

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2836 - L2 Version 3  
Chandra X-Ray Center

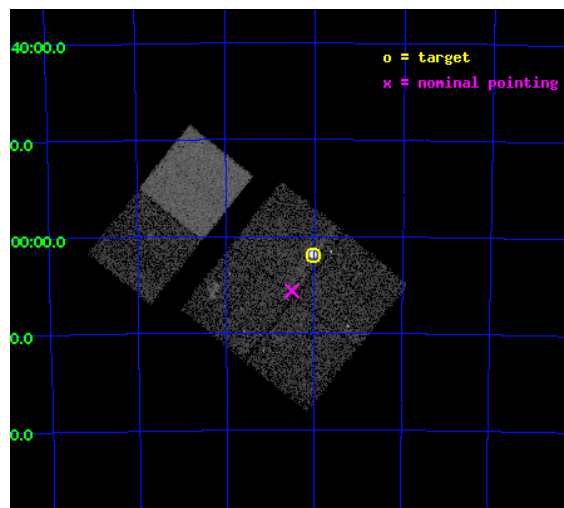
L2 Processing Date : Sep 28 2012

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# 1 Front

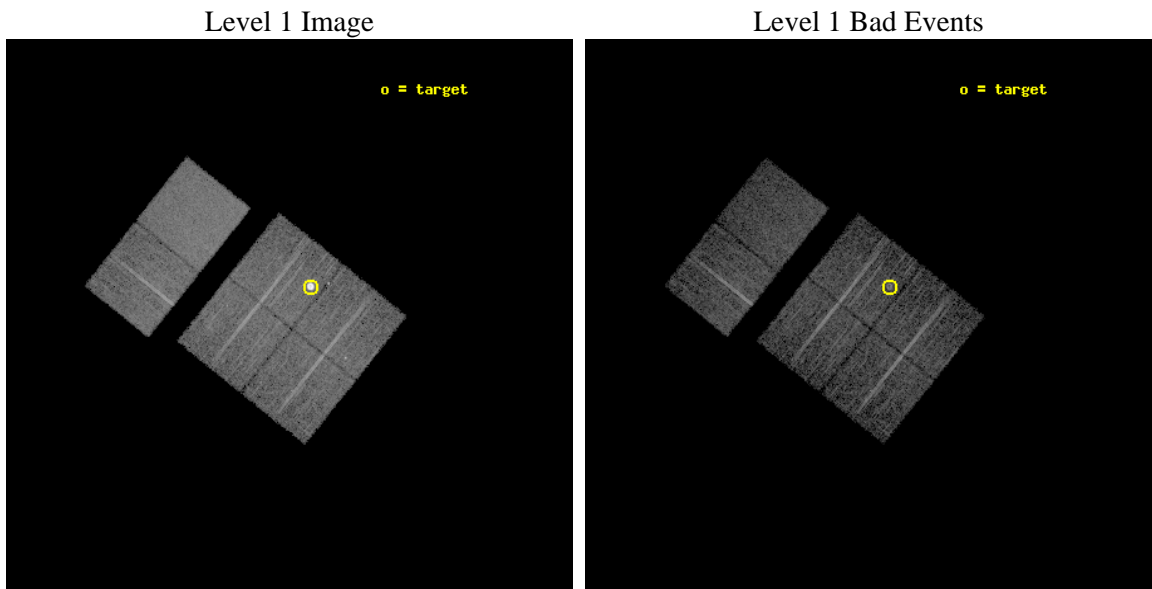
seq_num	590225	Sequence number
obs_id	2836	Observation id
title	AO3A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I3, T=120, Offsets=-4,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.127655285511	Nominal RA [deg]
dec_nom	-72.093917366723	Nominal Dec [deg]
roll_nom	308.72804056656	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7552.0000070184	Sum of GTIs [s]
livetime	7456.3720356611	Livetime [s]
ontime0	7551.9163715392	Sum of GTIs [s]
ontime1	7551.9574414492	Sum of GTIs [s]
ontime2	7551.9984814525	Sum of GTIs [s]
ontime3	7552.0000070184	Sum of GTIs [s]
ontime6	7552.0000070184	Sum of GTIs [s]
ontime7	7552.0000070184	Sum of GTIs [s]
l2events	78697	Number of level 2 events



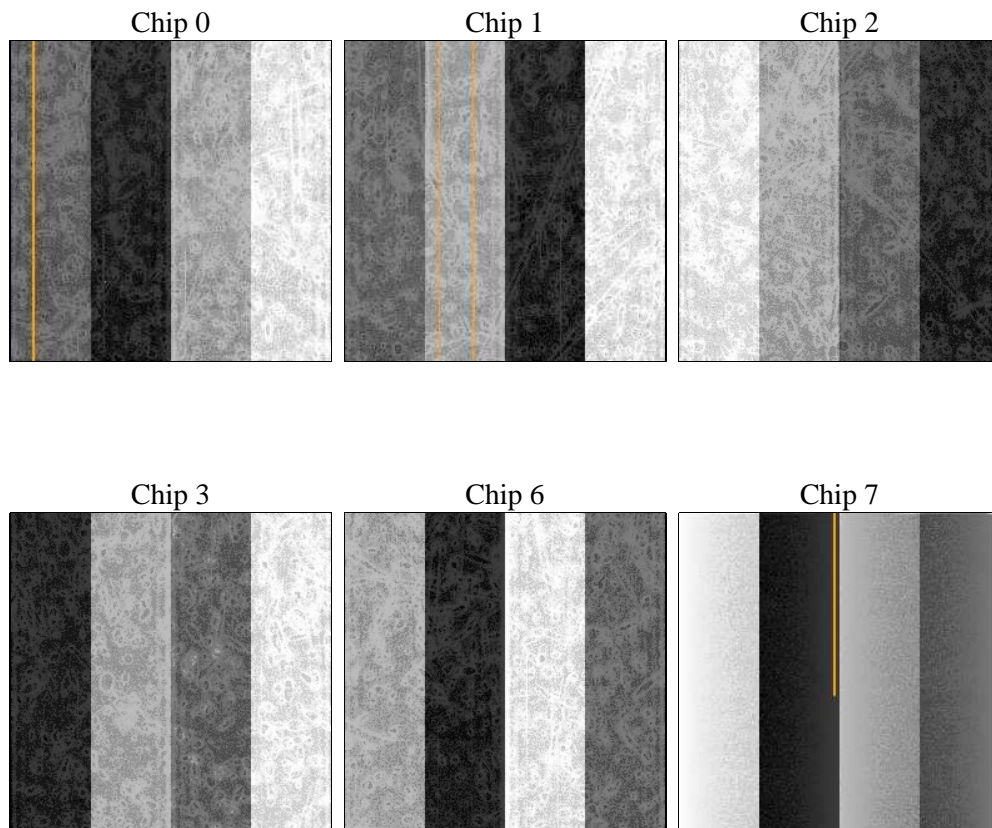
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7552.0000070184	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	7551.9163715392	Sum of GTIs [s]
date	2012-09-28T06:38:24	Date and time of file creation	ontime1	7551.9574414492	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	7551.9984814525	Sum of GTIs [s]
			ontime3	7552.0000070184	Sum of GTIs [s]
			ontime6	7552.0000070184	Sum of GTIs [s]
			ontime7	7552.0000070184	Sum of GTIs [s]
			l1events	324753	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	43373	45460	48021	75129	49635	63135	grade 0 events	2719	3237	3261	25753	2327	2520
rejected events	37228	38394	41550	43085	43876	37104		6%	7%	6%	34%	4%	3%
rejected %	85%	84%	86%	57%	88%	58%	grade 1 events	21	25	25	248	31	66
								0%	0%	0%	0%	0%	0%
							grade 2 events	1285	1348	1171	3102	1105	5114
								2%	2%	2%	4%	2%	8%
							grade 3 events	592	645	508	1008	562	2341
								1%	1%	1%	1%	1%	3%
							grade 4 events	543	660	540	1014	557	2297
								1%	1%	1%	1%	1%	3%
							grade 5 events	1753	1848	1564	1972	2208	6013
								4%	4%	3%	2%	4%	9%
							grade 6 events	1010	1183	999	1192	1213	13778
								2%	2%	2%	1%	2%	21%
							grade 7 events	35450	36514	39953	40840	41632	31006
								81%	80%	83%	54%	83%	49%

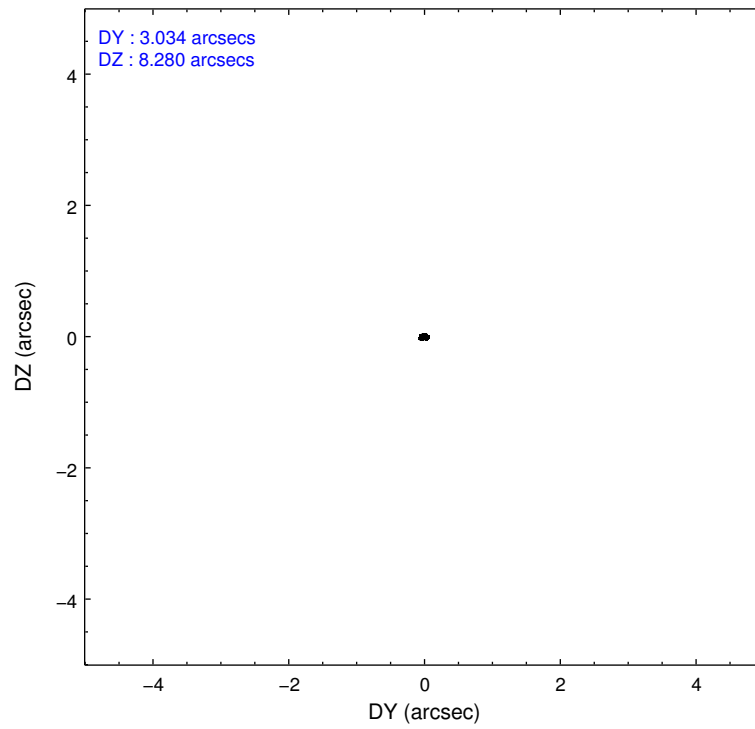
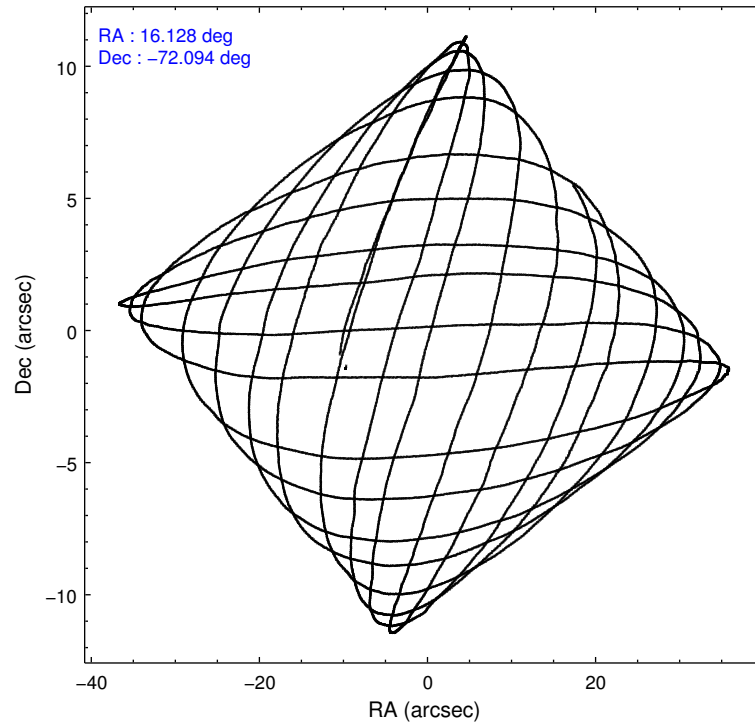


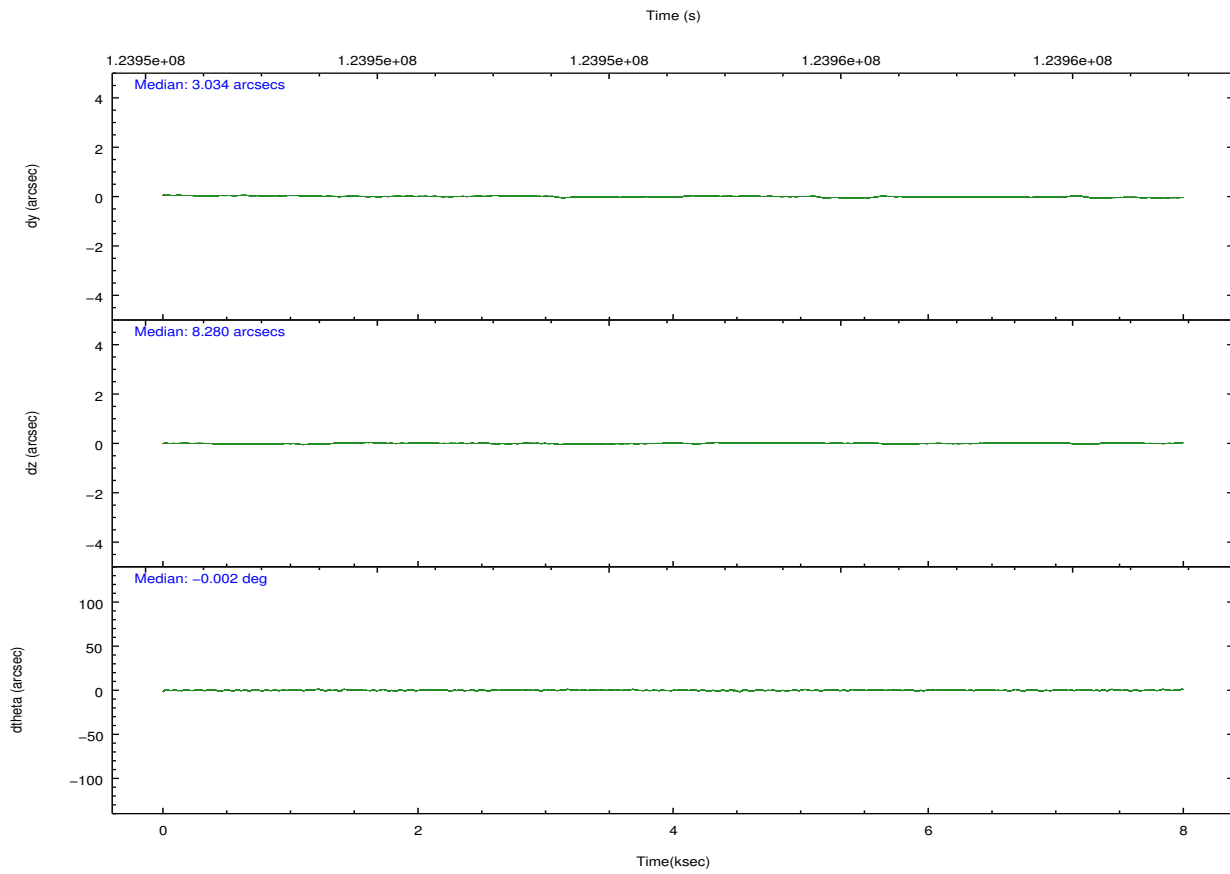
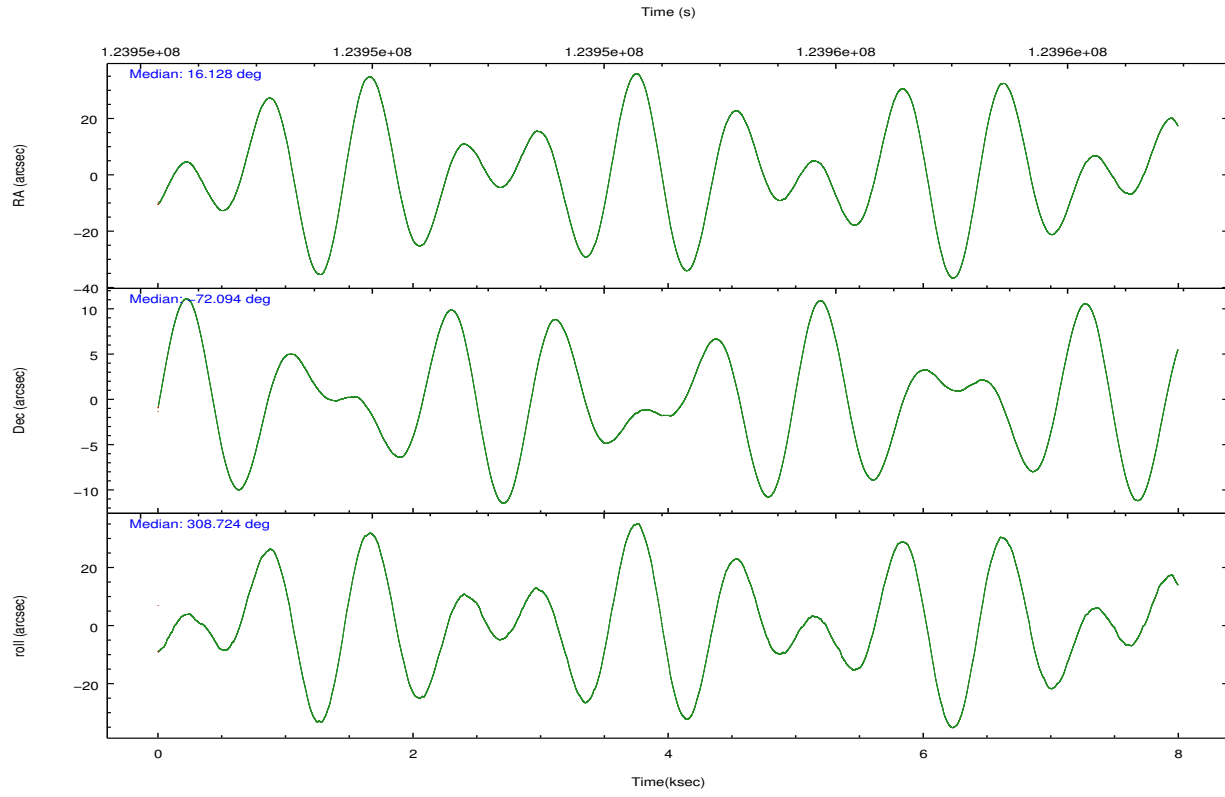
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	16.044461	16.12765528551121
[deg] Pointing Dec	-72.084029	-72.09391736672269
[deg] Pointing Roll	308.440188	308.728040566561
[s] Window start time (MET)	123552064.184000	123552064.184000
[s] Window stop time (MET)	126144064.184000	126144064.184000
[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)	123950749.184000	123950373.14547
Observation start date	2001-12-05T14:44:45	2001-12-05T14:39:33
[s] Observation end time (MET)	123958549.184000	123958682.8208
Observation end date	2001-12-05T16:54:45	2001-12-05T16:58:02
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



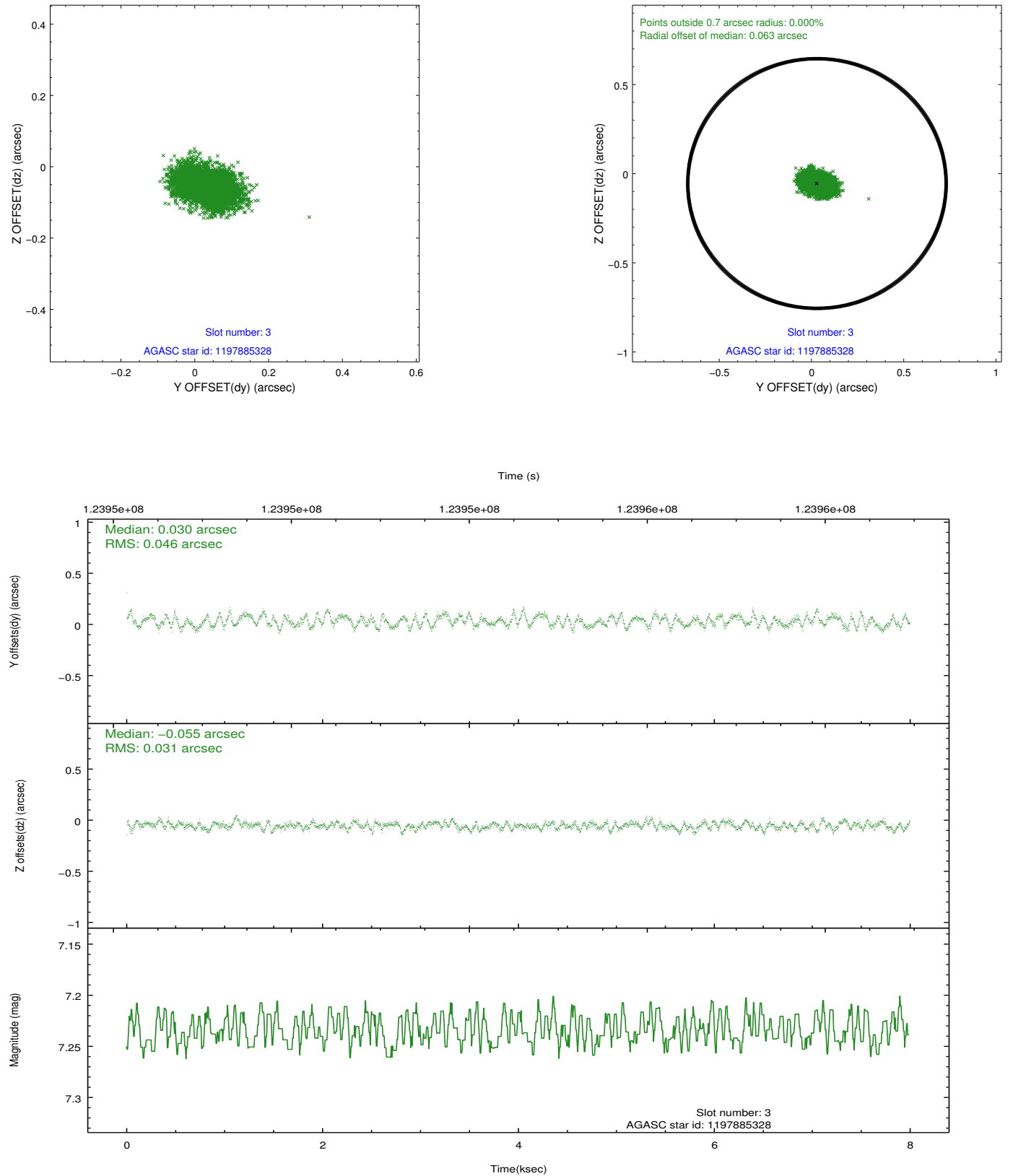


### Slot Statistics

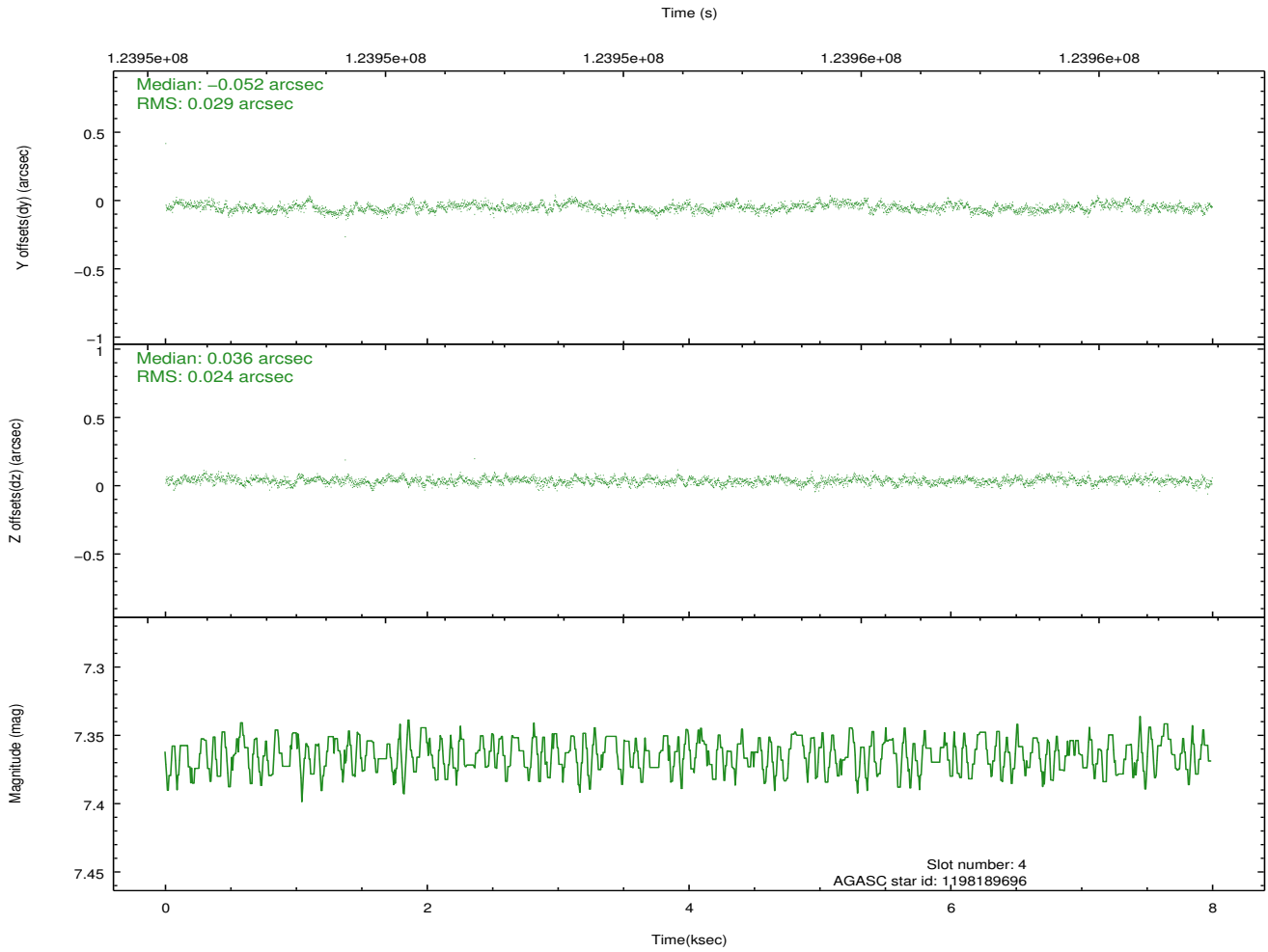
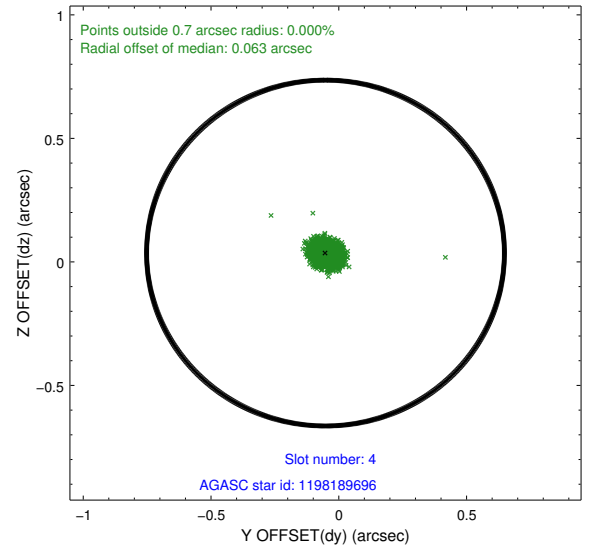
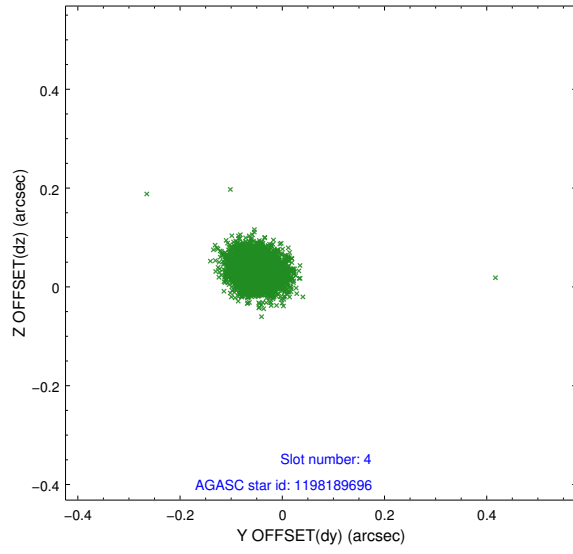
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	1951	-0.022	0.061	0.006	0.010	0.000000	0.000000	936.73	-831.65
1	FID	ACIS-I-5	7.23	1951	-0.050	0.038	0.006	0.010	0.000000	0.000000	-1811.00	1065.48
2	FID	ACIS-I-6	7.26	1951	-0.019	-0.029	0.007	0.011	0.000000	0.000000	401.53	1710.70
3	GUIDE	1197885328	7.23	3900	0.030	-0.055	0.060	0.093	16.283090	-71.733943	-819.64	994.25
4	GUIDE	1198189696	7.36	3900	-0.052	0.036	0.039	0.062	15.223750	-72.697522	1187.95	-2064.63
5	GUIDE	1197750936	7.56	3900	0.015	-0.075	0.042	0.067	15.387940	-71.549550	-1968.88	607.10
6	GUIDE	1198283128	8.01	3901	-0.106	0.085	0.048	0.080	17.272580	-72.642428	2404.16	-224.59
7	GUIDE	1197878768	9.63	3887	0.111	0.008	0.119	0.186	16.656786	-71.304581	-1755.63	2295.74

## 2.4 Star Slots

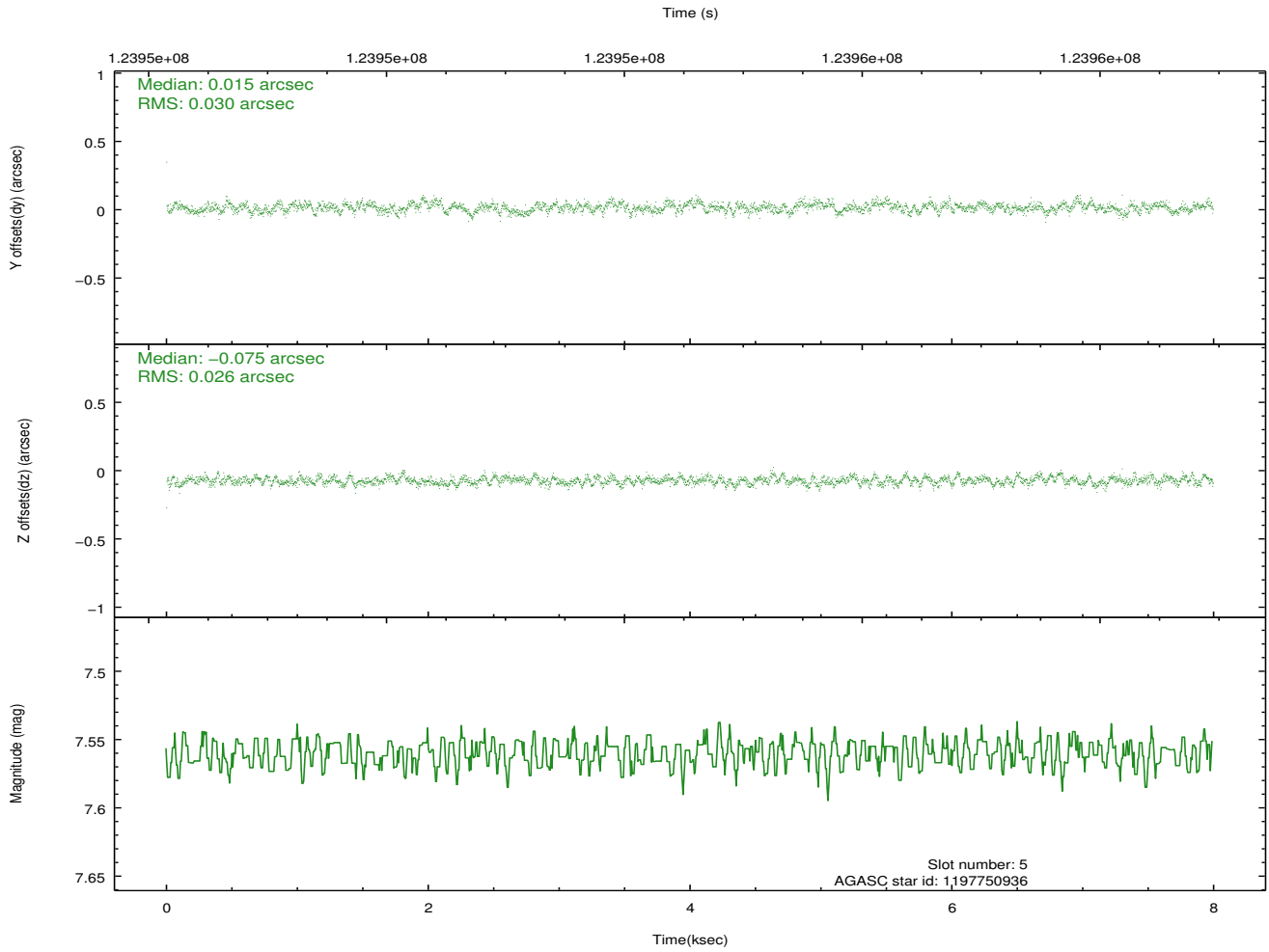
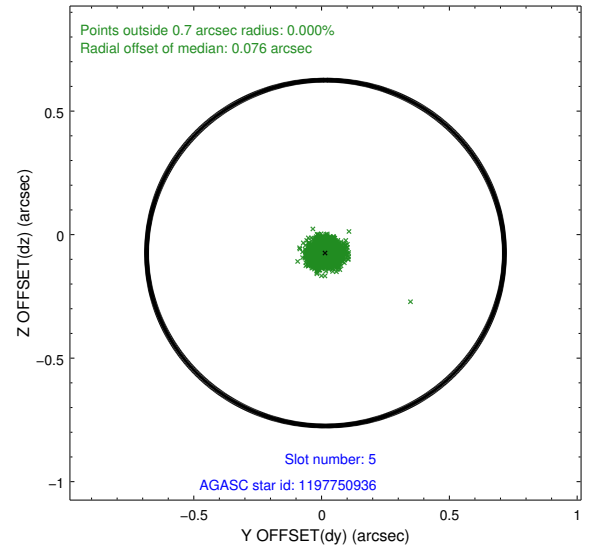
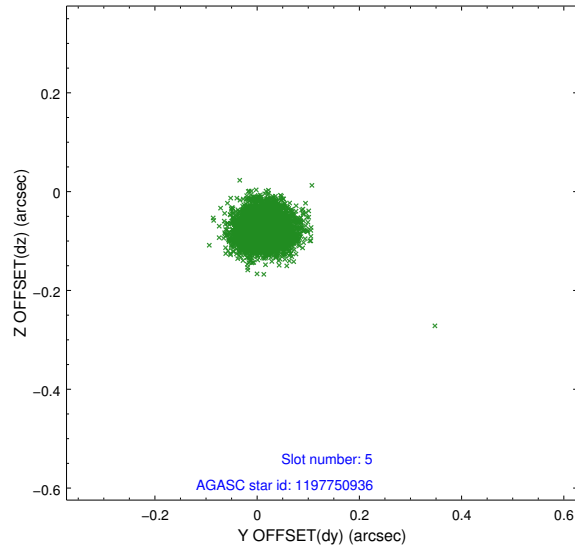
### 2.4.1 Slot 3



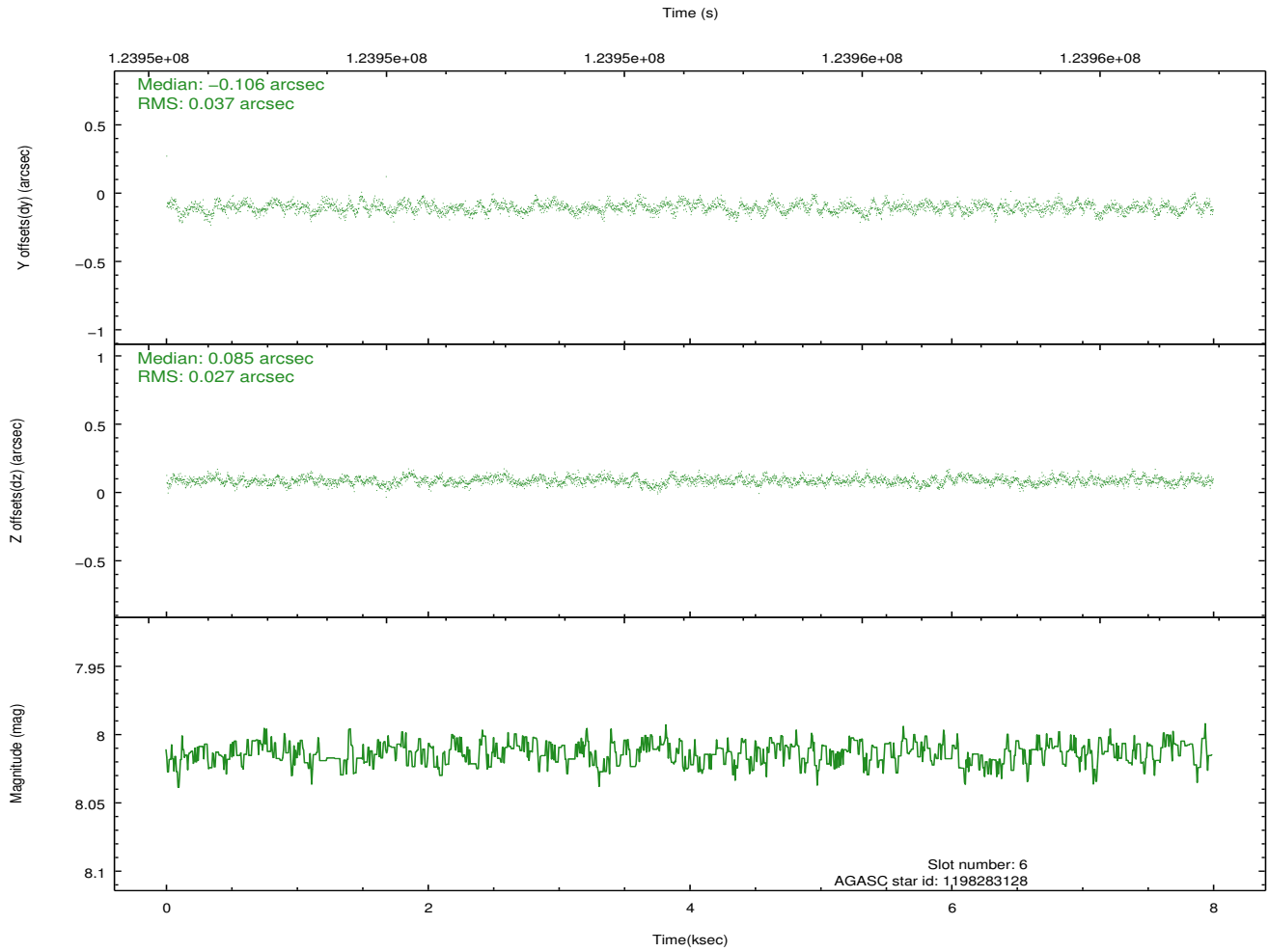
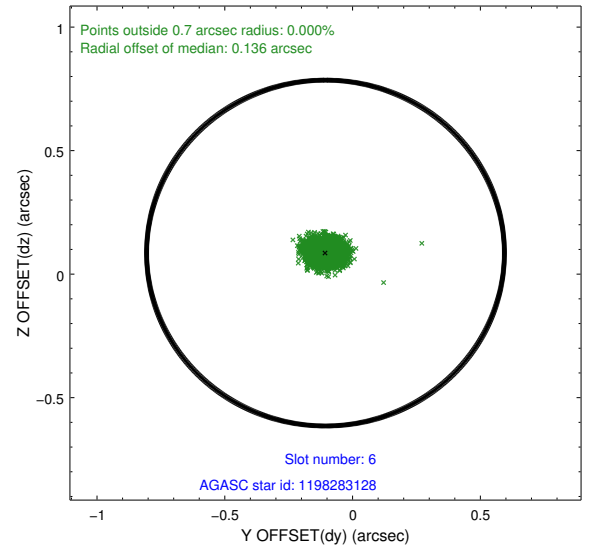
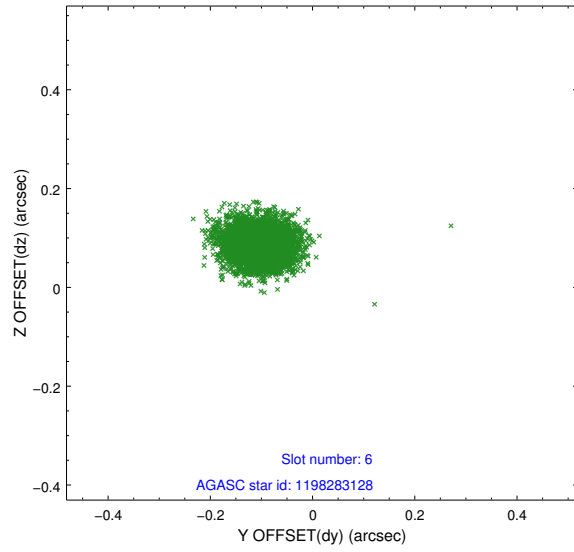
## 2.4.2 Slot 4



### 2.4.3 Slot 5

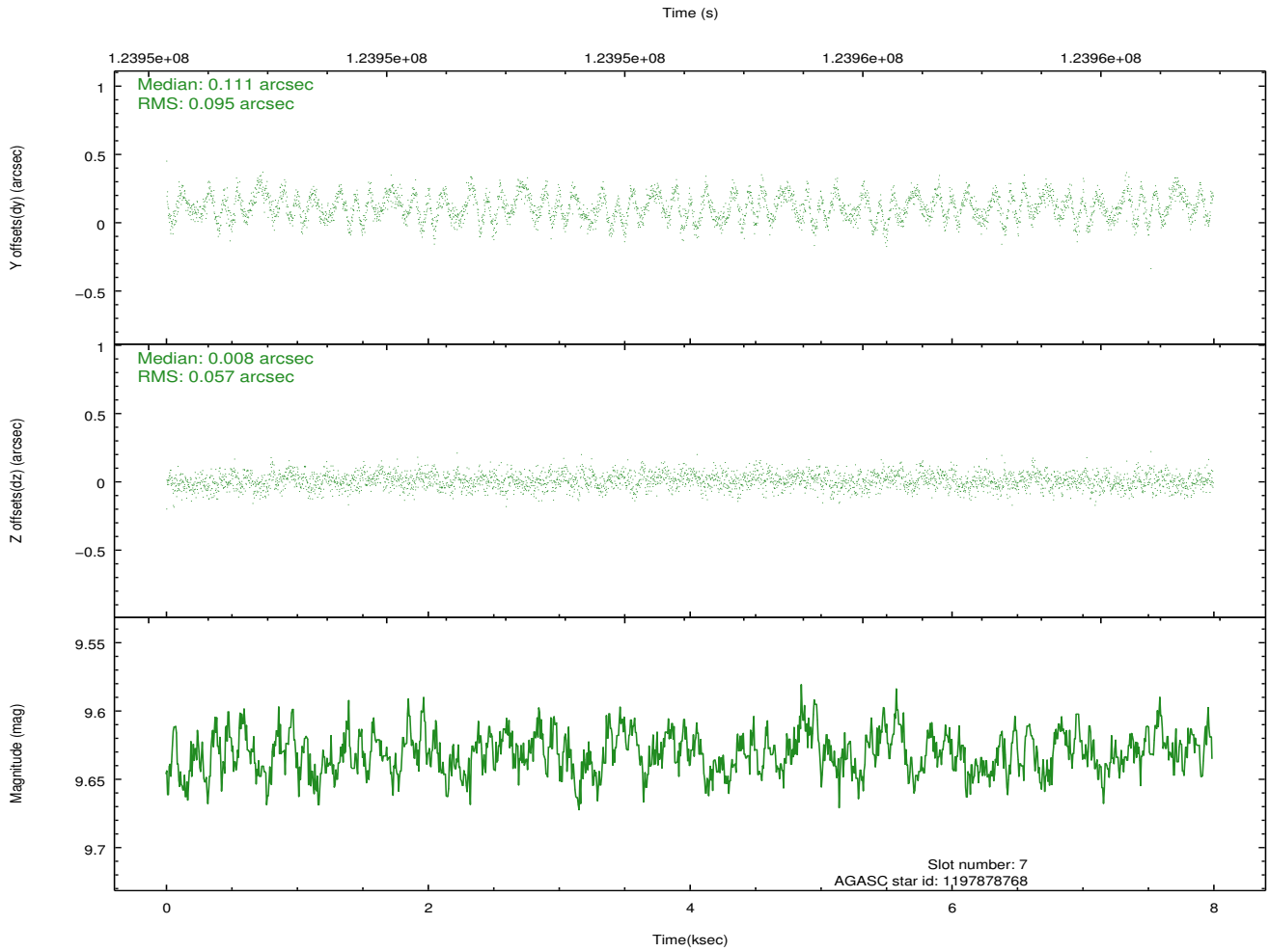
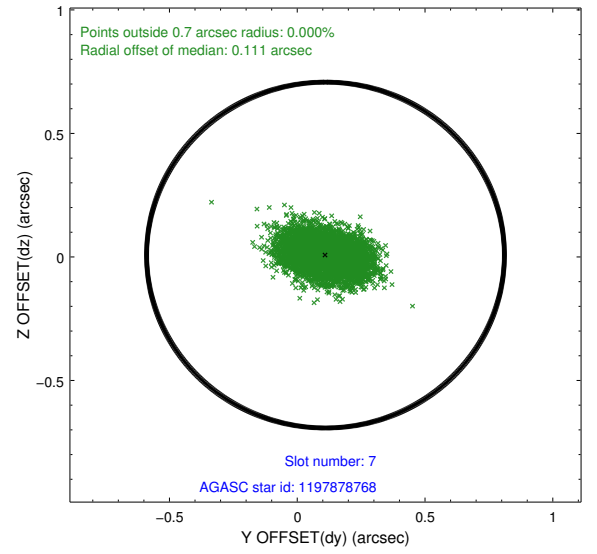
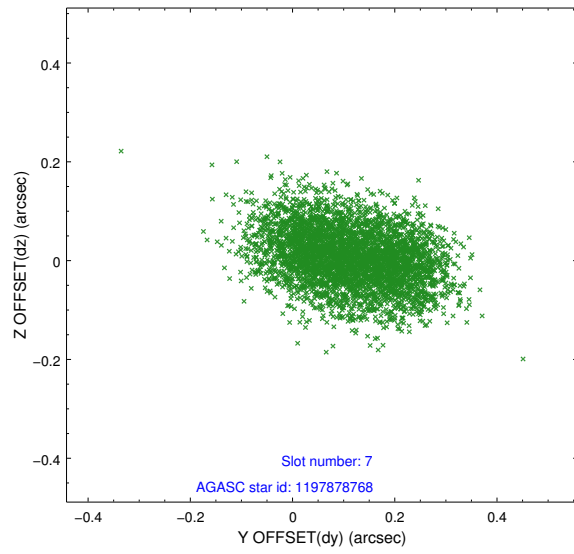


## 2.4.4 Slot 6



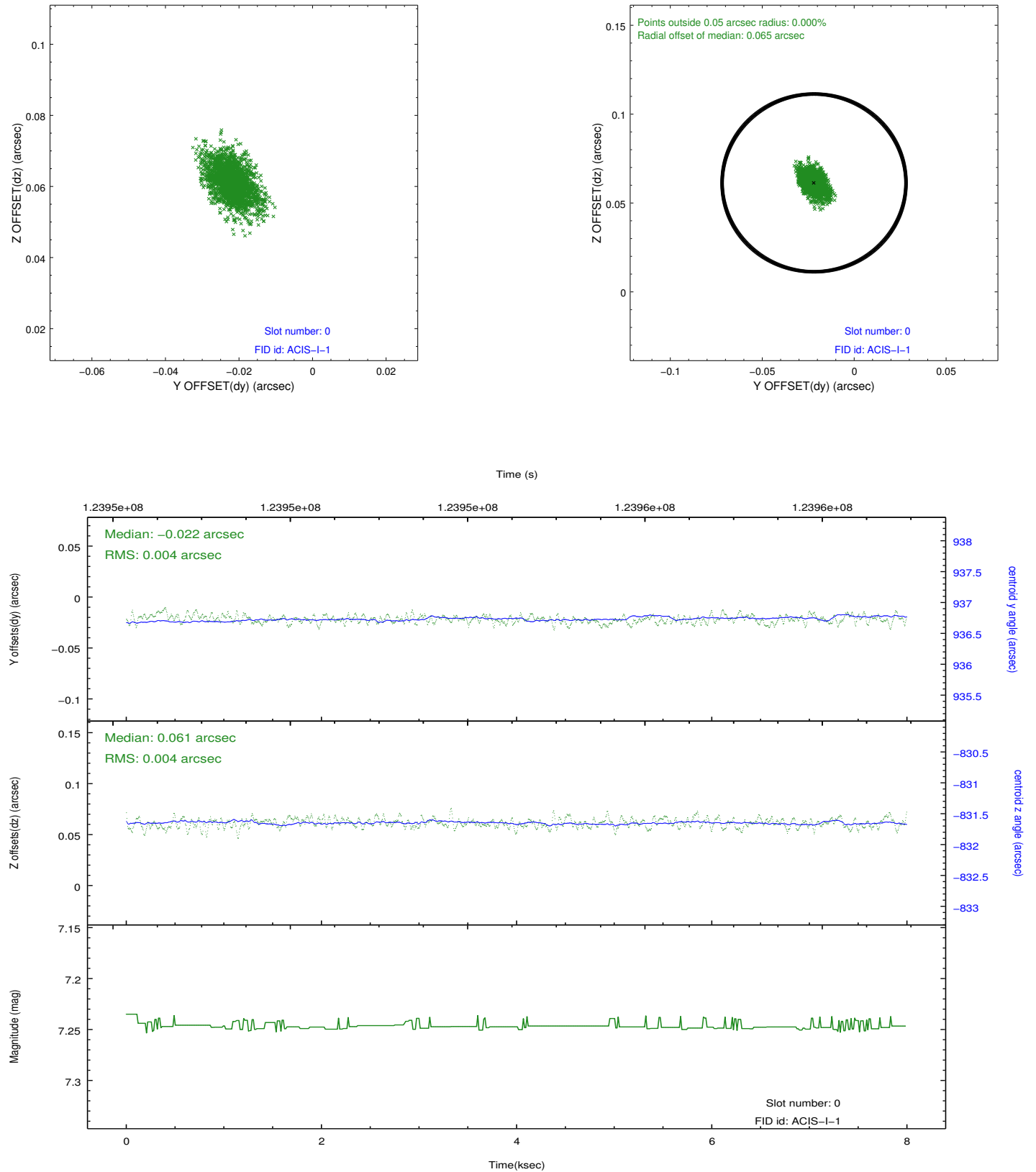


## 2.4.5 Slot 7

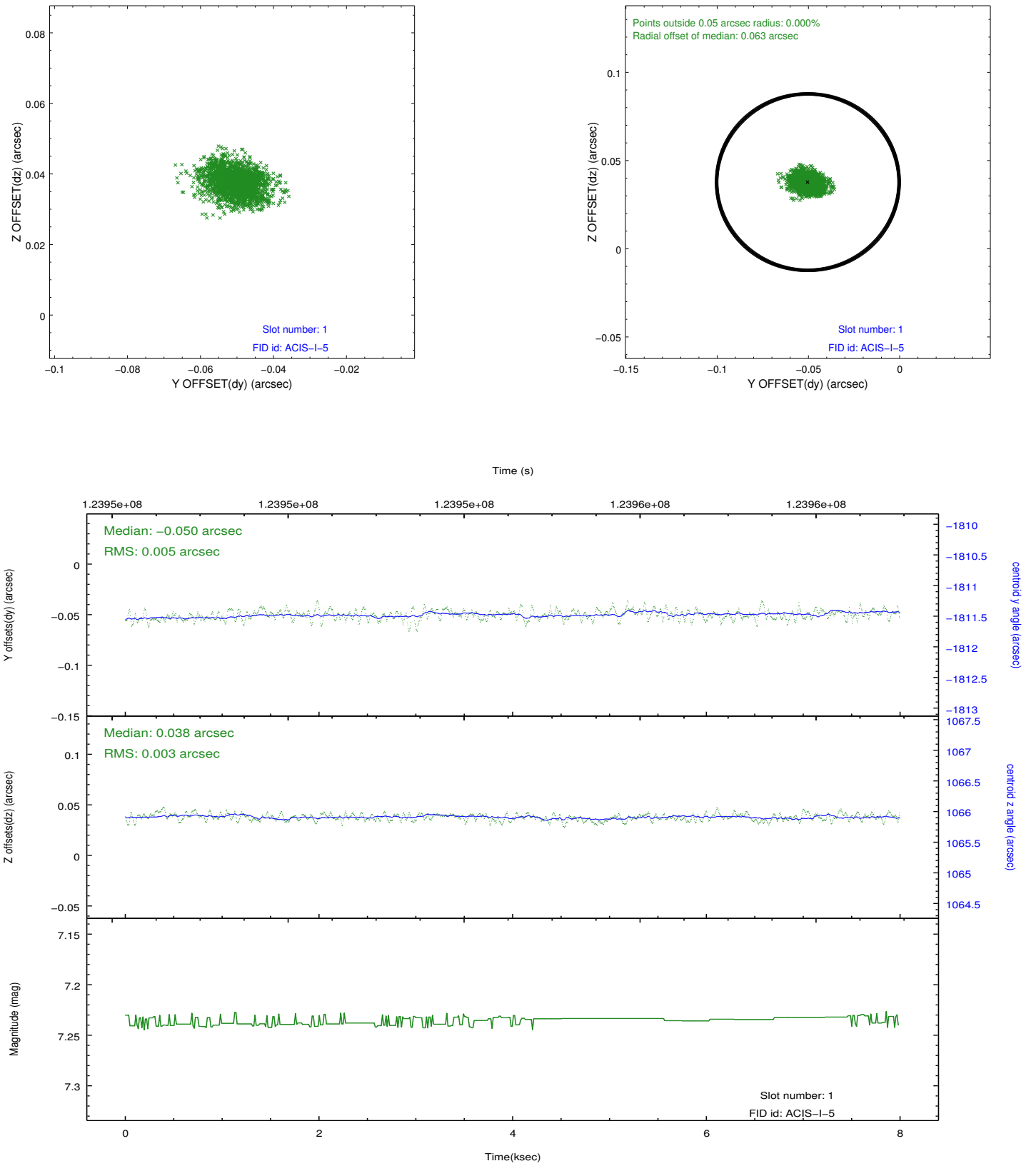


## 2.5 FID Slots

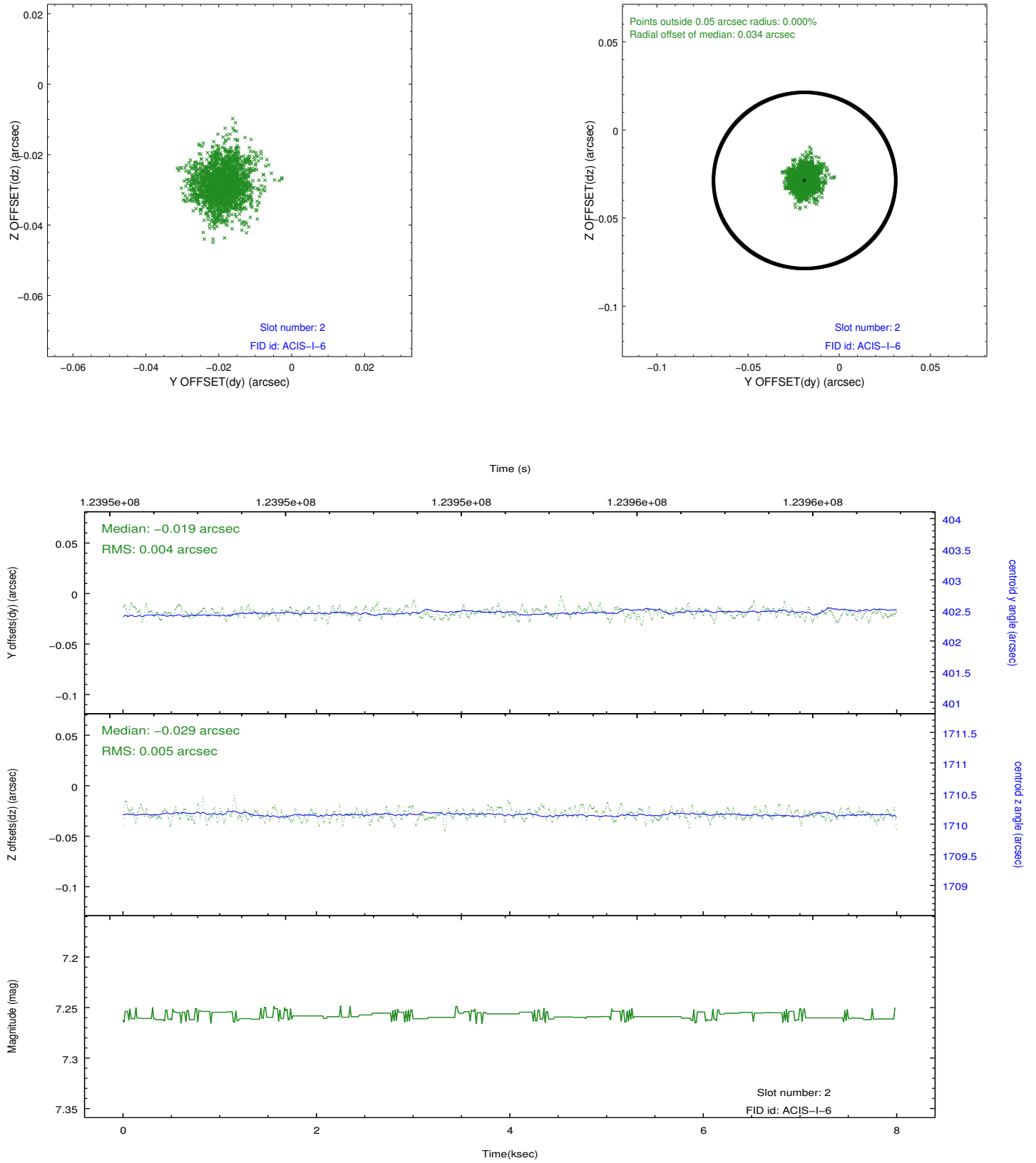
### 2.5.1 Slot 0



## 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)	2012.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.555

### A.2 Comments

Window constraint met.