

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 499 - L2 Version 4  
Chandra X-Ray Center

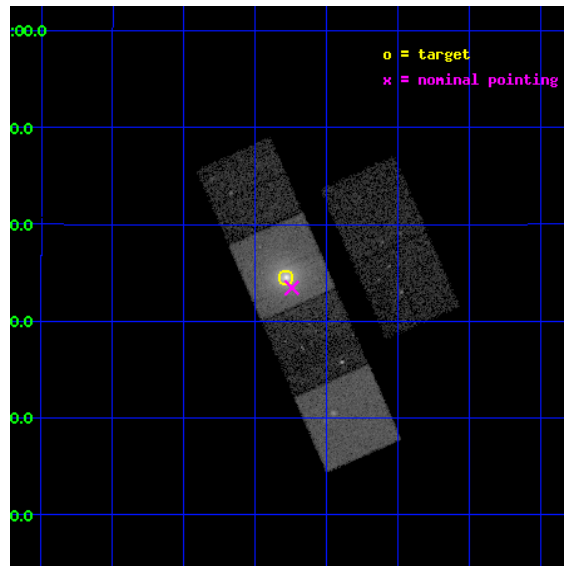
L2 Processing Date : Aug 30 2012

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# 1 Front

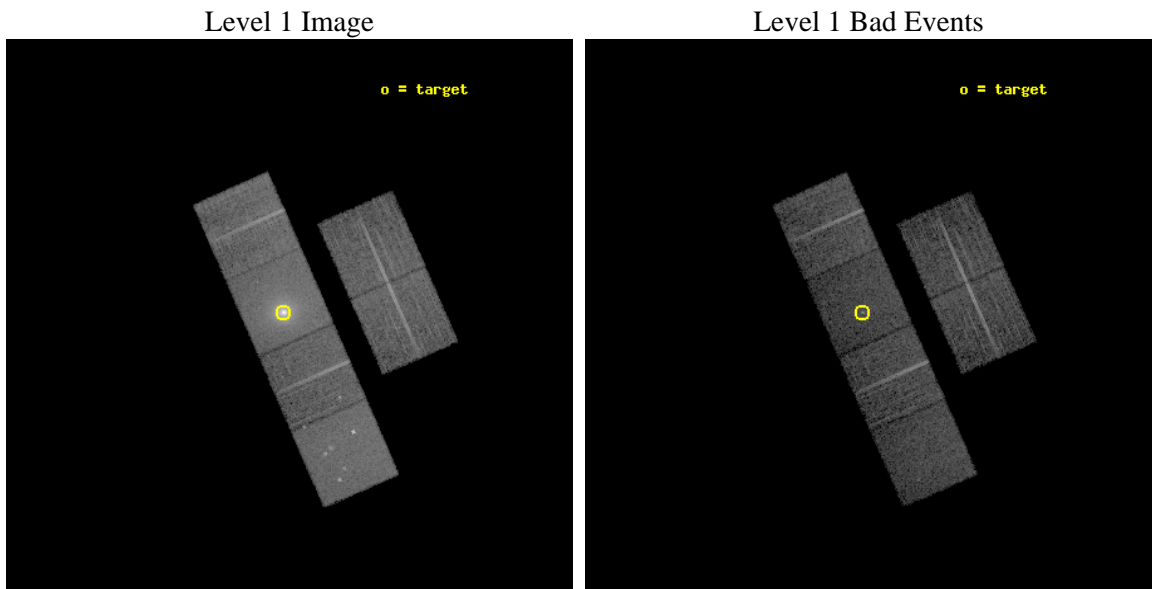
seq_num	800007	Sequence number
obs_id	499	Observation id
title	THE MASSIVE COOLING FLOW IN A2204	Proposal title
observer	Professor Andrew Fabian	Principal investigator
object	A2204	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	248.195833	Observer's specified target RA [deg]
dec_targ	5.575833	Observer's specified target Dec [deg]
ra_nom	248.18567726207	Nominal RA [deg]
dec_nom	5.557393680659	Nominal Dec [deg]
roll_nom	246.33253844783	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10195.20000948	Sum of GTIs [s]
livetime	10066.102248148	Livetime [s]
ontime2	10195.20000948	Sum of GTIs [s]
ontime3	10195.20000948	Sum of GTIs [s]
ontime5	10195.20000948	Sum of GTIs [s]
ontime6	10195.20000948	Sum of GTIs [s]
ontime7	10195.20000948	Sum of GTIs [s]
ontime8	10195.20000948	Sum of GTIs [s]
l2events	160863	Number of level 2 events



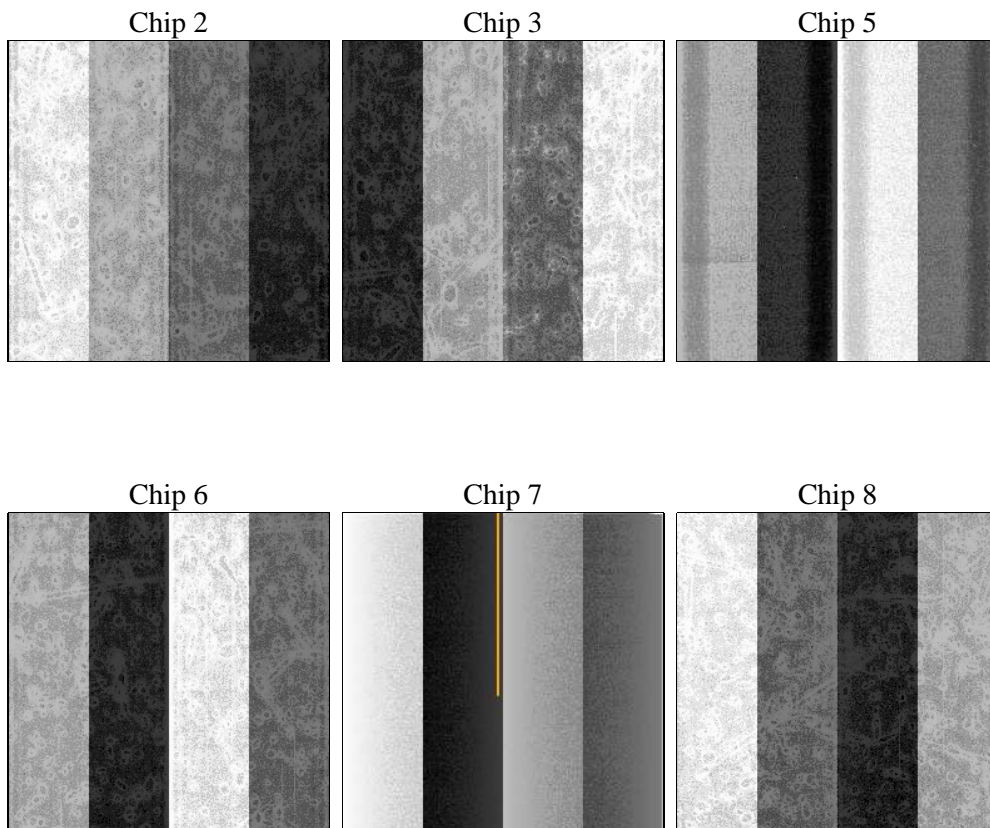
## 2 OBI

### 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	8.4.5	Processing system revision	ontime	10195.20000948	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	10195.20000948	Sum of GTIs [s]
date	2012-08-30T21:13:01	Date and time of file creation	ontime3	10195.20000948	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	10195.20000948	Sum of GTIs [s]
			ontime6	10195.20000948	Sum of GTIs [s]
			ontime7	10195.20000948	Sum of GTIs [s]
			ontime8	10195.20000948	Sum of GTIs [s]
			l1events	489120	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	63661	60516	83884	61462	140894	78703	grade 0 events	3579	3532	7517	5367	24733	6495
rejected events	56088	53337	43328	51982	43662	60112		5%	5%	8%	8%	17%	8%
rejected %	88%	88%	51%	84%	30%	76%	grade 1 events	27	31	126	23	132	49
								0%	0%	0%	0%	0%	0%
							grade 2 events	1627	1344	11639	1657	23779	3797
								2%	2%	13%	2%	16%	4%
							grade 3 events	660	636	1828	761	10759	2088
								1%	1%	2%	1%	7%	2%
							grade 4 events	622	661	1742	690	10632	1901
								0%	1%	2%	1%	7%	2%
							grade 5 events	1956	1982	5980	2349	7413	2971
								3%	3%	7%	3%	5%	3%
							grade 6 events	1232	1134	18701	1311	28689	4651
								1%	1%	22%	2%	20%	5%
							grade 7 events	53958	51196	36351	49304	34757	56751
								84%	84%	43%	80%	24%	72%

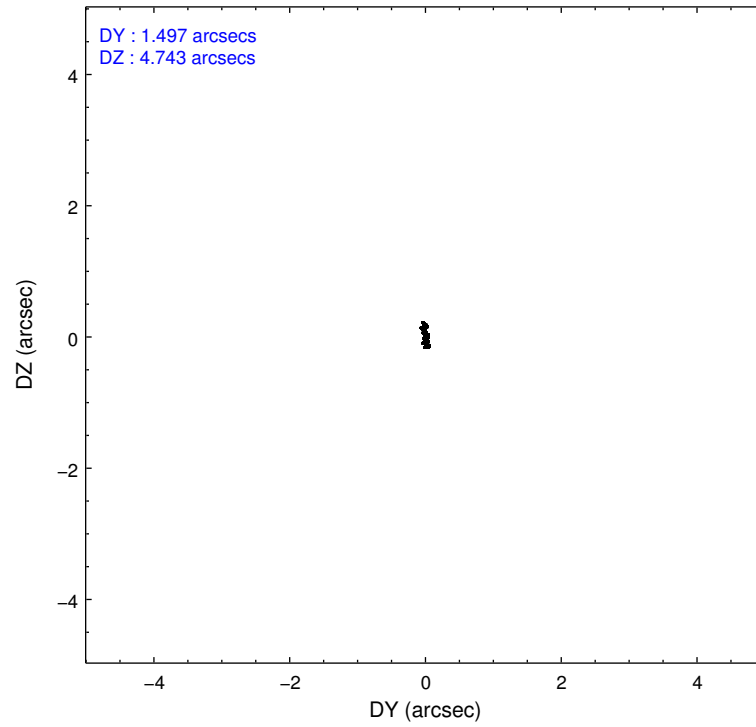
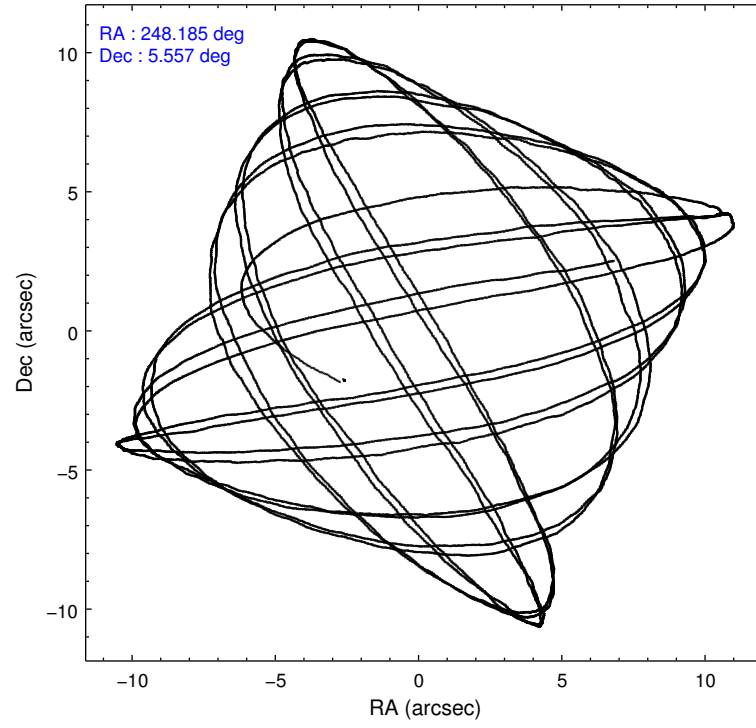


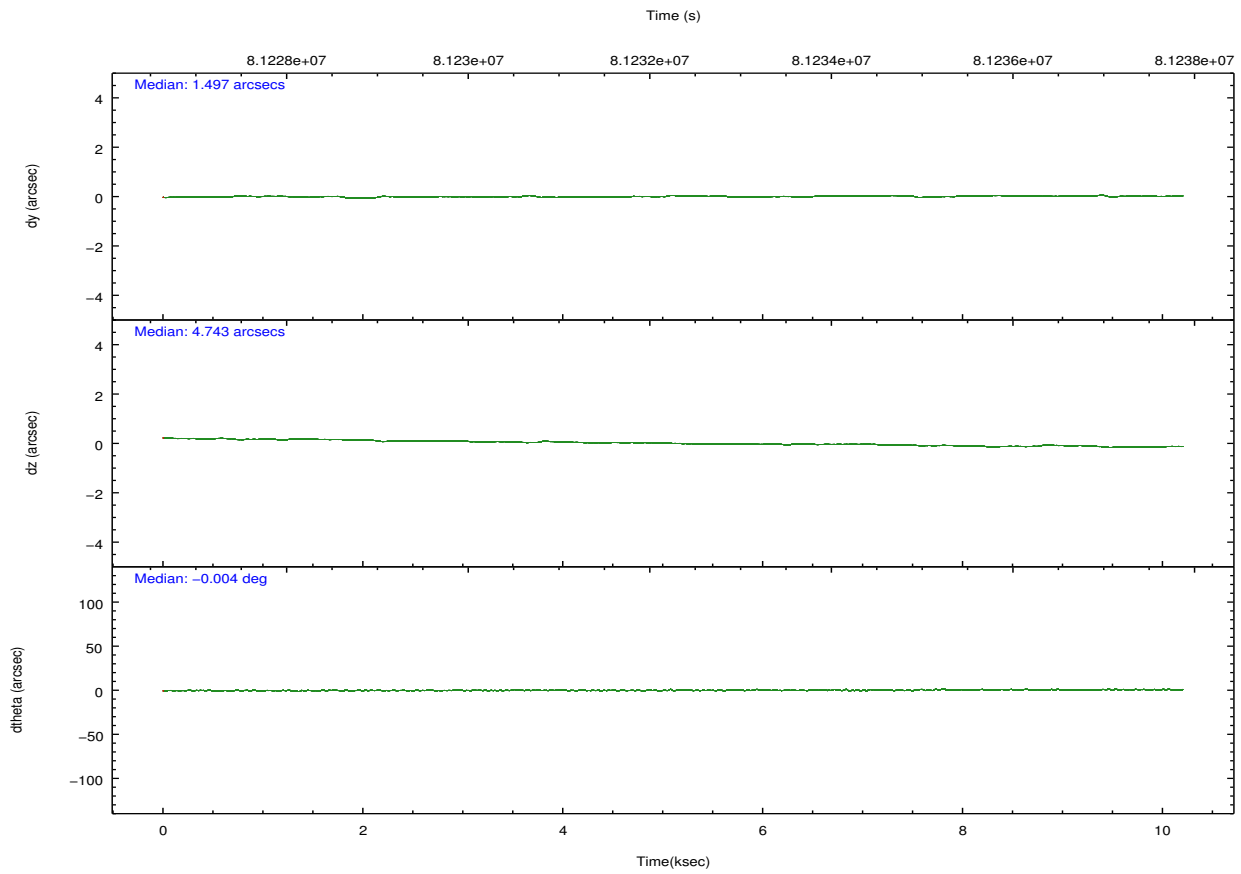
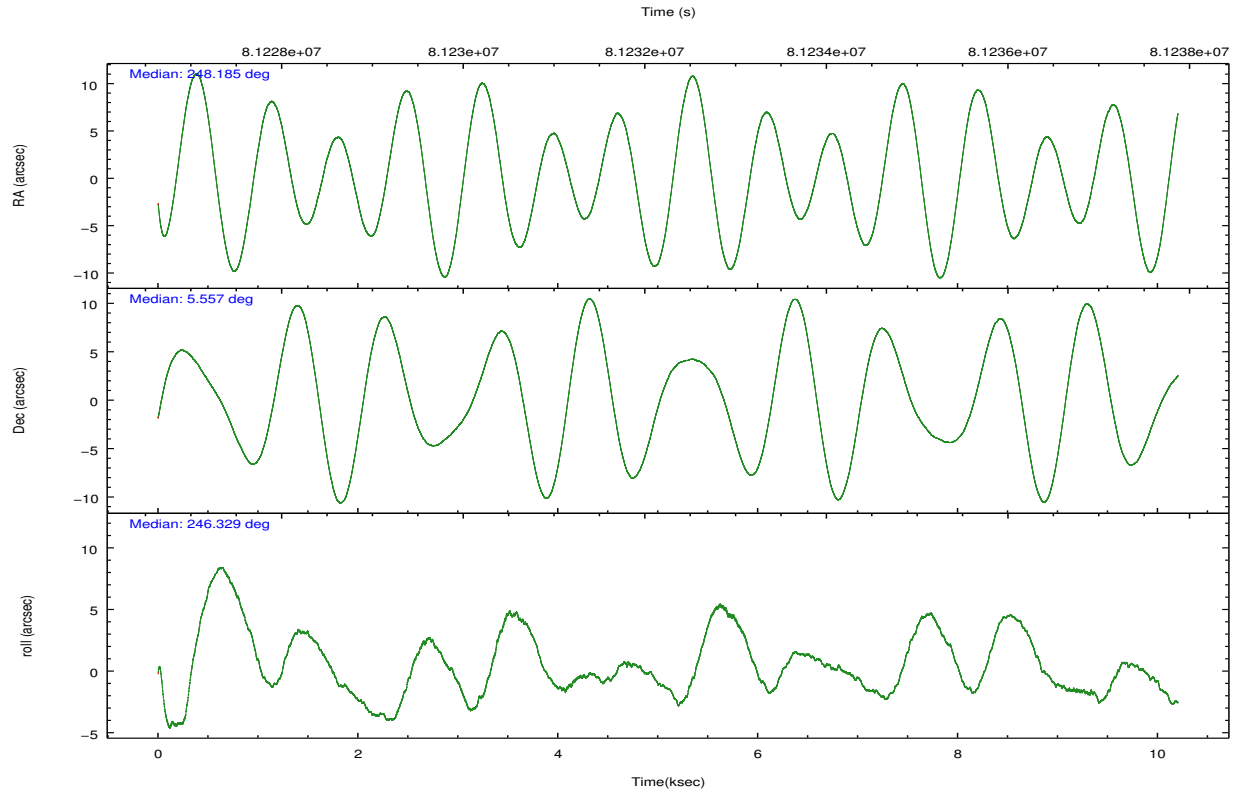
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	248.182519	248.1856772620674
[deg] Pointing Dec	5.584601	5.557393680658969
[deg] Pointing Roll	246.176208	246.3325384478325
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	81227357.184000	81226182.604645
Observation start date	2000-07-29T03:08:13	2000-07-29T02:49:42
[s] Observation end time (MET)	81237357.184000	81237925.005082
Observation end date	2000-07-29T05:54:53	2000-07-29T06:05:25
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



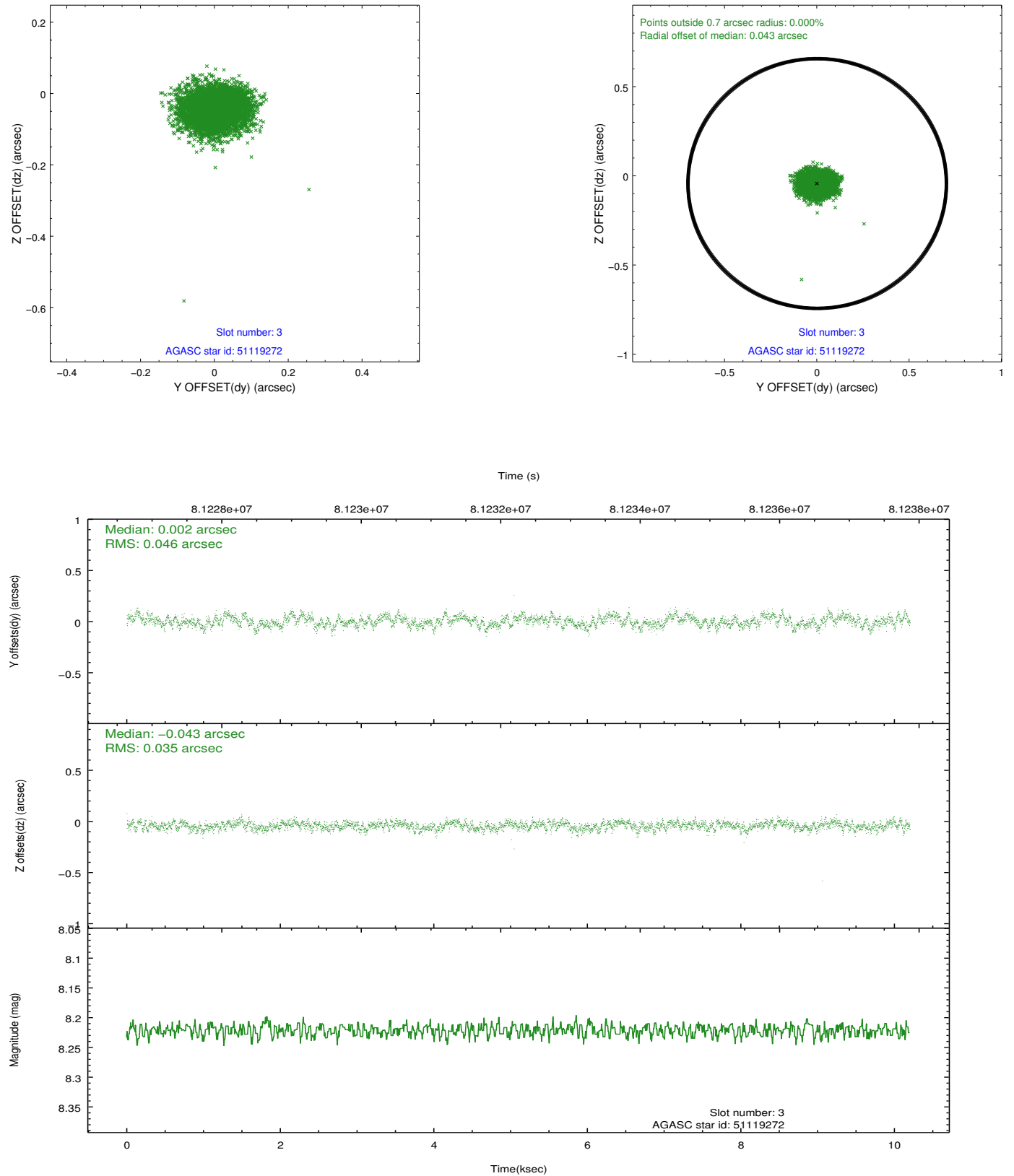


### Slot Statistics

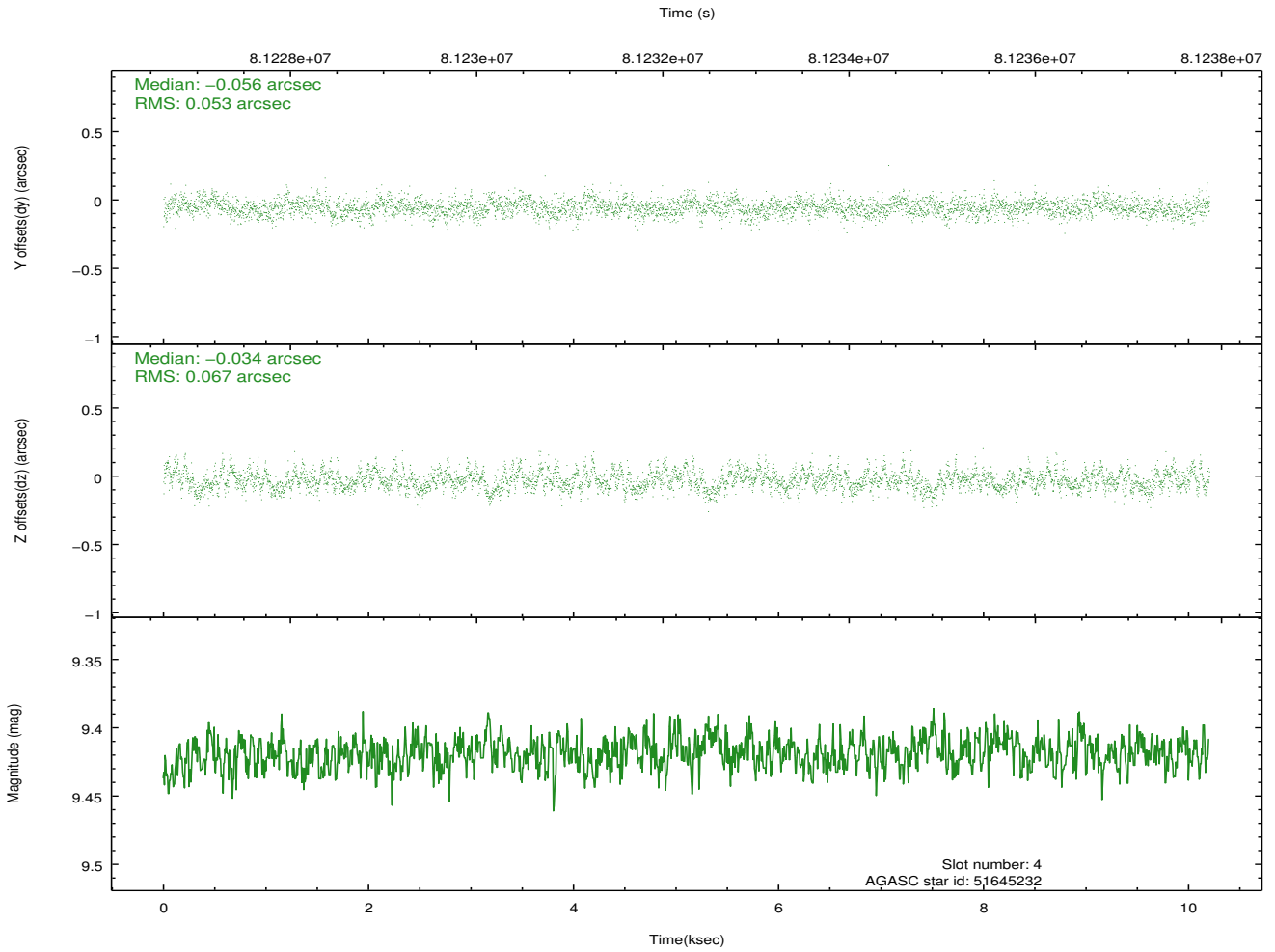
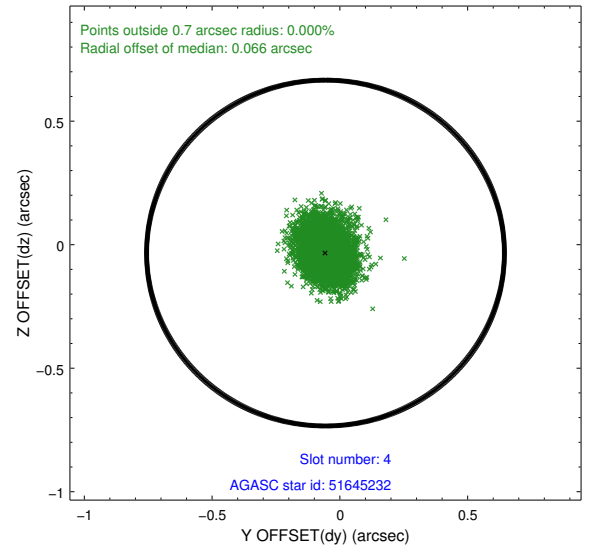
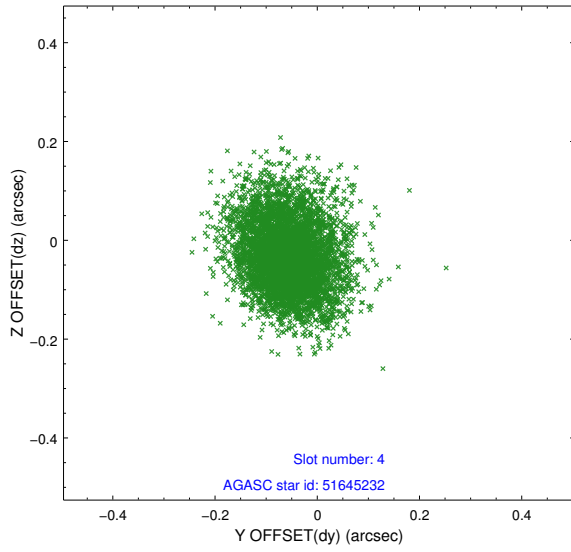
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2489	-0.029	-0.004	0.007	0.011	0.000000	0.000000	-754.13	-1725.81
1	FID	ACIS-S-4	7.21	2489	-0.010	0.015	0.005	0.009	0.000000	0.000000	2158.93	182.16
2	FID	ACIS-S-5	7.24	2489	0.008	-0.003	0.007	0.012	0.000000	0.000000	-1806.27	176.40
3	GUIDE	51119272	8.22	4977	0.002	-0.043	0.061	0.099	247.573996	5.444578	1341.23	-1791.08
4	GUIDE	51645232	9.42	4977	-0.056	-0.034	0.090	0.151	248.578272	6.115031	-2319.23	524.62
5	GUIDE	51655616	9.60	4976	-0.039	-0.062	0.094	0.155	248.007218	6.146329	-1596.90	-1390.22
6	GUIDE	51124424	9.15	4978	-0.032	0.089	0.090	0.144	248.473295	5.223097	768.89	1479.79
7	GUIDE	51128560	9.55	4975	0.130	0.046	0.151	0.223	248.555597	4.912811	1671.78	2202.08

## 2.4 Star Slots

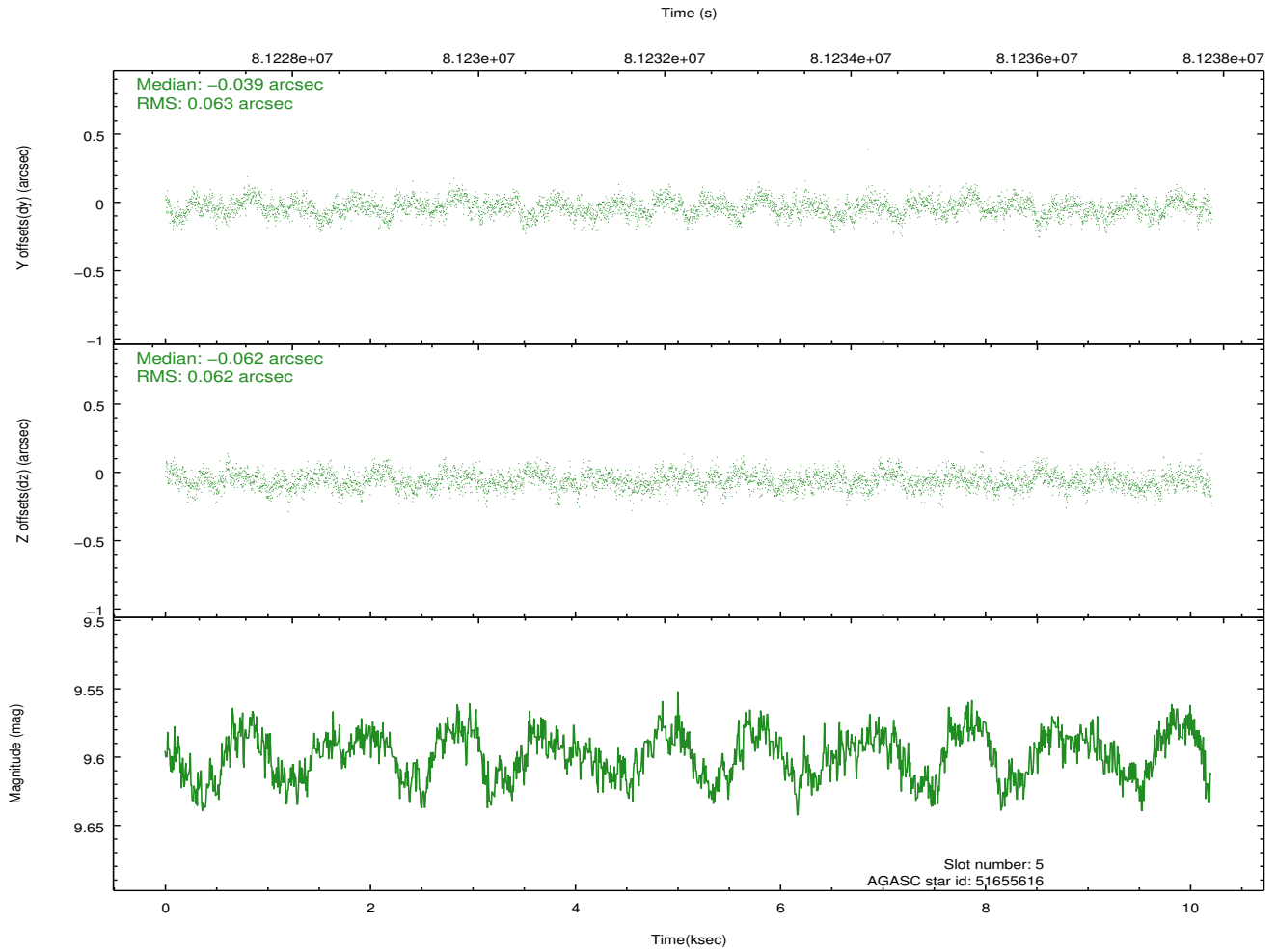
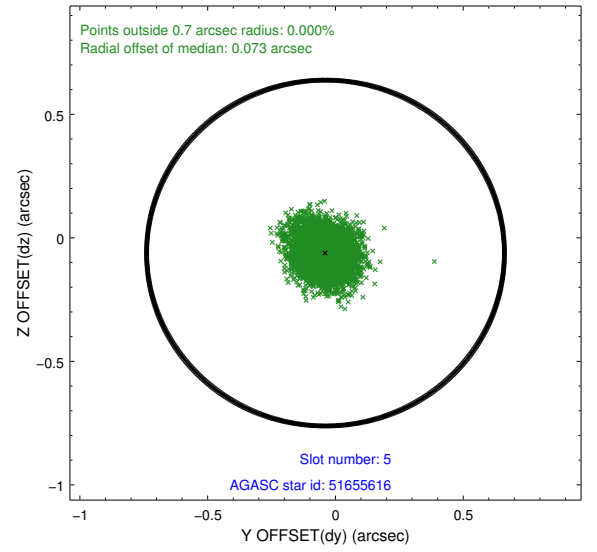
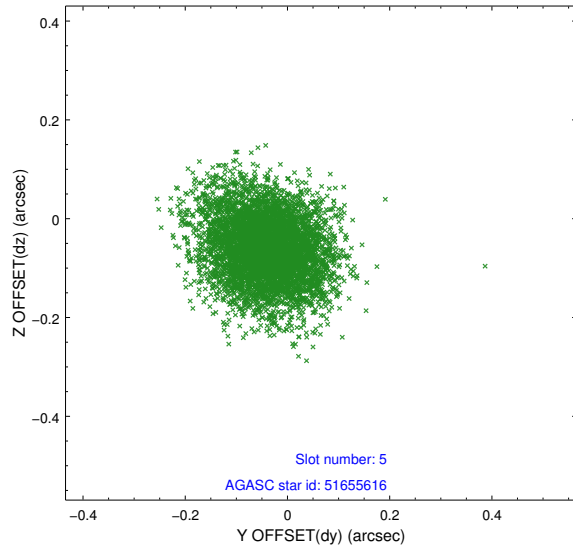
### 2.4.1 Slot 3



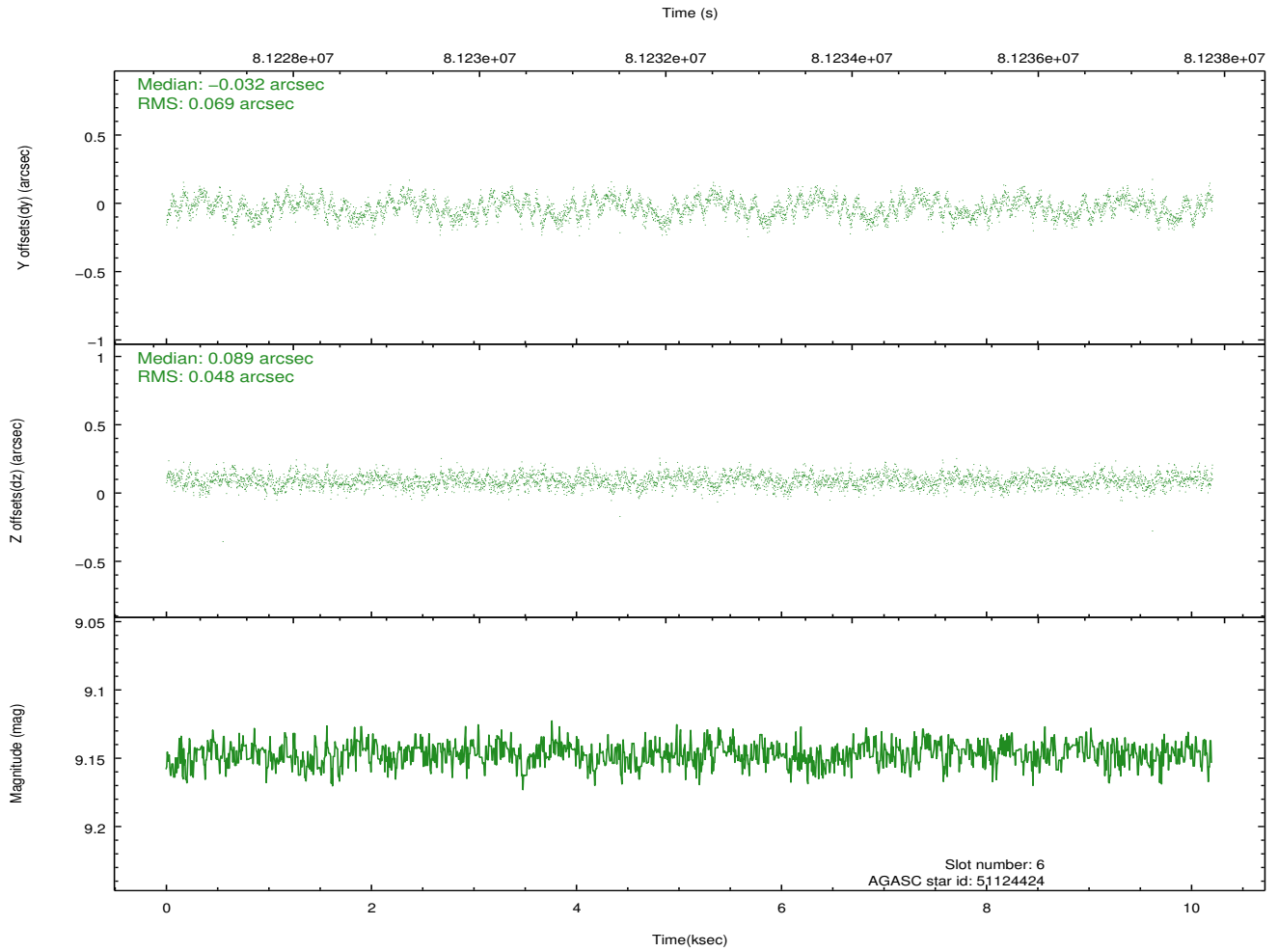
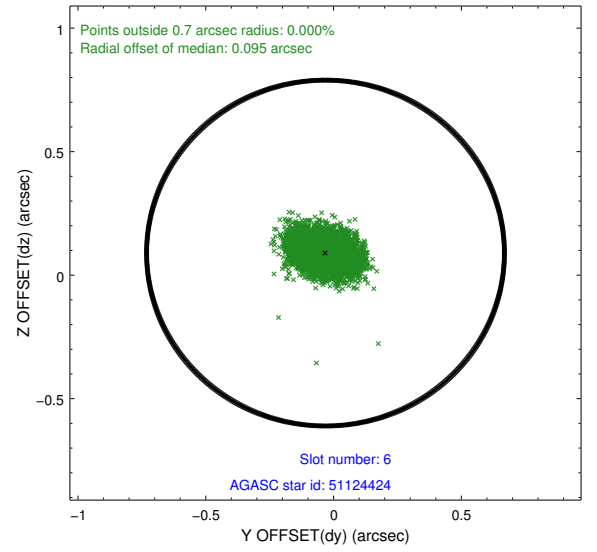
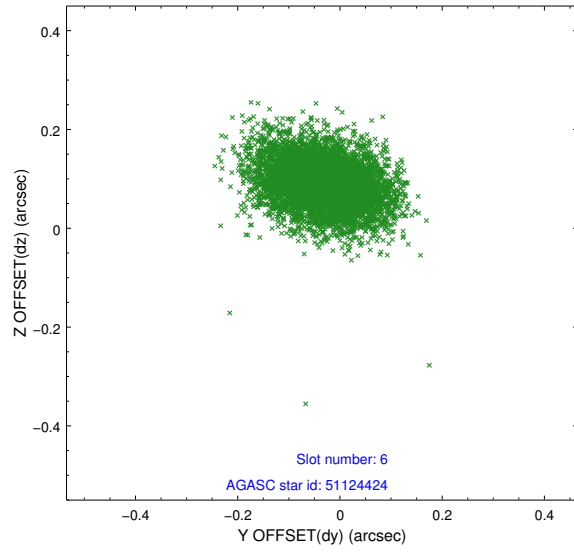
## 2.4.2 Slot 4



### 2.4.3 Slot 5

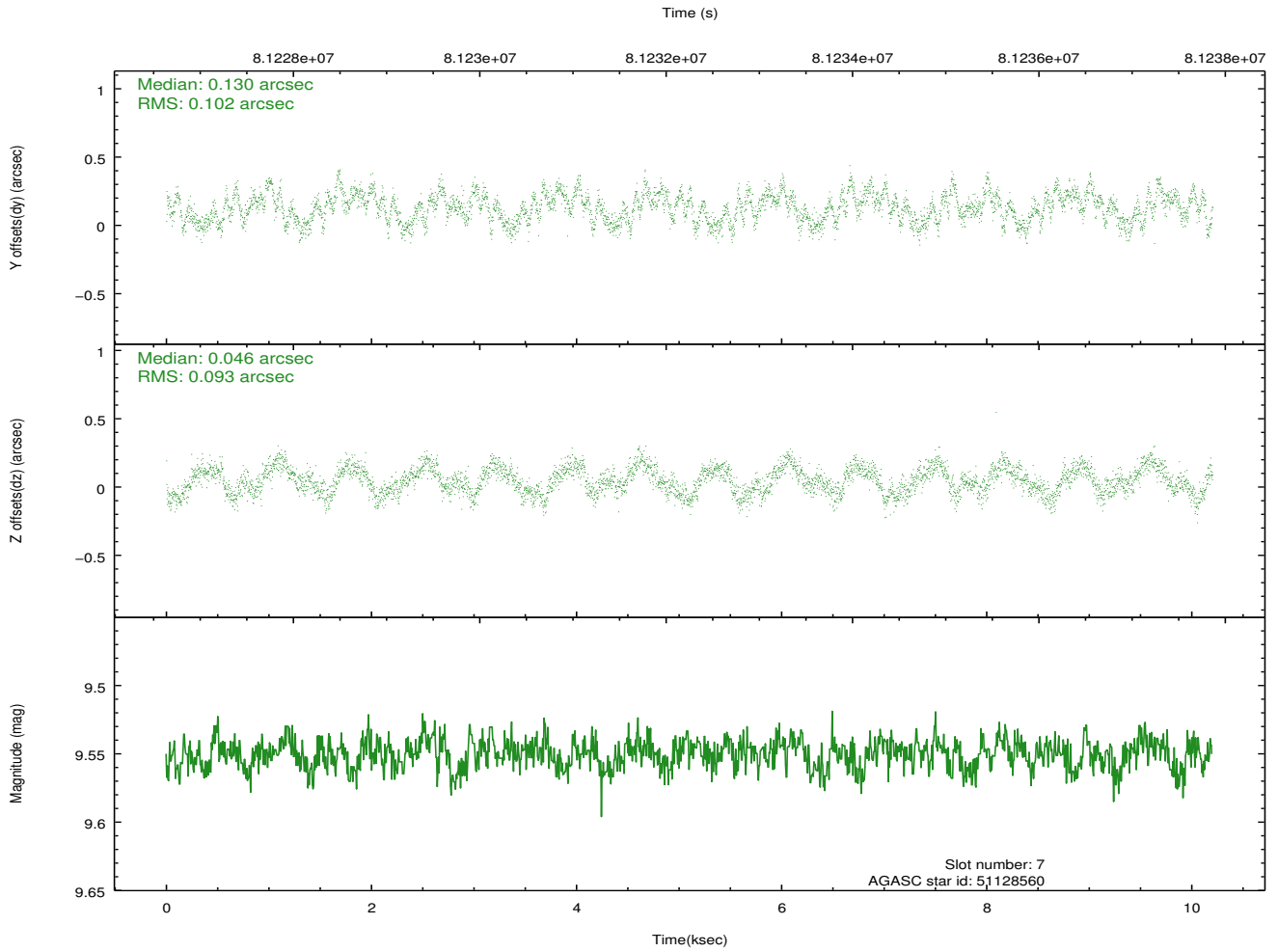
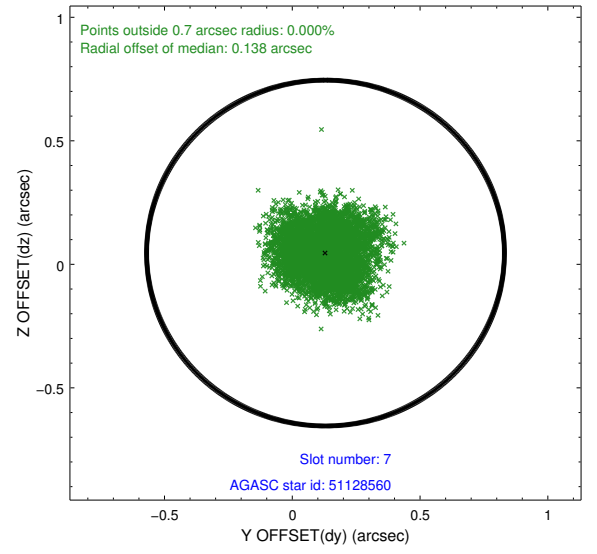
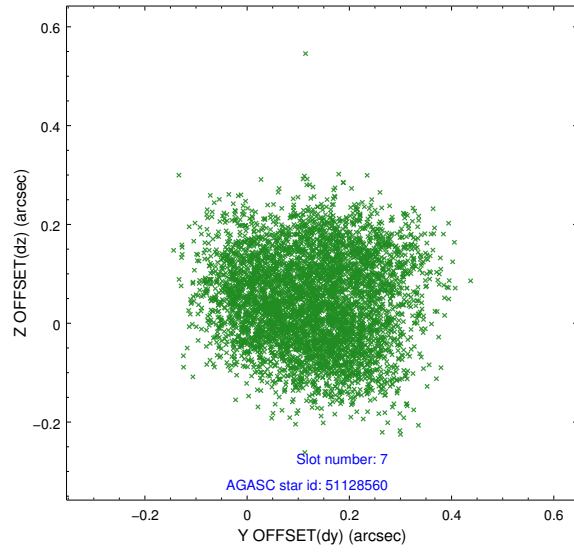


## 2.4.4 Slot 6



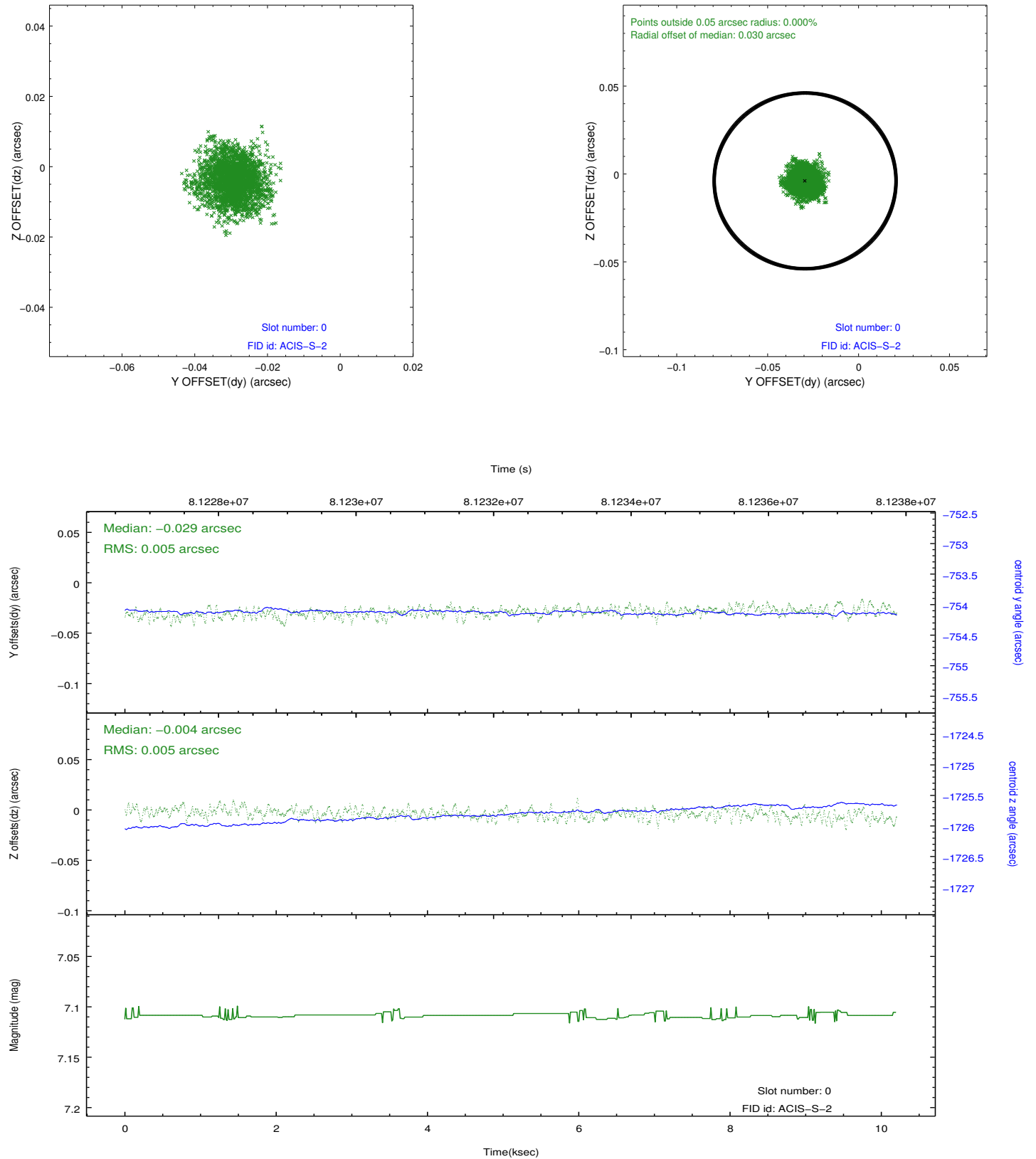


### 2.4.5 Slot 7

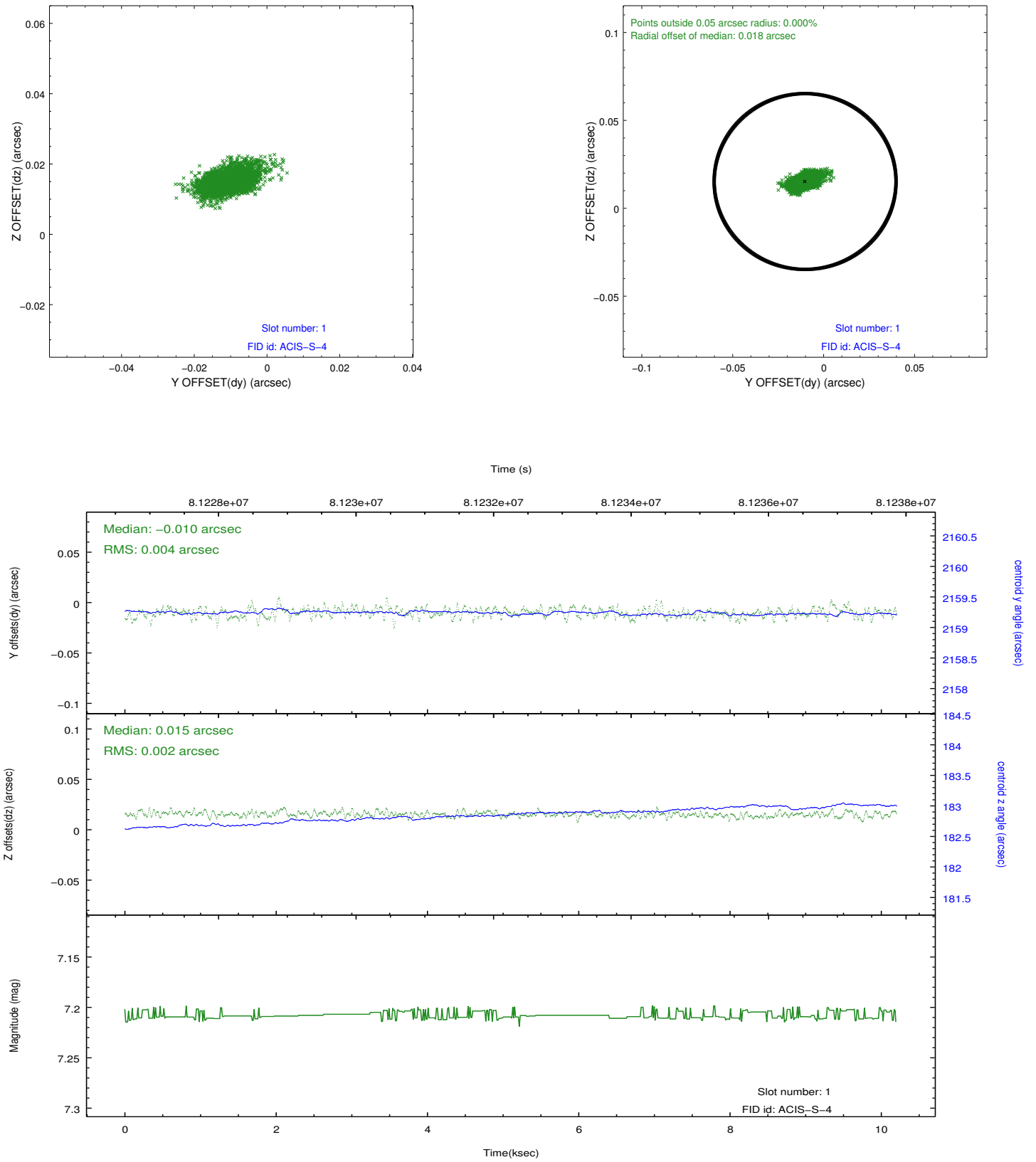


## 2.5 FID Slots

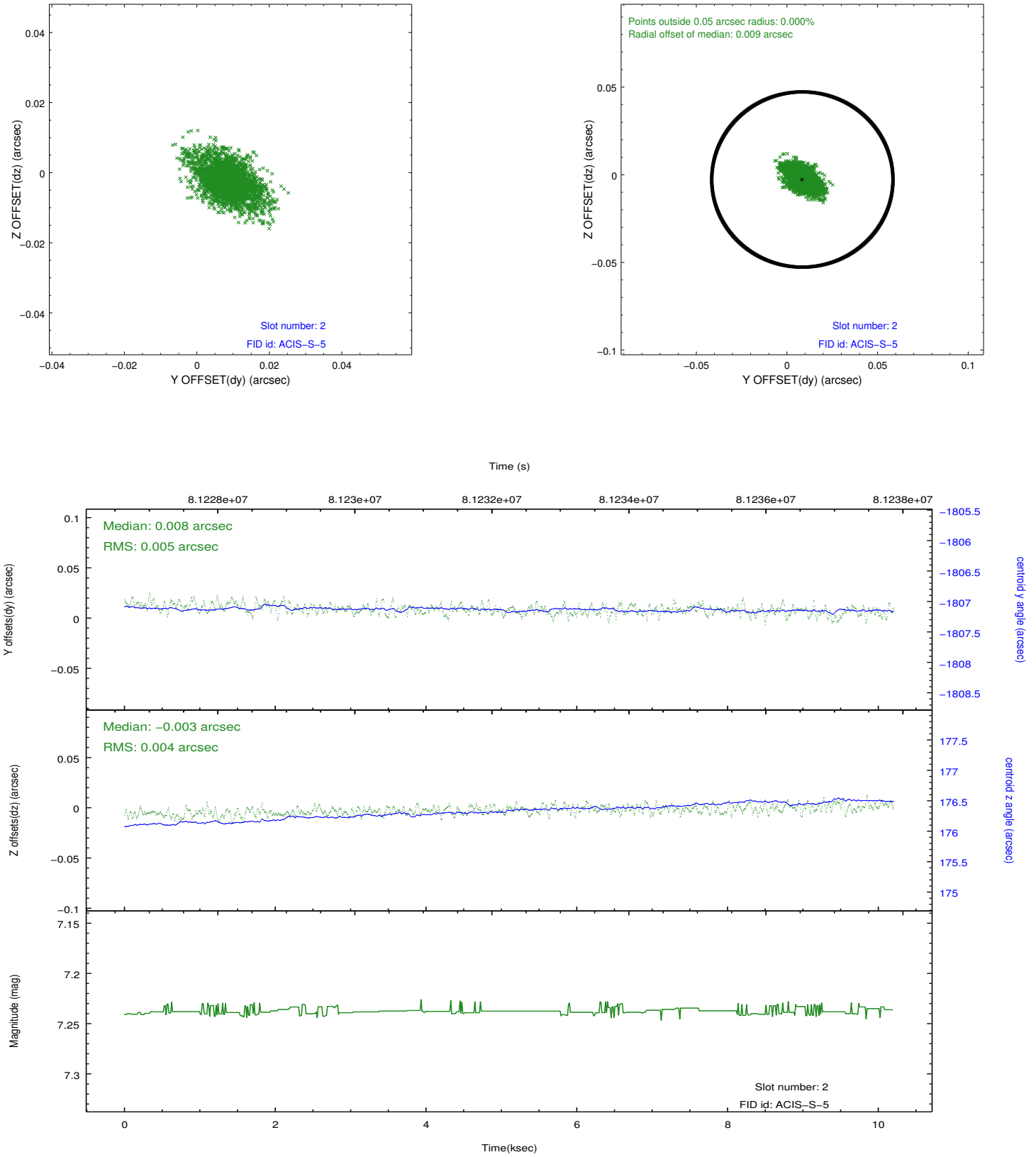
### 2.5.1 Slot 0



## 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)	2012.09.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.195

### A.2 Comments