

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8195 - L2 Version 2  
Chandra X-Ray Center

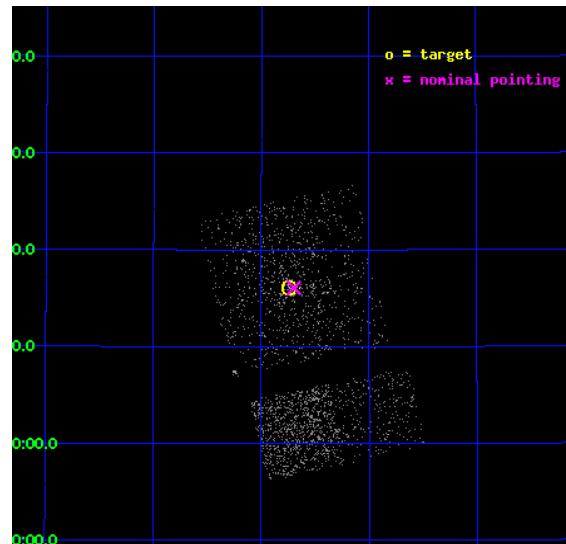
L2 Processing Date : May 1 2012

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# 1 Front

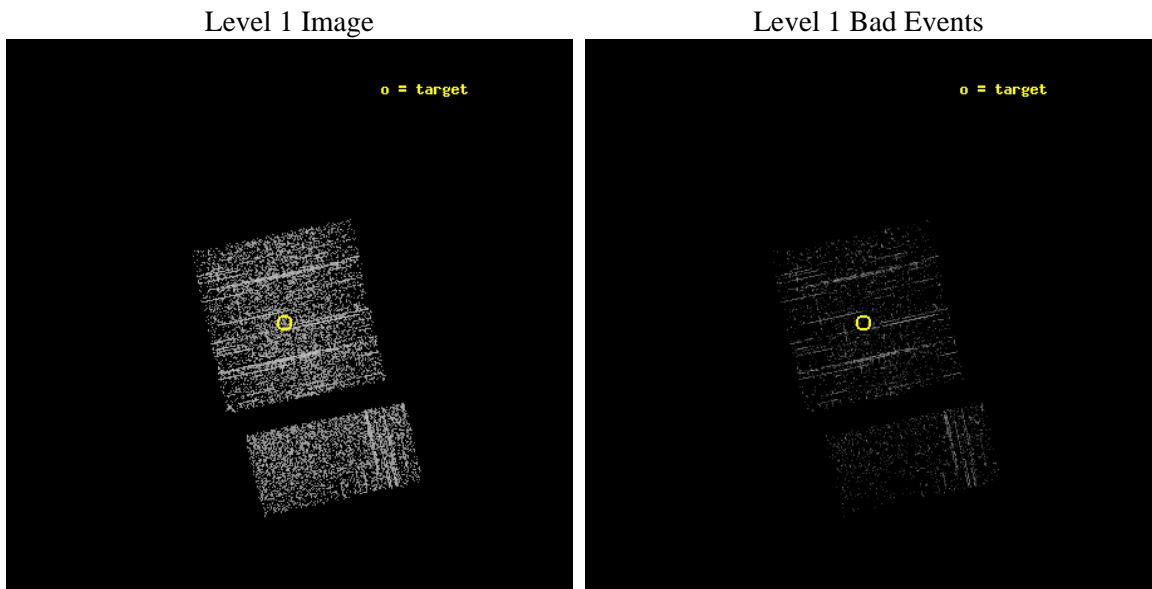
seq_num	600632	Sequence number
obs_id	8195	Observation id
title	Continued M31 Monitoring for Black Hole X-ray Nova	Proposal title
observer	Dr. Michael Garcia	Principal investigator
object	M31	Source name
dtcycle	0	&#160
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.674163892511	Nominal RA [deg]
dec_nom	41.268133121459	Nominal Dec [deg]
roll_nom	168.00224367499	Nominal Roll [deg]
revision	2	Processing version of data
ontime	937.77228885889	Sum of GTIs [s]
livetime	147.62797880949	Livetime [s]
ontime0	937.77230876684	Sum of GTIs [s]
ontime1	937.77228885889	Sum of GTIs [s]
ontime2	937.77228885889	Sum of GTIs [s]
ontime3	937.77228885889	Sum of GTIs [s]
ontime6	937.77228885889	Sum of GTIs [s]
ontime7	937.77228885889	Sum of GTIs [s]
l2events	2464	Number of level 2 events



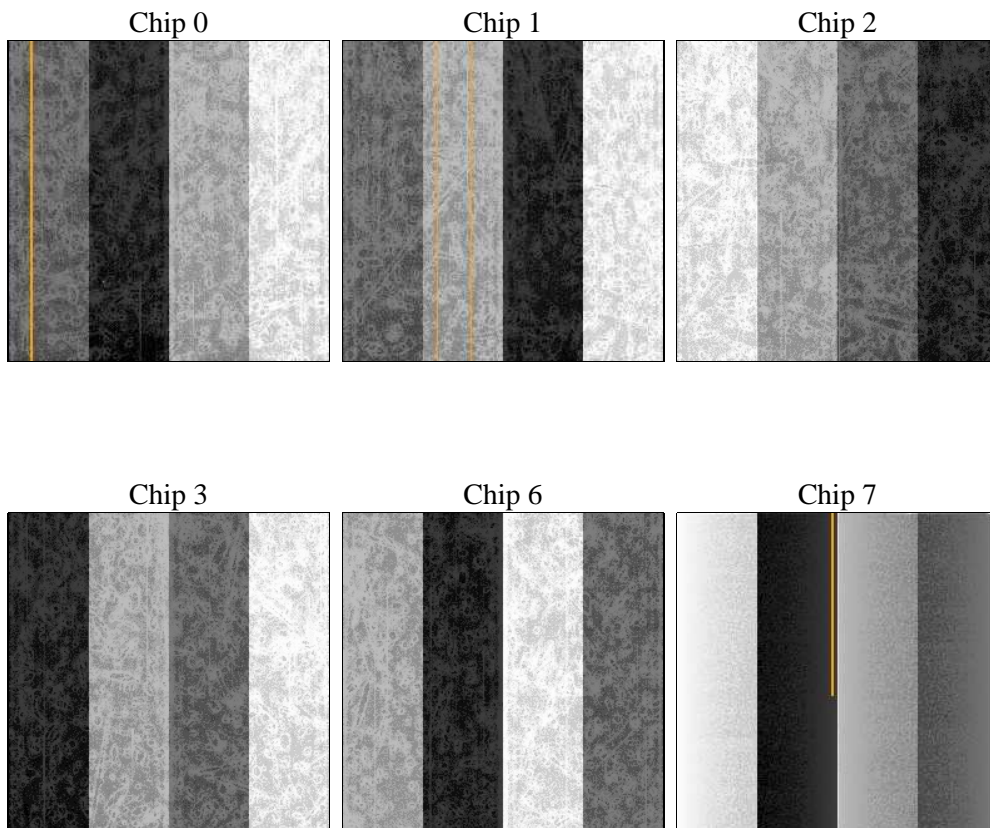
## 2 OBI Primary

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	937.77228885889	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	937.77230876684	Sum of GTIs [s]
date	2012-05-01T21:42:06	Date and time of file creation	ontime1	937.77228885889	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	937.77228885889	Sum of GTIs [s]
			ontime3	937.77228885889	Sum of GTIs [s]
			ontime6	937.77228885889	Sum of GTIs [s]
			ontime7	937.77228885889	Sum of GTIs [s]
			l1events	23110	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3375	3926	4551	4127	4048	3083
rejected events	3084	3524	4084	3703	3751	2113
rejected %	91%	89%	89%	89%	92%	68%

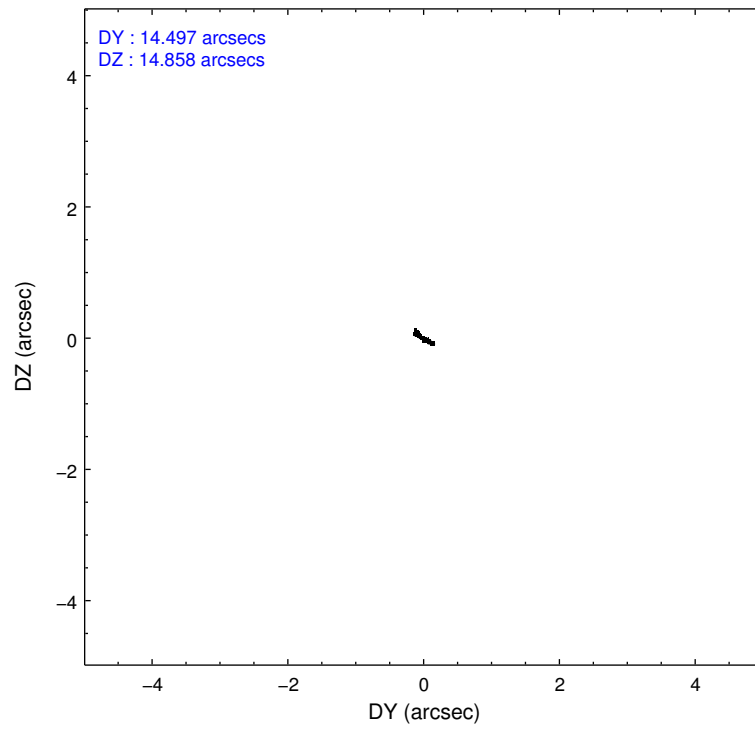
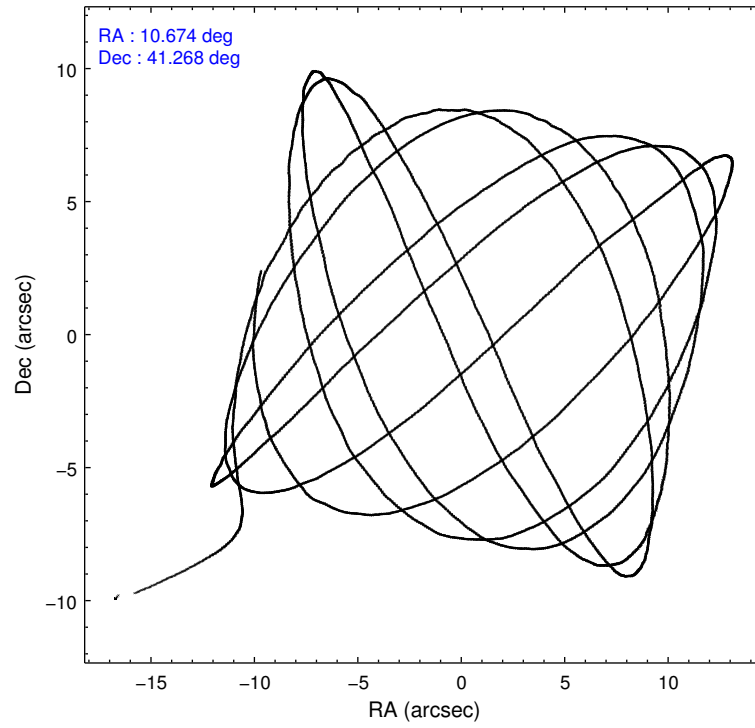
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	83	158	242	198	92	92
	2%	4%	5%	4%	2%	2%
grade 1 events	2	3	4	2	1	1
	0%	0%	0%	0%	0%	0%
grade 2 events	79	83	77	78	73	229
	2%	2%	1%	1%	1%	7%
grade 3 events	38	53	48	45	36	90
	1%	1%	1%	1%	0%	2%
grade 4 events	34	42	45	48	31	89
	1%	1%	0%	1%	0%	2%
grade 5 events	96	132	108	123	120	266
	2%	3%	2%	2%	2%	8%
grade 6 events	58	66	59	61	65	475
	1%	1%	1%	1%	1%	15%
grade 7 events	2985	3389	3968	3572	3630	1841
	88%	86%	87%	86%	89%	59%

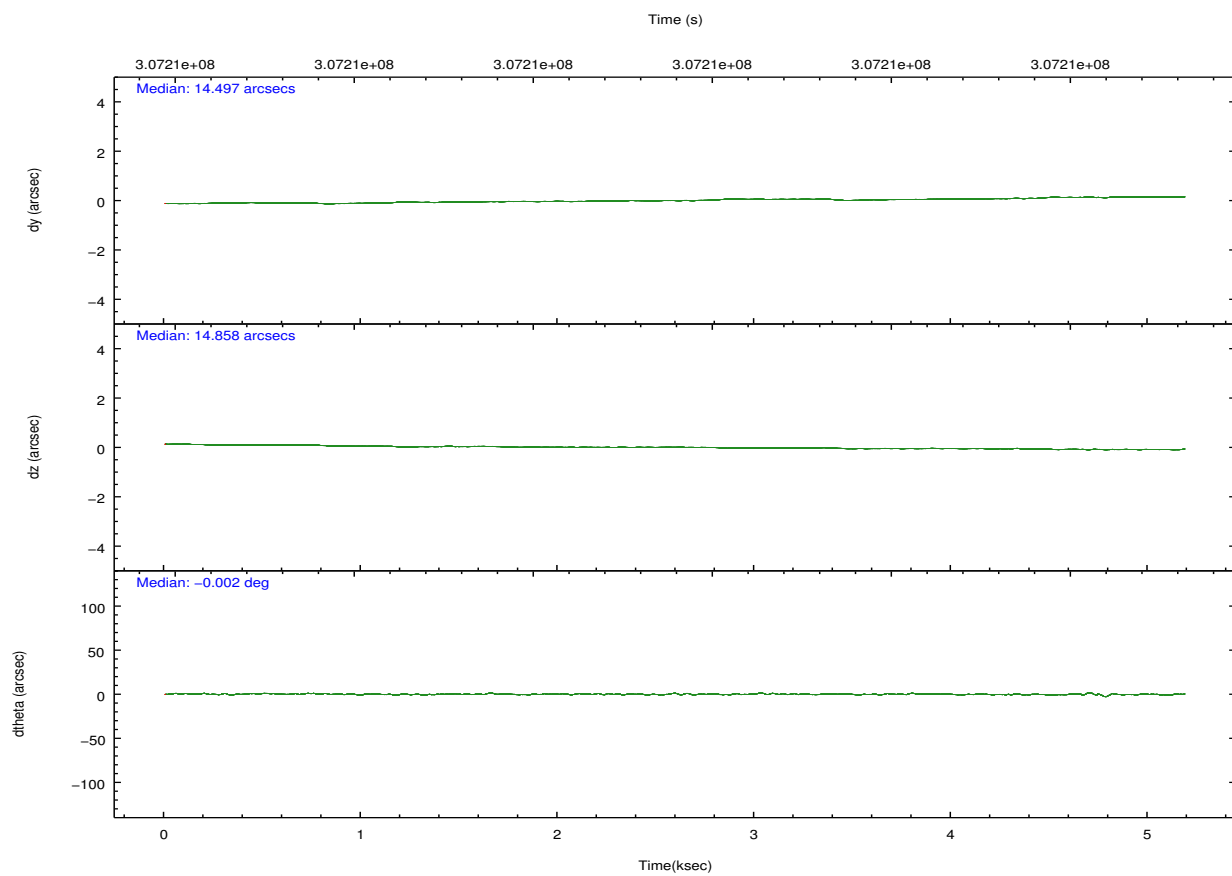
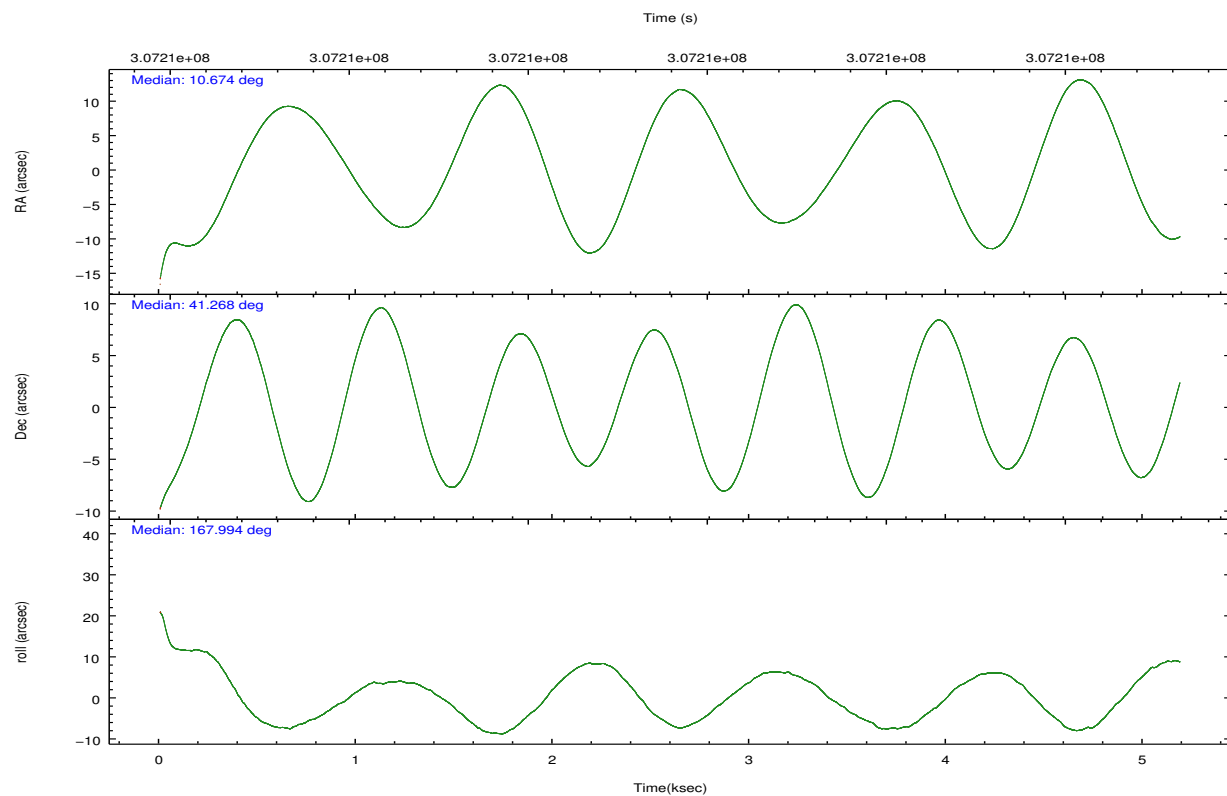


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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
[deg] Pointing RA	10.709046	10.67416389251134	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.276829	41.26813312145868	Alternating exposures requested	Y	Y
[deg] Pointing Roll	167.770532	168.002243674989	[s] Primary exposure time	0.600000	0.6
[mm] SIM focus pos	-0.782348	-0.7809083437167272	[s] Secondary exposure time	0.000000	3.2
[mm] SIM defocus	0	0.001439871863259334	Duty cycle	5	5
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	307207392.184000	307206323.42586			
Observation start date	2007-09-26T15:22:07	2007-09-26T15:05:23			
[s] Observation end time (MET)	307212392.184000	307213734.17622			
Observation end date	2007-09-26T16:45:27	2007-09-26T17:08:54			
Read mode	TIMED	TIMED			

## 2.3 Aspect



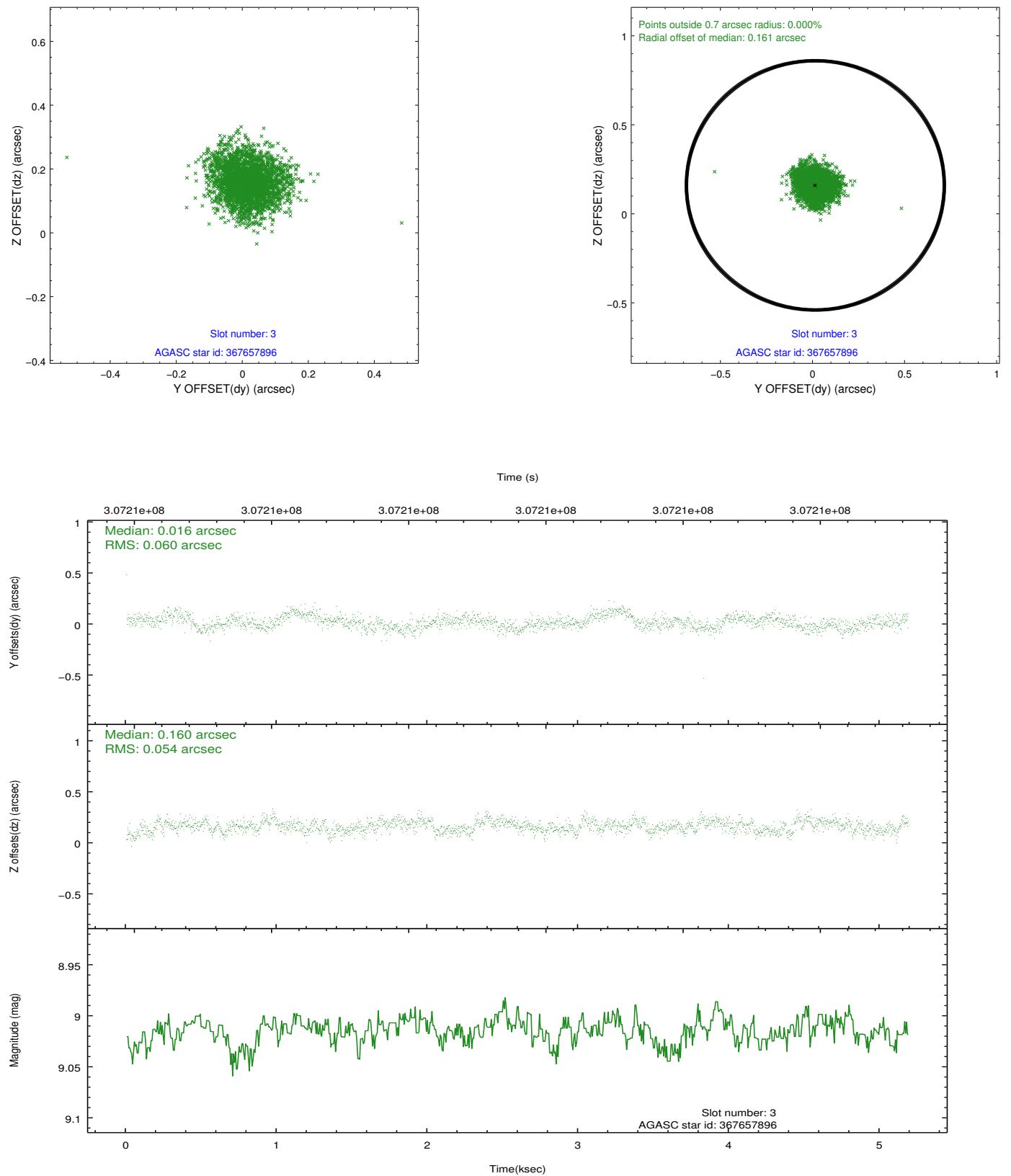


### Slot Statistics

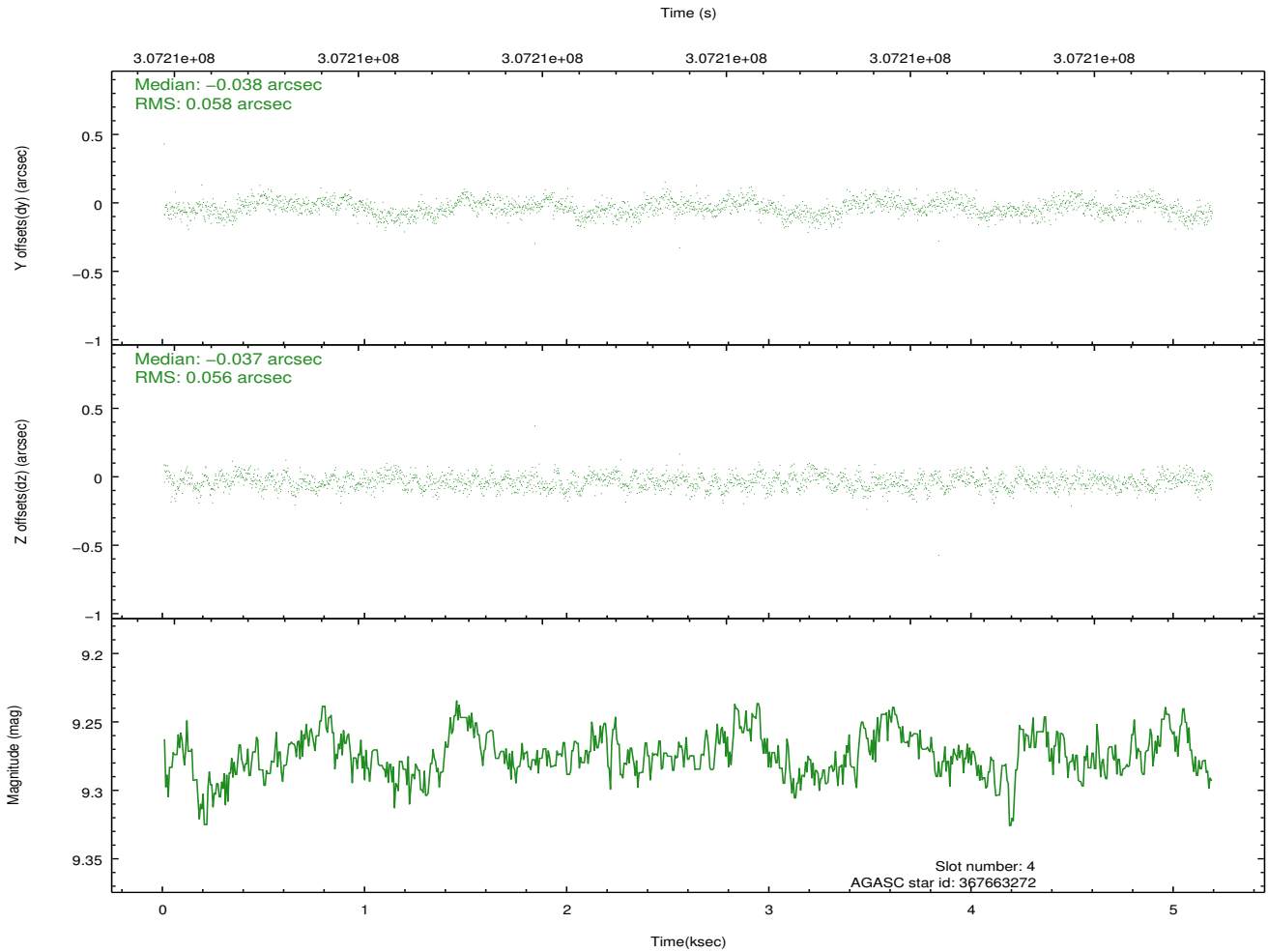
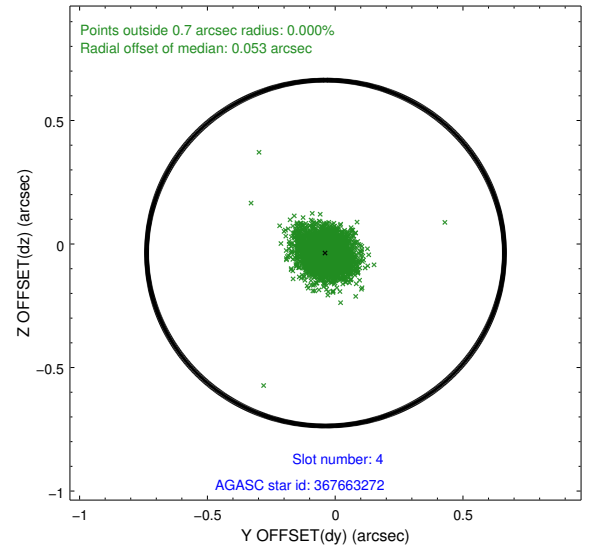
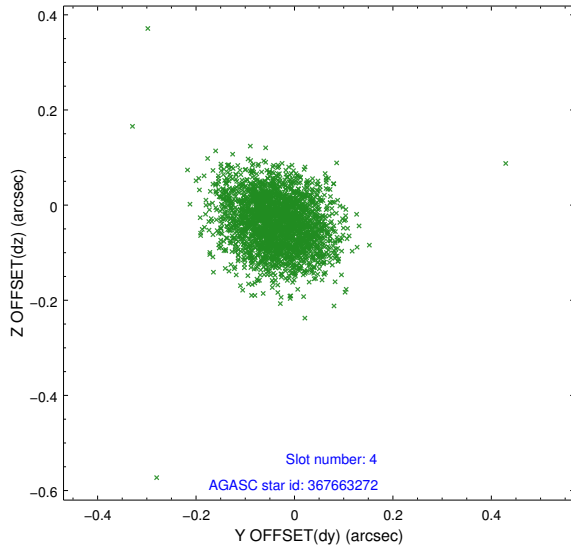
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.22	1265	0.033	-0.011	0.008	0.015	0.000000	0.000000	925.01	-838.46
1	FID	ACIS-I-5	7.22	1265	-0.219	0.034	0.007	0.013	0.000000	0.000000	-1822.71	1058.49
2	FID	ACIS-I-6	7.23	1265	0.095	0.047	0.008	0.013	0.000000	0.000000	389.34	1704.33
3	GUIDE	367657896	9.01	2530	0.016	0.160	0.086	0.134	11.197765	41.313576	-1262.62	-413.04
4	GUIDE	367663272	9.27	2527	-0.038	-0.037	0.083	0.136	10.656279	41.699429	461.11	-1456.71
5	GUIDE	367674552	8.85	2525	0.108	0.058	0.076	0.126	11.016238	41.570845	-583.72	-1211.85
6	GUIDE	367148872	7.21	2530	-0.246	-0.365	0.072	0.120	10.505940	40.688258	92.36	2187.10
7	GUIDE	367146616	8.85	2528	0.153	0.180	0.084	0.130	11.418645	41.190163	-1942.96	-109.37

## 2.4 Star Slots

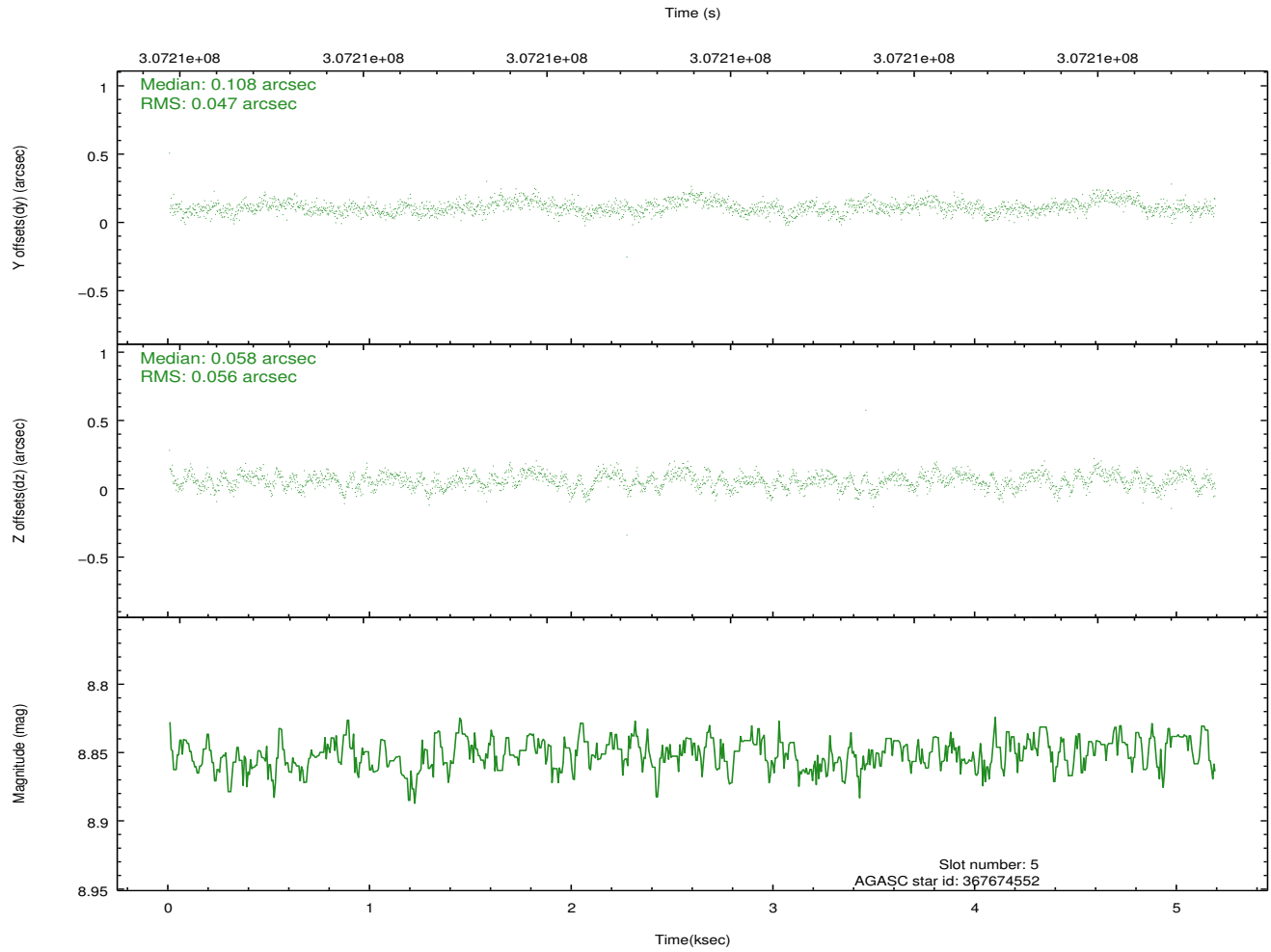
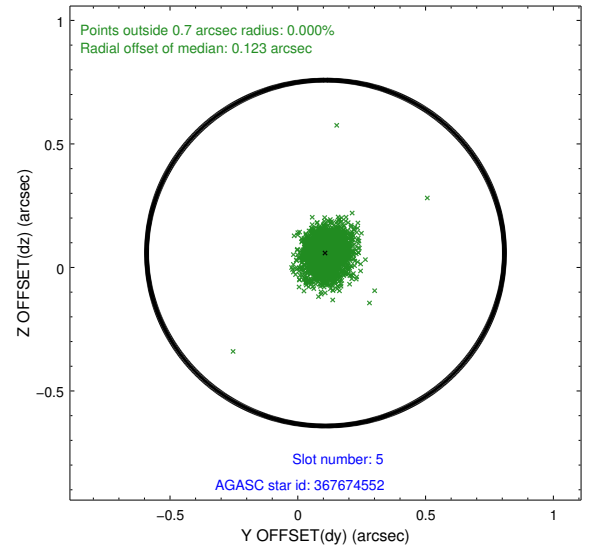
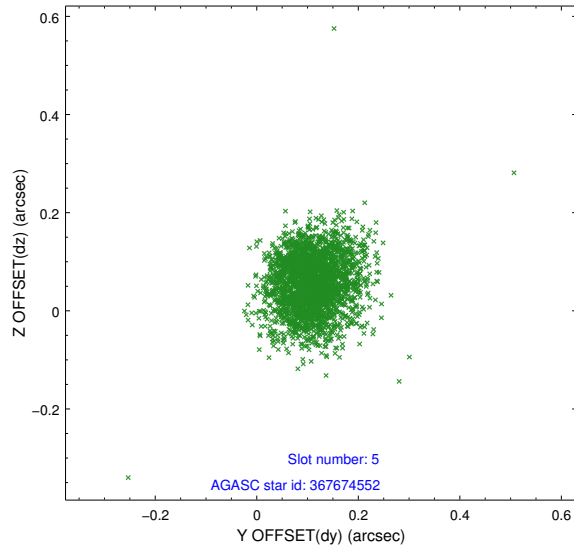
### 2.4.1 Slot 3



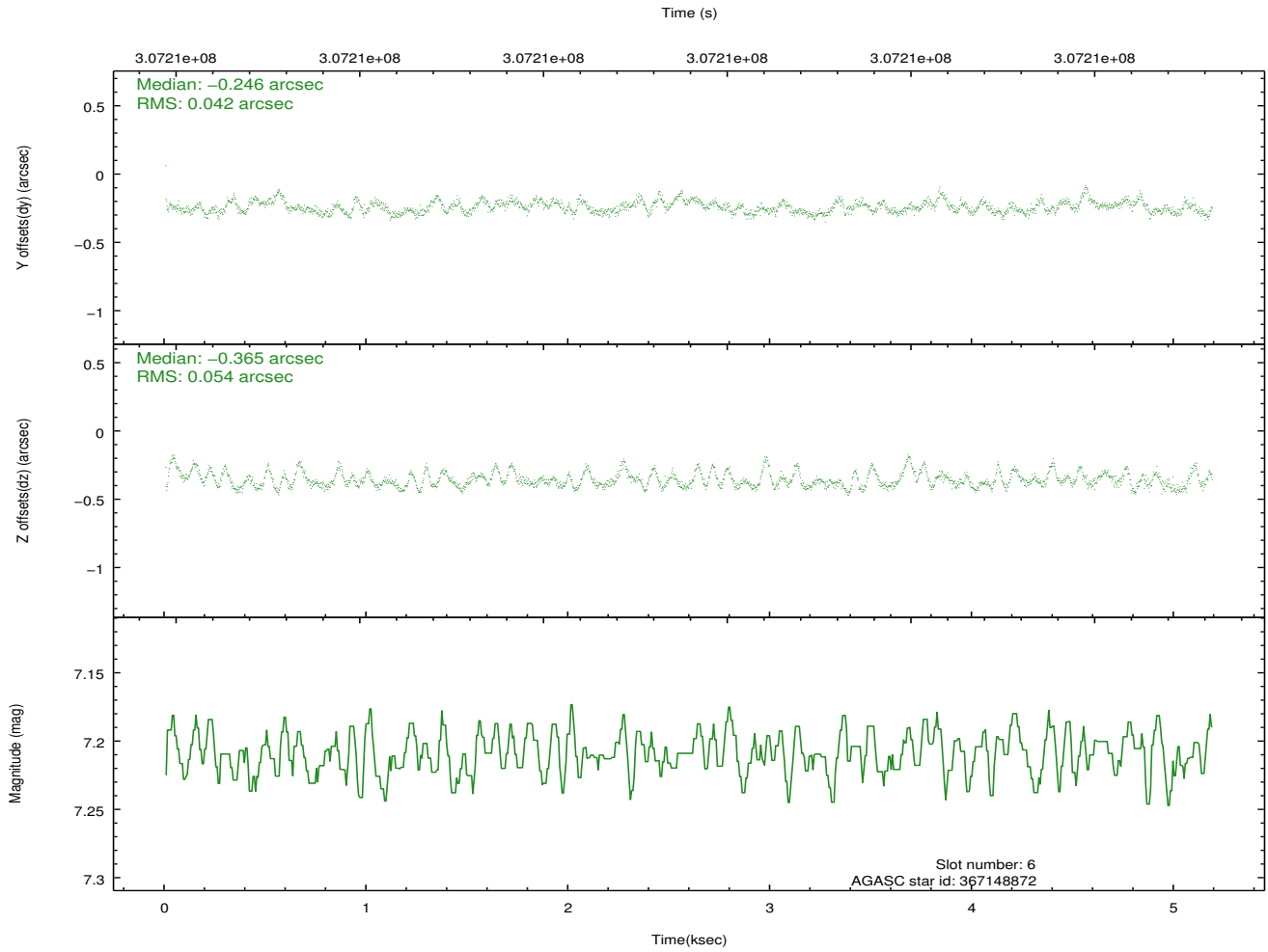
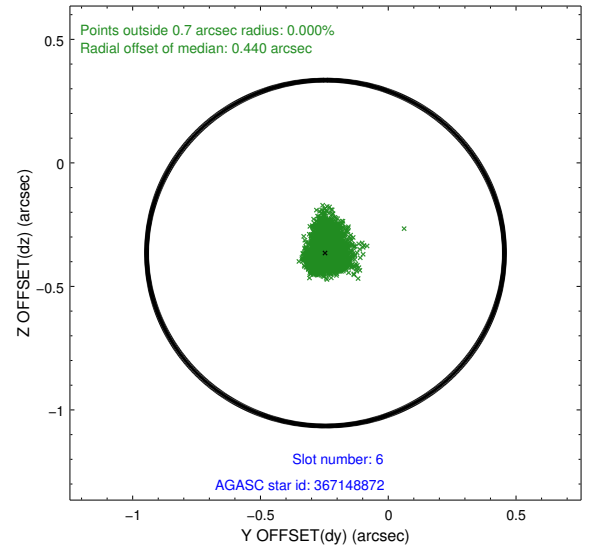
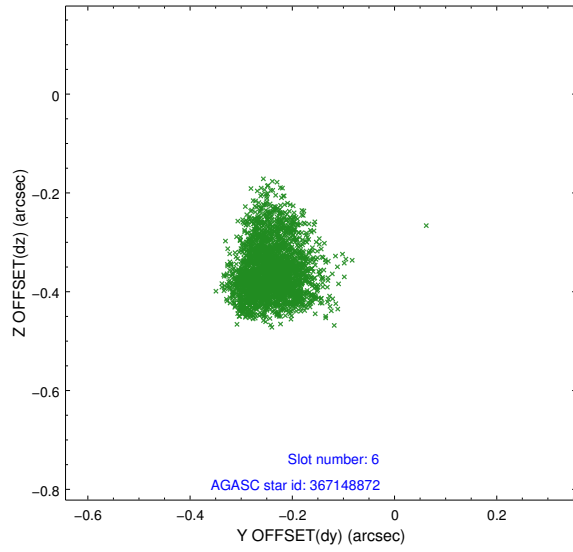
## 2.4.2 Slot 4



### 2.4.3 Slot 5

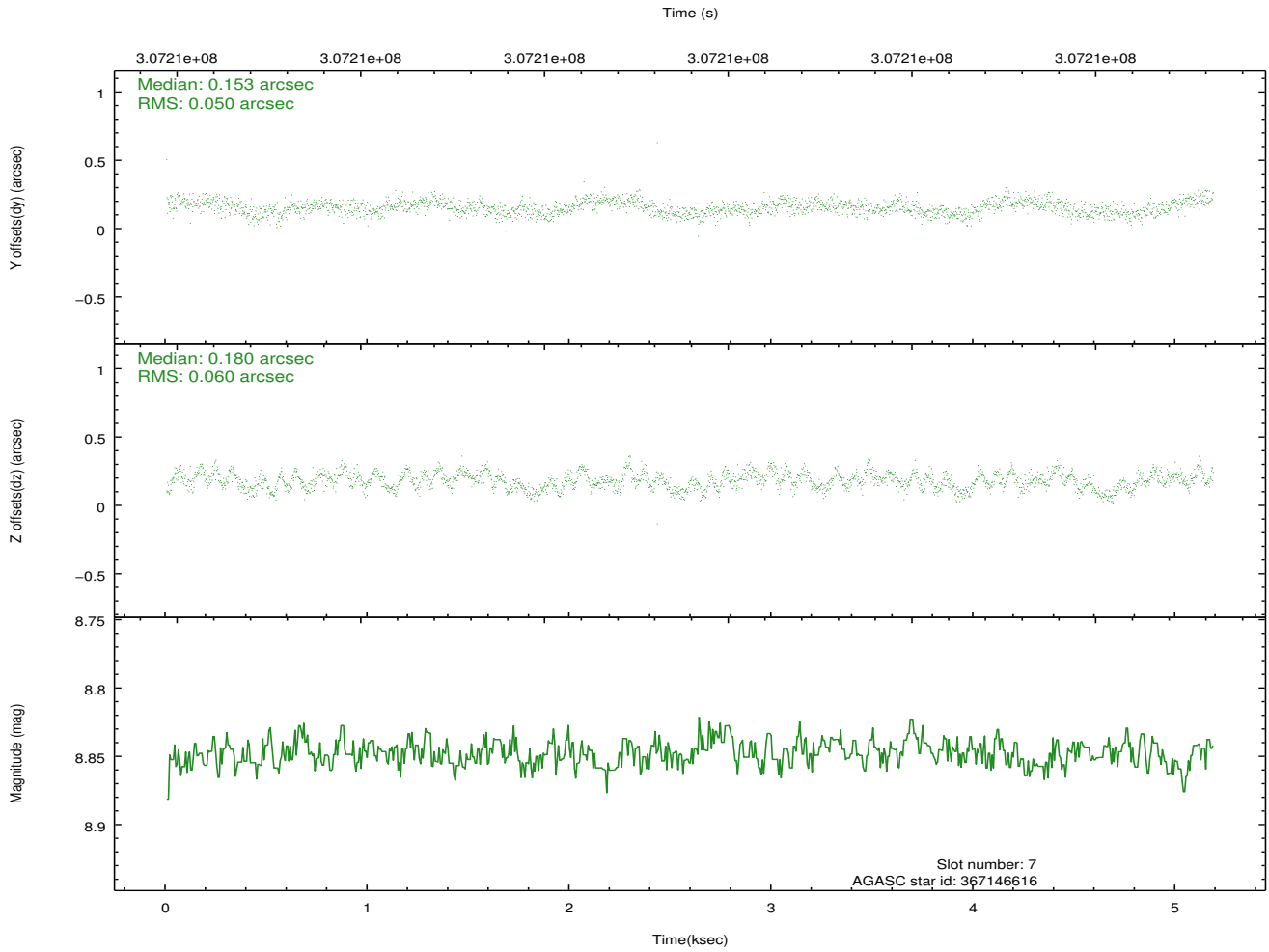
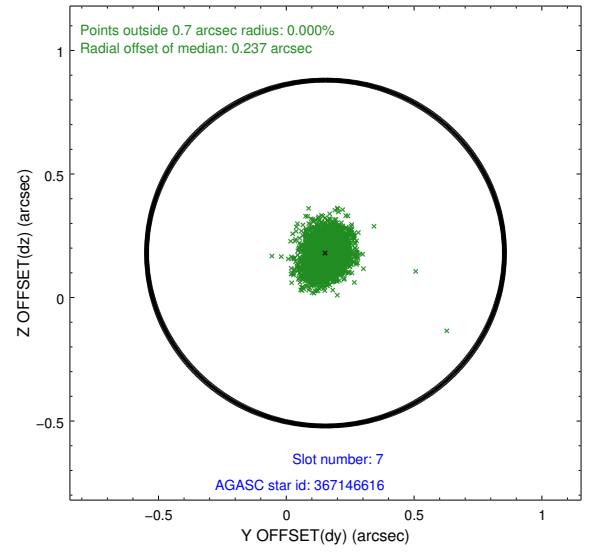
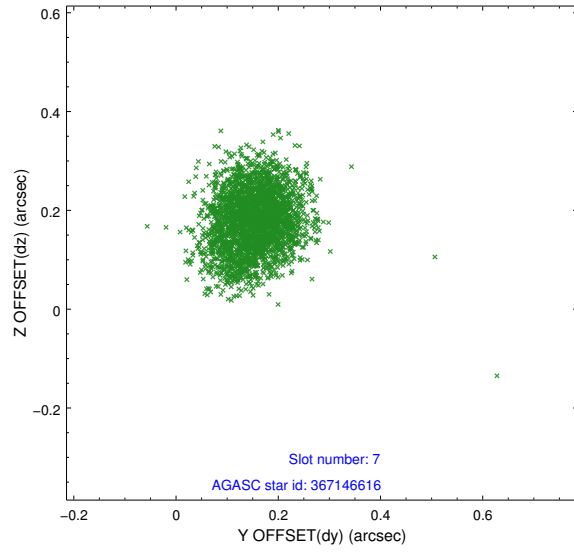


## 2.4.4 Slot 6



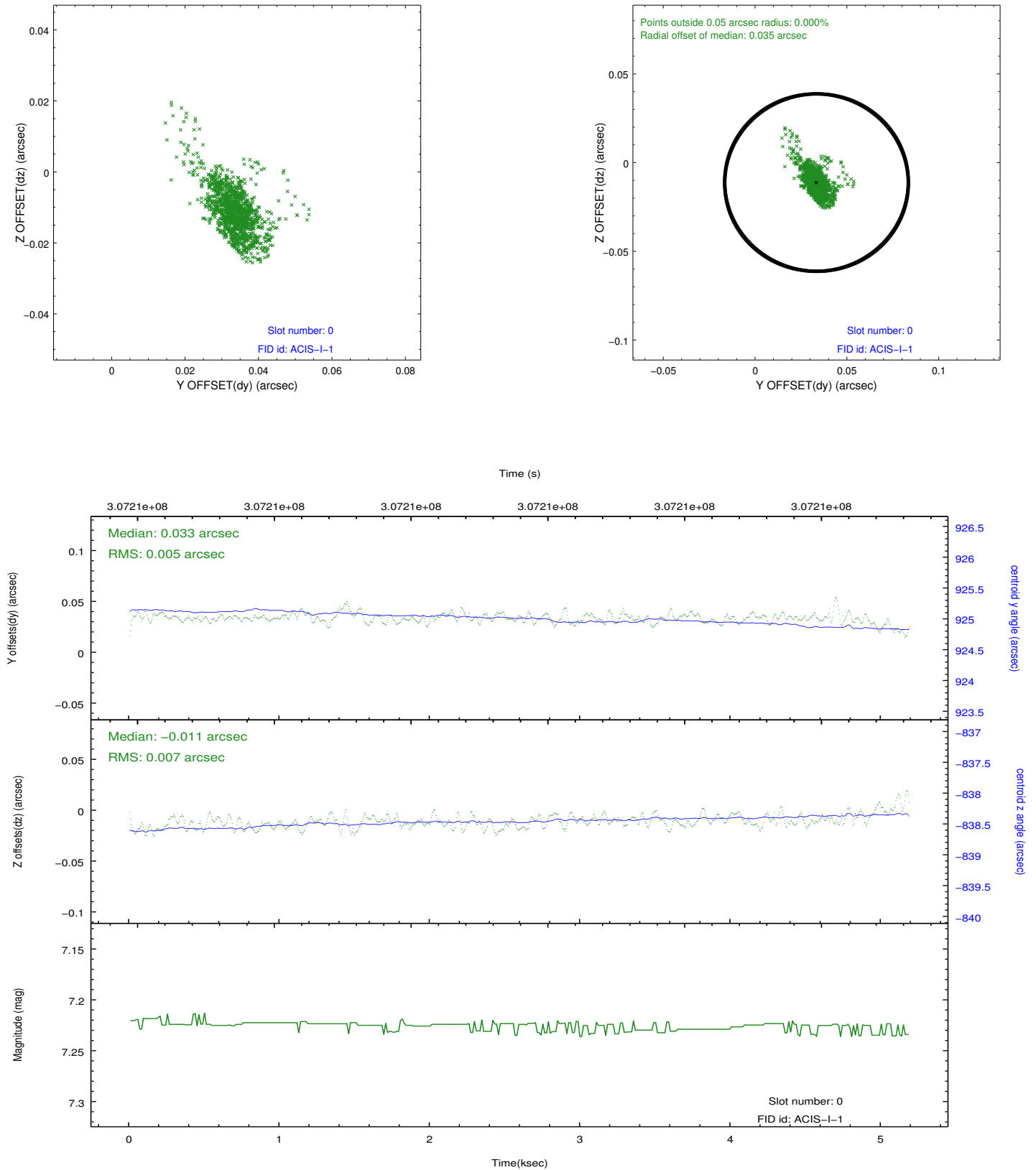


### 2.4.5 Slot 7

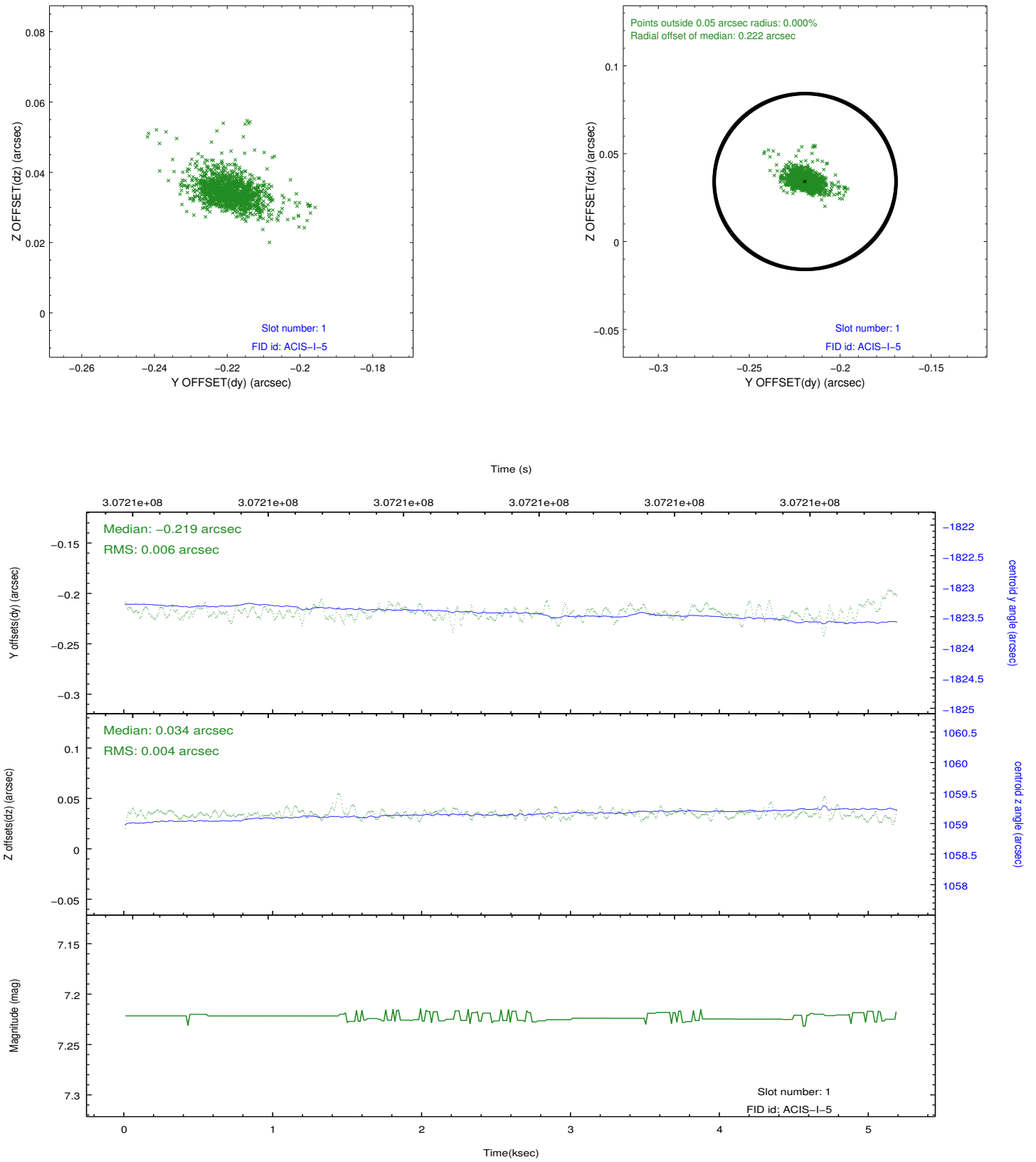


## 2.5 FID Slots

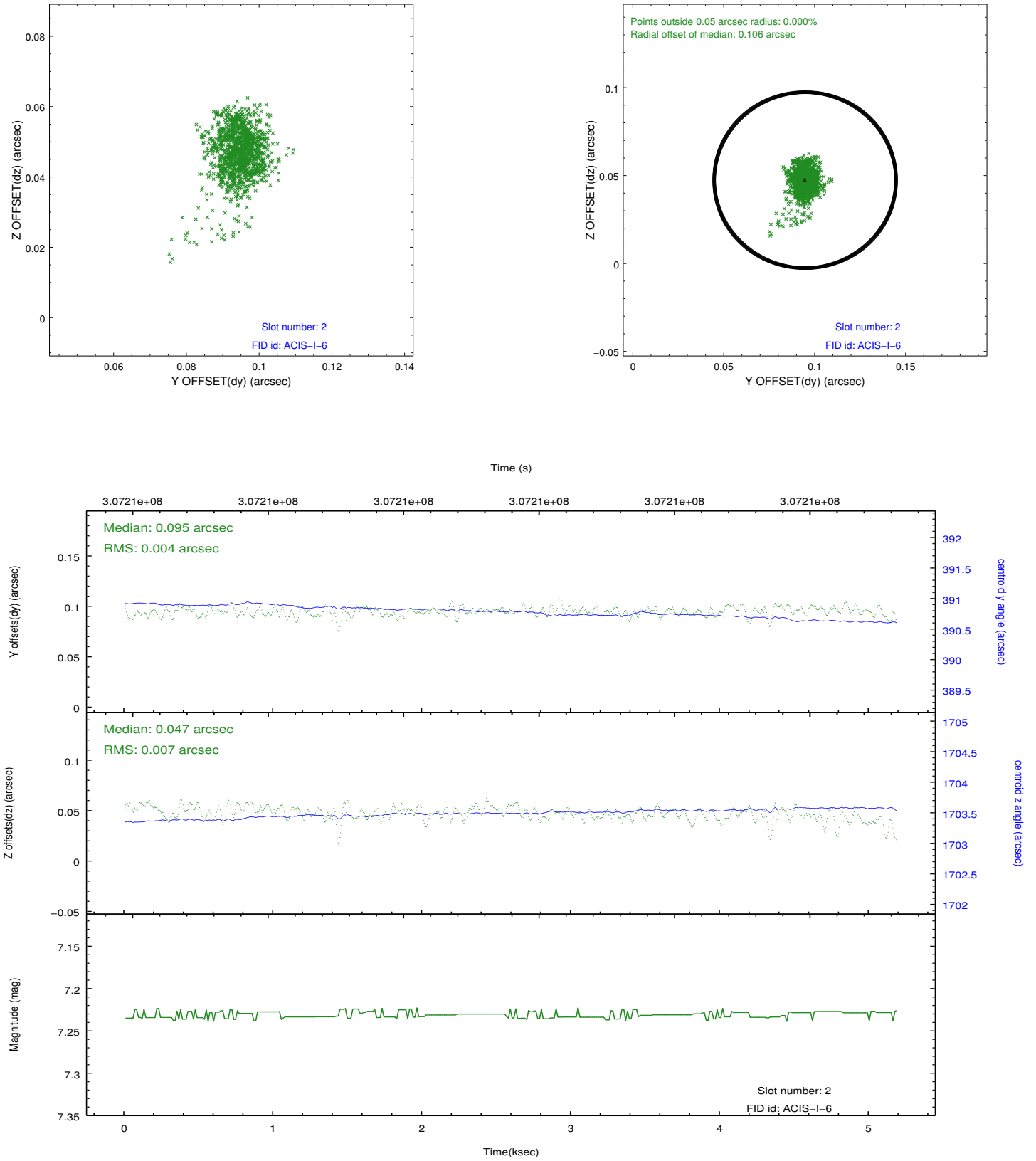
### 2.5.1 Slot 0



## 2.5.2 Slot 1



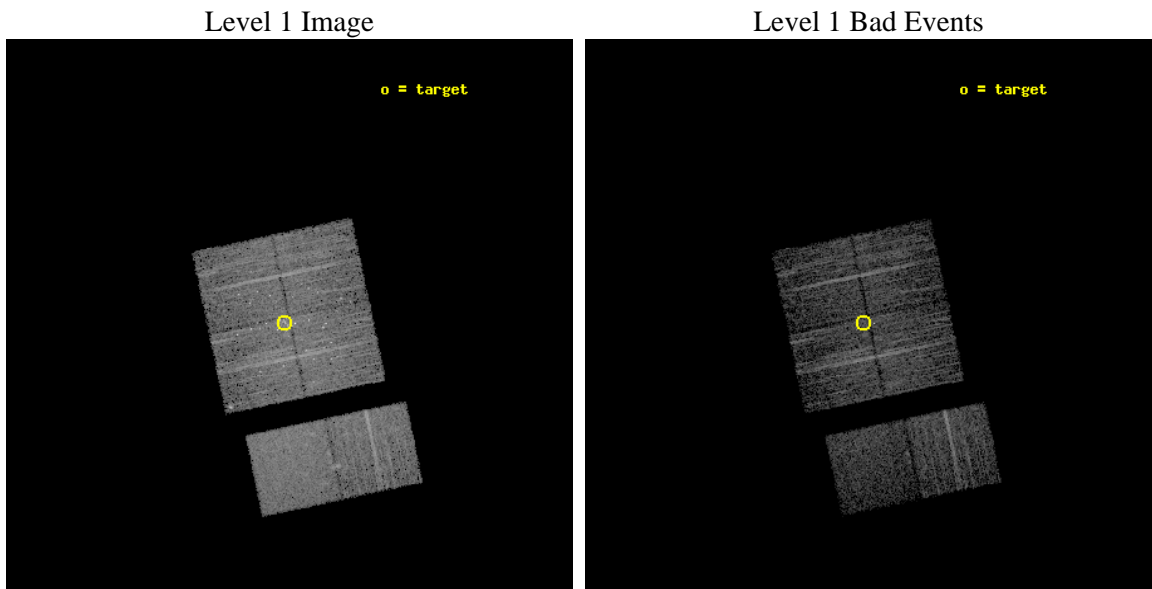
### 2.5.3 Slot 2



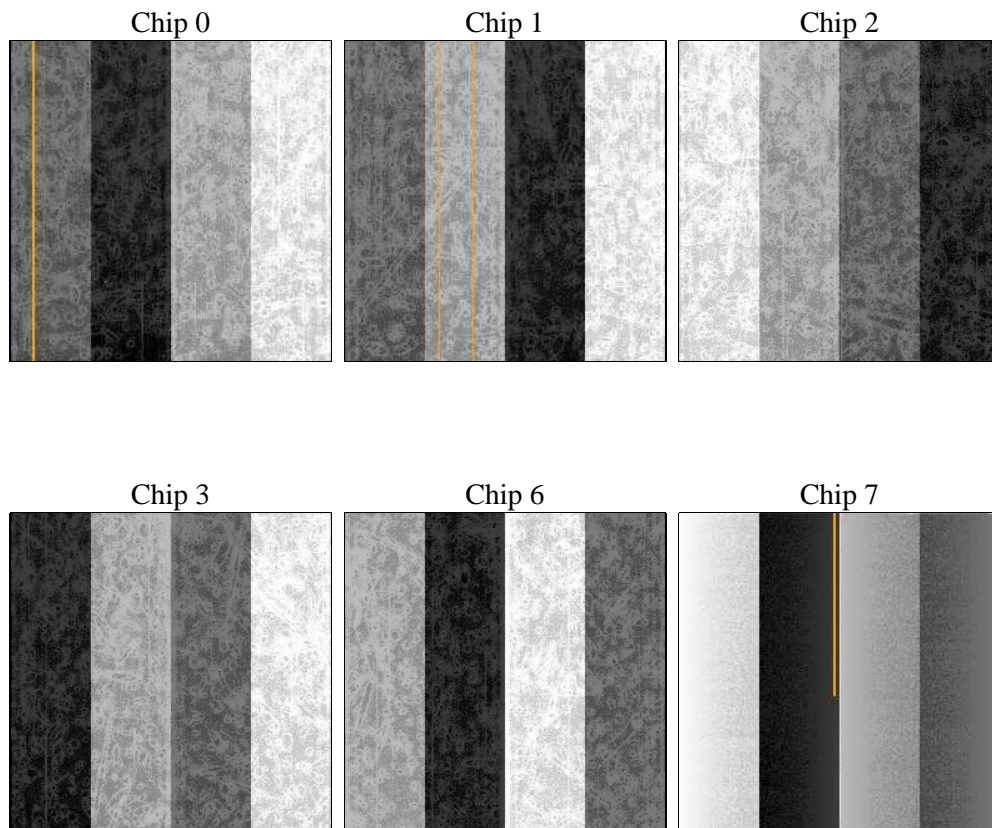
### 3 OBI Secondary

#### 3.1 OBI

##### 3.1.1 Images



##### 3.1.2 Bias



### 3.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	4016.2008815408	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	4016.2013593316	Sum of GTIs [s]
date	2012-05-01T21:44:02	Date and time of file creation	ontime1	4016.2010012269	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4016.200732708	Sum of GTIs [s]
			ontime3	4016.2008815408	Sum of GTIs [s]
			ontime6	4016.2009211779	Sum of GTIs [s]
			ontime7	4016.2011602521	Sum of GTIs [s]
			l1events	209038	Number of level 1 events

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	31636	31195	38949	37703	32694	36861	grade 0 events	1925	2954	4030	4759	1599	1756
rejected events	27420	25657	31937	30134	28822	19804		6%	9%	10%	12%	4%	4%
rejected %	86%	82%	81%	79%	88%	53%	grade 1 events	28	44	164	81	20	44
								0%	0%	0%	0%	0%	0%
							grade 2 events	835	1004	1221	1093	858	3459
								2%	3%	3%	2%	2%	9%
							grade 3 events	442	418	474	476	379	1583
								1%	1%	1%	1%	1%	4%
							grade 4 events	344	426	530	496	336	1546
								1%	1%	1%	1%	1%	4%
							grade 5 events	1075	1245	1103	1323	1355	3787
								3%	3%	2%	3%	4%	10%
							grade 6 events	671	743	766	752	705	8727
								2%	2%	1%	1%	2%	23%
							grade 7 events	26316	24361	30661	28723	27442	15959
								83%	78%	78%	76%	83%	43%

## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9538263

### A.2 Comments

Joint Proposal: HST