

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3622 - L2 Version 5  
Chandra X-Ray Center

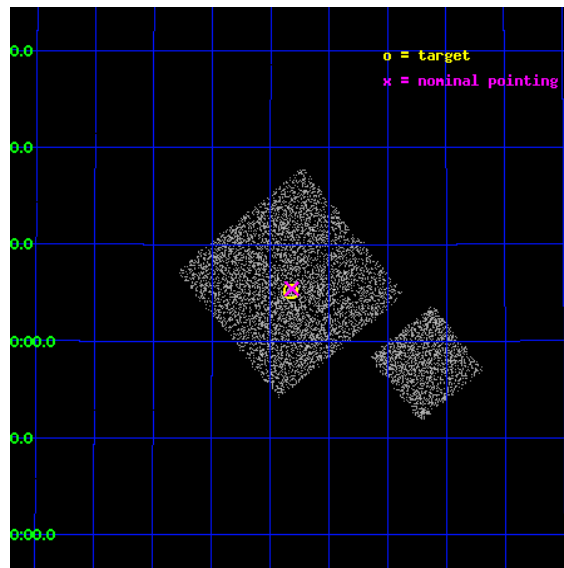
L2 Processing Date : Dec 31 2012

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# 1 Front

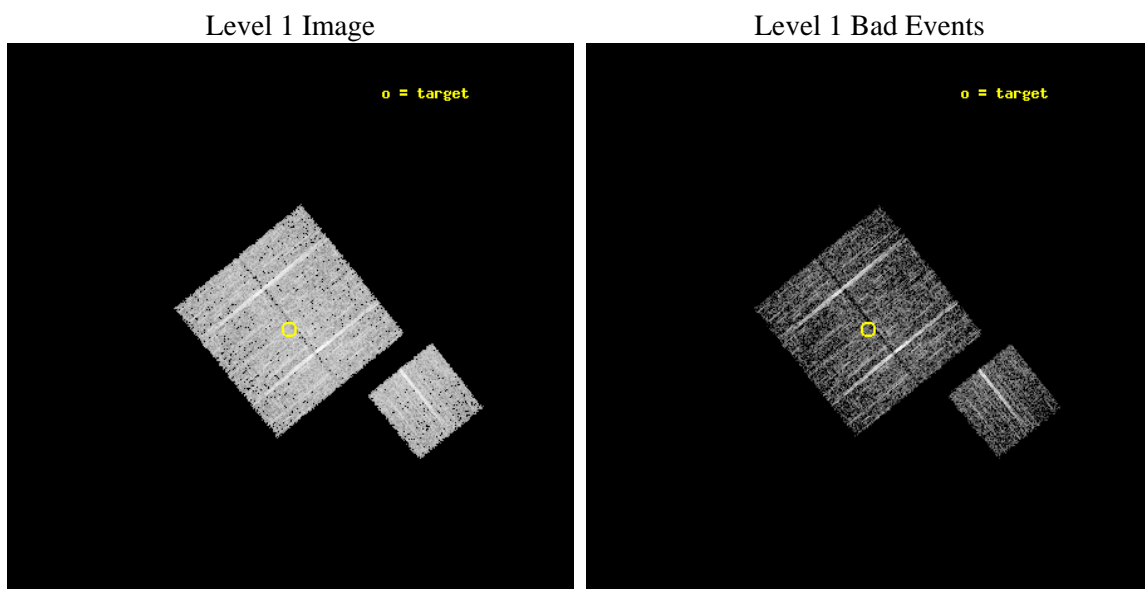
seq_num	900222	Sequence number
obs_id	3622	Observation id
title	CHANDRA LARGE SCALE SURVEY OF THE NOAO BOOTES DEEP FIELD	Proposal
observer	Dr. Stephen Murray	Principal investigator
object	NOAO FIELD F27	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	216.957163	Observer's specified target RA [deg]
dec_targ	35.08647	Observer's specified target Dec [deg]
ra_nom	216.95447303539	Nominal RA [deg]
dec_nom	35.090479810995	Nominal Dec [deg]
roll_nom	141.01023876709	Nominal Roll [deg]
revision	5	Processing version of data
ontime	4674.3850339949	Sum of GTIs [s]
livetime	4613.3107522936	Livetime [s]
ontime0	4674.261913985	Sum of GTIs [s]
ontime1	4674.3029539883	Sum of GTIs [s]
ontime2	4674.3439939916	Sum of GTIs [s]
ontime3	4674.3850339949	Sum of GTIs [s]
ontime6	4674.220854044	Sum of GTIs [s]
l2events	9544	Number of level 2 events



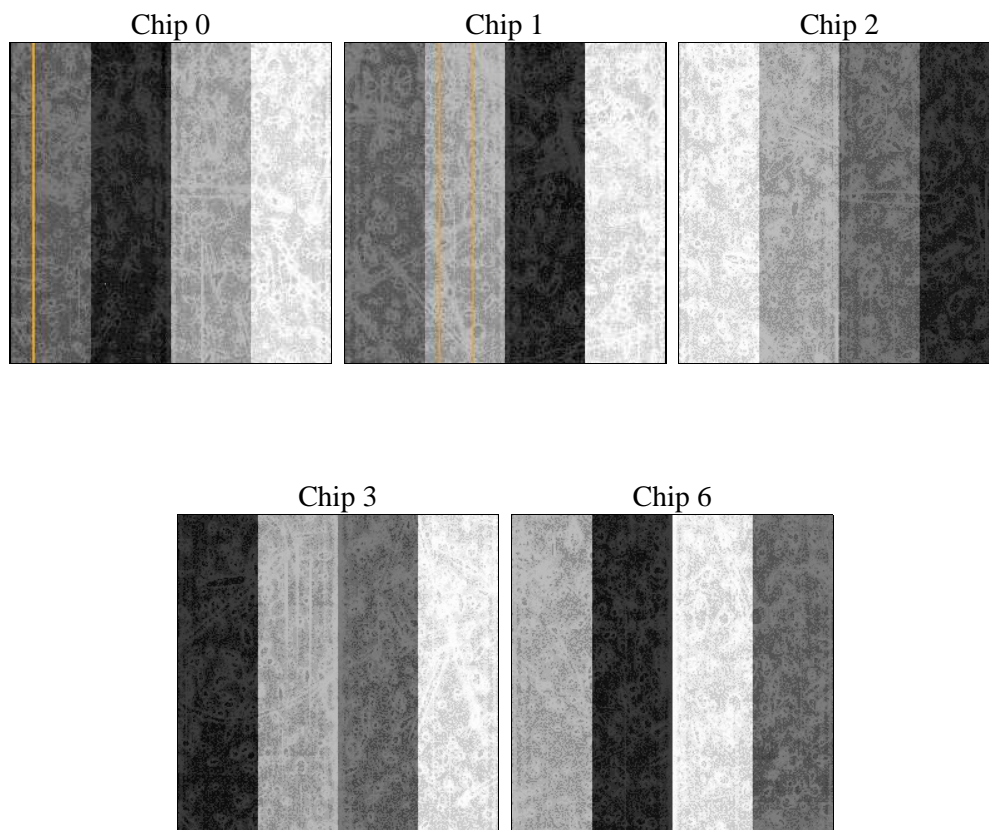
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4900.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	4674.3850339949	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime0	4674.261913985	Sum of GTIs [s]
date	2012-12-28T22:43:45	Date and time of file creation	ontime1	4674.3029539883	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	4674.3439939916	Sum of GTIs [s]
			ontime3	4674.3850339949	Sum of GTIs [s]
			ontime6	4674.220854044	Sum of GTIs [s]
			l1events	115753	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	21864	21969	25110	24312	22498
rejected events	19548	19597	22783	22092	20081
rejected %	89%	89%	90%	90%	89%

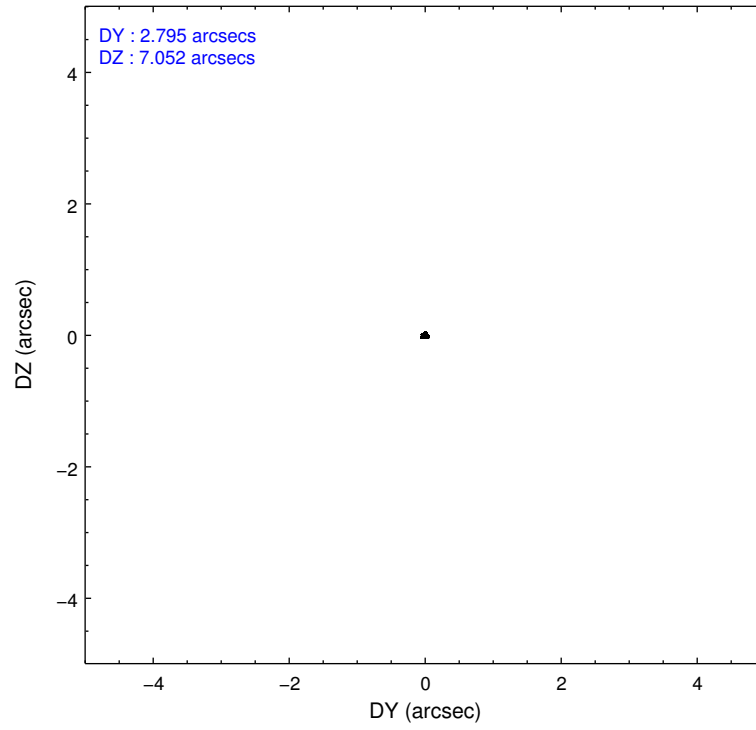
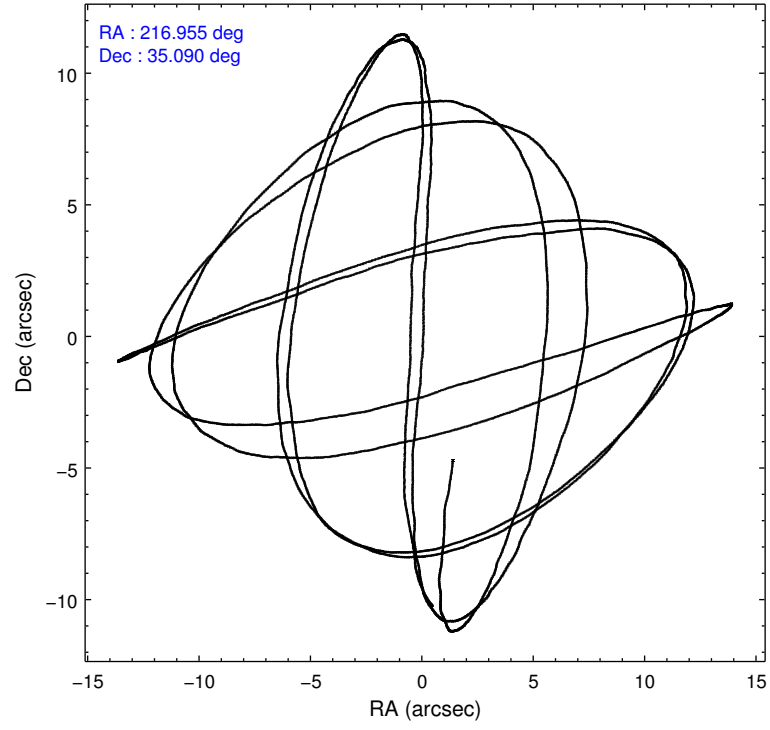
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	841	815	918	873	883
	3%	3%	3%	3%	3%
grade 1 events	9	13	10	9	10
	0%	0%	0%	0%	0%
grade 2 events	511	512	504	458	525
	2%	2%	2%	1%	2%
grade 3 events	272	282	249	240	263
	1%	1%	0%	0%	1%
grade 4 events	266	263	252	237	277
	1%	1%	1%	0%	1%
grade 5 events	655	760	652	807	765
	2%	3%	2%	3%	3%
grade 6 events	431	504	406	417	469
	1%	2%	1%	1%	2%
grade 7 events	18879	18820	22119	21271	19306
	86%	85%	88%	87%	85%

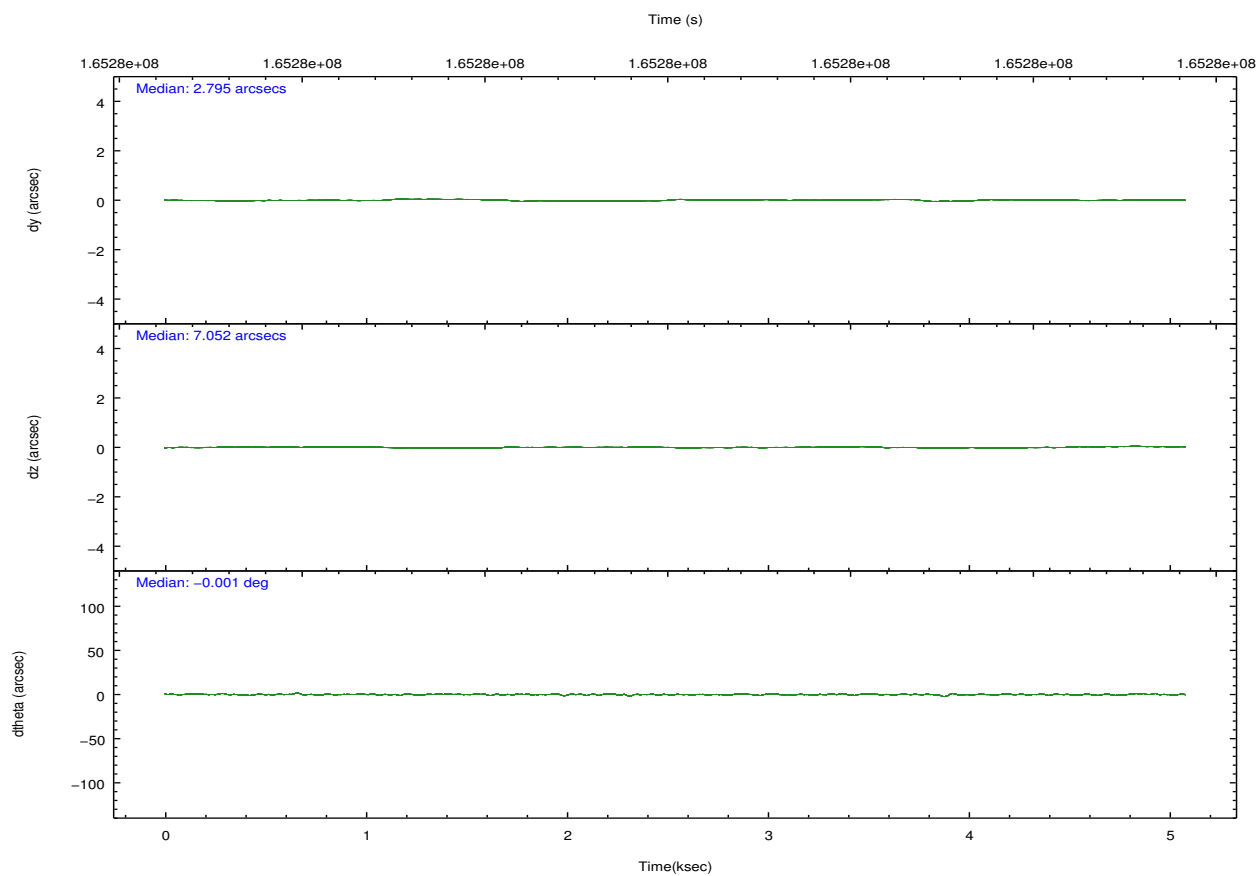
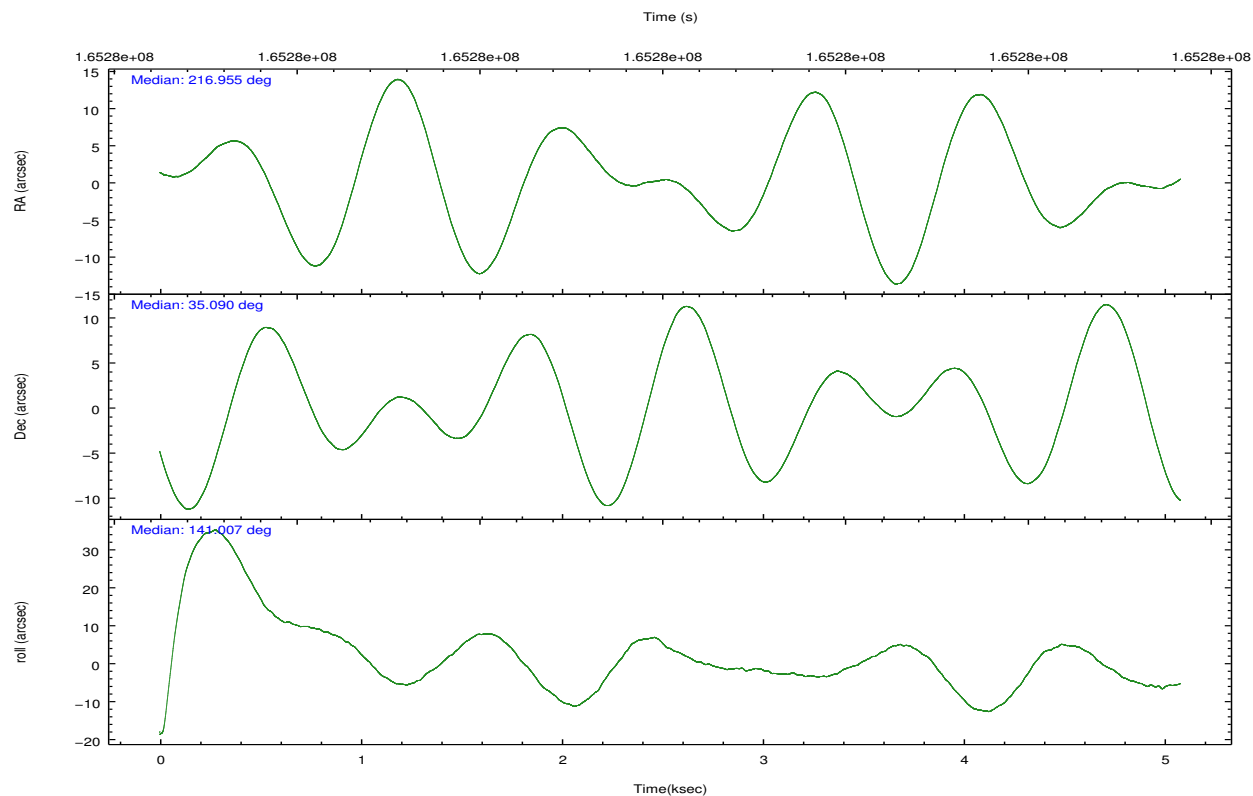


## 2.2 Compared Parameters

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	216.987567	216.954473035392	Subarray requested	NONE	NONE
[deg] Pointing Dec	35.086388	35.09047981099521	Alternating exposures requested	N	N
[deg] Pointing Roll	140.782518	141.0102387670939	[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)	165279680.184000	165279304.52025			
Observation start date	2003-03-28T23:00:16	2003-03-28T22:55:04			
[s] Observation end time (MET)	165284580.184000	165284714.47048			
Observation end date	2003-03-29T00:21:56	2003-03-29T00:25:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect



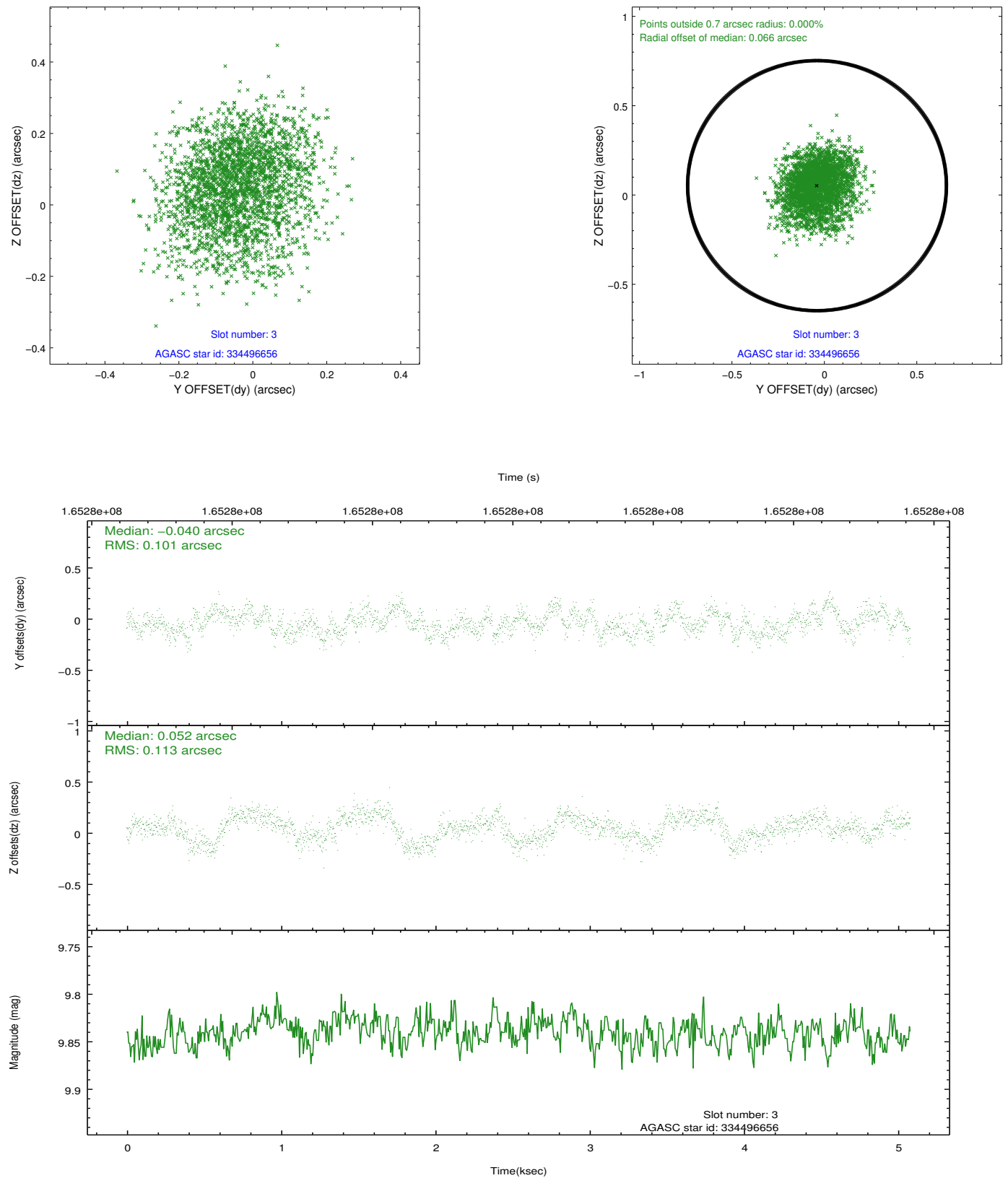


### Slot Statistics

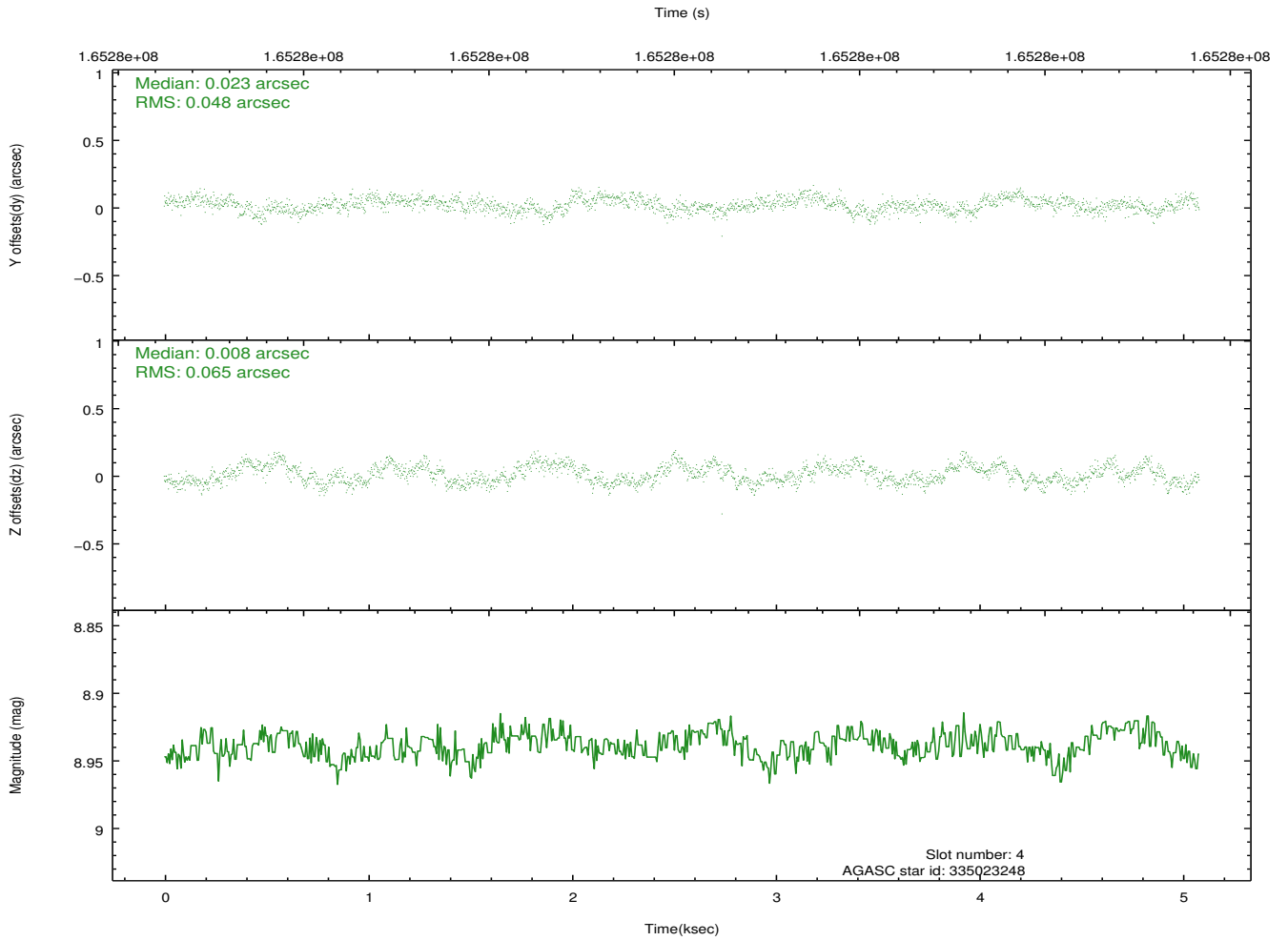
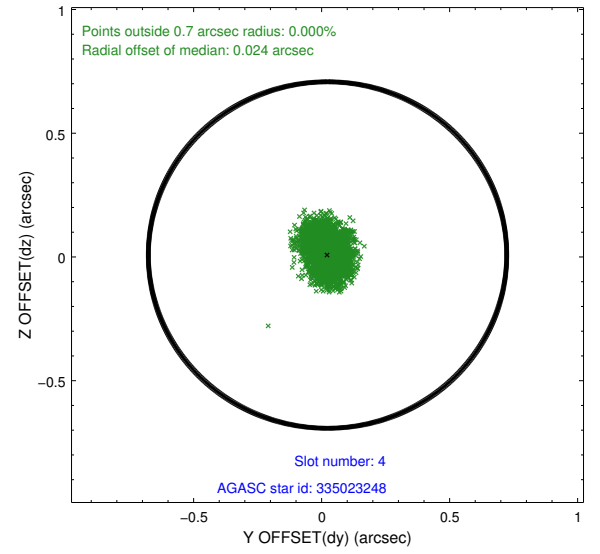
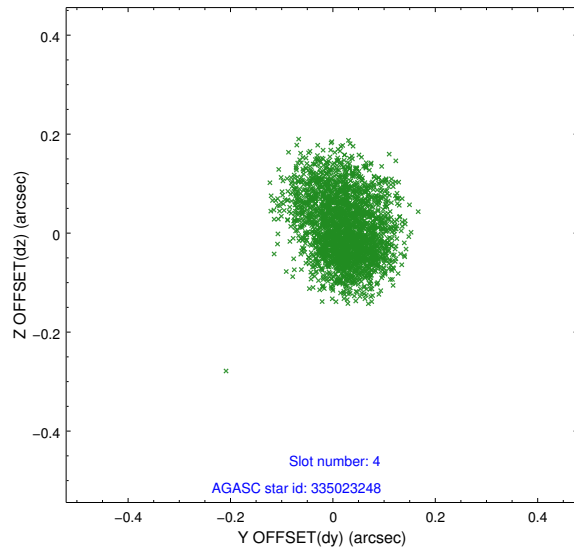
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	1240	0.020	-0.009	0.005	0.010	0.000000	0.000000	937.01	-830.47
1	FID	ACIS-I-5	7.24	1240	-0.080	0.059	0.005	0.010	0.000000	0.000000	-1810.50	1066.53
2	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	334496656	9.84	2480	-0.040	0.052	0.164	0.258	215.929218	35.031287	2302.43	2113.54
4	GUIDE	335023248	8.94	2479	0.023	0.008	0.088	0.136	217.634832	34.944512	-1797.44	-816.07
5	GUIDE	335030384	8.83	2480	0.018	-0.096	0.077	0.127	216.806407	34.722197	-413.73	1353.78
6	GUIDE	335414448	7.36	2480	-0.130	-0.036	0.076	0.121	216.992261	35.577204	1106.37	-1377.07
7	GUIDE	335417968	9.39	2477	0.125	0.067	0.093	0.149	217.358149	35.055285	-914.61	-605.92

## 2.4 Star Slots

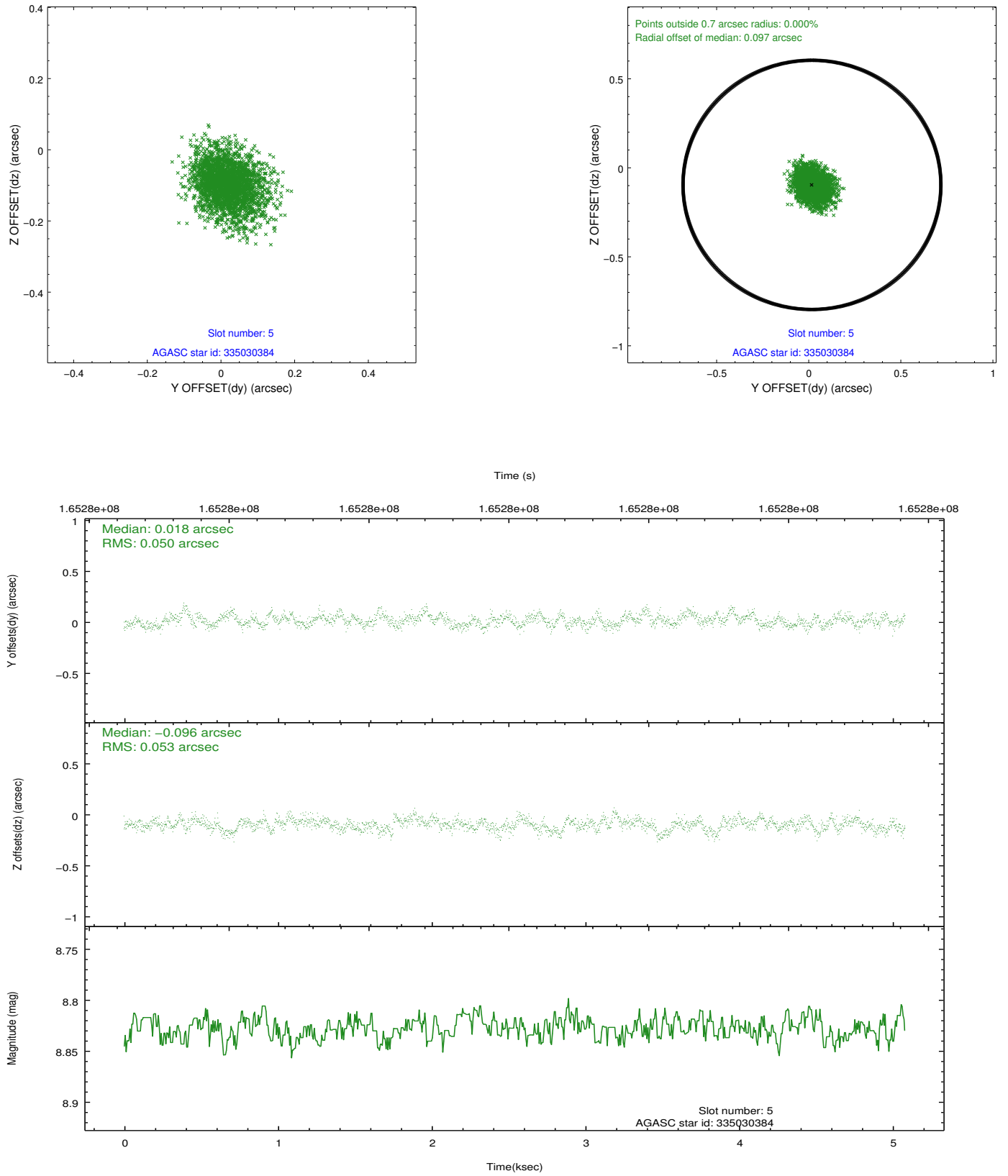
### 2.4.1 Slot 3



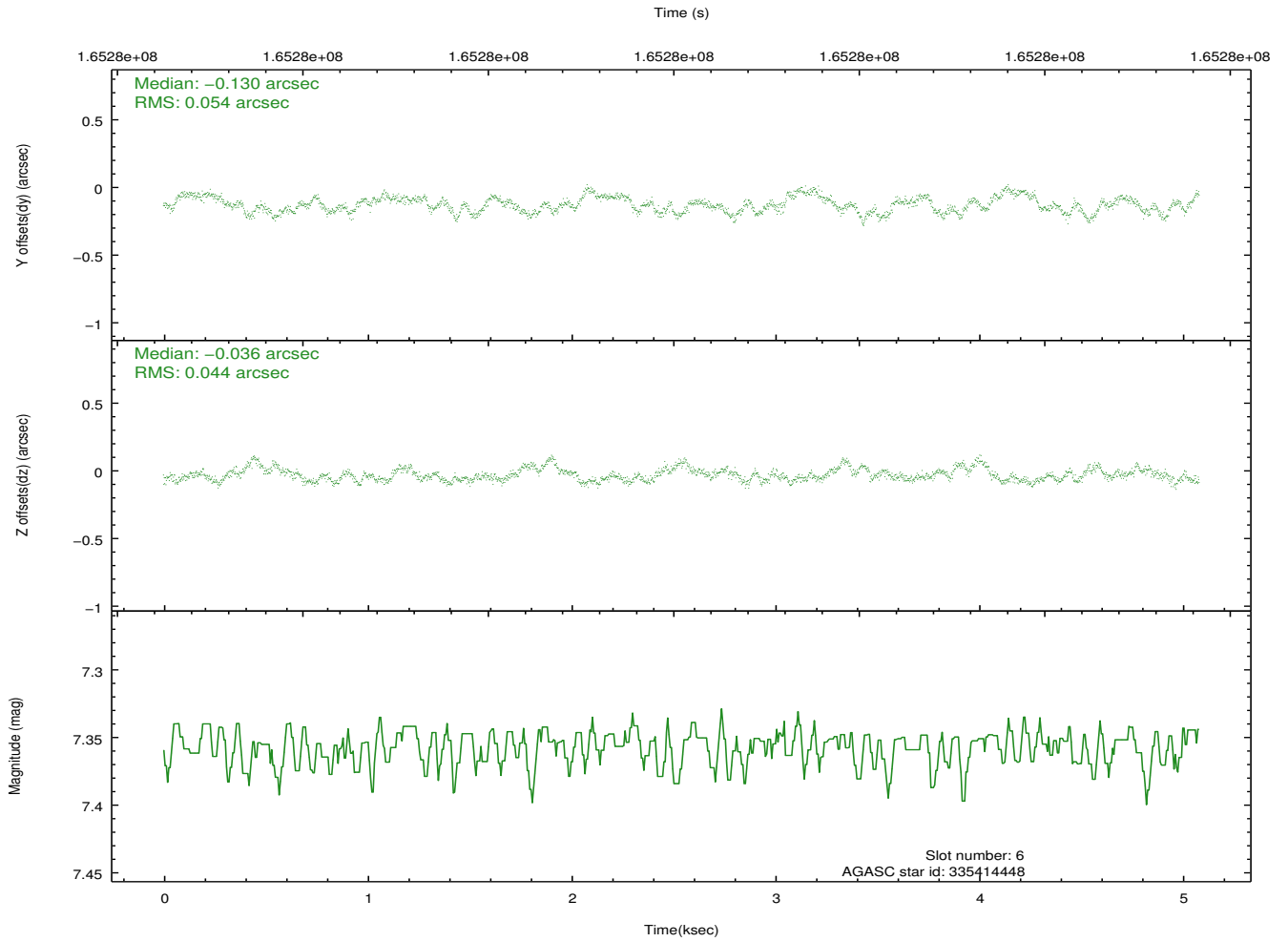
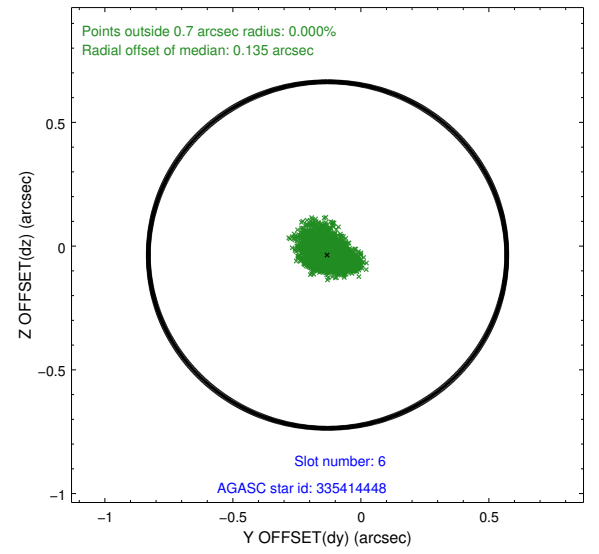
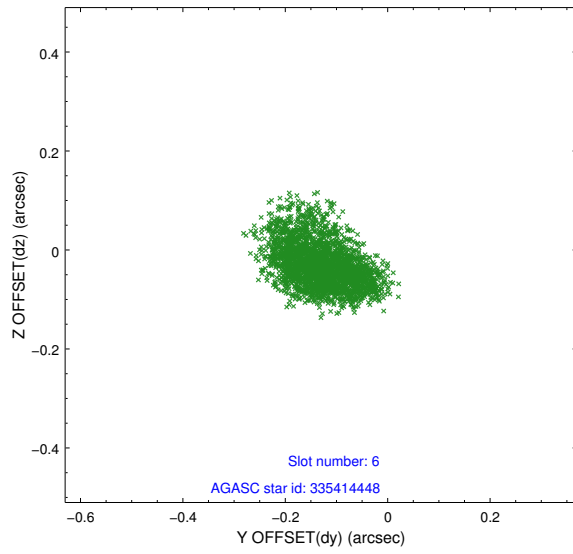
## 2.4.2 Slot 4



### 2.4.3 Slot 5

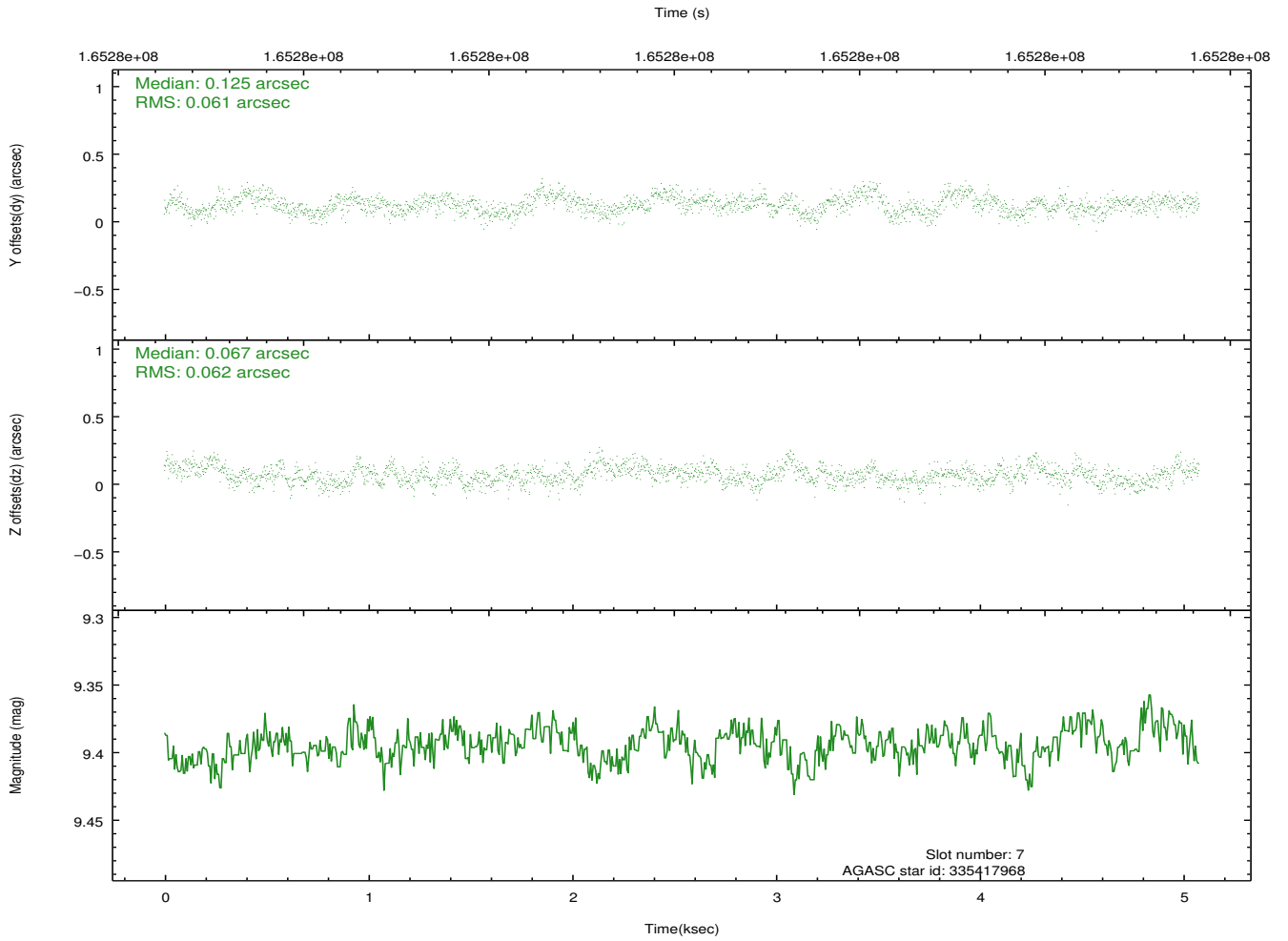
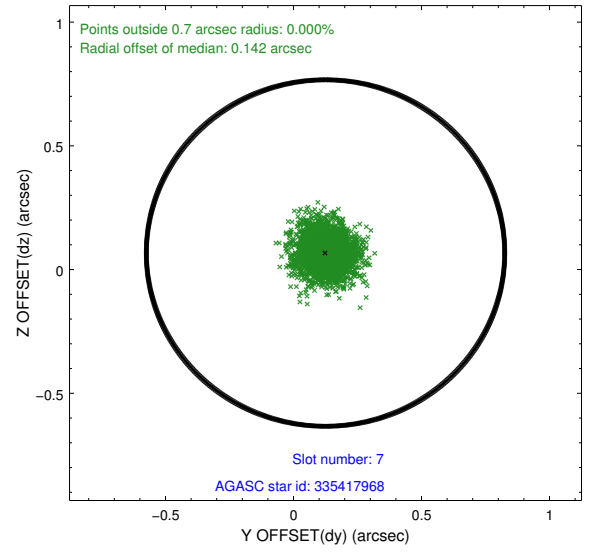
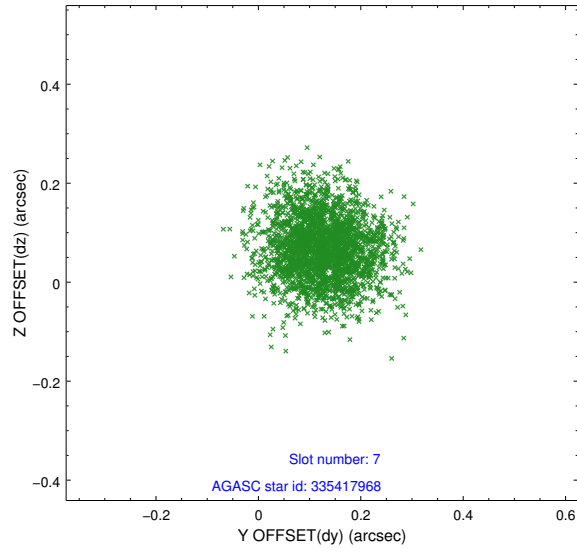


## 2.4.4 Slot 6



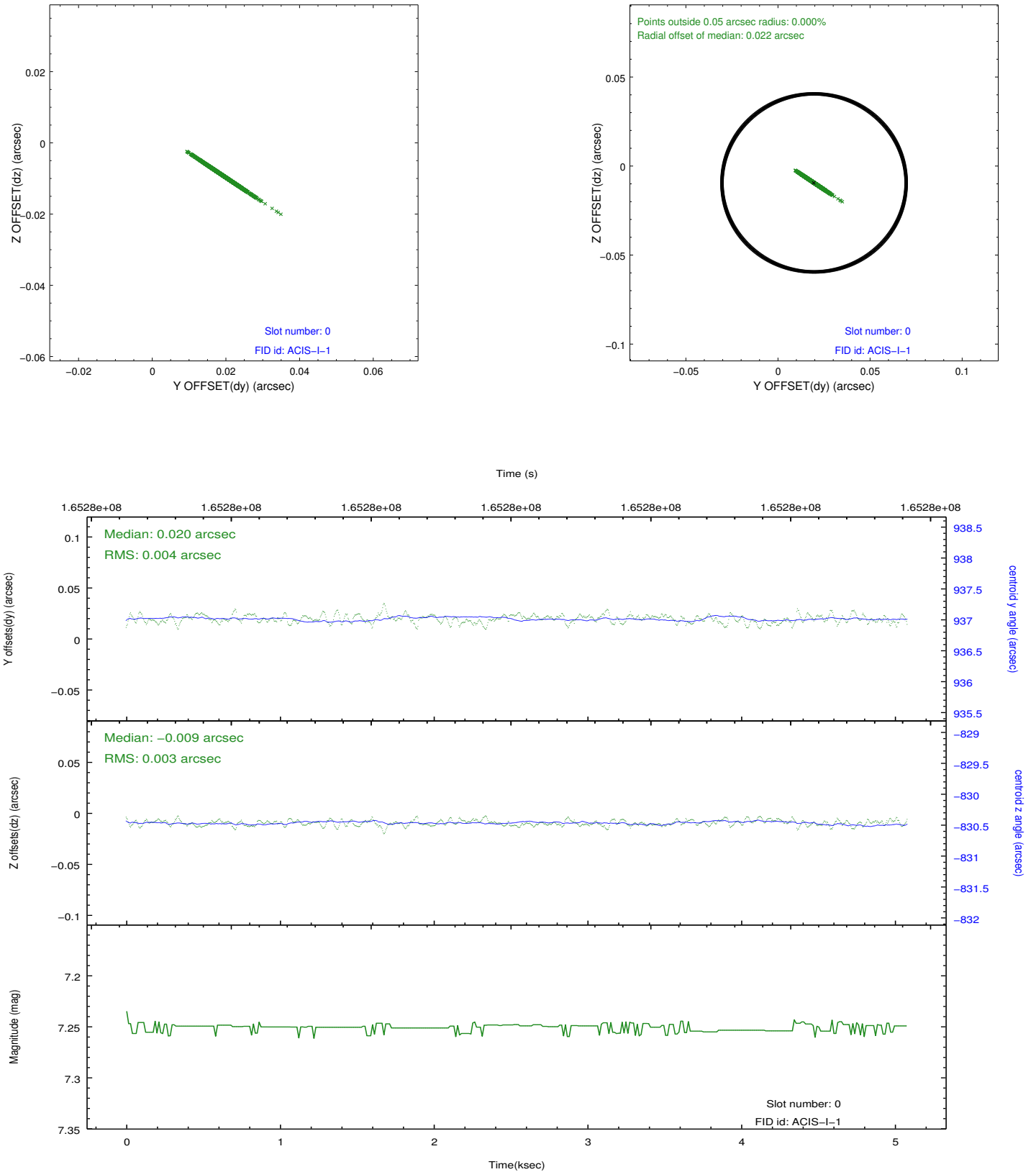


## 2.4.5 Slot 7

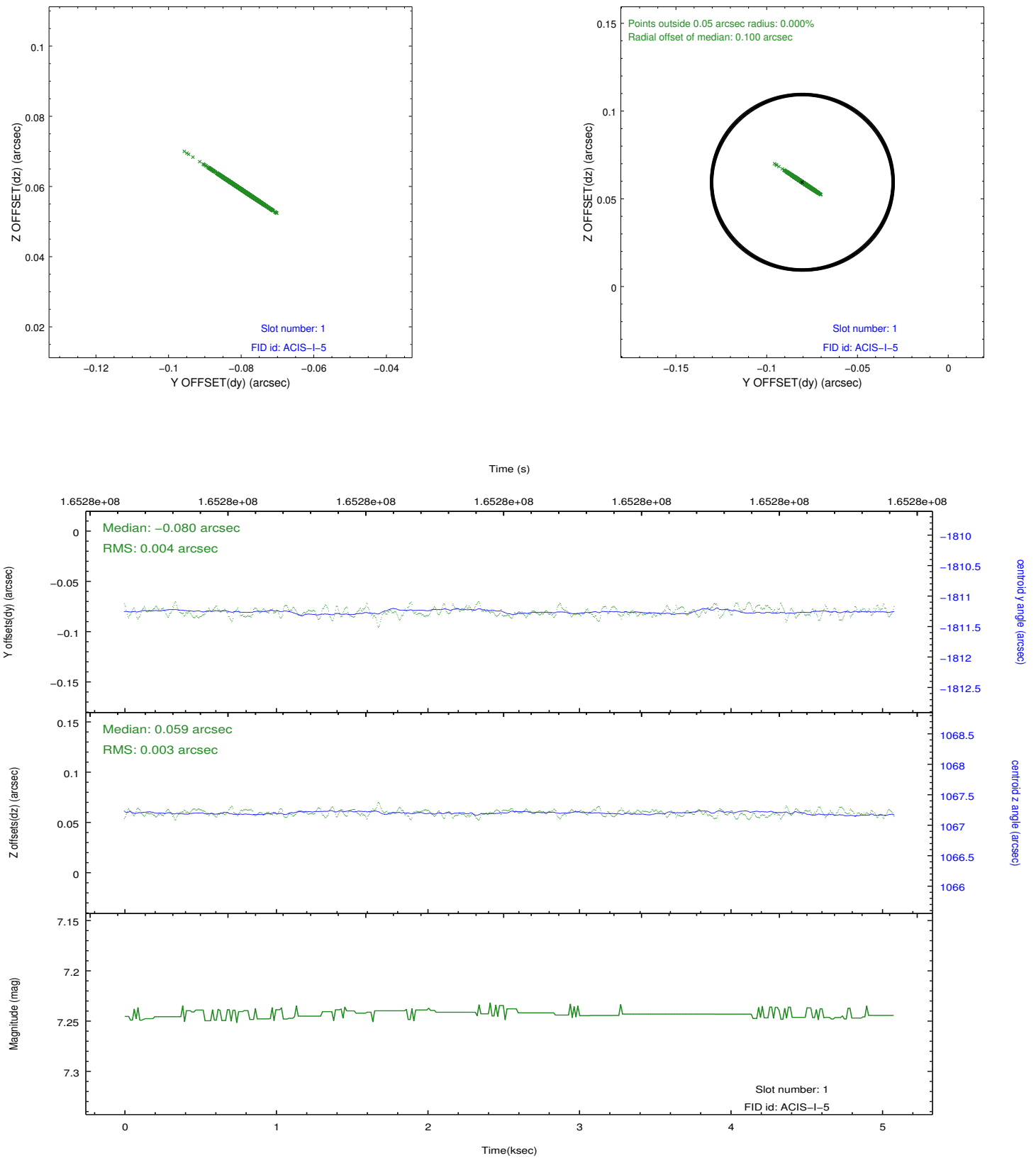


## 2.5 FID Slots

### 2.5.1 Slot 0



## 2.5.2 Slot 1



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.01.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.674

### A.2 Comments

The fid light in slot 2 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this fid light from the solution.