

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3584 - L2 Version 3  
Chandra X-Ray Center

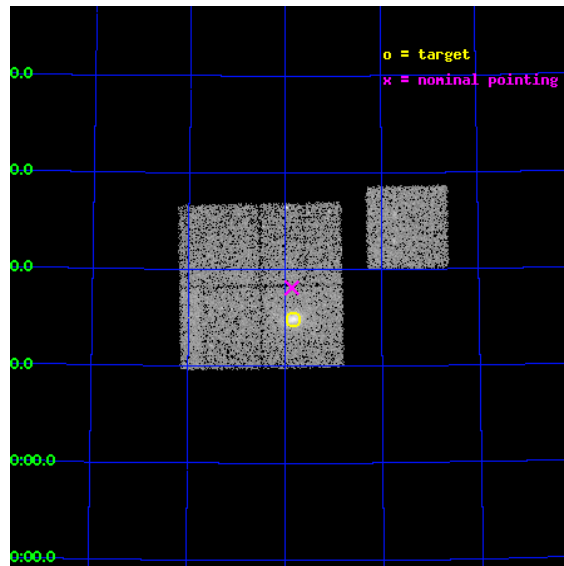
L2 Processing Date : Nov 5 2012

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# 1 Front

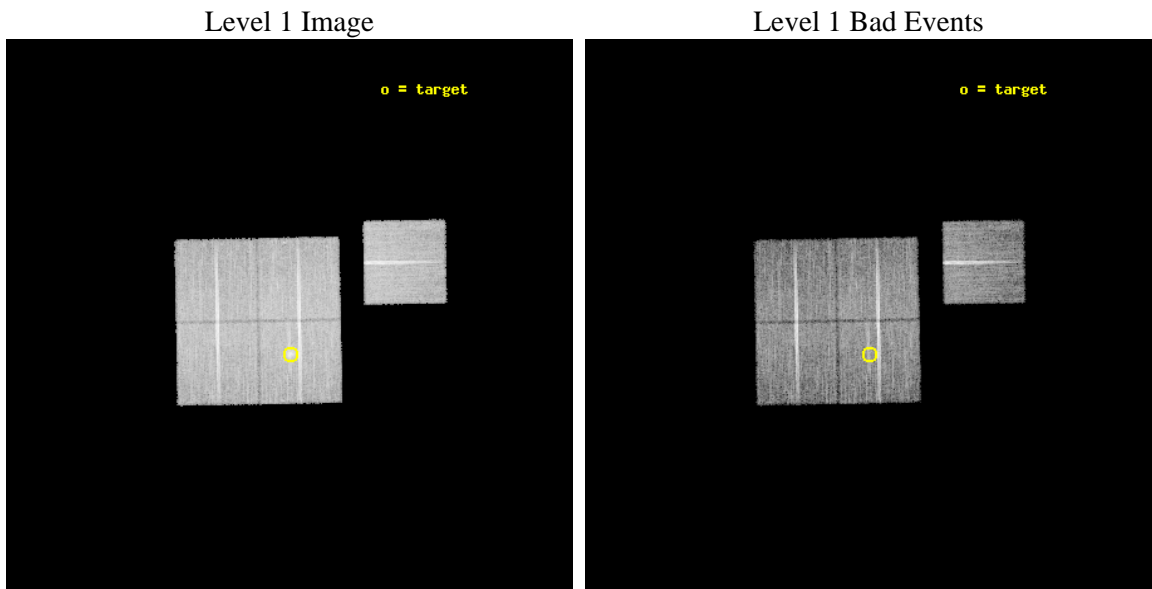
seq_num	800305	Sequence number
obs_id	3584	Observation id
title	X-RAY/SZ DETERMINATION OF COSMOLOGICAL PARAMETERS	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	MACS-J0647.7+7015	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	101.957083	Observer's specified target RA [deg]
dec_targ	70.248	Observer's specified target Dec [deg]
ra_nom	101.96588765956	Nominal RA [deg]
dec_nom	70.302256251021	Nominal Dec [deg]
roll_nom	88.970974403135	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20263.911055624	Sum of GTIs [s]
livetime	19999.148139608	Livetime [s]
ontime0	20260.646945417	Sum of GTIs [s]
ontime1	20263.828975618	Sum of GTIs [s]
ontime2	20257.588035345	Sum of GTIs [s]
ontime3	20263.911055624	Sum of GTIs [s]
ontime6	20263.746895611	Sum of GTIs [s]
l2events	48324	Number of level 2 events



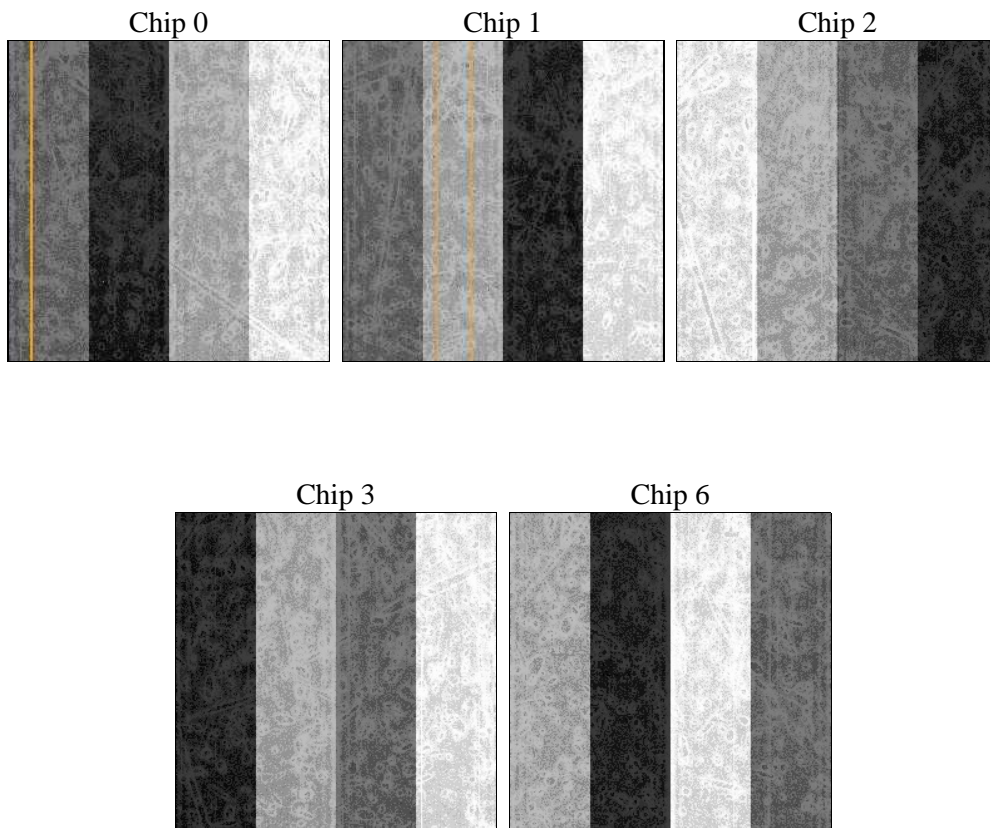
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20268.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20263.911055624	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	20260.646945417	Sum of GTIs [s]
date	2012-11-05T03:42:08	Date and time of file creation	ontime1	20263.828975618	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	20257.588035345	Sum of GTIs [s]
			ontime3	20263.911055624	Sum of GTIs [s]
			ontime6	20263.746895611	Sum of GTIs [s]
			l1events	538749	Number of level 1 events

### 2.1.4 Events

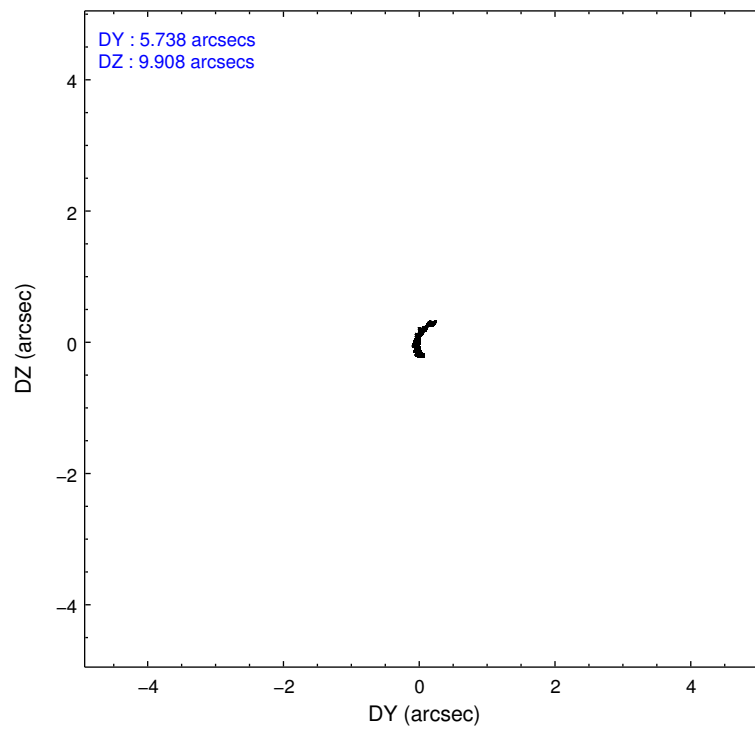
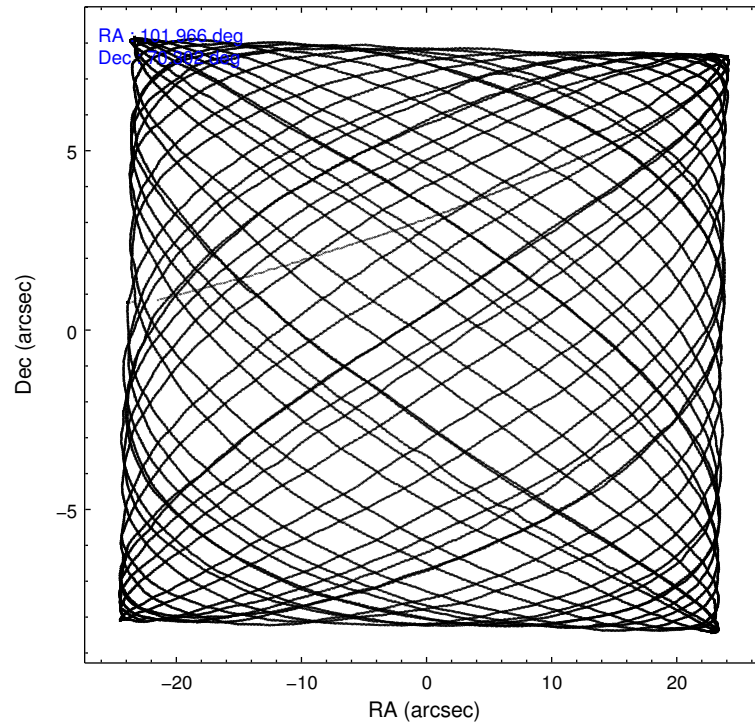
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	98805	103782	114291	113844	108027
rejected events	88545	91729	103881	99571	97265
rejected %	89%	88%	90%	87%	90%

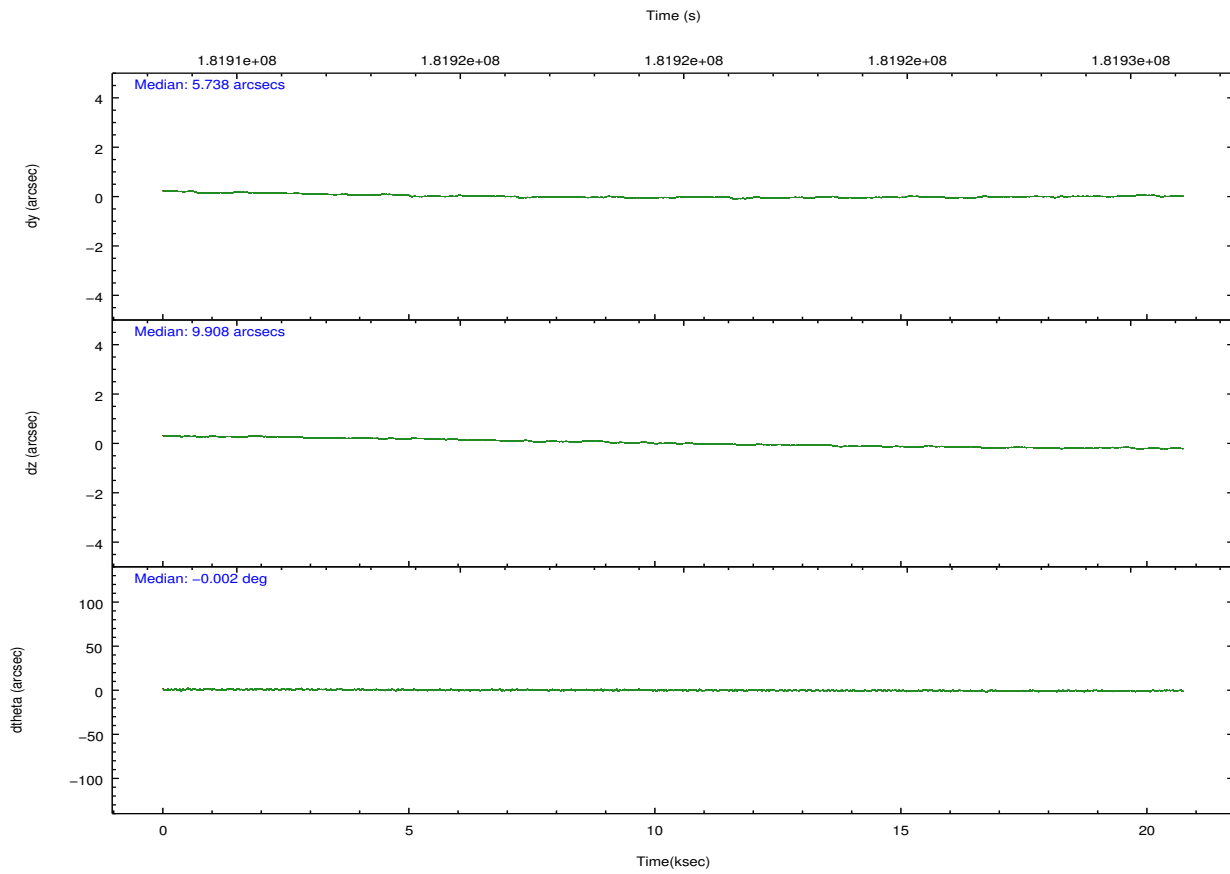
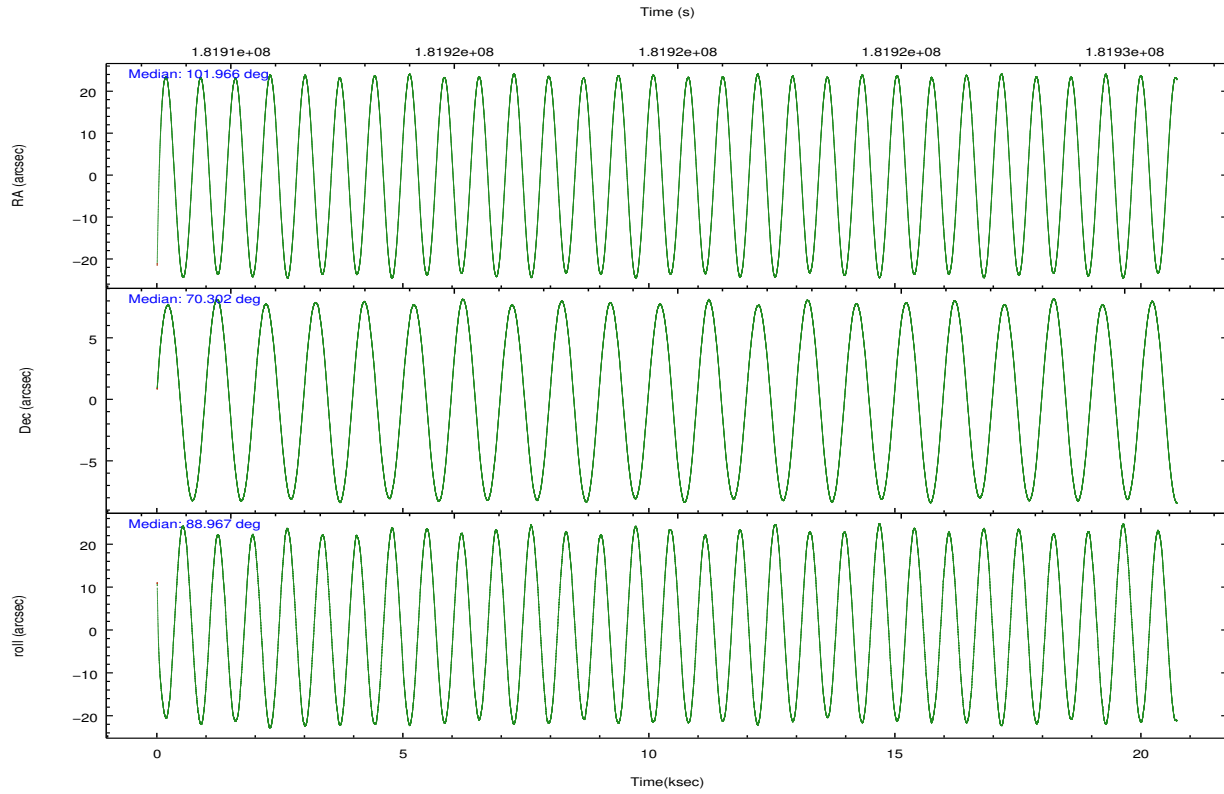
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3468	4373	3789	6963	3757
	3%	4%	3%	6%	3%
grade 1 events	44	46	47	73	48
	0%	0%	0%	0%	0%
grade 2 events	2427	2589	2435	2560	2281
	2%	2%	2%	2%	2%
grade 3 events	1213	1326	1190	1287	1232
	1%	1%	1%	1%	1%
grade 4 events	1160	1290	1168	1295	1241
	1%	1%	1%	1%	1%
grade 5 events	3696	4025	3440	4310	4187
	3%	3%	3%	3%	3%
grade 6 events	1996	2478	1834	2171	2254
	2%	2%	1%	1%	2%
grade 7 events	84801	87655	100388	95185	93027
	85%	84%	87%	83%	86%

## 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	102.005456	101.965887659557	Subarray requested	NONE	NONE
[deg] Pointing Dec	70.278322	70.30225625102079	Alternating exposures requested	N	N
[deg] Pointing Roll	88.725048	88.97097440313534	[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	-225.840463	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	181909856.184000	181908759.16548			
Observation start date	2003-10-07T10:29:52	2003-10-07T10:12:39			
[s] Observation end time (MET)	181930124.184000	181930890.45393			
Observation end date	2003-10-07T16:07:40	2003-10-07T16:21:30			
Read mode	TIMED	TIMED			

## 2.3 Aspect



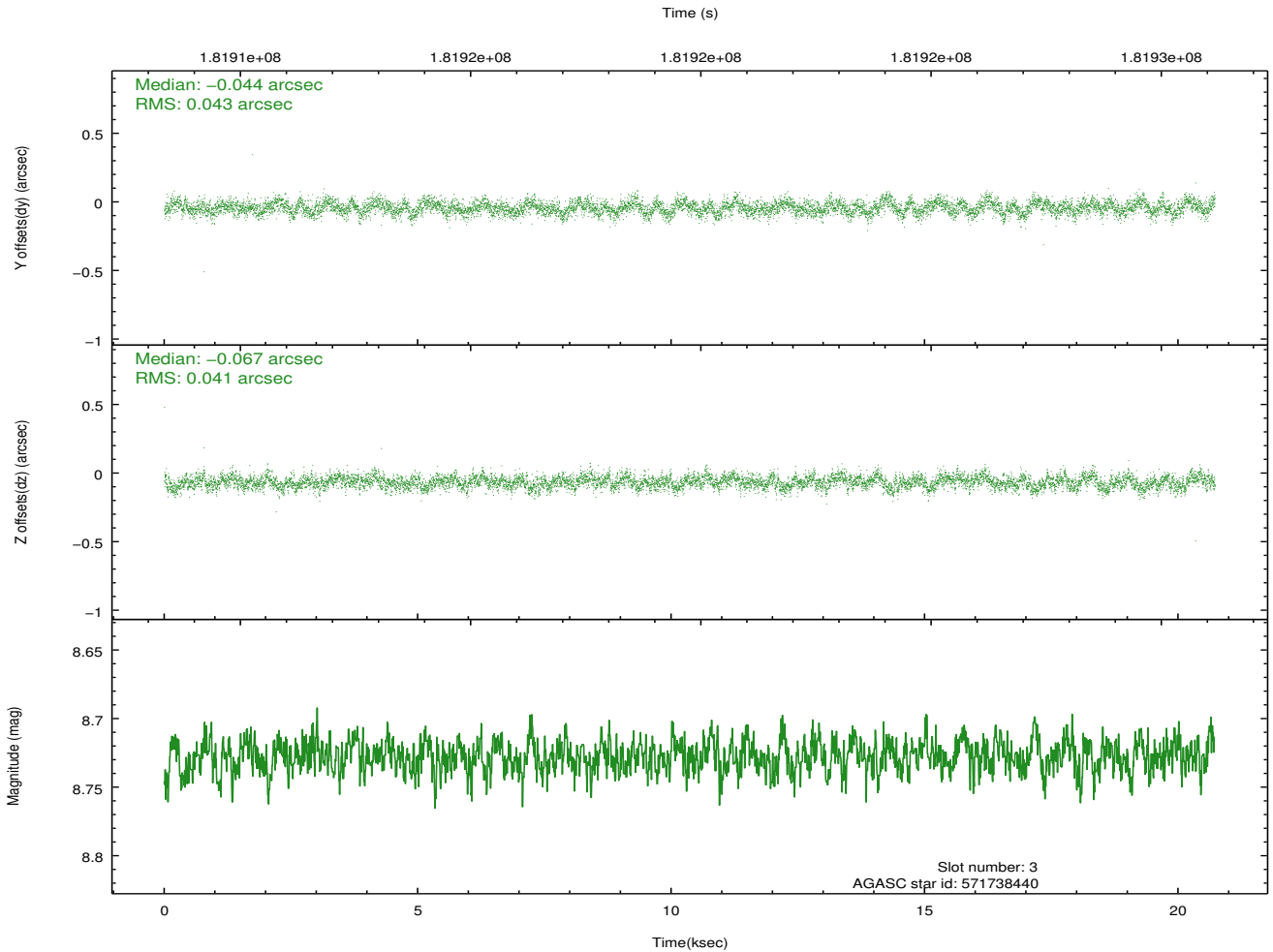
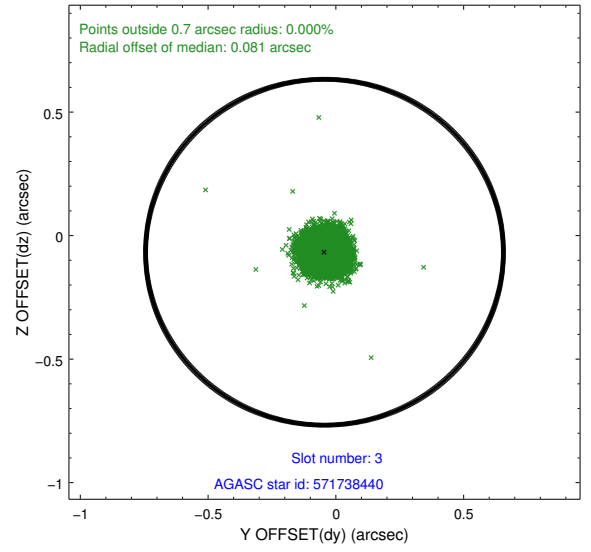
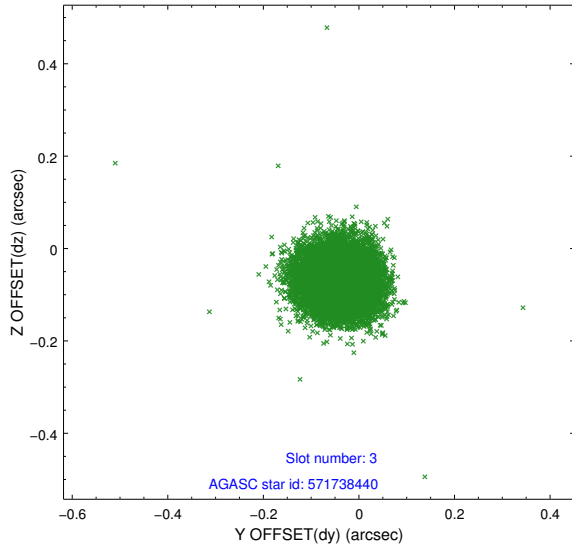


### Slot Statistics

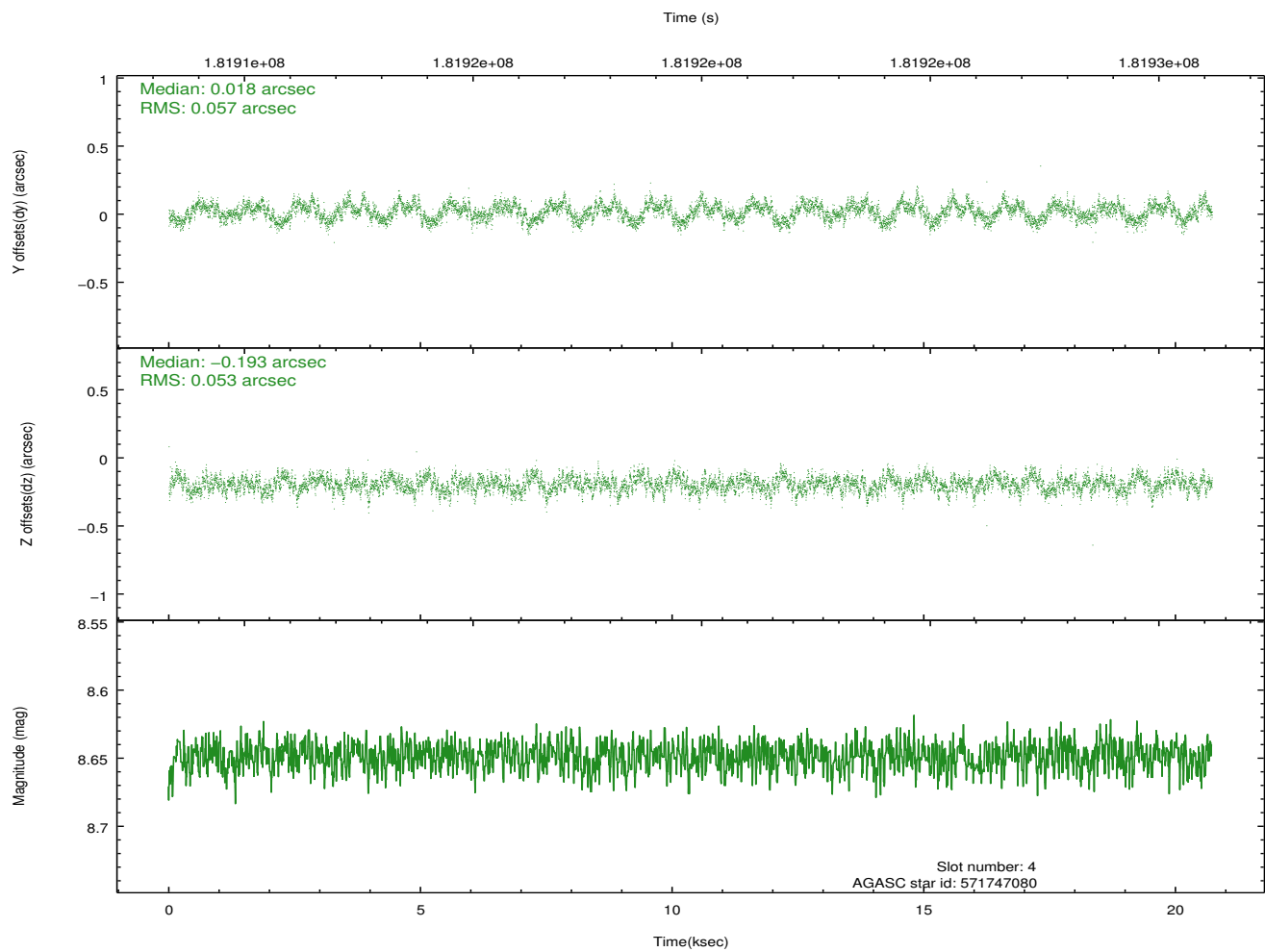
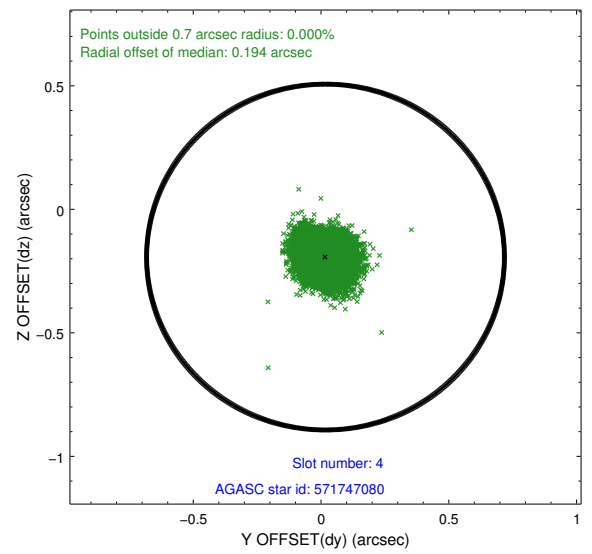
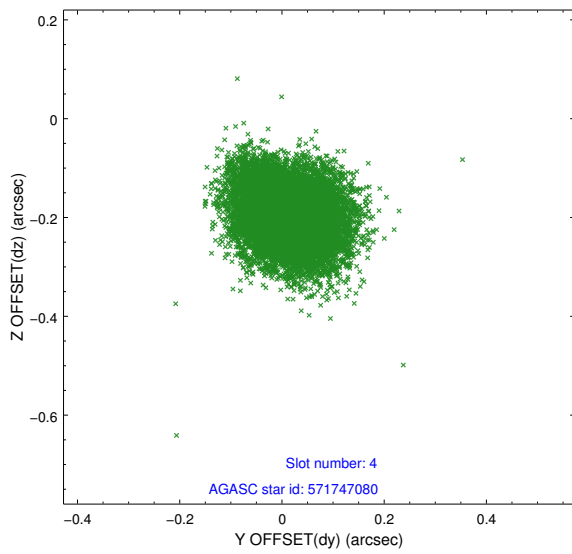
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	5055	0.087	-0.077	0.007	0.014	0.000000	0.000000	933.90	-992.56
1	FID	ACIS-I-5	7.22	5056	-0.230	0.077	0.008	0.014	0.000000	0.000000	-1814.42	904.97
2	FID	ACIS-I-6	7.25	5056	0.053	0.070	0.010	0.017	0.000000	0.000000	399.22	1549.67
3	GUIDE	571738440	8.73	10106	-0.044	-0.067	0.063	0.101	101.538336	70.748509	1682.13	592.24
4	GUIDE	571747080	8.65	10107	0.018	-0.193	0.084	0.133	100.454216	70.194141	-320.83	1885.34
5	GUIDE	571868960	8.41	10108	0.040	0.200	0.087	0.132	103.630562	69.677738	-2089.09	-2078.30
6	GUIDE	571737504	8.67	10109	0.131	-0.137	0.079	0.123	101.870026	69.629105	-2340.17	117.34
7	GUIDE	571870360	9.61	10104	-0.144	0.193	0.161	0.238	103.739194	70.763828	1822.37	-2015.57

## 2.4 Star Slots

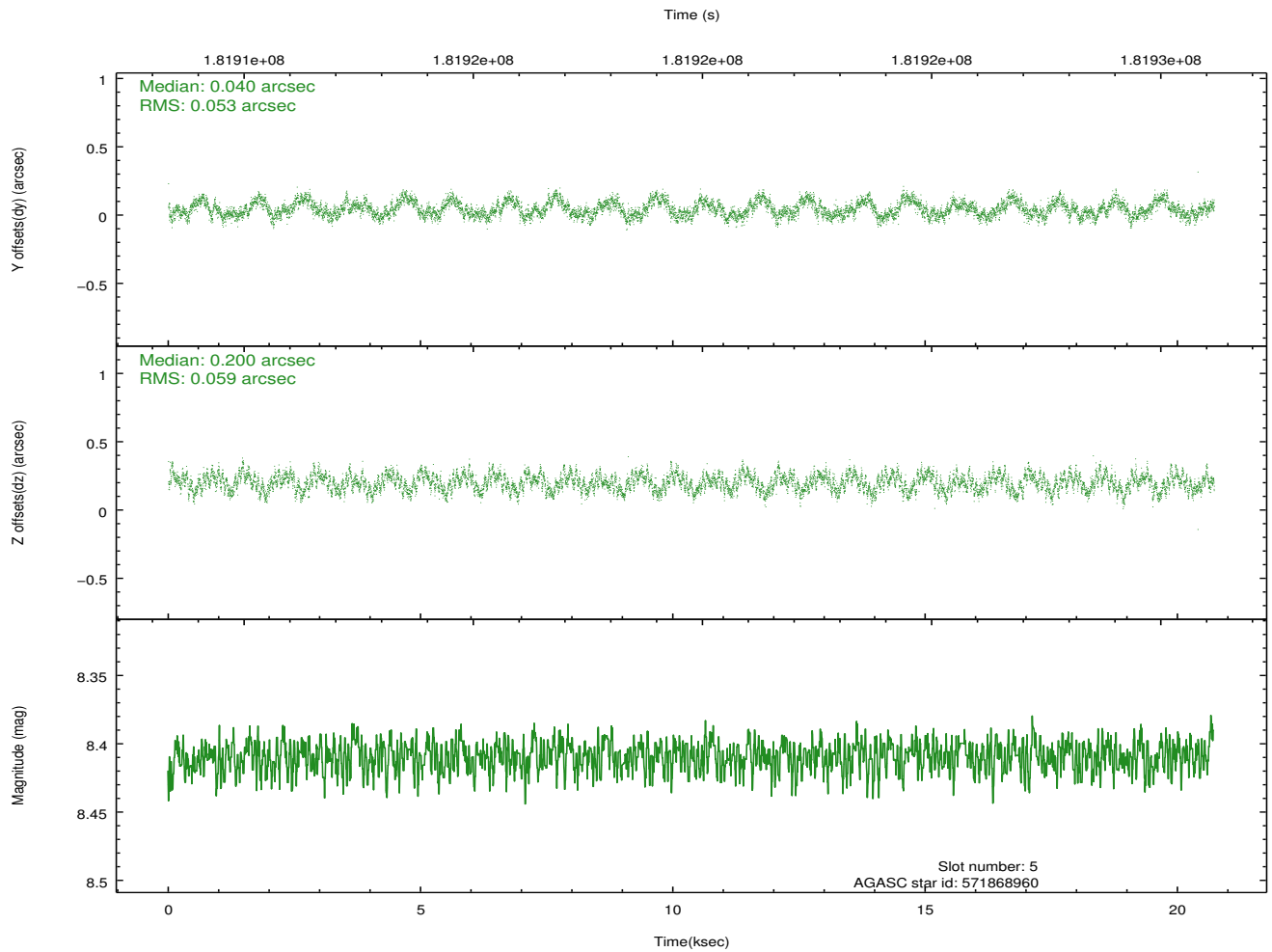
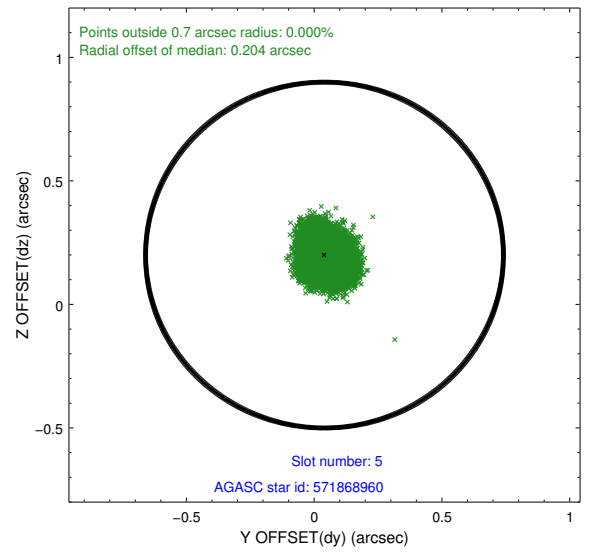
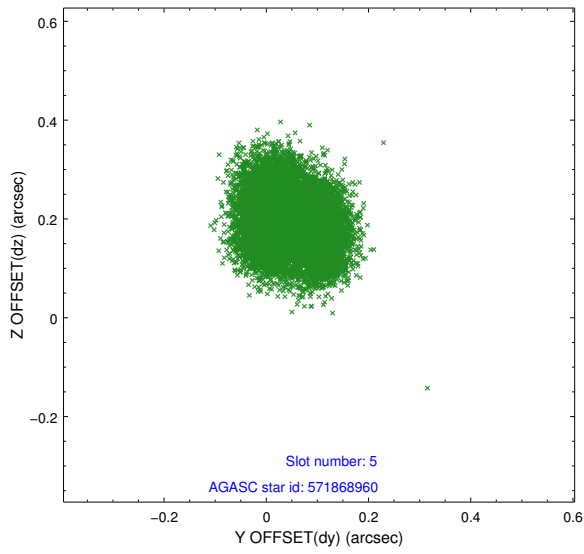
### 2.4.1 Slot 3



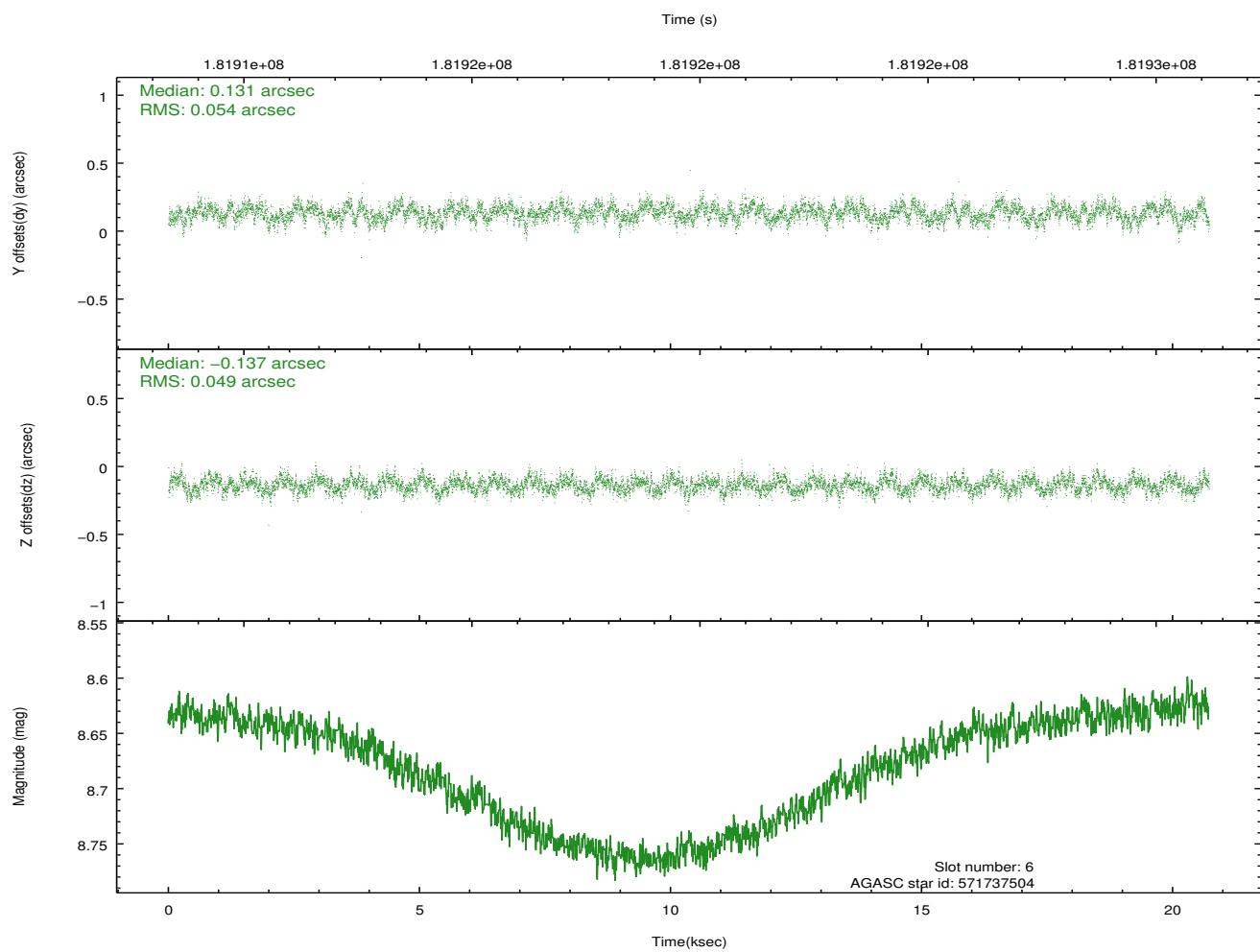
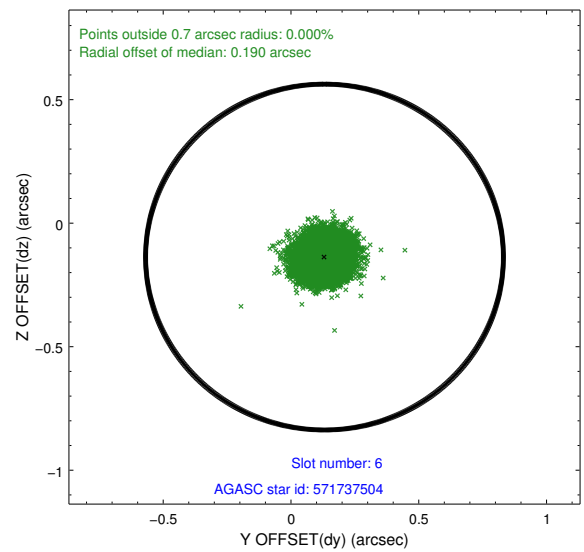
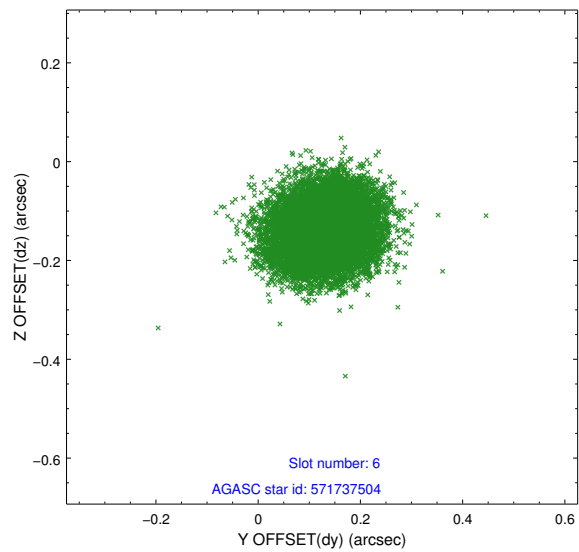
## 2.4.2 Slot 4



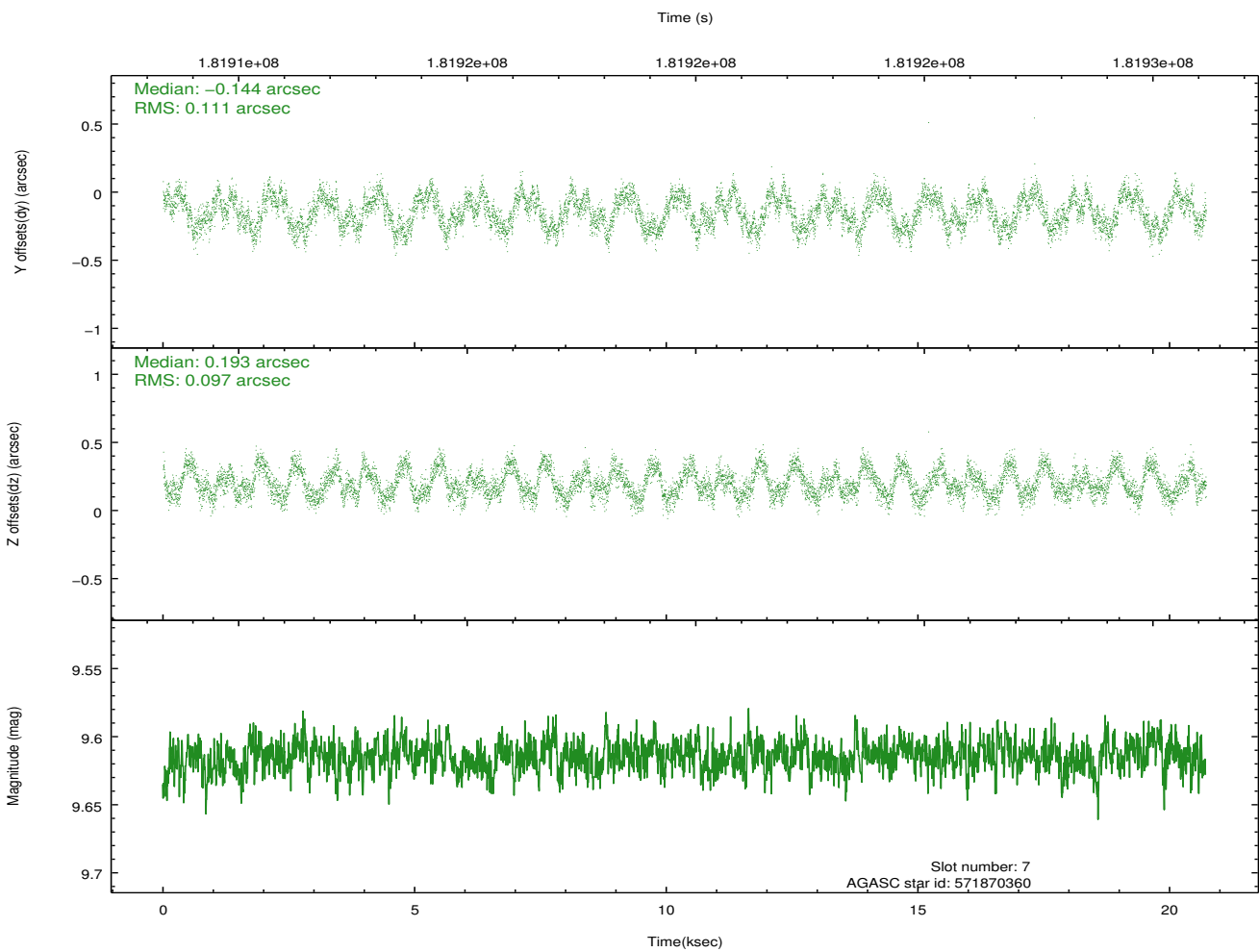
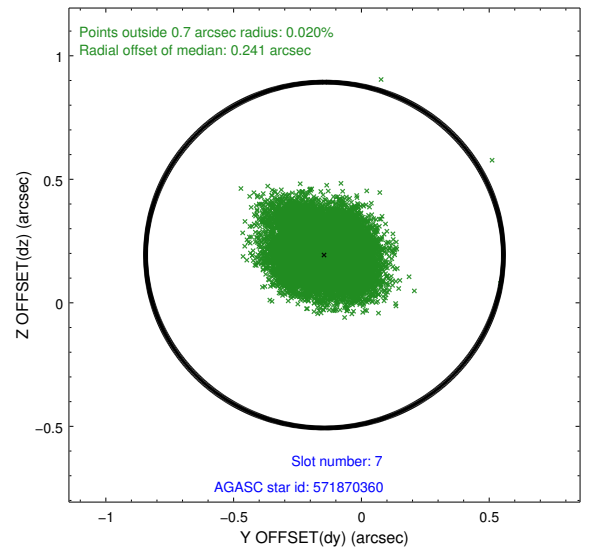
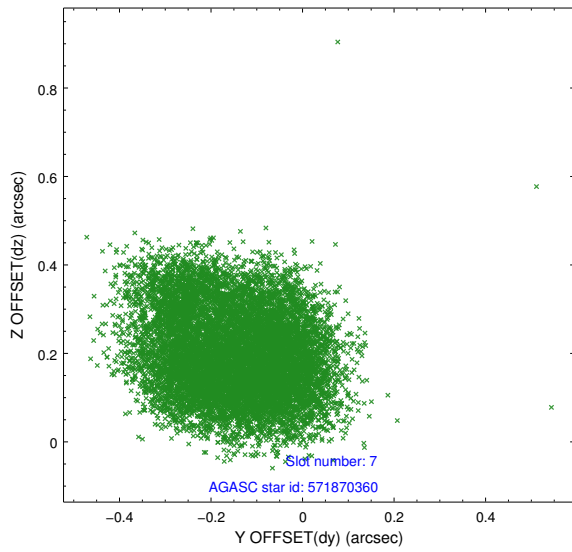
### 2.4.3 Slot 5



## 2.4.4 Slot 6

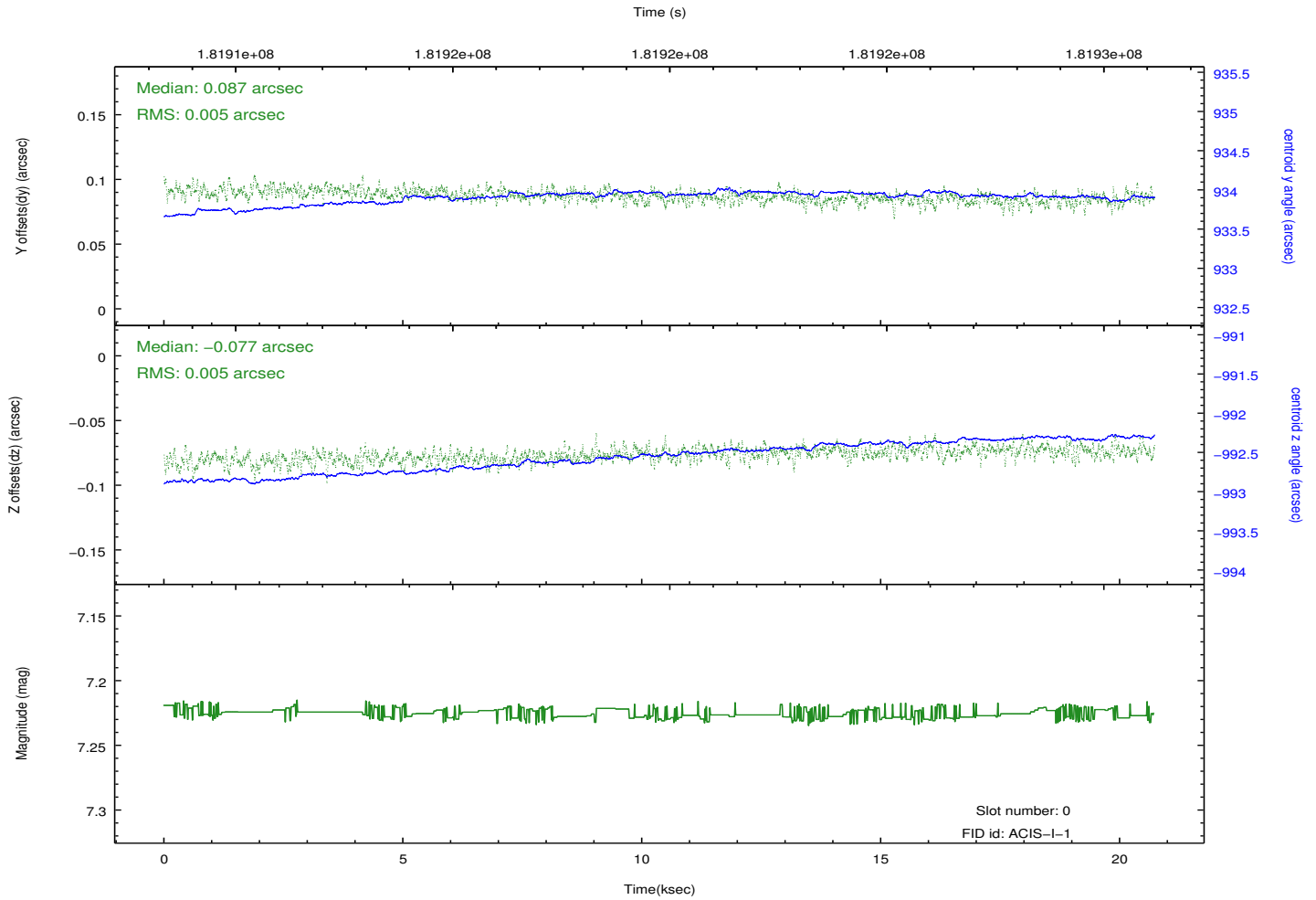
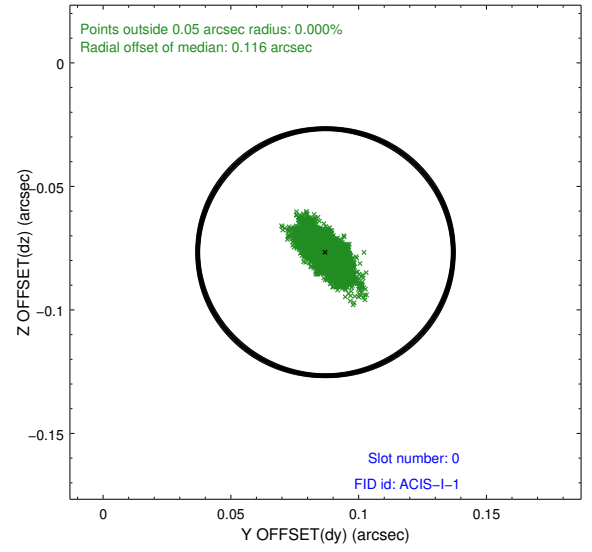
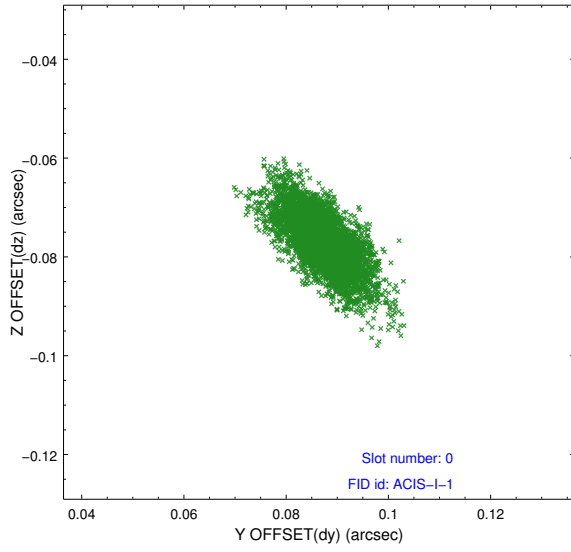


## 2.4.5 Slot 7

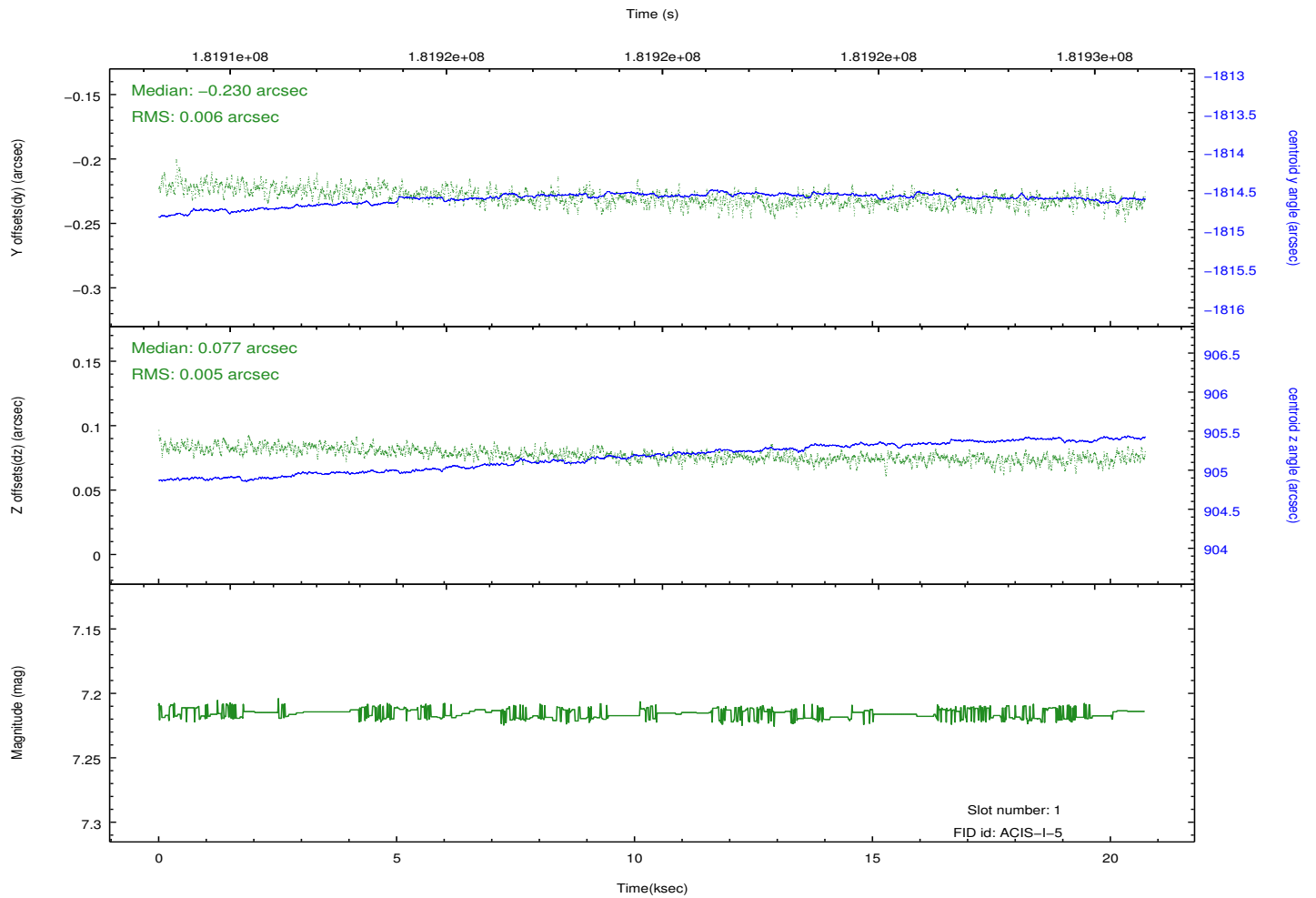
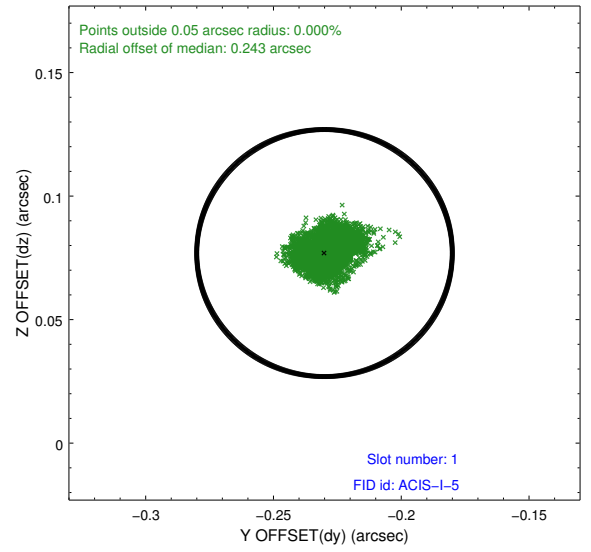
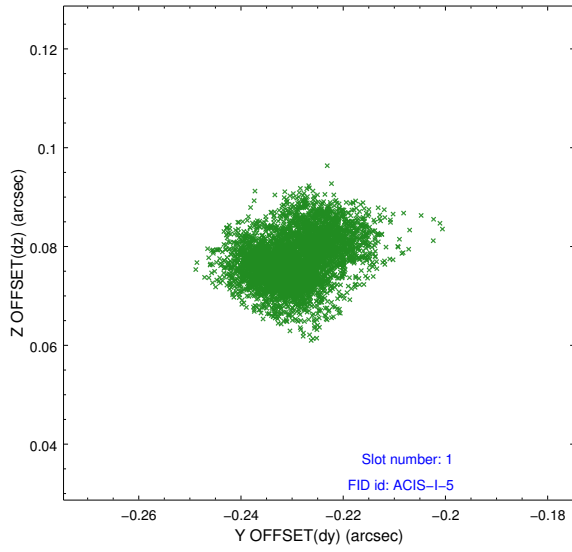


## 2.5 FID Slots

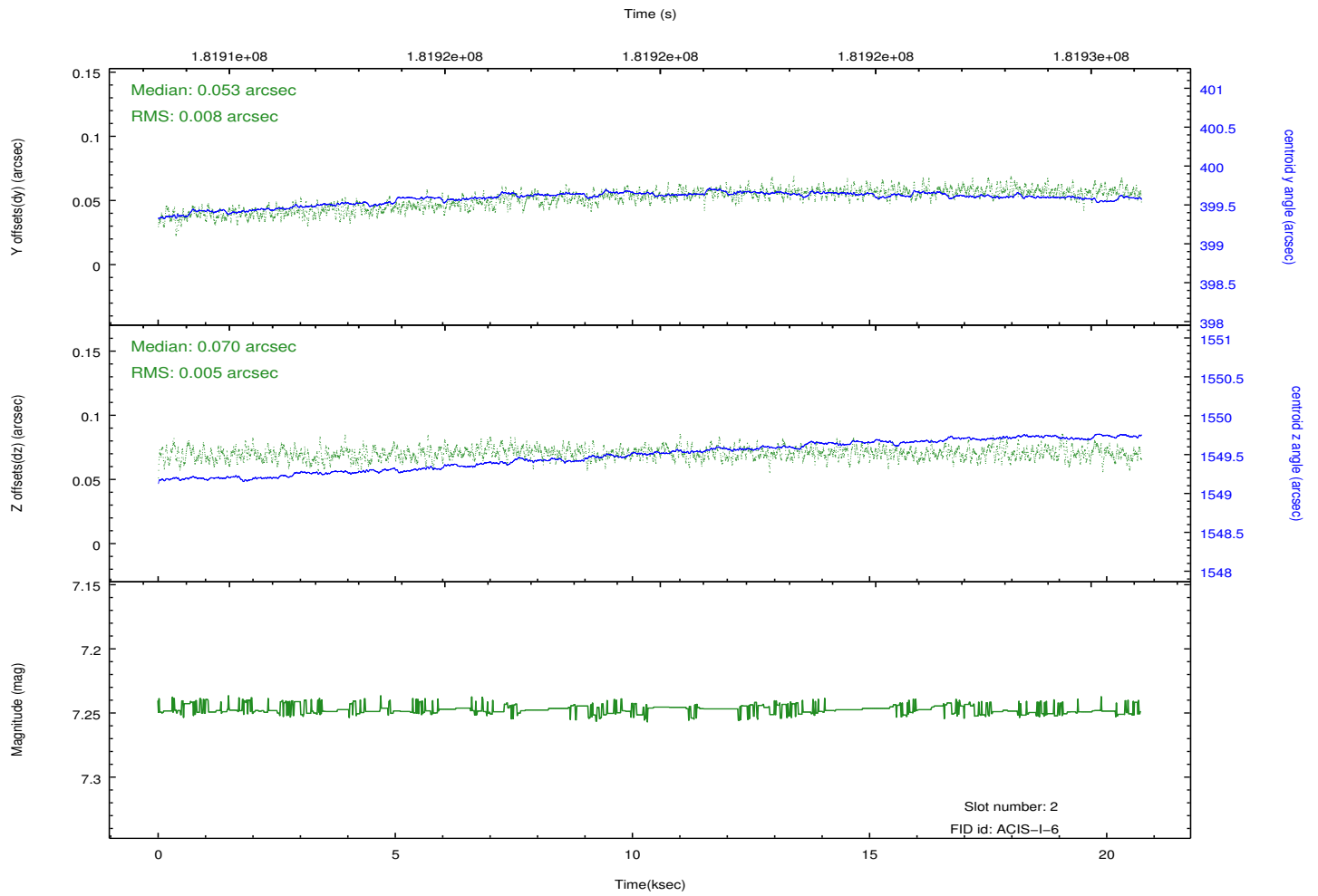
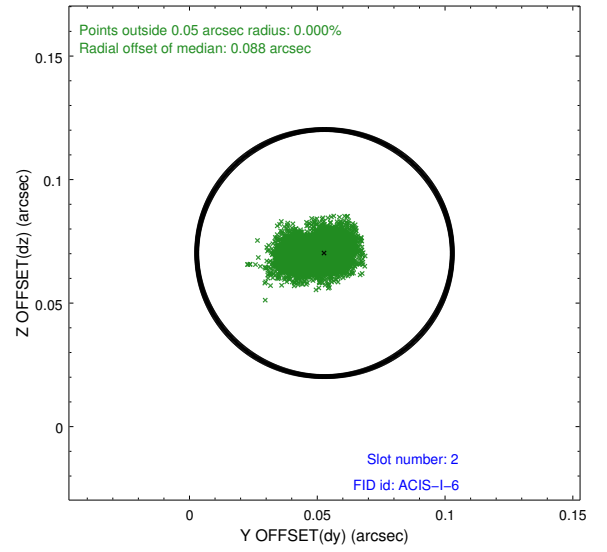
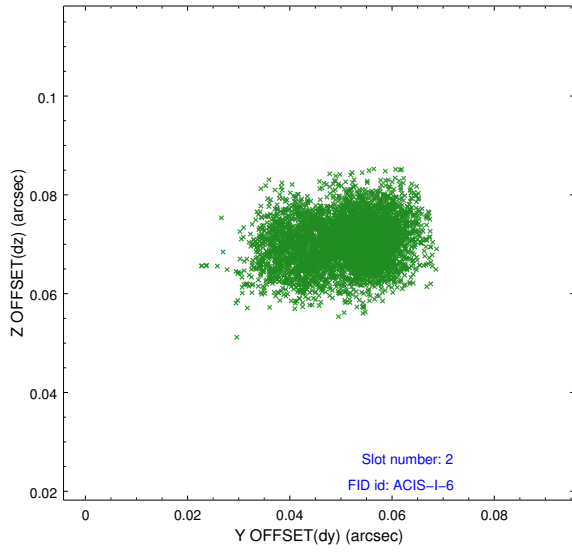
### 2.5.1 Slot 0



## 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)	2012.11.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.264

## A.2 Comments