

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1667 - L2 Version 3  
Chandra X-Ray Center

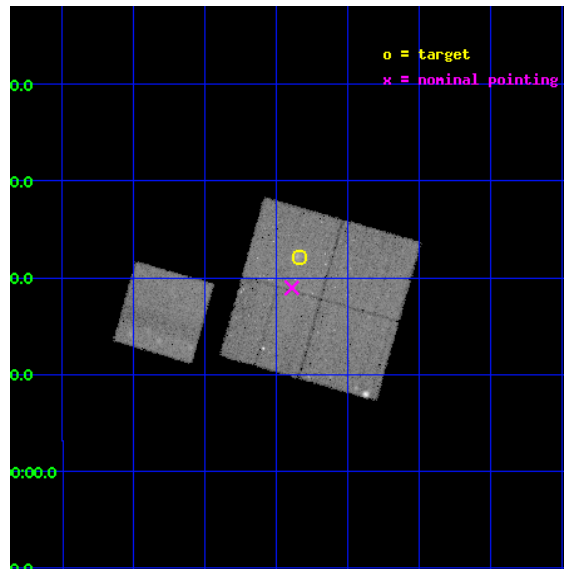
L2 Processing Date : Sep 25 2012

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# 1 Front

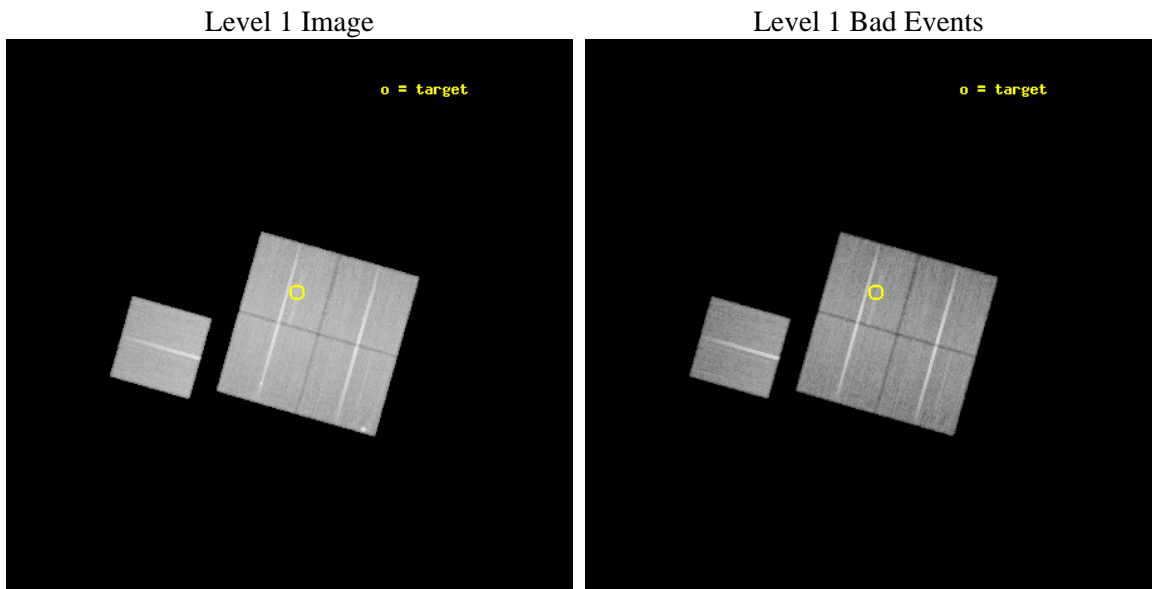
seq_num	800135	Sequence number
obs_id	1667	Observation id
title	DETERMINATION OF H0 AND Q0, 2000 PART 1	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	MS 2053.7-0449	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	314.085458	Observer's specified target RA [deg]
dec_targ	-4.631181	Observer's specified target Dec [deg]
ra_nom	314.09841174334	Nominal RA [deg]
dec_nom	-4.6839956891841	Nominal Dec [deg]
roll_nom	285.87602968433	Nominal Roll [deg]
revision	3	Processing version of data
ontime	45103.961645365	Sum of GTIs [s]
livetime	44514.645181415	Livetime [s]
ontime0	45103.838495433	Sum of GTIs [s]
ontime1	45100.738595113	Sum of GTIs [s]
ontime2	45091.35665454	Sum of GTIs [s]
ontime3	45103.961645365	Sum of GTIs [s]
ontime6	45097.515534848	Sum of GTIs [s]
l2events	158336	Number of level 2 events



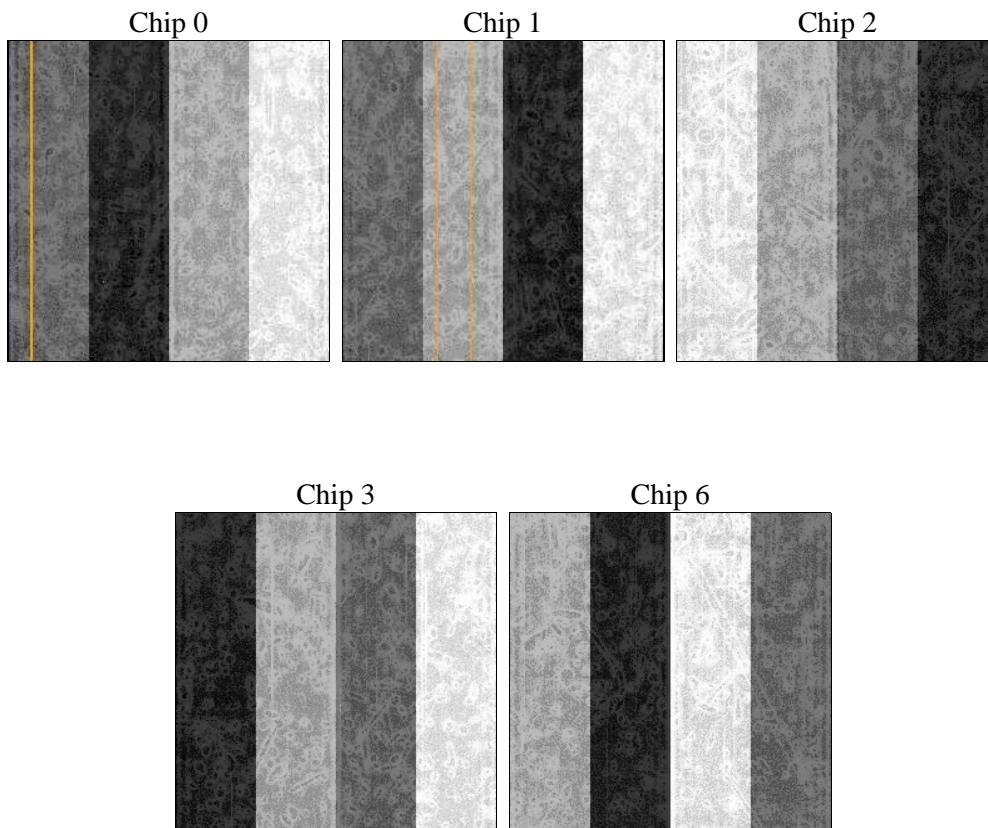
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	45103.961645365	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime0	45103.838495433	Sum of GTIs [s]
date	2012-09-25T05:04:30	Date and time of file creation	ontime1	45100.738595113	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	45091.35665454	Sum of GTIs [s]
			ontime3	45103.961645365	Sum of GTIs [s]
			ontime6	45097.515534848	Sum of GTIs [s]
			l1events	1387639	Number of level 1 events

### 2.1.4 Events

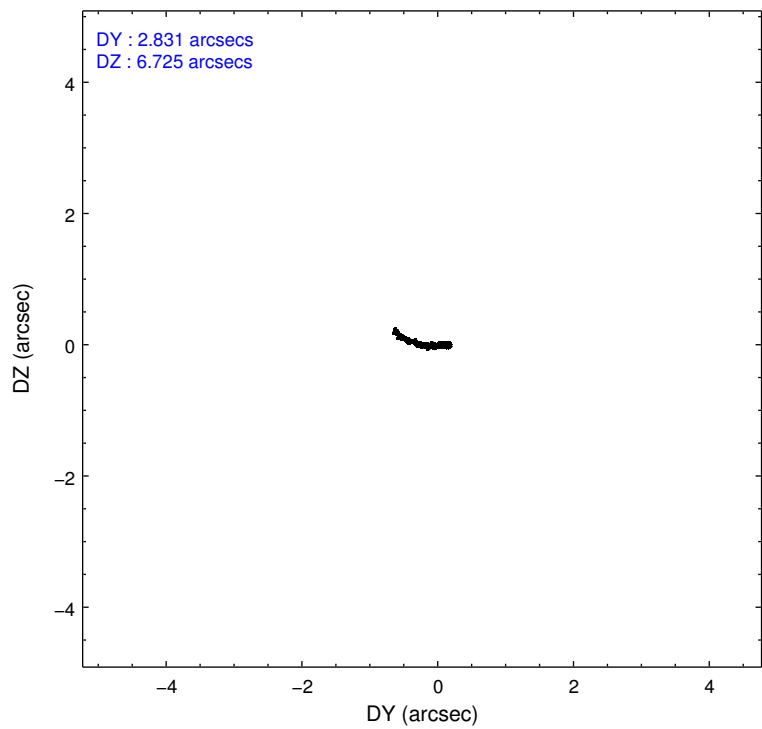
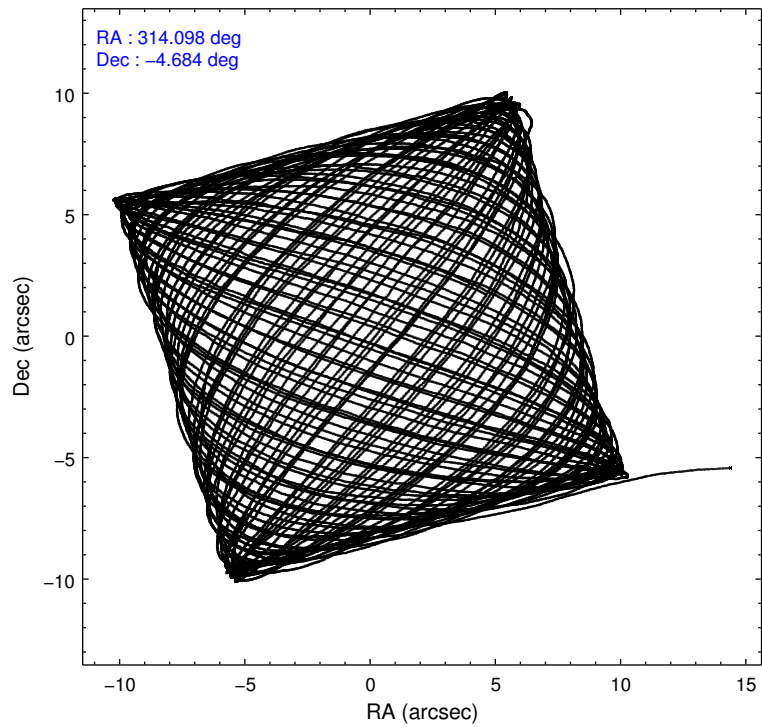
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	264322	265807	291358	284320	281832
rejected events	224911	228892	254886	247773	246447
rejected %	85%	86%	87%	87%	87%

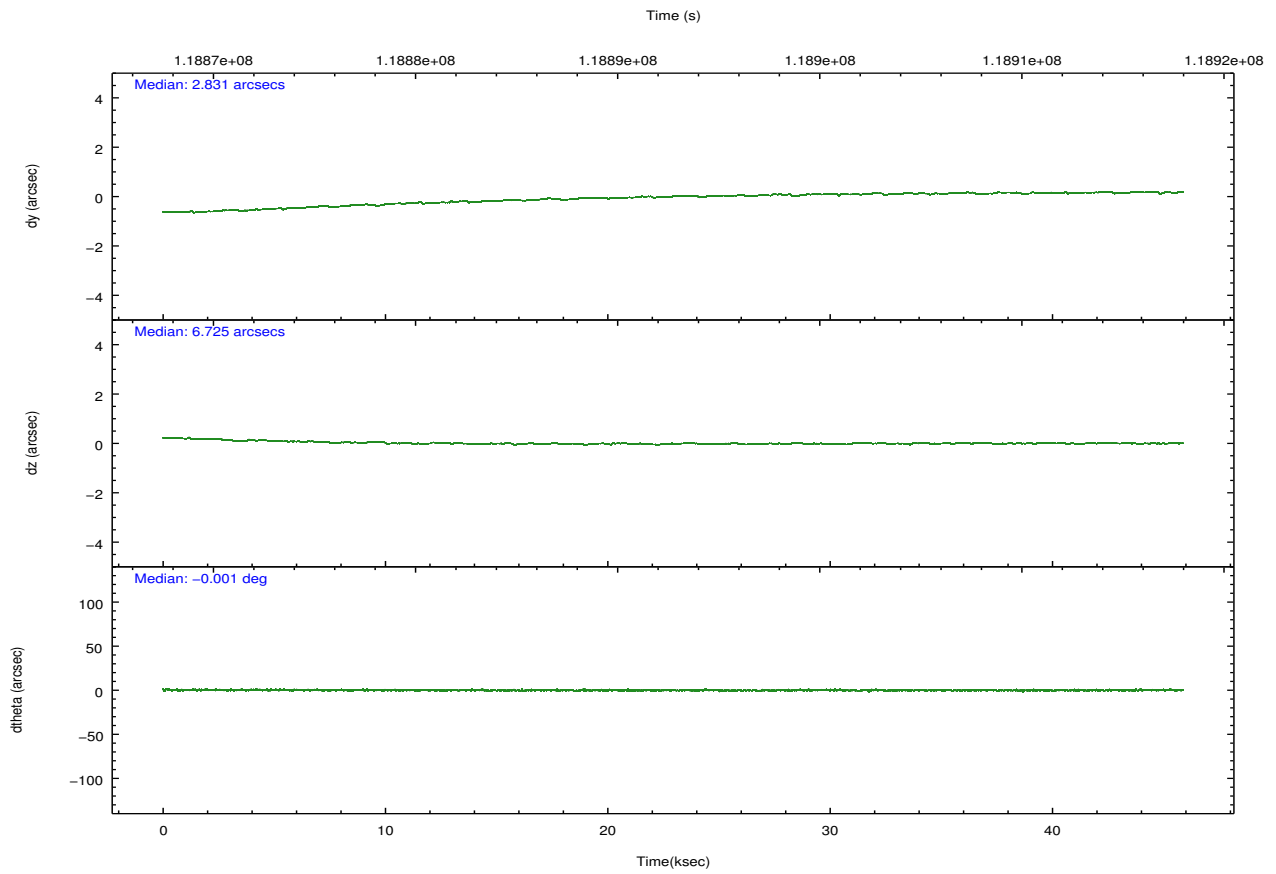
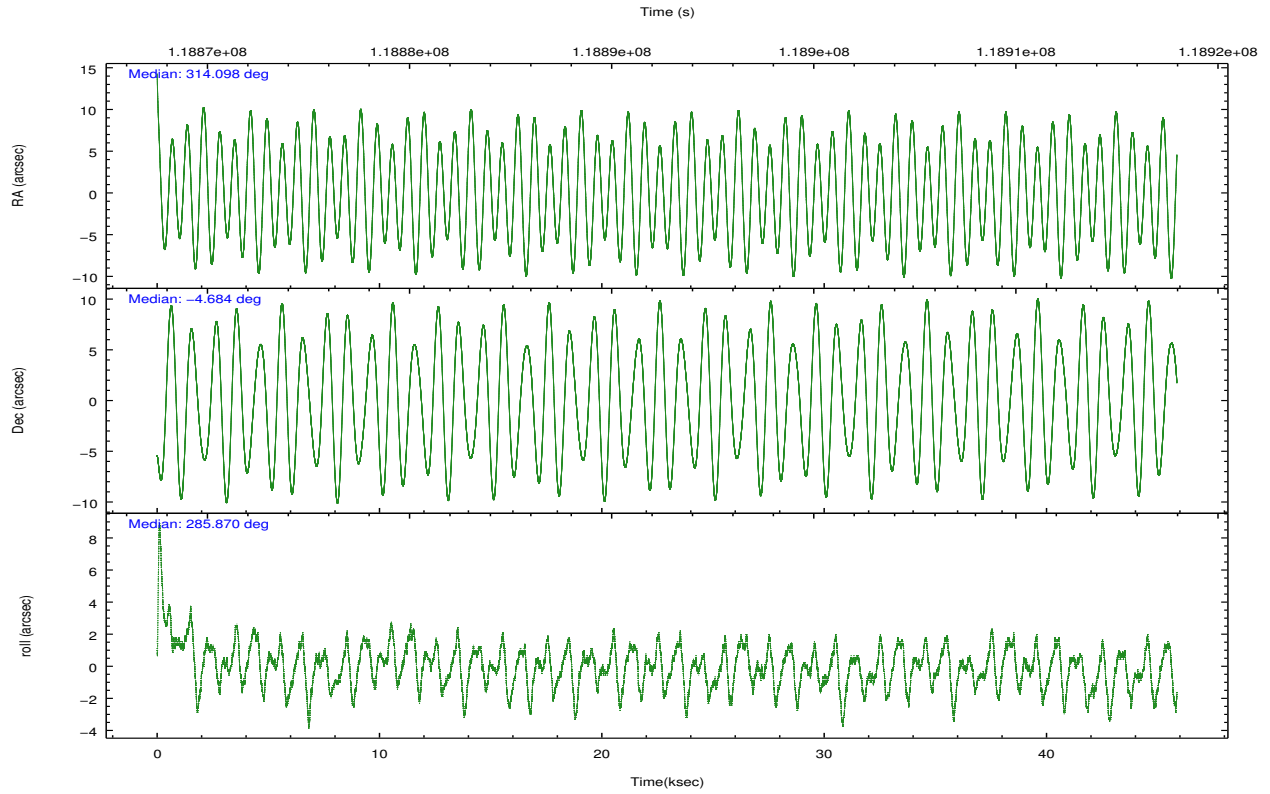
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	18193	15070	16346	16572	14649
	6%	5%	5%	5%	5%
grade 1 events	167	122	131	135	113
	0%	0%	0%	0%	0%
grade 2 events	8287	7964	7864	7311	7460
	3%	2%	2%	2%	2%
grade 3 events	3501	3481	3026	3132	3348
	1%	1%	1%	1%	1%
grade 4 events	3160	3517	3138	3162	3187
	1%	1%	1%	1%	1%
grade 5 events	9998	10731	9695	10955	11629
	3%	4%	3%	3%	4%
grade 6 events	6274	6887	6099	6373	6745
	2%	2%	2%	2%	2%
grade 7 events	214742	218035	245059	236680	234701
	81%	82%	84%	83%	83%

## 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	314.078634	314.0984117433409	Subarray requested	NONE	NONE
[deg] Pointing Dec	-4.664943	-4.683995689184106	Alternating exposures requested	N	N
[deg] Pointing Roll	285.665731	285.876029684334	[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	-225.840463	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	118870673.184000	118869376.70553			
Observation start date	2001-10-07T19:36:49	2001-10-07T19:16:16			
[s] Observation end time (MET)	118915673.184000	118916329.39489			
Observation end date	2001-10-08T08:06:49	2001-10-08T08:18:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



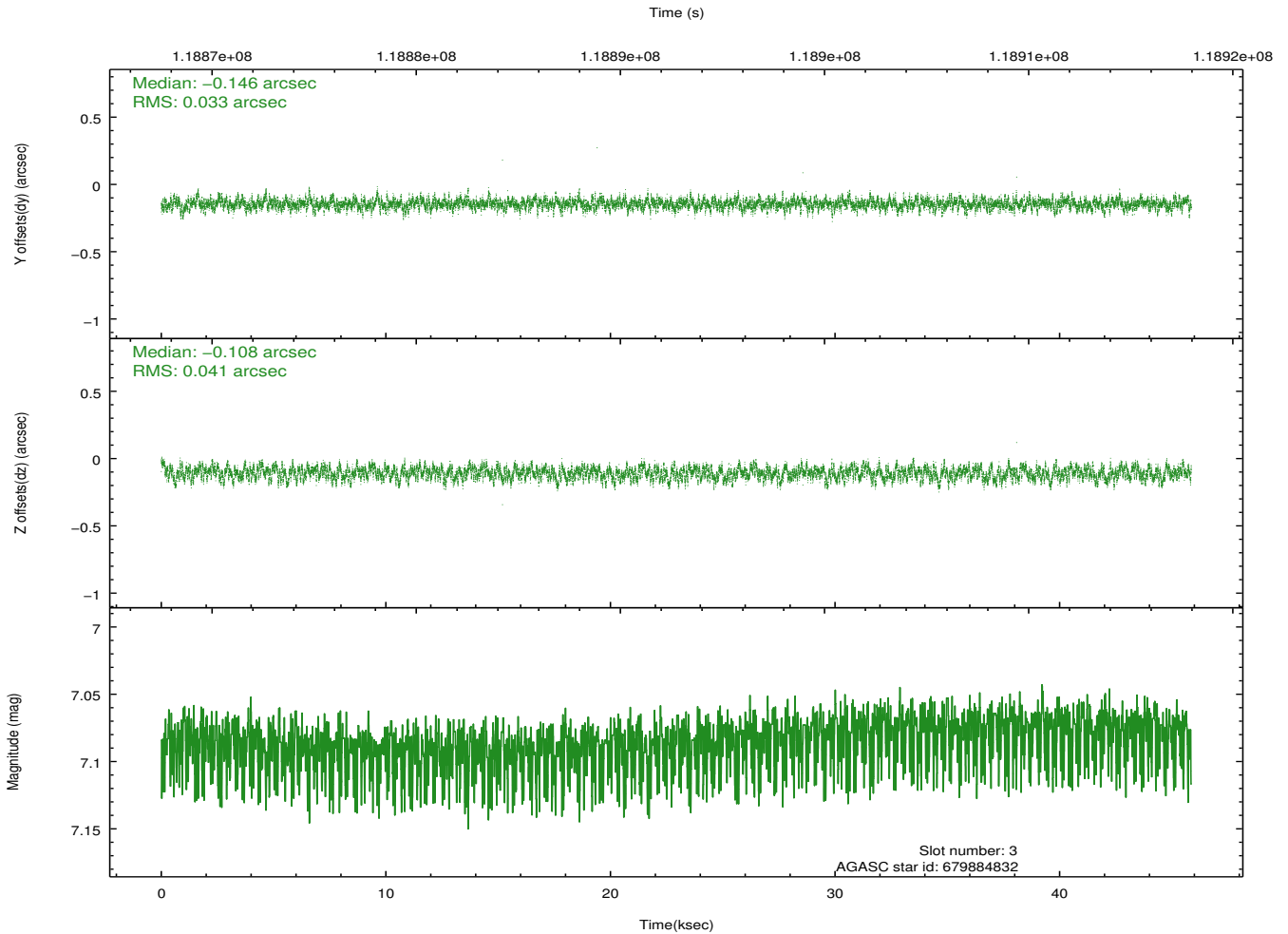
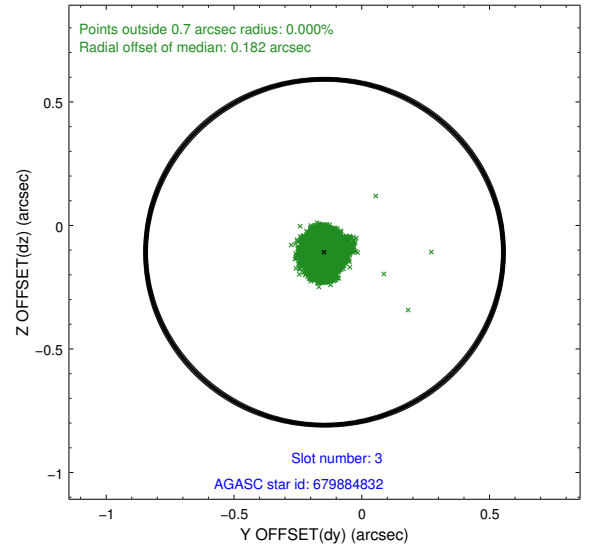
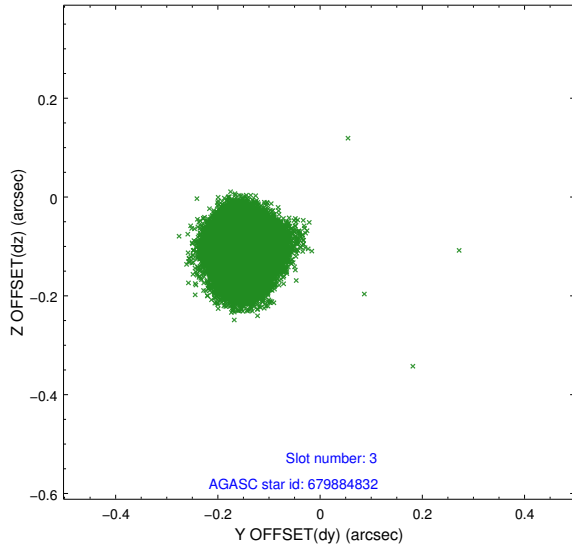


### Slot Statistics

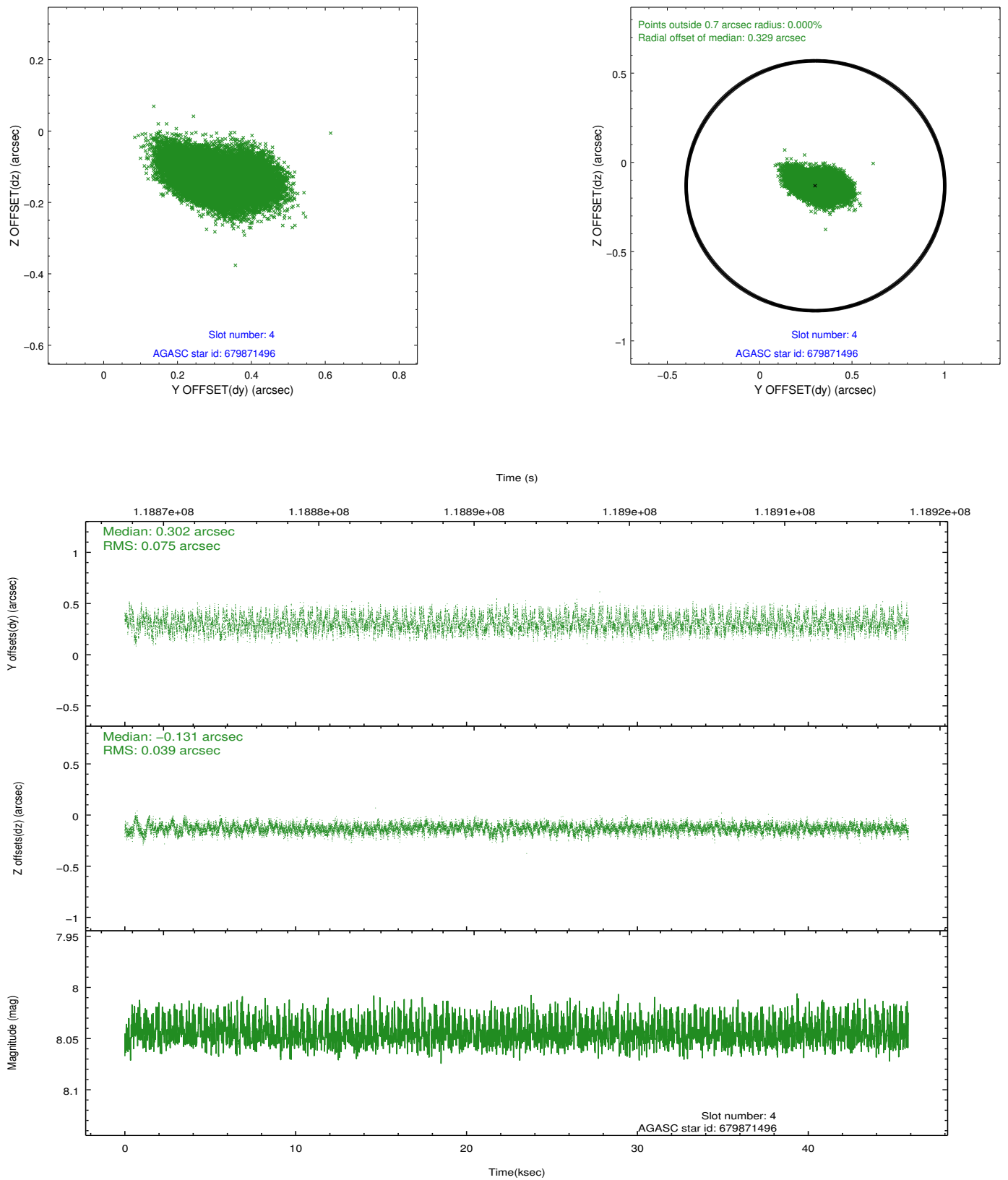
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	11182	0.083	-0.047	0.007	0.012	0.000000	0.000000	936.98	-989.27
1	FID	ACIS-I-5	7.23	11179	-0.150	0.103	0.009	0.015	0.000000	0.000000	-1811.33	908.41
2	FID	ACIS-I-6	7.27	11182	-0.024	0.015	0.009	0.016	0.000000	0.000000	402.48	1552.78
3	GUIDE	679884832	7.09	22368	-0.146	-0.108	0.057	0.089	313.520168	-4.542180	-965.75	-1810.67
4	GUIDE	679871496	8.04	22364	0.302	-0.131	0.090	0.149	313.646494	-5.465572	2358.26	-2269.59
5	GUIDE	679884440	8.45	22366	0.086	0.116	0.058	0.095	314.085119	-4.911965	862.91	-217.58
6	GUIDE	679874416	7.89	22367	-0.110	-0.030	0.065	0.105	313.462208	-4.598591	-826.07	-2065.69
7	GUIDE	679877432	9.82	22346	-0.132	0.155	0.120	0.193	314.278040	-4.000274	-2110.63	1335.56

## 2.4 Star Slots

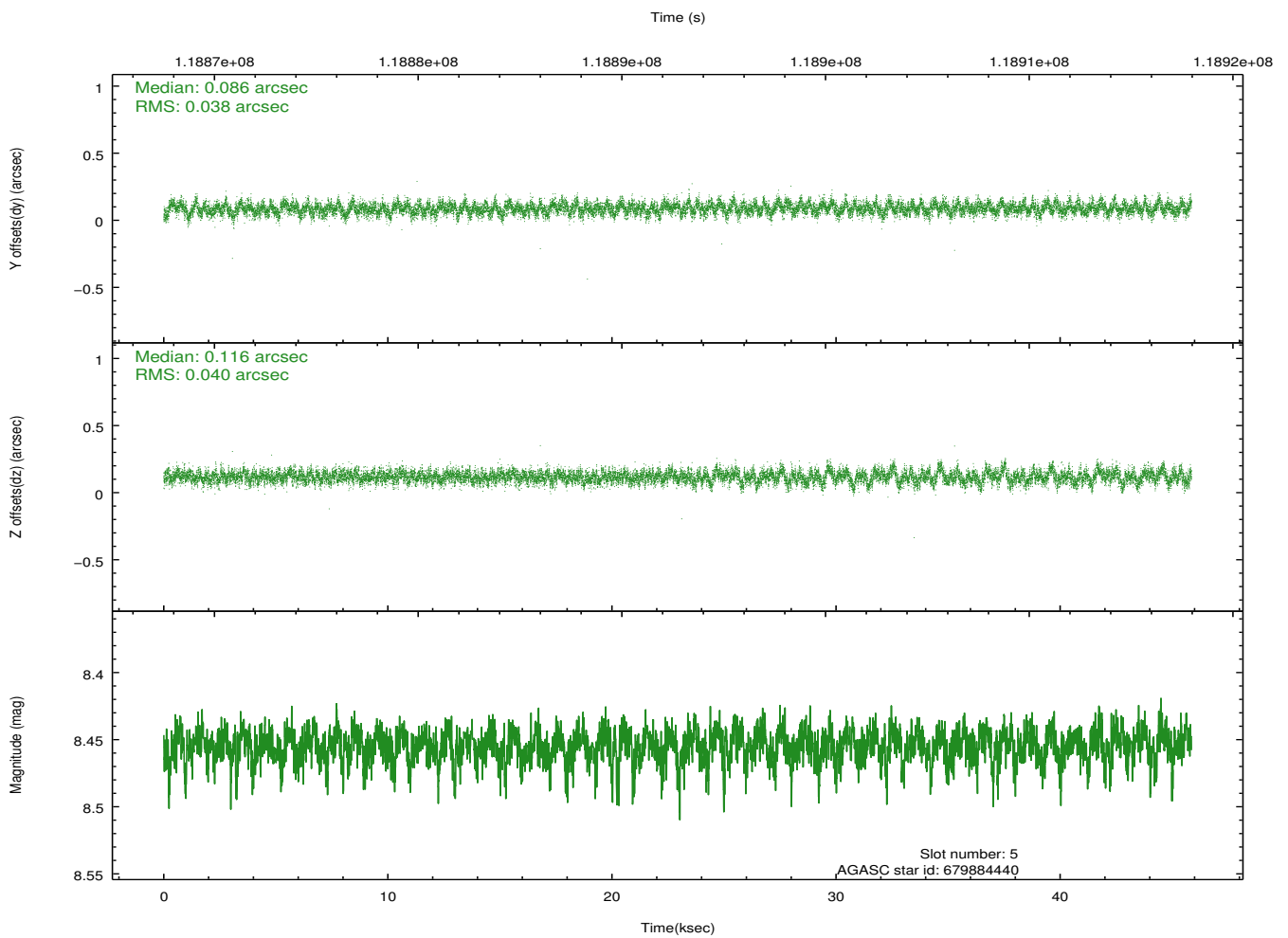
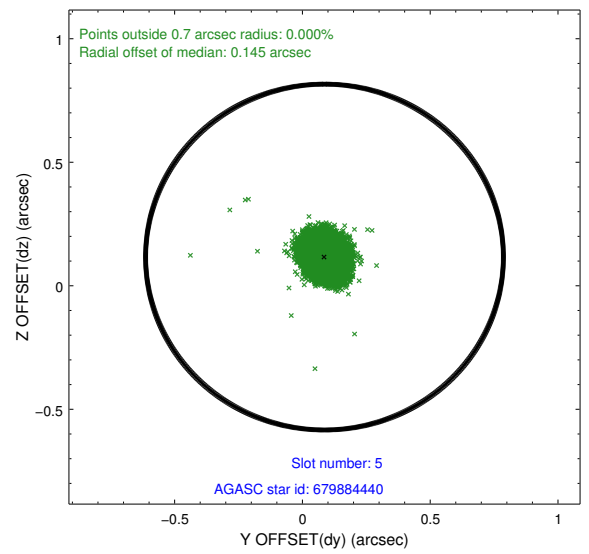
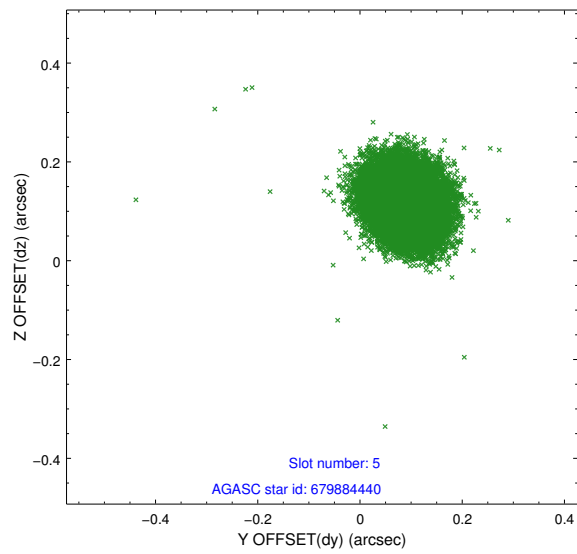
### 2.4.1 Slot 3



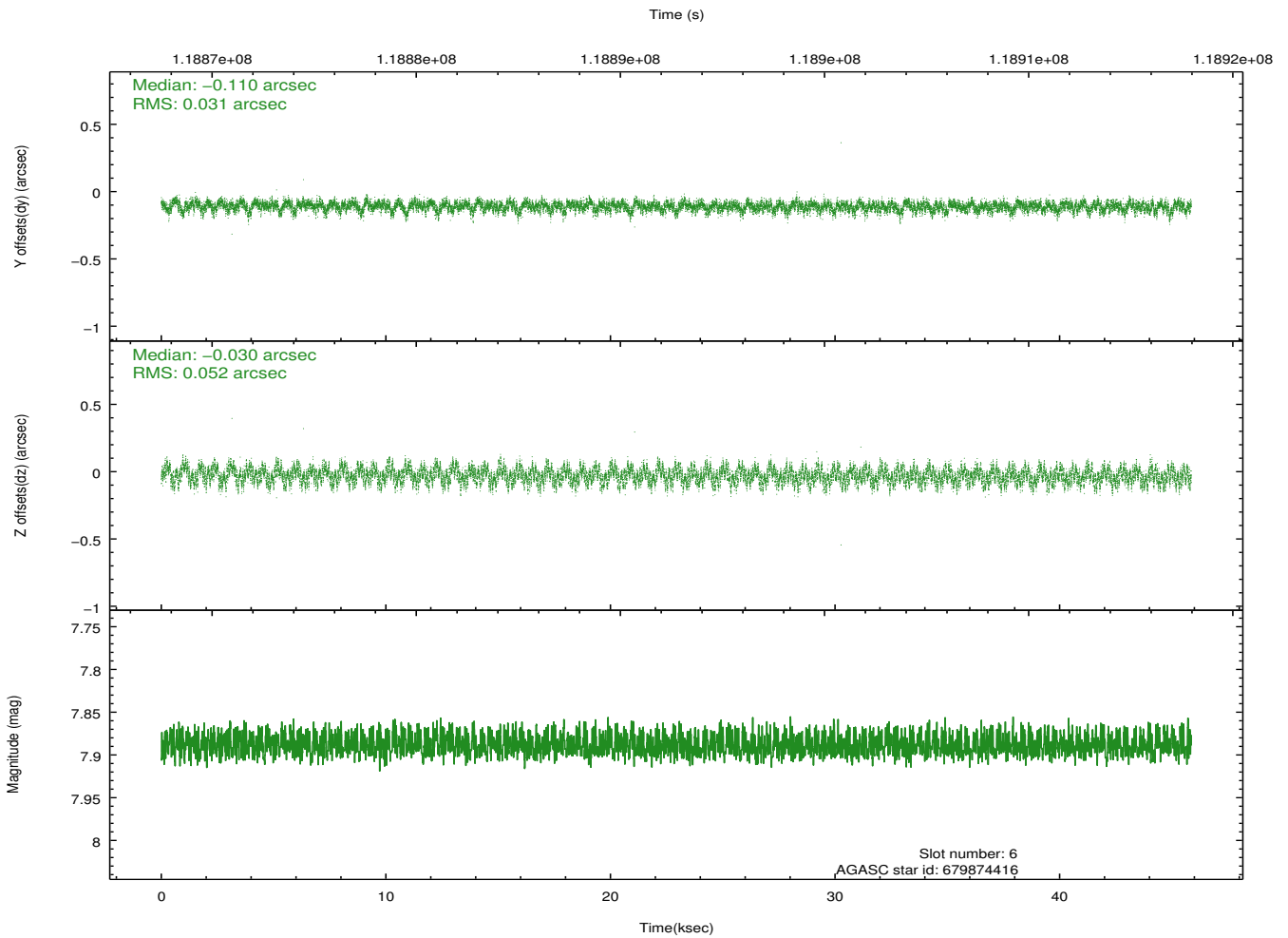
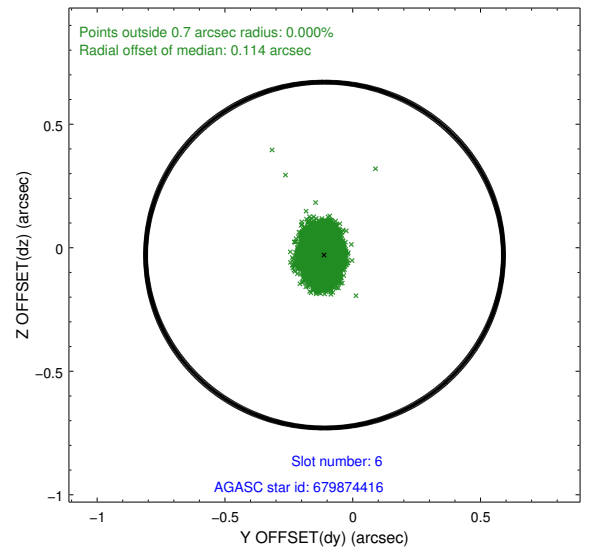
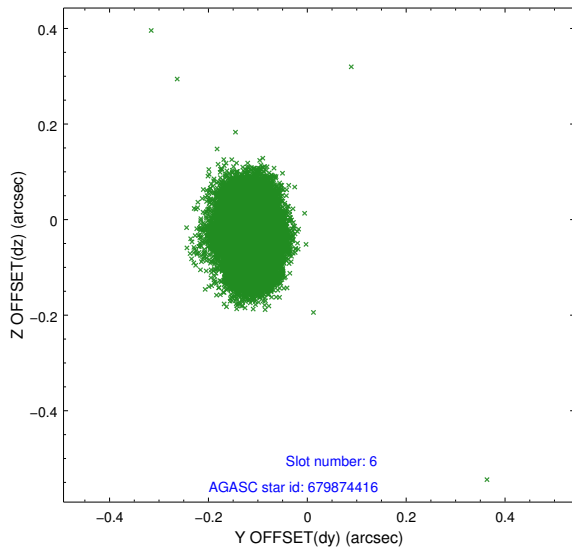
## 2.4.2 Slot 4



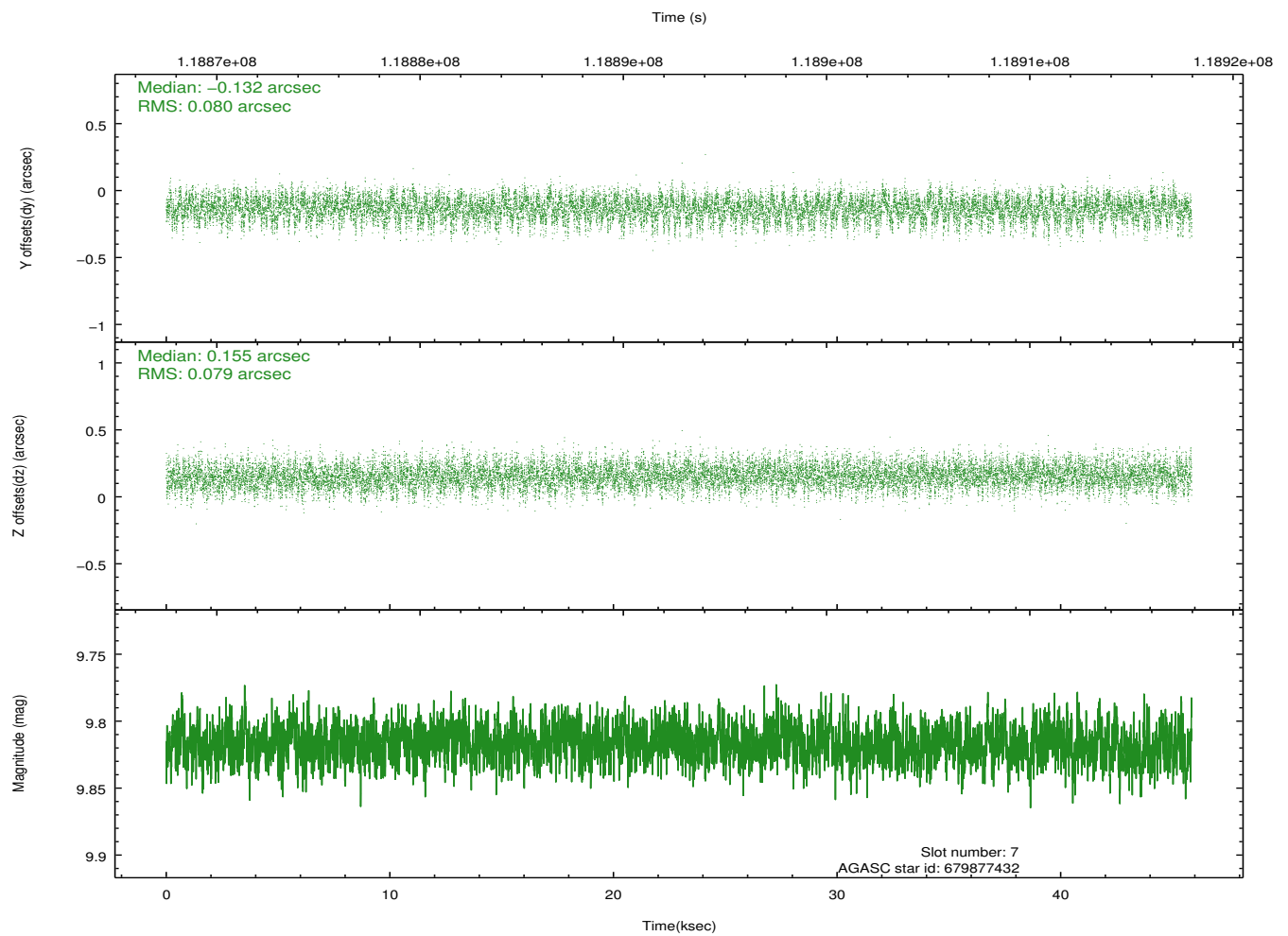
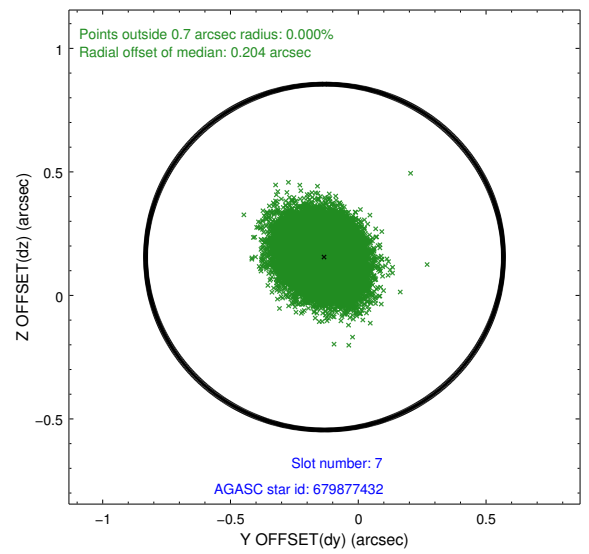
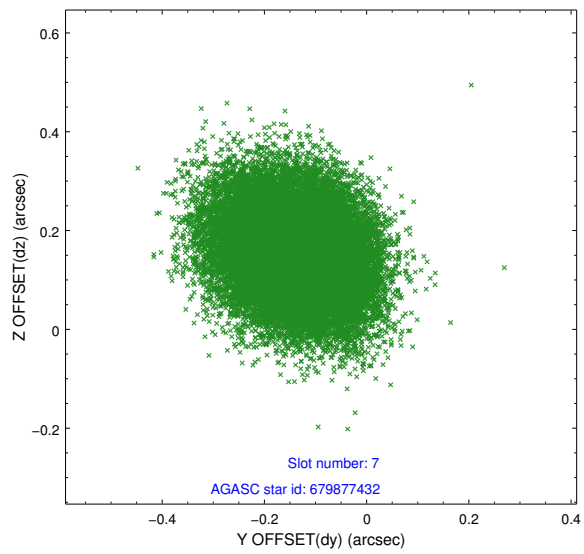
### 2.4.3 Slot 5



### 2.4.4 Slot 6

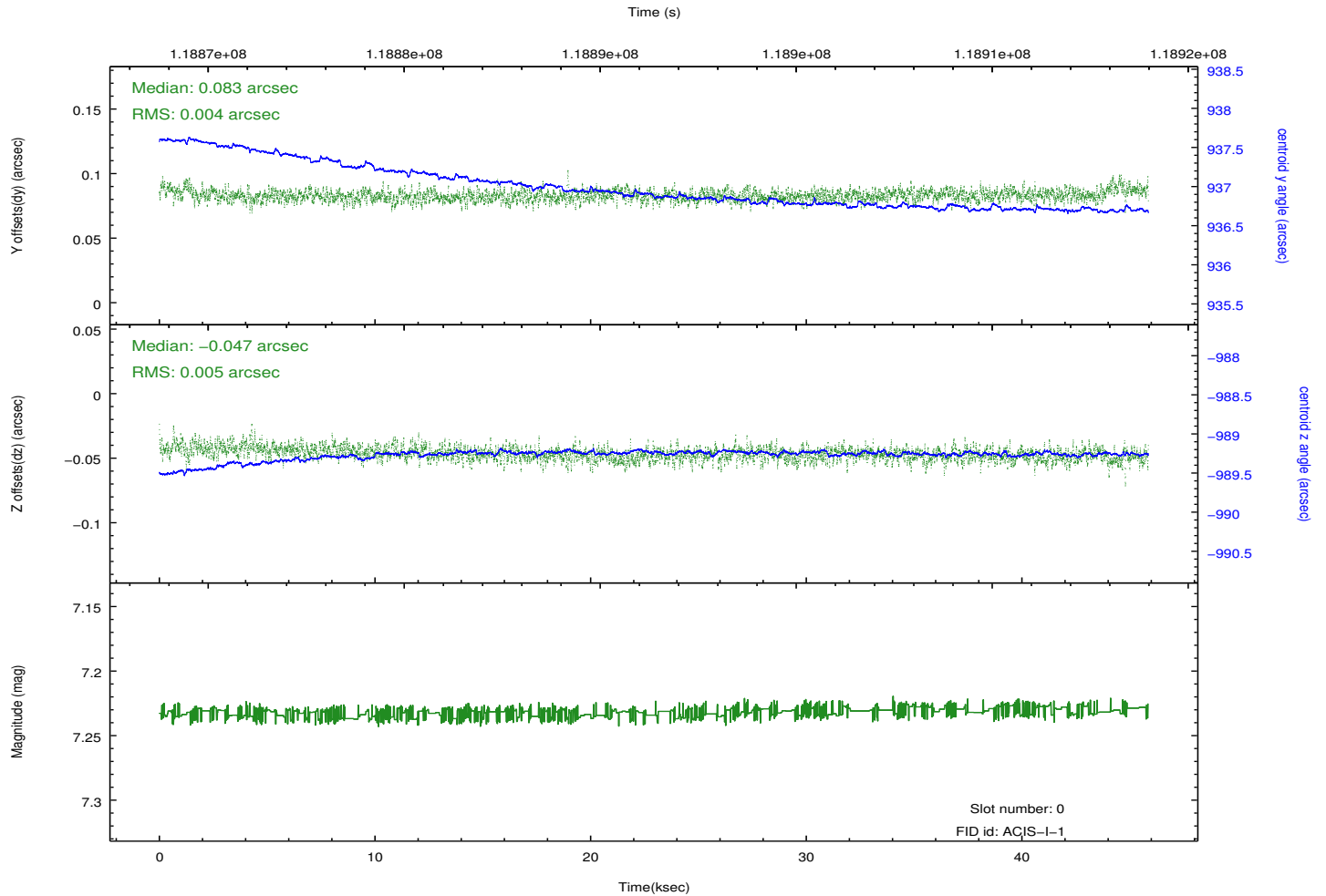
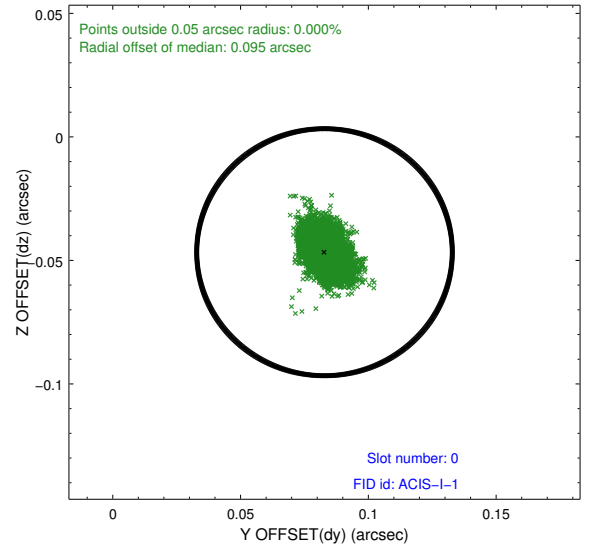
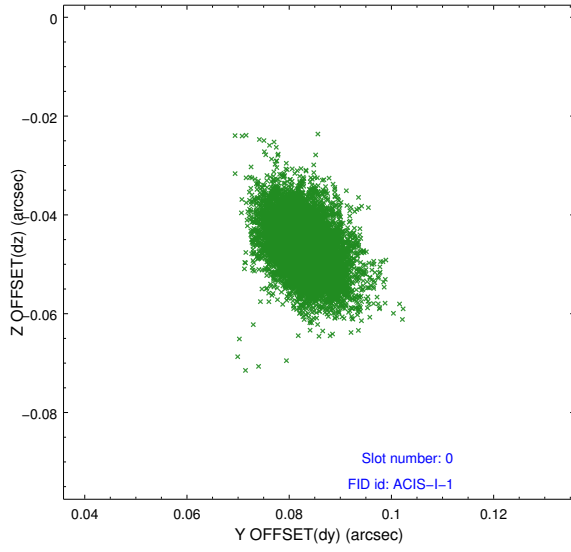


## 2.4.5 Slot 7

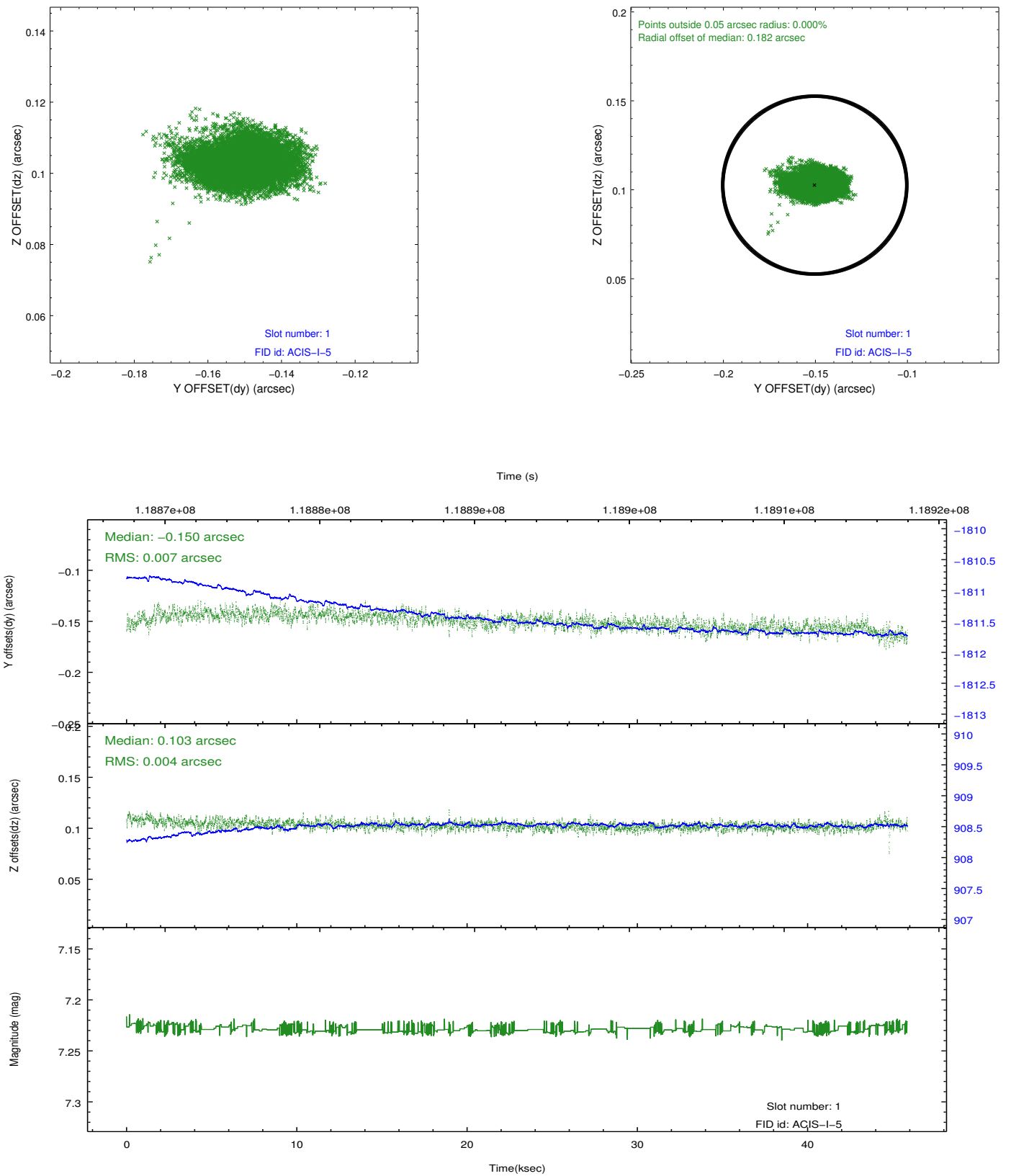


## 2.5 FID Slots

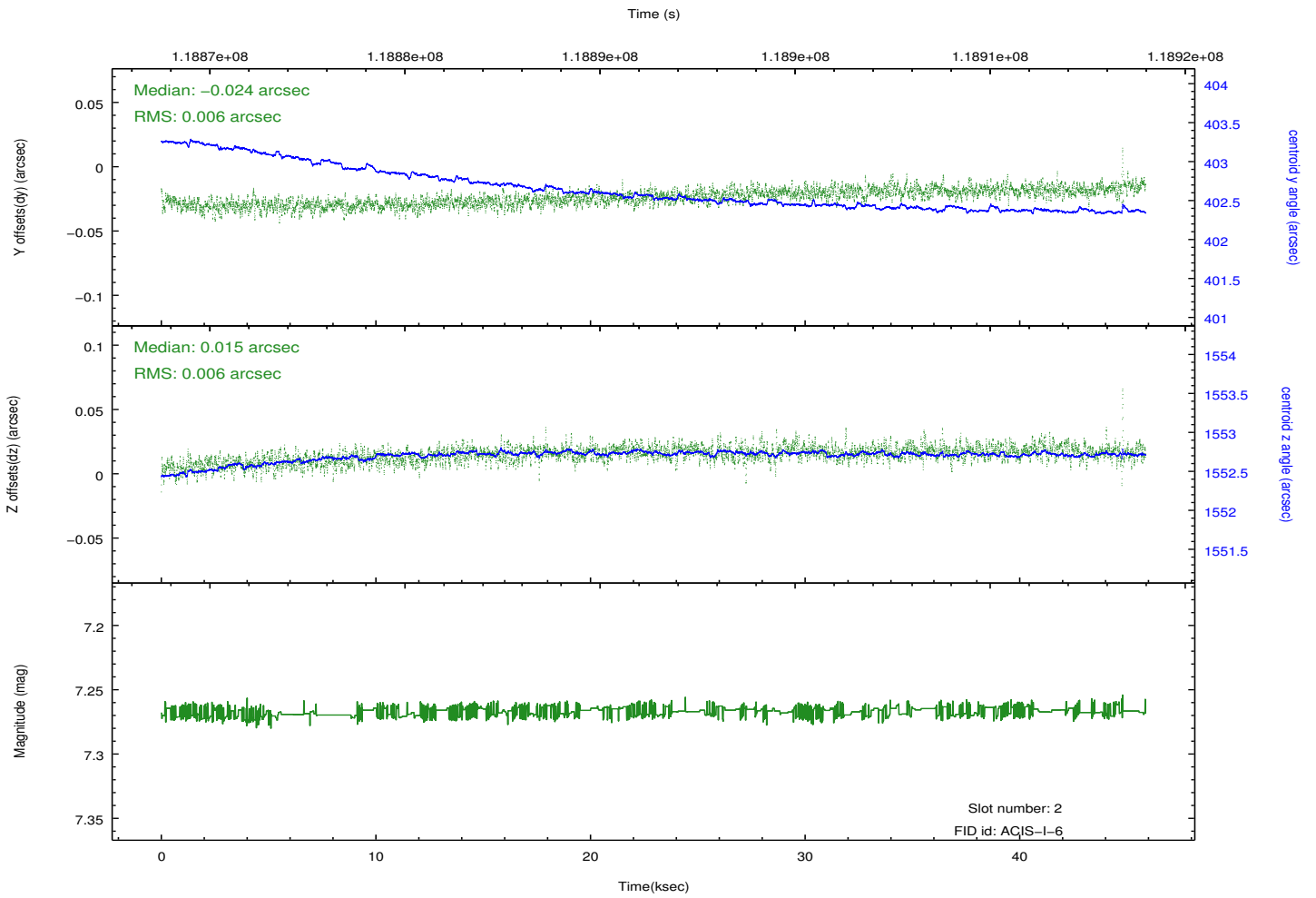
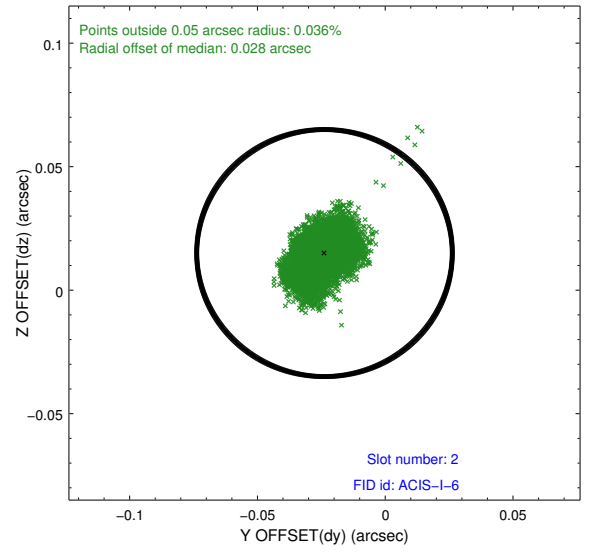
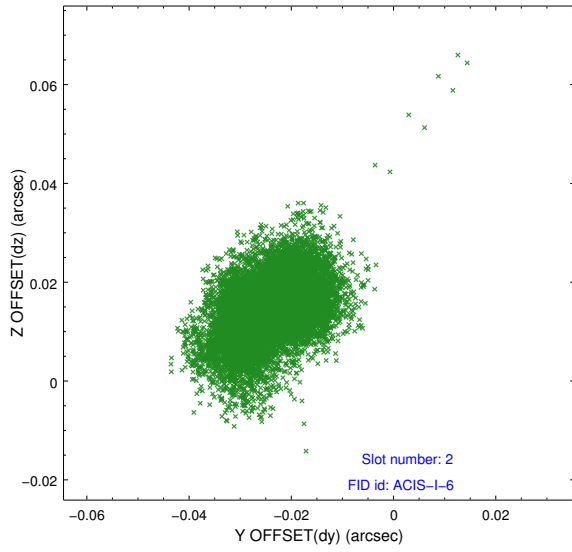
### 2.5.1 Slot 0



## 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)	2012.09.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.104

## A.2 Comments