

# V&V Reference Report

## L2 ASCDS Version : 8.2.1

Observation 1195 - L2 Version 3

Chandra X-Ray Center

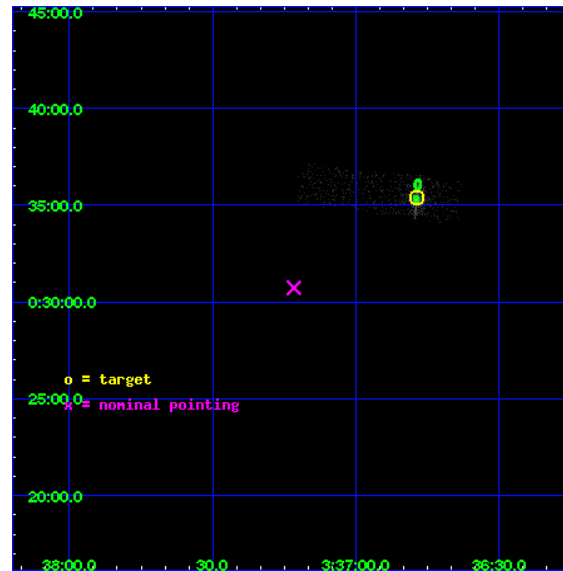
L2 Processing Date : Jan 13 2010

## 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
2.5	FID Slots . . . . .	13
2.5.1	Slot 0 . . . . .	13
2.5.2	Slot 1 . . . . .	14
2.5.3	Slot 2 . . . . .	15
<b>3</b>	<b>Point Sources</b>	<b>16</b>
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

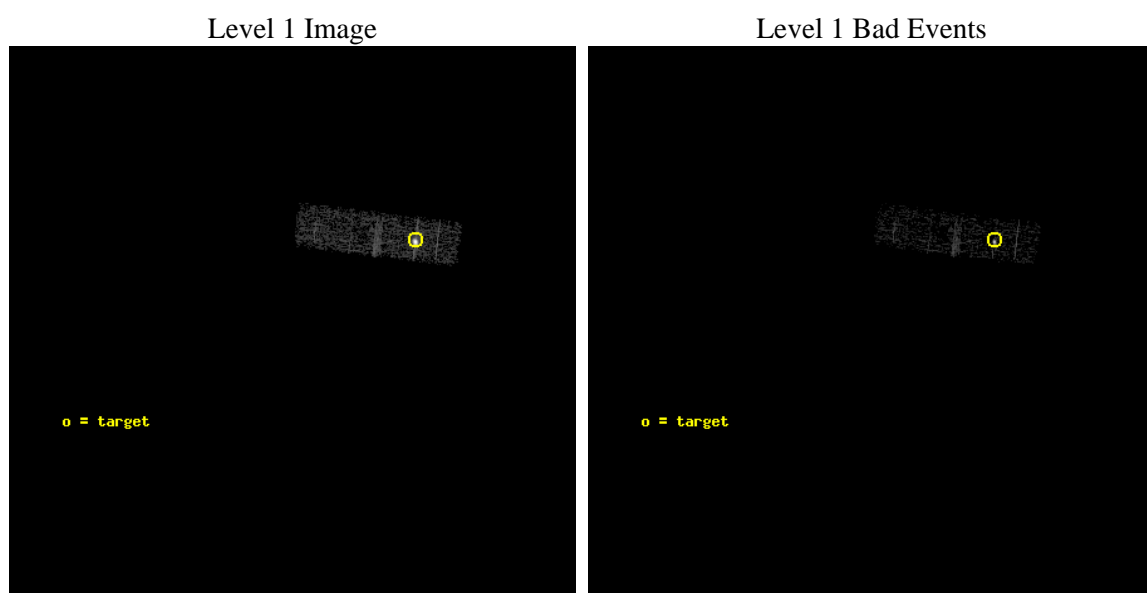
seq_num	280145	Sequence number
obs_id	1195	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	HR1099	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	54.197083	Observer's specified target RA
dec_targ	0.589972	Observer's specified target Dec
ra_nom	54.304219970807	Nominal RA
dec_nom	0.51218679138948	Nominal Dec
roll_nom	96.861427060526	Nominal Roll
revision	3	Processing version of data
ontime	1942.3266041726	Sum of GTIs [s]
livetime	1847.5474214521	Livetime [s]
ontime2	1942.3266041726	Sum of GTIs [s]
l2events	18604	Number of level 2 events



## 2 OBI

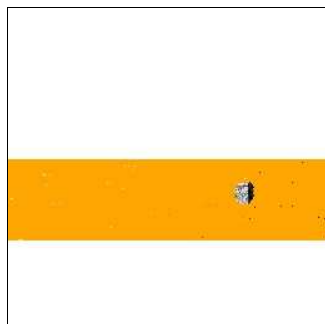
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 2



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	Scheduled observation exposure time
ascdsver	8.2.1	ASCDS version number	ontime	1942.3266041726	Sum of GTIs [s]
caldbver	4.1.5	&#160	ontime2	1942.3266041726	Sum of GTIs [s]
date	2010-01-13T07:30:17	Date and time of file creation	l1events	29204	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

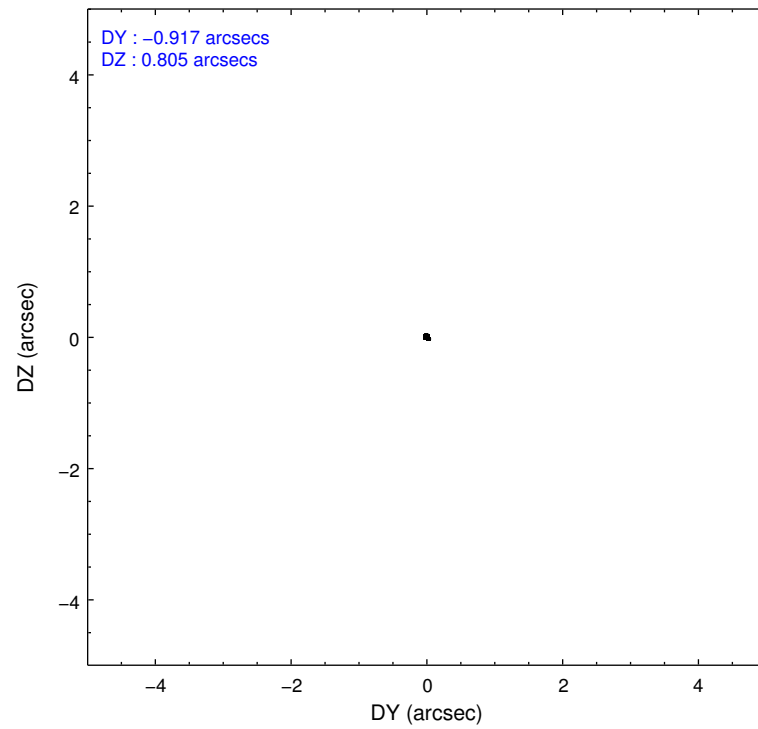
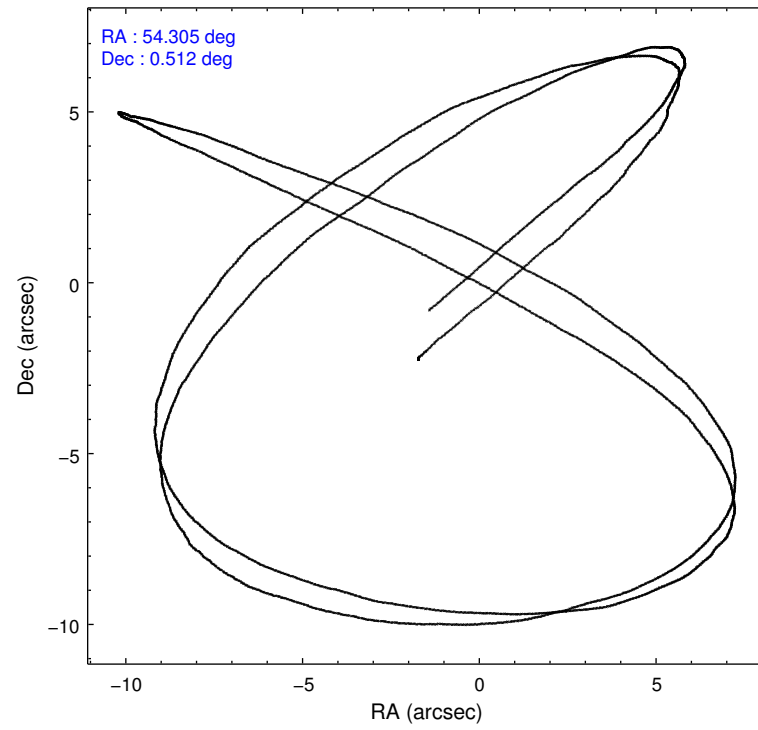
	<b>ccd 2</b>
level 1 events	29204
rejected events	9298
rejected %	31%

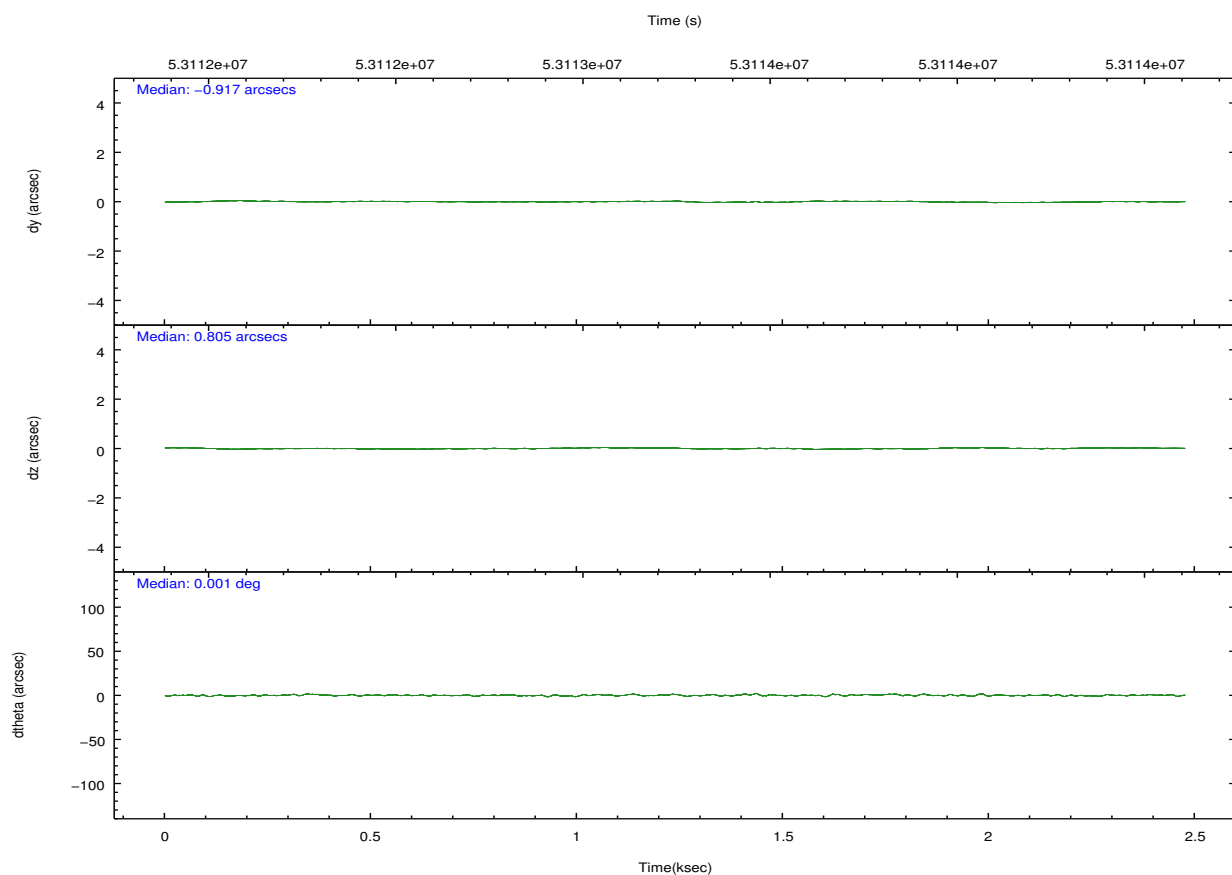
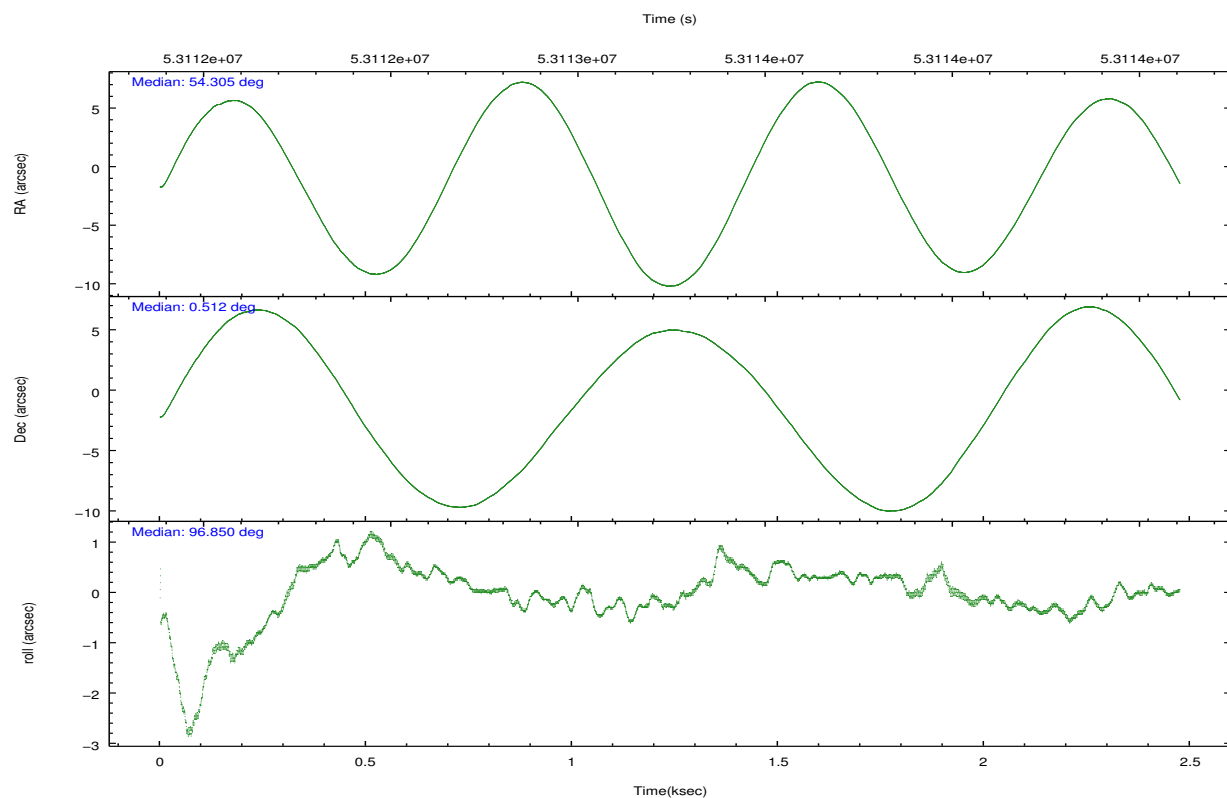
	<b>ccd 2</b>
grade 0 events	15141
	51%
grade 1 events	1249
	4%
grade 2 events	2446
	8%
grade 3 events	856
	2%
grade 4 events	869
	2%
grade 5 events	663
	2%
grade 6 events	613
	2%
grade 7 events	7367
	25%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-2	ACIS-2	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT_BIAS	FAINT_BIAS	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	54.320261	54.30421997080737	Subarray requested	CUSTOM	1/4
Pointing Dec	0.489226	0.5121867913894762	Subarray start row	284	284
Pointing Roll	96.652590	96.86142706052632	Subarray row count	256	256
SIM focus pos (mm)	-0.782348	-0.7809083437167272	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001439871863259334	Primary exposure time	0.000000	0.8
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	53112487.184000	53111820.908175			
Observation start date	1999-09-07T17:27:03	1999-09-07T17:17:00			
Observation end time	53114487.184000	53115374.070803			
Observation end date	1999-09-07T18:00:23	1999-09-07T18:16:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect





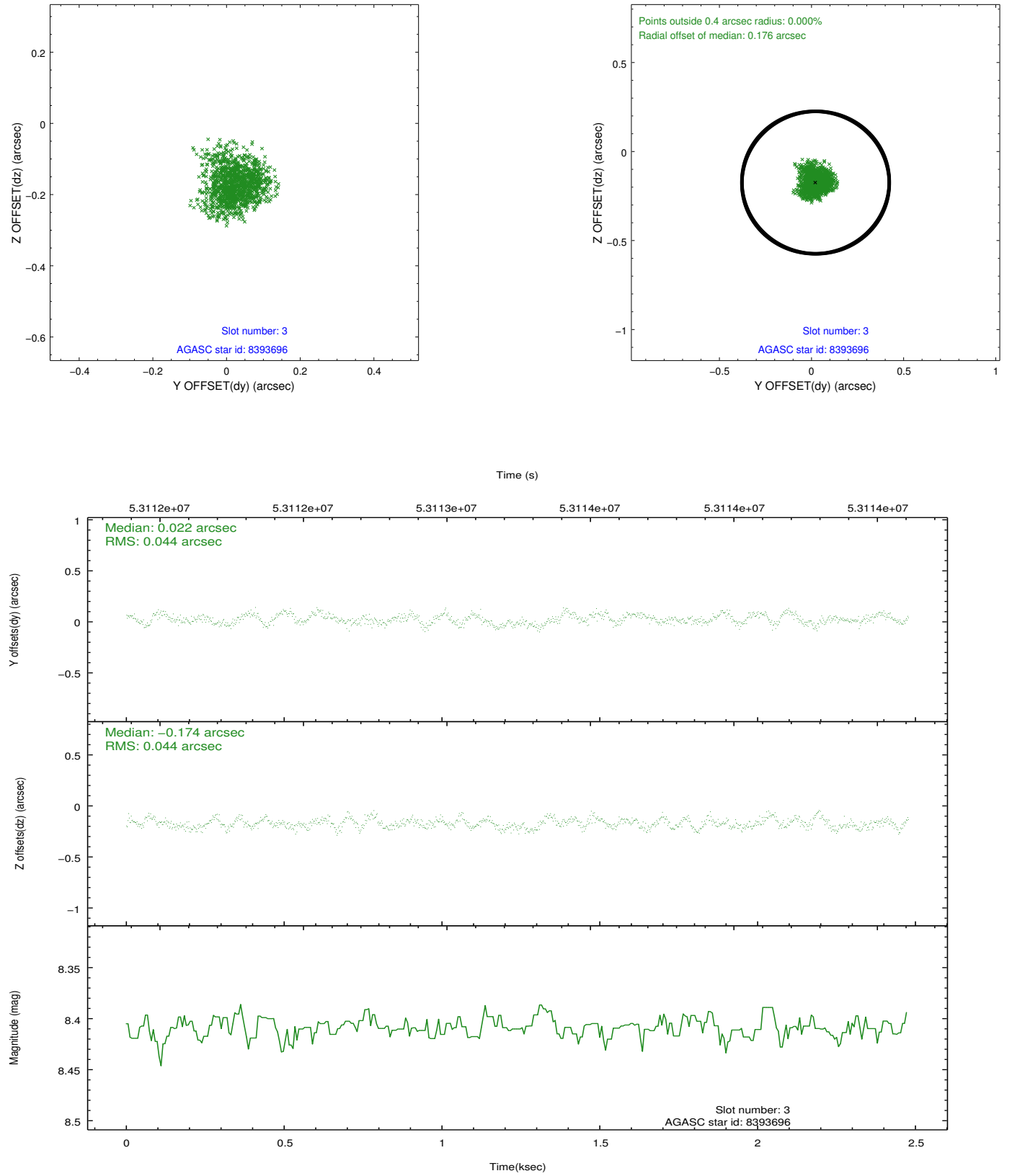
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	1208	-0.042	0.040	0.009	0.017	0.000000	0.000000	-753.45	-830.31
1	FID	ACIS-I-4	7.23	1209	0.125	0.021	0.006	0.011	0.000000	0.000000	2160.34	1075.06
2	FID	ACIS-I-5	7.23	1209	-0.184	0.007	0.009	0.015	0.000000	0.000000	-1805.71	1074.53
3	GUIDE	8393696	8.41	1209	0.022	-0.174	0.066	0.106	53.645666	0.680479	964.35	2333.17
4	GUIDE	8398800	8.69	1209	0.012	-0.018	0.056	0.096	54.242352	0.922024	1580.28	101.16
5	GUIDE	8390744	9.02	1208	-0.050	-0.051	0.071	0.112	53.677290	0.926294	1831.42	2117.88
6	GUIDE	8395104	8.66	1208	0.011	0.245	0.054	0.087	54.744893	0.796520	923.10	-1643.34
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

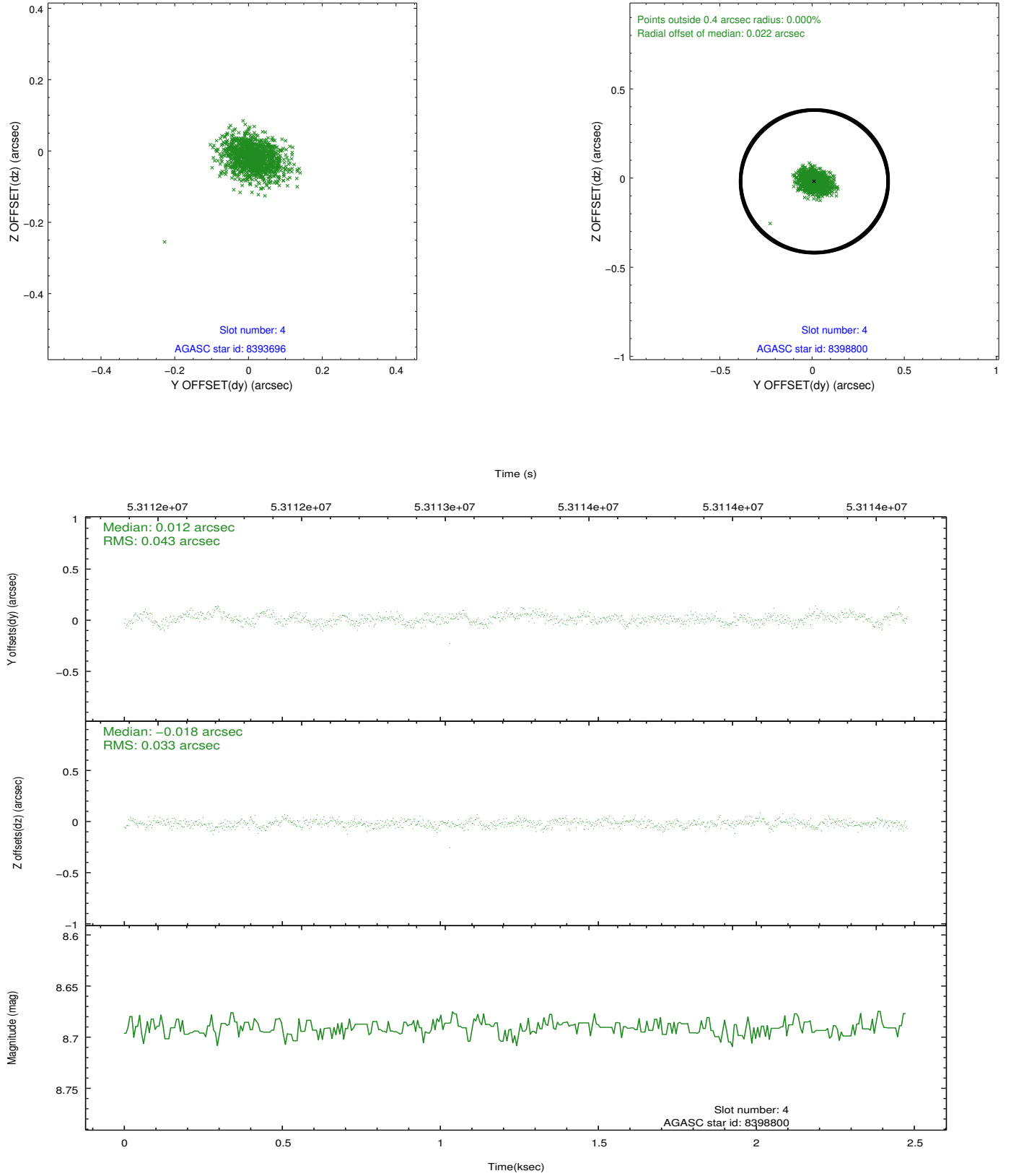


## 2.4 Star Slots

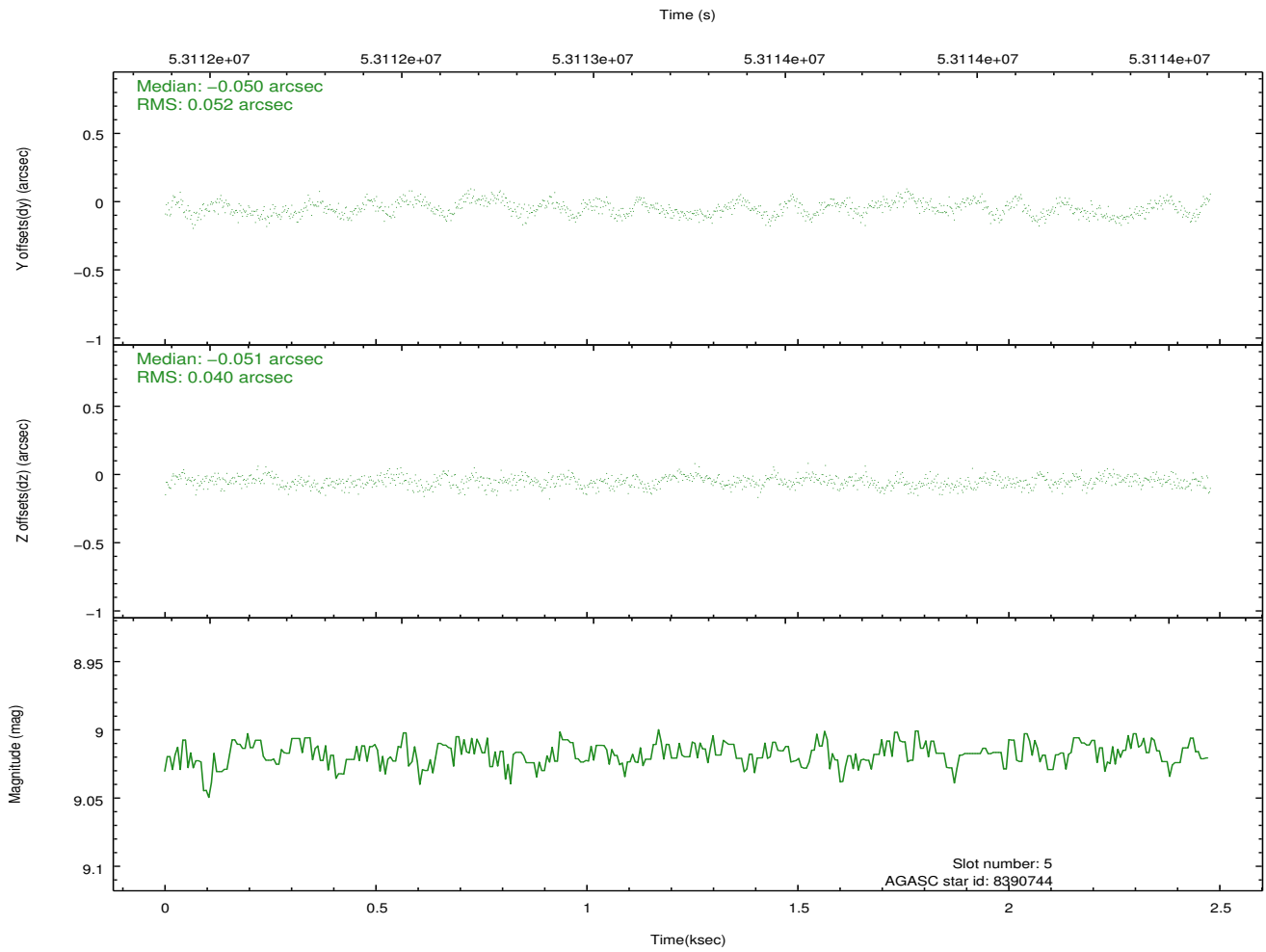
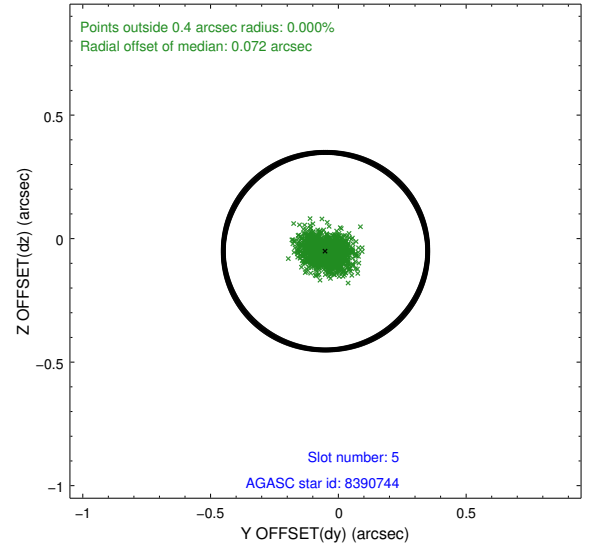
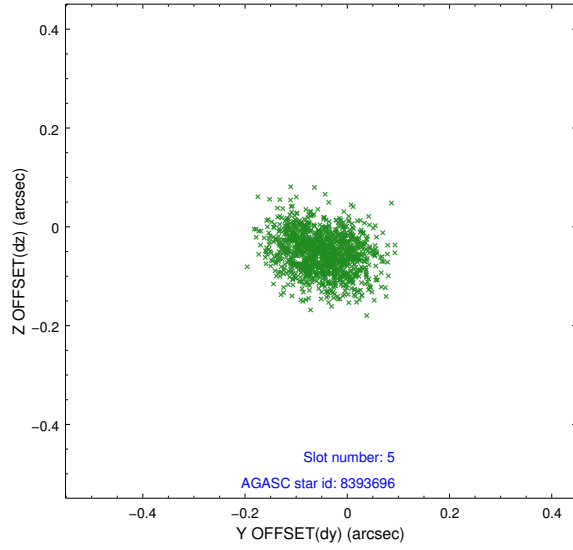
### 2.4.1 Slot 3



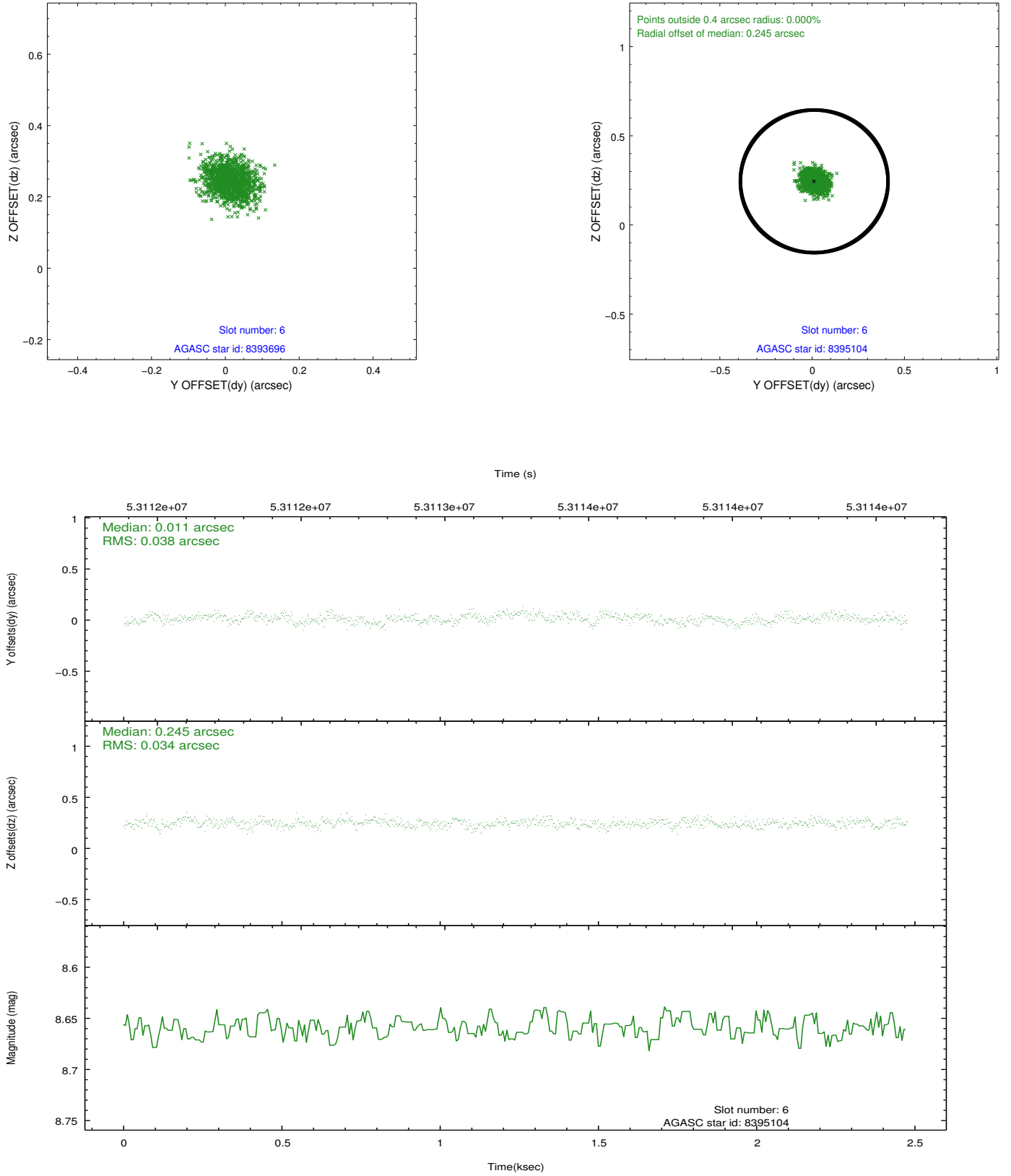
## 2.4.2 Slot 4



### 2.4.3 Slot 5

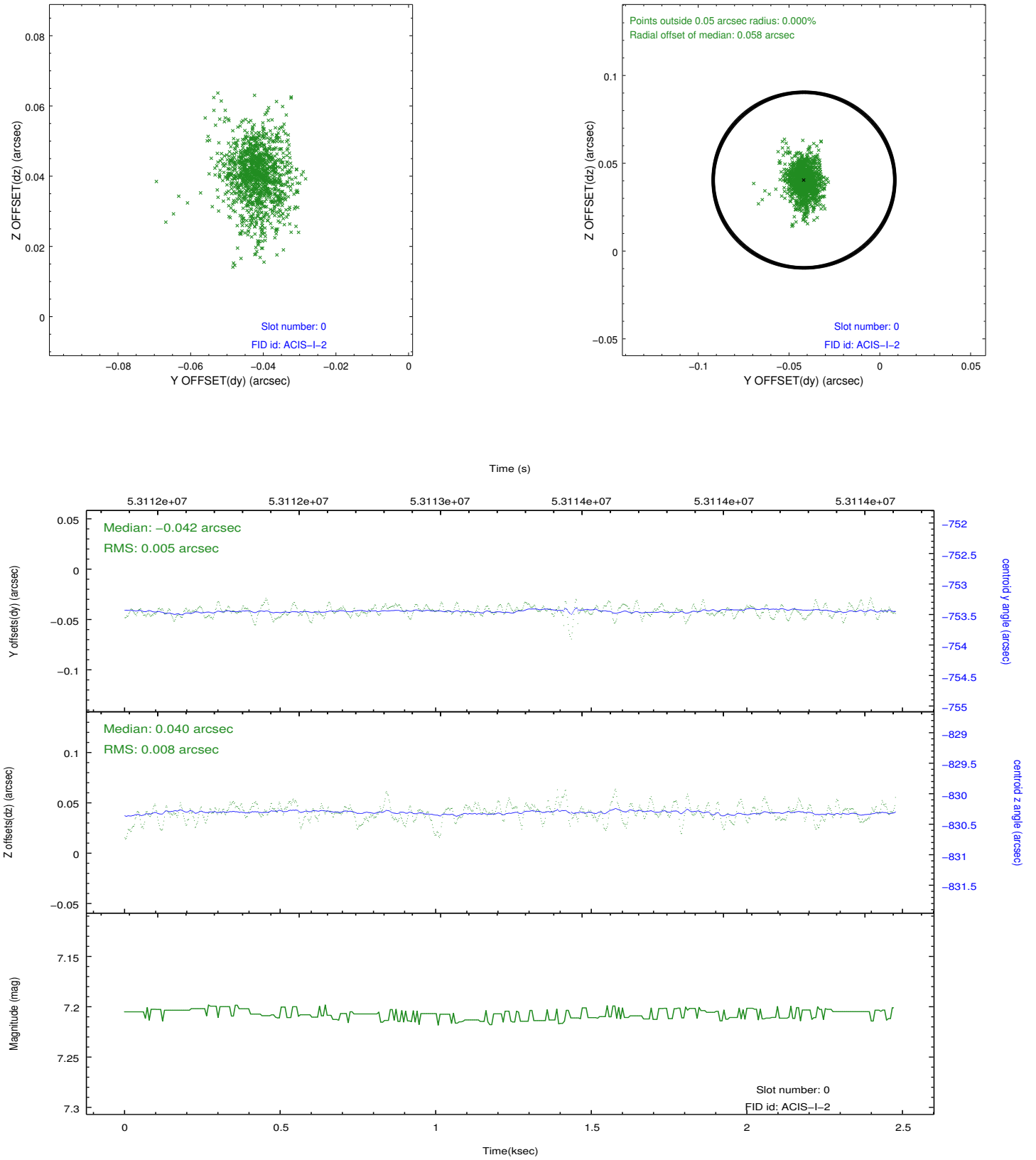


## 2.4.4 Slot 6

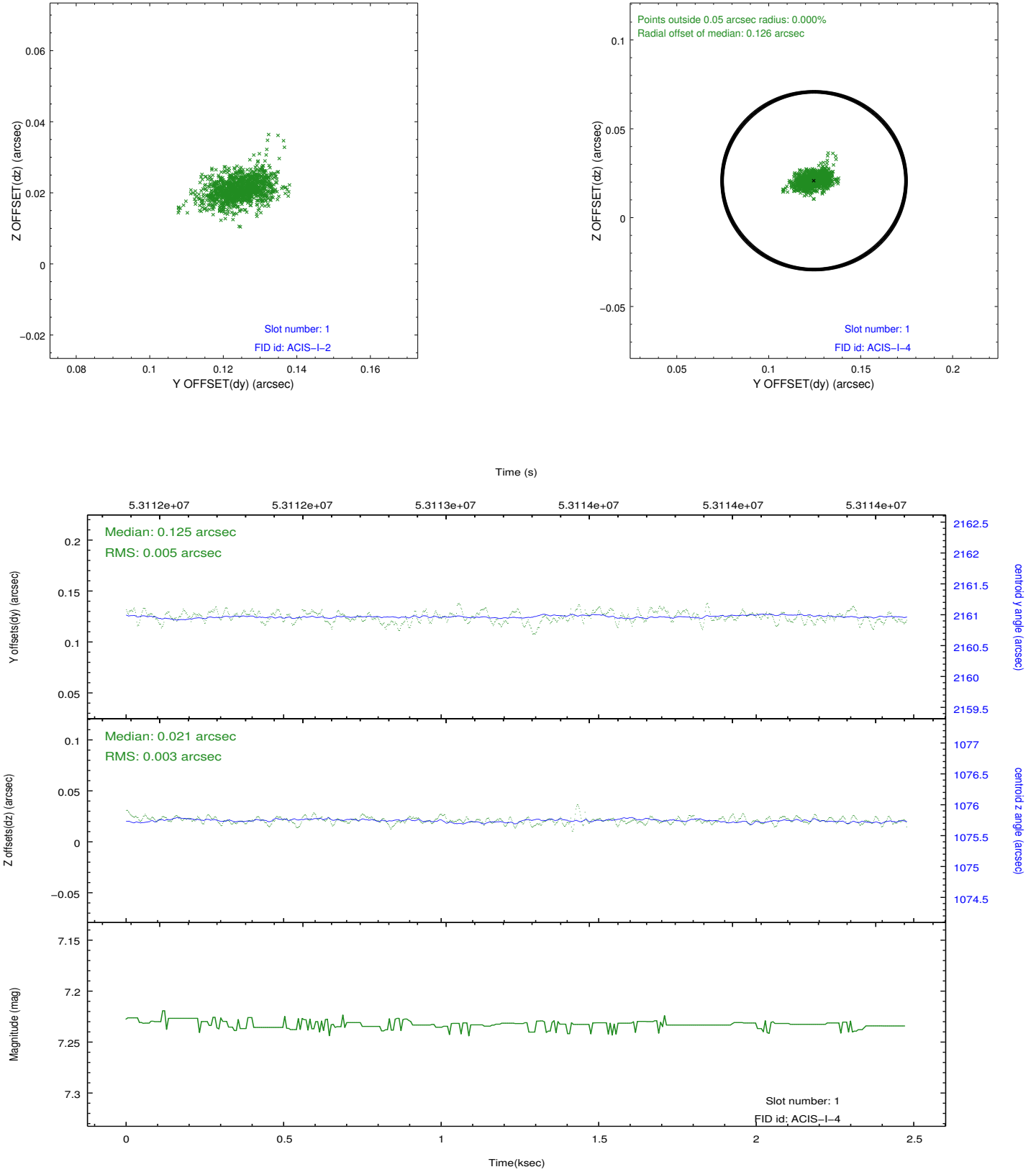


## 2.5 FID Slots

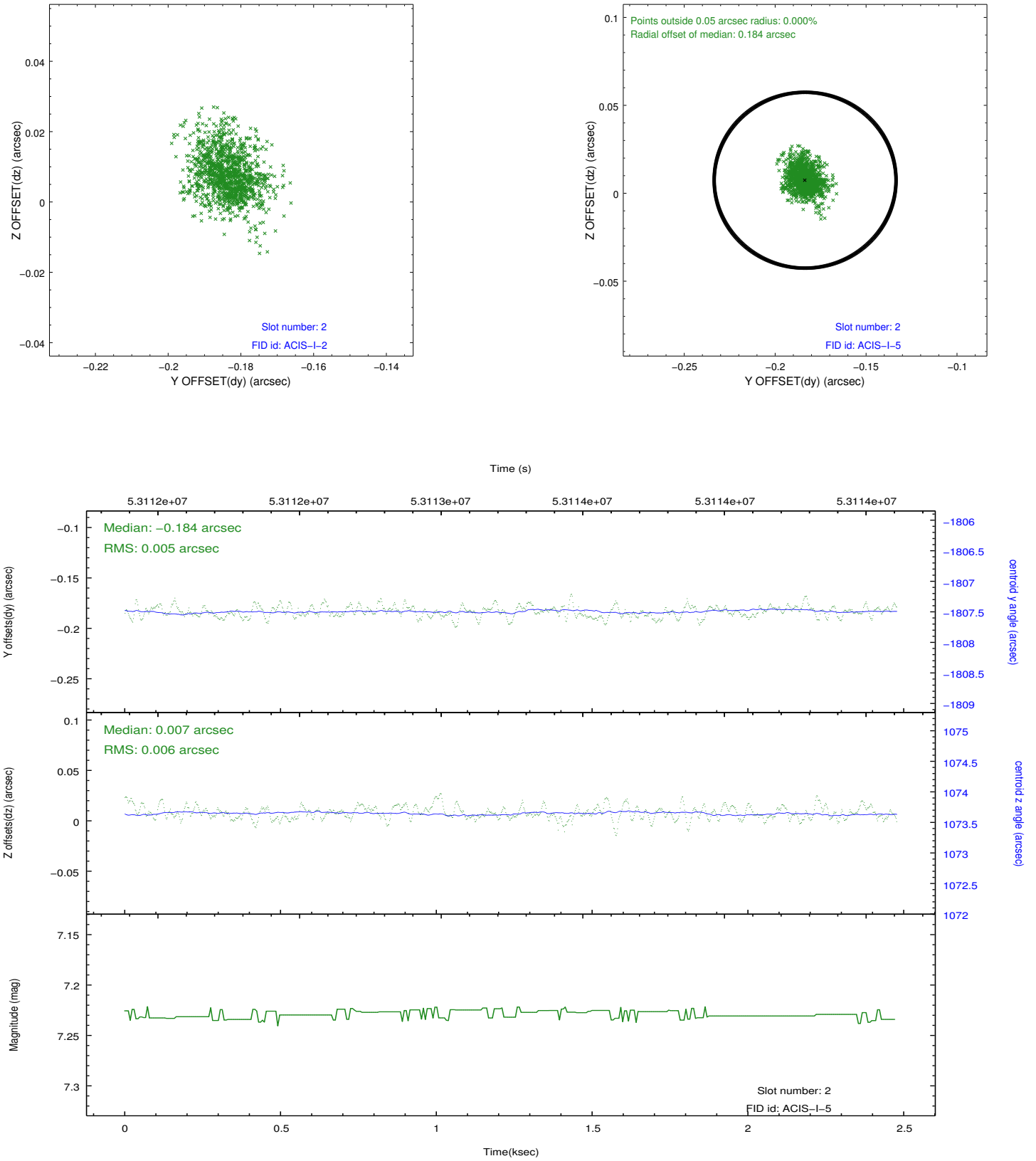
### 2.5.1 Slot 0



## 2.5.2 Slot 1

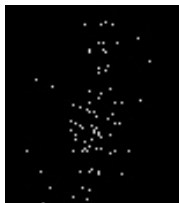


### 2.5.3 Slot 2



### 3 Point Sources

8.40 arcmin





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.942

## A.2 Comments

ACIS very off-axis PSF and effective area measurement on chip I2.

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Slot 7 was not utilized in this observation.

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The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T\_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.