

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4500 - L2 Version 5
Chandra X-Ray Center

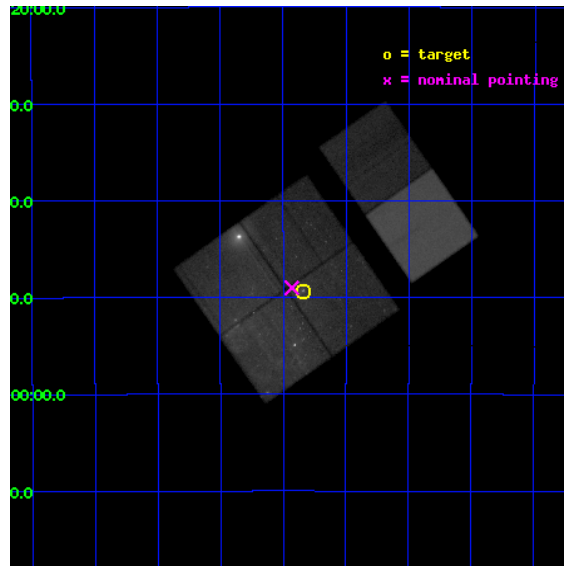
L2 Processing Date : Feb 4 2013

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1 Front

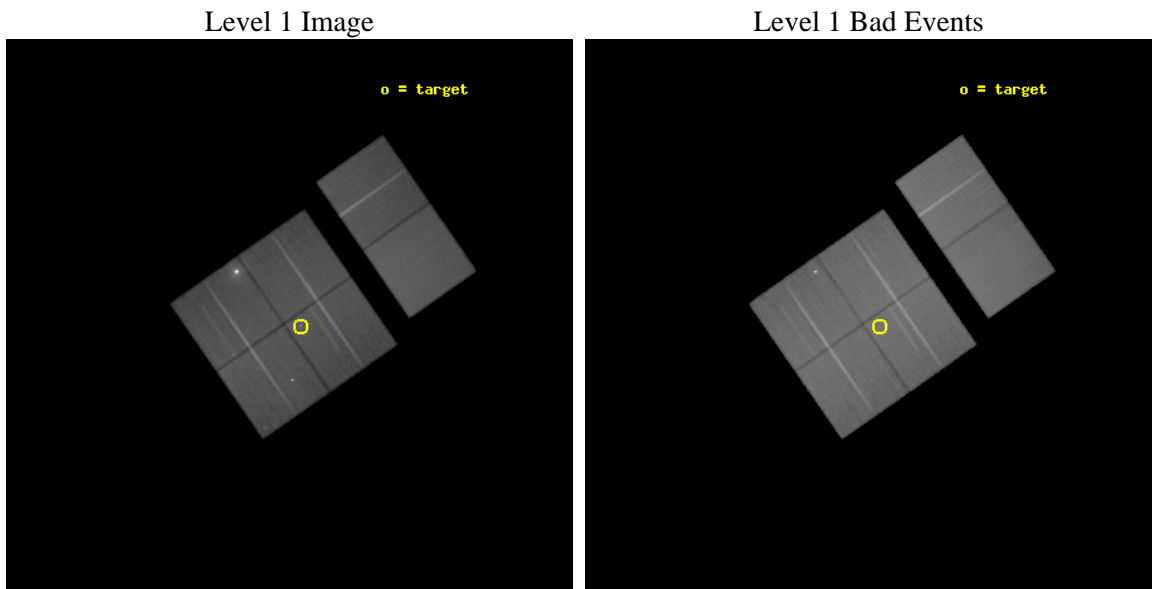
seq_num	200269	Sequence number
obs_id	4500	Observation id
title	The Nature of the X-ray Emission from the Arches Cluster and its Vicinity	Proposal title
observer	Prof. Q. Daniel Wang	Principal investigator
object	Arches Cluster	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.459583	Observer's specified target RA [deg]
dec_targ	-28.822222	Observer's specified target Dec [deg]
ra_nom	266.48262027787	Nominal RA [deg]
dec_nom	-28.816885116026	Nominal Dec [deg]
roll_nom	55.176085562871	Nominal Roll [deg]
revision	5	Processing version of data
ontime	99823.91764763	Sum of GTIs [s]
livetime	98559.887095629	Livetime [s]
ontime0	99820.676667362	Sum of GTIs [s]
ontime1	99823.917777091	Sum of GTIs [s]
ontime2	99820.676667333	Sum of GTIs [s]
ontime3	99823.91764763	Sum of GTIs [s]
ontime6	99820.676627576	Sum of GTIs [s]
ontime7	99830.399628103	Sum of GTIs [s]
l2events	1342723	Number of level 2 events



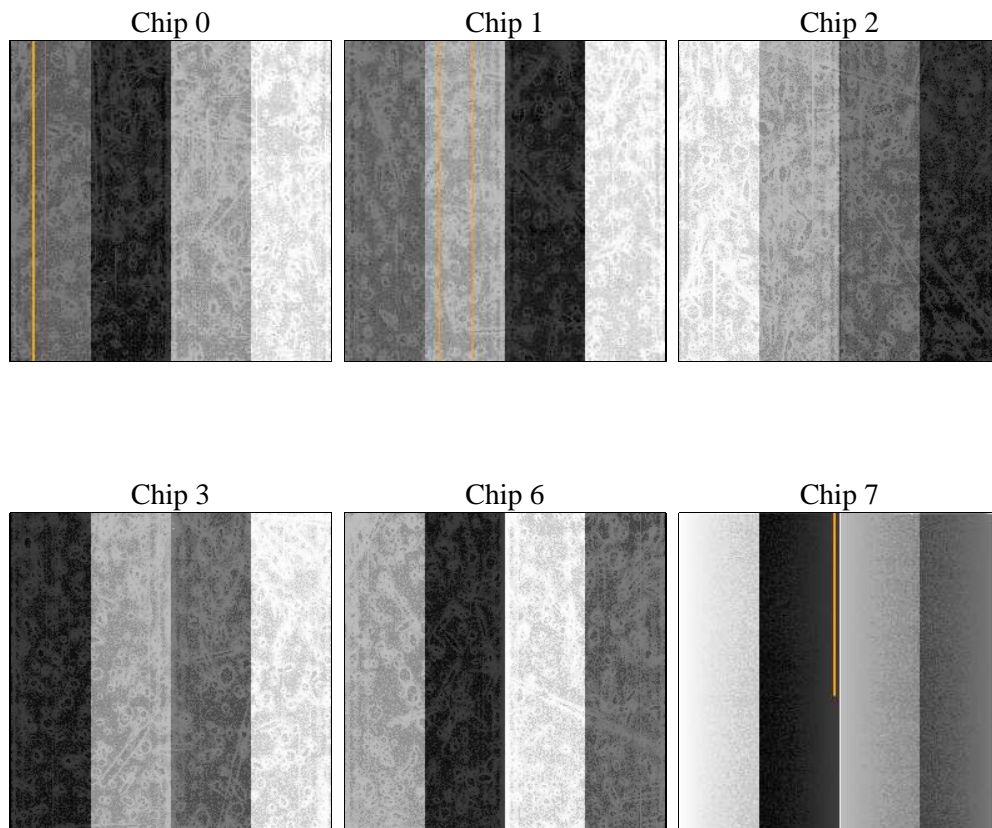
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	99700.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	99823.91764763	Sum of GTIs [s]
caldbver	4.5.5	 	ontime0	99820.676667362	Sum of GTIs [s]
date	2013-02-04T21:06:53	Date and time of file creation	ontime1	99823.917777091	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	99820.676667333	Sum of GTIs [s]
			ontime3	99823.91764763	Sum of GTIs [s]
			ontime6	99820.676627576	Sum of GTIs [s]
			ontime7	99830.399628103	Sum of GTIs [s]
			l1events	5192124	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	1015586	836868	782022	783189	777472	996987	grade 0 events	237769	147375	73696	76446	46134	38531
rejected events	600126	588211	646368	641618	674538	579272		23%	17%	9%	9%	5%	3%
rejected %	59%	70%	82%	81%	86%	58%	grade 1 events	6403	1031	653	712	469	901
								0%	0%	0%	0%	0%	0%
							grade 2 events	70747	41176	24083	24358	20441	84510
								6%	4%	3%	3%	2%	8%
							grade 3 events	27750	16359	10640	11114	9272	37880
								2%	1%	1%	1%	1%	3%
							grade 4 events	27085	16025	10624	11085	9087	37666
								2%	1%	1%	1%	1%	3%
							grade 5 events	35096	31387	28722	32782	34435	94377
								3%	3%	3%	4%	4%	9%
							grade 6 events	53347	28609	17391	19333	18683	221655
								5%	3%	2%	2%	2%	22%
							grade 7 events	557389	554906	616213	607359	638951	481467
								54%	66%	78%	77%	82%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	266.480103	266.4826202778695	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.844195	-28.81688511602614	Alternating exposures requested	N	N
[deg] Pointing Roll	54.966186	55.17608556287109	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	203159550.184000	203158232.91869			
Observation start date	2004-06-09T09:11:26	2004-06-09T08:50:32			
[s] Observation end time (MET)	203259250.184000	203259985.18569			
Observation end date	2004-06-10T12:53:06	2004-06-10T13:06:25			
Read mode	TIMED	TIMED			

2.3 Aspect

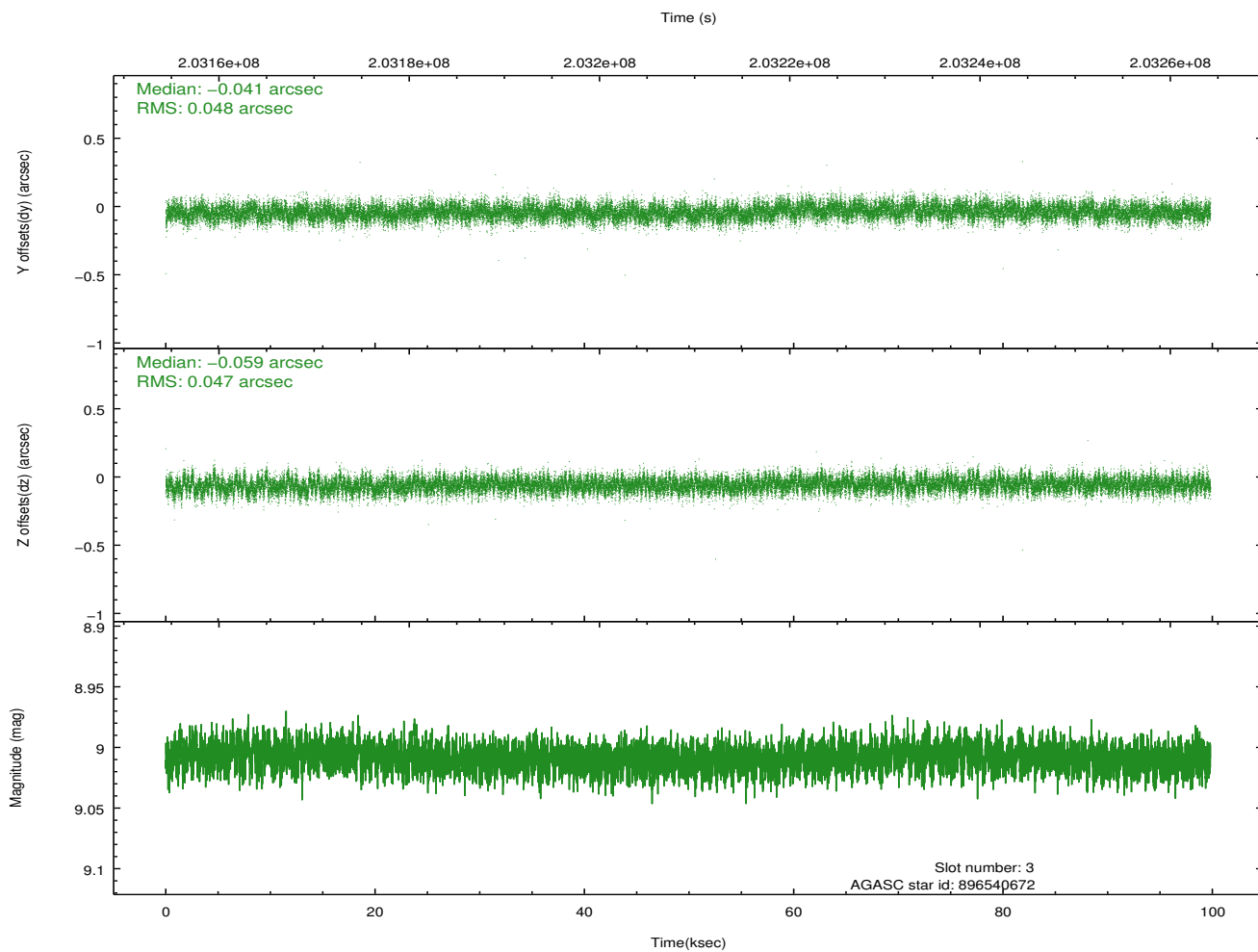
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	24349	0.039	0.022	0.047	0.062	0.000000	0.000000	934.40	-831.55
1	FID	ACIS-I-5	7.23	24349	-0.170	0.064	0.024	0.055	0.000000	0.000000	-1813.94	1066.04
2	FID	ACIS-I-6	7.25	24347	0.041	-0.003	0.019	0.027	0.000000	0.000000	400.07	1710.37
3	GUIDE	896540672	9.01	48682	-0.041	-0.059	0.071	0.115	266.662941	-28.185372	2274.85	886.52
4	GUIDE	896542744	9.40	48474	0.091	0.088	0.109	0.189	266.765496	-29.248460	-677.57	-1570.05
5	GUIDE	896403520	9.03	48680	0.089	-0.239	0.100	0.156	265.626481	-28.748780	-1273.33	2397.37
6	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	896538944	9.20	48675	-0.133	0.216	0.091	0.145	267.225265	-28.991989	905.68	-2230.53

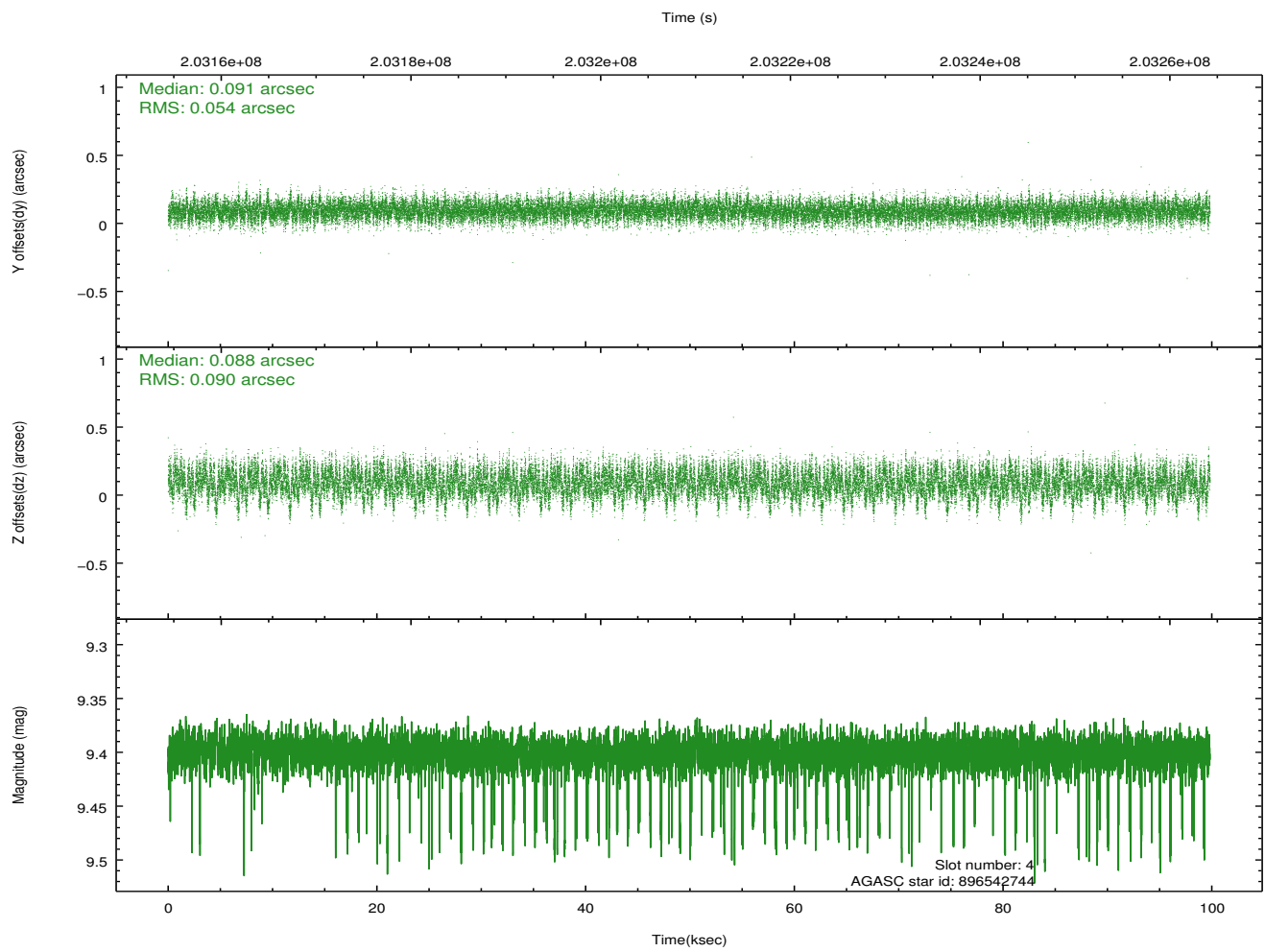
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2.4 Star Slots

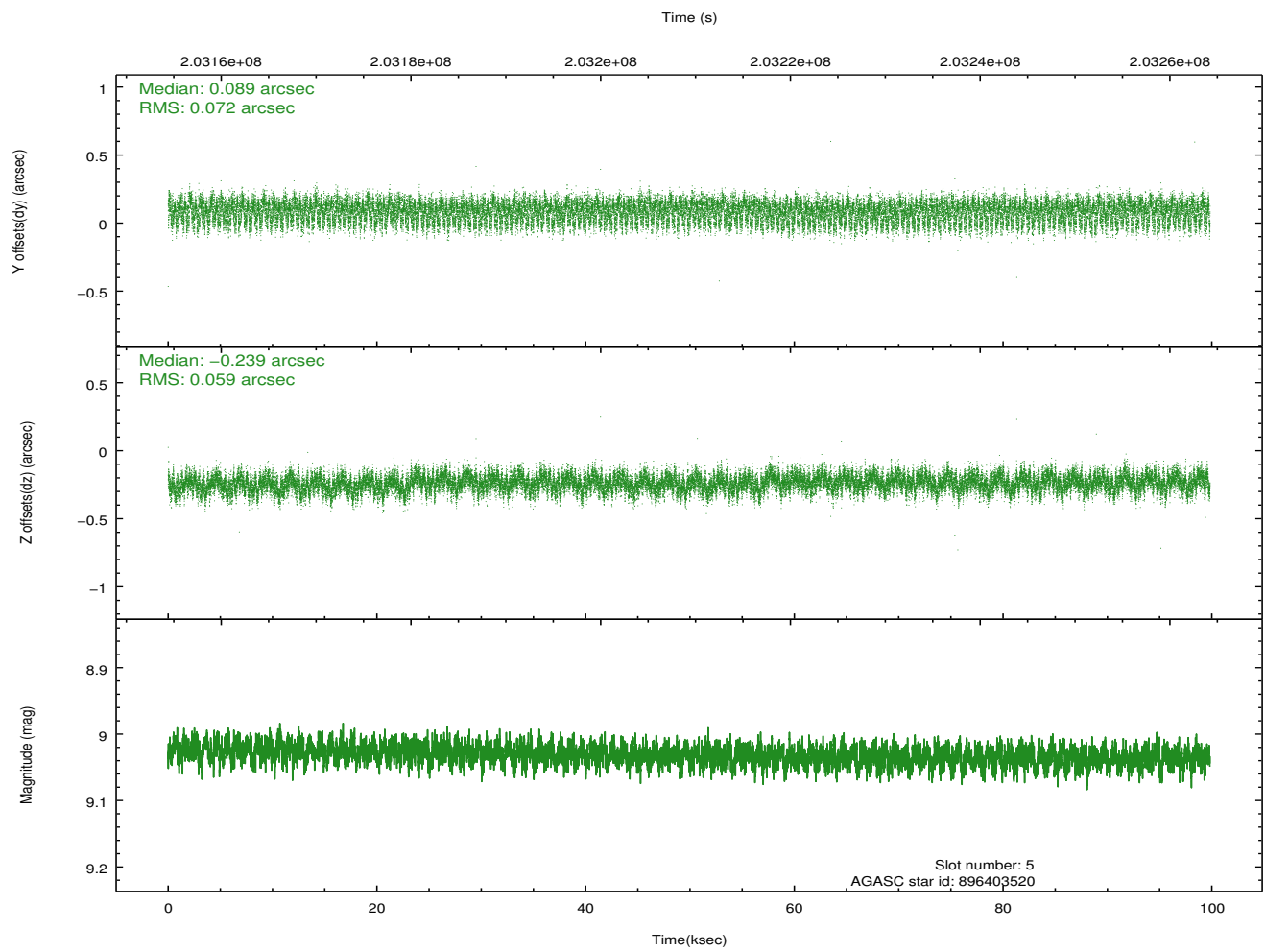
2.4.1 Slot 3



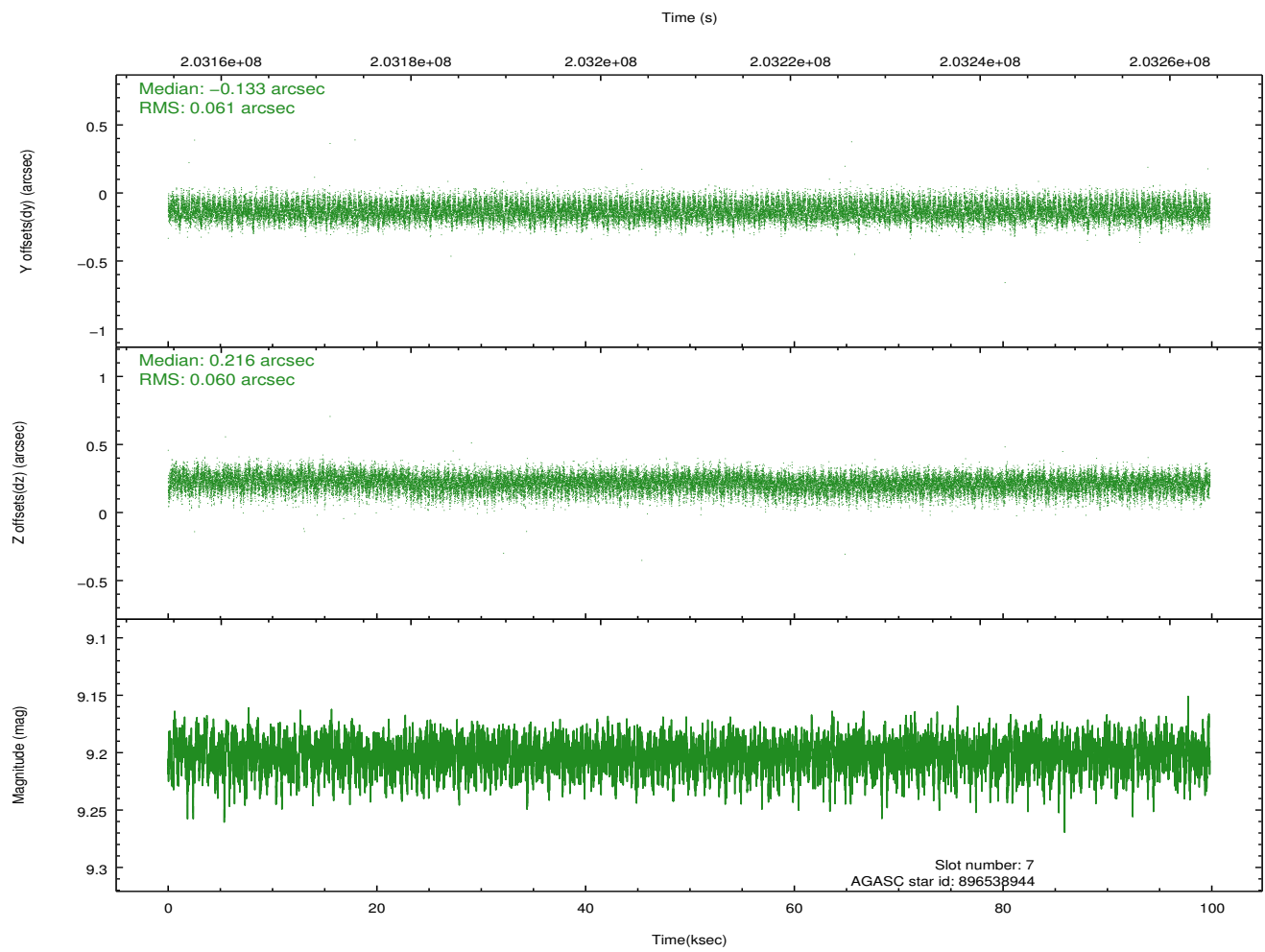
2.4.2 Slot 4



2.4.3 Slot 5

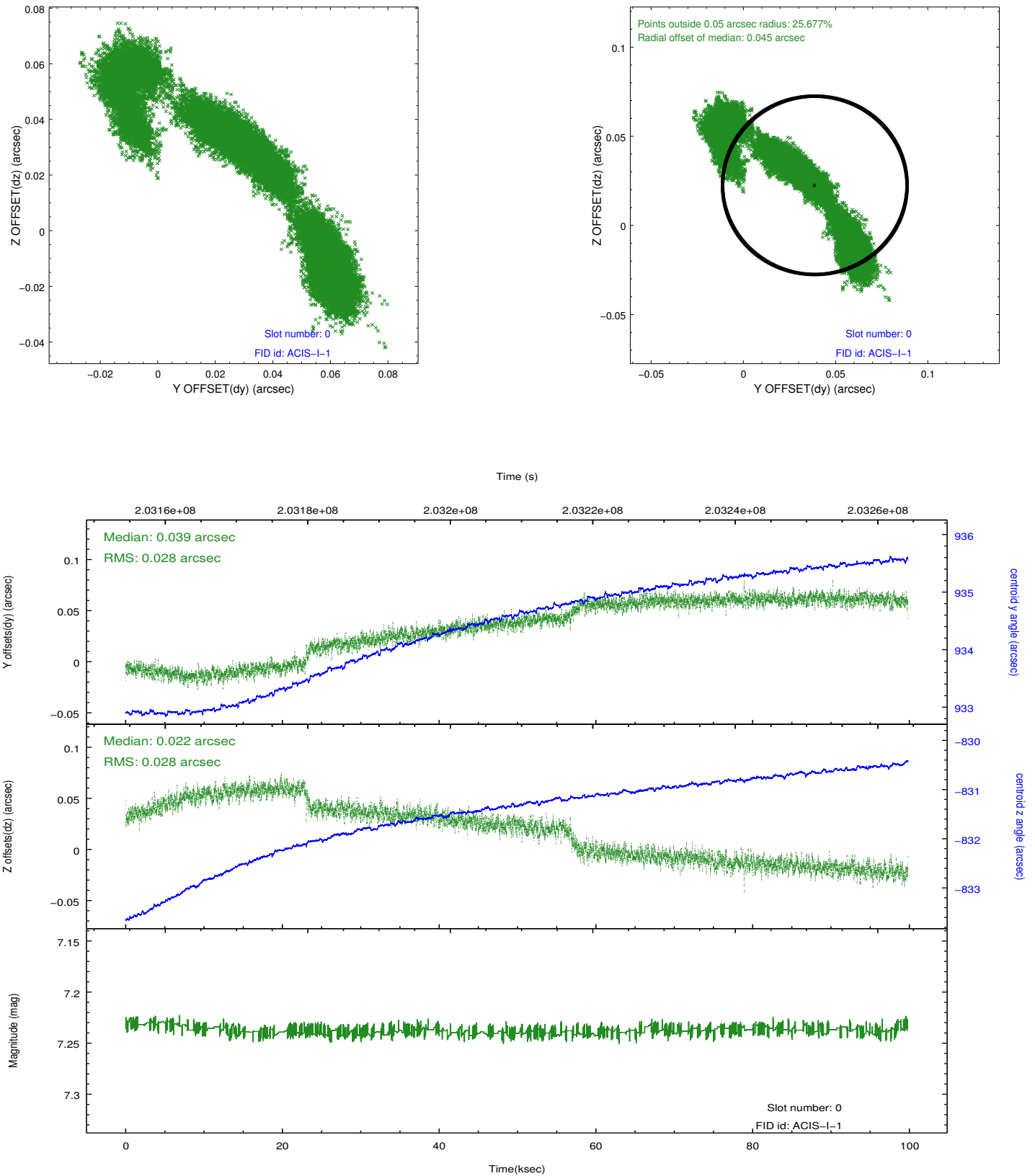


2.4.4 Slot 7

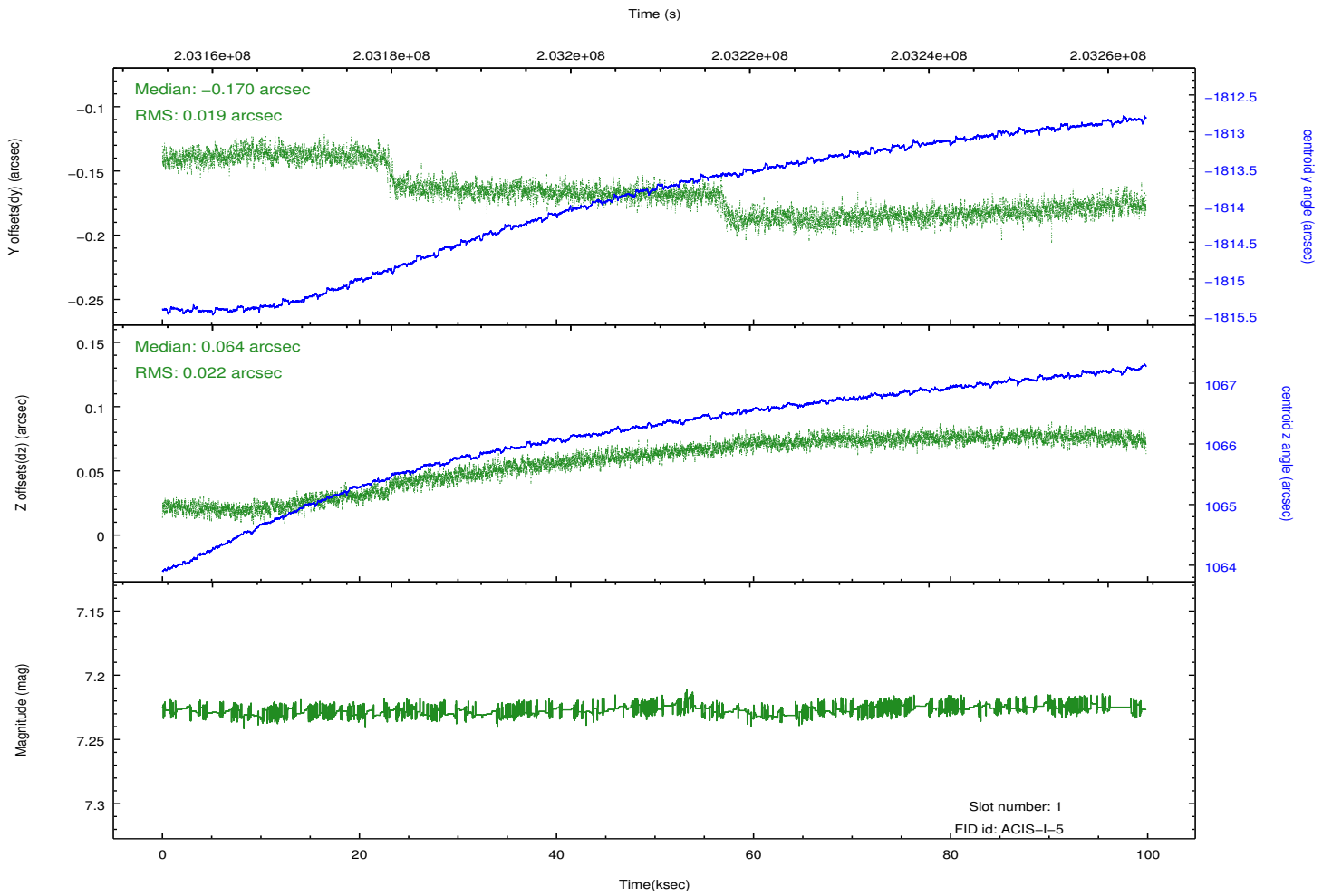
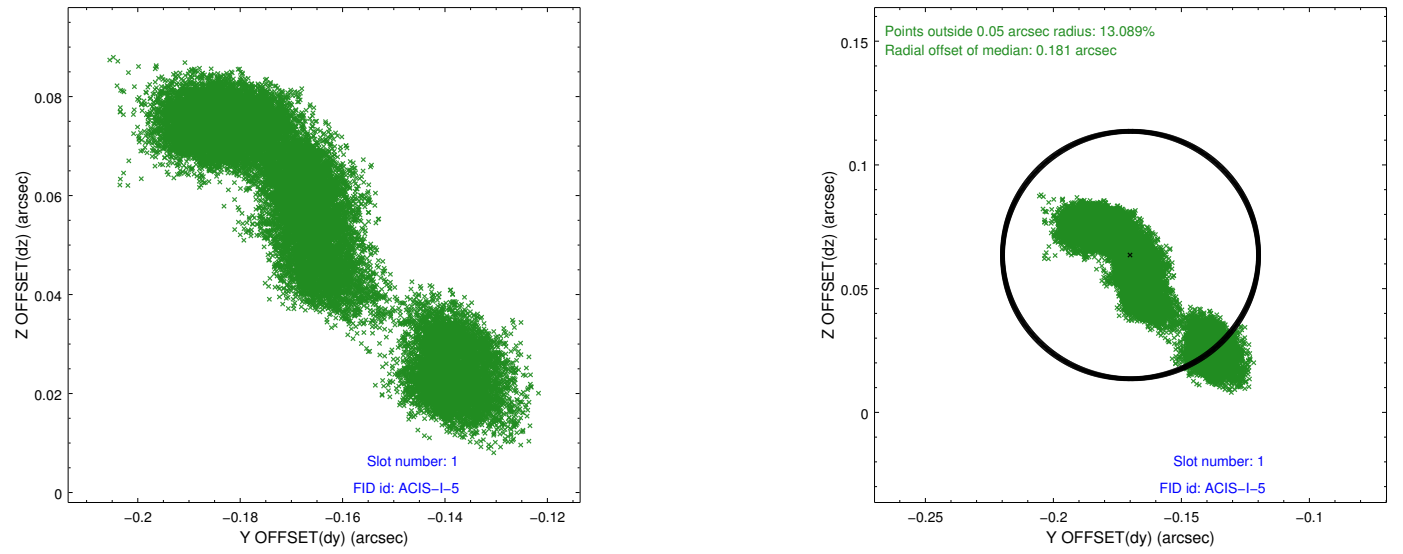


2.5 FID Slots

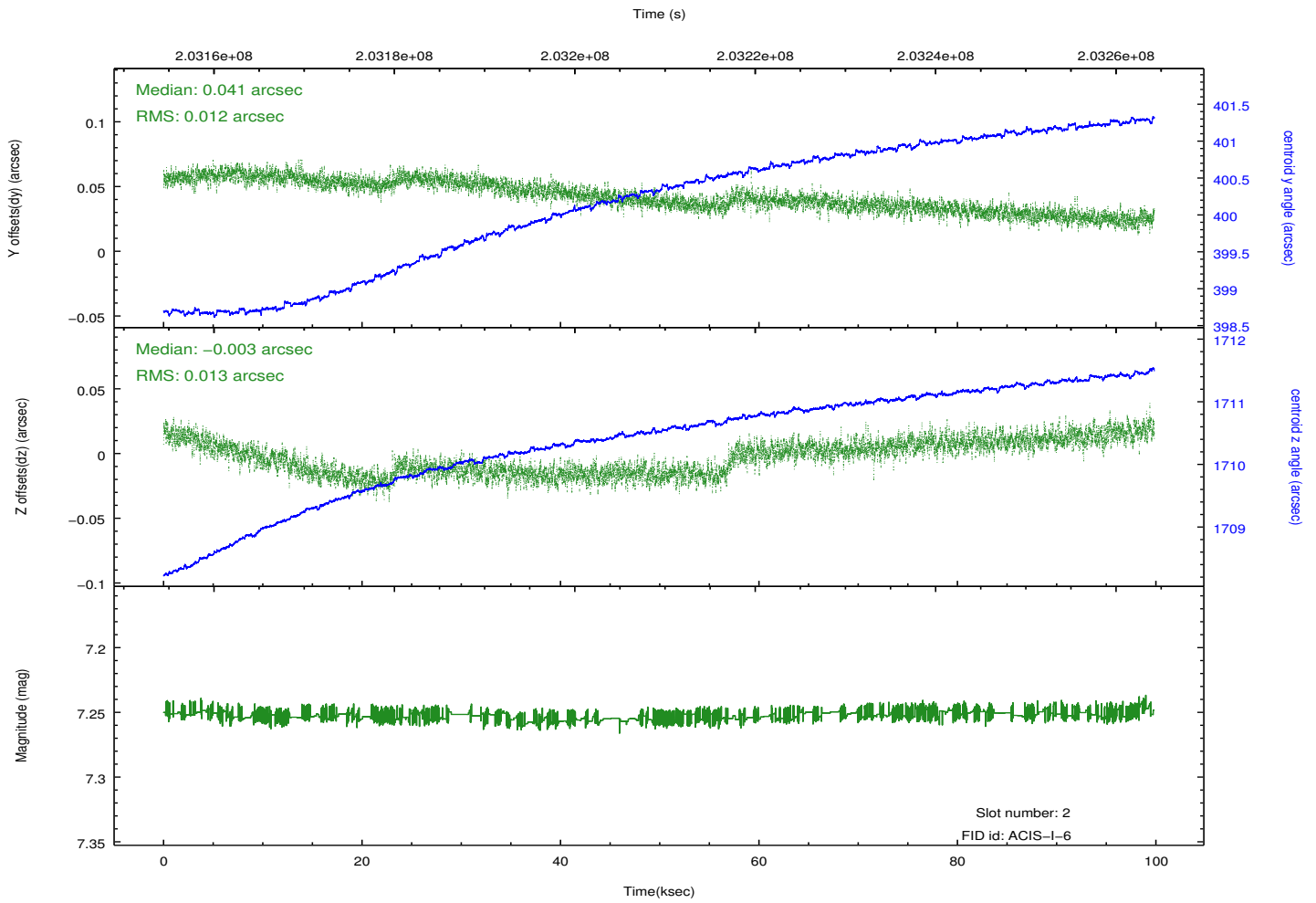
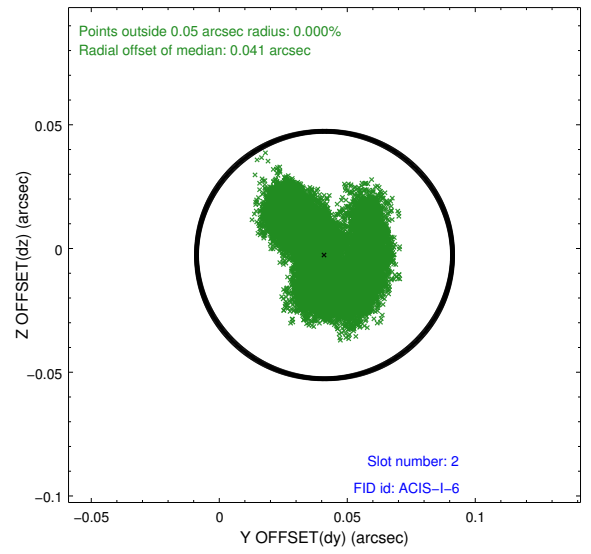
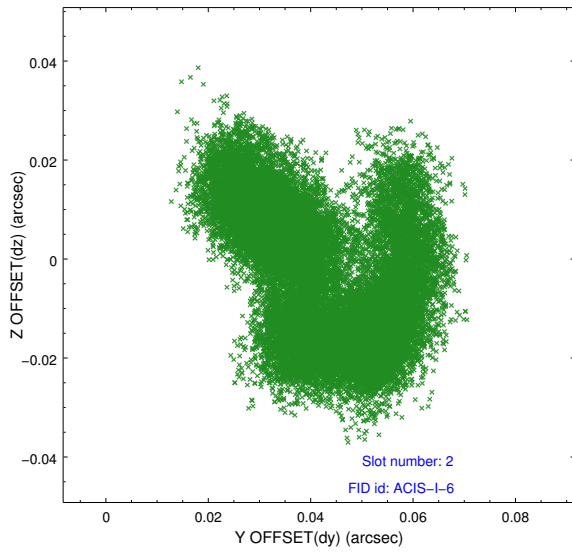
2.5.1 Slot 0



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)	2013.02.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	99.823

A.2 Comments

The guide star in slot 6 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.