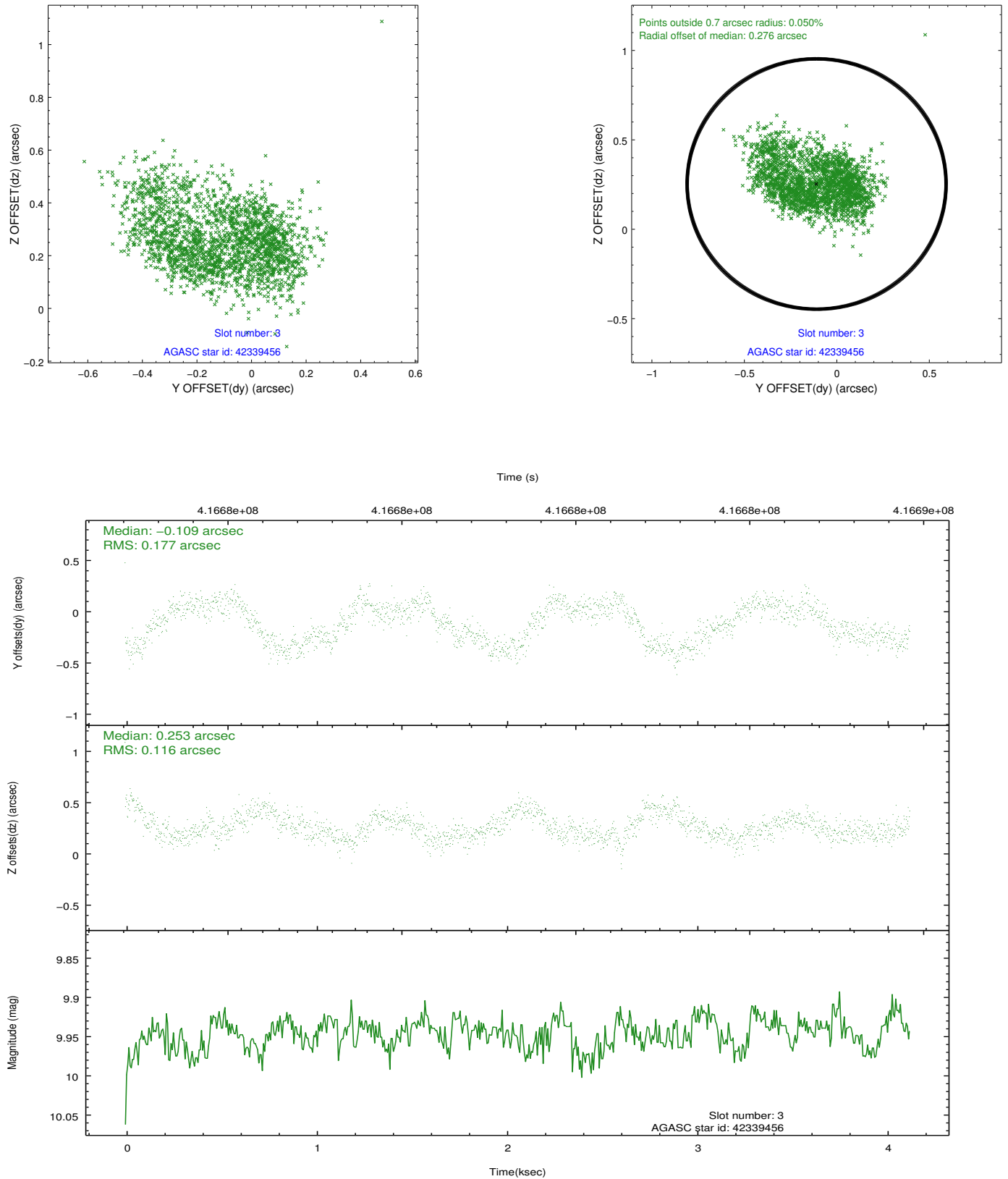


Slot Statistics

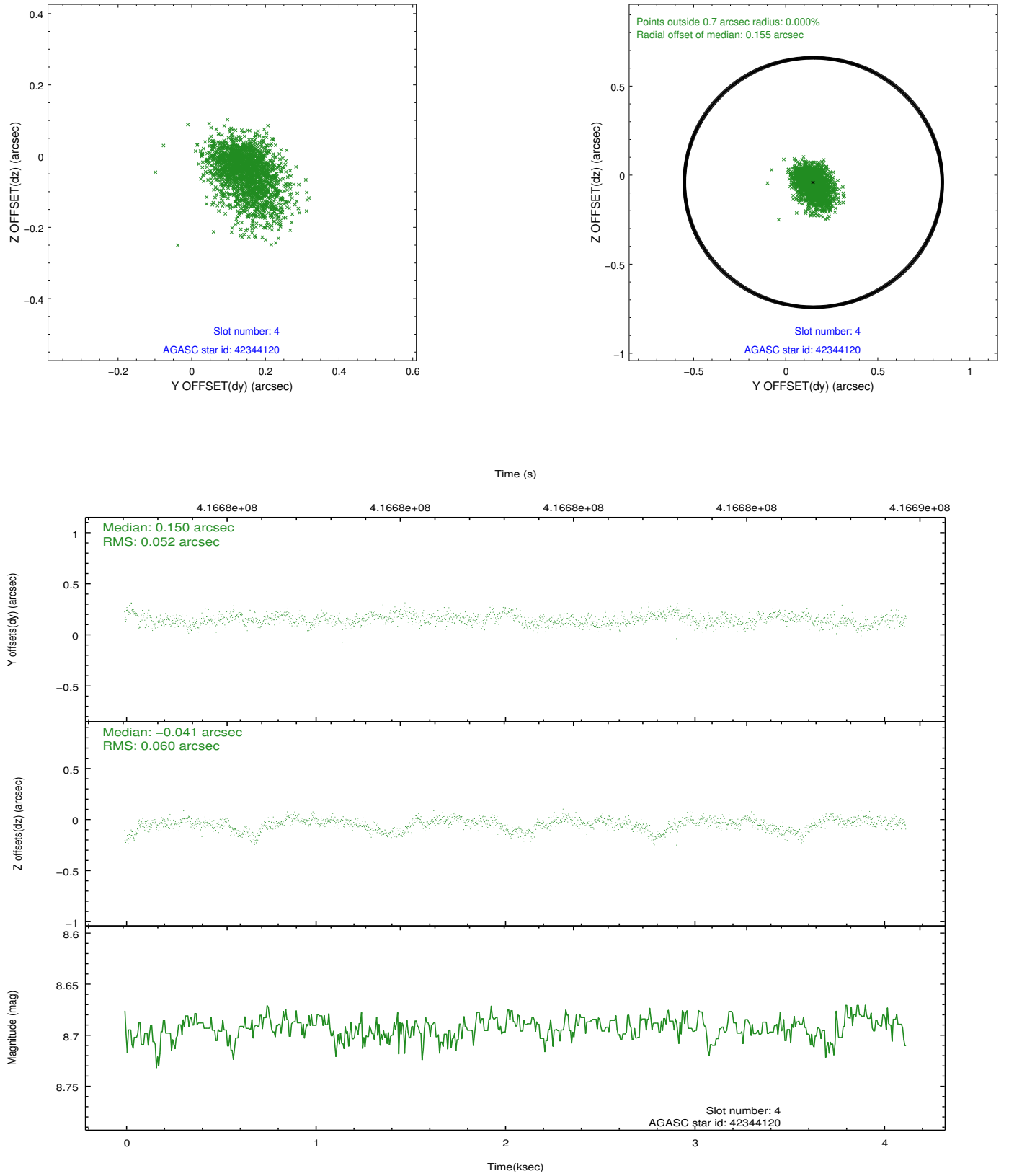
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	1006	-0.093	-0.071	0.006	0.010	0.000000	0.000000	-772.73	-1739.75
1	FID	ACIS-S-4	6.99	1006	0.260	0.064	0.005	0.010	0.000000	0.000000	2140.25	167.23
2	FID	ACIS-S-5	7.02	1006	-0.198	0.016	0.006	0.011	0.000000	0.000000	-1823.70	162.67
3	GUIDE	42339456	9.95	2012	-0.109	0.253	0.226	0.352	213.472501	6.918057	1774.79	-1666.74
4	GUIDE	42344120	8.69	2012	0.150	-0.041	0.081	0.140	212.686855	5.804616	-1948.79	1509.68
5	GUIDE	42344608	10.26	2005	-0.147	0.252	0.199	0.314	213.386275	6.840142	1523.27	-1333.11
6	GUIDE	42346056	9.69	2004	-0.087	-0.347	0.167	0.275	212.993605	6.599571	795.39	144.50
7	GUIDE	42344920	9.45	2007	0.206	-0.115	0.100	0.171	212.660092	5.687497	-2360.33	1645.61

2.4 Star Slots

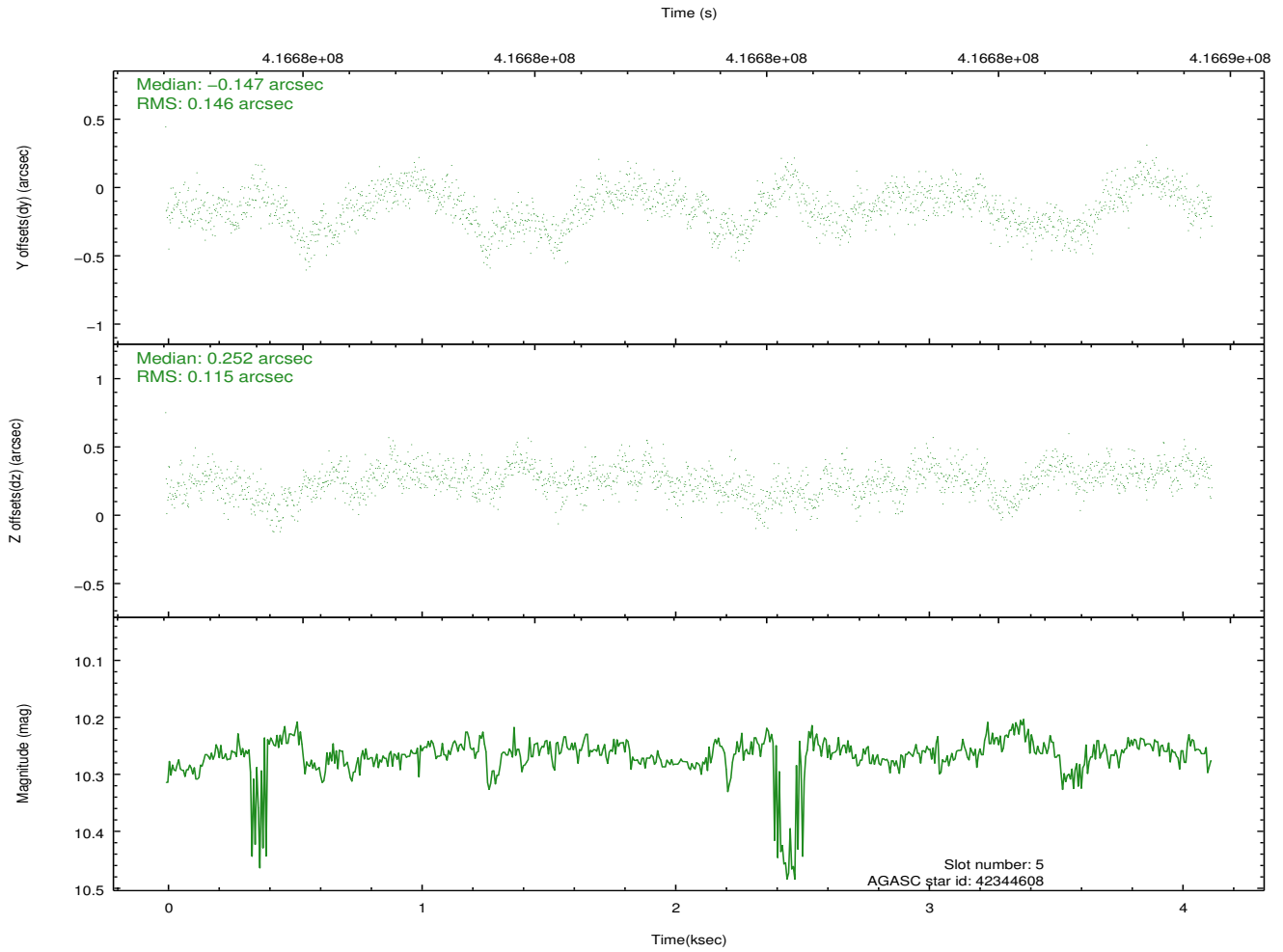
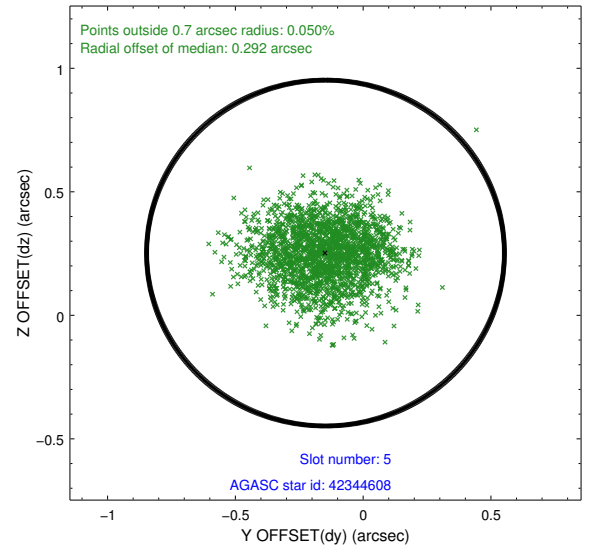
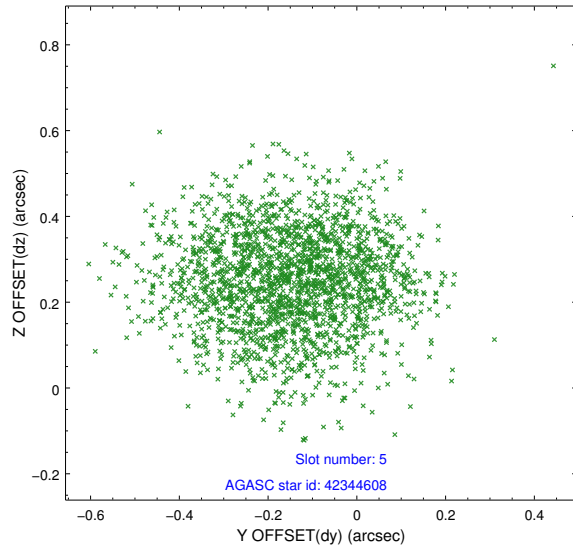
2.4.1 Slot 3



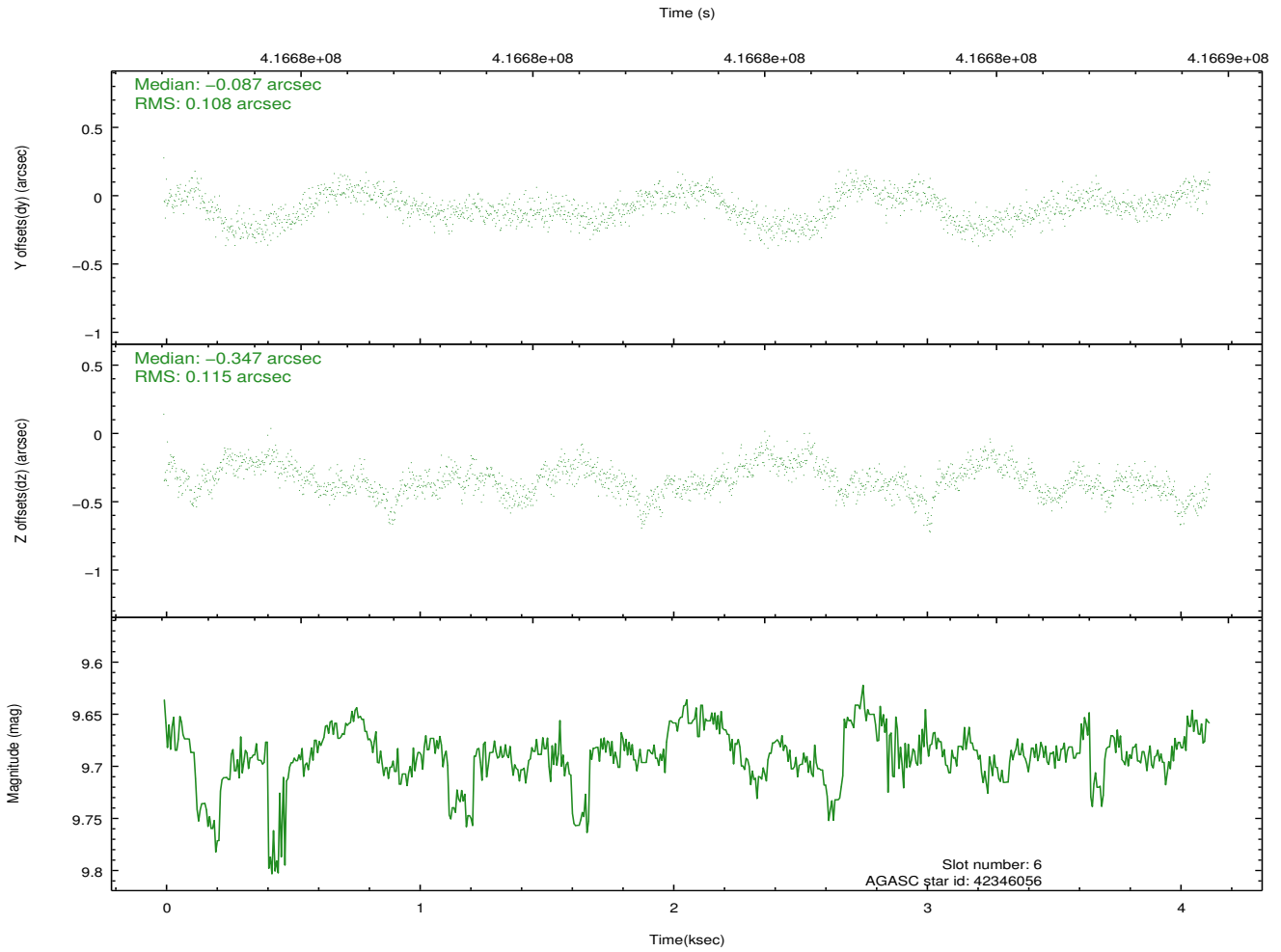
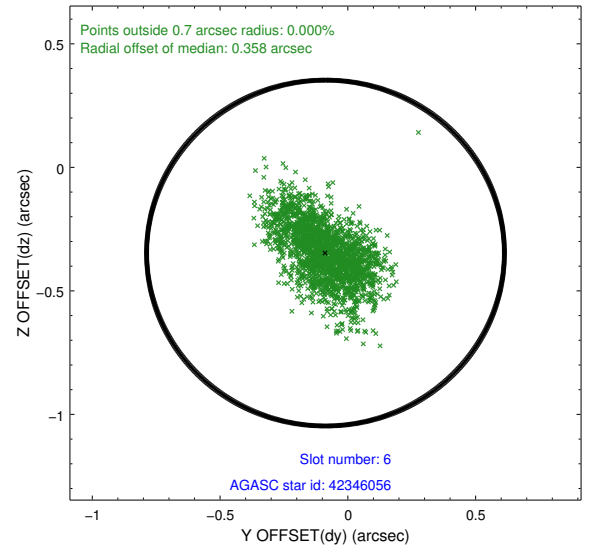
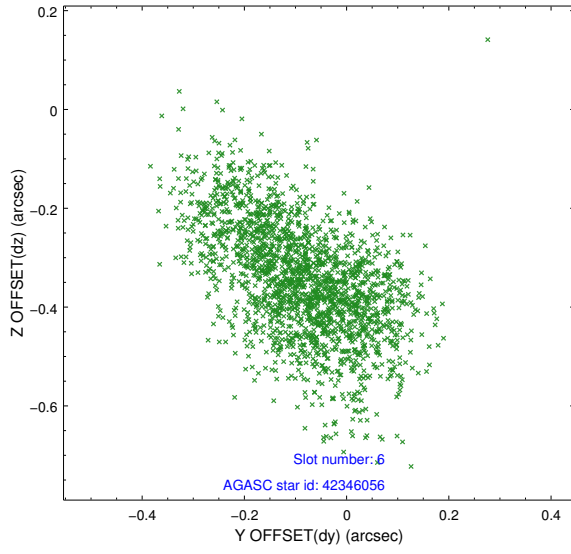
2.4.2 Slot 4



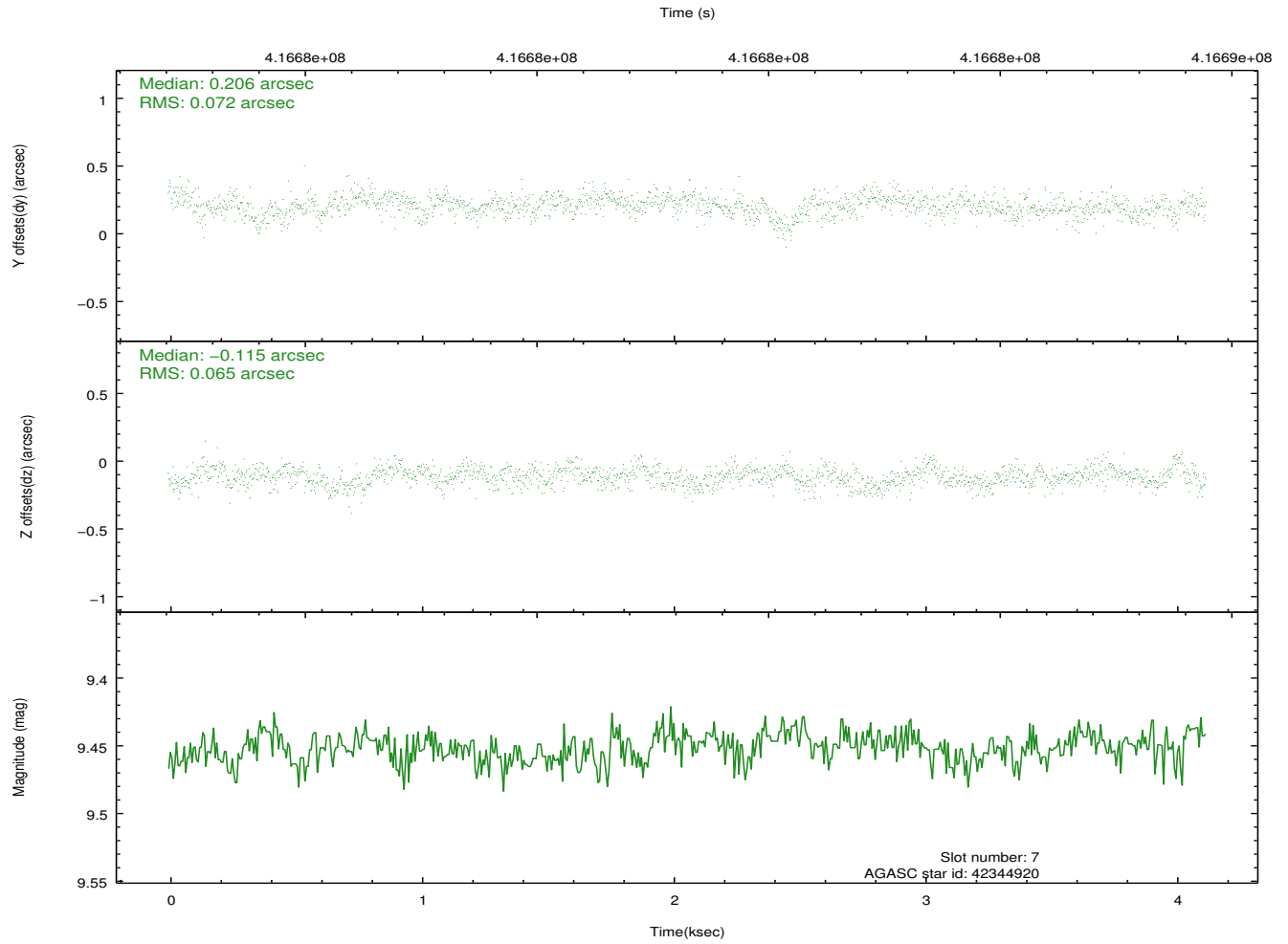
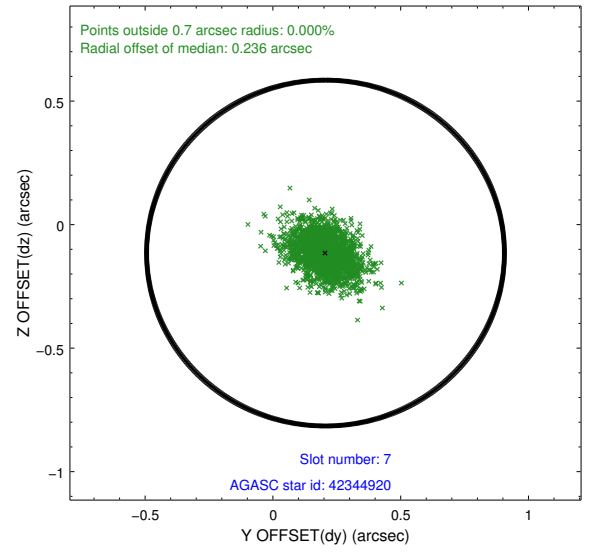
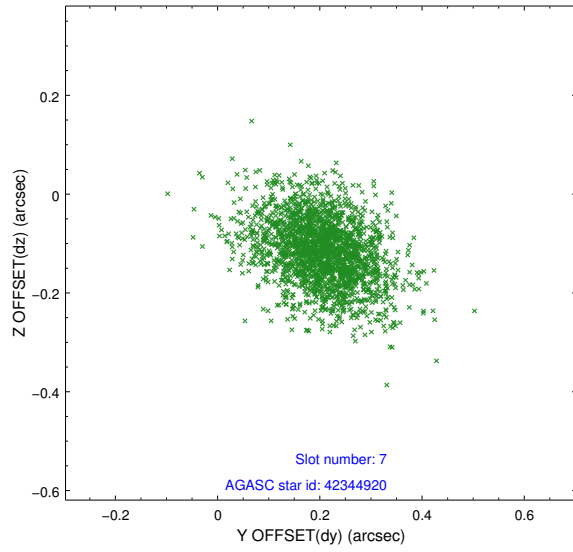
2.4.3 Slot 5



2.4.4 Slot 6

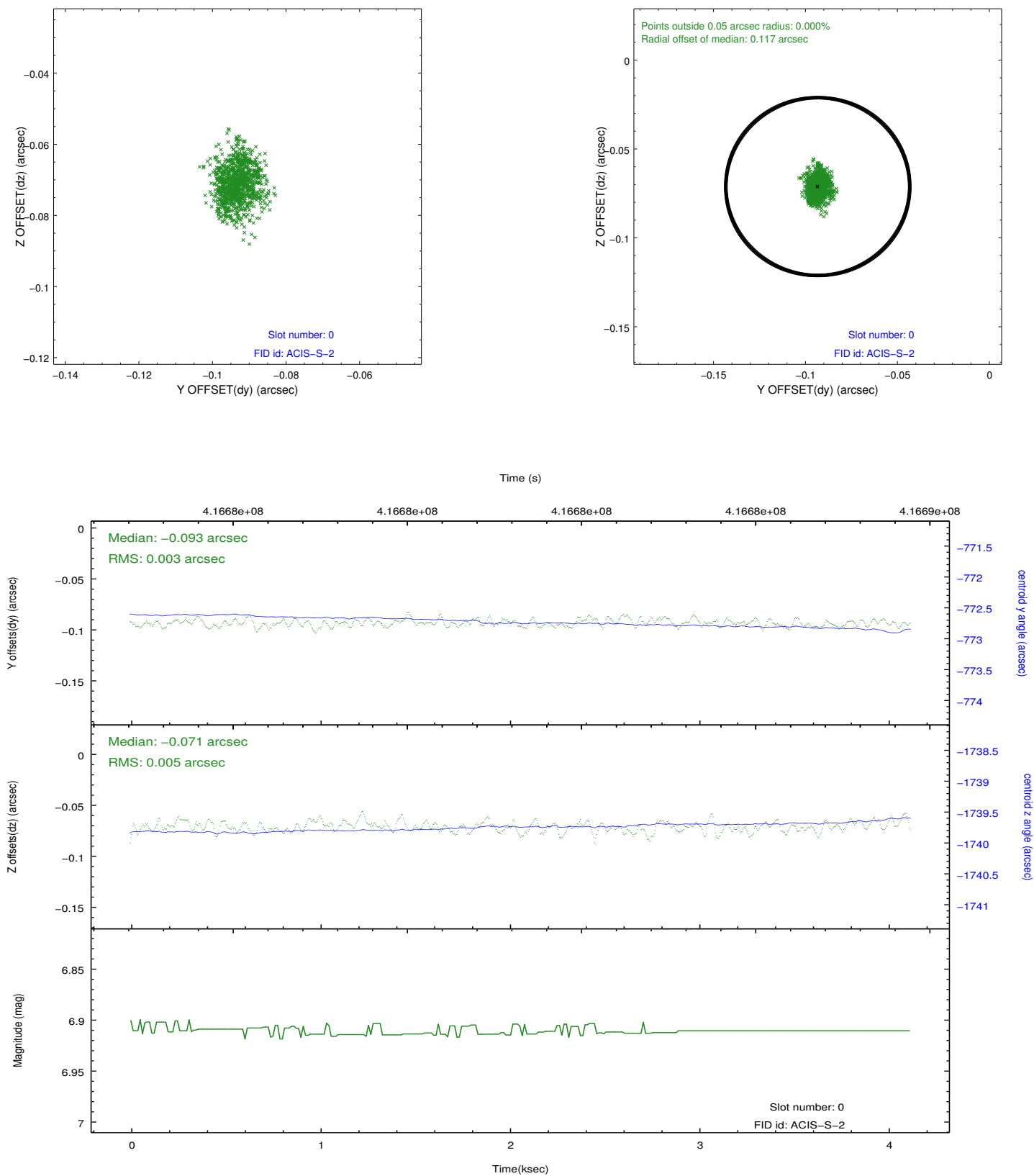


2.4.5 Slot 7

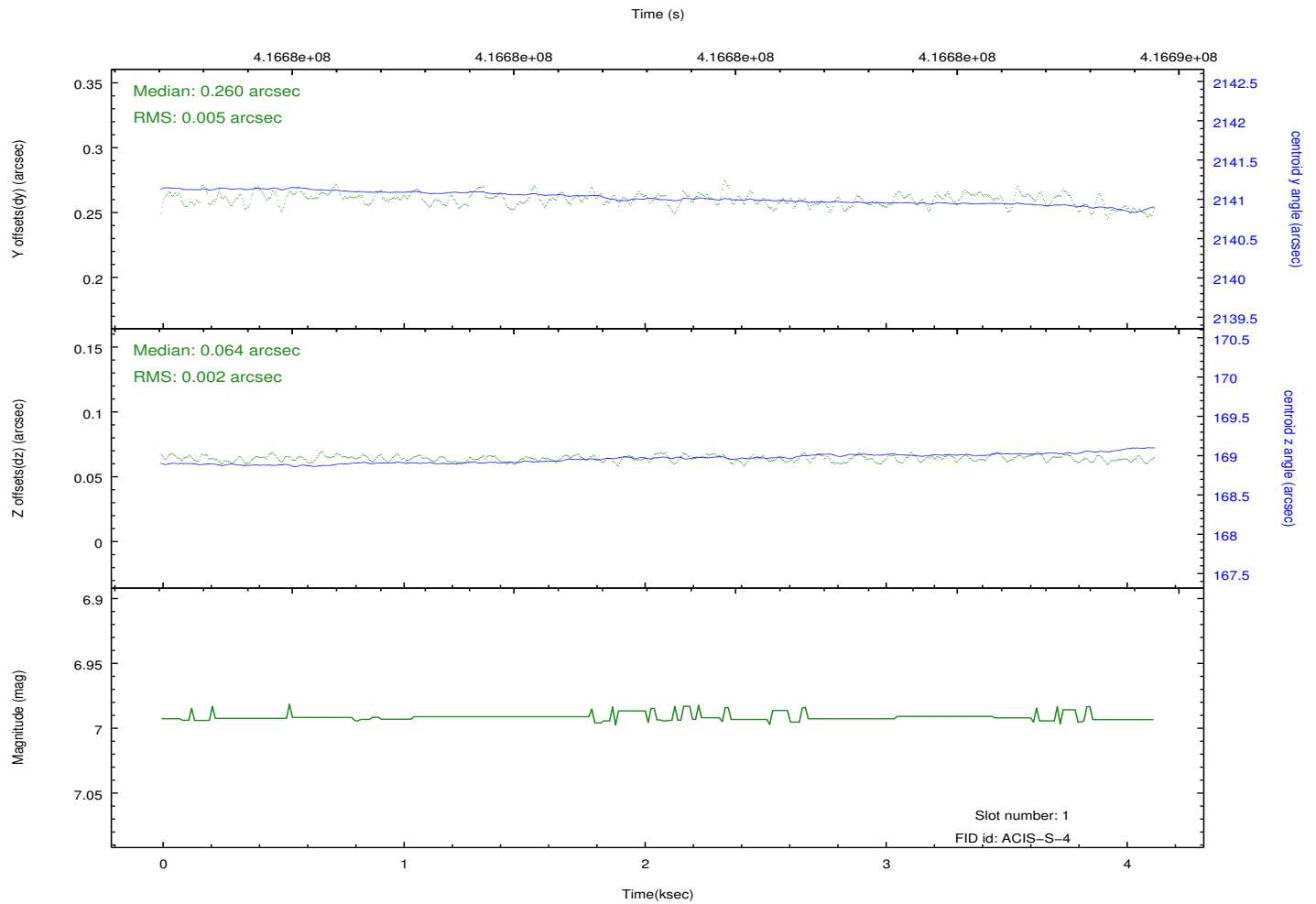
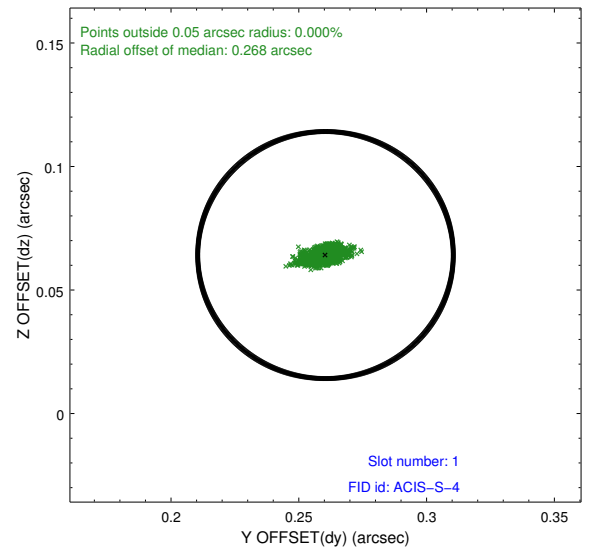
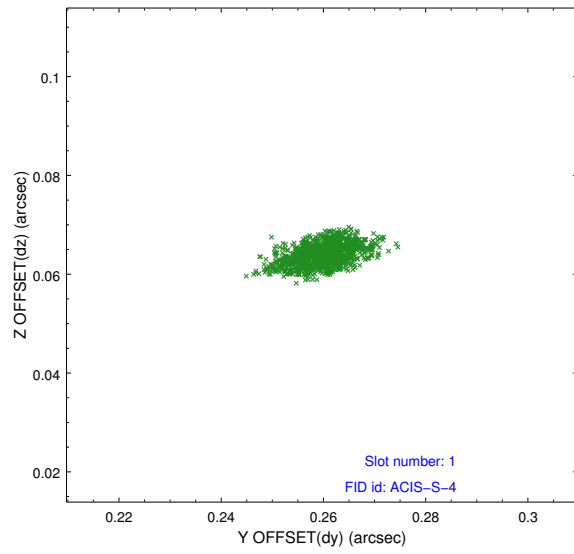


2.5 FID Slots

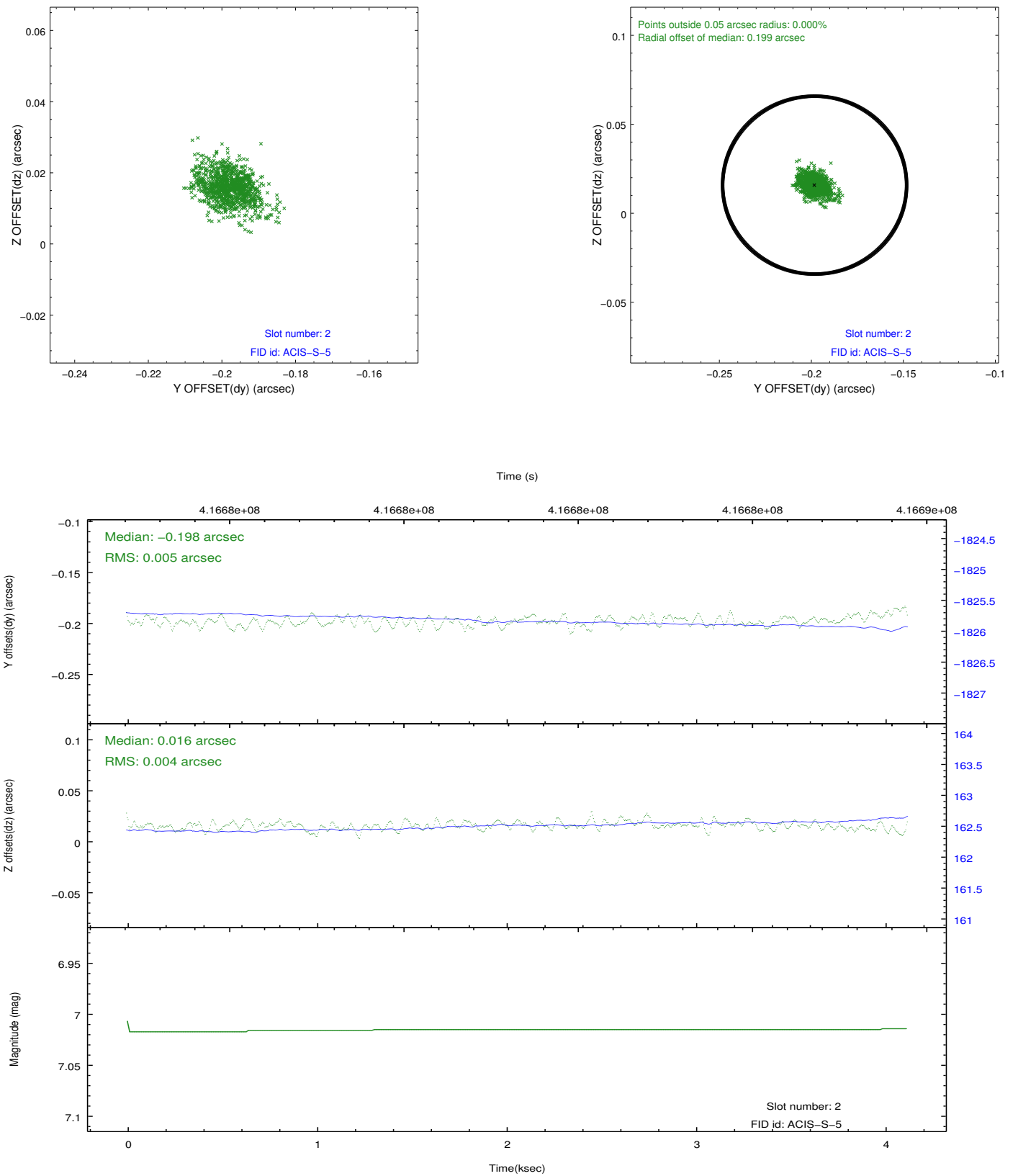
2.5.1 Slot 0



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	4.0610000312328

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.