

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 1782 - L2 Version 4  
Chandra X-Ray Center

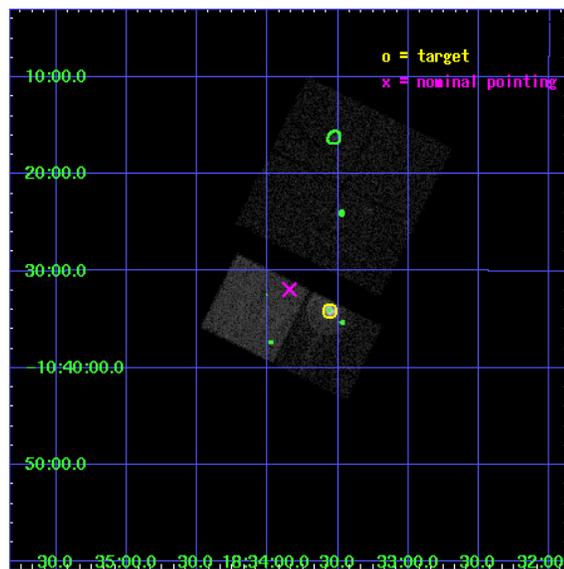
L2 Processing Date : Nov 19 2008

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# 1 Front

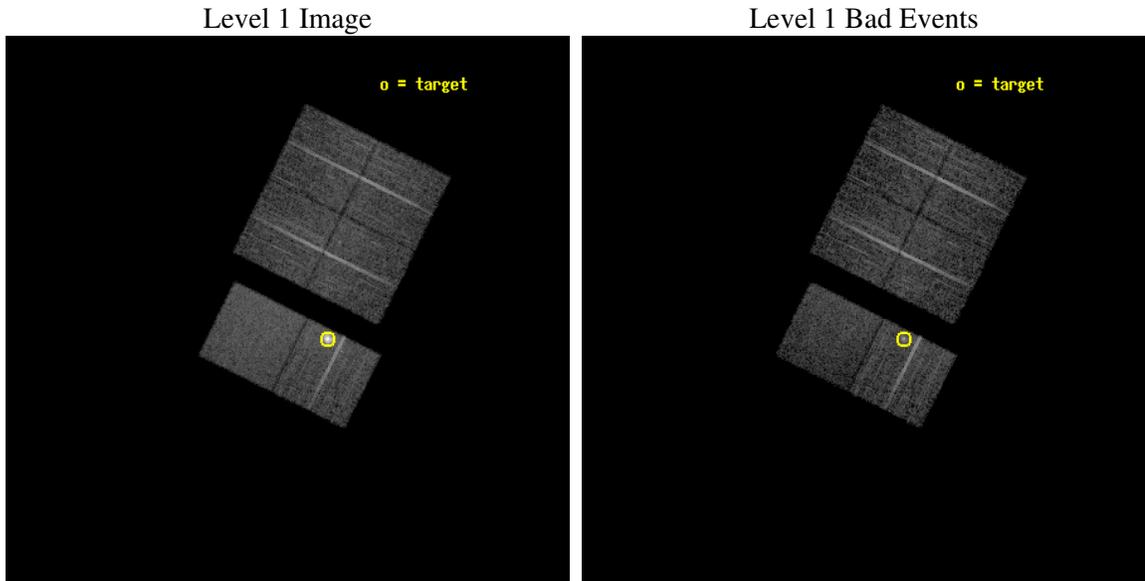
seq_num	590208
obs_id	1782
title	HRC RESPONSE TO CONTINUUM SOURCE.
observer	Dr. CXC Calibration
object	G21.5-0.9 [Chip S2, T=110, Offsets=5,0,-3]
dtcycle	0
cycle	P
ra_targ	278.389583
dec_targ	-10.568528
ra_nom	278.46097714374
dec_nom	-10.53199316494
roll_nom	206.37444674822
revision	4
ontime	7318.4000068158
livetime	7225.7300193181
ontime0	7318.4000068158
ontime1	7318.4000068158
ontime2	7318.4000068158
ontime3	7318.4000068158
ontime6	7318.4000068158
ontime7	7318.4000068158
l2events	65885



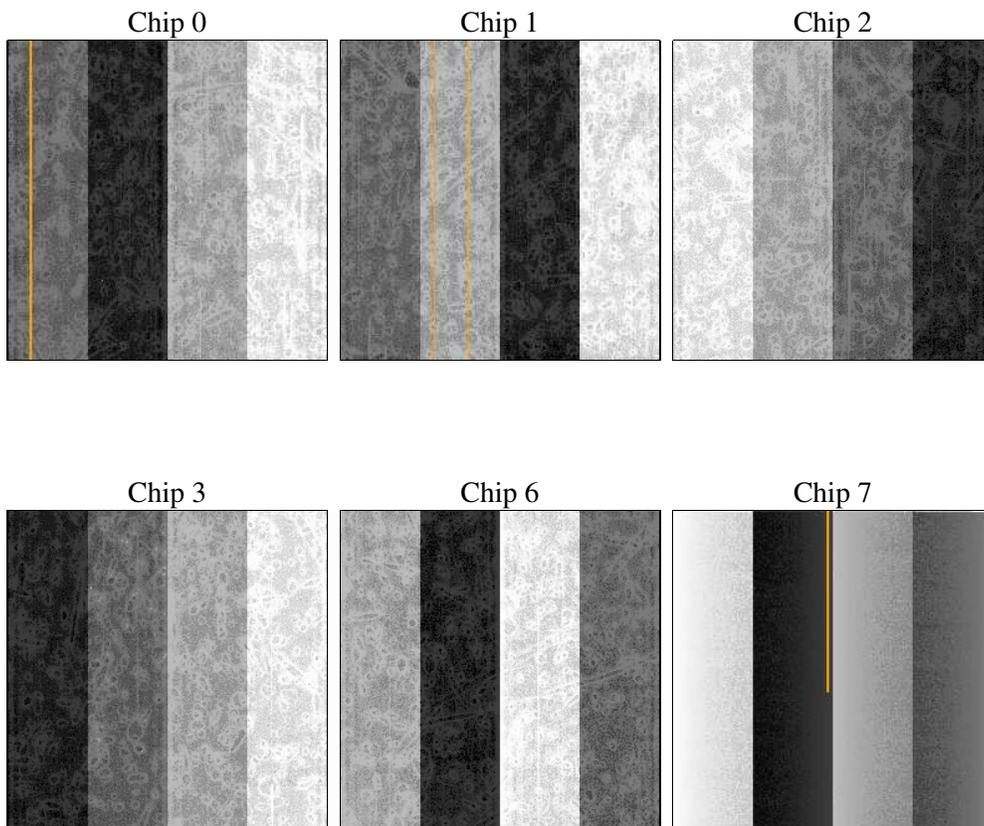
## 2 OBI

### 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	2008-11-19T16:12:01
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	324192

### 2.1.4 Events

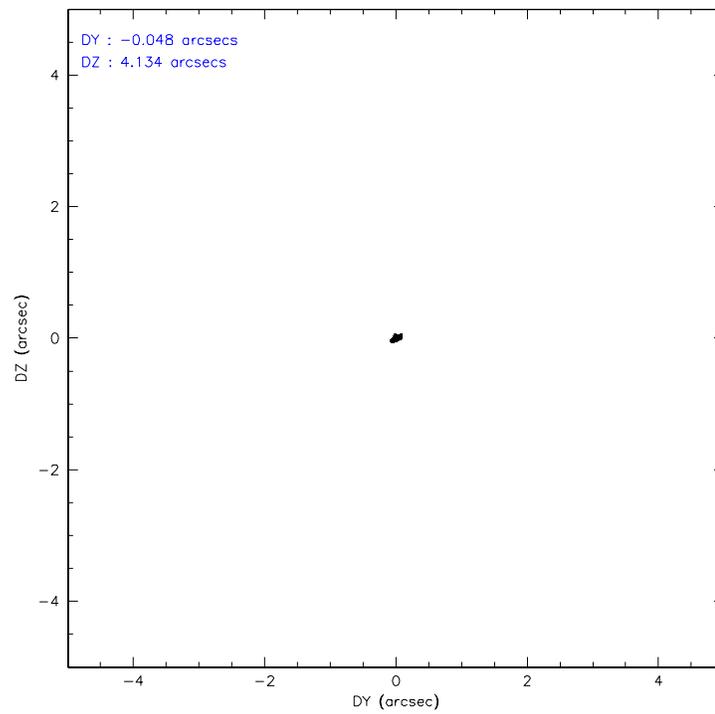
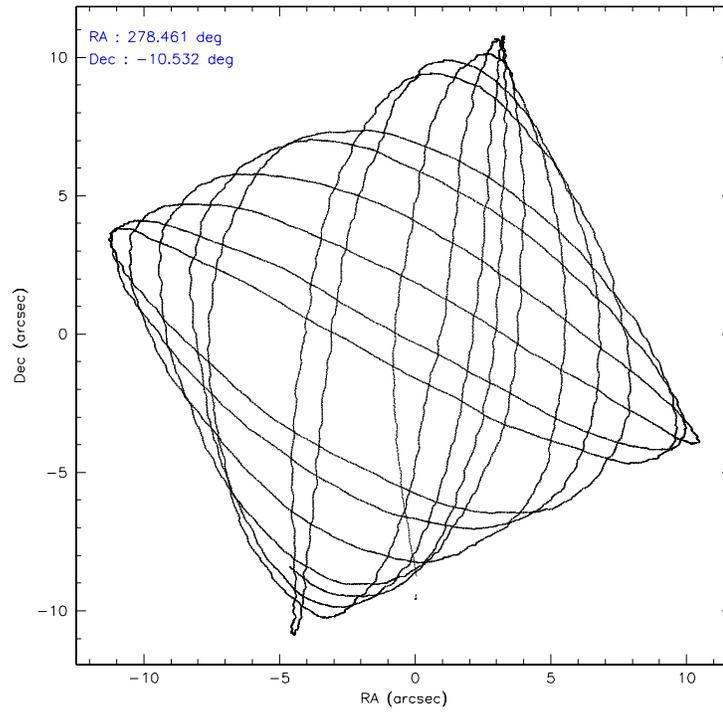
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	48151	47186	49569	48997	72826	57463
rejected events	42723	41609	44051	43787	47505	35490
rejected %	88%	88%	88%	89%	65%	61%

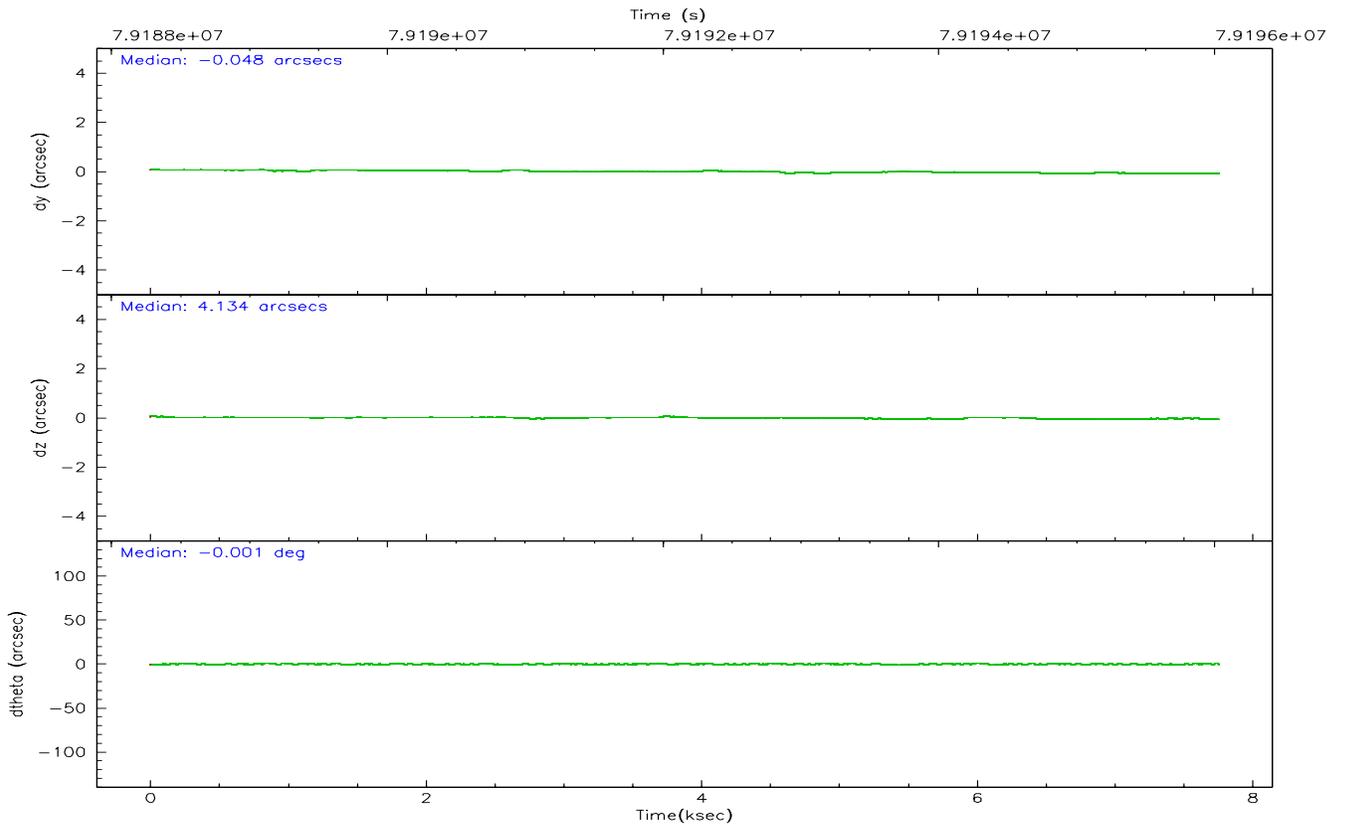
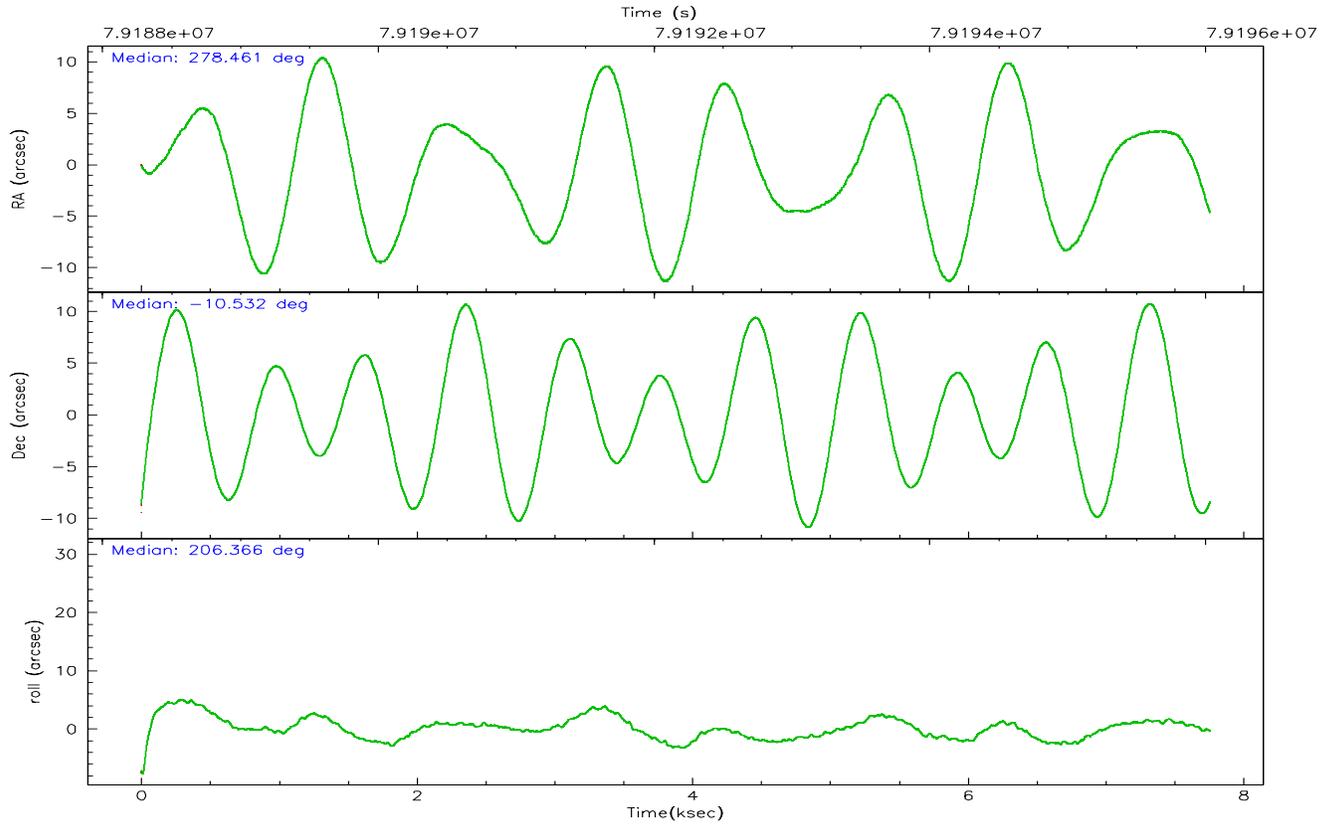
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1336	1309	1338	1190	3800	1356
	2%	2%	2%	2%	5%	2%
grade 1 events	14	10	10	7	27	32
	0%	0%	0%	0%	0%	0%
grade 2 events	2039	2067	2305	2060	17220	4751
	4%	4%	4%	4%	23%	8%
grade 3 events	395	445	326	348	488	1307
	0%	0%	0%	0%	0%	2%
grade 4 events	384	416	336	316	417	1147
	0%	0%	0%	0%	0%	1%
grade 5 events	1042	1056	893	1005	1339	3533
	2%	2%	1%	2%	1%	6%
grade 6 events	1278	1347	1220	1303	3408	13433
	2%	2%	2%	2%	4%	23%
grade 7 events	41663	40536	43141	42768	46127	31904
	86%	85%	87%	87%	63%	55%

## 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	278.476235	278.4609771437363	Subarray requested	NONE	NONE
Pointing Dec	-10.509125	-10.53199316493971	Alternating exposures requested	N	N
Pointing Roll	206.220612	206.3744467482215	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)	-199.707123	-199.7145787182124			
SIM translation stage offset (mm)	9.5746	9.582056135204567			
Observation start time	79188476.184000	79188099.69167601			
Observation start date	2000-07-05T12:46:52	2000-07-05T12:41:39			
Observation end time	79196036.184000	79196181.816974			
Observation end date	2000-07-05T14:52:52	2000-07-05T14:56:21			
Read mode	TIMED	TIMED			

## 2.3 Aspect



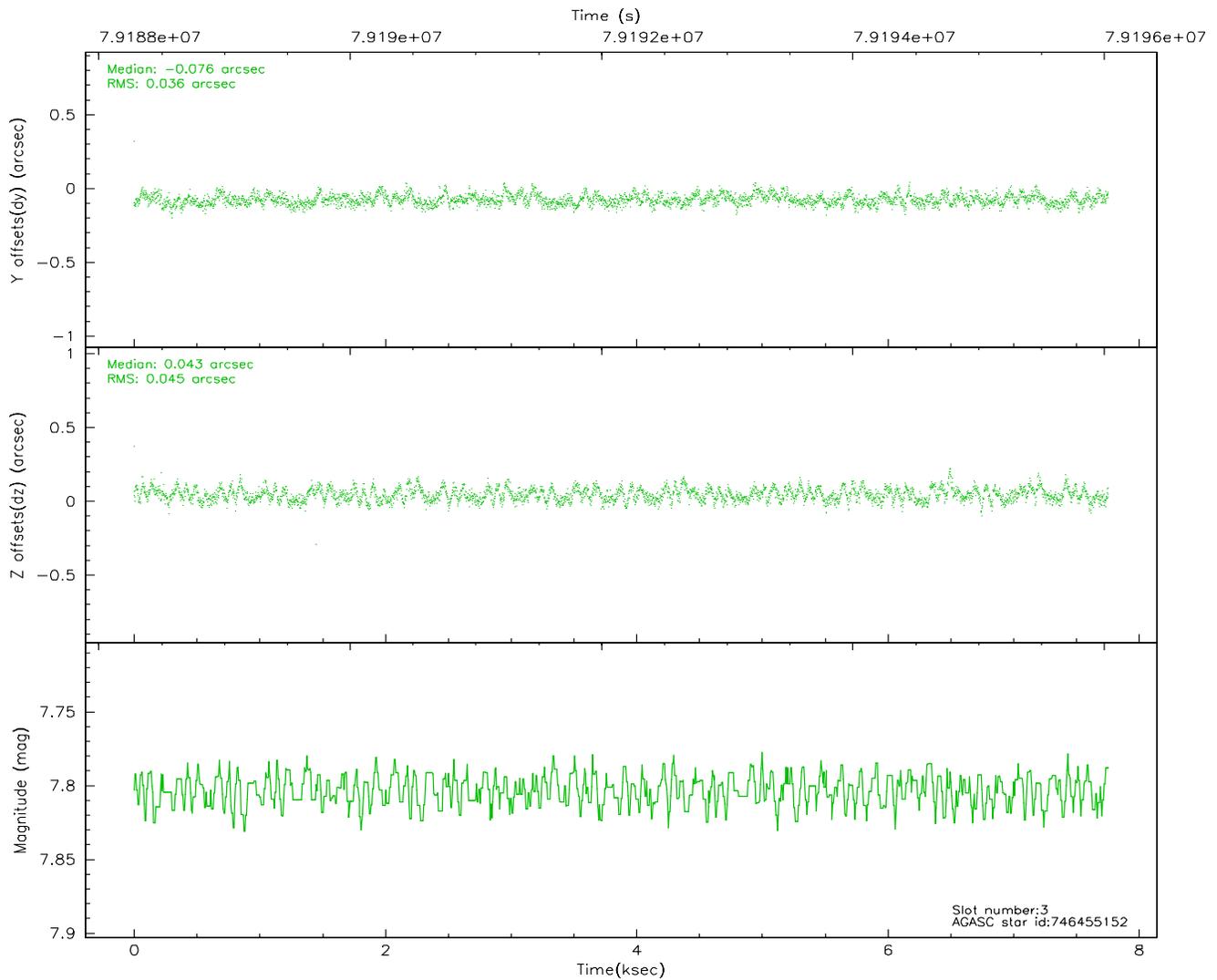
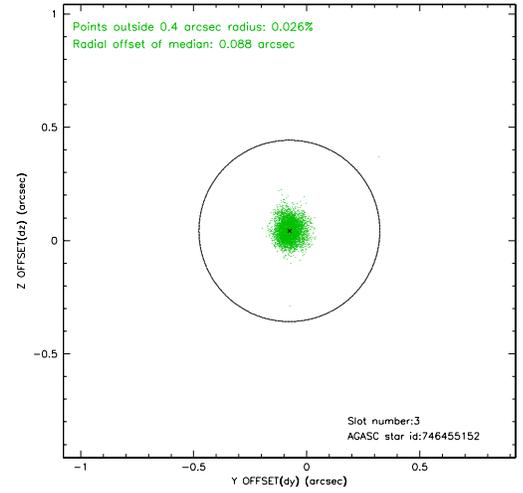
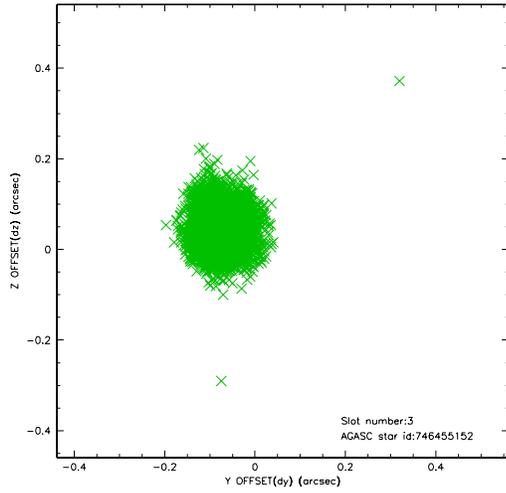


### Slot Statistics

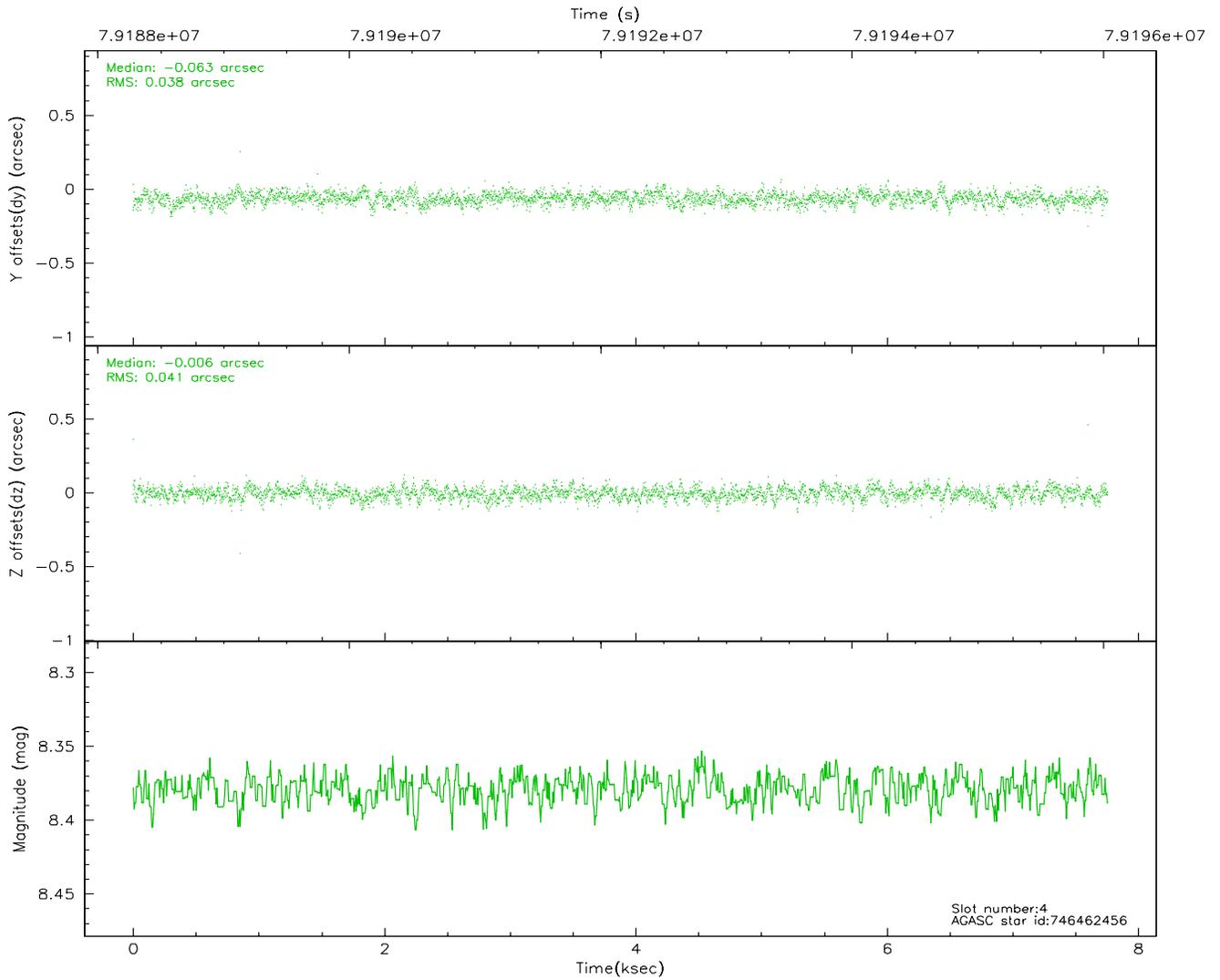
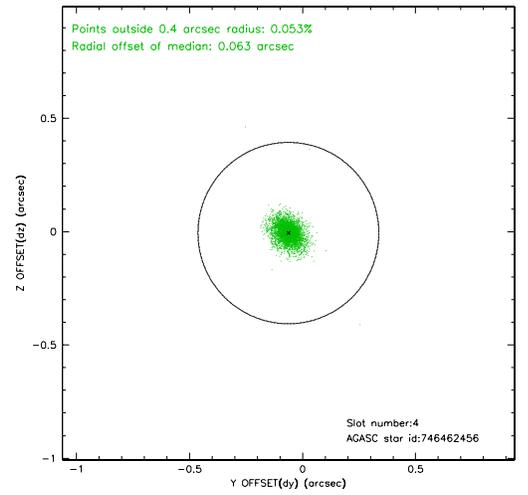
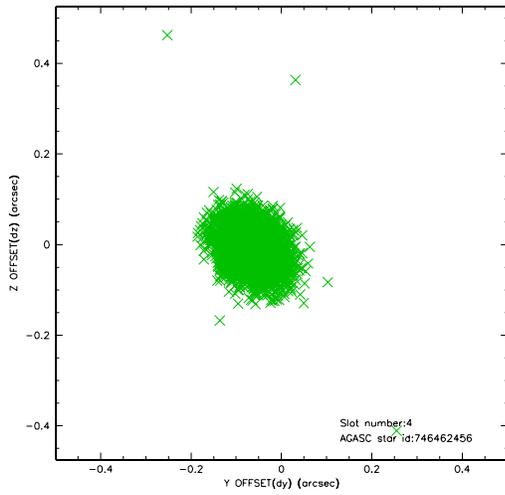
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.15	1893	0.061	0.132	0.007	0.011	0.000000	0.000000	-753.11	-1527.54
1	FID	ACIS-S-4	7.24	1892	-0.071	-0.065	0.005	0.009	0.000000	0.000000	2159.81	379.96
2	FID	ACIS-S-5	7.23	1892	-0.020	-0.058	0.007	0.011	0.000000	0.000000	-1805.00	374.67
3	GUIDE	746455152	7.80	3784	-0.076	0.043	0.060	0.096	278.447893	-9.976732	-756.39	-1763.22
4	GUIDE	746462456	8.38	3784	-0.063	-0.006	0.057	0.096	278.652171	-10.530173	-525.26	343.42
5	GUIDE	746462392	8.55	3784	-0.090	-0.082	0.072	0.117	279.038421	-10.890715	-1175.67	2112.70
6	GUIDE	746455112	8.93	3782	0.214	-0.025	0.063	0.109	278.266531	-10.703234	974.27	300.69
7	GUIDE	746460328	9.80	3780	0.018	0.074	0.091	0.150	278.603974	-9.898096	-1377.62	-1772.51

## 2.4 Star Slots

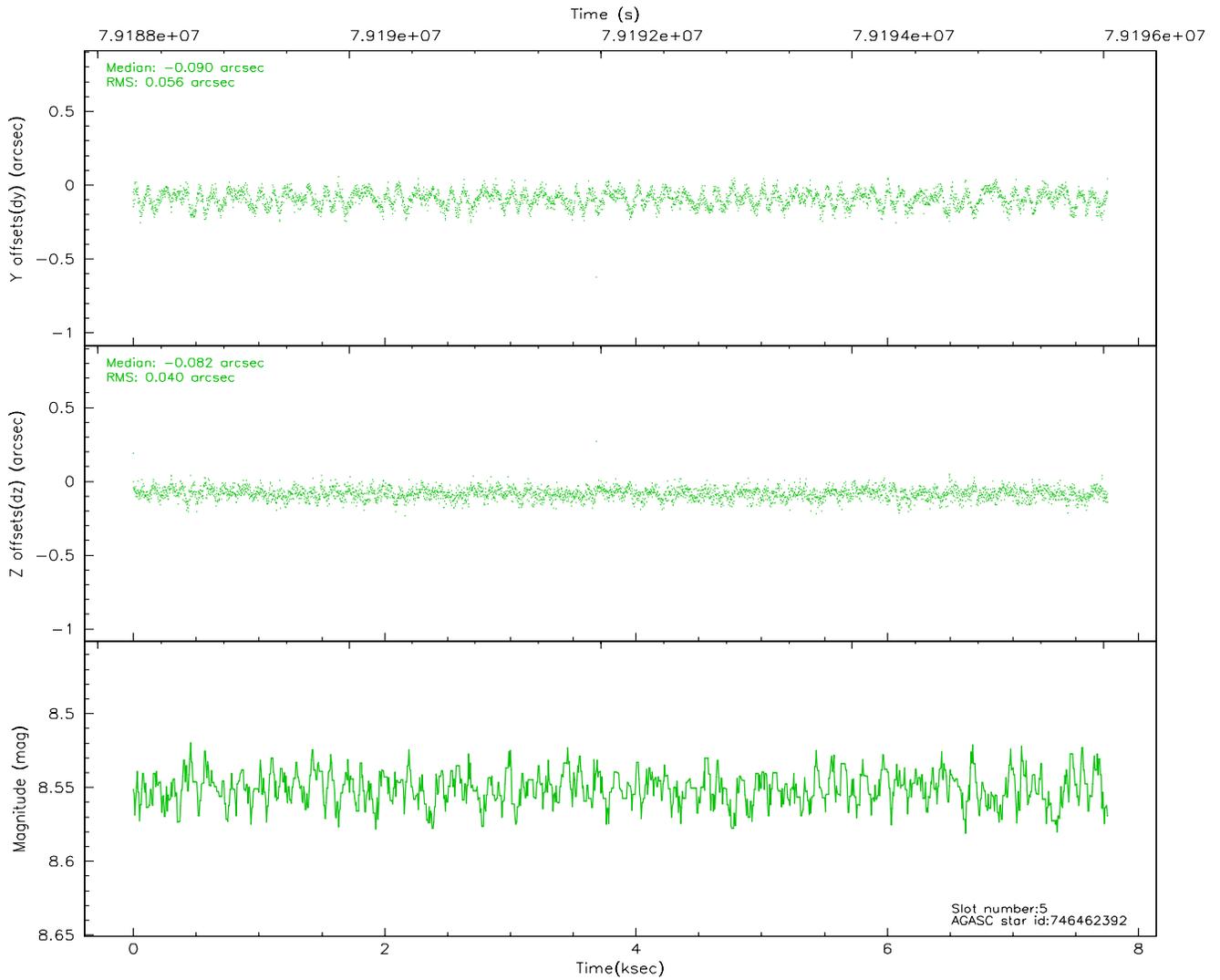
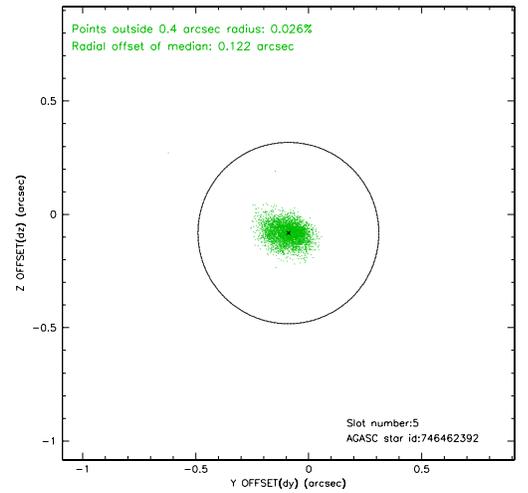
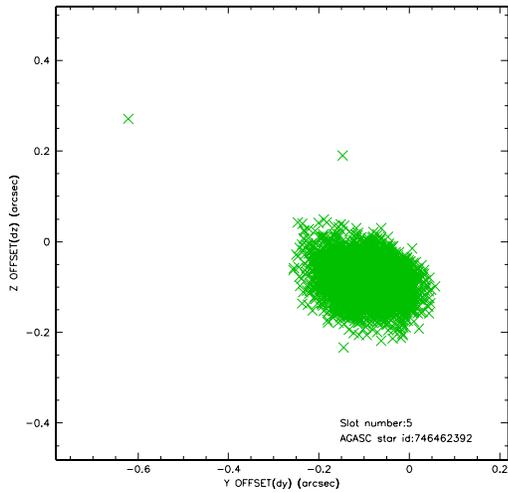
### 2.4.1 Slot 3



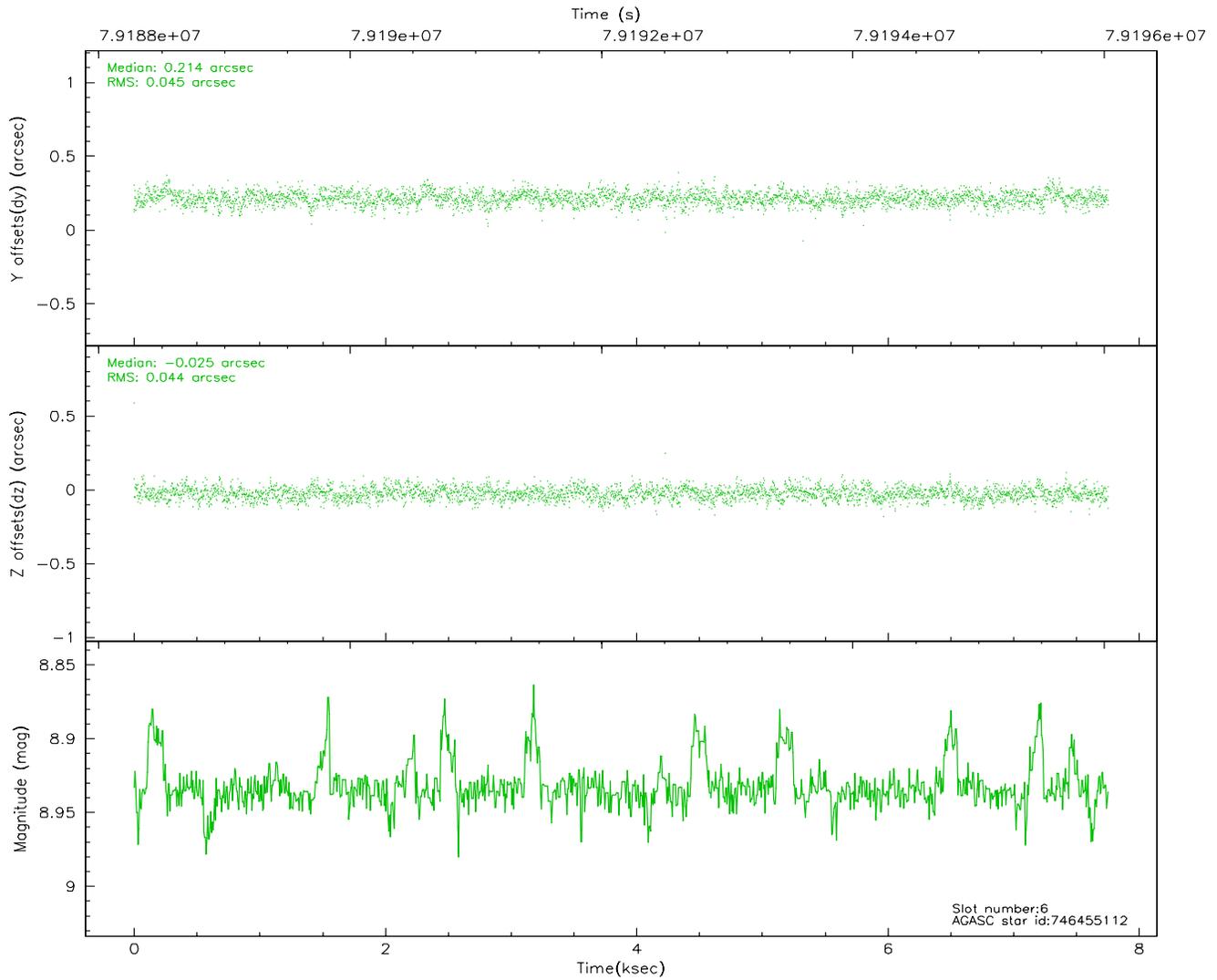
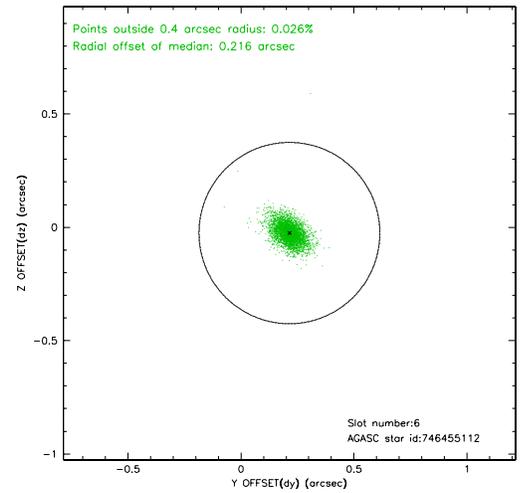
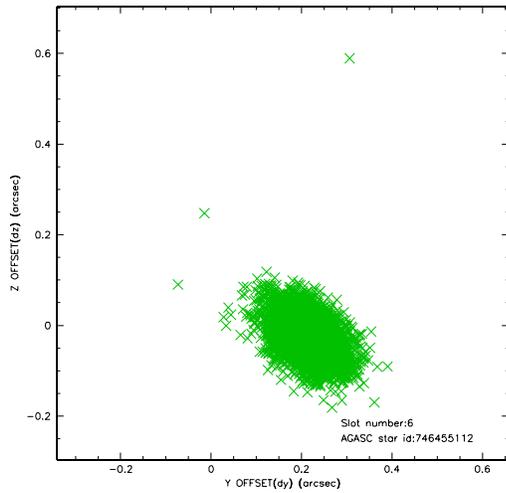
### 2.4.2 Slot 4



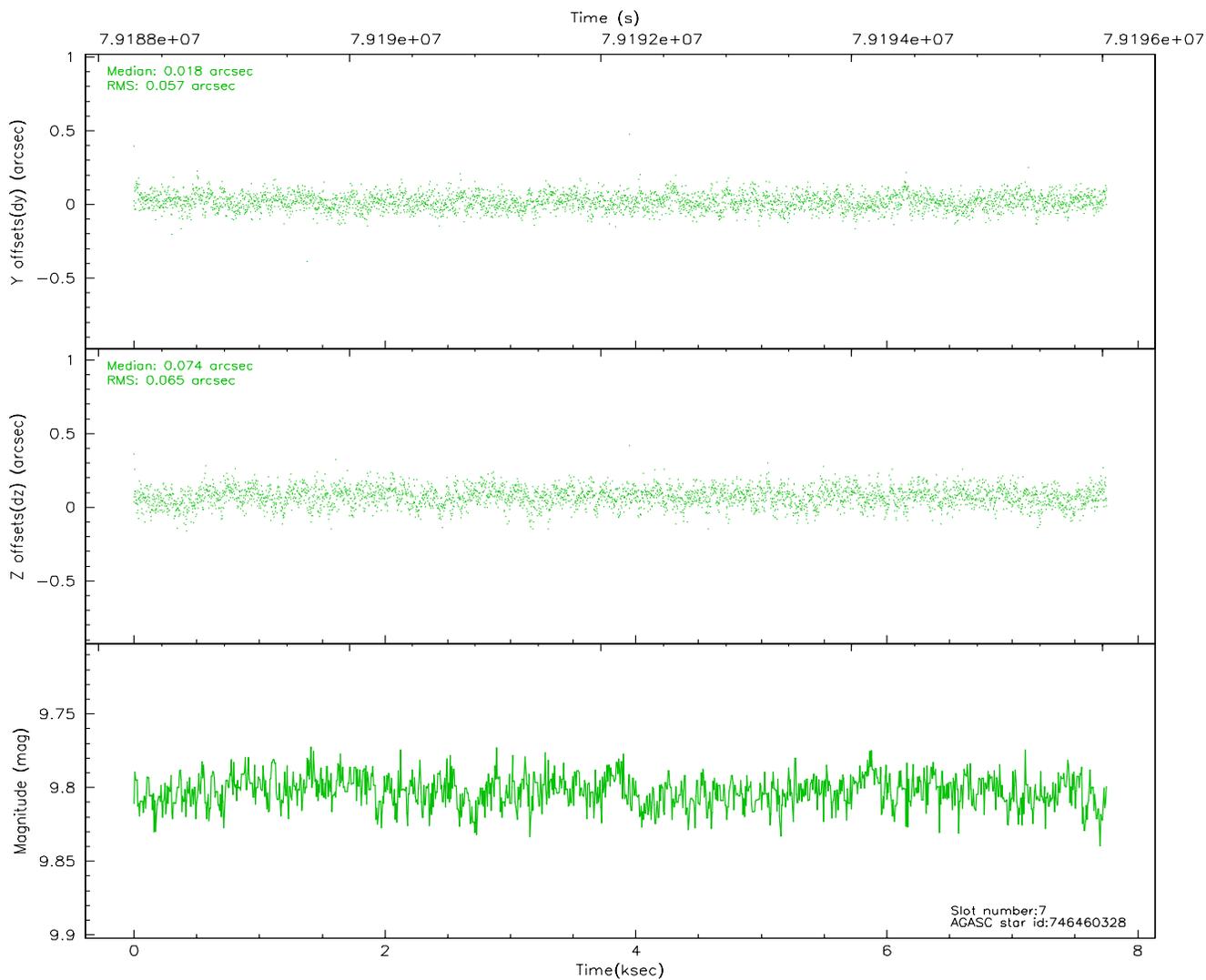
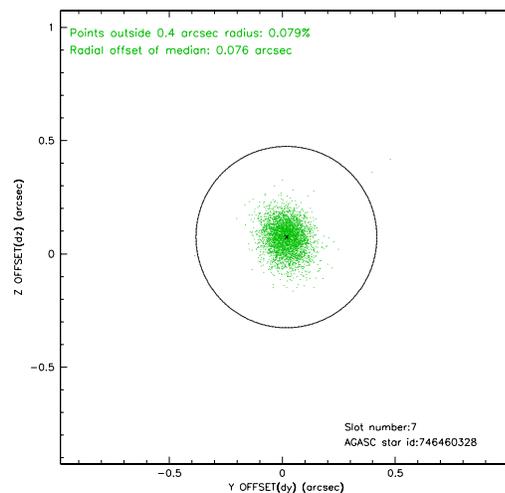
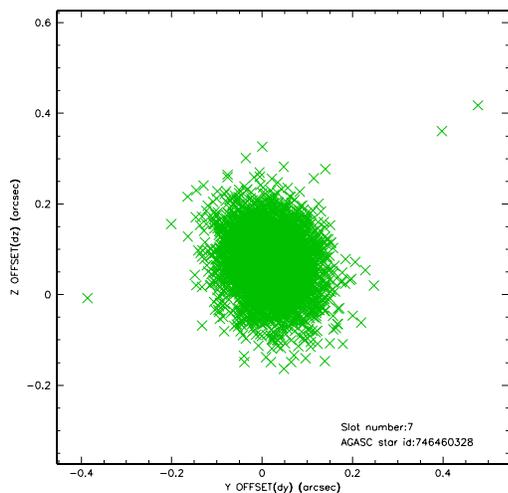
### 2.4.3 Slot 5



### 2.4.4 Slot 6

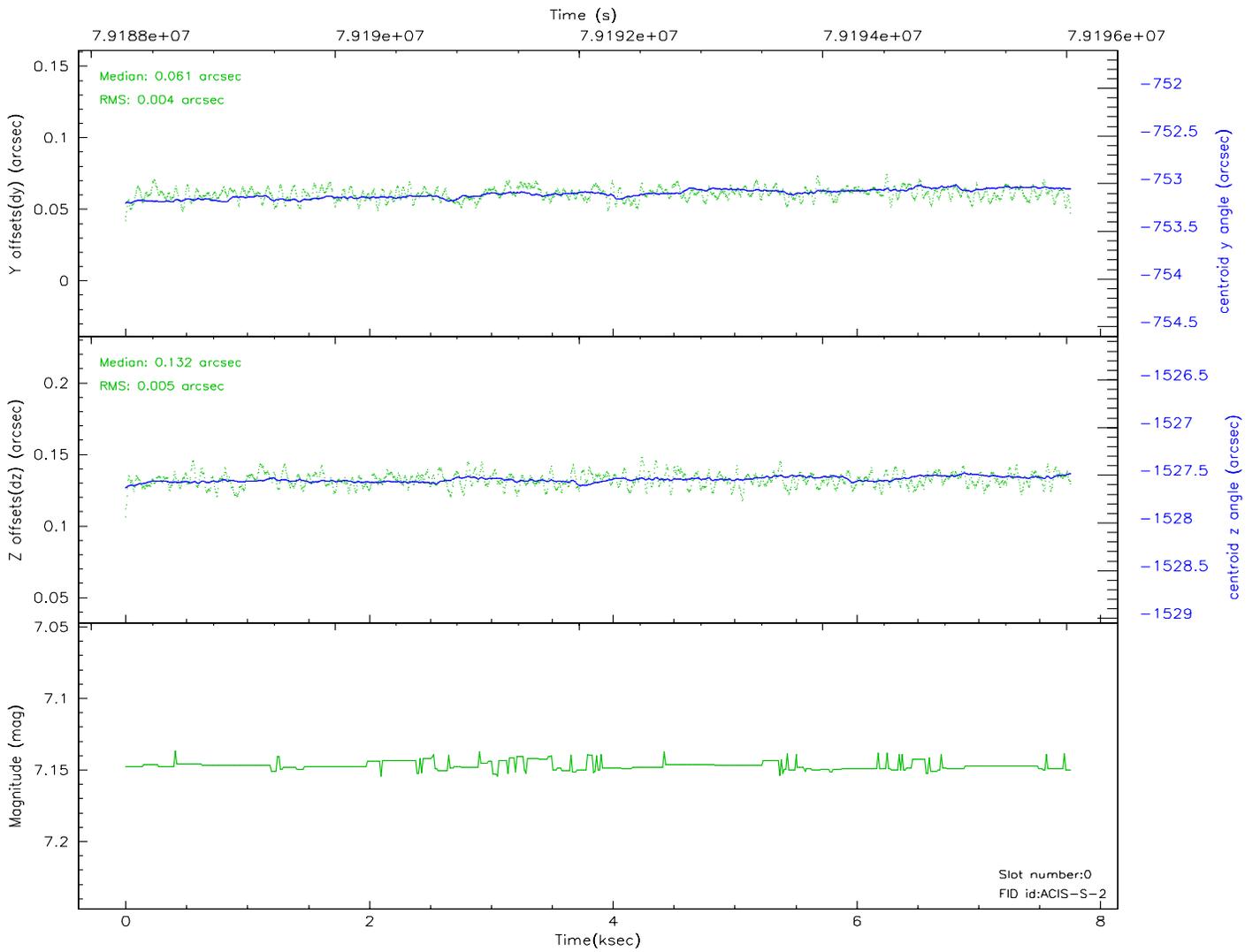
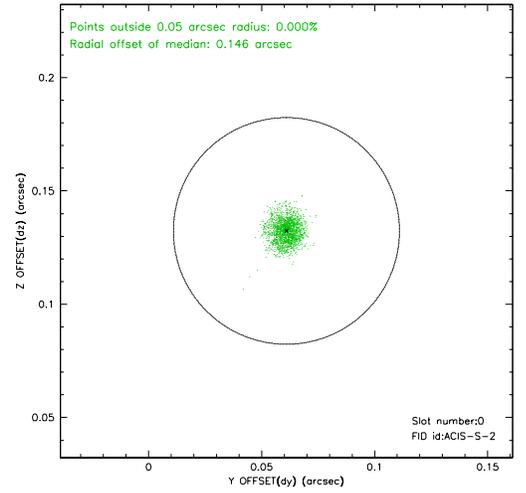
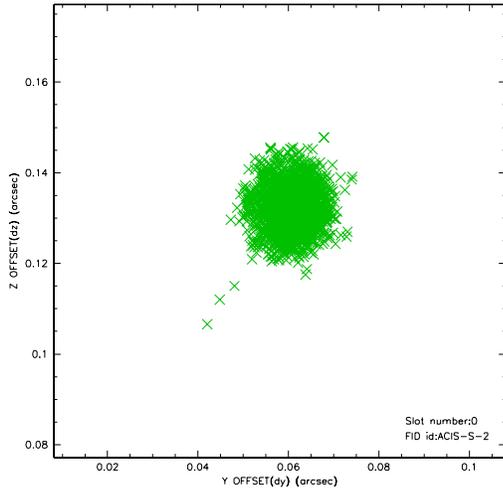


## 2.4.5 Slot 7

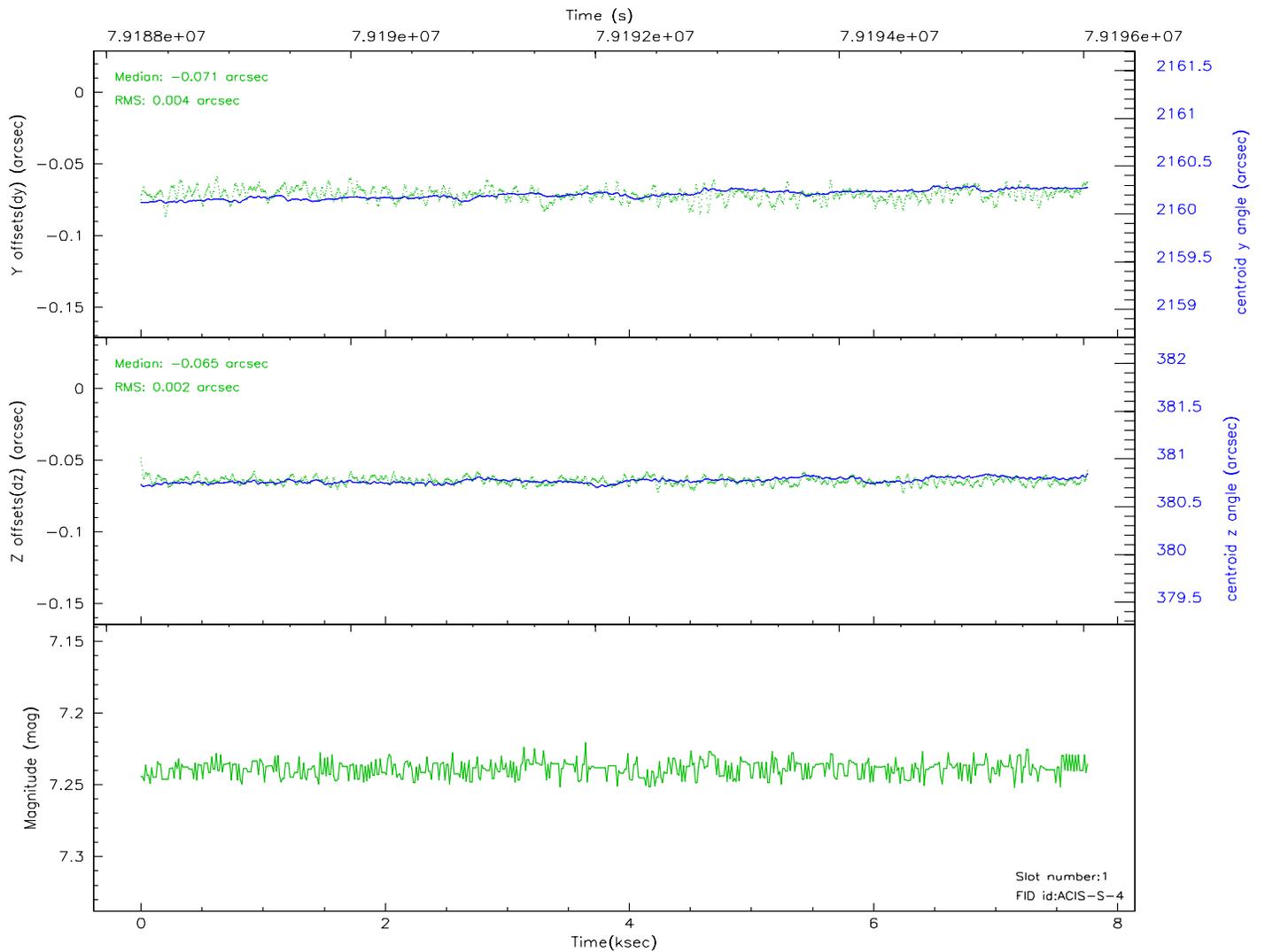
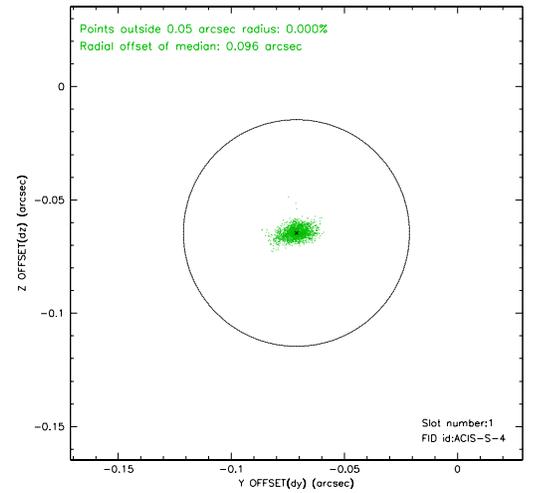
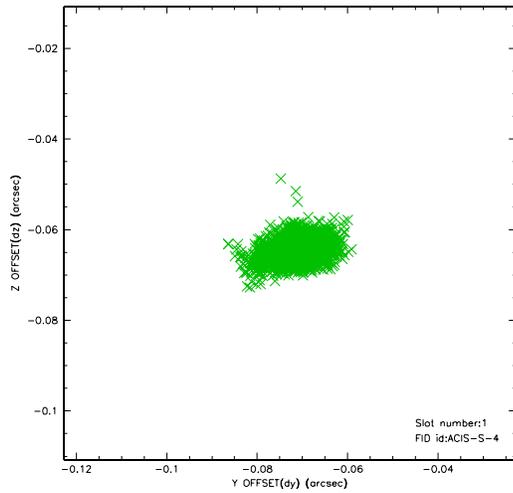


## 2.5 FID Slots

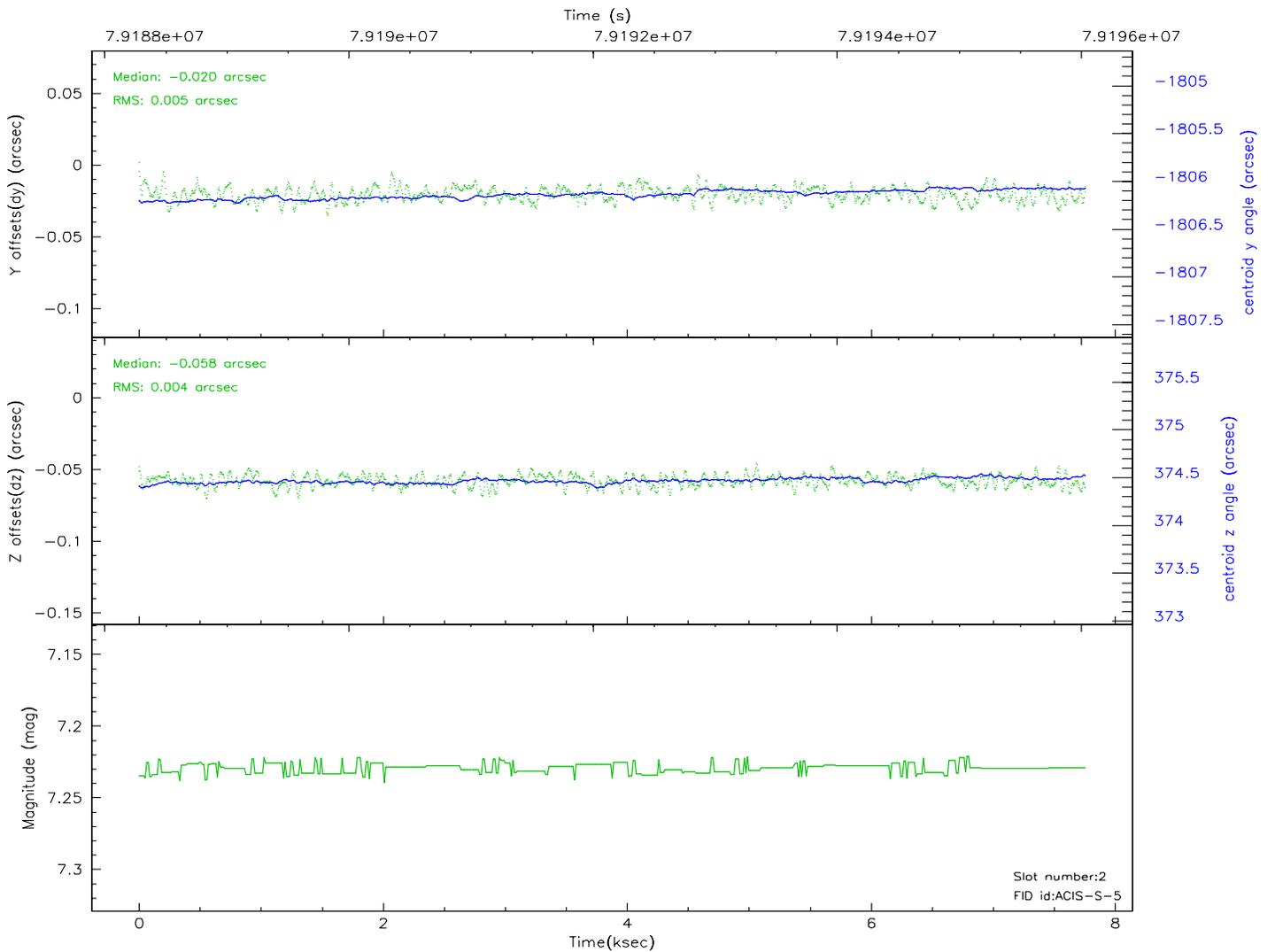
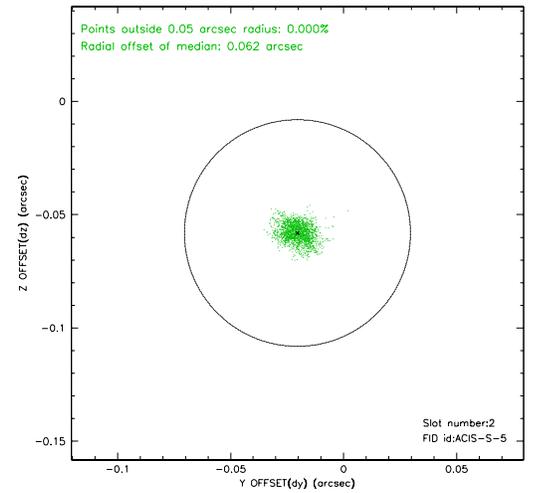
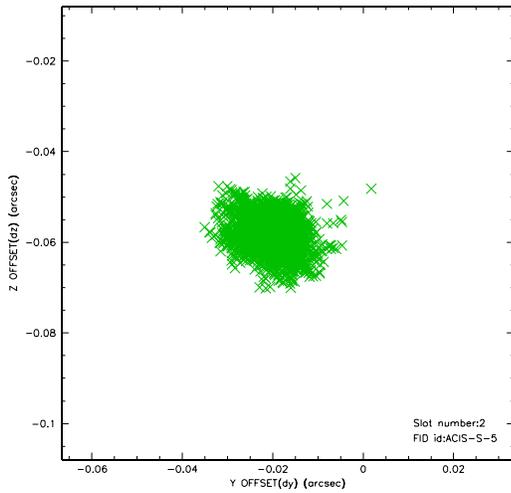
### 2.5.1 Slot 0



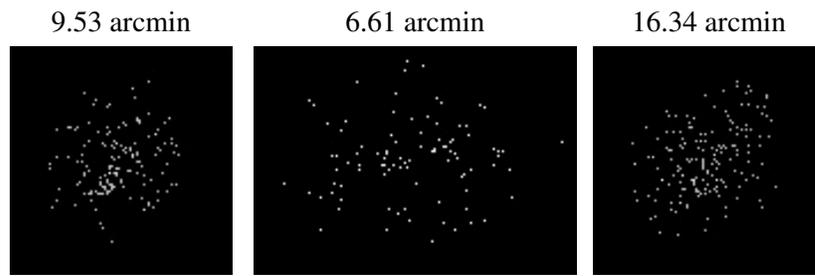
## 2.5.2 Slot 1



### 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	7.321

## A.2 Comments

Charge time for this ObsId remains at original value of 7.321 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.