

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 7242 - L2 Version 2  
Chandra X-Ray Center

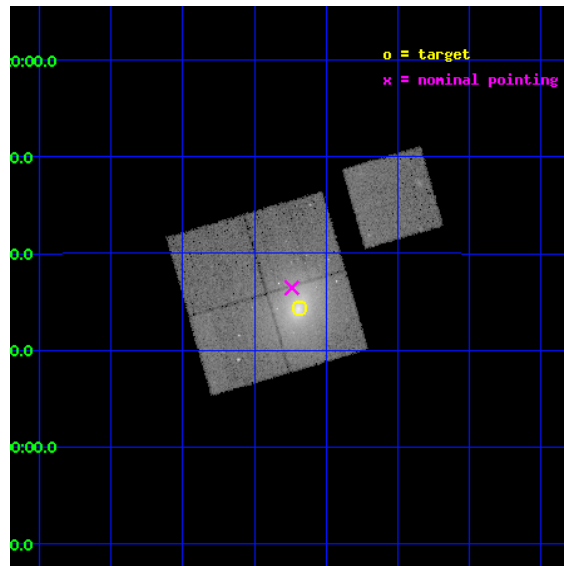
L2 Processing Date : Mar 27 2012

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# 1 Front

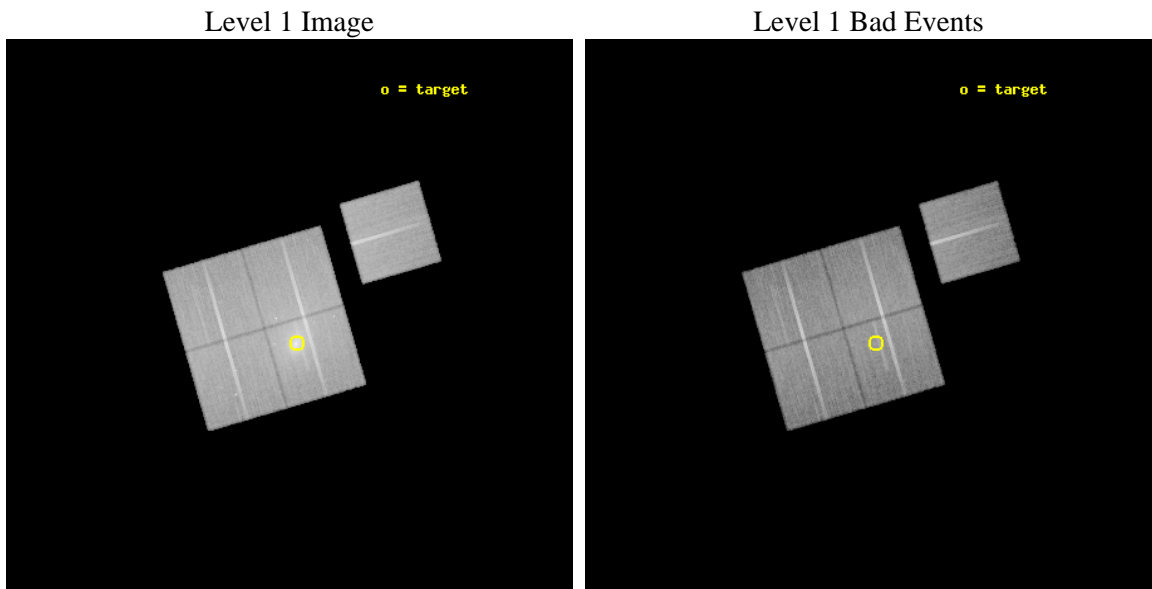
seq_num	800535	Sequence number
obs_id	7242	Observation id
title	A Deep Observation of a Radio-Quiet Cooling Flow	Proposal title
observer	Prof Megan Donahue	Principal investigator
object	Abell 1650	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.672083	Observer's specified target RA [deg]
dec_targ	-1.761389	Observer's specified target Dec [deg]
ra_nom	194.68446713413	Nominal RA [deg]
dec_nom	-1.725806571255	Nominal Dec [deg]
roll_nom	73.743205822808	Nominal Roll [deg]
revision	2	Processing version of data
ontime	37671.158927262	Sum of GTIs [s]
livetime	37178.957502773	Livetime [s]
ontime0	37664.876936853	Sum of GTIs [s]
ontime1	37671.158937275	Sum of GTIs [s]
ontime2	37674.299927533	Sum of GTIs [s]
ontime3	37671.158927262	Sum of GTIs [s]
ontime6	37664.876976609	Sum of GTIs [s]
l2events	229999	Number of level 2 events



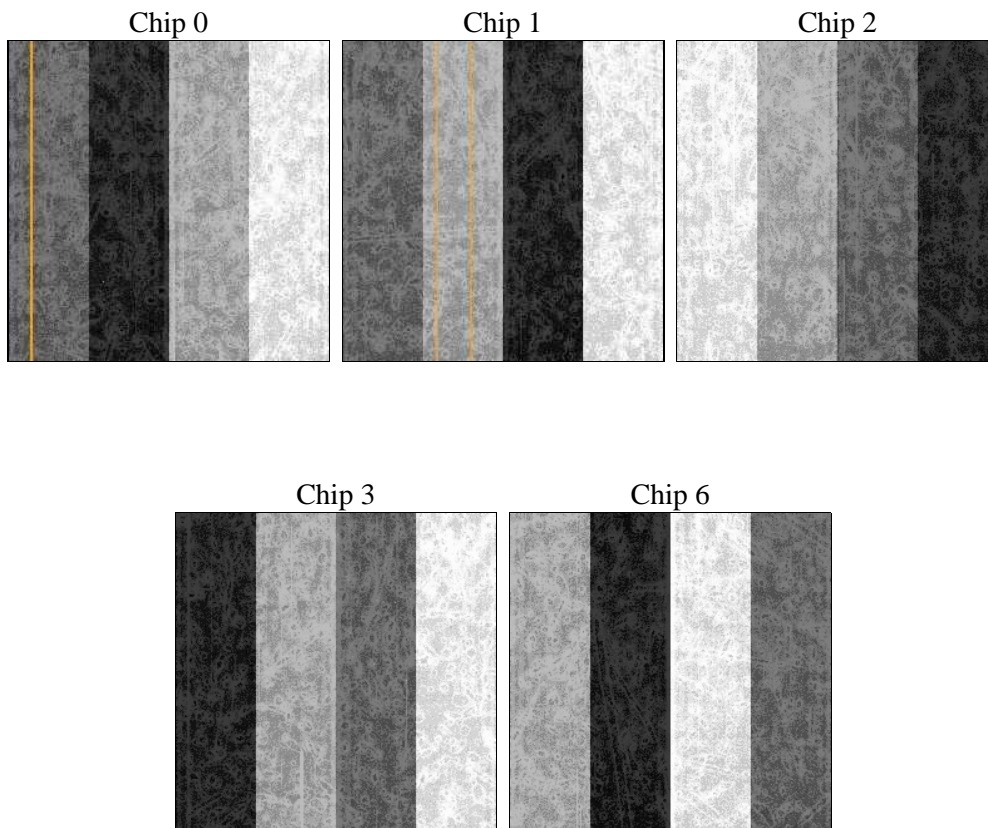
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	37500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	37671.158927262	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime0	37664.876936853	Sum of GTIs [s]
date	2012-03-27T04:00:44	Date and time of file creation	ontime1	37671.158937275	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	37674.299927533	Sum of GTIs [s]
			ontime3	37671.158927262	Sum of GTIs [s]
			ontime6	37664.876976609	Sum of GTIs [s]
			l1events	1476568	Number of level 1 events

### 2.1.4 Events

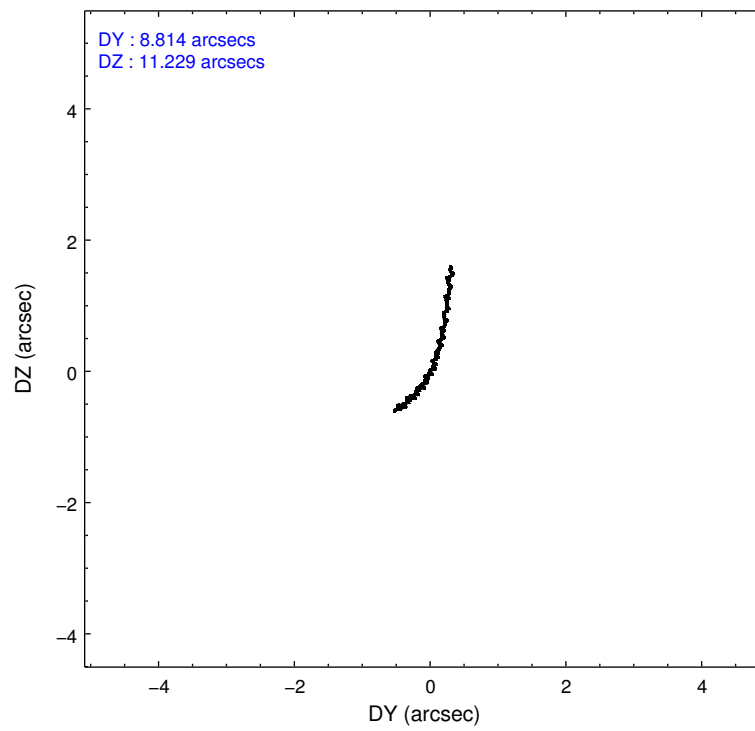
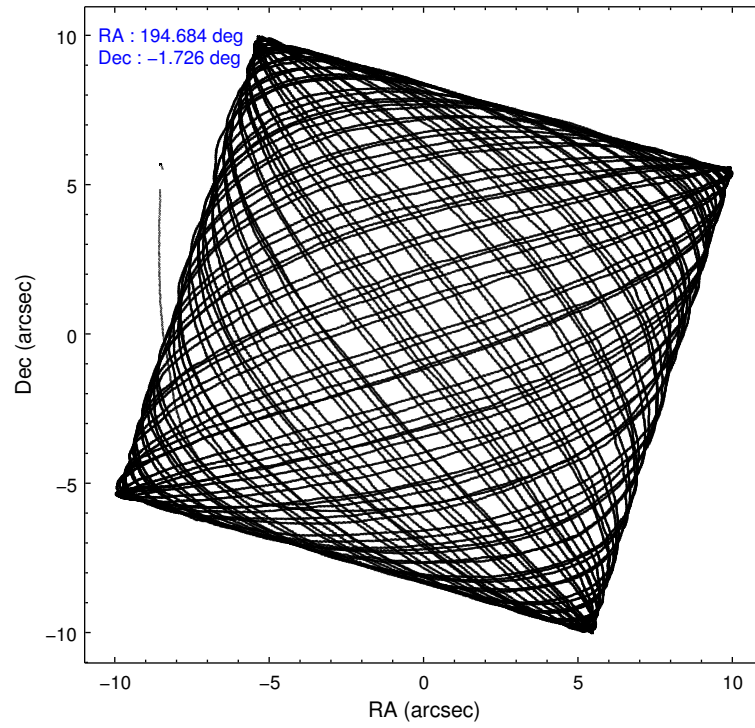
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	266634	267438	304685	366287	271524
rejected events	238103	227441	265773	244504	243071
rejected %	89%	85%	87%	66%	89%

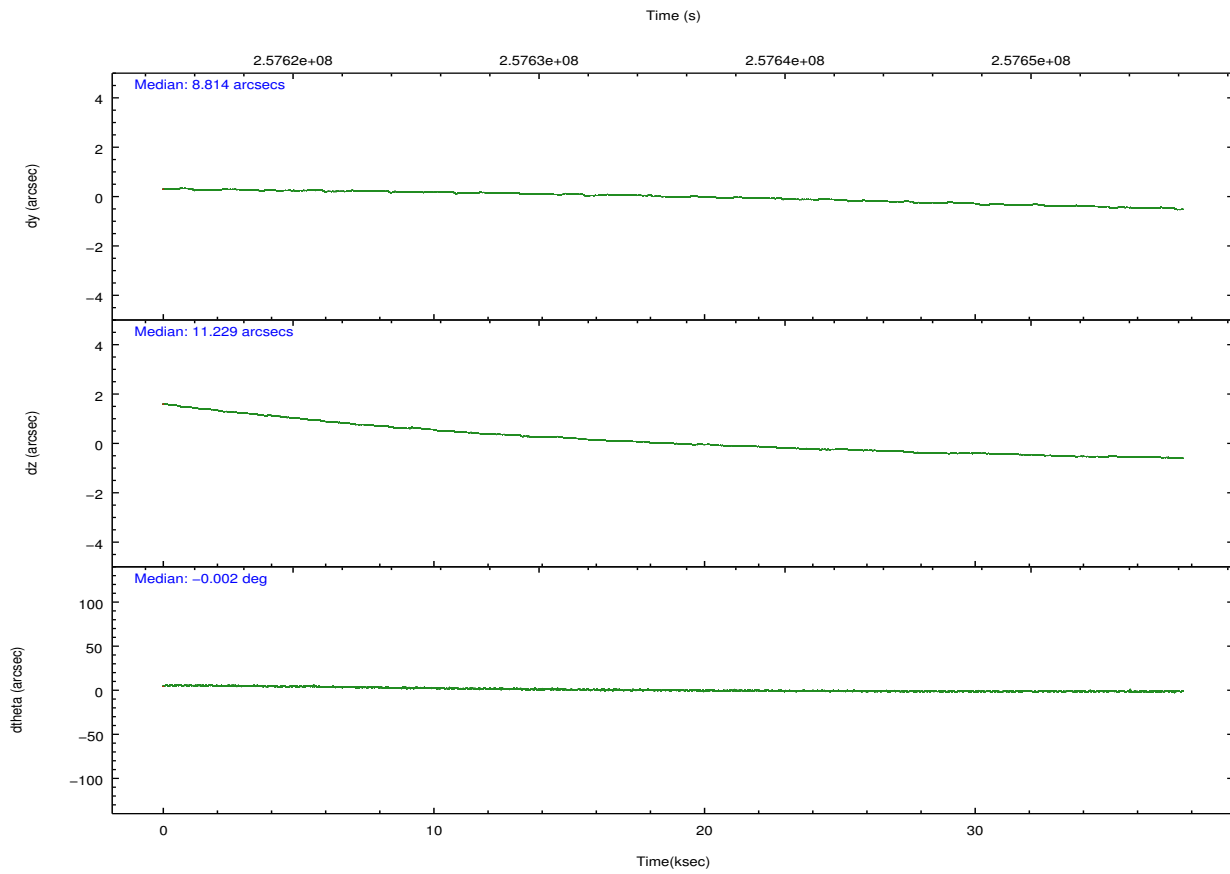
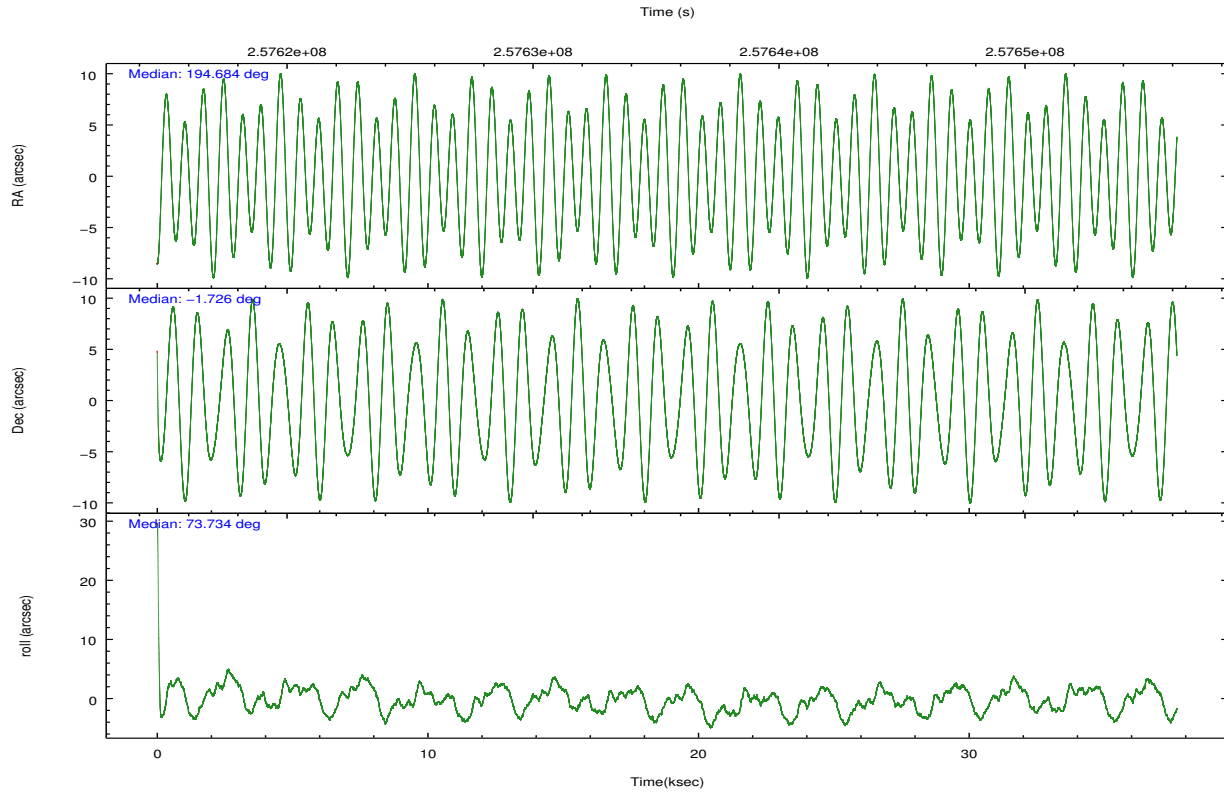
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10897	19096	20328	88854	10279
	4%	7%	6%	24%	3%
grade 1 events	144	141	228	618	133
	0%	0%	0%	0%	0%
grade 2 events	6606	7691	7448	14780	6087
	2%	2%	2%	4%	2%
grade 3 events	3198	3638	3141	5712	3197
	1%	1%	1%	1%	1%
grade 4 events	2922	3492	3276	5754	3123
	1%	1%	1%	1%	1%
grade 5 events	9118	10533	8844	11176	10760
	3%	3%	2%	3%	3%
grade 6 events	5129	6310	5048	7214	5945
	1%	2%	1%	1%	2%
grade 7 events	228620	216537	256372	232179	232000
	85%	80%	84%	63%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	194.691085	194.6844671341341	Subarray requested	NONE	NONE
[deg] Pointing Dec	-1.752397	-1.725806571254983	Alternating exposures requested	N	N
[deg] Pointing Roll	73.534711	73.74320582280785	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-227.592463	-227.5958210972112			
[mm] SIM translation stage offset	-6	-5.996631905718488			
[s] Observation start time (MET)	257616785.184000	257615672.56762			
Observation start date	2006-03-01T16:12:00	2006-03-01T15:54:32			
[s] Observation end time (MET)	257654285.184000	257655446.15697			
Observation end date	2006-03-02T02:37:00	2006-03-02T02:57:26			
Read mode	TIMED	TIMED			

## 2.3 Aspect



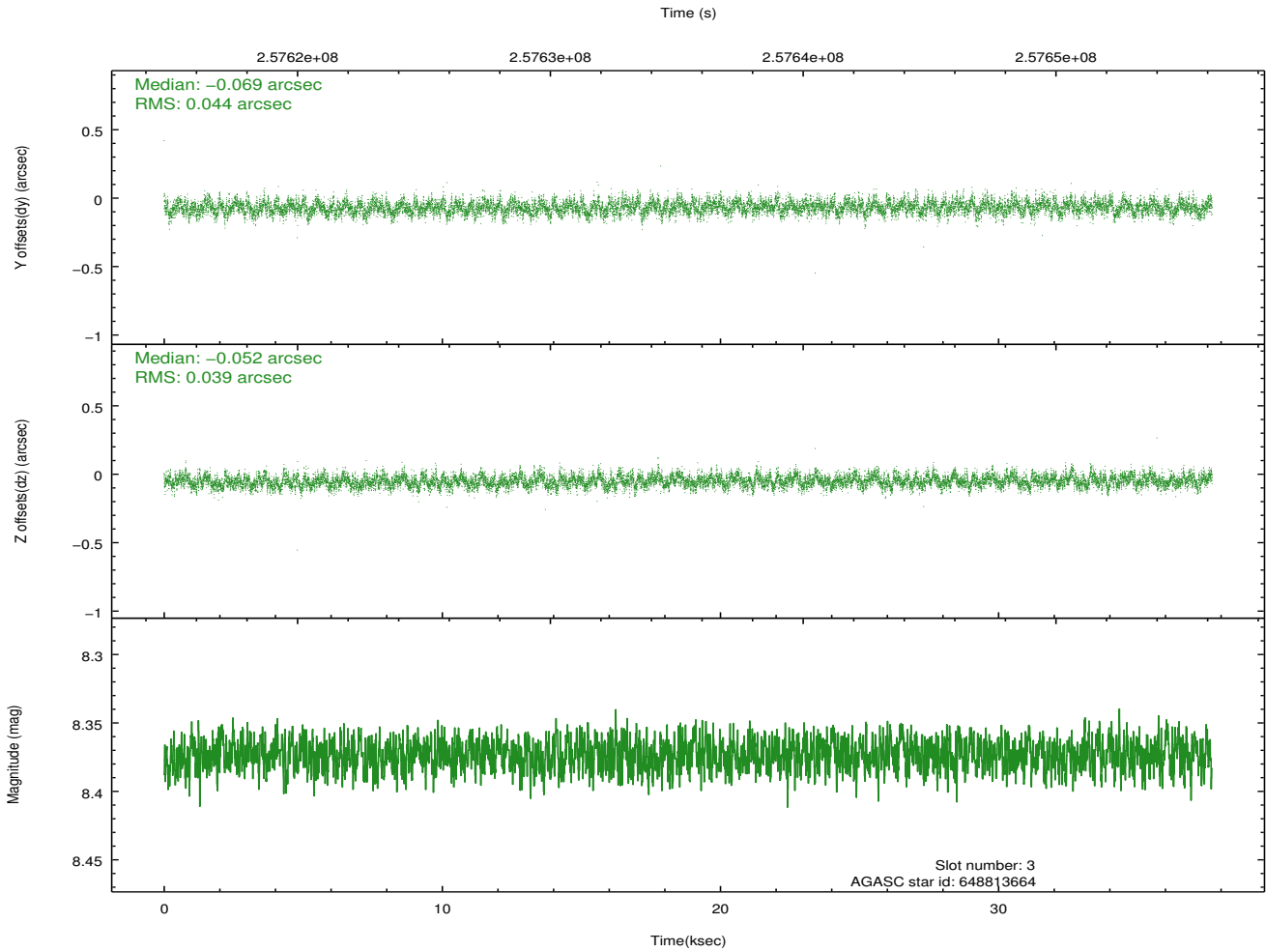
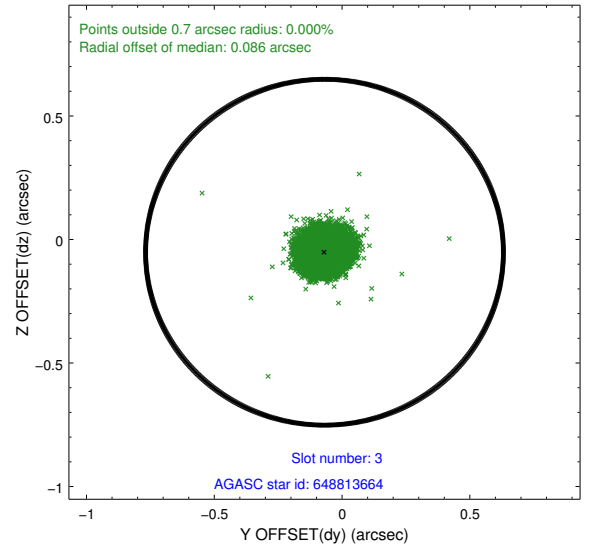
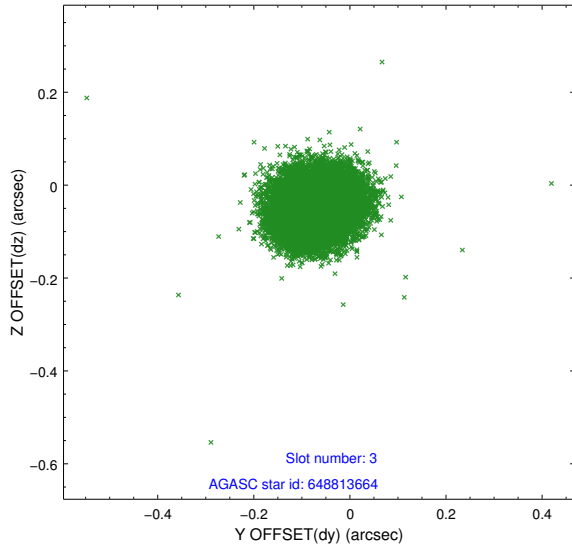


### Slot Statistics

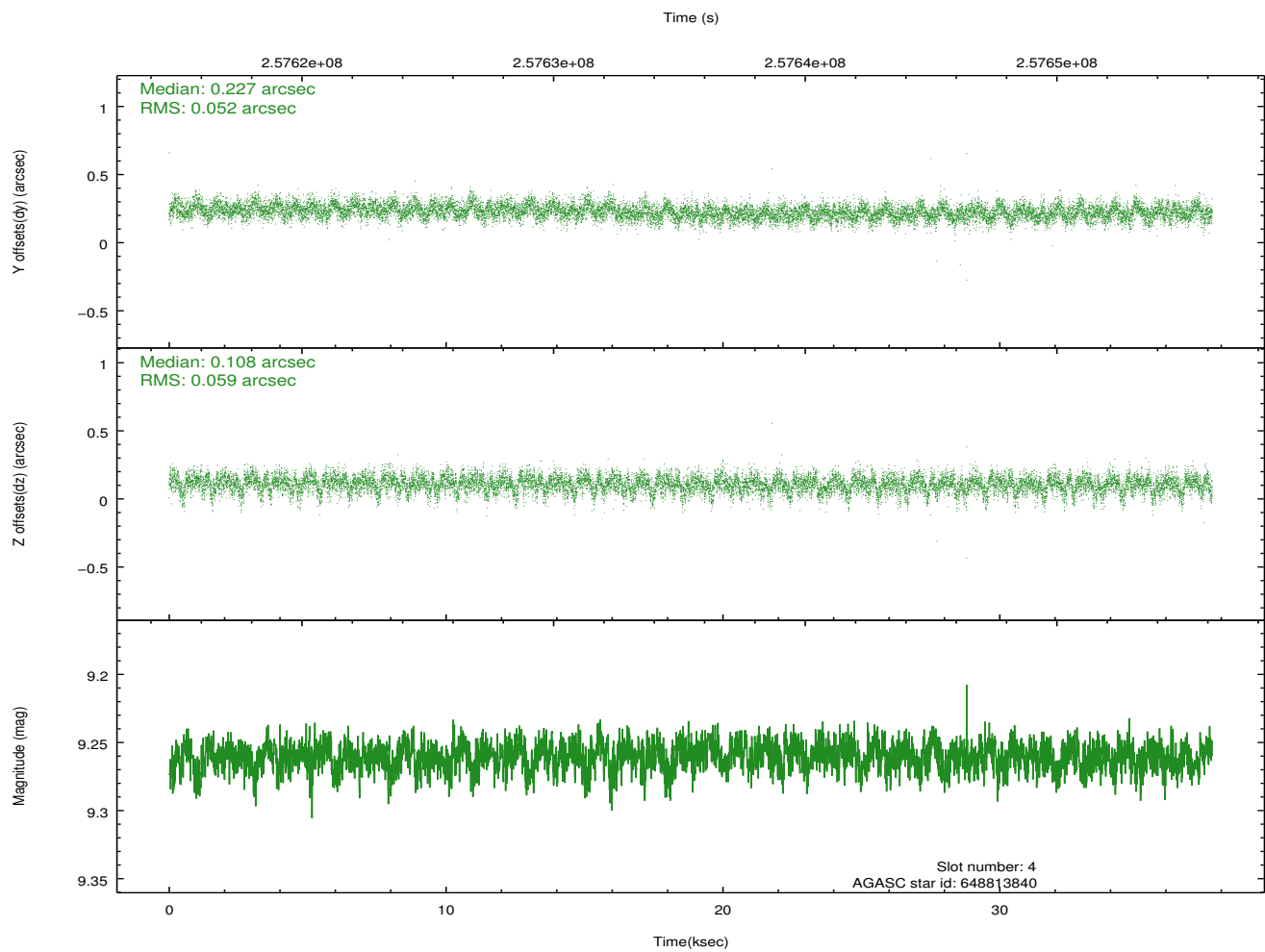
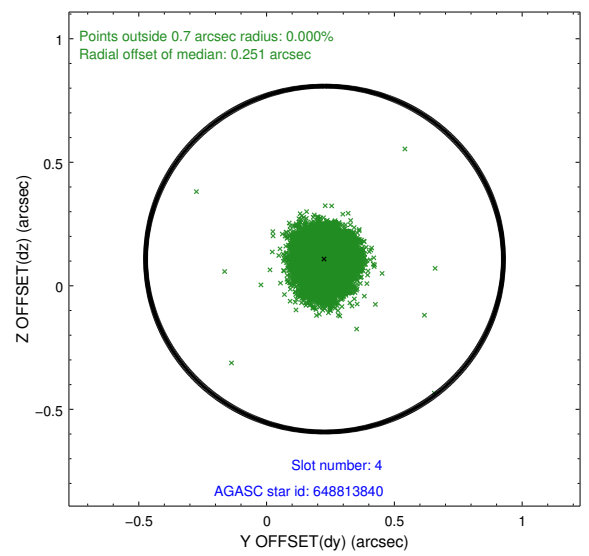
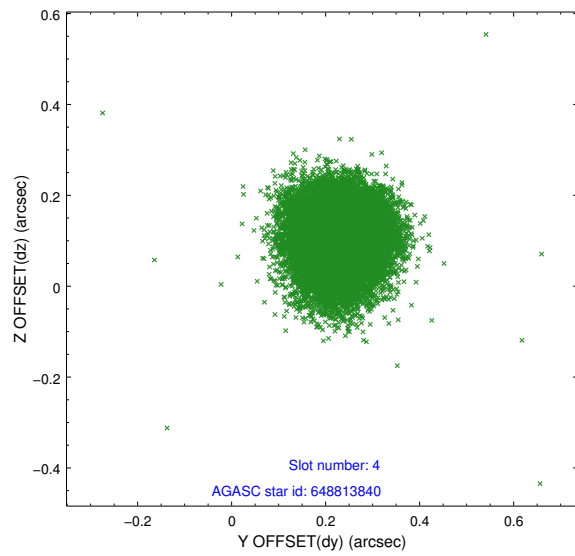
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	9189	0.096	-0.075	0.019	0.033	0.000000	0.000000	930.83	-958.06
1	FID	ACIS-I-5	7.23	9190	-0.272	0.074	0.015	0.030	0.000000	0.000000	-1817.62	939.58
2	FID	ACIS-I-6	7.25	9191	0.085	0.067	0.013	0.029	0.000000	0.000000	396.35	1584.09
3	GUIDE	648813664	8.37	18380	-0.069	-0.052	0.063	0.101	194.615044	-1.051809	2341.20	977.60
4	GUIDE	648813840	9.26	18376	0.227	0.108	0.083	0.135	194.717621	-1.945504	-639.32	-289.17
5	GUIDE	648813864	8.82	18373	-0.050	-0.152	0.067	0.107	194.235605	-1.103465	1775.36	2234.20
6	GUIDE	648814560	8.79	18372	-0.070	-0.111	0.068	0.109	194.841018	-1.130344	2300.77	117.34
7	GUIDE	649730488	7.86	18381	-0.041	0.212	0.060	0.098	195.031921	-1.185947	2303.76	-598.21

## 2.4 Star Slots

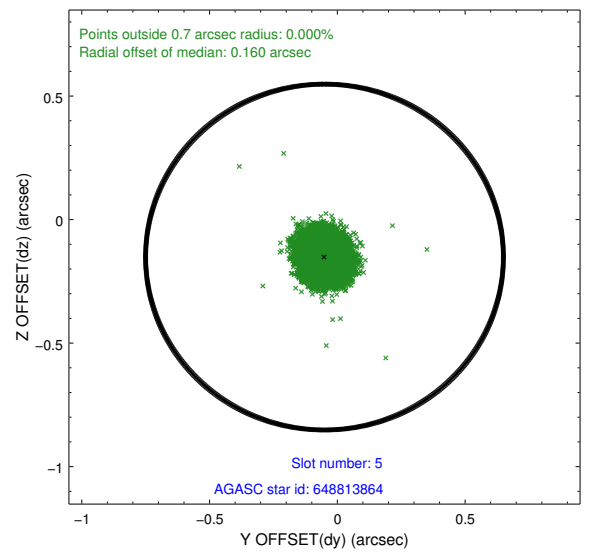
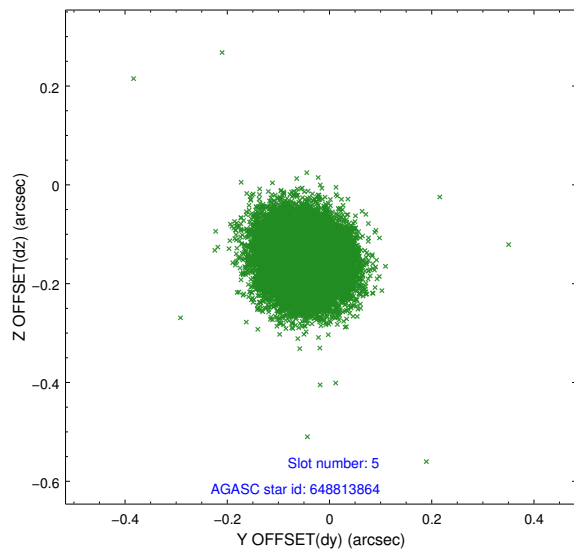
### 2.4.1 Slot 3



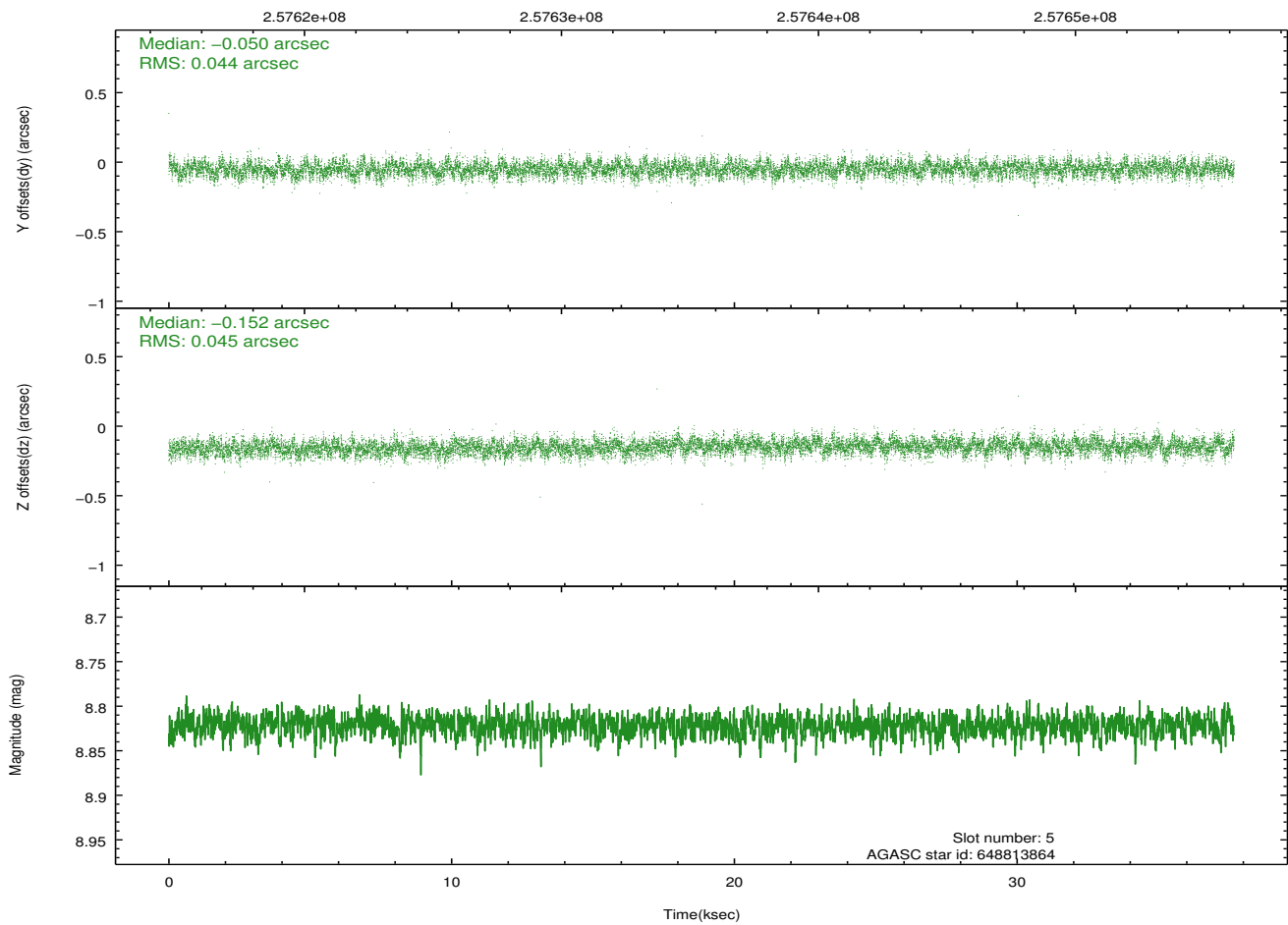
## 2.4.2 Slot 4



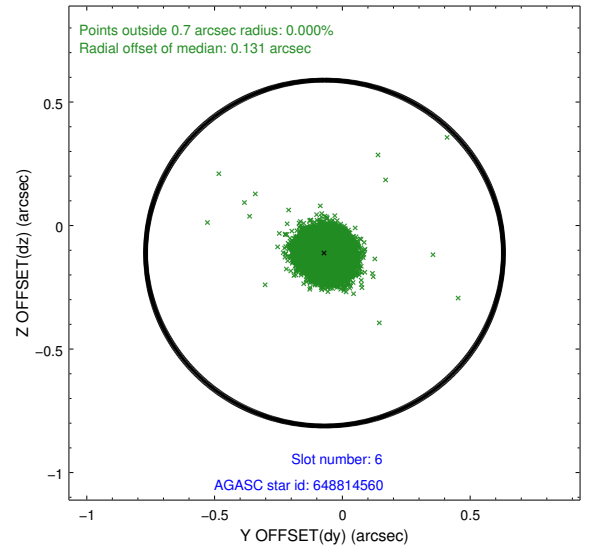
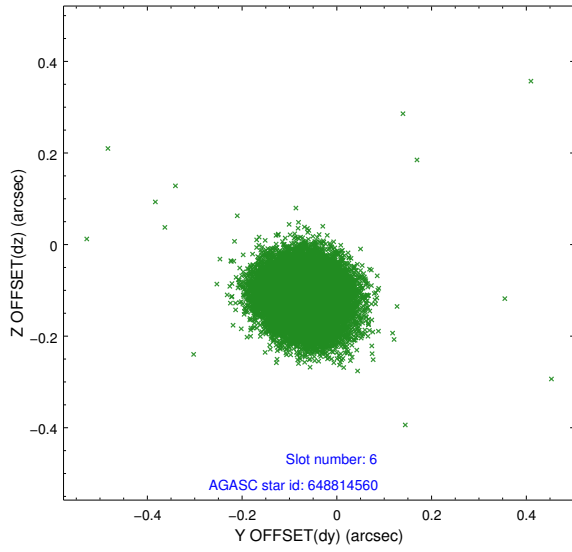
### 2.4.3 Slot 5



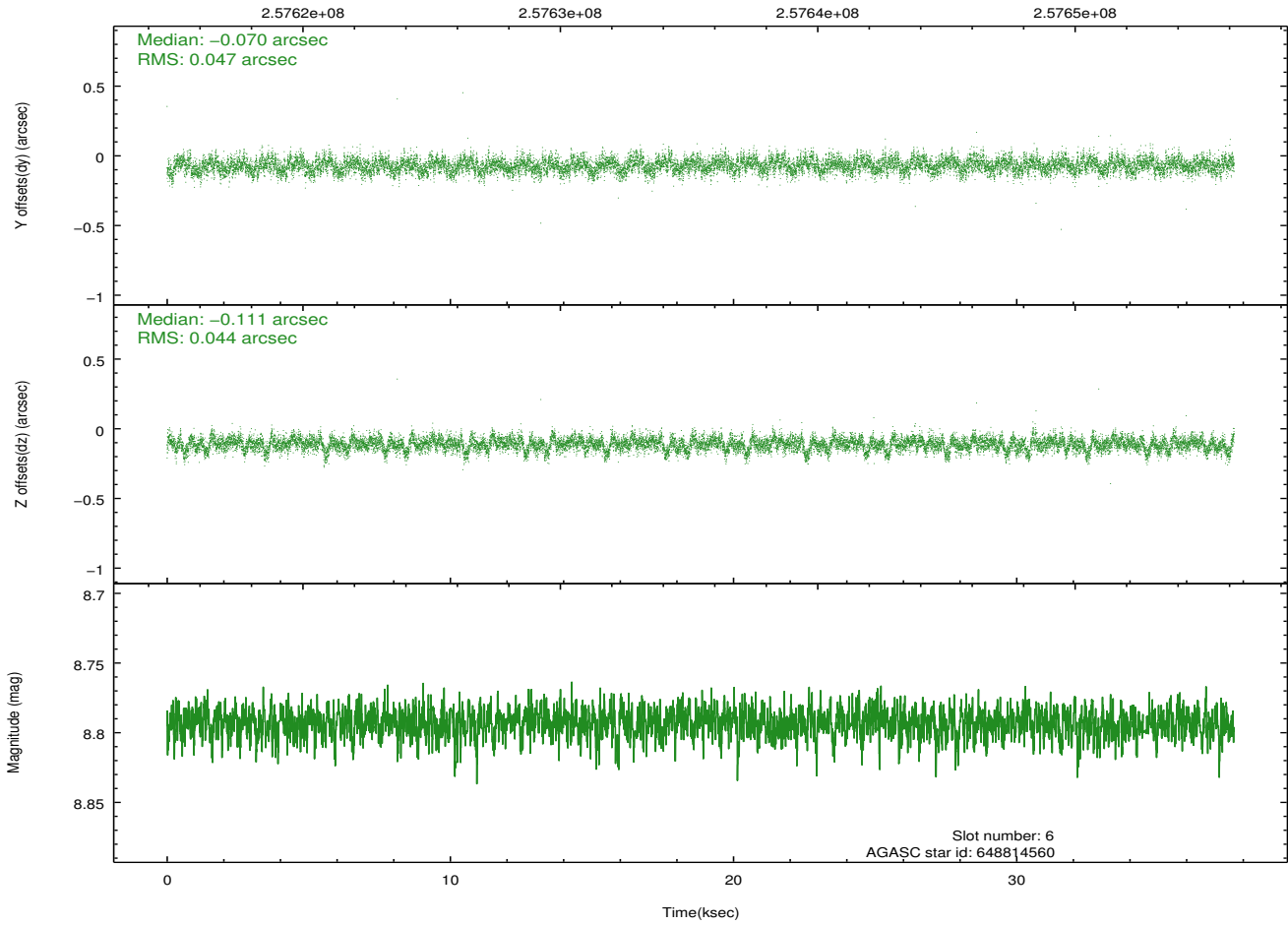
Time (s)



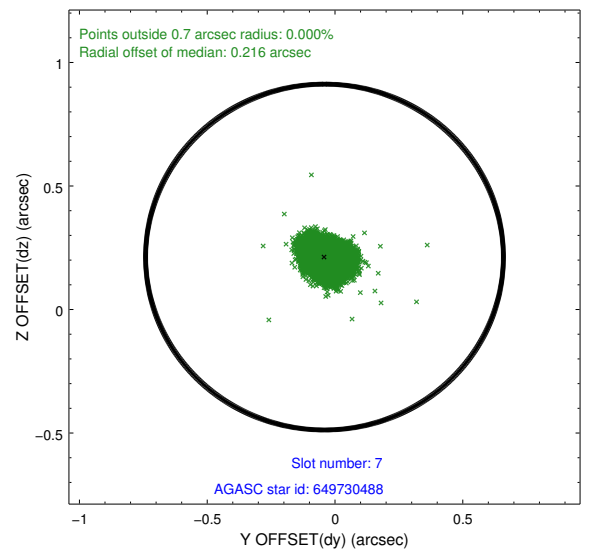
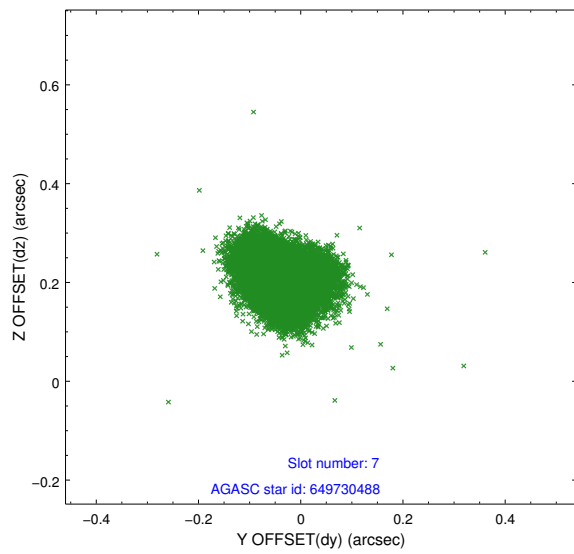
## 2.4.4 Slot 6



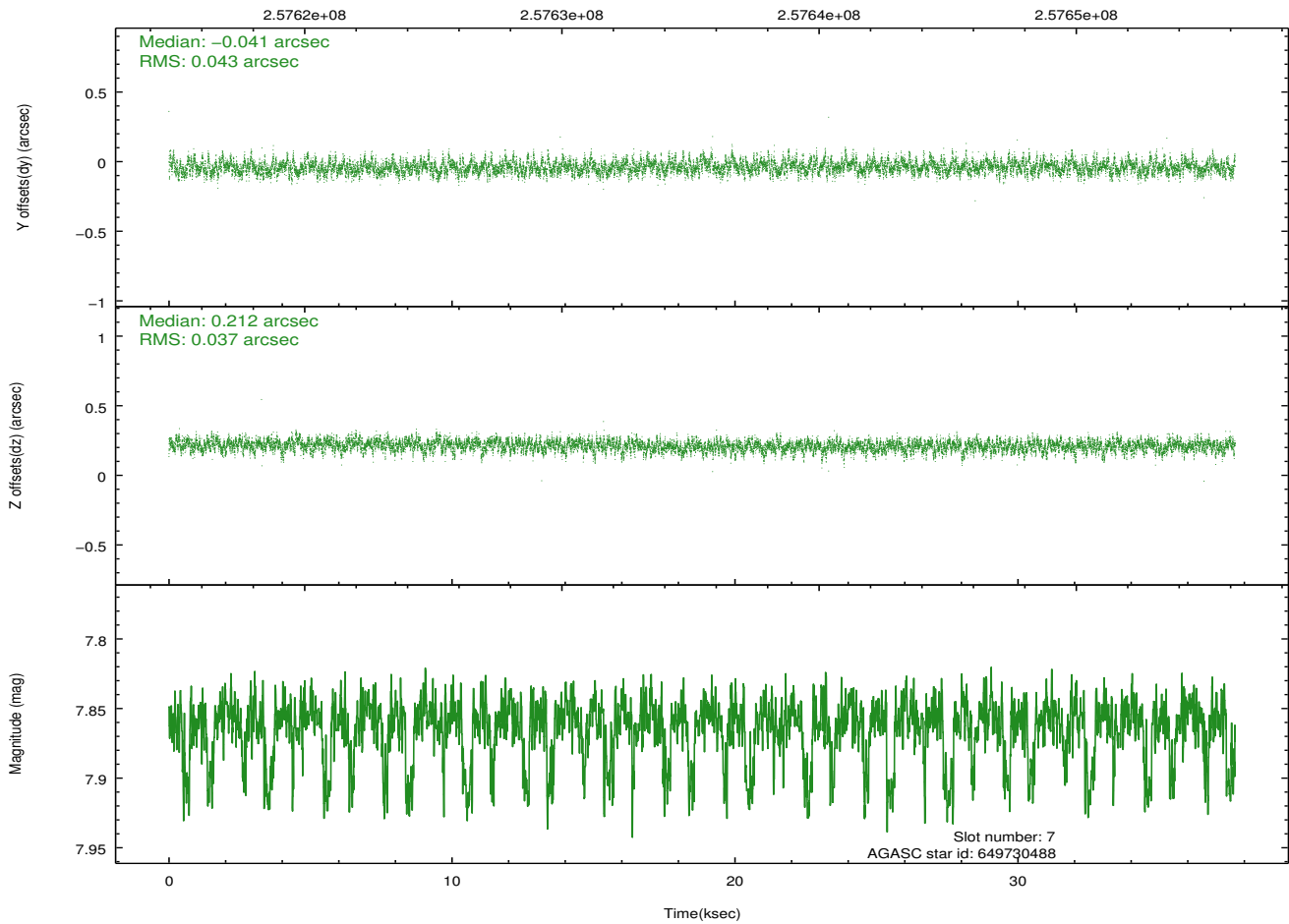
Time (s)



## 2.4.5 Slot 7

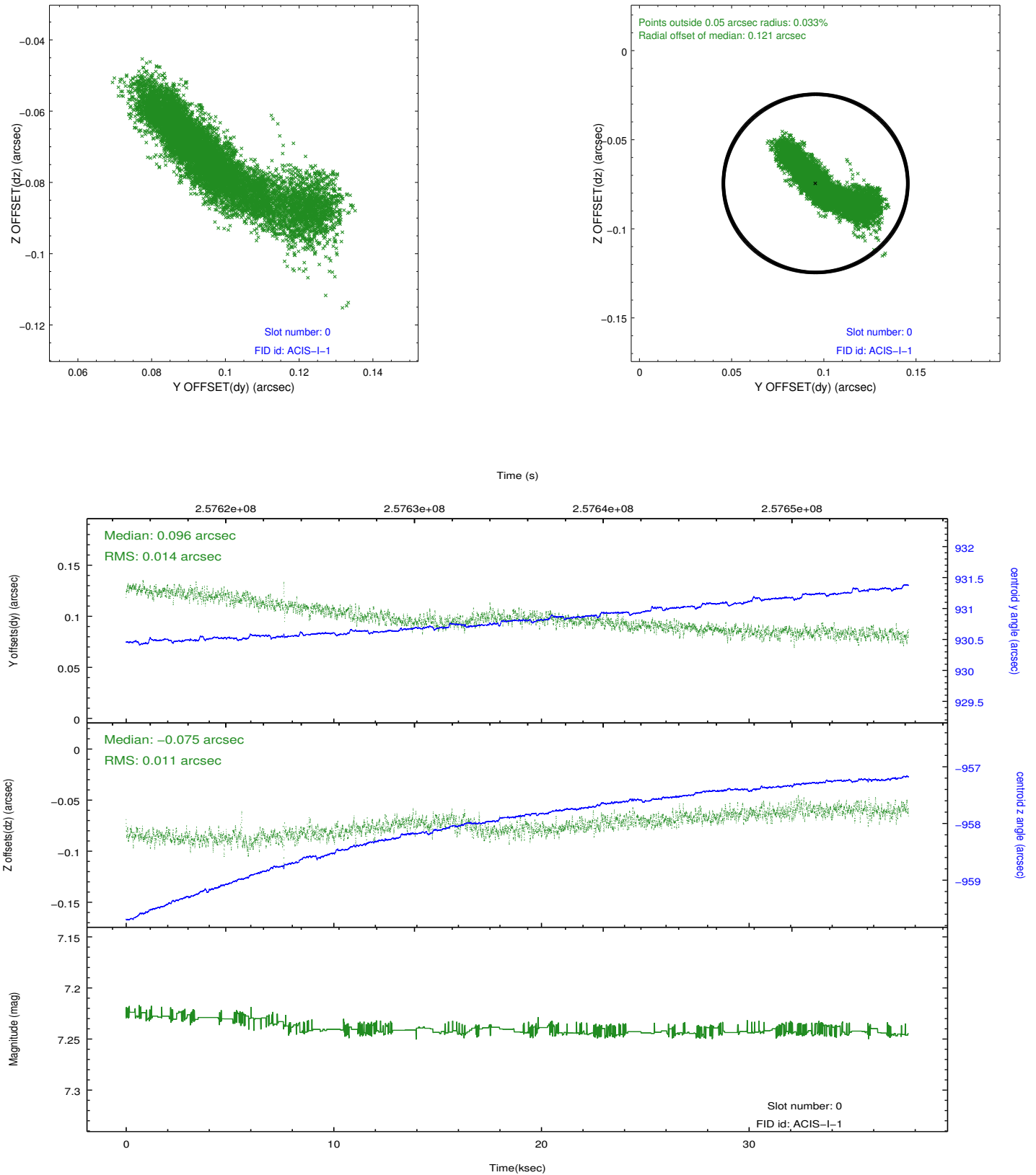


Time (s)

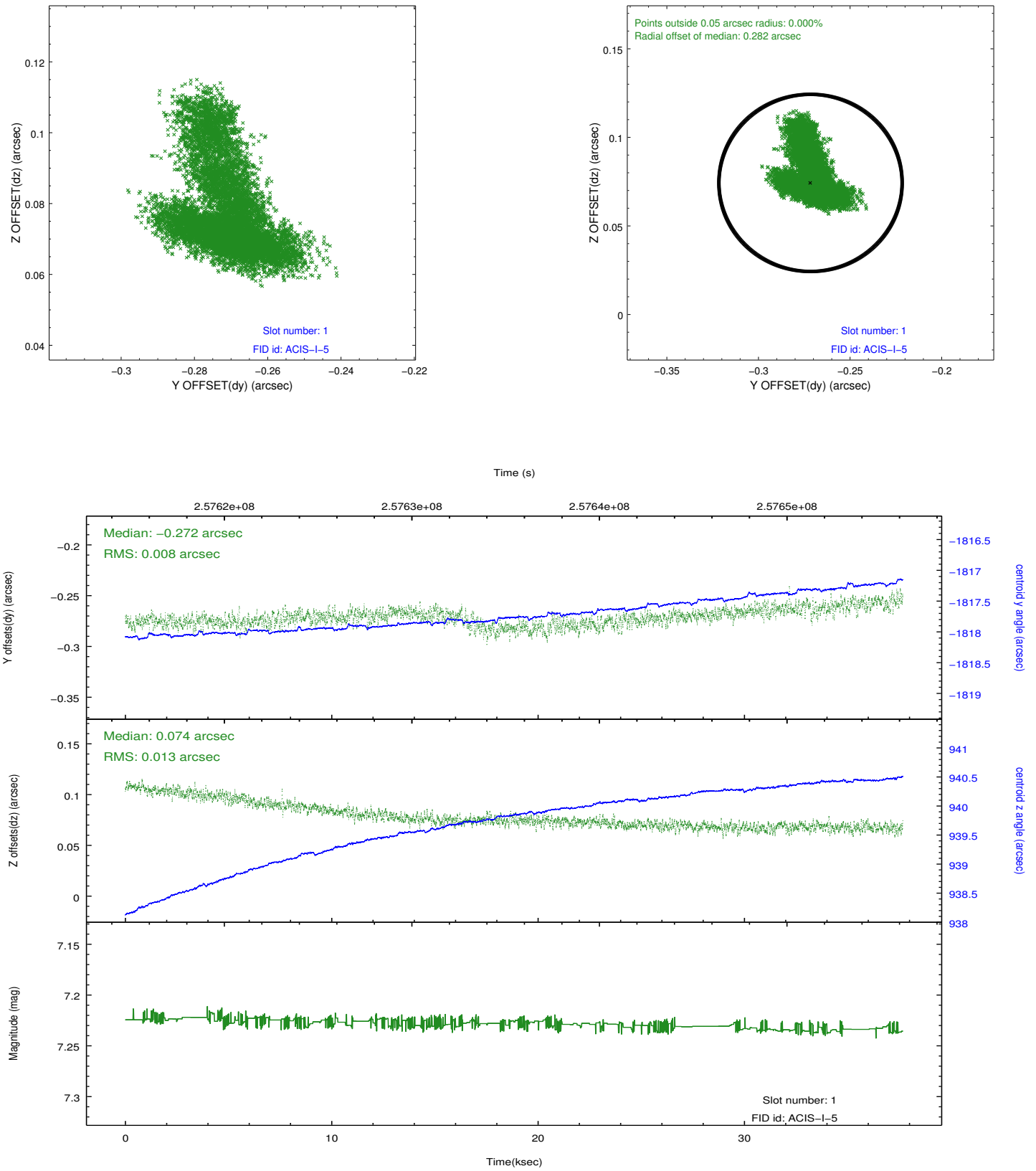


## 2.5 FID Slots

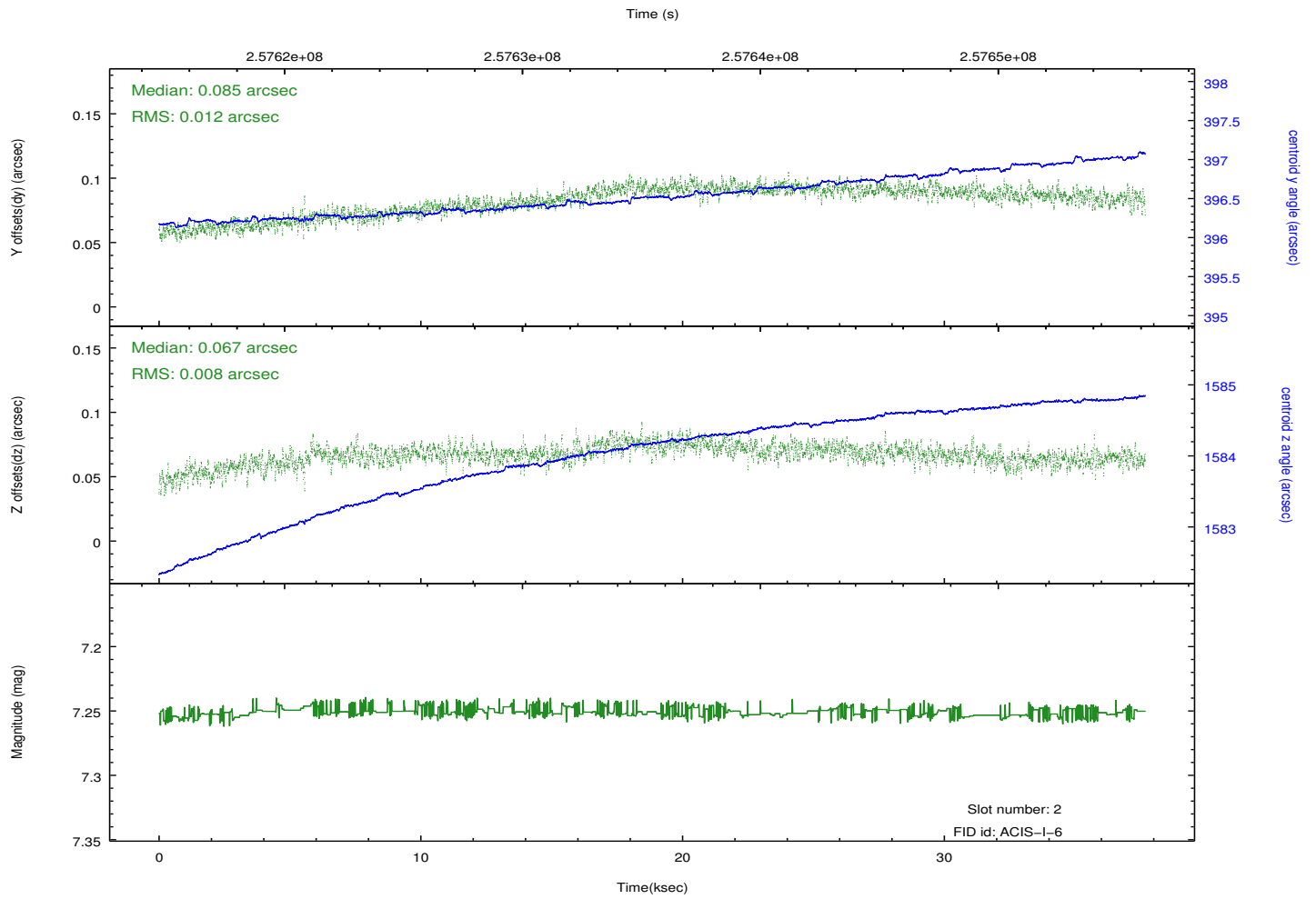
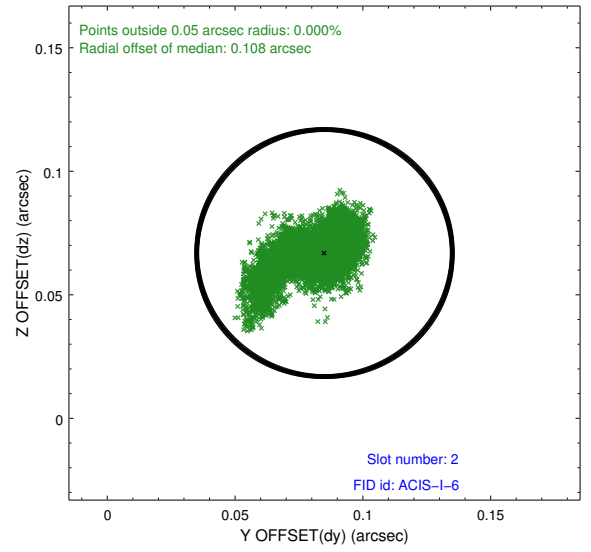
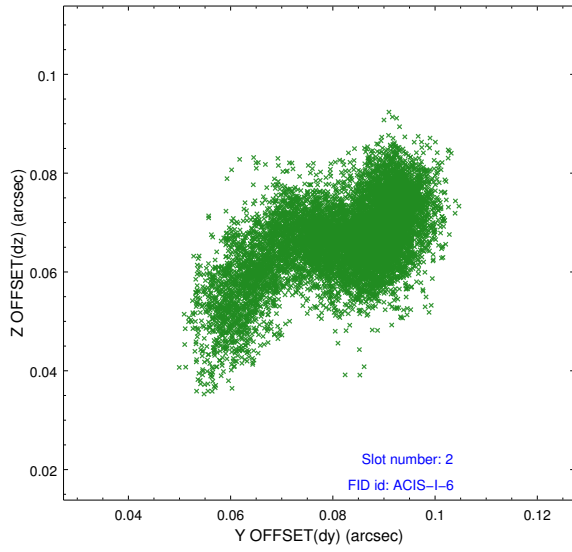
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.03.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.6711589

### A.2 Comments