

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13368 - L2 Version 1
Chandra X-Ray Center

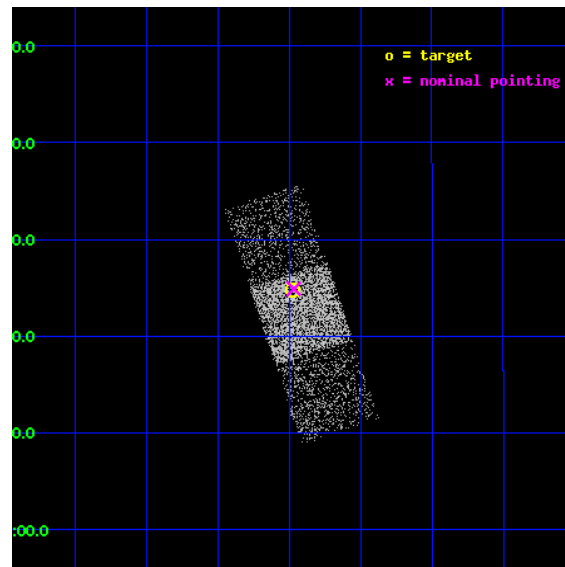
L2 Processing Date : Feb 9 2012

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1 Front

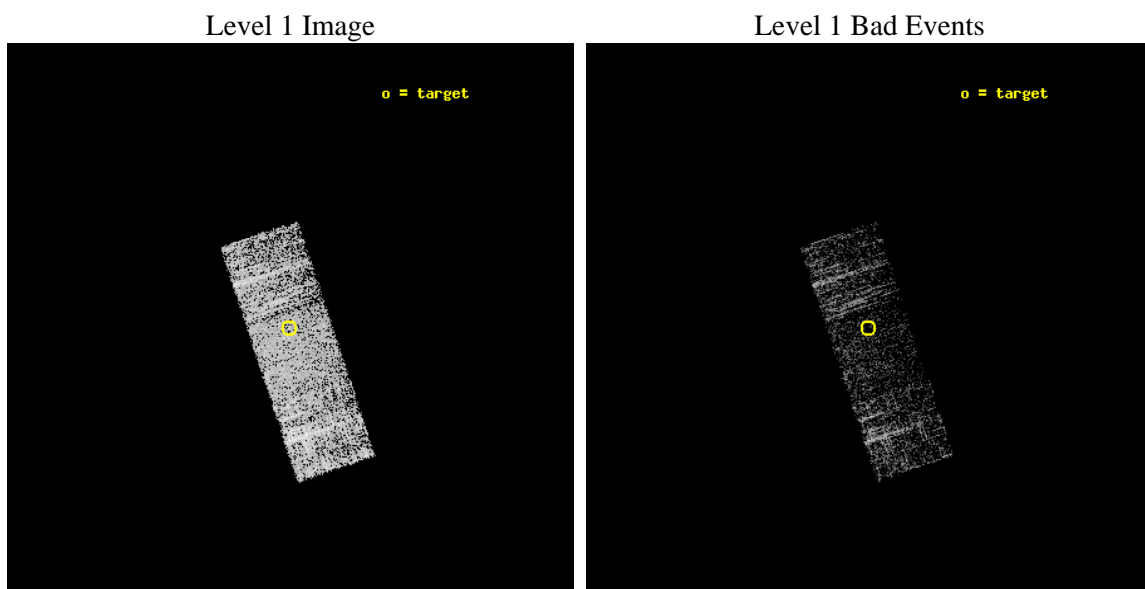
seq_num	702575	Sequence number
obs_id	13368	Observation id
title	A Large, Economical Snapshot Survey of the Most-Luminous Quasars from the Sloan Digital Sky Survey	Proposal title
observer	Prof. Gordon Garmire	Principal investigator
object	SDSS J1143+0524	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	175.99375	Observer's specified target RA [deg]
dec_targ	5.412472	Observer's specified target Dec [deg]
ra_nom	175.9917645437	Nominal RA [deg]
dec_nom	5.4148887424536	Nominal Dec [deg]
roll_nom	71.525757593774	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	6622	Number of level 2 events



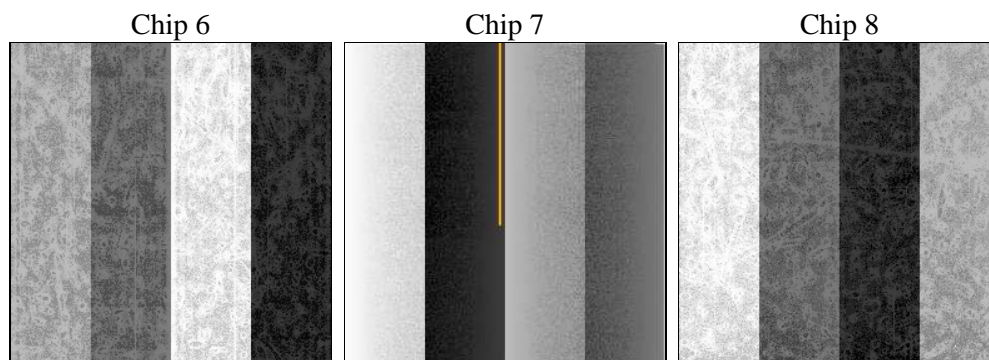
2 OBI

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]
caldsver	4.4.7	 	ontime6	1577.9000121355	Sum of GTIs [s]
date	2012-02-10T01:10:28	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	31161	Number of level 1 events

2.1.4 Events

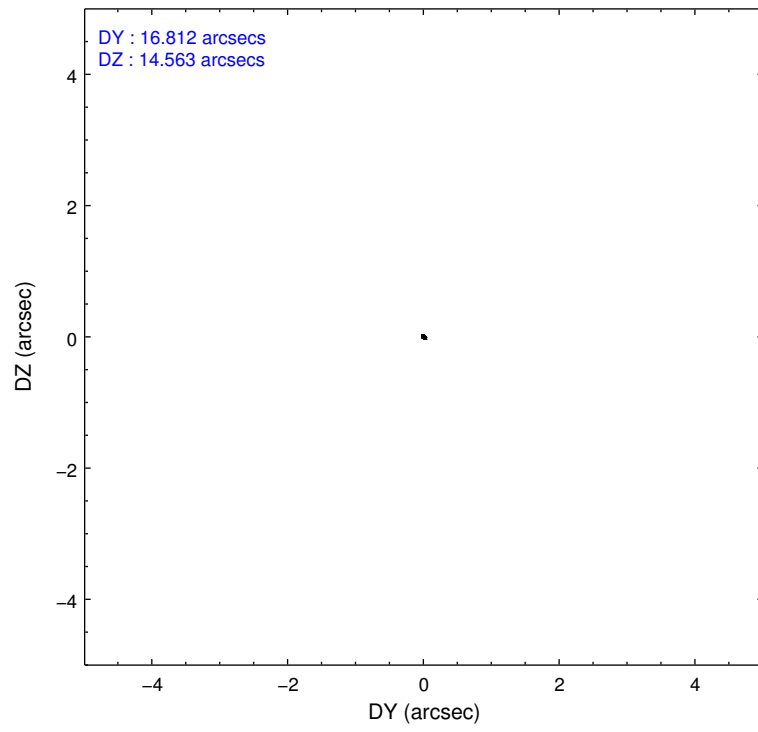
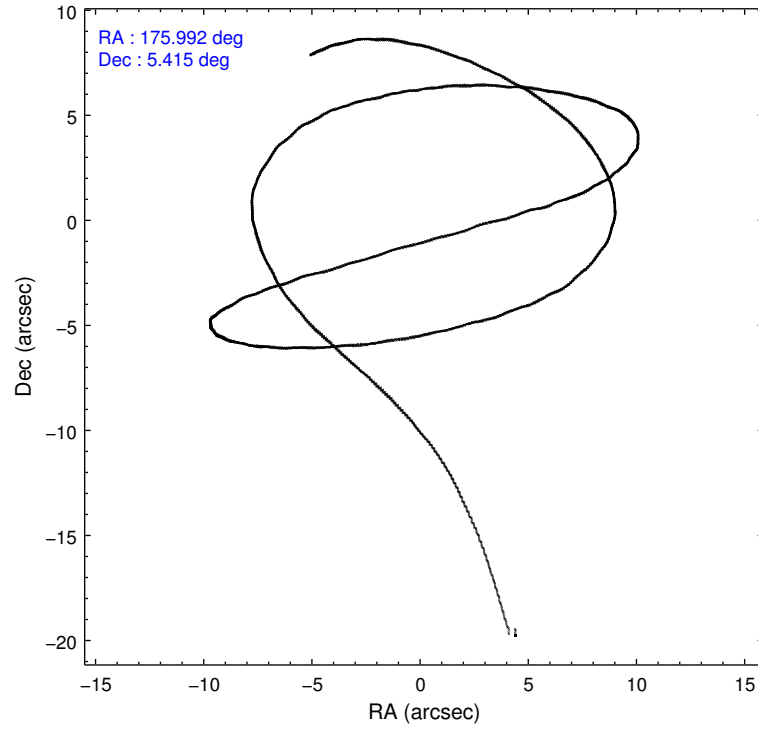
	ccd 6	ccd 7	ccd 8
level 1 events	9154	9876	12131
rejected events	8102	5089	8683
rejected %	88%	51%	71%

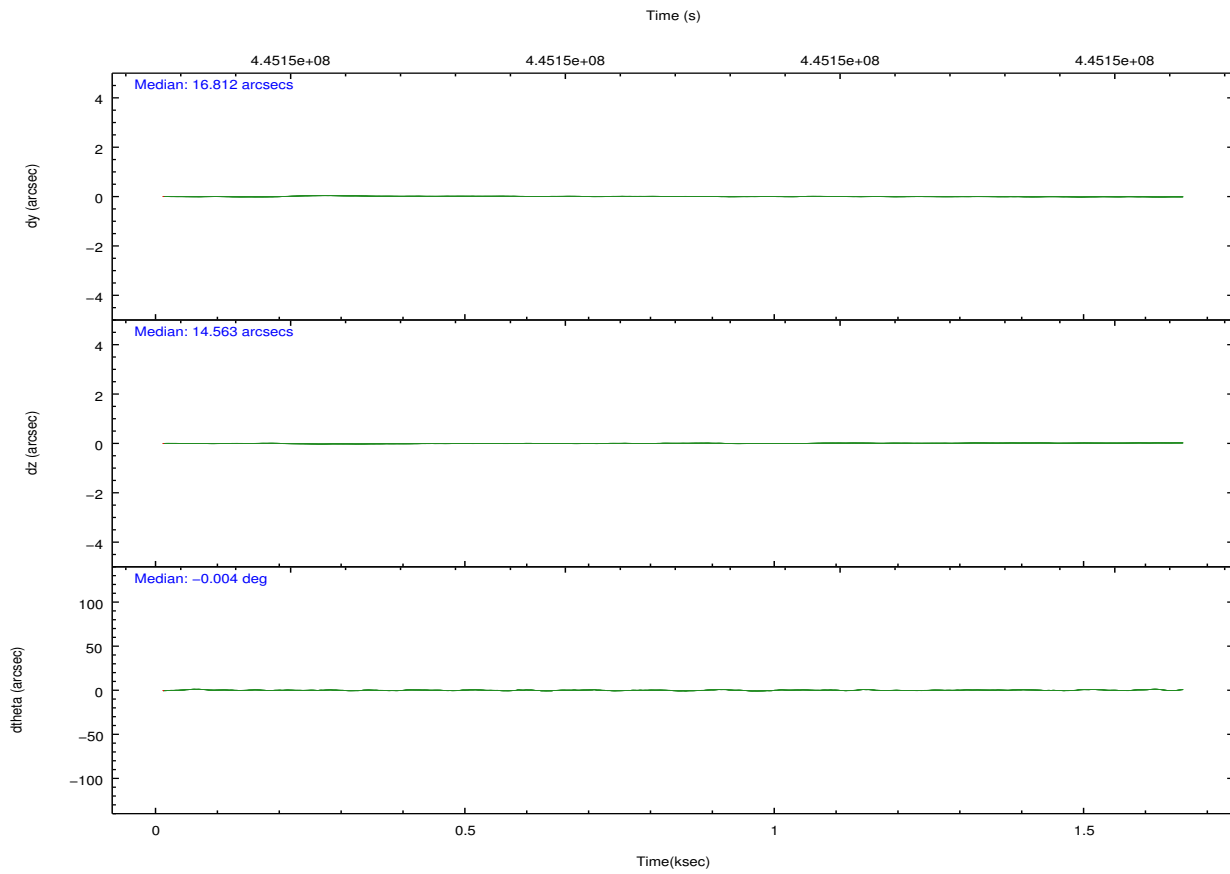
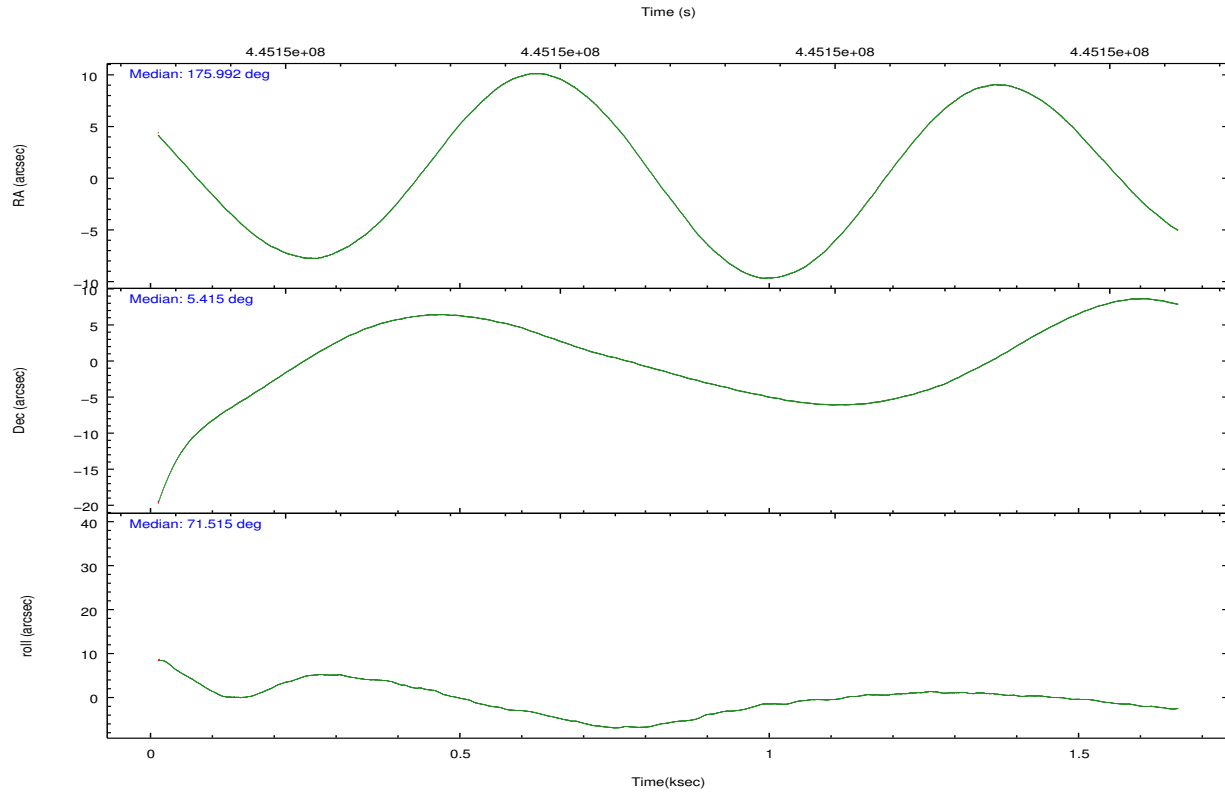
	ccd 6	ccd 7	ccd 8
grade 0 events	385	505	969
	4%	5%	7%
grade 1 events	2	8	8
	0%	0%	0%
grade 2 events	236	991	813
	2%	10%	6%
grade 3 events	108	420	372
	1%	4%	3%
grade 4 events	112	435	332
	1%	4%	2%
grade 5 events	380	1009	614
	4%	10%	5%
grade 6 events	213	2444	971
	2%	24%	8%
grade 7 events	7718	4064	8052
	84%	41%	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	175.997688	175.9917645437023	Subarray requested	NONE	NONE
[deg] Pointing Dec	5.388109	5.414888742453553	Alternating exposures requested	N	N
[deg] Pointing Roll	71.368463	71.52575759377426	[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)	445153024.184000	445151739.77497			
Observation start date	2012-02-09T05:35:58	2012-02-09T05:15:39			
[s] Observation end time (MET)	445154524.184000	445155488.71267			
Observation end date	2012-02-09T06:00:58	2012-02-09T06:18:08			
Read mode	TIMED	TIMED			

2.3 Aspect



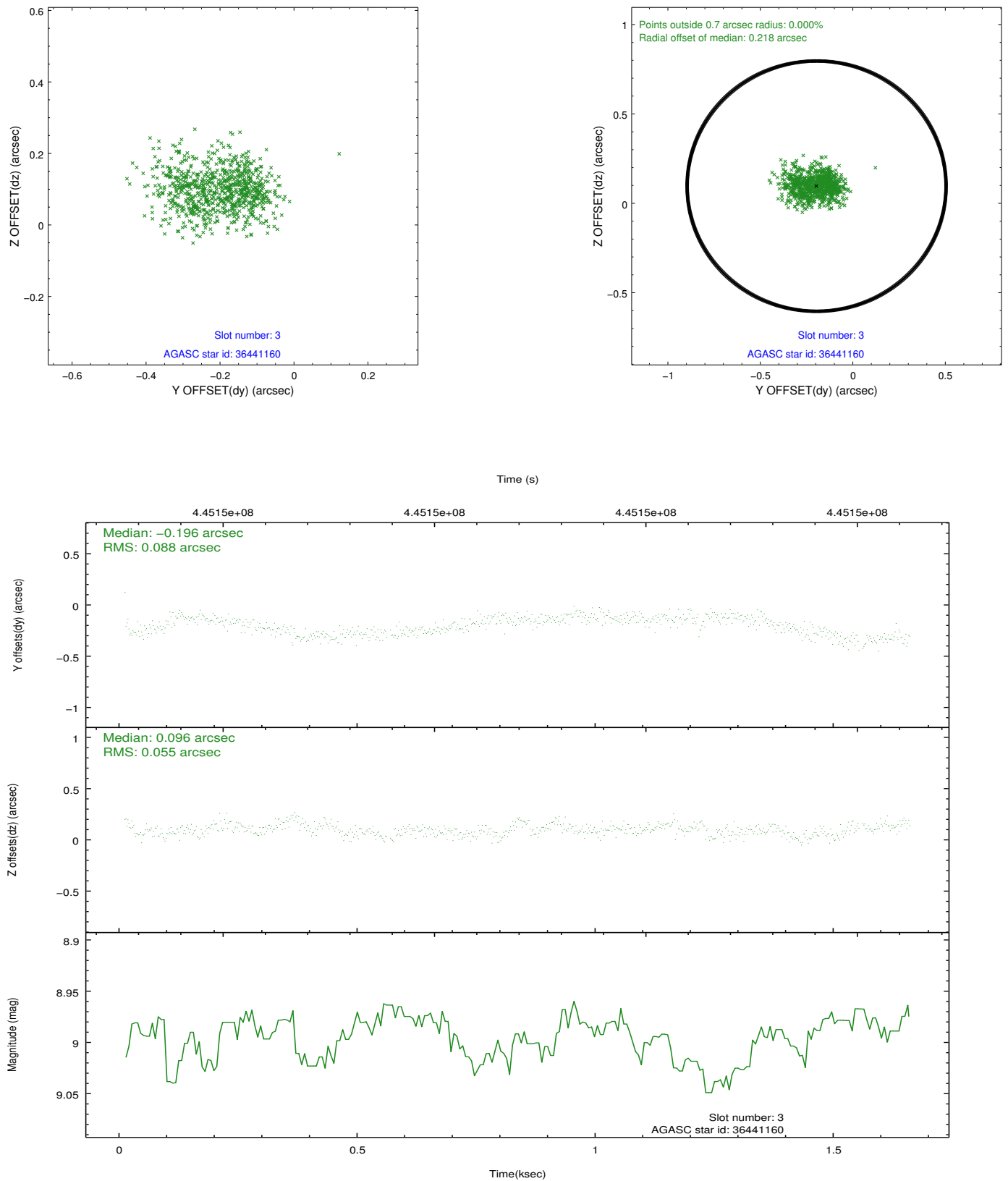


Slot Statistics

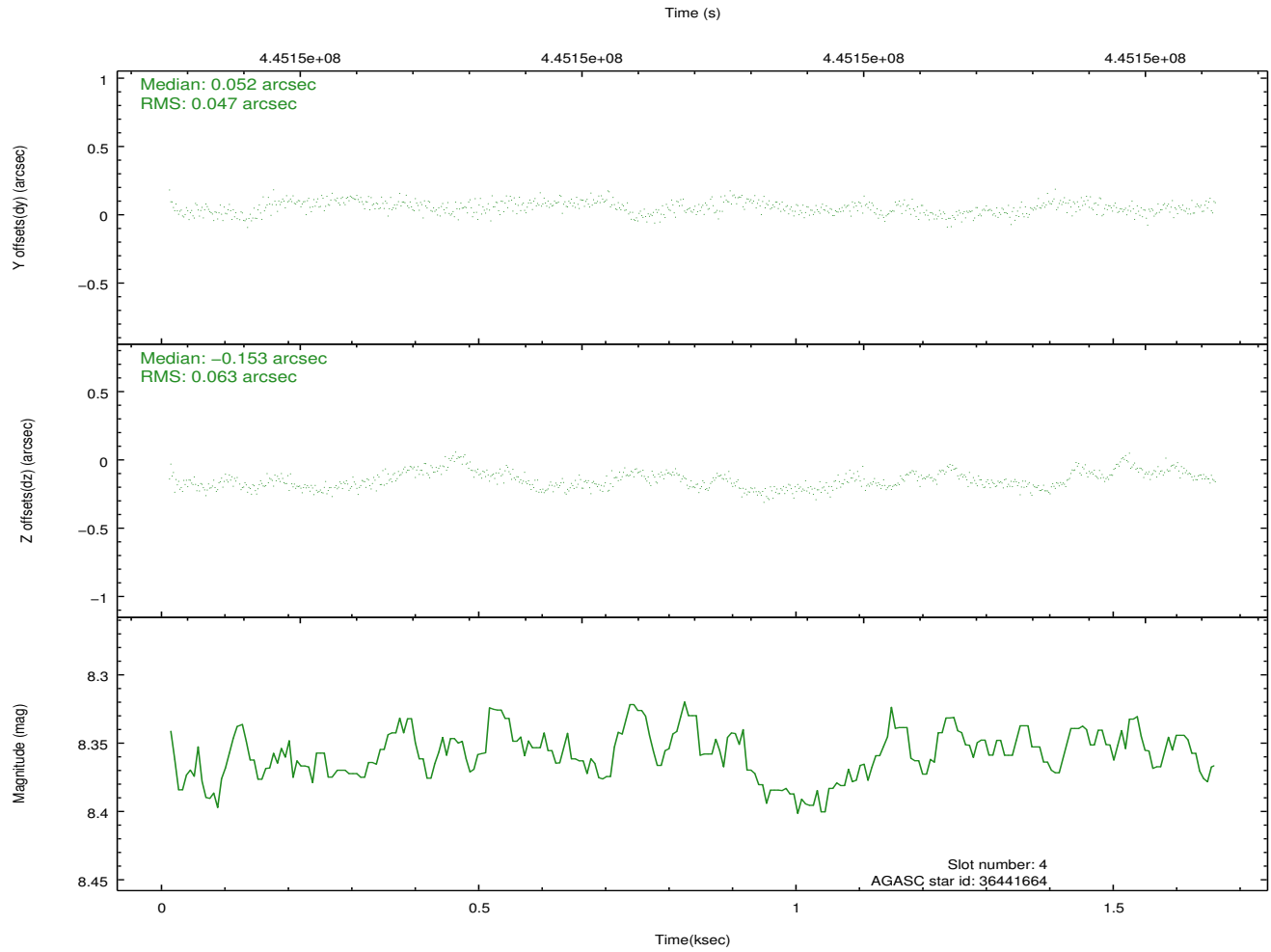
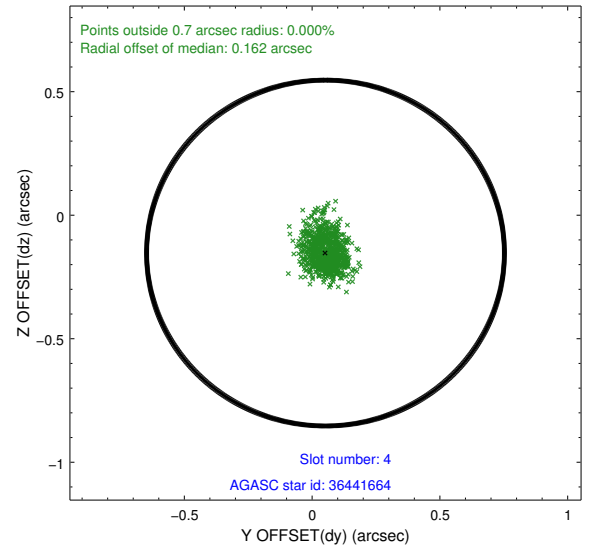
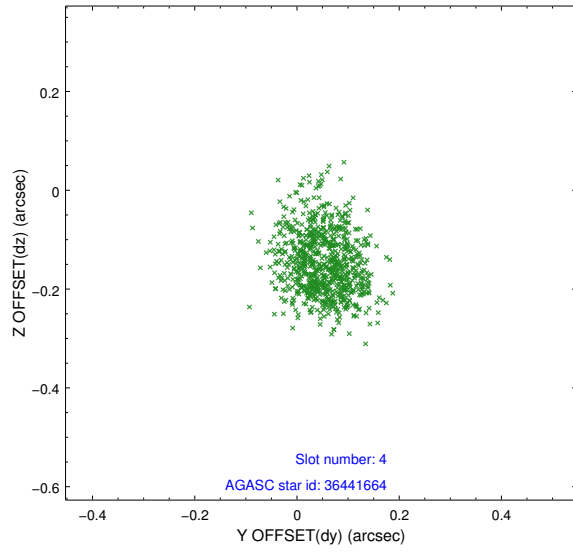
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.98	403	-0.117	-0.029	0.007	0.011	0.000000	0.000000	-769.95	-1735.91
1	FID	ACIS-S-4	7.07	403	0.241	0.065	0.005	0.009	0.000000	0.000000	2141.85	168.52
2	FID	ACIS-S-5	7.10	403	-0.155	-0.026	0.007	0.012	0.000000	0.000000	-1817.71	166.65
3	GUIDE	36441160	8.99	799	-0.196	0.096	0.109	0.173	176.279607	5.675539	1303.54	-626.19
4	GUIDE	36441664	8.36	803	0.052	-0.153	0.082	0.138	175.614508	5.505443	-36.57	1435.25
5	GUIDE	36443944	8.76	805	-0.029	0.122	0.104	0.167	176.714094	5.530749	1308.51	-2265.81
6	GUIDE	36444312	8.57	804	-0.022	0.113	0.083	0.127	176.420190	5.500270	869.50	-1307.32
7	GUIDE	36440880	9.76	804	0.202	-0.201	0.179	0.284	175.439956	5.193715	-1300.02	1669.32

2.4 Star Slots

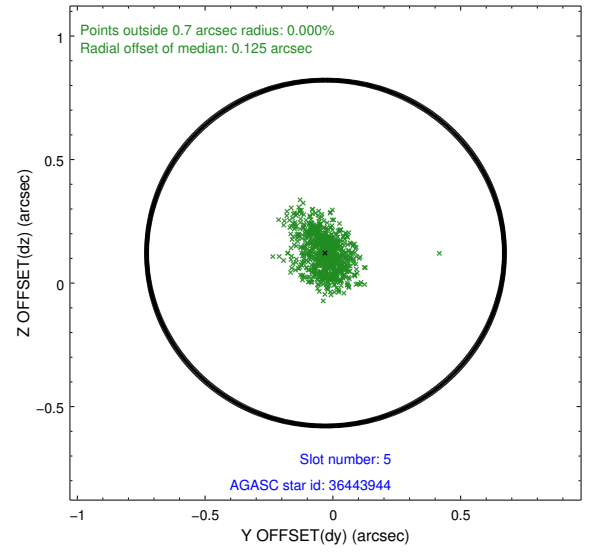
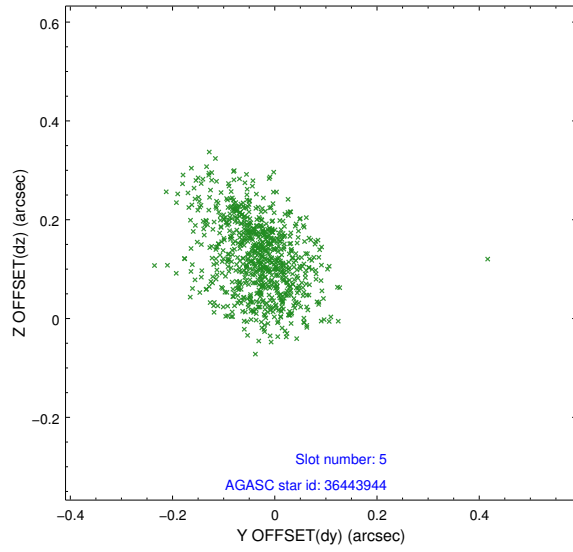
2.4.1 Slot 3



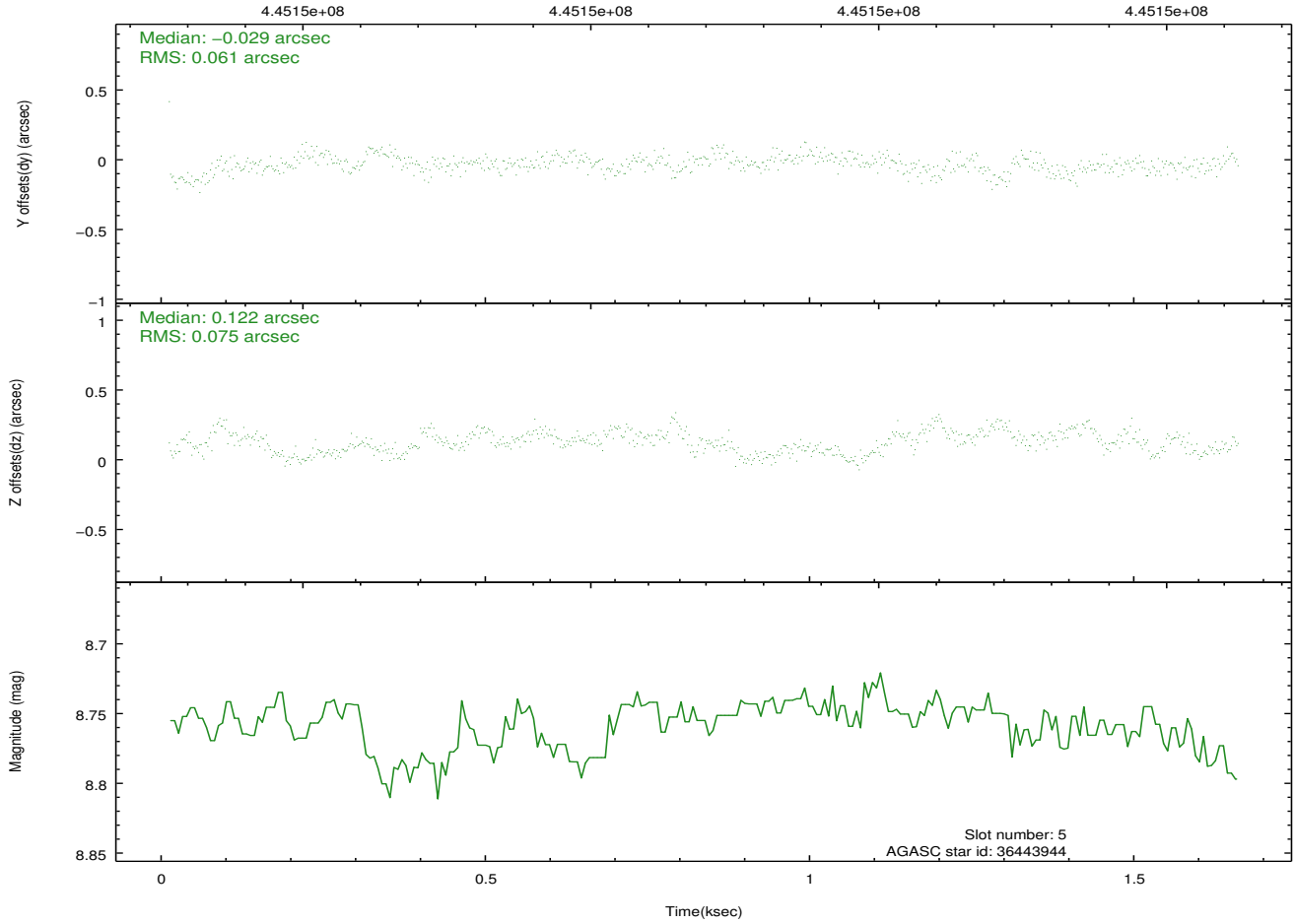
2.4.2 Slot 4



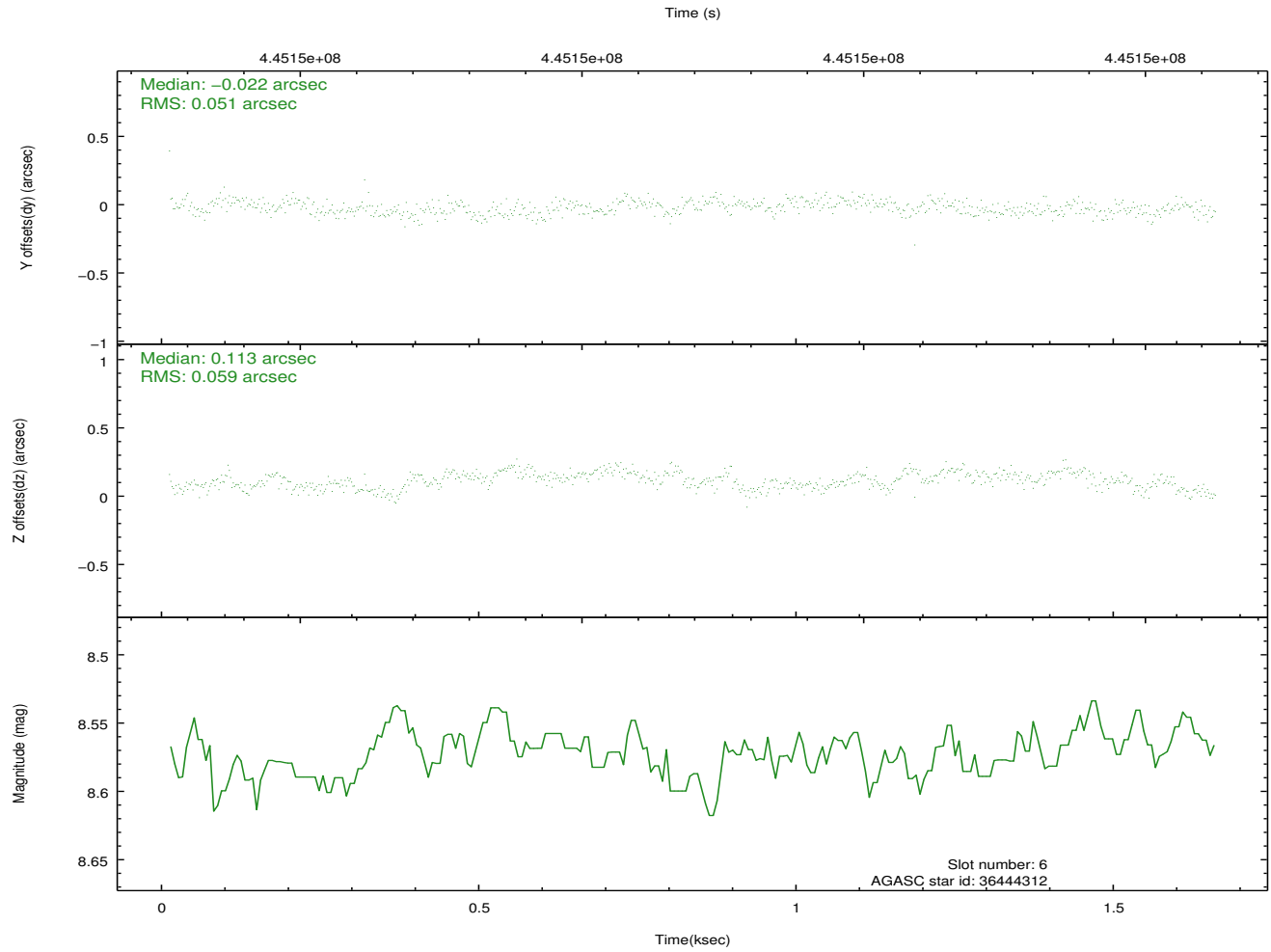
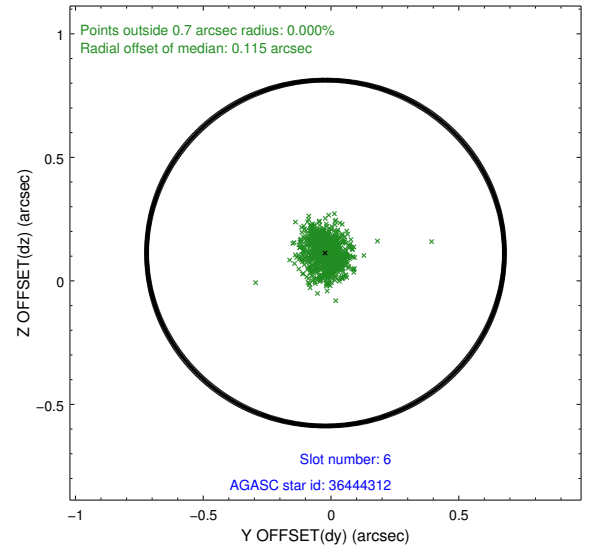
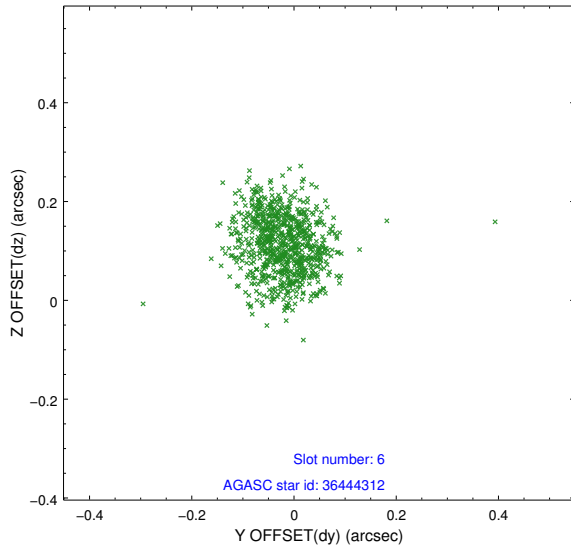
2.4.3 Slot 5



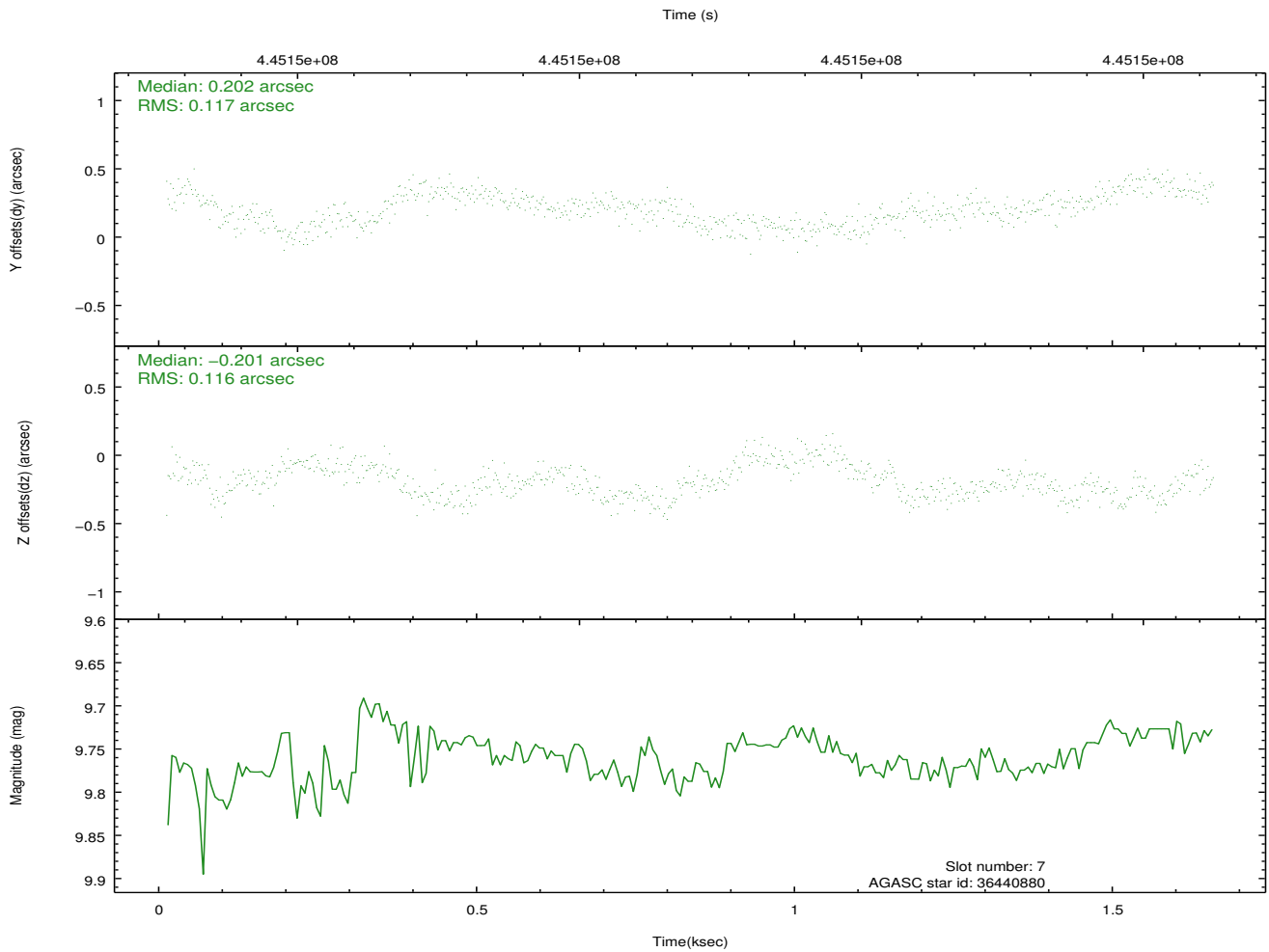
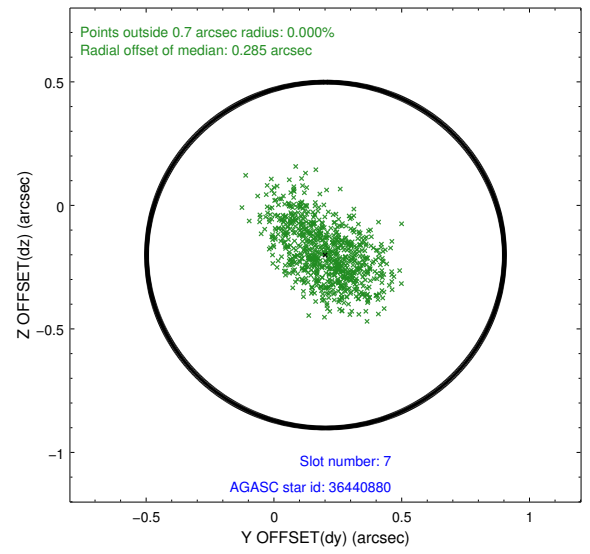
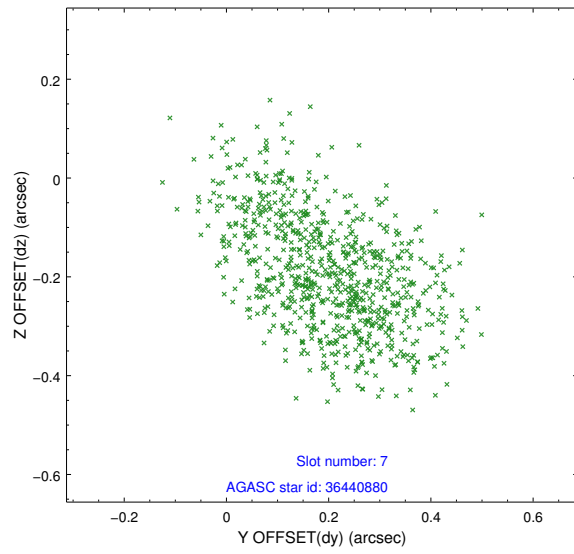
Time (s)



2.4.4 Slot 6

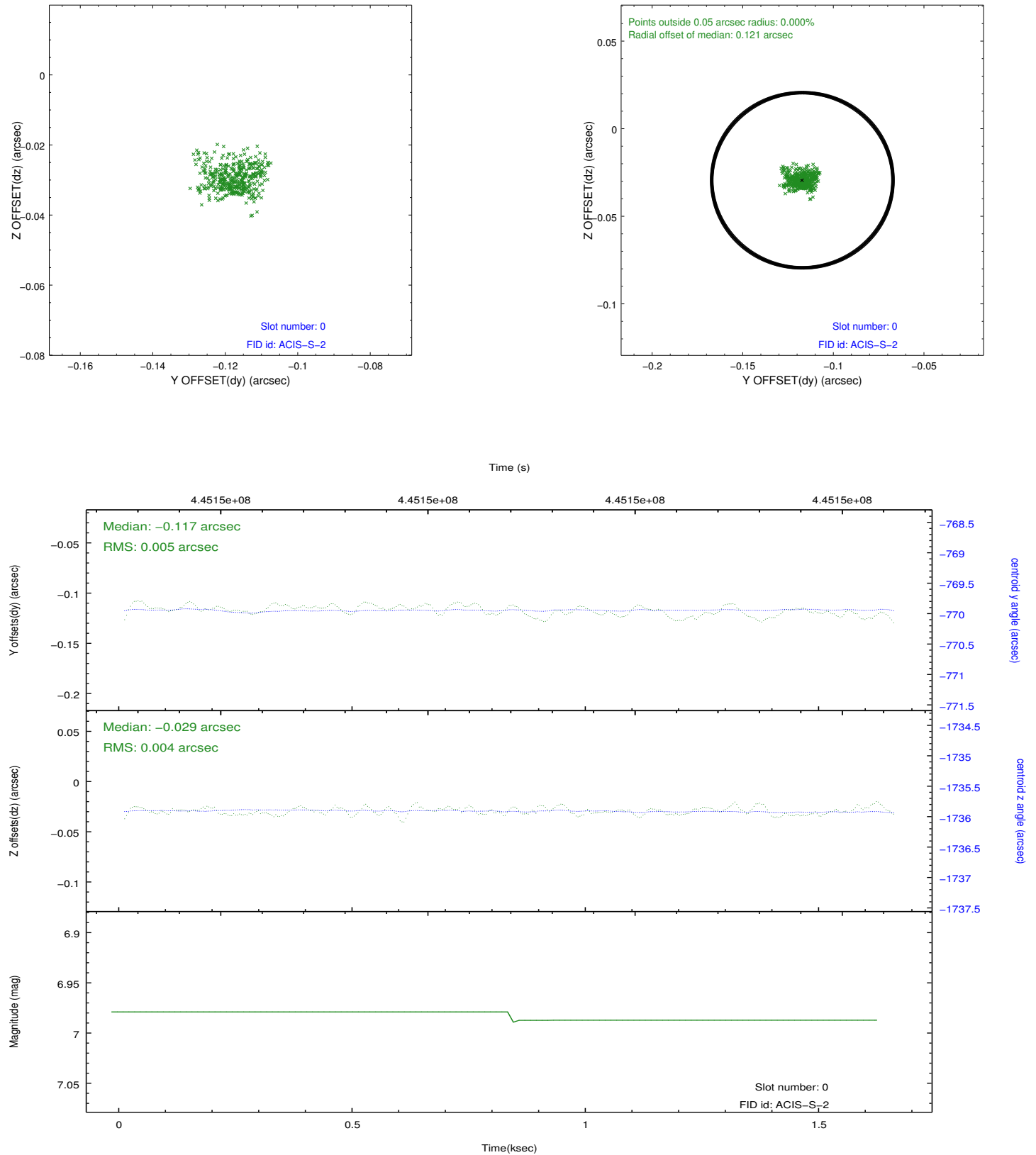


2.4.5 Slot 7

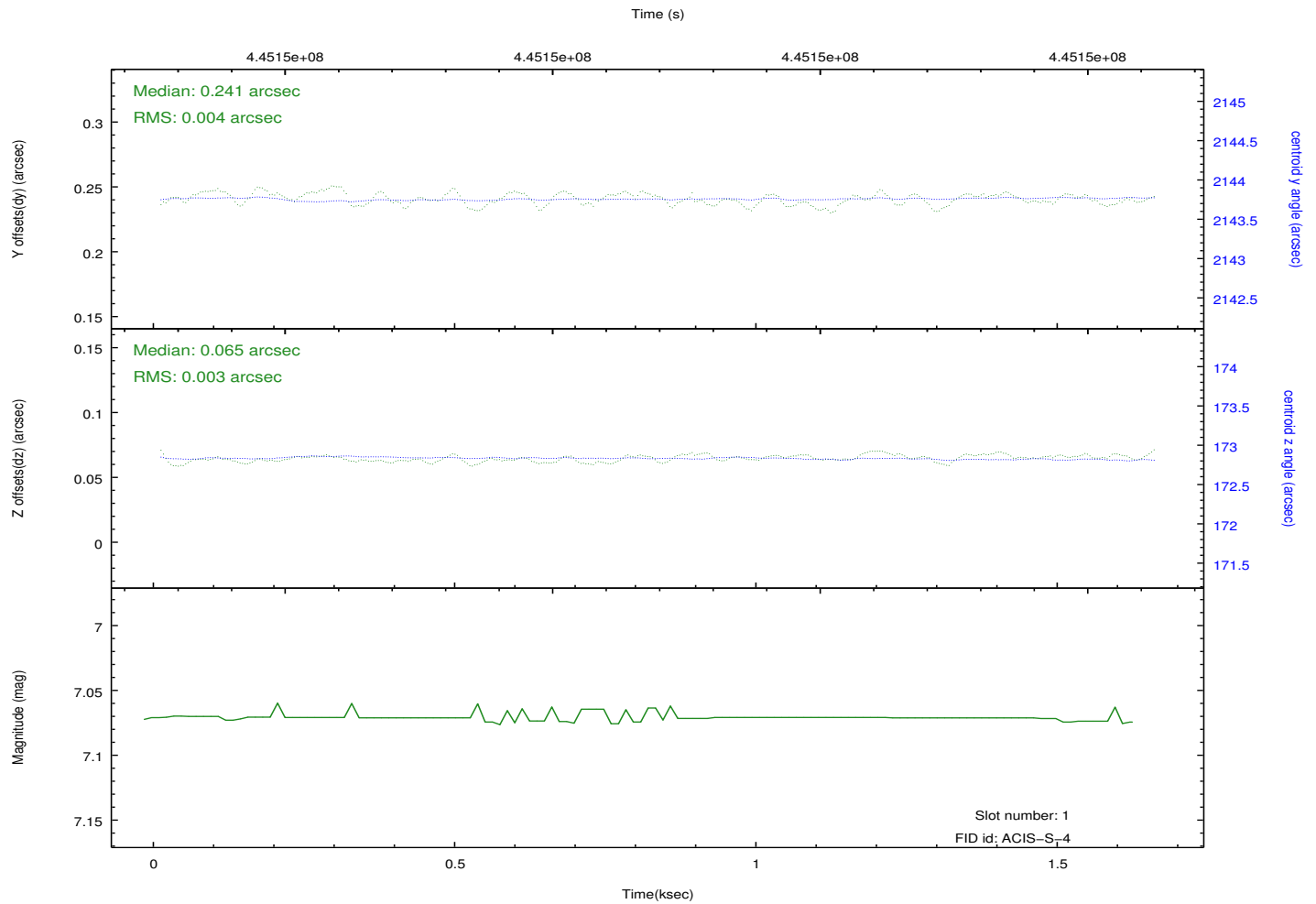
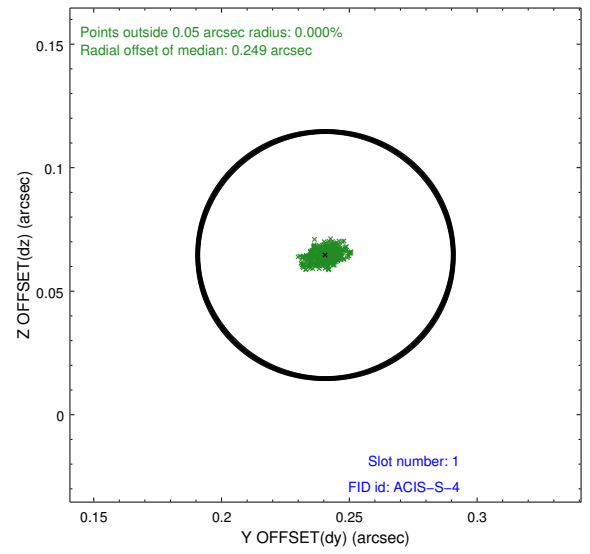
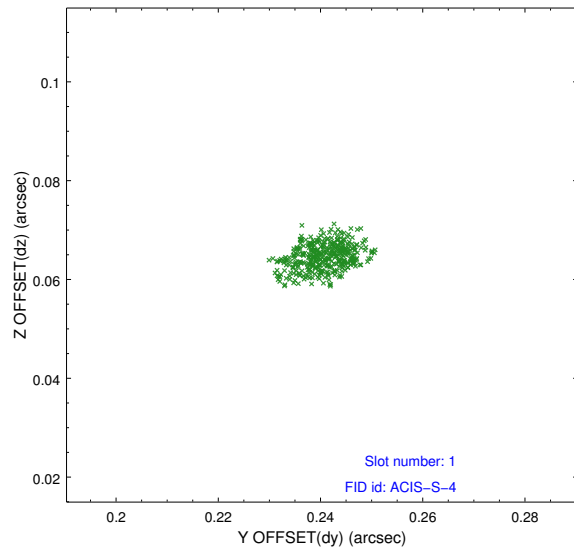


2.5 FID Slots

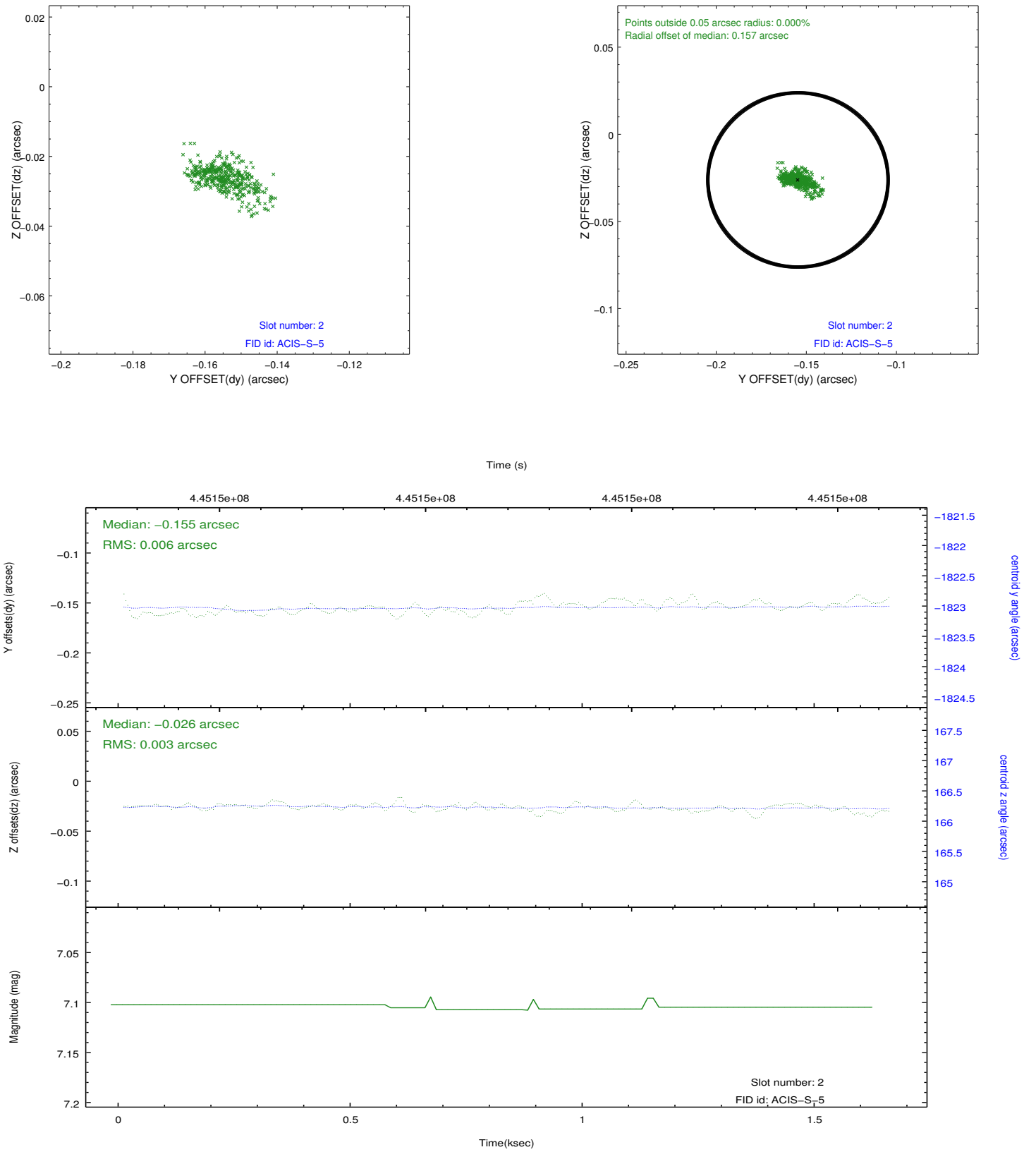
2.5.1 Slot 0



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)	2012.02.10
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.