

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 784 - L2 Version 4  
Chandra X-Ray Center

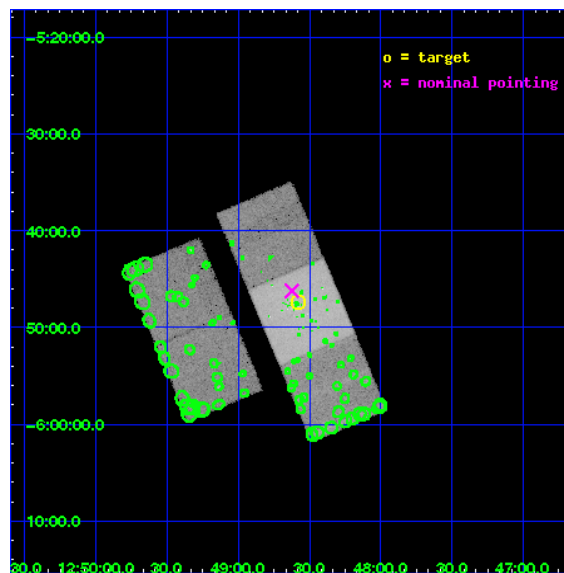
L2 Processing Date : Dec 2 2009

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# 1 Front

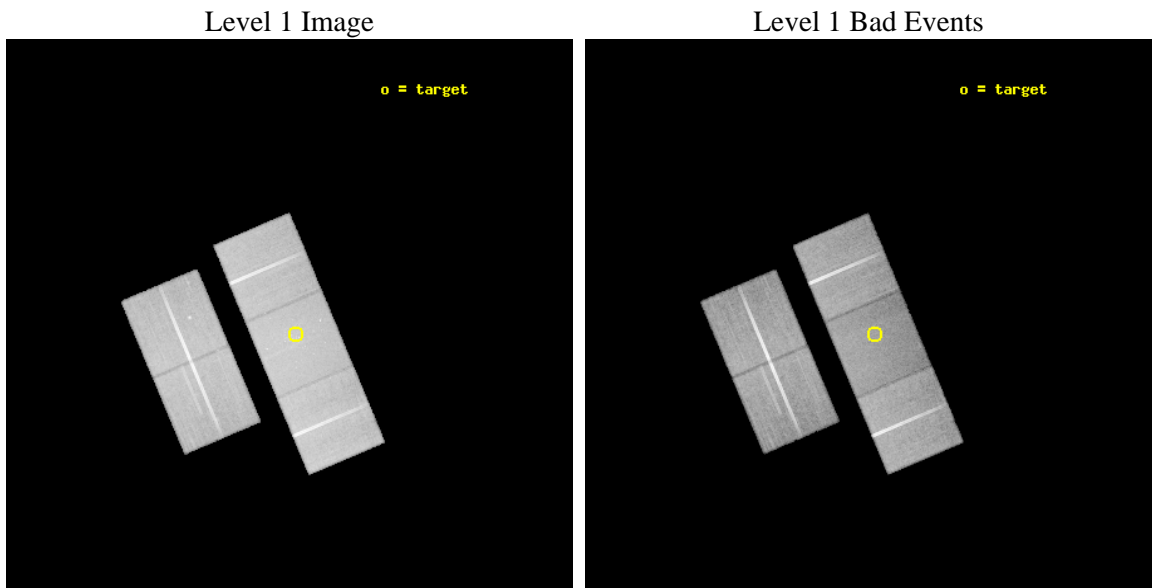
seq_num	600087	Sequence number
obs_id	784	Observation id
title	RESOLVING THE MYSTERY OF X-RAY FAINT ELLIPTICAL GALAXIES	Proposal
observer	Dr. Craig Sarazin	Principal investigator
object	NGC 4697	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	192.145833	Observer's specified target RA
dec_targ	-5.789167	Observer's specified target Dec
ra_nom	192.15588196762	Nominal RA
dec_nom	-5.7704303913953	Nominal Dec
roll_nom	67.12063106934	Nominal Roll
revision	4	Processing version of data
ontime	39765.648942463	Sum of GTIs [s]
livetime	39262.112351554	Livetime [s]
ontime2	39765.607932396	Sum of GTIs [s]
ontime3	39772.007802747	Sum of GTIs [s]
ontime6	39772.04884275	Sum of GTIs [s]
ontime7	39765.648942463	Sum of GTIs [s]
ontime8	39768.72583247	Sum of GTIs [s]
l2events	272998	Number of level 2 events



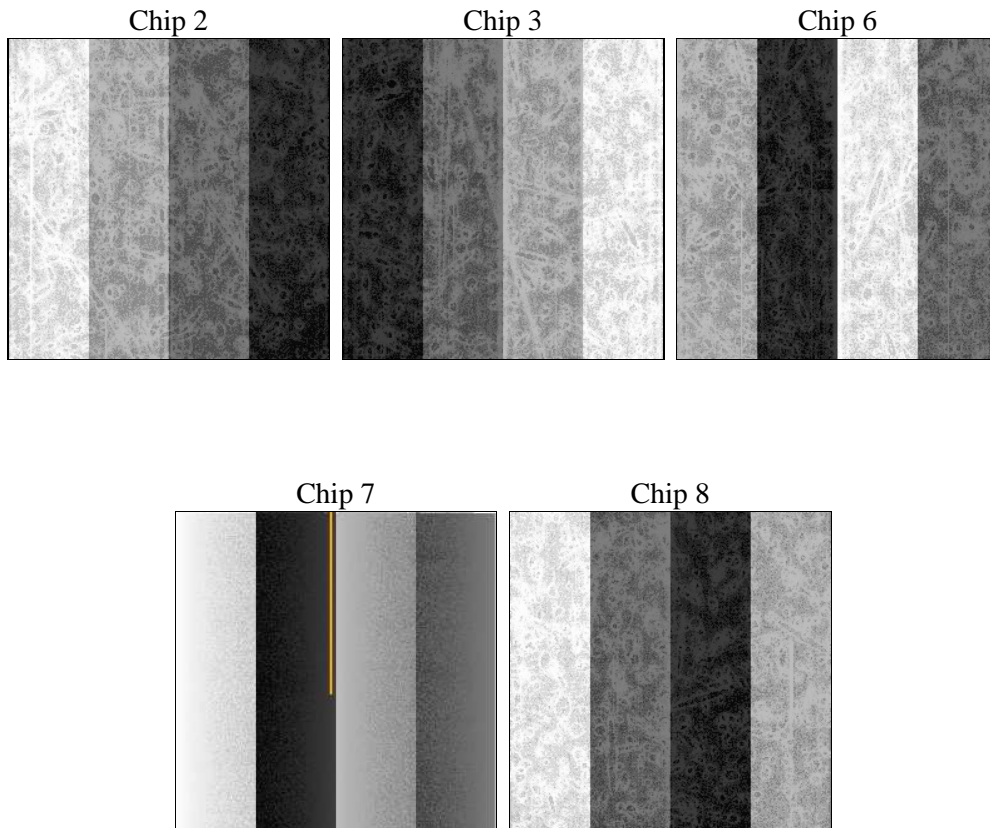
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	39765.648942463	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime2	39765.607932396	Sum of GTIs [s]
date	2009-12-02T17:19:30	Date and time of file creation	ontime3	39772.007802747	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	39772.04884275	Sum of GTIs [s]
			ontime7	39765.648942463	Sum of GTIs [s]
			ontime8	39768.72583247	Sum of GTIs [s]
			l1events	1769601	Number of level 1 events

### 2.1.4 Events

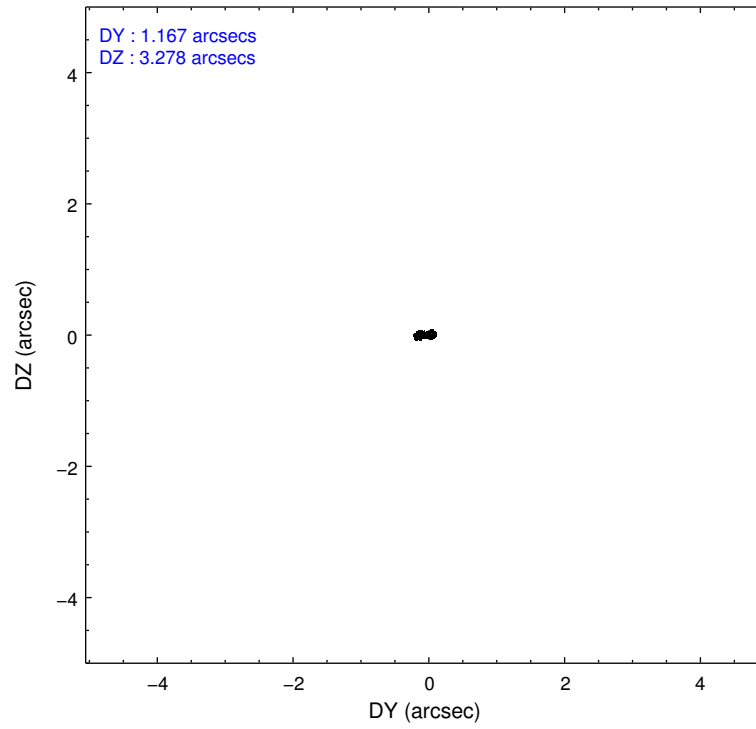
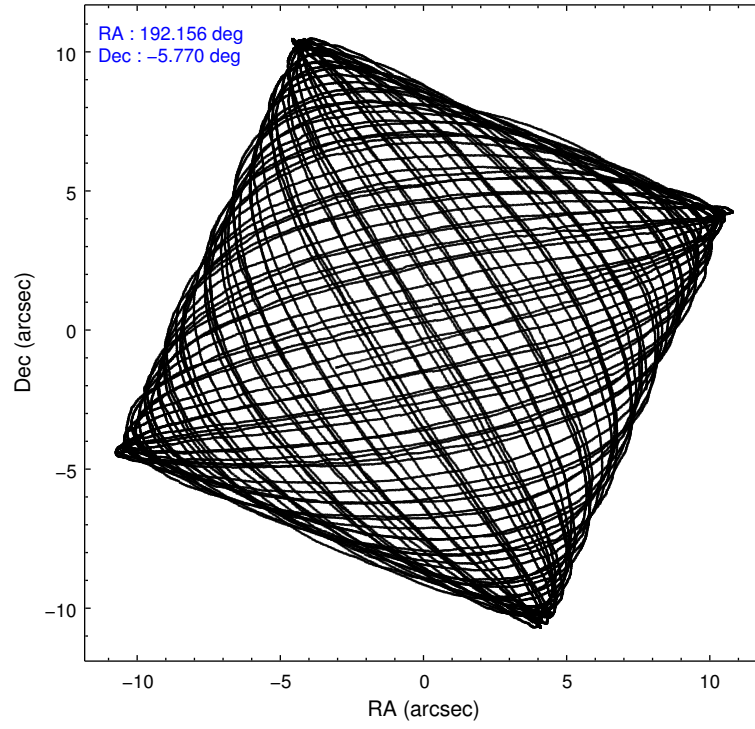
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	334617	327651	341476	368722	397135
rejected events	302950	295655	308335	220058	329859
rejected %	90%	90%	90%	59%	83%

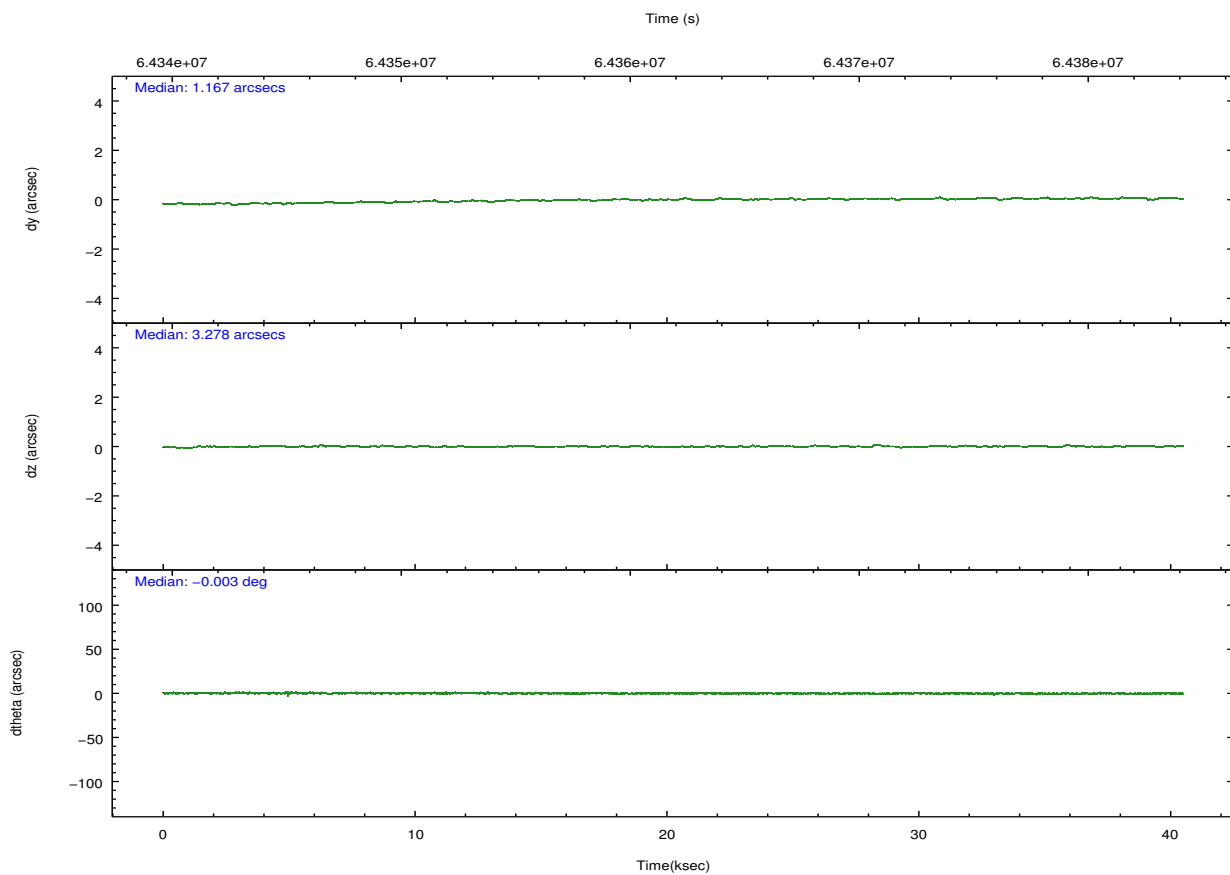
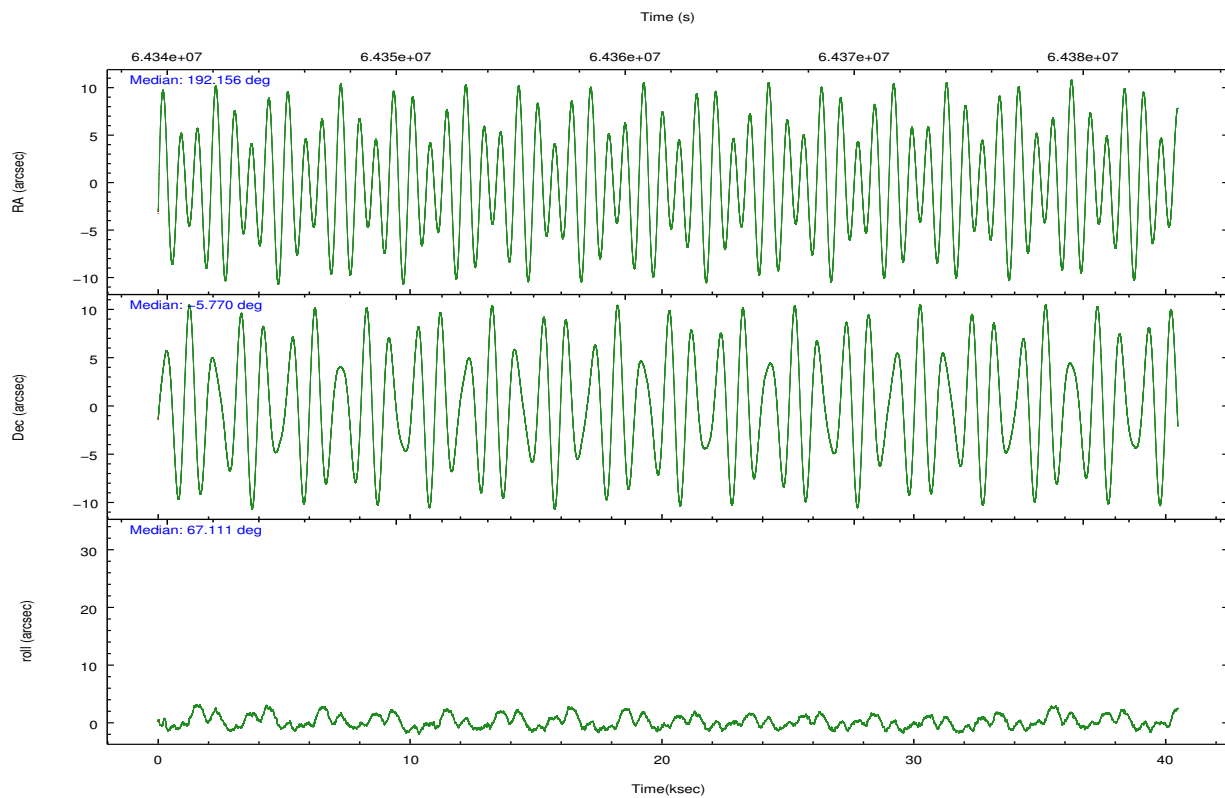
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	8129	7355	7224	12995	16375
	2%	2%	2%	3%	4%
grade 1 events	67	54	49	201	147
	0%	0%	0%	0%	0%
grade 2 events	12044	12680	12655	32178	20888
	3%	3%	3%	8%	5%
grade 3 events	2034	2066	2097	9523	5591
	0%	0%	0%	2%	1%
grade 4 events	2025	1972	2052	8737	5233
	0%	0%	0%	2%	1%
grade 5 events	5981	6320	7085	21977	9318
	1%	1%	2%	5%	2%
grade 6 events	7437	7924	9115	85274	19197
	2%	2%	2%	23%	4%
grade 7 events	296900	289280	301199	197837	320386
	88%	88%	88%	53%	80%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	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	192.159274	192.1558819676231	Subarray requested	NONE	NONE
Pointing Dec	-5.797751	-5.770430391395318	Alternating exposures requested	N	N
Pointing Roll	66.964350	67.12063106934046	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	64342113.184000	64341104.268947			
Observation start date	2000-01-15T16:47:29	2000-01-15T16:31:44			
Observation end time	64382113.184000	64383062.132972			
Observation end date	2000-01-16T03:54:09	2000-01-16T04:11:02			
Read mode	TIMED	TIMED			

## 2.3 Aspect



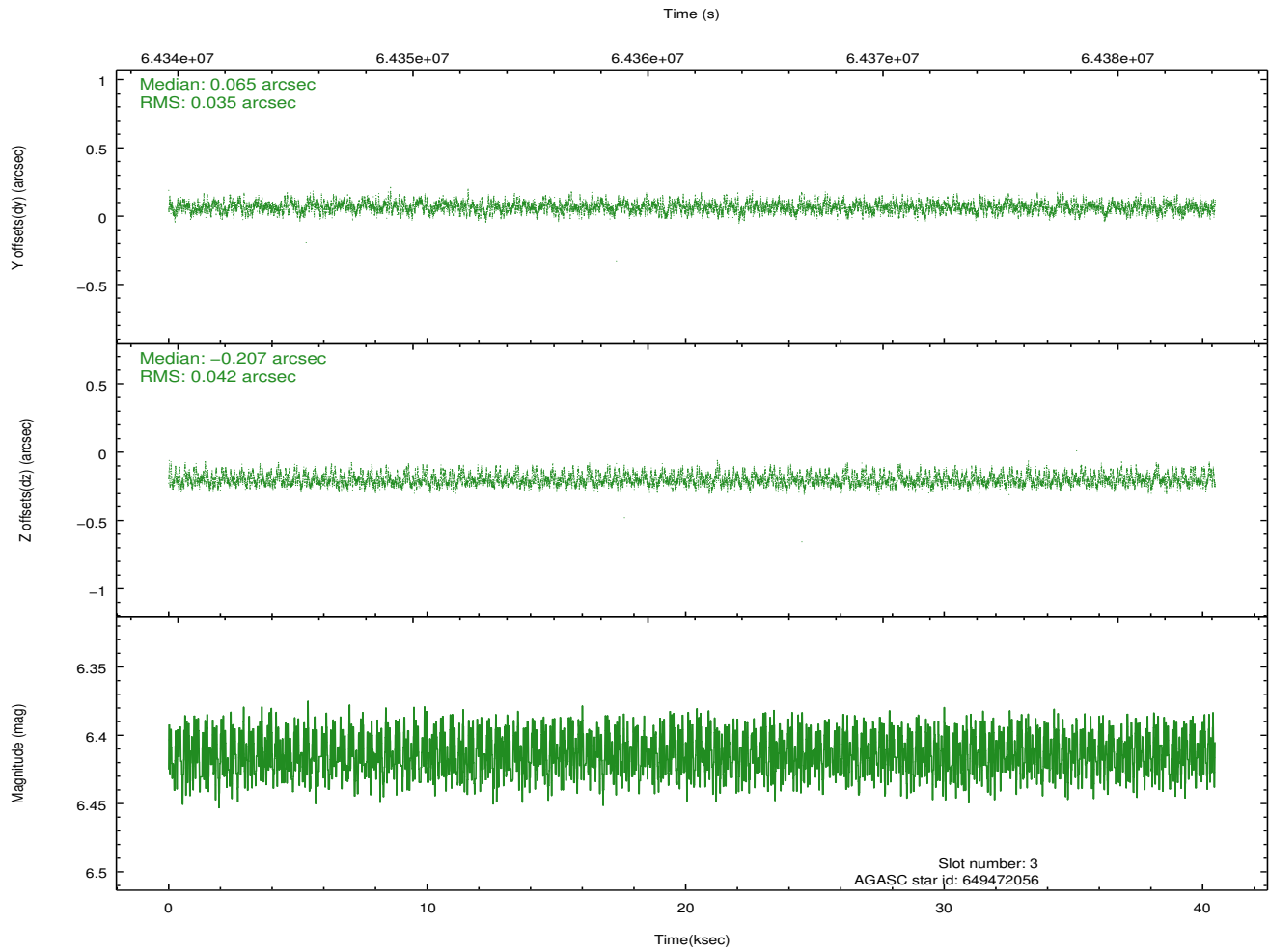
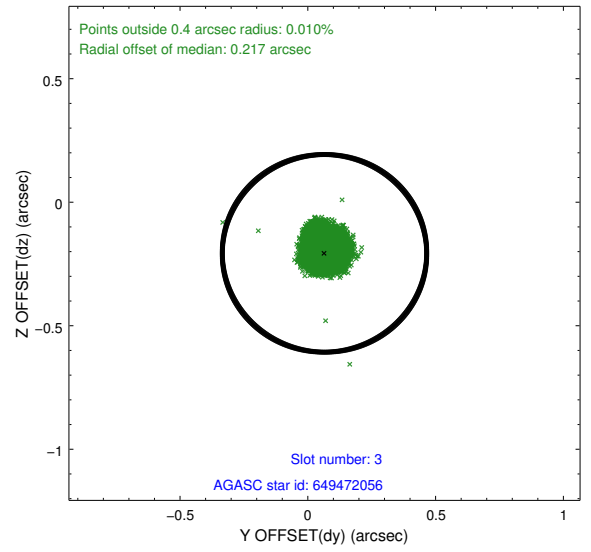
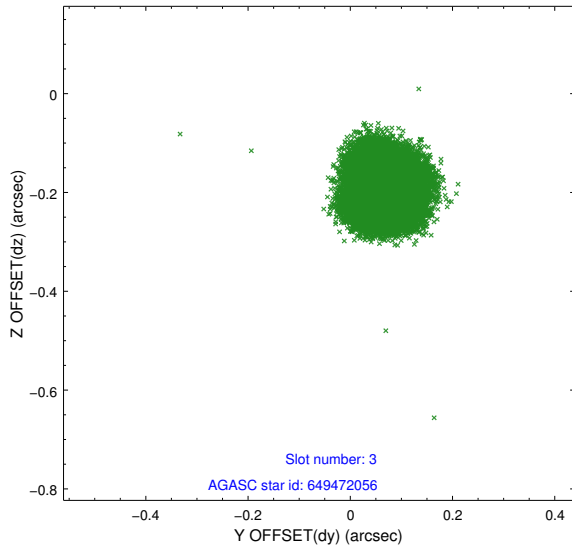


### Slot Statistics

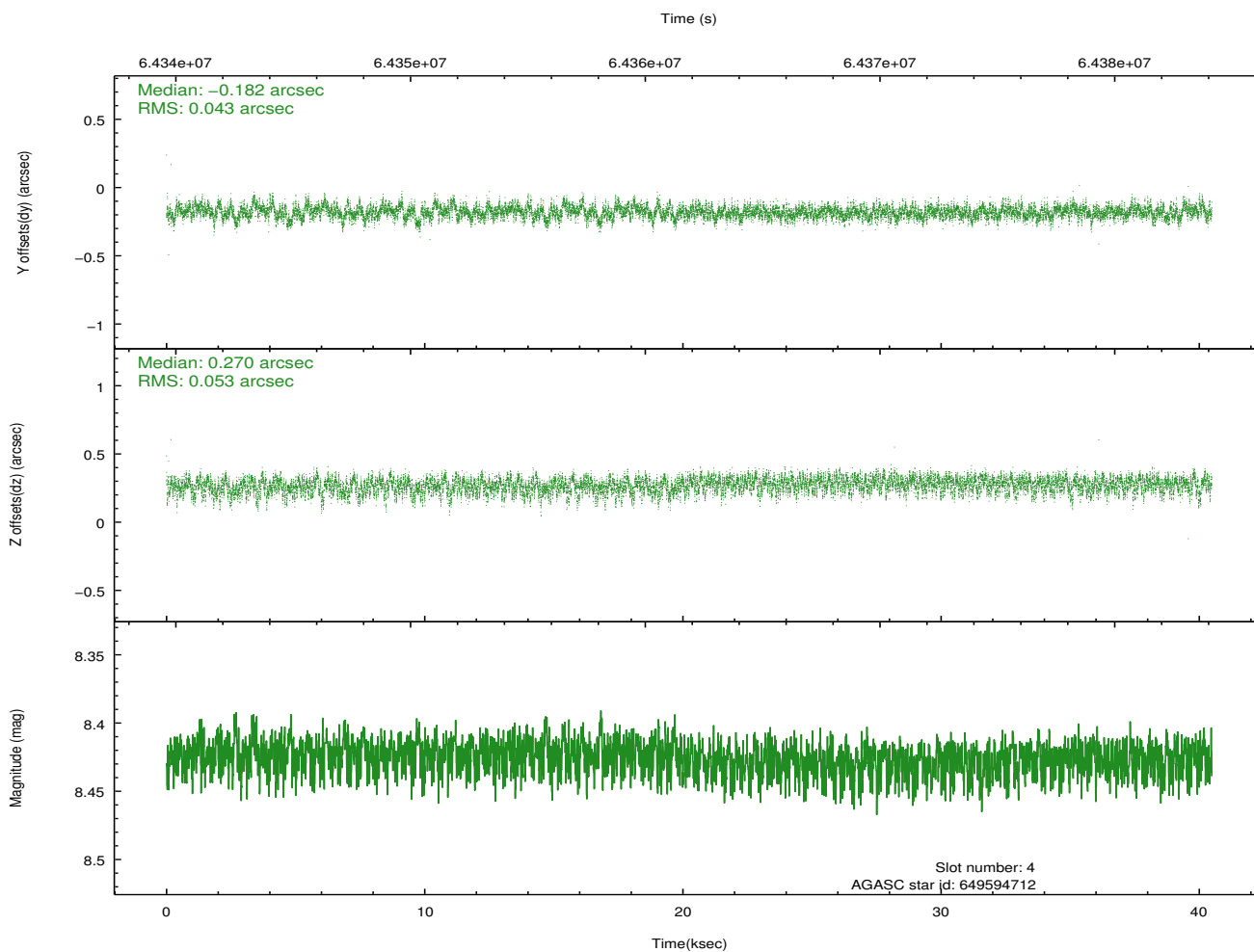
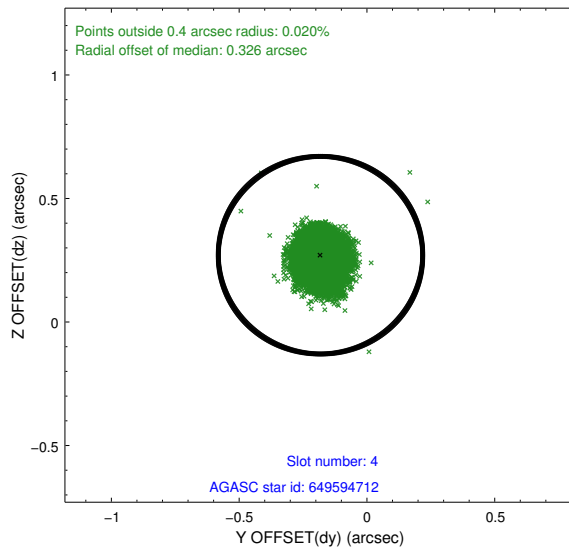
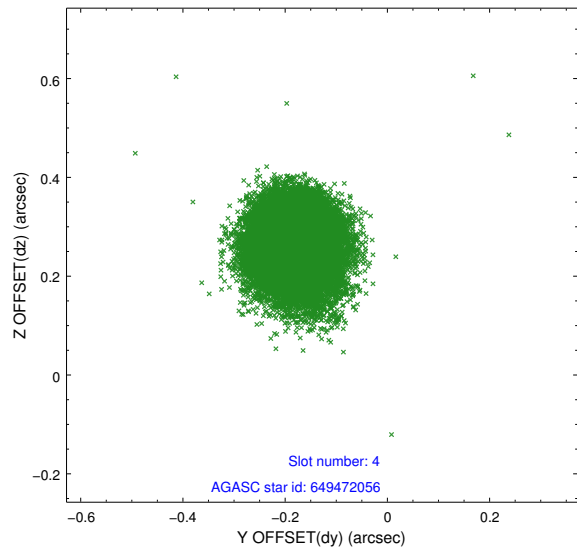
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	9871	0.032	-0.028	0.006	0.011	0.000000	0.000000	942.26	-1720.04
1	FID	ACIS-S-5	7.24	9871	-0.030	0.034	0.006	0.010	0.000000	0.000000	-1806.71	177.69
2	FID	ACIS-S-6	7.36	9873	-0.023	0.006	0.007	0.011	0.000000	0.000000	407.86	821.54
3	GUIDE	649472056	6.41	19745	0.065	-0.207	0.059	0.094	191.889264	-6.301748	-2048.23	179.10
4	GUIDE	649594712	8.43	19739	-0.182	0.270	0.073	0.117	192.730305	-6.061024	-73.45	-2251.68
5	GUIDE	649471008	8.77	19734	0.099	-0.121	0.060	0.097	191.883055	-5.890695	-695.50	779.46
6	GUIDE	649467328	9.36	19736	-0.046	0.000	0.080	0.130	192.312268	-5.822418	132.36	-538.40
7	GUIDE	649469056	9.61	19734	0.063	0.056	0.078	0.128	192.411237	-6.079132	-579.45	-1226.02

## 2.4 Star Slots

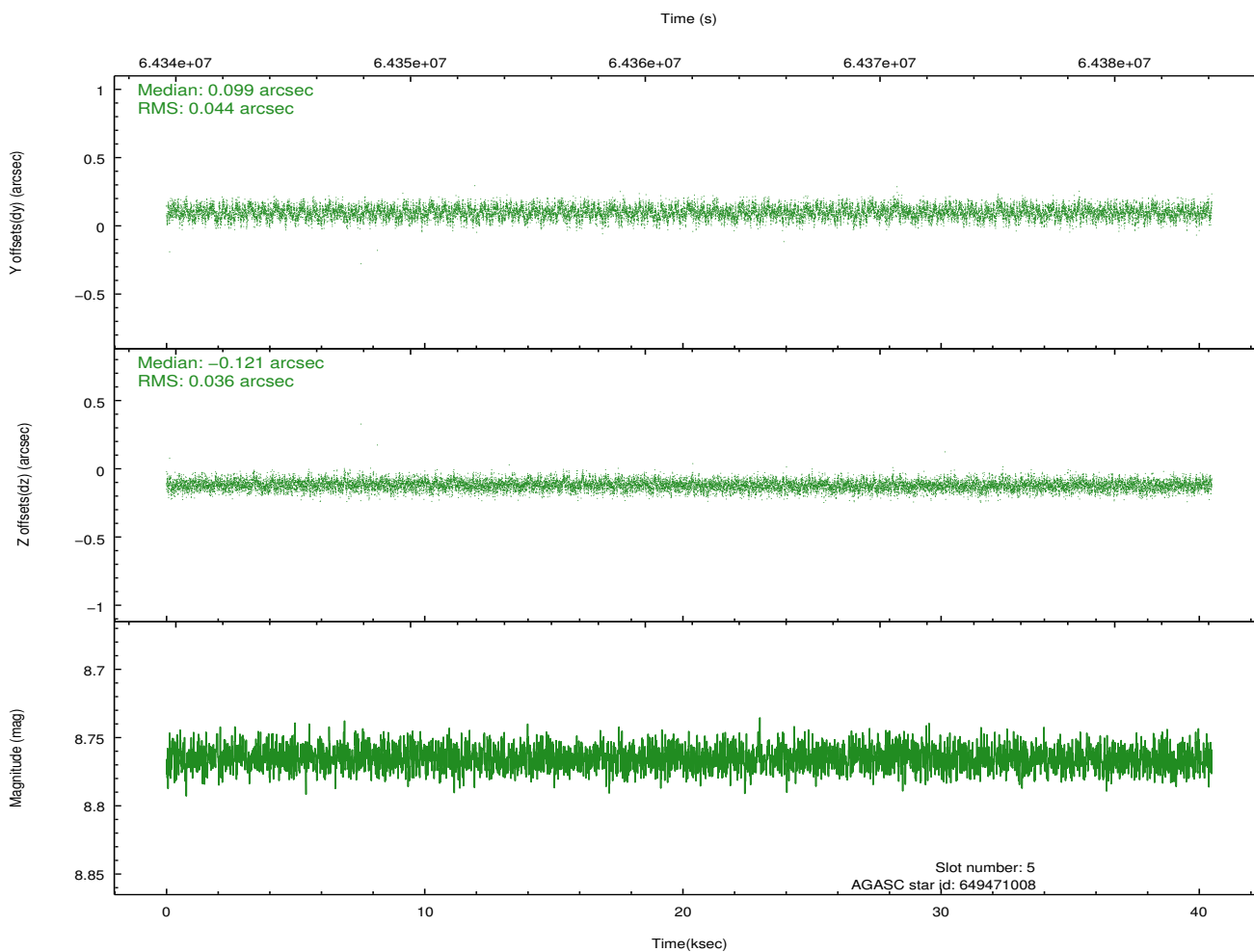
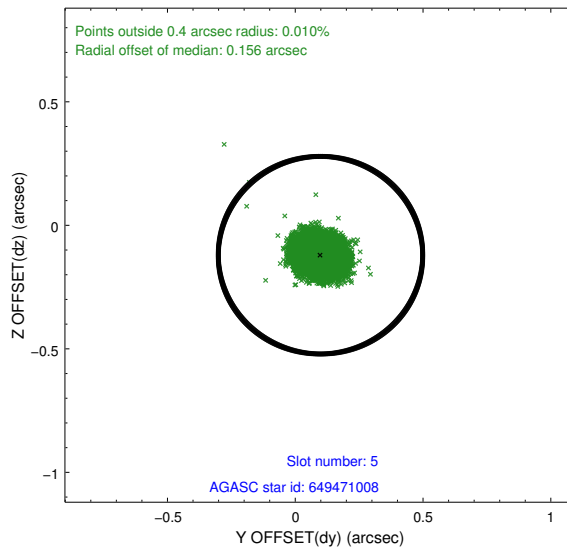
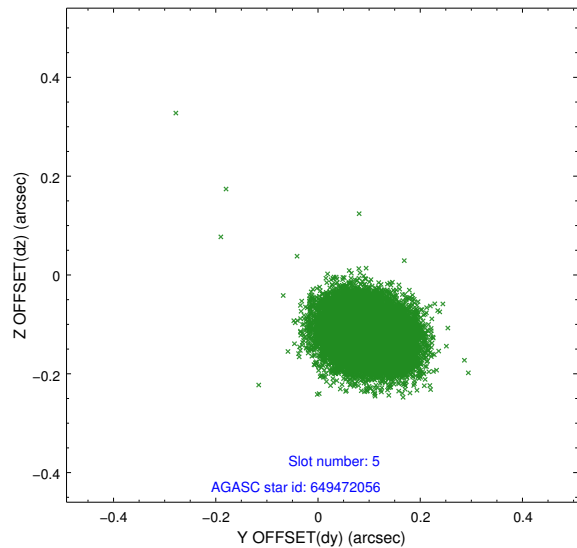
### 2.4.1 Slot 3



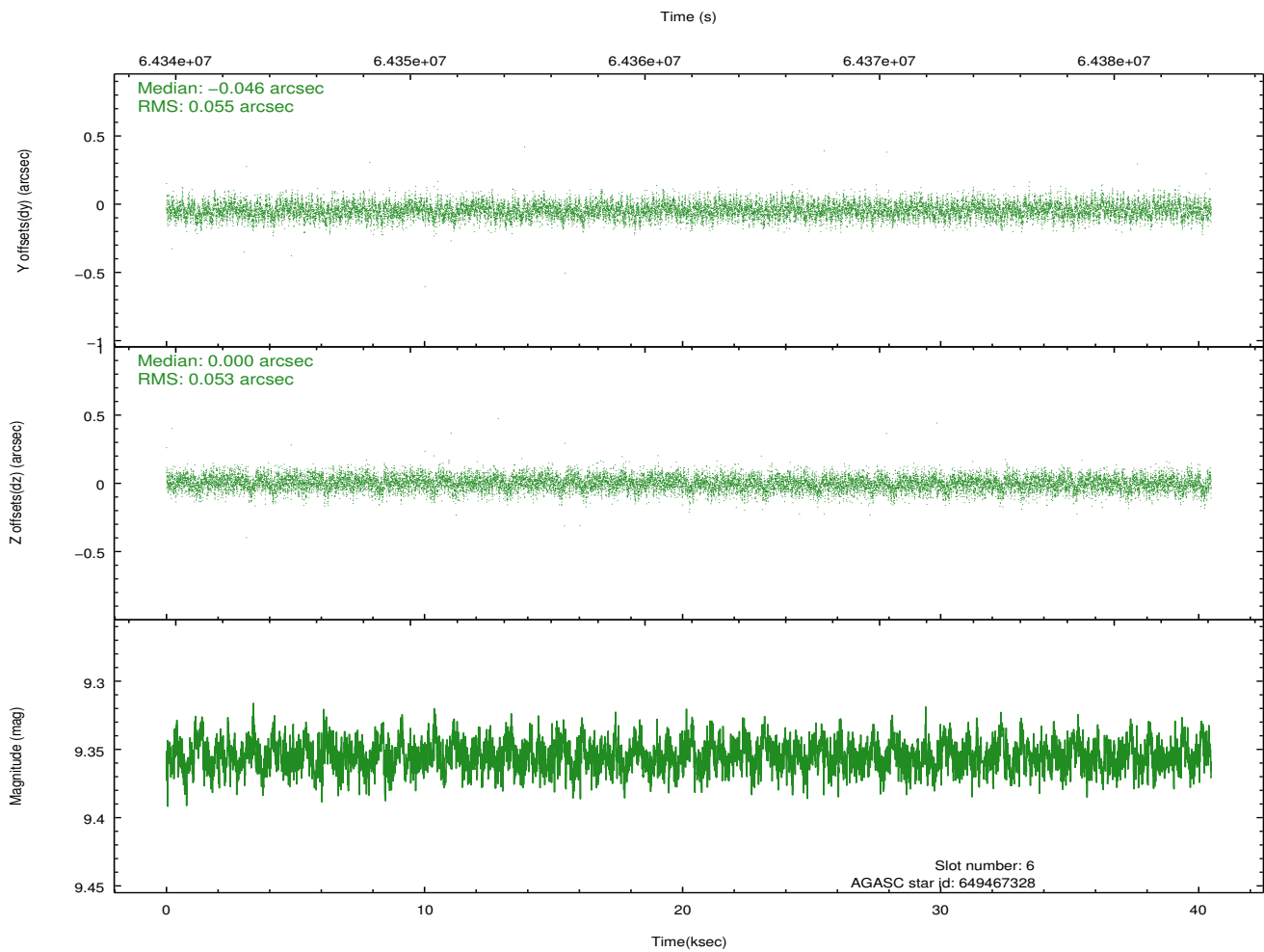
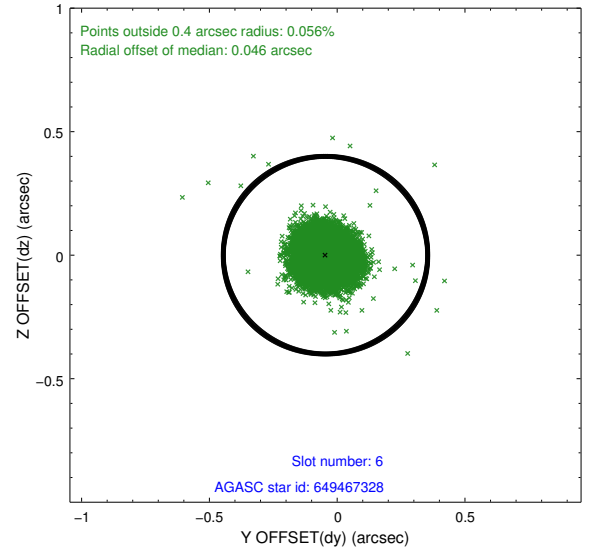
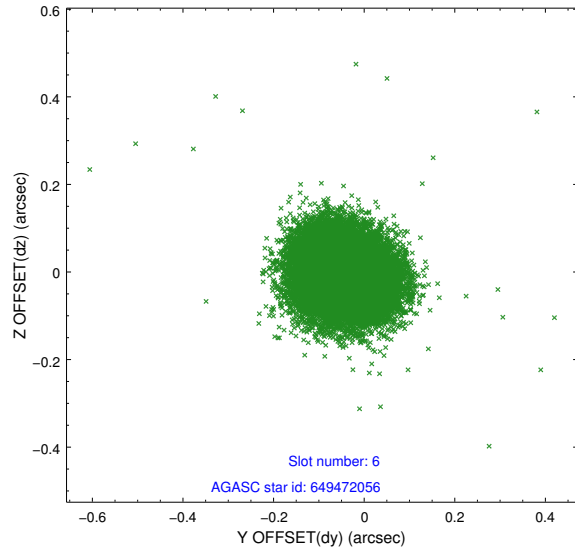
## 2.4.2 Slot 4



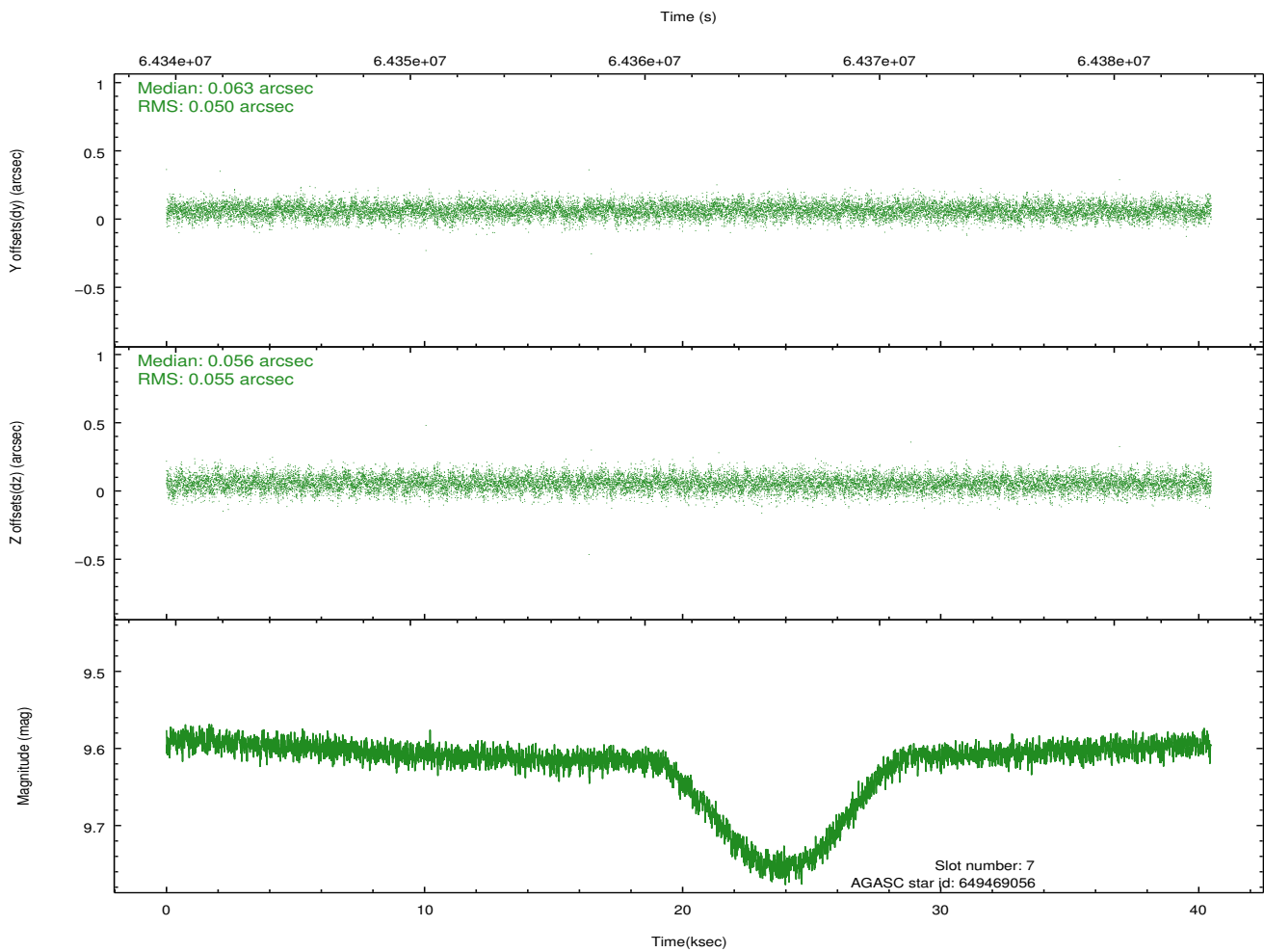
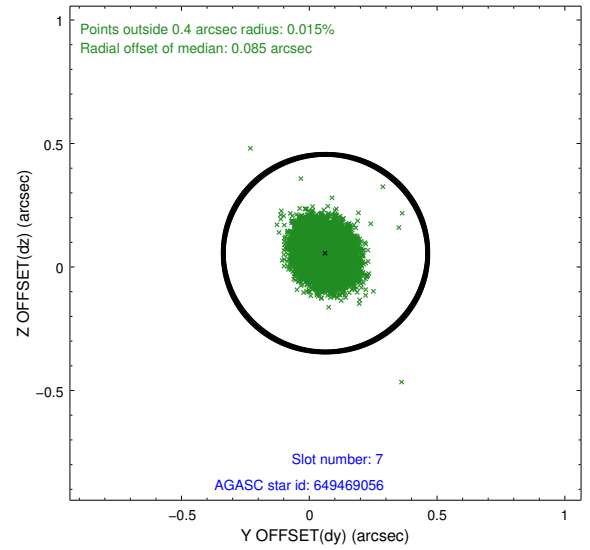
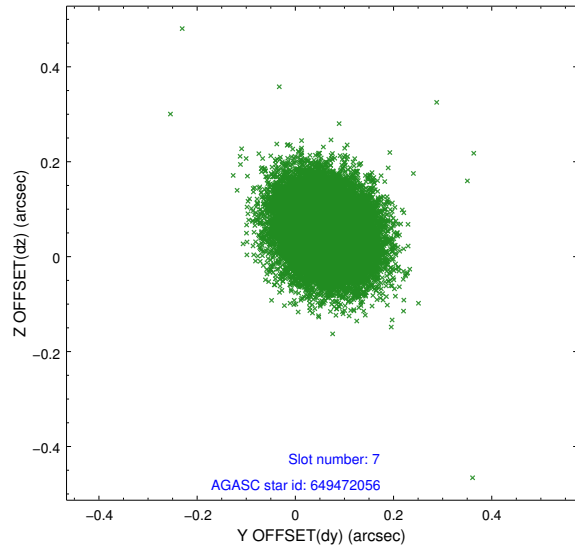
### 2.4.3 Slot 5



## 2.4.4 Slot 6

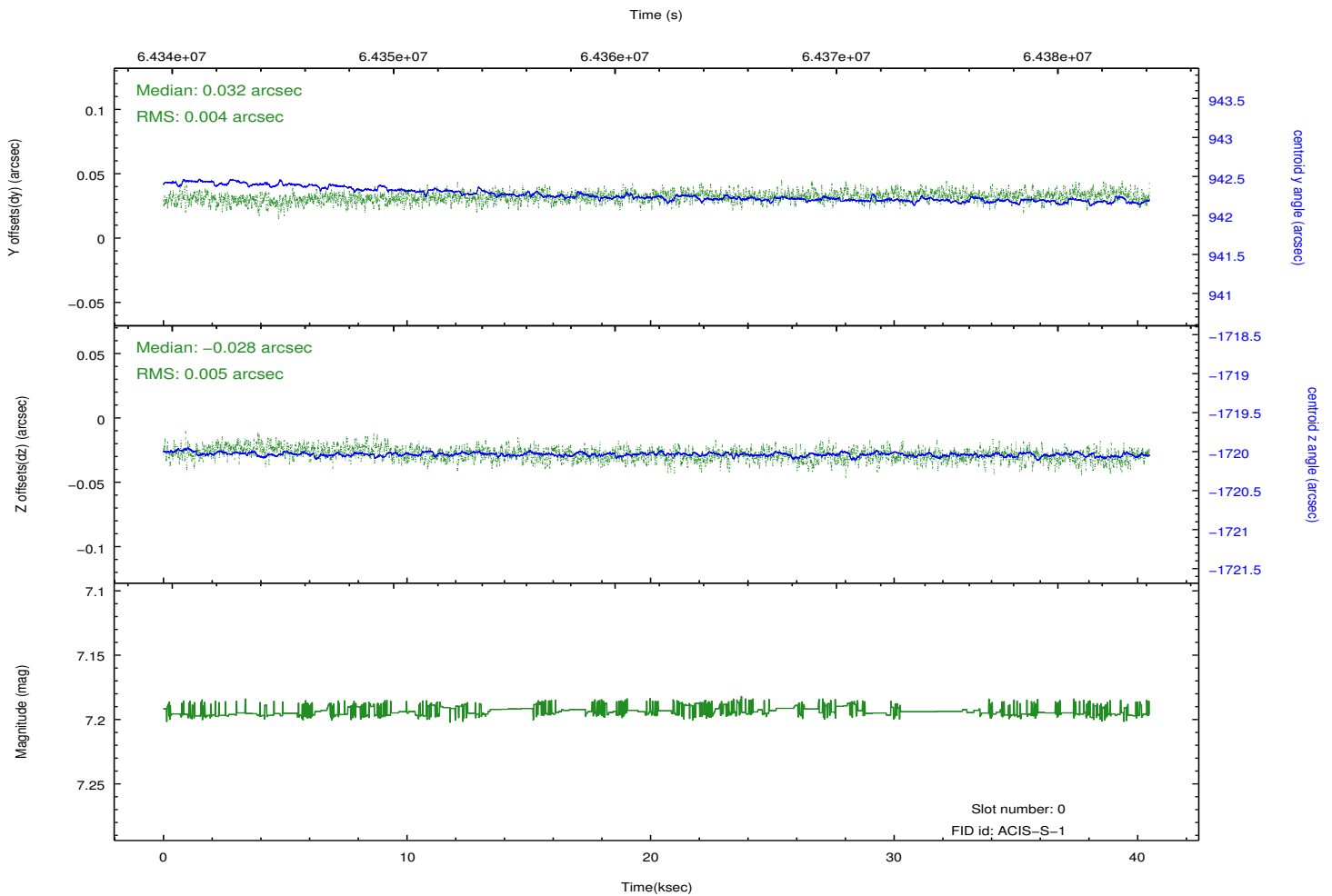
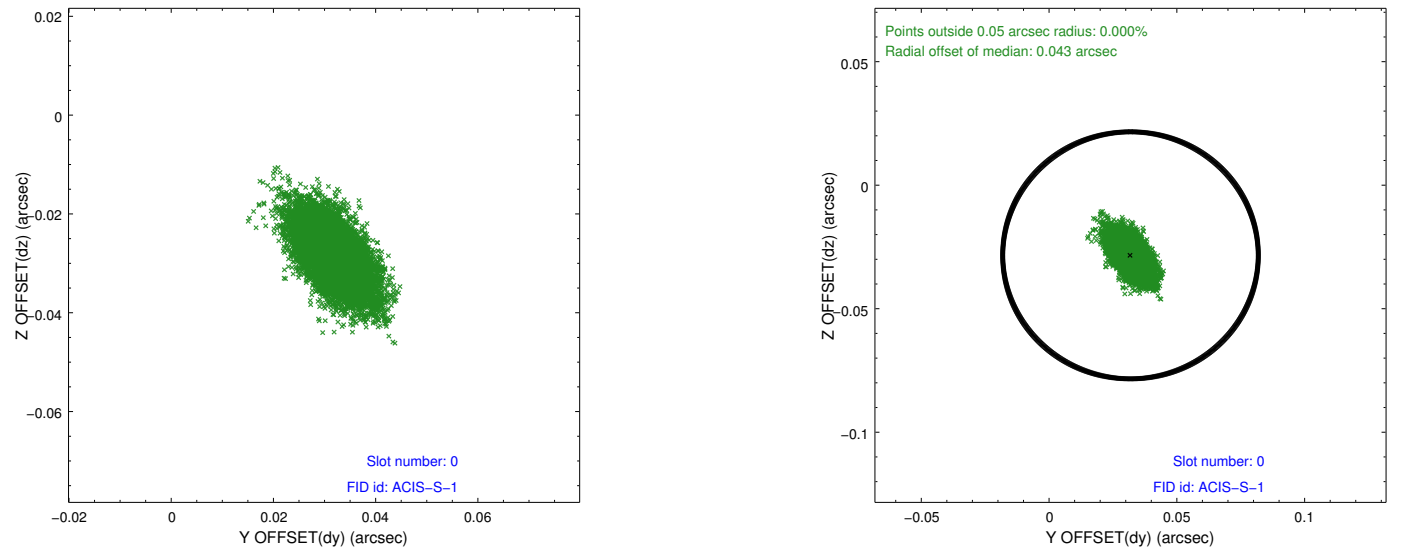


## 2.4.5 Slot 7

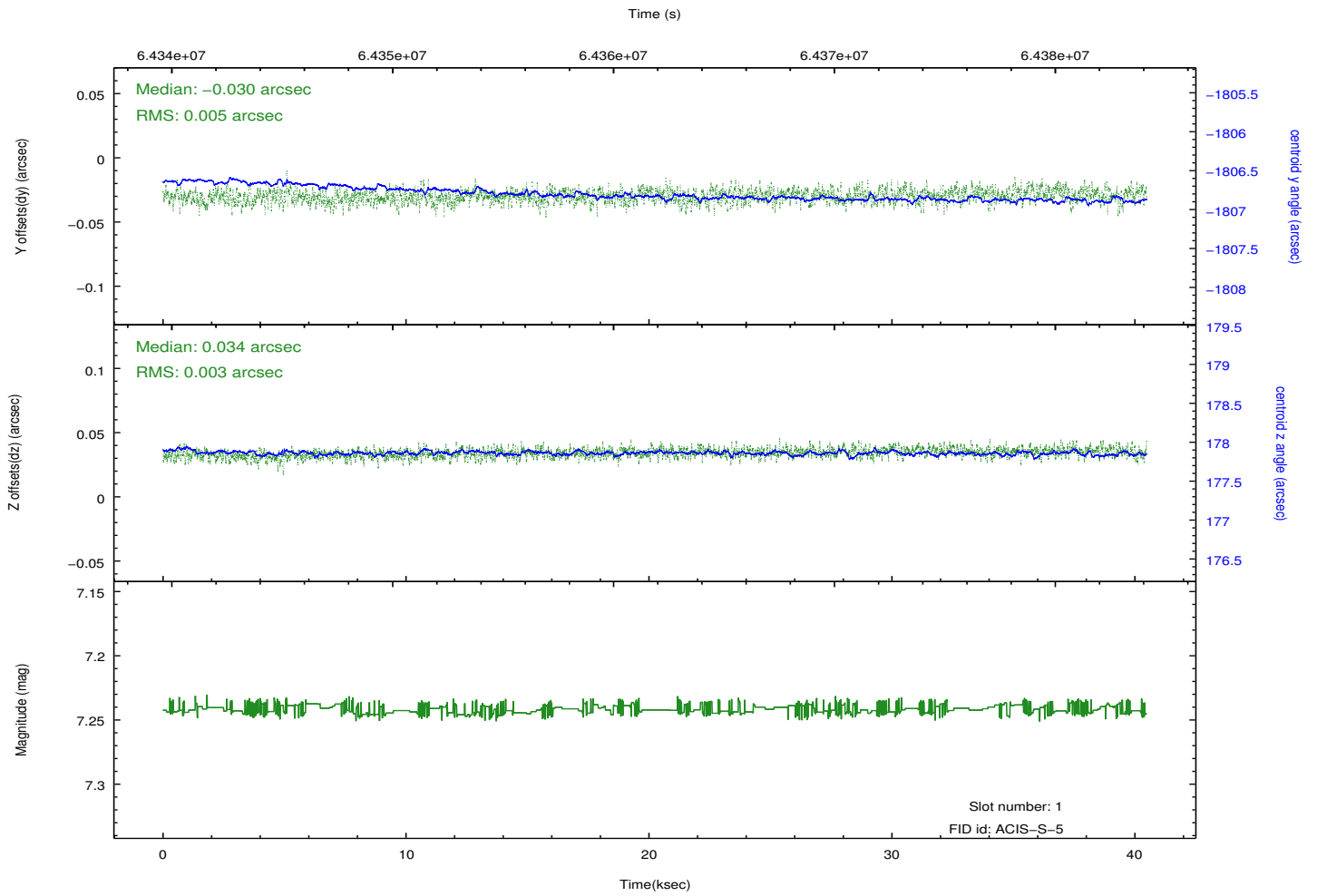
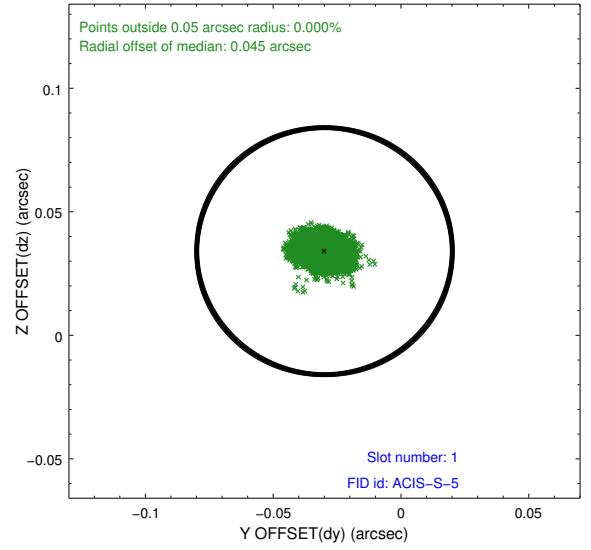
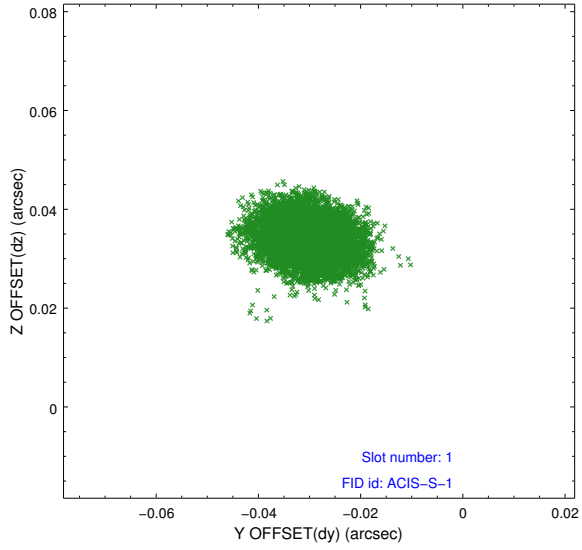


## 2.5 FID Slots

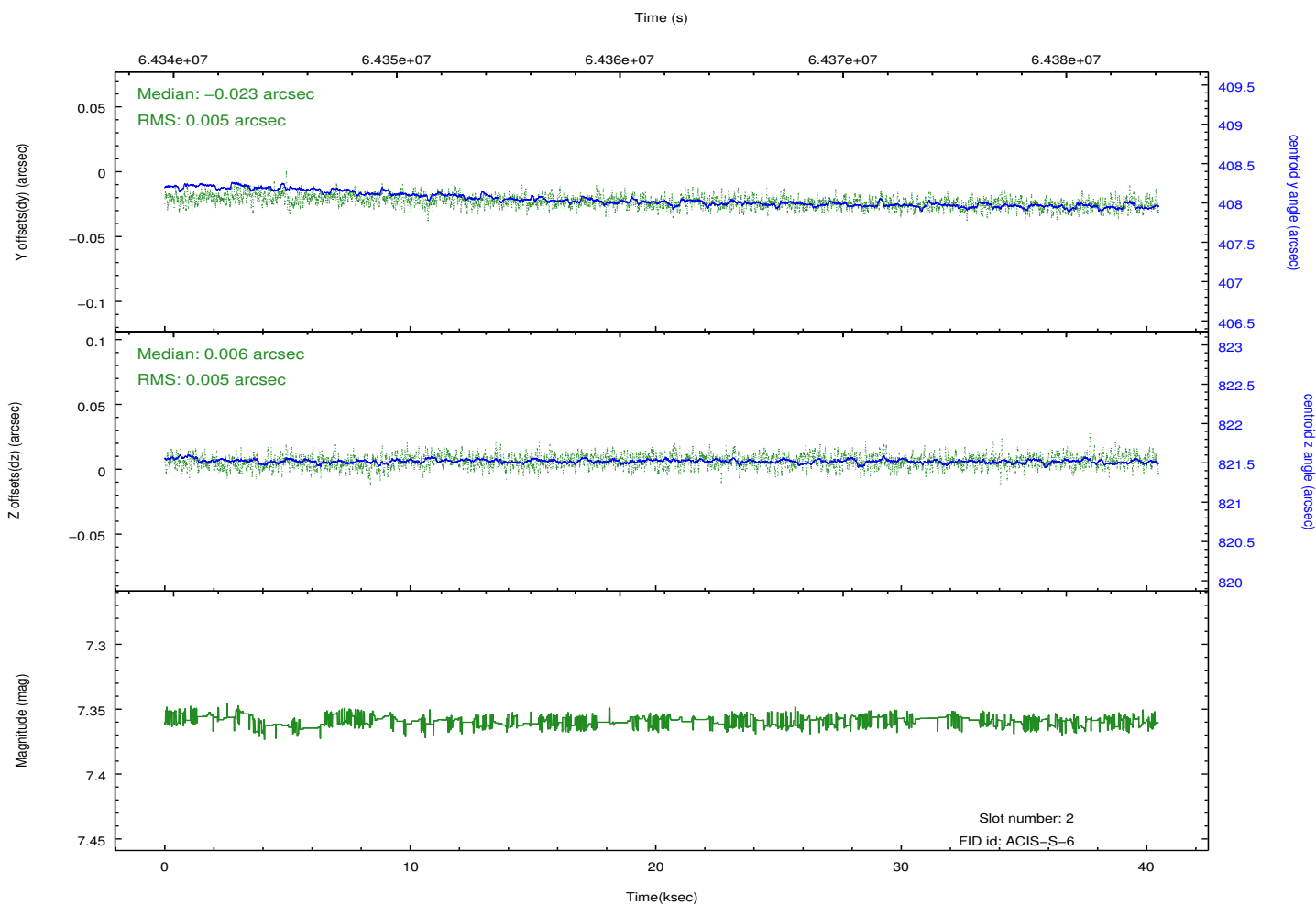
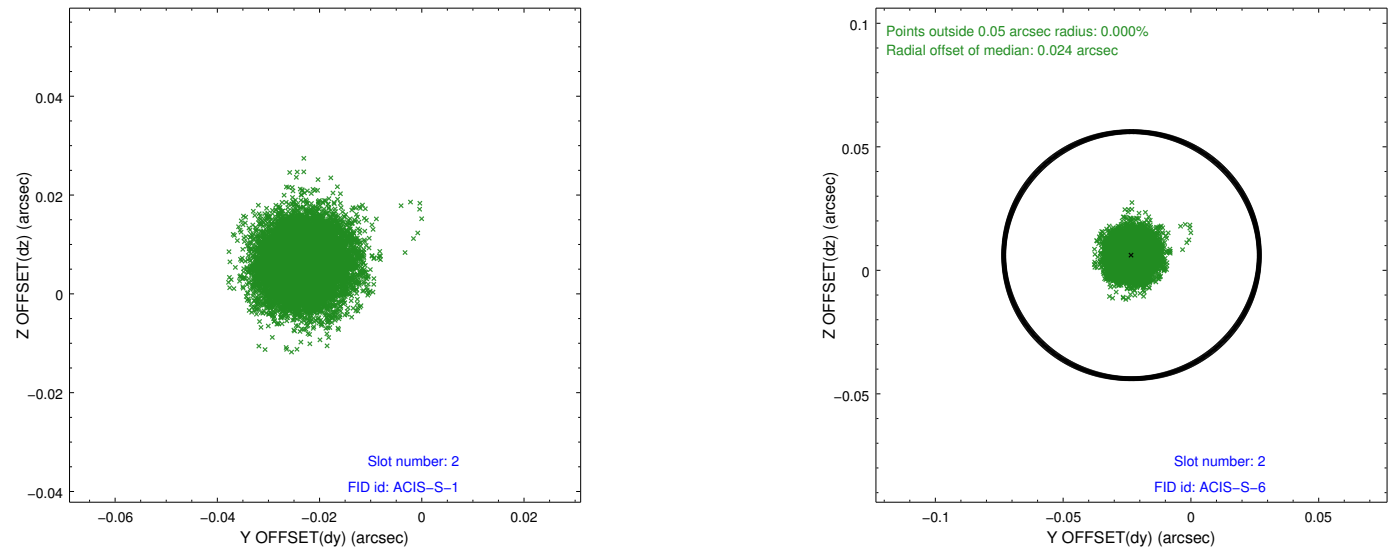
### 2.5.1 Slot 0



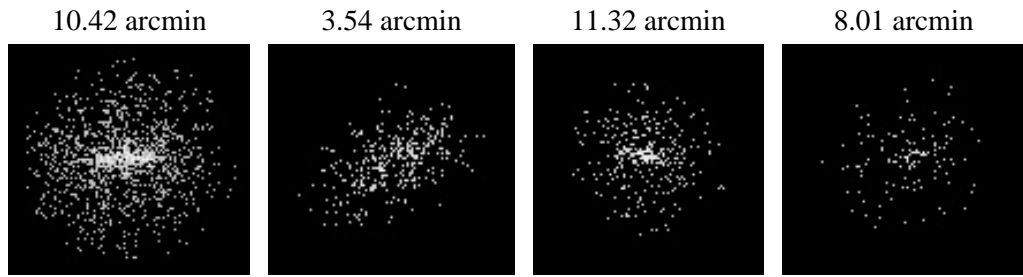
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2009.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.763

## A.2 Comments

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