

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4046 - L2 Version 3  
Chandra X-Ray Center

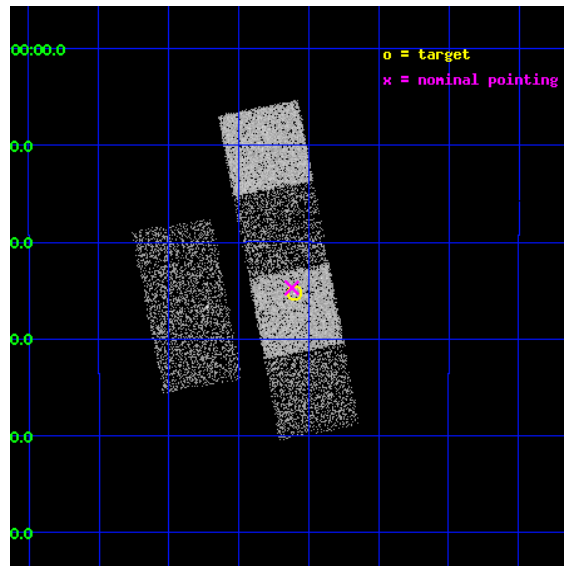
L2 Processing Date : Oct 24 2012

## 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

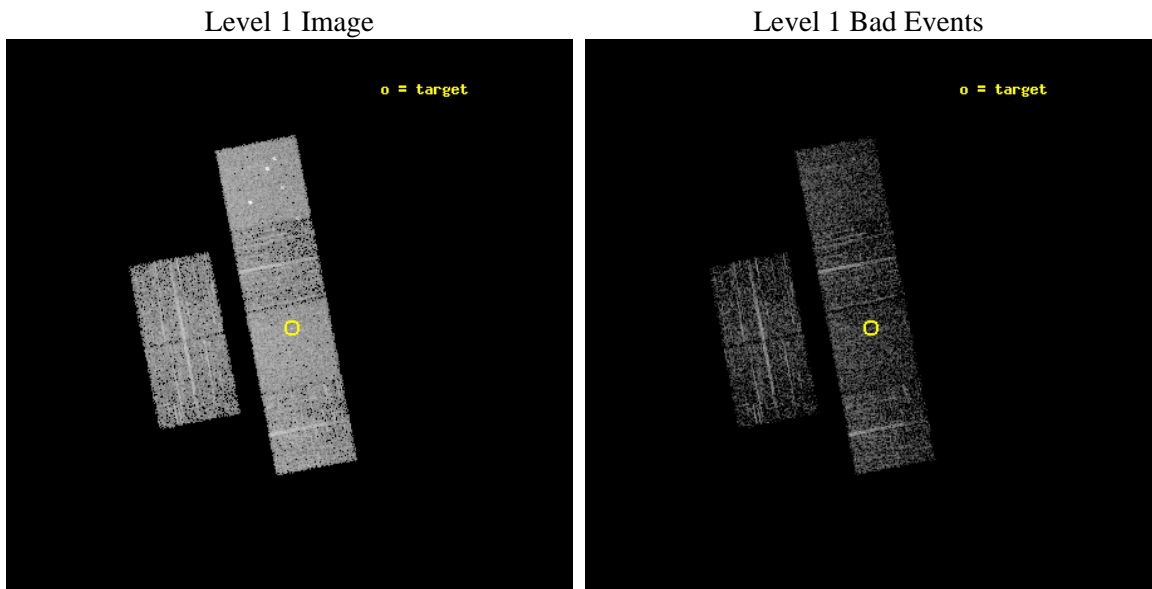
seq_num	700725	Sequence number
obs_id	4046	Observation id
title	WHY DO WE SEE BROAD LINES IN X-RAY ABSORBED AGN?	Proposal title
observer	Dr. Belinda Wilkes	Principal investigator
object	2MASS150706-122516	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	226.776667	Observer's specified target RA [deg]
dec_targ	-12.421083	Observer's specified target Dec [deg]
ra_nom	226.78011873032	Nominal RA [deg]
dec_nom	-12.412136450662	Nominal Dec [deg]
roll_nom	79.142050328682	Nominal Roll [deg]
revision	3	Processing version of data
ontime	2769.8537359536	Sum of GTIs [s]
livetime	2734.7801801432	Livetime [s]
ontime2	2769.8947759569	Sum of GTIs [s]
ontime3	2769.7306159437	Sum of GTIs [s]
ontime5	2769.8126959503	Sum of GTIs [s]
ontime6	2769.771655947	Sum of GTIs [s]
ontime7	2769.8537359536	Sum of GTIs [s]
ontime8	2769.6895759702	Sum of GTIs [s]
l2events	28451	Number of level 2 events



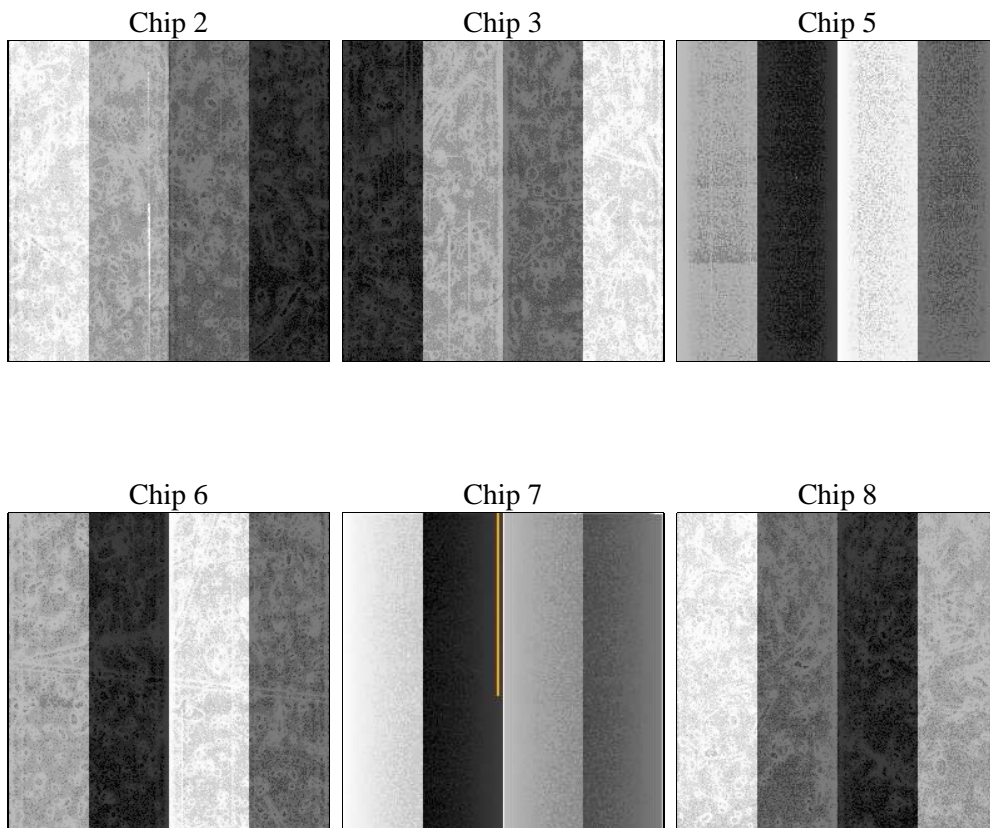
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2769.8537359536	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	2769.8947759569	Sum of GTIs [s]
date	2012-10-24T20:39:37	Date and time of file creation	ontime3	2769.7306159437	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	2769.8126959503	Sum of GTIs [s]
			ontime6	2769.771655947	Sum of GTIs [s]
			ontime7	2769.8537359536	Sum of GTIs [s]
			ontime8	2769.6895759702	Sum of GTIs [s]
			l1events	126259	Number of level 1 events

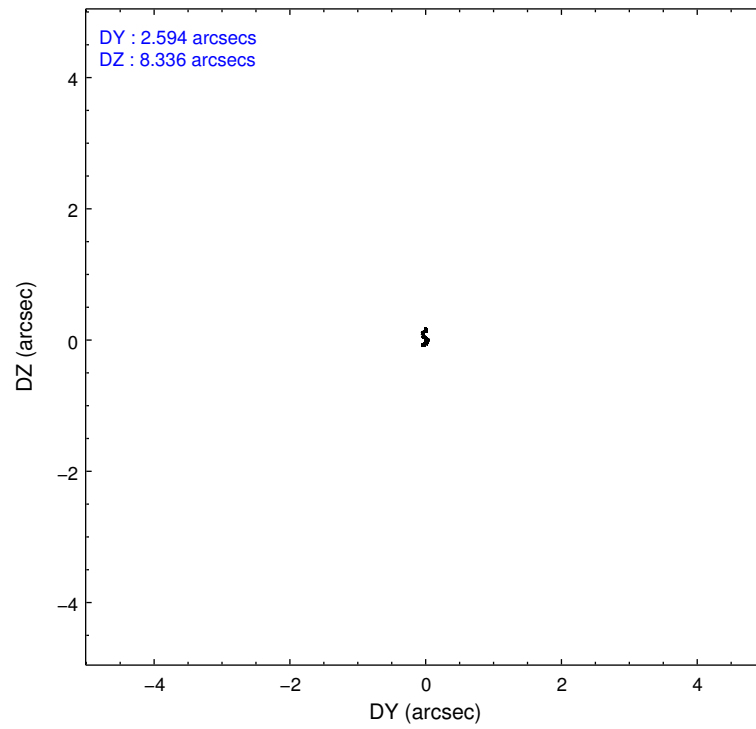
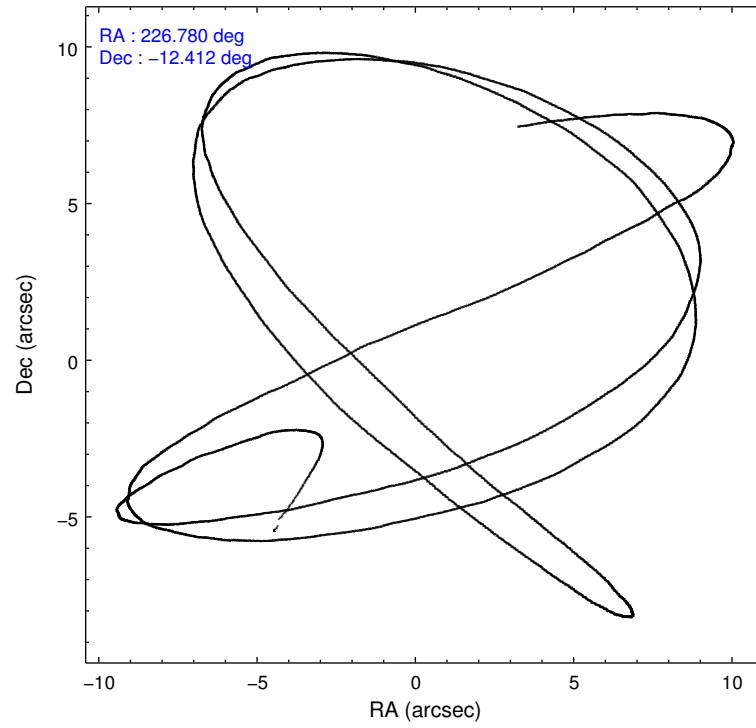
### 2.1.4 Events

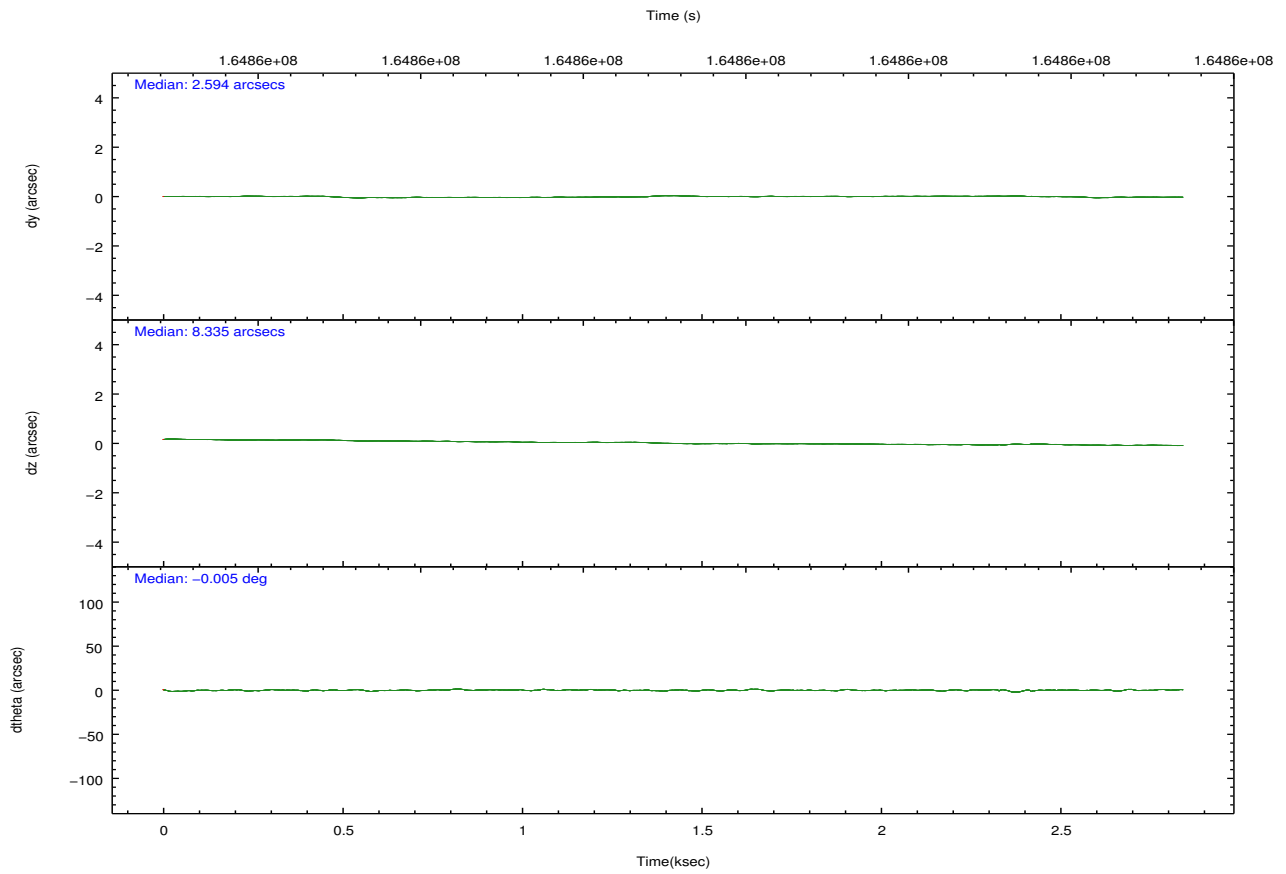
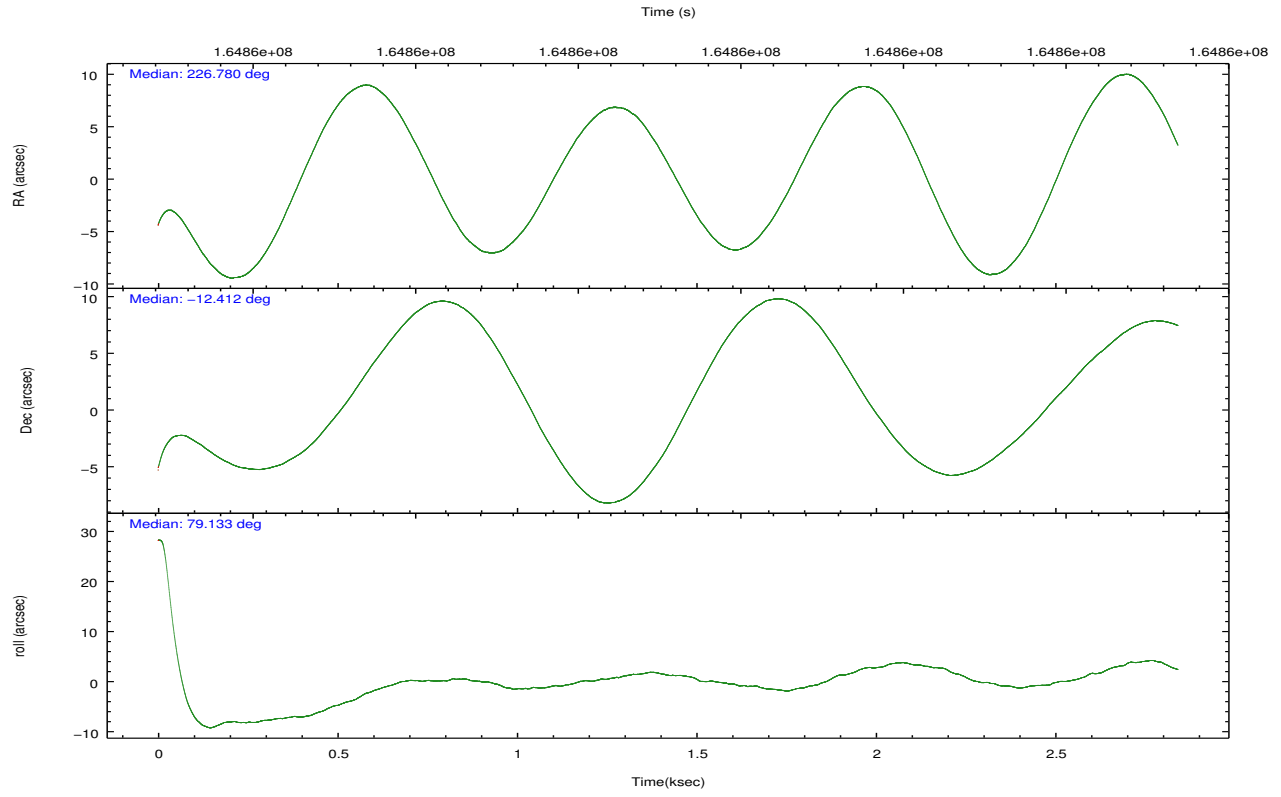
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	18151	16633	27317	18064	24086	22008	grade 0 events	1028	975	2457	915	939	1489
rejected events	16027	14522	14012	15862	14226	17335		5%	5%	8%	5%	3%	6%
rejected %	88%	87%	51%	87%	59%	78%	grade 1 events	14	9	28	11	24	19
								0%	0%	0%	0%	0%	0%
							grade 2 events	399	425	3683	445	1962	999
								2%	2%	13%	2%	8%	4%
							grade 3 events	166	182	503	204	864	445
								0%	1%	1%	1%	3%	2%
							grade 4 events	176	208	471	210	897	423
								0%	1%	1%	1%	3%	1%
							grade 5 events	644	745	1849	812	2190	1033
								3%	4%	6%	4%	9%	4%
							grade 6 events	357	322	6212	430	5208	1321
								1%	1%	22%	2%	21%	6%
							grade 7 events	15367	13767	12114	15037	12002	16279
								84%	82%	44%	83%	49%	73%

## 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	226.789710	226.7801187303225	Subarray requested	NONE	NONE
[deg] Pointing Dec	-12.437653	-12.41213645066206	Alternating exposures requested	N	N
[deg] Pointing Roll	78.987311	79.14205032868165	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	164858492.184000	164857477.53997			
Observation start date	2003-03-24T02:00:28	2003-03-24T01:44:37			
[s] Observation end time (MET)	164861192.184000	164861587.79014			
Observation end date	2003-03-24T02:45:28	2003-03-24T02:53:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect





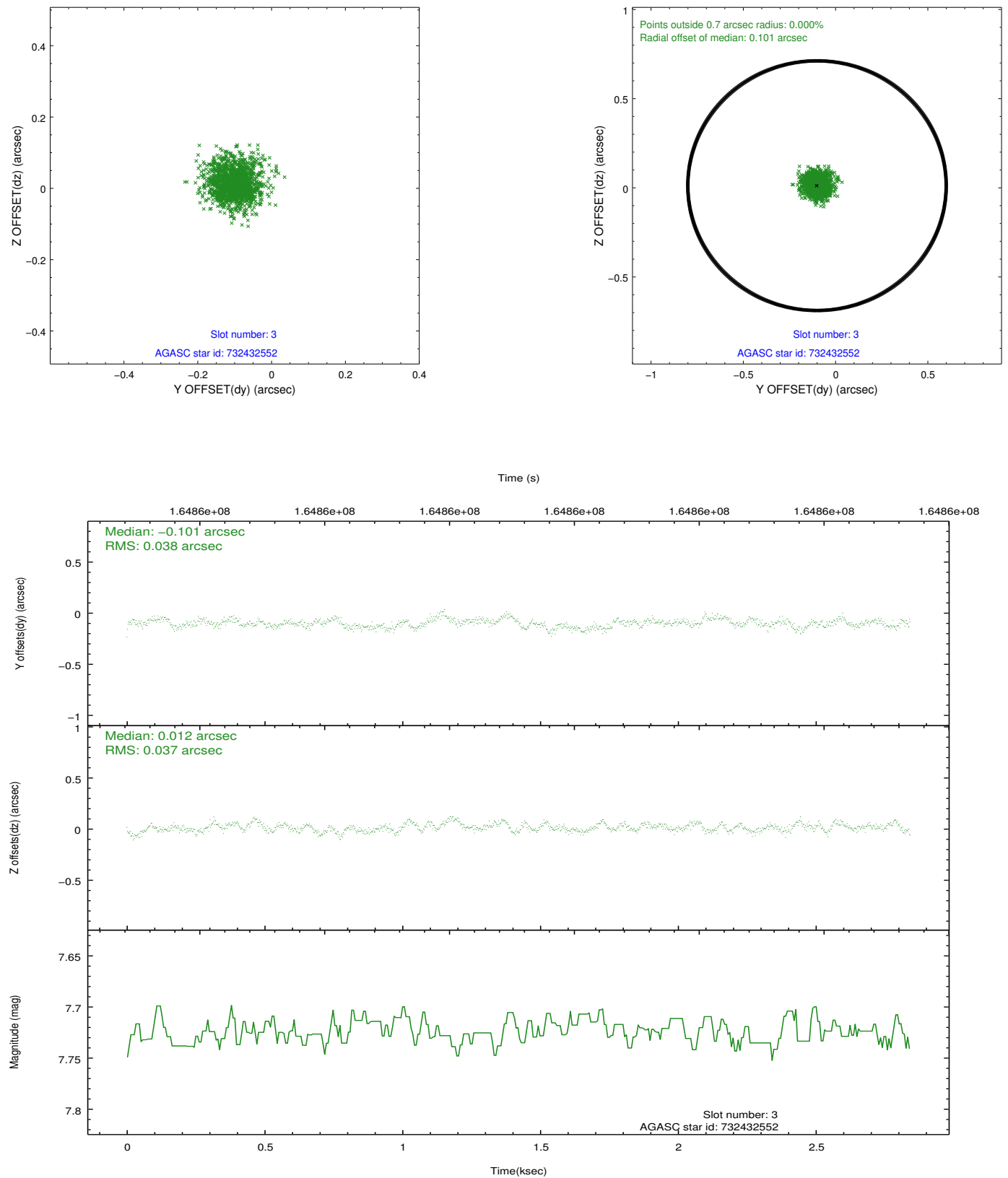
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	694	0.053	0.006	0.007	0.013	0.000000	0.000000	940.84	-1725.15
1	FID	ACIS-S-2	7.11	693	-0.050	0.008	0.006	0.010	0.000000	0.000000	-753.89	-1732.00
2	FID	ACIS-S-4	7.20	693	-0.029	-0.008	0.006	0.010	0.000000	0.000000	2157.01	176.64
3	GUIDE	732432552	7.72	1386	-0.101	0.012	0.057	0.093	227.026704	-12.051419	1524.03	-553.02
4	GUIDE	732433968	8.79	1386	-0.157	0.215	0.098	0.159	227.506119	-12.142119	1524.32	-2272.31
5	GUIDE	732437944	8.74	1387	0.222	-0.302	0.108	0.172	226.115380	-12.885074	-2034.76	2012.26
6	GUIDE	732438664	9.09	1387	0.144	-0.232	0.101	0.164	226.237456	-12.395587	-225.55	1935.48
7	GUIDE	732436000	9.63	1386	-0.114	0.301	0.113	0.191	227.529265	-12.252924	1146.88	-2425.84

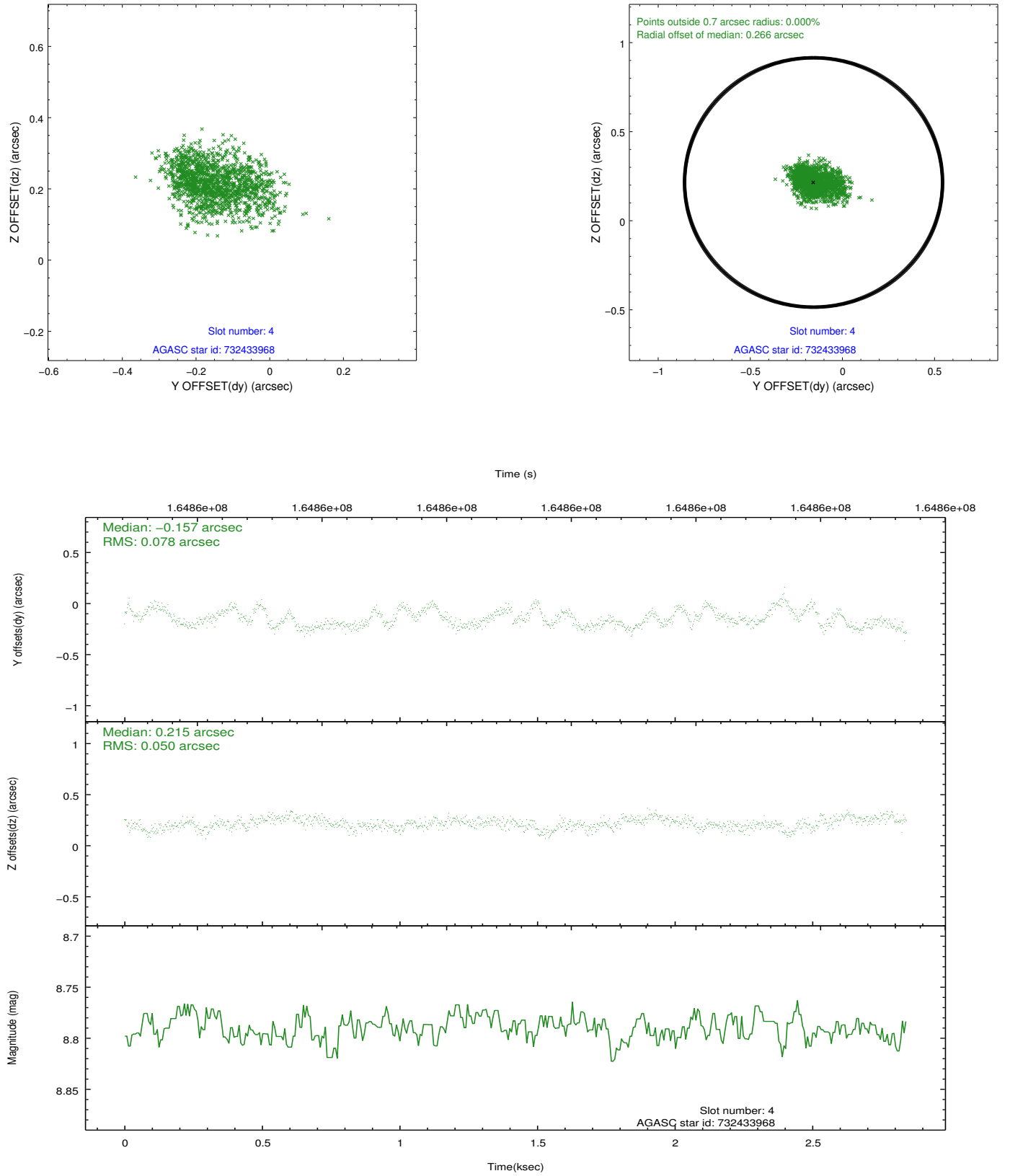


## 2.4 Star Slots

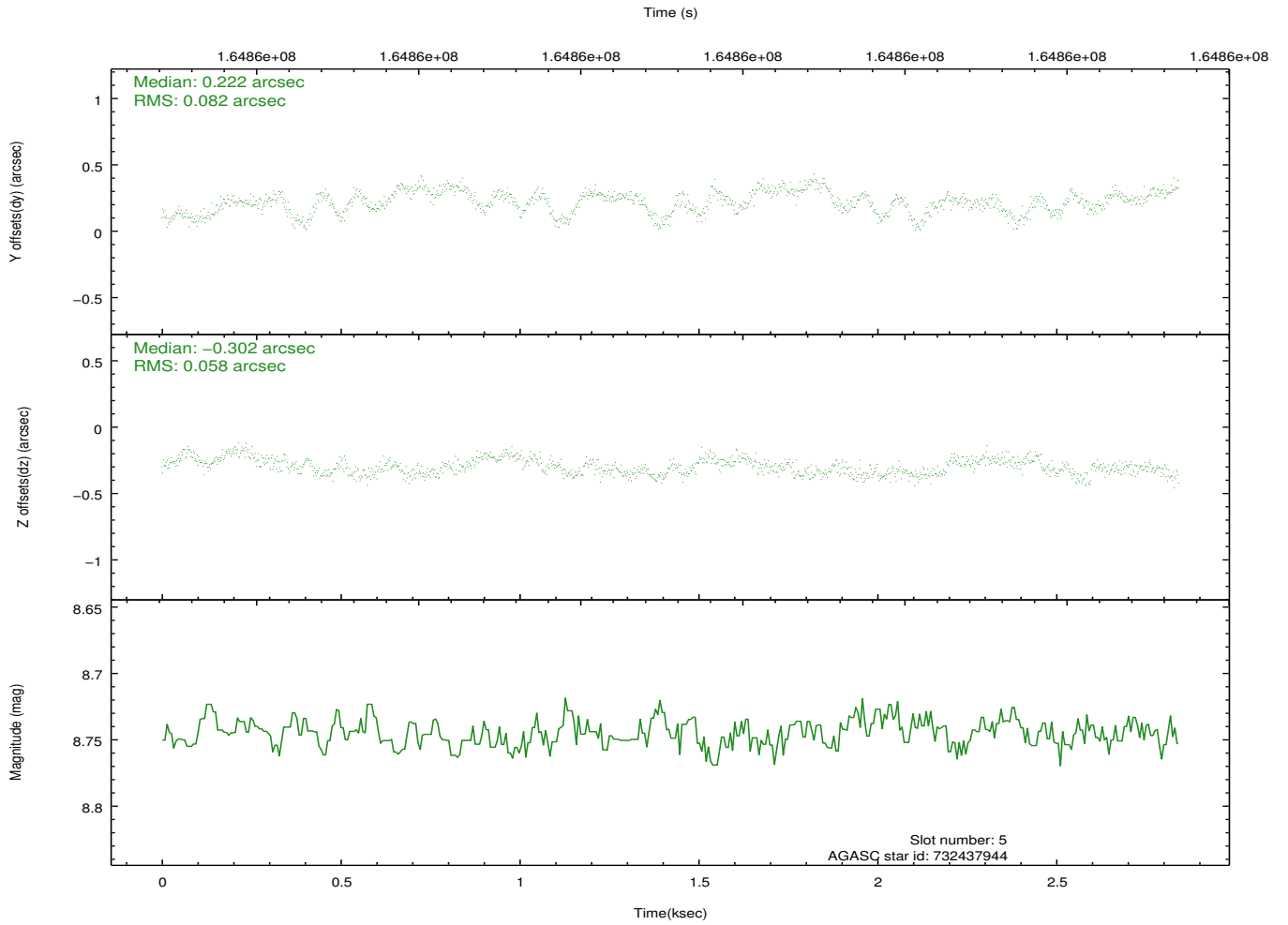
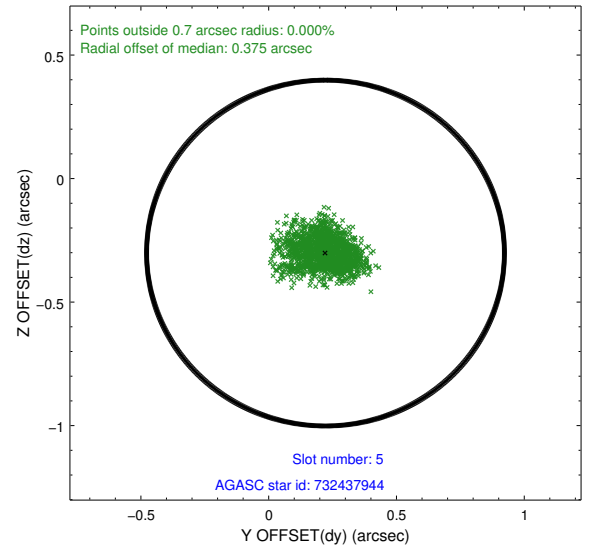
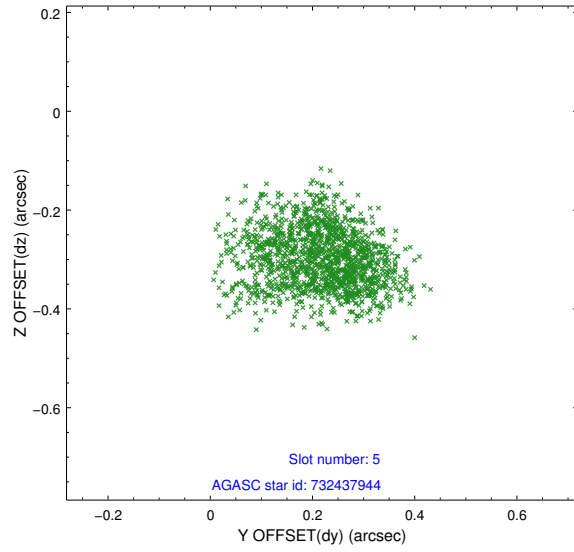
### 2.4.1 Slot 3



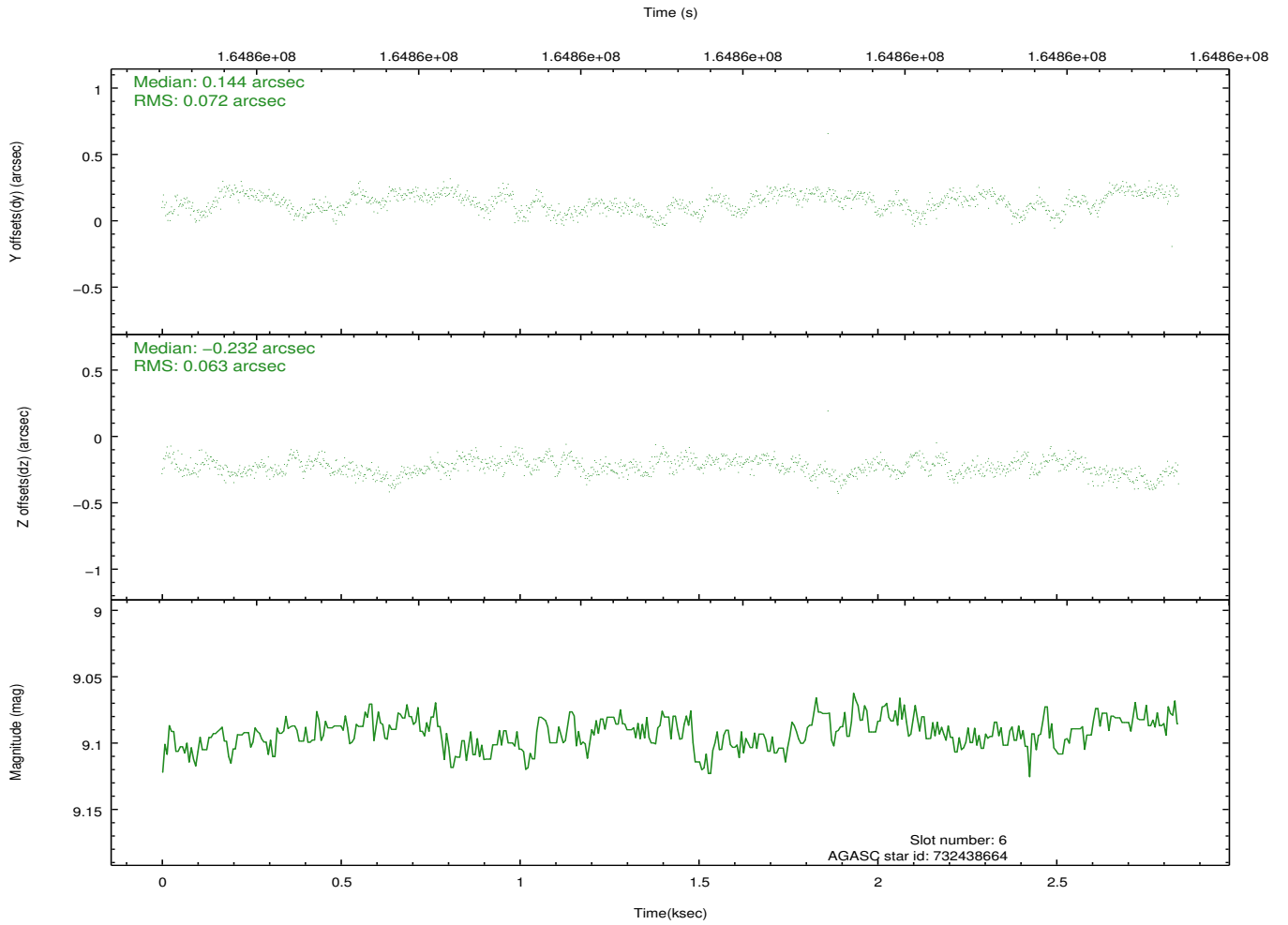
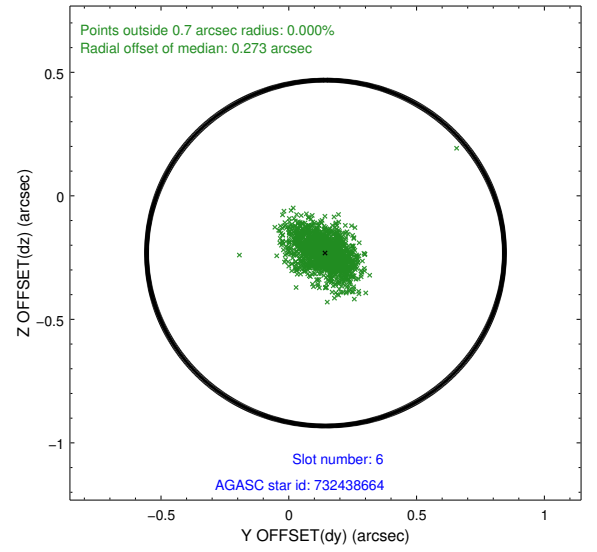
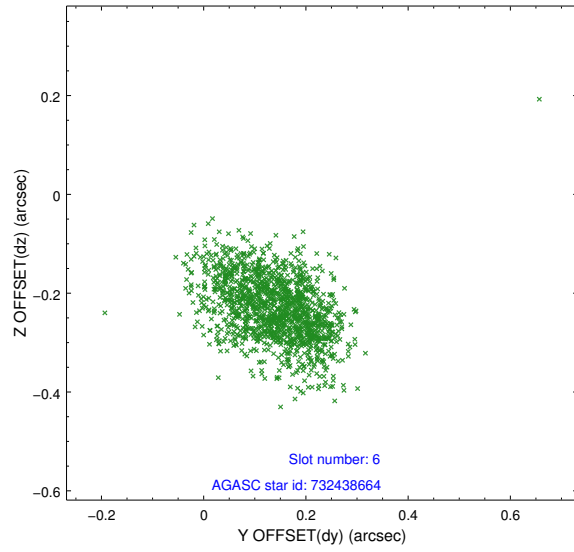
## 2.4.2 Slot 4



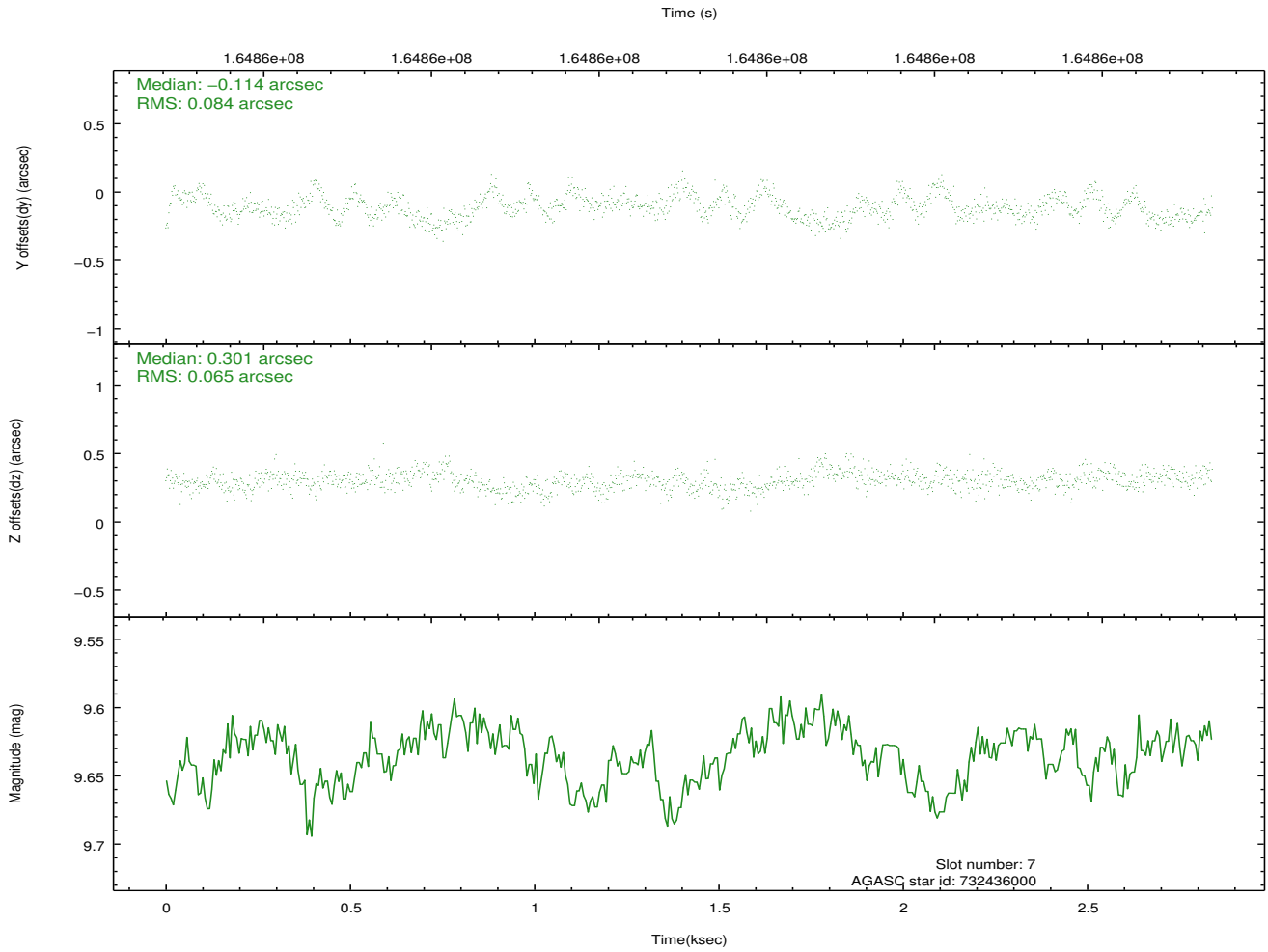
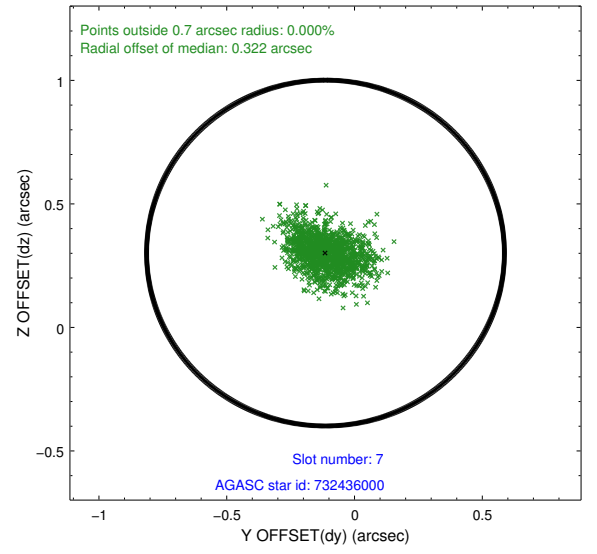
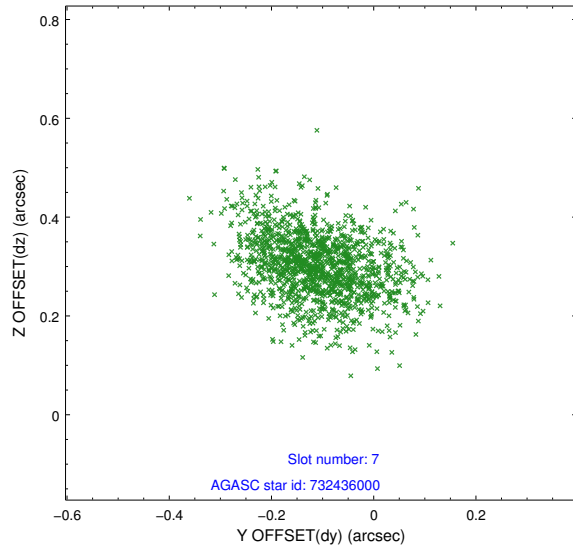
### 2.4.3 Slot 5



## 2.4.4 Slot 6

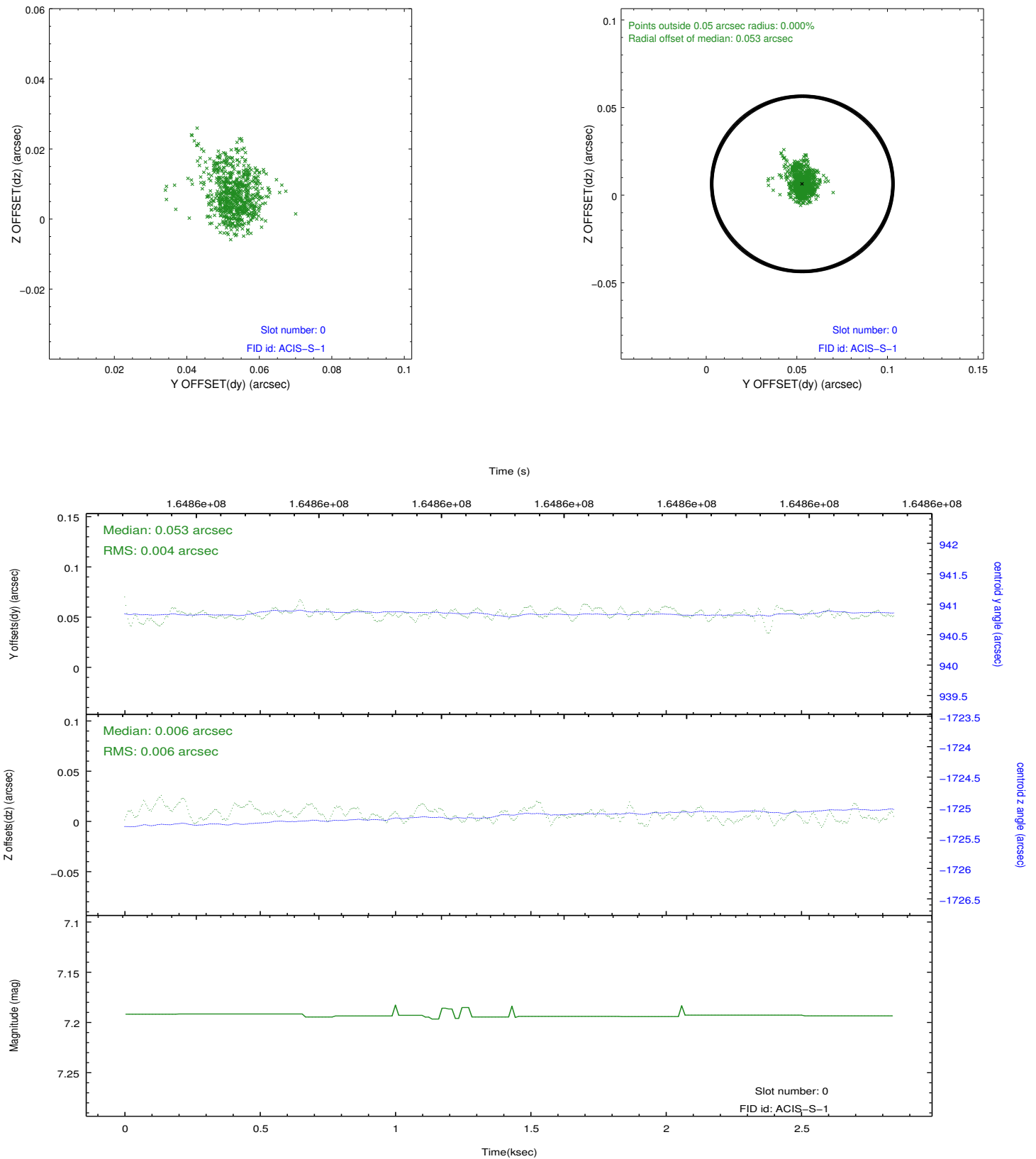


## 2.4.5 Slot 7

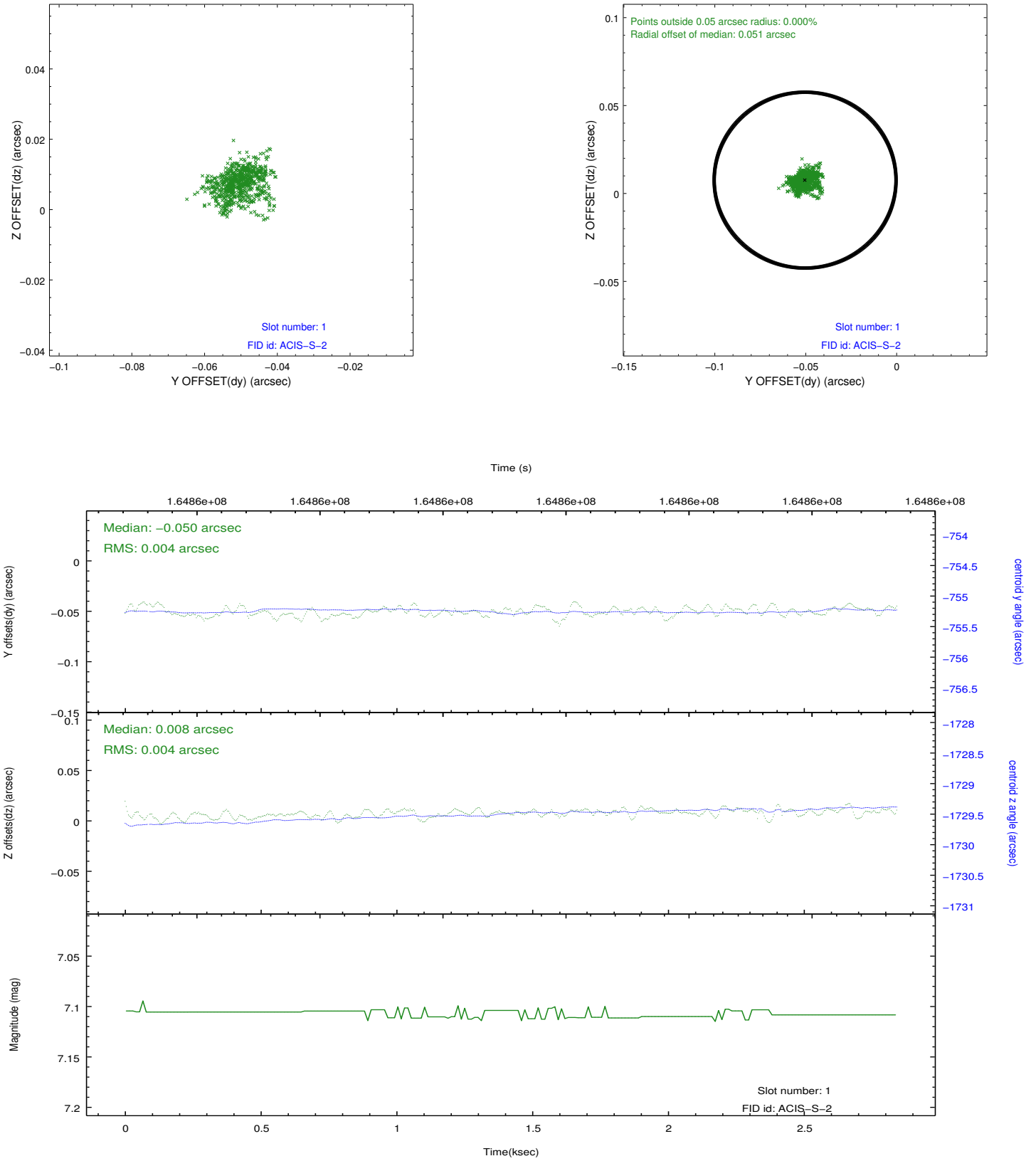


## 2.5 FID Slots

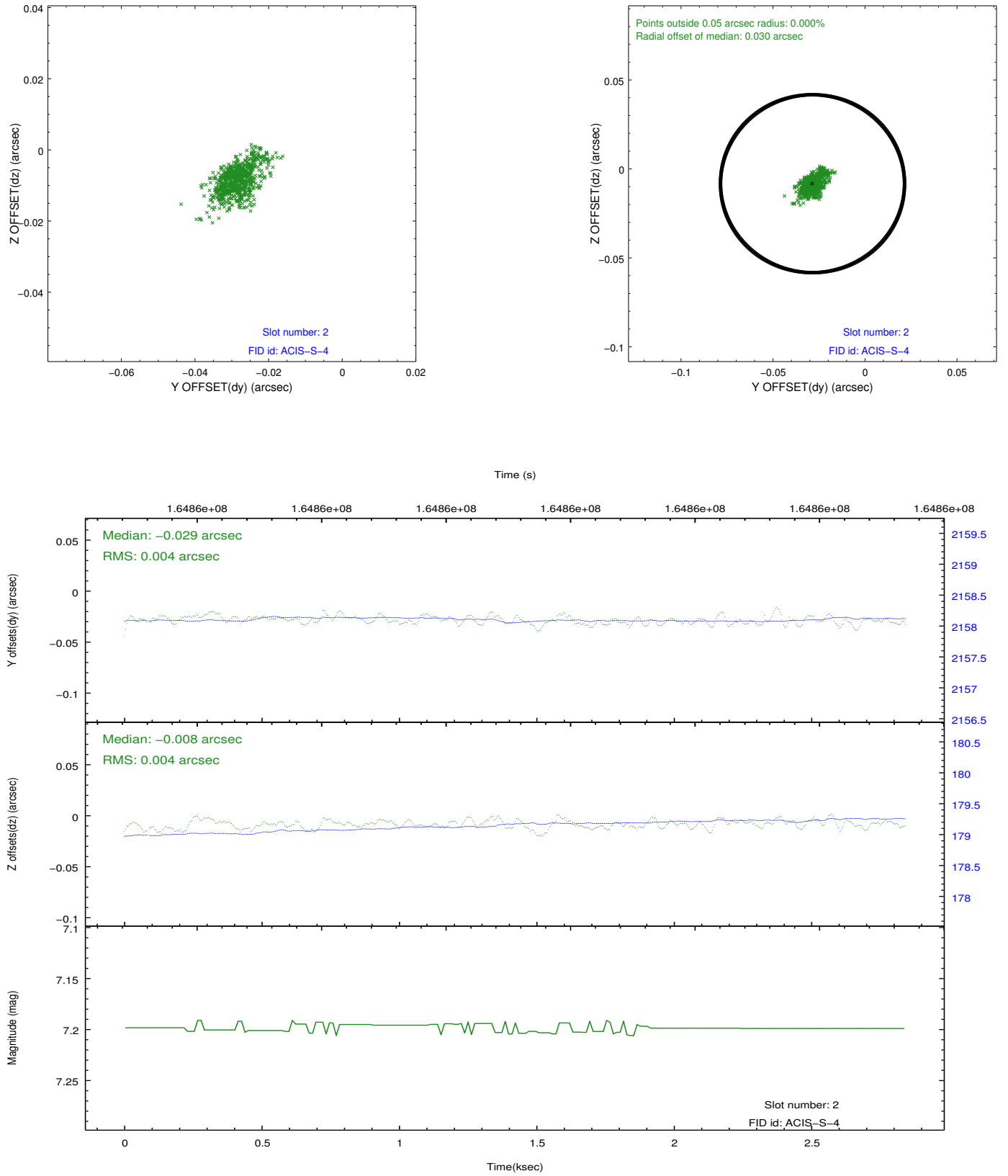
### 2.5.1 Slot 0



## 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)	2012.11.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.77

### **A.2 Comments**