

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15163 - L2 Version 2
Chandra X-Ray Center

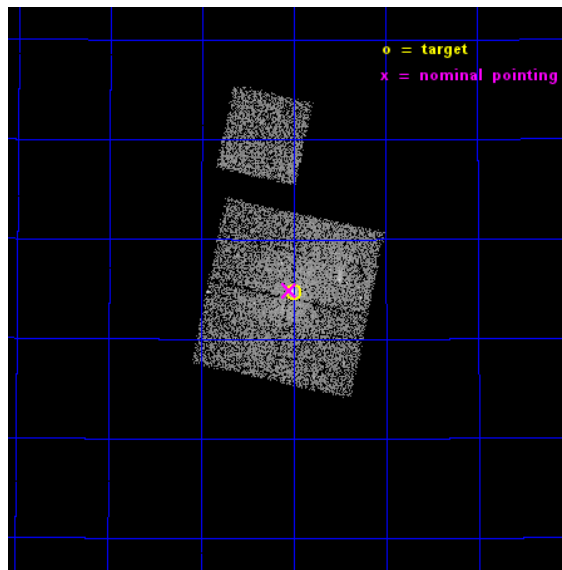
L2 Processing Date : Nov 30 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

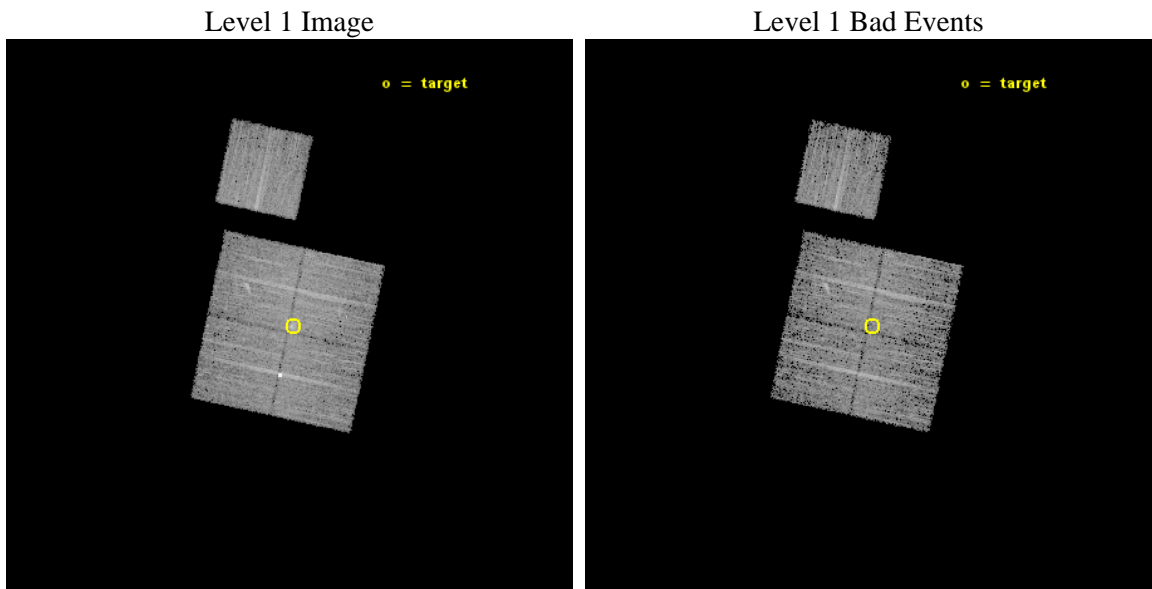
seq_num	801291	Sequence number
obs_id	15163	Observation id
title	COMPLETING eHIFLUGCS: THE ULTIMATE PRECISE AND ACCURATE LOCAL BASELINE	Proposal title
observer	Dr. Thomas Reiprich	Principal investigator
object	Z8338	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.750417	Observer's specified target RA [deg]
dec_targ	49.911	Observer's specified target Dec [deg]
ra_nom	272.76143554017	Nominal RA [deg]
dec_nom	49.914929048351	Nominal Dec [deg]
roll_nom	12.122499177114	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8081.7000621557	Sum of GTIs [s]
livetime	7976.1067011826	Livetime [s]
ontime0	8081.7000621557	Sum of GTIs [s]
ontime1	8081.7000621557	Sum of GTIs [s]
ontime2	8075.418061018	Sum of GTIs [s]
ontime3	8081.7000621557	Sum of GTIs [s]
ontime6	8081.7000621557	Sum of GTIs [s]
l2events	26032	Number of level 2 events



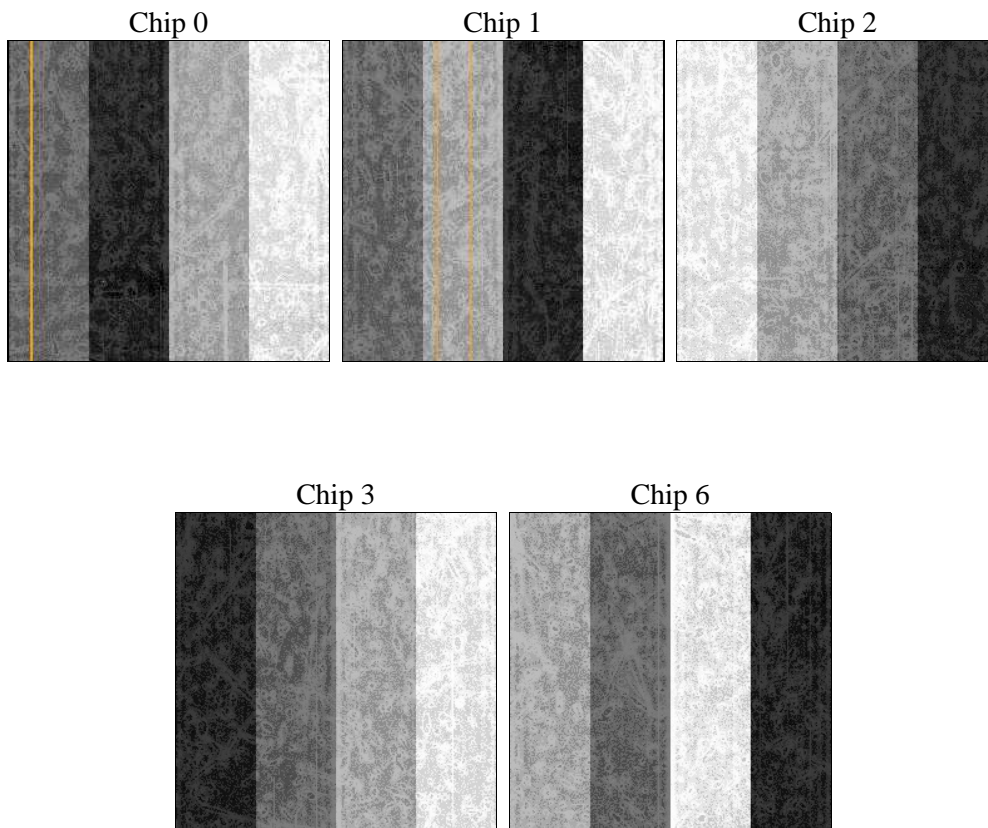
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	8081.7000621557	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	8081.7000621557	Sum of GTIs [s]
date	2014-12-01T03:09:42	Date and time of file creation	ontime1	8081.7000621557	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8075.418061018	Sum of GTIs [s]
			ontime3	8081.7000621557	Sum of GTIs [s]
			ontime6	8081.7000621557	Sum of GTIs [s]
			l1events	206622	Number of level 1 events

2.1.4 Events

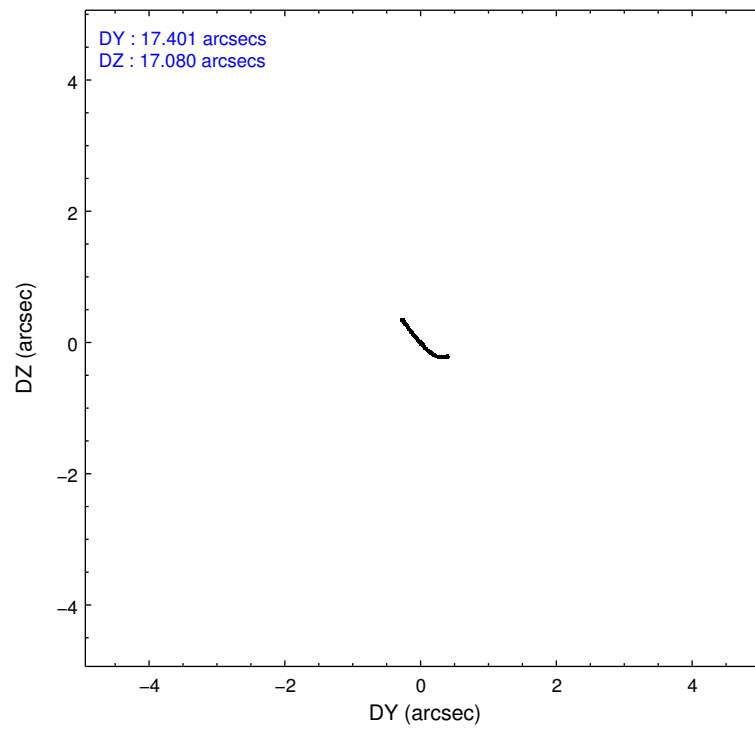
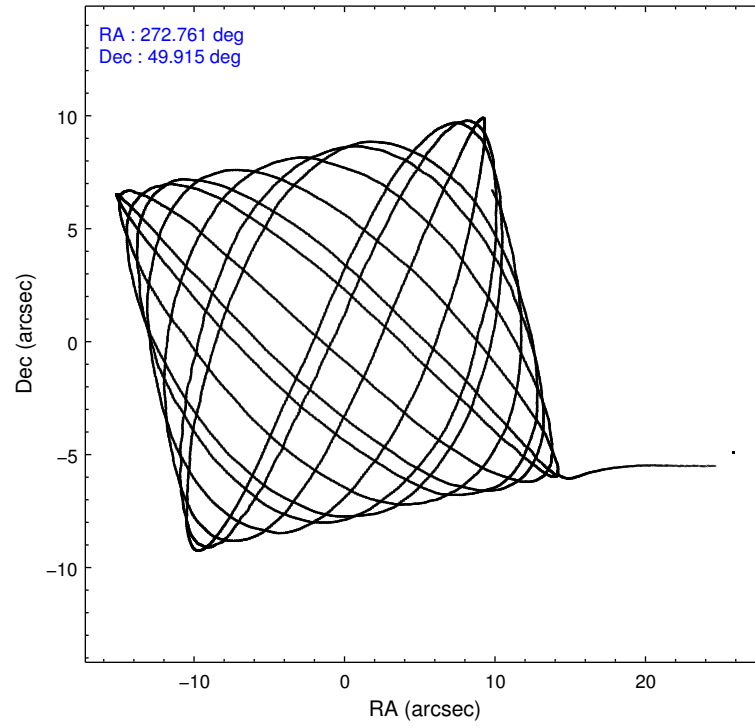
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	37532	42558	42031	44161	40340
rejected events	31826	33624	36309	36223	35436
rejected %	84%	79%	86%	82%	87%

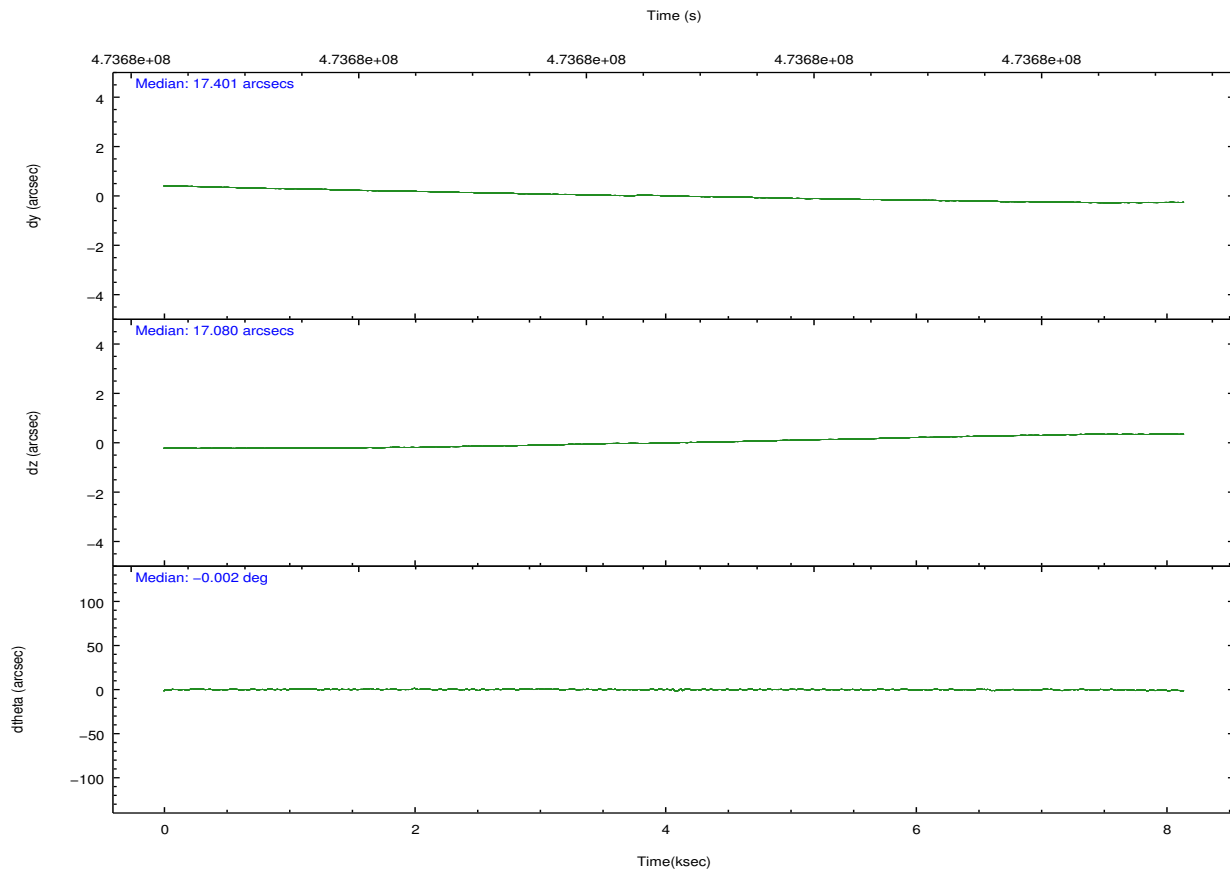
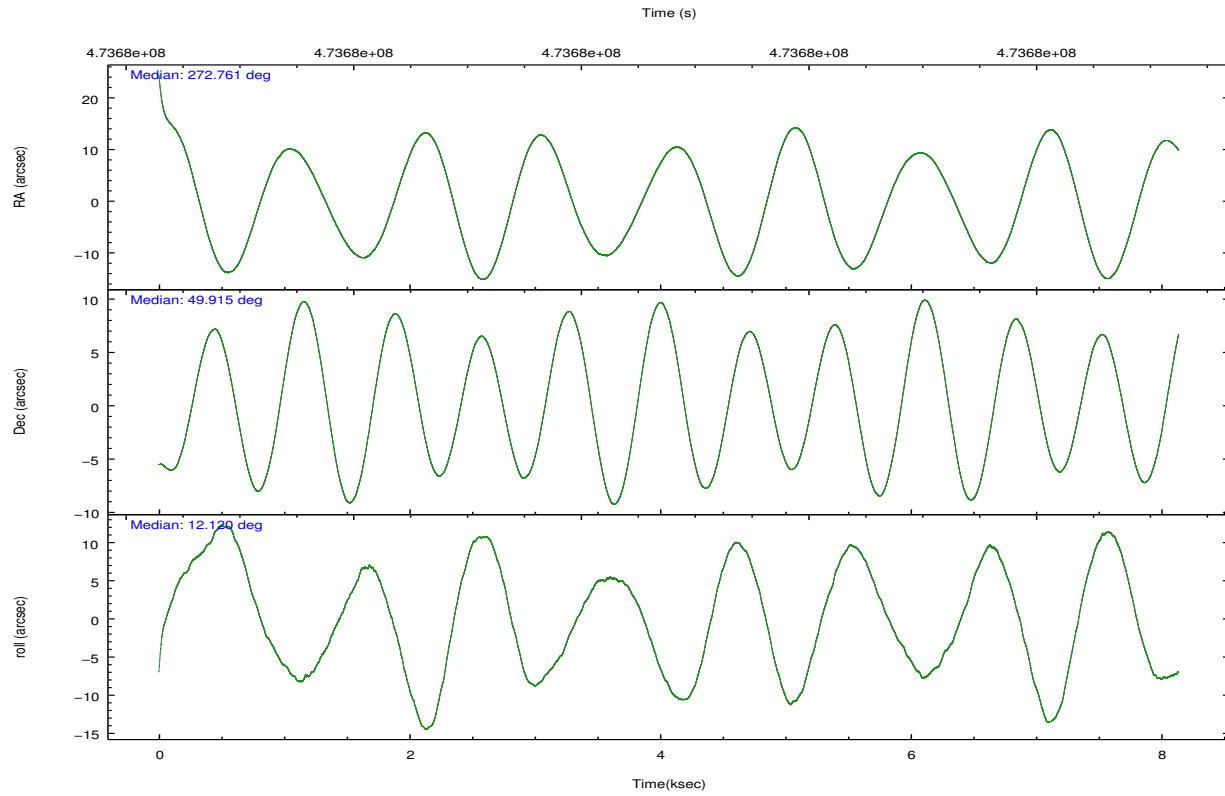
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2517	5653	2713	4538	1759
	6%	13%	6%	10%	4%
grade 1 events	25	52	21	26	22
	0%	0%	0%	0%	0%
grade 2 events	1183	1205	1171	1273	1117
	3%	2%	2%	2%	2%
grade 3 events	533	524	483	598	506
	1%	1%	1%	1%	1%
grade 4 events	525	500	497	583	482
	1%	1%	1%	1%	1%
grade 5 events	1530	1737	1439	1907	1735
	4%	4%	3%	4%	4%
grade 6 events	950	1060	861	950	1041
	2%	2%	2%	2%	2%
grade 7 events	30269	31827	34846	34286	33678
	80%	74%	82%	77%	83%

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	272.729793	272.7614355401735	CCD I2 on	Y	Y
[deg] Pointing Dec	49.896440	49.91492904835087	CCD I3 on	Y	Y
[deg] Pointing Roll	11.938028	12.12249917711365	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	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	473676838.184000	473675707.79426	CCD S5 on	N	N
Observation start date	2013-01-04T08:52:51	2013-01-04T08:35:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	473684838.184000	473686373.43233	On-chip summing requested	N	N
Observation end date	2013-01-04T11:06:11	2013-01-04T11:32:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





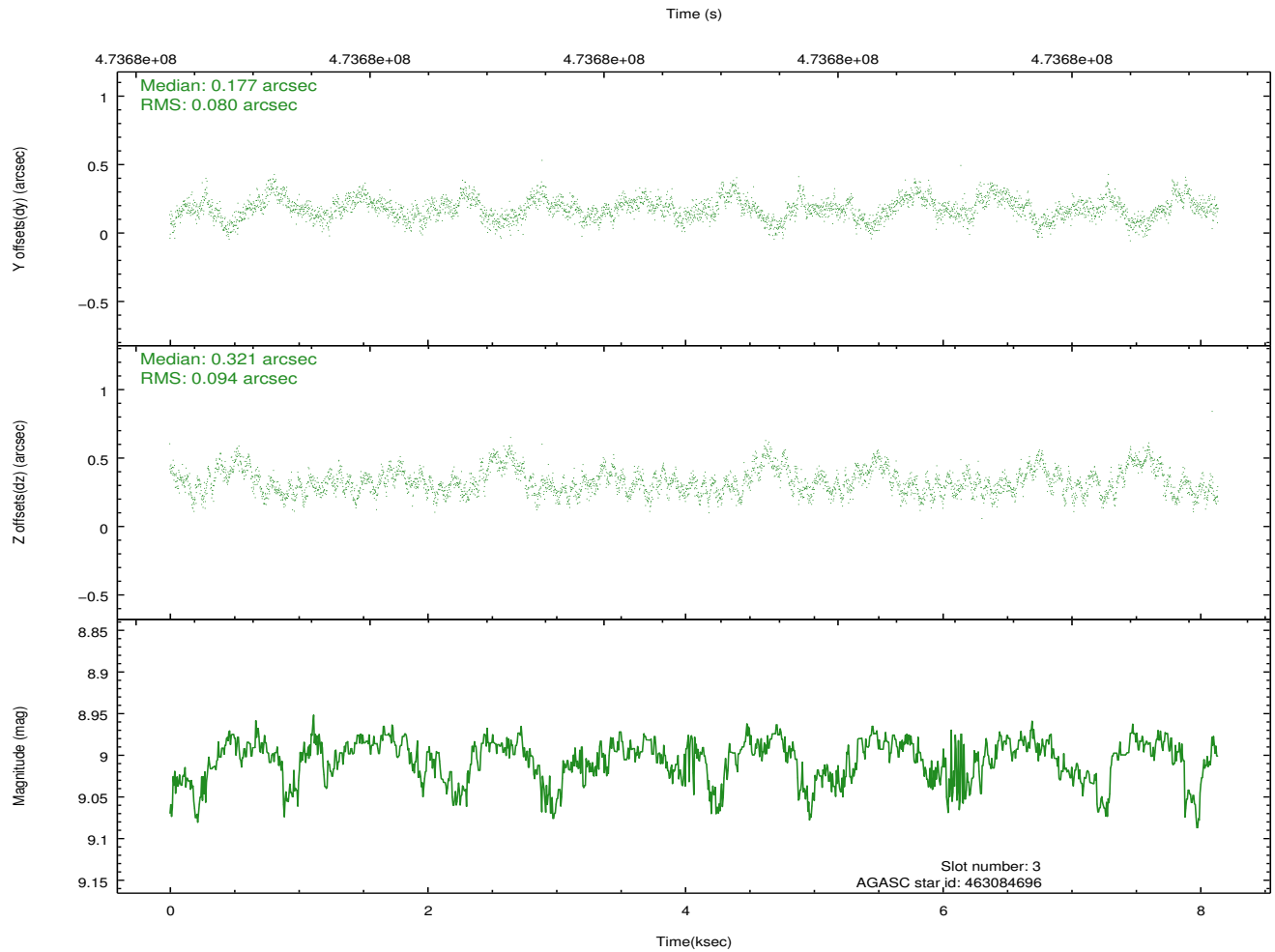
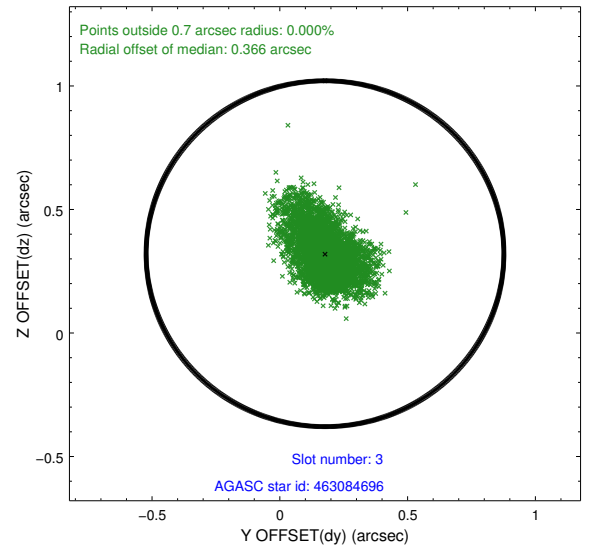
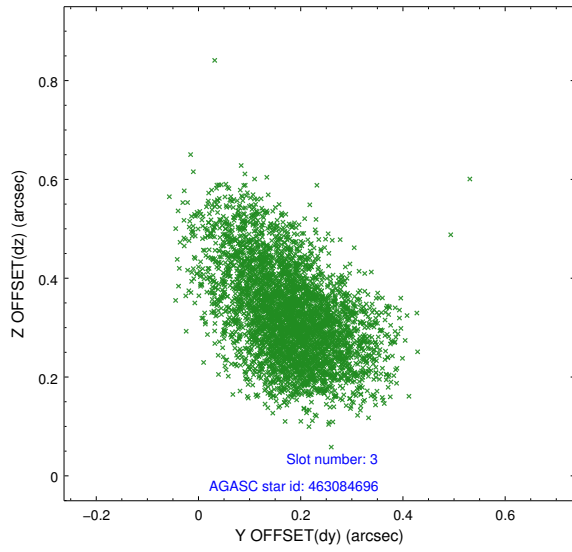
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.17	1985	0.088	-0.049	0.018	0.028	0.000000	0.000000	922.07	-840.81
1	FID		ACIS-I-5	7.17	1985	-0.288	0.068	0.012	0.020	0.000000	0.000000	-1826.03	1056.45
2	FID		ACIS-I-6	7.17	1985	0.109	0.050	0.015	0.024	0.000000	0.000000	386.89	1701.71
3	GUIDE	used	463084696	9.00	3970	0.177	0.321	0.130	0.220	273.211558	49.626674	899.30	-1178.27
4	GUIDE	used	463091592	9.20	3965	-0.092	-0.164	0.093	0.154	273.392110	50.573139	1987.00	2076.83
5	GUIDE	used	462957560	8.90	3970	0.090	0.048	0.081	0.133	271.724252	49.814479	-2342.17	211.01
6	GUIDE	used	462957104	9.14	3959	0.056	-0.025	0.109	0.175	272.224010	49.834034	-1195.24	27.82
7	GUIDE	used	463088504	8.03	3967	-0.232	-0.196	0.090	0.142	273.676468	50.243700	2393.41	785.94

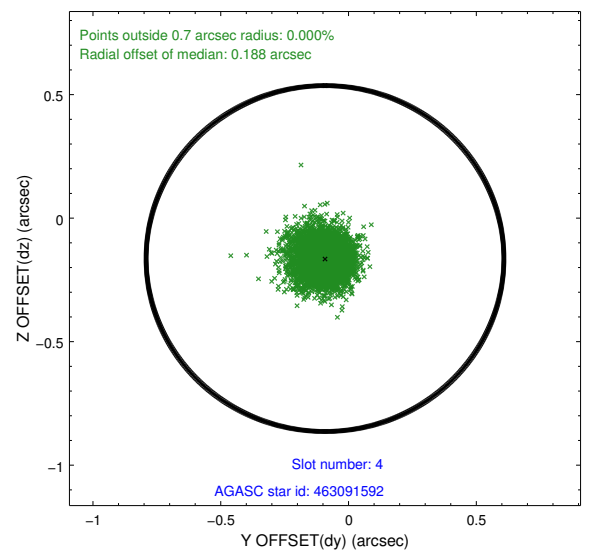
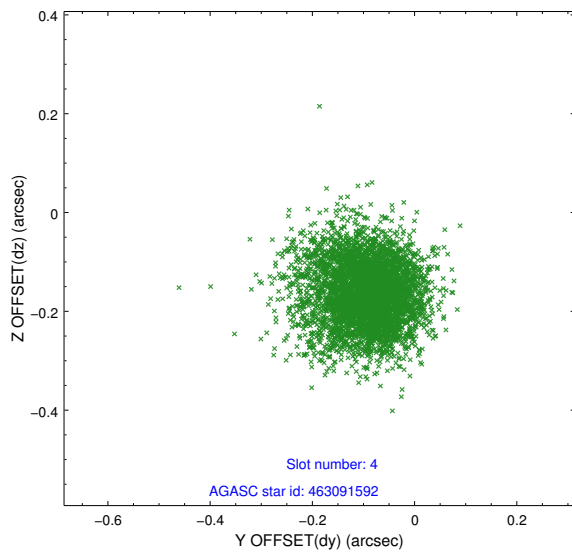
∞

2.4 Star Slots

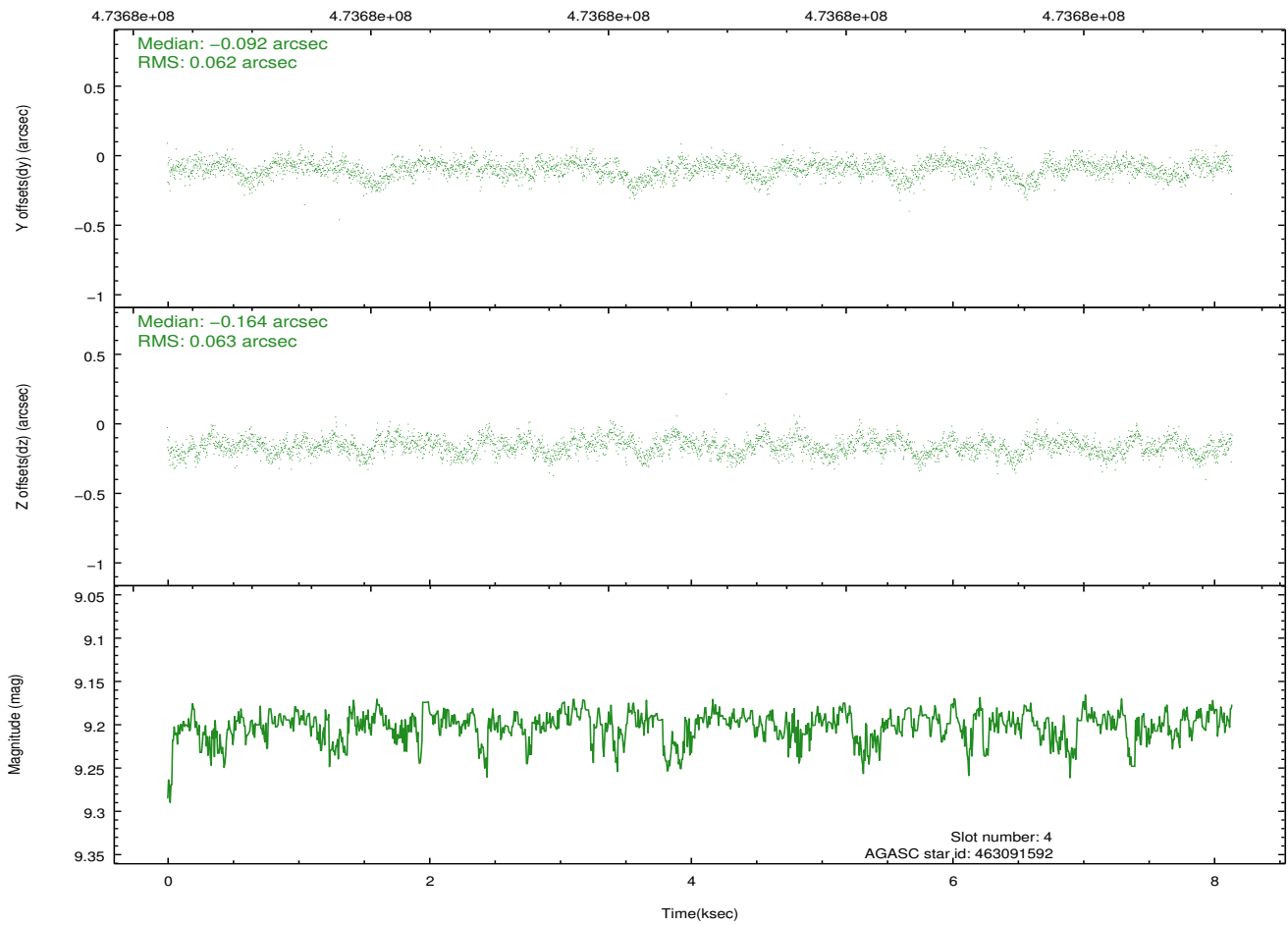
2.4.1 Slot 3



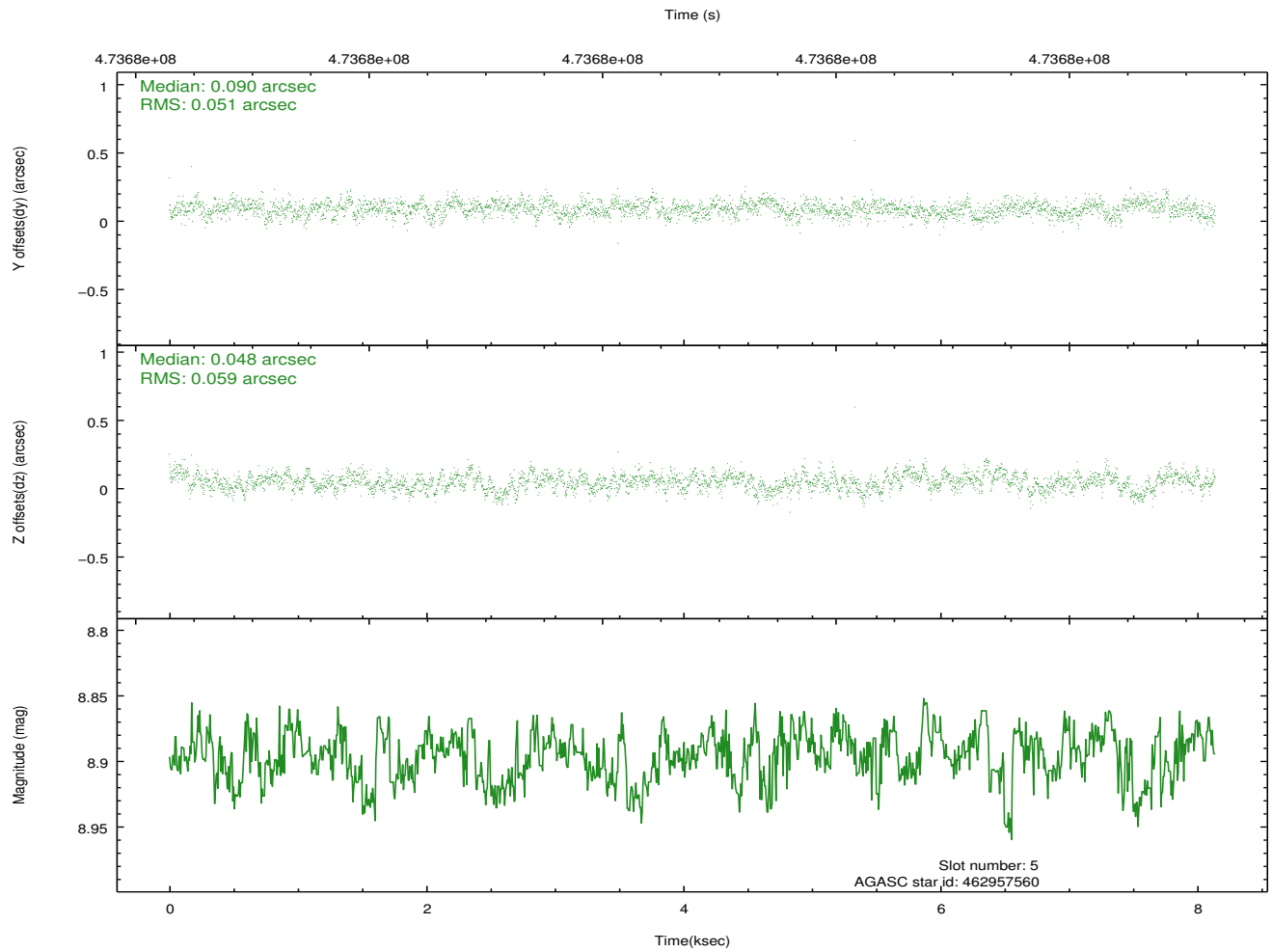
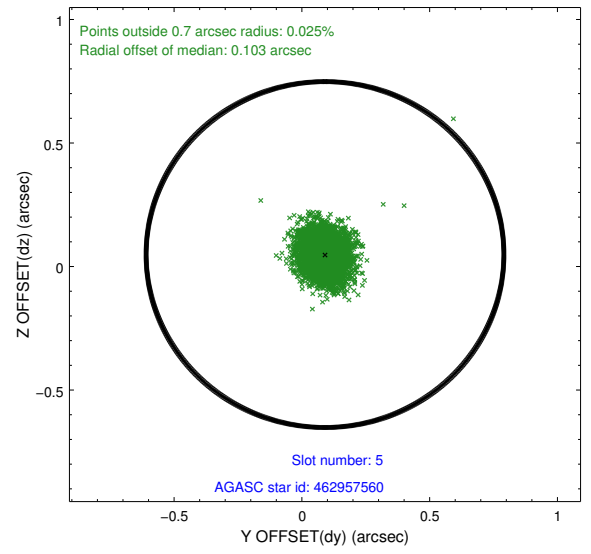
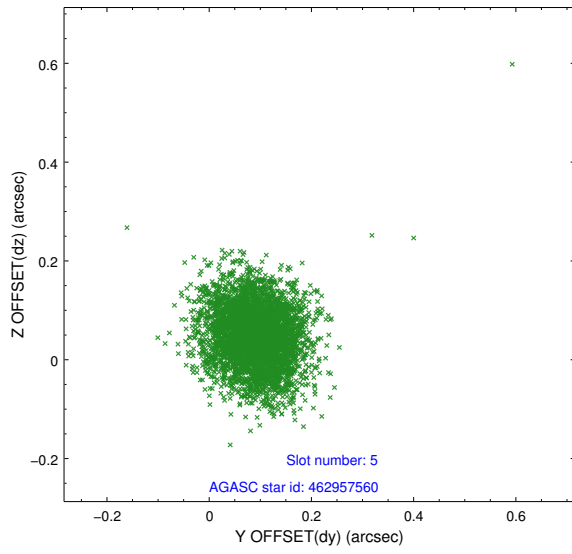
2.4.2 Slot 4



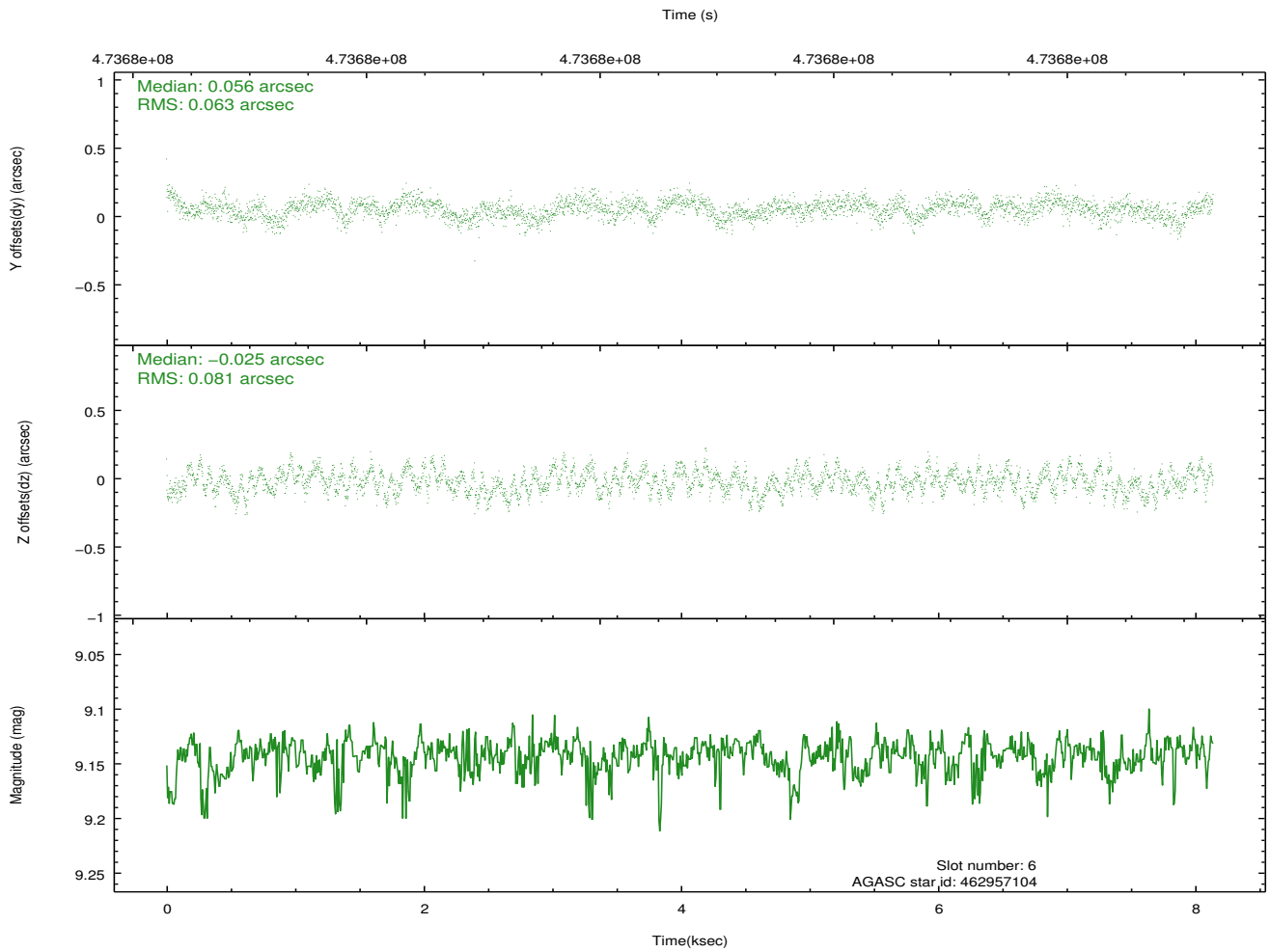
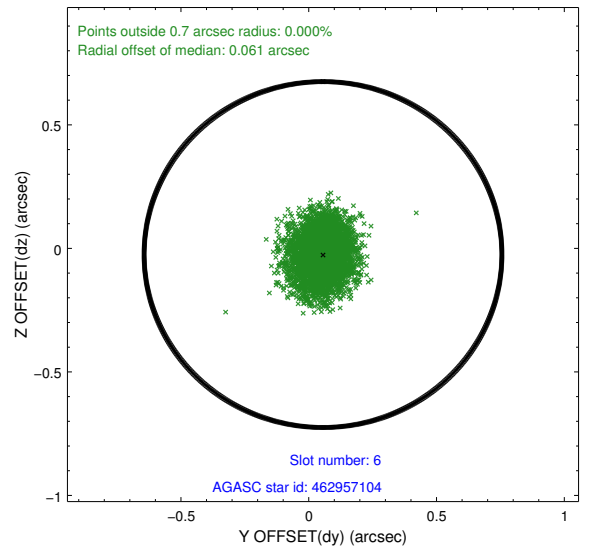
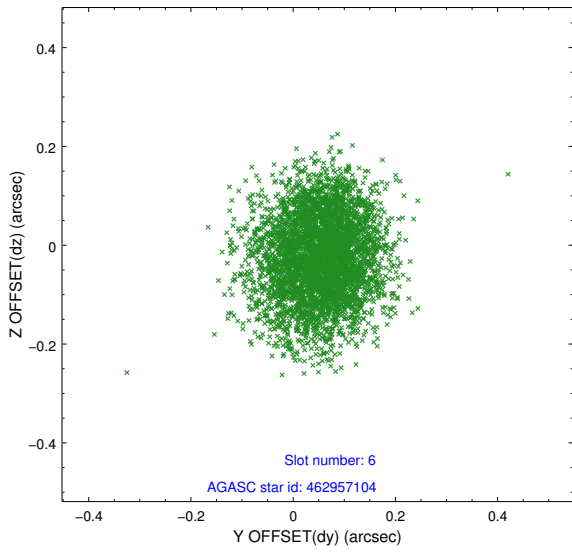
Time (s)



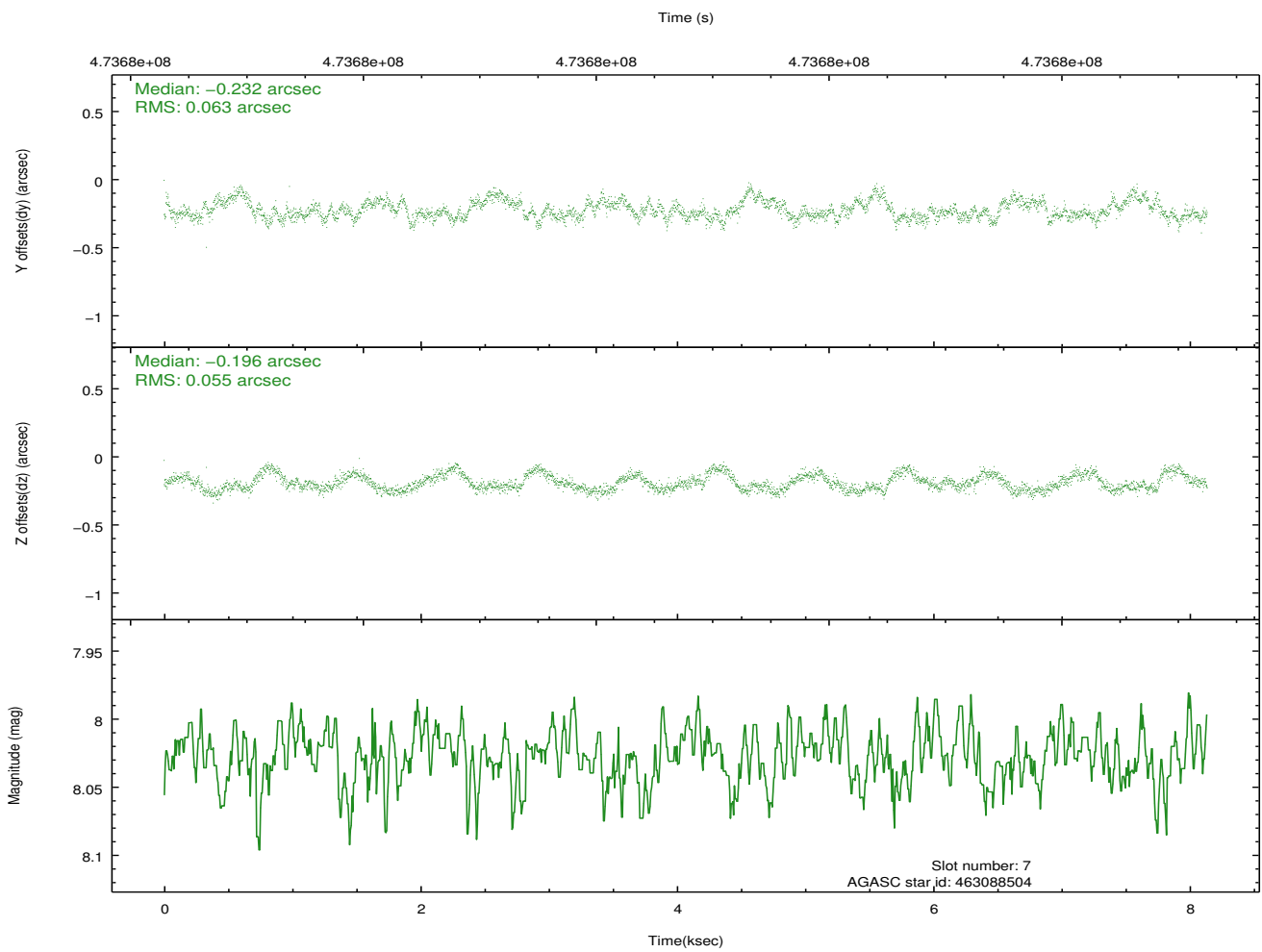
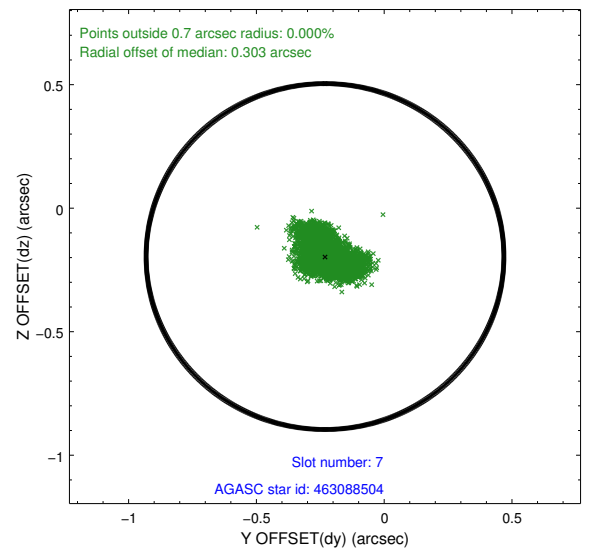
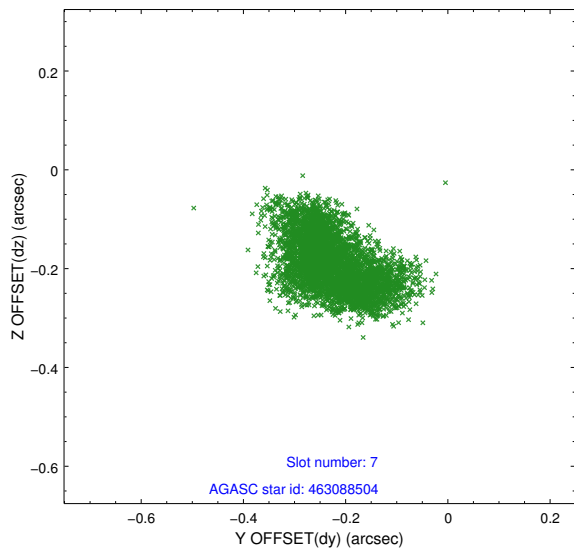
2.4.3 Slot 5



2.4.4 Slot 6

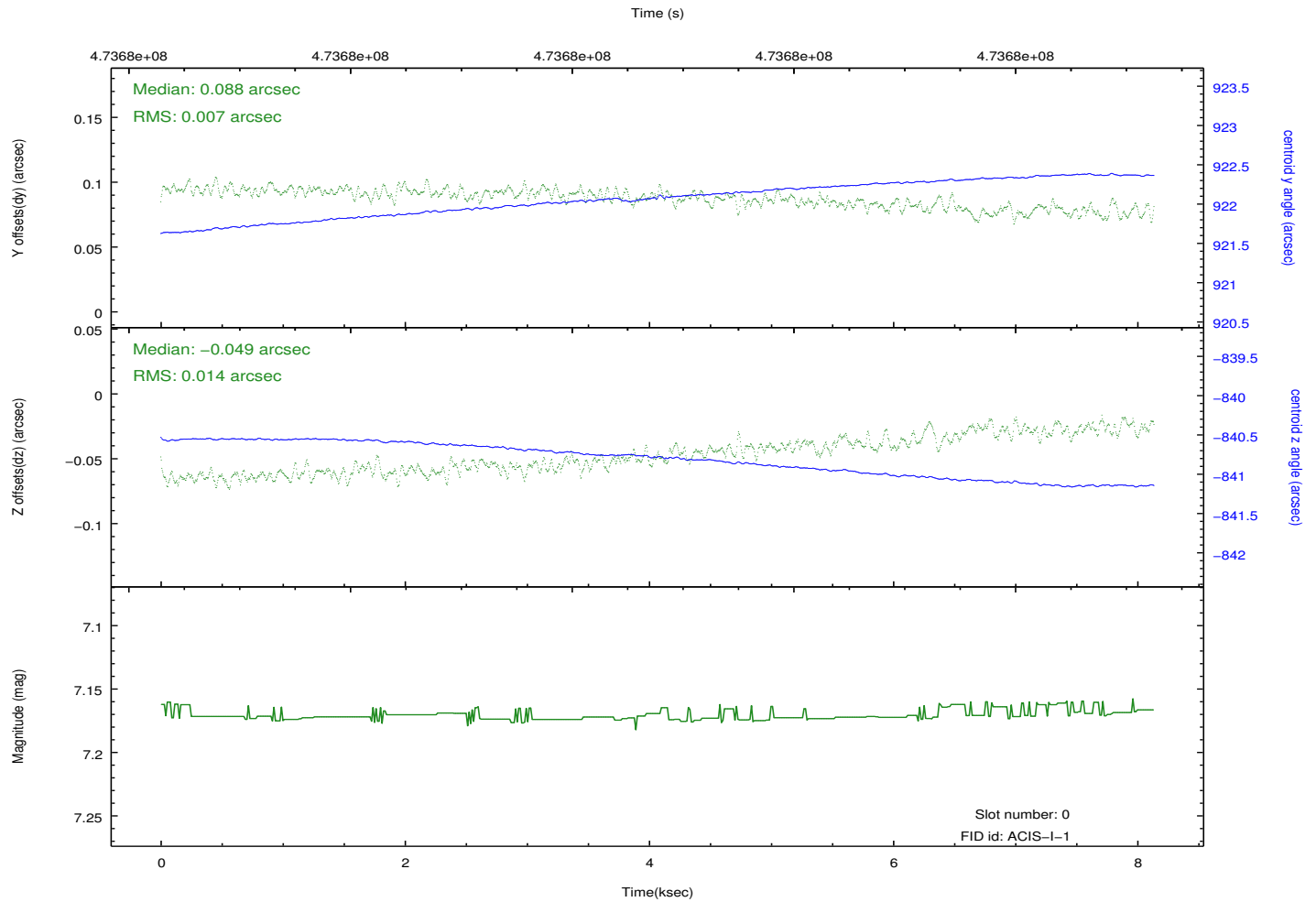
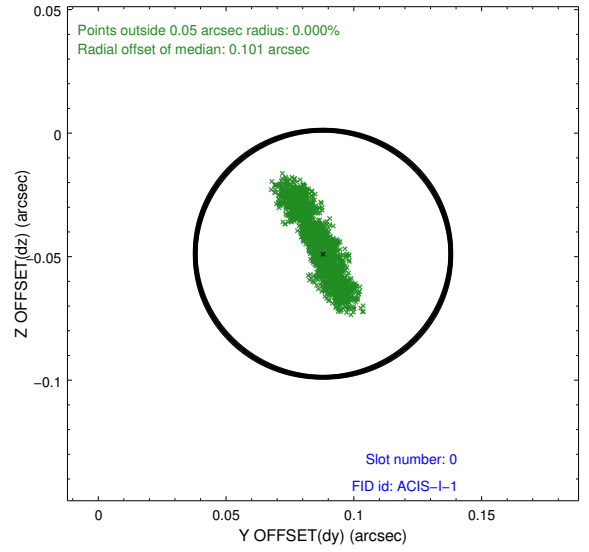
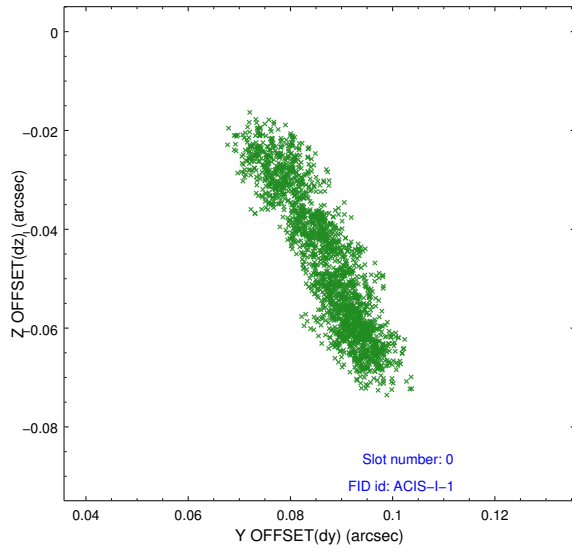


2.4.5 Slot 7

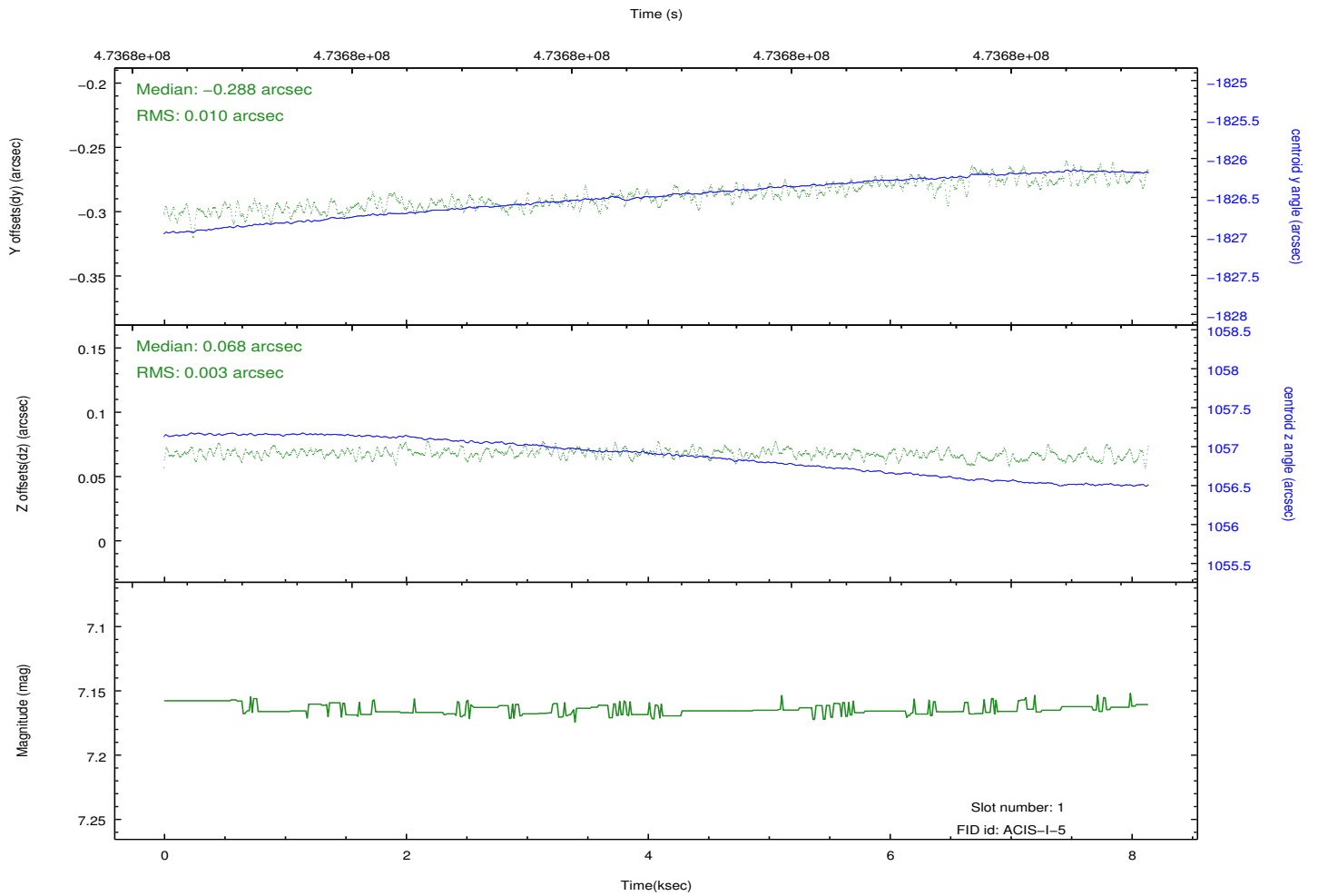
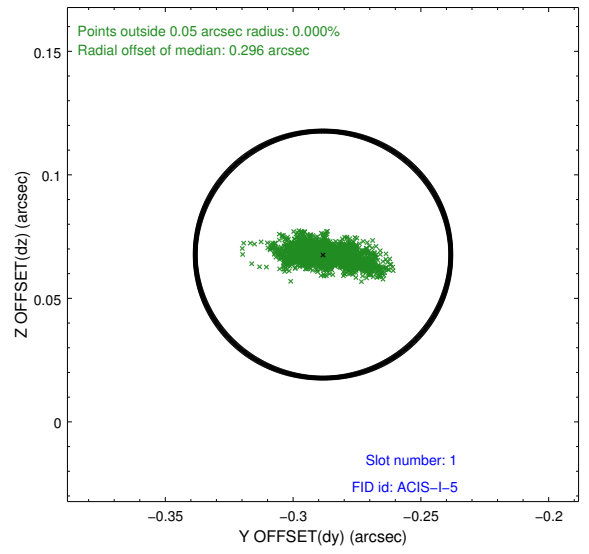
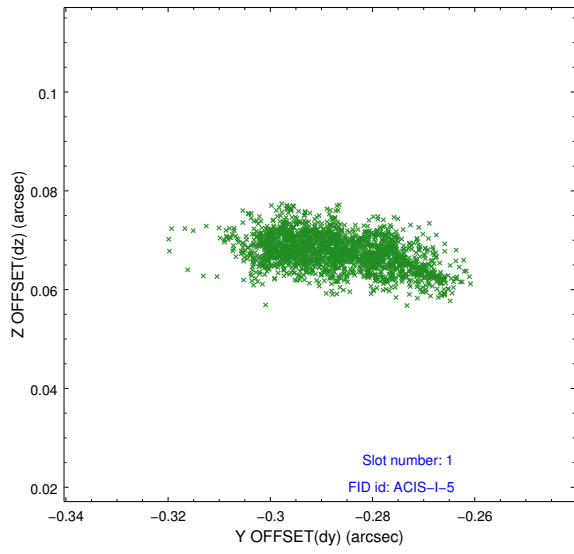


2.5 FID Slots

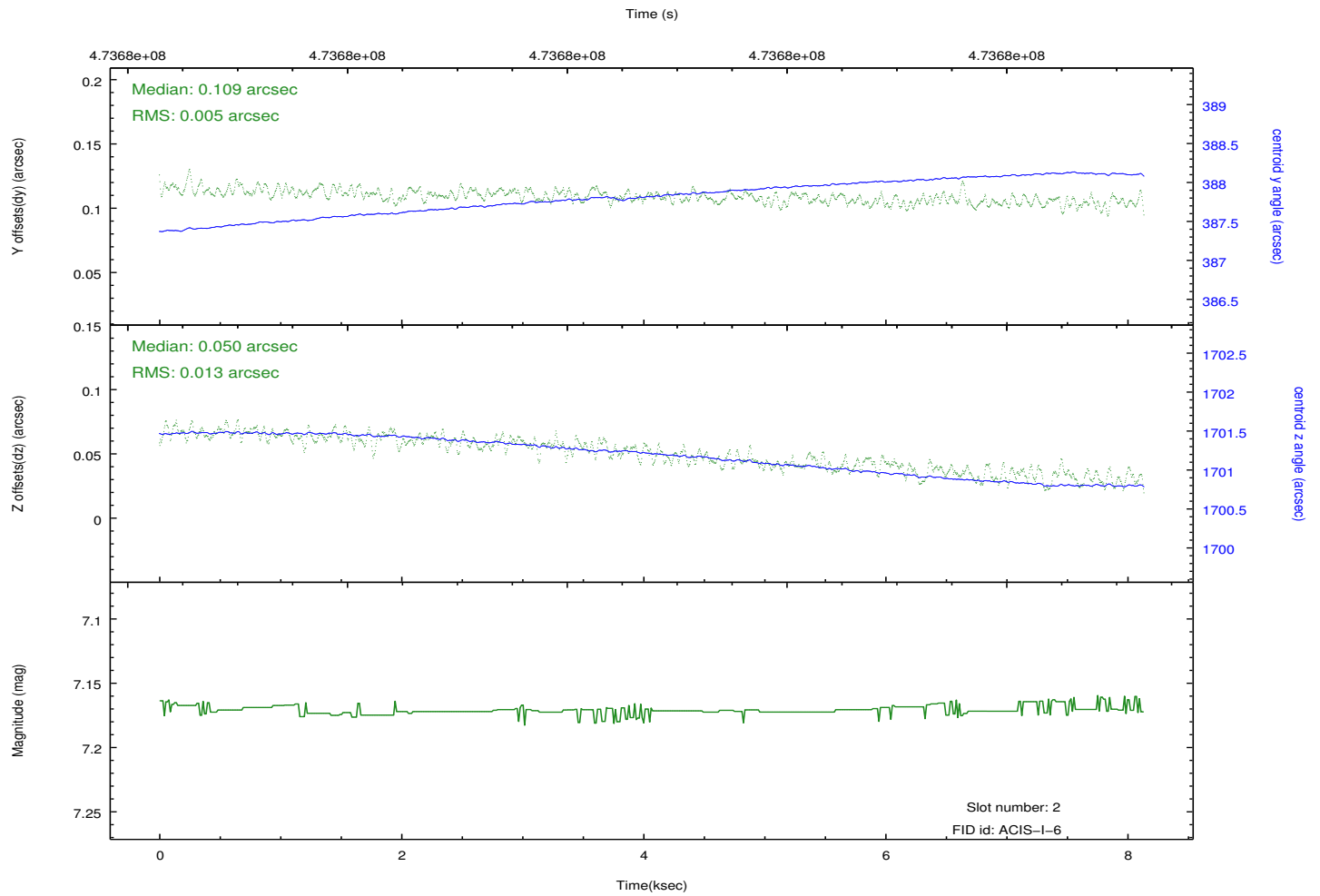
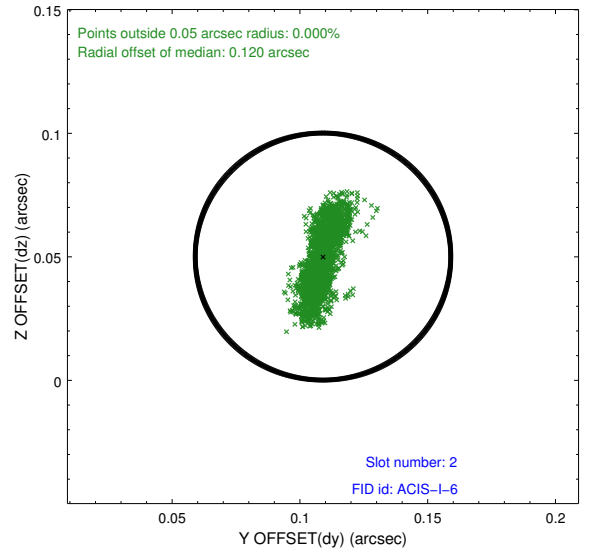
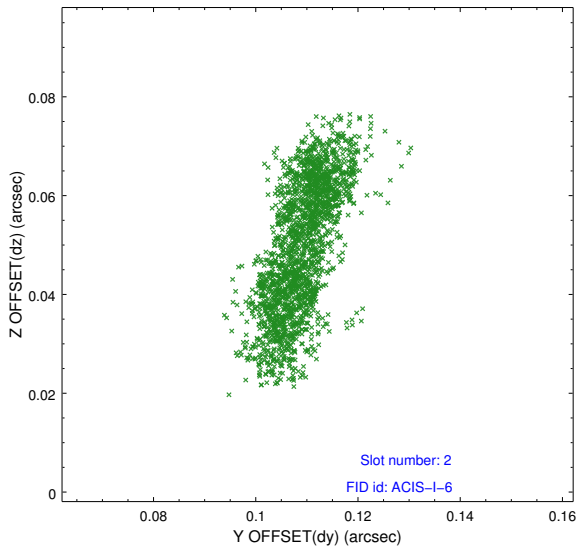
2.5.1 Slot 0



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)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0817000621557

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.