

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5152 - L2 Version 3  
Chandra X-Ray Center

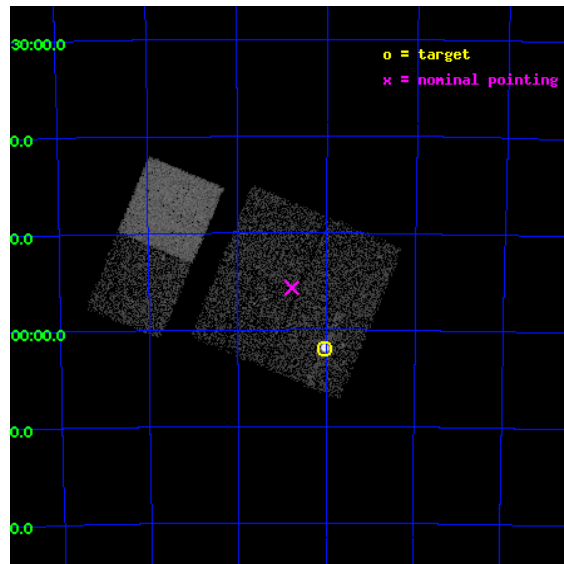
L2 Processing Date : Nov 9 2012

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# 1 Front

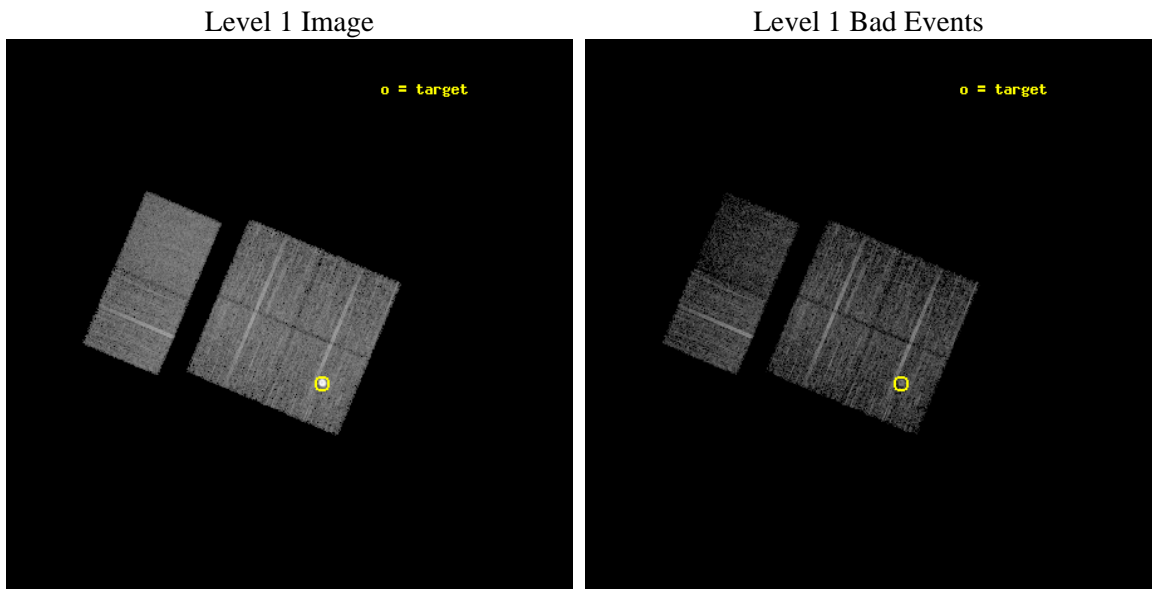
seq_num	590350	Sequence number
obs_id	5152	Observation id
title	AO5A ACIS-I Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[S3,-120,-5,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.195279750264	Nominal RA [deg]
dec_nom	-71.928047041292	Nominal Dec [deg]
roll_nom	292.85436783158	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8079.723311156	Sum of GTIs [s]
livetime	7977.4129895649	Livetime [s]
ontime0	8079.723311156	Sum of GTIs [s]
ontime1	8079.7643511295	Sum of GTIs [s]
ontime2	8079.8053911328	Sum of GTIs [s]
ontime3	8079.8464311361	Sum of GTIs [s]
ontime6	8079.9285111427	Sum of GTIs [s]
ontime7	8079.8874711394	Sum of GTIs [s]
l2events	58873	Number of level 2 events



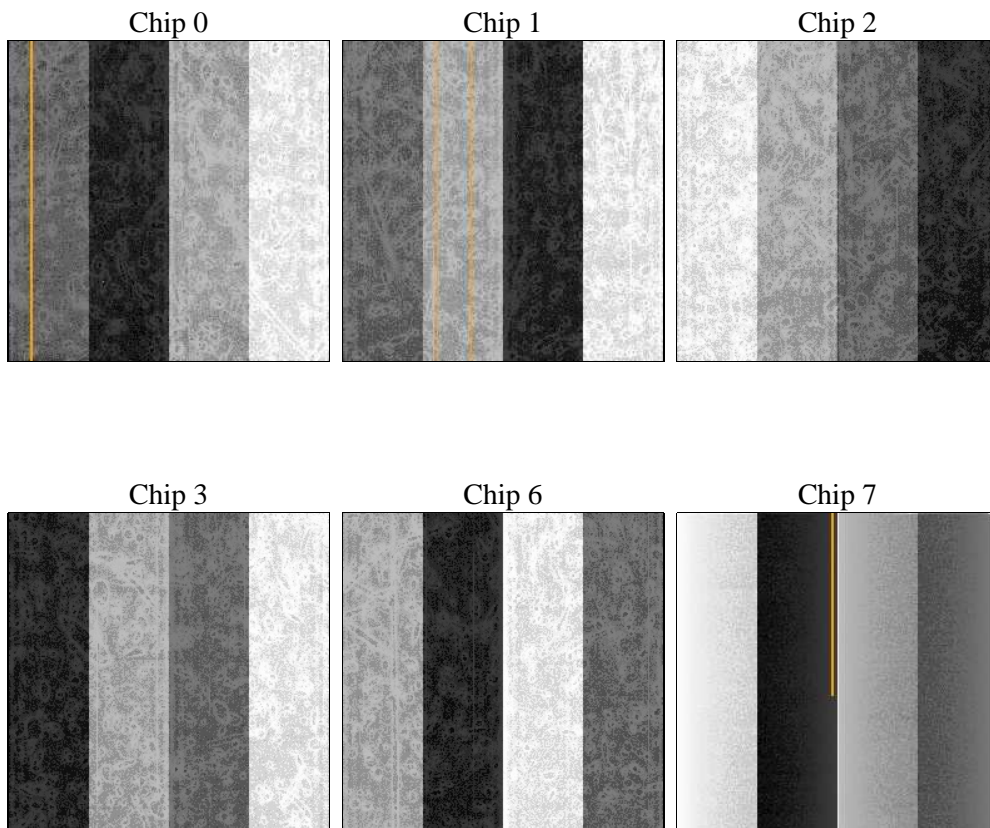
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8010.362000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	8079.723311156	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	8079.723311156	Sum of GTIs [s]
date	2012-11-09T07:41:31	Date and time of file creation	ontime1	8079.7643511295	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8079.8053911328	Sum of GTIs [s]
			ontime3	8079.8464311361	Sum of GTIs [s]
			ontime6	8079.9285111427	Sum of GTIs [s]
			ontime7	8079.8874711394	Sum of GTIs [s]
			l1events	248805	Number of level 1 events

### 2.1.4 Events

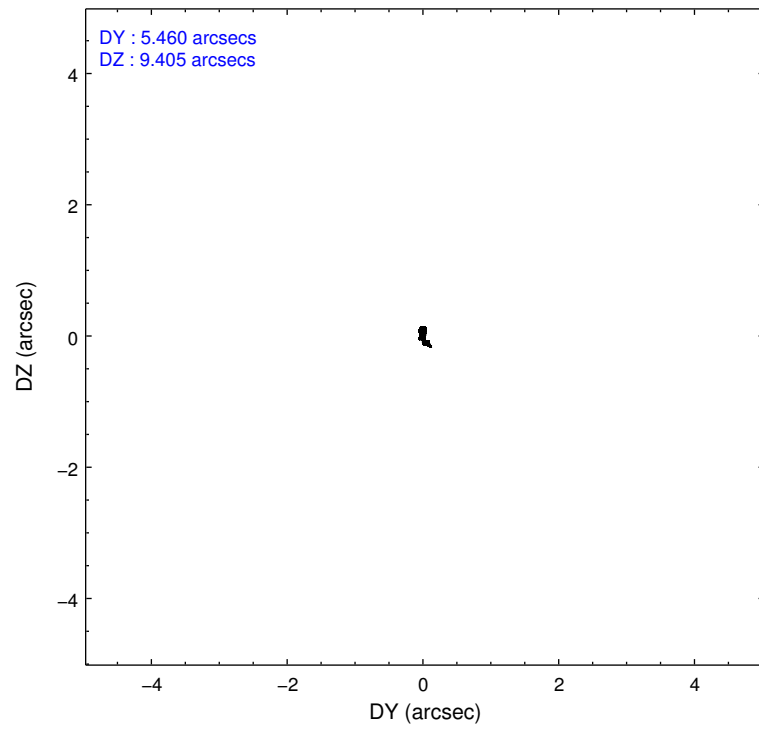
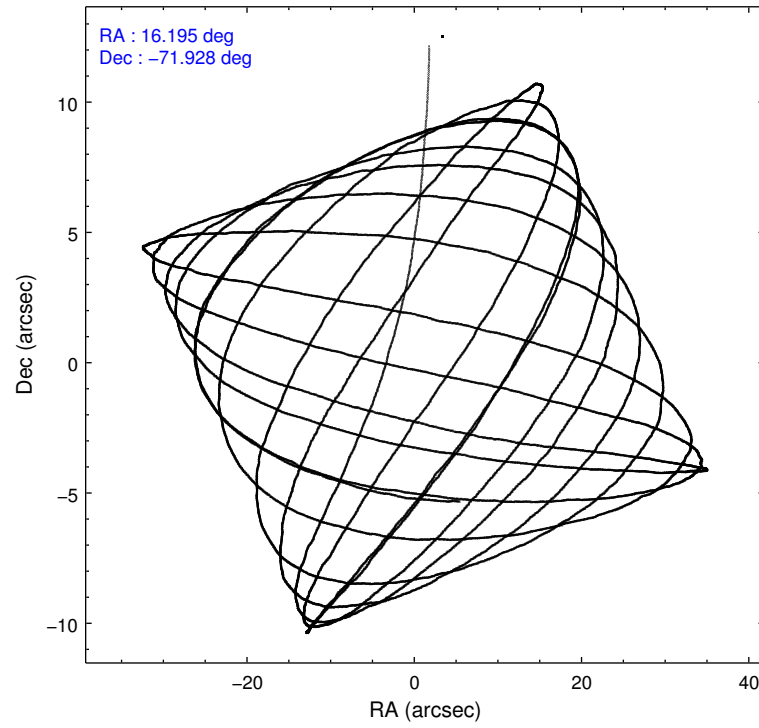
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	59962	34801	39771	37291	38475	38505	grade 0 events	22405	1452	1496	1325	1493	2176
rejected events	32496	30751	36050	33697	34464	18479		37%	4%	3%	3%	3%	5%
rejected %	54%	88%	90%	90%	89%	47%	grade 1 events	166	16	26	16	19	45
								0%	0%	0%	0%	0%	0%
							grade 2 events	2532	875	787	798	840	4060
								4%	2%	1%	2%	2%	10%
							grade 3 events	876	477	410	388	431	1914
								1%	1%	1%	1%	1%	4%
							grade 4 events	784	445	400	422	431	1915
								1%	1%	1%	1%	1%	4%
							grade 5 events	1183	1205	1075	1363	1360	3948
								1%	3%	2%	3%	3%	10%
							grade 6 events	883	801	631	667	818	9970
								1%	2%	1%	1%	2%	25%
							grade 7 events	31133	29530	34946	32312	33083	14477
								51%	84%	87%	86%	85%	37%

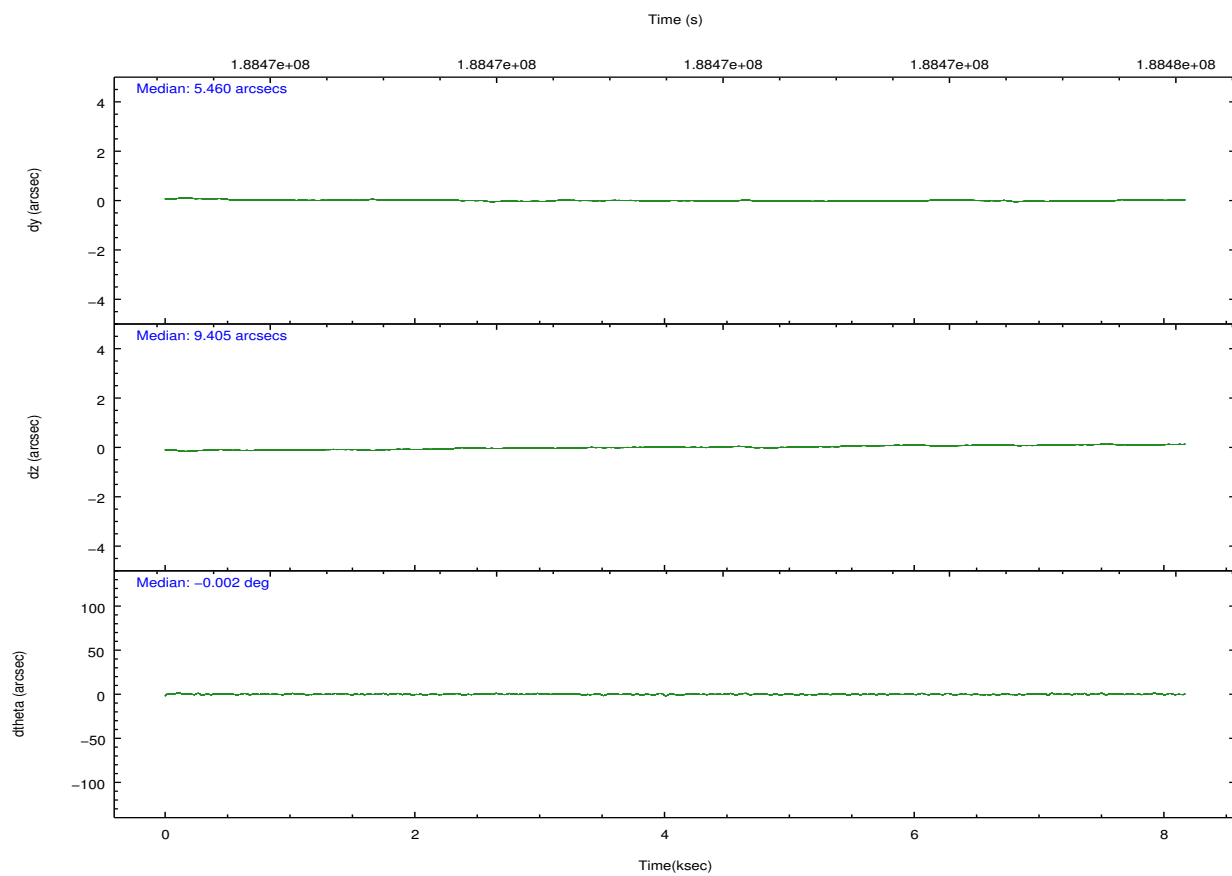
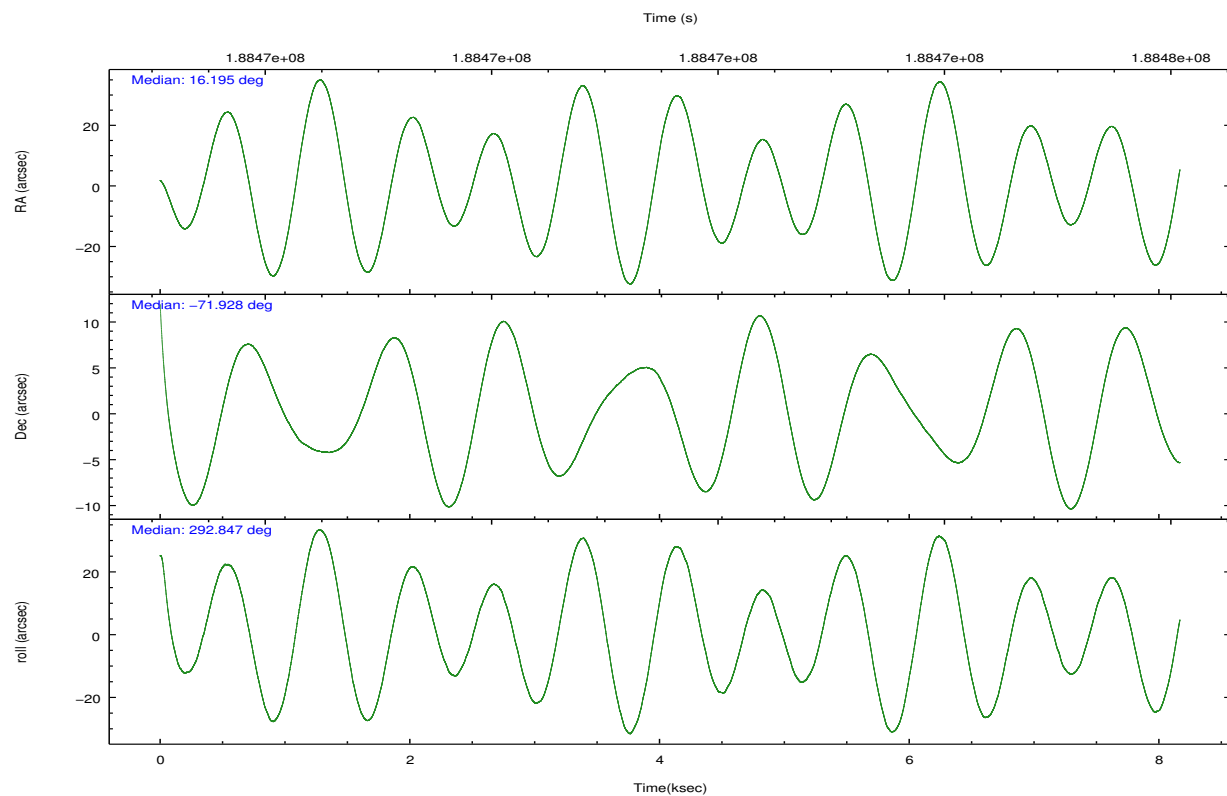


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	16.124908	16.19527975026426	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.911576	-71.92804704129198	Alternating exposures requested	N	N
[deg] Pointing Roll	292.578764	292.8543678315805	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	181353664.184000	181353664.184000			
[s] Window stop time (MET)	189216064.184000	189216064.184000			
[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)	188467647.184000	188466502.39911			
Observation start date	2003-12-22T08:06:23	2003-12-22T07:48:22			
[s] Observation end time (MET)	188475657.184000	188475971.86202			
Observation end date	2003-12-22T10:19:53	2003-12-22T10:26:11			
Read mode	TIMED	TIMED			

## 2.3 Aspect



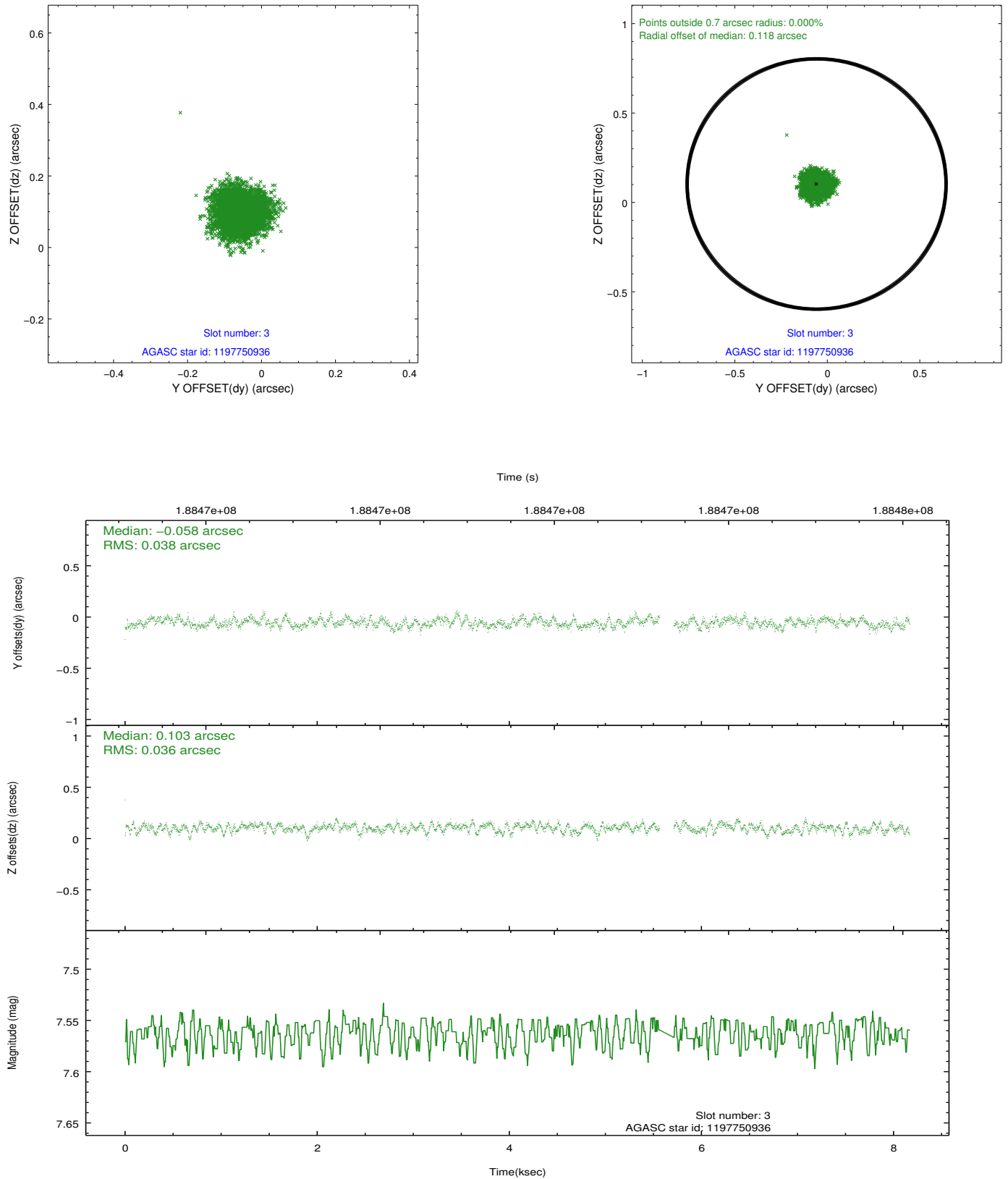


### Slot Statistics

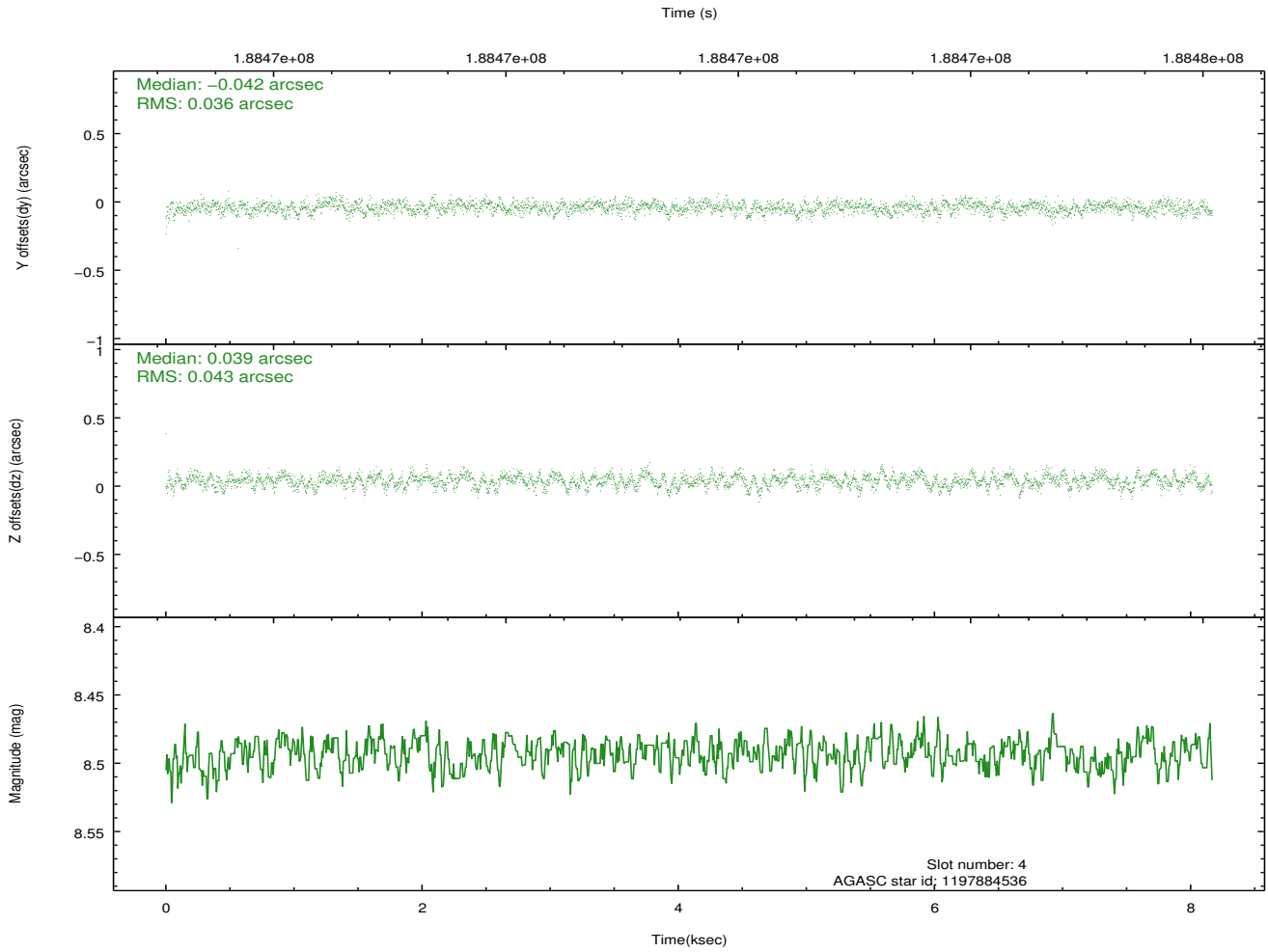
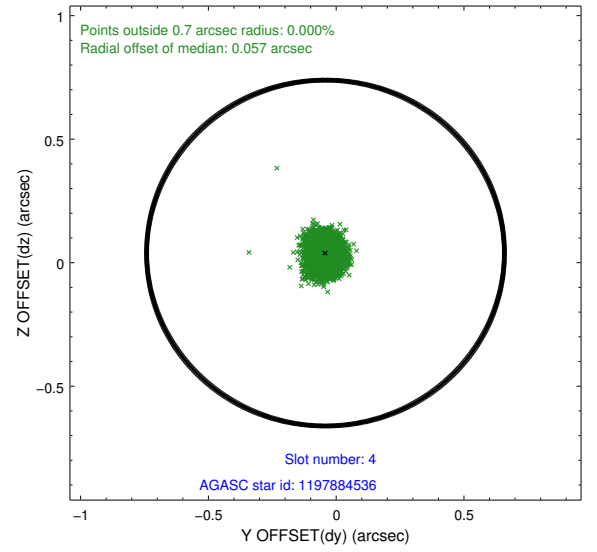
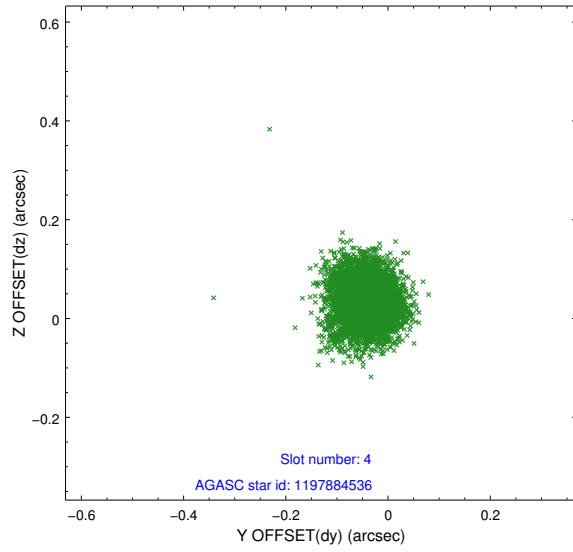
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	1993	-0.006	0.052	0.008	0.013	0.000000	0.000000	934.26	-832.81
1	FID	ACIS-I-5	7.23	1993	-0.135	0.029	0.006	0.009	0.000000	0.000000	-1813.61	1064.31
2	FID	ACIS-I-6	7.25	1993	0.049	-0.010	0.008	0.013	0.000000	0.000000	399.11	1709.56
3	GUIDE	1197750936	7.56	3913	-0.058	0.103	0.056	0.088	15.387940	-71.549550	-1520.61	-276.65
4	GUIDE	1197884536	8.49	3983	-0.042	0.039	0.060	0.096	17.160729	-71.835289	201.75	1175.20
5	GUIDE	1197884712	8.31	3985	0.079	0.028	0.057	0.090	16.087398	-72.252690	1118.69	-508.79
6	GUIDE	1197885328	7.24	3986	0.013	-0.147	0.049	0.078	16.283090	-71.733943	-521.13	410.61
7	GUIDE	1198189696	7.39	3985	0.004	-0.020	0.061	0.097	15.223750	-72.697522	2249.39	-1979.45

## 2.4 Star Slots

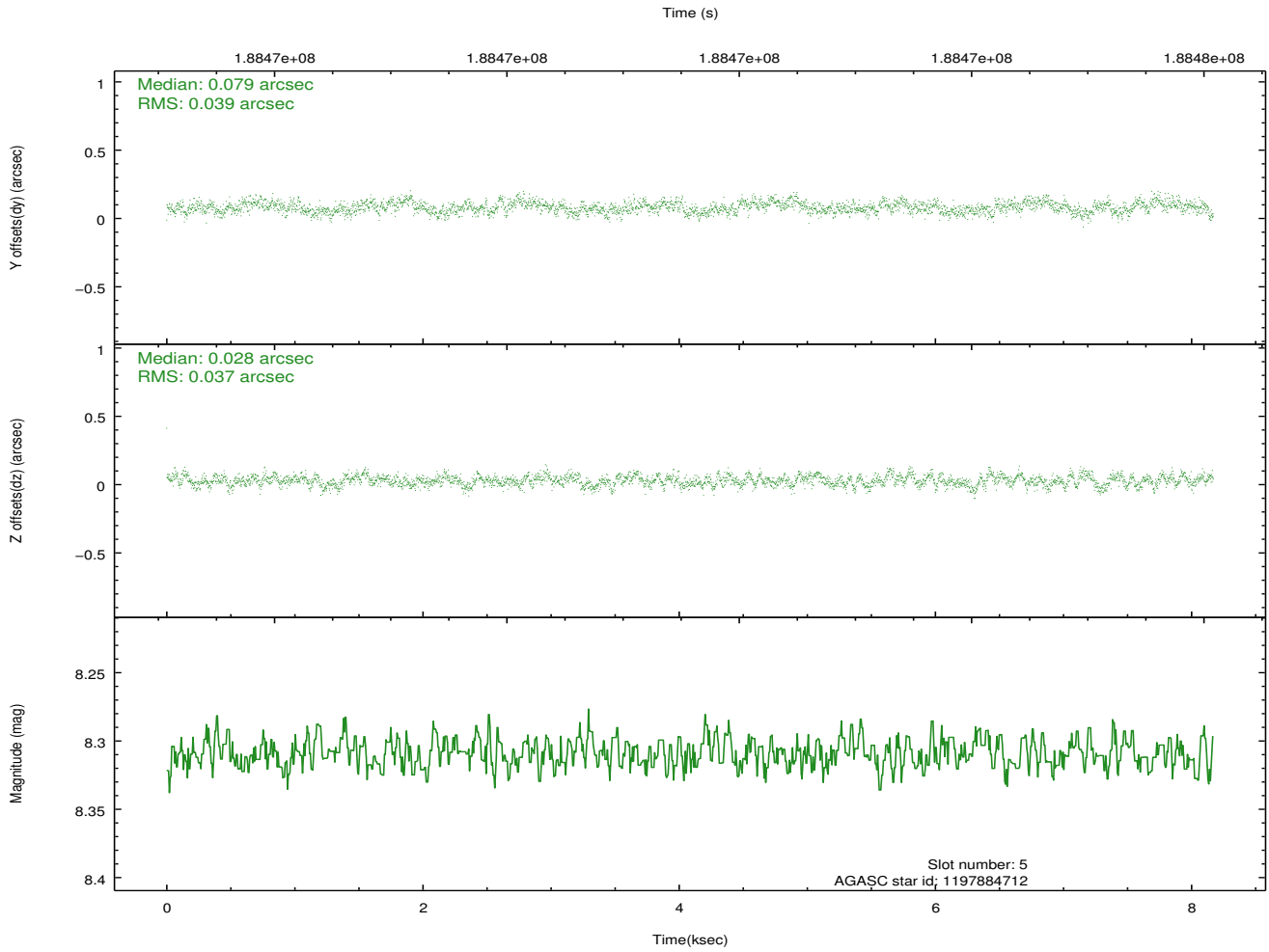
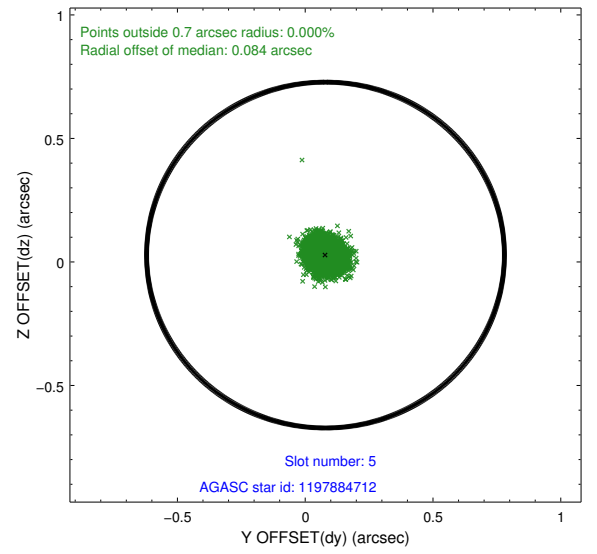
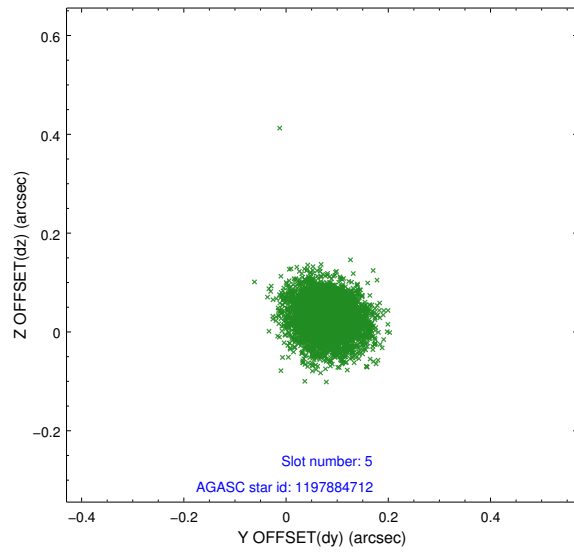
### 2.4.1 Slot 3



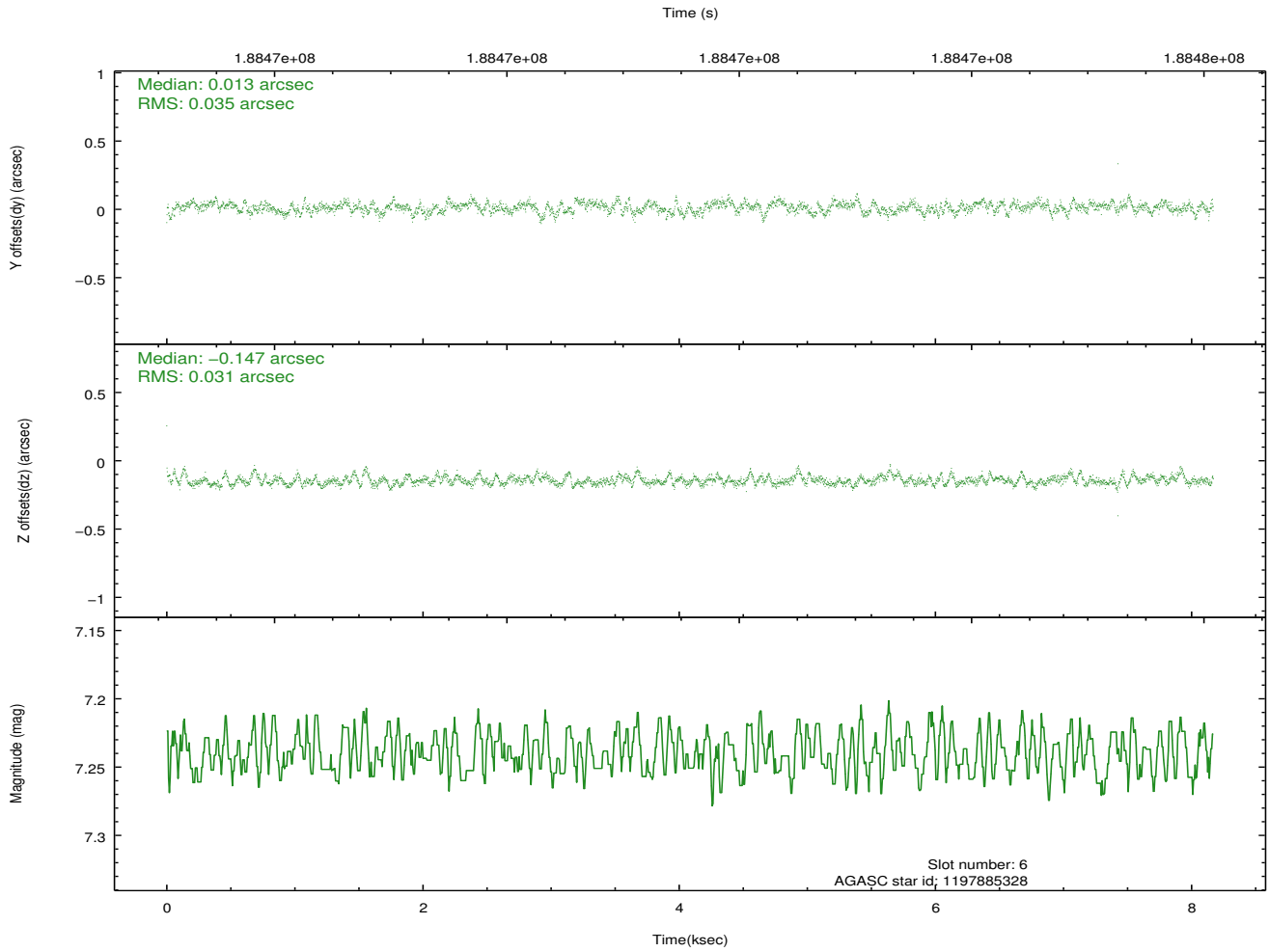
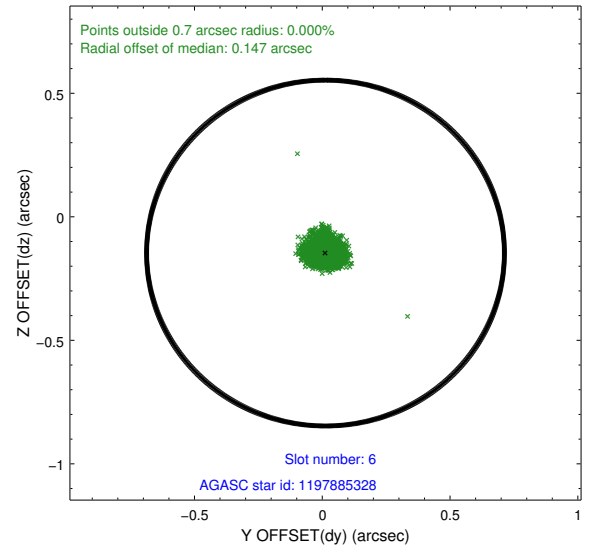
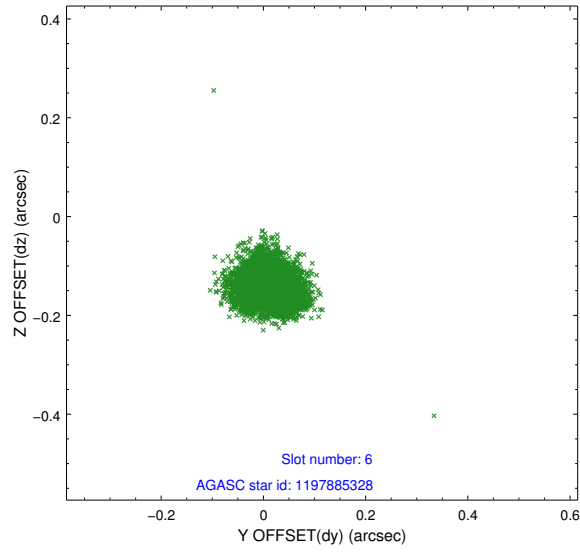
## 2.4.2 Slot 4



### 2.4.3 Slot 5

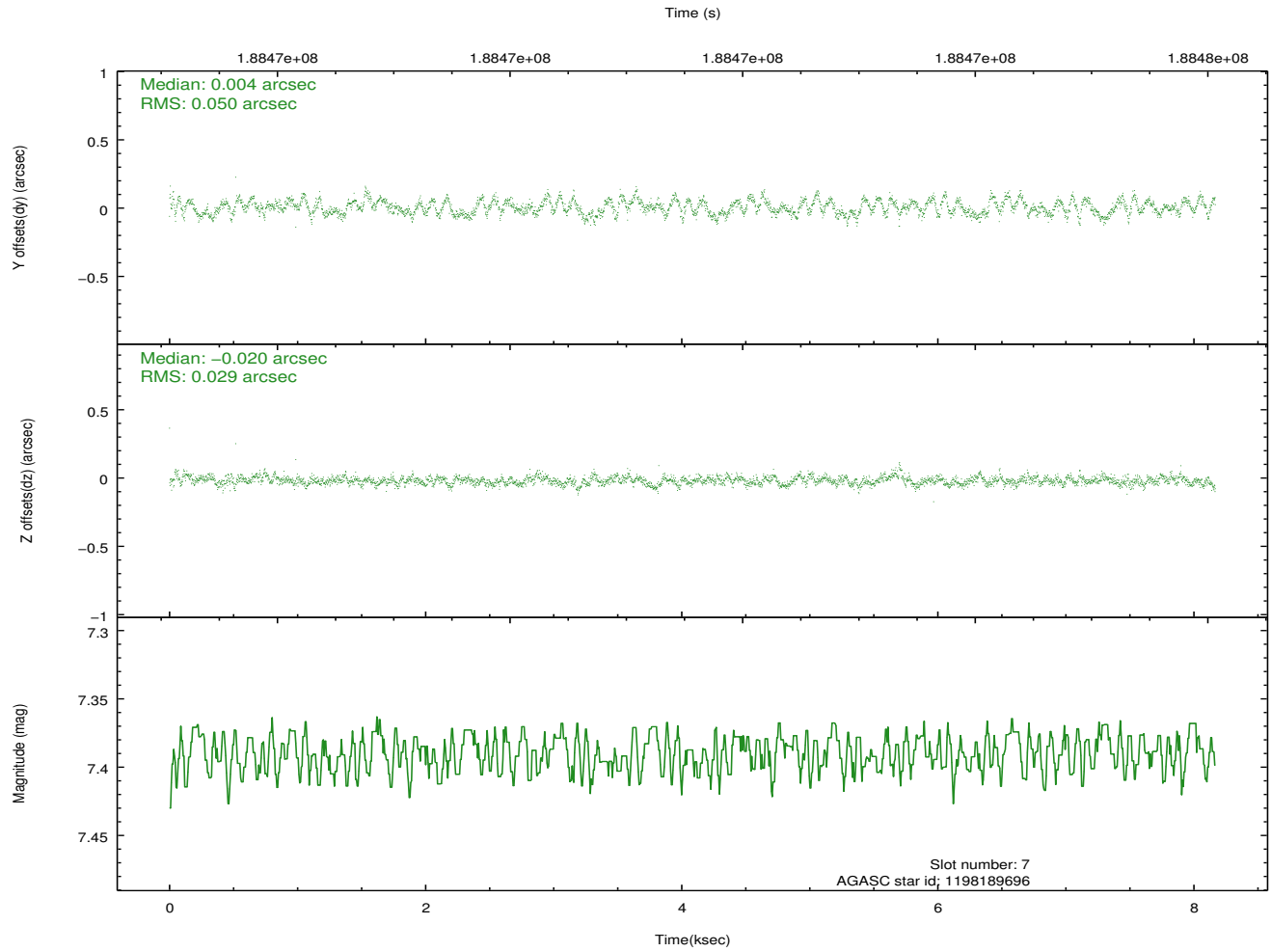
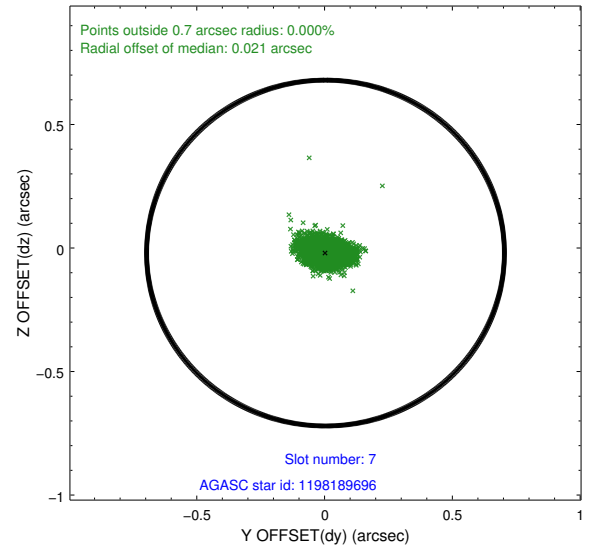
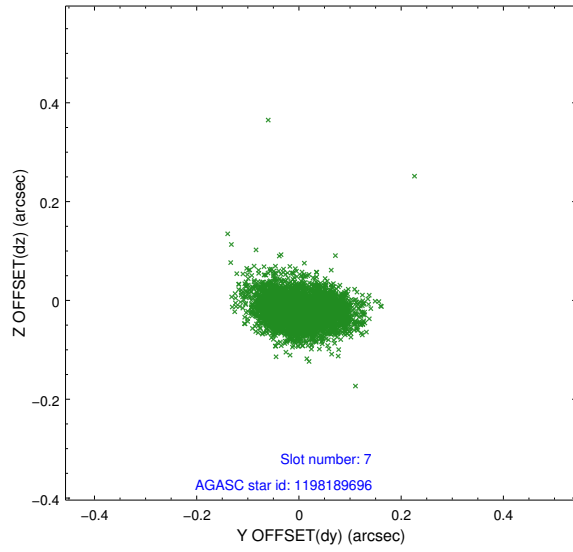


## 2.4.4 Slot 6



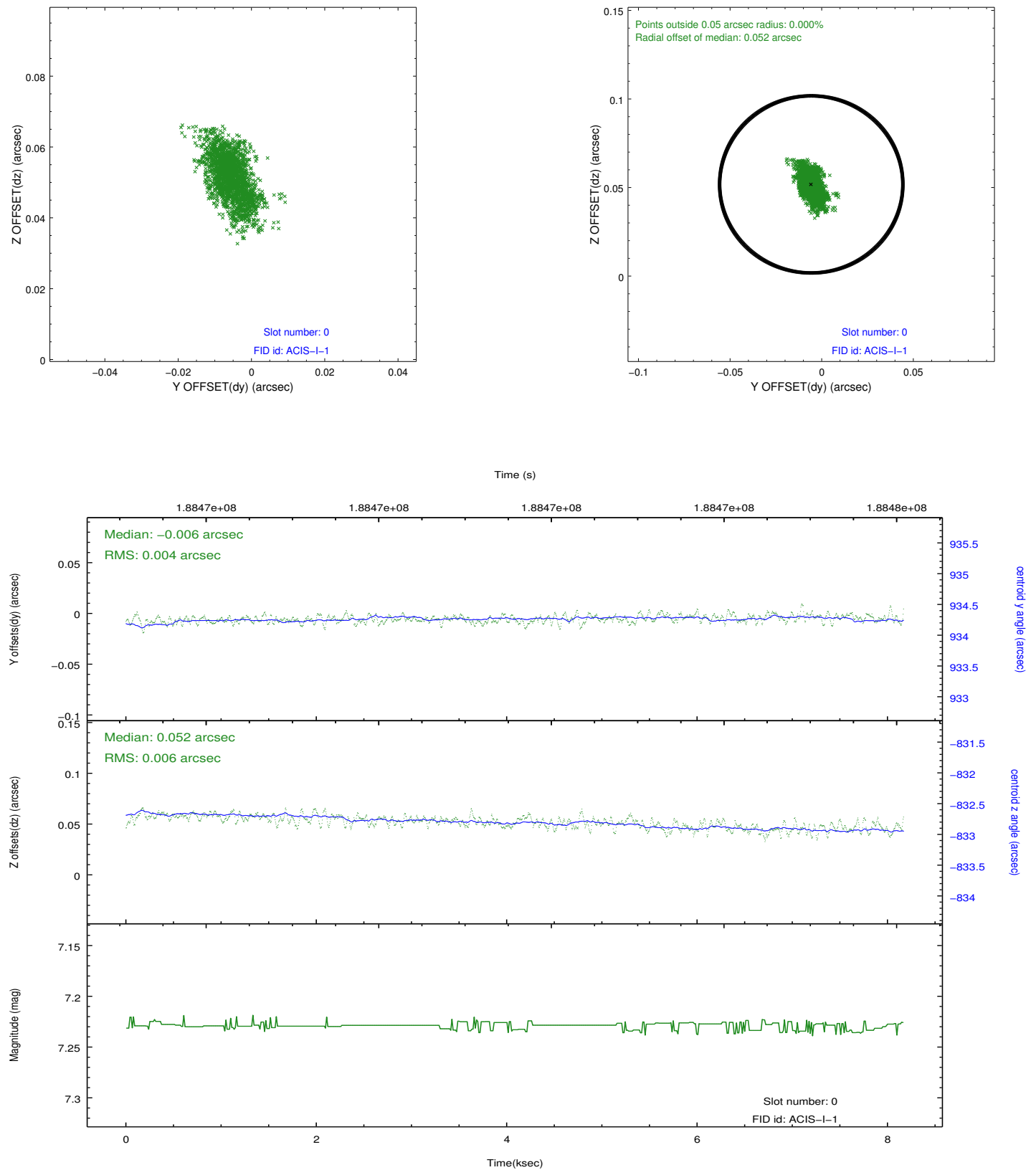


## 2.4.5 Slot 7

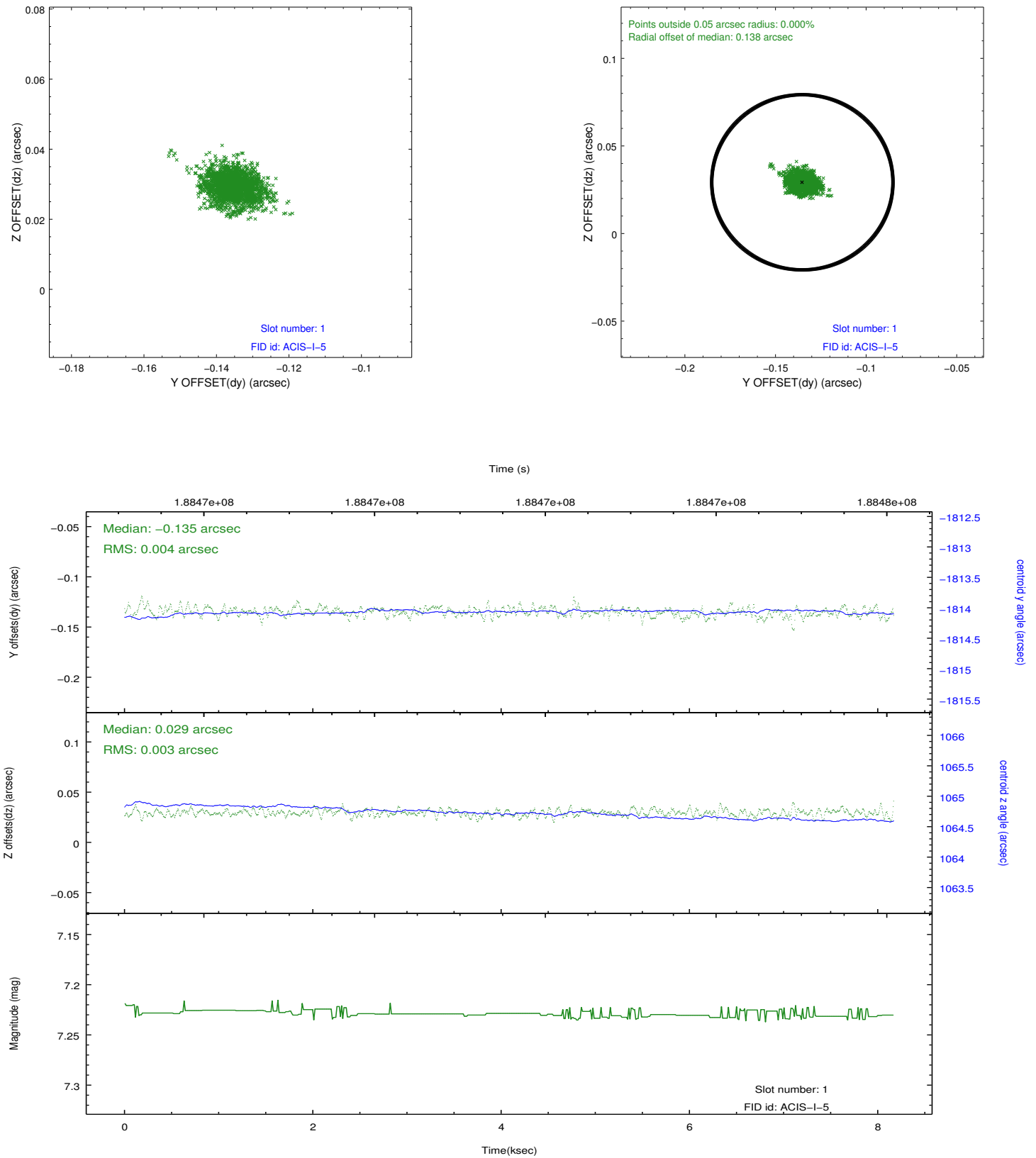


## 2.5 FID Slots

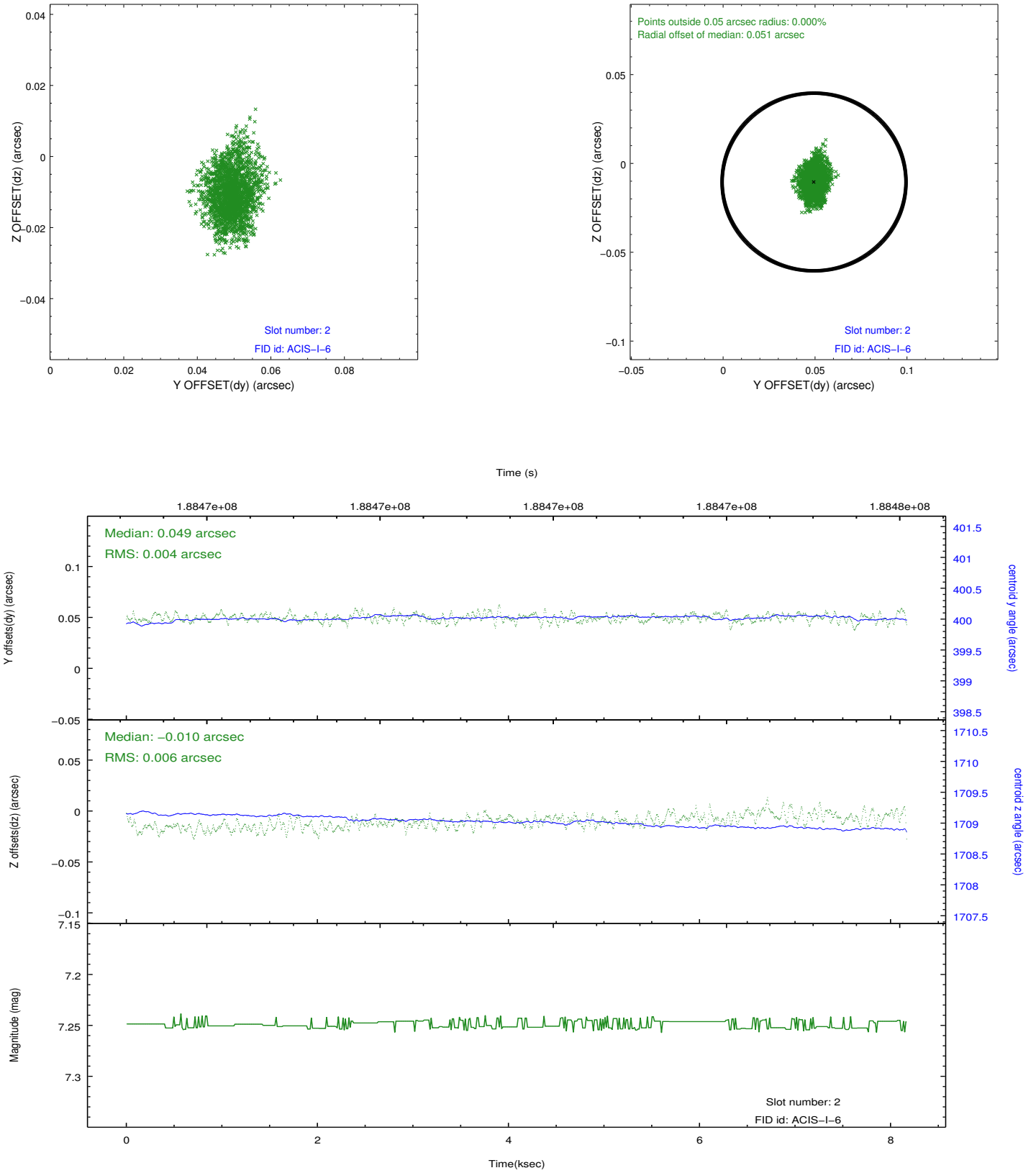
### 2.5.1 Slot 0



## 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)	2012.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.079

### A.2 Comments

Window constraint met. label says S3, snr lands on i0, presumed ok since observation for calibration