

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21618 - L2 Version 1  
Chandra X-Ray Center

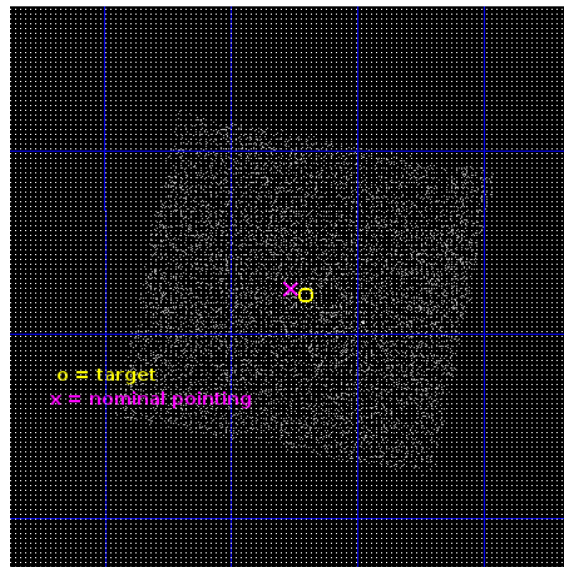
L2 Processing Date : Jul 29 2019

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# 1 Front

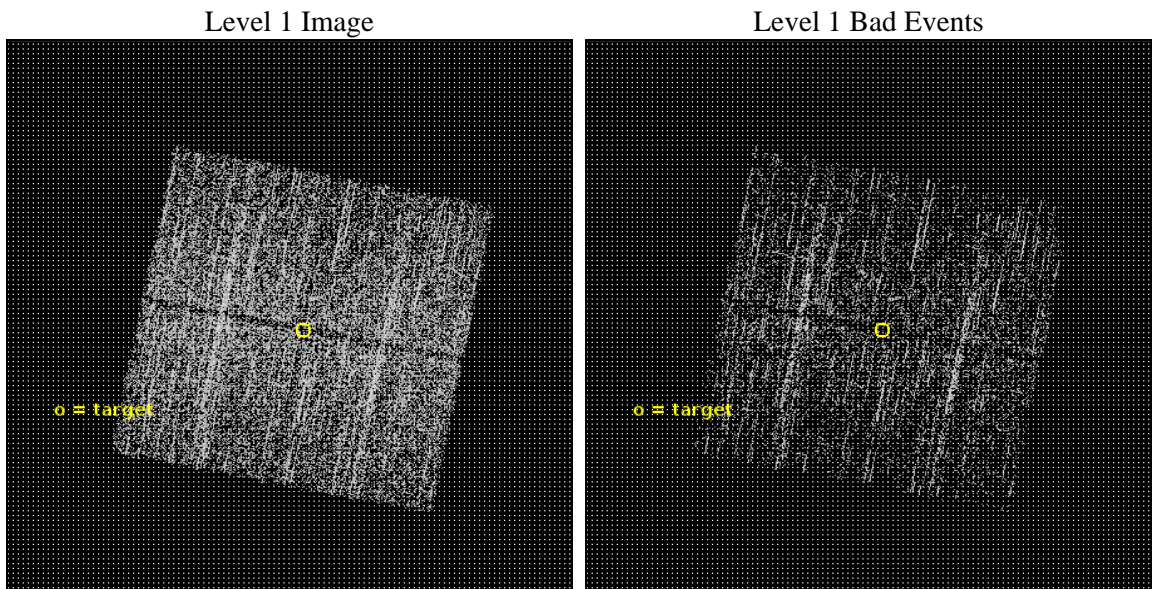
seq_num	300450	Sequence number
obs_id	21618	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 4	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.4263	Observer's specified target RA [deg]
dec_targ	-28.131657	Observer's specified target Dec [deg]
ra_nom	266.44029755816	Nominal RA [deg]
dec_nom	-28.125599755426	Nominal Dec [deg]
roll_nom	281.21532382619	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1908.6516137123	Sum of GTIs [s]
livetime	1883.7136752503	Livetime [s]
ontime0	1908.6105737686	Sum of GTIs [s]
ontime1	1908.6516137123	Sum of GTIs [s]
ontime2	1908.6926537752	Sum of GTIs [s]
ontime3	1908.7336937189	Sum of GTIs [s]
l2events	6521	Number of level 2 events



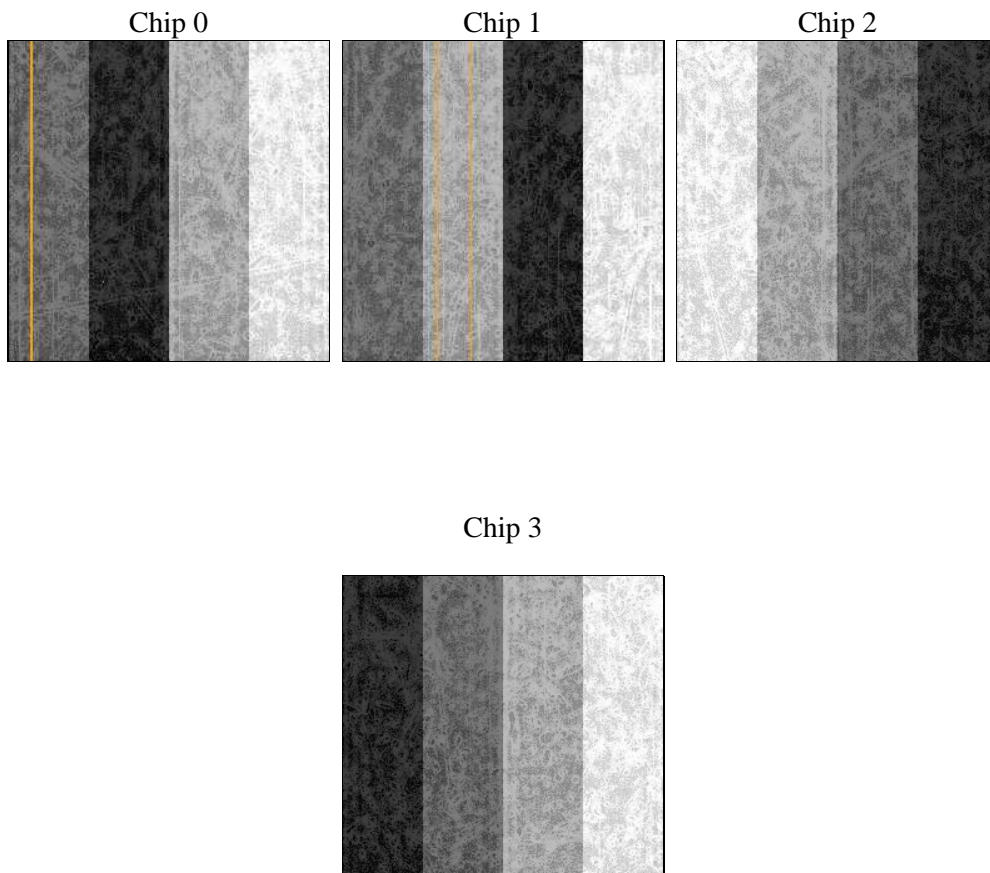
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	1908.6516137123	Sum of GTIs [s]
caldsver	4.8.3.1	&#160	ontime0	1908.6105737686	Sum of GTIs [s]
date	2019-07-29T04:41:29	Date and time of file creation	ontime1	1908.6516137123	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1908.6926537752	Sum of GTIs [s]
			ontime3	1908.7336937189	Sum of GTIs [s]
			l1events	58325	Number of level 1 events

### 2.1.4 Events

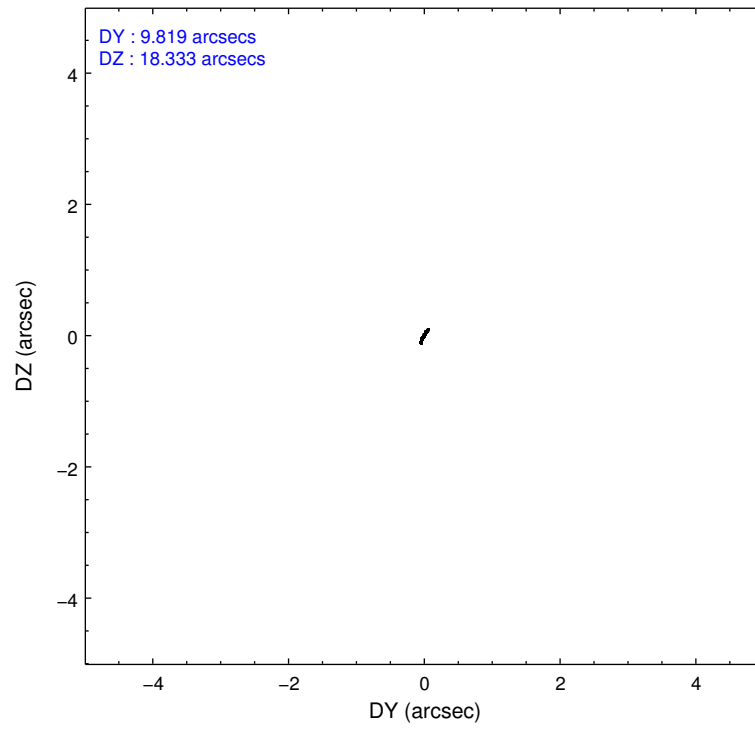
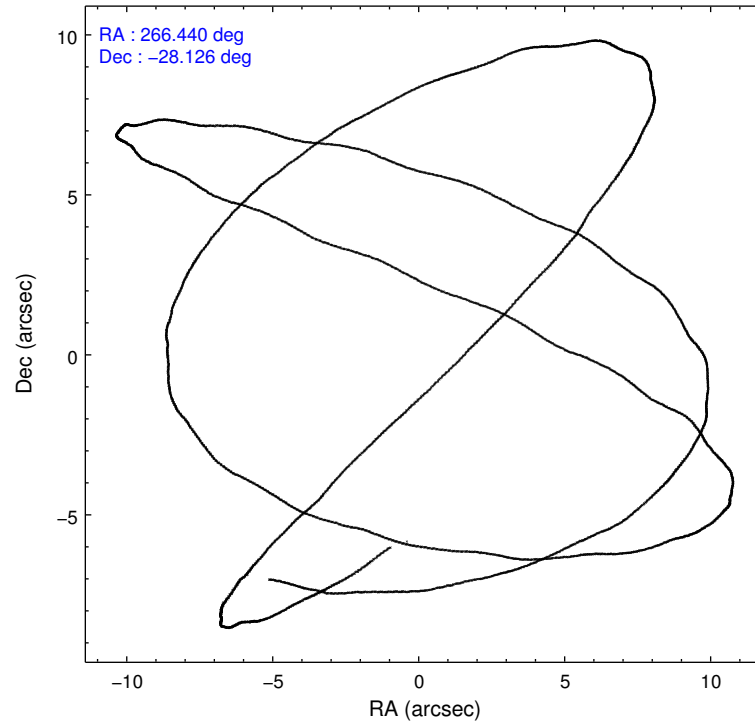
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	14283	14332	15039	14671
rejected events	12228	12281	13184	12953
rejected %	85%	85%	87%	88%

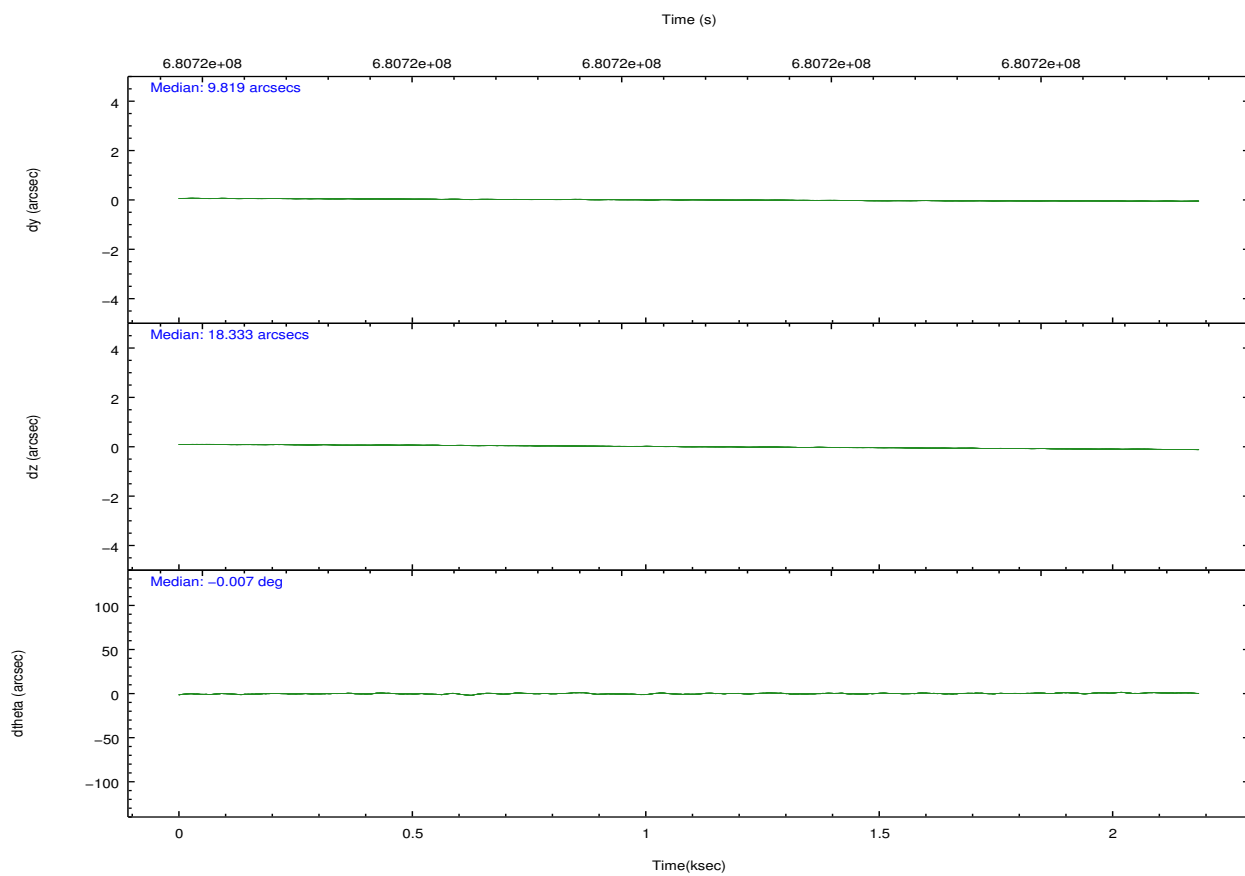
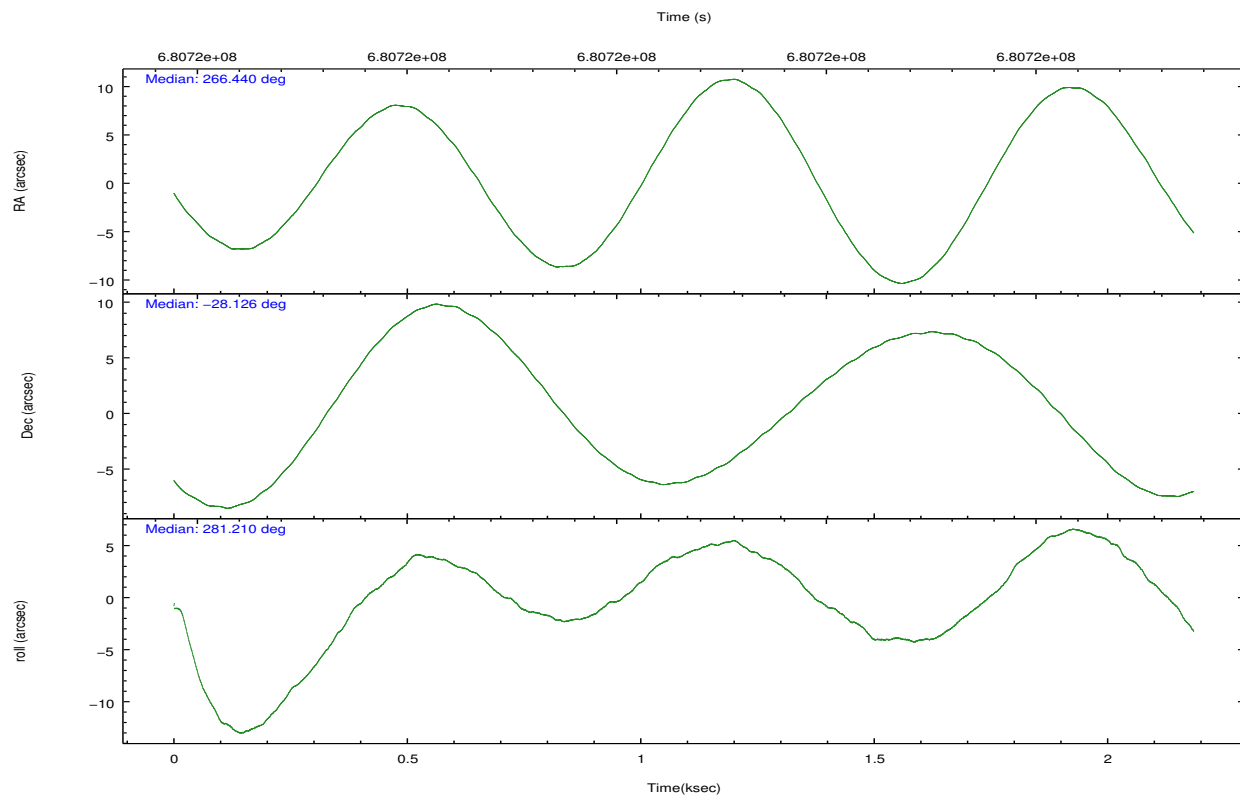
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	821	676	751	657
	5%	4%	4%	4%
grade 1 events	6	8	9	8
	0%	0%	0%	0%
grade 2 events	490	591	428	393
	3%	4%	2%	2%
grade 3 events	186	171	176	170
	1%	1%	1%	1%
grade 4 events	185	172	173	179
	1%	1%	1%	1%
grade 5 events	641	647	564	675
	4%	4%	3%	4%
grade 6 events	377	443	333	324
	2%	3%	2%	2%
grade 7 events	11577	11624	12605	12265
	81%	81%	83%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	266.419535	266.4402975581647	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.104736	-28.12559975542638	Alternating exposures requested	N	N
[deg] Pointing Roll	280.996819	281.2153238261852	[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)	680723267.184000	680722890.9044501			
Observation start date	2019-07-28T17:46:38	2019-07-28T17:41:30			
[s] Observation end time (MET)	680725267.184000	680725401.1296			
Observation end date	2019-07-28T18:19:58	2019-07-28T18:23:21			
Read mode	TIMED	TIMED			

## 2.3 Aspect





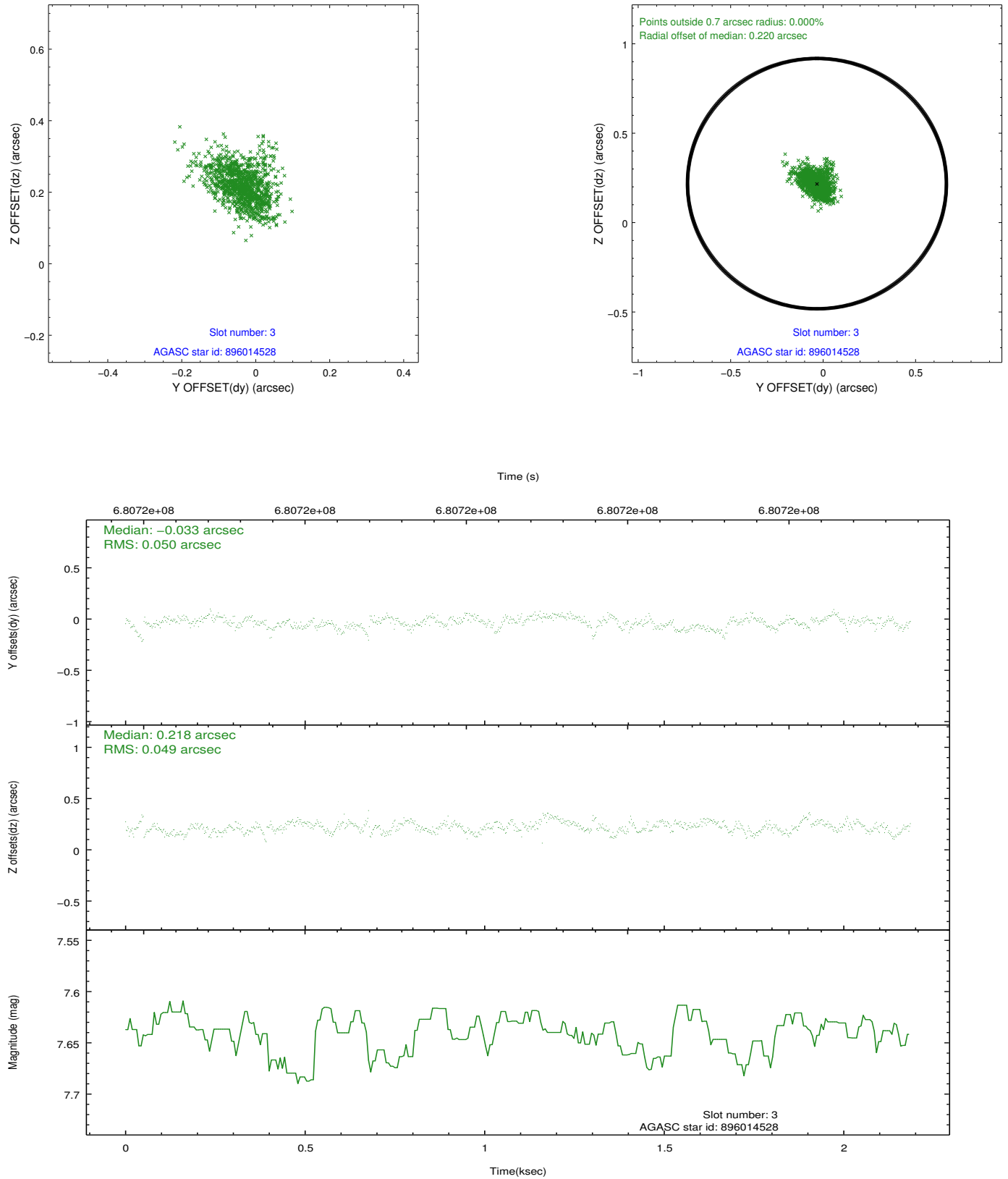
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.27	533	1.000	0.114	-0.068	0.006	0.011	0.000000	0.000000	929.97	-842
1	FID		ACIS-I-5	7.23	533	1.000	-0.462	0.042	0.006	0.012	0.000000	0.000000	-1817.22	1053
2	FID		ACIS-I-6	7.23	532	1.000	0.257	0.096	0.007	0.011	0.000000	0.000000	392.19	1701
3	GUIDE	used	896014528	7.64	1067	1.000	-0.033	0.218	0.073	0.128	266.628858	-27.438607	-2226.39	1113
4	GUIDE	used	896537176	8.02	1066	1.000	0.040	-0.052	0.059	0.097	266.498272	-28.678259	2072.20	-148
5	GUIDE	used	896538696	6.79	1067	1.000	-0.046	0.073	0.070	0.118	266.298470	-28.325572	709.04	-528
6	GUIDE	used	896540888	7.89	1067	1.000	-0.141	-0.453	0.101	0.175	267.212234	-28.246138	987.29	2368
7	GUIDE	used	896404568	7.84	1066	1.000	0.193	0.220	0.088	0.153	265.687293	-28.431080	719.02	-2498

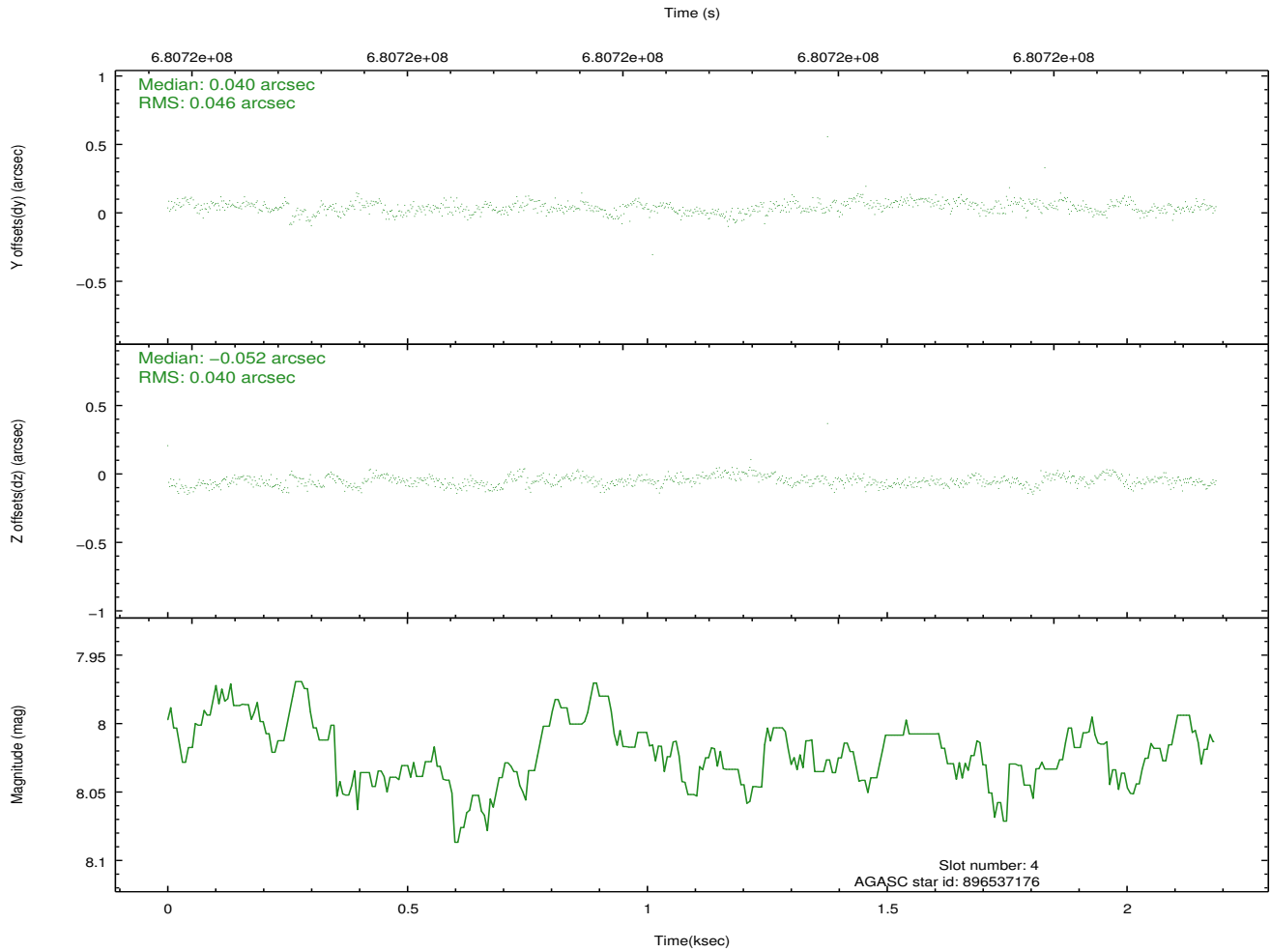
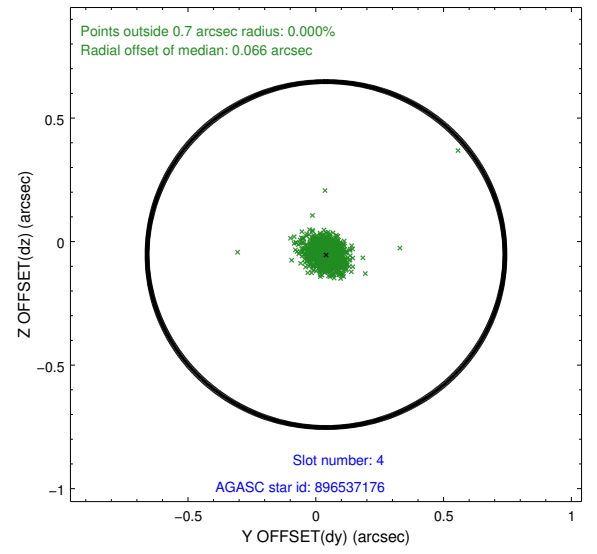
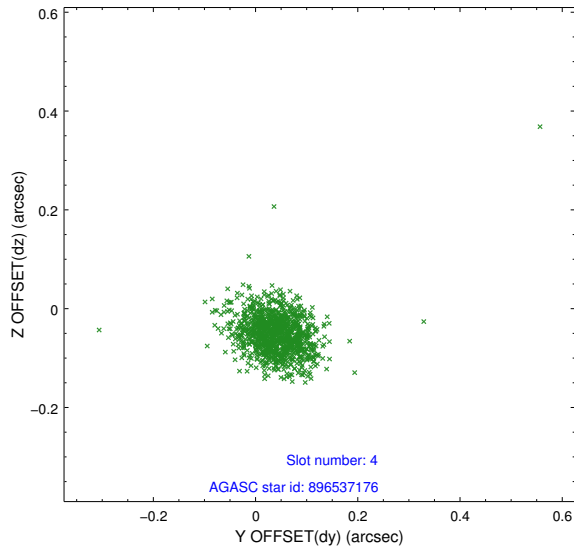


## 2.4 Star Slots

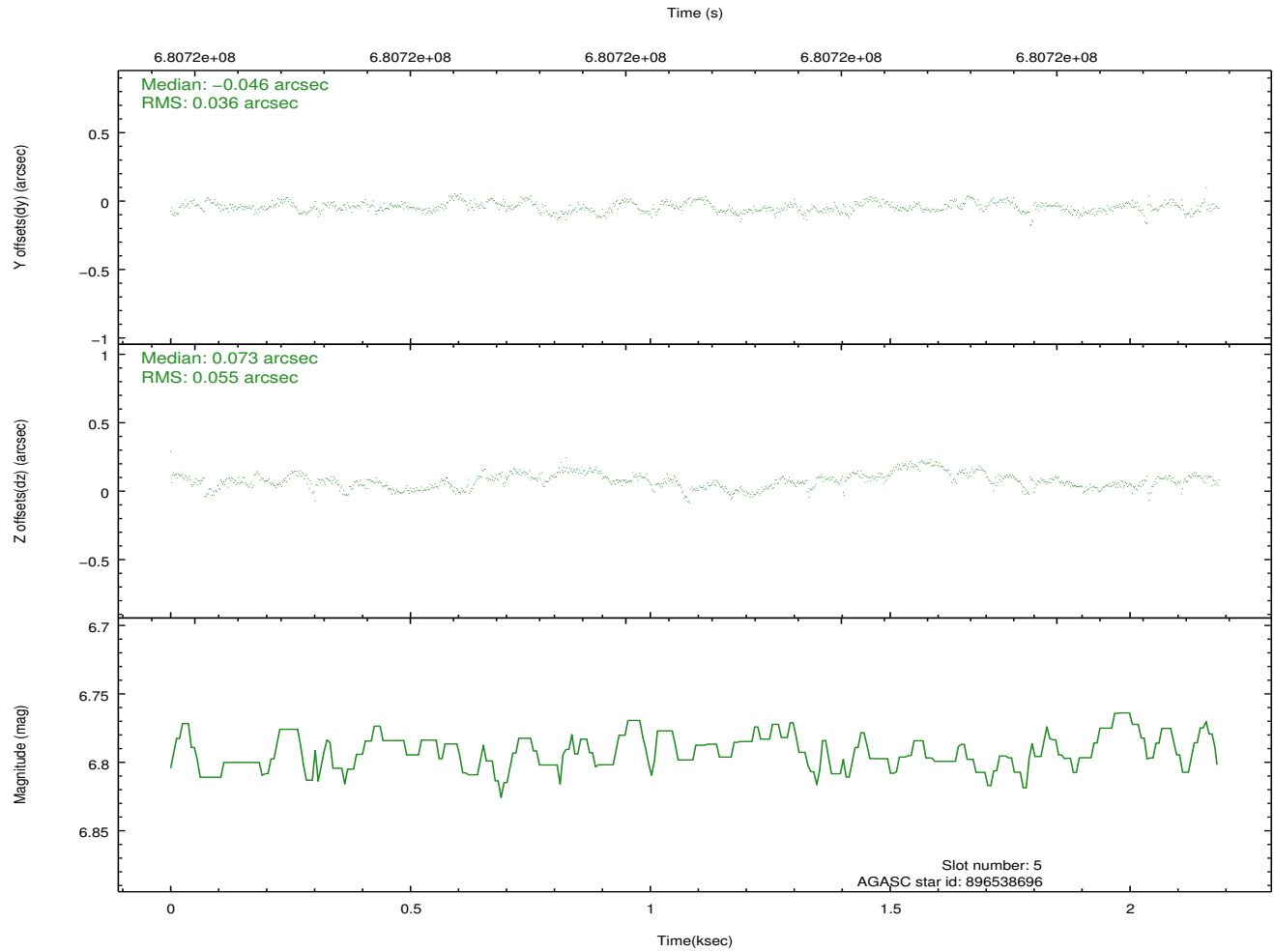
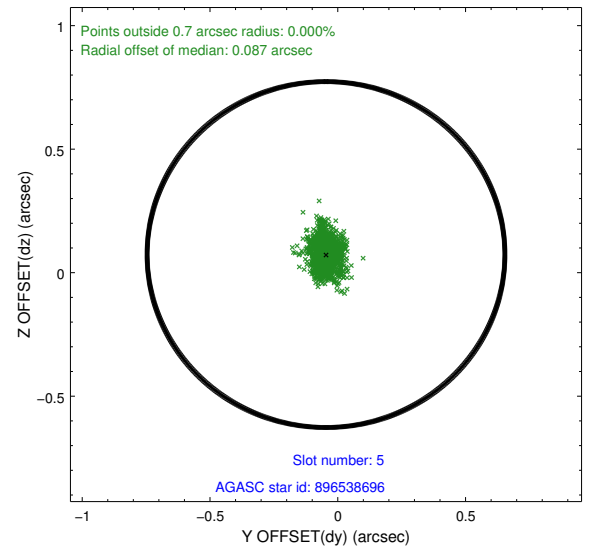
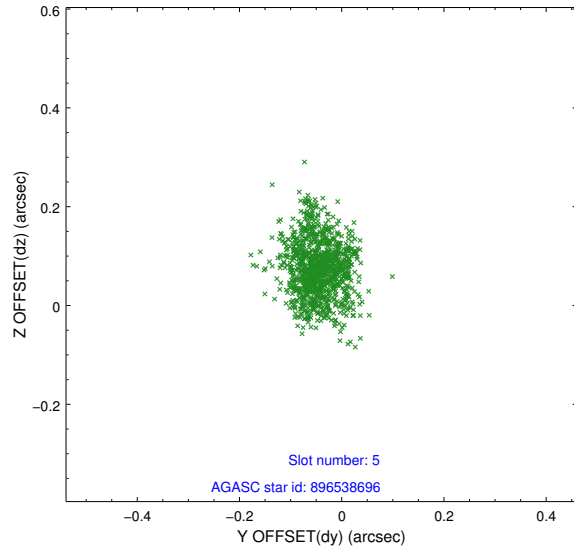
### 2.4.1 Slot 3



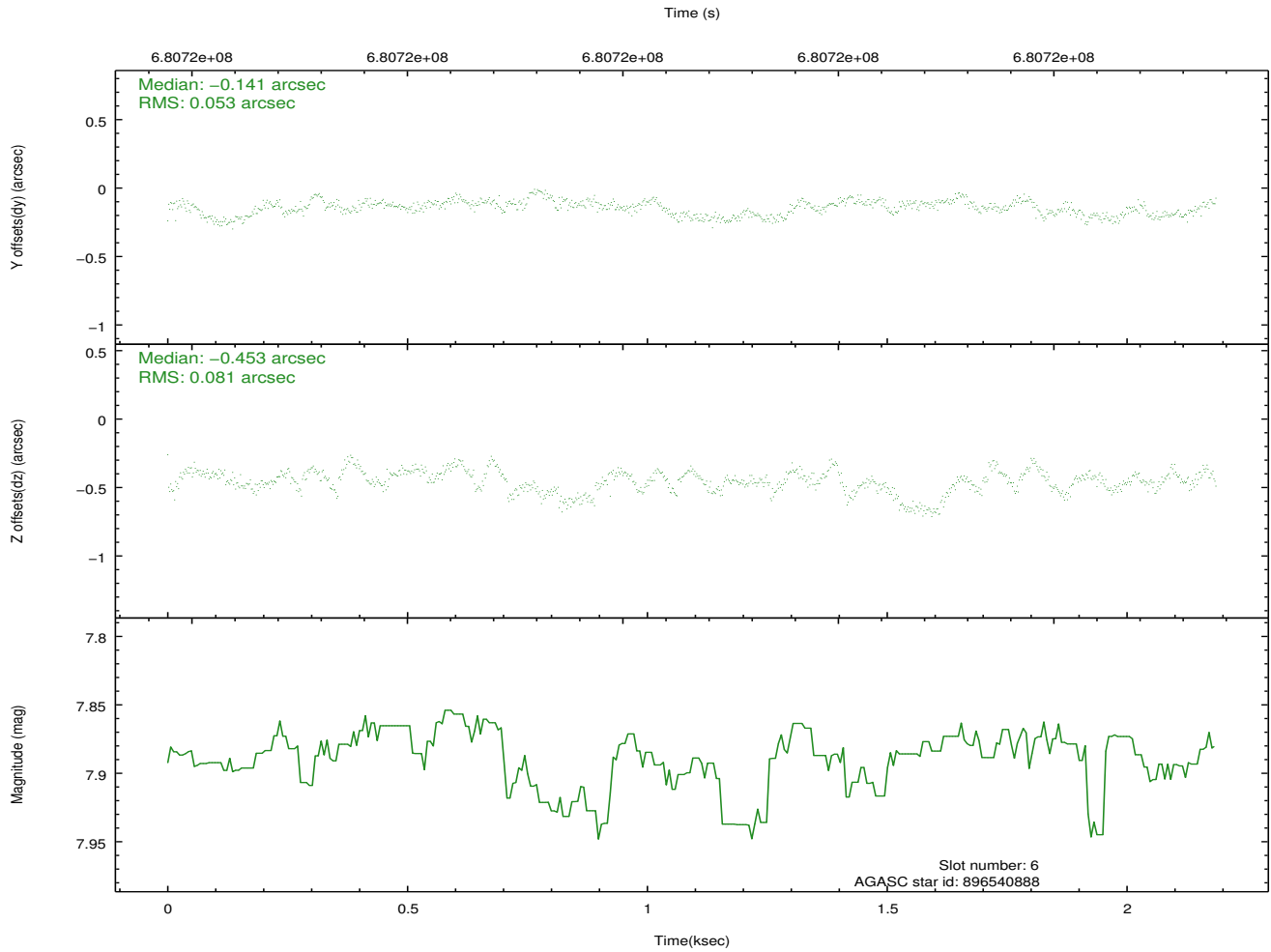
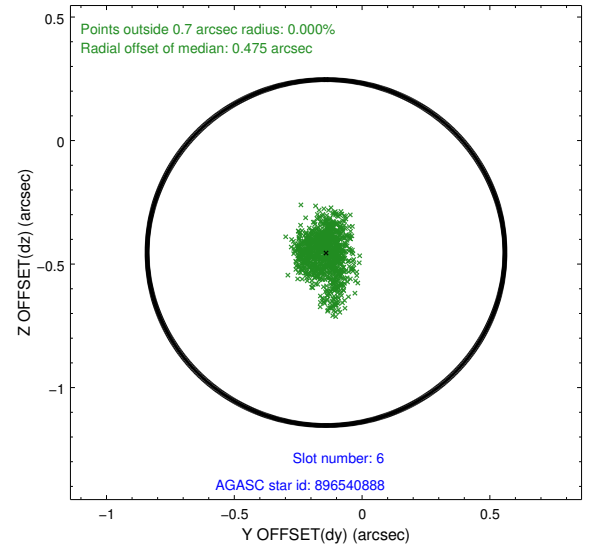
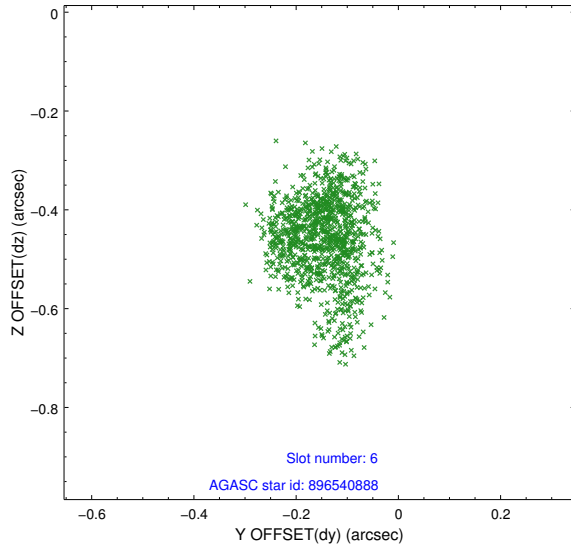
## 2.4.2 Slot 4



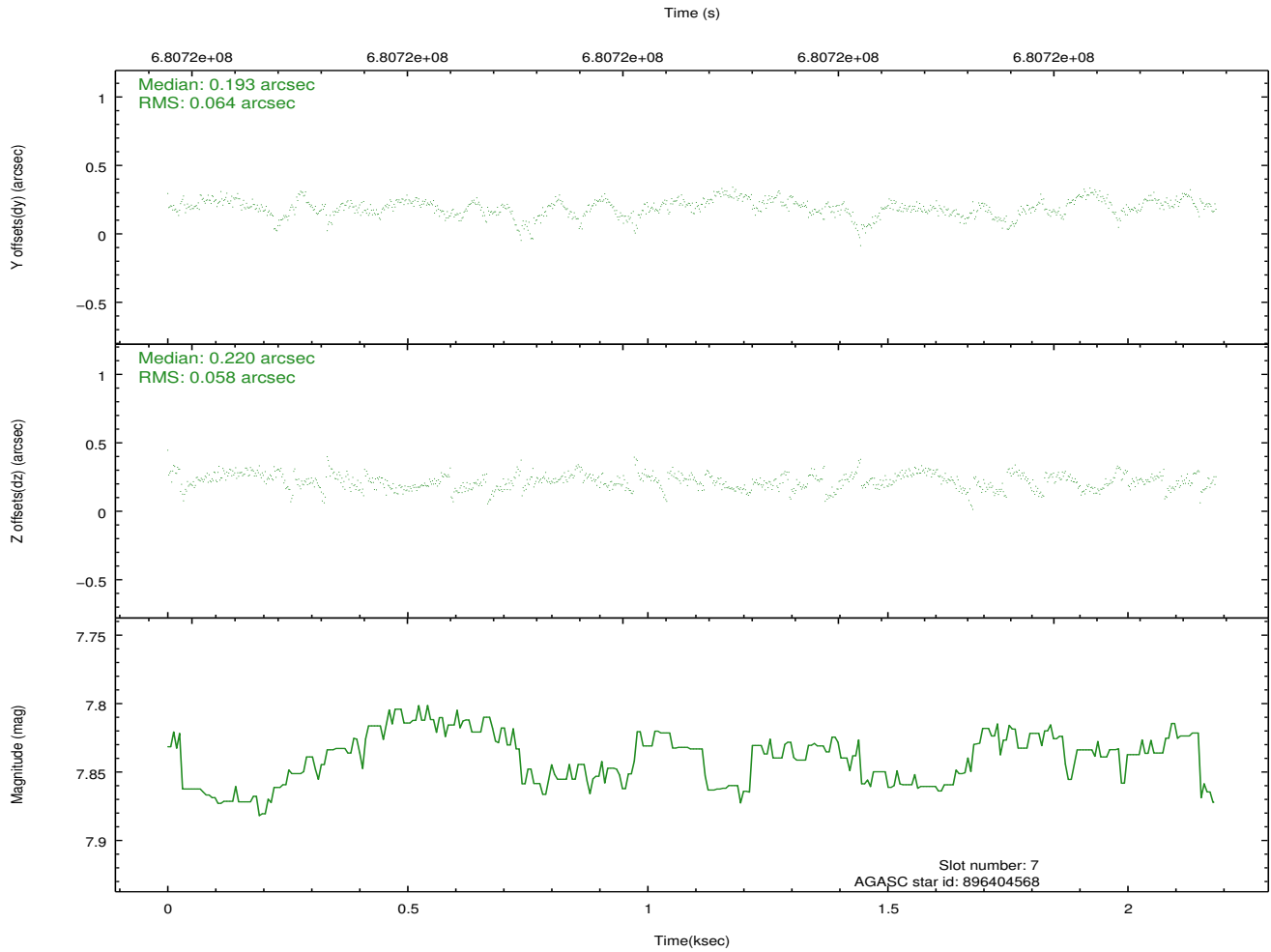
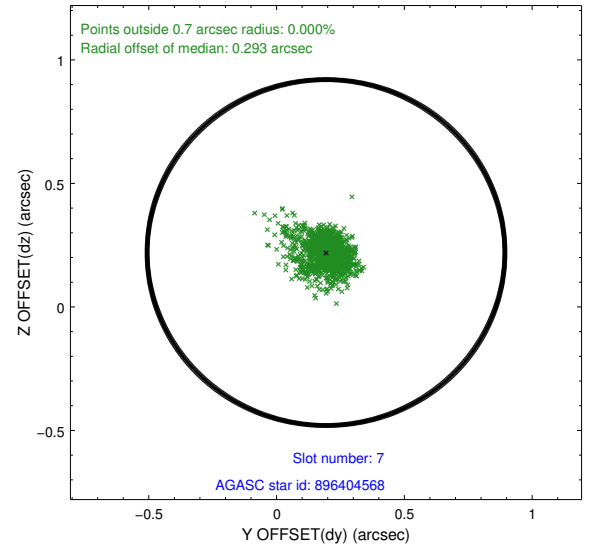
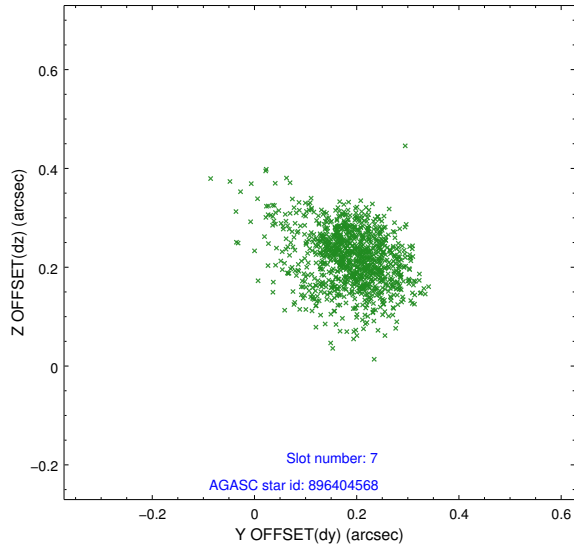
### 2.4.3 Slot 5



## 2.4.4 Slot 6

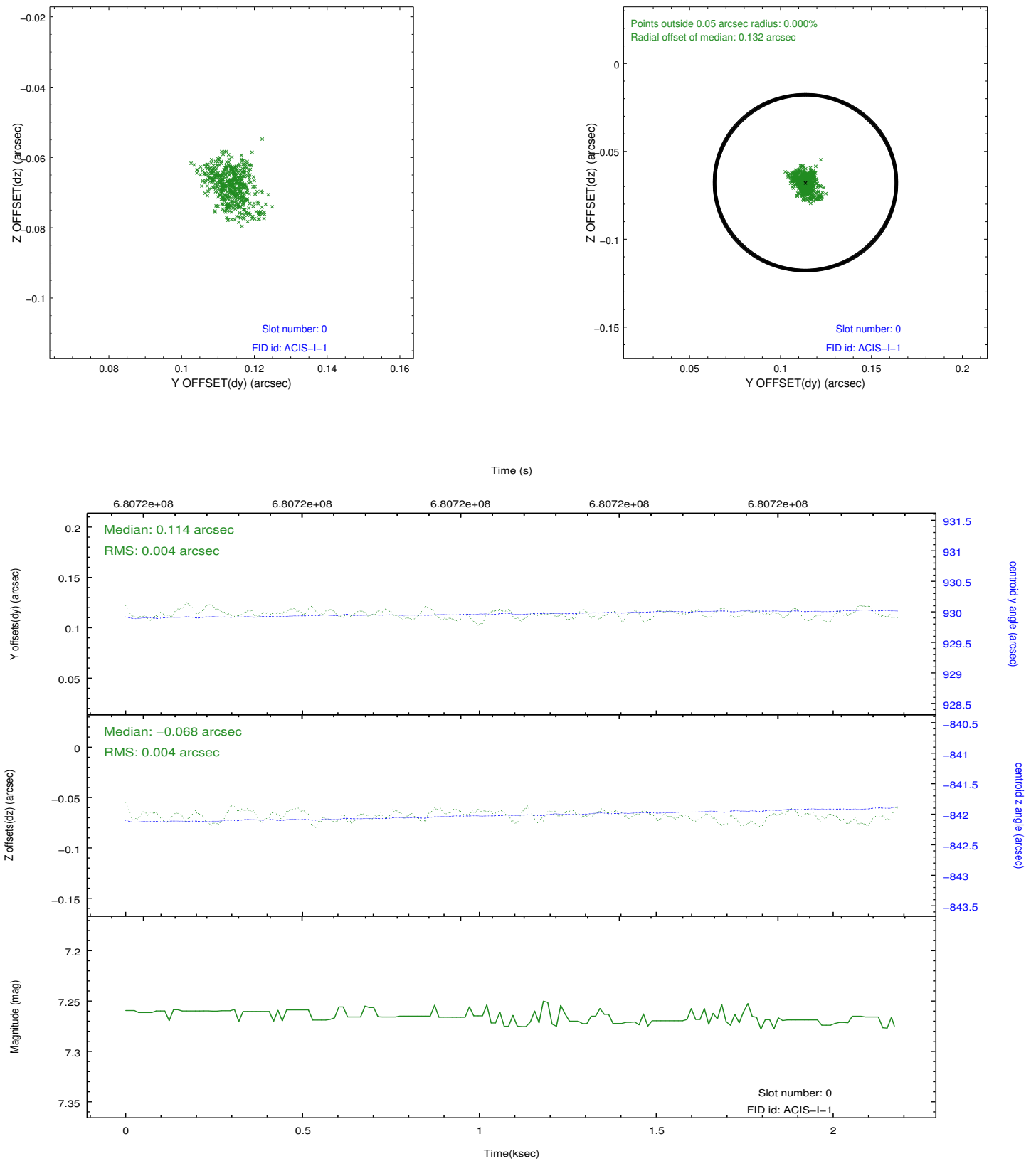


## 2.4.5 Slot 7

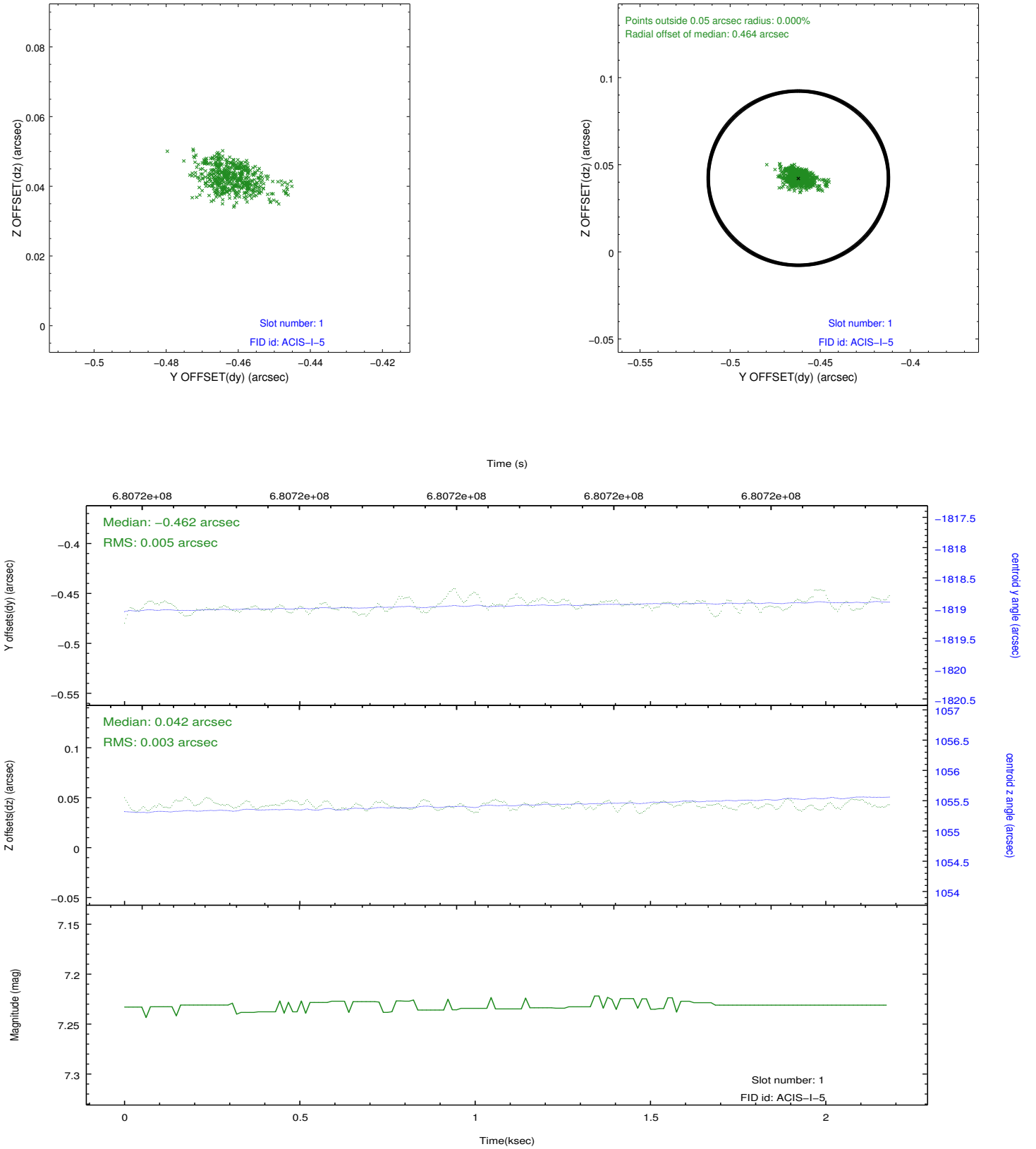


## 2.5 FID Slots

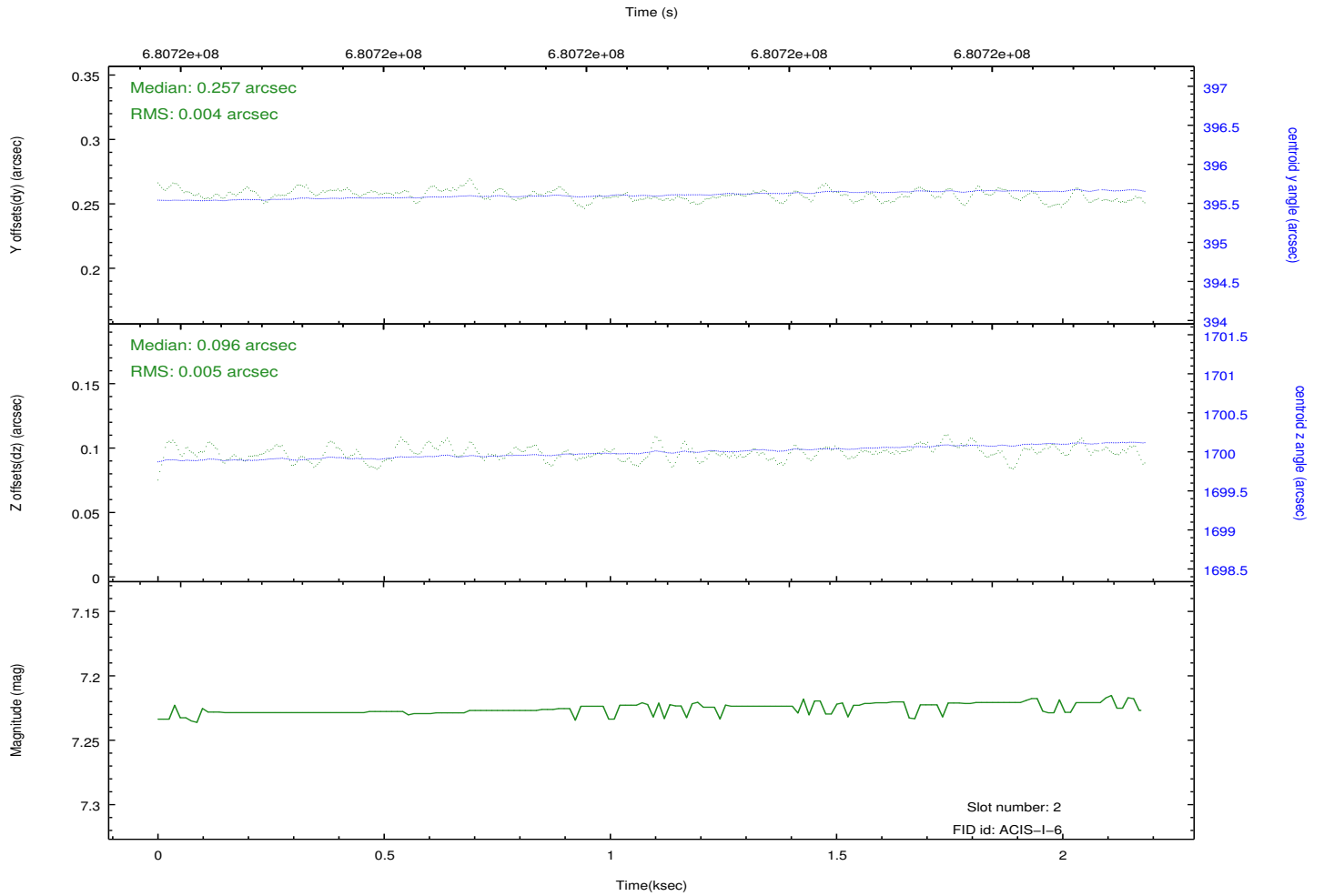
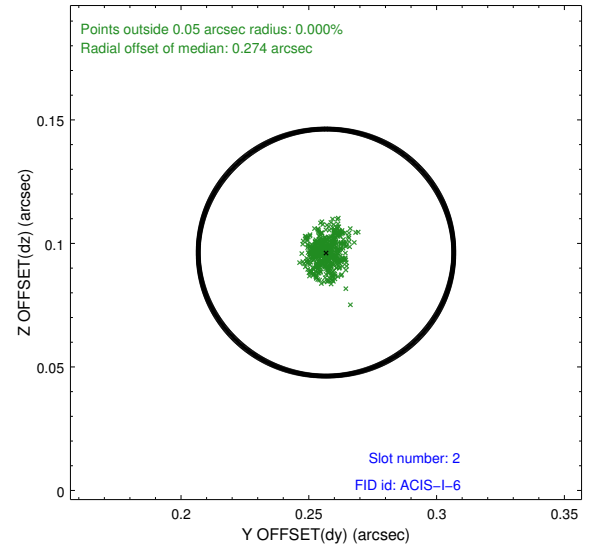
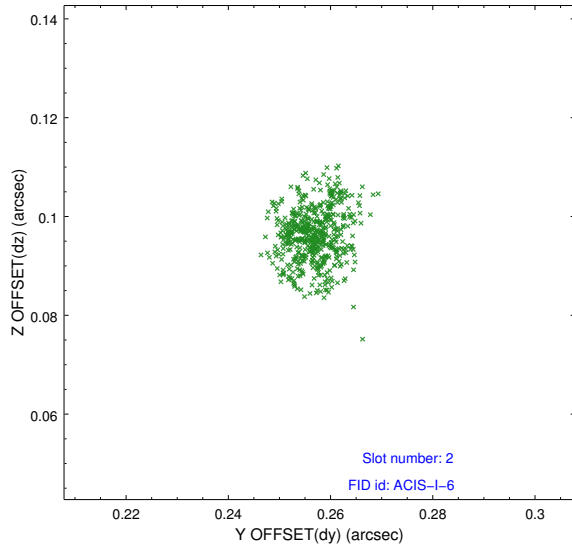
### 2.5.1 Slot 0



## 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)	2019.07.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9086516137123

### A.2 Comments