

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11515 - L2 Version 2  
Chandra X-Ray Center

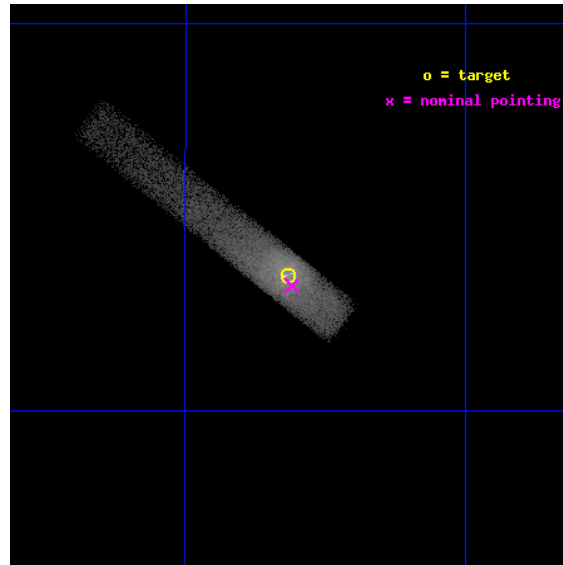
L2 Processing Date : Jun 24 2012

## 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

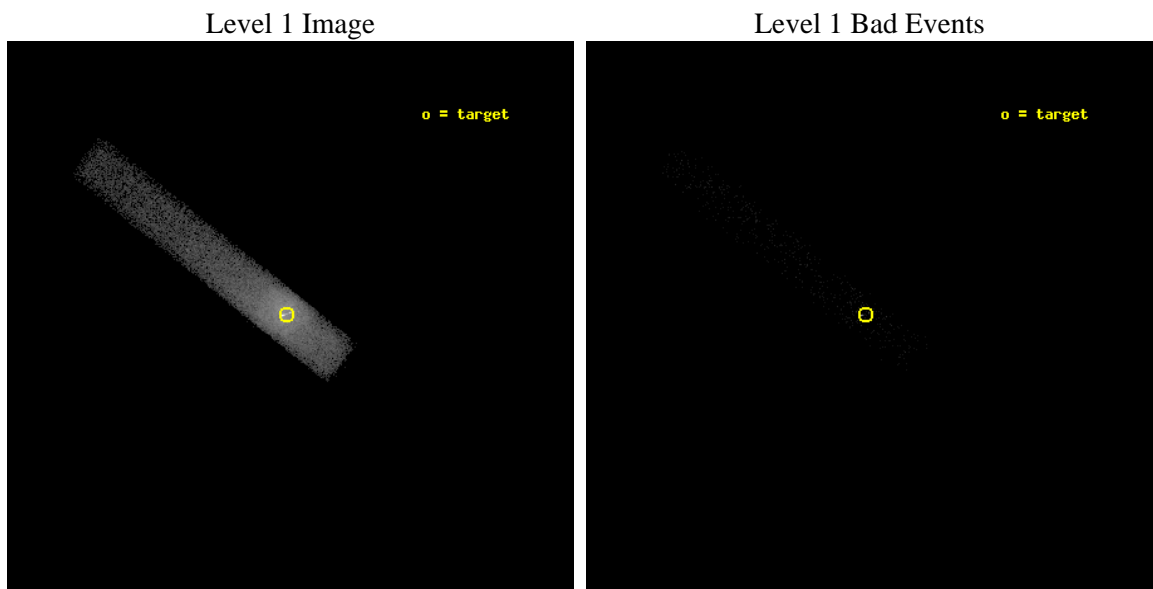
seq_num	702101	Sequence number
obs_id	11515	Observation id
title	The X-ray - TeV Connection in M87	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.70248328931	Nominal RA [deg]
dec_nom	12.387022359466	Nominal Dec [deg]
roll_nom	218.64456511051	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5181.5996911526	Sum of GTIs [s]
livetime	4699.437412618	Livetime [s]
ontime7	5181.5996911526	Sum of GTIs [s]
l2events	48886	Number of level 2 events



## 2 OBI

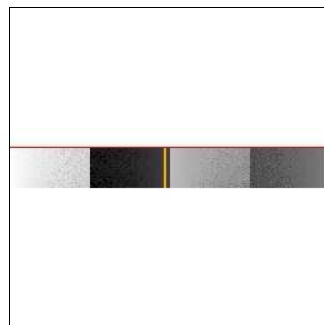
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4999.698000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5181.5996911526	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime7	5181.5996911526	Sum of GTIs [s]
date	2012-06-24T08:30:13	Date and time of file creation	l1events	55682	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	55682
rejected events	6170
rejected %	11%

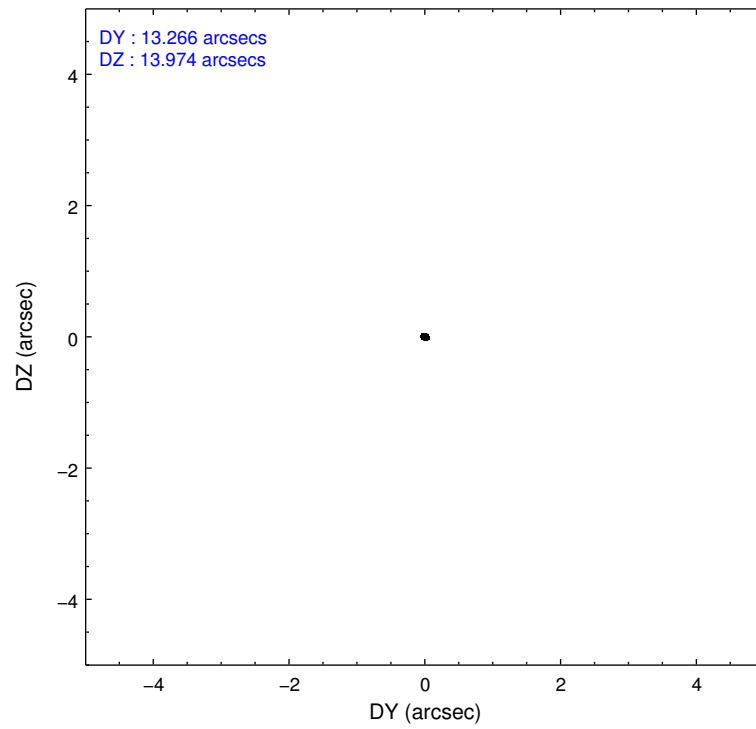
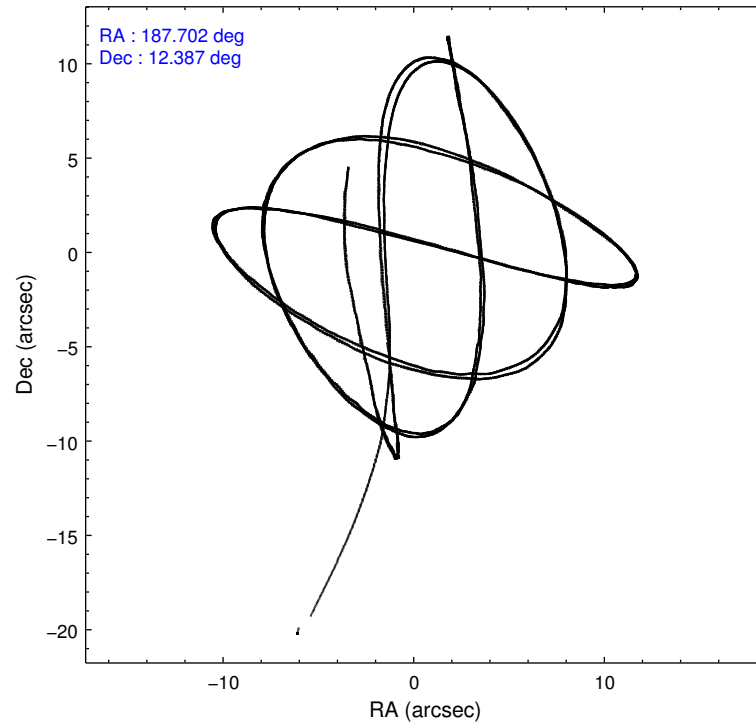
	<b>ccd 7</b>
grade 0 events	15662
	28%
grade 1 events	42
	0%
grade 2 events	13360
	23%
grade 3 events	6204
	11%
grade 4 events	5917
	10%
grade 5 events	1121
	2%
grade 6 events	10354
	18%
grade 7 events	3022
	5%

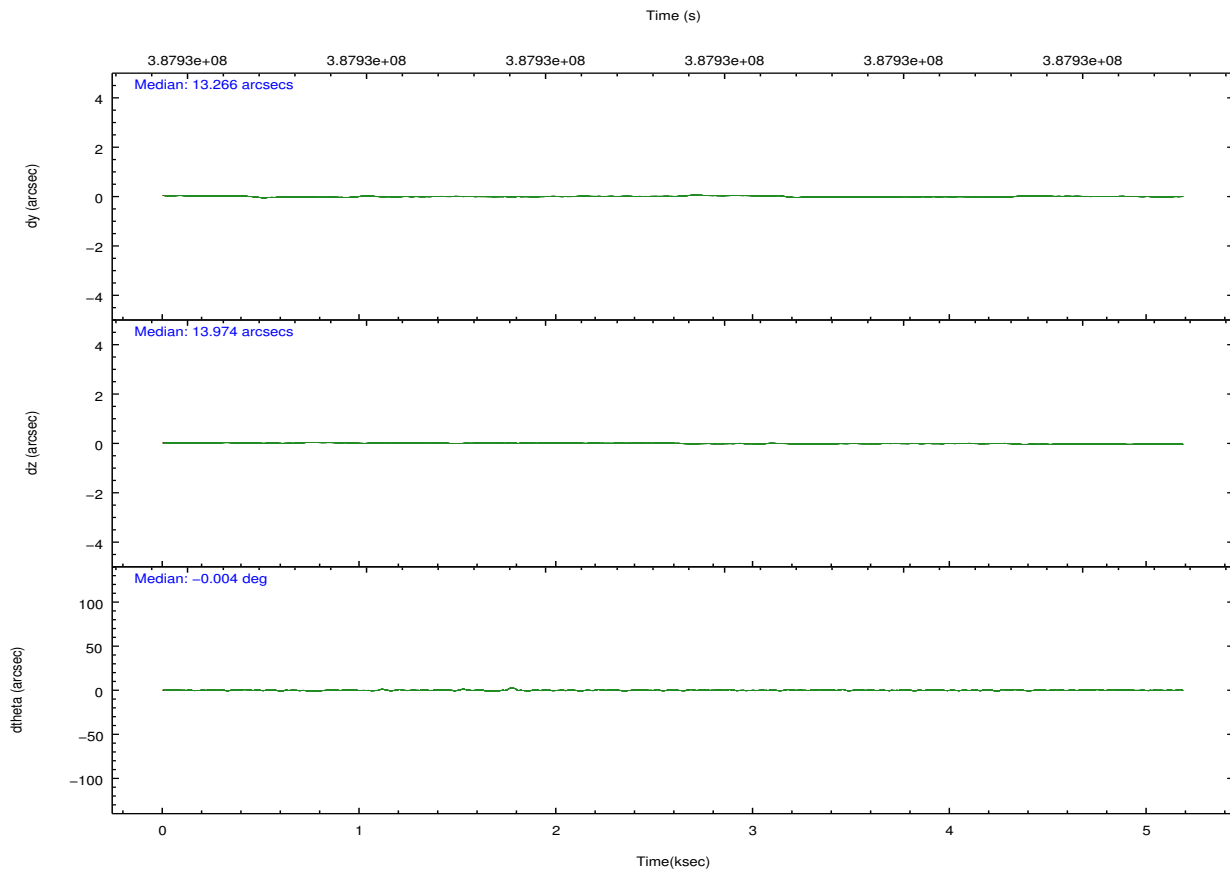
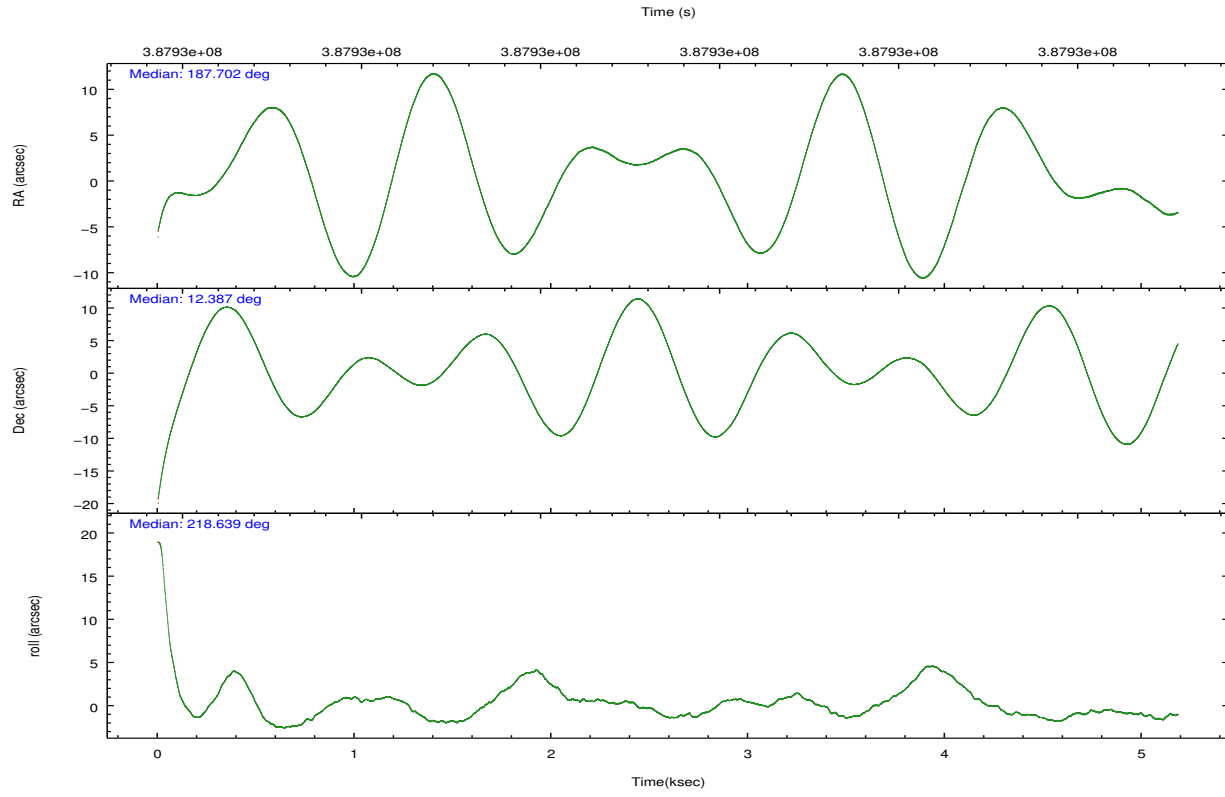


## 2.2 Compared Parameters

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	187.712338	187.7024832893075	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.412702	12.38702235946561	Subarray start row	449	449
[deg] Pointing Roll	218.485774	218.6445651105066	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)	387929307.184000	387928062.50504			
Observation start date	2010-04-17T22:07:21	2010-04-17T21:47:42			
[s] Observation end time (MET)	387934307.184000	387934531.79287			
Observation end date	2010-04-17T23:30:41	2010-04-17T23:35:31			
Read mode	TIMED	TIMED			

## 2.3 Aspect



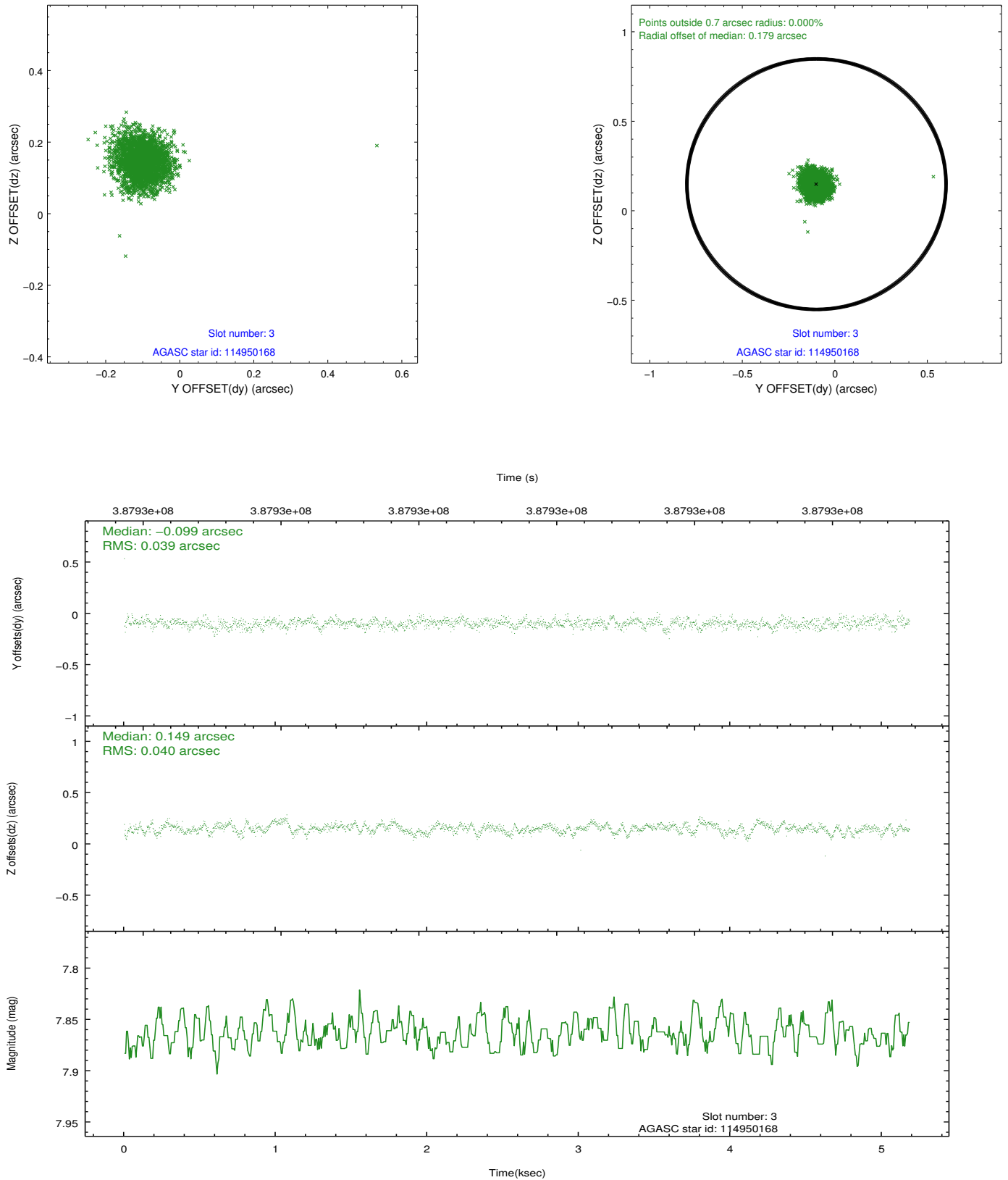


### Slot Statistics

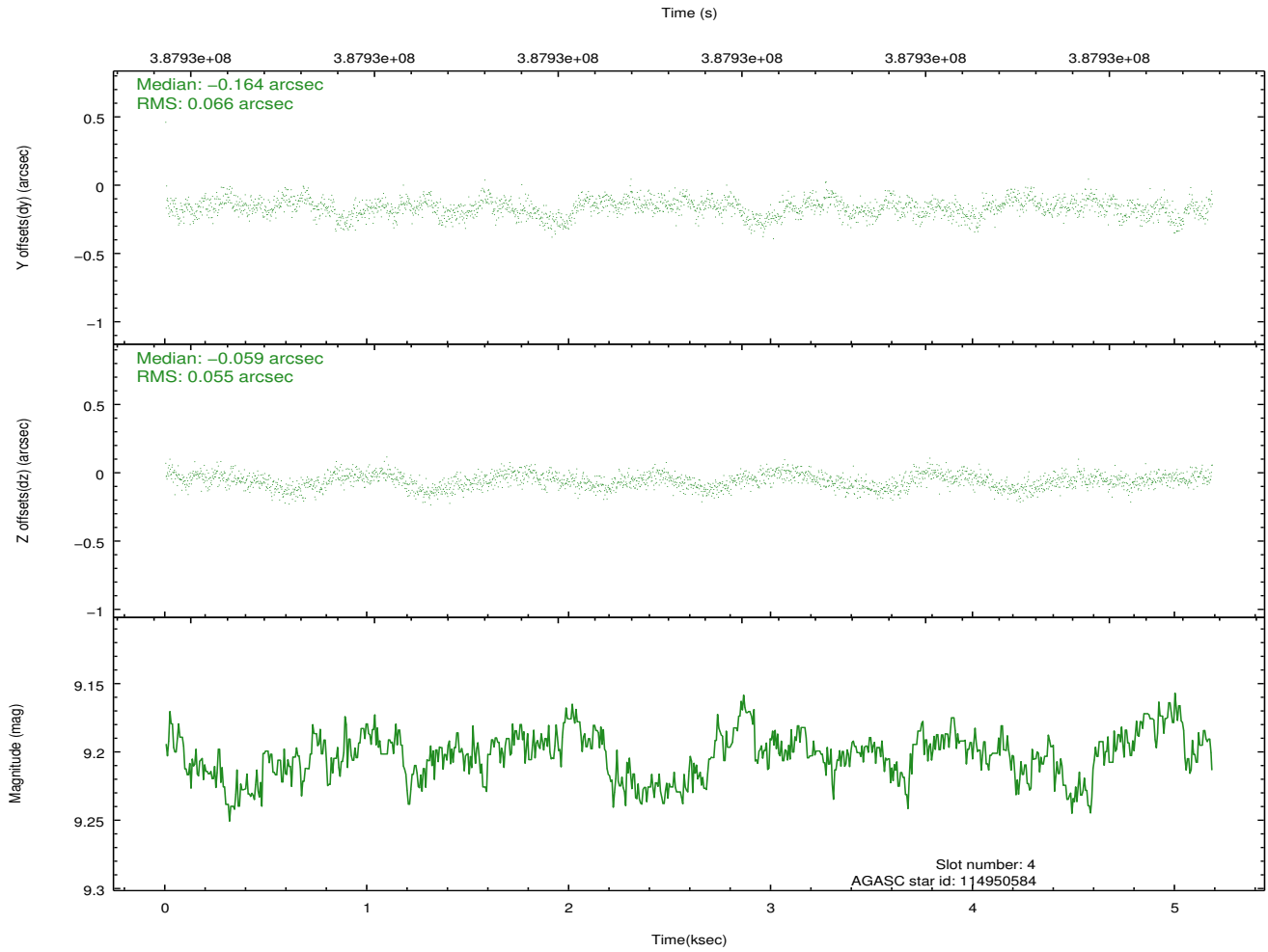
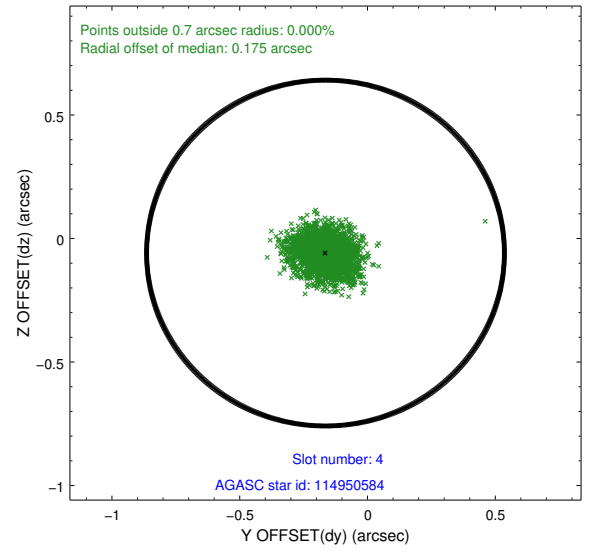
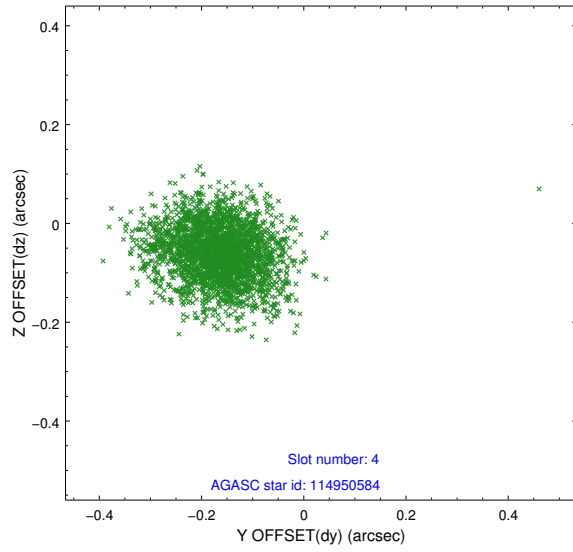
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.96	1265	-0.039	-0.055	0.006	0.011	0.000000	0.000000	-766.22	-1735.33
1	FID	ACIS-S-4	7.04	1265	0.170	0.034	0.006	0.010	0.000000	0.000000	2146.72	172.04
2	FID	ACIS-S-5	7.08	1265	-0.163	0.030	0.006	0.011	0.000000	0.000000	-1817.70	167.03
3	GUIDE	114950168	7.86	2529	-0.099	0.149	0.058	0.094	187.143398	12.117441	2227.83	-415.51
4	GUIDE	114950584	9.20	2528	-0.164	-0.059	0.090	0.148	187.487323	11.827248	1933.08	1155.77
5	GUIDE	114952792	9.50	2526	-0.040	-0.013	0.099	0.168	187.070263	12.344747	1920.03	-1215.66
6	GUIDE	114952824	8.59	2529	0.091	0.173	0.072	0.112	187.703904	12.486727	-141.31	-227.75
7	GUIDE	114955056	8.31	2528	0.217	-0.246	0.063	0.102	187.914001	12.127854	82.63	1243.58

## 2.4 Star Slots

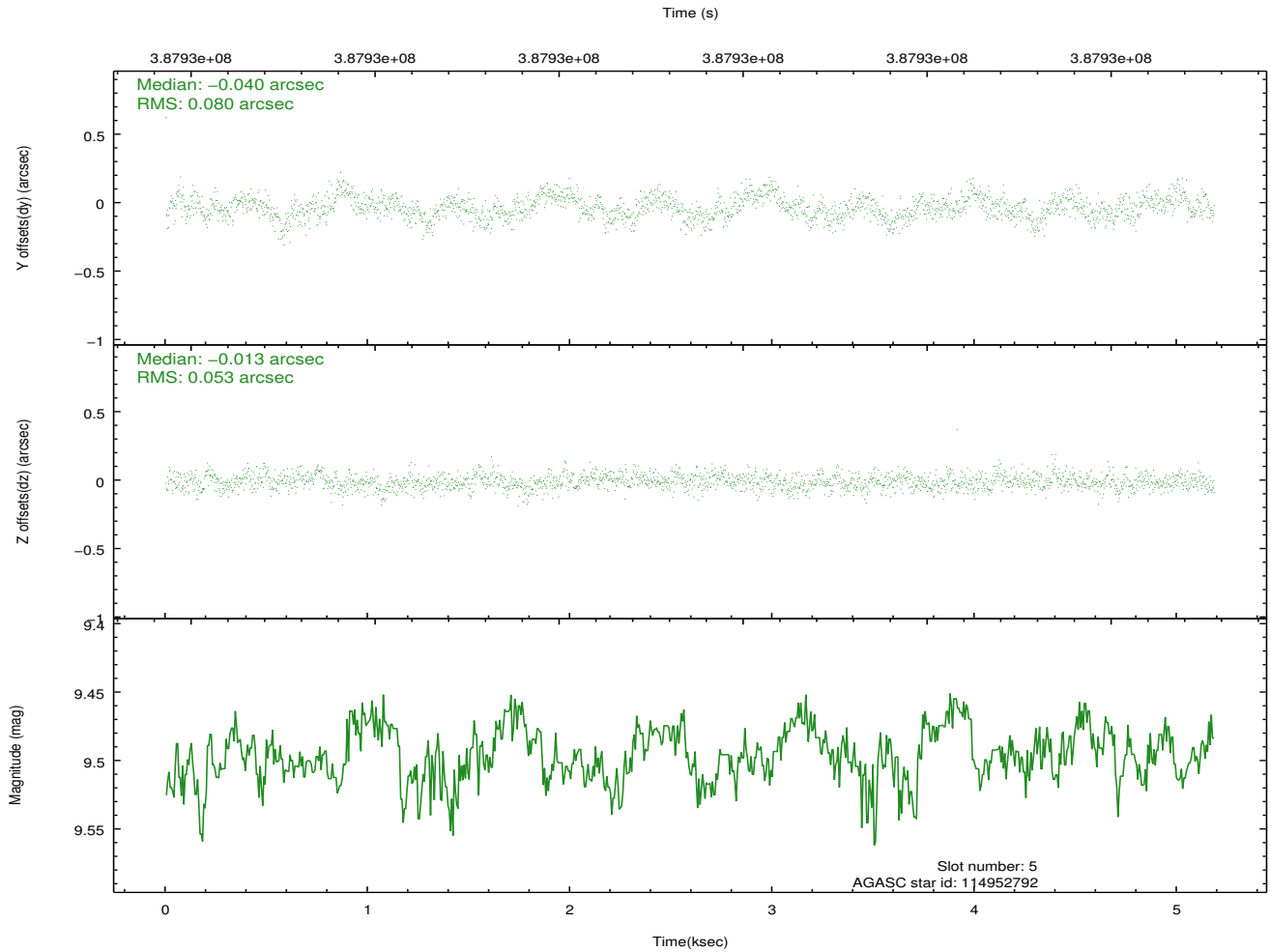
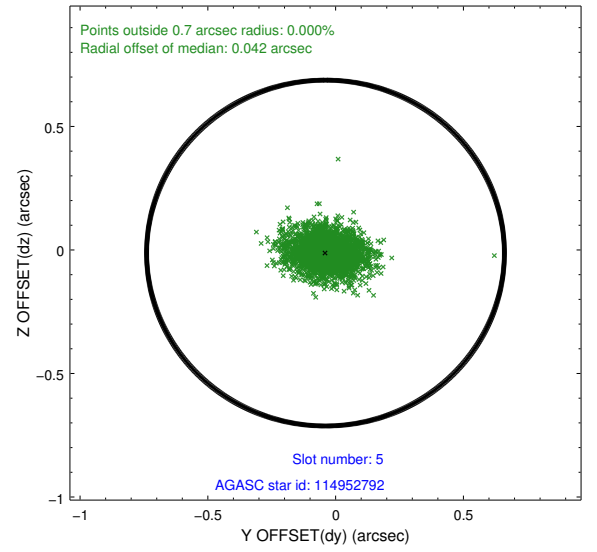
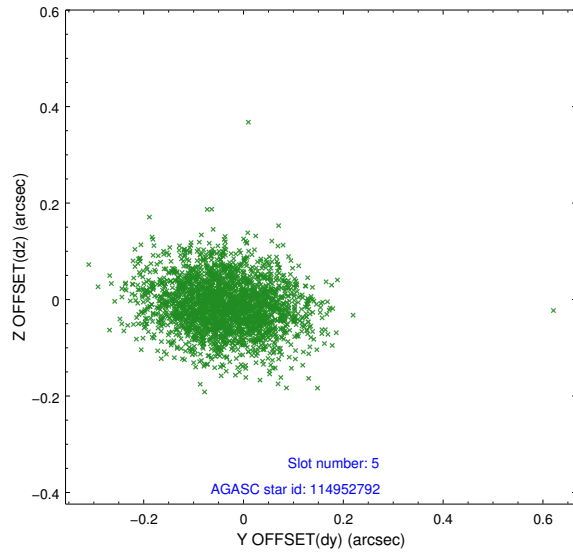
### 2.4.1 Slot 3



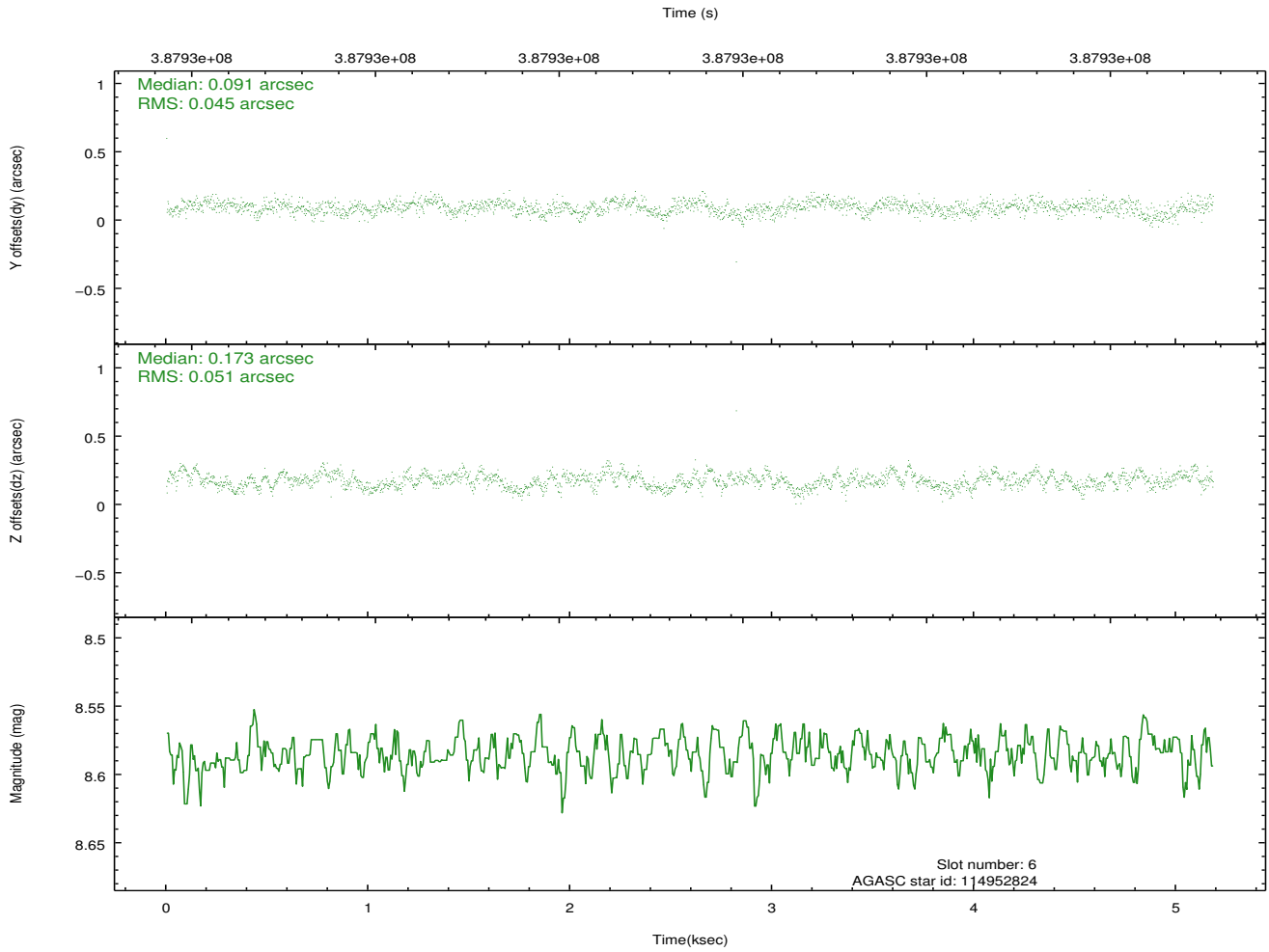
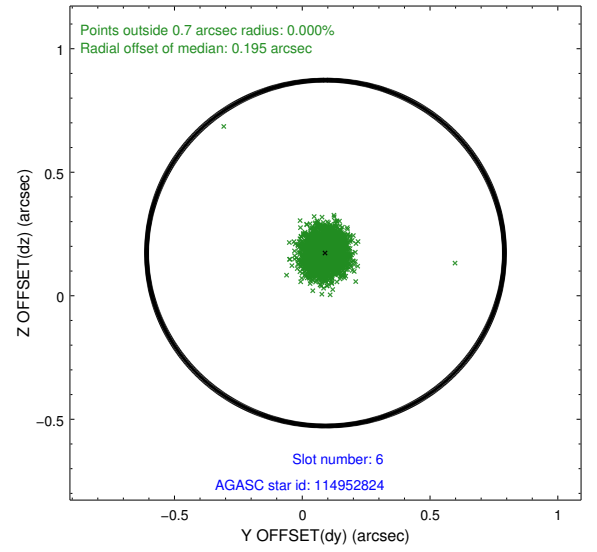
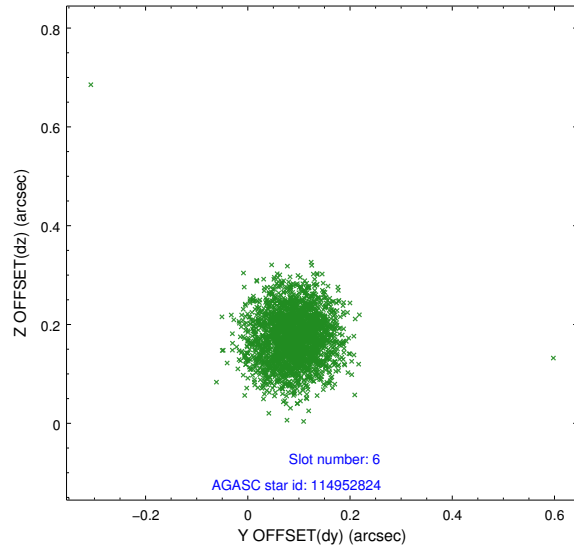
## 2.4.2 Slot 4



### 2.4.3 Slot 5

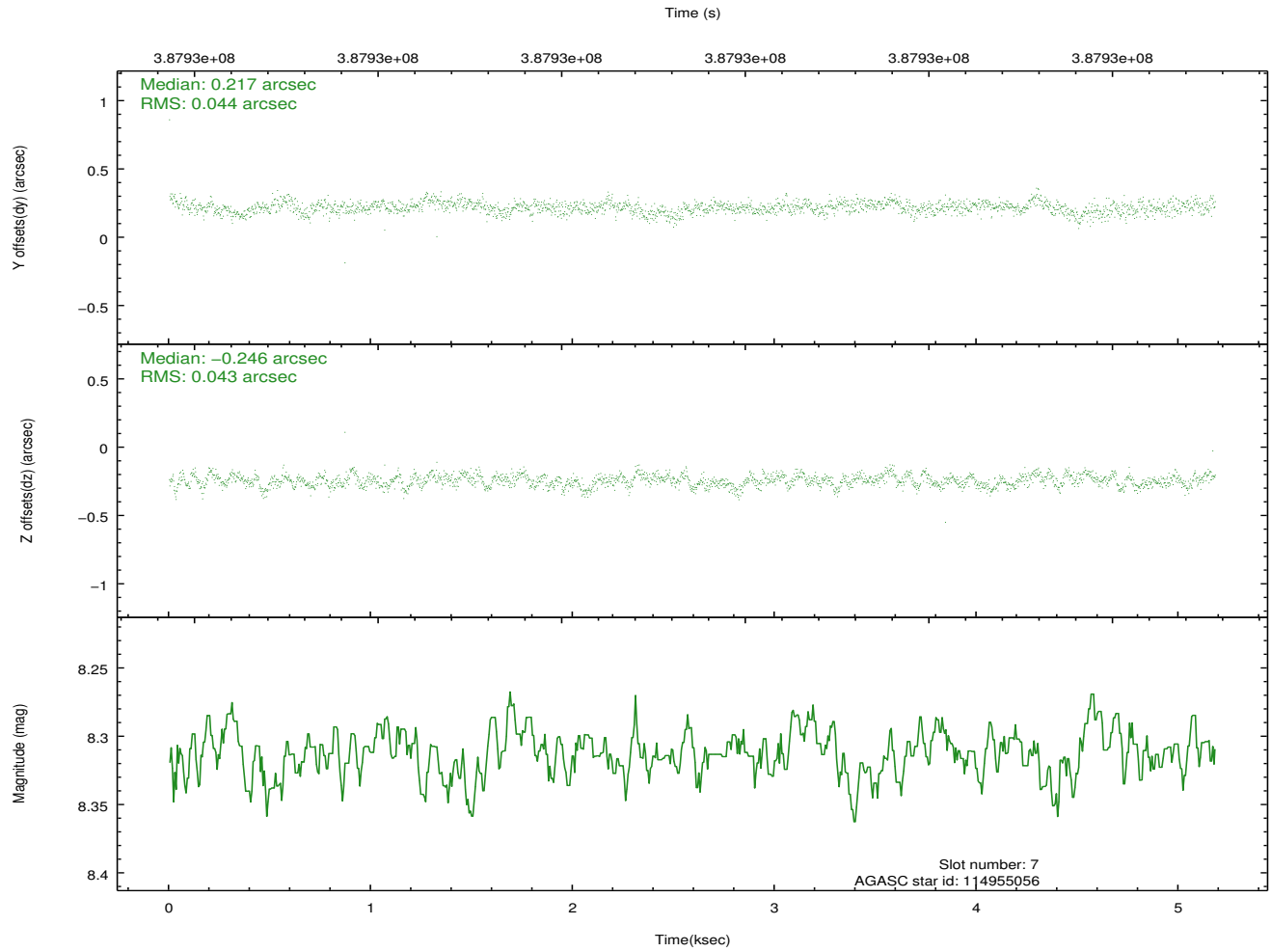
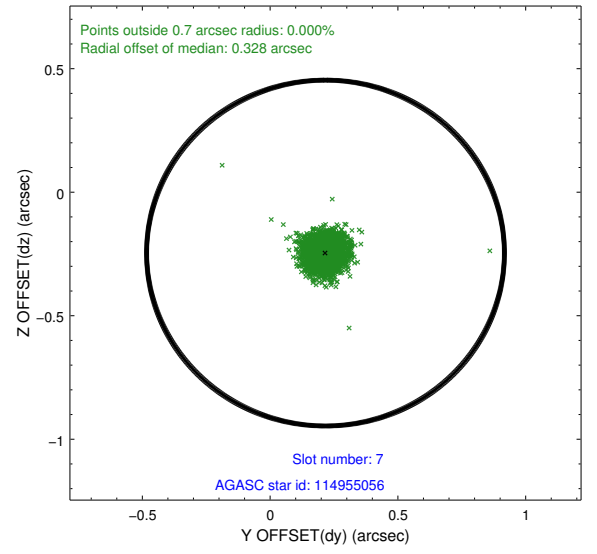
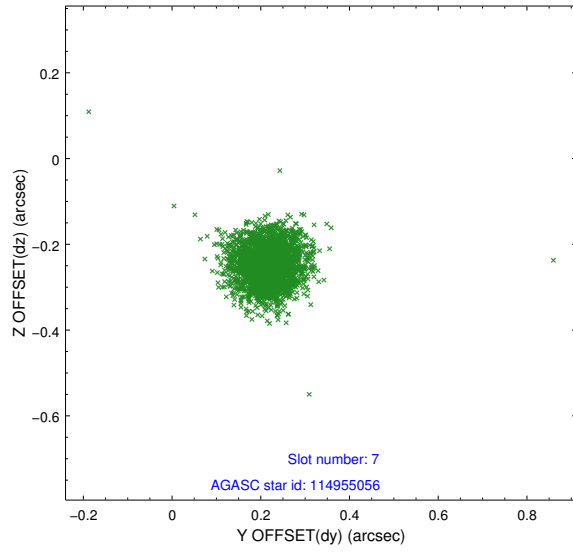


## 2.4.4 Slot 6



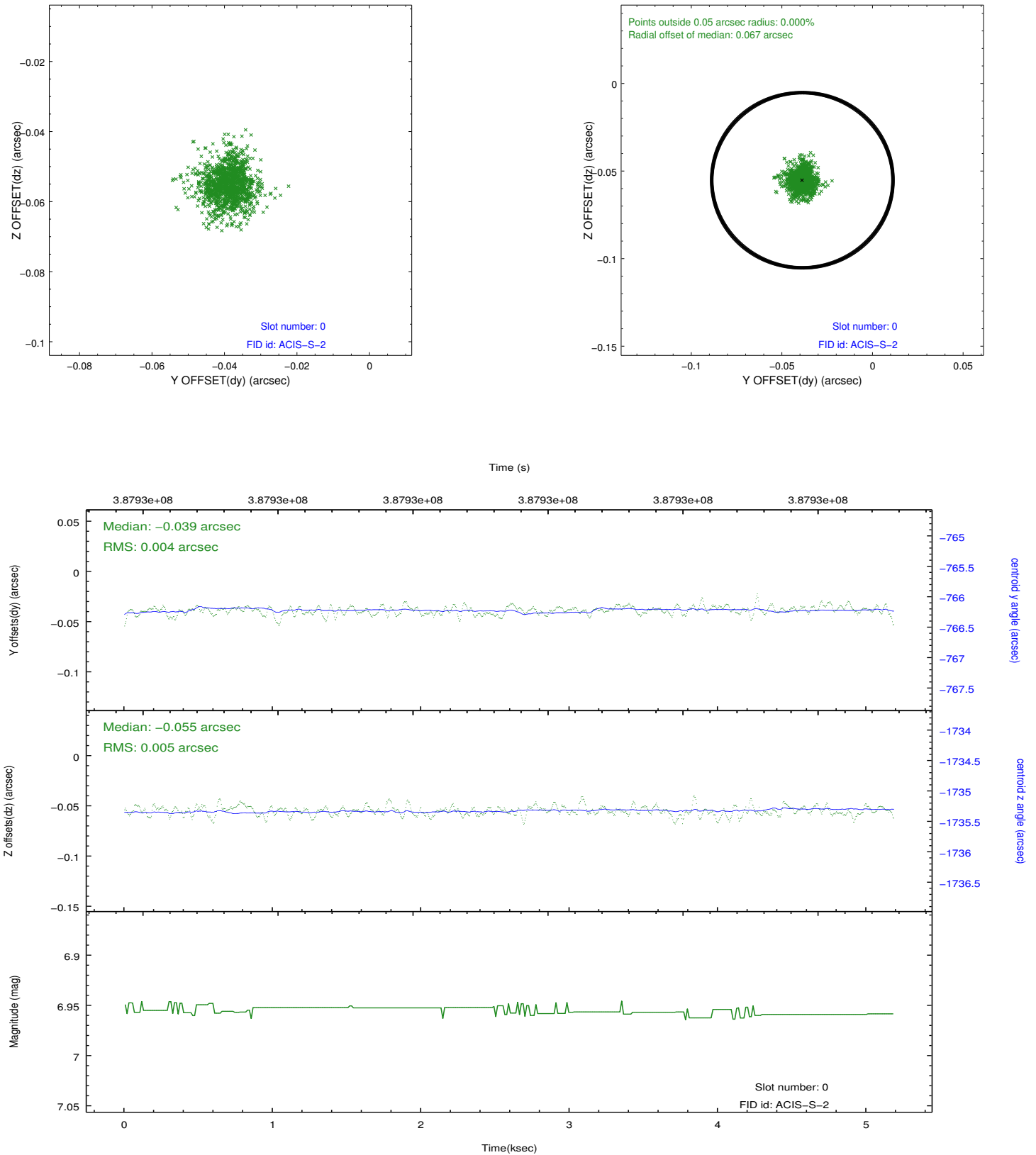


## 2.4.5 Slot 7

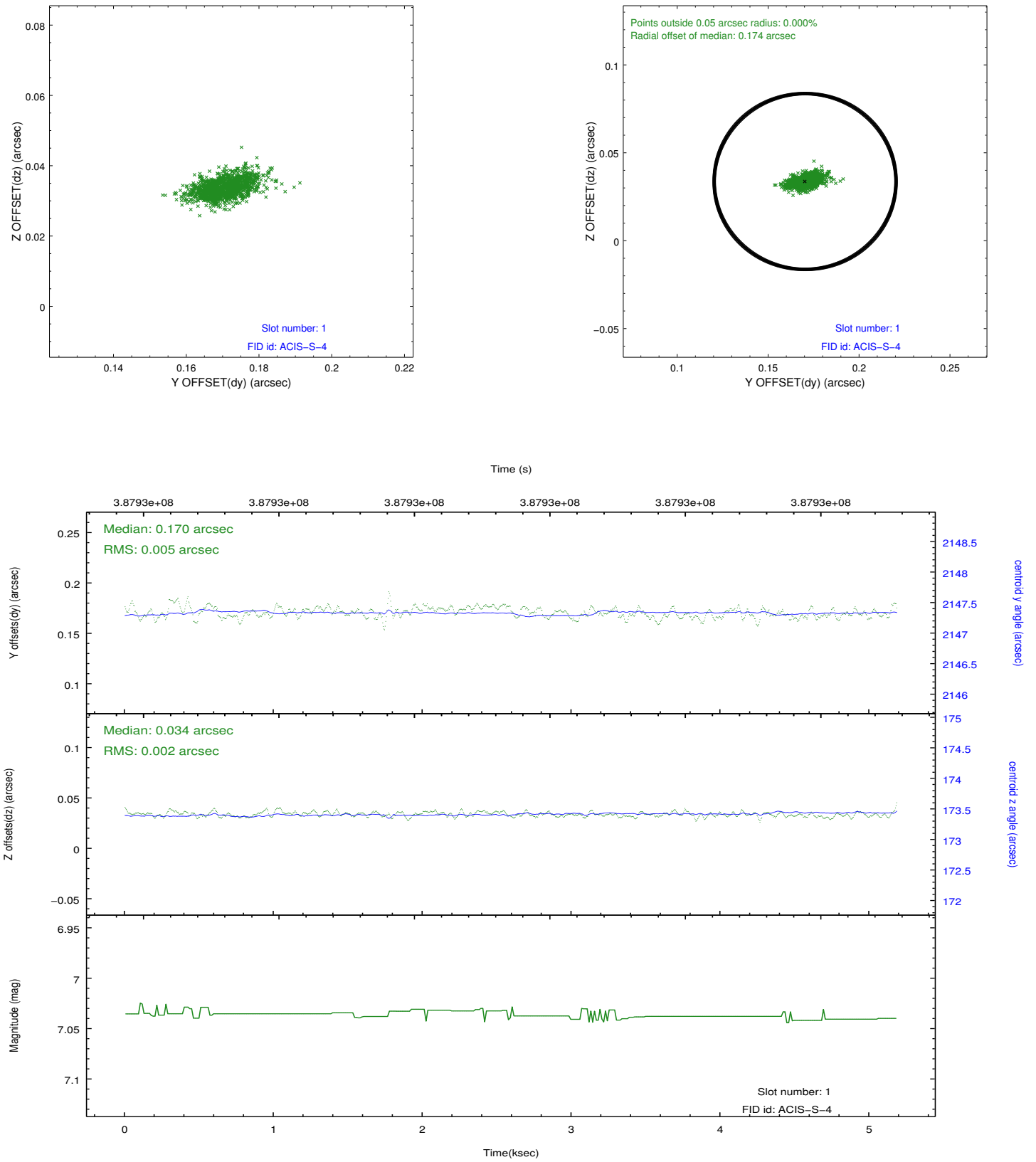


## 2.5 FID Slots

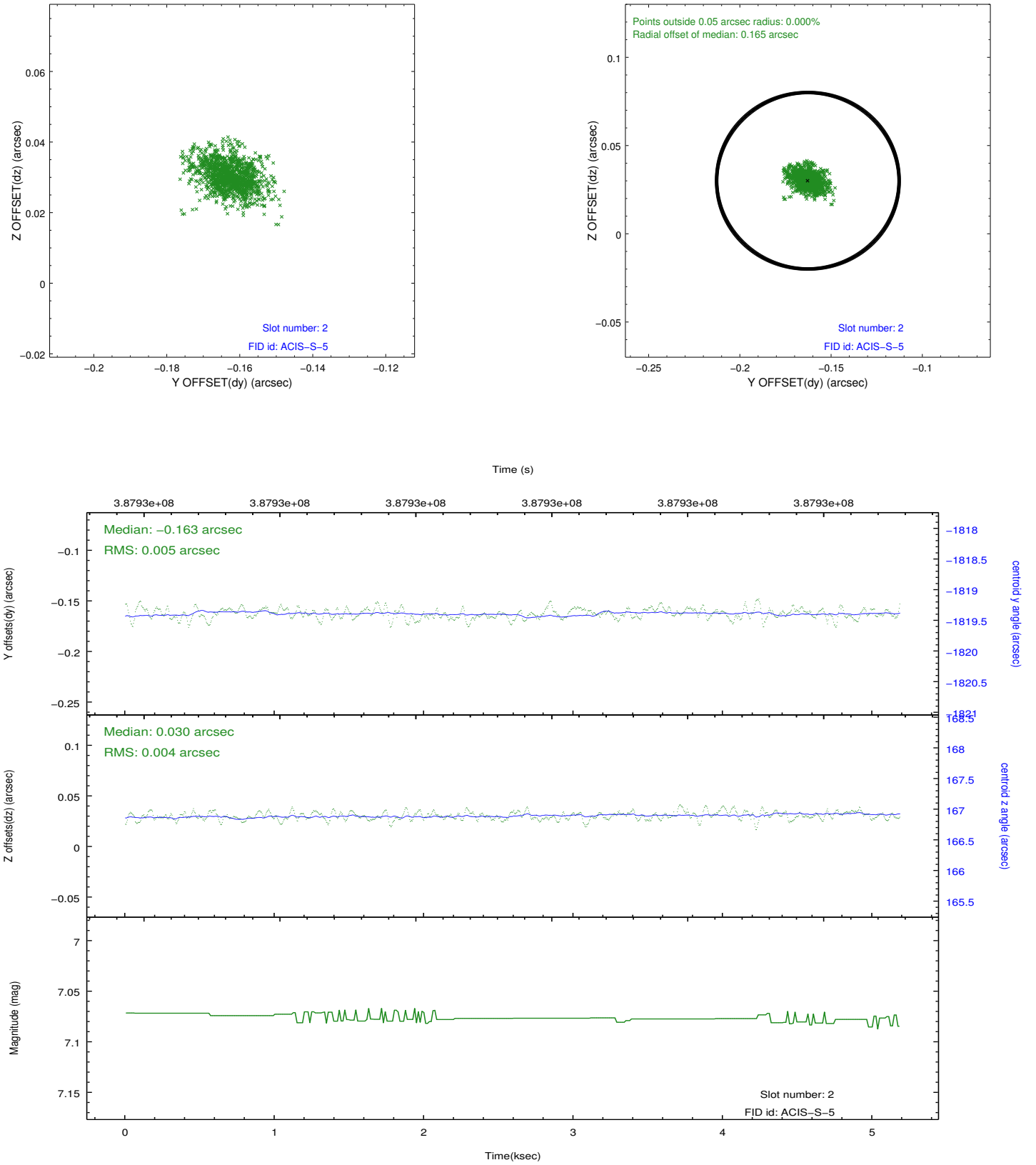
### 2.5.1 Slot 0



## 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	5.1815996911526

### A.2 Comments