

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 13986 - L2 Version 1  
Chandra X-Ray Center

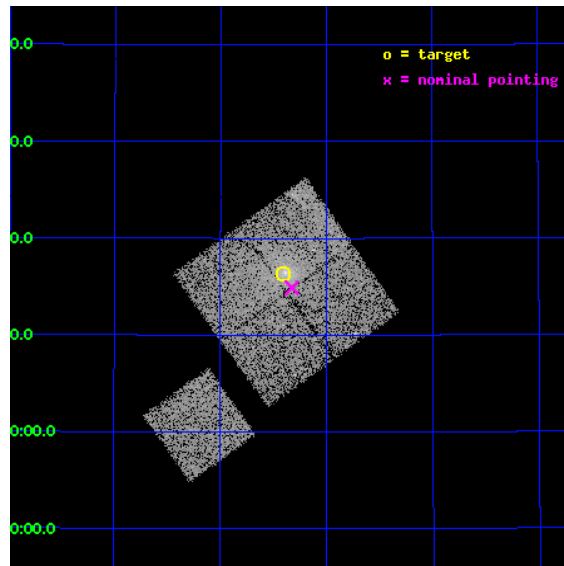
L2 Processing Date : Feb 26 2012

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# 1 Front

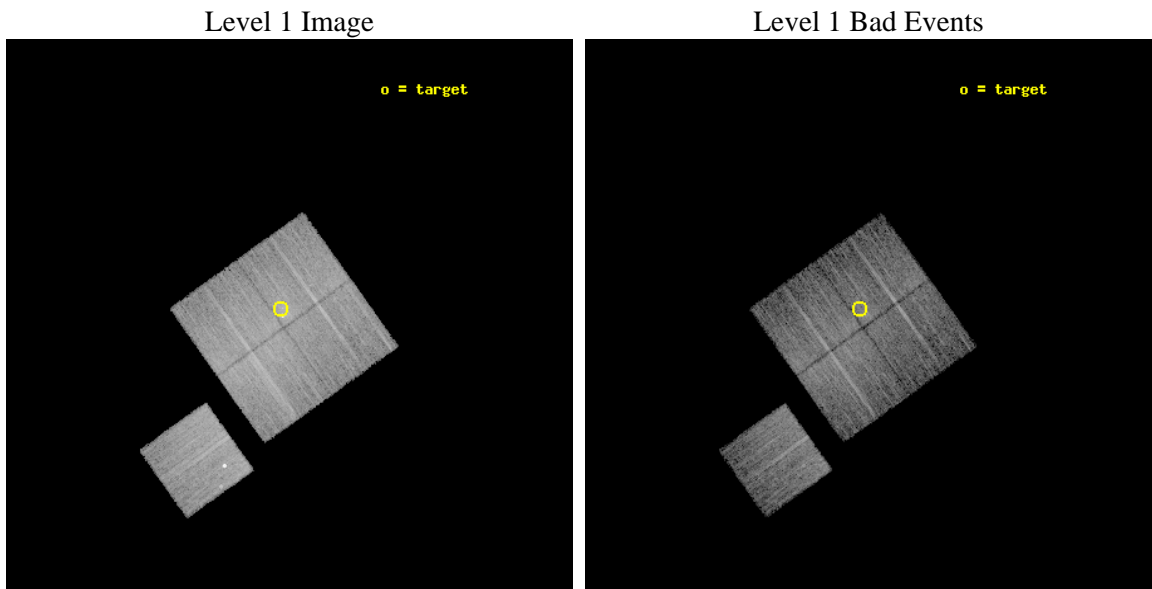
seq_num	801166	Sequence number
obs_id	13986	Observation id
title	The X-ray Scaling Relations of Low-Mass Galaxy Clusters	Proposal t
observer	Dr Ben Maughan	Principal investigator
object	cl0810+4216	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	122.600833	Observer's specified target RA [deg]
dec_targ	42.271944	Observer's specified target Dec [deg]
ra_nom	122.58160788051	Nominal RA [deg]
dec_nom	42.248086841386	Nominal Dec [deg]
roll_nom	234.42401876568	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10077.467279136	Sum of GTIs [s]
livetime	9945.7977502108	Livetime [s]
ontime0	10077.426239133	Sum of GTIs [s]
ontime1	10077.467279136	Sum of GTIs [s]
ontime2	10074.367298901	Sum of GTIs [s]
ontime3	10077.549359143	Sum of GTIs [s]
ontime6	10077.38519913	Sum of GTIs [s]
l2events	37063	Number of level 2 events



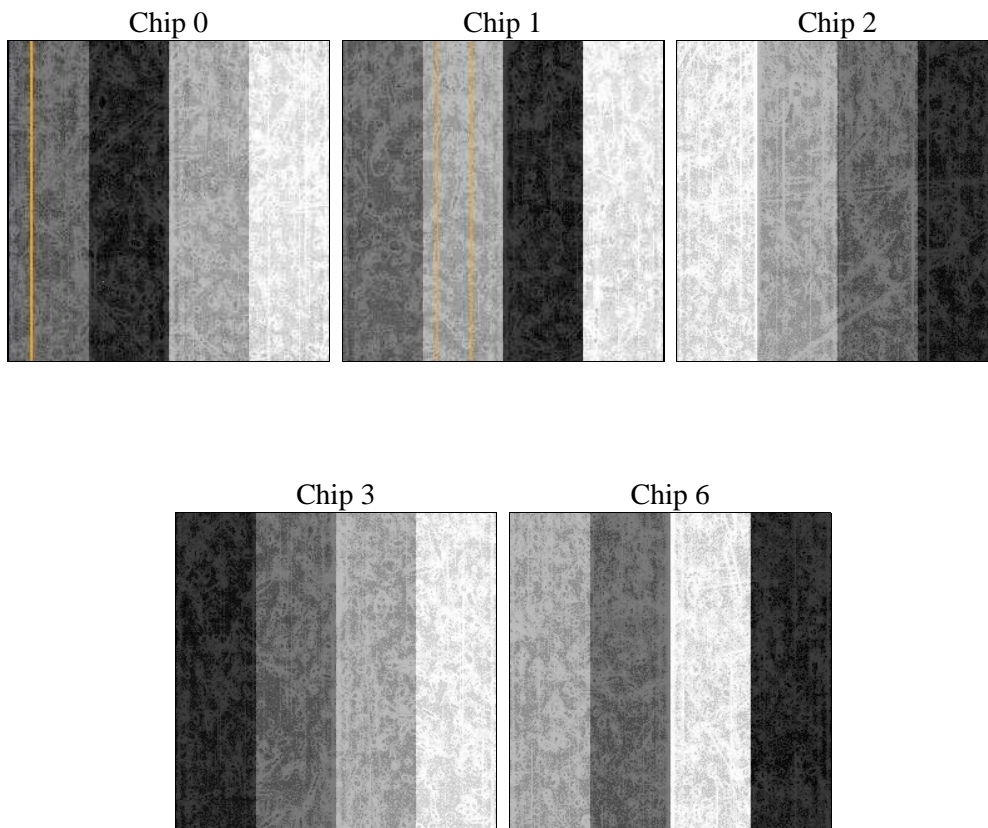
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.900000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	10077.467279136	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime0	10077.426239133	Sum of GTIs [s]
date	2012-02-26T23:51:34	Date and time of file creation	ontime1	10077.467279136	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10074.367298901	Sum of GTIs [s]
			ontime3	10077.549359143	Sum of GTIs [s]
			ontime6	10077.38519913	Sum of GTIs [s]
			l1events	402599	Number of level 1 events

### 2.1.4 Events

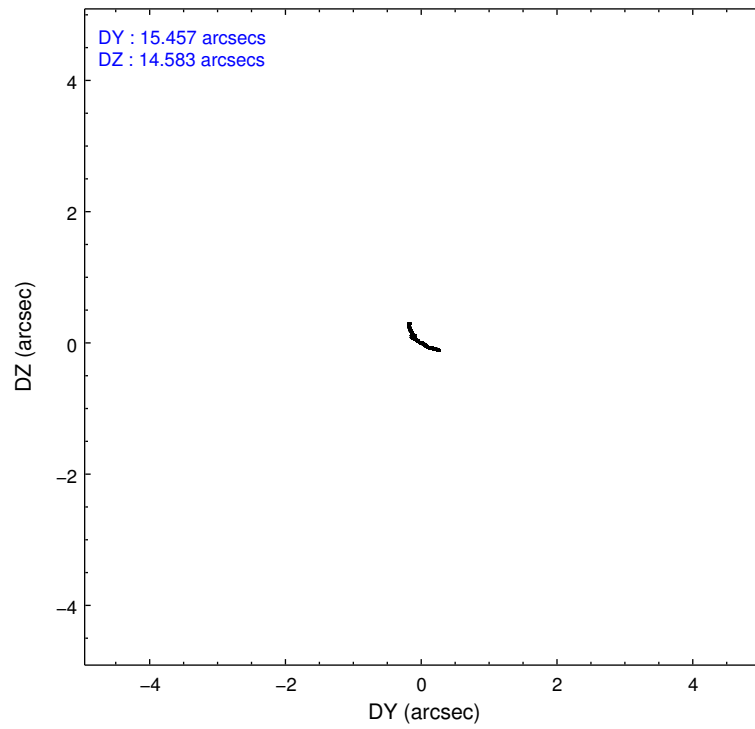
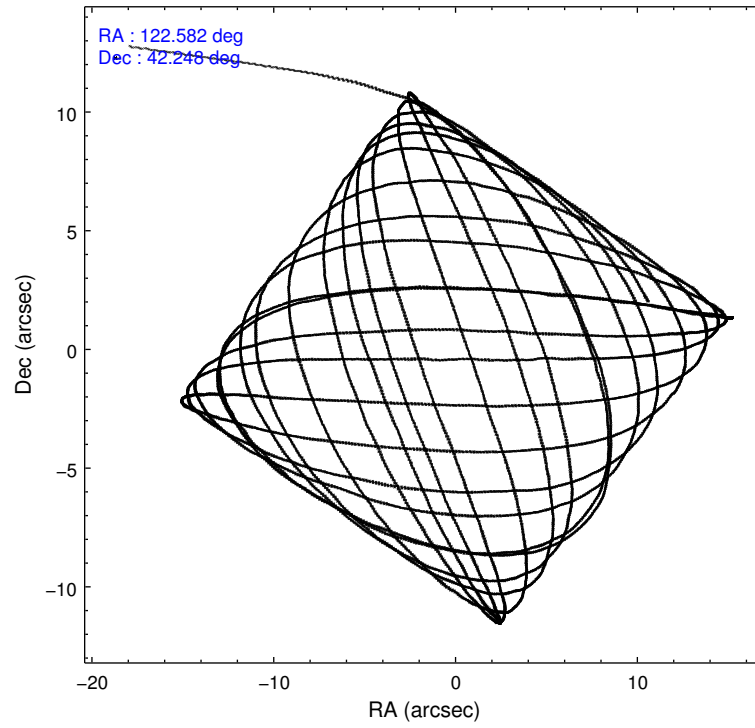
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	67389	79754	87845	79797	87814
rejected events	57233	64637	76532	71745	74589
rejected %	84%	81%	87%	89%	84%

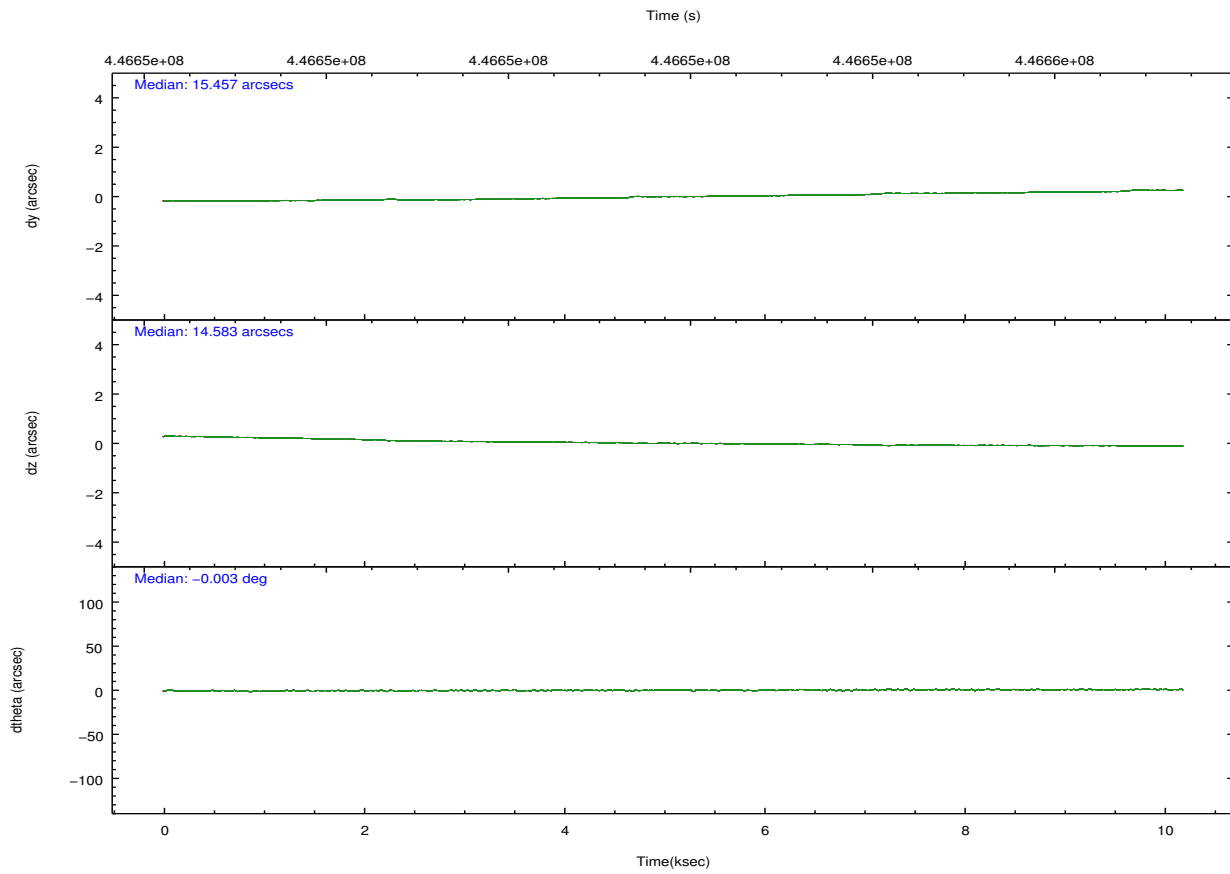
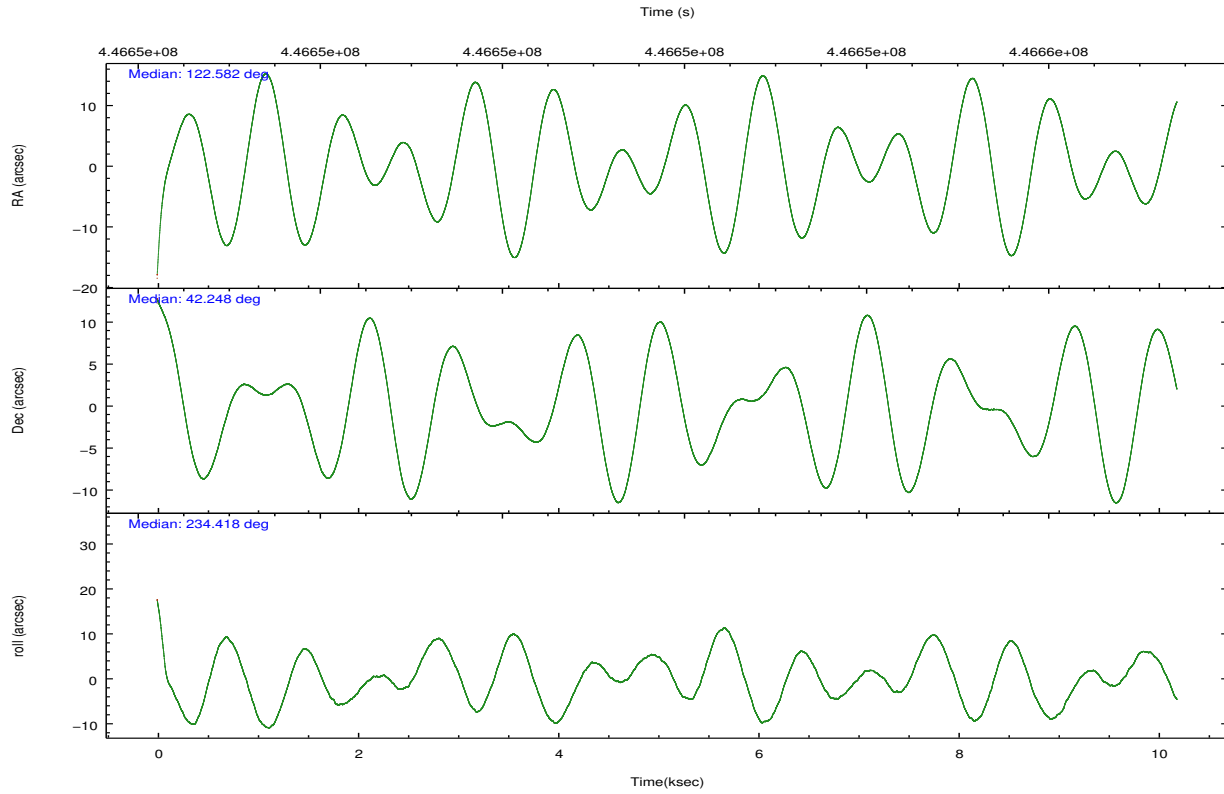
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4392	5851	4806	3296	7365
	6%	7%	5%	4%	8%
grade 1 events	61	56	64	40	88
	0%	0%	0%	0%	0%
grade 2 events	2770	5742	3112	1850	2737
	4%	7%	3%	2%	3%
grade 3 events	799	850	694	760	745
	1%	1%	0%	0%	0%
grade 4 events	768	883	1119	760	755
	1%	1%	1%	0%	0%
grade 5 events	2709	2885	2580	3087	2915
	4%	3%	2%	3%	3%
grade 6 events	1428	1799	1597	1386	1632
	2%	2%	1%	1%	1%
grade 7 events	54462	61688	73873	68618	71577
	80%	77%	84%	85%	81%

## 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	122.585068	122.581607880508	Subarray requested	NONE	NONE
[deg] Pointing Dec	42.275421	42.24808684138561	Alternating exposures requested	N	N
[deg] Pointing Roll	234.213001	234.4240187656781	[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	-237.742463	-237.751140600212			
[mm] SIM translation stage offset	4.15	4.158687597282352			
[s] Observation start time (MET)	446646895.184000	446645832.12911			
Observation start date	2012-02-26T12:33:49	2012-02-26T12:17:12			
[s] Observation end time (MET)	446656896.184000	446657133.77971			
Observation end date	2012-02-26T15:20:30	2012-02-26T15:25:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



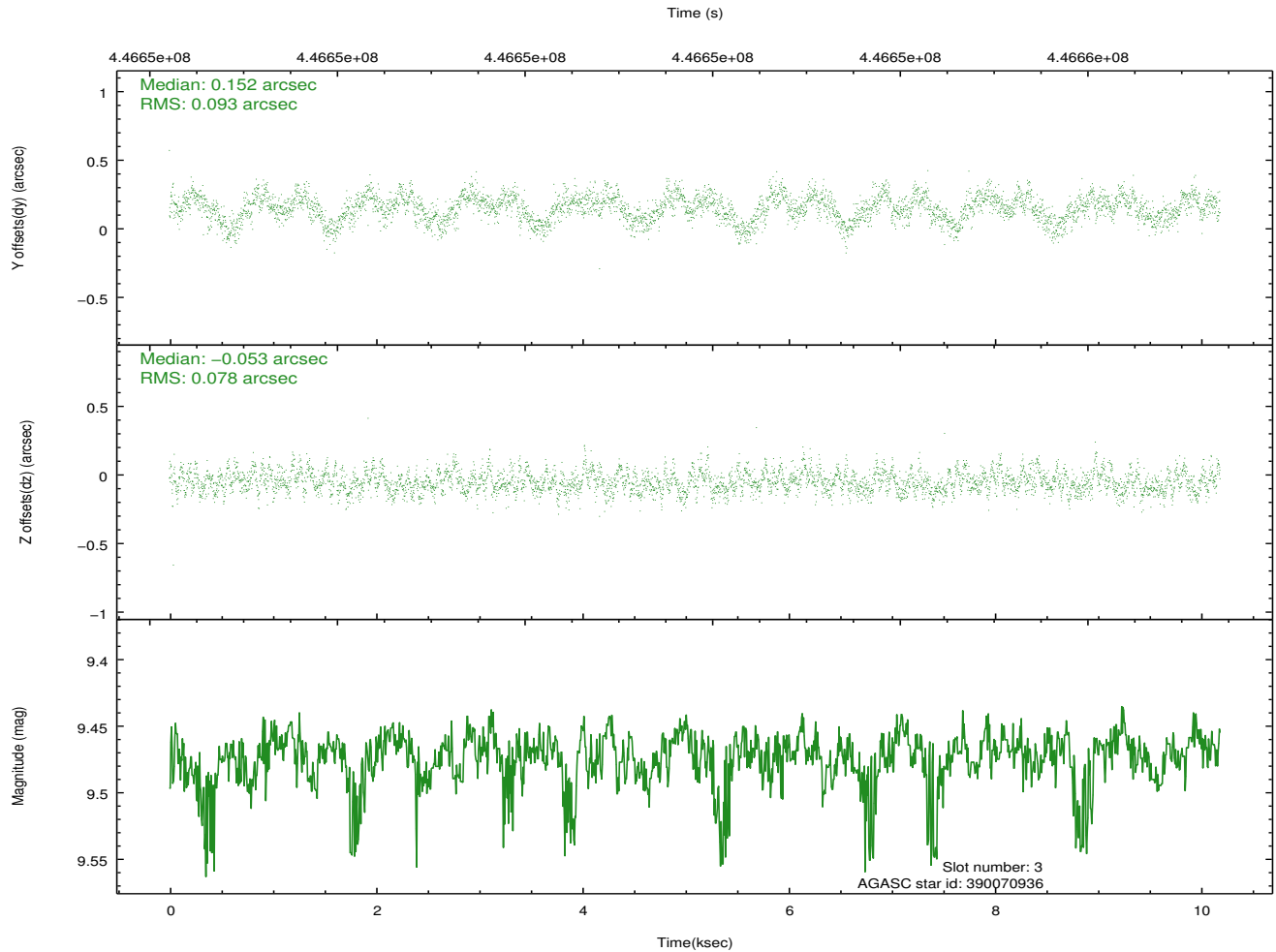
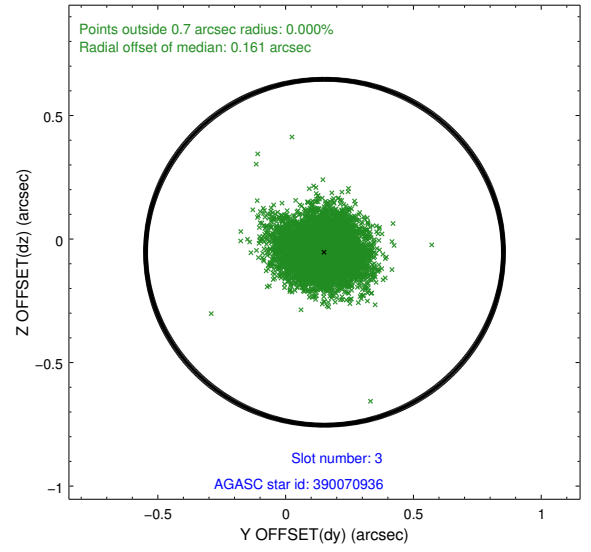
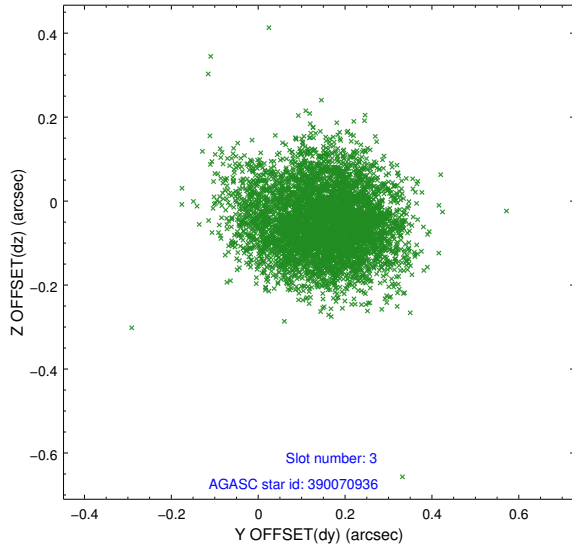


### Slot Statistics

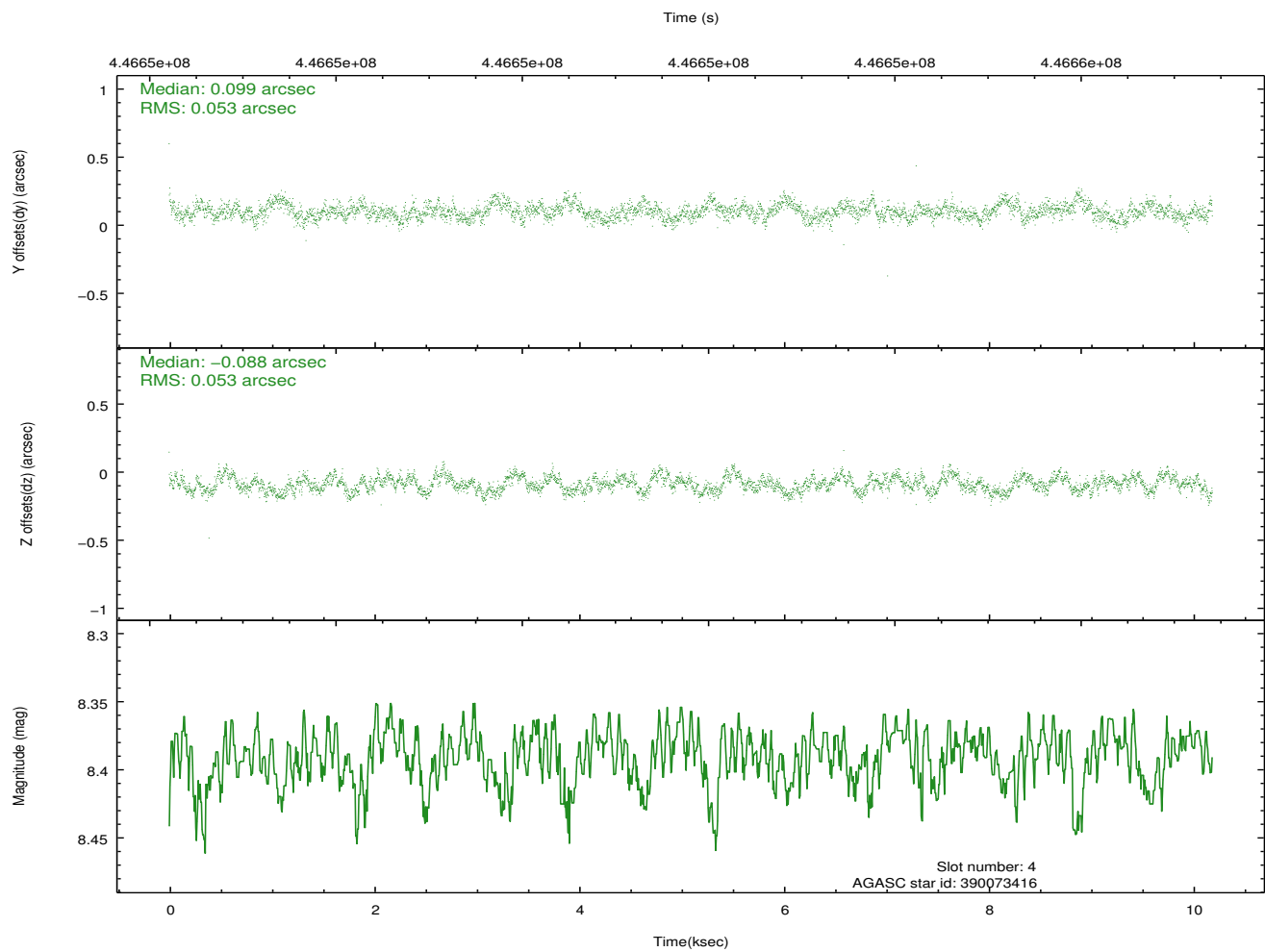
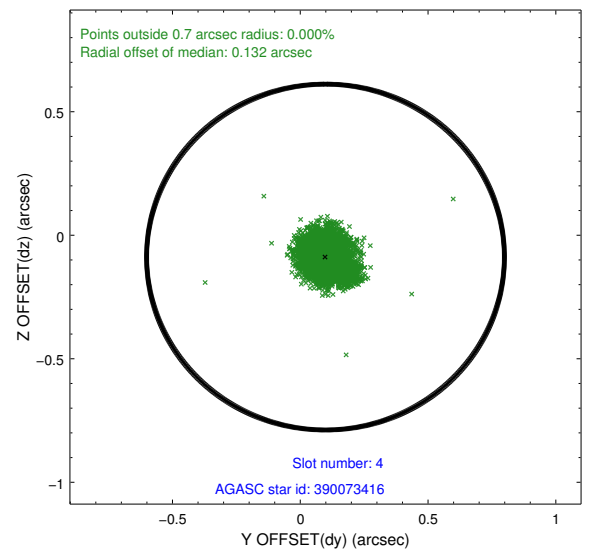
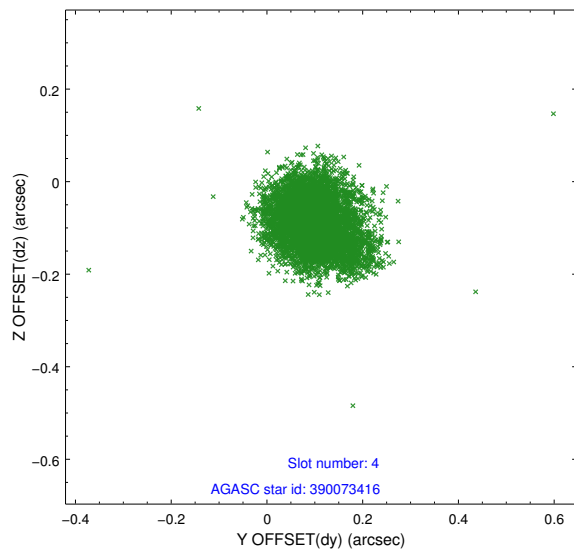
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.08	2486	0.004	0.070	0.006	0.011	0.000000	0.000000	924.09	-752.58
1	FID	ACIS-I-5	7.06	2486	-0.165	0.036	0.006	0.010	0.000000	0.000000	-1823.95	1144.58
2	FID	ACIS-I-6	7.06	2486	0.070	-0.035	0.006	0.011	0.000000	0.000000	389.07	1789.65
3	GUIDE	390070936	9.47	4964	0.152	-0.053	0.130	0.206	122.243728	42.332075	365.60	-856.55
4	GUIDE	390073416	8.39	4968	0.099	-0.088	0.080	0.126	122.581437	41.637876	1868.51	1334.47
5	GUIDE	390076552	9.55	4966	-0.066	0.043	0.159	0.260	122.868934	42.014547	317.56	1165.12
6	GUIDE	390204920	9.72	4965	-0.162	0.077	0.169	0.269	123.432047	42.449494	-1832.84	1452.60
7	GUIDE	390470352	9.09	4966	-0.013	0.023	0.091	0.145	122.010309	42.518150	178.95	-1750.40

## 2.4 Star Slots

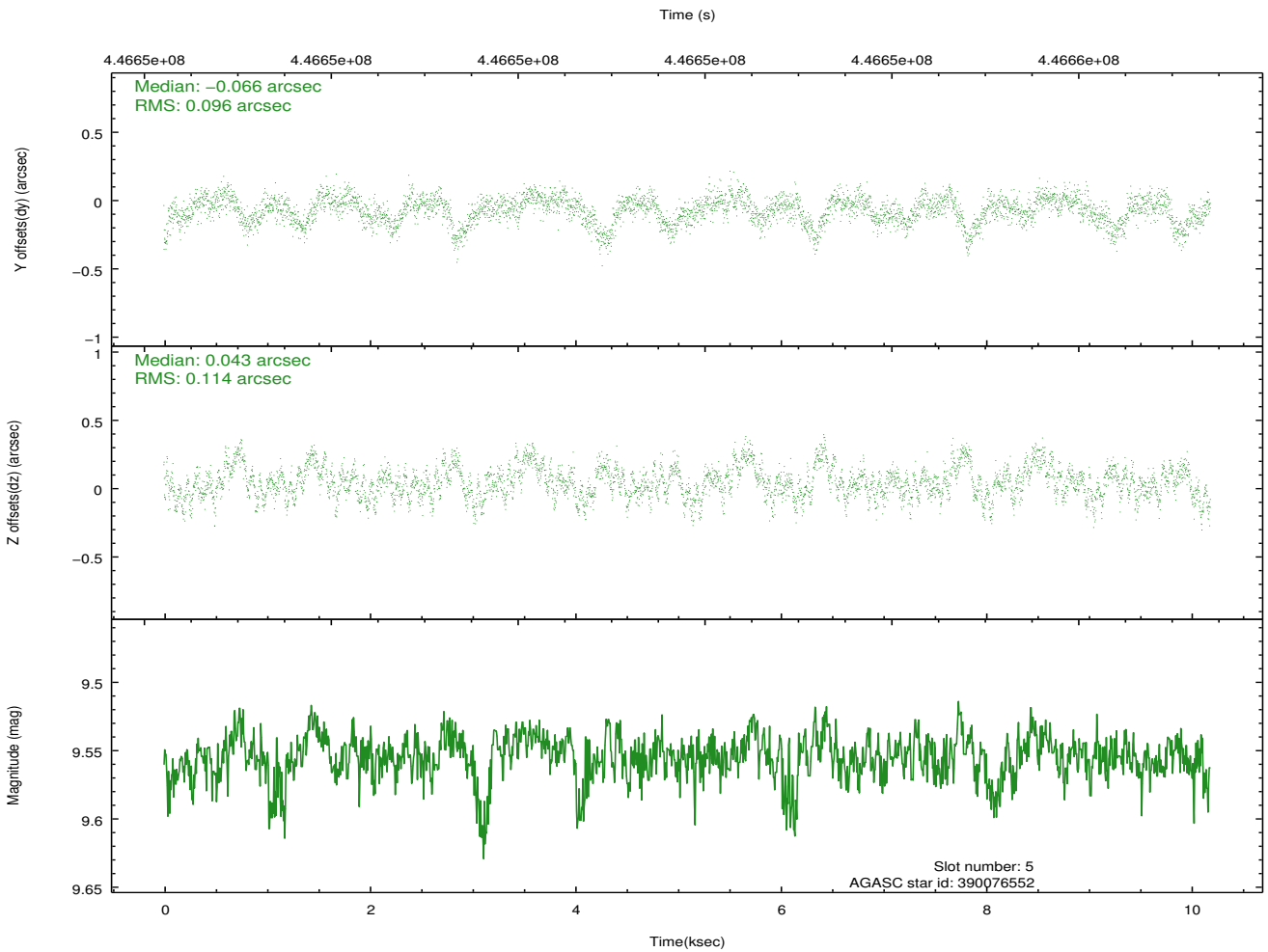
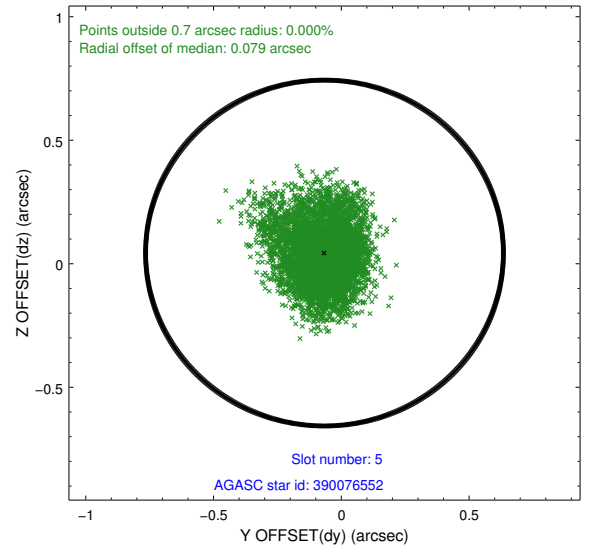
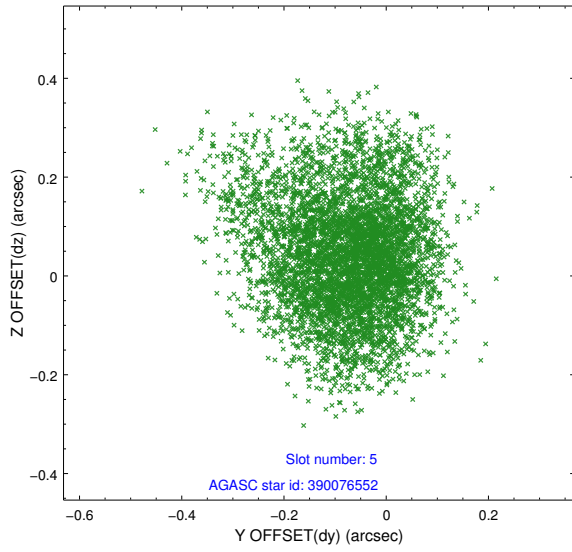
### 2.4.1 Slot 3



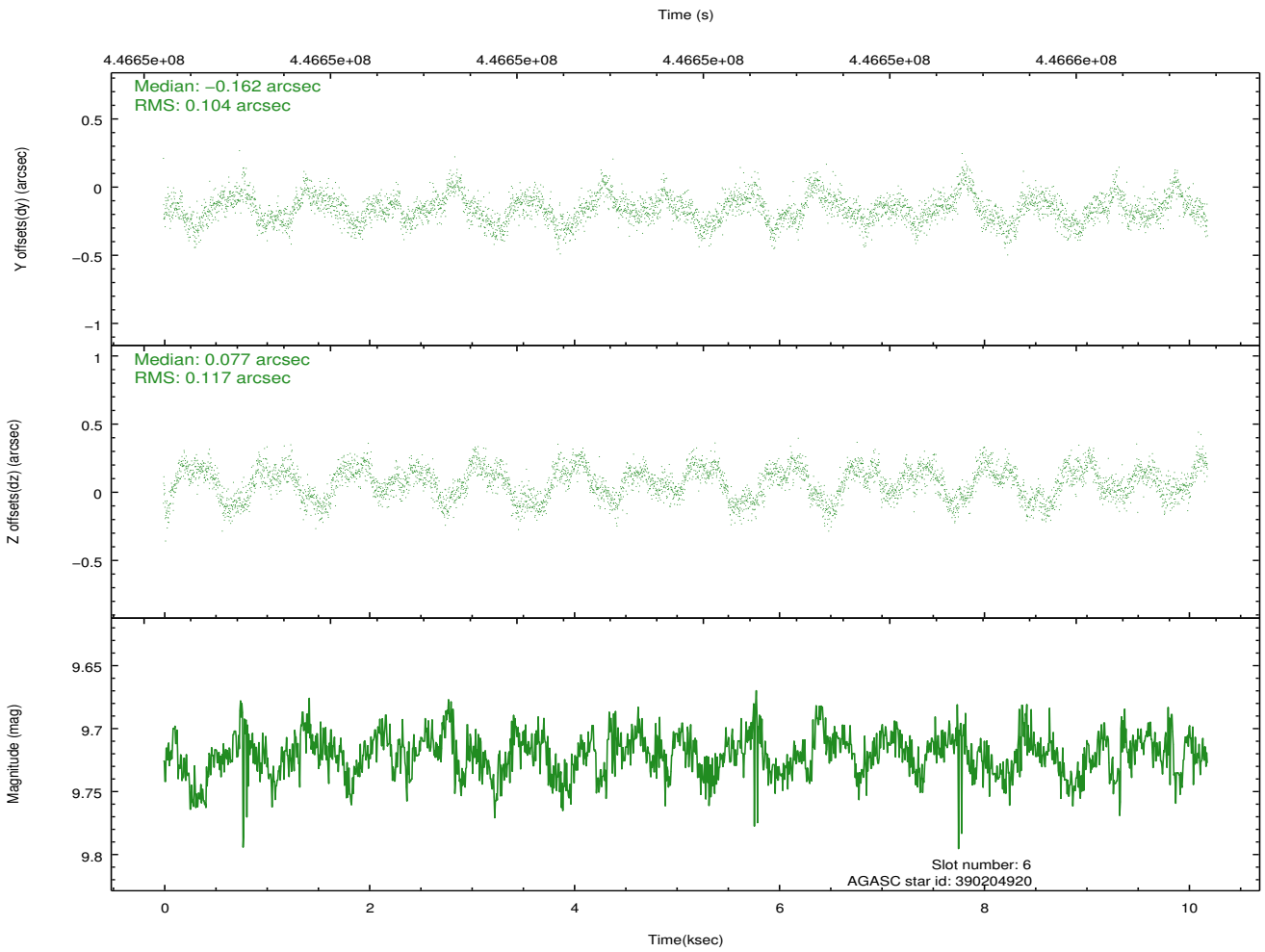
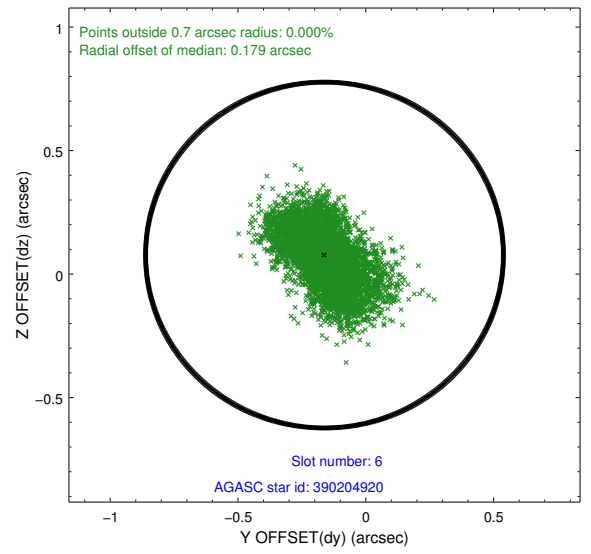
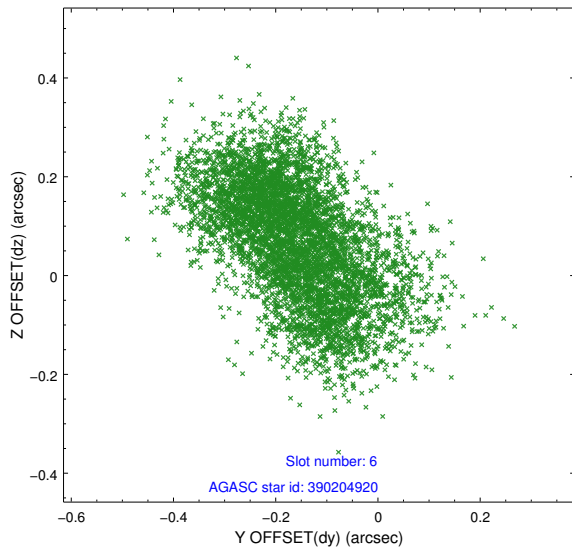
## 2.4.2 Slot 4



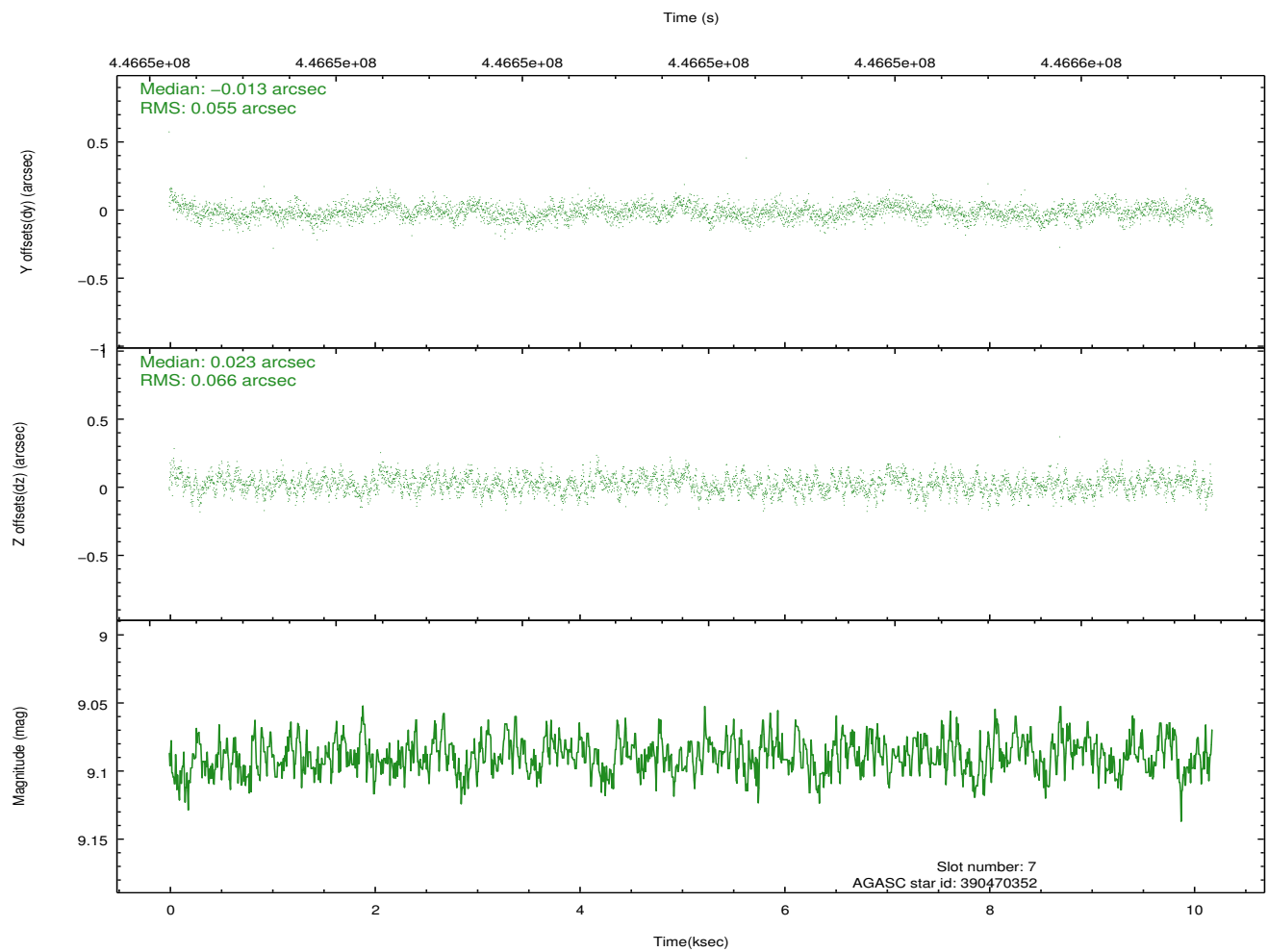
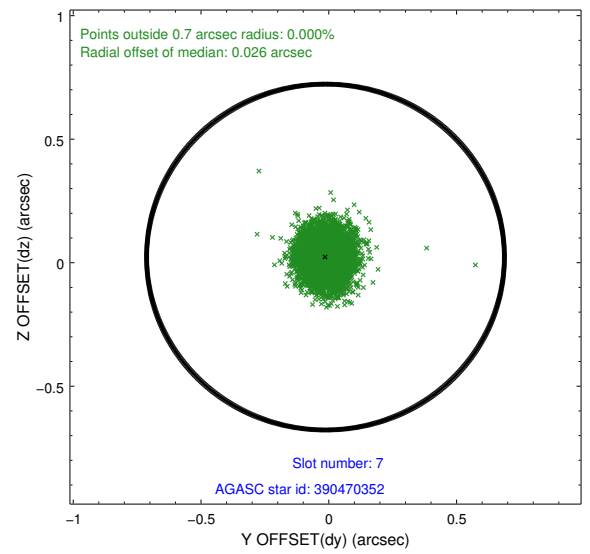
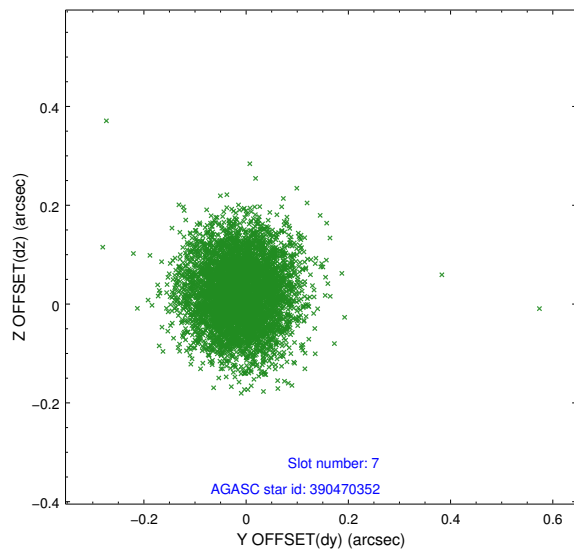
### 2.4.3 Slot 5



## 2.4.4 Slot 6

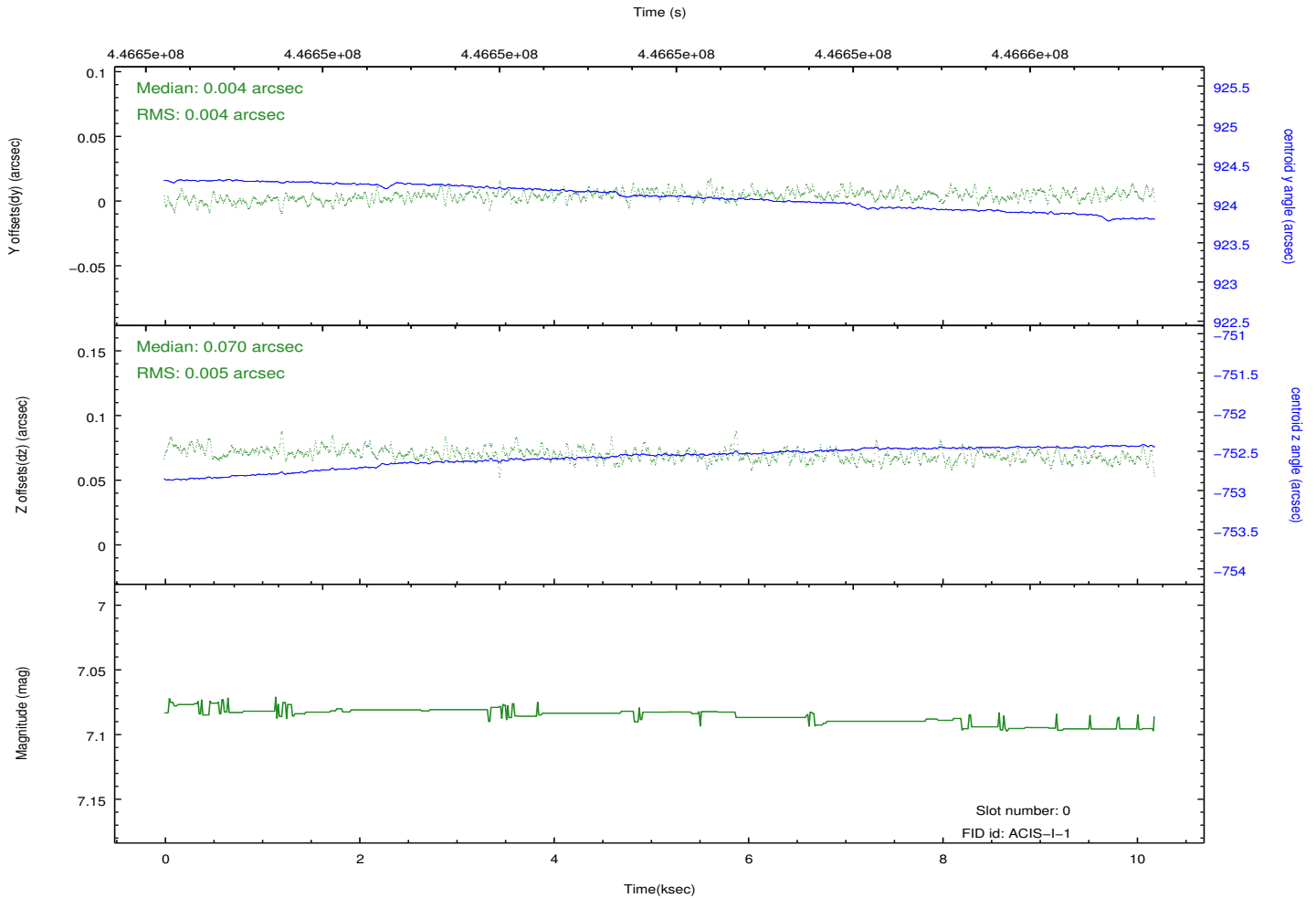
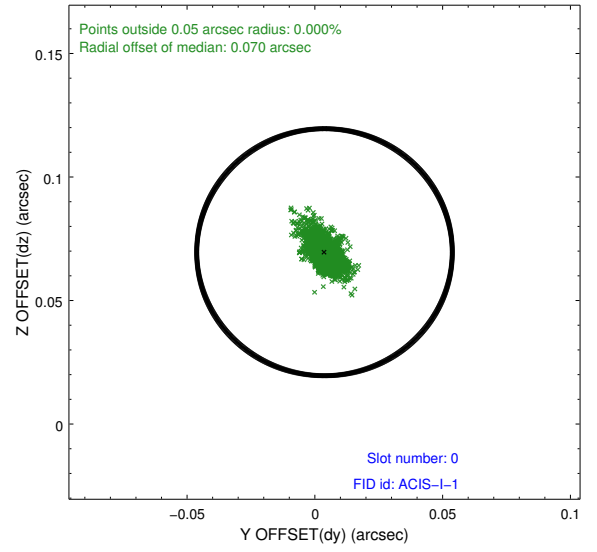
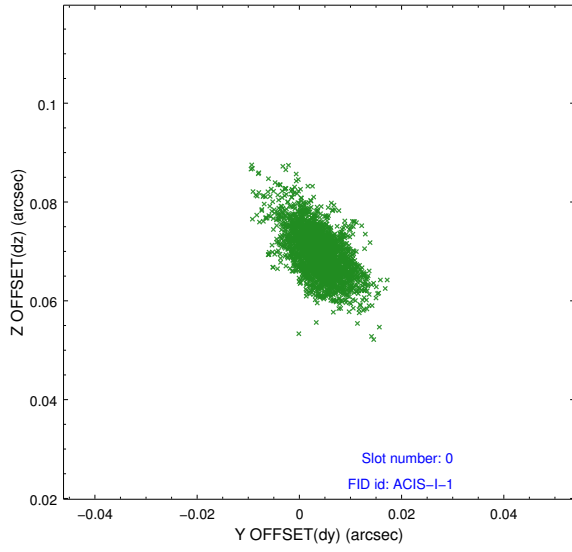


## 2.4.5 Slot 7

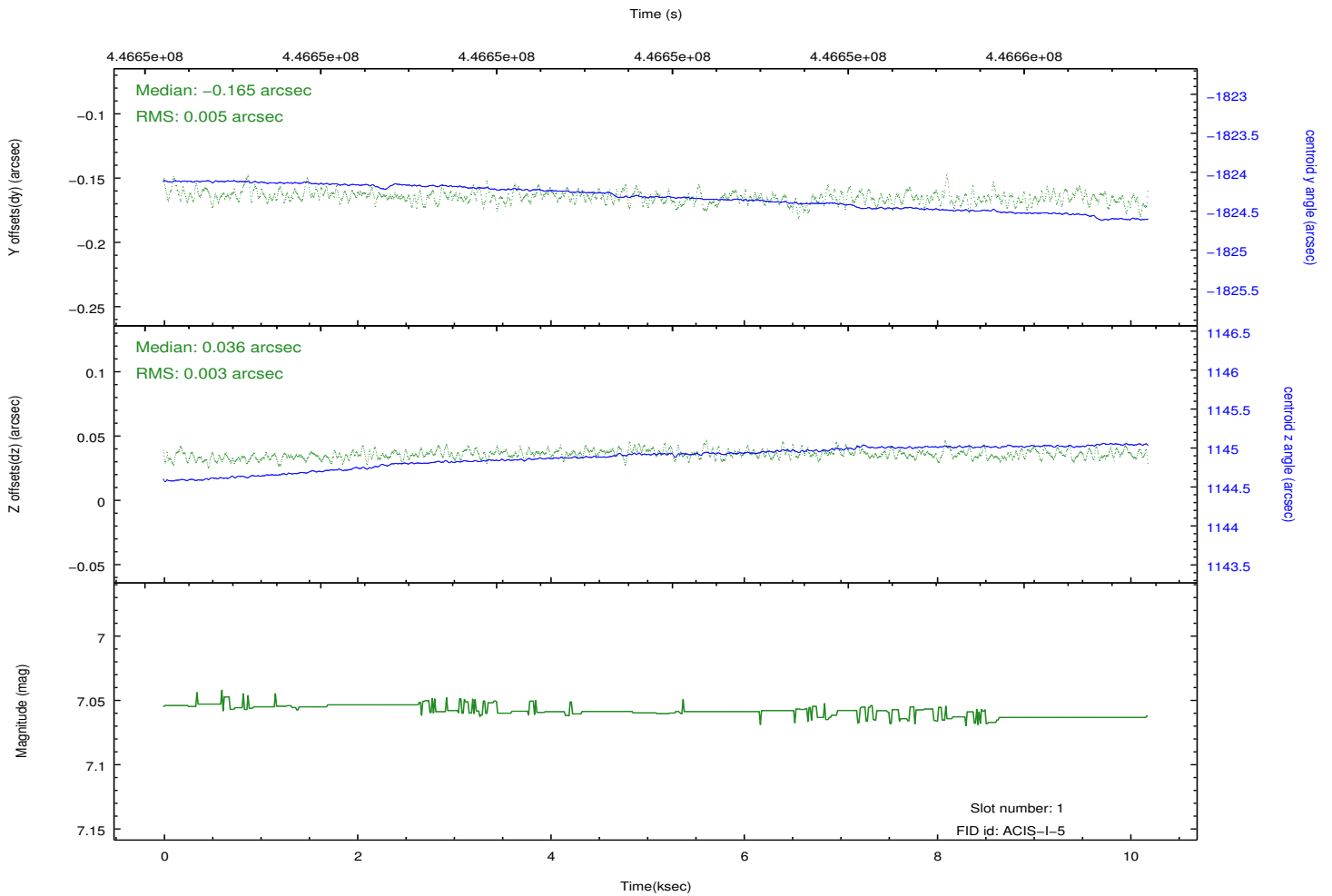
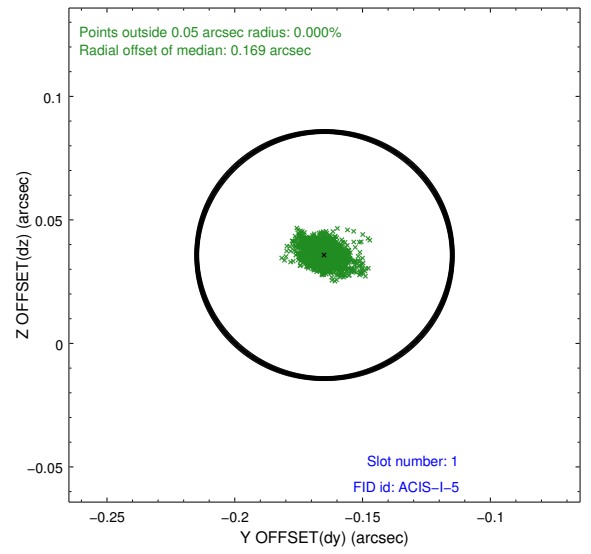
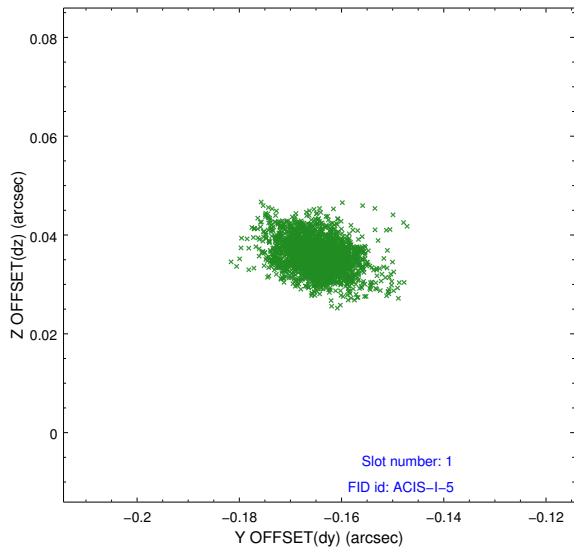


## 2.5 FID Slots

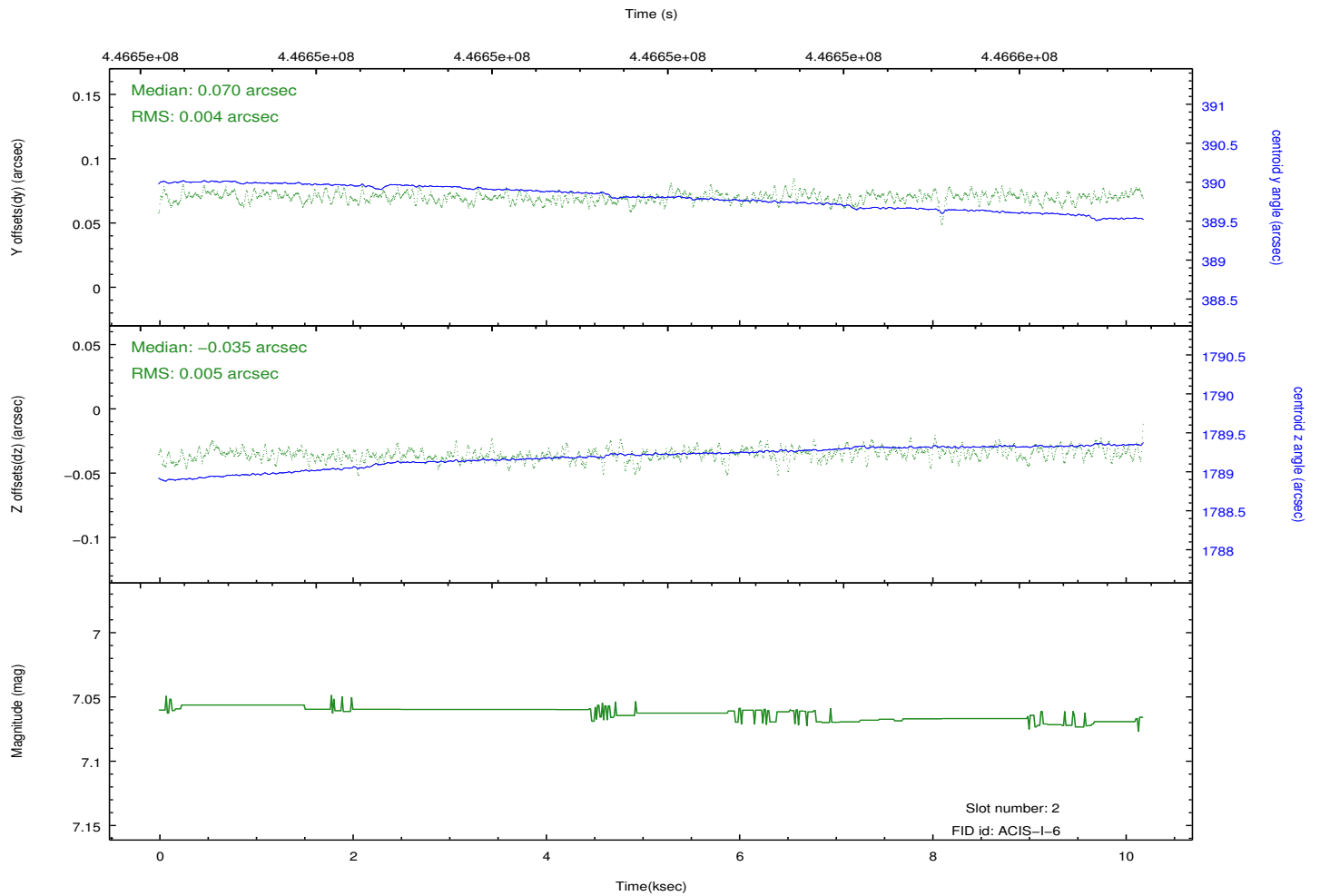
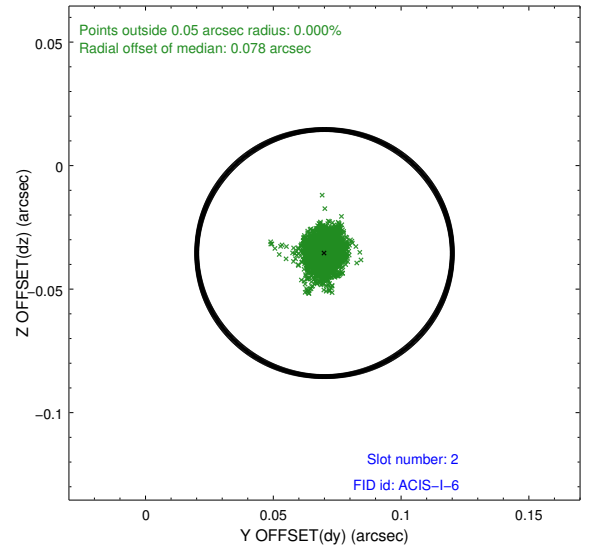
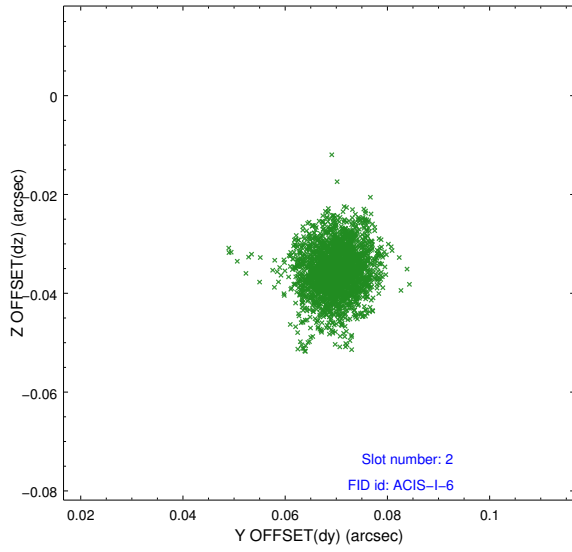
### 2.5.1 Slot 0



## 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)	2012.02.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.077467279136

### A.2 Comments