

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1563 - L2 Version 3  
Chandra X-Ray Center

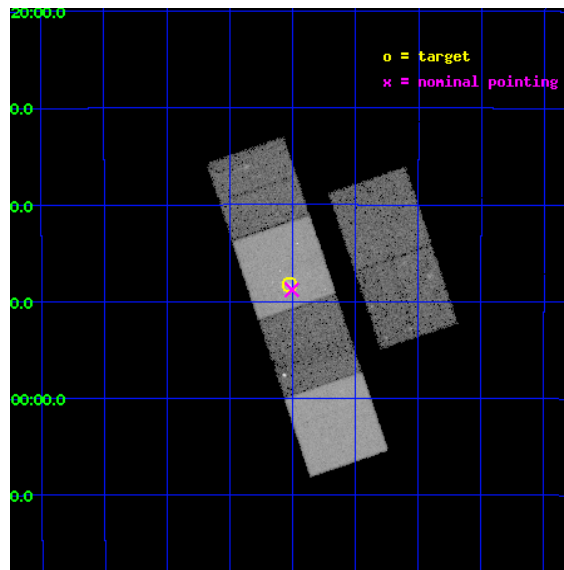
L2 Processing Date : Sep 17 2012

## 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	600120	Sequence number
obs_id	1563	Observation id
title	CHANDRA OBSERVATIONS OF THE ELLIPTICAL GALAXY NGC3923	Proposal tit
observer	Dr. Stephen Murray	Principal investigator
object	NGC3923	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.757083	Observer's specified target RA [deg]
dec_targ	-28.804778	Observer's specified target Dec [deg]
ra_nom	177.75168135625	Nominal RA [deg]
dec_nom	-28.813344859426	Nominal Dec [deg]
roll_nom	251.33923635842	Nominal Roll [deg]
revision	3	Processing version of data
ontime	21379.200019896	Sum of GTIs [s]
livetime	21108.483716235	Livetime [s]
ontime2	21372.718129322	Sum of GTIs [s]
ontime3	21375.959059641	Sum of GTIs [s]
ontime5	21375.959089562	Sum of GTIs [s]
ontime6	21375.959059641	Sum of GTIs [s]
ontime7	21379.200019896	Sum of GTIs [s]
ontime8	21372.718129322	Sum of GTIs [s]
l2events	250019	Number of level 2 events

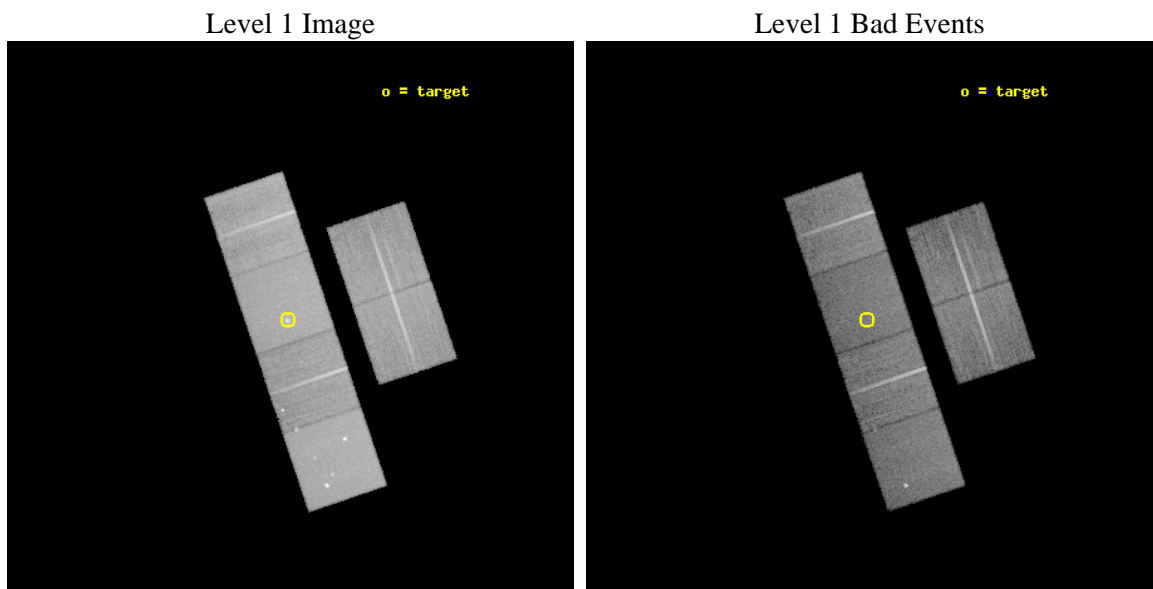




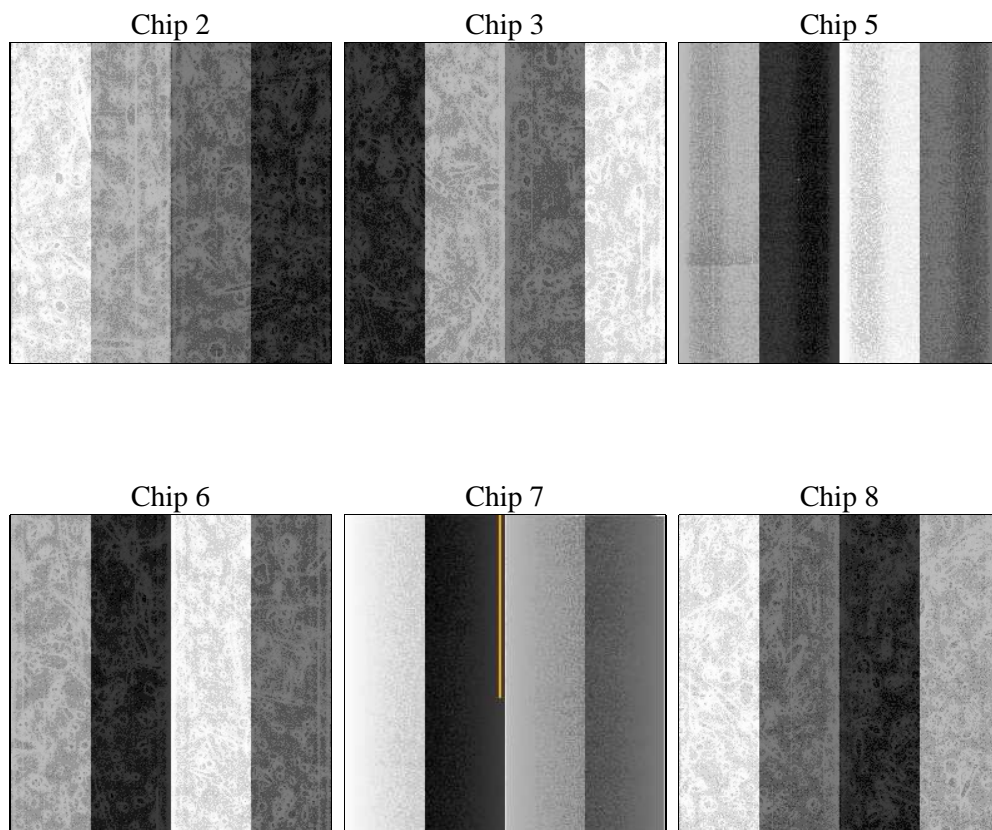
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21625.672000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	21379.200019896	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	21372.718129322	Sum of GTIs [s]
date	2012-09-17T22:27:01	Date and time of file creation	ontime3	21375.959059641	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	21375.959089562	Sum of GTIs [s]
			ontime6	21375.959059641	Sum of GTIs [s]
			ontime7	21379.200019896	Sum of GTIs [s]
			ontime8	21372.718129322	Sum of GTIs [s]
			l1events	1034330	Number of level 1 events

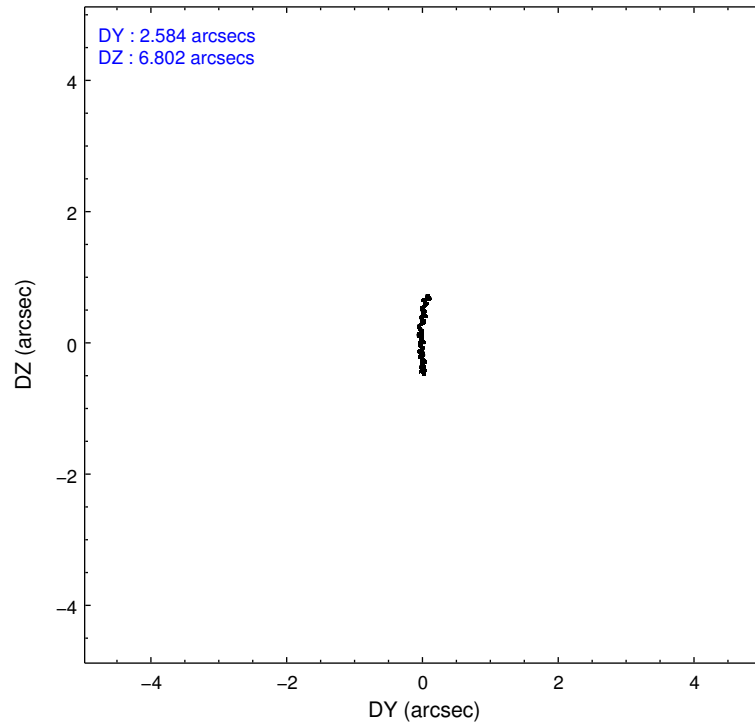
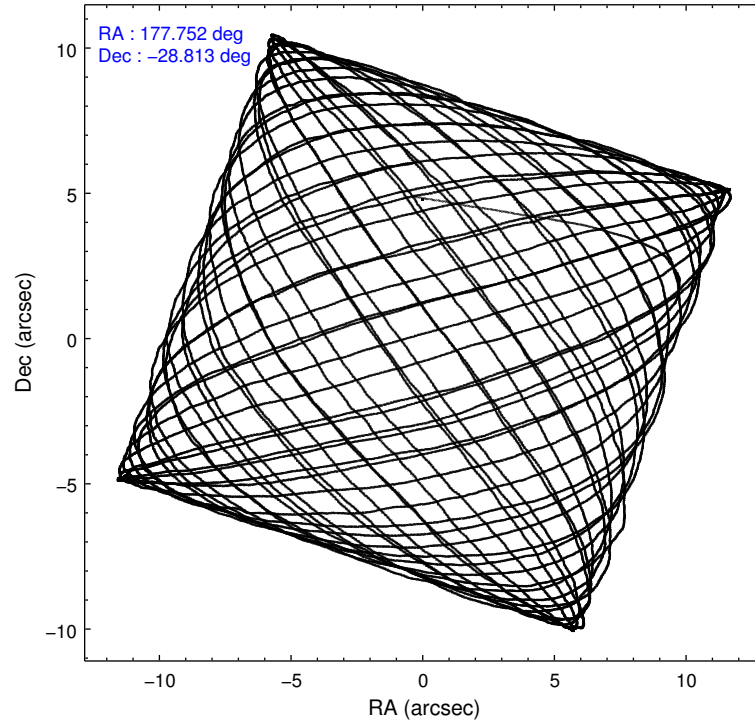
### 2.1.4 Events

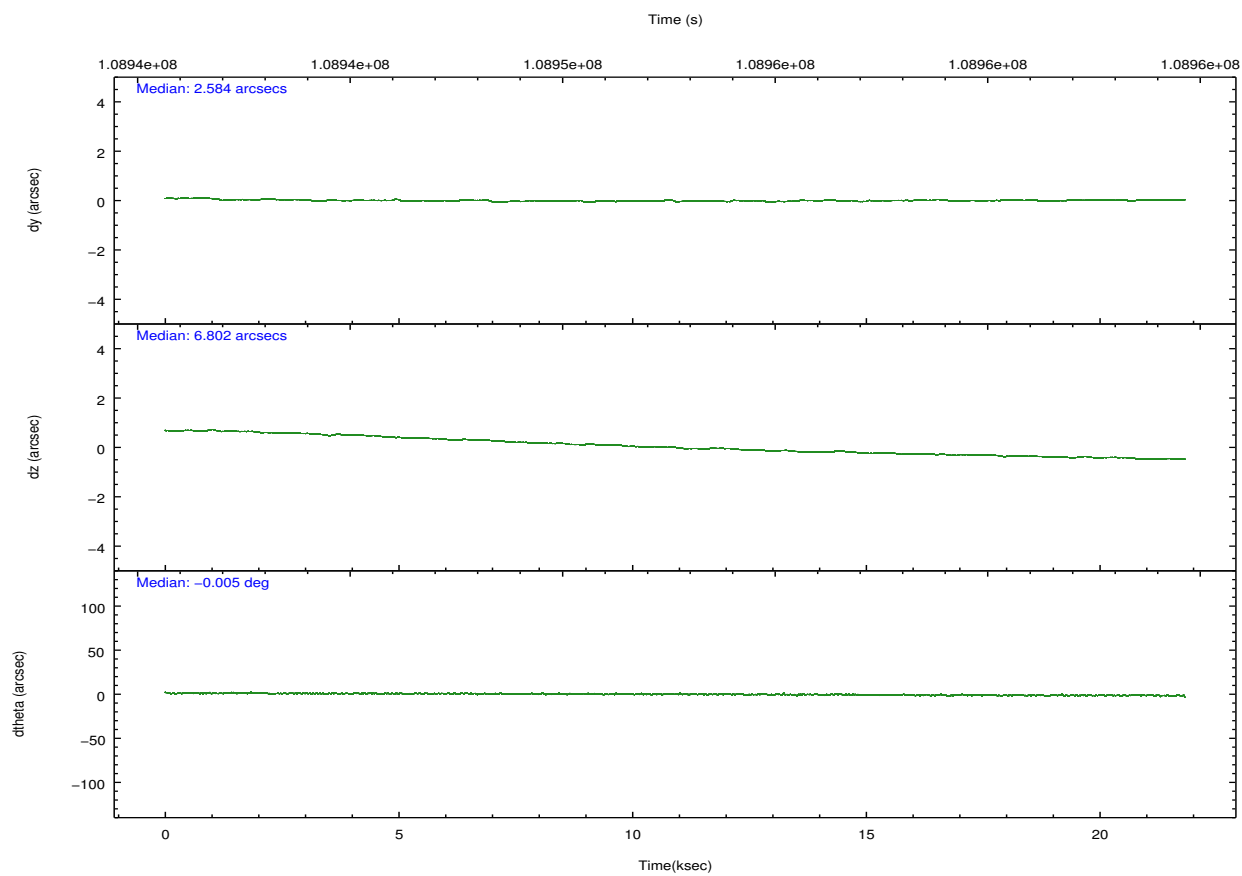
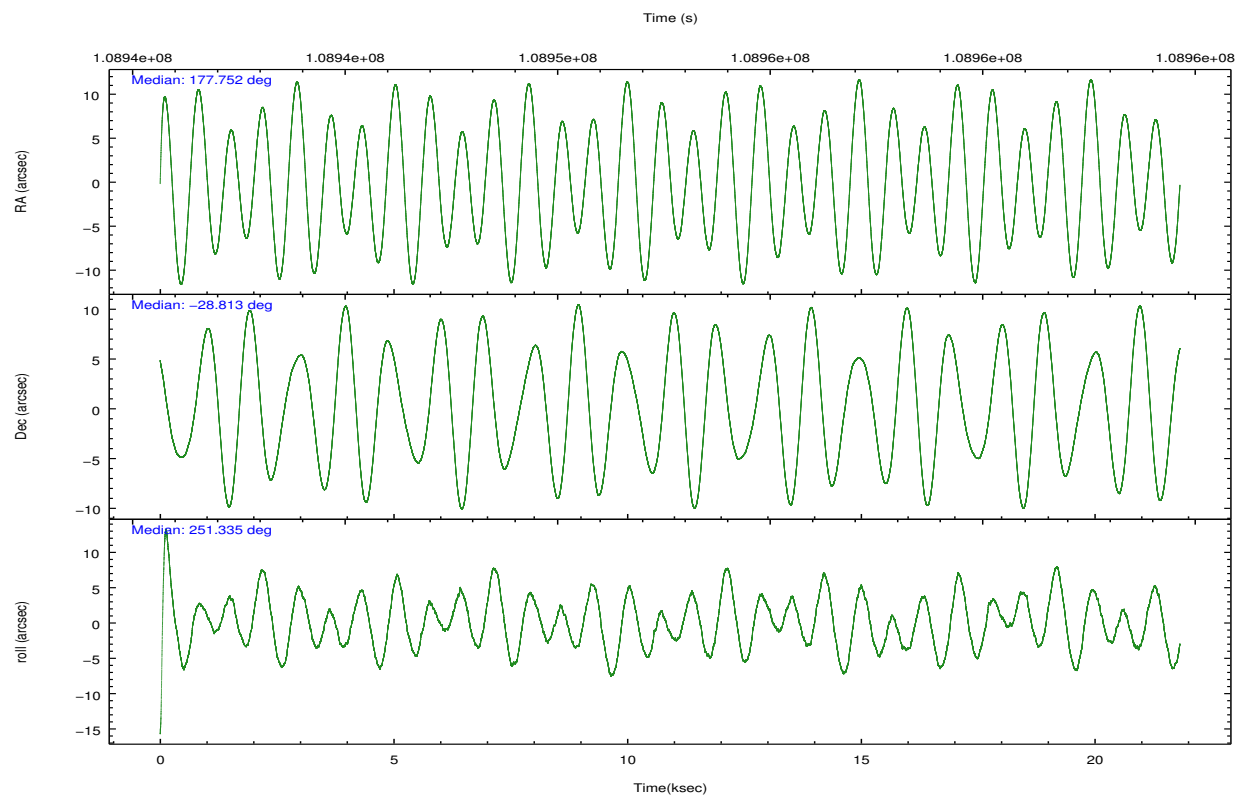
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	148736	141756	211759	144883	196368	190828	grade 0 events	8444	7934	14030	9033	10846	15166
rejected events	130114	123993	108170	125057	105413	146541		5%	5%	6%	6%	5%	7%
rejected %	87%	87%	51%	86%	53%	76%	grade 1 events	78	55	278	80	183	132
								0%	0%	0%	0%	0%	0%
							grade 2 events	3959	3744	29110	3891	18184	8834
								2%	2%	13%	2%	9%	4%
							grade 3 events	1597	1488	5383	1732	8368	5373
								1%	1%	2%	1%	4%	2%
							grade 4 events	1497	1555	4438	1687	8126	4863
								1%	1%	2%	1%	4%	2%
							grade 5 events	4920	5272	16060	5929	17394	7483
								3%	3%	7%	4%	8%	3%
							grade 6 events	3129	3049	50645	3491	45442	10053
								2%	2%	23%	2%	23%	5%
							grade 7 events	125112	118659	91815	119040	87825	138924
								84%	83%	43%	82%	44%	72%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	177.745250	177.7516813562459	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.786630	-28.81334485942588	Alternating exposures requested	N	N
[deg] Pointing Roll	251.179522	251.3392363584248	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	108941926.184000	108941127.91488			
Observation start date	2001-06-14T21:37:42	2001-06-14T21:25:27			
[s] Observation end time (MET)	108963551.184000	108963866.00327			
Observation end date	2001-06-15T03:38:07	2001-06-15T03:44:26			
Read mode	TIMED	TIMED			

## 2.3 Aspect



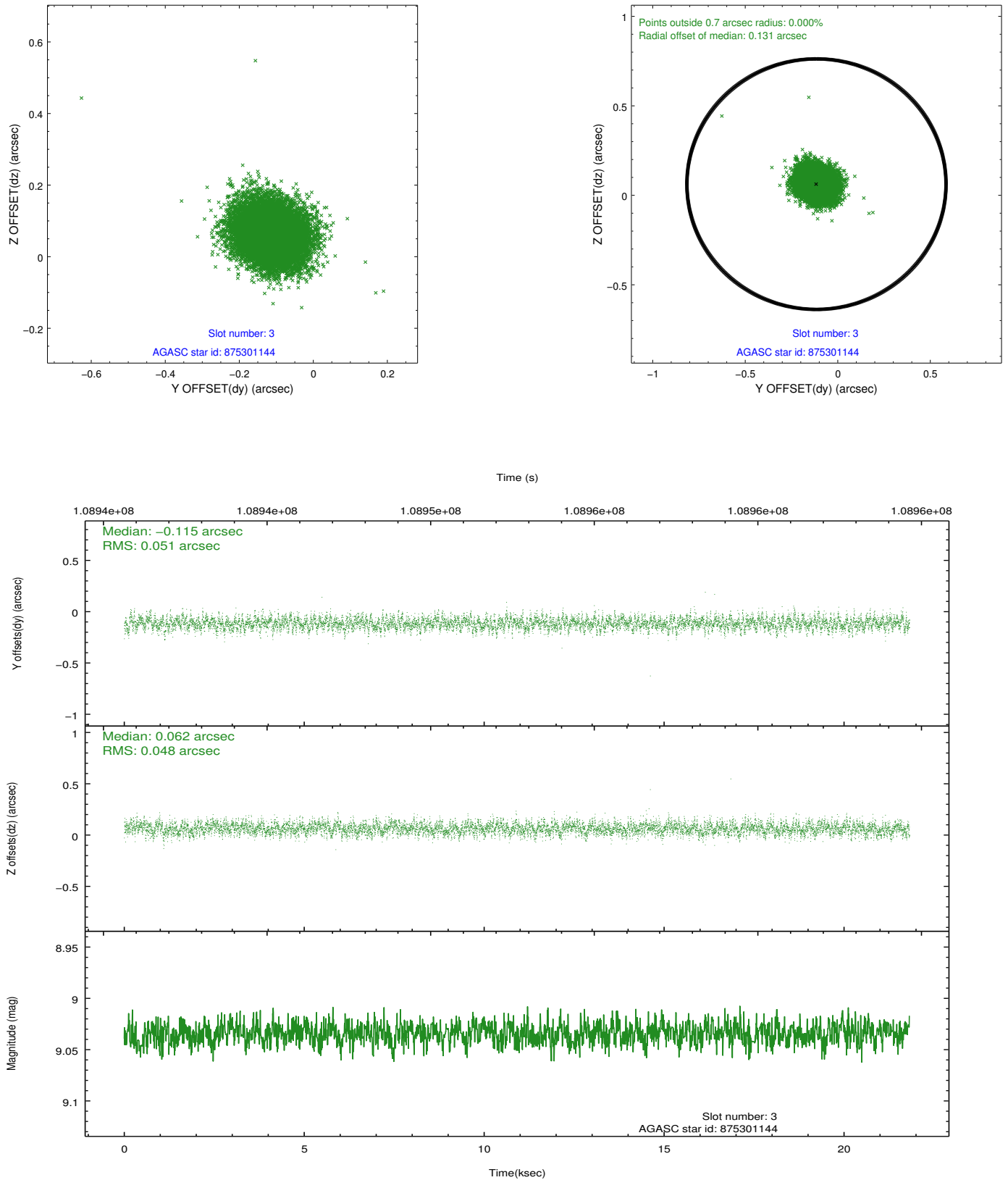


### Slot Statistics

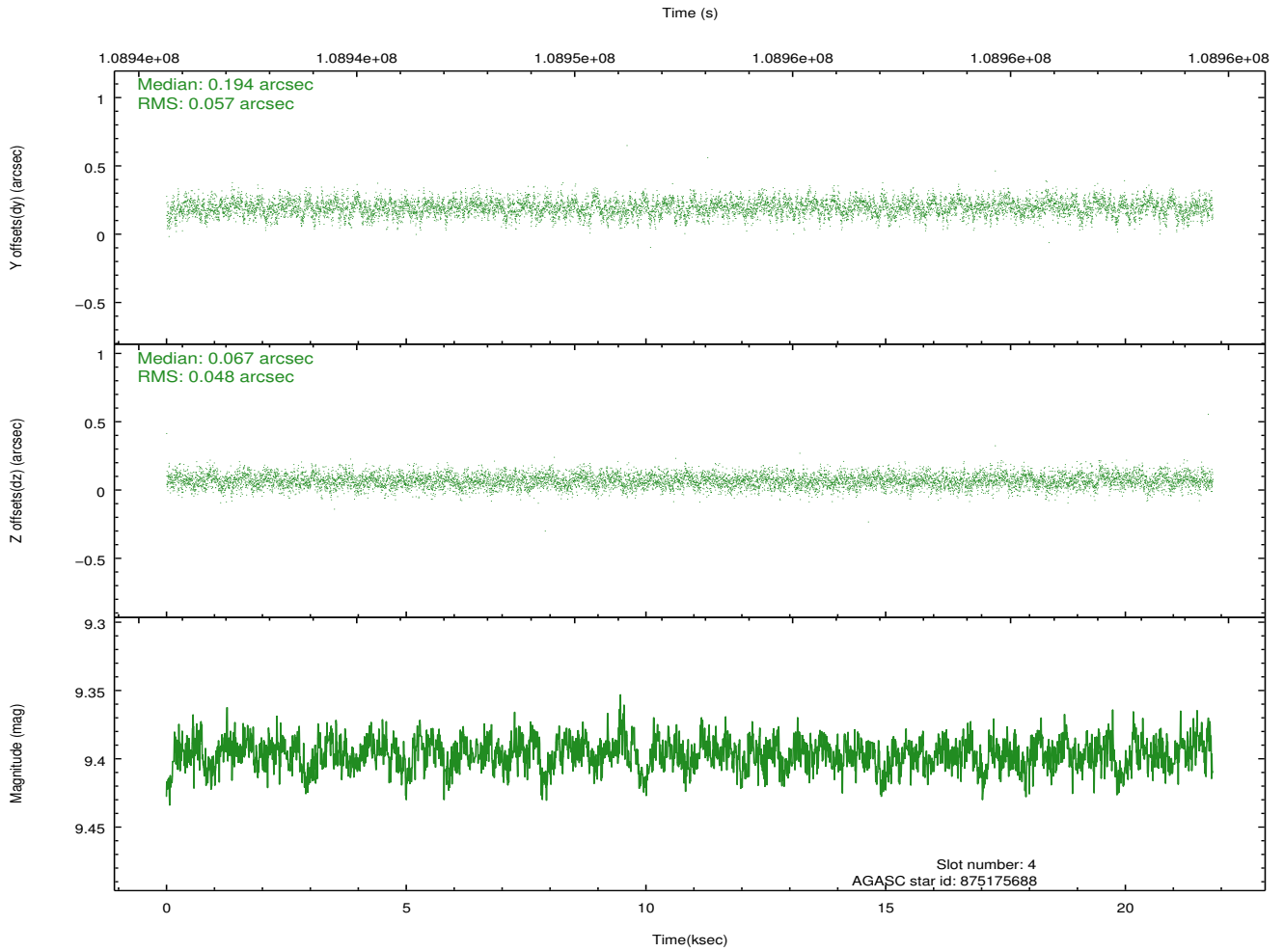
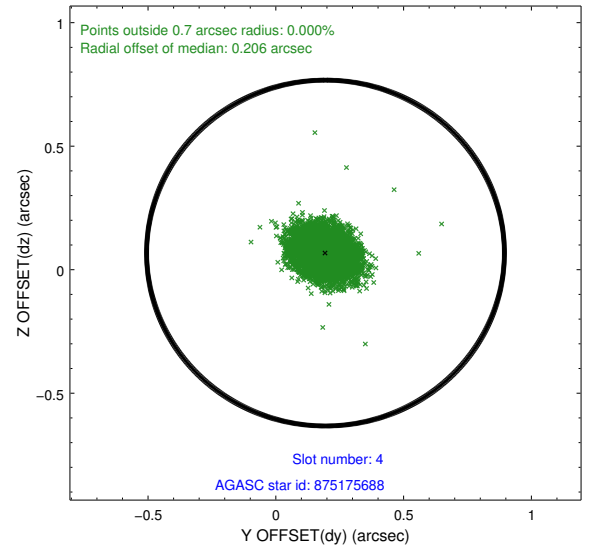
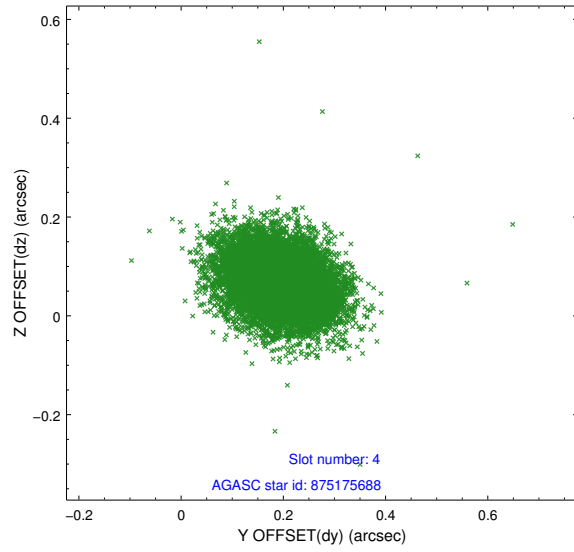
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	5321	-0.009	-0.015	0.010	0.019	0.000000	0.000000	-755.21	-1728.04
1	FID	ACIS-S-4	7.20	5320	-0.020	-0.000	0.006	0.011	0.000000	0.000000	2157.97	180.32
2	FID	ACIS-S-6	7.35	5320	0.002	0.022	0.010	0.017	0.000000	0.000000	406.96	817.90
3	GUIDE	875301144	9.03	10640	-0.115	0.062	0.074	0.119	178.305115	-28.400581	-1882.66	1230.55
4	GUIDE	875175688	9.40	10625	0.194	0.067	0.079	0.129	177.575125	-29.128754	1339.85	-109.19
5	GUIDE	875300464	9.49	10639	-0.084	0.068	0.098	0.159	178.404263	-28.636939	-1175.45	1798.32
6	GUIDE	875174096	10.09	10640	-0.150	-0.184	0.133	0.212	177.355536	-28.280737	-1322.47	-1756.98
7	GUIDE	875176128	9.52	10639	0.148	-0.013	0.097	0.157	177.792980	-29.489014	2346.17	956.81

## 2.4 Star Slots

### 2.4.1 Slot 3

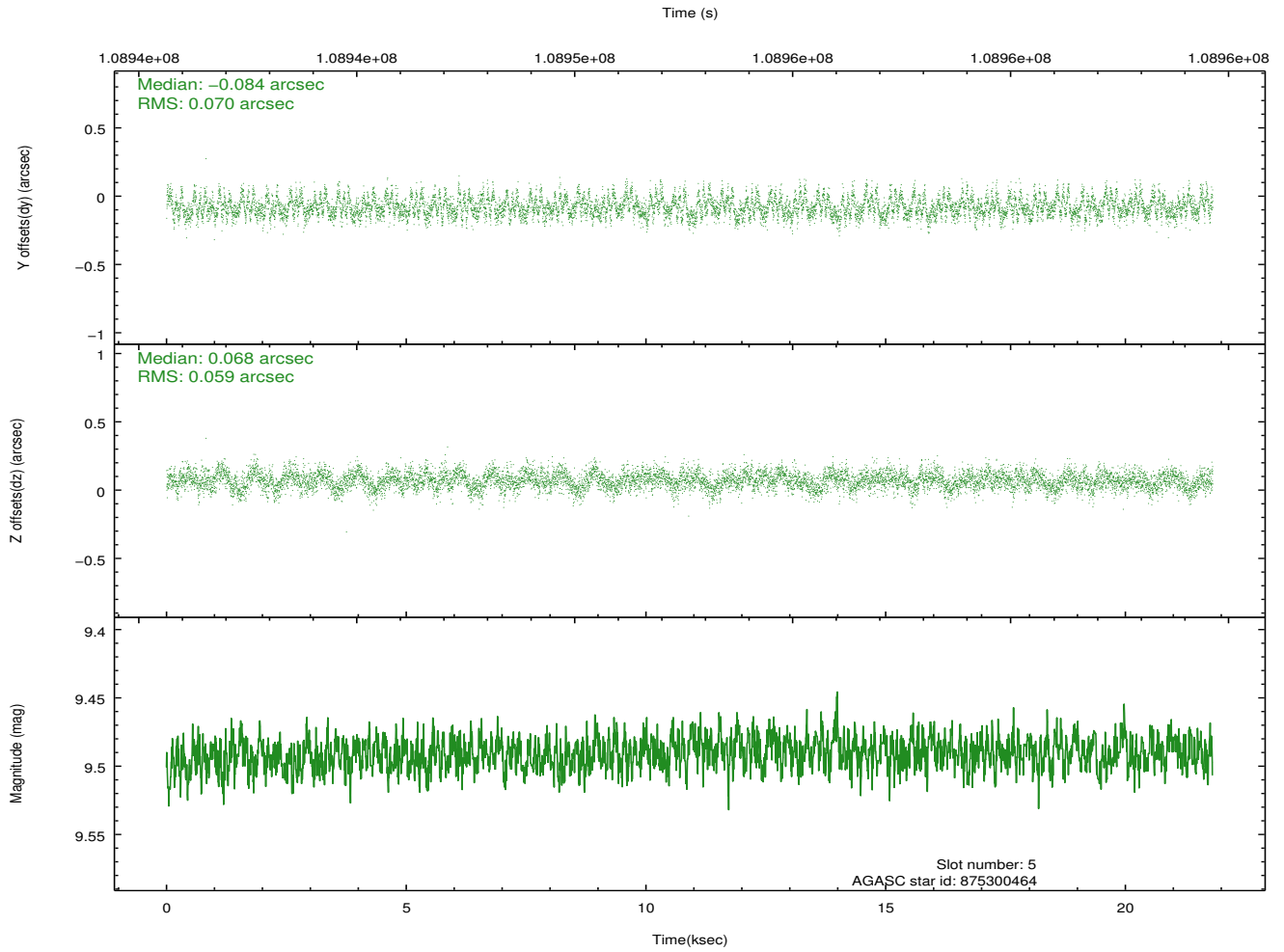
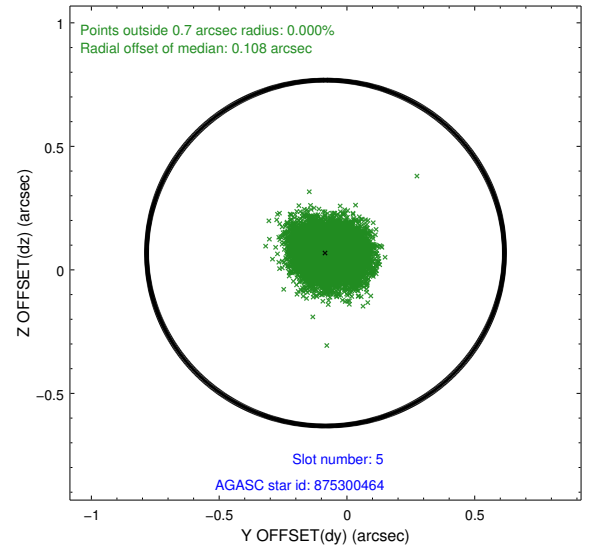
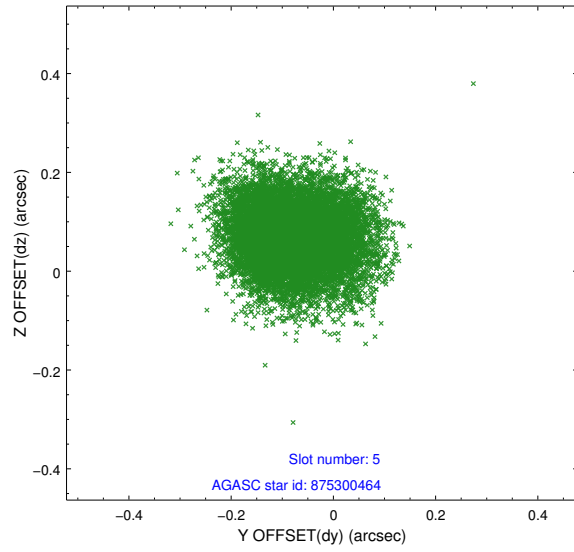


## 2.4.2 Slot 4

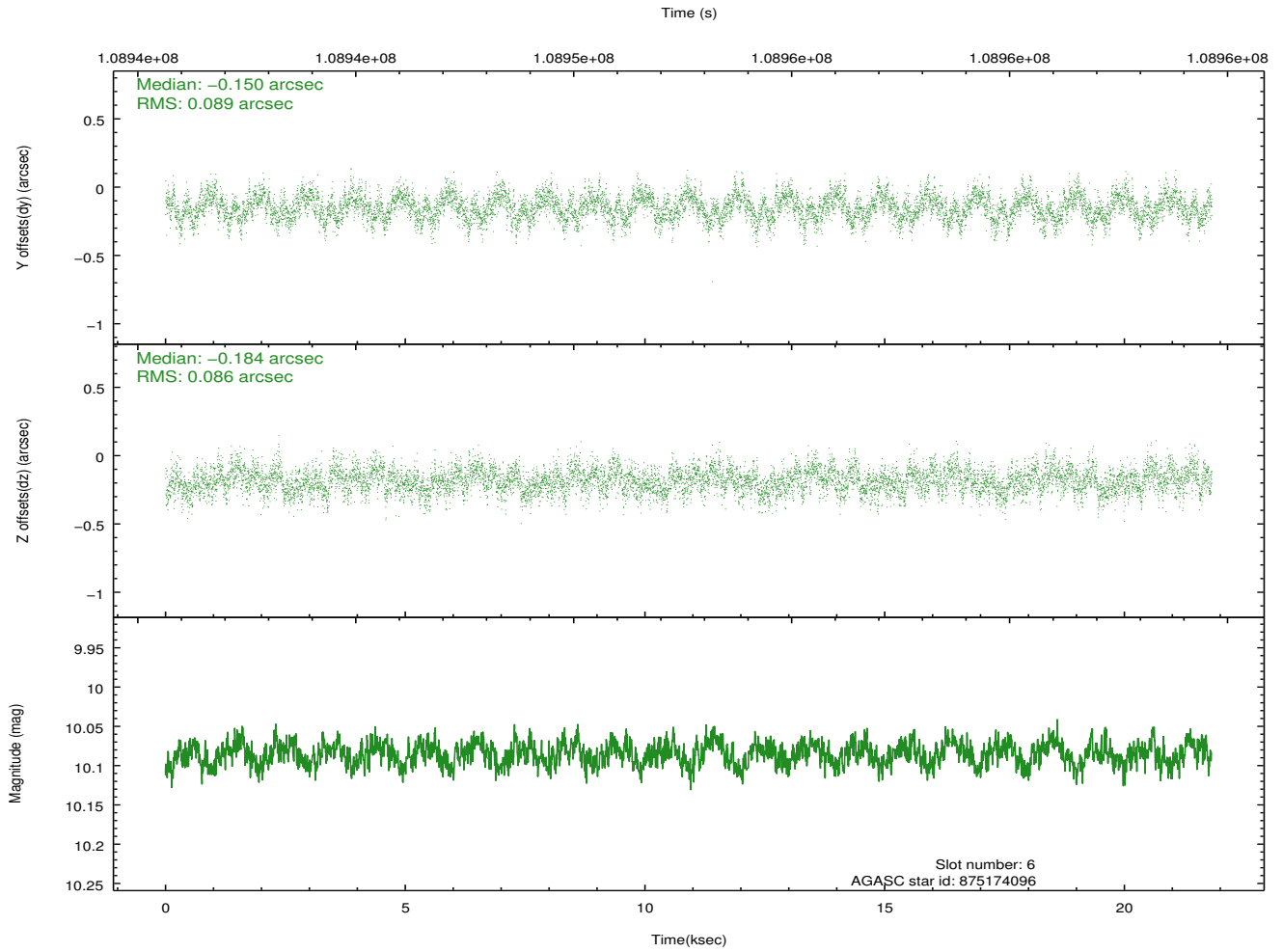
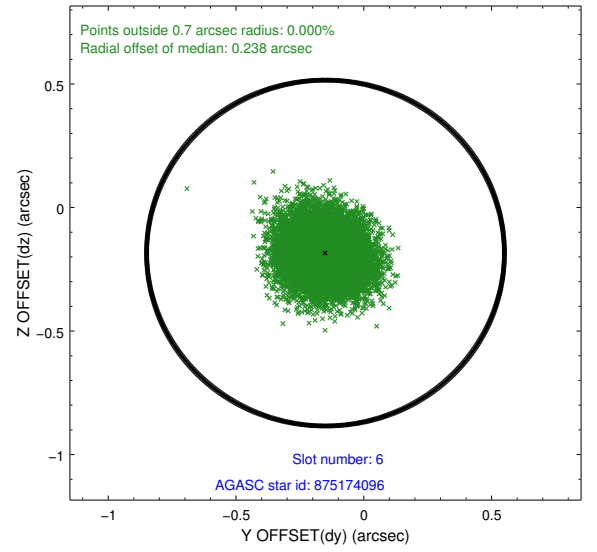
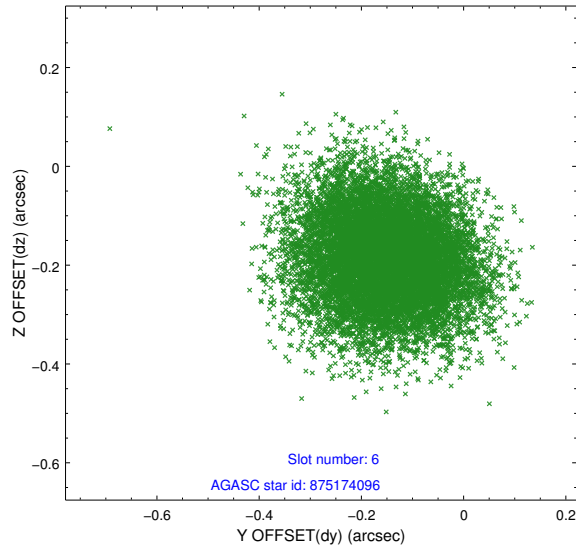




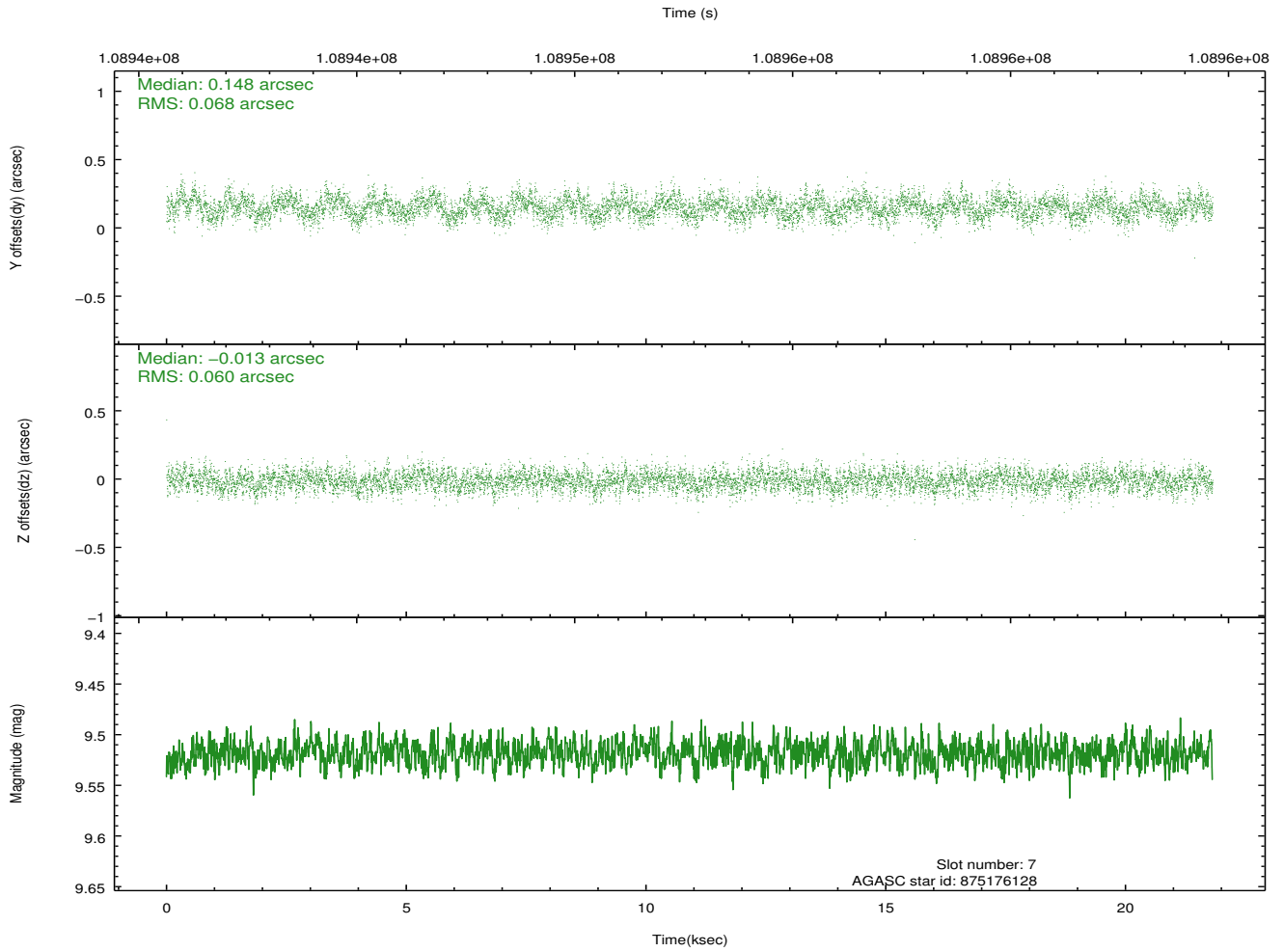
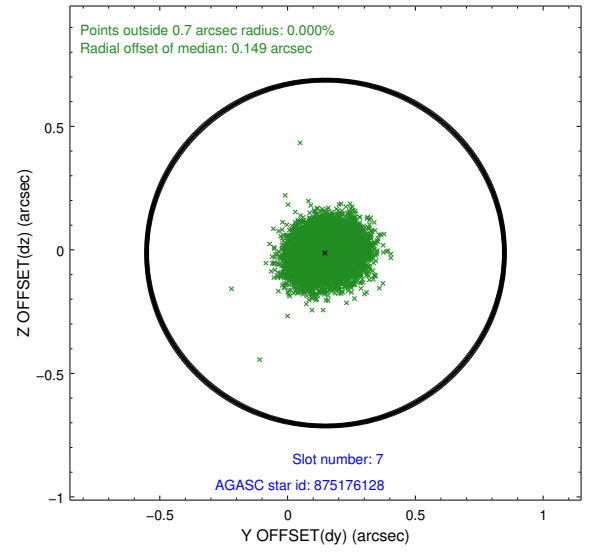
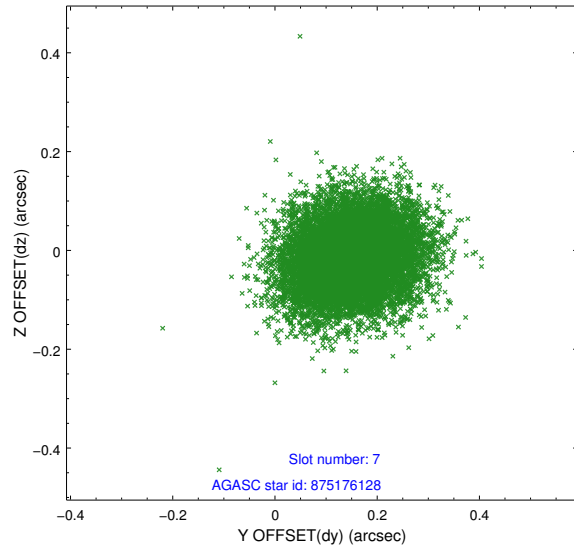
### 2.4.3 Slot 5



## 2.4.4 Slot 6

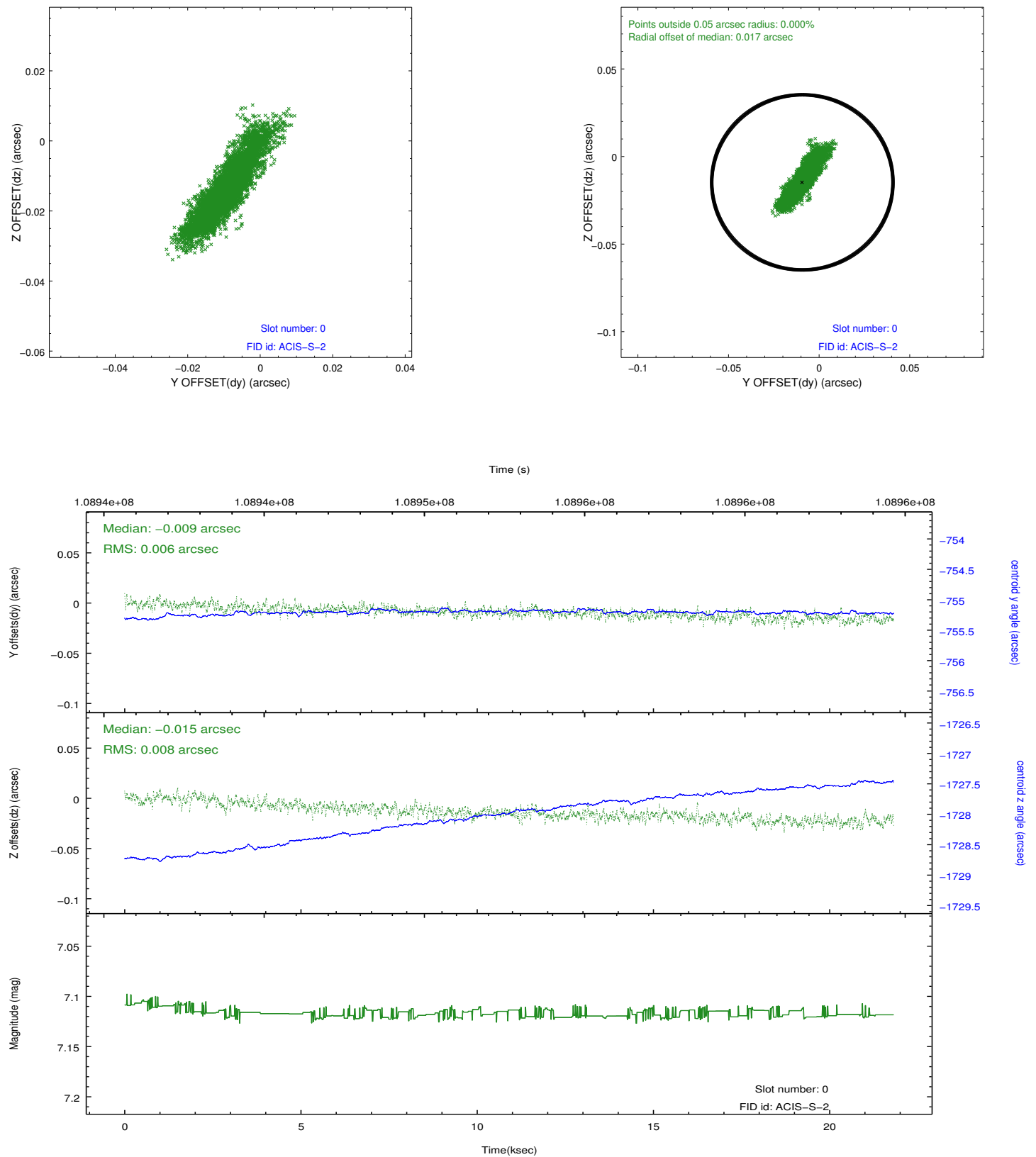


## 2.4.5 Slot 7

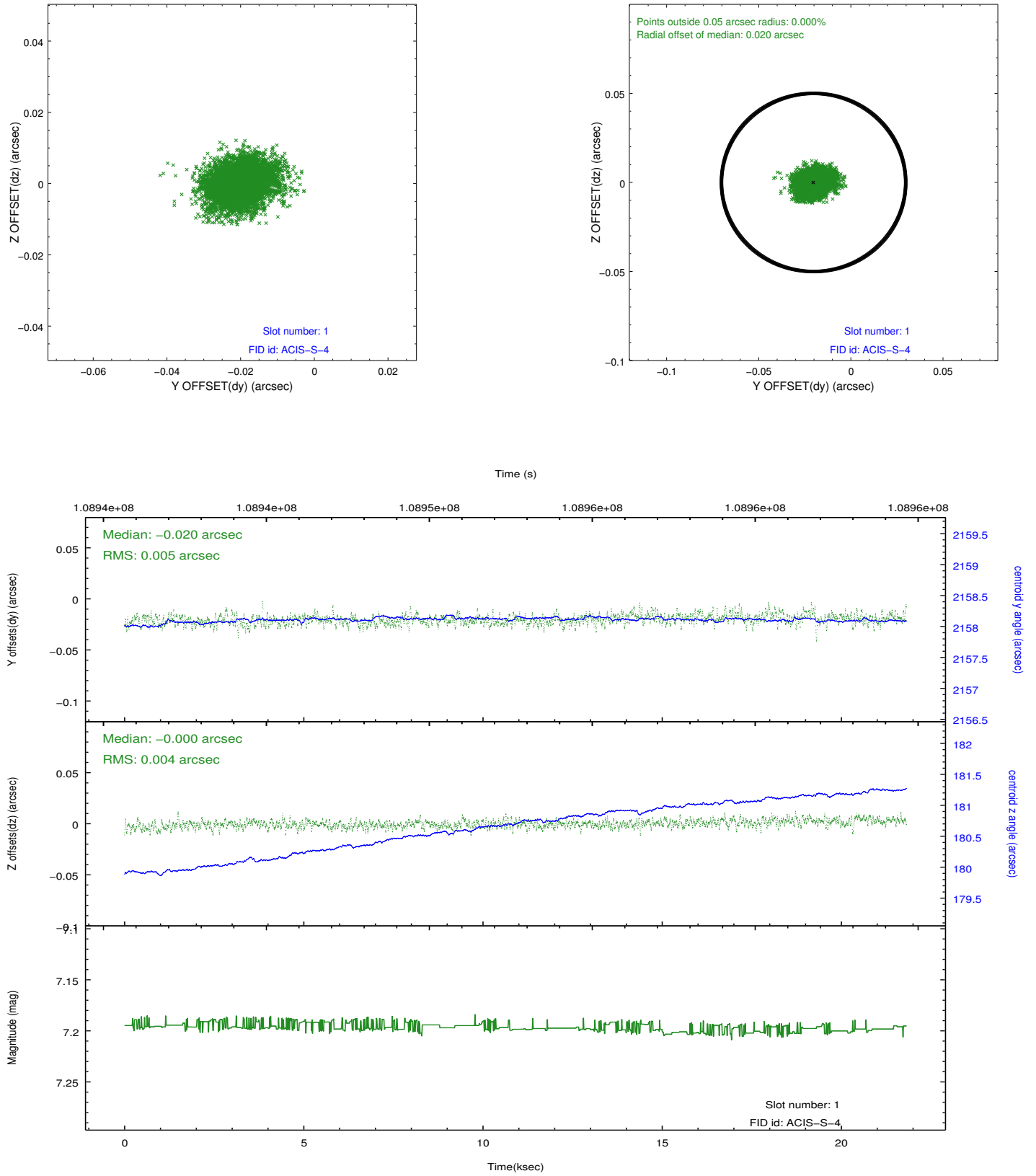


## 2.5 FID Slots

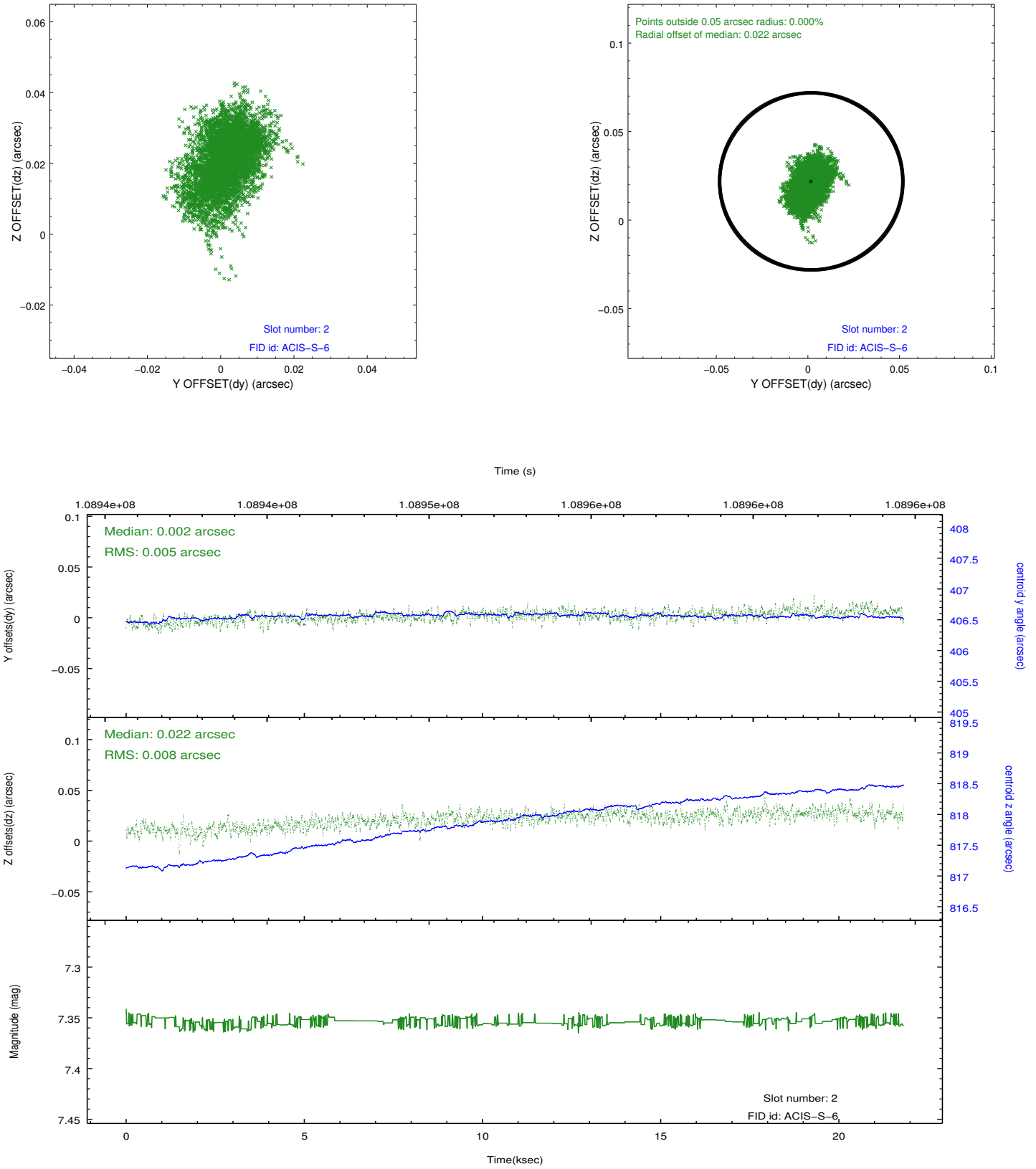
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.09.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.4

### A.2 Comments