

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9578 - L2 Version 4
Chandra X-Ray Center

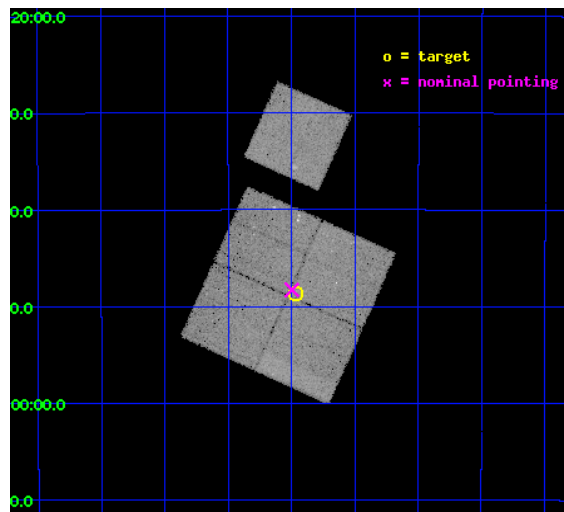
L2 Processing Date : May 23 2012

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1 Front

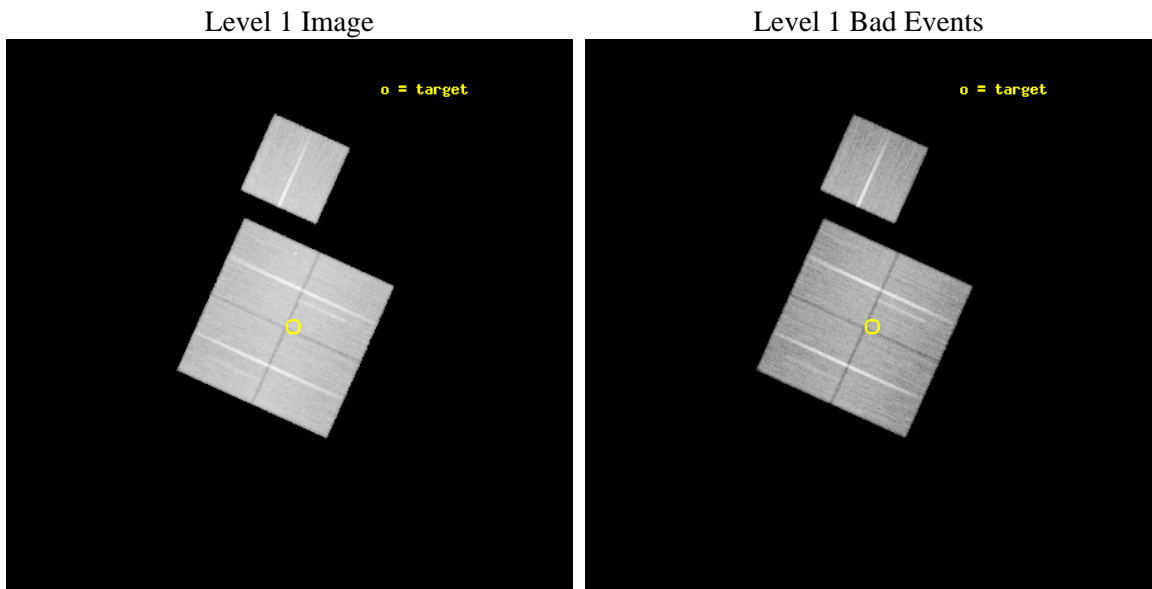
seq_num	900737	Sequence number
obs_id	9578	Observation id
title	The Chandra Deep Field-South Survey: A Public Chandra Legacy	Propo
observer	Dr. Harvey Tananbaum	Principal investigator
object	Chandra Deep Field-South	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	53.1175	Observer's specified target RA [deg]
dec_targ	-27.81	Observer's specified target Dec [deg]
ra_nom	53.124319894403	Nominal RA [deg]
dec_nom	-27.804636968314	Nominal Dec [deg]
roll_nom	24.211858598473	Nominal Roll [deg]
revision	4	Processing version of data
ontime	39084.800300598	Sum of GTIs [s]
livetime	38574.128610859	Livetime [s]
ontime0	39081.659300387	Sum of GTIs [s]
ontime1	39078.518369734	Sum of GTIs [s]
ontime2	39075.377349615	Sum of GTIs [s]
ontime3	39084.800300598	Sum of GTIs [s]
ontime6	39084.800300598	Sum of GTIs [s]
l2events	133706	Number of level 2 events



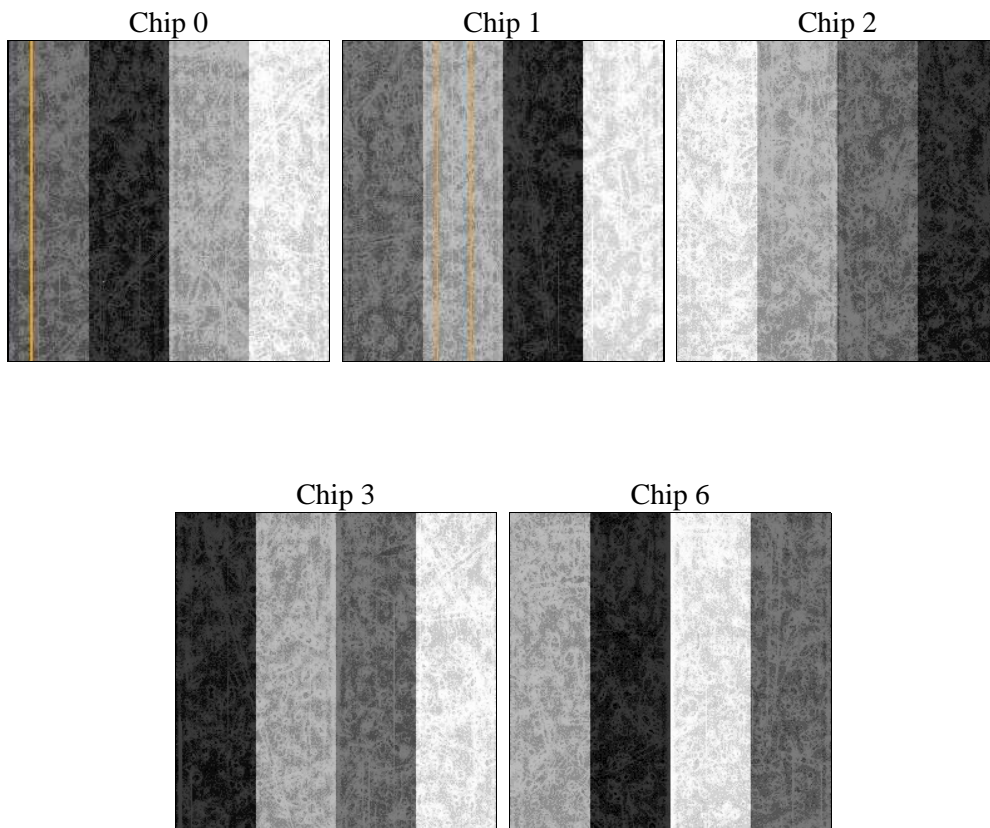
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	47365.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	39084.800300598	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	39081.659300387	Sum of GTIs [s]
date	2012-05-23T14:55:59	Date and time of file creation	ontime1	39078.518369734	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	39075.377349615	Sum of GTIs [s]
			ontime3	39084.800300598	Sum of GTIs [s]
			ontime6	39084.800300598	Sum of GTIs [s]
			l1events	1595579	Number of level 1 events

2.1.4 Events

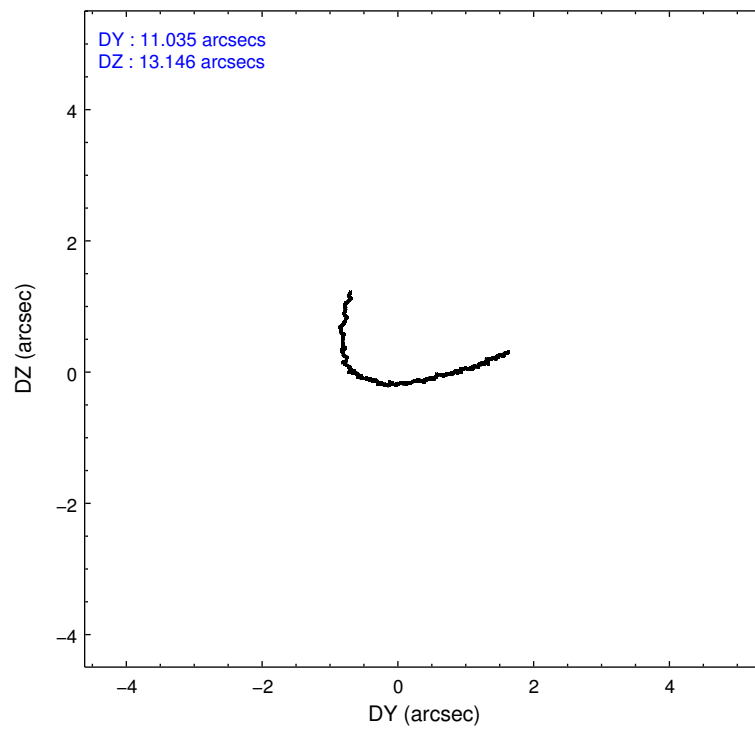
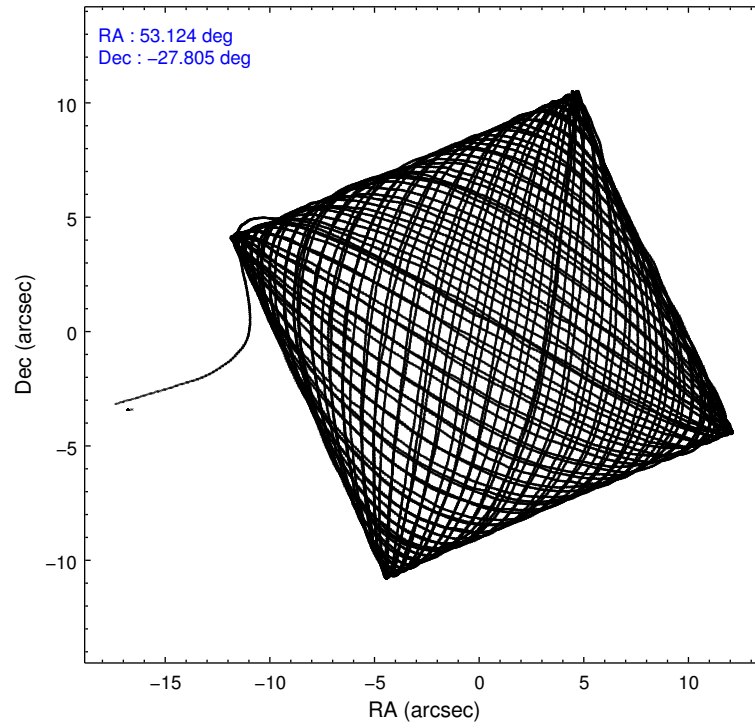
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	305873	304431	341403	324812	319060
rejected events	274737	269800	309811	294969	285062
rejected %	89%	88%	90%	90%	89%

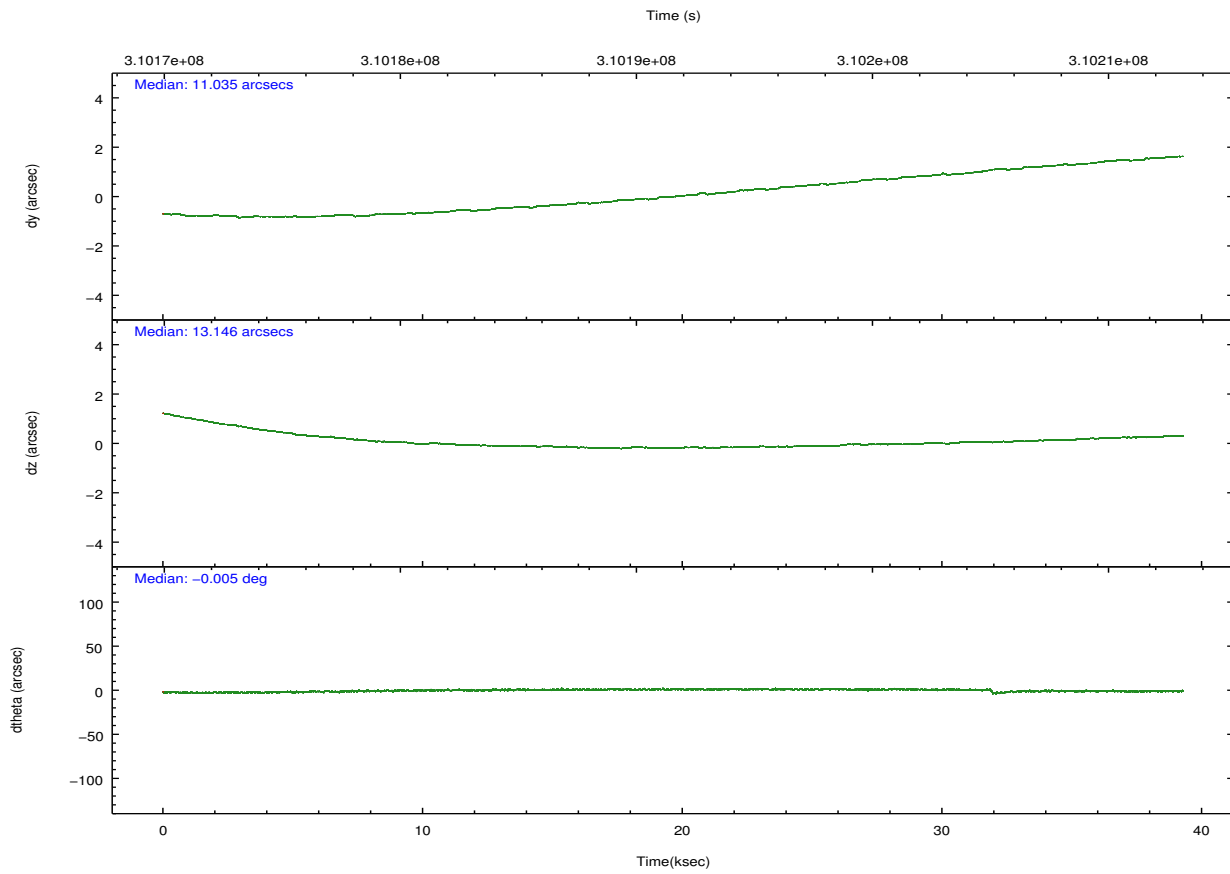
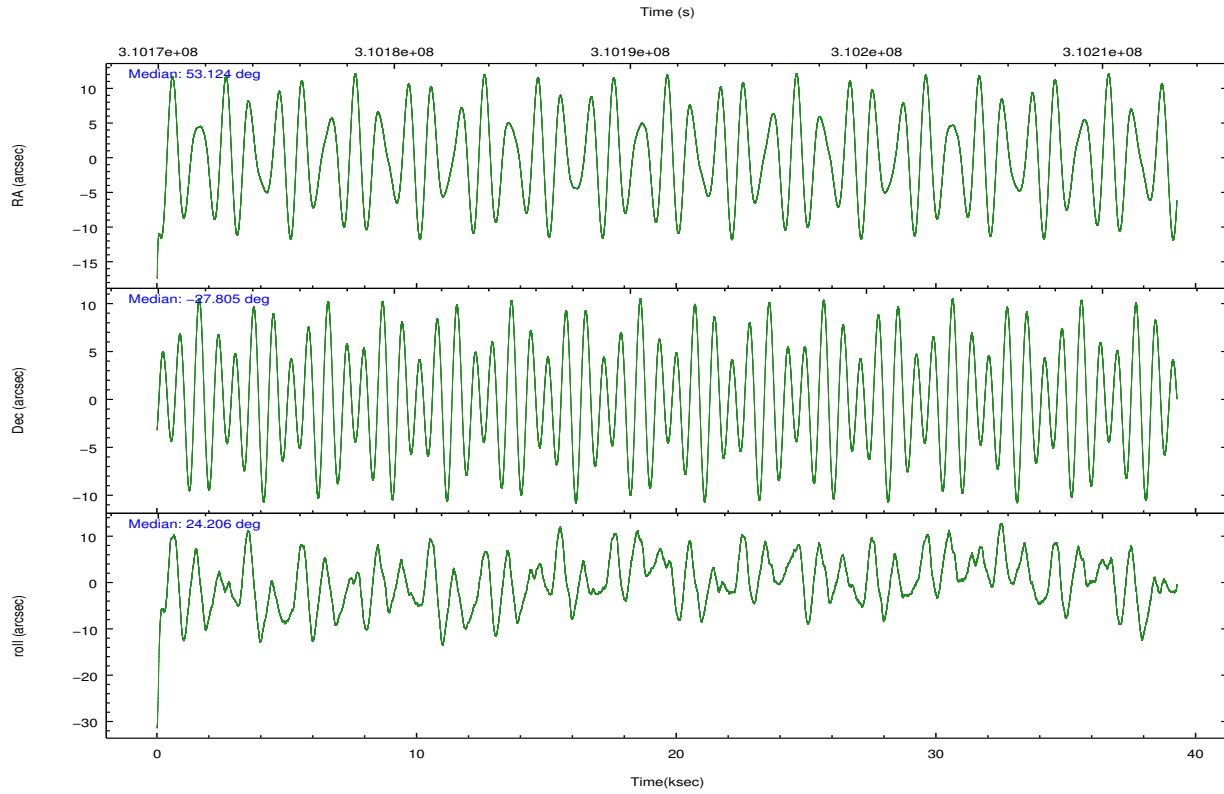
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10754	12364	11823	10497	12976
	3%	4%	3%	3%	4%
grade 1 events	162	167	186	204	156
	0%	0%	0%	0%	0%
grade 2 events	7719	7900	7670	6733	7357
	2%	2%	2%	2%	2%
grade 3 events	3588	3831	3262	3535	3628
	1%	1%	0%	1%	1%
grade 4 events	3436	3775	3303	3368	3454
	1%	1%	0%	1%	1%
grade 5 events	11193	12532	10379	12892	12404
	3%	4%	3%	3%	3%
grade 6 events	5922	7088	5796	5984	6853
	1%	2%	1%	1%	2%
grade 7 events	263099	256774	298984	281599	272232
	86%	84%	87%	86%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	53.106257	53.12431989440314	Subarray requested	NONE	NONE
[deg] Pointing Dec	-27.827009	-27.80463696831389	Alternating exposures requested	N	N
[deg] Pointing Roll	23.994753	24.21185859847272	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	310172081.184000	310170930.04378			
Observation start date	2007-10-30T22:53:36	2007-10-30T22:35:30			
[s] Observation end time (MET)	310219446.184000	310212444.08329			
Observation end date	2007-10-31T12:03:01	2007-10-31T10:07:24			
Read mode	TIMED	TIMED			

2.3 Aspect



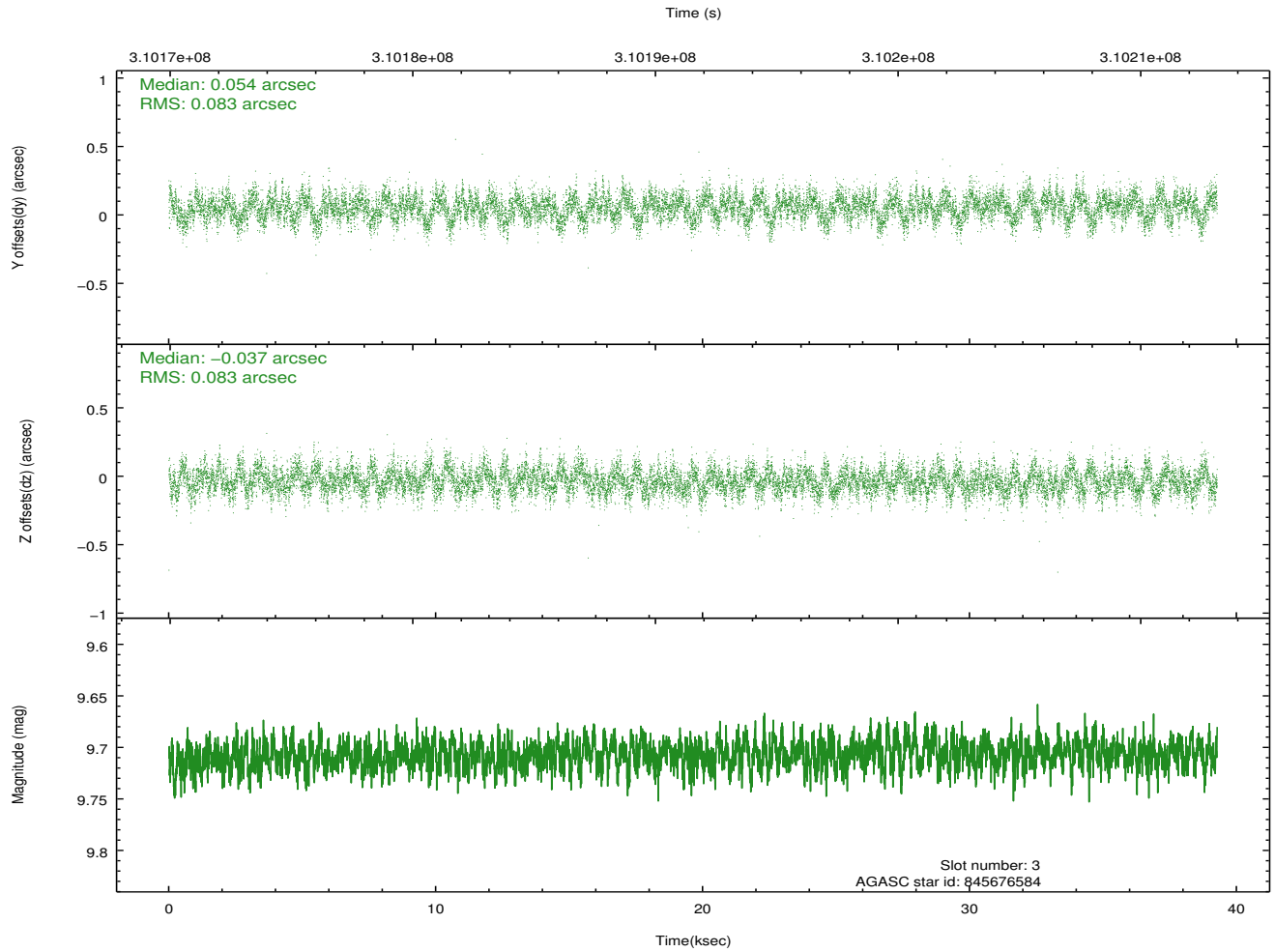
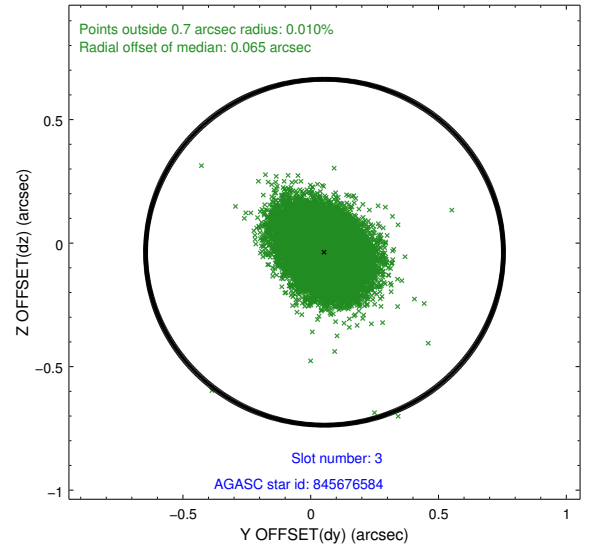
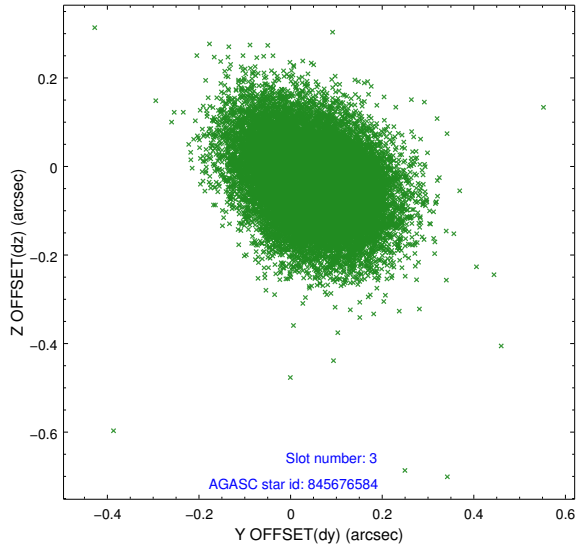


Slot Statistics

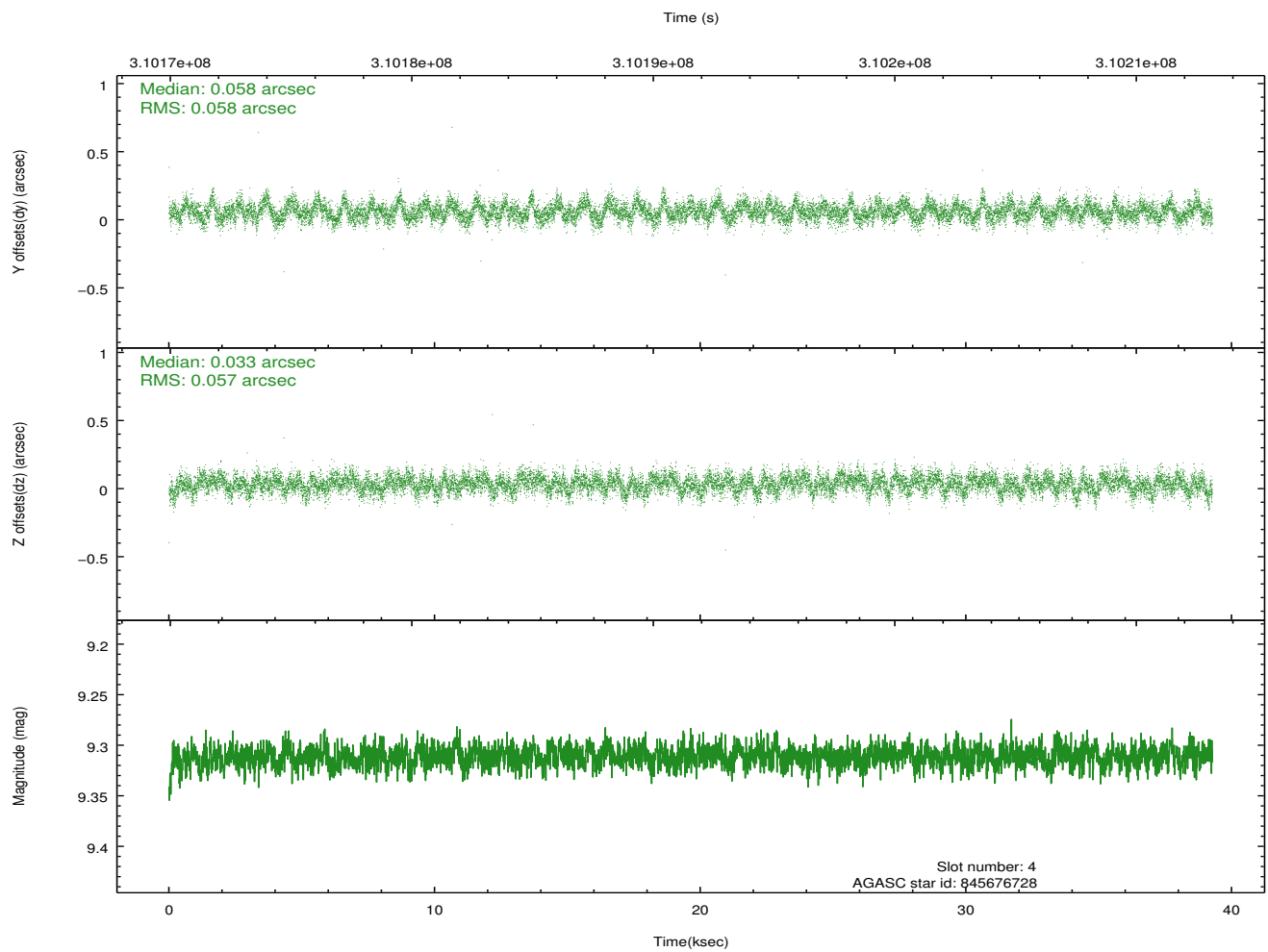
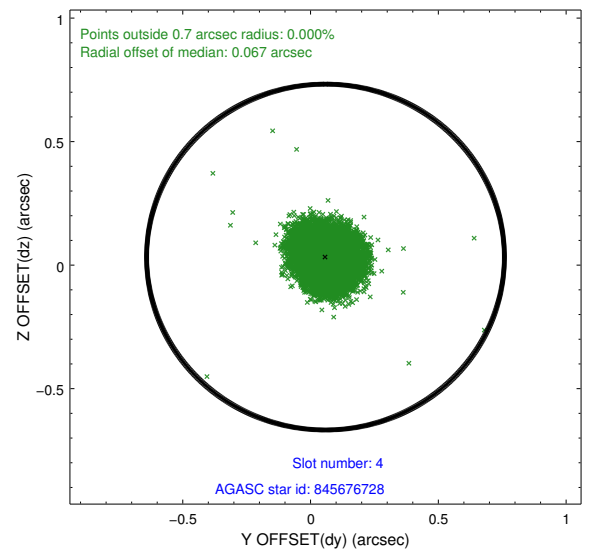
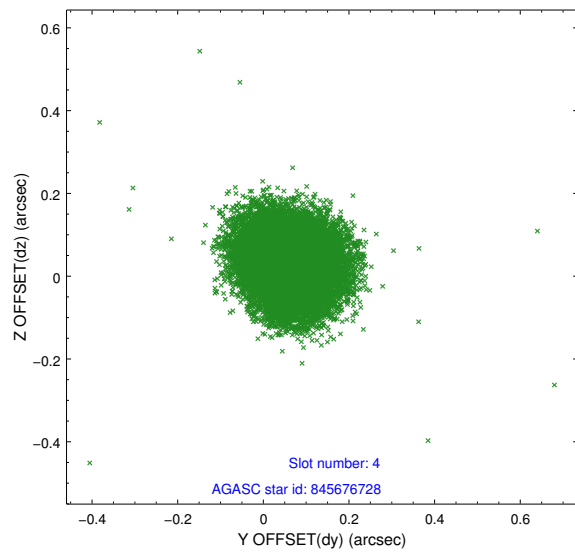
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.16	9579	0.020	-0.110	0.009	0.016	0.000000	0.000000	928.46	-836.87
1	FID	ACIS-I-3	7.36	9579	-0.007	0.146	0.011	0.018	0.000000	0.000000	45.95	-969.97
2	FID	ACIS-I-5	7.15	9579	-0.102	0.036	0.011	0.026	0.000000	0.000000	-1819.95	1060.61
3	GUIDE	845676584	9.71	19140	0.054	-0.037	0.124	0.205	52.264247	-27.542890	-2043.14	2019.00
4	GUIDE	845676728	9.31	19138	0.058	0.033	0.087	0.138	52.877179	-27.664318	-429.23	831.76
5	GUIDE	845676936	9.46	19130	-0.027	-0.125	0.259	0.363	52.843773	-27.880153	-840.69	164.08
6	GUIDE	845807880	8.77	19148	-0.070	0.118	0.094	0.144	53.382027	-27.886093	715.02	-551.67
7	GUIDE	845813656	10.21	19048	-0.009	-0.010	0.179	0.285	53.922767	-28.083703	1990.62	-1906.37

2.4 Star Slots

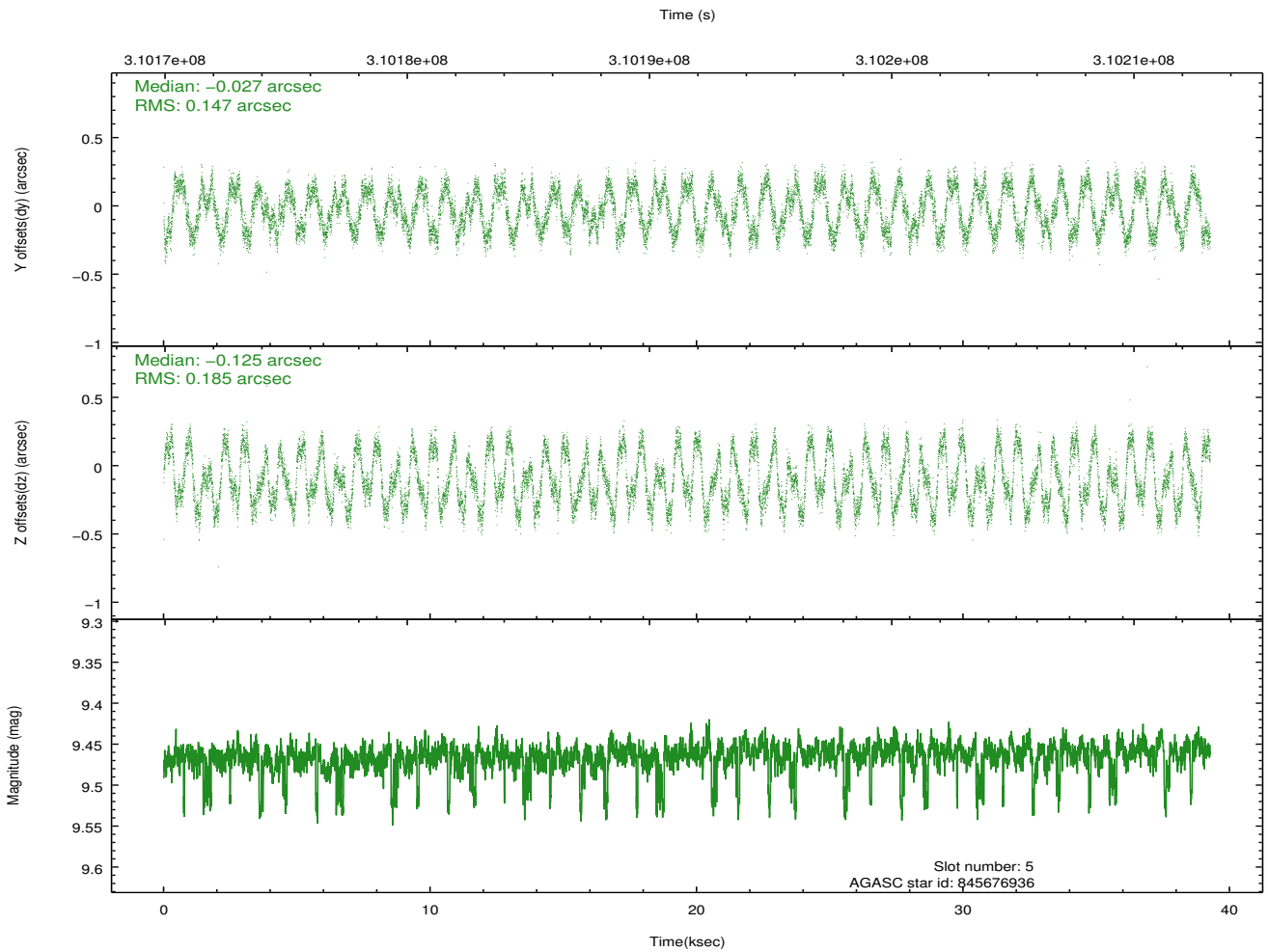
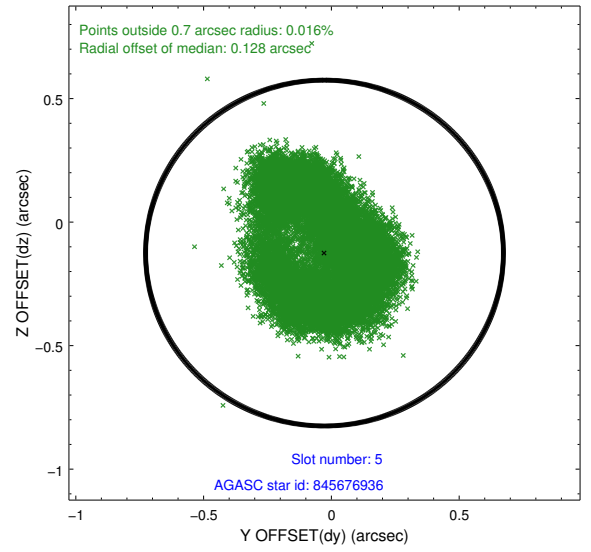
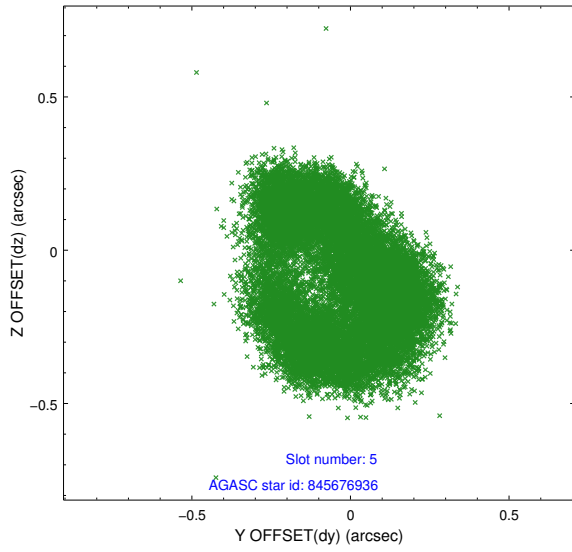
2.4.1 Slot 3



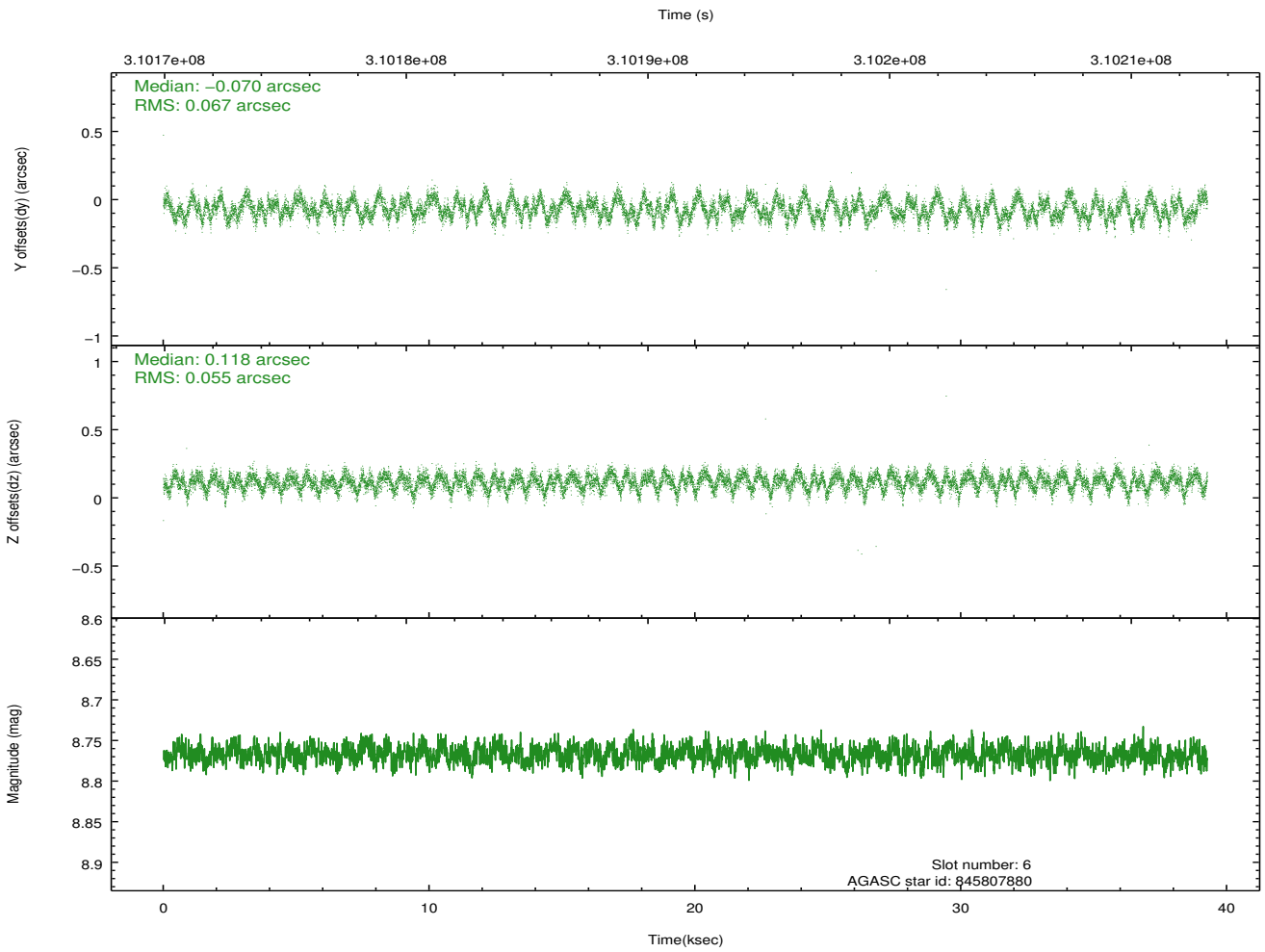
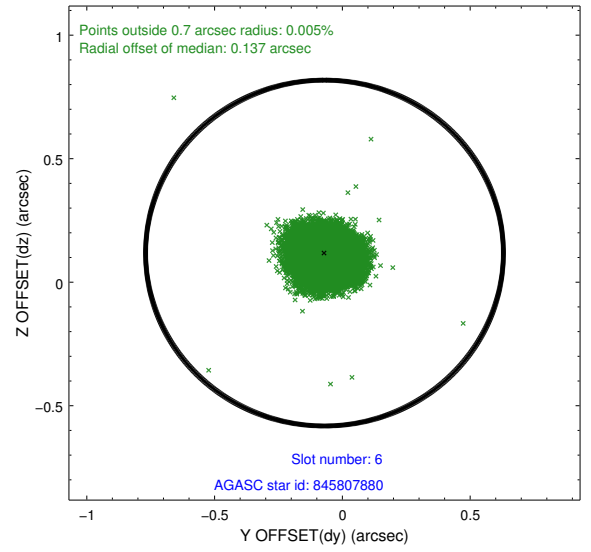
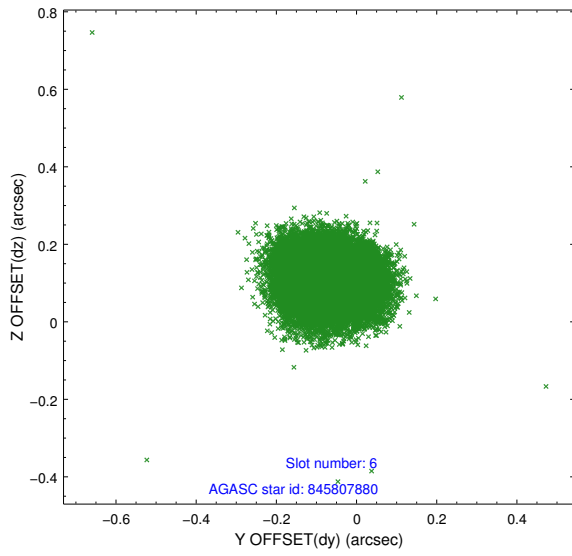
2.4.2 Slot 4



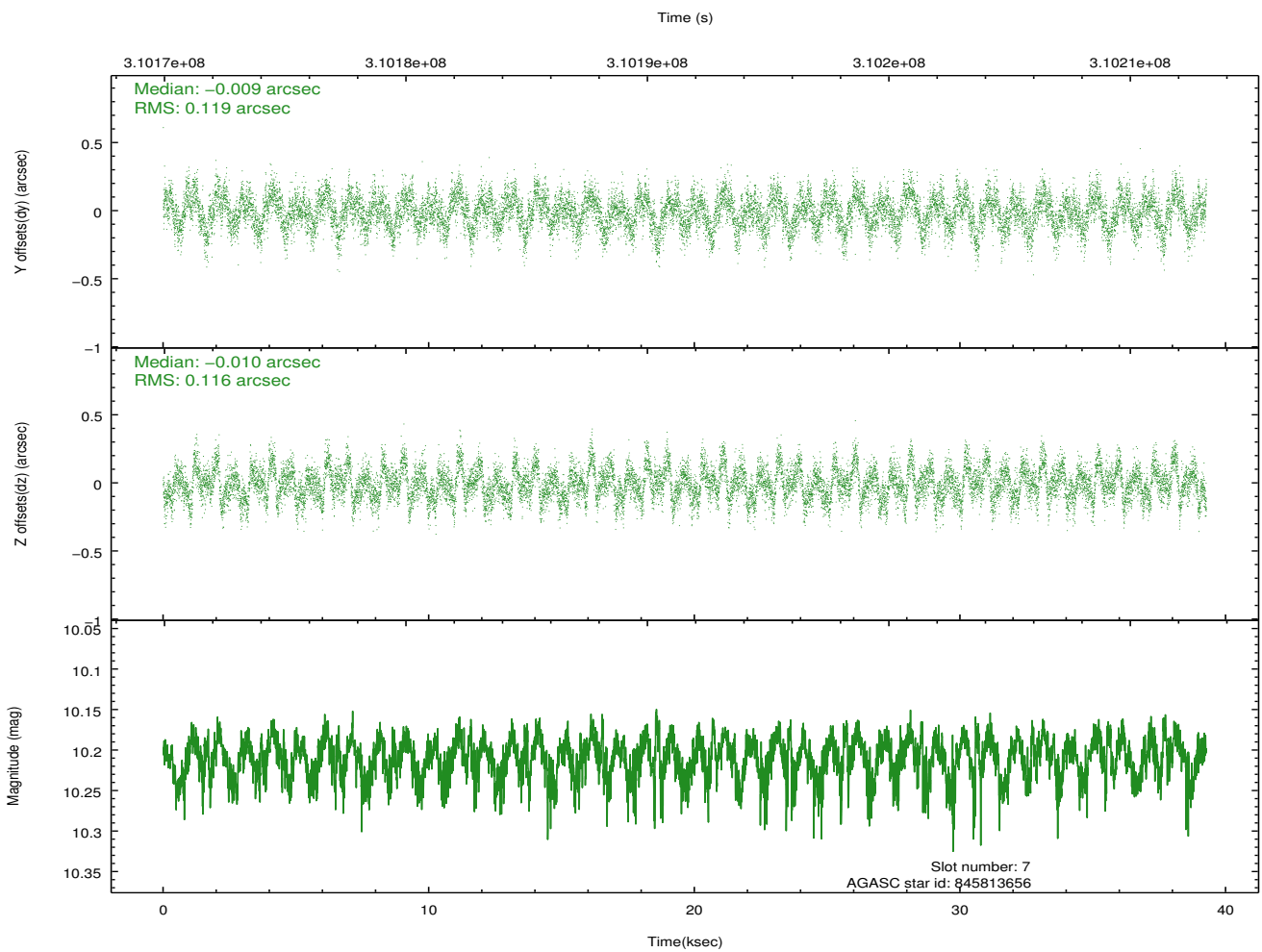
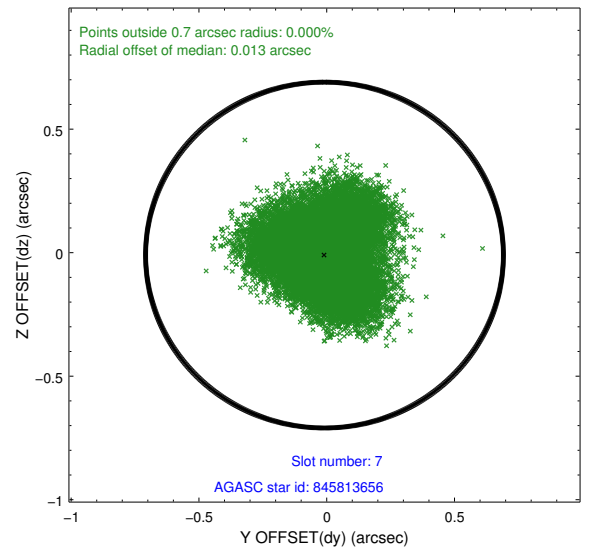
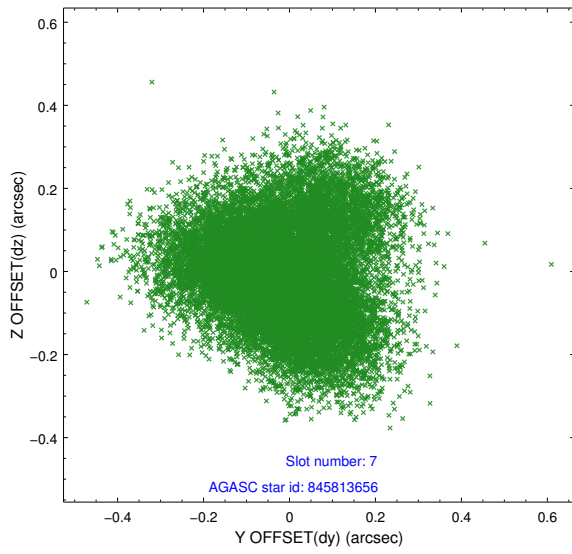
2.4.3 Slot 5



2.4.4 Slot 6

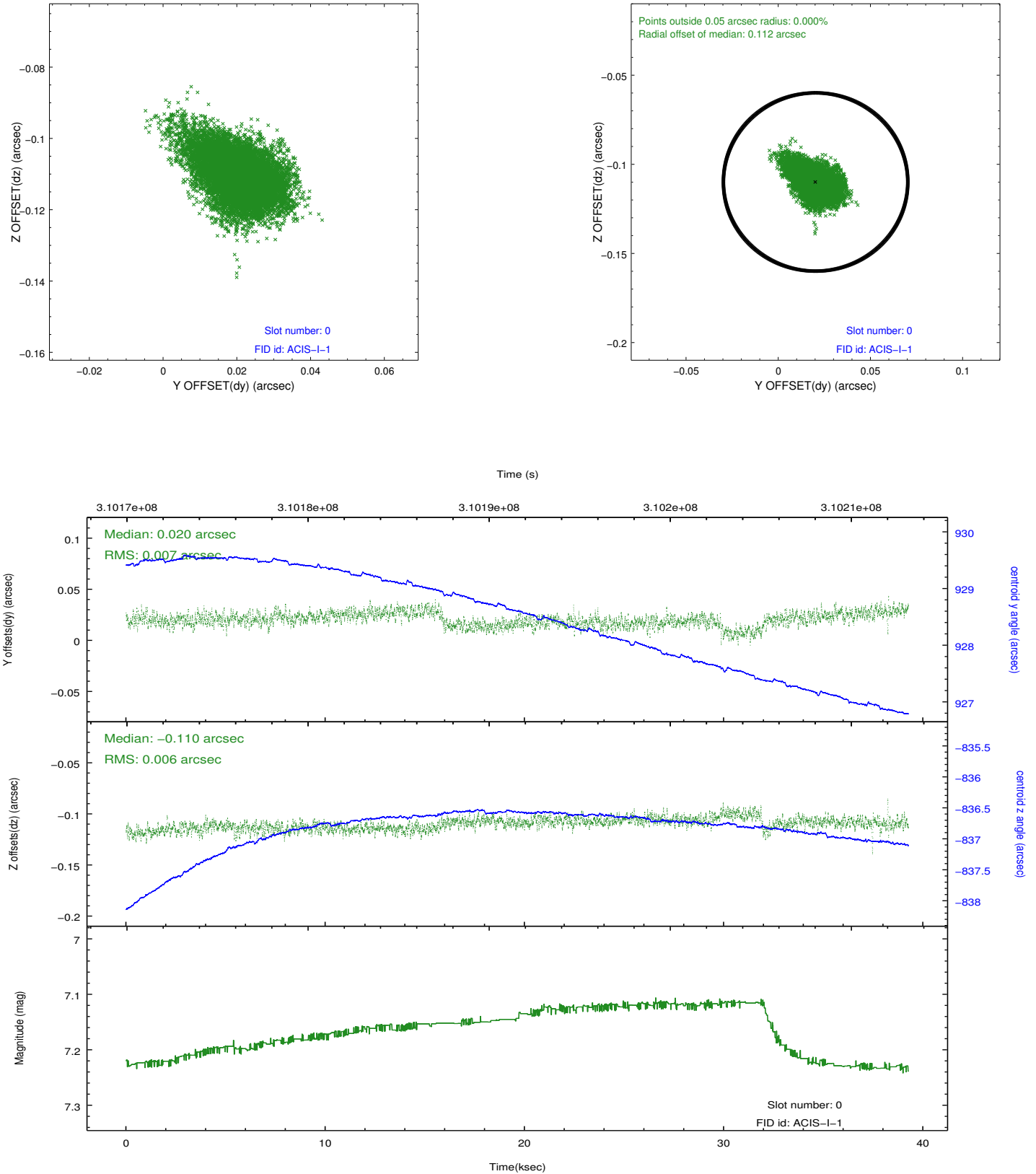


2.4.5 Slot 7

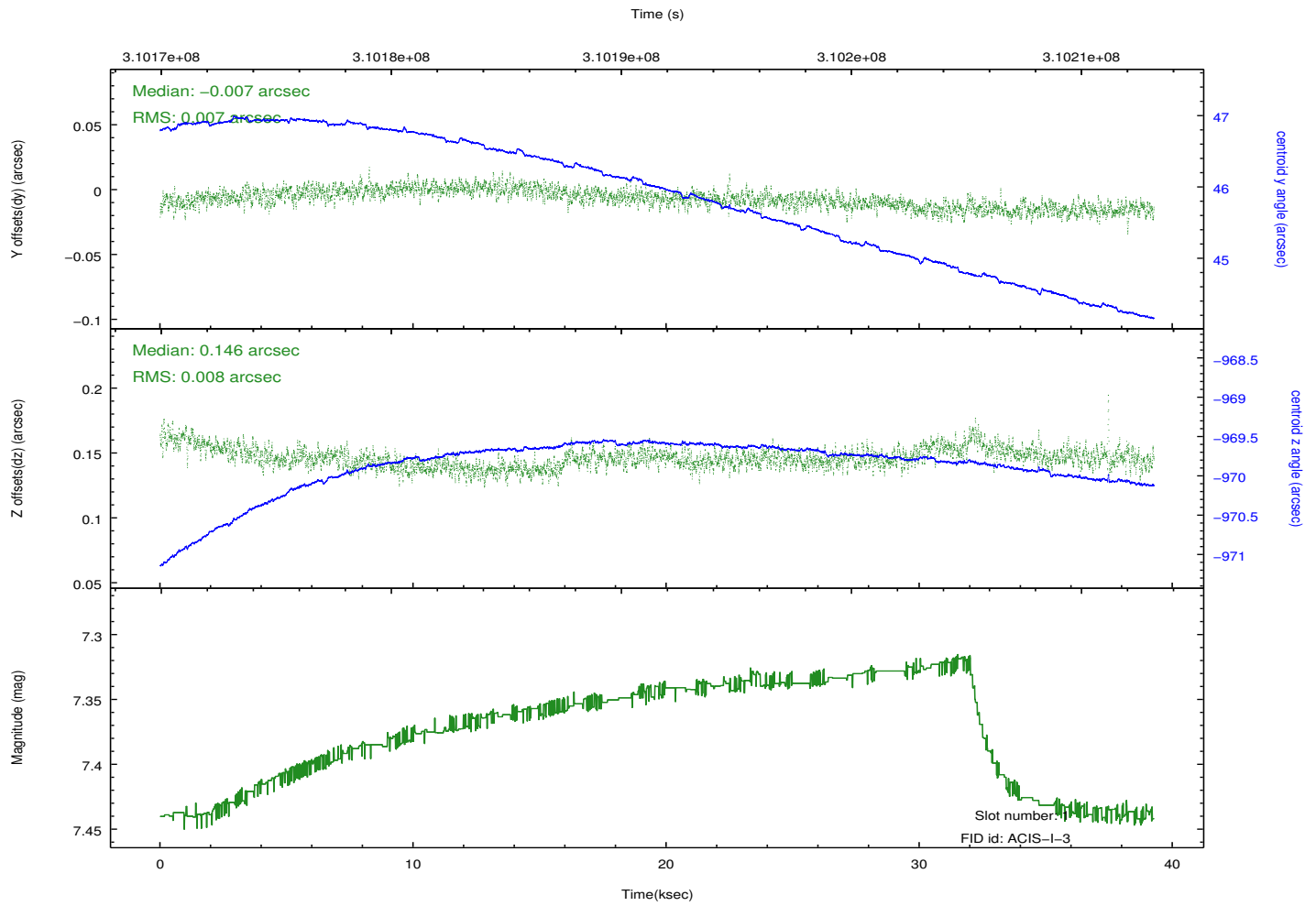
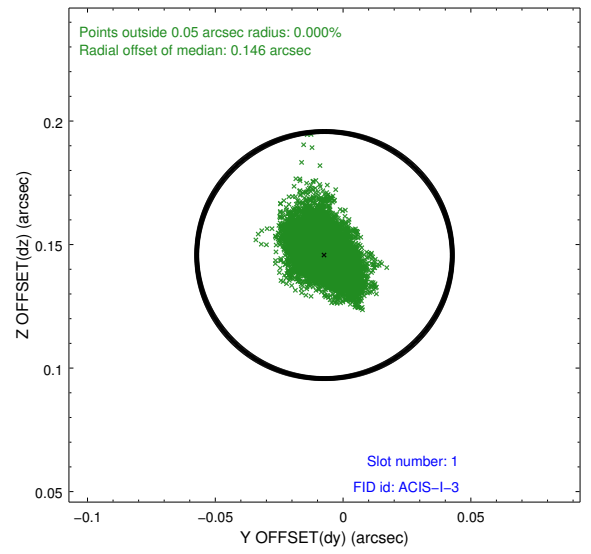
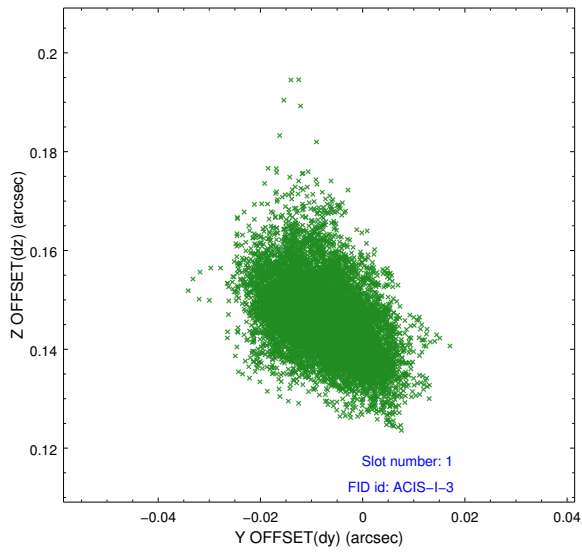


2.5 FID Slots

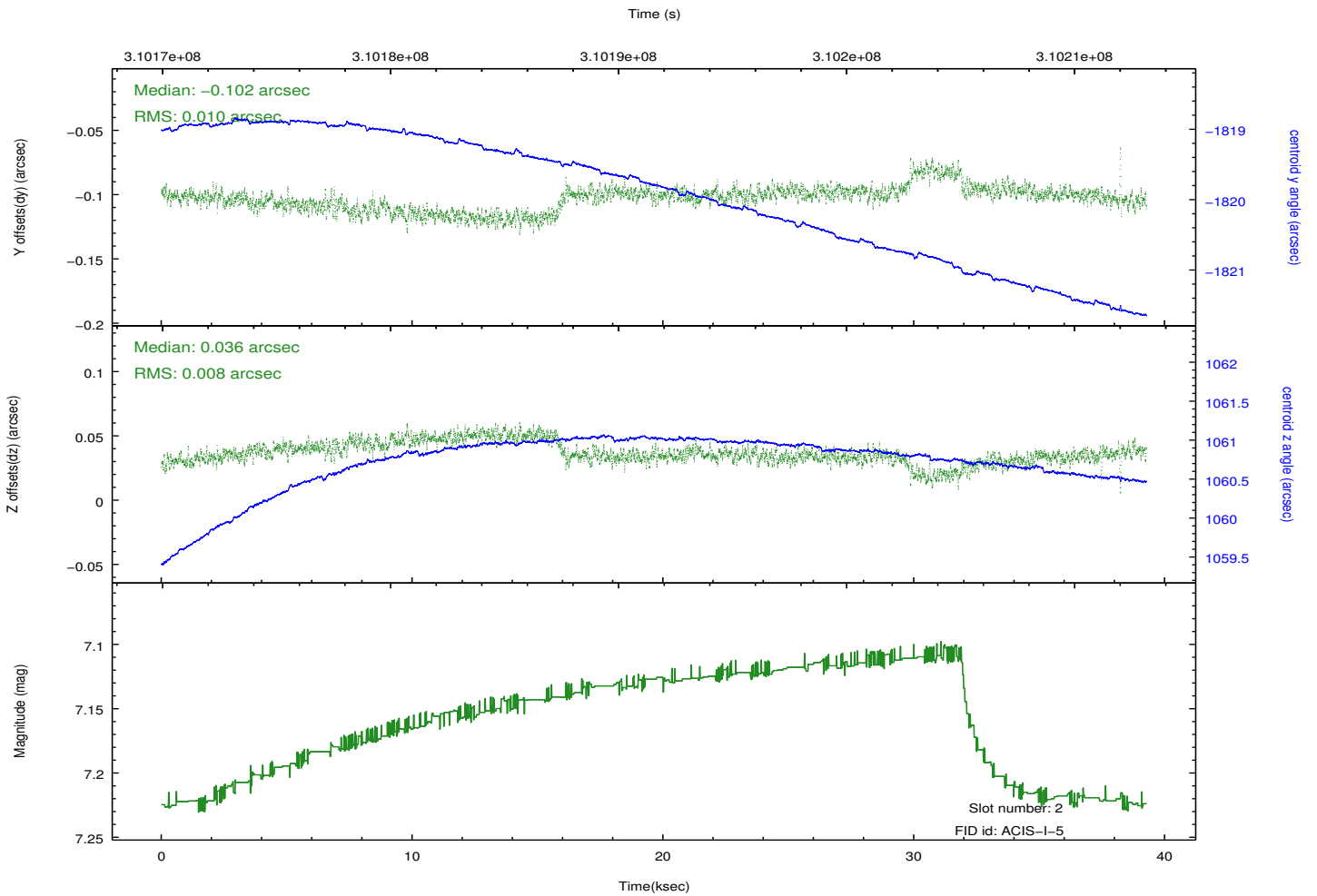
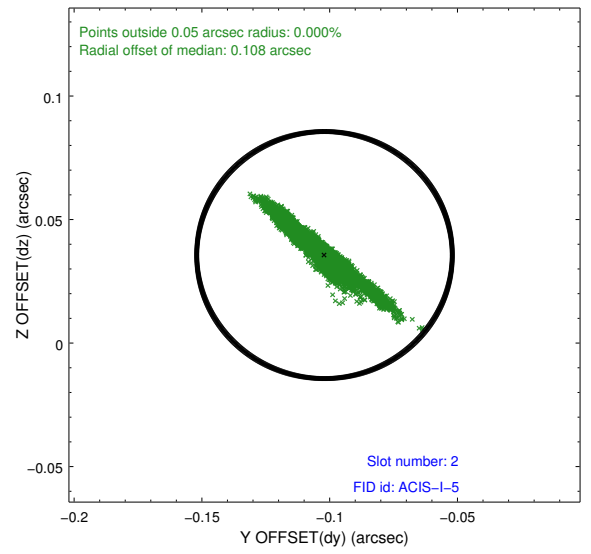
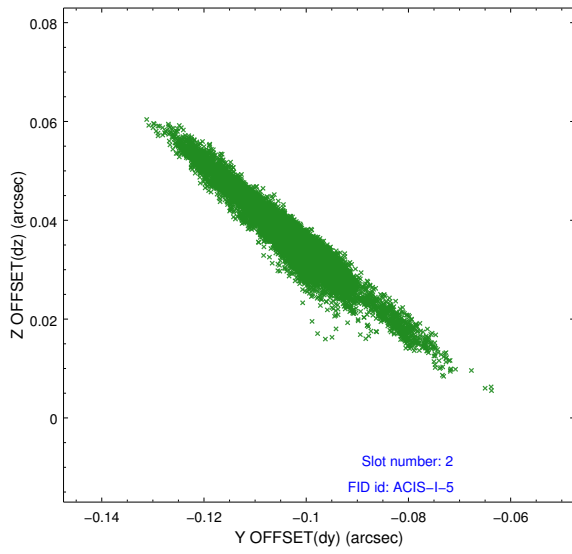
2.5.1 Slot 0



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)	2012.05.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.0848003

A.2 Comments

The detector housing of ACIS was cooled during this observation as a test. The cooler temperatures caused migration of the fid light positions as a function of the temperature. The aspect pipeline now does a fid light correction for the ACIS detector housing temperature variation and the aspect solution is acceptable.

=====

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:
(53.29837, -27.79718), (53.29307, -27.78673), (53.27116, -27.79548), (53.28221, -27.80363)