

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 547 - L2 Version 4
Chandra X-Ray Center

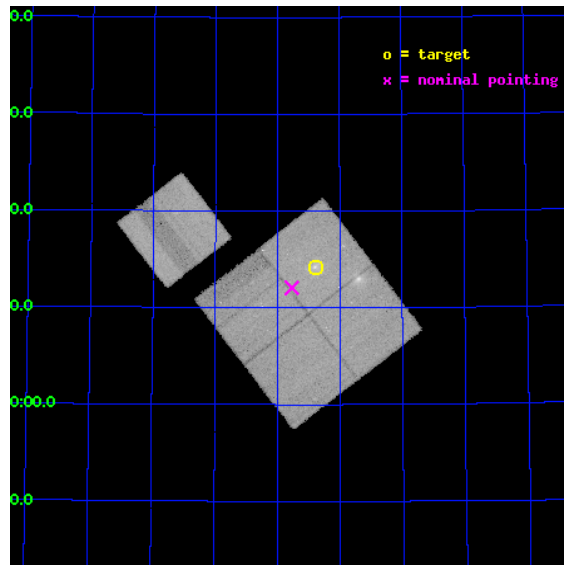
L2 Processing Date : Nov 5 2012

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1 Front

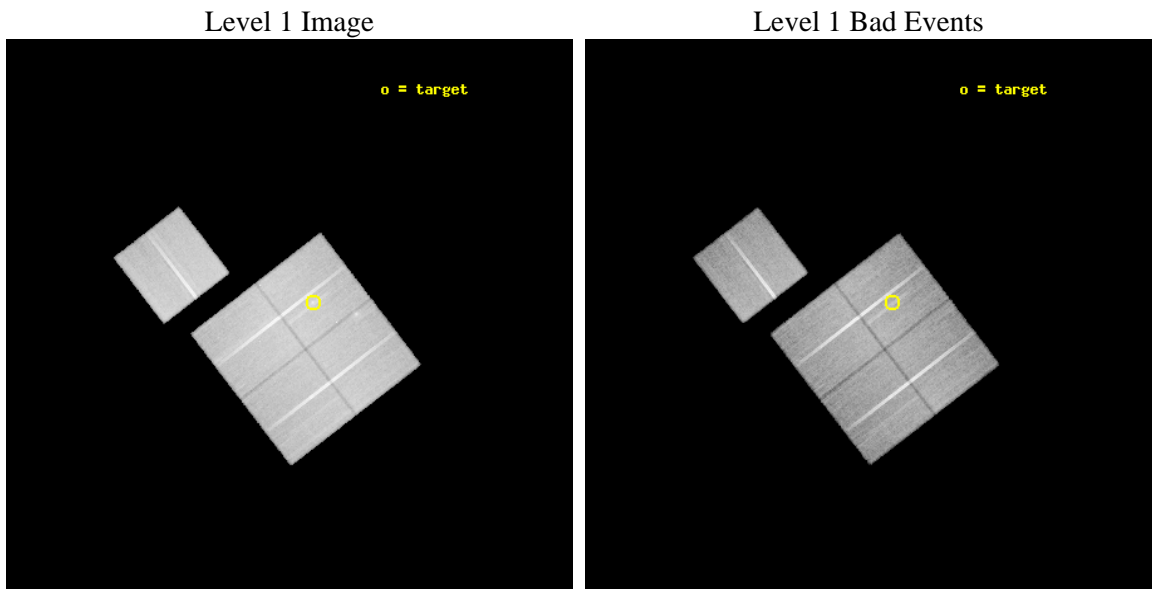
seq_num	800055	Sequence number
obs_id	547	Observation id
title	DETERMINATION OF H0/Q0	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	V1701+6414	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.345833	Observer's specified target RA [deg]
dec_targ	64.236	Observer's specified target Dec [deg]
ra_nom	255.44222918037	Nominal RA [deg]
dec_nom	64.201179450292	Nominal Dec [deg]
roll_nom	322.43146443121	Nominal Roll [deg]
revision	4	Processing version of data
ontime	50163.118096322	Sum of GTIs [s]
livetime	49527.922490383	Livetime [s]
ontime0	50169.600046709	Sum of GTIs [s]
ontime1	50166.359096467	Sum of GTIs [s]
ontime2	50163.118136242	Sum of GTIs [s]
ontime3	50163.118096322	Sum of GTIs [s]
ontime6	50166.359086454	Sum of GTIs [s]
l2events	279036	Number of level 2 events



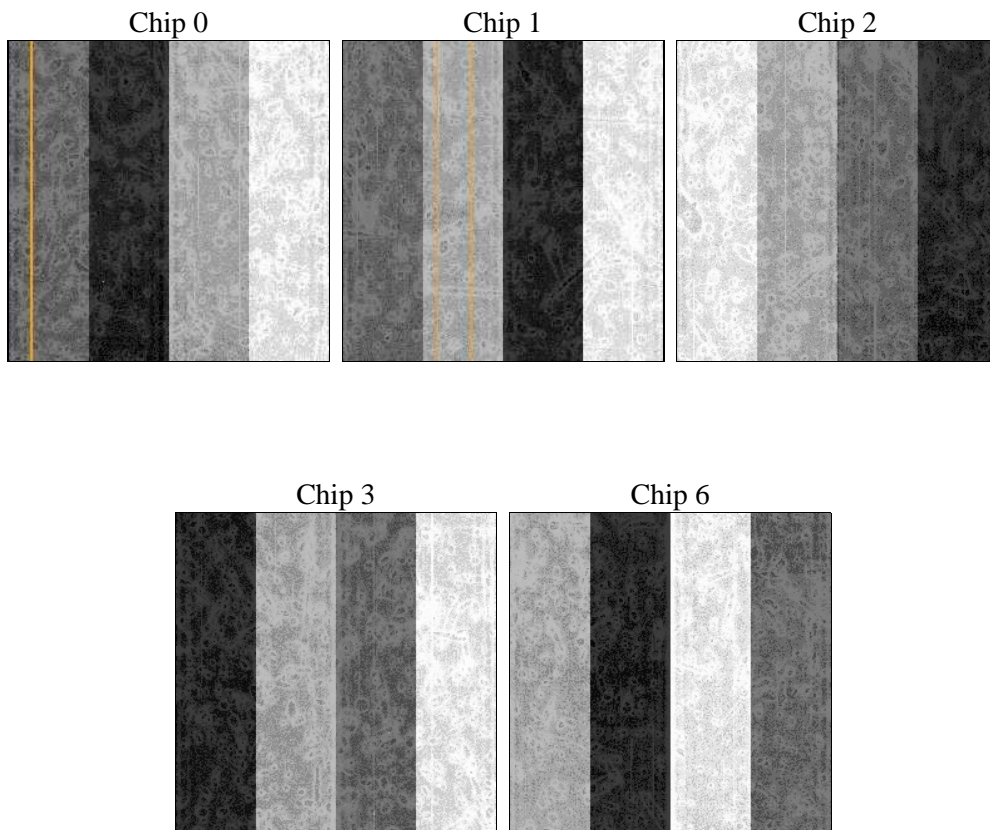
2 OBI

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	8.4.5	Processing system revision	ontime	50163.118096322	Sum of GTIs [s]
caldbver	4.5.2	 	ontime0	50169.600046709	Sum of GTIs [s]
date	2012-11-05T17:39:08	Date and time of file creation	ontime1	50166.359096467	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	50163.118136242	Sum of GTIs [s]
			ontime3	50163.118096322	Sum of GTIs [s]
			ontime6	50166.359086454	Sum of GTIs [s]
			l1events	1793593	Number of level 1 events

2.1.4 Events

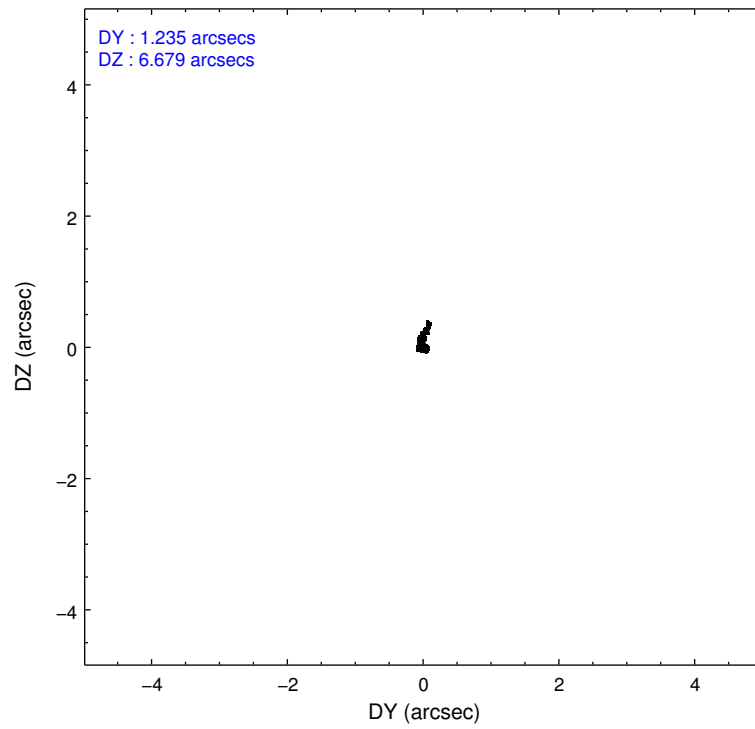
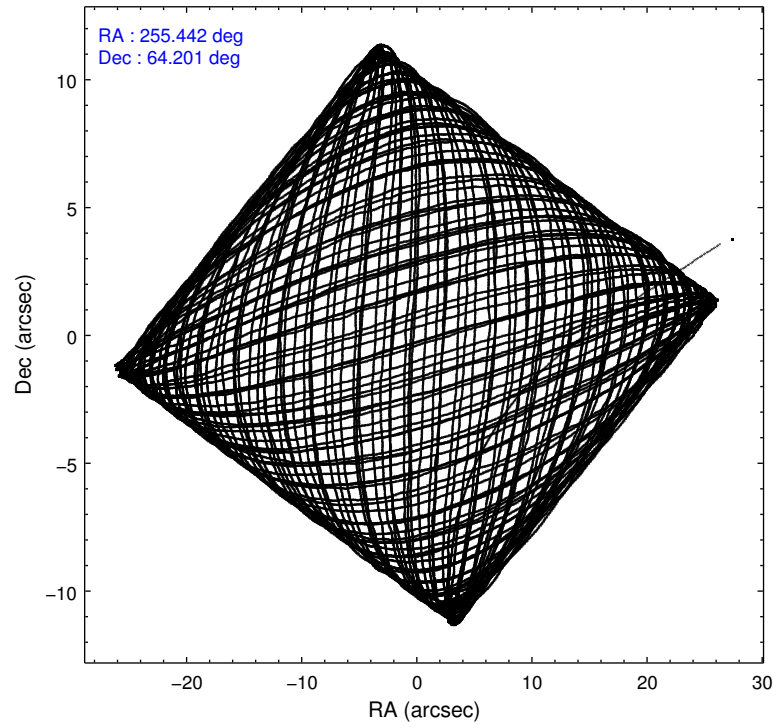
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	357477	338977	365042	367853	364244
rejected events	258384	271670	301742	299889	298742
rejected %	72%	80%	82%	81%	82%

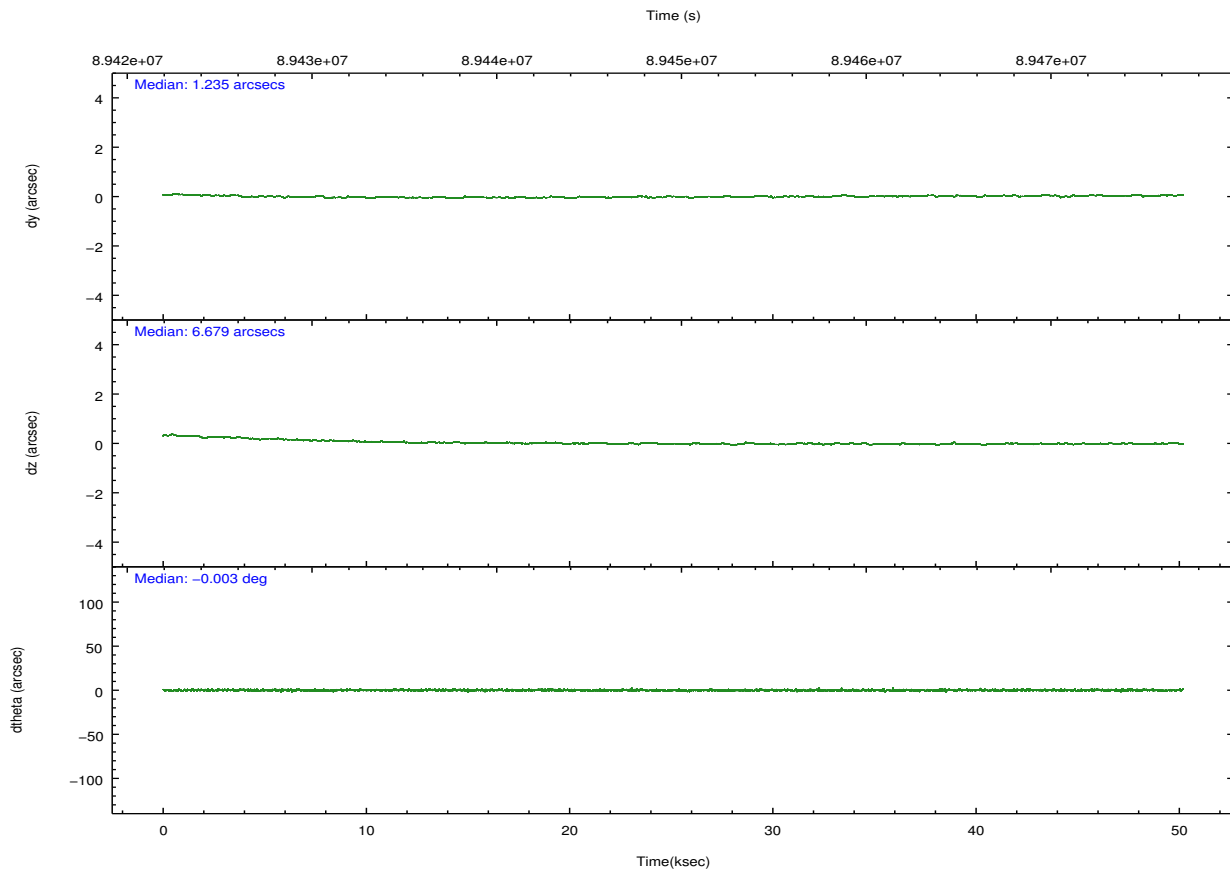
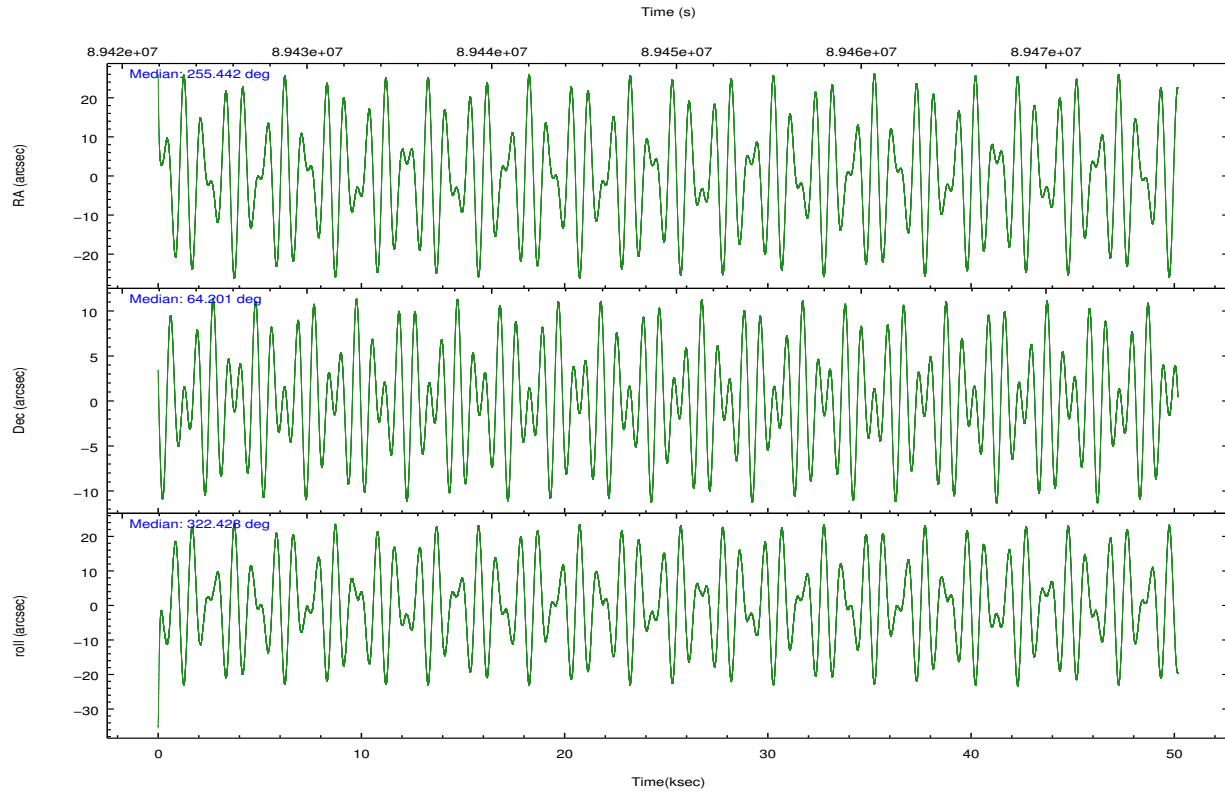
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	62214	28383	28182	30145	28953
	17%	8%	7%	8%	7%
grade 1 events	236	153	214	202	203
	0%	0%	0%	0%	0%
grade 2 events	17647	18224	15876	17652	17325
	4%	5%	4%	4%	4%
grade 3 events	3740	4207	3353	3748	3812
	1%	1%	0%	1%	1%
grade 4 events	3905	4299	4426	4132	3961
	1%	1%	1%	1%	1%
grade 5 events	10202	10923	9618	11393	12039
	2%	3%	2%	3%	3%
grade 6 events	11706	12277	11543	12376	11513
	3%	3%	3%	3%	3%
grade 7 events	247827	260511	291830	288205	286438
	69%	76%	79%	78%	78%

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	255.379592	255.4422291803717	Subarray requested	NONE	NONE
[deg] Pointing Dec	64.204856	64.2011794502925	Alternating exposures requested	N	N
[deg] Pointing Roll	322.279177	322.431464431208	[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	-225.840463	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	89424634.184000	89423592.225225			
Observation start date	2000-11-01T00:09:30	2000-10-31T23:53:12			
[s] Observation end time (MET)	89474634.184000	89475401.364682			
Observation end date	2000-11-01T14:02:50	2000-11-01T14:16:41			
Read mode	TIMED	TIMED			

2.3 Aspect



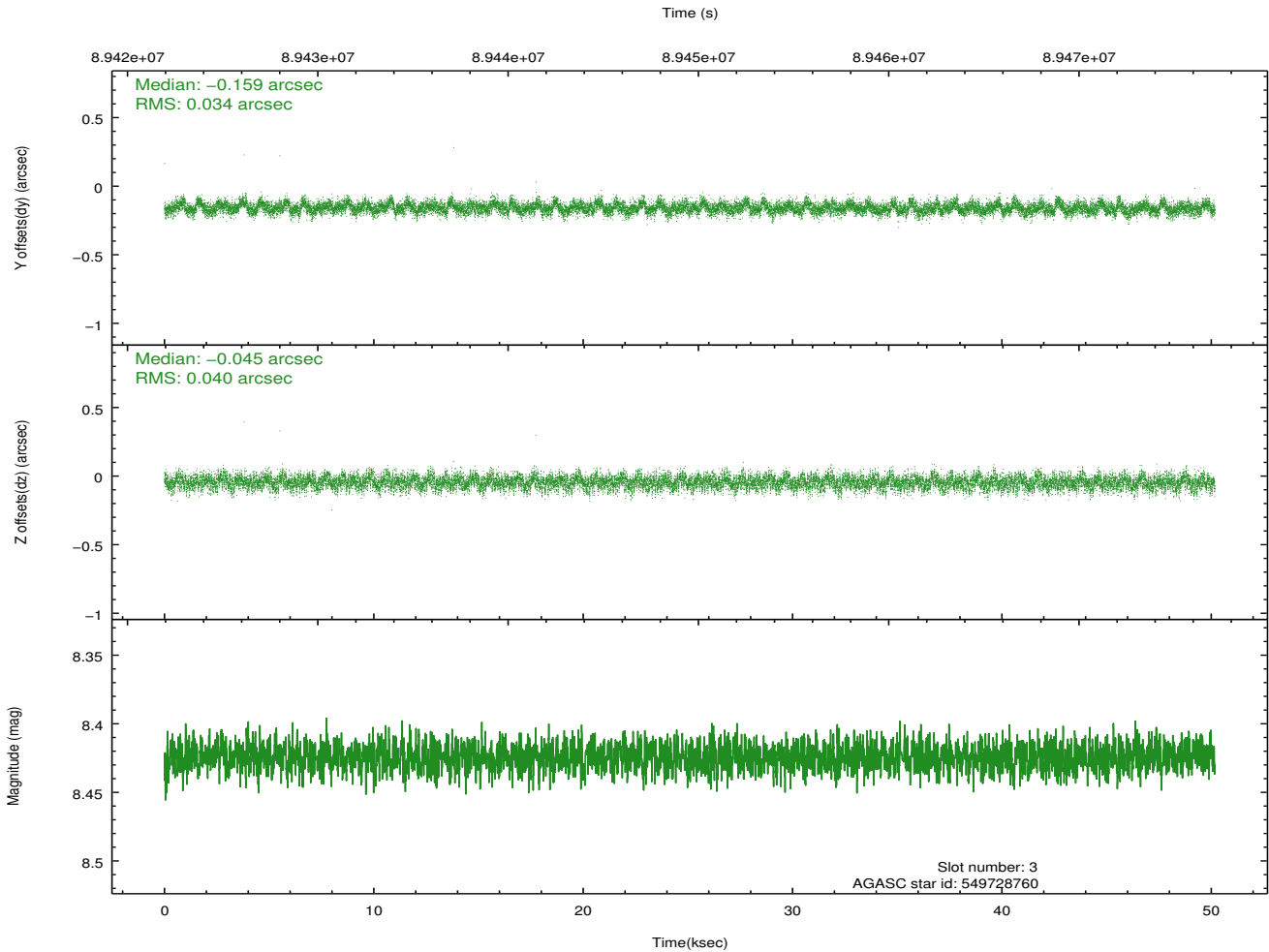
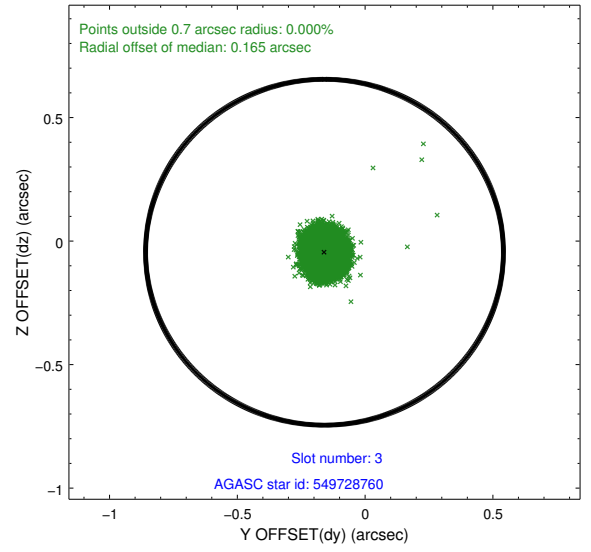
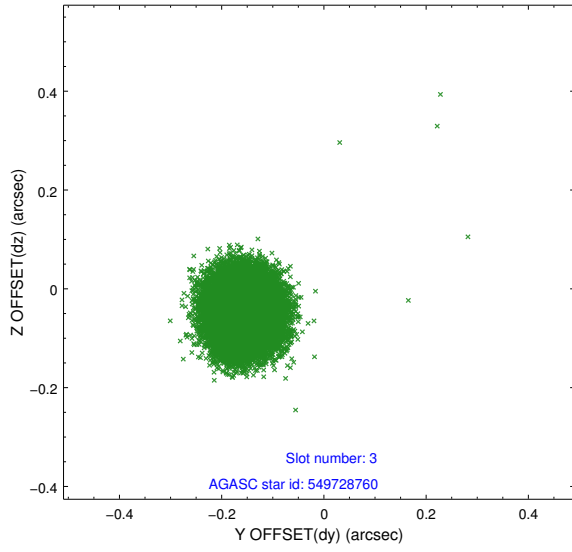


Slot Statistics

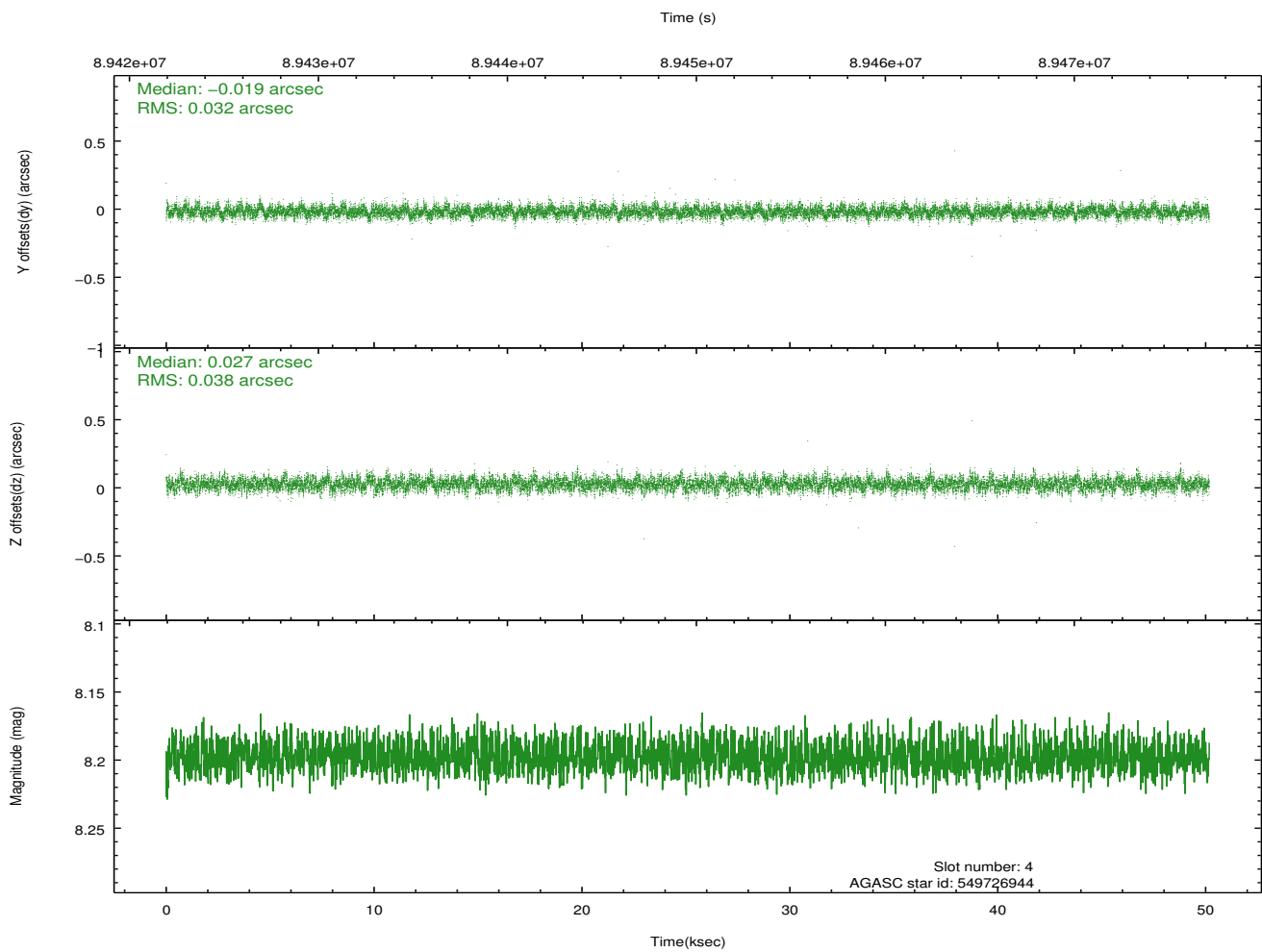
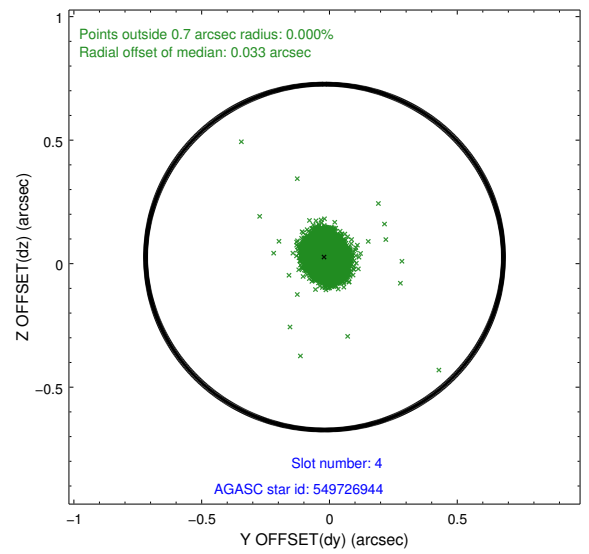
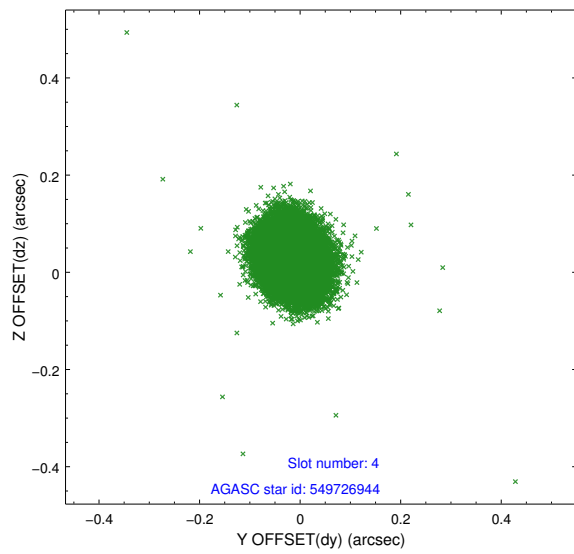
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.18	12238	-0.057	-0.046	0.009	0.015	0.000000	0.000000	-756.17	-994.56
1	FID	ACIS-I-4	7.15	12237	-0.033	0.051	0.006	0.011	0.000000	0.000000	2157.87	911.67
2	FID	ACIS-I-5	7.22	12239	-0.011	0.064	0.009	0.015	0.000000	0.000000	-1809.58	908.50
3	GUIDE	549728760	8.42	24476	-0.159	-0.045	0.056	0.089	253.412765	64.138917	-2325.80	-2039.21
4	GUIDE	549726944	8.20	24475	-0.019	0.027	0.052	0.085	254.598381	64.304516	-1187.96	-456.04
5	GUIDE	549719808	8.81	24395	-0.054	-0.035	0.068	0.112	255.292775	64.694097	-1182.72	1311.79
6	GUIDE	549726784	8.99	24474	0.097	0.025	0.059	0.097	255.680869	64.026795	768.09	-214.98
7	GUIDE	549724848	9.56	24464	0.132	0.034	0.106	0.182	255.389284	63.950133	574.18	-715.48

2.4 Star Slots

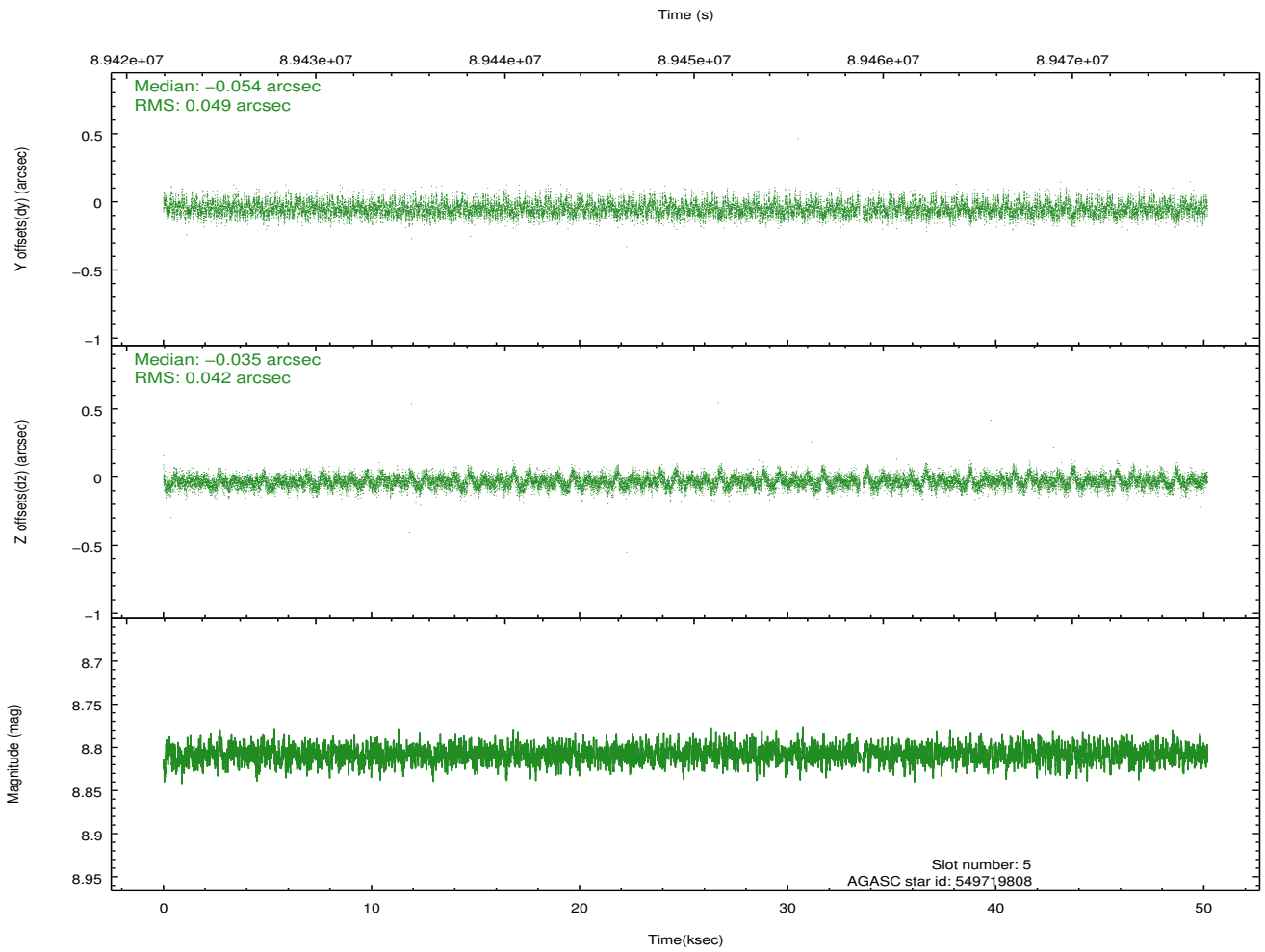
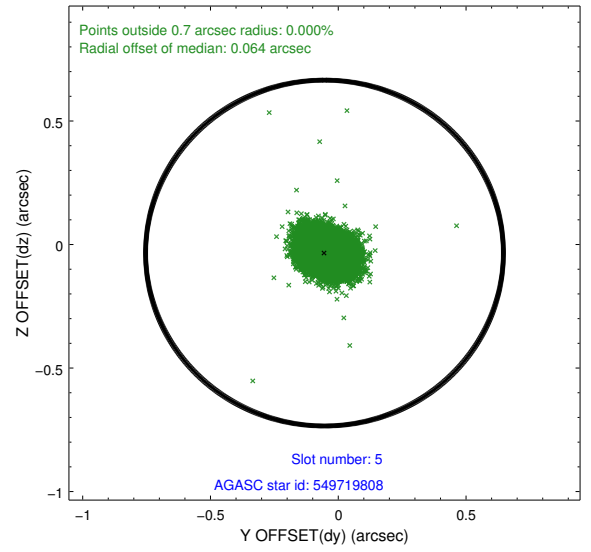
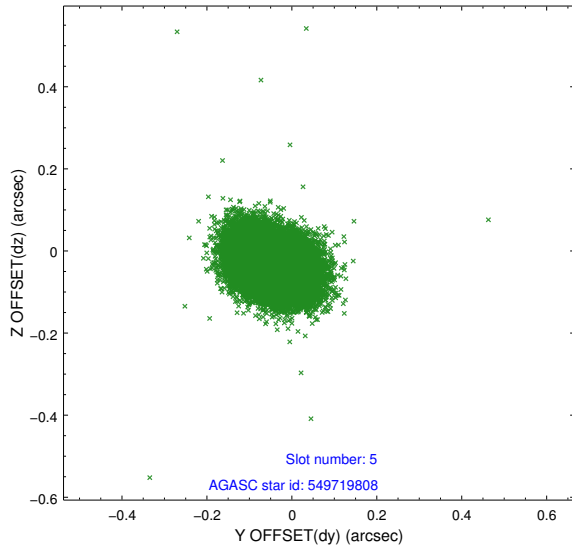
2.4.1 Slot 3



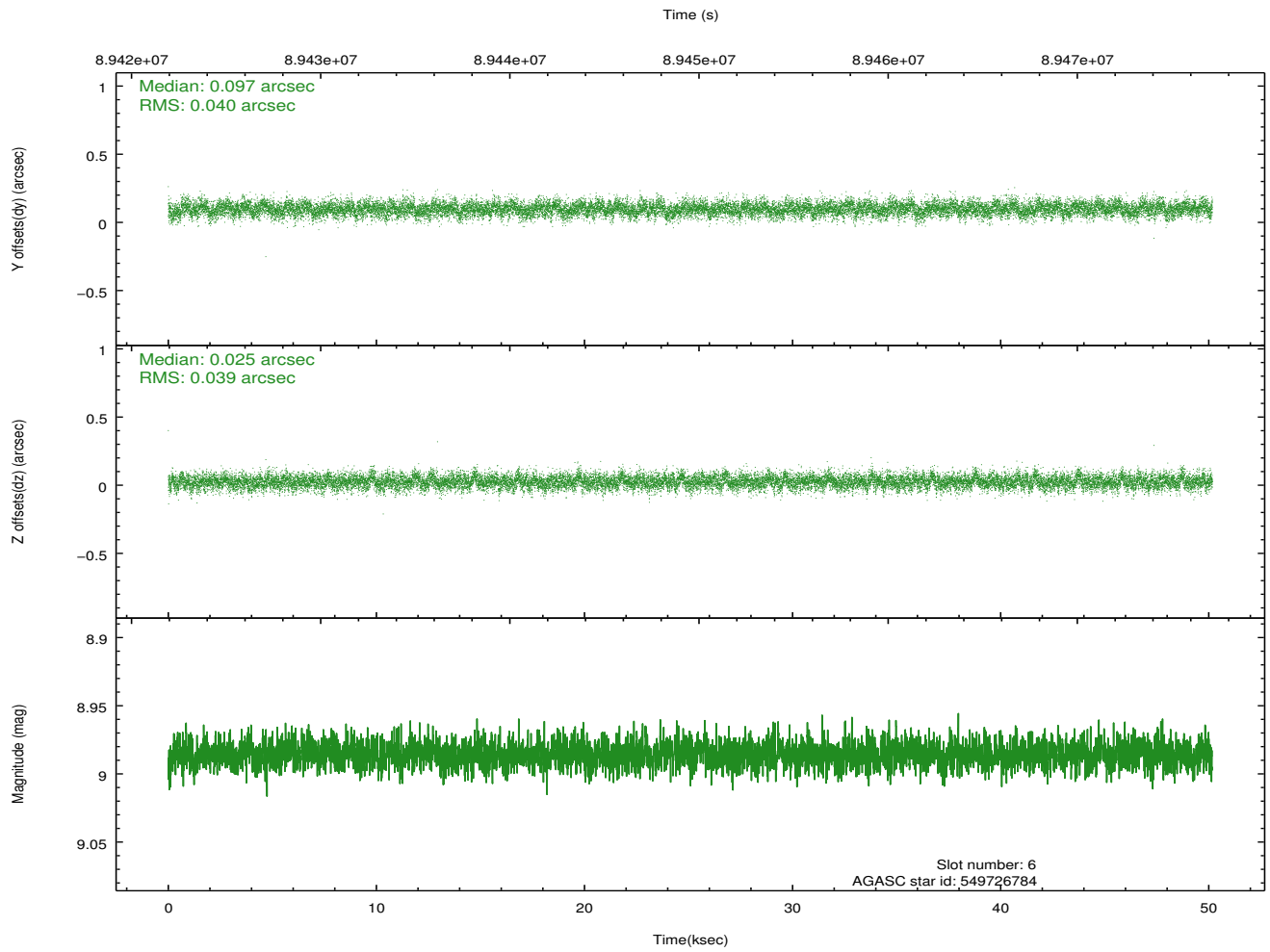
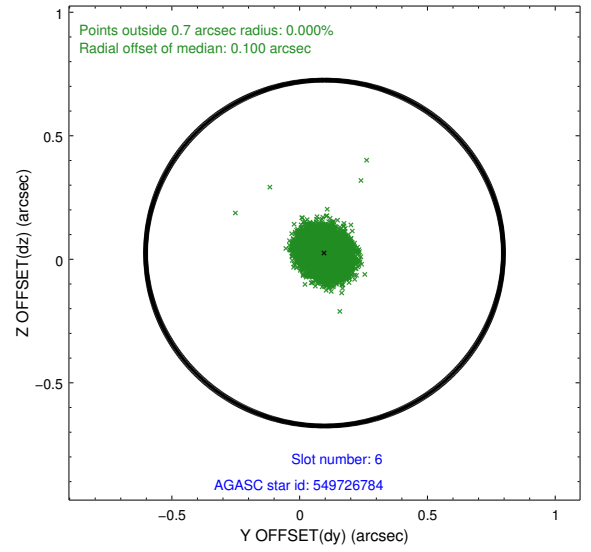
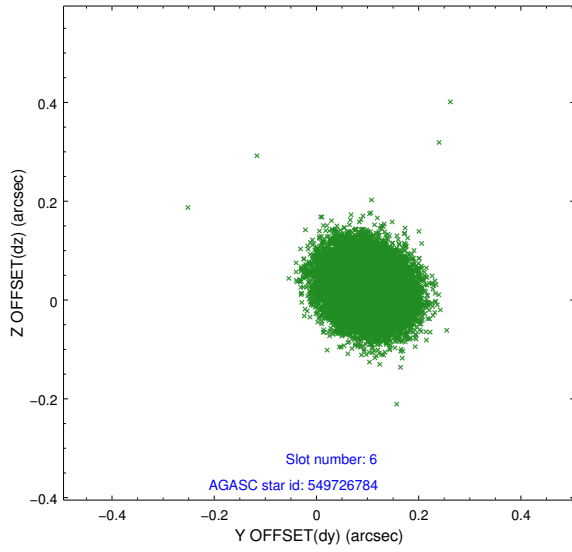
2.4.2 Slot 4



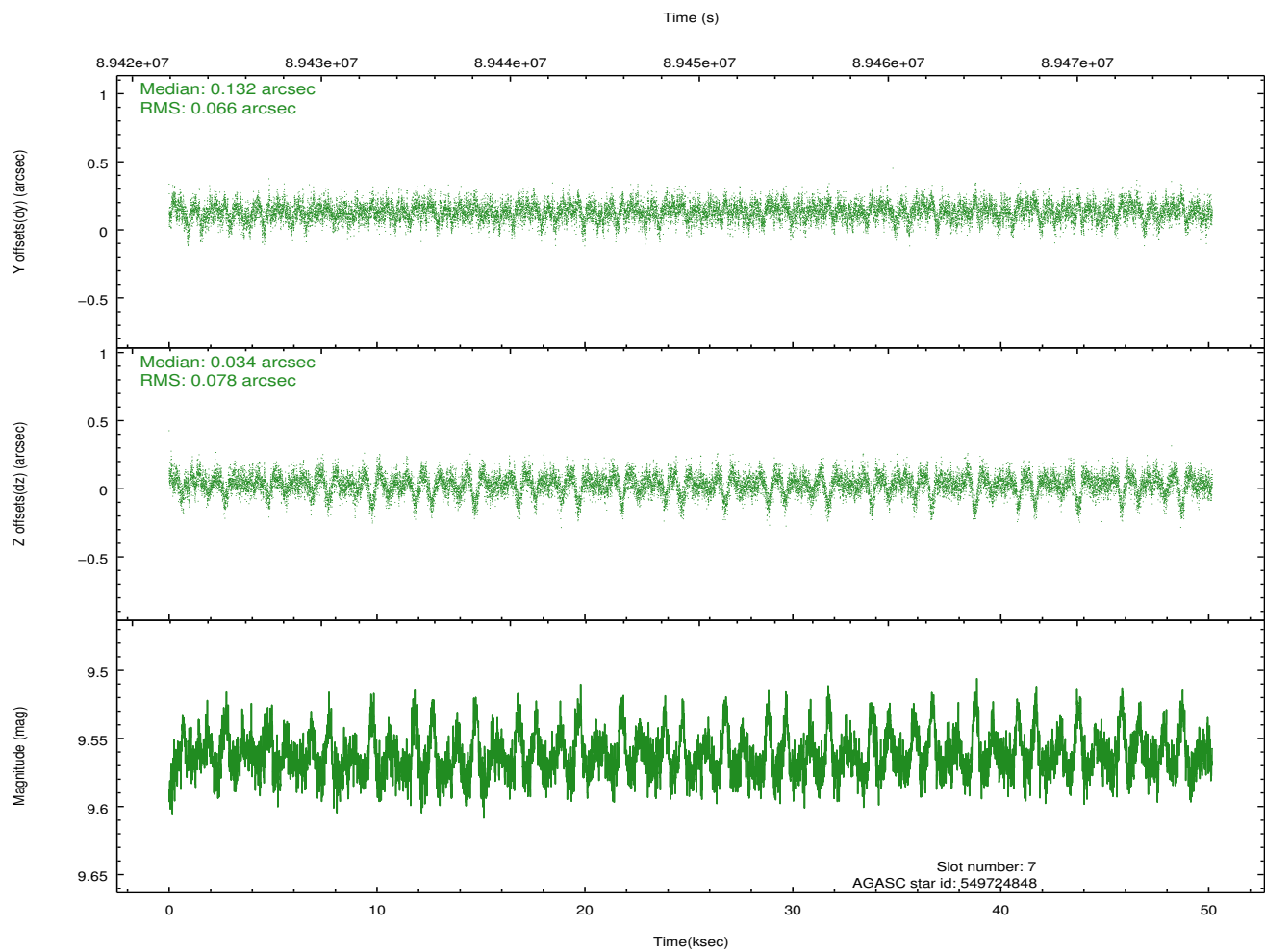
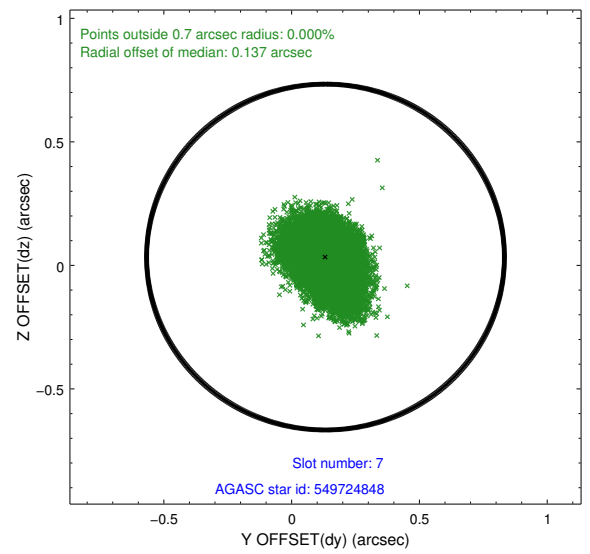
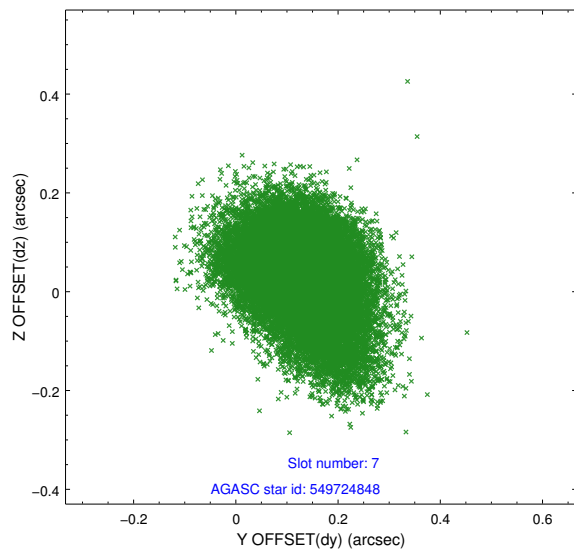
2.4.3 Slot 5



2.4.4 Slot 6

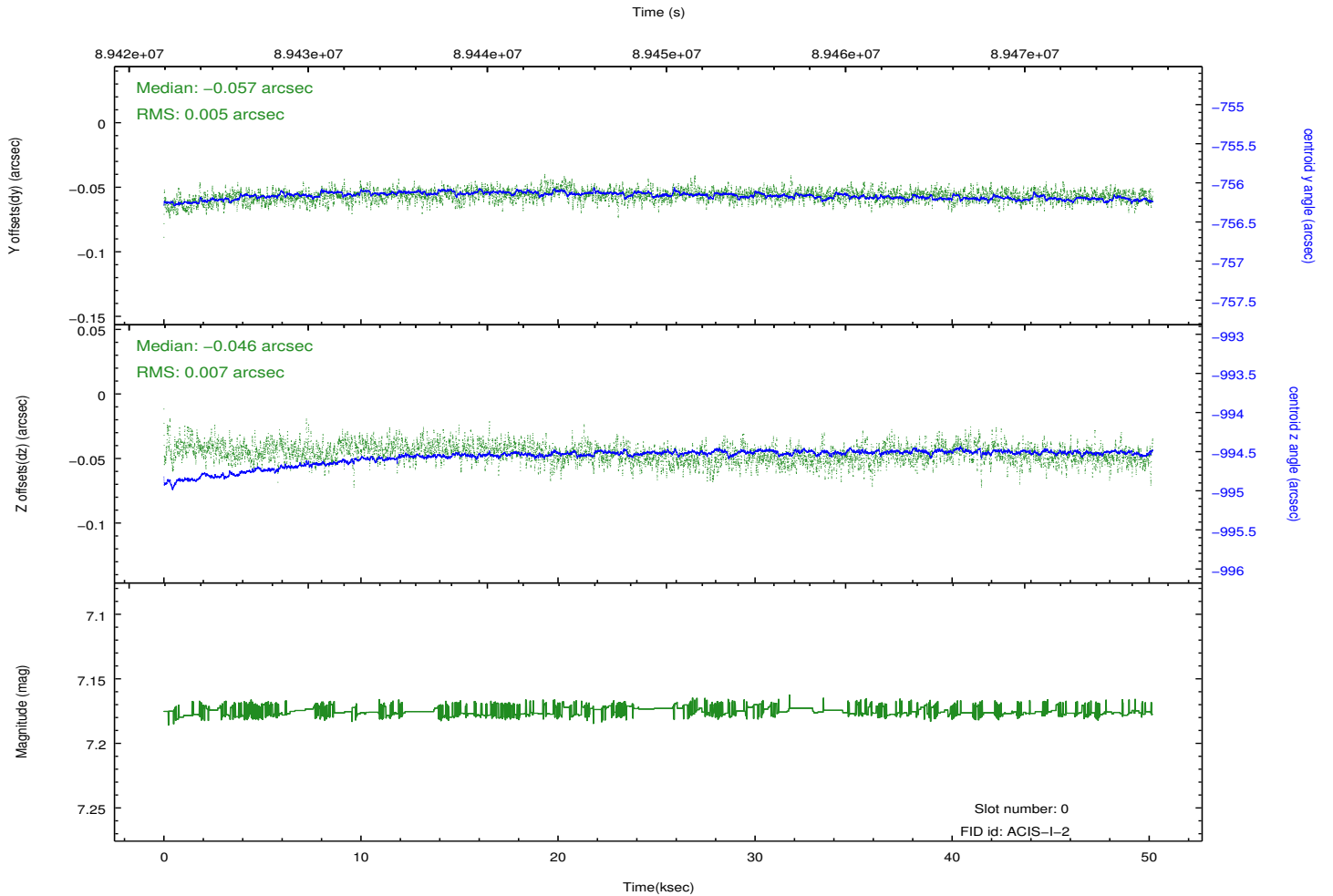
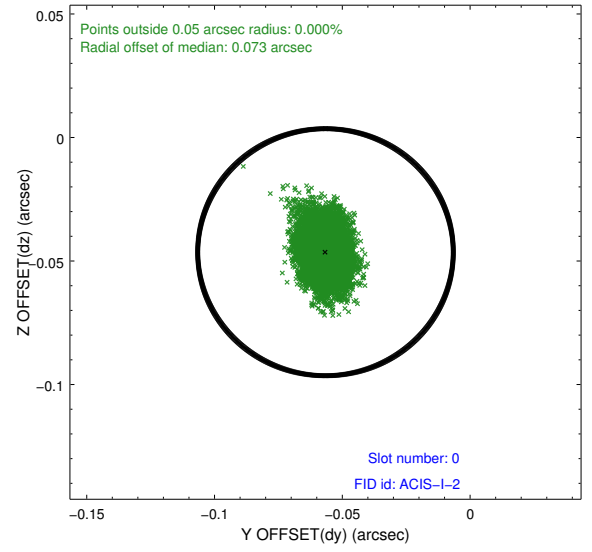
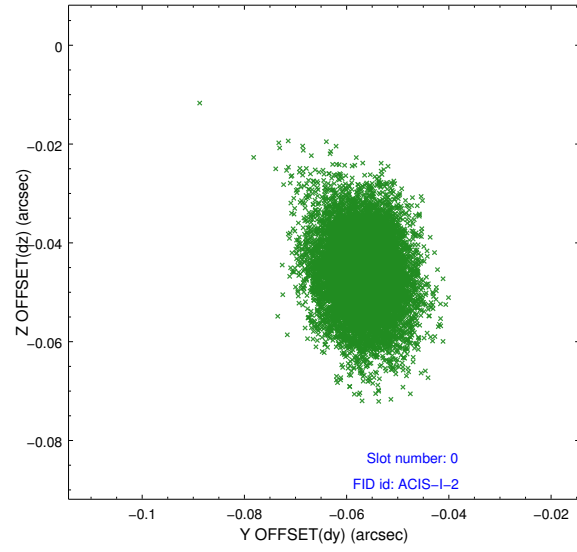


2.4.5 Slot 7

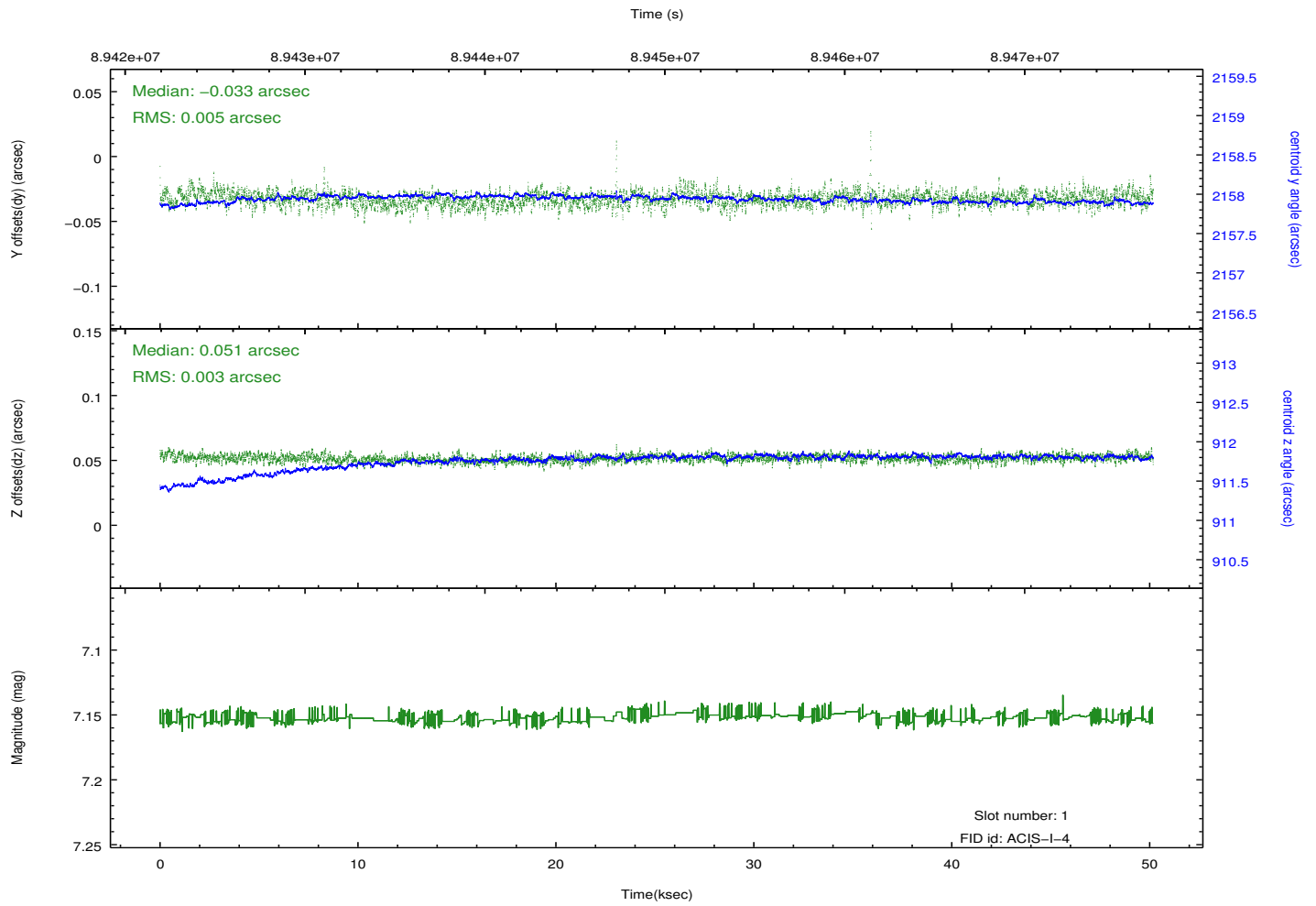
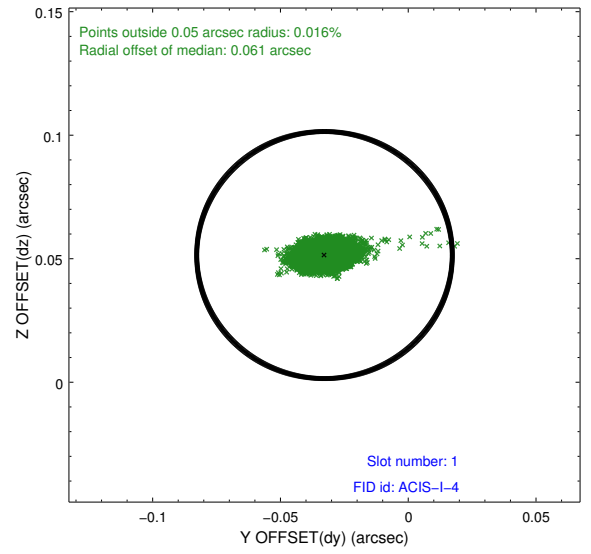
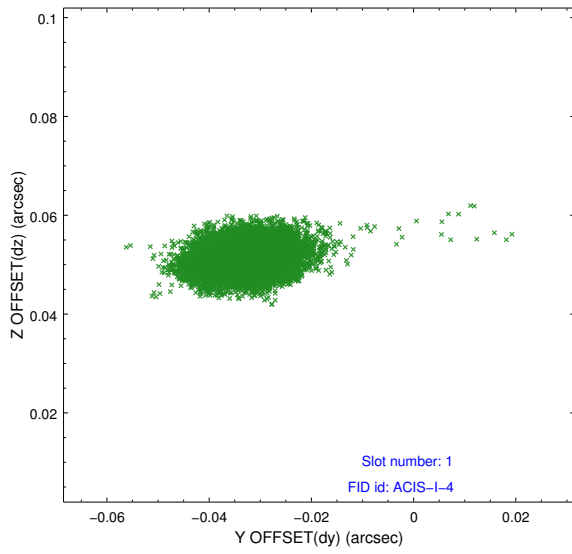


2.5 FID Slots

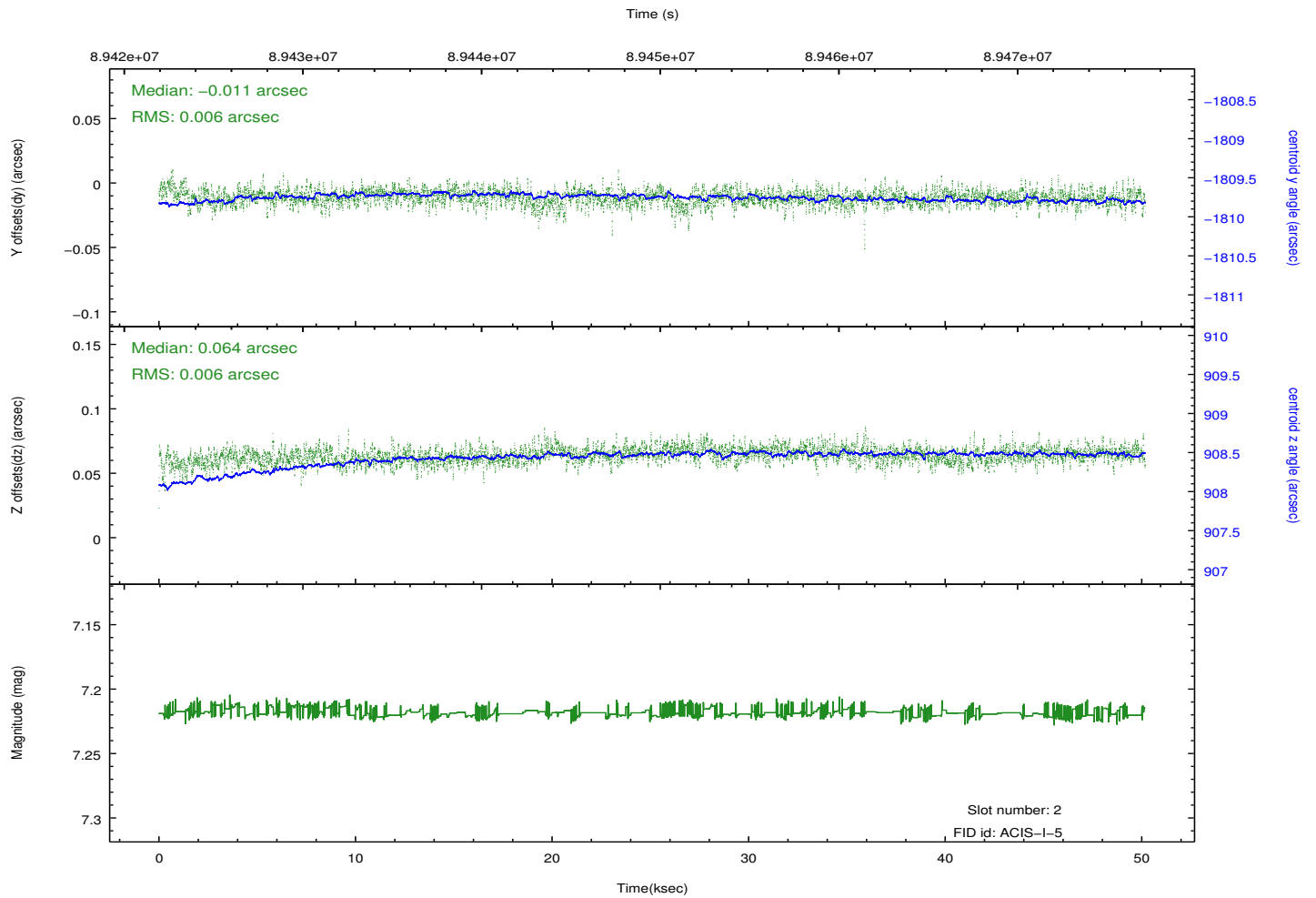
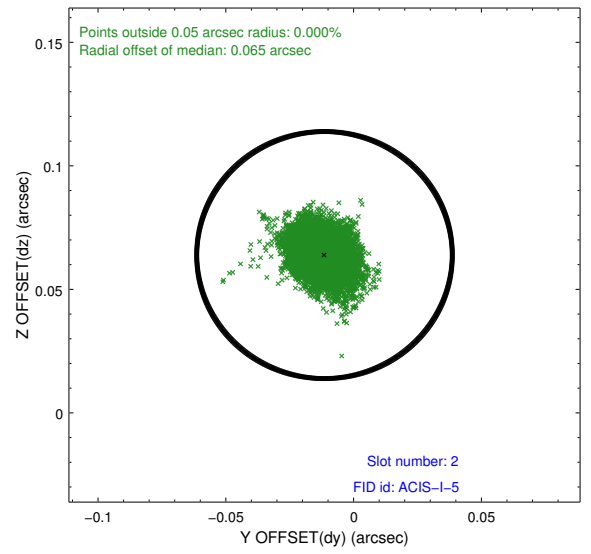
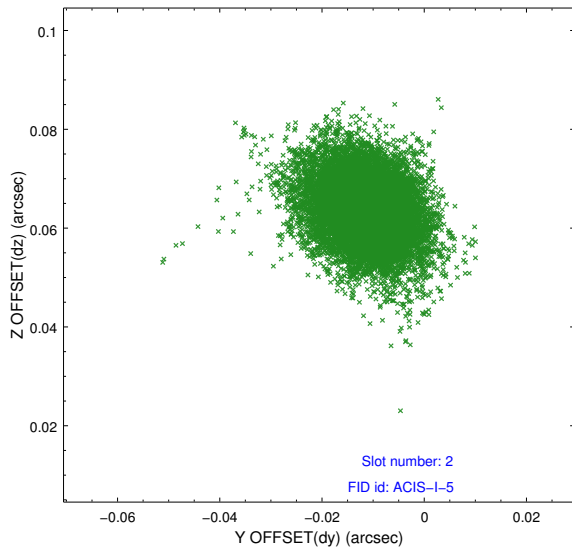
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.163

A.2 Comments

A spatial region of the original bias map for CCD = 0 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 = 0 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:
(255.53375,64.01349), (255.54443,64.01953), (255.29163,64.10453), (255.28098,64.09848)