

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 896 - L2 Version 7
Chandra X-Ray Center

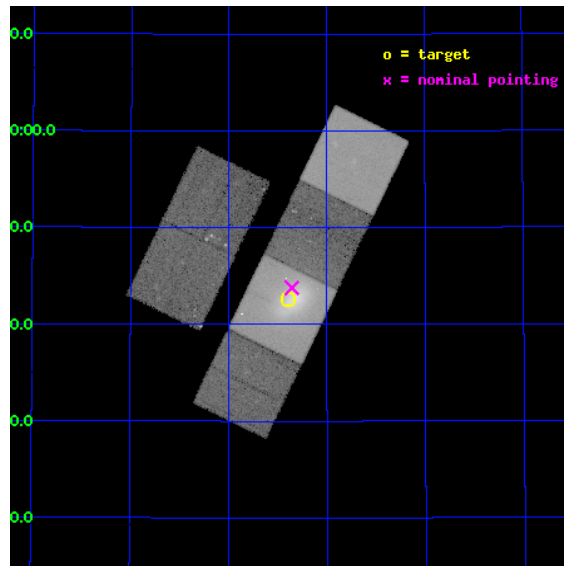
L2 Processing Date : Nov 7 2012

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1 Front

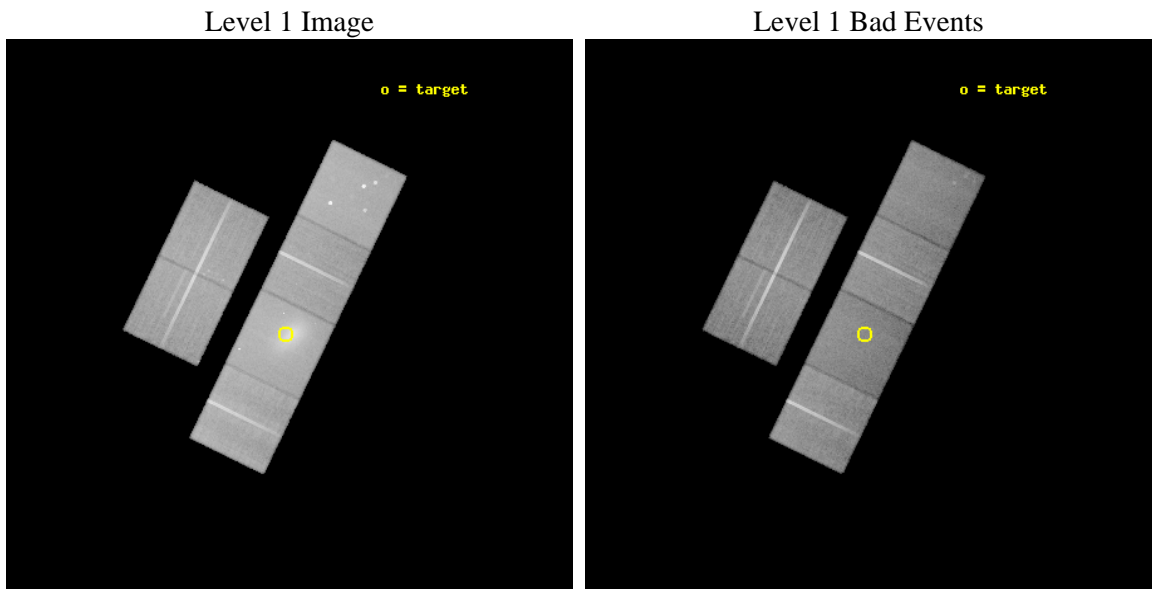
seq_num	800072	Sequence number
obs_id	896	Observation id
title	X-RAY STRUCTURE OF LENSING CLUSTERS	Proposal title
observer	Dr. John Houck	Principal investigator
object	ABELL 2219	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	250.1	Observer's specified target RA [deg]
dec_targ	46.71	Observer's specified target Dec [deg]
ra_nom	250.08907028944	Nominal RA [deg]
dec_nom	46.729778283182	Nominal Dec [deg]
roll_nom	115.92086407115	Nominal Roll [deg]
revision	7	Processing version of data
ontime	42838.400039881	Sum of GTIs [s]
livetime	42295.954424389	Livetime [s]
ontime2	42838.400039881	Sum of GTIs [s]
ontime3	42838.400039881	Sum of GTIs [s]
ontime5	42838.400039881	Sum of GTIs [s]
ontime6	42838.400039881	Sum of GTIs [s]
ontime7	42838.400039881	Sum of GTIs [s]
ontime8	42835.159049734	Sum of GTIs [s]
l2events	578326	Number of level 2 events



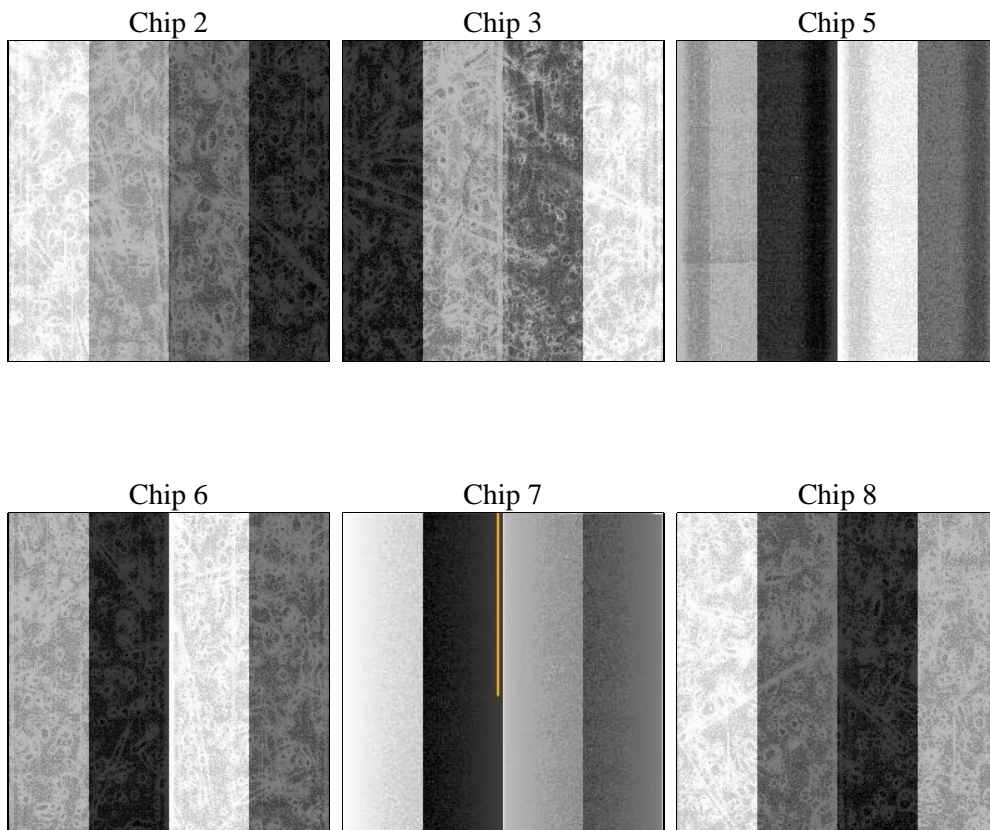
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	42500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	42838.400039881	Sum of GTIs [s]
caldbver	4.5.2	 	ontime2	42838.400039881	Sum of GTIs [s]
date	2012-11-07T18:40:29	Date and time of file creation	ontime3	42838.400039881	Sum of GTIs [s]
revision	7	Processing version of data	ontime5	42838.400039881	Sum of GTIs [s]
			ontime6	42838.400039881	Sum of GTIs [s]
			ontime7	42838.400039881	Sum of GTIs [s]
			ontime8	42835.159049734	Sum of GTIs [s]
			l1events	2227098	Number of level 1 events

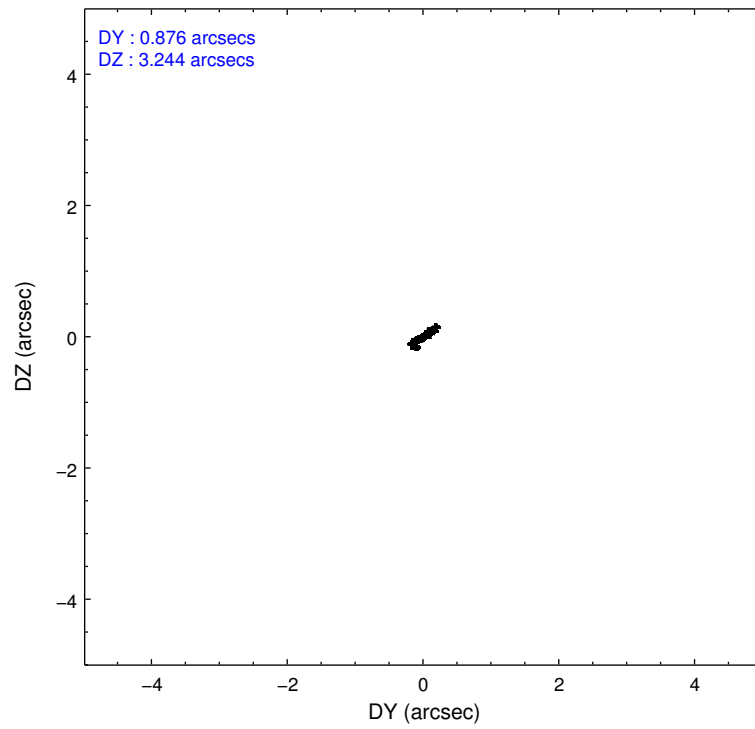
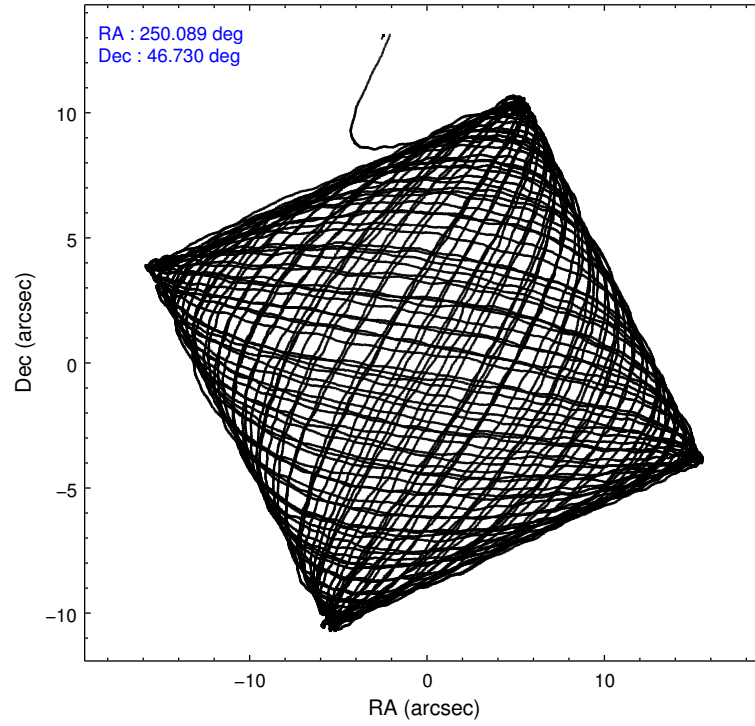
2.1.4 Events

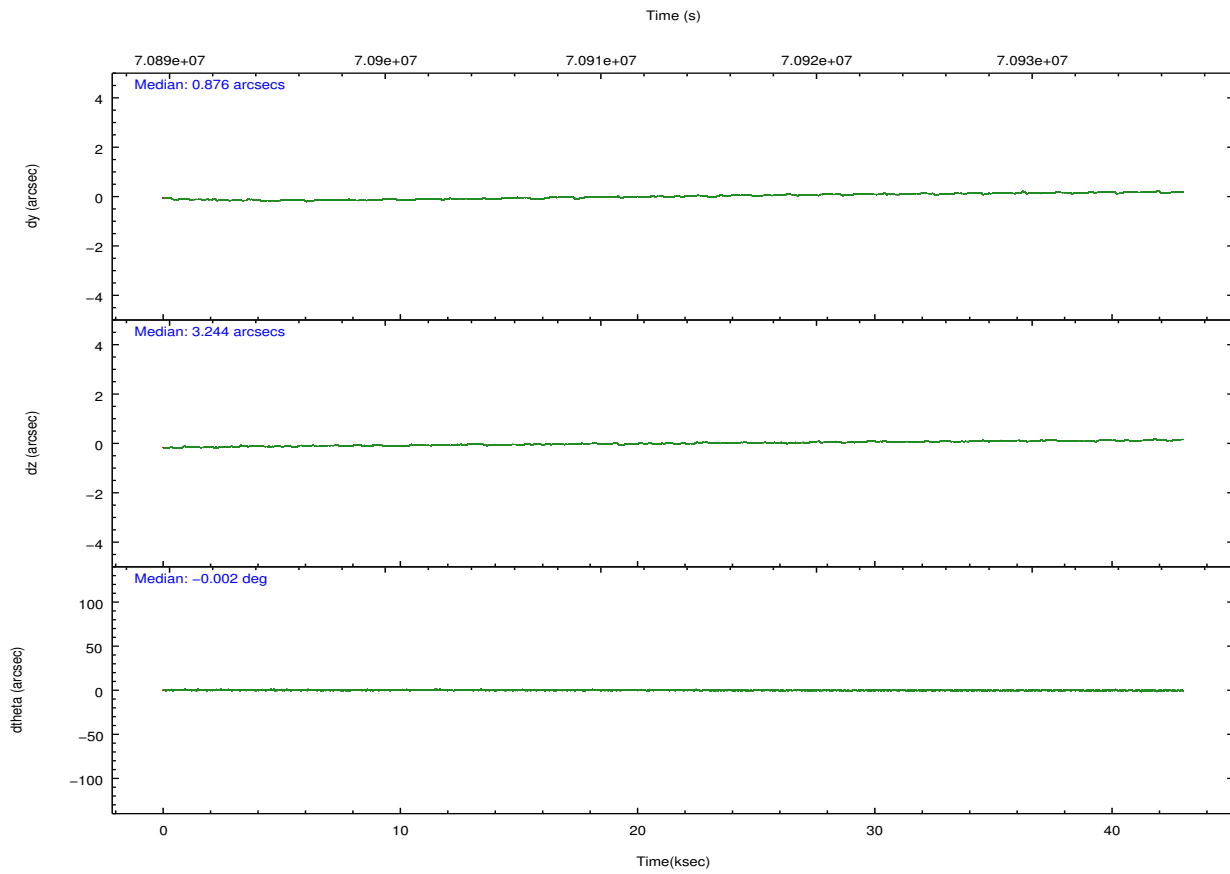
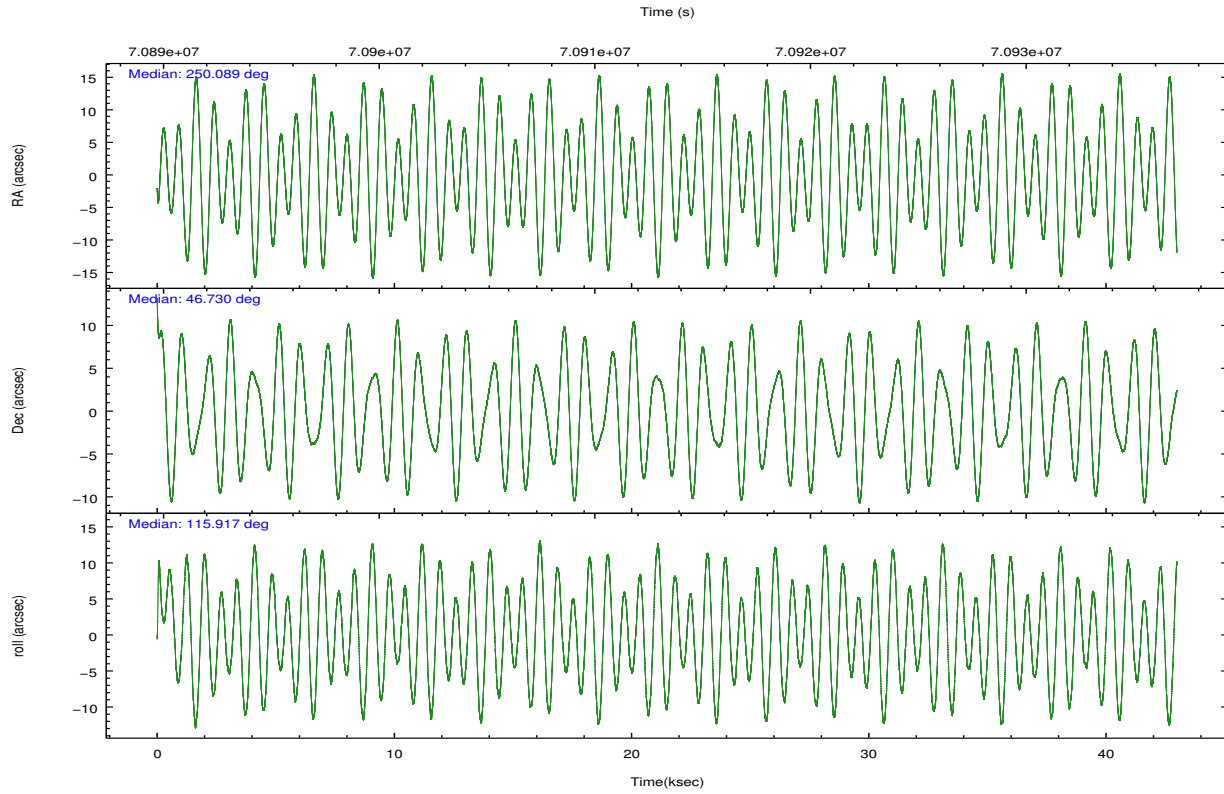
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	320761	309256	406291	317157	494006	379627	grade 0 events	14381	14627	32401	17967	59946	23832
rejected events	287599	276773	211317	279014	205622	306493		4%	4%	7%	5%	12%	6%
rejected %	89%	89%	52%	87%	41%	80%	grade 1 events	126	154	629	136	352	211
								0%	0%	0%	0%	0%	0%
							grade 2 events	6917	6049	52749	6799	65030	15506
								2%	1%	12%	2%	13%	4%
							grade 3 events	3262	3235	8211	3572	29657	8032
								1%	1%	2%	1%	6%	2%
							grade 4 events	3079	3221	7925	3474	29280	7439
								0%	1%	1%	1%	5%	1%
							grade 5 events	9327	10252	29999	11557	34814	14440
								2%	3%	7%	3%	7%	3%
							grade 6 events	5528	5352	93705	6335	104486	18330
								1%	1%	23%	1%	21%	4%
							grade 7 events	278141	266366	180672	267317	170441	291837
								86%	86%	44%	84%	34%	76%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	250.122269	250.0890702894366	Subarray requested	NONE	NONE
[deg] Pointing Dec	46.714405	46.72977828318222	Alternating exposures requested	N	N
[deg] Pointing Roll	115.740073	115.9208640711471	[s] Primary exposure time	0.000000	3.2
[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)	70892345.184000	70891044.186727			
Observation start date	2000-03-31T12:18:01	2000-03-31T11:57:24			
[s] Observation end time (MET)	70934845.184000	70935816.700865			
Observation end date	2000-04-01T00:06:21	2000-04-01T00:23:36			
Read mode	TIMED	TIMED			

2.3 Aspect



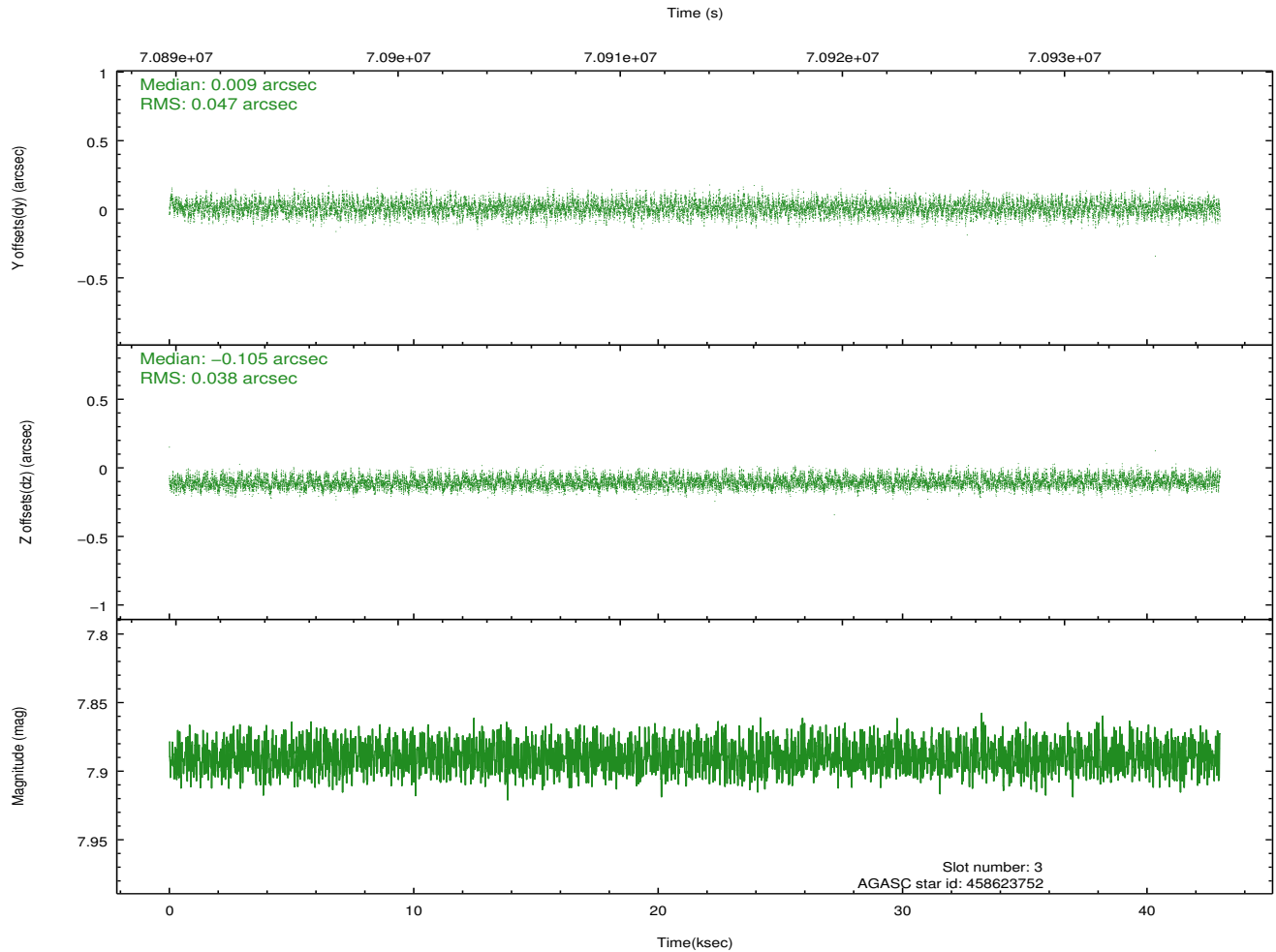
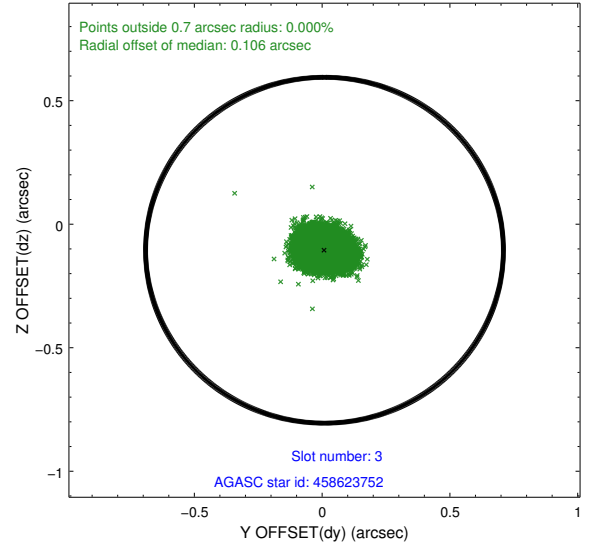
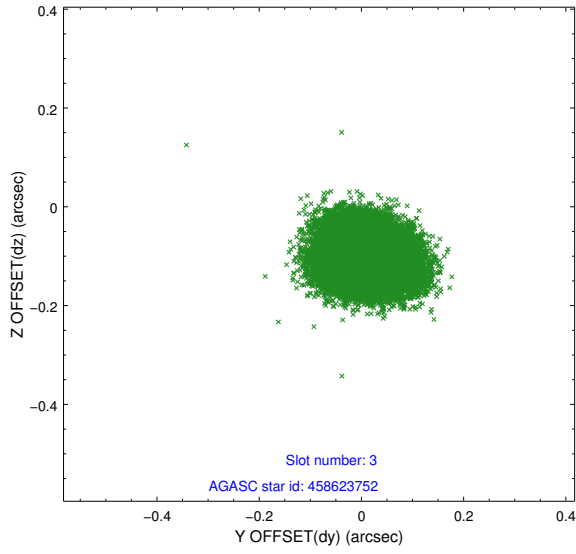


Slot Statistics

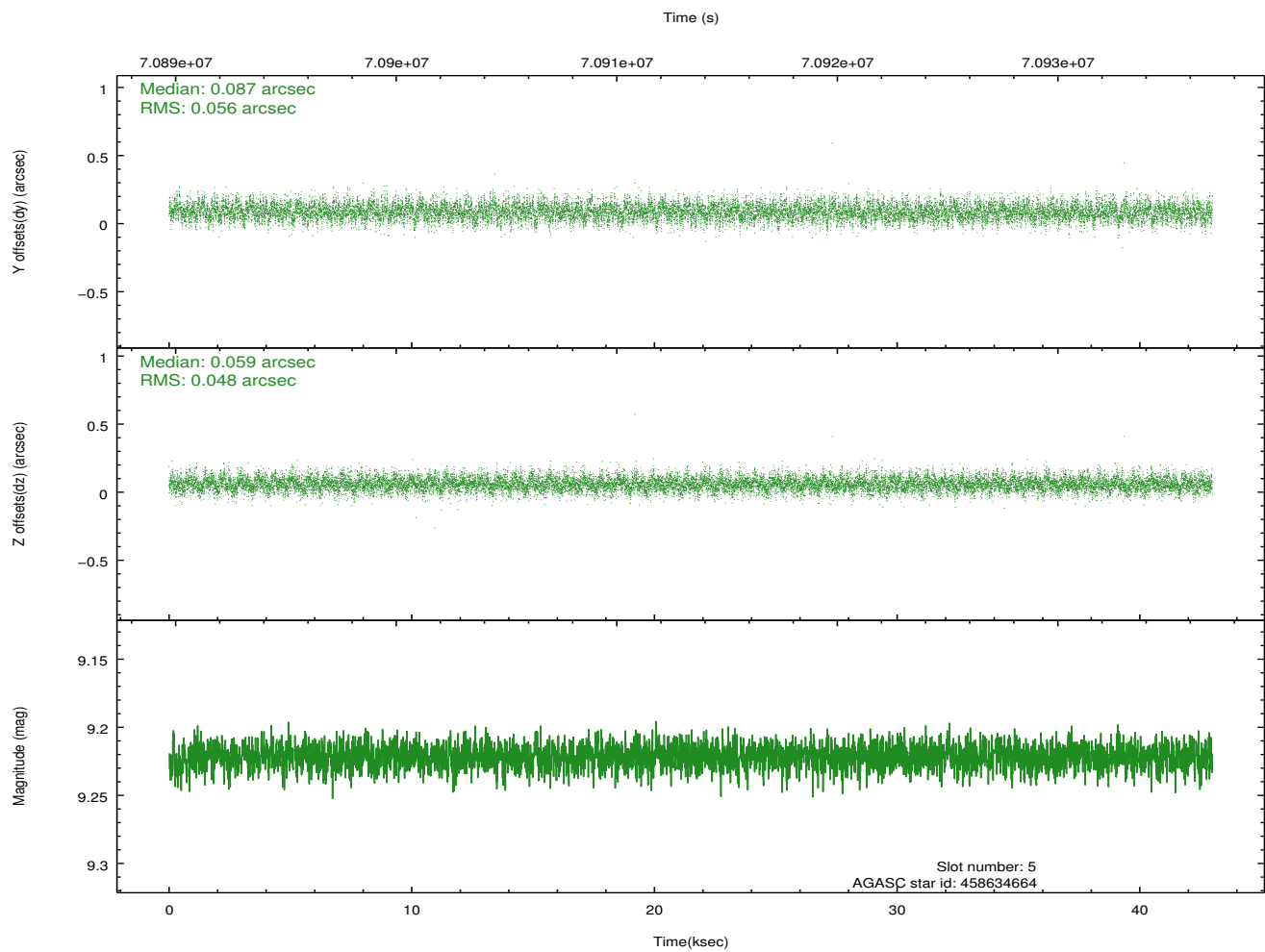
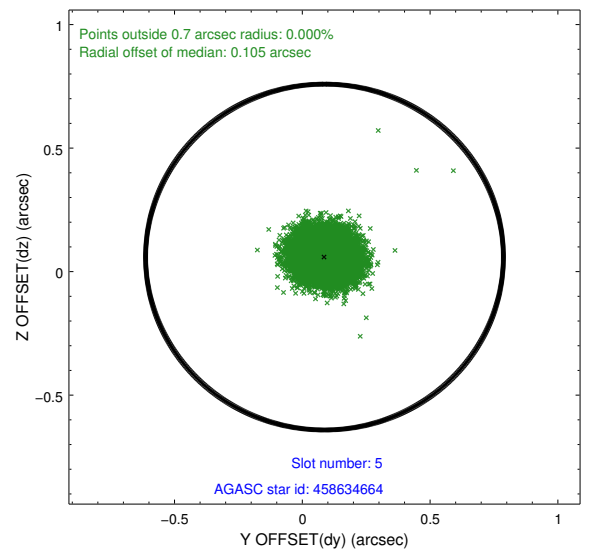
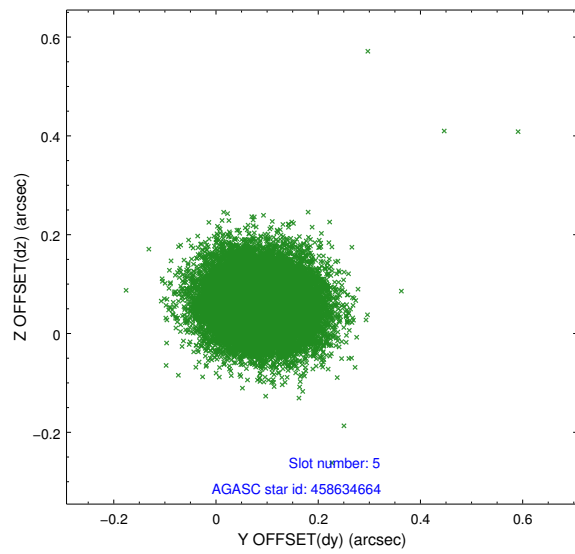
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	10484	-0.002	-0.012	0.007	0.012	0.000000	0.000000	-753.52	-1724.24
1	FID	ACIS-S-4	7.21	10480	0.002	0.004	0.006	0.010	0.000000	0.000000	2159.81	184.17
2	FID	ACIS-S-5	7.24	10484	-0.031	0.016	0.007	0.012	0.000000	0.000000	-1806.33	177.97
3	GUIDE	458623752	7.89	20959	0.009	-0.105	0.065	0.103	249.631548	46.393849	-507.07	1596.52
4	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	458634664	9.22	20959	0.087	0.059	0.078	0.127	251.009501	46.332103	-2186.21	-1394.68
6	GUIDE	458621344	9.95	20894	-0.113	0.072	0.110	0.177	250.294958	47.285824	1670.11	-1273.73
7	GUIDE	458629408	9.82	20881	0.015	-0.025	0.099	0.161	250.557292	47.098807	786.36	-1563.00

2.4 Star Slots

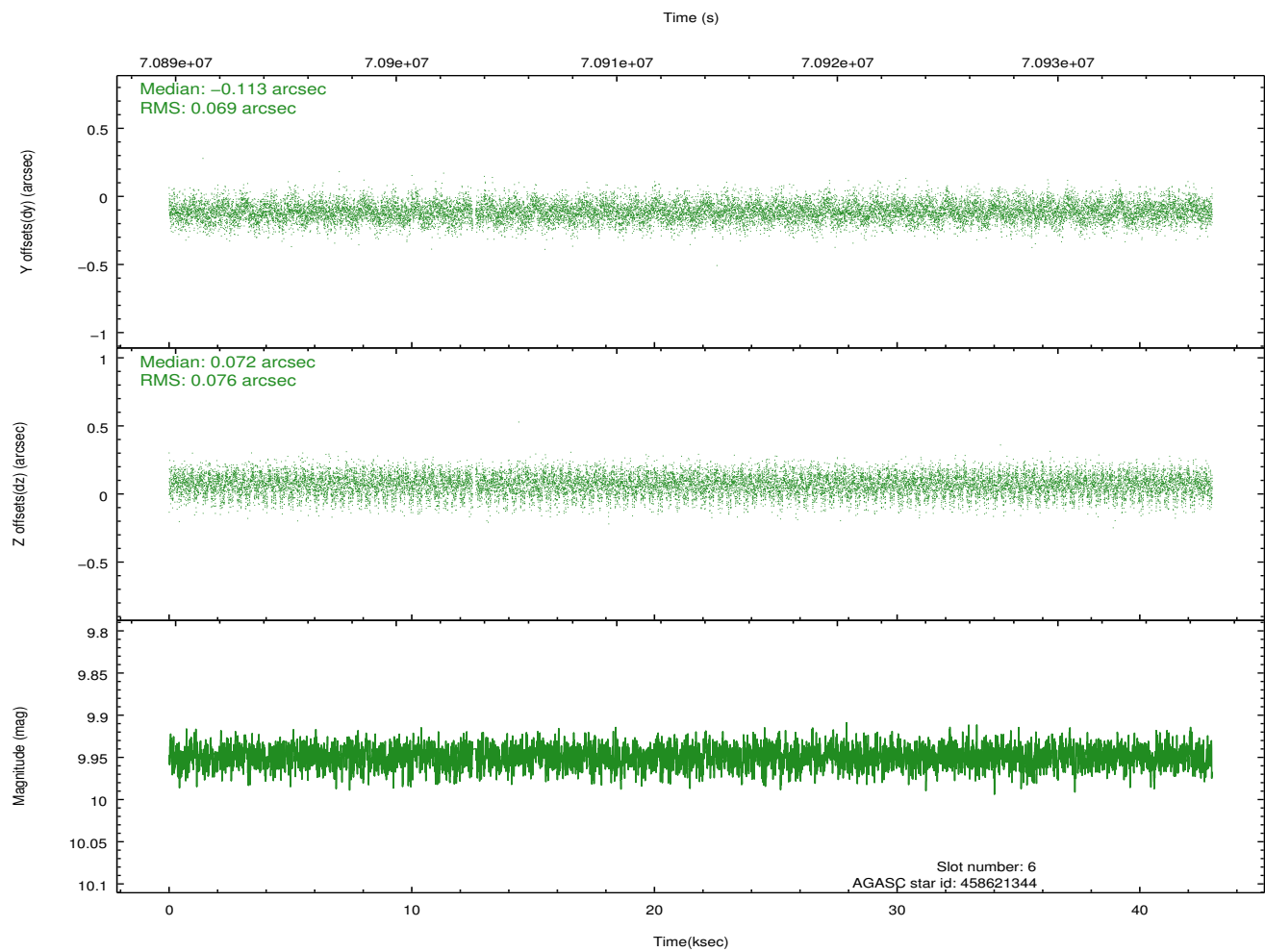
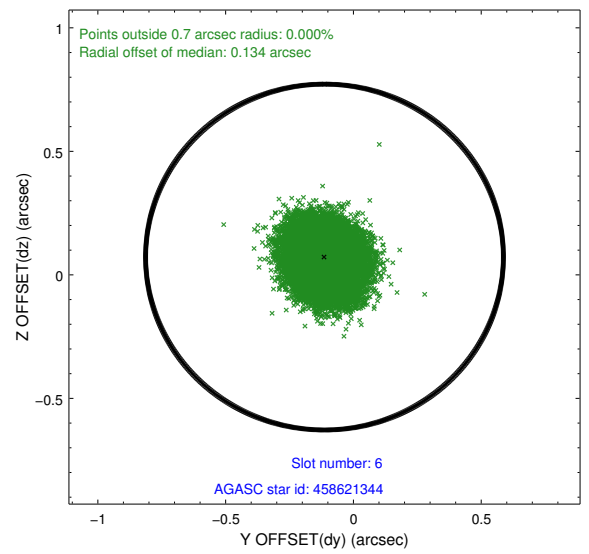
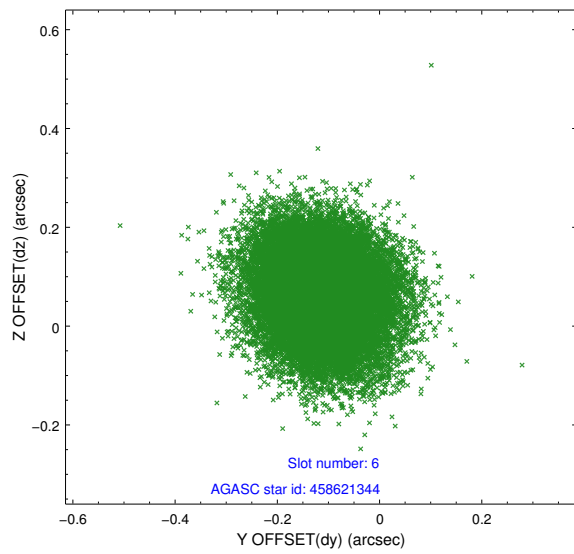
2.4.1 Slot 3



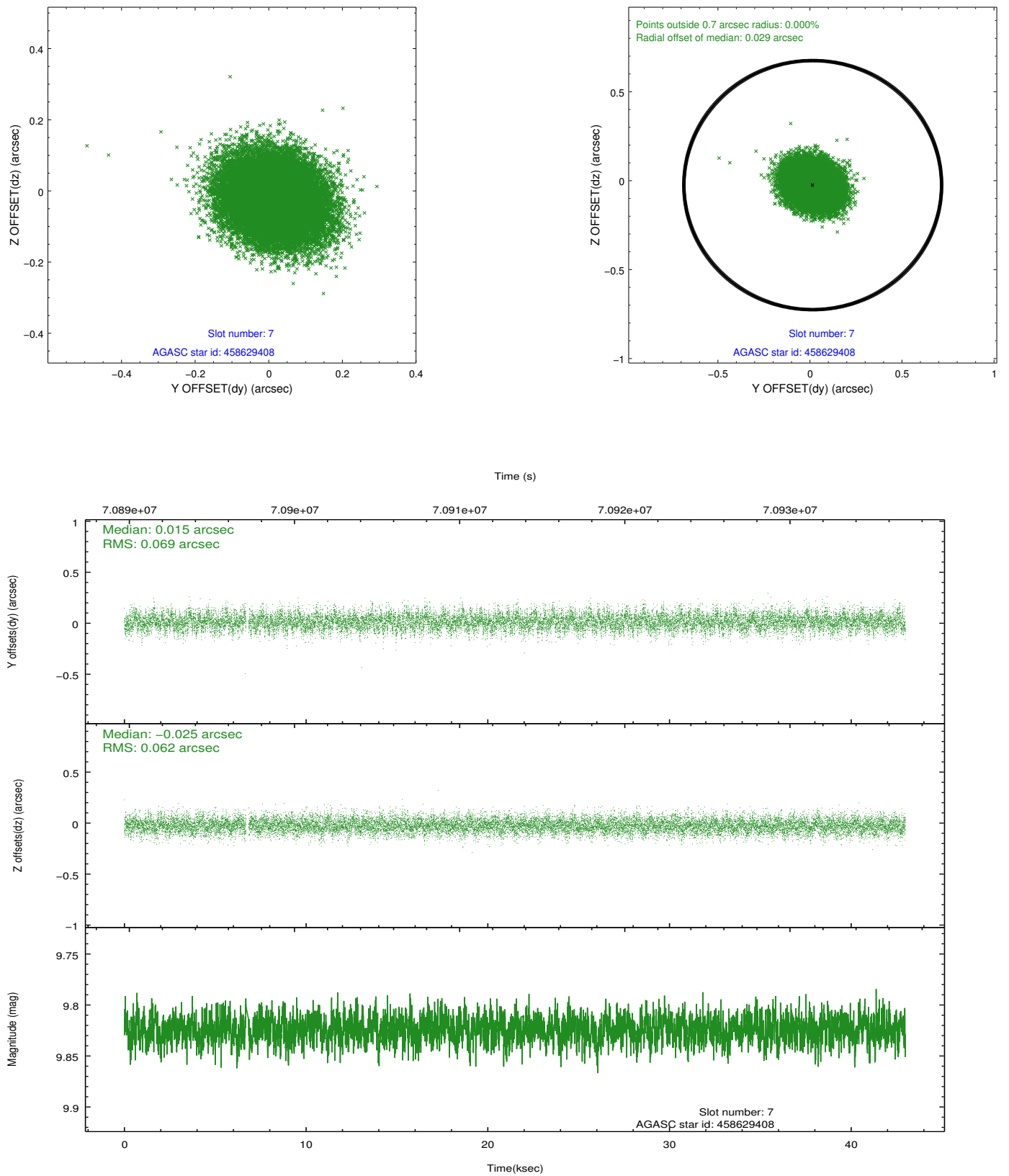
2.4.2 Slot 5



2.4.3 Slot 6

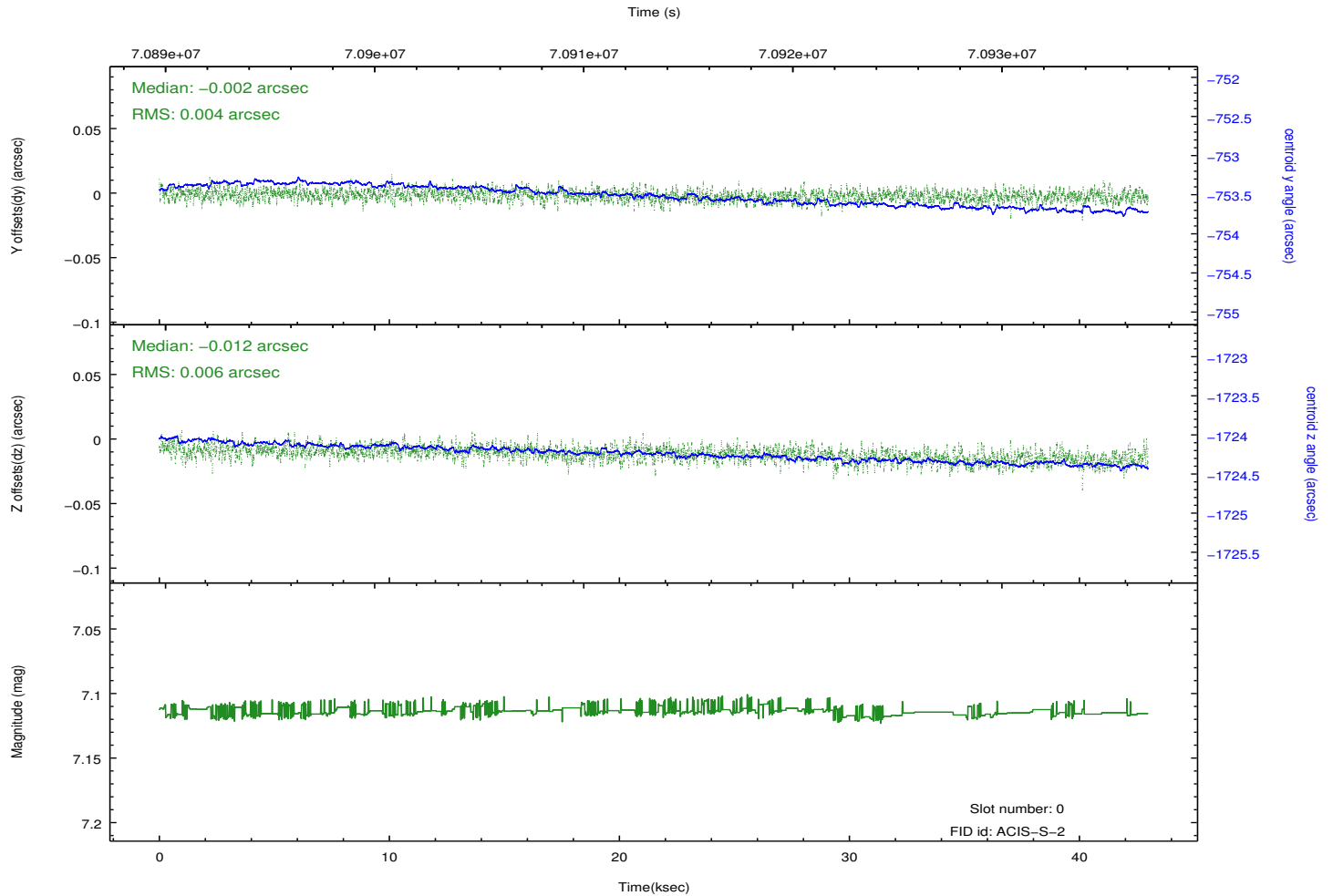
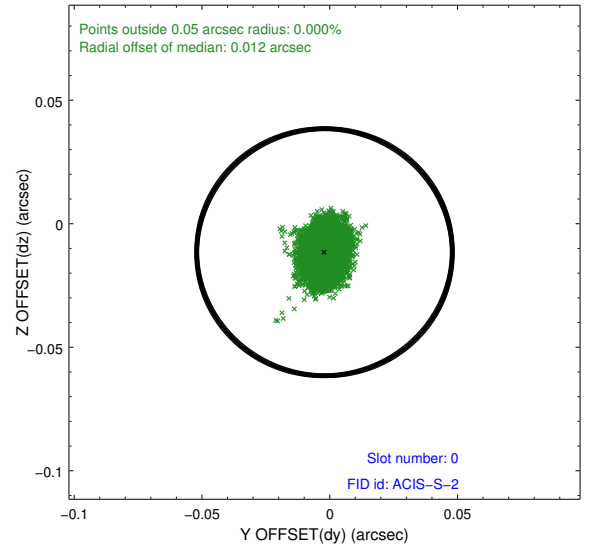
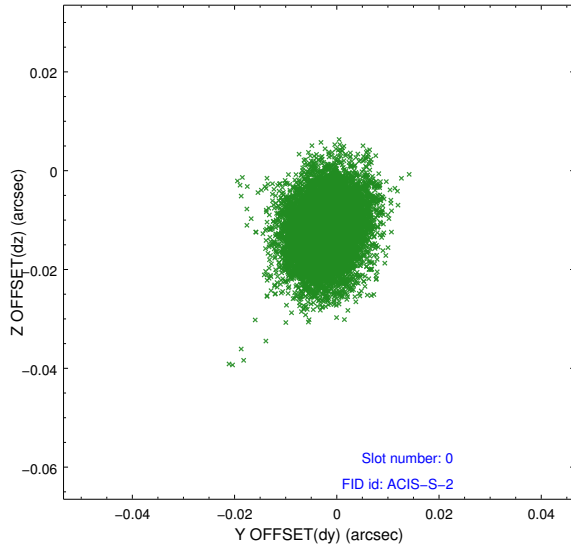


2.4.4 Slot 7

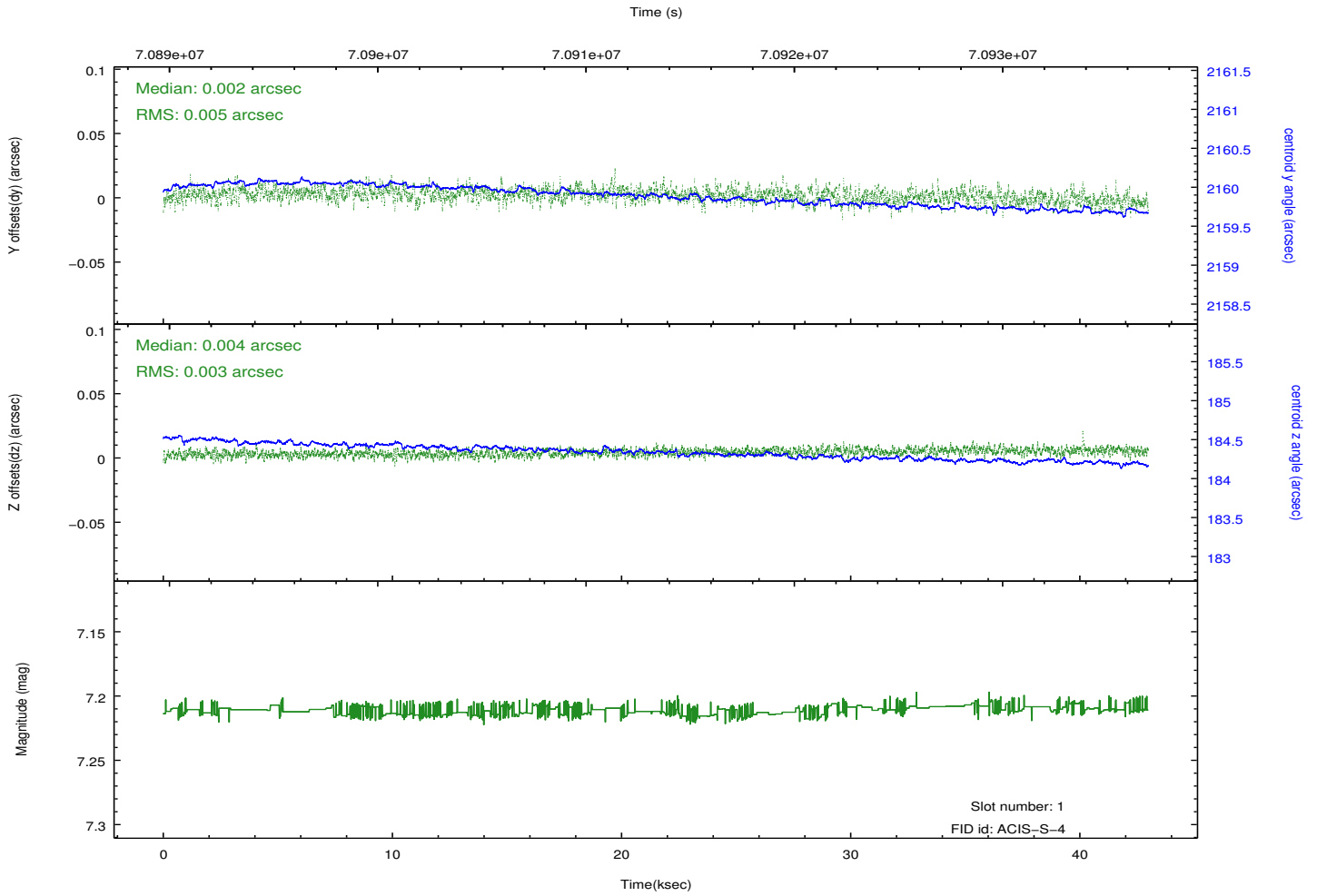
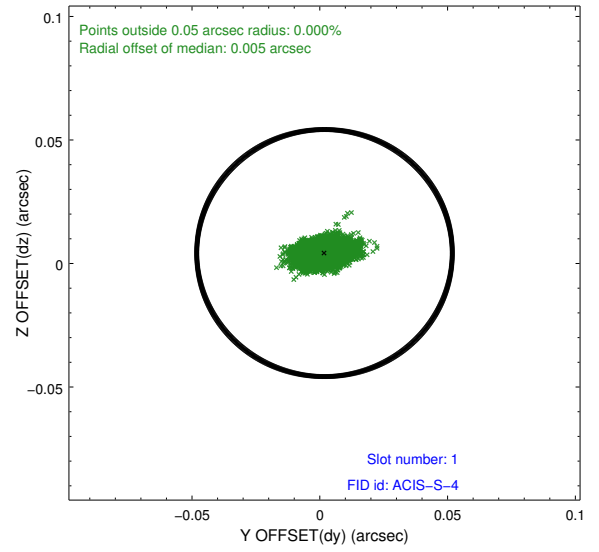
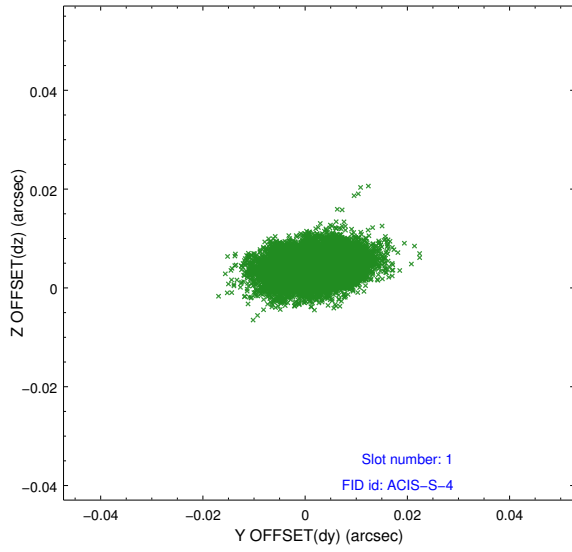


2.5 FID Slots

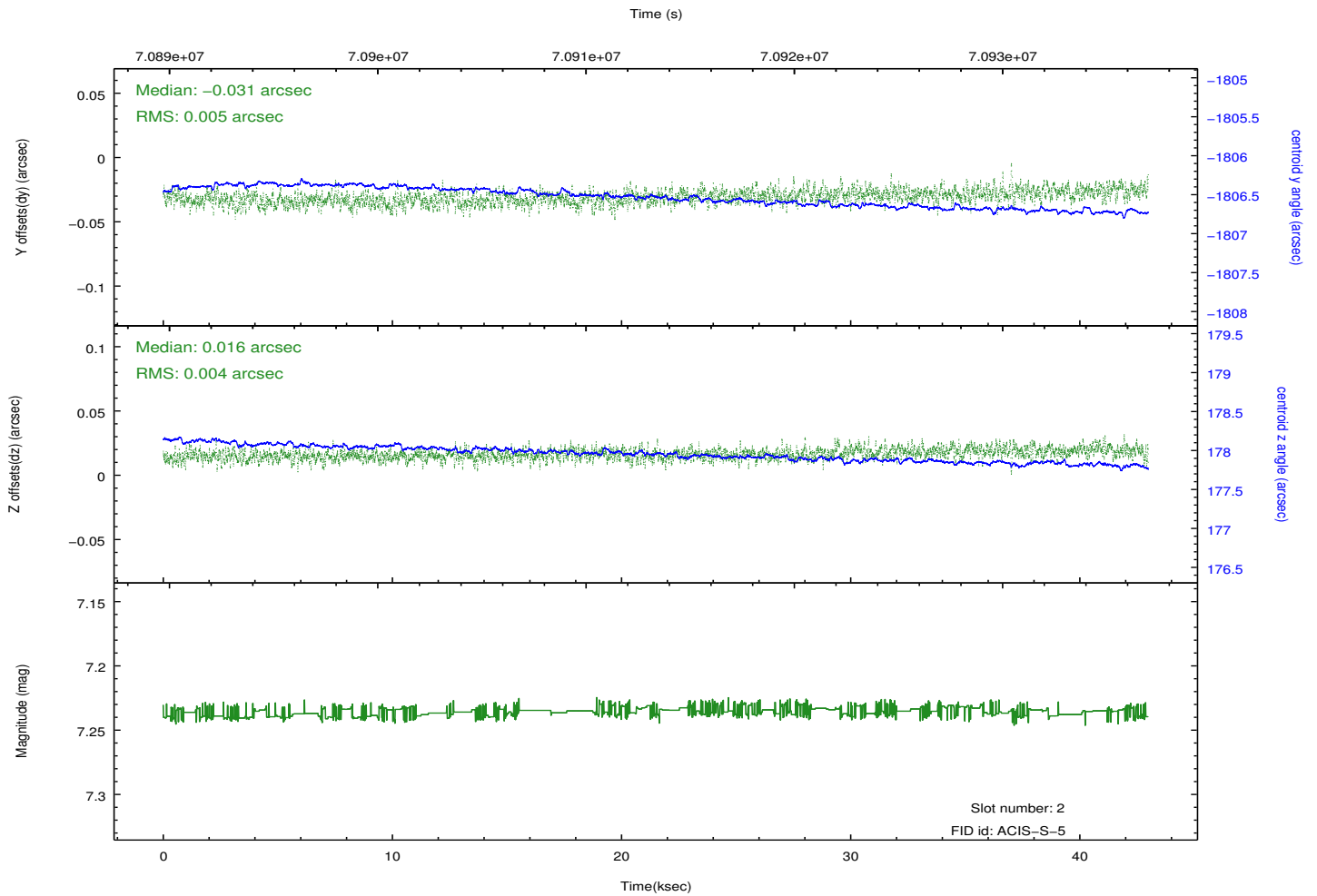
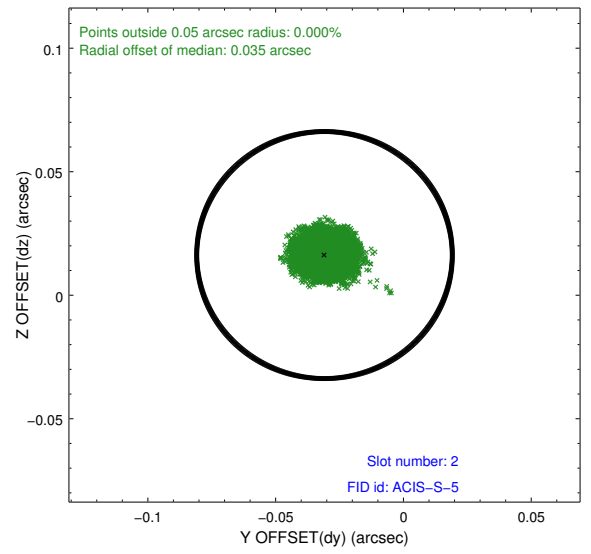
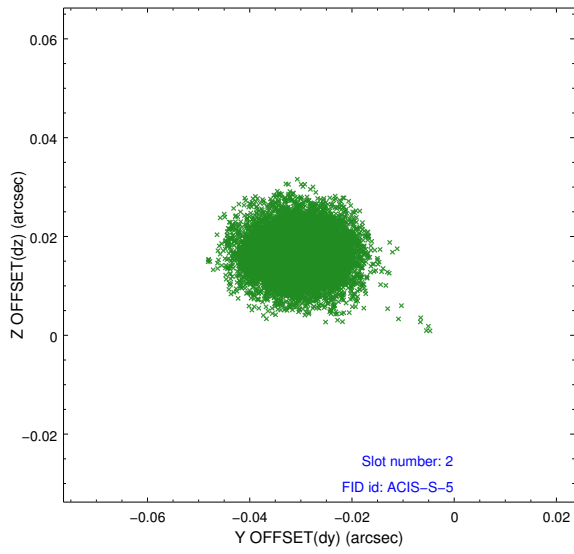
2.5.1 Slot 0



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)	2012.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	42.844

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.

=====

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:

(250.36345,46.70631), (250.37278,46.70937), (250.30491,46.80576), (250.29558,46.80270)