

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 6056 - L2 Version 3  
Chandra X-Ray Center

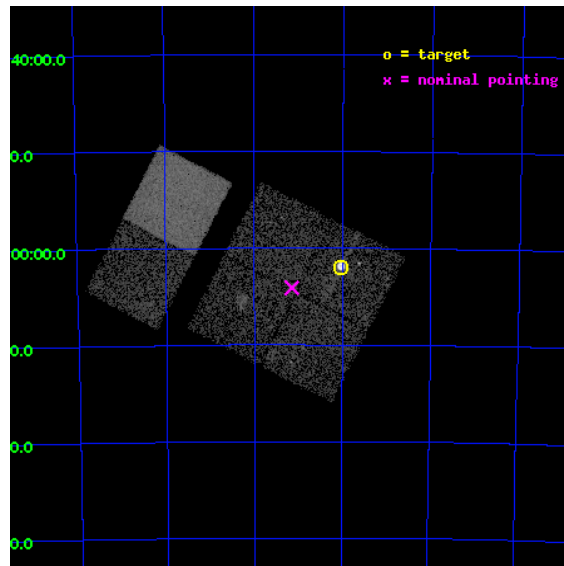
L2 Processing Date : Dec 14 2012

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# 1 Front

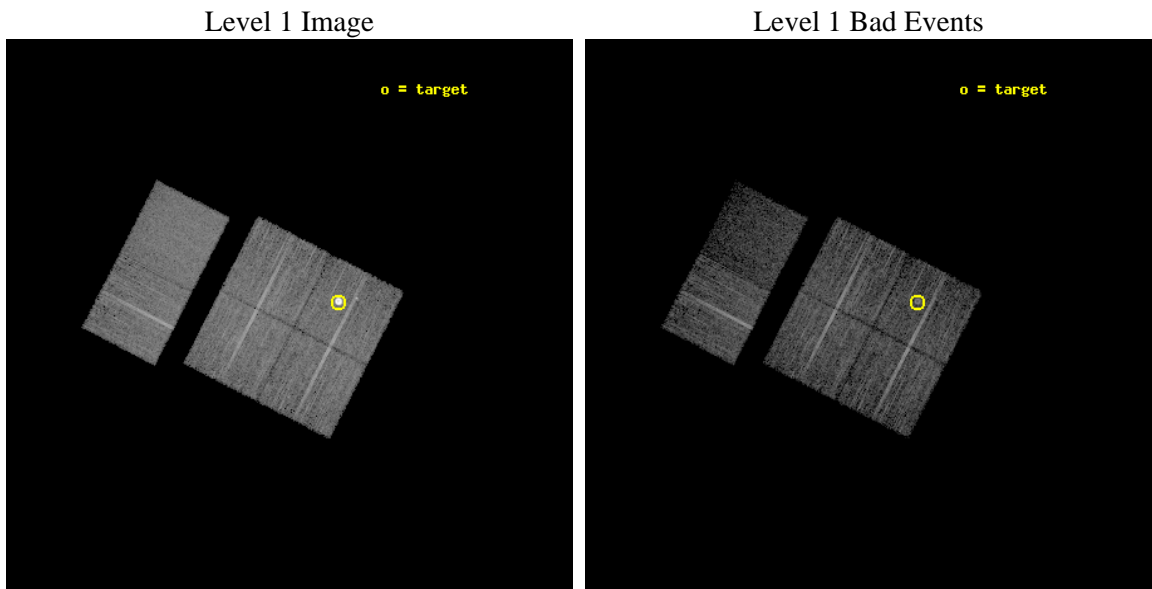
seq_num	590383	Sequence number
obs_id	6056	Observation id
title	AO6A ACIS-I Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[I1,-120,-4.0,-3.68,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.286375749247	Nominal RA [deg]
dec_nom	-72.068416944101	Nominal Dec [deg]
roll_nom	297.17290027098	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8111.9589795768	Sum of GTIs [s]
livetime	8009.2404705421	Livetime [s]
ontime0	8115.1999697685	Sum of GTIs [s]
ontime1	8111.9589795768	Sum of GTIs [s]
ontime2	8111.9590293765	Sum of GTIs [s]
ontime3	8115.1999697685	Sum of GTIs [s]
ontime6	8115.1999697685	Sum of GTIs [s]
ontime7	8115.1999697685	Sum of GTIs [s]
l2events	71772	Number of level 2 events



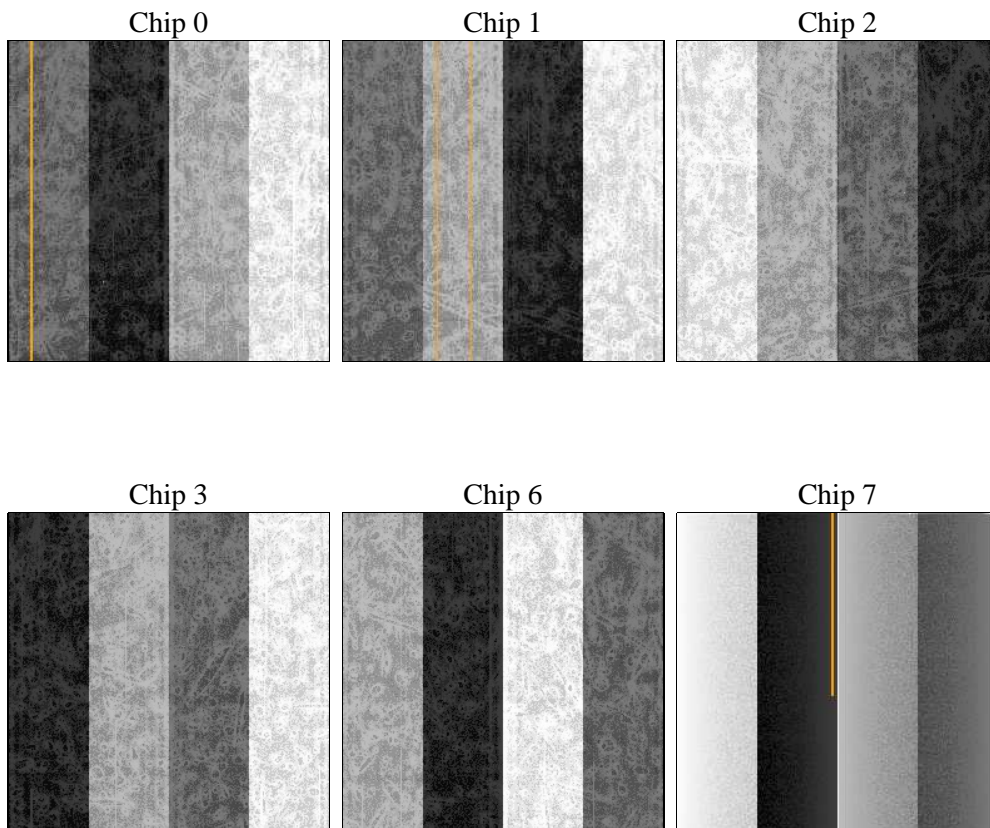
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	8111.9589795768	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime0	8115.1999697685	Sum of GTIs [s]
date	2012-12-14T20:27:38	Date and time of file creation	ontime1	8111.9589795768	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8111.9590293765	Sum of GTIs [s]
			ontime3	8115.1999697685	Sum of GTIs [s]
			ontime6	8115.1999697685	Sum of GTIs [s]
			ontime7	8115.1999697685	Sum of GTIs [s]
			l1events	360276	Number of level 1 events

### 2.1.4 Events

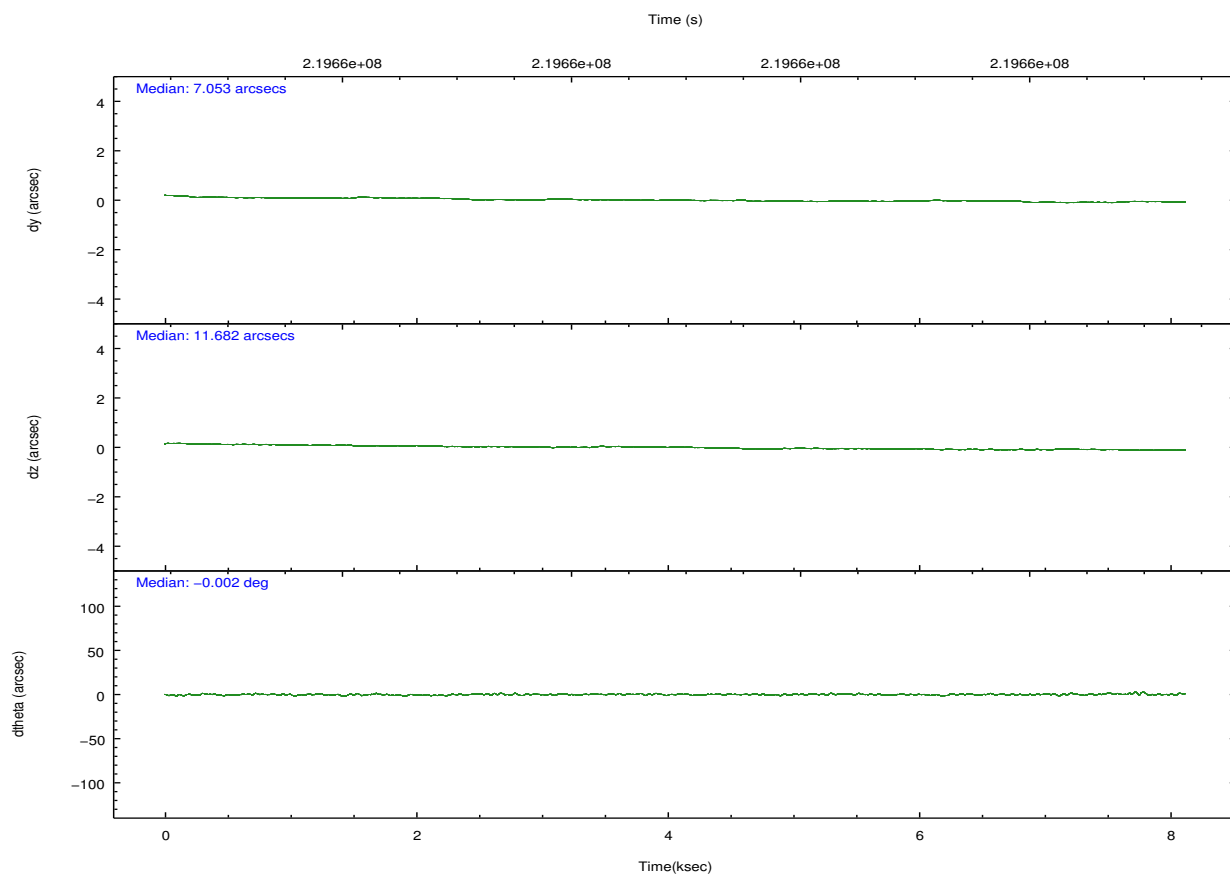
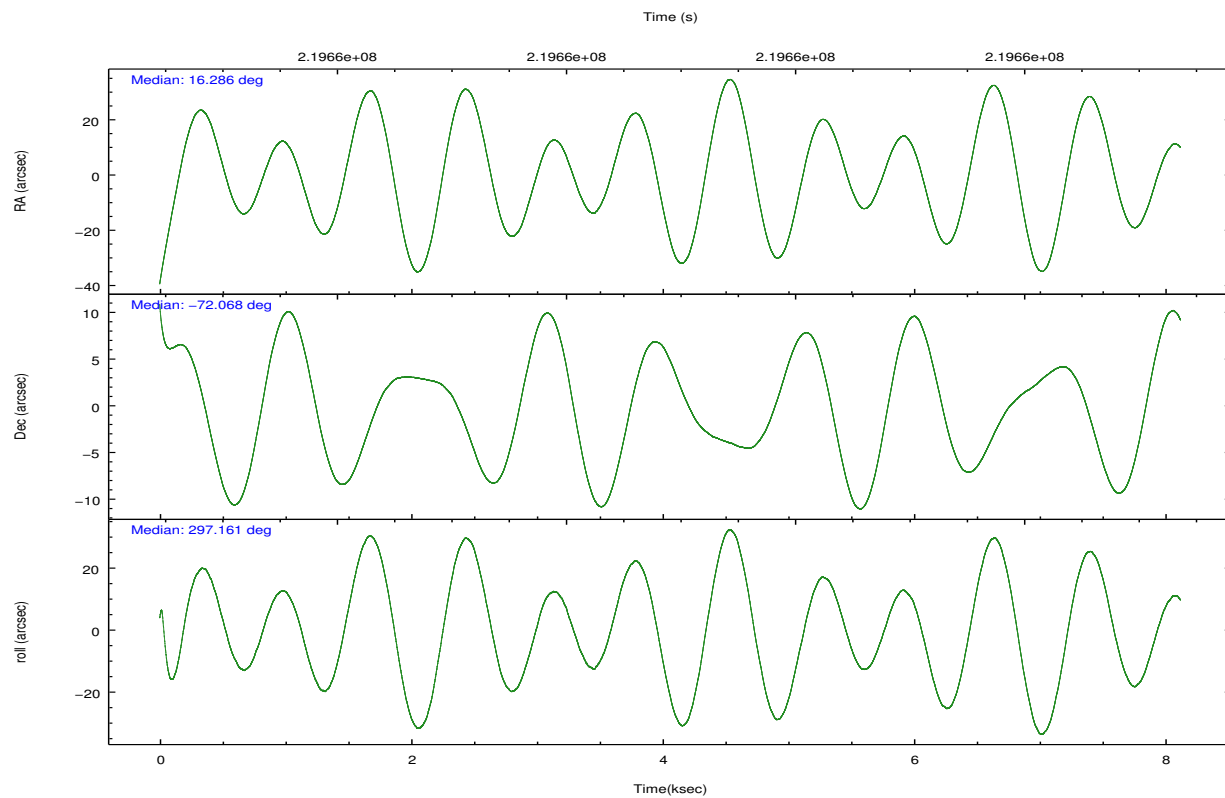
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	52633	75986	59308	57181	57999	57169	grade 0 events	2513	24039	2570	2140	2362	3134
rejected events	47142	46704	54003	52313	52555	29371		4%	31%	4%	3%	4%	5%
rejected %	89%	61%	91%	91%	90%	51%	grade 1 events	29	222	43	32	22	57
								0%	0%	0%	0%	0%	0%
							grade 2 events	1317	3068	1274	1088	1274	6357
								2%	4%	2%	1%	2%	11%
							grade 3 events	660	1120	565	619	619	2847
								1%	1%	0%	1%	1%	4%
							grade 4 events	566	1083	595	586	647	2996
								1%	1%	1%	1%	1%	5%
							grade 5 events	1611	1765	1478	1867	1914	5811
								3%	2%	2%	3%	3%	10%
							grade 6 events	974	1243	865	985	1166	15188
								1%	1%	1%	1%	2%	26%
							grade 7 events	44963	43446	51918	49864	49995	20779
								85%	57%	87%	87%	86%	36%



## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	16.211422	16.28637574924721	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.053698	-72.06841694410136	Alternating exposures requested	N	N
[deg] Pointing Roll	296.892828	297.1729002709772	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	215654464.184000	215654464.184000			
[s] Window stop time (MET)	220838464.184000	220838464.184000			
[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)	219656964.184000	219655435.94232			
Observation start date	2004-12-17T07:48:20	2004-12-17T07:23:55			
[s] Observation end time (MET)	219664964.184000	219665557.30527			
Observation end date	2004-12-17T10:01:40	2004-12-17T10:12:37			
Read mode	TIMED	TIMED			

## 2.3 Aspect

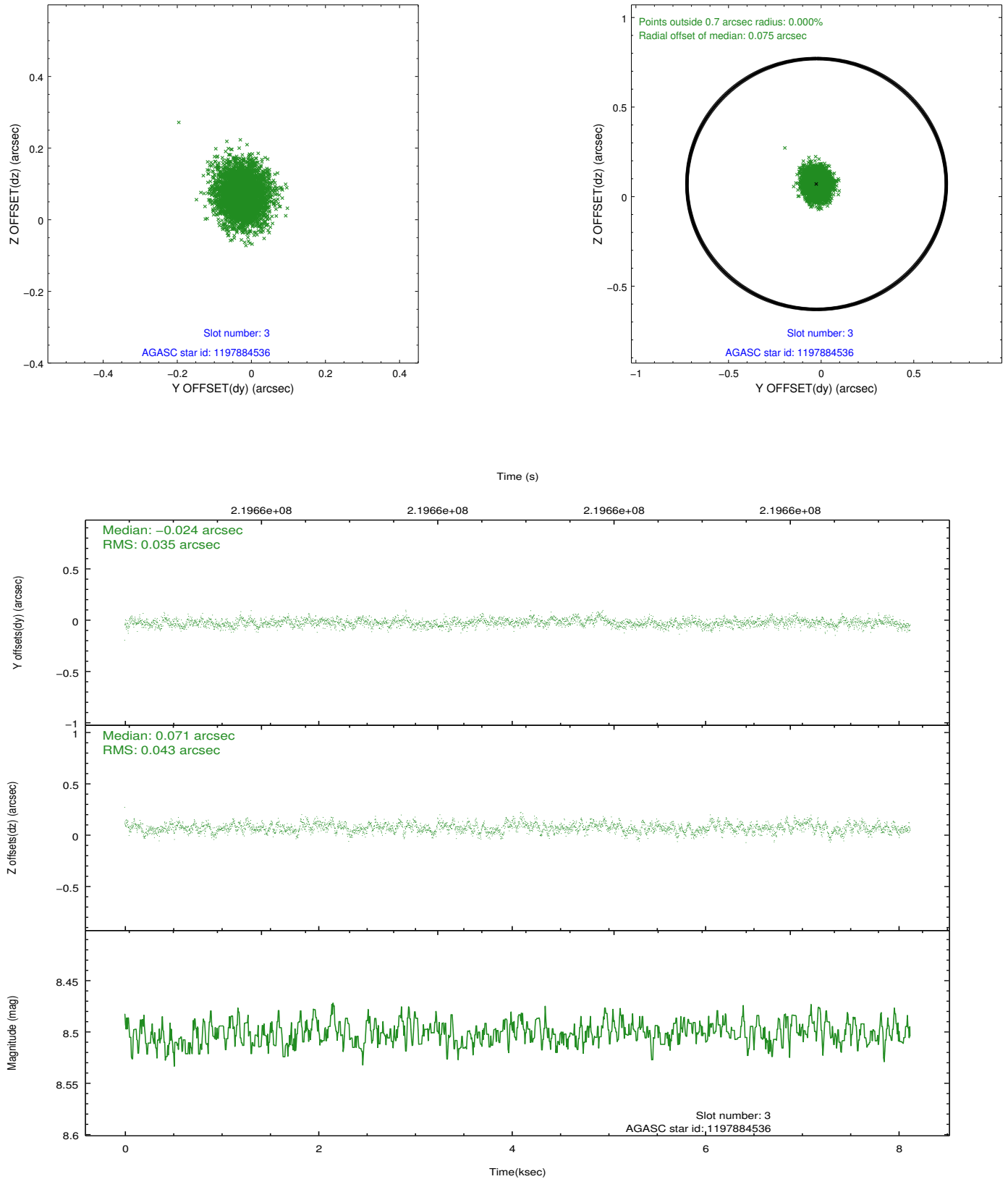


### Slot Statistics

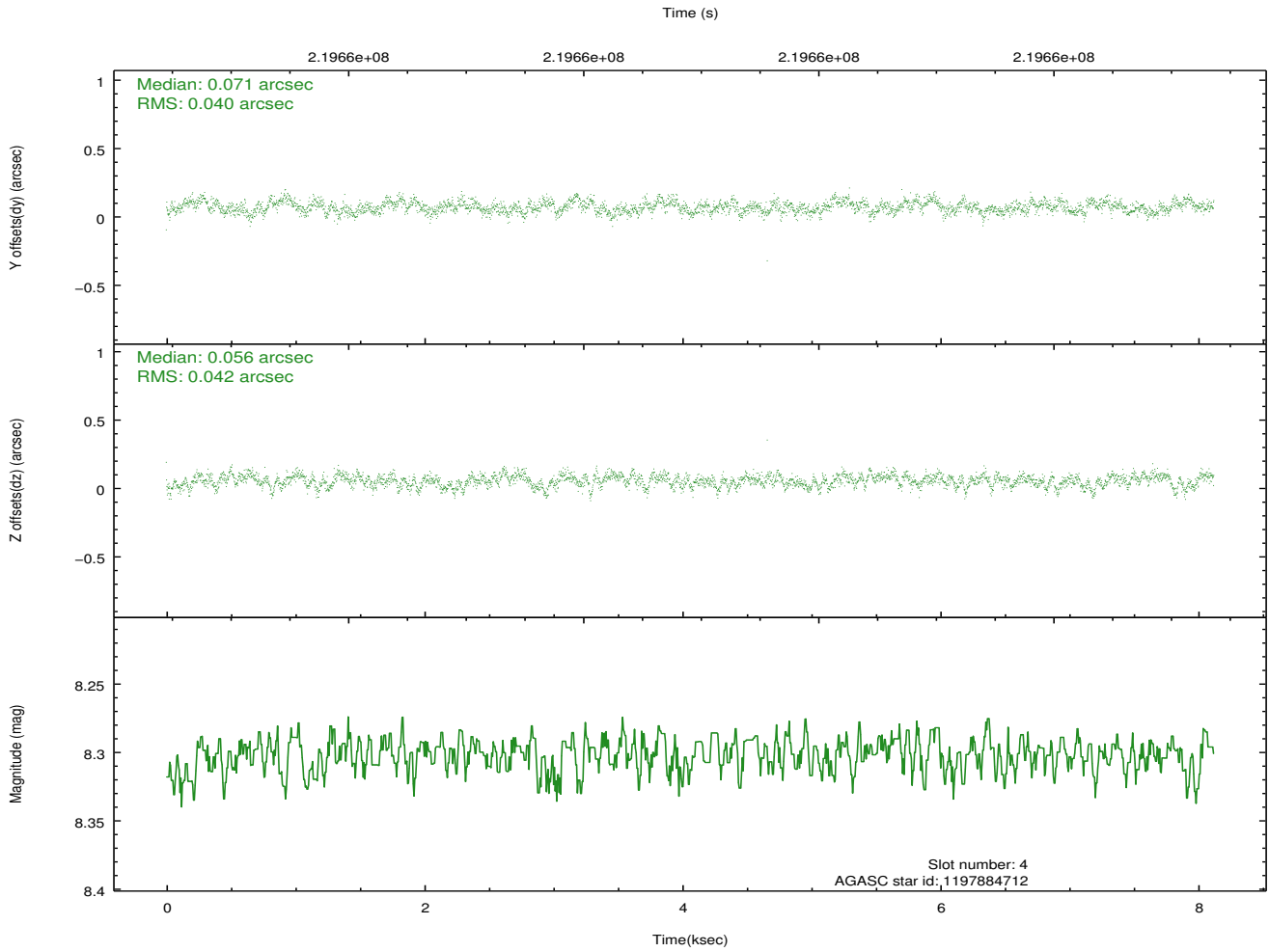
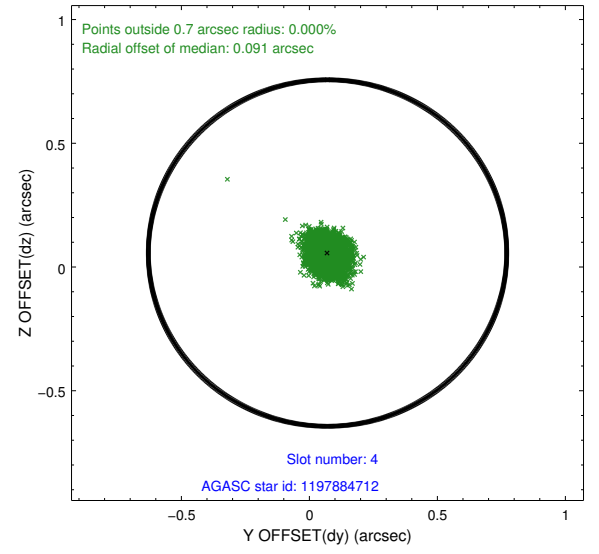
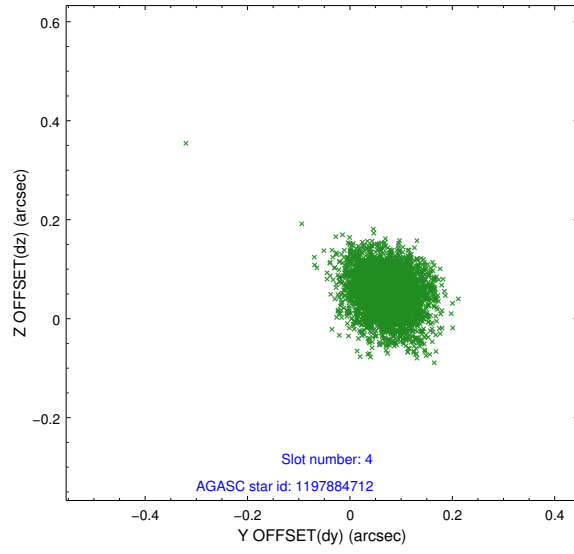
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.14	1981	-0.082	-0.109	0.010	0.017	0.000000	0.000000	-761.64	-841.67
1	FID	ACIS-I-4	7.18	1981	0.135	0.080	0.008	0.015	0.000000	0.000000	2152.32	1064.36
2	FID	ACIS-I-5	7.22	1981	-0.155	0.099	0.009	0.015	0.000000	0.000000	-1814.66	1062.99
3	GUIDE	1197884536	8.50	3961	-0.024	0.071	0.059	0.097	17.160729	-71.835289	-211.71	1301.90
4	GUIDE	1197884712	8.30	3963	0.071	0.056	0.061	0.100	16.087398	-72.252690	578.07	-445.09
5	GUIDE	1197885104	9.35	3957	0.098	-0.024	0.085	0.135	17.845067	-72.189368	1271.56	1371.88
6	GUIDE	1197885328	7.23	3962	-0.081	-0.128	0.054	0.086	16.283090	-71.733943	-989.41	593.23
7	GUIDE	1198189696	7.38	3962	-0.063	0.024	0.054	0.086	15.223750	-72.697522	1597.24	-1995.02

## 2.4 Star Slots

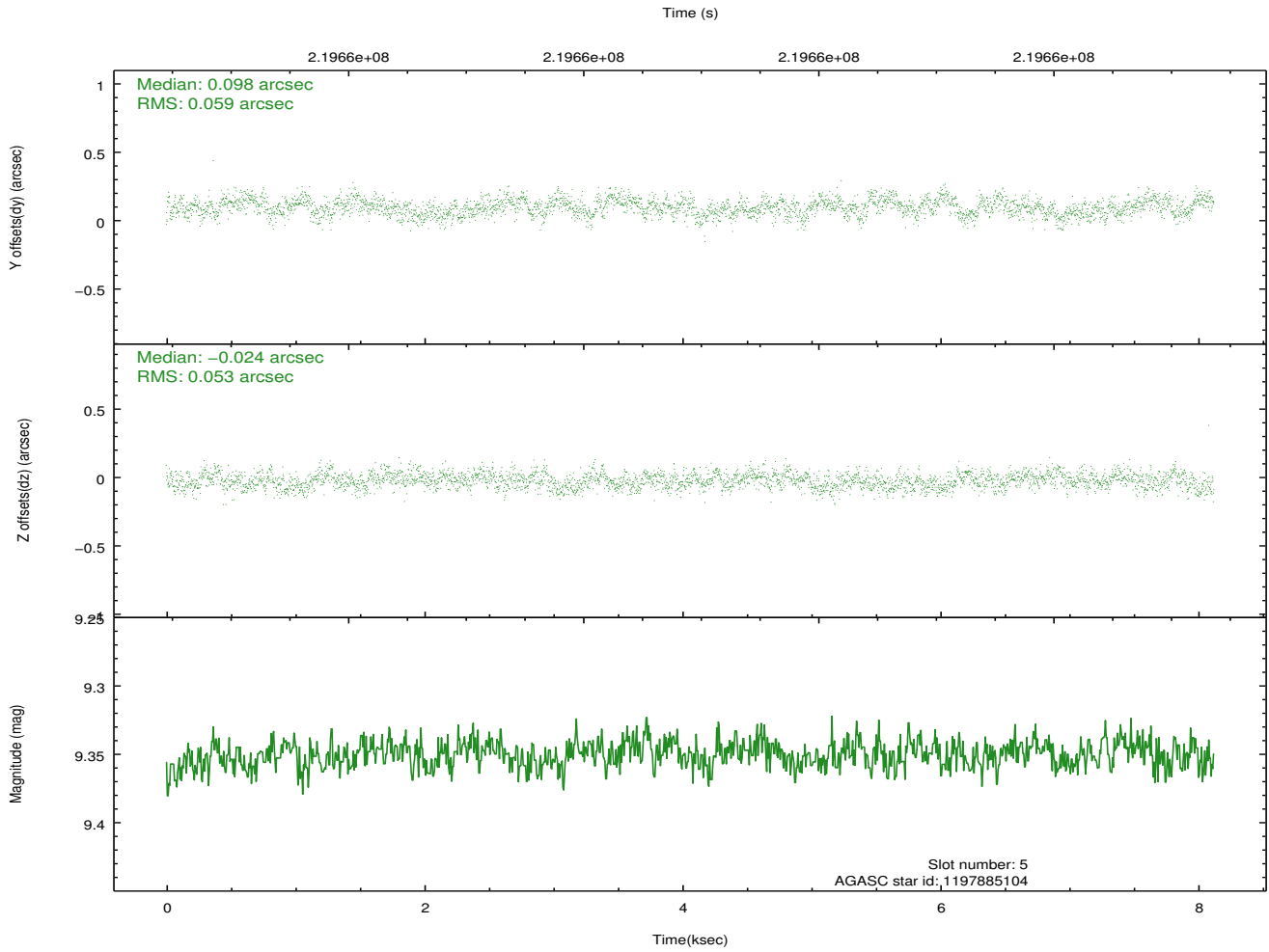
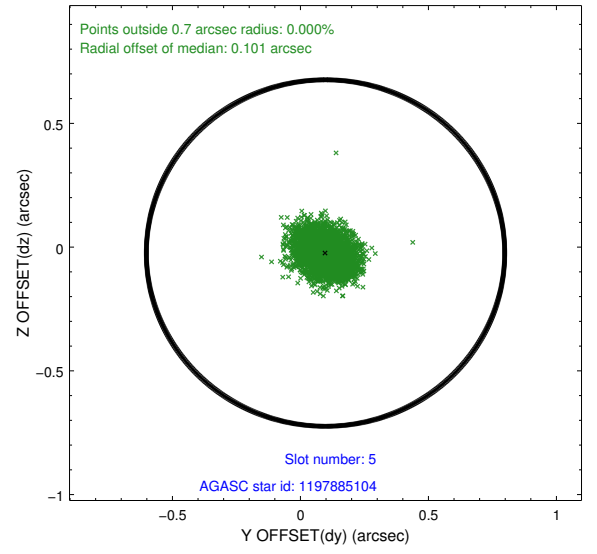
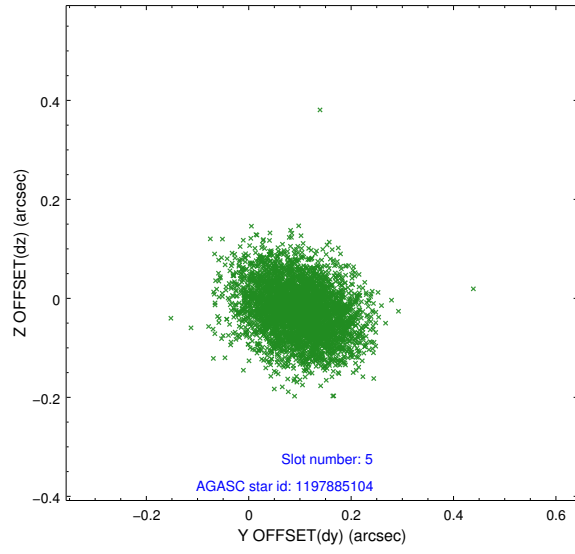
### 2.4.1 Slot 3



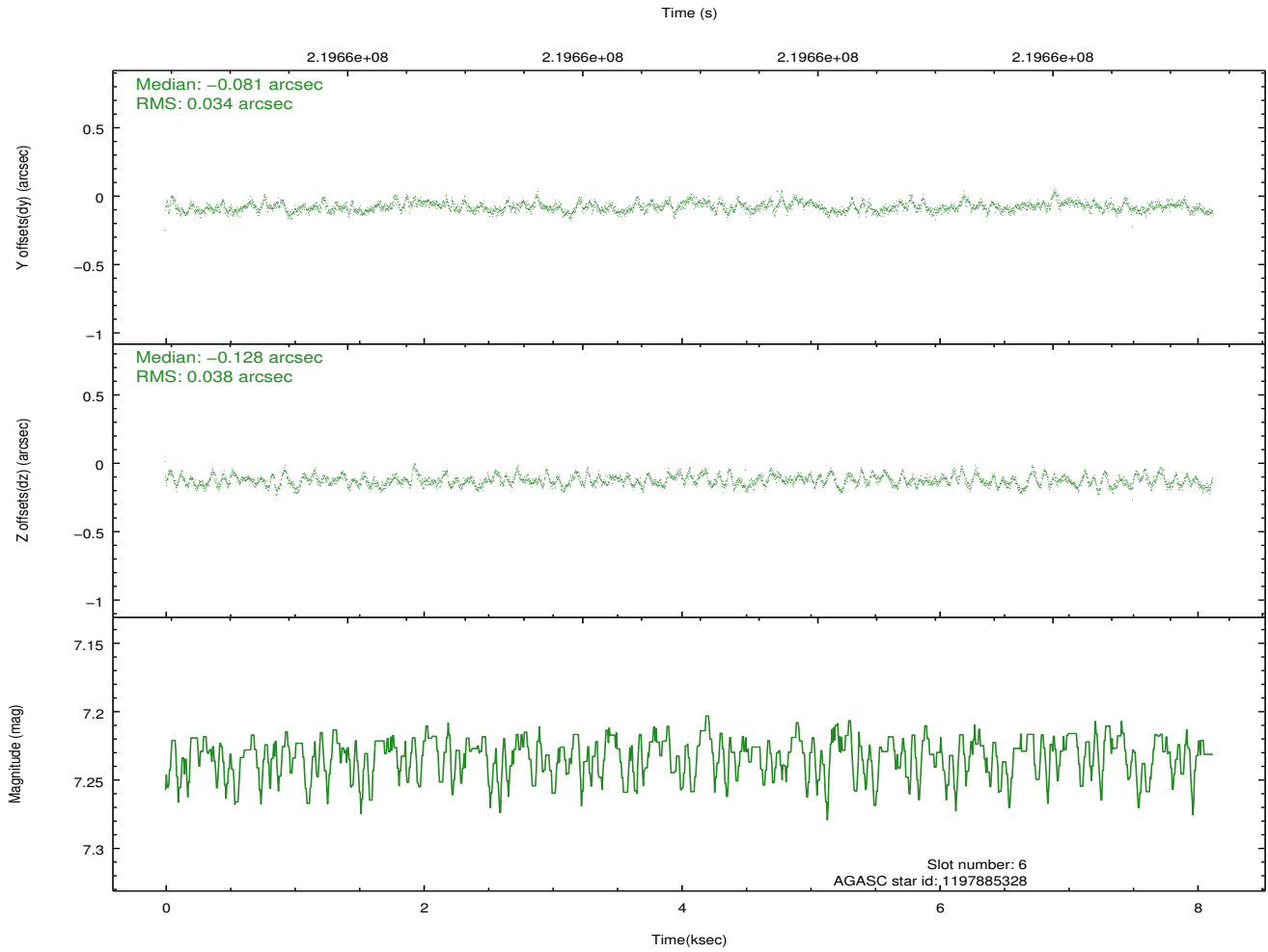
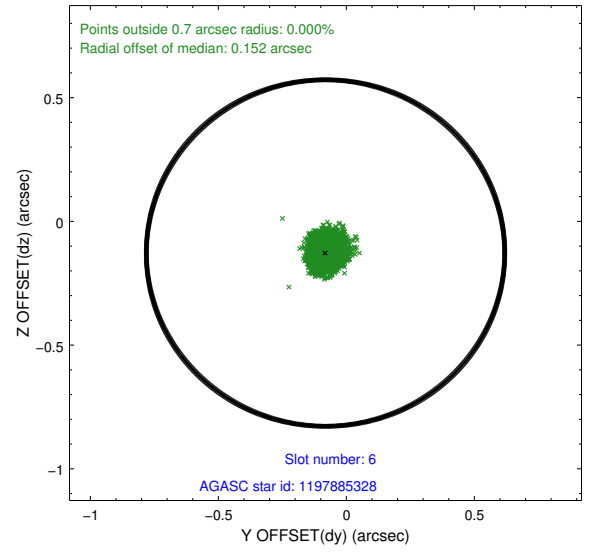
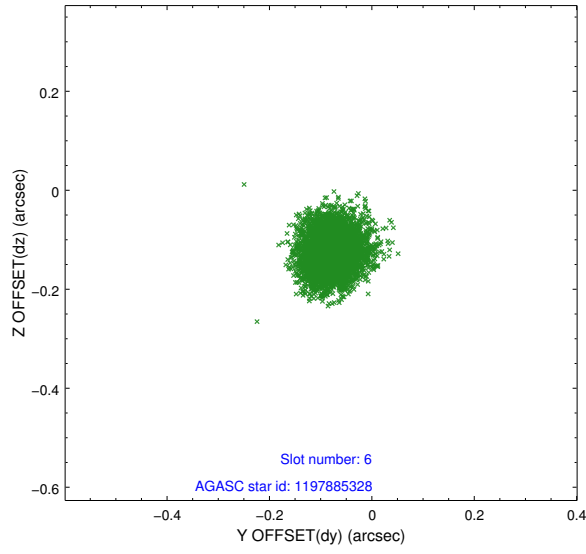
## 2.4.2 Slot 4



### 2.4.3 Slot 5

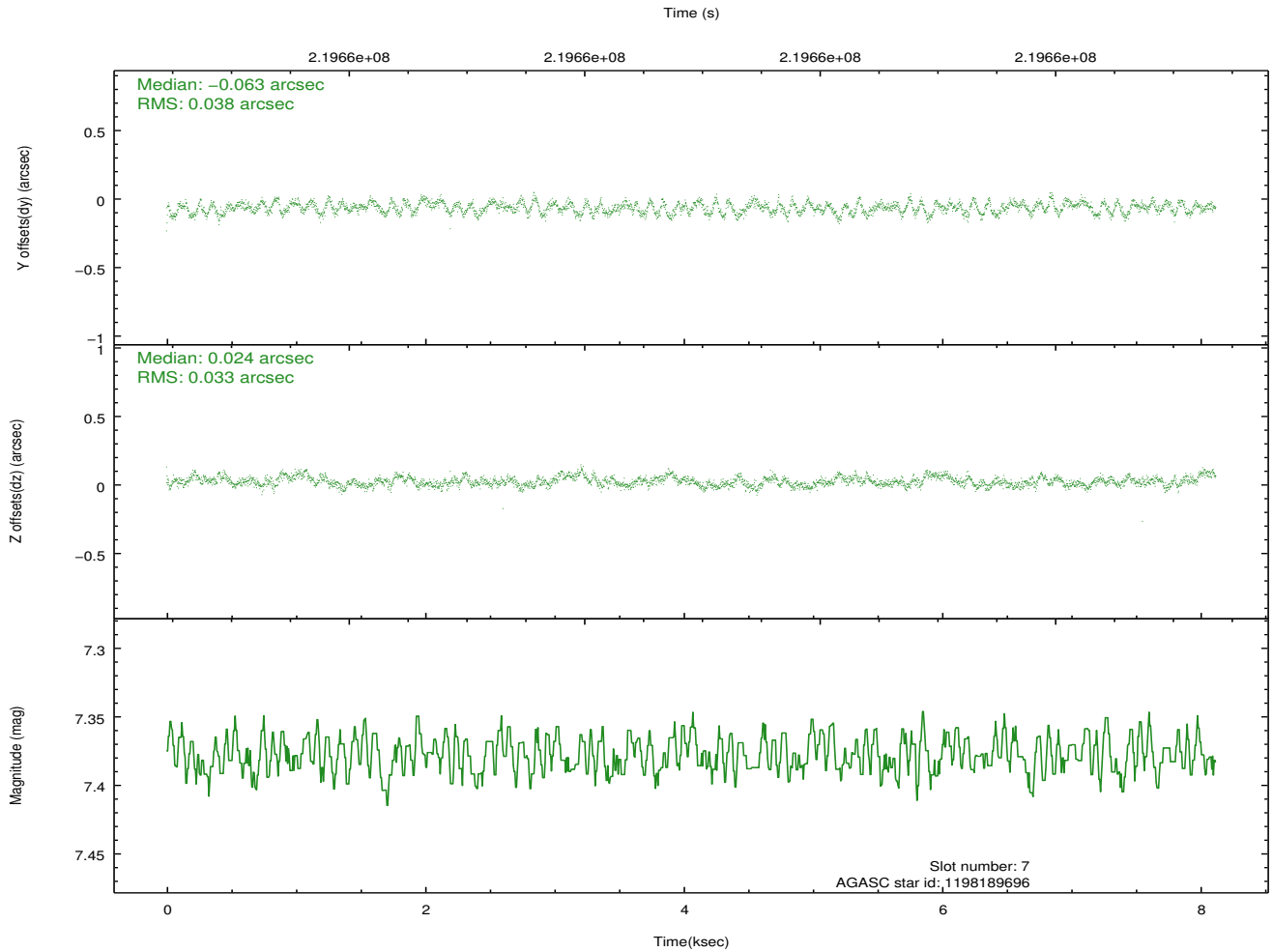
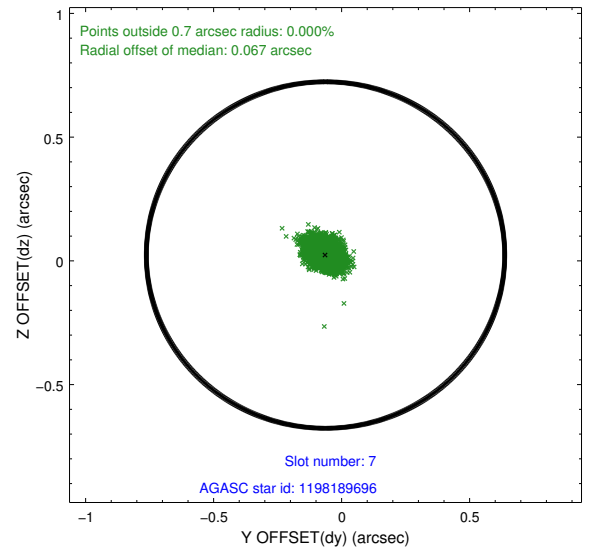
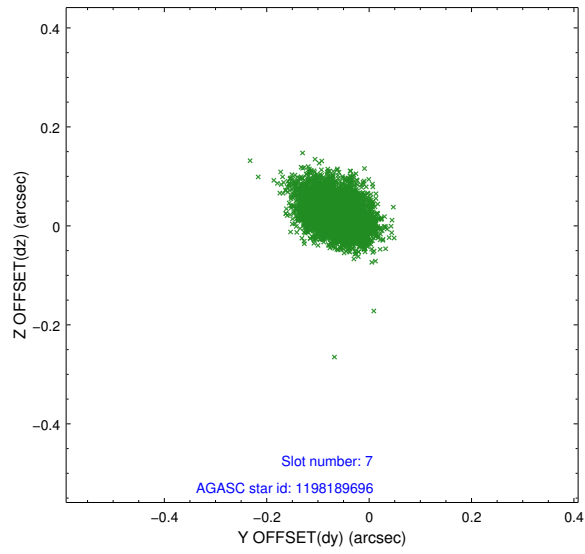


## 2.4.4 Slot 6



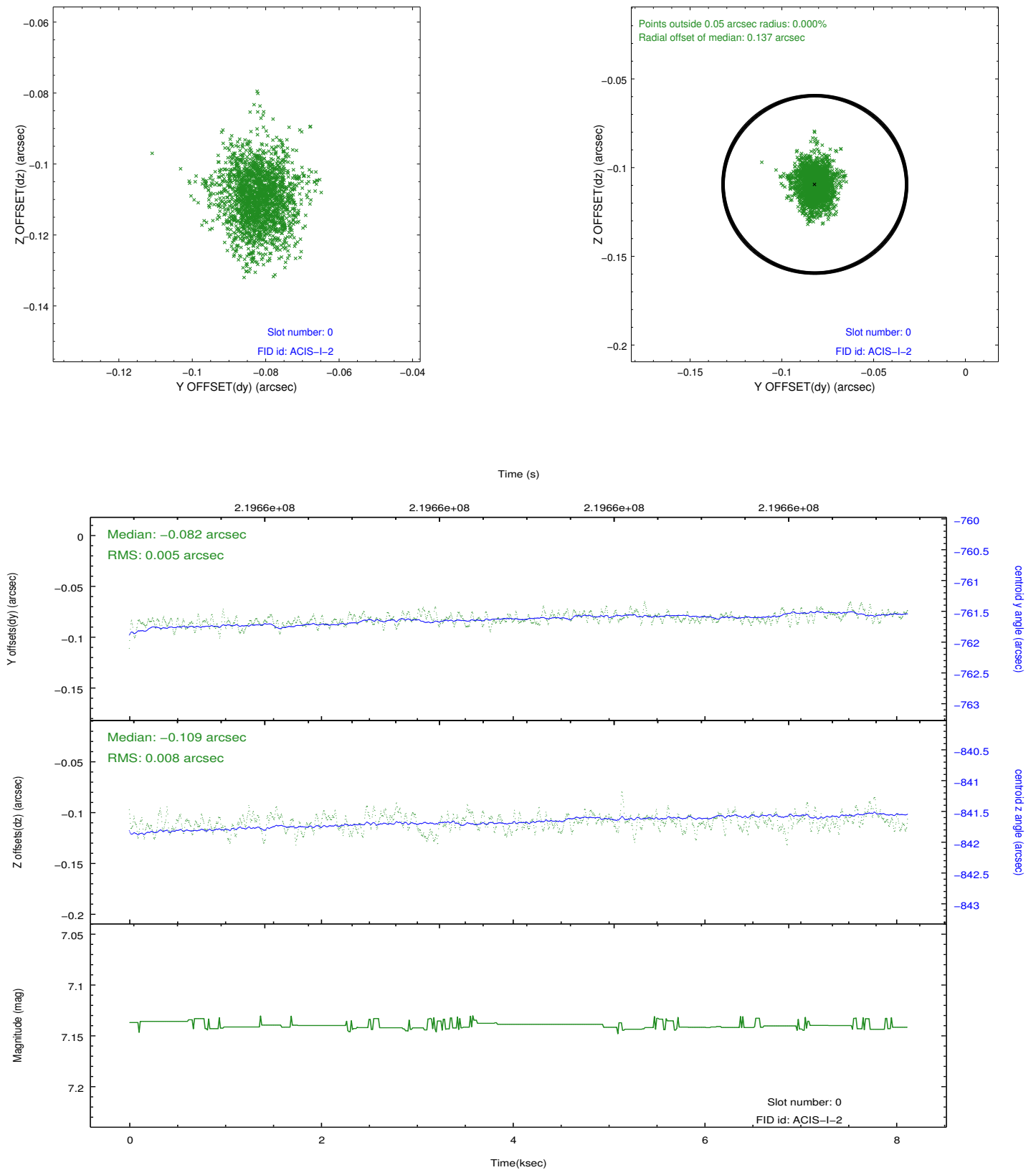


### 2.4.5 Slot 7

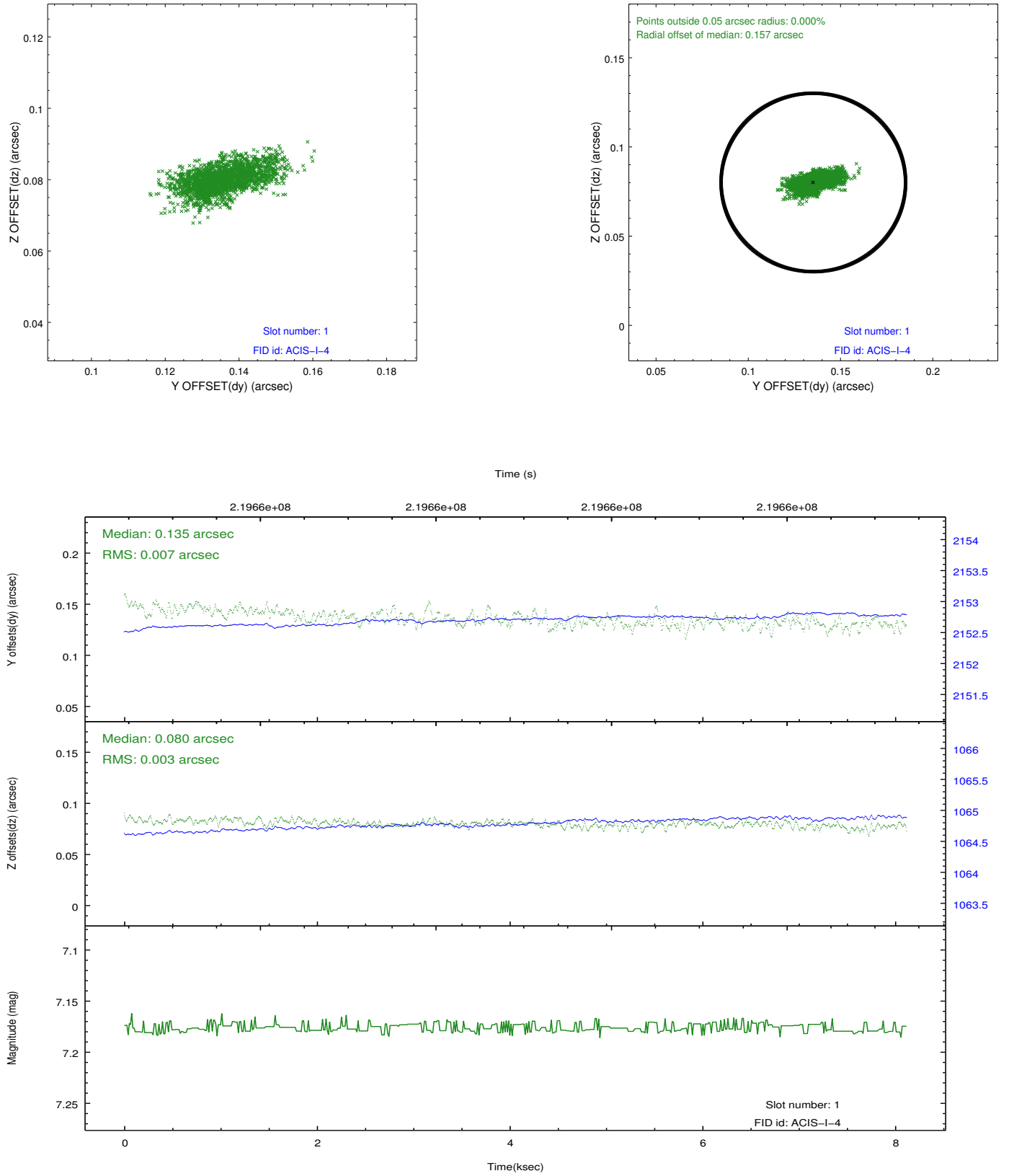


## 2.5 FID Slots

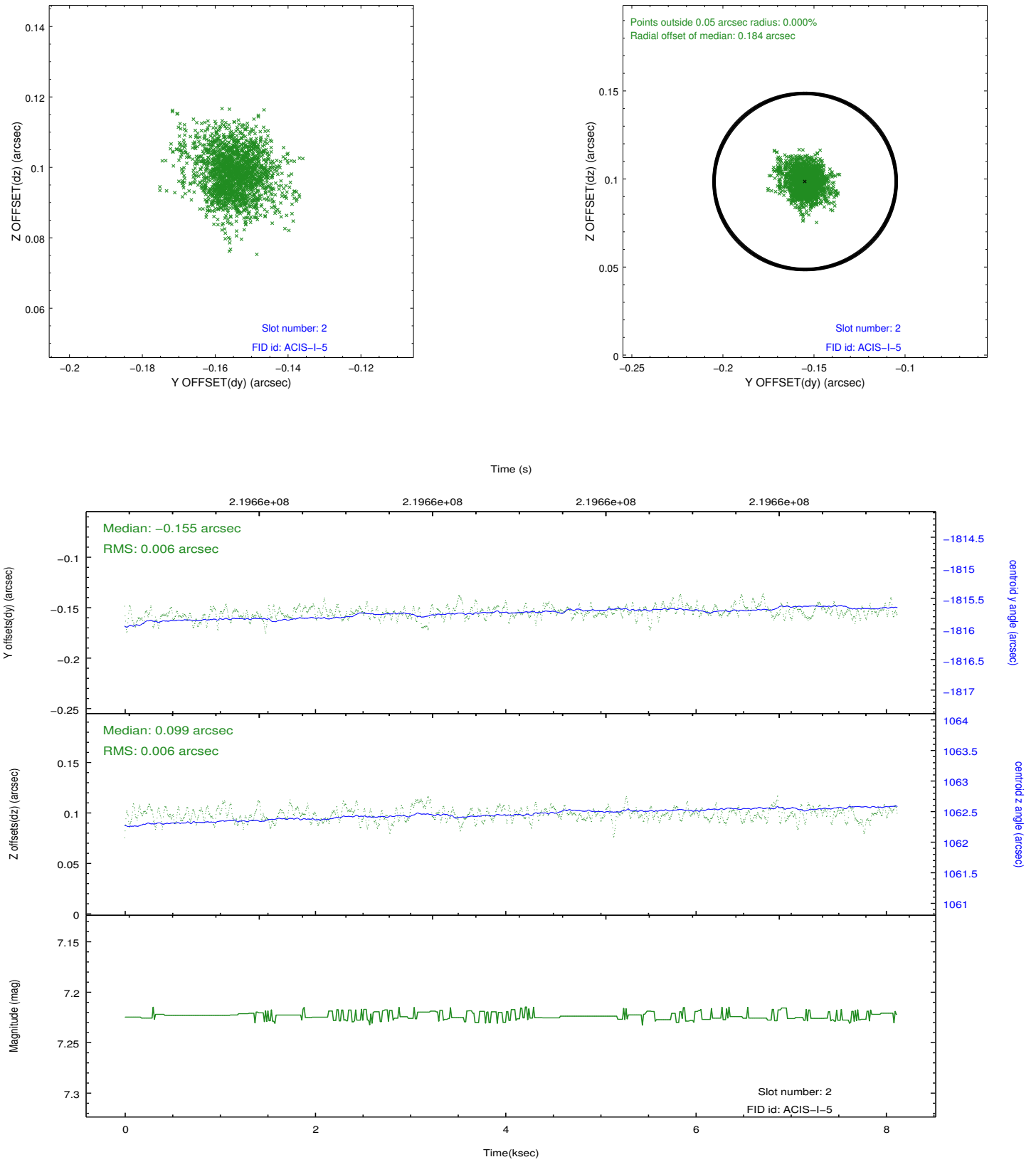
### 2.5.1 Slot 0



## 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)	2013.01.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.111958

### A.2 Comments

Window constraint met.