

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12845 - L2 Version 2
Chandra X-Ray Center

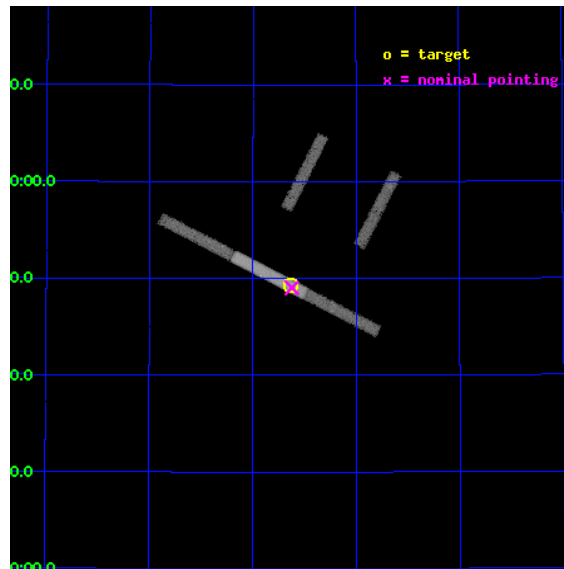
L2 Processing Date : Feb 2 2012

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1 Front

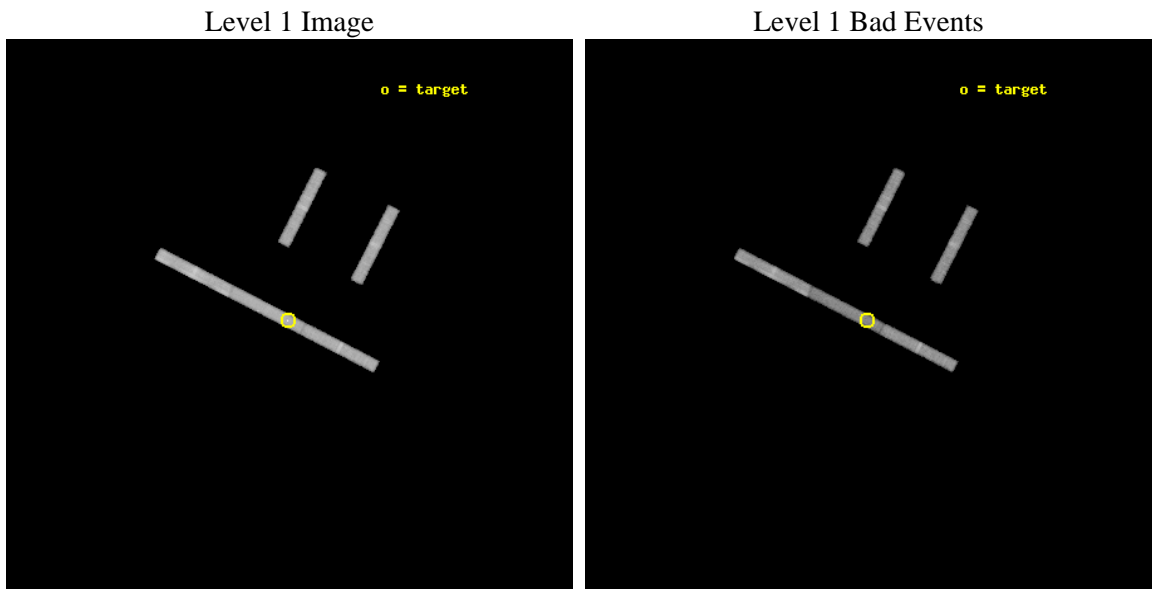
seq_num	702478	Sequence number
obs_id	12845	Observation id
title	X-ray properties of the Youngest Radio Sources	Proposal title
observer	Aneta Siemiginowska	Principal investigator
object	B3 0710+439	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	108.409167	Observer's specified target RA [deg]
dec_targ	43.821444	Observer's specified target Dec [deg]
ra_nom	108.40569584066	Nominal RA [deg]
dec_nom	43.817301543637	Nominal Dec [deg]
roll_nom	207.13775996881	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40064.499317646	Sum of GTIs [s]
livetime	37845.662207644	Livetime [s]
ontime2	40064.499317646	Sum of GTIs [s]
ontime3	40064.499317646	Sum of GTIs [s]
ontime6	40064.499317646	Sum of GTIs [s]
ontime7	40064.499317646	Sum of GTIs [s]
ontime8	40064.499317646	Sum of GTIs [s]
l2events	40141	Number of level 2 events



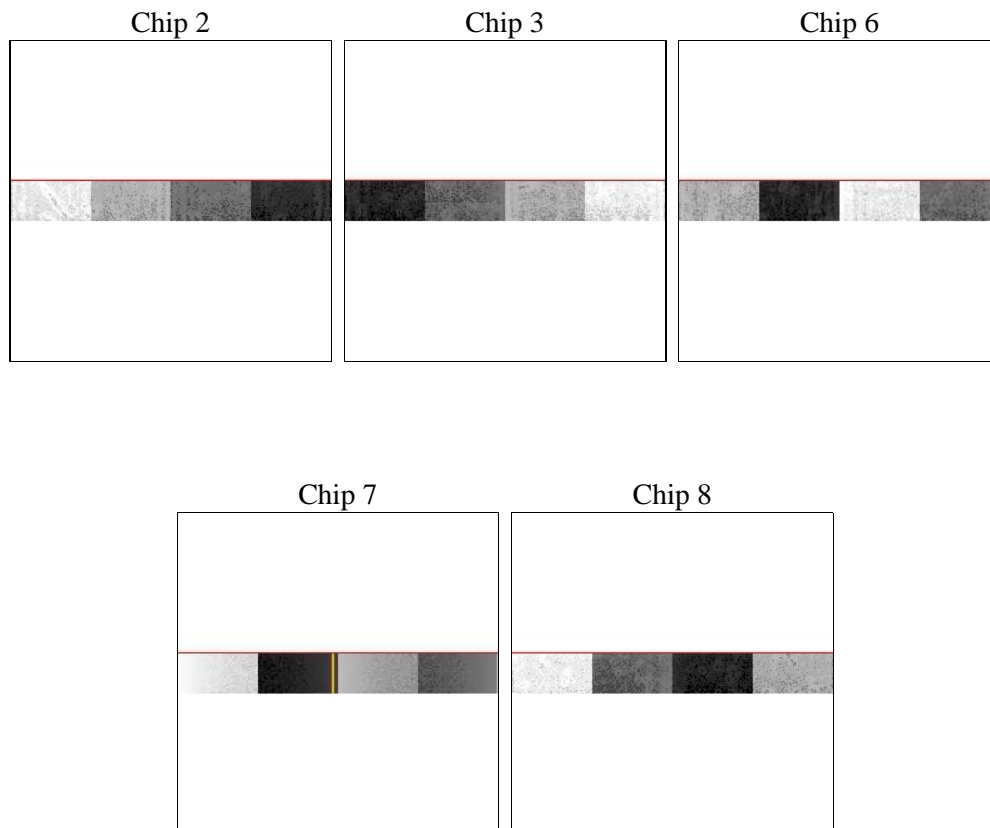
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	40064.499317646	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	40064.499317646	Sum of GTIs [s]
date	2012-02-02T07:59:47	Date and time of file creation	ontime3	40064.499317646	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	40064.499317646	Sum of GTIs [s]
			ontime7	40064.499317646	Sum of GTIs [s]
			ontime8	40064.499317646	Sum of GTIs [s]
			l1events	252806	Number of level 1 events

2.1.4 Events

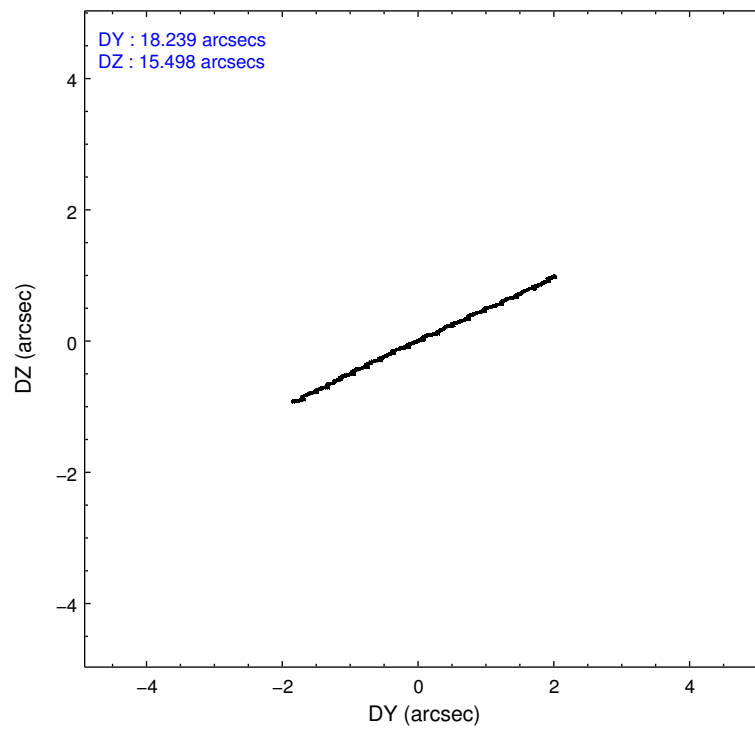
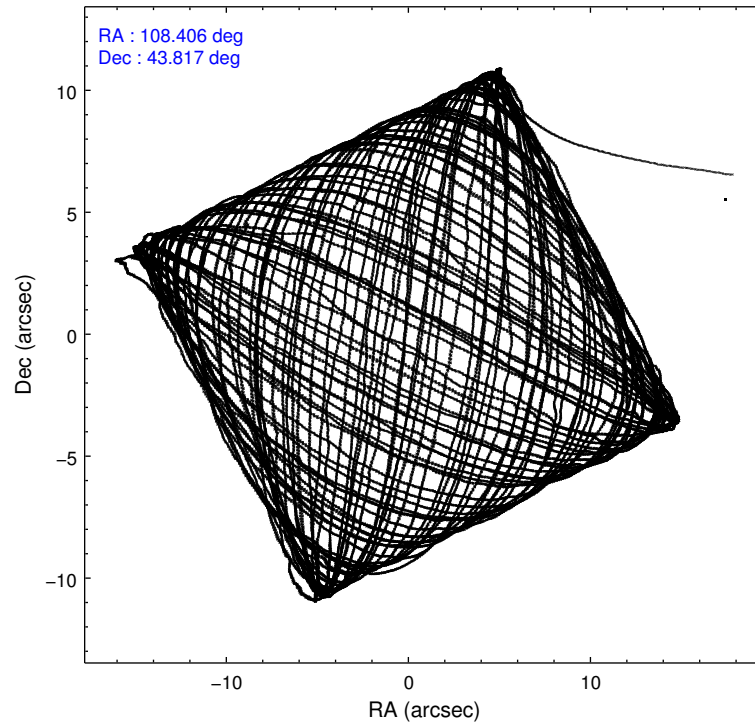
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	42992	43979	48696	51543	65596
rejected events	38156	39364	43206	26586	51592
rejected %	88%	89%	88%	51%	78%

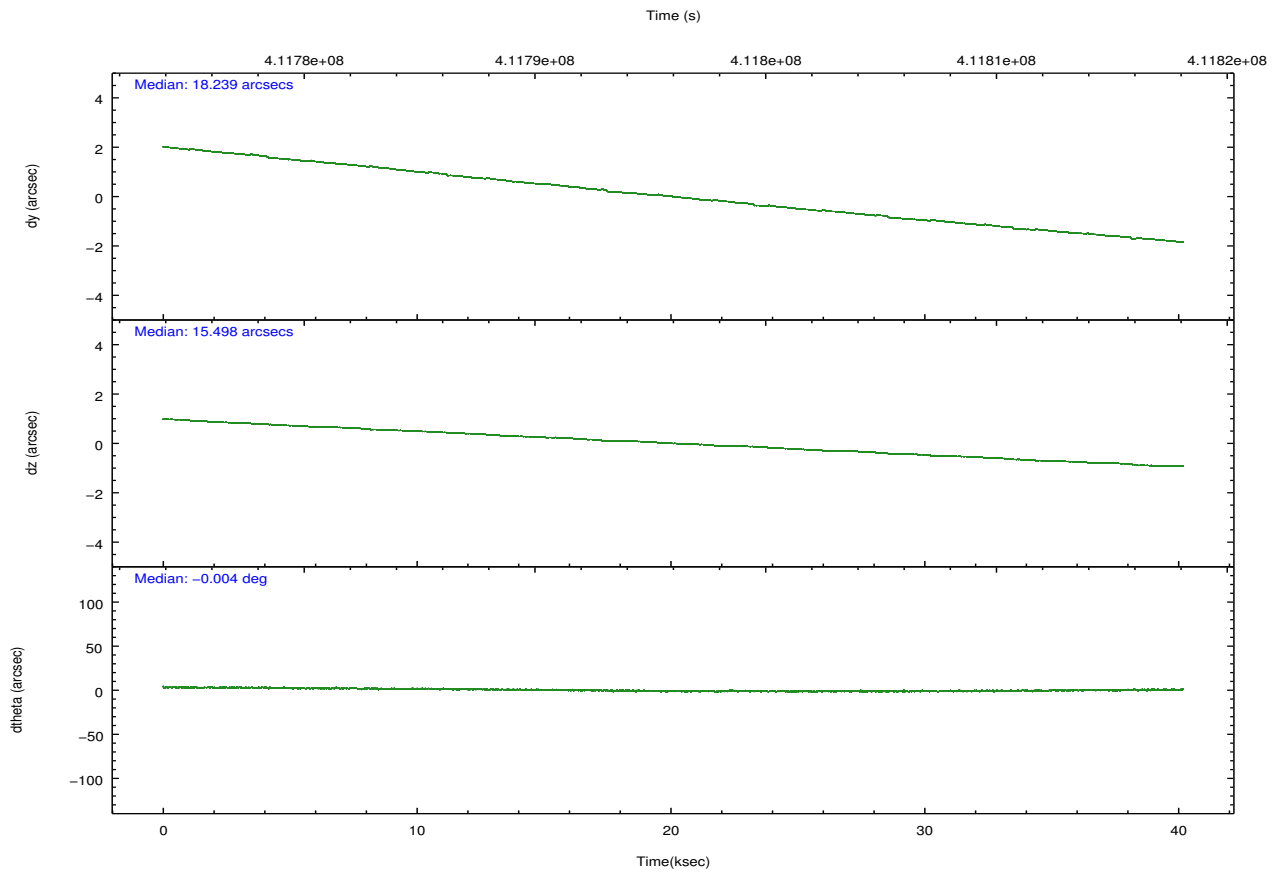
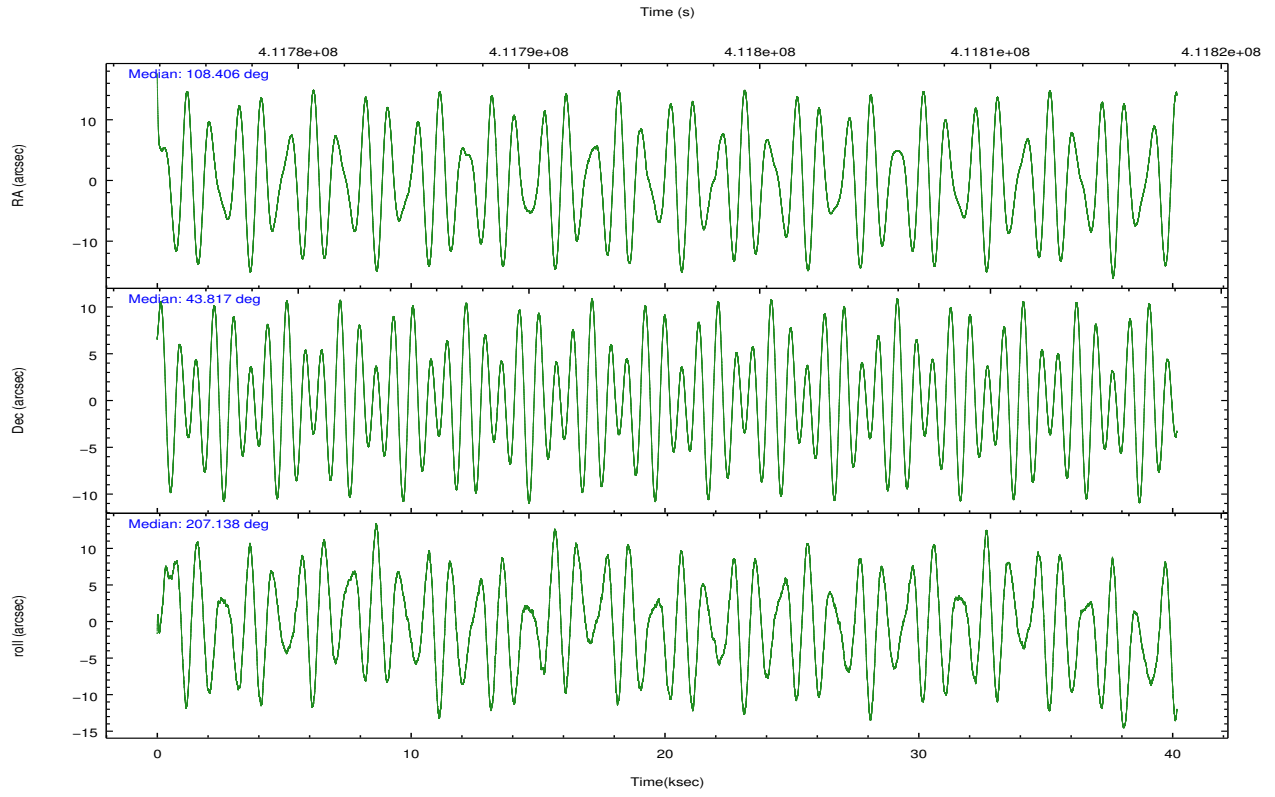
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1338	1236	1599	2852	3110
	3%	2%	3%	5%	4%
grade 1 events	9	17	13	73	28
	0%	0%	0%	0%	0%
grade 2 events	965	879	1072	5224	3096
	2%	1%	2%	10%	4%
grade 3 events	835	852	912	2912	1571
	1%	1%	1%	5%	2%
grade 4 events	886	807	903	2806	1493
	2%	1%	1%	5%	2%
grade 5 events	1412	1681	1850	5216	2482
	3%	3%	3%	10%	3%
grade 6 events	812	841	1004	11165	4734
	1%	1%	2%	21%	7%
grade 7 events	36735	37666	41343	21295	49082
	85%	85%	84%	41%	74%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	108.425825	108.4056958406649	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	43.840459	43.81730154363738	Subarray start row	449	449
[deg] Pointing Roll	206.967187	207.1377599688094	Subarray row count	128	128
[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	0.7
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	411776071.184000	411774779.44004			
Observation start date	2011-01-18T22:13:25	2011-01-18T21:52:59			
[s] Observation end time (MET)	411816071.184000	411816996.62973			
Observation end date	2011-01-19T09:20:05	2011-01-19T09:36:36			
Read mode	TIMED	TIMED			

2.3 Aspect



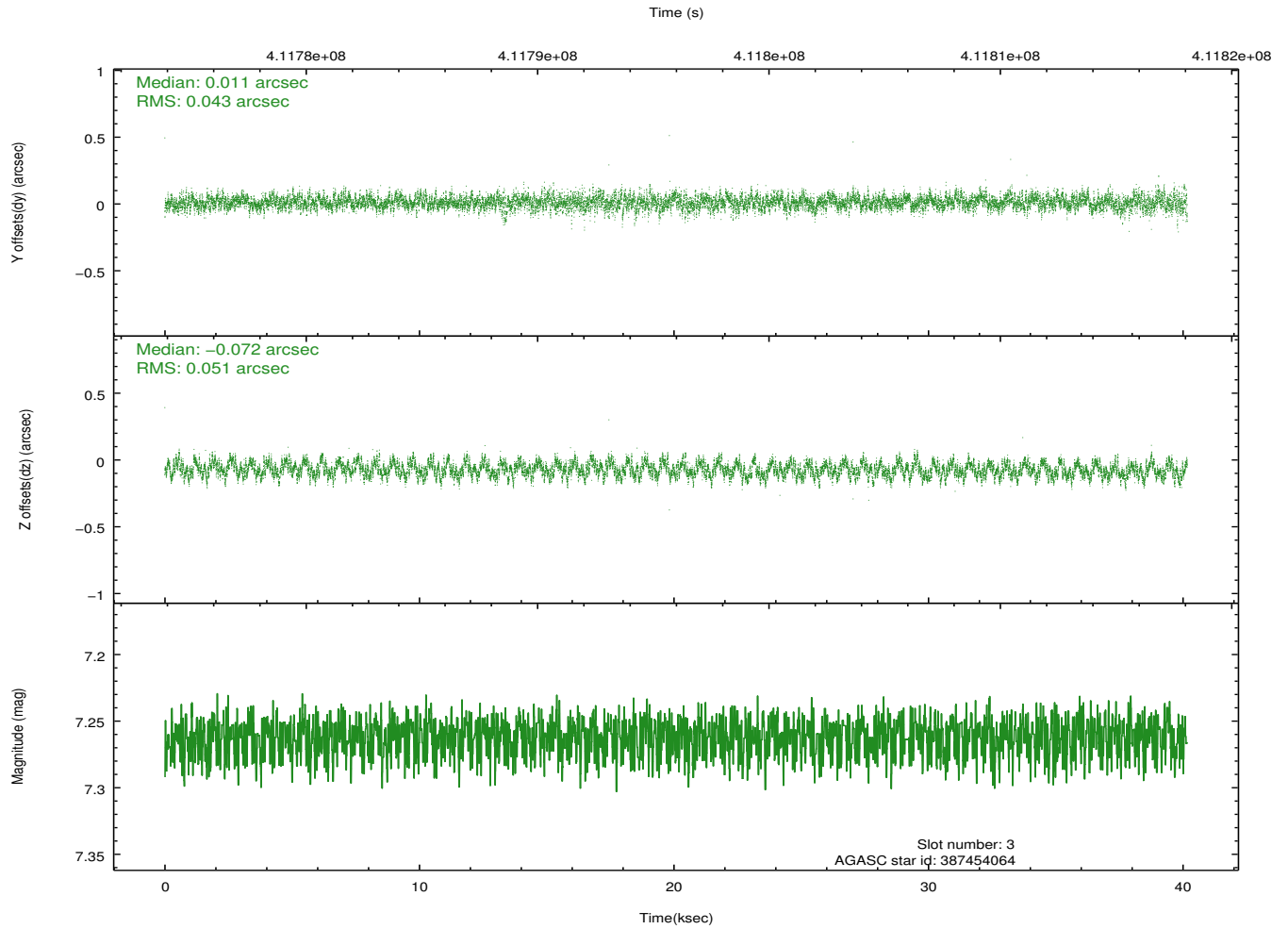
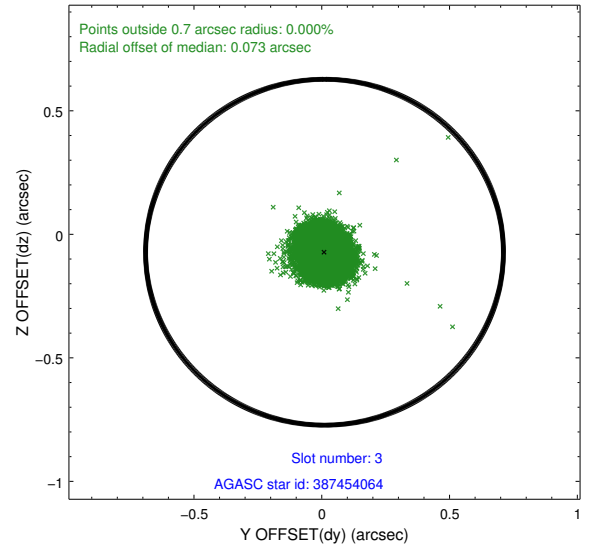
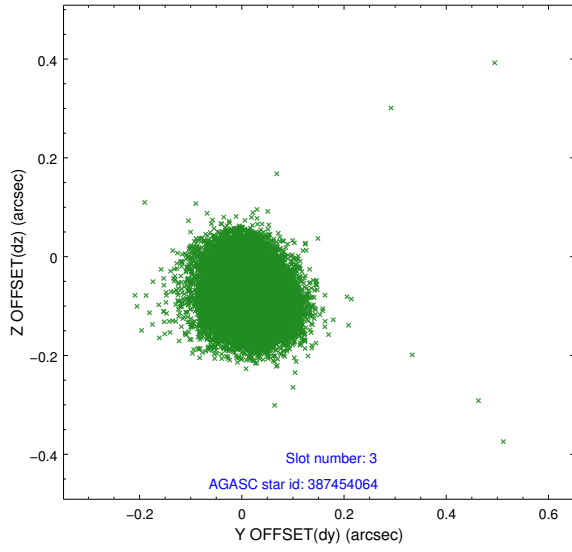


Slot Statistics

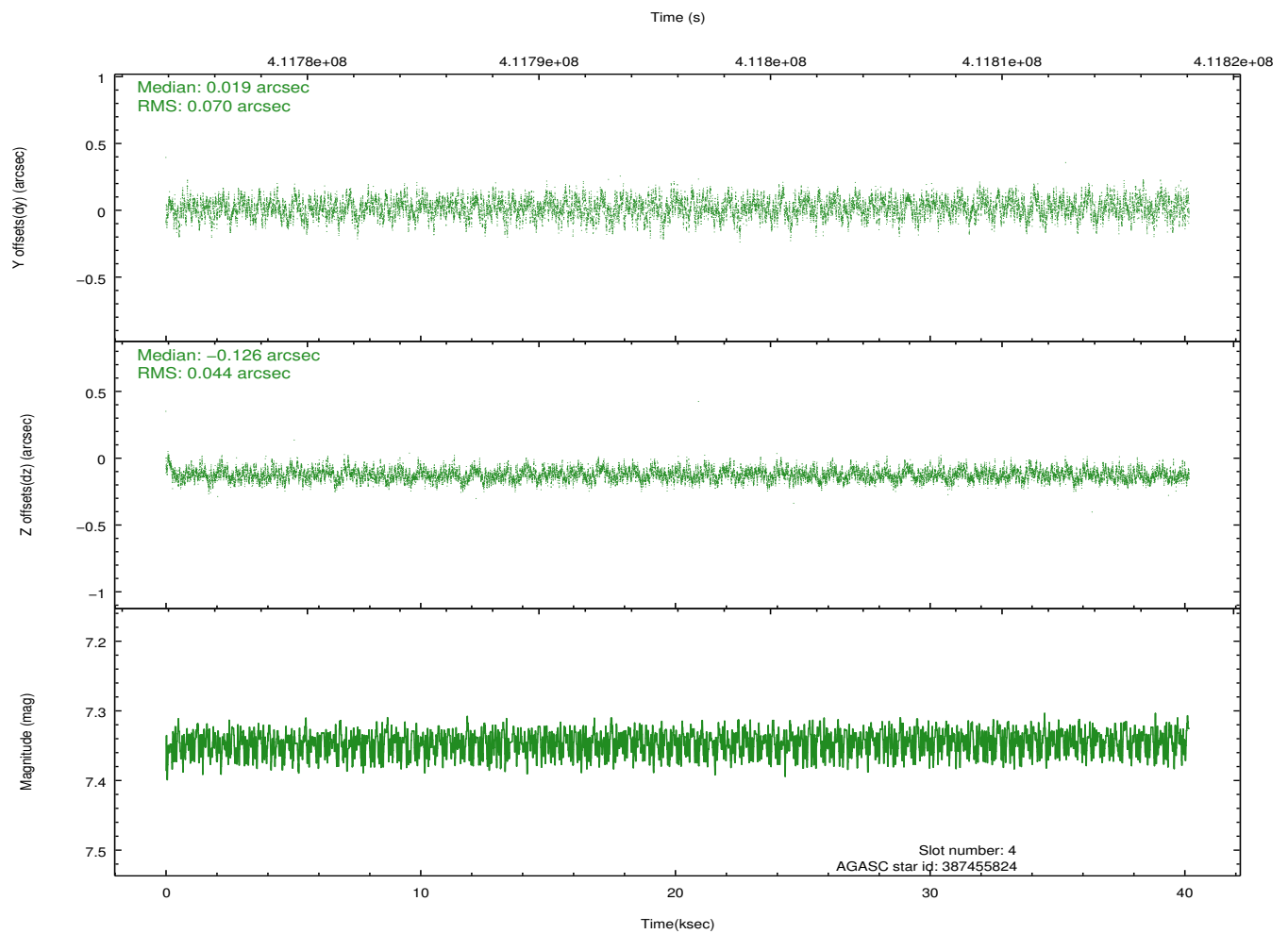
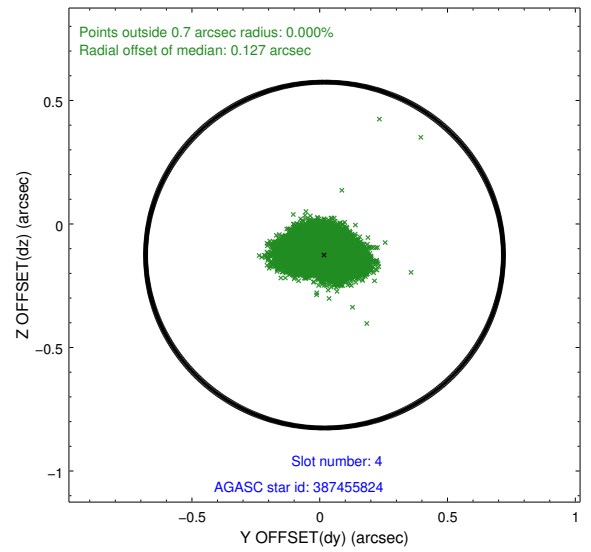
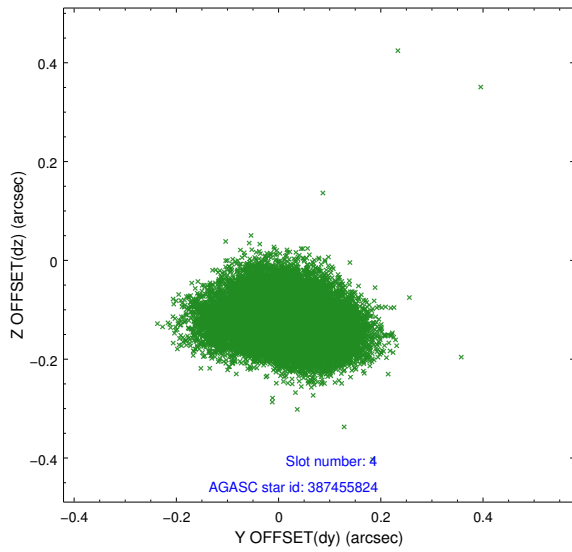
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.01	9798	-0.100	-0.021	0.014	0.025	0.000000	0.000000	-771.41	-1736.87
1	FID	ACIS-S-4	7.09	9799	0.229	0.055	0.027	0.042	0.000000	0.000000	2142.17	171.69
2	FID	ACIS-S-5	7.12	9799	-0.157	-0.025	0.023	0.038	0.000000	0.000000	-1824.30	165.27
3	GUIDE	387454064	7.26	19597	0.011	-0.072	0.071	0.112	108.124987	43.988867	451.95	-830.40
4	GUIDE	387455824	7.35	19596	0.019	-0.126	0.088	0.143	108.004503	43.842976	970.35	-506.16
5	GUIDE	387457224	9.15	19530	-0.238	-0.077	0.092	0.149	107.828978	43.347296	2195.36	869.17
6	GUIDE	387457592	8.52	19587	0.051	0.260	0.091	0.150	108.976779	43.561853	-827.79	1542.21
7	GUIDE	387326288	9.48	19555	0.154	-0.000	0.155	0.244	107.463294	44.223322	1582.11	-2366.89

2.4 Star Slots

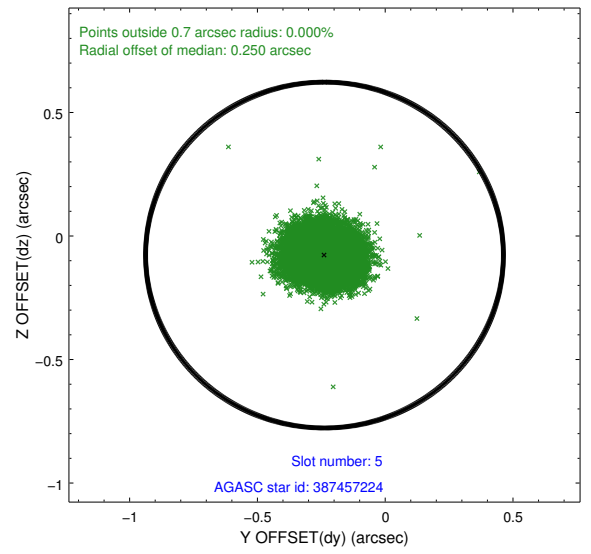
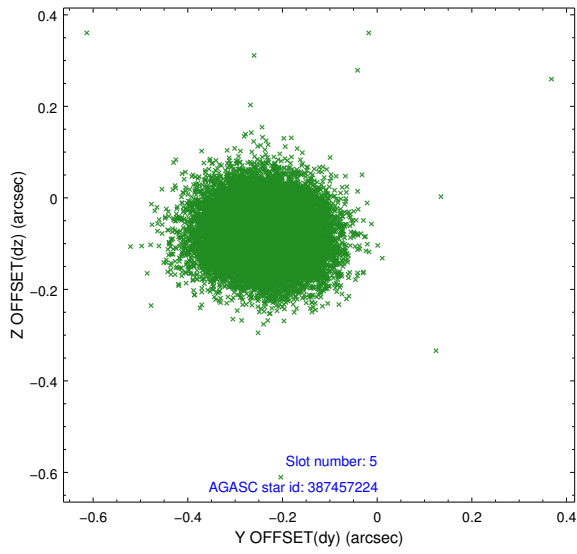
2.4.1 Slot 3



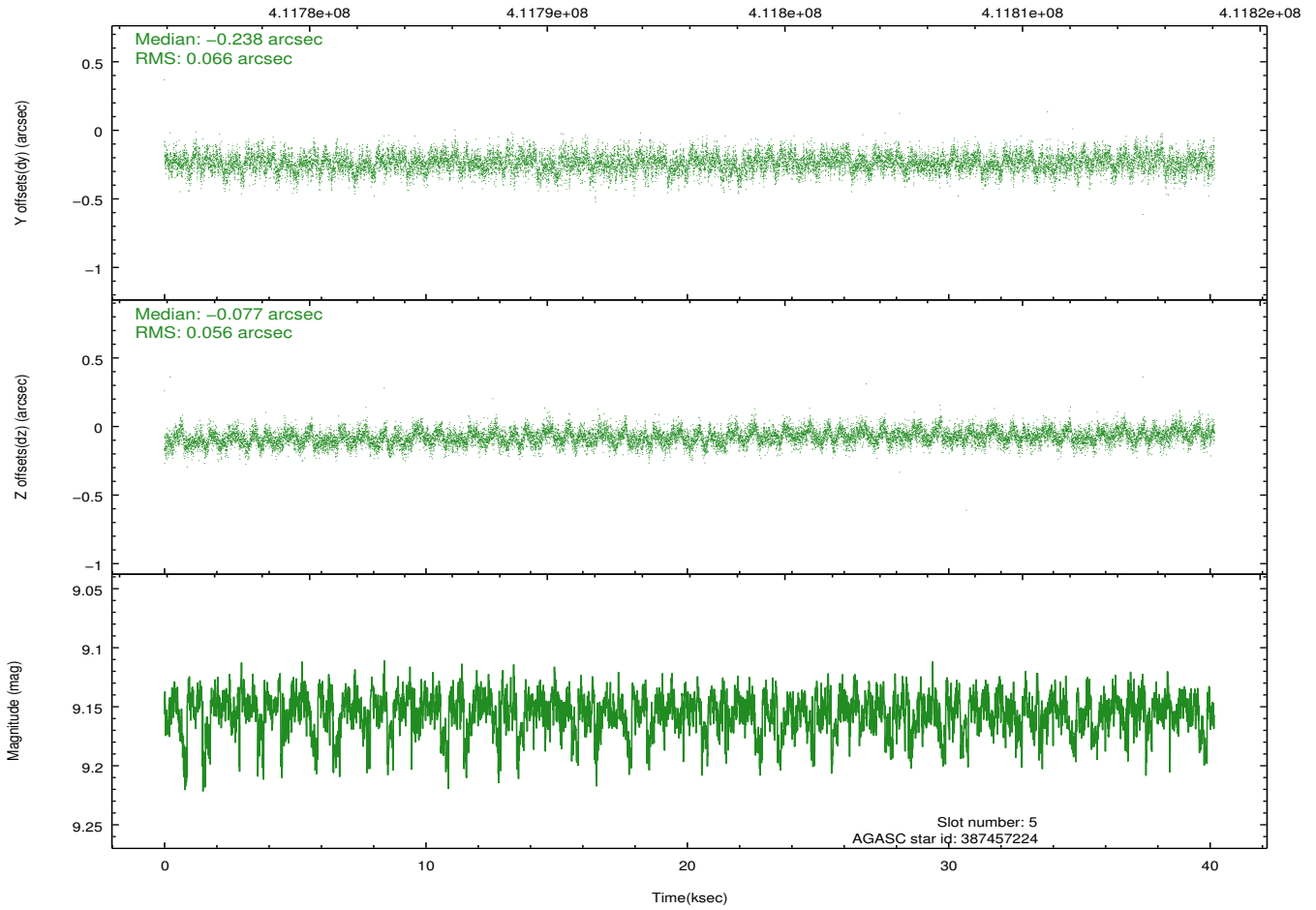
2.4.2 Slot 4



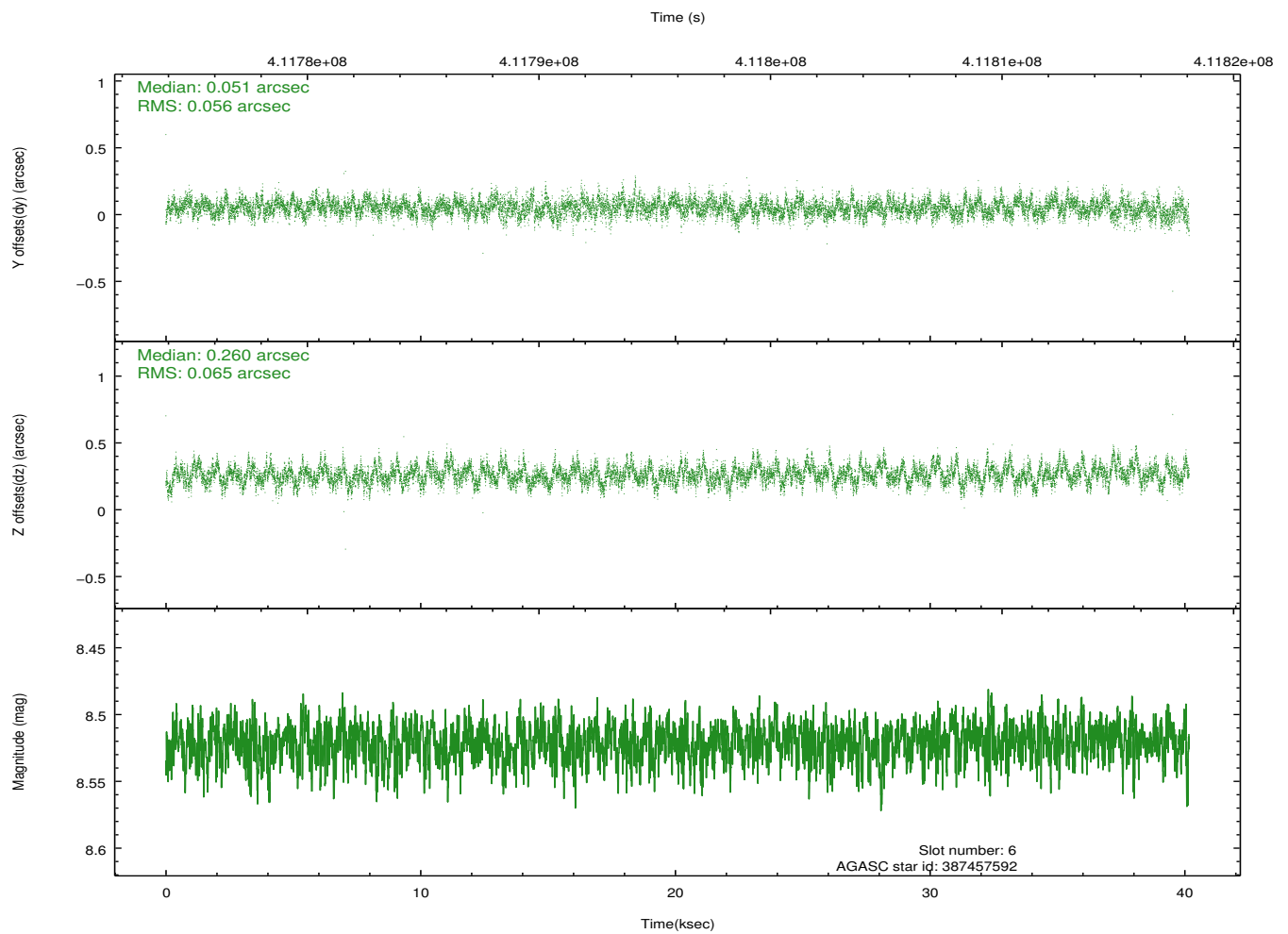
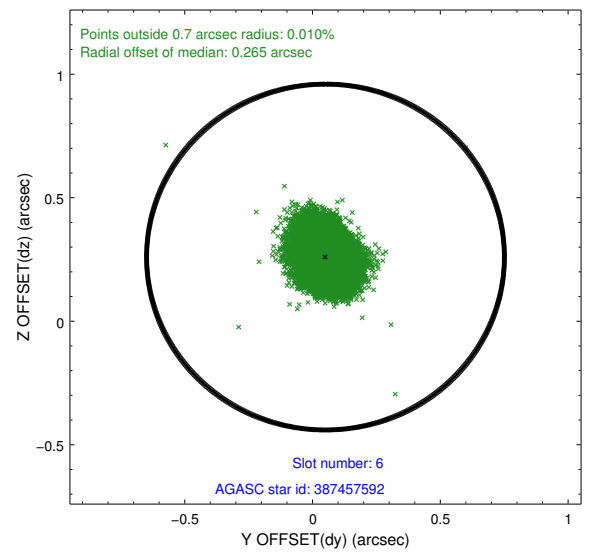
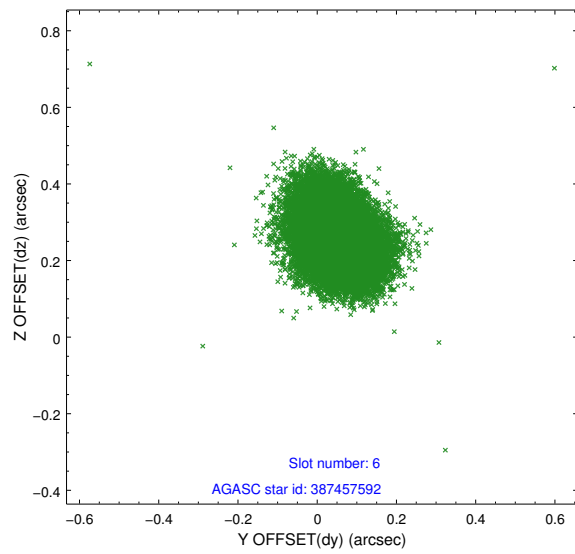
2.4.3 Slot 5



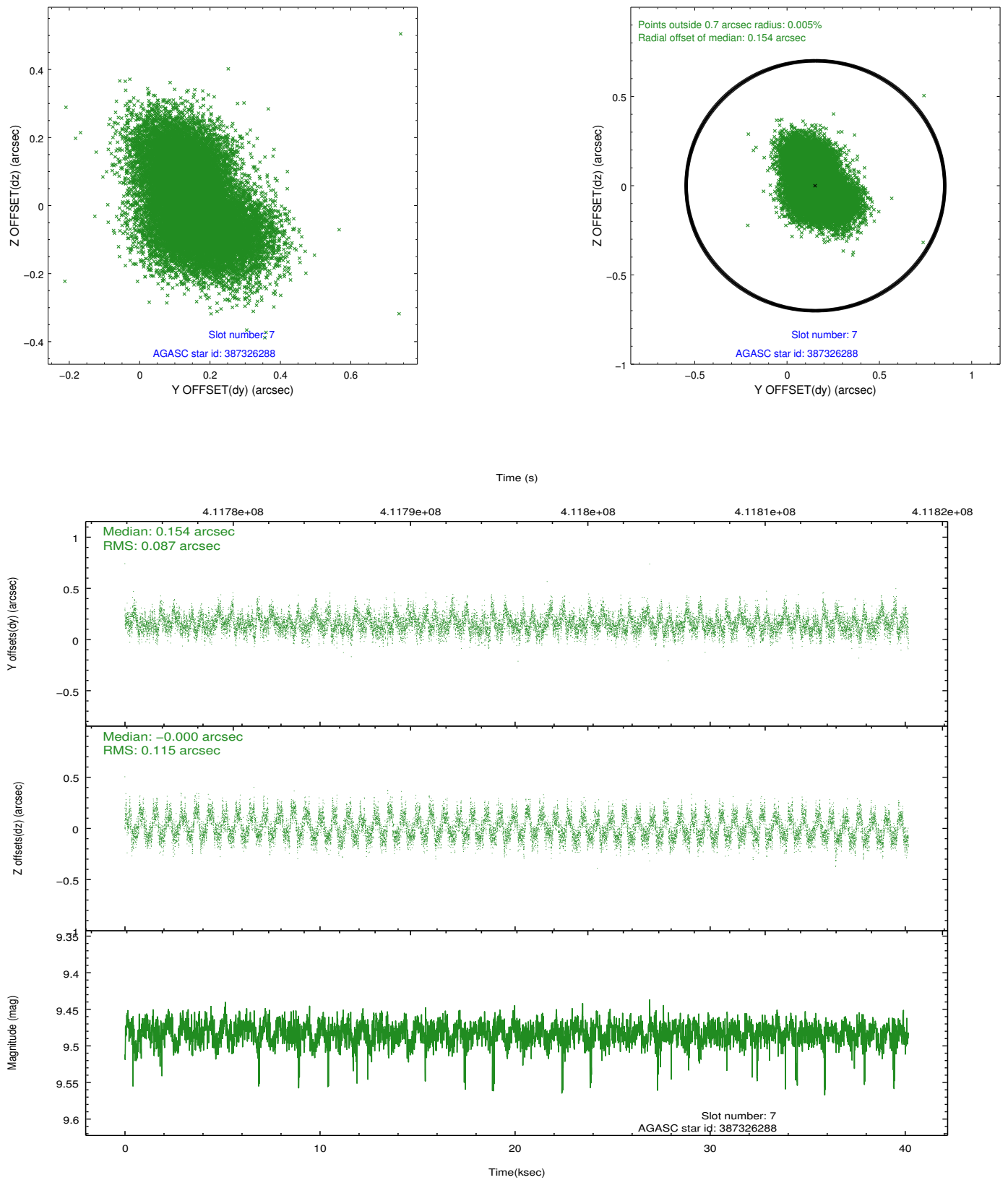
Time (s)



2.4.4 Slot 6

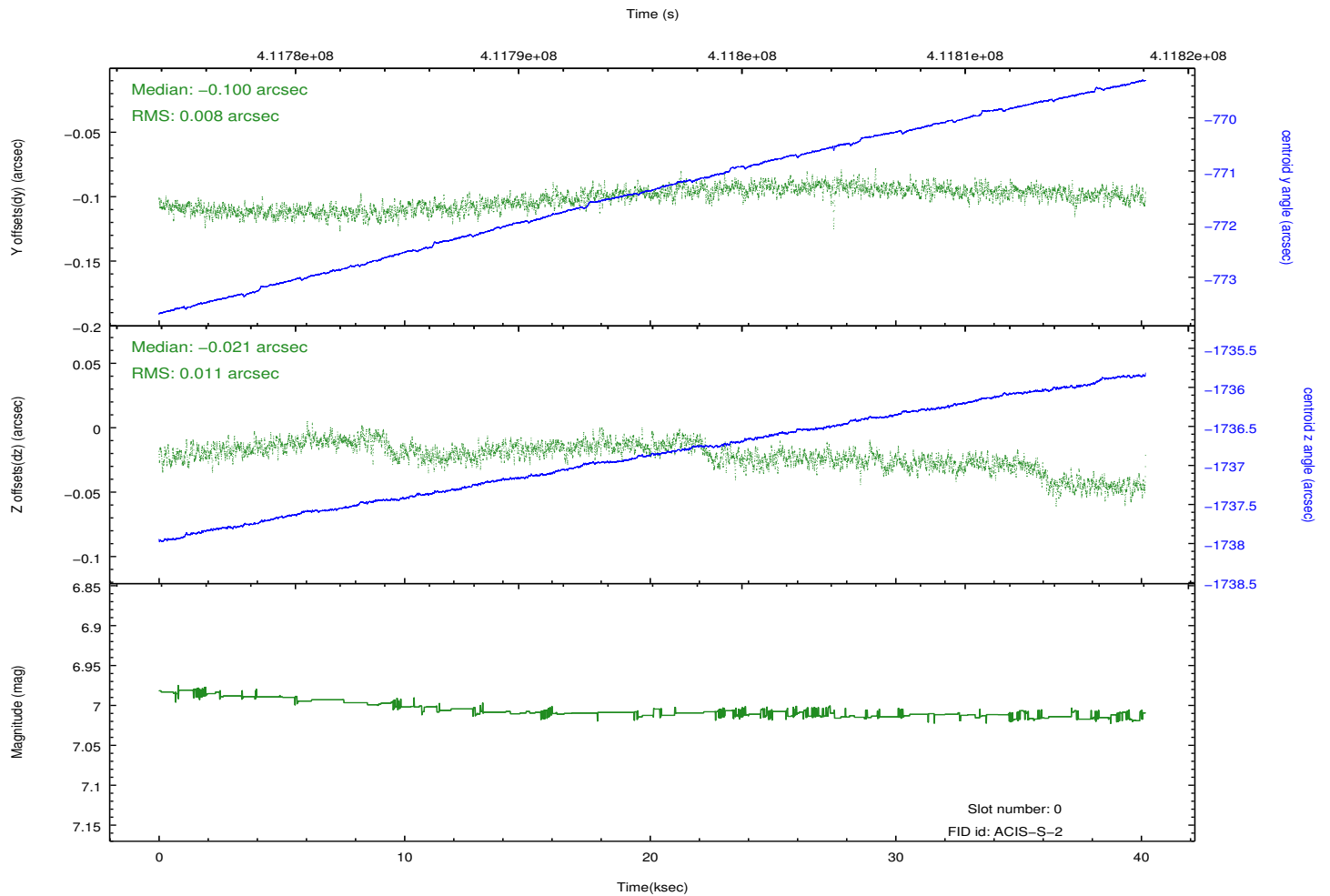
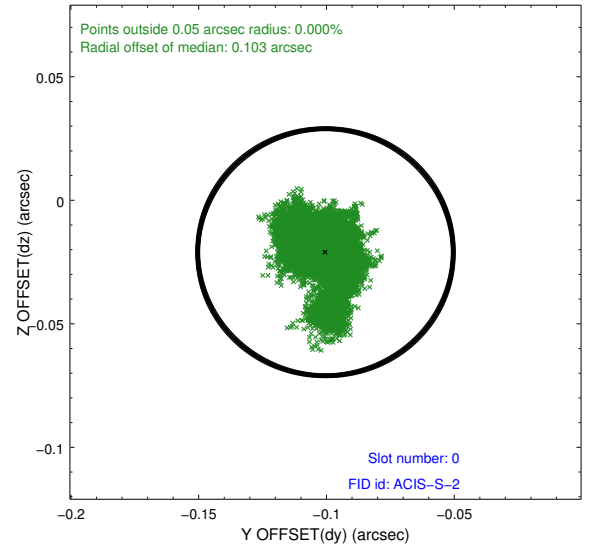
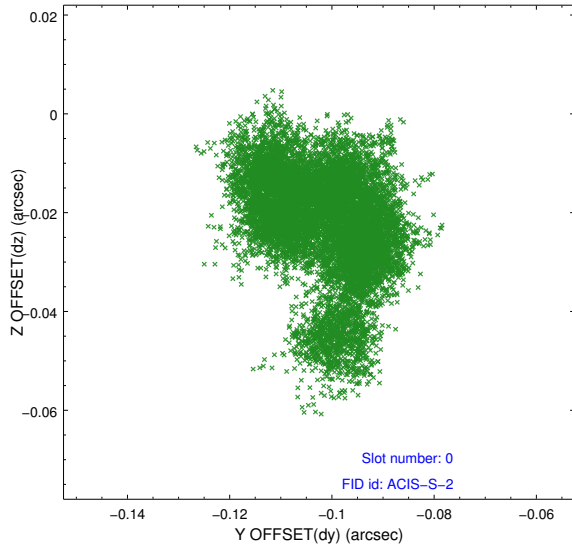


2.4.5 Slot 7

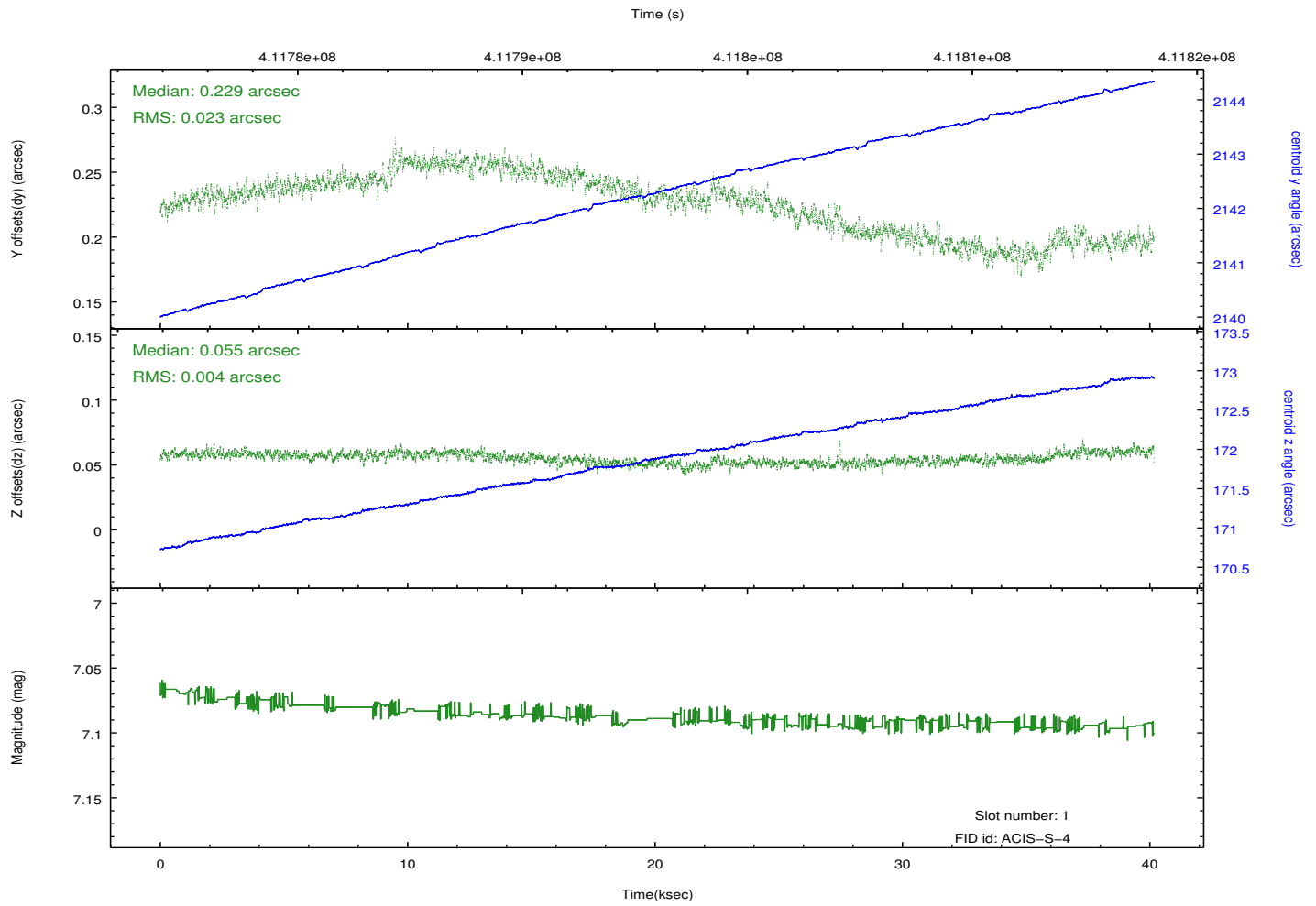
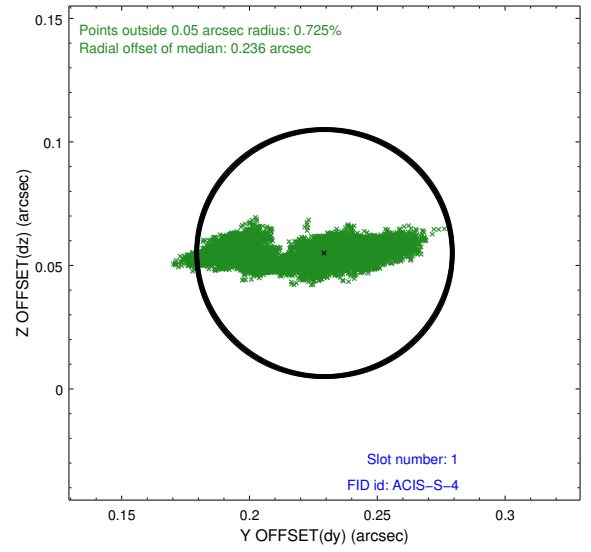
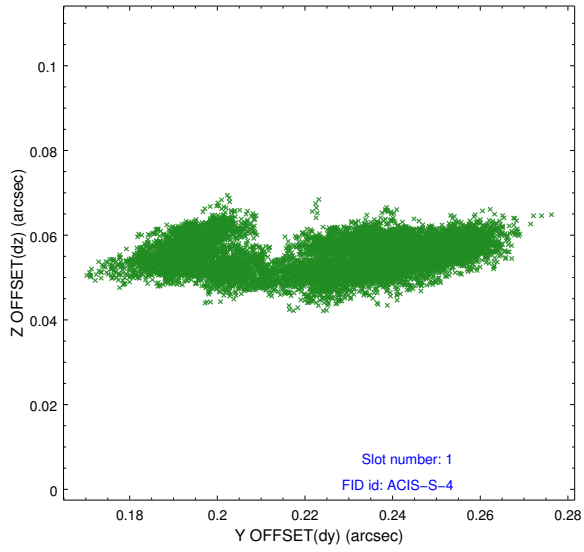


2.5 FID Slots

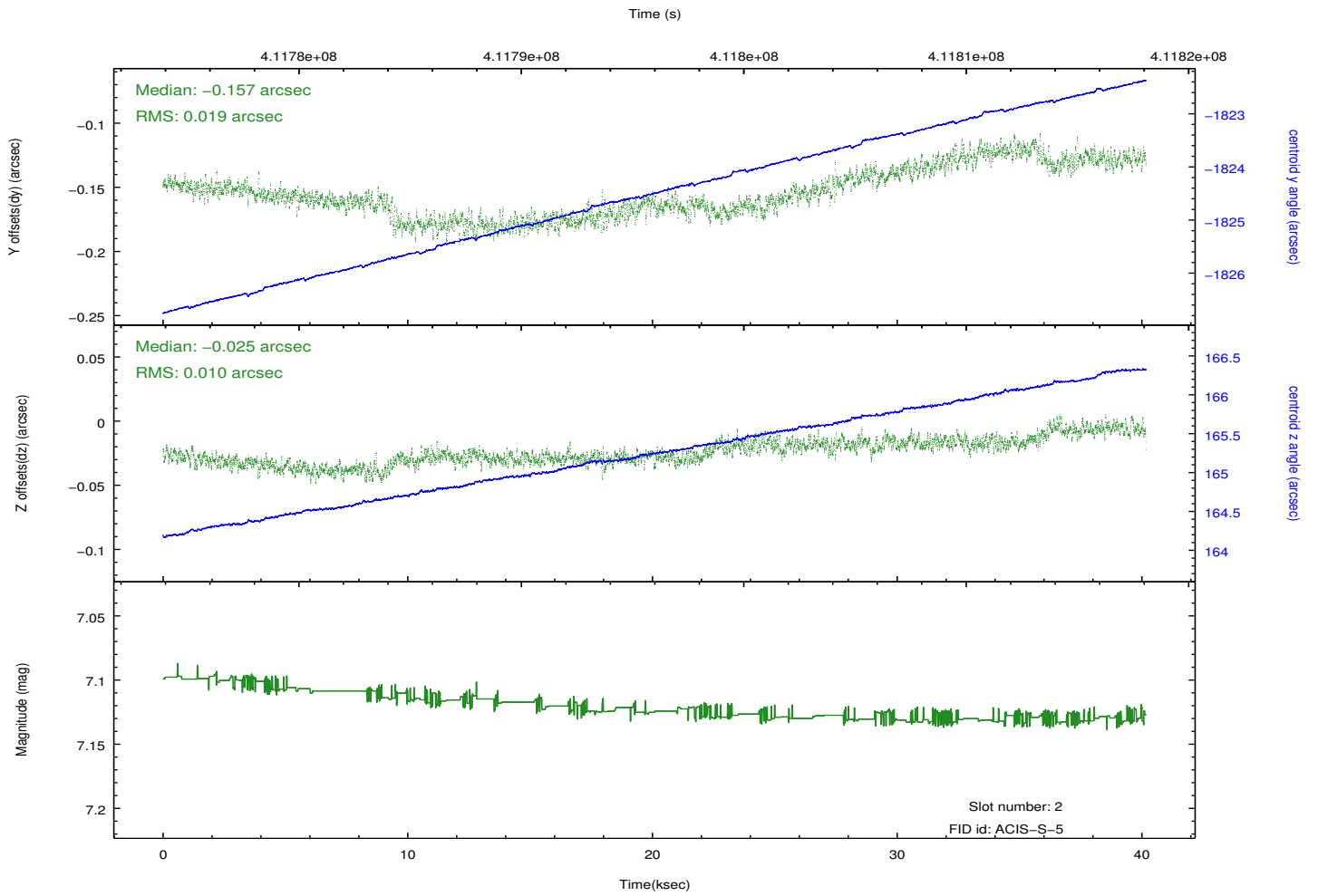
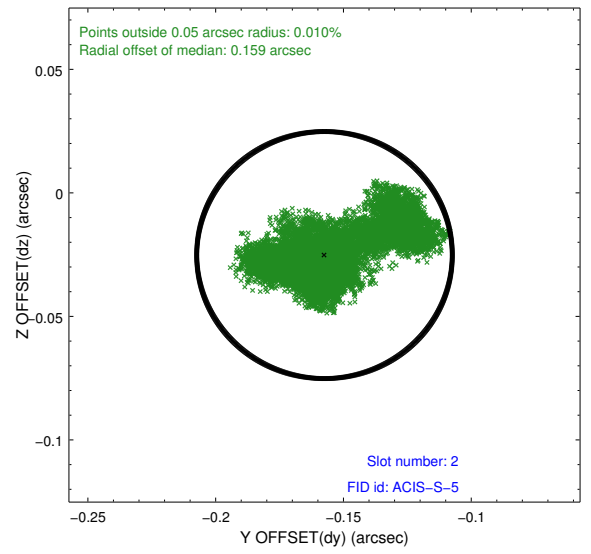
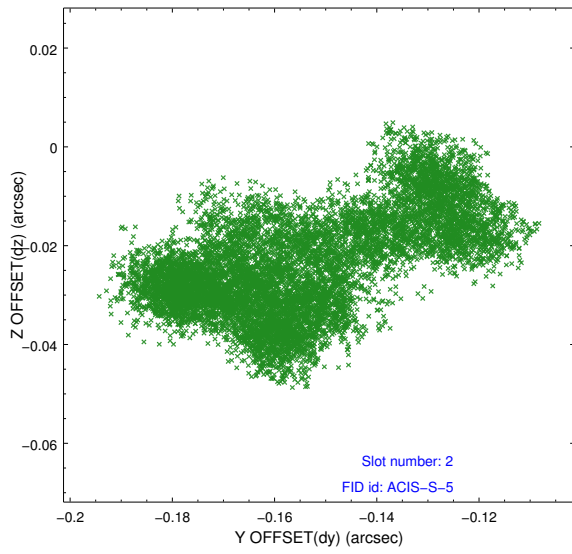
2.5.1 Slot 0



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)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.064499317646

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.