

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 306 - L2 Version 4

Chandra X-Ray Center

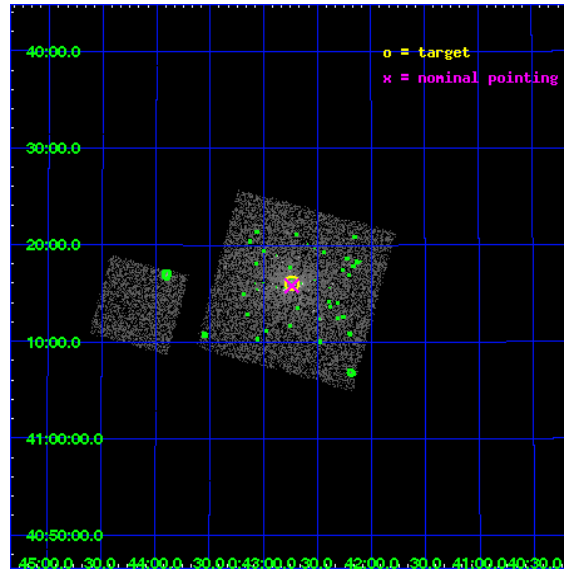
L2 Processing Date : Nov 29 2009

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# 1 Front

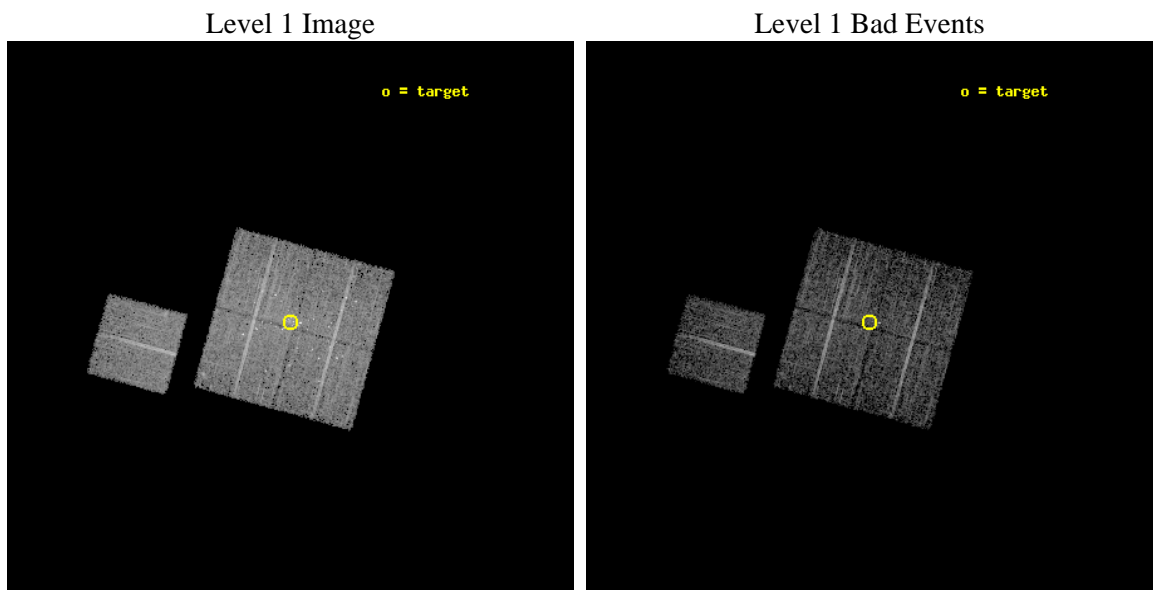
seq_num	600066	Sequence number
obs_id	306	Observation id
title	M31 MONITORING (FOLLOWUP)	Proposal title
observer	Dr Steve Murray	Principal investigator
object	M31 TRANSIENT TBD	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.685	Observer's specified target RA
dec_targ	41.268972	Observer's specified target Dec
ra_nom	10.684088597009	Nominal RA
dec_nom	41.263695615791	Nominal Dec
roll_nom	285.38107759573	Nominal Roll
revision	4	Processing version of data
ontime	4182.3179853857	Sum of GTIs [s]
livetime	4129.3589567652	Livetime [s]
ontime0	4182.4000038952	Sum of GTIs [s]
ontime1	4182.4000038952	Sum of GTIs [s]
ontime2	4179.1590436772	Sum of GTIs [s]
ontime3	4182.3179853857	Sum of GTIs [s]
ontime6	4182.3590253815	Sum of GTIs [s]
l2events	28317	Number of level 2 events



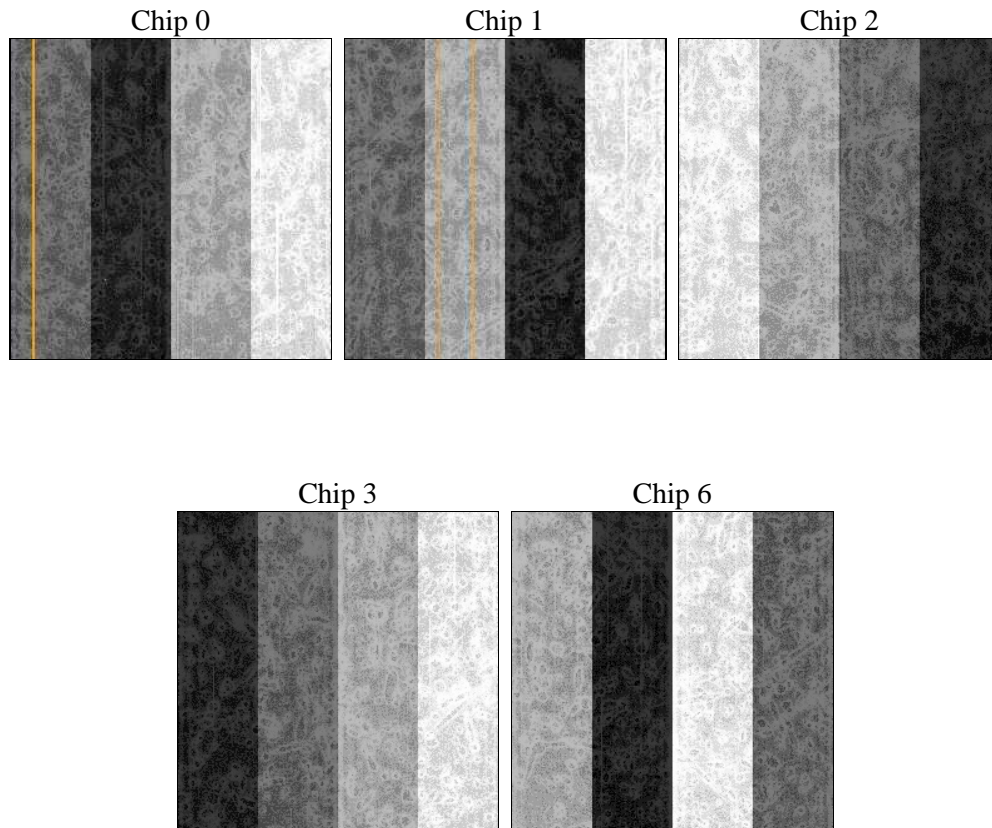
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	4182.3179853857	Sum of GTIs [s]
caldsver	4.1.4	&#160	ontime0	4182.4000038952	Sum of GTIs [s]
date	2009-11-29T20:00:09	Date and time of file creation	ontime1	4182.4000038952	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4179.1590436772	Sum of GTIs [s]
			ontime3	4182.3179853857	Sum of GTIs [s]
			ontime6	4182.3590253815	Sum of GTIs [s]
			l1events	180533	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	32984	35850	38232	39424	34043
rejected events	27426	28581	32002	31936	30561
rejected %	83%	79%	83%	81%	89%

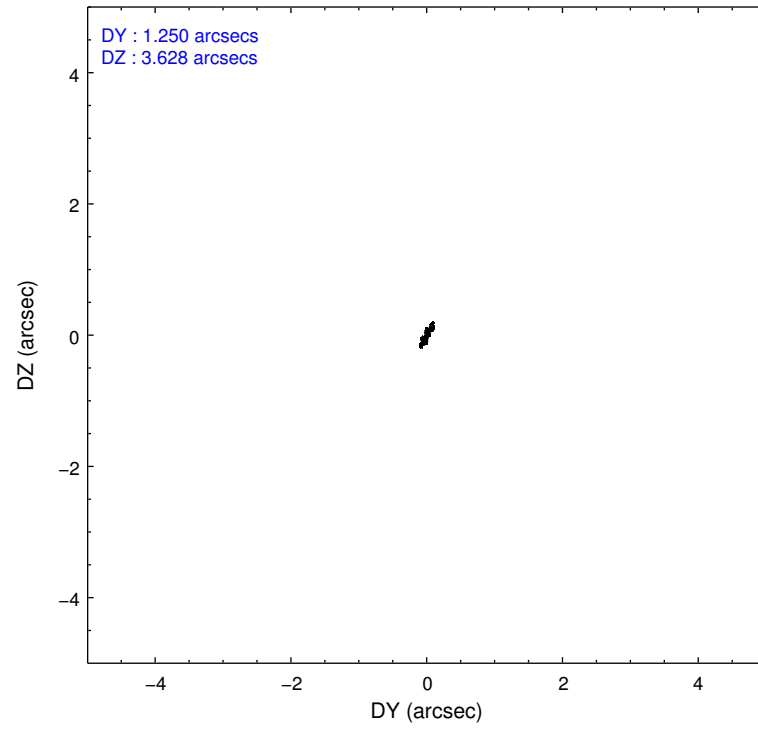
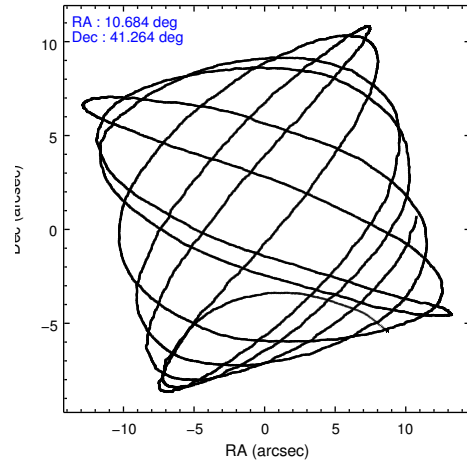
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2236	2899	2411	3273	766
	6%	8%	6%	8%	2%
grade 1 events	7	56	21	27	4
	0%	0%	0%	0%	0%
grade 2 events	1967	2458	2400	2758	1331
	5%	6%	6%	6%	3%
grade 3 events	272	369	240	263	223
	0%	1%	0%	0%	0%
grade 4 events	255	350	259	268	223
	0%	0%	0%	0%	0%
grade 5 events	689	837	652	702	715
	2%	2%	1%	1%	2%
grade 6 events	847	1200	931	944	945
	2%	3%	2%	2%	2%
grade 7 events	26711	27681	31318	31189	29836
	80%	77%	81%	79%	87%

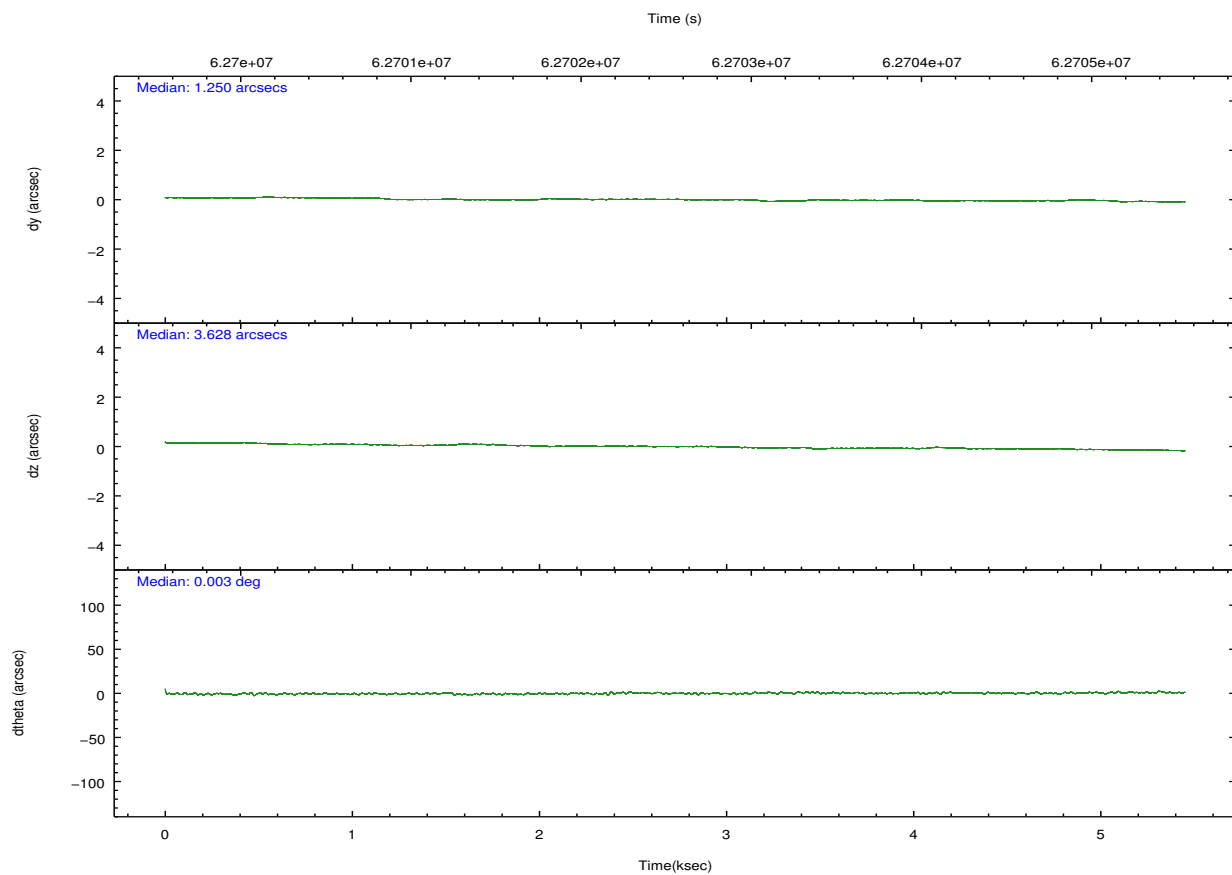
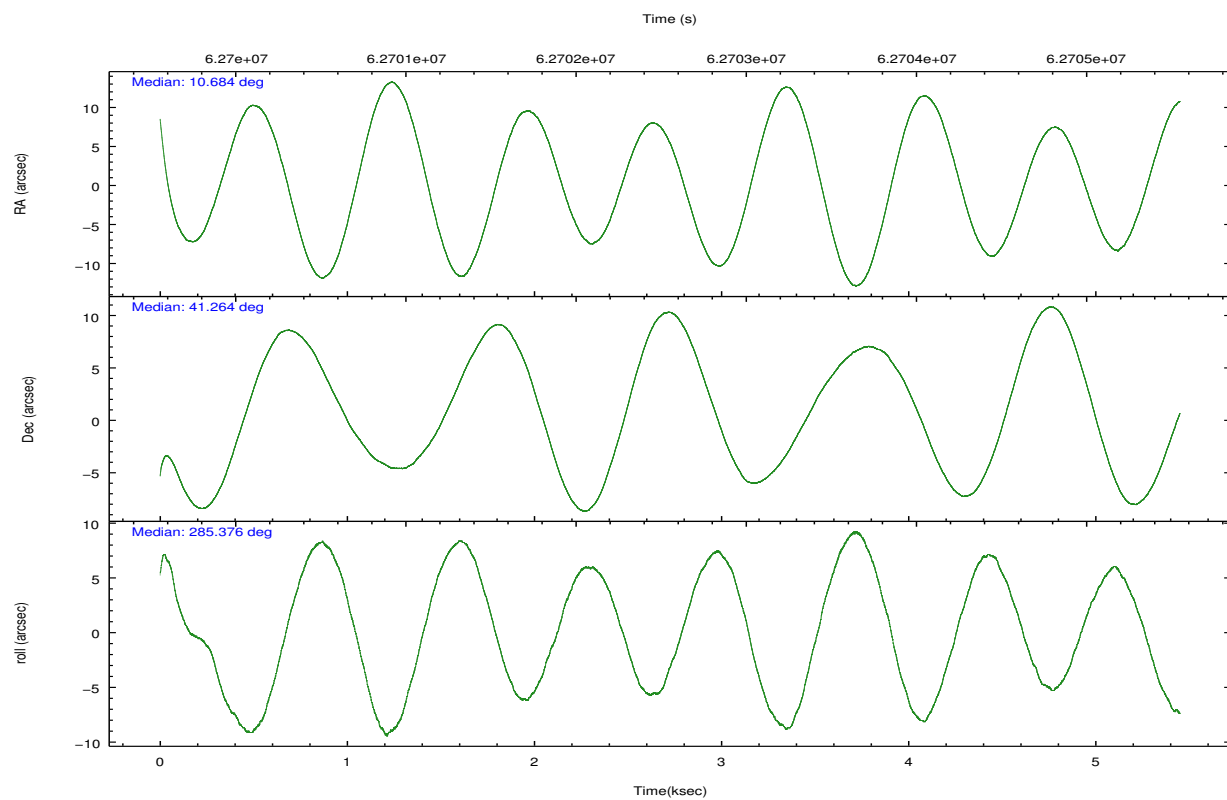


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	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
Pointing RA	10.658137	10.68408859700924	Subarray requested	NONE	NONE
Pointing Dec	41.283524	41.26369561579122	Alternating exposures requested	N	N
Pointing Roll	285.189477	285.3810775957292	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	62700278.184000	62699140.821873			
Observation start date	1999-12-27T16:43:34	1999-12-27T16:25:40			
Observation end time	62705278.184000	62707119.422162			
Observation end date	1999-12-27T18:06:54	1999-12-27T18:38:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect



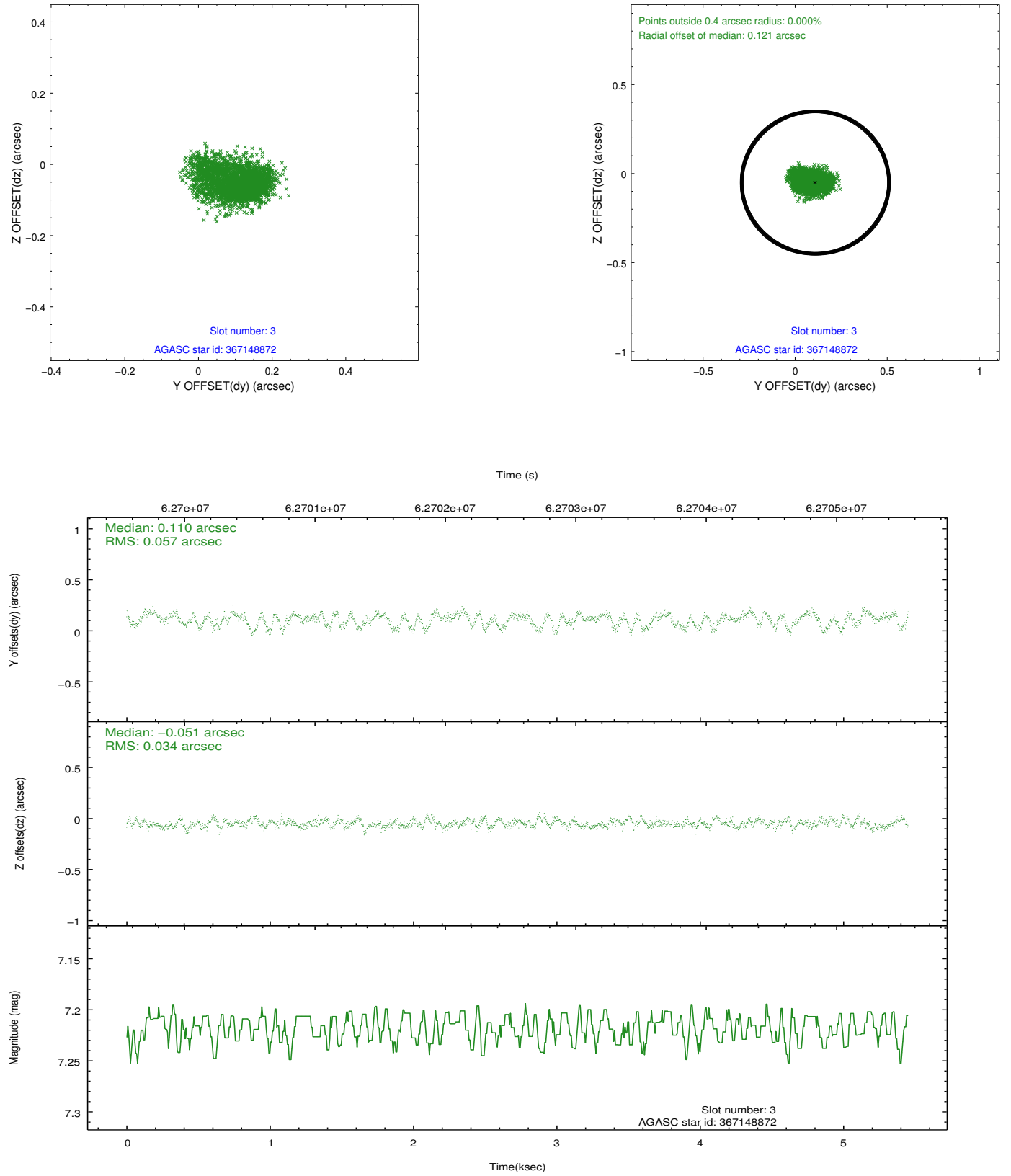


Slot Statistics

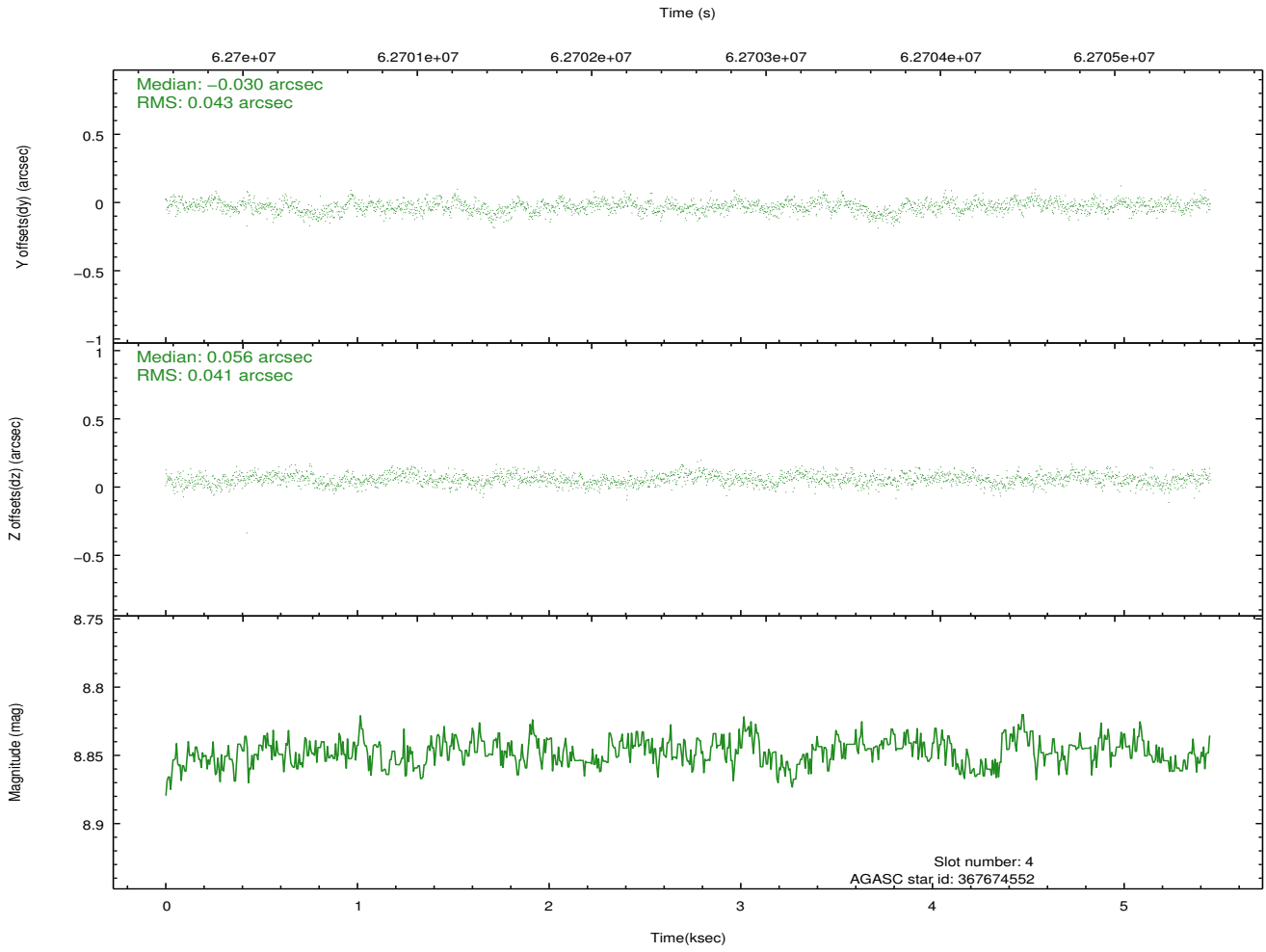
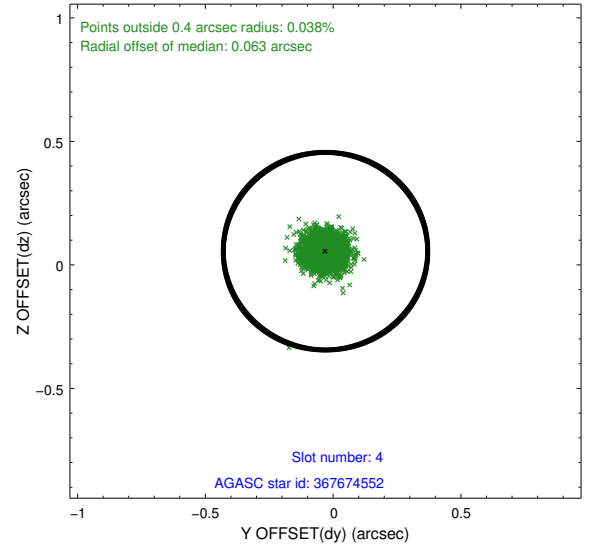
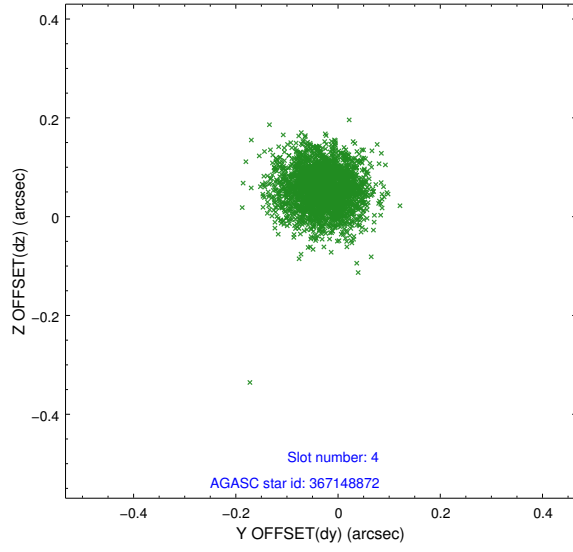
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	2660	-0.008	0.077	0.009	0.015	0.000000	0.000000	-755.66	-833.15
1	FID	ACIS-I-4	7.25	2660	0.042	-0.005	0.006	0.011	0.000000	0.000000	2158.39	1072.47
2	FID	ACIS-I-5	7.24	2660	-0.135	-0.002	0.009	0.015	0.000000	0.000000	-1808.85	1071.19
3	GUIDE	367148872	7.22	2659	0.110	-0.051	0.069	0.119	10.505940	40.688258	1959.01	-962.54
4	GUIDE	367674552	8.85	2659	-0.030	0.056	0.063	0.102	11.016238	41.570845	-746.94	1201.63
5	GUIDE	367146616	8.85	2659	0.033	0.052	0.074	0.121	11.418645	41.190163	854.98	1902.88
6	GUIDE	367658664	9.59	2659	-0.005	-0.017	0.094	0.157	10.374070	41.369746	-501.55	-658.64
7	GUIDE	367665472	9.48	2657	-0.098	-0.041	0.081	0.131	10.241611	41.730843	-1850.21	-658.11

## 2.4 Star Slots

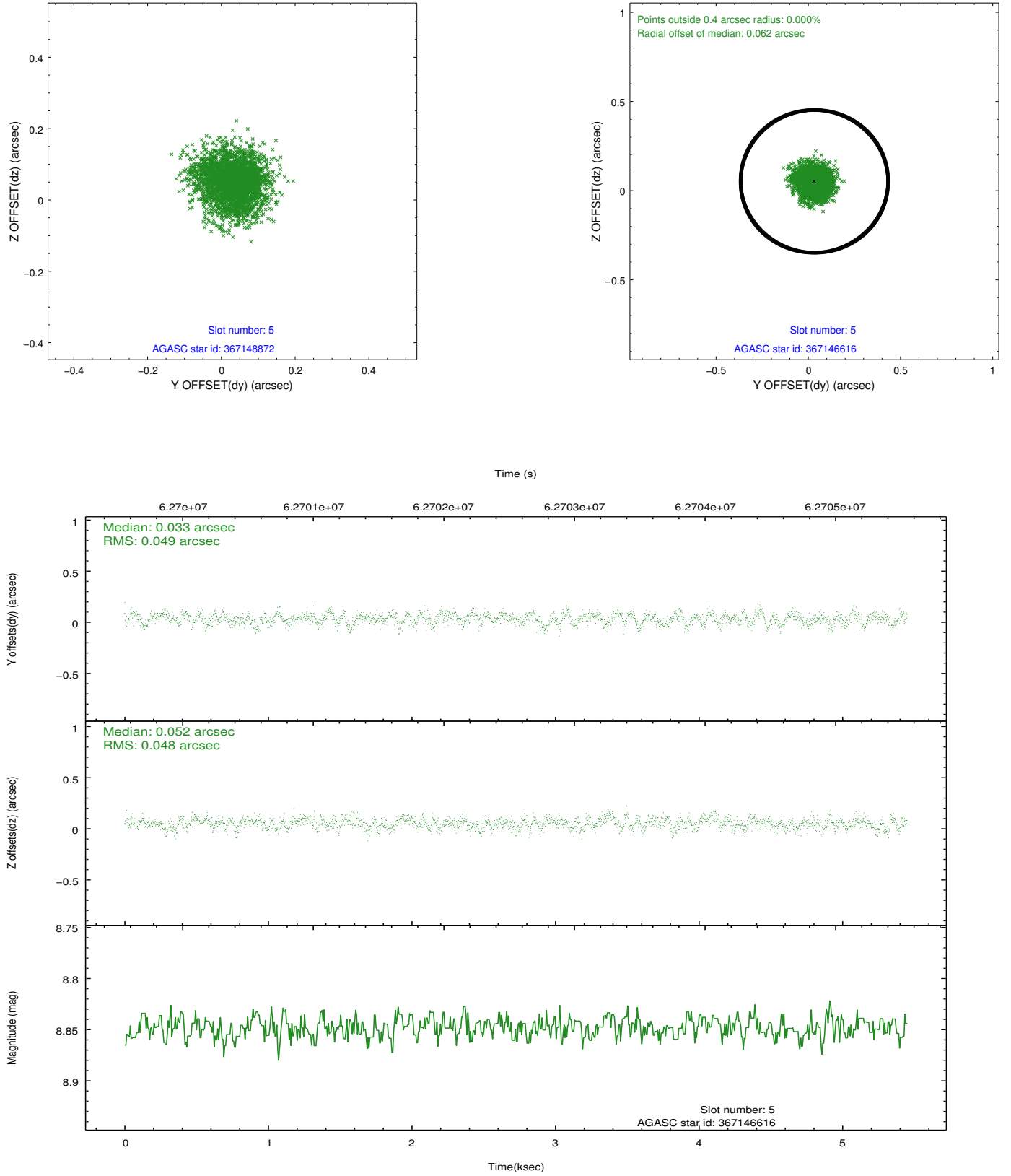
### 2.4.1 Slot 3



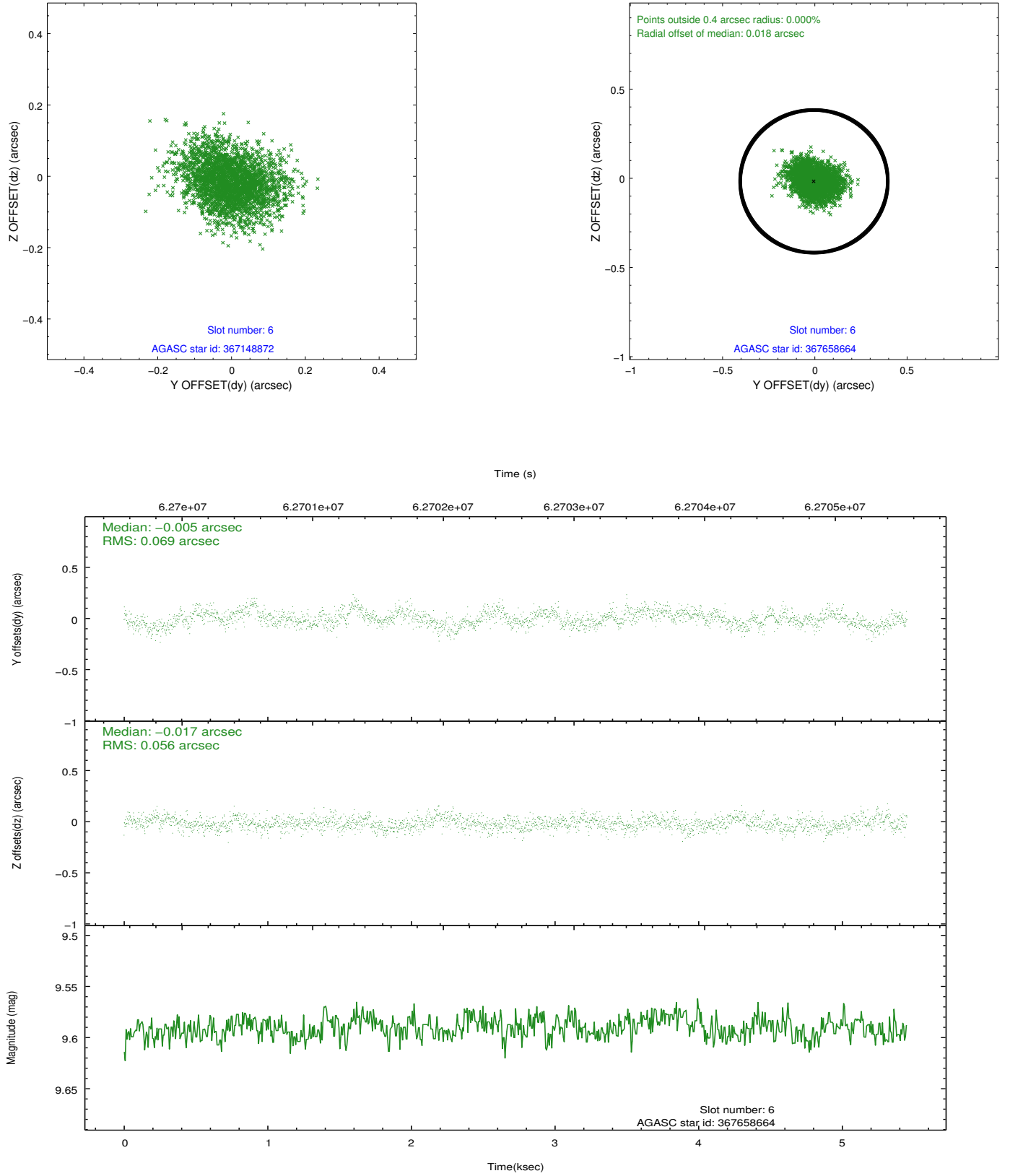
## 2.4.2 Slot 4



### 2.4.3 Slot 5

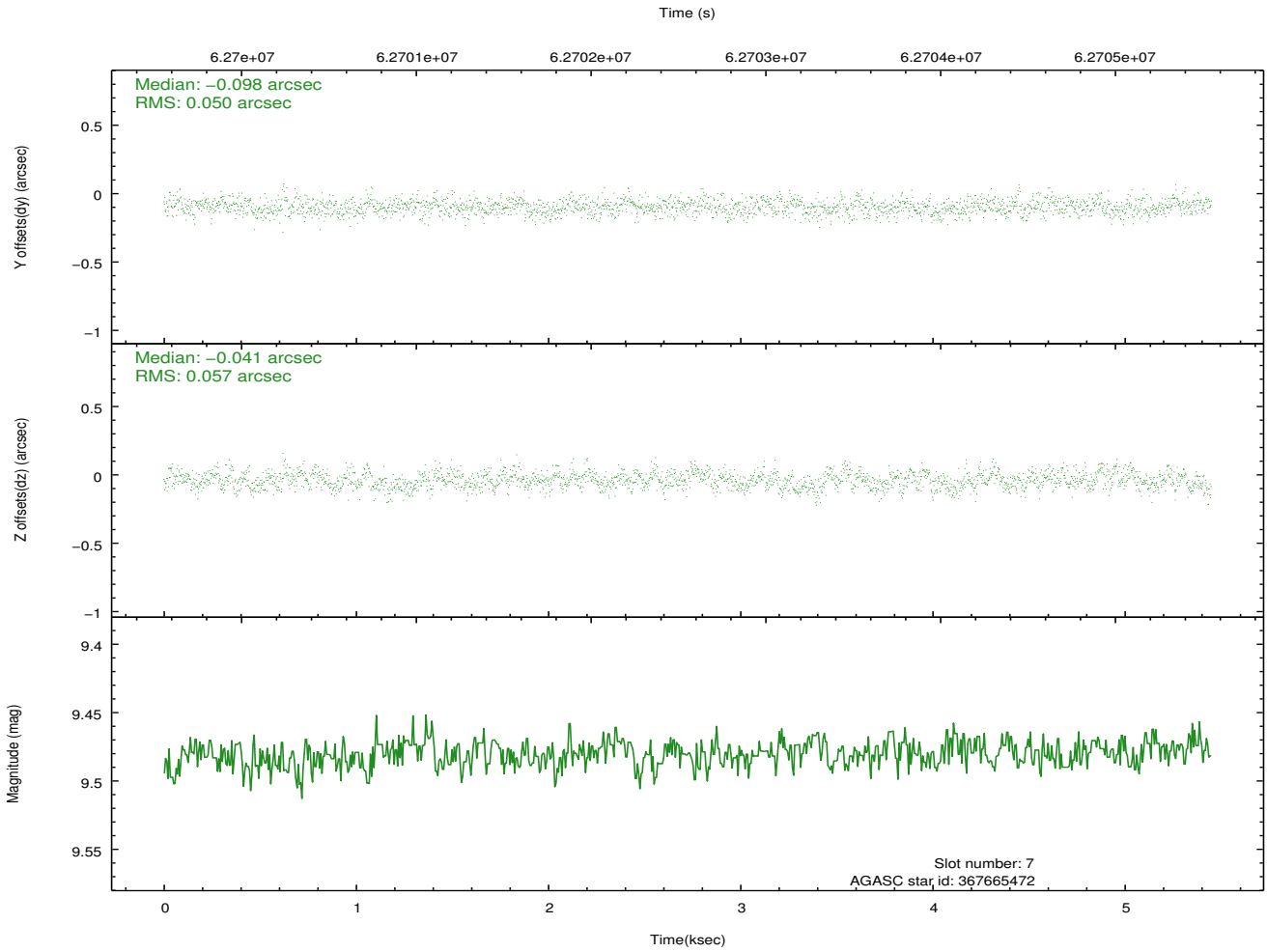
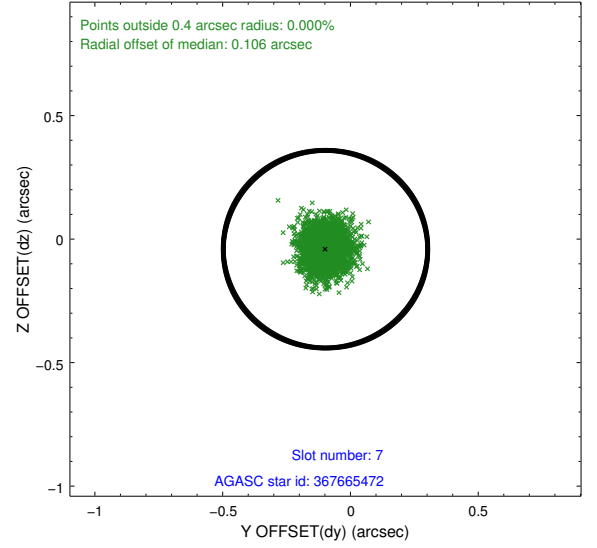
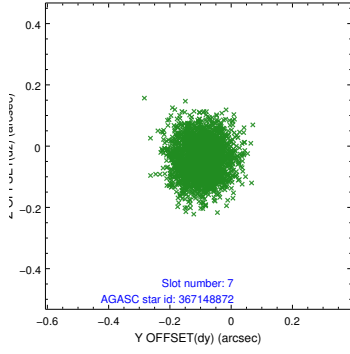


## 2.4.4 Slot 6



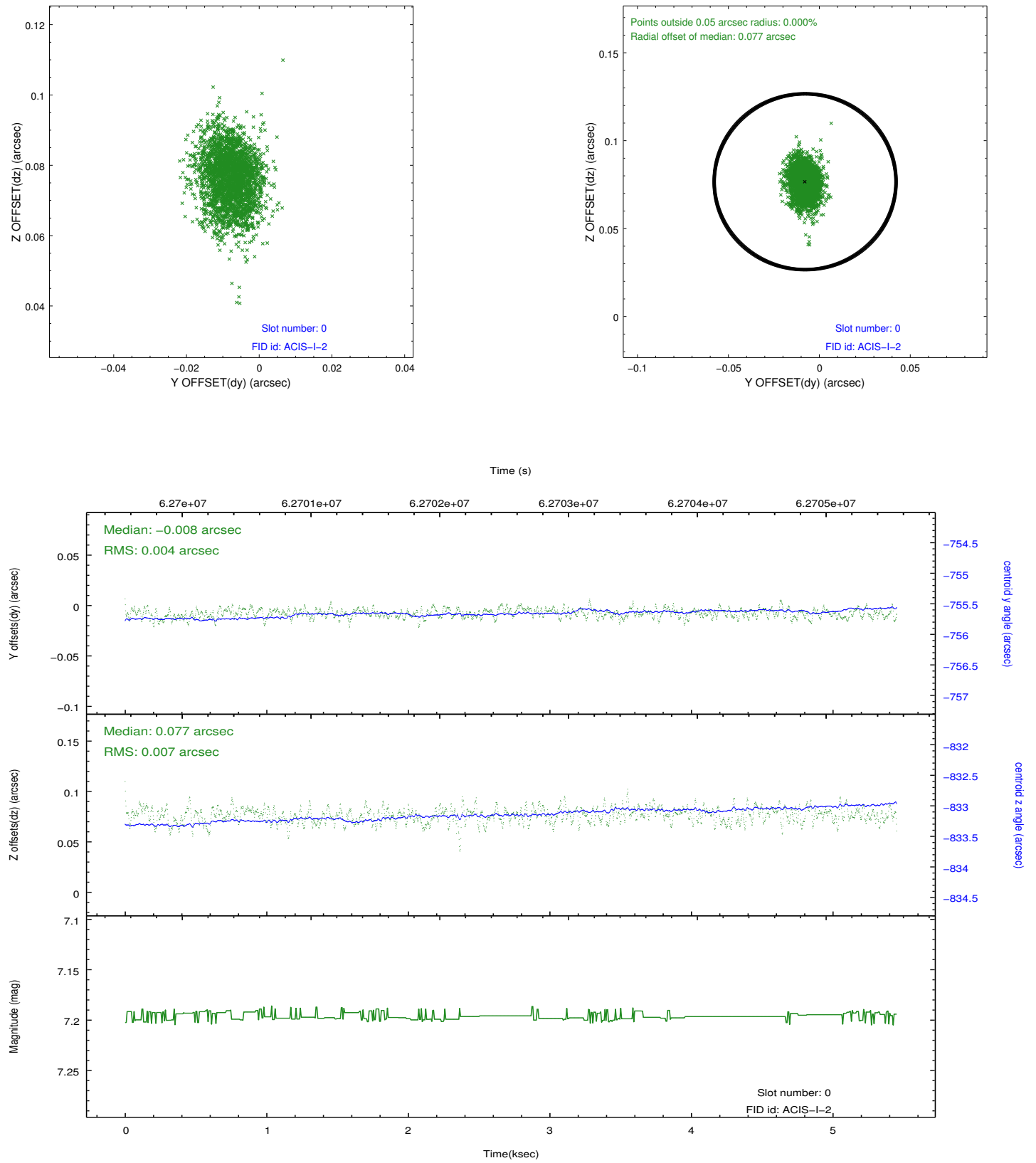


## 2.4.5 Slot 7

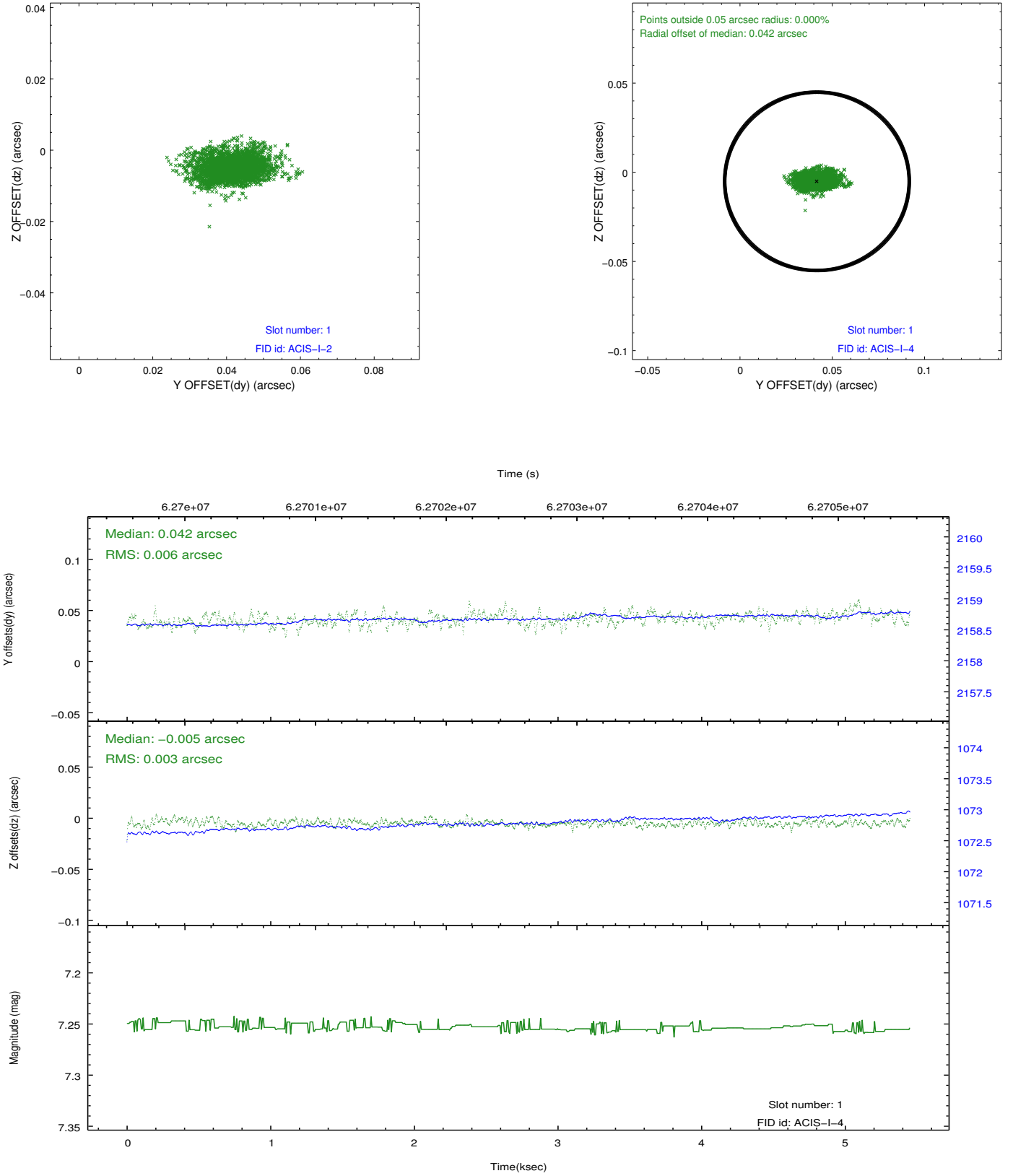


## 2.5 FID Slots

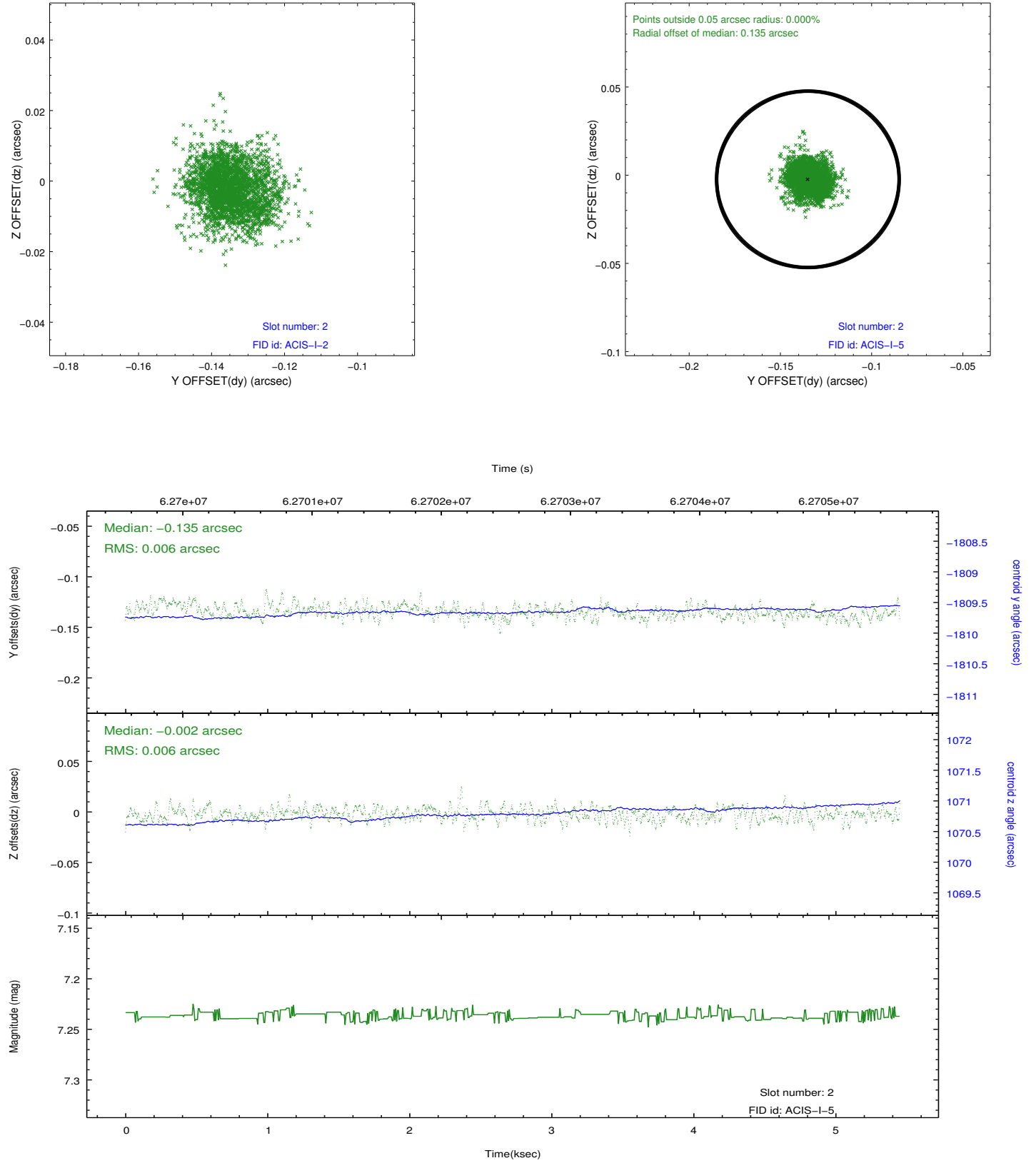
### 2.5.1 Slot 0



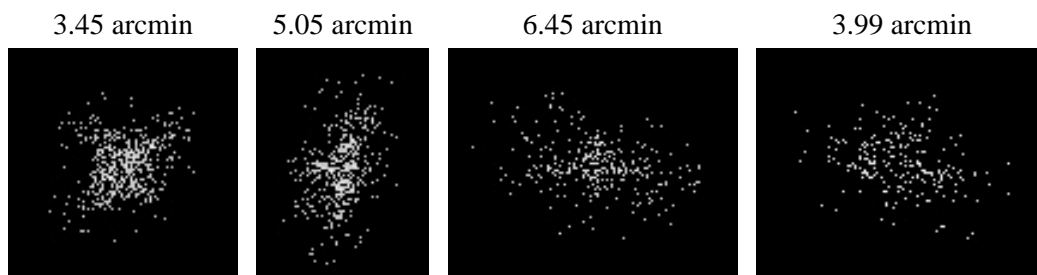
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2009.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.185

## A.2 Comments

Observation has about 800 seconds less OnTime than requested, due to an unusually long slew. All events are included in this processing.

=====

Focal plane temperature is warmer than -118.7 C degrees during the entire

observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature

is warmer than -116.7 degrees C for the entire observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips.

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. No CTI correction was applied in this processing because that calibration is not available at these focal plane temperatures.