

# V&V Reference Report

## L2 ASCDS Version : 10.4.2.1

Observation 16670 - L2 Version 1  
Chandra X-Ray Center

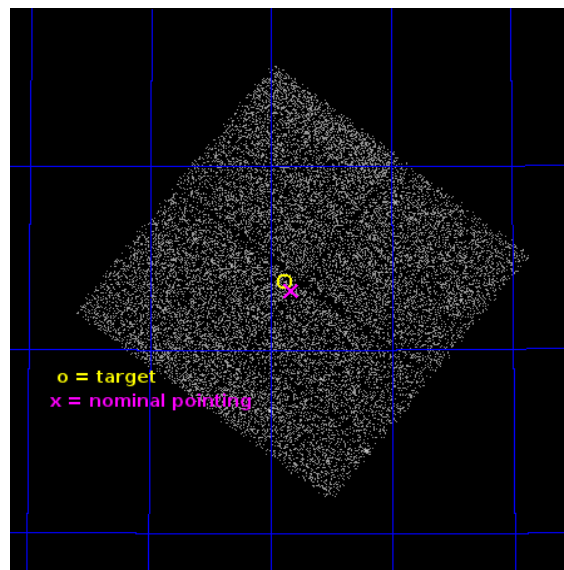
L2 Processing Date : Oct 10 2015

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# 1 Front

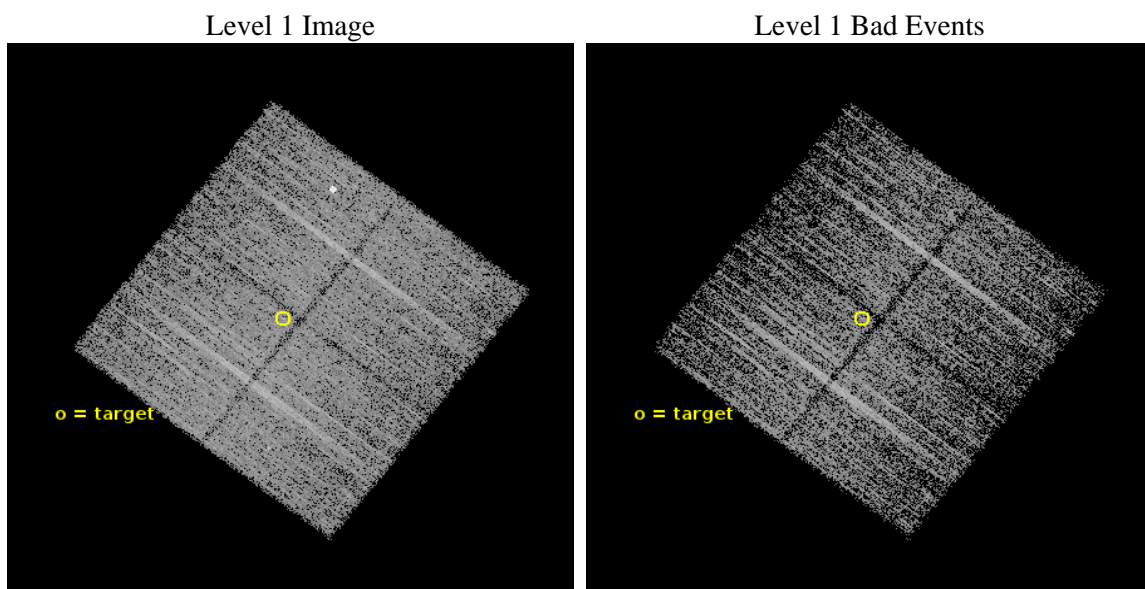
seq_num	200991	Sequence number
obs_id	16670	Observation id
title	A Study of Colliding Winds in Short Period B Star Binaries	Proposa
observer	Professor Richard Ignace	Principal investigator
object	AH Cep	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	341.970417	Observer's specified target RA [deg]
dec_targ	65.062139	Observer's specified target Dec [deg]
ra_nom	341.95739881143	Nominal RA [deg]
dec_nom	65.053756021153	Nominal Dec [deg]
roll_nom	217.67345389184	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10084.031654358	Sum of GTIs [s]
livetime	9952.2763570376	Livetime [s]
ontime0	10083.908534408	Sum of GTIs [s]
ontime1	10083.949574351	Sum of GTIs [s]
ontime2	10083.990614414	Sum of GTIs [s]
ontime3	10084.031654358	Sum of GTIs [s]
l2events	20899	Number of level 2 events



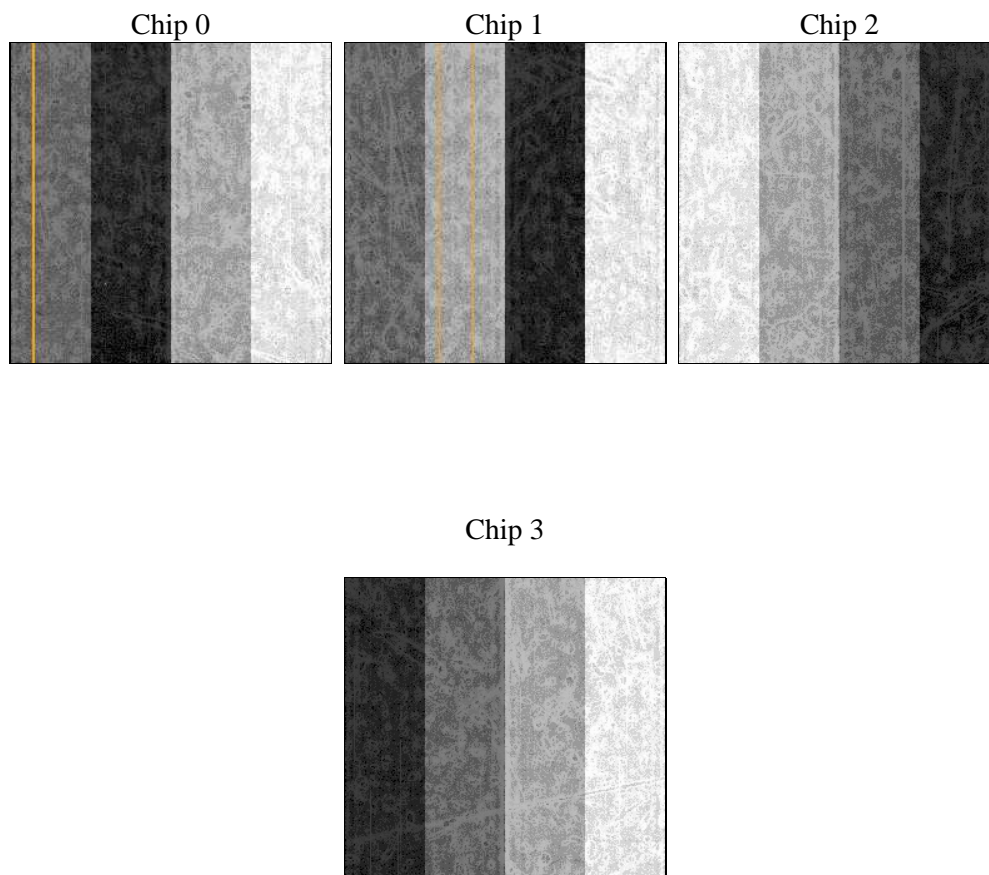
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	10084.031654358	Sum of GTIs [s]
caldsver	4.6.10a	&#160	ontime0	10083.908534408	Sum of GTIs [s]
date	2015-10-10T15:41:41	Date and time of file creation	ontime1	10083.949574351	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10083.990614414	Sum of GTIs [s]
			ontime3	10084.031654358	Sum of GTIs [s]
			l1events	210338	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	48179	52758	54224	55177
rejected events	41866	43692	48341	49367
rejected %	86%	82%	89%	89%

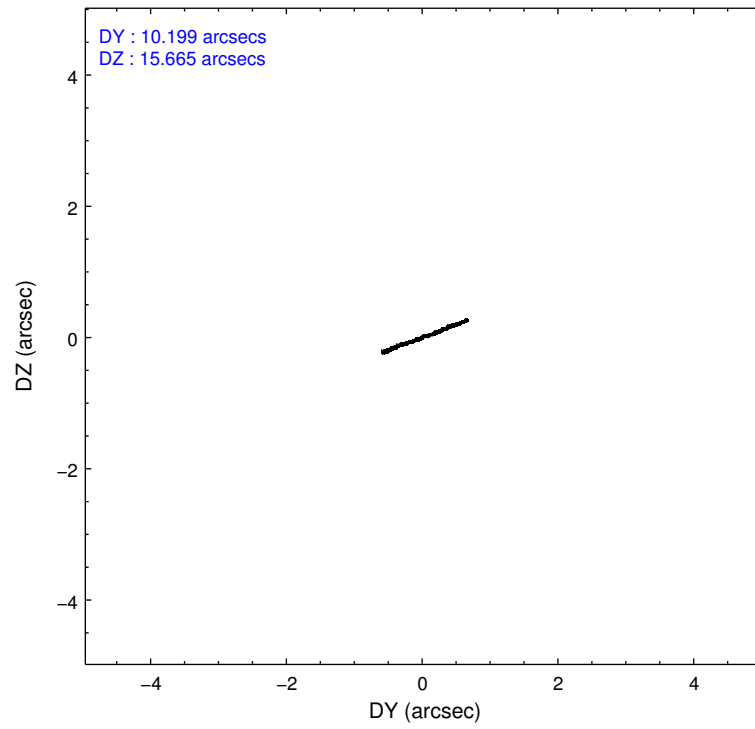
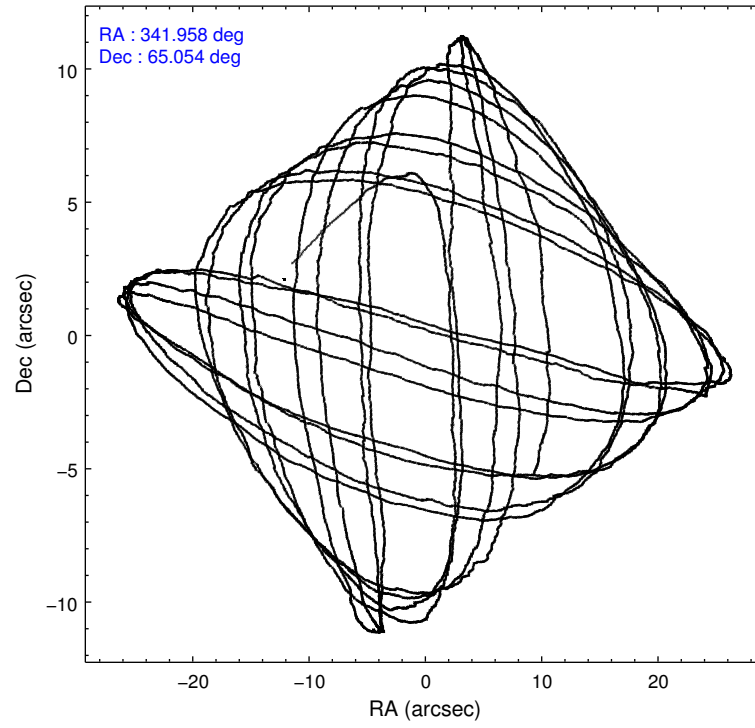
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2125	4460	2103	2028
	4%	8%	3%	3%
grade 1 events	26	41	34	30
	0%	0%	0%	0%
grade 2 events	1530	1755	1412	1275
	3%	3%	2%	2%
grade 3 events	669	642	611	620
	1%	1%	1%	1%
grade 4 events	608	637	601	572
	1%	1%	1%	1%
grade 5 events	2290	2506	2171	2742
	4%	4%	4%	4%
grade 6 events	1386	1578	1162	1316
	2%	2%	2%	2%
grade 7 events	39545	41139	46130	46594
	82%	77%	85%	84%

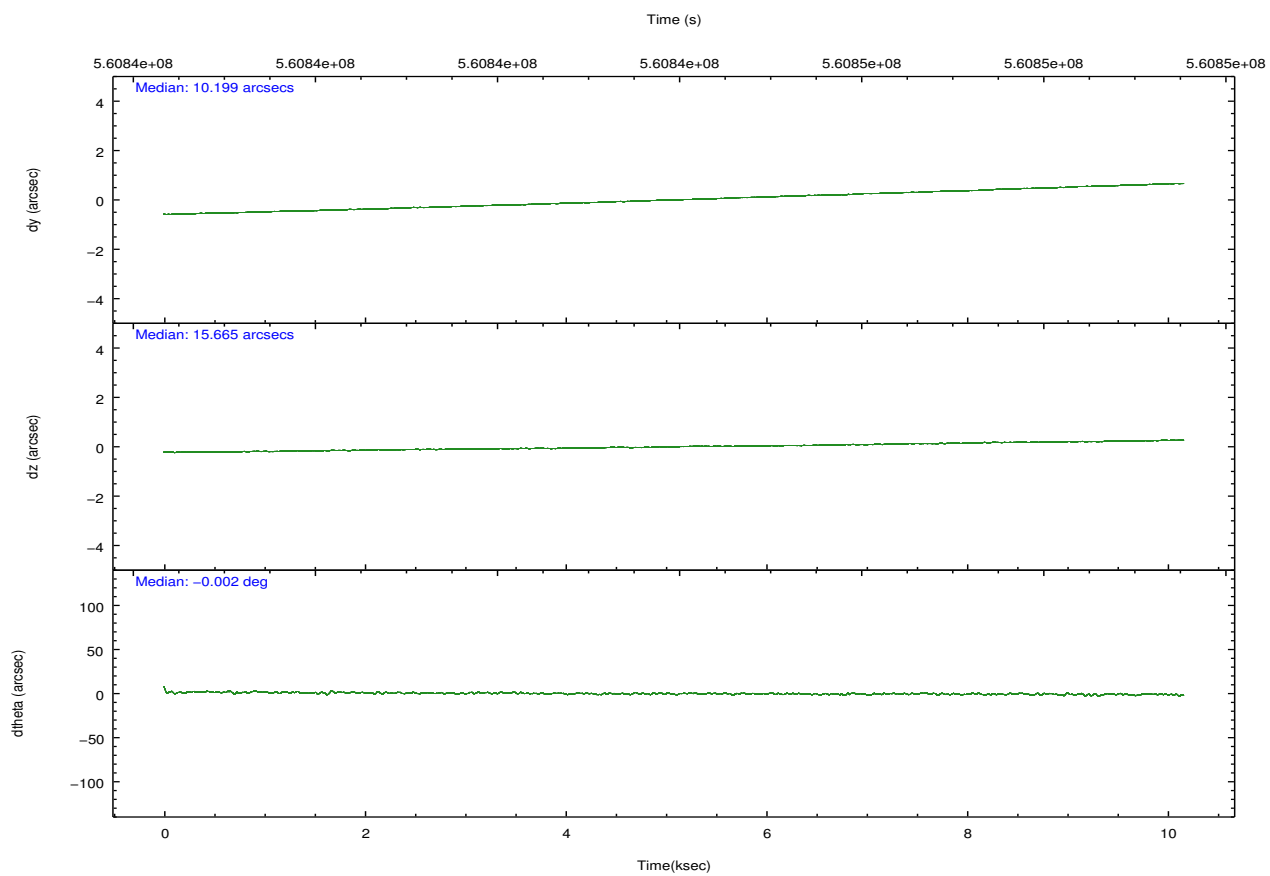
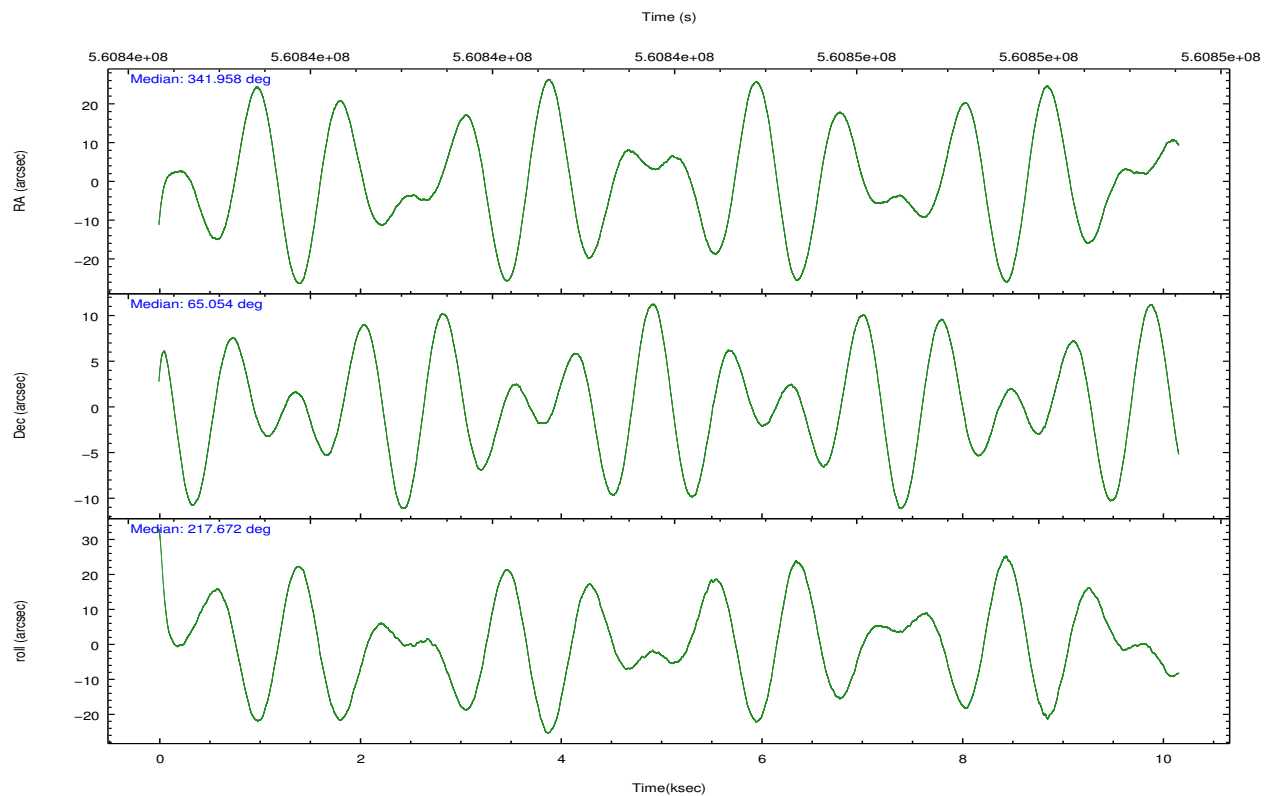


## 2.2 Compared Parameters

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	341.982021	341.9573988114284	Subarray requested	NONE	NONE
[deg] Pointing Dec	65.079331	65.05375602115309	Alternating exposures requested	N	N
[deg] Pointing Roll	217.442408	217.6734538918427	[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)	560839001.184000	560837520.12205			
Observation start date	2015-10-10T04:35:33	2015-10-10T04:12:00			
[s] Observation end time (MET)	560849001.184000	560850345.43527			
Observation end date	2015-10-10T07:22:13	2015-10-10T07:45:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect



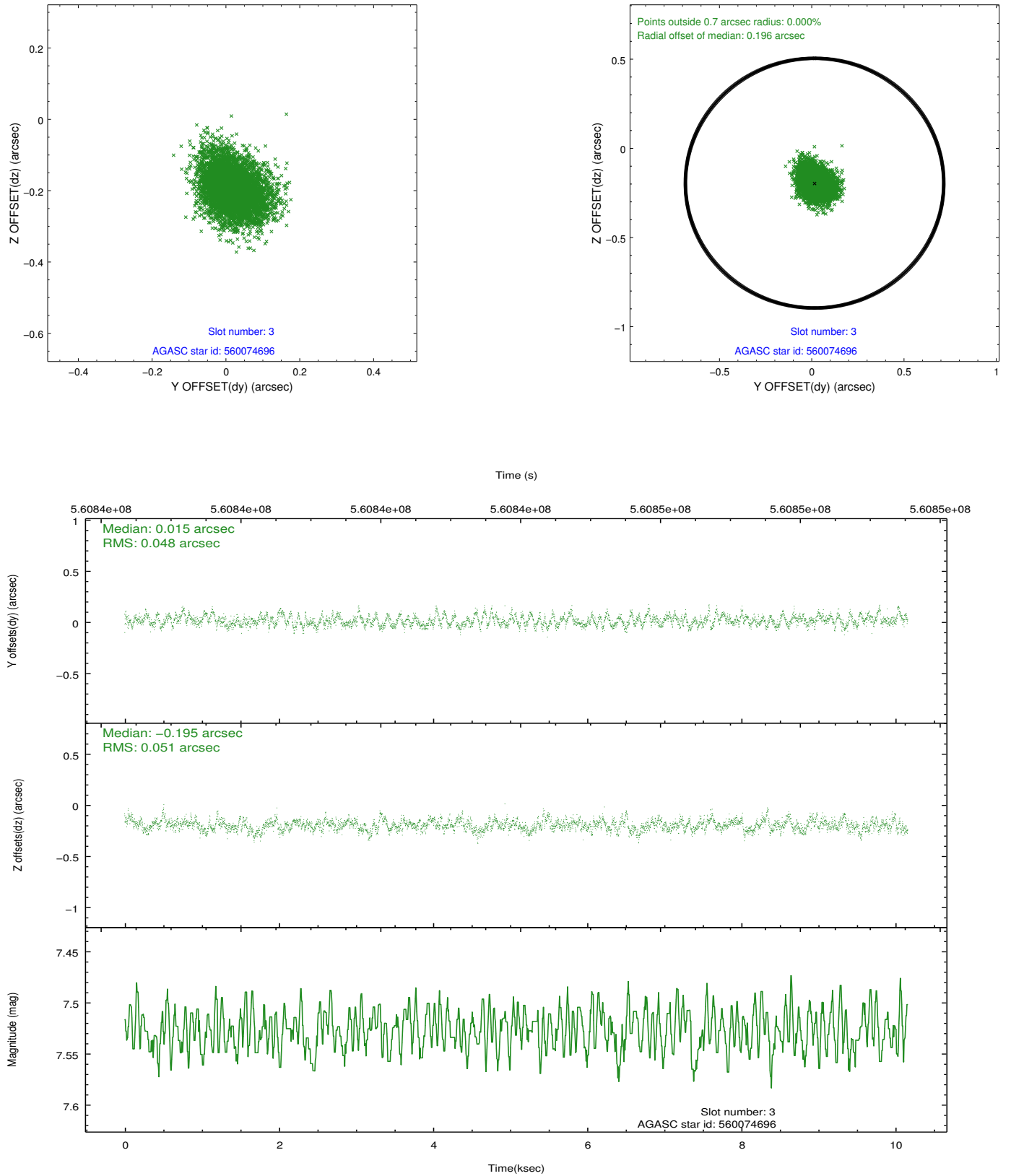


### Slot Statistics

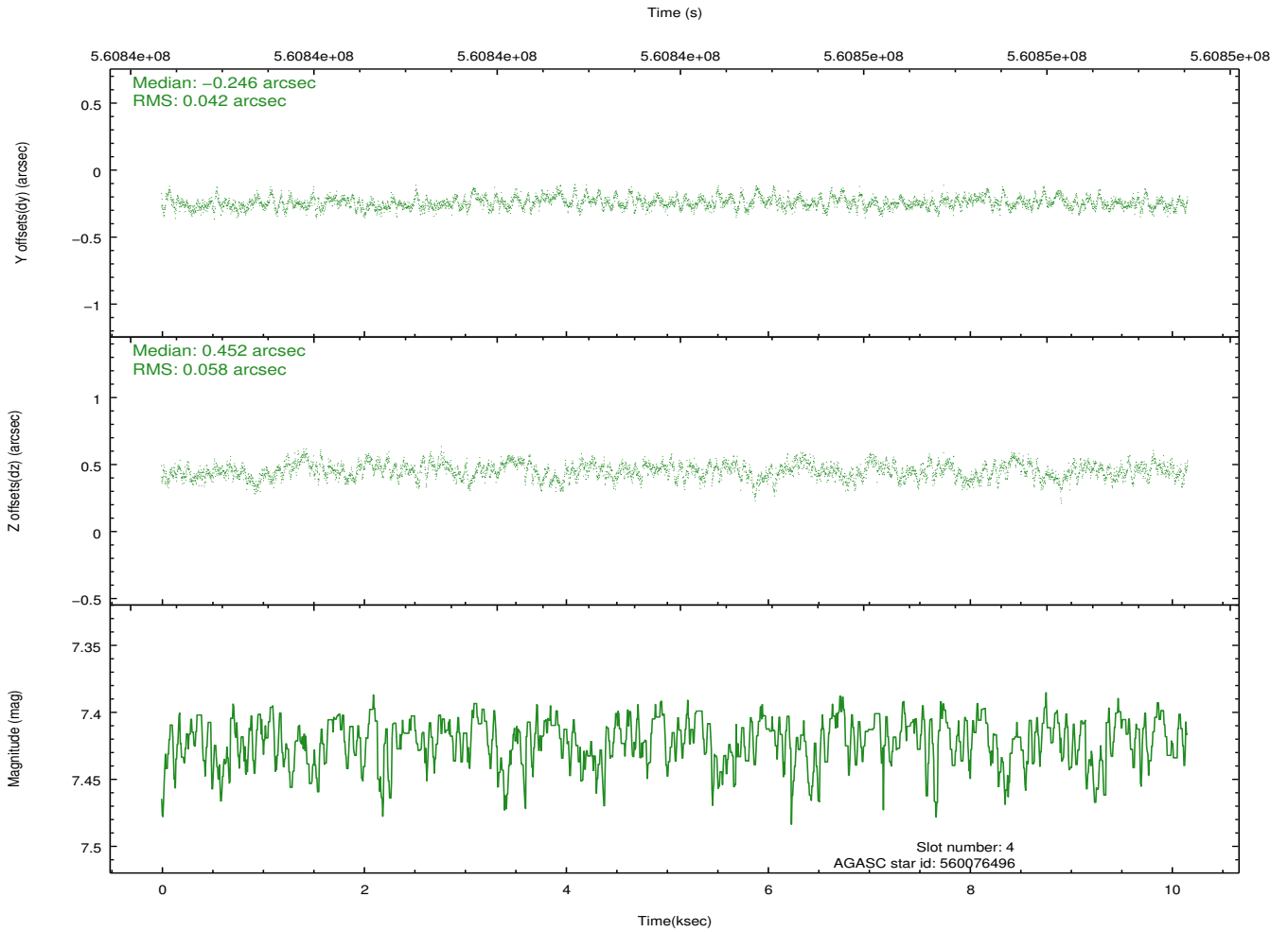
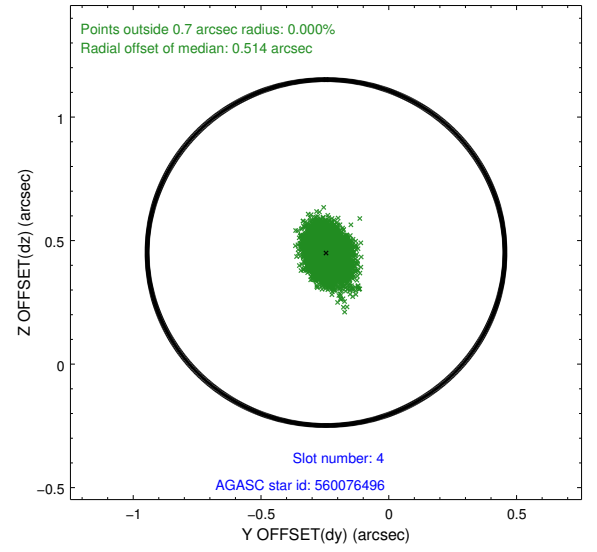
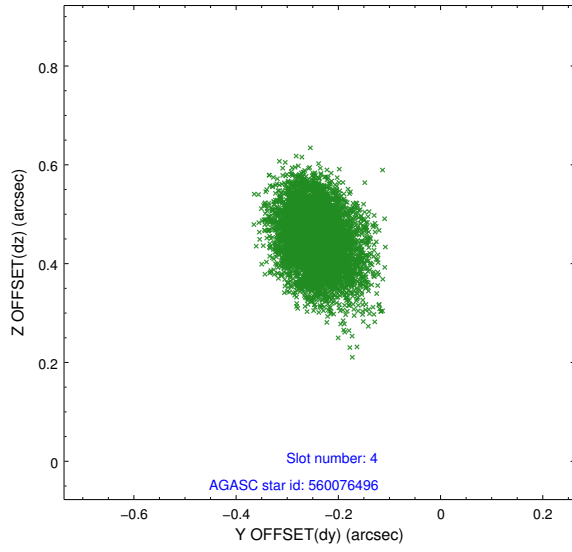
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.15	2479	-0.206	-0.135	0.009	0.018	0.000000	0.000000	-765.01	-845.79
1	FID		ACIS-I-4	7.18	2477	0.384	0.146	0.009	0.017	0.000000	0.000000	2149.42	1060.39
2	FID		ACIS-I-5	7.24	2478	-0.280	0.057	0.012	0.020	0.000000	0.000000	-1818.23	1058.76
3	GUIDE	used	560074696	7.53	4957	0.015	-0.195	0.074	0.121	341.024279	64.570666	2284.56	549.07
4	GUIDE	used	560076496	7.42	4958	-0.246	0.452	0.077	0.123	341.515045	65.294616	85.64	-1043.94
5	GUIDE	used	560079536	6.80	4957	0.228	0.171	0.062	0.102	340.571226	64.872037	2151.85	-737.64
6	GUIDE	used	561783384	8.05	4956	0.083	-0.247	0.084	0.137	343.125943	65.176298	-1593.64	761.55
7	GUIDE	used	560079392	8.00	4956	-0.088	-0.179	0.078	0.123	341.749918	64.177620	2262.04	2356.04

## 2.4 Star Slots

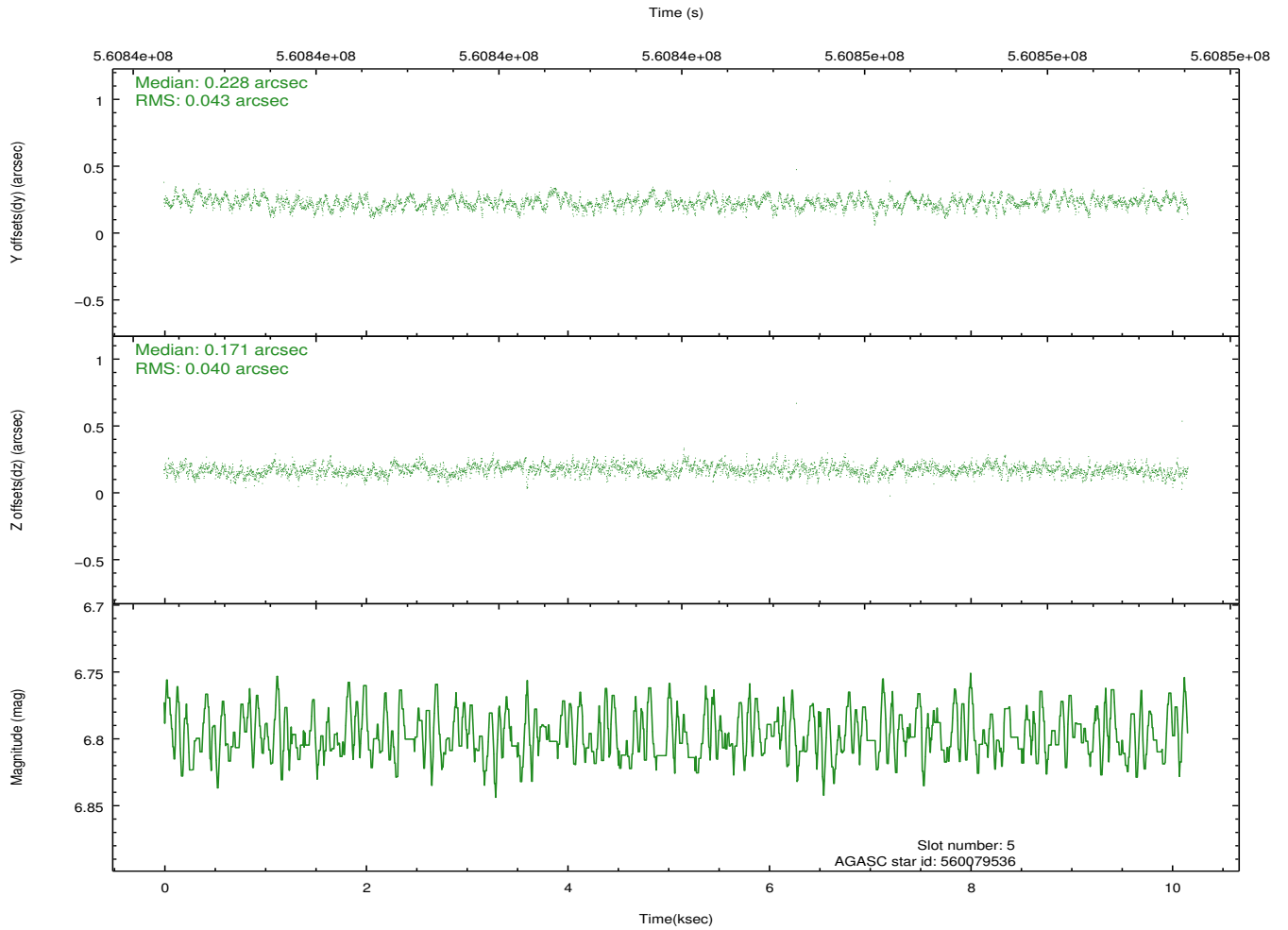
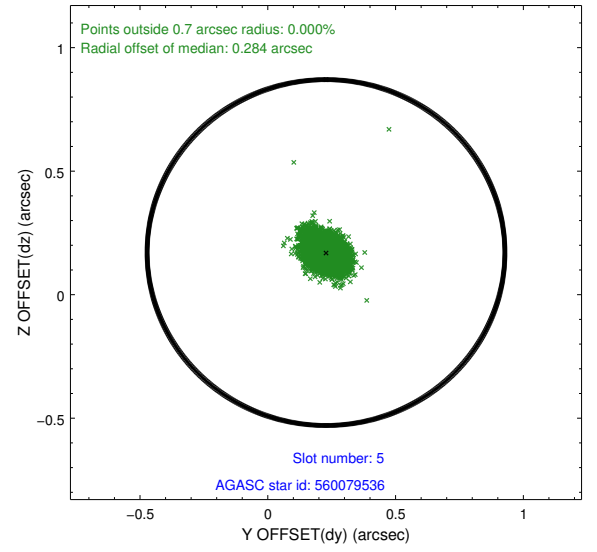
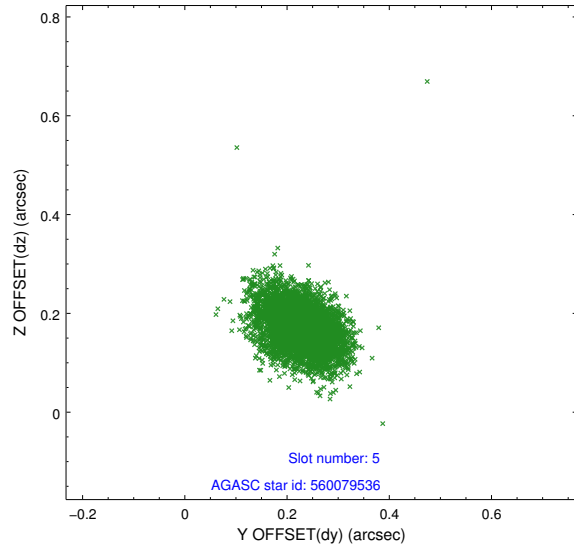
### 2.4.1 Slot 3



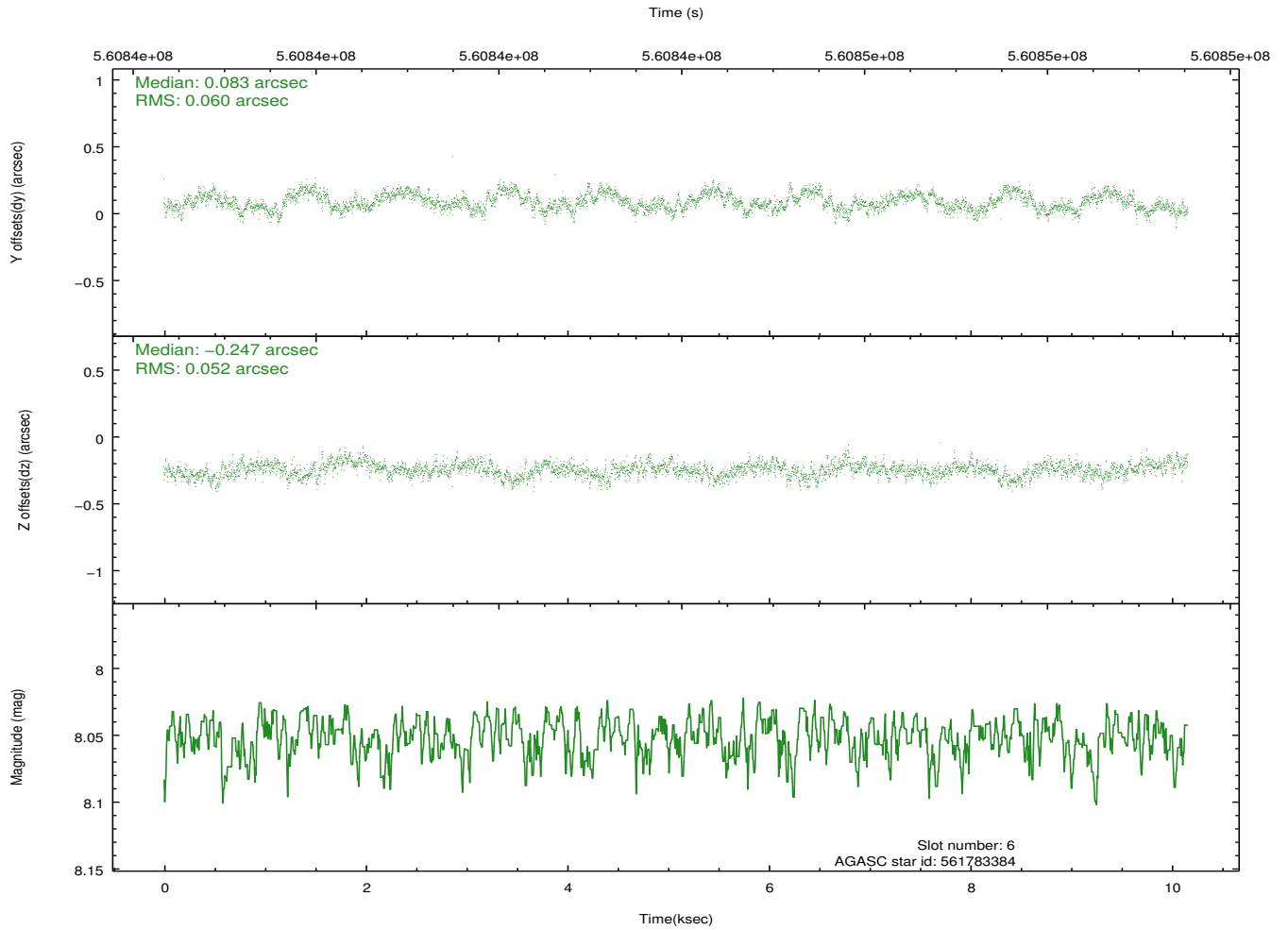
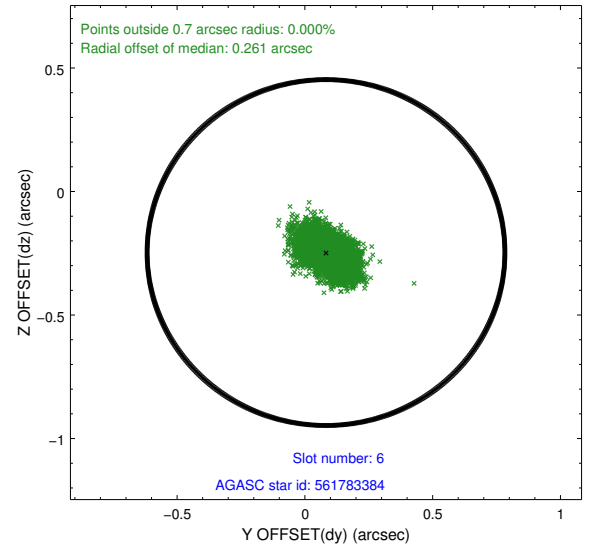
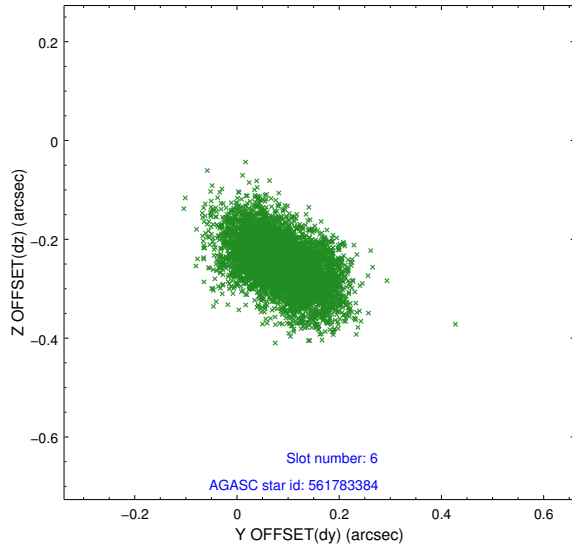
## 2.4.2 Slot 4



### 2.4.3 Slot 5

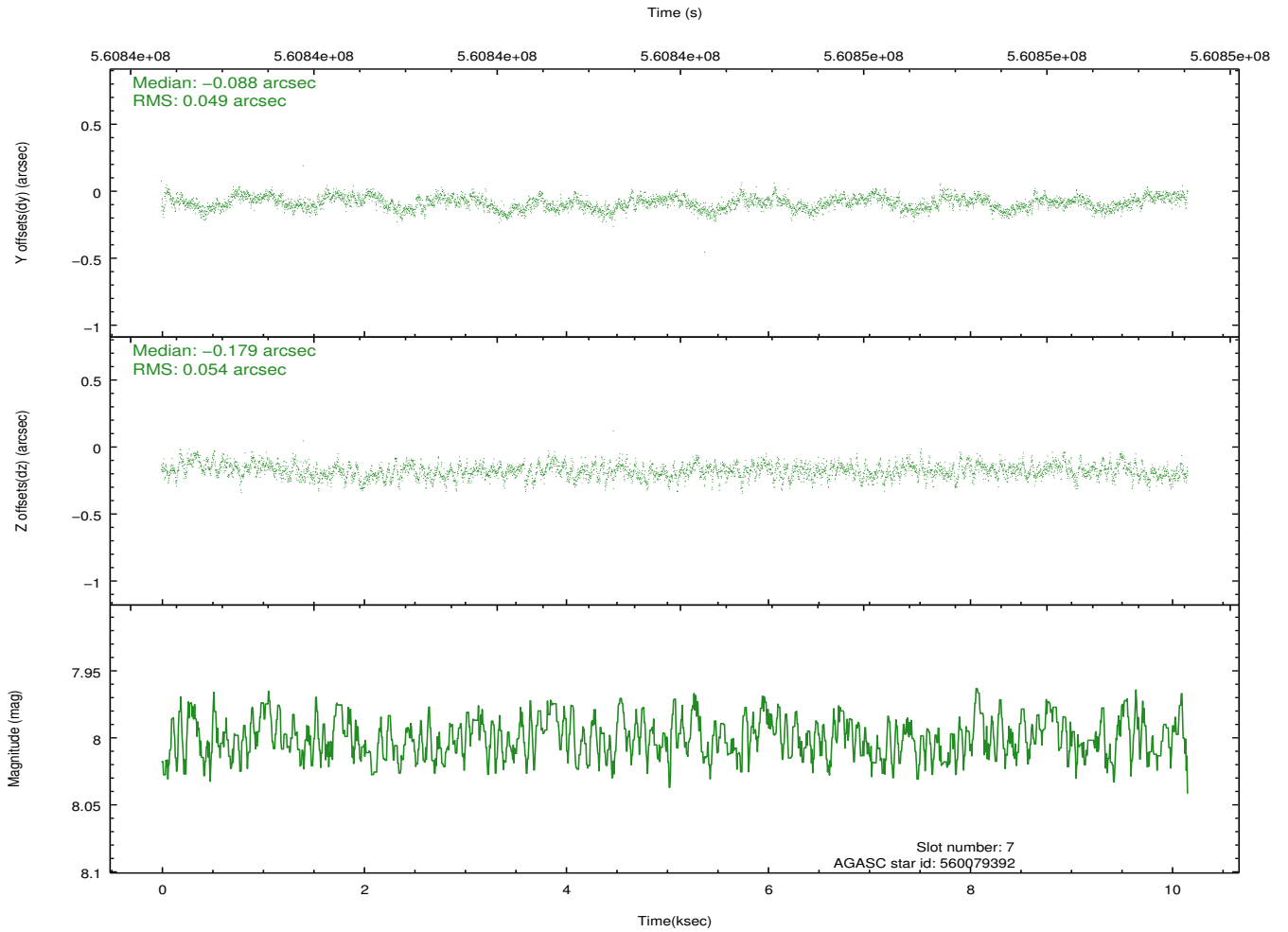
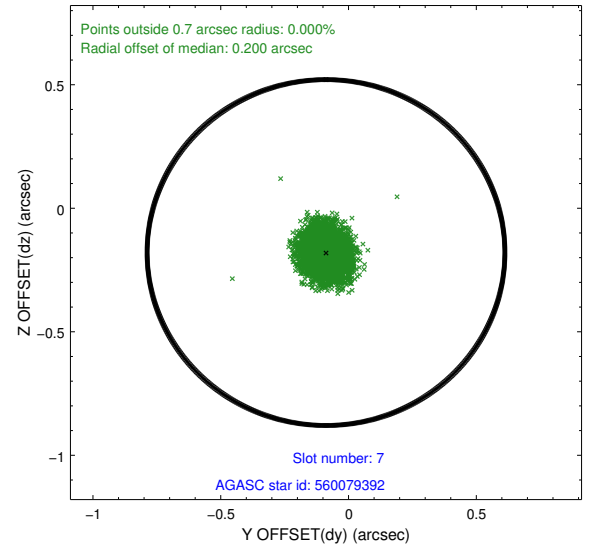
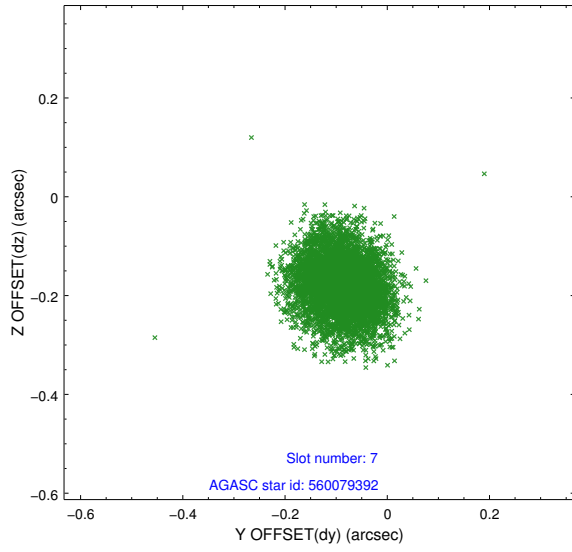


## 2.4.4 Slot 6



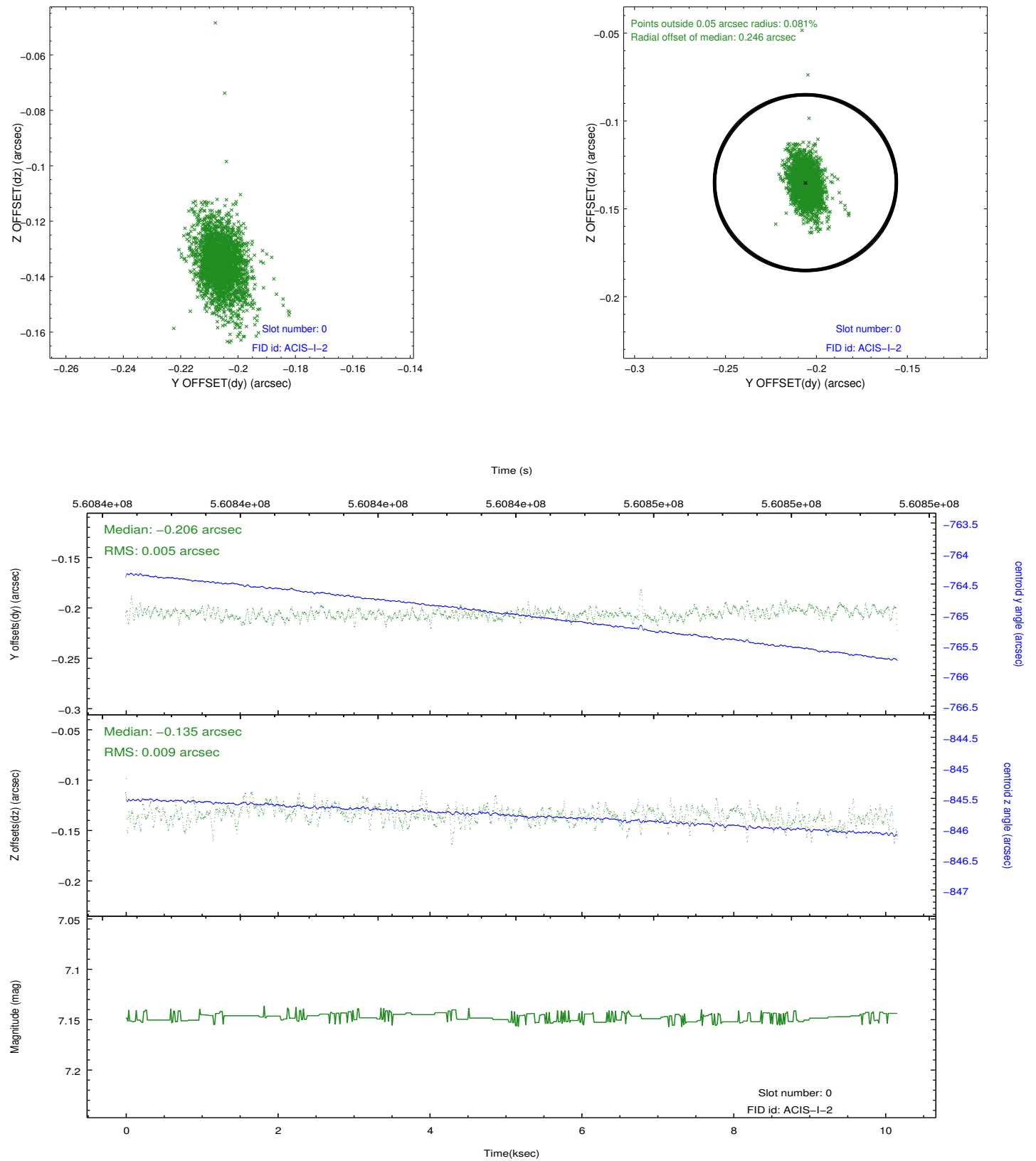


## 2.4.5 Slot 7

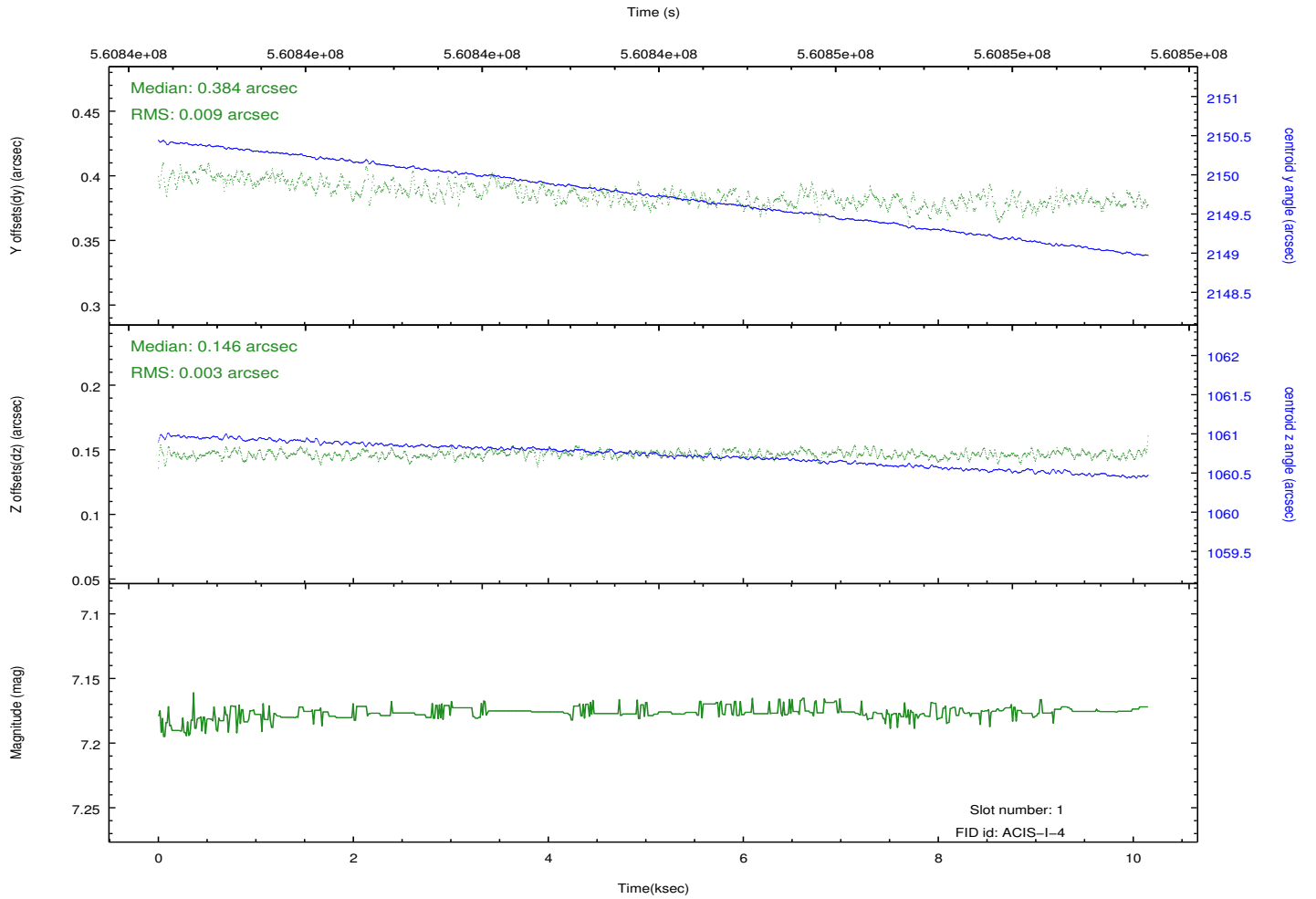
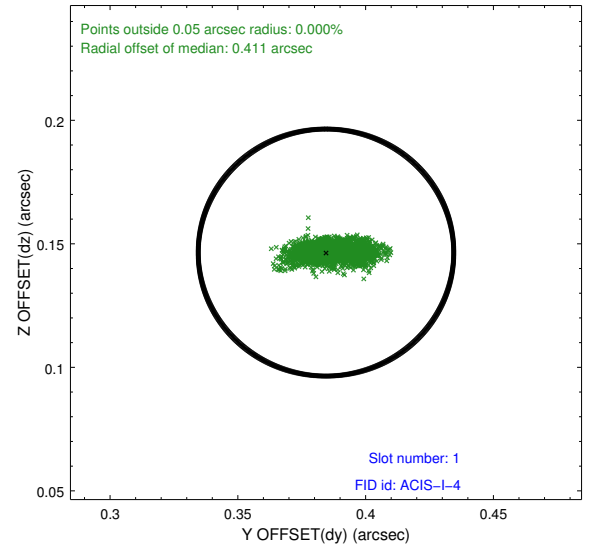
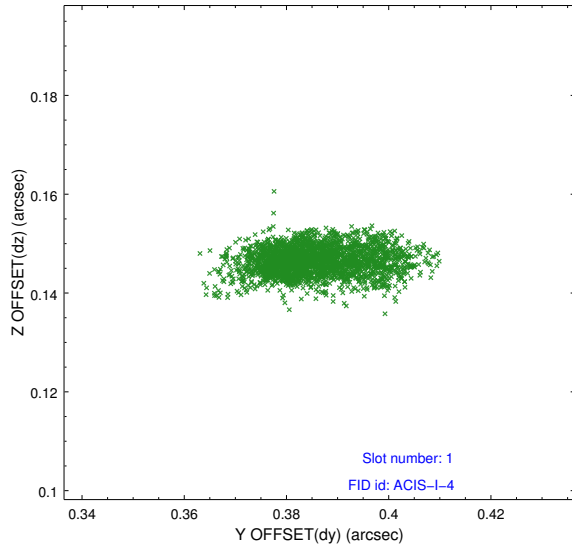


## 2.5 FID Slots

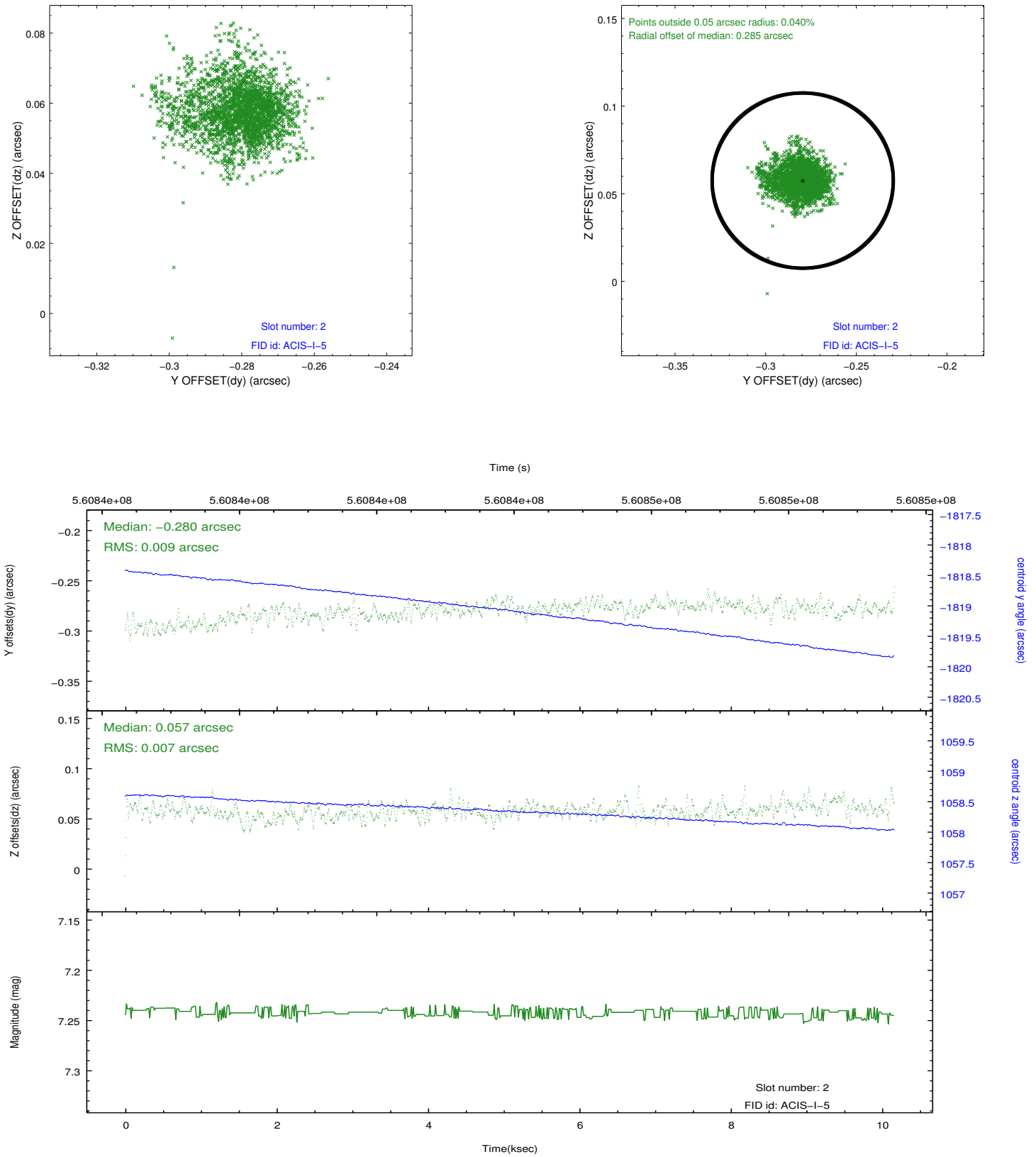
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2015.10.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.084031654358

### A.2 Comments