

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.2

Observation 4682 - L2 Version <sub>e</sub>1  
Chandra X-Ray Center

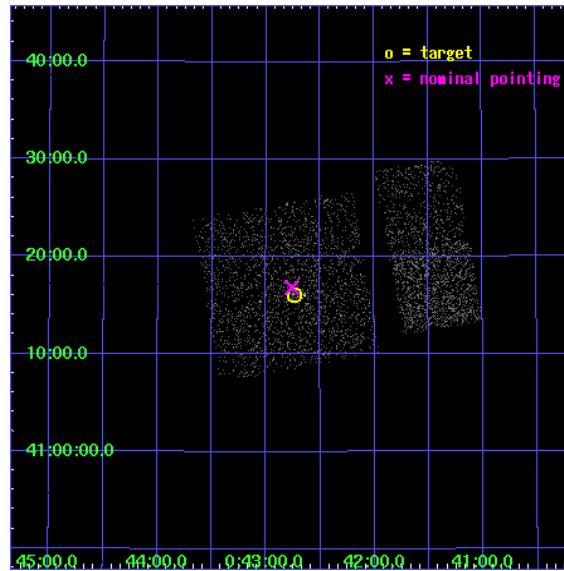
L2 Processing Date : May 17 2006

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# 1 Front

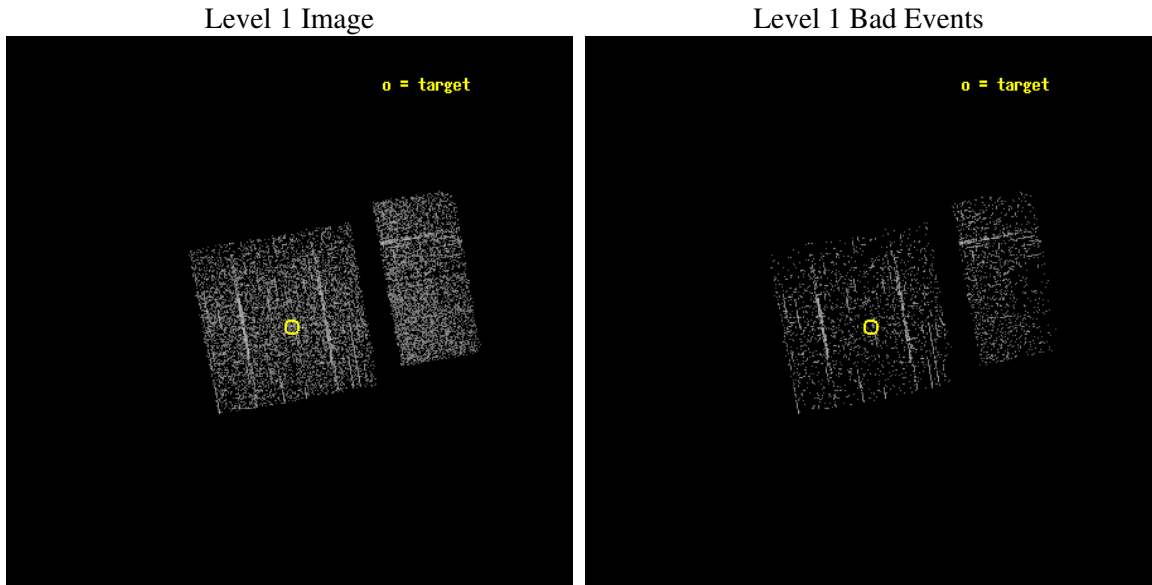
seq_num	600337
obs_id	4682
title	Searching for Black Hole X-ray Nova in M31
observer	Dr. Stephen Murray
object	M31-Center
dtcycle	0
cycle	P
ra_targ	10.685
dec_targ	41.268972
ra_nom	10.69033974472
dec_nom	41.28106332163
roll_nom	79.990187193568
revision	2
ontime	937.51597100496
livetime	147.58762819649
ontime0	937.39285102487
ontime1	937.43389099836
ontime2	937.47493100166
ontime3	937.51597100496
ontime6	937.59456038475
ontime7	937.55701100826
l2events	4374



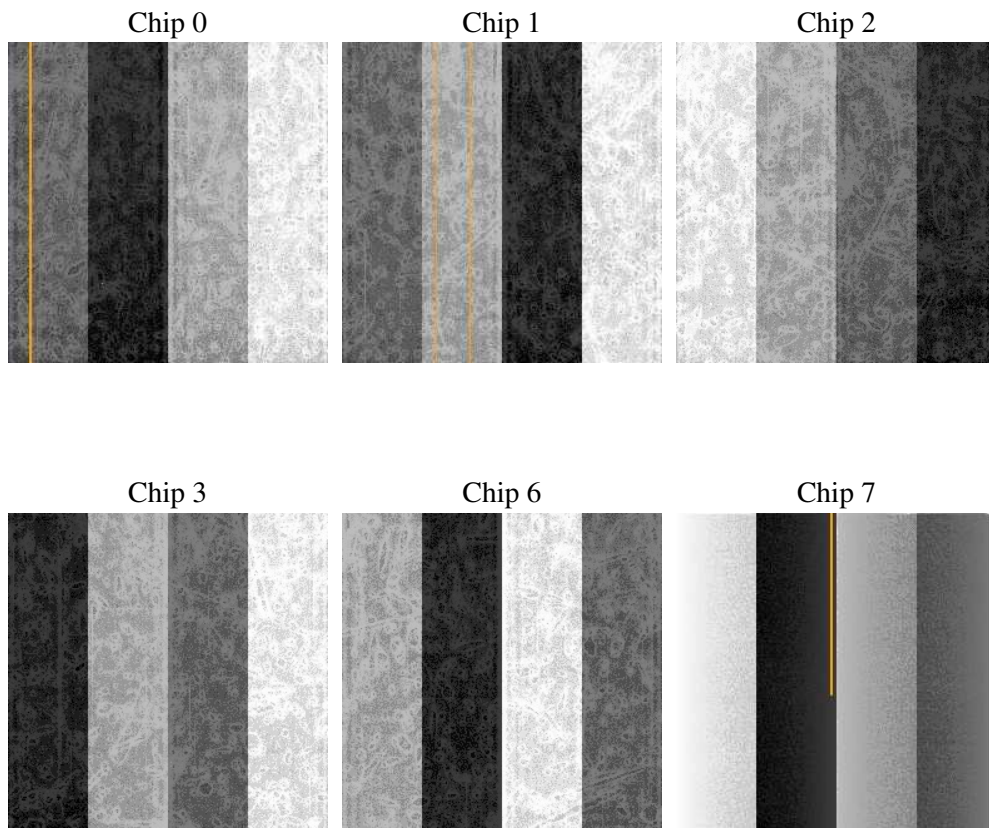
## 2 OBI Primary

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.2
caldsver	3.2.2
date	2006-05-17T09:43:32
revision	2

sched_exp_time	4791.529000
ontime	945.21728038788
ontime0	945.21728038788
ontime1	945.21728038788
ontime2	945.21728038788
ontime3	945.21728038788
ontime6	945.21728038788
ontime7	945.21728038788
l1events	22282

### 2.1.4 Events

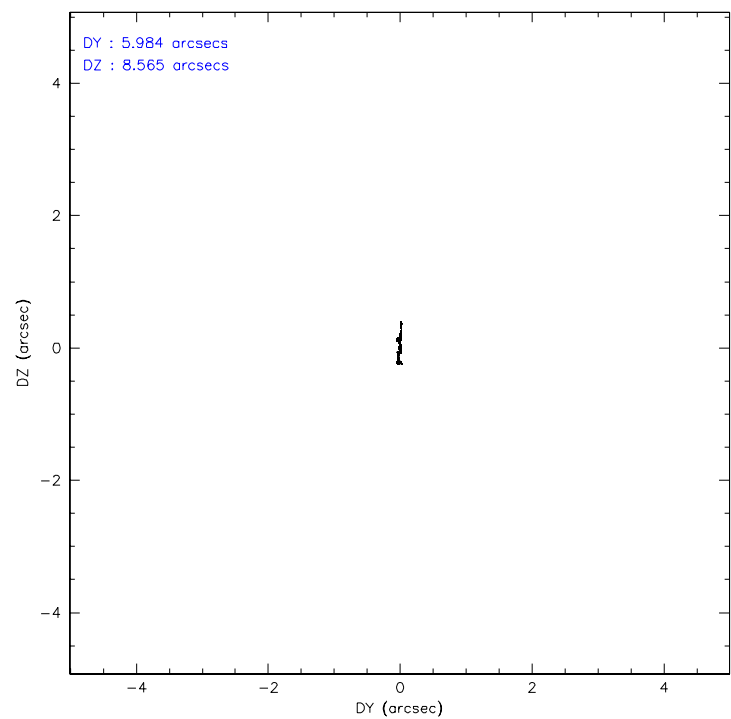
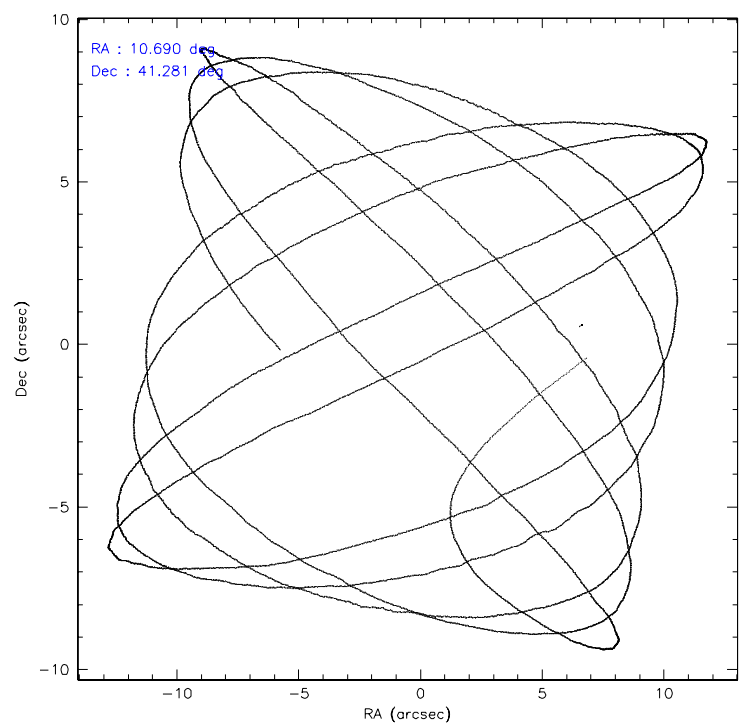
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3524	3539	3400	3829	4004	3986
rejected events	2900	2803	2746	2971	3373	2654
rejected %	82%	79%	80%	77%	84%	66%

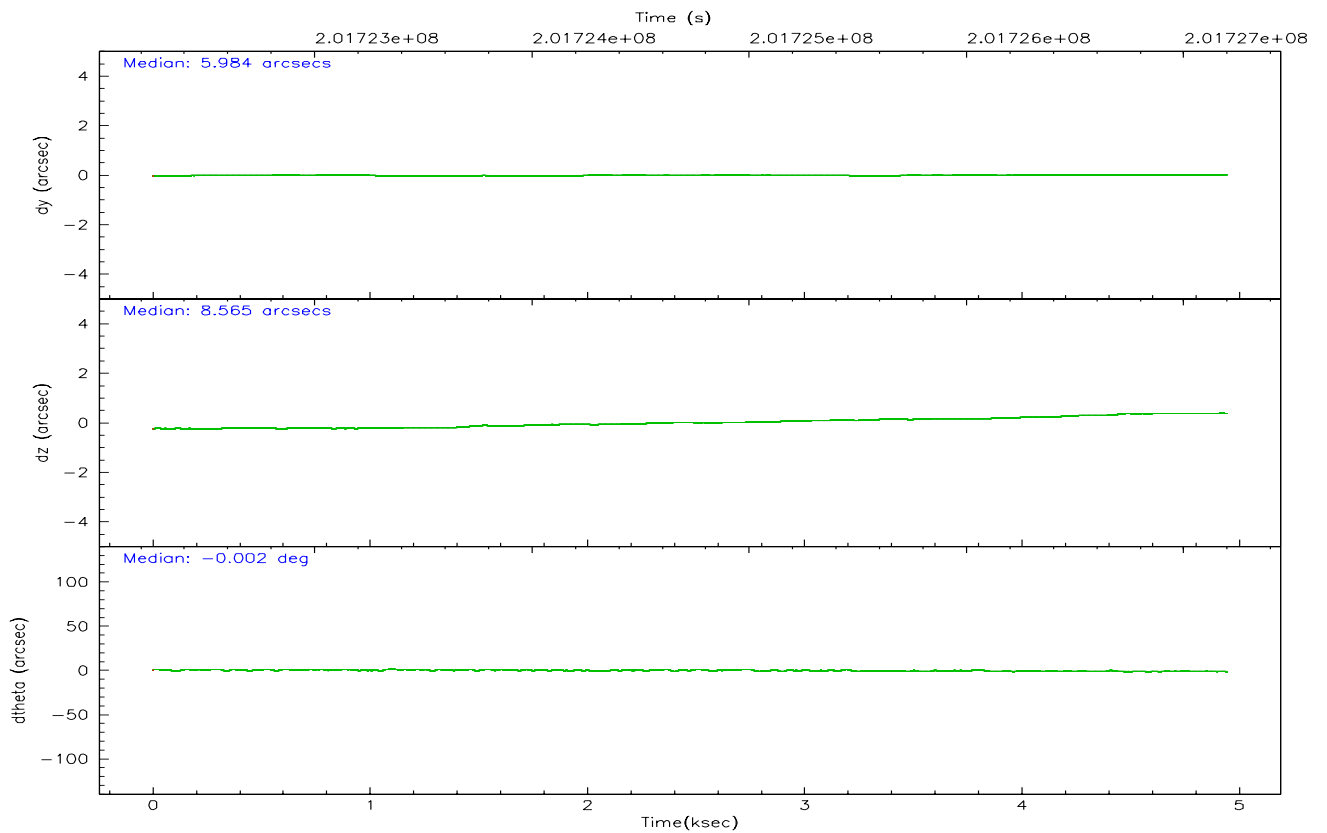
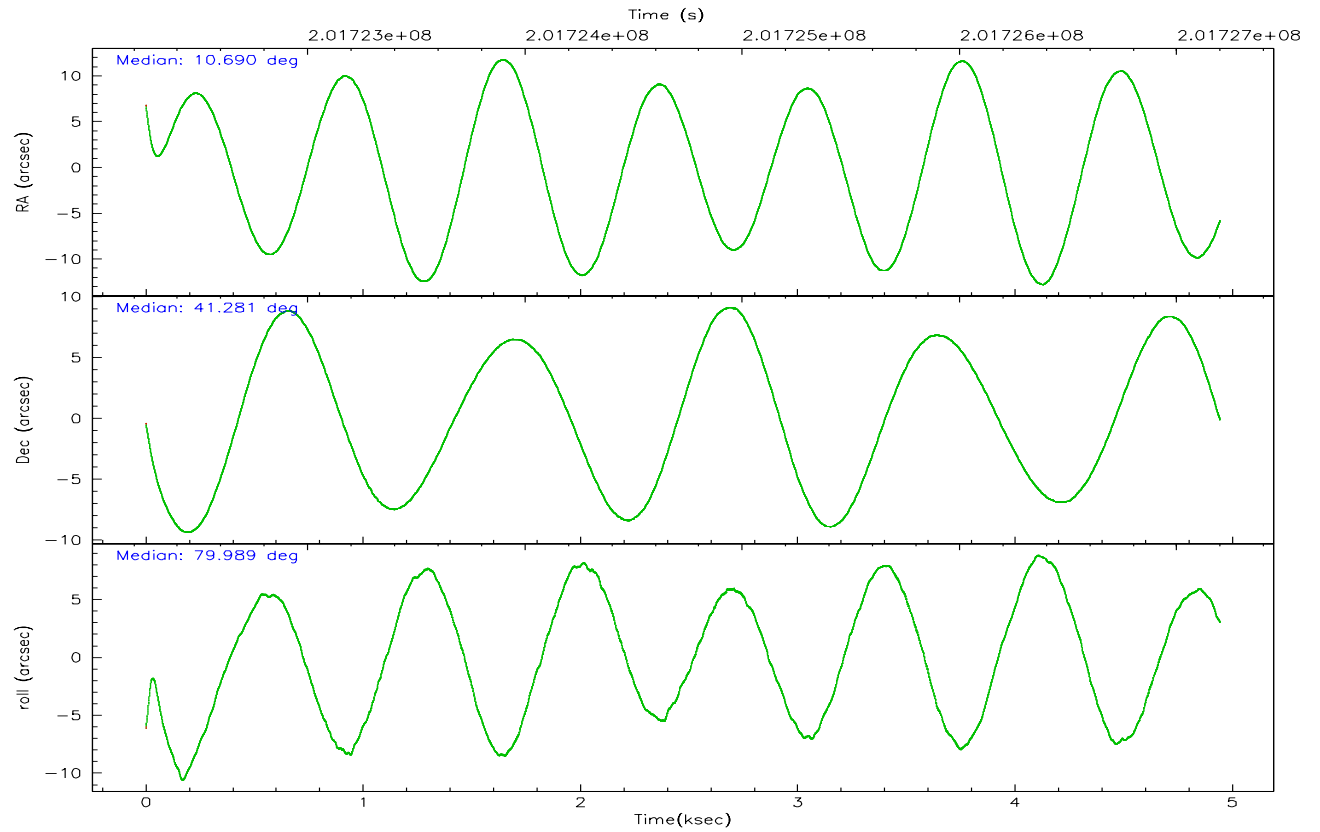
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	358	411	398	563	345	107
	10%	11%	11%	14%	8%	2%
grade 1 events	1	1	1	5	4	2
	0%	0%	0%	0%	0%	0%
grade 2 events	89	127	103	109	106	305
	2%	3%	3%	2%	2%	7%
grade 3 events	63	63	39	56	50	82
	1%	1%	1%	1%	1%	2%
grade 4 events	53	54	40	65	59	84
	1%	1%	1%	1%	1%	2%
grade 5 events	107	135	83	115	128	254
	3%	3%	2%	3%	3%	6%
grade 6 events	70	82	80	73	77	766
	1%	2%	2%	1%	1%	19%
grade 7 events	2783	2666	2656	2843	3235	2386
	78%	75%	78%	74%	80%	59%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	10.702912	10.69033974472008	Alternating exposures requested	Y	Y
Pointing Dec	41.255369	41.28106332163045	Primary exposure time	0.600000	0.6
Pointing Roll	79.773202	79.9901871935681	Secondary exposure time	3.200000	3.2
Window start time	201139264.184000	201139264.184000	Duty cycle	5	5
Window stop time	201744064.184000	201744064.184000			
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	201722410.184000	201721169.53019			
Observation start date	2004-05-23T17:59:06	2004-05-23T17:39:29			
Observation end time	201727201.184000	201727516.33048			
Observation end date	2004-05-23T19:18:57	2004-05-23T19:25:16			
Read mode	TIMED	TIMED			

### 2.3 Aspect



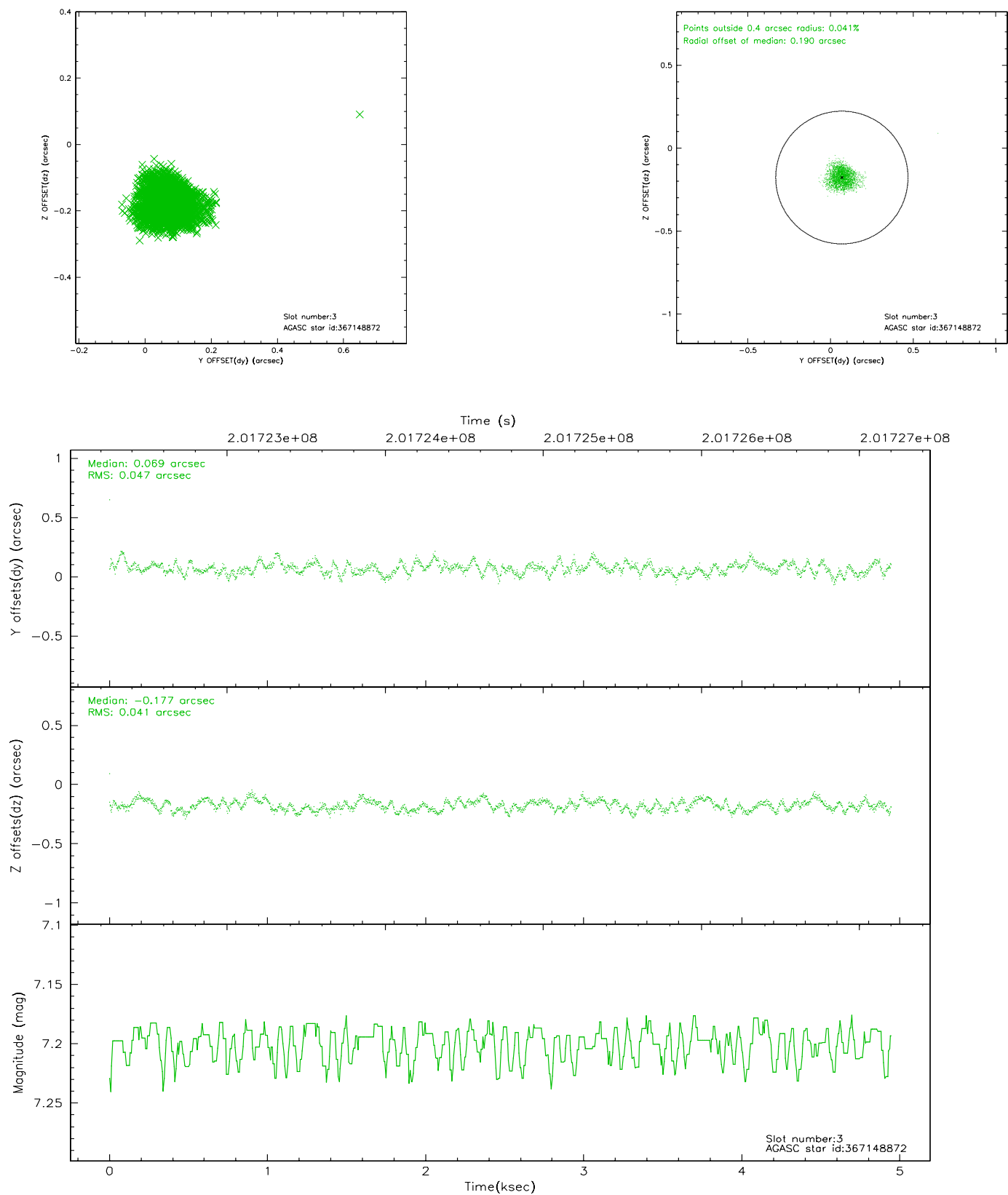


# Slot Statistics

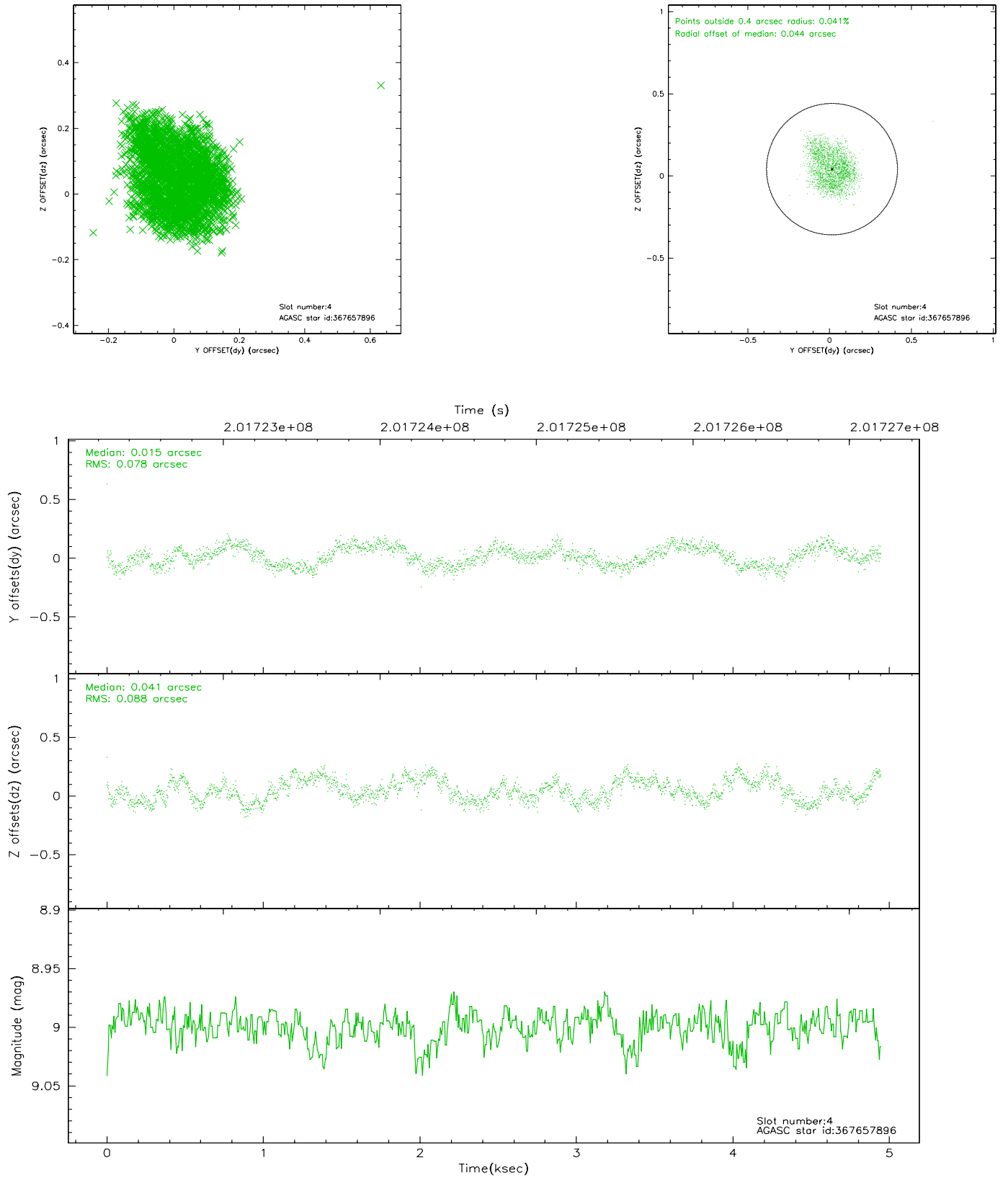
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1207	-0.004	0.067	0.010	0.016	0.000000	0.000000	933.73	-831.95
1	FID	ACIS-I-5	7.23	1207	-0.127	0.037	0.008	0.014	0.000000	0.000000	-1813.82	1064.90
2	FID	ACIS-I-6	7.26	1207	0.040	-0.033	0.009	0.014	0.000000	0.000000	397.98	1710.73
3	GUIDE	367148872	7.20	2413	0.069	-0.177	0.066	0.103	10.505940	40.688258	-2103.92	166.80
4	GUIDE	367657896	9.00	2410	0.015	0.041	0.128	0.190	11.197765	41.313576	447.04	-1278.57
5	GUIDE	367663272	9.29	2413	0.006	-0.118	0.078	0.131	10.656279	41.699429	1551.27	407.14
6	GUIDE	367674552	8.85	2413	-0.046	0.087	0.071	0.115	11.016238	41.570845	1269.91	-628.11
7	GUIDE	367138920	7.73	2411	-0.041	0.164	0.076	0.122	11.513485	40.808909	-1178.85	-2457.45

## 2.4 Star Slots

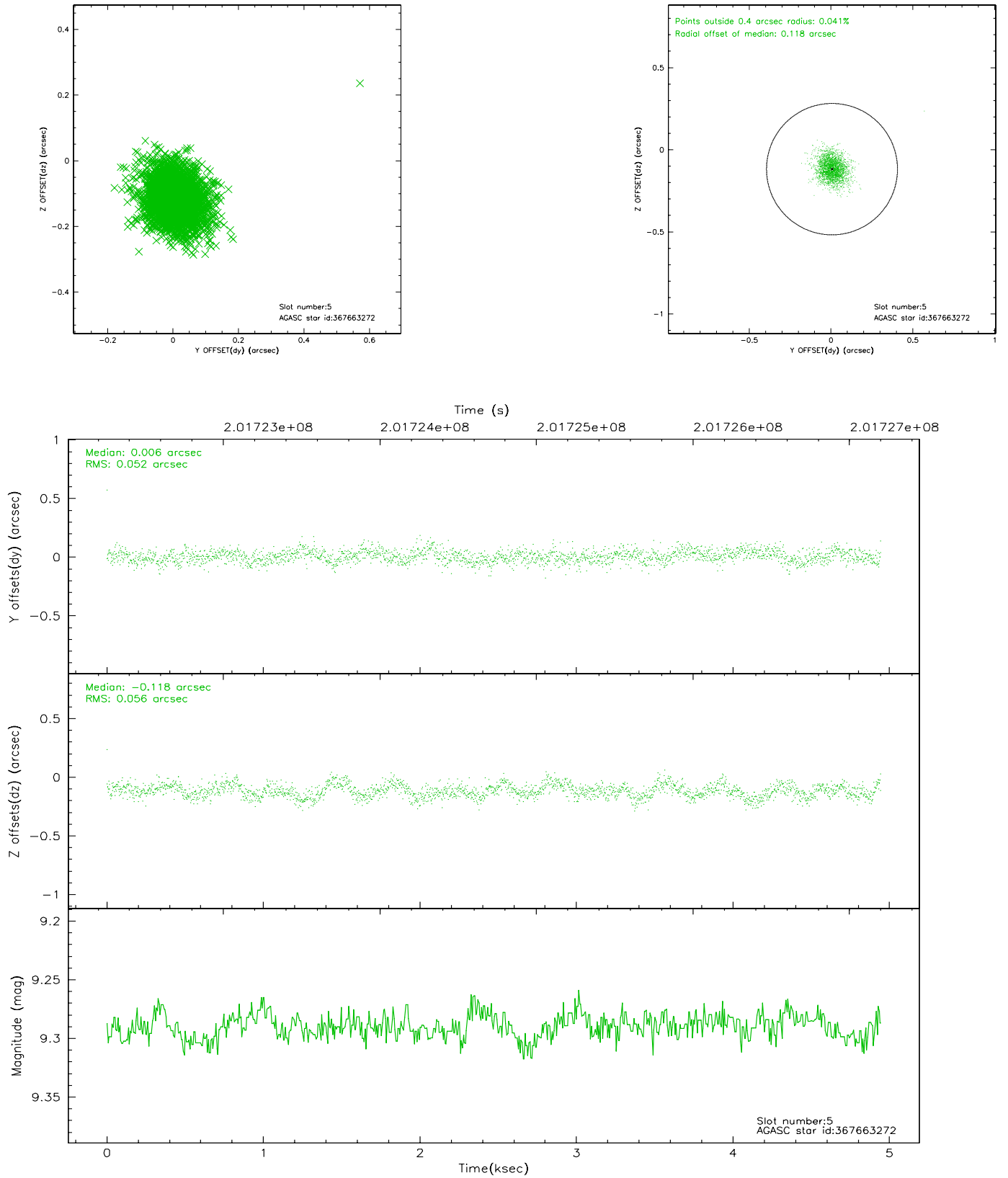
### 2.4.1 Slot 3



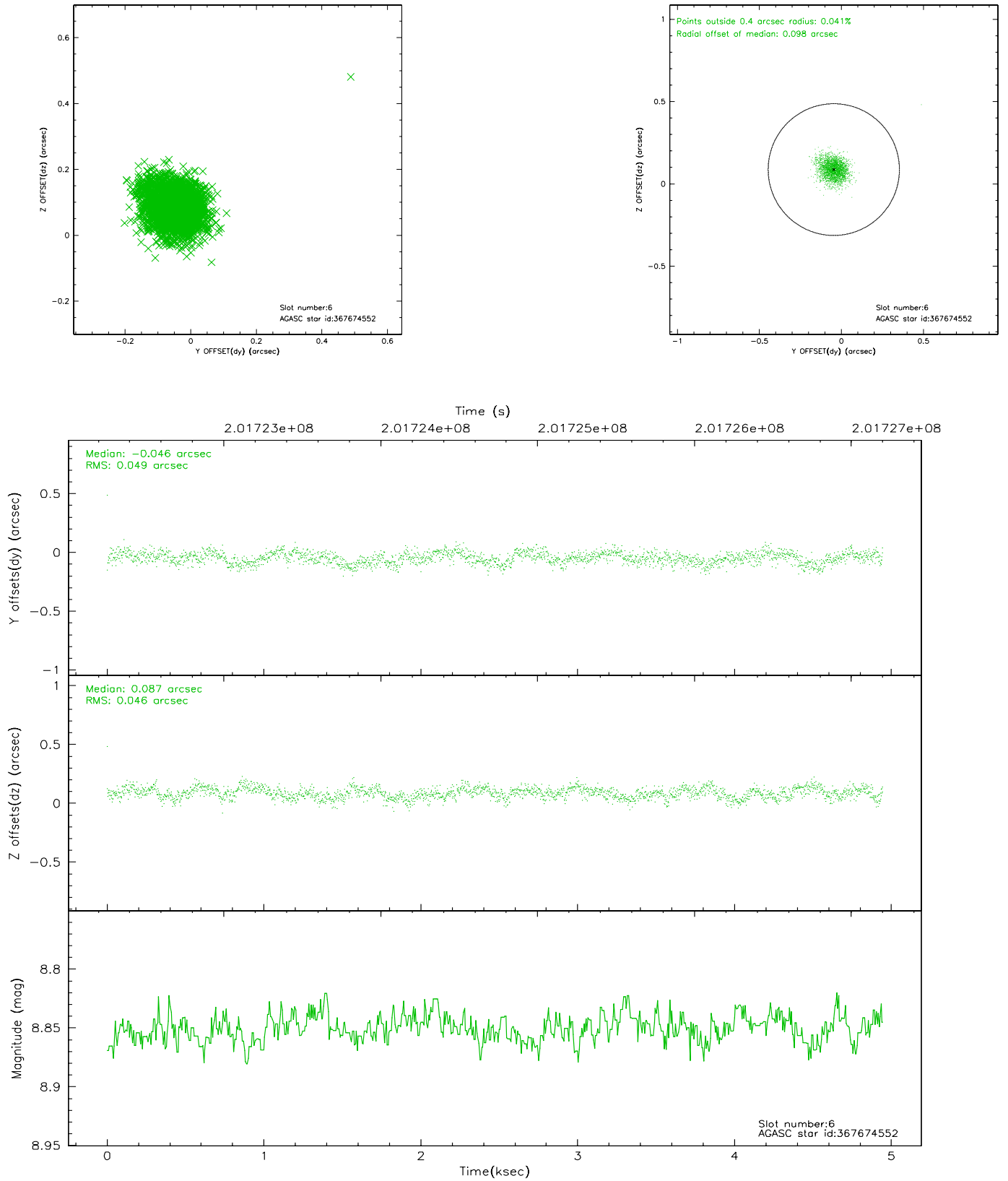
## 2.4.2 Slot 4



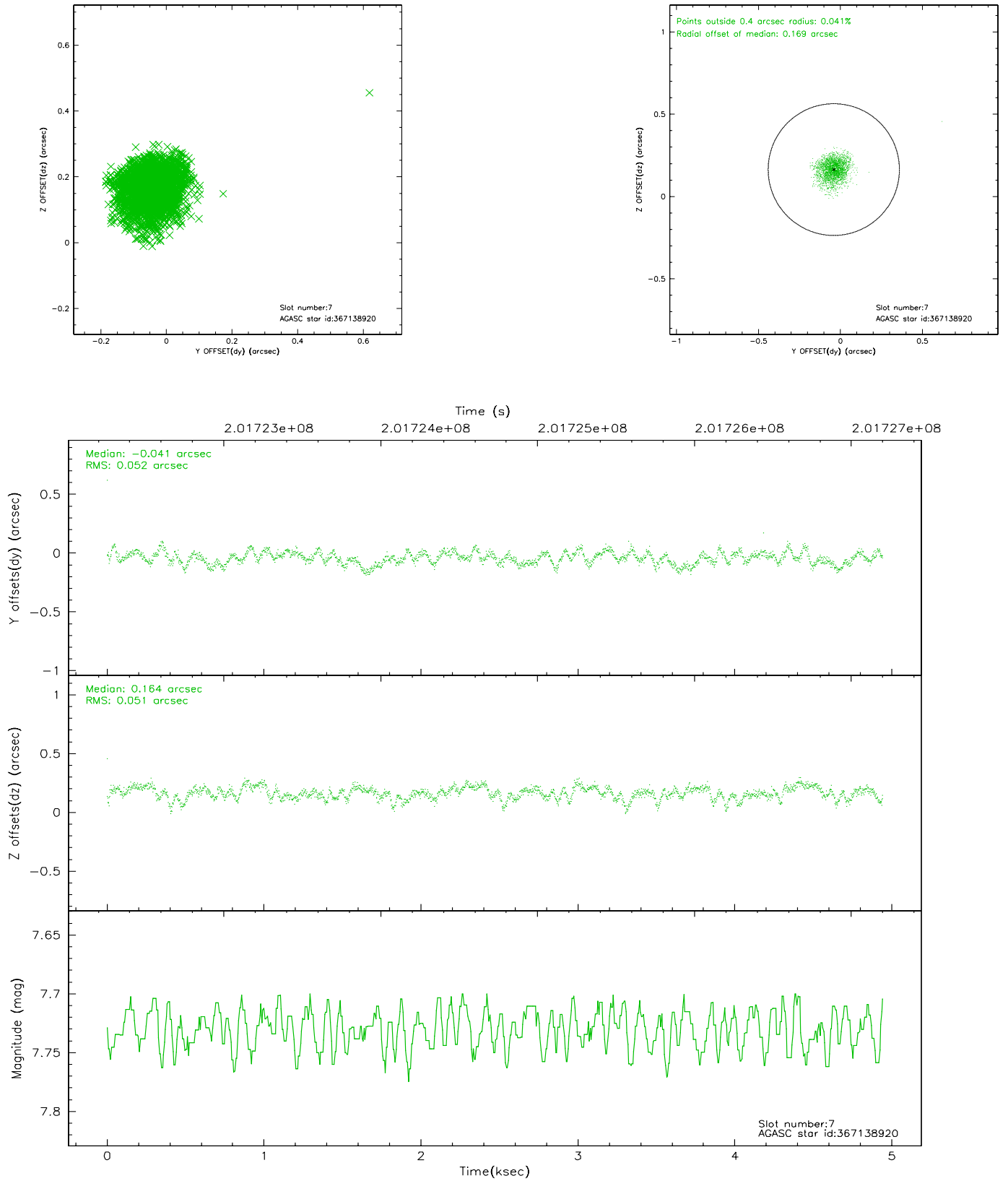
### 2.4.3 Slot 5



## 2.4.4 Slot 6

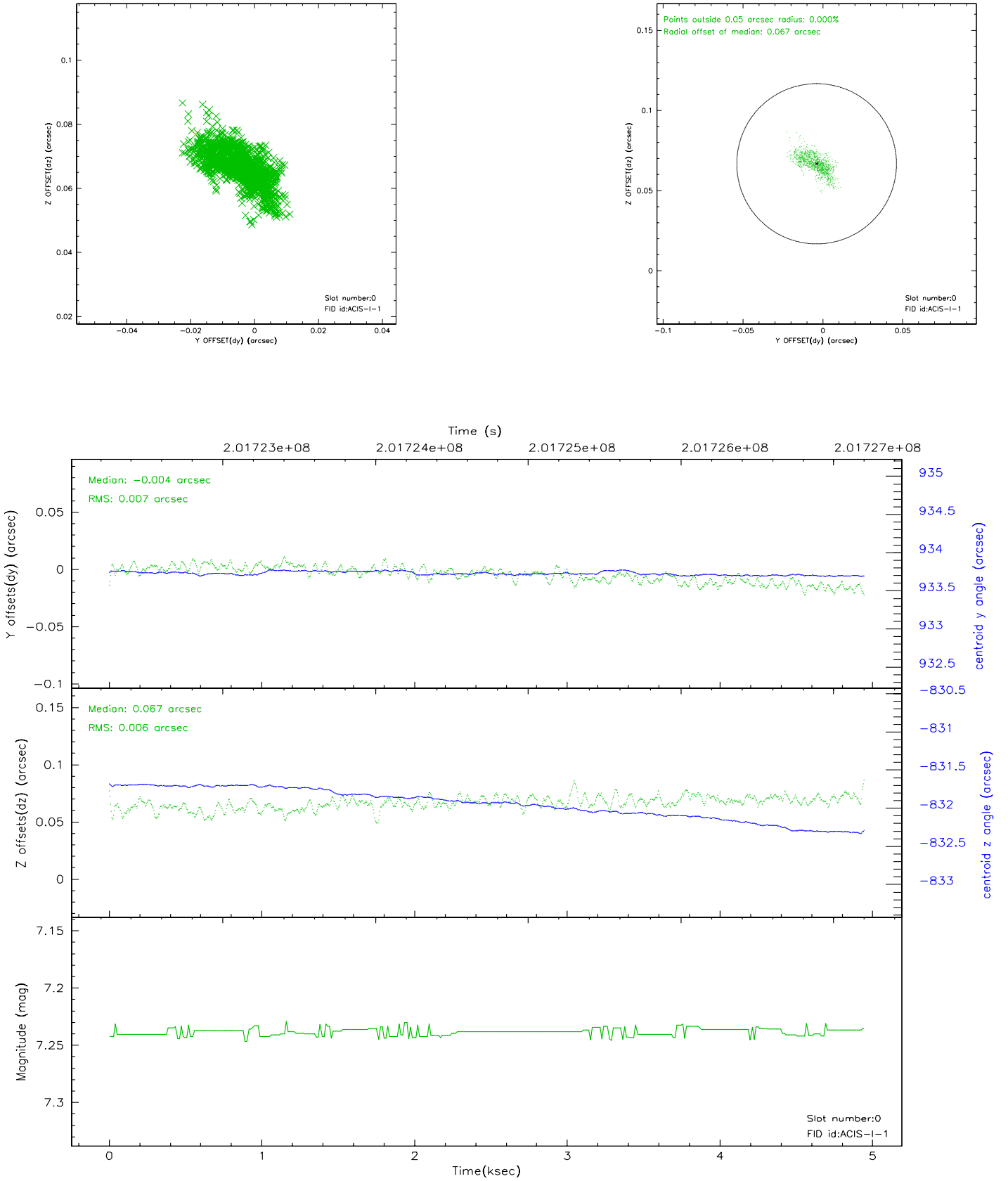


## 2.4.5 Slot 7

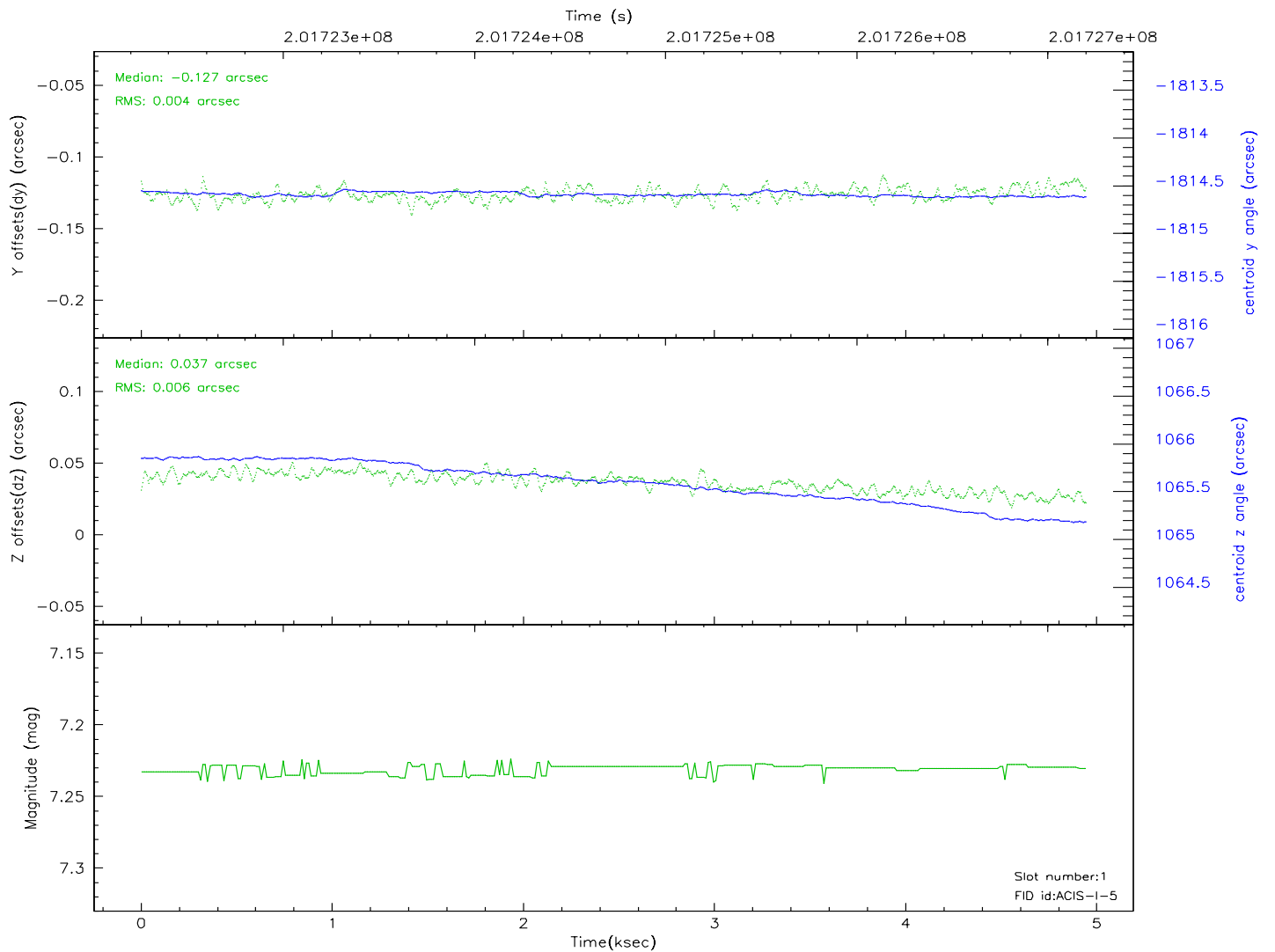
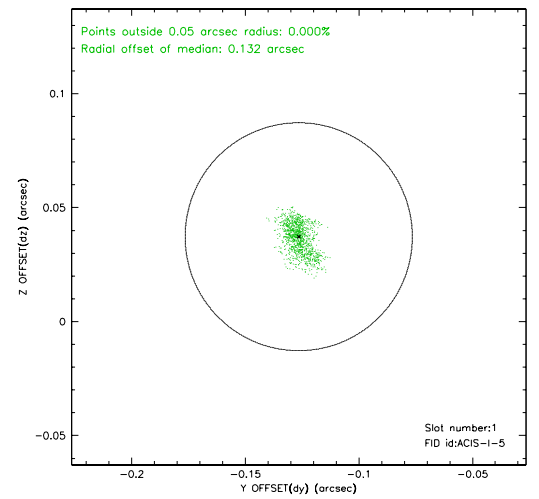
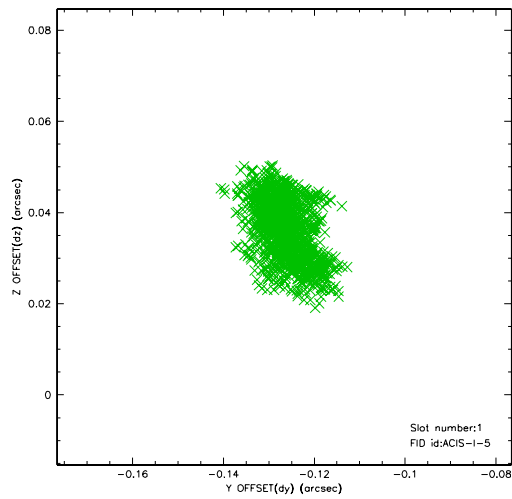


## 2.5 FID Slots

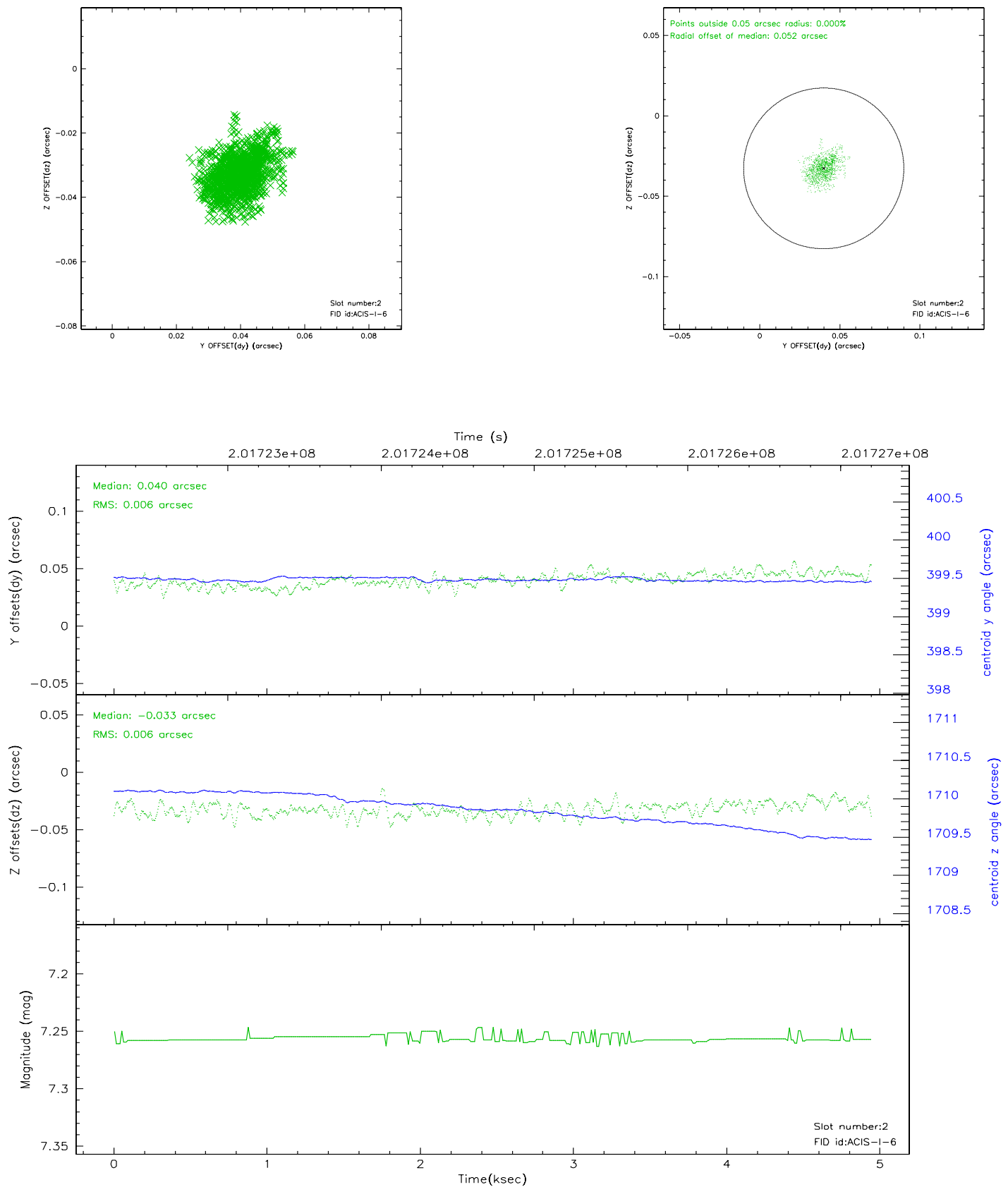
### 2.5.1 Slot 0



## 2.5.2 Slot 1



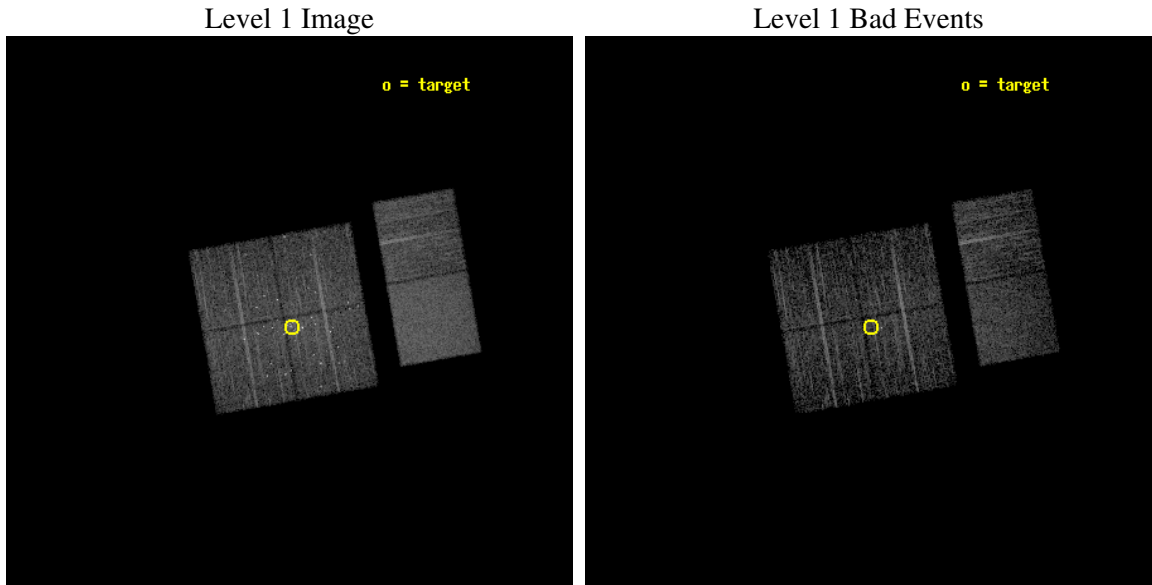
### 2.5.3 Slot 2



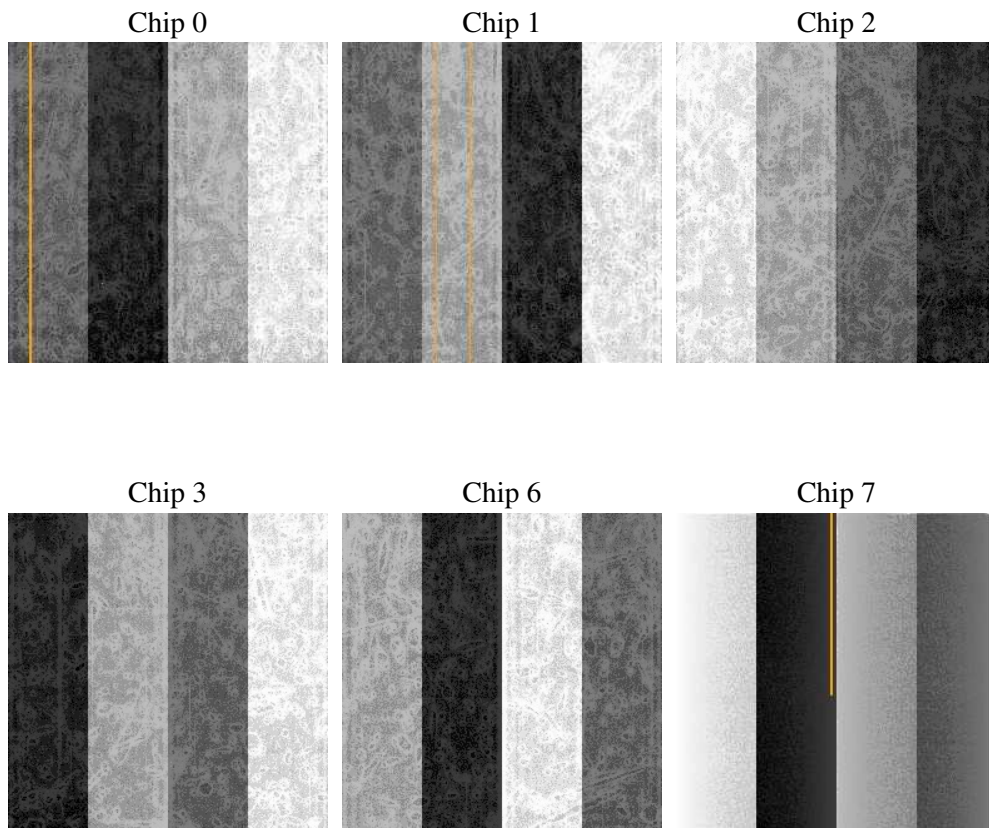
## 3 OBI Secondary

### 3.1 OBI

#### 3.1.1 Images



#### 3.1.2 Bias



### 3.1.3 Parameters

obi_num	0
ascdsver	7.6.7.2
caldbver	3.2.2
date	2006-05-17T09:56:23
revision	2

sched_exp_time	4791.529000
ontime	4025.3387010992
ontime0	4028.579790622
ontime1	4025.338591367
ontime2	4025.3389099538
ontime3	4025.3387010992
ontime6	4025.3388600349
ontime7	4025.3388004601
l1events	246507

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	36634	38637	36712	42955	39098	52471
rejected events	24676	24957	24801	25997	27688	26505
rejected %	67%	64%	67%	60%	70%	50%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	8217	9307	8447	12325	7669	1813
	22%	24%	23%	28%	19%	3%
grade 1 events	71	53	56	229	33	34
	0%	0%	0%	0%	0%	0%
grade 2 events	1690	2000	1464	2069	1568	5797
	4%	5%	3%	4%	4%	11%
grade 3 events	613	747	563	846	590	1241
	1%	1%	1%	1%	1%	2%
grade 4 events	625	671	606	832	590	1241
	1%	1%	1%	1%	1%	2%
grade 5 events	1199	1304	1140	1439	1416	2699
	3%	3%	3%	3%	3%	5%
grade 6 events	984	1144	978	1124	1147	16109
	2%	2%	2%	2%	2%	30%
grade 7 events	23235	23411	23458	24091	26085	23537
	63%	60%	63%	56%	66%	44%

## 4 Point Sources

## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.05.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.933

### A.2 Comments

Window constraint met.