

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12047 - L2 Version 2  
Chandra X-Ray Center

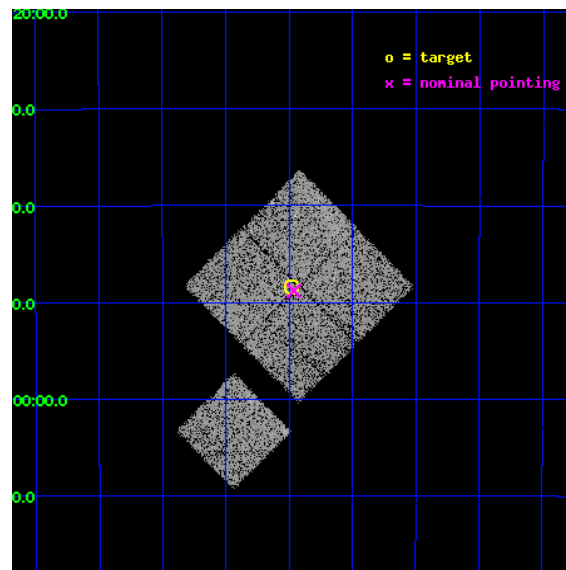
L2 Processing Date : Jun 24 2012

## 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

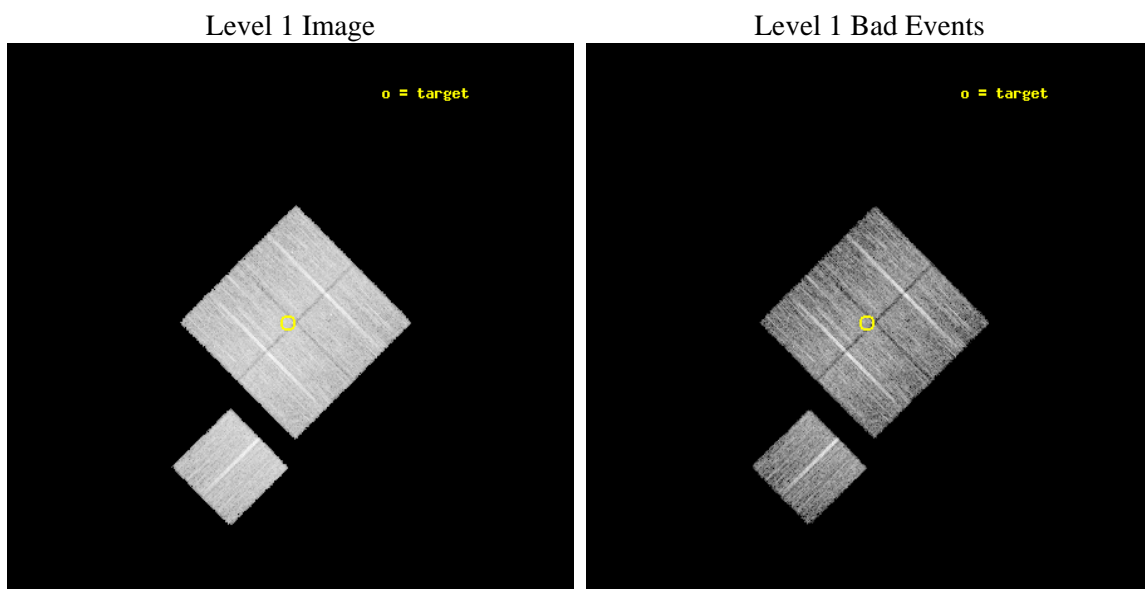
seq_num	900937	Sequence number
obs_id	12047	Observation id
title	The Chandra Deep Field-South Survey: An Ultradeep Chandra Legacy	P
observer	Dr. Harvey Tananbaum	Principal investigator
object	Chandra Deep Field-South	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	53.12	Observer's specified target RA [deg]
dec_targ	-27.806389	Observer's specified target Dec [deg]
ra_nom	53.115820808571	Nominal RA [deg]
dec_nom	-27.813572615469	Nominal Dec [deg]
roll_nom	225.20675471195	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10276.459088802	Sum of GTIs [s]
livetime	10142.189585388	Livetime [s]
ontime0	10279.60007906	Sum of GTIs [s]
ontime1	10279.60007906	Sum of GTIs [s]
ontime2	10276.459118724	Sum of GTIs [s]
ontime3	10276.459088802	Sum of GTIs [s]
ontime6	10276.459118783	Sum of GTIs [s]
l2events	35176	Number of level 2 events



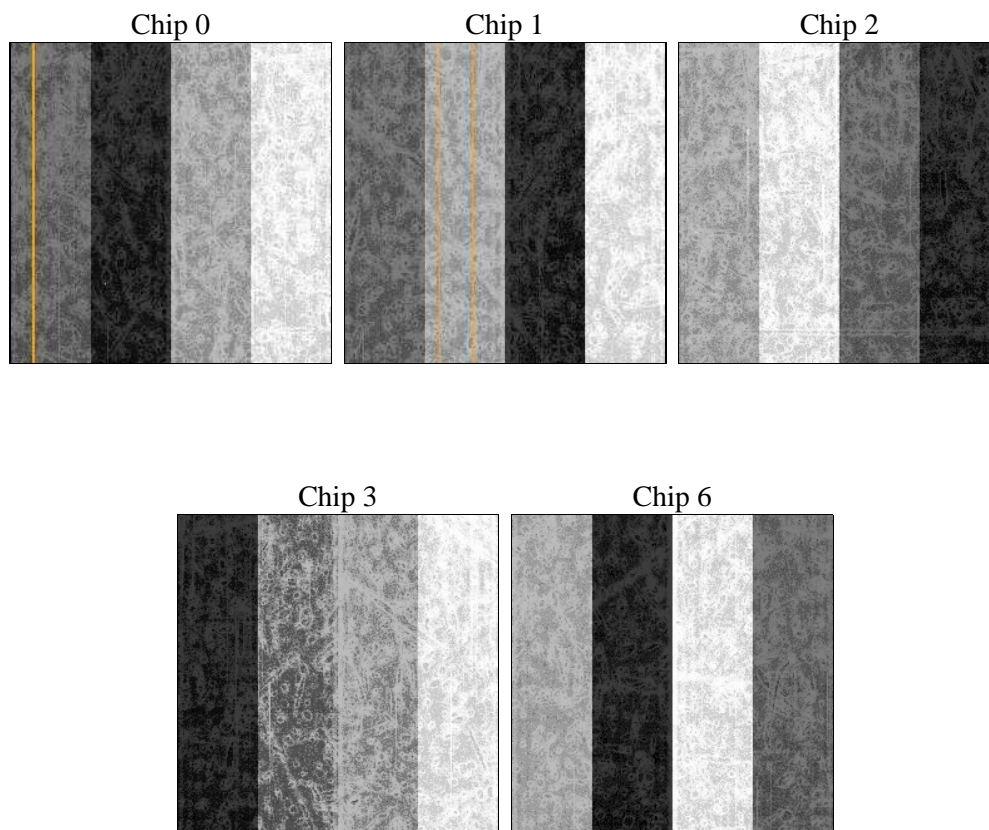
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10155.037000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10276.459088802	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime0	10279.60007906	Sum of GTIs [s]
date	2012-06-24T08:12:33	Date and time of file creation	ontime1	10279.60007906	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10276.459118724	Sum of GTIs [s]
			ontime3	10276.459088802	Sum of GTIs [s]
			ontime6	10276.459118783	Sum of GTIs [s]
			l1events	424379	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	81708	83252	87877	86615	84927
rejected events	73200	73731	79853	79061	76423
rejected %	89%	88%	90%	91%	89%

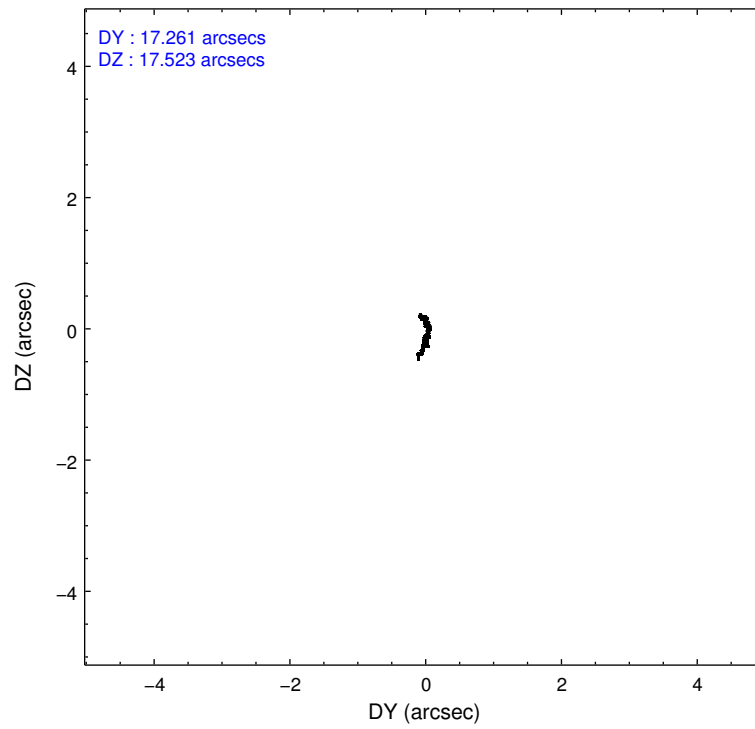
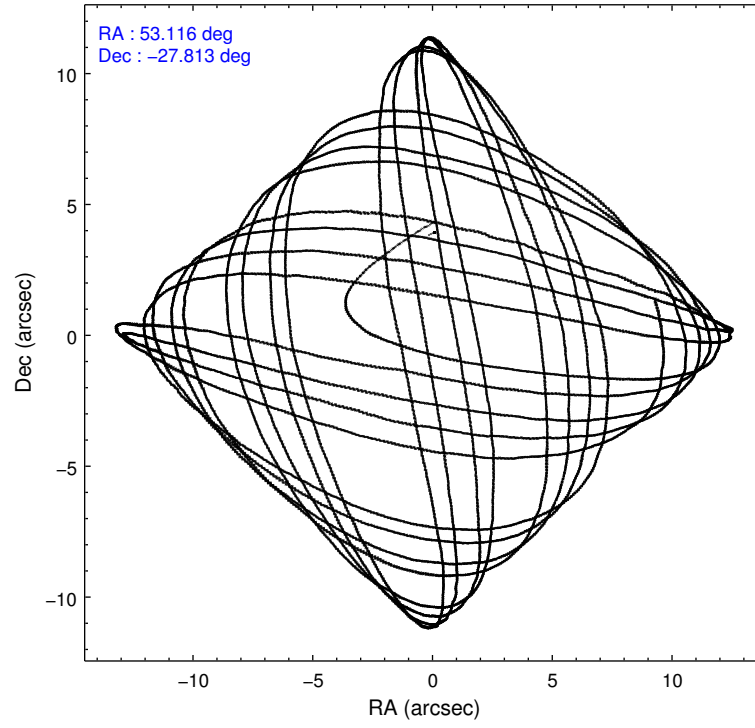
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3374	3864	3251	2942	3440
	4%	4%	3%	3%	4%
grade 1 events	60	40	40	40	33
	0%	0%	0%	0%	0%
grade 2 events	2393	2507	2261	1998	2096
	2%	3%	2%	2%	2%
grade 3 events	1023	1110	955	956	1040
	1%	1%	1%	1%	1%
grade 4 events	956	1073	951	982	969
	1%	1%	1%	1%	1%
grade 5 events	3498	3670	3325	3891	3670
	4%	4%	3%	4%	4%
grade 6 events	1904	2209	1746	1741	2091
	2%	2%	1%	2%	2%
grade 7 events	68500	68779	75348	74065	71588
	83%	82%	85%	85%	84%

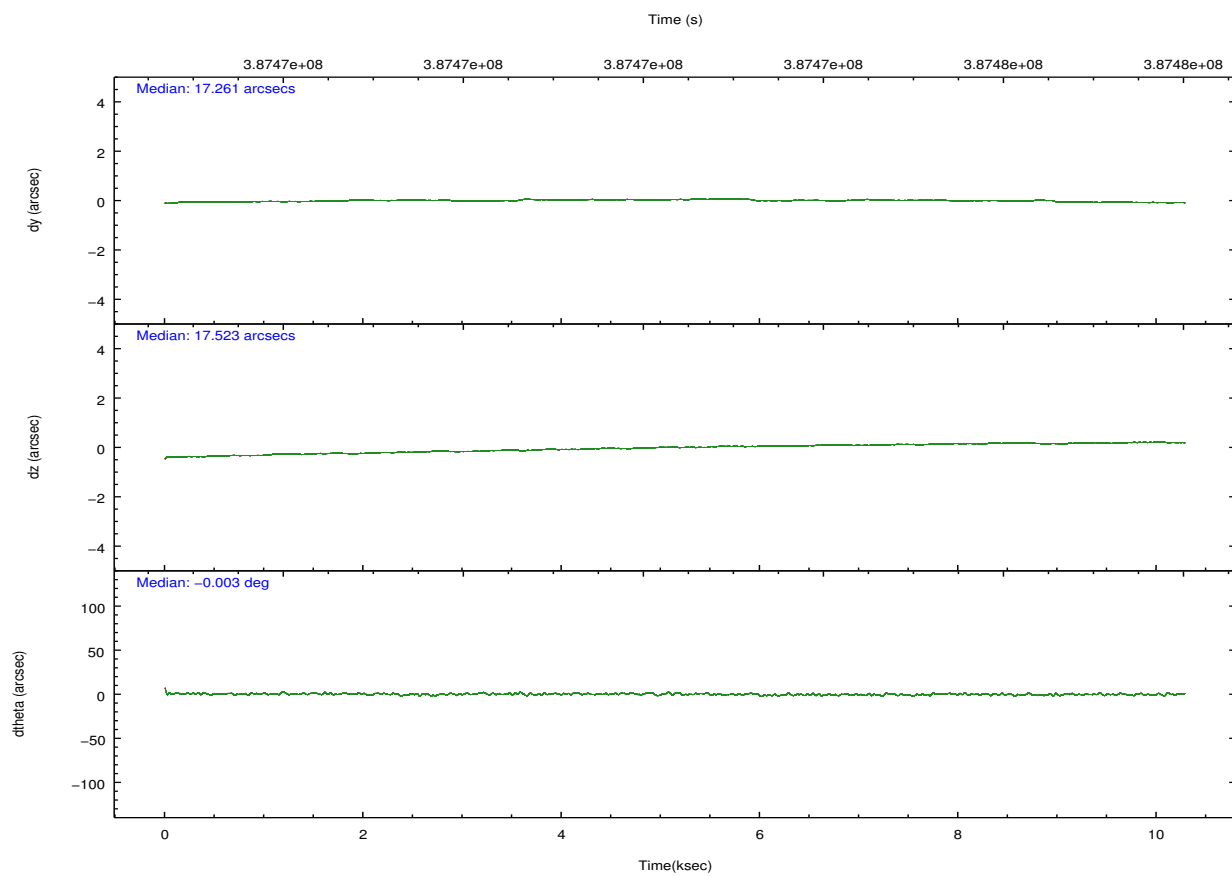
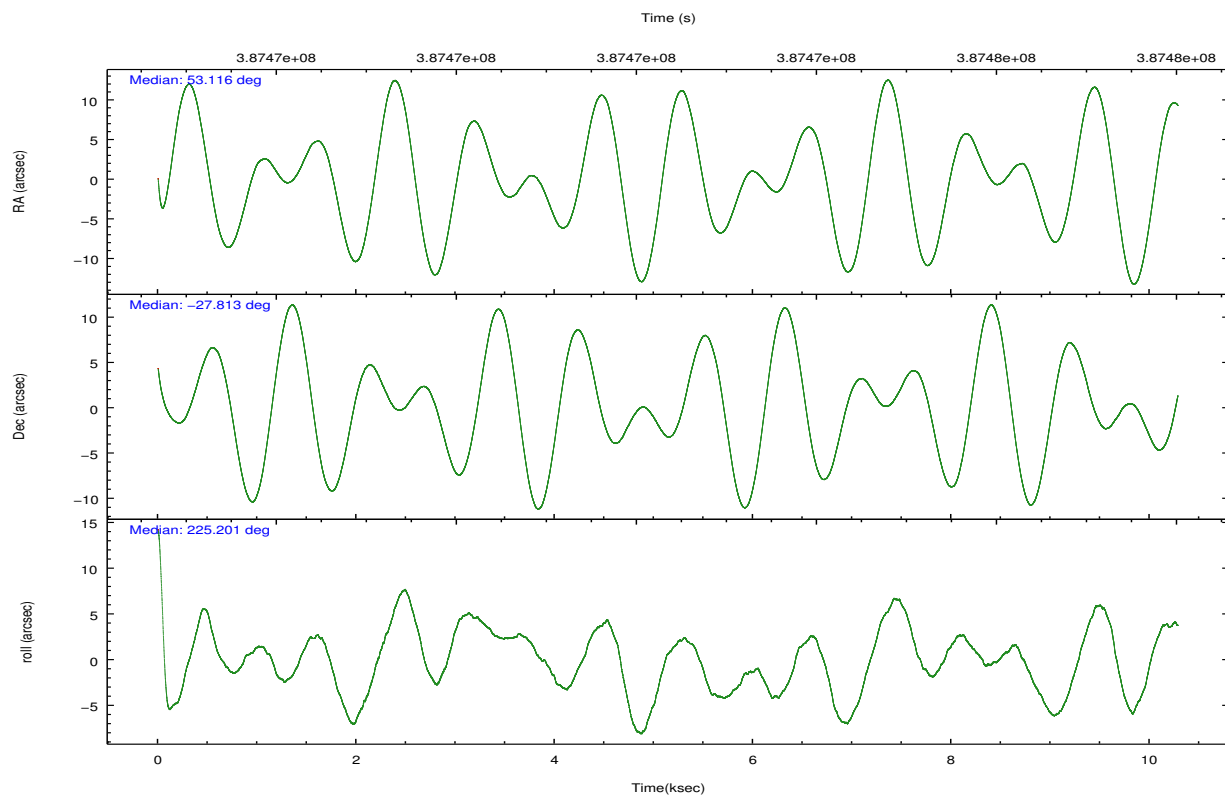


## 2.2 Compared Parameters

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	53.123602	53.11582080857111	CCD I2 on	Y	Y
[deg] Pointing Dec	-27.786940	-27.81357261546905	CCD I3 on	Y	Y
[deg] Pointing Roll	225.001684	225.2067547119524	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)	387467336.184000	387465677.80654	CCD S5 on	N	N
Observation start date	2010-04-12T13:47:50	2010-04-12T13:21:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	387477491.184000	387477726.68215	On-chip summing requested	N	N
Observation end date	2010-04-12T16:37:05	2010-04-12T16:42:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



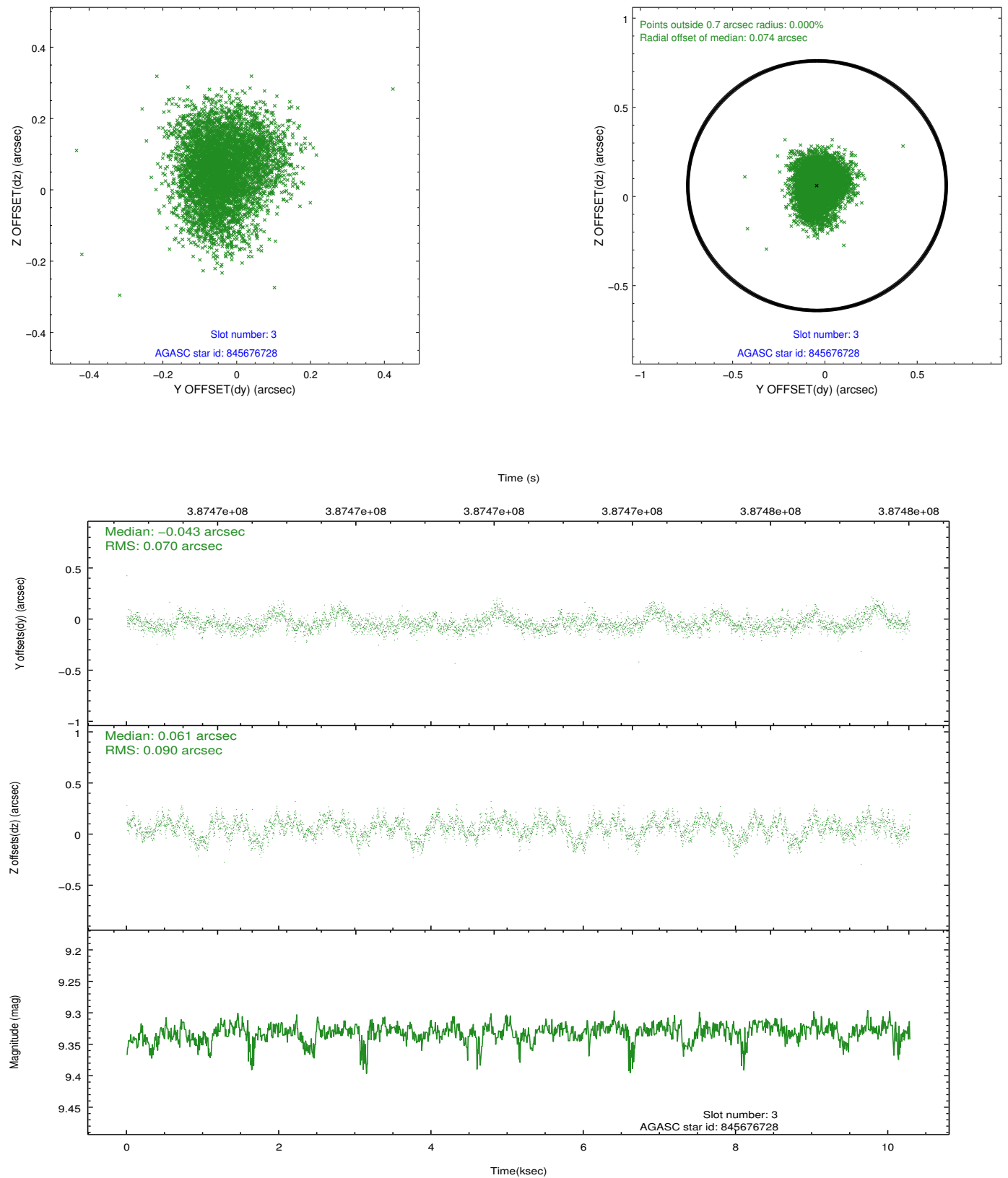


### Slot Statistics

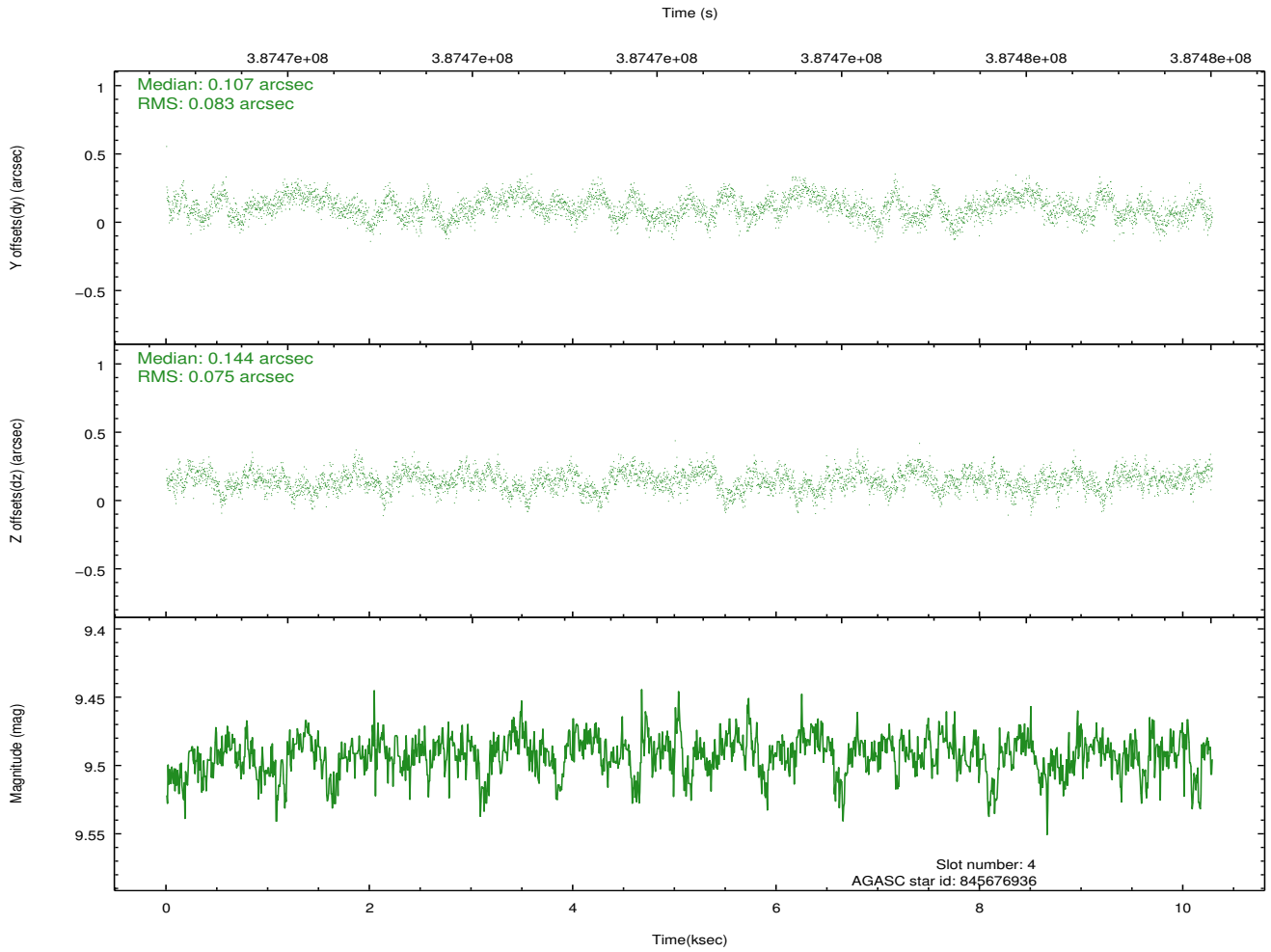
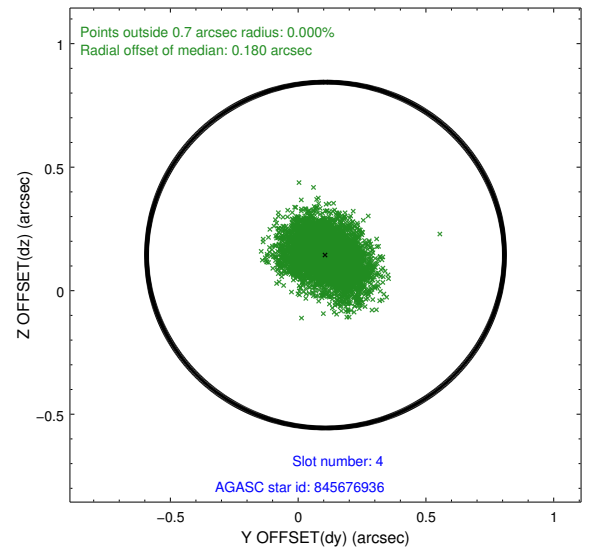
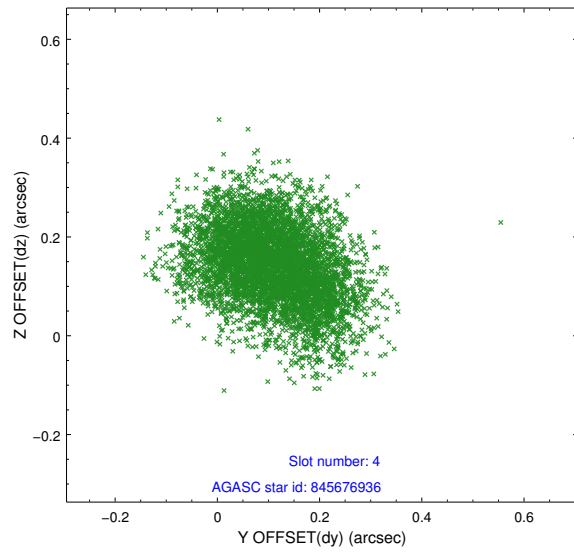
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	6.97	2509	-0.088	-0.014	0.009	0.016	0.000000	0.000000	922.07	-841.15
1	FID	ACIS-I-2	6.89	2509	-0.125	-0.061	0.007	0.010	0.000000	0.000000	-771.78	-847.92
2	FID	ACIS-I-4	6.90	2509	0.115	0.143	0.006	0.011	0.000000	0.000000	2141.90	1058.56
3	GUIDE	845676728	9.33	5013	-0.043	0.061	0.121	0.197	52.877179	-27.664318	244.30	-867.06
4	GUIDE	845676936	9.49	5013	0.107	0.144	0.120	0.191	52.843773	-27.880153	867.74	-391.40
5	GUIDE	845807880	8.82	5013	-0.068	0.009	0.111	0.165	53.382027	-27.886093	-328.12	834.40
6	GUIDE	845808520	10.16	4989	0.057	-0.048	0.198	0.307	53.575292	-27.720766	-1184.43	851.96
7	GUIDE	845816344	9.22	5002	-0.061	-0.157	0.112	0.173	53.137522	-28.675689	2231.21	2293.78

## 2.4 Star Slots

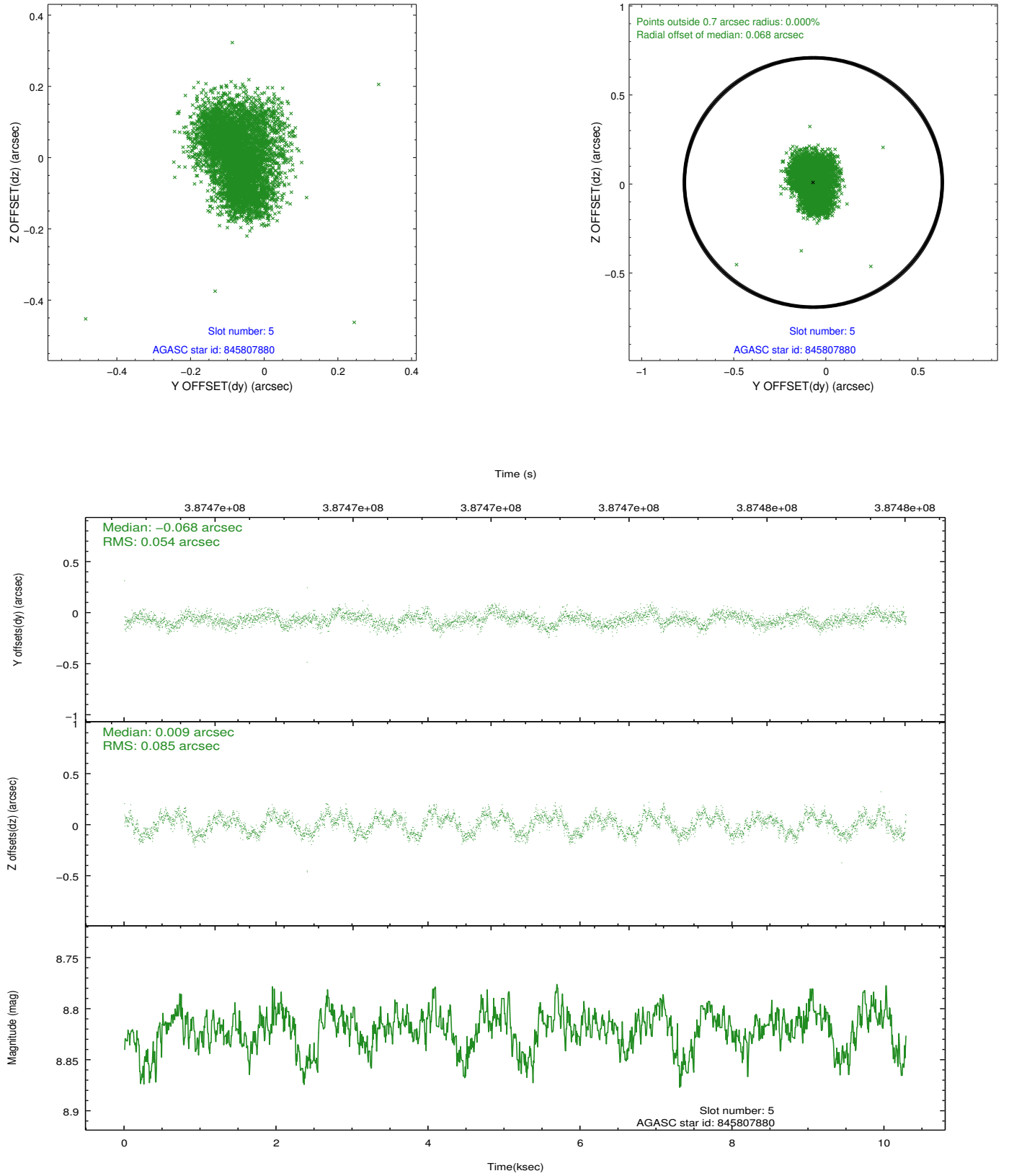
### 2.4.1 Slot 3



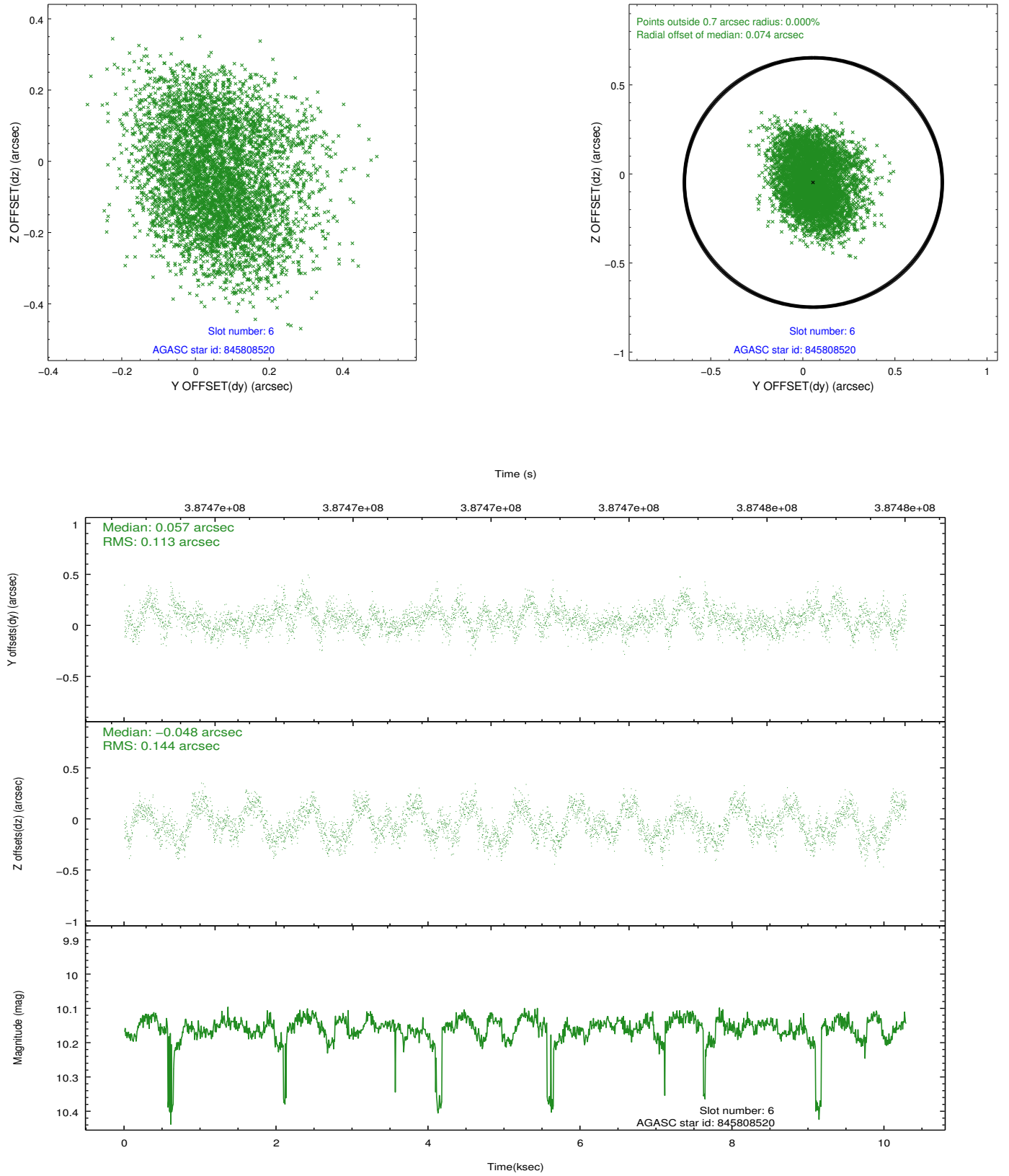
## 2.4.2 Slot 4



### 2.4.3 Slot 5

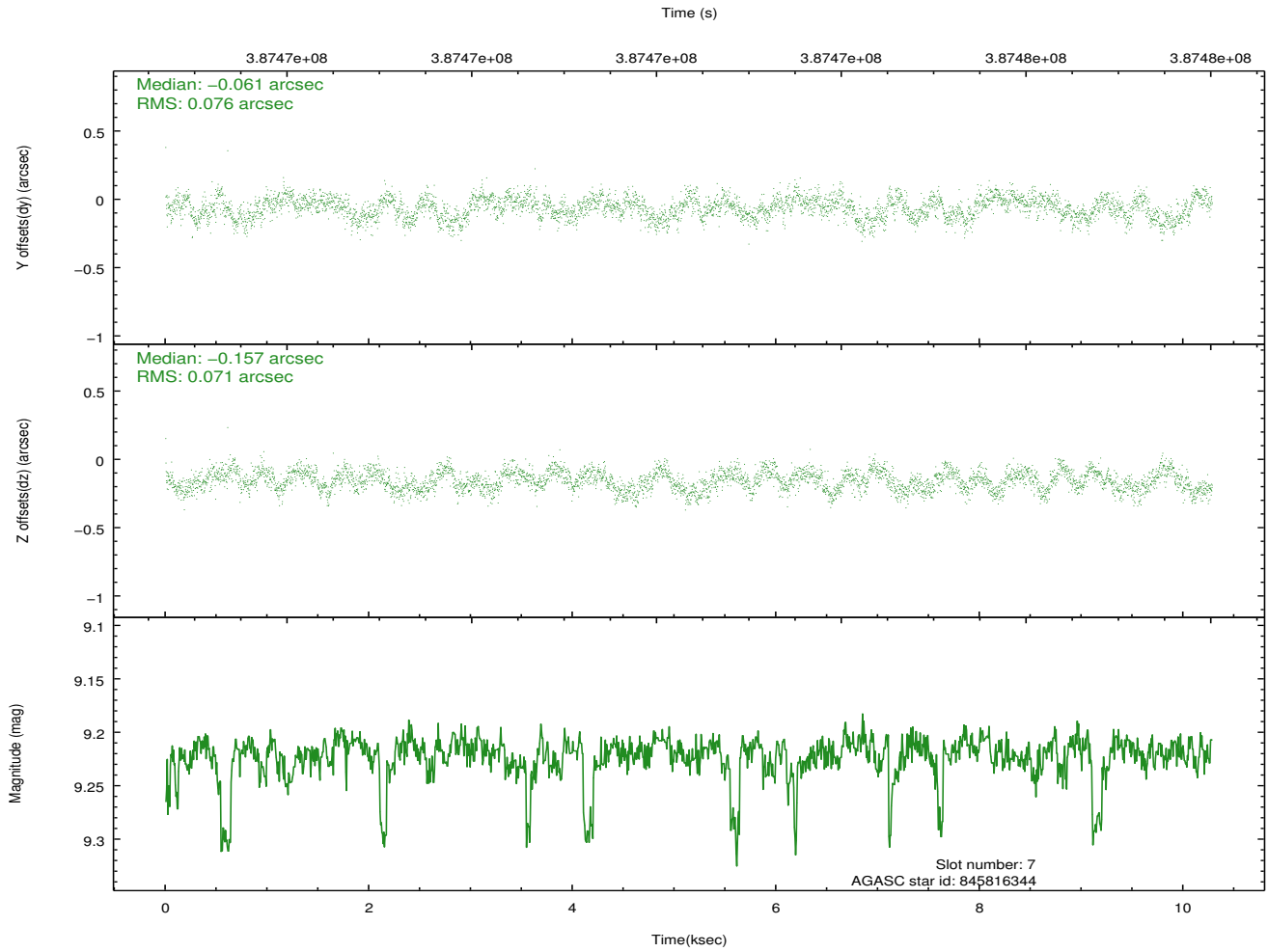
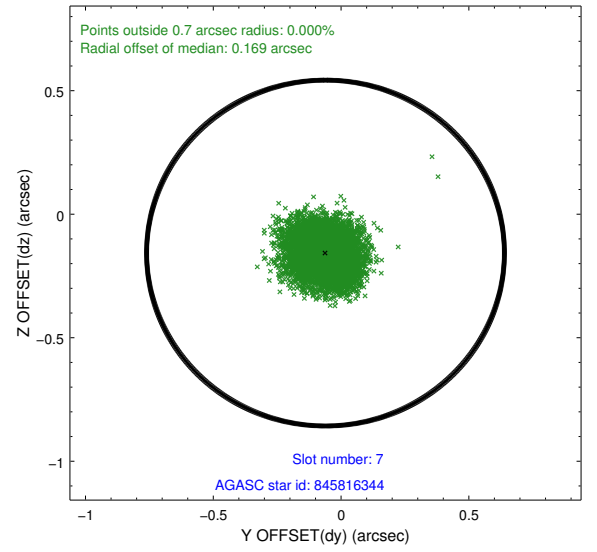
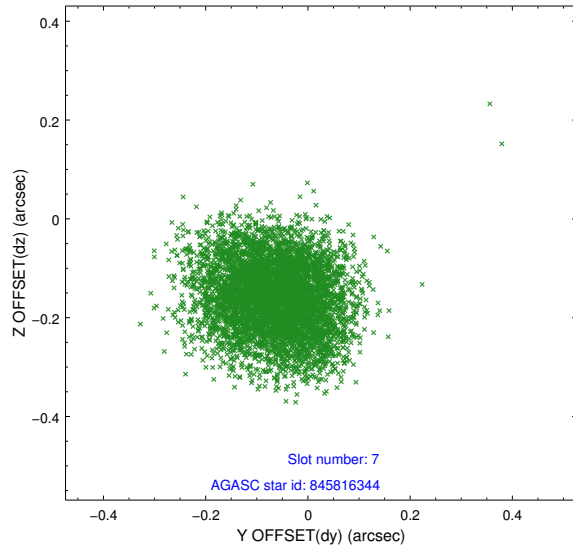


## 2.4.4 Slot 6



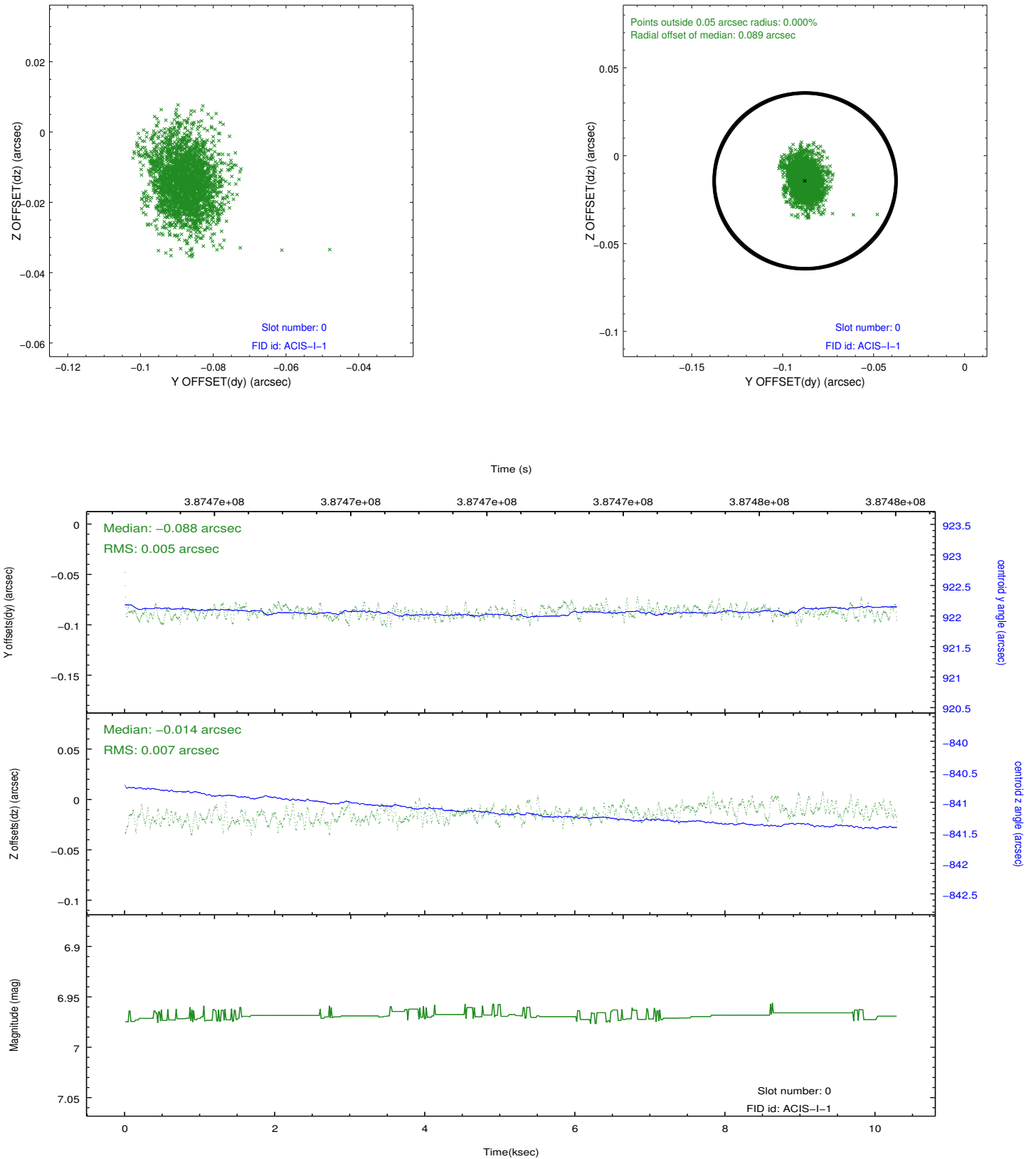


## 2.4.5 Slot 7

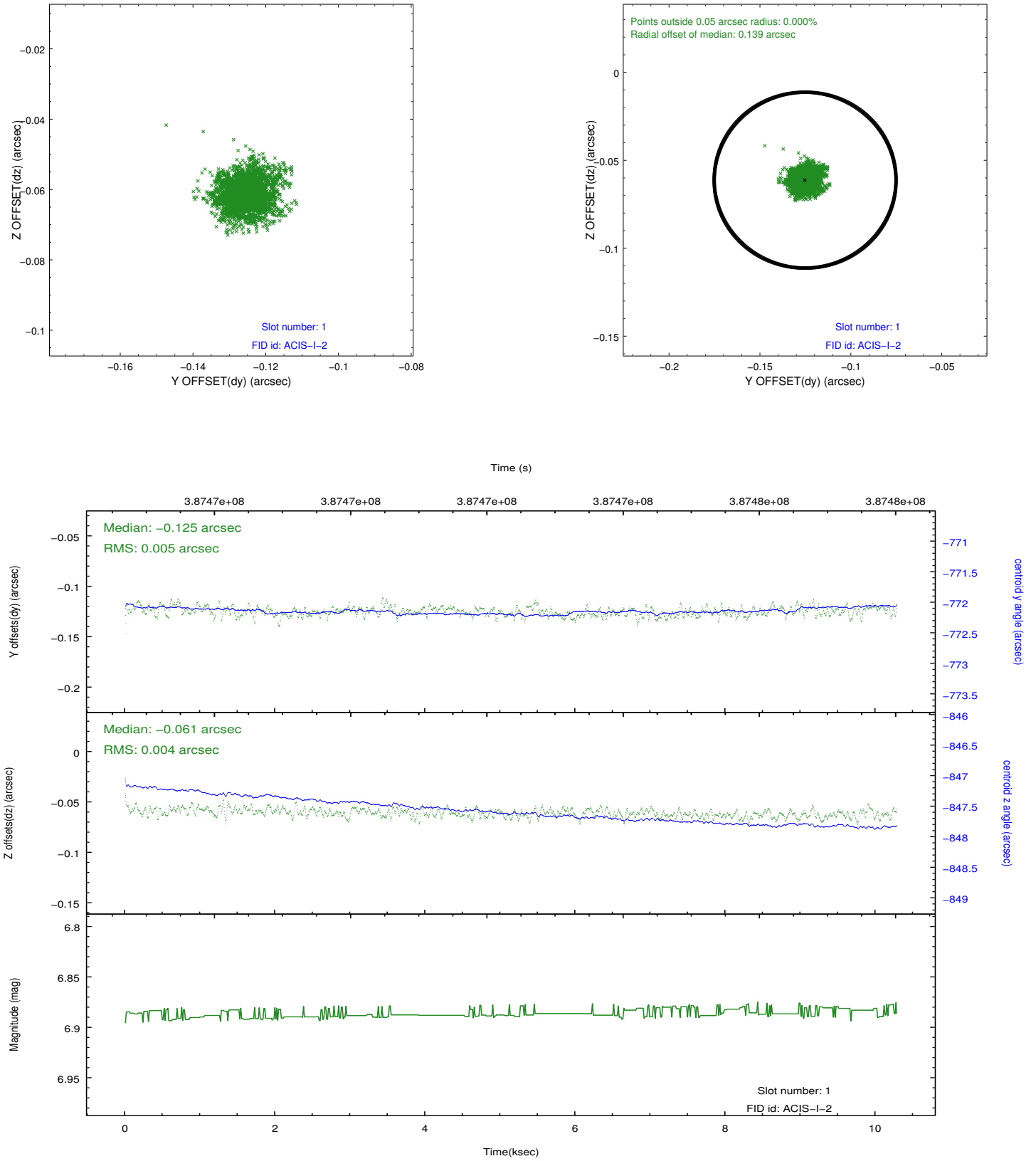


## 2.5 FID Slots

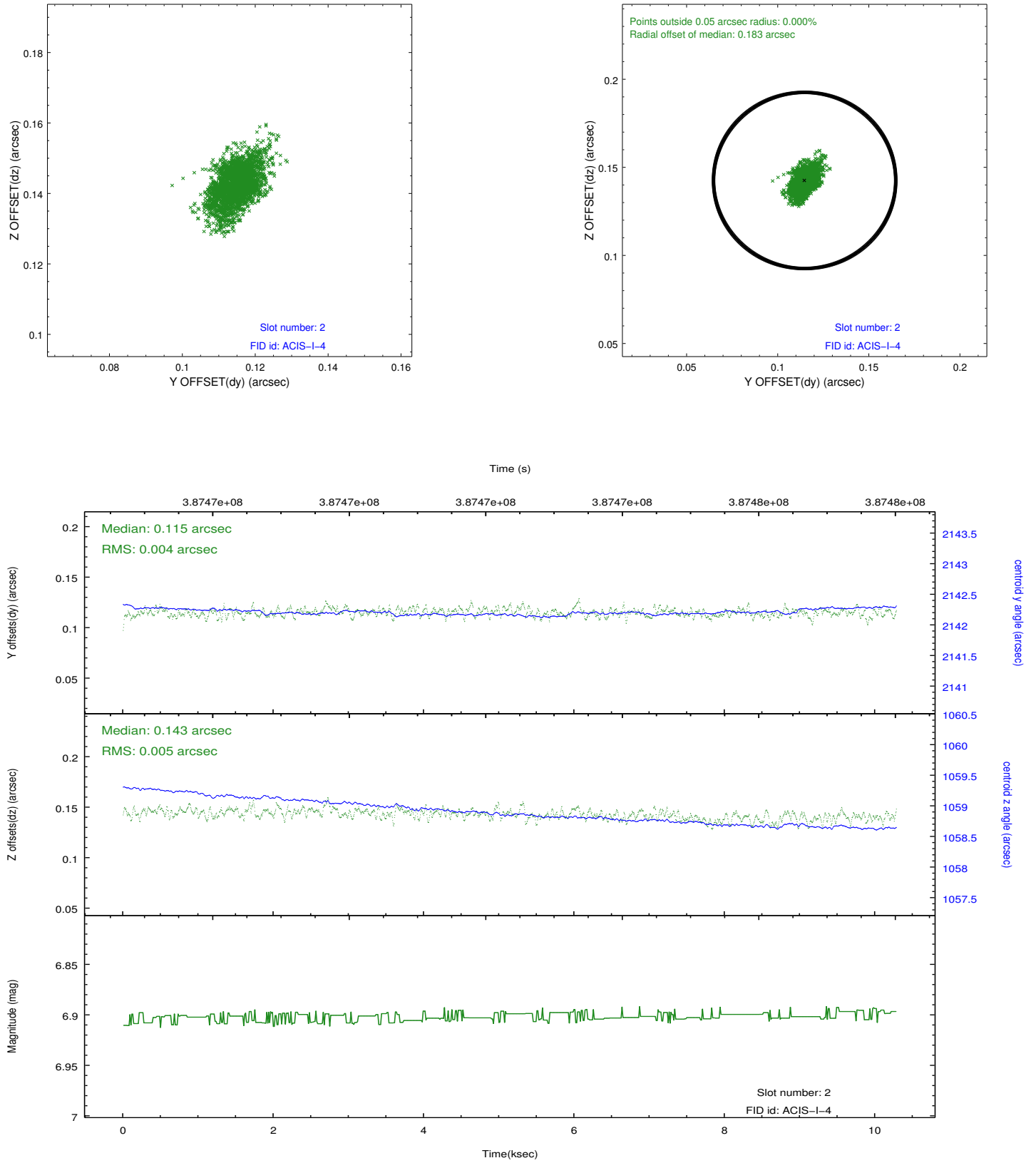
### 2.5.1 Slot 0



## 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)	2012.06.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.276459088802

### A.2 Comments