

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18648 - L2 Version 1  
Chandra X-Ray Center

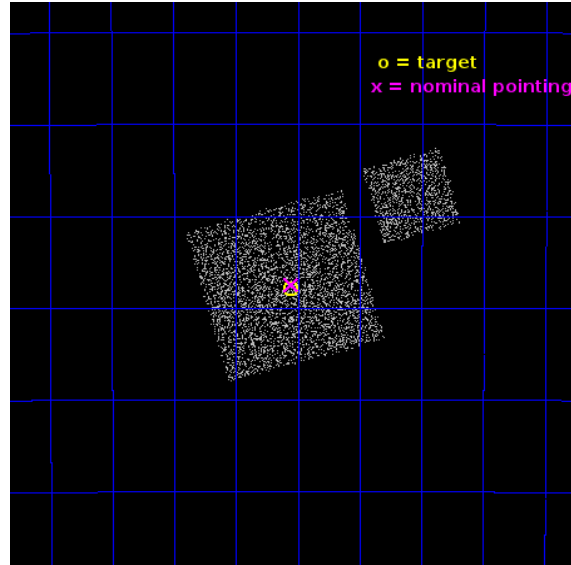
L2 Processing Date : May 22 2016

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# 1 Front

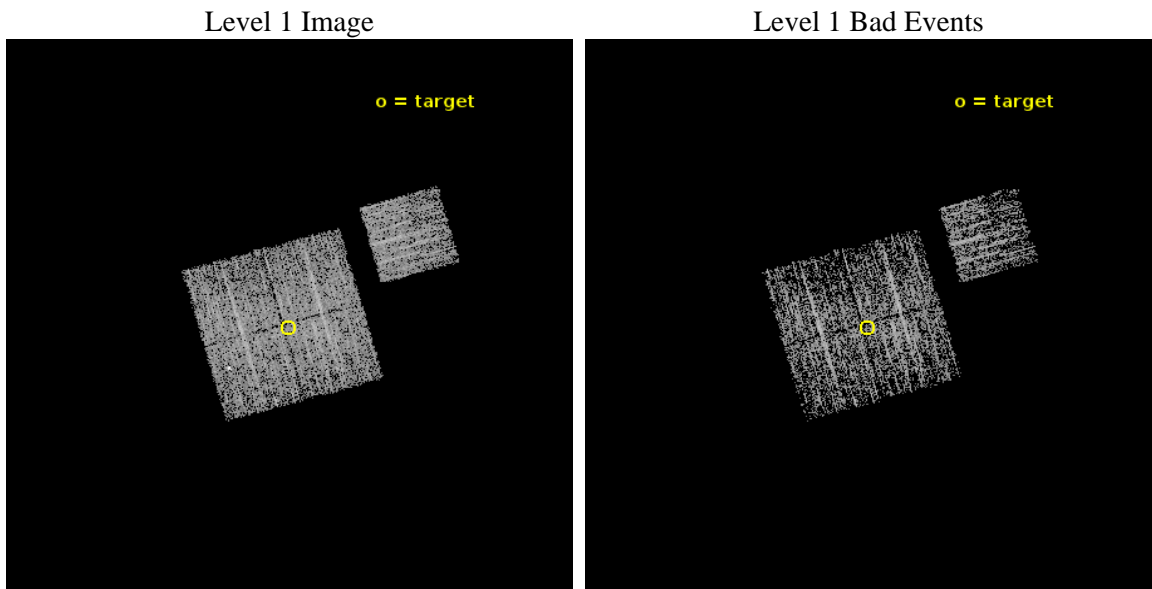
seq_num	300372	Sequence number
obs_id	18648	Observation id
title	X-raying the Galactic center/bulge interface	Proposal title
observer	Q. Daniel Wang	Principal investigator
object	GC-GB interface	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.63834	Observer's specified target RA [deg]
dec_targ	-30.13202	Observer's specified target Dec [deg]
ra_nom	265.63775606239	Nominal RA [deg]
dec_nom	-30.124638706074	Nominal Dec [deg]
roll_nom	74.221637491888	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1955.8996580839	Sum of GTIs [s]
livetime	1930.3443891387	Livetime [s]
ontime0	1955.7765381336	Sum of GTIs [s]
ontime1	1955.8175780773	Sum of GTIs [s]
ontime2	1955.8586080074	Sum of GTIs [s]
ontime3	1955.8996580839	Sum of GTIs [s]
ontime6	1955.7354980707	Sum of GTIs [s]
l2events	6501	Number of level 2 events



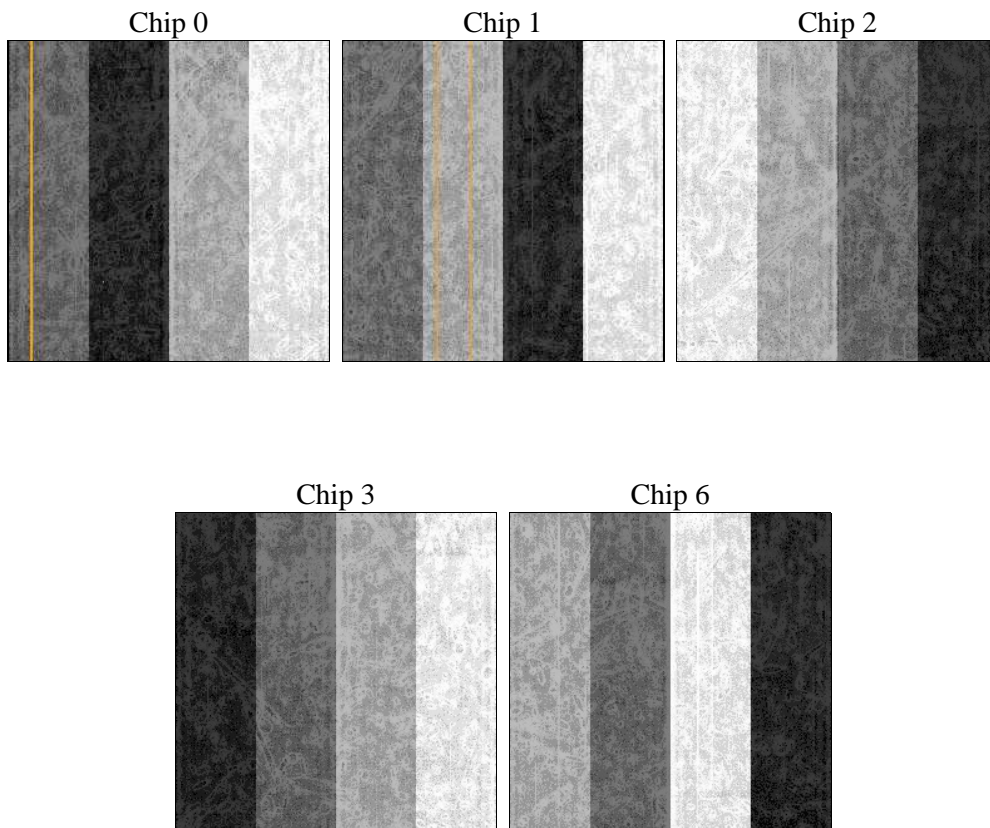
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2180.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	1955.8996580839	Sum of GTIs [s]
caldsver	4.7.1	&#160	ontime0	1955.7765381336	Sum of GTIs [s]
date	2016-05-22T15:20:03	Date and time of file creation	ontime1	1955.8175780773	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1955.8586080074	Sum of GTIs [s]
			ontime3	1955.8996580839	Sum of GTIs [s]
			ontime6	1955.7354980707	Sum of GTIs [s]
			l1events	60828	Number of level 1 events

### 2.1.4 Events

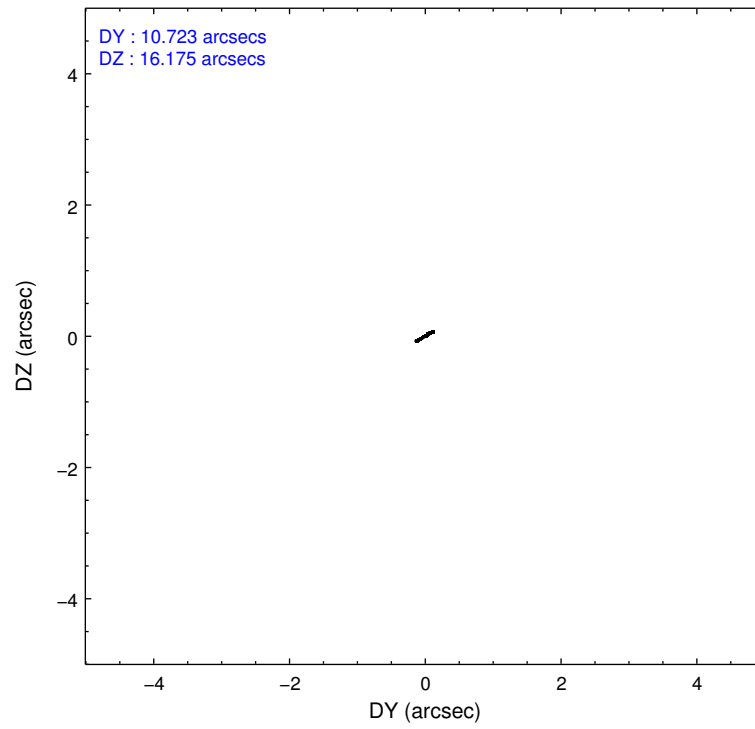
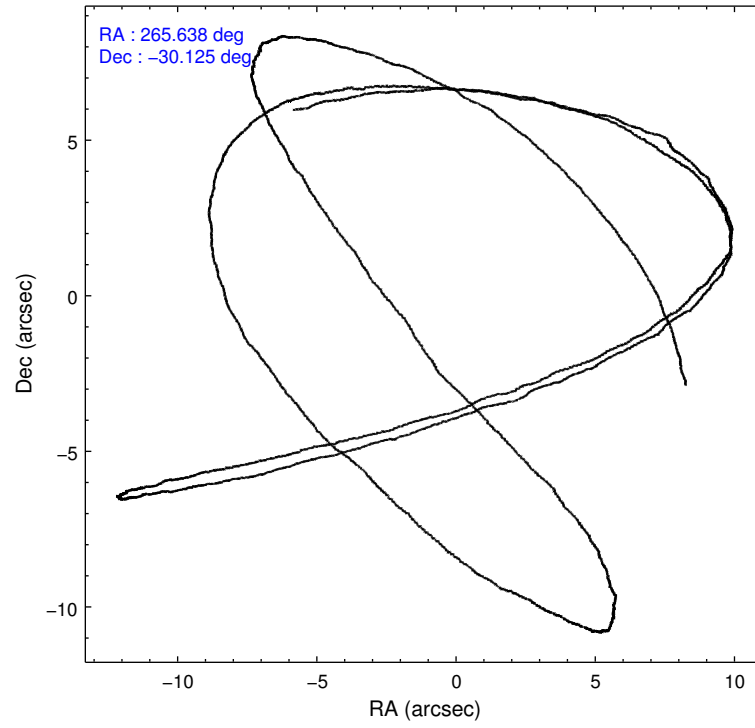
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	11894	12171	12059	12409	12295
rejected events	10422	10033	10590	10916	10783
rejected %	87%	82%	87%	87%	87%

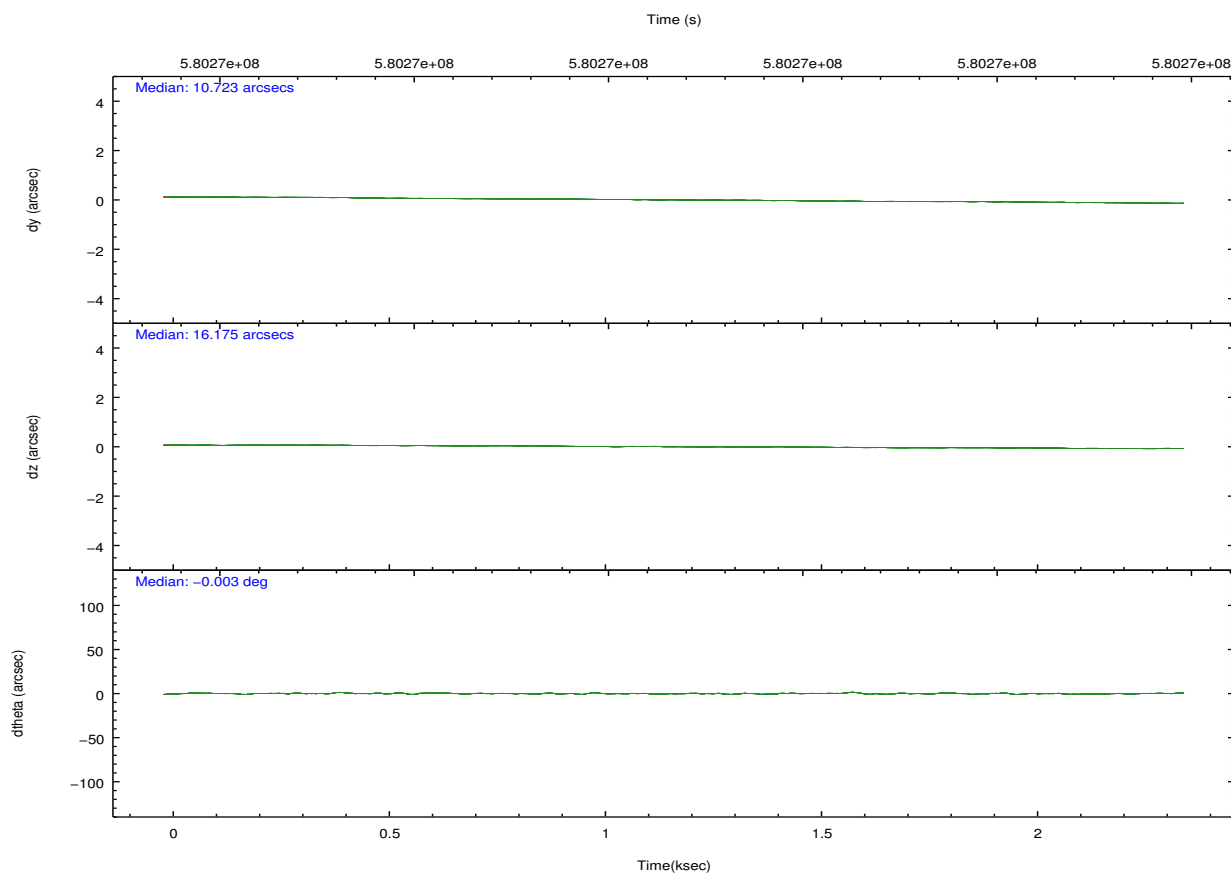
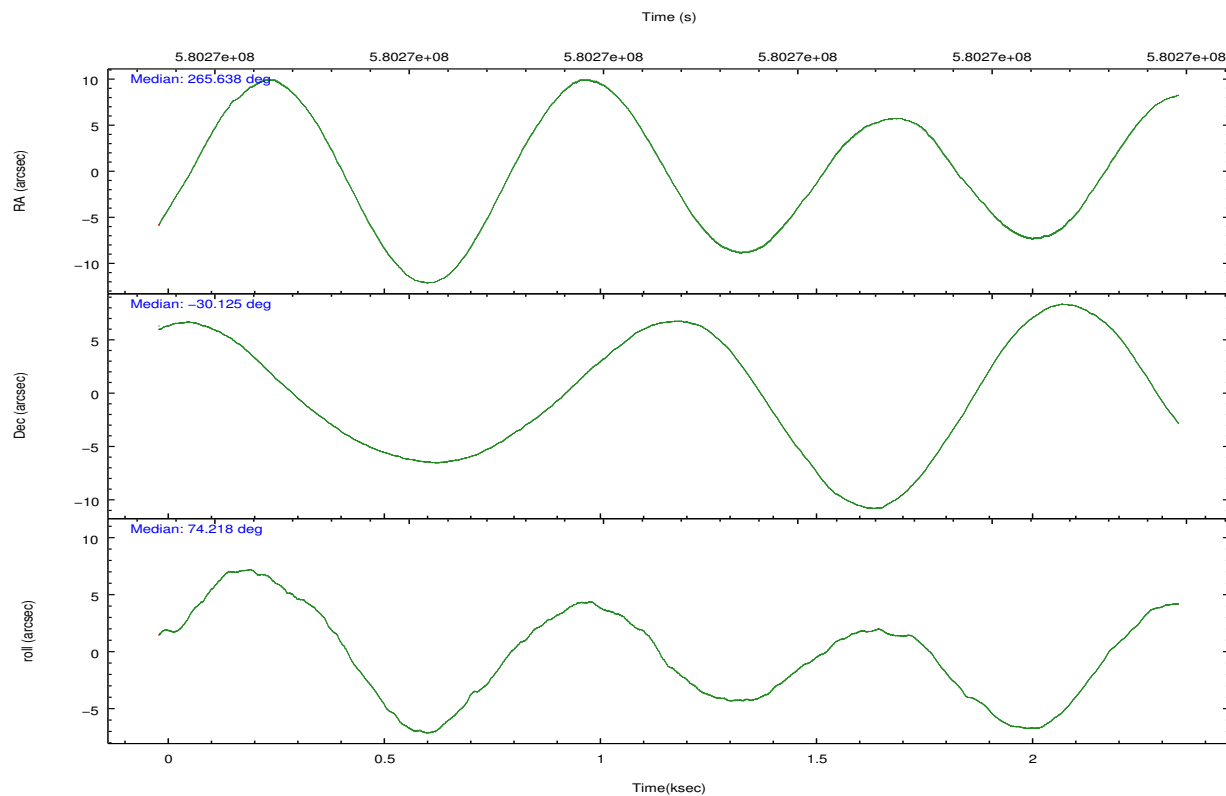
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	584	1118	593	596	551
	4%	9%	4%	4%	4%
grade 1 events	7	5	5	7	8
	0%	0%	0%	0%	0%
grade 2 events	344	389	330	321	338
	2%	3%	2%	2%	2%
grade 3 events	134	144	151	145	139
	1%	1%	1%	1%	1%
grade 4 events	113	137	134	147	134
	0%	1%	1%	1%	1%
grade 5 events	490	533	521	619	524
	4%	4%	4%	4%	4%
grade 6 events	302	353	263	287	350
	2%	2%	2%	2%	2%
grade 7 events	9920	9492	10062	10287	10251
	83%	77%	83%	82%	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	265.645630	265.6377560623922	CCD I2 on	Y	Y
[deg] Pointing Dec	-30.151631	-30.12463870607428	CCD I3 on	Y	Y
[deg] Pointing Roll	74.016905	74.22163749188765	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)	580266143.184000	580265767.32497	CCD S5 on	N	N
Observation start date	2016-05-22T01:01:15	2016-05-22T00:56:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	580268323.184000	580268456.92512	On-chip summing requested	N	N
Observation end date	2016-05-22T01:37:35	2016-05-22T01:40:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





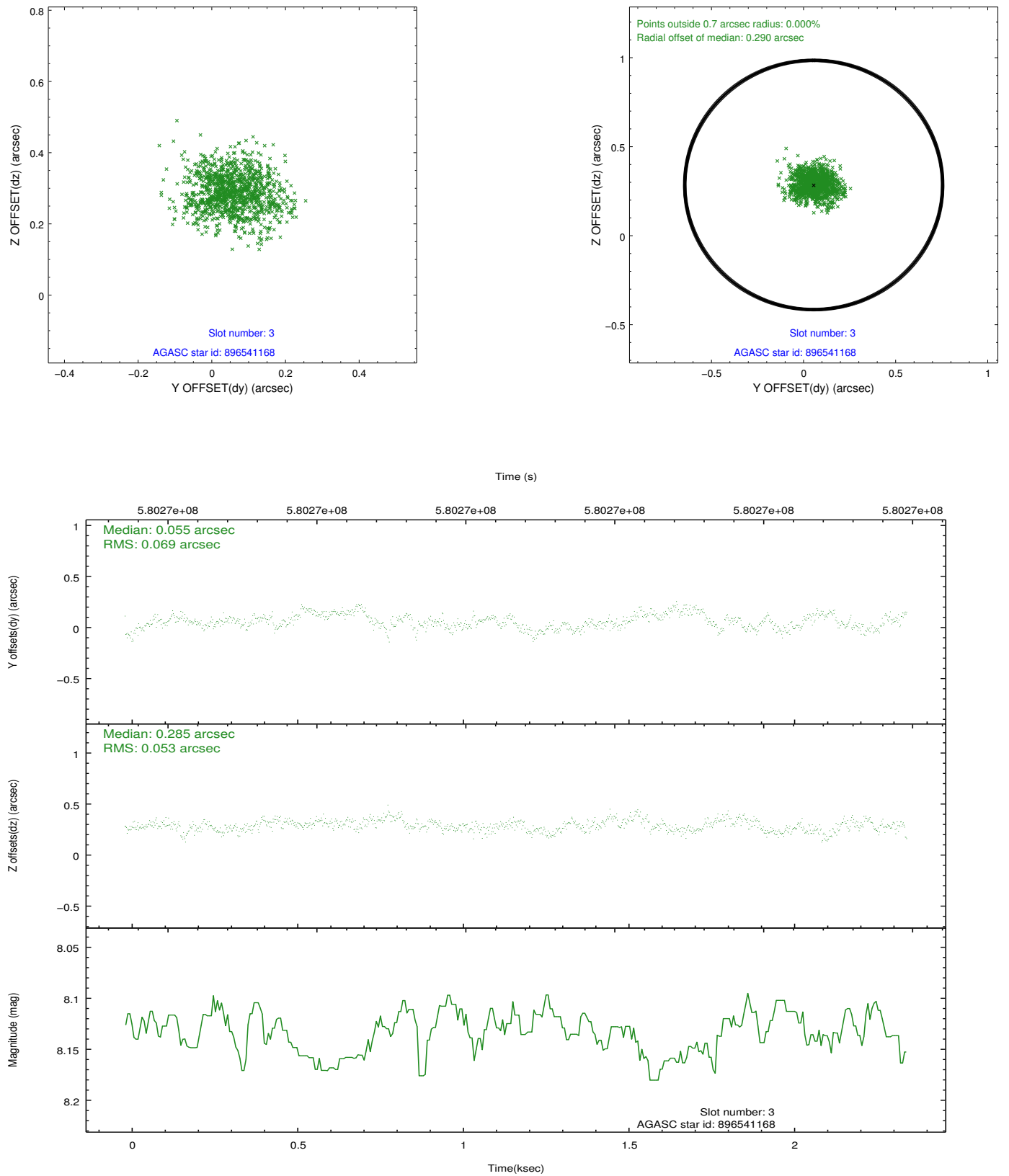
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.27	576	0.093	-0.106	0.006	0.011	0.000000	0.000000	928.95	-839.91
1	FID		ACIS-I-5	7.25	576	-0.305	0.055	0.006	0.010	0.000000	0.000000	-1818.05	1056.33
2	FID		ACIS-I-6	7.25	576	0.121	0.121	0.007	0.011	0.000000	0.000000	391.51	1704.04
3	GUIDE	used	896541168	8.13	1151	0.055	0.285	0.092	0.152	266.319970	-29.850801	1614.10	-1727.01
4	GUIDE	used	966919304	8.42	1152	0.330	0.278	0.086	0.133	265.660763	-30.717261	-1943.66	-607.02
5	GUIDE	used	966924920	8.07	1152	-0.128	0.112	0.094	0.162	265.875401	-30.176961	106.01	-713.06
6	GUIDE	used	896405480	8.22	1152	-0.233	-0.536	0.073	0.117	265.220460	-29.599691	1540.34	1824.94
7	GUIDE	used	966790944	8.76	1148	-0.019	-0.154	0.130	0.218	265.185568	-30.443091	-1404.21	1084.39

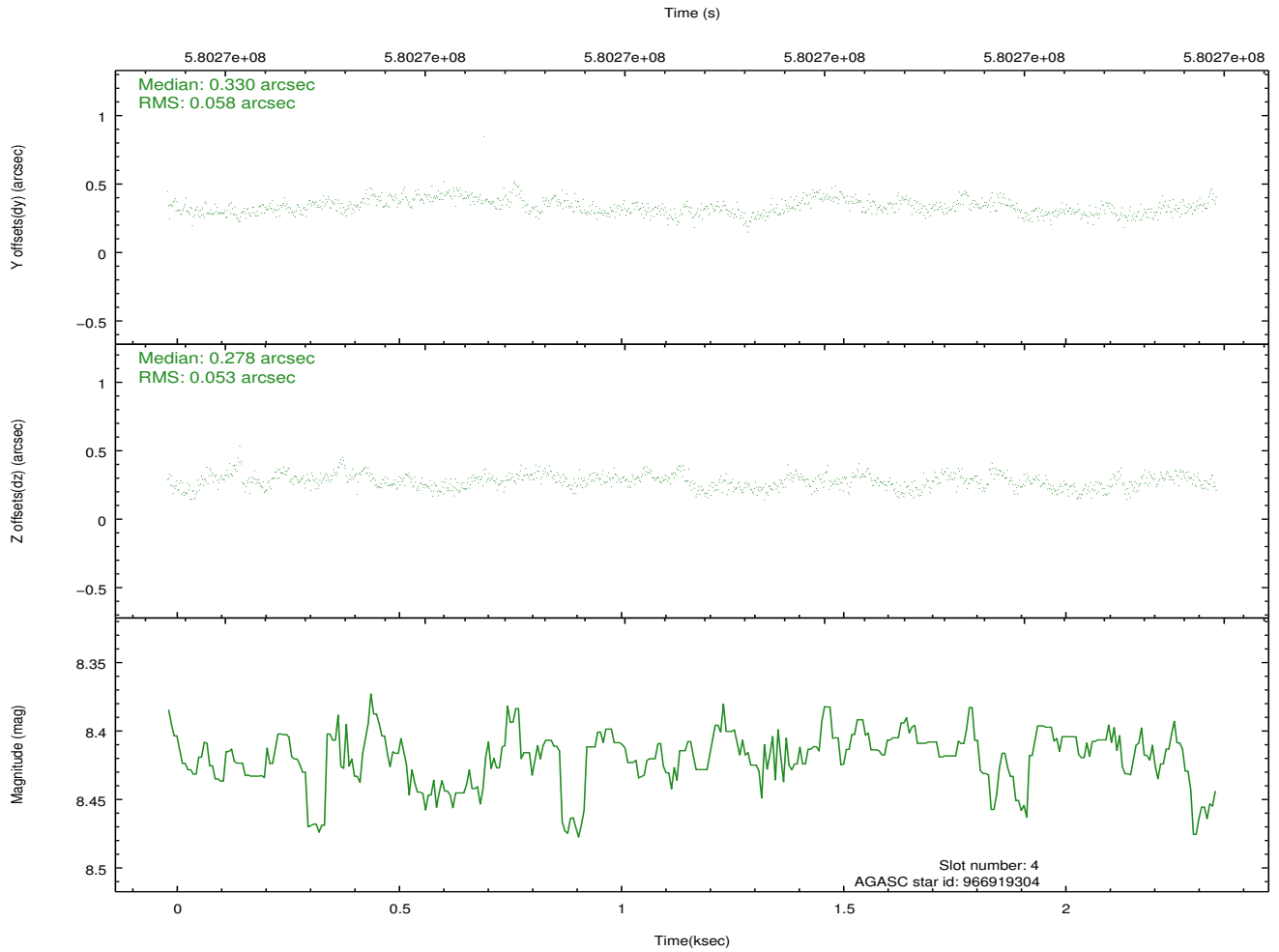
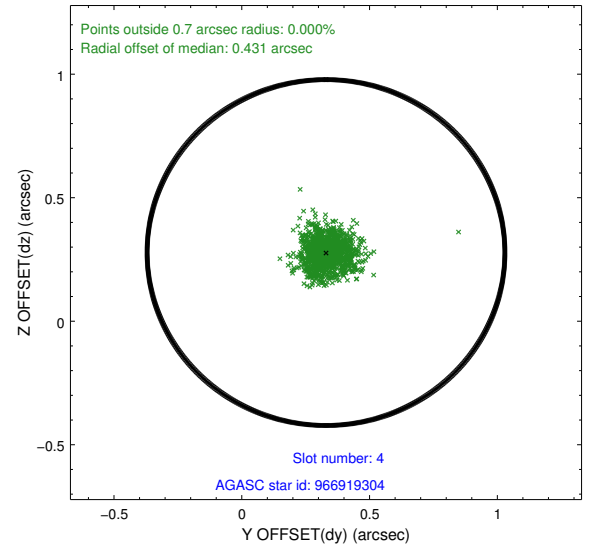
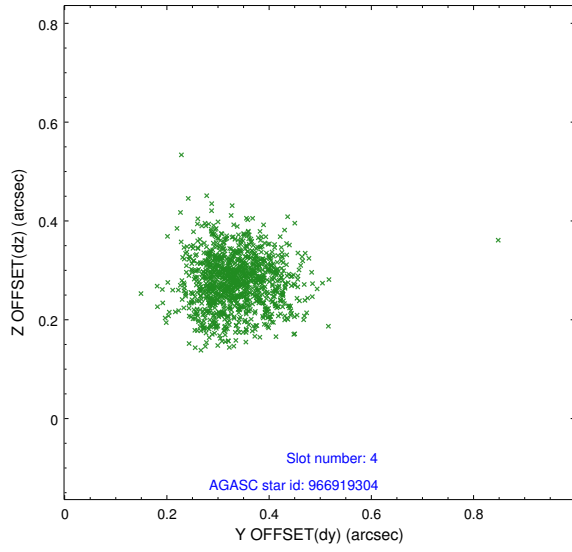


## 2.4 Star Slots

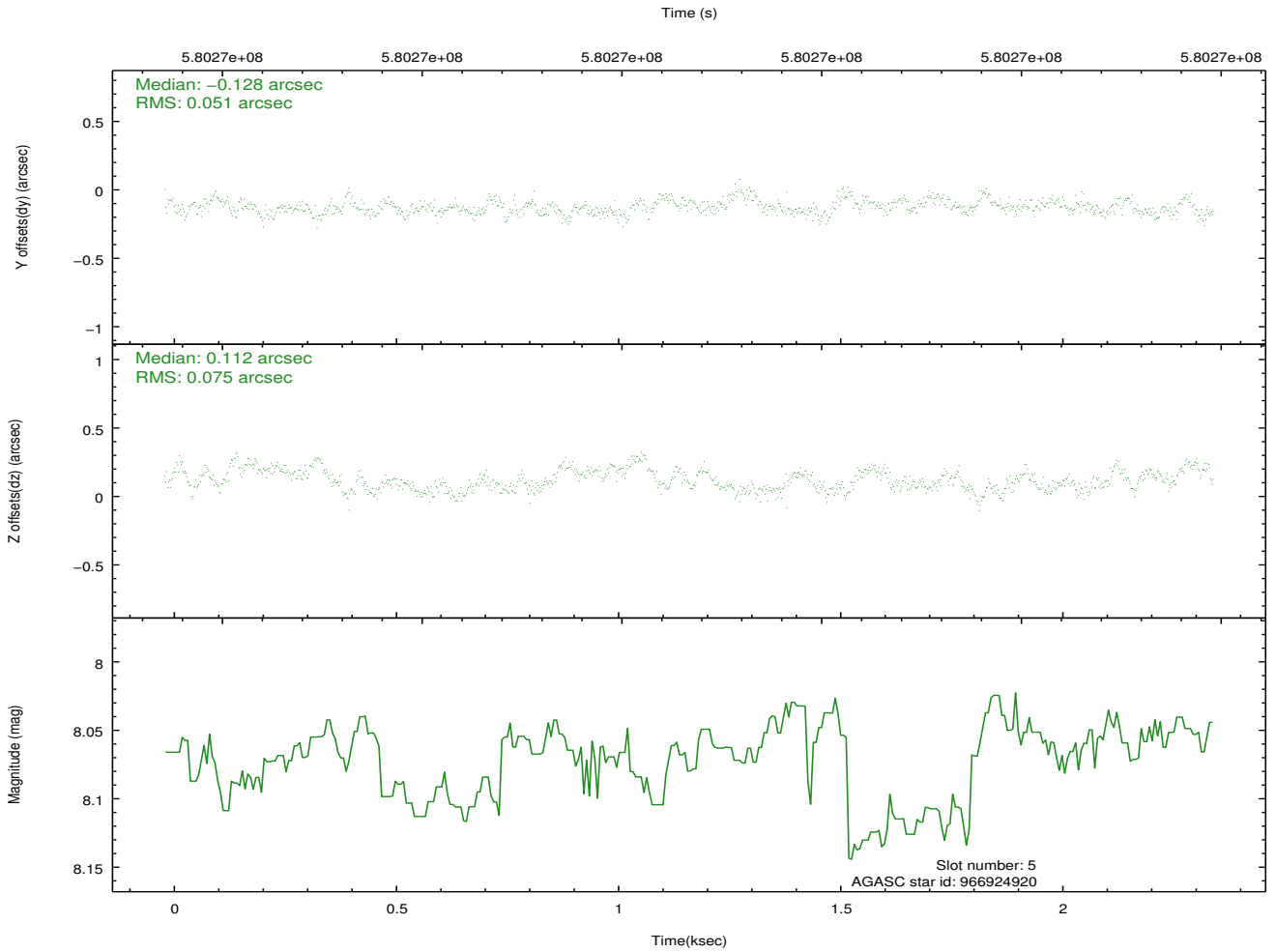
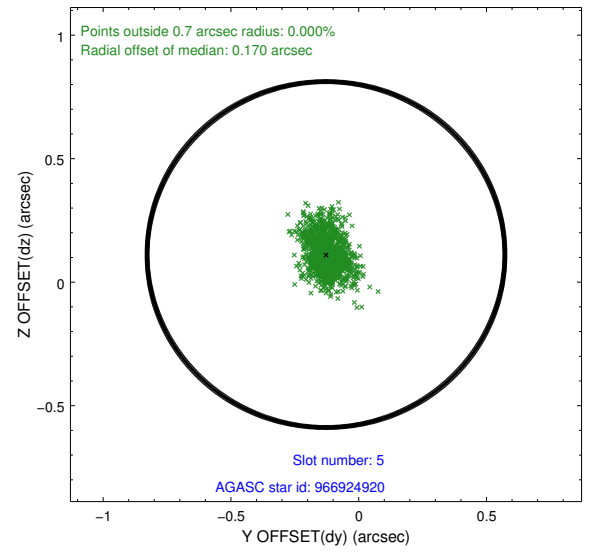
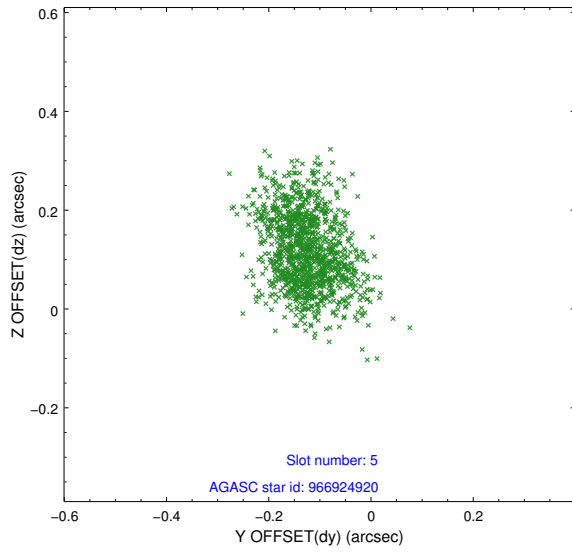
### 2.4.1 Slot 3



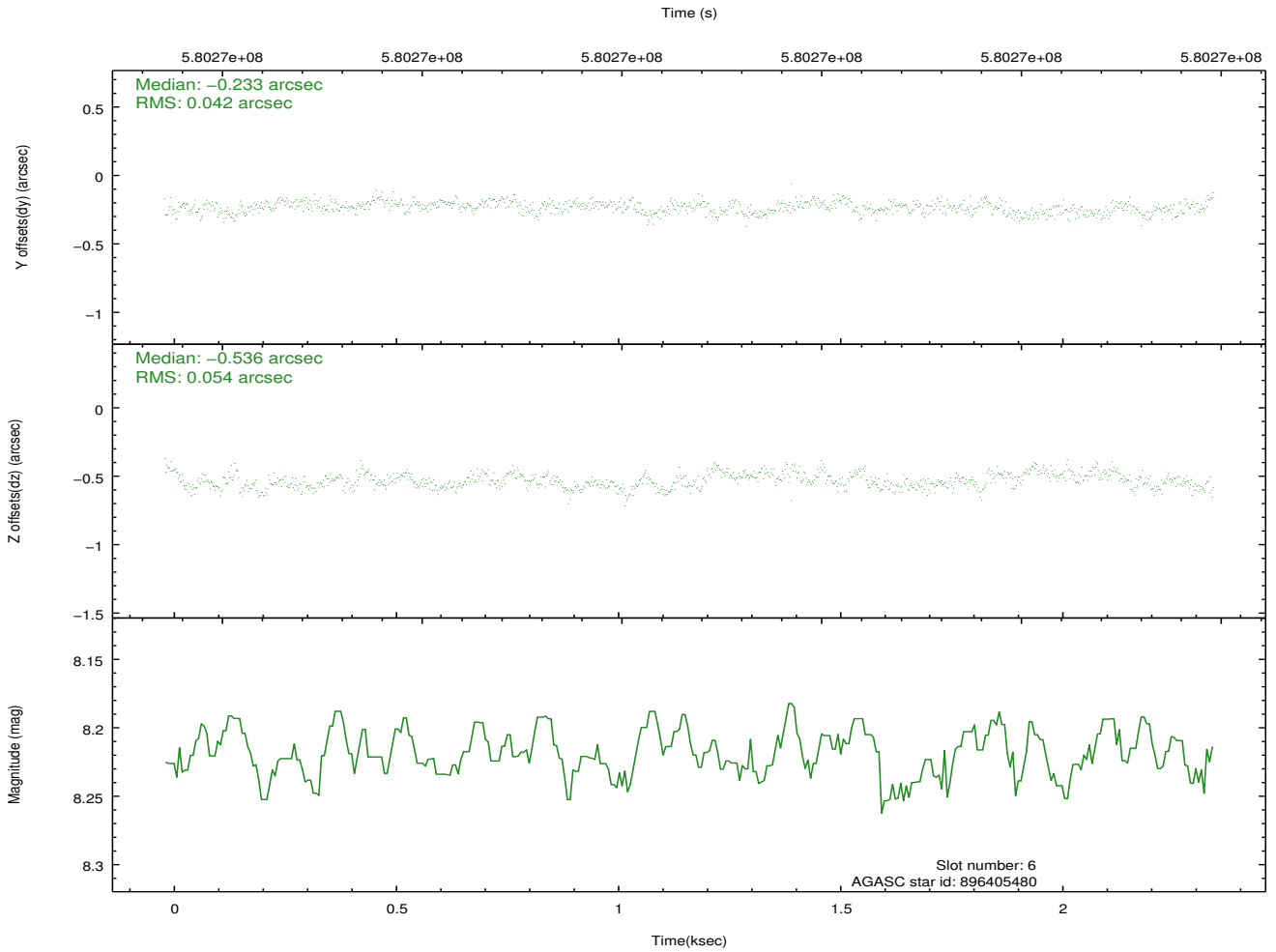
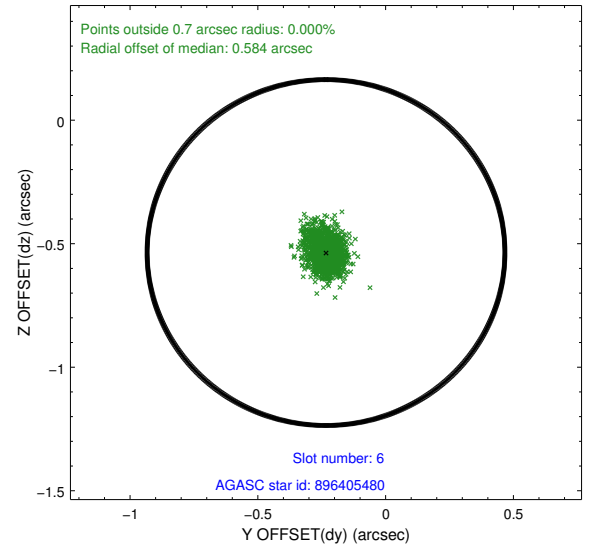
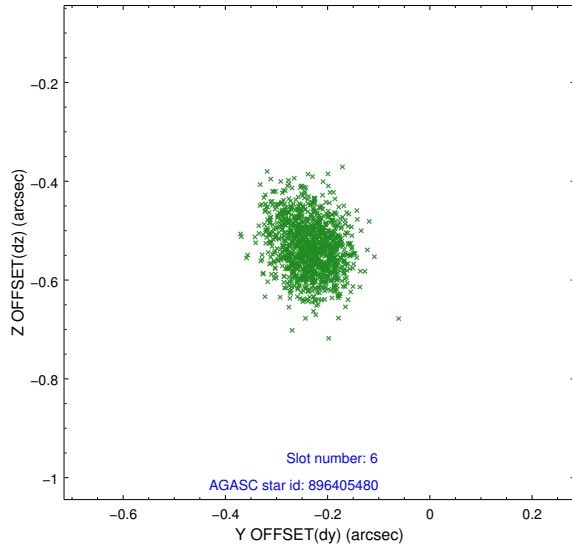
## 2.4.2 Slot 4



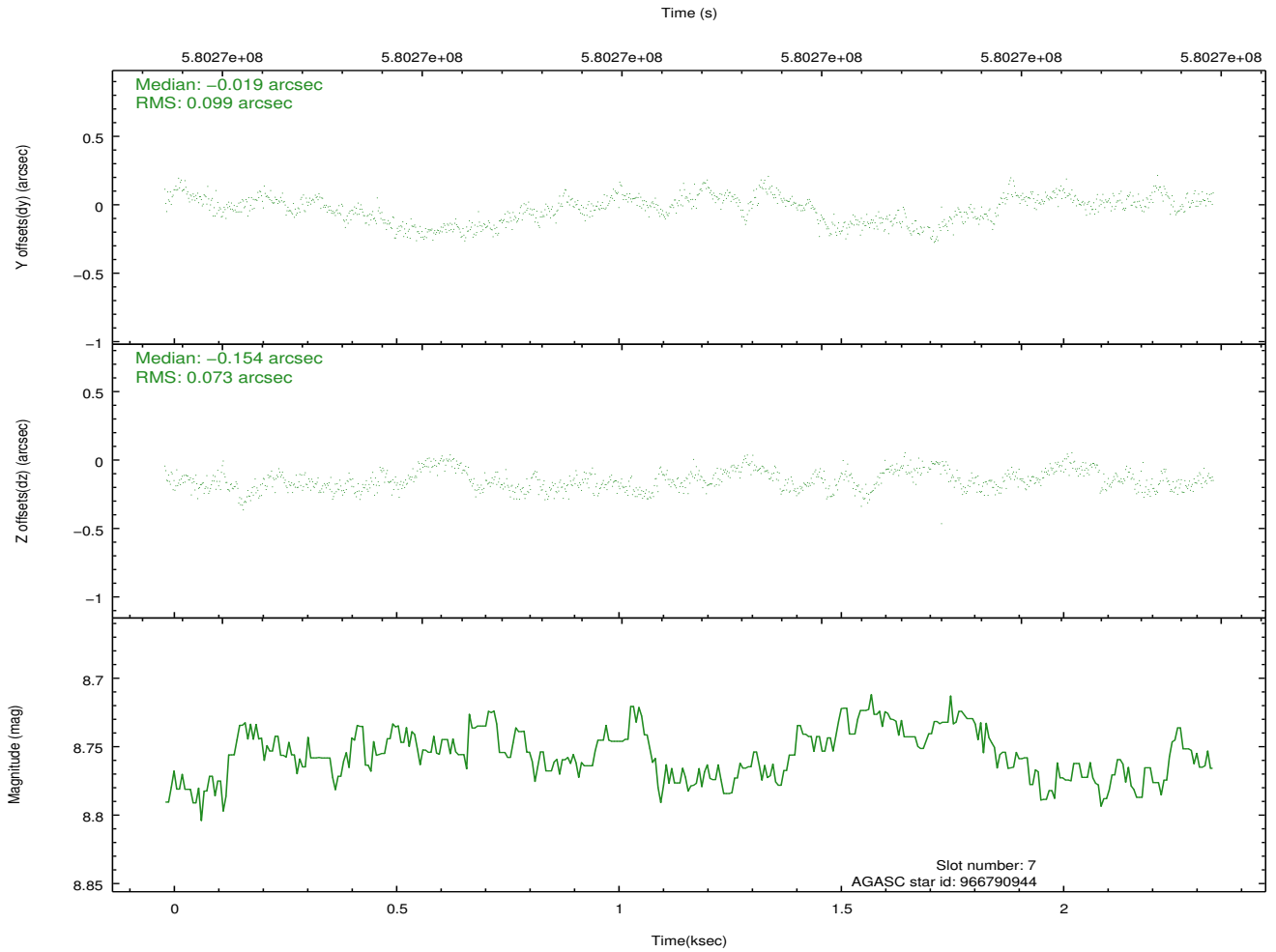
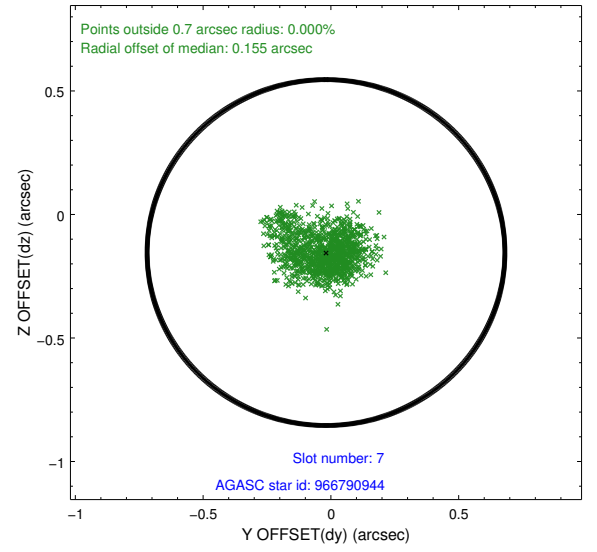
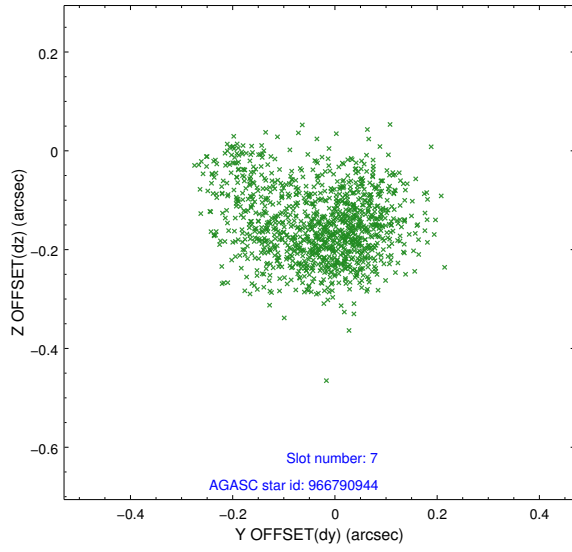
### 2.4.3 Slot 5



## 2.4.4 Slot 6

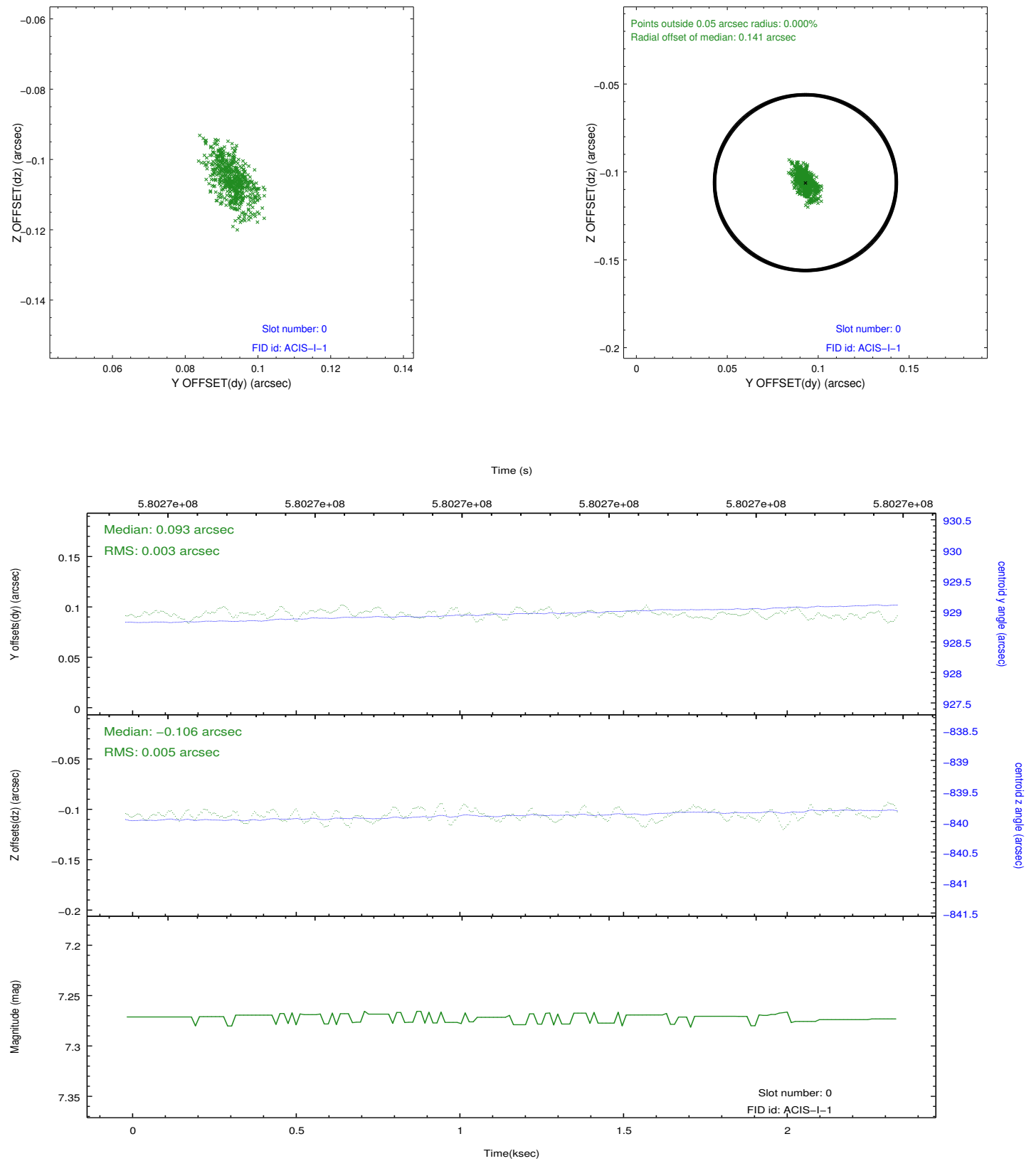


## 2.4.5 Slot 7

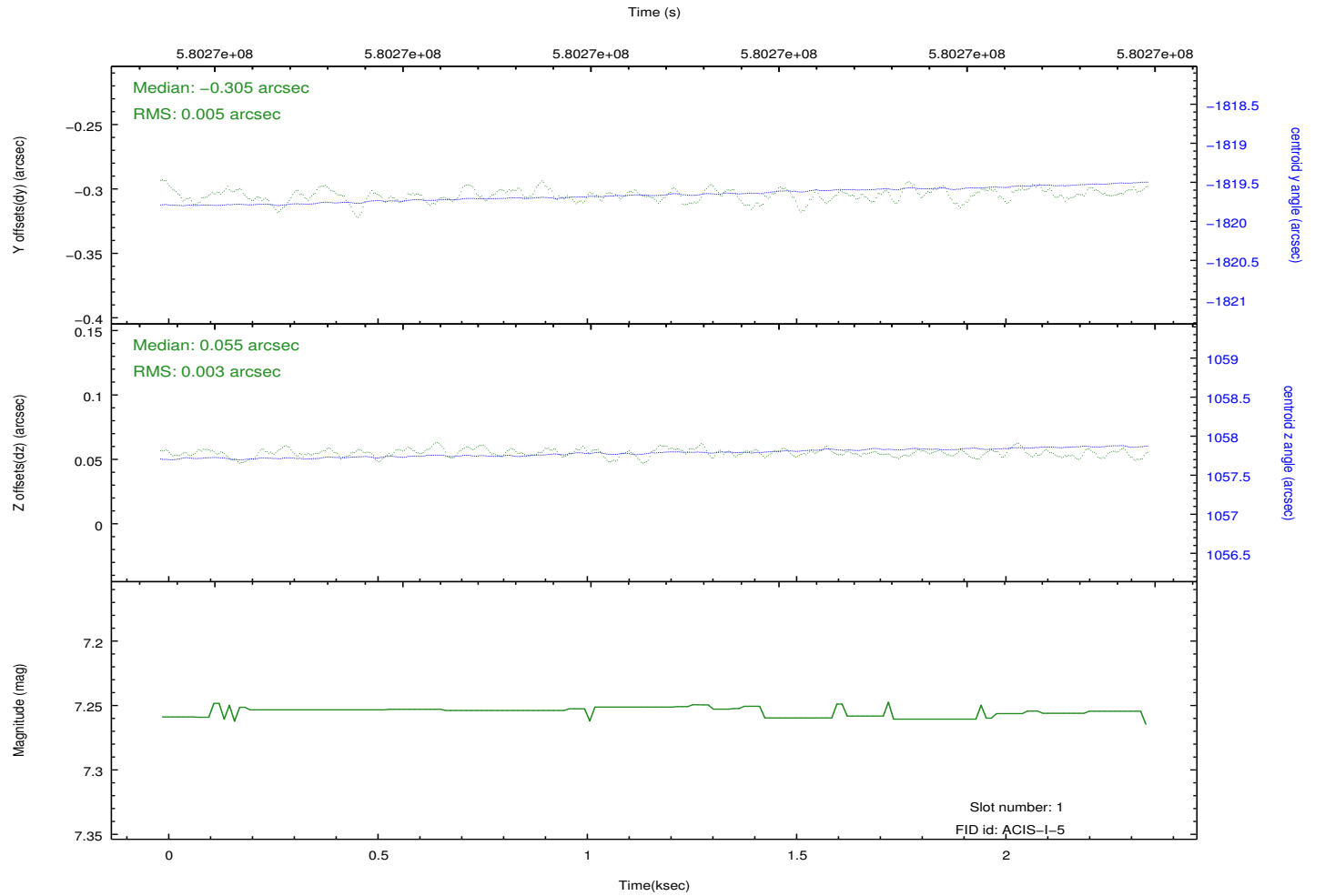
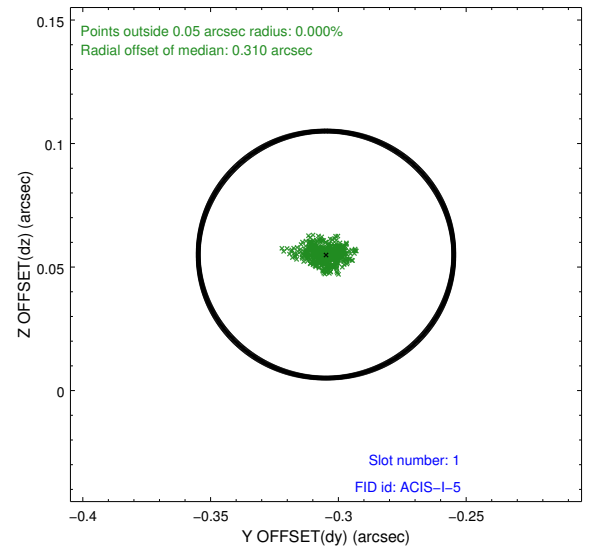
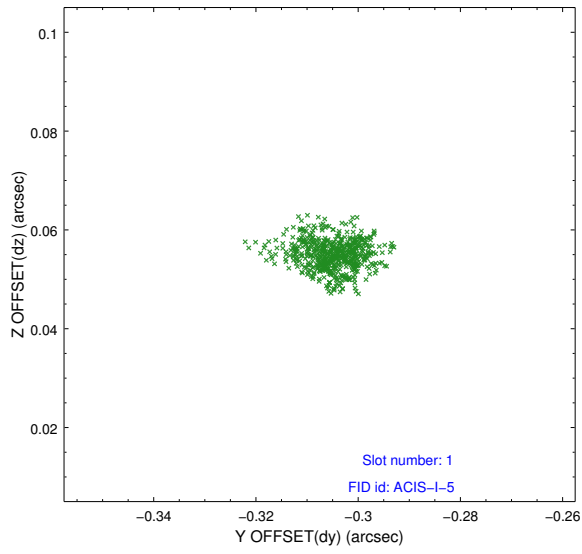


## 2.5 FID Slots

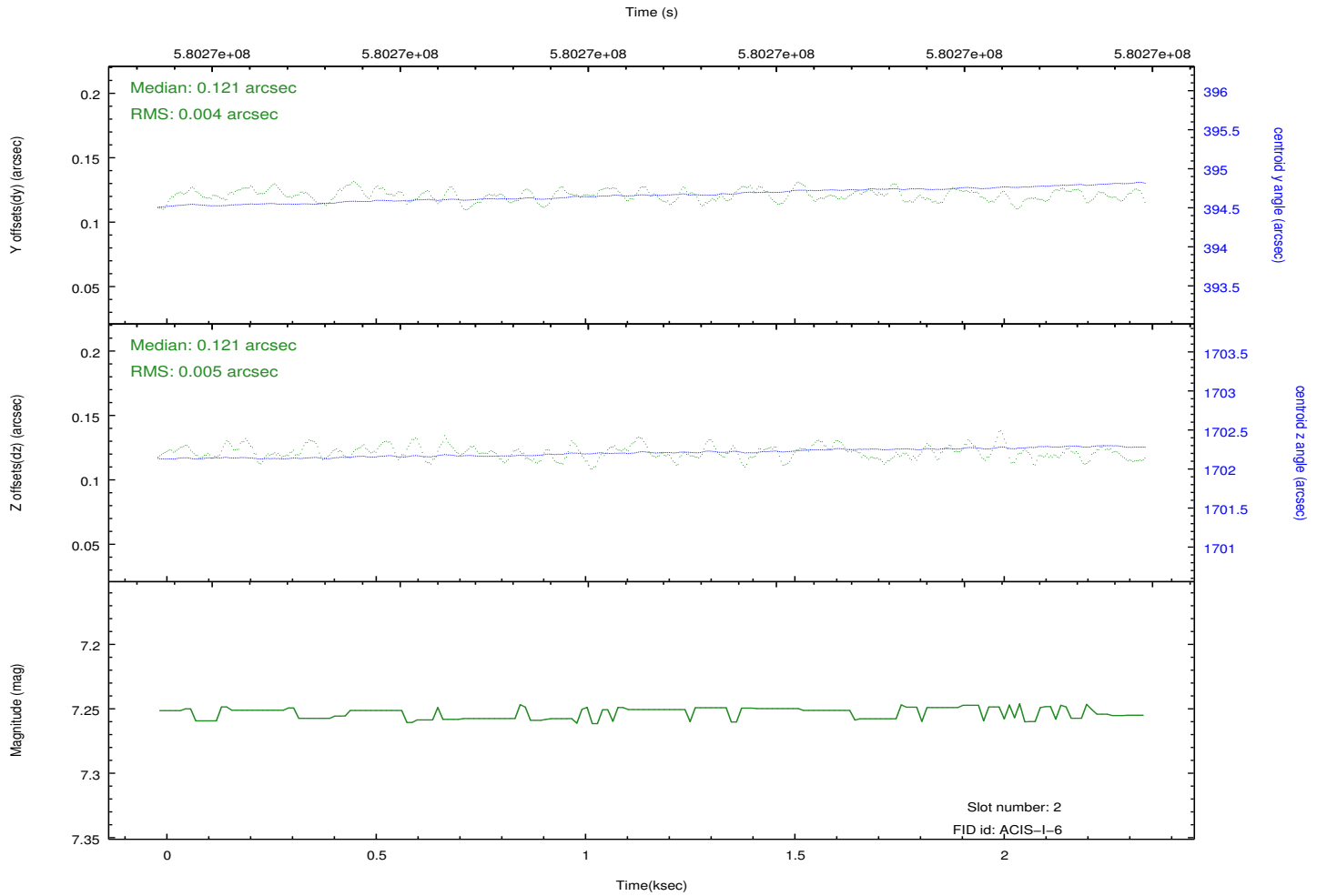
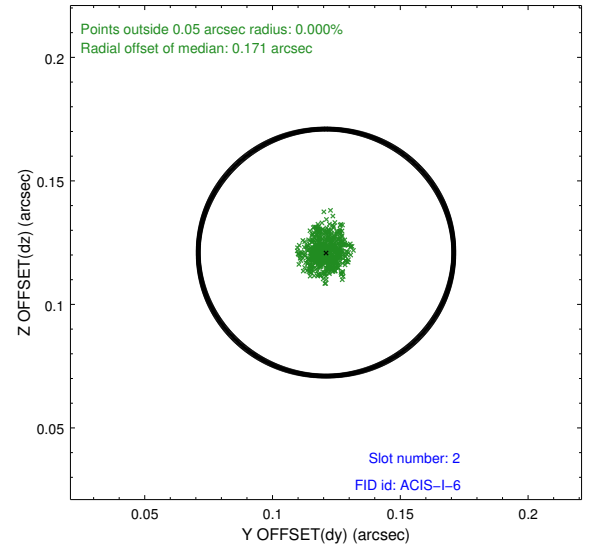
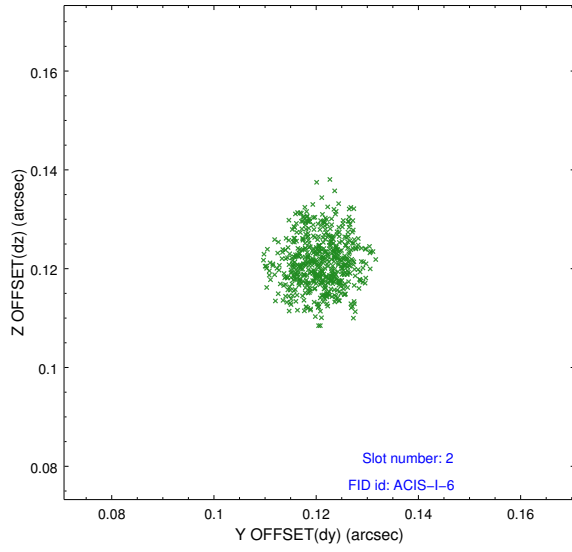
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.05.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9558996580839

### A.2 Comments