

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 6840 - L2 Version 3  
Chandra X-Ray Center

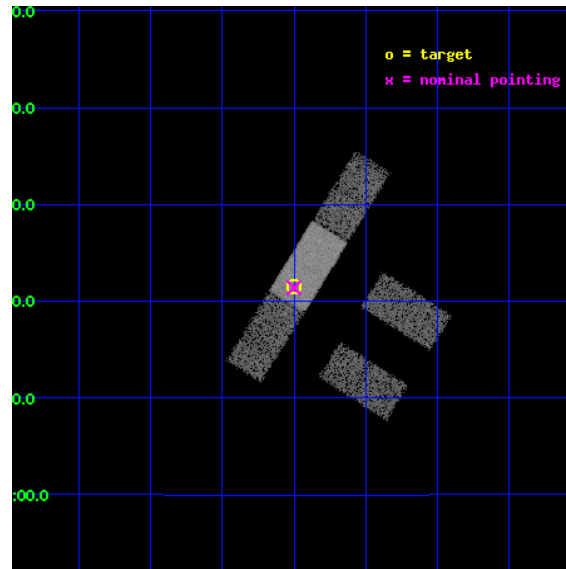
L2 Processing Date : Apr 18 2012

## 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

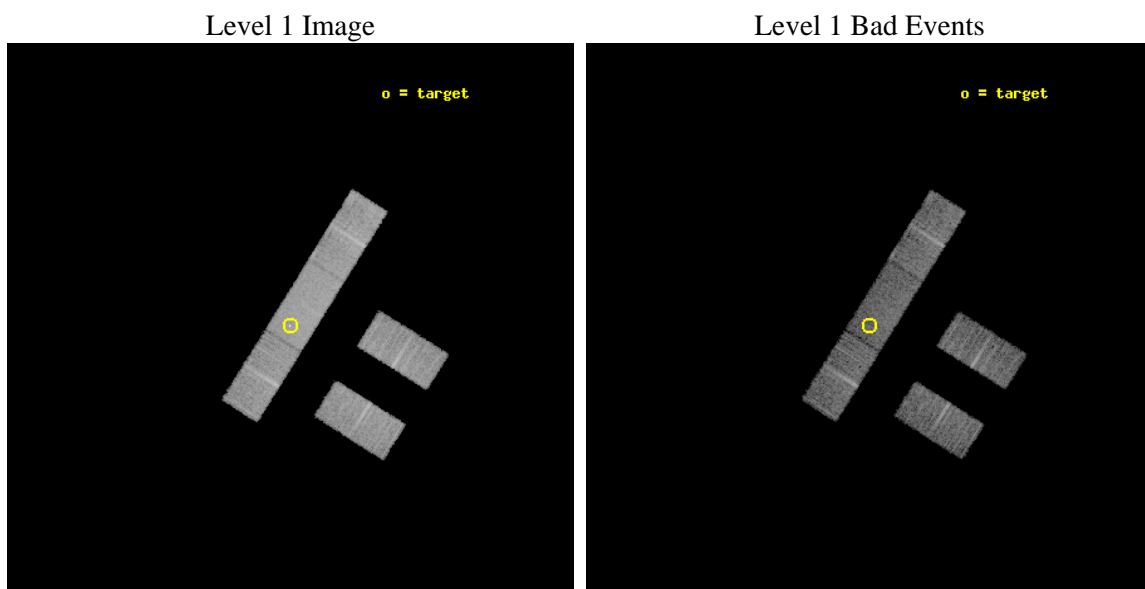
seq_num	701258	Sequence number
obs_id	6840	Observation id
title	Measuring the Size of a Quasar With Microlensing	Proposal title
observer	Prof. Christopher Kochanek	Principal investigator
object	Q2237+0305	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	340.125833	Observer's specified target RA [deg]
dec_targ	3.358333	Observer's specified target Dec [deg]
ra_nom	340.12513309063	Nominal RA [deg]
dec_nom	3.35636924887	Nominal Dec [deg]
roll_nom	302.02679192553	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8168.4999427795	Sum of GTIs [s]
livetime	7975.9510997595	Livetime [s]
ontime2	8168.4999427795	Sum of GTIs [s]
ontime3	8166.7589326501	Sum of GTIs [s]
ontime6	8168.4999427795	Sum of GTIs [s]
ontime7	8168.4999427795	Sum of GTIs [s]
ontime8	8168.4999427795	Sum of GTIs [s]
l2events	39554	Number of level 2 events



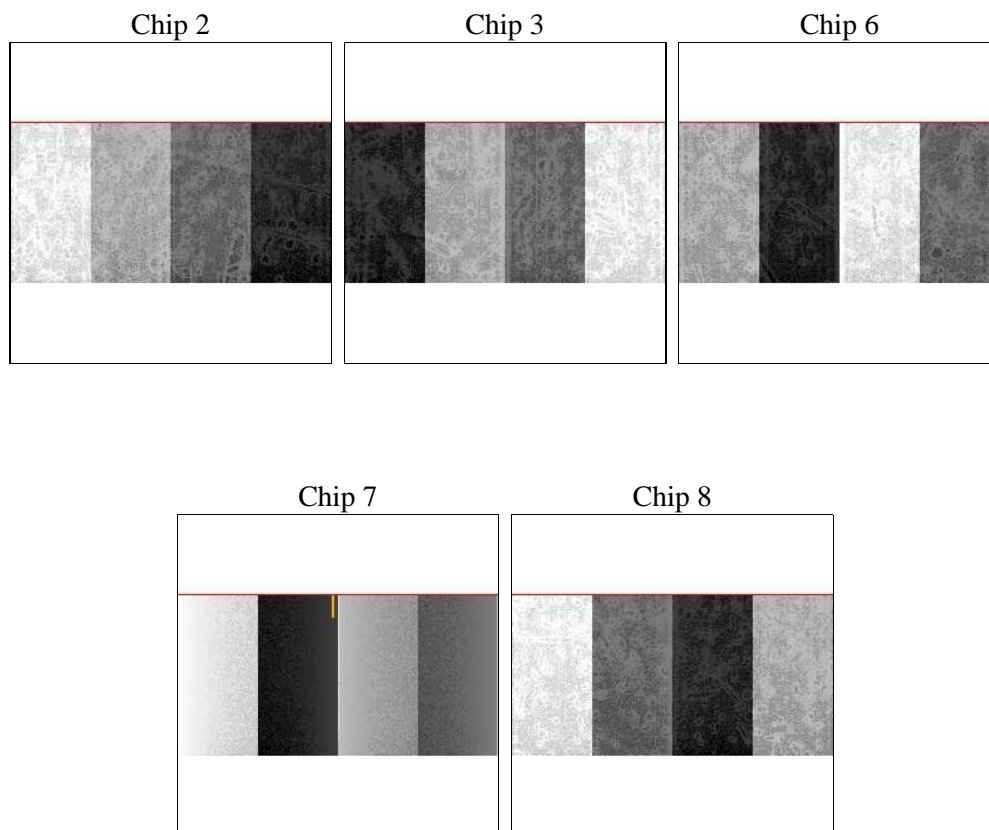
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	8168.4999427795	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	8168.4999427795	Sum of GTIs [s]
date	2012-04-18T12:28:55	Date and time of file creation	ontime3	8166.7589326501	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	8168.4999427795	Sum of GTIs [s]
			ontime7	8168.4999427795	Sum of GTIs [s]
			ontime8	8168.4999427795	Sum of GTIs [s]
			l1events	230165	Number of level 1 events

### 2.1.4 Events

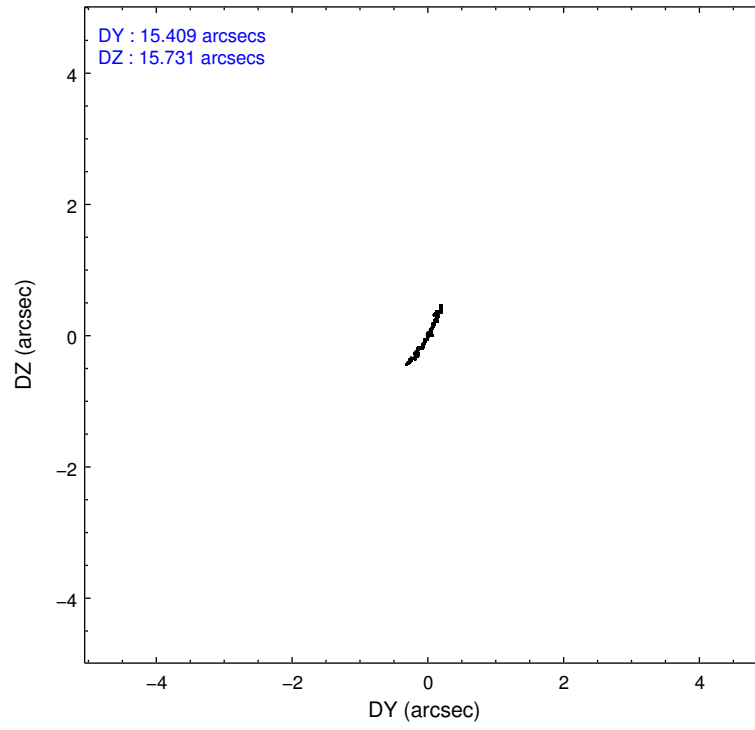
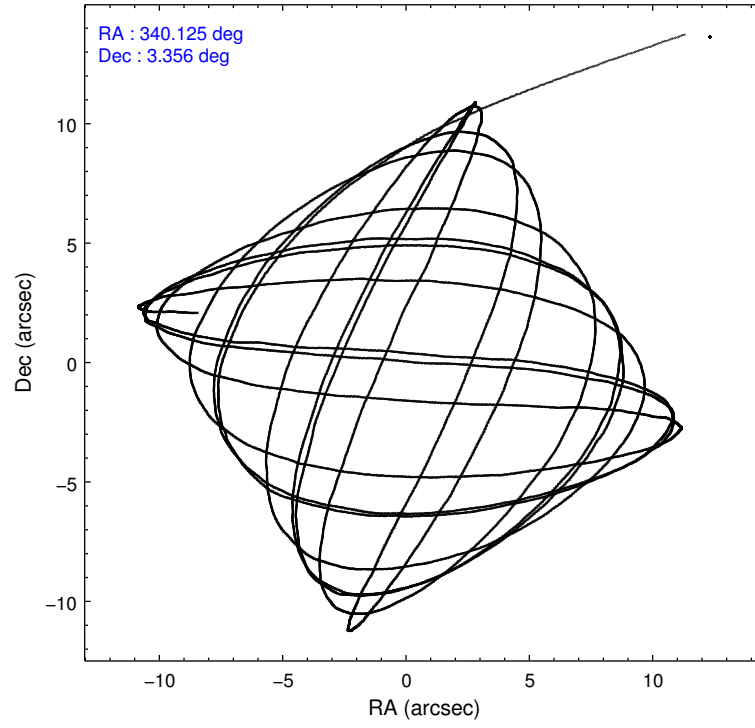
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	40254	40545	41382	55252	52732
rejected events	35565	35883	36509	31855	42257
rejected %	88%	88%	88%	57%	80%

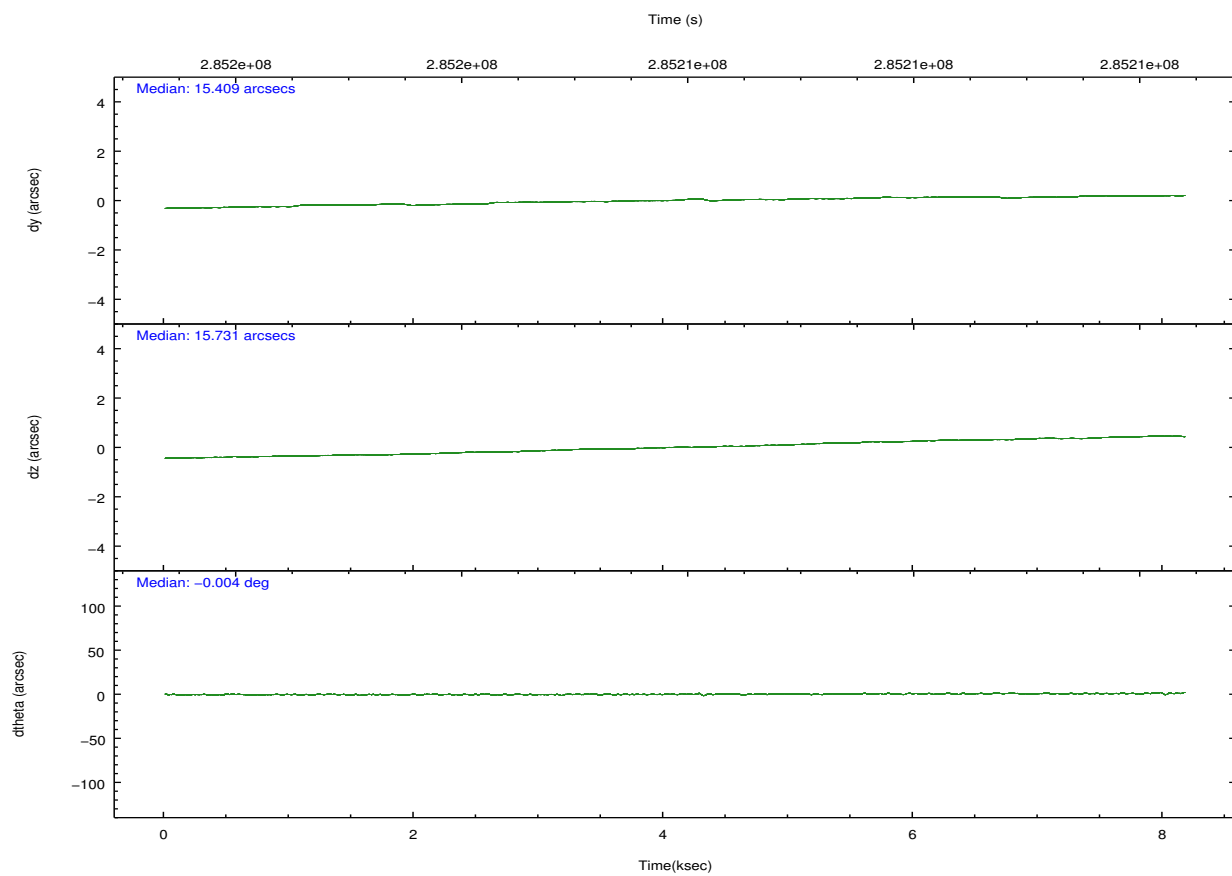
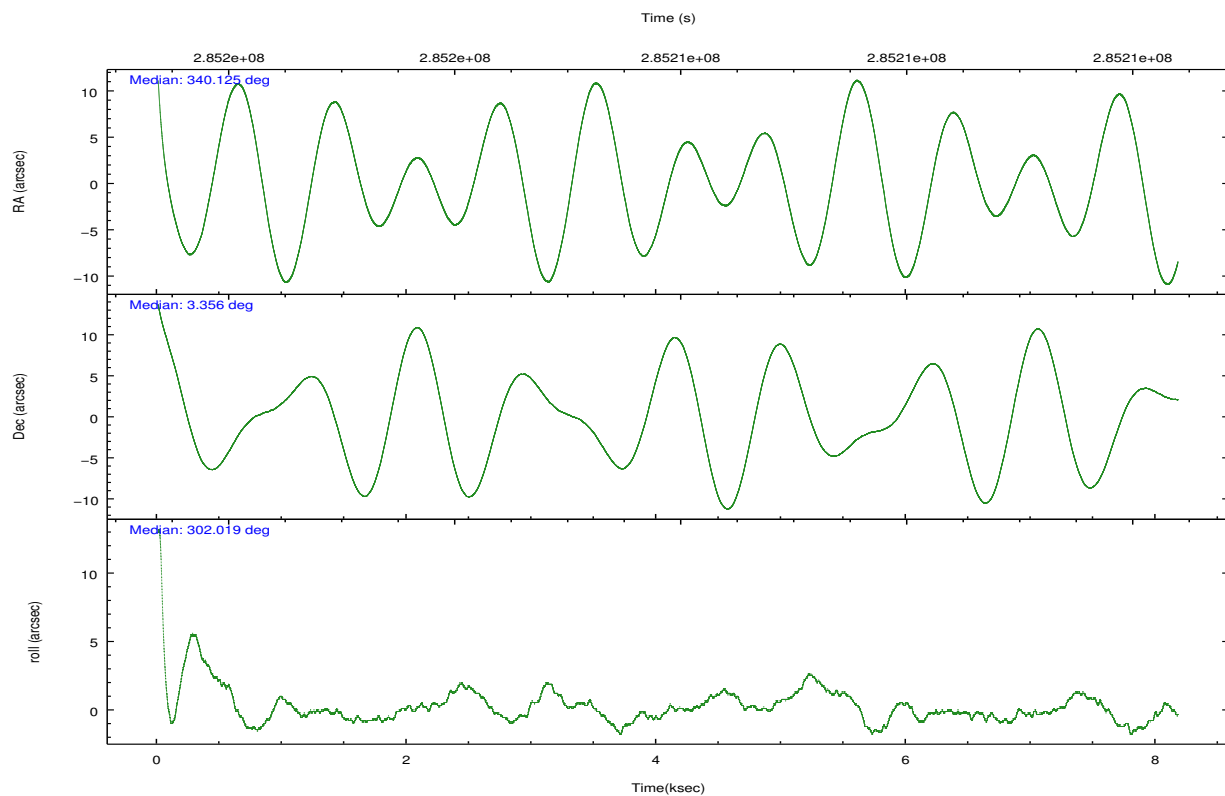
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2029	2000	1820	2441	3247
	5%	4%	4%	4%	6%
grade 1 events	16	14	11	59	42
	0%	0%	0%	0%	0%
grade 2 events	931	877	1042	4976	2419
	2%	2%	2%	9%	4%
grade 3 events	538	559	573	2221	1146
	1%	1%	1%	4%	2%
grade 4 events	572	561	541	2247	1109
	1%	1%	1%	4%	2%
grade 5 events	1502	1778	1887	5147	2371
	3%	4%	4%	9%	4%
grade 6 events	749	786	1019	12038	2816
	1%	1%	2%	21%	5%
grade 7 events	33917	33970	34489	26123	39582
	84%	83%	83%	47%	75%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	340.100811	340.125133090632	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	3.368833	3.35636924887003	Subarray start row	257	257
[deg] Pointing Roll	301.871567	302.0267919255264	Subarray row count	512	512
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1.7
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	285201977.184000	285201075.53714			
Observation start date	2007-01-14T22:45:12	2007-01-14T22:31:15			
[s] Observation end time (MET)	285209977.184000	285210947.31261			
Observation end date	2007-01-15T00:58:32	2007-01-15T01:15:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect



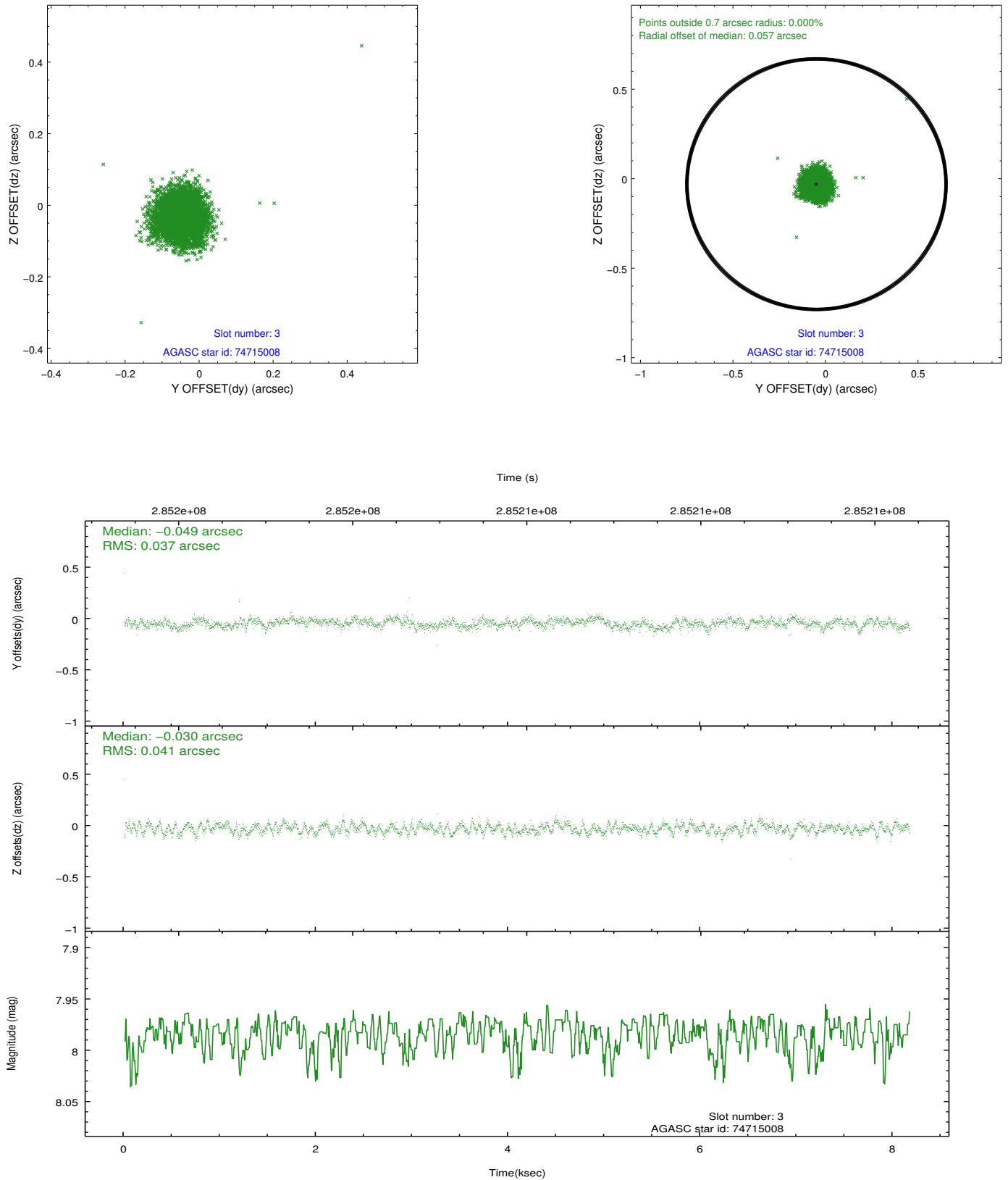


### Slot Statistics

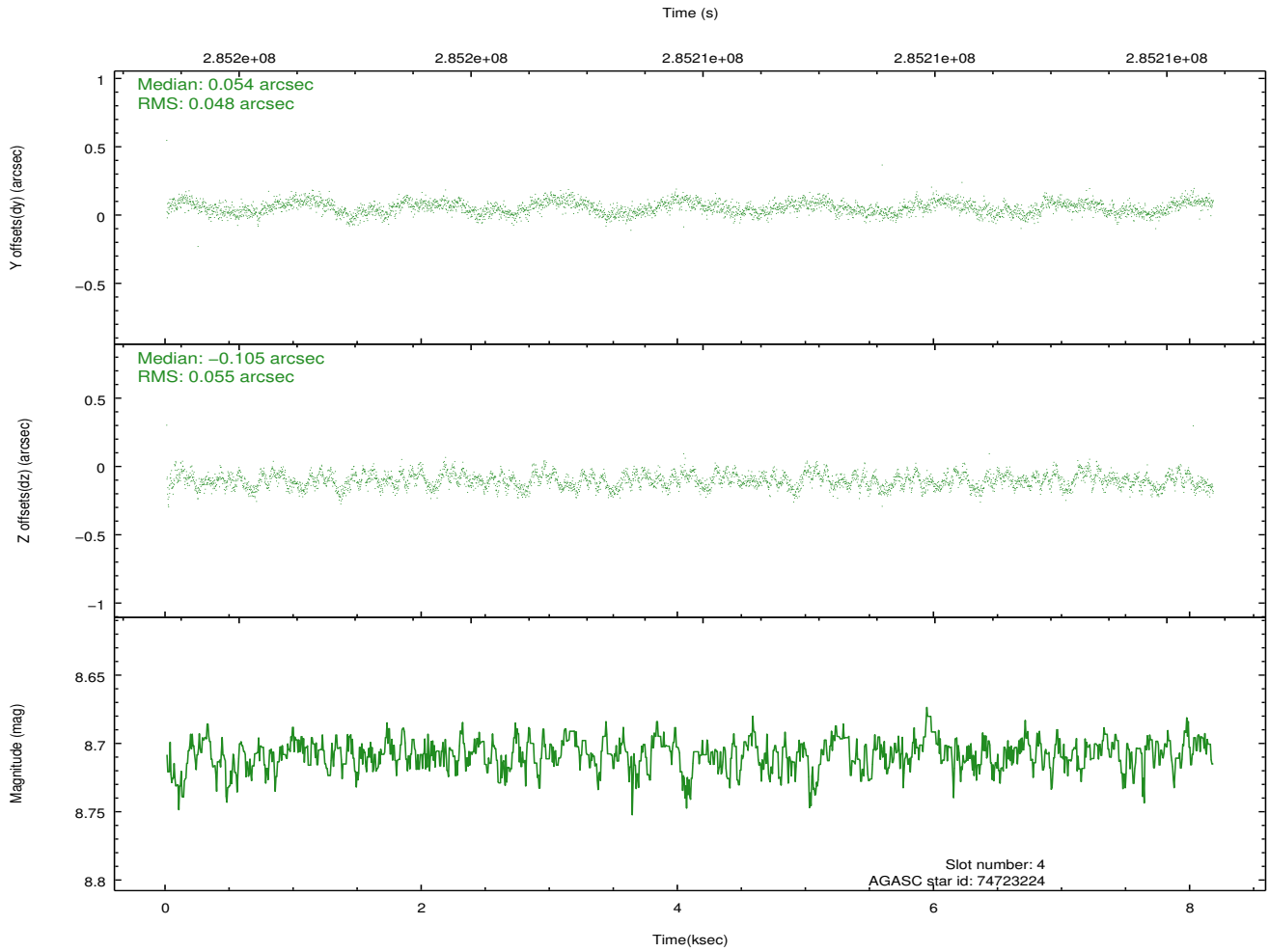
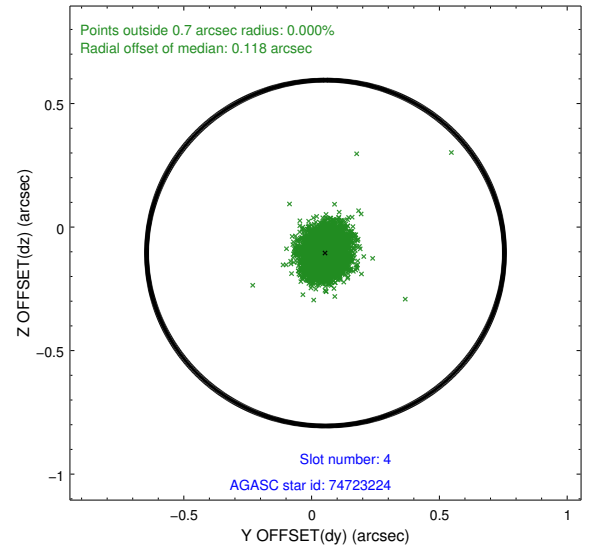
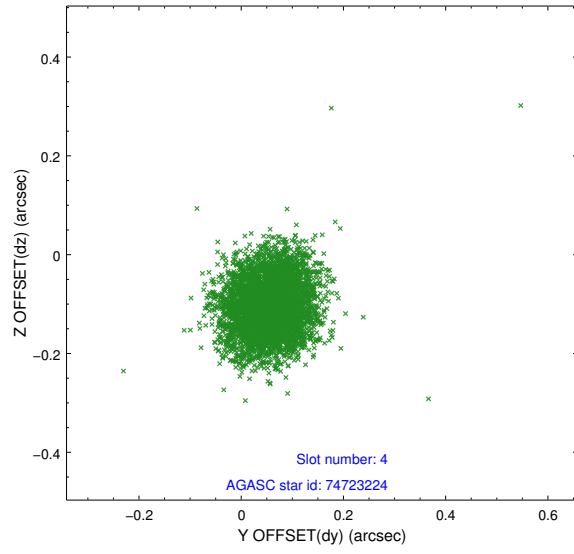
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1993	-0.109	-0.030	0.007	0.012	0.000000	0.000000	-768.48	-1737.11
1	FID	ACIS-S-4	7.20	1993	0.215	0.061	0.008	0.015	0.000000	0.000000	2144.81	170.75
2	FID	ACIS-S-5	7.22	1993	-0.137	-0.021	0.008	0.015	0.000000	0.000000	-1820.48	165.12
3	GUIDE	74715008	7.98	3987	-0.049	-0.030	0.058	0.091	339.956848	3.242441	113.62	-679.30
4	GUIDE	74723224	8.71	3985	0.054	-0.105	0.077	0.120	339.594650	3.574222	-1587.97	-1153.90
5	GUIDE	74842128	8.52	3987	0.051	-0.037	0.070	0.110	340.118134	3.132788	754.67	-395.86
6	GUIDE	74854992	8.27	3987	0.047	0.016	0.062	0.097	340.342808	3.603730	-258.58	1185.00
7	GUIDE	74855160	9.25	3978	-0.108	0.162	0.094	0.155	340.321337	4.258359	-2301.45	2363.97

## 2.4 Star Slots

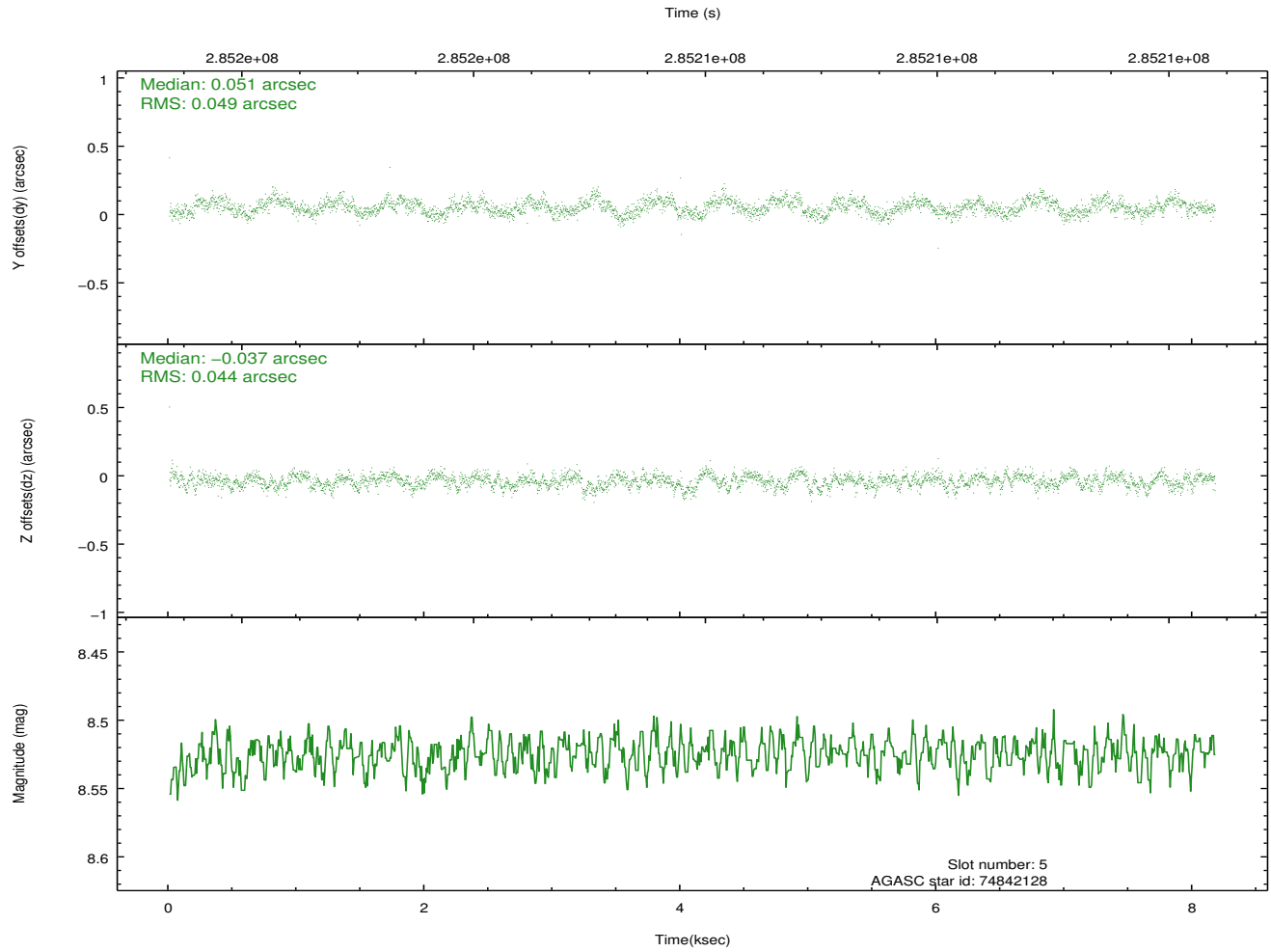
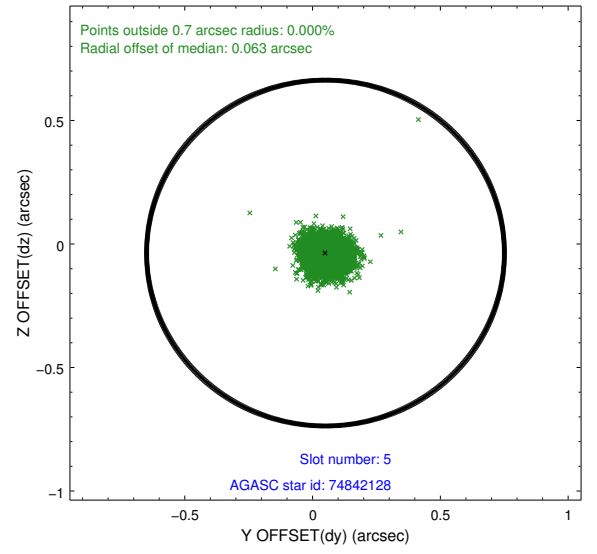
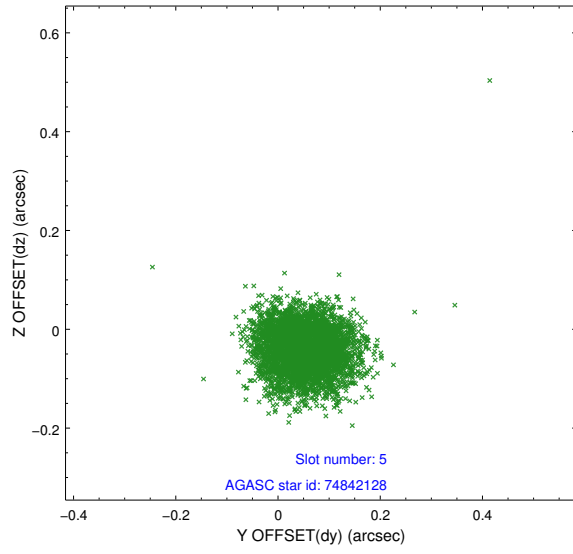
### 2.4.1 Slot 3



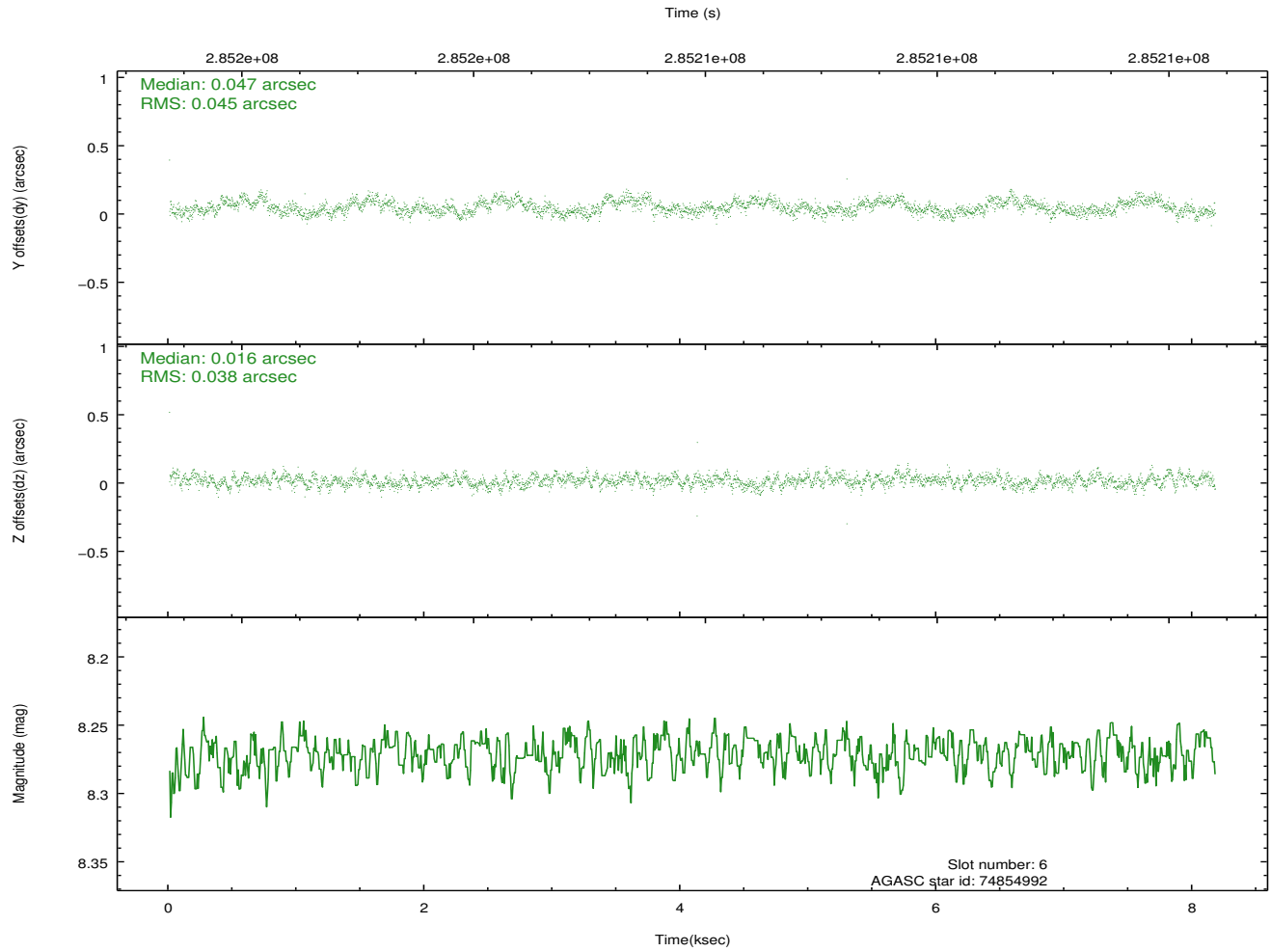
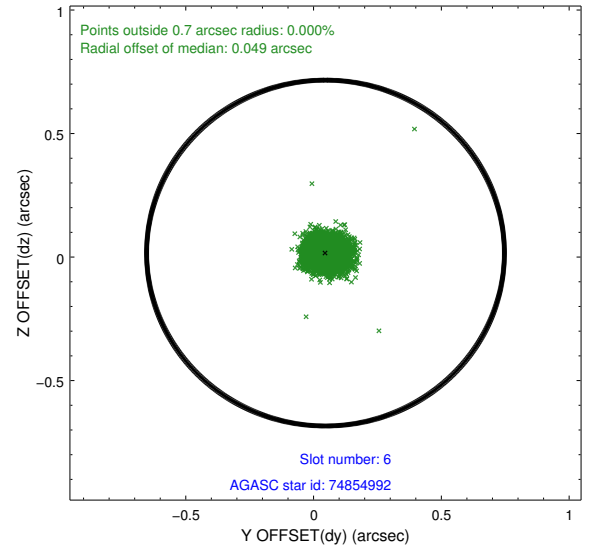
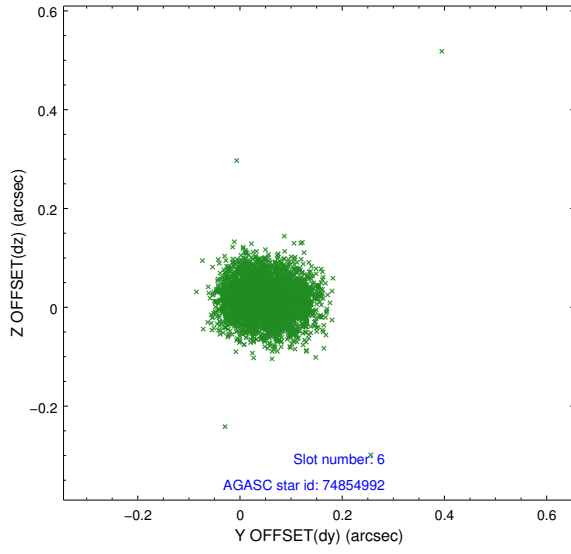
## 2.4.2 Slot 4



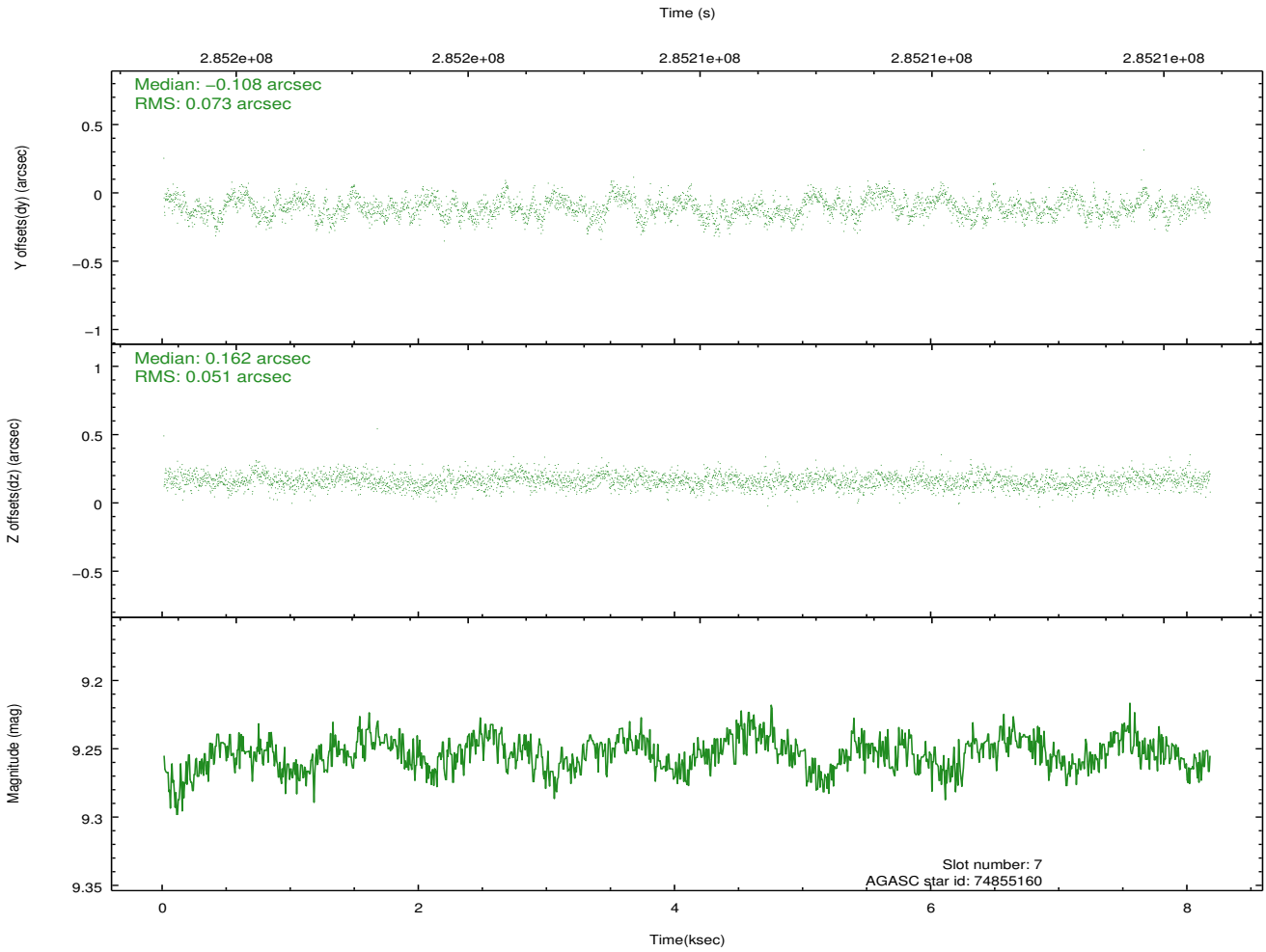
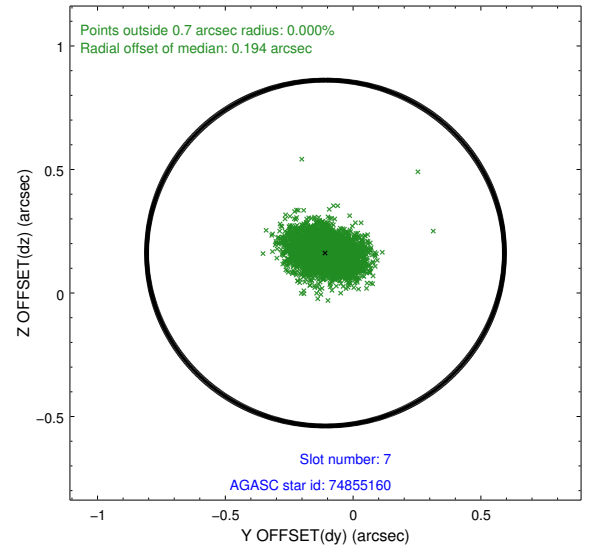
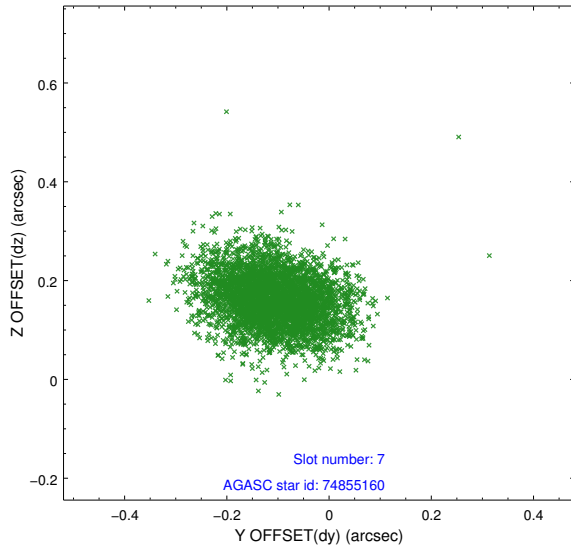
### 2.4.3 Slot 5



## 2.4.4 Slot 6

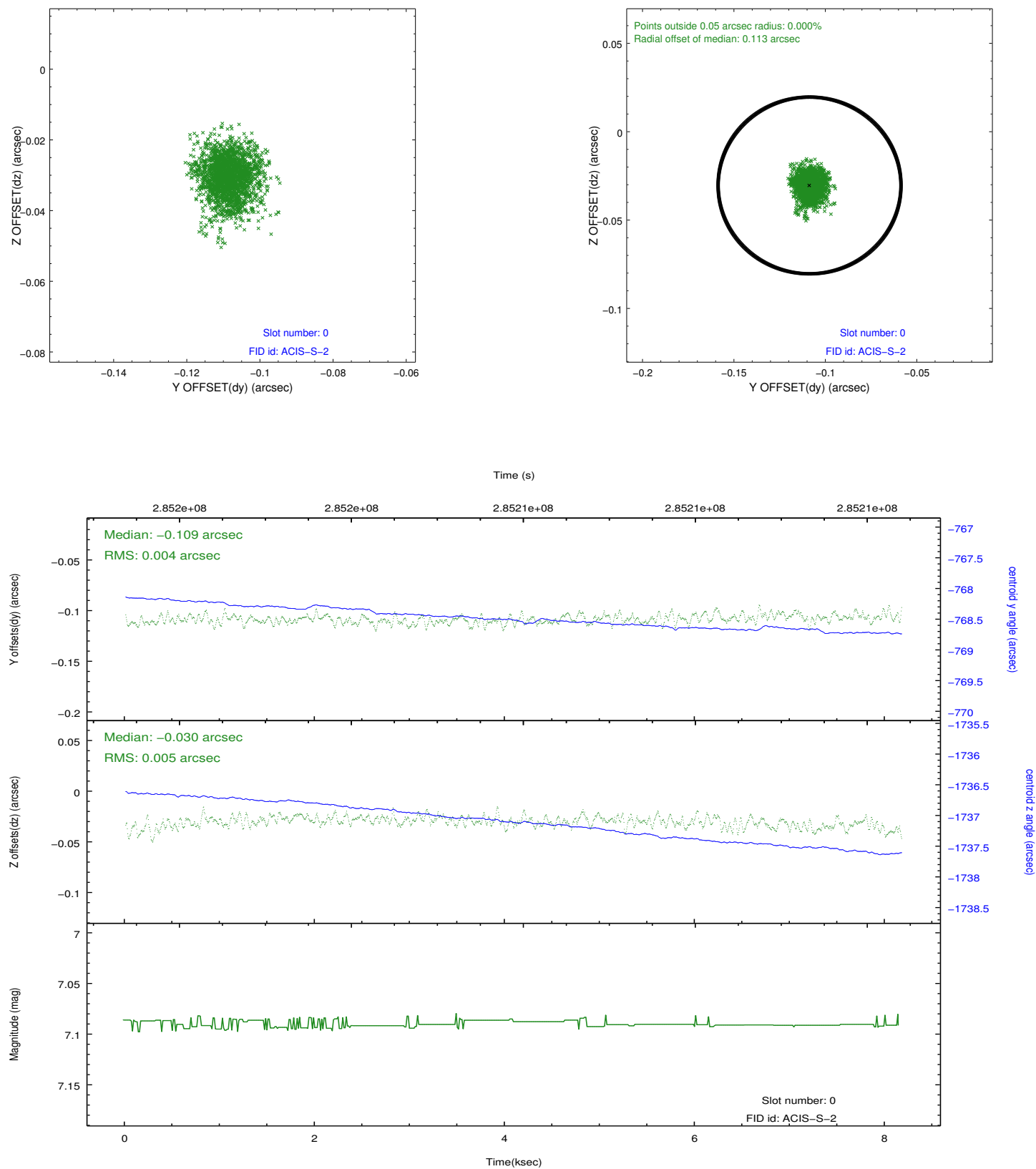


## 2.4.5 Slot 7

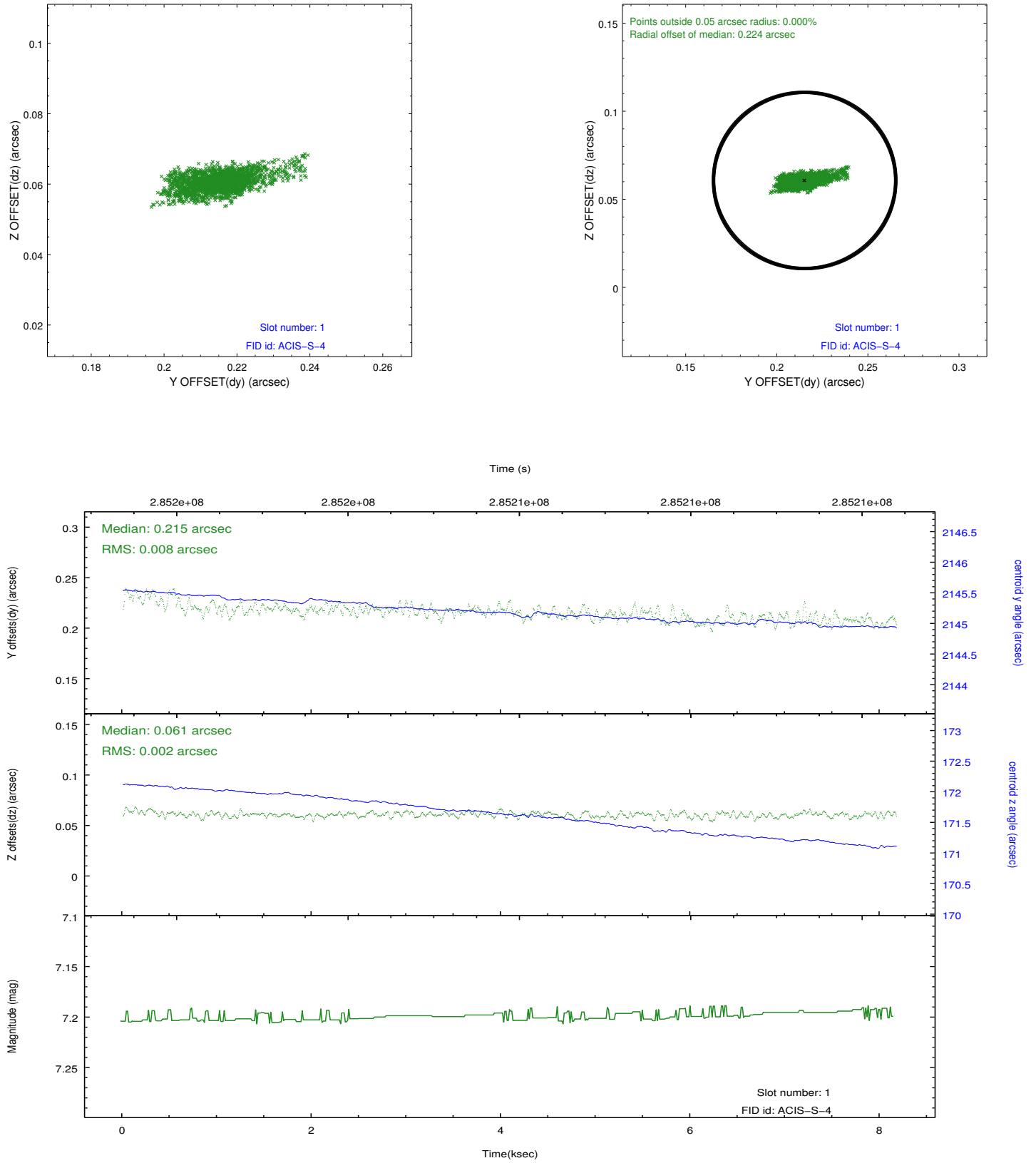


## 2.5 FID Slots

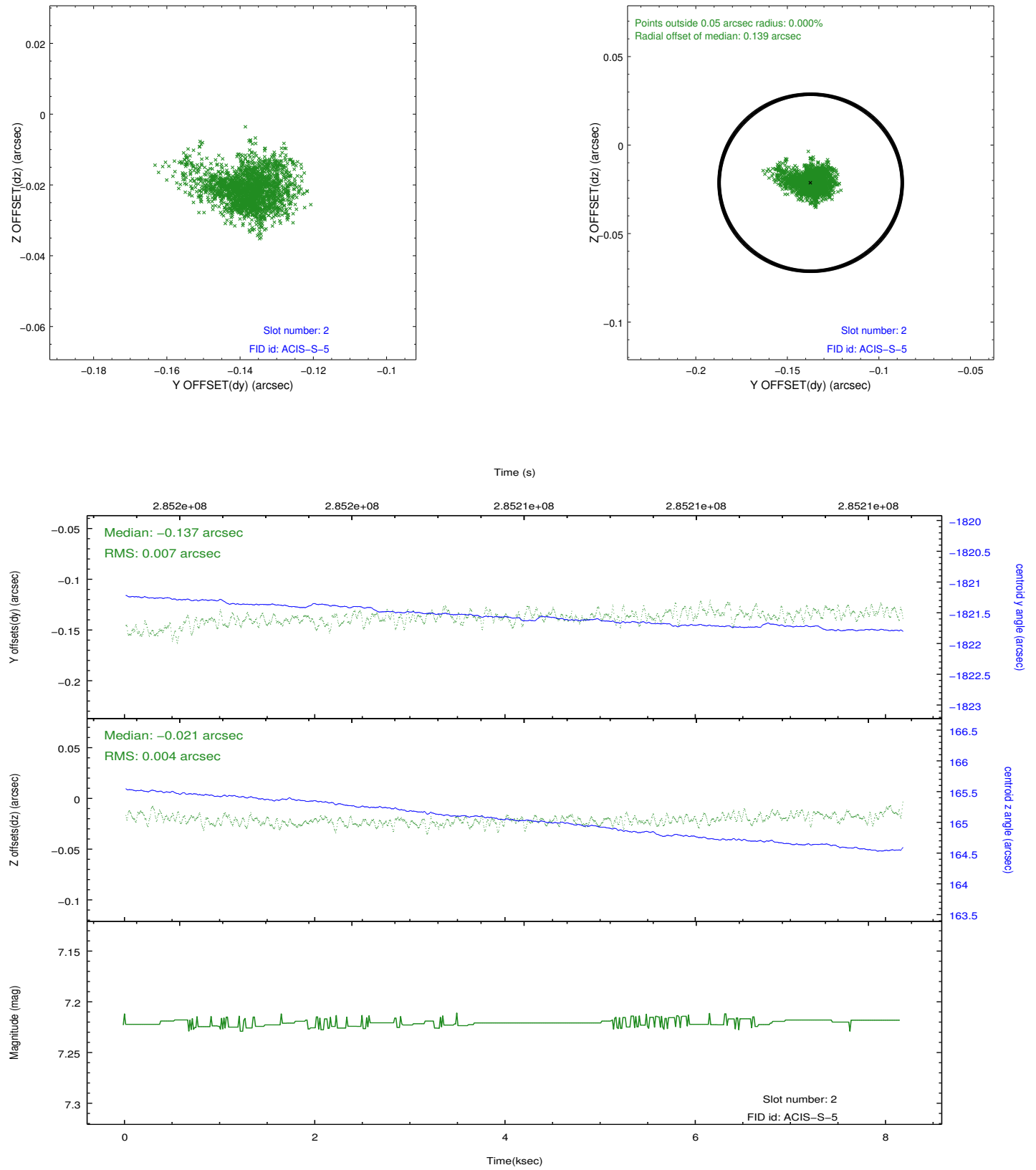
### 2.5.1 Slot 0



## 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)	2012.04.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.16849994

### A.2 Comments