

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16514 - L2 Version 1  
Chandra X-Ray Center

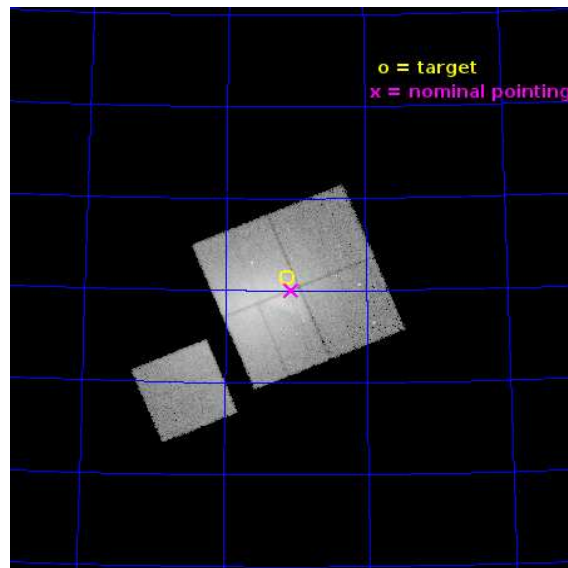
L2 Processing Date : Aug 18 2014

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# 1 Front

seq_num	801383	Sequence number
obs_id	16514	Observation id
title	Abell 2256: New paradigms for thermal/relativistic interactions?	P
observer	Dr. LAWRENCE RUDNICK	Principal investigator
object	Abell 2256	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.702371	Observer's specified target RA [deg]
dec_targ	78.691008	Observer's specified target Dec [deg]
ra_nom	255.66552090604	Nominal RA [deg]
dec_nom	78.667495413062	Nominal Dec [deg]
roll_nom	247.34482666299	Nominal Roll [deg]
revision	1	Processing version of data
ontime	45082.919899285	Sum of GTIs [s]
livetime	44493.878361238	Livetime [s]
ontime0	45082.796779275	Sum of GTIs [s]
ontime1	45076.555908501	Sum of GTIs [s]
ontime2	45079.737888932	Sum of GTIs [s]
ontime3	45082.919899285	Sum of GTIs [s]
ontime6	45082.755739272	Sum of GTIs [s]
l2events	307394	Number of level 2 events

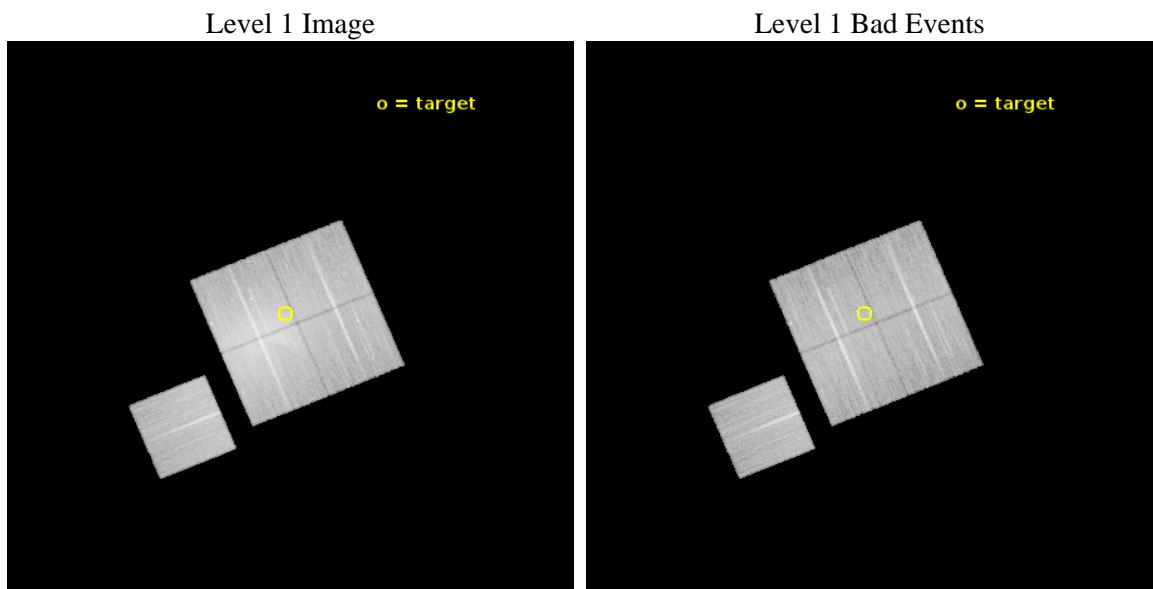




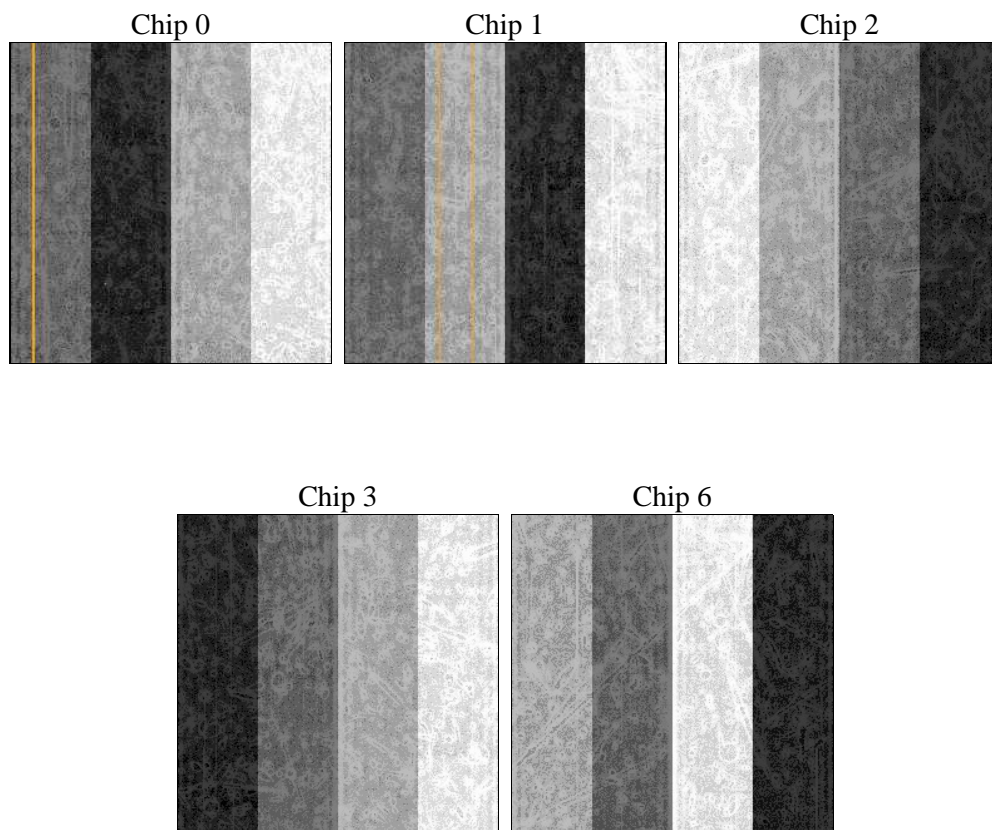
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	45082.919899285	Sum of GTIs [s]
caldbver	4.6.2	&#160	ontime0	45082.796779275	Sum of GTIs [s]
date	2014-08-18T13:56:16	Date and time of file creation	ontime1	45076.555908501	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	45079.737888932	Sum of GTIs [s]
			ontime3	45082.919899285	Sum of GTIs [s]
			ontime6	45082.755739272	Sum of GTIs [s]
			l1events	1213769	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	204877	204440	300846	284902	218704
rejected events	164217	163773	187860	176617	181848
rejected %	80%	80%	62%	61%	83%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	21550	21054	80728	76823	18372
	10%	10%	26%	26%	8%
grade 1 events	155	138	419	423	132
	0%	0%	0%	0%	0%
grade 2 events	7948	7804	14907	13979	6991
	3%	3%	4%	4%	3%
grade 3 events	3077	3023	5325	5144	2937
	1%	1%	1%	1%	1%
grade 4 events	2943	2957	5224	5220	2875
	1%	1%	1%	1%	1%
grade 5 events	8464	9041	8393	9985	9267
	4%	4%	2%	3%	4%
grade 6 events	5144	5837	6816	7137	5692
	2%	2%	2%	2%	2%
grade 7 events	155596	154586	179034	166191	172438
	75%	75%	59%	58%	78%

## 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	255.647023	255.6655209060417	Subarray requested	NONE	NONE
[deg] Pointing Dec	78.694859	78.66749541306176	Alternating exposures requested	N	N
[deg] Pointing Roll	247.154273	247.344826662994	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	524669557.184000	524668245.95886			
Observation start date	2014-08-17T13:31:30	2014-08-17T13:10:45			
[s] Observation end time (MET)	524714557.184000	524715263.73647			
Observation end date	2014-08-18T02:01:30	2014-08-18T02:14:23			
Read mode	TIMED	TIMED			

## 2.3 Aspect

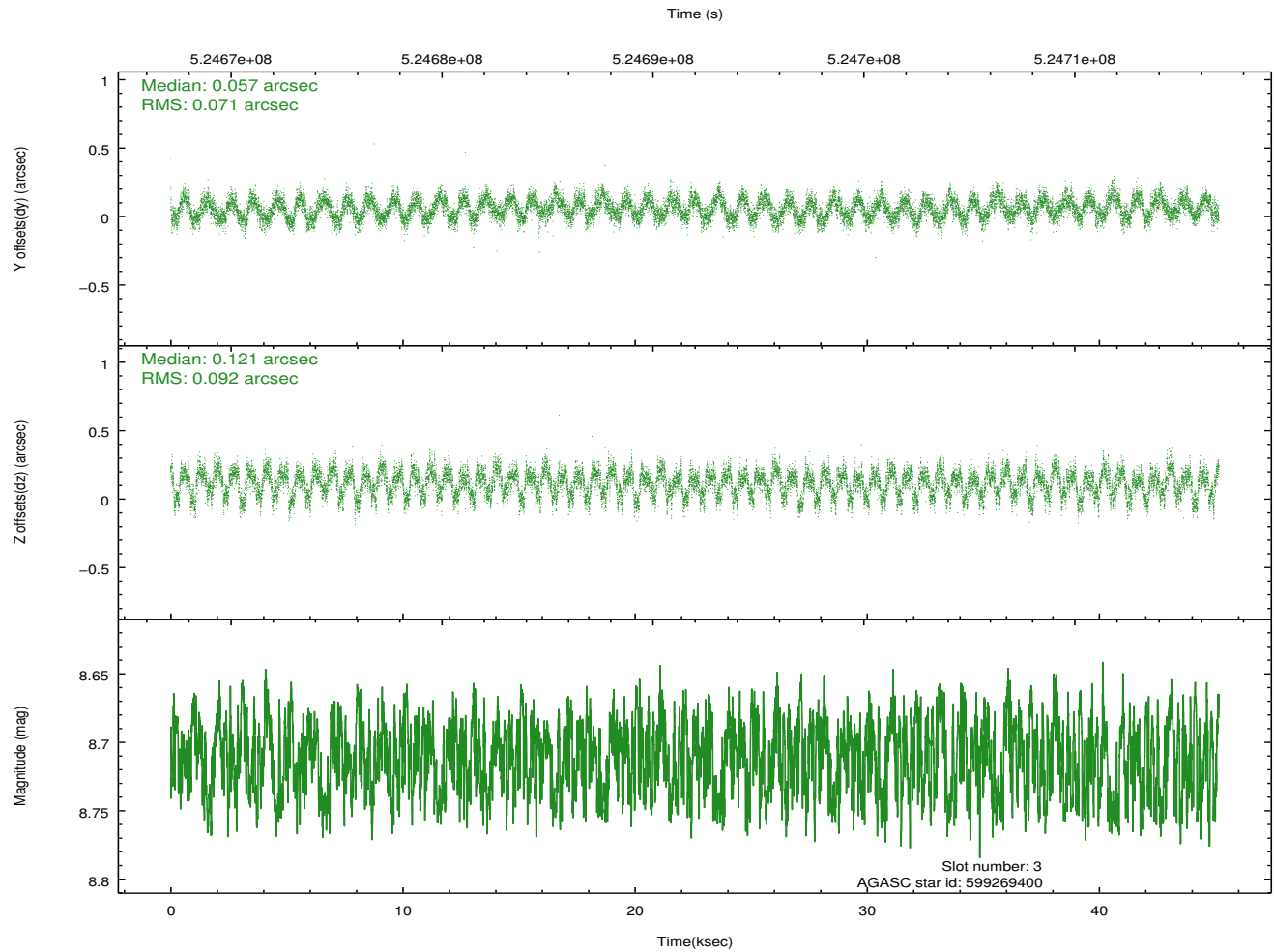
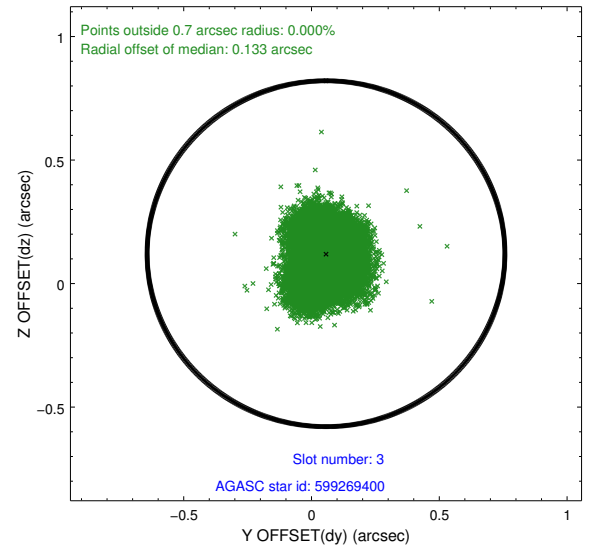
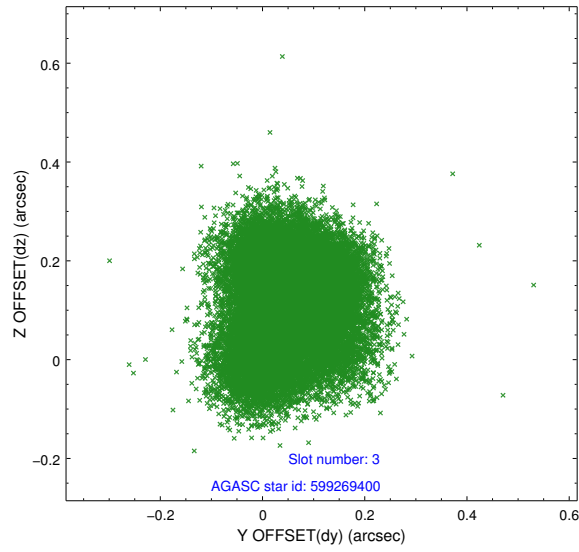


### Slot Statistics

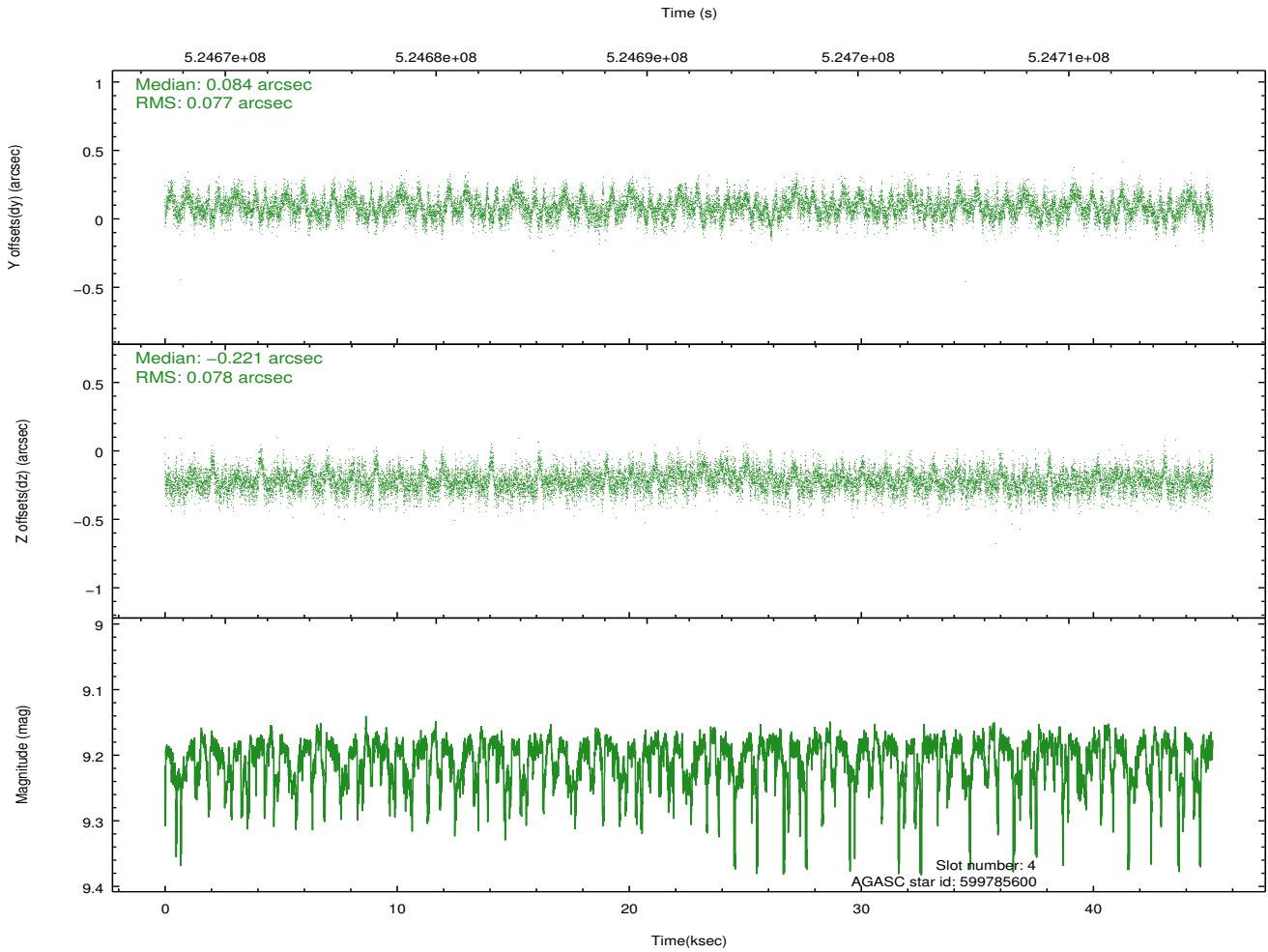
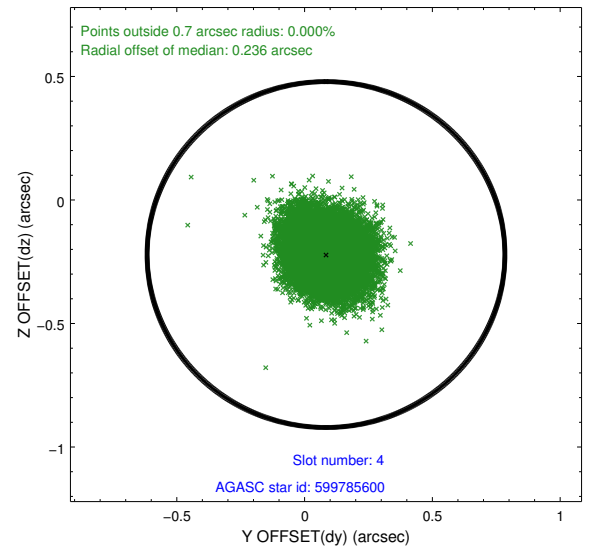
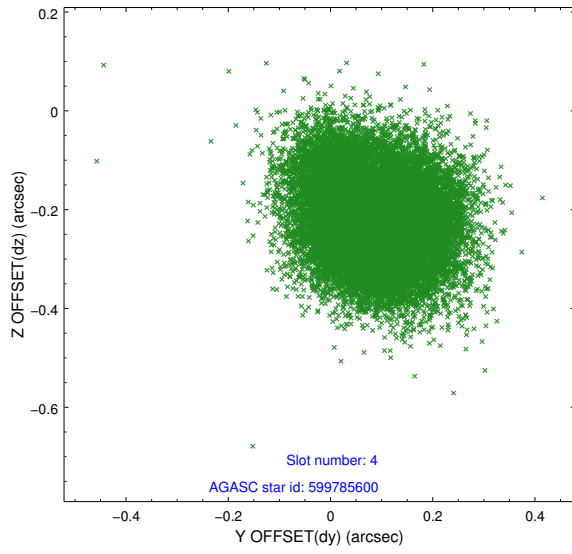
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.09	11015	0.053	0.007	0.031	0.041	0.000000	0.000000	913.78	-845.52
1	FID	ACIS-I-5	7.08	11014	-0.282	0.045	0.014	0.029	0.000000	0.000000	-1834.72	1051.92
2	FID	ACIS-I-6	7.08	11014	0.135	0.021	0.029	0.038	0.000000	0.000000	379.33	1696.46
3	GUIDE	599269400	8.71	22022	0.057	0.121	0.125	0.195	254.398050	78.499006	989.50	-555.34
4	GUIDE	599785600	9.20	22017	0.084	-0.221	0.116	0.189	259.639486	78.927525	-1930.67	2179.11
5	GUIDE	599789480	8.82	22021	0.042	0.134	0.127	0.200	253.845424	78.947438	-372.65	-1505.81
6	GUIDE	599790632	7.97	22026	0.060	-0.219	0.090	0.142	257.096793	78.828804	-848.26	739.61
7	GUIDE	599790040	9.03	22014	-0.249	0.195	0.132	0.210	252.479590	78.878159	191.07	-2304.67

## 2.4 Star Slots

### 2.4.1 Slot 3

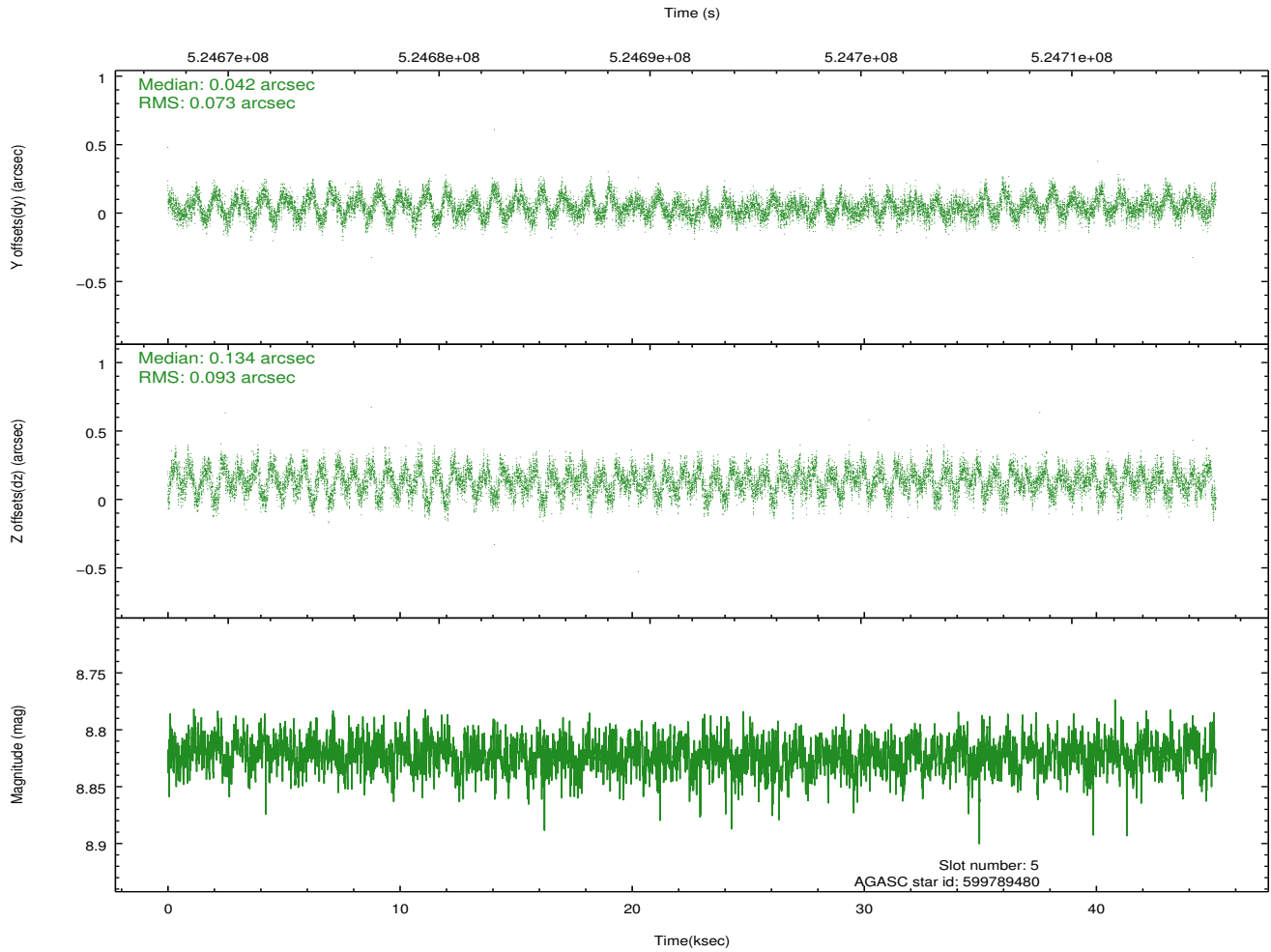
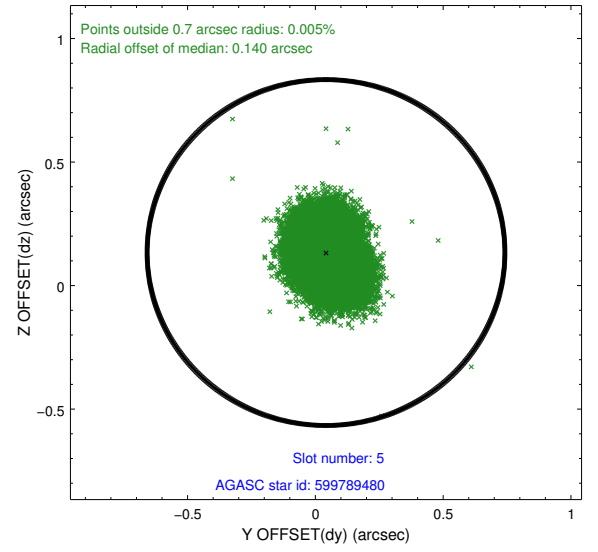
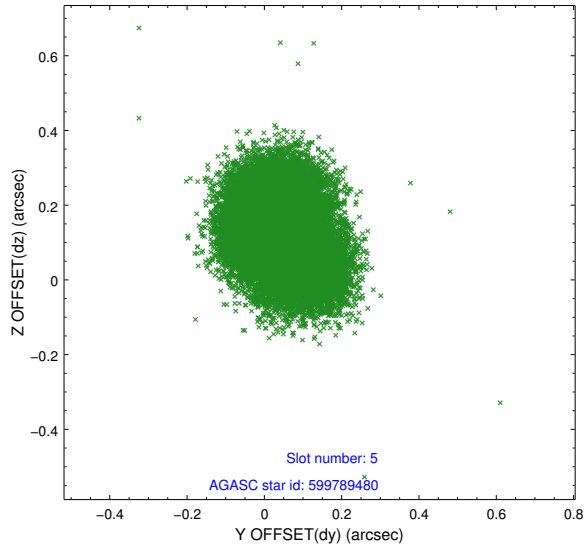


## 2.4.2 Slot 4

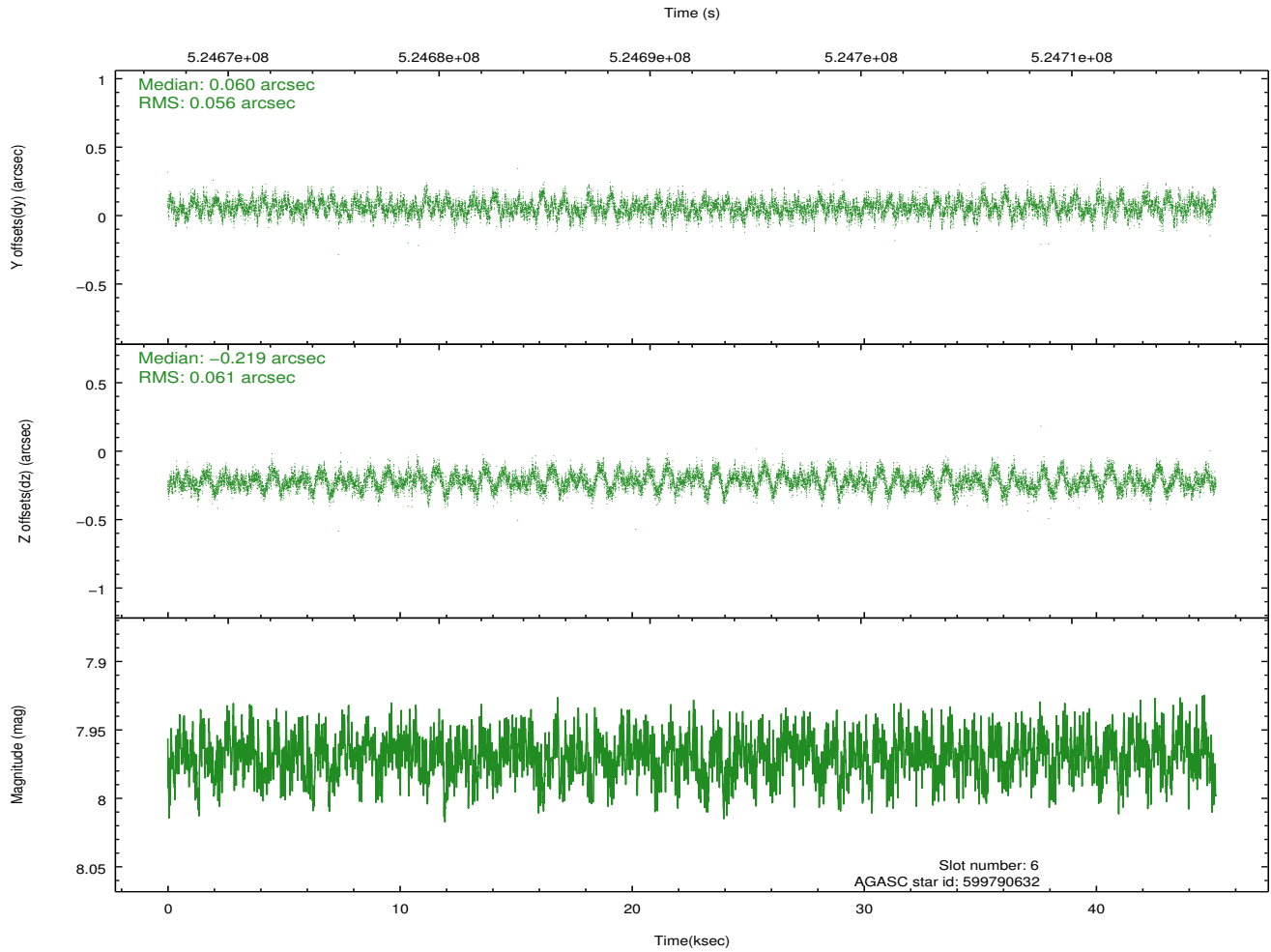
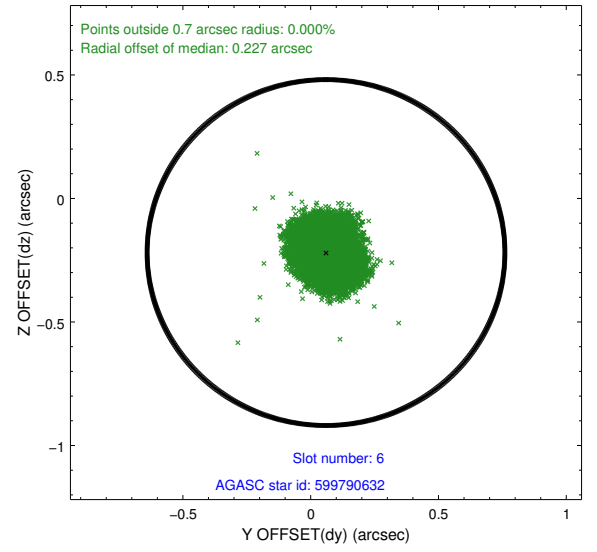
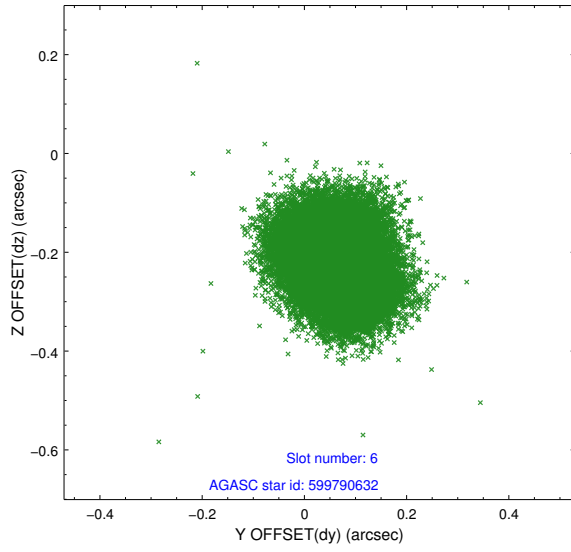




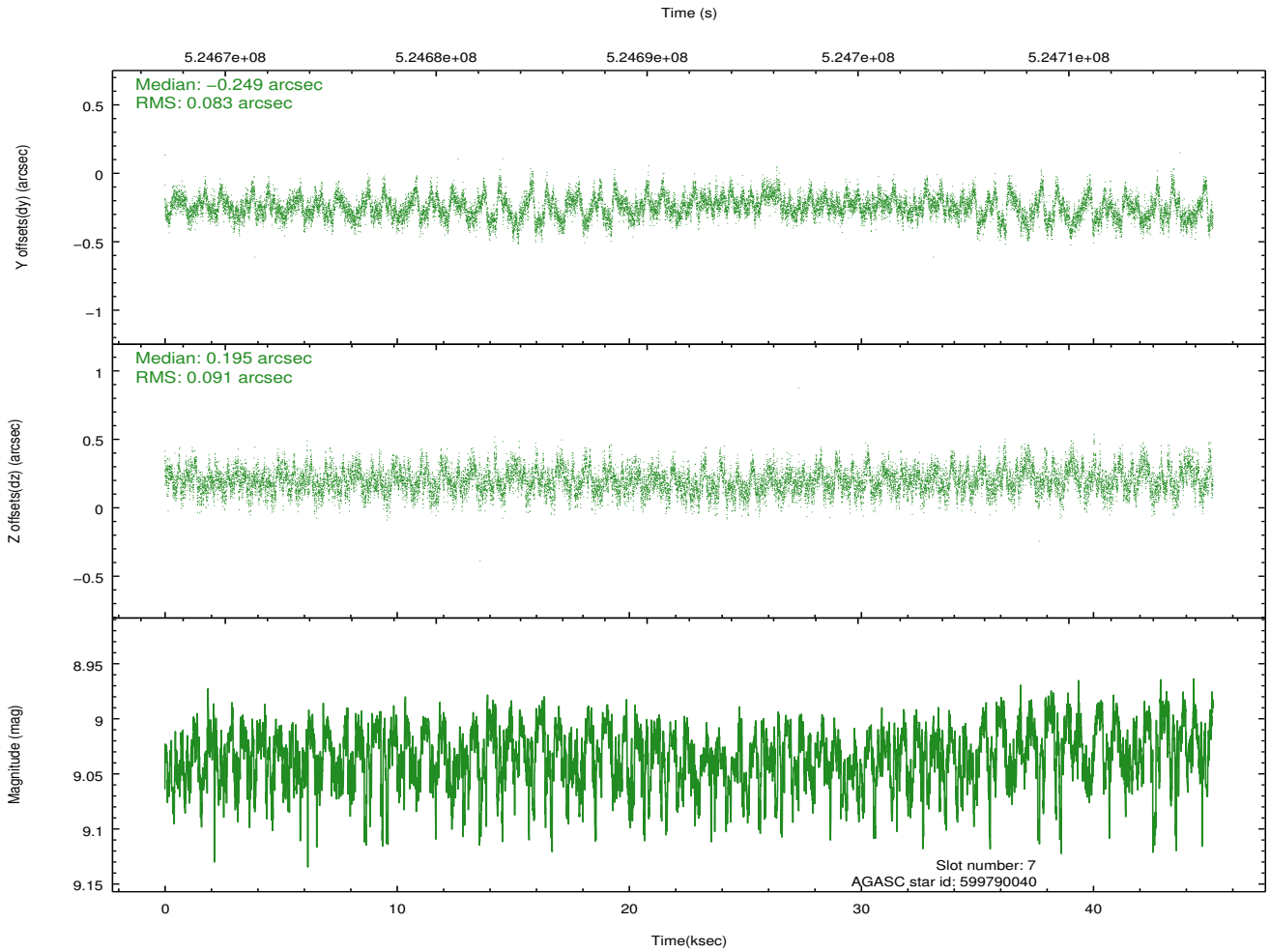
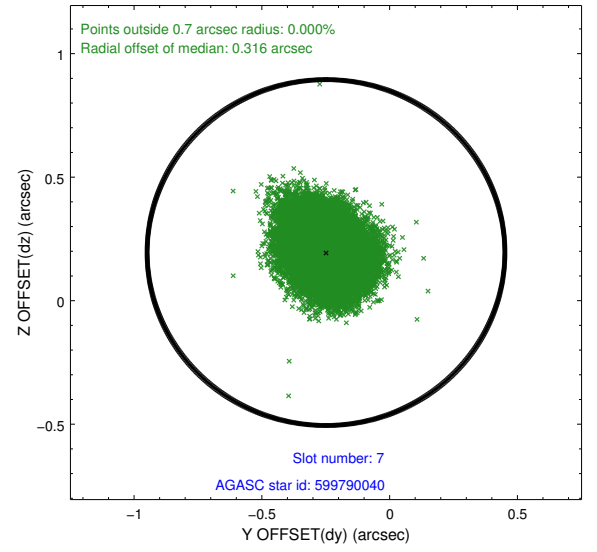
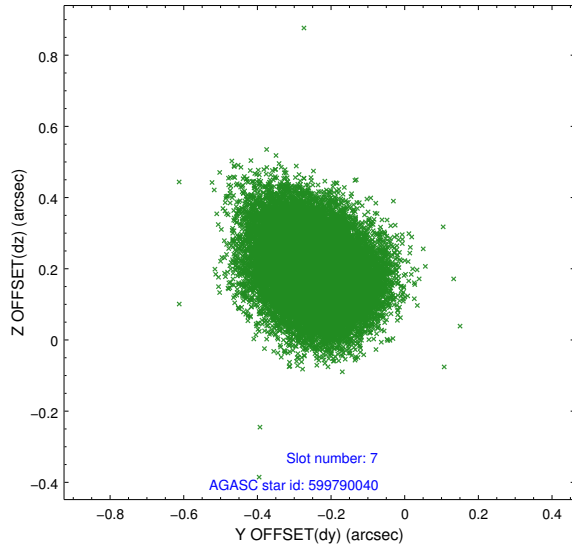
### 2.4.3 Slot 5



## 2.4.4 Slot 6

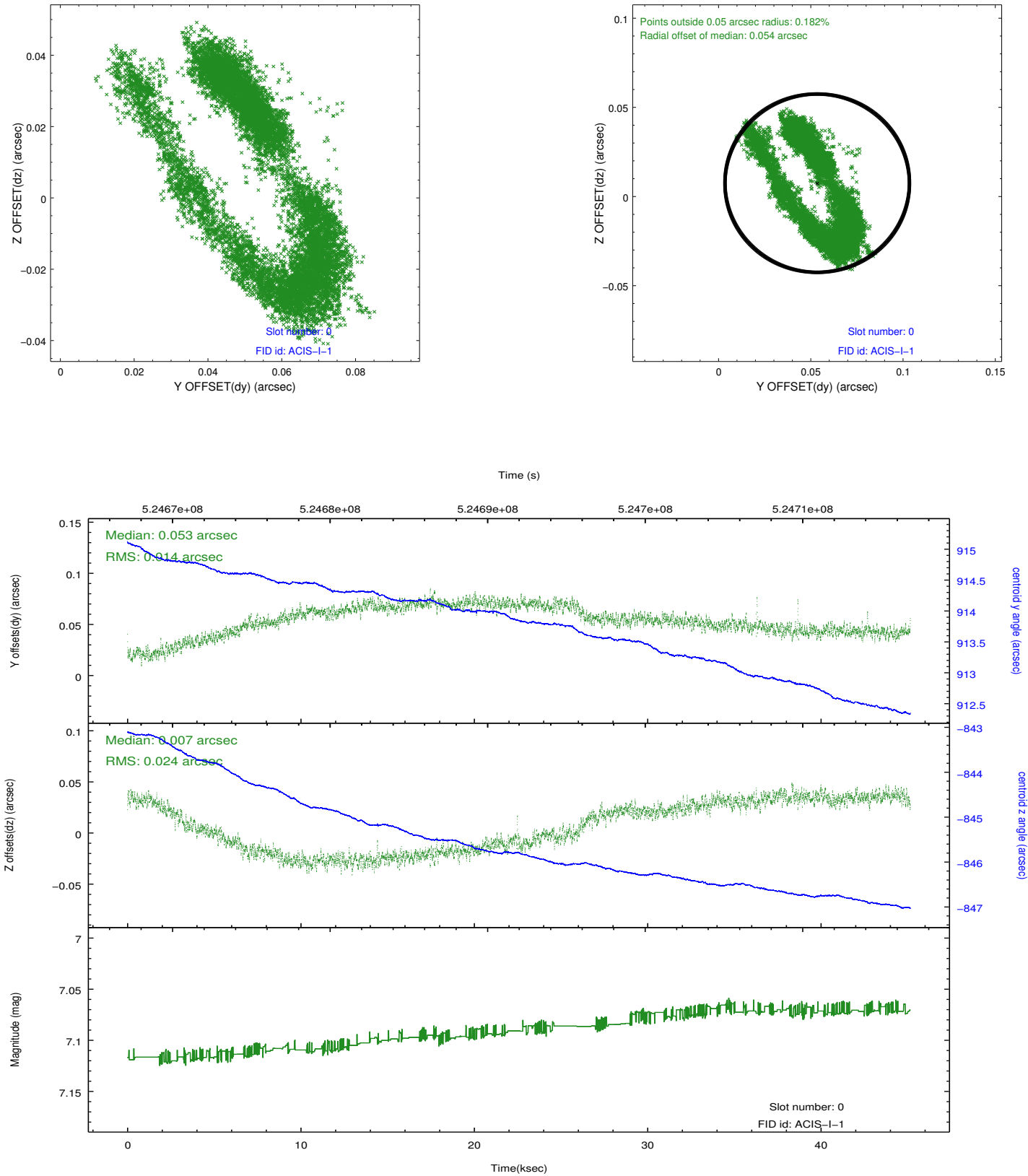


## 2.4.5 Slot 7

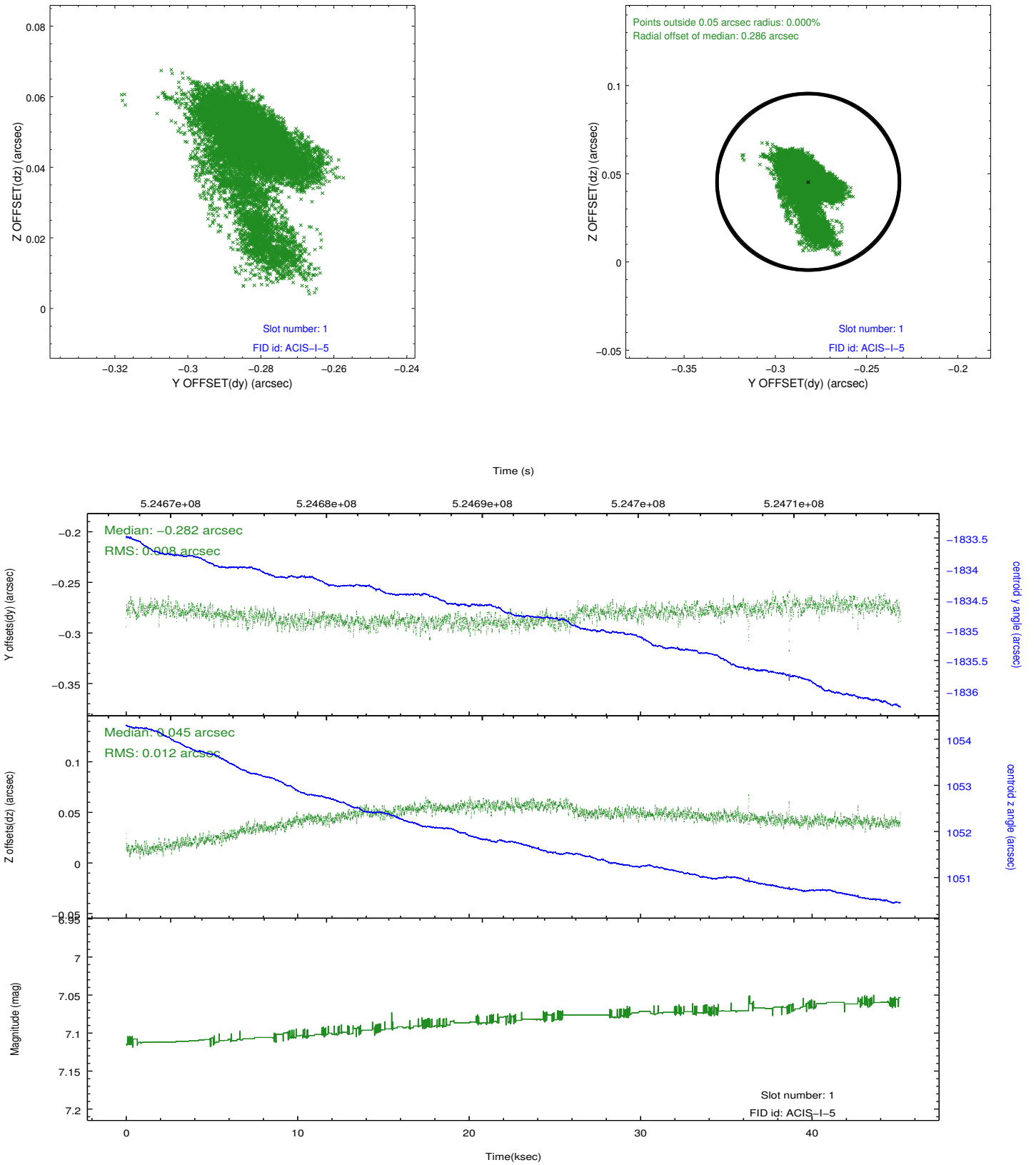


## 2.5 FID Slots

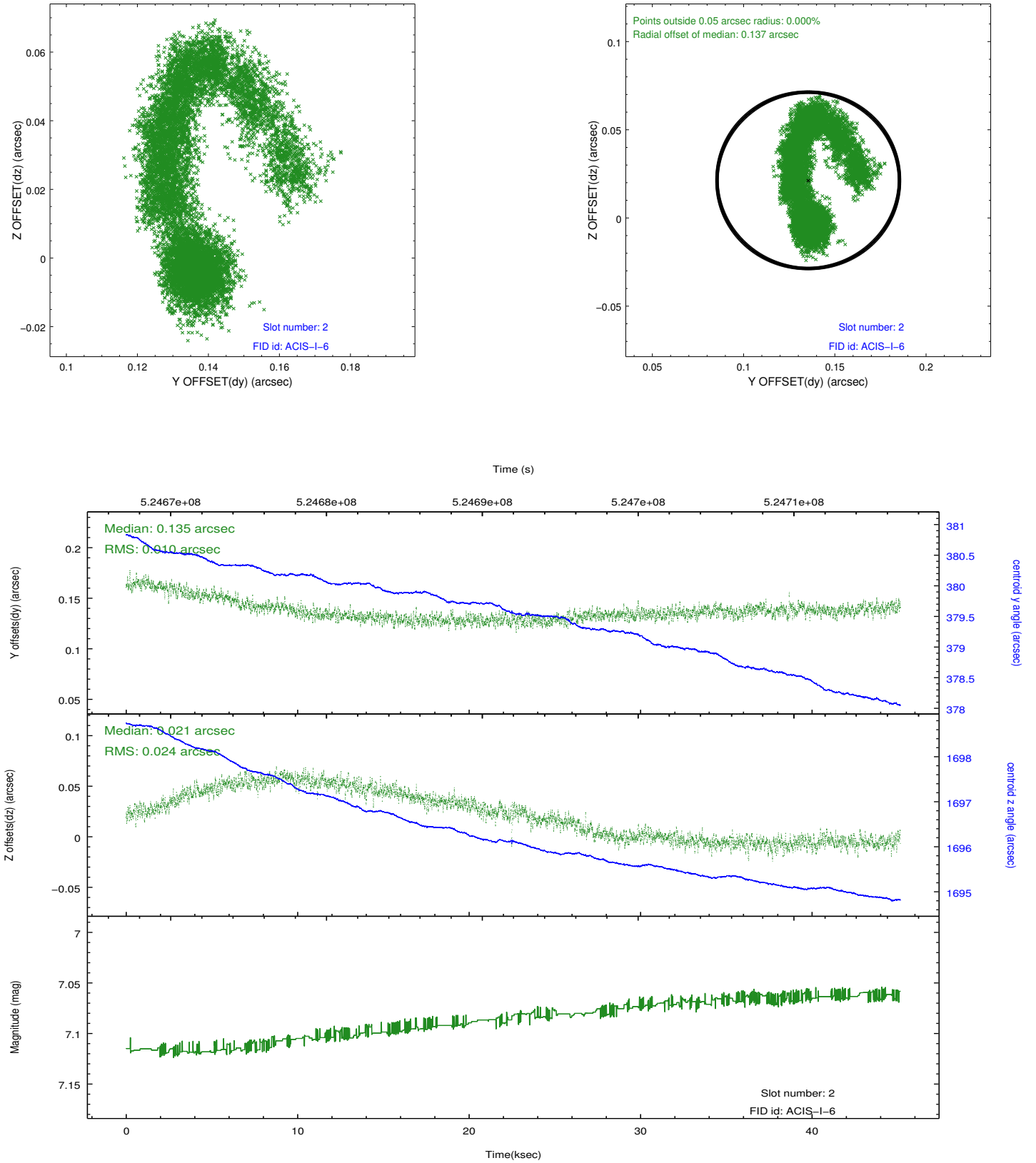
### 2.5.1 Slot 0



## 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)	2014.08.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.082919899285

### A.2 Comments