

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 5759 - L2 Version 3  
Chandra X-Ray Center

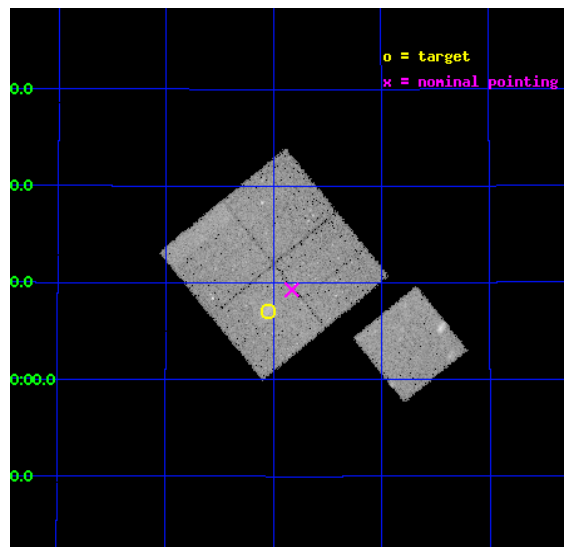
L2 Processing Date : Dec 16 2012

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# 1 Front

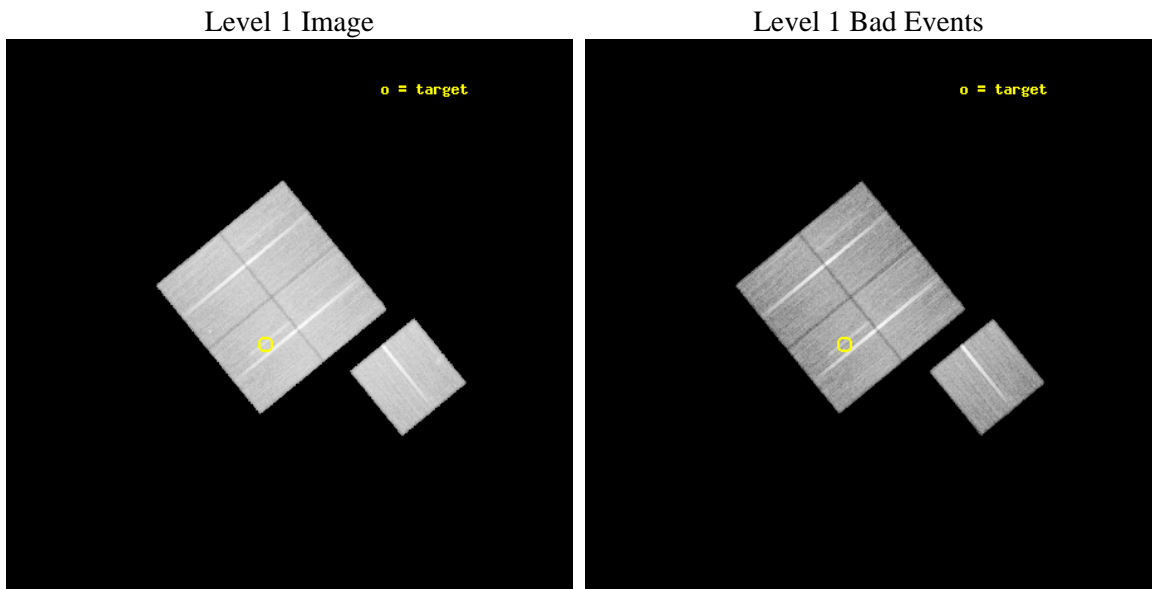
seq_num	800472	Sequence number
obs_id	5759	Observation id
title	DARK ENERGY WITH X-RAY CLUSTERS: CHANDRA OBSERVATIONS OF 41 HIGH-REDSHIFT CLUSTERS FROM THE 400 deg <sup>2</sup> ROSAT PSPC SURVEY	Proposal titl
observer	Dr. Alexey Vikhlinin	Principal investigator
object	cl0956+4107	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	149.011667	Observer's specified target RA [deg]
dec_targ	41.118889	Observer's specified target Dec [deg]
ra_nom	148.95755979797	Nominal RA [deg]
dec_nom	41.1547890797	Nominal Dec [deg]
roll_nom	140.74733014992	Nominal Roll [deg]
revision	3	Processing version of data
ontime	40696.758931458	Sum of GTIs [s]
livetime	40165.0258155	Livetime [s]
ontime0	40699.899921715	Sum of GTIs [s]
ontime1	40696.758941472	Sum of GTIs [s]
ontime2	40699.899921715	Sum of GTIs [s]
ontime3	40696.758931458	Sum of GTIs [s]
ontime6	40696.758951396	Sum of GTIs [s]
l2events	108863	Number of level 2 events



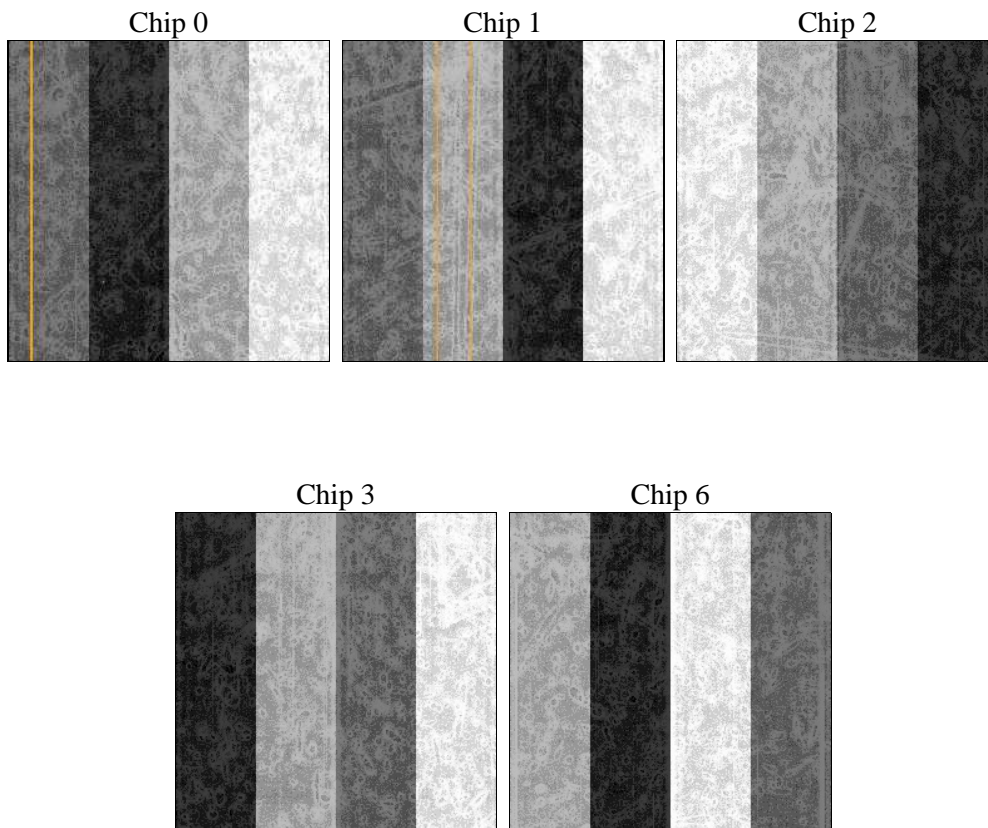
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	40517.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	40696.758931458	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime0	40699.899921715	Sum of GTIs [s]
date	2012-12-16T13:50:57	Date and time of file creation	ontime1	40696.758941472	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	40699.899921715	Sum of GTIs [s]
			ontime3	40696.758931458	Sum of GTIs [s]
			ontime6	40696.758951396	Sum of GTIs [s]
			l1events	1223782	Number of level 1 events

### 2.1.4 Events

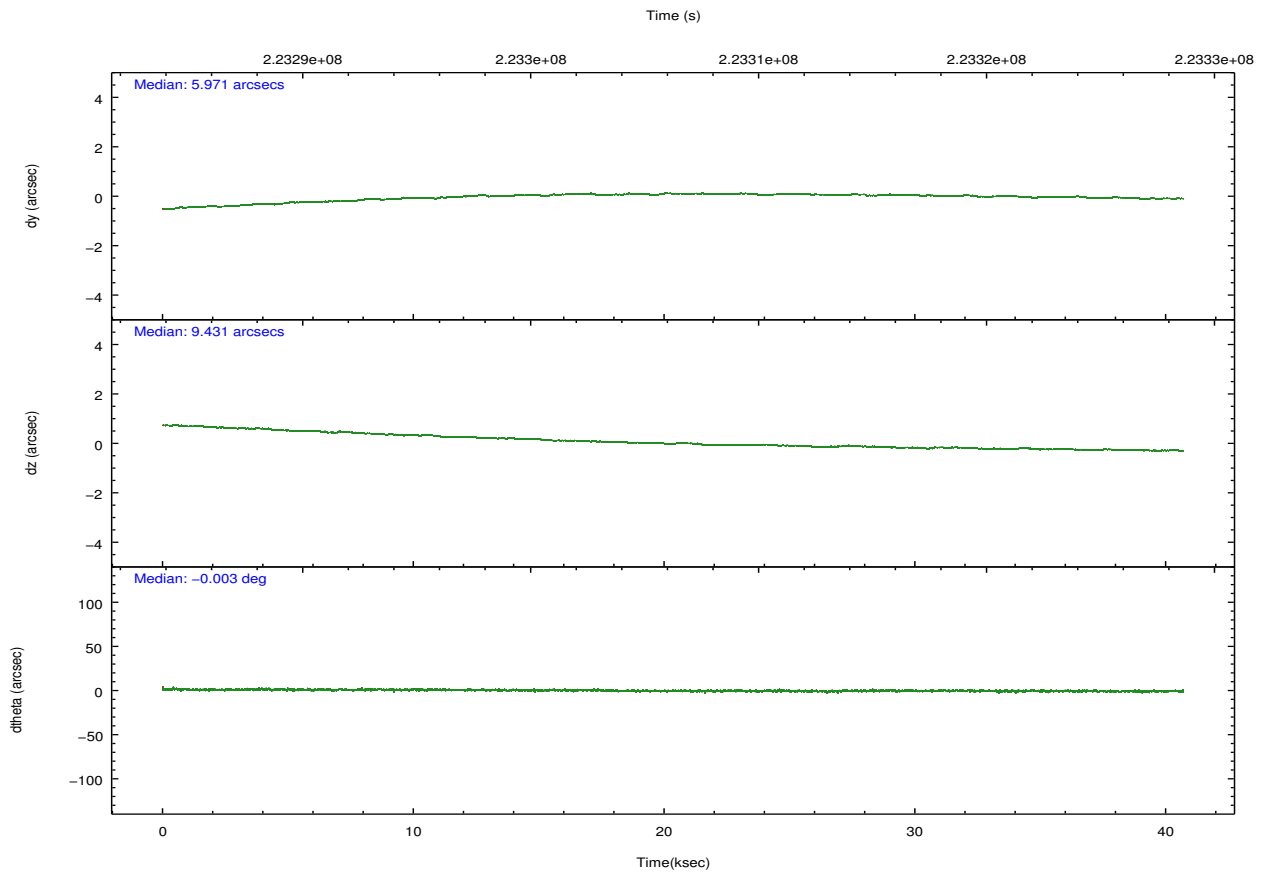
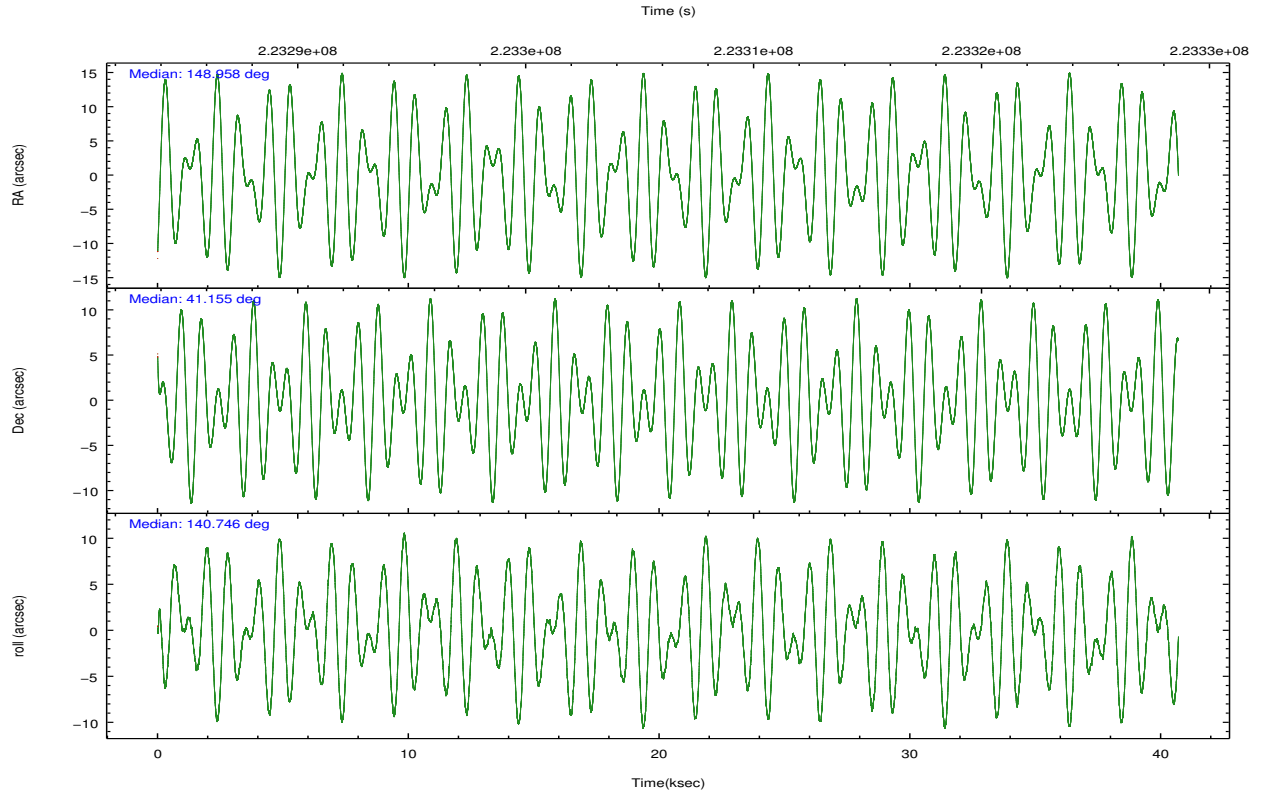
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	232297	232066	261690	249167	248562
rejected events	207218	203647	236957	224202	221668
rejected %	89%	87%	90%	89%	89%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8811	10505	9171	9356	10149
	3%	4%	3%	3%	4%
grade 1 events	126	110	125	124	114
	0%	0%	0%	0%	0%
grade 2 events	5896	6083	5765	5353	5441
	2%	2%	2%	2%	2%
grade 3 events	2927	3094	2707	2796	2936
	1%	1%	1%	1%	1%
grade 4 events	2672	3033	2657	2758	2889
	1%	1%	1%	1%	1%
grade 5 events	8758	9429	8352	9937	9717
	3%	4%	3%	3%	3%
grade 6 events	4830	5756	4488	4750	5524
	2%	2%	1%	1%	2%
grade 7 events	198277	194056	228425	214093	211792
	85%	83%	87%	85%	85%

## 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	148.993472	148.9575597979715	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.150485	41.15478907970046	Alternating exposures requested	N	N
[deg] Pointing Roll	140.515016	140.7473301499207	[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)	223286084.184000	223285041.05596			
Observation start date	2005-01-28T07:53:40	2005-01-28T07:37:21			
[s] Observation end time (MET)	223326601.184000	223327406.35787			
Observation end date	2005-01-28T19:08:57	2005-01-28T19:23:26			
Read mode	TIMED	TIMED			

## 2.3 Aspect

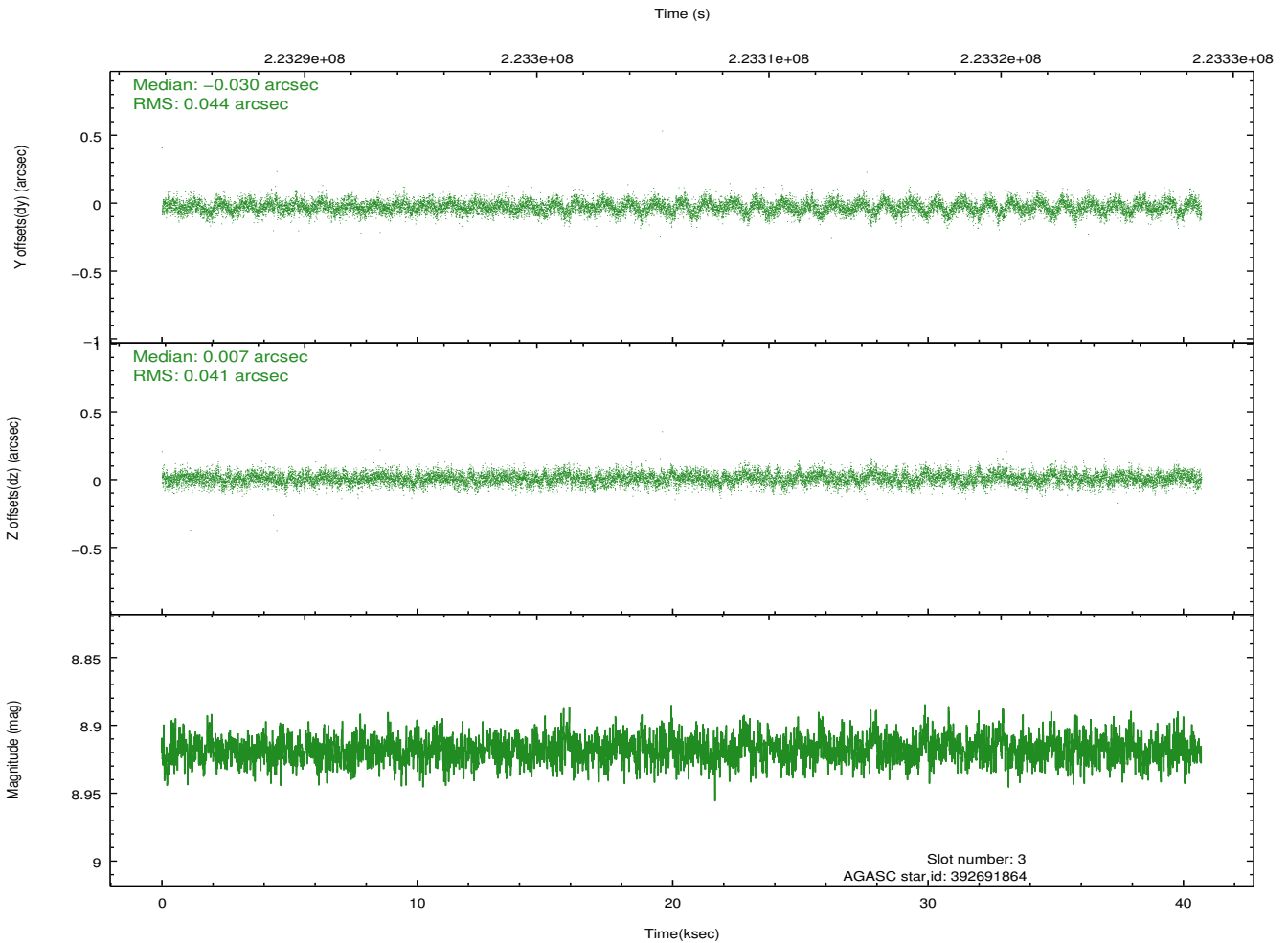
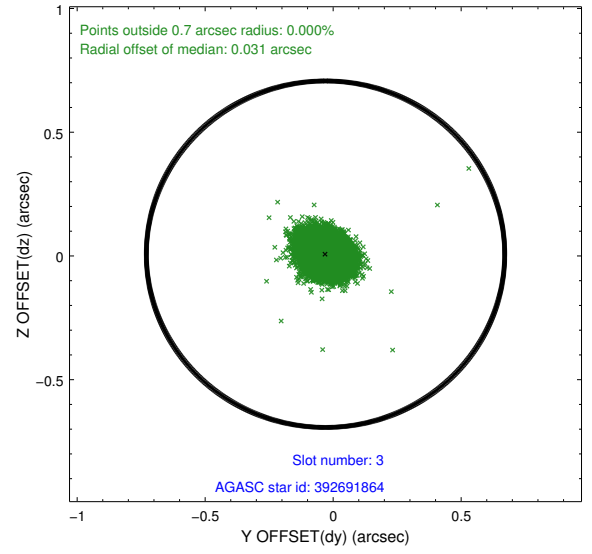
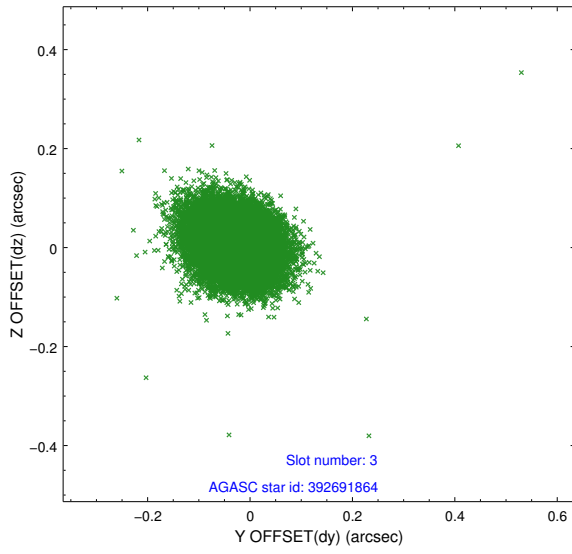


### Slot Statistics

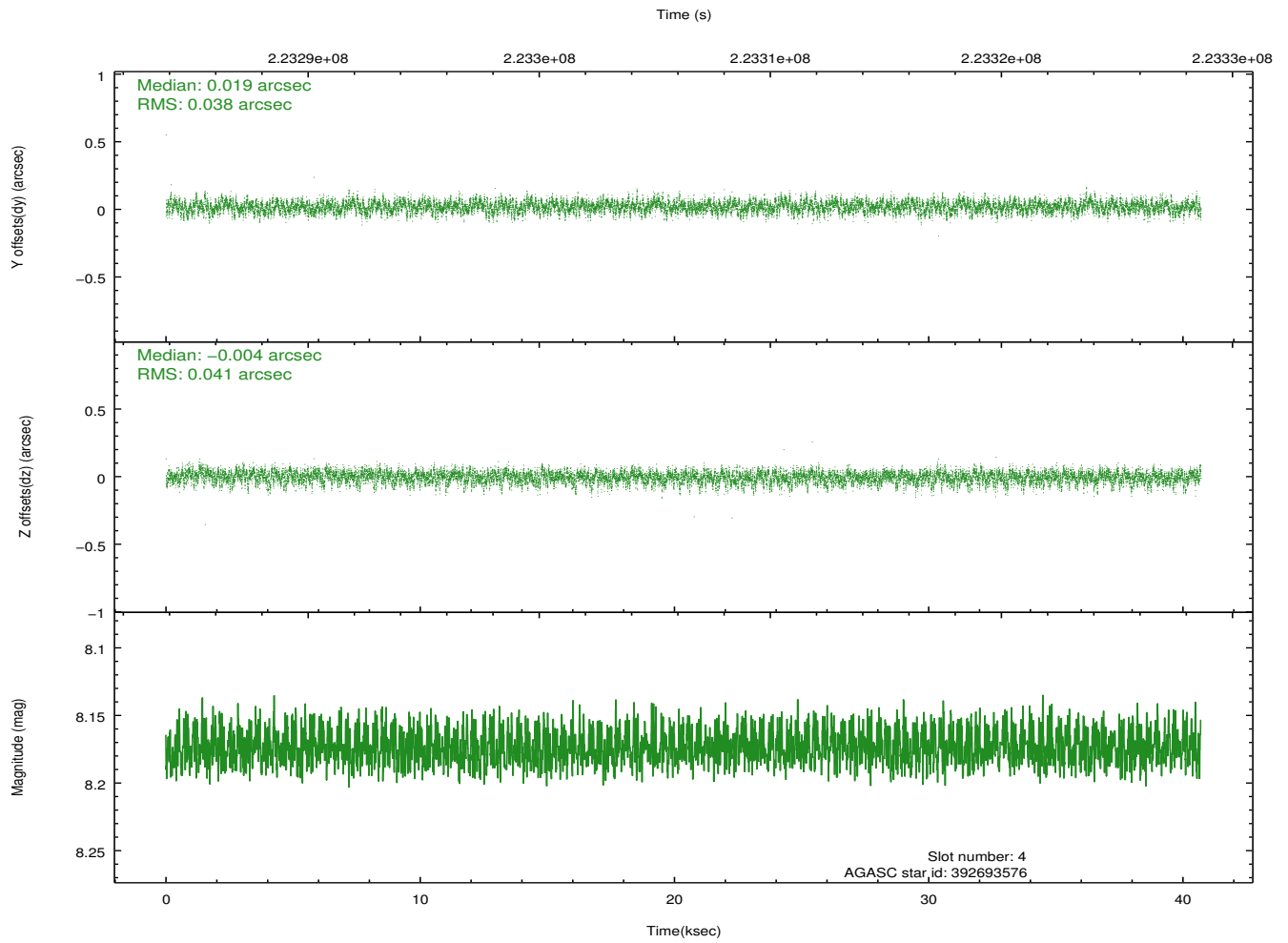
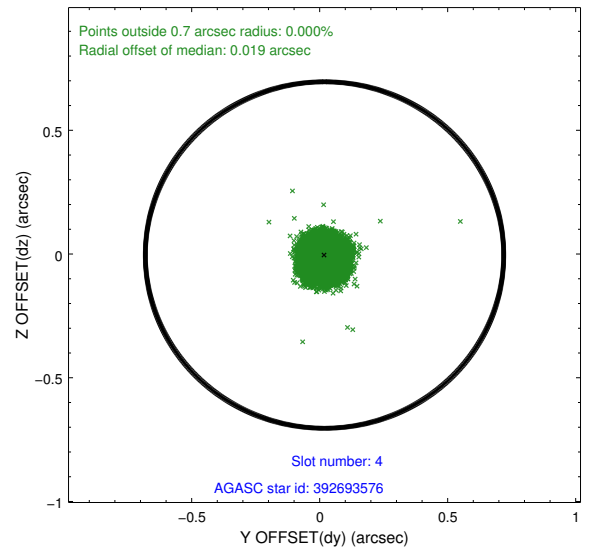
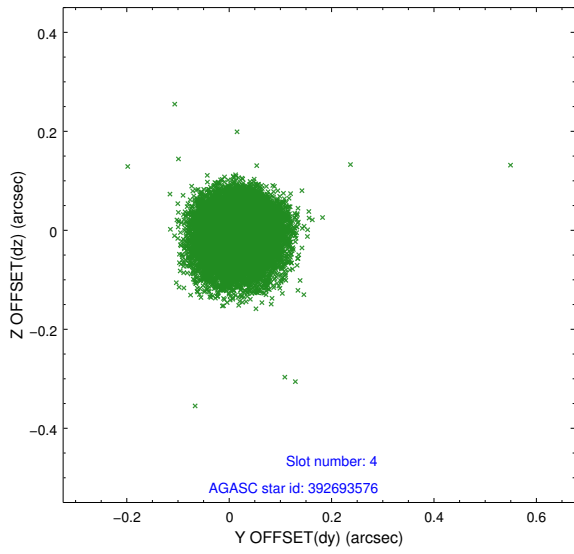
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.18	9928	-0.048	-0.048	0.012	0.019	0.000000	0.000000	-760.96	-997.45
1	FID	ACIS-I-4	7.14	9928	0.045	0.048	0.009	0.016	0.000000	0.000000	2153.12	908.79
2	FID	ACIS-I-5	7.22	9929	-0.099	0.069	0.009	0.015	0.000000	0.000000	-1814.45	905.63
3	GUIDE	392691864	8.92	19853	-0.030	0.007	0.063	0.104	148.998449	41.278003	281.95	-362.56
4	GUIDE	392693576	8.17	19854	0.019	-0.004	0.059	0.096	149.531855	41.595239	-97.29	-2160.66
5	GUIDE	392694320	8.54	19851	-0.070	-0.080	0.064	0.104	148.201769	41.462521	2369.24	483.75
6	GUIDE	392694512	9.10	19843	-0.033	0.108	0.077	0.124	149.375349	41.193921	-697.02	-779.89
7	GUIDE	392695480	8.86	19847	0.115	-0.027	0.067	0.107	149.916110	41.131503	-1965.34	-1548.18

## 2.4 Star Slots

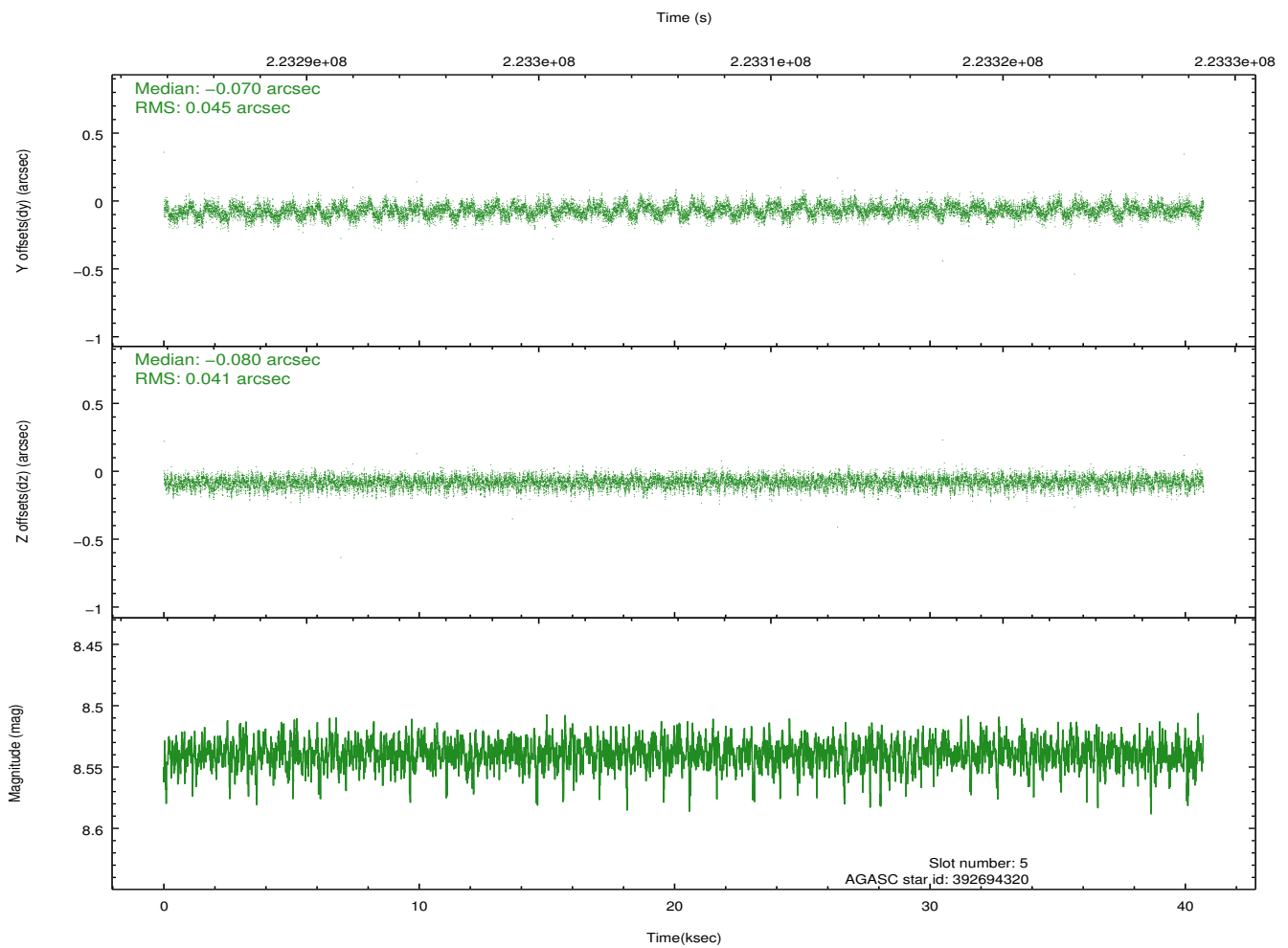
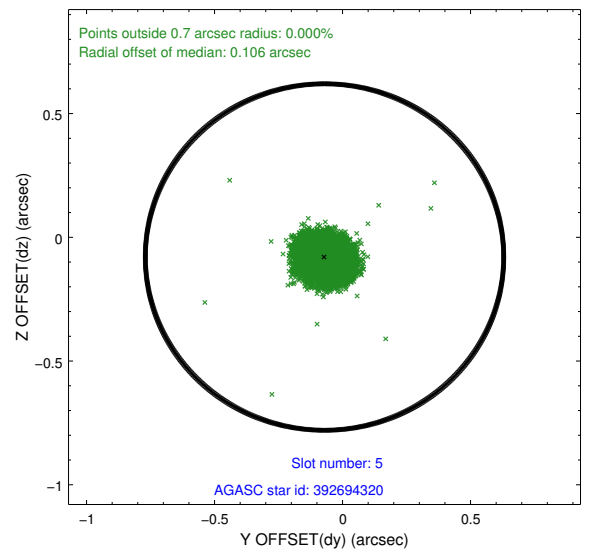
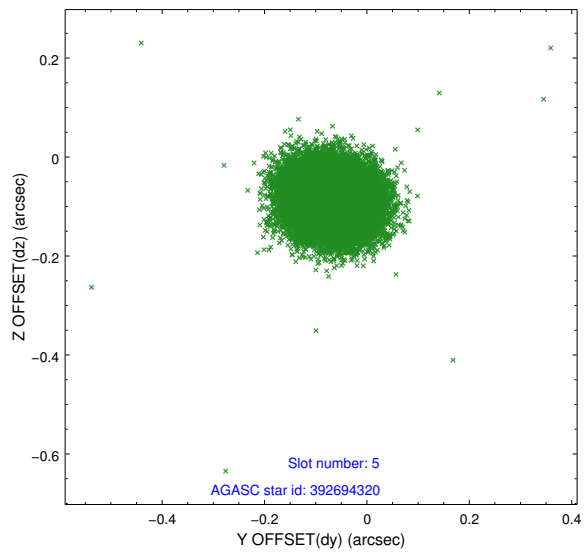
### 2.4.1 Slot 3



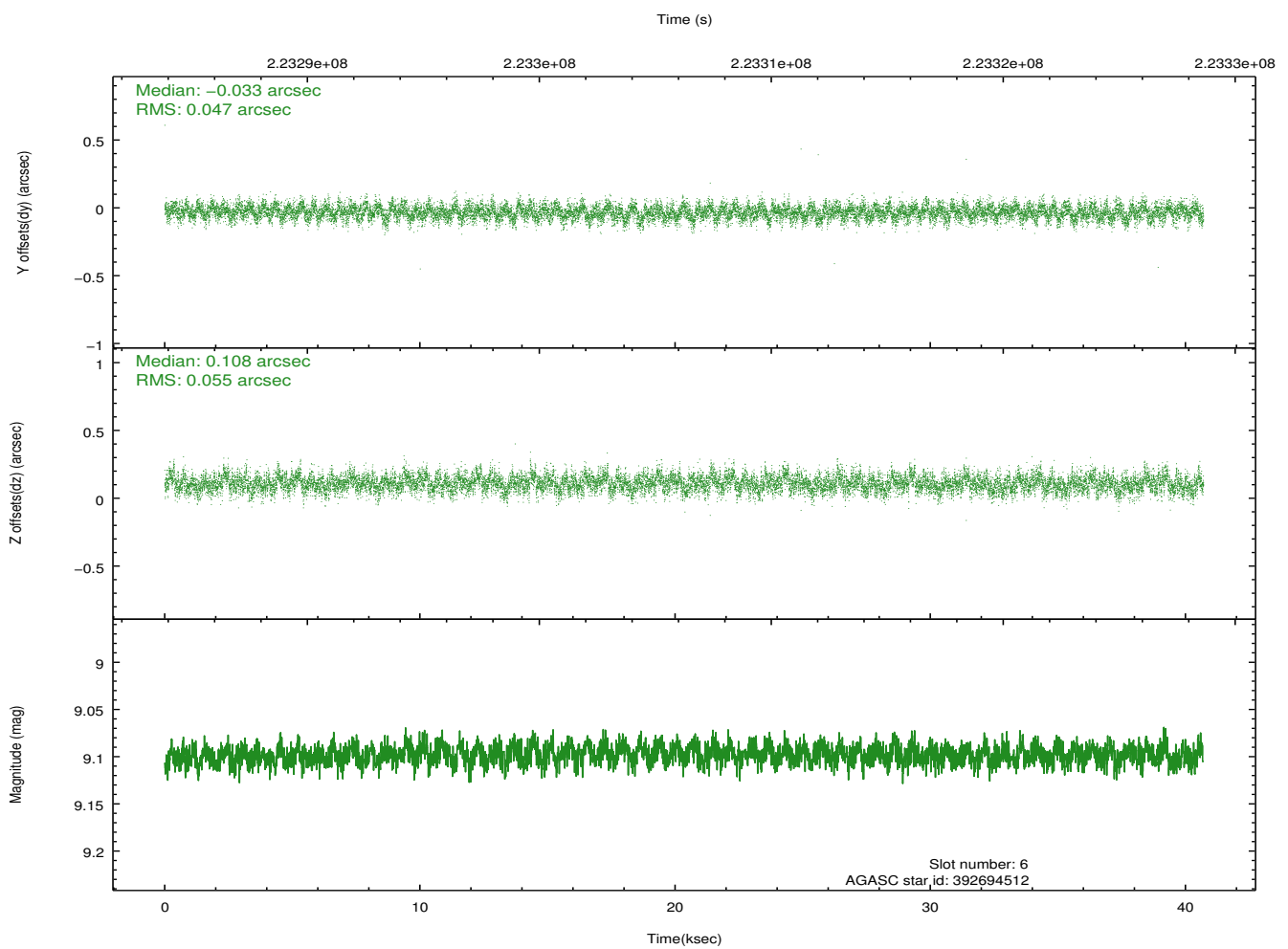
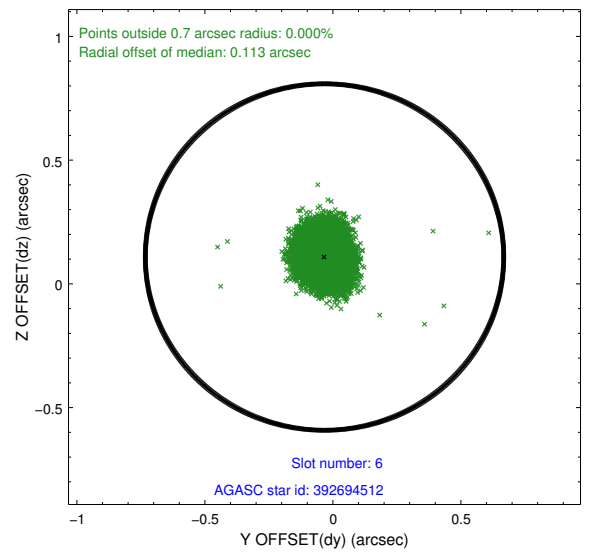
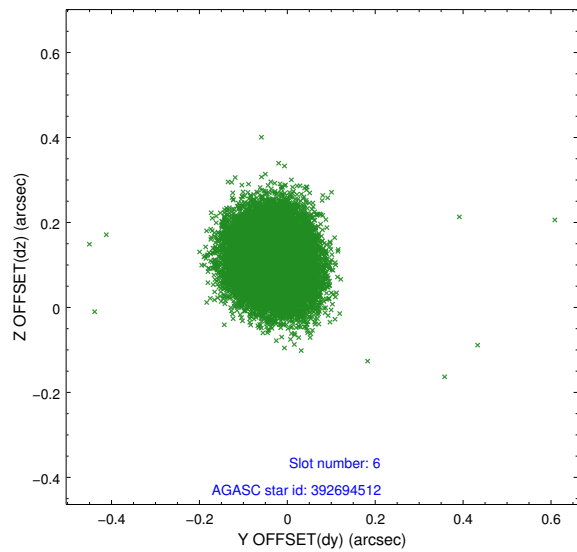
## 2.4.2 Slot 4



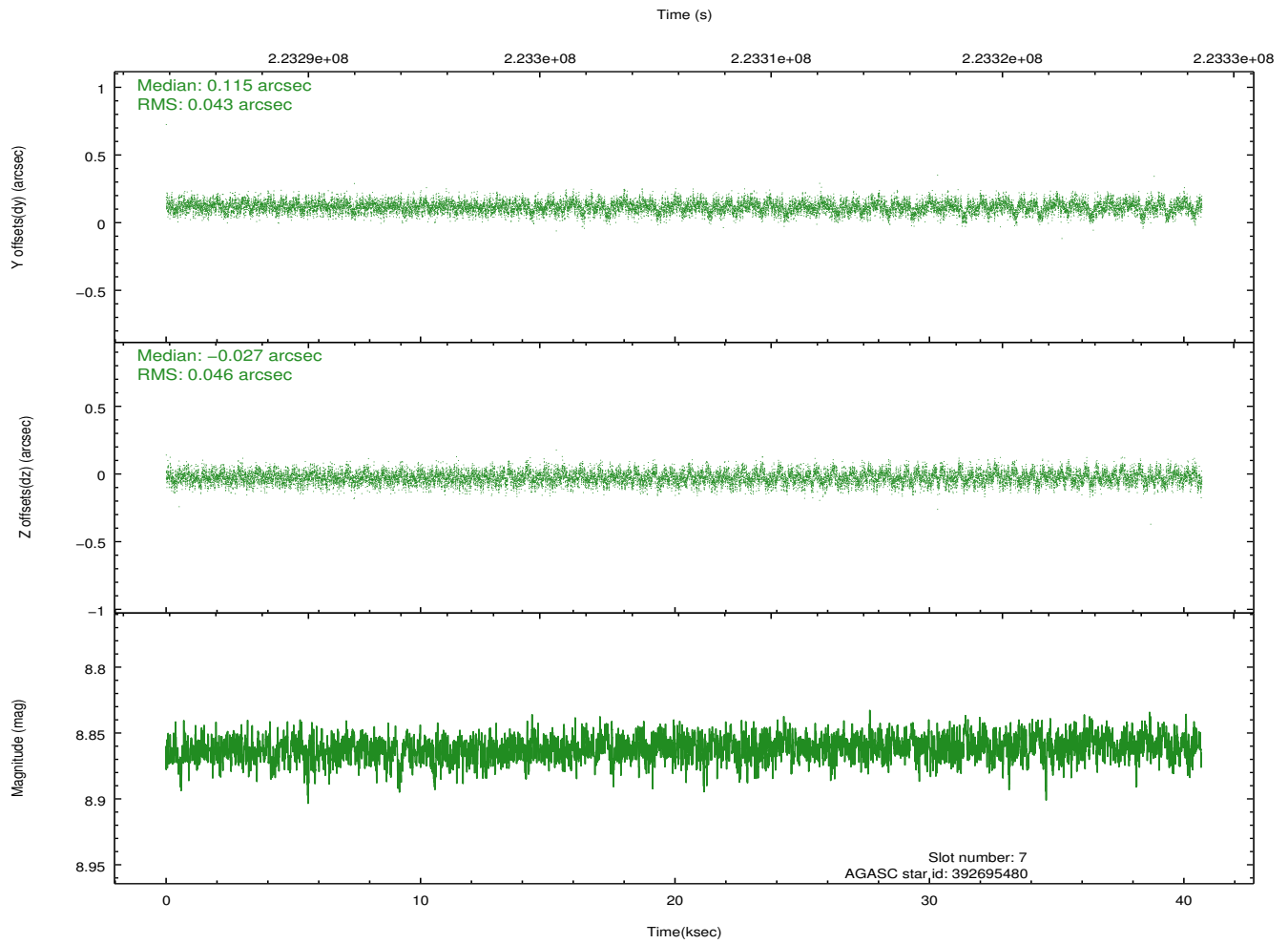
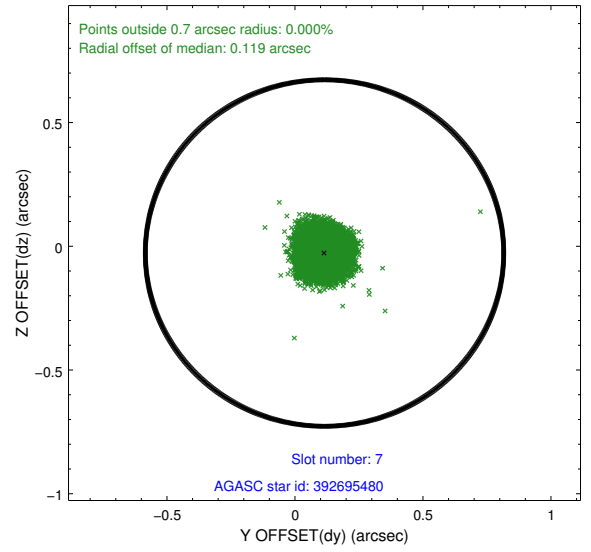
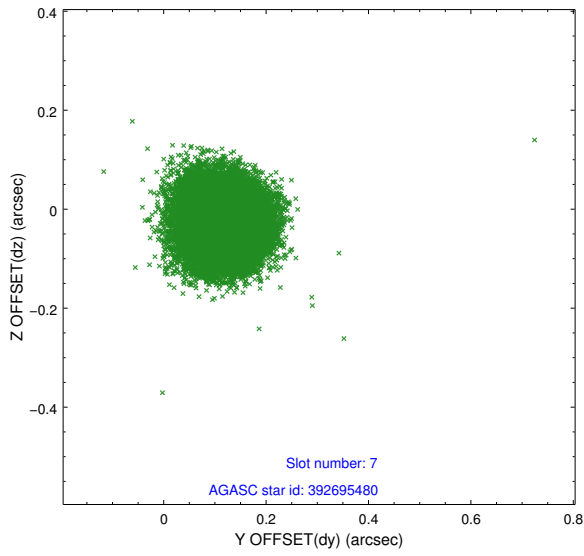
### 2.4.3 Slot 5



## 2.4.4 Slot 6

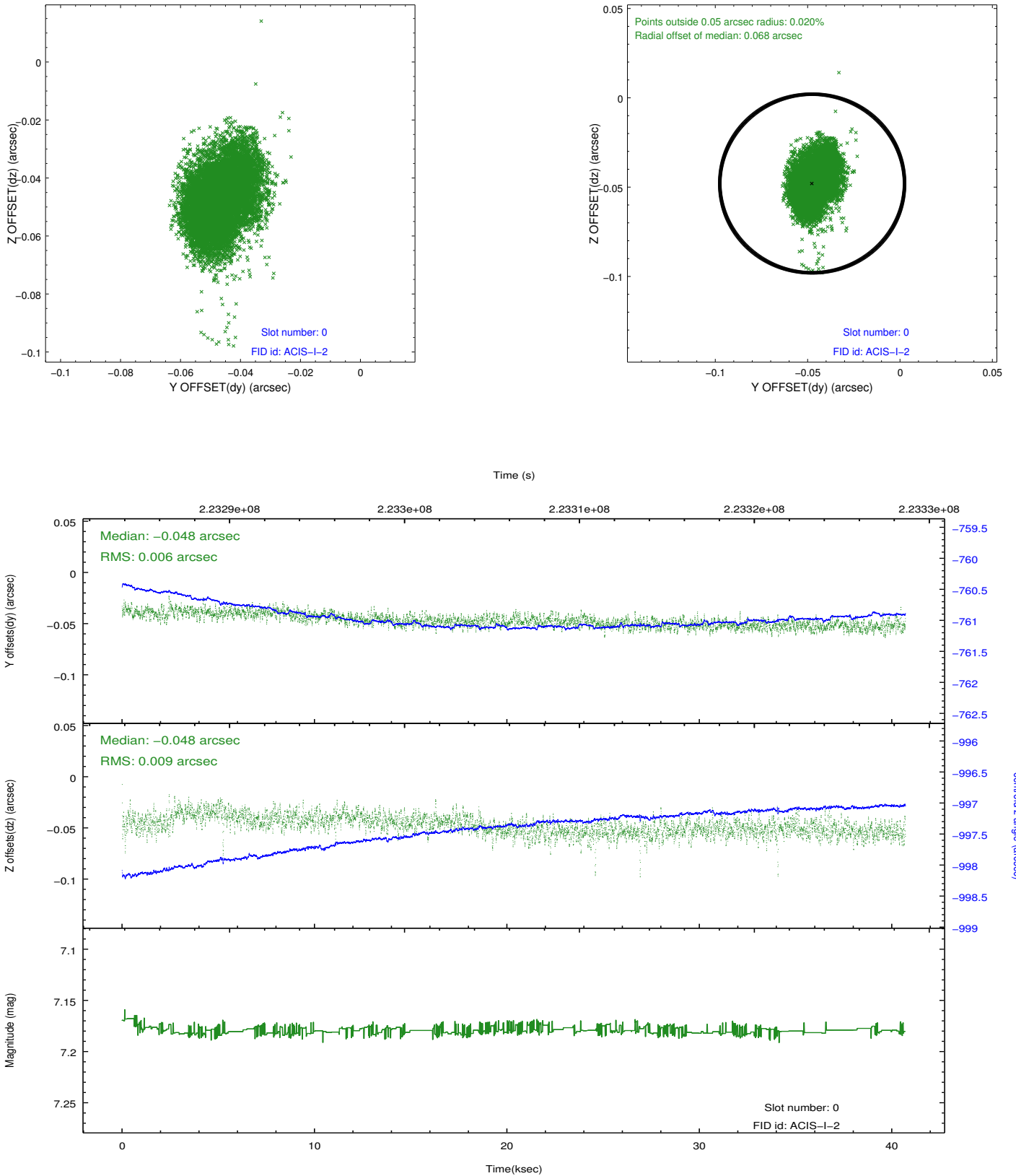


### 2.4.5 Slot 7

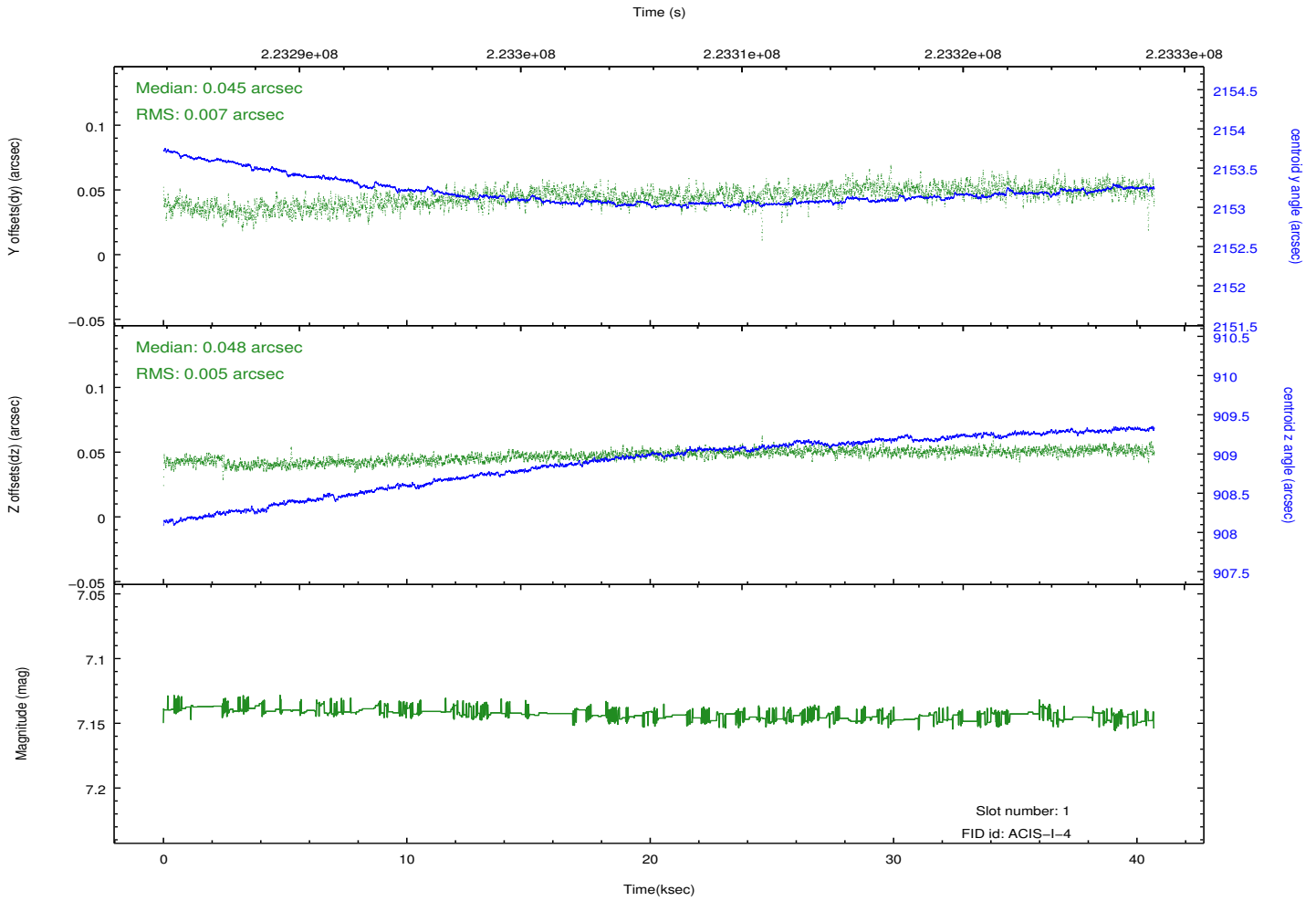
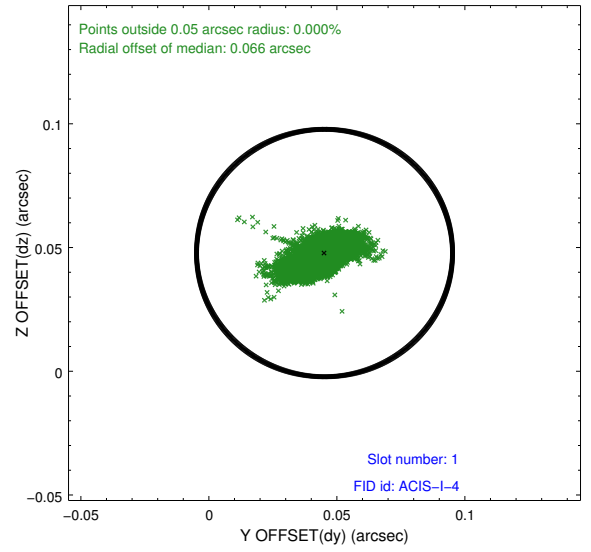
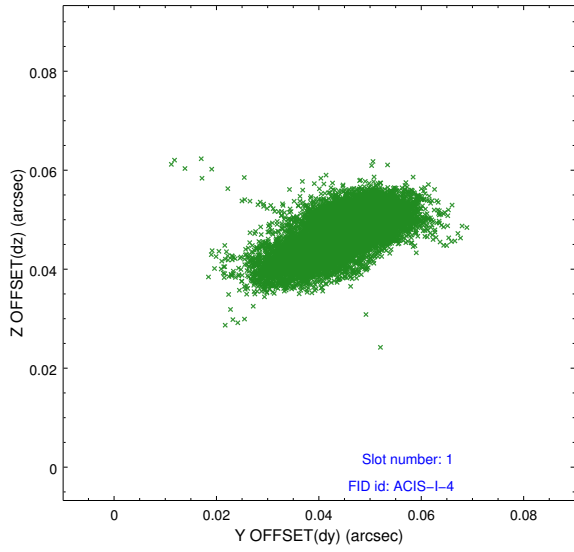


## 2.5 FID Slots

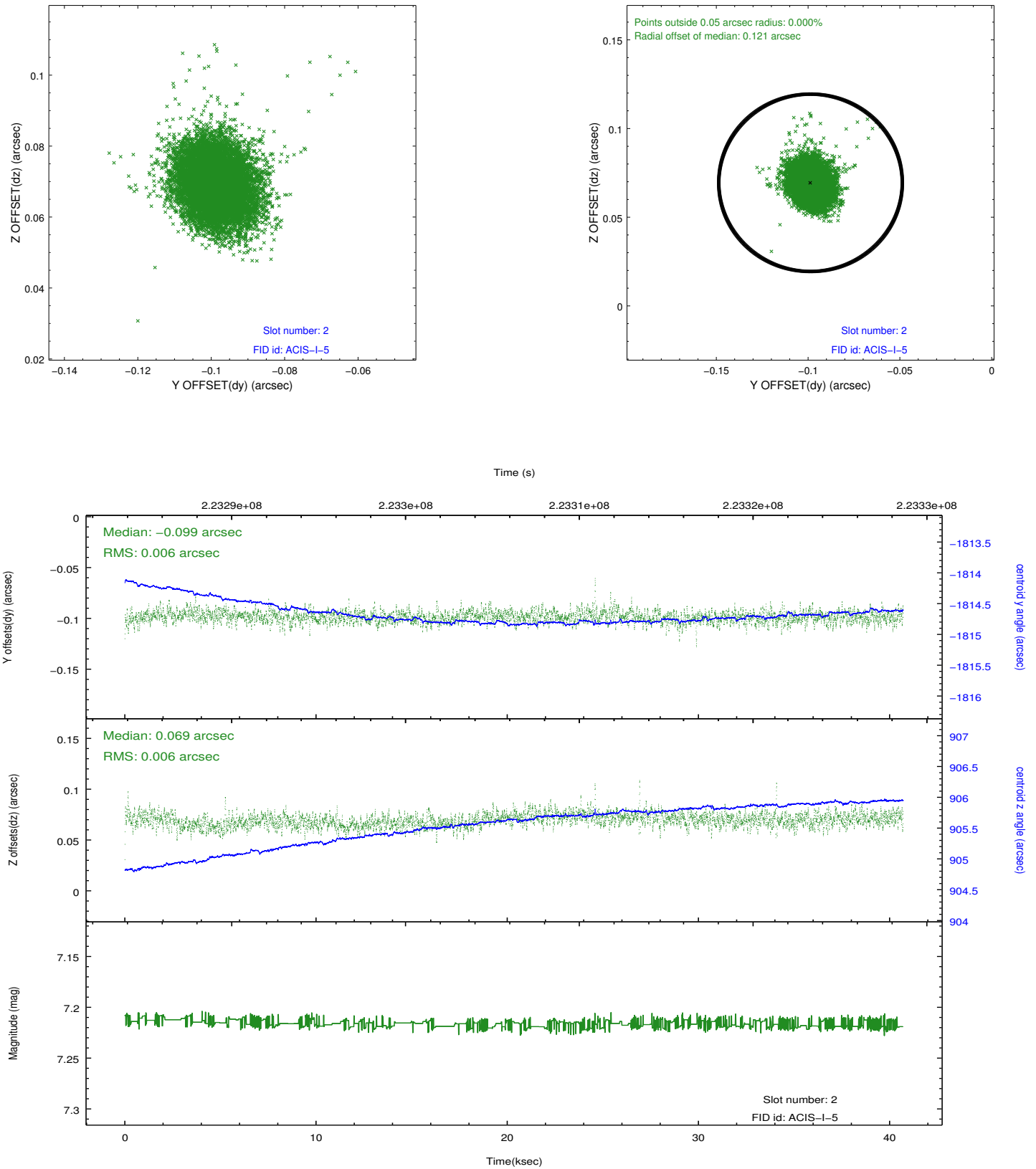
### 2.5.1 Slot 0



## 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)	2013.01.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.69675

## A.2 Comments