

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16178 - L2 Version 1  
Chandra X-Ray Center

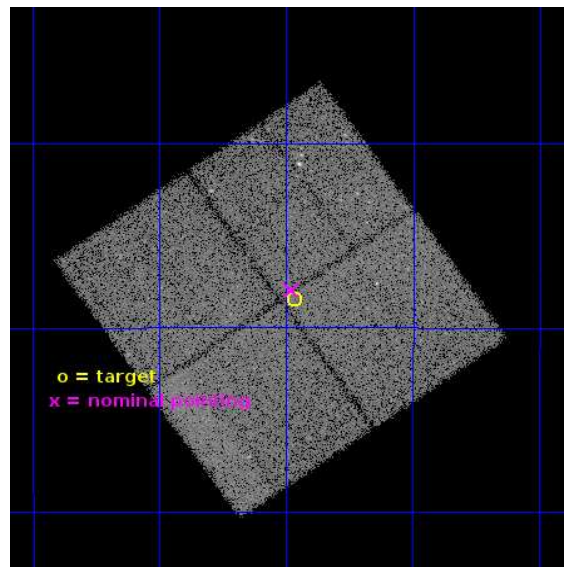
L2 Processing Date : Oct 8 2014

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# 1 Front

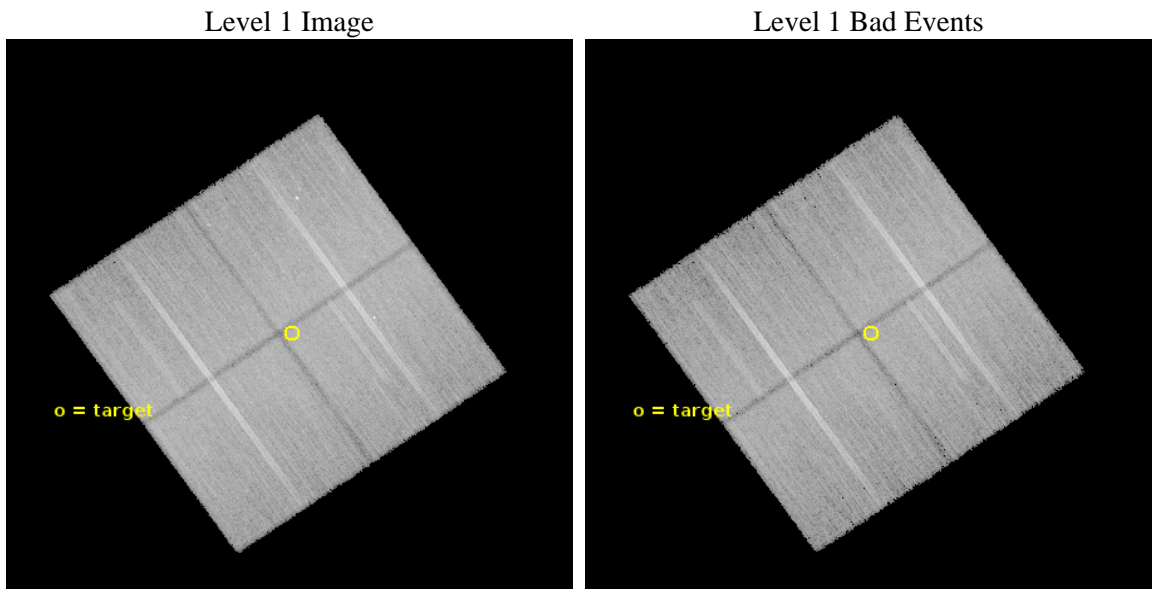
seq_num	901115	Sequence number
obs_id	16178	Observation id
title	The Chandra Deep Field-South: A Peerless Ultradeep Survey for Exploring the Distant X-ray Universe	Proposal title
observer	Prof. W.N. Brandt	Principal investigator
object	Chandra Deep Field-South	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	53.117083	Observer's specified target RA [deg]
dec_targ	-27.807333	Observer's specified target Dec [deg]
ra_nom	53.119881485094	Nominal RA [deg]
dec_nom	-27.799531752994	Nominal Dec [deg]
roll_nom	55.009991559243	Nominal Roll [deg]
revision	1	Processing version of data
ontime	74954.374623716	Sum of GTIs [s]
livetime	73975.040538649	Livetime [s]
ontime0	74944.828452766	Sum of GTIs [s]
ontime1	74954.292543709	Sum of GTIs [s]
ontime2	74951.19257313	Sum of GTIs [s]
ontime3	74954.374623716	Sum of GTIs [s]
l2events	147087	Number of level 2 events



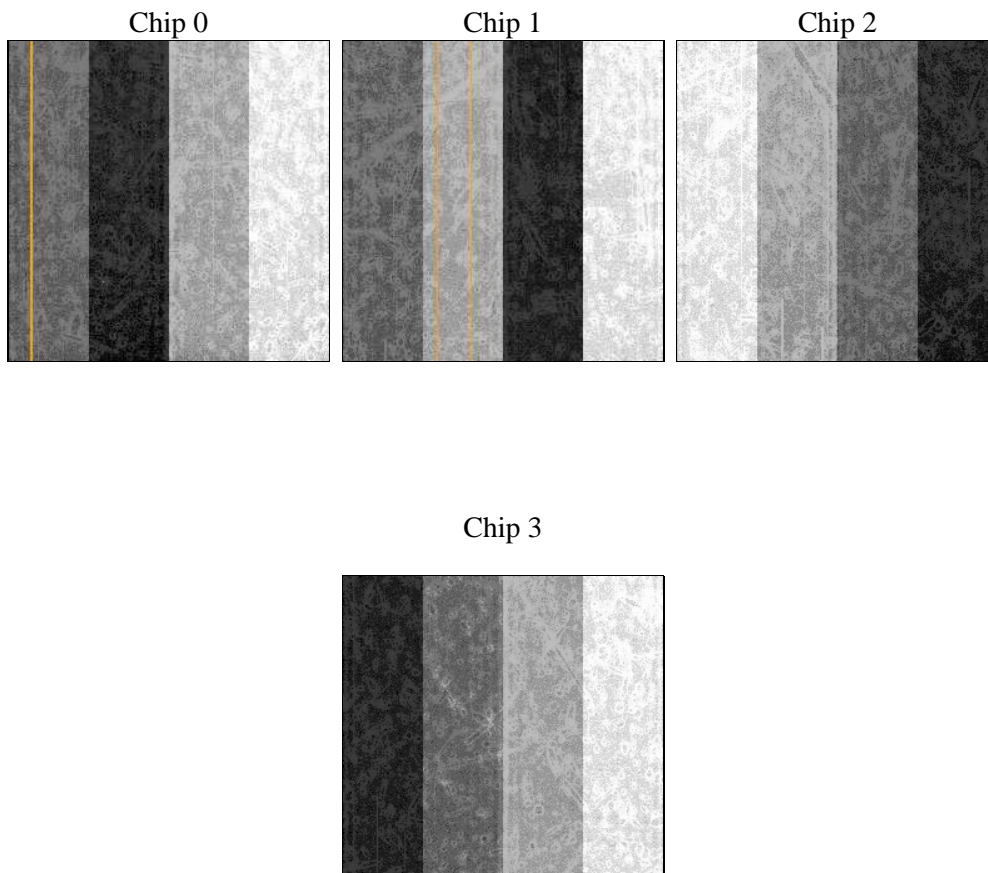
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	74863.825000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	74954.374623716	Sum of GTIs [s]
caldsver	4.6.3	&#160	ontime0	74944.828452766	Sum of GTIs [s]
date	2014-10-08T16:09:52	Date and time of file creation	ontime1	74954.292543709	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	74951.19257313	Sum of GTIs [s]
			ontime3	74954.374623716	Sum of GTIs [s]
			l1events	1396051	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	330547	342020	368024	355460
rejected events	287088	294464	324367	314533
rejected %	86%	86%	88%	88%

	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	14697	15909	15883	14225
	4%	4%	4%	4%
grade 1 events	180	162	218	221
	0%	0%	0%	0%
grade 2 events	10953	11783	10622	9452
	3%	3%	2%	2%
grade 3 events	4547	4681	4335	4146
	1%	1%	1%	1%
grade 4 events	4155	4760	4414	4393
	1%	1%	1%	1%
grade 5 events	17366	18592	16471	19744
	5%	5%	4%	5%
grade 6 events	9110	10426	8407	8711
	2%	3%	2%	2%
grade 7 events	269539	275707	307674	294568
	81%	80%	83%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	53.117283	53.11988148509395	Subarray requested	NONE	NONE
[deg] Pointing Dec	-27.827032	-27.79953175299412	Alternating exposures requested	N	N
[deg] Pointing Roll	54.800097	55.00999155924337	[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)	529070405.184000	529069484.4782			
Observation start date	2014-10-07T11:58:58	2014-10-07T11:44:44			
[s] Observation end time (MET)	529145269.184000	529145506.68243			
Observation end date	2014-10-08T08:46:42	2014-10-08T08:51:46			
Read mode	TIMED	TIMED			

## 2.3 Aspect

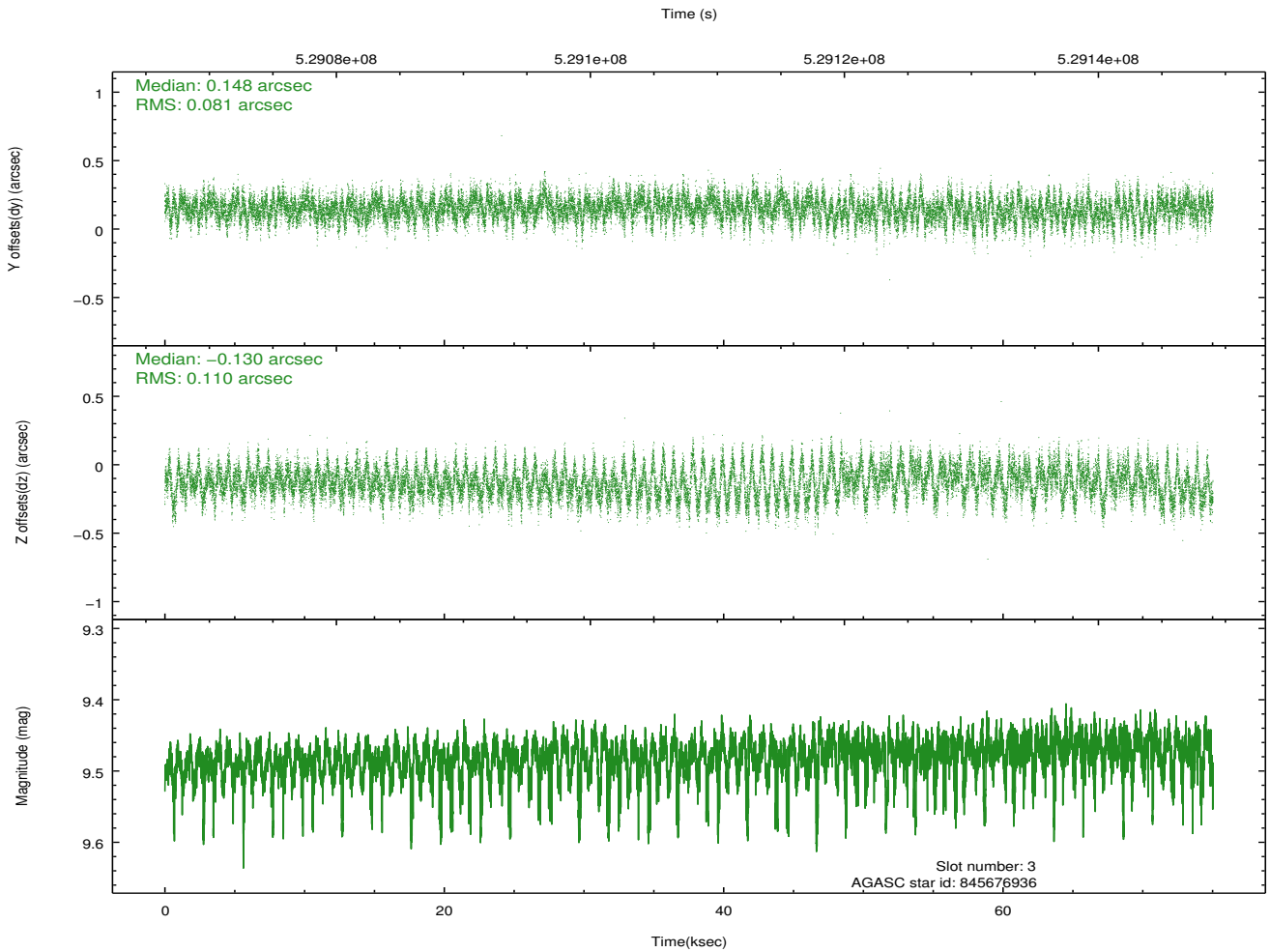
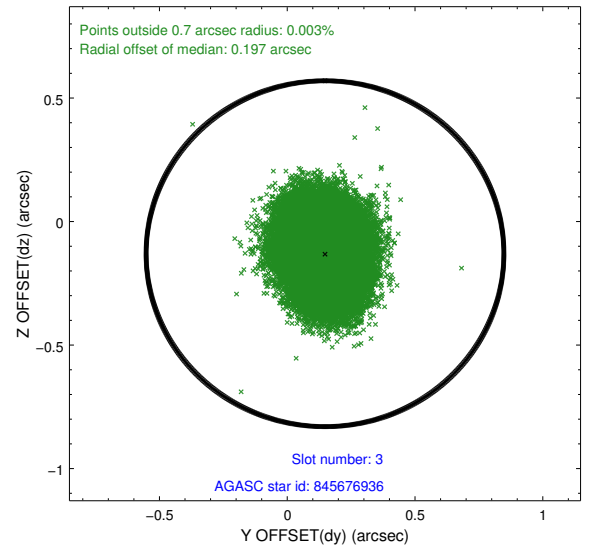
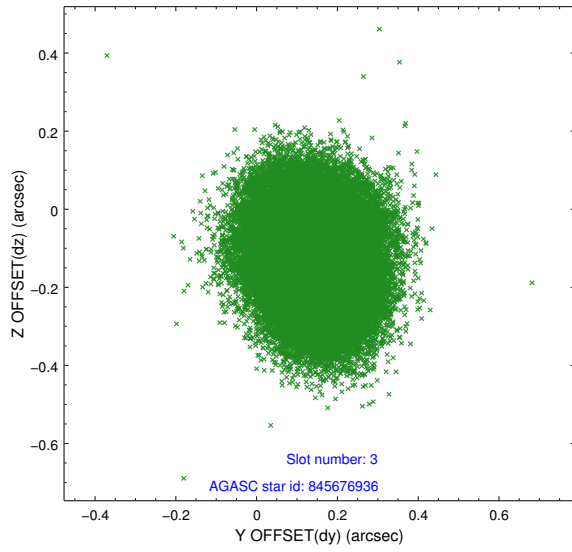


### Slot Statistics

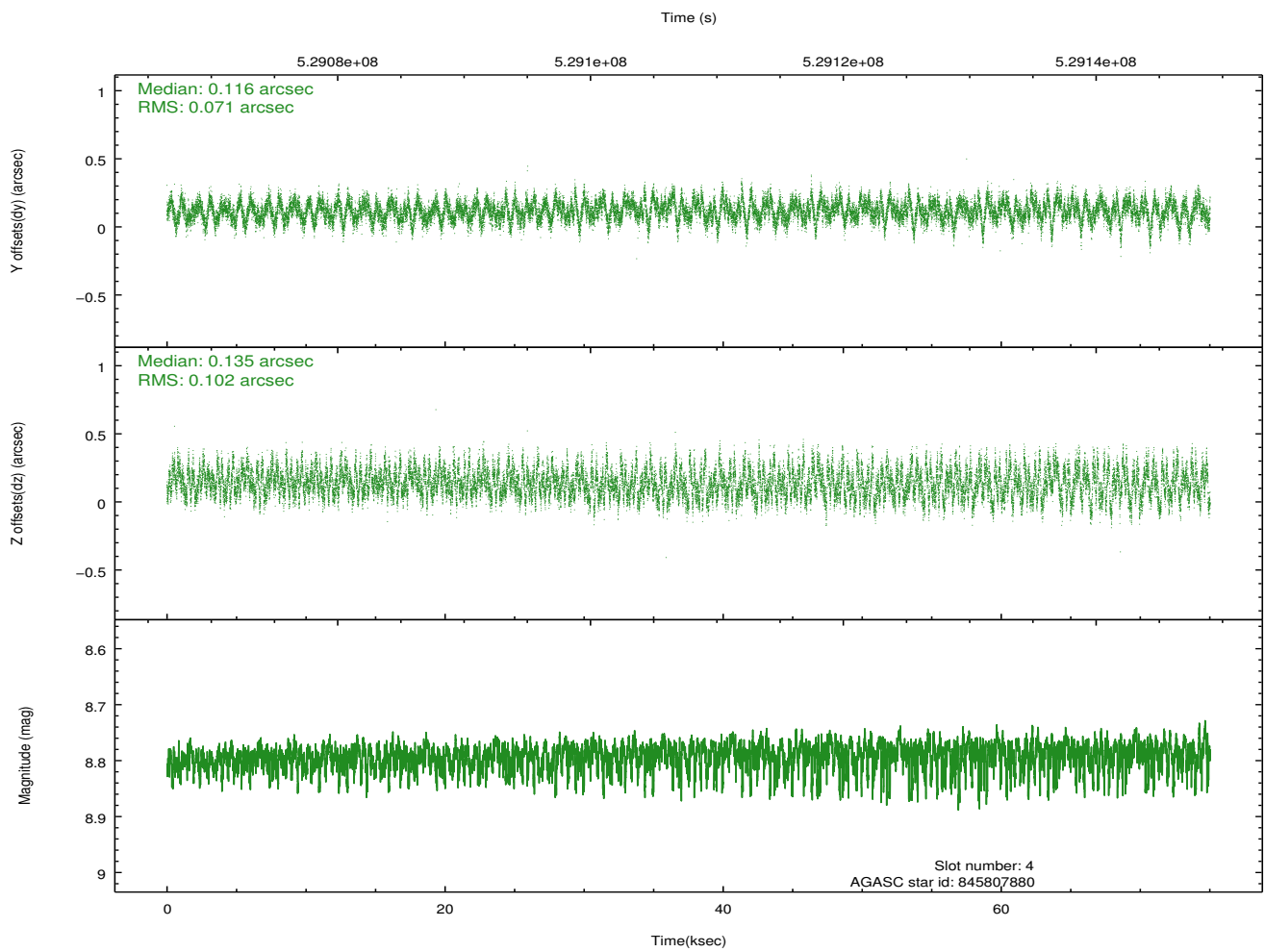
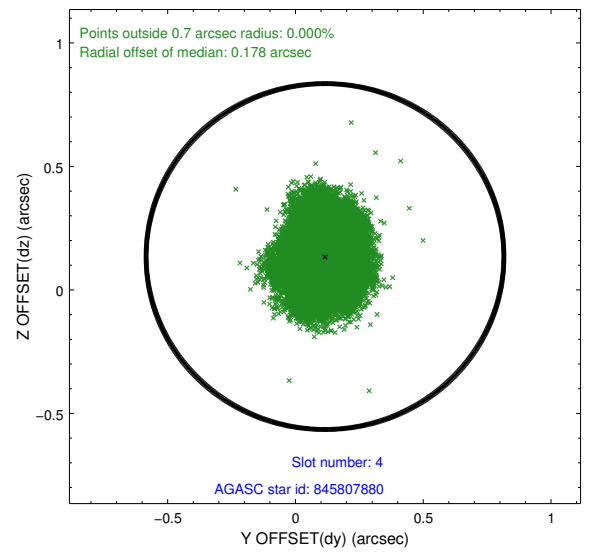
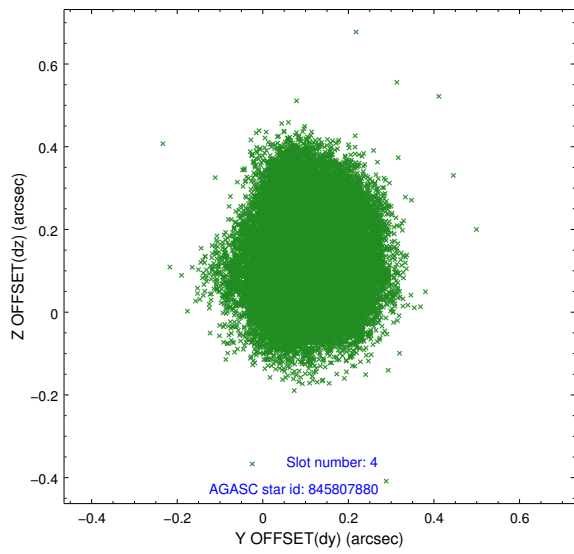
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.04	18299	-0.153	-0.086	0.042	0.061	0.000000	0.000000	-777.72	-849.82
1	FID	ACIS-I-4	7.08	18300	0.345	0.108	0.034	0.073	0.000000	0.000000	2136.79	1056.66
2	FID	ACIS-I-5	7.13	18301	-0.287	0.047	0.024	0.036	0.000000	0.000000	-1831.83	1054.27
3	GUIDE	845676936	9.48	36567	0.148	-0.130	0.148	0.234	52.843773	-27.880153	-657.58	599.96
4	GUIDE	845807880	8.79	36586	0.116	0.135	0.135	0.211	53.382027	-27.886093	311.77	-811.27
5	GUIDE	845808496	10.15	36548	-0.030	0.114	0.286	0.487	53.777917	-27.725281	1508.76	-1512.29
6	GUIDE	845808968	9.91	35490	0.007	0.042	0.243	0.405	54.016598	-27.589085	2346.22	-1856.83
7	BAD	845815128	10.19	34655	-0.162	-0.197	0.406	0.596	53.509794	-28.102676	-93.38	-1591.72

## 2.4 Star Slots

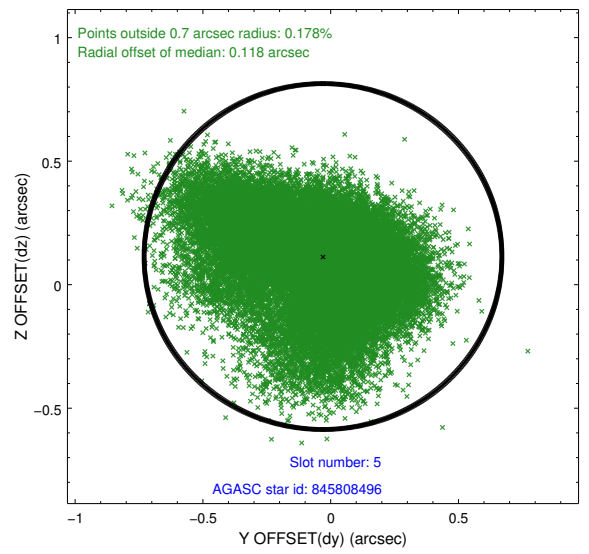
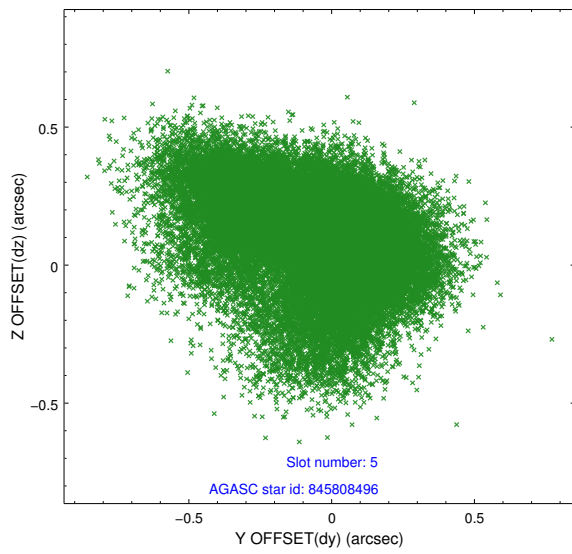
### 2.4.1 Slot 3



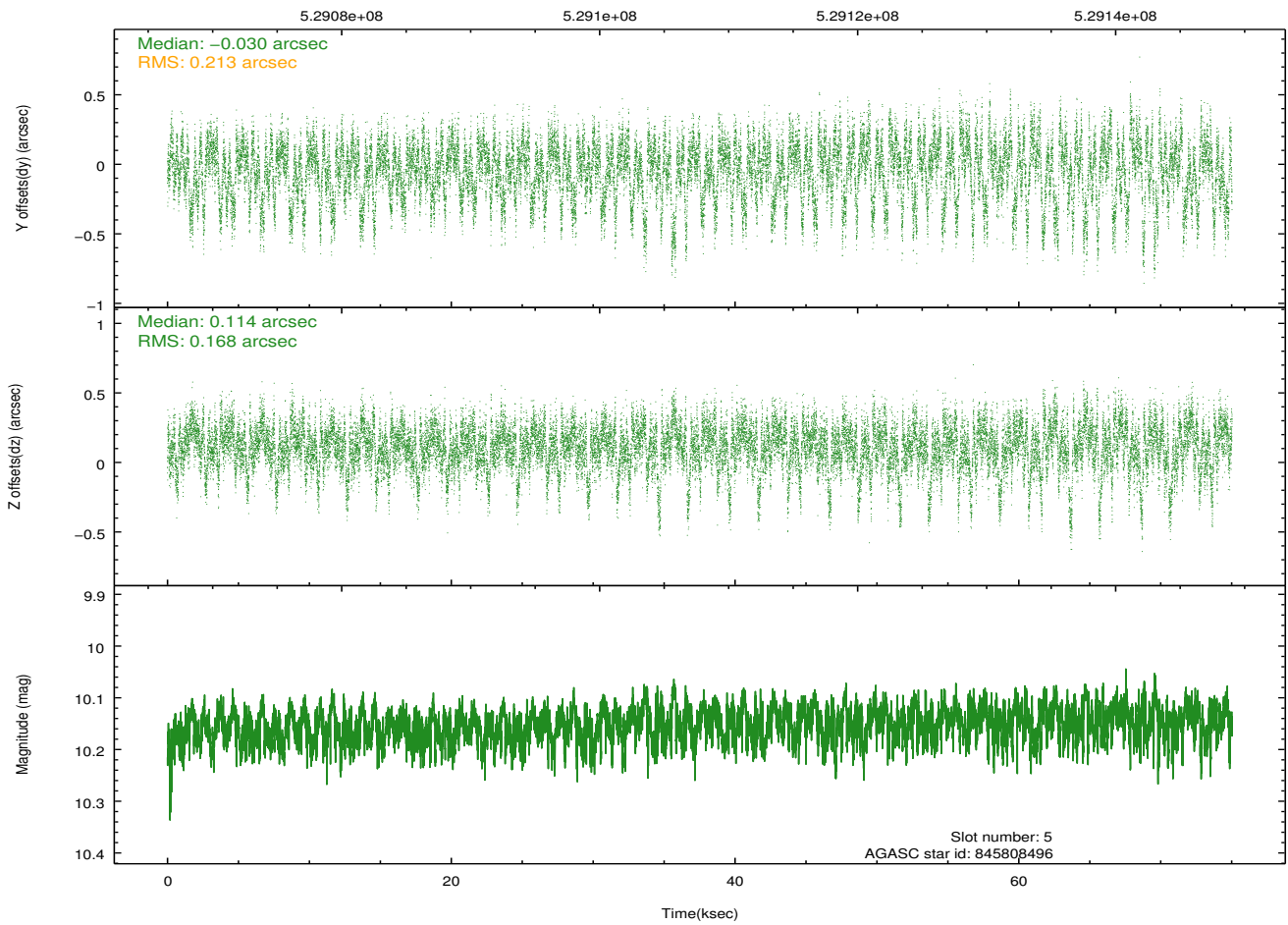
## 2.4.2 Slot 4



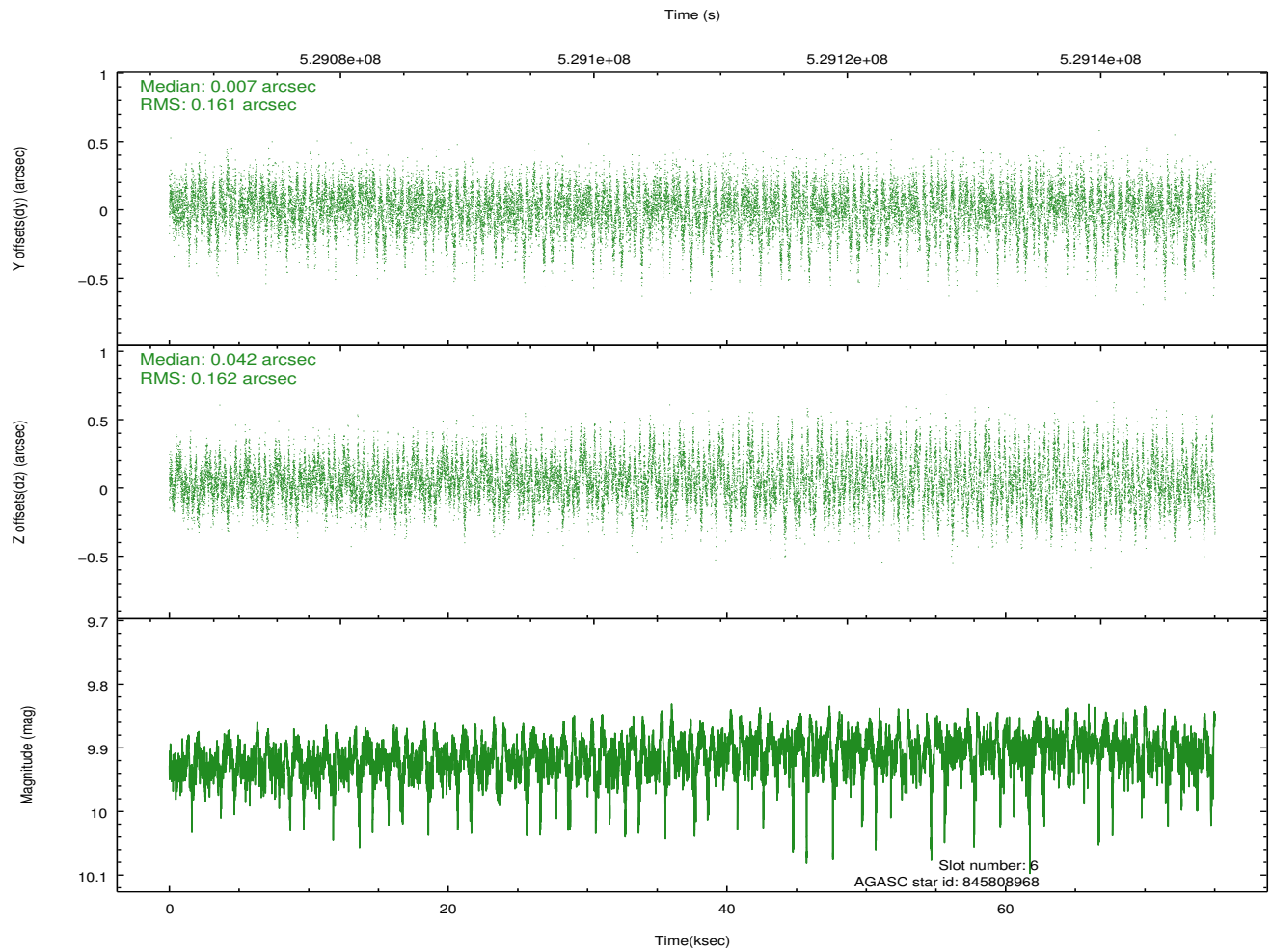
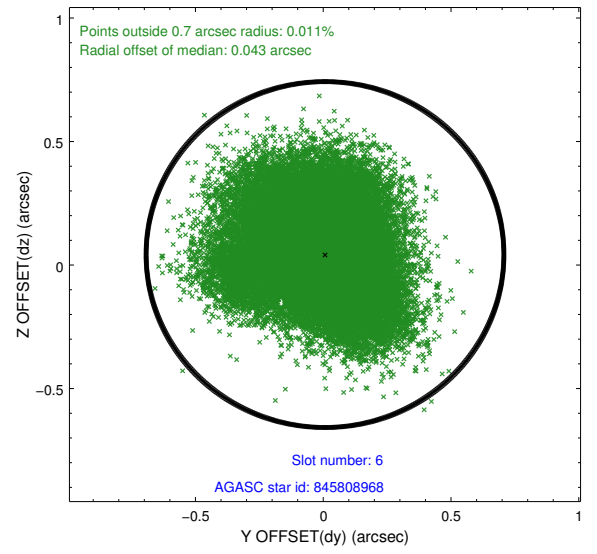
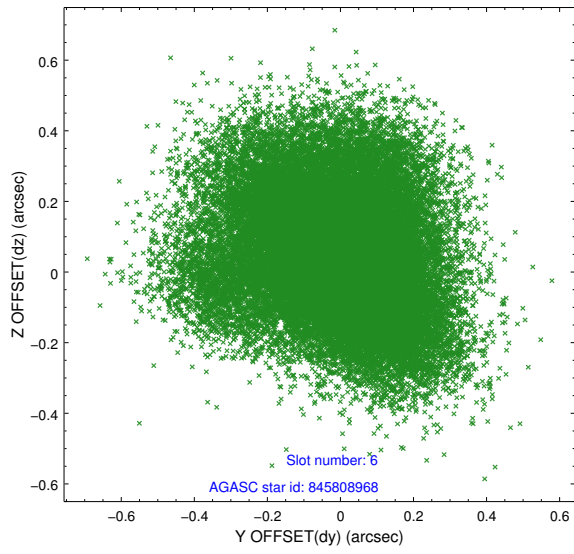
### 2.4.3 Slot 5



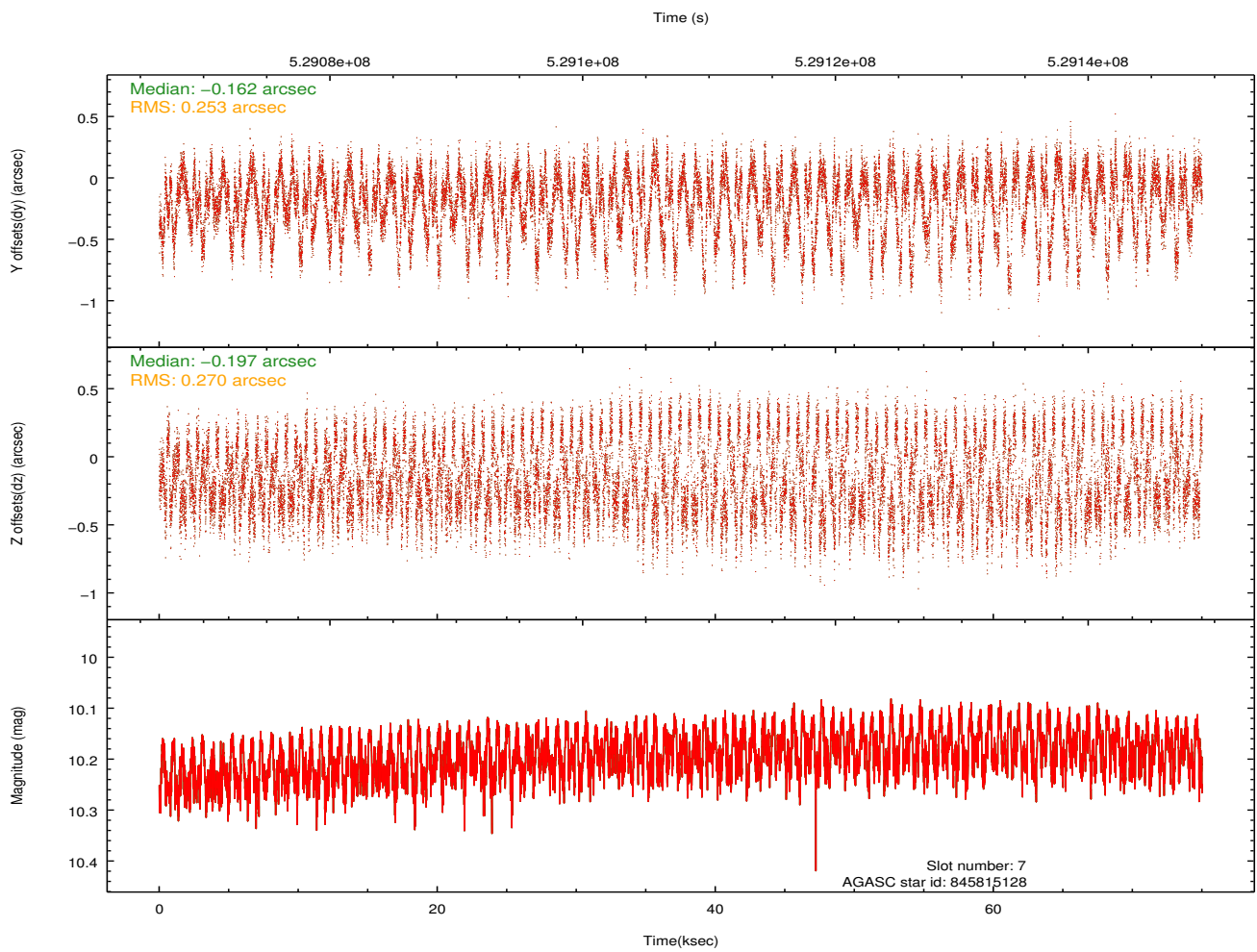
Time (s)



## 2.4.4 Slot 6

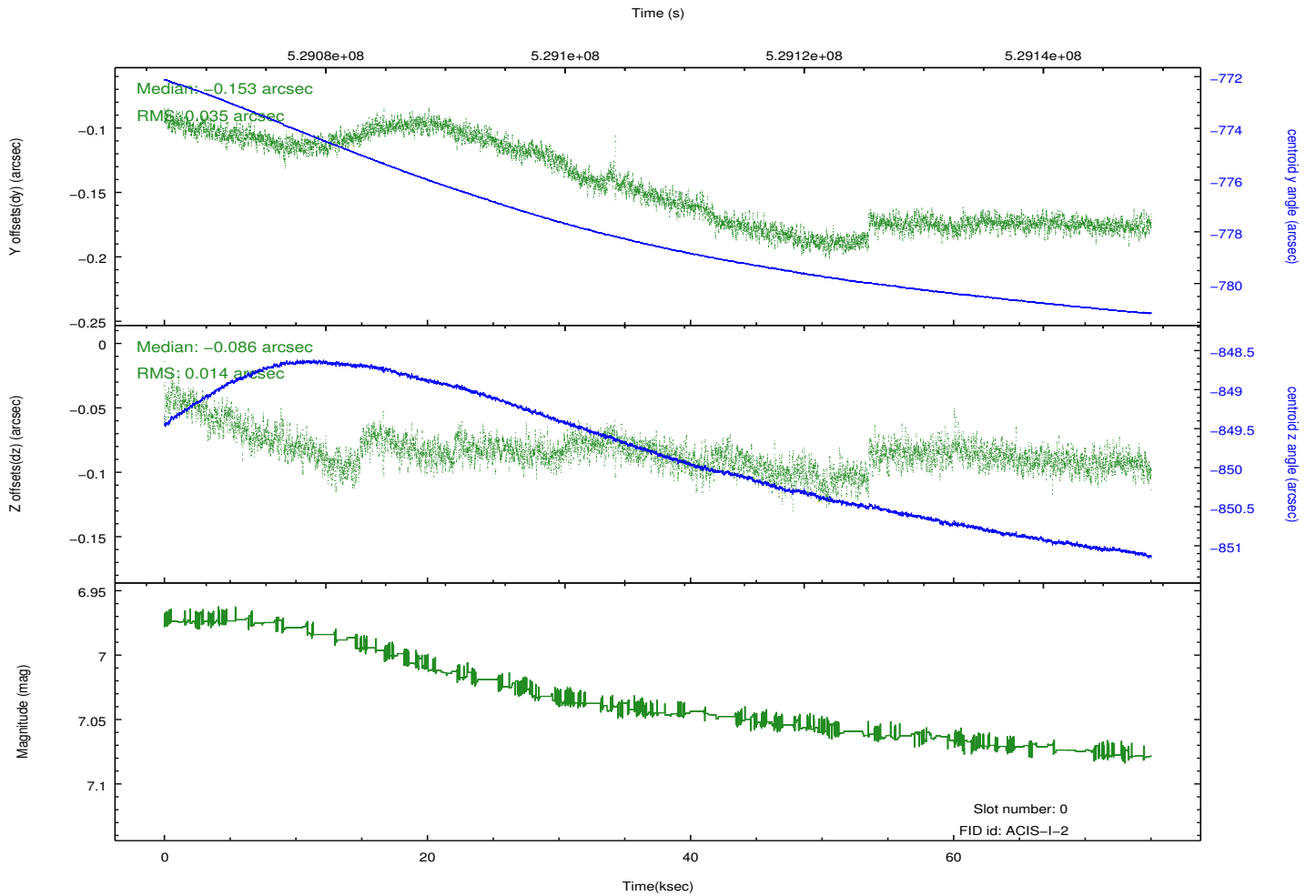
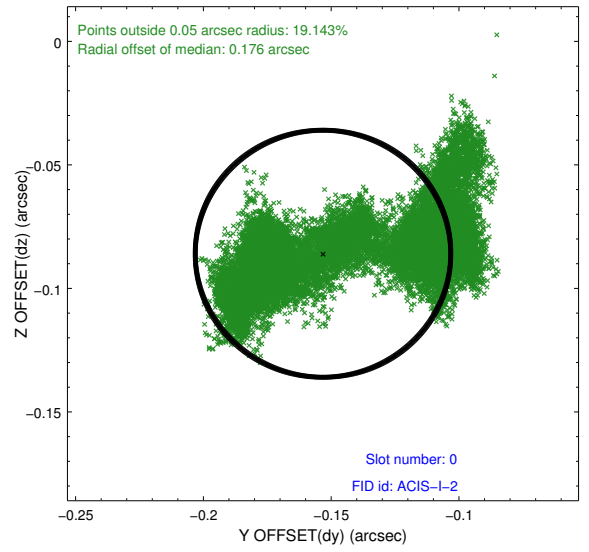
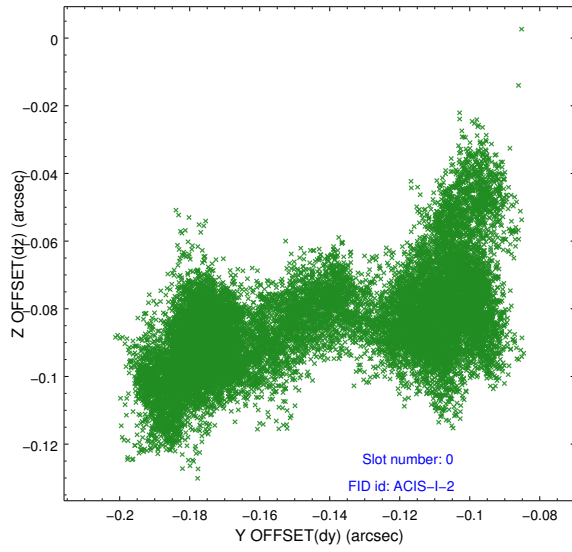


## 2.4.5 Slot 7

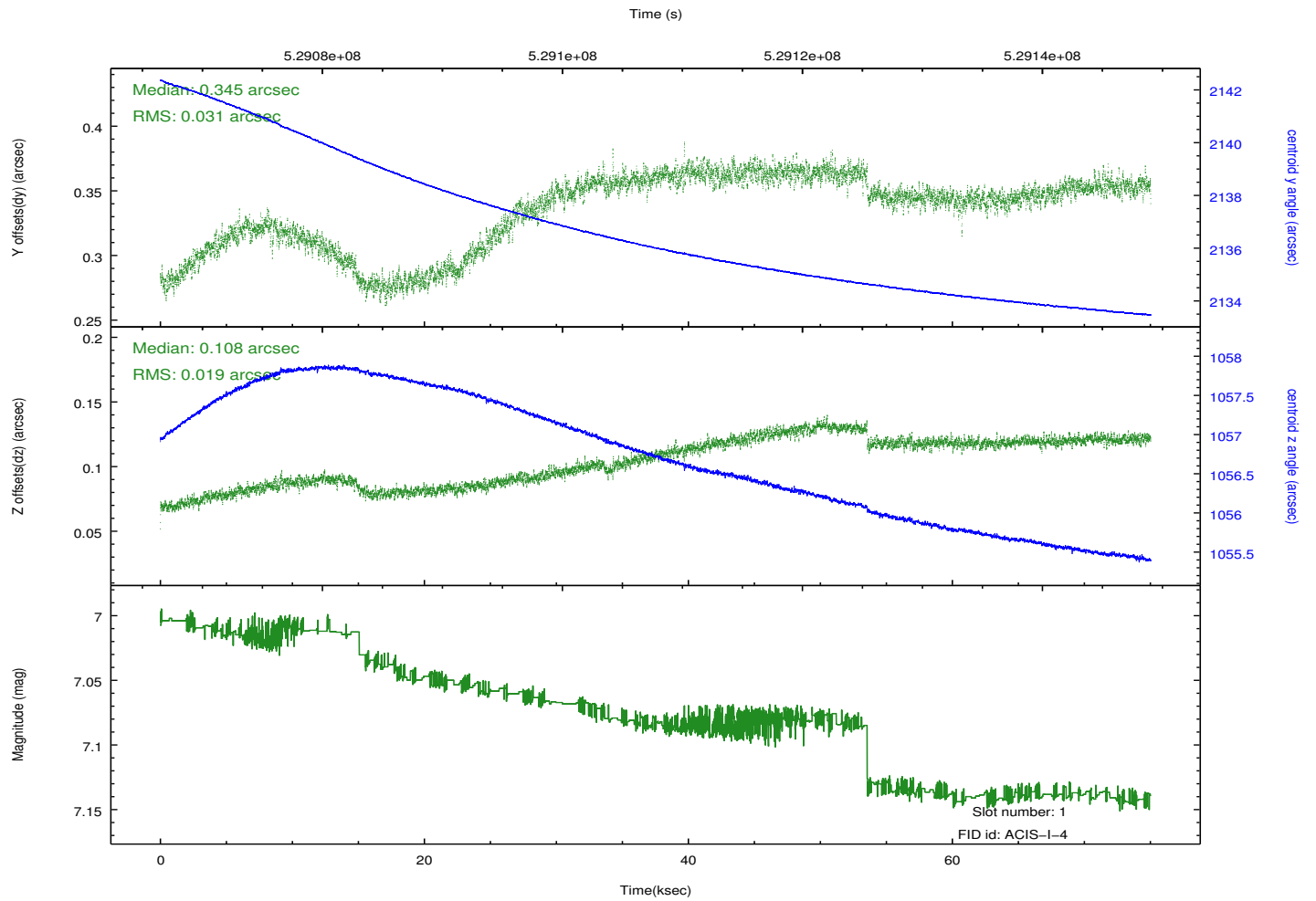
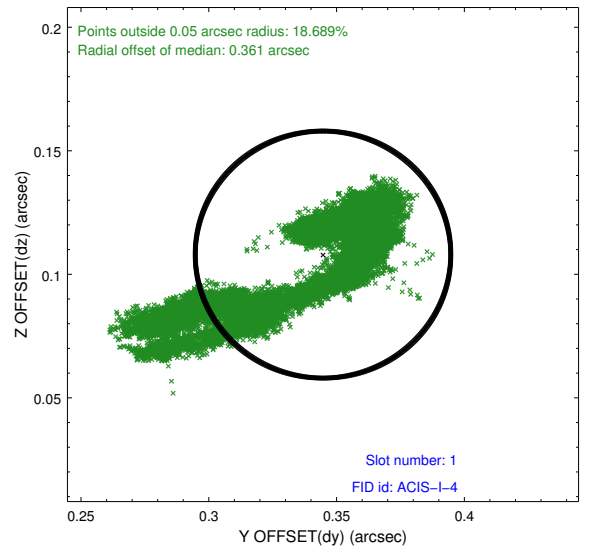
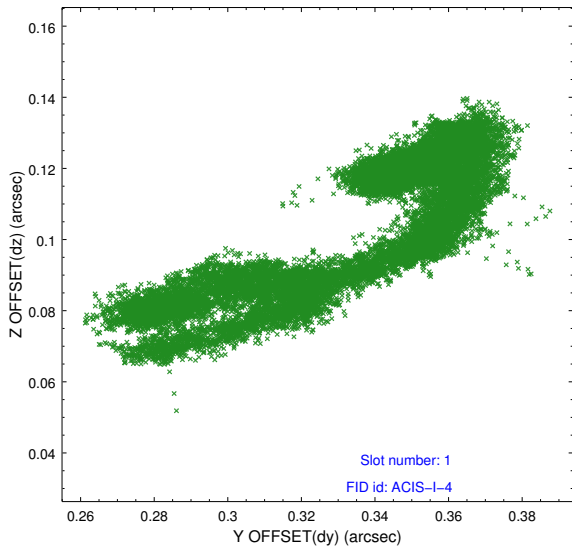


## 2.5 FID Slots

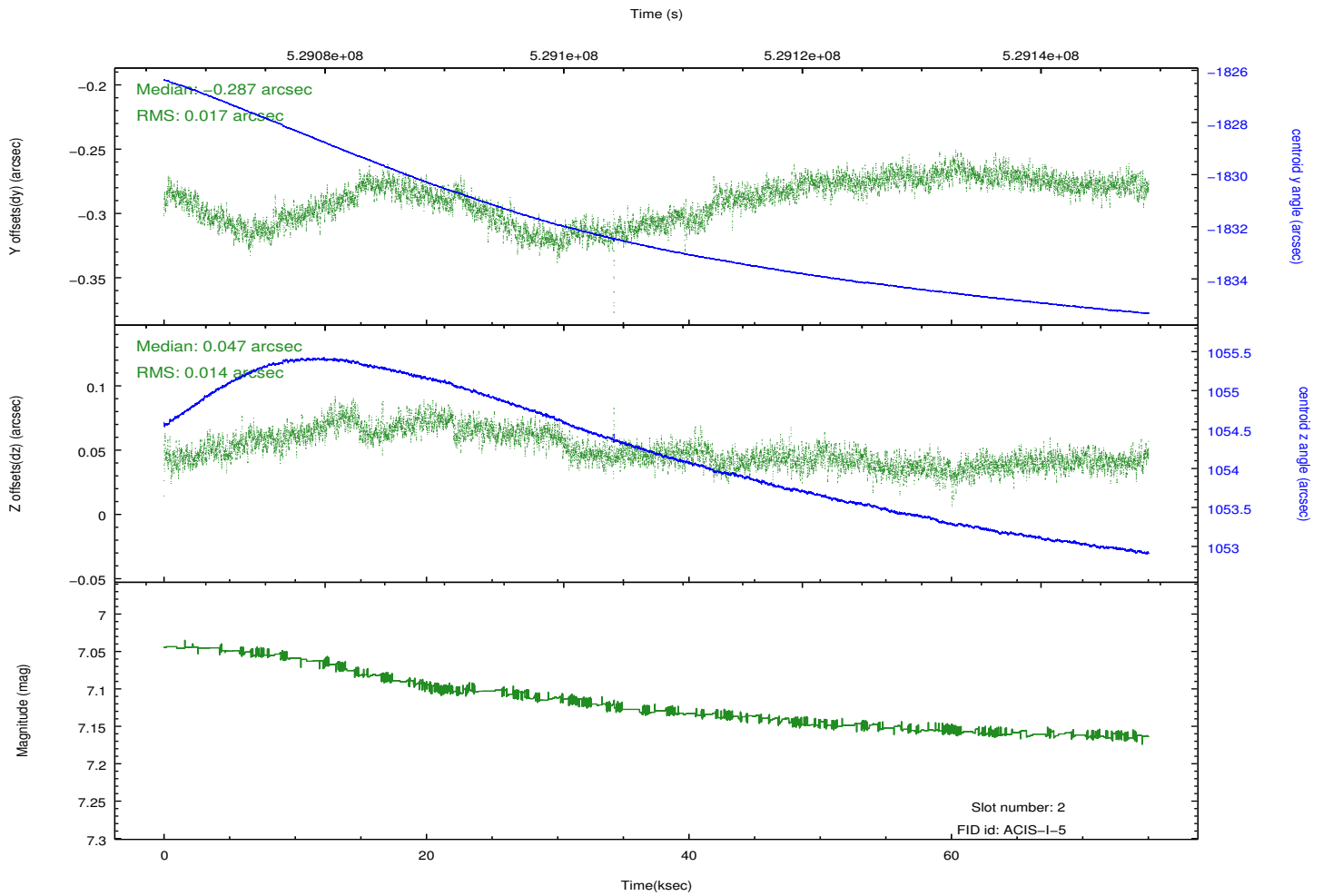
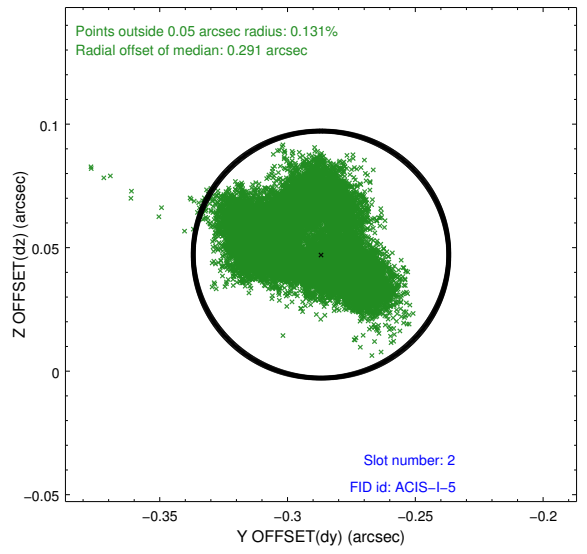
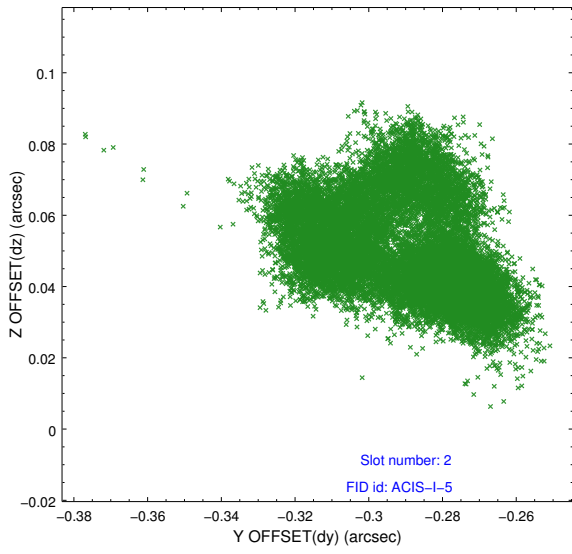
### 2.5.1 Slot 0



## 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)	2014.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	74.954374623716

## A.2 Comments