

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13345 - L2 Version 1
Chandra X-Ray Center

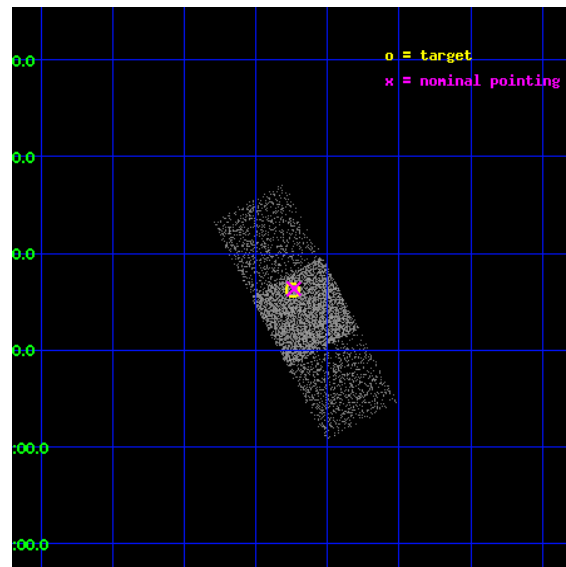
L2 Processing Date : Feb 10 2012

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1 Front

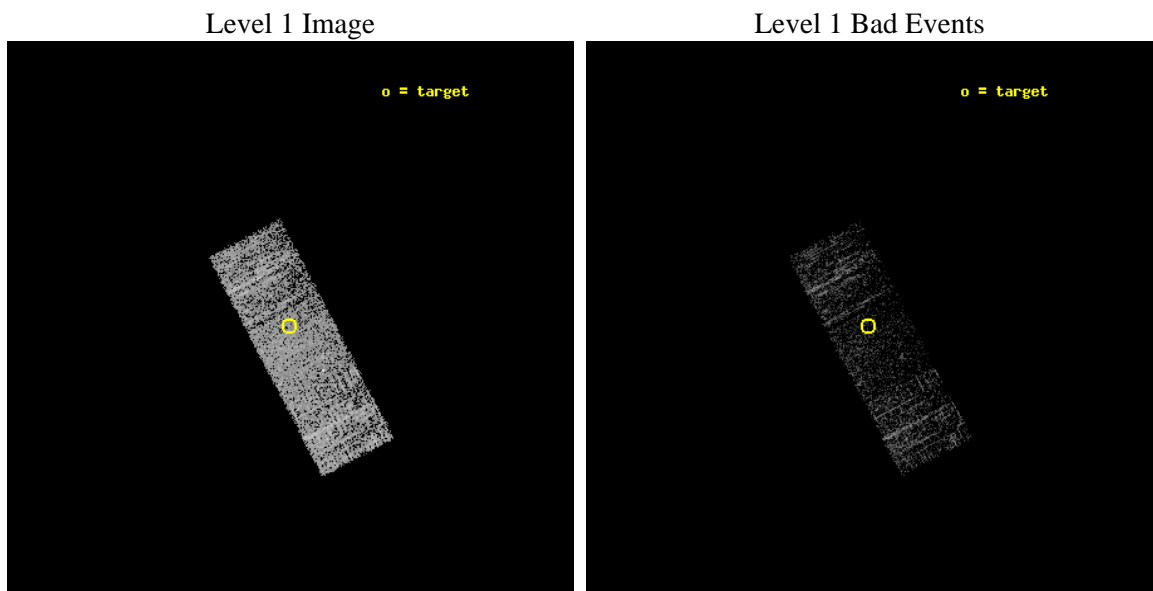
seq_num	702552	Sequence number
obs_id	13345	Observation id
title	A Large, Economical Snapshot Survey of the Most-Luminous Quasars from the Sloan Digital Sky Survey	Proposal title
observer	Prof. Gordon Garmire	Principal investigator
object	SDSS J1201+0116	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.435	Observer's specified target RA [deg]
dec_targ	1.269889	Observer's specified target Dec [deg]
ra_nom	180.43352774983	Nominal RA [deg]
dec_nom	1.2722768784128	Nominal Dec [deg]
roll_nom	62.157035146262	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1577.9000121355	Sum of GTIs [s]
livetime	1557.2835868439	Livetime [s]
ontime6	1577.9000121355	Sum of GTIs [s]
ontime7	1577.9000121355	Sum of GTIs [s]
ontime8	1577.9000121355	Sum of GTIs [s]
l2events	6803	Number of level 2 events



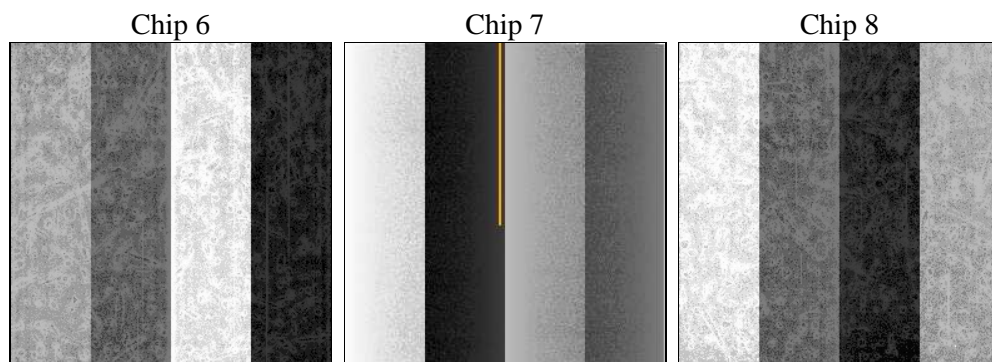
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	1577.9000121355	Sum of GTIs [s]
caldbver	4.4.7	 	ontime6	1577.9000121355	Sum of GTIs [s]
date	2012-02-10T20:56:43	Date and time of file creation	ontime7	1577.9000121355	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	1577.9000121355	Sum of GTIs [s]
			l1events	30915	Number of level 1 events

2.1.4 Events

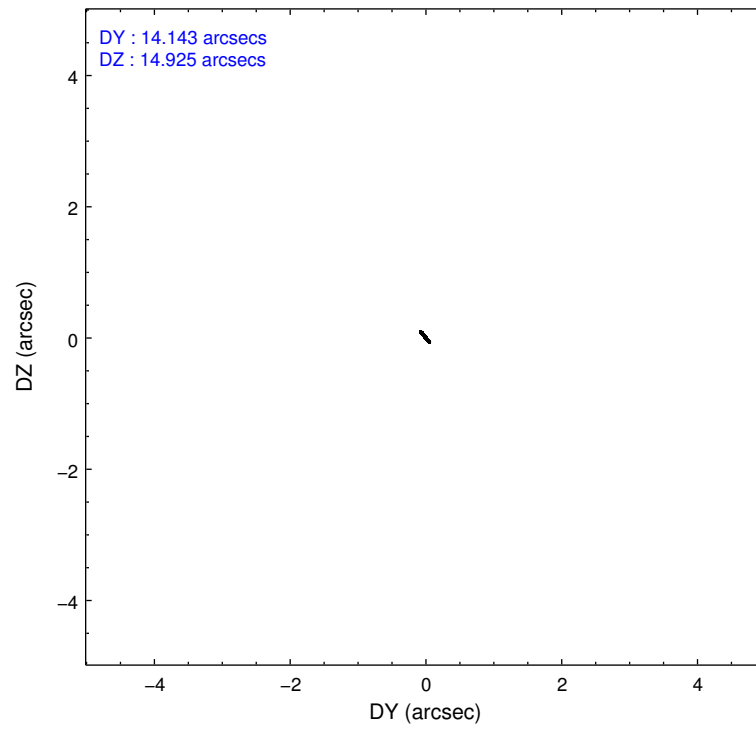
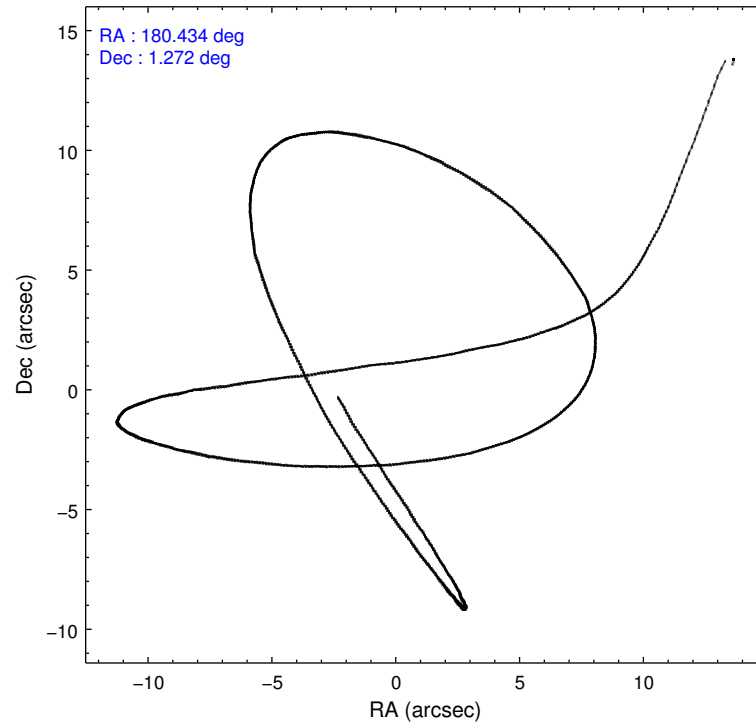
	ccd 6	ccd 7	ccd 8
level 1 events	8895	10036	11984
rejected events	7813	5058	8549
rejected %	87%	50%	71%

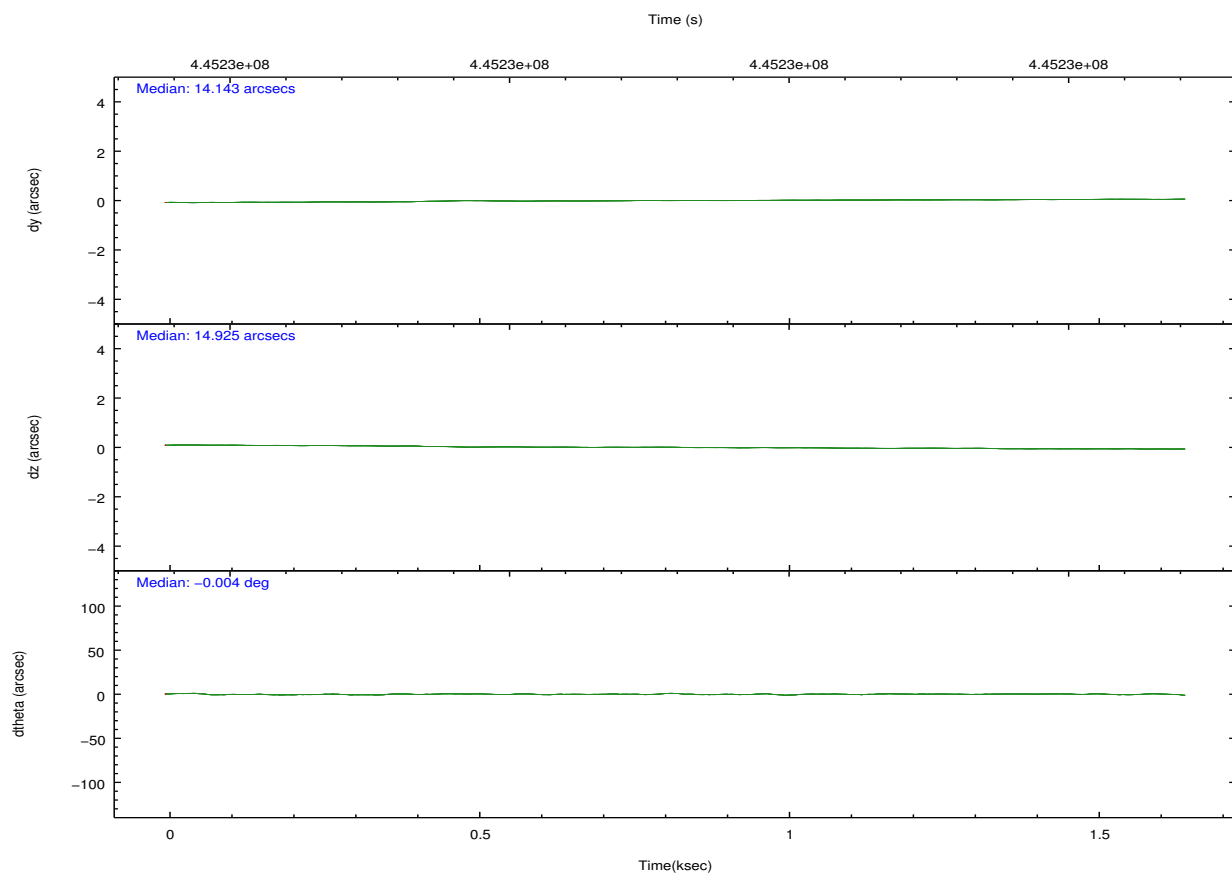
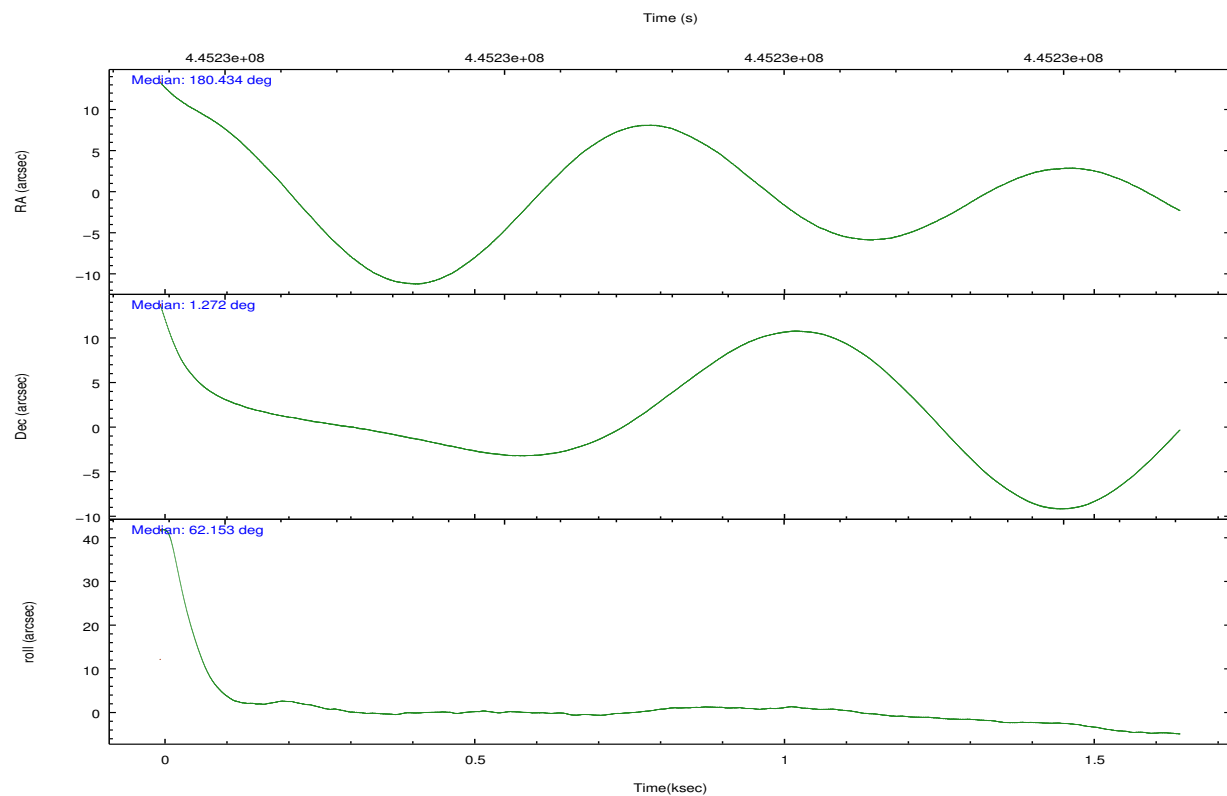
	ccd 6	ccd 7	ccd 8
grade 0 events	399	540	975
	4%	5%	8%
grade 1 events	3	13	15
	0%	0%	0%
grade 2 events	244	1085	756
	2%	10%	6%
grade 3 events	110	447	391
	1%	4%	3%
grade 4 events	103	422	420
	1%	4%	3%
grade 5 events	379	1051	510
	4%	10%	4%
grade 6 events	227	2495	896
	2%	24%	7%
grade 7 events	7430	3983	8021
	83%	39%	66%

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	180.434905	180.4335277498341	Subarray requested	NONE	NONE
[deg] Pointing Dec	1.245213	1.272276878412809	Alternating exposures requested	N	N
[deg] Pointing Roll	61.999998	62.15703514626184	[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)	445228619.184000	445227052.16645			
Observation start date	2012-02-10T02:35:53	2012-02-10T02:10:52			
[s] Observation end time (MET)	445230119.184000	445231044.54166			
Observation end date	2012-02-10T03:00:53	2012-02-10T03:17:24			
Read mode	TIMED	TIMED			

2.3 Aspect



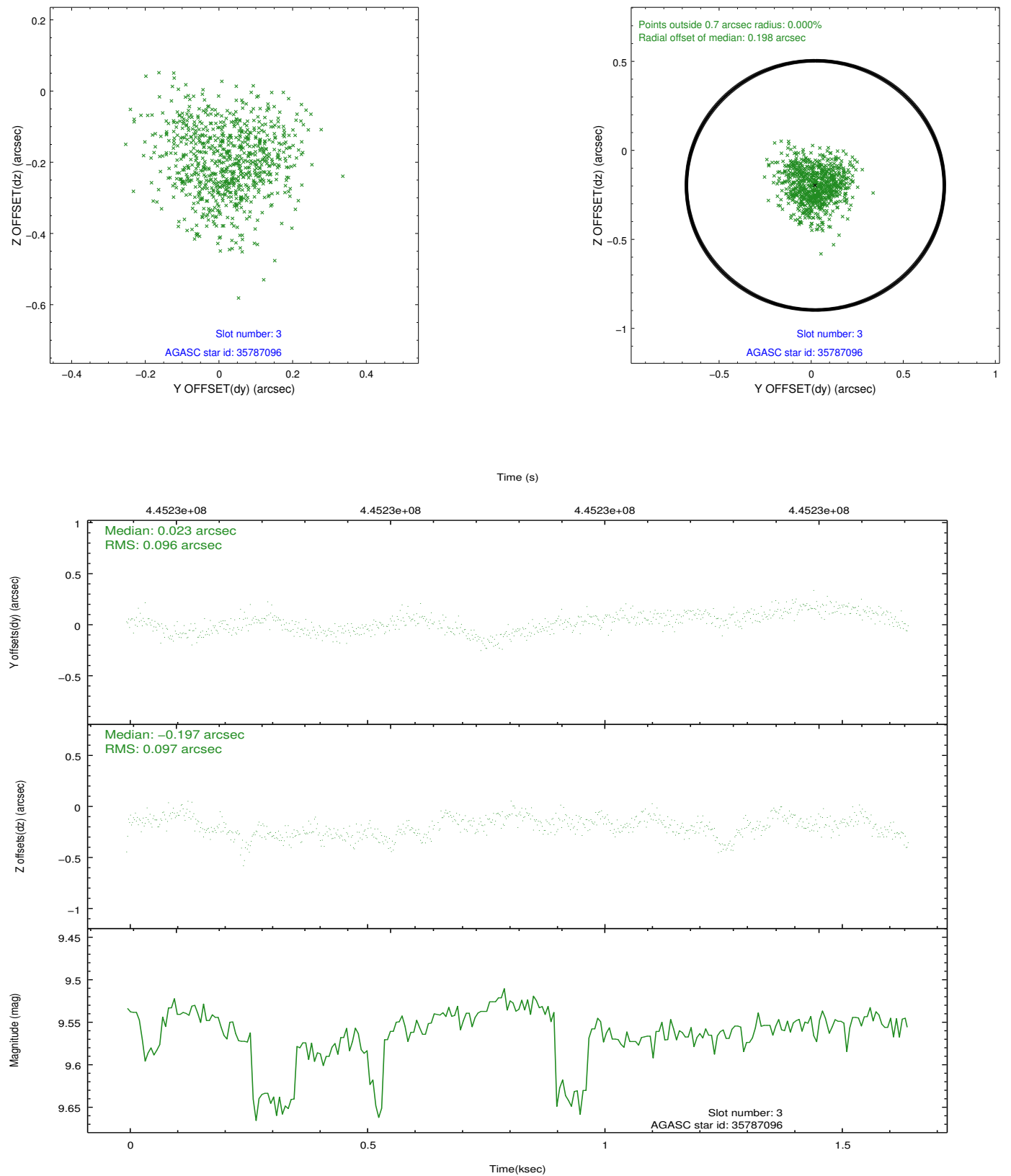


Slot Statistics

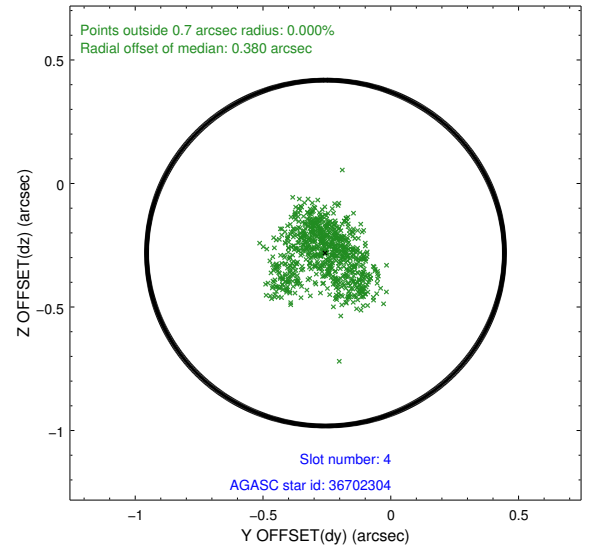
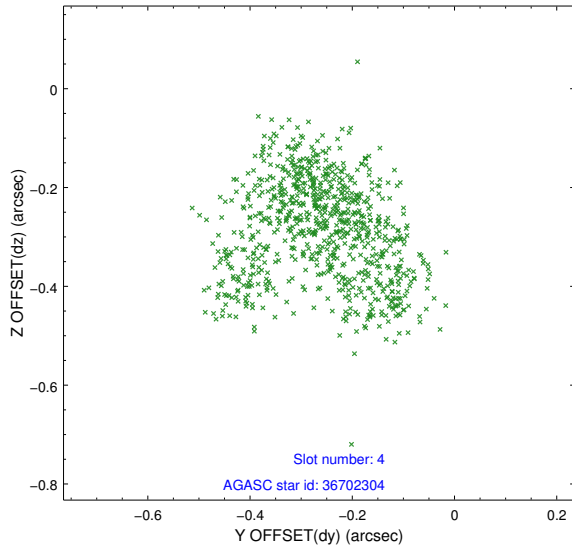
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	402	-0.084	-0.009	0.007	0.012	0.000000	0.000000	-767.17	-1736.27
1	FID	ACIS-S-4	7.00	402	0.227	0.043	0.006	0.017	0.000000	0.000000	2144.58	168.11
2	FID	ACIS-S-5	7.02	402	-0.174	-0.025	0.008	0.019	0.000000	0.000000	-1814.97	166.27
3	GUIDE	35787096	9.56	800	0.023	-0.197	0.146	0.230	179.996076	1.211456	-848.17	1337.94
4	GUIDE	36702304	9.40	801	-0.255	-0.282	0.159	0.229	180.247074	1.873627	1680.30	1662.34
5	GUIDE	36702648	7.38	803	0.121	0.172	0.055	0.082	180.588629	0.563683	-1903.41	-1637.55
6	GUIDE	36703344	8.03	804	-0.075	0.162	0.076	0.144	181.053552	1.462035	1732.43	-1599.16
7	GUIDE	36706440	8.45	802	0.204	0.156	0.070	0.108	180.443373	0.532111	-2248.97	-1233.20

2.4 Star Slots

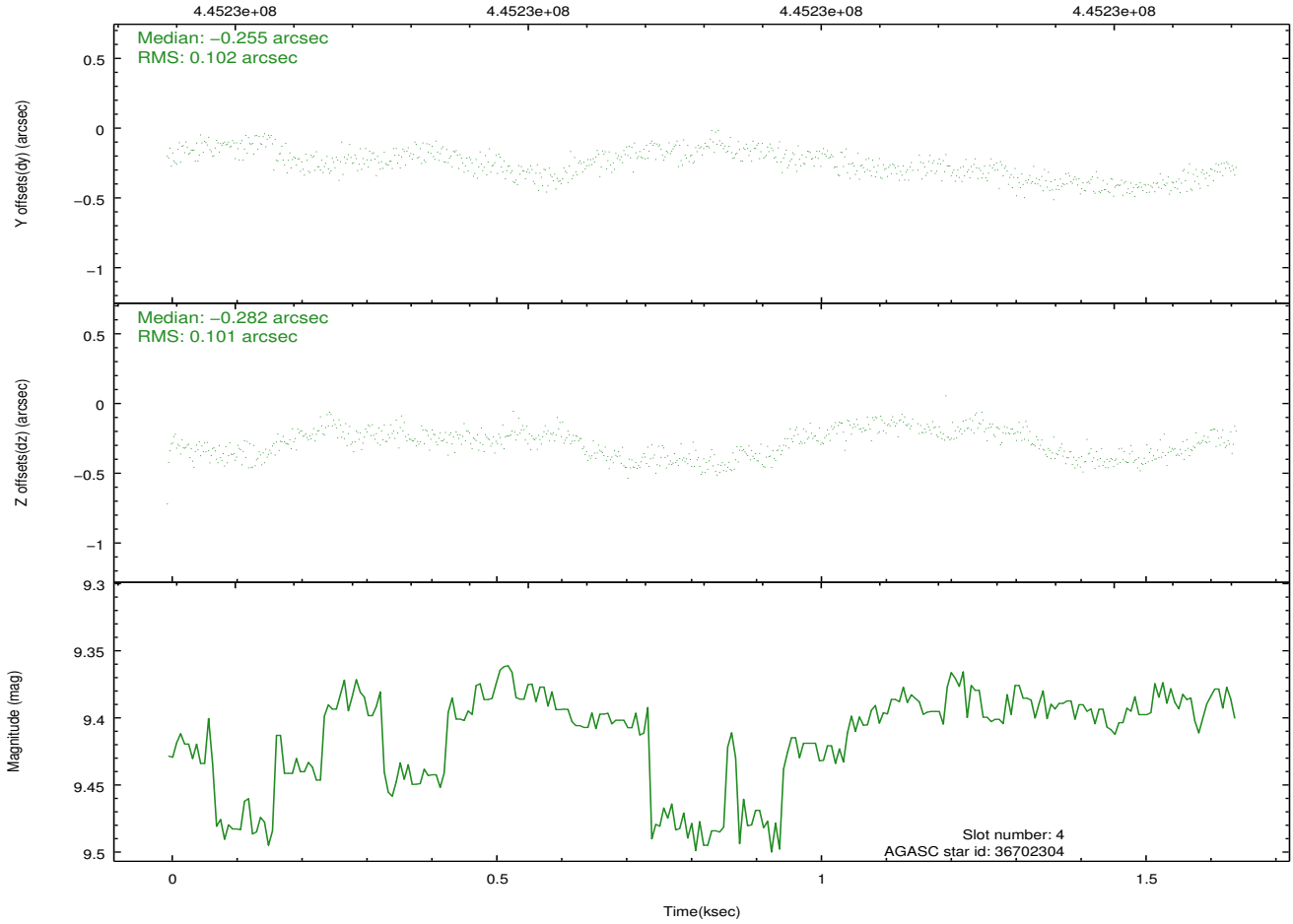
2.4.1 Slot 3



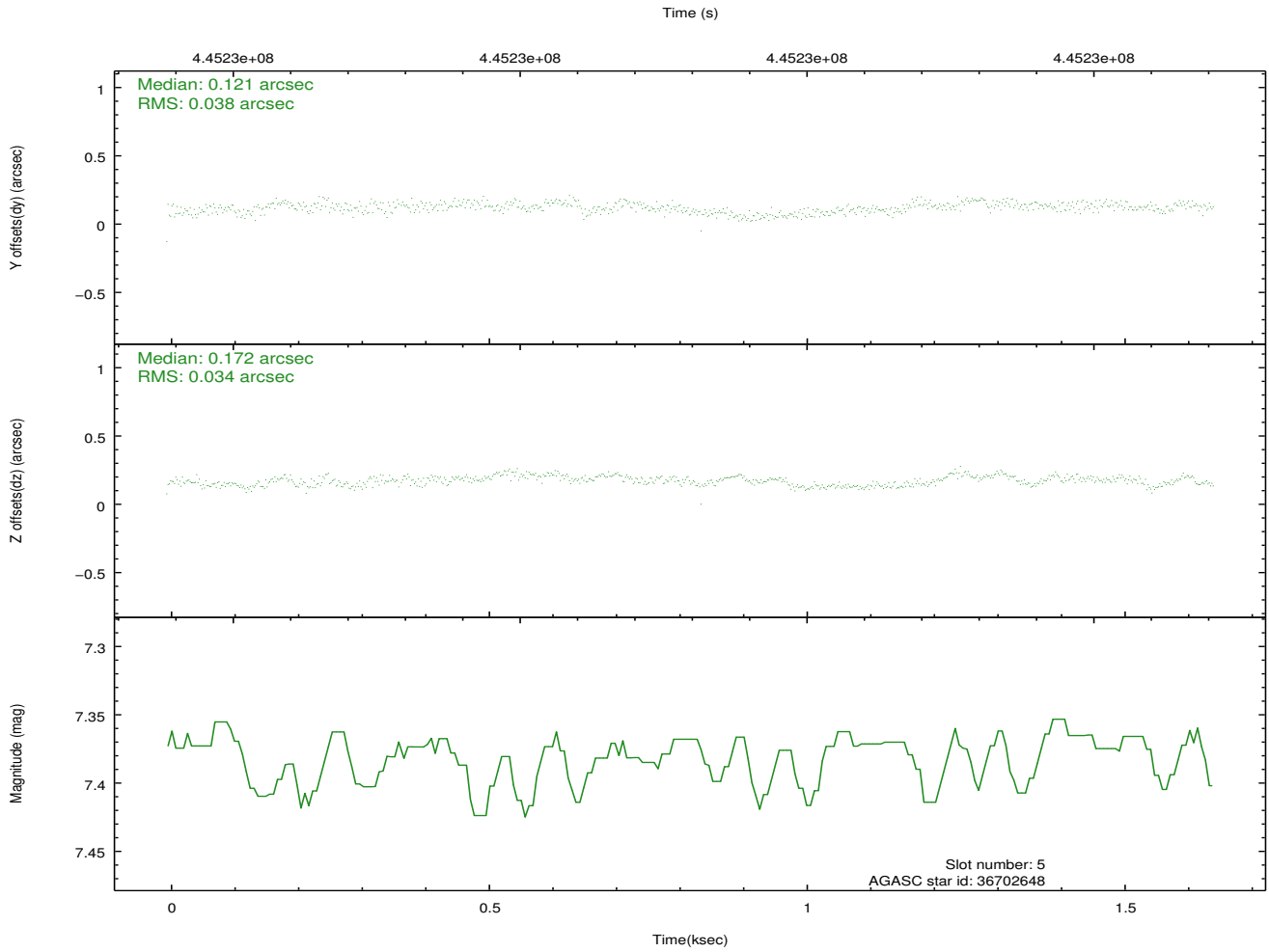
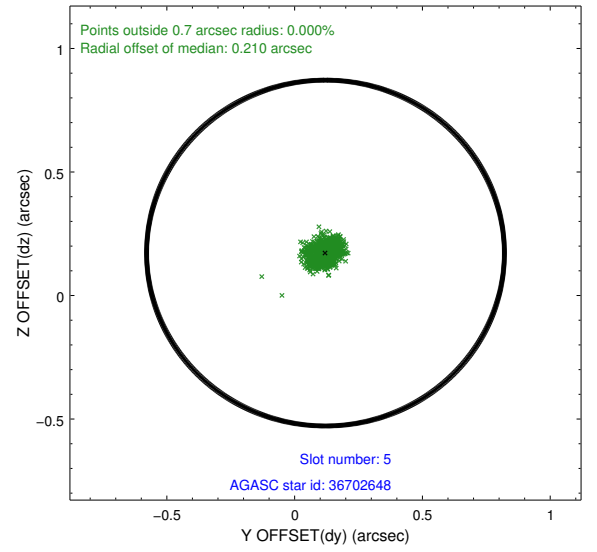
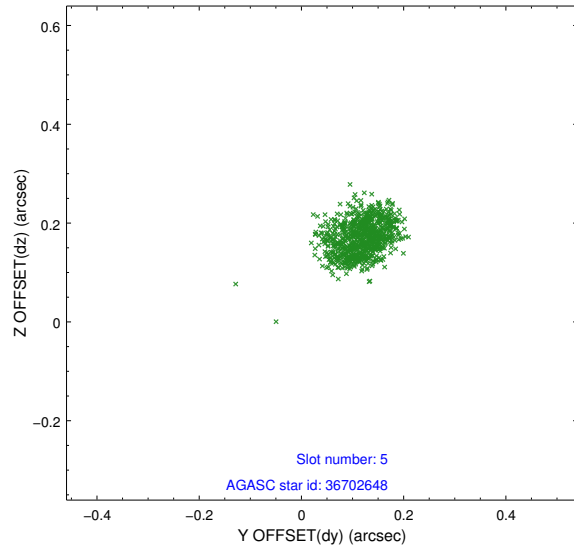
2.4.2 Slot 4



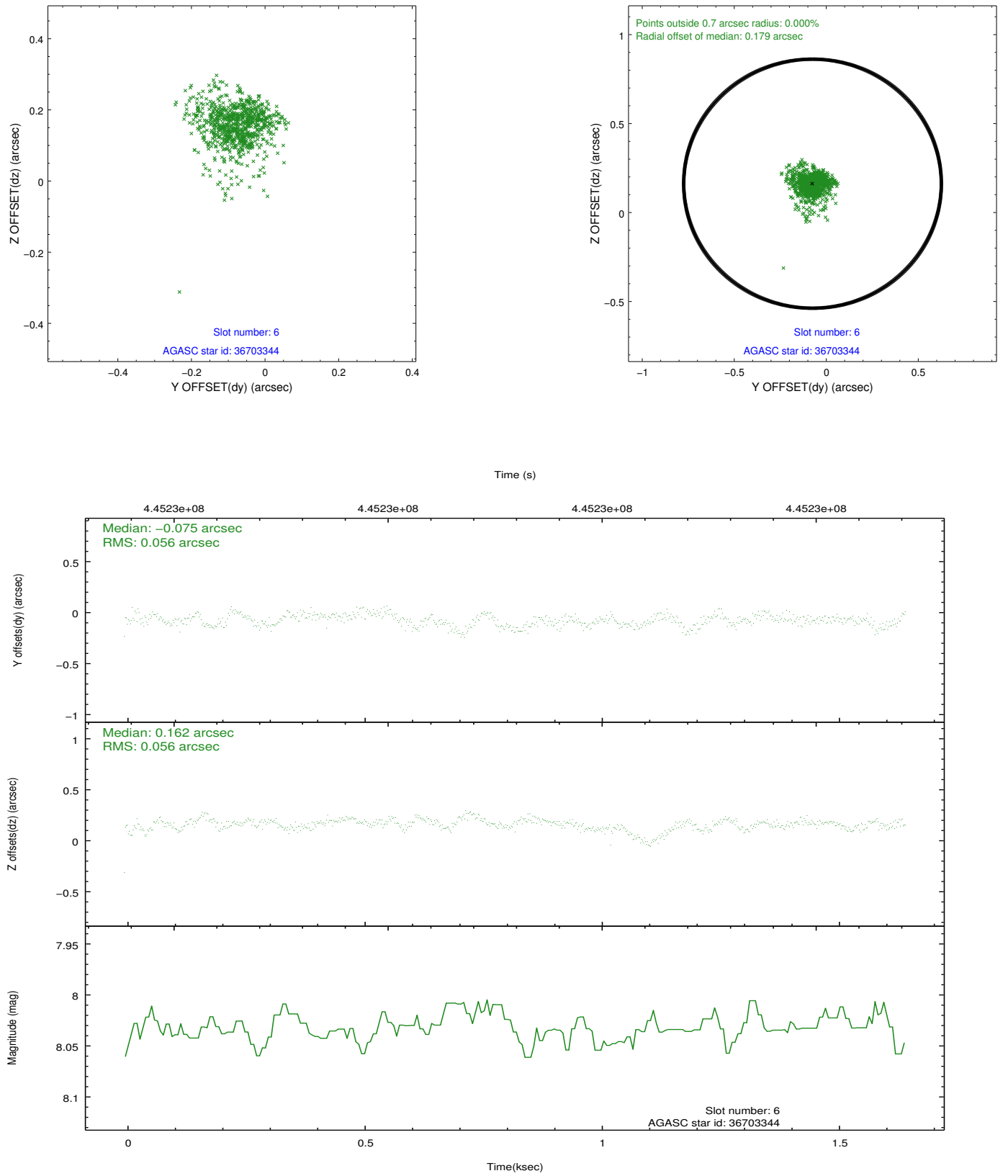
Time (s)



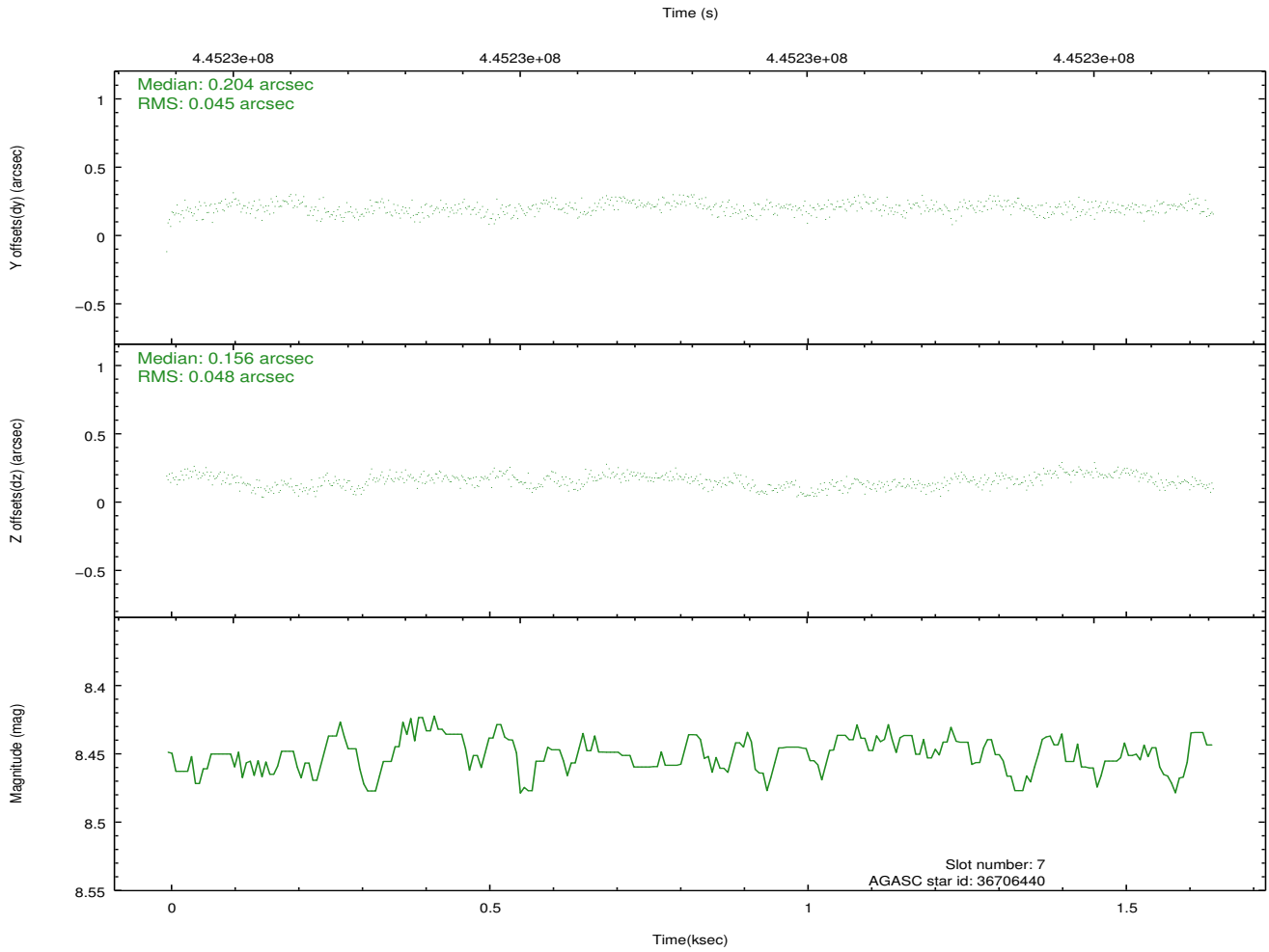
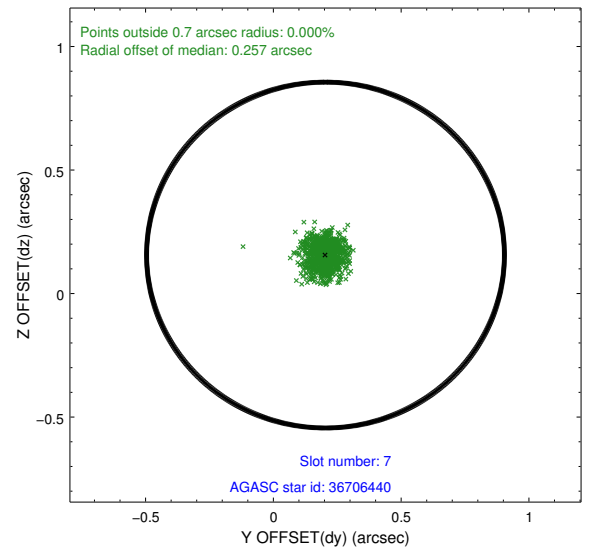
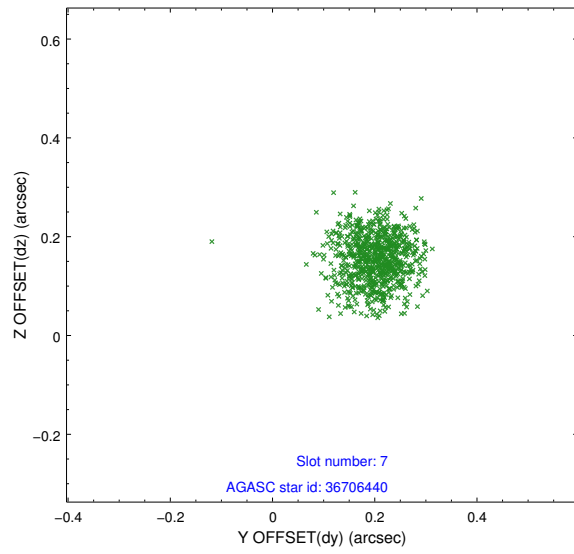
2.4.3 Slot 5



2.4.4 Slot 6

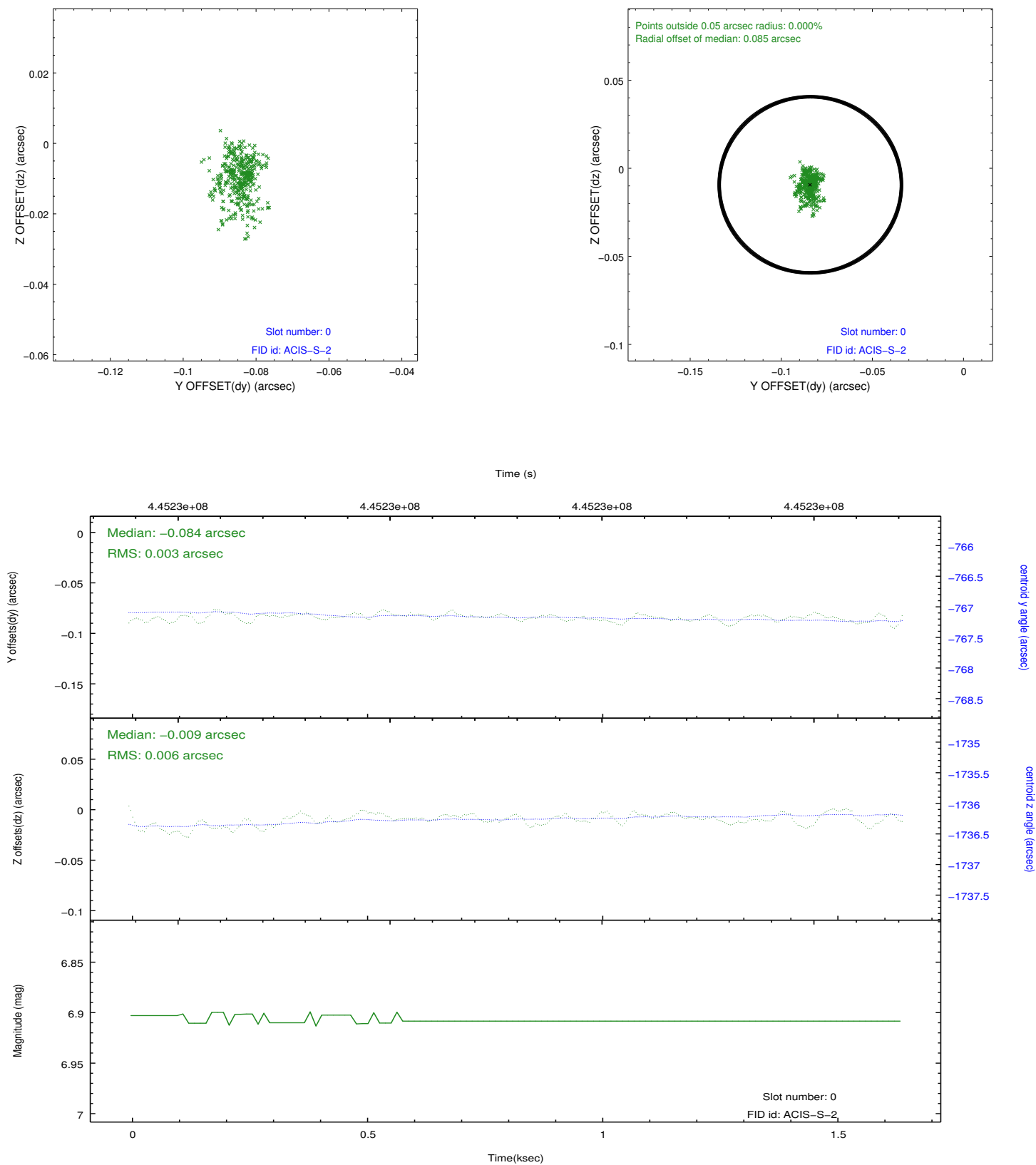


2.4.5 Slot 7

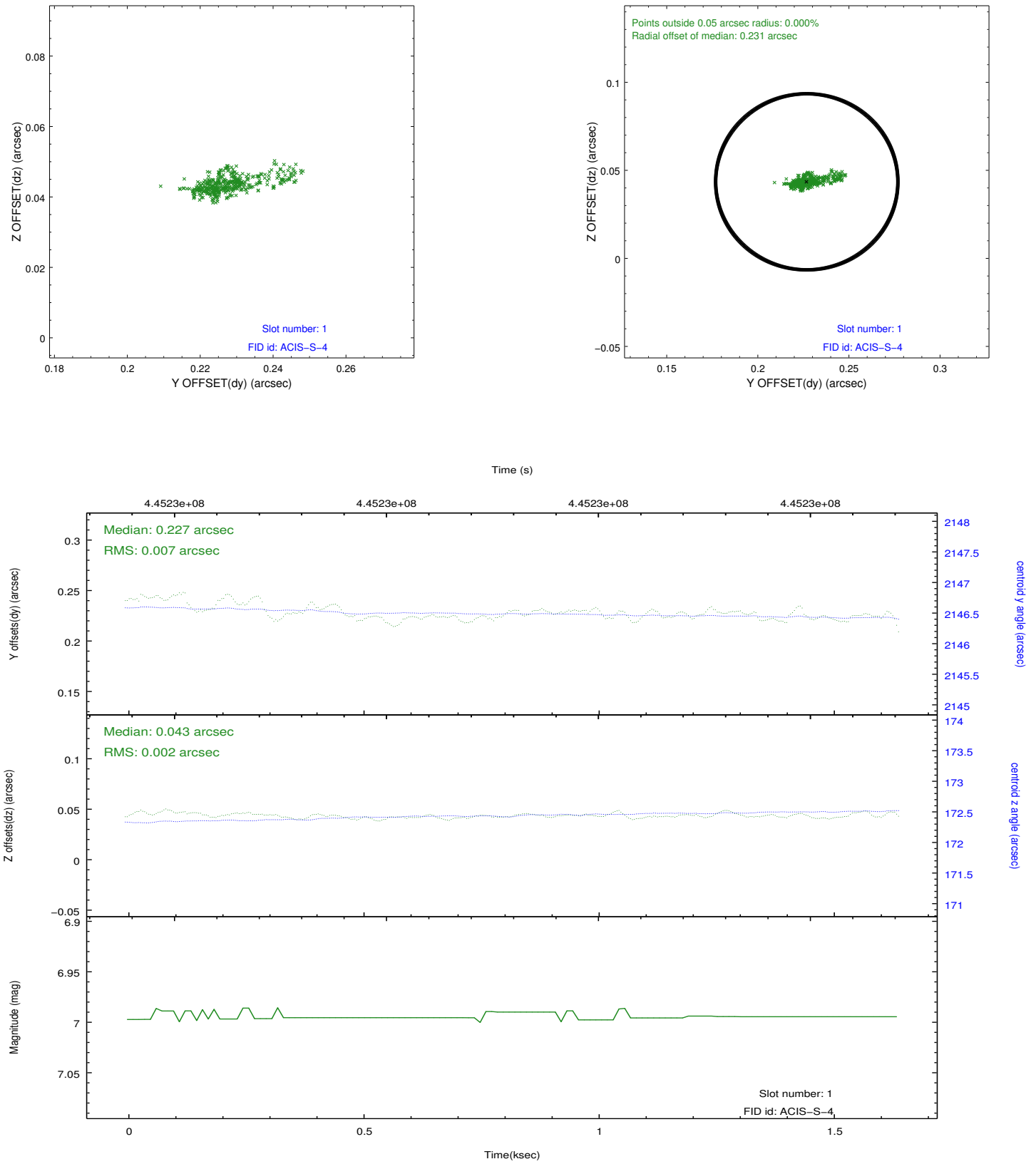


2.5 FID Slots

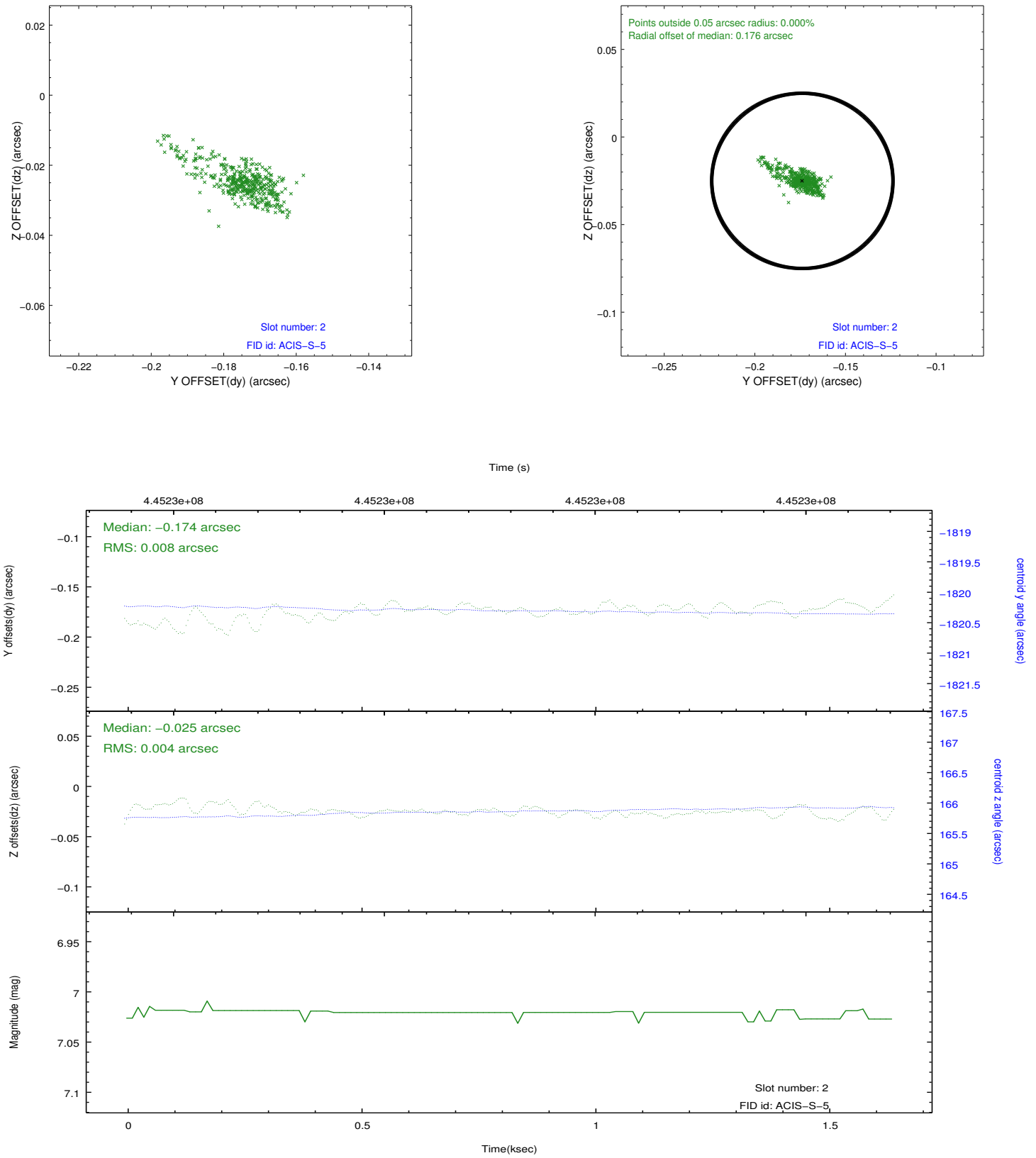
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.5779000121355

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.