

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11514 - L2 Version 2  
Chandra X-Ray Center

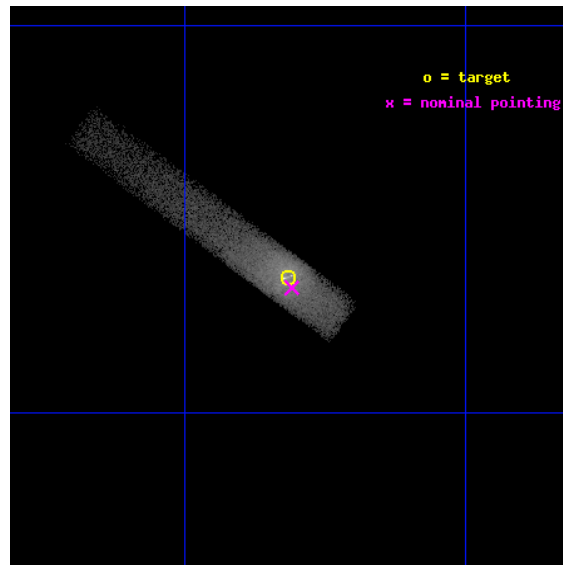
L2 Processing Date : Jun 24 2012

## 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

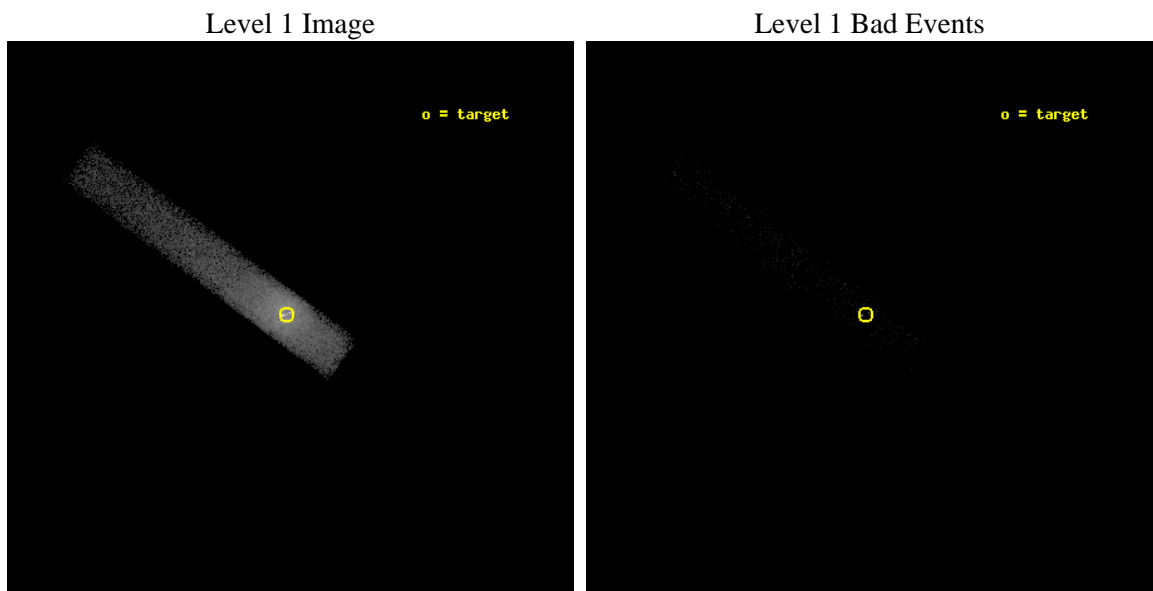
seq_num	702100	Sequence number
obs_id	11514	Observation id
title	The X-ray - TeV Connection in M87	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.7023845665	Nominal RA [deg]
dec_nom	12.387159031705	Nominal Dec [deg]
roll_nom	216.38362935306	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4993.1997023821	Sum of GTIs [s]
livetime	4528.5685673699	Livetime [s]
ontime7	4993.1997023821	Sum of GTIs [s]
l2events	46876	Number of level 2 events



## 2 OBI

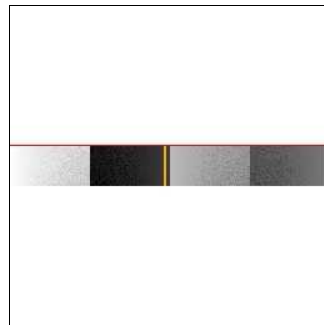
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4993.1997023821	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime7	4993.1997023821	Sum of GTIs [s]
date	2012-06-24T08:09:17	Date and time of file creation	l1events	50838	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	50838
rejected events	3434
rejected %	6%

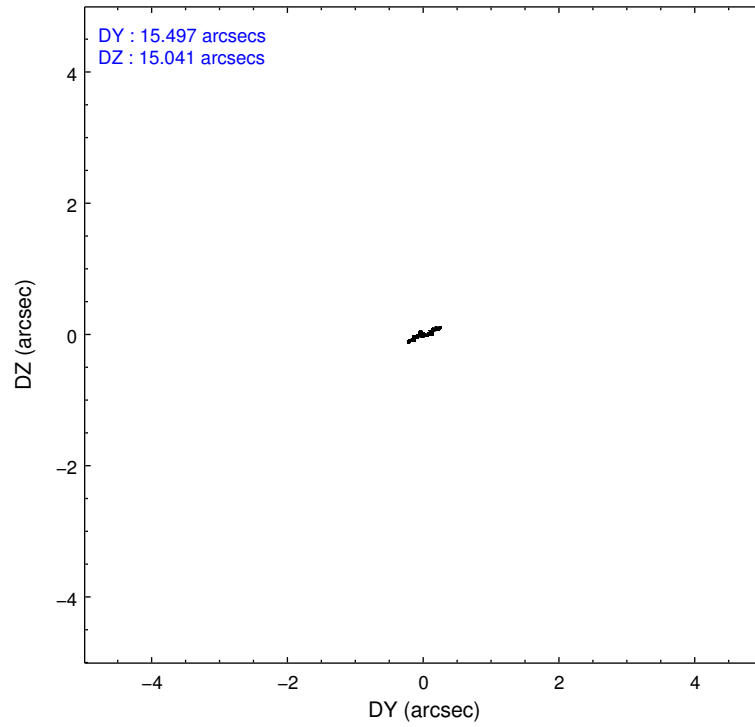
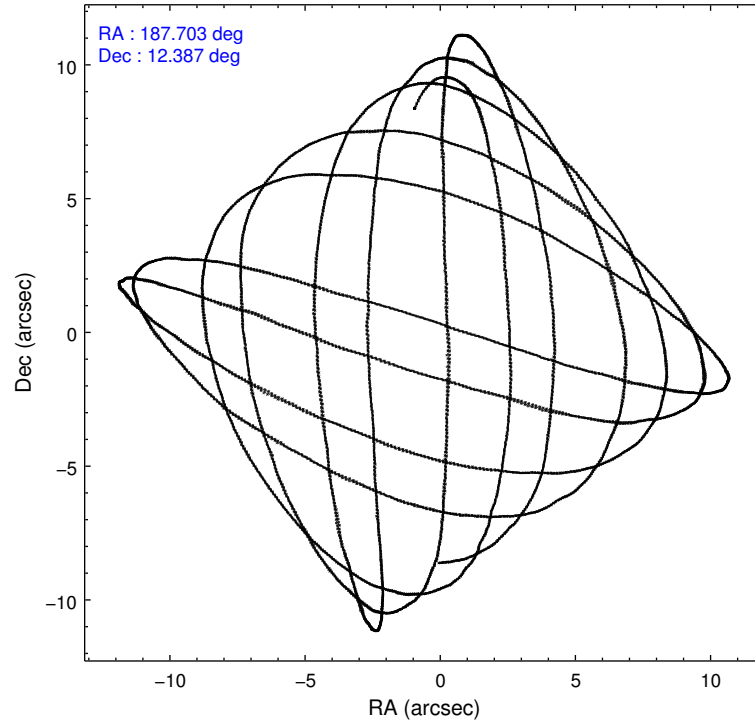
	<b>ccd 7</b>
grade 0 events	14236
	28%
grade 1 events	43
	0%
grade 2 events	12400
	24%
grade 3 events	5557
	10%
grade 4 events	5681
	11%
grade 5 events	976
	1%
grade 6 events	9537
	18%
grade 7 events	2408
	4%

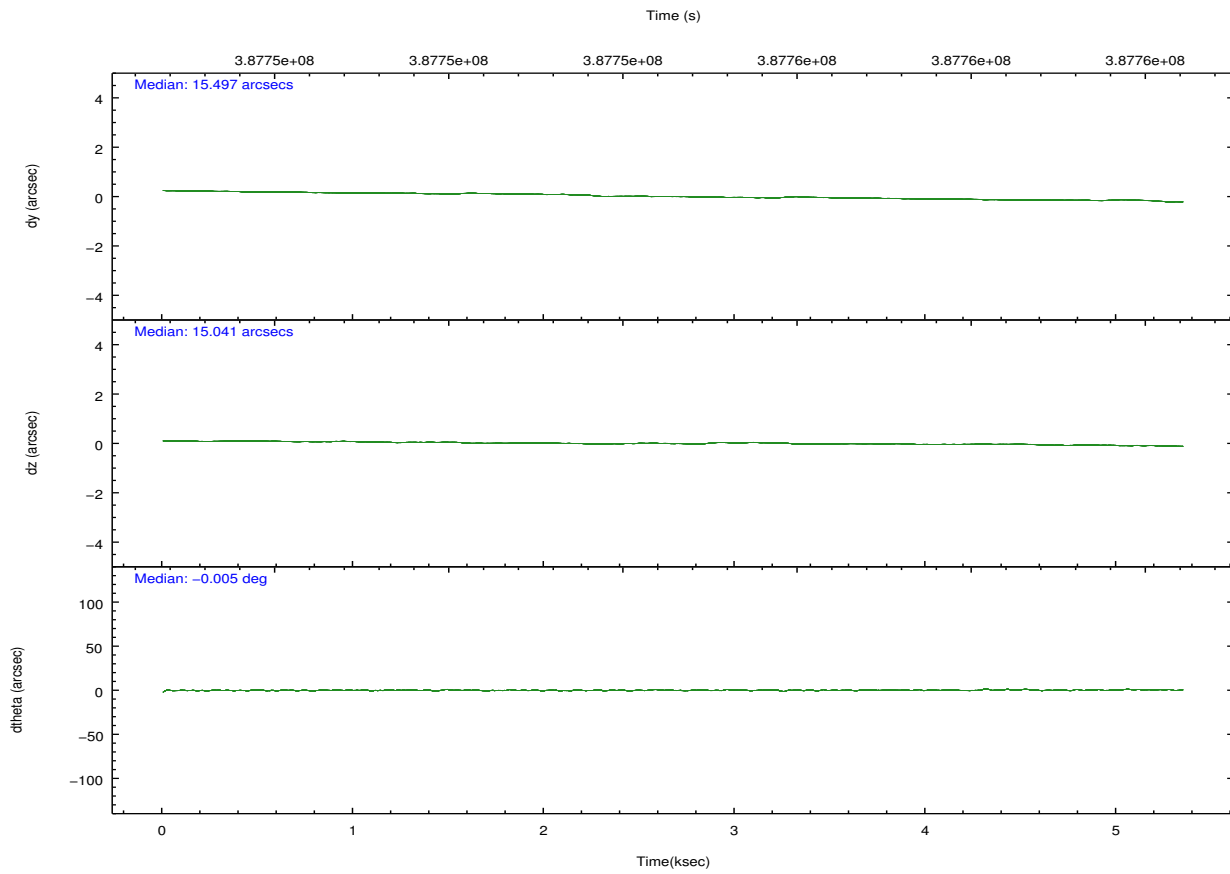
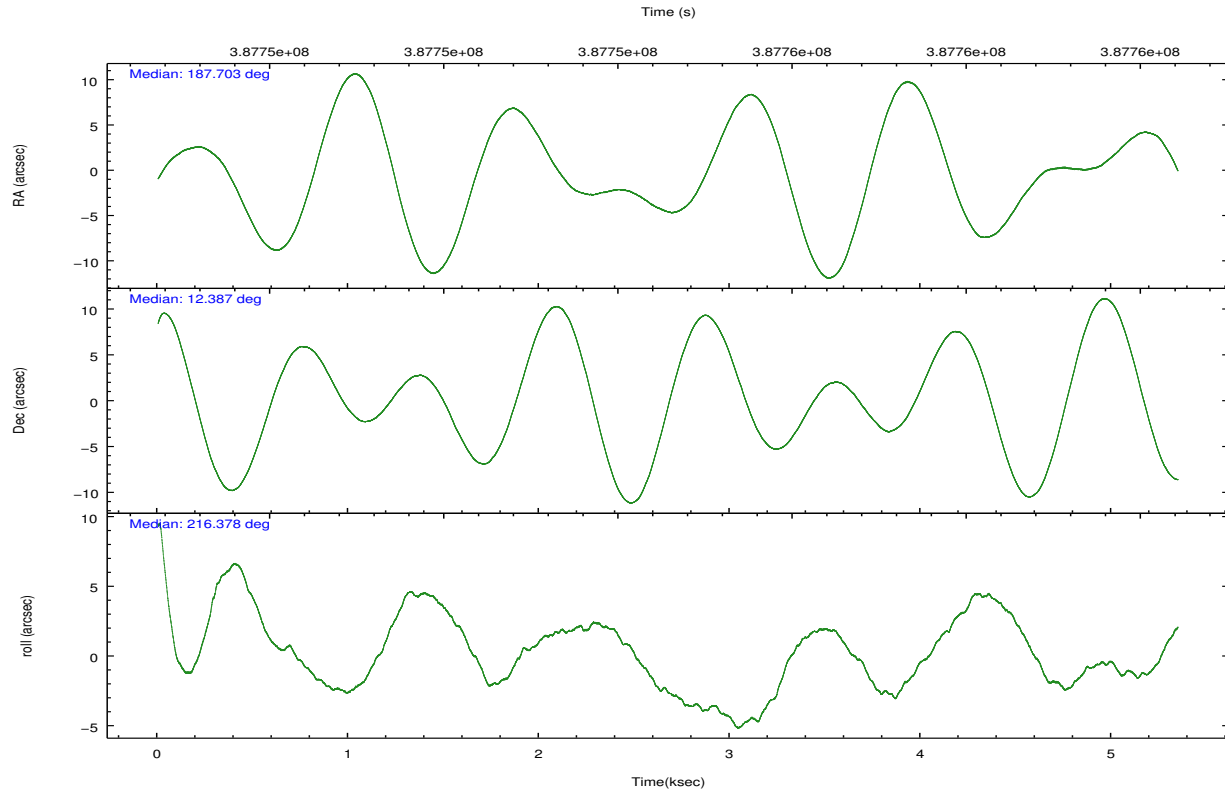


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	187.713173	187.7023845665009	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.412372	12.38715903170502	Subarray start row	449	449
[deg] Pointing Roll	216.224670	216.3836293530638	Subarray row count	128	128
[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	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	387751970.184000	387750762.60853			
Observation start date	2010-04-15T20:51:44	2010-04-15T20:32:42			
[s] Observation end time (MET)	387756970.184000	387757817.68388			
Observation end date	2010-04-15T22:15:04	2010-04-15T22:30:17			
Read mode	TIMED	TIMED			

## 2.3 Aspect



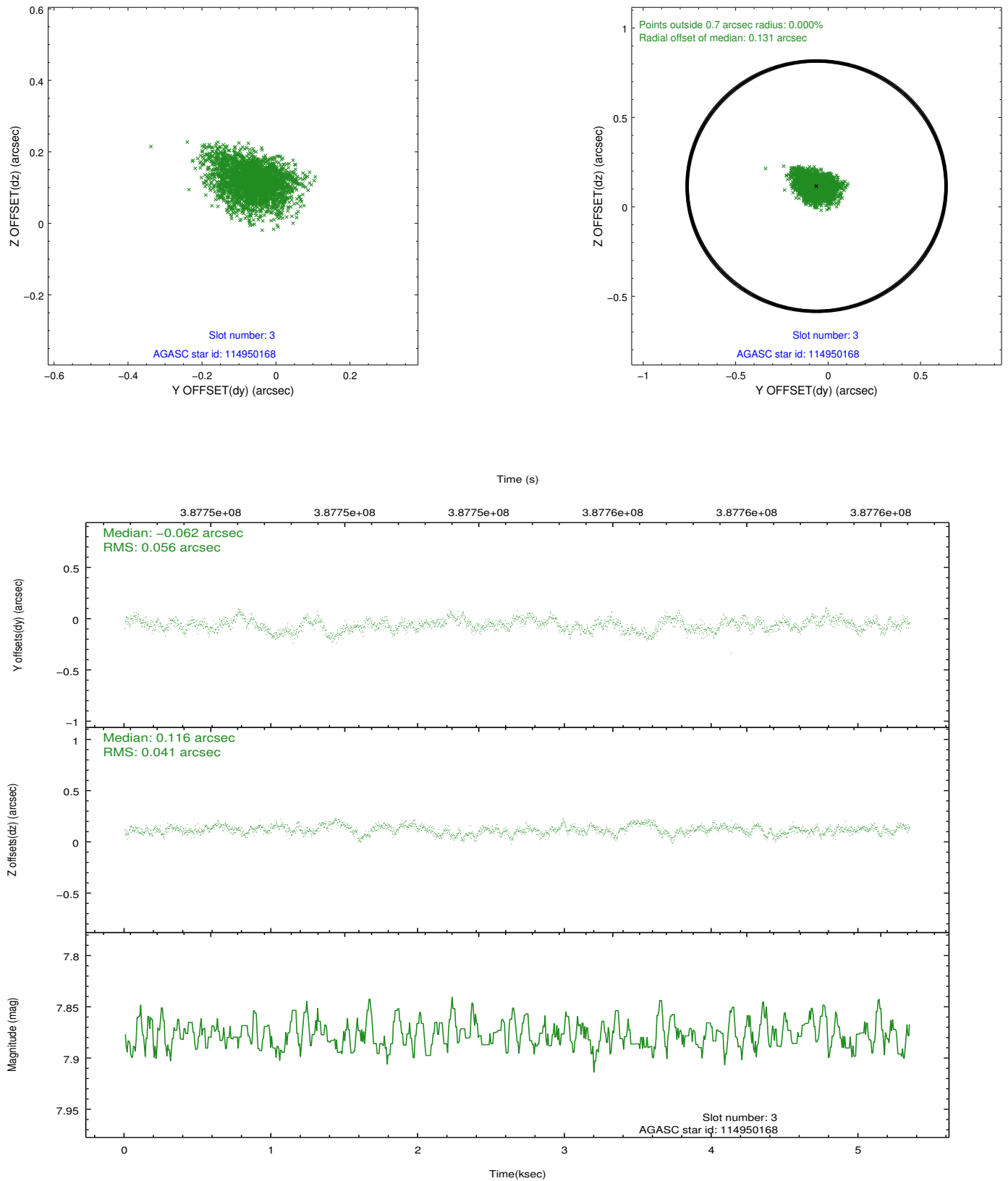


Slot Statistics

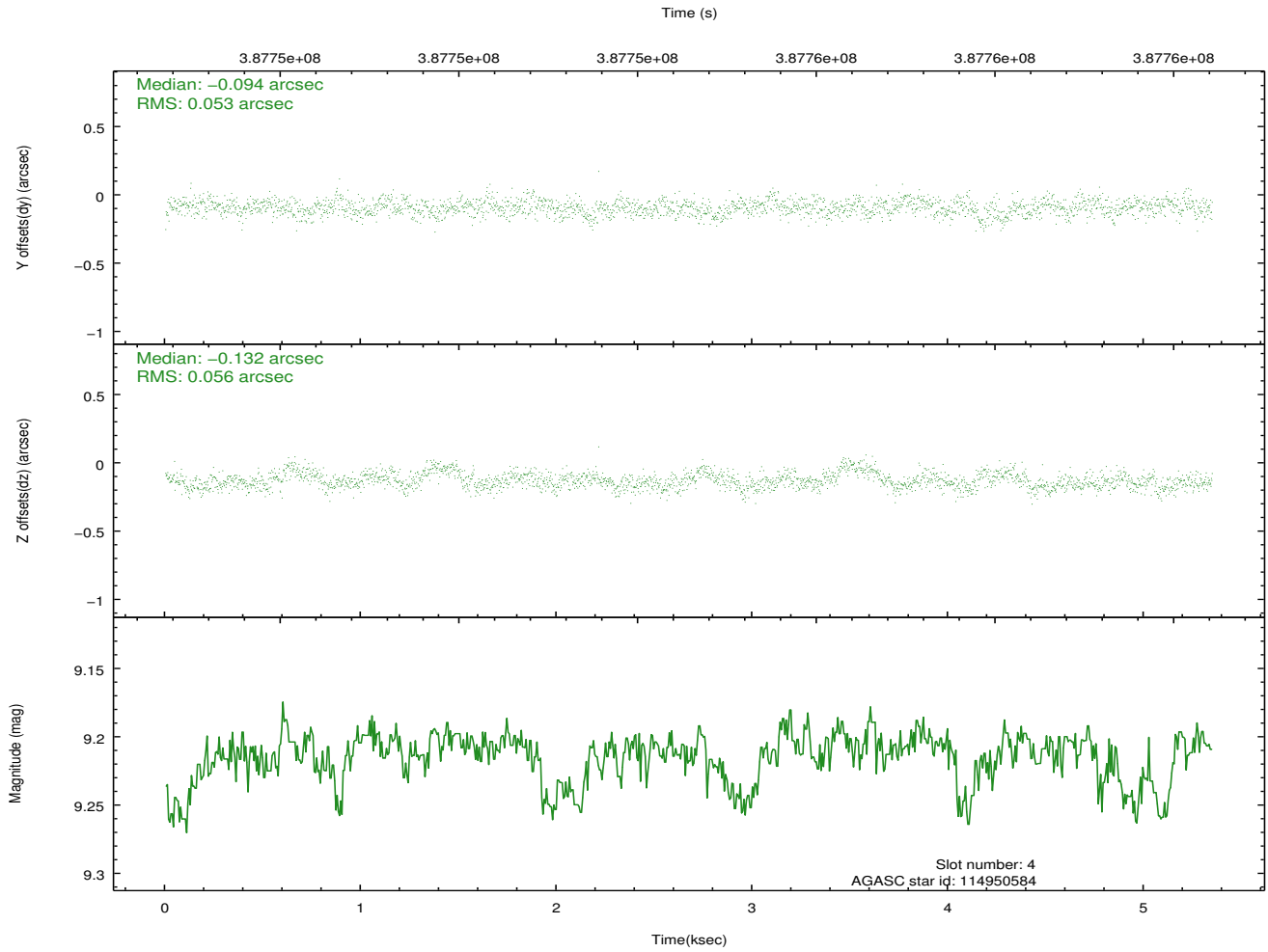
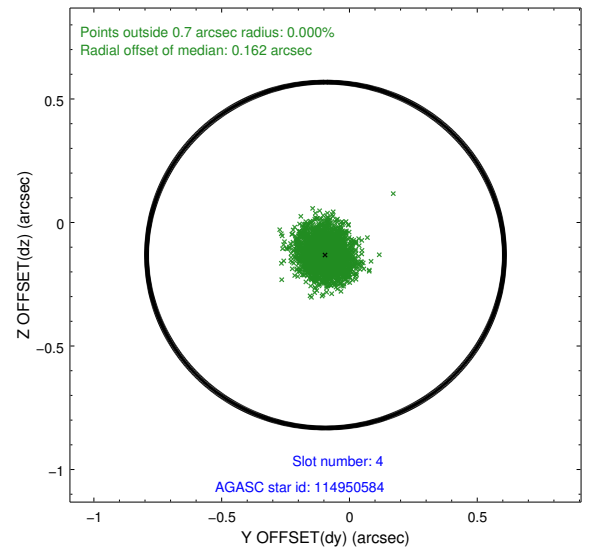
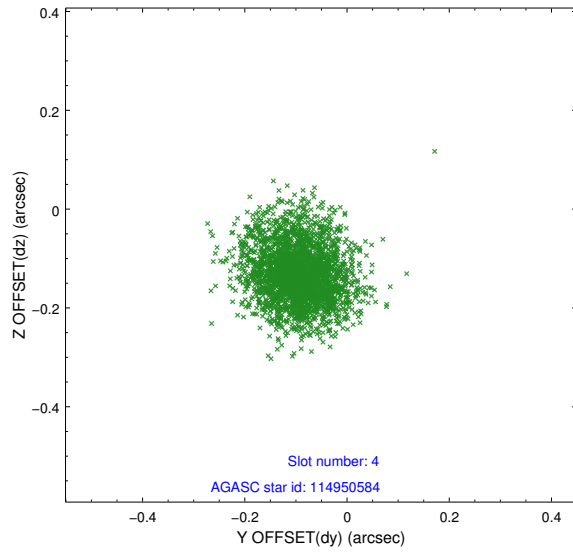
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	1304	-0.098	-0.011	0.006	0.011	0.000000	0.000000	-768.58	-1736.44
1	FID	ACIS-S-4	7.01	1304	0.173	0.051	0.006	0.012	0.000000	0.000000	2144.44	170.96
2	FID	ACIS-S-5	7.04	1304	-0.107	-0.031	0.007	0.012	0.000000	0.000000	-1820.00	165.80
3	GUIDE	114950168	7.88	2609	-0.062	0.116	0.073	0.122	187.143398	12.117441	2244.43	-329.90
4	GUIDE	114950584	9.21	2605	-0.094	-0.132	0.082	0.133	187.487323	11.827248	1887.93	1228.48
5	GUIDE	114952792	9.48	2596	-0.026	0.015	0.129	0.214	187.070263	12.344747	1968.37	-1141.54
6	GUIDE	114952824	8.58	2608	0.170	0.047	0.107	0.160	187.703904	12.486727	-130.26	-235.83
7	GUIDE	114956608	9.65	2606	0.021	-0.046	0.123	0.195	187.452443	11.725979	2202.49	1449.78

## 2.4 Star Slots

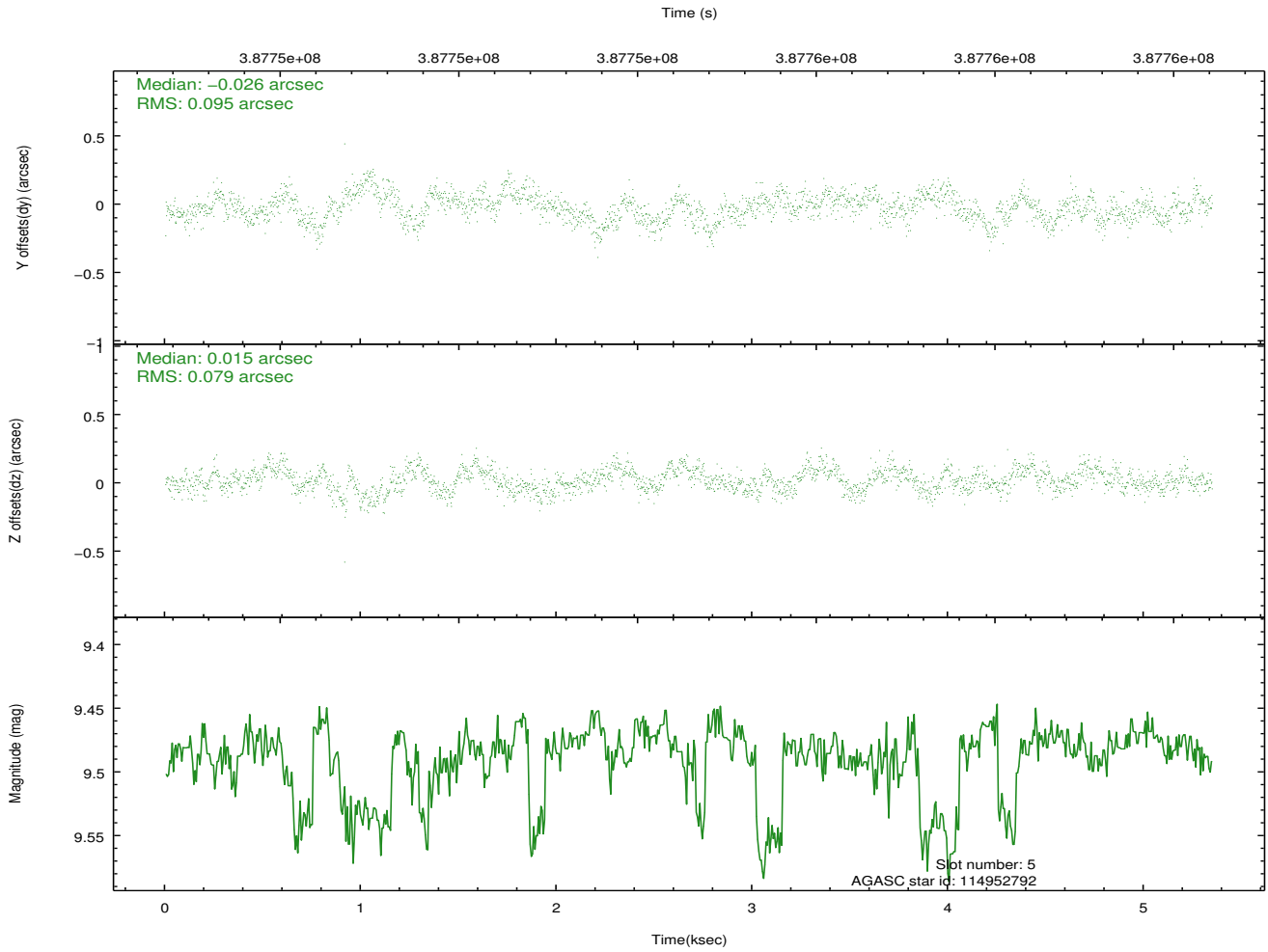
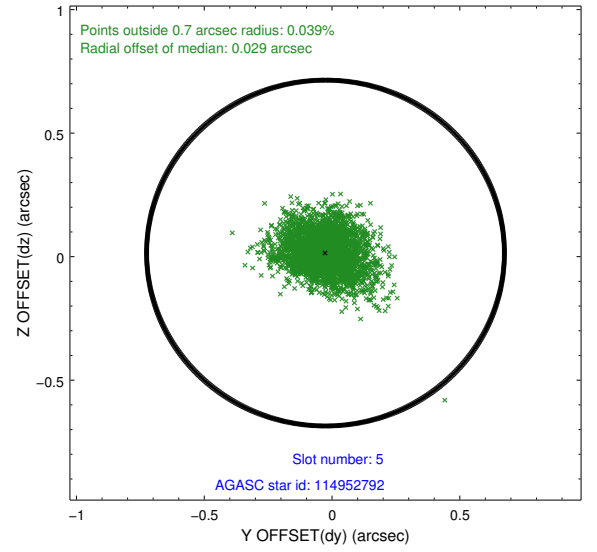
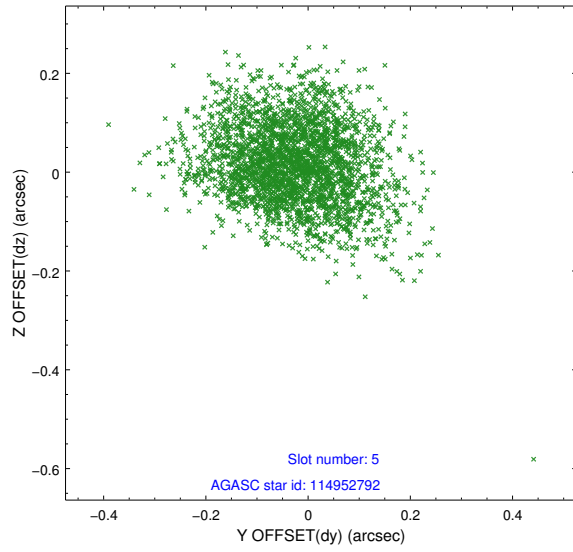
### 2.4.1 Slot 3



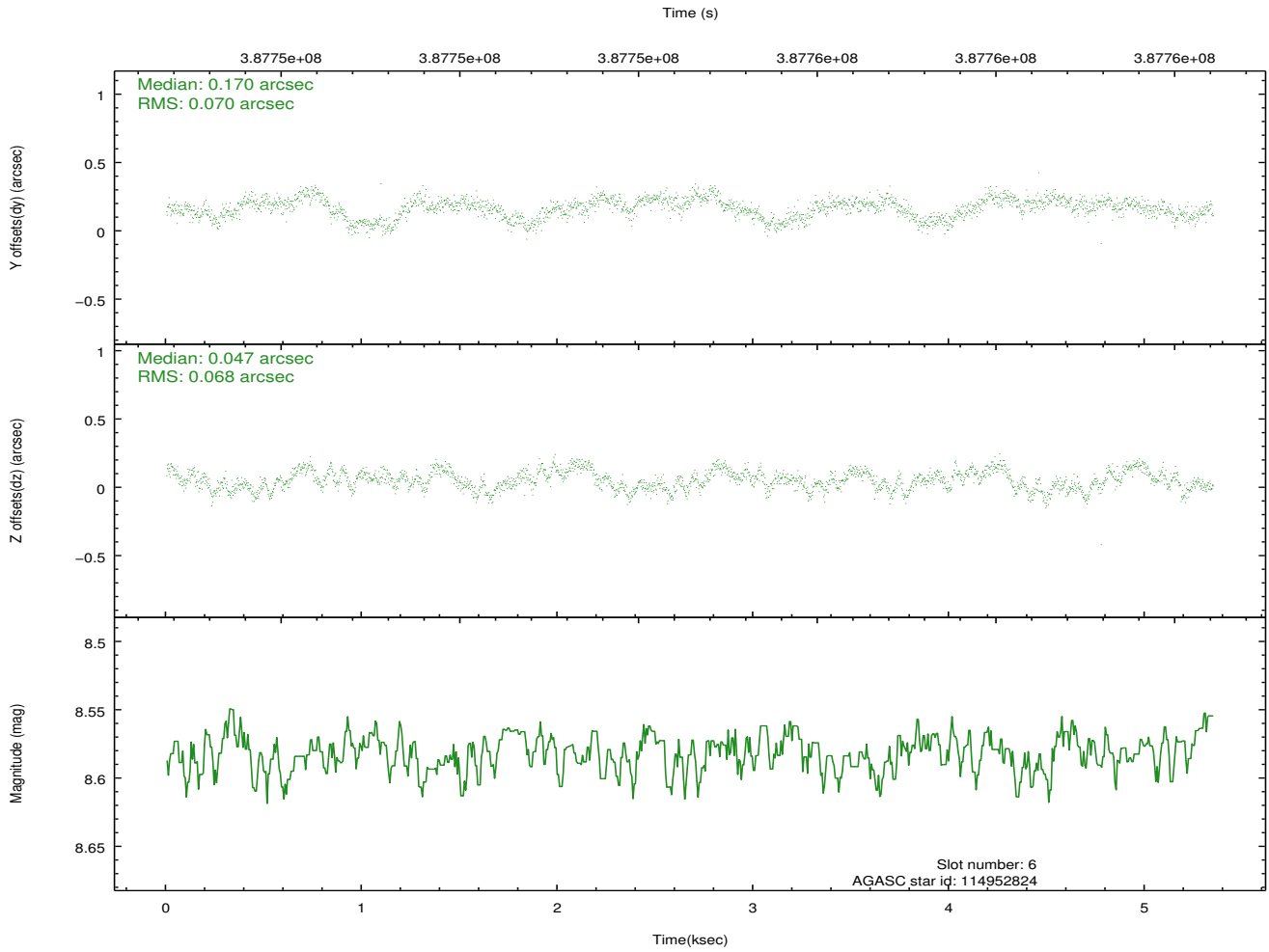
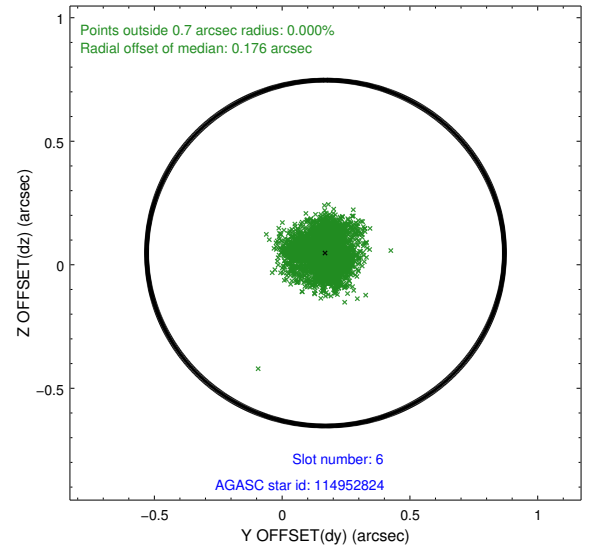
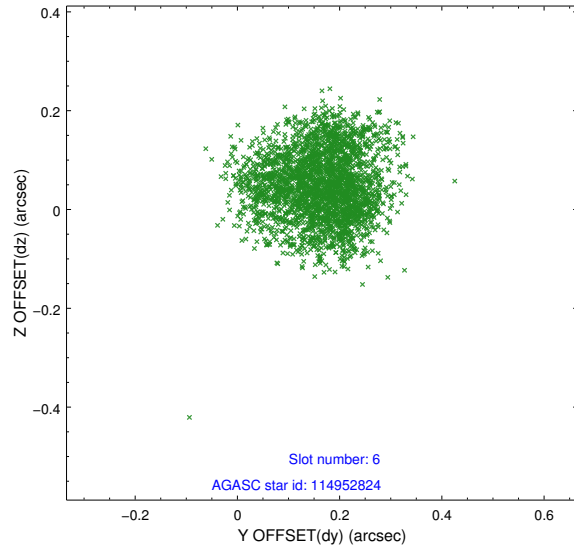
## 2.4.2 Slot 4



### 2.4.3 Slot 5

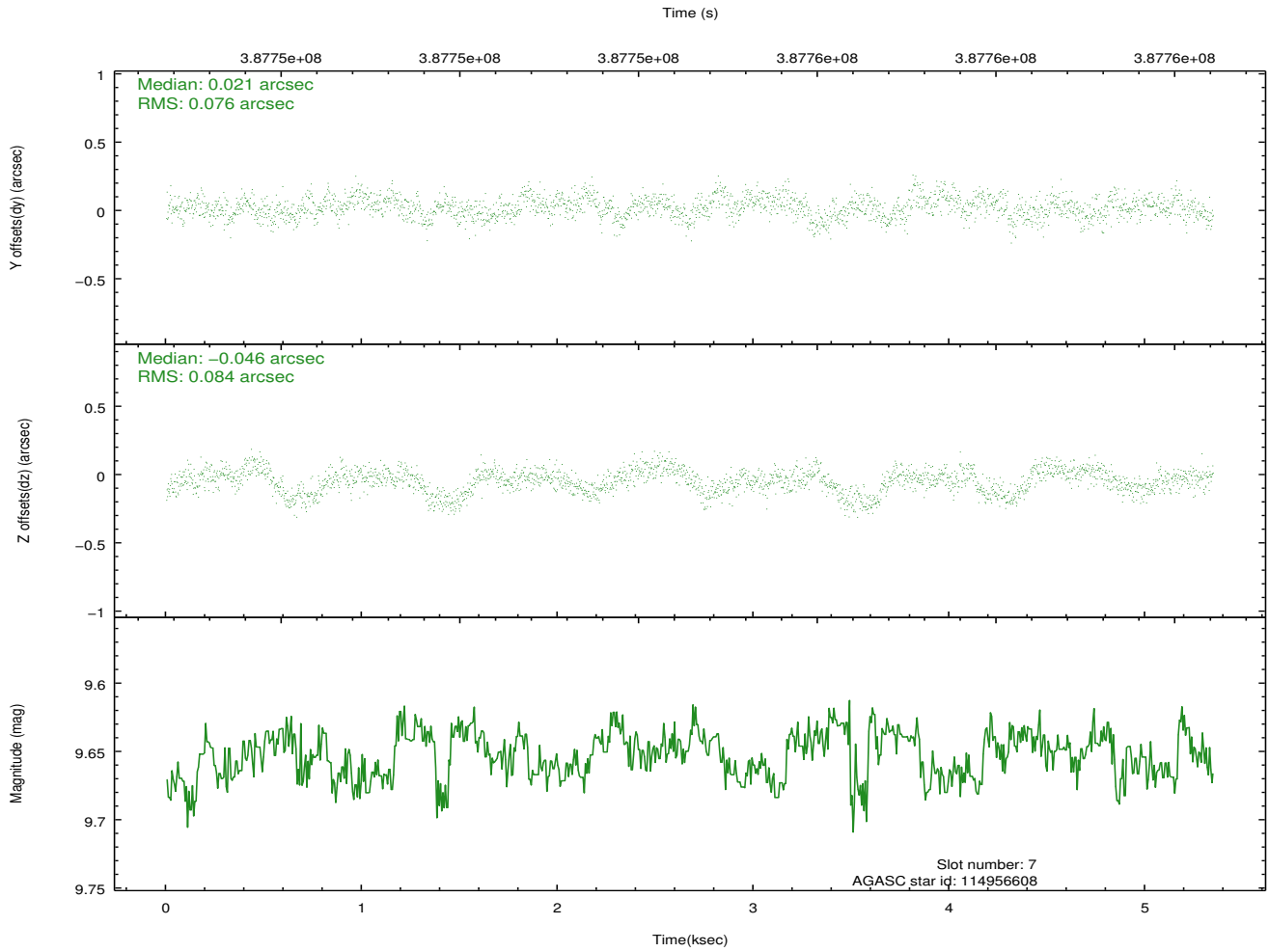
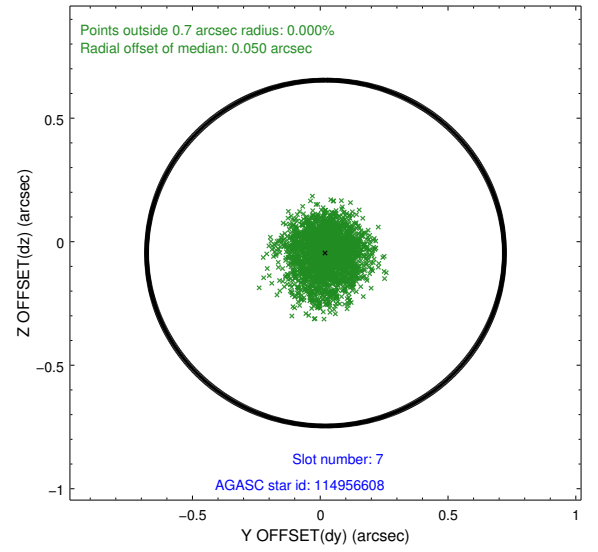
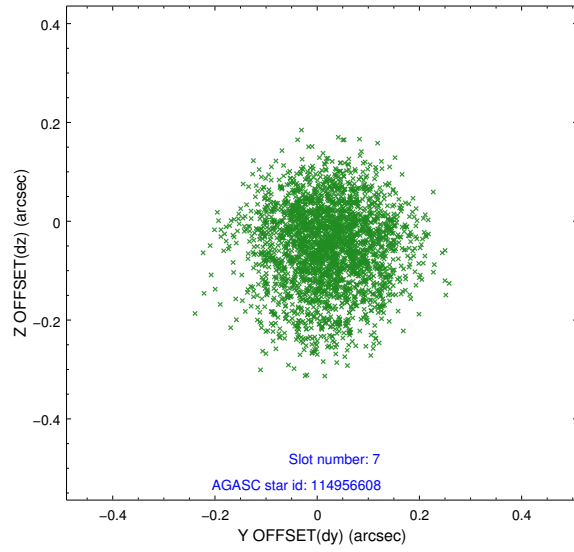


## 2.4.4 Slot 6



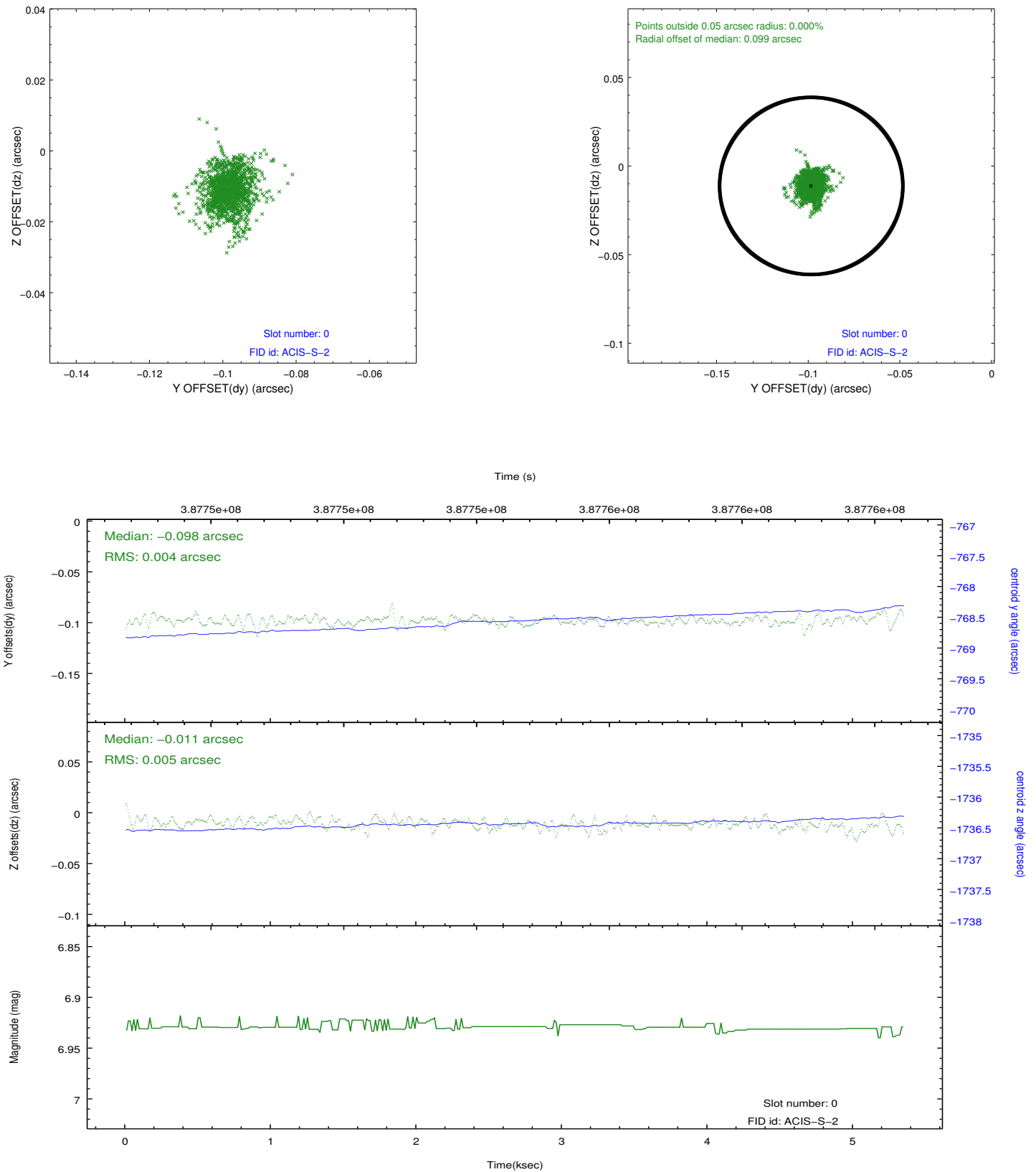


## 2.4.5 Slot 7

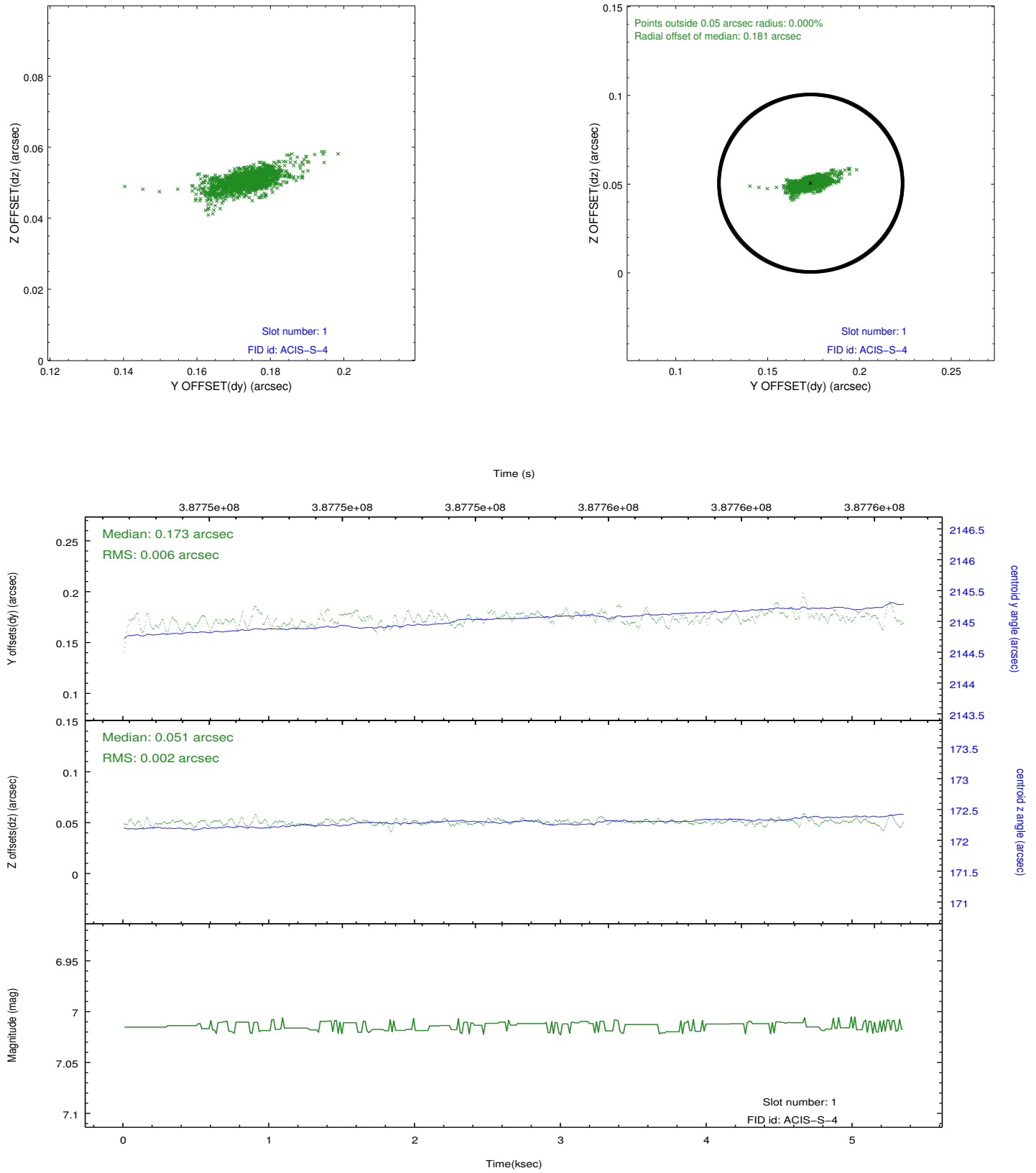


## 2.5 FID Slots

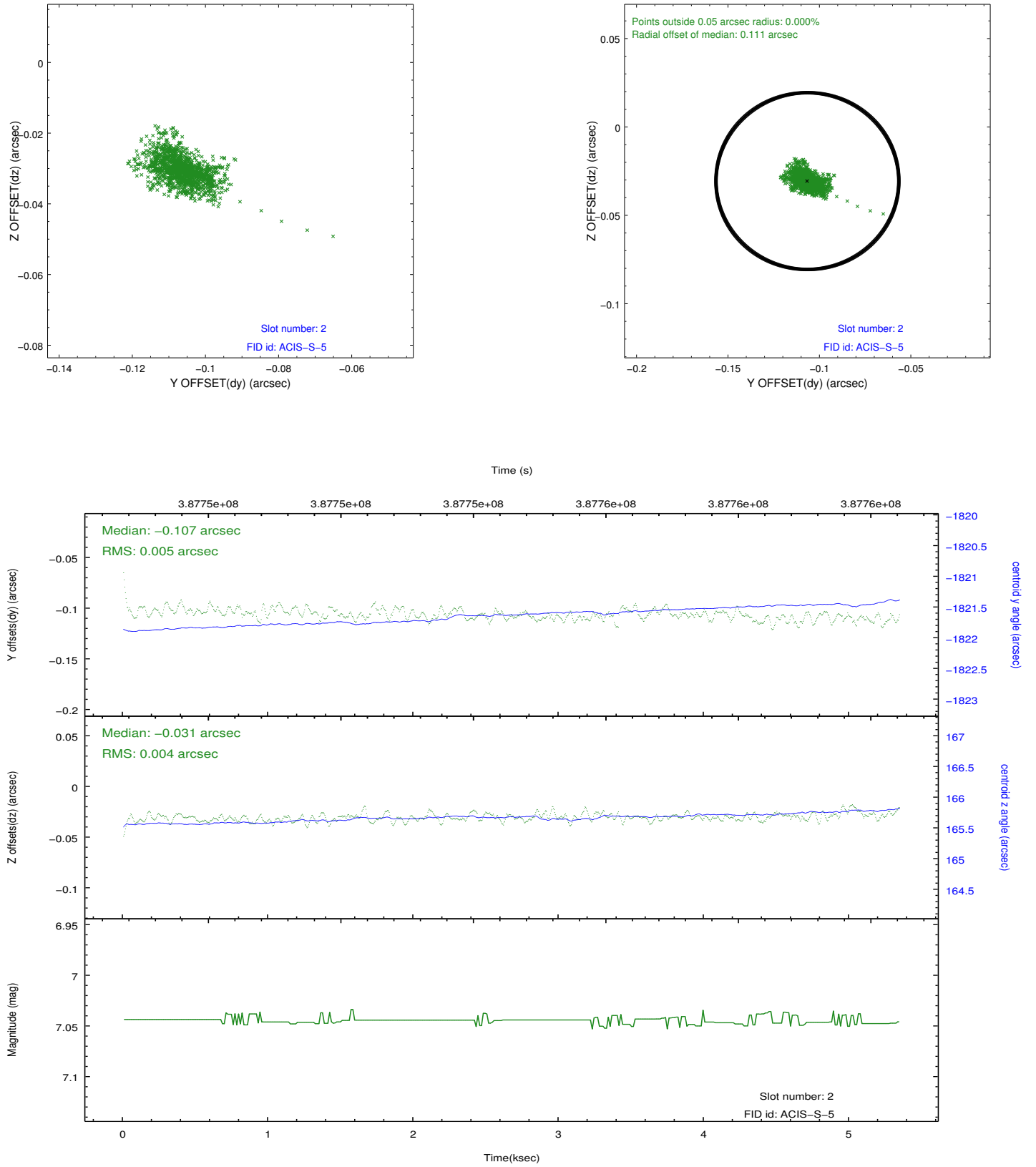
### 2.5.1 Slot 0



## 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	4.9931997023821

### A.2 Comments

Monitor constraint met, follows obs11513 by two days.