

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7893 - L2 Version 2  
Chandra X-Ray Center

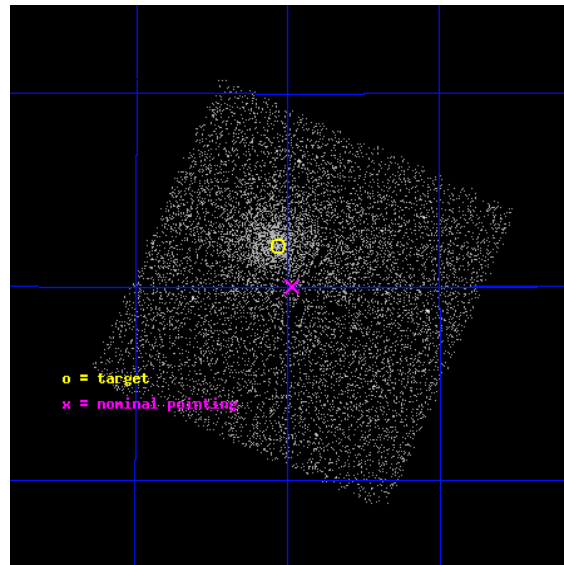
L2 Processing Date : Apr 28 2012

## 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

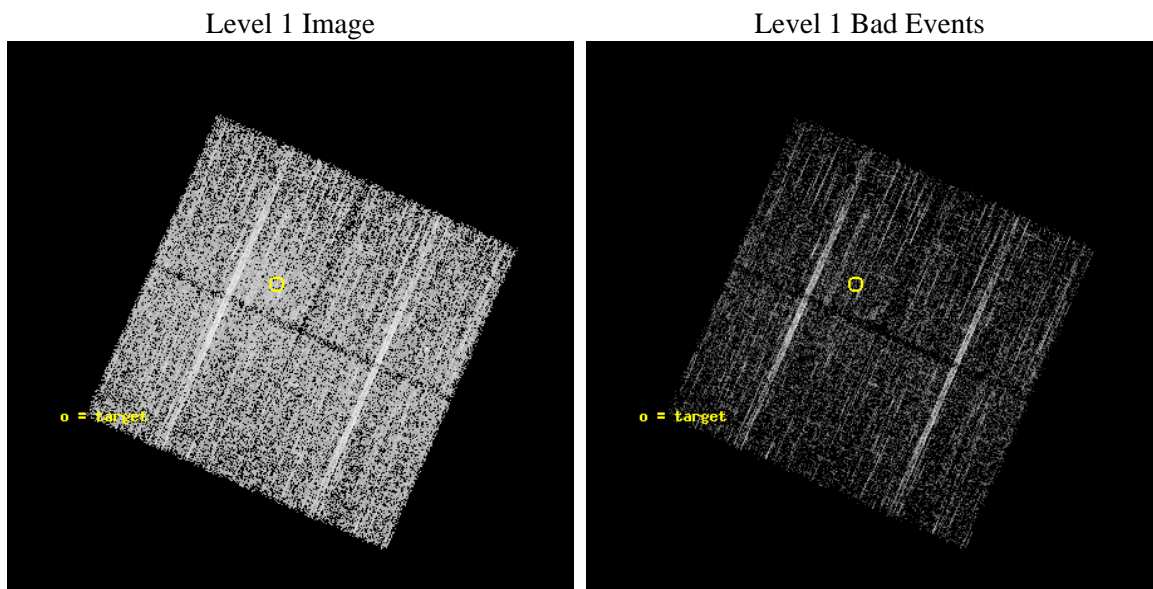
seq_num	701556	Sequence number
obs_id	7893	Observation id
title	Snapshot Survey for X-ray Outbursts in Rich Clusters of Galaxies	P
observer	Professor Gordon Garmire	Principal investigator
object	A1446	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.515833	Observer's specified target RA [deg]
dec_targ	58.035944	Observer's specified target Dec [deg]
ra_nom	180.49349310996	Nominal RA [deg]
dec_nom	58.000480293551	Nominal Dec [deg]
roll_nom	293.96022574979	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5056.0590486526	Sum of GTIs [s]
livetime	4989.9979149655	Livetime [s]
ontime0	5059.2000389099	Sum of GTIs [s]
ontime1	5059.2000389099	Sum of GTIs [s]
ontime2	5056.0590786338	Sum of GTIs [s]
ontime3	5056.0590486526	Sum of GTIs [s]
l2events	11466	Number of level 2 events



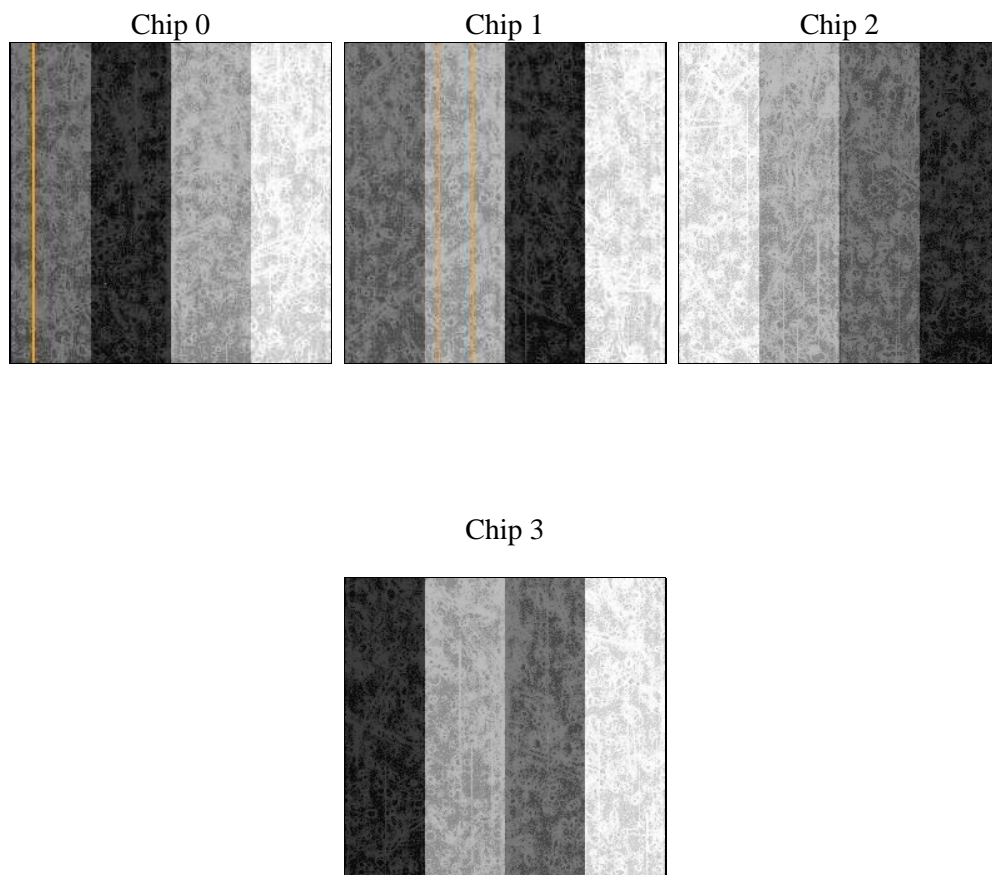
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	5056.0590486526	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	5059.2000389099	Sum of GTIs [s]
date	2012-04-28T15:51:08	Date and time of file creation	ontime1	5059.2000389099	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5056.0590786338	Sum of GTIs [s]
			ontime3	5056.0590486526	Sum of GTIs [s]
			l1events	136355	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	32783	33236	34858	35478
rejected events	29662	29785	31720	31059
rejected %	90%	89%	90%	87%

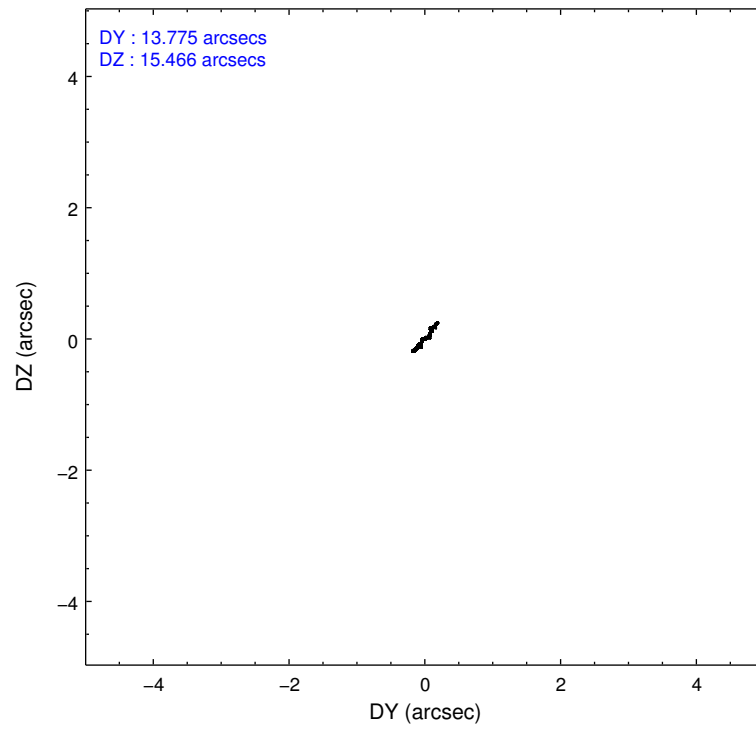
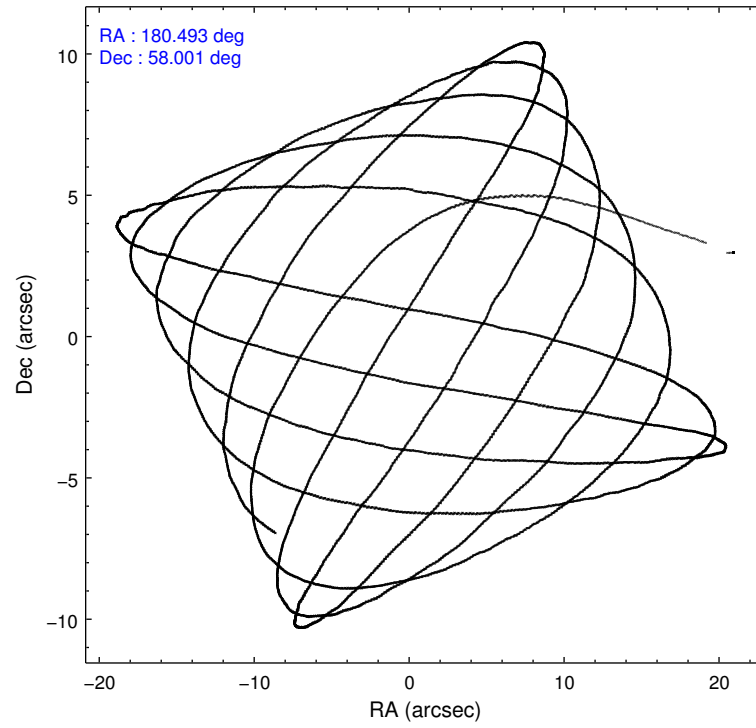
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	1307	1509	1435	2600
	3%	4%	4%	7%
grade 1 events	24	16	20	36
	0%	0%	0%	0%
grade 2 events	731	722	653	707
	2%	2%	1%	1%
grade 3 events	341	365	321	351
	1%	1%	0%	0%
grade 4 events	315	346	337	317
	0%	1%	0%	0%
grade 5 events	556	669	476	684
	1%	2%	1%	1%
grade 6 events	428	514	395	449
	1%	1%	1%	1%
grade 7 events	29081	29095	31221	30334
	88%	87%	89%	85%

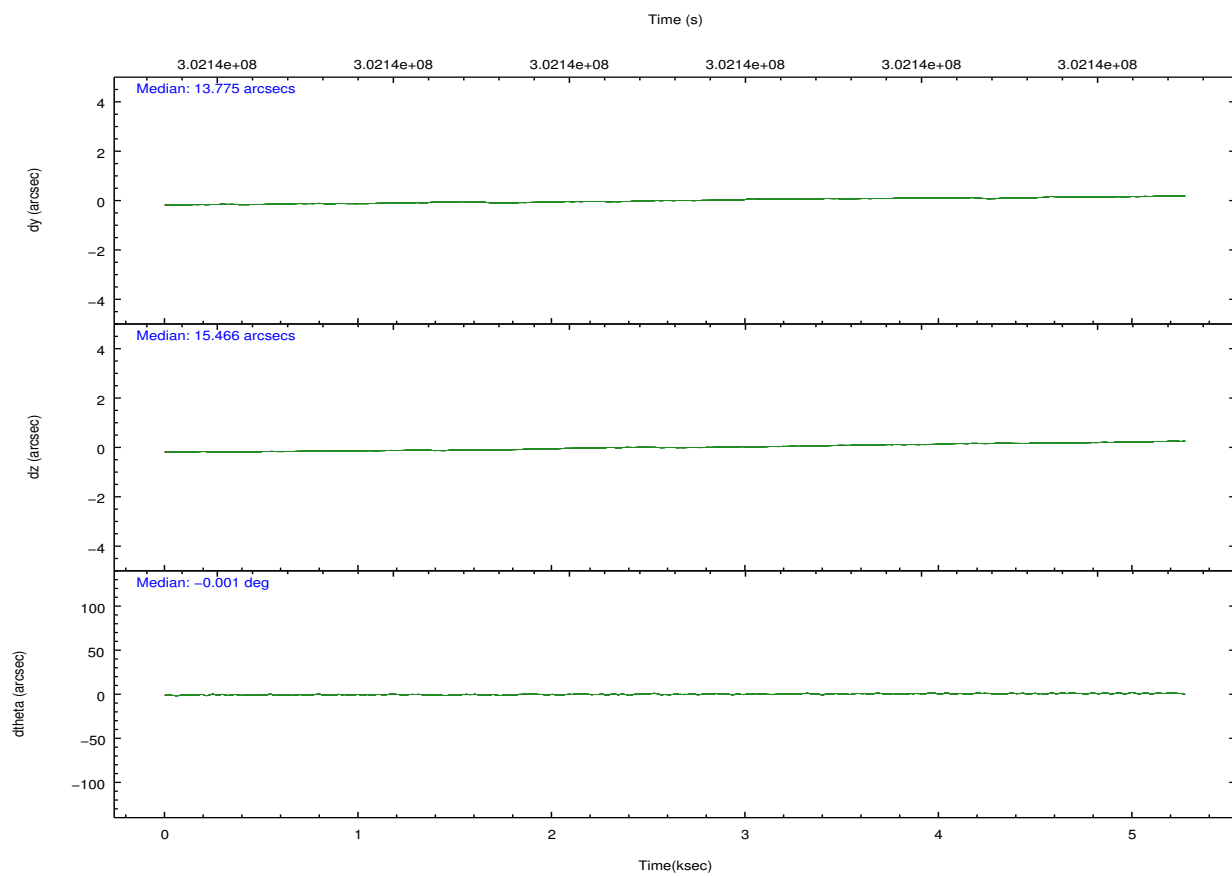
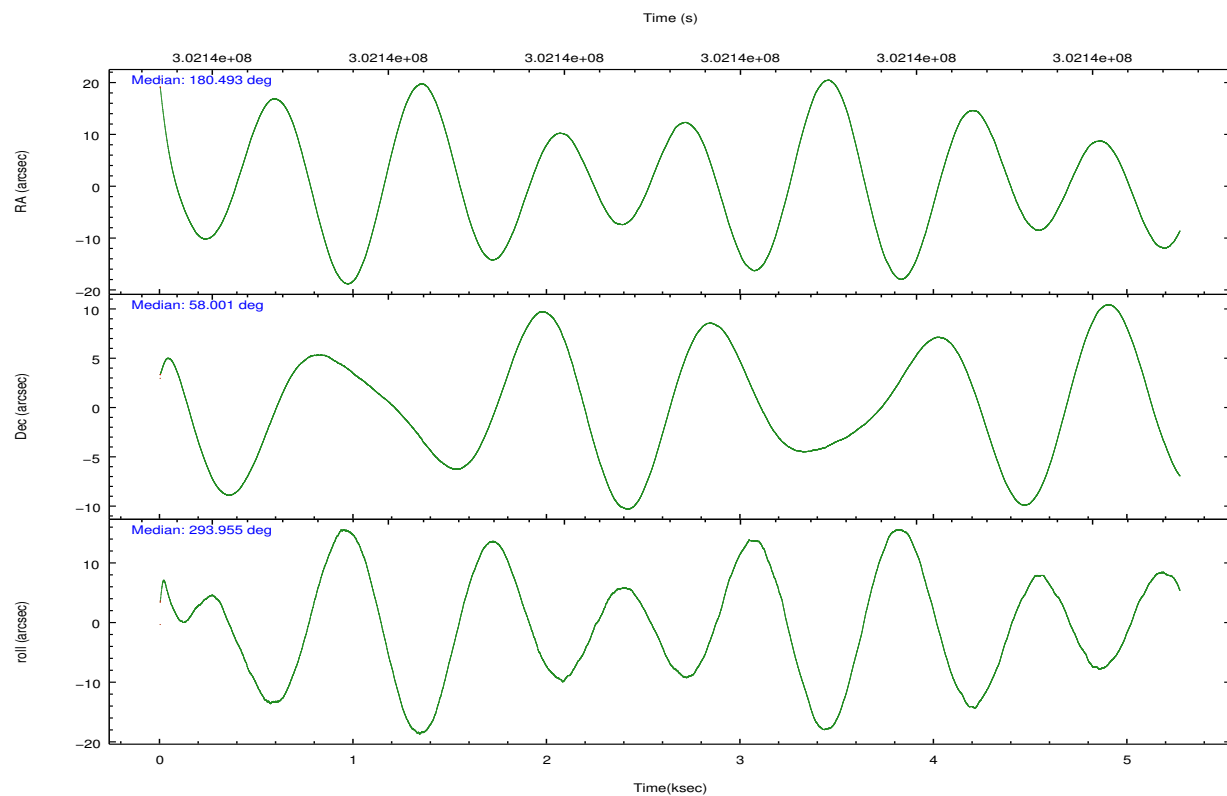


## 2.2 Compared Parameters

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	180.451470	180.4934931099617	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.016571	58.00048029355069	Alternating exposures requested	N	N
[deg] Pointing Roll	293.787135	293.9602257497858	[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)	302137235.184000	302136322.11966			
Observation start date	2007-07-29T22:59:30	2007-07-29T22:45:22			
[s] Observation end time (MET)	302142235.184000	302143224.46999			
Observation end date	2007-07-30T00:22:50	2007-07-30T00:40:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect



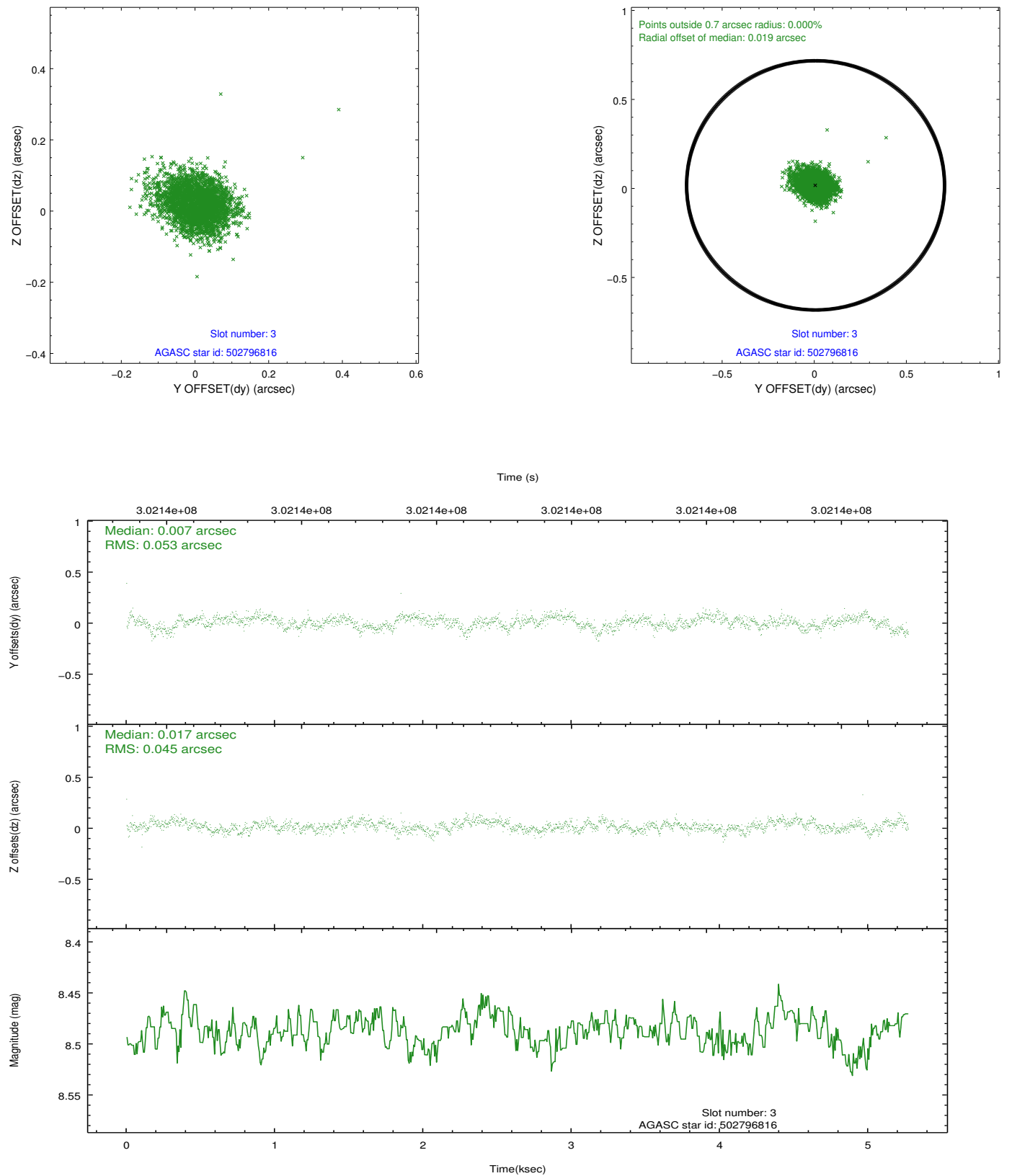


### Slot Statistics

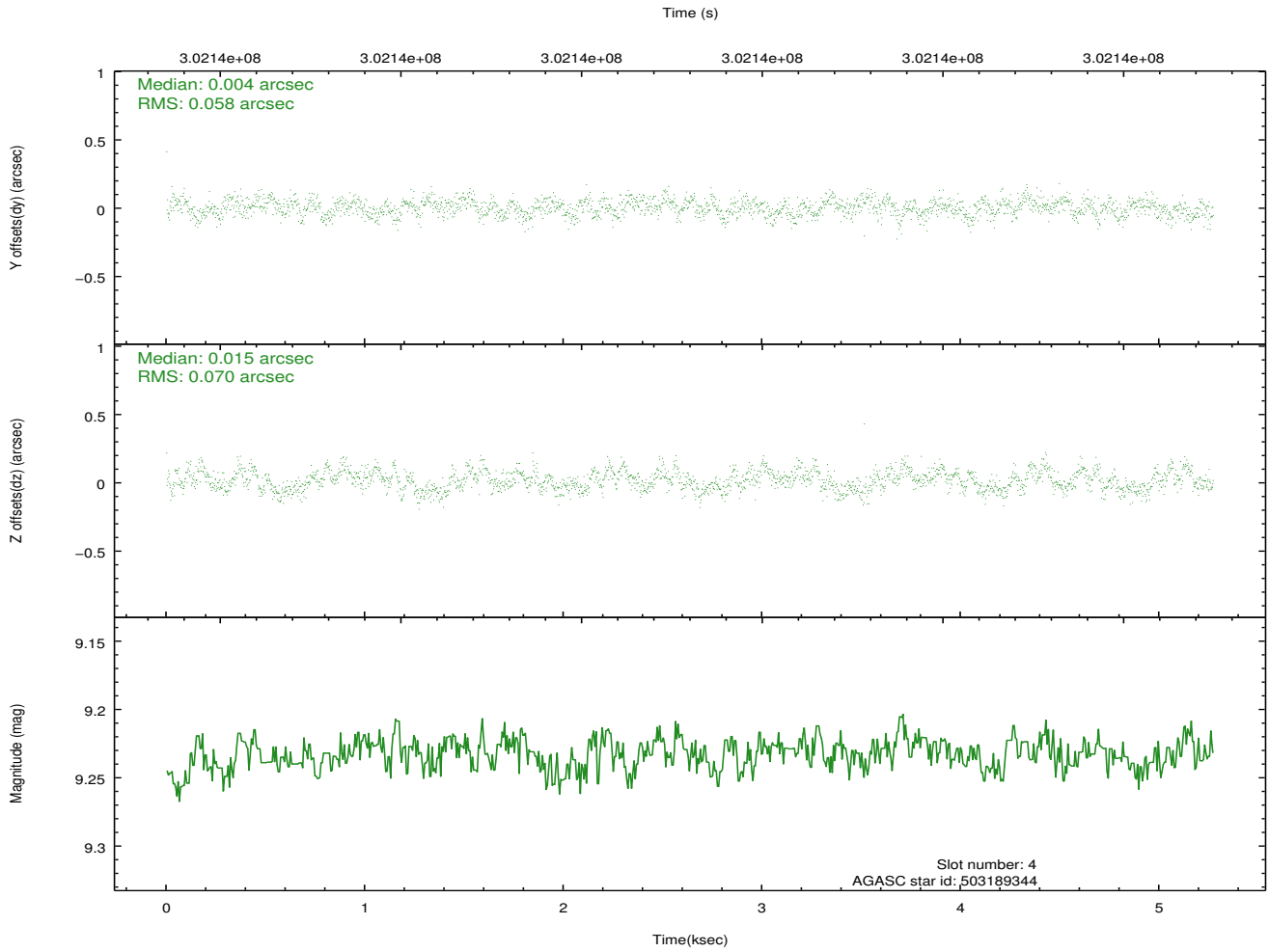
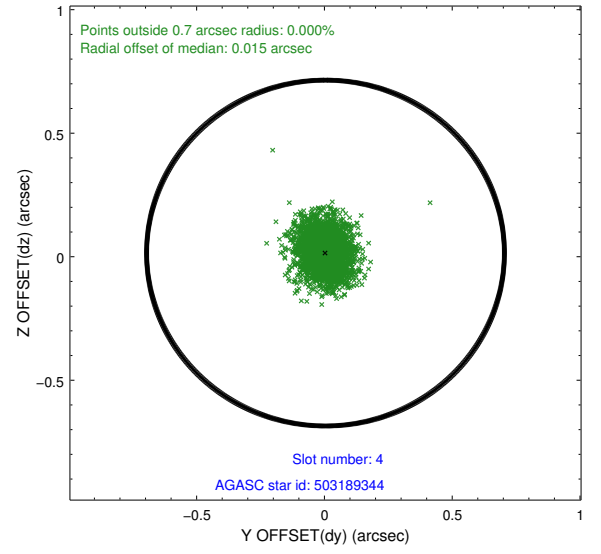
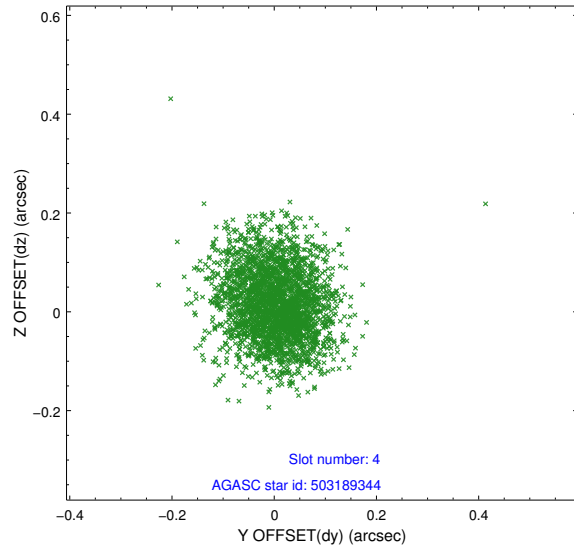
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.22	1286	0.046	-0.038	0.010	0.017	0.000000	0.000000	925.75	-839.13
1	FID	ACIS-I-5	7.22	1286	-0.217	0.043	0.007	0.012	0.000000	0.000000	-1821.96	1057.89
2	FID	ACIS-I-6	7.23	1286	0.080	0.066	0.008	0.013	0.000000	0.000000	390.11	1703.69
3	GUIDE	502796816	8.49	2571	0.007	0.017	0.073	0.120	180.073256	57.474716	1488.18	-1456.30
4	GUIDE	503189344	9.23	2570	0.004	0.015	0.097	0.157	181.212469	58.115210	252.59	1469.94
5	GUIDE	503191072	7.51	2572	-0.036	-0.059	0.063	0.105	181.684877	57.600556	2310.42	1582.05
6	GUIDE	503191776	8.07	2571	-0.087	-0.039	0.061	0.098	179.048919	58.169874	-1602.93	-2202.18
7	GUIDE	502797216	9.36	2570	0.114	0.068	0.104	0.169	180.744655	57.426606	2171.86	-336.14

## 2.4 Star Slots

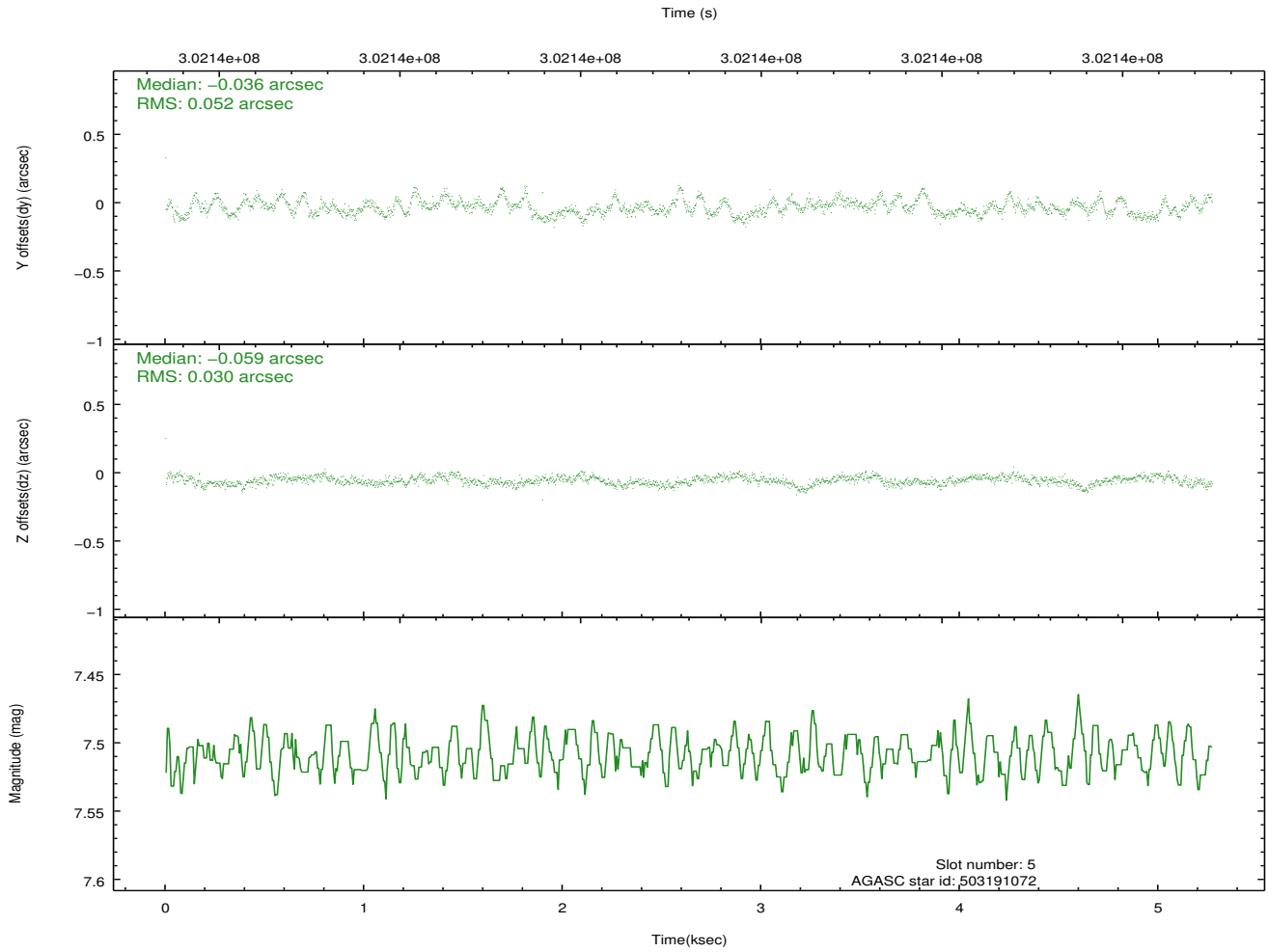
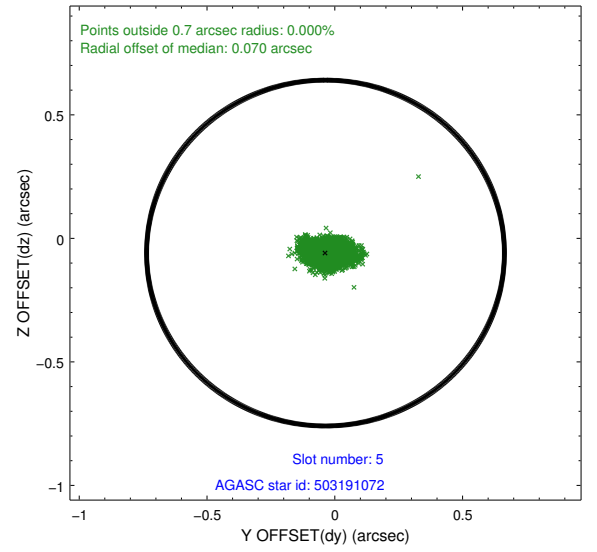
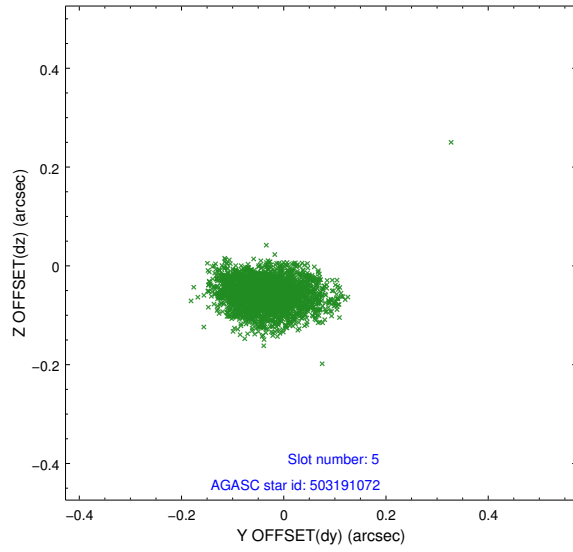
### 2.4.1 Slot 3



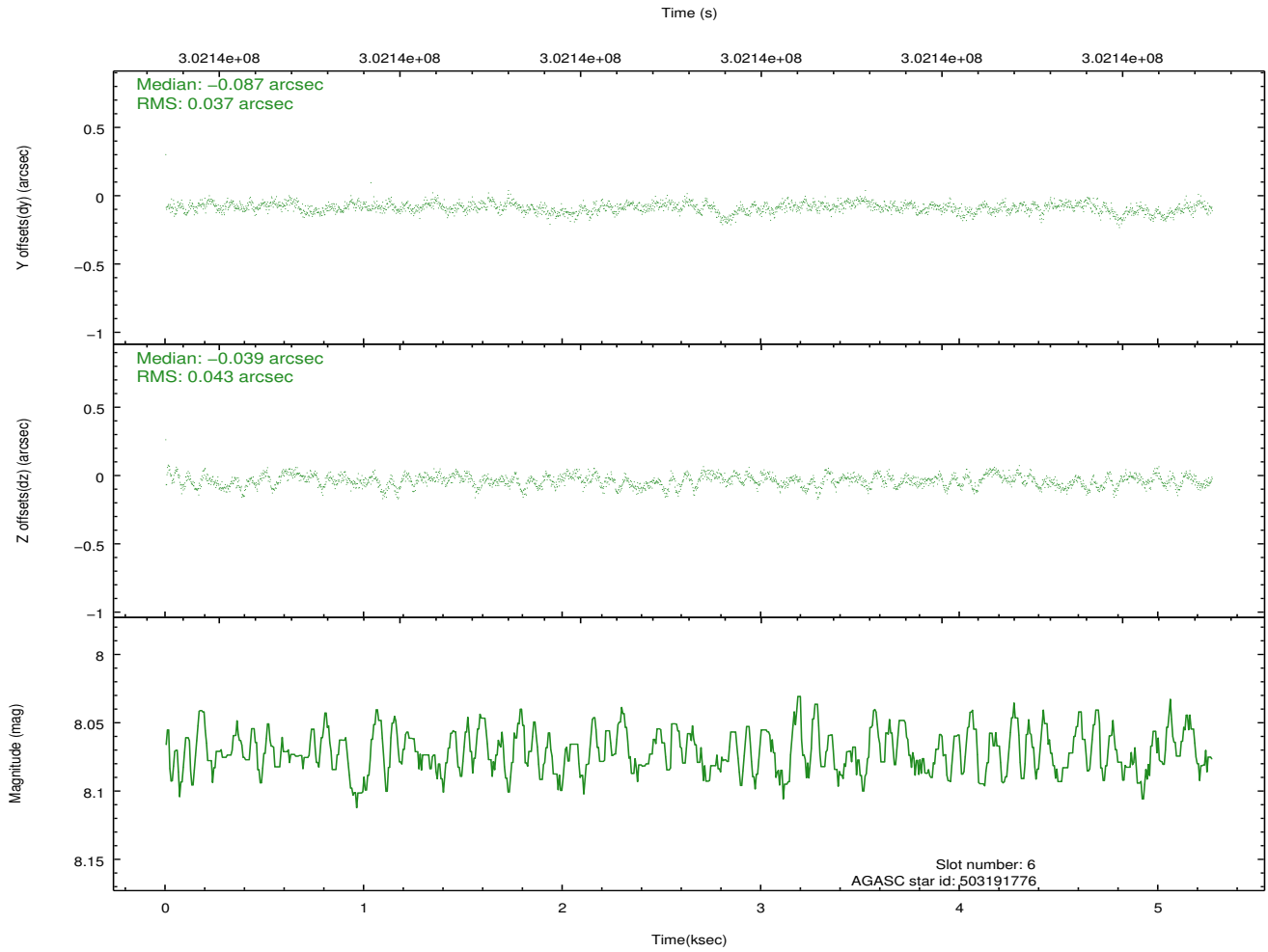
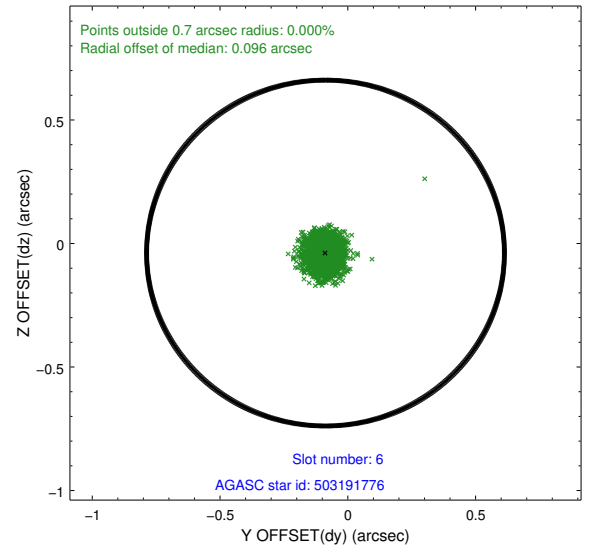
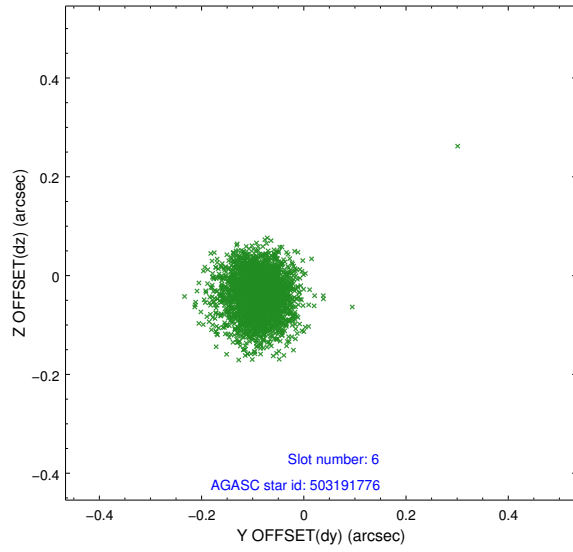
## 2.4.2 Slot 4



### 2.4.3 Slot 5

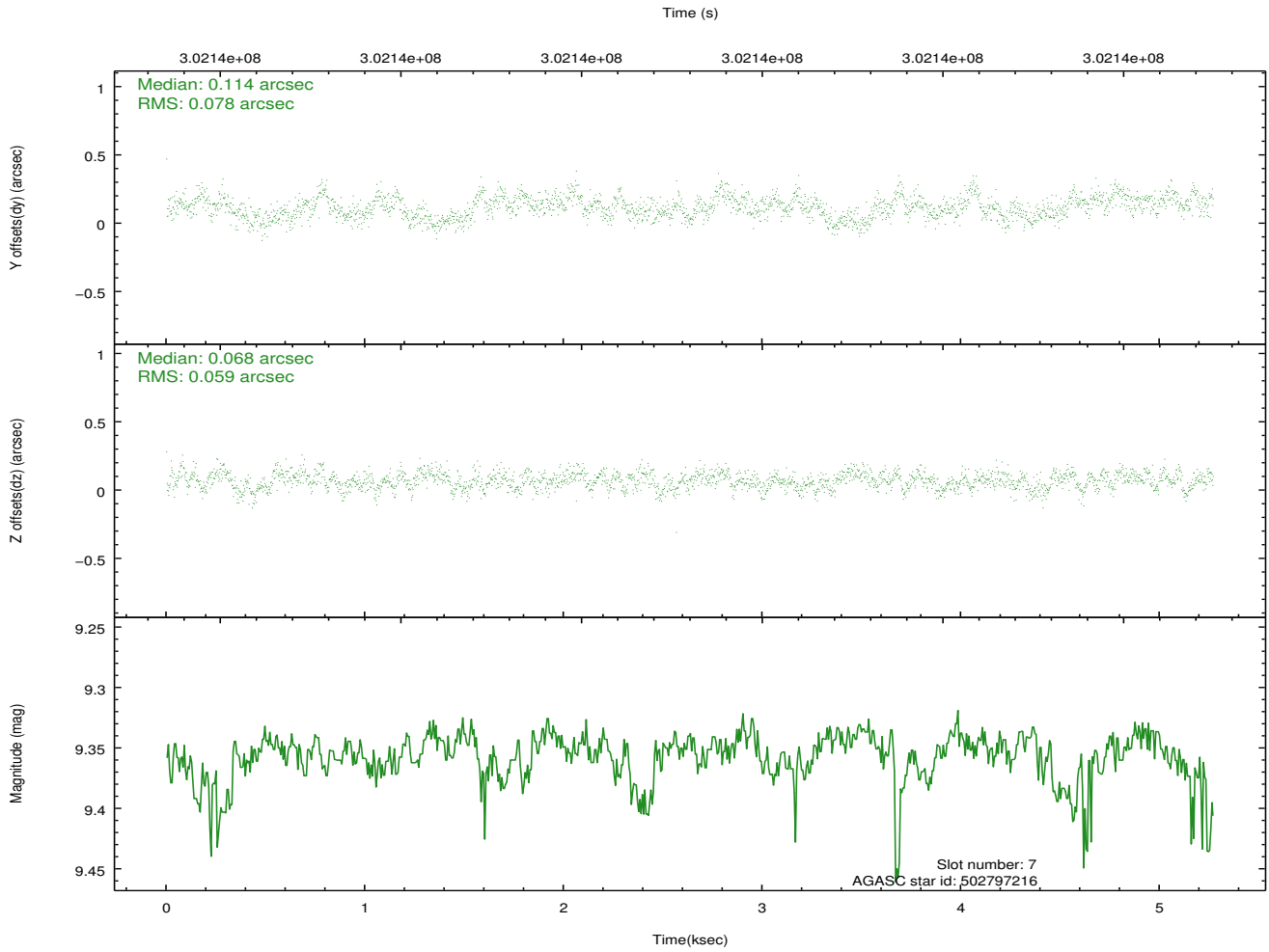
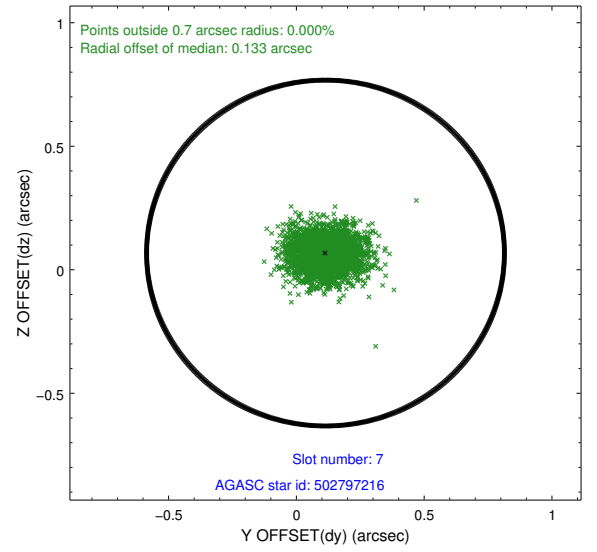
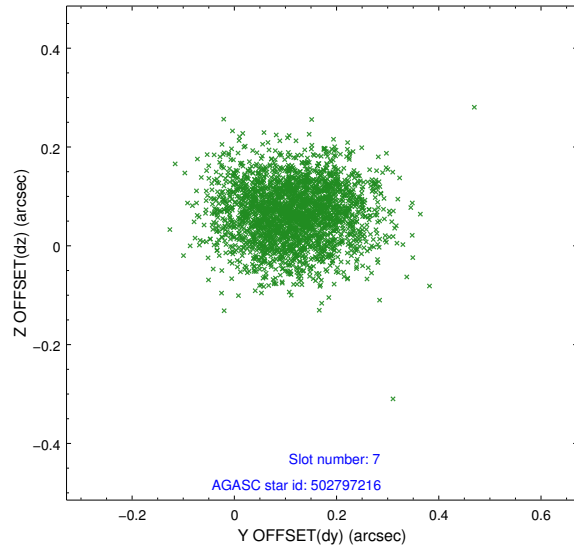


## 2.4.4 Slot 6



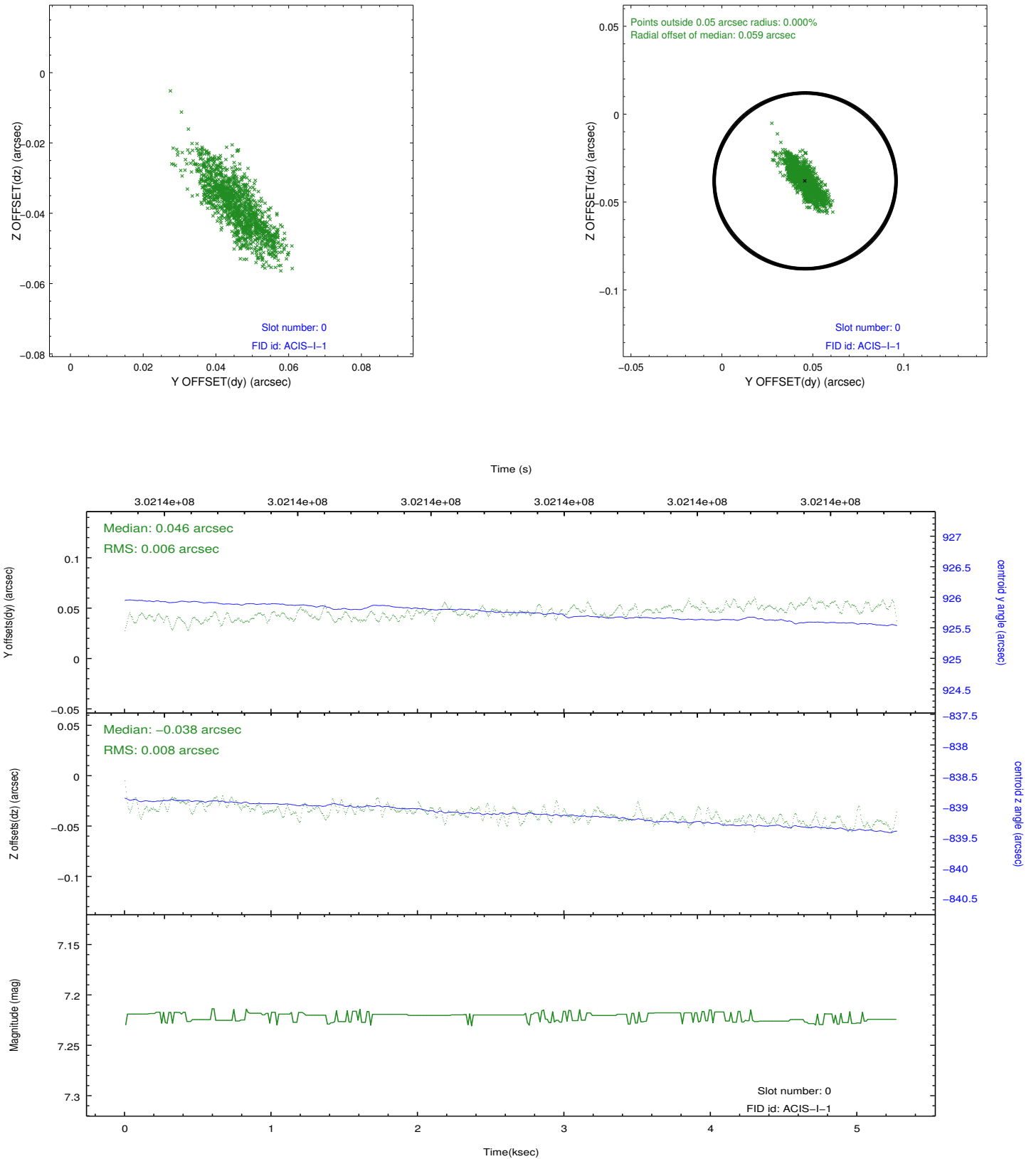


### 2.4.5 Slot 7

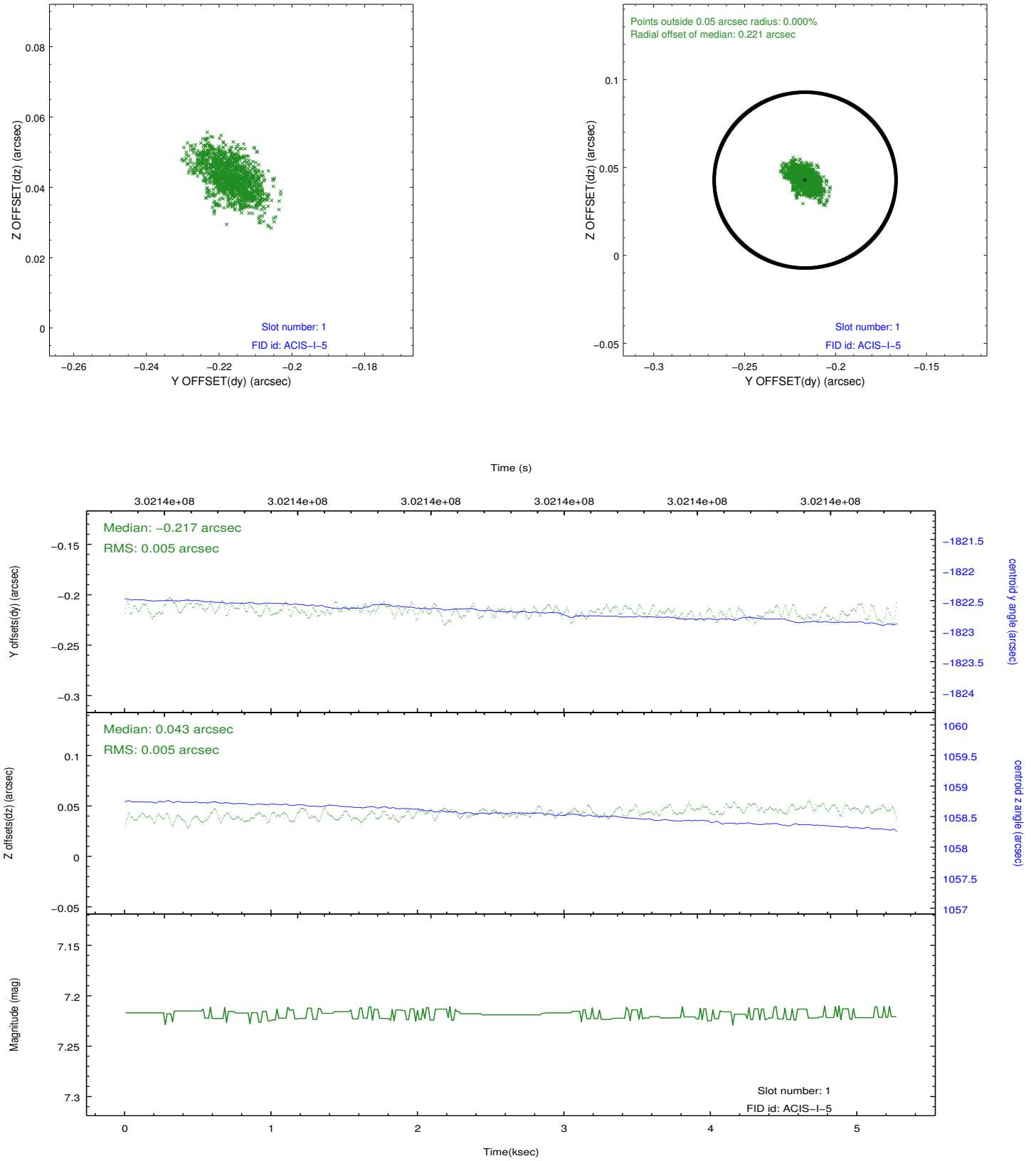


## 2.5 FID Slots

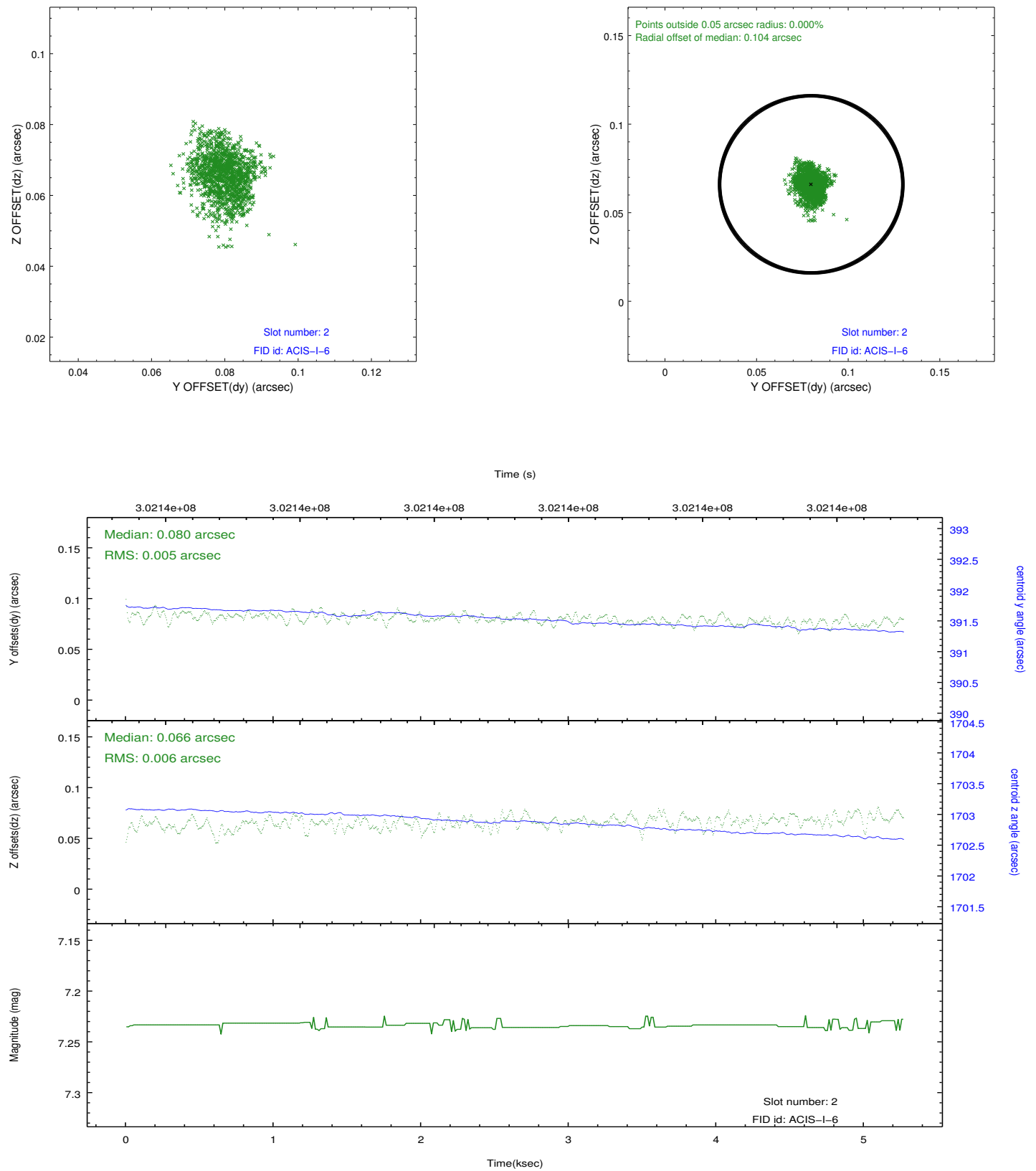
### 2.5.1 Slot 0



## 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)	2012.05.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.05605904

### A.2 Comments