

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21615 - L2 Version 1  
Chandra X-Ray Center

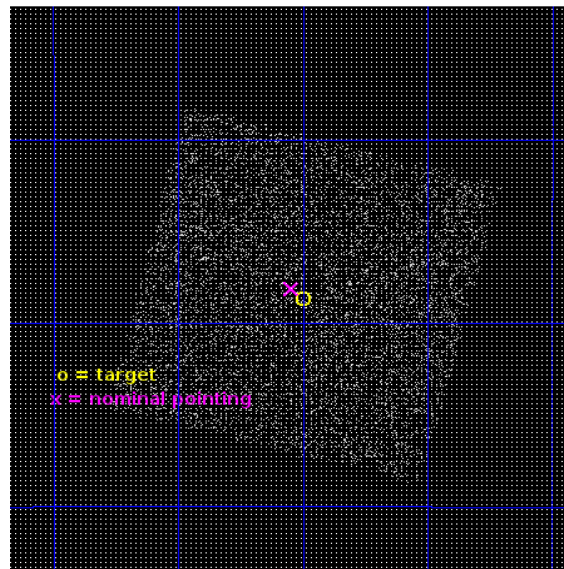
L2 Processing Date : Jul 8 2019

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

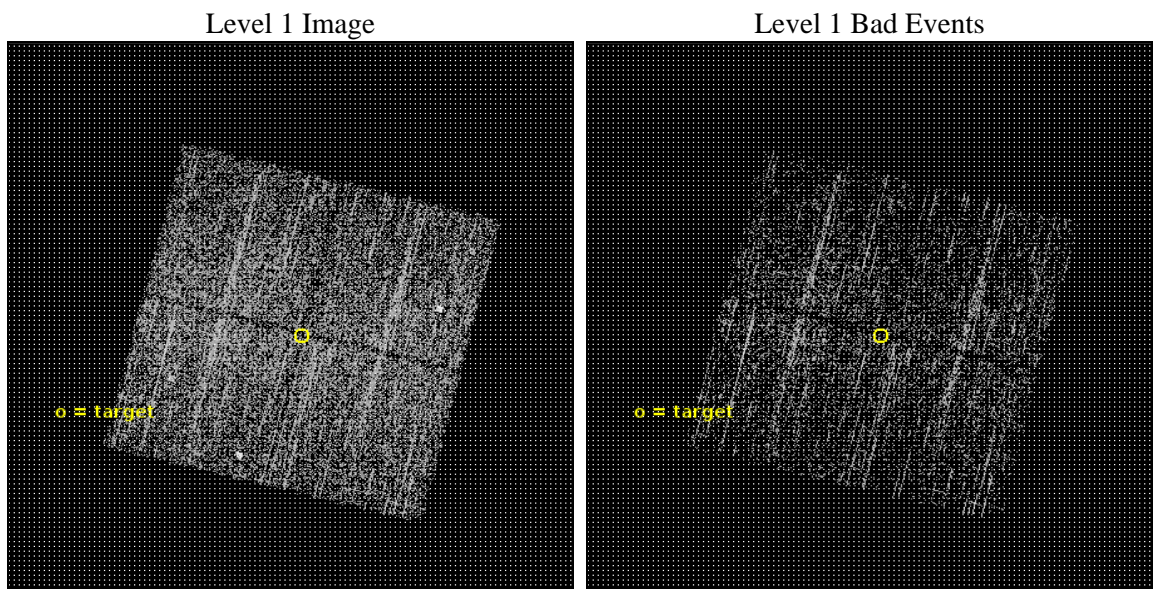
seq_num	300447	Sequence number
obs_id	21615	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.37457	Observer's specified target RA [deg]
dec_targ	-29.644501	Observer's specified target Dec [deg]
ra_nom	265.3864792214	Nominal RA [deg]
dec_nom	-29.635592926013	Nominal Dec [deg]
roll_nom	284.21460275363	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1900.2178542614	Sum of GTIs [s]
livetime	1875.3901090754	Livetime [s]
ontime0	1906.500014782	Sum of GTIs [s]
ontime1	1906.500014782	Sum of GTIs [s]
ontime2	1906.500014782	Sum of GTIs [s]
ontime3	1900.2178542614	Sum of GTIs [s]
l2events	5875	Number of level 2 events



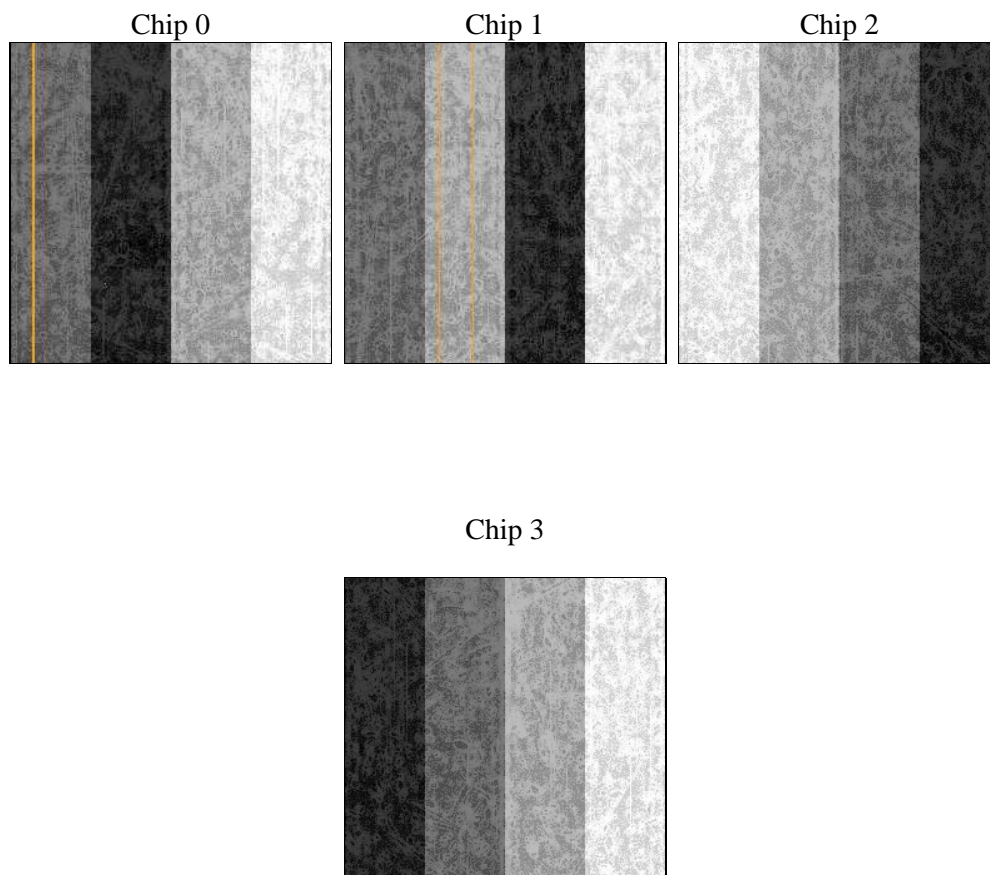
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	1900.2178542614	Sum of GTIs [s]
caldsver	4.8.3.1	&#160	ontime0	1906.500014782	Sum of GTIs [s]
date	2019-07-08T12:09:43	Date and time of file creation	ontime1	1906.500014782	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1906.500014782	Sum of GTIs [s]
			ontime3	1900.2178542614	Sum of GTIs [s]
			l1events	58939	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	14457	14383	16468	13631
rejected events	12655	11965	14144	11940
rejected %	87%	83%	85%	87%

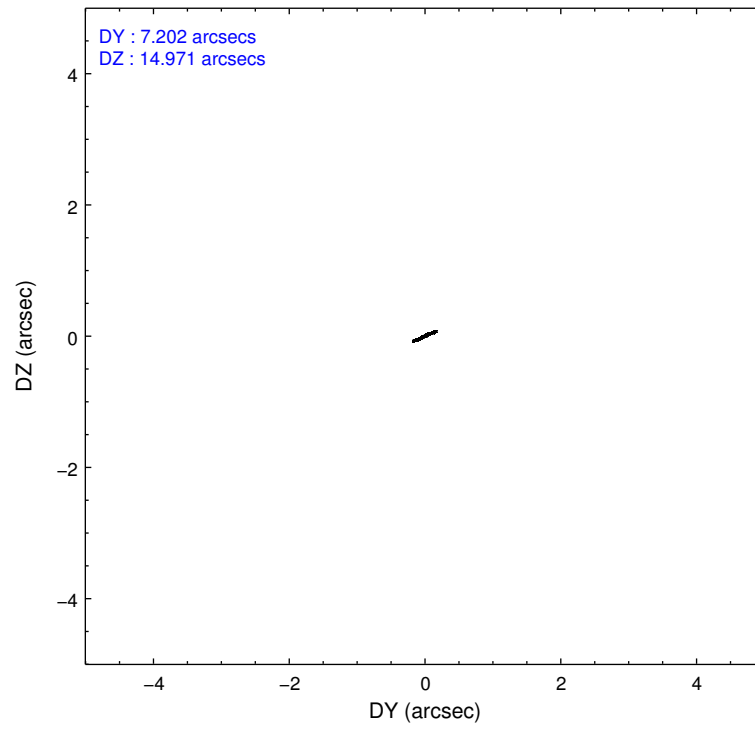
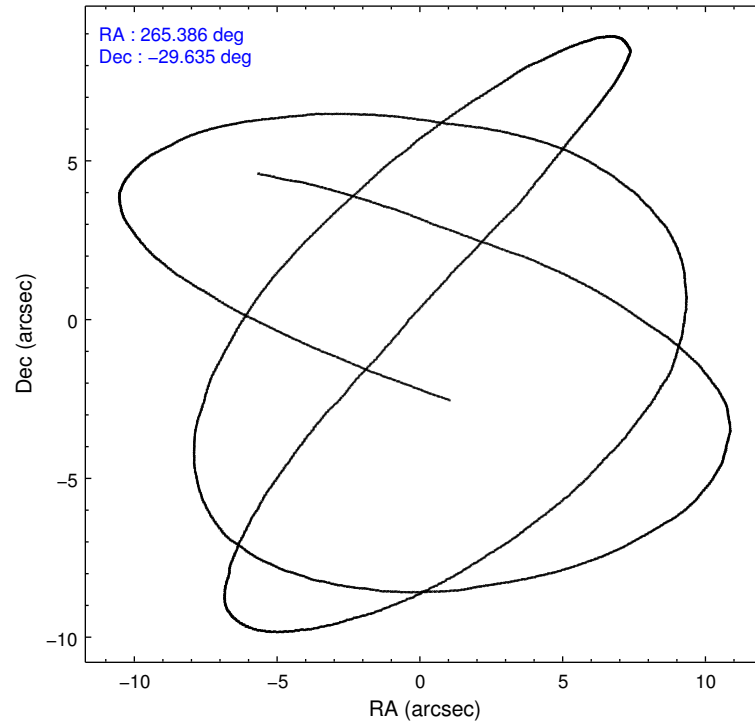
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	606	1216	1314	612
	4%	8%	7%	4%
grade 1 events	2	12	15	1
	0%	0%	0%	0%
grade 2 events	428	468	374	350
	2%	3%	2%	2%
grade 3 events	183	167	162	160
	1%	1%	0%	1%
grade 4 events	181	162	166	162
	1%	1%	1%	1%
grade 5 events	576	591	561	631
	3%	4%	3%	4%
grade 6 events	410	410	314	413
	2%	2%	1%	3%
grade 7 events	12071	11357	13562	11302
	83%	78%	82%	82%

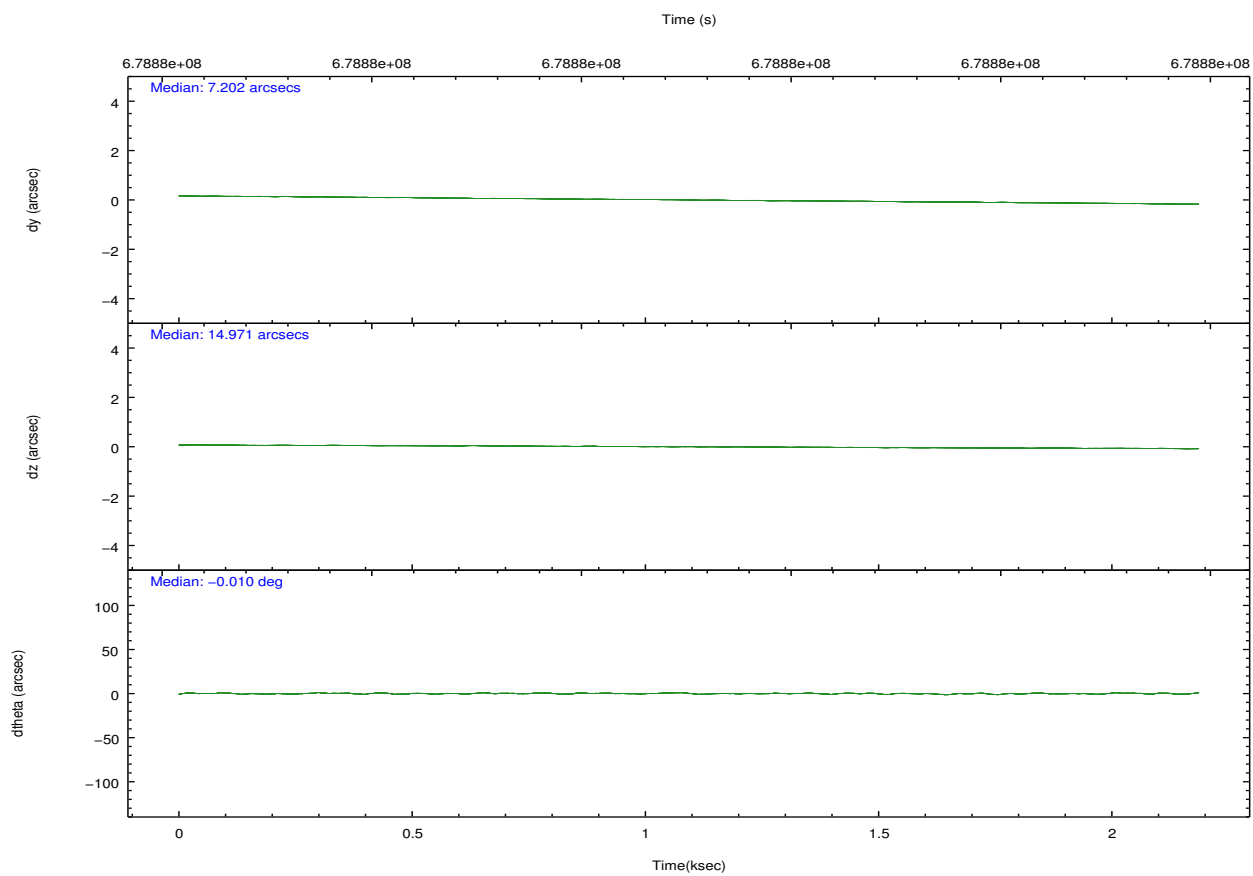
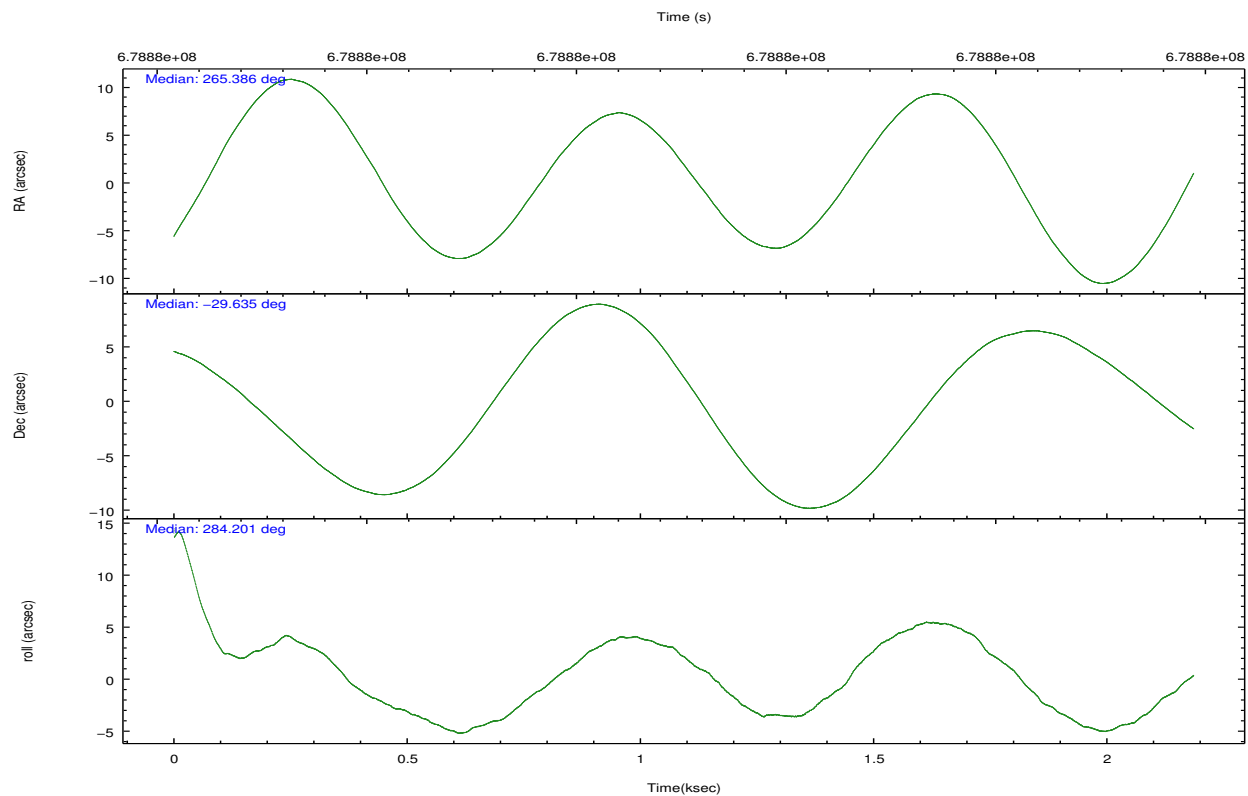
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	265.364237	265.3864792214025
[deg] Pointing Dec	-29.615941	-29.63559292601335
[deg] Pointing Roll	283.994895	284.214602753631
[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)	678879355.184000	678878979.3437099
Observation start date	2019-07-07T09:34:46	2019-07-07T09:29:39
[s] Observation end time (MET)	678881355.184000	678881522.8813601
Observation end date	2019-07-07T10:08:06	2019-07-07T10:12:02
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



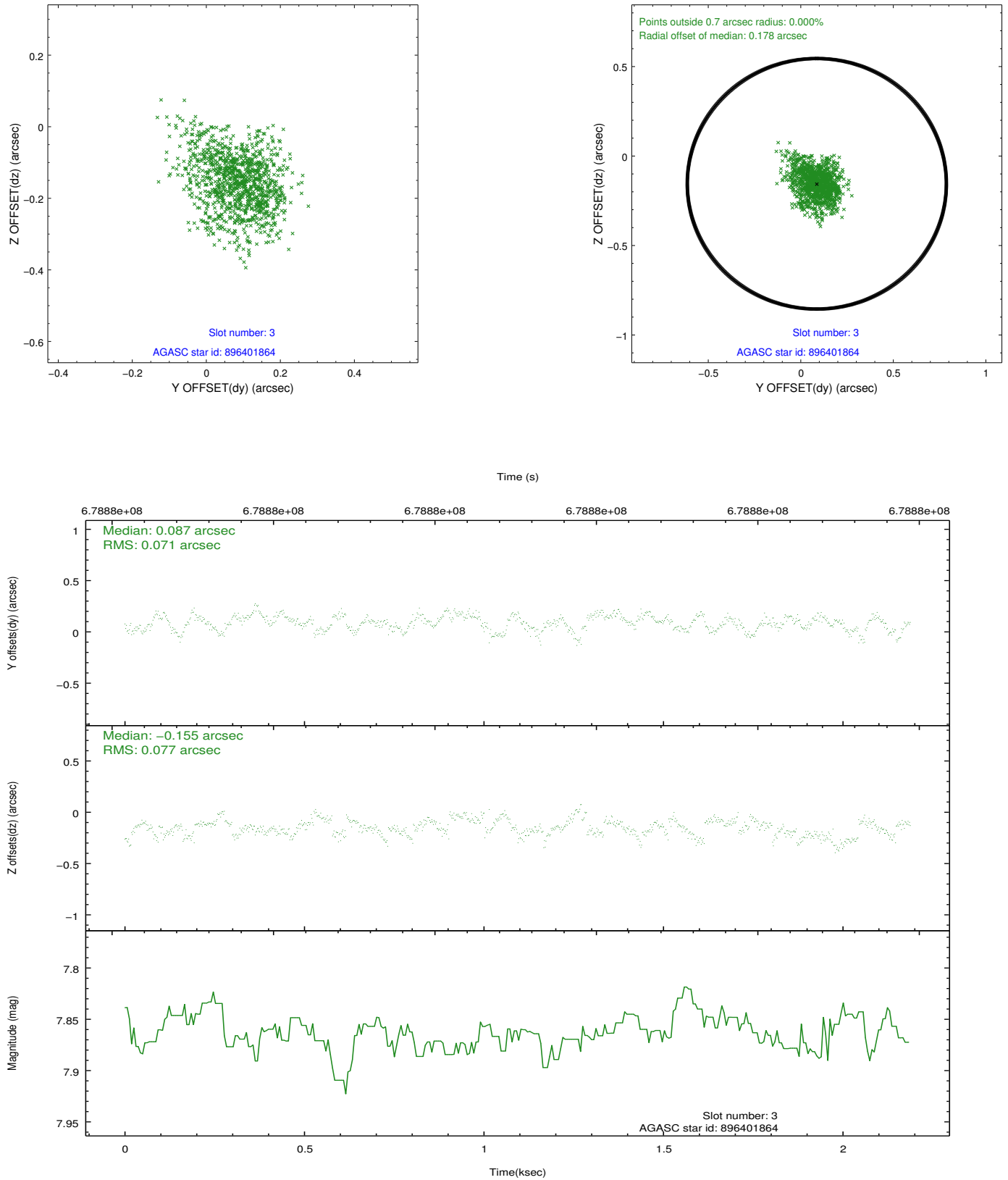


Slot Statistics

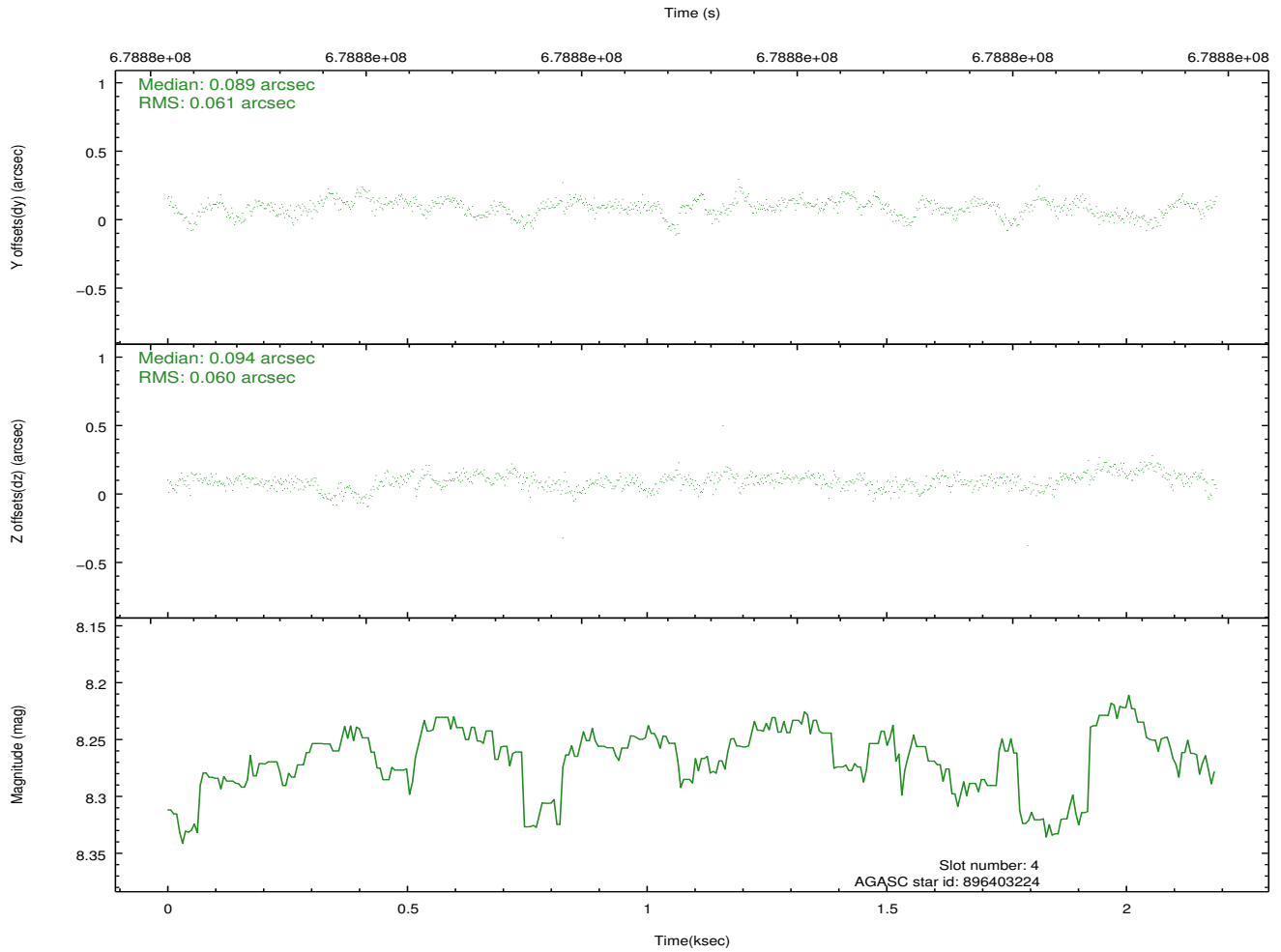
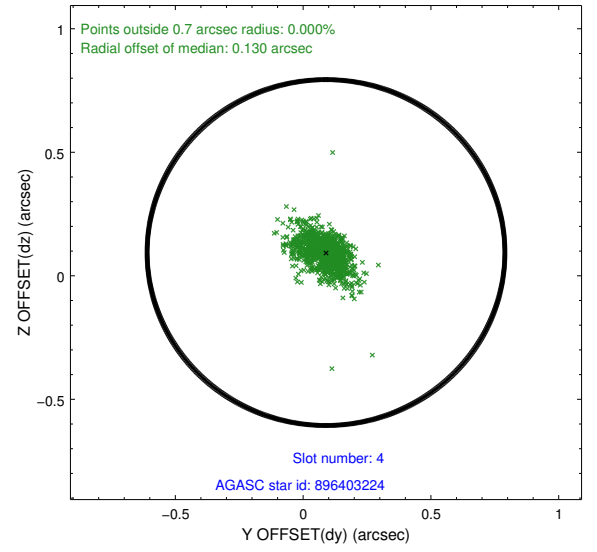
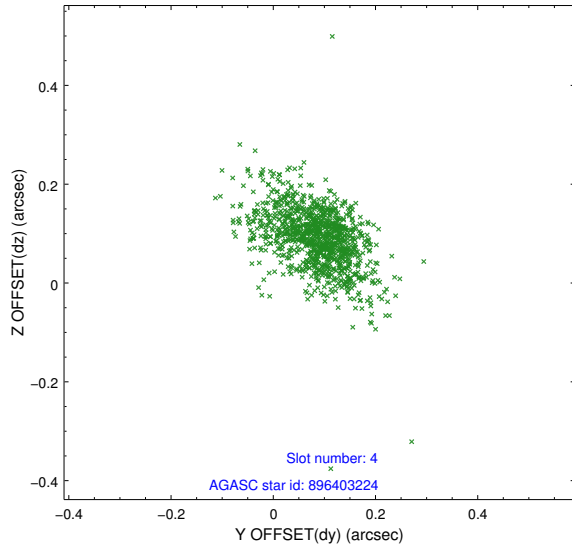
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.21	534	1.000	0.230	-0.214	0.007	0.010	0.000000	0.000000	932.83	-838
1	FID		ACIS-I-3	7.43	534	1.000	-0.116	0.204	0.008	0.012	0.000000	0.000000	51.66	-973
2	FID		ACIS-I-5	7.20	534	1.000	-0.204	0.083	0.005	0.011	0.000000	0.000000	-1815.98	1056
3	GUIDE	used	896401864	7.86	1067	1.000	0.087	-0.155	0.112	0.180	264.861768	-29.959752	826.35	-1820
4	GUIDE	used	896403224	8.26	1068	1.000	0.089	0.094	0.083	0.157	265.612825	-29.438915	-427.45	908
5	GUIDE	used	896404376	6.67	1068	1.000	-0.079	0.229	0.097	0.156	264.835179	-29.530972	-693.22	-1534
6	GUIDE	used	896405480	8.24	1068	1.000	0.002	0.178	0.097	0.155	265.220460	-29.599691	-165.25	-423
7	GUIDE	used	896540808	7.47	1067	1.000	-0.093	-0.329	0.082	0.131	265.985401	-29.308604	-597.18	2157

## 2.4 Star Slots

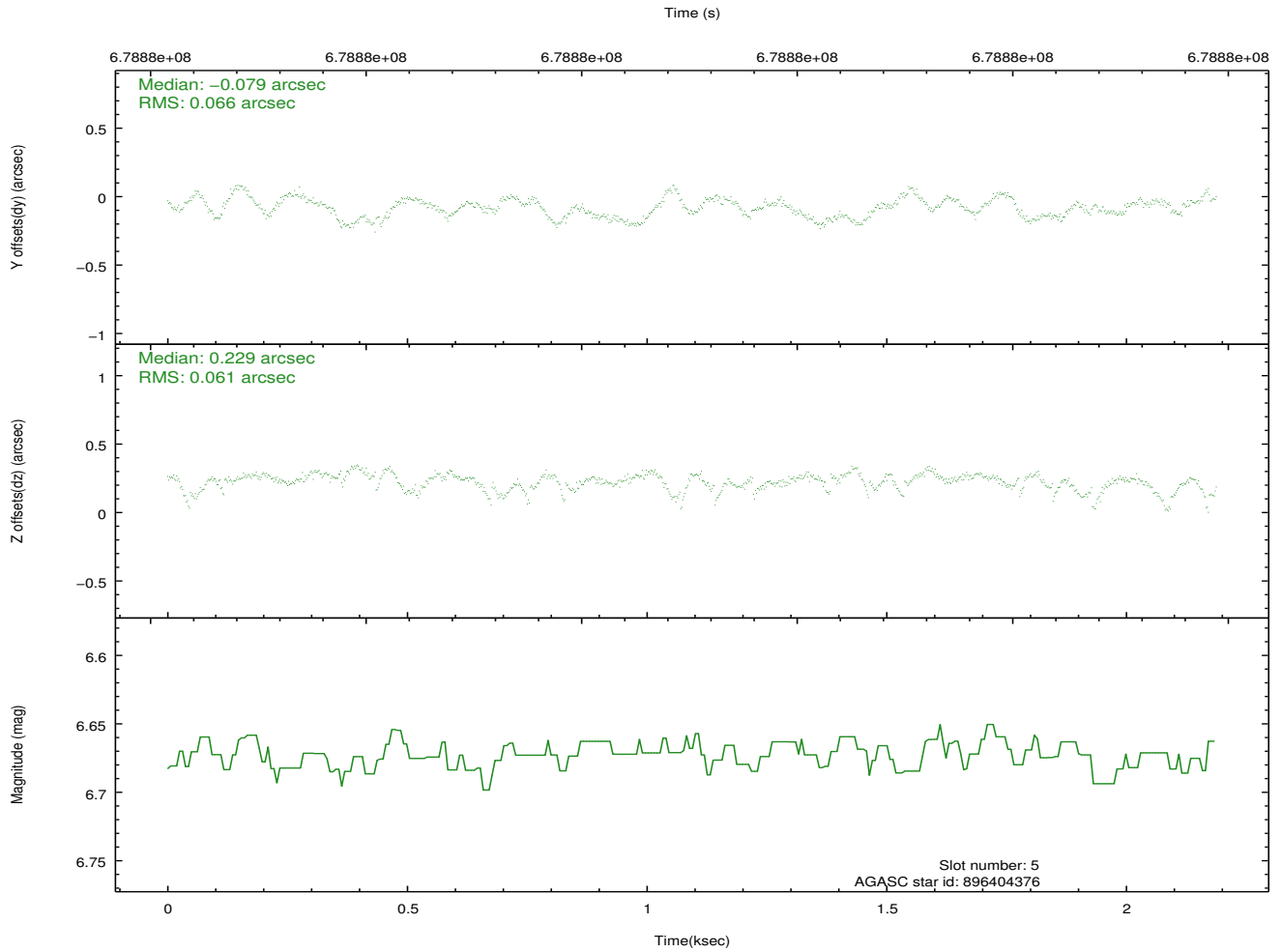
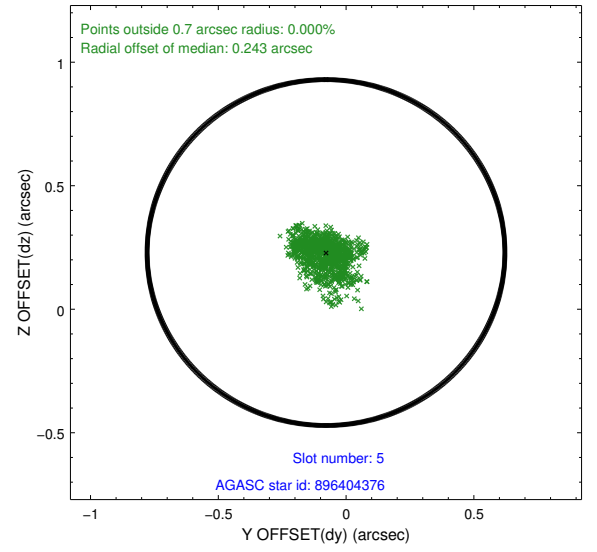
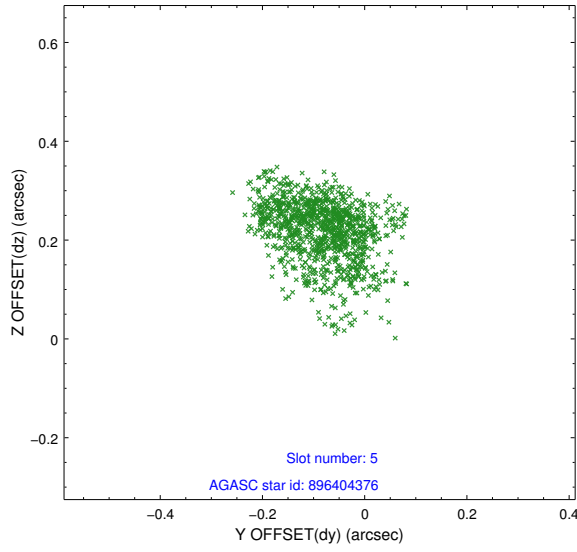
### 2.4.1 Slot 3



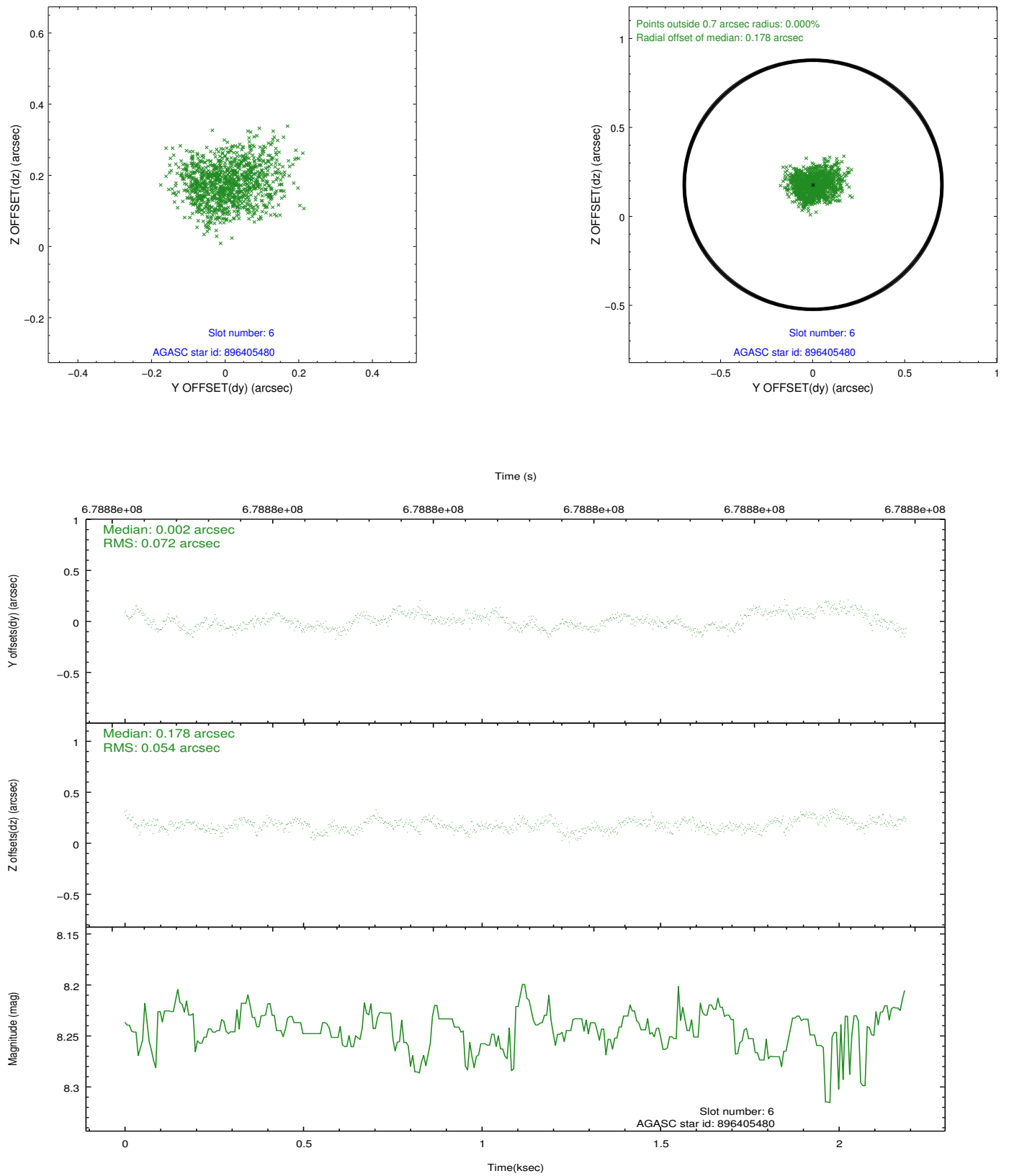
## 2.4.2 Slot 4



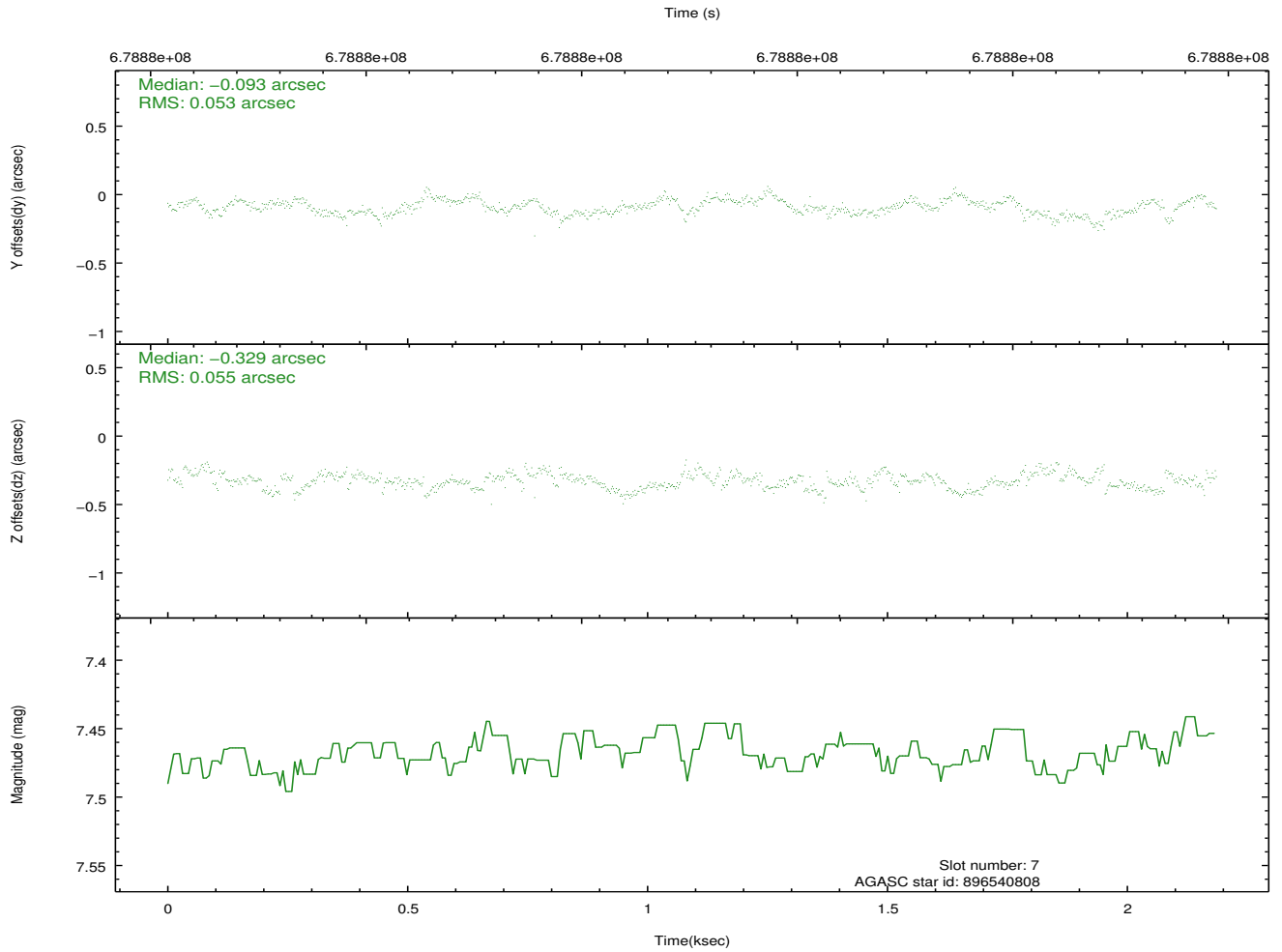
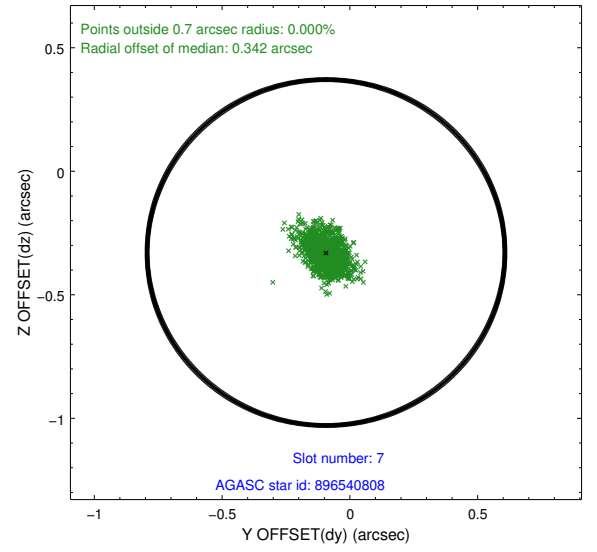
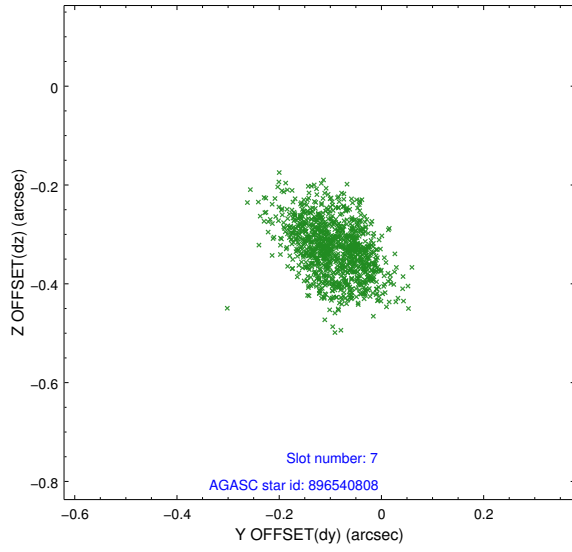
### 2.4.3 Slot 5



## 2.4.4 Slot 6

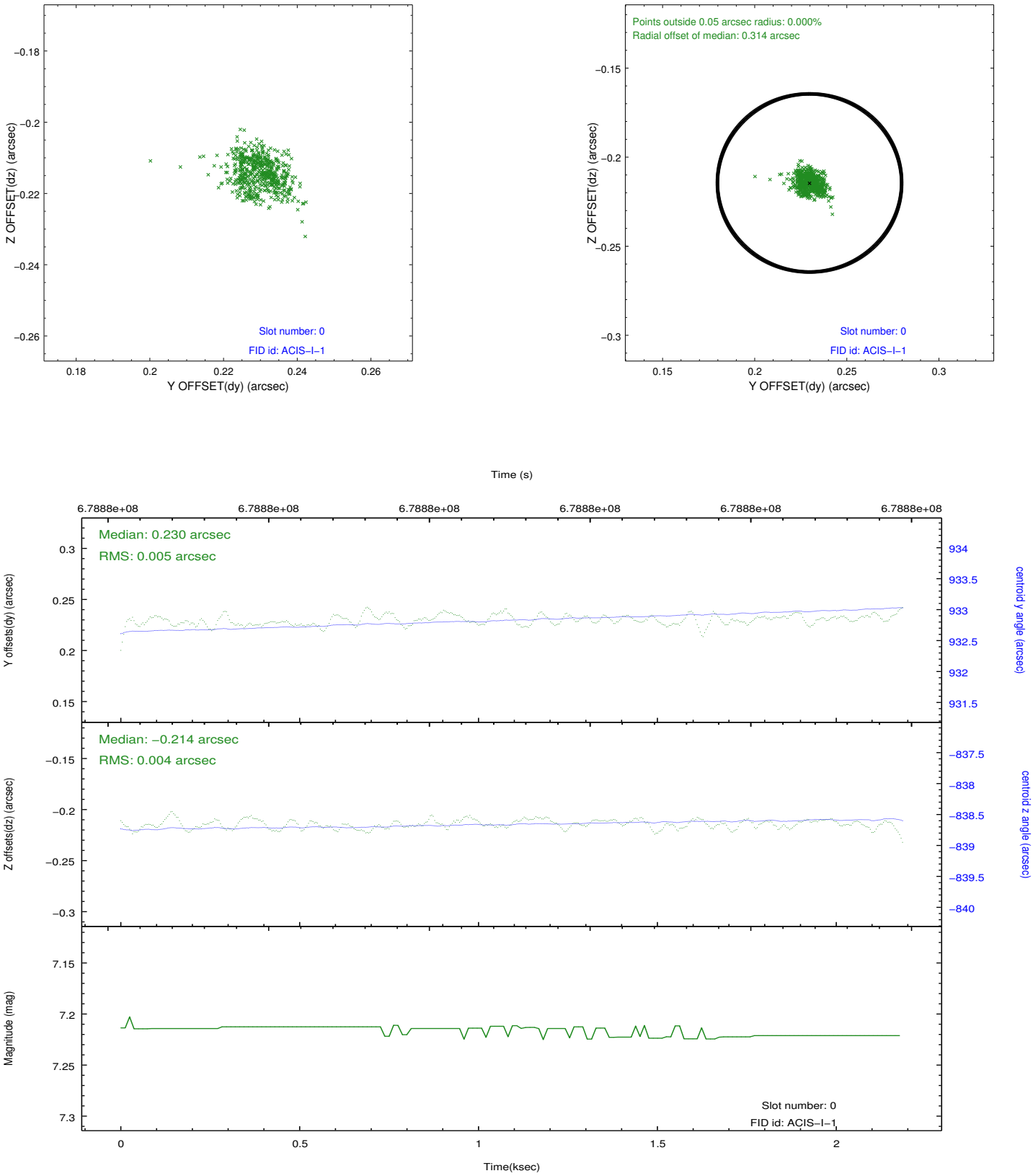


## 2.4.5 Slot 7

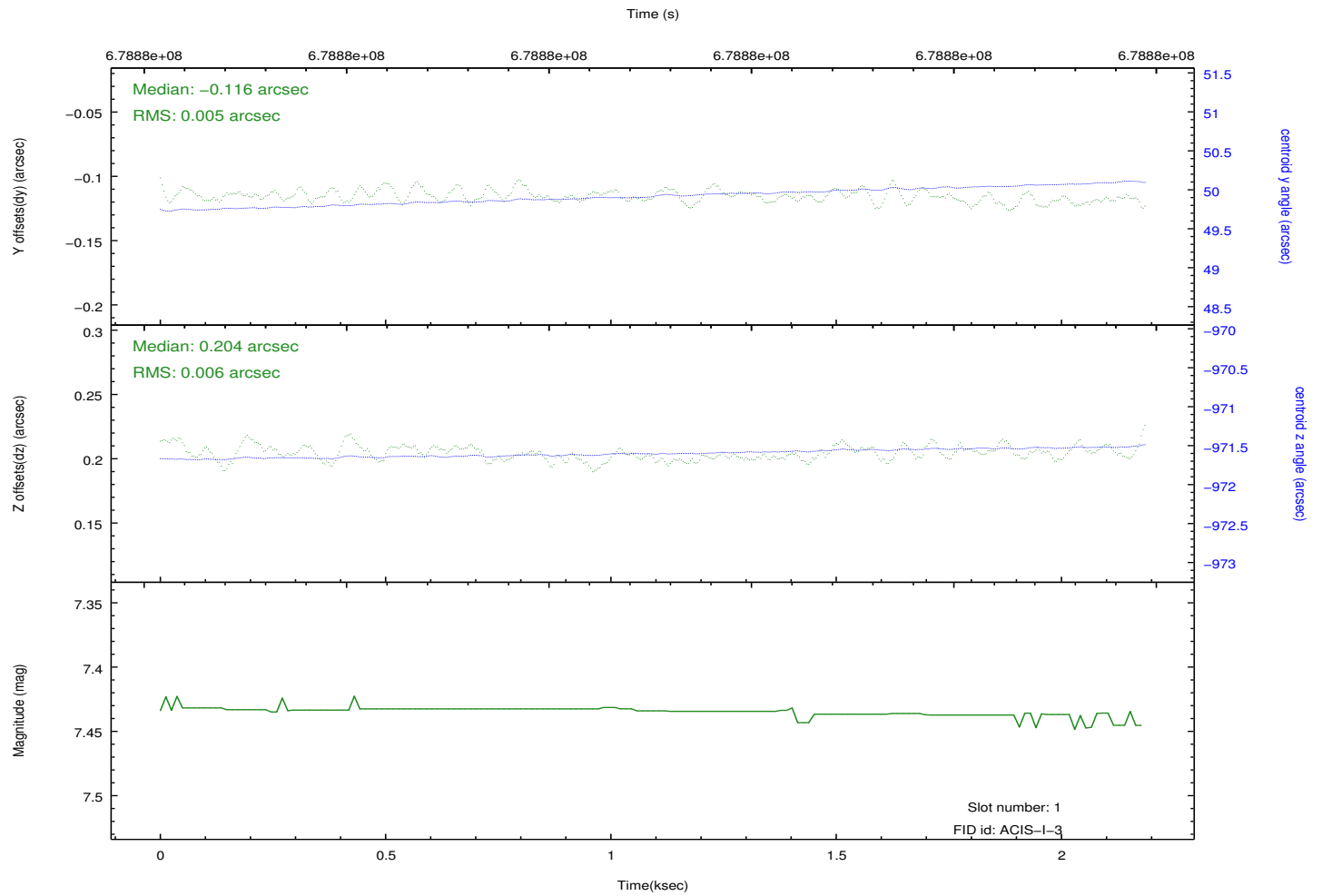
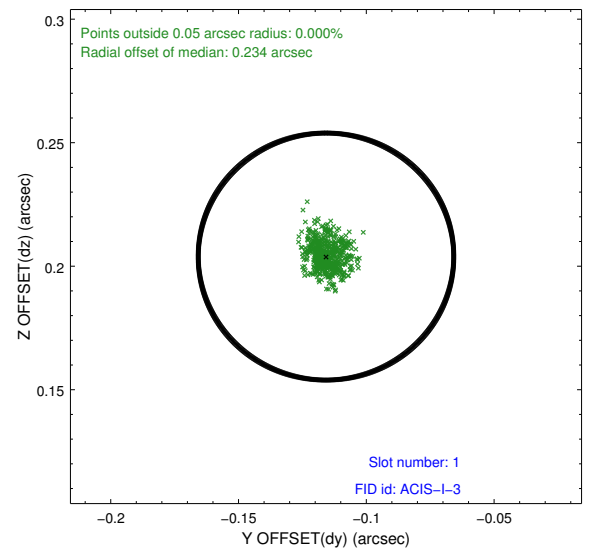
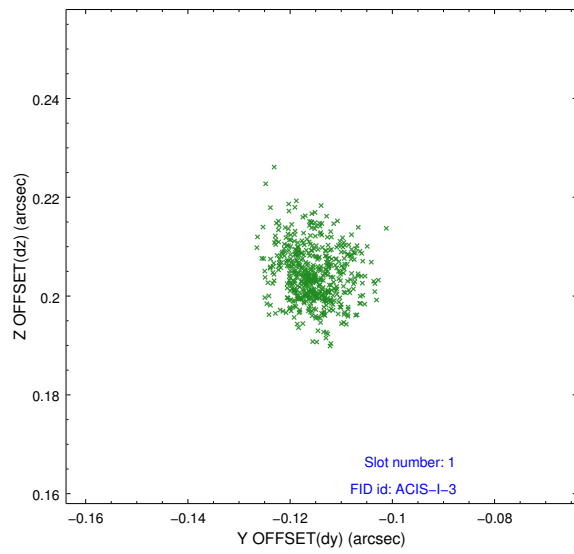


# 2.5 FID Slots

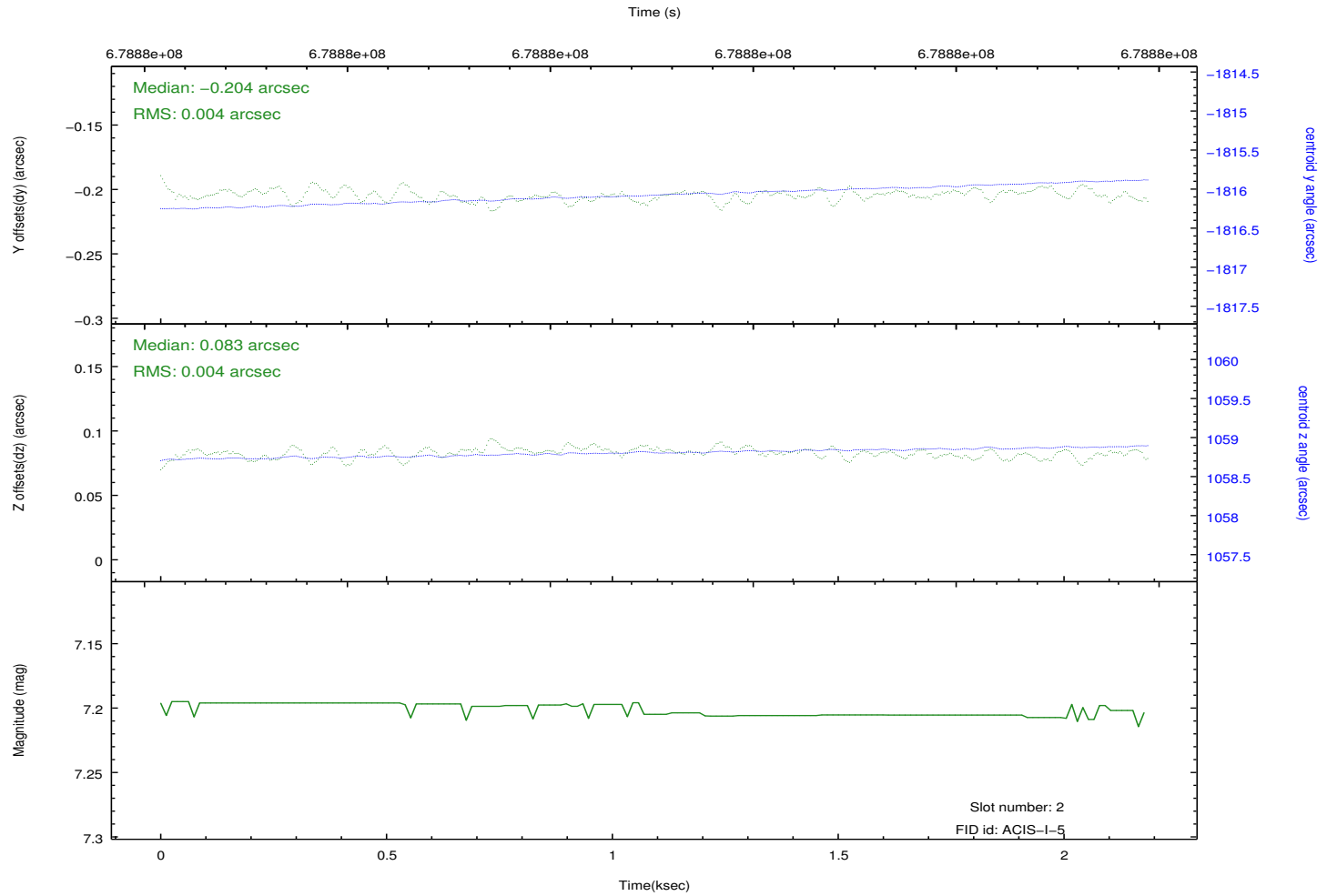
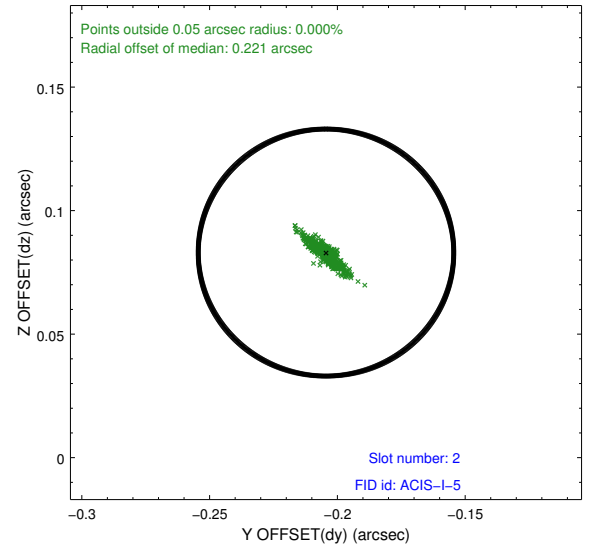
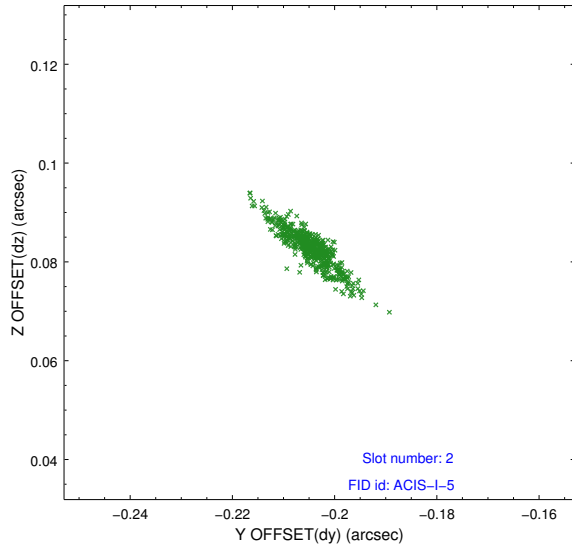
## 2.5.1 Slot 0



## 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)	2019.07.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9002178542614

### A.2 Comments