

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13110 - L2 Version 2
Chandra X-Ray Center

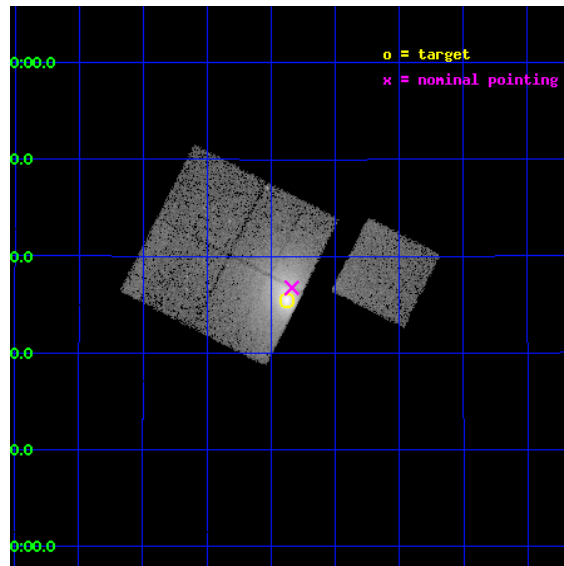
L2 Processing Date : Feb 6 2012

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1 Front

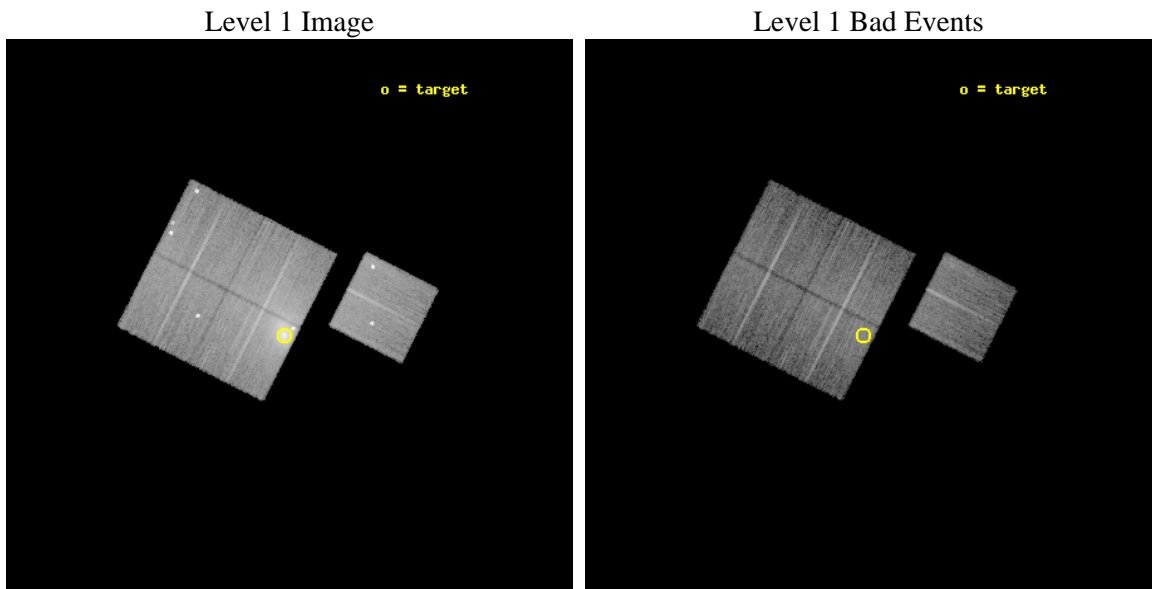
seq_num	890050	Sequence number
obs_id	13110	Observation id
title	AO-12 Calibration Observations of A1795	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	A1795	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219583	Observer's specified target RA [deg]
dec_targ	26.590833	Observer's specified target Dec [deg]
ra_nom	207.20953886019	Nominal RA [deg]
dec_nom	26.612506451919	Nominal Dec [deg]
roll_nom	116.97337523854	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14770.648869991	Sum of GTIs [s]
livetime	14577.659468511	Livetime [s]
ontime0	14773.666760445	Sum of GTIs [s]
ontime1	14773.707800448	Sum of GTIs [s]
ontime2	14773.74884057	Sum of GTIs [s]
ontime3	14770.648869991	Sum of GTIs [s]
ontime6	14776.766750813	Sum of GTIs [s]
l2events	137543	Number of level 2 events



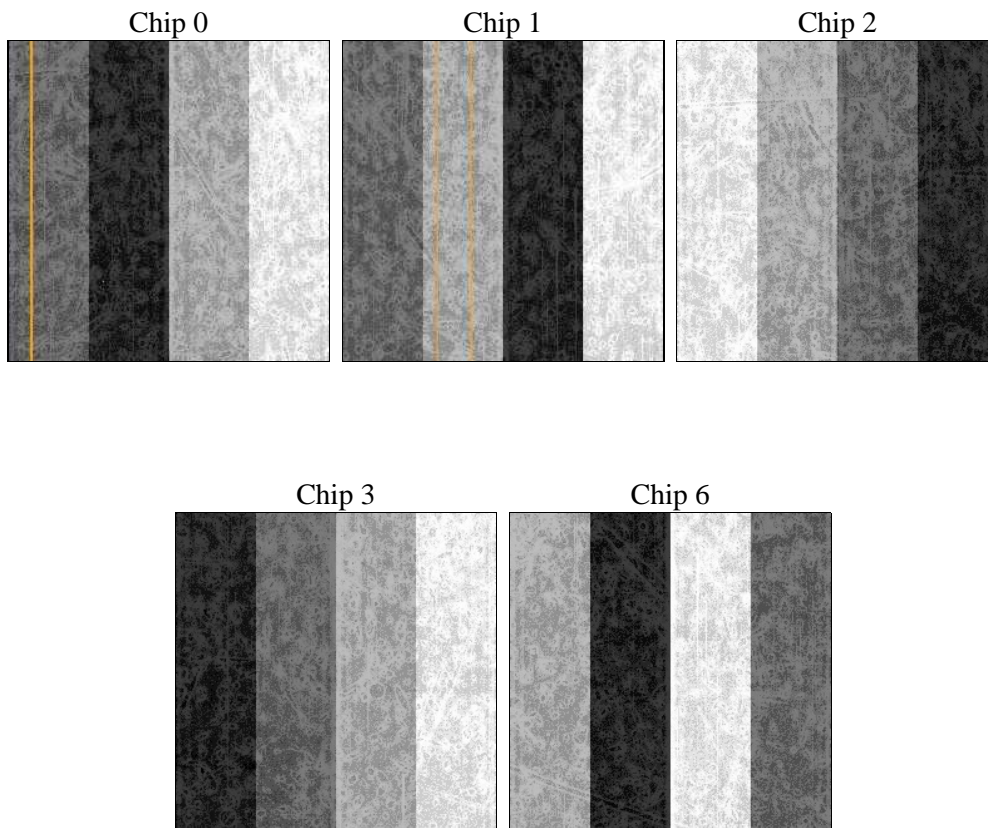
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	14770.648869991	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	14773.666760445	Sum of GTIs [s]
date	2012-02-06T06:51:00	Date and time of file creation	ontime1	14773.707800448	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	14773.74884057	Sum of GTIs [s]
			ontime3	14770.648869991	Sum of GTIs [s]
			ontime6	14776.766750813	Sum of GTIs [s]
			l1events	651794	Number of level 1 events

2.1.4 Events

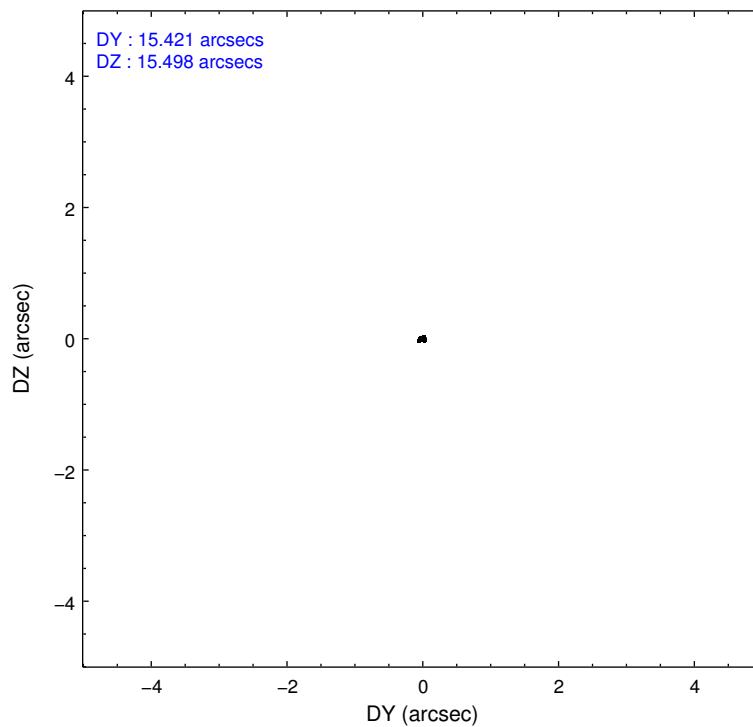
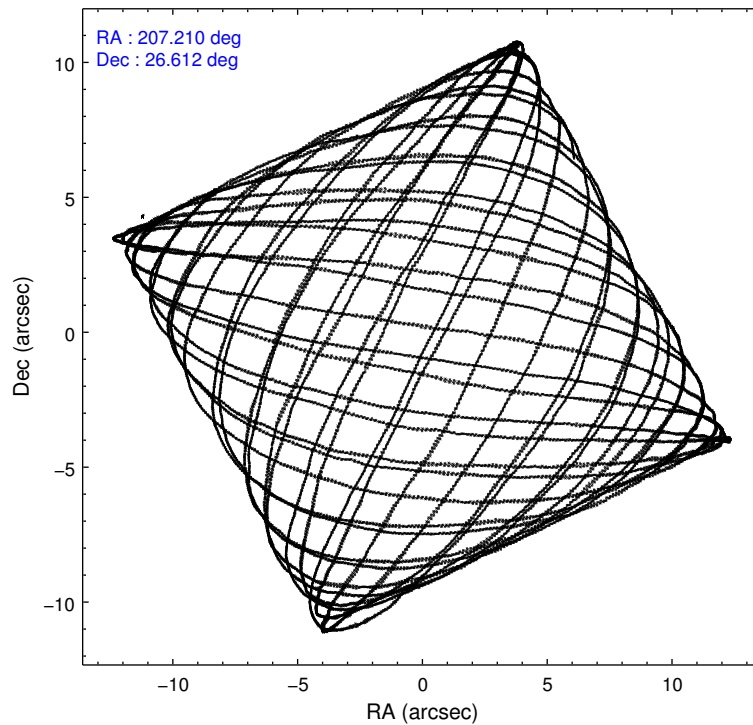
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	108197	103743	135038	183217	121599
rejected events	85231	85958	102255	99549	99114
rejected %	78%	82%	75%	54%	81%

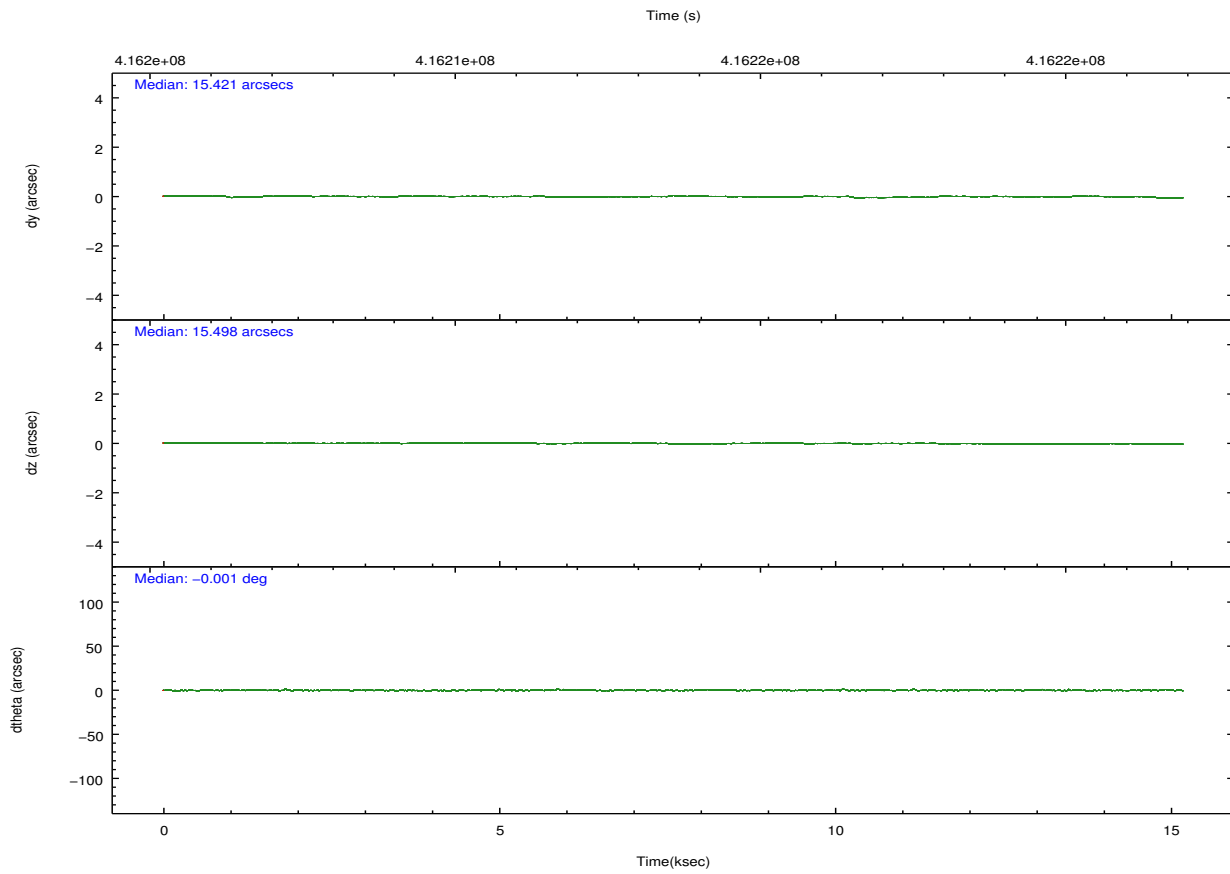
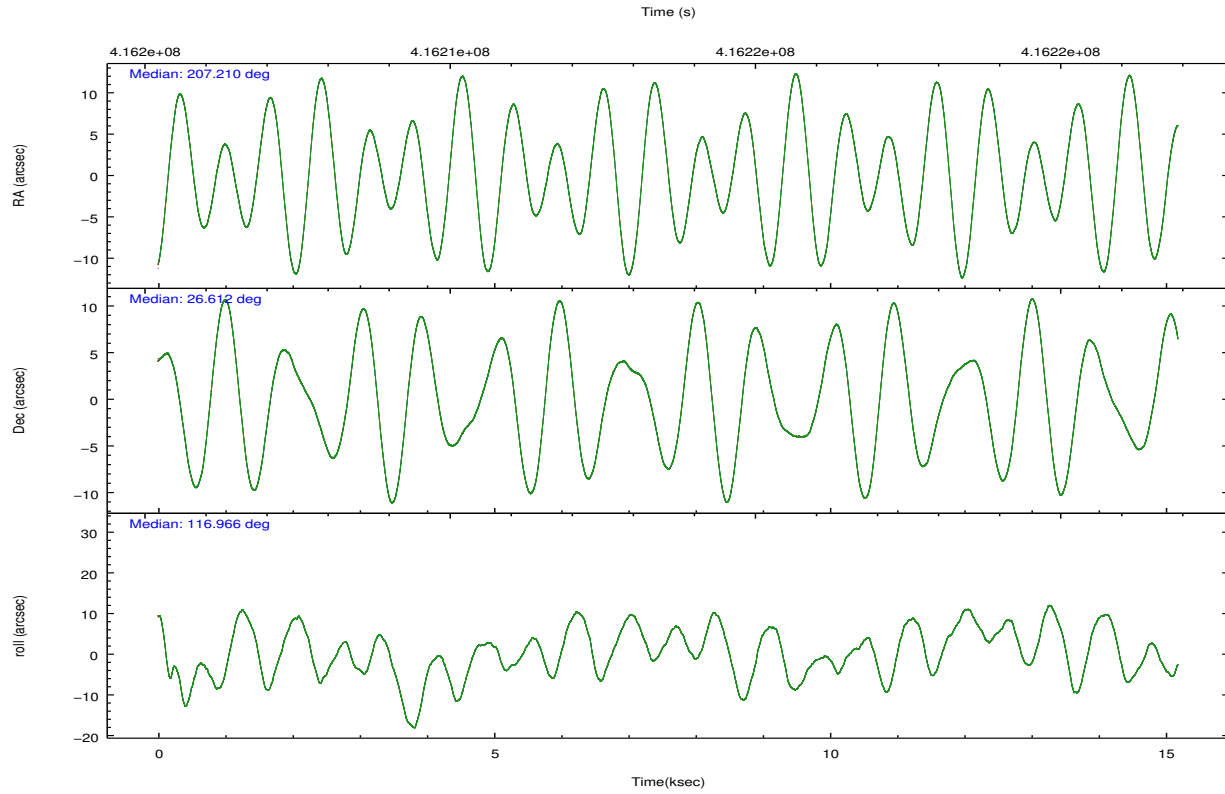
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	14972	9380	21155	64047	13983
	13%	9%	15%	34%	11%
grade 1 events	159	85	195	417	95
	0%	0%	0%	0%	0%
grade 2 events	3438	3254	5204	9253	3420
	3%	3%	3%	5%	2%
grade 3 events	1211	1282	1695	3196	1302
	1%	1%	1%	1%	1%
grade 4 events	1146	1283	2006	3240	1249
	1%	1%	1%	1%	1%
grade 5 events	4256	4423	4070	4822	4549
	3%	4%	3%	2%	3%
grade 6 events	2211	2595	2731	3965	2538
	2%	2%	2%	2%	2%
grade 7 events	80804	81441	97982	94277	94463
	74%	78%	72%	51%	77%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	207.235393	207.2095388601853	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.597591	26.61250645191908	Alternating exposures requested	N	N
[deg] Pointing Roll	116.753106	116.9733752385443	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-214.092463	-214.0989765584371			
[mm] SIM translation stage offset	-19.5	-19.49347644449256			
[s] Observation start time (MET)	416206154.184000	416205778.30688			
Observation start date	2011-03-11T04:48:08	2011-03-11T04:42:58			
[s] Observation end time (MET)	416221154.184000	416221288.60768			
Observation end date	2011-03-11T08:58:08	2011-03-11T09:01:28			
Read mode	TIMED	TIMED			

2.3 Aspect



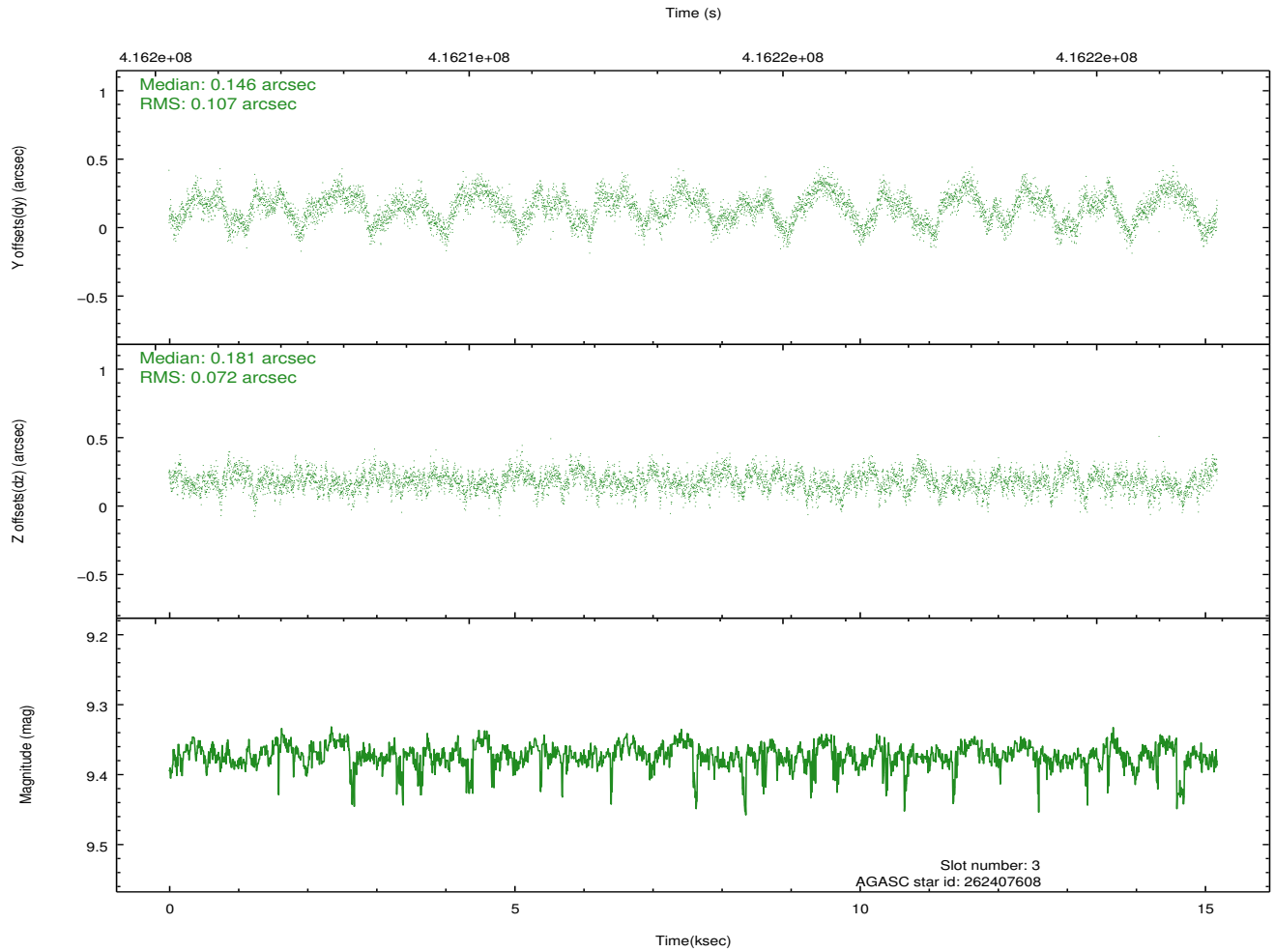
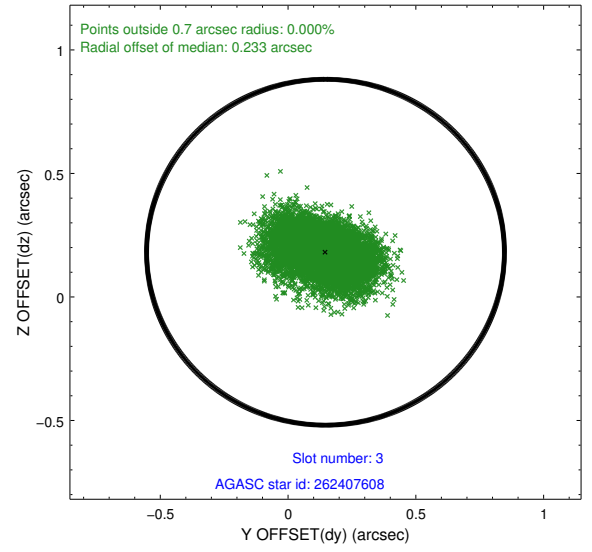
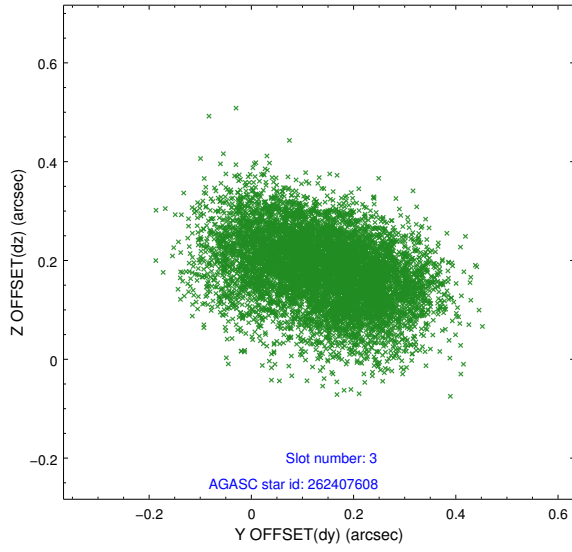


Slot Statistics

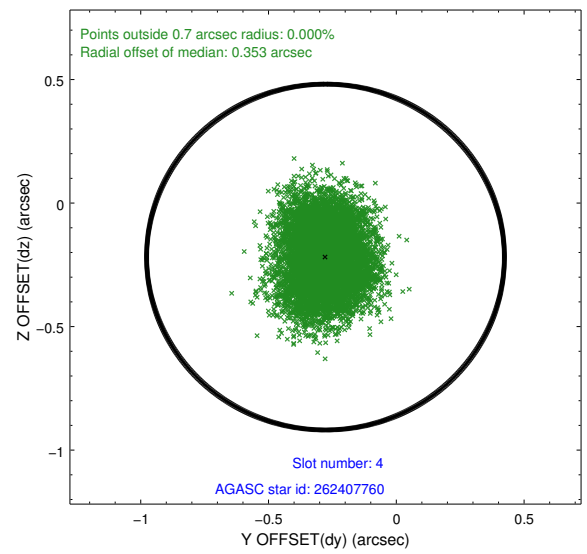
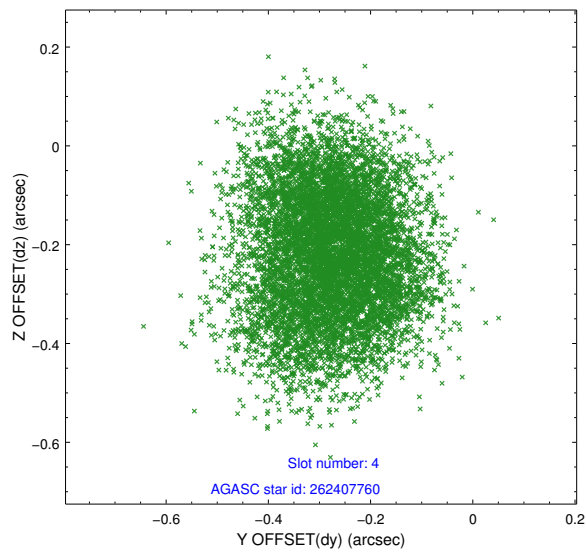
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.08	3702	0.274	-0.202	0.006	0.010	0.000000	0.000000	923.93	-1239.65
1	FID	ACIS-I-5	7.09	3703	-0.491	0.185	0.006	0.010	0.000000	0.000000	-1824.76	658.00
2	FID	ACIS-I-6	7.13	3703	0.126	0.087	0.006	0.011	0.000000	0.000000	389.03	1302.72
3	GUIDE	262407608	9.37	7393	0.146	0.181	0.138	0.222	207.378401	26.435507	-727.88	-149.08
4	GUIDE	262407760	9.91	7395	-0.277	-0.219	0.166	0.259	206.566773	26.577263	908.73	1952.85
5	GUIDE	262408936	9.60	7372	0.018	-0.198	0.228	0.348	207.154731	26.726554	531.69	22.60
6	GUIDE	262409624	10.04	7351	-0.085	0.002	0.201	0.364	207.610037	27.074851	995.87	-1846.42
7	GUIDE	262275128	10.50	7375	0.226	0.244	0.244	0.415	206.271046	26.873005	2290.37	2314.06

2.4 Star Slots

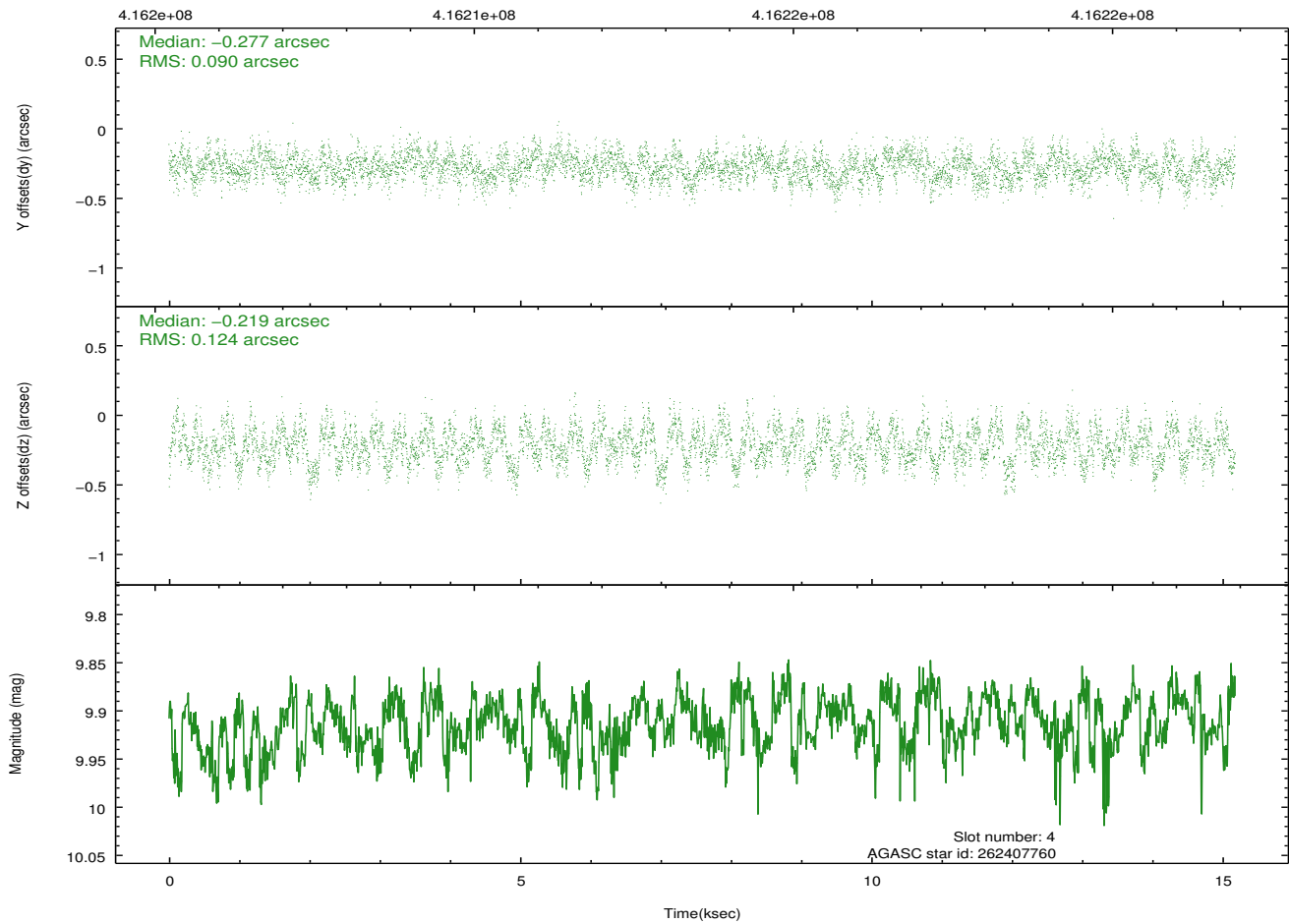
2.4.1 Slot 3



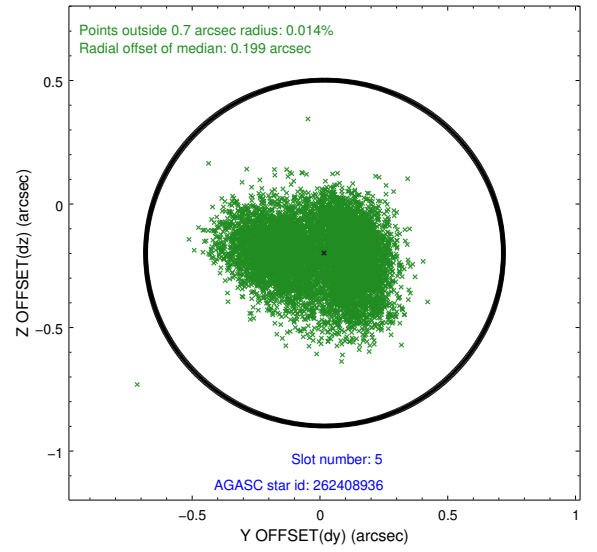
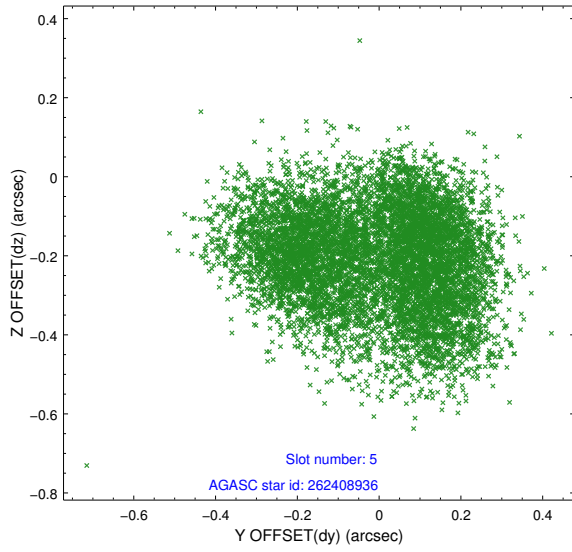
2.4.2 Slot 4



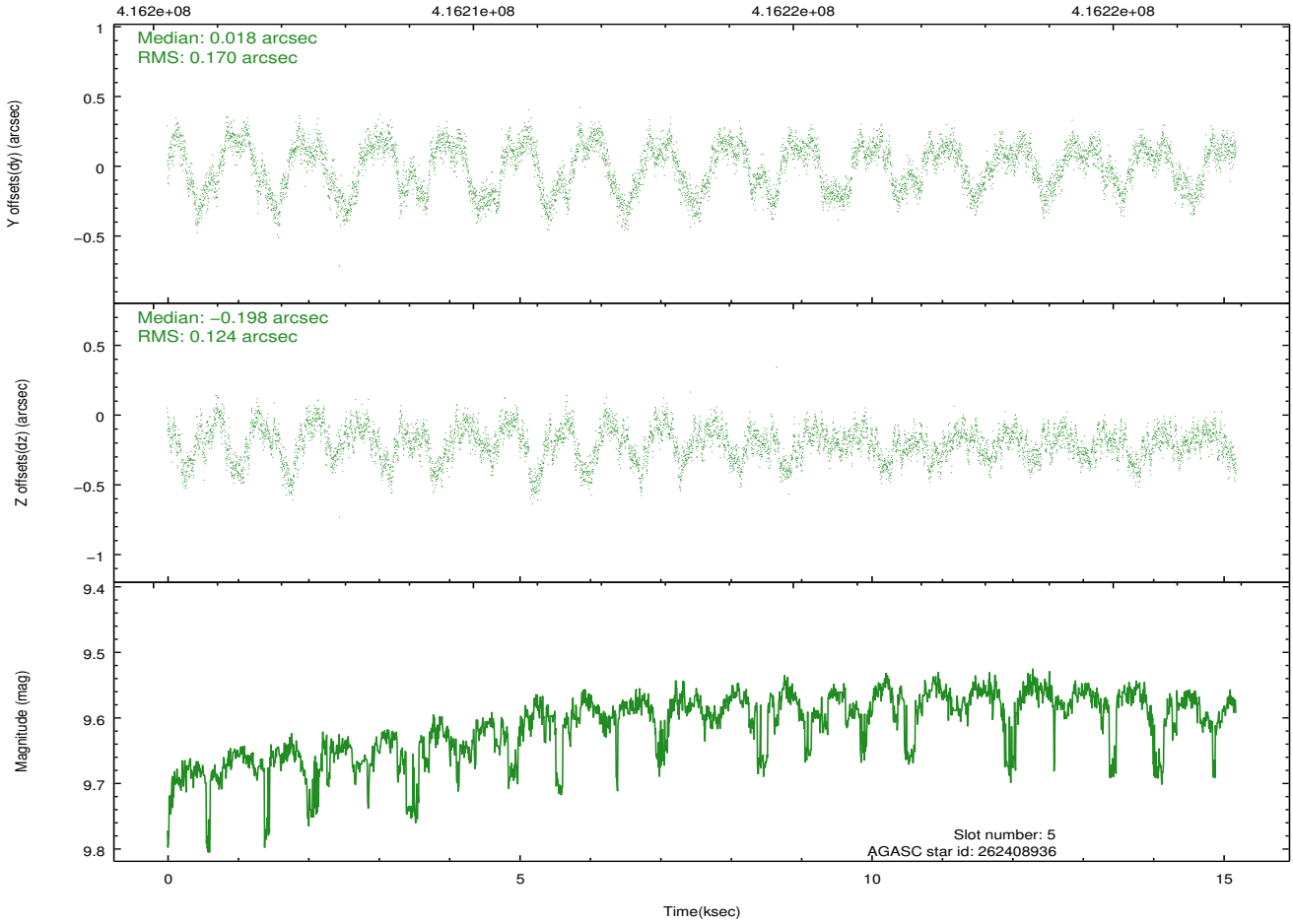
Time (s)



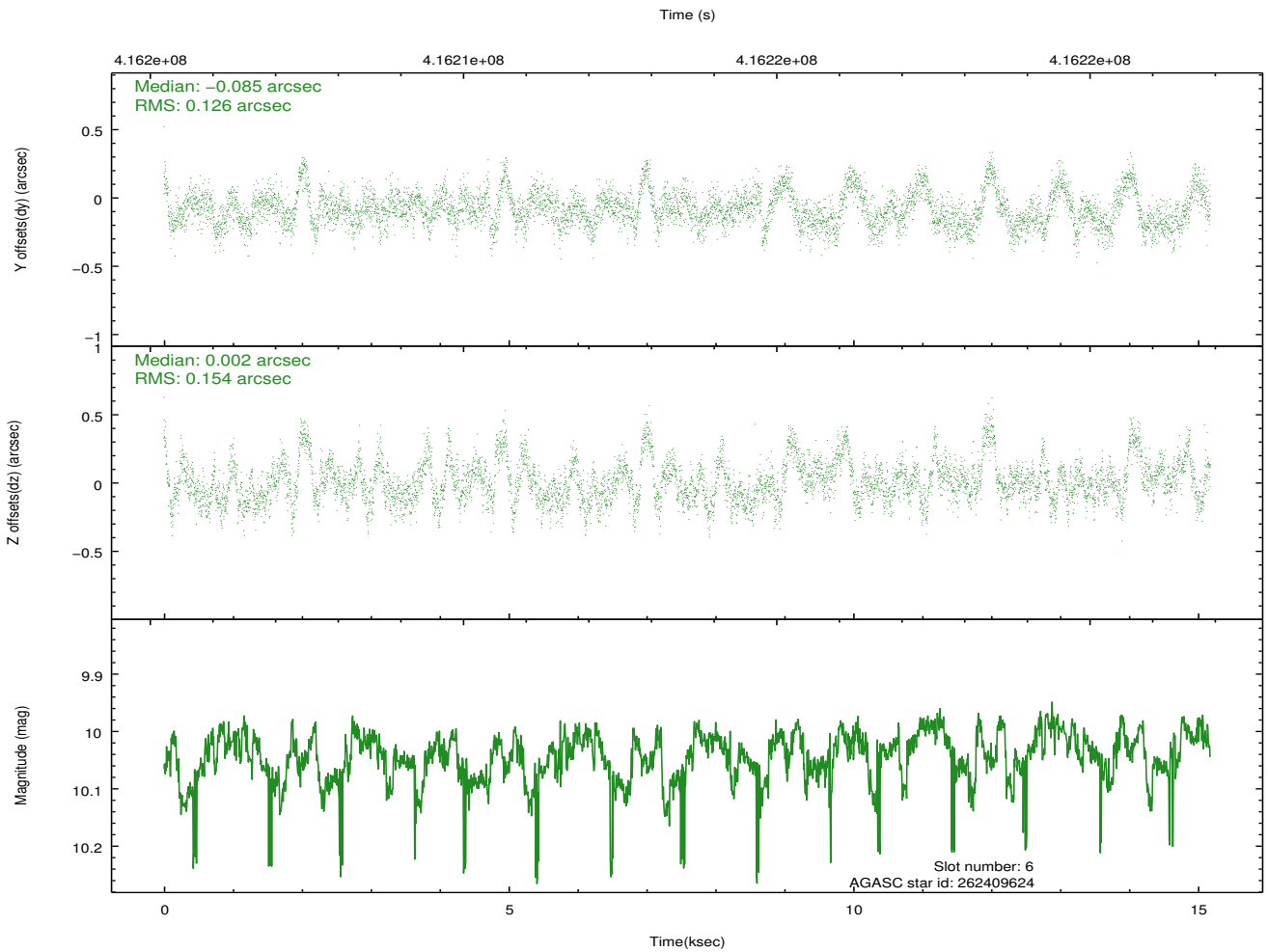
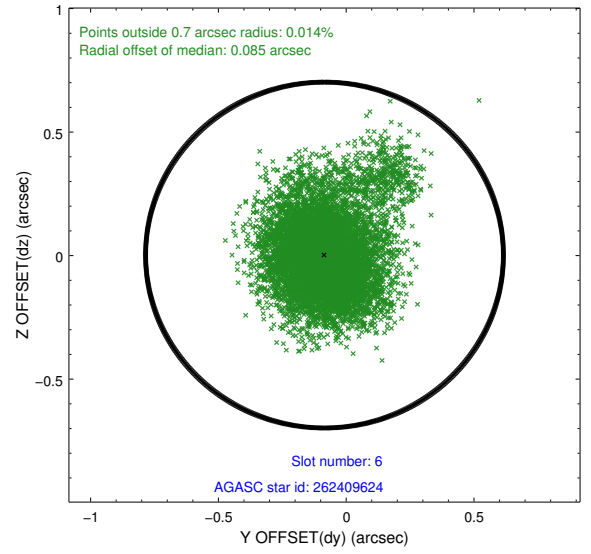
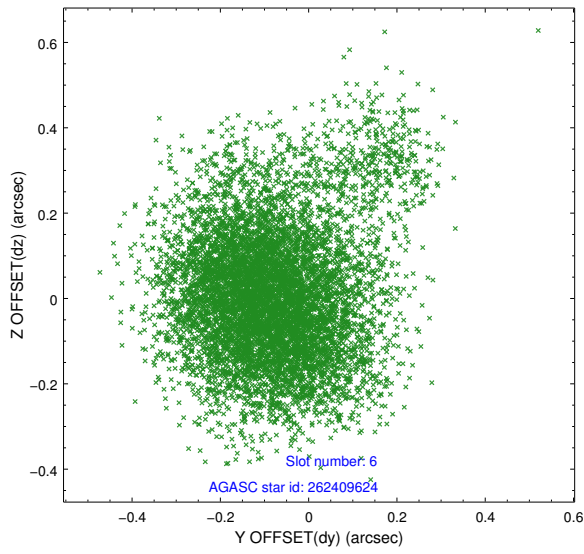
2.4.3 Slot 5



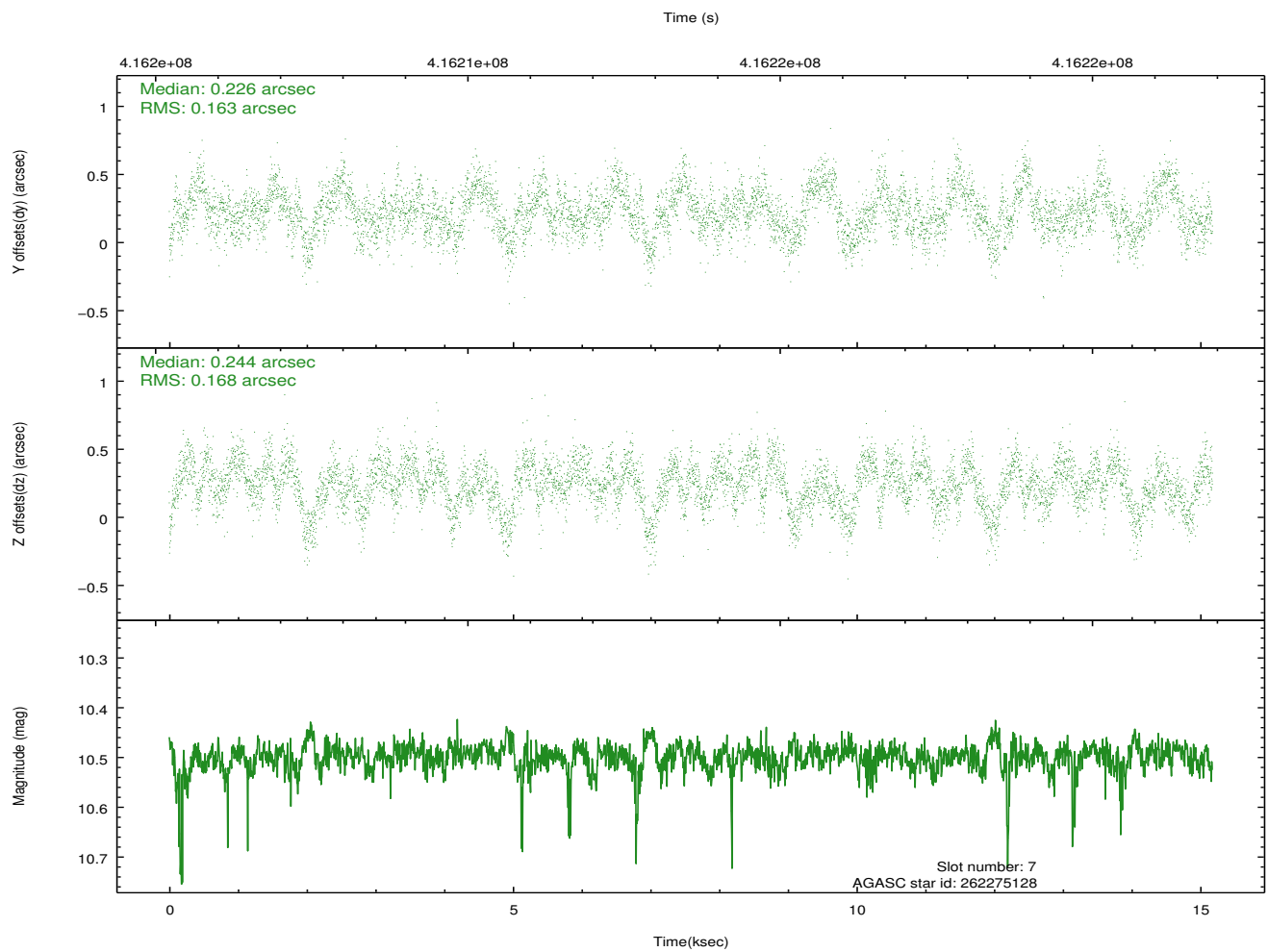
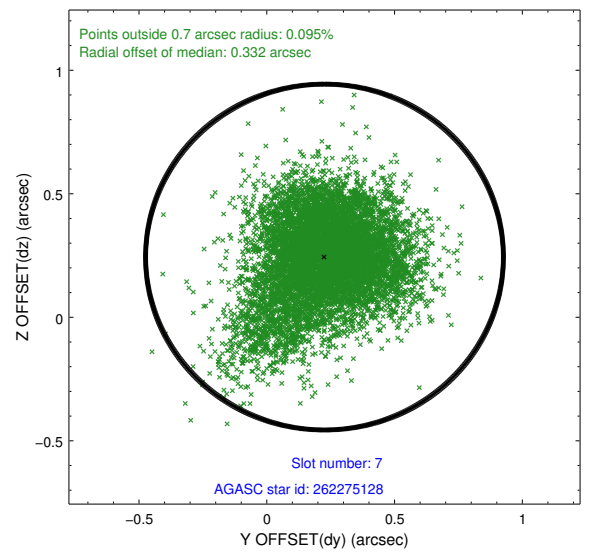
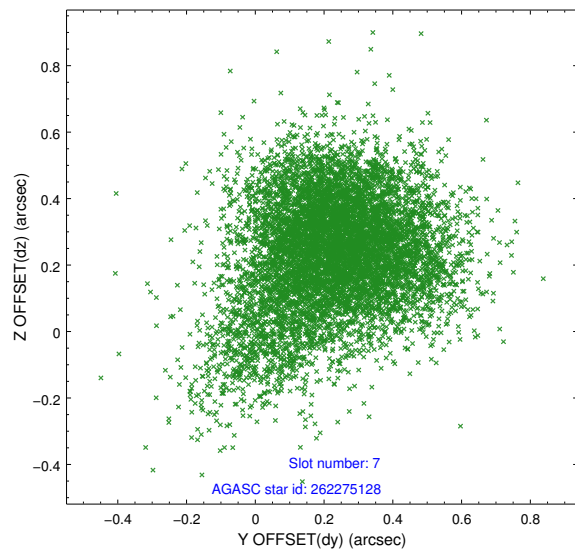
Time (s)



2.4.4 Slot 6

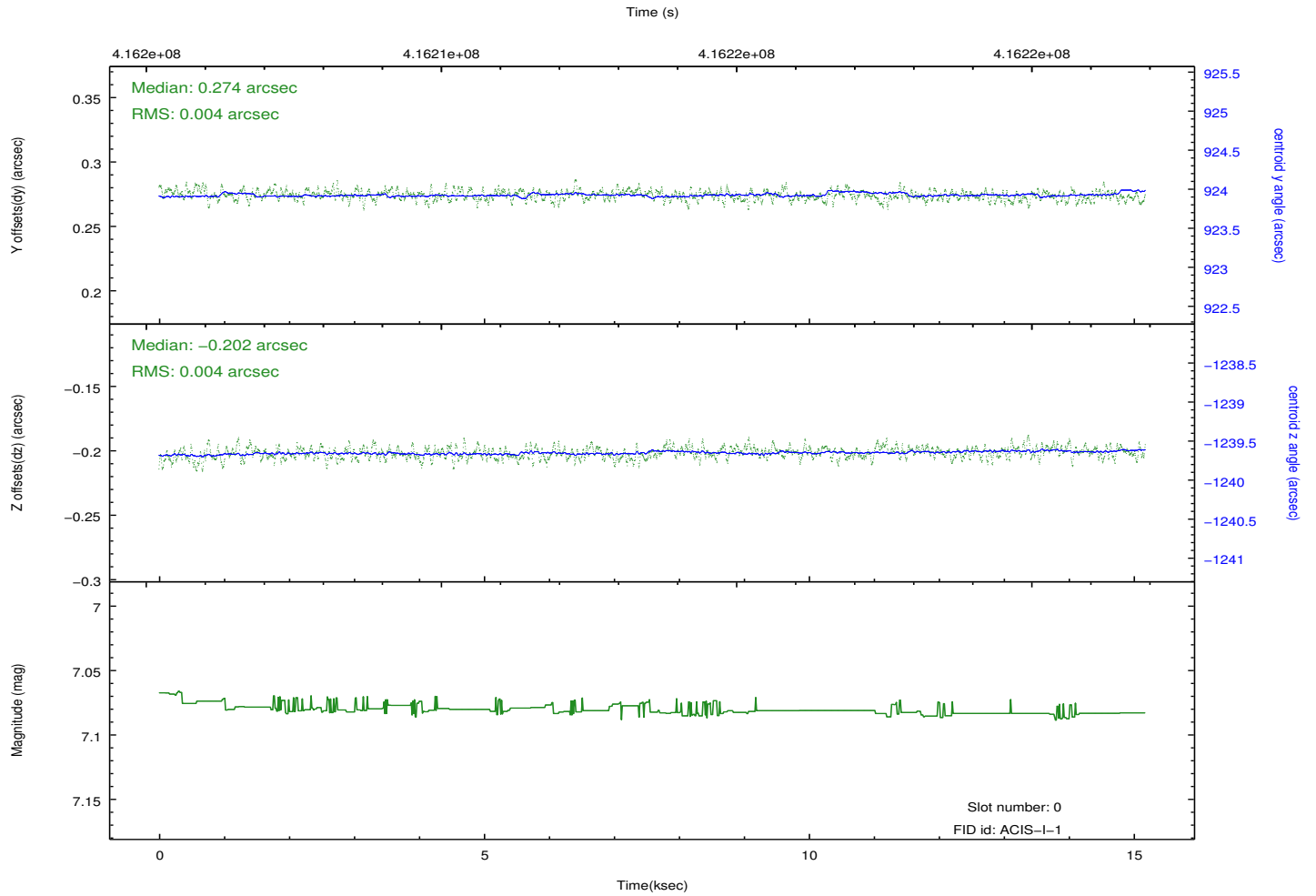
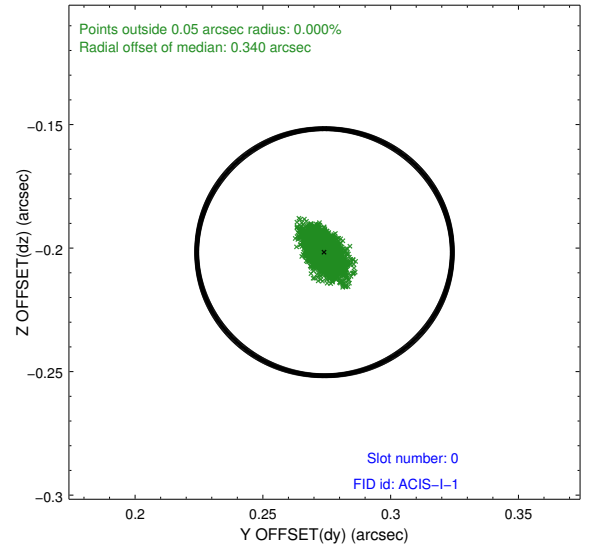
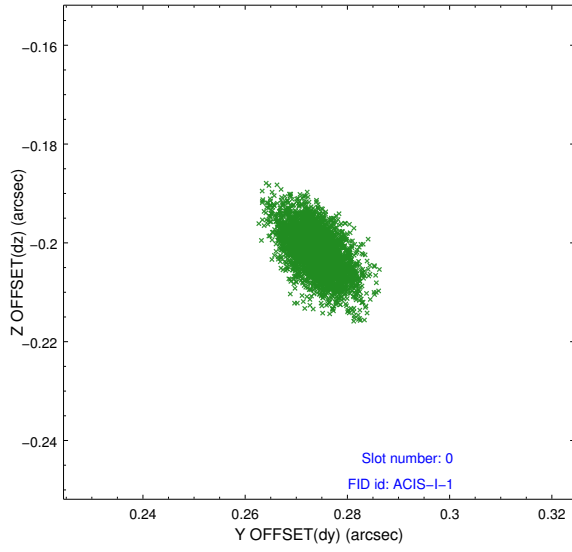


2.4.5 Slot 7

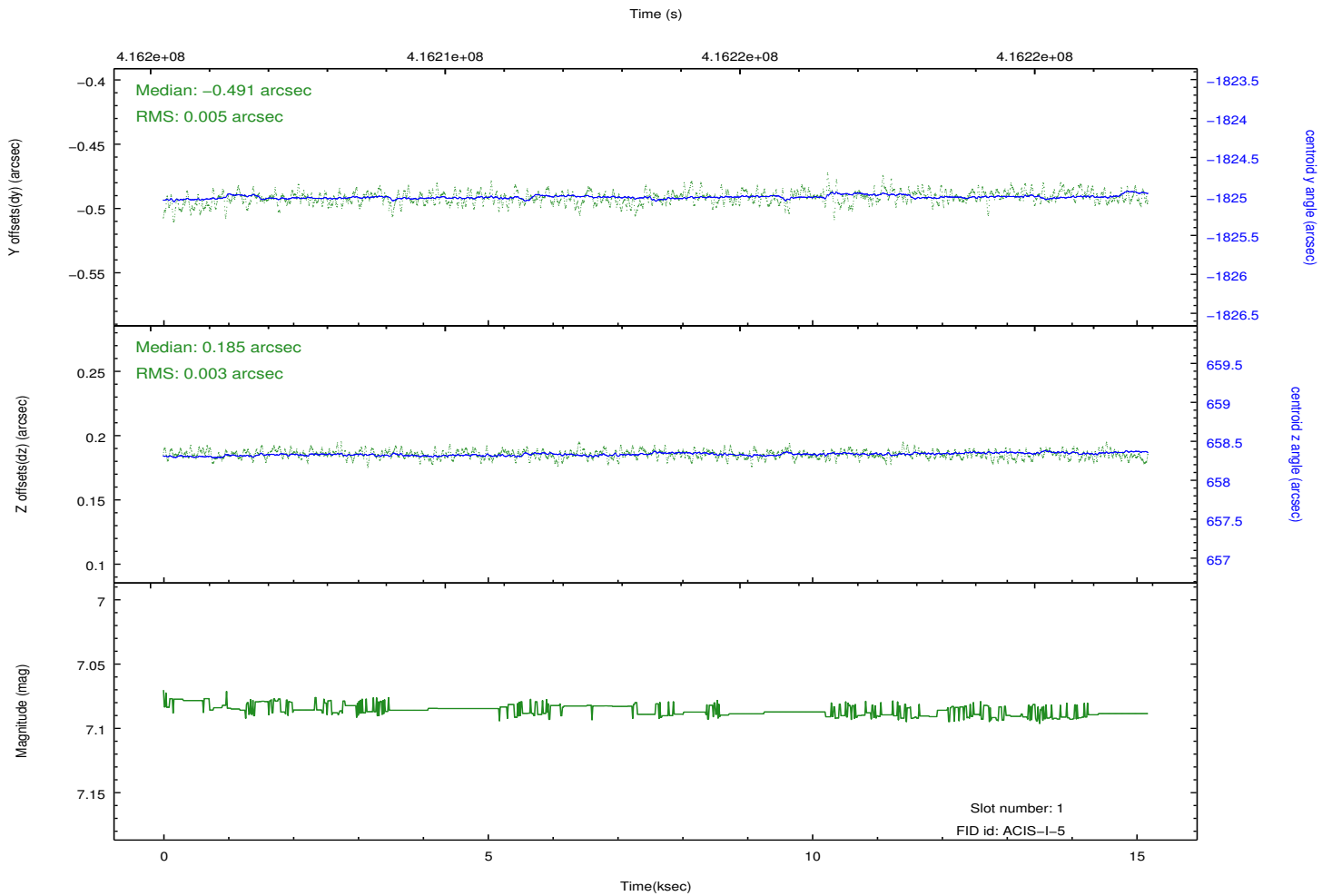
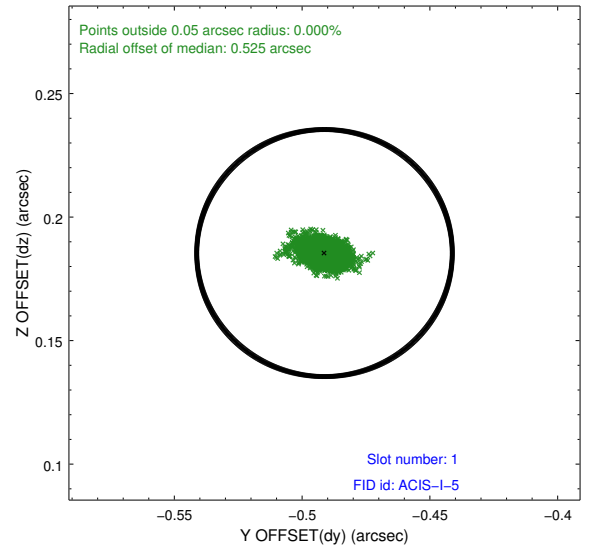
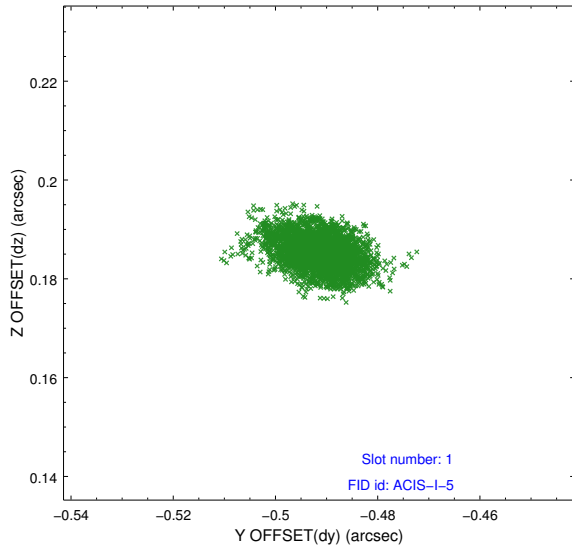


2.5 FID Slots

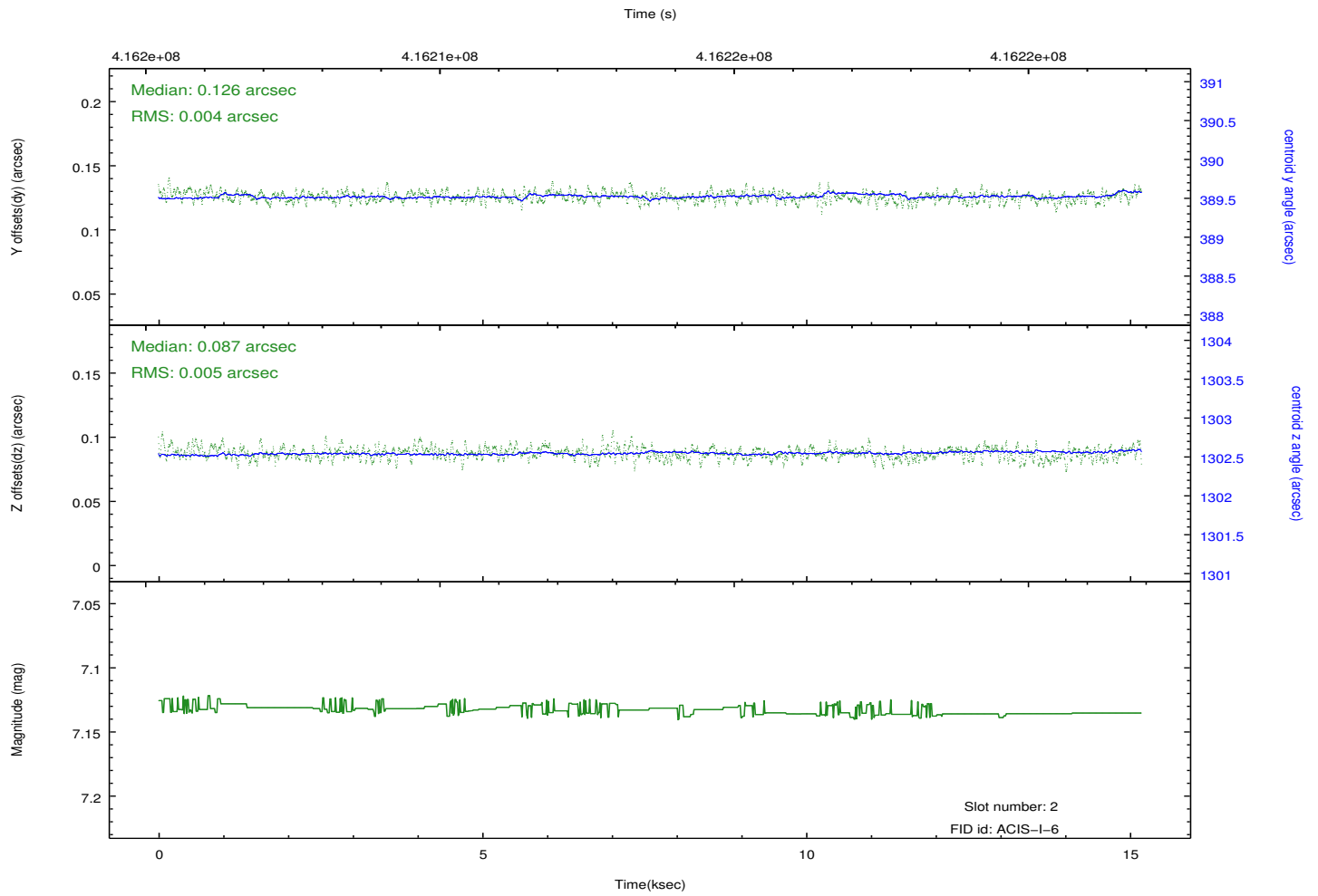
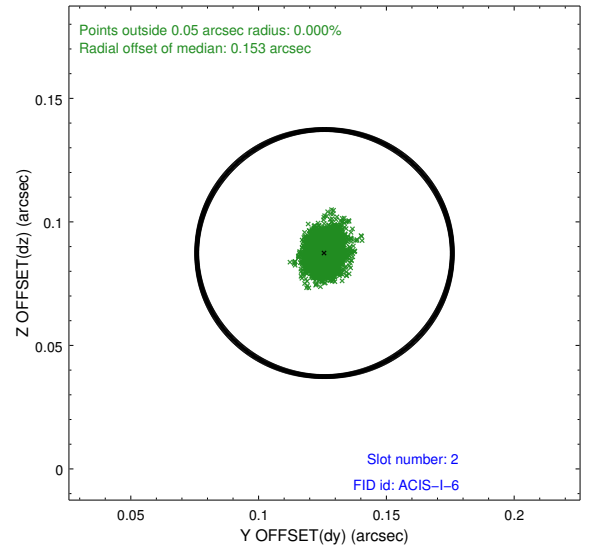
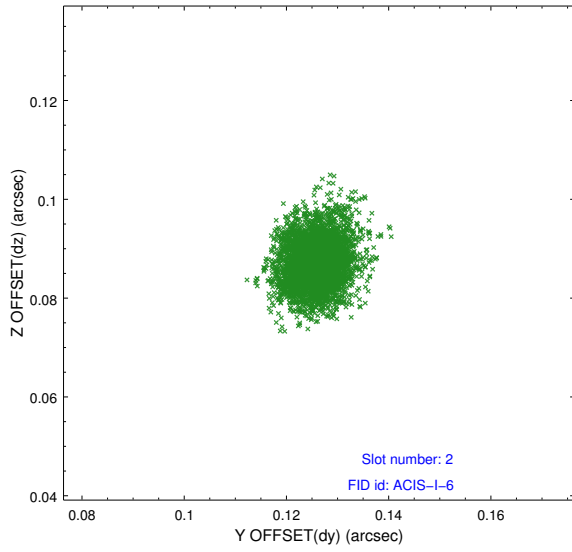
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.77064886868

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.

==

This observation was performed with a large SIM offset. As a result, the fid light positions are beyond normally expected ranges, but the fid light position correction has compensated for this offset.