

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3545 - L2 Version 3  
Chandra X-Ray Center

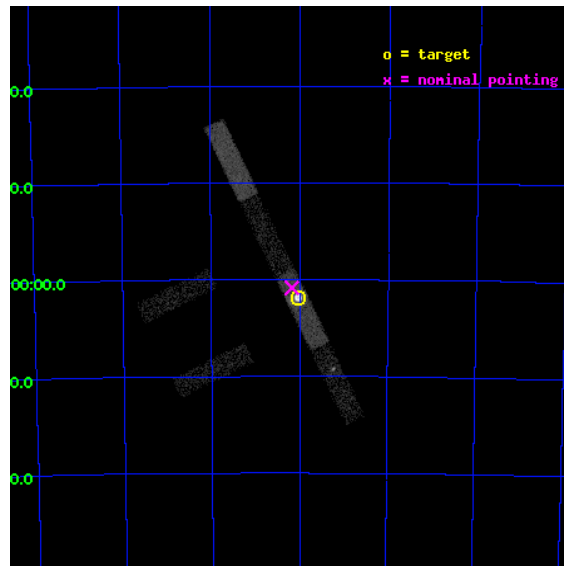
L2 Processing Date : Nov 3 2012

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# 1 Front

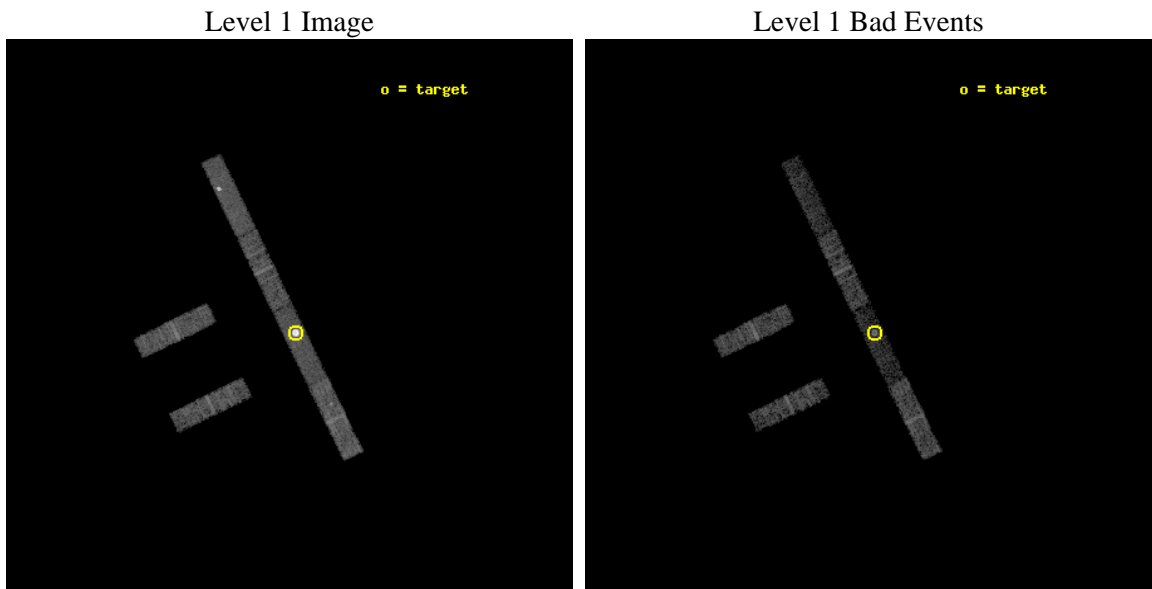
seq_num	590300	Sequence number
obs_id	3545	Observation id
title	AO4B ACIS-S CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[S3,-120,-1,0,0]	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.044141445301	Nominal RA [deg]
dec_nom	-72.014188433753	Nominal Dec [deg]
roll_nom	64.077015220143	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8155.3999557793	Sum of GTIs [s]
livetime	7862.073153752	Livetime [s]
ontime2	8155.3999557793	Sum of GTIs [s]
ontime3	8155.3999557793	Sum of GTIs [s]
ontime5	8155.3999557793	Sum of GTIs [s]
ontime6	8155.3999557793	Sum of GTIs [s]
ontime7	8155.3999557793	Sum of GTIs [s]
ontime8	8155.3999557793	Sum of GTIs [s]
l2events	73990	Number of level 2 events



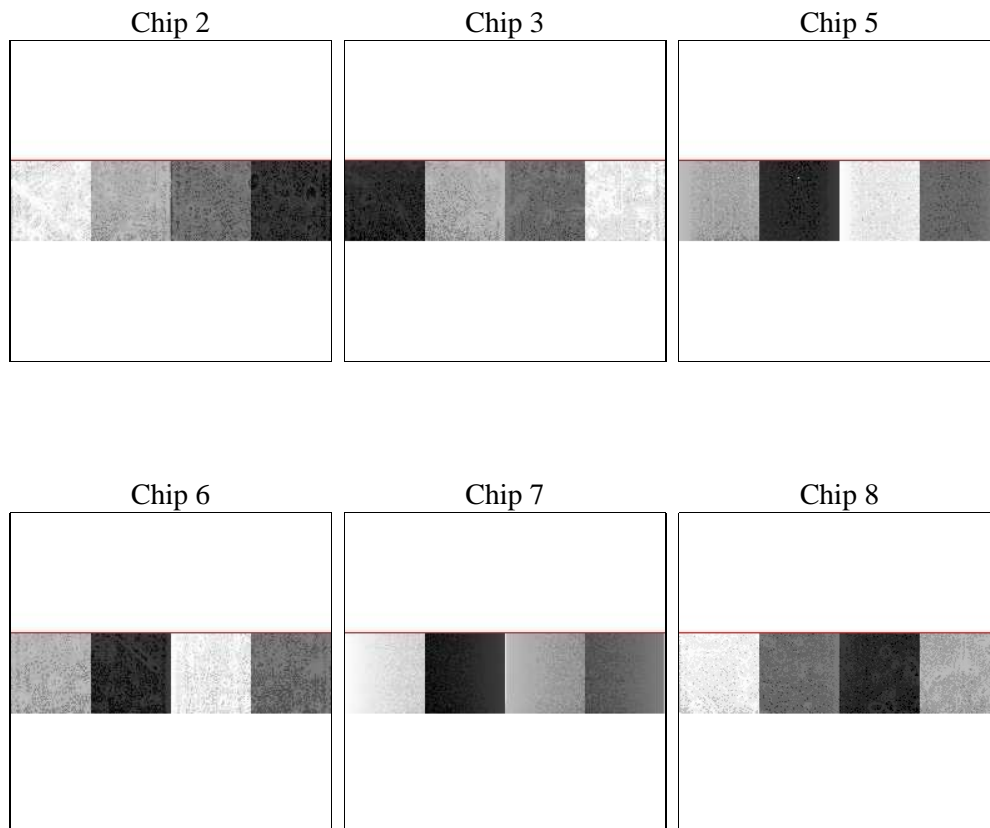
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	8155.3999557793	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	8155.3999557793	Sum of GTIs [s]
date	2012-11-03T14:22:30	Date and time of file creation	ontime3	8155.3999557793	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	8155.3999557793	Sum of GTIs [s]
			ontime6	8155.3999557793	Sum of GTIs [s]
			ontime7	8155.3999557793	Sum of GTIs [s]
			ontime8	8155.3999557793	Sum of GTIs [s]
			l1events	151305	Number of level 1 events

### 2.1.4 Events

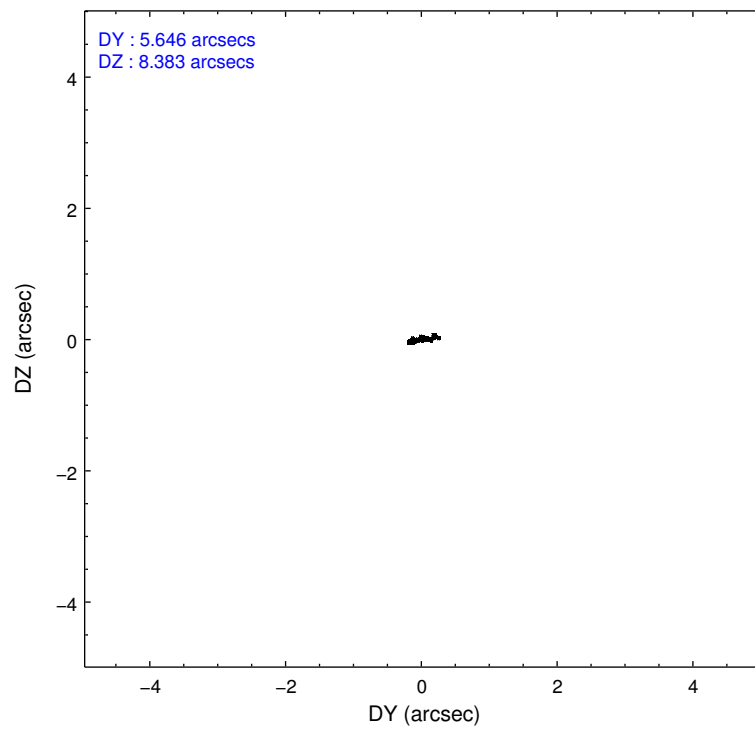
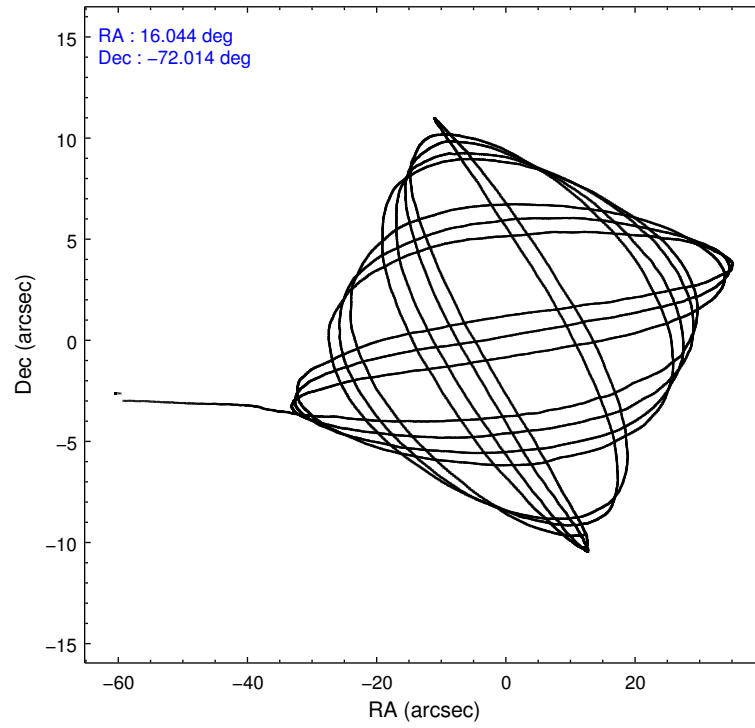
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	15538	13254	18799	13687	71693	18334
rejected events	14299	12108	7522	12451	8006	14774
rejected %	92%	91%	40%	90%	11%	80%

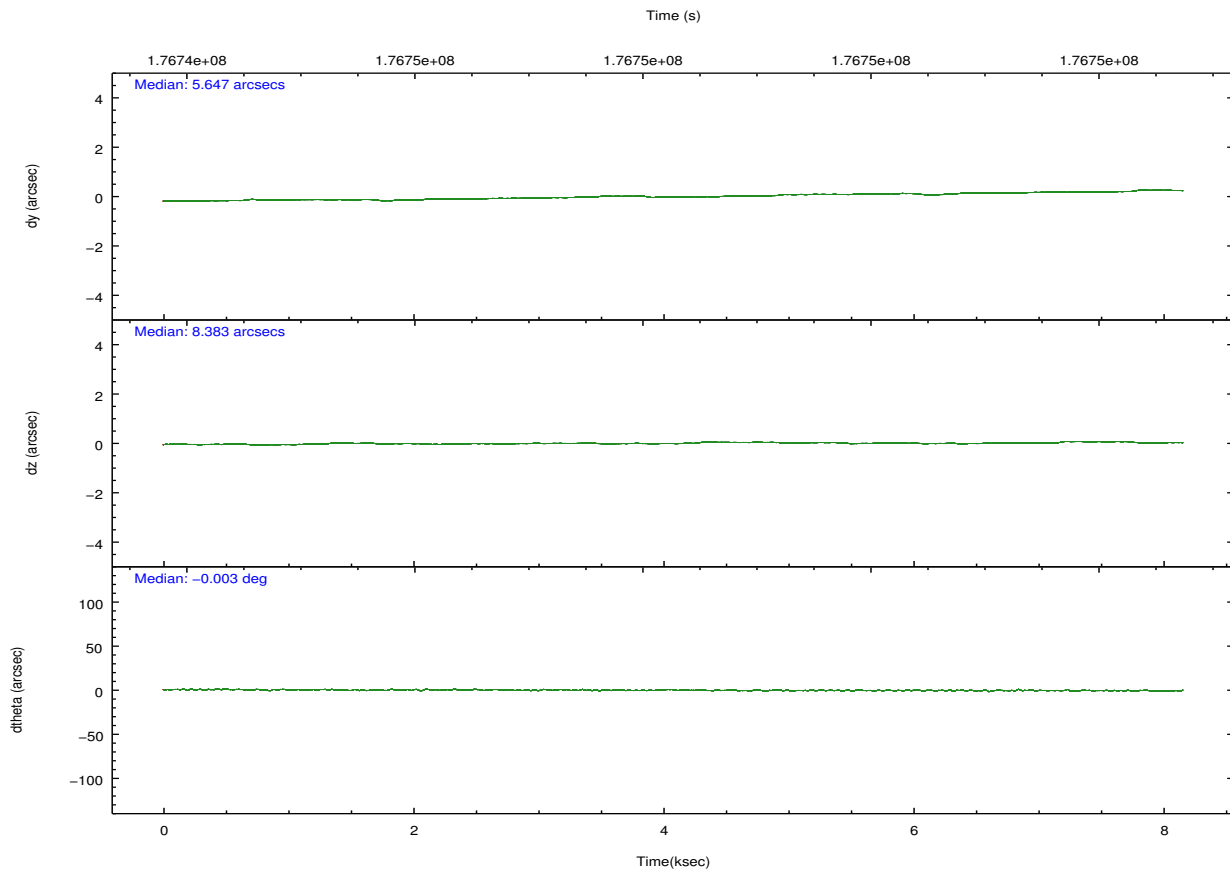
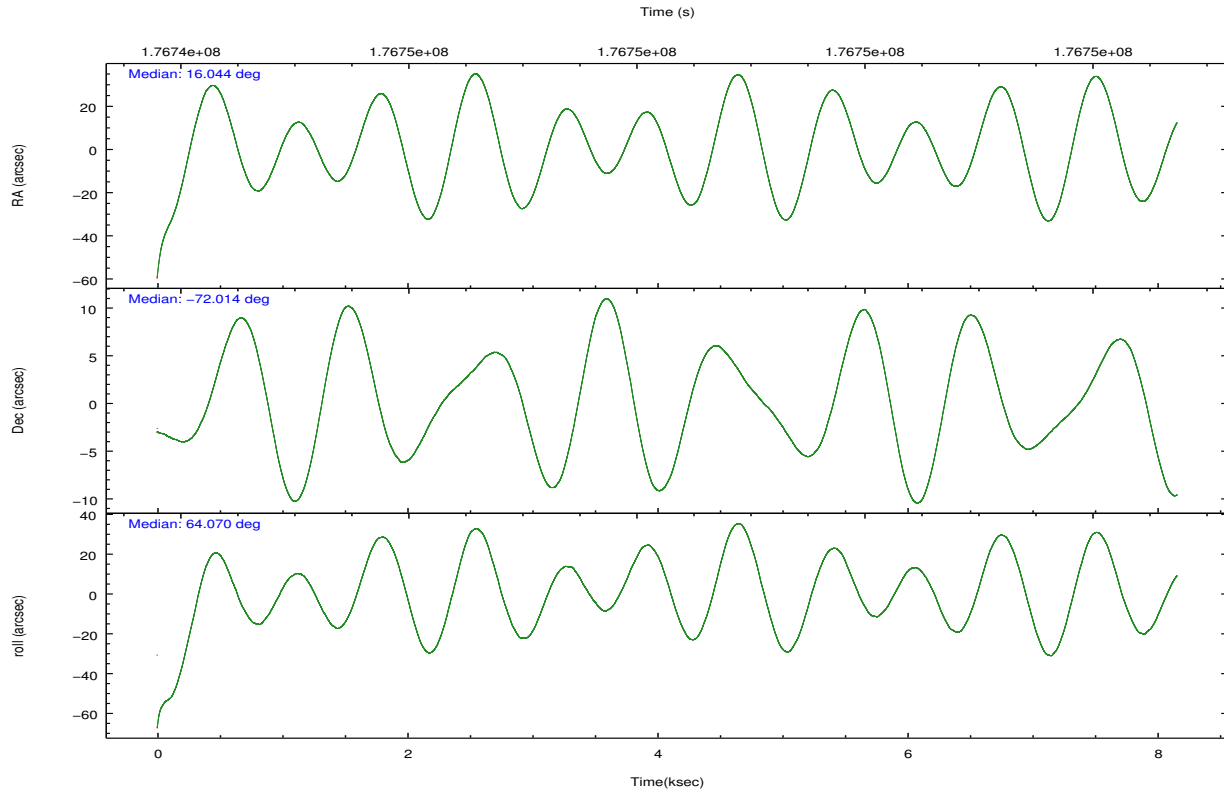
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	418	445	5847	530	23287	1256
	2%	3%	31%	3%	32%	6%
grade 1 events	5	4	19	5	162	5
	0%	0%	0%	0%	0%	0%
grade 2 events	281	214	2179	237	16961	783
	1%	1%	11%	1%	23%	4%
grade 3 events	232	207	545	237	7856	465
	1%	1%	2%	1%	10%	2%
grade 4 events	219	209	534	244	7706	405
	1%	1%	2%	1%	10%	2%
grade 5 events	333	384	1285	374	1751	592
	2%	2%	6%	2%	2%	3%
grade 6 events	223	193	3393	246	9522	975
	1%	1%	18%	1%	13%	5%
grade 7 events	13827	11598	4997	11814	4448	13853
	88%	87%	26%	86%	6%	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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	16.051818	16.04414144530074	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-72.041311	-72.01418843375266	Subarray start row	385	385
[deg] Pointing Roll	63.927672	64.07701522014298	Subarray row count	256	256
[s] Window start time (MET)	174614464.184000	174614464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	177292864.184000	177292864.184000	[s] Primary exposure time	0.000000	1.1
[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)	176744343.184000	176743149.98166			
Observation start date	2003-08-08T15:37:59	2003-08-08T15:19:09			
[s] Observation end time (MET)	176752343.184000	176752477.48206			
Observation end date	2003-08-08T17:51:19	2003-08-08T17:54:37			
Read mode	TIMED	TIMED			

## 2.3 Aspect



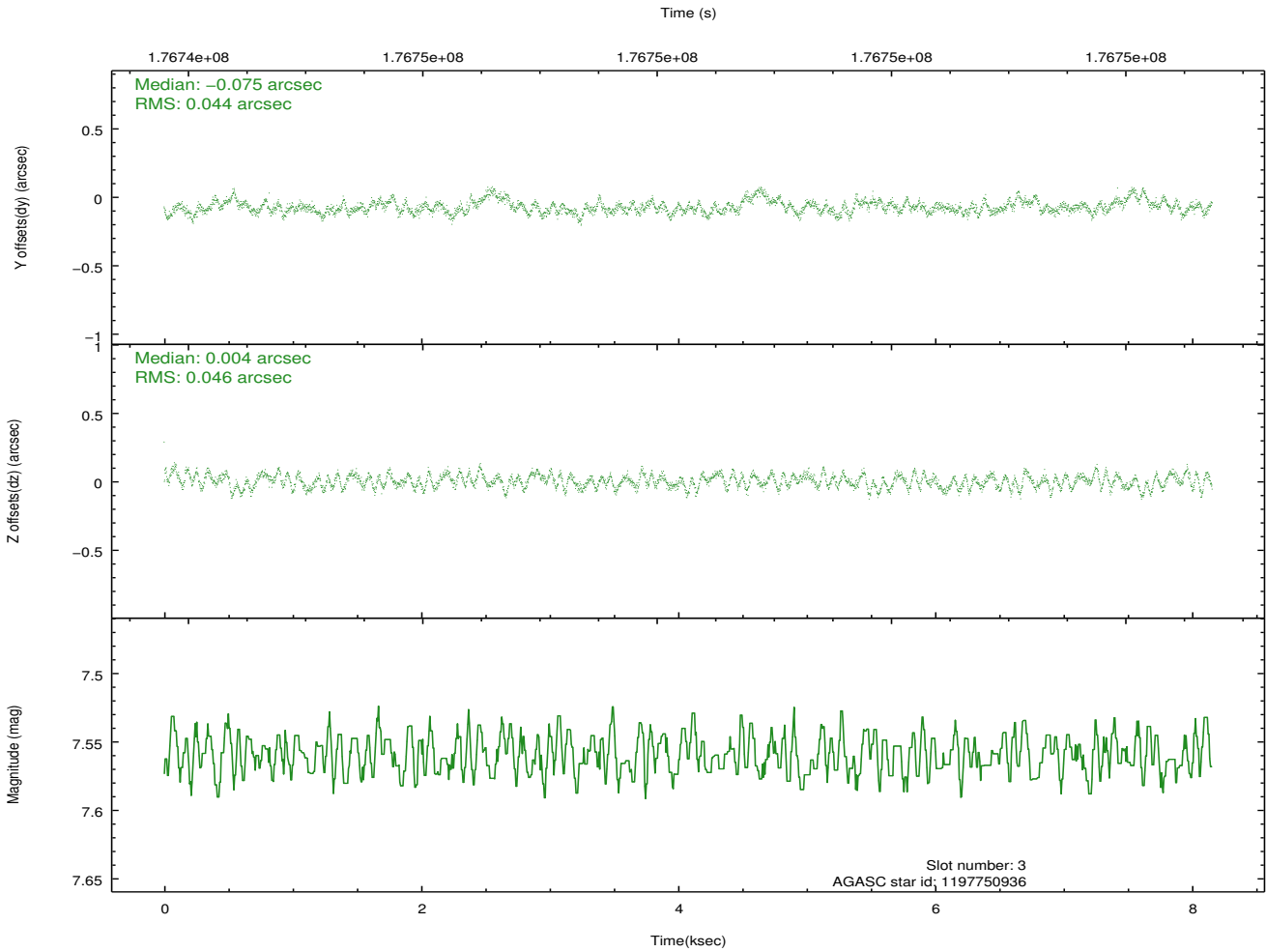
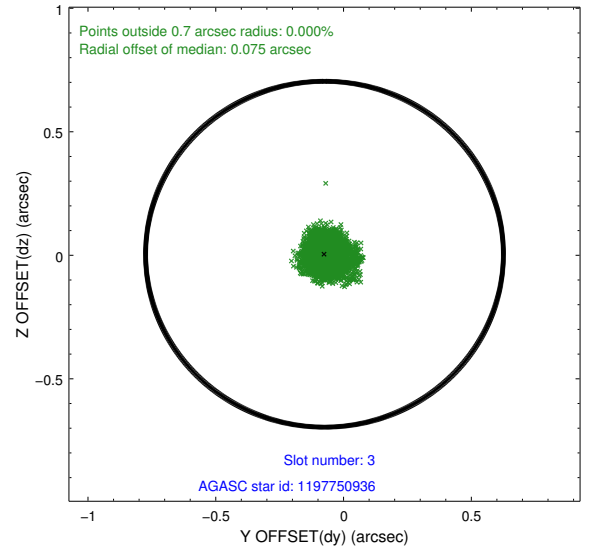
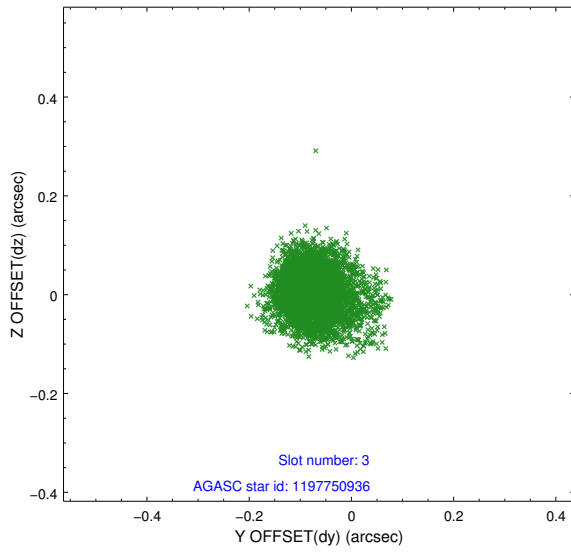


### Slot Statistics

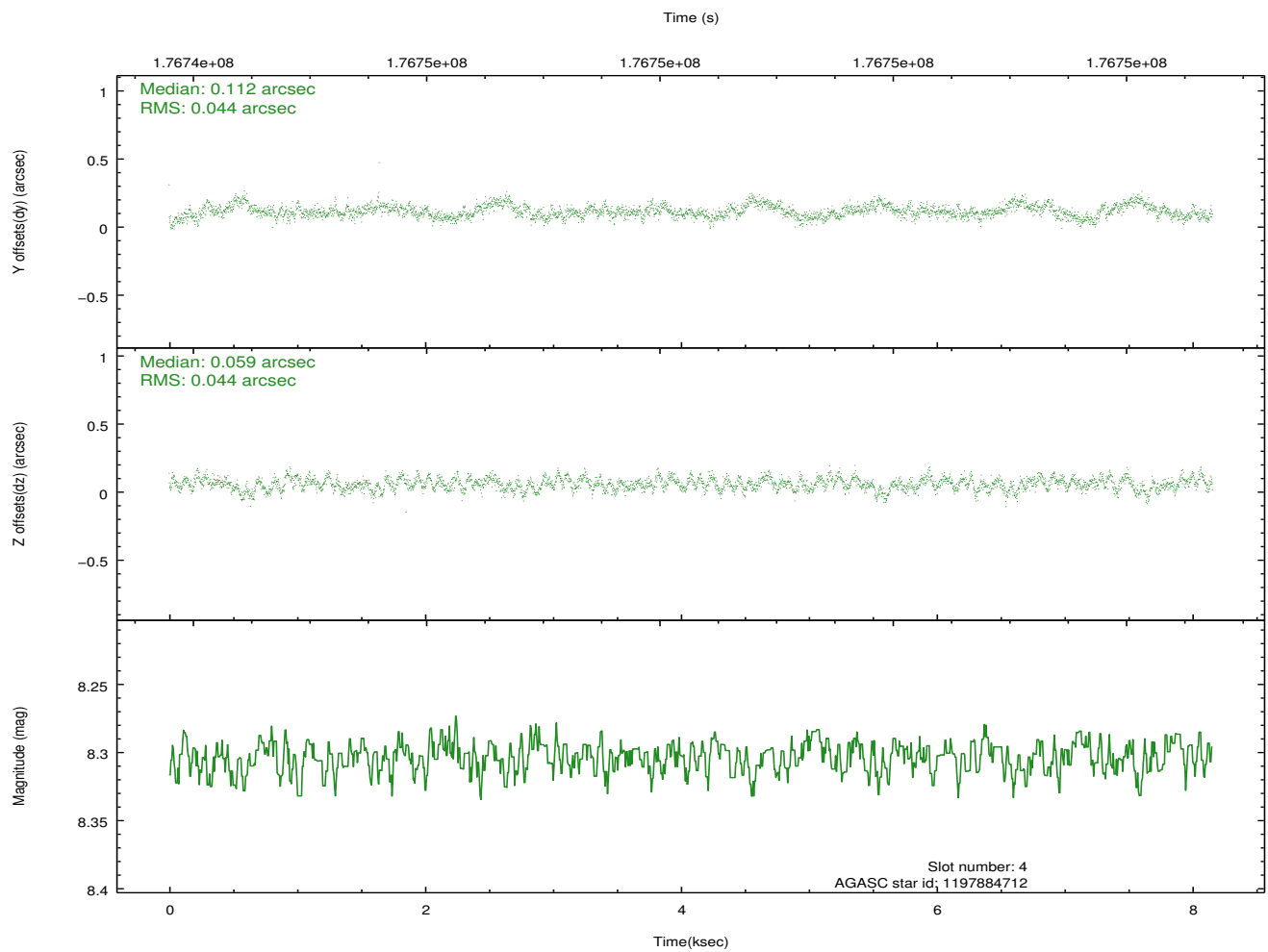
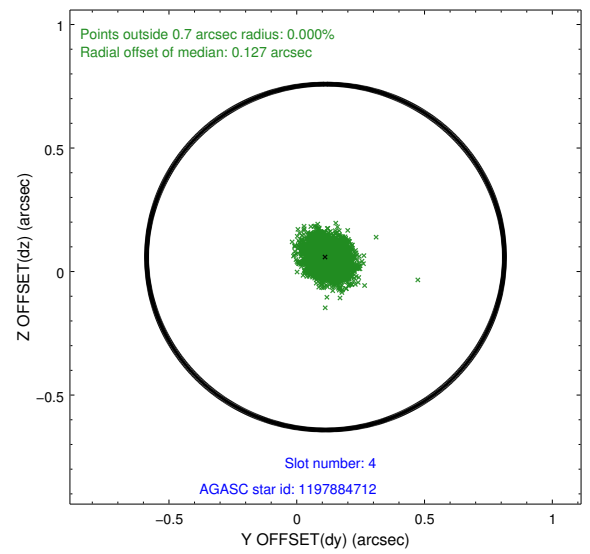
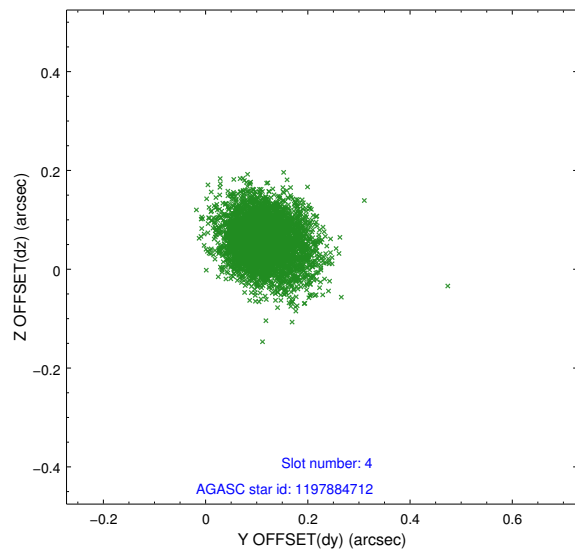
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1990	-0.034	-0.041	0.007	0.011	0.000000	0.000000	-758.43	-1729.61
1	FID	ACIS-S-4	7.21	1990	0.066	0.028	0.006	0.011	0.000000	0.000000	2154.66	178.18
2	FID	ACIS-S-5	7.23	1990	-0.062	0.022	0.007	0.012	0.000000	0.000000	-1810.39	172.69
3	GUIDE	1197750936	7.56	3980	-0.075	0.004	0.068	0.109	15.387940	-71.549550	1254.03	1455.54
4	GUIDE	1197884712	8.30	3980	0.112	0.059	0.066	0.109	16.087398	-72.252690	-665.55	-369.40
5	GUIDE	1197885104	9.36	3978	-0.001	0.083	0.092	0.151	17.845067	-72.189368	362.75	-2020.73
6	GUIDE	1197885328	7.22	3980	-0.034	-0.127	0.056	0.089	16.283090	-71.733943	1108.87	250.76
7	GUIDE	1197750824	10.11	3974	0.004	-0.022	0.162	0.310	14.791487	-71.393477	1445.46	2318.75

## 2.4 Star Slots

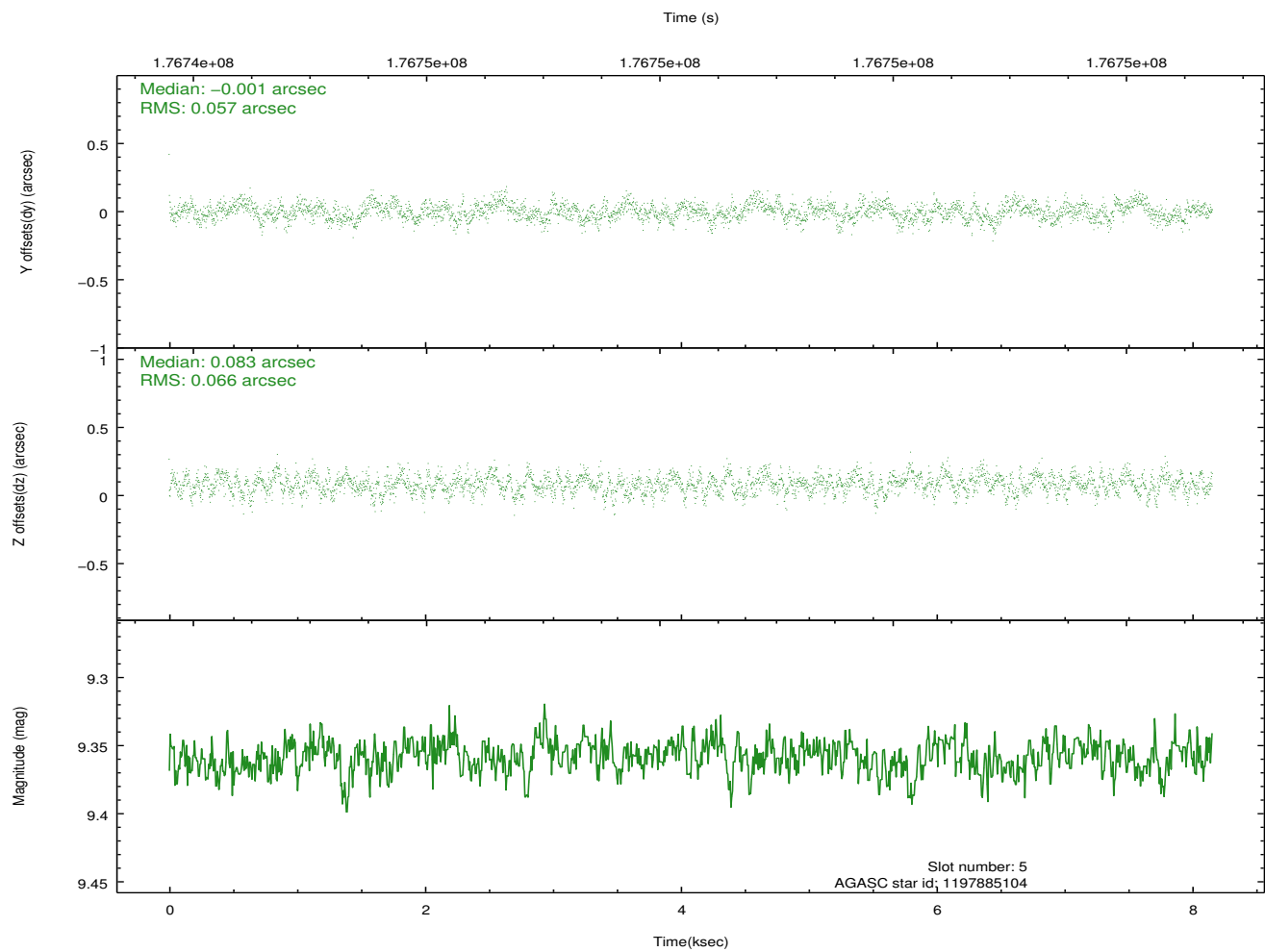
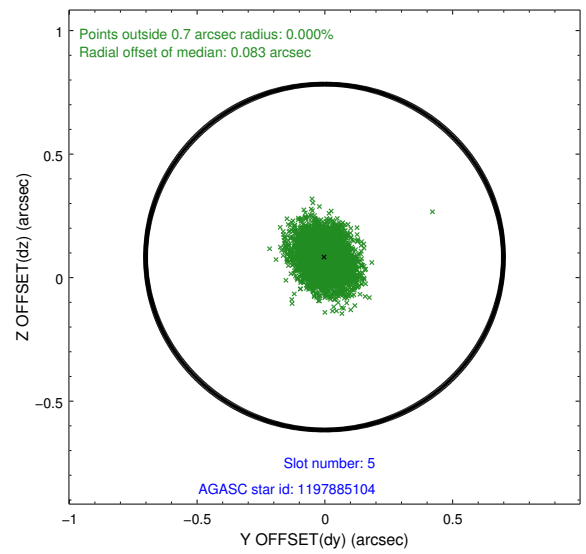
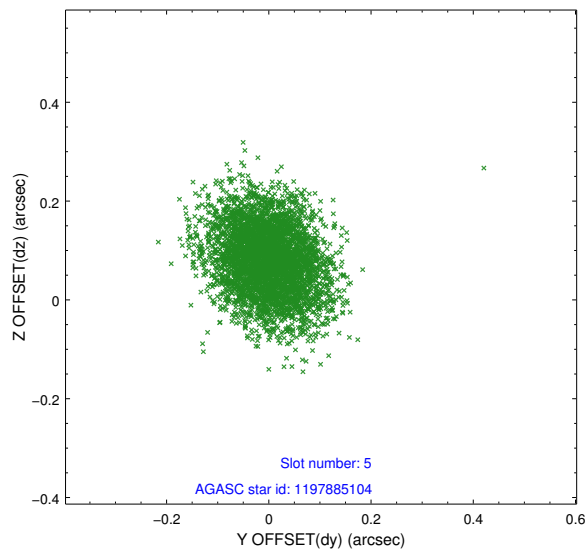
### 2.4.1 Slot 3



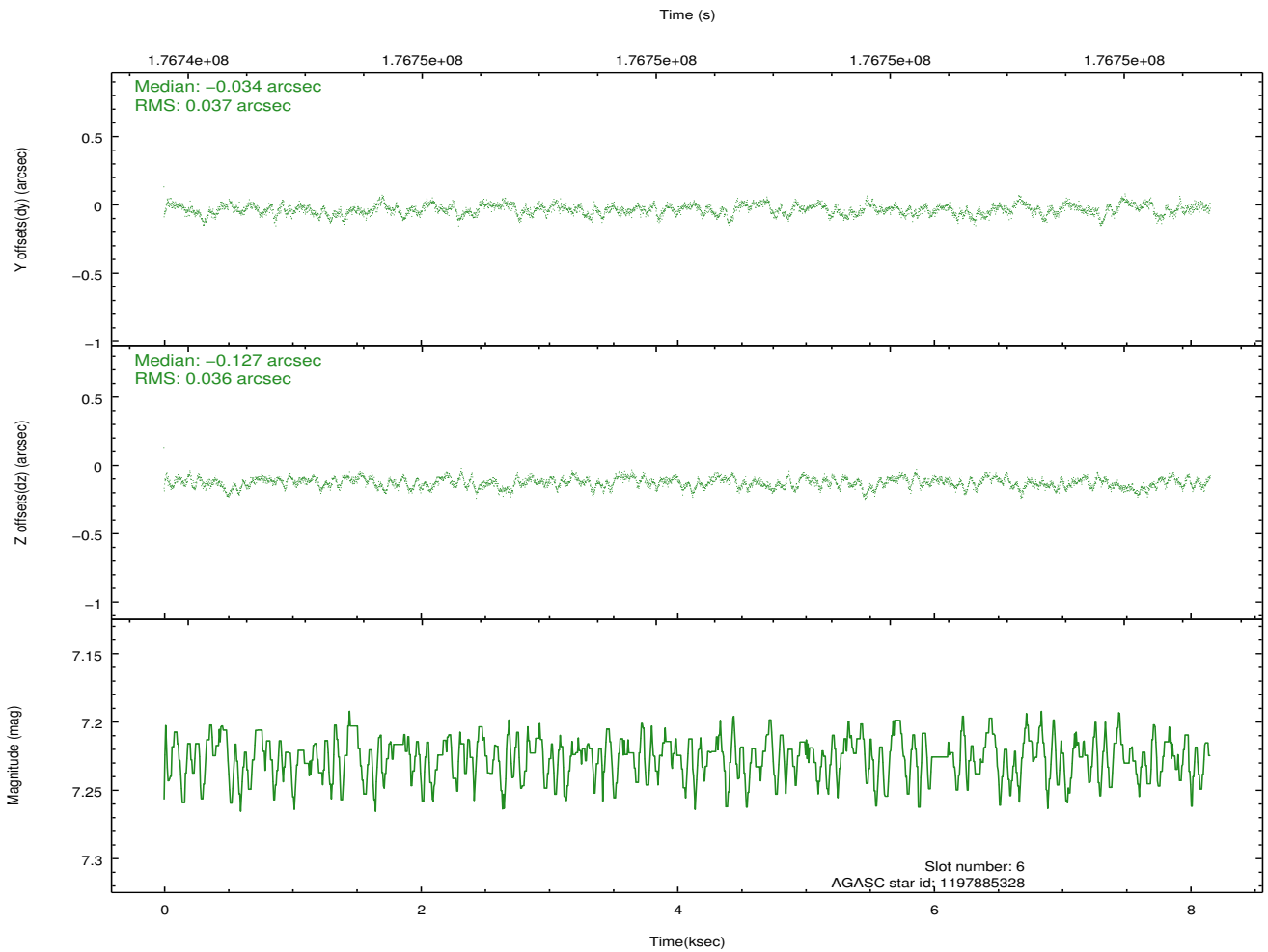
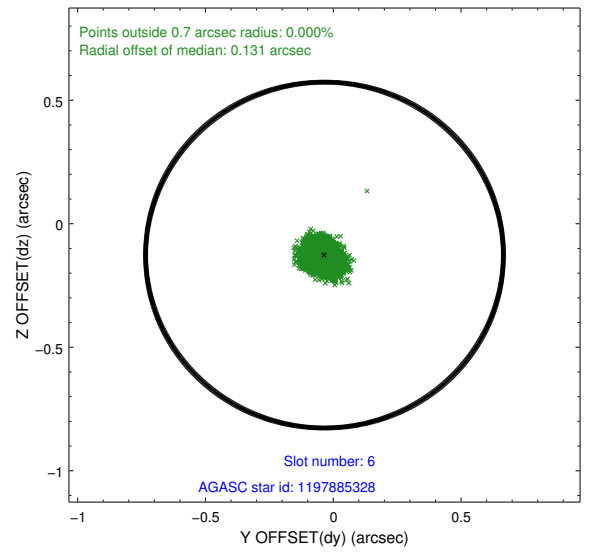
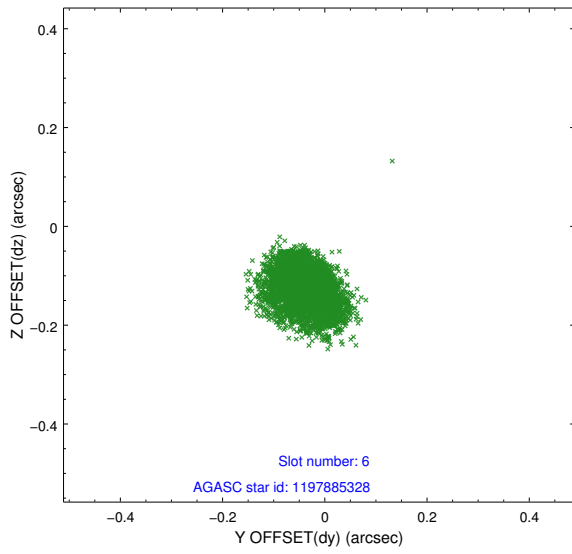
## 2.4.2 Slot 4



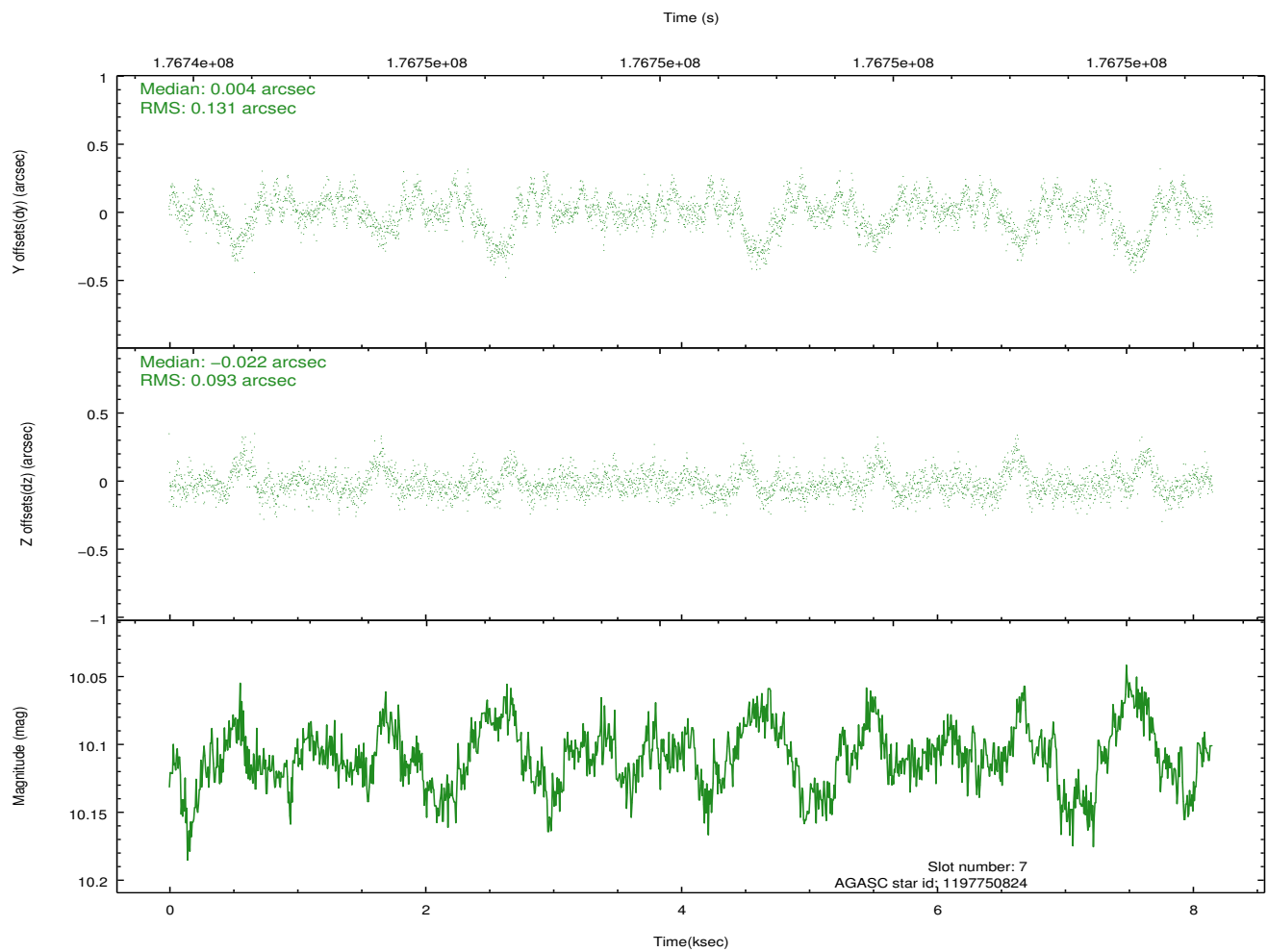
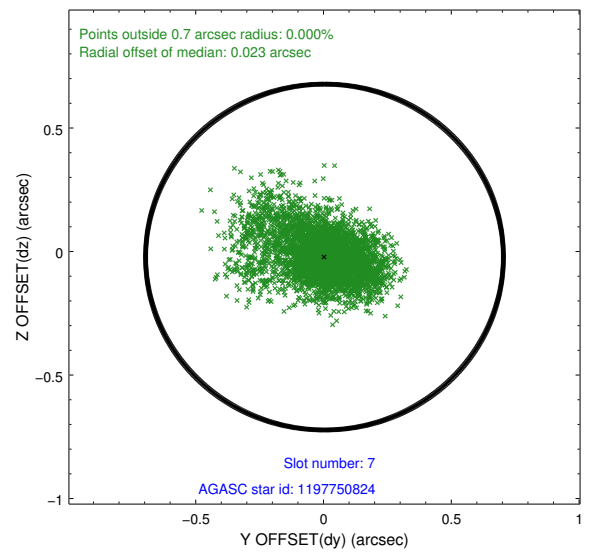
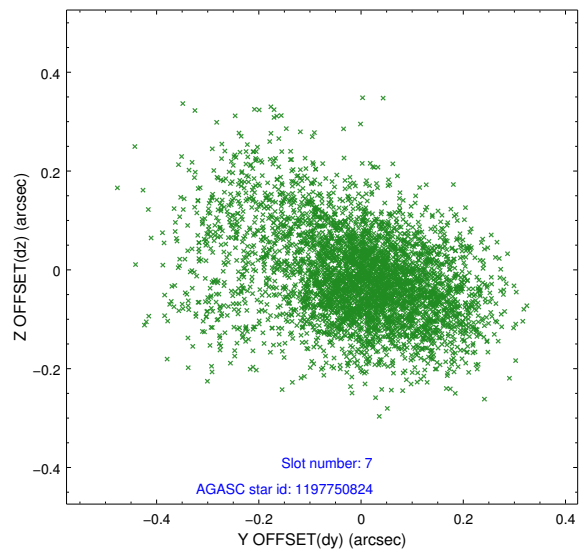
### 2.4.3 Slot 5



### 2.4.4 Slot 6

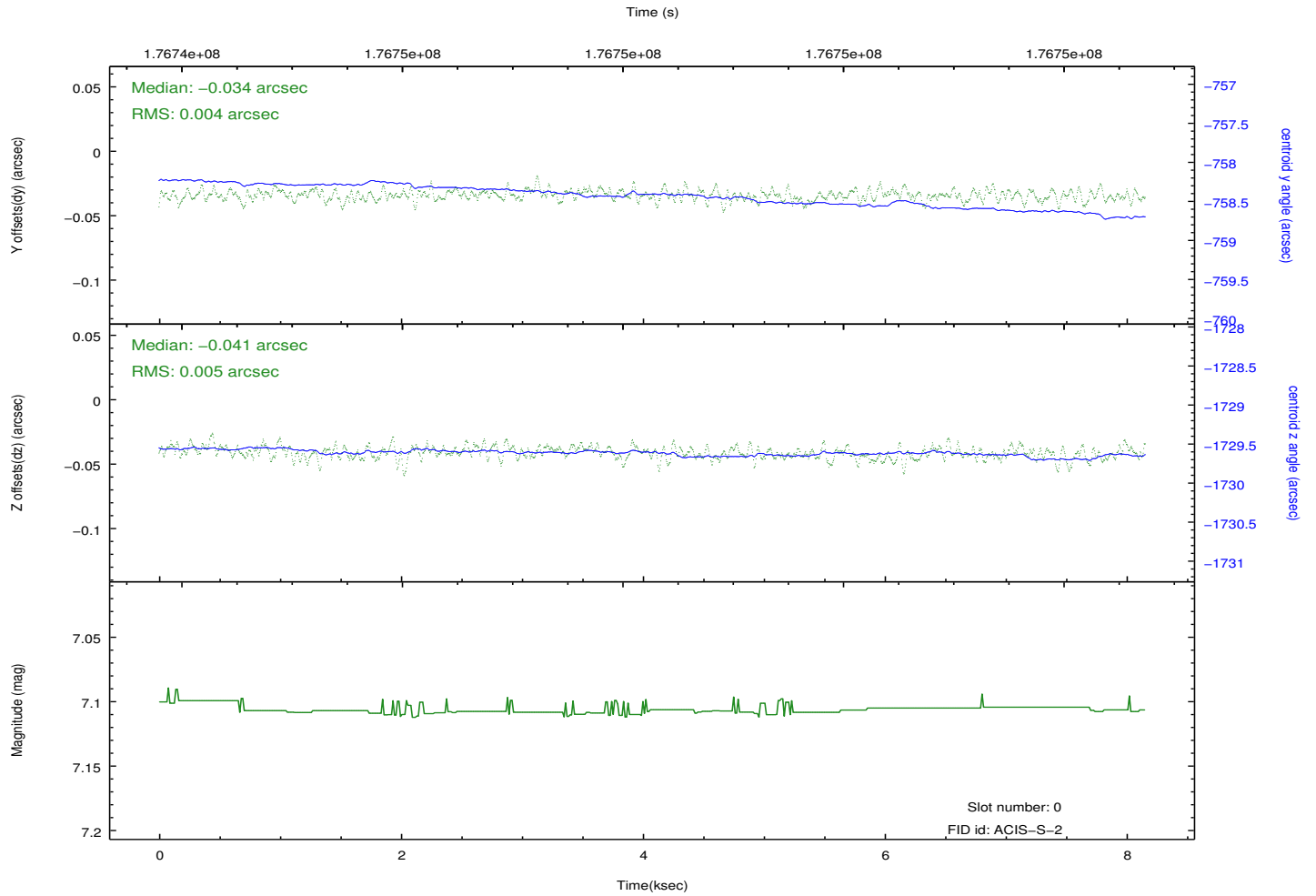
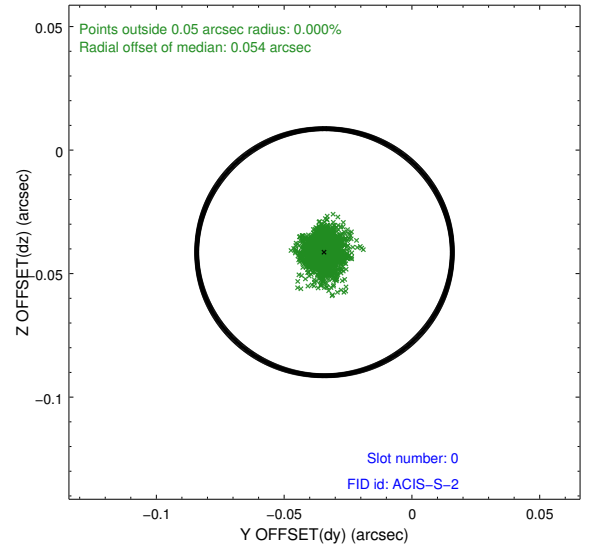
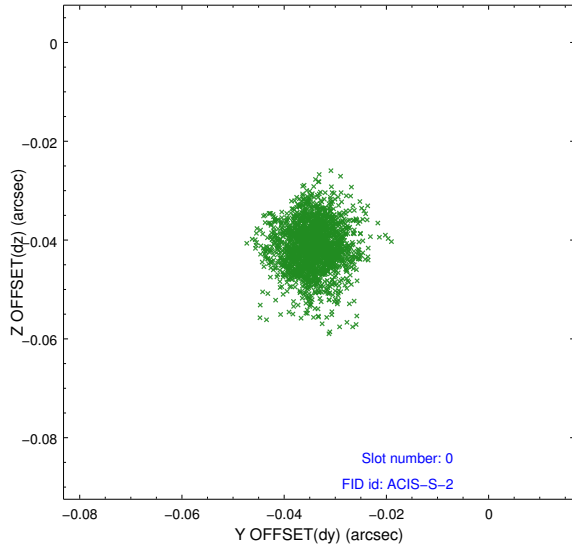


## 2.4.5 Slot 7

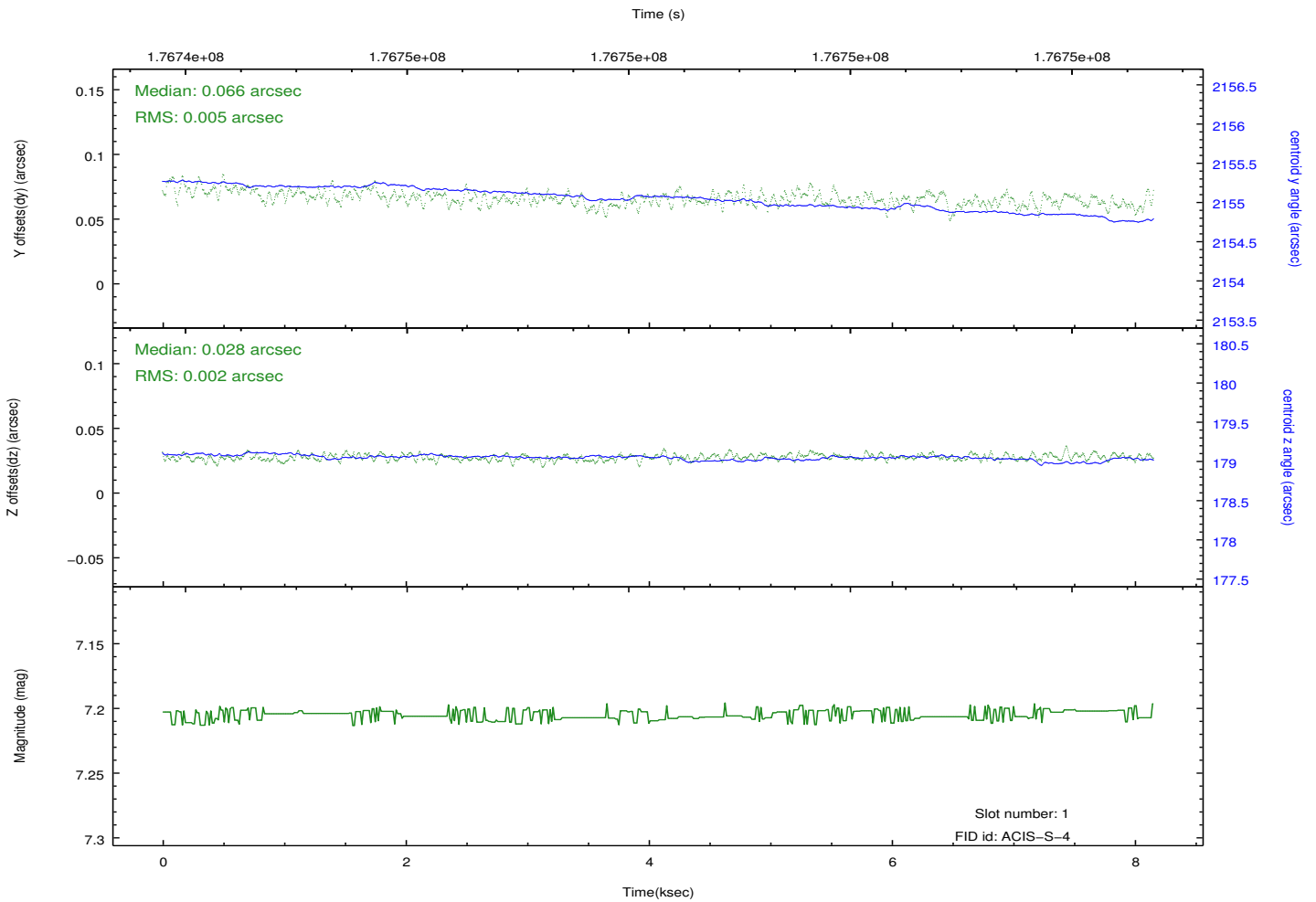
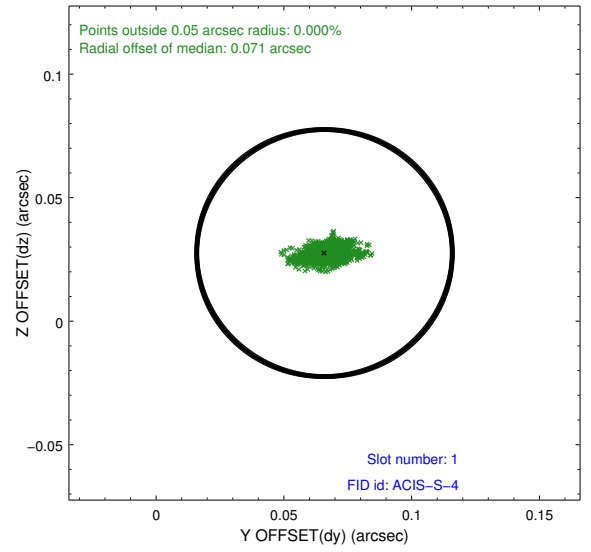
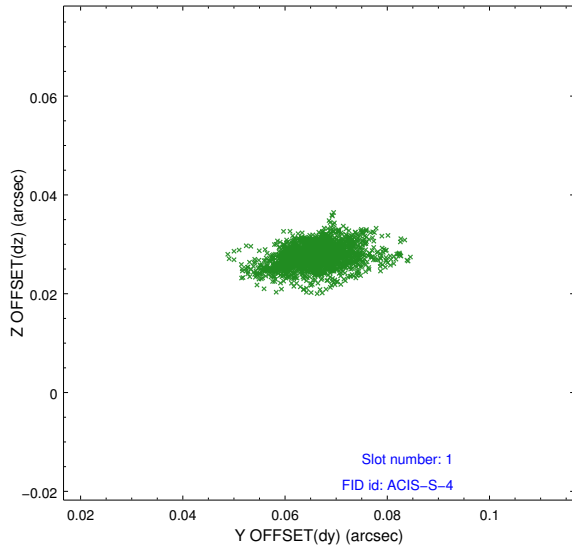


## 2.5 FID Slots

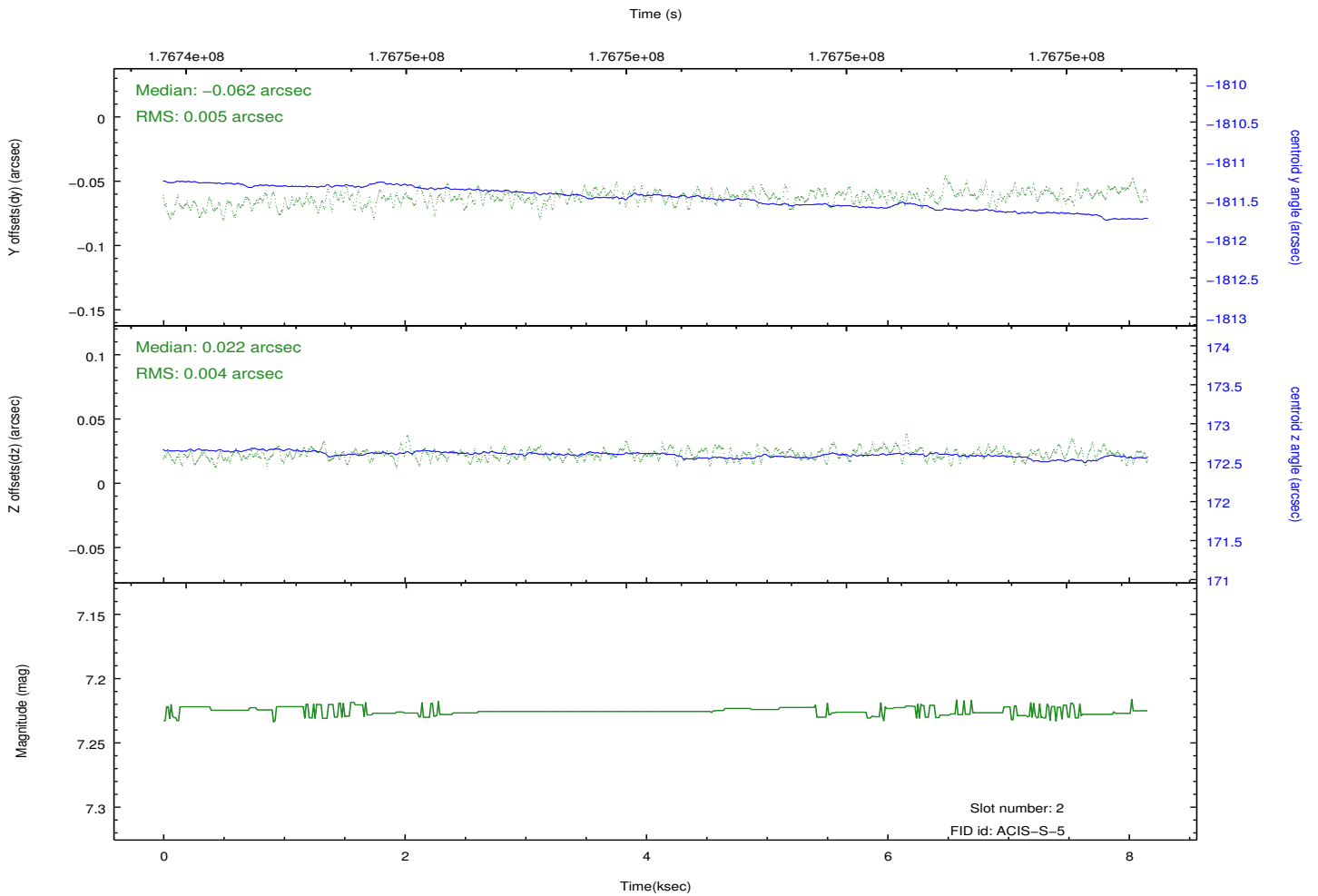
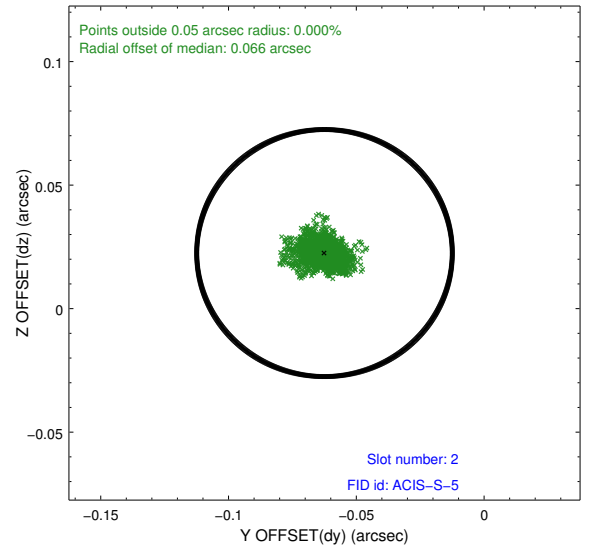
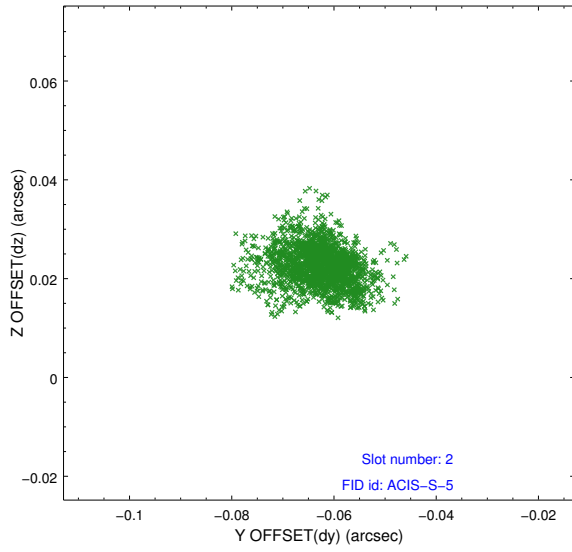
### 2.5.1 Slot 0



## 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)	2012.11.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.155

## A.2 Comments

Window constraint met.