

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4033 - L2 Version 3  
Chandra X-Ray Center

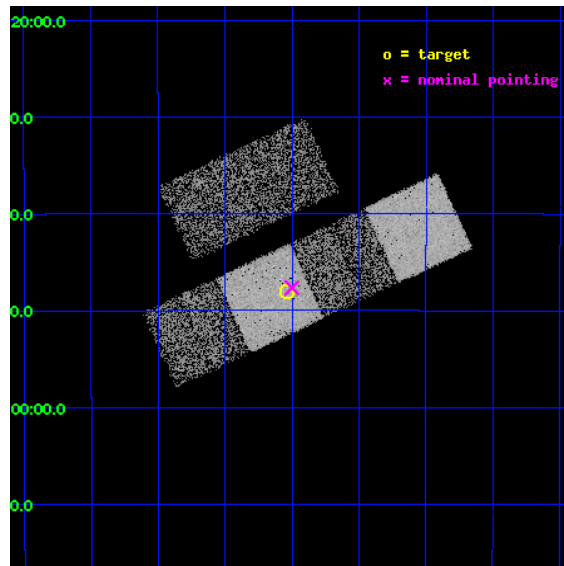
L2 Processing Date : Oct 29 2012

## 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

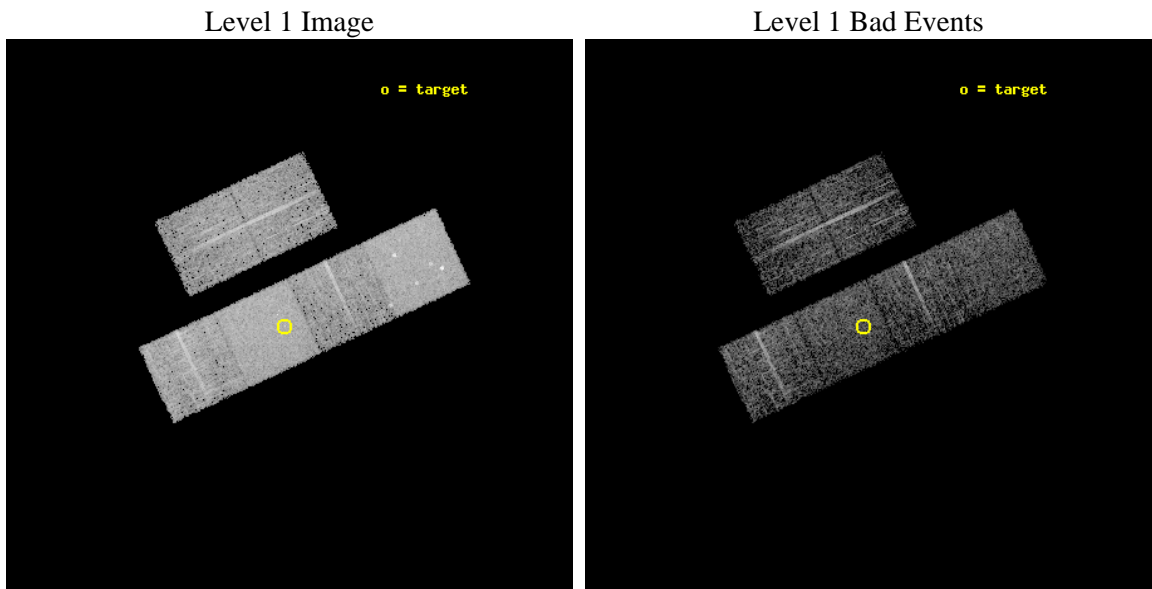
seq_num	700712	Sequence number
obs_id	4033	Observation id
title	WHY DO WE SEE BROAD LINES IN X-RAY ABSORBED AGN?	Proposal title
observer	Dr. Belinda Wilkes	Principal investigator
object	2MASS042032-204759	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	65.13375	Observer's specified target RA [deg]
dec_targ	-20.799778	Observer's specified target Dec [deg]
ra_nom	65.12527812855	Nominal RA [deg]
dec_nom	-20.794137880074	Nominal Dec [deg]
roll_nom	154.98359479263	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4454.3999834061	Sum of GTIs [s]
livetime	4397.9956886985	Livetime [s]
ontime2	4454.3999834061	Sum of GTIs [s]
ontime3	4454.3999834061	Sum of GTIs [s]
ontime5	4454.3999834061	Sum of GTIs [s]
ontime6	4454.3999834061	Sum of GTIs [s]
ontime7	4454.3999834061	Sum of GTIs [s]
ontime8	4454.3999834061	Sum of GTIs [s]
l2events	52725	Number of level 2 events



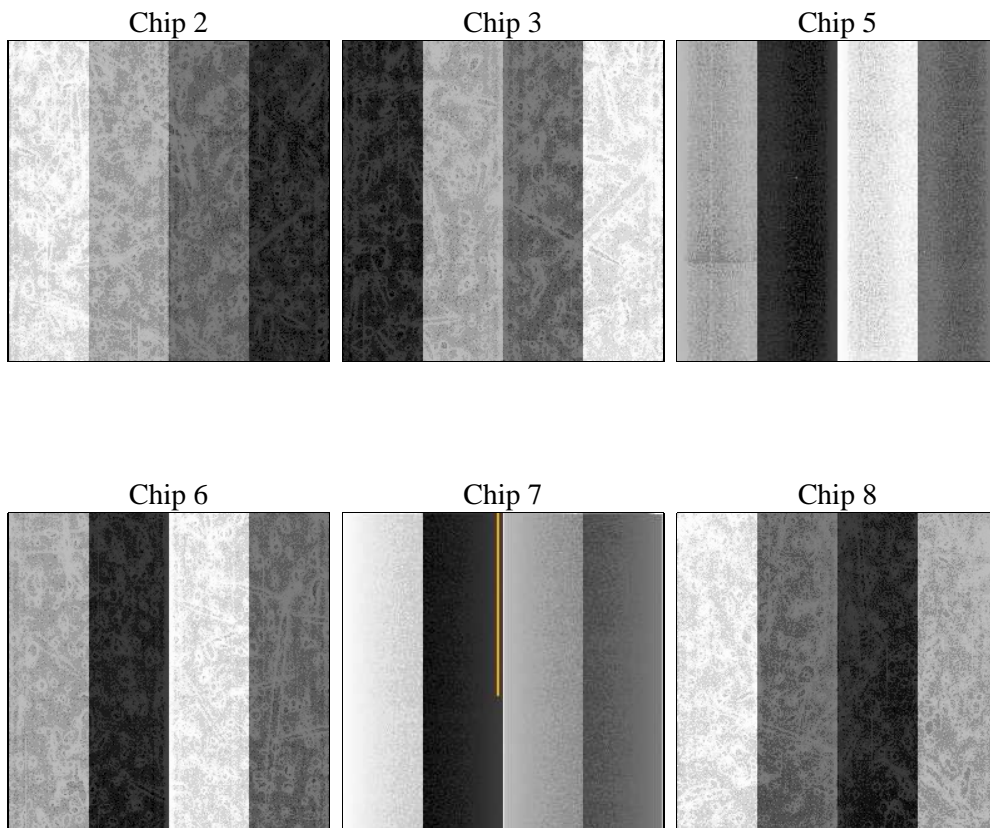
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4478.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4454.3999834061	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	4454.3999834061	Sum of GTIs [s]
date	2012-10-29T17:43:47	Date and time of file creation	ontime3	4454.3999834061	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	4454.3999834061	Sum of GTIs [s]
			ontime6	4454.3999834061	Sum of GTIs [s]
			ontime7	4454.3999834061	Sum of GTIs [s]
			ontime8	4454.3999834061	Sum of GTIs [s]
			l1events	201786	Number of level 1 events

### 2.1.4 Events

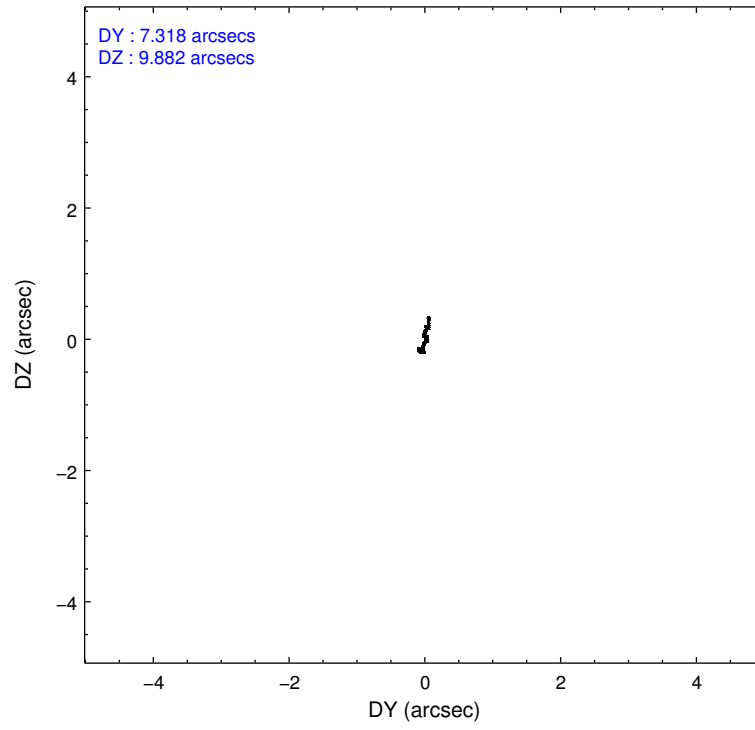
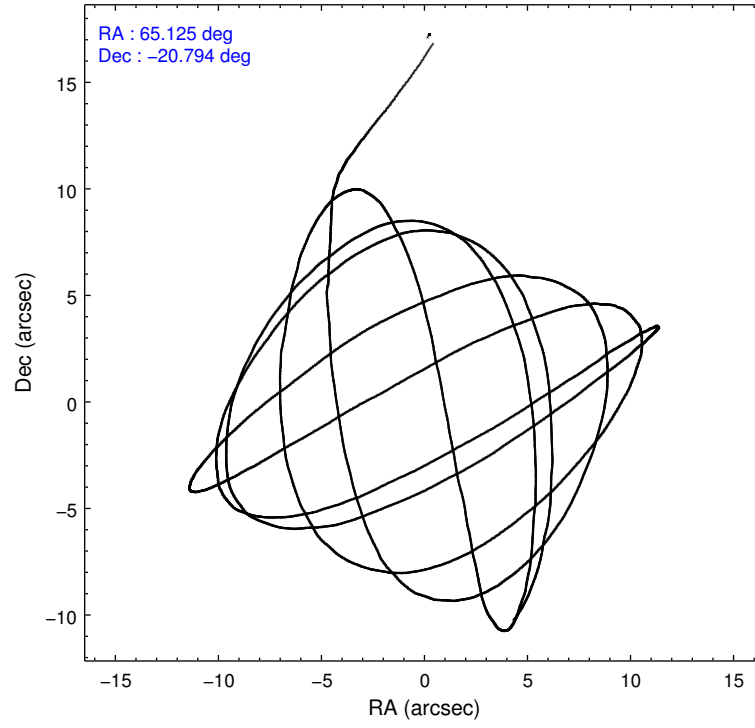
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	26942	25994	45009	26959	41170	35712	grade 0 events	1684	1631	3328	1840	1919	2917
rejected events	23441	22565	22265	23077	21771	27258		6%	6%	7%	6%	4%	8%
rejected %	87%	86%	49%	85%	52%	76%	grade 1 events	16	18	123	18	38	25
								0%	0%	0%	0%	0%	0%
							grade 2 events	629	634	6494	750	3731	1795
								2%	2%	14%	2%	9%	5%
							grade 3 events	308	334	965	291	1625	844
								1%	1%	2%	1%	3%	2%
							grade 4 events	325	328	992	317	1687	779
								1%	1%	2%	1%	4%	2%
							grade 5 events	1028	1187	3058	1227	3601	1623
								3%	4%	6%	4%	8%	4%
							grade 6 events	555	506	10980	687	10445	2121
								2%	1%	24%	2%	25%	5%
							grade 7 events	22397	21356	19069	21829	18124	25608
								83%	82%	42%	80%	44%	71%

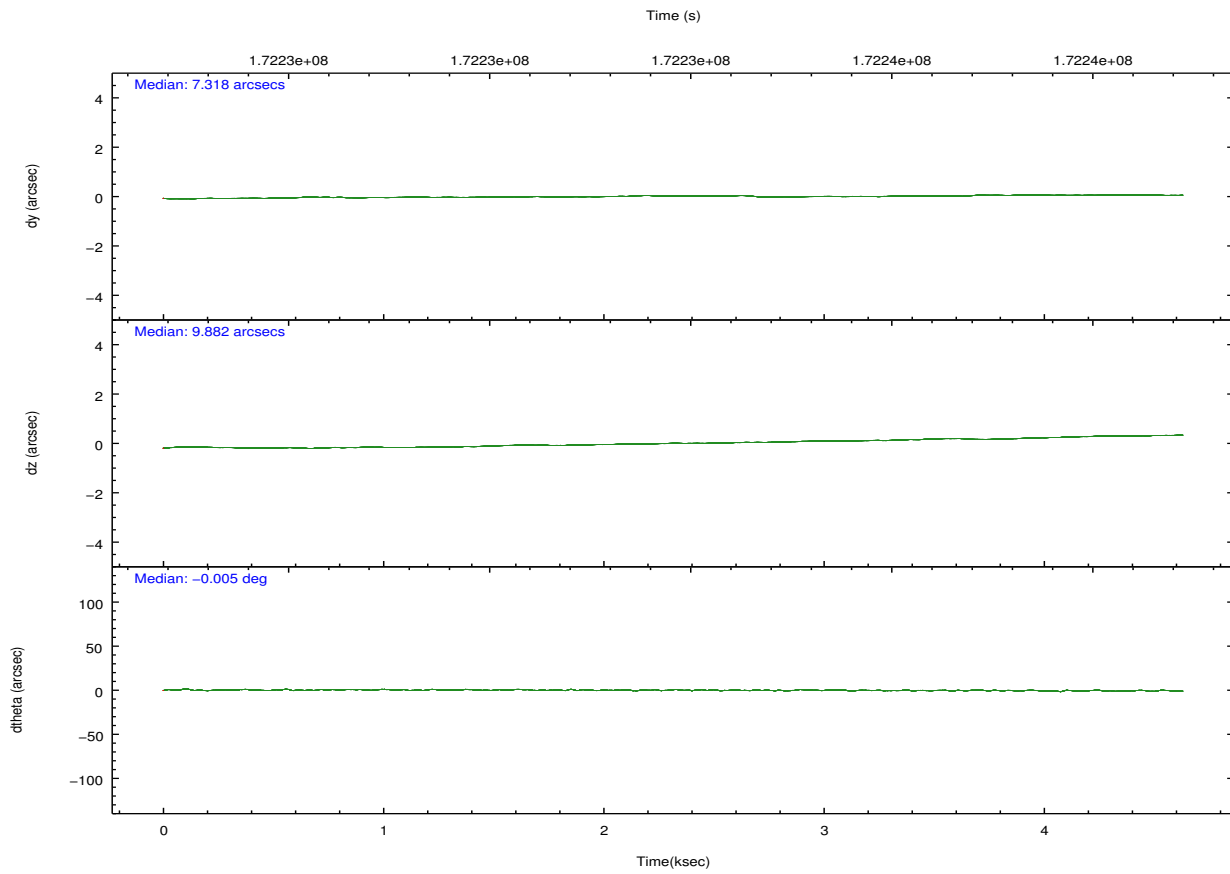
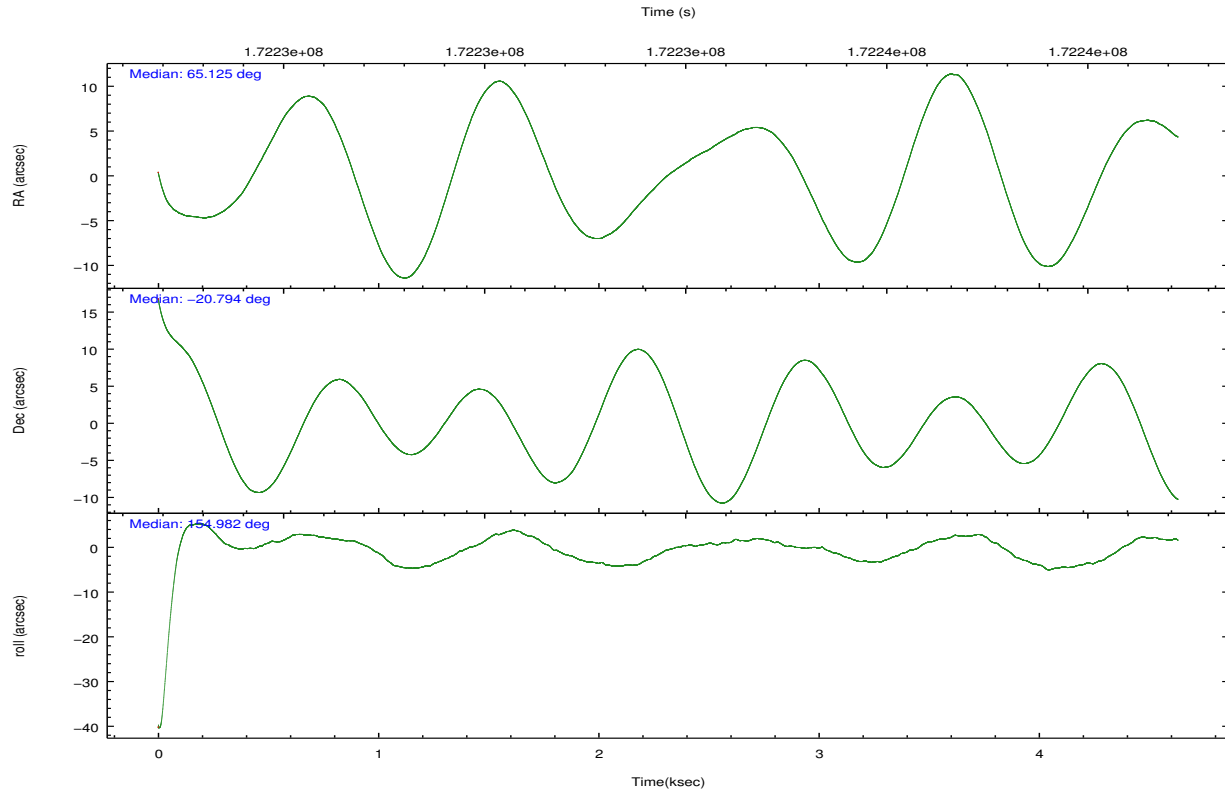


## 2.2 Compared Parameters

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	65.154268	65.12527812854965	Subarray requested	NONE	NONE
[deg] Pointing Dec	-20.791482	-20.79413788007366	Alternating exposures requested	N	N
[deg] Pointing Roll	154.837402	154.9835947926331	[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)	172231752.184000	172230653.40196			
Observation start date	2003-06-17T10:08:08	2003-06-17T09:50:53			
[s] Observation end time (MET)	172236230.184000	172236629.15222			
Observation end date	2003-06-17T11:22:46	2003-06-17T11:30:29			
Read mode	TIMED	TIMED			

## 2.3 Aspect



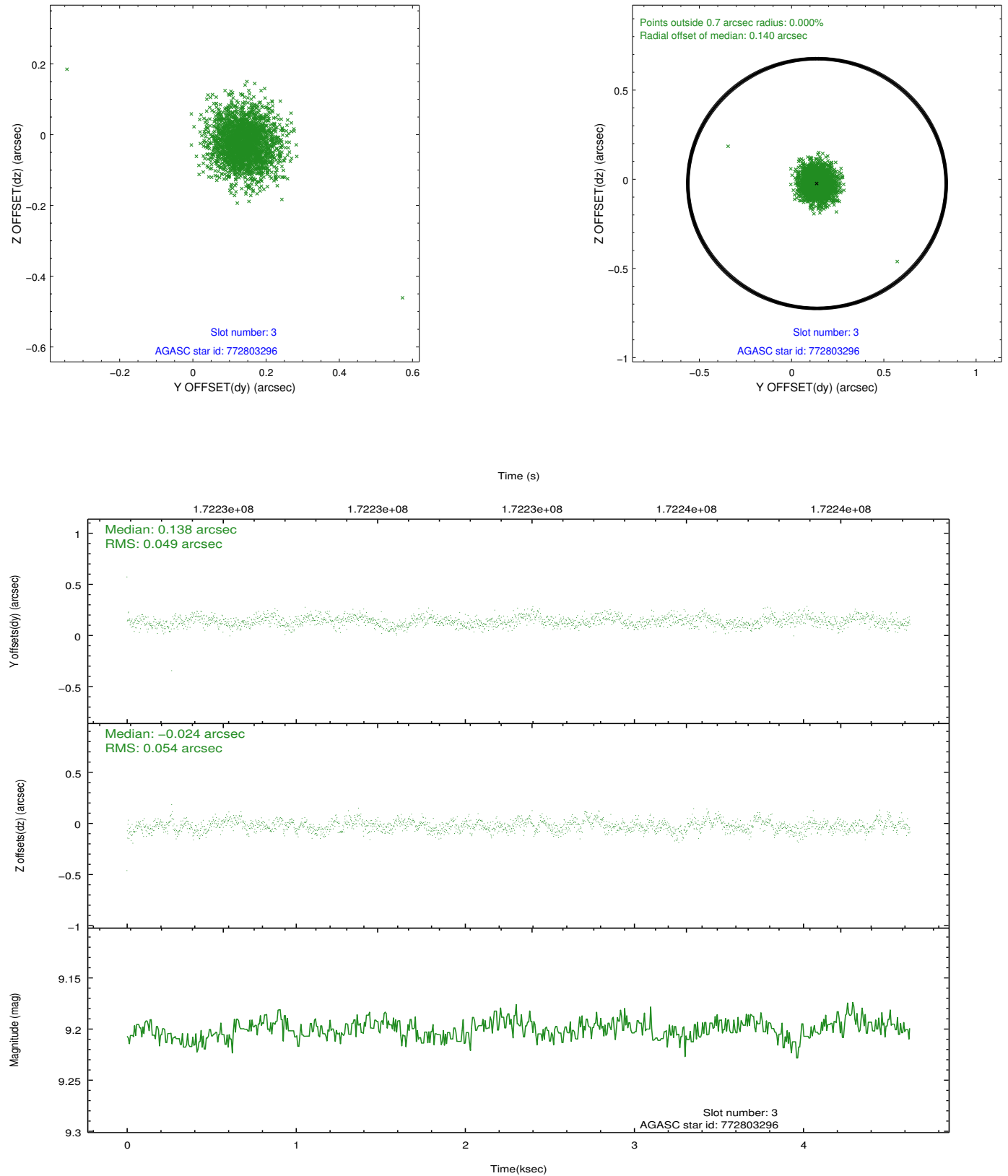


### Slot Statistics

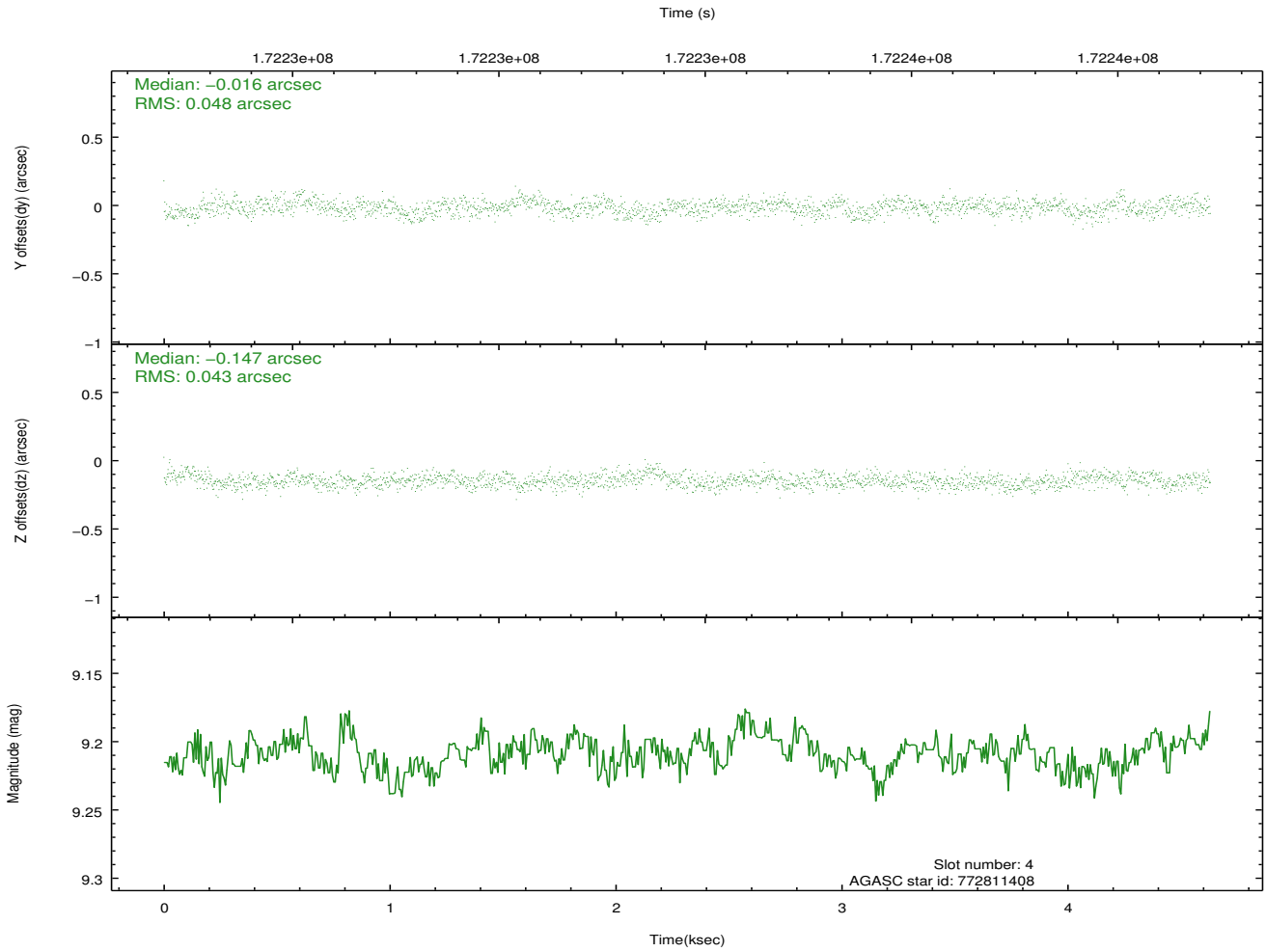
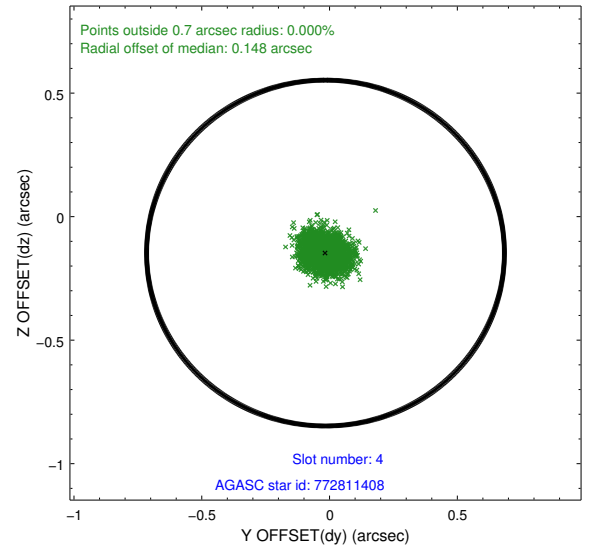
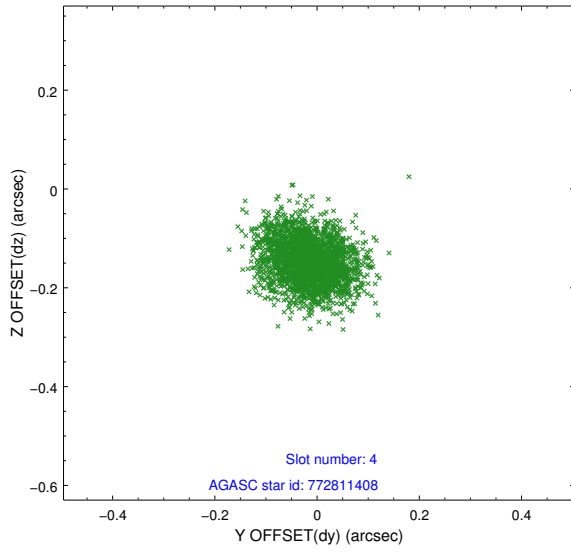
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.35	1130	-0.039	-0.017	0.008	0.013	0.000000	0.000000	-760.08	-1731.17
1	FID	ACIS-S-4	7.20	1130	0.048	0.023	0.006	0.012	0.000000	0.000000	2152.65	176.03
2	FID	ACIS-S-5	7.23	1130	-0.041	0.003	0.008	0.012	0.000000	0.000000	-1811.26	171.12
3	GUIDE	772803296	9.20	2258	0.138	-0.024	0.075	0.124	65.718496	-20.757498	-1668.36	-914.97
4	GUIDE	772811408	9.21	2259	-0.016	-0.147	0.068	0.112	64.611570	-20.749623	1716.12	643.55
5	GUIDE	772812936	8.40	2260	-0.027	0.084	0.058	0.094	65.316084	-20.190591	425.73	-2188.56
6	GUIDE	772813912	9.17	2259	-0.164	0.067	0.078	0.126	64.663698	-20.325697	2211.07	-811.66
7	GUIDE	772800608	8.34	2259	0.071	0.019	0.061	0.099	65.998239	-20.588452	-2265.51	-1864.17

## 2.4 Star Slots

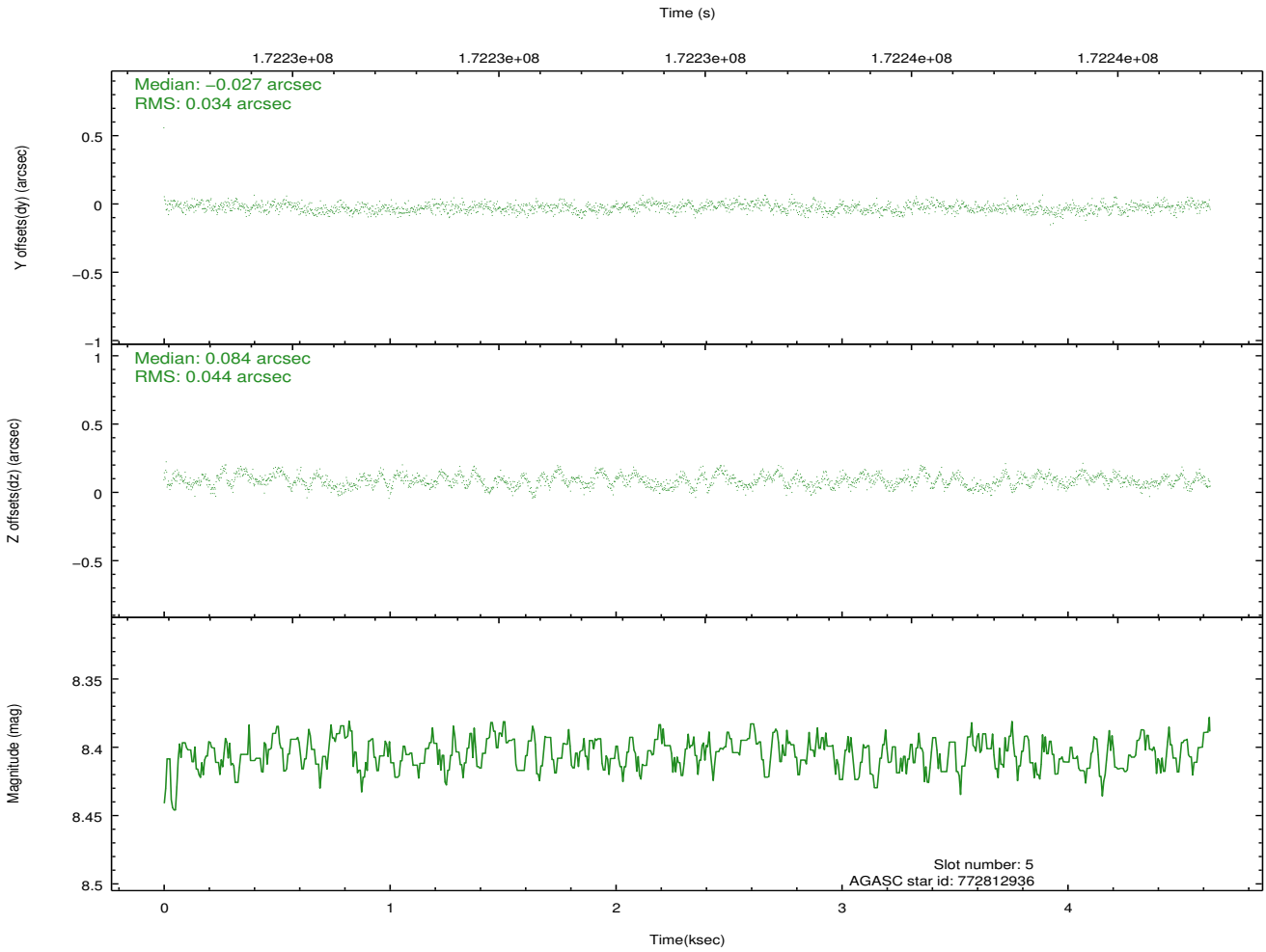
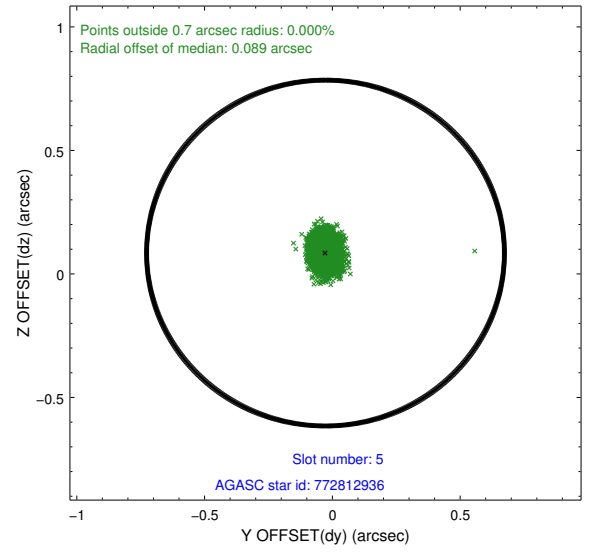
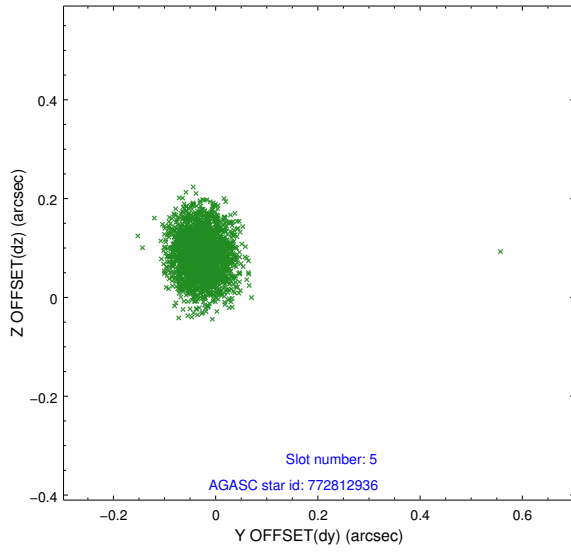
### 2.4.1 Slot 3



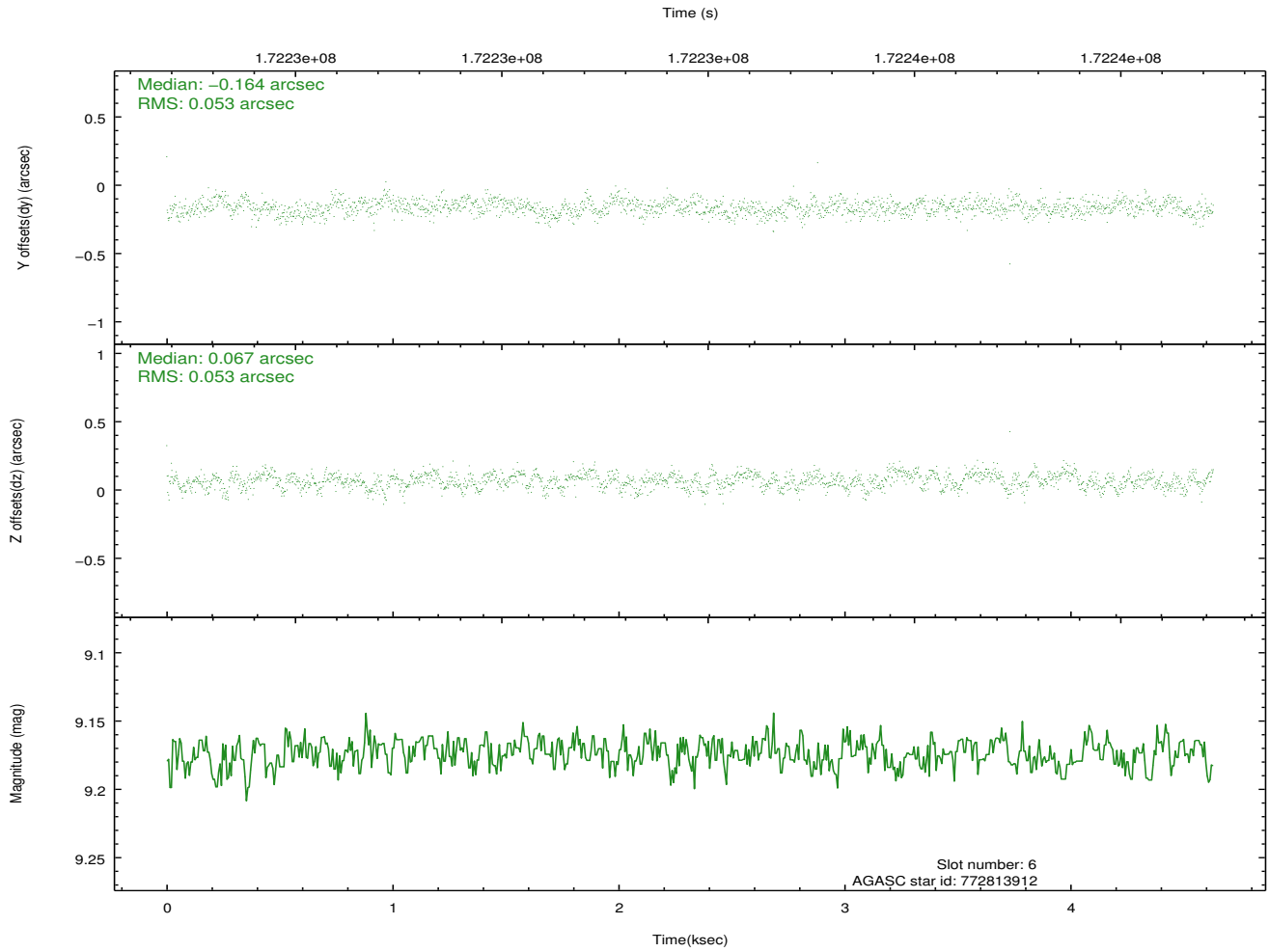
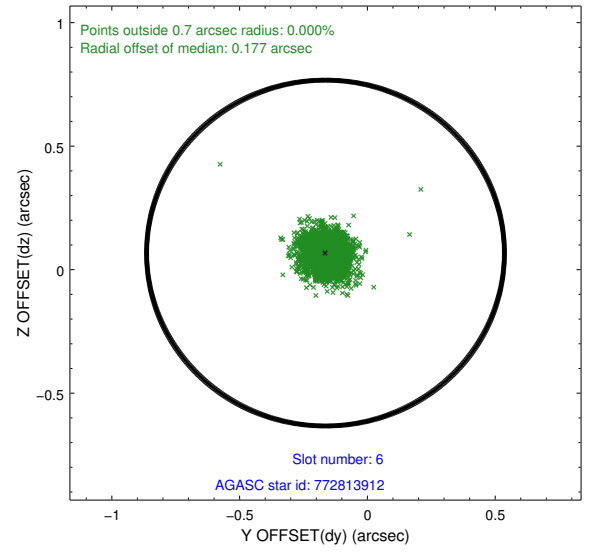
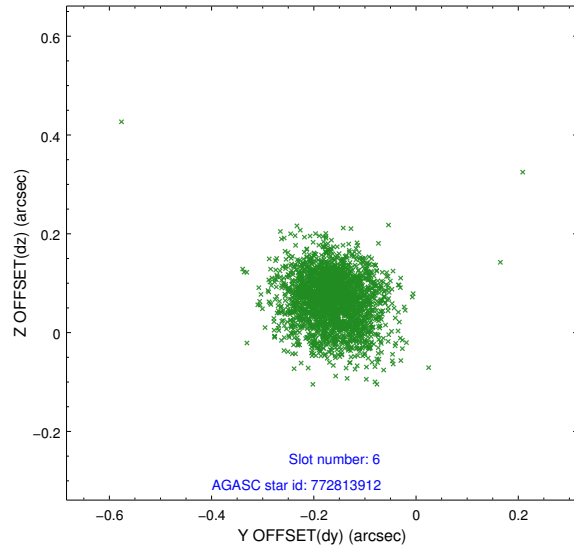
## 2.4.2 Slot 4



### 2.4.3 Slot 5

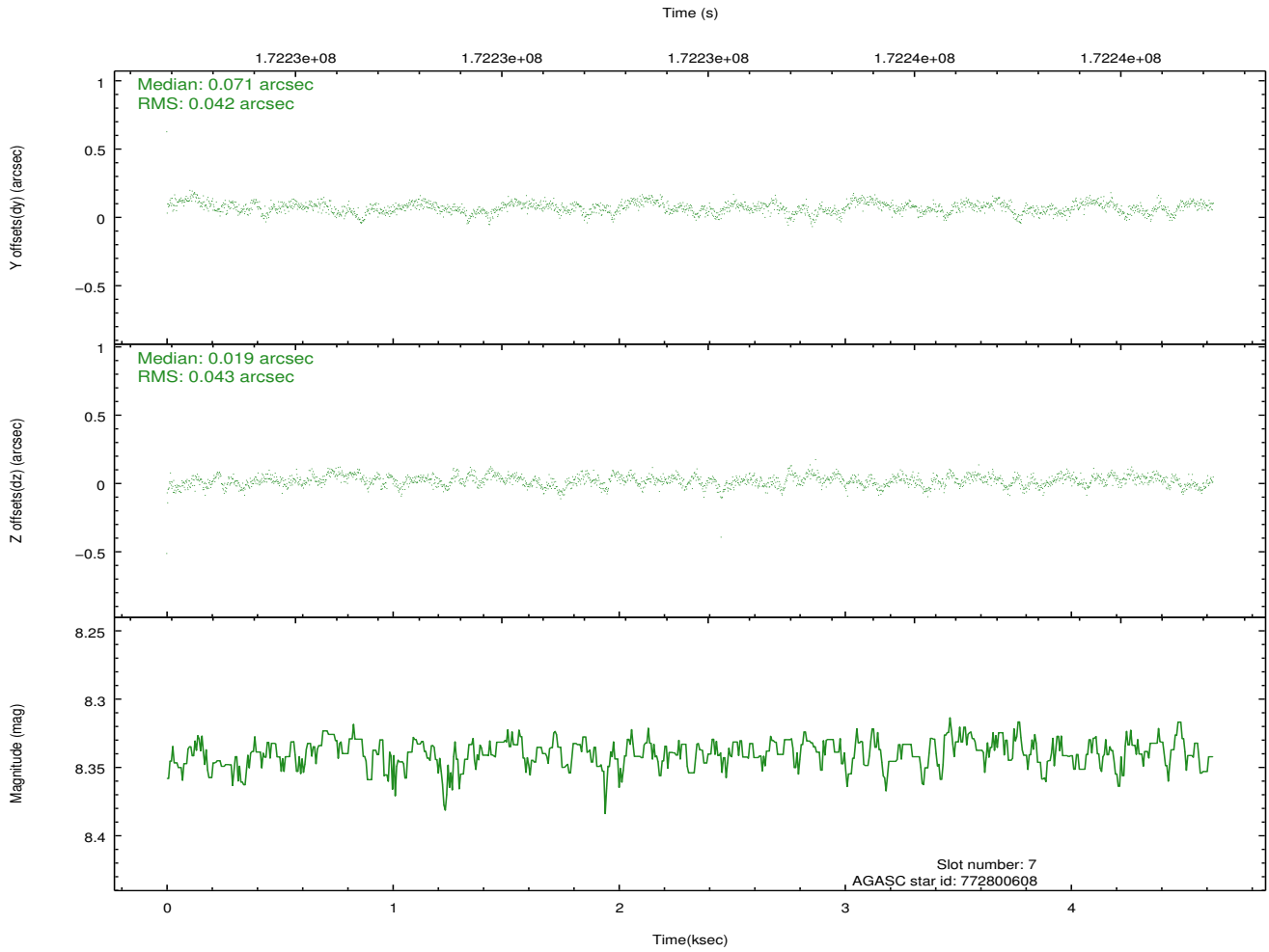
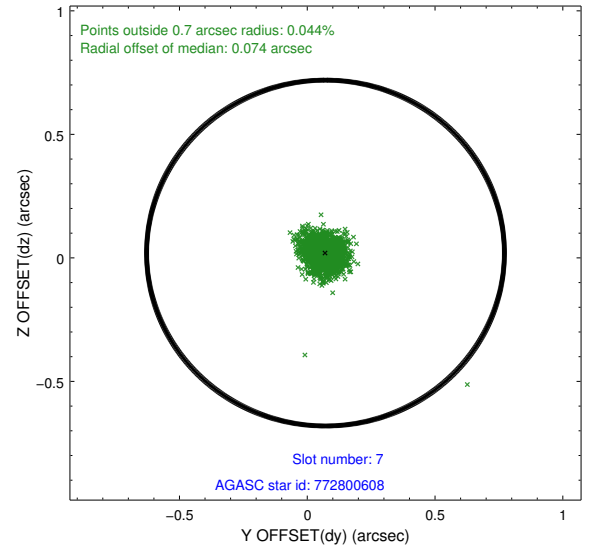
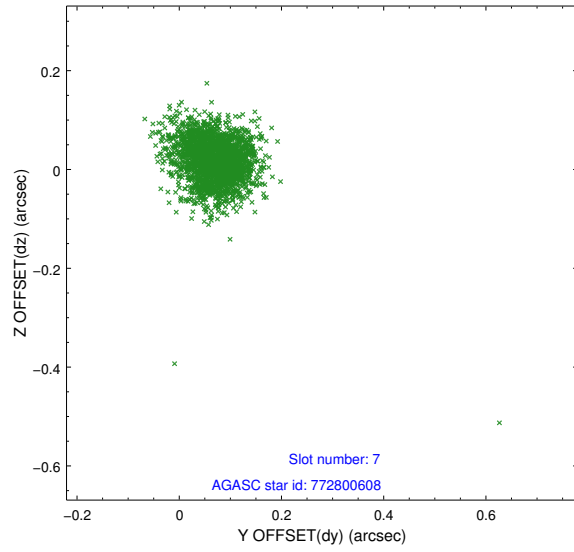


## 2.4.4 Slot 6



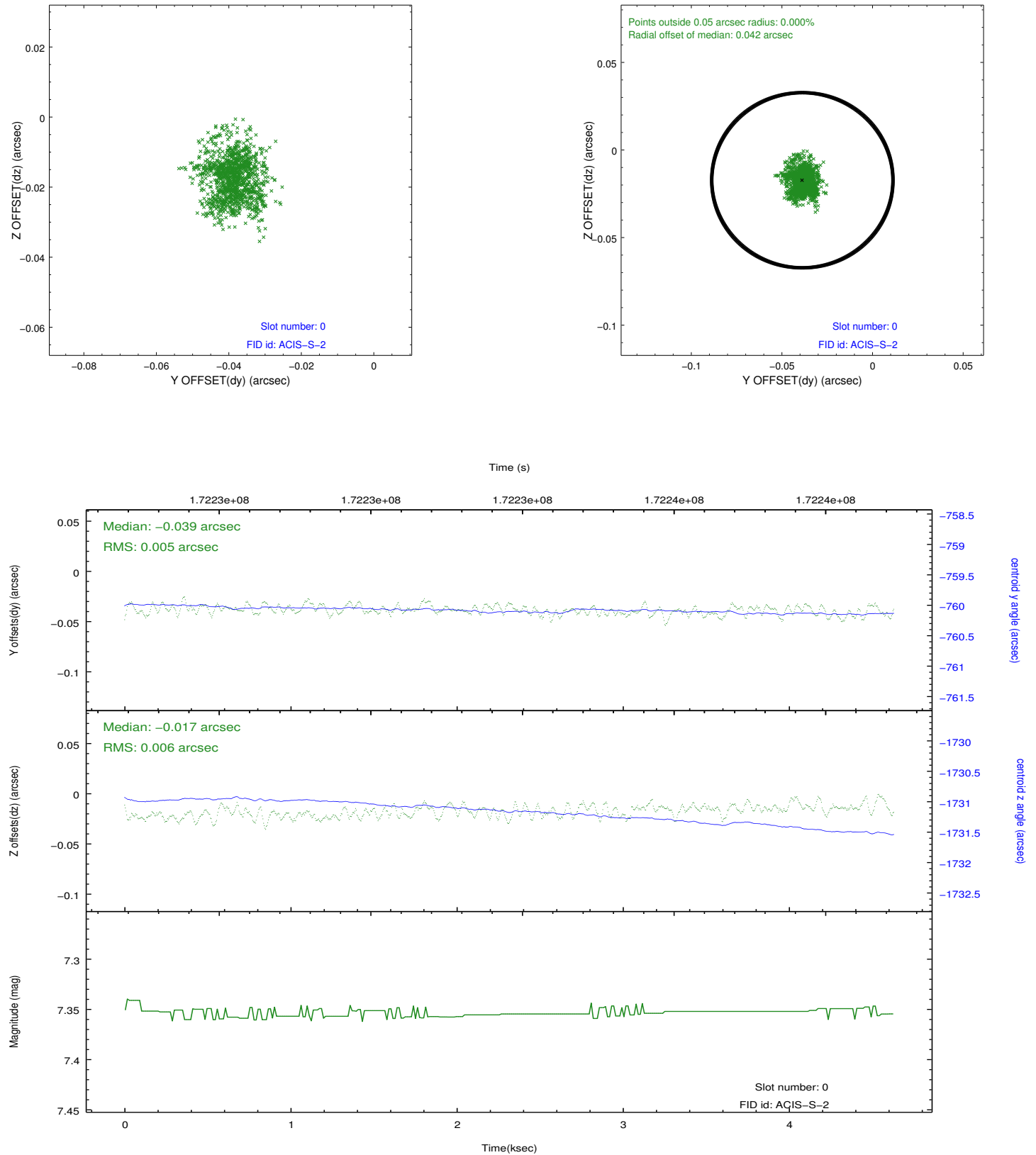


## 2.4.5 Slot 7

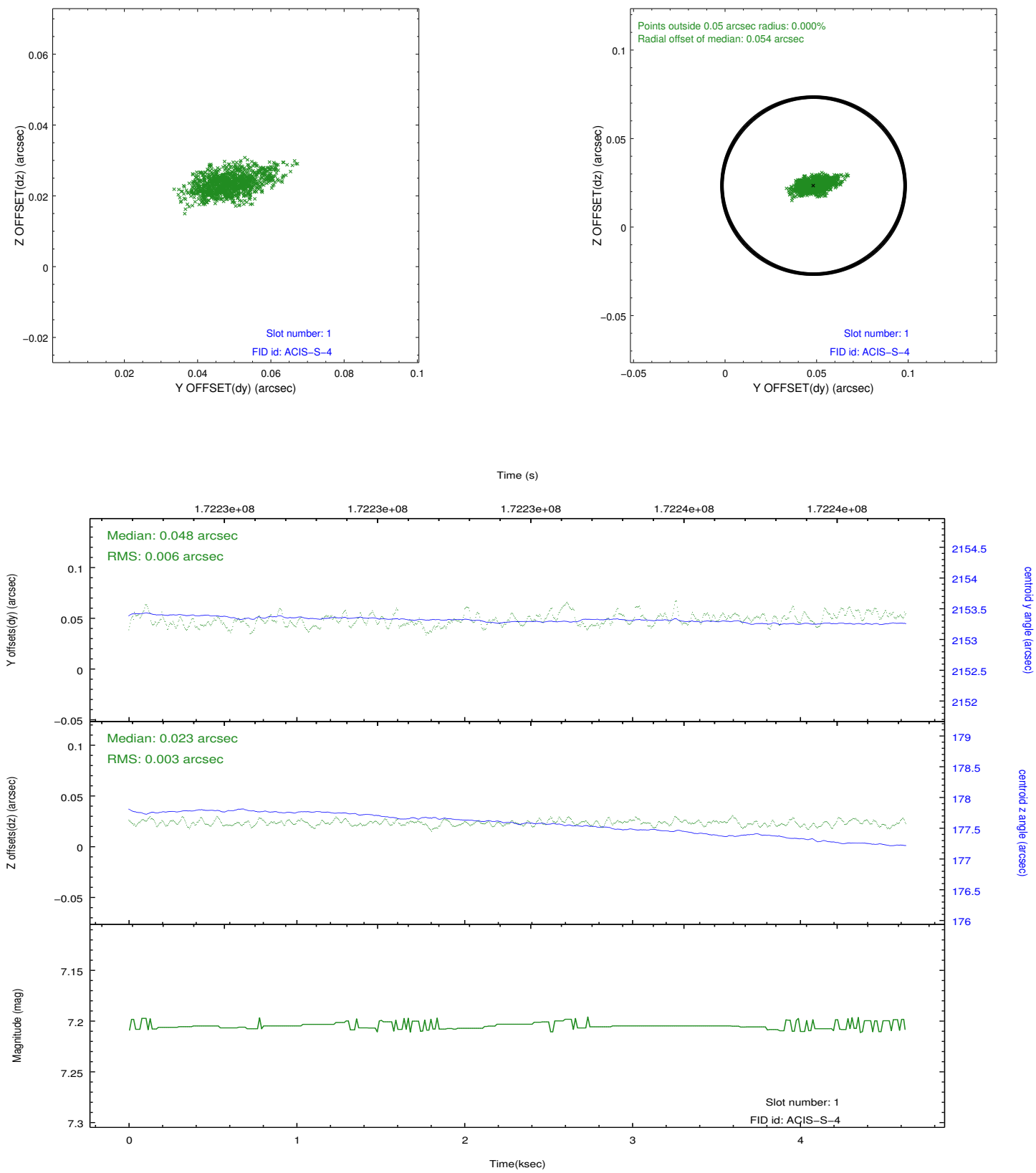


## 2.5 FID Slots

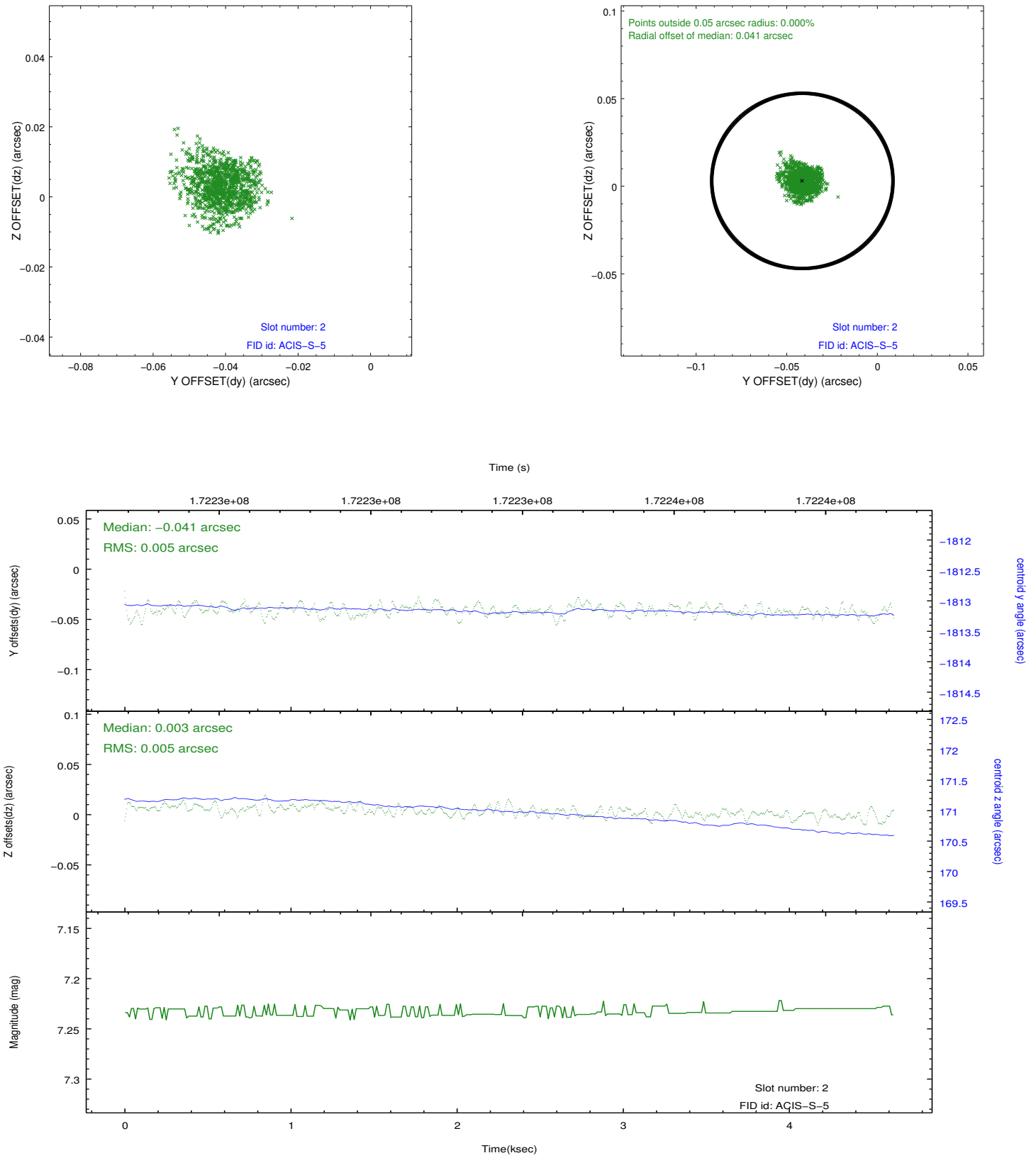
### 2.5.1 Slot 0



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)	2012.11.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.46

### **A.2 Comments**