

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7853 - L2 Version 2  
Chandra X-Ray Center

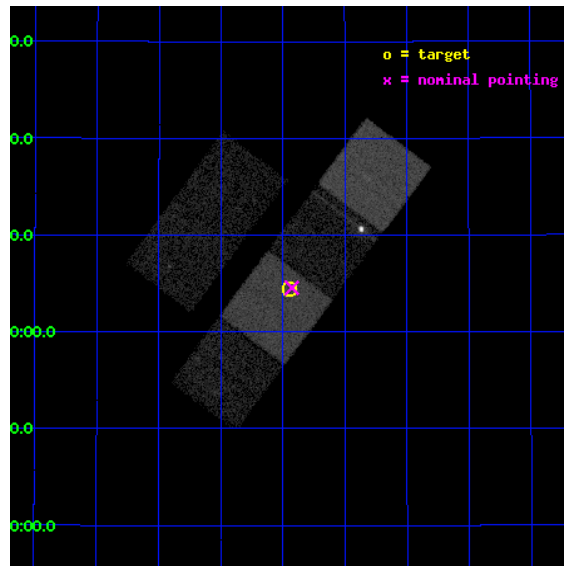
L2 Processing Date : May 10 2012

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# 1 Front

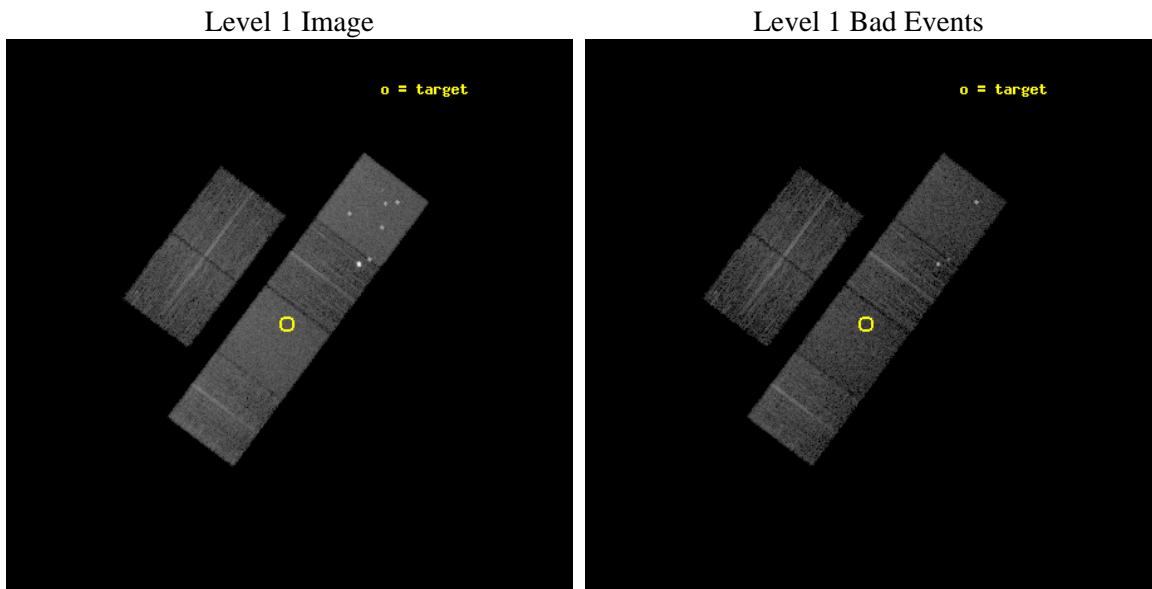
seq_num	701517	Sequence number
obs_id	7853	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 4308	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	185.487083	Observer's specified target RA [deg]
dec_targ	30.07425	Observer's specified target Dec [deg]
ra_nom	185.48174068647	Nominal RA [deg]
dec_nom	30.075987916156	Nominal Dec [deg]
roll_nom	126.87315710193	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4761.0197129846	Sum of GTIs [s]
livetime	4700.7328146369	Livetime [s]
ontime2	4761.0607629418	Sum of GTIs [s]
ontime3	4760.8966029286	Sum of GTIs [s]
ontime5	4760.9786829352	Sum of GTIs [s]
ontime6	4760.9376429319	Sum of GTIs [s]
ontime7	4761.0197129846	Sum of GTIs [s]
ontime8	4757.614503026	Sum of GTIs [s]
l2events	100563	Number of level 2 events



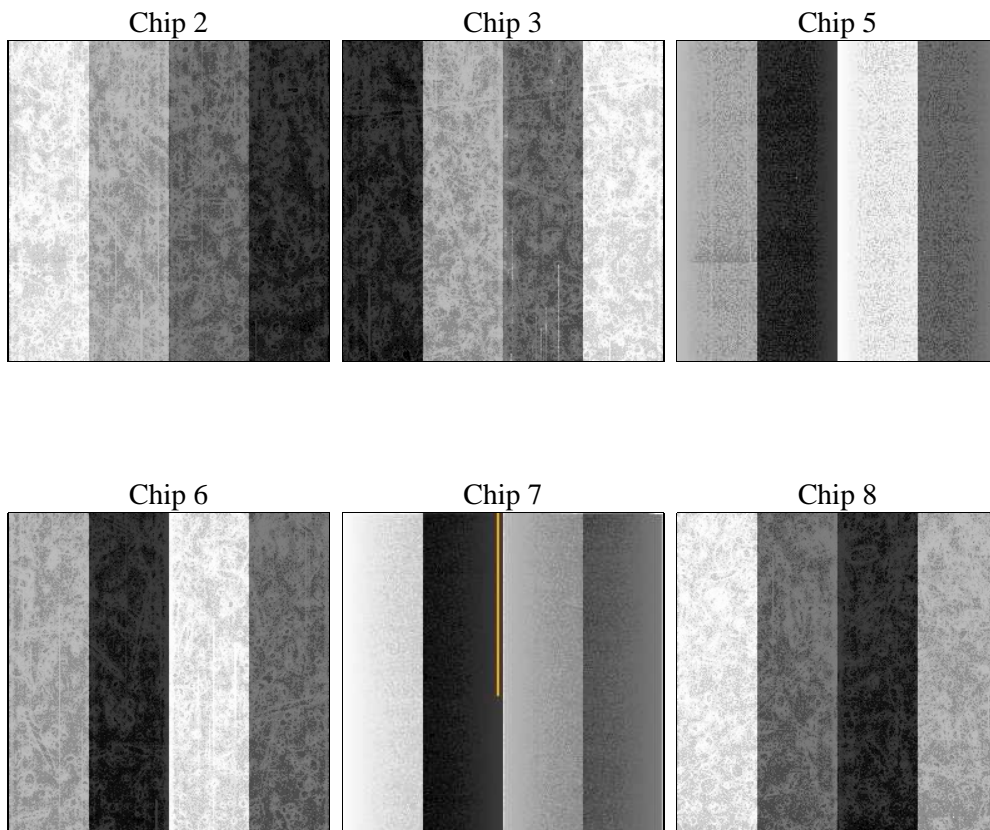
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	4761.0197129846	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	4761.0607629418	Sum of GTIs [s]
date	2012-05-10T11:05:49	Date and time of file creation	ontime3	4760.8966029286	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	4760.9786829352	Sum of GTIs [s]
			ontime6	4760.9376429319	Sum of GTIs [s]
			ontime7	4761.0197129846	Sum of GTIs [s]
			ontime8	4757.614503026	Sum of GTIs [s]
			l1events	368435	Number of level 1 events

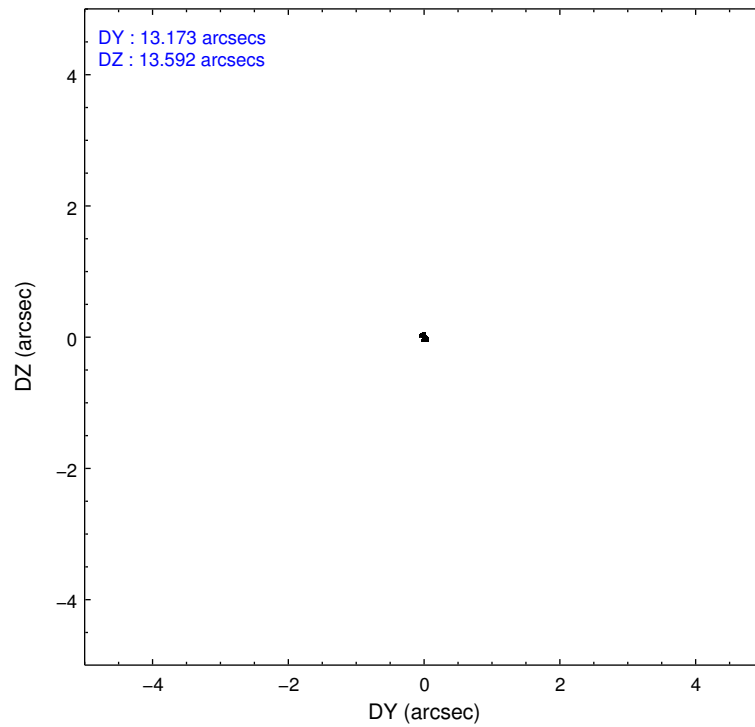
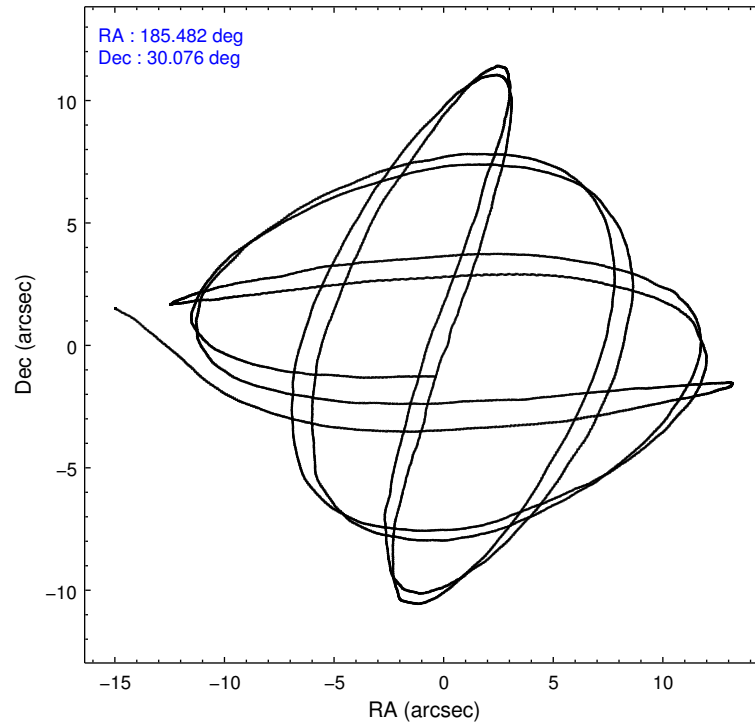
### 2.1.4 Events

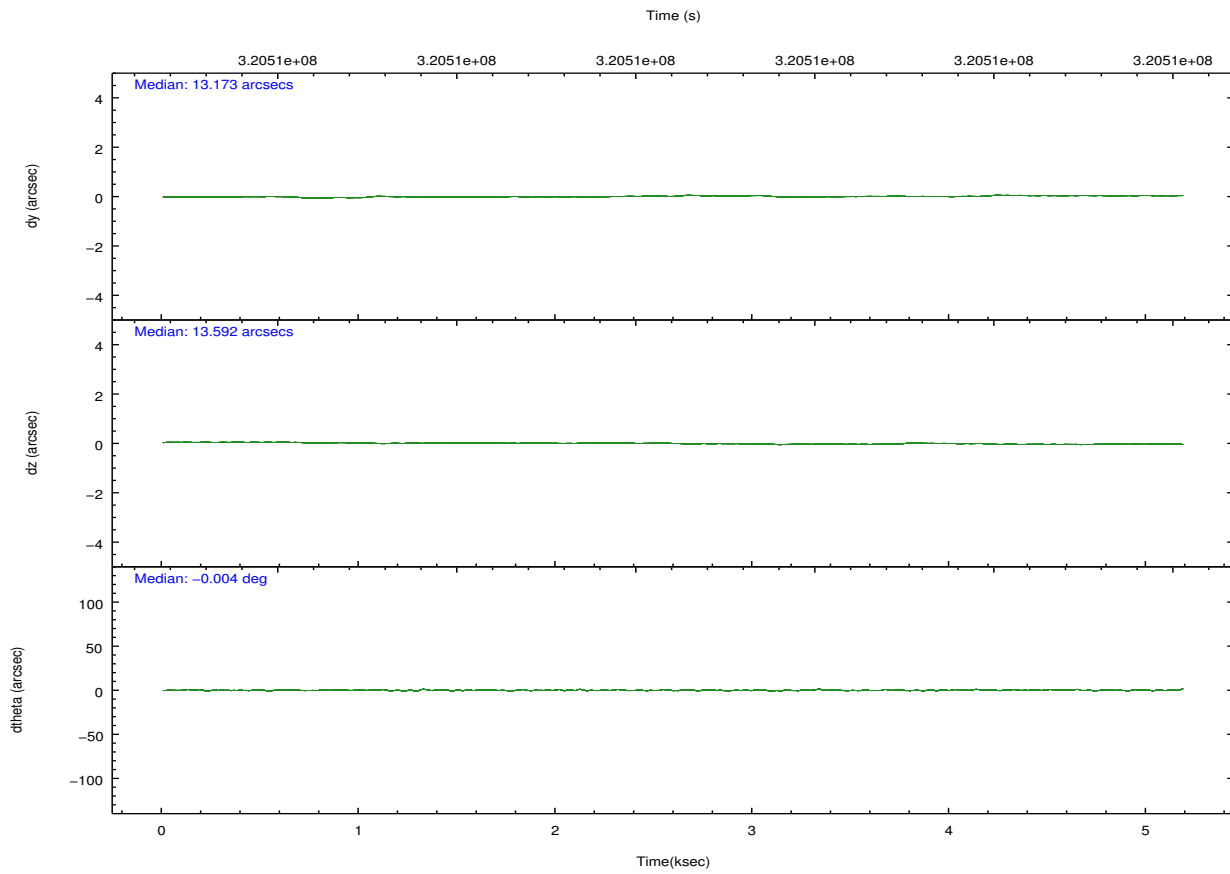
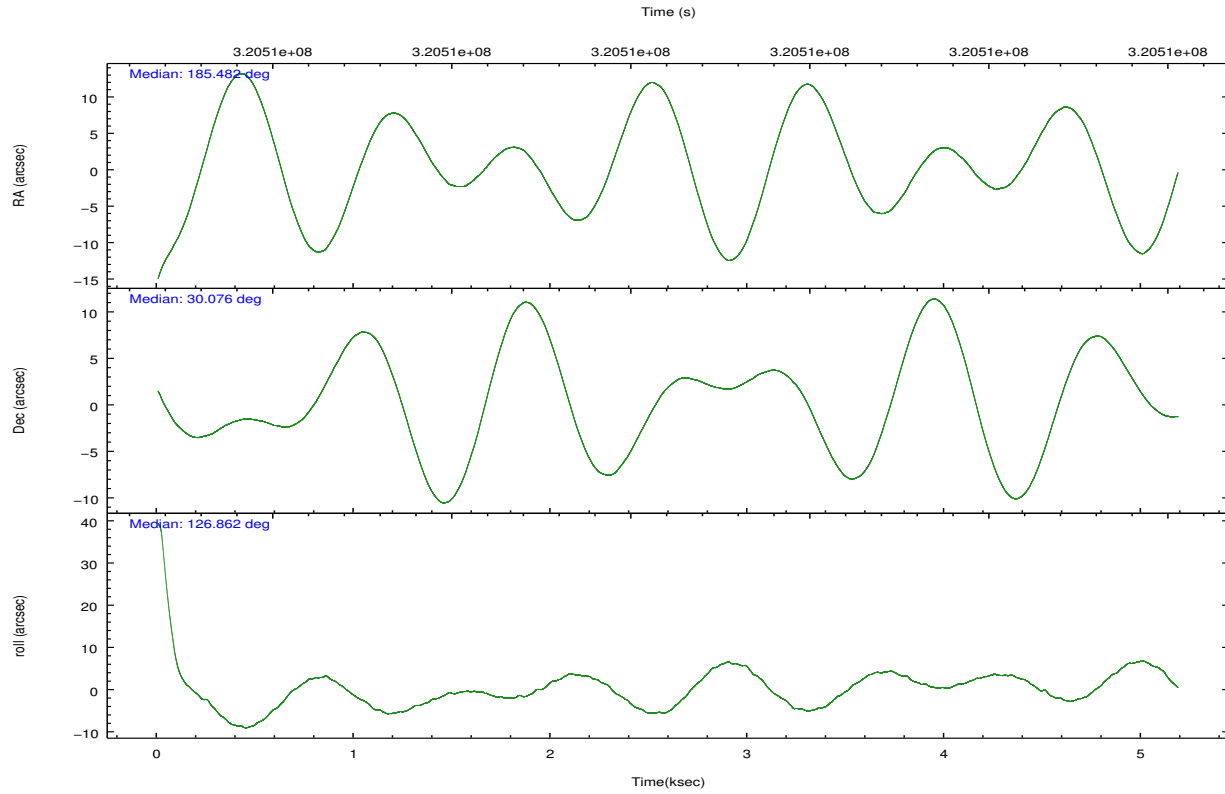
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	45741	45208	78162	72138	64434	62752	grade 0 events	2316	2399	6008	20714	2229	4317
rejected events	40279	39634	40368	43311	38095	49515		5%	5%	7%	28%	3%	6%
rejected %	88%	87%	51%	60%	59%	78%	grade 1 events	39	24	85	778	70	58
								0%	0%	0%	1%	0%	0%
							grade 2 events	1177	1112	10330	3750	5393	2859
								2%	2%	13%	5%	8%	4%
							grade 3 events	537	516	1183	1298	2203	1484
								1%	1%	1%	1%	3%	2%
							grade 4 events	535	540	1136	1318	2198	1337
								1%	1%	1%	1%	3%	2%
							grade 5 events	1911	2191	5432	2488	6028	2847
								4%	4%	6%	3%	9%	4%
							grade 6 events	898	1009	19165	1766	14331	3243
								1%	2%	24%	2%	22%	5%
							grade 7 events	38328	37417	34823	40026	31982	46607
								83%	82%	44%	55%	49%	74%

## 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	185.511081	185.481740686467	Subarray requested	NONE	NONE
[deg] Pointing Dec	30.065620	30.0759879161556	Alternating exposures requested	N	N
[deg] Pointing Roll	126.701730	126.8731571019298	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	320507806.184000	320506968.01911			
Observation start date	2008-02-27T13:55:41	2008-02-27T13:42:48			
[s] Observation end time (MET)	320512806.184000	320513592.59443			
Observation end date	2008-02-27T15:19:01	2008-02-27T15:33:12			
Read mode	TIMED	TIMED			

## 2.3 Aspect



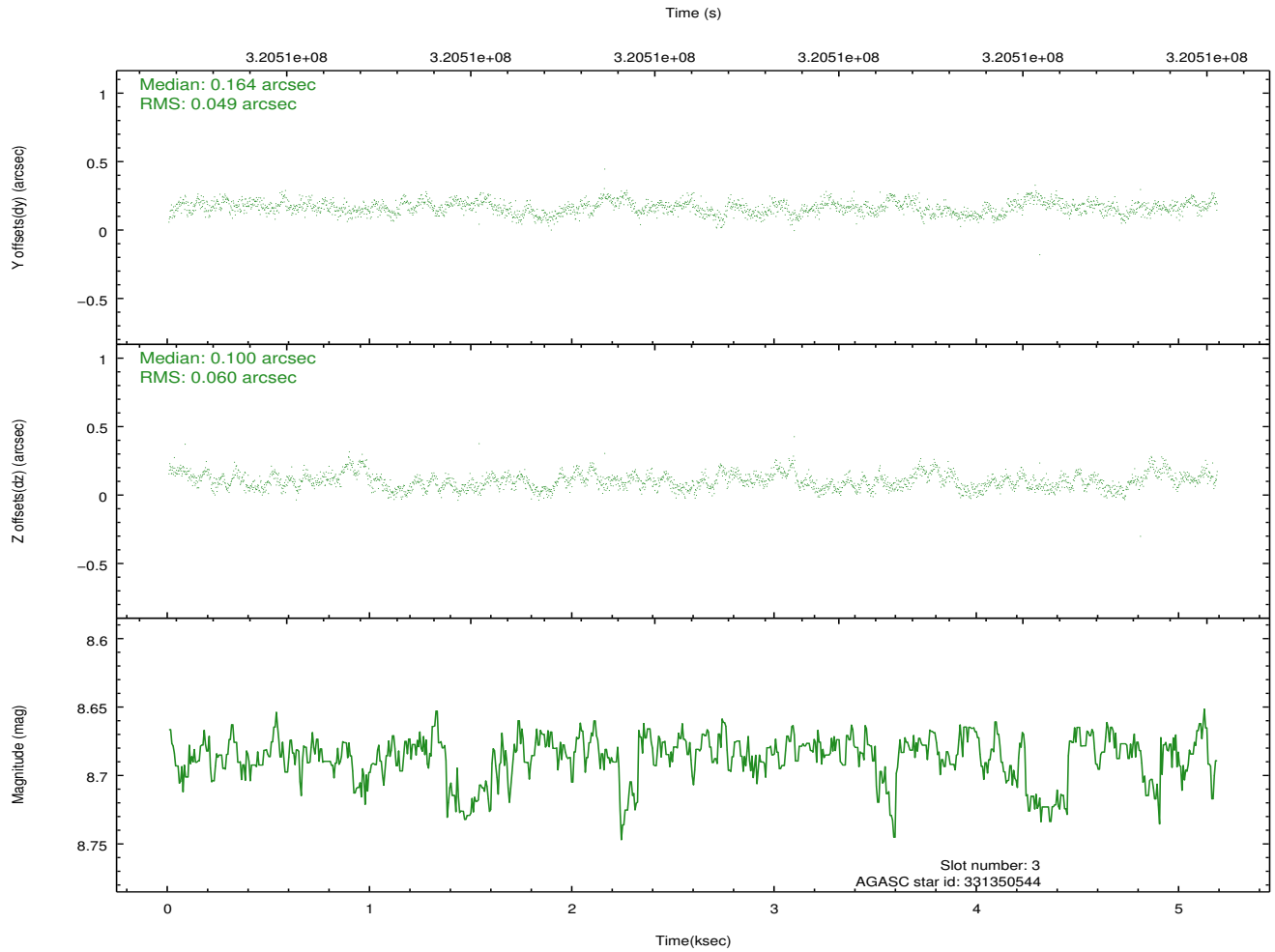
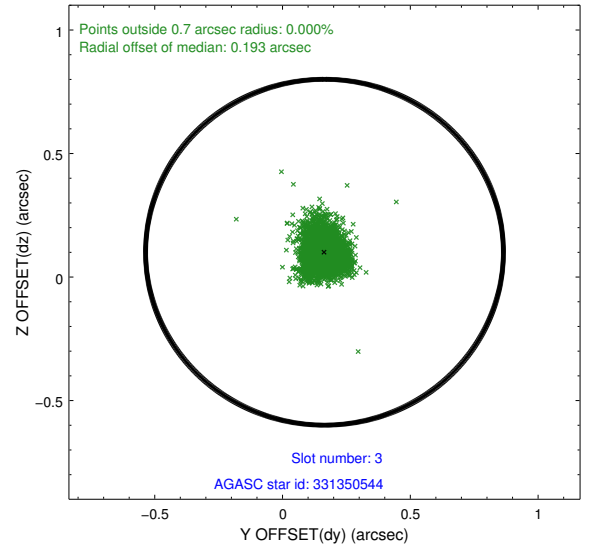
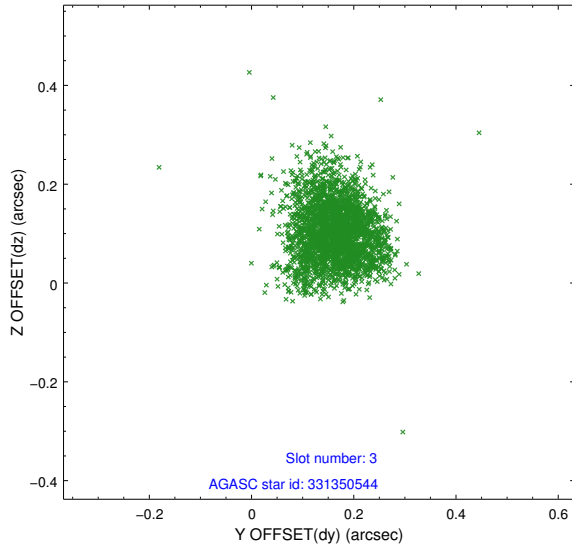


### Slot Statistics

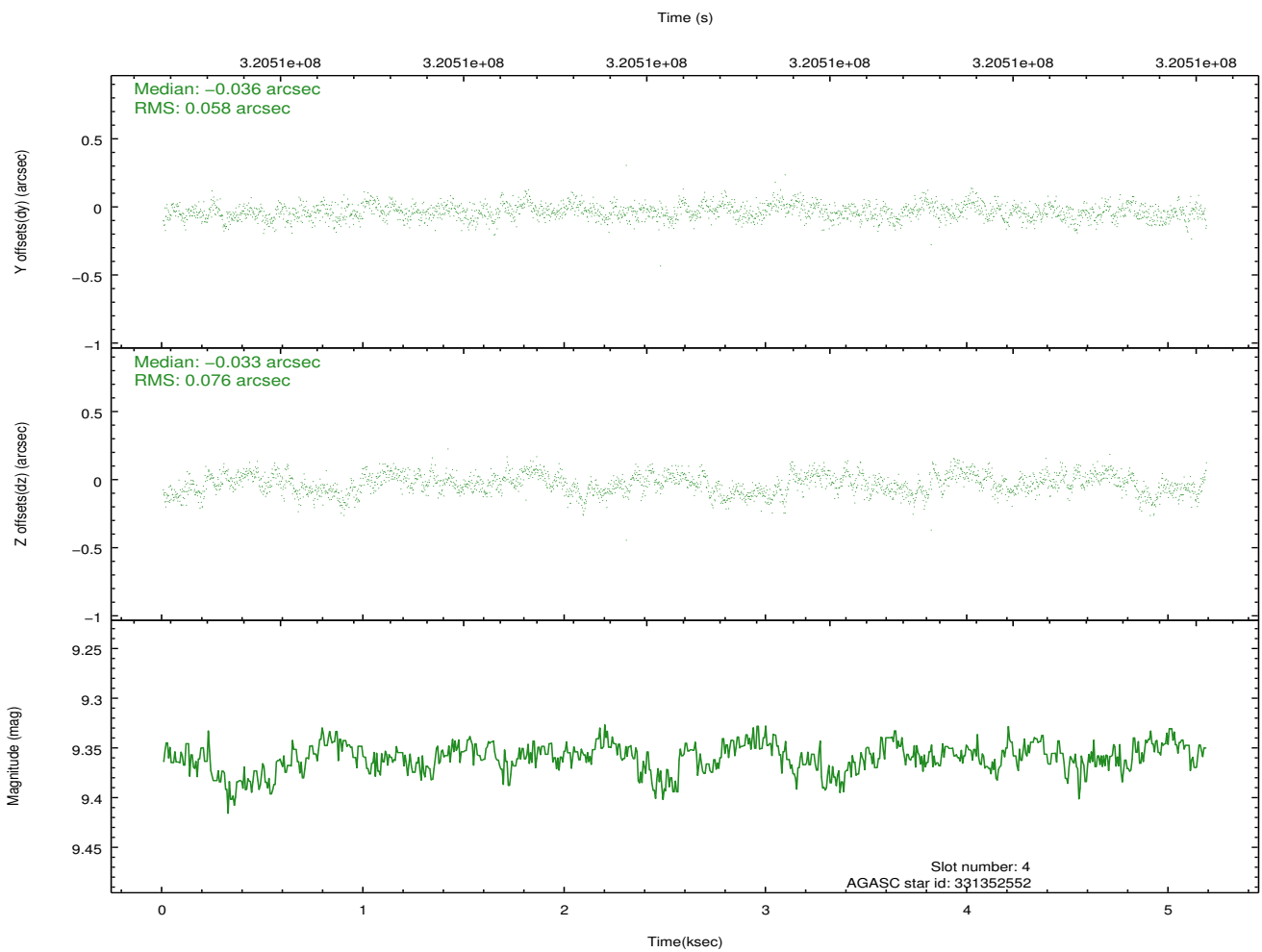
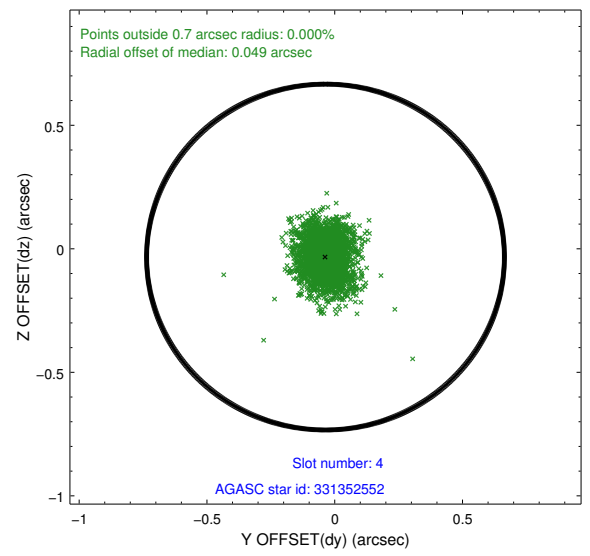
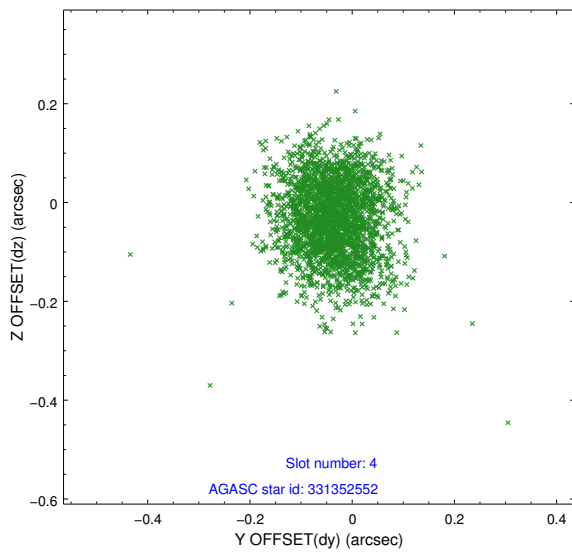
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1264	-0.031	-0.061	0.007	0.010	0.000000	0.000000	-766.13	-1734.94
1	FID	ACIS-S-4	7.19	1264	0.153	0.031	0.006	0.011	0.000000	0.000000	2146.80	172.42
2	FID	ACIS-S-5	7.23	1264	-0.153	0.038	0.007	0.011	0.000000	0.000000	-1817.59	167.43
3	GUIDE	331350544	8.69	2526	0.164	0.100	0.081	0.132	184.879941	30.167953	1473.88	1351.56
4	GUIDE	331352552	9.36	2528	-0.036	-0.033	0.100	0.163	185.768300	30.610633	1099.17	-1811.40
5	GUIDE	331354016	8.53	2528	-0.001	0.004	0.067	0.110	185.691721	30.800938	1790.00	-2030.98
6	GUIDE	331355312	7.77	2528	0.074	0.190	0.047	0.080	184.992302	30.486549	2180.69	381.97
7	GUIDE	331368240	6.50	2528	-0.204	-0.261	0.066	0.103	184.631757	30.249046	2171.62	1791.58

## 2.4 Star Slots

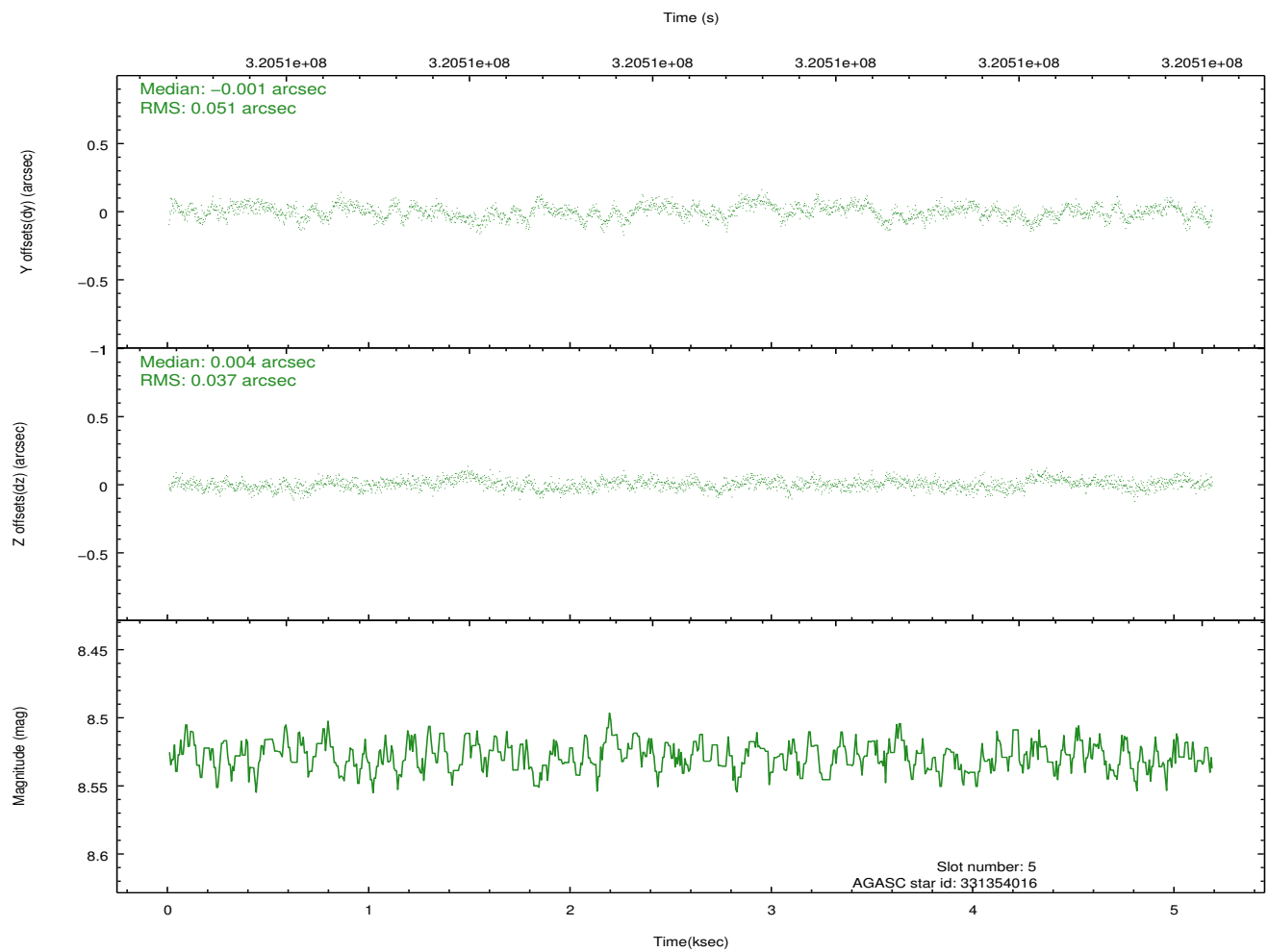
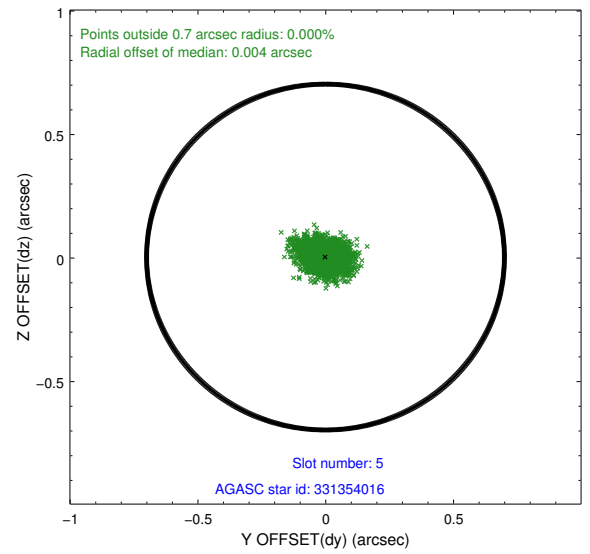
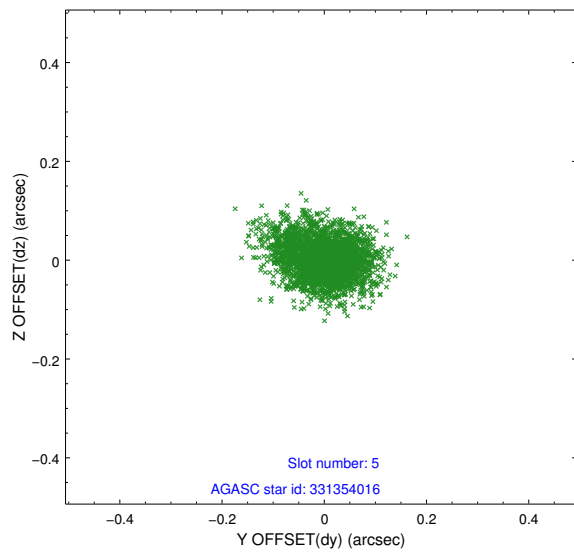
### 2.4.1 Slot 3



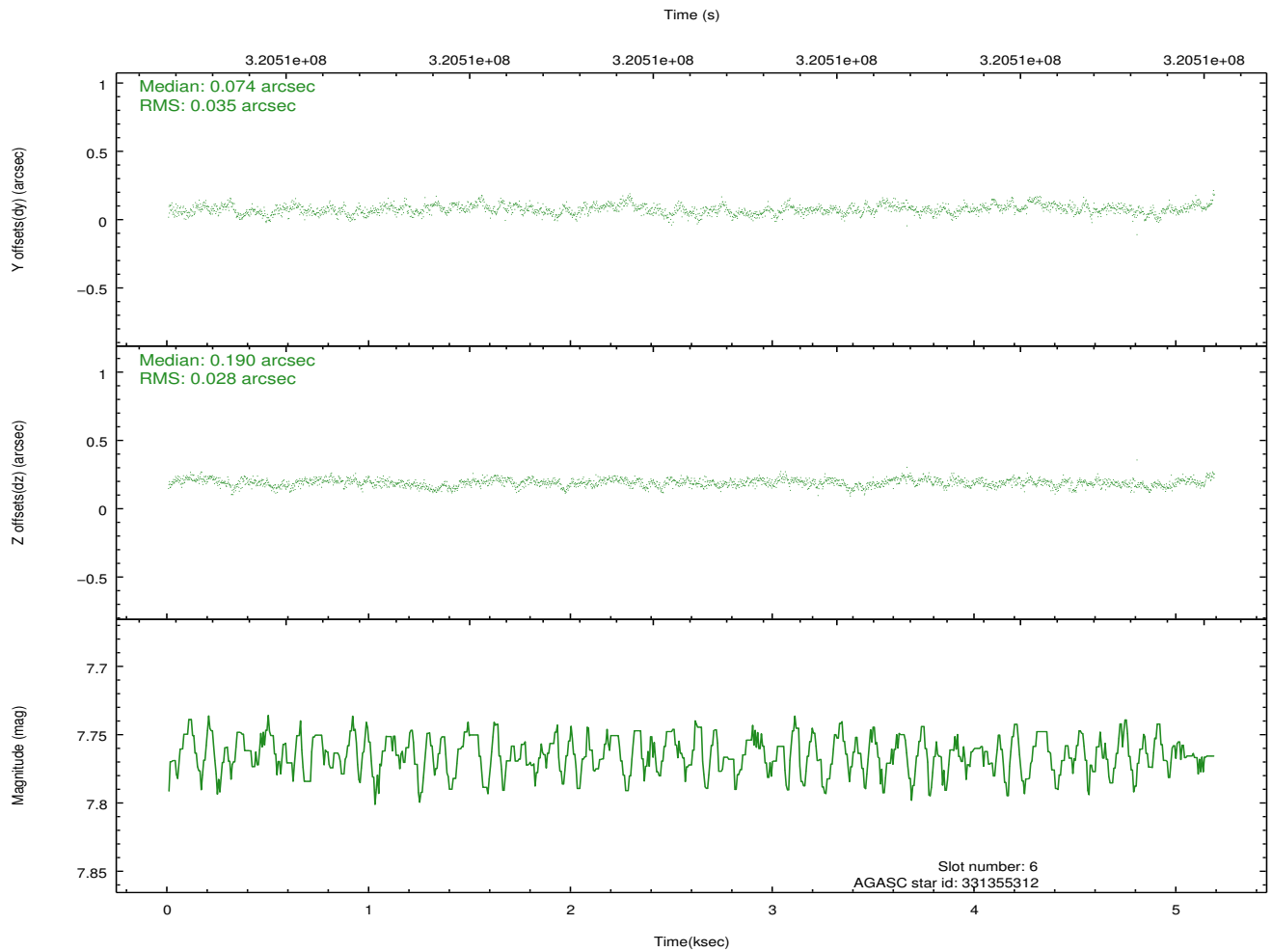
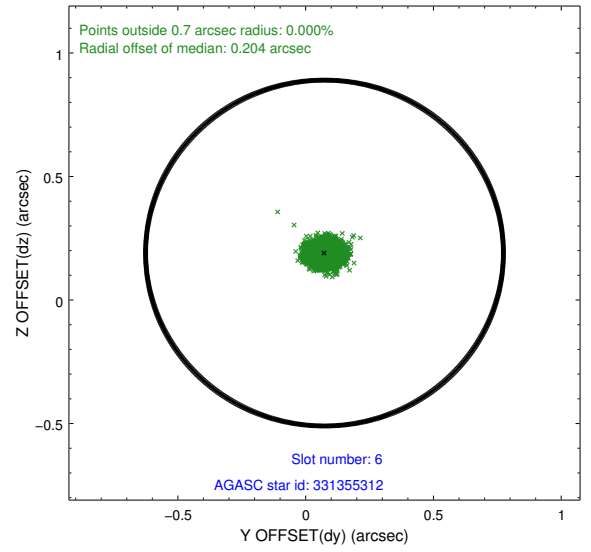
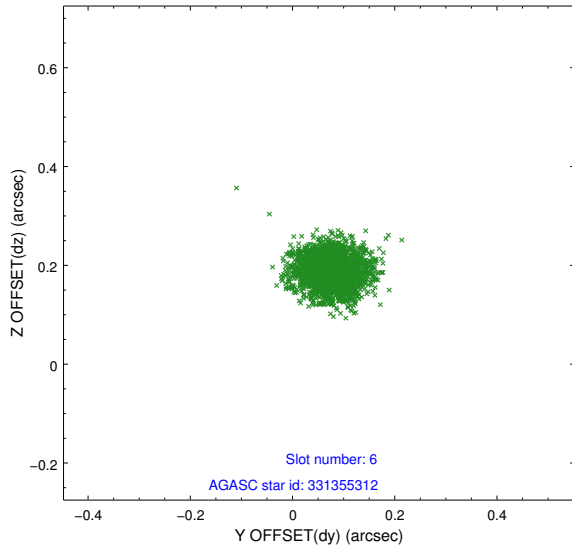
## 2.4.2 Slot 4



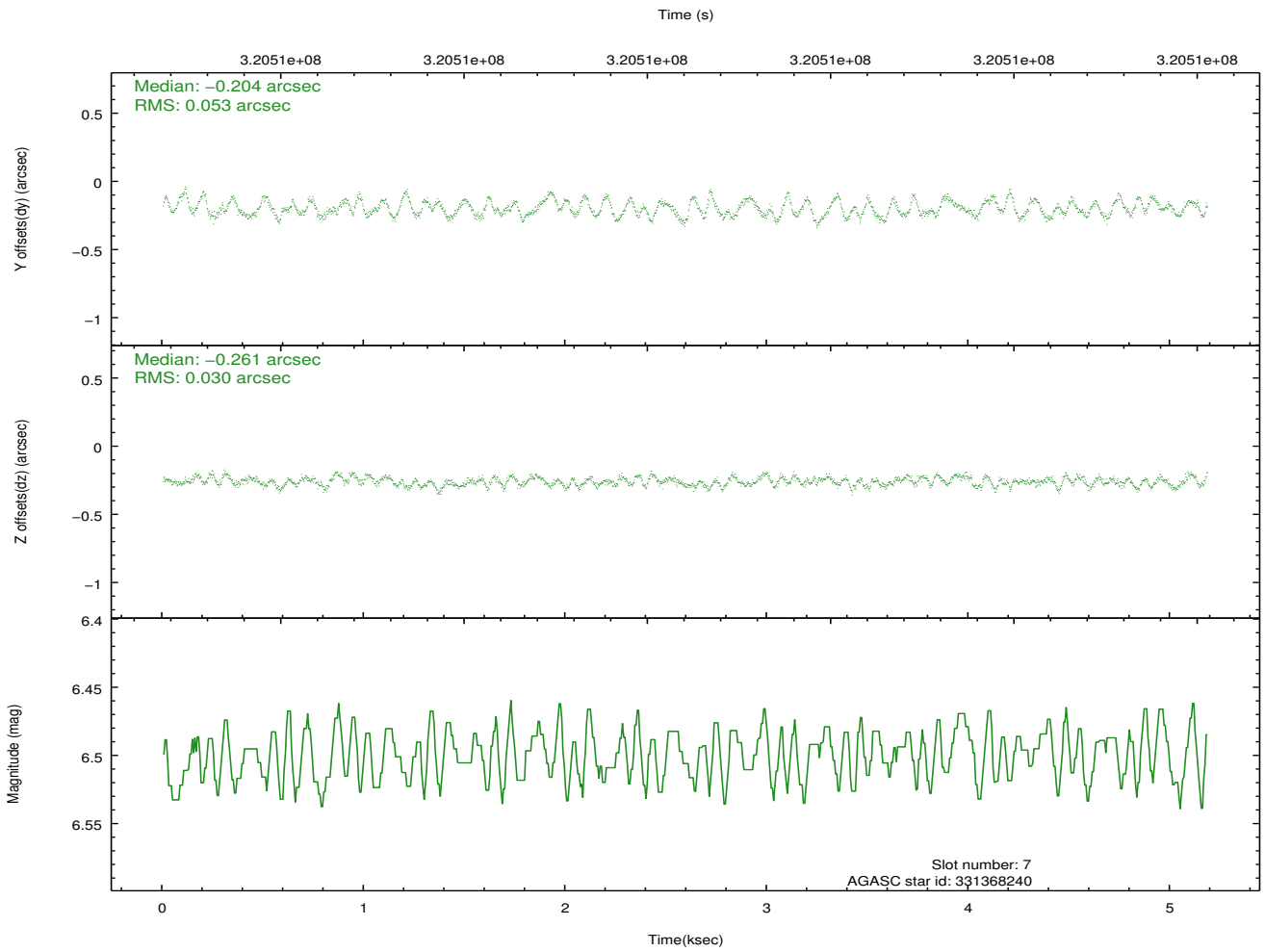
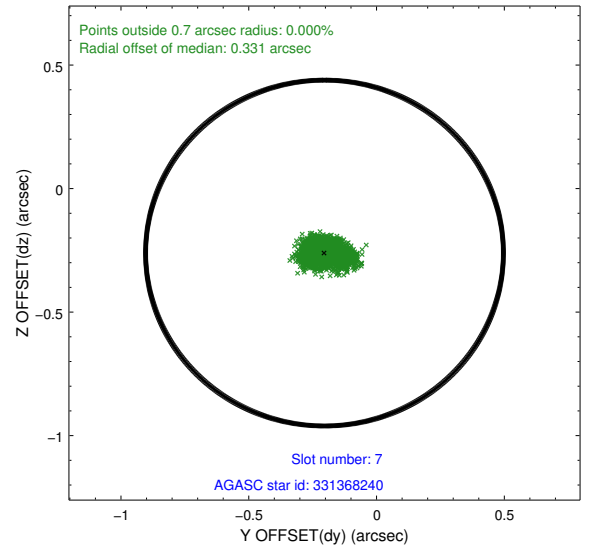
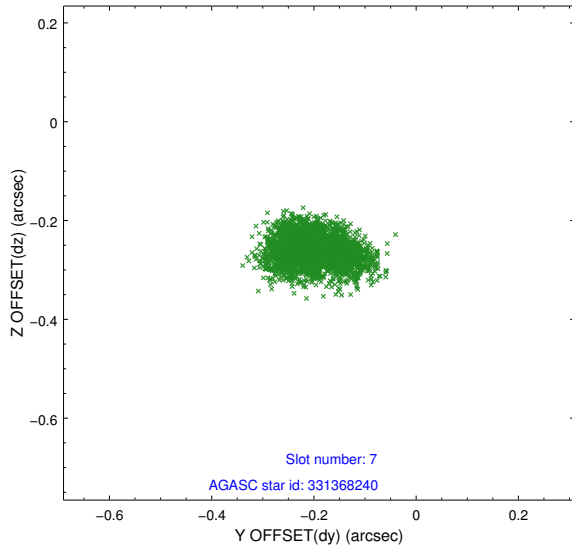
### 2.4.3 Slot 5



### 2.4.4 Slot 6

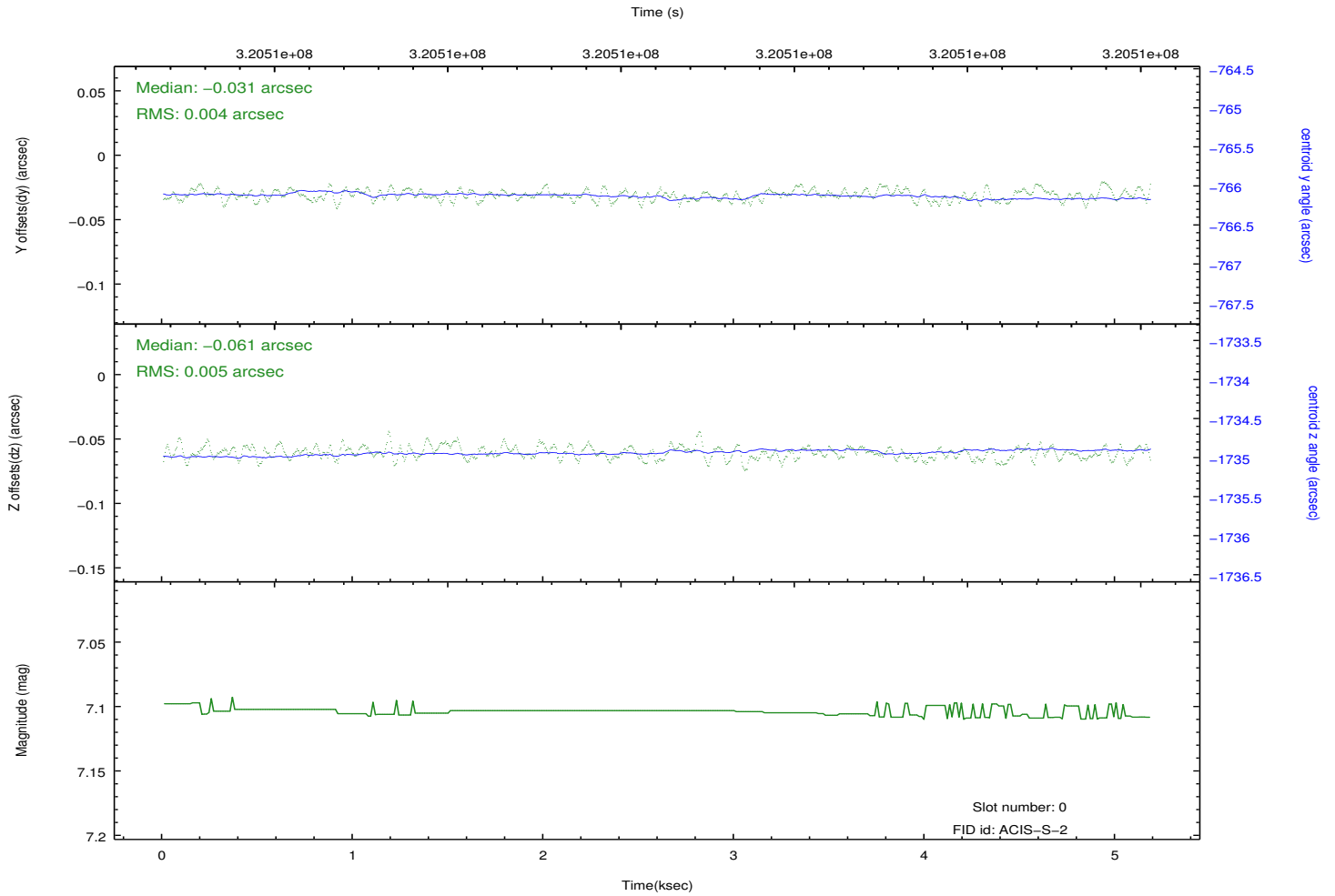
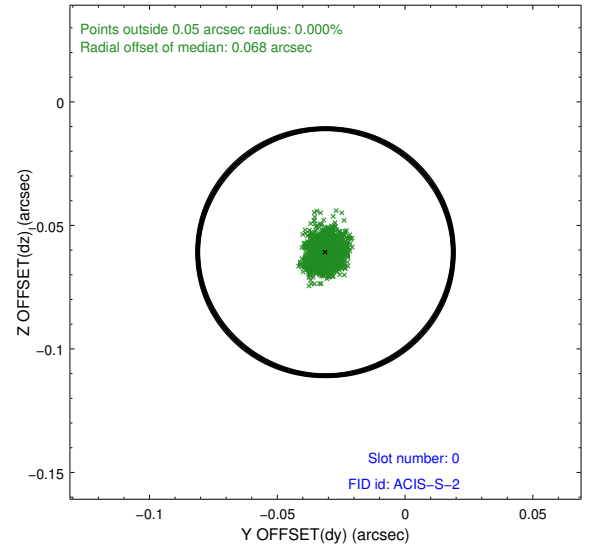
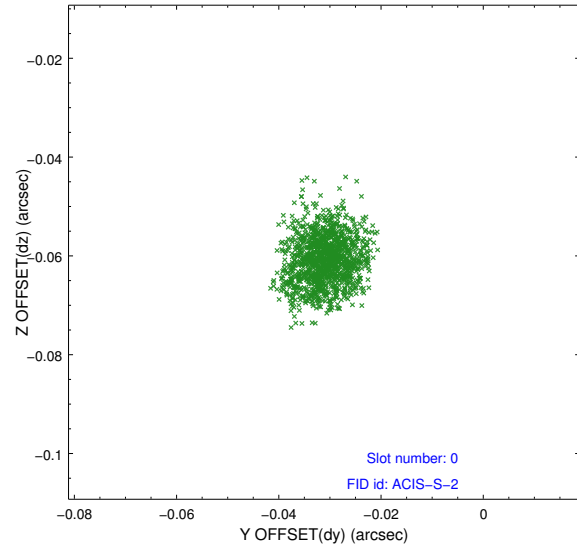


### 2.4.5 Slot 7

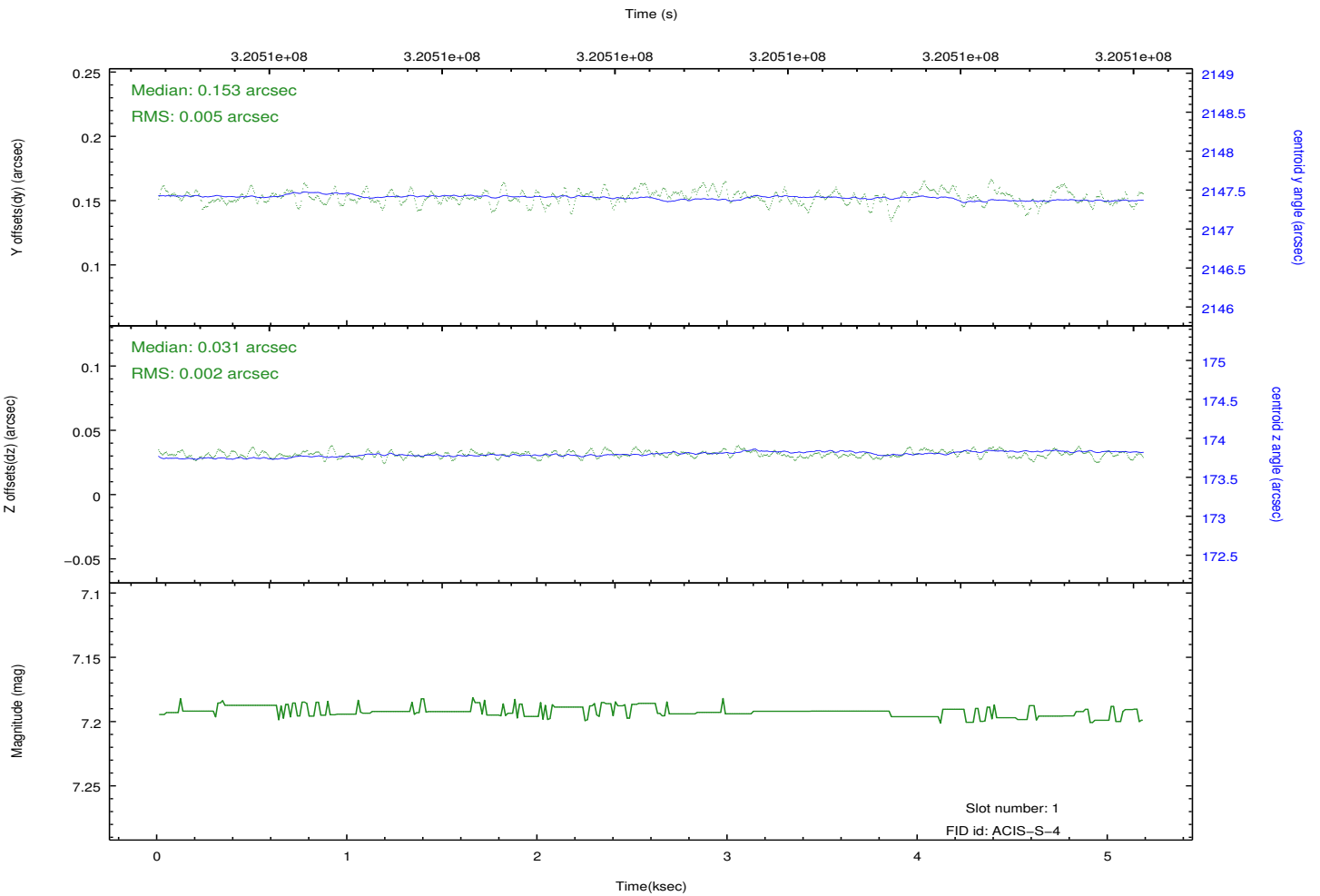
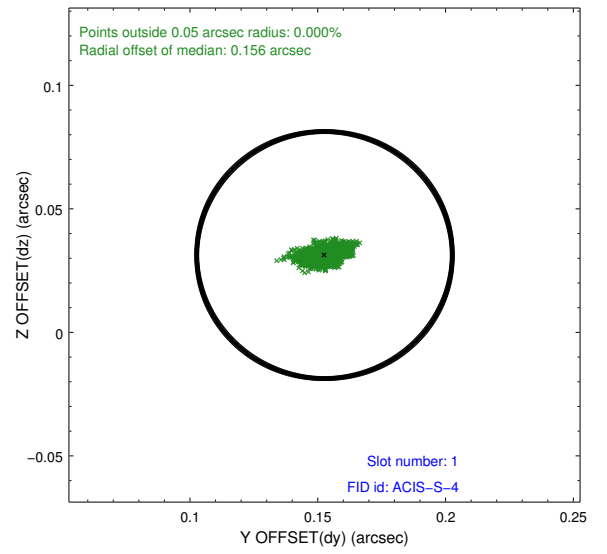
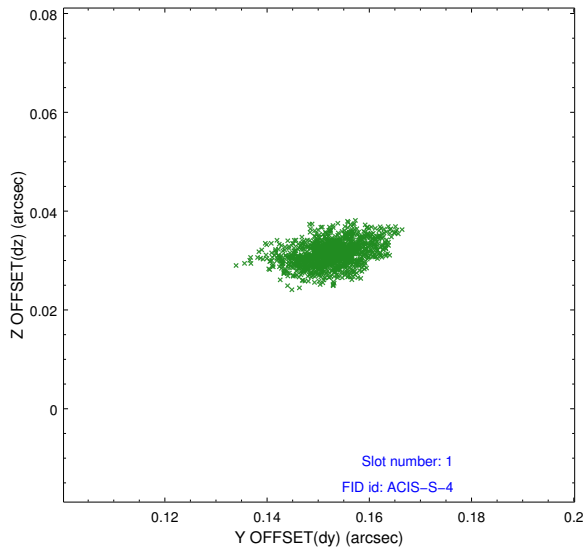


## 2.5 FID Slots

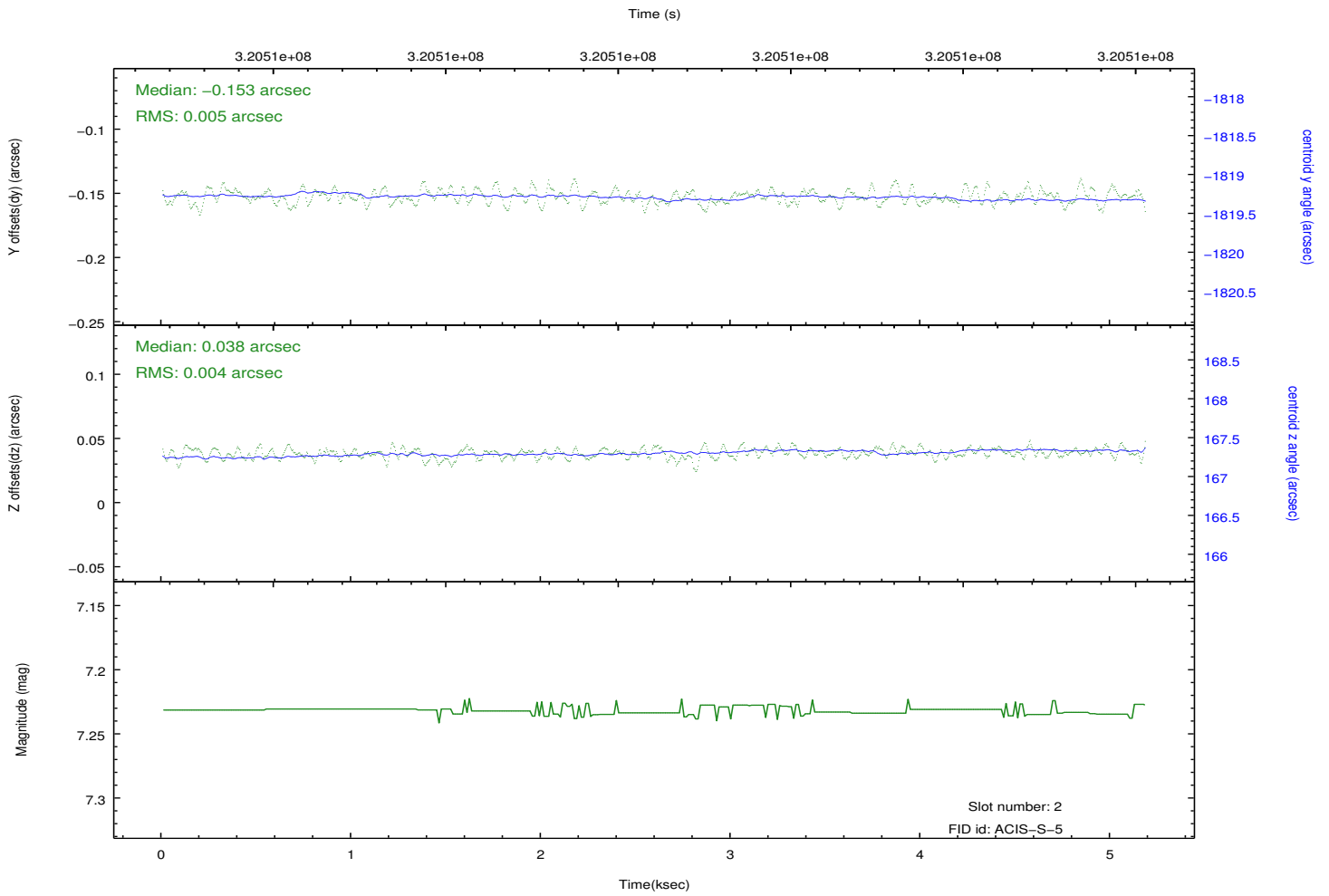
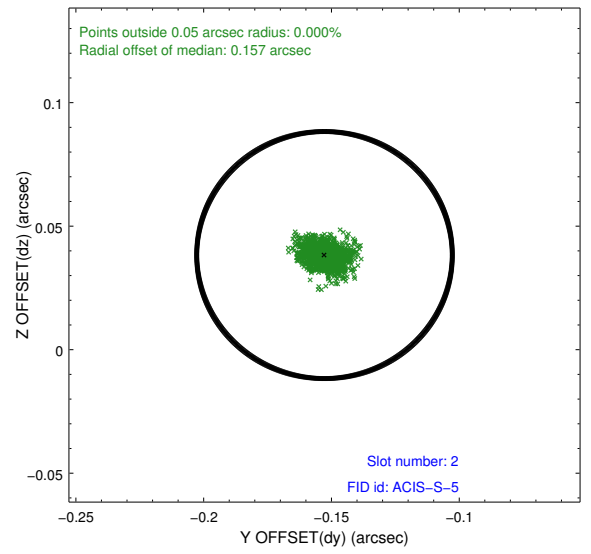
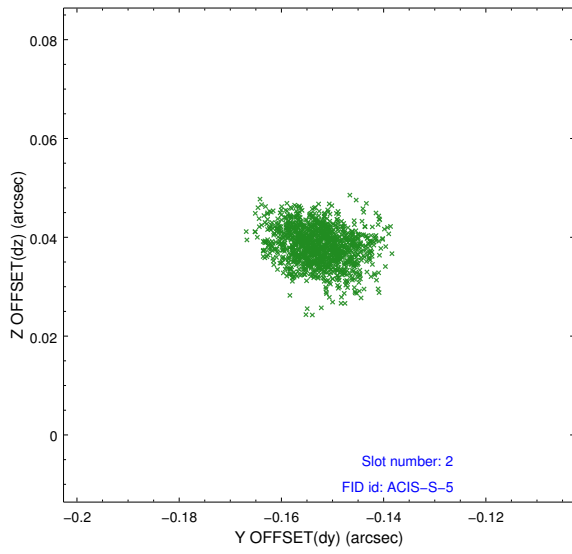
### 2.5.1 Slot 0



## 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)	2012.05.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.76159998

## A.2 Comments