

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18312 - L2 Version 1  
Chandra X-Ray Center

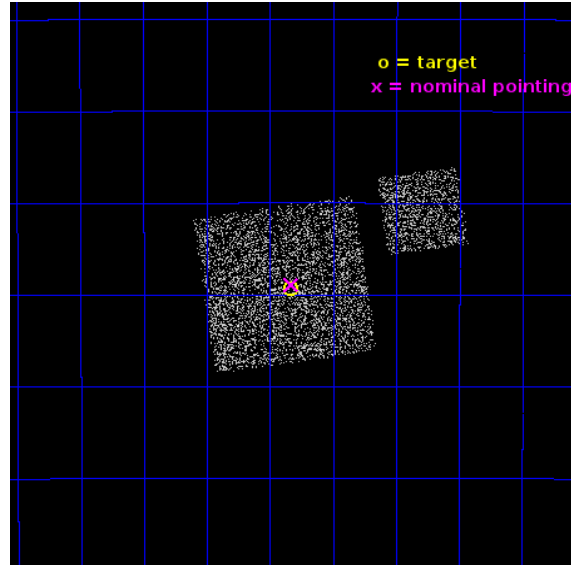
L2 Processing Date : May 11 2016

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# 1 Front

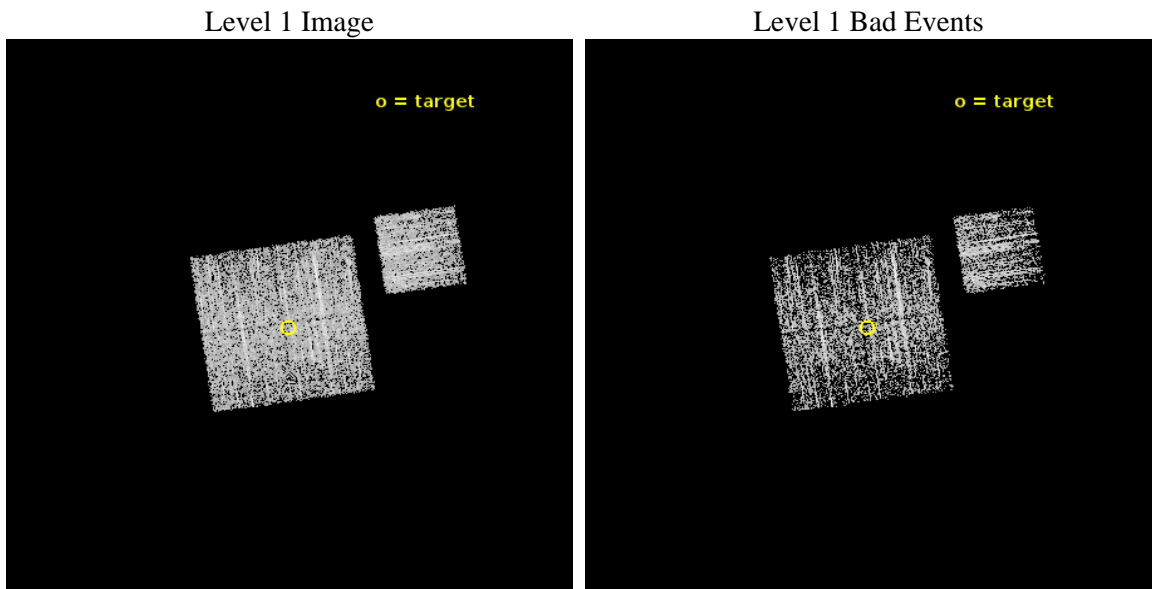
seq_num	300343	Sequence number
obs_id	18312	Observation id
title	X-raying the Galactic center/bulge interface	Proposal title
observer	Q. Daniel Wang	Principal investigator
object	GC-GB interface	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.5844	Observer's specified target RA [deg]
dec_targ	-28.155892	Observer's specified target Dec [deg]
ra_nom	265.58248496269	Nominal RA [deg]
dec_nom	-28.148768087081	Nominal Dec [deg]
roll_nom	81.652280709934	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1955.7596489191	Sum of GTIs [s]
livetime	1930.2062092967	Livetime [s]
ontime0	1955.6365289688	Sum of GTIs [s]
ontime1	1955.6775689125	Sum of GTIs [s]
ontime2	1955.7185989618	Sum of GTIs [s]
ontime3	1955.7596489191	Sum of GTIs [s]
ontime6	1955.5954889059	Sum of GTIs [s]
l2events	6925	Number of level 2 events



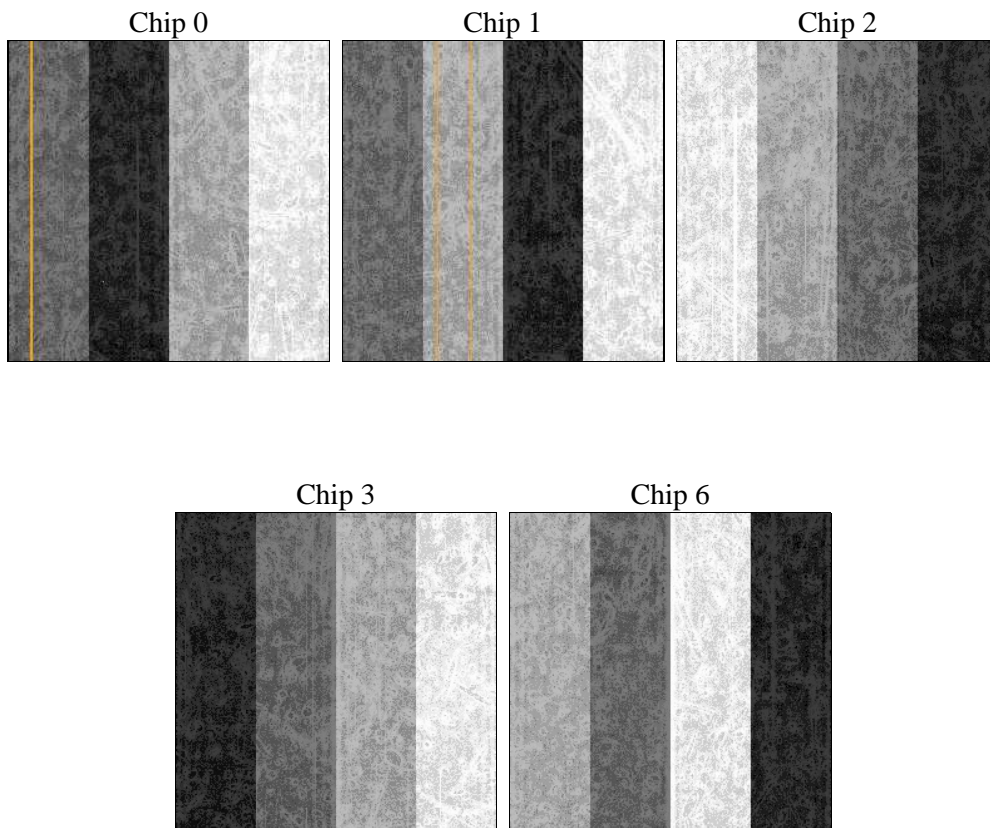
## 2 OBI

### 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	1955.7596489191	Sum of GTIs [s]
caldsver	4.7.1	&#160	ontime0	1955.6365289688	Sum of GTIs [s]
date	2016-05-11T15:41:24	Date and time of file creation	ontime1	1955.6775689125	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1955.7185989618	Sum of GTIs [s]
			ontime3	1955.7596489191	Sum of GTIs [s]
			ontime6	1955.5954889059	Sum of GTIs [s]
			l1events	62392	Number of level 1 events

### 2.1.4 Events

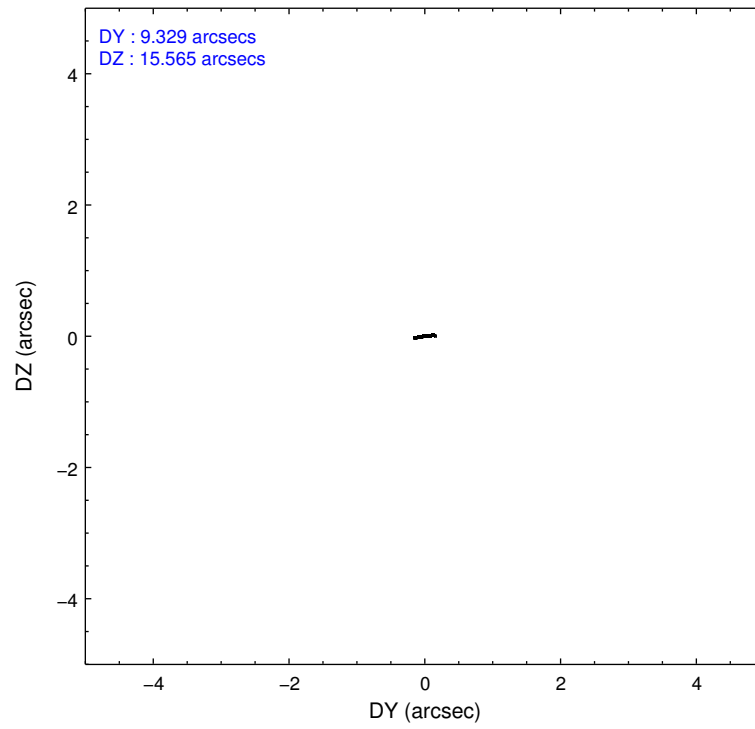
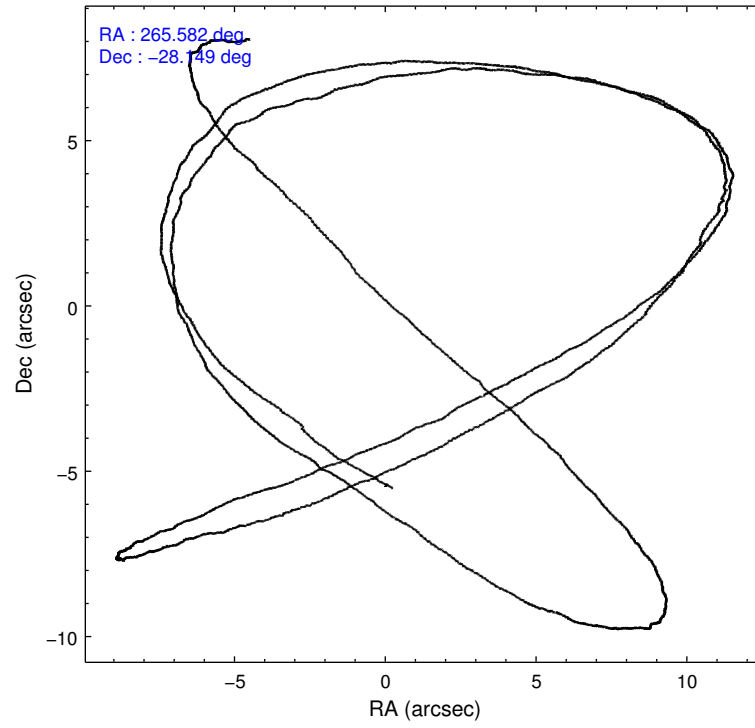
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	11895	11489	13174	11932	13902
rejected events	10268	9635	11622	10393	12370
rejected %	86%	83%	88%	87%	88%

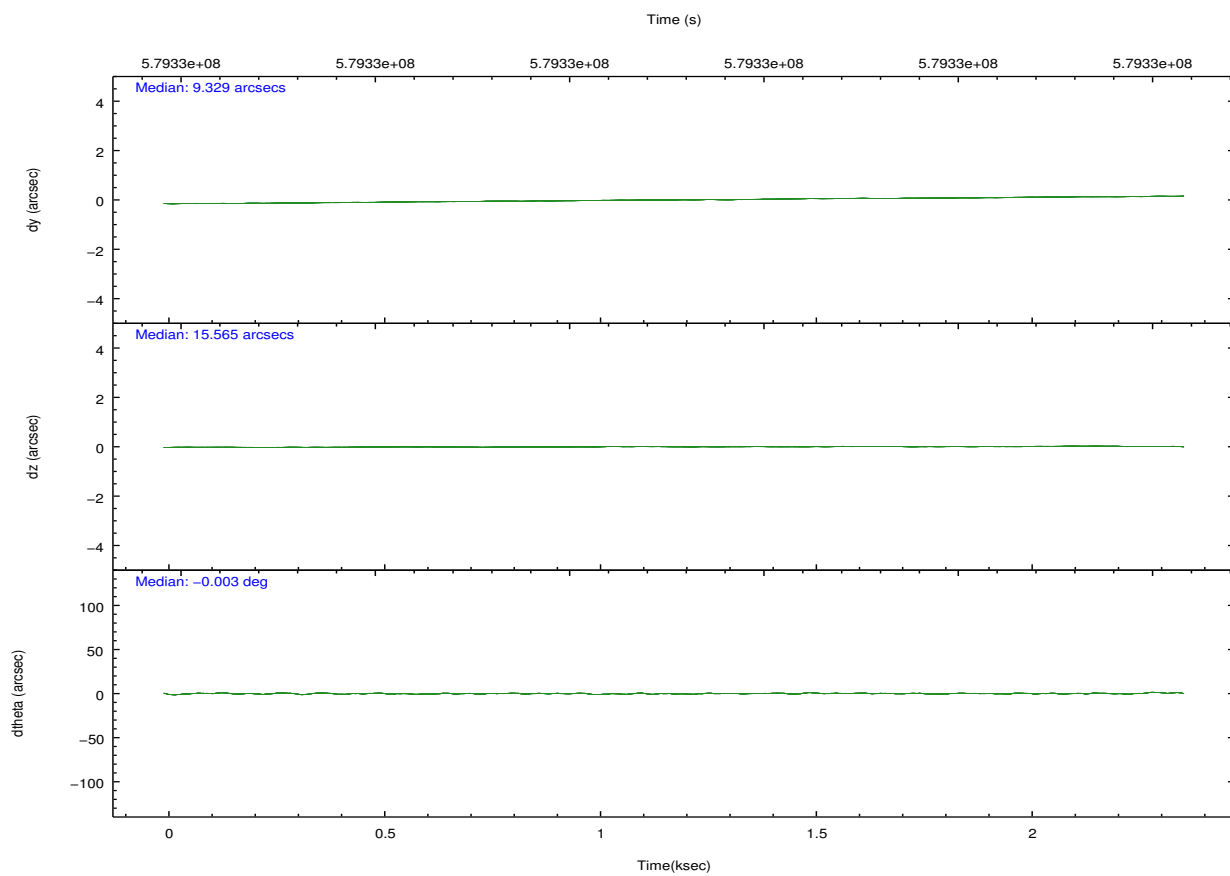
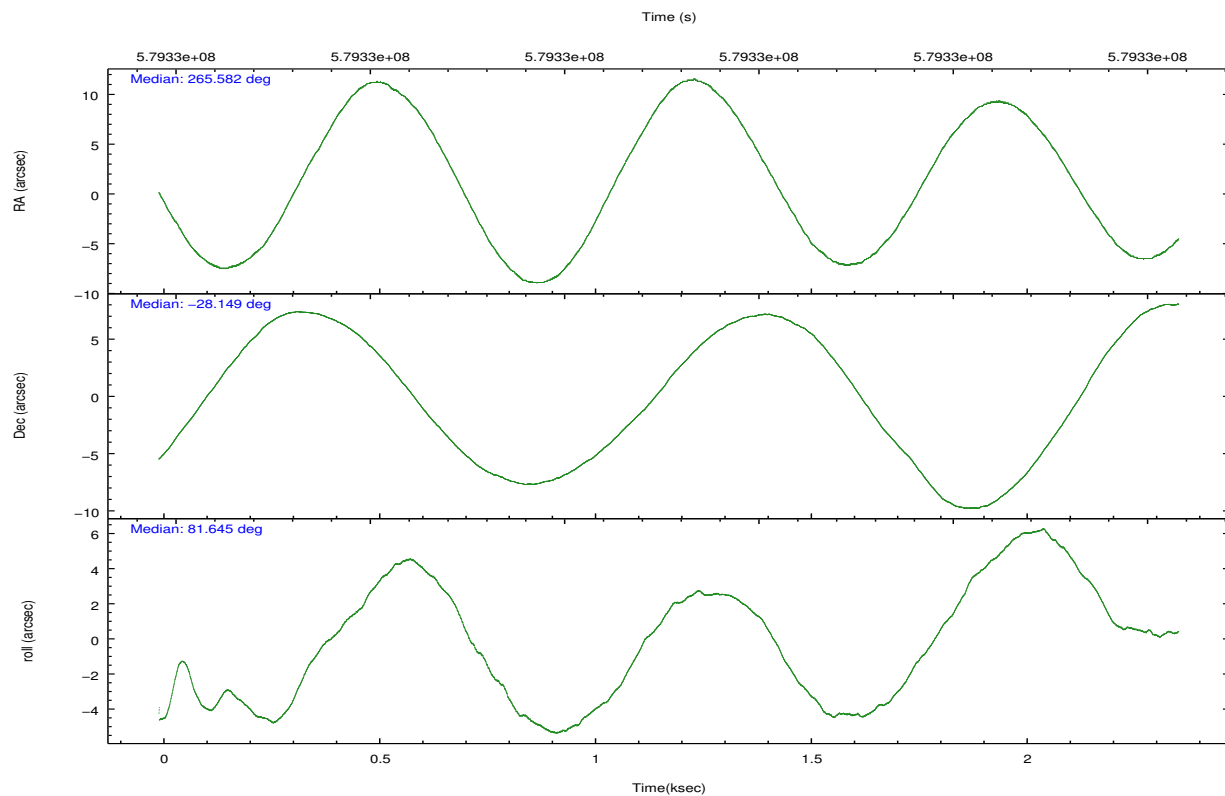
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	679	765	636	630	585
	5%	6%	4%	5%	4%
grade 1 events	4	5	4	10	5
	0%	0%	0%	0%	0%
grade 2 events	374	420	349	320	336
	3%	3%	2%	2%	2%
grade 3 events	165	158	149	154	146
	1%	1%	1%	1%	1%
grade 4 events	132	141	155	140	134
	1%	1%	1%	1%	0%
grade 5 events	513	578	475	645	556
	4%	5%	3%	5%	3%
grade 6 events	283	373	264	296	332
	2%	3%	2%	2%	2%
grade 7 events	9745	9049	11142	9737	11808
	81%	78%	84%	81%	84%

## 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	265.594371	265.5824849626924	CCD I2 on	Y	Y
[deg] Pointing Dec	-28.174515	-28.14876808708087	CCD I3 on	Y	Y
[deg] Pointing Roll	81.449199	81.65228070993369	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)	579331756.184000	579331380.34653	CCD S5 on	N	N
Observation start date	2016-05-11T05:28:08	2016-05-11T05:23:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	579333936.184000	579334069.9466799	On-chip summing requested	N	N
Observation end date	2016-05-11T06:04:28	2016-05-11T06:07:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





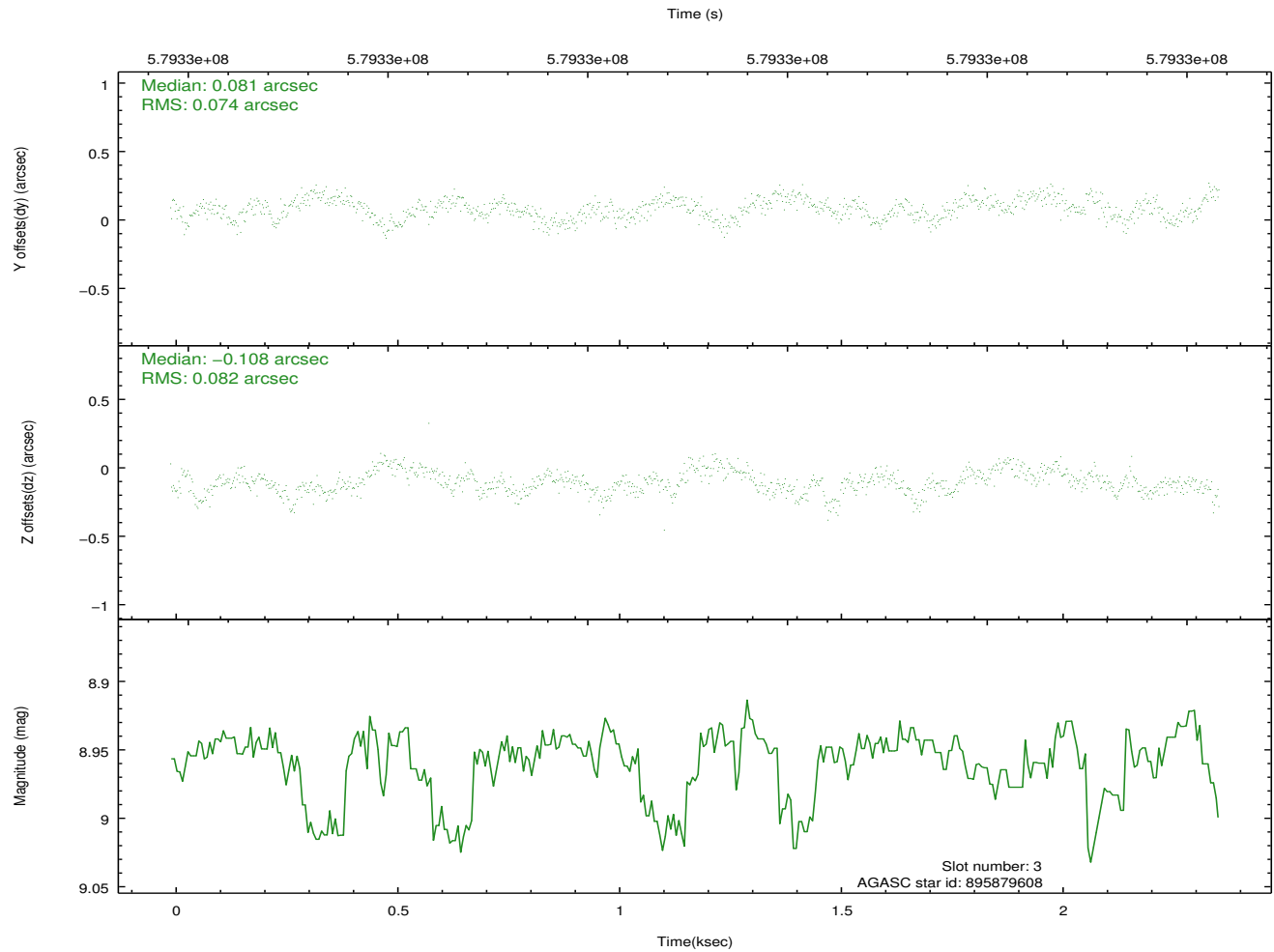
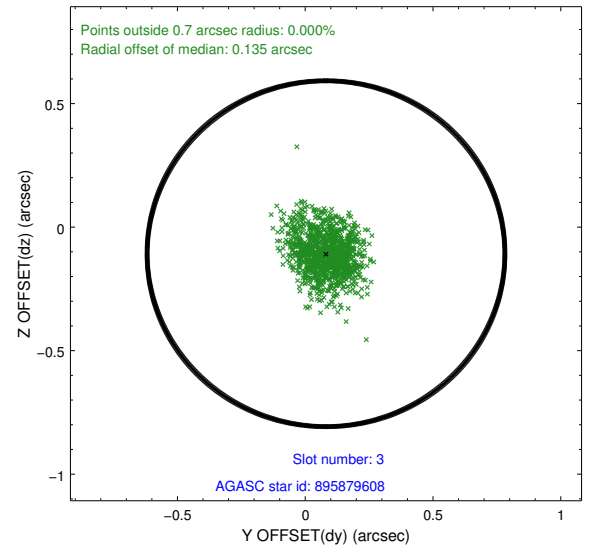
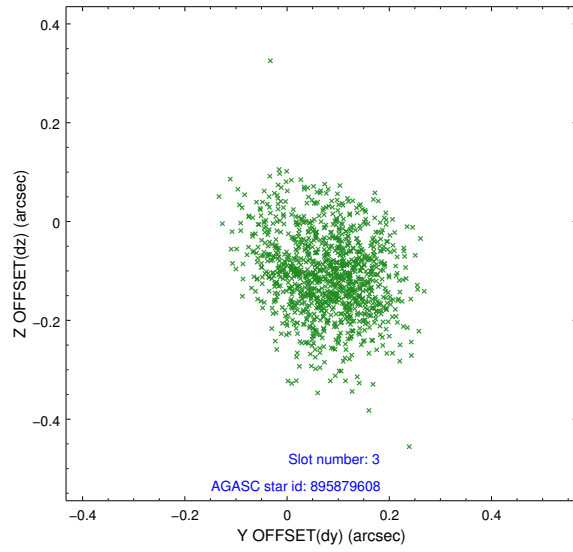
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	577	0.105	-0.121	0.007	0.011	0.000000	0.000000	930.40	-839.29
1	FID		ACIS-I-5	7.23	577	-0.316	0.062	0.006	0.010	0.000000	0.000000	-1816.63	1056.96
2	FID		ACIS-I-6	7.24	577	0.119	0.129	0.008	0.012	0.000000	0.000000	392.94	1704.68
3	GUIDE	used	895879608	8.95	1151	0.081	-0.108	0.117	0.189	265.708239	-27.843915	1230.64	-182.02
4	GUIDE	used	896402272	7.59	1154	0.102	-0.056	0.067	0.109	265.637294	-28.313189	-472.41	-209.59
5	GUIDE	used	896403520	8.99	1151	-0.416	0.033	0.091	0.149	265.626481	-28.748780	-2030.21	-408.61
6	GUIDE	used	896404568	7.83	1153	0.130	-0.080	0.083	0.131	265.687293	-28.431080	-871.45	-429.36
7	GUIDE	used	896538696	6.81	1153	0.098	0.205	0.078	0.123	266.298470	-28.325572	-212.90	-2289.02

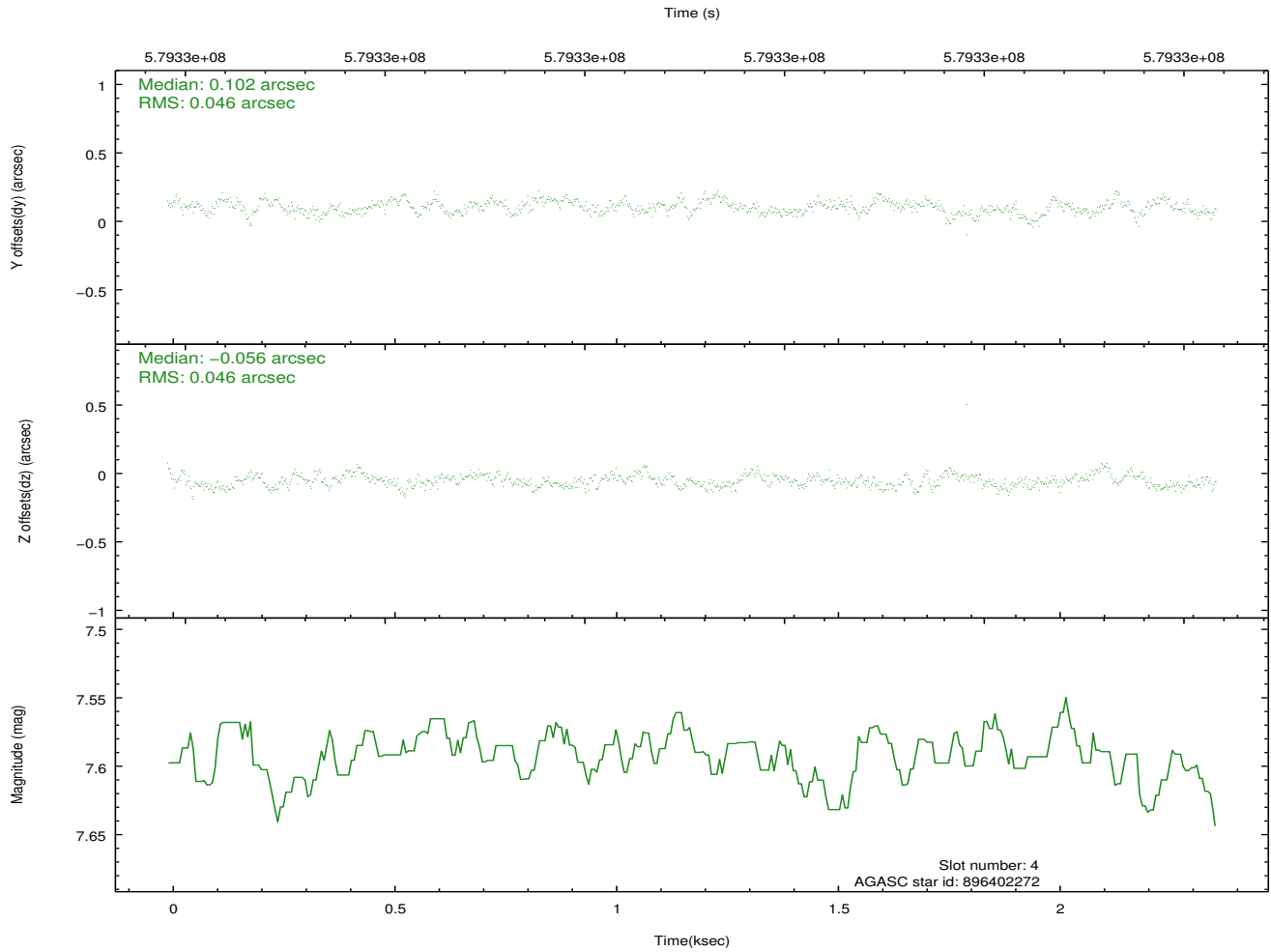
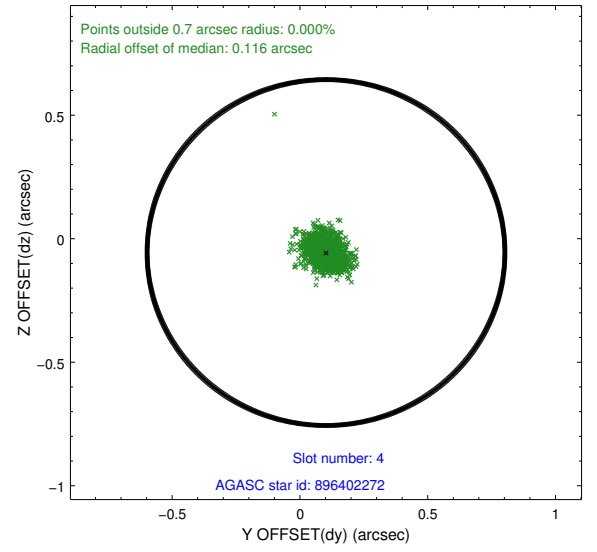
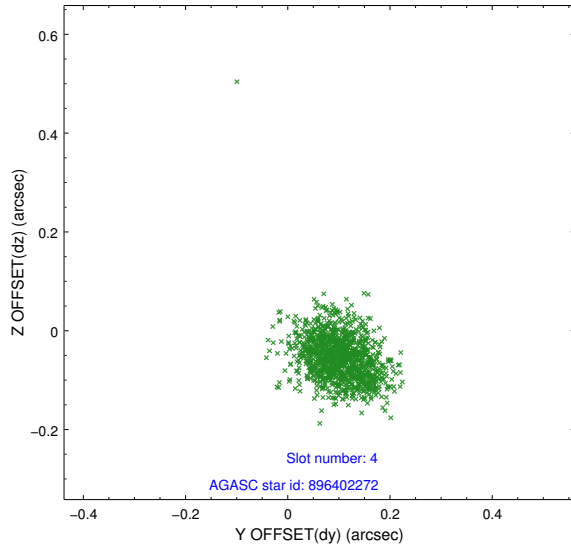


## 2.4 Star Slots

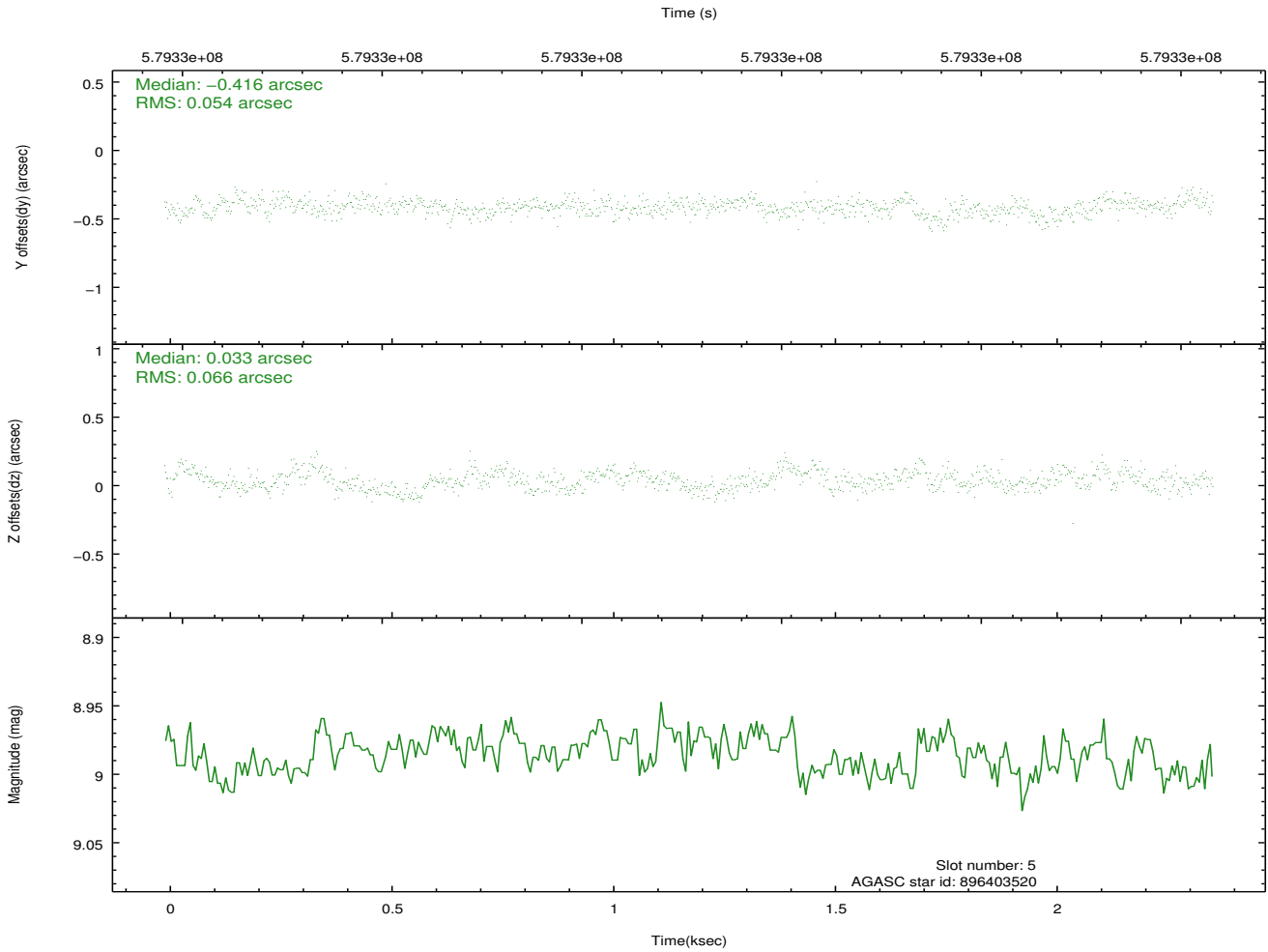
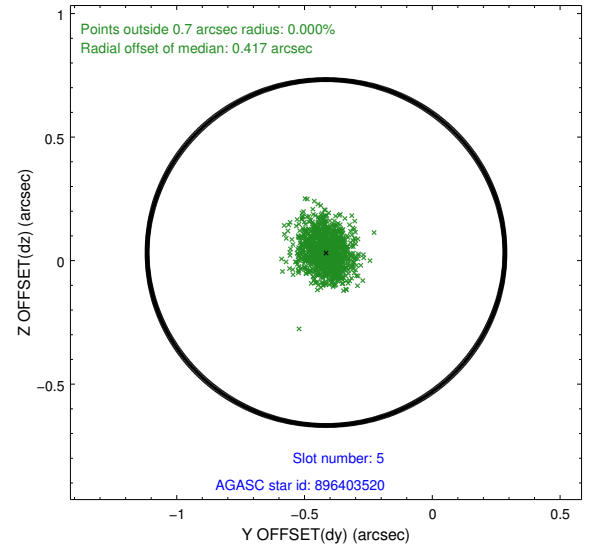
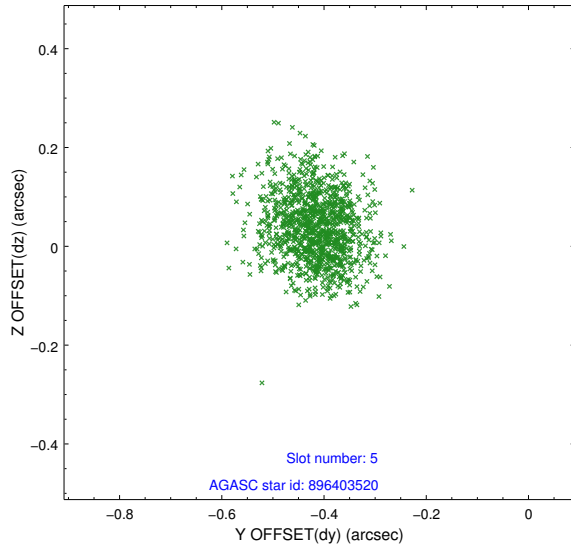
### 2.4.1 Slot 3



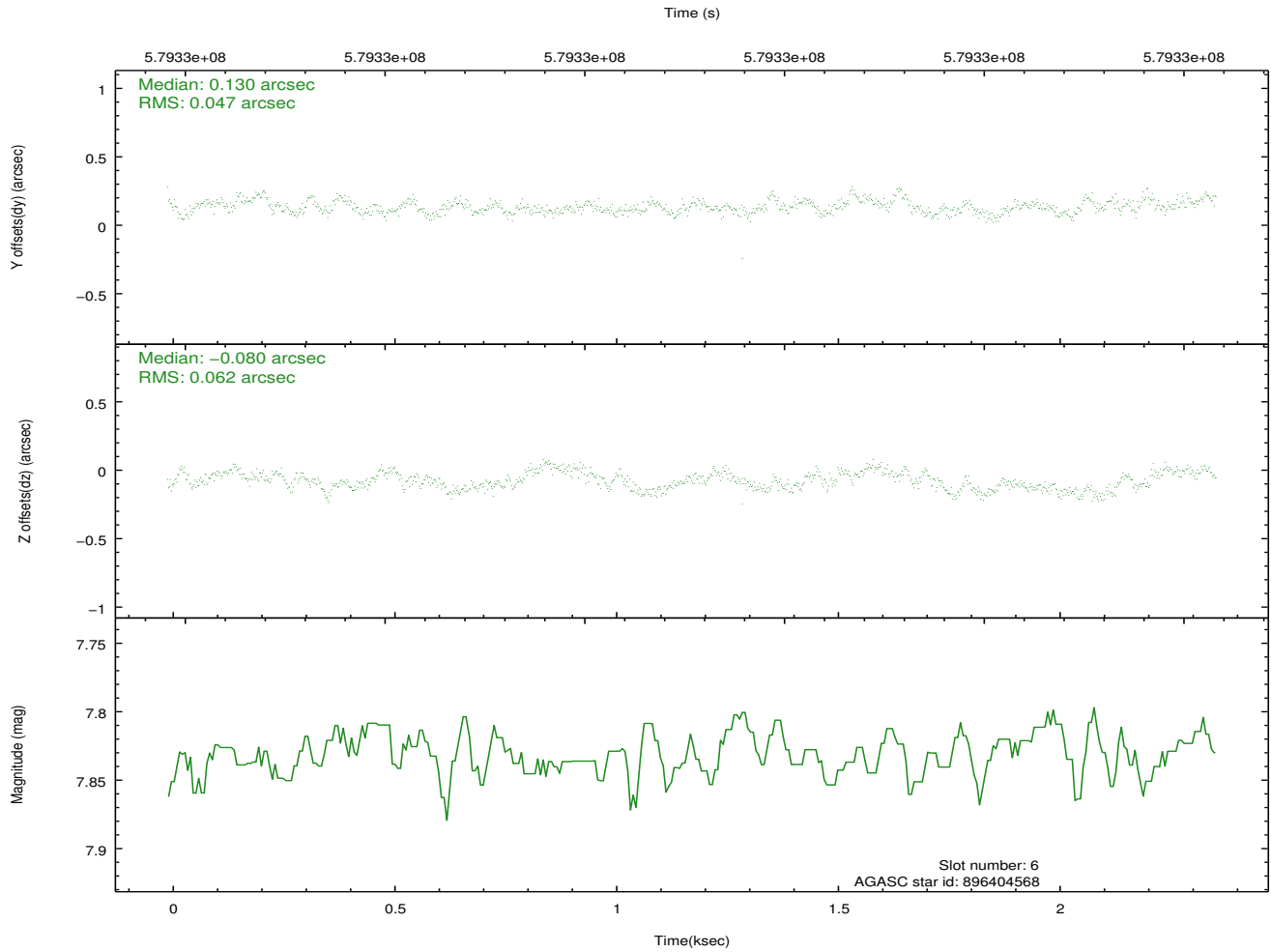
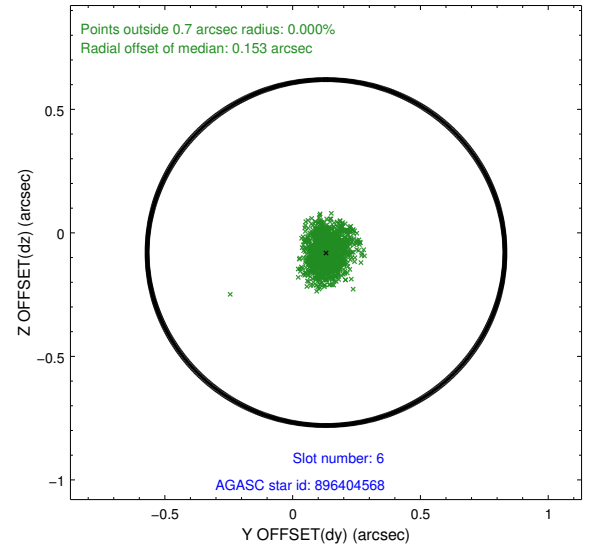
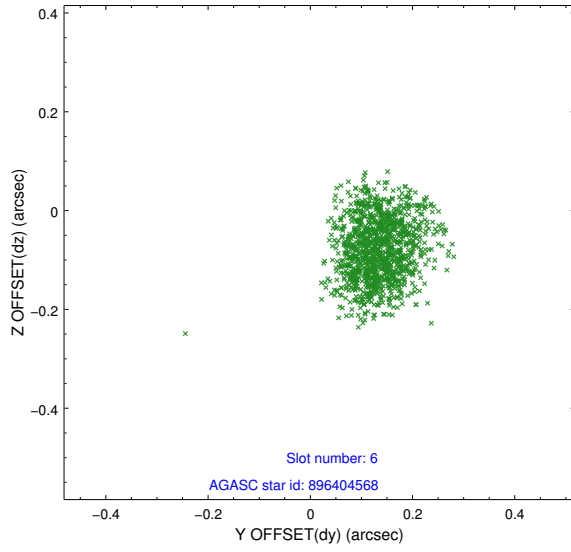
## 2.4.2 Slot 4



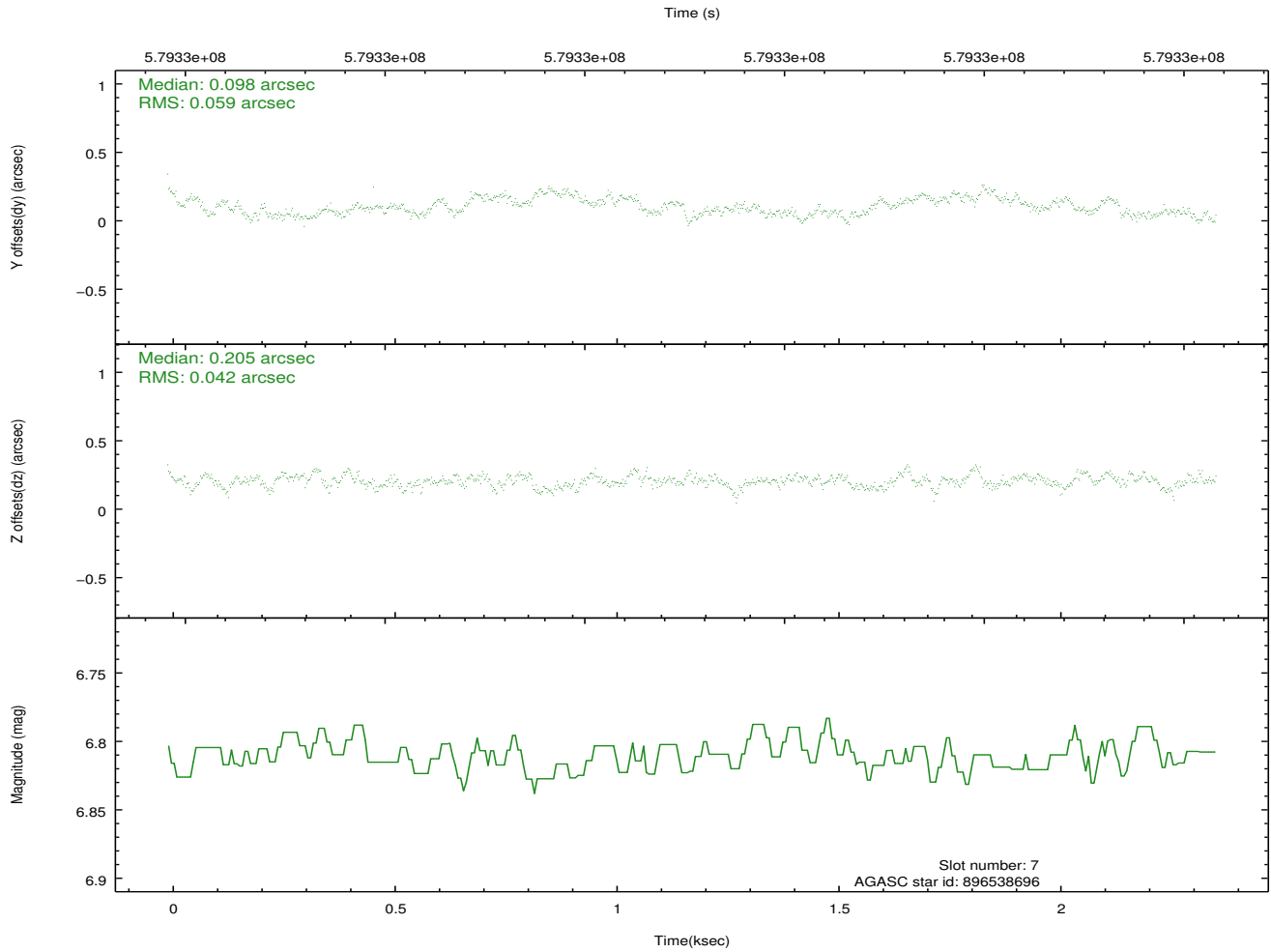
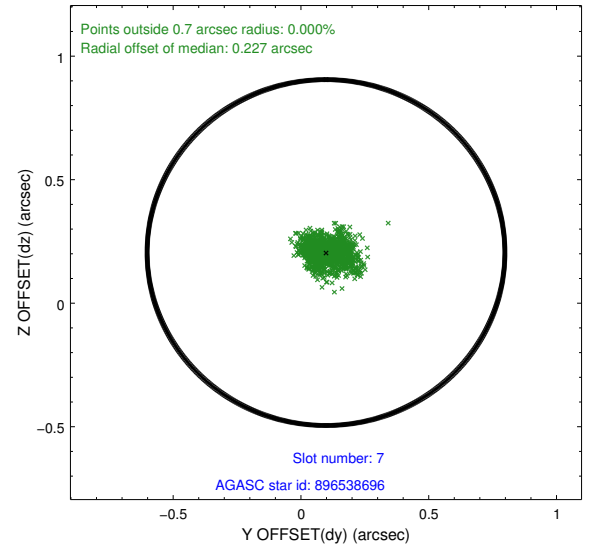
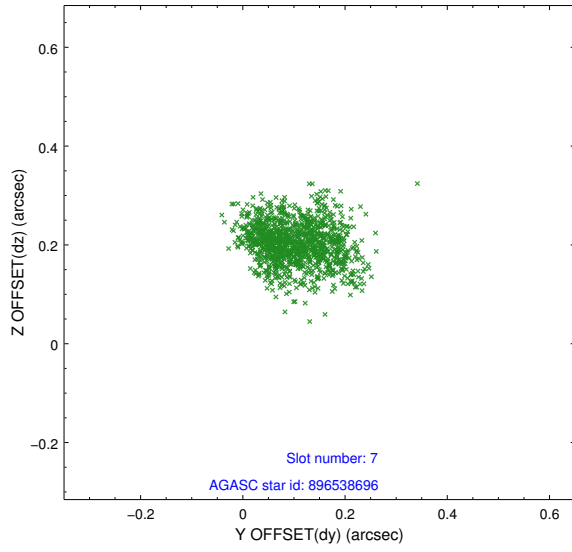
### 2.4.3 Slot 5



## 2.4.4 Slot 6

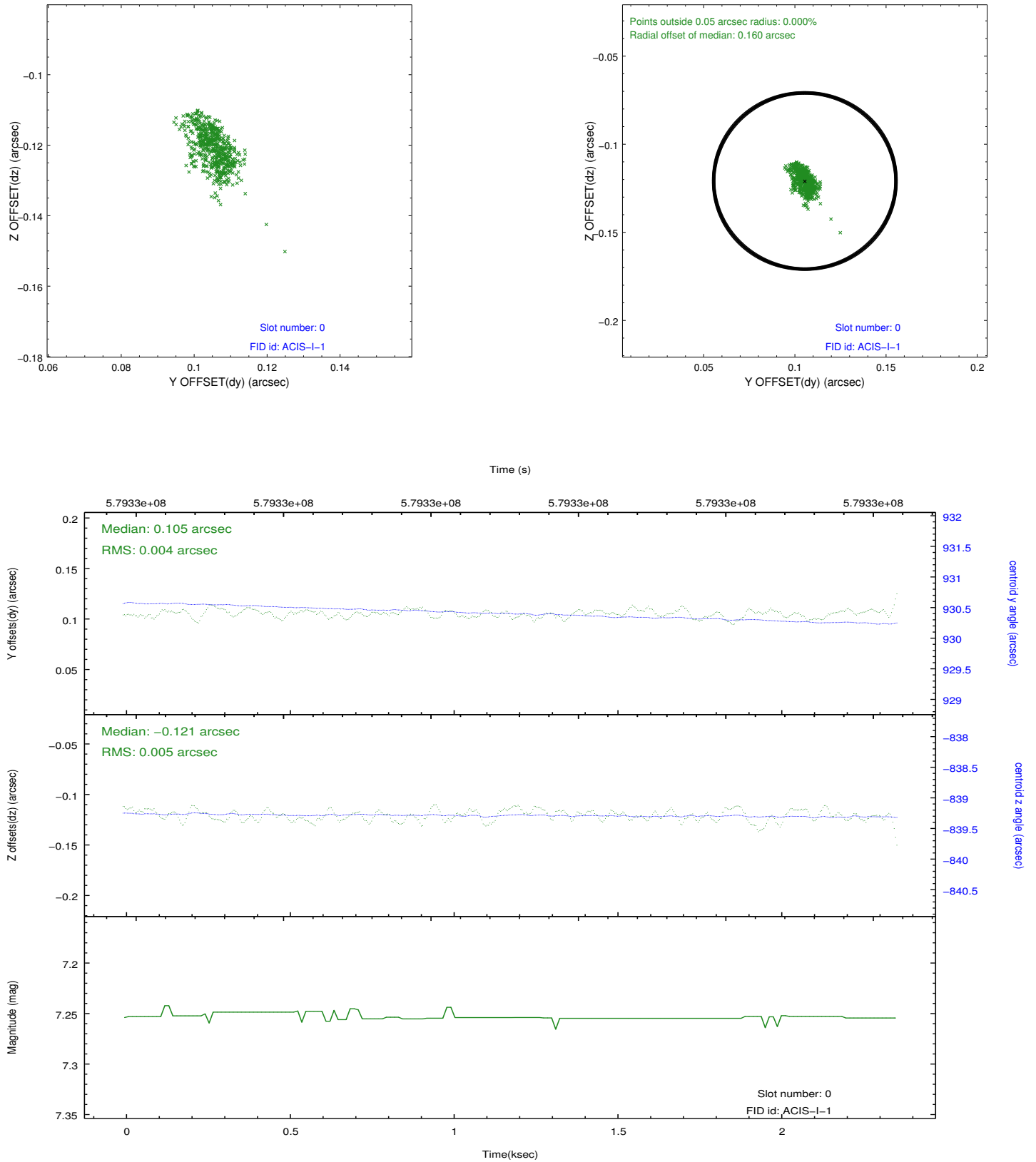


## 2.4.5 Slot 7

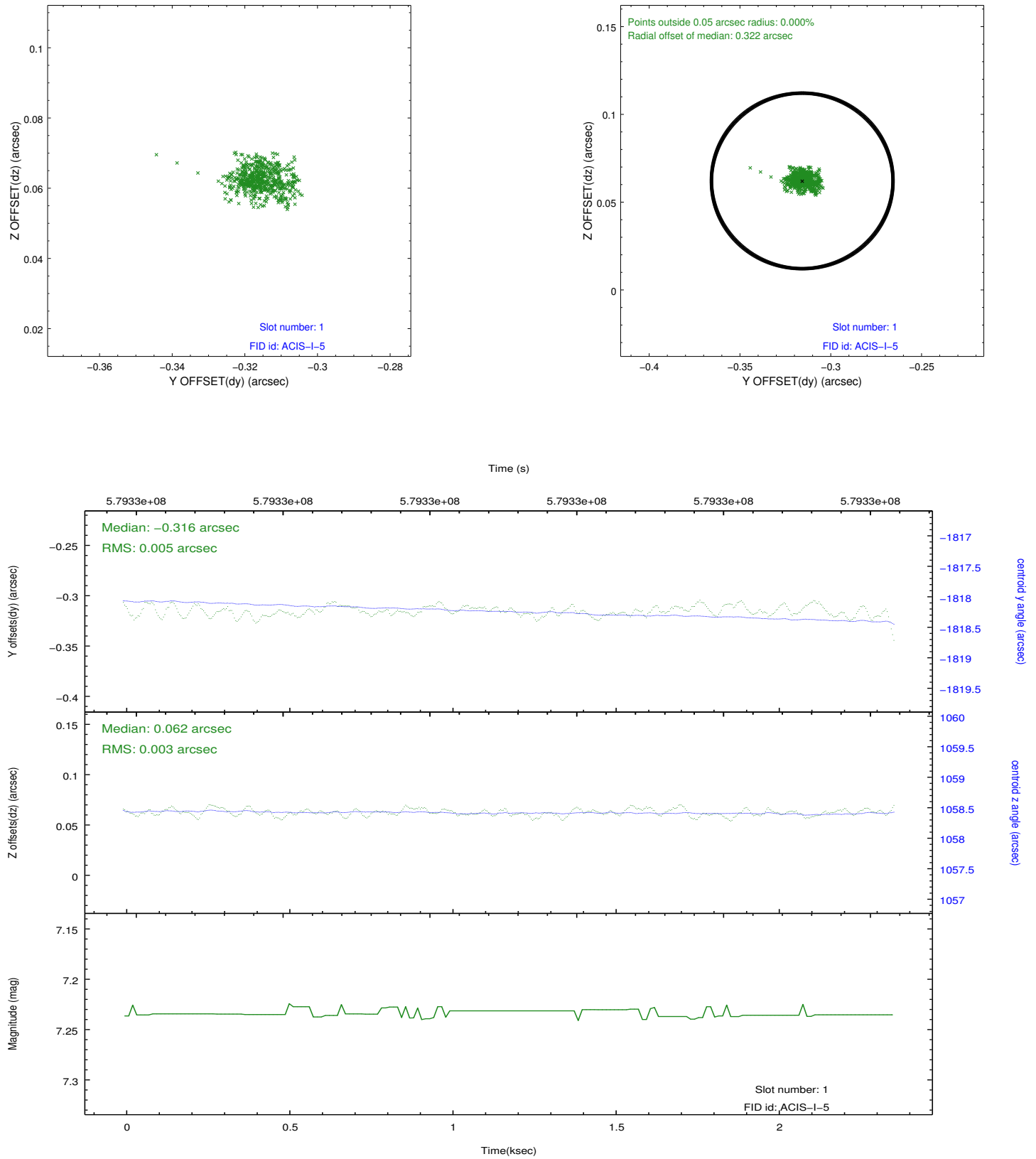


## 2.5 FID Slots

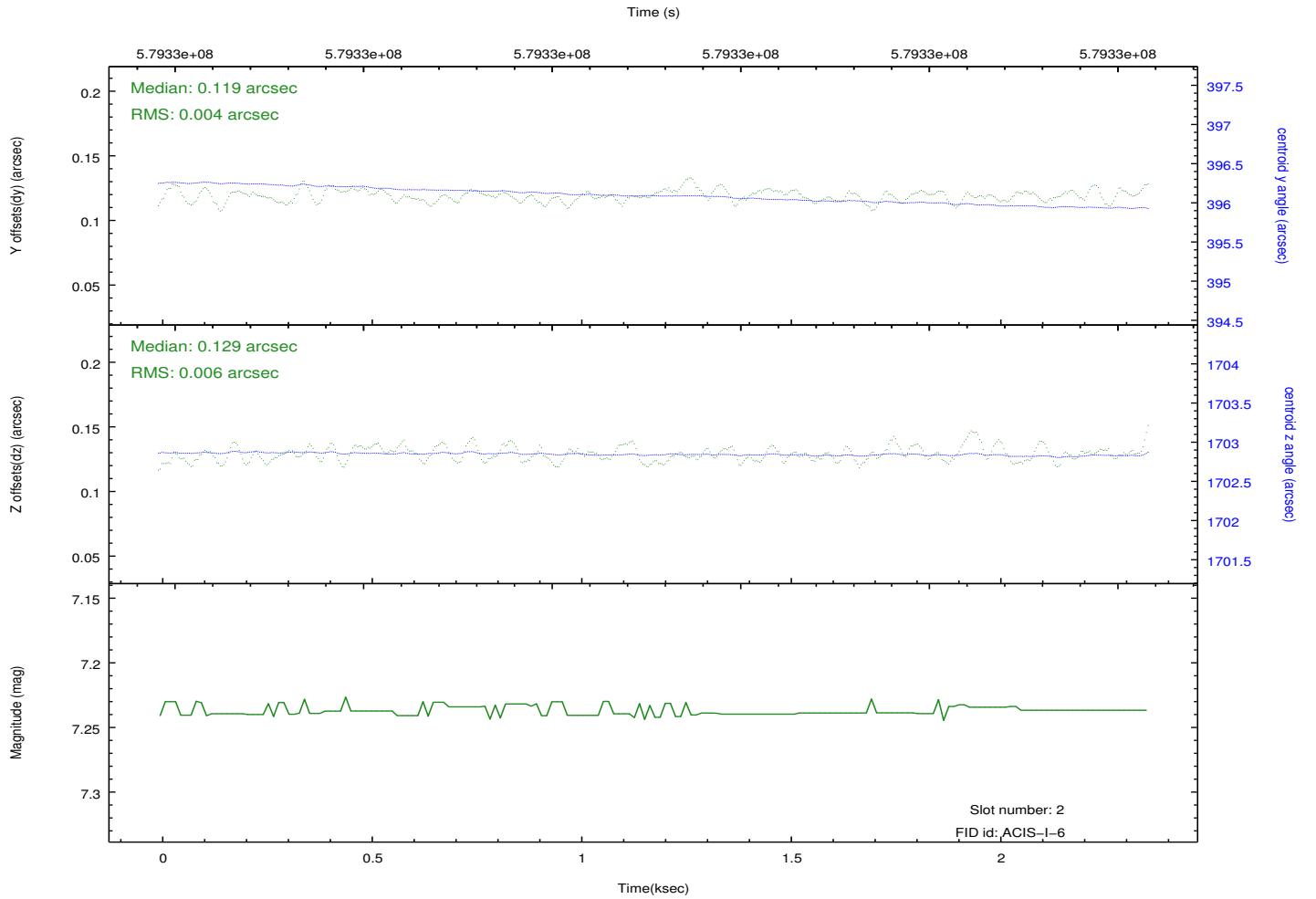
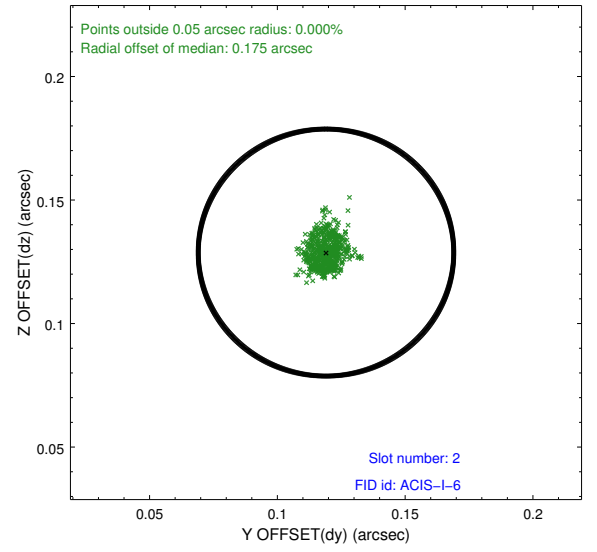
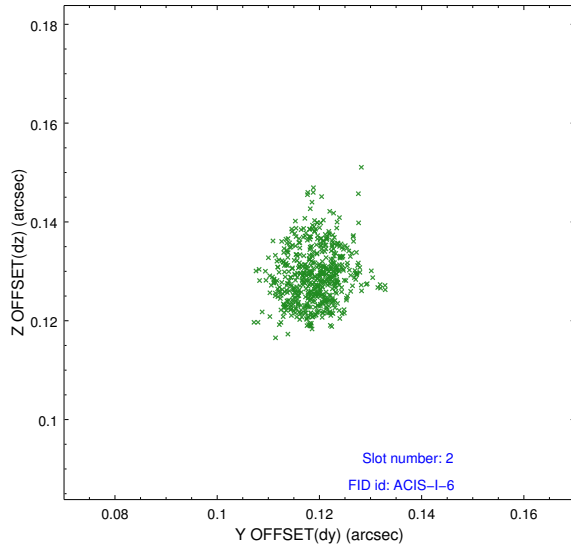
### 2.5.1 Slot 0



## 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)	2016.05.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9557596489191

### A.2 Comments