

# V&V Reference Report

## L2 ASCDS Version : 10.5.2

Observation 18995 - L2 Version 1  
Chandra X-Ray Center

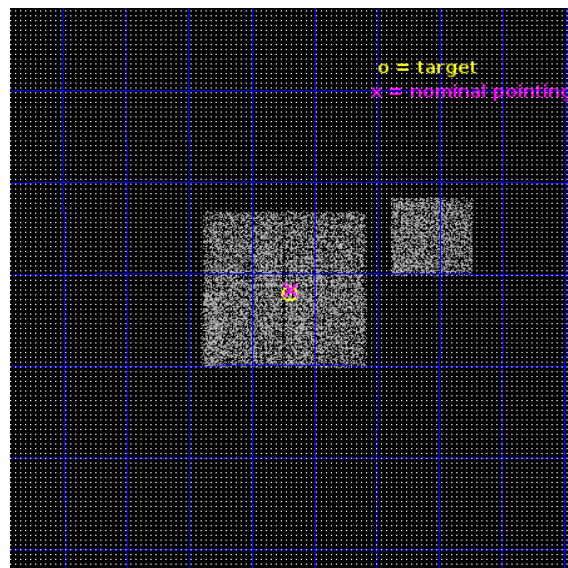
L2 Processing Date : Feb 28 2017

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# 1 Front

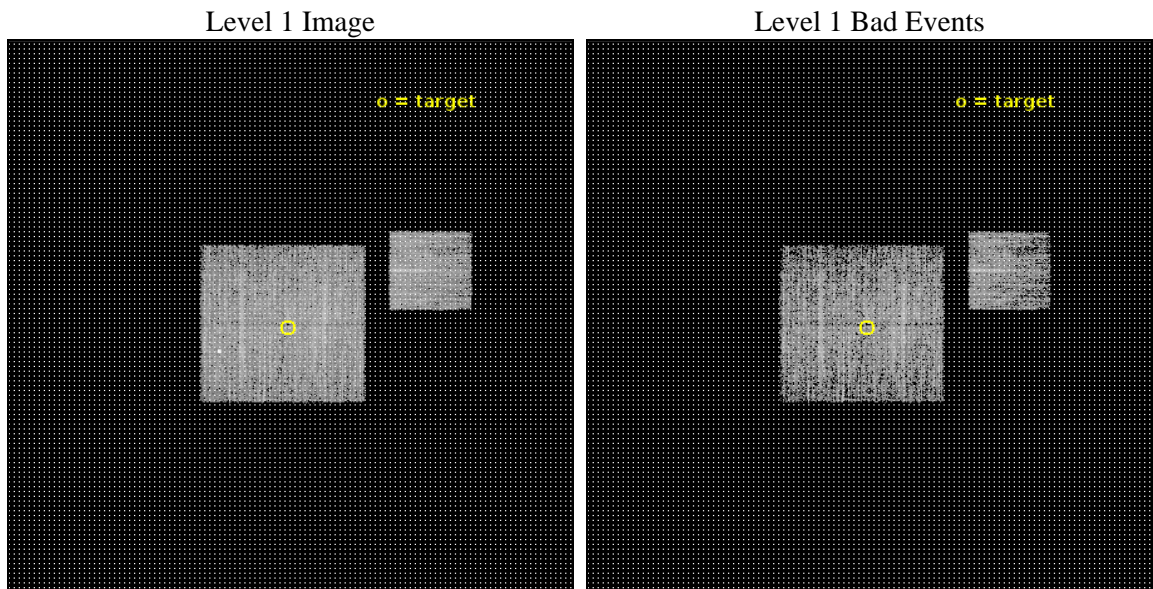
seq_num	401863	Sequence number
obs_id	18995	Observation id
title	Accurate localization of hard X-ray sources in the Galactic Center region. Search for HMXBs in the bulge	Proposal title
observer	Alexander Lutovinov	Principal investigator
object	AX J1742.6-2901	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.674583	Observer's specified target RA [deg]
dec_targ	-29.036028	Observer's specified target Dec [deg]
ra_nom	265.67054721737	Nominal RA [deg]
dec_nom	-29.028990570228	Nominal Dec [deg]
roll_nom	90.176025736794	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4062.9509150982	Sum of GTIs [s]
livetime	4009.8654702915	Livetime [s]
ontime0	4062.8277951479	Sum of GTIs [s]
ontime1	4062.8688350916	Sum of GTIs [s]
ontime2	4062.9098751545	Sum of GTIs [s]
ontime3	4062.9509150982	Sum of GTIs [s]
ontime6	4062.786755085	Sum of GTIs [s]
l2events	16103	Number of level 2 events



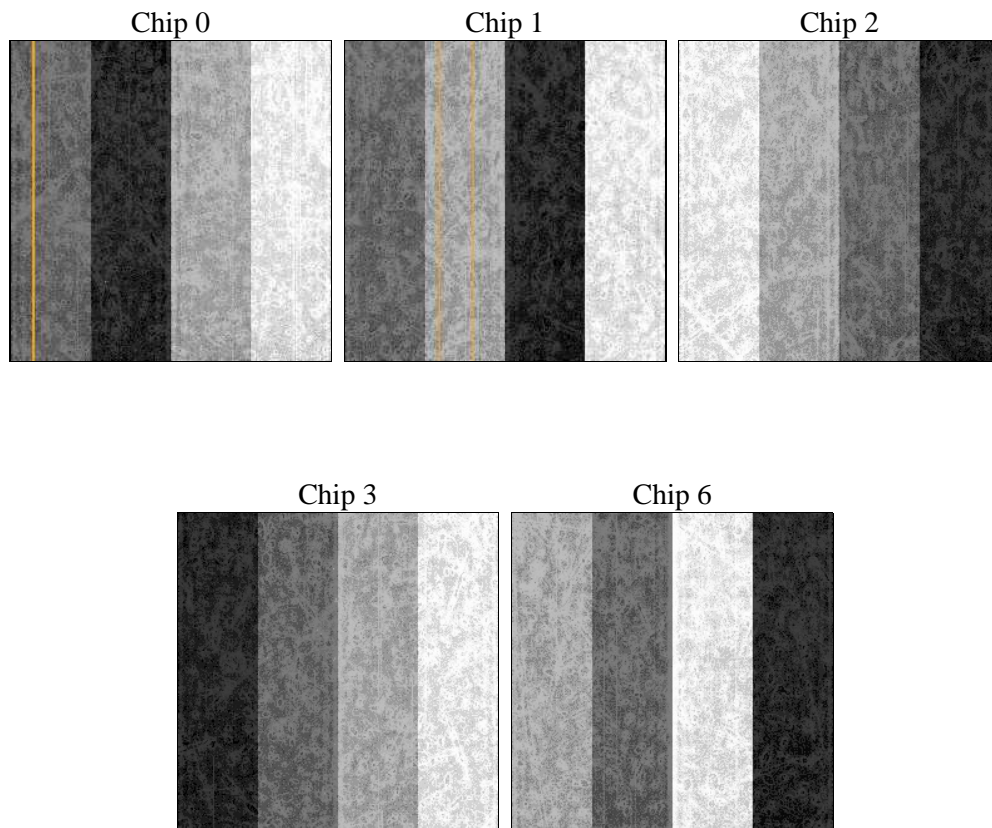
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	4062.9509150982	Sum of GTIs [s]
caldsver	4.7.3	&#160	ontime0	4062.8277951479	Sum of GTIs [s]
date	2017-02-28T05:27:57	Date and time of file creation	ontime1	4062.8688350916	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	4062.9098751545	Sum of GTIs [s]
			ontime3	4062.9509150982	Sum of GTIs [s]
			ontime6	4062.786755085	Sum of GTIs [s]
			l1events	142070	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	25810	29355	30108	28027	28770
rejected events	22071	24081	26319	24389	25218
rejected %	85%	82%	87%	87%	87%

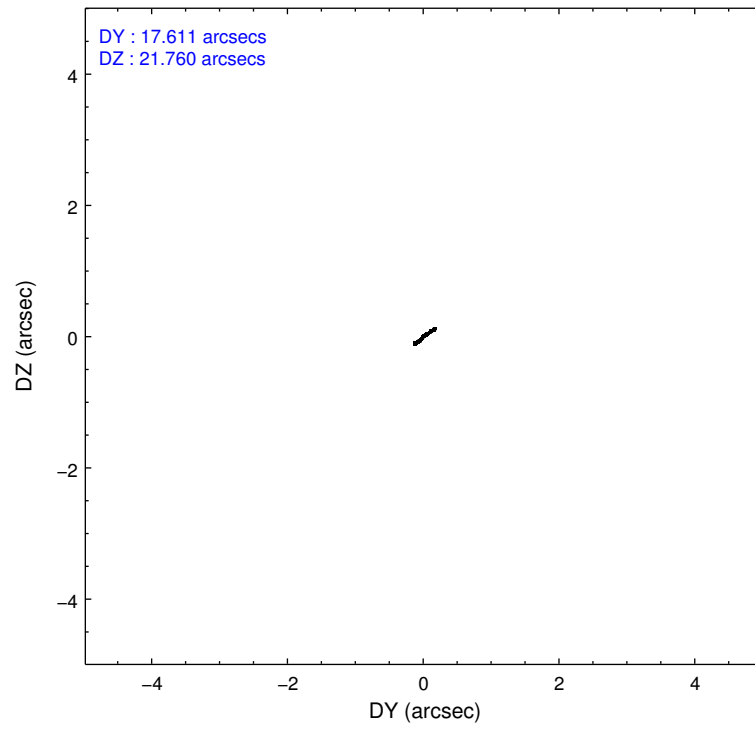
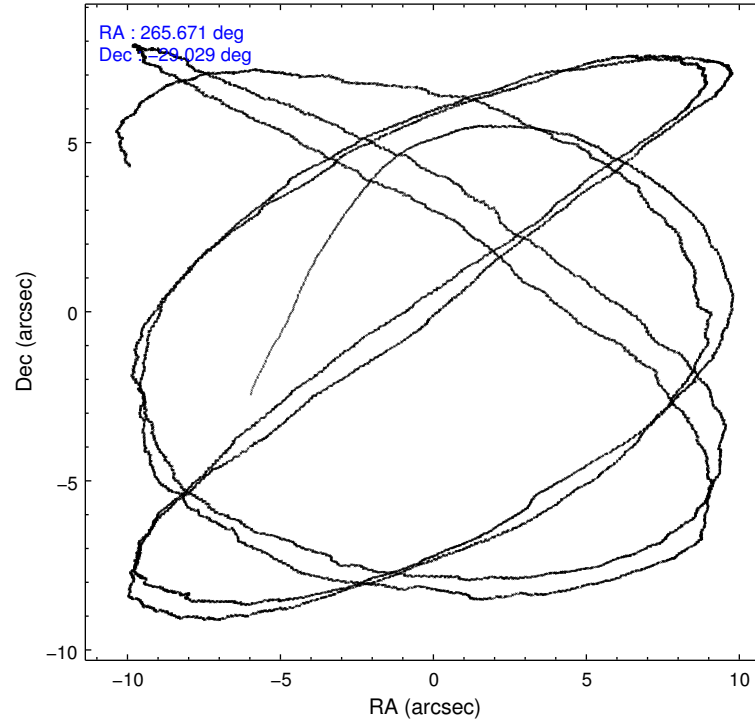
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1491	2797	1603	1506	1387
	5%	9%	5%	5%	4%
grade 1 events	14	29	22	17	16
	0%	0%	0%	0%	0%
grade 2 events	844	945	885	718	758
	3%	3%	2%	2%	2%
grade 3 events	369	370	342	340	366
	1%	1%	1%	1%	1%
grade 4 events	291	380	351	393	291
	1%	1%	1%	1%	1%
grade 5 events	1282	1325	1231	1394	1347
	4%	4%	4%	4%	4%
grade 6 events	748	793	611	682	754
	2%	2%	2%	2%	2%
grade 7 events	20771	22716	25063	22977	23851
	80%	77%	83%	81%	82%

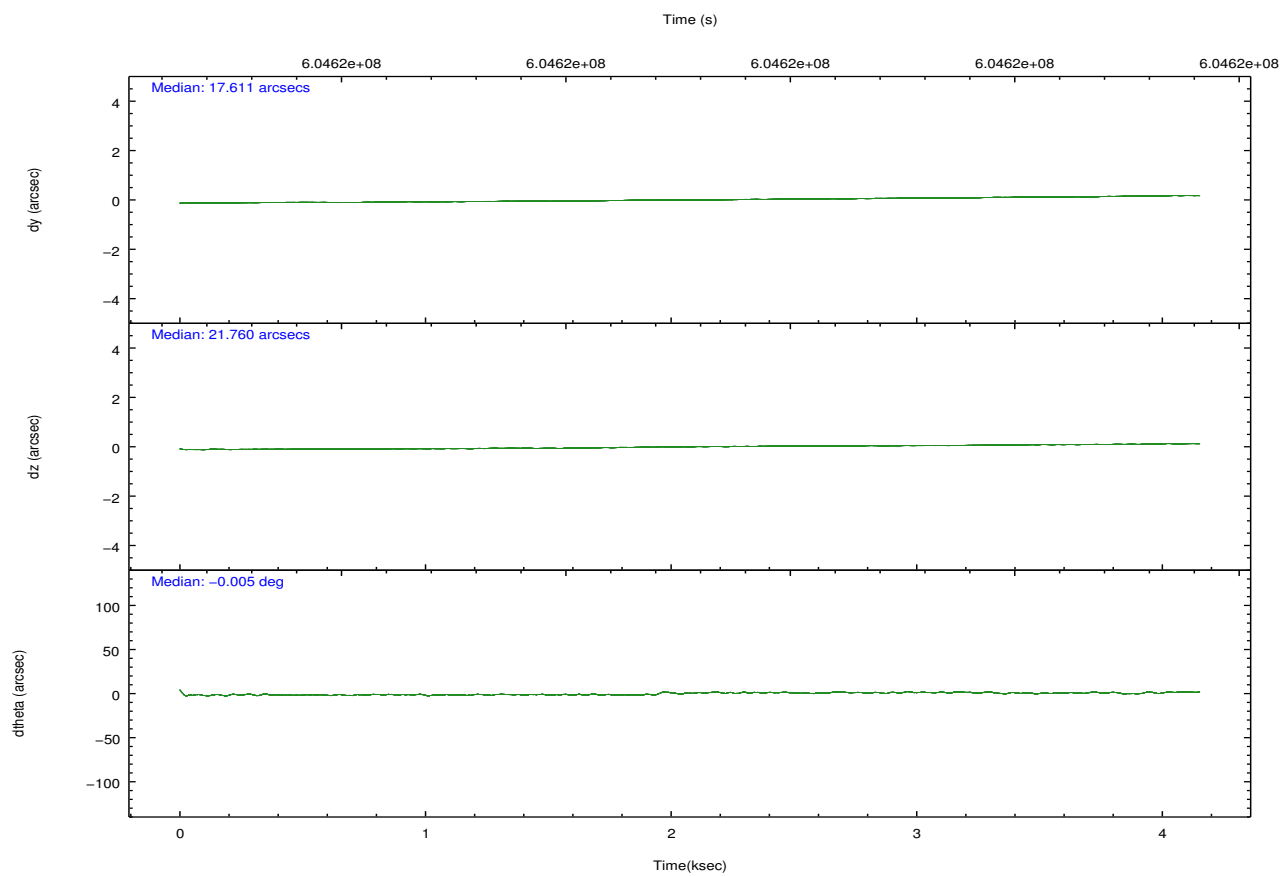
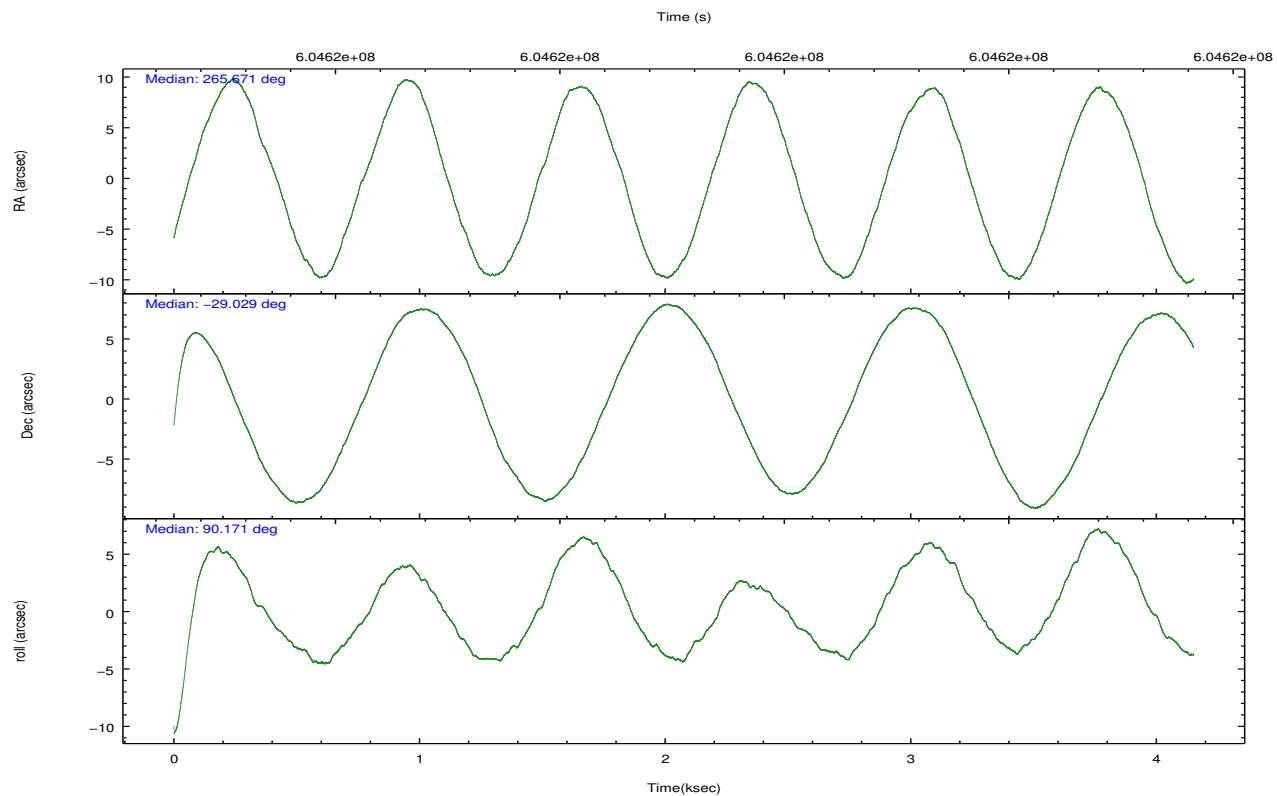


## 2.2 Compared Parameters

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	265.686495	265.6705472173703	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.052868	-29.02899057022844	Alternating exposures requested	N	N
[deg] Pointing Roll	89.975118	90.17602573679426	[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)	604617616.184000	604616069.50296			
Observation start date	2017-02-27T21:19:07	2017-02-27T20:54:29			
[s] Observation end time (MET)	604621616.184000	604622468.06583			
Observation end date	2017-02-27T22:25:47	2017-02-27T22:41:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect



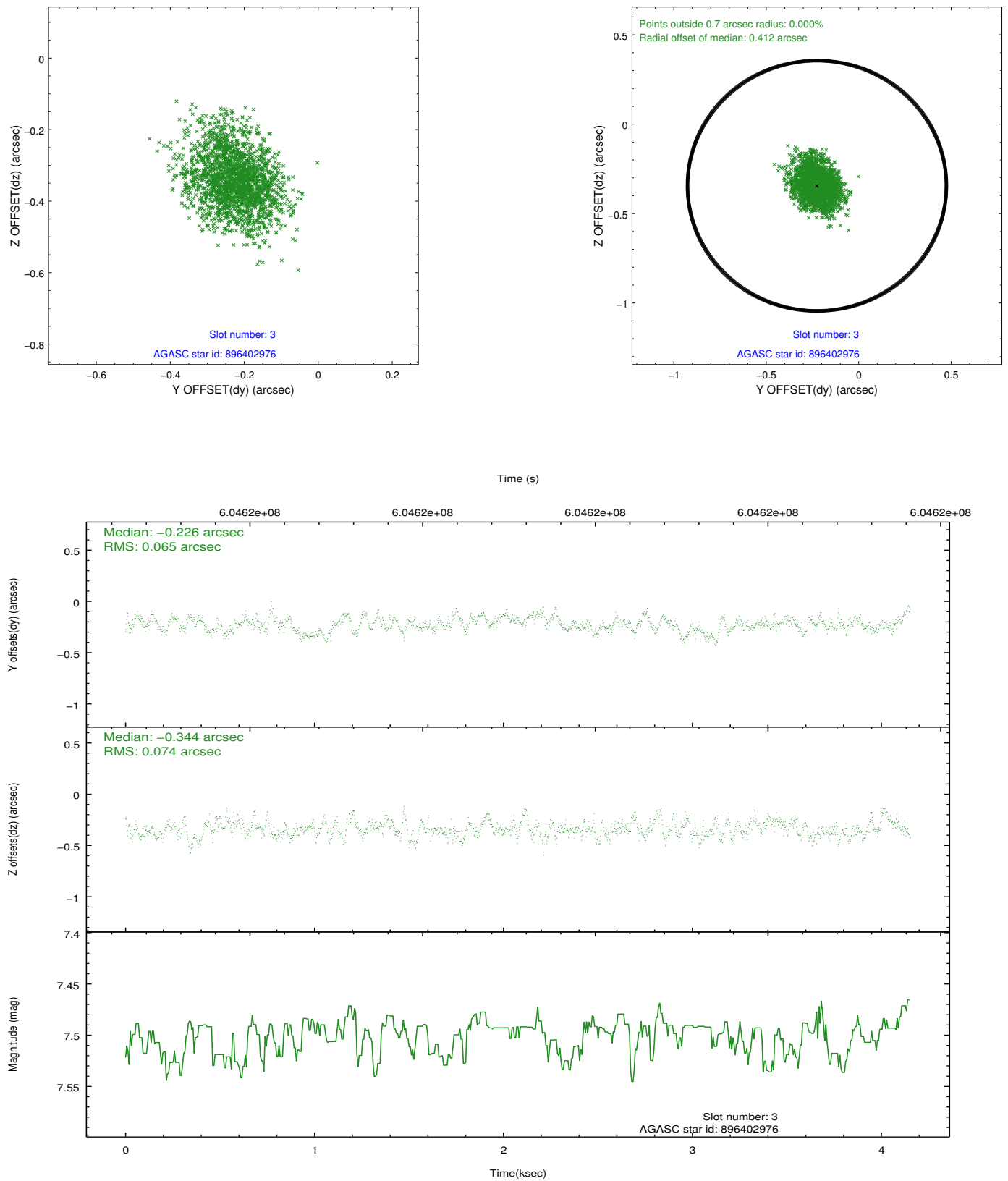


Slot Statistics

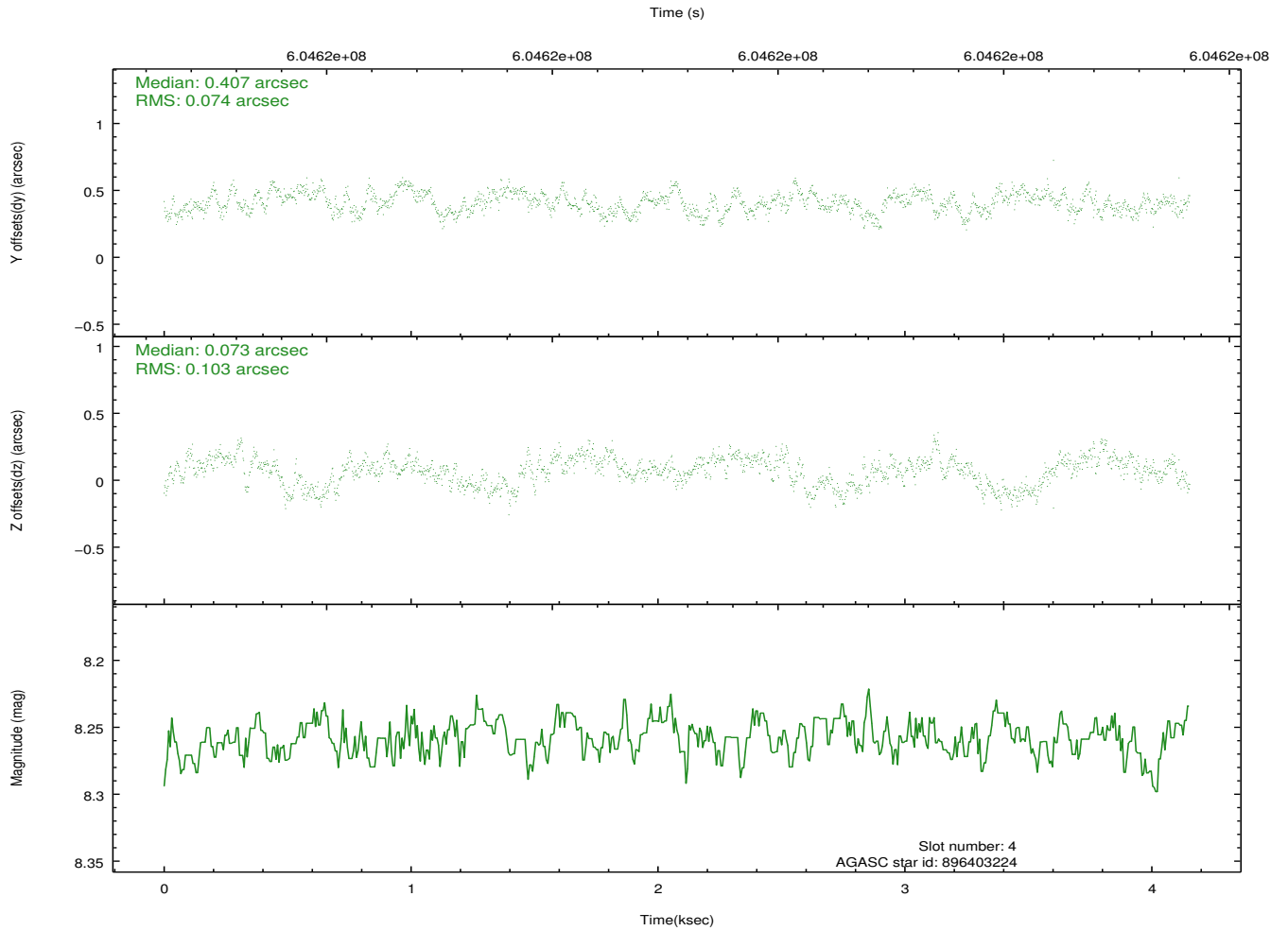
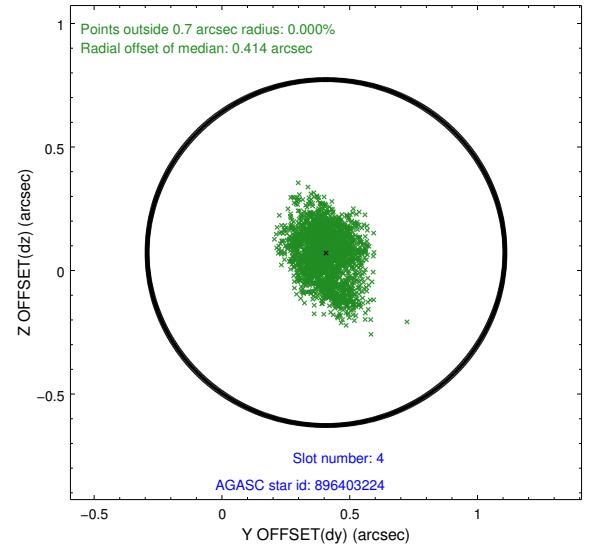
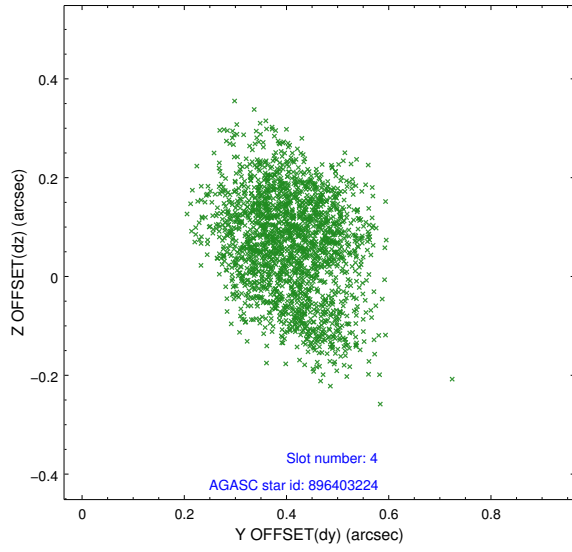
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	1013	-0.068	-0.078	0.020	0.030	0.000000	0.000000	921.74	-845.57
1	FID		ACIS-I-4	7.06	1012	0.385	0.108	0.018	0.026	0.000000	0.000000	2142.97	1053.73
2	FID		ACIS-I-5	7.10	1013	-0.415	0.039	0.009	0.016	0.000000	0.000000	-1824.78	1053.03
3	GUIDE	used	896402976	7.50	2024	-0.226	-0.344	0.106	0.173	265.099474	-28.923203	460.82	1849.73
4	GUIDE	used	896403224	8.26	2024	0.407	0.073	0.136	0.216	265.612825	-29.438915	-1389.91	231.25
5	GUIDE	used	896405480	8.21	2026	0.446	-0.330	0.094	0.163	265.220460	-29.599691	-1972.69	1457.77
6	GUIDE	used	896532680	8.75	2023	-0.182	0.260	0.150	0.249	266.342632	-28.496299	1997.70	-2073.83
7	GUIDE	used	896534664	8.20	2025	-0.439	0.344	0.147	0.263	266.405570	-28.407461	2318.18	-2276.40

## 2.4 Star Slots

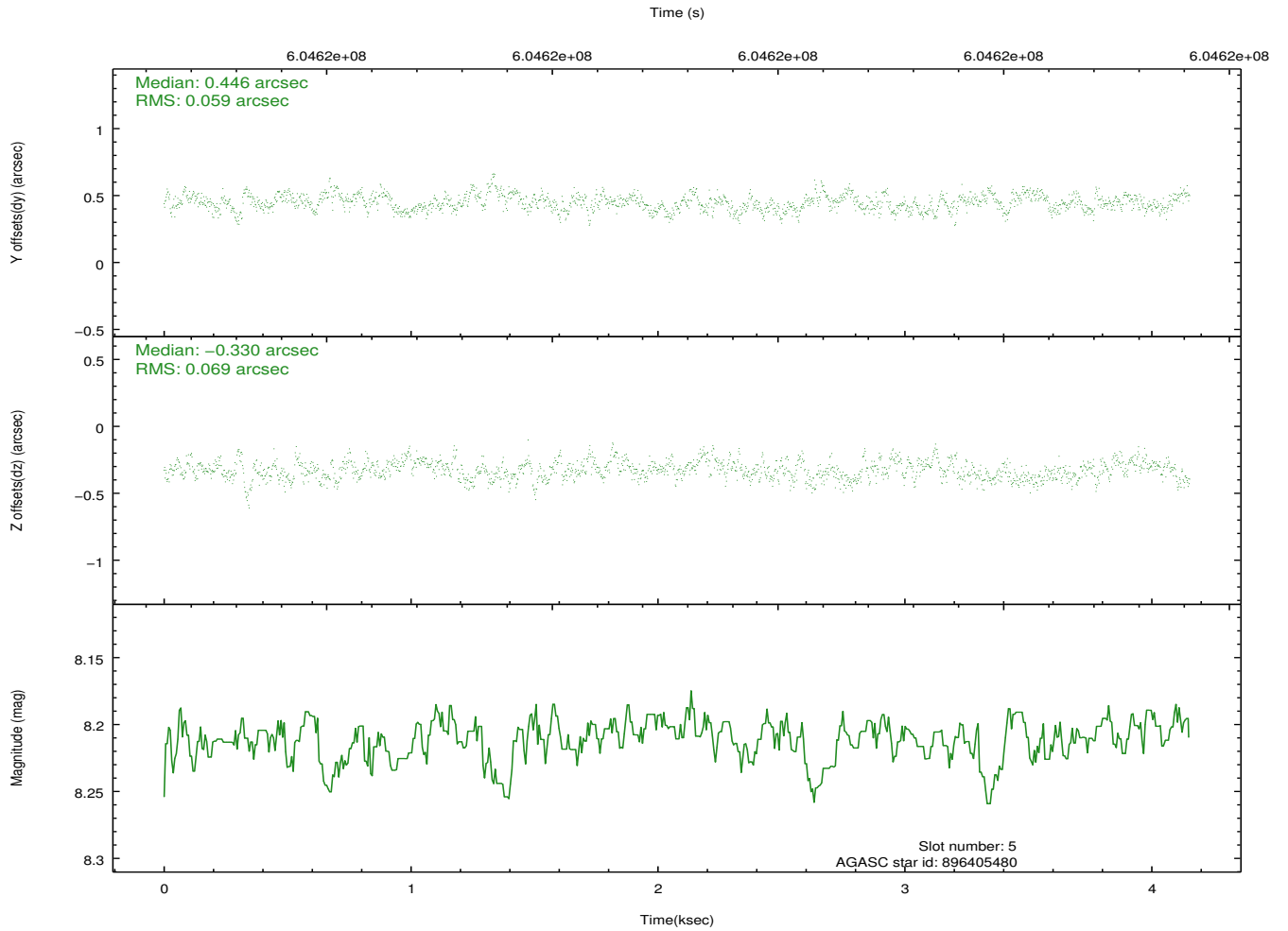
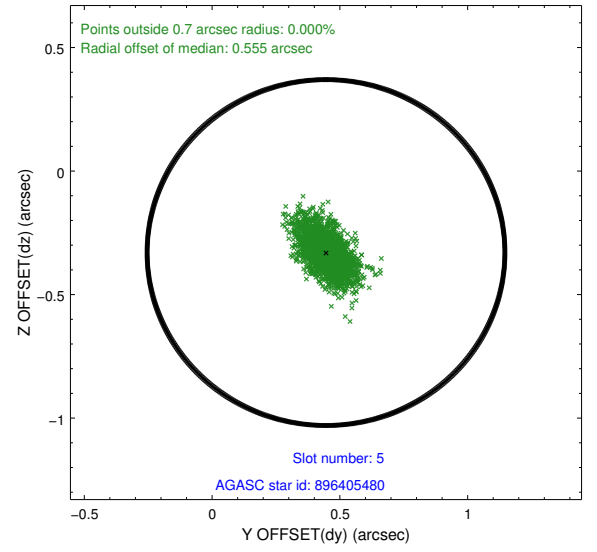
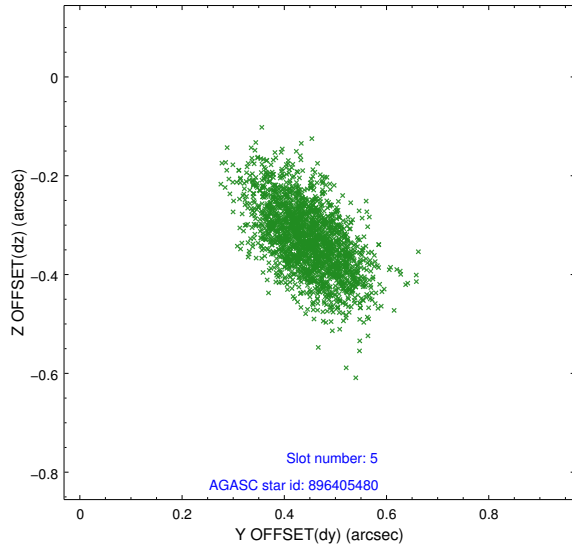
### 2.4.1 Slot 3



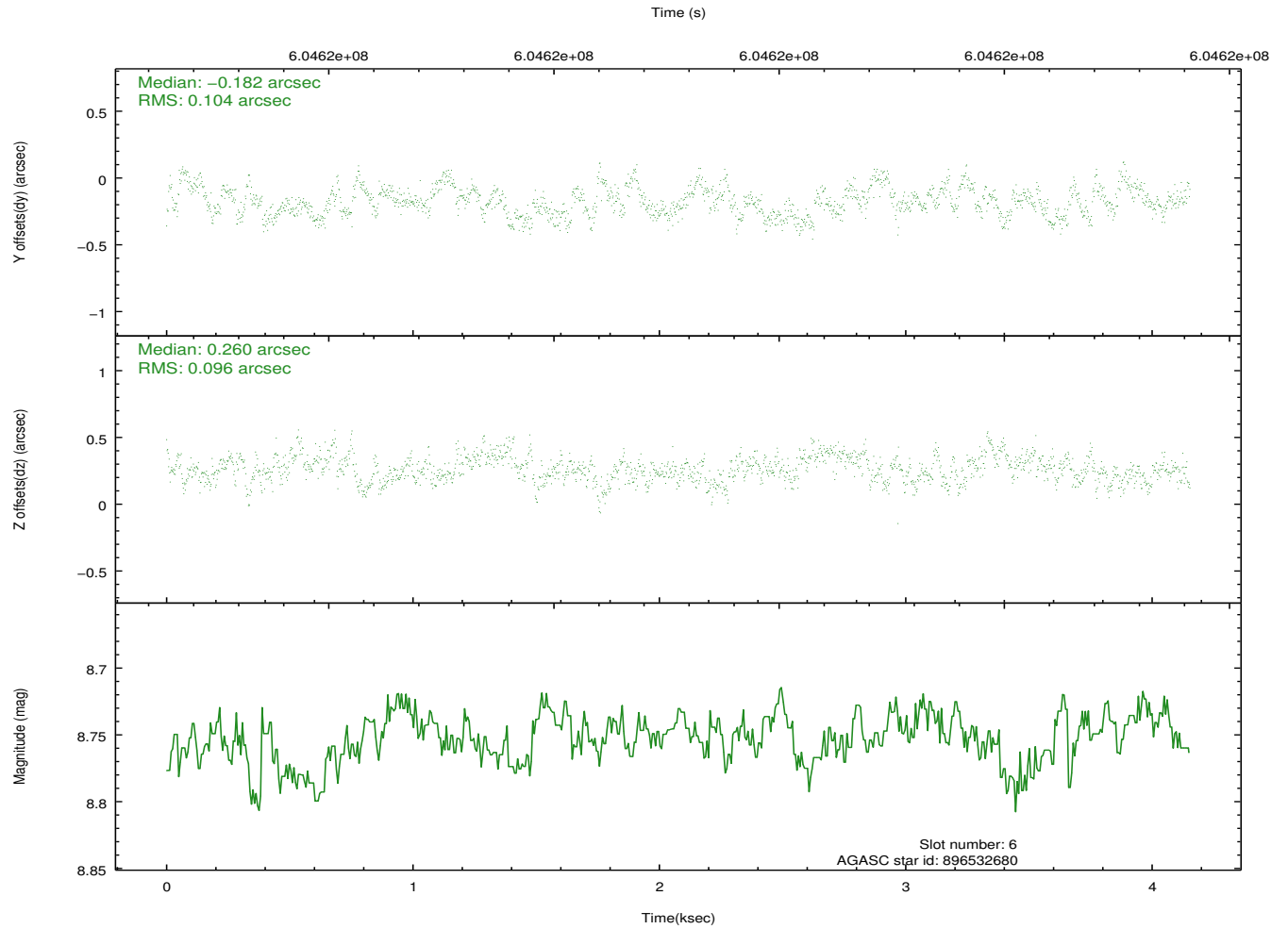
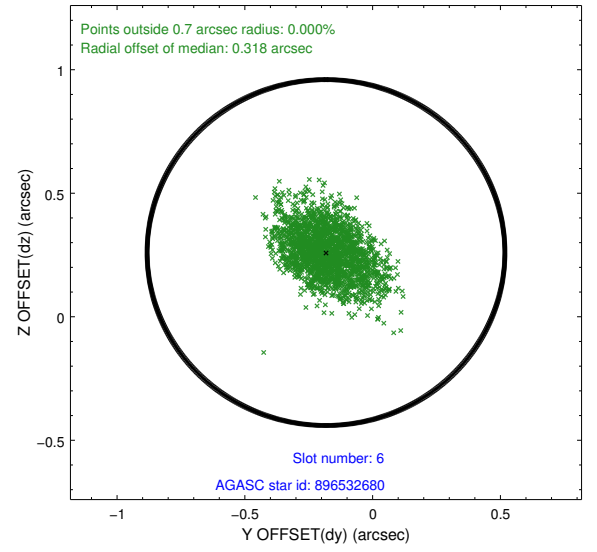
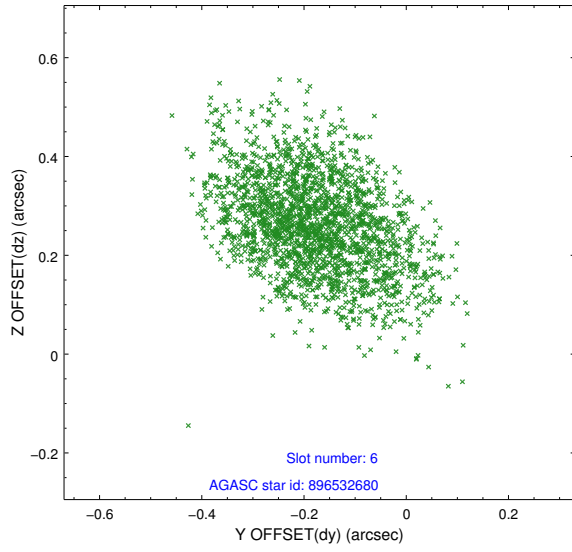
## 2.4.2 Slot 4



### 2.4.3 Slot 5

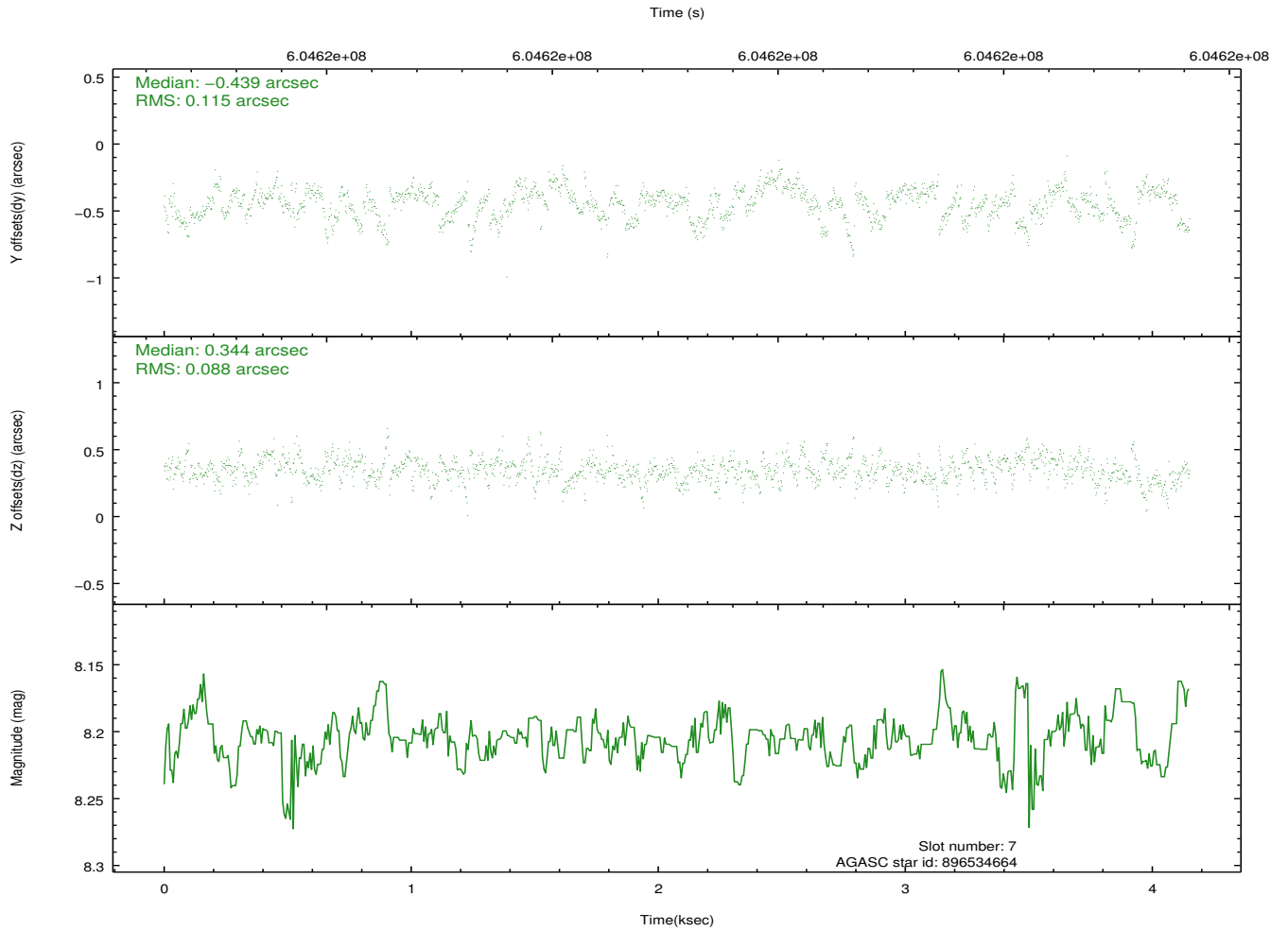
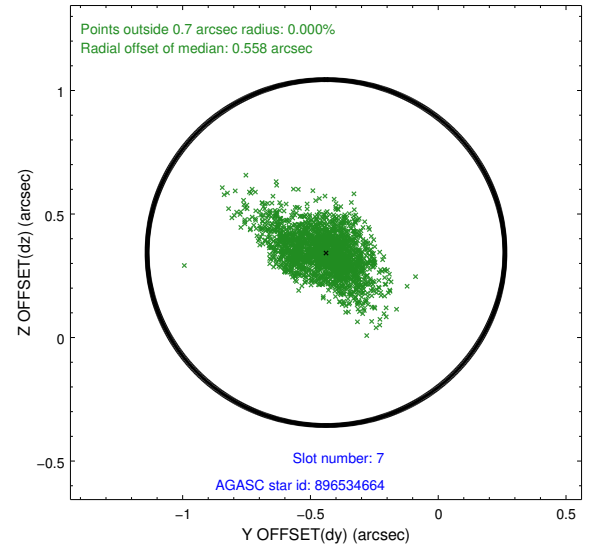
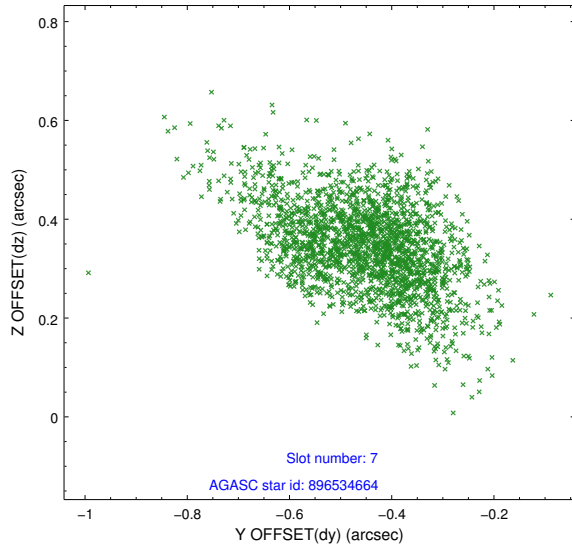


## 2.4.4 Slot 6



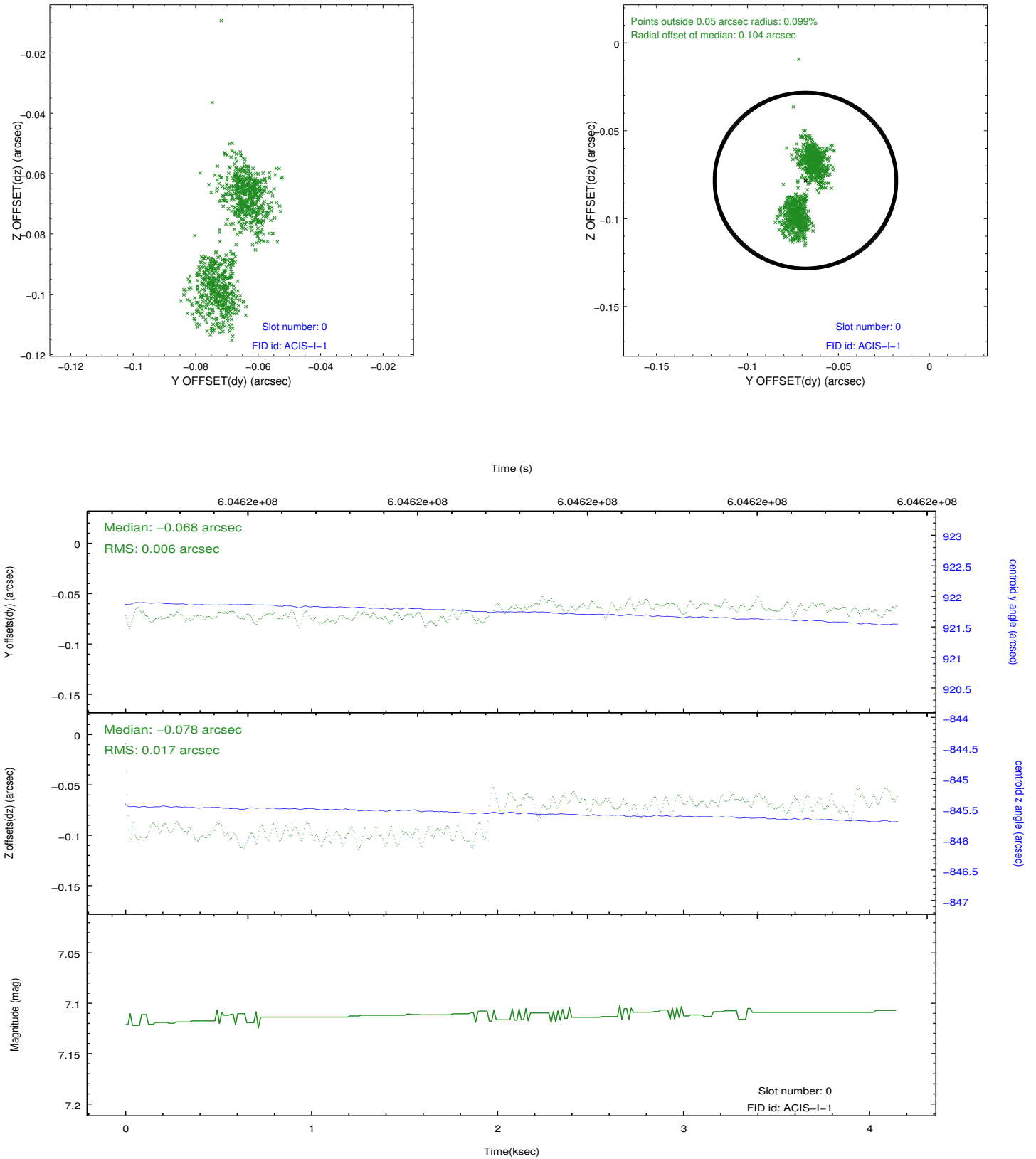


## 2.4.5 Slot 7

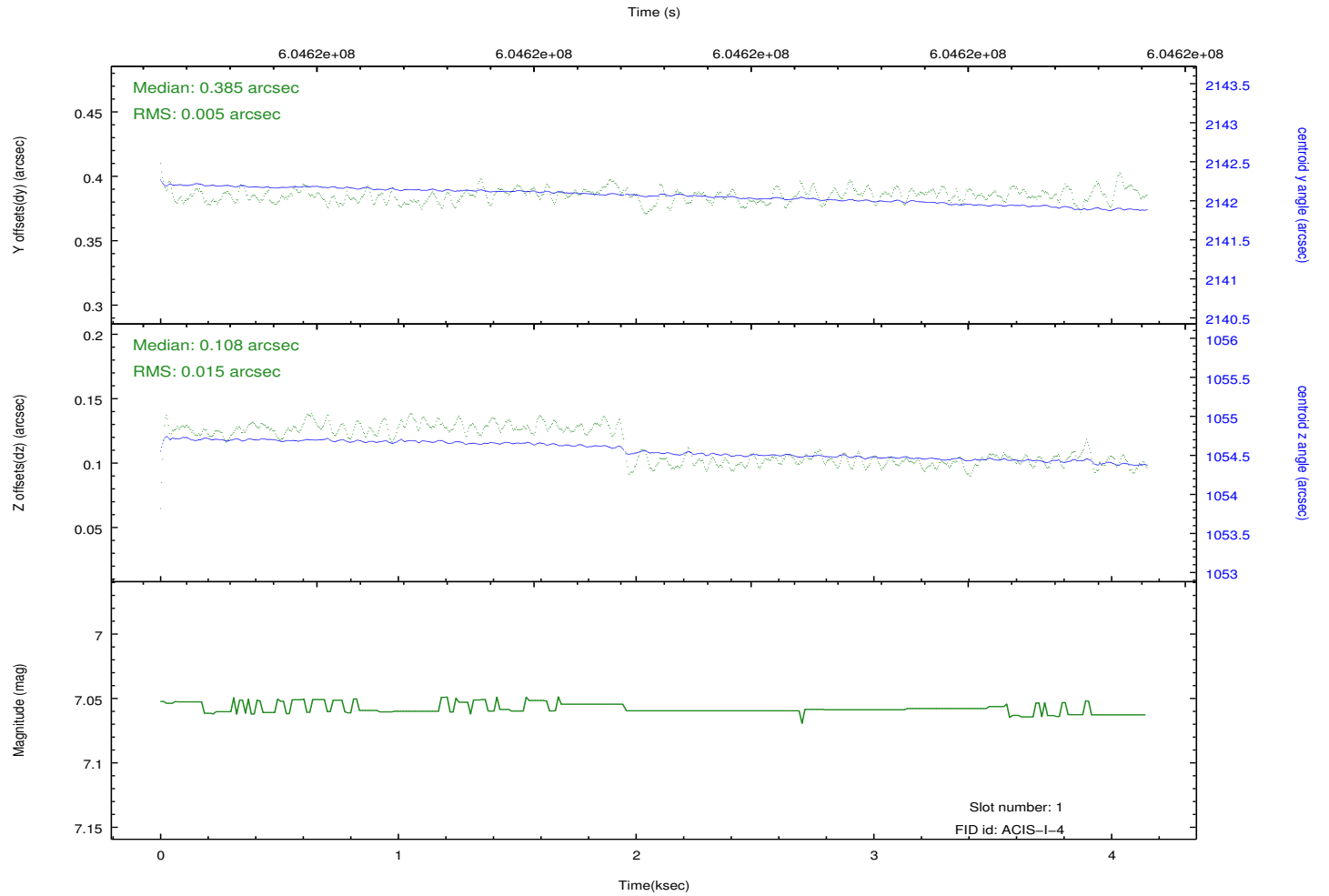
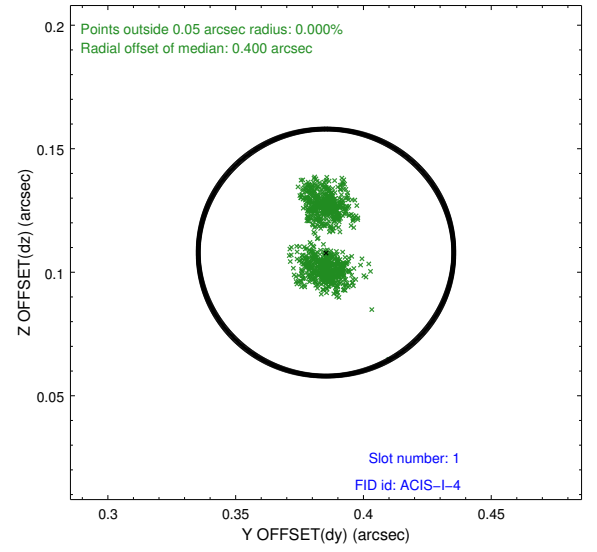
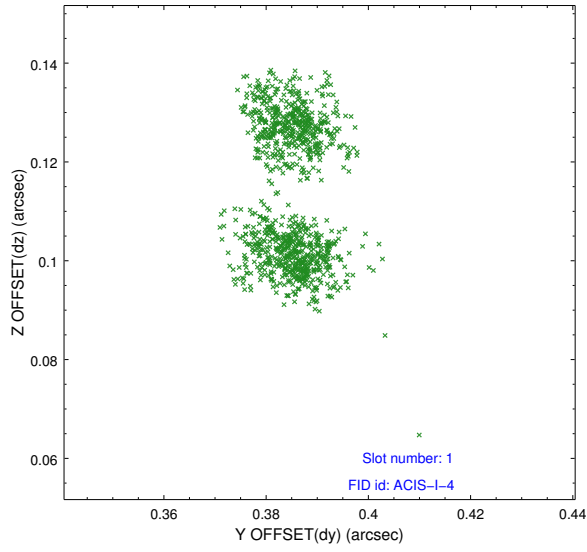


## 2.5 FID Slots

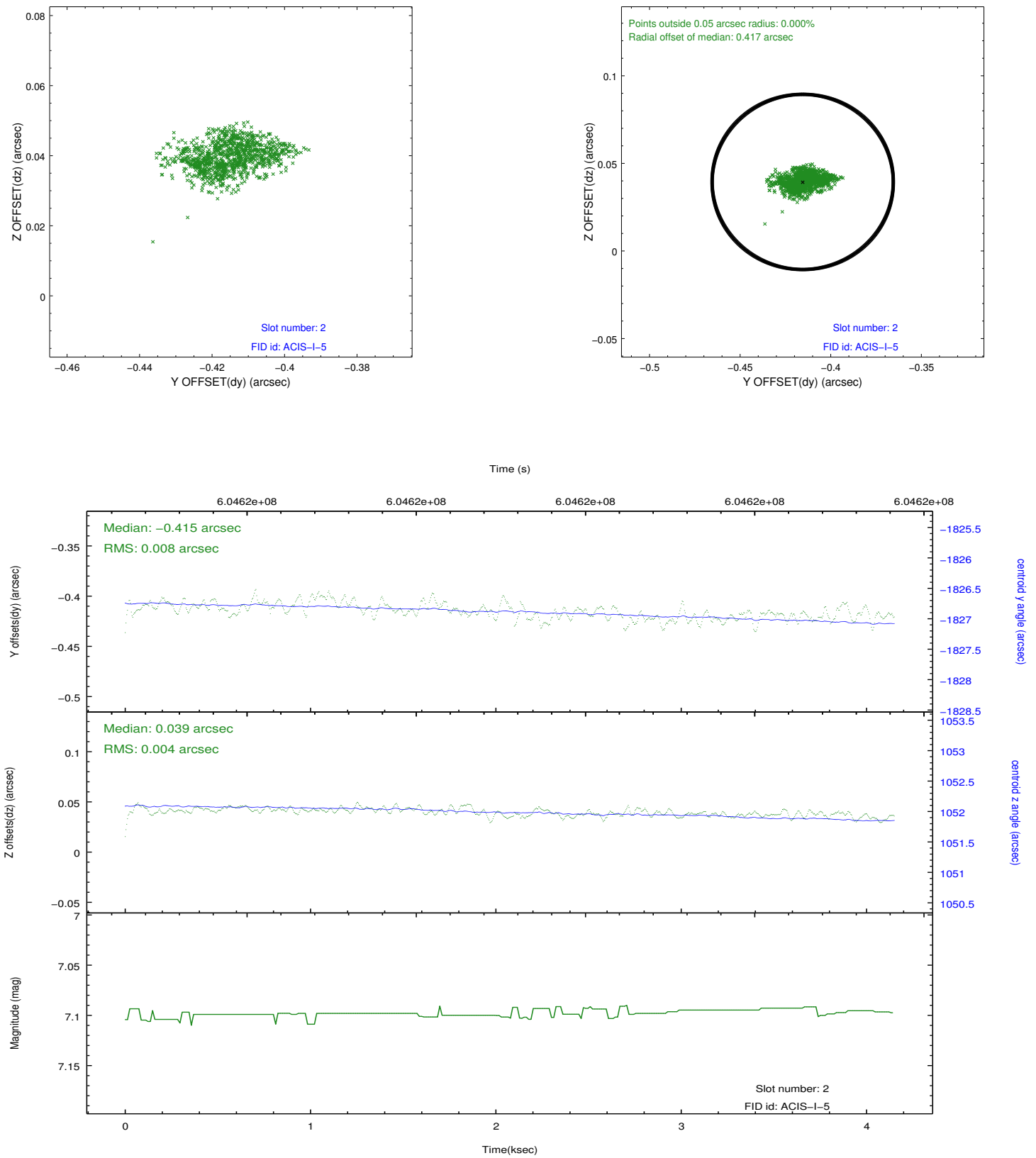
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.02.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.0629509150982

### A.2 Comments