

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21526 - L2 Version 1  
Chandra X-Ray Center

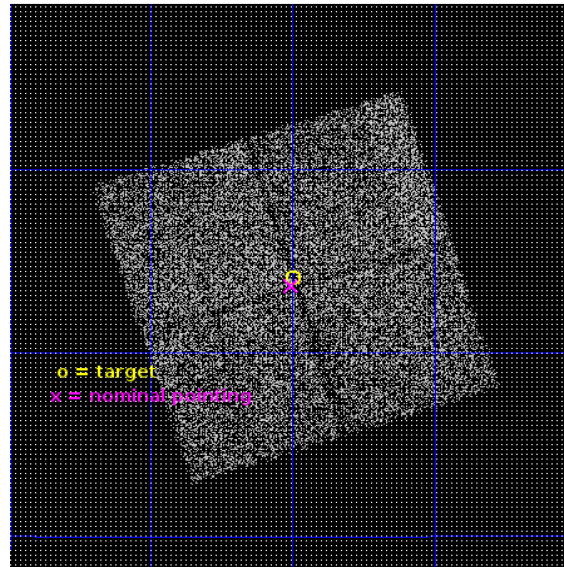
L2 Processing Date : Apr 10 2019

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# 1 Front

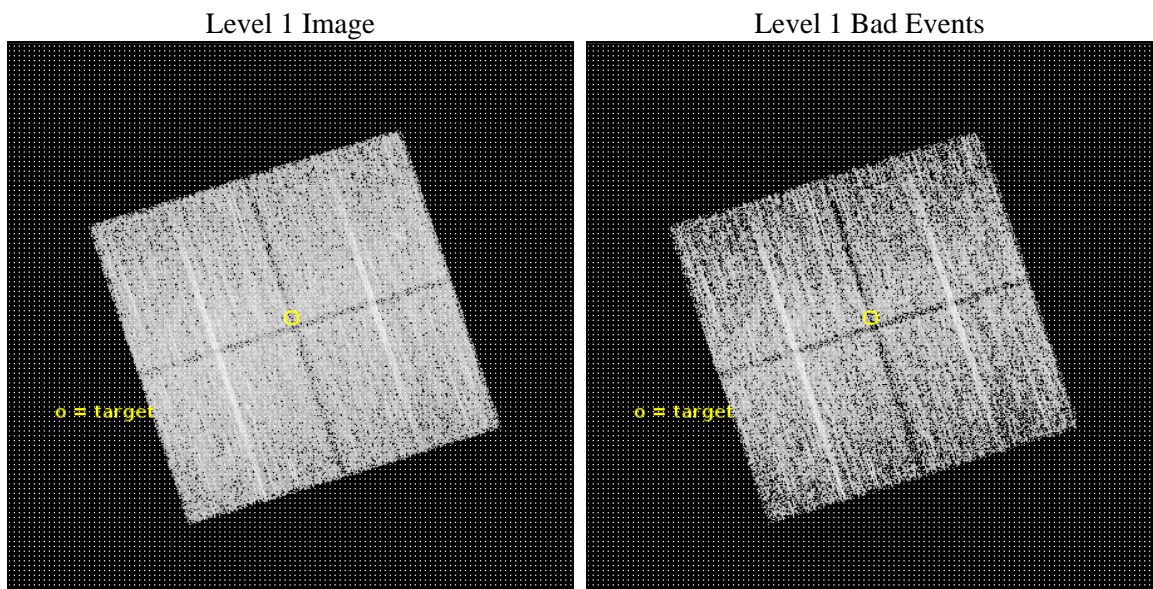
seq_num	703819	Sequence number
obs_id	21526	Observation id
title	Black Holes in Green Peas?	Proposal title
observer	Sangeeta Malhotra	Principal investigator
object	J101629.88+073404.9	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	154.124583	Observer's specified target RA [deg]
dec_targ	7.568028	Observer's specified target Dec [deg]
ra_nom	154.12586438564	Nominal RA [deg]
dec_nom	7.560781377737	Nominal Dec [deg]
roll_nom	252.04952735966	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10076.794721246	Sum of GTIs [s]
livetime	9945.1339797843	Livetime [s]
ontime0	10076.753681302	Sum of GTIs [s]
ontime1	10076.794721246	Sum of GTIs [s]
ontime2	10076.835761309	Sum of GTIs [s]
ontime3	10076.876801252	Sum of GTIs [s]
l2events	28666	Number of level 2 events



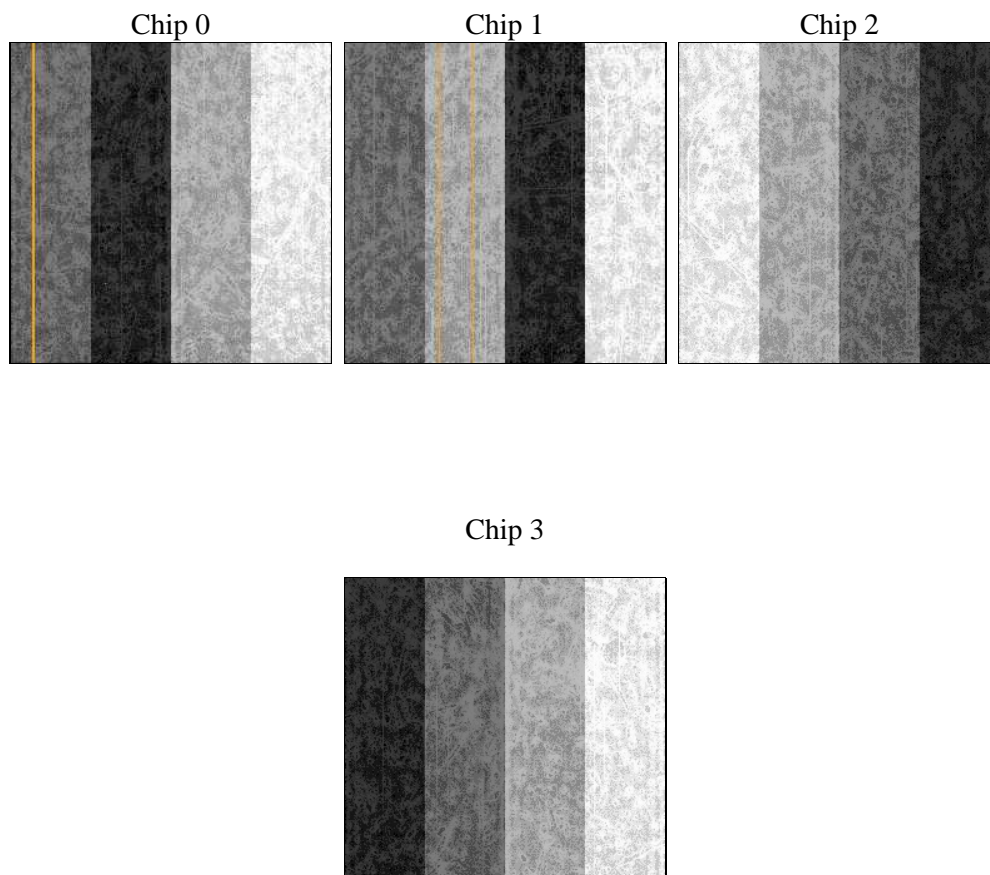
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	10076.794721246	Sum of GTIs [s]
caldsver	4.8.2	&#160	ontime0	10076.753681302	Sum of GTIs [s]
date	2019-04-10T05:35:46	Date and time of file creation	ontime1	10076.794721246	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10076.835761309	Sum of GTIs [s]
			ontime3	10076.876801252	Sum of GTIs [s]
			l1events	300673	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	71164	72228	78360	78921
rejected events	62666	62844	70269	70779
rejected %	88%	87%	89%	89%

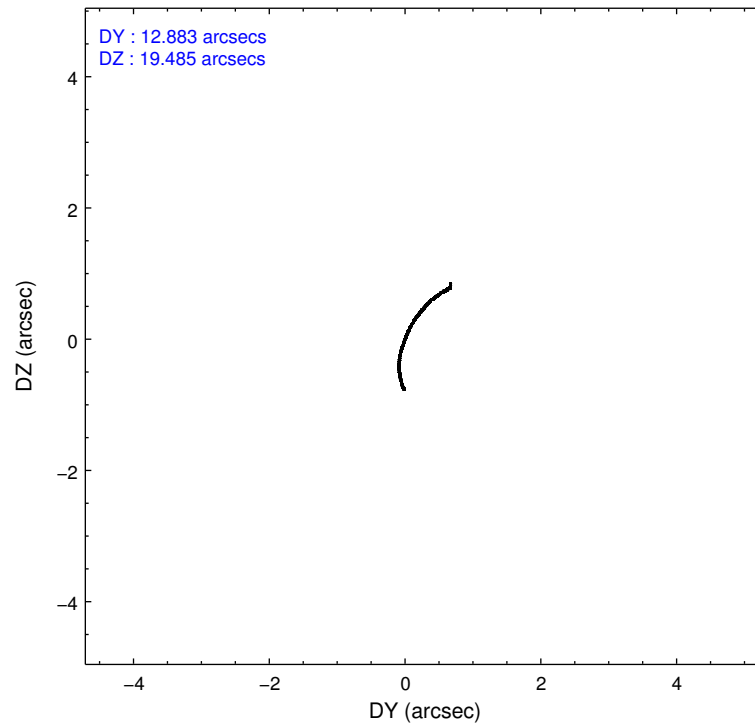
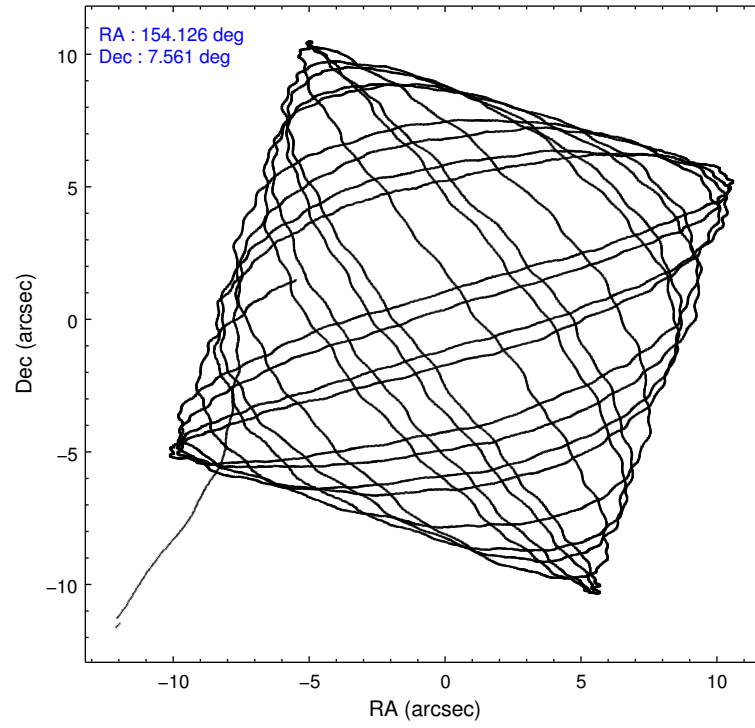
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2820	3022	2932	2982
	3%	4%	3%	3%
grade 1 events	43	34	41	46
	0%	0%	0%	0%
grade 2 events	2185	2498	1916	1738
	3%	3%	2%	2%
grade 3 events	867	825	836	824
	1%	1%	1%	1%
grade 4 events	787	879	829	829
	1%	1%	1%	1%
grade 5 events	3394	3289	3095	3750
	4%	4%	3%	4%
grade 6 events	1845	2164	1586	1771
	2%	2%	2%	2%
grade 7 events	59223	59517	67125	66981
	83%	82%	85%	84%

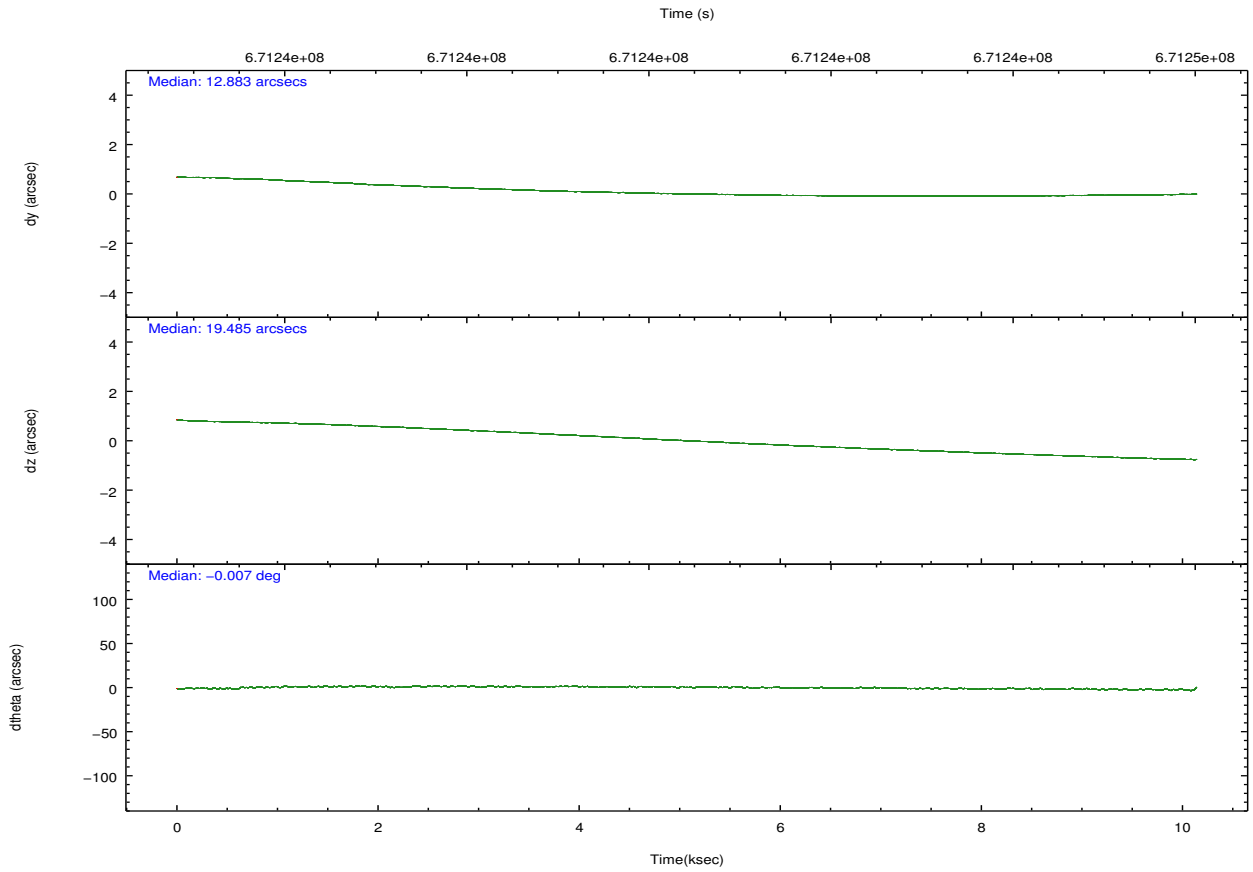
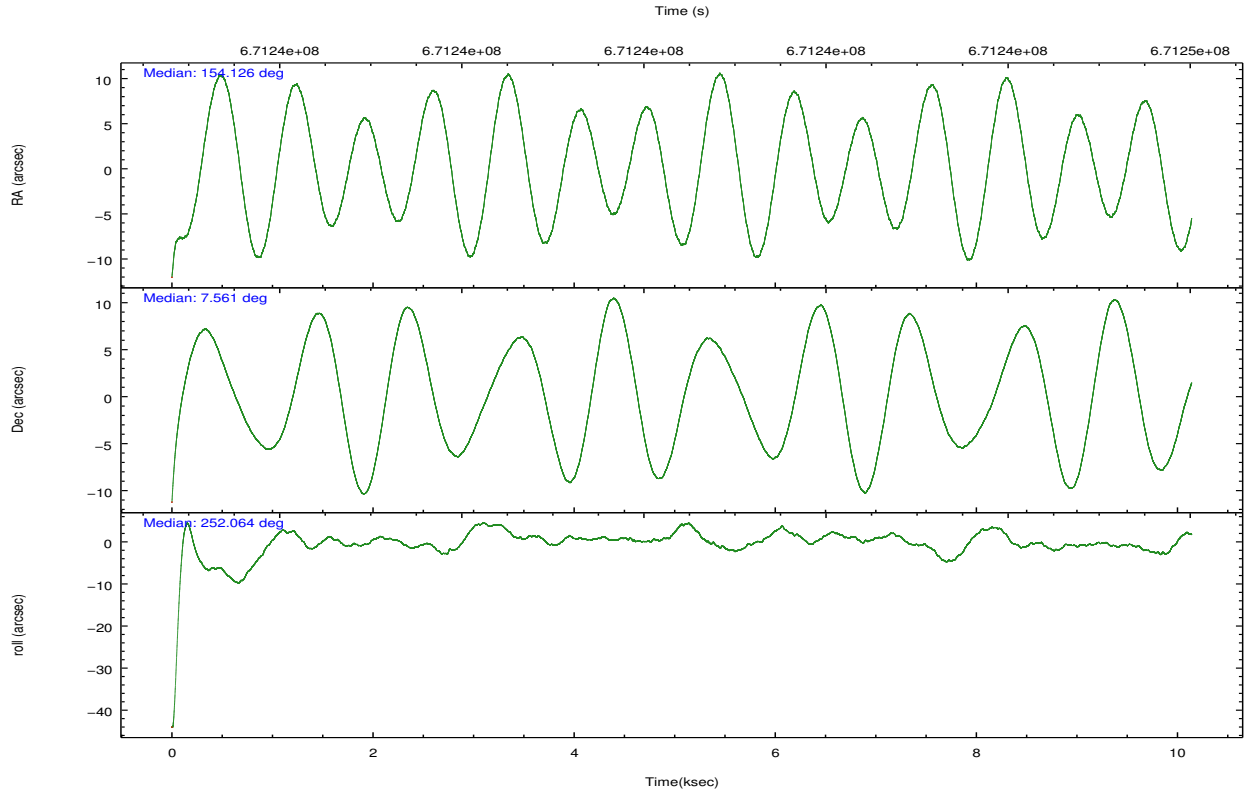


## 2.2 Compared Parameters

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	154.119998	154.1258643856401	Subarray requested	NONE	NONE
[deg] Pointing Dec	7.587763	7.560781377736982	Alternating exposures requested	N	N
[deg] Pointing Roll	251.841678	252.0495273596555	[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	-235.192463	-235.1965962538271			
[mm] SIM translation stage offset	1.6	1.604143250897408			
[s] Observation start time (MET)	671235489.184000	671234222.9228899			
Observation start date	2019-04-09T22:17:00	2019-04-09T21:57:02			
[s] Observation end time (MET)	671245489.184000	671246138.03611			
Observation end date	2019-04-10T01:03:40	2019-04-10T01:15:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect



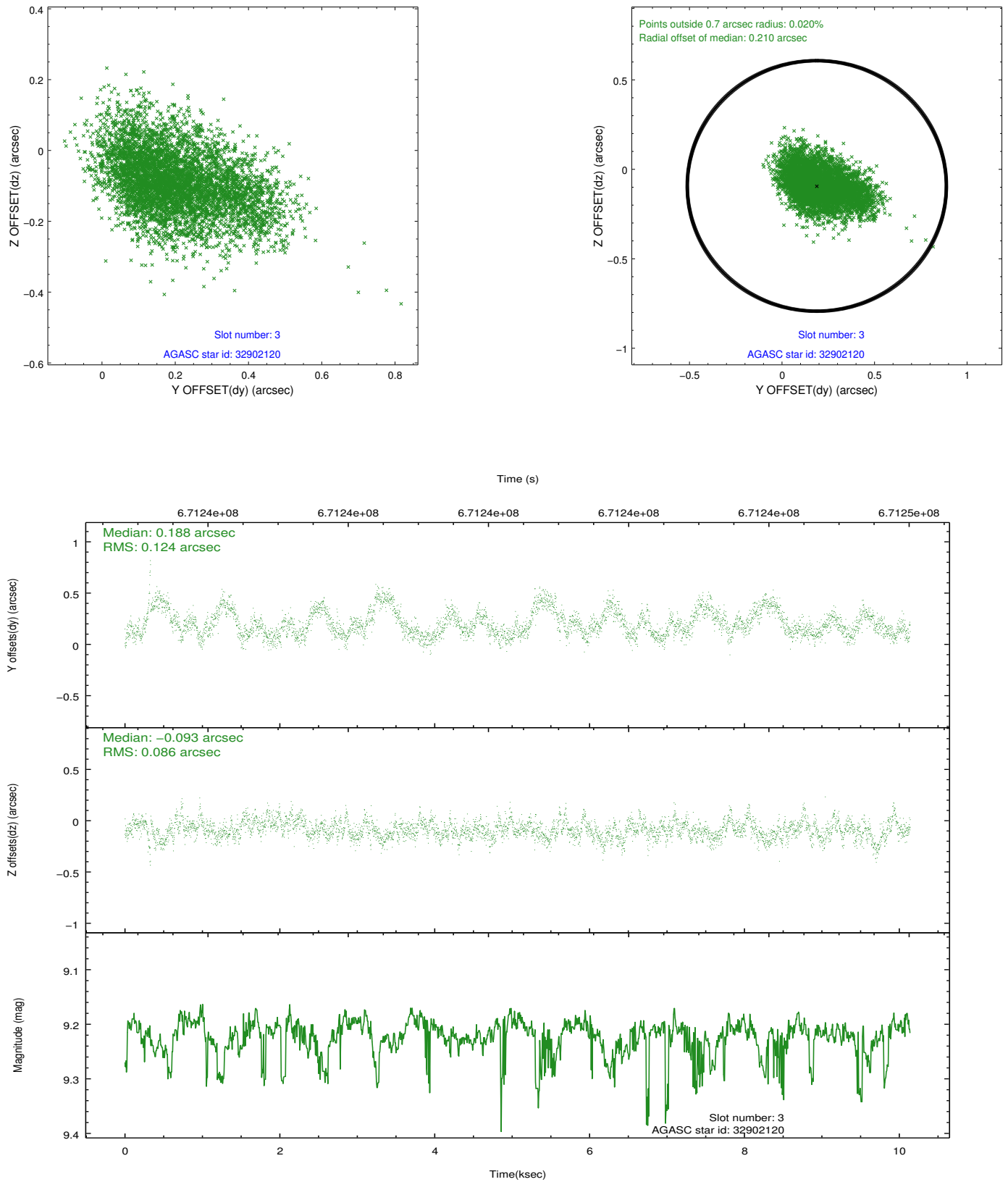


Slot Statistics

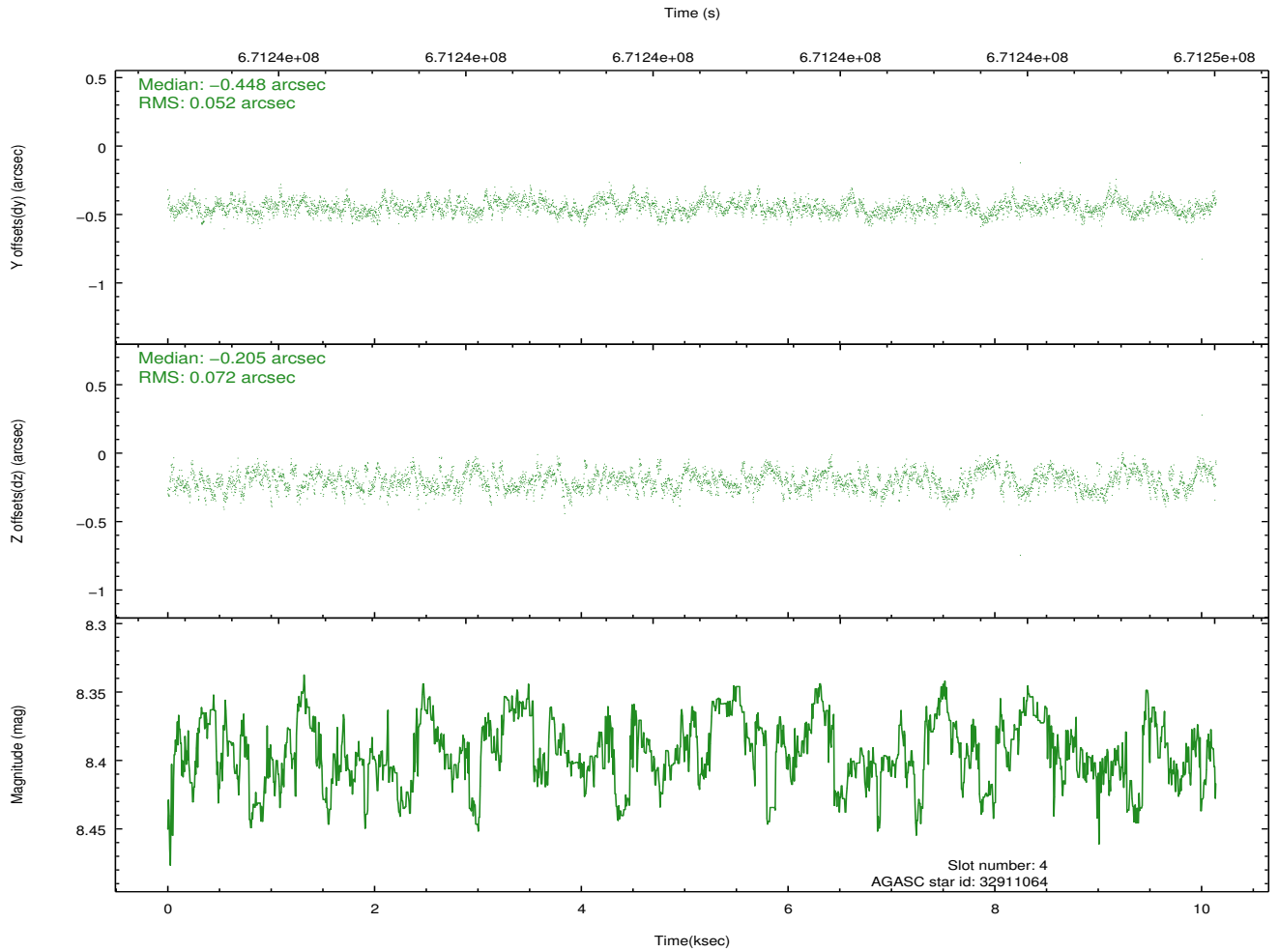
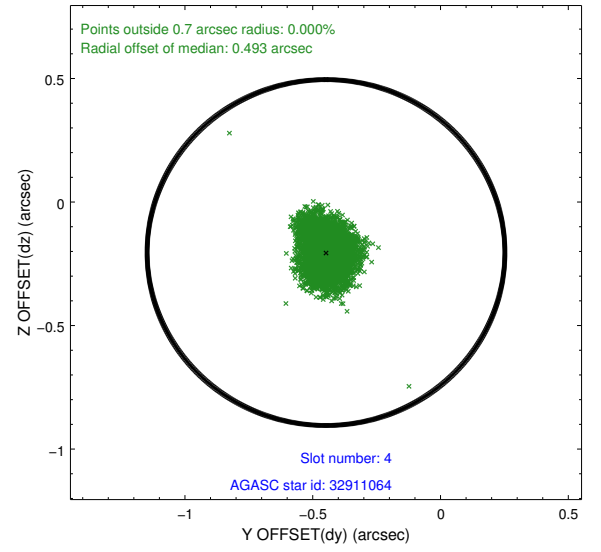
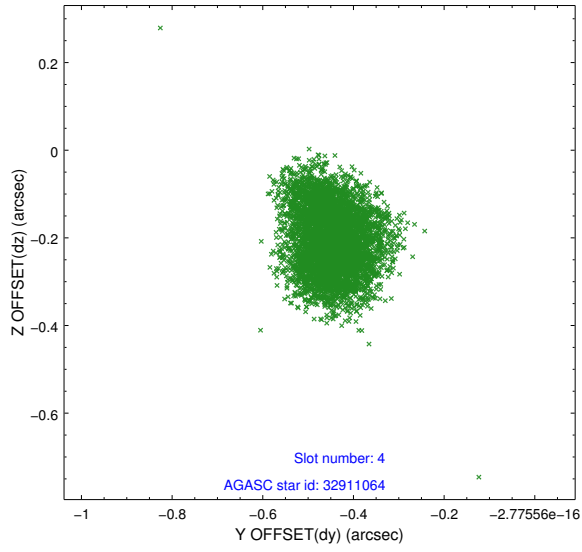
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.25	2474	1.000	0.108	-0.124	0.013	0.026	0.000000	0.000000	926.71	-810
1	FID		ACIS-I-5	7.24	2474	1.000	-0.459	0.023	0.011	0.018	0.000000	0.000000	-1821.83	1086
2	FID		ACIS-I-6	7.22	2474	1.000	0.260	0.174	0.015	0.032	0.000000	0.000000	391.63	1732
3	GUIDE	used	32902120	9.22	4946	1.000	0.188	-0.093	0.157	0.271	154.050587	7.136727	1620.32	268
4	GUIDE	used	32911064	8.40	4946	1.000	-0.448	-0.205	0.096	0.149	154.653928	7.283766	445.09	2151
5	GUIDE	used	109713256	8.63	4942	1.000	0.262	0.339	0.206	0.280	154.231629	8.245181	-2372.31	-358
6	GUIDE	used	109716568	8.35	4947	1.000	-0.115	-0.057	0.125	0.203	154.447325	7.513481	-110.84	1192
7	GUIDE	used	109717176	9.62	4937	1.000	0.093	0.004	0.169	0.268	154.403422	7.591776	-328.95	956

## 2.4 Star Slots

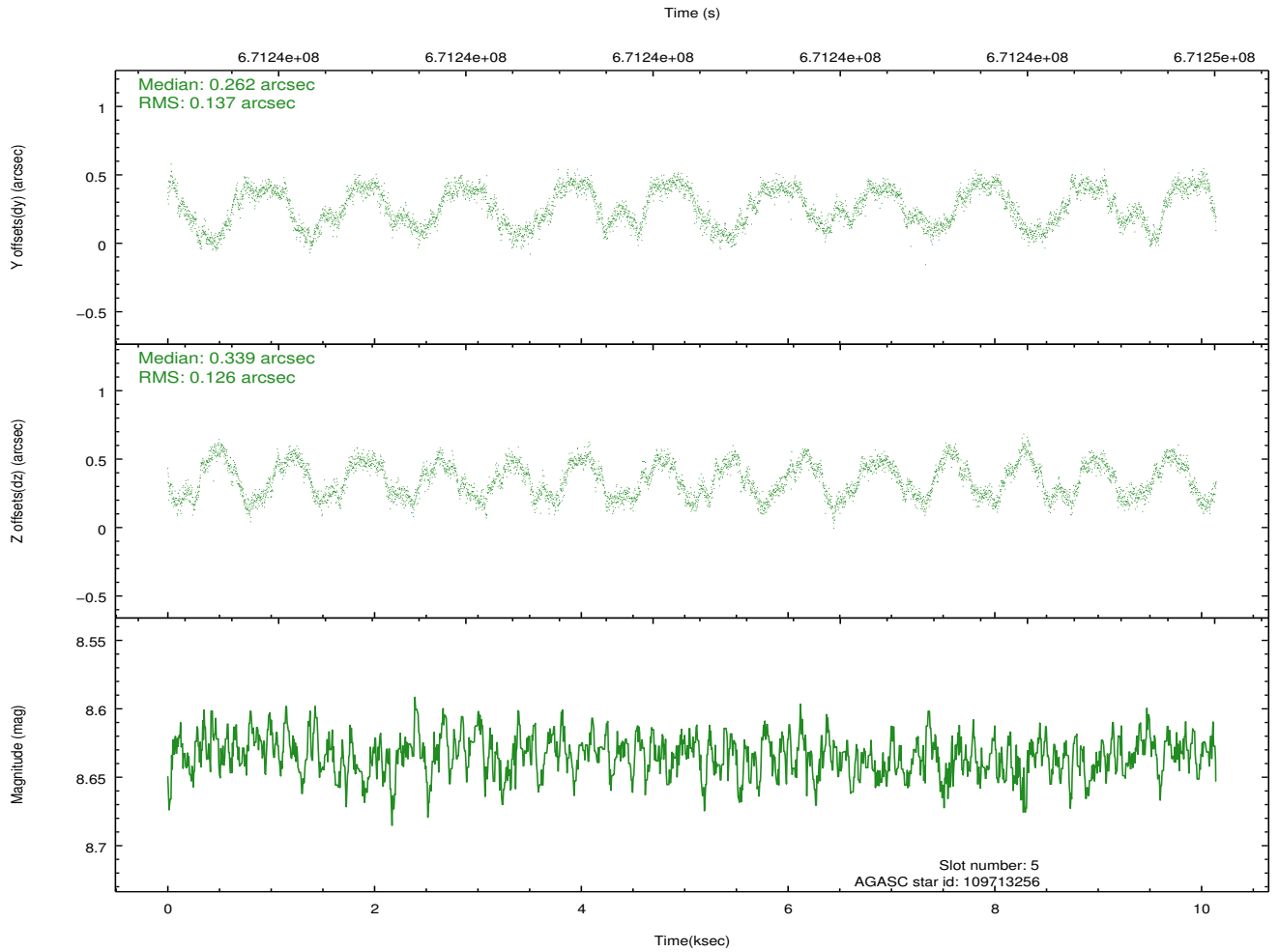
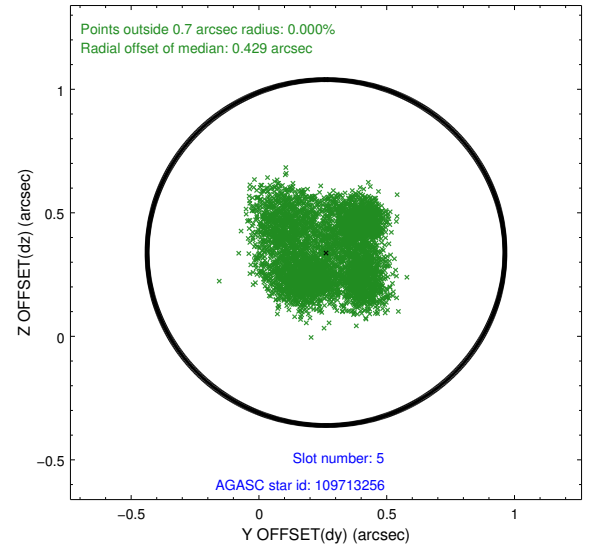
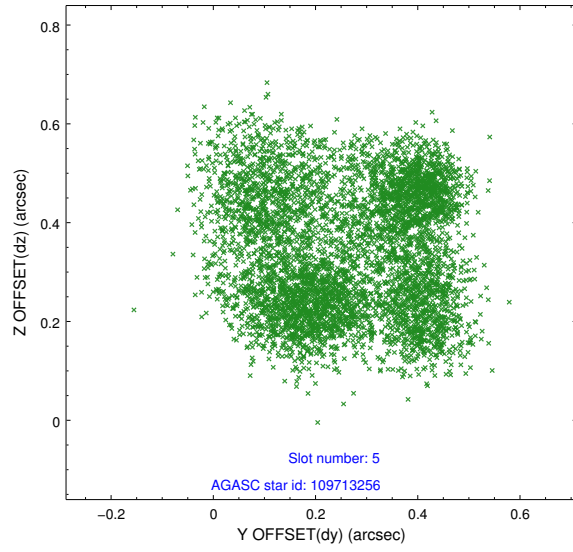
### 2.4.1 Slot 3



## 2.4.2 Slot 4

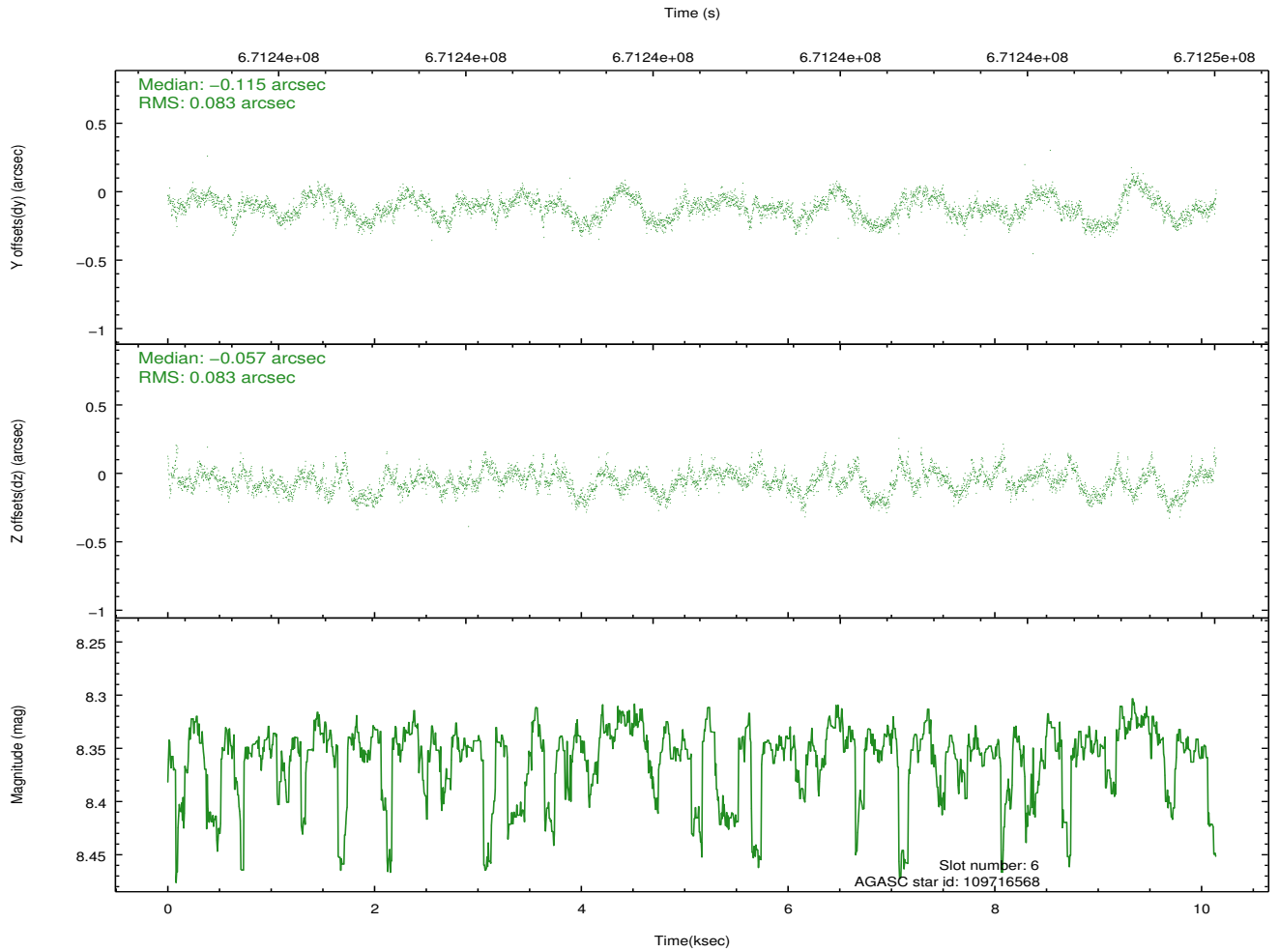
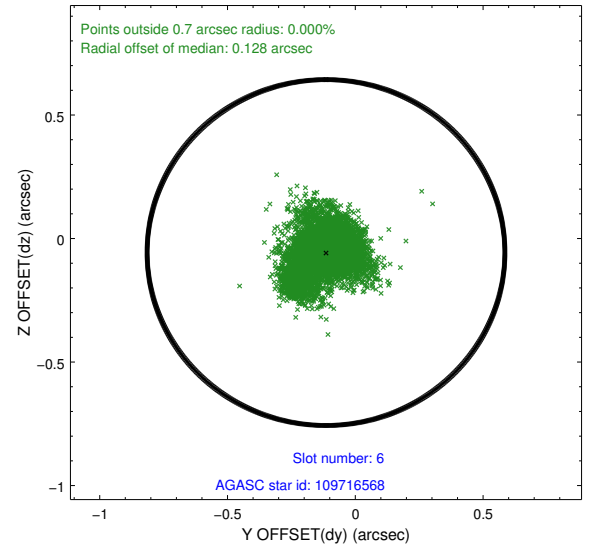
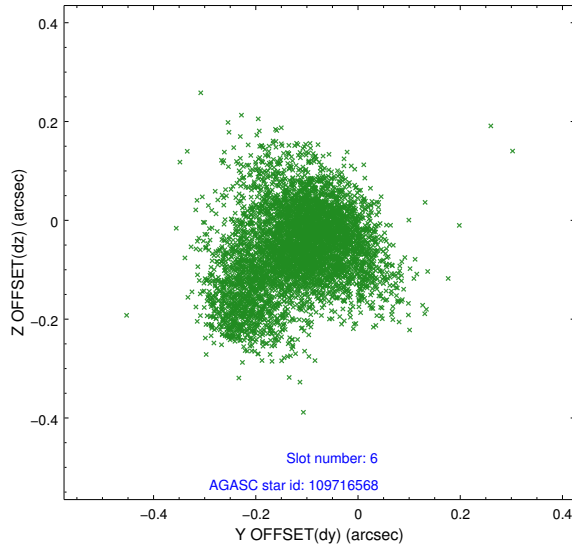


### 2.4.3 Slot 5

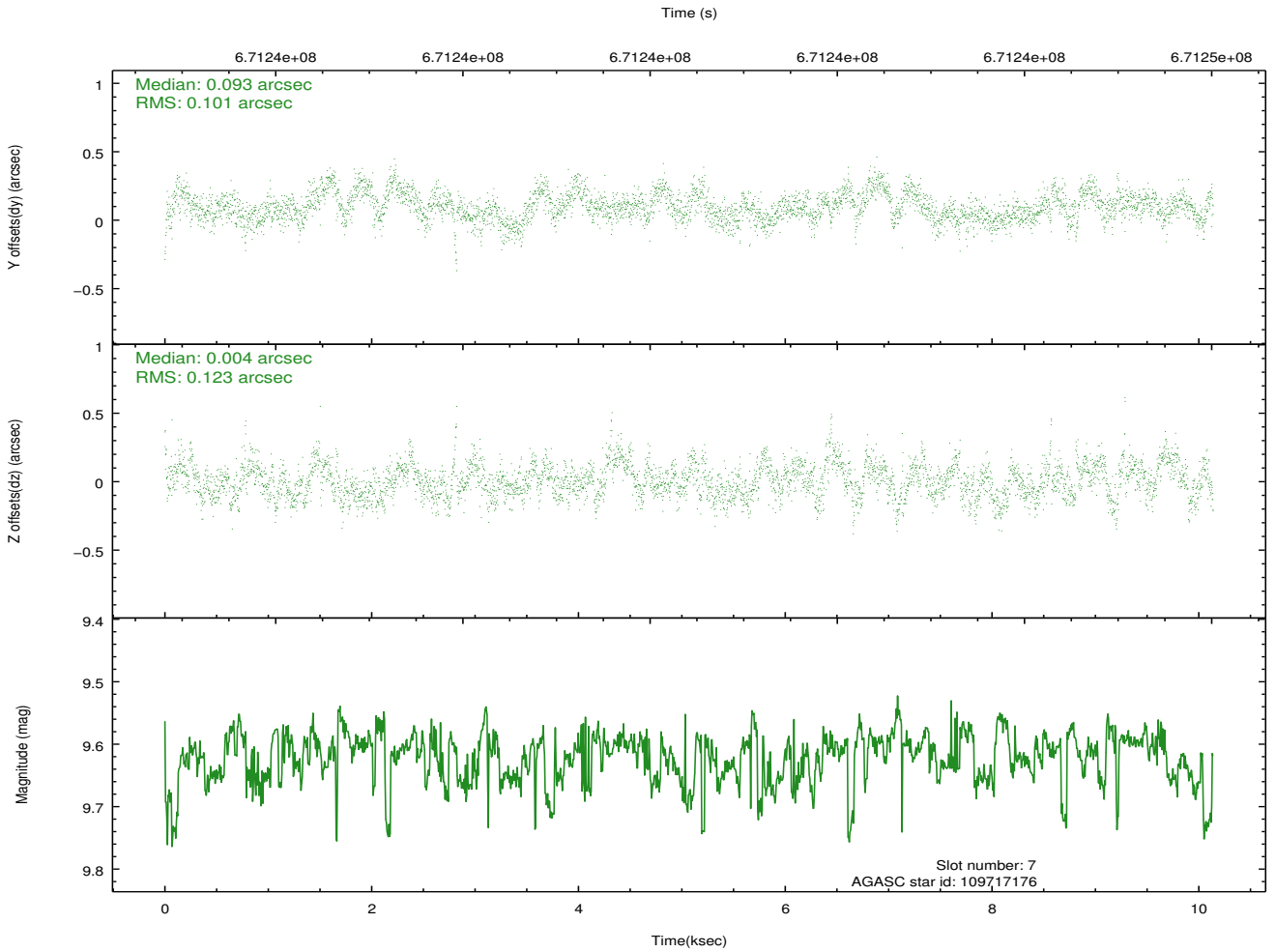
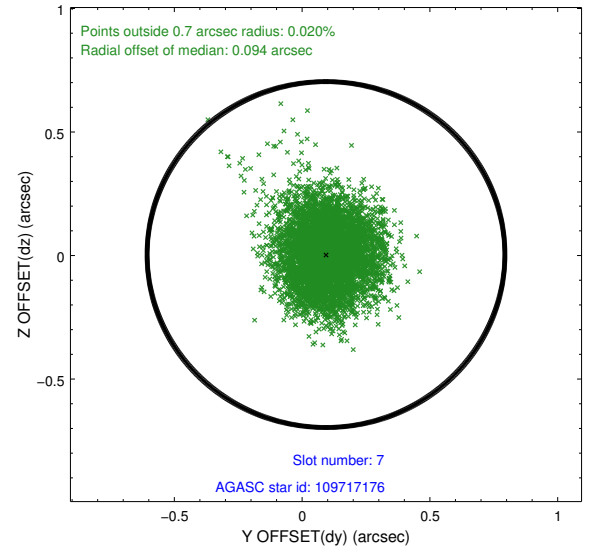
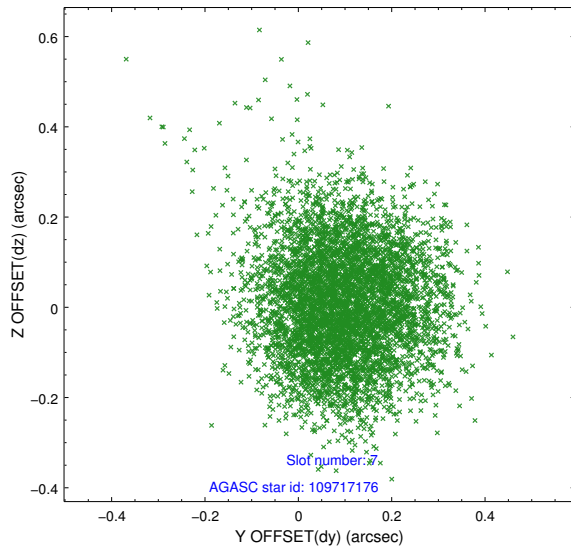




## 2.4.4 Slot 6

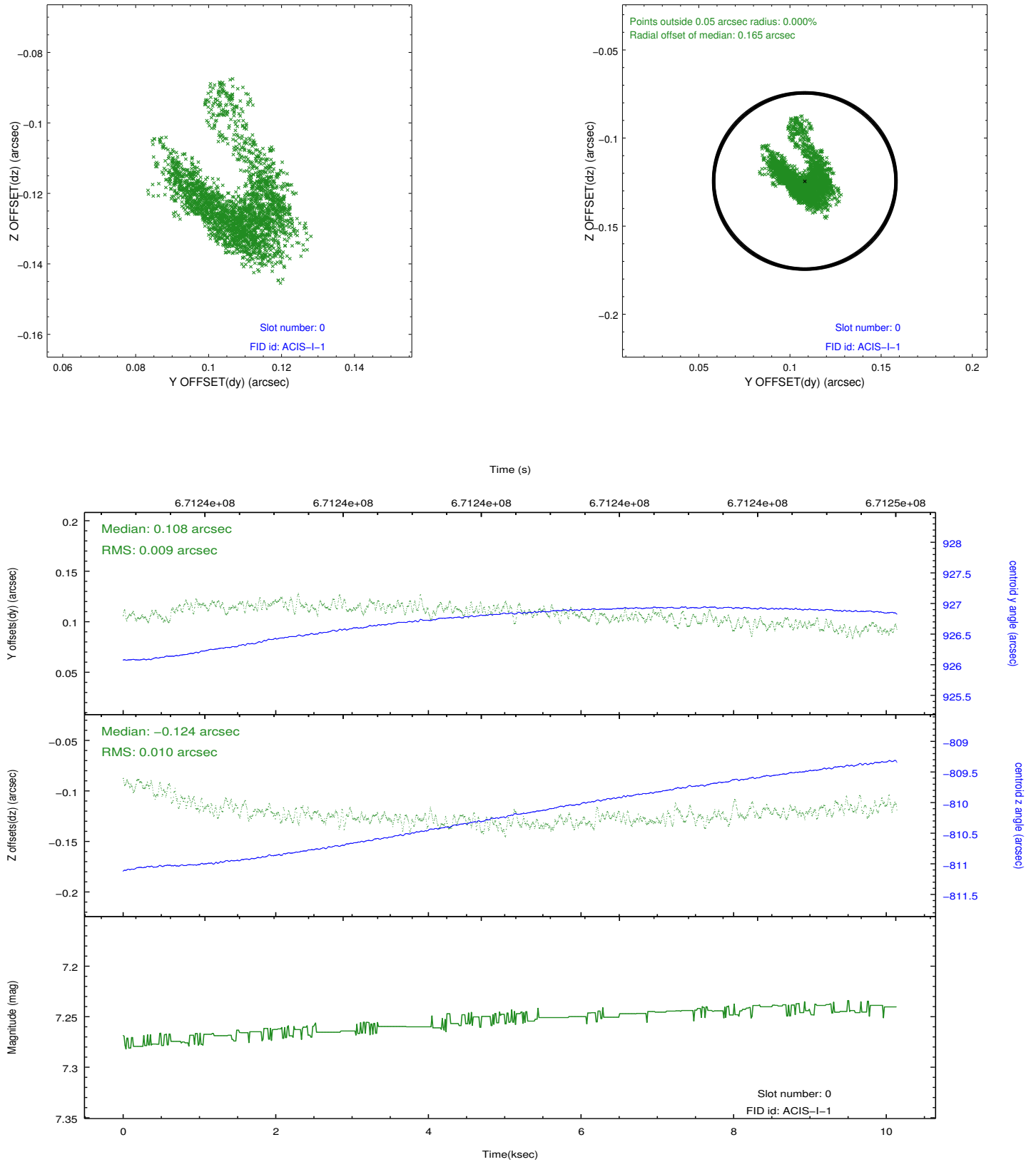


## 2.4.5 Slot 7

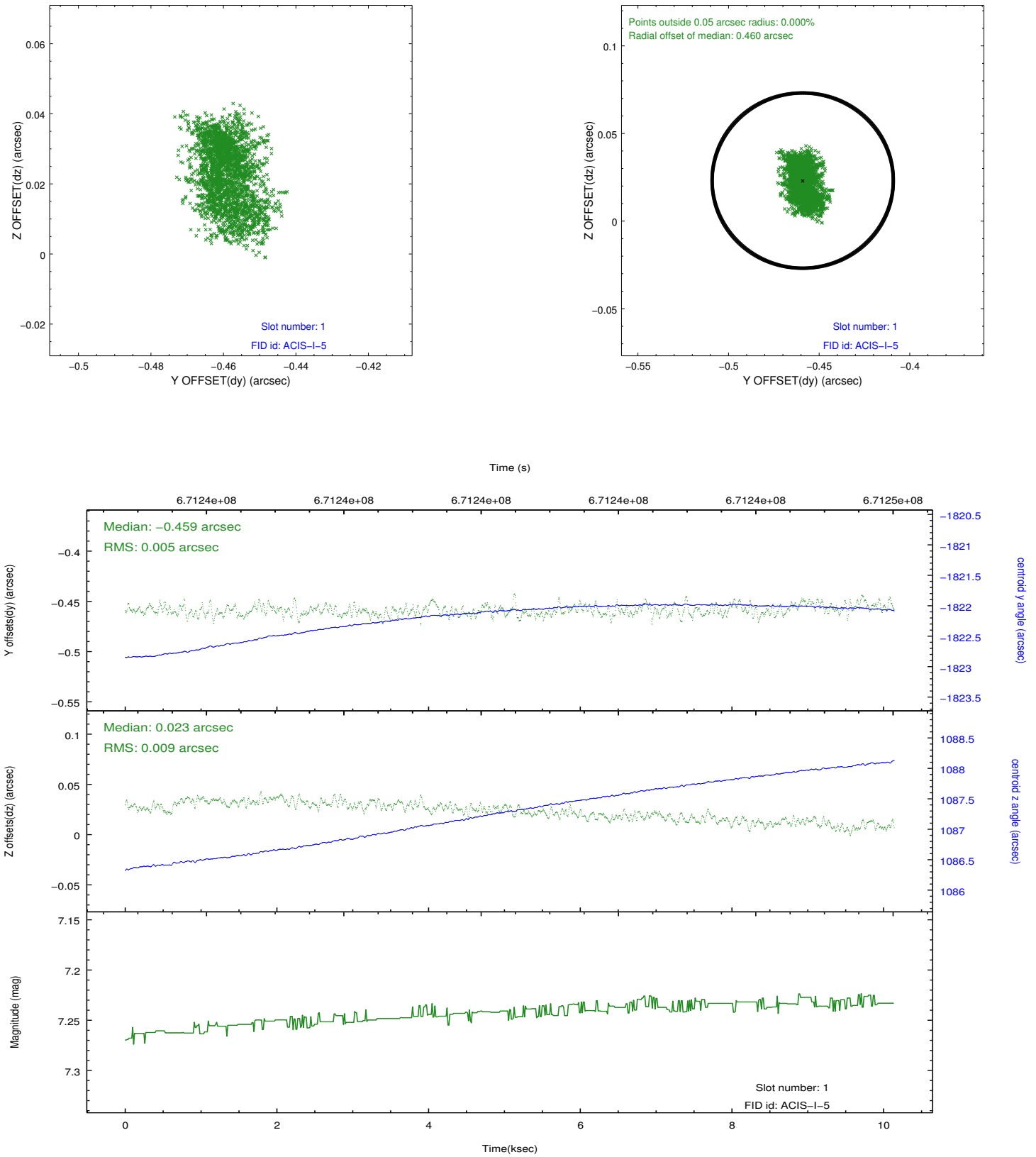


## 2.5 FID Slots

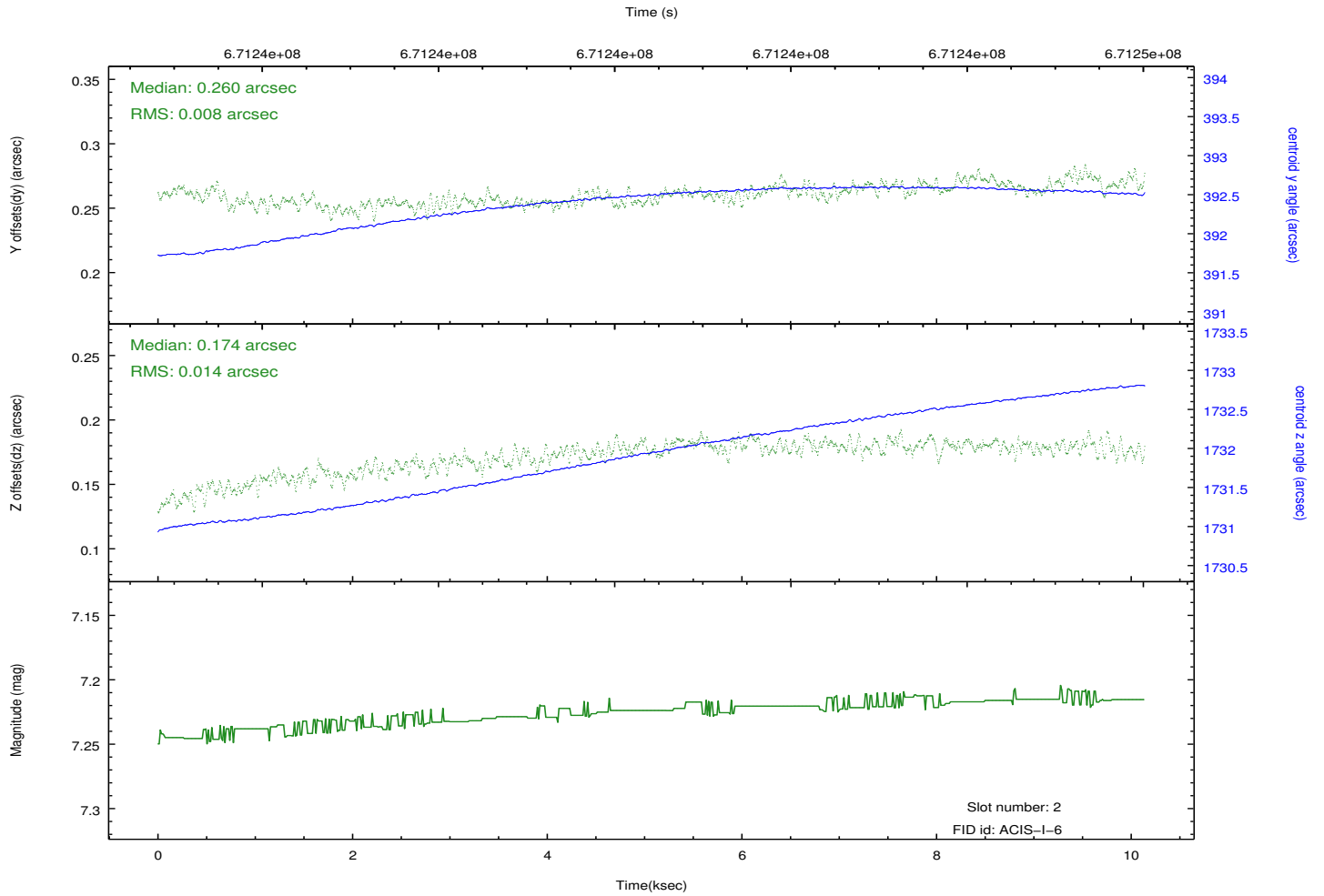
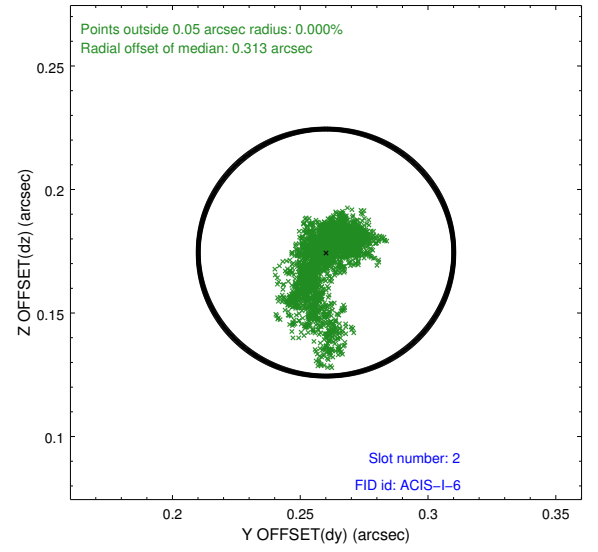
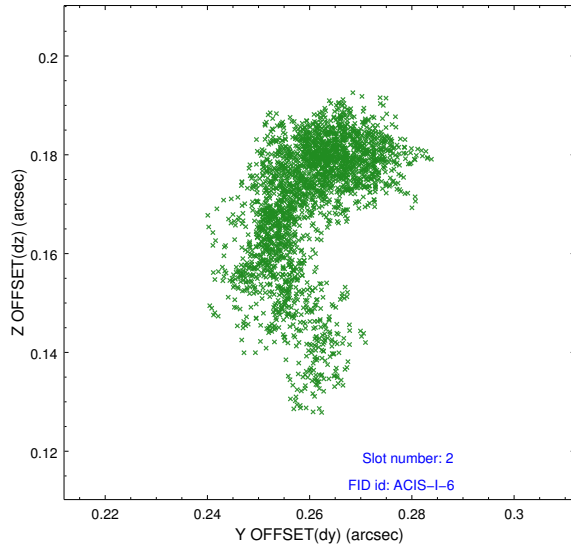
### 2.5.1 Slot 0



## 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)	2019.04.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.076794721246

### A.2 Comments