

# V&V Reference Report

## L2 ASCDS Version : 8.2.1

Observation 1108 - L2 Version 3

Chandra X-Ray Center

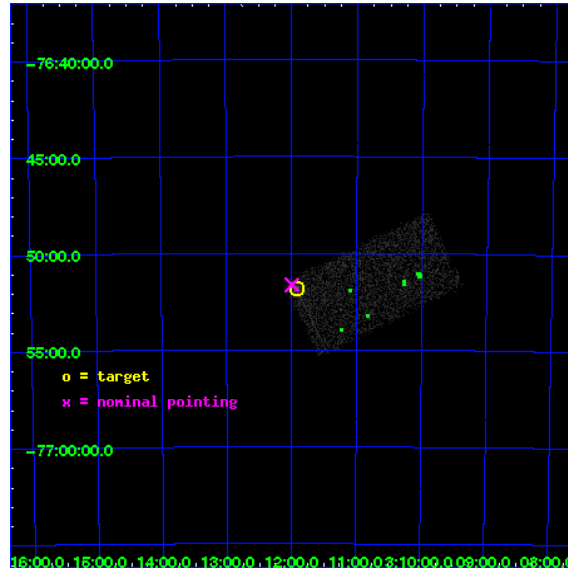
L2 Processing Date : Jan 13 2010

## 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
2.4.5	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>3</b>	<b>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18

# 1 Front

seq_num	780058	Sequence number
obs_id	1108	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0312-770	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	47.98	Observer's specified target RA
dec_targ	-76.864167	Observer's specified target Dec
ra_nom	47.998824566987	Nominal RA
dec_nom	-76.86059821743	Nominal Dec
roll_nom	64.027971855854	Nominal Roll
revision	3	Processing version of data
ontime	13871.432381347	Sum of GTIs [s]
livetime	13502.017191001	Livetime [s]
ontime3	13871.432381347	Sum of GTIs [s]
l2events	12692	Number of level 2 events

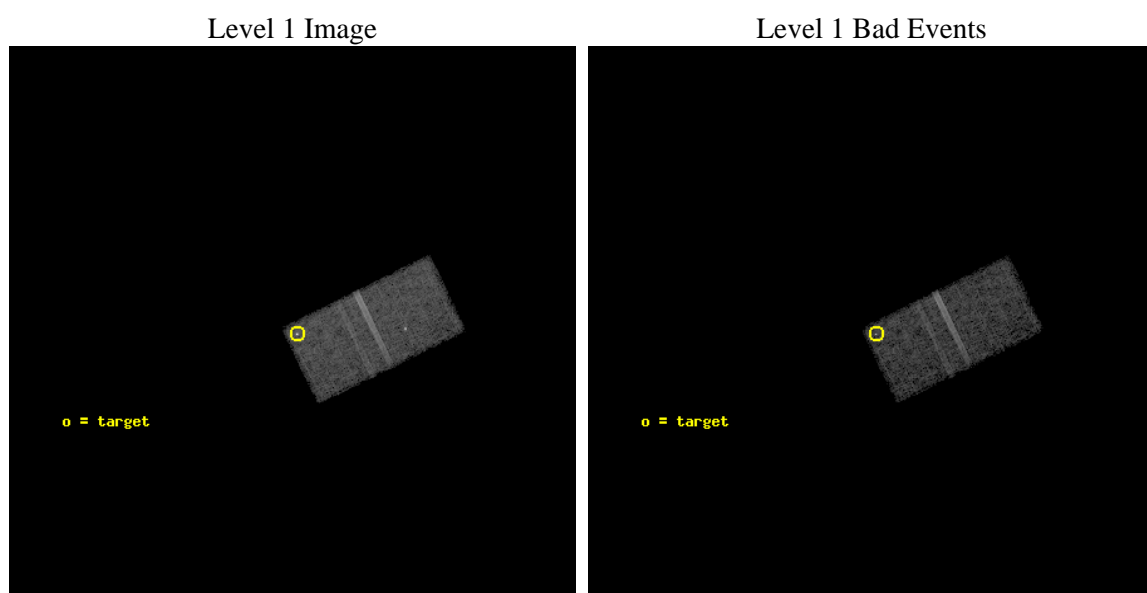




## 2 OBI

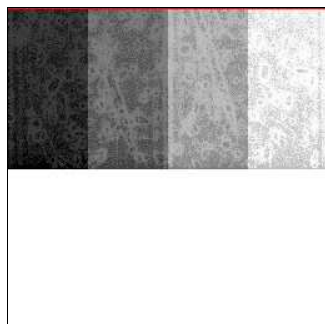
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 3



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	Scheduled observation exposure time
ascdsver	8.2.1	ASCDS version number	ontime	13871.432381347	Sum of GTIs [s]
caldbver	4.1.5	&#160	ontime3	13871.432381347	Sum of GTIs [s]
date	2010-01-13T08:37:52	Date and time of file creation	ll events	89995	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

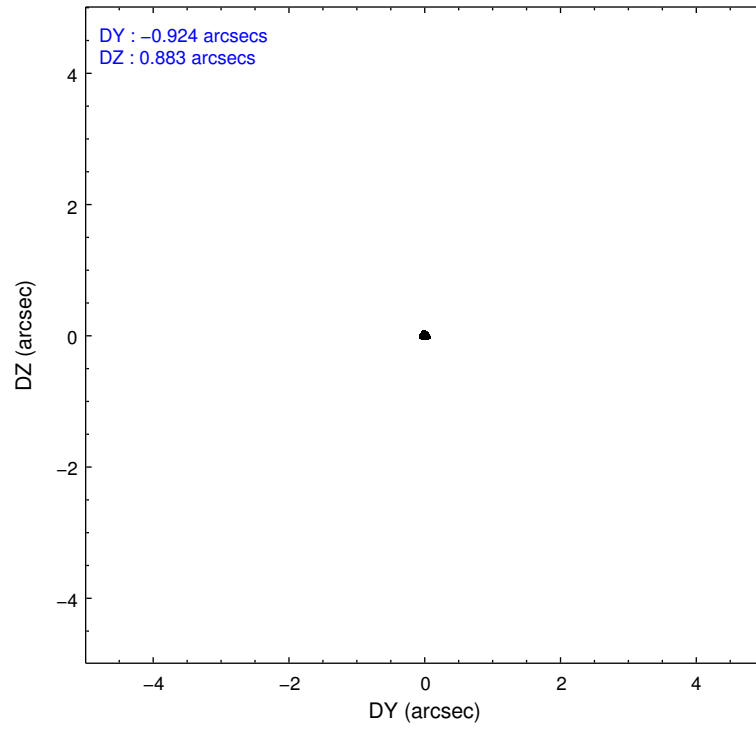
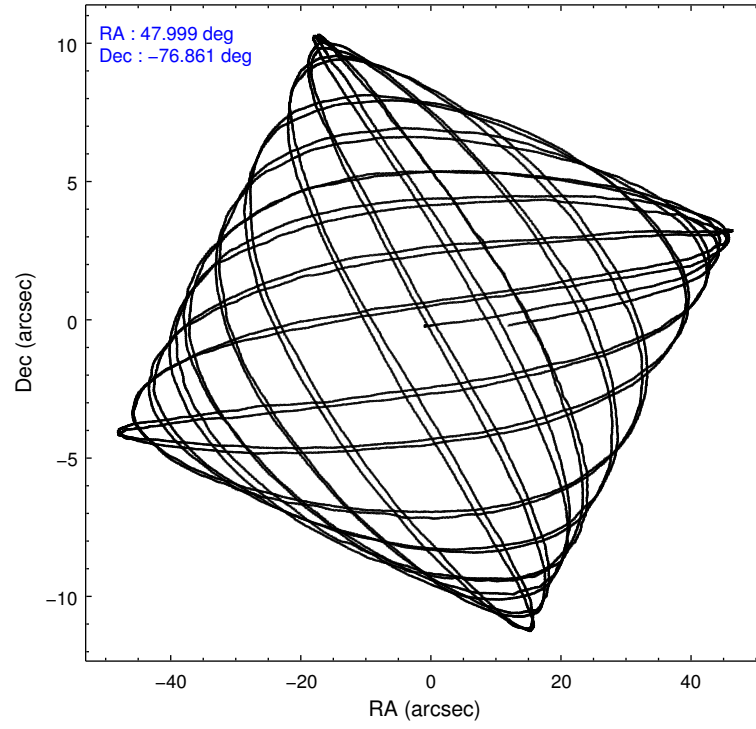
	<b>ccd 3</b>
level 1 events	89995
rejected events	76356
rejected %	84%

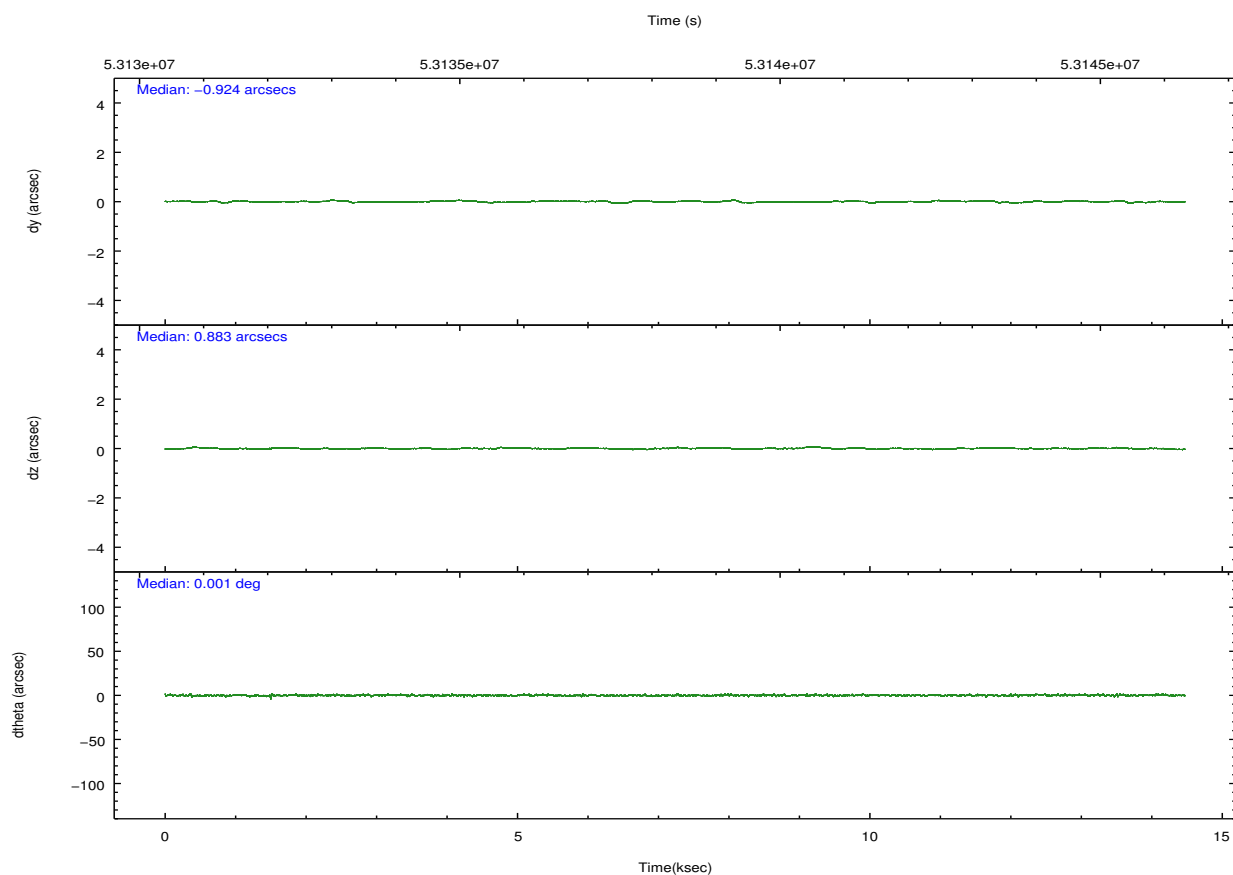
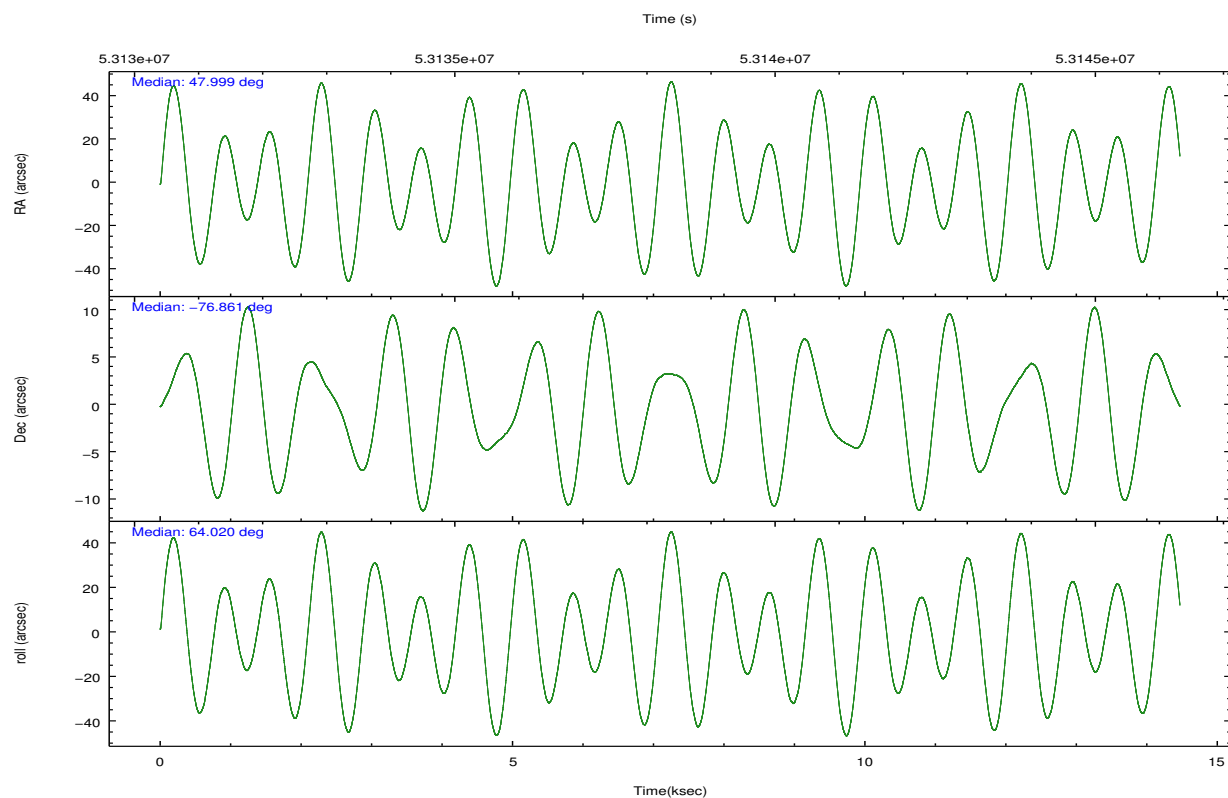
	<b>ccd 3</b>
grade 0 events	6046
	6%
grade 1 events	290
	0%
grade 2 events	3543
	3%
grade 3 events	1084
	1%
grade 4 events	1073
	1%
grade 5 events	1775
	1%
grade 6 events	1897
	2%
grade 7 events	74287
	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-3	ACIS-3	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	48.004373	47.99882456698678	Subarray requested	CUSTOM	1/2
Pointing Dec	-76.888423	-76.86059821742992	Subarray start row	512	512
Pointing Roll	63.824683	64.02797185585405	Subarray row count	512	512
SIM focus pos (mm)	-0.782348	-0.7809083437167272	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001439871863259334	Primary exposure time	0.000000	1.5
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	53131593.184000	53130927.421361			
Observation start date	1999-09-07T22:45:29	1999-09-07T22:35:27			
Observation end time	53145593.184000	53145727.909392			
Observation end date	1999-09-08T02:38:49	1999-09-08T02:42:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect



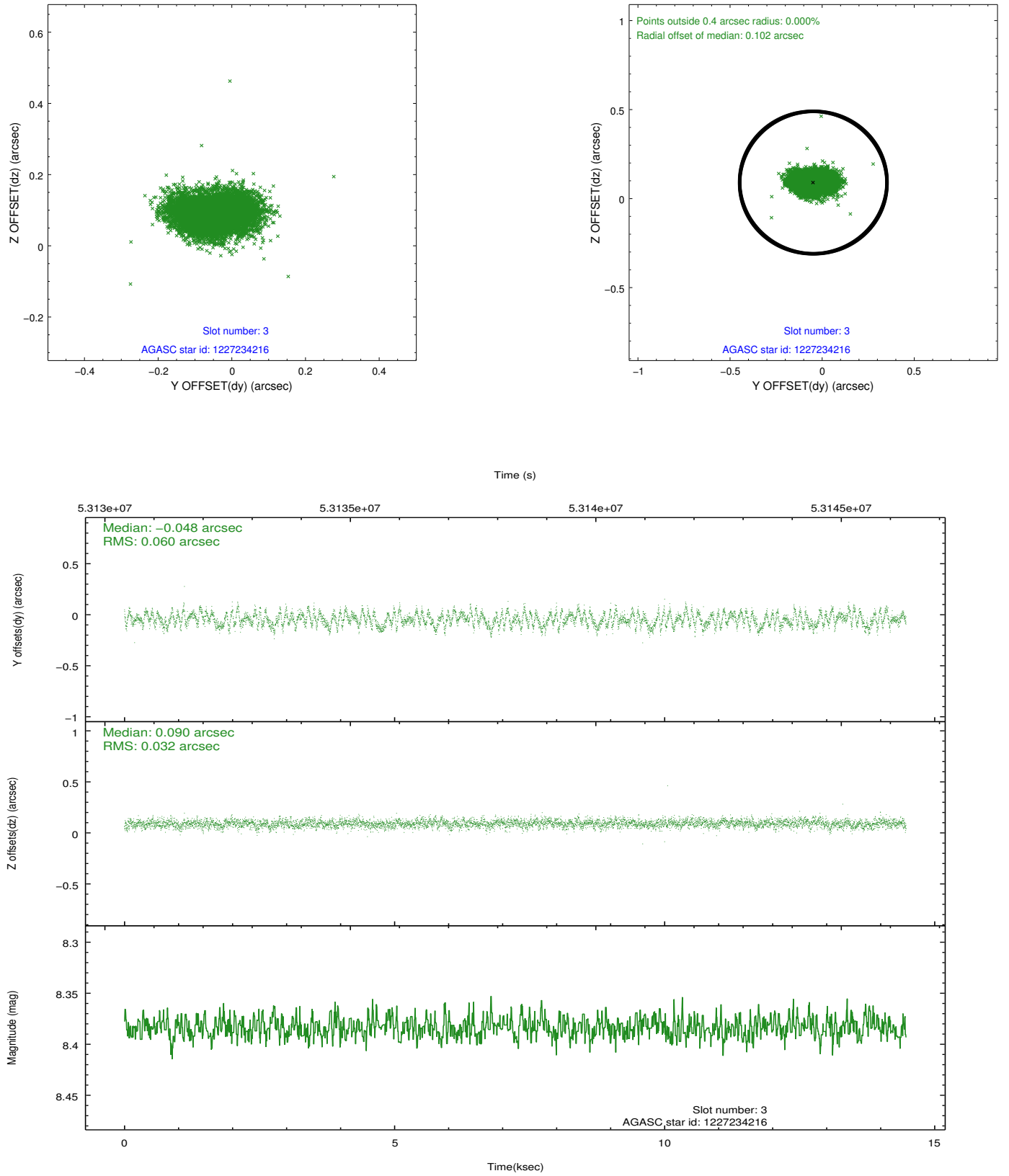


Slot Statistics

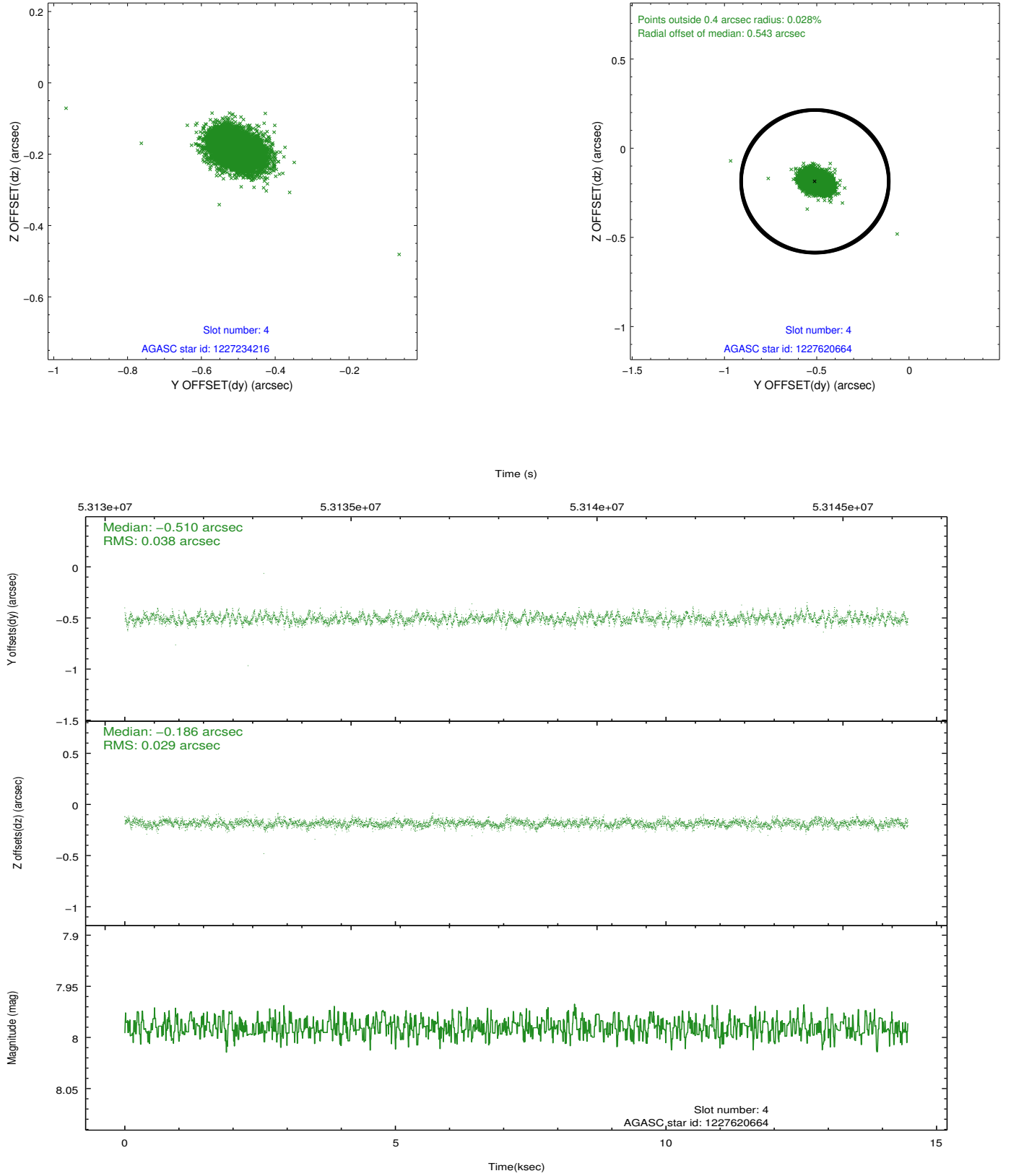
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	7059	-0.047	0.035	0.009	0.015	0.000000	0.000000	-753.44	-830.39
1	FID	ACIS-I-4	7.23	7058	0.130	0.025	0.006	0.011	0.000000	0.000000	2160.87	1075.56
2	FID	ACIS-I-5	7.23	7058	-0.183	0.009	0.009	0.015	0.000000	0.000000	-1807.19	1073.72
3	GUIDE	1227234216	8.38	7056	-0.048	0.090	0.072	0.118	51.506981	-76.616205	2088.97	-2223.16
4	GUIDE	1227620664	7.99	7059	-0.510	-0.186	0.050	0.082	46.150563	-77.166043	-1571.74	878.76
5	GUIDE	1227629440	9.11	7050	-0.176	-0.038	0.069	0.111	48.268116	-77.028500	-359.03	-413.46
6	GUIDE	1227104240	9.79	7053	-0.130	0.179	0.091	0.147	48.955462	-76.524572	1521.83	-140.29
7	GUIDE	1227097864	9.92	7055	0.863	-0.044	0.091	0.150	46.669937	-76.763312	-90.92	1180.63

## 2.4 Star Slots

### 2.4.1 Slot 3

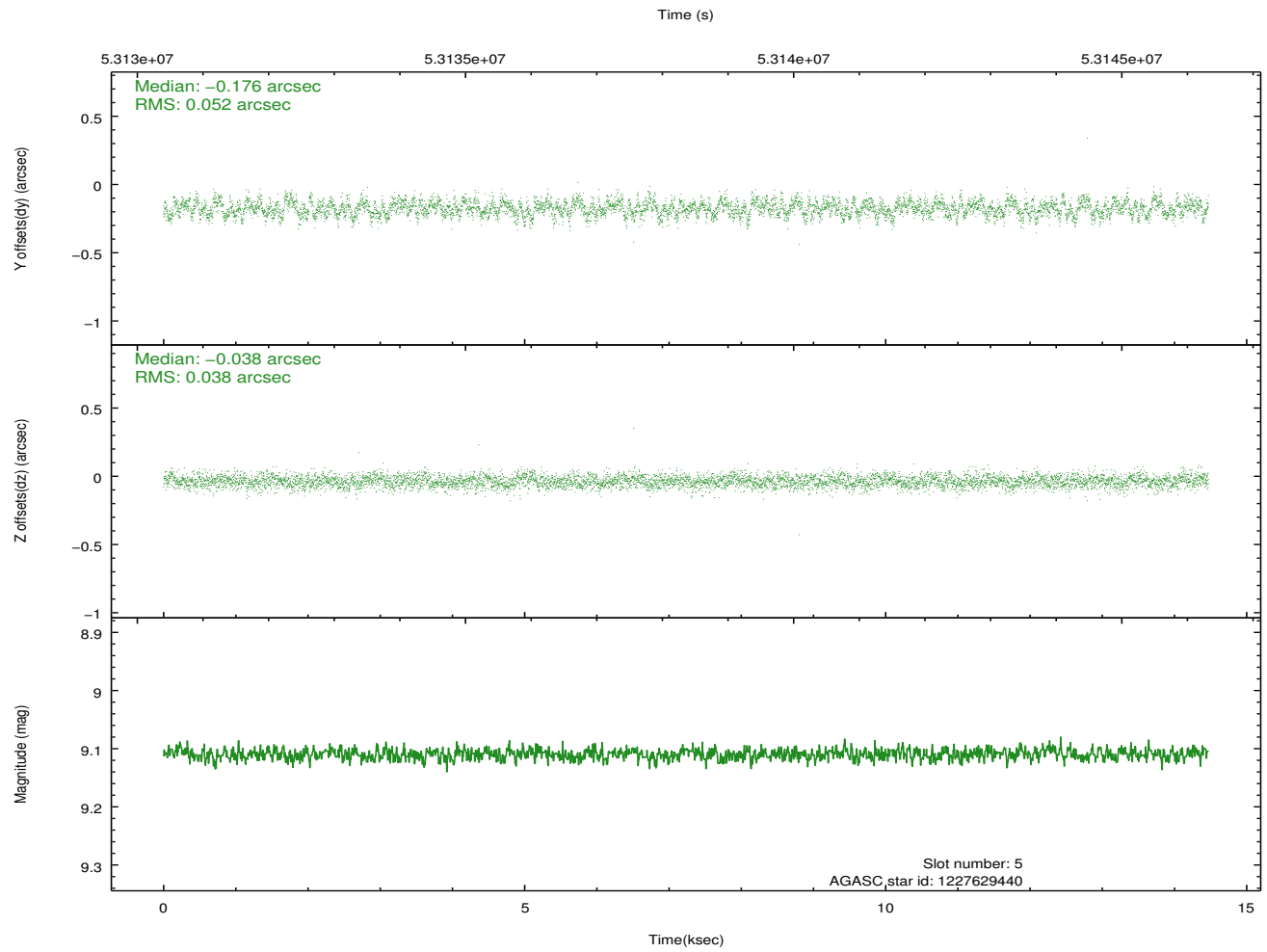
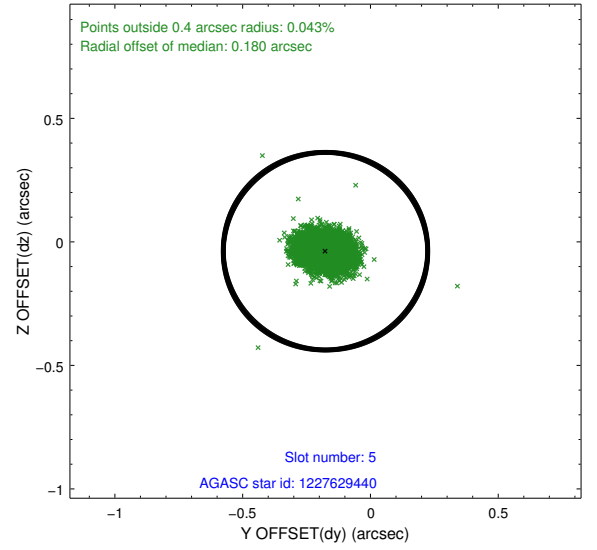
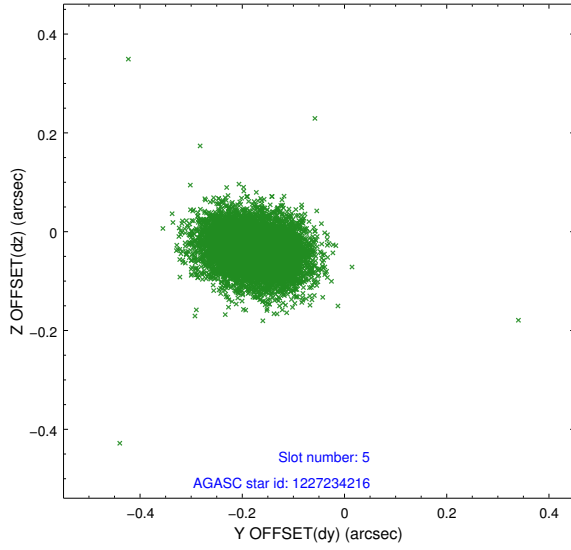


## 2.4.2 Slot 4

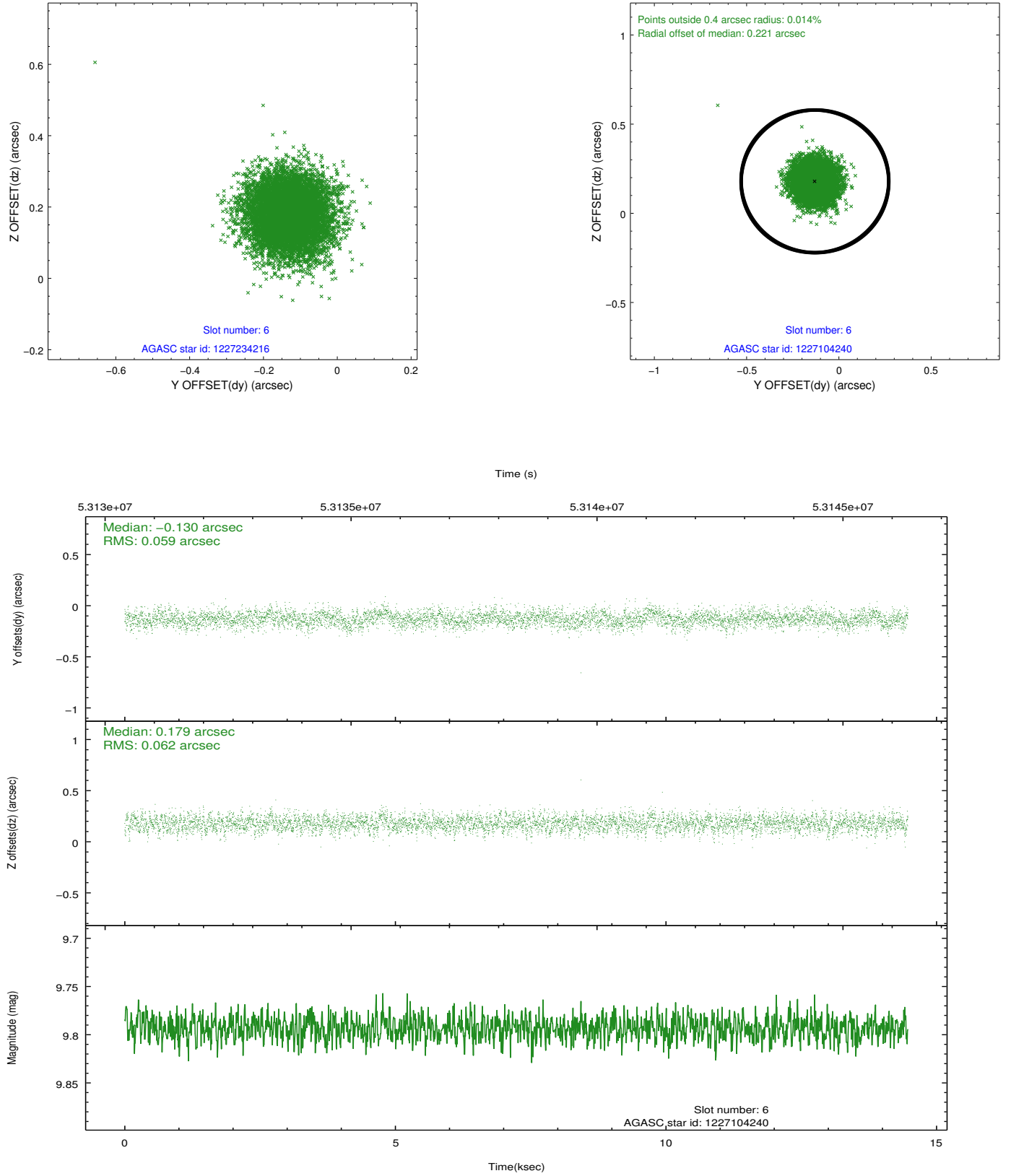




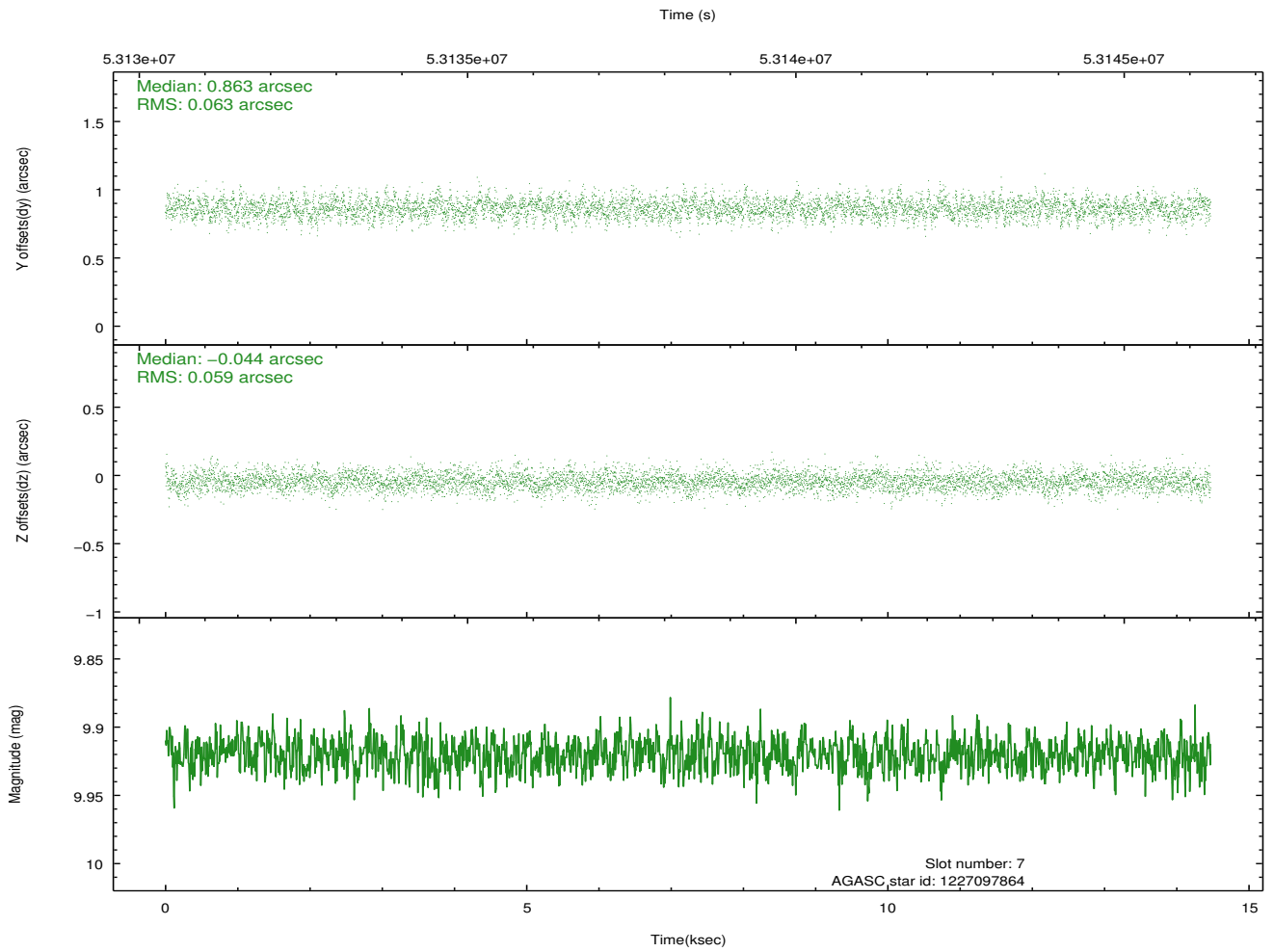
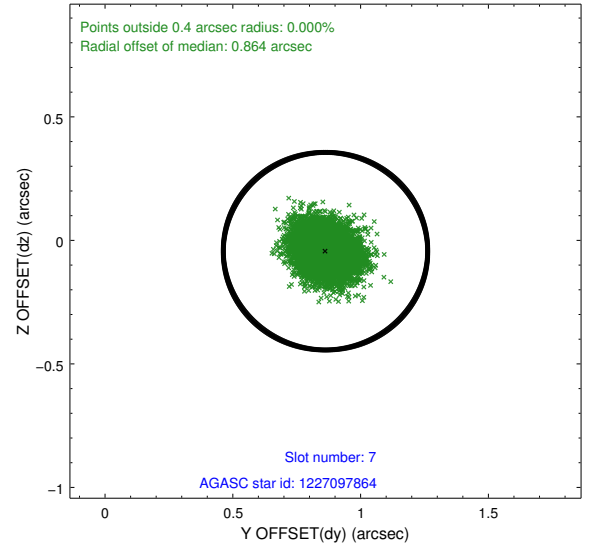
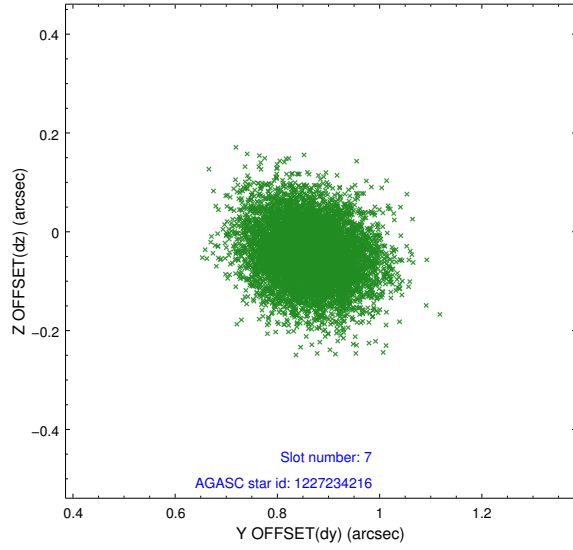
### 2.4.3 Slot 5



## 2.4.4 Slot 6

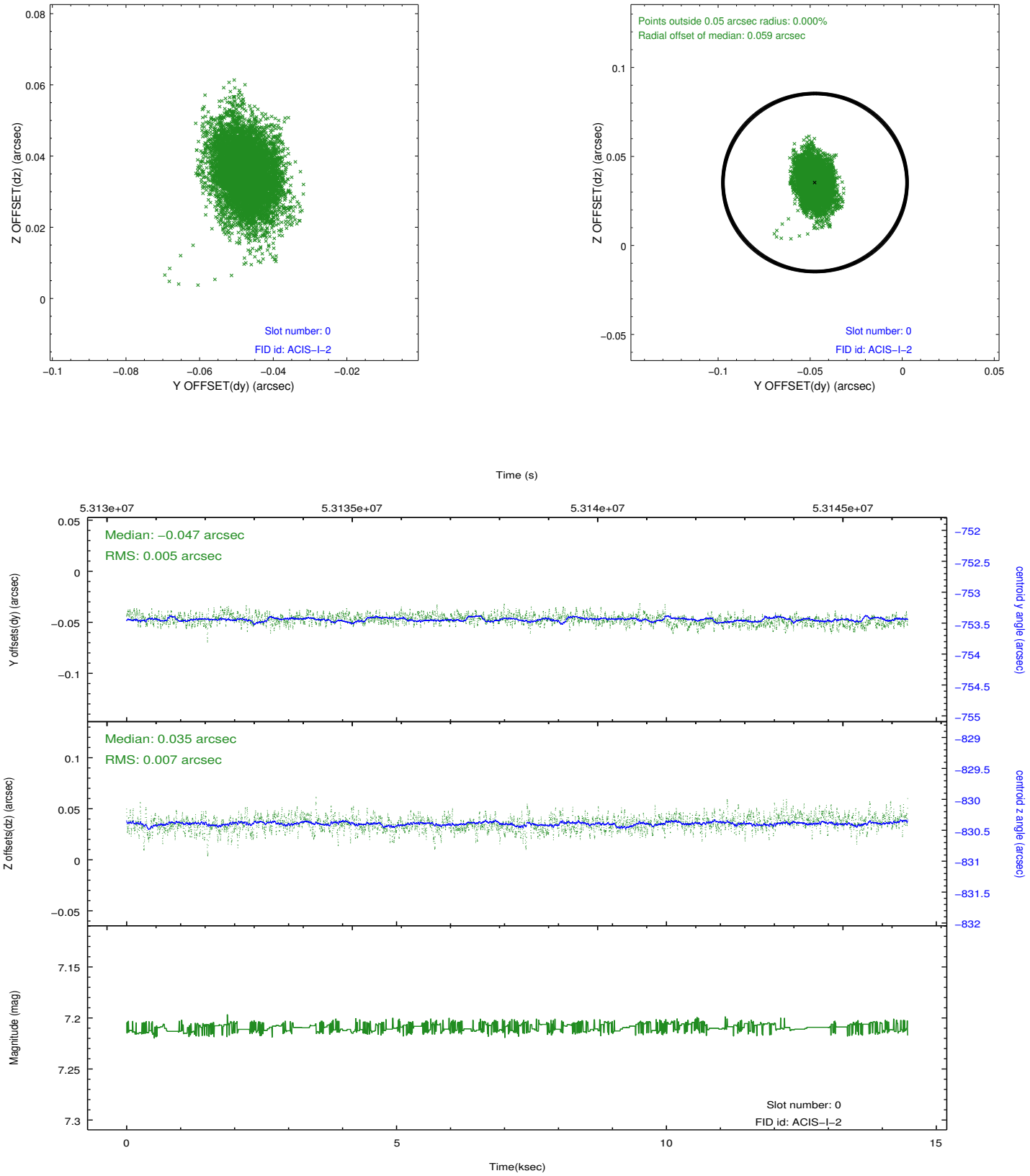


## 2.4.5 Slot 7

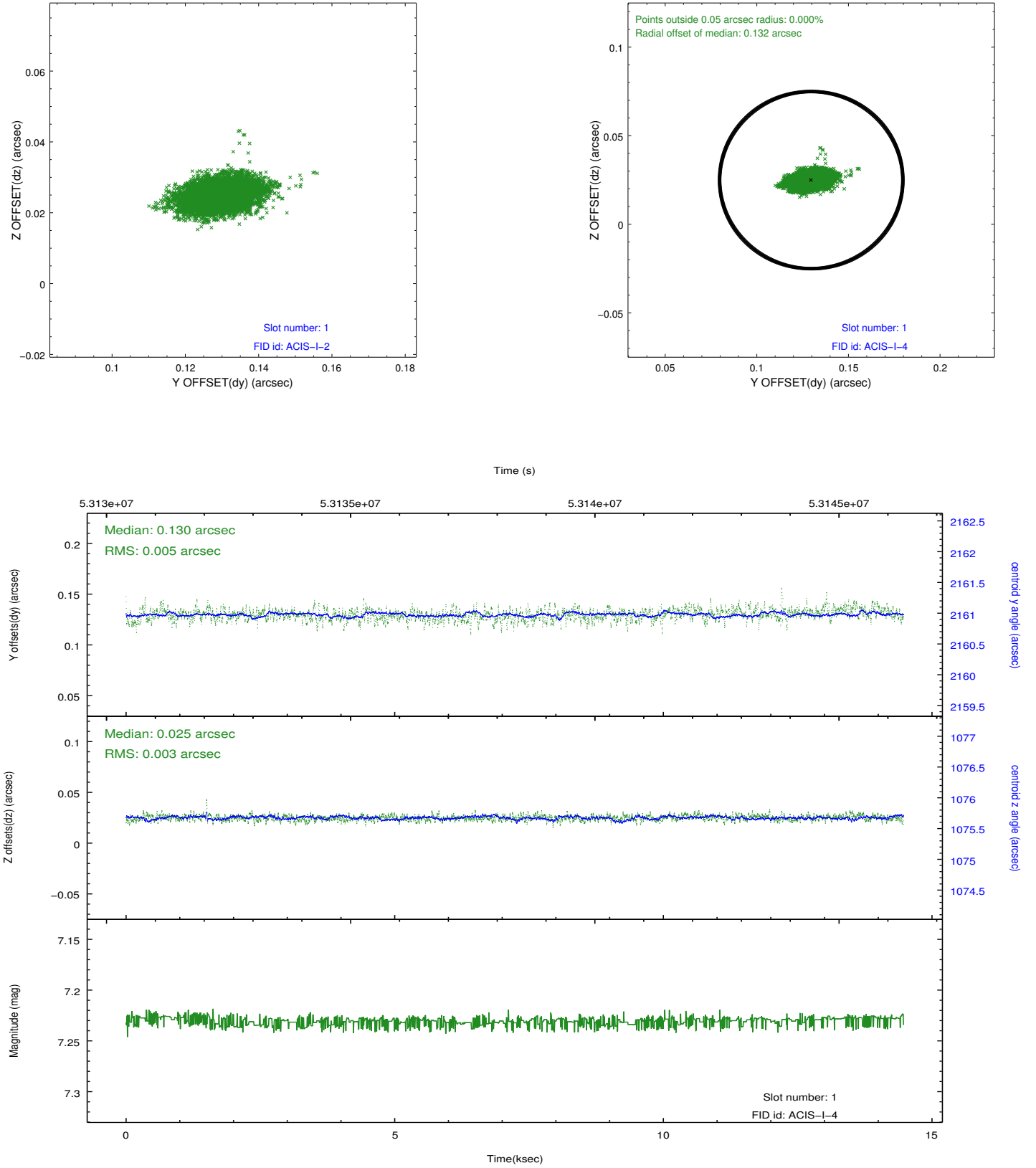


## 2.5 FID Slots

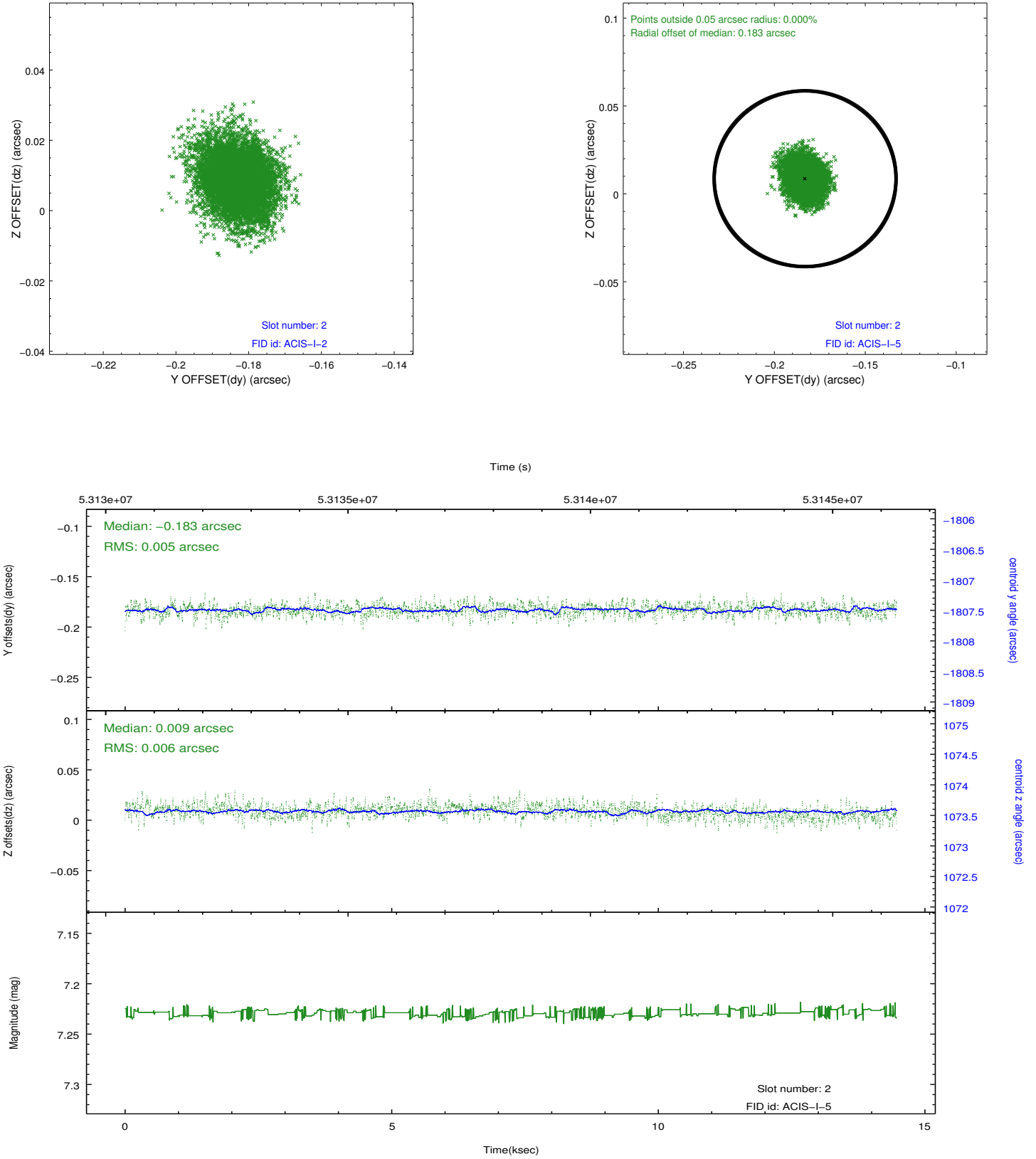
### 2.5.1 Slot 0



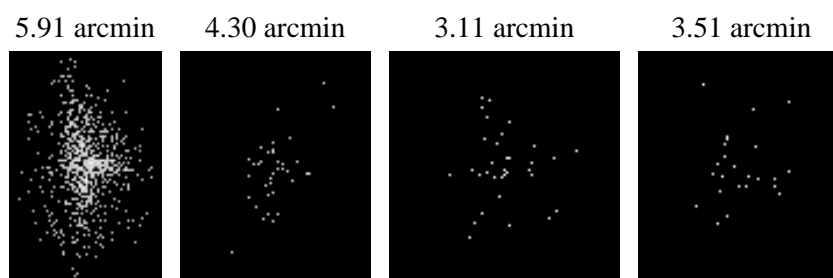
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.87

## A.2 Comments

ACIS PSF measurement on I3.

=====

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.

=====