

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 1772 - L2 Version 5  
Chandra X-Ray Center

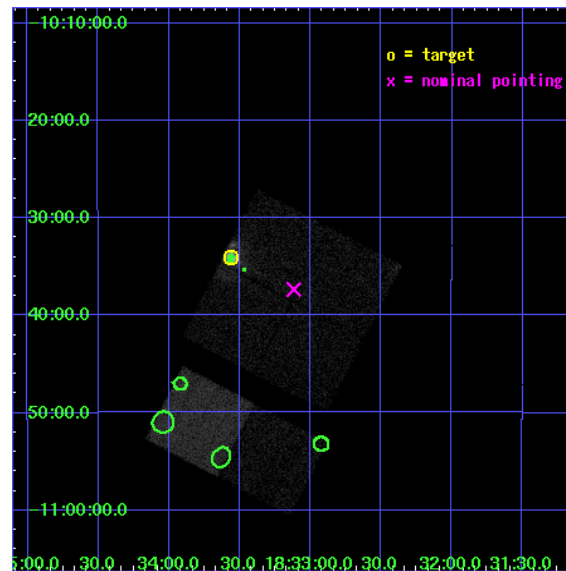
L2 Processing Date : Nov 20 2008

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.5	FID Slots . . . . .	13
2.5.1	Slot 0 . . . . .	13
2.5.2	Slot 1 . . . . .	14
2.5.3	Slot 2 . . . . .	15
<b>3</b>	<b>Point Sources</b>	<b>16</b>
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

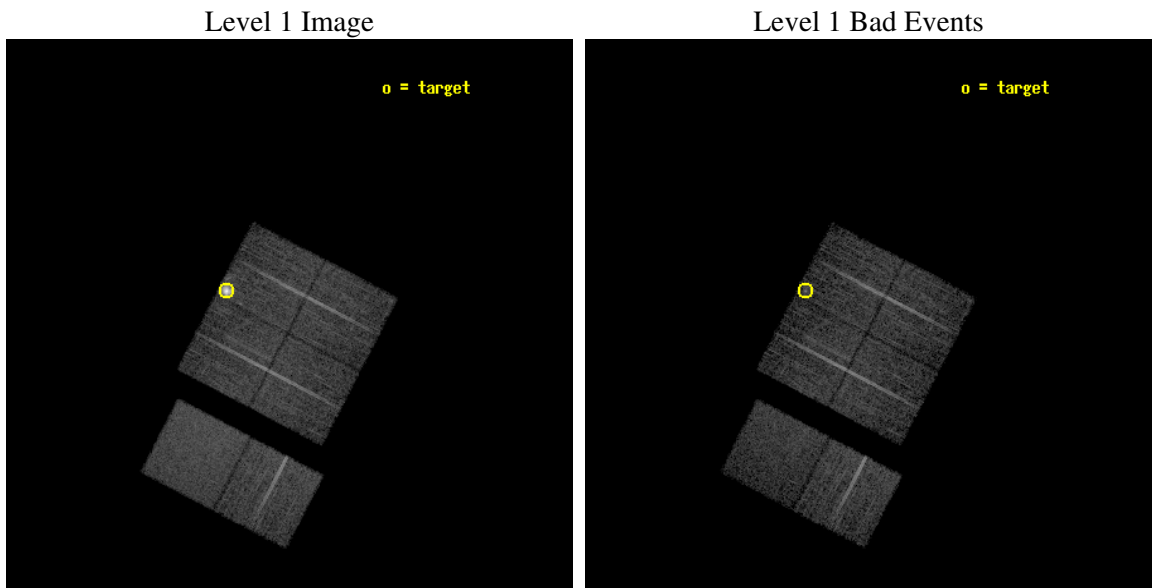
seq_num	590198
obs_id	1772
title	HRC RESPONSE TO CONTINUUM SOURCE.
observer	Dr. CXC Calibration
object	G21.5-0.9 [Chip I1, T=110, Offsets=-7,0,-1]
dtcycle	0
cycle	P
ra_targ	278.389583
dec_targ	-10.568528
ra_nom	278.27920664508
dec_nom	-10.622598373756
roll_nom	207.56930029058
revision	5
ontime	7507.2000069916
livetime	7412.1393202099
ontime0	7507.2000069916
ontime1	7507.2000069916
ontime2	7507.2000069916
ontime3	7507.2000069916
ontime6	7507.2000069916
ontime7	7507.2000069916
l2events	66647



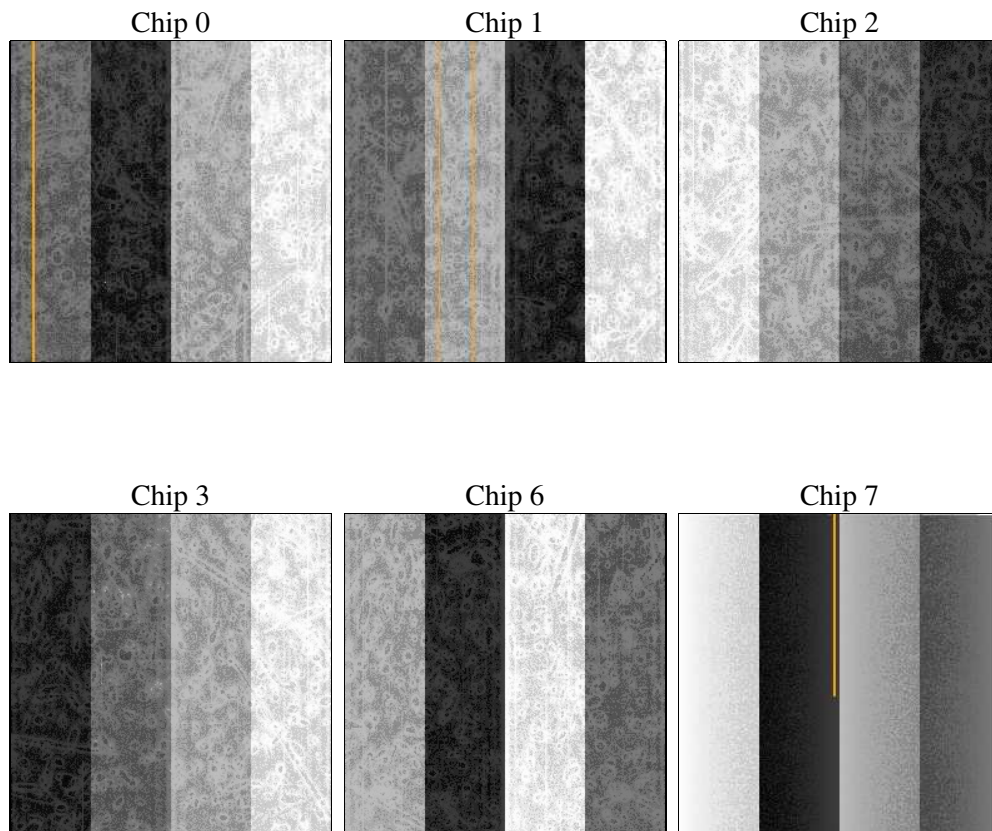
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.11.9
caldbver	3.5.0
date	2008-11-20T23:00:49
revision	5

sched_exp_time	7560.000000
ontime	7507.2000069916
ontime0	7507.2000069916
ontime1	7507.2000069916
ontime2	7507.2000069916
ontime3	7507.2000069916
ontime6	7507.2000069916
ontime7	7507.2000069916
l1events	335256

### 2.1.4 Events

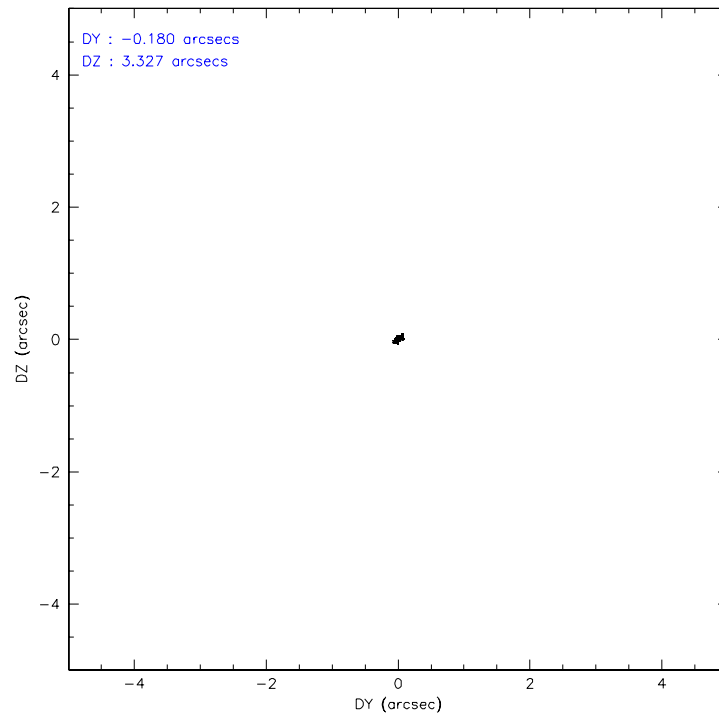
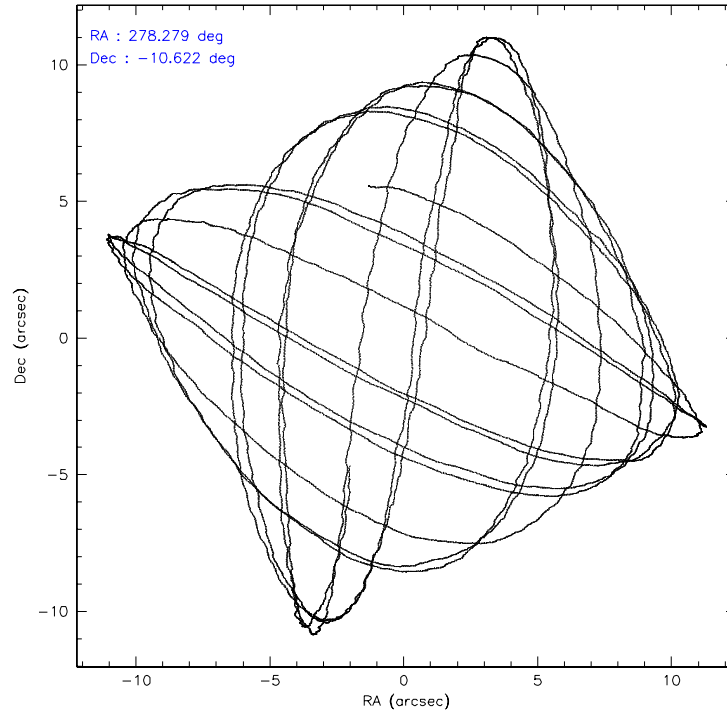
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	49589	69276	50878	51914	55177	58422
rejected events	43812	43889	45819	45800	49661	36540
rejected %	88%	63%	90%	88%	90%	62%

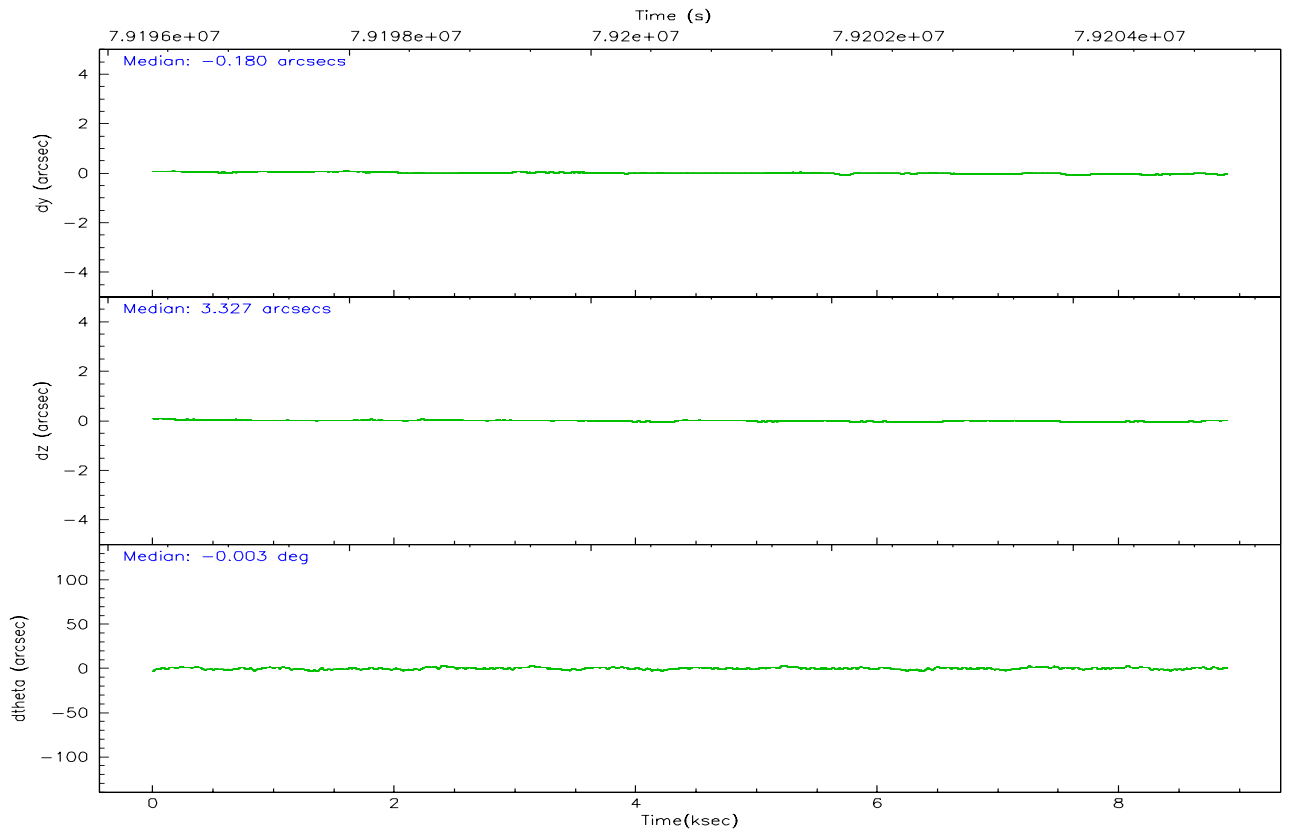
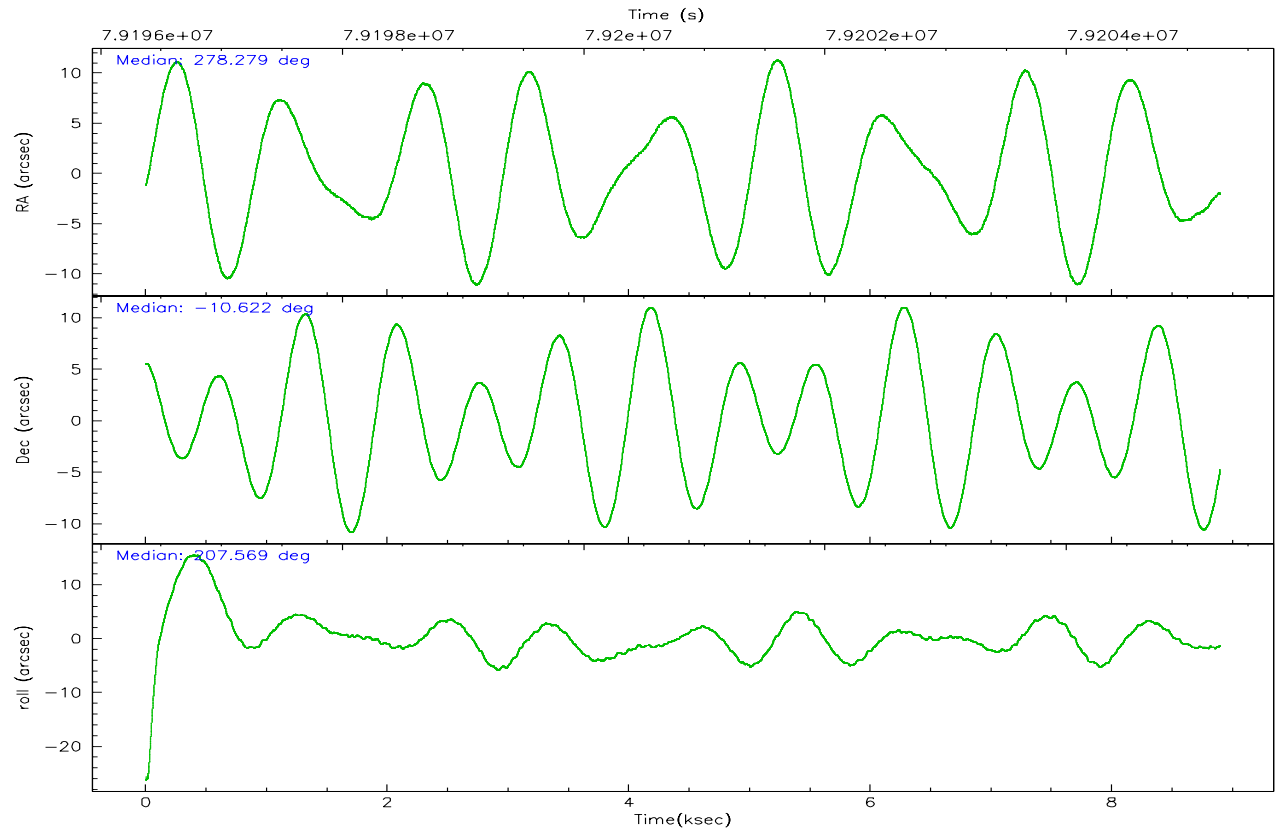
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1544	15445	1168	1811	1093	1231
	3%	22%	2%	3%	1%	2%
grade 1 events	14	117	10	13	12	29
	0%	0%	0%	0%	0%	0%
grade 2 events	2166	4715	2011	2188	2178	4648
	4%	6%	3%	4%	3%	7%
grade 3 events	400	1358	319	355	335	1268
	0%	1%	0%	0%	0%	2%
grade 4 events	389	1290	321	373	337	1137
	0%	1%	0%	0%	0%	1%
grade 5 events	1106	1272	982	1118	1191	3514
	2%	1%	1%	2%	2%	6%
grade 6 events	1281	2594	1244	1389	1576	13606
	2%	3%	2%	2%	2%	23%
grade 7 events	42689	42485	44823	44667	48455	32989
	86%	61%	88%	86%	87%	56%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	278.294324	278.2792066450842	Subarray requested	NONE	NONE
Pointing Dec	-10.599366	-10.62259837375552	Alternating exposures requested	N	N
Pointing Roll	207.363395	207.5693002905757	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)	-238.277263	-238.2741181829365			
SIM translation stage offset (mm)	4.6848	4.681665180006831			
Observation start time	79197716.184000	79196181.816974			
Observation start date	2000-07-05T15:20:52	2000-07-05T14:56:21			
Observation end time	79205276.184000	79205409.892314			
Observation end date	2000-07-05T17:26:52	2000-07-05T17:30:09			
Read mode	TIMED	TIMED			

## 2.3 Aspect





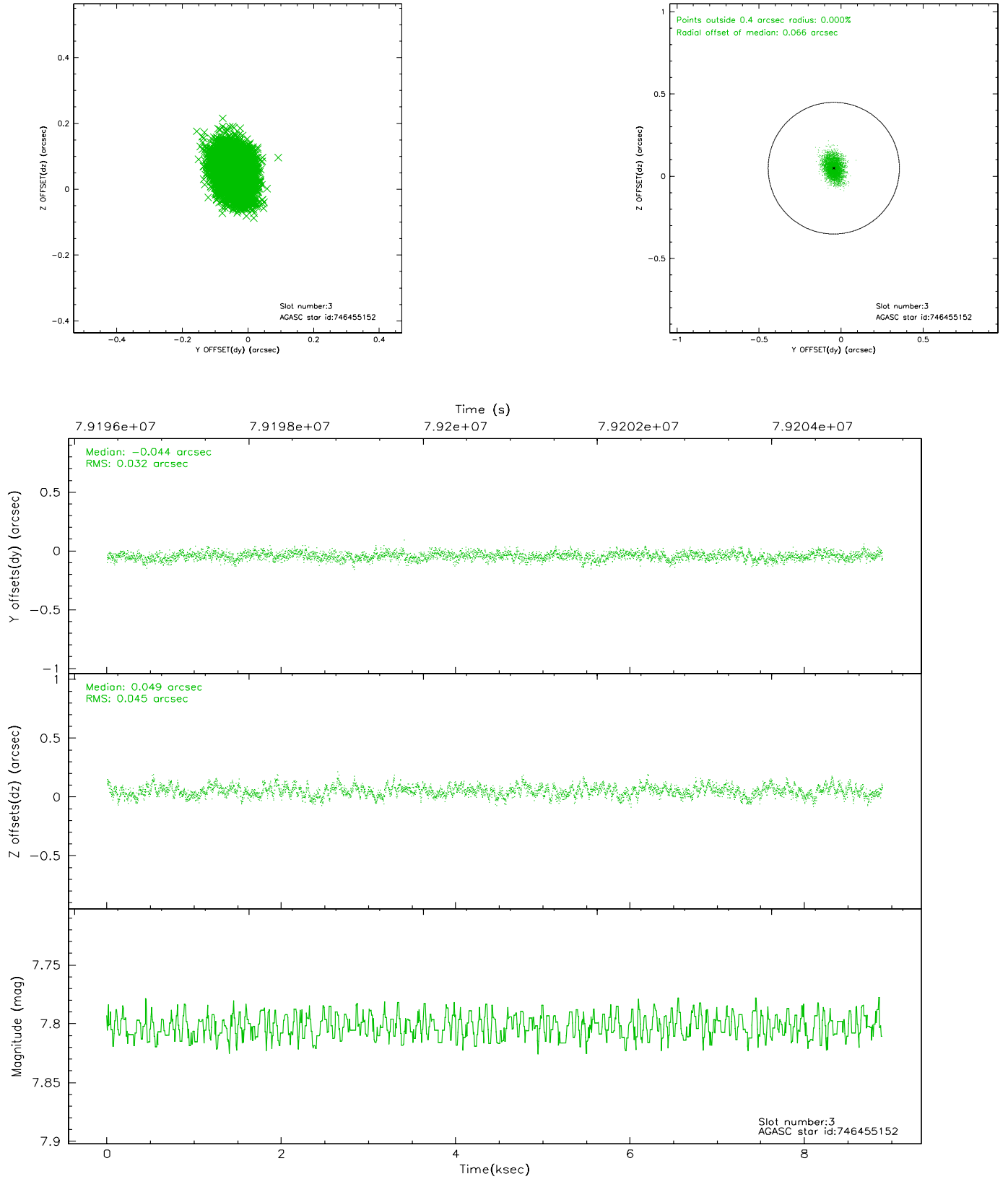
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	2170	-0.058	-0.058	0.010	0.017	0.000000	0.000000	-753.82	-737.41
1	FID	ACIS-I-4	7.19	2169	-0.060	0.054	0.009	0.015	0.000000	0.000000	2159.94	1168.71
2	FID	ACIS-I-5	7.23	2170	0.017	0.072	0.011	0.018	0.000000	0.000000	-1807.07	1167.78
3	GUIDE	746455152	7.80	4341	-0.044	0.049	0.058	0.096	278.447893	-9.976732	-1513.76	-1739.93
4	GUIDE	746462456	8.39	4341	-0.114	-0.039	0.069	0.114	278.652171	-10.530173	-1239.35	361.55
5	GUIDE	746455112	8.92	4336	0.111	-0.003	0.092	0.150	278.266531	-10.703234	259.07	287.32
6	GUIDE	746460328	9.81	4271	0.048	-0.006	0.098	0.163	278.603974	-9.898096	-2135.26	-1736.60
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

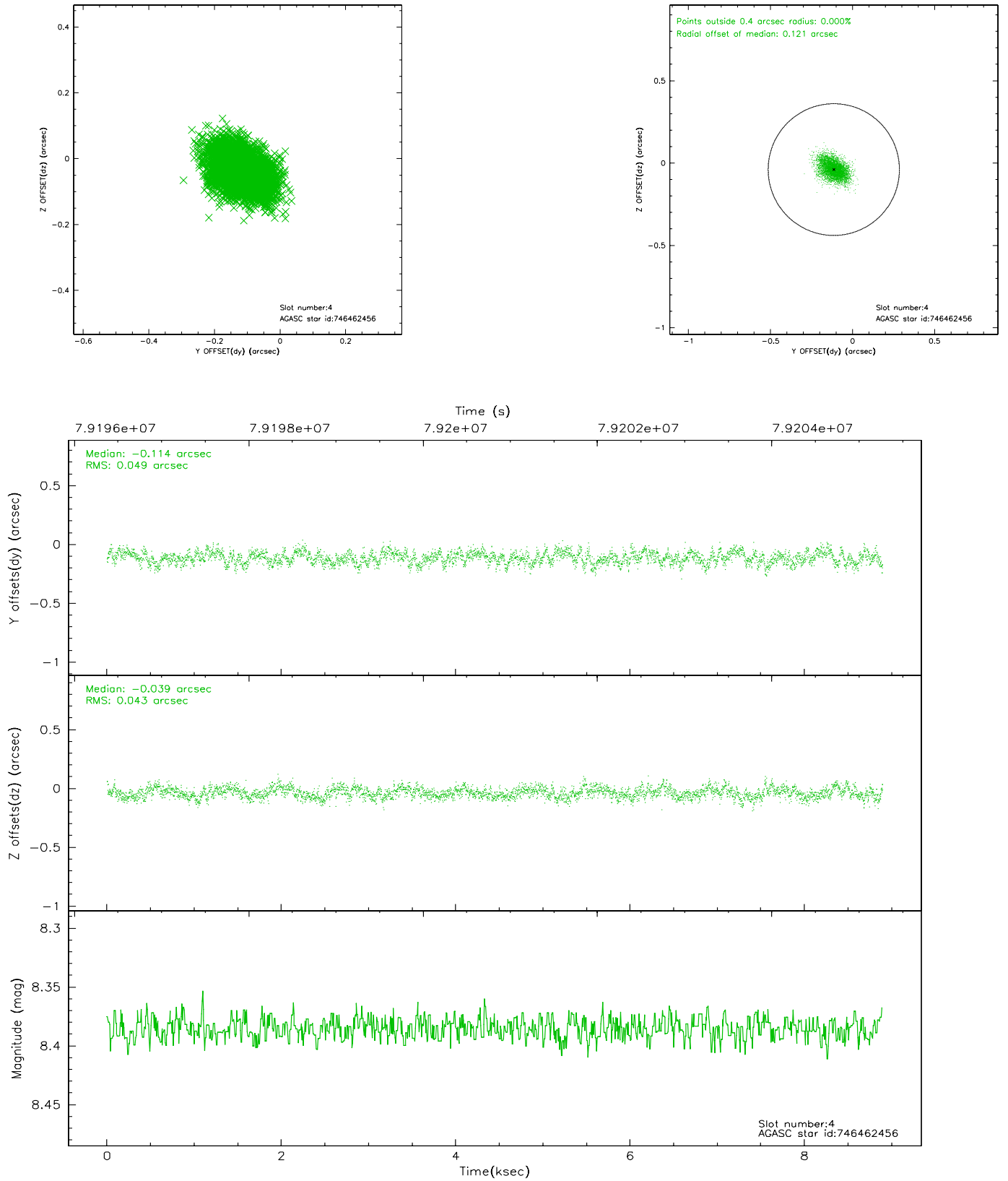


## 2.4 Star Slots

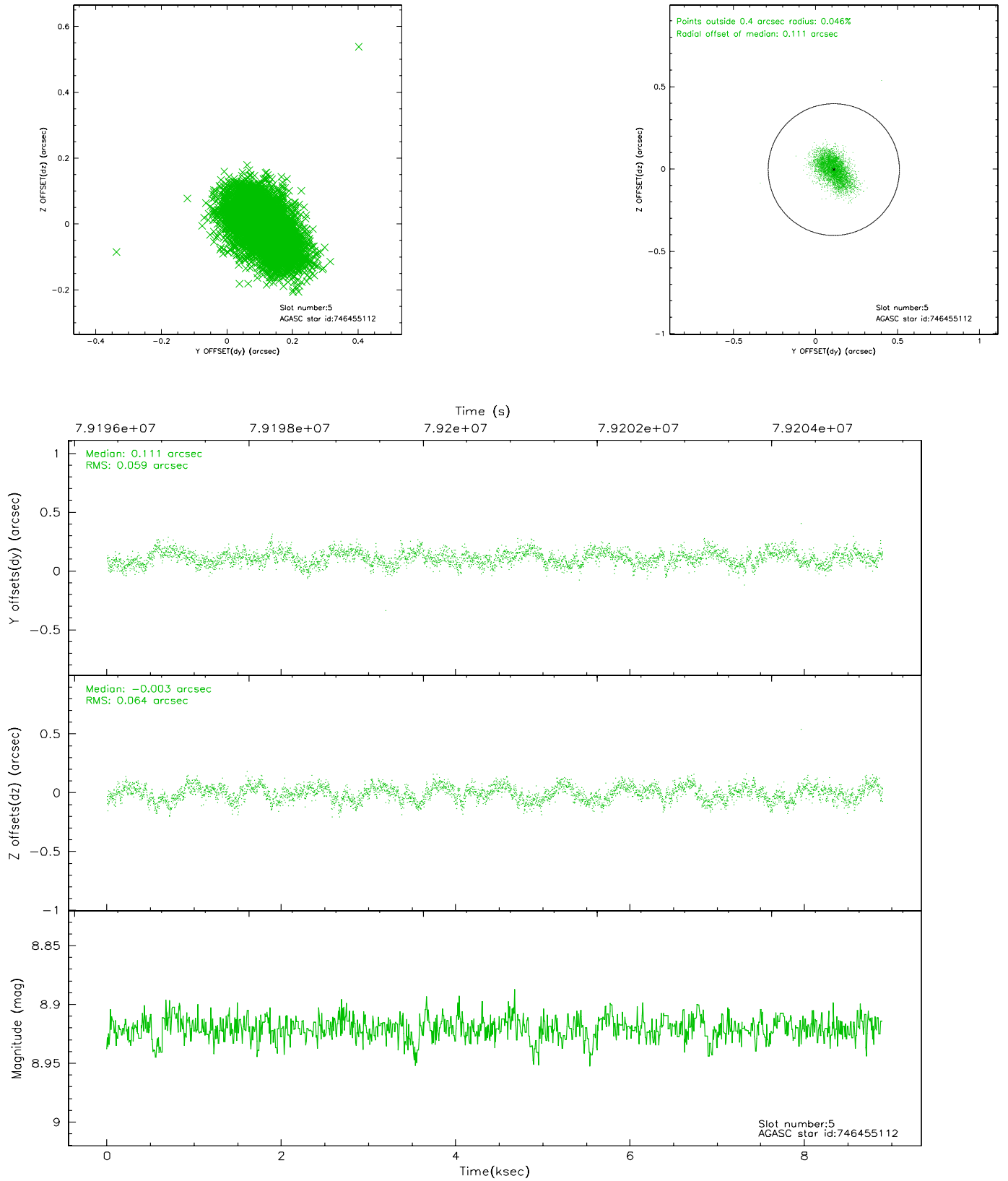
### 2.4.1 Slot 3



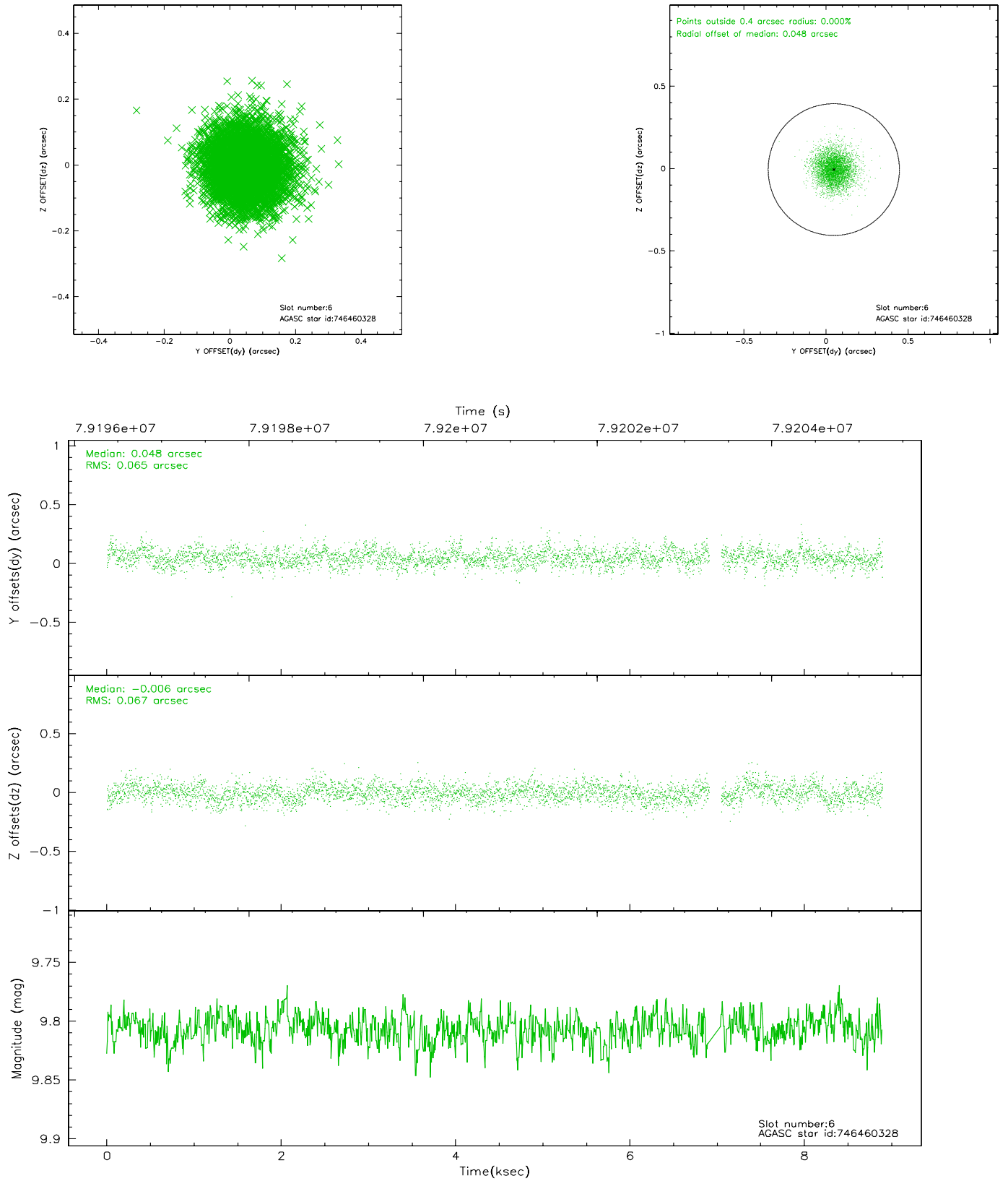
## 2.4.2 Slot 4



### 2.4.3 Slot 5

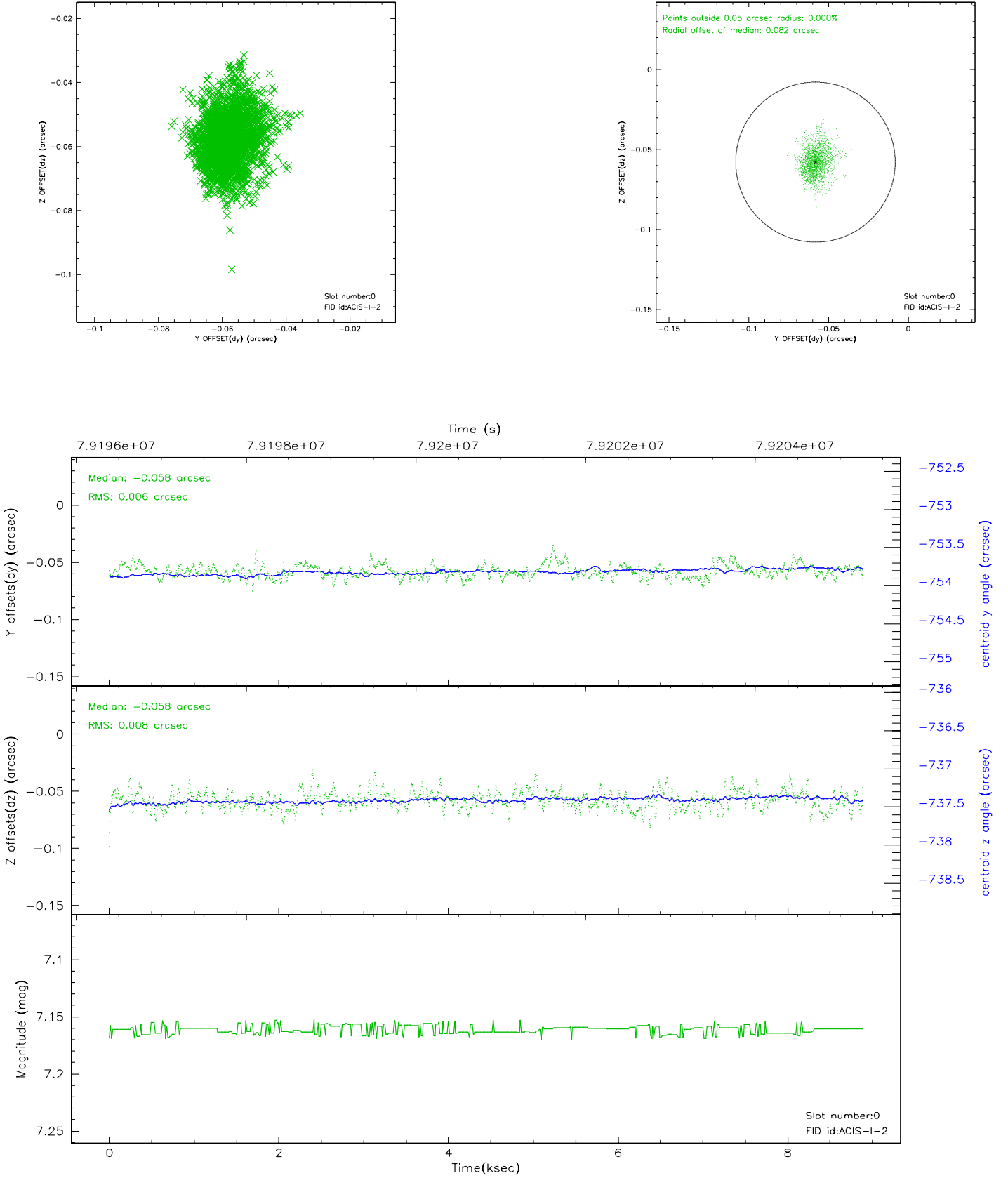


## 2.4.4 Slot 6

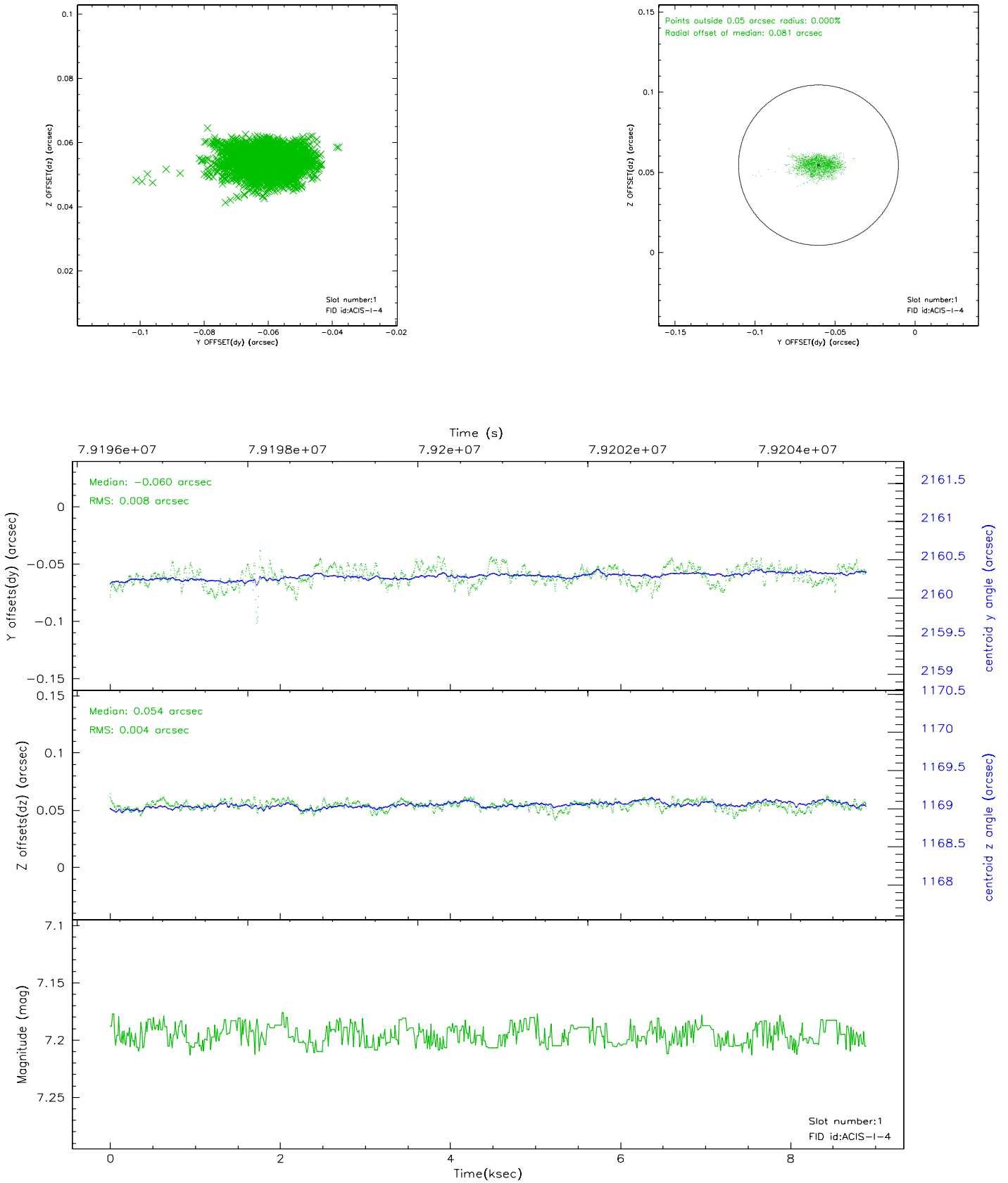


## 2.5 FID Slots

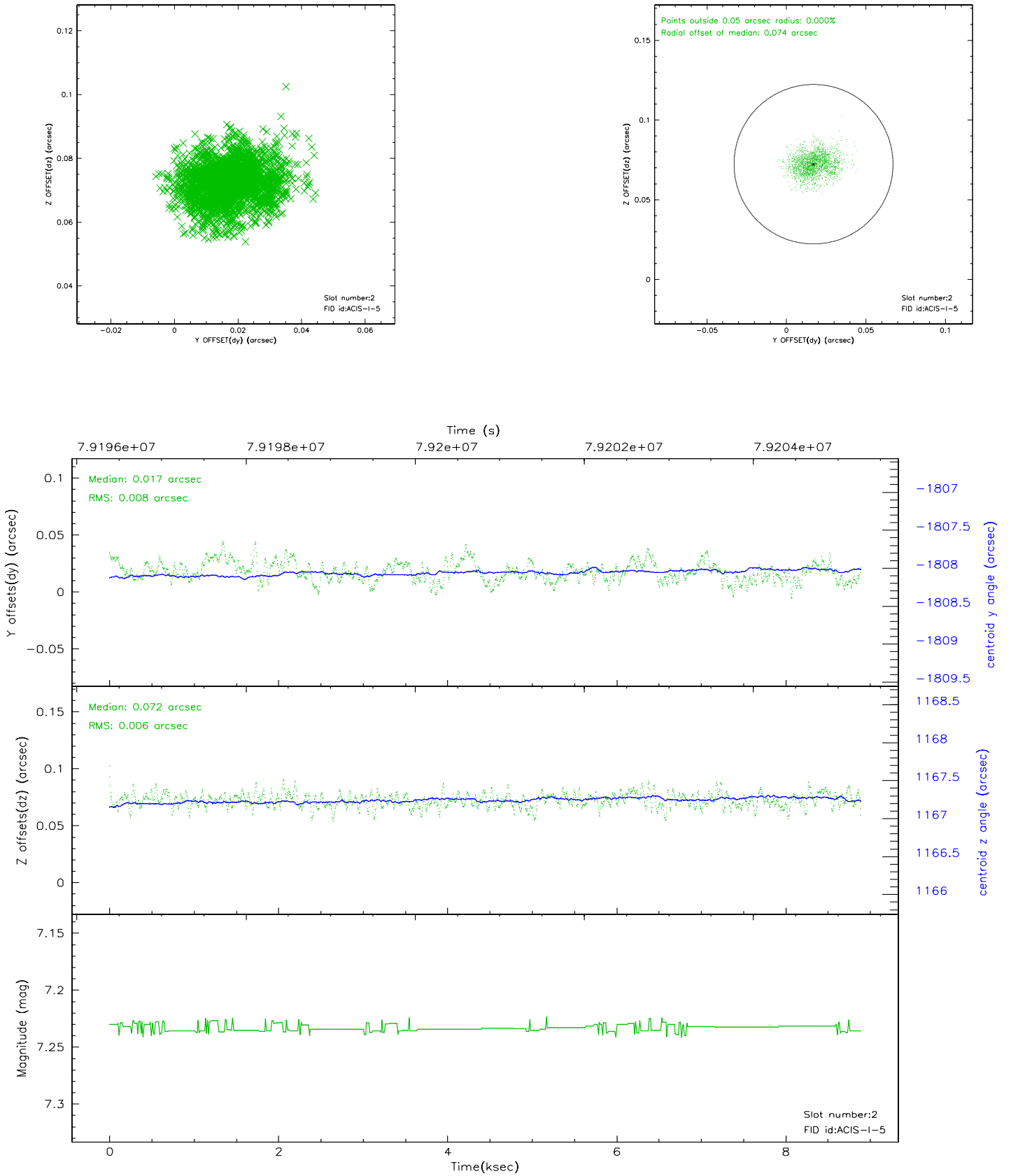
### 2.5.1 Slot 0



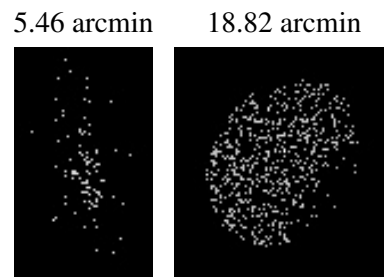
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources





# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2010.10.01
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	7.507

## A.2 Comments

The guide star in slot 7 was manually excluded from the processing due to poor data quality.

=====

This calibration observation was acquired with the focal plane temperature raised from -120C to -110C, for attempted recalibration of ACIS for the

1999-09-16 through 2000-01-28 period.

=====

This reprocessing of the data applies no CTI correction because none is available for that temperature.

=====

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 approximately 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.