

# V&V Reference Report

## L2 ASCDS Version : 10.2.1

Observation 16470 - L2 Version 2  
Chandra X-Ray Center

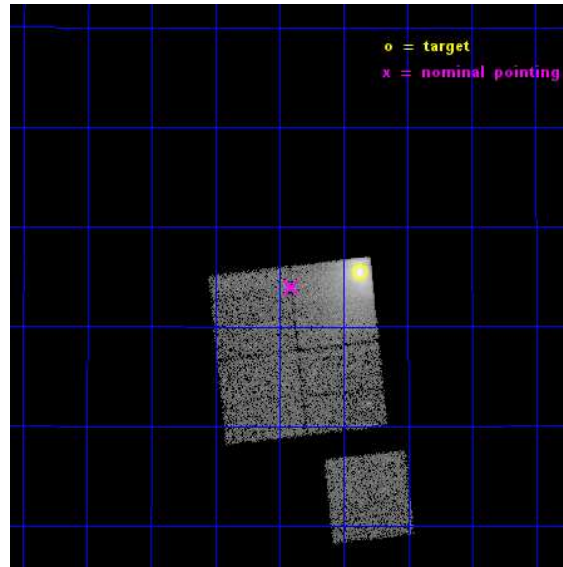
L2 Processing Date : Dec 10 2014

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# 1 Front

seq_num	890092	Sequence number
obs_id	16470	Observation id
title	AO-15 Calibration Observations of A1795	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	A1795	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219583	Observer's specified target RA [deg]
dec_targ	26.590833	Observer's specified target Dec [deg]
ra_nom	207.35212165367	Nominal RA [deg]
dec_nom	26.56575737581	Nominal Dec [deg]
roll_nom	173.72012691952	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14773.596575677	Sum of GTIs [s]
livetime	14580.568660253	Livetime [s]
ontime0	14773.596575677	Sum of GTIs [s]
ontime1	14767.355525196	Sum of GTIs [s]
ontime2	14773.678655684	Sum of GTIs [s]
ontime3	14773.719695687	Sum of GTIs [s]
ontime6	14773.555535674	Sum of GTIs [s]
l2events	86303	Number of level 2 events

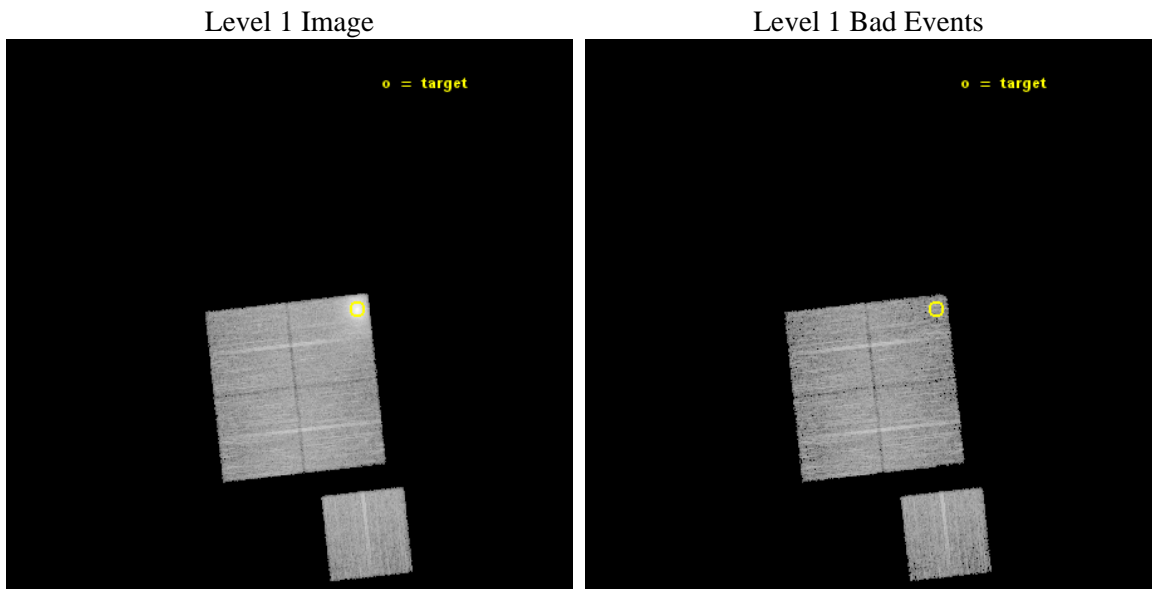




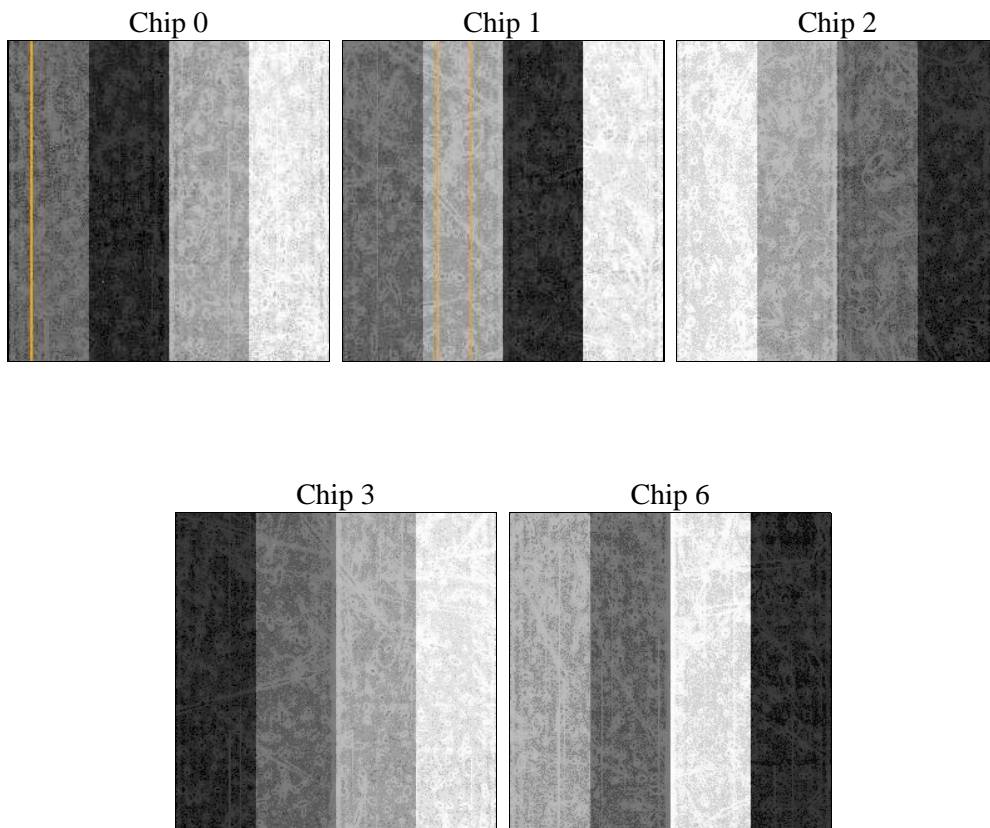
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	14773.596575677	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime0	14773.596575677	Sum of GTIs [s]
date	2014-12-11T03:28:34	Date and time of file creation	ontime1	14767.355525196	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	14773.678655684	Sum of GTIs [s]
			ontime3	14773.719695687	Sum of GTIs [s]
			ontime6	14773.555535674	Sum of GTIs [s]
			l1events	387028	Number of level 1 events

### 2.1.4 Events

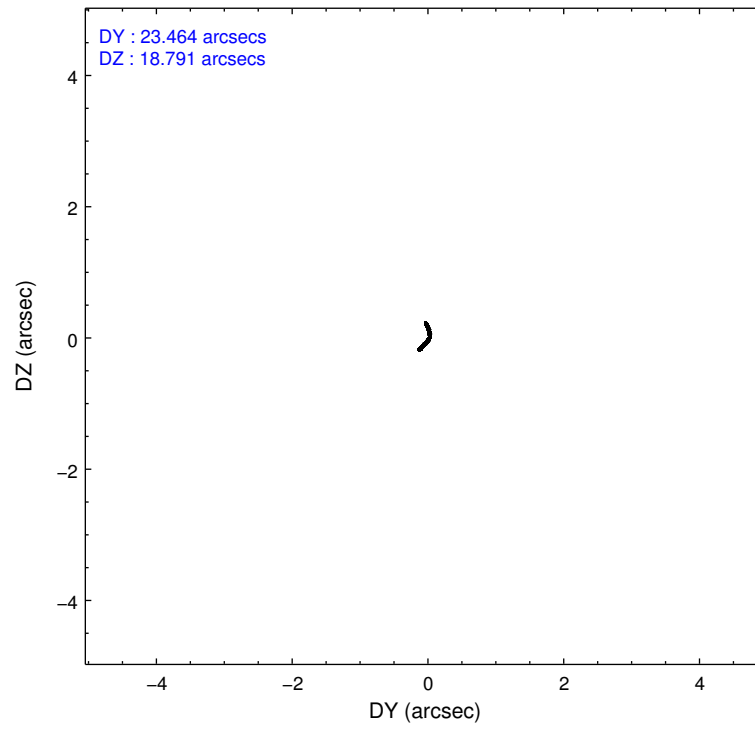
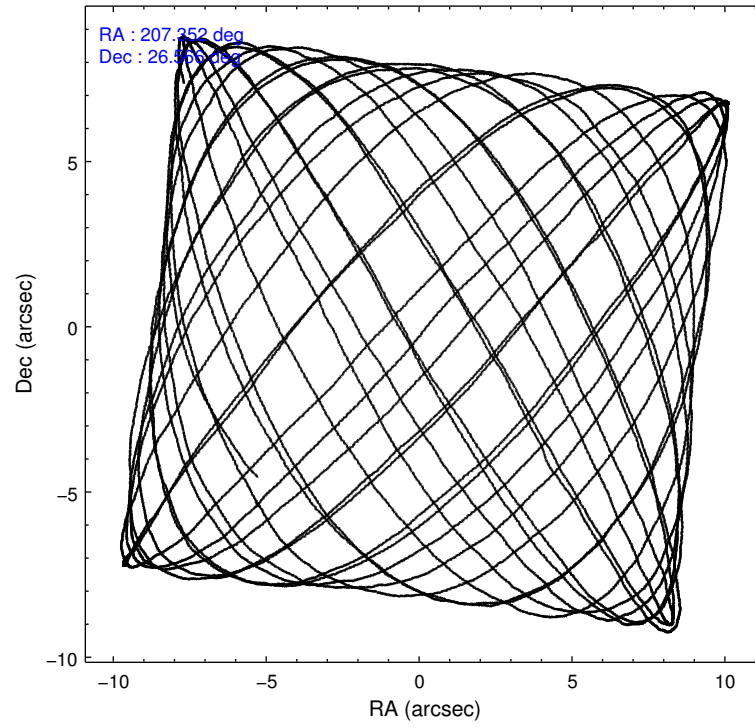
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	115634	65189	69552	68659	67994
rejected events	54720	55093	60342	60633	59687
rejected %	47%	84%	86%	88%	87%

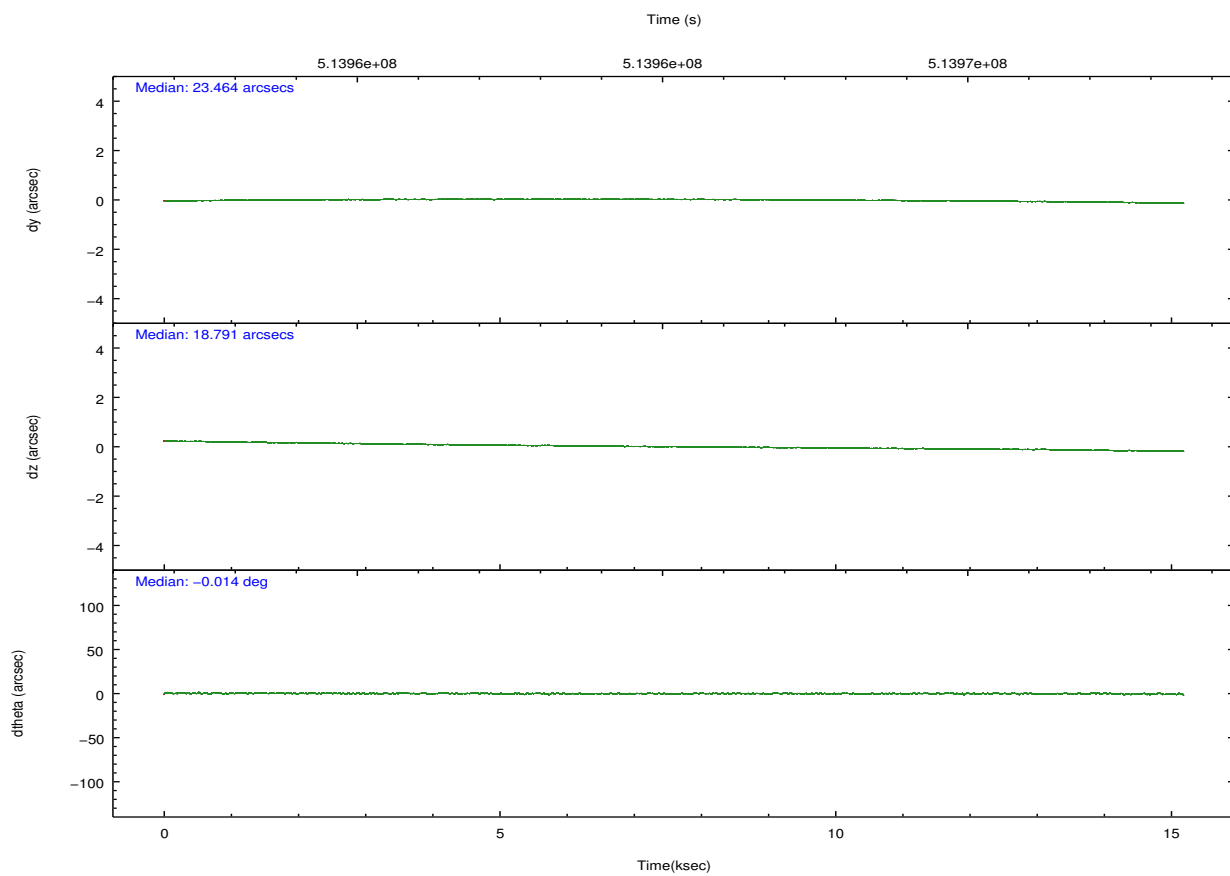
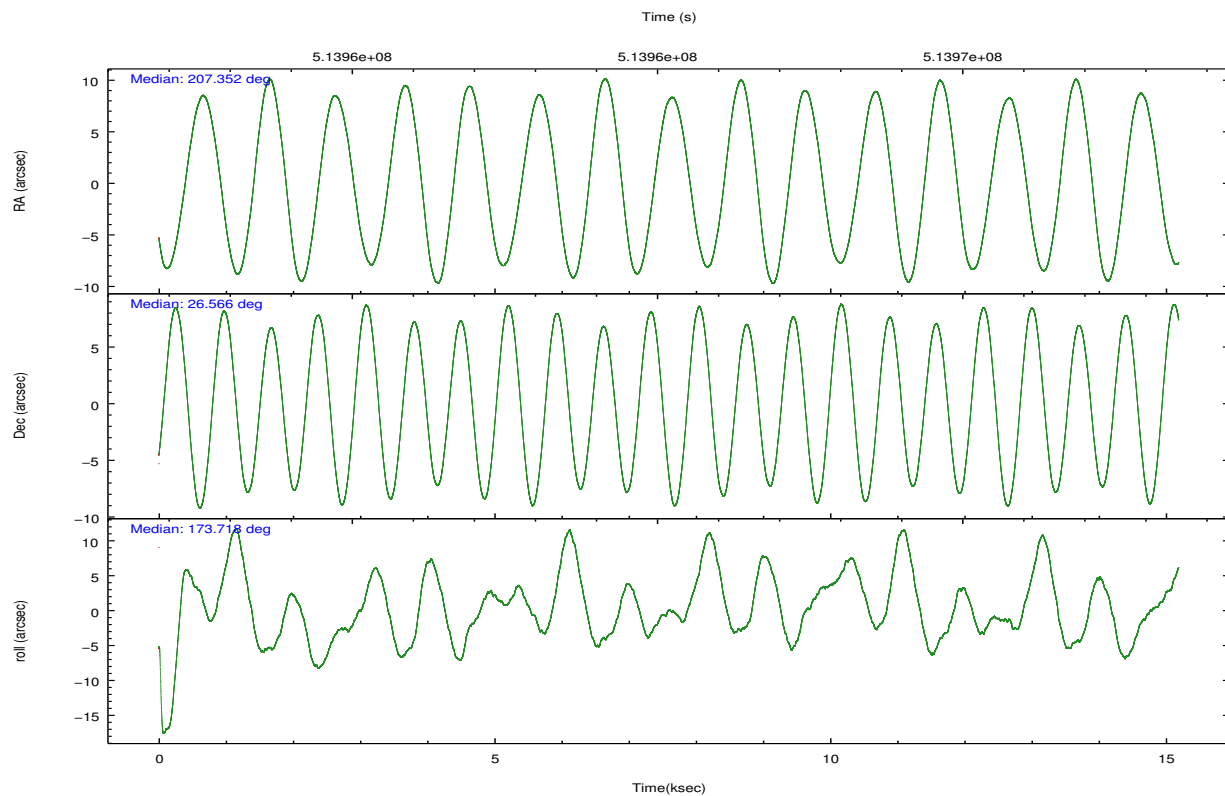
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	44346	3859	3762	2851	2713
	38%	5%	5%	4%	3%
grade 1 events	195	35	49	39	30
	0%	0%	0%	0%	0%
grade 2 events	7820	2371	2075	1793	1920
	6%	3%	2%	2%	2%
grade 3 events	2678	920	808	844	847
	2%	1%	1%	1%	1%
grade 4 events	2706	967	920	834	883
	2%	1%	1%	1%	1%
grade 5 events	3359	3660	3175	3868	3741
	2%	5%	4%	5%	5%
grade 6 events	3394	1984	1651	1709	1950
	2%	3%	2%	2%	2%
grade 7 events	51136	51393	57112	56721	55910
	44%	78%	82%	82%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	207.380244	207.3521216536675	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.576904	26.56575737580952	Alternating exposures requested	N	N
[deg] Pointing Roll	173.498853	173.720126919522	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	512697667.184000	512697667.184000			
[s] Window stop time (MET)	515203267.184000	515203267.184000			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-254.359963	-254.3657361129205			
[mm] SIM translation stage offset	20.7675	20.77328310999084			
[s] Observation start time (MET)	513957781.184000	513957405.87898			
Observation start date	2014-04-15T14:01:54	2014-04-15T13:56:45			
[s] Observation end time (MET)	513972781.184000	513973980.64237			
Observation end date	2014-04-15T18:11:54	2014-04-15T18:33:00			
Read mode	TIMED	TIMED			

## 2.3 Aspect



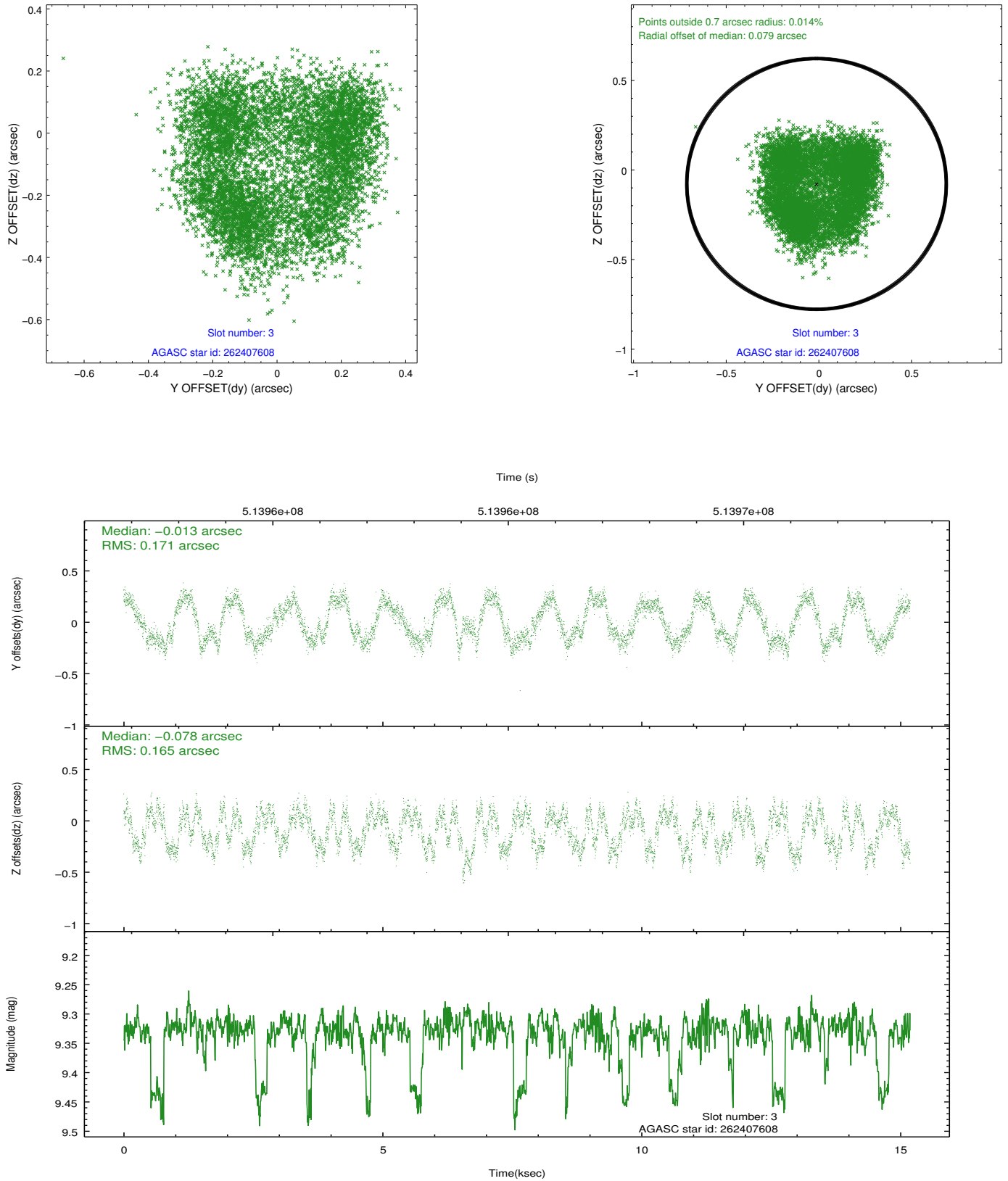


### Slot Statistics

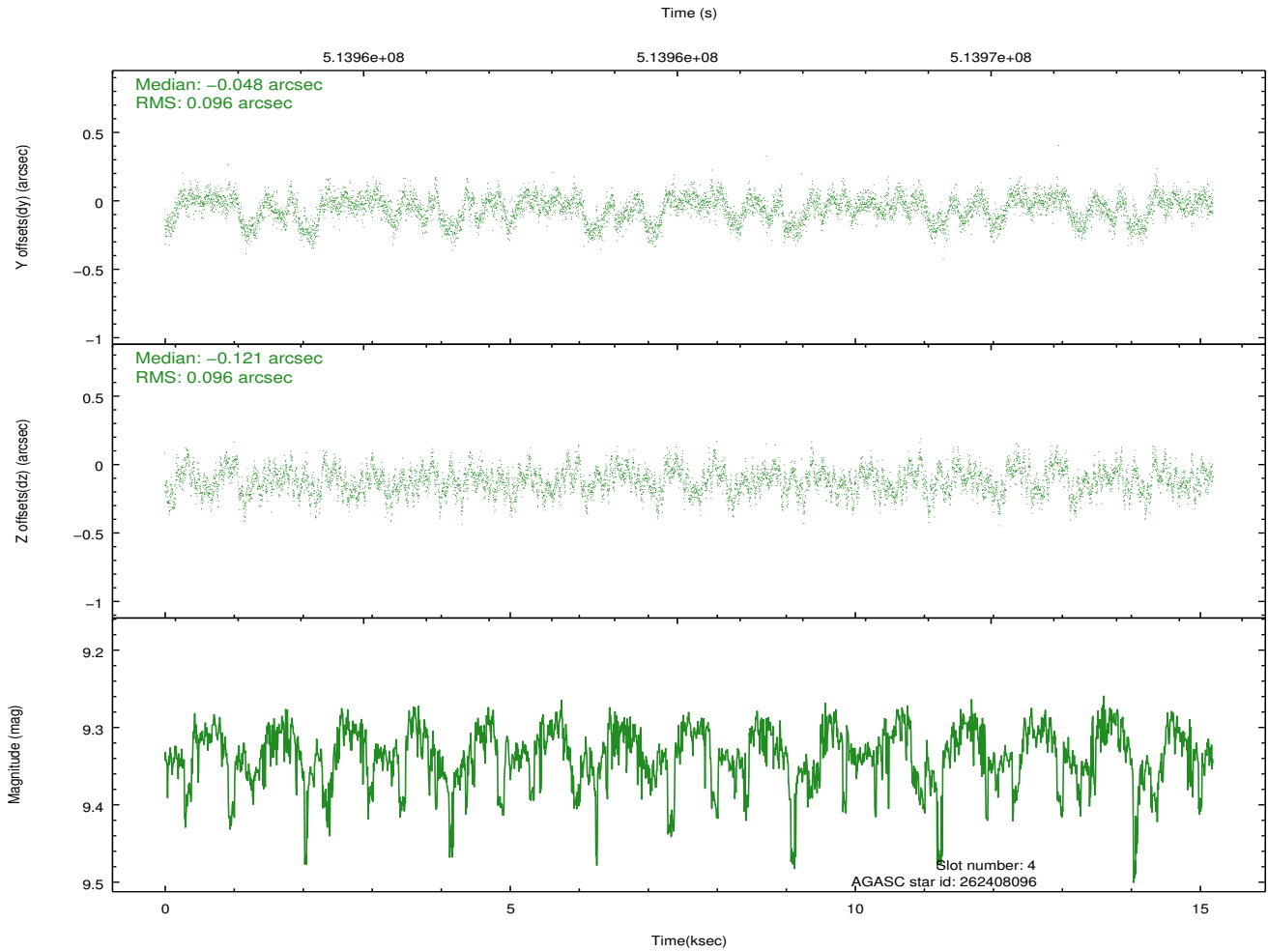
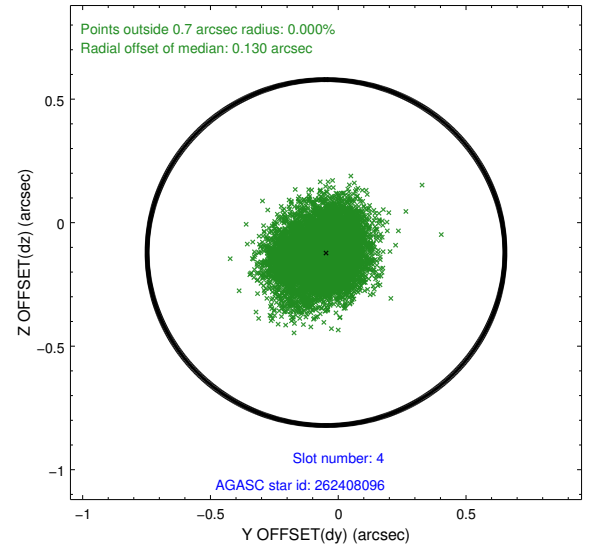
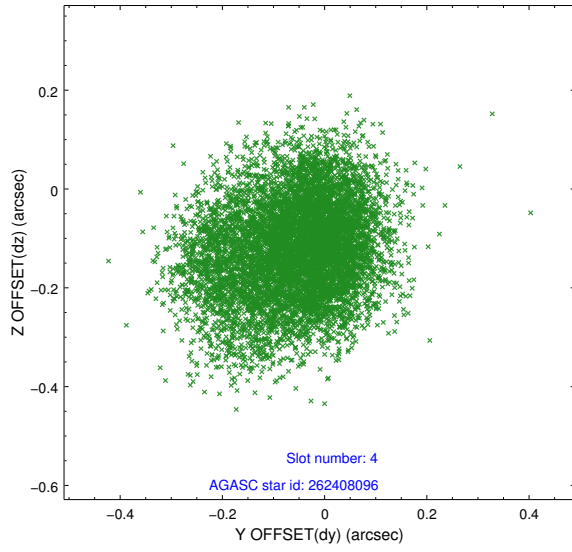
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.15	3705	-0.129	-0.560	0.010	0.018	0.000000	0.000000	-777.02	-424.79
1	FID		ACIS-I-4	7.11	3705	0.257	0.220	0.006	0.011	0.000000	0.000000	2136.90	1482.71
2	FID		ACIS-I-5	7.12	3705	-0.228	0.407	0.009	0.015	0.000000	0.000000	-1831.98	1482.32
3	GUIDE	used	262407608	9.33	7403	-0.013	-0.078	0.263	0.347	207.378401	26.435507	-51.61	506.82
4	GUIDE	used	262408096	9.33	7401	-0.048	-0.121	0.147	0.231	207.011678	26.515421	1155.54	352.91
5	GUIDE	used	262408512	7.99	7409	0.051	0.186	0.085	0.142	207.800210	27.128796	-1111.13	-2127.98
6	GUIDE	used	262408936	9.67	7403	0.101	0.016	0.159	0.306	207.154731	26.726554	781.54	-453.47
7	GUIDE	used	262414456	9.28	7400	-0.099	-0.003	0.123	0.192	208.043290	26.129682	-2310.78	1352.11

## 2.4 Star Slots

### 2.4.1 Slot 3

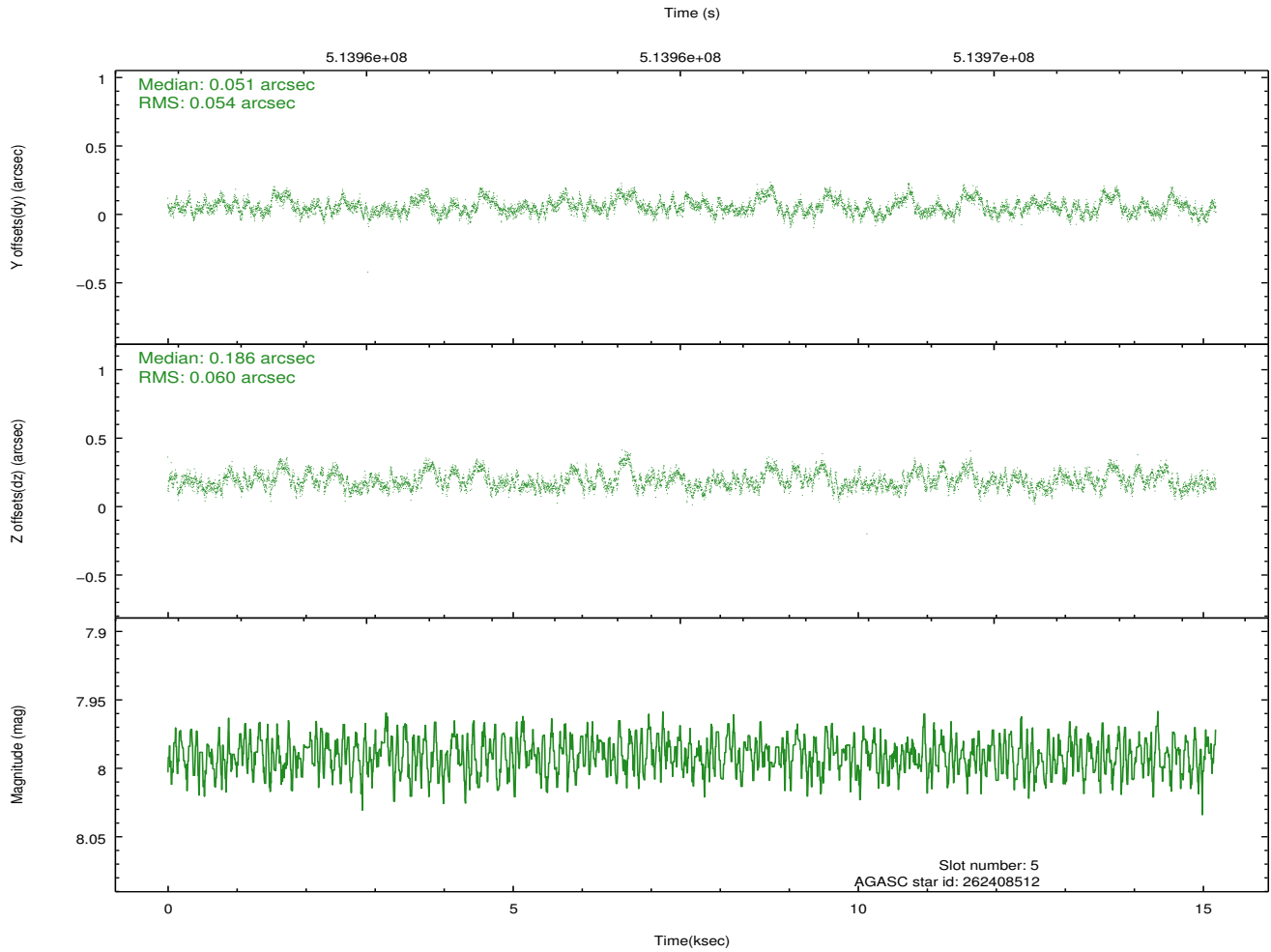
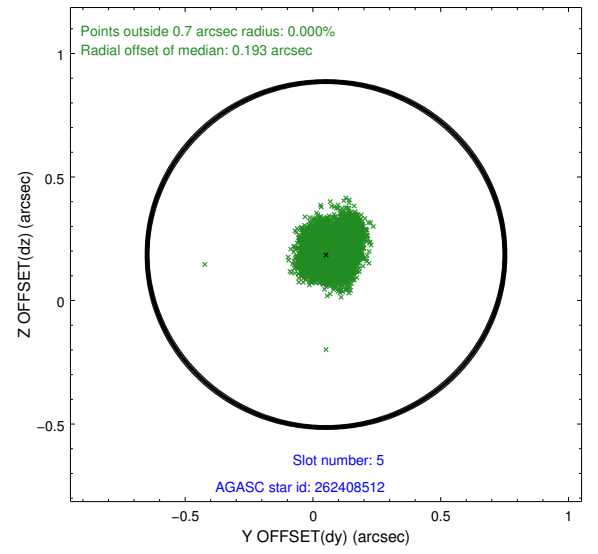
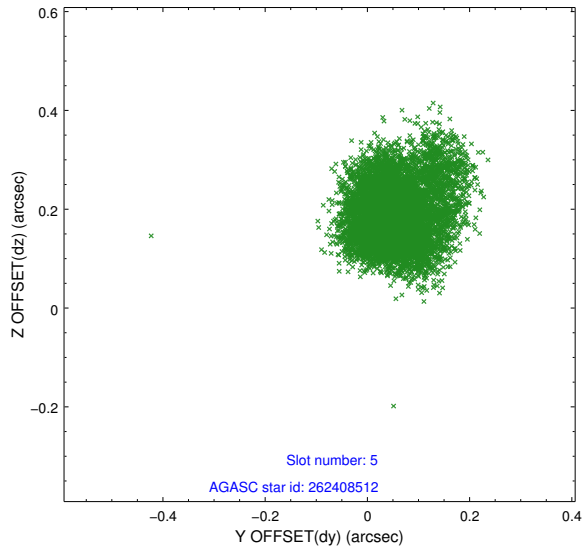


## 2.4.2 Slot 4

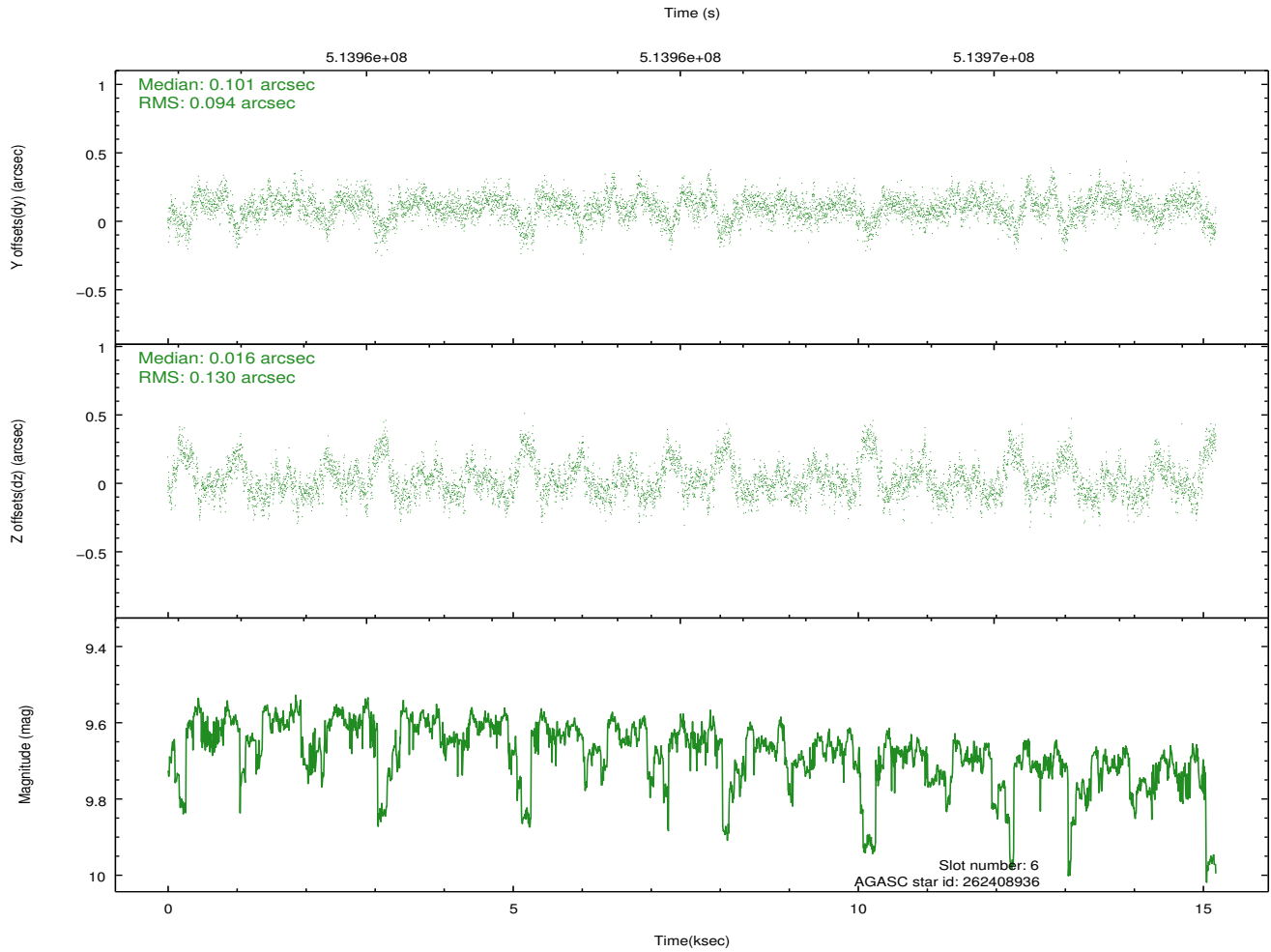
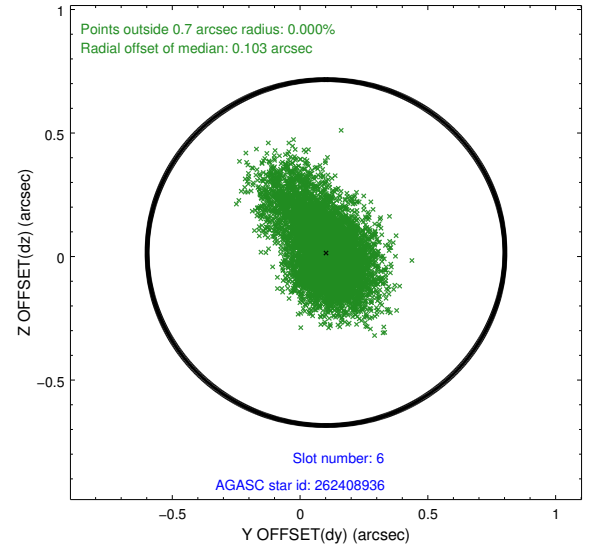
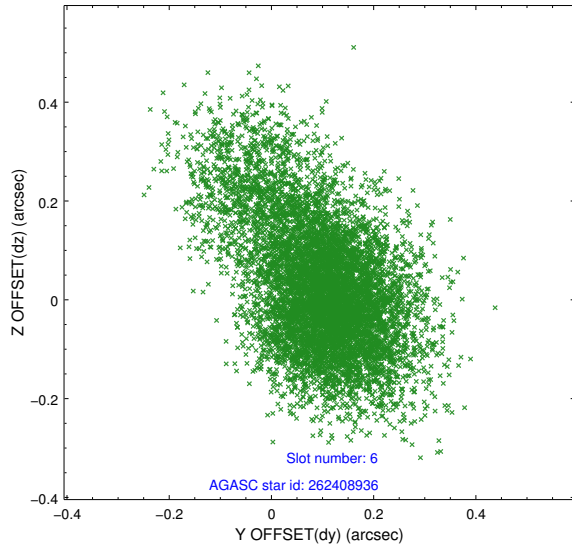




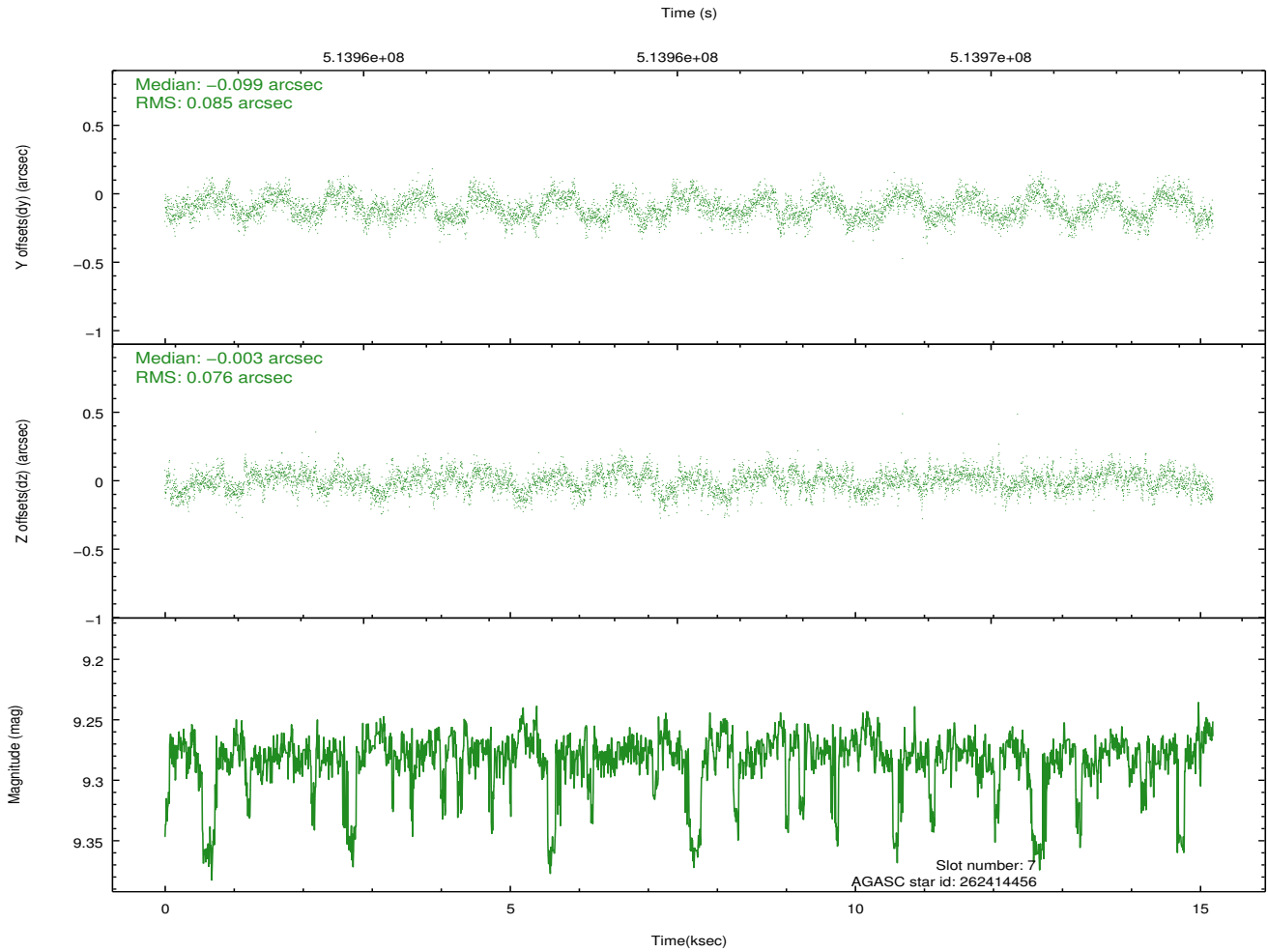
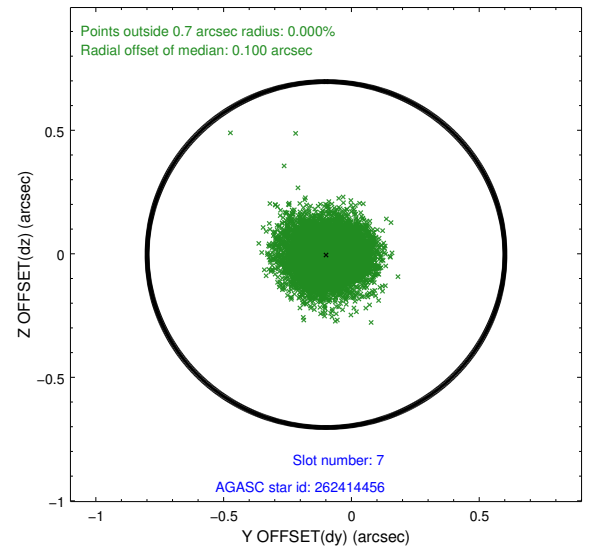
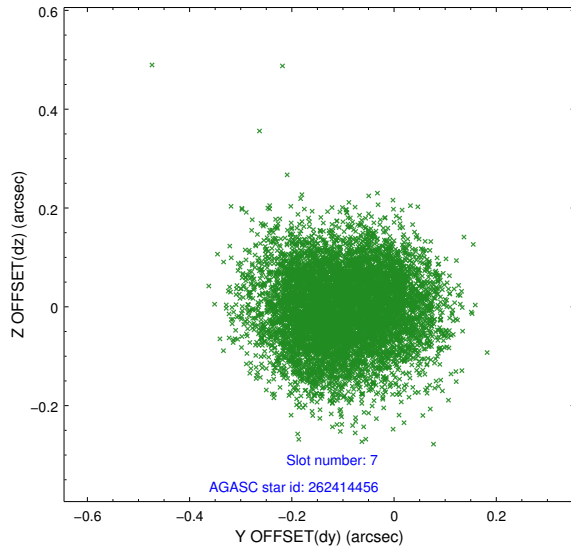
### 2.4.3 Slot 5



## 2.4.4 Slot 6

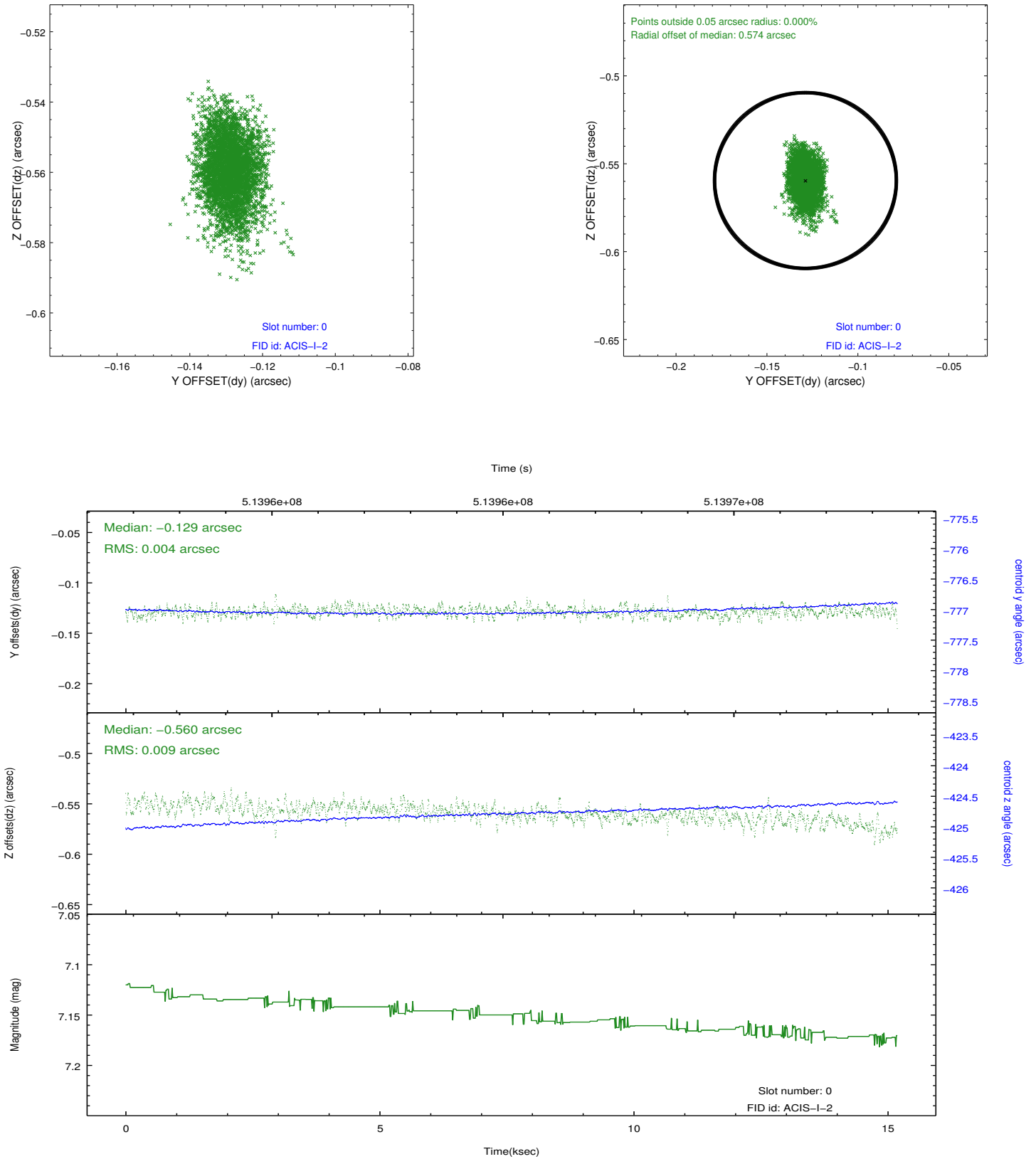


## 2.4.5 Slot 7

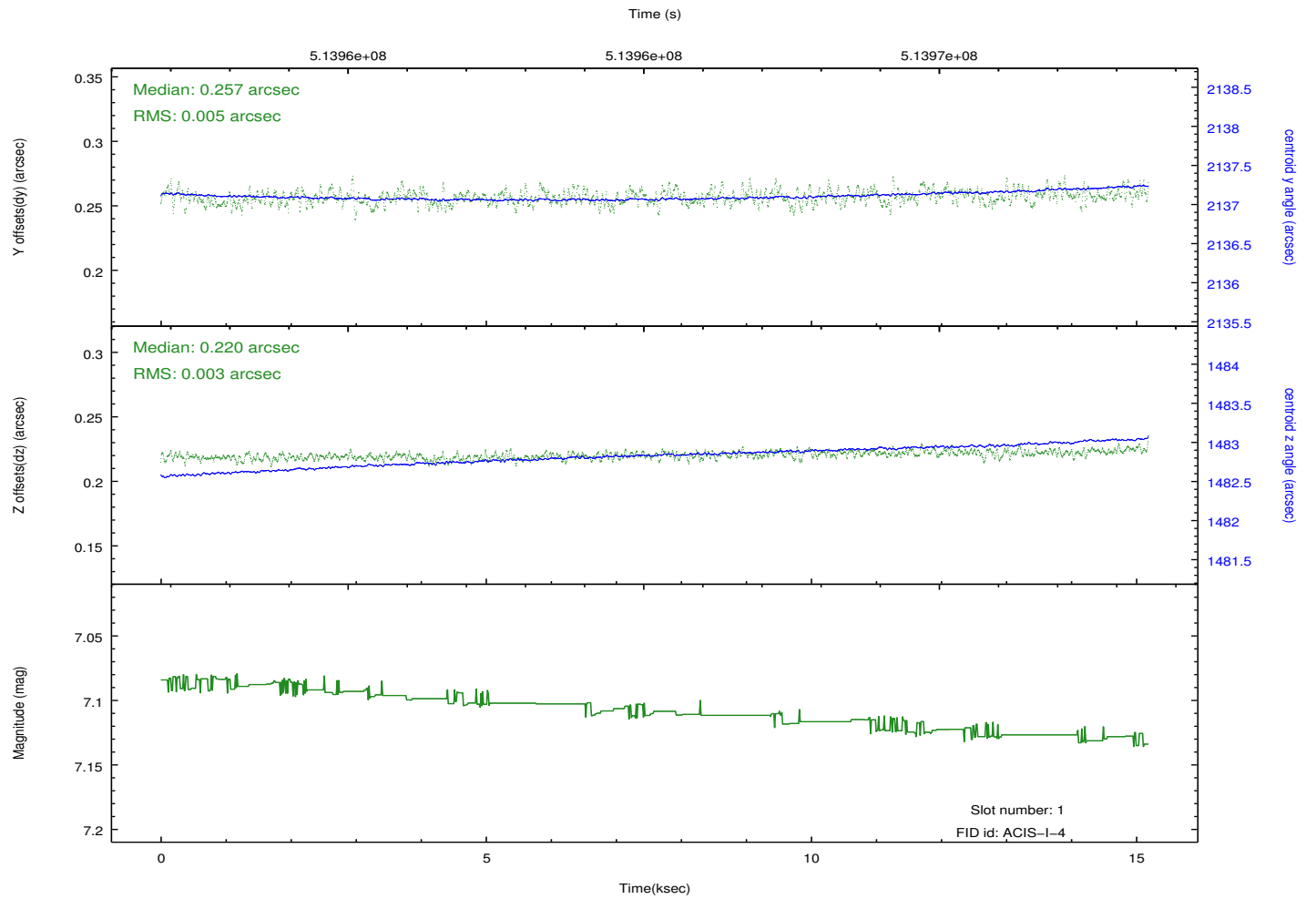
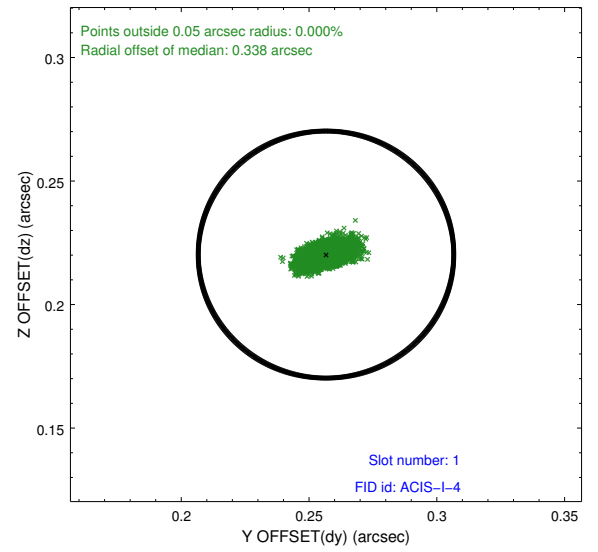
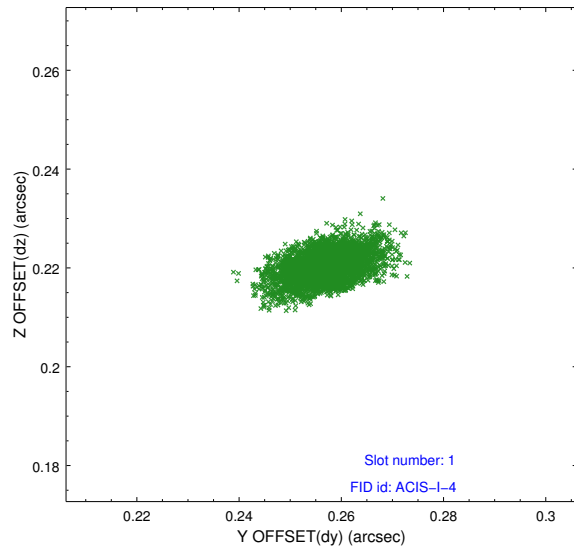


## 2.5 FID Slots

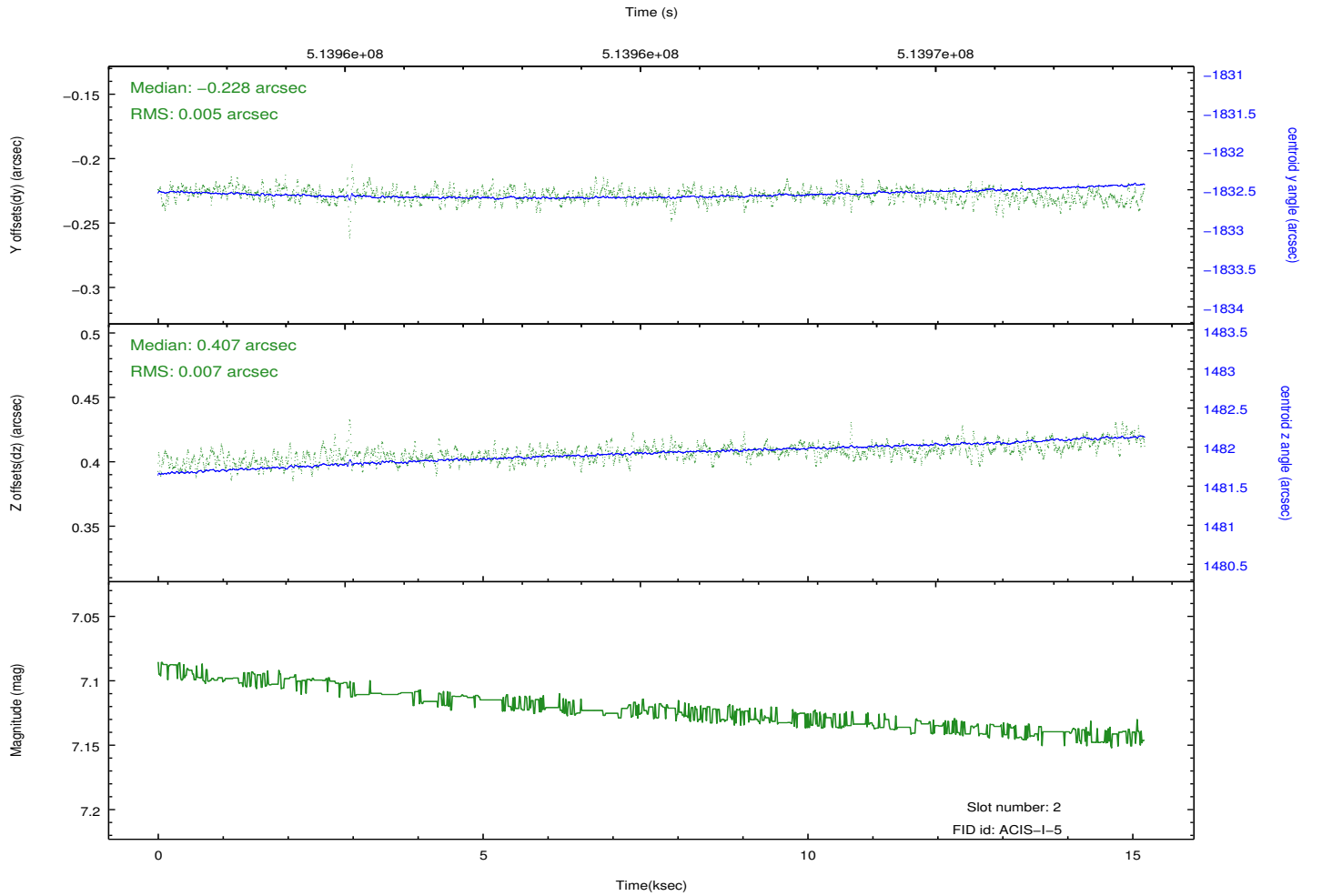
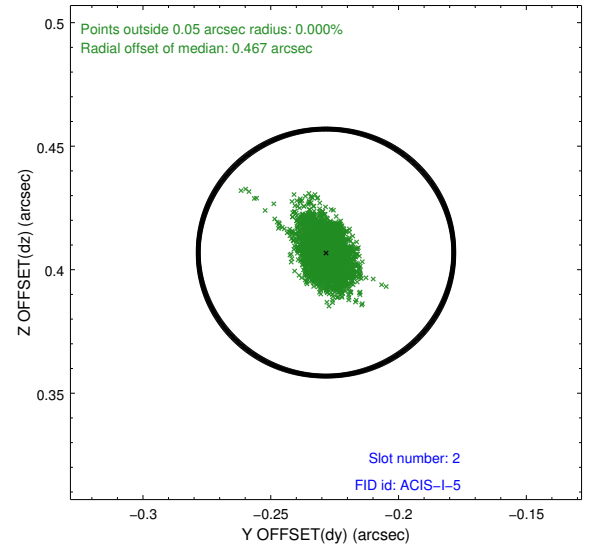
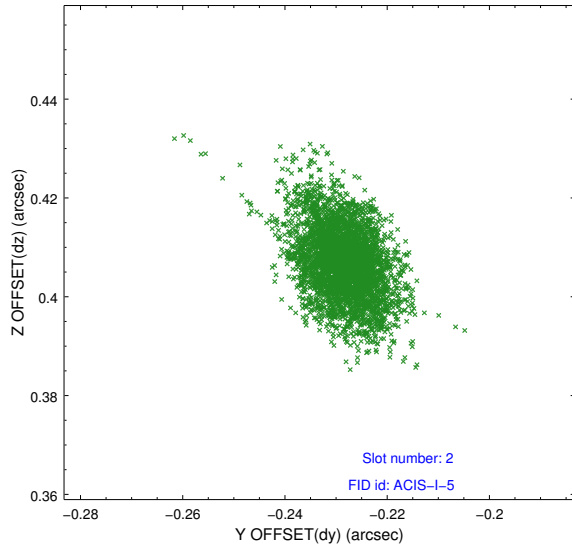
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.773596575677

## A.2 Comments

Window preference met.

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.