

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12384 - L2 Version 2  
Chandra X-Ray Center

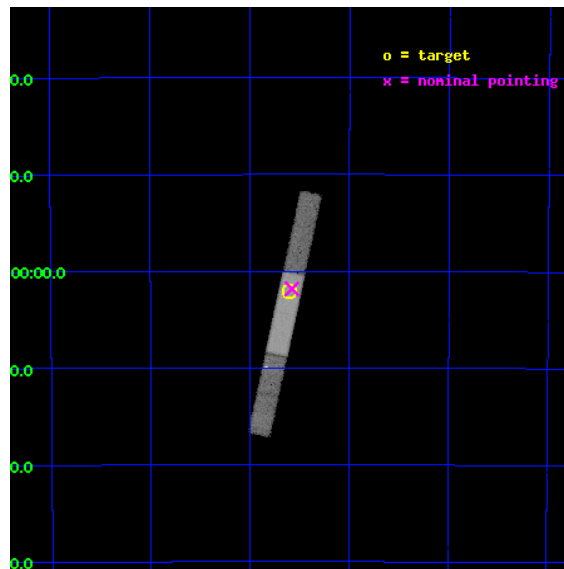
L2 Processing Date : Jul 7 2012

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# 1 Front

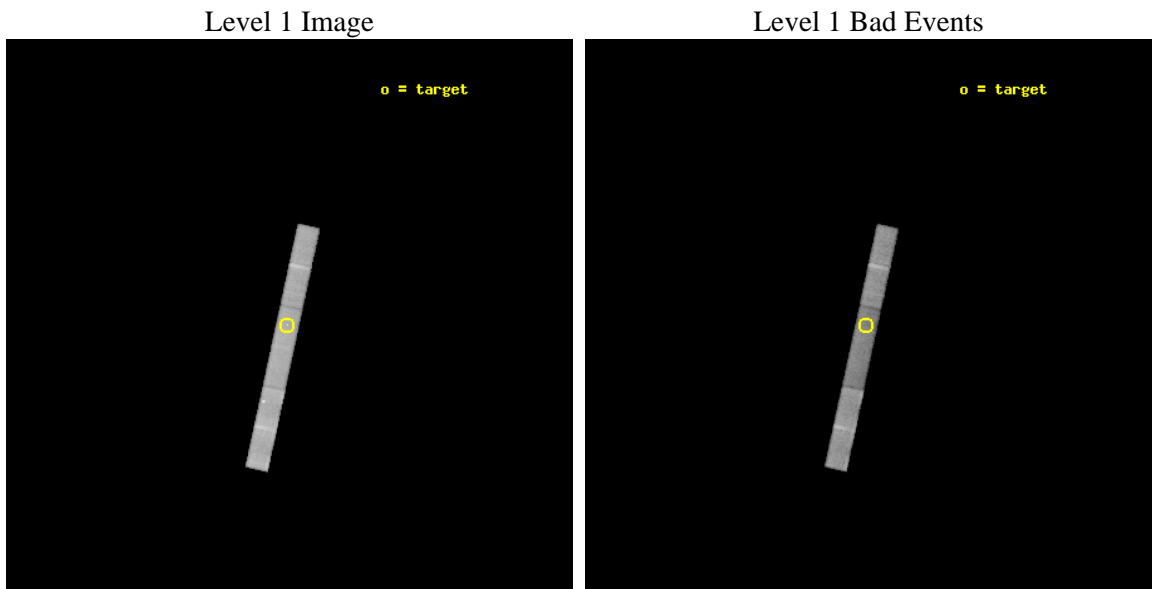
seq_num	200718	Sequence number
obs_id	12384	Observation id
title	Characterizing the X-ray Radiation Field in the Earth-like Planet Forming ExoSystem HD 113766	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	HD 113766	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	196.649167	Observer's specified target RA [deg]
dec_targ	-46.033889	Observer's specified target Dec [deg]
ra_nom	196.64431119871	Nominal RA [deg]
dec_nom	-46.030392337129	Nominal Dec [deg]
roll_nom	102.2890205499	Nominal Roll [deg]
revision	2	Processing version of data
ontime	39051.653984547	Sum of GTIs [s]
livetime	37348.559663874	Livetime [s]
ontime6	39051.612944543	Sum of GTIs [s]
ontime7	39051.653984547	Sum of GTIs [s]
ontime8	39051.57190454	Sum of GTIs [s]
l2events	62948	Number of level 2 events



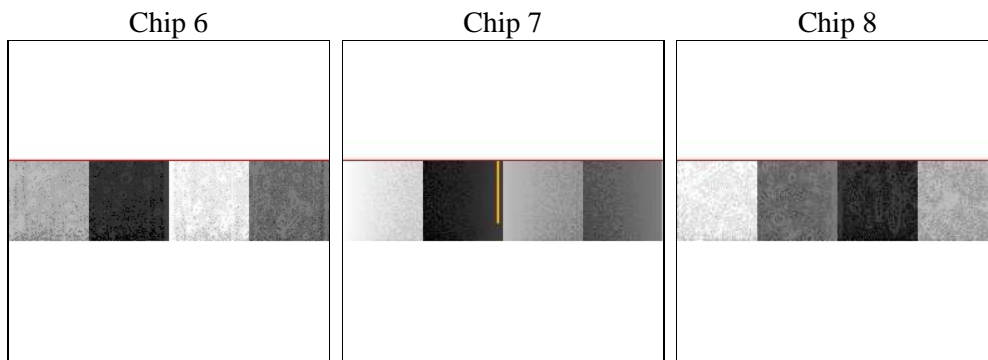
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38978.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	39051.653984547	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime6	39051.612944543	Sum of GTIs [s]
date	2012-07-07T18:59:14	Date and time of file creation	ontime7	39051.653984547	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	39051.57190454	Sum of GTIs [s]
			l1events	299360	Number of level 1 events

### 2.1.4 Events

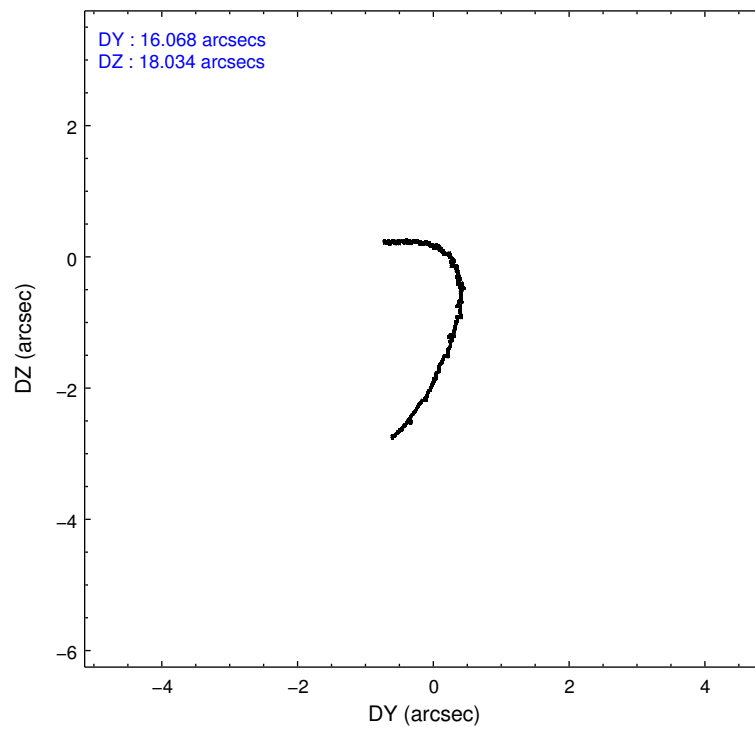
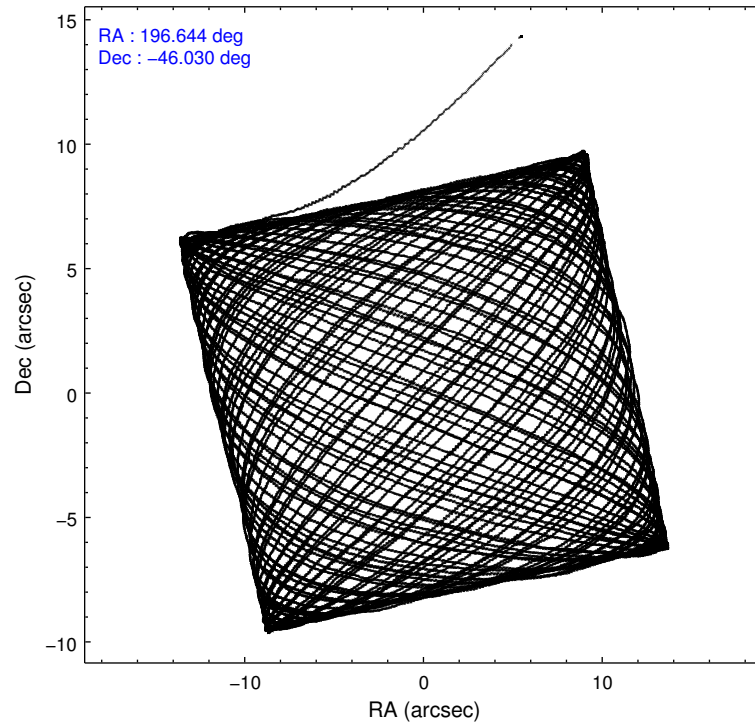
	ccd 6	ccd 7	ccd 8
level 1 events	85710	92671	120979
rejected events	75935	47362	90710
rejected %	88%	51%	74%

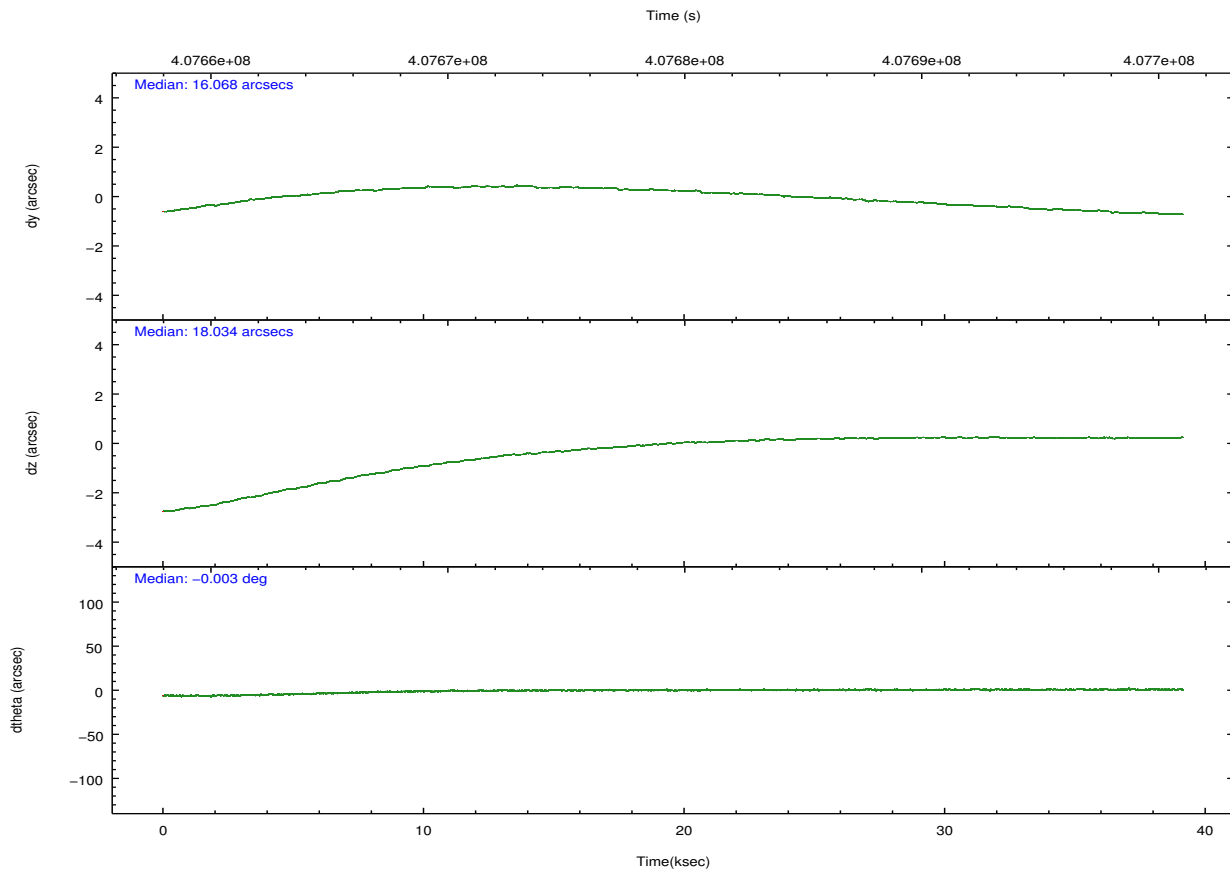
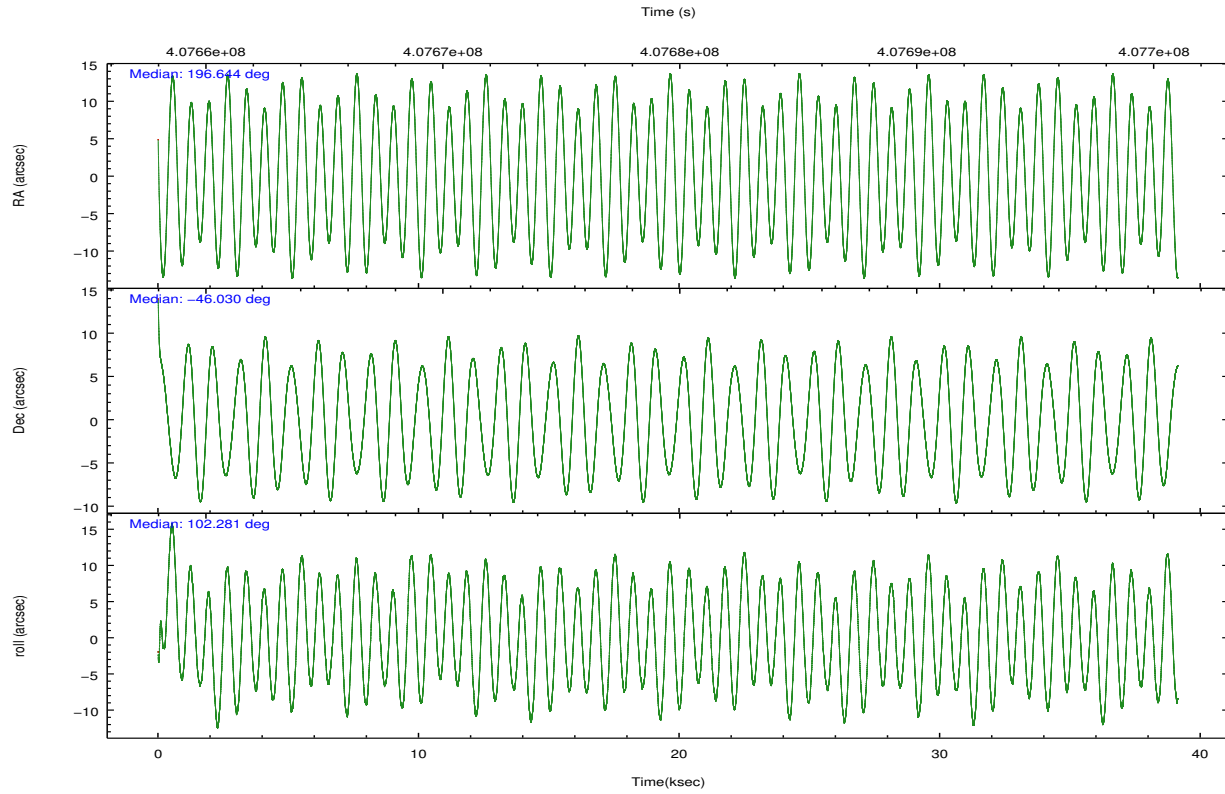
	ccd 6	ccd 7	ccd 8
grade 0 events	2915	5053	9914
	3%	5%	8%
grade 1 events	24	120	59
	0%	0%	0%
grade 2 events	1987	9447	6278
	2%	10%	5%
grade 3 events	1495	5073	3210
	1%	5%	2%
grade 4 events	1469	4914	3080
	1%	5%	2%
grade 5 events	3295	9558	4750
	3%	10%	3%
grade 6 events	1910	20823	7787
	2%	22%	6%
grade 7 events	72615	37683	85901
	84%	40%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	196.671228	196.6443111987122	CCD I2 on	N	N
[deg] Pointing Dec	-46.050366	-46.03039233712878	CCD I3 on	N	N
[deg] Pointing Roll	102.151773	102.2890205499	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	407660105.184000	407659057.26507	CCD S5 on	N	N
Observation start date	2010-12-02T06:53:59	2010-12-02T06:37:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	407699083.184000	407699415.10465	On-chip summing requested	N	N
Observation end date	2010-12-02T17:43:37	2010-12-02T17:50:15	Subarray requested	CUSTOM	1/4
Read mode	TIMED	TIMED	Subarray start row	385	385
			Subarray row count	256	256
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.9

## 2.3 Aspect



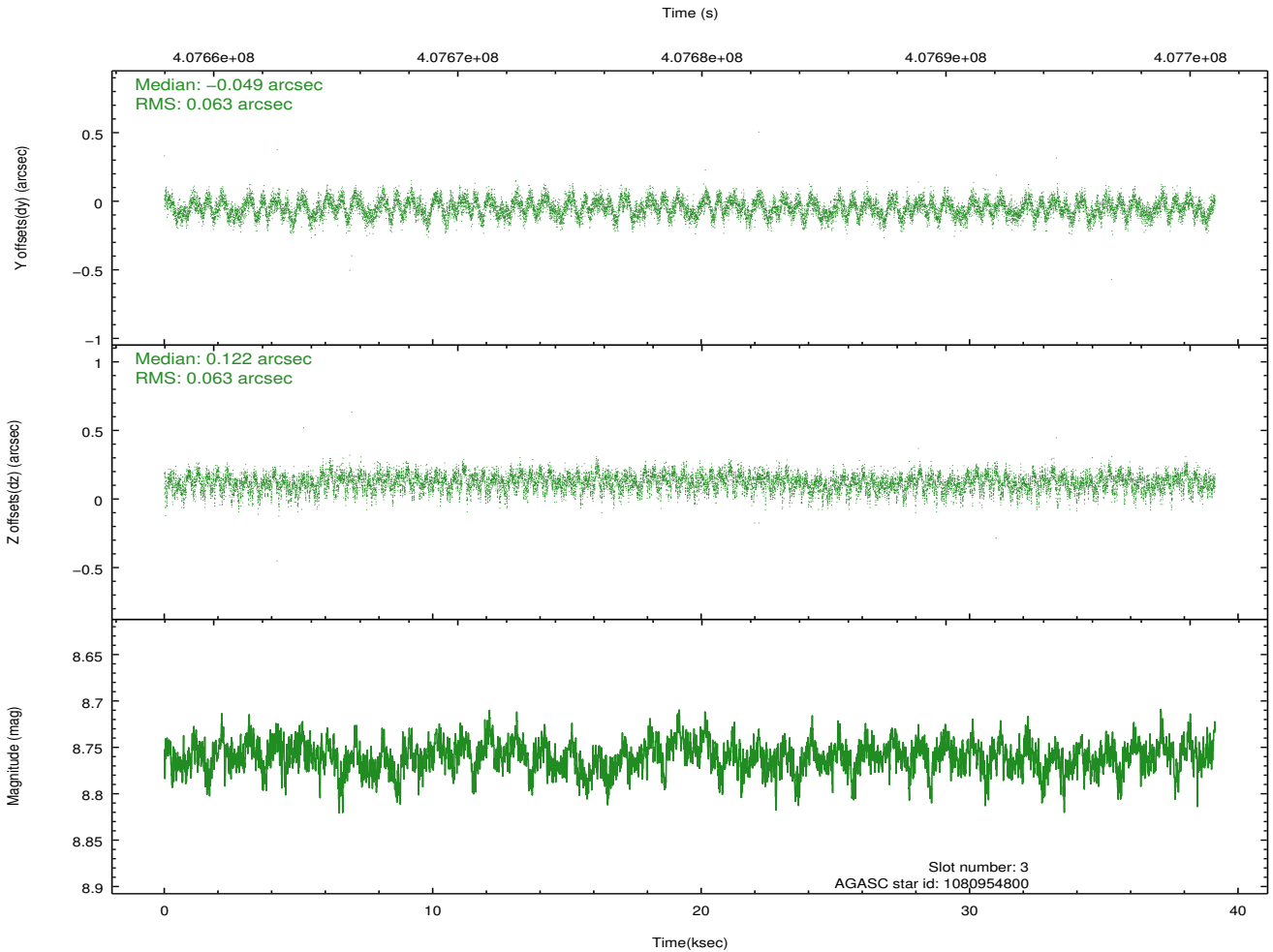
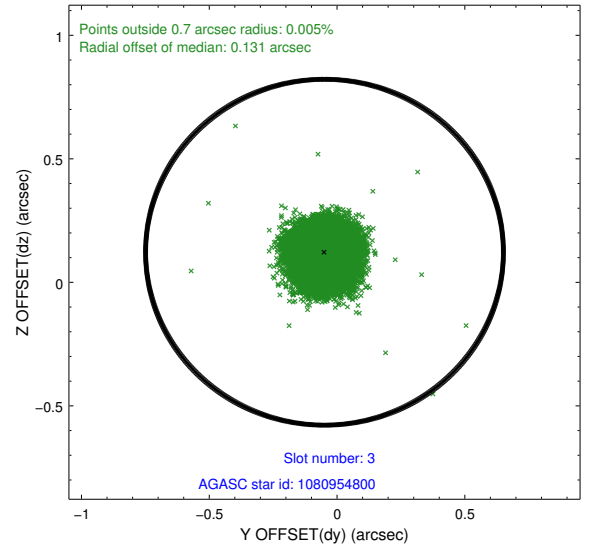
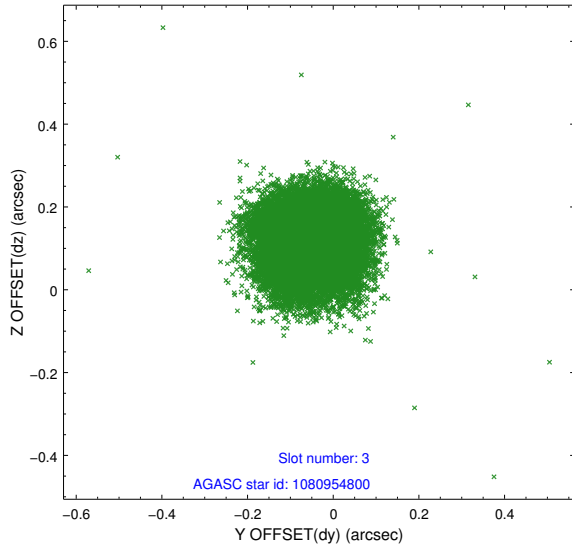


### Slot Statistics

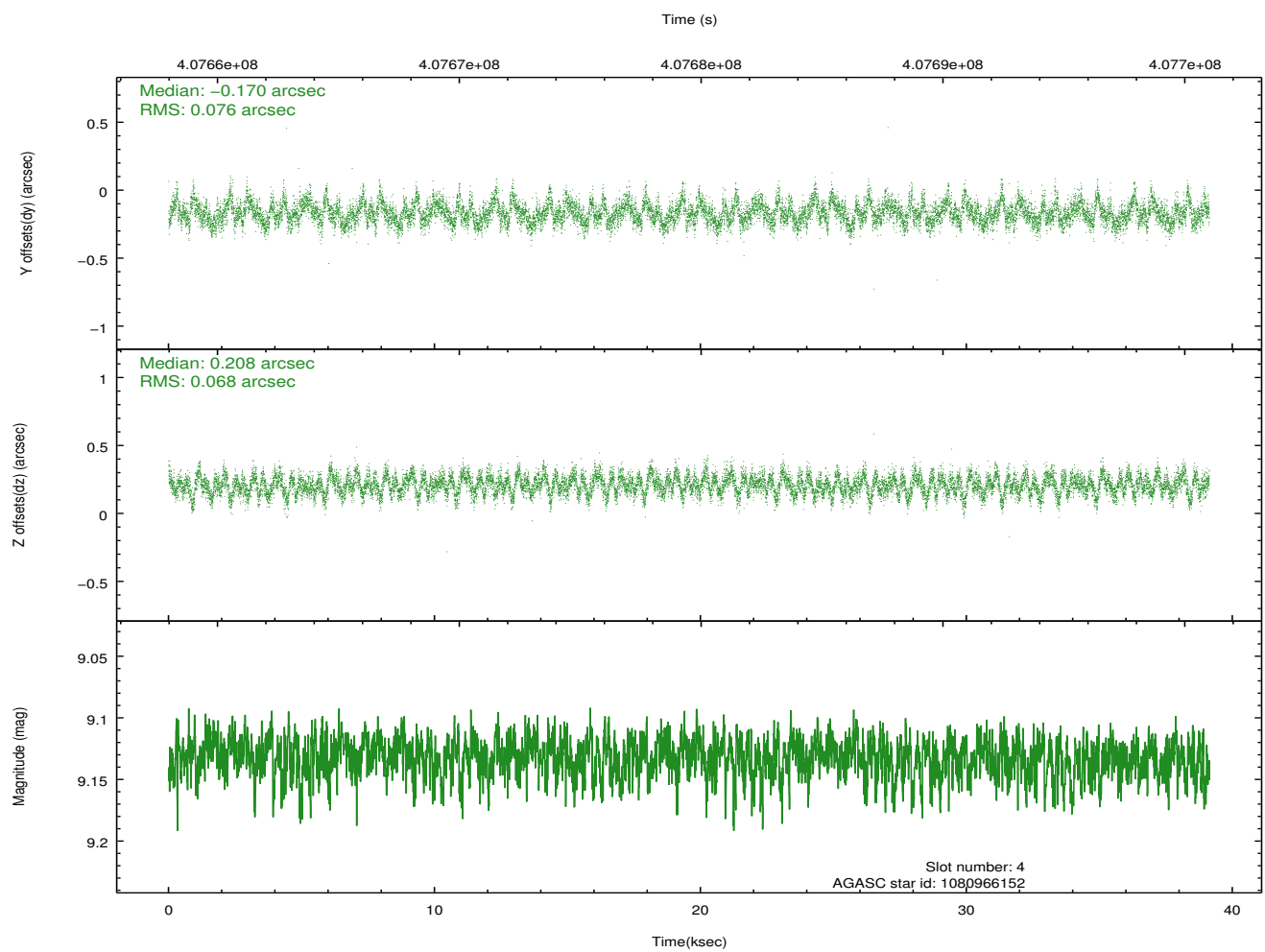
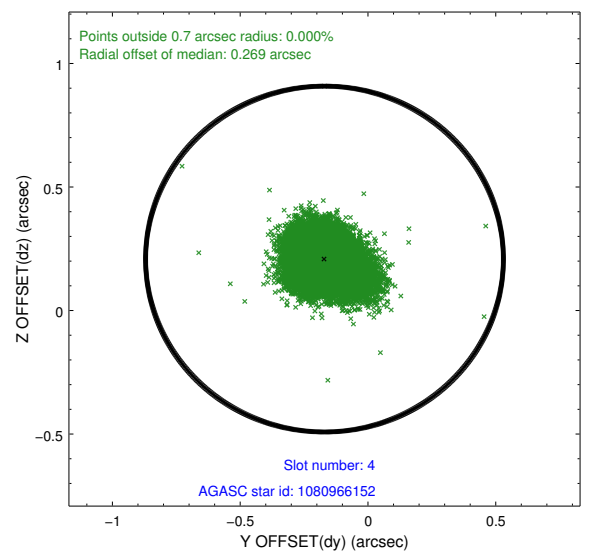
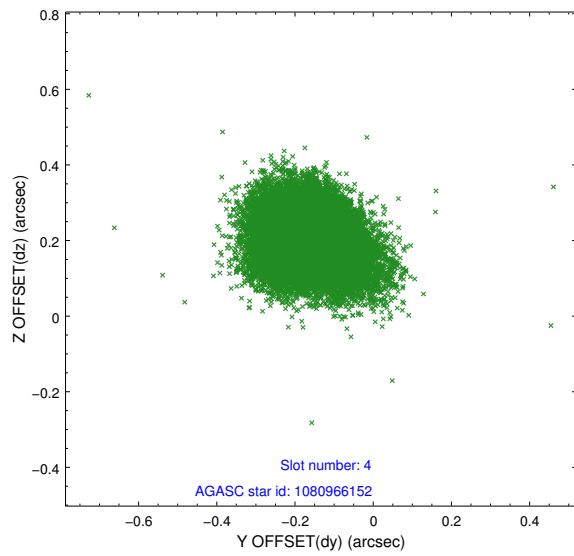
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	9546	-0.073	-0.037	0.019	0.038	0.000000	0.000000	-769.12	-1739.03
1	FID	ACIS-S-4	6.97	9546	0.164	0.045	0.019	0.027	0.000000	0.000000	2144.42	169.46
2	FID	ACIS-S-5	7.01	9545	-0.121	0.004	0.018	0.040	0.000000	0.000000	-1821.95	163.17
3	GUIDE	1080954800	8.76	19089	-0.049	0.122	0.096	0.149	197.378911	-45.791960	528.16	-1930.57
4	GUIDE	1080966152	9.13	18965	-0.170	0.208	0.107	0.176	197.122335	-45.368268	2157.66	-1631.17
5	GUIDE	1080823096	9.06	19065	0.132	-0.082	0.095	0.154	195.559244	-45.554331	2316.75	2369.01
6	GUIDE	1080824248	9.27	19018	-0.127	-0.028	0.103	0.175	195.868613	-45.715957	1591.76	1721.37
7	GUIDE	1080836072	9.16	19078	0.209	-0.211	0.100	0.158	196.711840	-46.347257	-1065.53	126.17

## 2.4 Star Slots

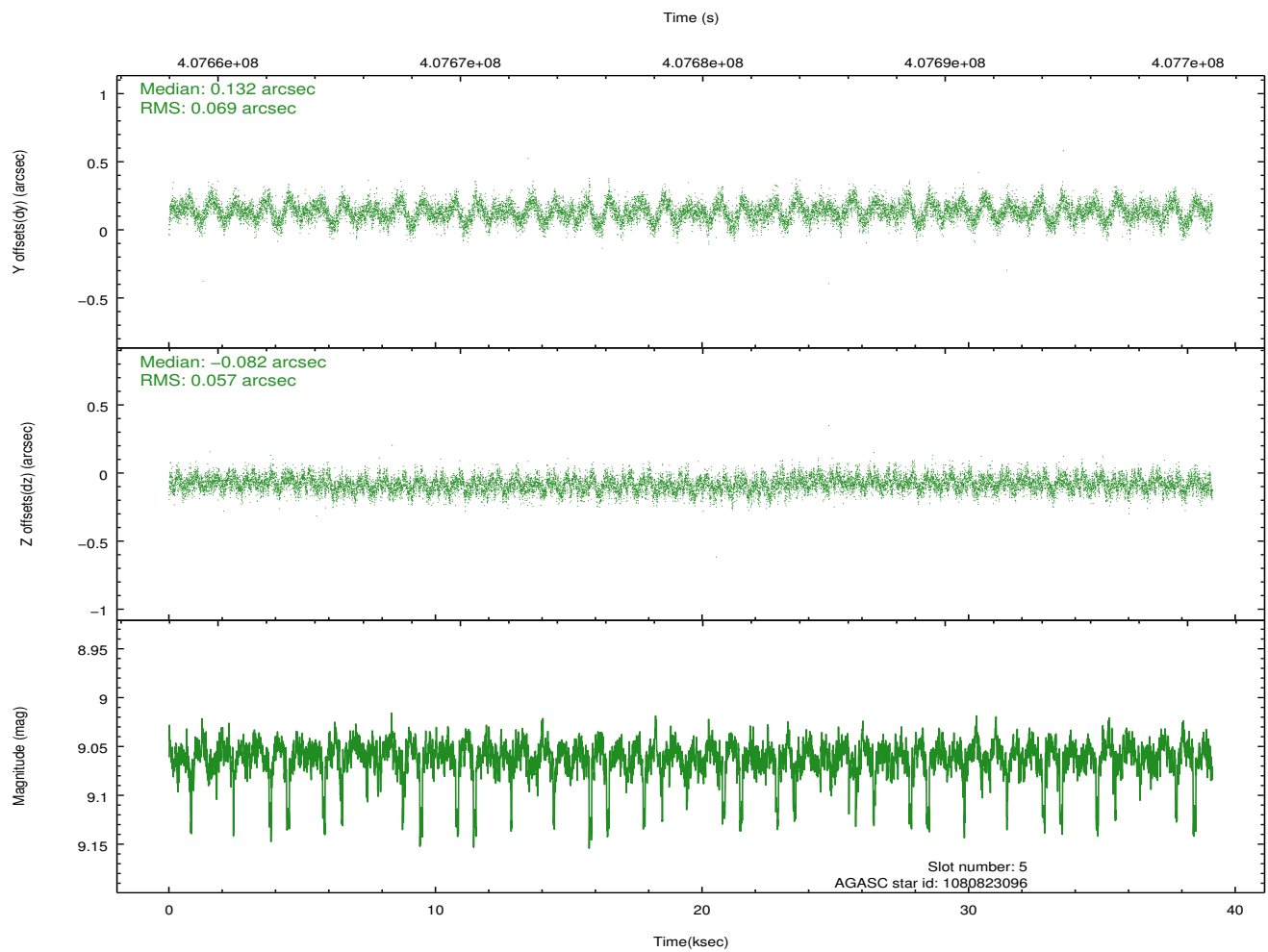
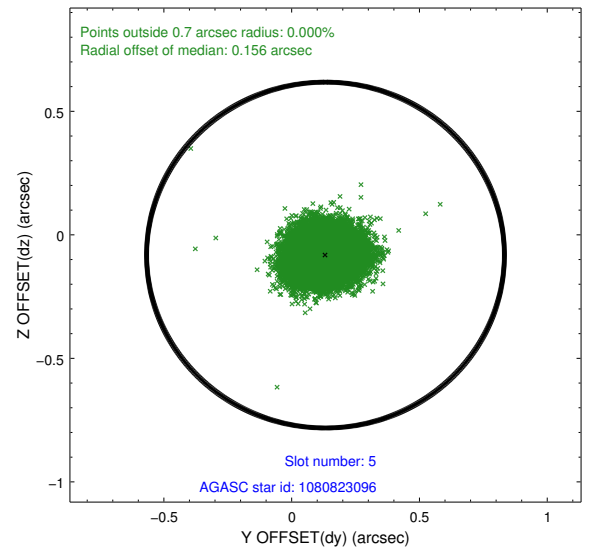
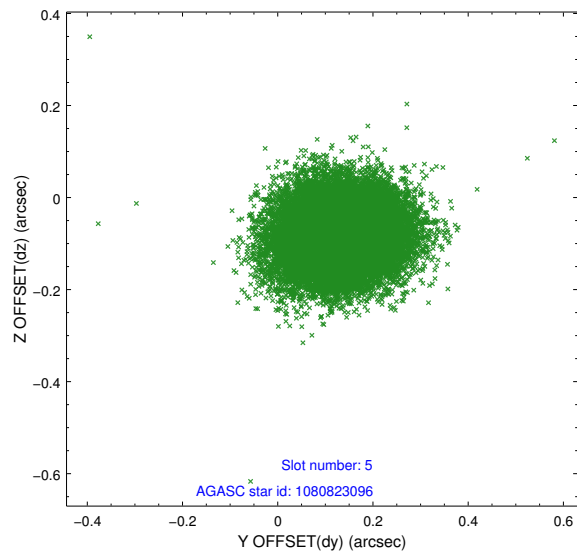
### 2.4.1 Slot 3



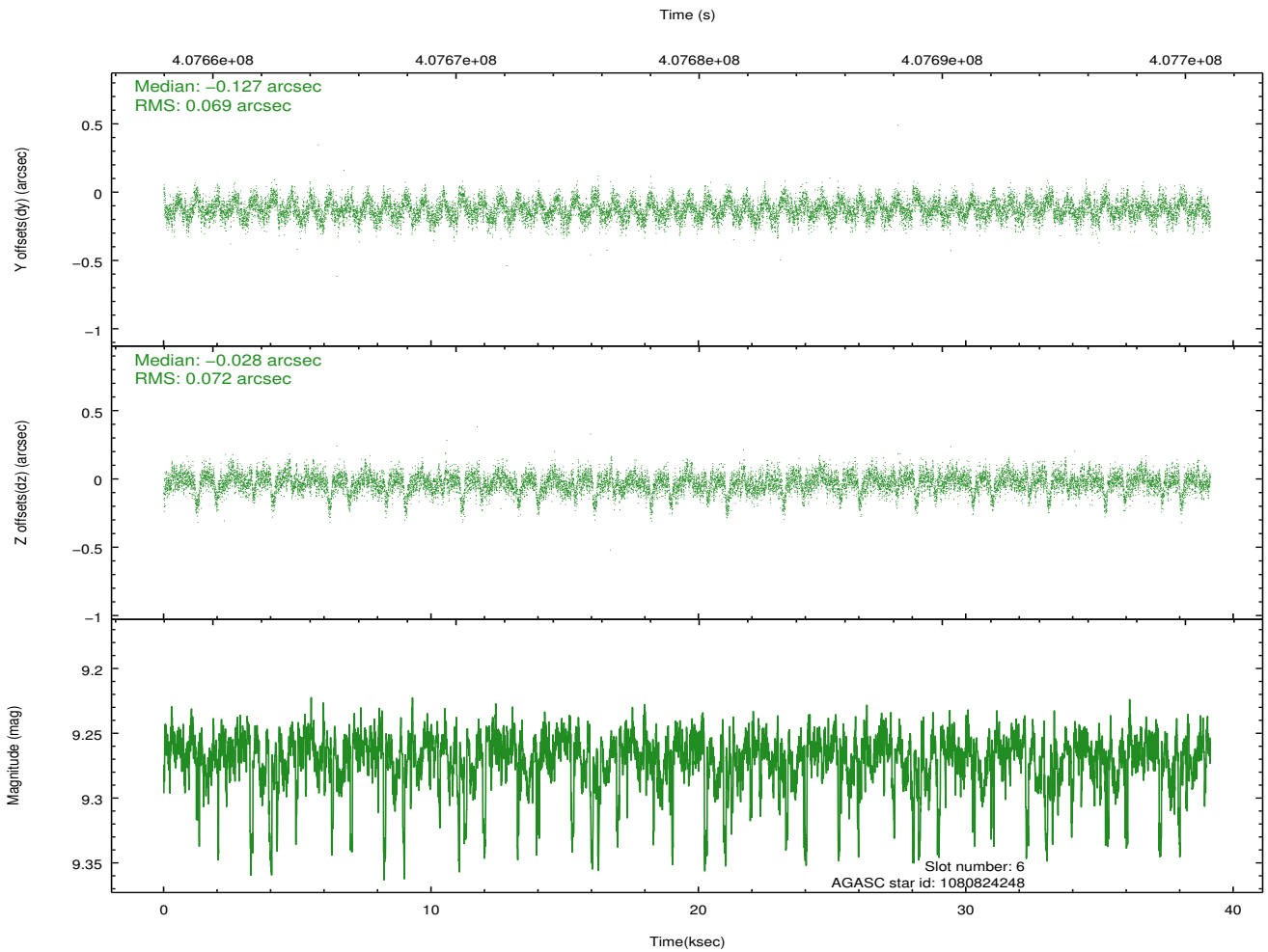
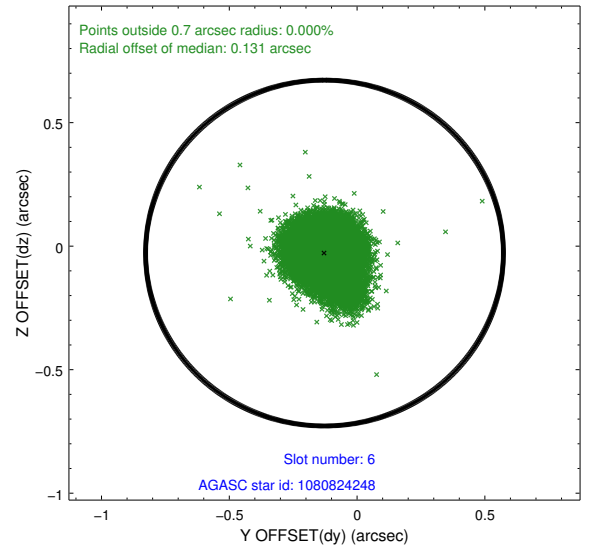
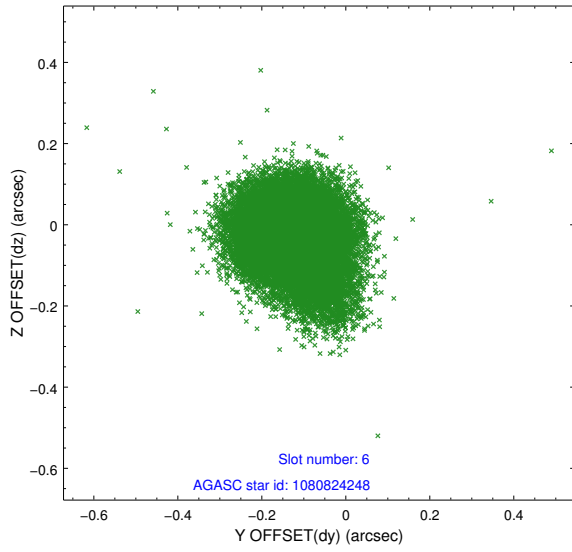
## 2.4.2 Slot 4



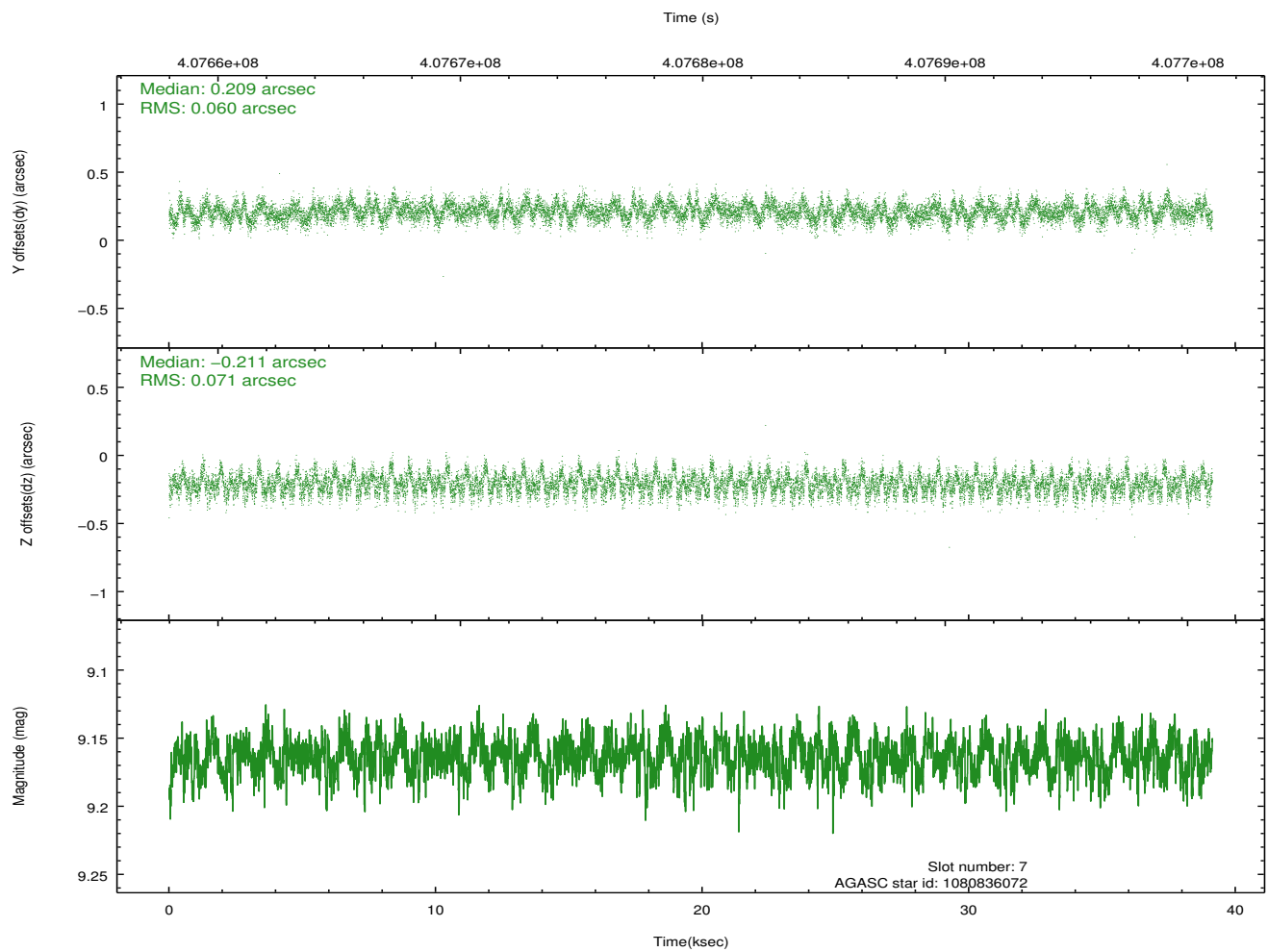
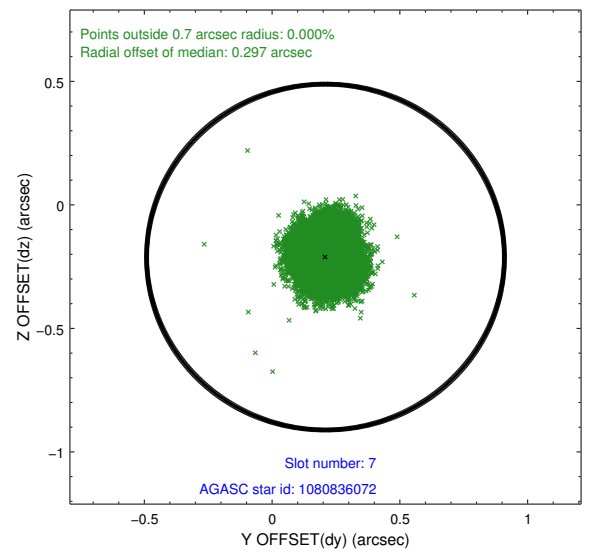
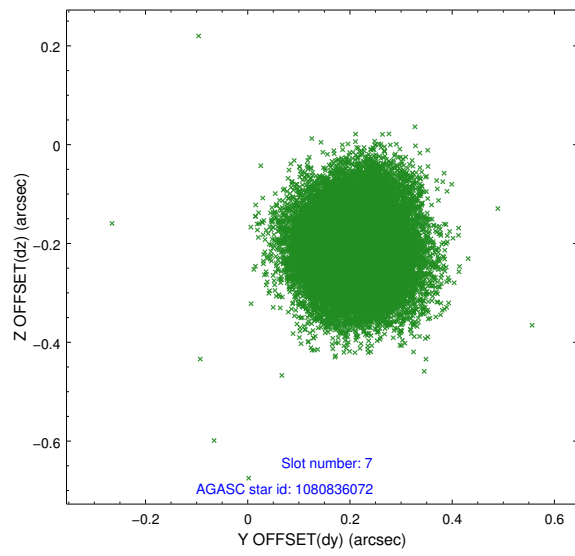
### 2.4.3 Slot 5



### 2.4.4 Slot 6

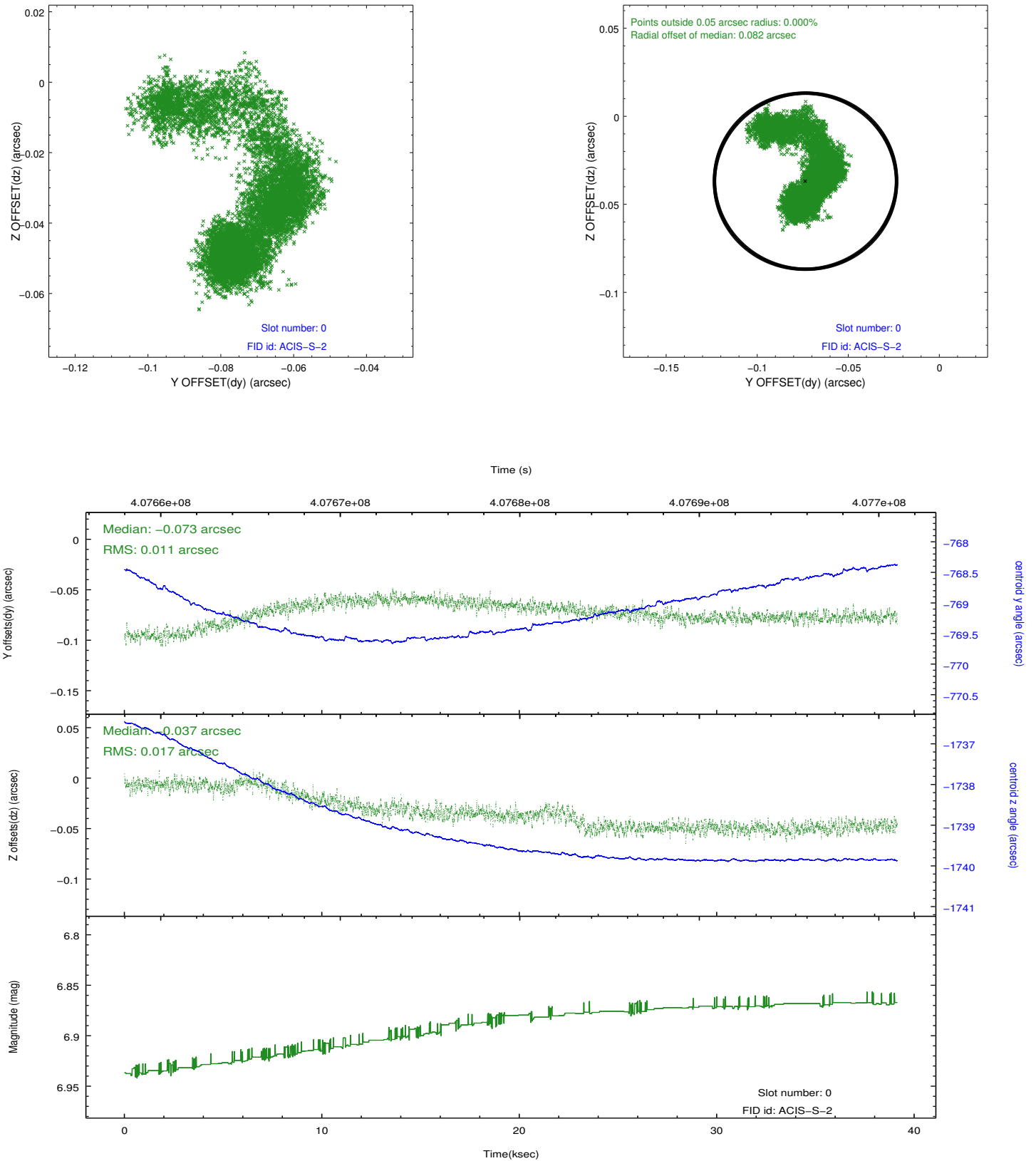


## 2.4.5 Slot 7

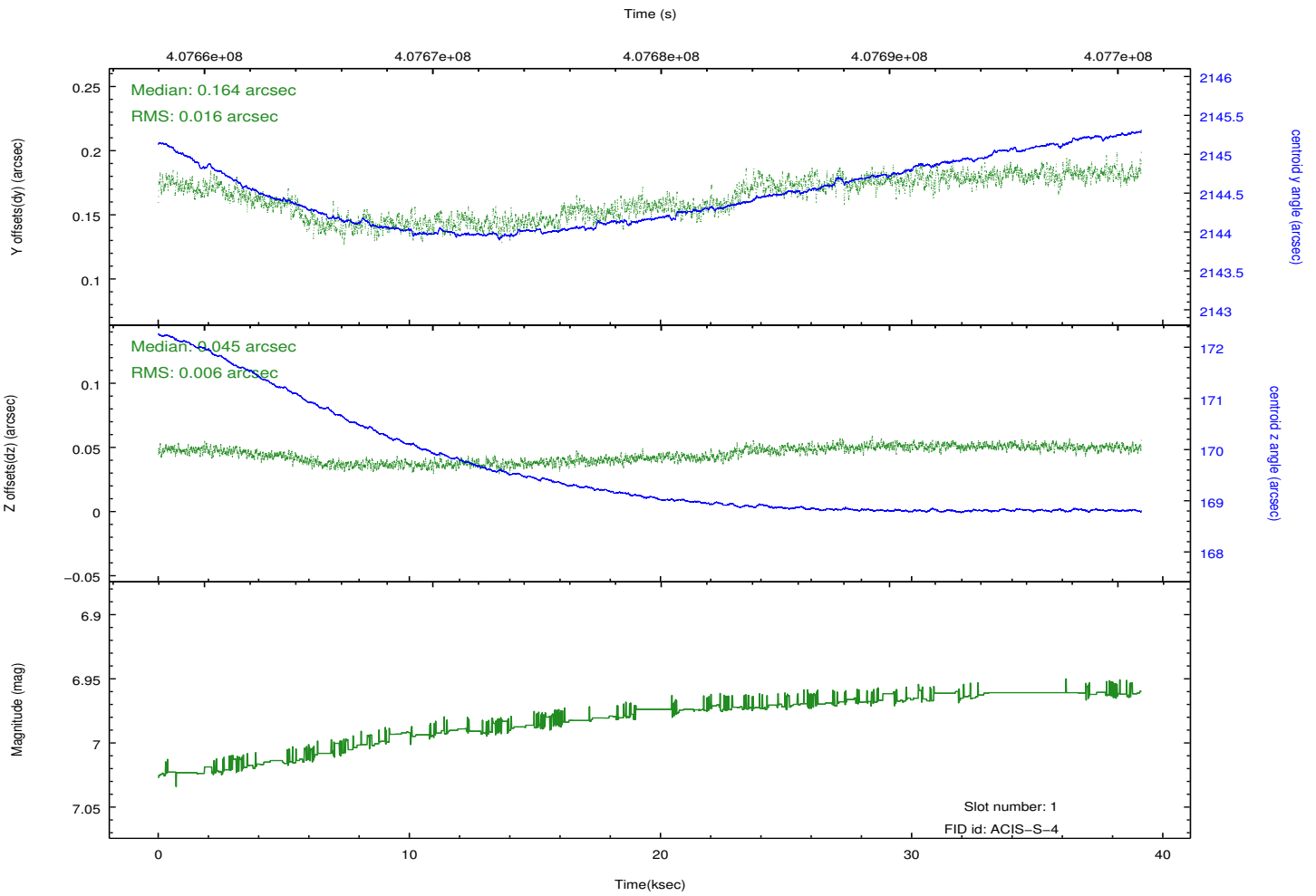
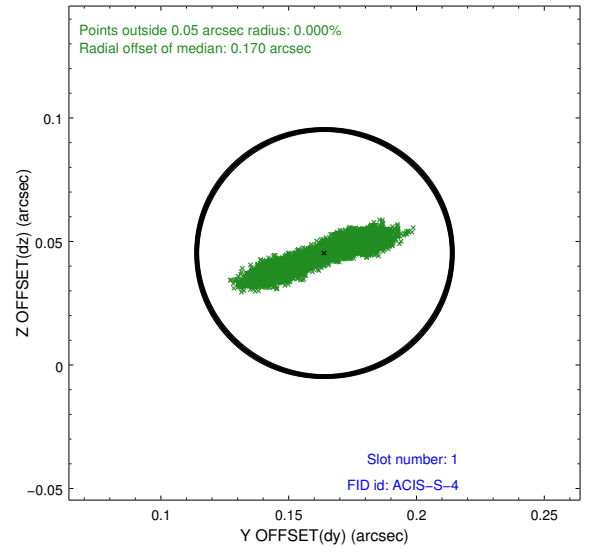
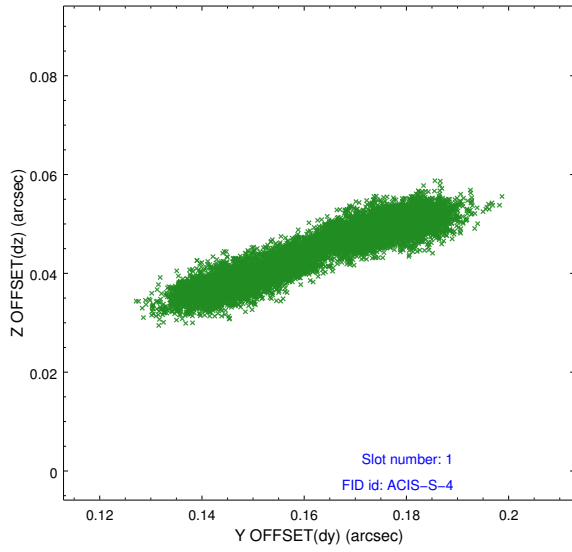


## 2.5 FID Slots

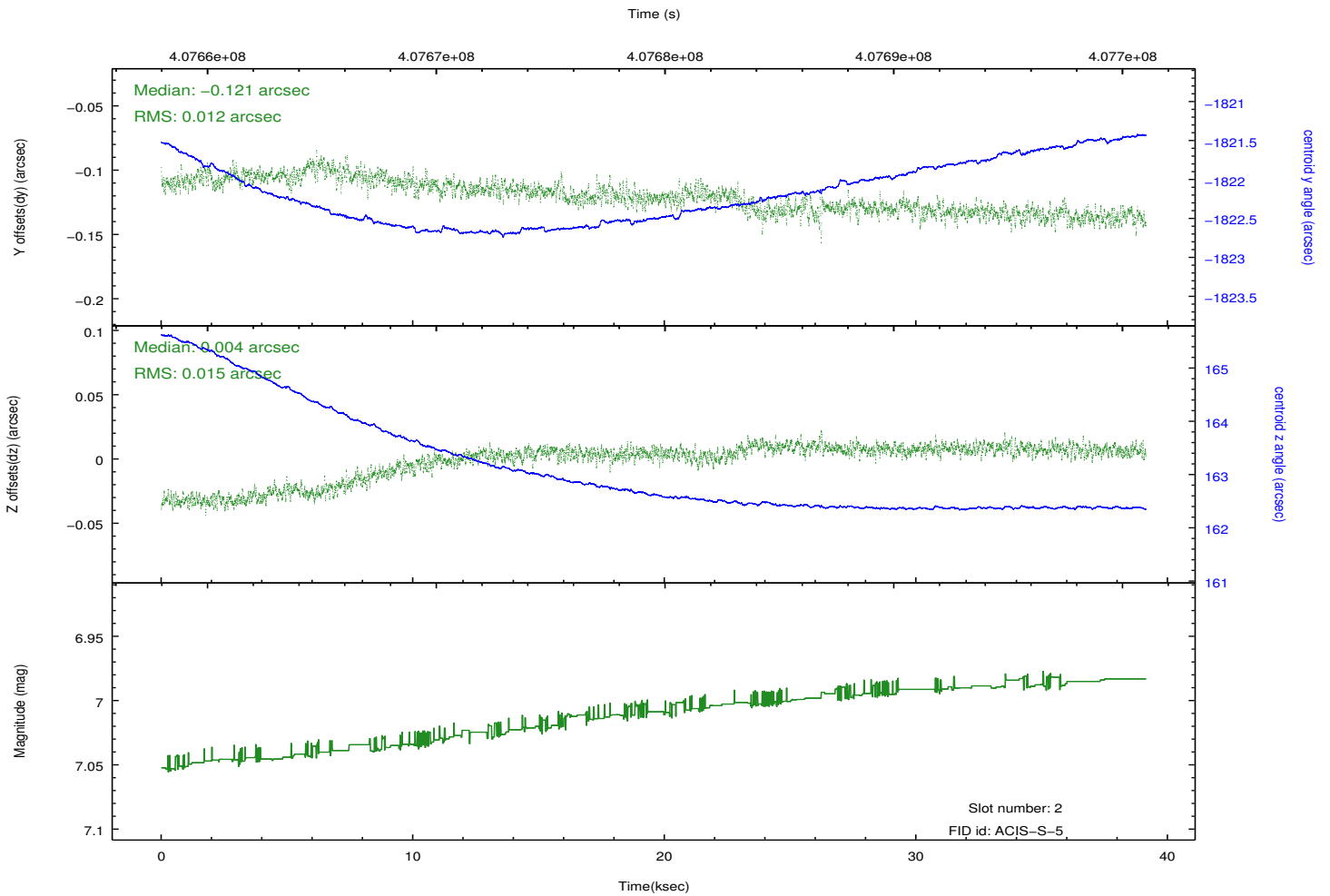
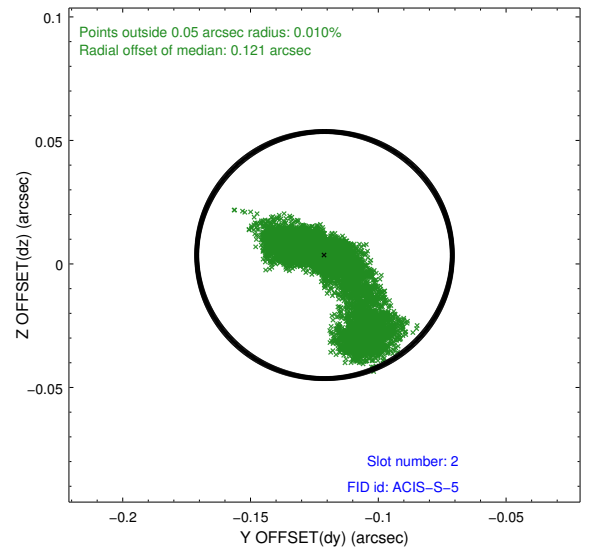
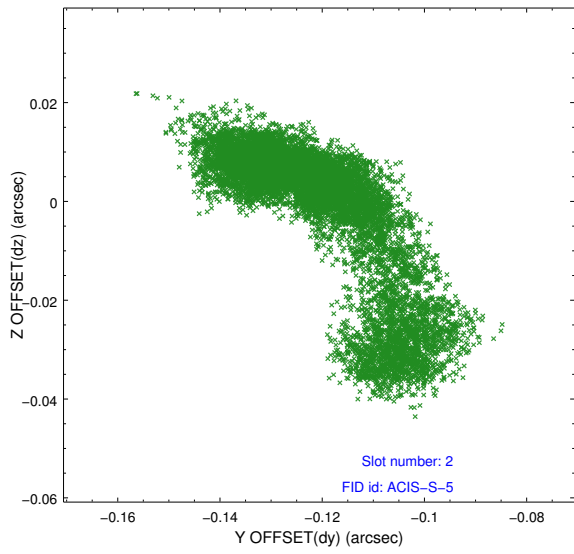
### 2.5.1 Slot 0



## 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)	2012.07.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.051653981388

## A.2 Comments