

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 1281 - L2 Version 4  
Chandra X-Ray Center

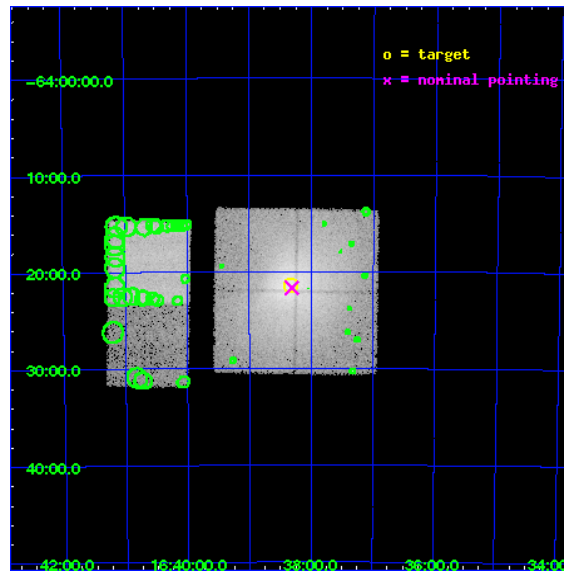
L2 Processing Date : Dec 17 2009

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# 1 Front

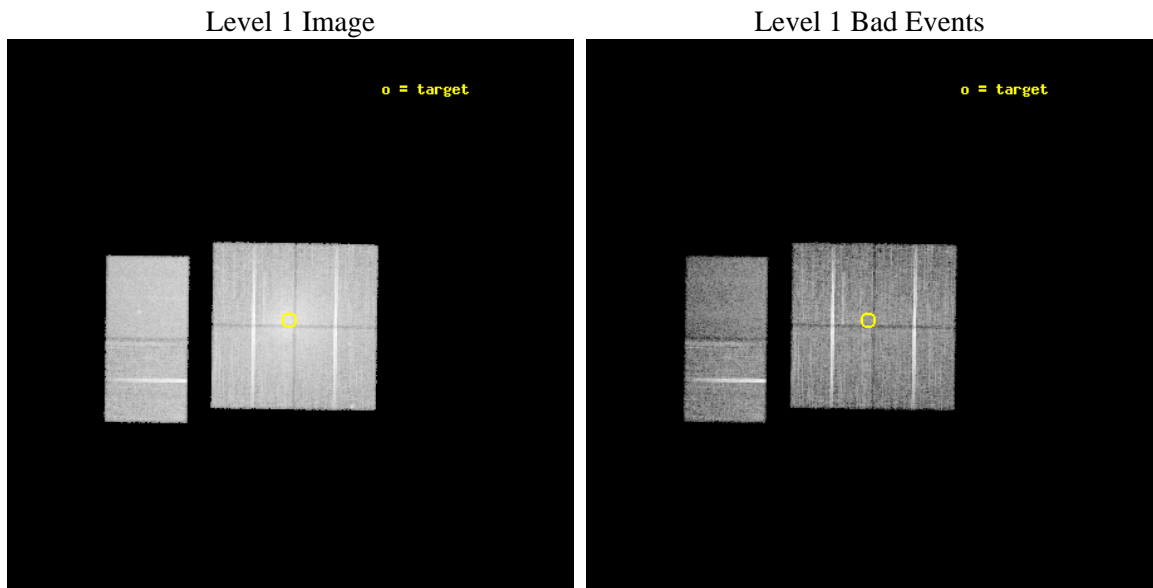
seq_num	880231	Sequence number
obs_id	1281	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	Triang.Austr.	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	249.583333	Observer's specified target RA
dec_targ	-64.356111	Observer's specified target Dec
ra_nom	249.57810525066	Nominal RA
dec_nom	-64.361292490279	Nominal Dec
roll_nom	270.83718587831	Nominal Roll
revision	4	Processing version of data
ontime	11536.000010744	Sum of GTIs [s]
livetime	11389.924232462	Livetime [s]
ontime0	11536.000010744	Sum of GTIs [s]
ontime1	11536.000010744	Sum of GTIs [s]
ontime2	11536.000010744	Sum of GTIs [s]
ontime3	11536.000010744	Sum of GTIs [s]
ontime6	11536.000010744	Sum of GTIs [s]
ontime7	11536.000010744	Sum of GTIs [s]
l2events	247166	Number of level 2 events



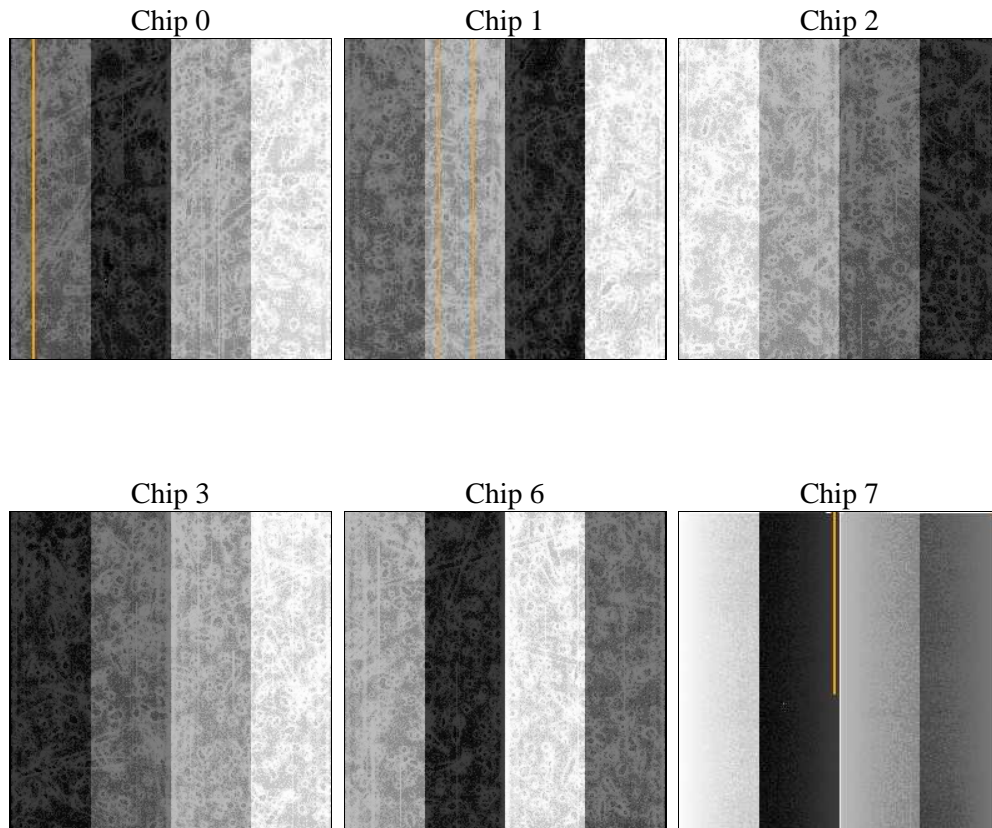
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12500.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	11536.000010744	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime0	11536.000010744	Sum of GTIs [s]
date	2009-12-17T07:31:38	Date and time of file creation	ontime1	11536.000010744	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	11536.000010744	Sum of GTIs [s]
			ontime3	11536.000010744	Sum of GTIs [s]
			ontime6	11536.000010744	Sum of GTIs [s]
			ontime7	11536.000010744	Sum of GTIs [s]
			l1events	821312	Number of level 1 events

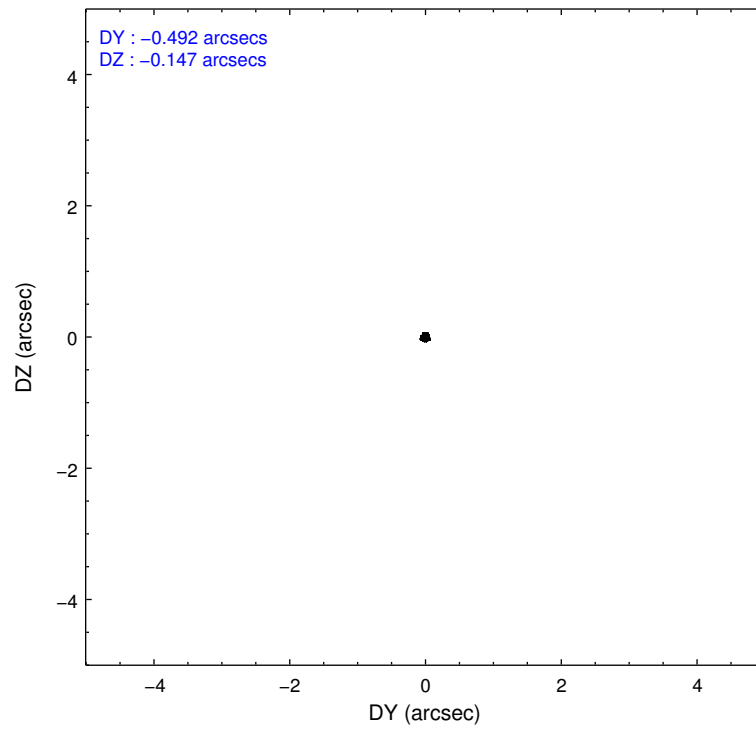
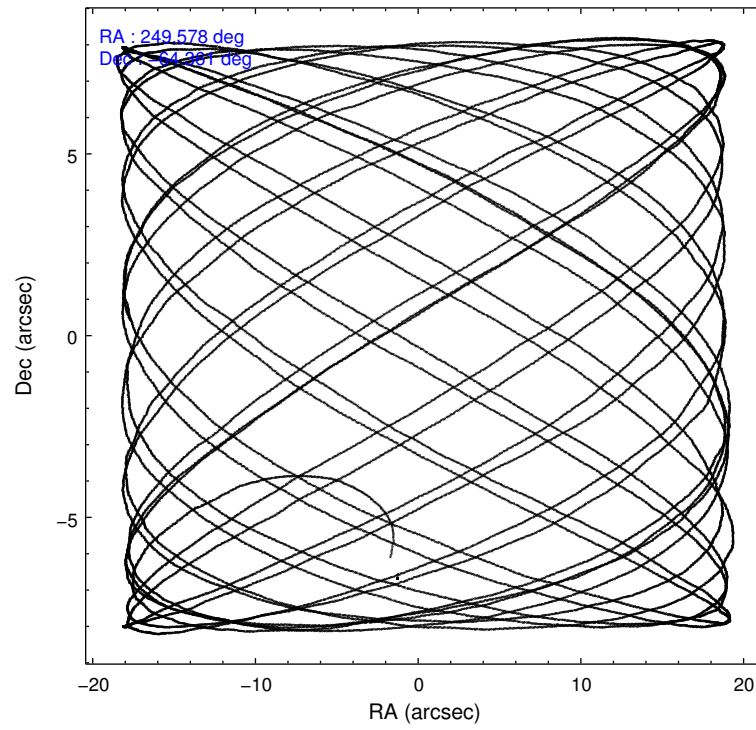
### 2.1.4 Events

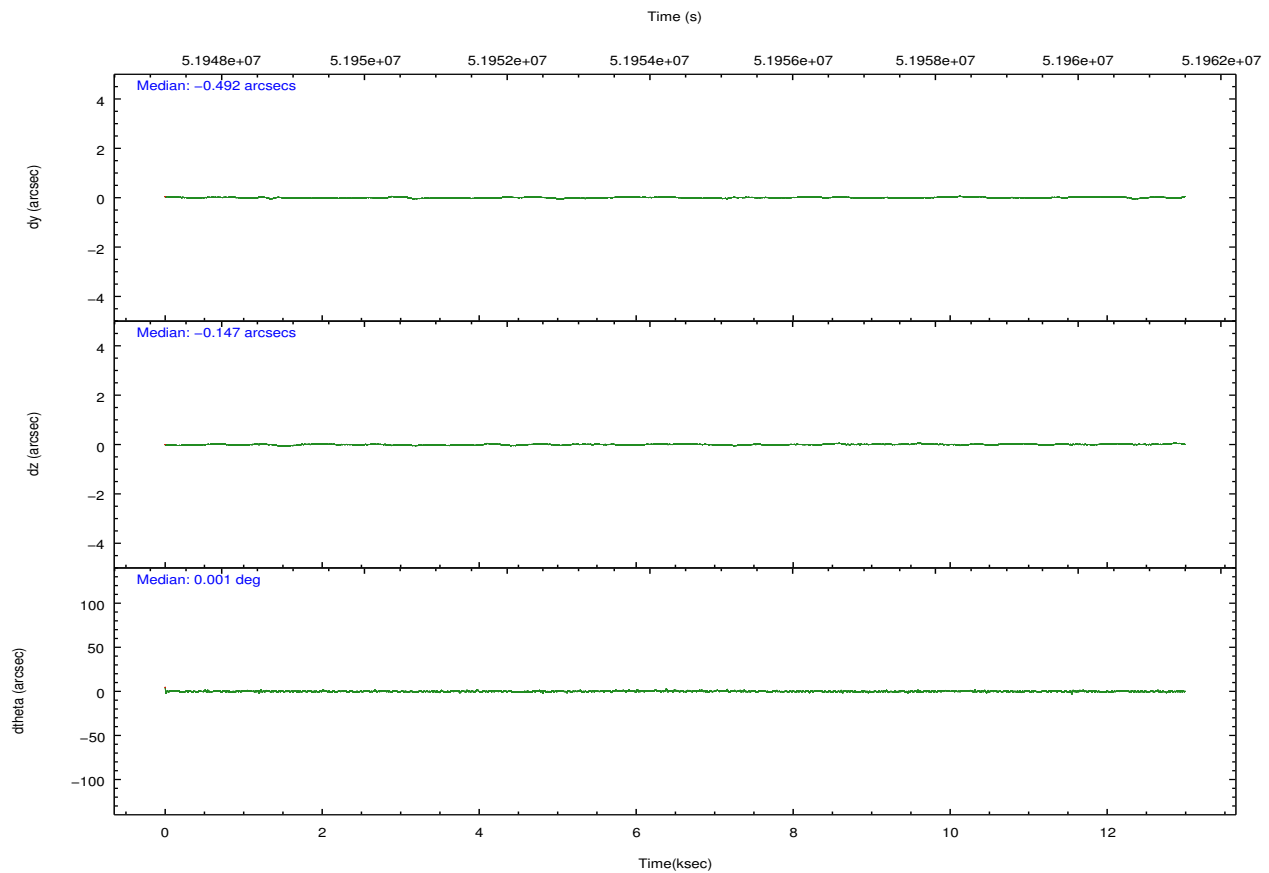
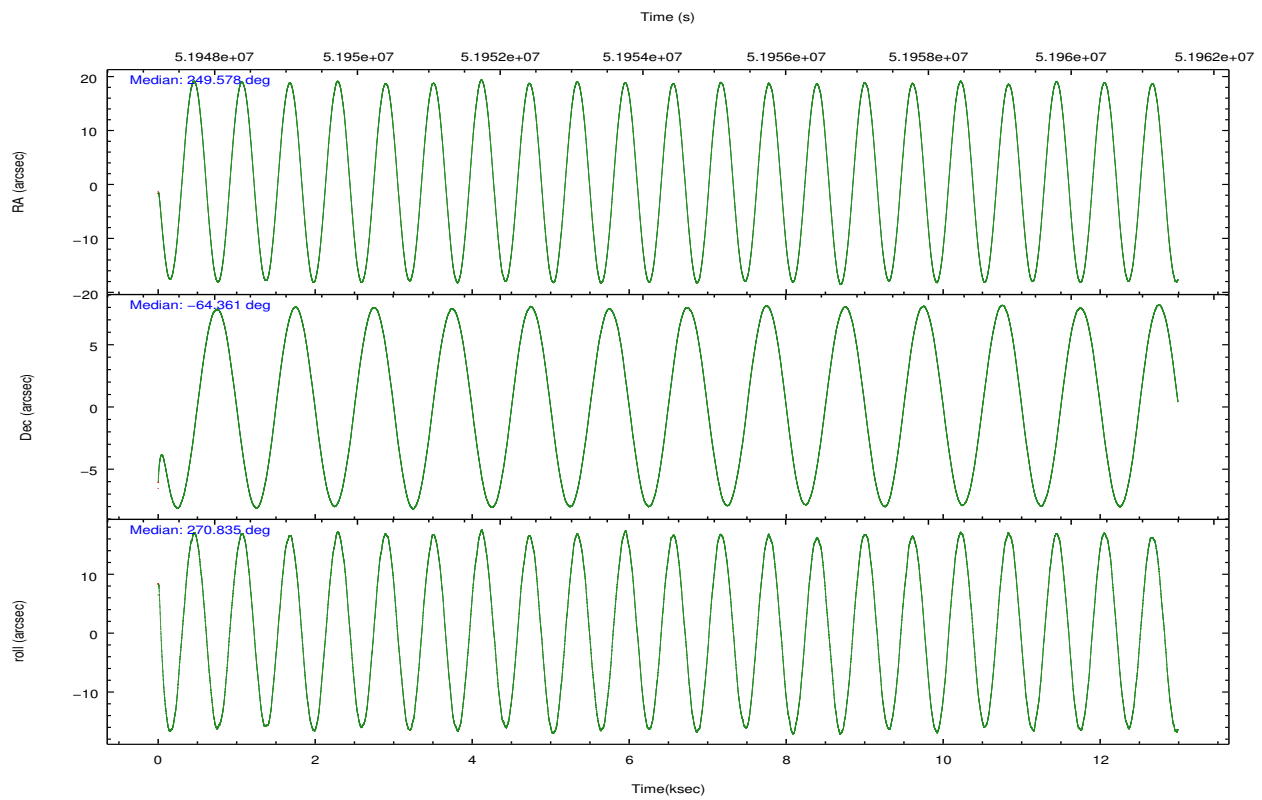
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	133294	147048	150756	150661	110402	129151	grade 0 events	24833	36532	31053	34940	4969	5719
rejected events	95985	94586	105858	101137	97940	70265		18%	24%	20%	23%	4%	4%
rejected %	72%	64%	70%	67%	88%	54%	grade 1 events	150	184	164	171	29	77
								0%	0%	0%	0%	0%	0%
							grade 2 events	5689	7219	6553	6884	3262	9793
								4%	4%	4%	4%	2%	7%
							grade 3 events	2002	2645	2115	2255	1015	5759
								1%	1%	1%	1%	0%	4%
							grade 4 events	1931	2481	2083	2238	940	4975
								1%	1%	1%	1%	0%	3%
							grade 5 events	2862	3202	2614	2834	2923	7616
								2%	2%	1%	1%	2%	5%
							grade 6 events	2862	3597	3107	3218	2279	32648
								2%	2%	2%	2%	2%	25%
							grade 7 events	92965	91188	103067	98121	94985	62564
								69%	62%	68%	65%	86%	48%

## 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	249.546673	249.5781052506578	Subarray requested	NONE	NONE
Pointing Dec	-64.336957	-64.36129249027917	Alternating exposures requested	N	N
Pointing Roll	270.600159	270.837185878315	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7362356599963374			
SIM defocus (mm)	0	0.04611255558364913			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	51948348.184000	51947203.566335			
Observation start date	1999-08-25T06:04:44	1999-08-25T05:46:43			
Observation end time	51960848.184000	51960974.44183			
Observation end date	1999-08-25T09:33:04	1999-08-25T09:36:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect



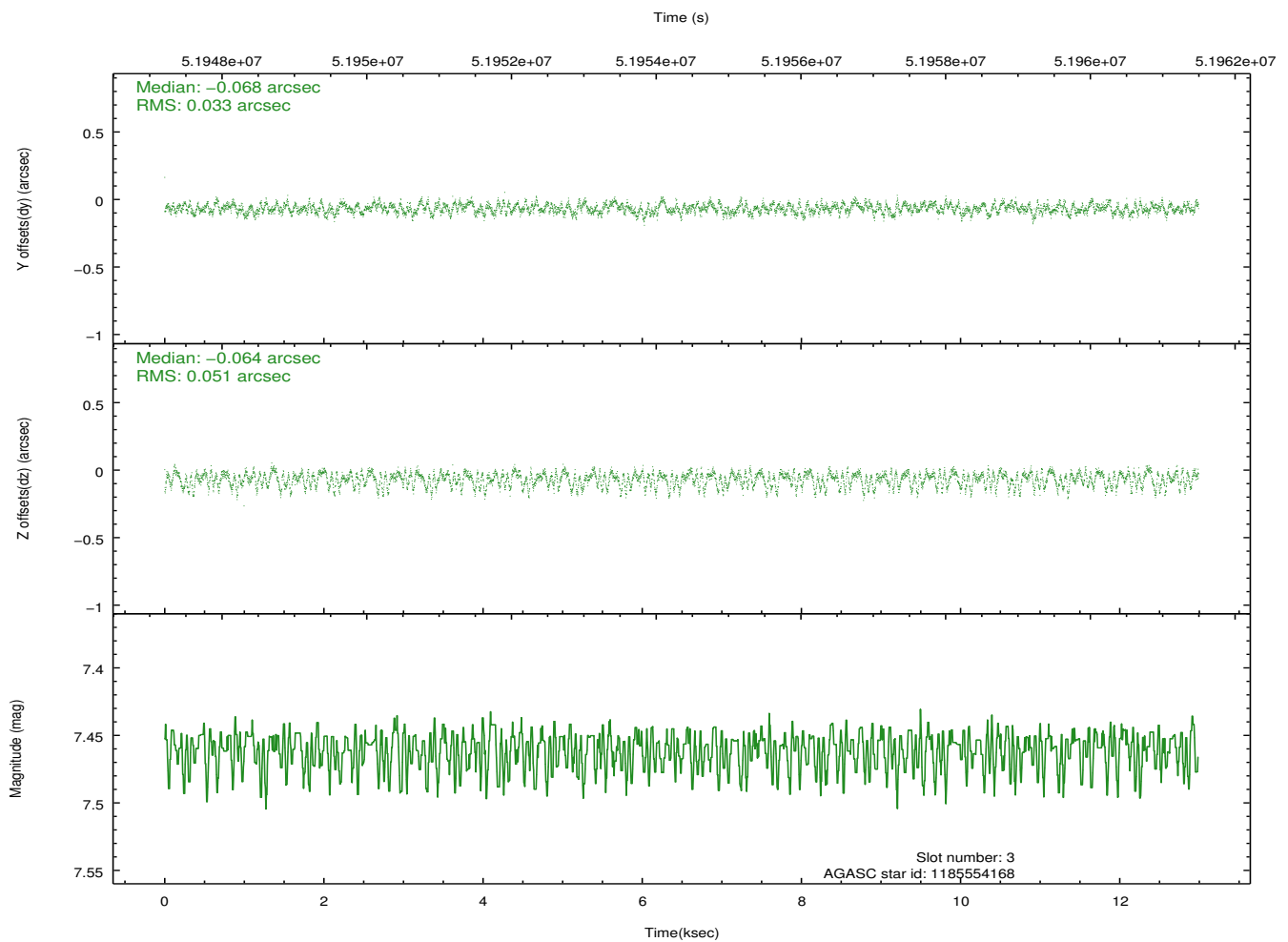
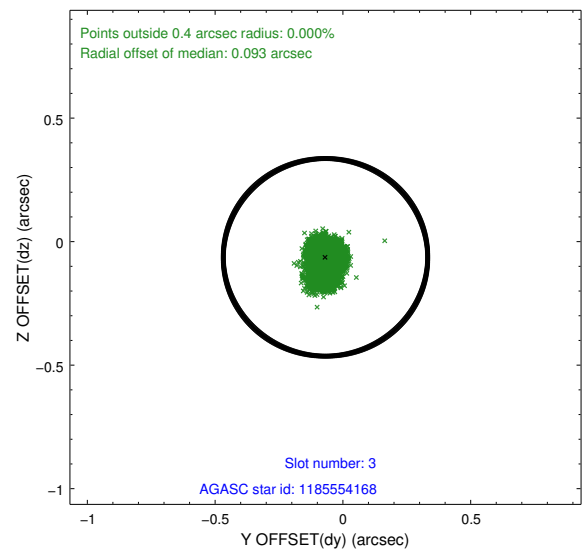
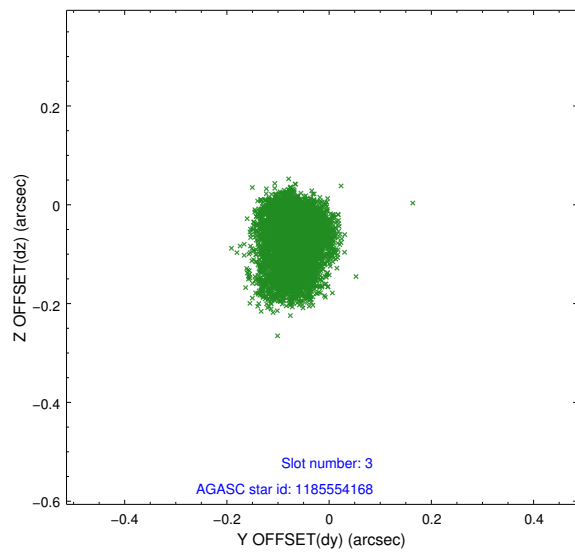


### Slot Statistics

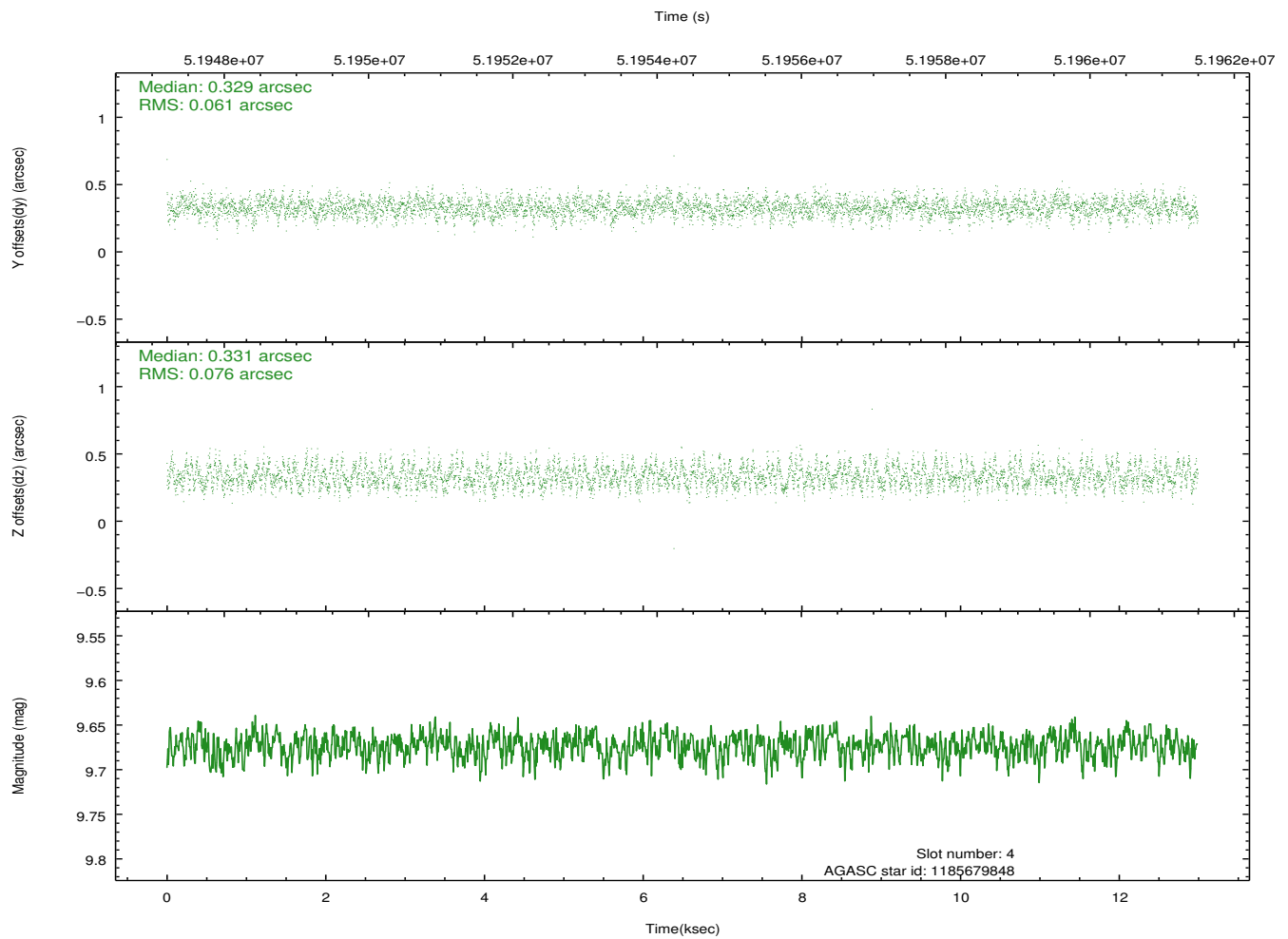
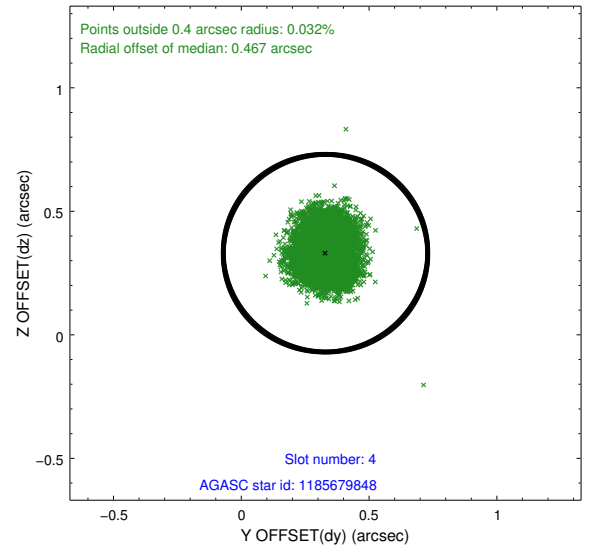
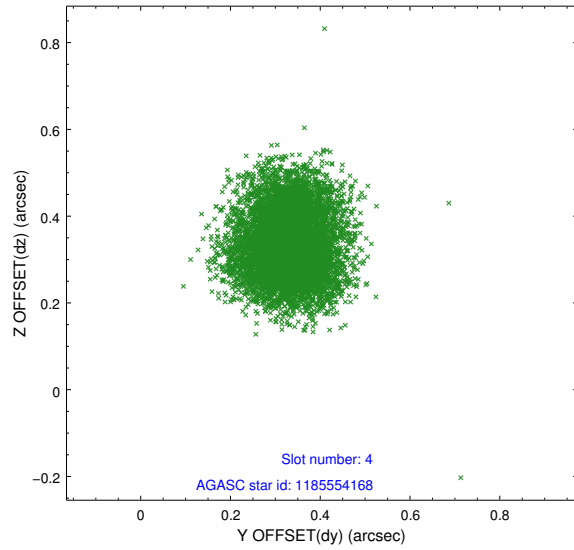
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	6338	-0.033	0.057	0.010	0.016	0.000000	0.000000	-753.87	-829.32
1	FID	ACIS-I-4	7.24	6338	0.141	0.012	0.007	0.013	0.000000	0.000000	2160.43	1076.61
2	FID	ACIS-I-5	7.23	6338	-0.208	-0.001	0.008	0.014	0.000000	0.000000	-1807.63	1074.78
3	GUIDE	1185554168	7.46	6337	-0.068	-0.064	0.063	0.107	248.273316	-63.842249	-1781.96	-2001.50
4	GUIDE	1185679848	9.67	6332	0.329	0.331	0.105	0.164	249.815537	-64.925183	2122.68	388.82
5	GUIDE	1185690296	8.30	6338	-0.226	0.137	0.051	0.084	250.876096	-63.982213	-1233.11	2113.15
6	GUIDE	1185681360	9.57	6335	-0.060	-0.044	0.080	0.126	248.781751	-63.785496	-1990.85	-1194.70
7	BAD	1185681736	7.95	3169	0.043	-0.718	0.047	0.078	249.919561	-65.018920	2461.80	542.05

## 2.4 Star Slots

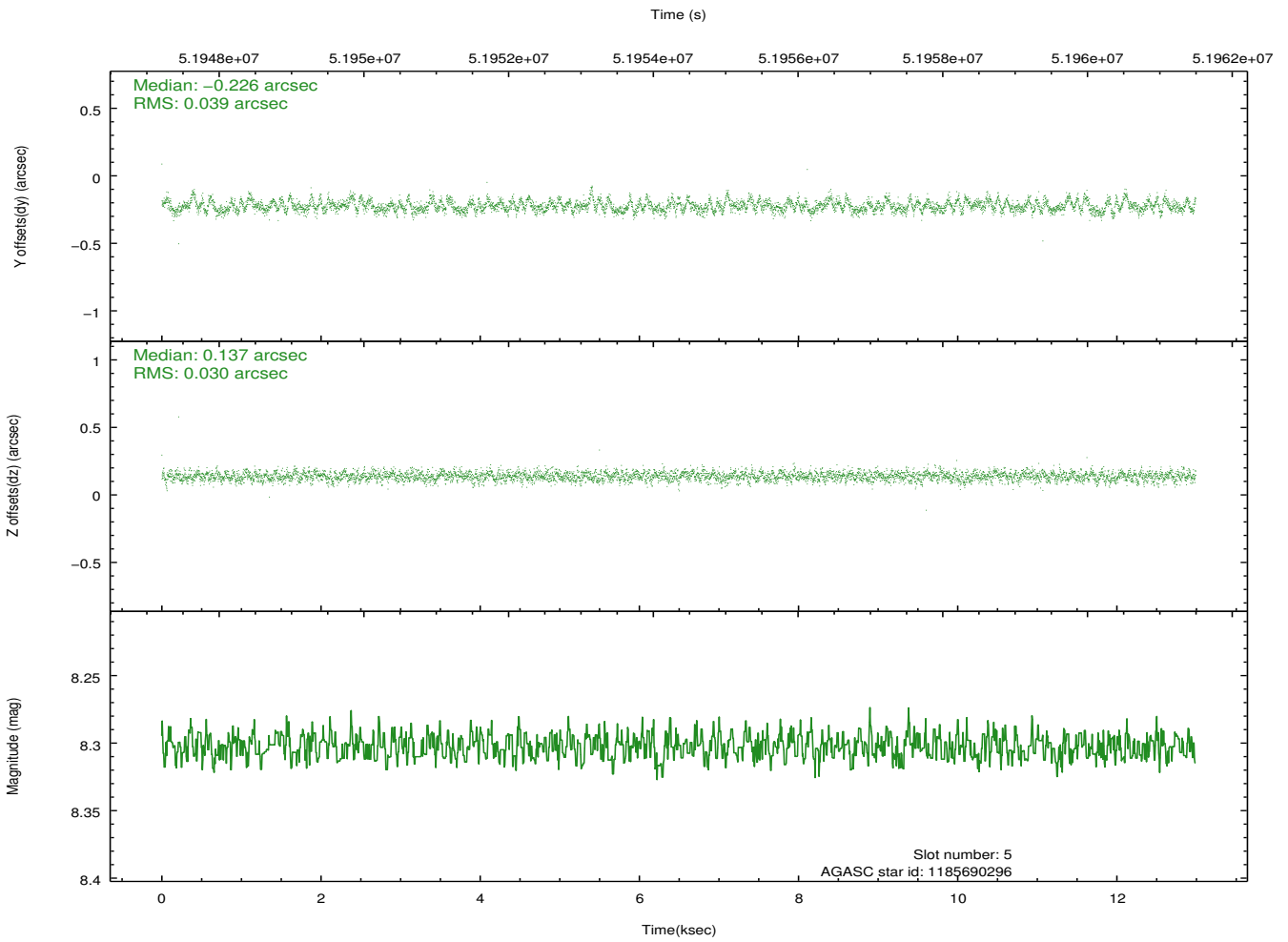
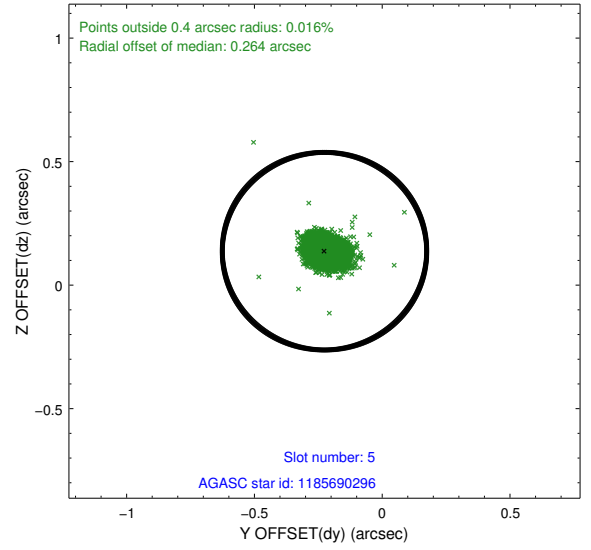
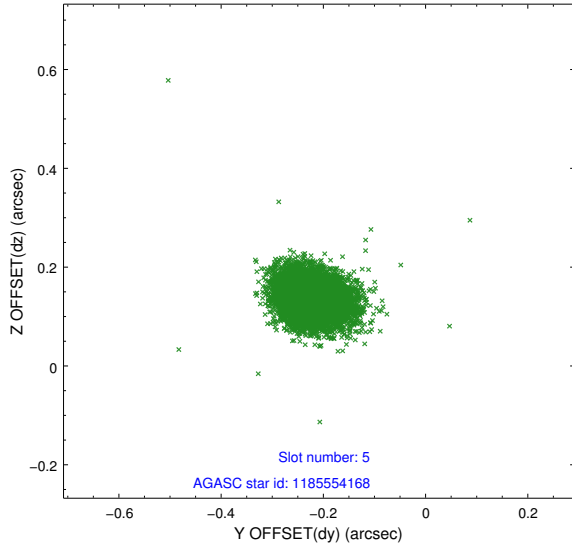
### 2.4.1 Slot 3



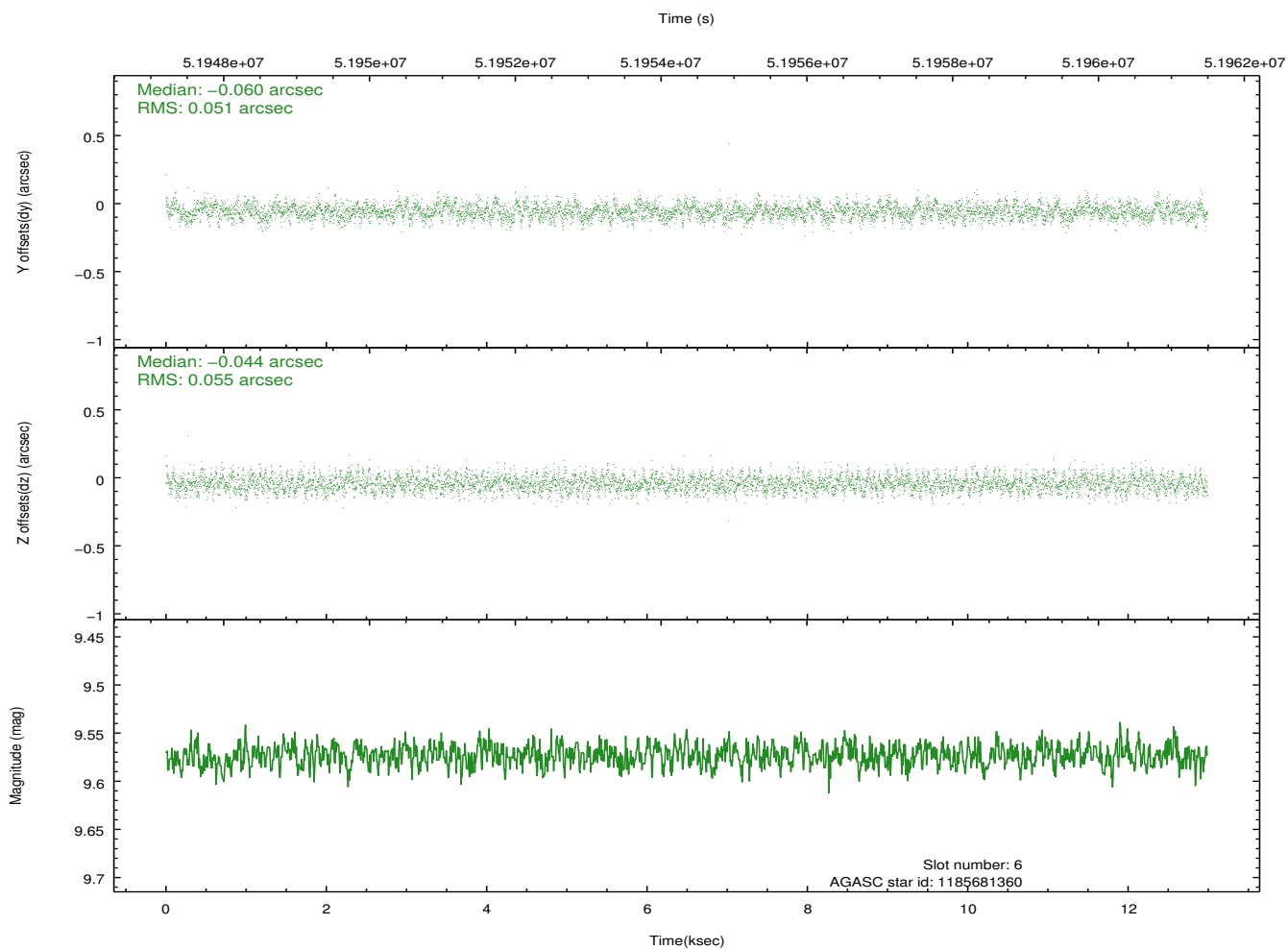
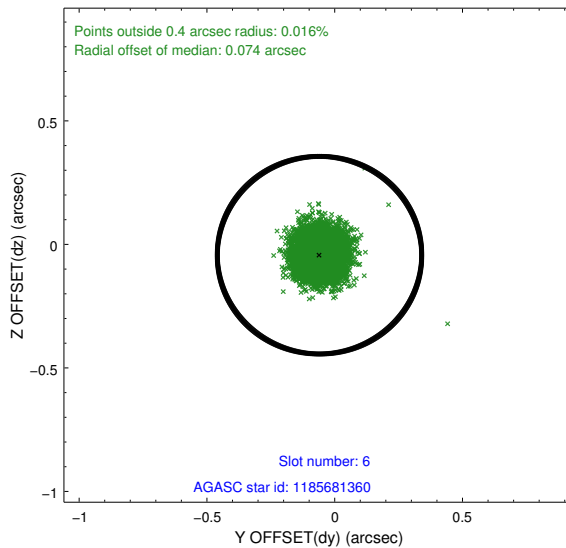
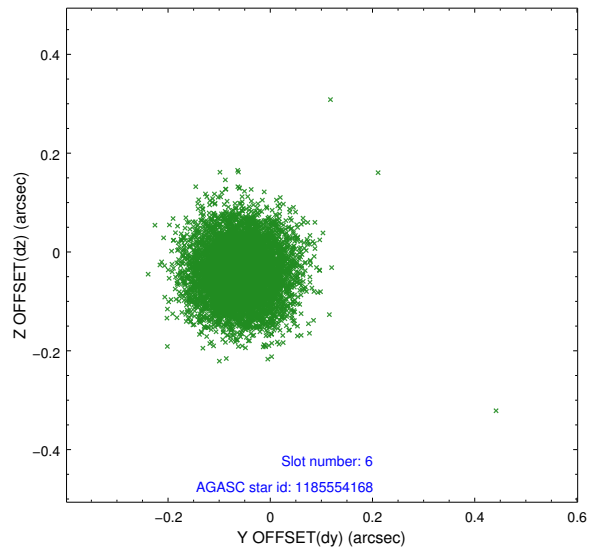
## 2.4.2 Slot 4



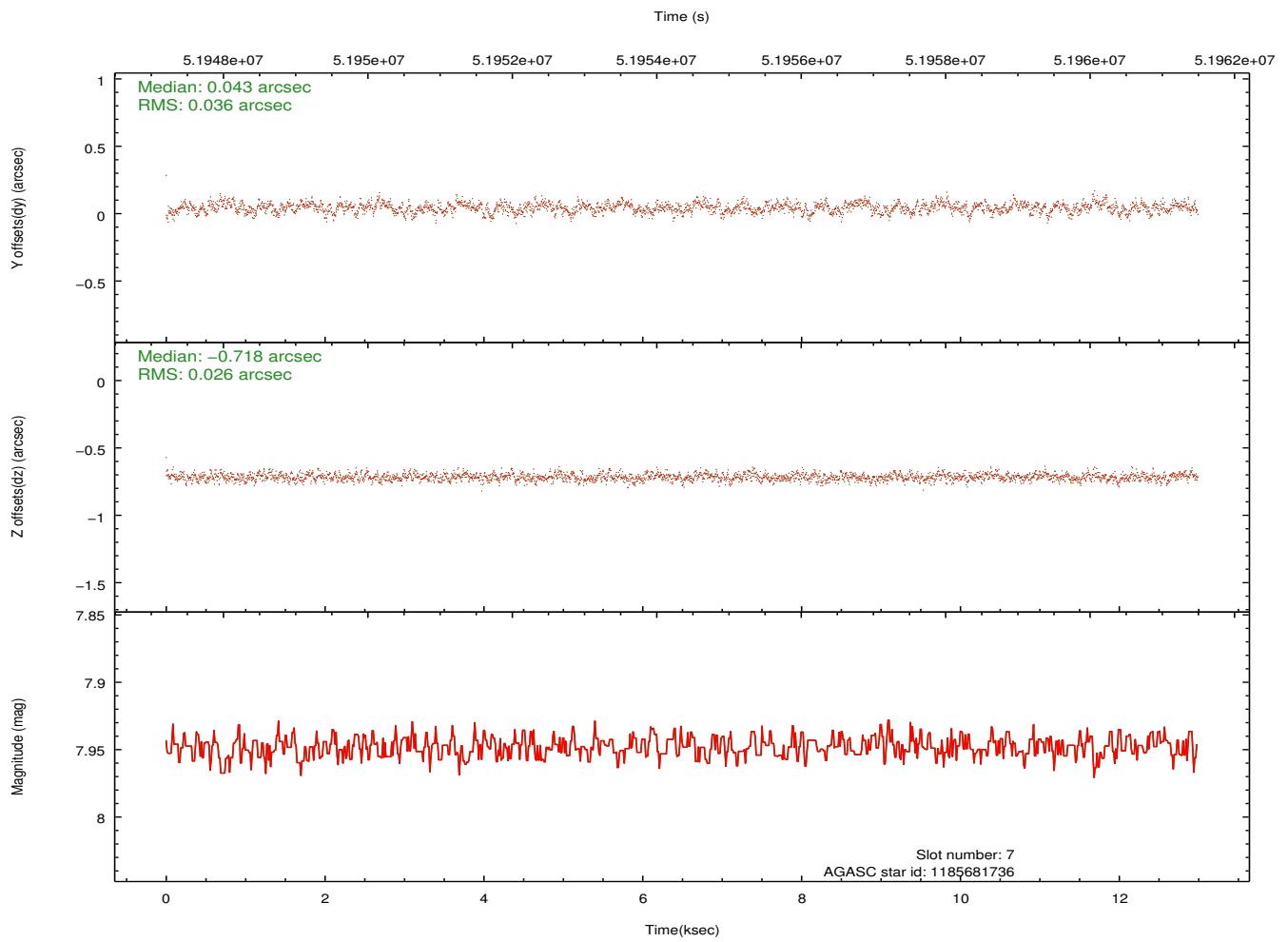
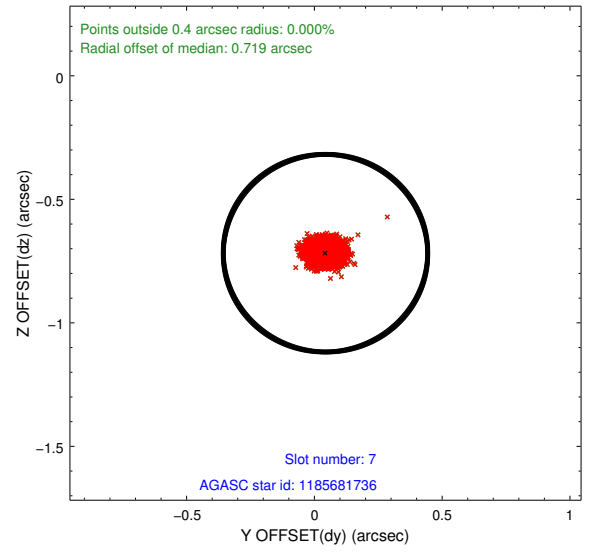
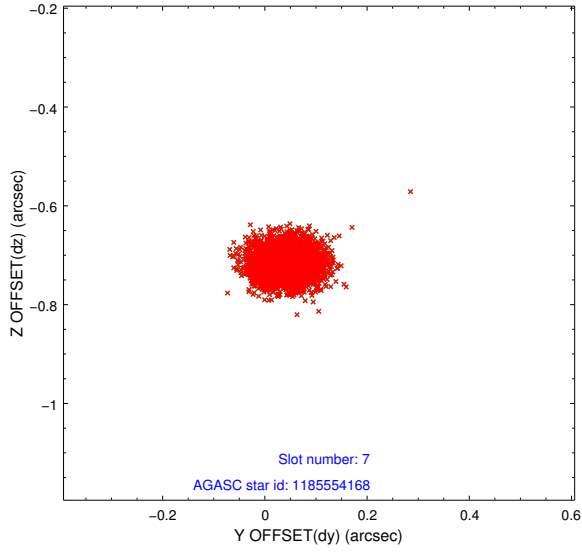
### 2.4.3 Slot 5



## 2.4.4 Slot 6

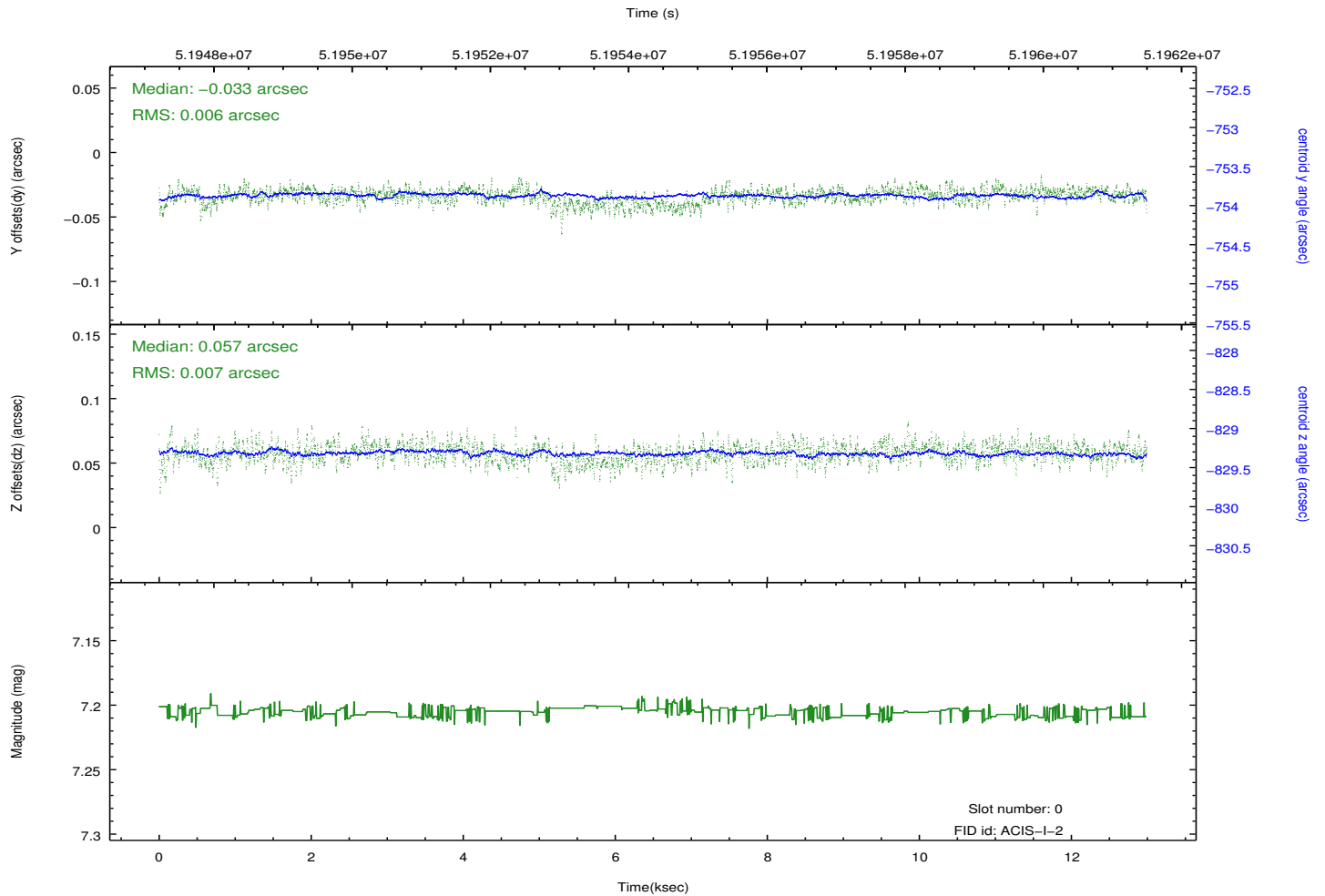
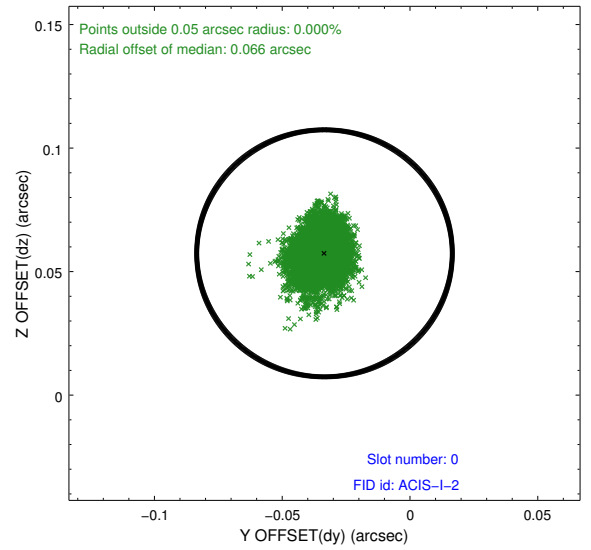
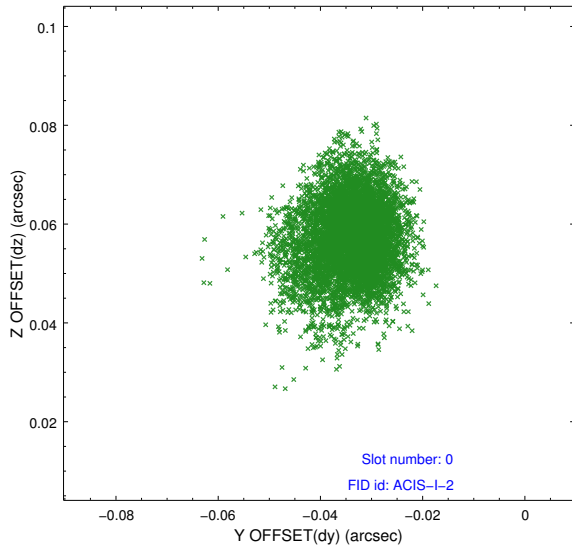


## 2.4.5 Slot 7

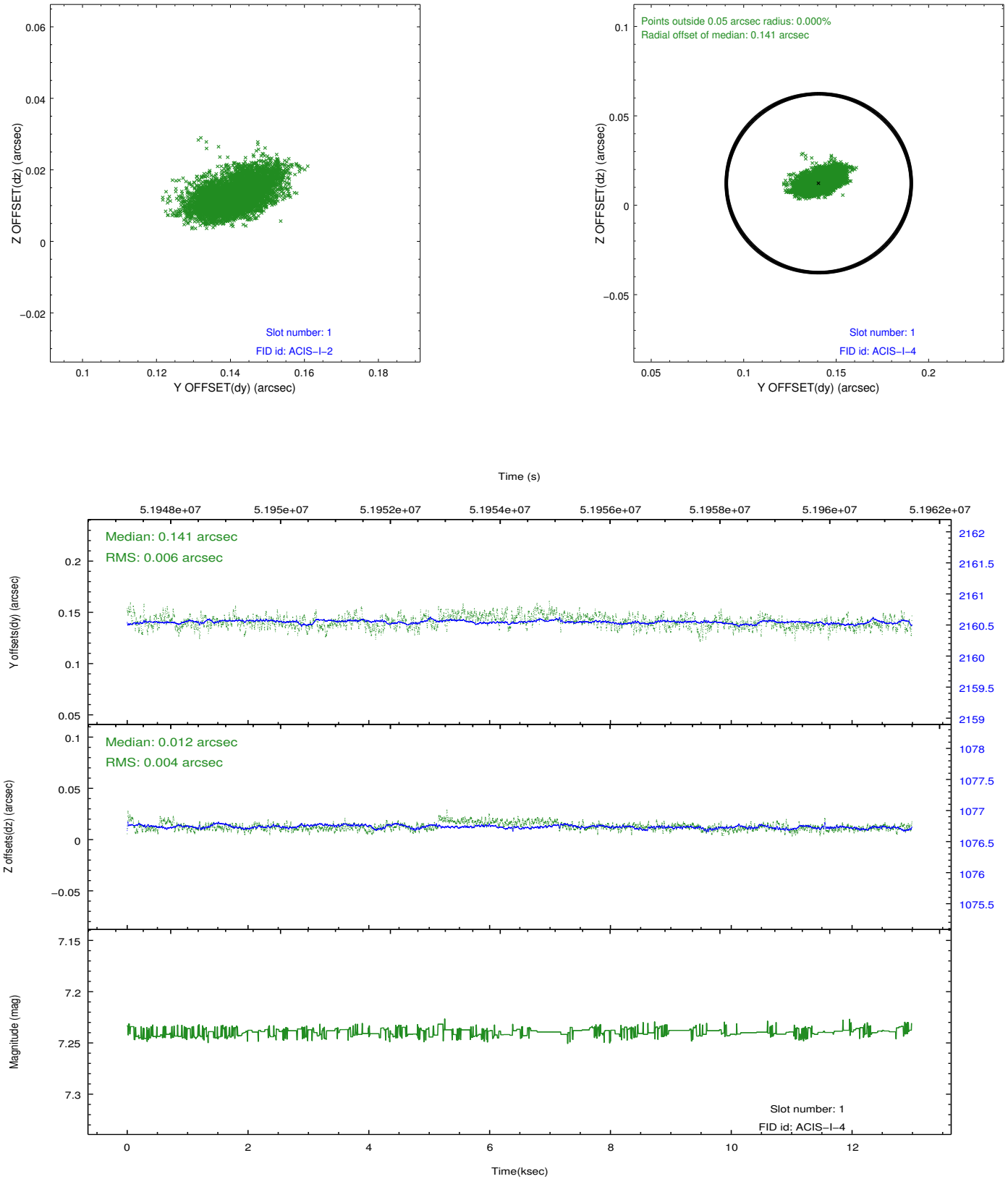


## 2.5 FID Slots

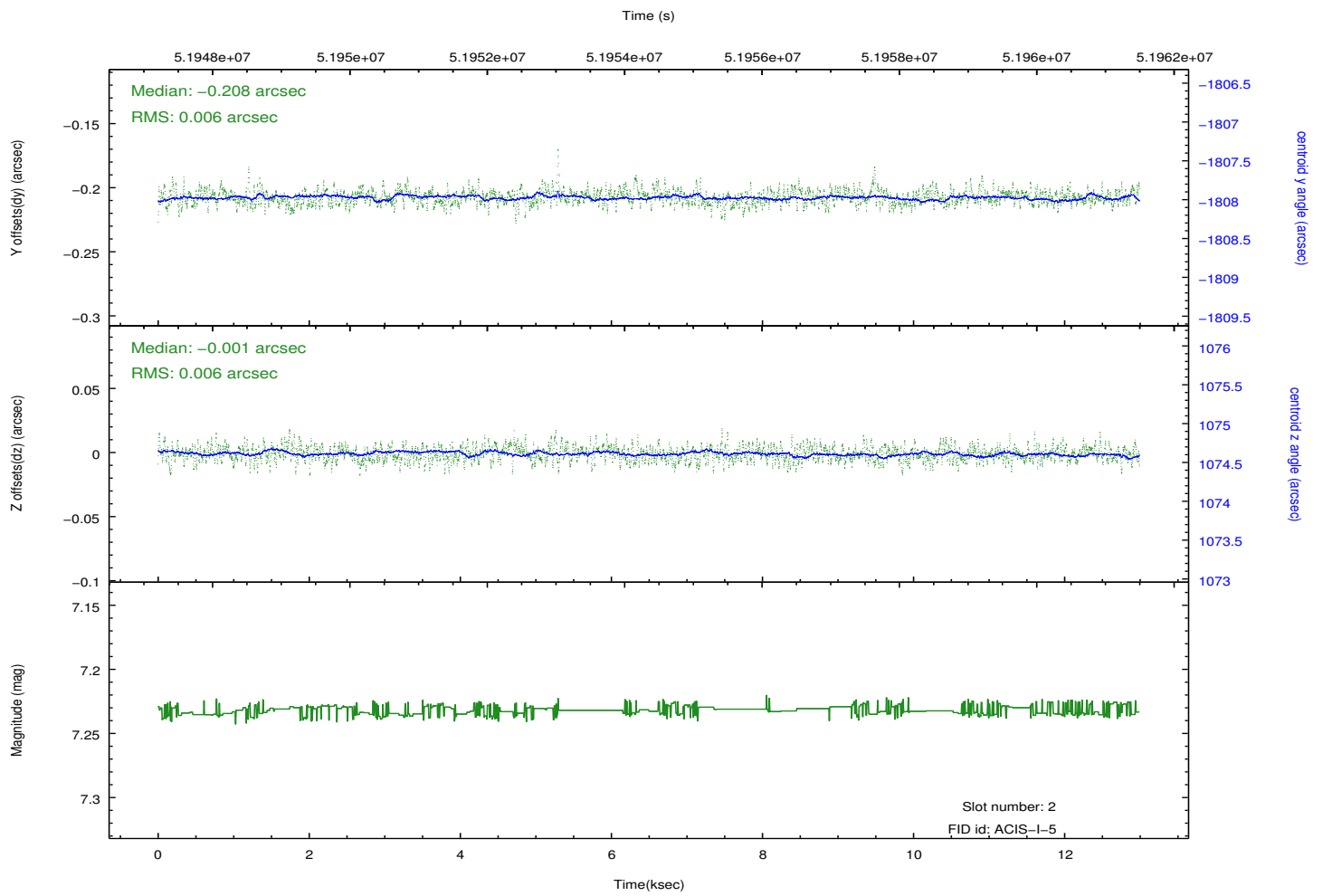
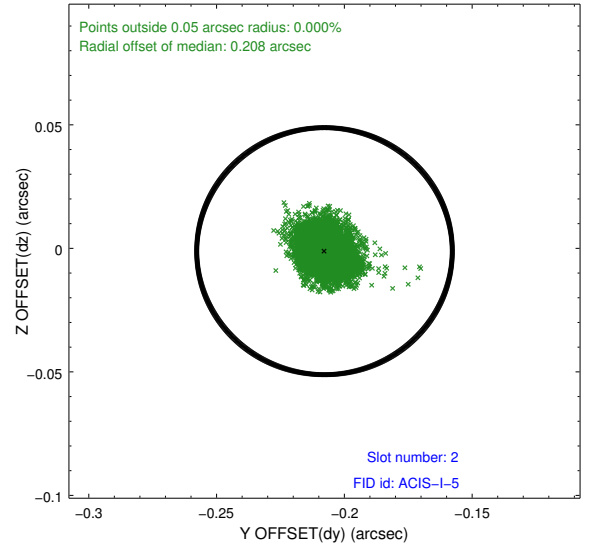
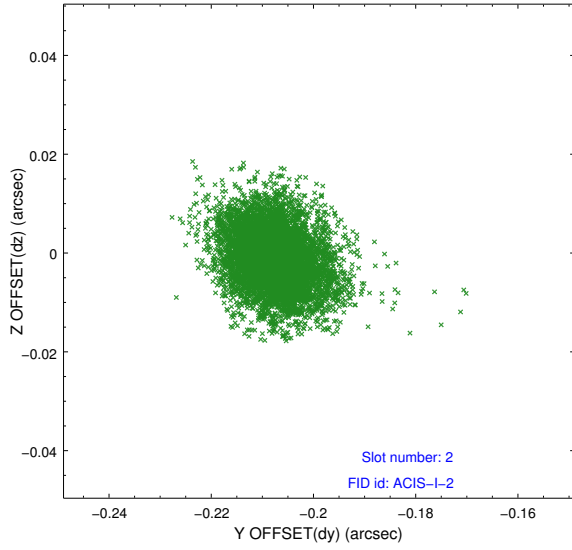
### 2.5.1 Slot 0



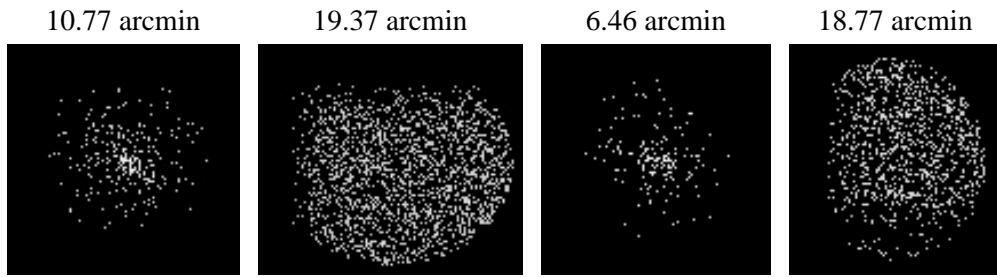
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.529

## A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one fid light or guide star from the solution.

===

The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T\_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

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.