

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9378 - L2 Version 3
Chandra X-Ray Center

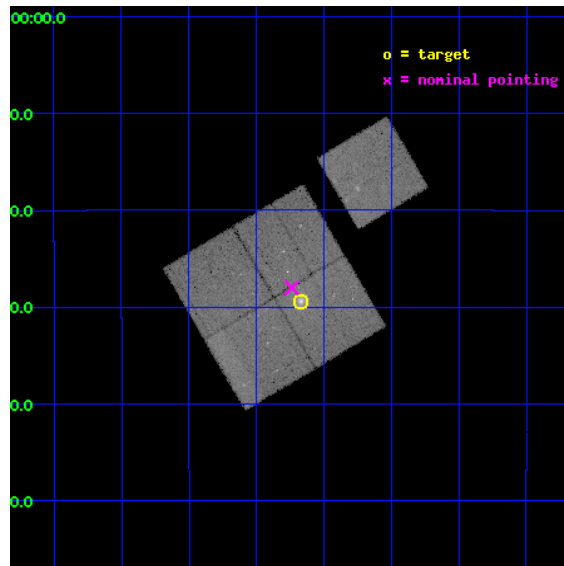
L2 Processing Date : May 12 2012

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1 Front

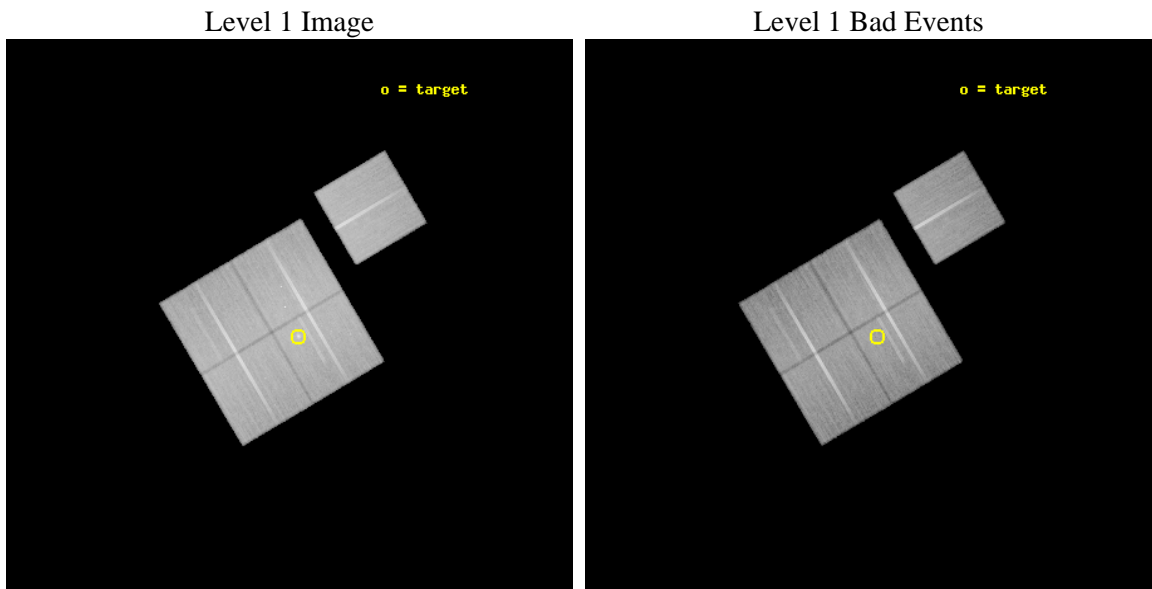
seq_num	800715	Sequence number
obs_id	9378	Observation id
title	Probing Dark Energy with Relaxed Galaxy Clusters	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	MACS1359	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	209.792917	Observer's specified target RA [deg]
dec_targ	-19.490111	Observer's specified target Dec [deg]
ra_nom	209.80955007959	Nominal RA [deg]
dec_nom	-19.467205716985	Nominal Dec [deg]
roll_nom	59.405385087055	Nominal Roll [deg]
revision	3	Processing version of data
ontime	50040.077424109	Sum of GTIs [s]
livetime	49386.266973594	Livetime [s]
ontime0	50039.989122152	Sum of GTIs [s]
ontime1	50043.171232283	Sum of GTIs [s]
ontime2	50040.071301877	Sum of GTIs [s]
ontime3	50040.077424109	Sum of GTIs [s]
ontime6	50046.23013252	Sum of GTIs [s]
l2events	178565	Number of level 2 events



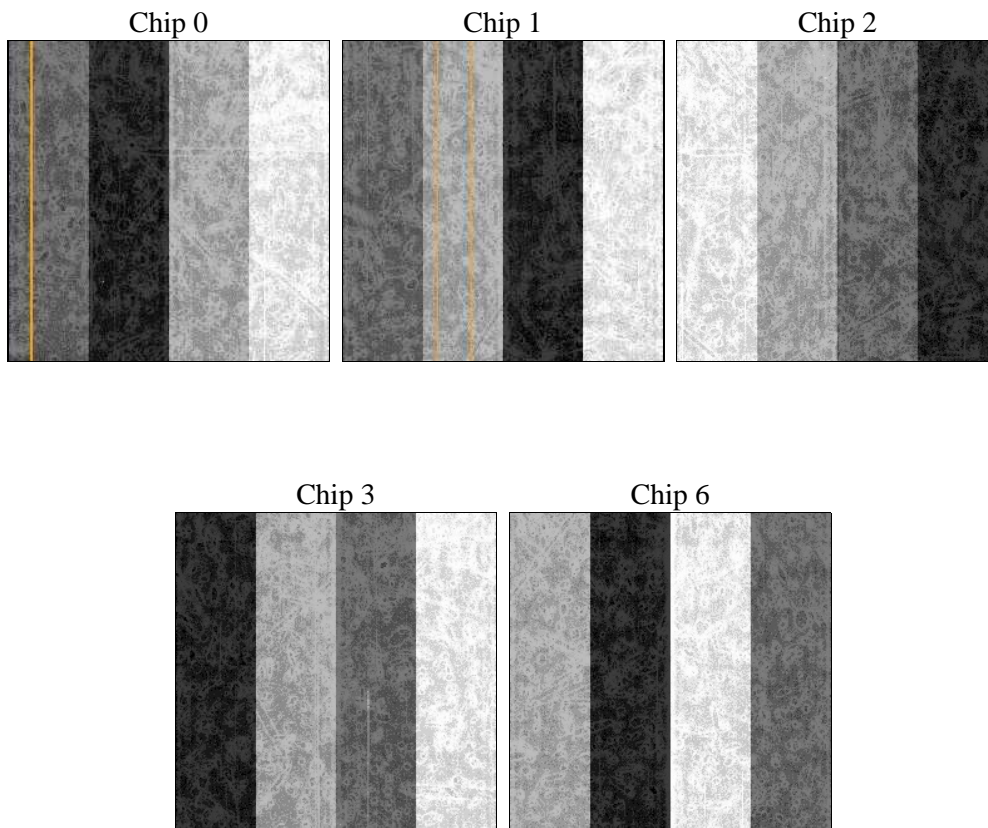
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	50040.077424109	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	50039.989122152	Sum of GTIs [s]
date	2012-05-12T02:08:34	Date and time of file creation	ontime1	50043.171232283	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	50040.071301877	Sum of GTIs [s]
			ontime3	50040.077424109	Sum of GTIs [s]
			ontime6	50046.23013252	Sum of GTIs [s]
			l1events	1993815	Number of level 1 events

2.1.4 Events

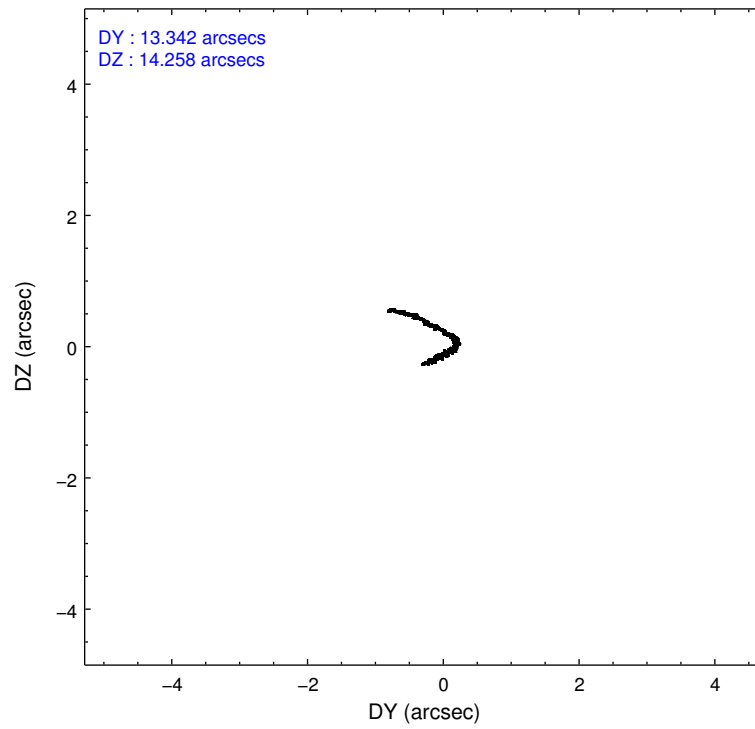
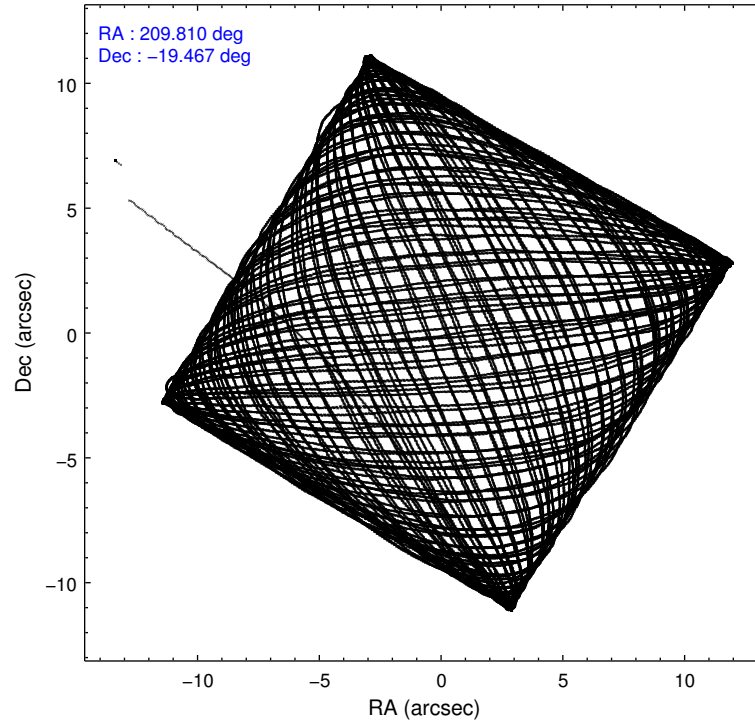
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	378376	380348	422441	408031	404619
rejected events	338295	334801	380552	364137	362132
rejected %	89%	88%	90%	89%	89%

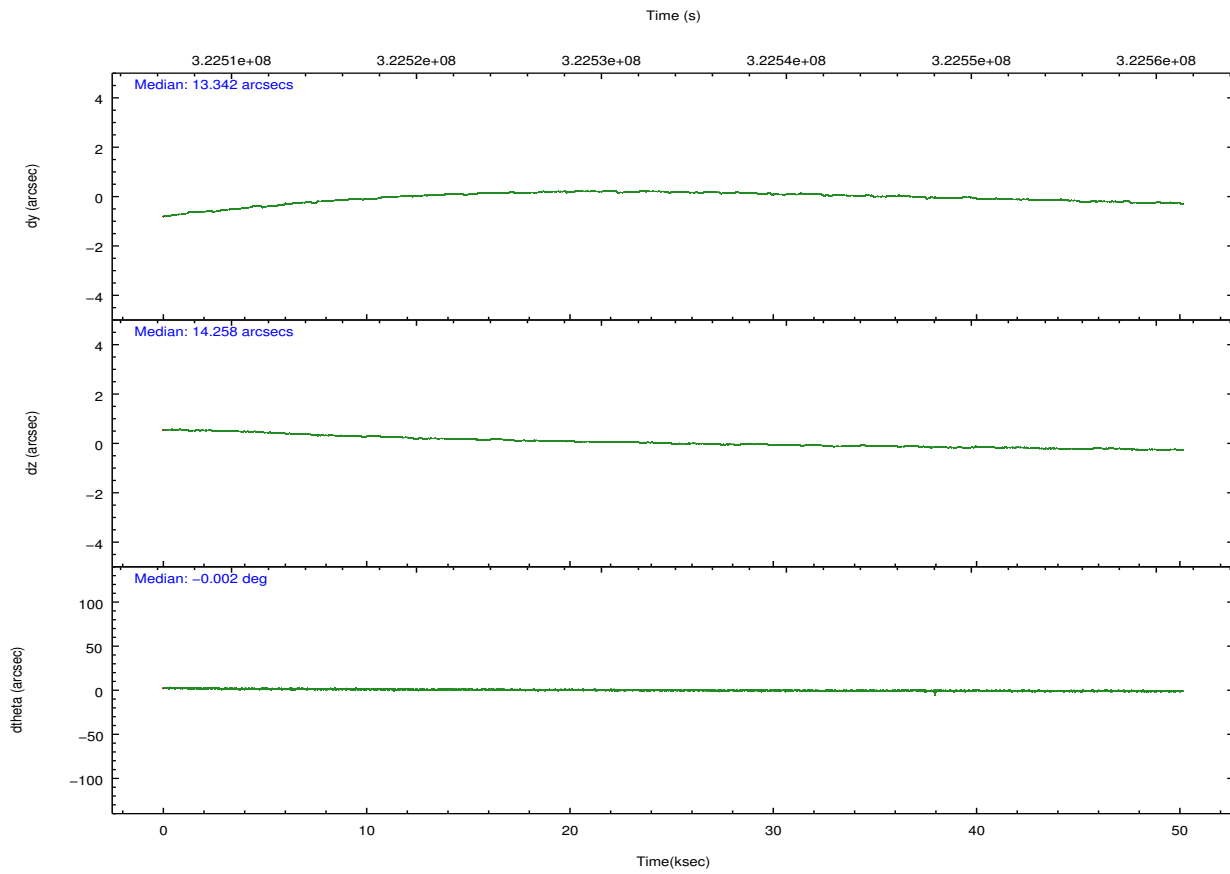
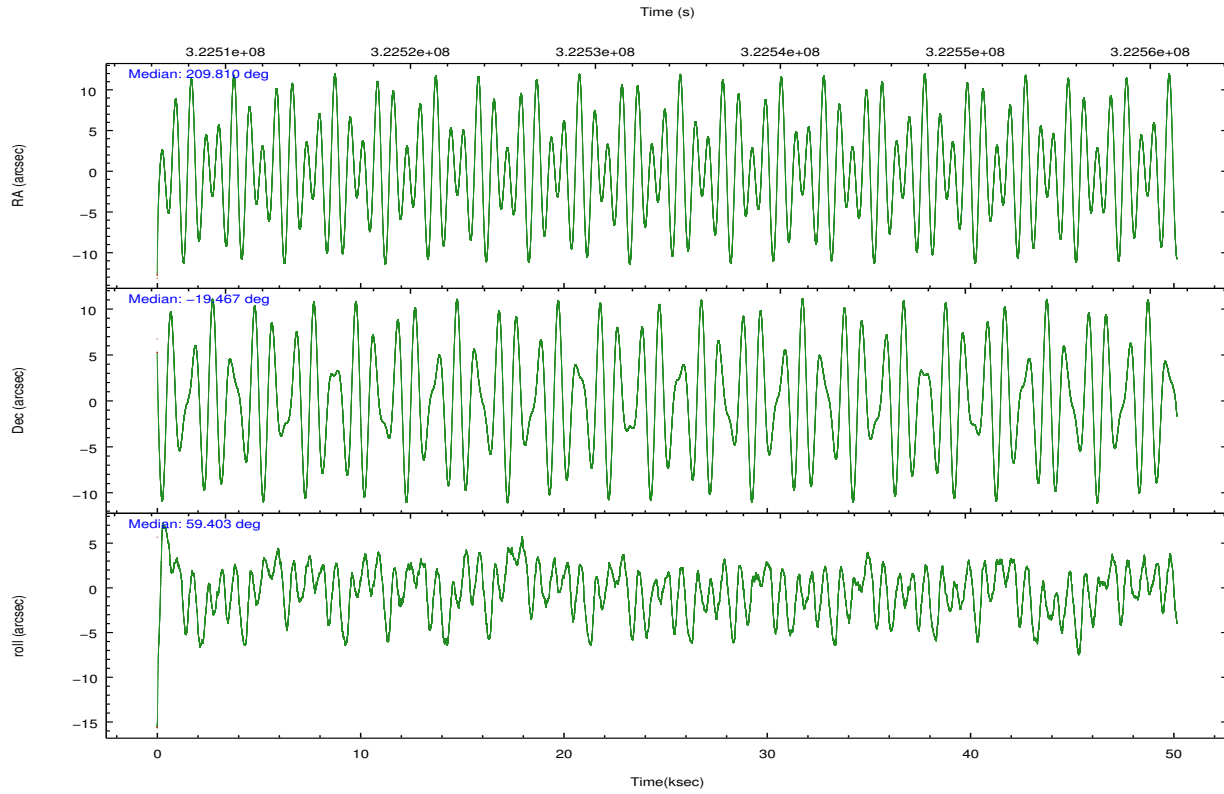
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	13904	16331	15885	18254	15136
	3%	4%	3%	4%	3%
grade 1 events	206	215	259	241	183
	0%	0%	0%	0%	0%
grade 2 events	9763	10252	9873	8901	9027
	2%	2%	2%	2%	2%
grade 3 events	4488	4919	4253	4537	4585
	1%	1%	1%	1%	1%
grade 4 events	4142	4827	4402	4409	4597
	1%	1%	1%	1%	1%
grade 5 events	14413	15614	13483	16588	15755
	3%	4%	3%	4%	3%
grade 6 events	7788	9233	7482	7800	9143
	2%	2%	1%	1%	2%
grade 7 events	323672	318957	366804	347301	346193
	85%	83%	86%	85%	85%

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	209.809358	209.8095500795907	CCD I2 on	Y	Y
[deg] Pointing Dec	-19.494697	-19.46720571698452	CCD I3 on	Y	Y
[deg] Pointing Roll	59.196630	59.40538508705463	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-229.442463	-229.4438428438578	CCD S3 on	N	N
[mm] SIM translation stage offset	-4.15	-4.148610159071865	CCD S4 on	N	N
[s] Observation start time (MET)	322508949.184000	322508016.16638	CCD S5 on	N	N
Observation start date	2008-03-21T17:48:04	2008-03-21T17:33:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	322558949.184000	322559641.31889	On-chip summing requested	N	N
Observation end date	2008-03-22T07:41:24	2008-03-22T07:54:01	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



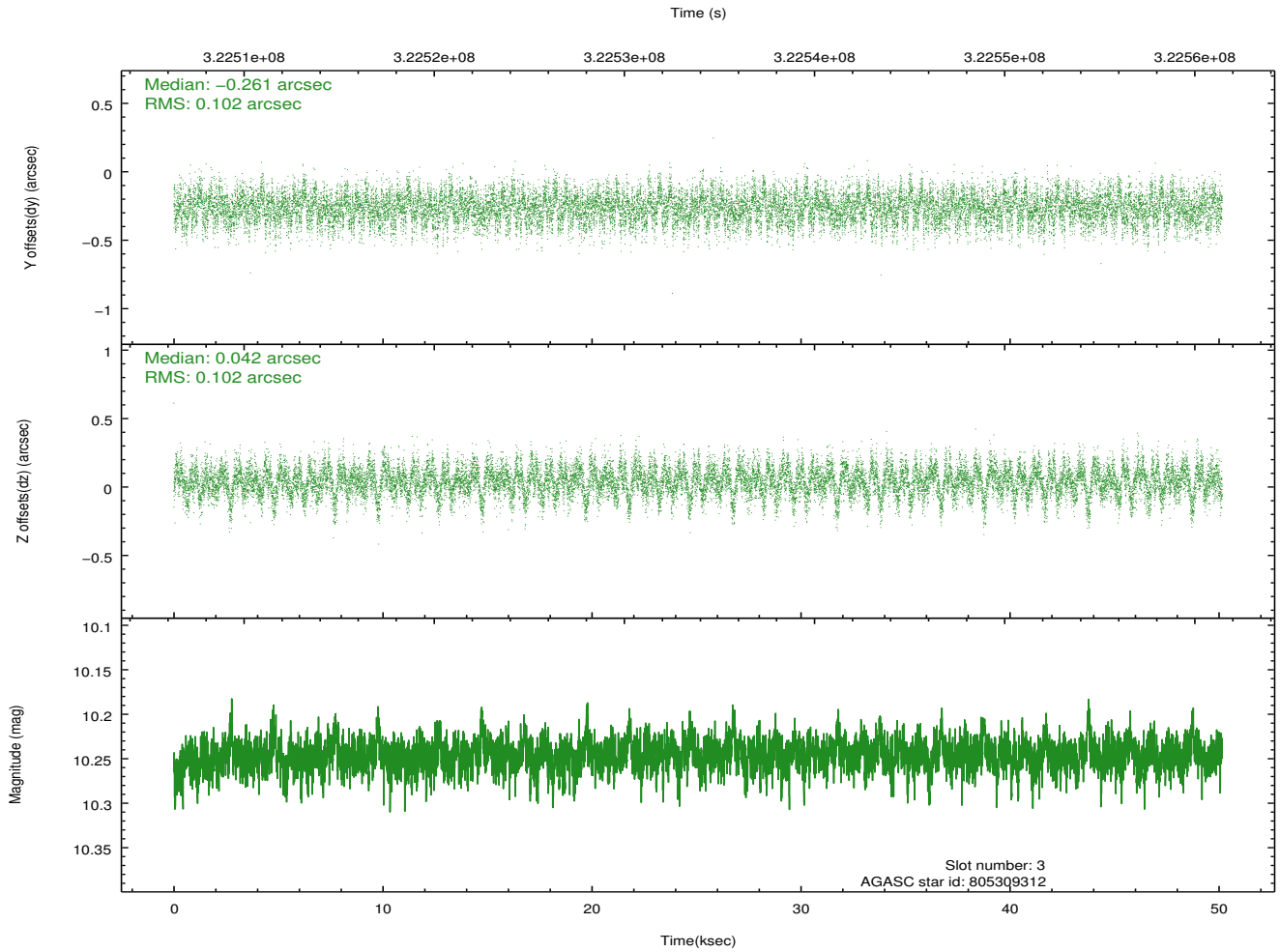
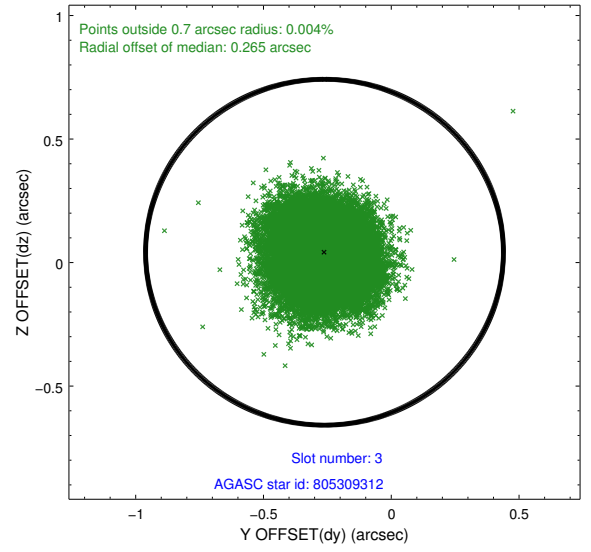
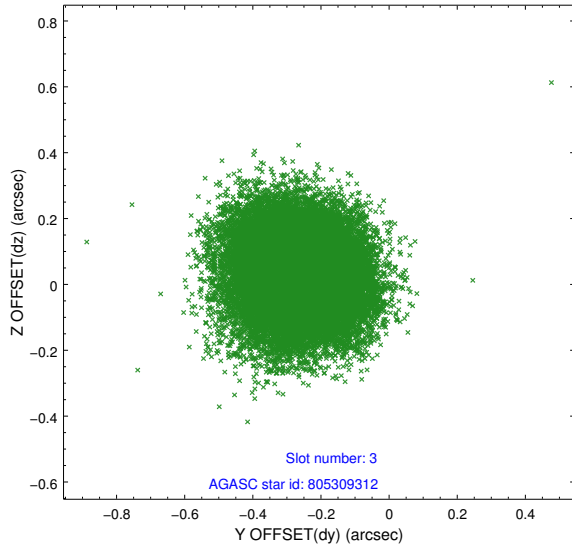


Slot Statistics

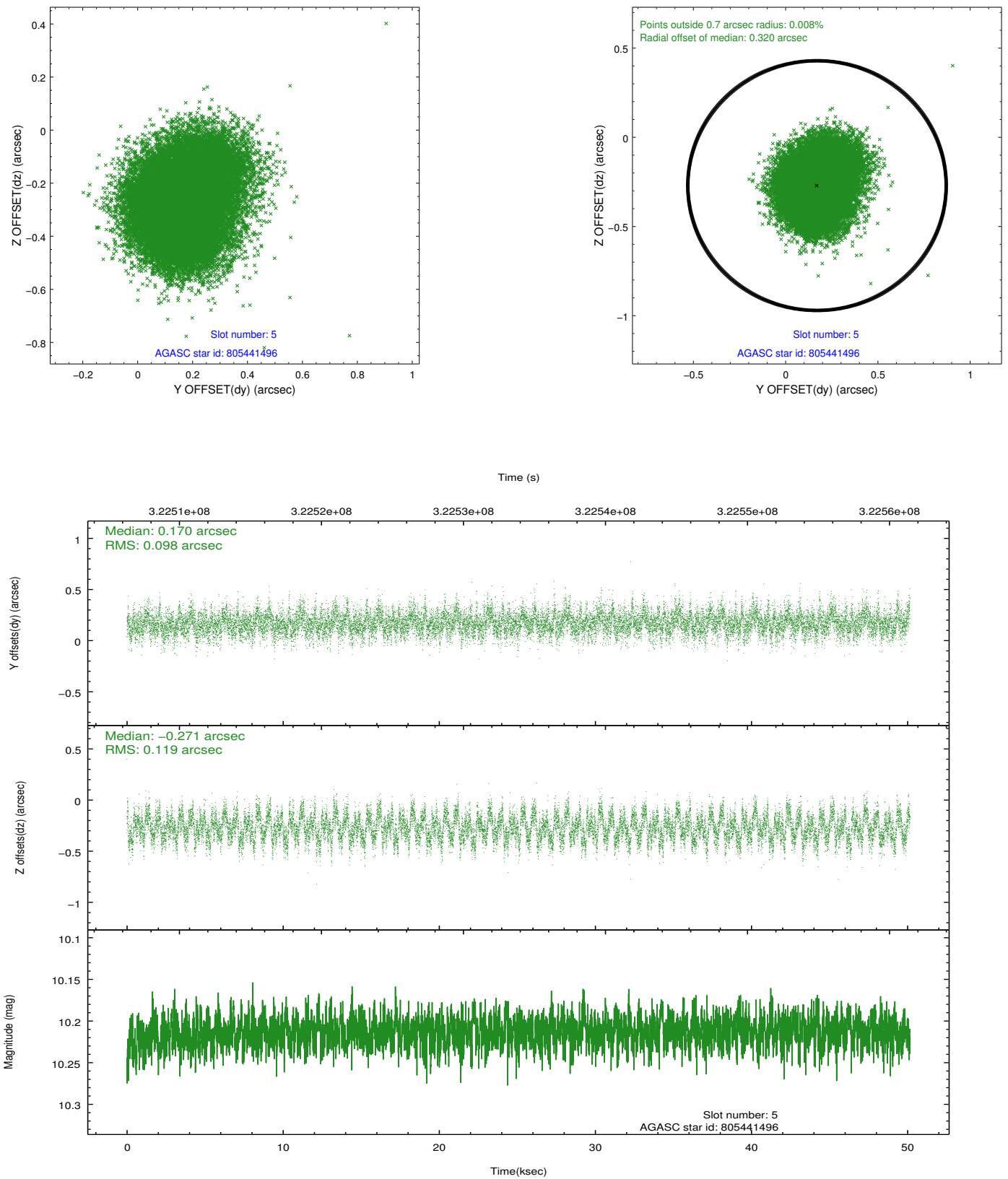
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	12233	0.082	-0.030	0.012	0.021	0.000000	0.000000	926.23	-923.04
1	FID	ACIS-I-5	7.22	12232	-0.250	0.076	0.009	0.017	0.000000	0.000000	-1822.23	974.54
2	FID	ACIS-I-6	7.23	12233	0.079	0.024	0.011	0.024	0.000000	0.000000	391.78	1618.99
3	GUIDE	805309312	10.25	24422	-0.261	0.042	0.155	0.249	209.746430	-18.889324	1762.16	1300.42
4	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	805441496	10.21	24427	0.170	-0.271	0.166	0.262	210.098540	-19.005498	2016.37	56.13
6	GUIDE	805313512	9.18	24445	0.070	0.071	0.082	0.136	209.099234	-19.852223	-2340.76	1403.81
7	GUIDE	805438464	9.81	24425	0.024	0.166	0.153	0.250	210.452871	-19.096125	2350.24	-1147.58

2.4 Star Slots

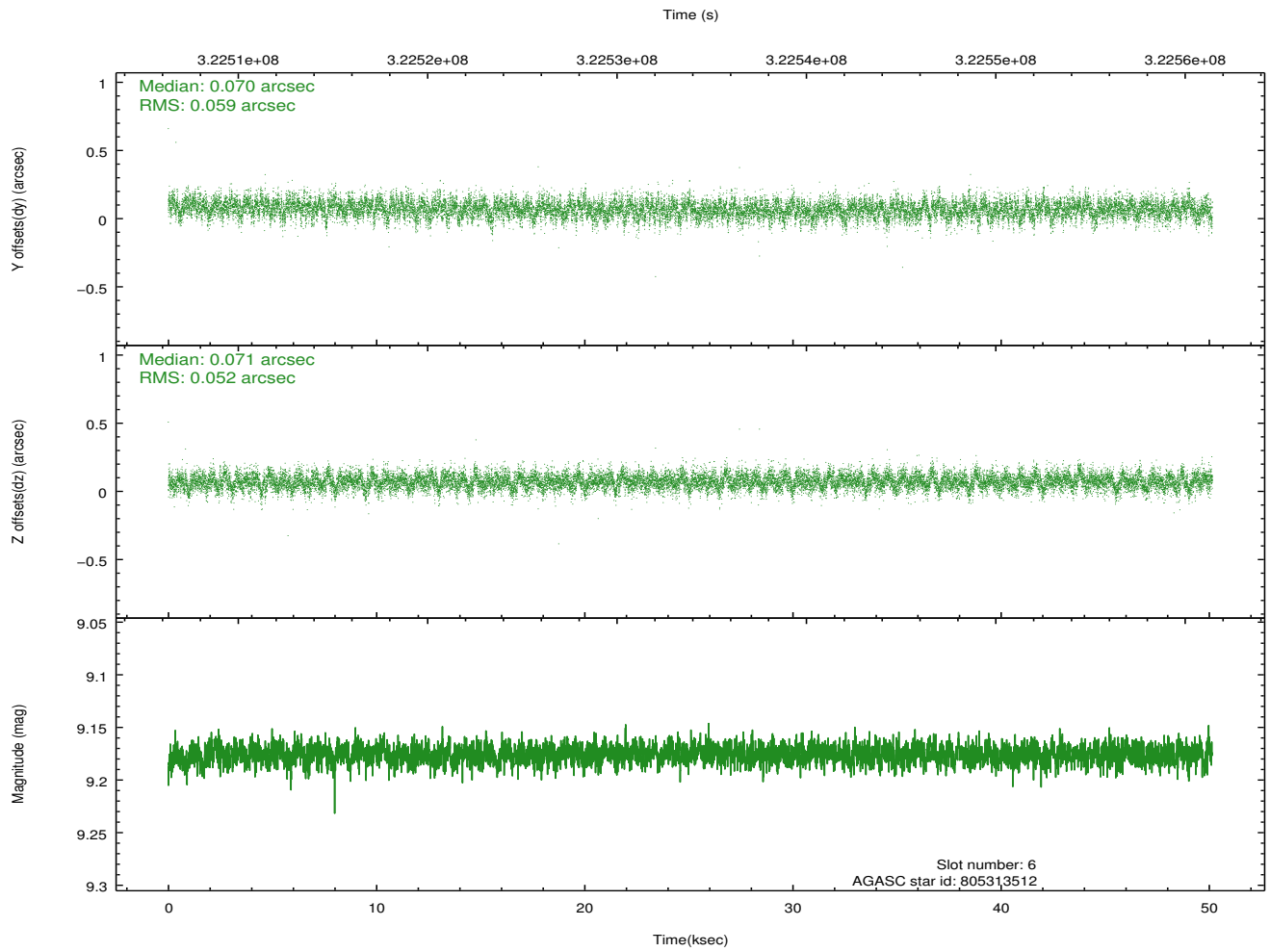
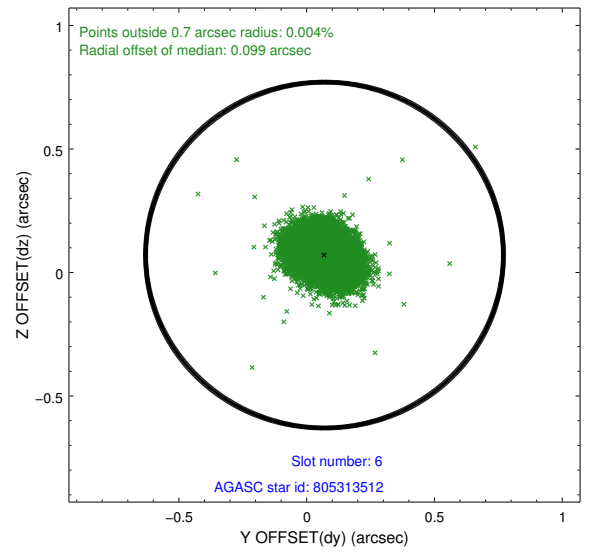
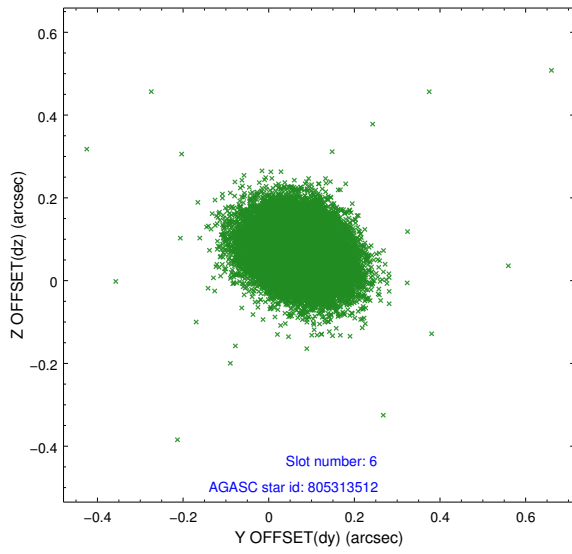
2.4.1 Slot 3



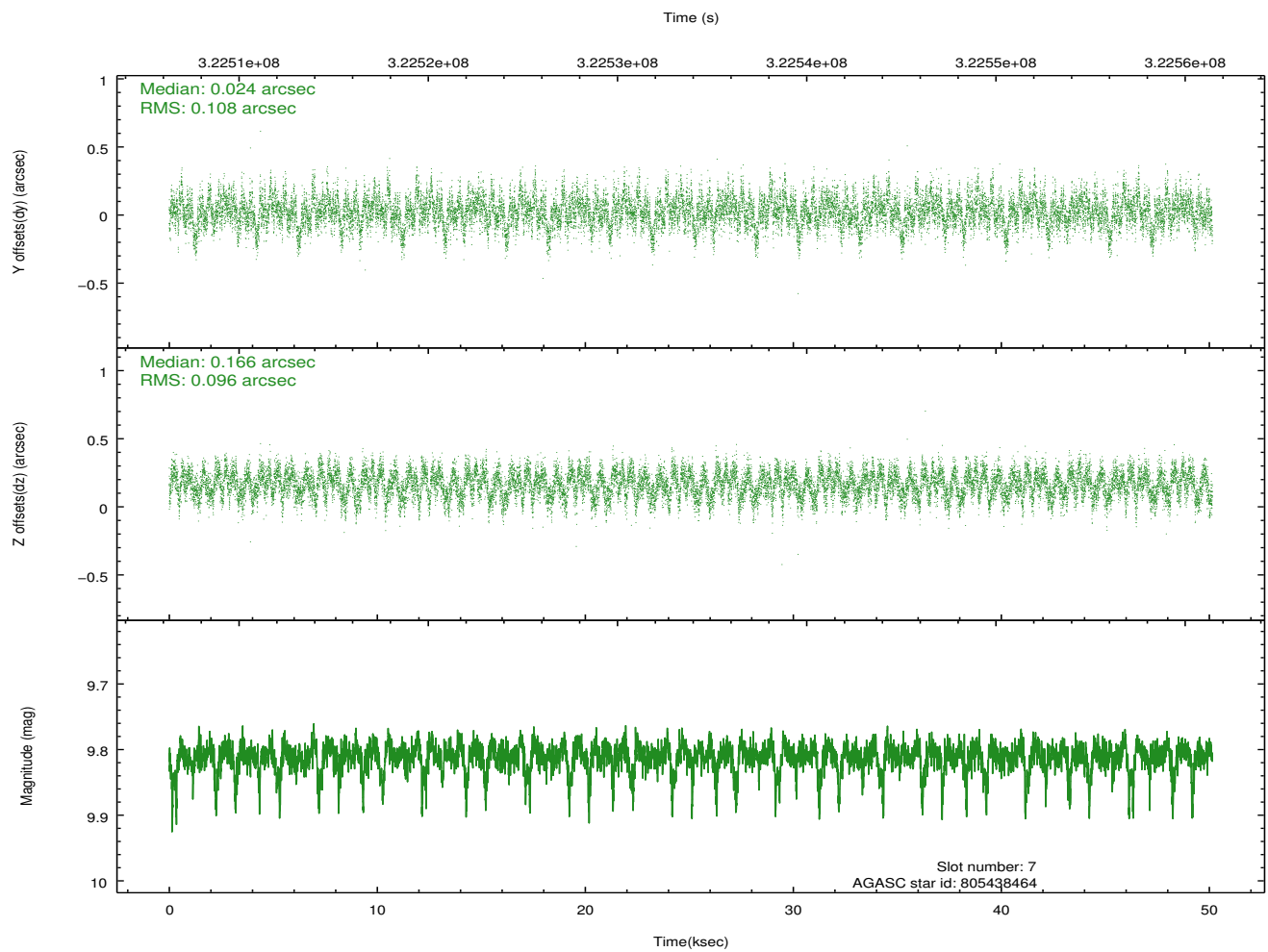
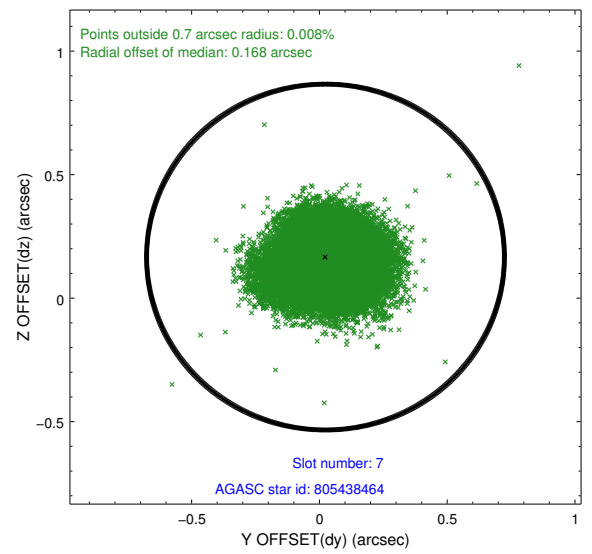
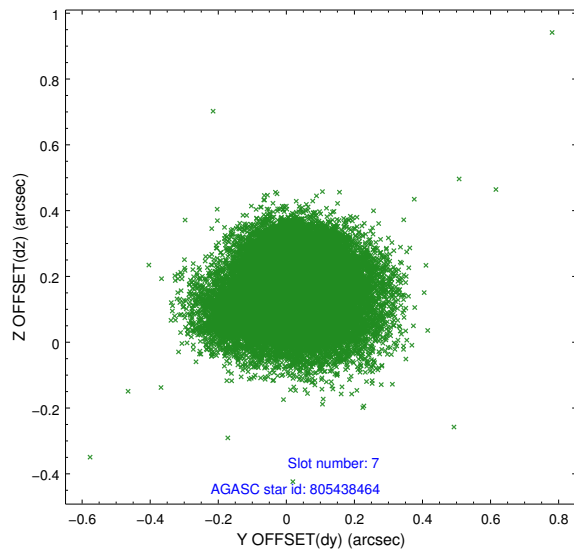
2.4.2 Slot 5



2.4.3 Slot 6

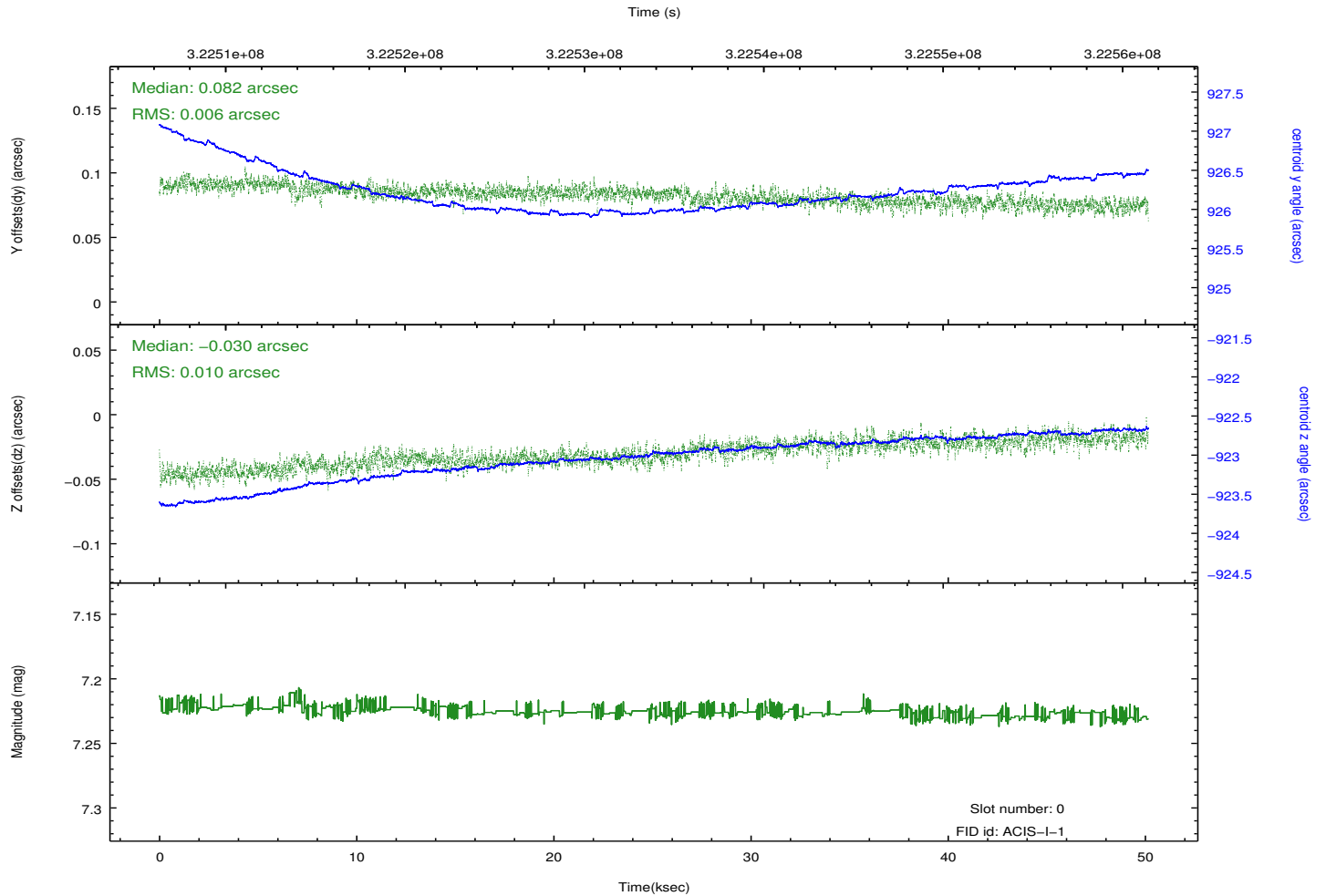
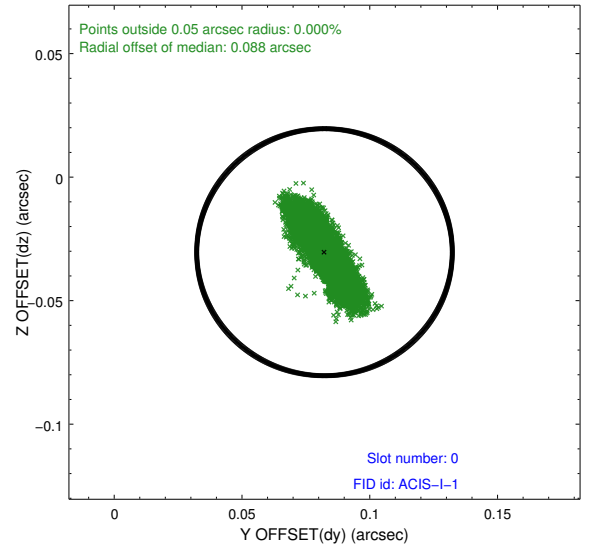
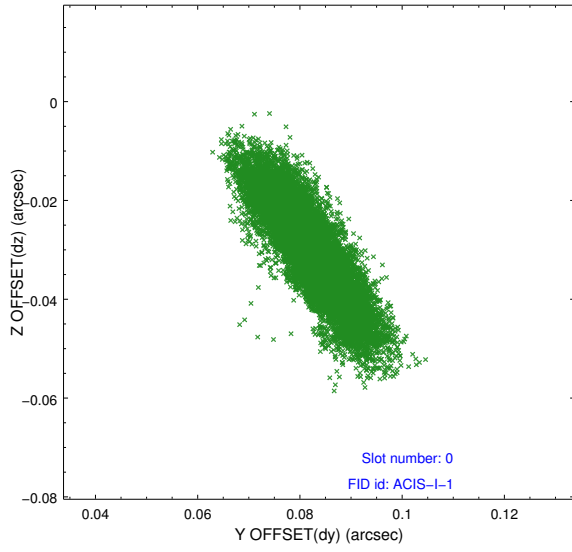


2.4.4 Slot 7

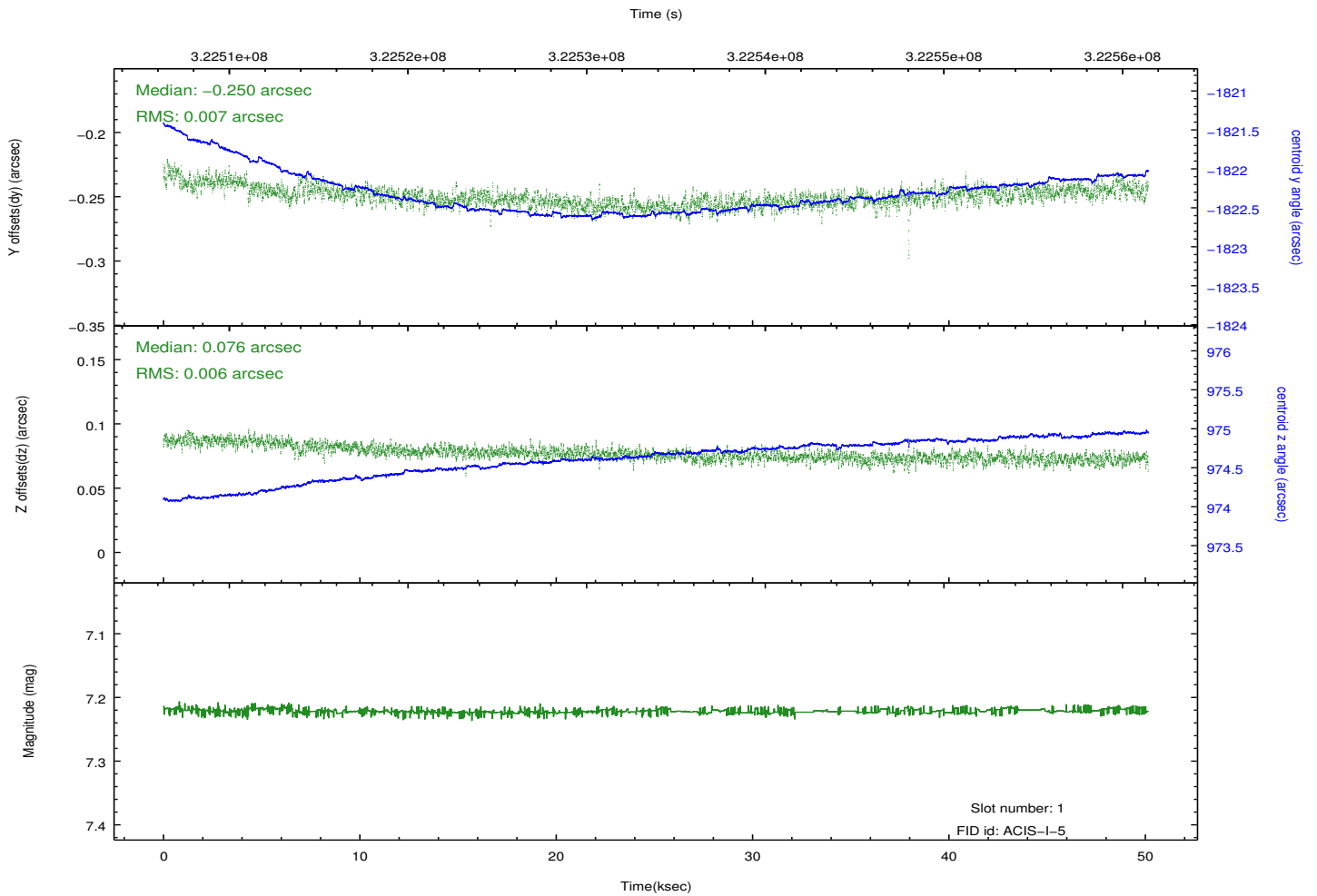
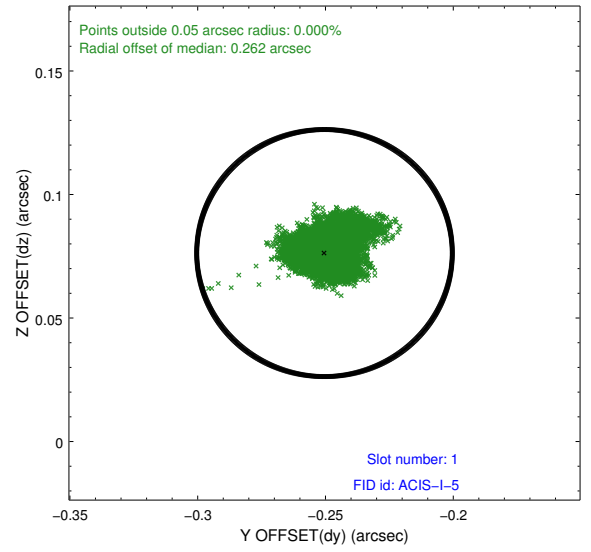
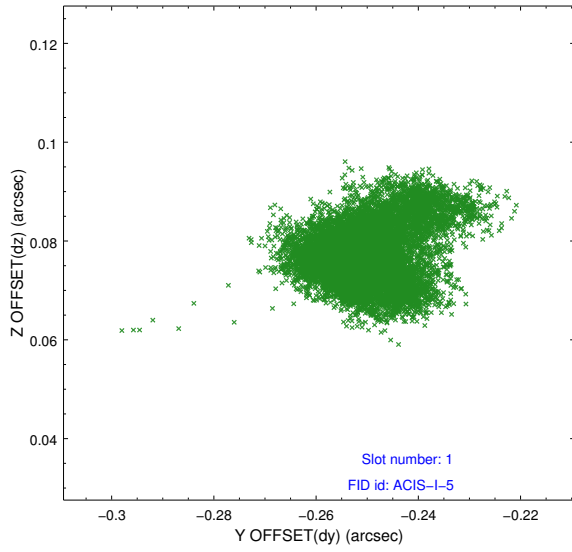


2.5 FID Slots

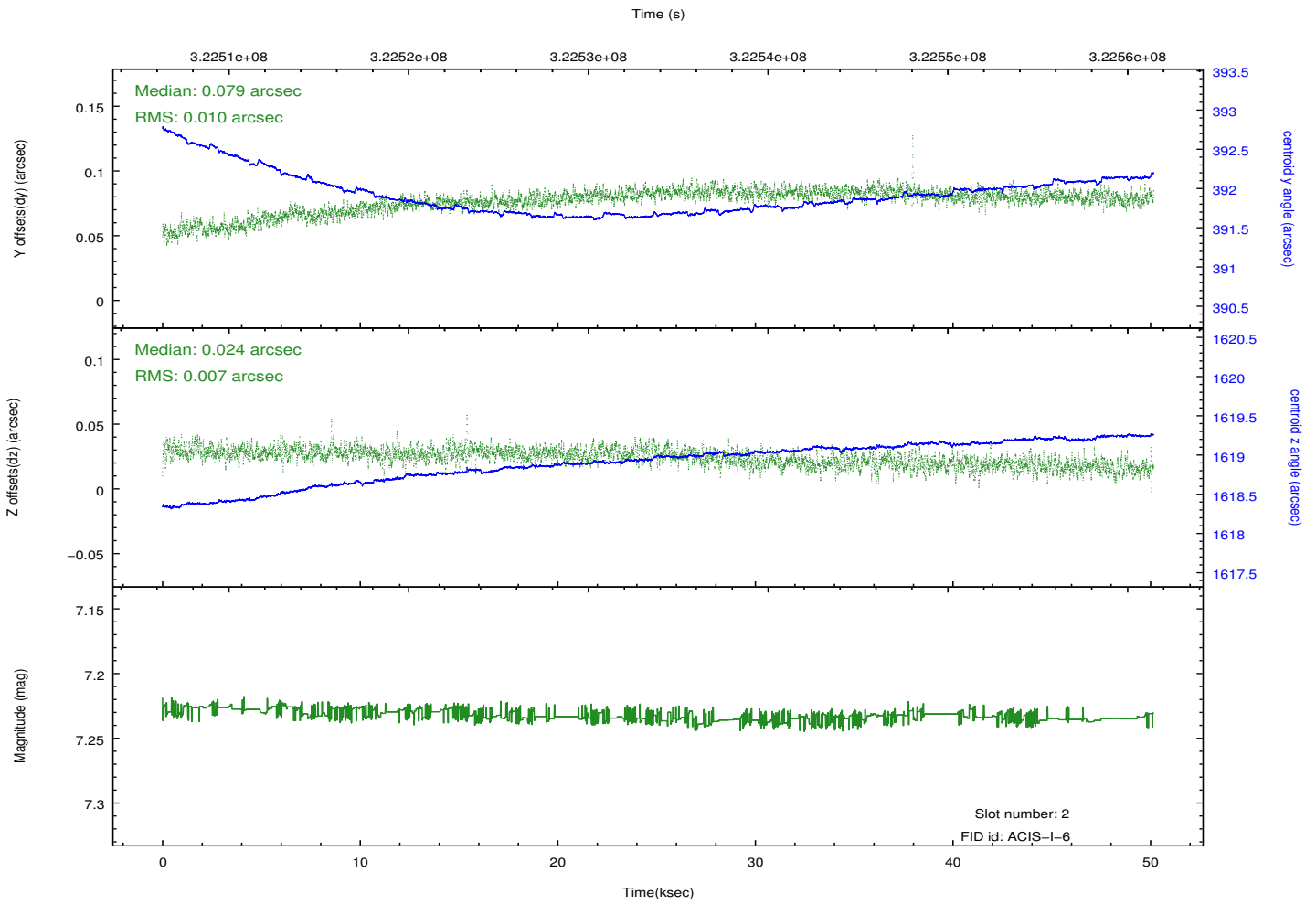
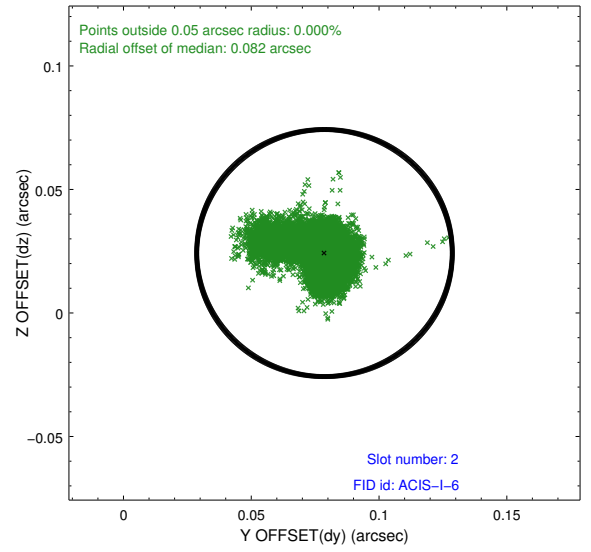
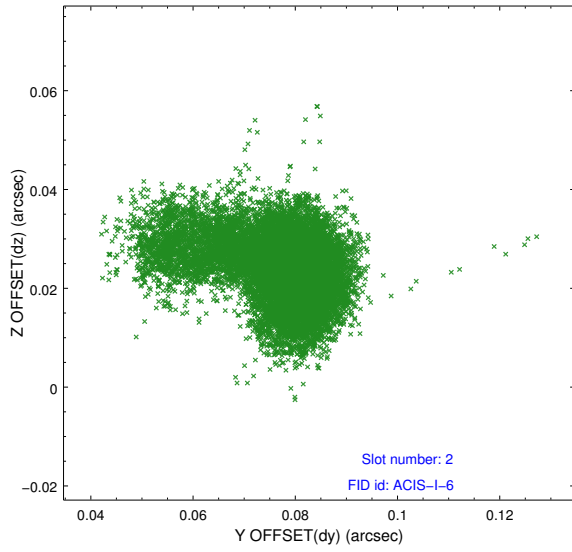
2.5.1 Slot 0



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)	2012.05.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.0400774

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.

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Less than five seconds of raw data were removed from the input telemetry to remove data corruption. The loss of this data should have no impact on the final data products.