

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7708 - L2 Version 2  
Chandra X-Ray Center

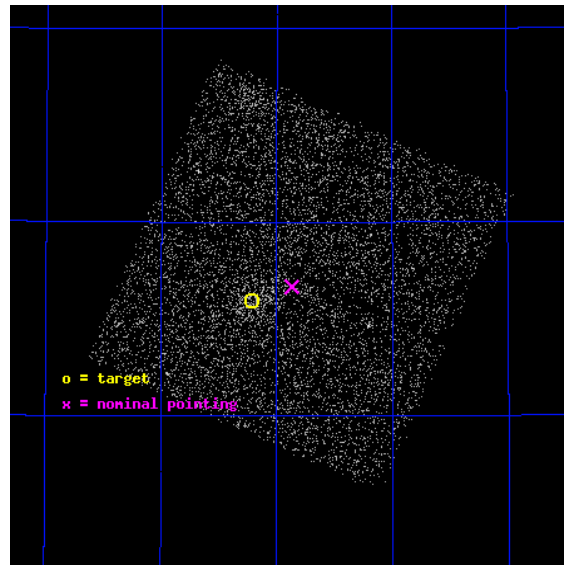
L2 Processing Date : Apr 26 2012

## 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

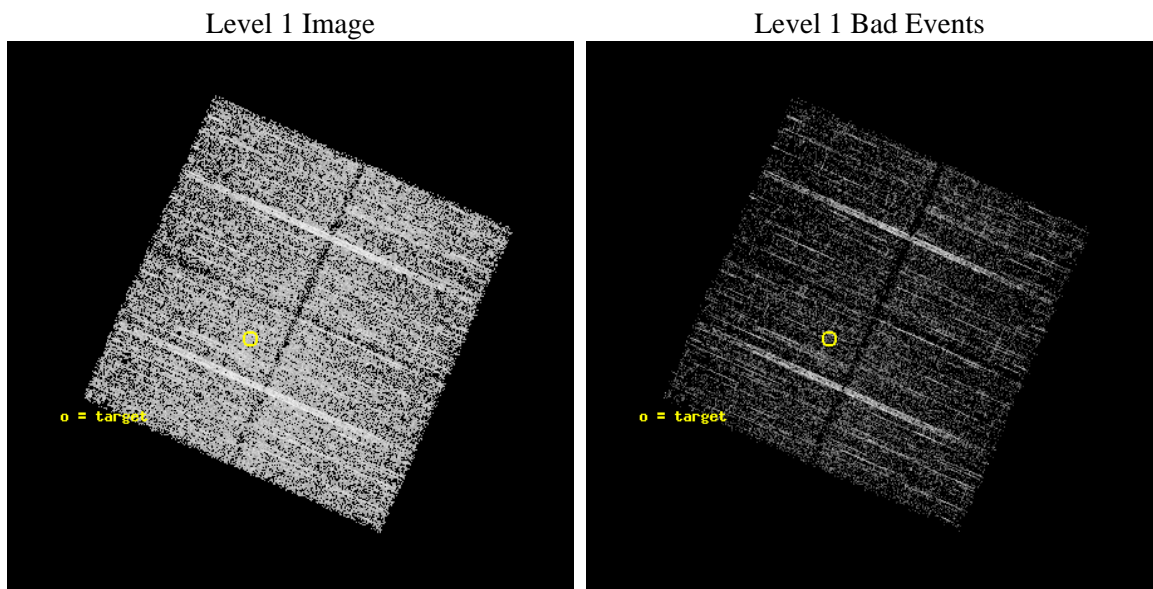
seq_num	701376	Sequence number
obs_id	7708	Observation id
title	Snapshot Survey for X-ray Outbursts in Rich Clusters of Galaxies	P
observer	Professor Gordon Garmire	Principal investigator
object	A2125	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	235.305417	Observer's specified target RA [deg]
dec_targ	66.266111	Observer's specified target Dec [deg]
ra_nom	235.21741778446	Nominal RA [deg]
dec_nom	66.277852128127	Nominal Dec [deg]
roll_nom	203.94833315659	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4789.2083584666	Sum of GTIs [s]
livetime	4726.6338254994	Livetime [s]
ontime0	4789.0852384567	Sum of GTIs [s]
ontime1	4789.12627846	Sum of GTIs [s]
ontime2	4786.026348114	Sum of GTIs [s]
ontime3	4789.2083584666	Sum of GTIs [s]
l2events	9192	Number of level 2 events



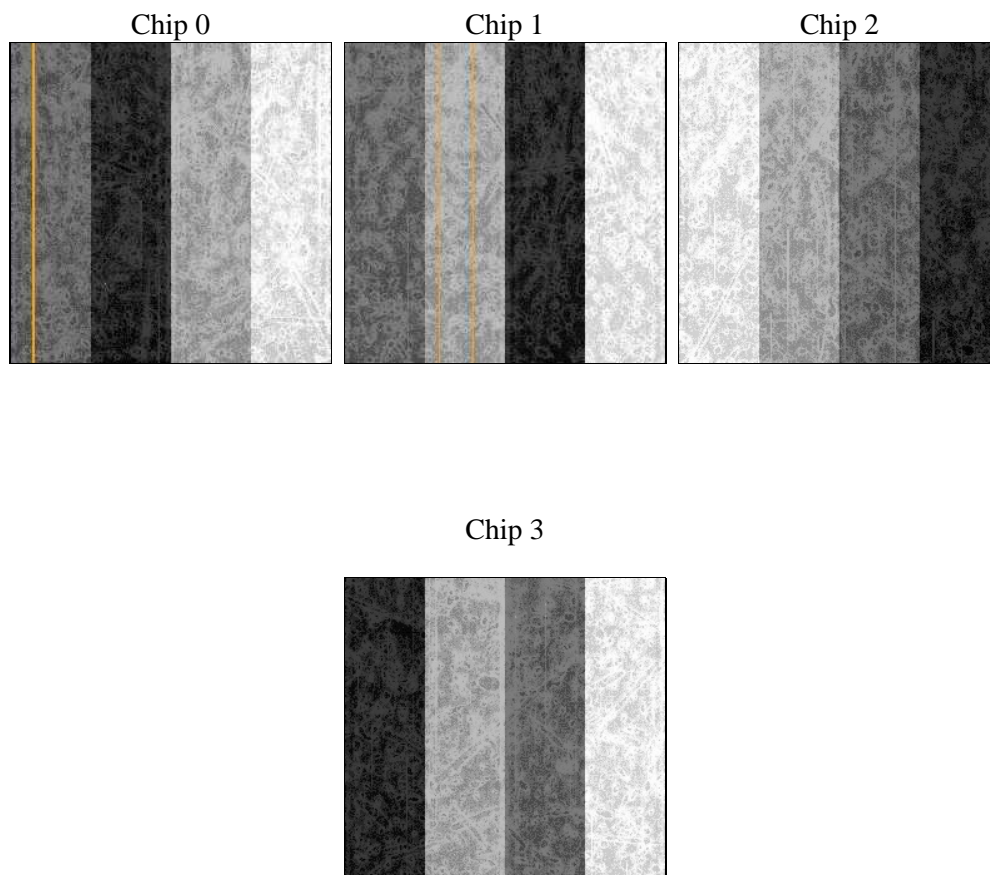
## 2 OBI

### 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	4789.2083584666	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	4789.0852384567	Sum of GTIs [s]
date	2012-04-26T11:40:27	Date and time of file creation	ontime1	4789.12627846	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4786.026348114	Sum of GTIs [s]
			ontime3	4789.2083584666	Sum of GTIs [s]
			l1events	132112	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	32106	29867	35664	34475
rejected events	29279	26774	32851	31529
rejected %	91%	89%	92%	91%

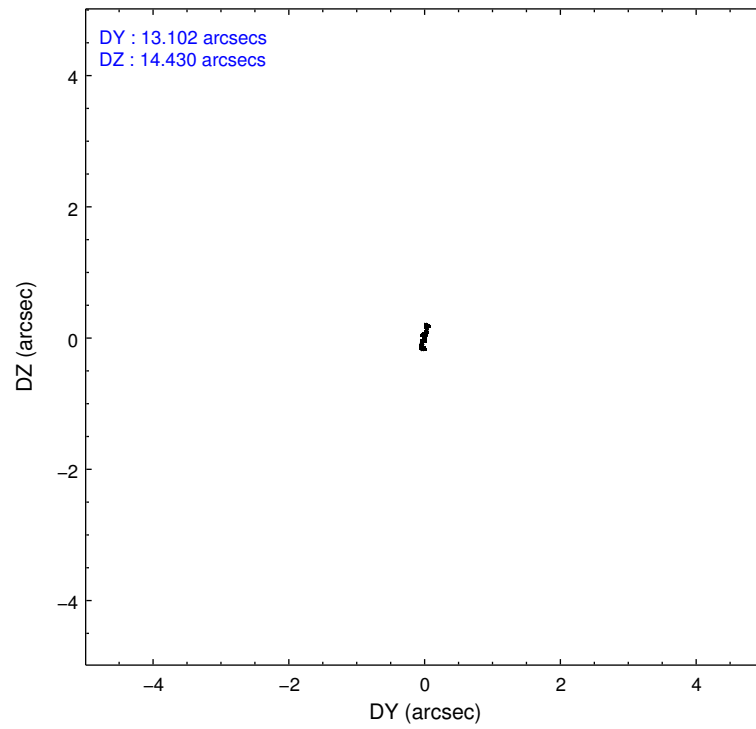
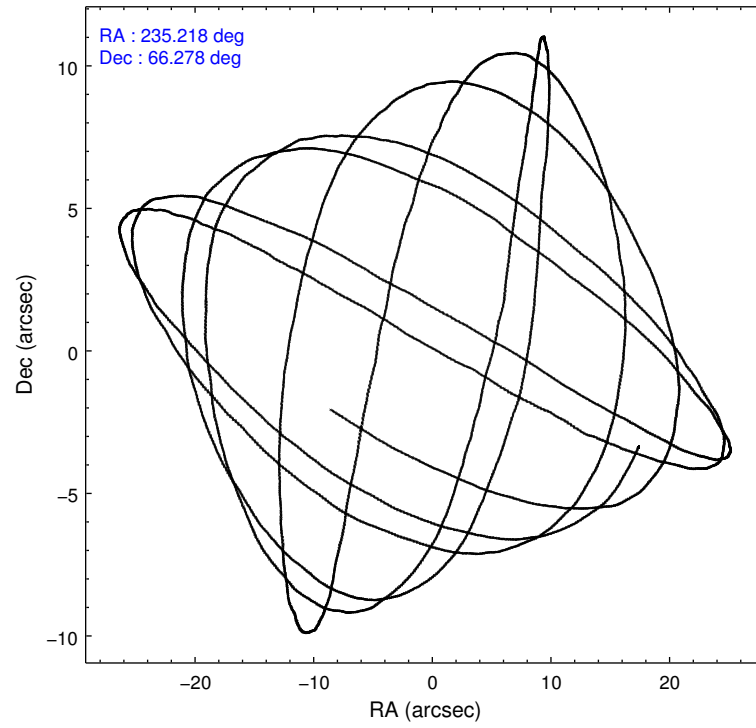
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	1070	1199	1188	1317
	3%	4%	3%	3%
grade 1 events	18	20	21	24
	0%	0%	0%	0%
grade 2 events	700	664	670	580
	2%	2%	1%	1%
grade 3 events	365	370	296	308
	1%	1%	0%	0%
grade 4 events	276	380	310	310
	0%	1%	0%	0%
grade 5 events	551	597	505	609
	1%	1%	1%	1%
grade 6 events	420	482	353	431
	1%	1%	0%	1%
grade 7 events	28706	26155	32321	30896
	89%	87%	90%	89%

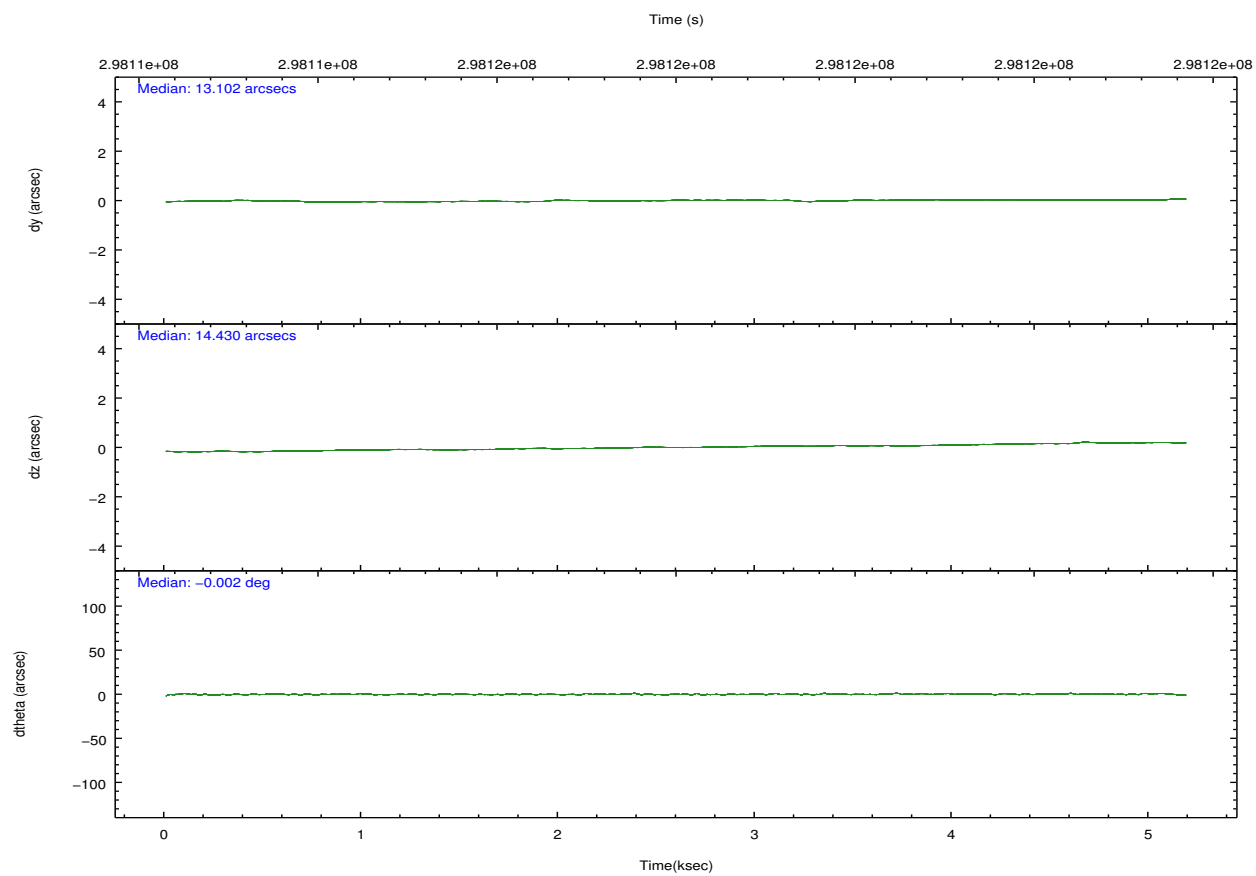
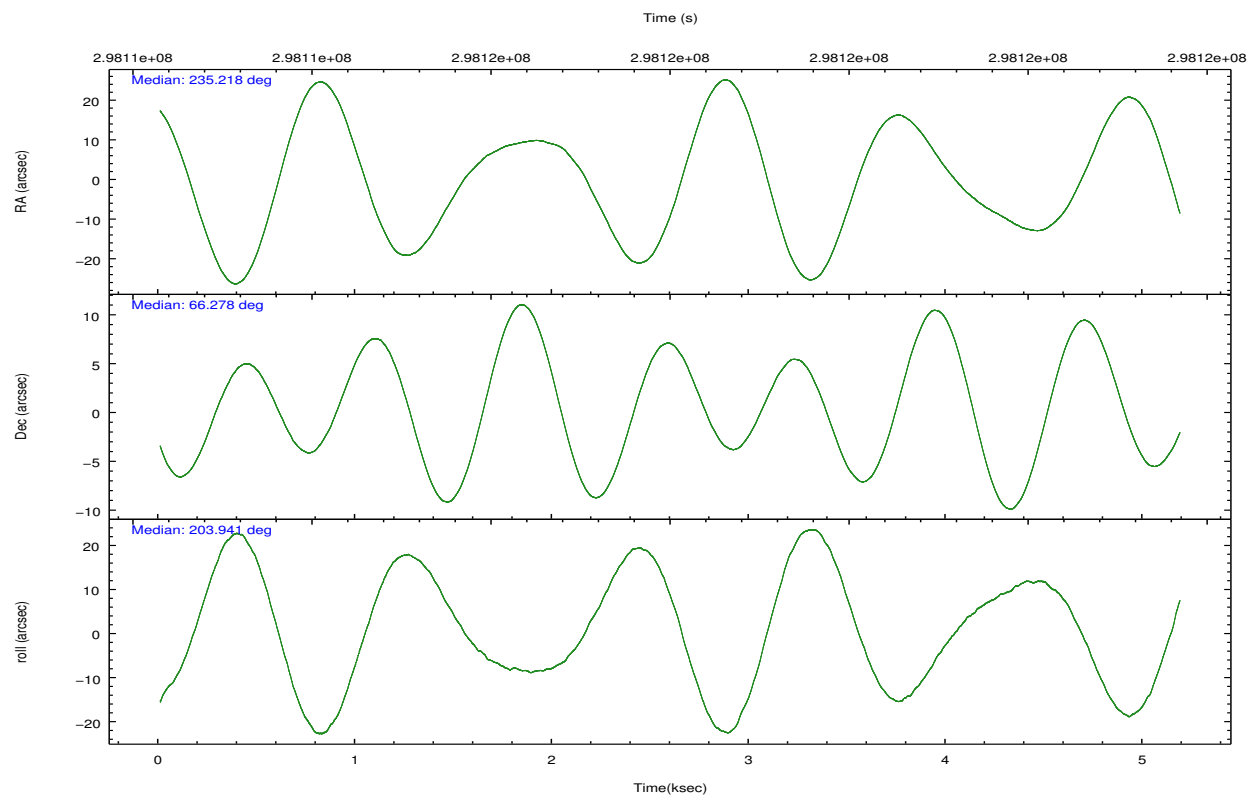


## 2.2 Compared Parameters

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	235.257377	235.2174177844584	Subarray requested	NONE	NONE
[deg] Pointing Dec	66.300216	66.27785212812668	Alternating exposures requested	N	N
[deg] Pointing Roll	203.703061	203.9483331565886	[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)	298113602.184000	298113104.16449			
Observation start date	2007-06-13T09:18:57	2007-06-13T09:11:44			
[s] Observation end time (MET)	298118602.184000	298120066.47732			
Observation end date	2007-06-13T10:42:17	2007-06-13T11:07:46			
Read mode	TIMED	TIMED			

## 2.3 Aspect



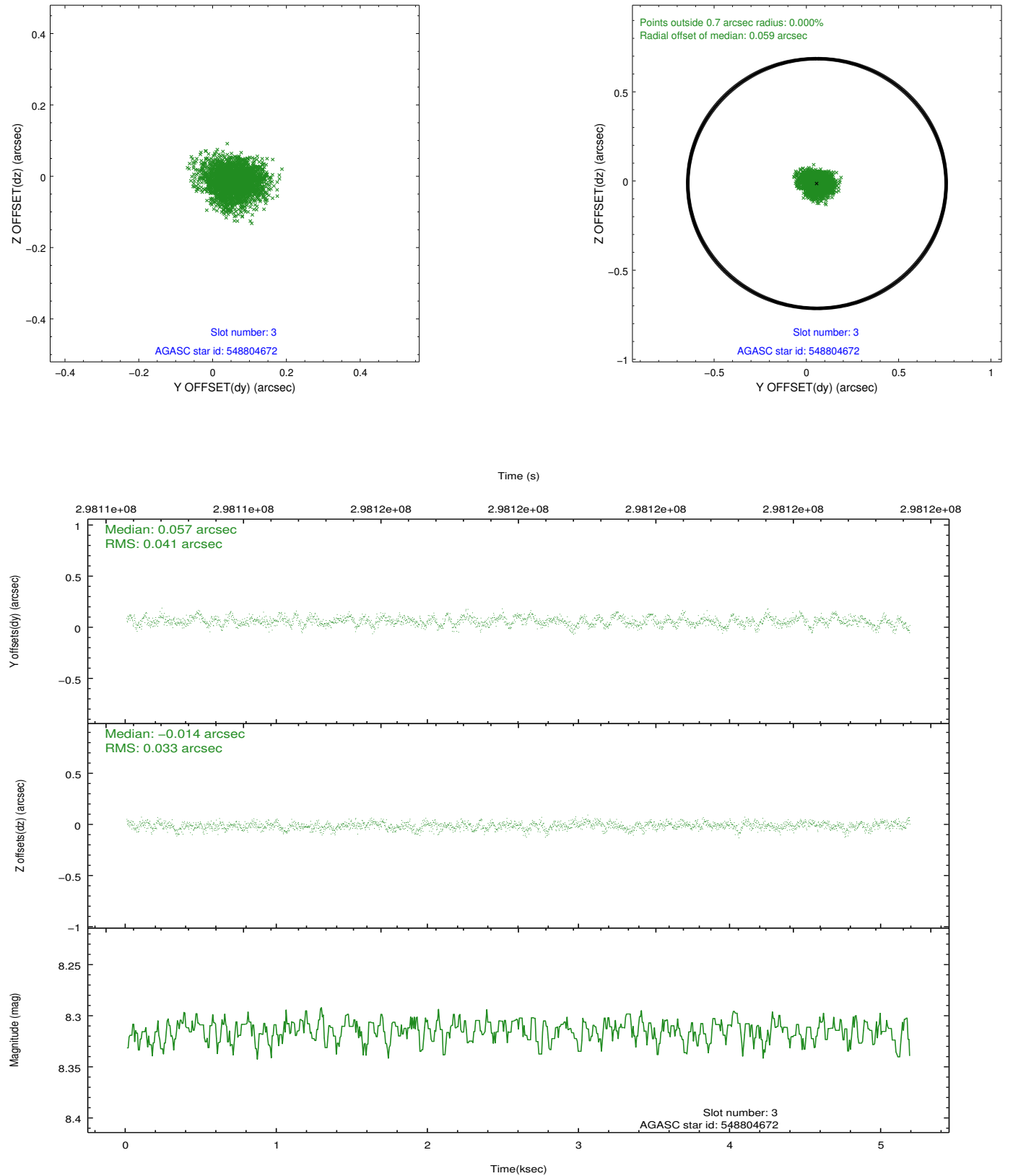


### Slot Statistics

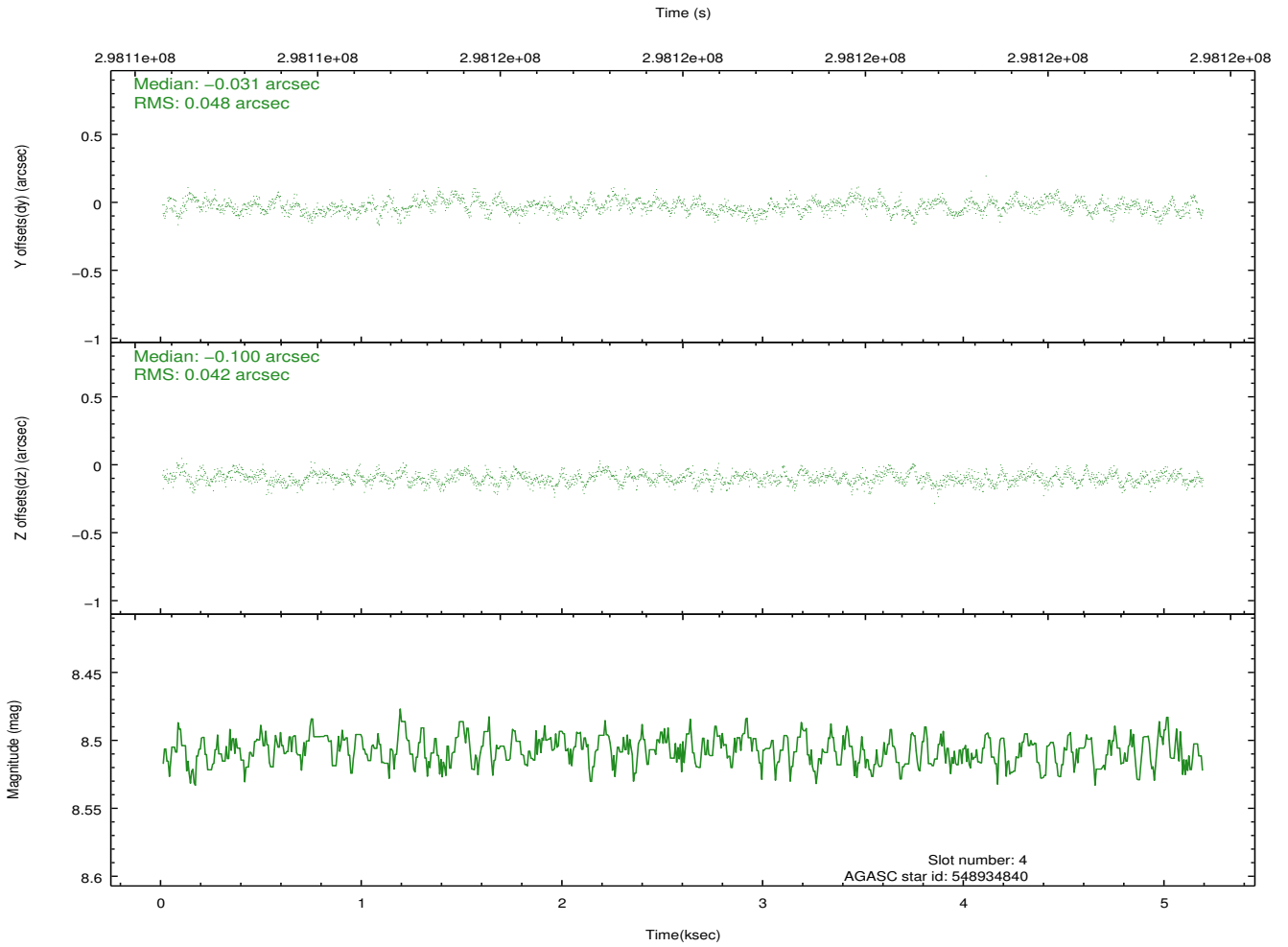
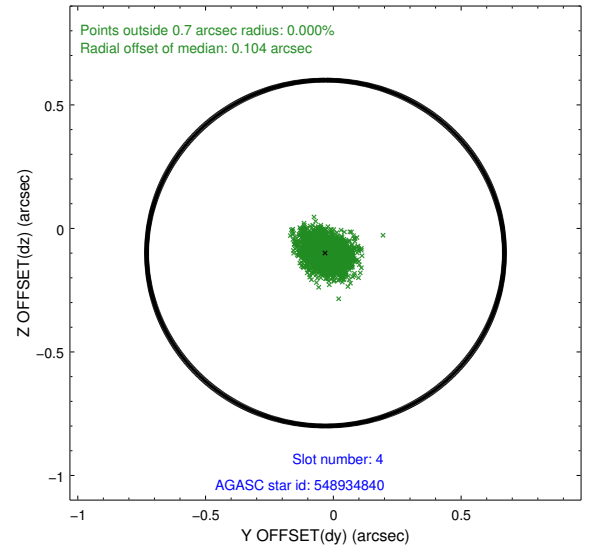
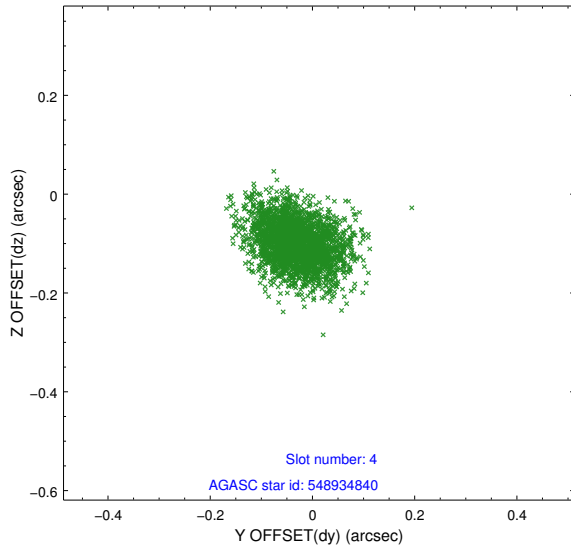
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	1264	0.038	-0.012	0.008	0.013	0.000000	0.000000	926.46	-838.02
1	FID	ACIS-I-5	7.22	1264	-0.227	0.037	0.006	0.011	0.000000	0.000000	-1821.28	1058.91
2	FID	ACIS-I-6	7.23	1264	0.098	0.045	0.008	0.013	0.000000	0.000000	390.77	1704.76
3	GUIDE	548804672	8.31	2525	0.057	-0.014	0.057	0.091	233.704838	66.646394	1517.01	-2056.85
4	GUIDE	548934840	8.51	2529	-0.031	-0.100	0.067	0.112	236.649520	65.864398	-1254.29	2238.43
5	GUIDE	548934848	8.23	2529	0.020	0.090	0.066	0.106	235.310442	66.385864	-194.24	-250.94
6	GUIDE	548935416	6.91	2529	-0.070	-0.093	0.078	0.117	234.639529	65.790545	1570.88	1309.80
7	GUIDE	548938232	9.16	2526	0.014	0.120	0.082	0.131	236.256996	66.776975	-1992.78	-1011.28

## 2.4 Star Slots

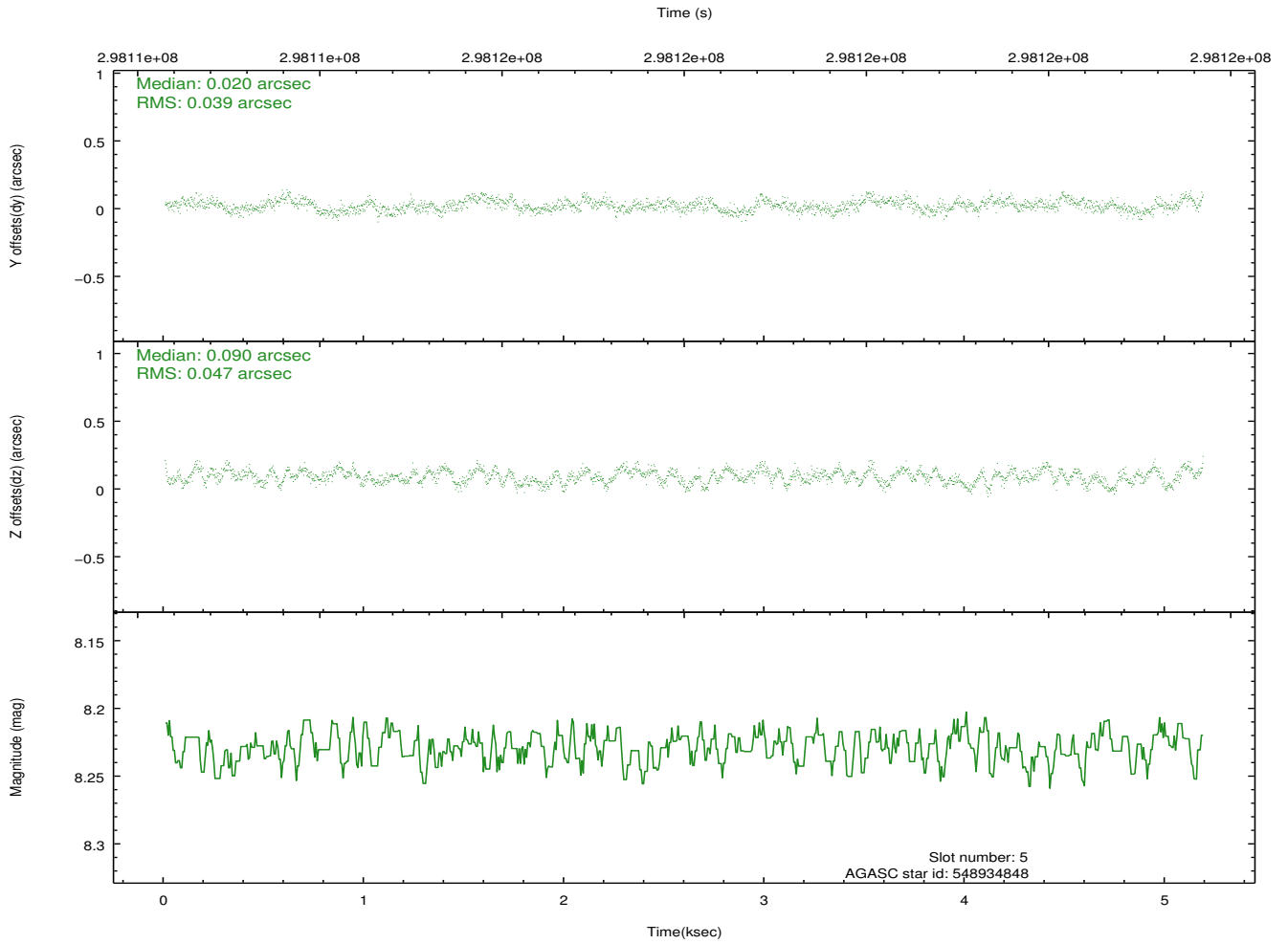
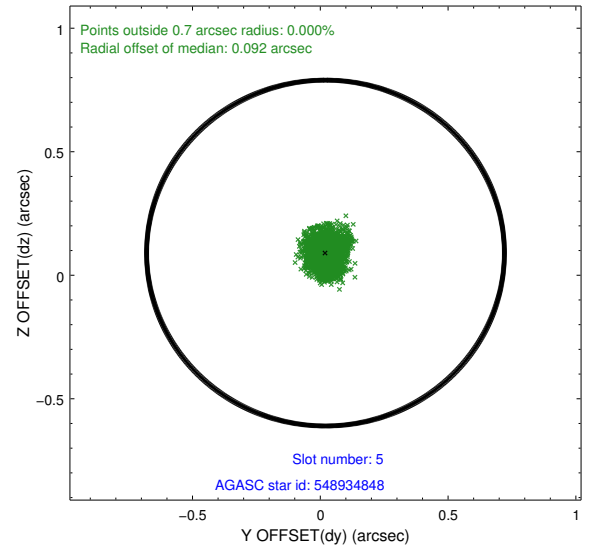
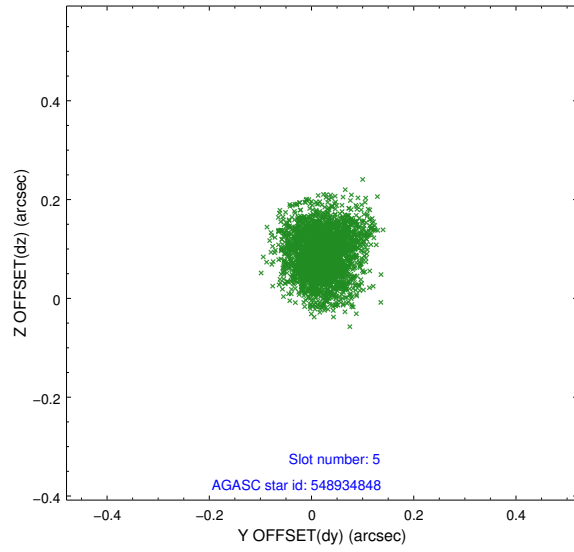
### 2.4.1 Slot 3



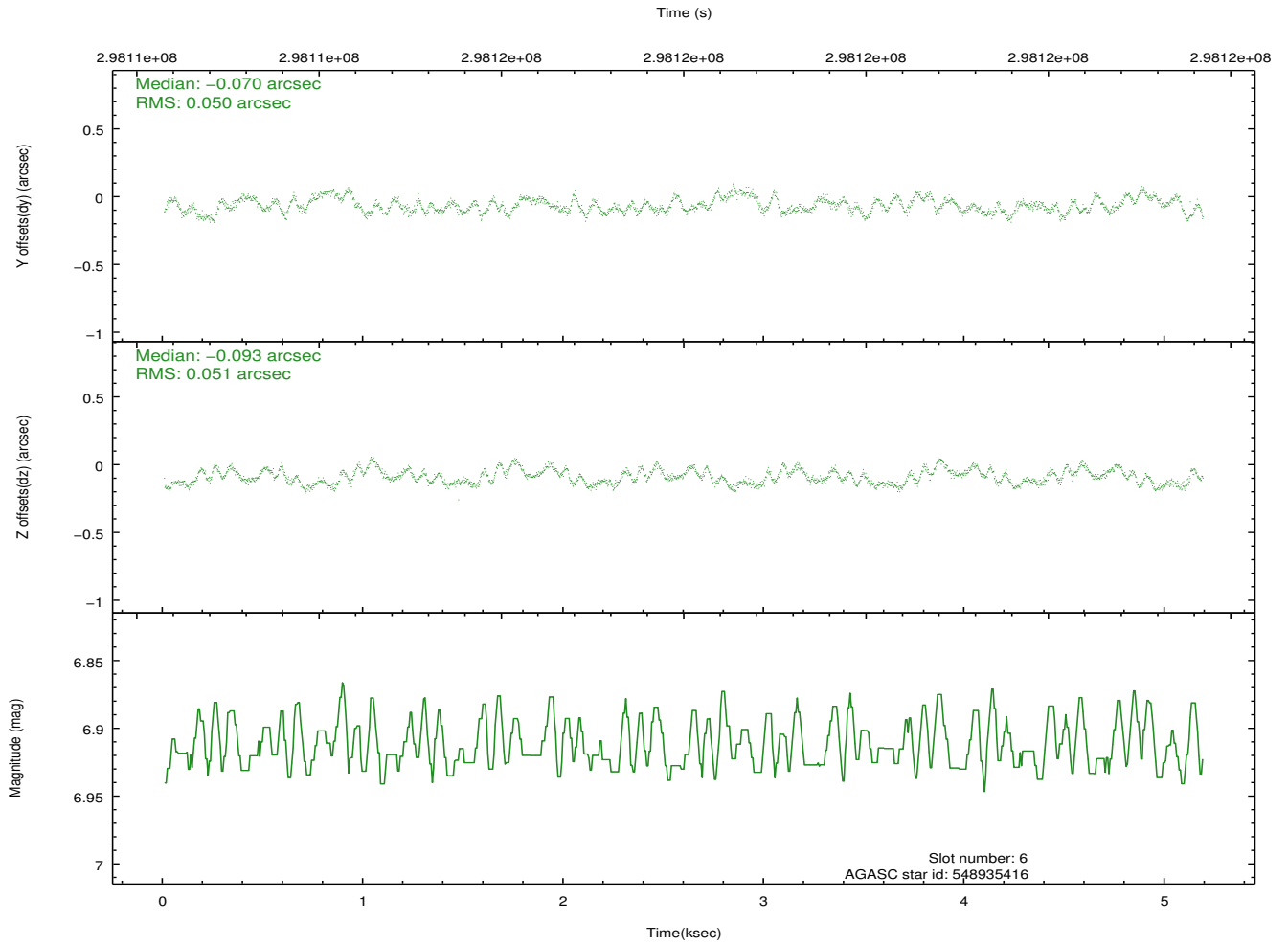
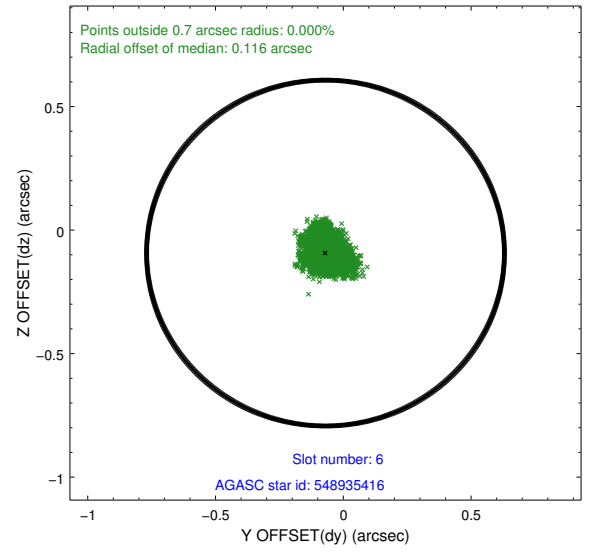
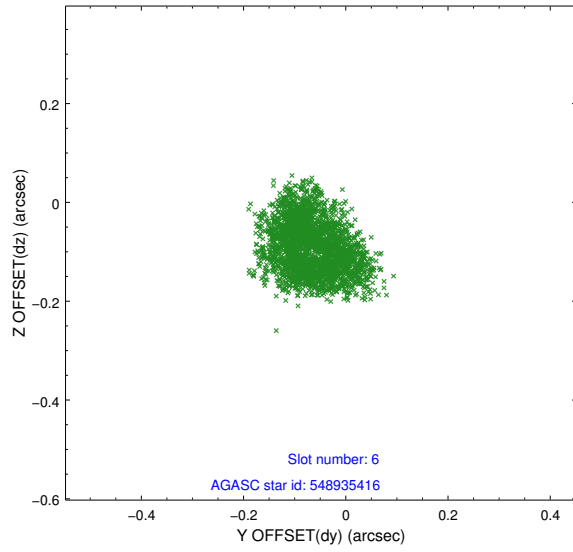
## 2.4.2 Slot 4



### 2.4.3 Slot 5

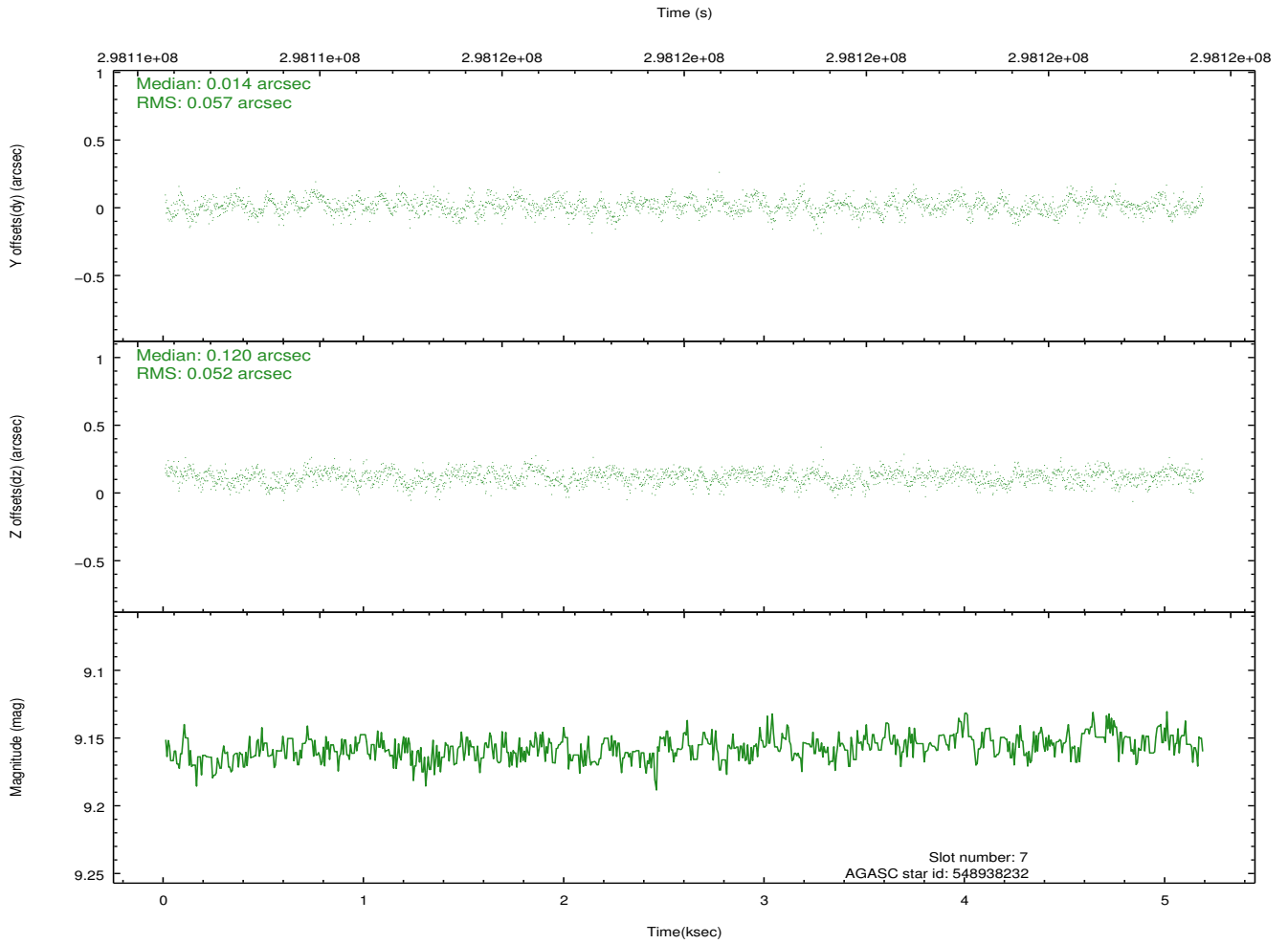
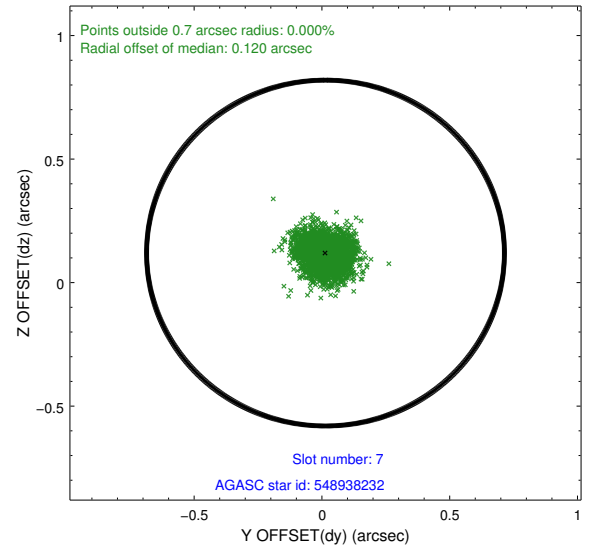
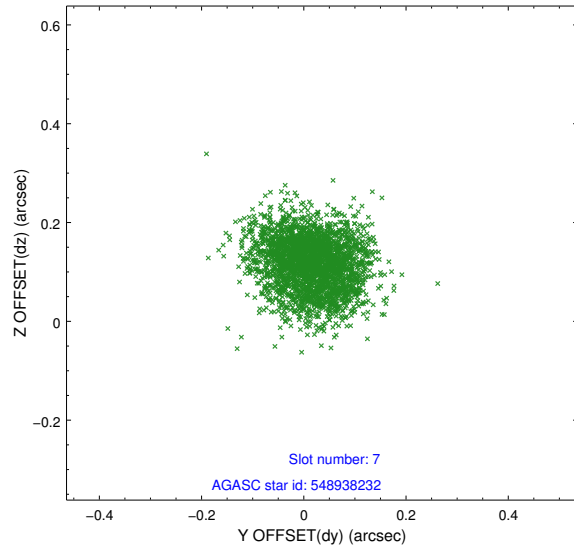


## 2.4.4 Slot 6



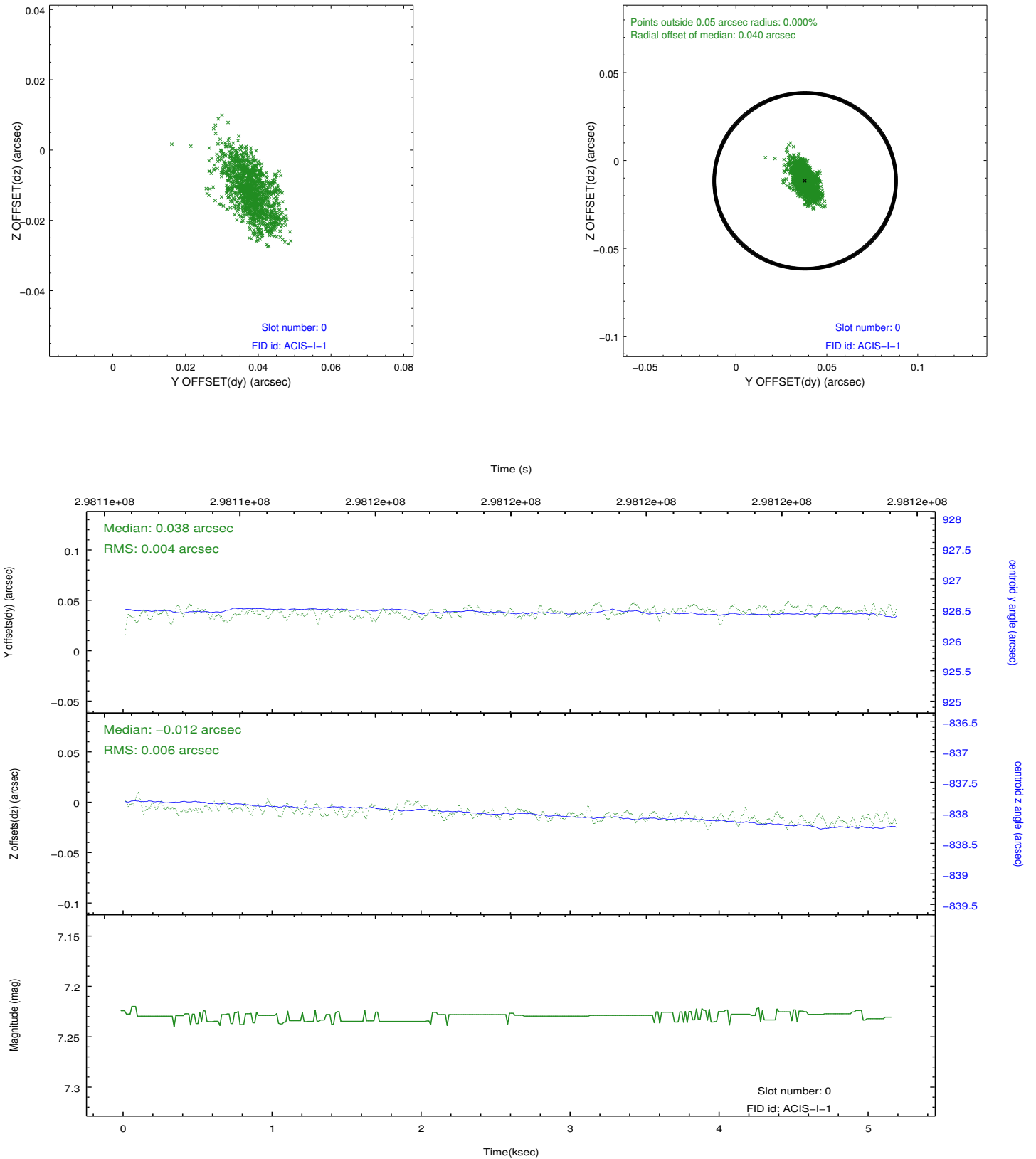


### 2.4.5 Slot 7

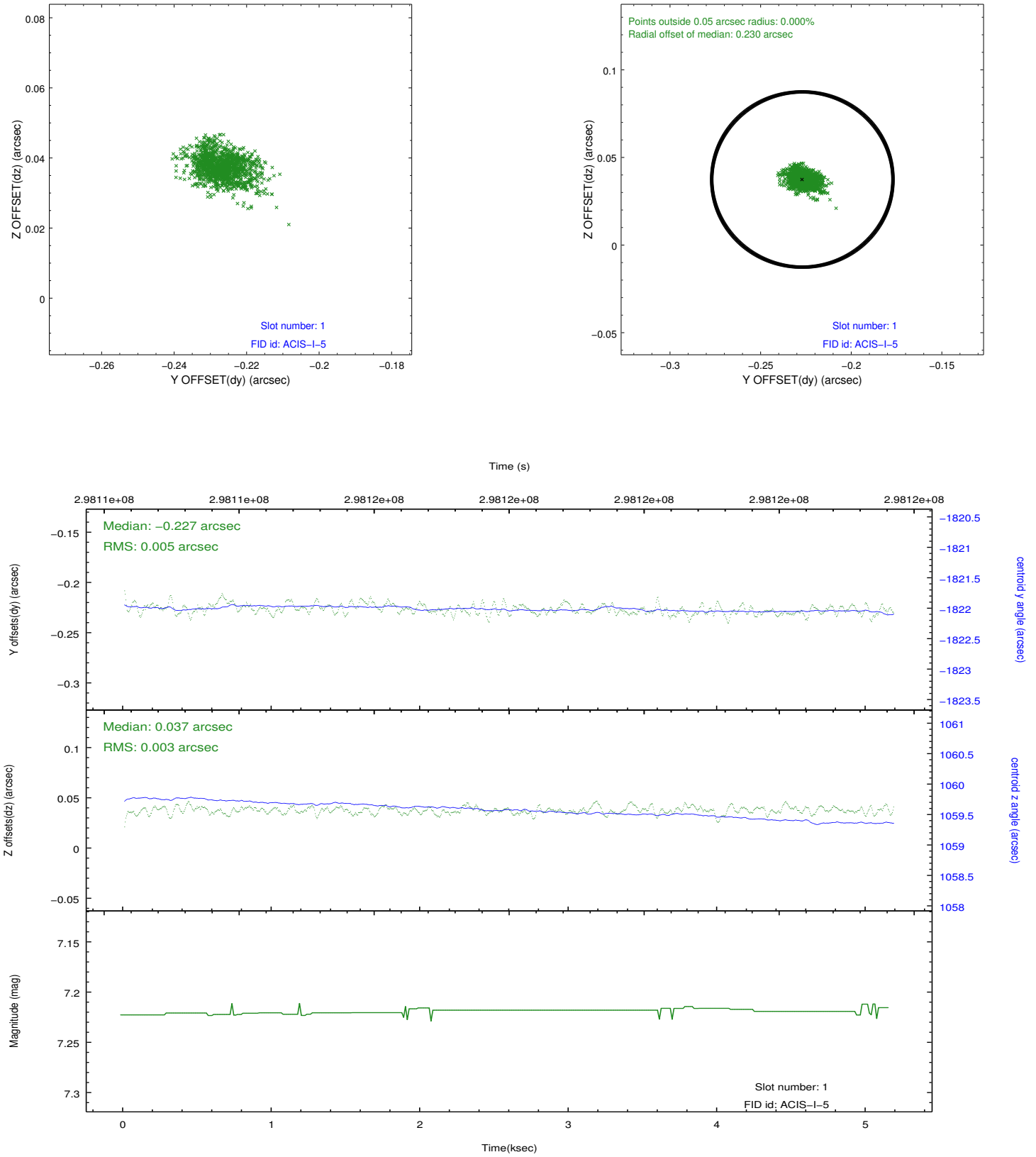


## 2.5 FID Slots

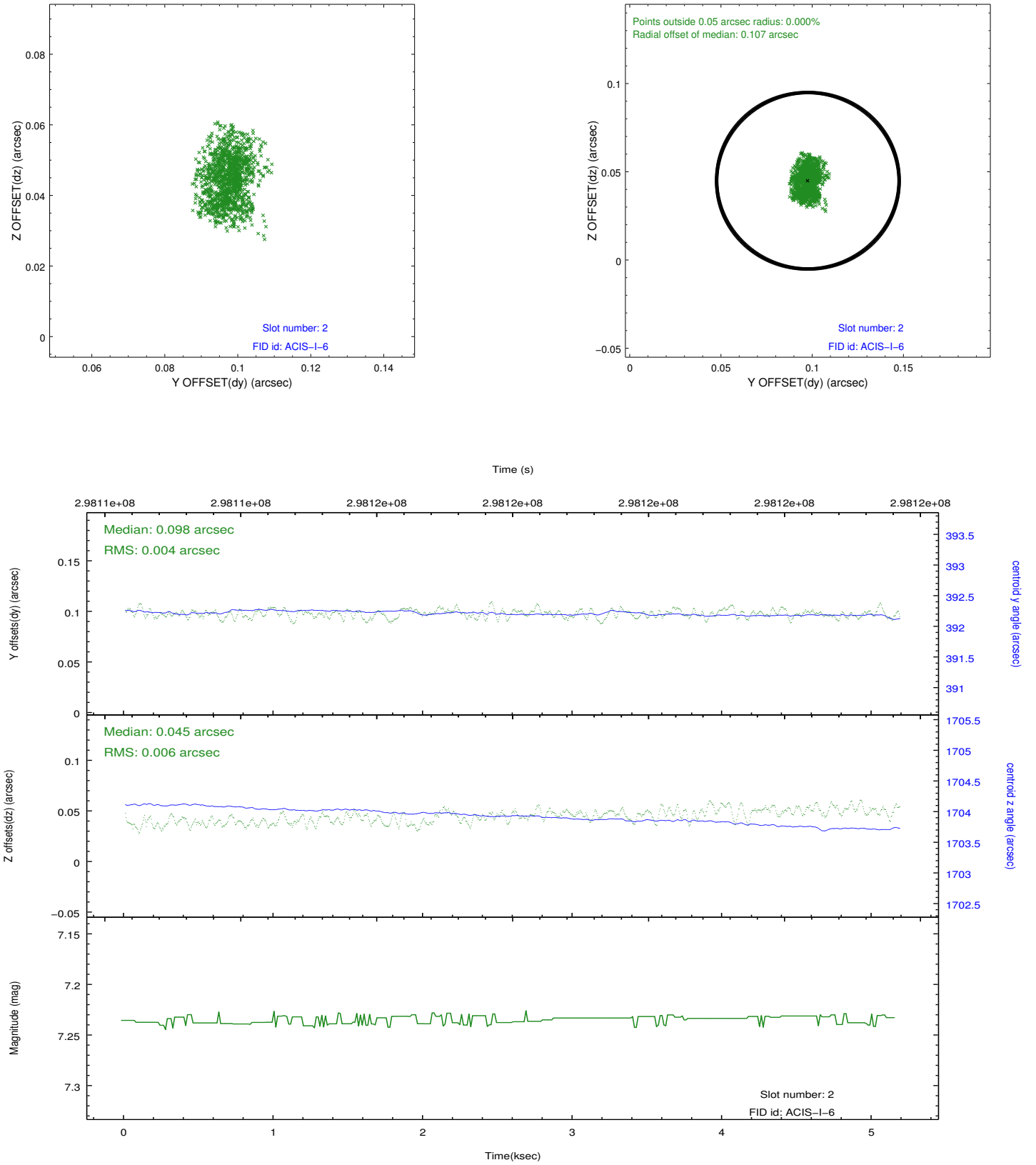
### 2.5.1 Slot 0



## 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)	2012.04.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.78950003

### A.2 Comments