

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2017 - L2 Version <sub>e</sub>1  
Chandra X-Ray Center

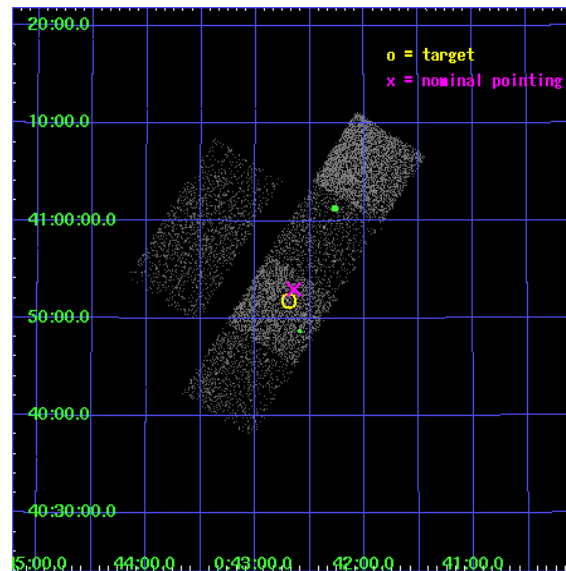
L2 Processing Date : Dec 15 2006

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# 1 Front

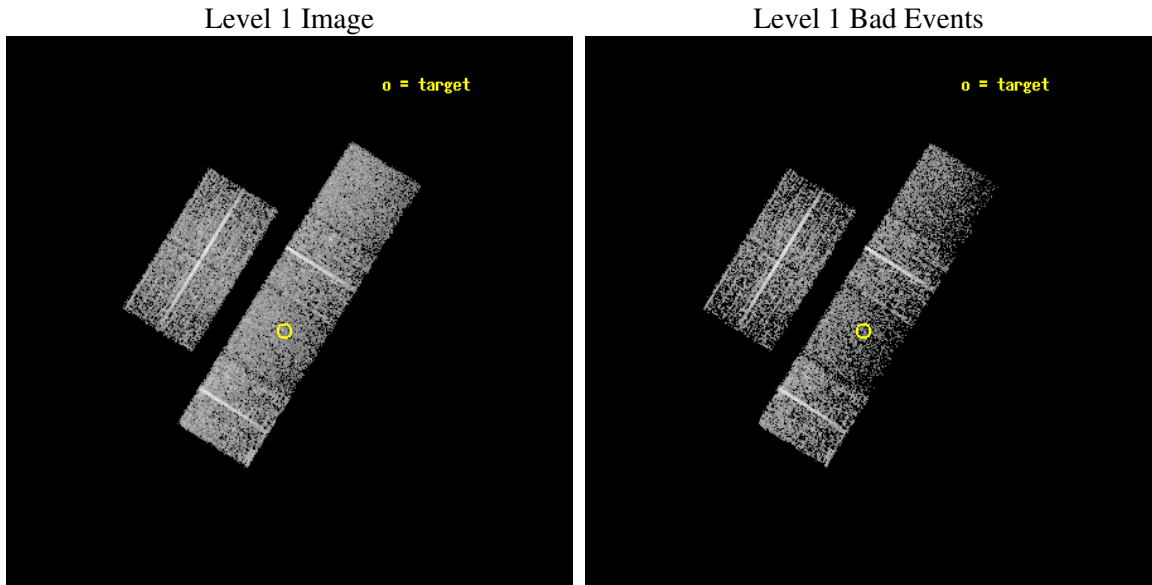
seq_num	600151
obs_id	2017
title	A DEEP SURVEY OF X-RAY SOURCES IN M32, THE NEAREST ELLIPTICAL GALAXY
observer	PROFESSOR ROBERT O'CONNELL
object	M32
dtcycle	0
cycle	P
ra_targ	10.674167
dec_targ	40.864444
ra_nom	10.661594788697
dec_nom	40.882991706846
roll_nom	121.9960605819
revision	2
ontime	5024.7561451793
livetime	429.29999873376
ontime2	5024.7561451793
ontime3	5024.866943419
ontime5	5024.7848634273
ontime6	5024.8259034157
ontime7	5024.7561451793
ontime8	5024.8676573485
l2events	11171



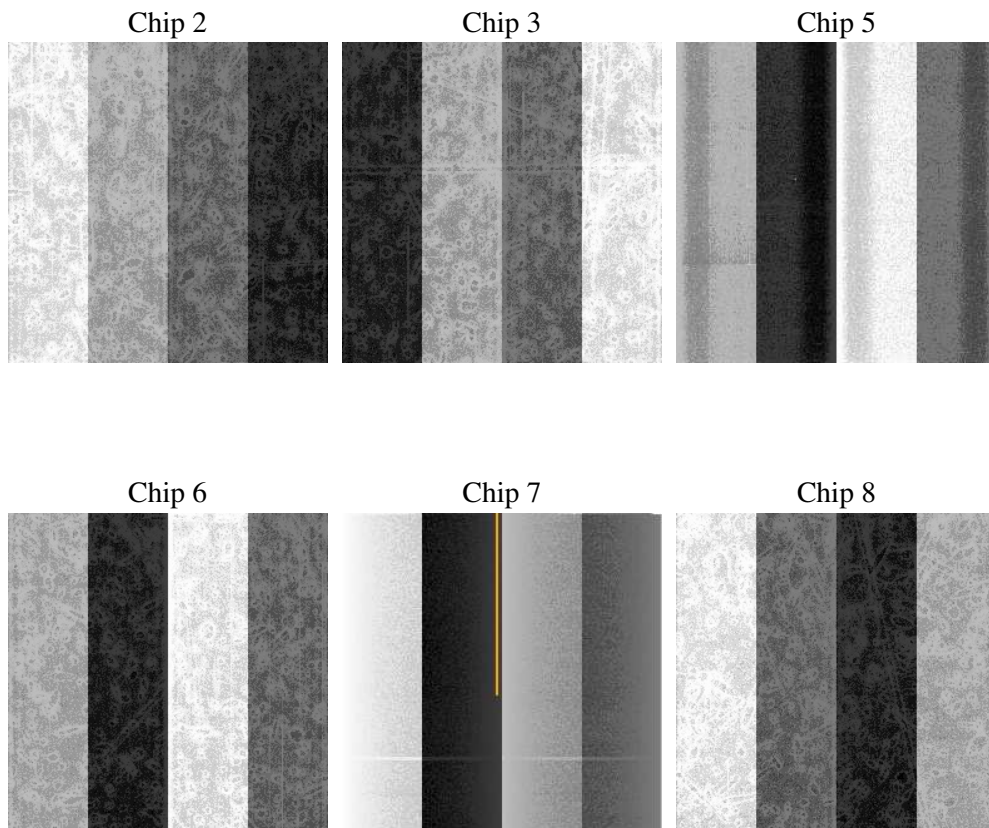
## 2 OBI Primary

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldbver	3.2.4
date	2006-12-15T17:20:52
revision	2

sched_exp_time	51576.115000
ontime	5031.7788651586
ontime2	5031.7788651586
ontime3	5031.7788651586
ontime5	5031.7788651586
ontime6	5031.7788651586
ontime7	5031.7788651586
ontime8	5031.7788651586
l1events	105271

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	18467	17165	14846	19103	14136	21554
rejected events	17351	16089	10410	17779	10743	19496
rejected %	93%	93%	70%	93%	75%	90%

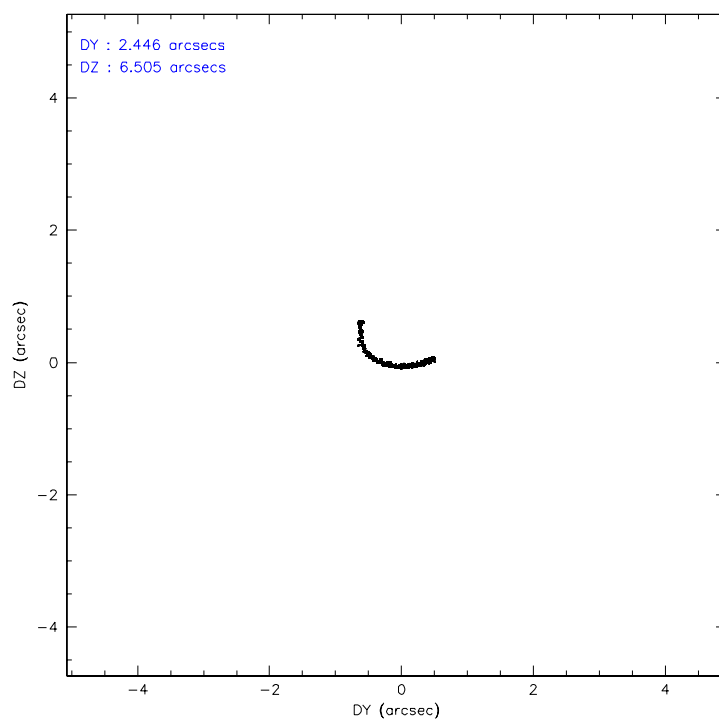
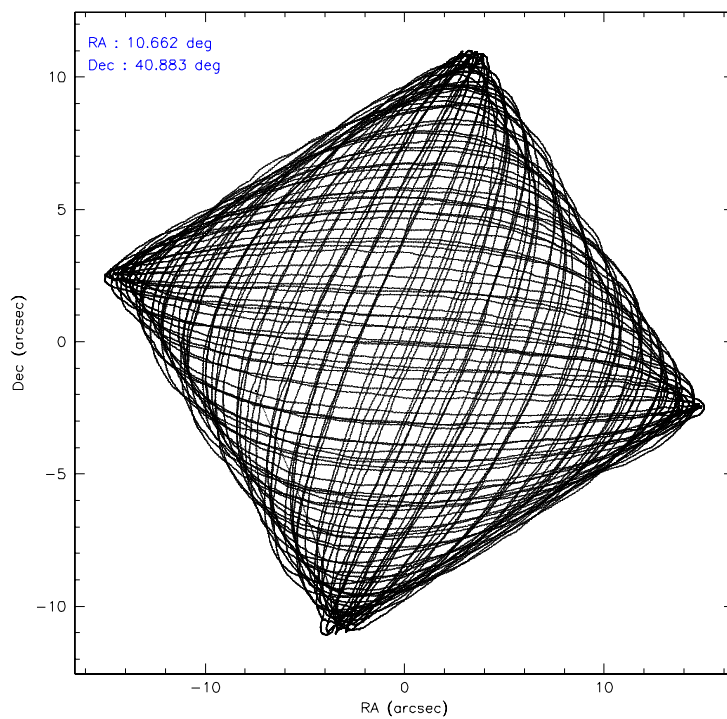
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	295	304	228	415	277	451
	1%	1%	1%	2%	1%	2%
grade 1 events	7	4	9	4	7	5
	0%	0%	0%	0%	0%	0%
grade 2 events	251	246	1206	292	839	496
	1%	1%	8%	1%	5%	2%
grade 3 events	169	171	208	175	277	231
	0%	0%	1%	0%	1%	1%
grade 4 events	168	138	232	192	260	205
	0%	0%	1%	1%	1%	0%
grade 5 events	433	441	763	444	891	623
	2%	2%	5%	2%	6%	2%
grade 6 events	234	221	2564	253	1746	677
	1%	1%	17%	1%	12%	3%
grade 7 events	16910	15640	9636	17328	9839	18866
	91%	91%	64%	90%	69%	87%

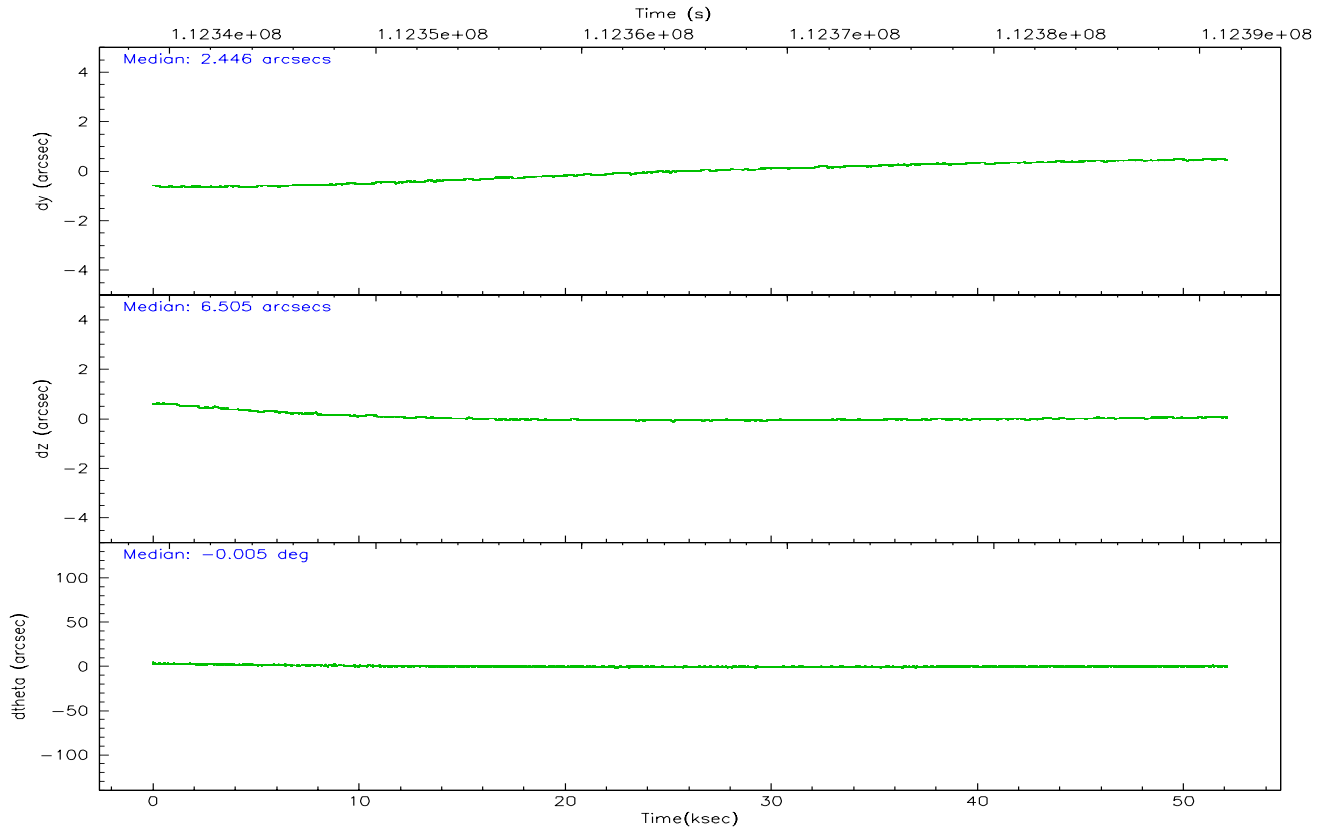
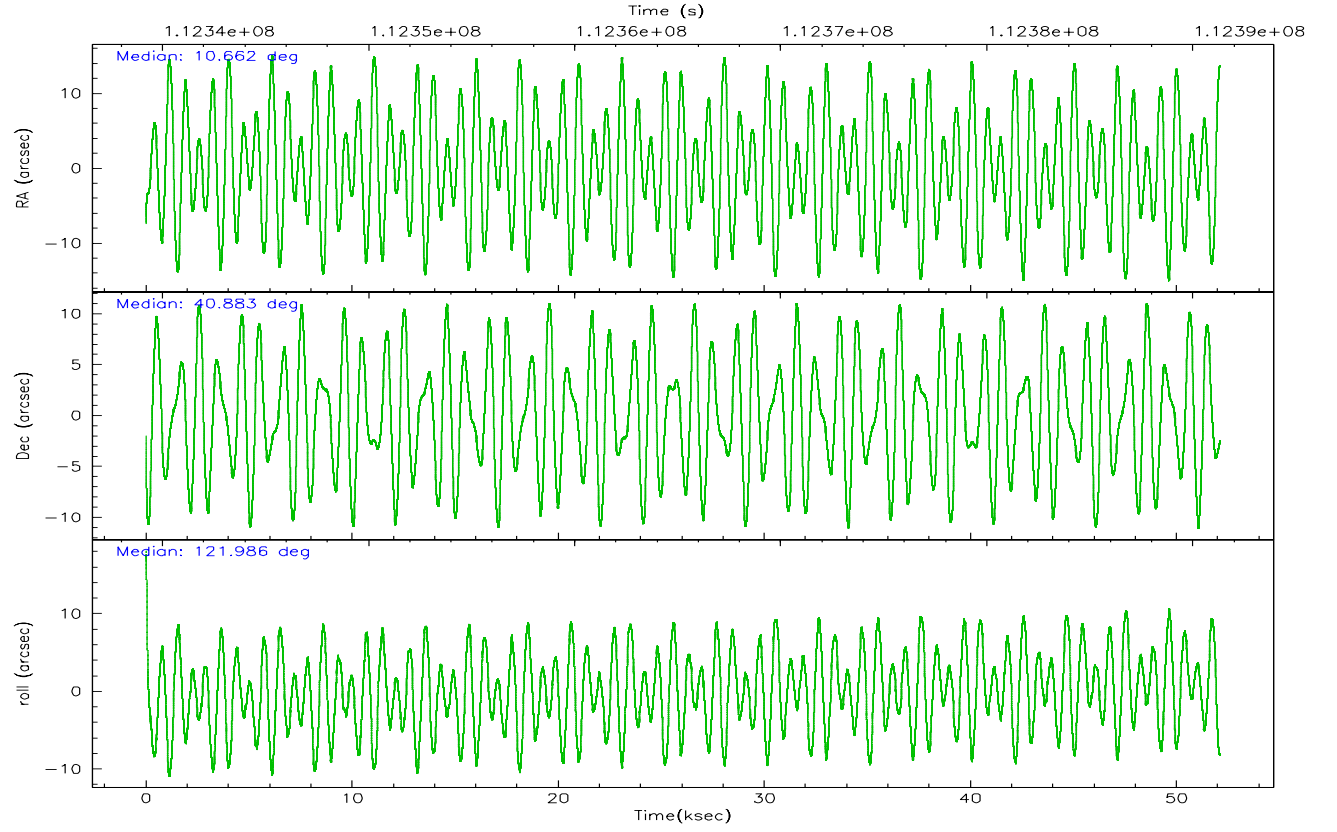


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	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	10.693631	10.66159478869678	Subarray requested	NONE	NONE
Pointing Dec	40.870442	40.88299170684571	Alternating exposures requested	Y	Y
Pointing Roll	121.818469	121.996060581899	Primary exposure time	0.200000	0.3
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Secondary exposure time	0.000000	3.2
SIM defocus (mm)	0	0.001444936568705701	Duty cycle	10	10
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	112339749.184000	112338600.73513			
Observation start date	2001-07-24T05:28:05	2001-07-24T05:10:00			
Observation end time	112391325.184000	112391639.36221			
Observation end date	2001-07-24T19:47:41	2001-07-24T19:53:59			
Read mode	TIMED	TIMED			

## 2.3 Aspect



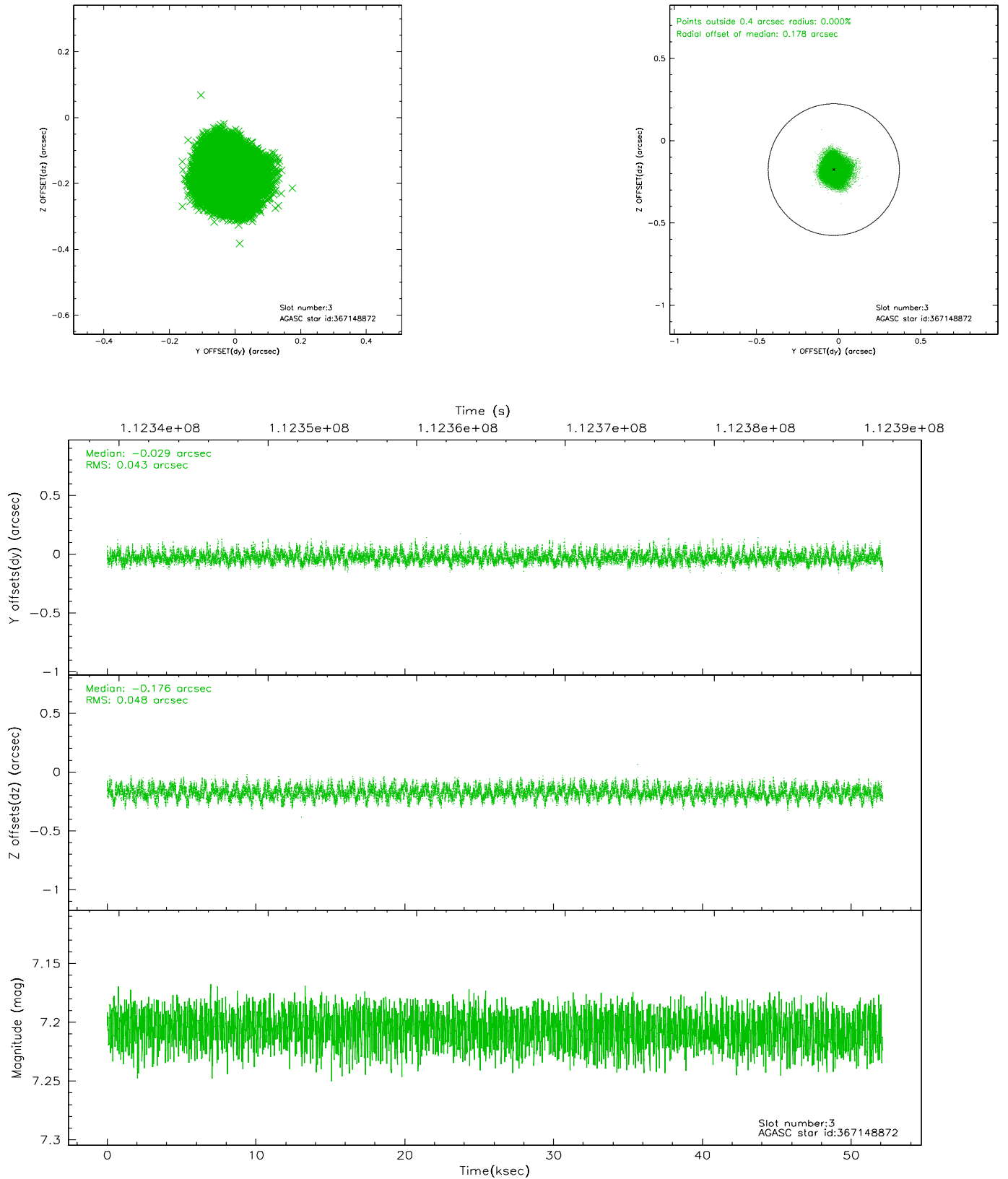


### Slot Statistics

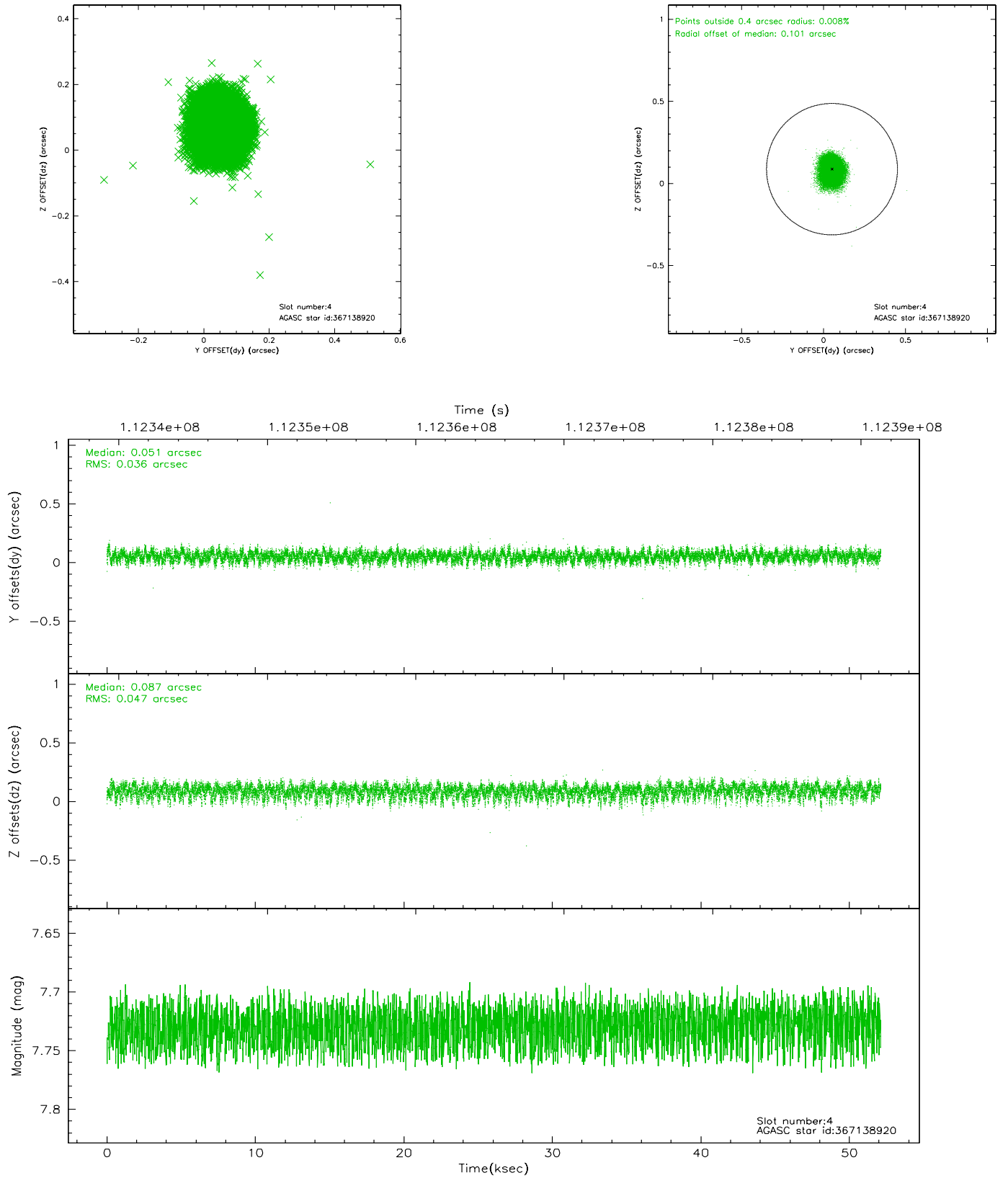
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	12713	-0.016	0.028	0.011	0.020	0.000000	0.000000	-755.01	-1727.65
1	FID	ACIS-S-4	7.20	12713	-0.090	0.000	0.014	0.021	0.000000	0.000000	2158.17	180.87
2	FID	ACIS-S-5	7.24	12711	0.073	-0.019	0.010	0.017	0.000000	0.000000	-1807.83	174.44
3	GUIDE	367148872	7.20	25426	-0.029	-0.176	0.069	0.108	10.505940	40.688258	-287.66	780.82
4	GUIDE	367138920	7.73	25424	0.051	0.087	0.062	0.103	11.513485	40.808909	-1357.67	-1787.04
5	GUIDE	367139768	7.98	25424	0.065	0.079	0.054	0.086	11.069715	40.685175	-1106.79	-521.97
6	GUIDE	367144424	8.65	25423	0.127	-0.208	0.069	0.112	10.464515	40.309136	-1385.66	1599.07
7	GUIDE	367674552	8.86	25417	-0.214	0.223	0.079	0.129	11.016238	41.570845	1685.22	-2067.90

## 2.4 Star Slots

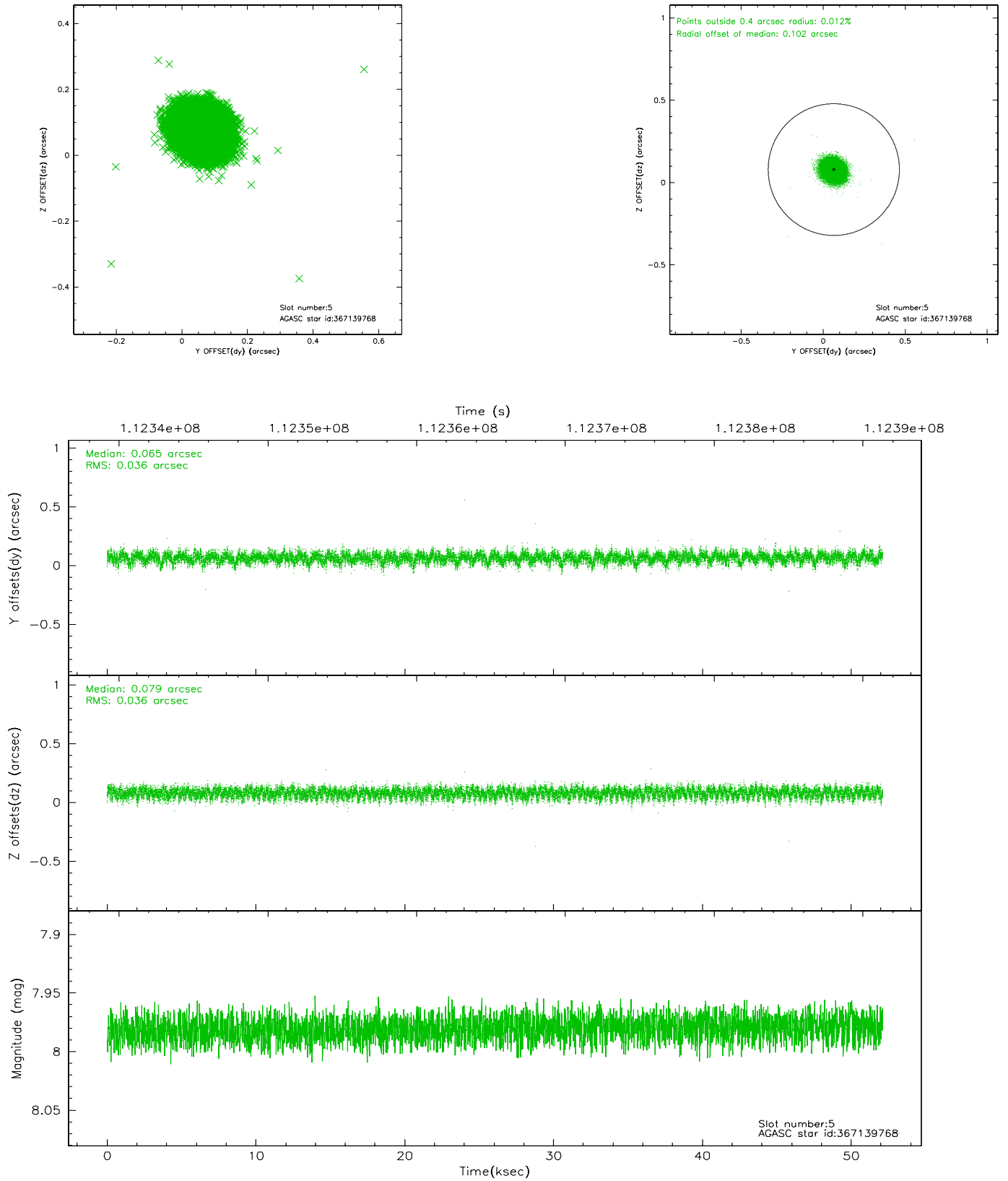
### 2.4.1 Slot 3



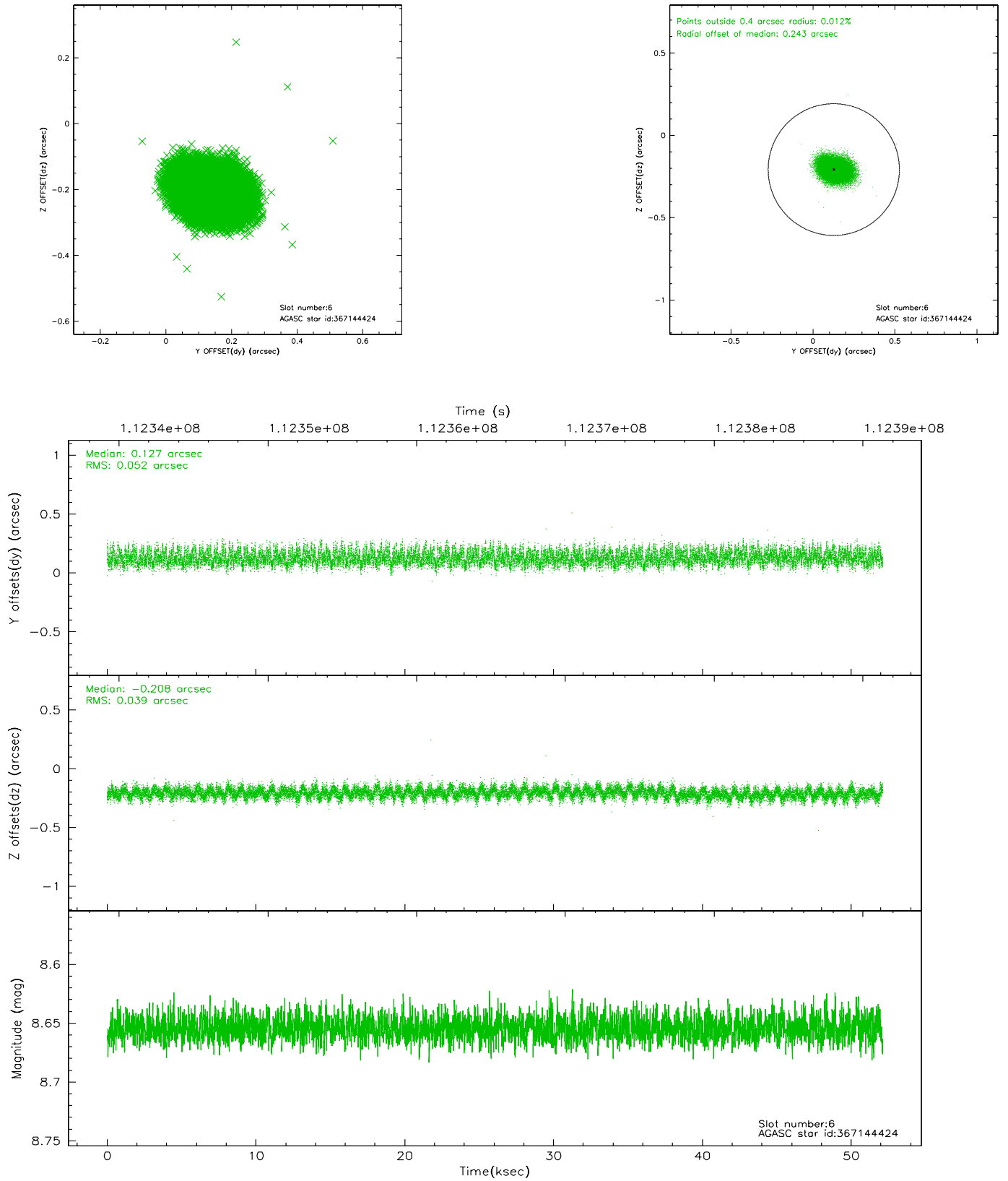
## 2.4.2 Slot 4



### 2.4.3 Slot 5

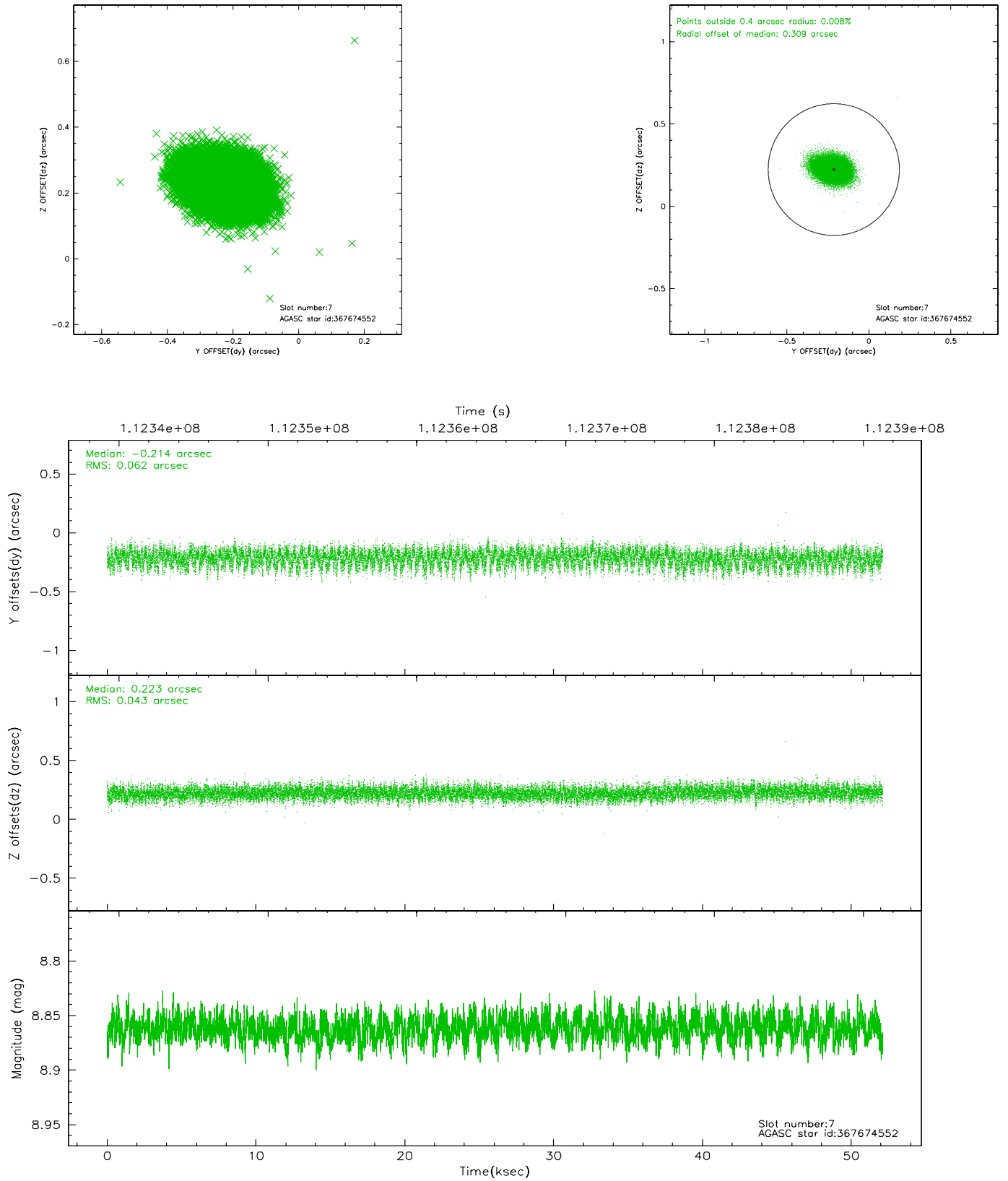


## 2.4.4 Slot 6



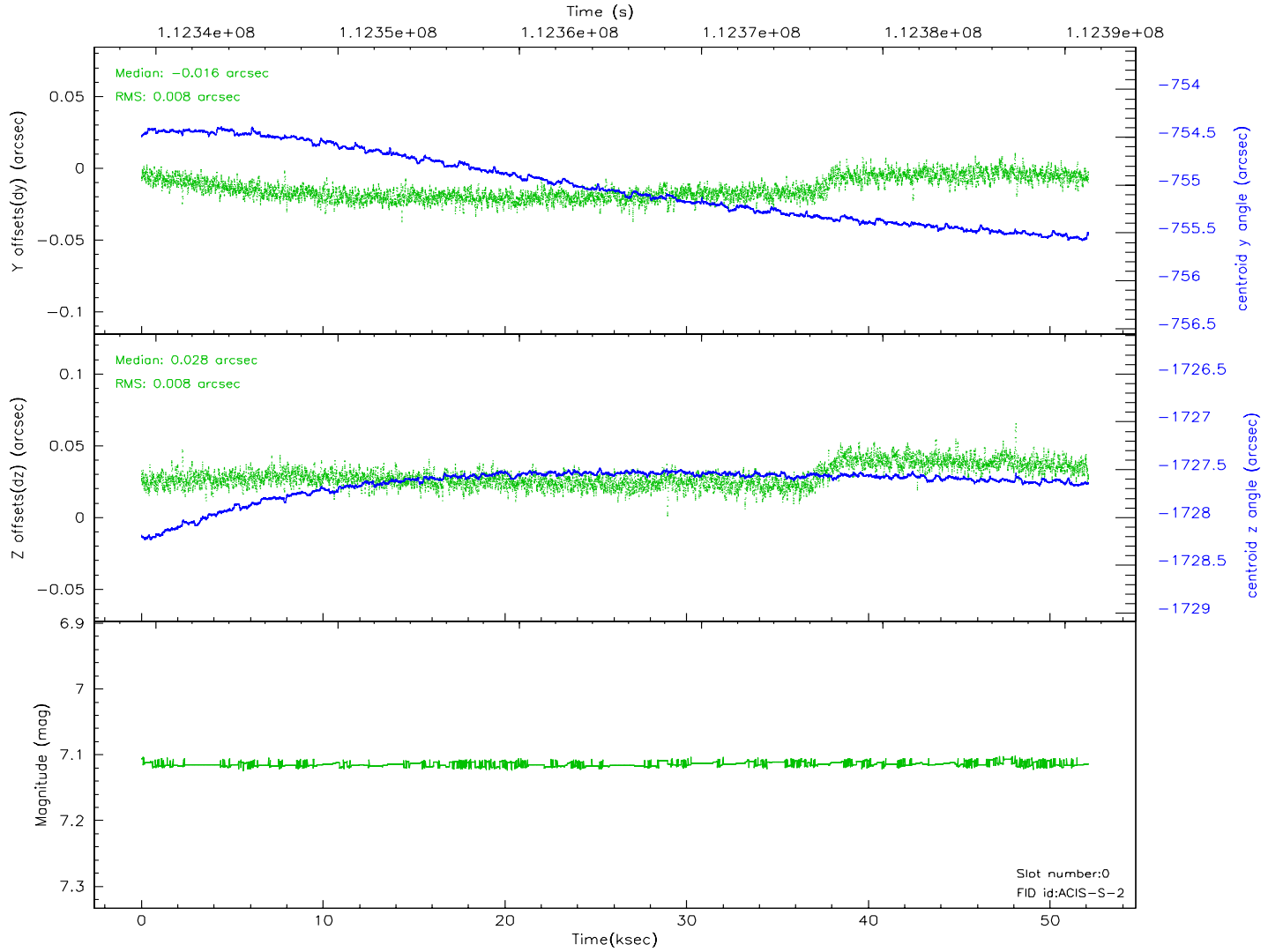
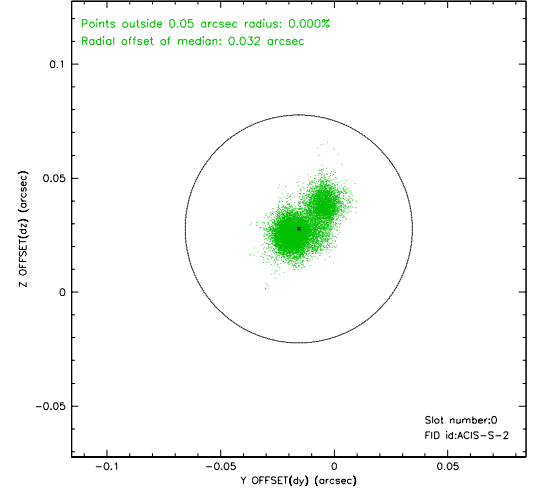
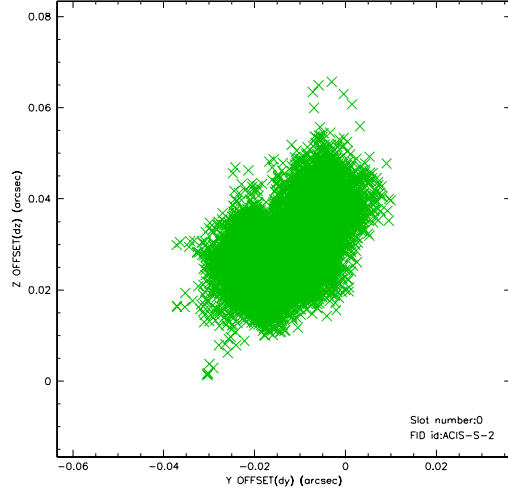


## 2.4.5 Slot 7

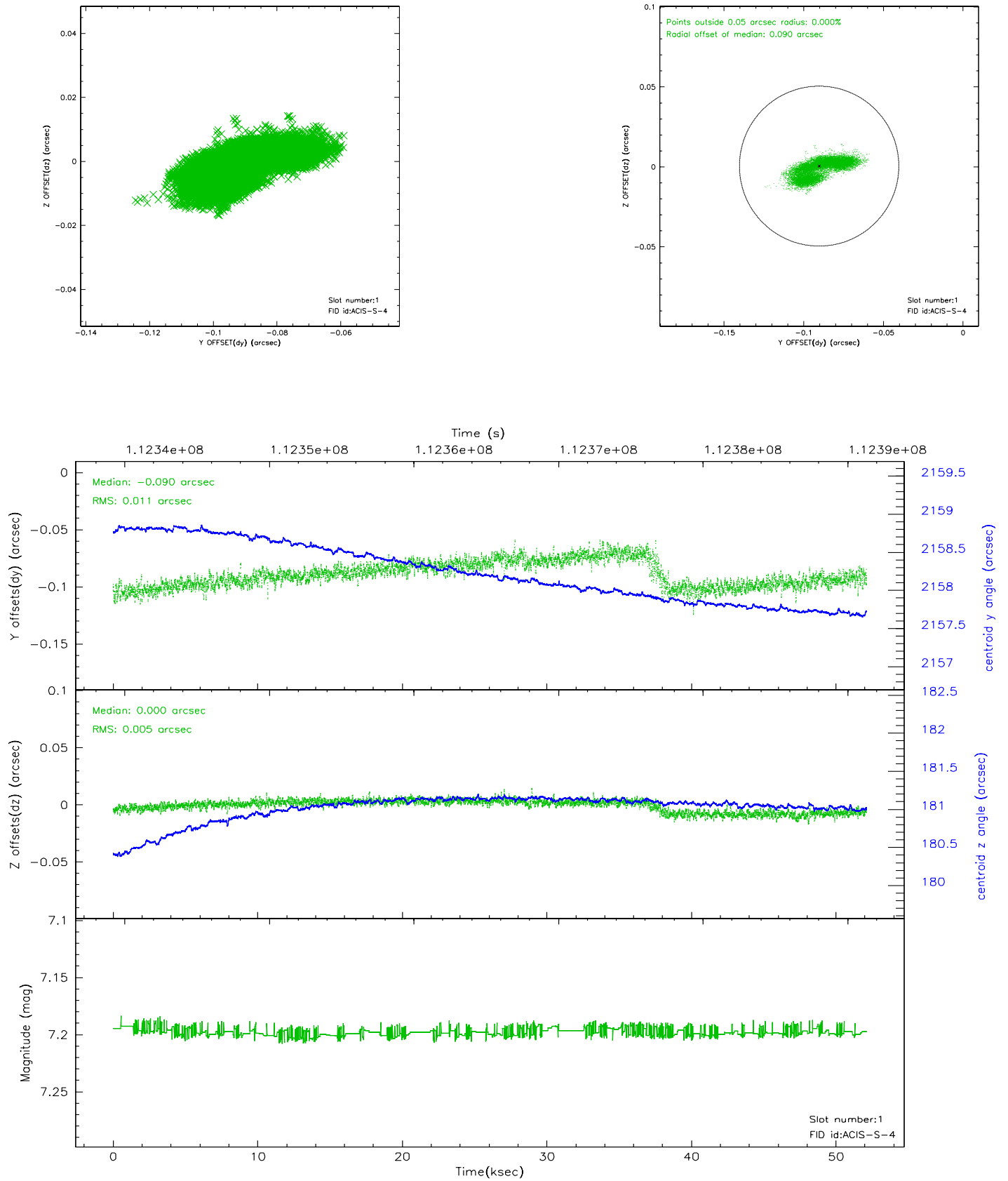


## 2.5 FID Slots

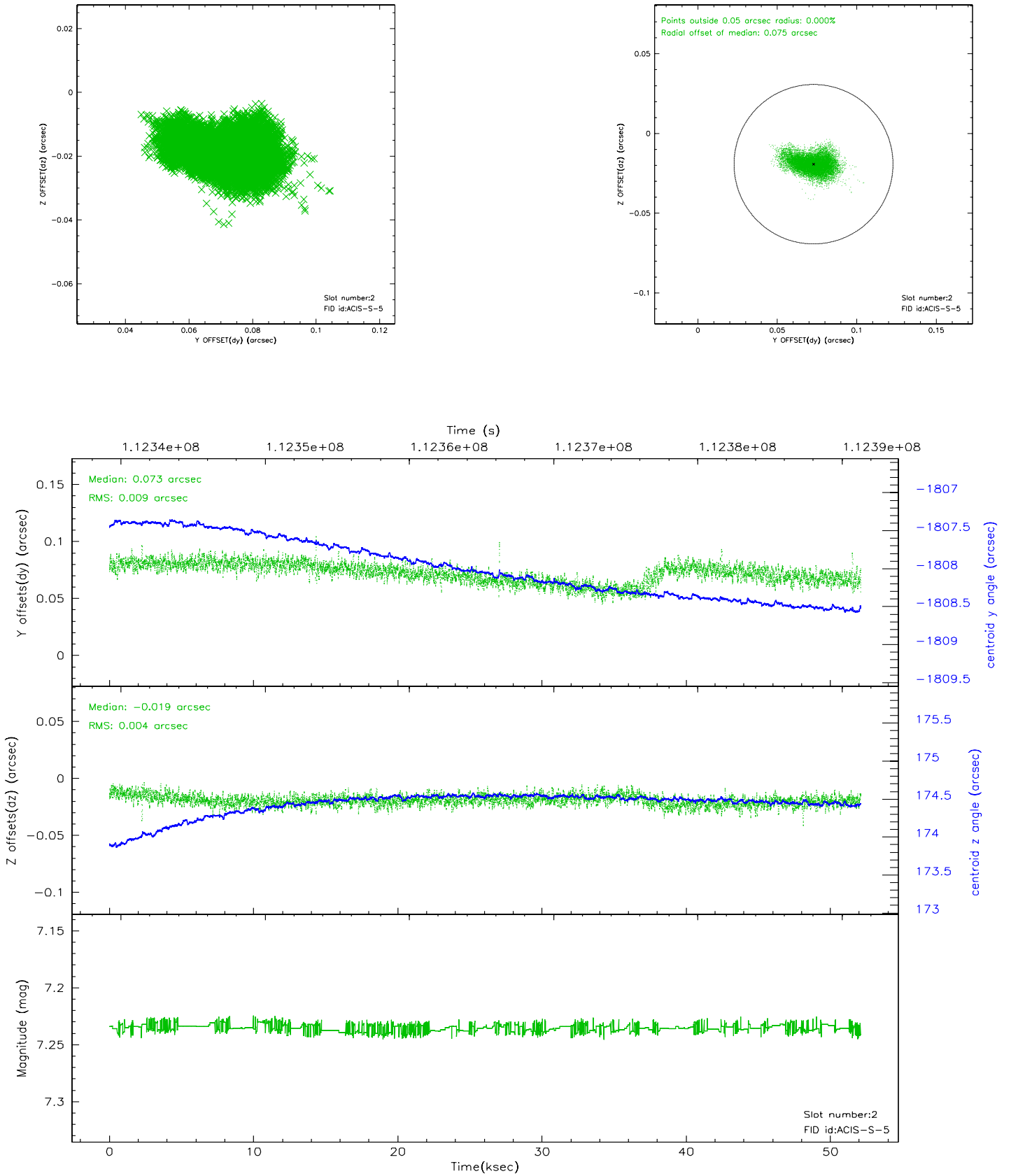
### 2.5.1 Slot 0



## 2.5.2 Slot 1



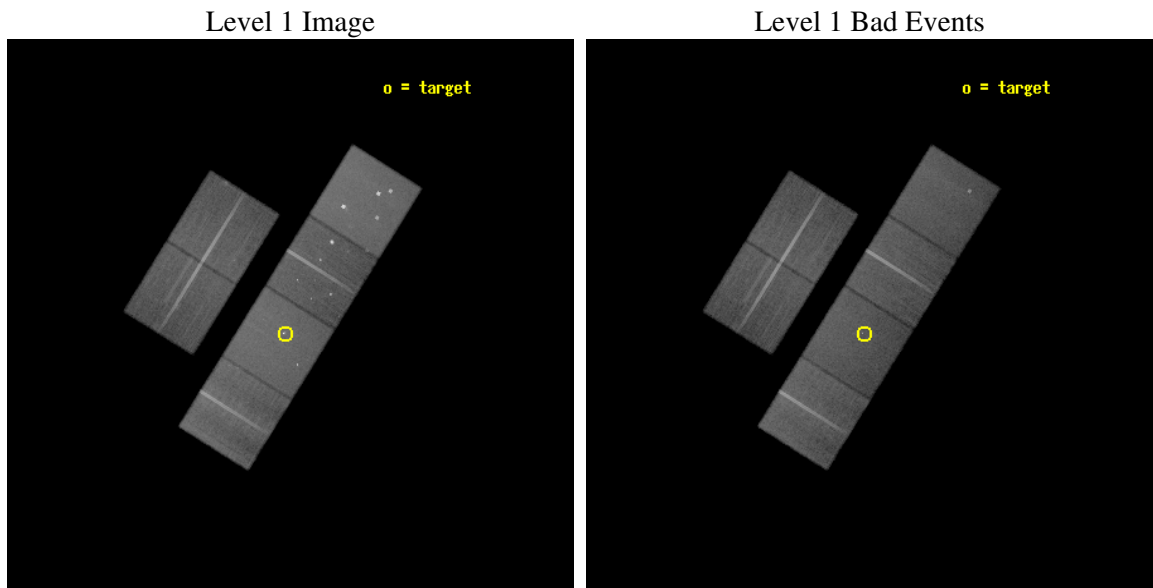
## 2.5.3 Slot 2



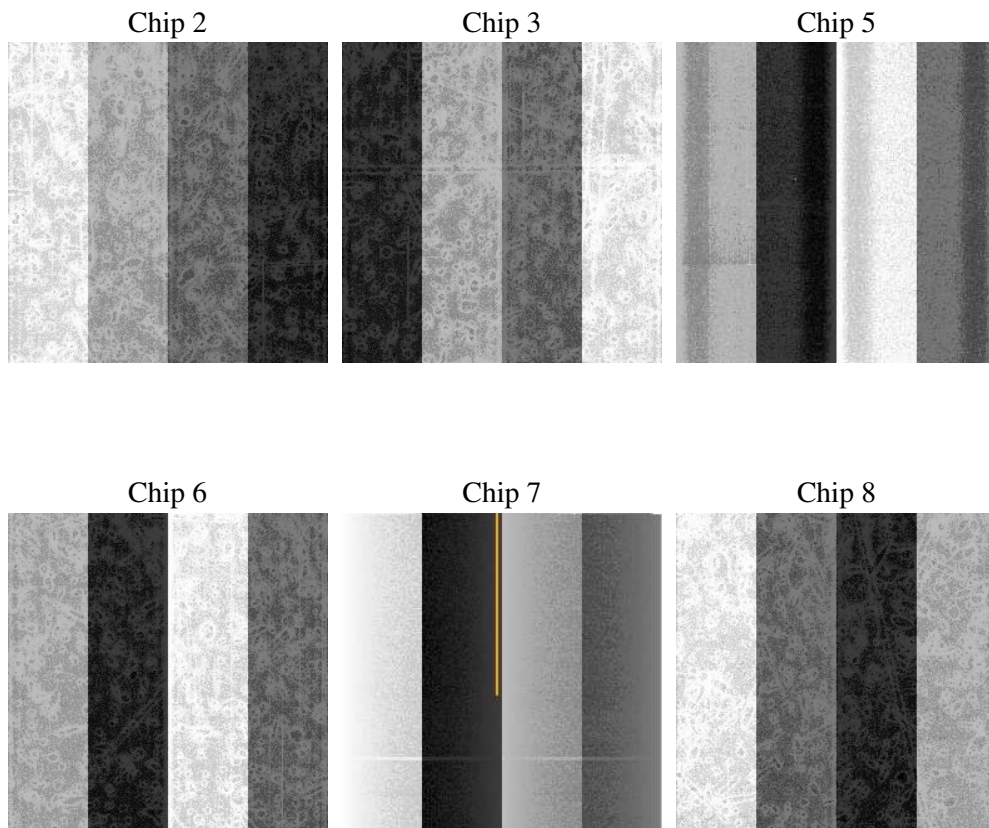
### 3 OBI Secondary

#### 3.1 OBI

##### 3.1.1 Images



##### 3.1.2 Bias



### 3.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldsver	3.2.4
date	2006-12-15T17:57:35
revision	2

sched_exp_time	51576.115000
ontime	46466.261467904
ontime2	46463.019619748
ontime3	46466.261277884
ontime5	46466.261707231
ontime6	46463.01925078
ontime7	46466.261467904
ontime8	46463.019649744
l1events	2242356

### 3.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	325389	303030	472879	330426	416963	393669
rejected events	288759	268065	244183	280205	245120	316031
rejected %	88%	88%	51%	84%	58%	80%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	16093	15179	41429	25864	13170	24872
	4%	5%	8%	7%	3%	6%
grade 1 events	149	146	1775	225	306	235
	0%	0%	0%	0%	0%	0%
grade 2 events	7786	6776	63206	8774	41808	16795
	2%	2%	13%	2%	10%	4%
grade 3 events	3346	3427	5308	4120	9875	8087
	1%	1%	1%	1%	2%	2%
grade 4 events	3189	3455	5207	3936	9662	7608
	0%	1%	1%	1%	2%	1%
grade 5 events	10843	11642	21495	13137	27214	16385
	3%	3%	4%	3%	6%	4%
grade 6 events	6217	6129	113563	7530	97338	20287
	1%	2%	24%	2%	23%	5%
grade 7 events	277766	256276	220896	266840	217590	299400
	85%	84%	46%	80%	52%	76%

## 4 Point Sources

9.33 arcmin



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.12.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	51.4847995

### A.2 Comments

Charge time for this ObsId remains at original value of 46.463 ks, although with the current processing the charge time would have been 51.4848 ksec.