

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4010 - L2 Version 3  
Chandra X-Ray Center

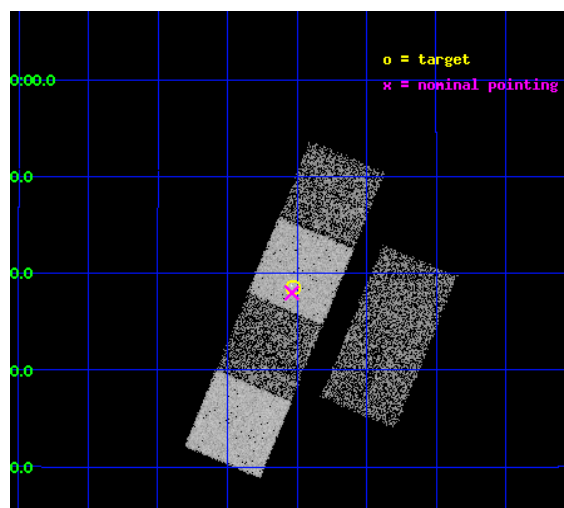
L2 Processing Date : Oct 22 2012

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# 1 Front

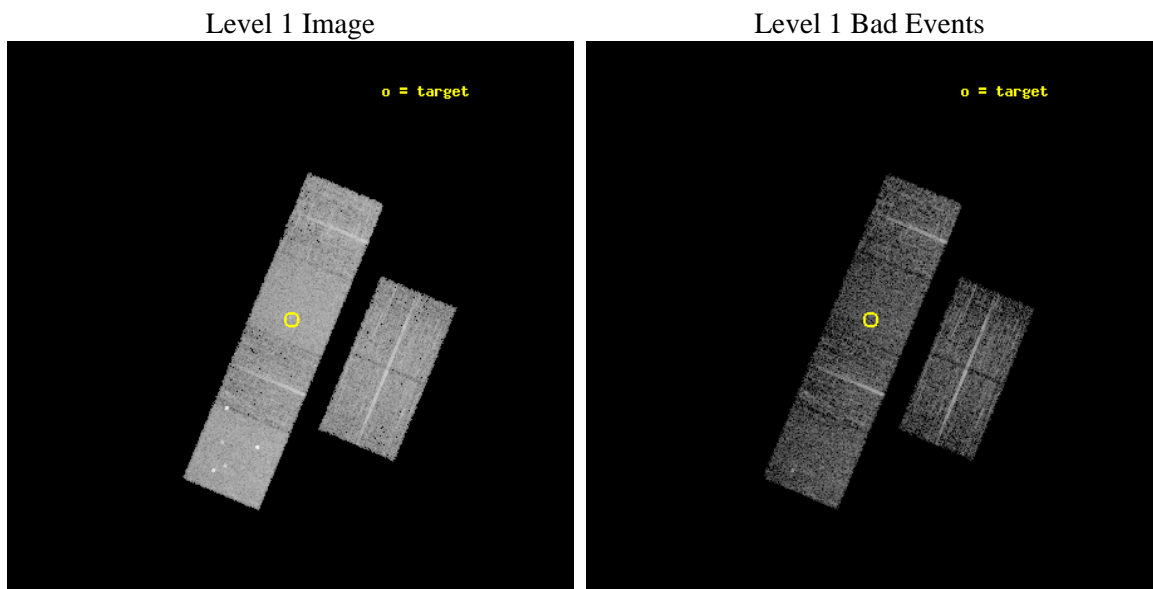
seq_num	700689	Sequence number
obs_id	4010	Observation id
title	A CHANDRA SURVEY OF INFRARED-BRIGHT LINER GALAXIES	Proposal title
observer	Dr. Shobita Satyapal	Principal investigator
object	NGC 660	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	25.757083	Observer's specified target RA [deg]
dec_targ	13.642778	Observer's specified target Dec [deg]
ra_nom	25.759181390267	Nominal RA [deg]
dec_nom	13.633291553225	Nominal Dec [deg]
roll_nom	292.50657281401	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5129.5999808908	Sum of GTIs [s]
livetime	5064.6458972584	Livetime [s]
ontime2	5129.5999808908	Sum of GTIs [s]
ontime3	5129.5999808908	Sum of GTIs [s]
ontime5	5129.5999808908	Sum of GTIs [s]
ontime6	5129.5999808908	Sum of GTIs [s]
ontime7	5129.5999808908	Sum of GTIs [s]
ontime8	5129.5999808908	Sum of GTIs [s]
l2events	52209	Number of level 2 events



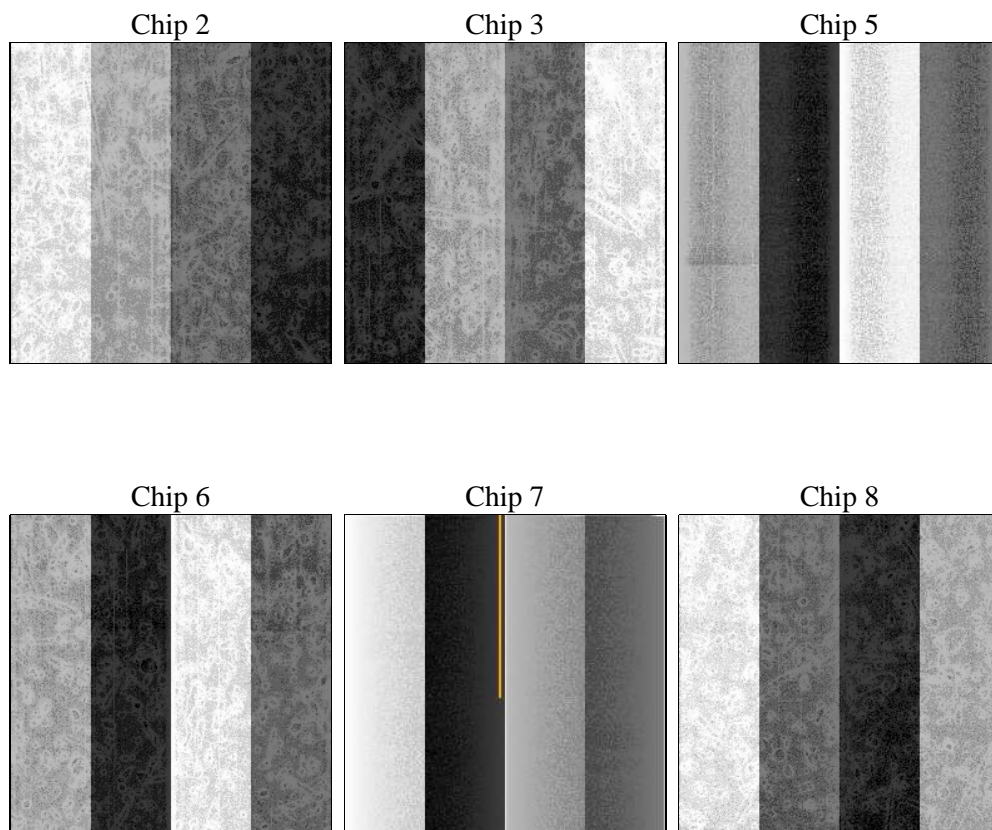
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4950.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5129.5999808908	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	5129.5999808908	Sum of GTIs [s]
date	2012-10-22T07:28:29	Date and time of file creation	ontime3	5129.5999808908	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5129.5999808908	Sum of GTIs [s]
			ontime6	5129.5999808908	Sum of GTIs [s]
			ontime7	5129.5999808908	Sum of GTIs [s]
			ontime8	5129.5999808908	Sum of GTIs [s]
			l1events	245151	Number of level 1 events

### 2.1.4 Events

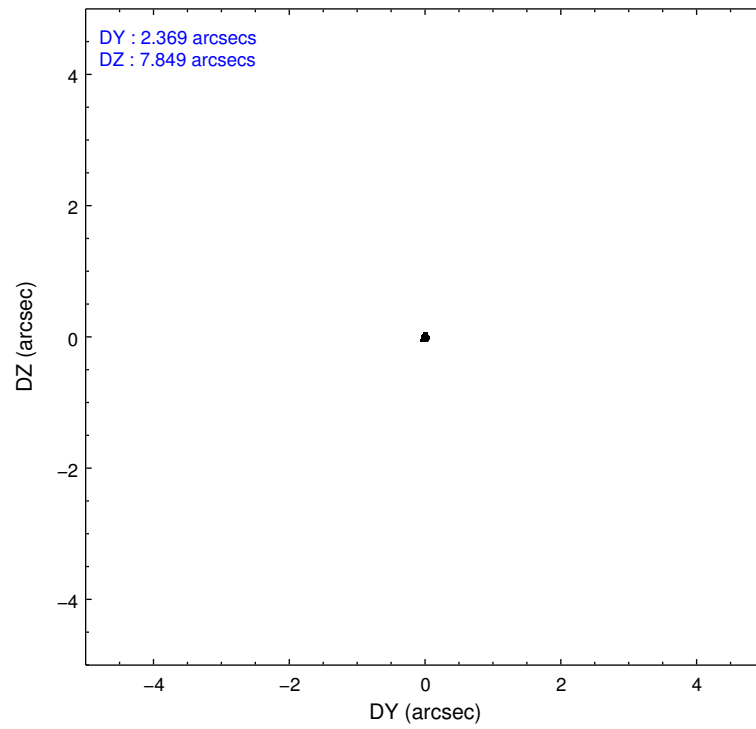
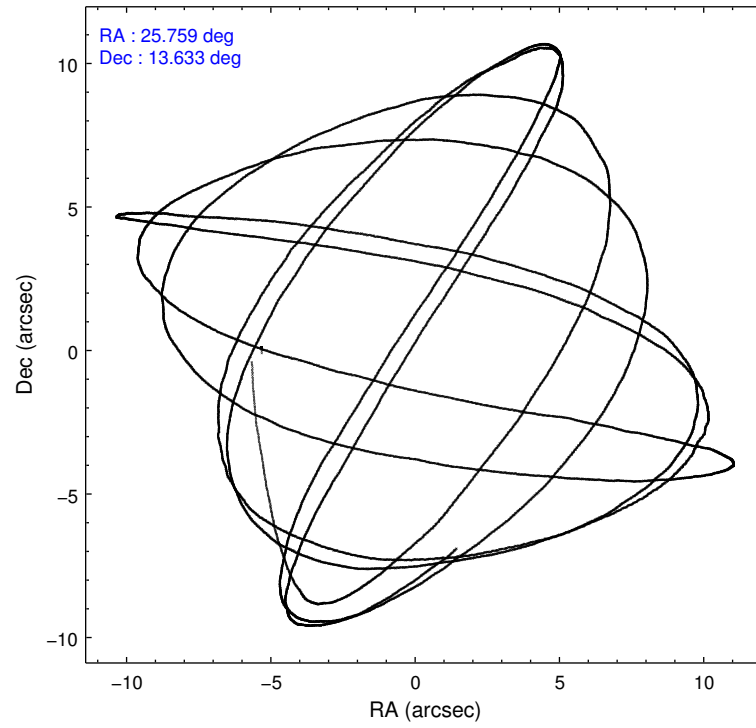
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	34714	34069	52654	34711	45967	43036	grade 0 events	1831	1643	4377	1601	1816	2716
rejected events	30702	30346	28347	30905	27597	34734		5%	4%	8%	4%	3%	6%
rejected %	88%	89%	53%	89%	60%	80%	grade 1 events	21	26	66	20	41	26
								0%	0%	0%	0%	0%	0%
							grade 2 events	825	737	7002	803	3798	1885
								2%	2%	13%	2%	8%	4%
							grade 3 events	422	350	961	360	1759	922
								1%	1%	1%	1%	3%	2%
							grade 4 events	378	419	1018	365	1671	866
								1%	1%	1%	1%	3%	2%
							grade 5 events	1359	1402	3712	1469	4336	2013
								3%	4%	7%	4%	9%	4%
							grade 6 events	670	680	11735	791	9912	2205
								1%	1%	22%	2%	21%	5%
							grade 7 events	29208	28812	23783	29302	22634	32403
								84%	84%	45%	84%	49%	75%

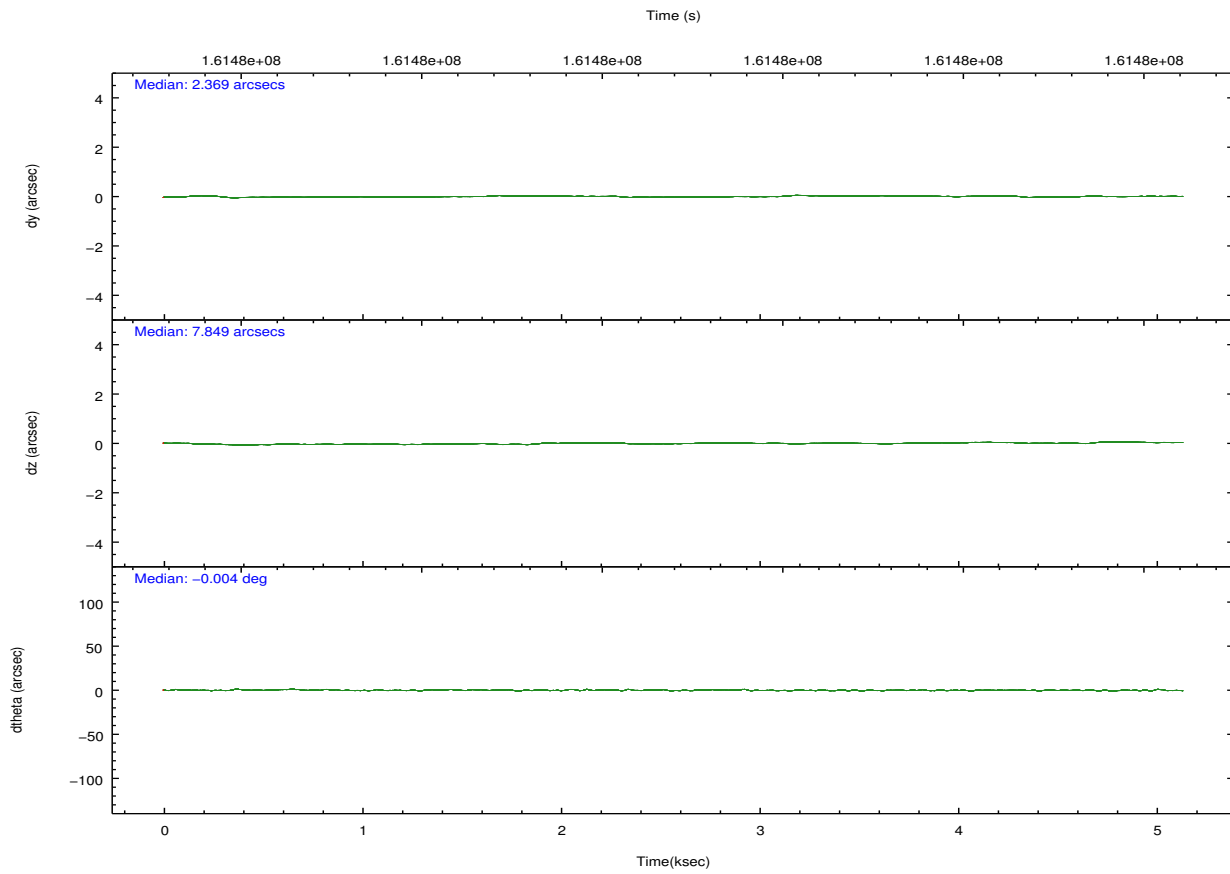
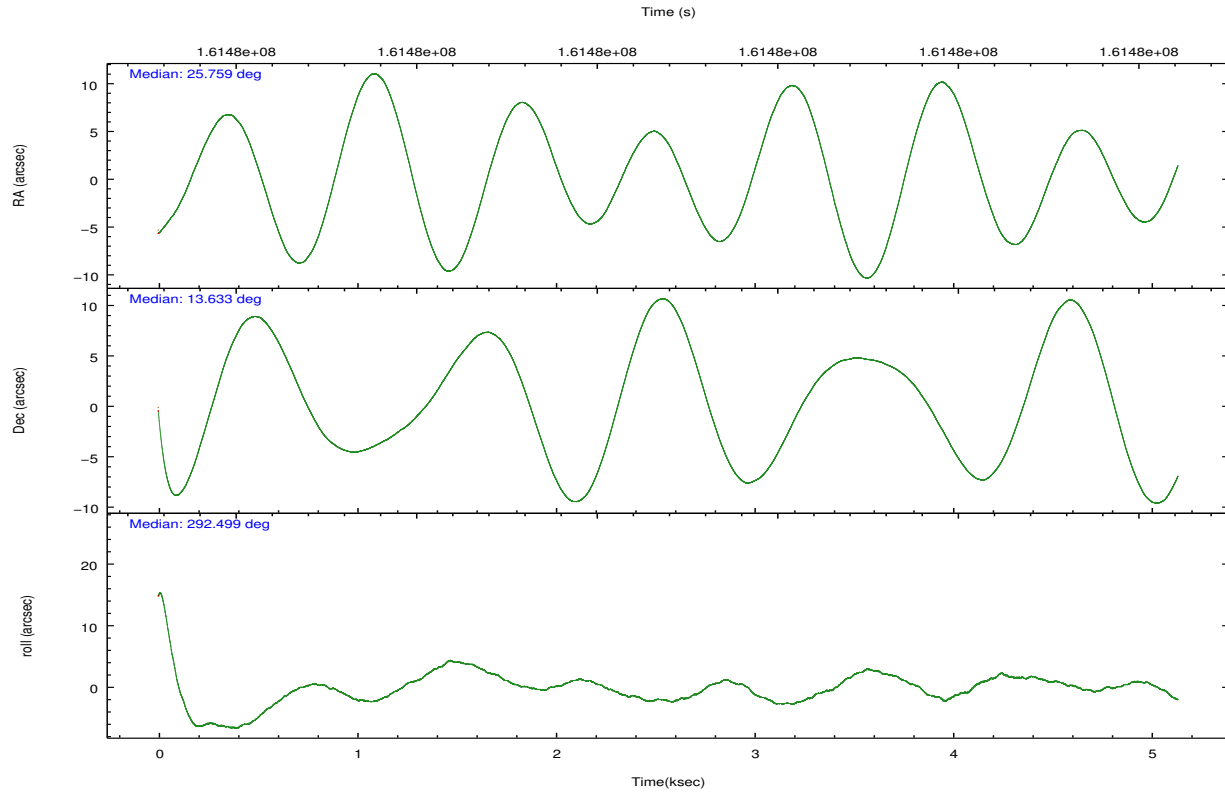


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	25.736766	25.7591813902668	Subarray requested	NONE	NONE
[deg] Pointing Dec	13.649614	13.63329155322484	Alternating exposures requested	N	N
[deg] Pointing Roll	292.355195	292.506572814011	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	161476003.184000	161474857.47265			
Observation start date	2003-02-12T22:25:39	2003-02-12T22:07:37			
[s] Observation end time (MET)	161480953.184000	161481690.12293			
Observation end date	2003-02-12T23:48:09	2003-02-13T00:01:30			
Read mode	TIMED	TIMED			

## 2.3 Aspect



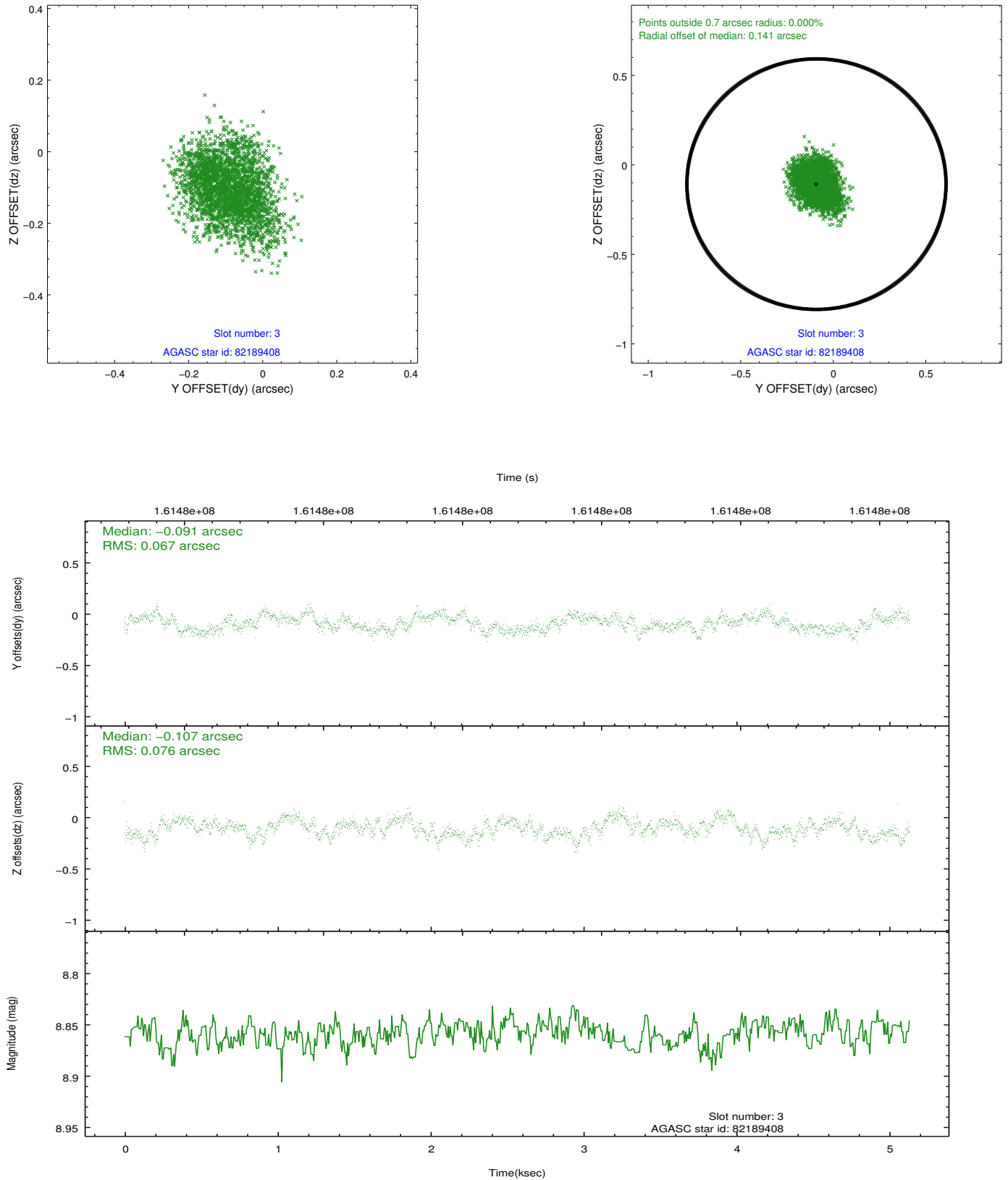


### Slot Statistics

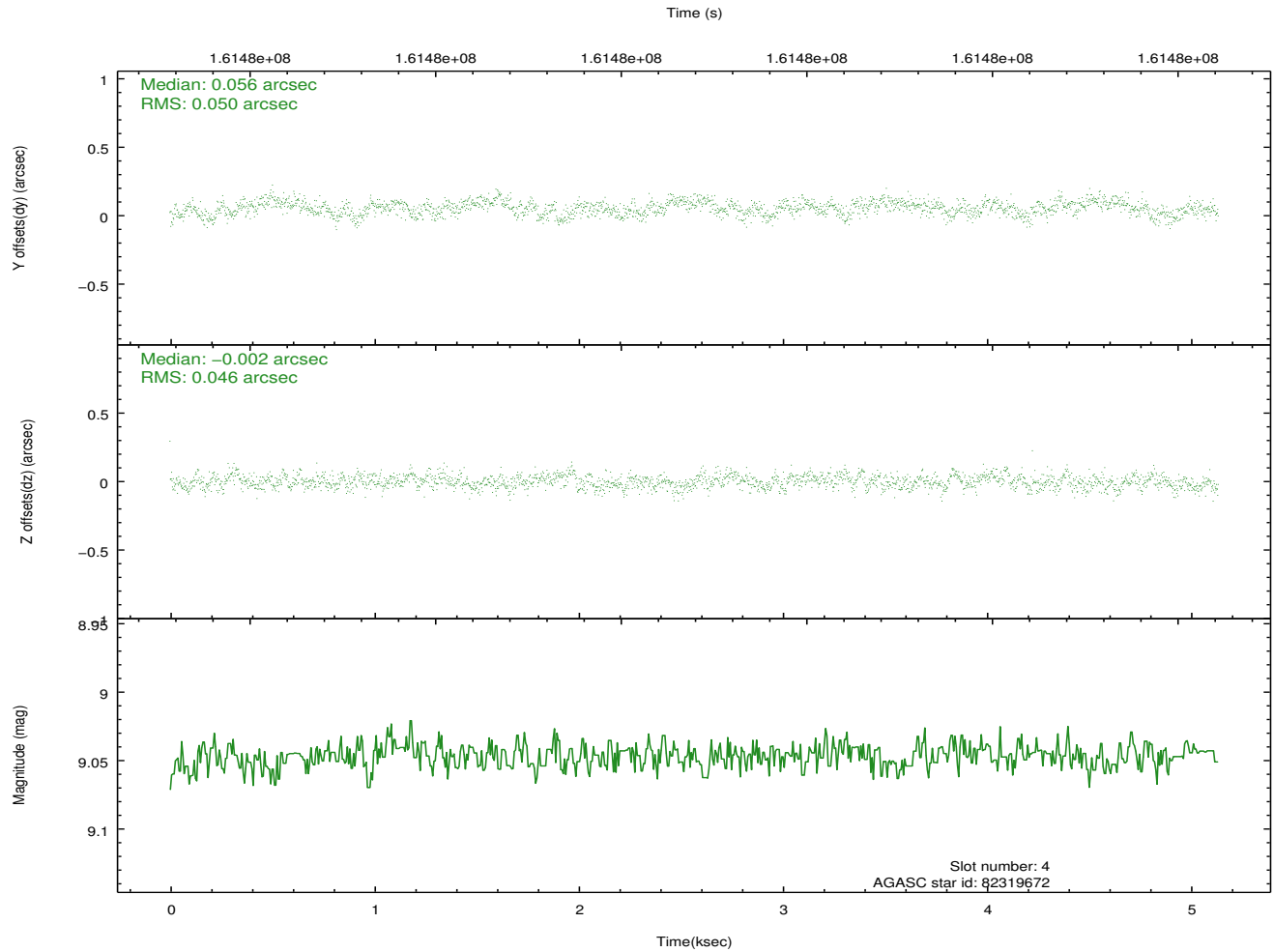
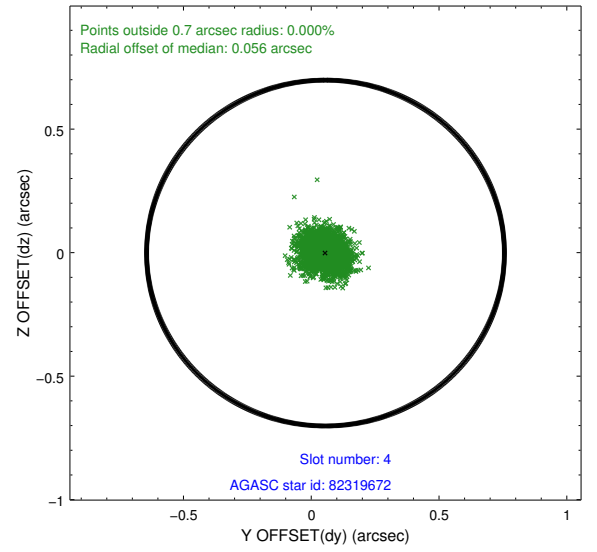
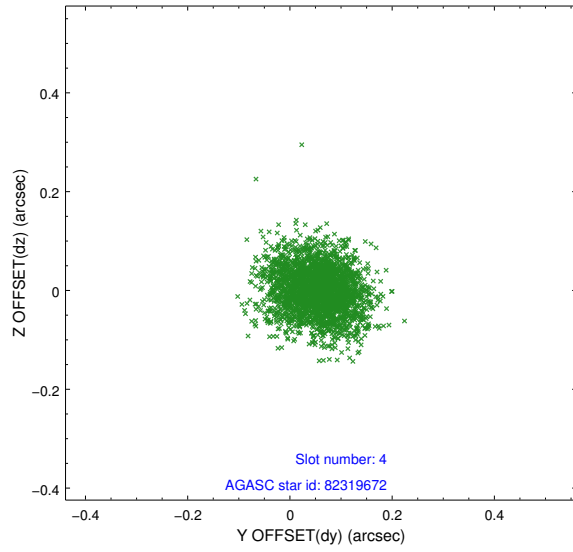
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1253	-0.016	-0.002	0.007	0.012	0.000000	0.000000	-755.02	-1729.03
1	FID	ACIS-S-4	7.20	1252	-0.036	0.008	0.005	0.011	0.000000	0.000000	2157.71	178.23
2	FID	ACIS-S-5	7.23	1253	0.021	0.003	0.007	0.012	0.000000	0.000000	-1806.29	173.26
3	GUIDE	82189408	8.86	2505	-0.091	-0.107	0.108	0.170	25.276758	13.237916	756.47	-2053.55
4	GUIDE	82319672	9.05	2506	0.056	-0.002	0.072	0.115	25.615508	13.734038	-441.87	-276.94
5	GUIDE	82320496	8.44	2505	-0.086	0.036	0.069	0.107	26.104669	14.056528	-867.37	1746.00
6	GUIDE	82313504	8.75	2505	0.264	-0.035	0.090	0.144	25.809581	12.954660	2411.04	-713.85
7	GUIDE	82322456	9.09	2505	-0.147	0.104	0.087	0.145	25.957853	14.433526	-2316.45	1786.53

## 2.4 Star Slots

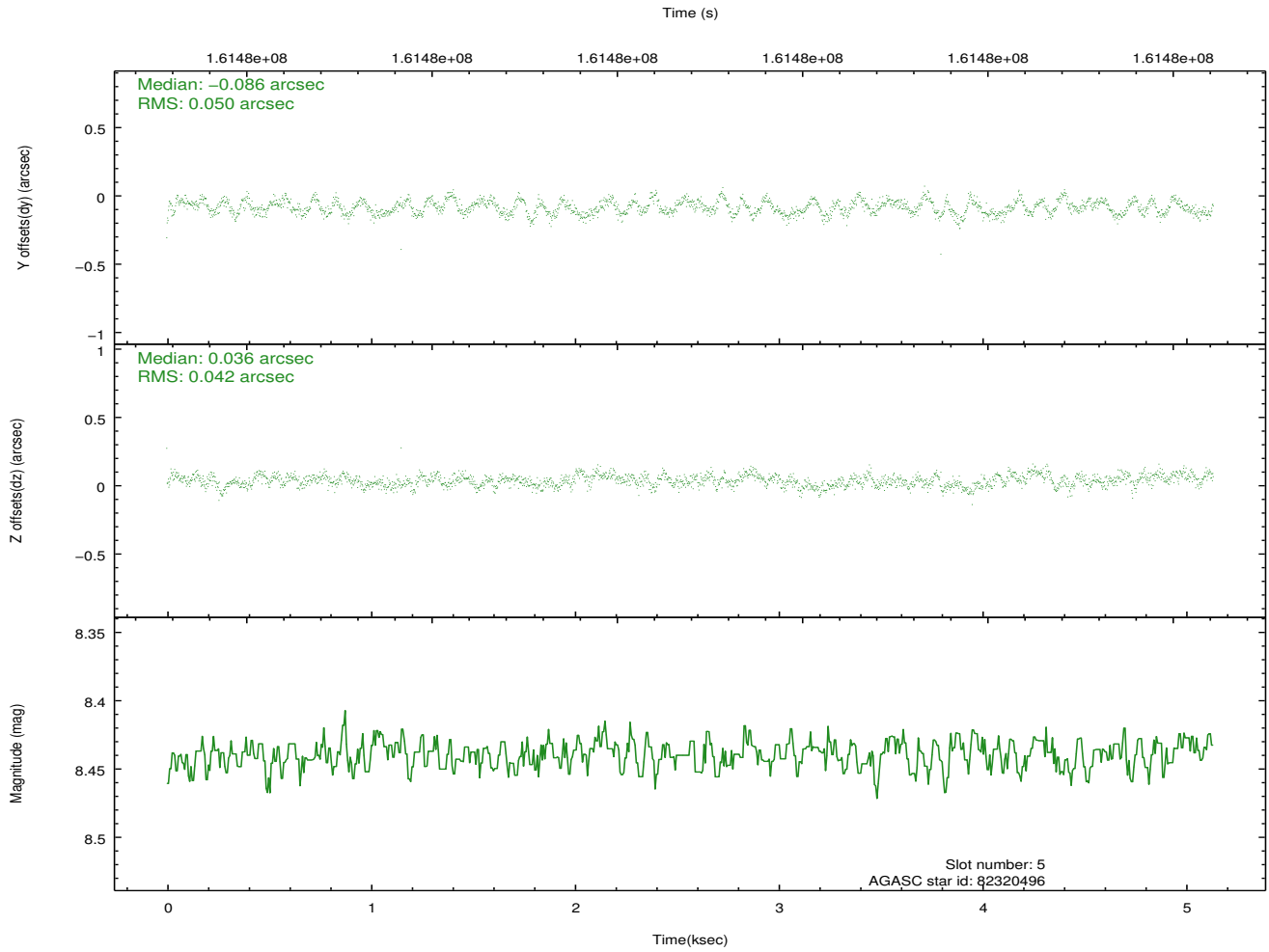
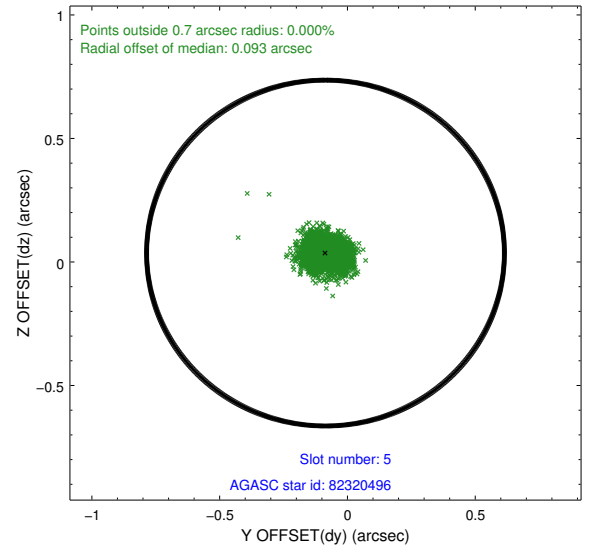
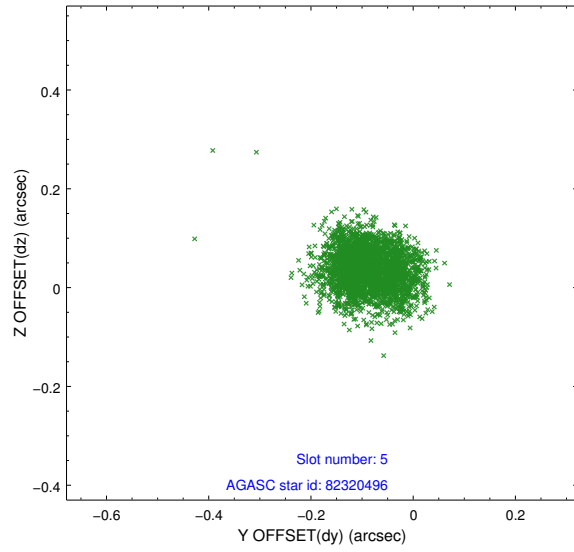
### 2.4.1 Slot 3



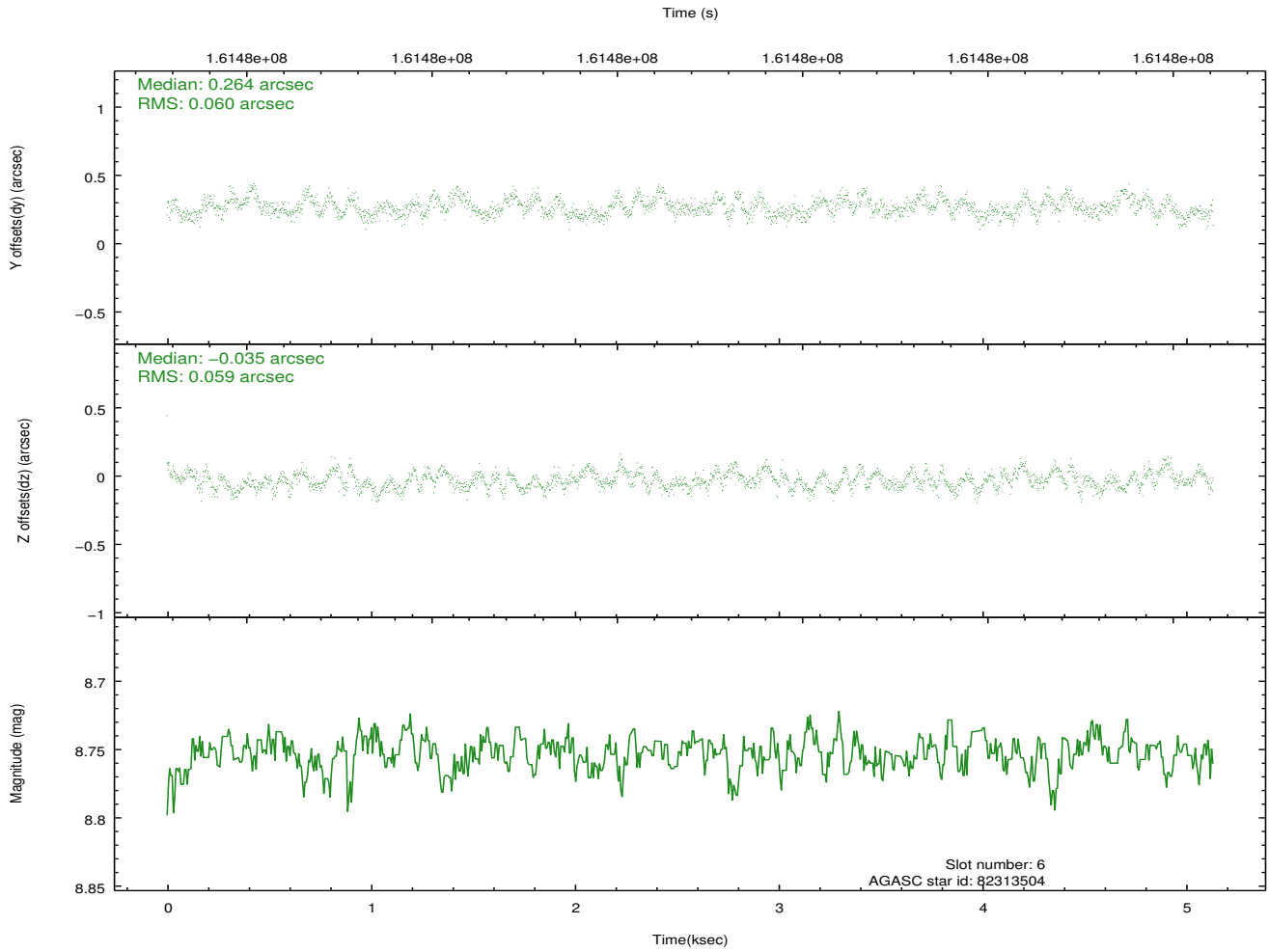
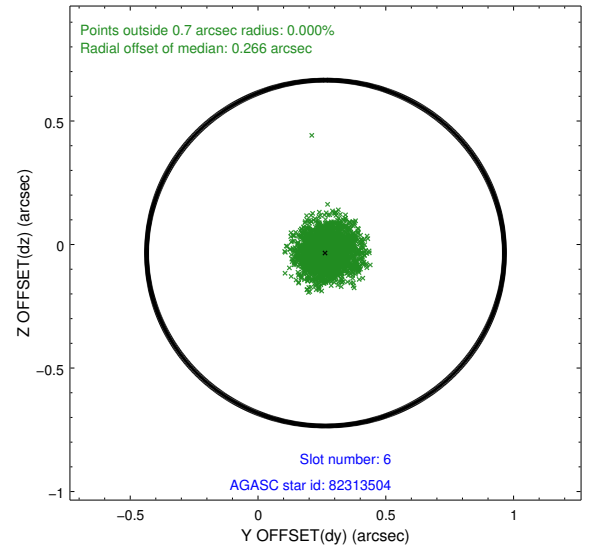
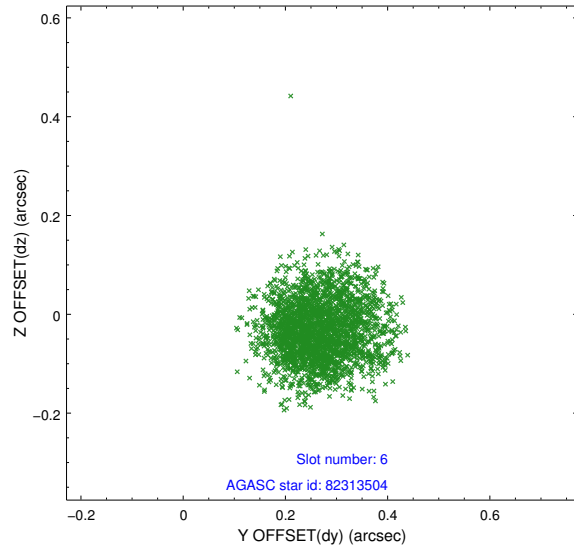
## 2.4.2 Slot 4



### 2.4.3 Slot 5

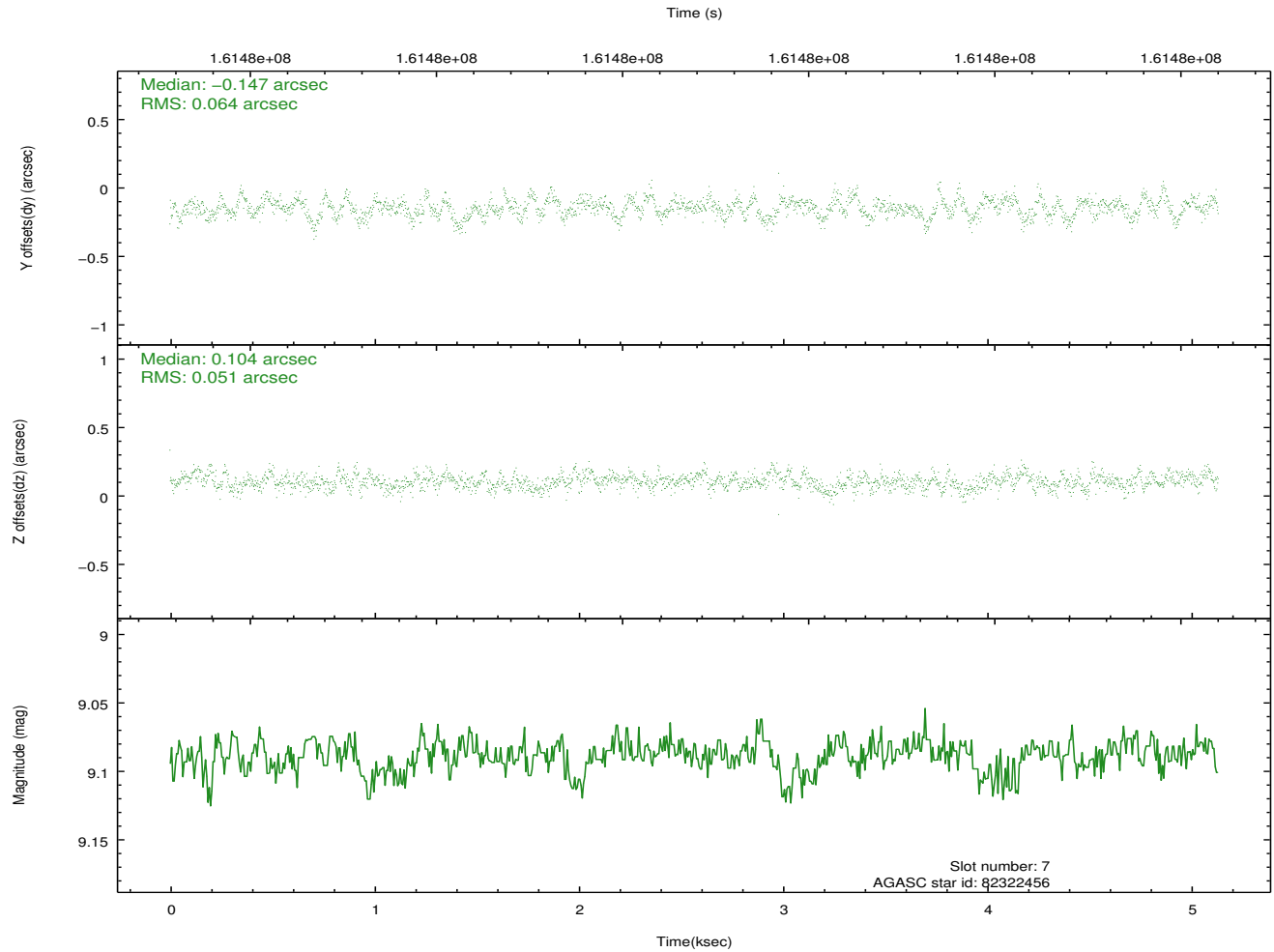
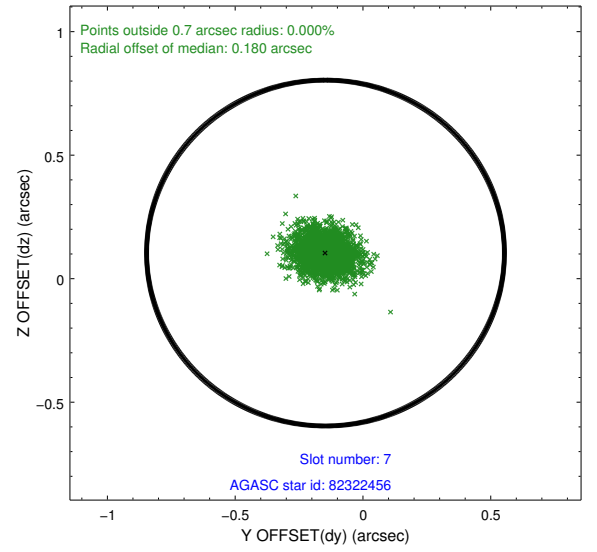
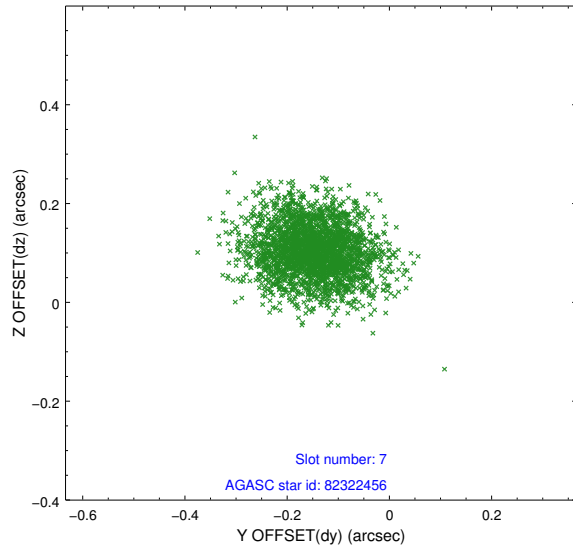


## 2.4.4 Slot 6



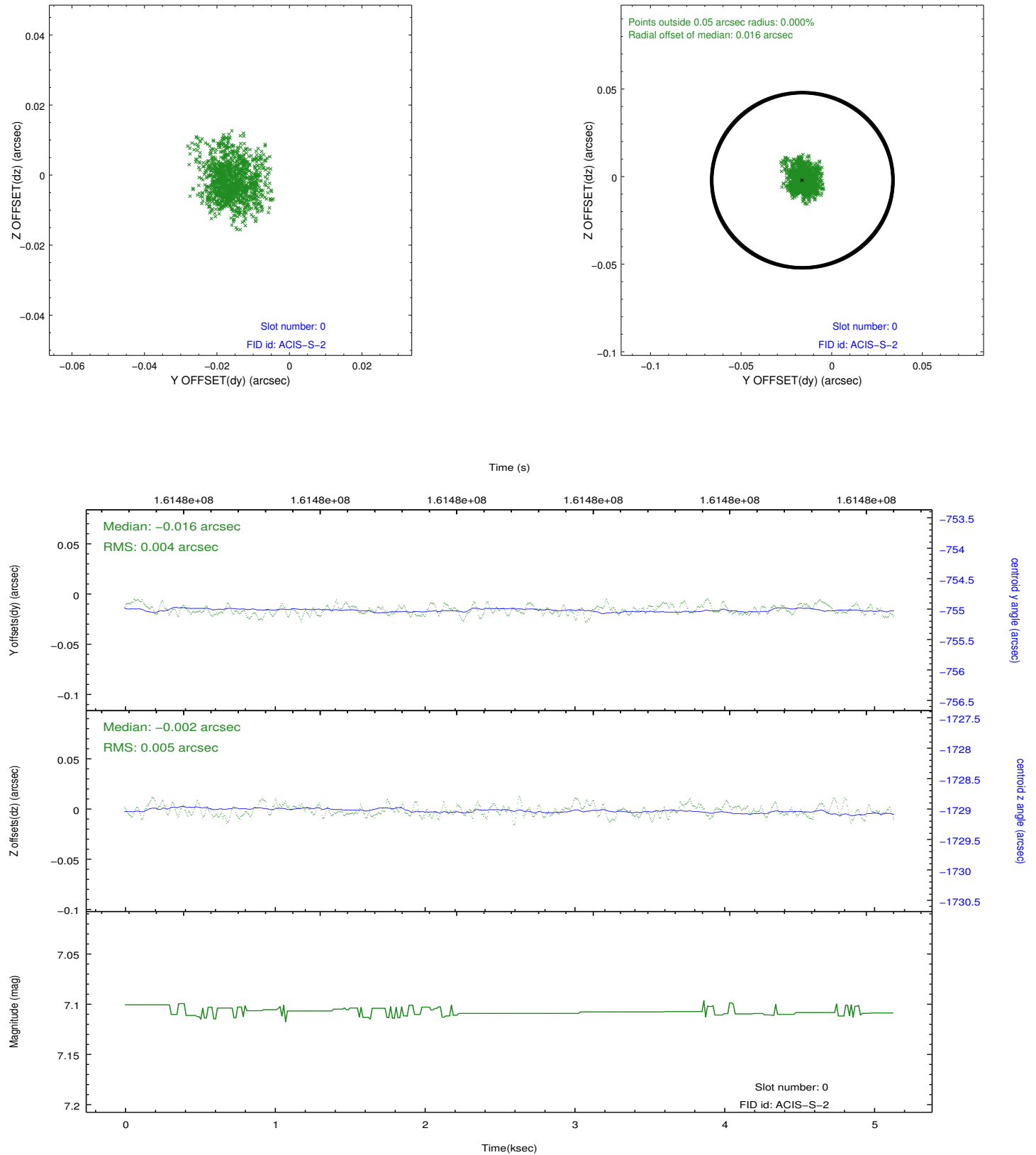


### 2.4.5 Slot 7

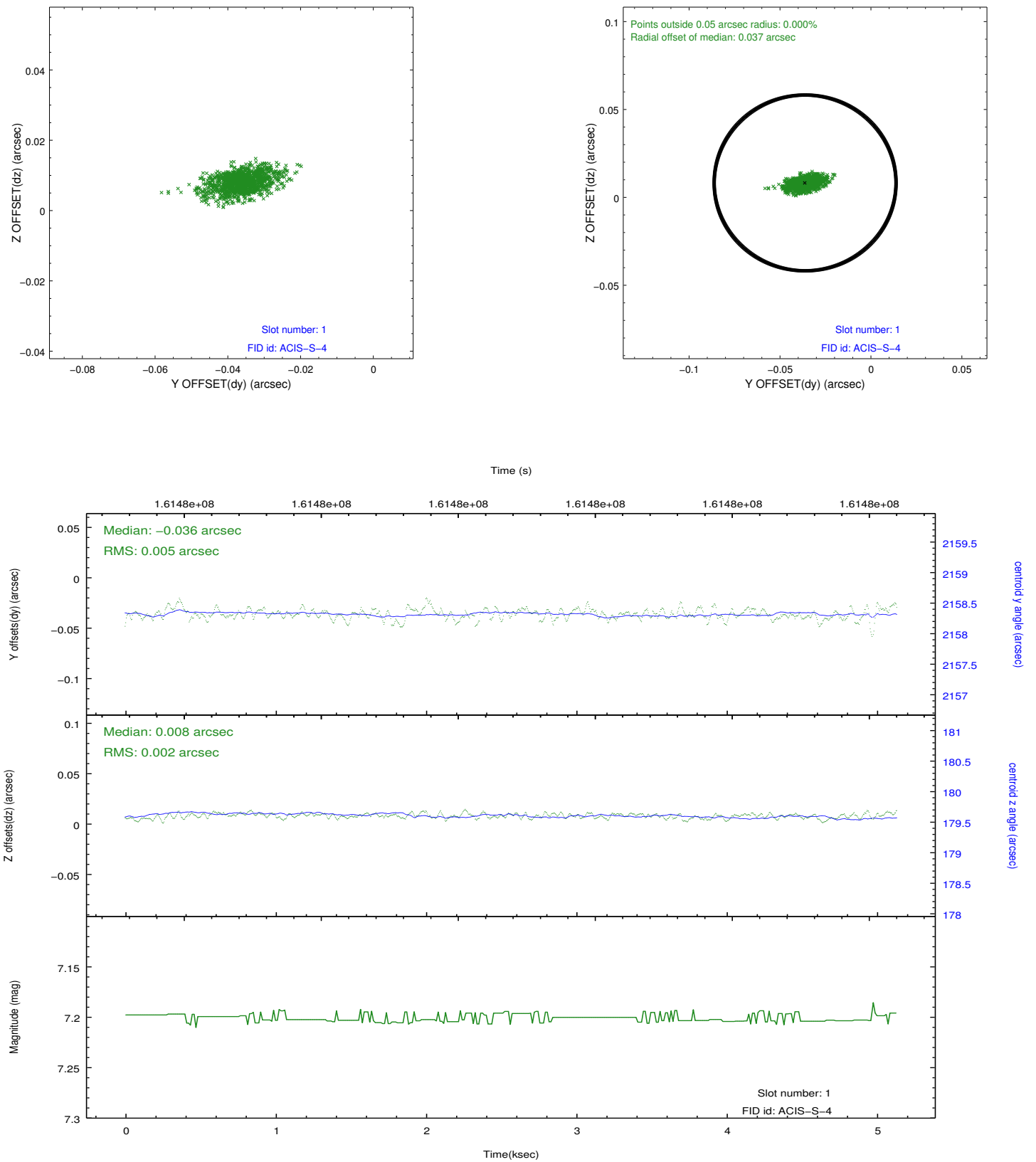


## 2.5 FID Slots

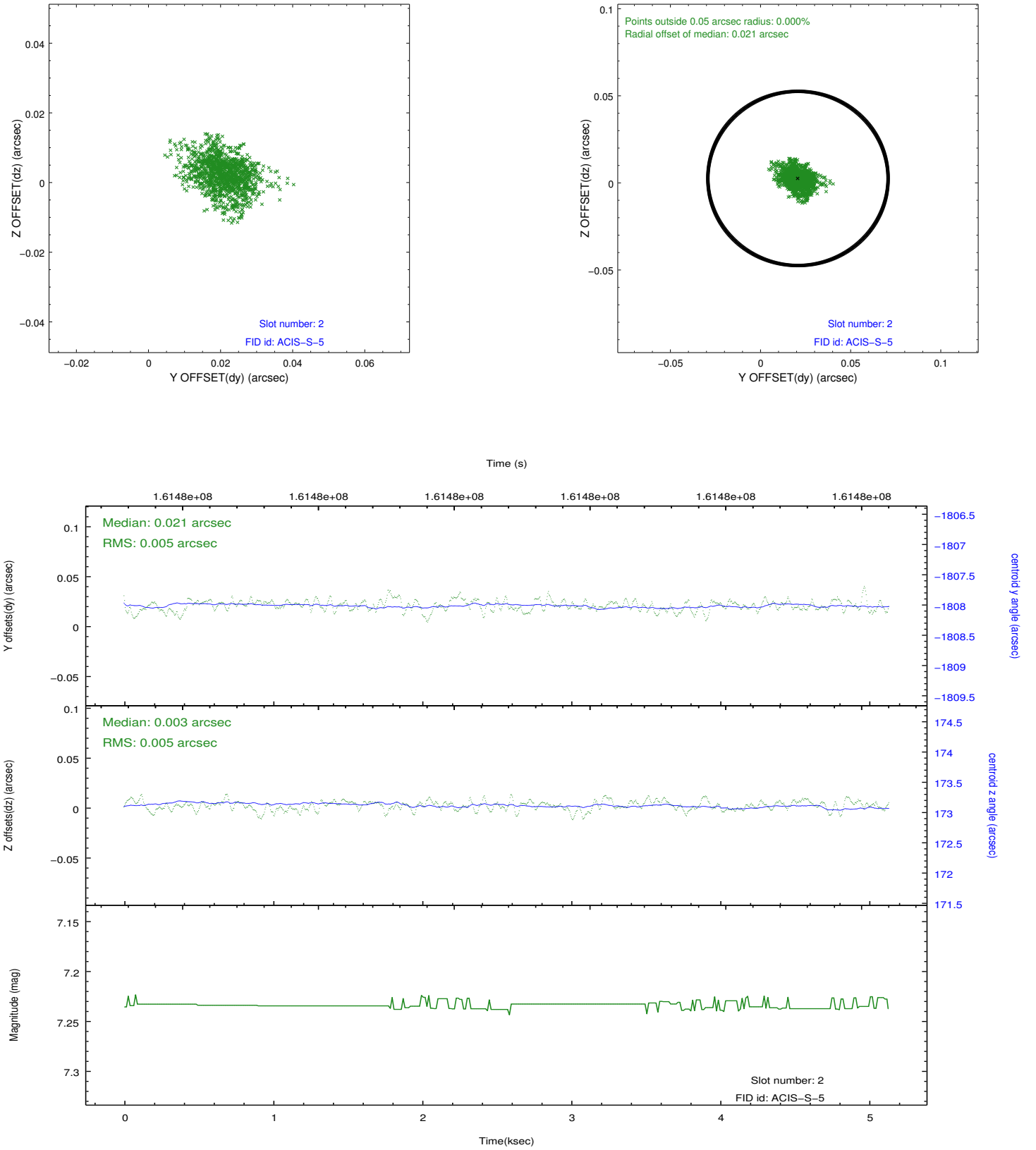
### 2.5.1 Slot 0



## 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)	2012.11.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.129

### A.2 Comments