

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2978 - L2 Version 001  
Chandra X-Ray Center

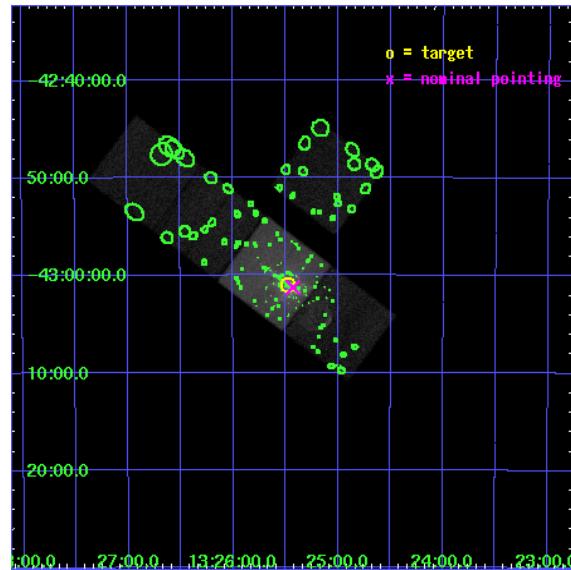
L2 Processing Date : Oct 2 2006

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# 1 Front

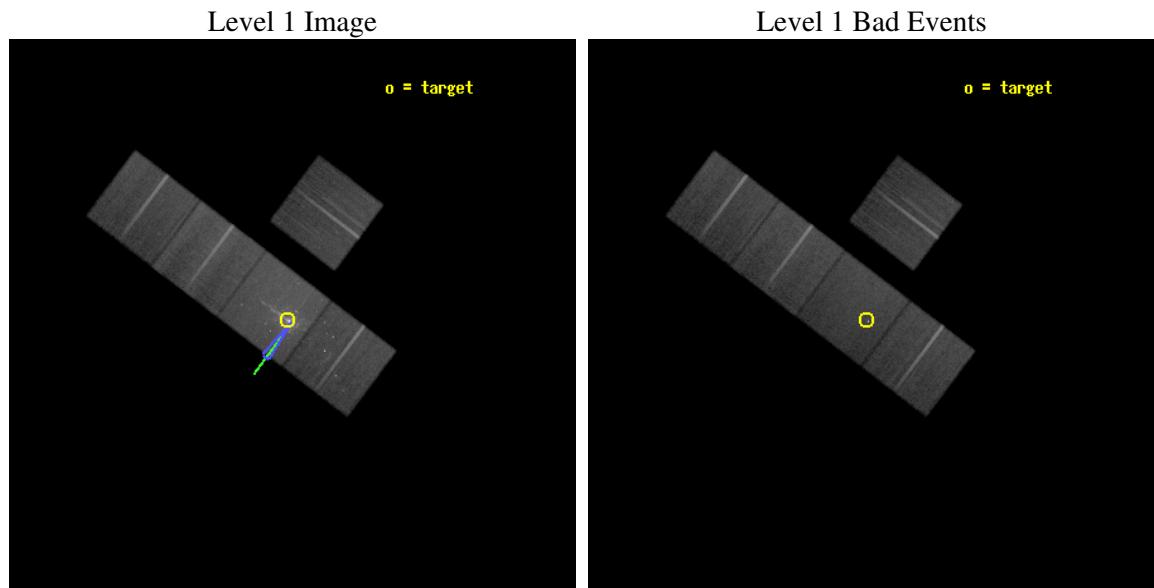
seq_num	700417
obs_id	2978
title	FOLLOW-UP OBSERVATIONS OF THE RADIO GALAXY CEN-A
observer	Dr. Stephen Murray
object	CEN-A
dtcycle	0
cycle	P
ra_targ	201.369542
dec_targ	-43.016583
ra_nom	201.35773867306
dec_nom	-43.020983769071
roll_nom	217.14858200753
revision	2
ontime	45179.399913132
livetime	44589.097792677
ontime3	45179.399913132
ontime6	45179.399913132
ontime7	45179.399913132
ontime8	45179.399913132
ontime9	45179.399913132
l2events	379591



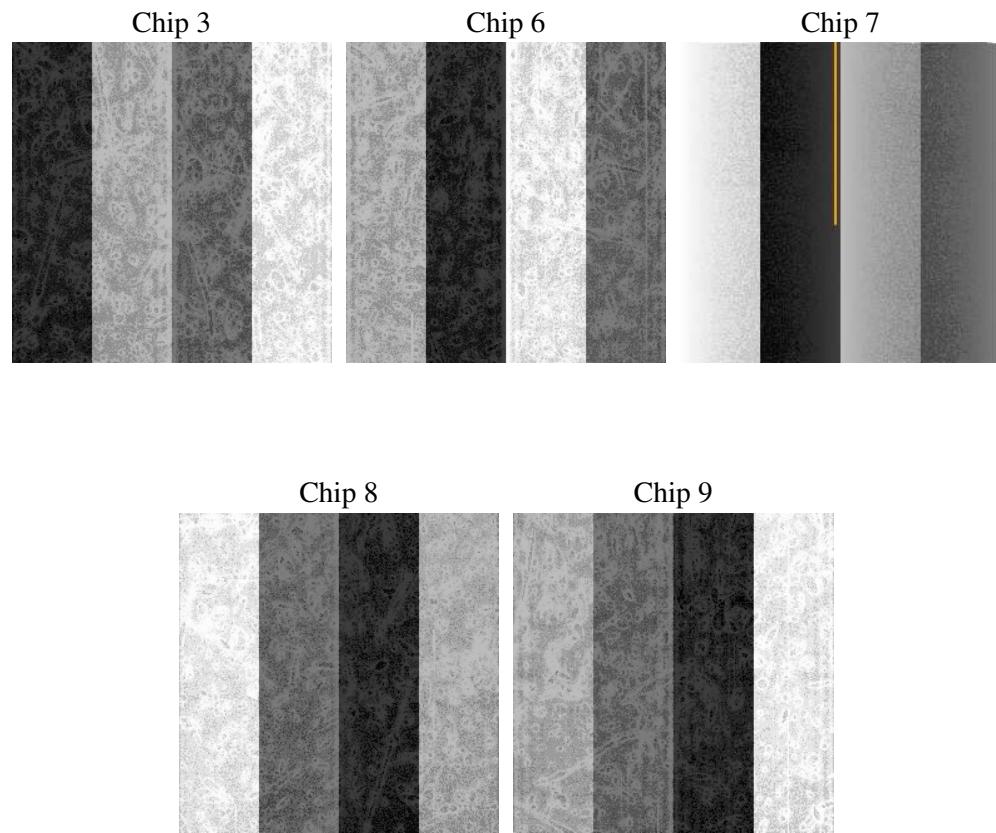
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldbver	3.2.3
date	2006-10-02T20:21:00
revision	2

sched_exp_time	45000.000000
ontime	45183.275635034
ontime3	45183.275635034
ontime6	45183.275605083
ontime7	45183.275635034
ontime8	45183.275635034
ontime9	45183.275605083
l1events	1683952

### 2.1.4 Events

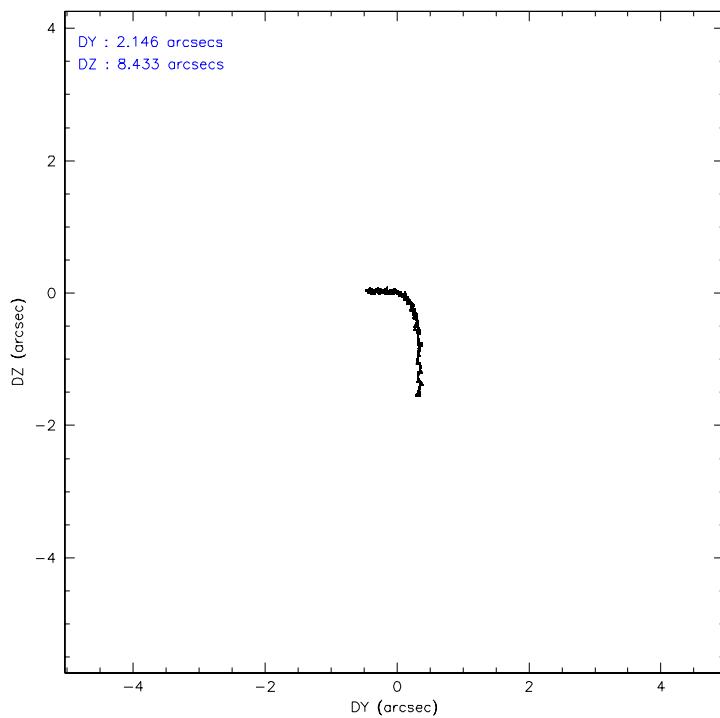
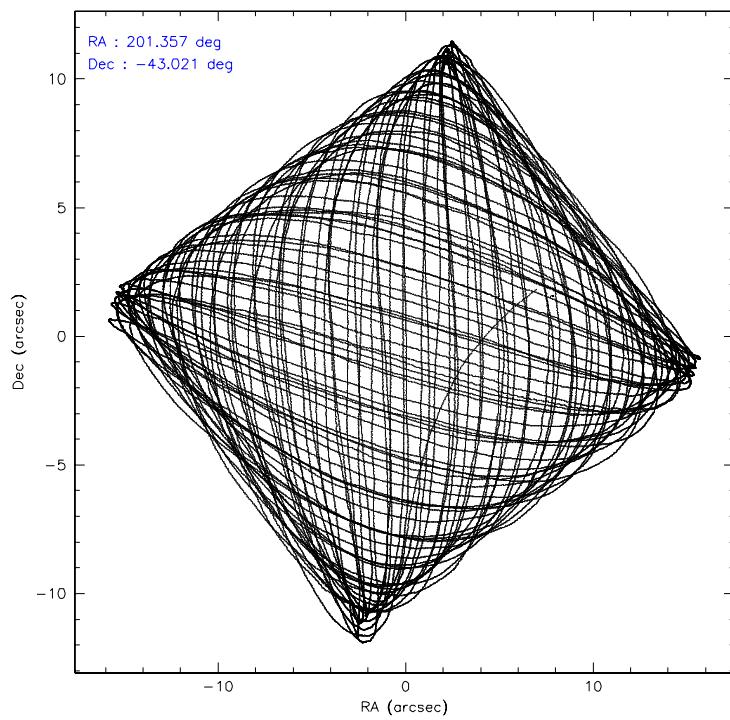
	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>	<b>ccd 9</b>
level 1 events	276794	299209	471188	355549	281212
rejected events	242405	250337	231885	279601	244494
rejected %	87%	83%	49%	78%	86%

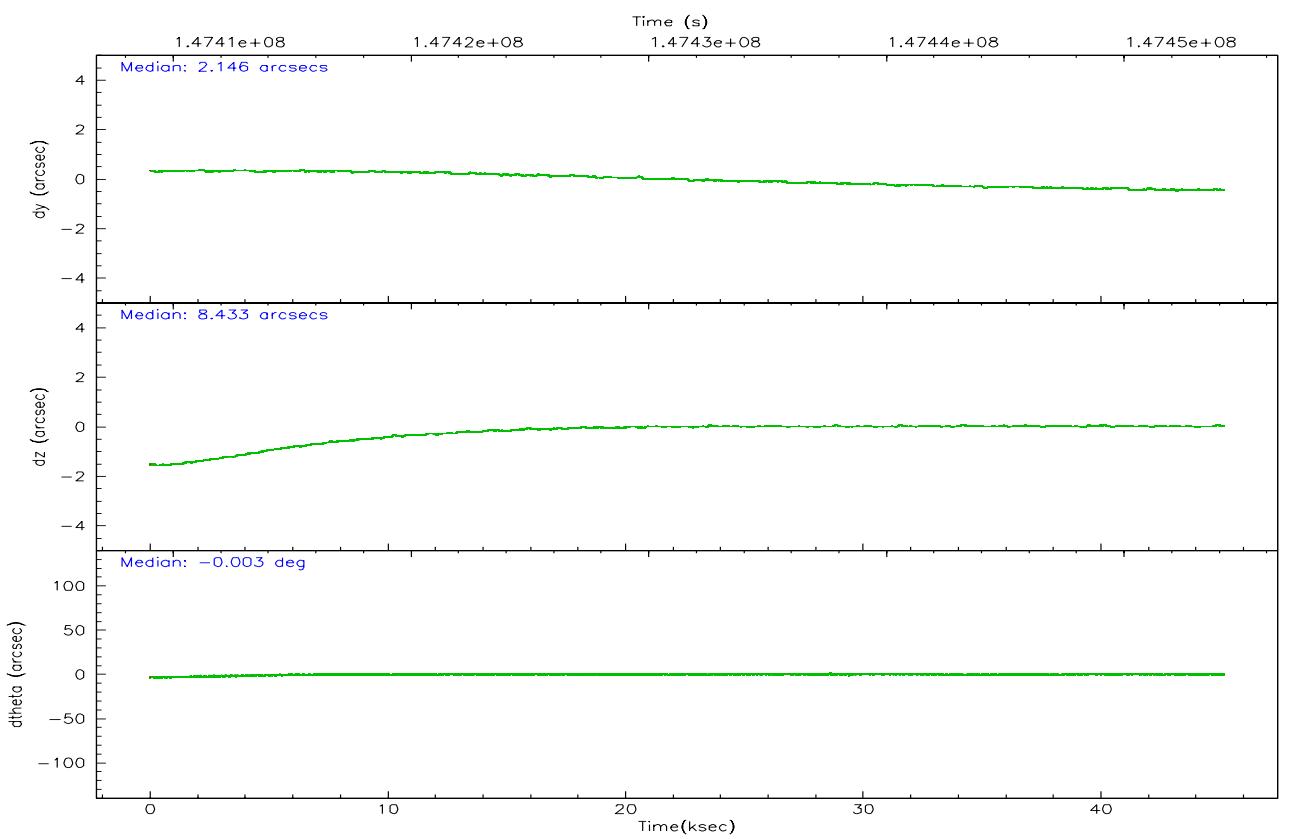
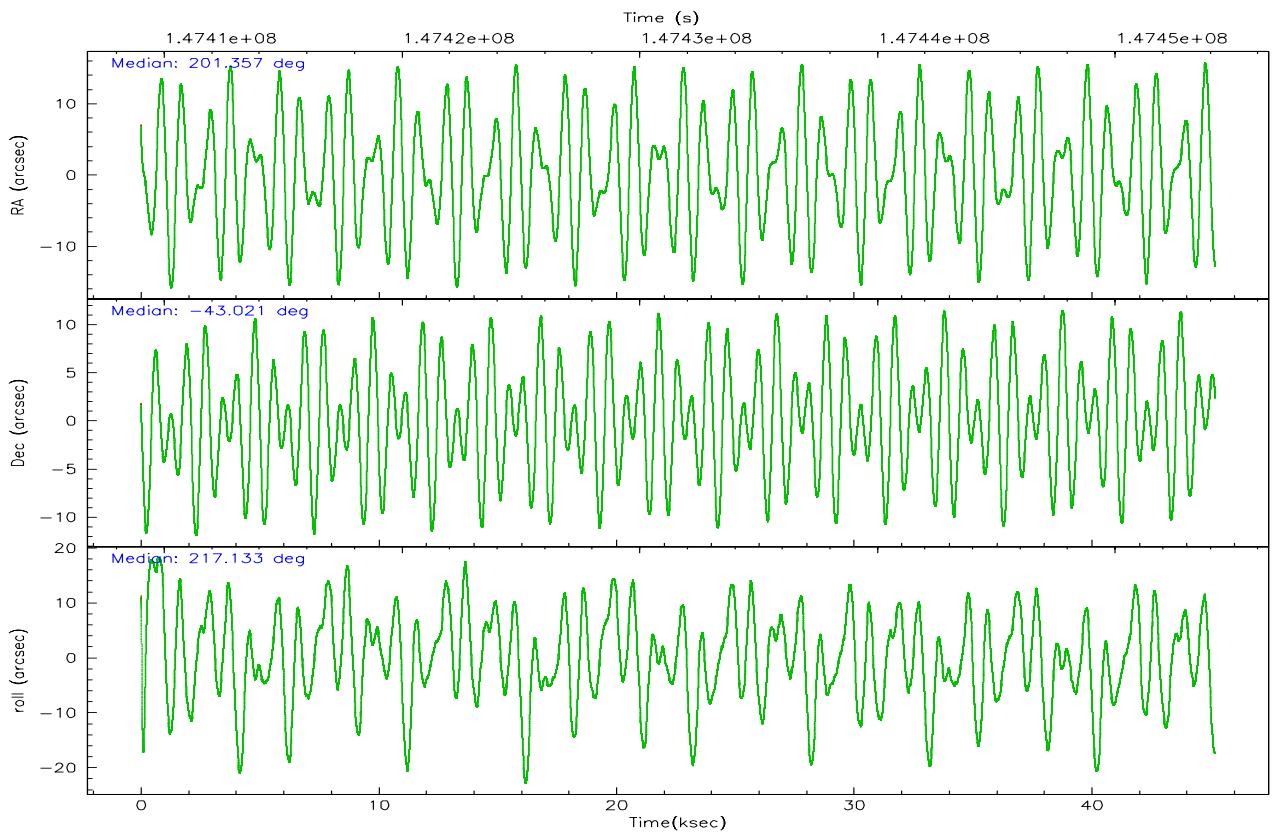
	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>	<b>ccd 9</b>
grade 0 events	16329	26194	34478	26501	16793
	5%	8%	7%	7%	5%
grade 1 events	162	184	409	227	158
	0%	0%	0%	0%	0%
grade 2 events	6066	8247	62156	15757	6623
	2%	2%	13%	4%	2%
grade 3 events	3314	3758	17662	7827	3440
	1%	1%	3%	2%	1%
grade 4 events	3178	3639	17328	7239	3343
	1%	1%	3%	2%	1%
grade 5 events	11768	12342	26239	15945	13241
	4%	4%	5%	4%	4%
grade 6 events	5507	7041	107709	18636	6520
	1%	2%	22%	5%	2%
grade 7 events	230470	237804	205207	263417	231094
	83%	79%	43%	74%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-36789	ACIS-36789	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	201.371754	201.3577386730567	Subarray requested	NONE	NONE
Pointing Dec	-42.995747	-43.02098376907054	Alternating exposures requested	N	N
Pointing Roll	217.001503	217.1485820075292	Primary exposure time	0.000000	3.1
Roll angle	217.000000	217.000000			
Roll tolerance	5.000000	5.000000			
Roll constraint allows 180D rotation	N	N			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	147409210.184000	147408210.96189			
Observation start date	2002-09-03T02:59:06	2002-09-03T02:43:30			
Observation end time	147454210.184000	147454991.96382			
Observation end date	2002-09-03T15:29:06	2002-09-03T15:43:11			
Read mode	TIMED	TIMED			

## 2.3 Aspect





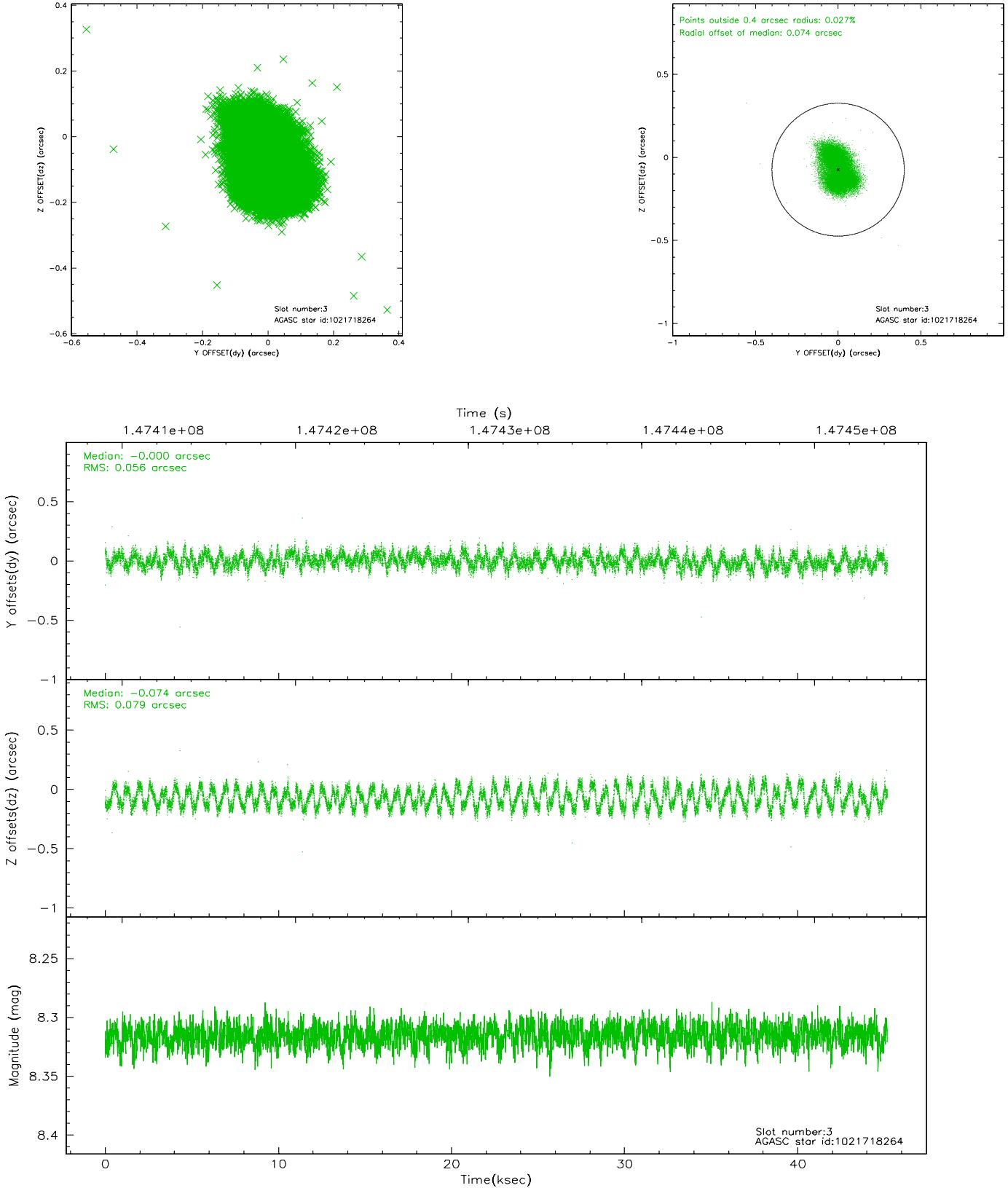
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	11023	-0.005	0.024	0.013	0.023	0.000000	0.000000	-754.77	-1729.36
1	FID	ACIS-S-4	7.20	11020	-0.070	-0.005	0.010	0.033	0.000000	0.000000	2158.47	179.08
2	FID	ACIS-S-5	7.24	11022	0.040	-0.011	0.010	0.017	0.000000	0.000000	-1807.56	172.77
3	GUIDE	1021718264	8.32	22037	-0.000	-0.074	0.106	0.154	202.114846	-42.795539	-1997.12	612.71
4	GUIDE	1021720872	9.78	21990	0.063	-0.126	0.166	0.292	200.668338	-42.835886	1140.98	-1570.15
5	GUIDE	1021722032	10.12	22011	-0.069	-0.003	0.186	0.294	200.643231	-42.613906	719.02	-2252.01
6	GUIDE	1021721504	9.55	21979	0.075	0.109	0.148	0.323	201.182768	-43.000443	407.30	-284.78
7	GUIDE	1021721672	9.54	22037	-0.059	0.091	0.099	0.160	201.740358	-43.079729	-591.80	827.01

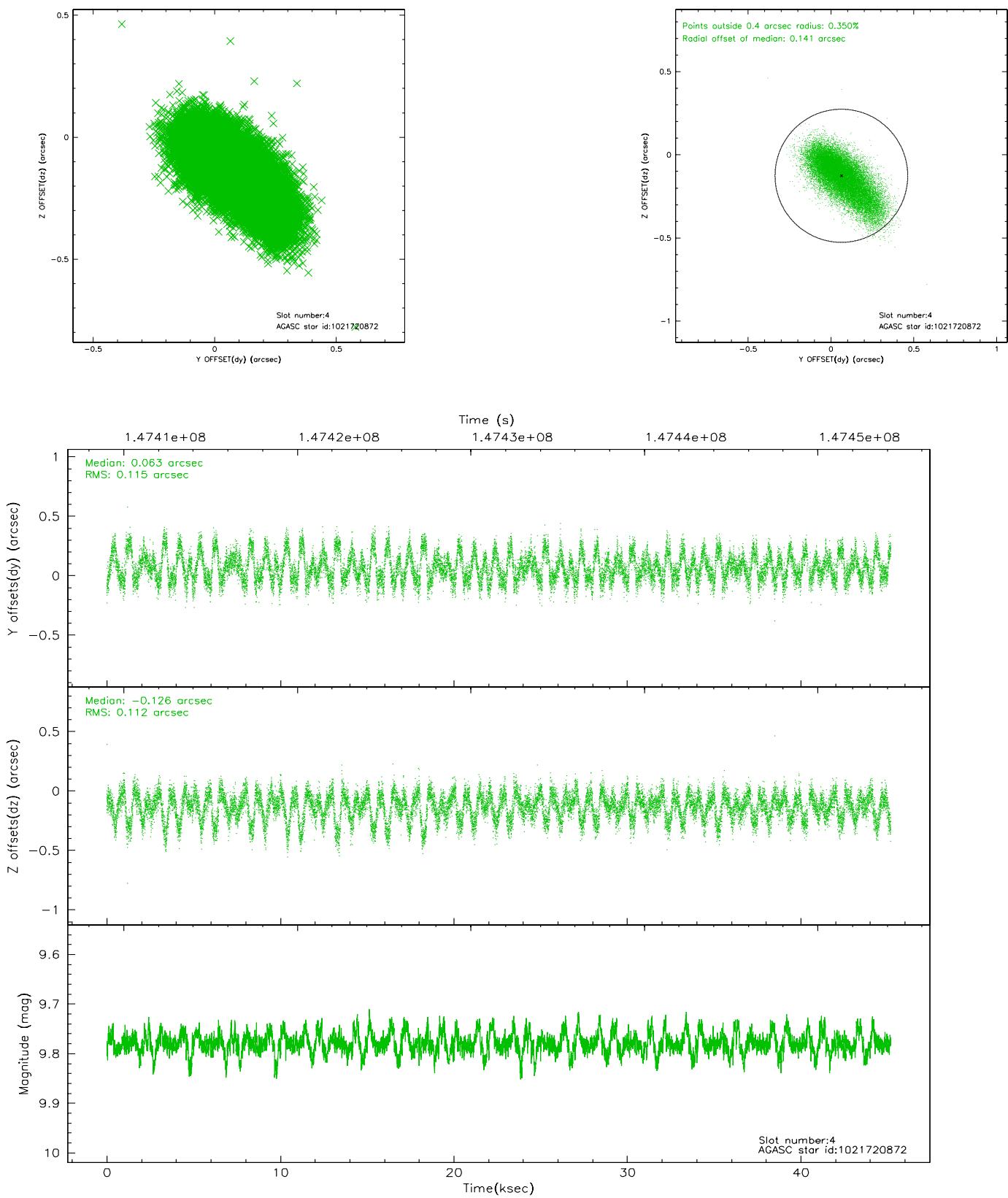
∞

## 2.4 Star Slots

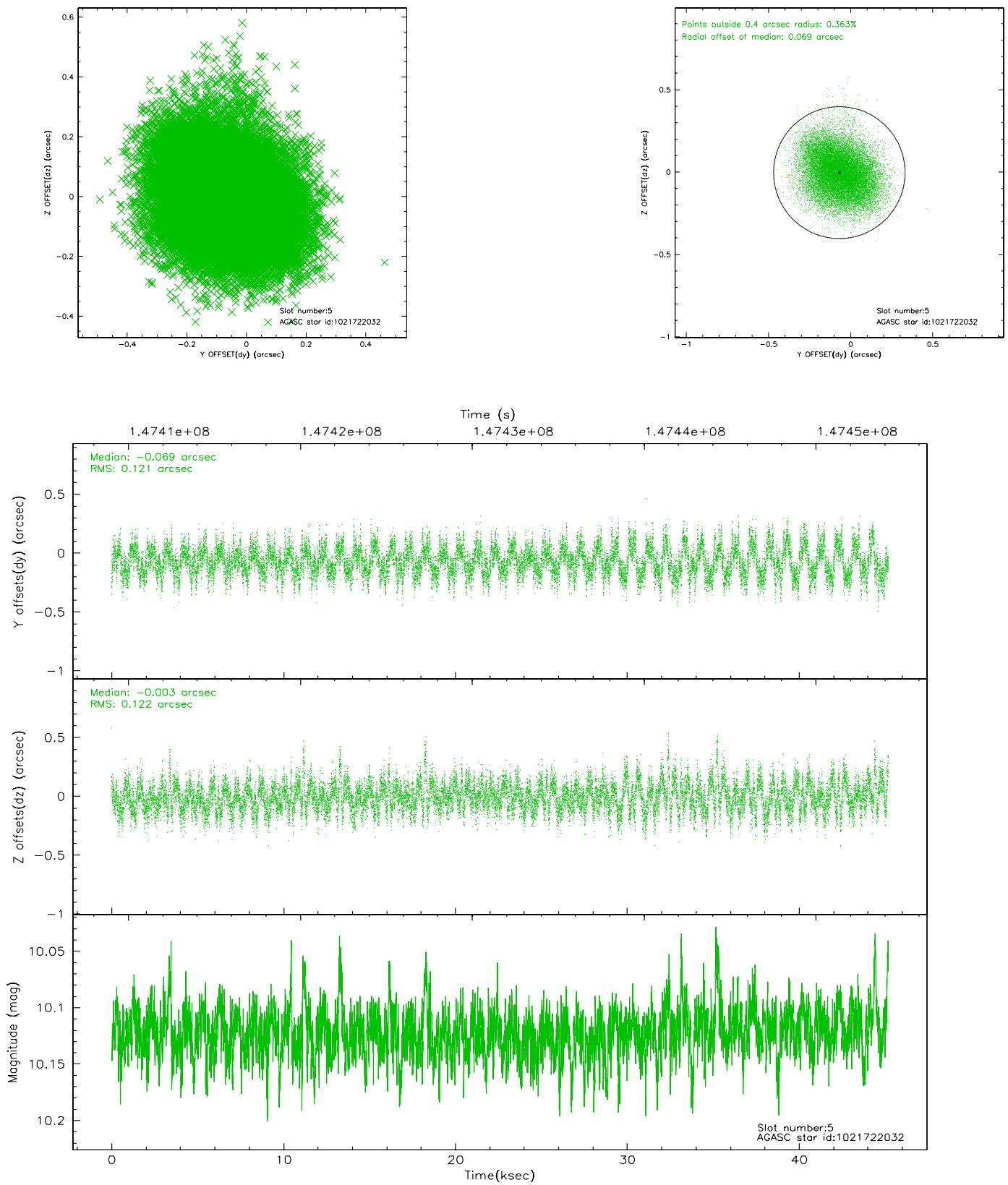
### 2.4.1 Slot 3



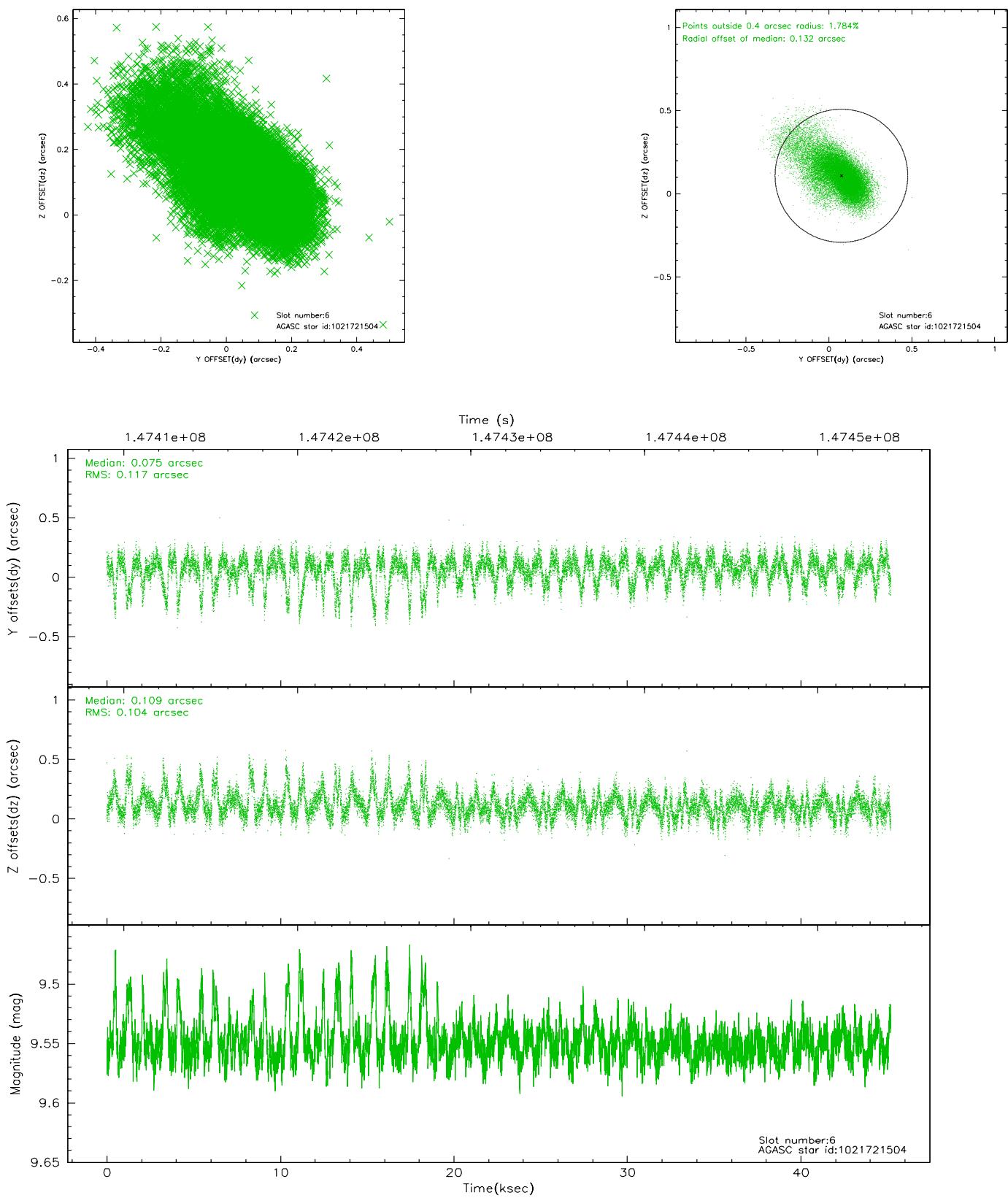
## 2.4.2 Slot 4



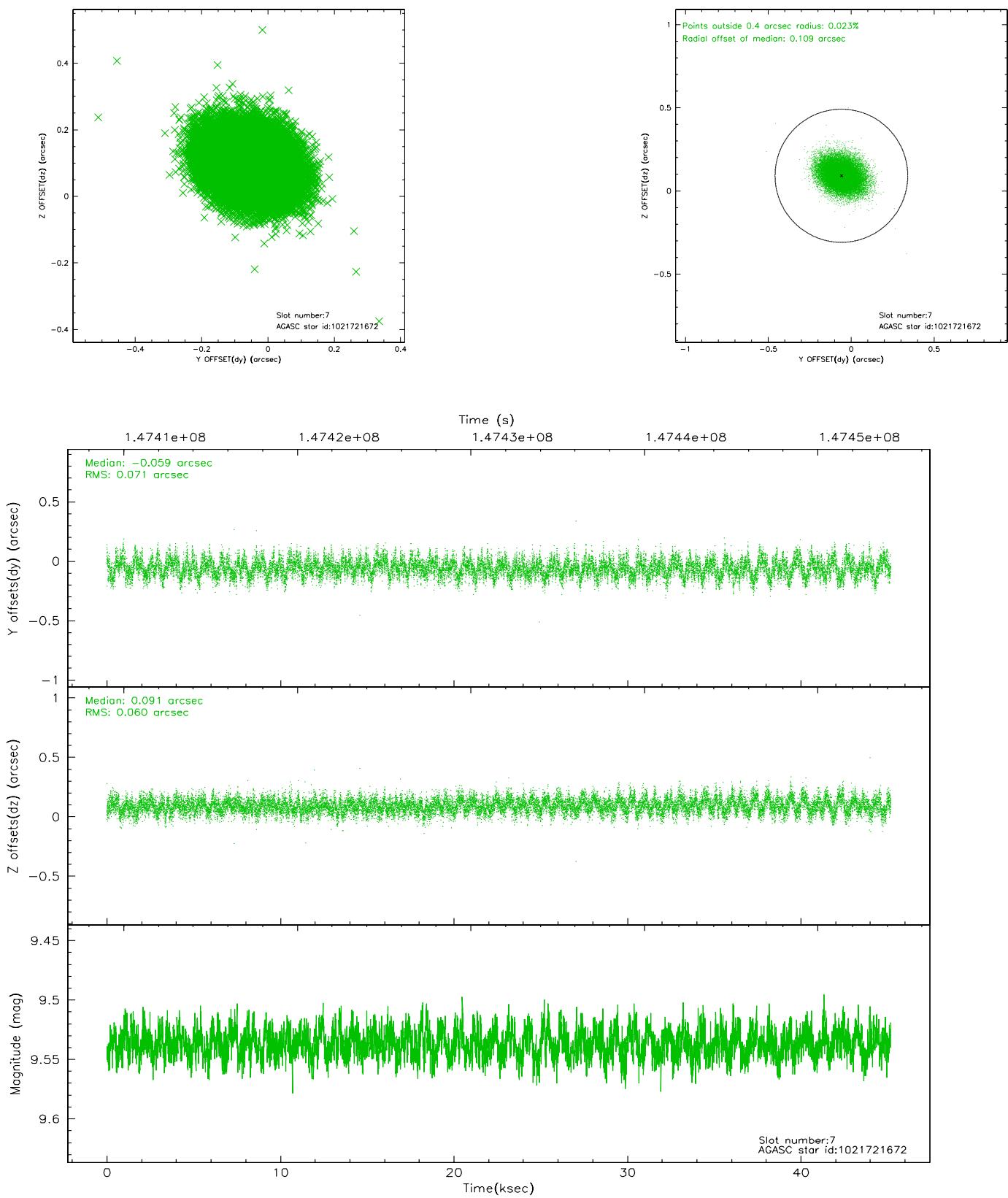
### 2.4.3 Slot 5



## 2.4.4 Slot 6

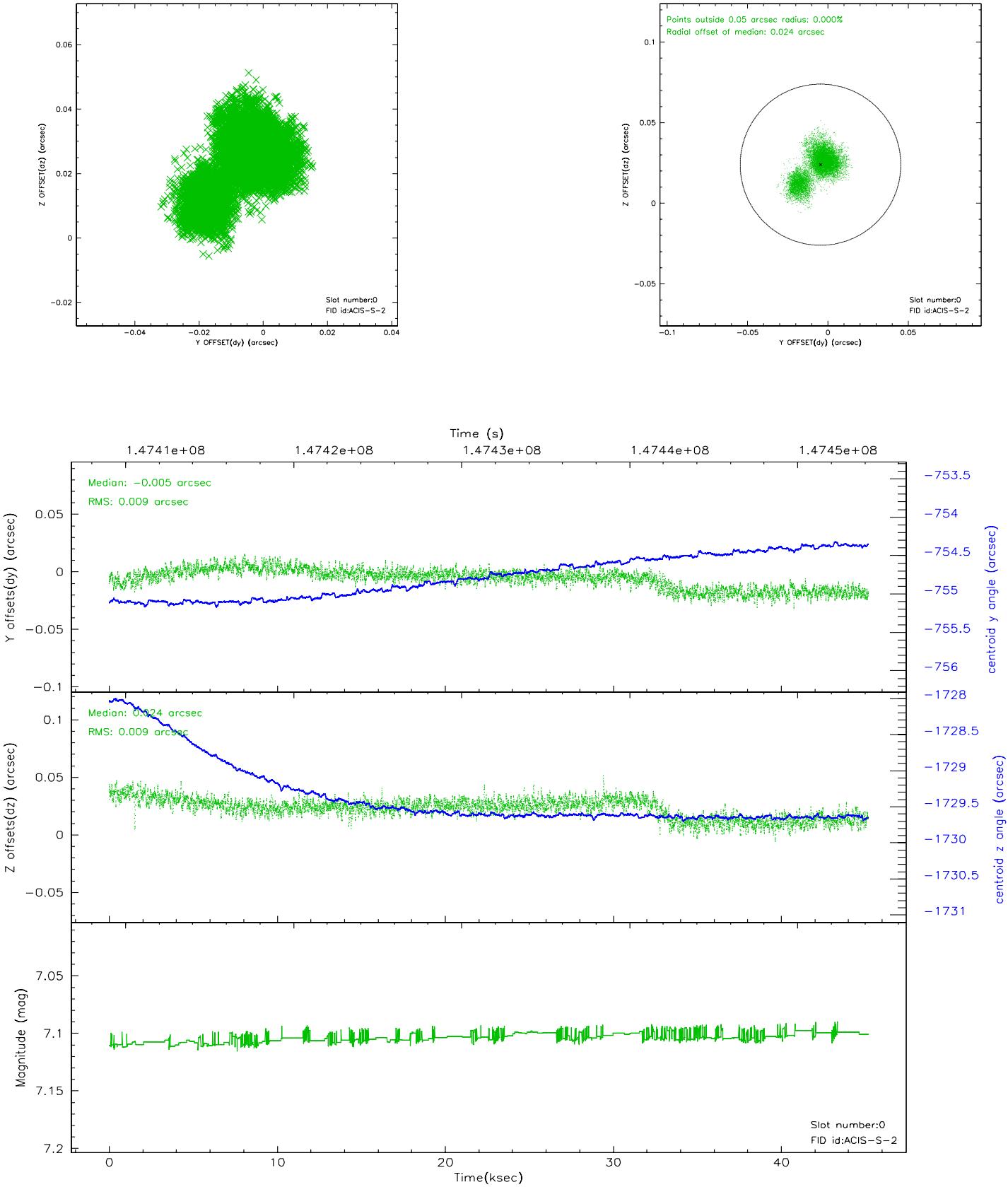


## 2.4.5 Slot 7

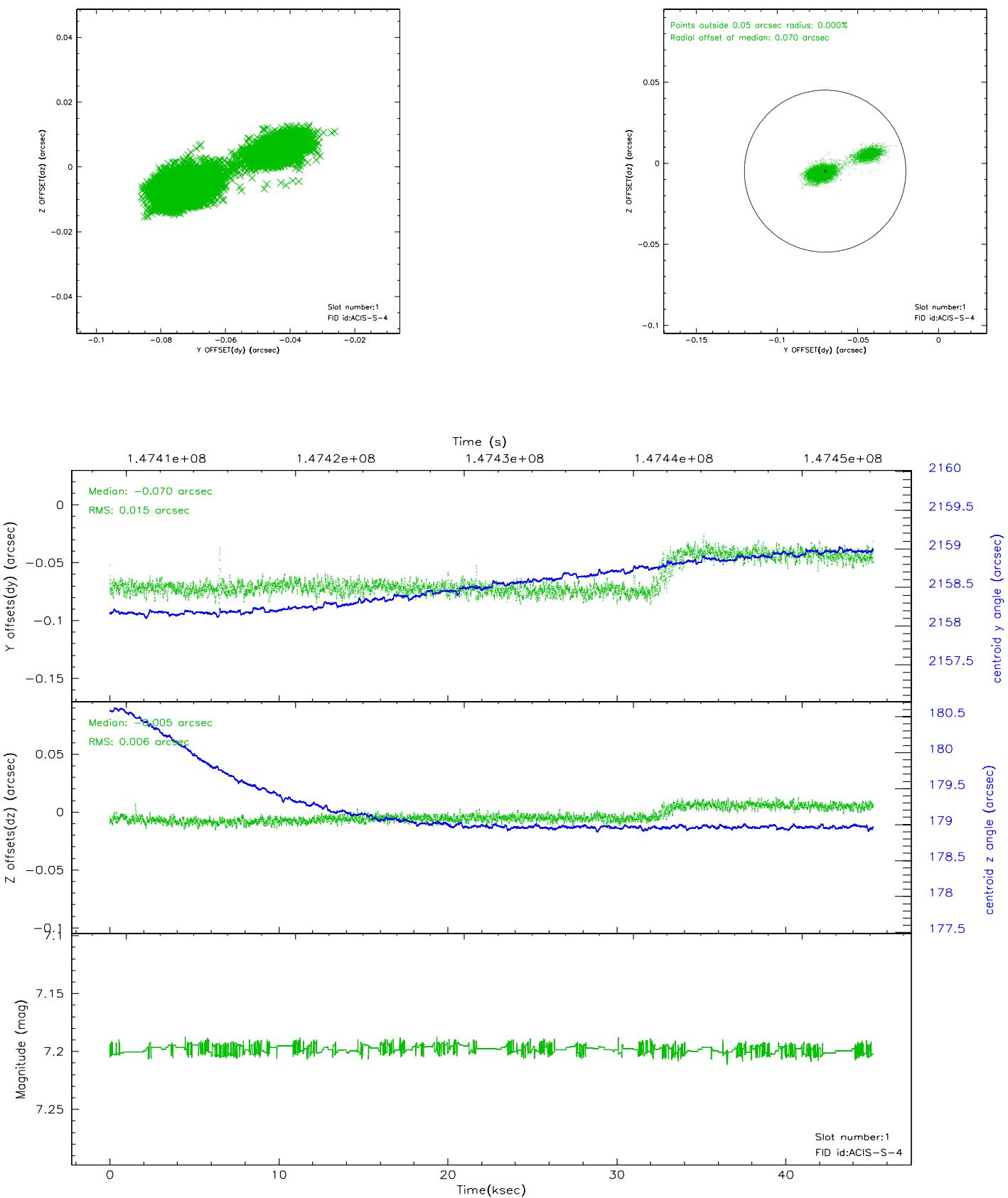


## 2.5 FID Slots

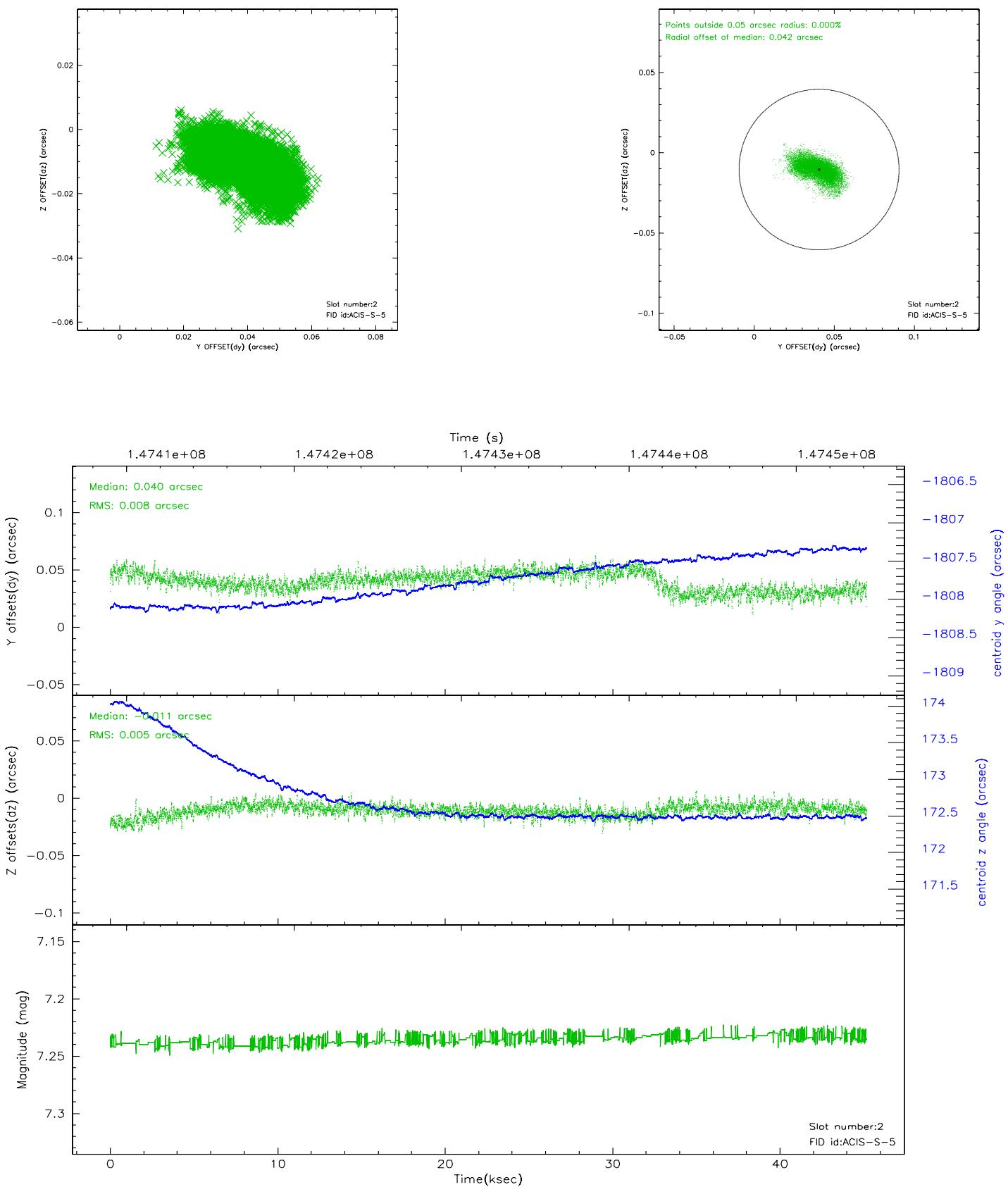
### 2.5.1 Slot 0



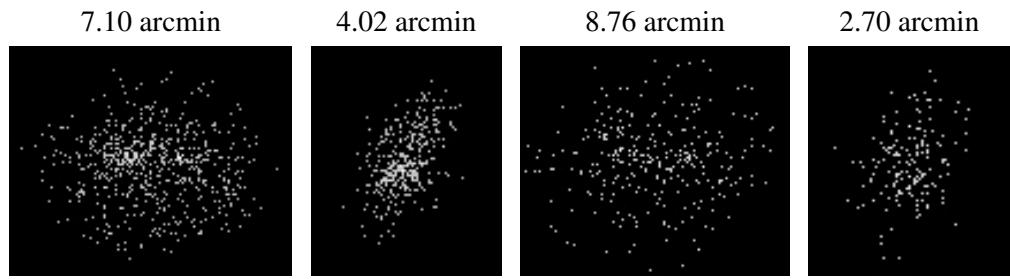
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.10.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.182

## A.2 Comments

Roll constraint met.

The primary source has some pile-up.

Focal plane temperature is warmer than -118.7 C degrees during the first 8 ksec of this observation. The ACIS spectral response calibration for the front-illuminated chips is less accurate at these warmer temperatures than it is at -119.7 C. The back-illuminated chips are not affected at the focal plane temperatures recorded for this observation. Users whose science objectives depend on the most accurate spectral response (i.e.: 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.