

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8515 - L2 Version 3  
Chandra X-Ray Center

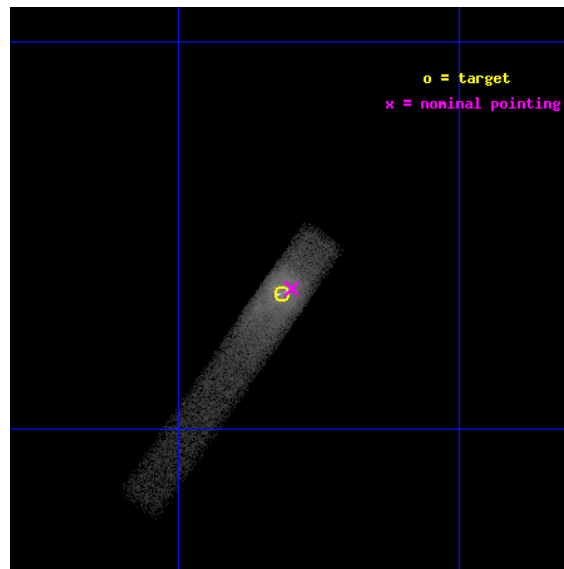
L2 Processing Date : Apr 21 2012

## 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

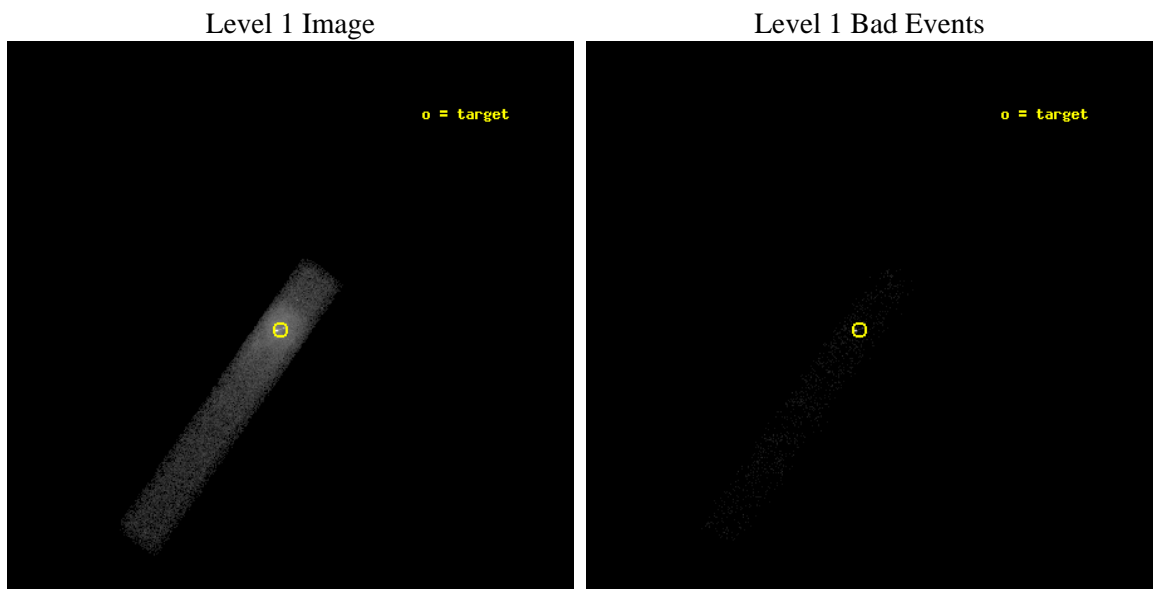
seq_num	701581	Sequence number
obs_id	8515	Observation id
title	Short Timescale X-ray Variability in the M87 Jet: the TeV connection	&#160
observer	Dr. Daniel Harris	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.69965199431	Nominal RA [deg]
dec_nom	12.393628882667	Nominal Dec [deg]
roll_nom	124.86153646529	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5177.599691391	Sum of GTIs [s]
livetime	4695.8096239715	Livetime [s]
ontime7	5177.599691391	Sum of GTIs [s]
l2events	58123	Number of level 2 events



## 2 OBI

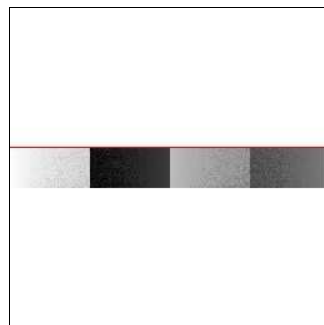
### 2.1 OBI

#### 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	8.4.4	Processing system revision	ontime	5177.599691391	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime7	5177.599691391	Sum of GTIs [s]
date	2012-04-21T13:34:15	Date and time of file creation	l1events	70187	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	70187
rejected events	11463
rejected %	16%

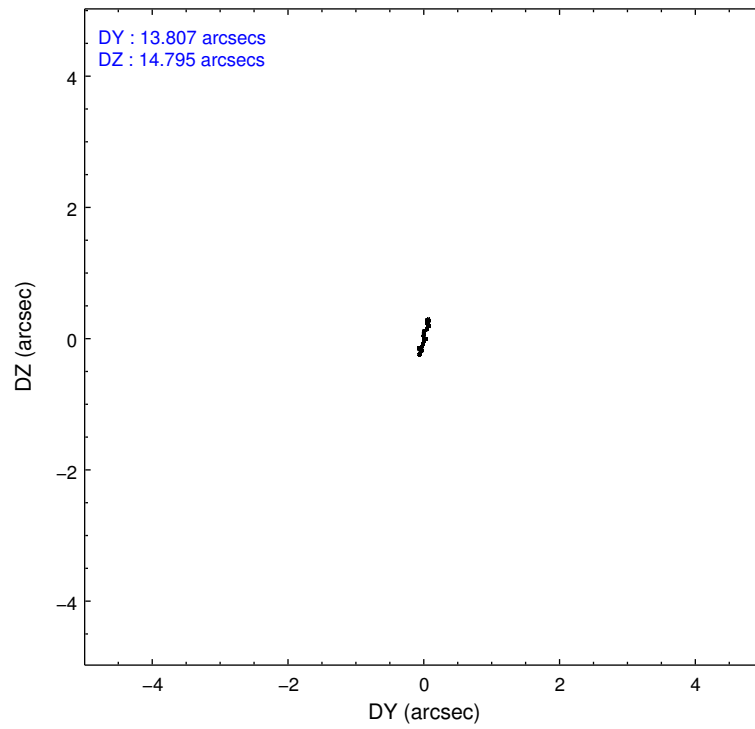
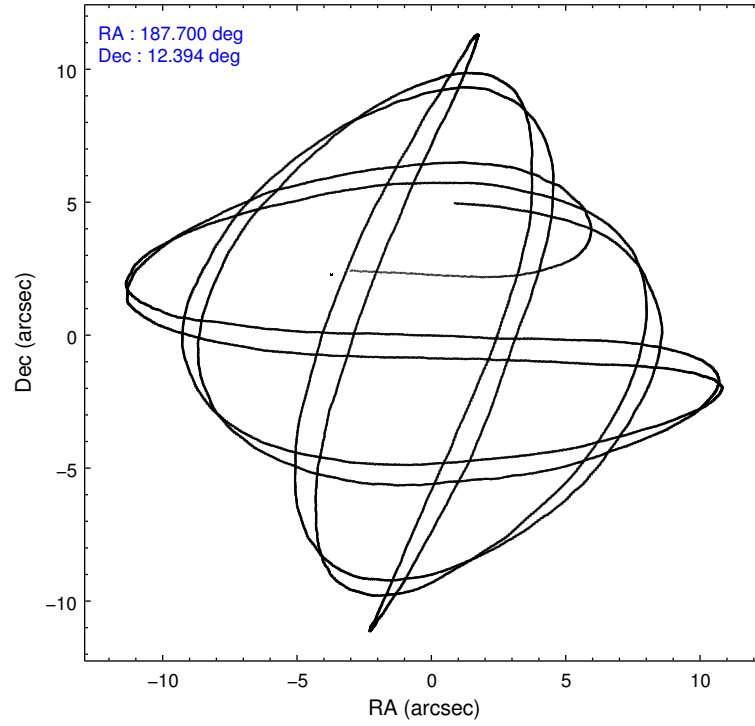
	<b>ccd 7</b>
grade 0 events	17795
	25%
grade 1 events	304
	0%
grade 2 events	15801
	22%
grade 3 events	7152
	10%
grade 4 events	7092
	10%
grade 5 events	2433
	3%
grade 6 events	13455
	19%
grade 7 events	6155
	8%

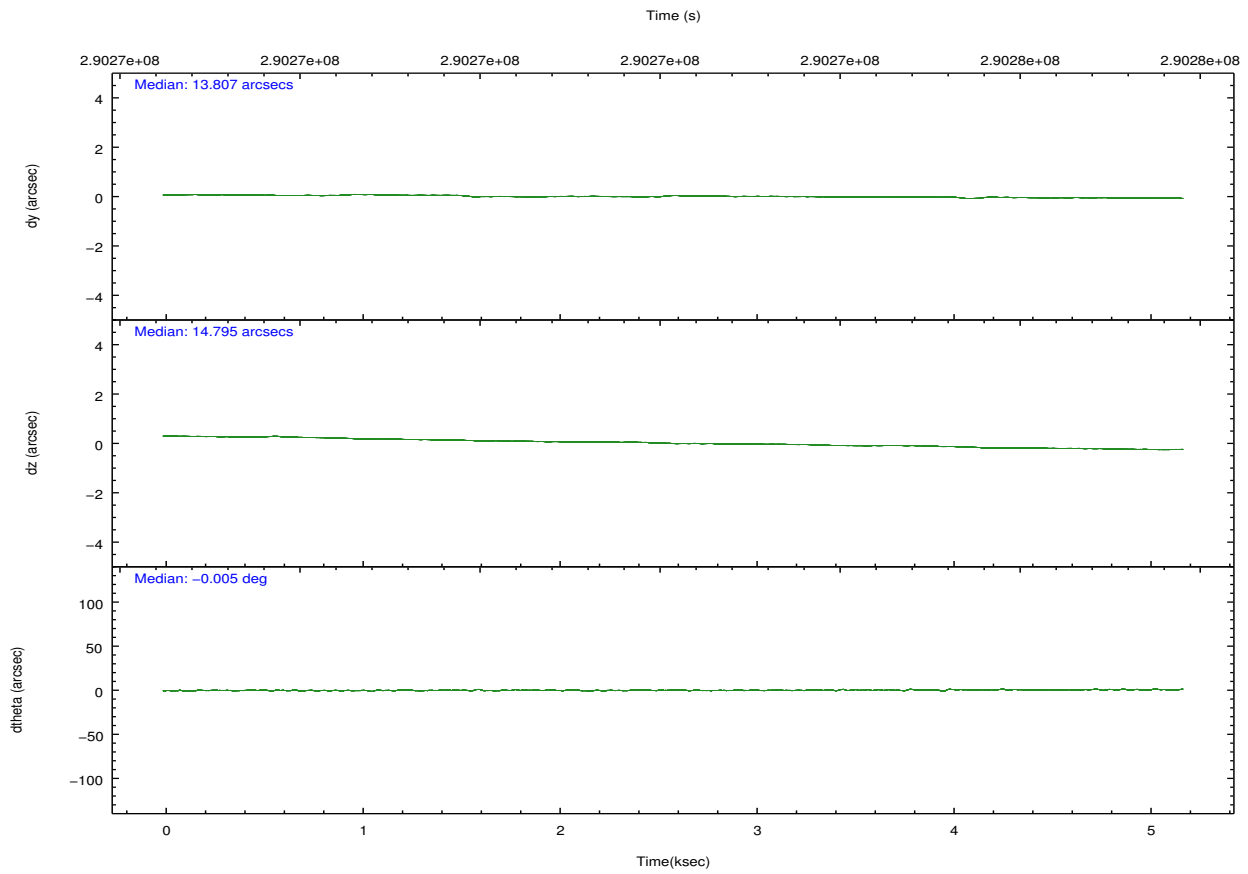
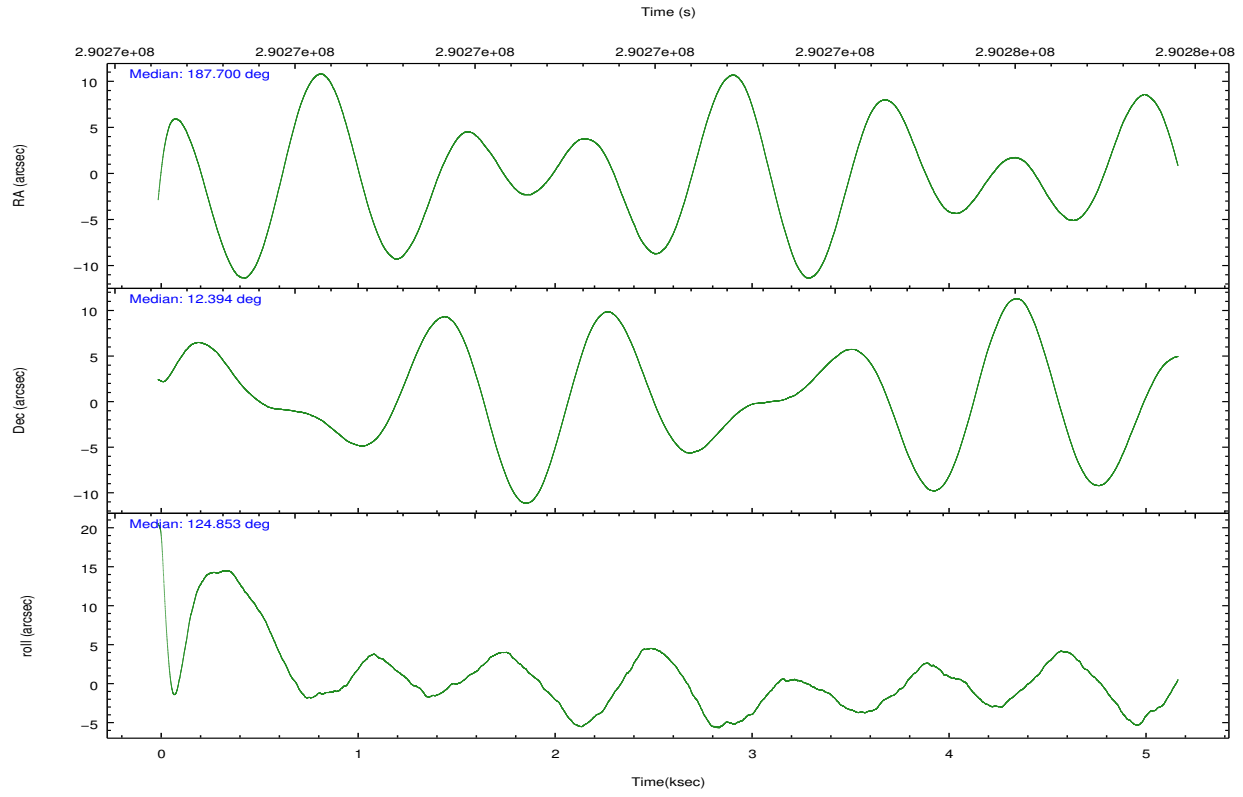


## 2.2 Compared Parameters

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	187.725113	187.6996519943135	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.382320	12.39362888266687	Subarray start row	449	449
[deg] Pointing Roll	124.699377	124.8615364652866	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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	290270659.184000	290269282.57781			
Observation start date	2007-03-14T14:43:14	2007-03-14T14:21:22			
[s] Observation end time (MET)	290275659.184000	290276138.80314			
Observation end date	2007-03-14T16:06:34	2007-03-14T16:15:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect



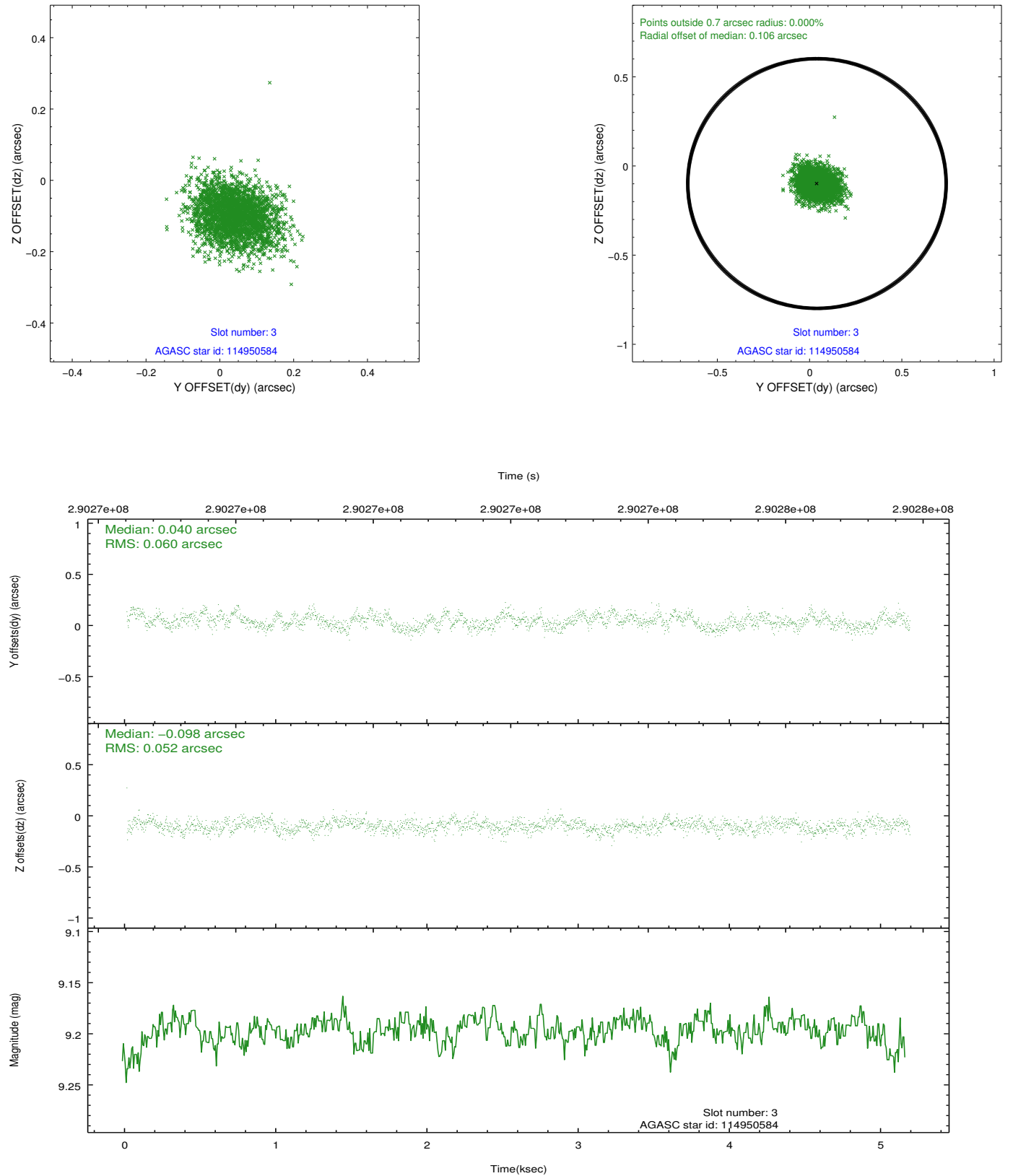


### Slot Statistics

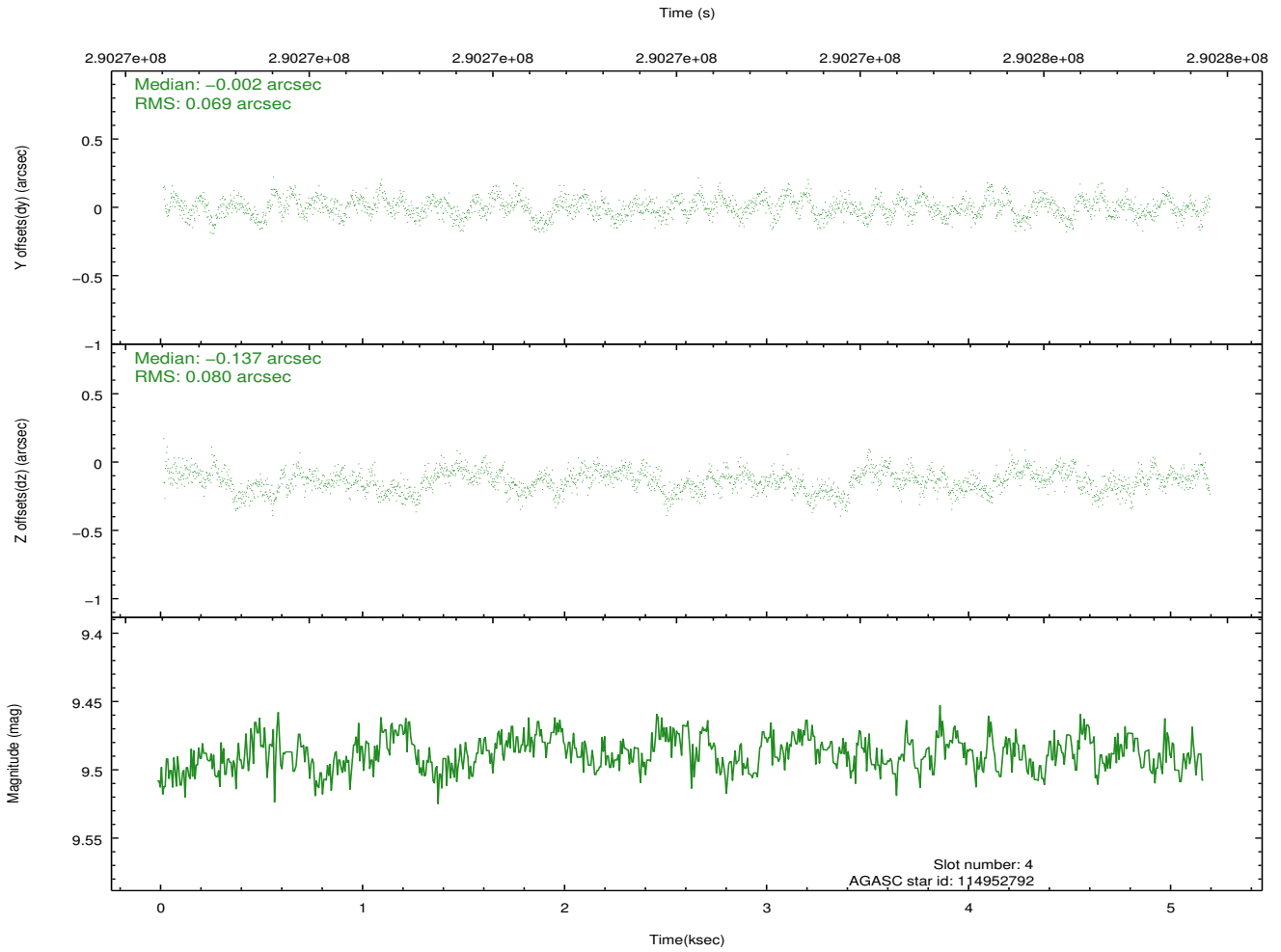
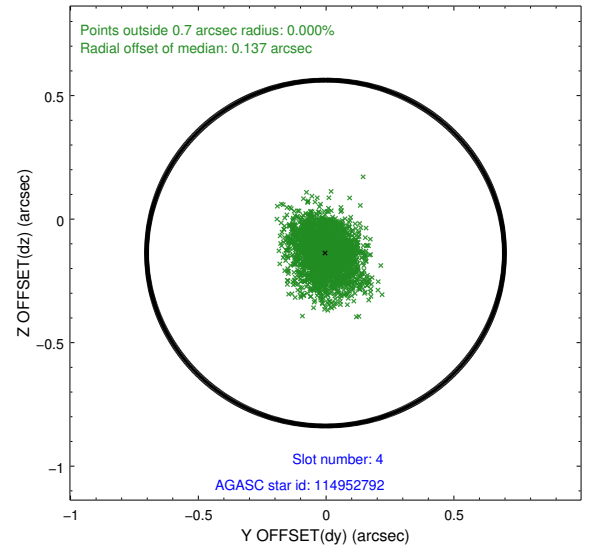
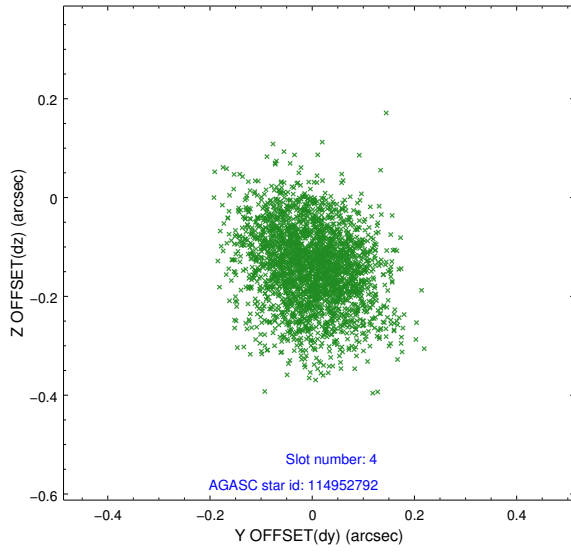
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1263	-0.068	-0.048	0.008	0.013	0.000000	0.000000	-766.80	-1736.19
1	FID	ACIS-S-4	7.20	1263	0.210	0.046	0.007	0.012	0.000000	0.000000	2146.20	171.20
2	FID	ACIS-S-5	7.23	1263	-0.174	0.011	0.008	0.013	0.000000	0.000000	-1818.27	166.13
3	GUIDE	114950584	9.20	2526	0.040	-0.098	0.084	0.136	187.487323	11.827248	-1165.59	1826.49
4	GUIDE	114952792	9.49	2525	-0.002	-0.137	0.113	0.184	187.070263	12.344747	1201.67	1970.55
5	GUIDE	114952824	8.57	2525	-0.102	0.221	0.099	0.151	187.703904	12.486727	352.12	-151.08
6	GUIDE	114956608	9.67	2521	0.068	-0.059	0.113	0.187	187.452443	11.725979	-1394.91	2135.64
7	GUIDE	115347520	10.16	2465	-0.008	0.086	0.205	0.315	187.517505	12.810279	1681.60	-276.79

## 2.4 Star Slots

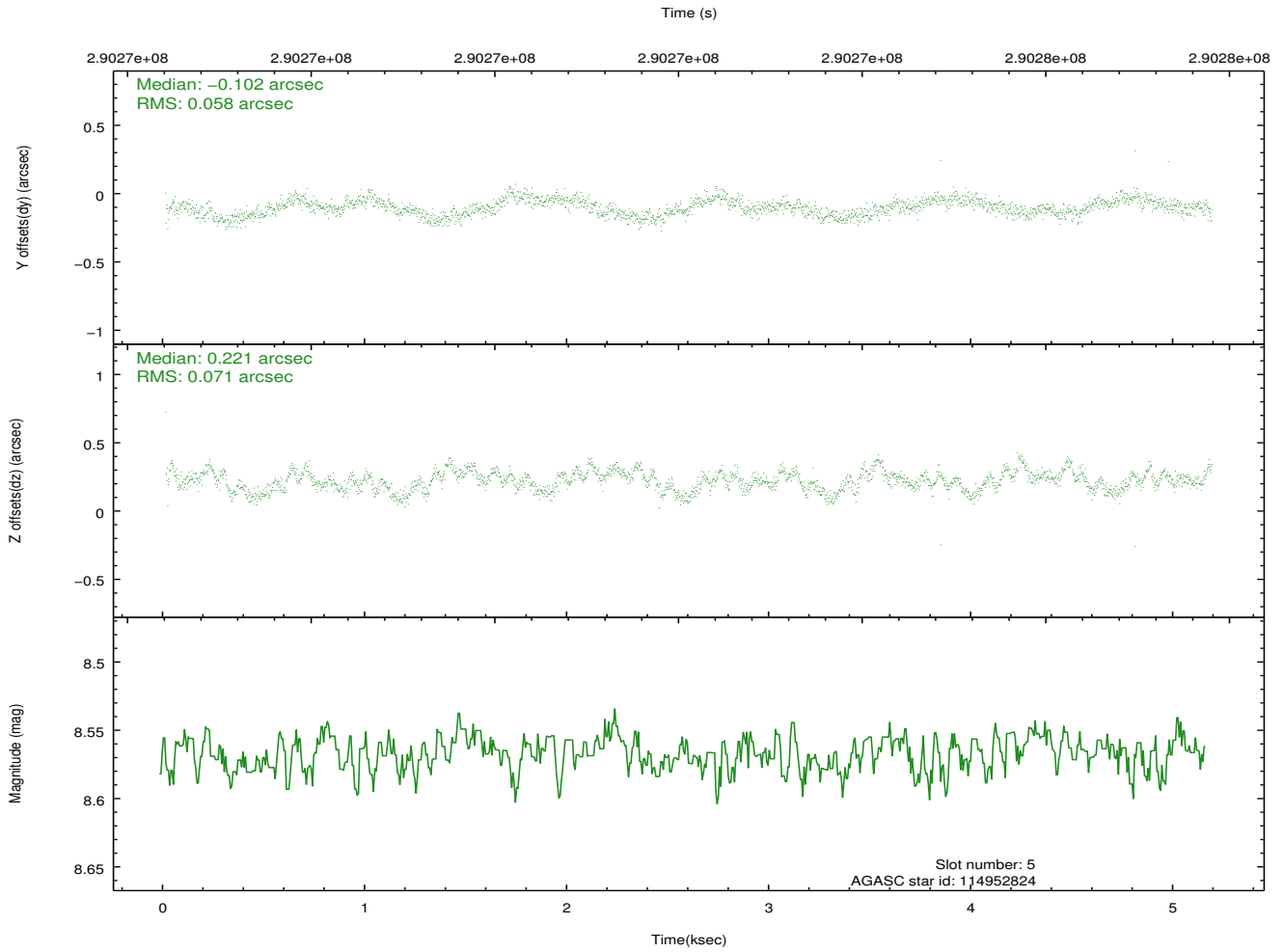
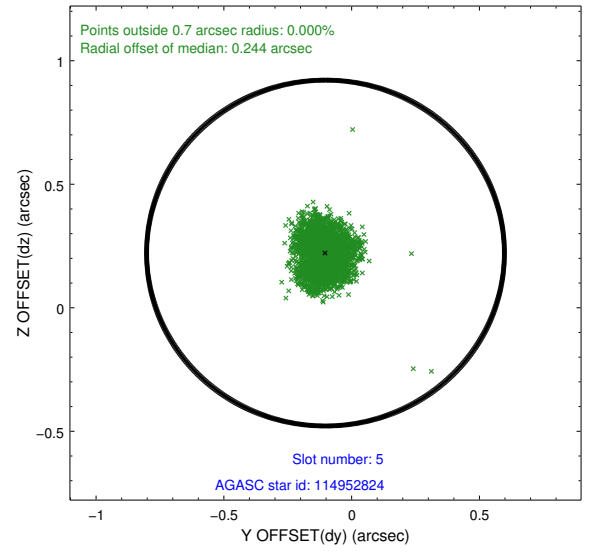
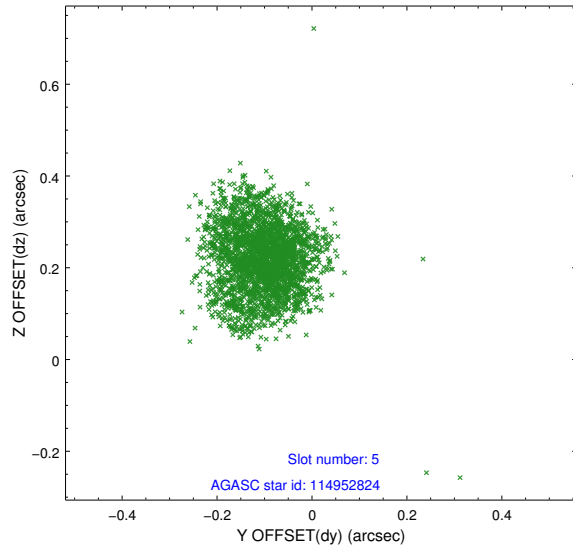
### 2.4.1 Slot 3



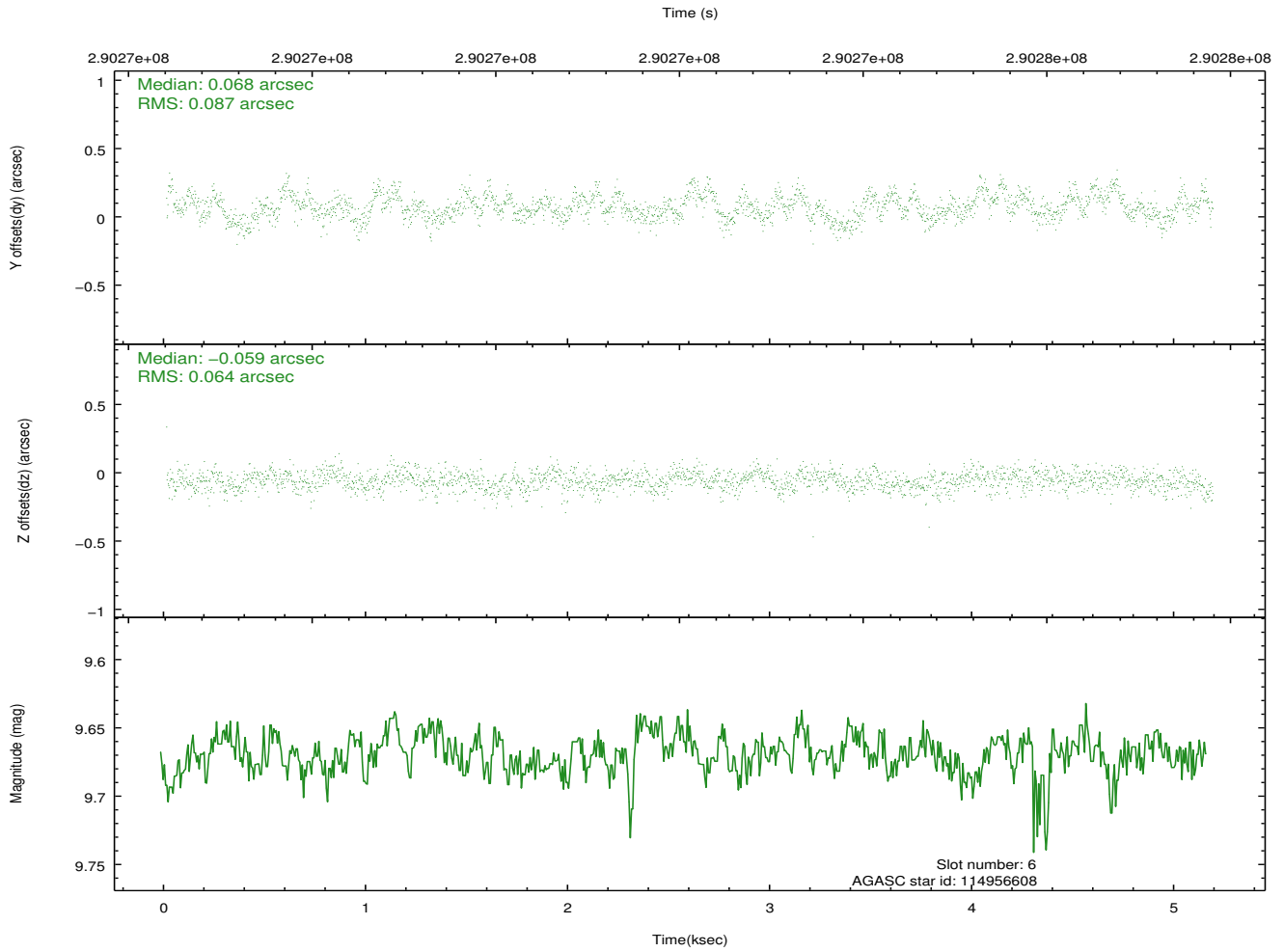
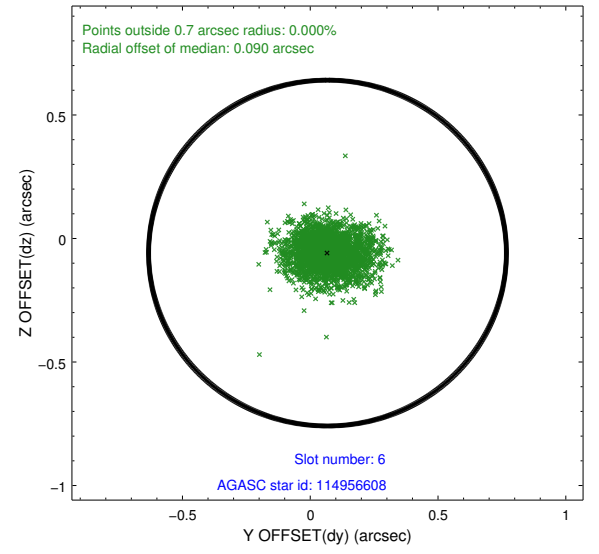
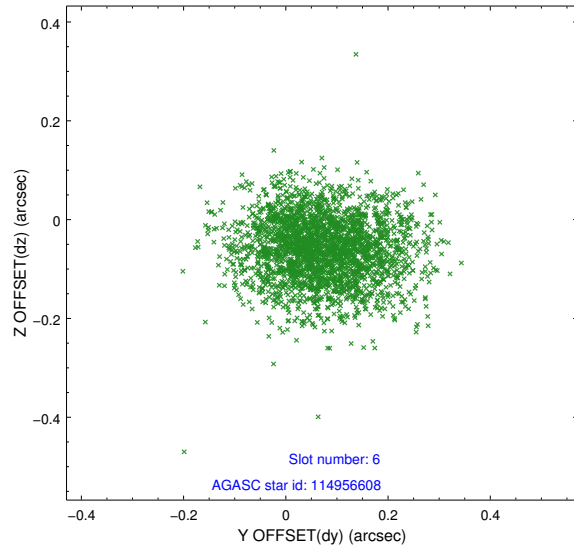
## 2.4.2 Slot 4



### 2.4.3 Slot 5

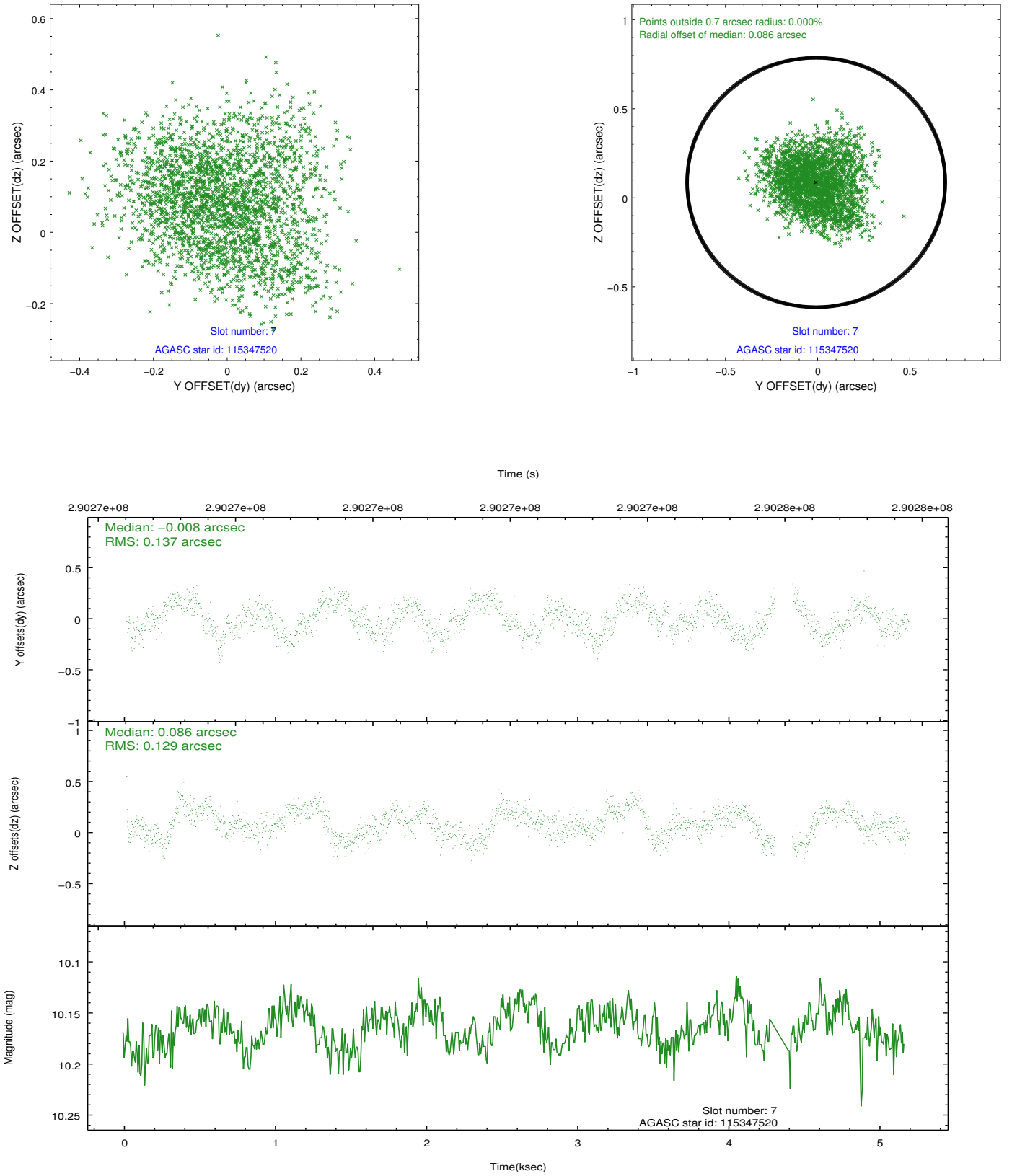


## 2.4.4 Slot 6



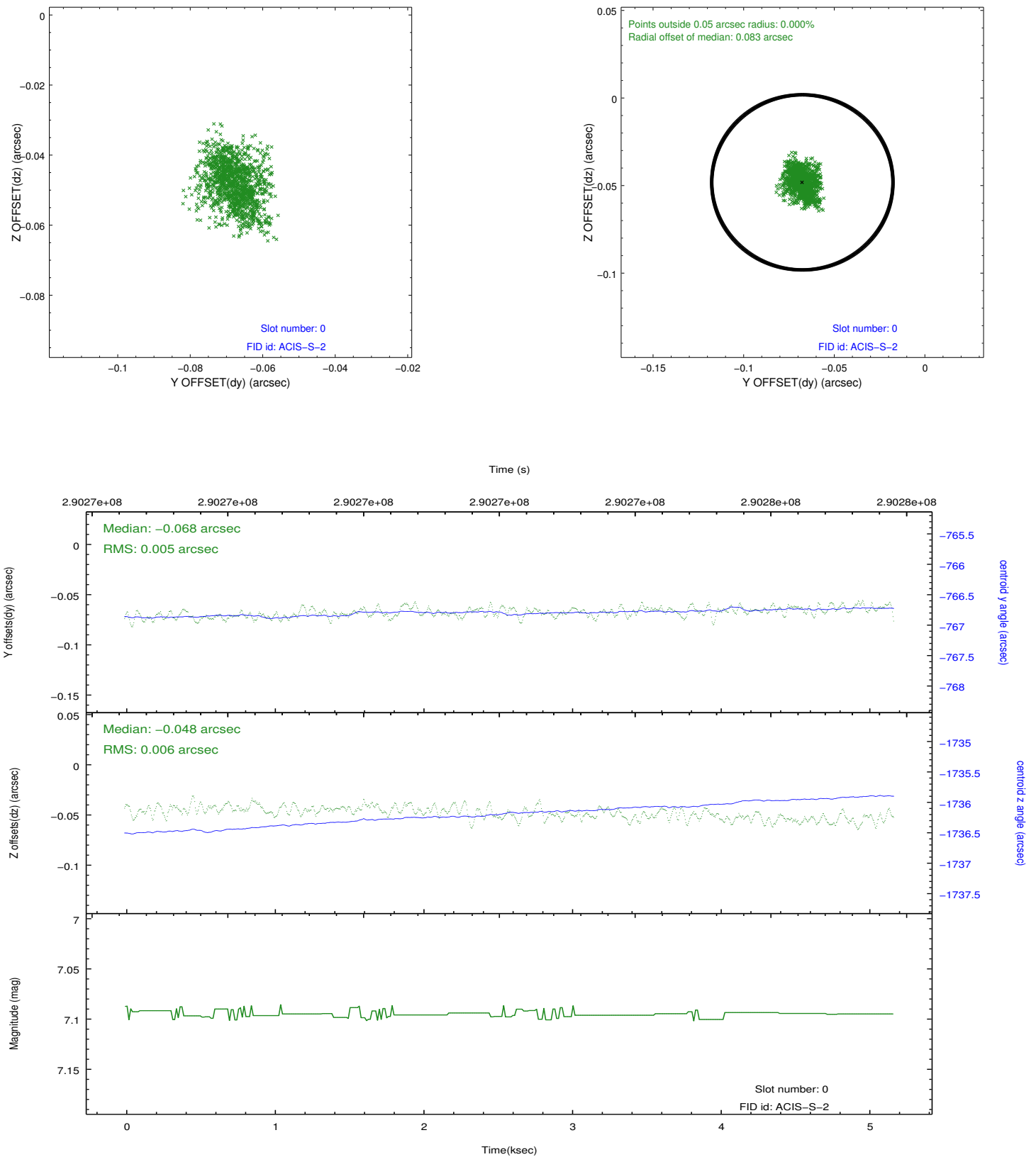


## 2.4.5 Slot 7

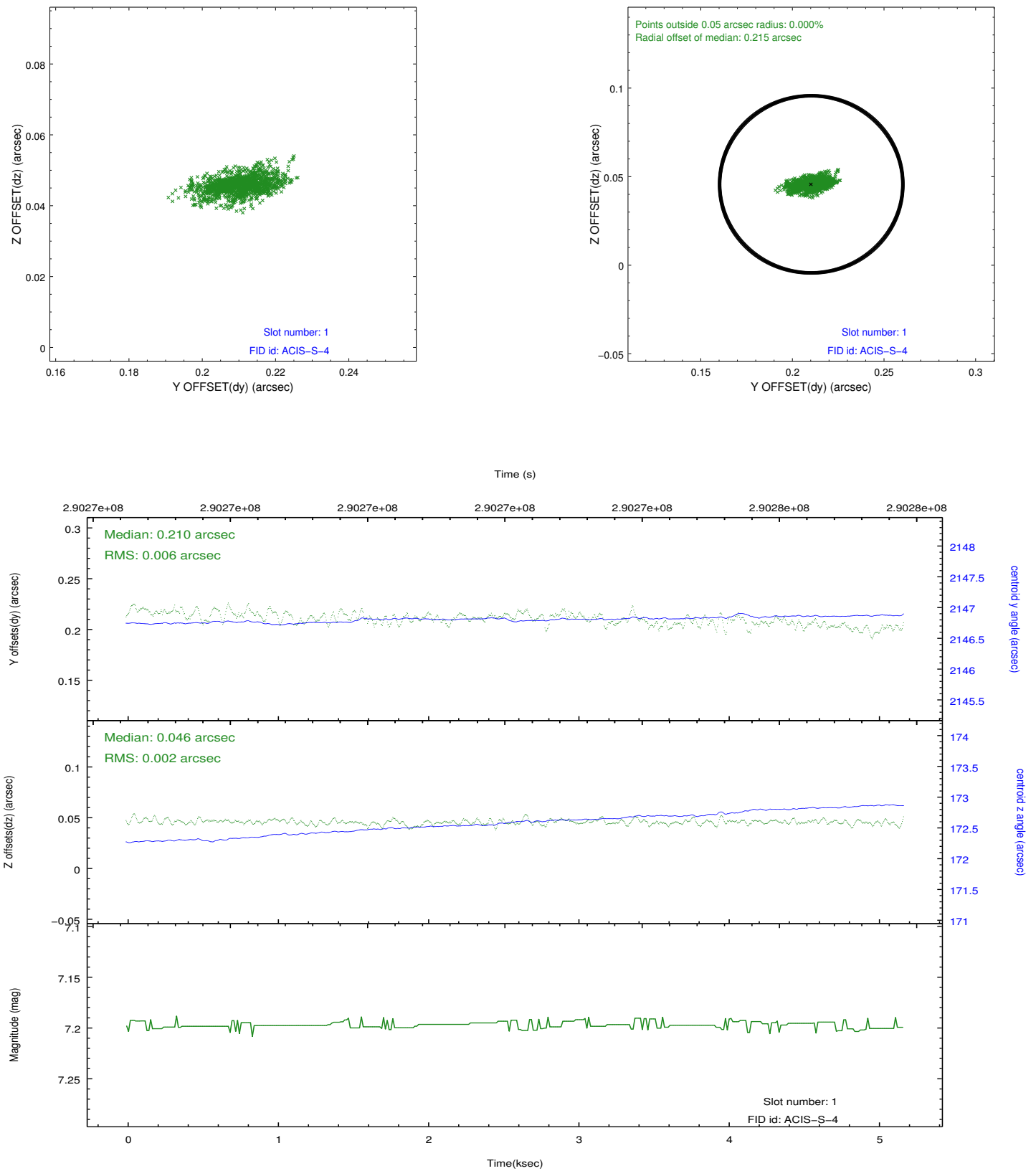


## 2.5 FID Slots

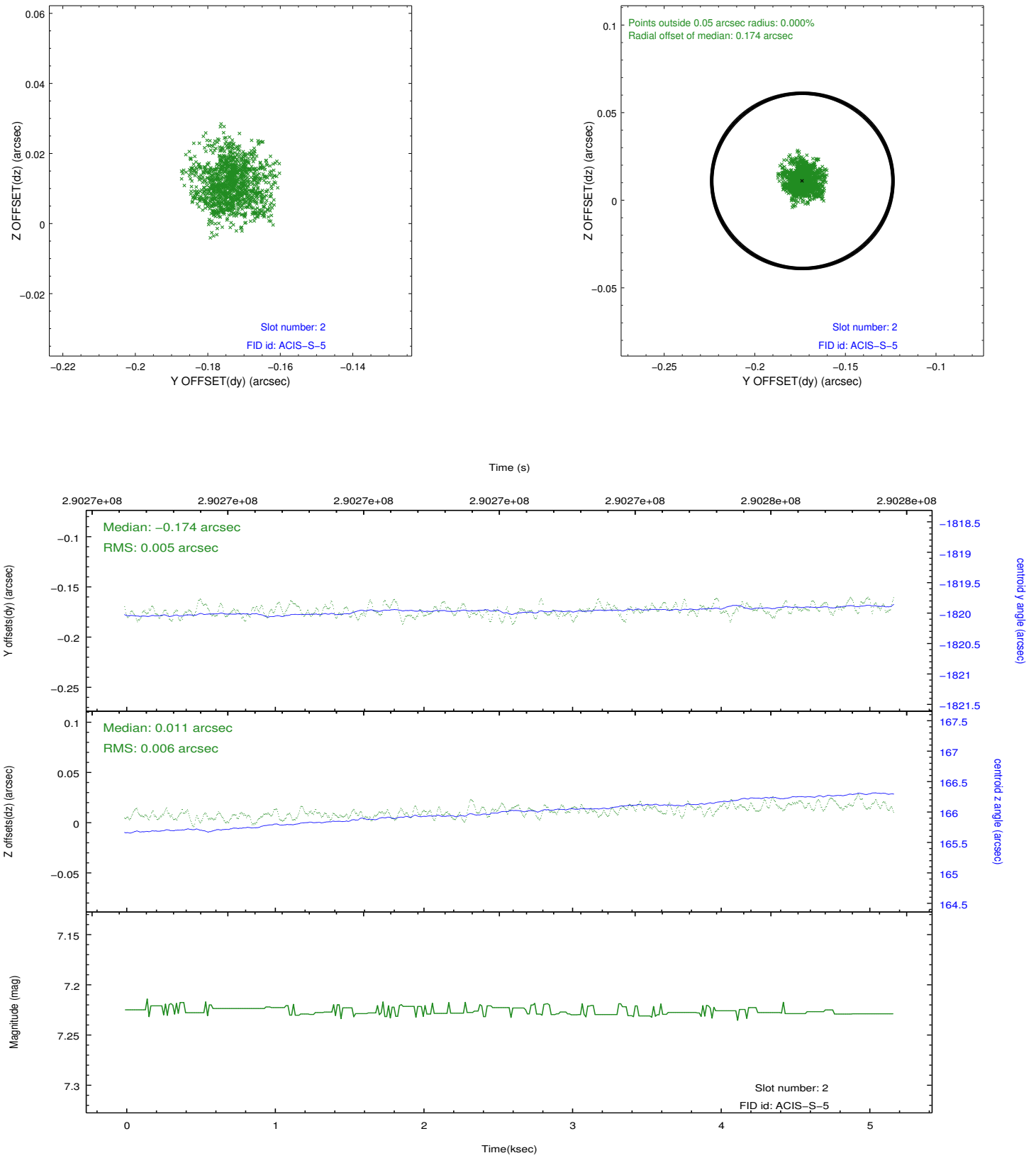
### 2.5.1 Slot 0



## 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)	2012.04.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.17759969

### A.2 Comments