

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2095 - L2 Version 3  
Chandra X-Ray Center

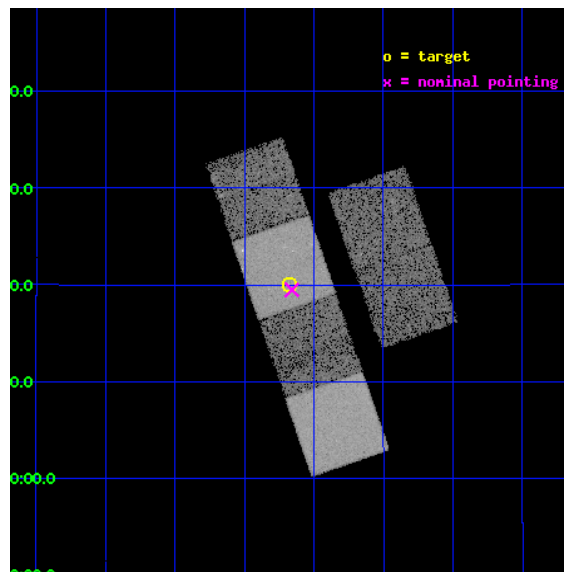
L2 Processing Date : Sep 17 2012

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# 1 Front

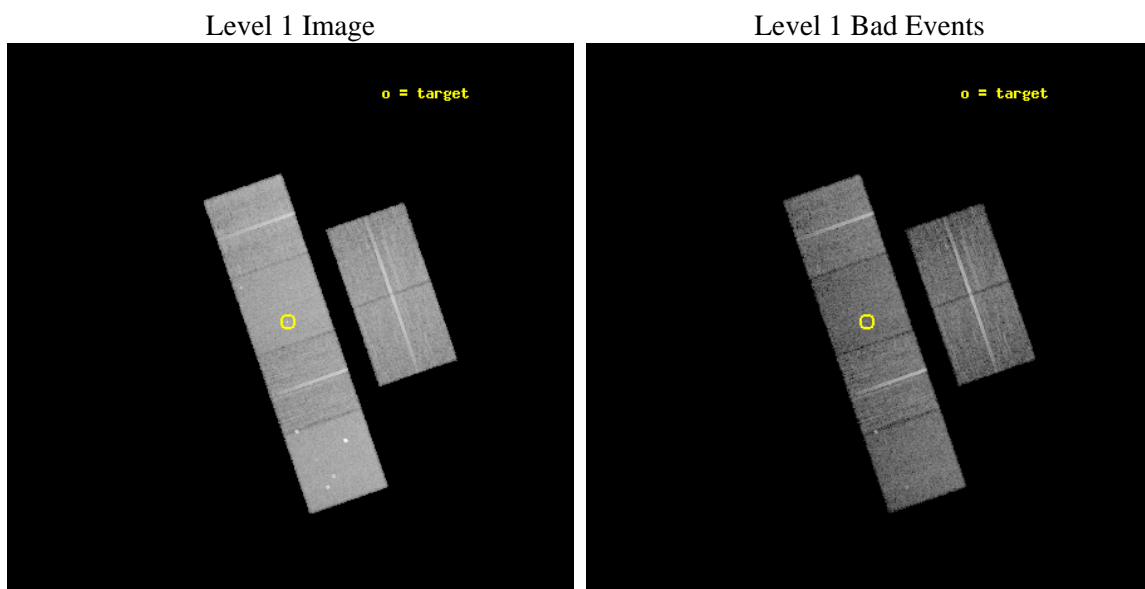
seq_num	700285	Sequence number
obs_id	2095	Observation id
title	X-RAY STRUCTURES IN AND AROUND POWERFUL RADIO SOURCES	Proposal tit
observer	Prof Diana Worrall	Principal investigator
object	3C 228	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	147.544583	Observer's specified target RA [deg]
dec_targ	14.333361	Observer's specified target Dec [deg]
ra_nom	147.53962408573	Nominal RA [deg]
dec_nom	14.324823529602	Nominal Dec [deg]
roll_nom	250.97589823079	Nominal Roll [deg]
revision	3	Processing version of data
ontime	13958.400012985	Sum of GTIs [s]
livetime	13781.650347281	Livetime [s]
ontime2	13958.400012985	Sum of GTIs [s]
ontime3	13958.400012985	Sum of GTIs [s]
ontime5	13958.400012985	Sum of GTIs [s]
ontime6	13958.400012985	Sum of GTIs [s]
ontime7	13958.400012985	Sum of GTIs [s]
ontime8	13955.123239771	Sum of GTIs [s]
l2events	136754	Number of level 2 events



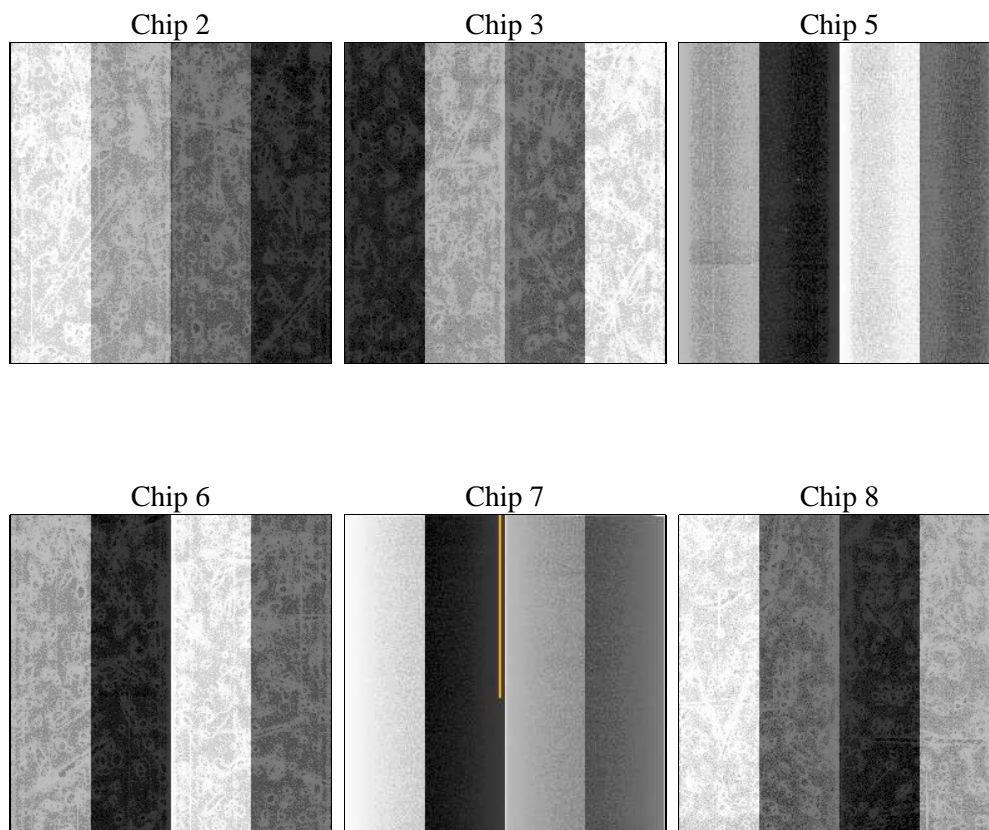
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	14200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	13958.400012985	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime2	13958.400012985	Sum of GTIs [s]
date	2012-09-17T18:08:45	Date and time of file creation	ontime3	13958.400012985	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	13958.400012985	Sum of GTIs [s]
			ontime6	13958.400012985	Sum of GTIs [s]
			ontime7	13958.400012985	Sum of GTIs [s]
			ontime8	13955.123239771	Sum of GTIs [s]
			l1events	632082	Number of level 1 events

### 2.1.4 Events

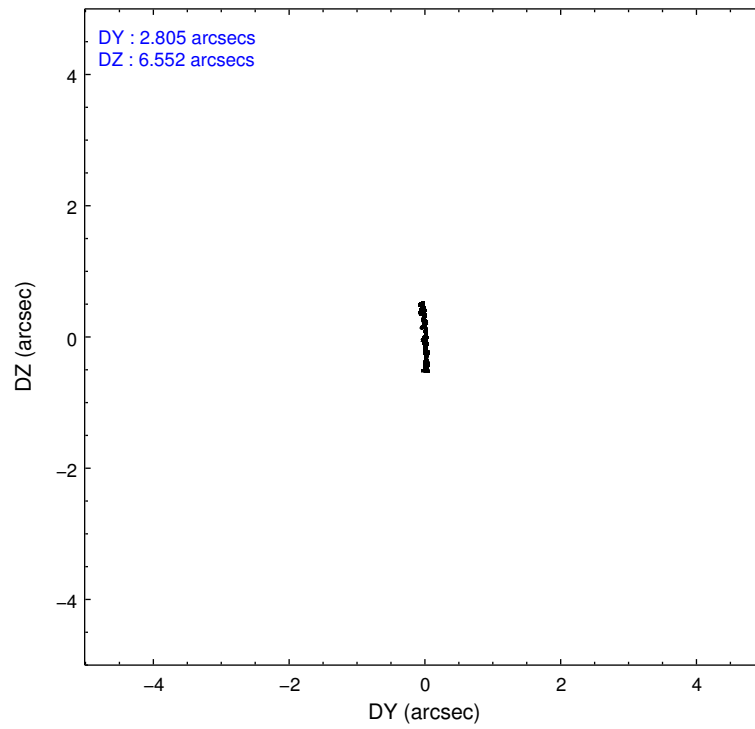
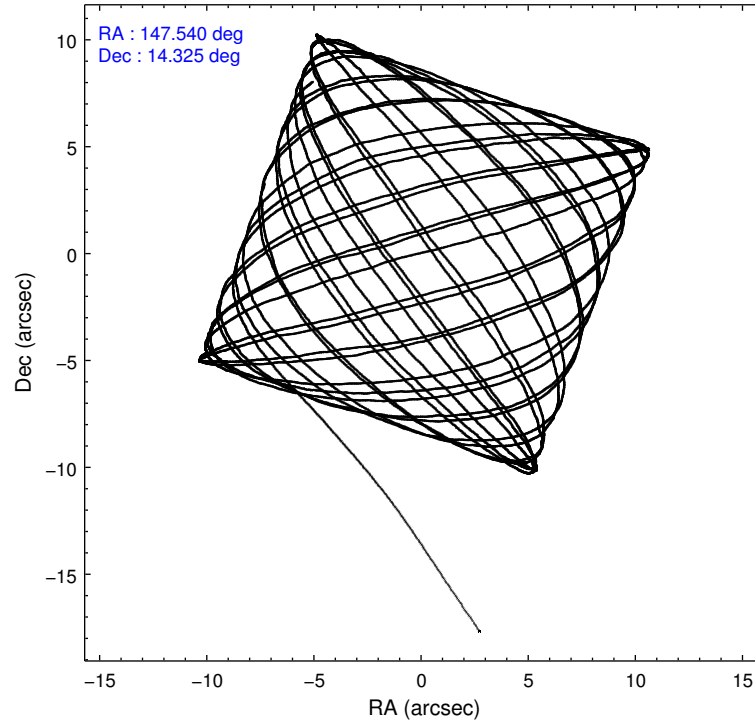
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	89910	88116	128784	93293	115089	116890	grade 0 events	4149	4084	8729	4145	4911	7409
rejected events	79948	78385	68249	82978	66621	93004		4%	4%	6%	4%	4%	6%
rejected %	88%	88%	52%	88%	57%	79%	grade 1 events	51	42	459	33	103	63
								0%	0%	0%	0%	0%	0%
							grade 2 events	2172	1985	16942	2019	9687	5118
								2%	2%	13%	2%	8%	4%
							grade 3 events	934	954	2522	1036	4491	2716
								1%	1%	1%	1%	3%	2%
							grade 4 events	989	965	2485	1062	4419	2512
								1%	1%	1%	1%	3%	2%
							grade 5 events	3040	3354	9741	3741	11014	4773
								3%	3%	7%	4%	9%	4%
							grade 6 events	1721	1748	29872	2054	24971	6134
								1%	1%	23%	2%	21%	5%
							grade 7 events	76854	74984	58034	79203	55493	88165
								85%	85%	45%	84%	48%	75%

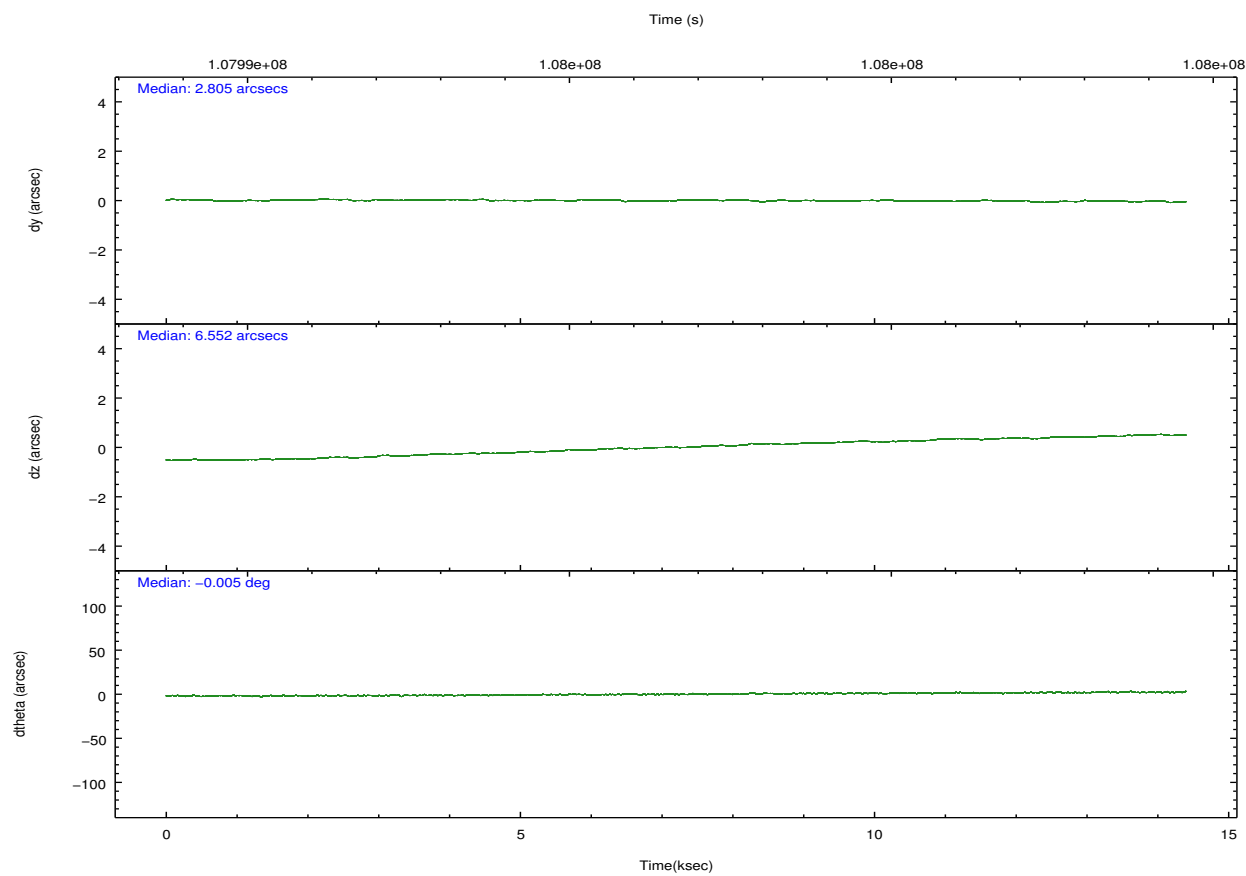
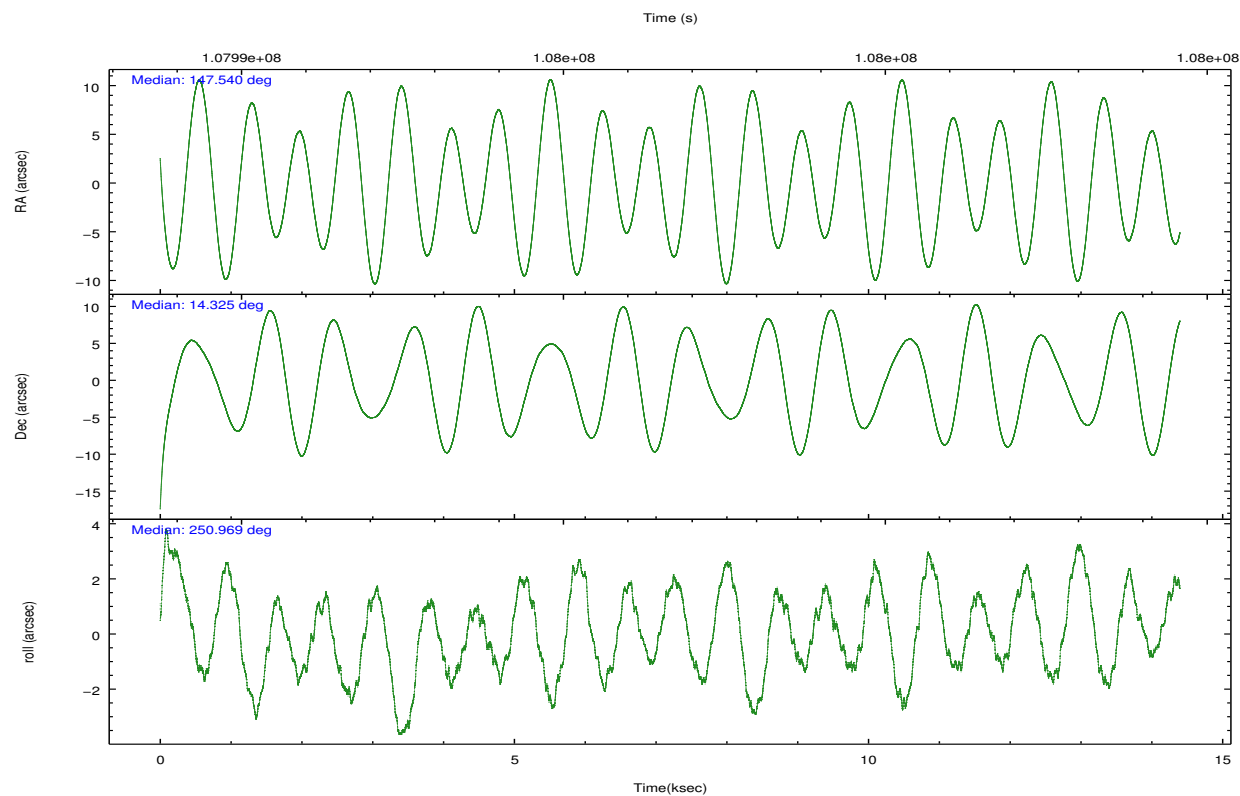


## 2.2 Compared Parameters

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	147.533998	147.5396240857276	Subarray requested	NONE	NONE
[deg] Pointing Dec	14.351572	14.32482352960216	Alternating exposures requested	N	N
[deg] Pointing Roll	250.820669	250.9758982307902	[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)	107989628.184000	107988735.80277			
Observation start date	2001-06-03T21:06:04	2001-06-03T20:52:15			
[s] Observation end time (MET)	108003828.184000	108004469.55338			
Observation end date	2001-06-04T01:02:44	2001-06-04T01:14:29			
Read mode	TIMED	TIMED			

## 2.3 Aspect



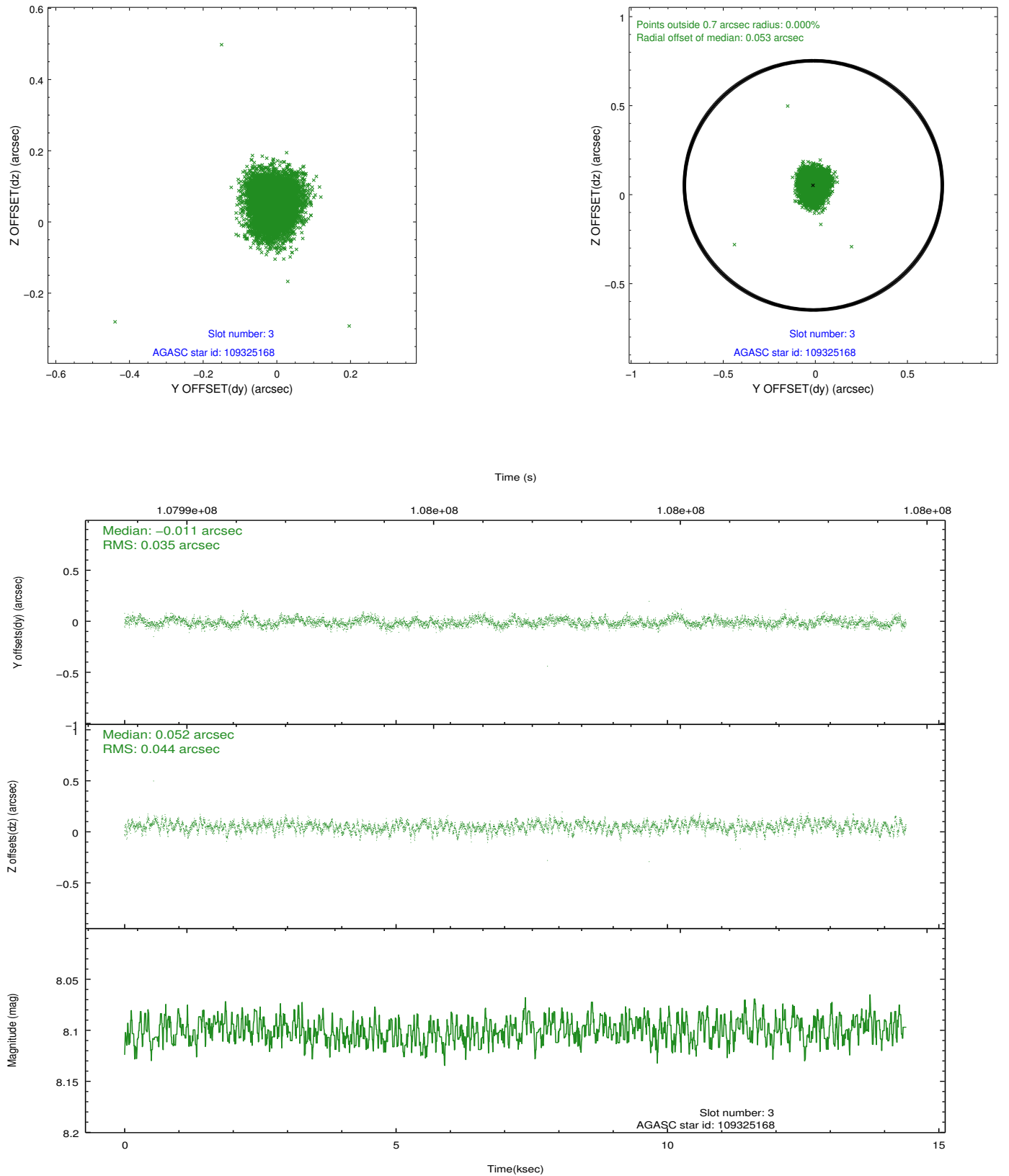


### Slot Statistics

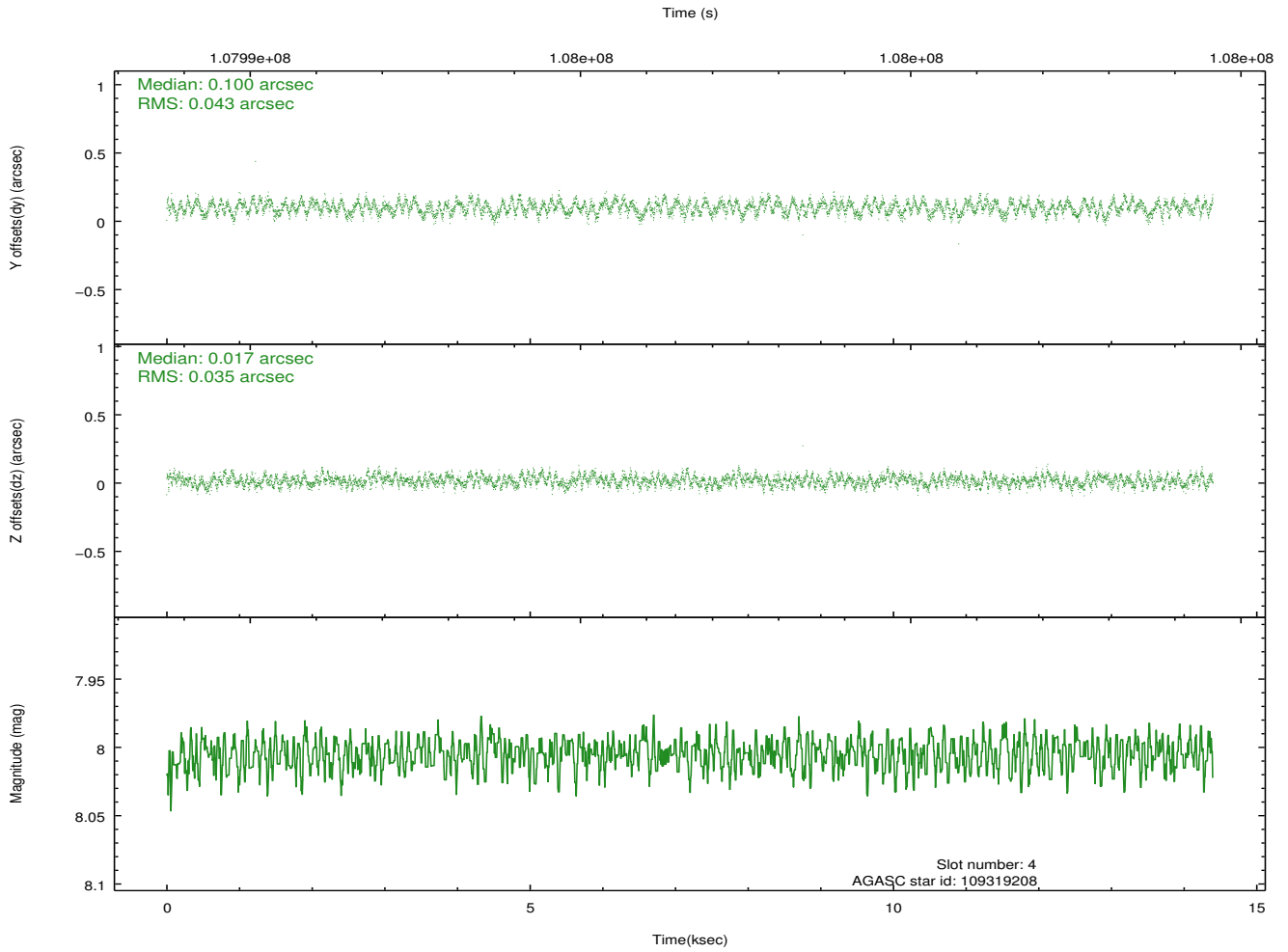
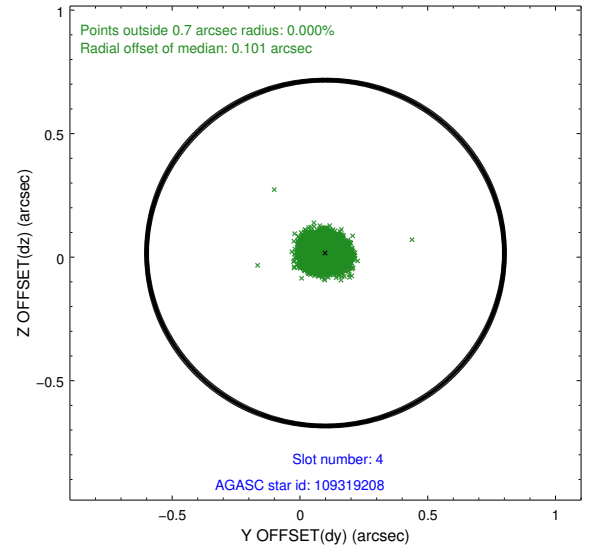
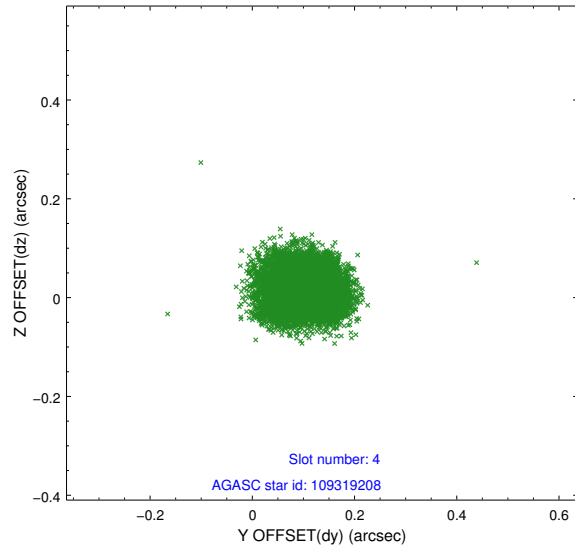
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	3512	-0.016	0.014	0.011	0.017	0.000000	0.000000	-755.43	-1727.69
1	FID	ACIS-S-4	7.20	3511	-0.057	0.004	0.008	0.015	0.000000	0.000000	2157.63	180.48
2	FID	ACIS-S-5	7.24	3511	0.040	-0.008	0.009	0.015	0.000000	0.000000	-1807.83	174.46
3	GUIDE	109325168	8.10	7019	-0.011	0.052	0.059	0.097	147.482941	14.562637	-658.63	-417.53
4	GUIDE	109319208	8.00	7018	0.100	0.017	0.060	0.092	147.710270	14.120752	582.84	854.32
5	GUIDE	109324784	8.62	7022	-0.111	-0.114	0.065	0.106	147.303028	14.957479	-1796.01	-1475.55
6	GUIDE	109455448	8.78	7021	-0.116	0.165	0.086	0.137	148.378447	14.717182	-2214.44	2342.86
7	GUIDE	109320368	9.05	7022	0.144	-0.117	0.088	0.144	146.751214	14.131748	1641.72	-2322.06

## 2.4 Star Slots

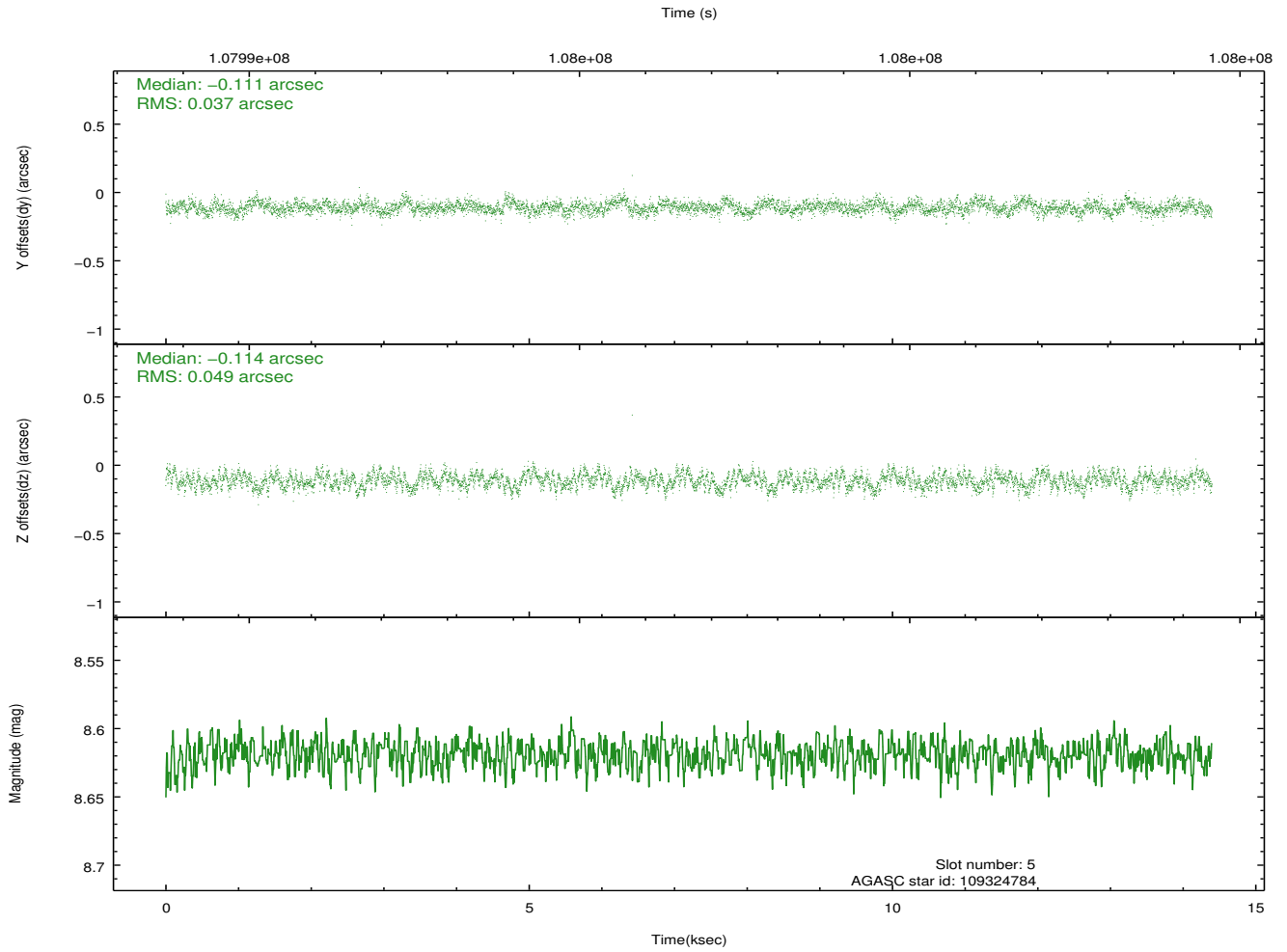
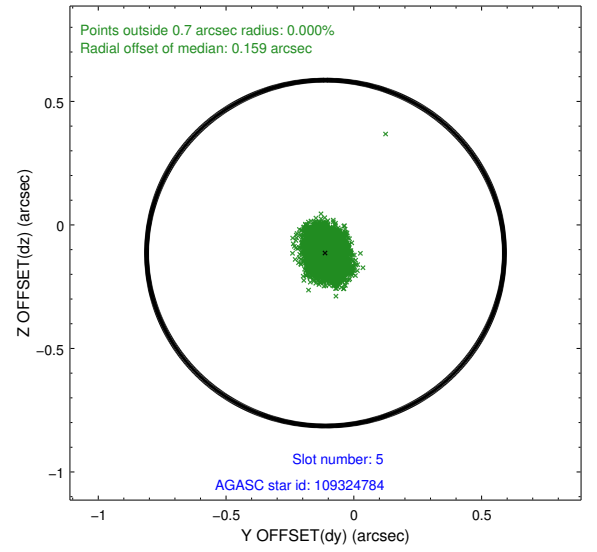
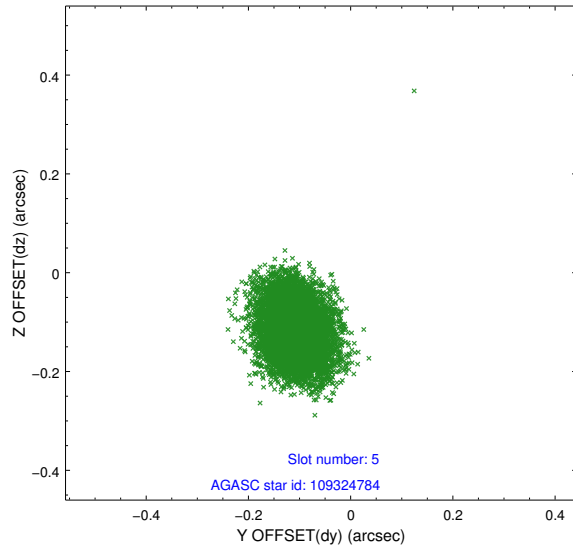
### 2.4.1 Slot 3



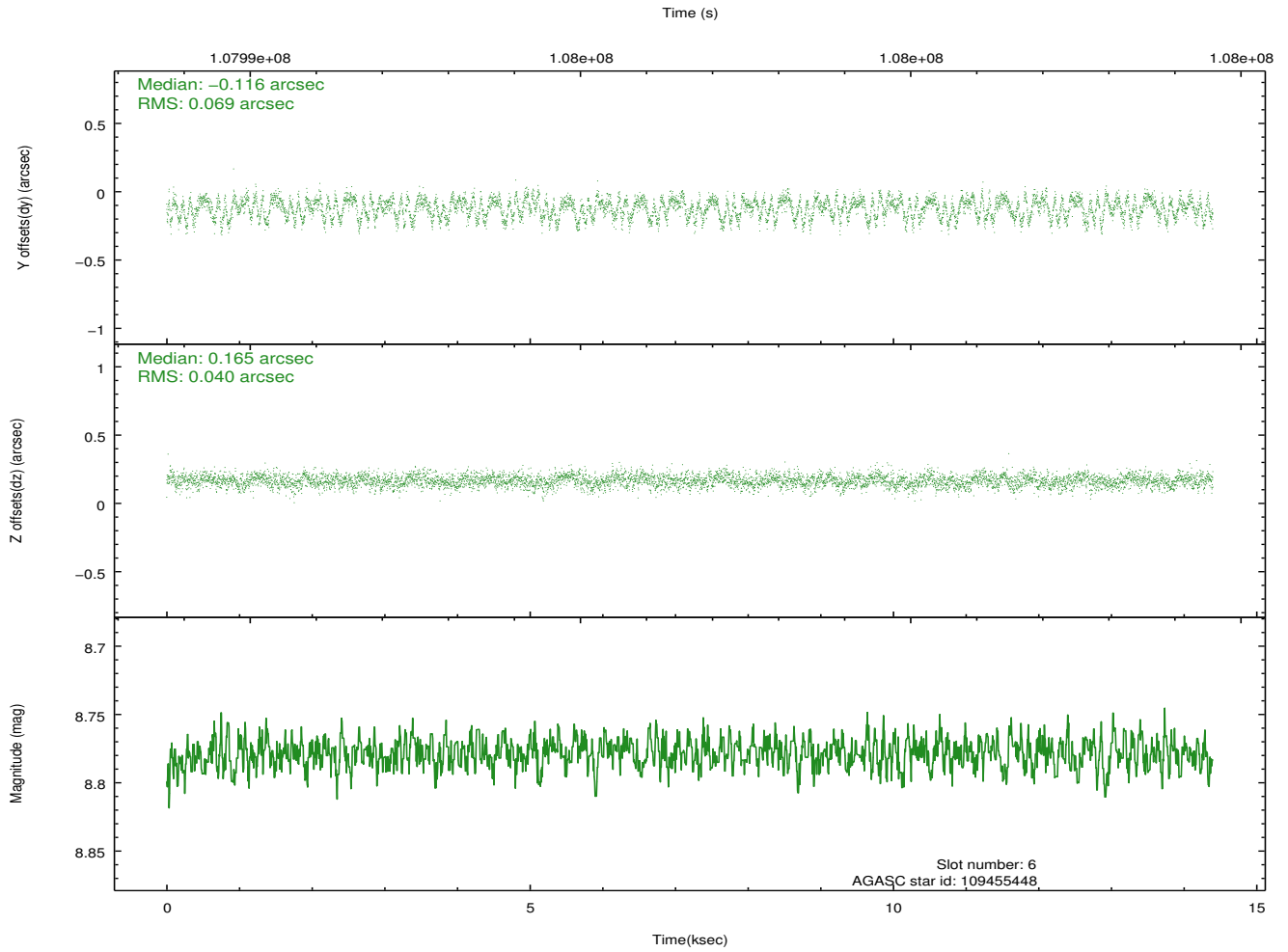
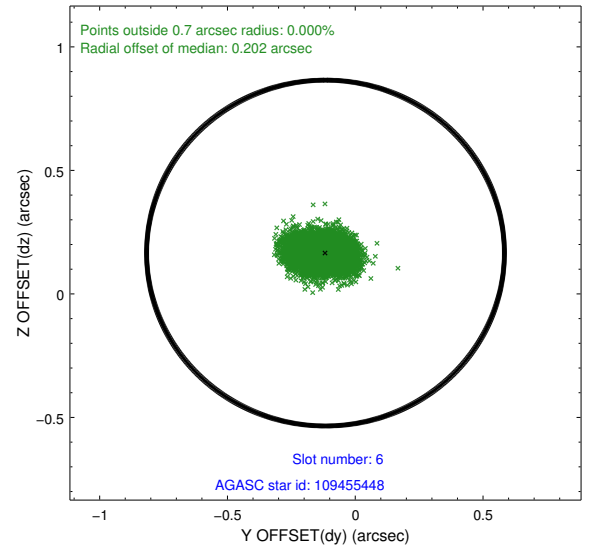
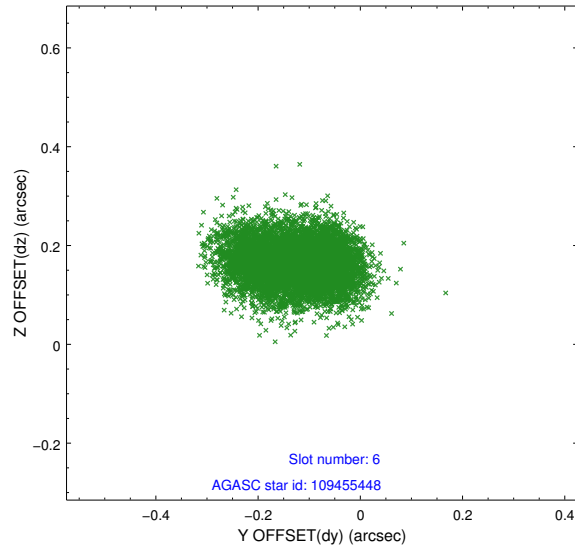
## 2.4.2 Slot 4



### 2.4.3 Slot 5

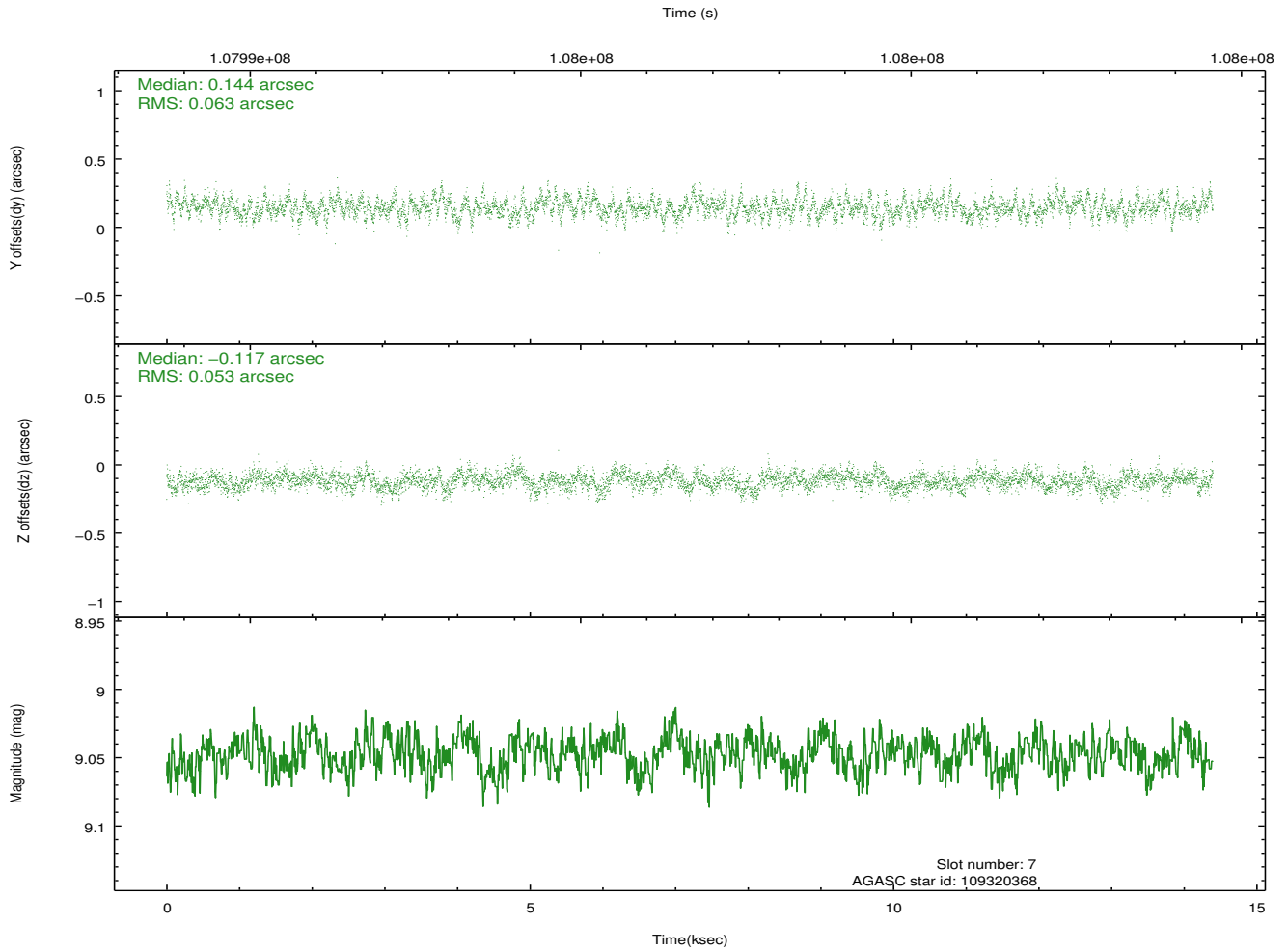
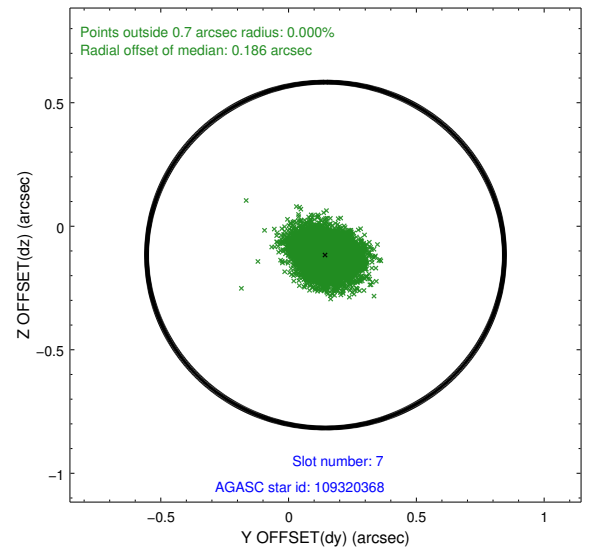
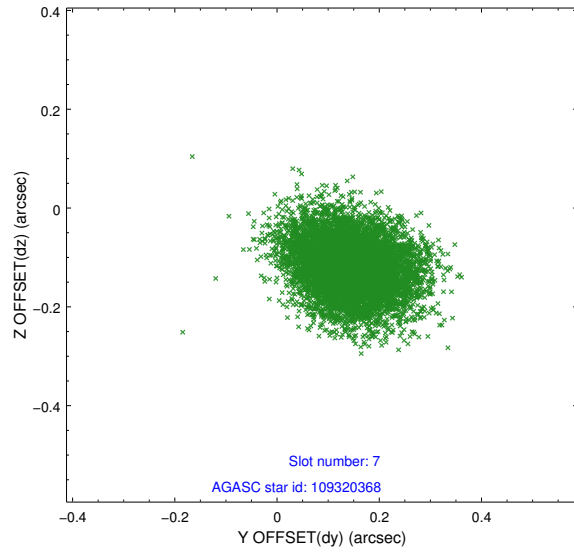


## 2.4.4 Slot 6



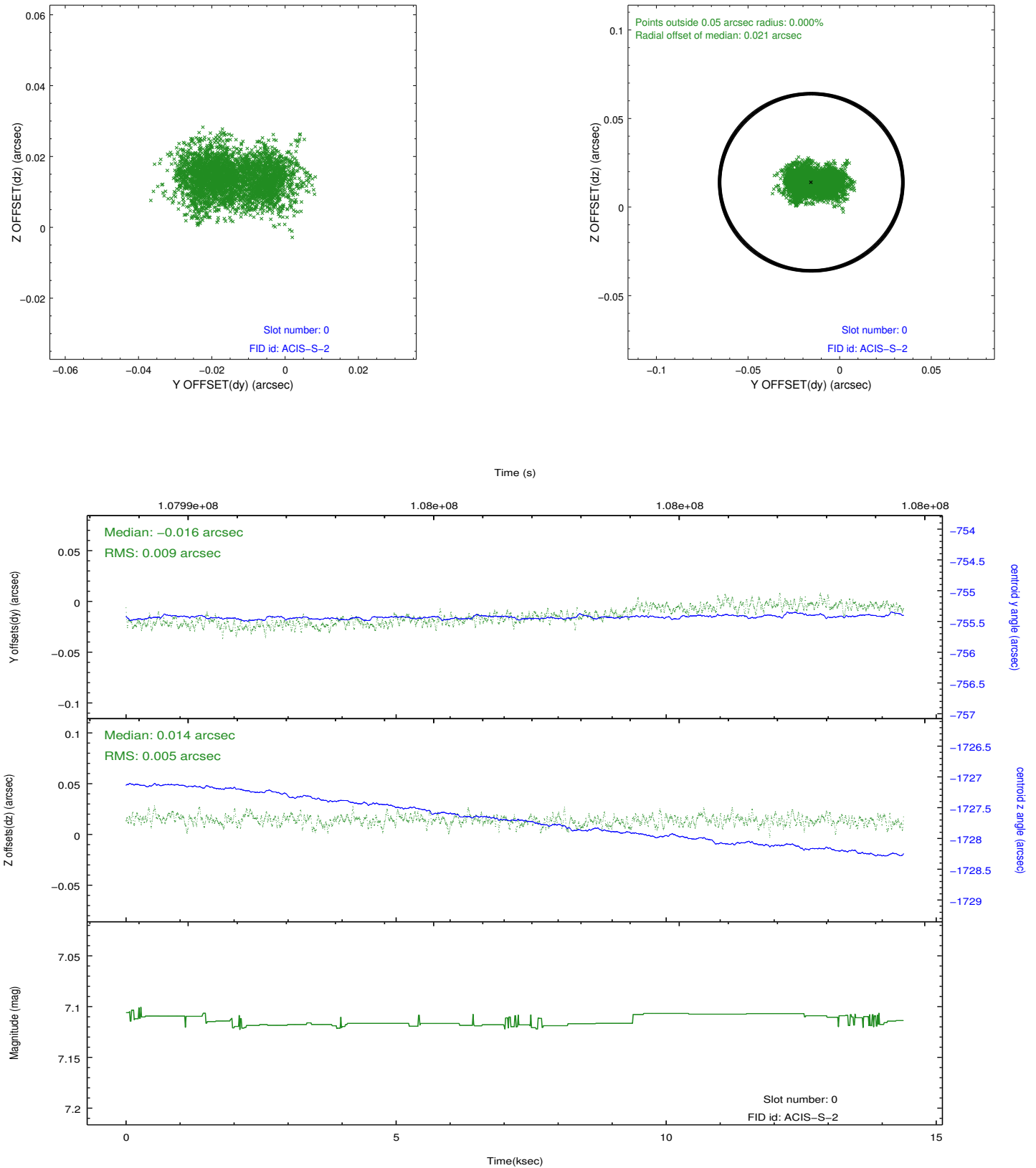


## 2.4.5 Slot 7

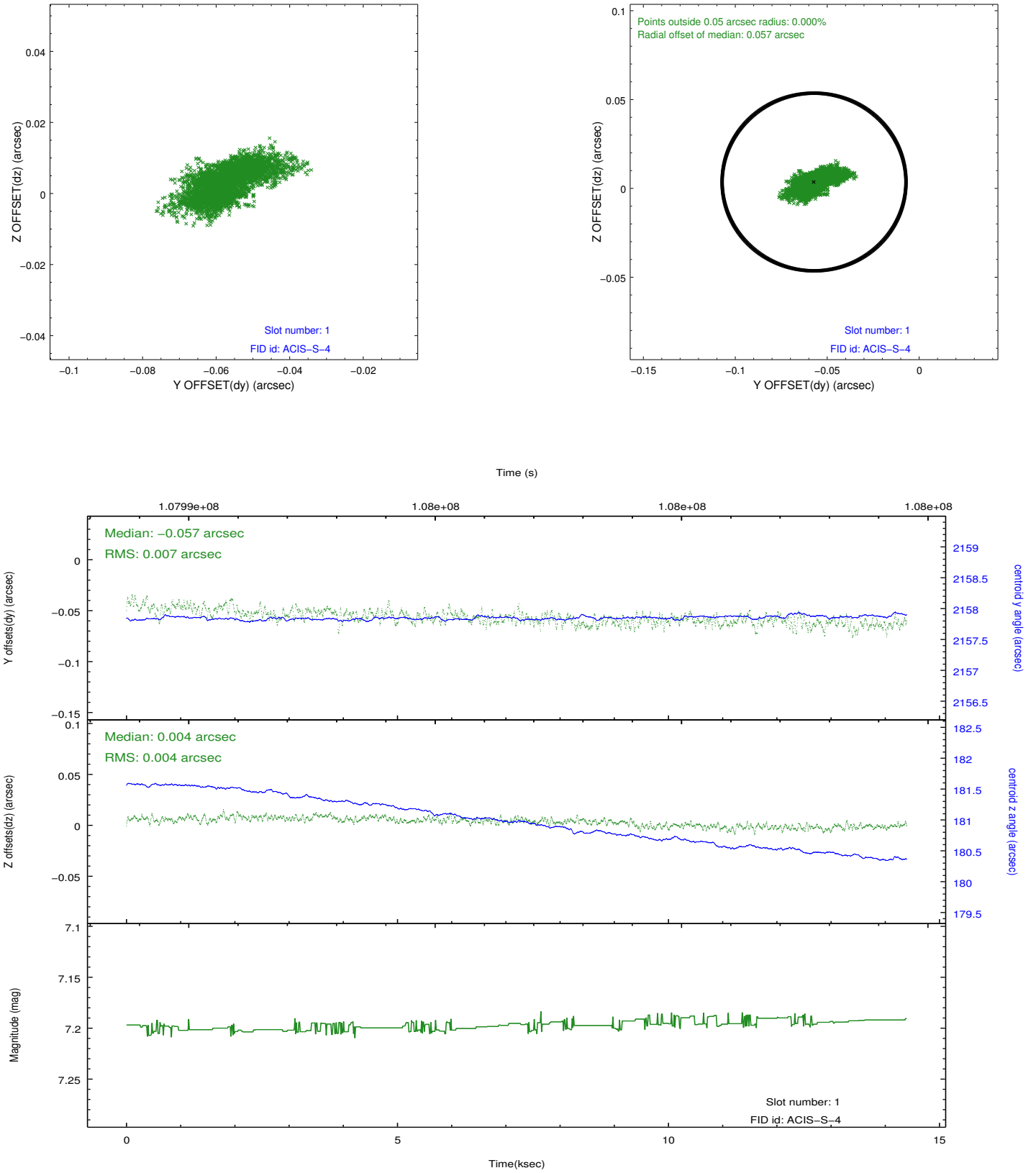


## 2.5 FID Slots

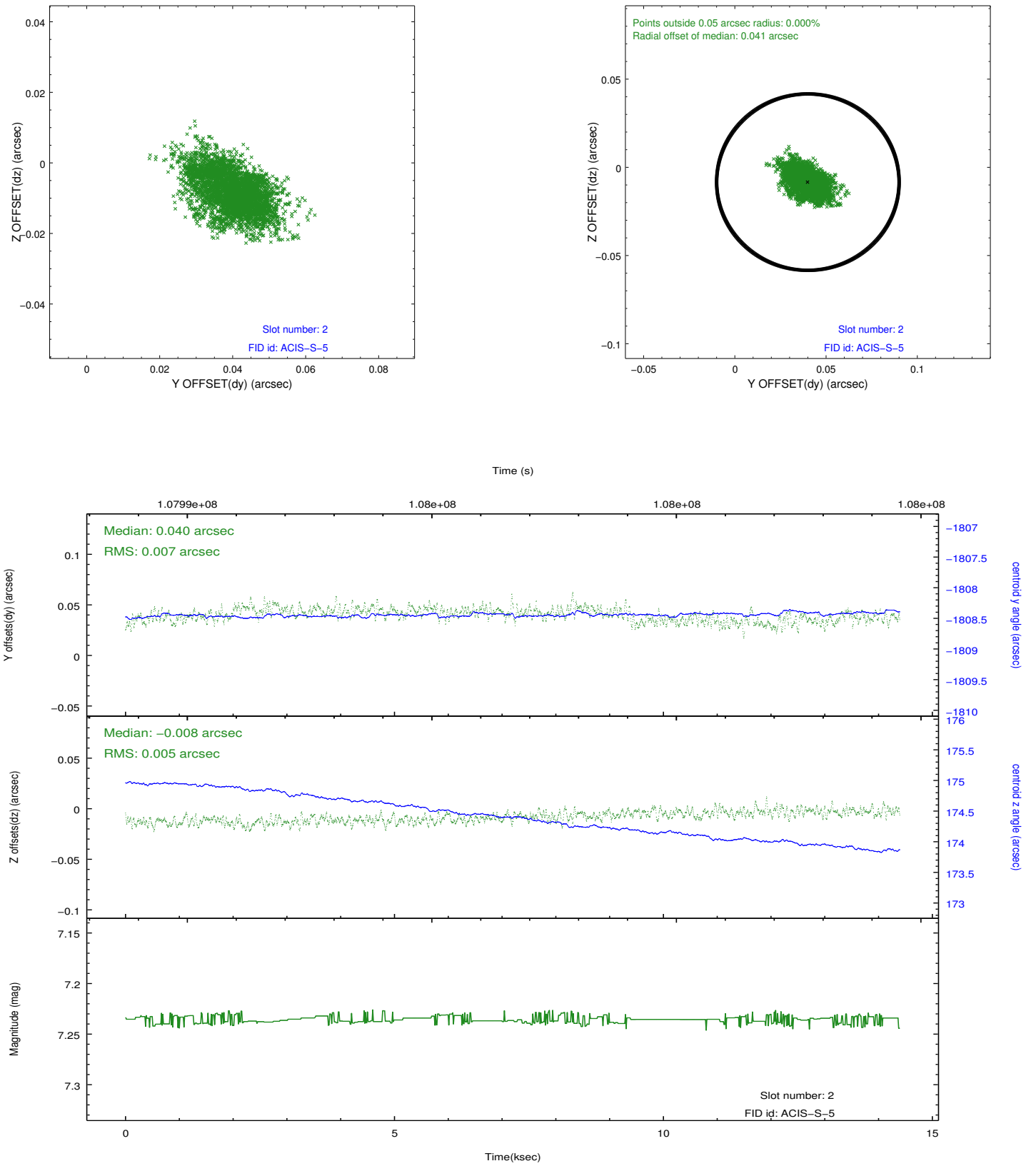
### 2.5.1 Slot 0



## 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)	2012.09.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.961

### A.2 Comments