

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 1770 - L2 Version 4  
Chandra X-Ray Center

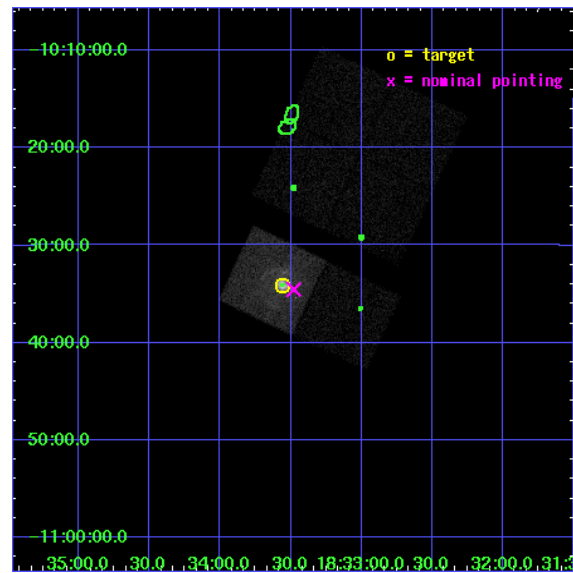
L2 Processing Date : Nov 18 2008

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# 1 Front

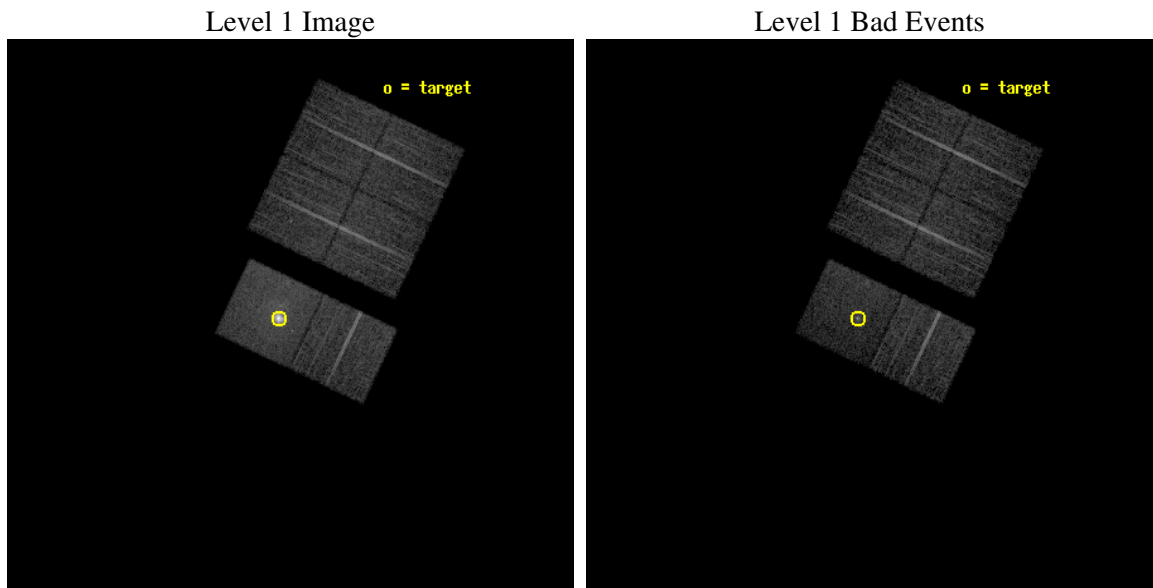
seq_num	590196
obs_id	1770
title	HRC RESPONSE TO CONTINUUM SOURCE.
observer	Dr. CXC Calibration
object	G21.5-0.9 [Chip S3, T=110, Offsets=-1,0,0]
dtcycle	0
cycle	P
ra_targ	278.389583
dec_targ	-10.568528
ra_nom	278.36953601559
dec_nom	-10.575837754566
roll_nom	205.32909070027
revision	4
ontime	7308.7590365708
livetime	7216.2111288434
ontime0	7312.0000068098
ontime1	7312.0000068098
ontime2	7312.0000068098
ontime3	7312.0000068098
ontime6	7312.0000068098
ontime7	7308.7590365708
l2events	73112



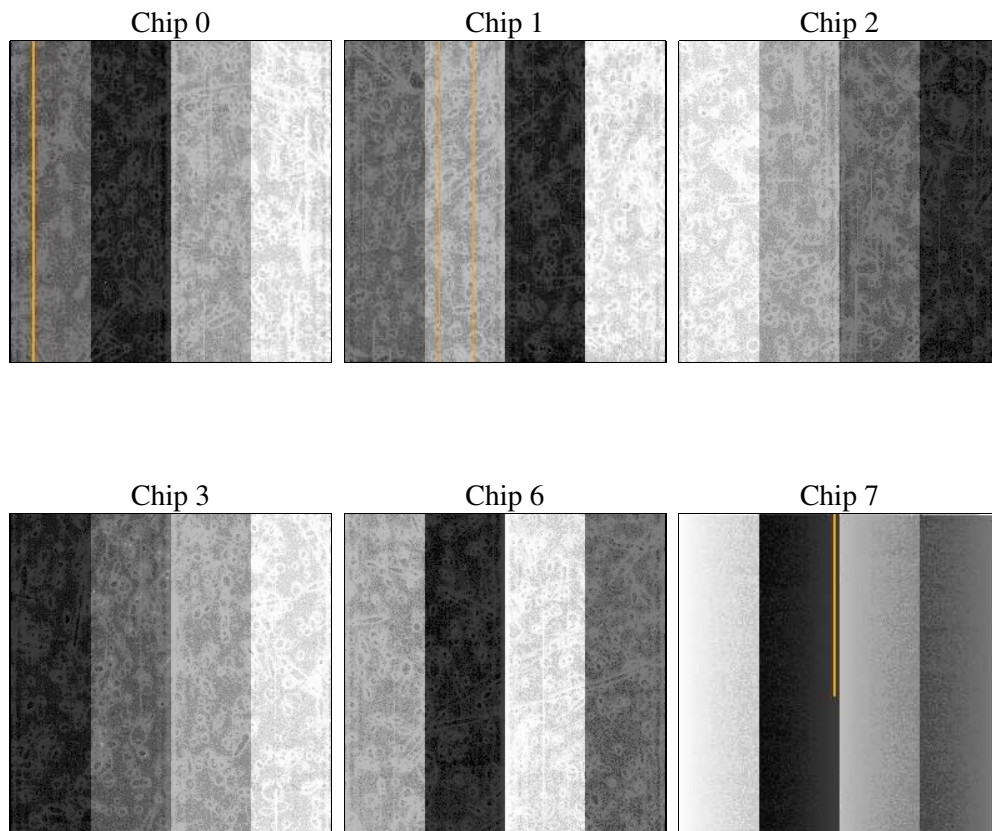
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.11.9
caldsver	3.5.0
date	2008-11-18T17:48:50
revision	4

sched_exp_time	7560.000000
ontime	7308.7590365708
ontime0	7312.0000068098
ontime1	7312.0000068098
ontime2	7312.0000068098
ontime3	7312.0000068098
ontime6	7312.0000068098
ontime7	7308.7590365708
l1events	333438

### 2.1.4 Events

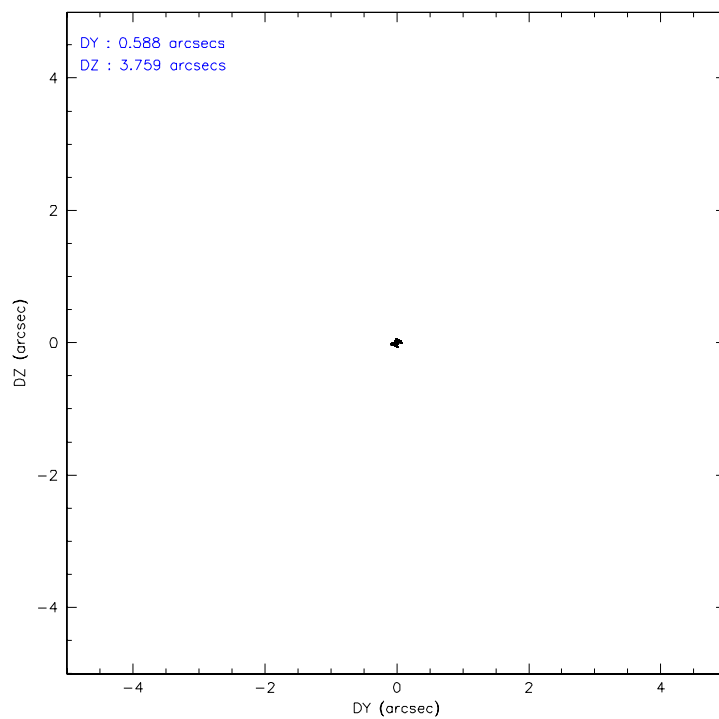
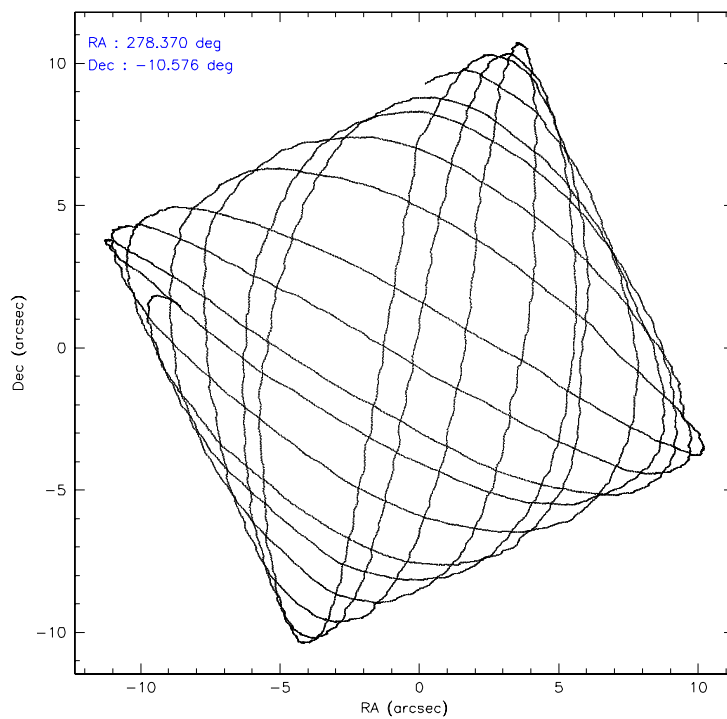
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	47855	46450	51948	49391	52207	85587
rejected events	42557	40899	46930	43883	46551	36441
rejected %	88%	88%	90%	88%	89%	42%

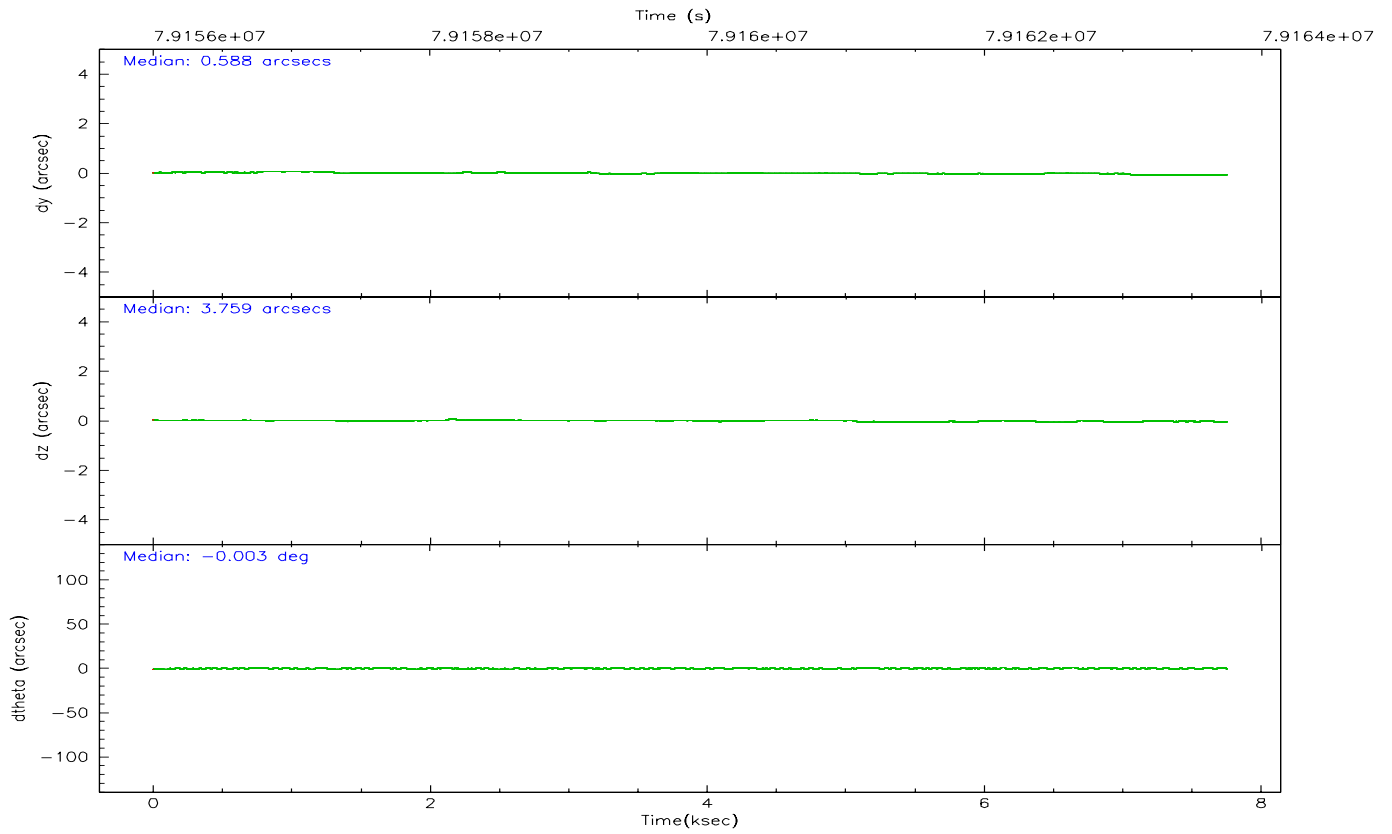
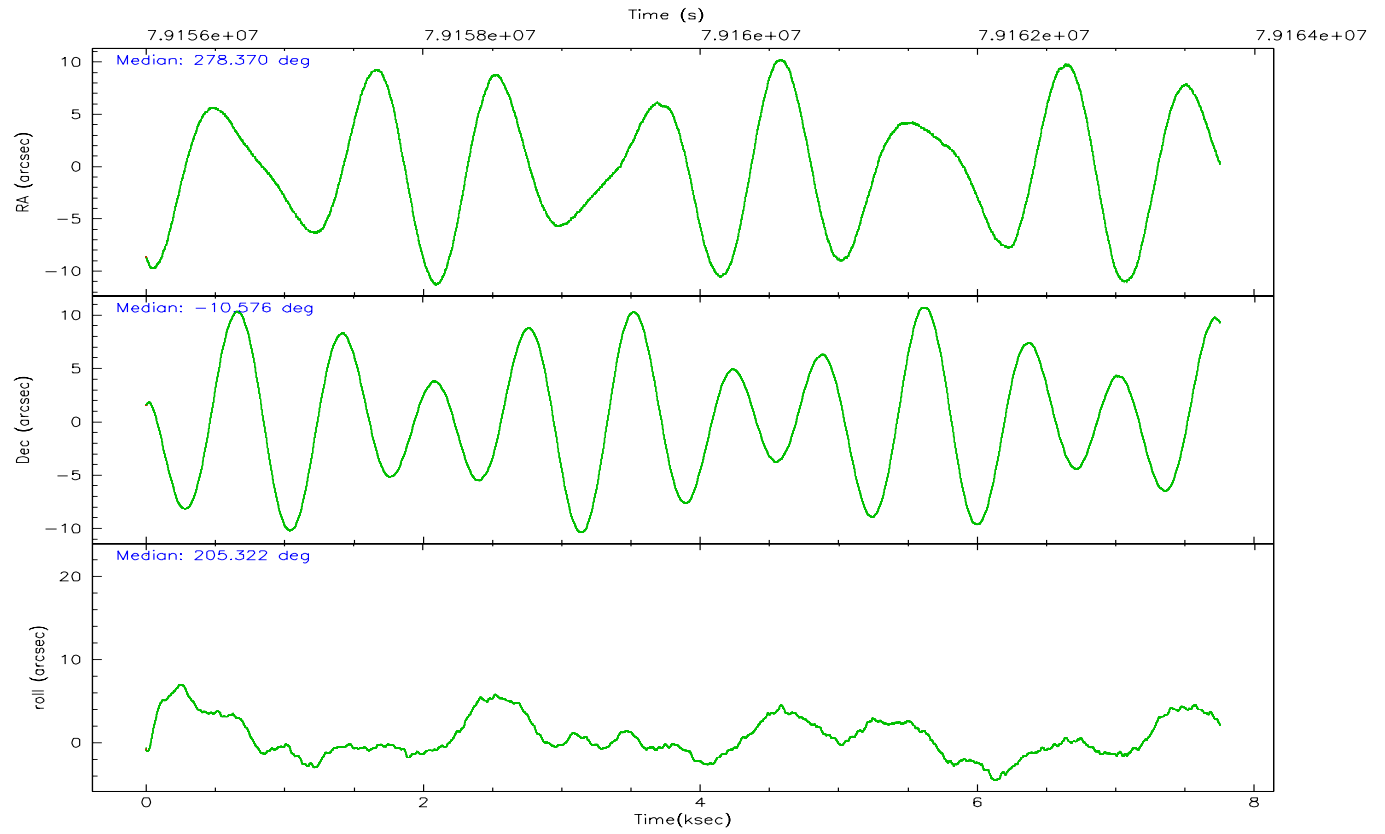
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1321	1356	1167	1445	1184	6845
	2%	2%	2%	2%	2%	7%
grade 1 events	14	6	8	6	6	57
	0%	0%	0%	0%	0%	0%
grade 2 events	1996	2068	2028	2142	2245	11717
	4%	4%	3%	4%	4%	13%
grade 3 events	393	417	344	316	348	4427
	0%	0%	0%	0%	0%	5%
grade 4 events	317	366	299	298	332	3894
	0%	0%	0%	0%	0%	4%
grade 5 events	1027	988	870	1017	1189	3798
	2%	2%	1%	2%	2%	4%
grade 6 events	1274	1346	1183	1308	1547	22283
	2%	2%	2%	2%	2%	26%
grade 7 events	41513	39903	46049	42859	45356	32566
	86%	85%	88%	86%	86%	38%

## 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	278.385261	278.3695360155946	Subarray requested	NONE	NONE
Pointing Dec	-10.553212	-10.57583775456622	Alternating exposures requested	N	N
Pointing Roll	205.175343	205.3290907002722	Primary exposure time	0.000000	3.2
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	79156196.184000	79155819.877986			
Observation start date	2000-07-05T03:48:52	2000-07-05T03:43:39			
Observation end time	79163756.184000	79163890.215784			
Observation end date	2000-07-05T05:54:52	2000-07-05T05:58:10			
Read mode	TIMED	TIMED			

## 2.3 Aspect





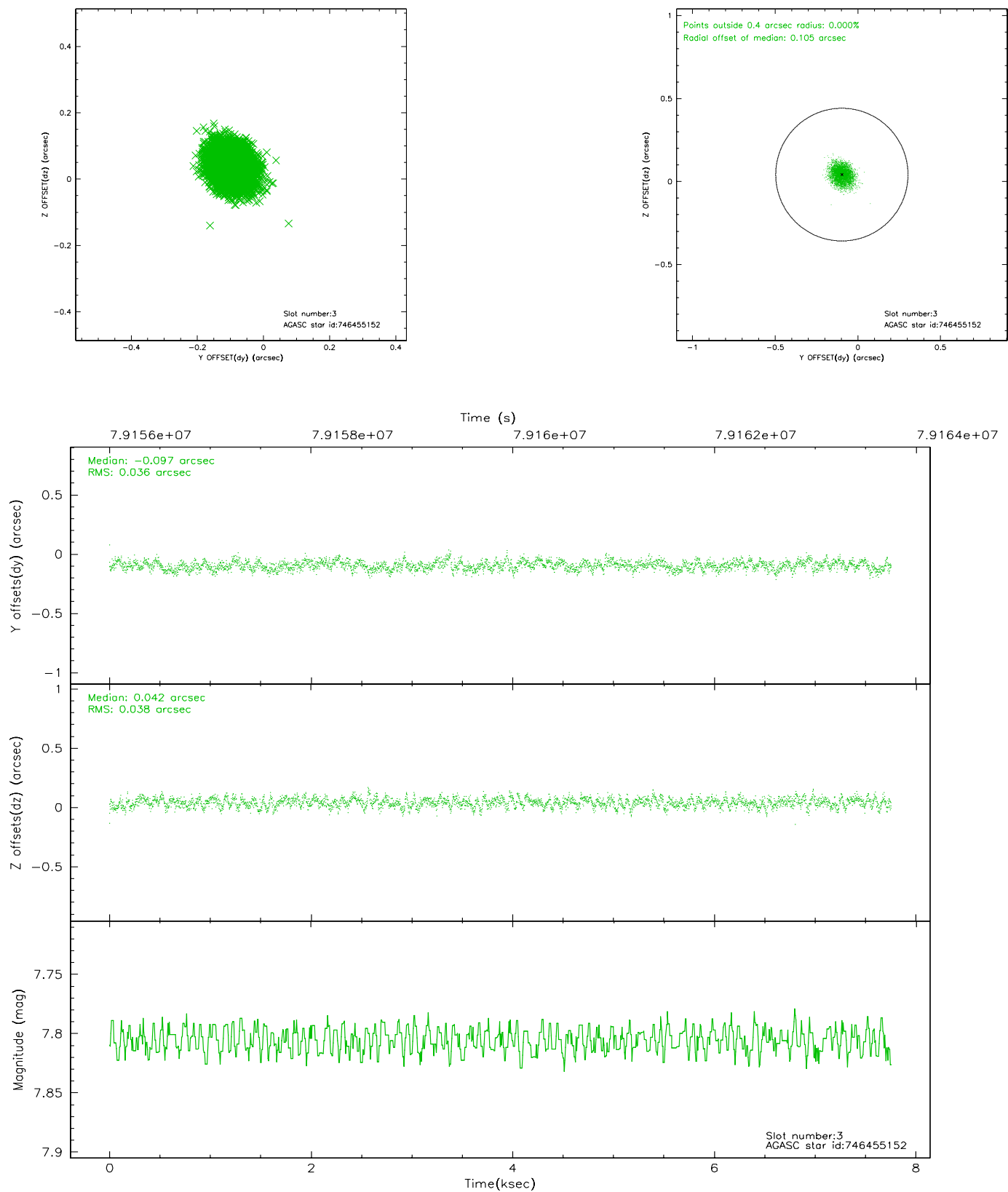
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1892	-0.008	-0.007	0.007	0.011	0.000000	0.000000	-753.20	-1724.83
1	FID	ACIS-S-4	7.21	1890	-0.011	0.006	0.005	0.009	0.000000	0.000000	2159.78	182.87
2	FID	ACIS-S-5	7.24	1891	-0.012	0.010	0.007	0.011	0.000000	0.000000	-1805.07	177.44
3	GUIDE	746455152	7.80	3781	-0.097	0.042	0.056	0.090	278.447893	-9.976732	-1083.76	-1783.61
4	GUIDE	746462392	8.55	3782	-0.022	-0.068	0.087	0.151	279.038421	-10.890715	-1572.50	2083.67
5	GUIDE	746455112	8.94	3779	0.219	-0.097	0.082	0.135	278.266531	-10.703234	609.55	310.91
6	GUIDE	746460328	9.81	3779	-0.031	0.038	0.088	0.144	278.603974	-9.898096	-1704.86	-1804.08
7	GUIDE	746995400	9.72	3778	-0.061	0.086	0.111	0.180	278.078957	-11.289885	2106.32	1940.70

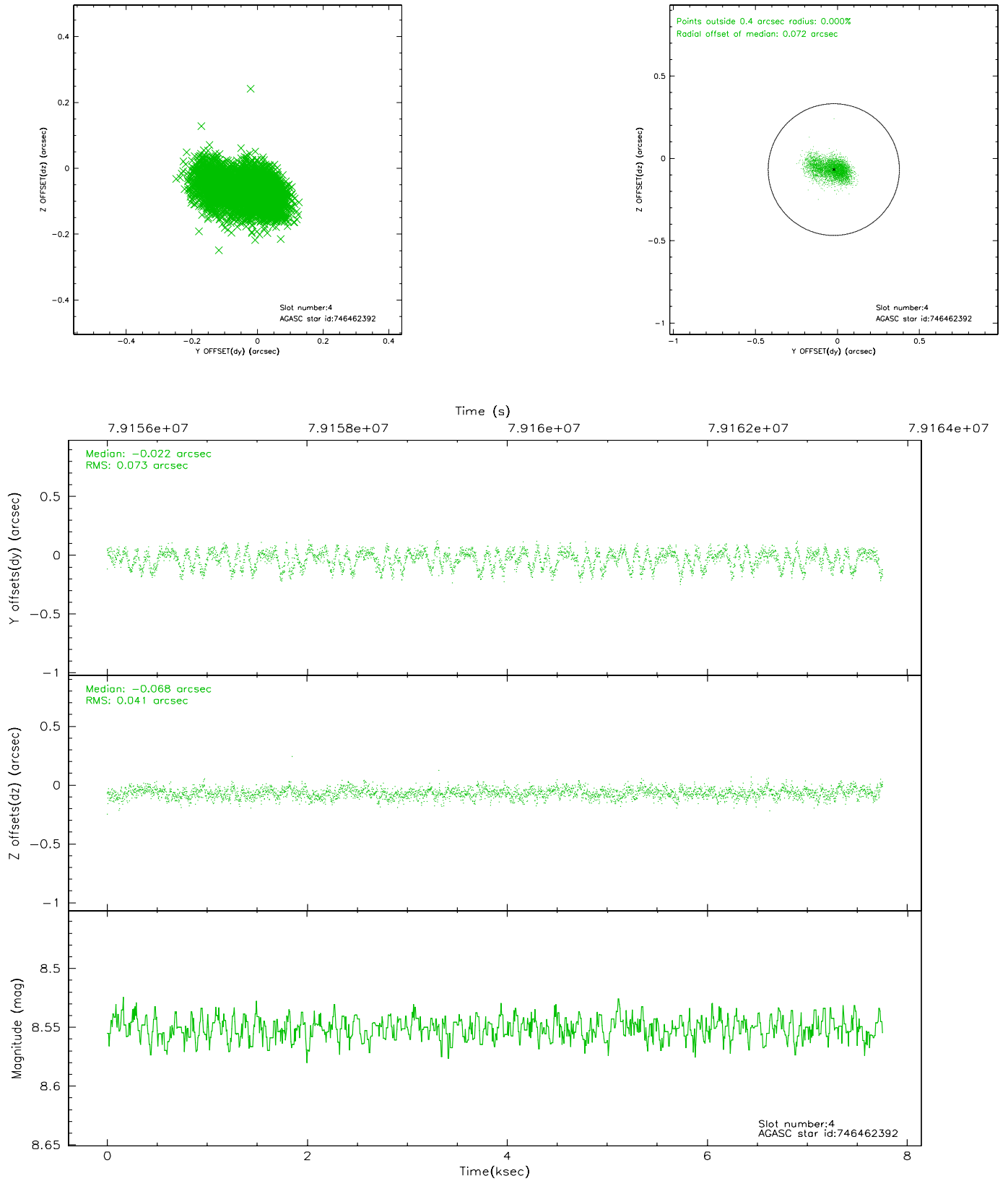


## 2.4 Star Slots

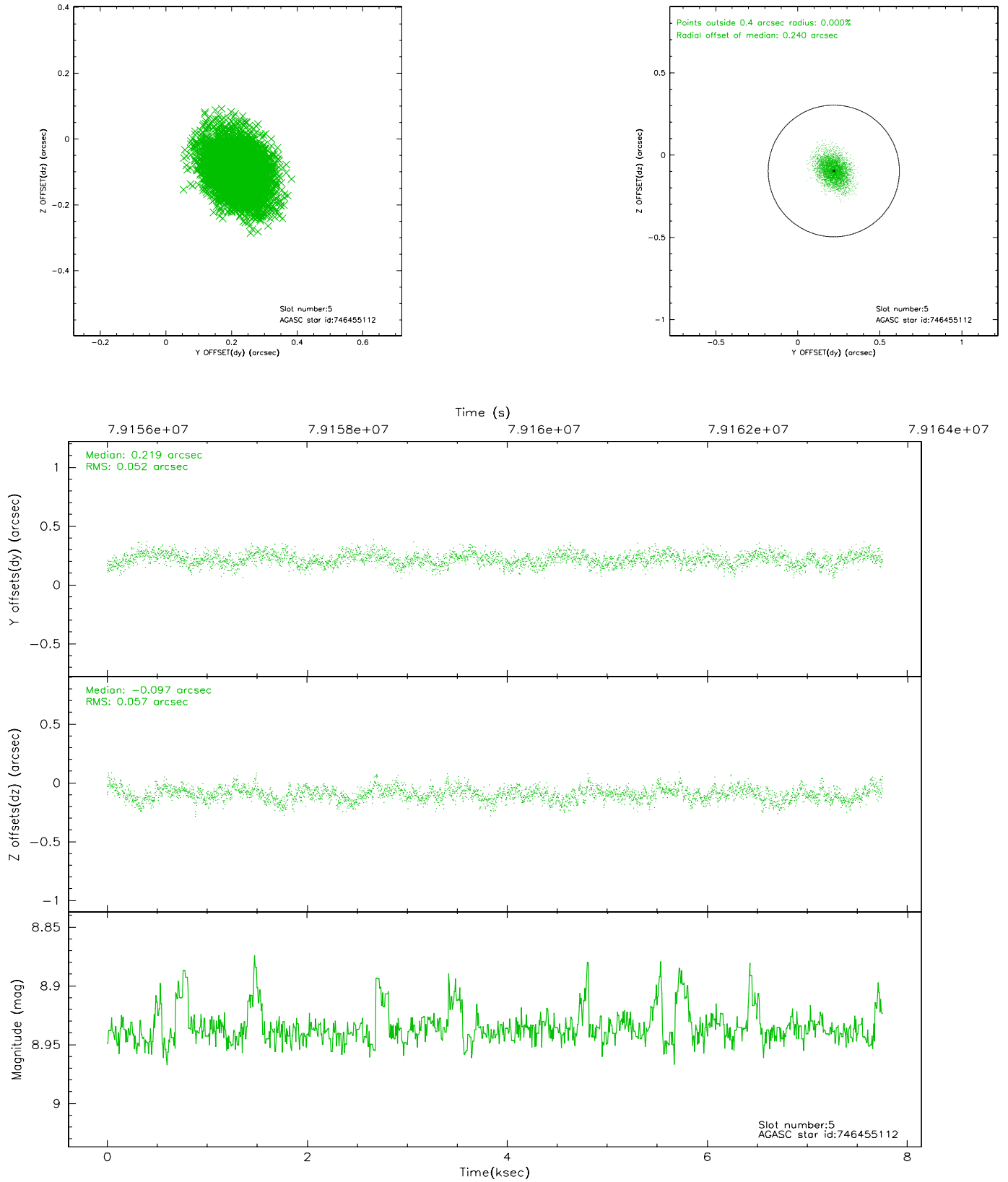
### 2.4.1 Slot 3



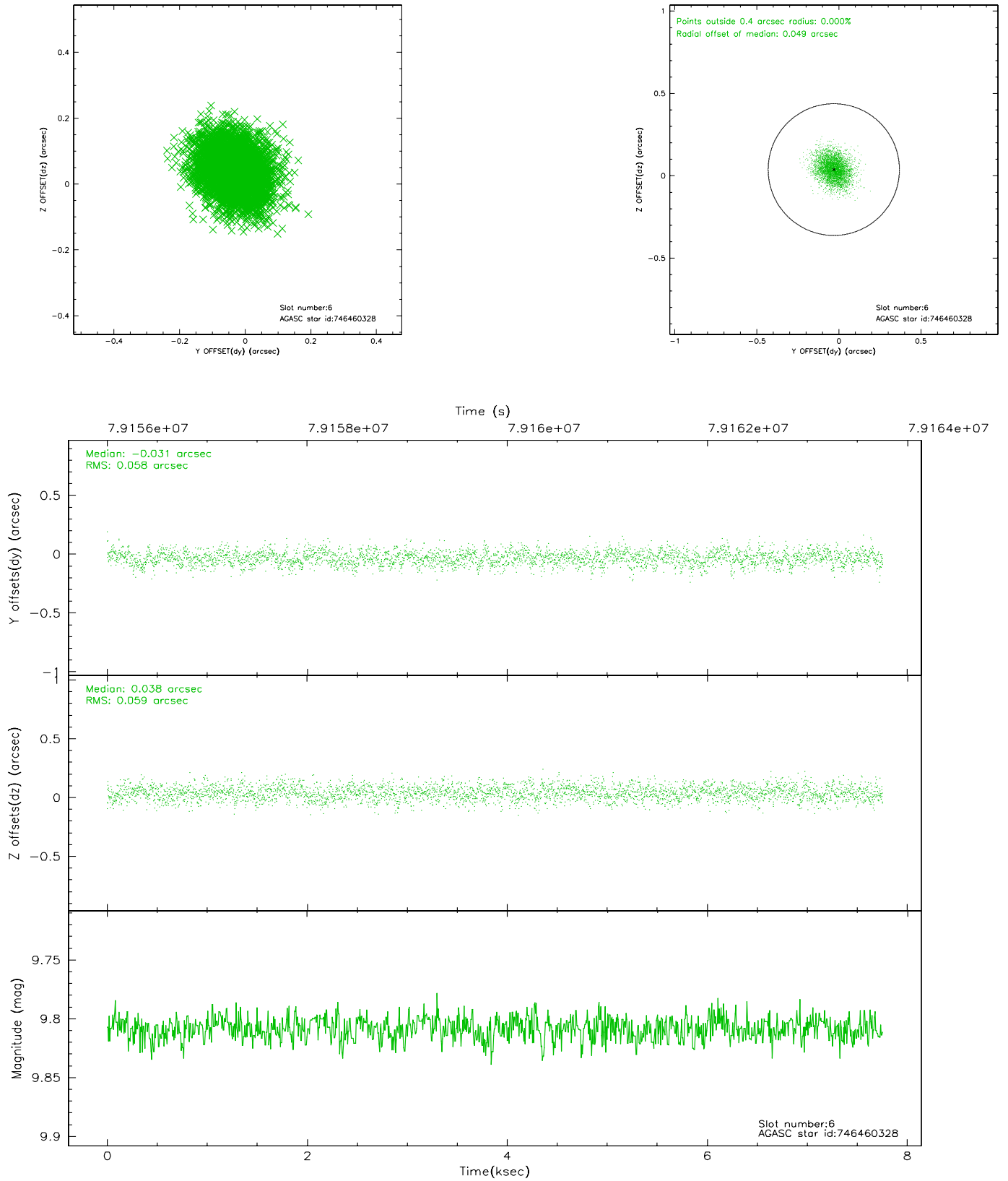
## 2.4.2 Slot 4



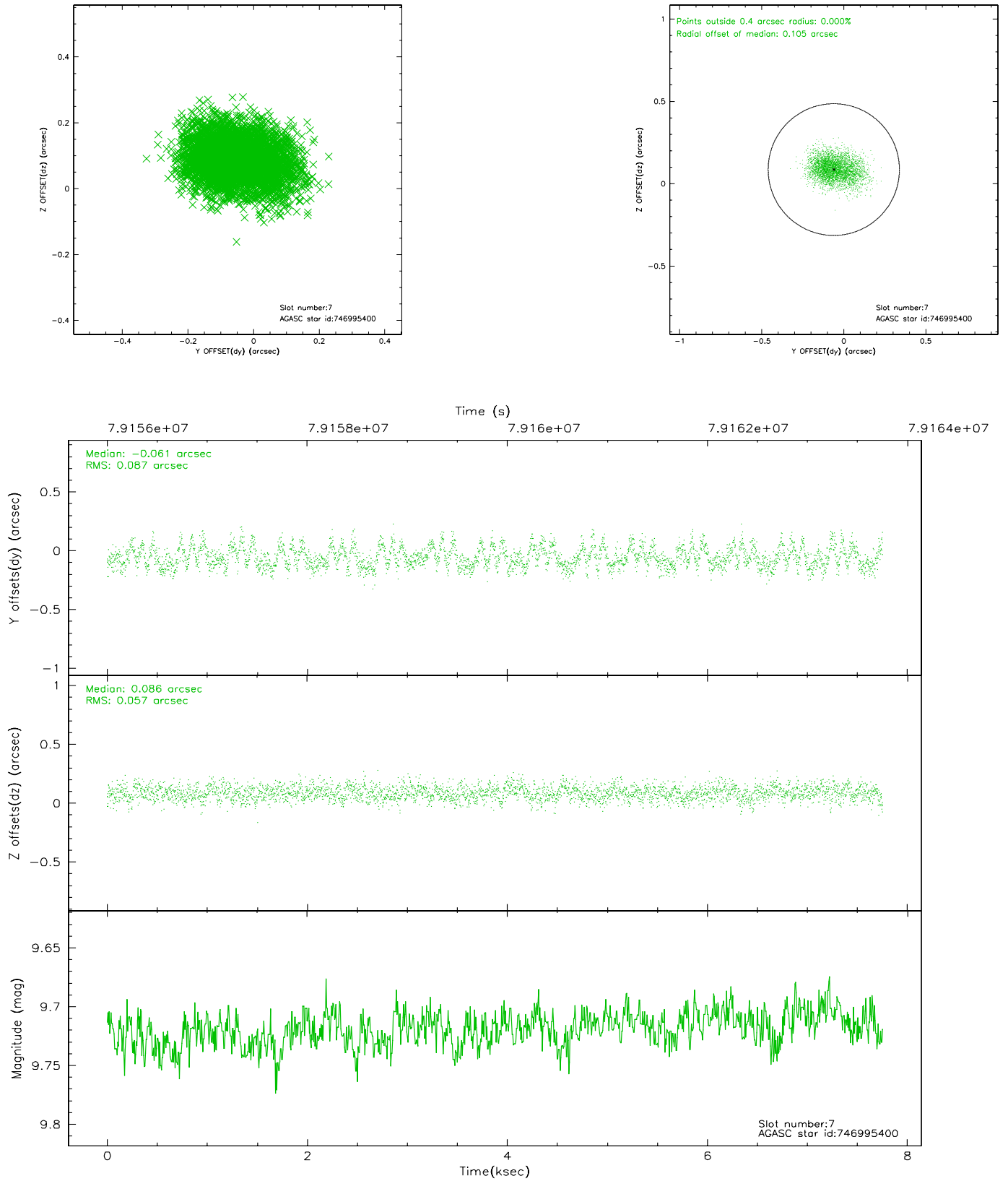
### 2.4.3 Slot 5



## 2.4.4 Slot 6

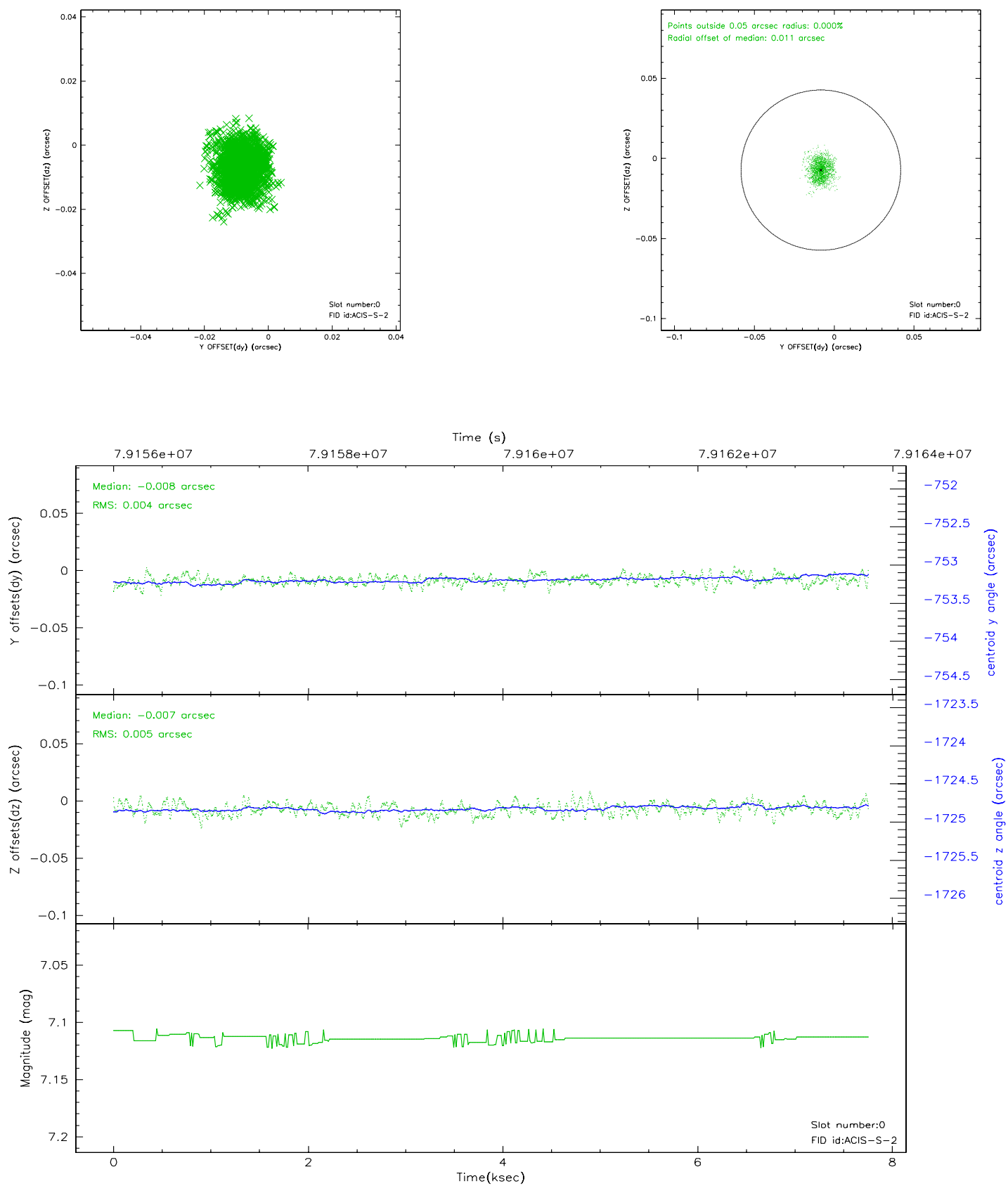


## 2.4.5 Slot 7

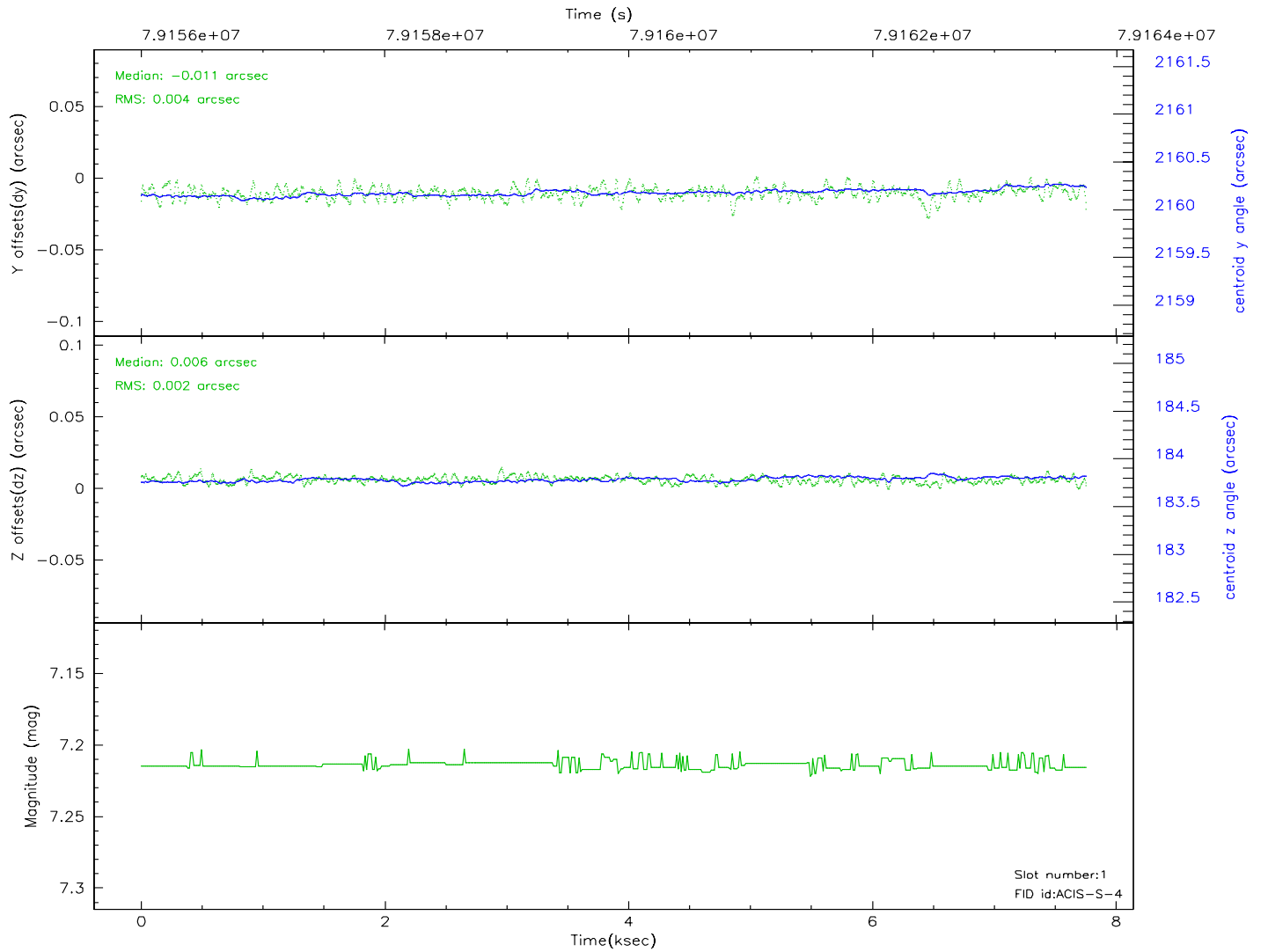
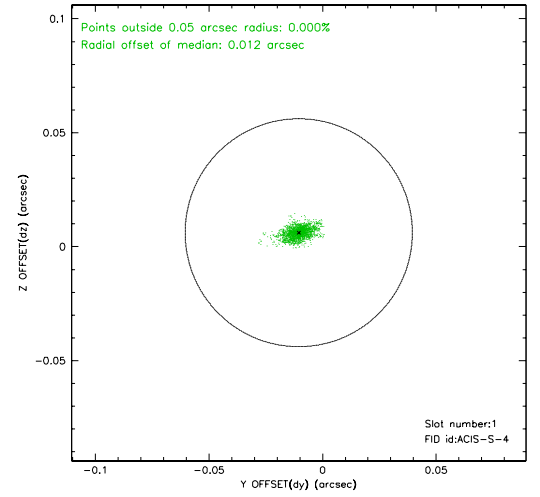
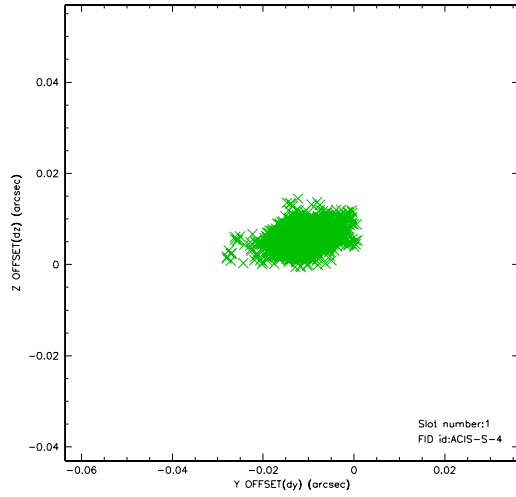


## 2.5 FID Slots

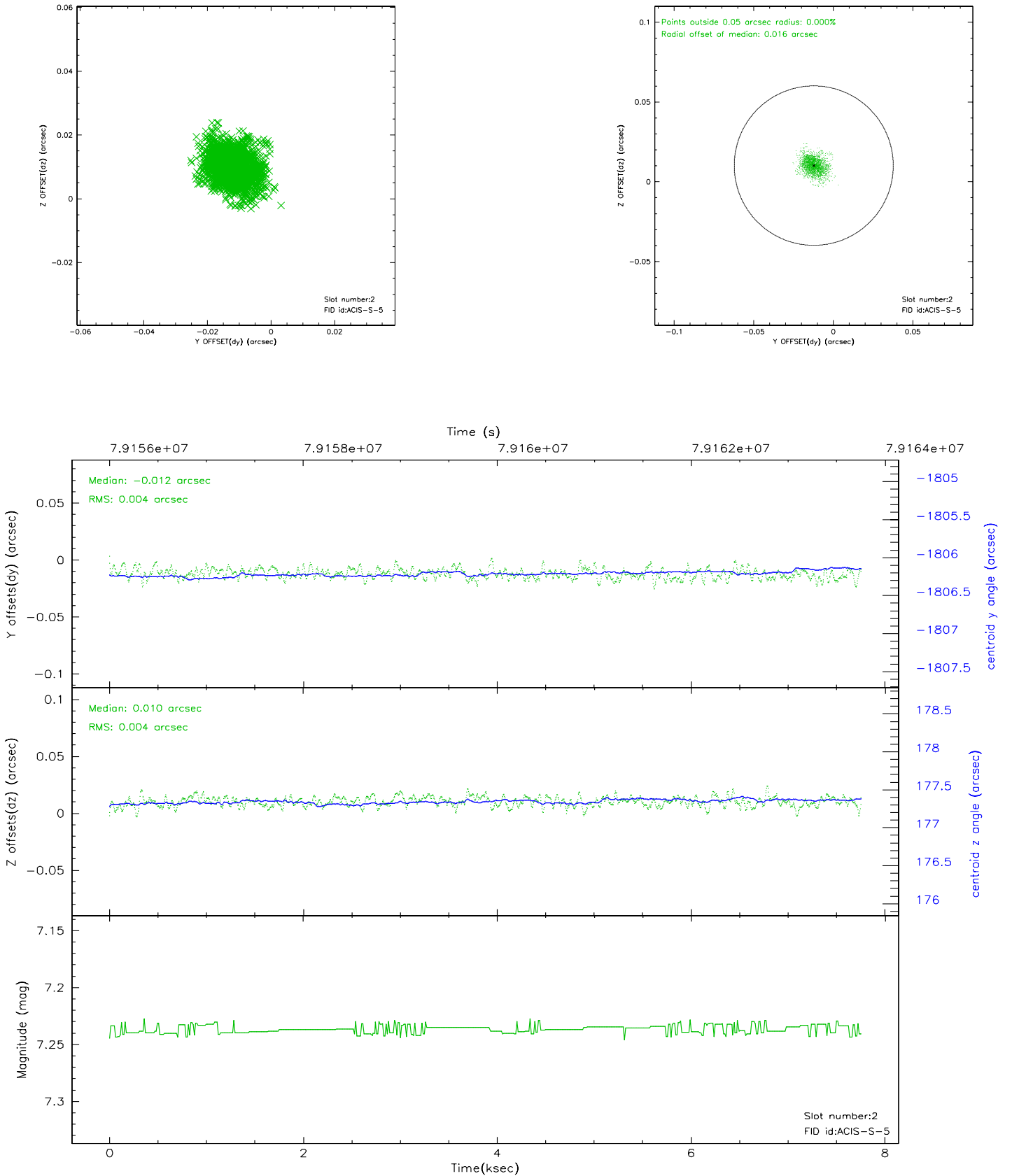
### 2.5.1 Slot 0



## 2.5.2 Slot 1

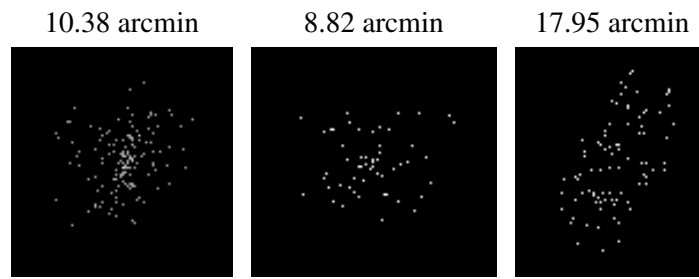


## 2.5.3 Slot 2





### 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	2
V&V Disposition and Status	OK
V&V Charge Time	7.315

## A.2 Comments

Charge time for this ObsId remains at original value of 7.315 ks,  
although  
with the current processing the charge time would have been 7.308 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.