

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 1779 - L2 Version 4  
Chandra X-Ray Center

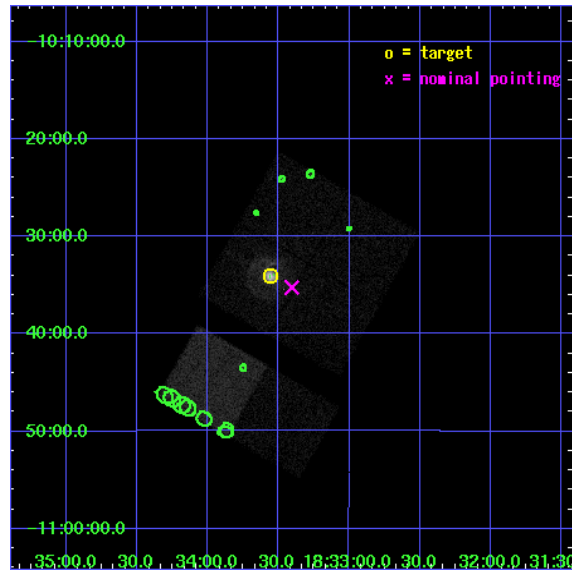
L2 Processing Date : Nov 19 2008

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# 1 Front

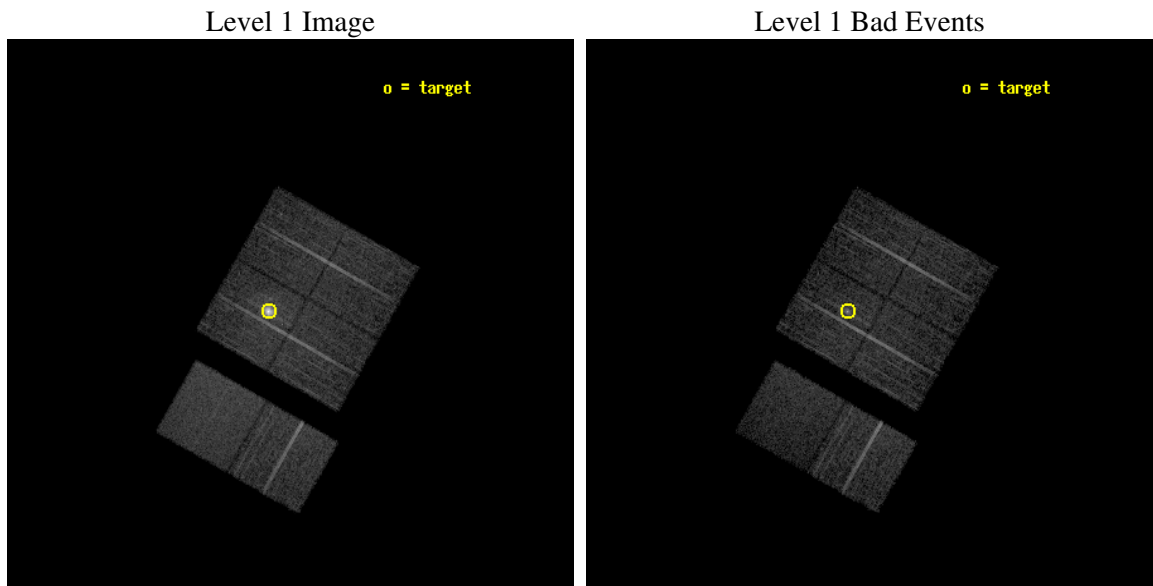
seq_num	590205
obs_id	1779
title	HRC RESPONSE TO CONTINUUM SOURCE.
observer	Dr. CXC Calibration
object	G21.5-0.9 [Chip I3, T=110, Offsets=-2,0,2]
dtcycle	0
cycle	P
ra_targ	278.389583
dec_targ	-10.568528
ra_nom	278.35140547657
dec_nom	-10.587560319825
roll_nom	209.6965087231
revision	4
ontime	7318.4000068158
livetime	7225.7300193181
ontime0	7318.4000068158
ontime1	7318.4000068158
ontime2	7318.4000068158
ontime3	7318.4000068158
ontime6	7318.4000068158
ontime7	7318.4000068158
l2events	67321



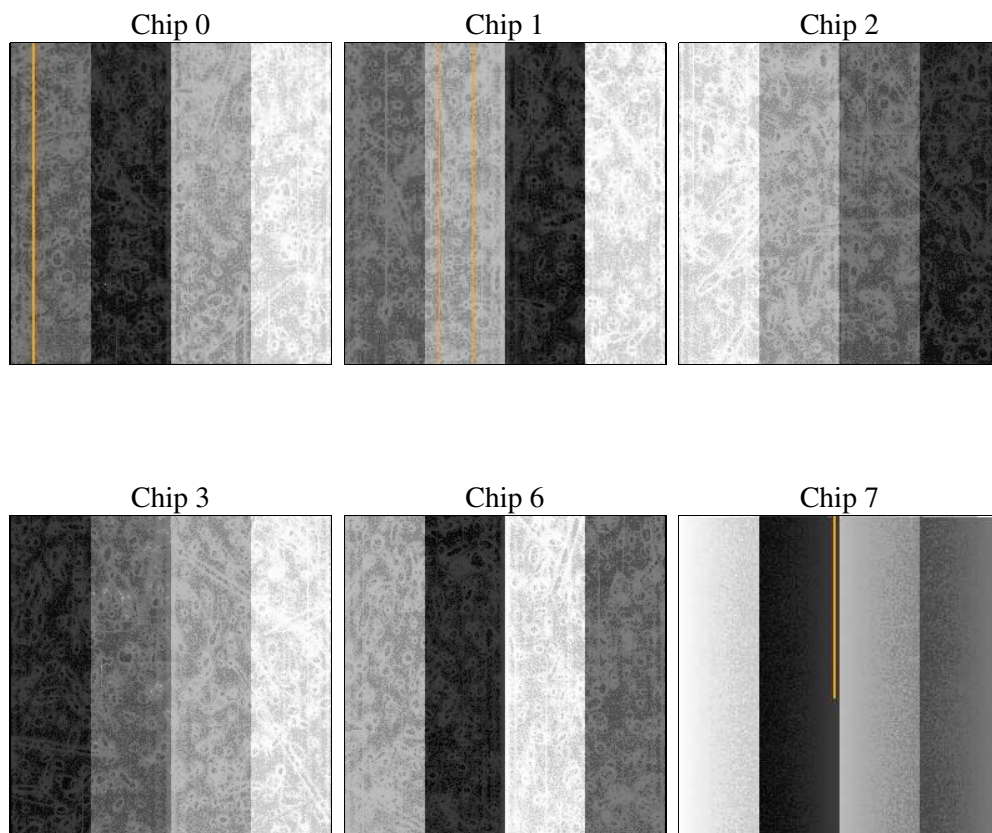
## 2 OBI

### 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	2008-11-19T16:21:57
revision	4

sched_exp_time	7560.000000
ontime	7318.4000068158
ontime0	7318.4000068158
ontime1	7318.4000068158
ontime2	7318.4000068158
ontime3	7318.4000068158
ontime6	7318.4000068158
ontime7	7318.4000068158
l1events	329789

### 2.1.4 Events

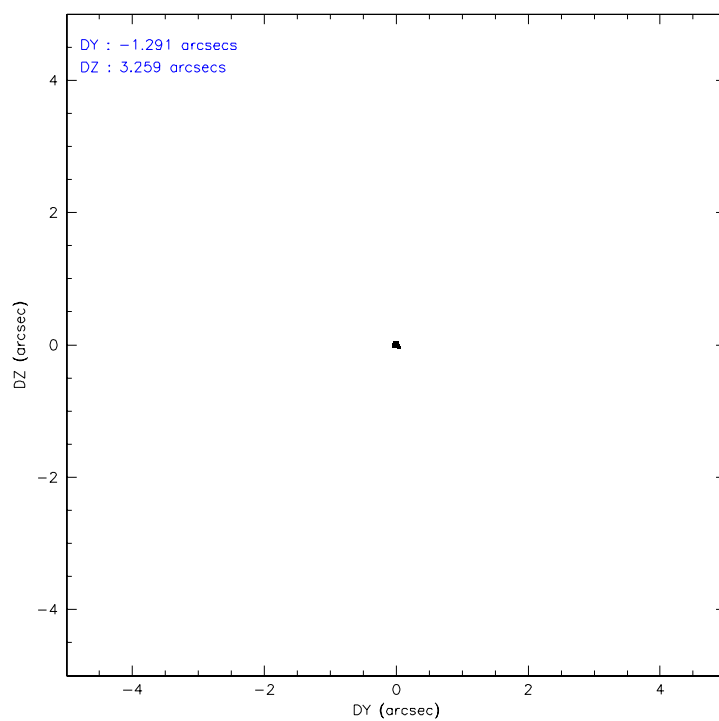
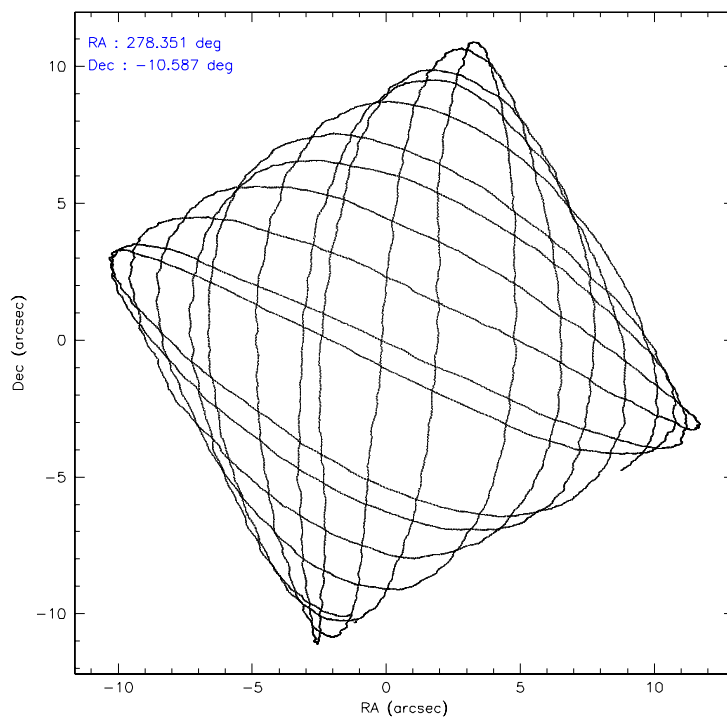
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	47478	46966	51634	73410	53517	56784
rejected events	41988	40794	46470	46607	48172	35258
rejected %	88%	86%	89%	63%	90%	62%

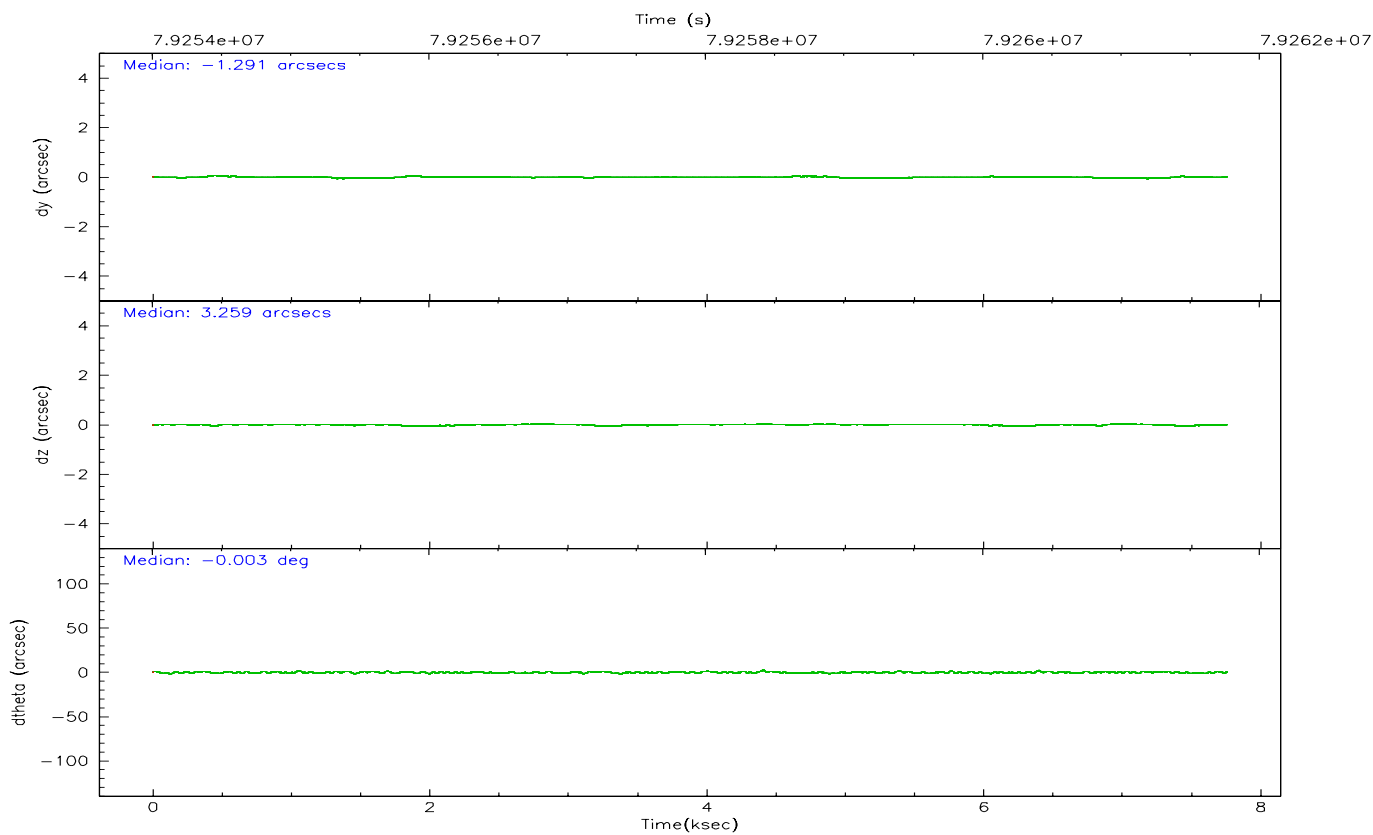
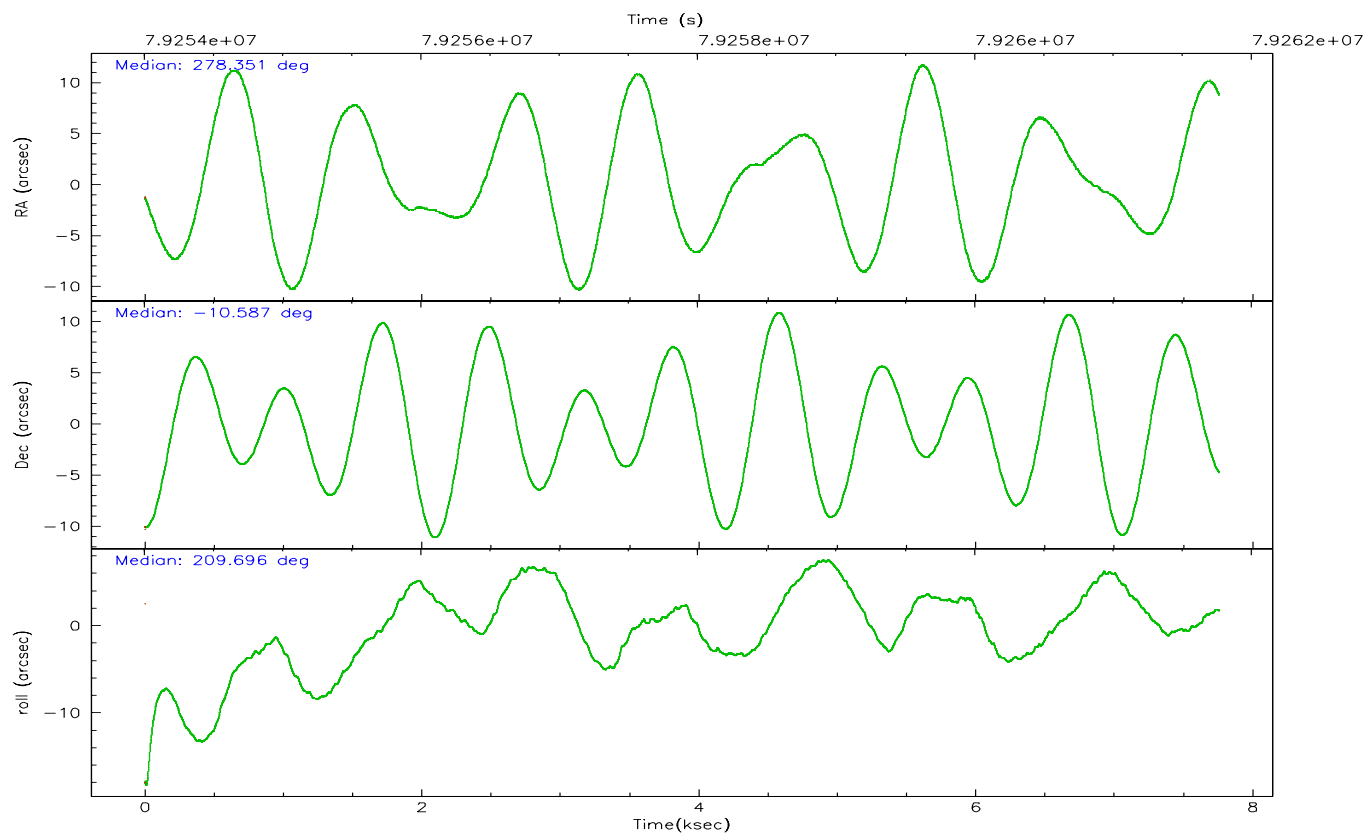
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1394	1772	1231	8482	1055	1238
	2%	3%	2%	11%	1%	2%
grade 1 events	10	9	11	65	14	29
	0%	0%	0%	0%	0%	0%
grade 2 events	2132	2097	2020	13940	2099	4611
	4%	4%	3%	18%	3%	8%
grade 3 events	352	447	327	682	337	1250
	0%	0%	0%	0%	0%	2%
grade 4 events	364	438	332	639	358	1178
	0%	0%	0%	0%	0%	2%
grade 5 events	992	1074	968	1270	1180	3392
	2%	2%	1%	1%	2%	5%
grade 6 events	1250	1423	1258	3083	1498	13273
	2%	3%	2%	4%	2%	23%
grade 7 events	40984	39706	45487	45249	46976	31813
	86%	84%	88%	61%	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	278.365655	278.351405476571	Subarray requested	NONE	NONE
Pointing Dec	-10.563830	-10.58756031982451	Alternating exposures requested	N	N
Pointing Roll	209.490441	209.696508723096	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)	-226.272463	-226.2682626179875			
SIM translation stage offset (mm)	-7.32	-7.32419038494217			
Observation start time	79254206.184000	79253829.86909799			
Observation start date	2000-07-06T07:02:22	2000-07-06T06:57:09			
Observation end time	79261766.184000	79262433.71941499			
Observation end date	2000-07-06T09:08:22	2000-07-06T09:20:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



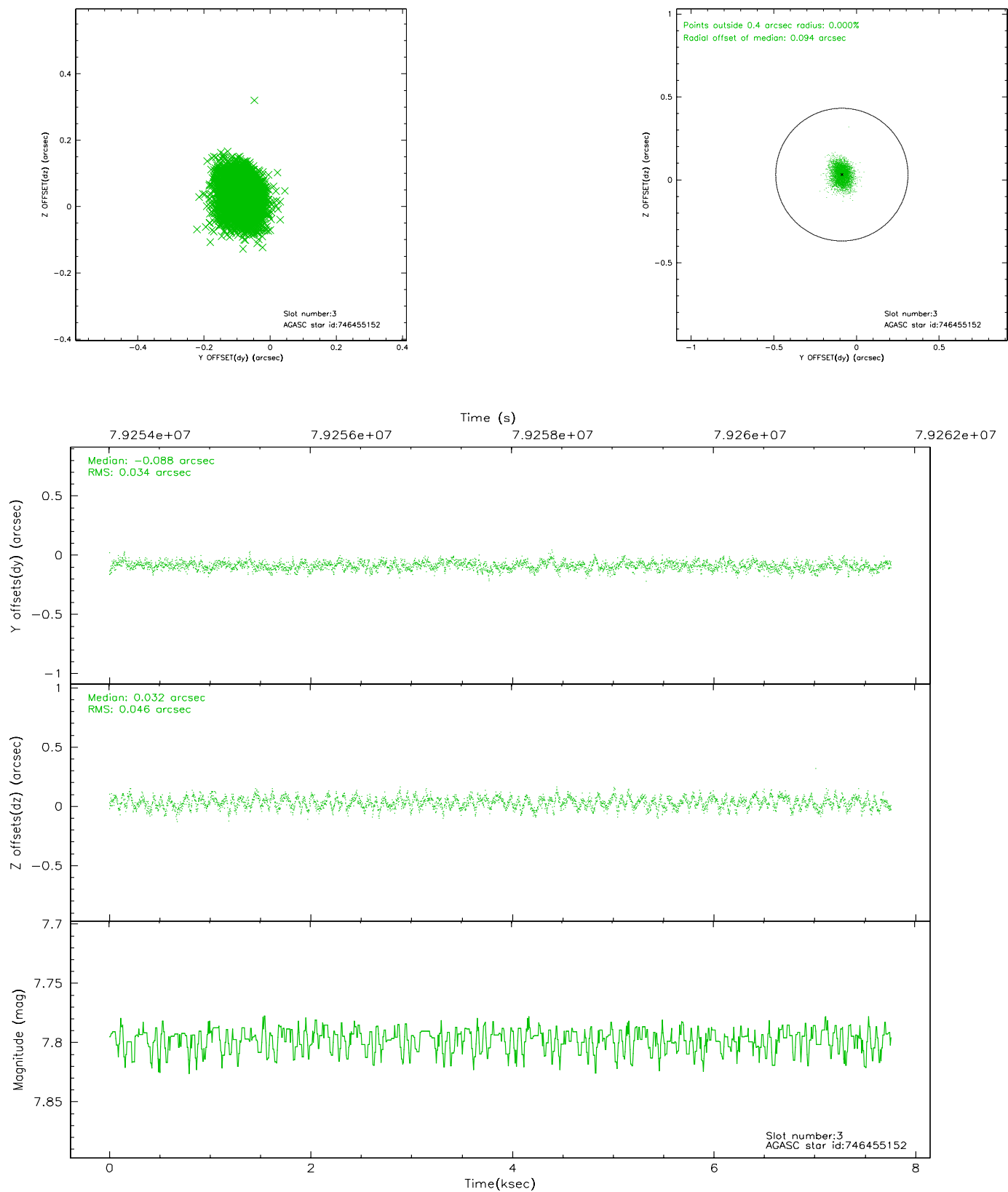


### Slot Statistics

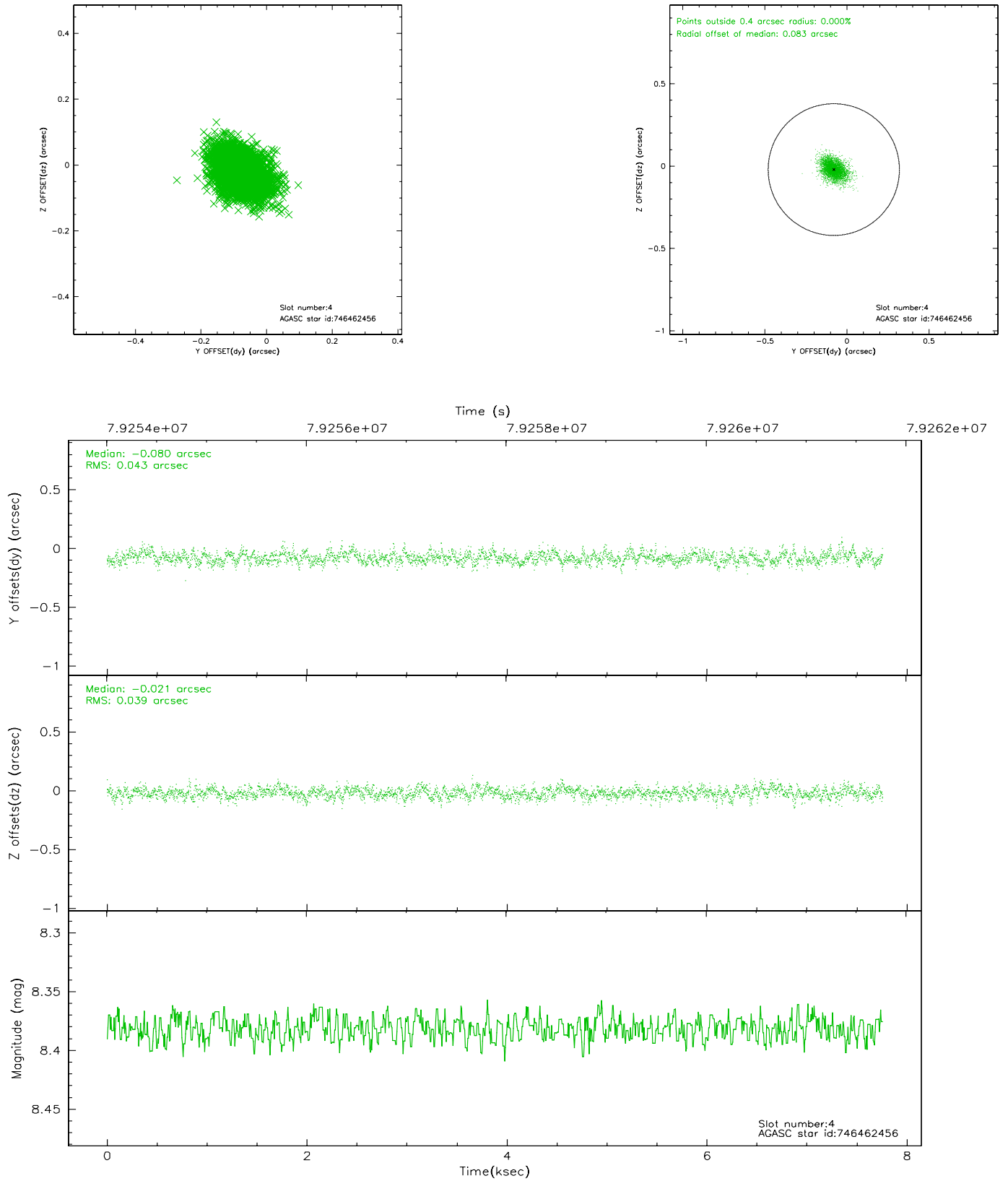
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.17	1893	-0.051	-0.037	0.008	0.014	0.000000	0.000000	-753.52	-982.35
1	FID	ACIS-I-4	7.15	1889	-0.047	0.046	0.006	0.010	0.000000	0.000000	2160.15	923.48
2	FID	ACIS-I-5	7.23	1892	-0.003	0.060	0.008	0.014	0.000000	0.000000	-1806.01	921.16
3	GUIDE	746455152	7.80	3784	-0.088	0.032	0.061	0.099	278.447893	-9.976732	-1293.78	-1695.23
4	GUIDE	746462456	8.38	3780	-0.080	-0.021	0.061	0.102	278.652171	-10.530173	-941.96	394.67
5	GUIDE	746455112	8.93	3782	0.200	-0.116	0.069	0.115	278.266531	-10.703234	552.76	265.20
6	GUIDE	746460328	9.81	3771	0.007	0.016	0.094	0.151	278.603974	-9.898096	-1914.63	-1668.81
7	GUIDE	746995400	9.48	3781	-0.034	0.091	0.098	0.159	278.078957	-11.289885	2168.01	1777.98

## 2.4 Star Slots

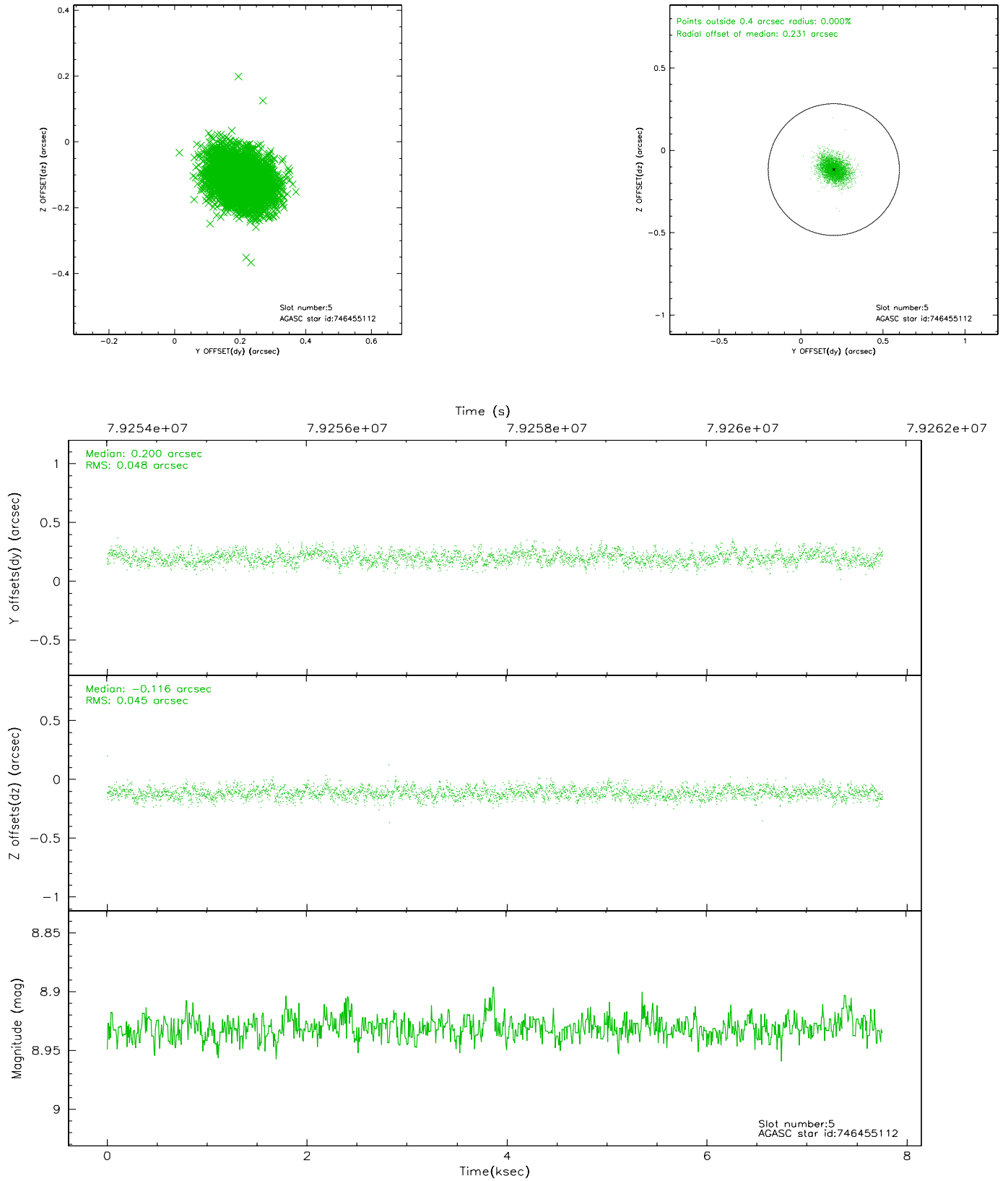
### 2.4.1 Slot 3



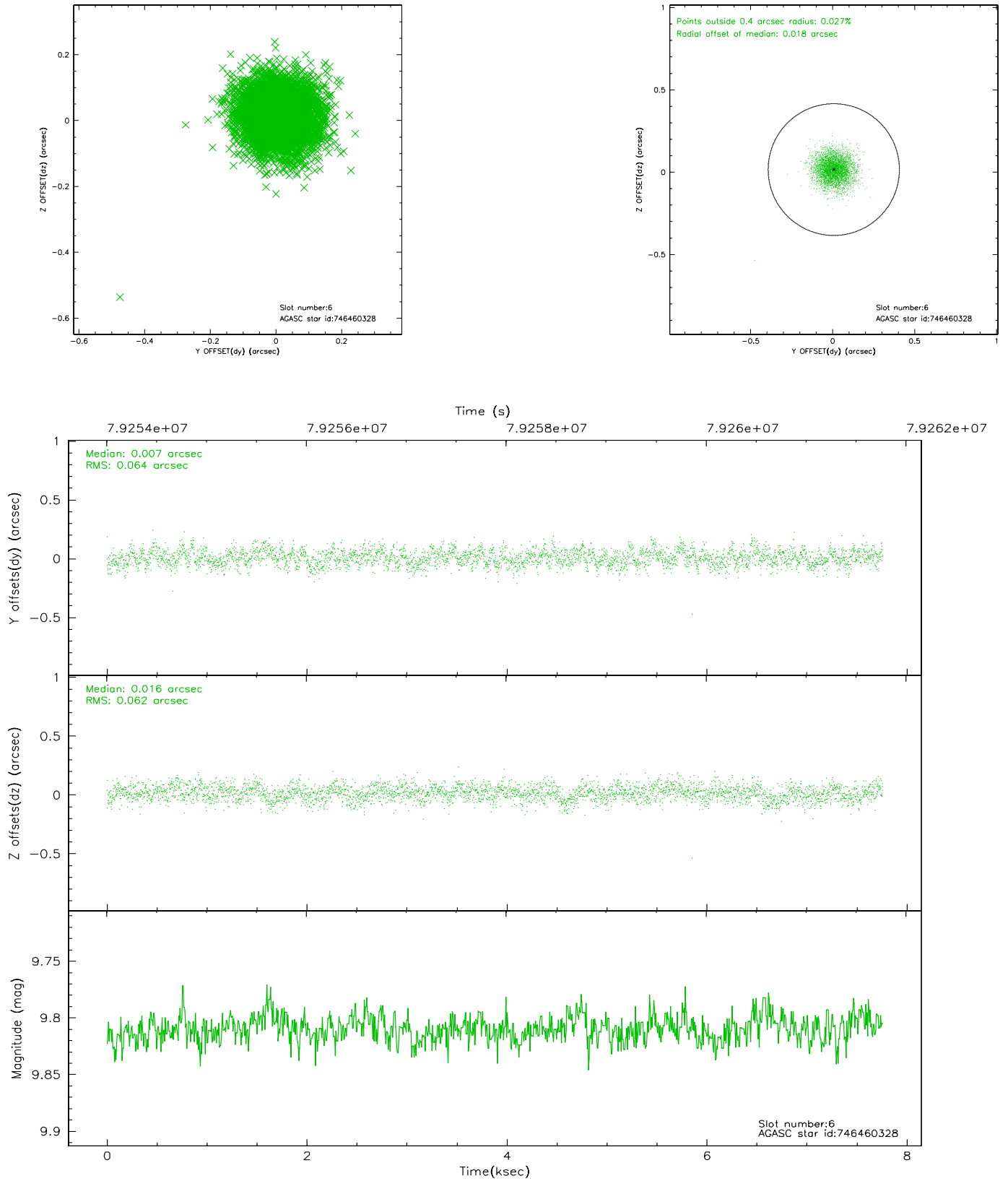
## 2.4.2 Slot 4



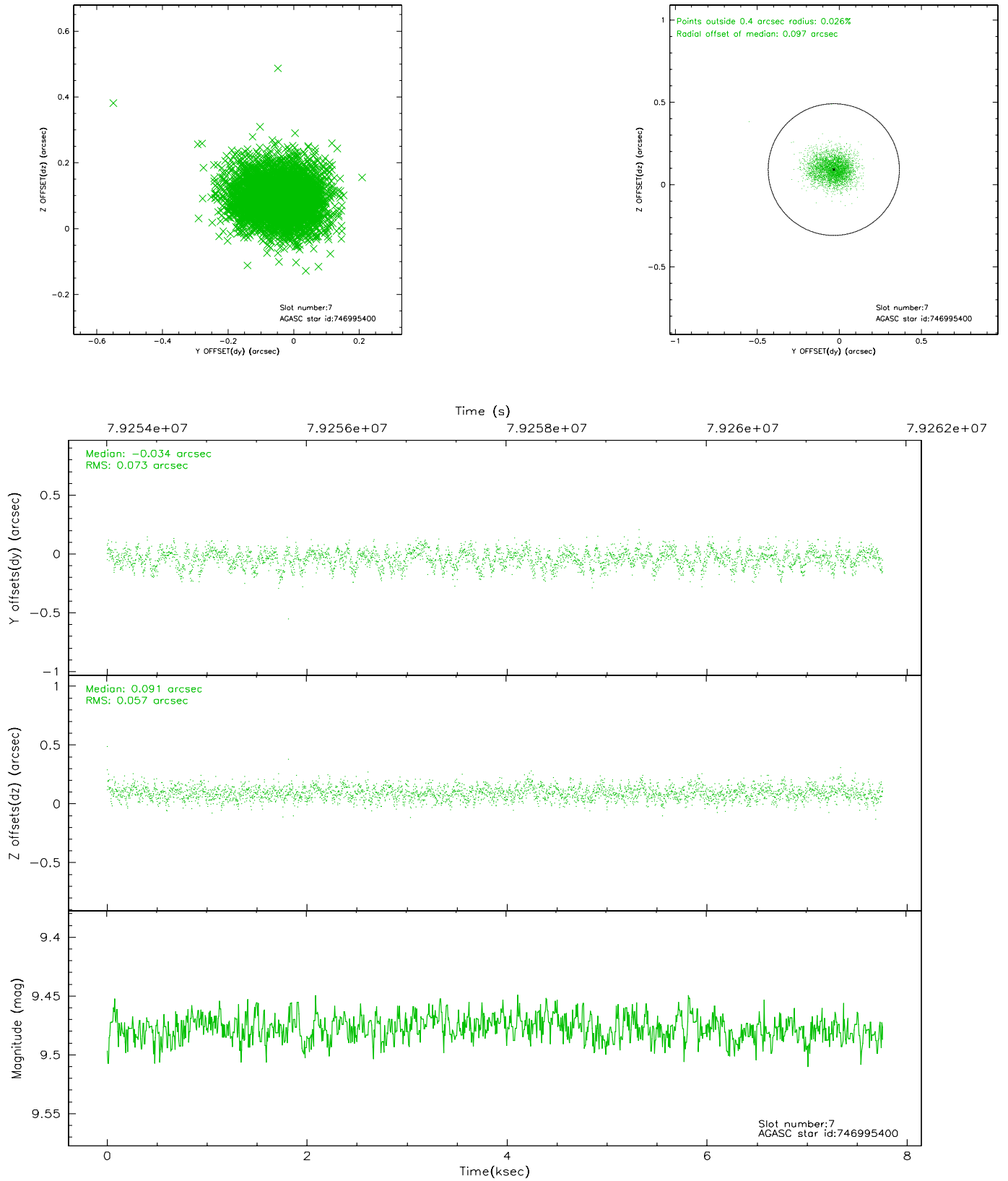
### 2.4.3 Slot 5



## 2.4.4 Slot 6

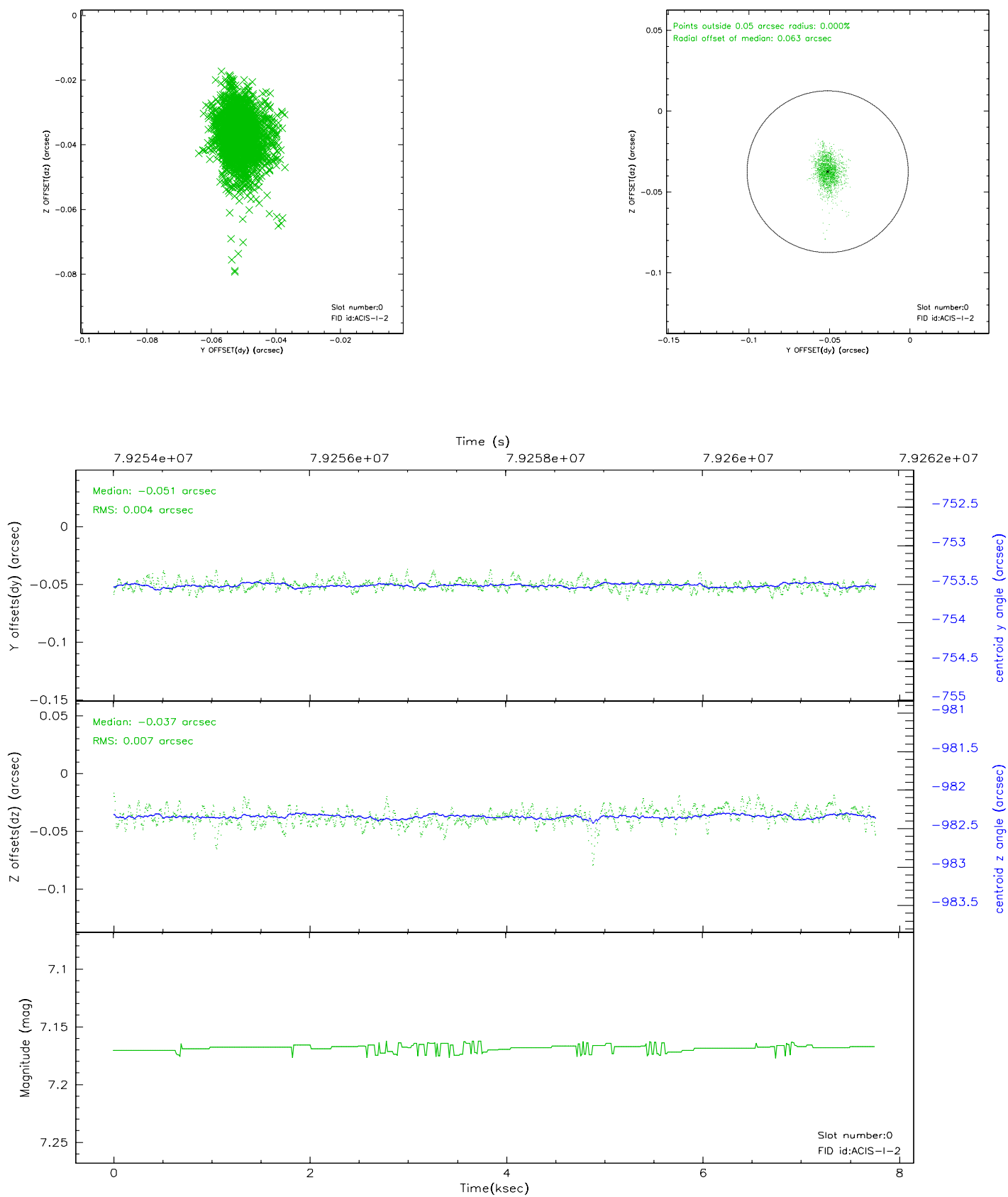


## 2.4.5 Slot 7

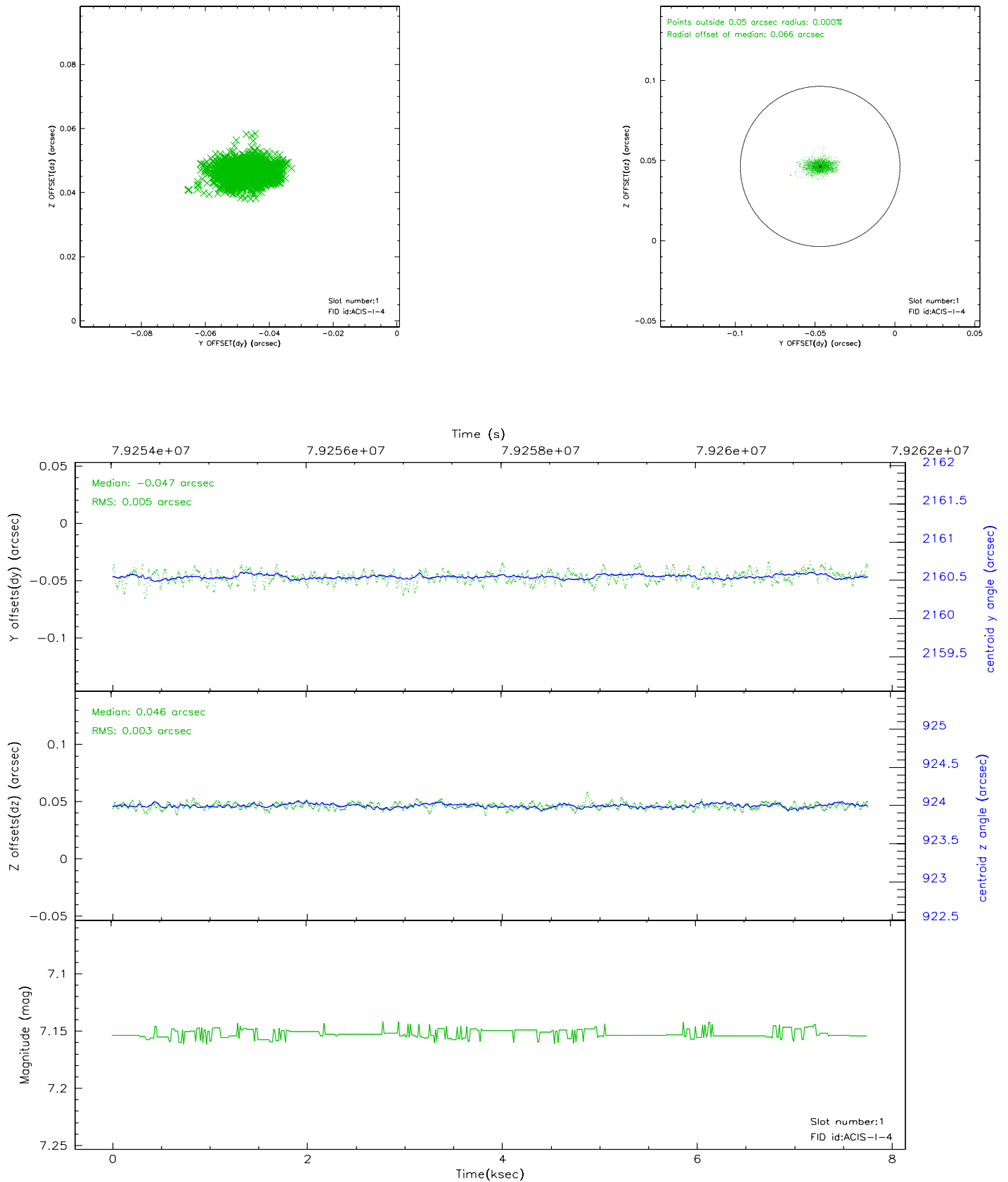


## 2.5 FID Slots

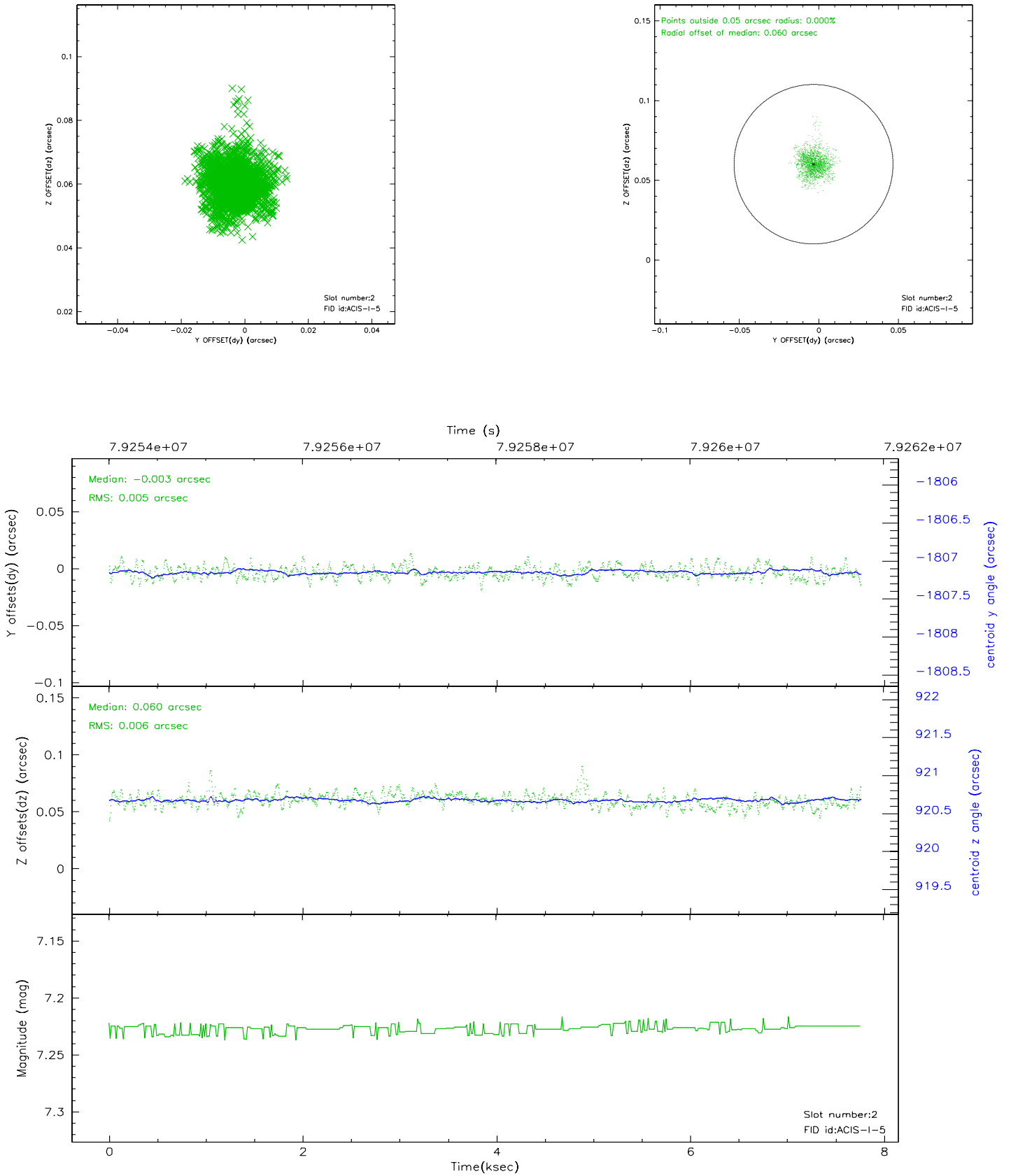
### 2.5.1 Slot 0



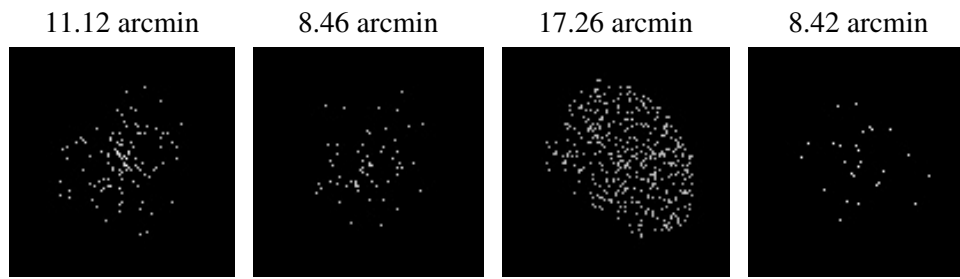
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2008.11.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.324

## A.2 Comments

Charge time for this ObsId remains at original value of 7.324 ks, although with the current processing the charge time would have been 7.318 ksec.=====

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.