

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3712 - L2 Version 3  
Chandra X-Ray Center

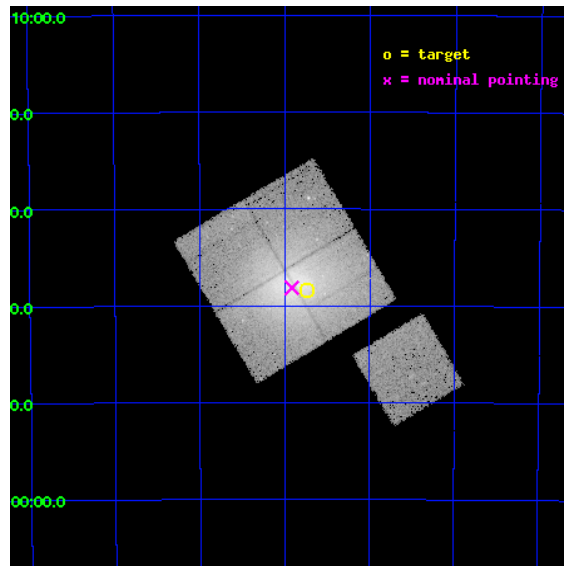
L2 Processing Date : Oct 10 2012

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# 1 Front

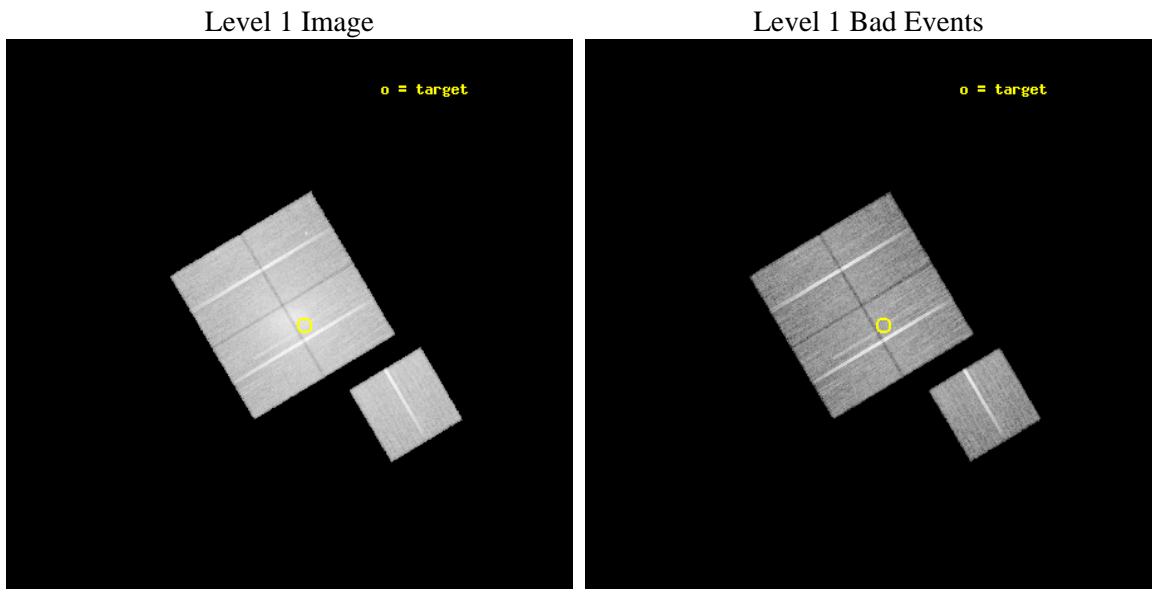
seq_num	800201	Sequence number
obs_id	3712	Observation id
title	GAS DENSITY DISCONTINUITIES IN MERGING CLUSTERS	Proposal title
observer	Dr Maxim Markevitch	Principal investigator
object	A3158	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	55.682917	Observer's specified target RA [deg]
dec_targ	-53.641	Observer's specified target Dec [deg]
ra_nom	55.728883435155	Nominal RA [deg]
dec_nom	-53.6358054383	Nominal Dec [deg]
roll_nom	149.24568523848	Nominal Roll [deg]
revision	3	Processing version of data
ontime	31375.058979422	Sum of GTIs [s]
livetime	30965.120735873	Livetime [s]
ontime0	31371.918019205	Sum of GTIs [s]
ontime1	31378.199939638	Sum of GTIs [s]
ontime2	31375.058979422	Sum of GTIs [s]
ontime3	31375.058979422	Sum of GTIs [s]
ontime6	31378.199939638	Sum of GTIs [s]
l2events	203615	Number of level 2 events



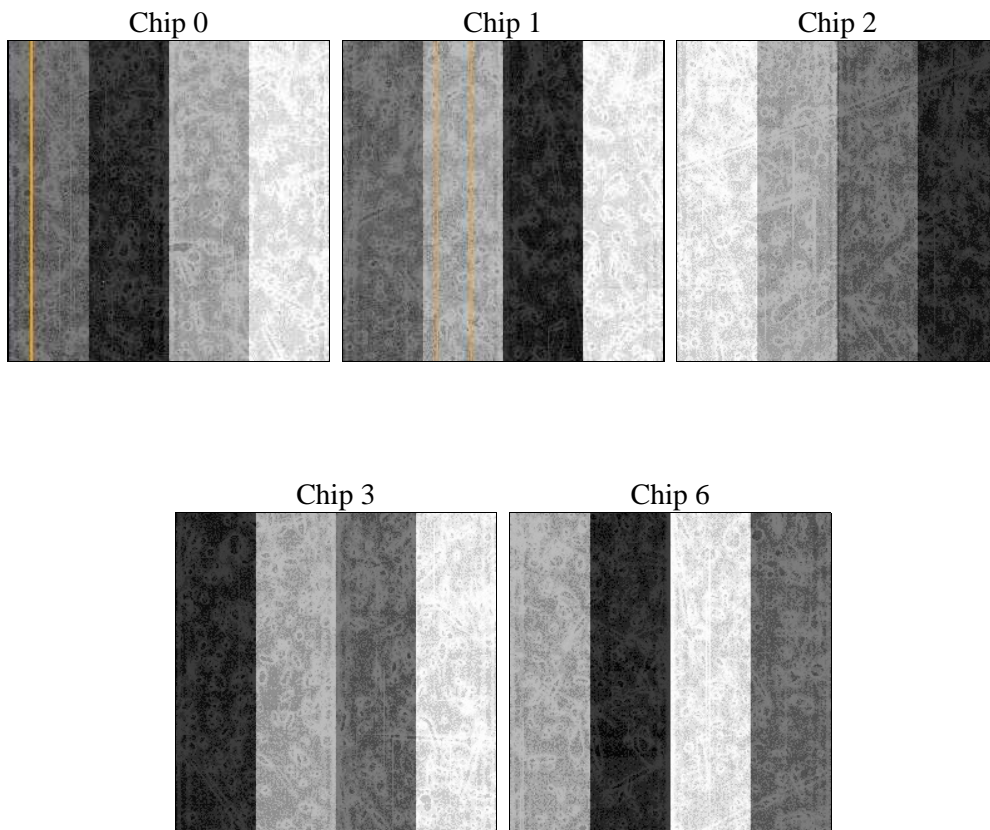
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31261.310000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	31375.058979422	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	31371.918019205	Sum of GTIs [s]
date	2012-10-10T01:03:34	Date and time of file creation	ontime1	31378.199939638	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	31375.058979422	Sum of GTIs [s]
			ontime3	31375.058979422	Sum of GTIs [s]
			ontime6	31378.199939638	Sum of GTIs [s]
			l1events	986724	Number of level 1 events

### 2.1.4 Events

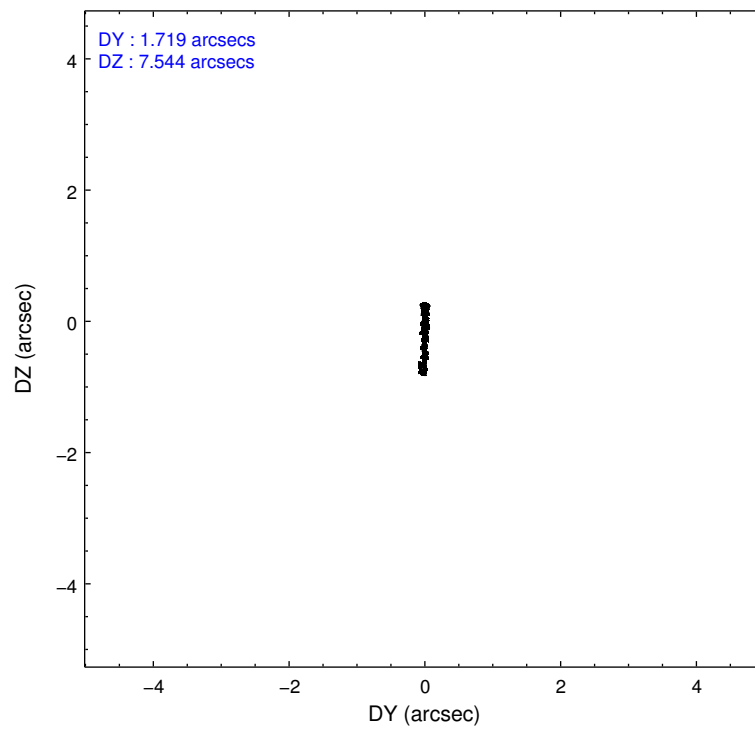
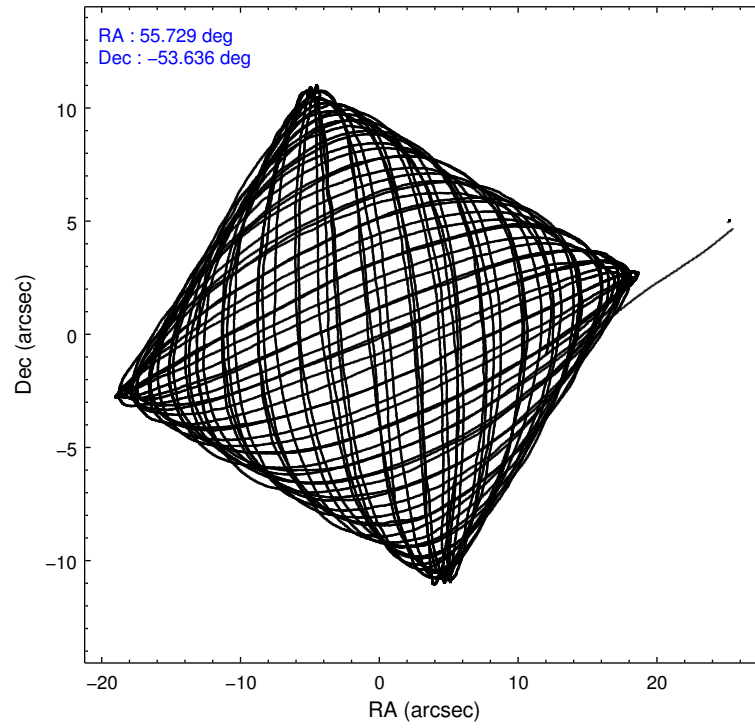
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	173869	178508	241807	221312	171228
rejected events	140854	142122	168203	157353	151958
rejected %	81%	79%	69%	71%	88%

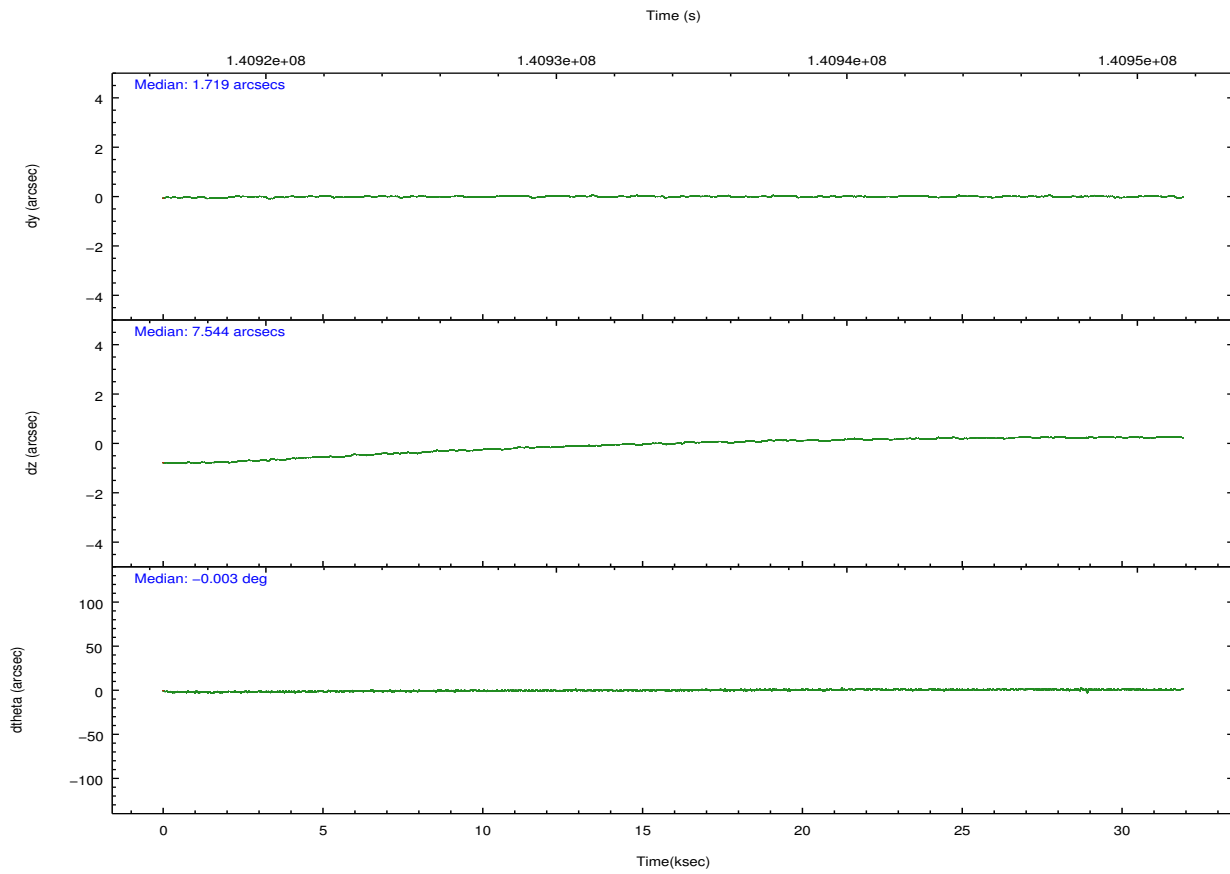
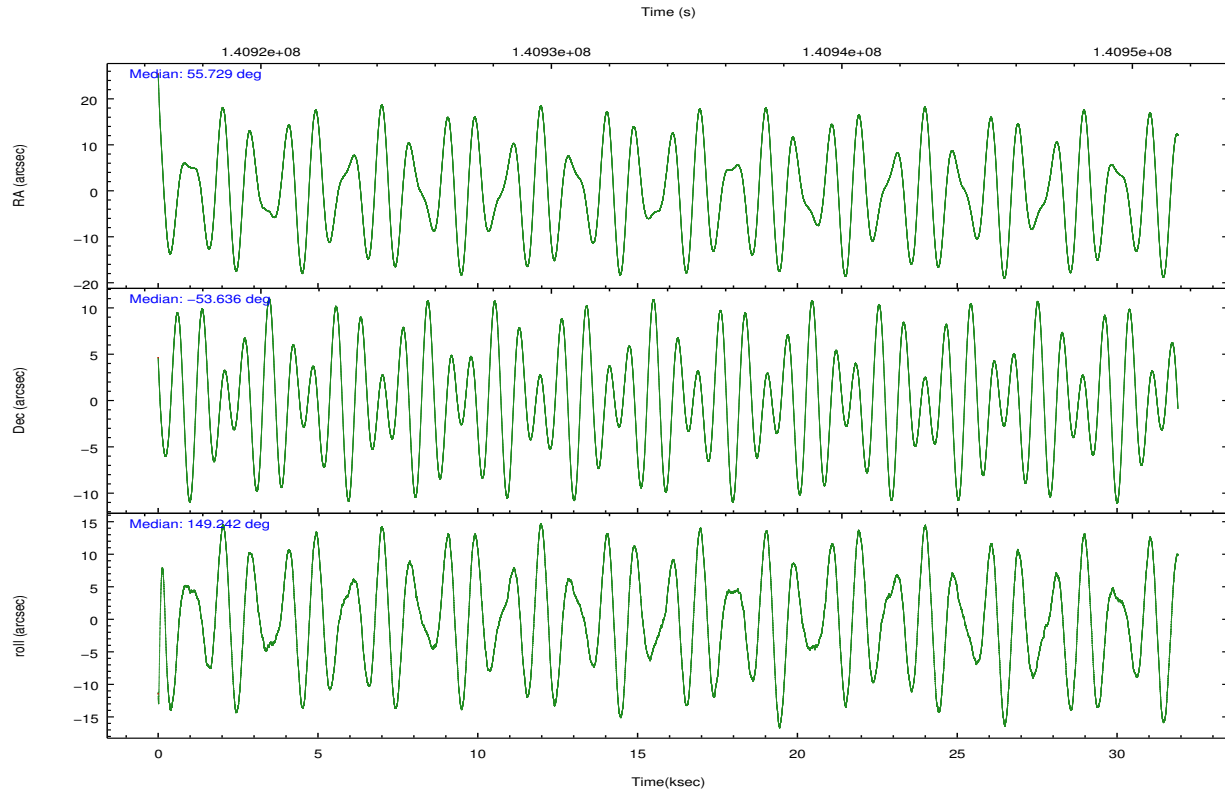
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	19268	21506	53051	45504	8099
	11%	12%	21%	20%	4%
grade 1 events	123	130	227	244	71
	0%	0%	0%	0%	0%
grade 2 events	5323	5604	9424	7902	3673
	3%	3%	3%	3%	2%
grade 3 events	2531	2712	3366	3214	1973
	1%	1%	1%	1%	1%
grade 4 events	2276	2578	3358	3068	1976
	1%	1%	1%	1%	1%
grade 5 events	5533	6120	5488	6235	6341
	3%	3%	2%	2%	3%
grade 6 events	3624	3990	4419	4283	3554
	2%	2%	1%	1%	2%
grade 7 events	135191	135868	162474	150862	145541
	77%	76%	67%	68%	84%

## 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	55.775092	55.72888343515481	Subarray requested	NONE	NONE
[deg] Pointing Dec	-53.636083	-53.63580543829994	Alternating exposures requested	N	N
[deg] Pointing Roll	149.074220	149.2456852384752	[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	-229.592463	-229.5846445007452			
[mm] SIM translation stage offset	-4	-4.007808502184531			
[s] Observation start time (MET)	140918707.184000	140917519.65748			
Observation start date	2002-06-20T00:04:03	2002-06-19T23:45:19			
[s] Observation end time (MET)	140949968.184000	140950282.75883			
Observation end date	2002-06-20T08:45:04	2002-06-20T08:51:22			
Read mode	TIMED	TIMED			

## 2.3 Aspect



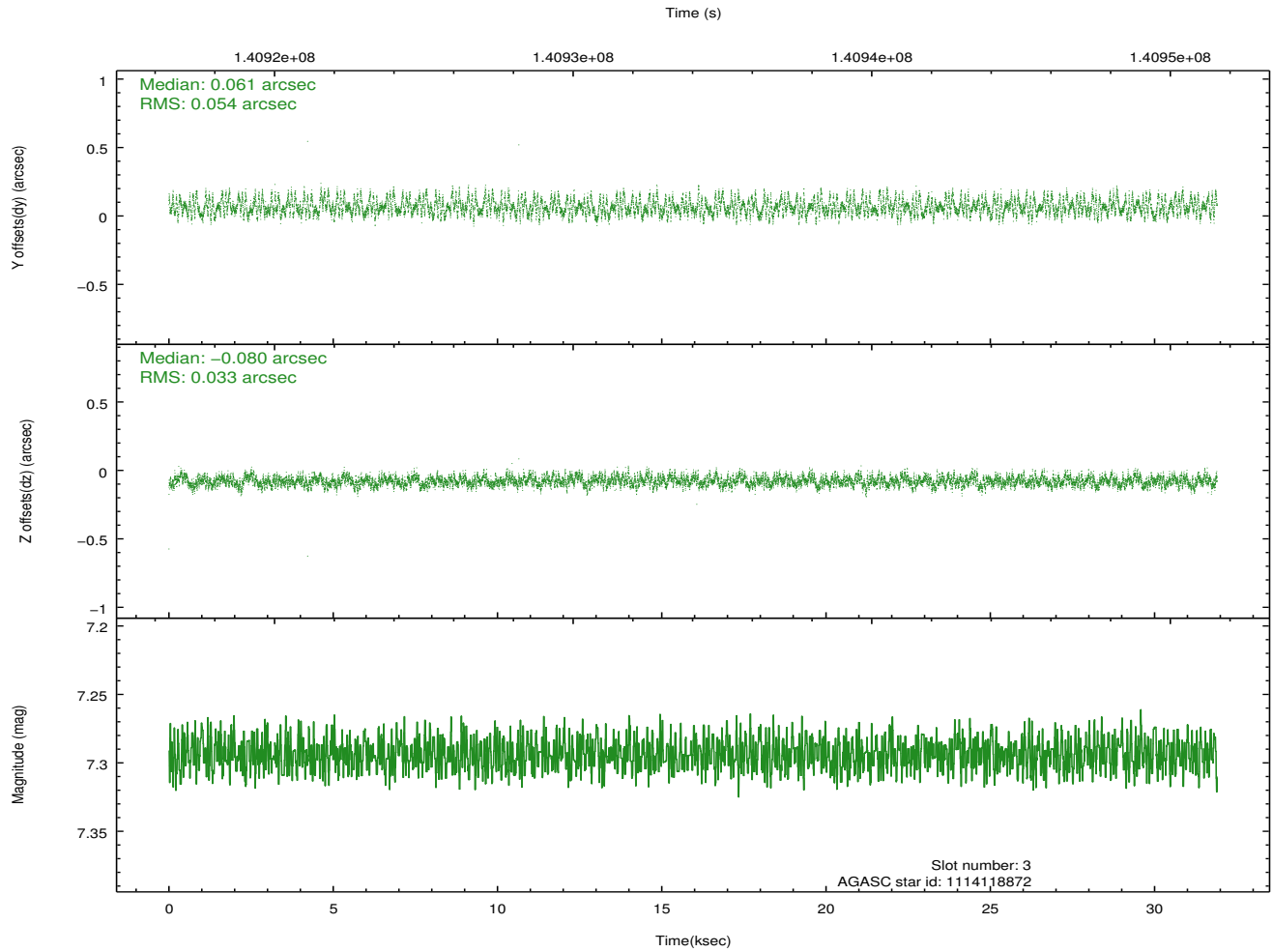
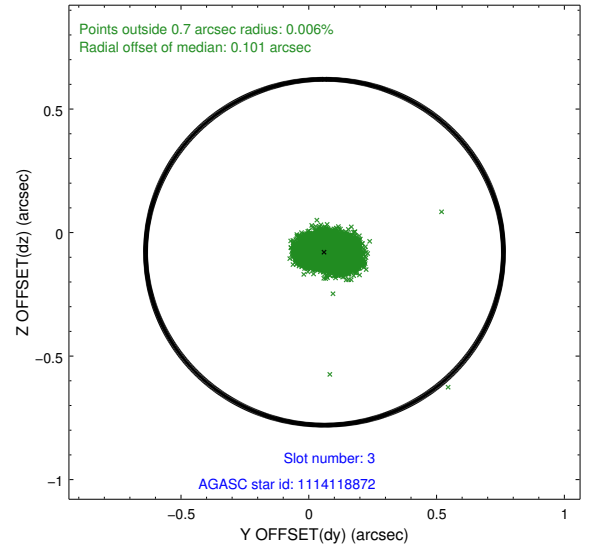
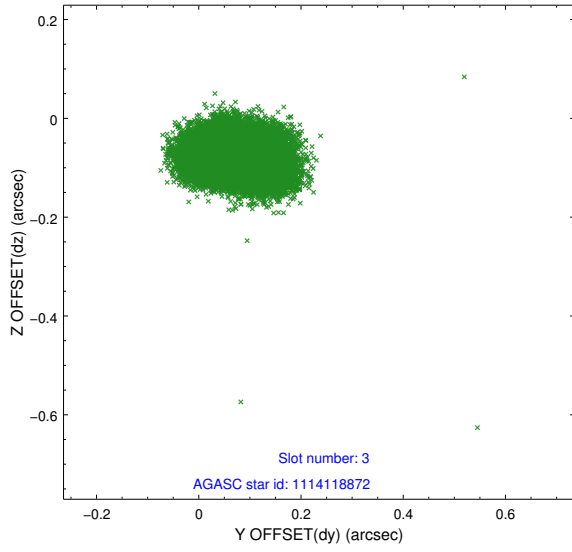


### Slot Statistics

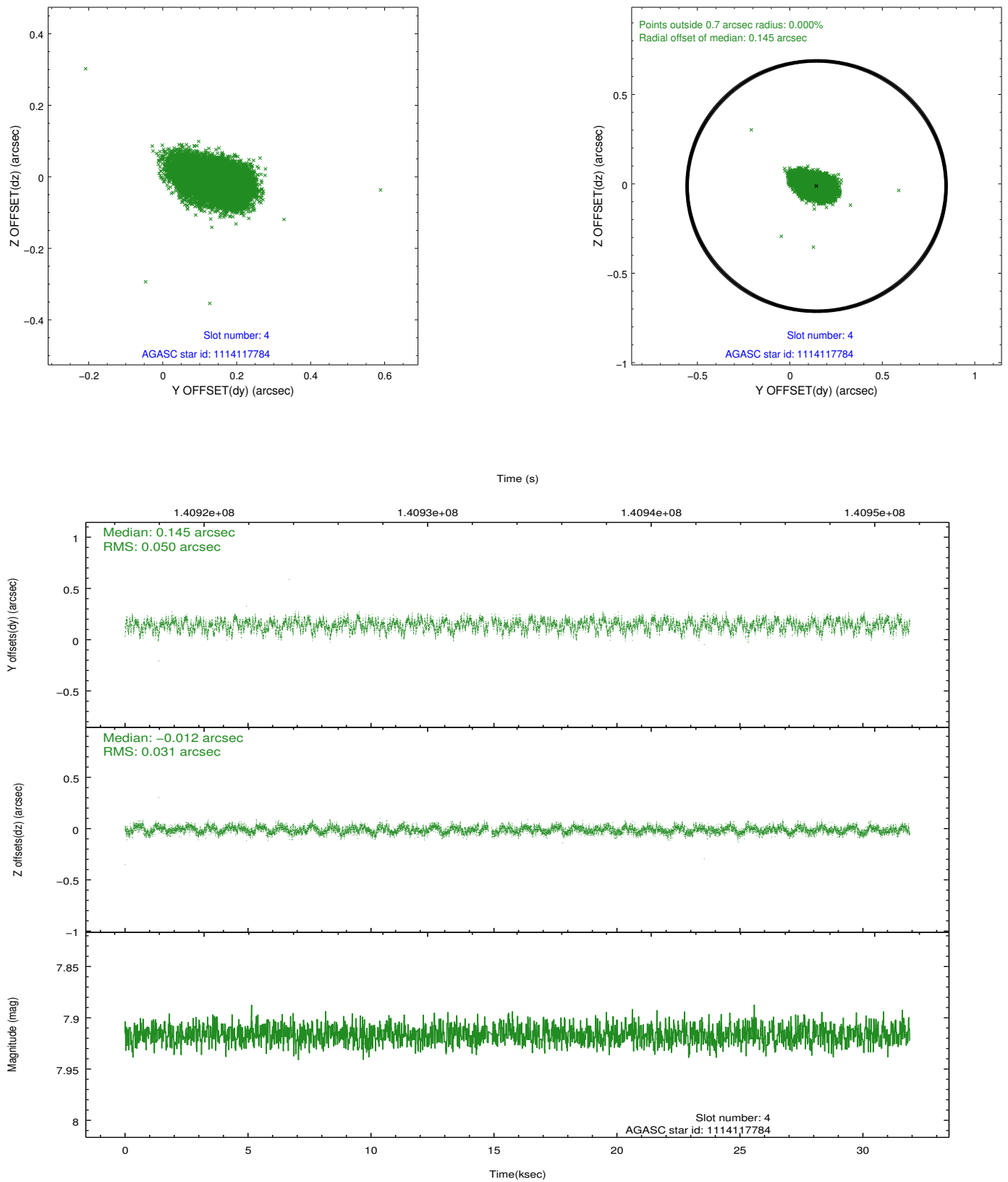
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-3	7.42	7782	-0.020	0.208	0.011	0.019	0.000000	0.000000	55.45	-1046.09
1	FID	ACIS-I-5	7.24	7781	-0.110	-0.014	0.009	0.015	0.000000	0.000000	-1810.28	984.31
2	FID	ACIS-I-6	7.27	7782	0.038	-0.125	0.008	0.013	0.000000	0.000000	403.53	1628.84
3	GUIDE	1114118872	7.29	15559	0.061	-0.080	0.067	0.110	56.068532	-54.477824	-2084.77	2284.64
4	GUIDE	1114117784	7.92	15496	0.145	-0.012	0.062	0.104	56.191874	-54.166281	-1736.02	1188.09
5	GUIDE	1114120328	8.00	15559	-0.052	-0.037	0.061	0.096	55.167791	-53.738234	916.90	984.73
6	GUIDE	1114119656	9.33	15555	-0.031	0.126	0.069	0.112	55.642480	-53.276810	909.36	-962.37
7	GUIDE	1114113800	9.61	15481	-0.125	0.004	0.107	0.181	54.861207	-53.366759	2175.53	187.92

## 2.4 Star Slots

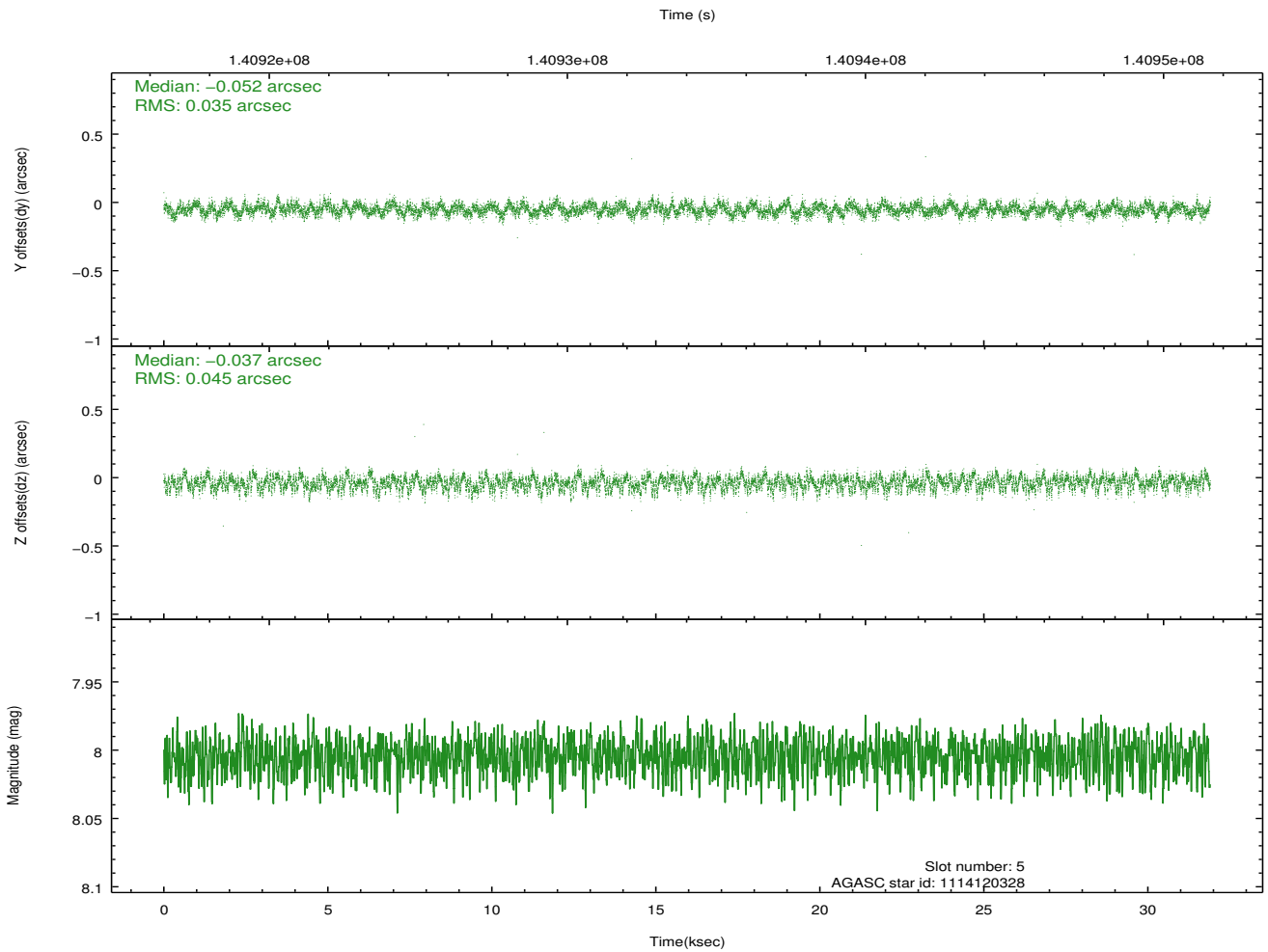
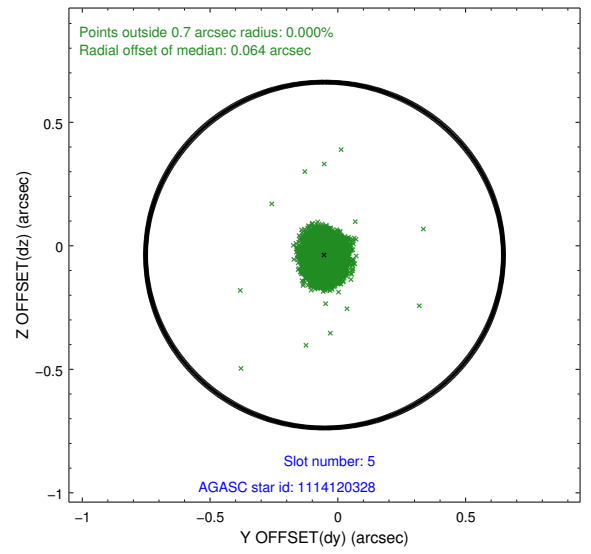
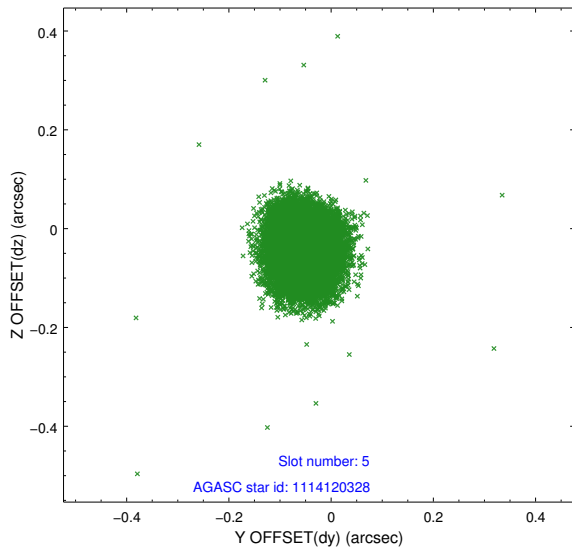
### 2.4.1 Slot 3



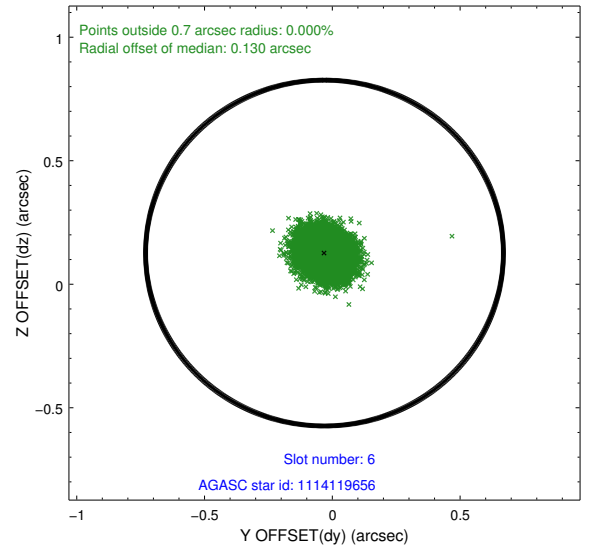
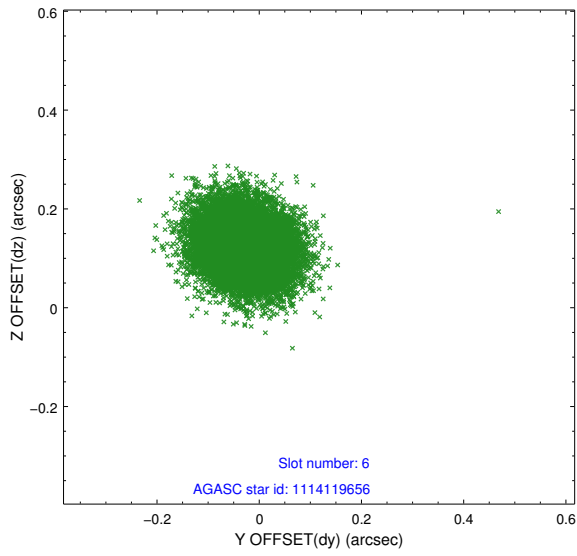
## 2.4.2 Slot 4



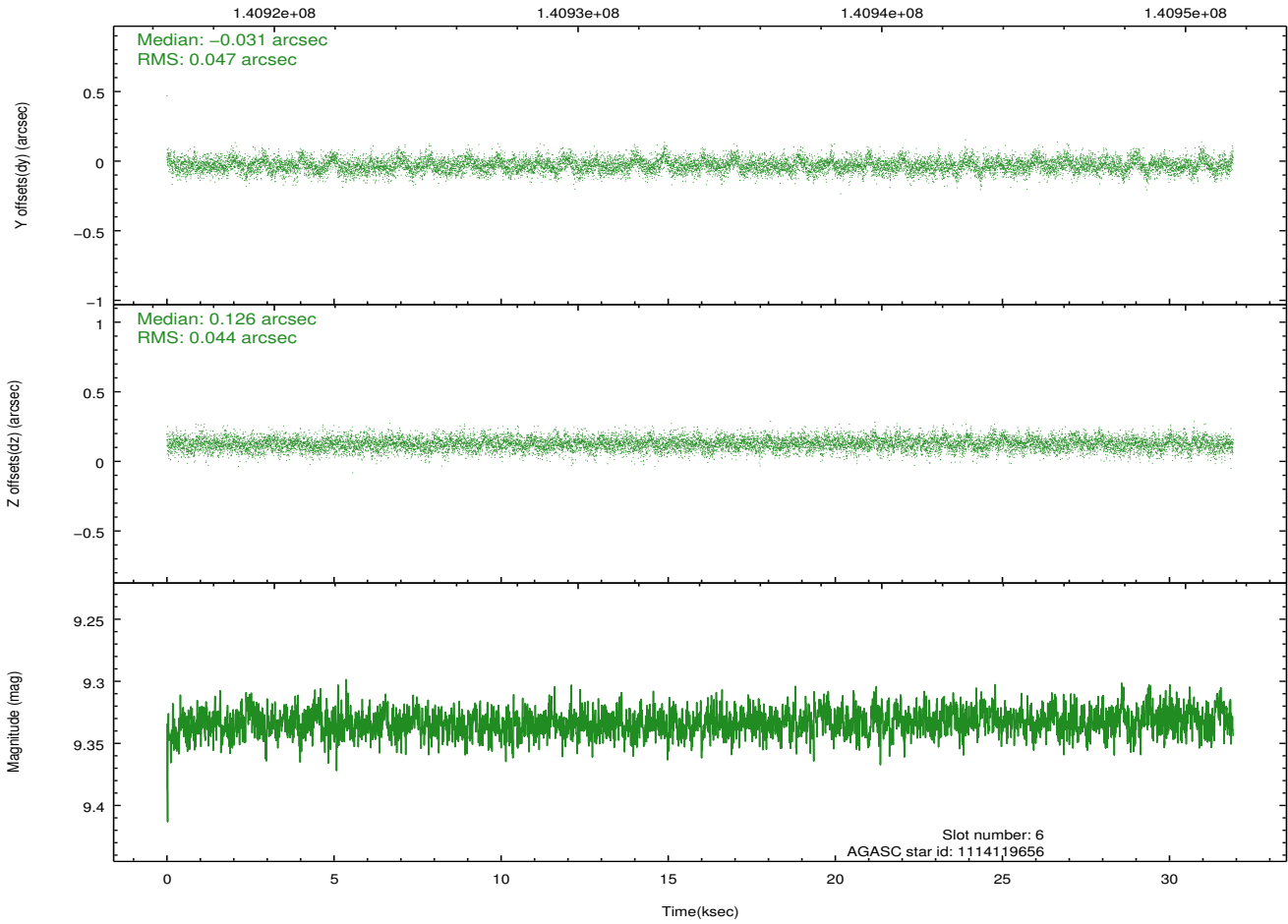
### 2.4.3 Slot 5



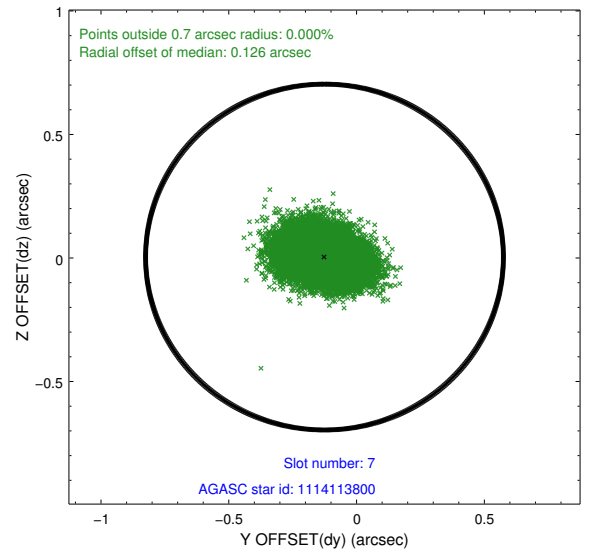
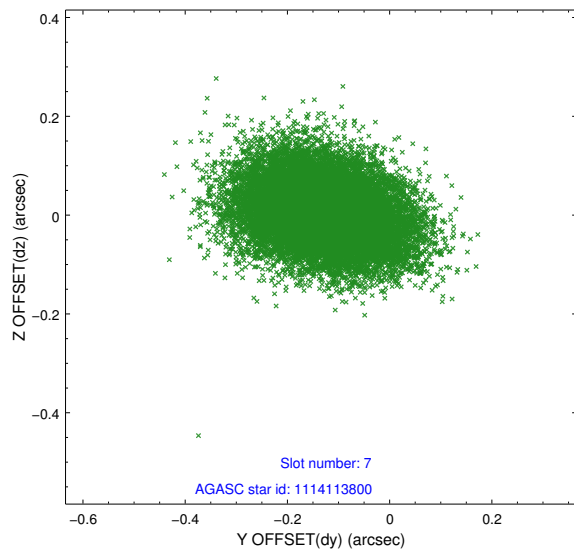
### 2.4.4 Slot 6



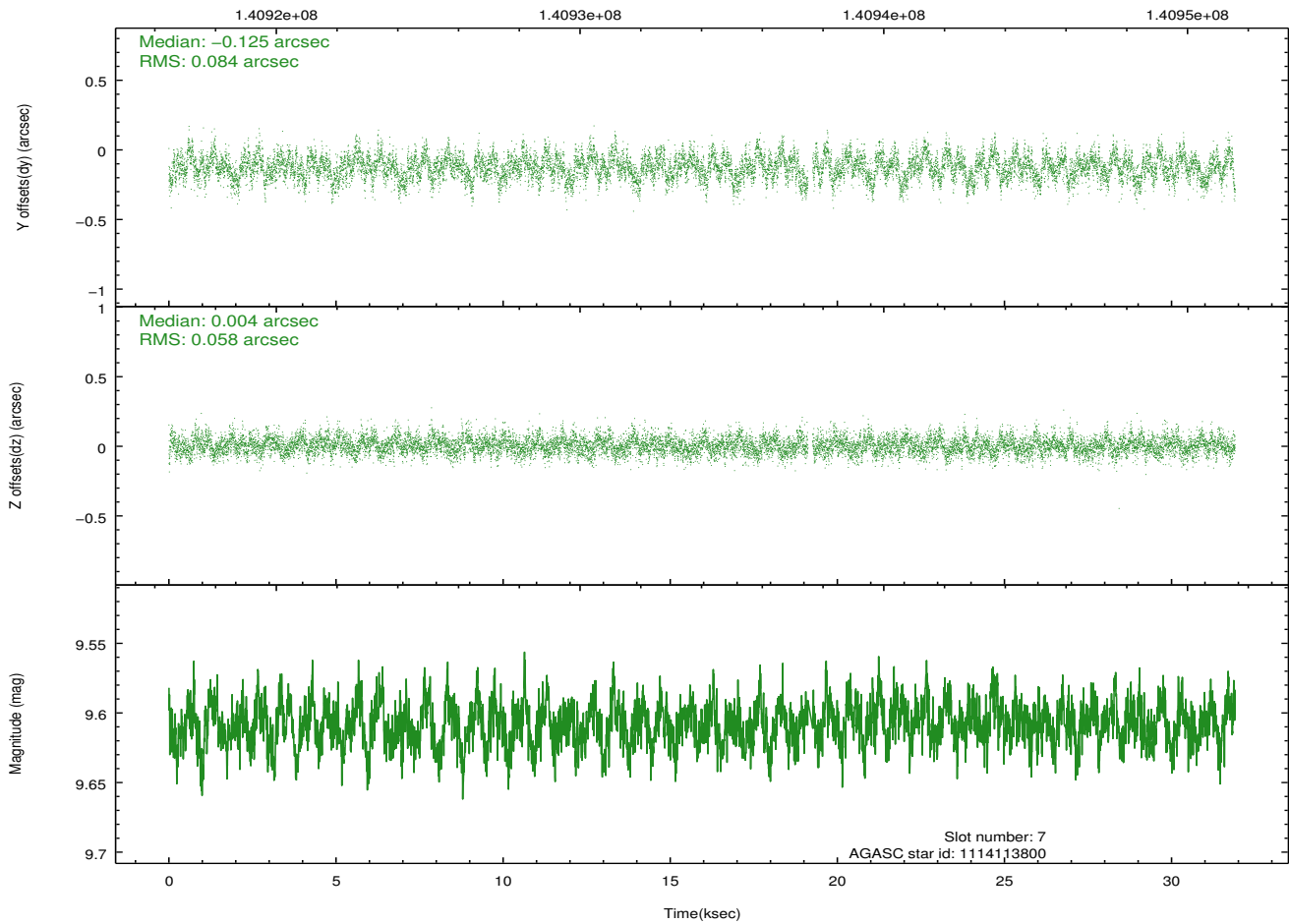
Time (s)



## 2.4.5 Slot 7

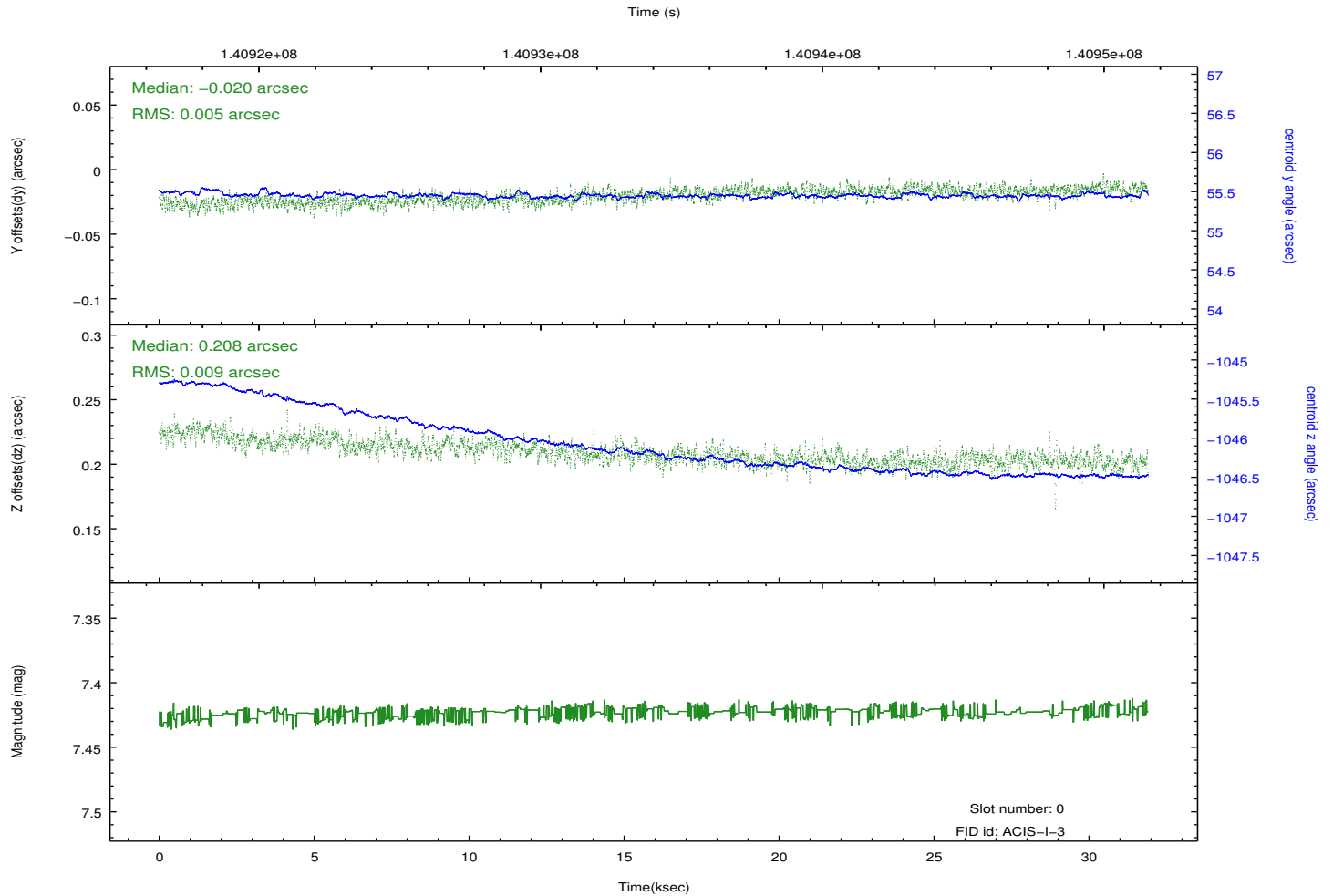
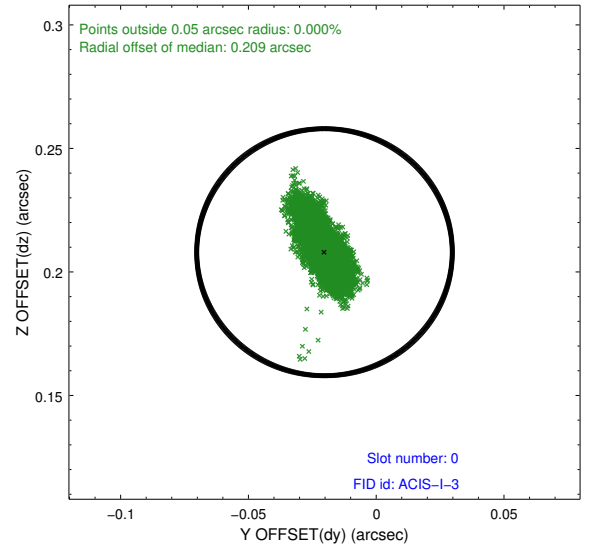
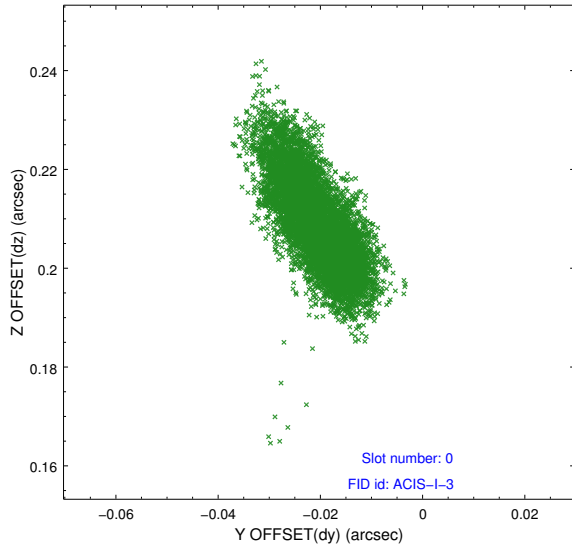


Time (s)

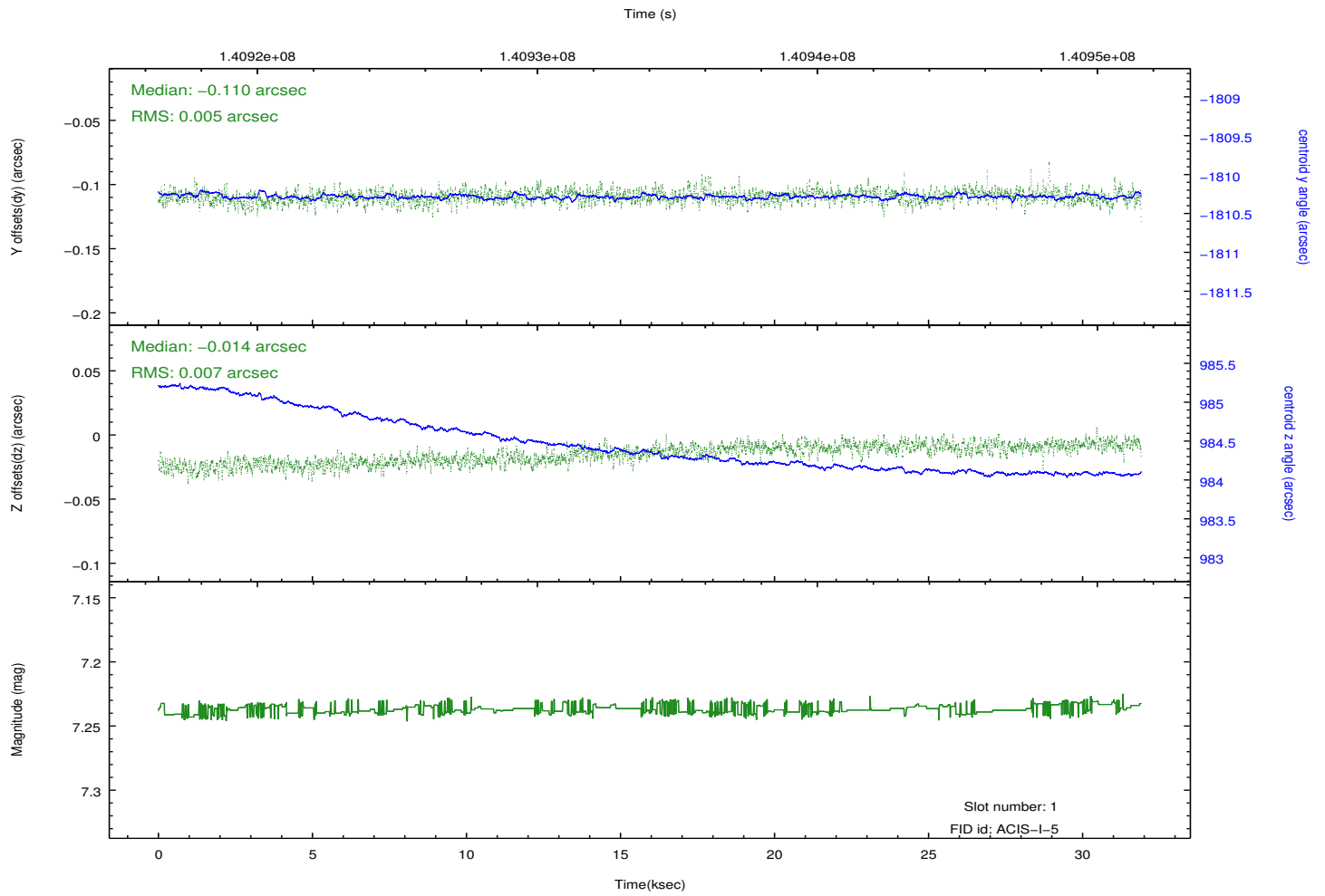
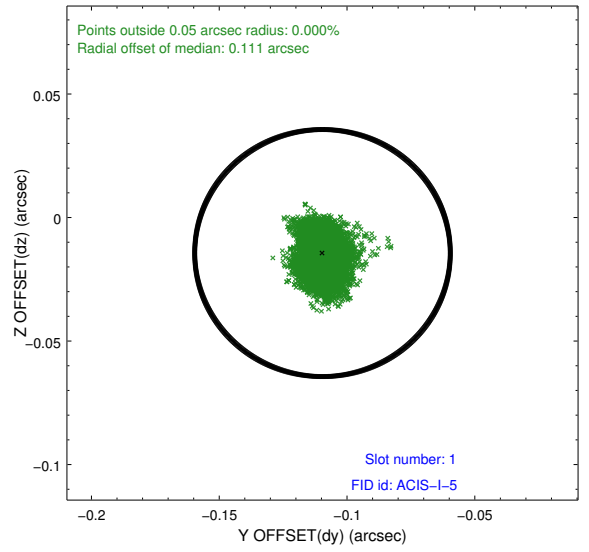
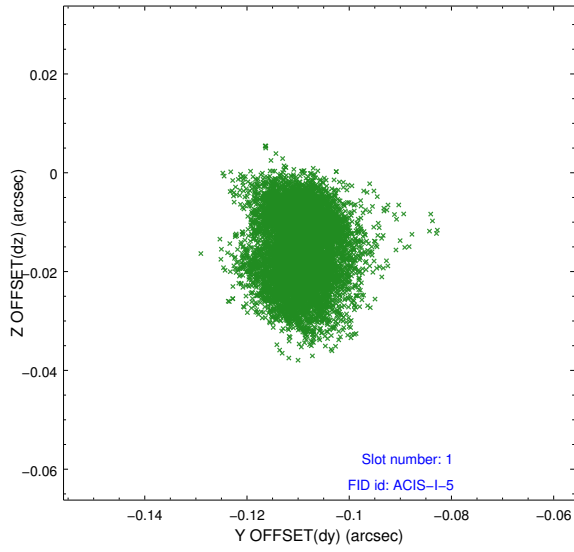


## 2.5 FID Slots

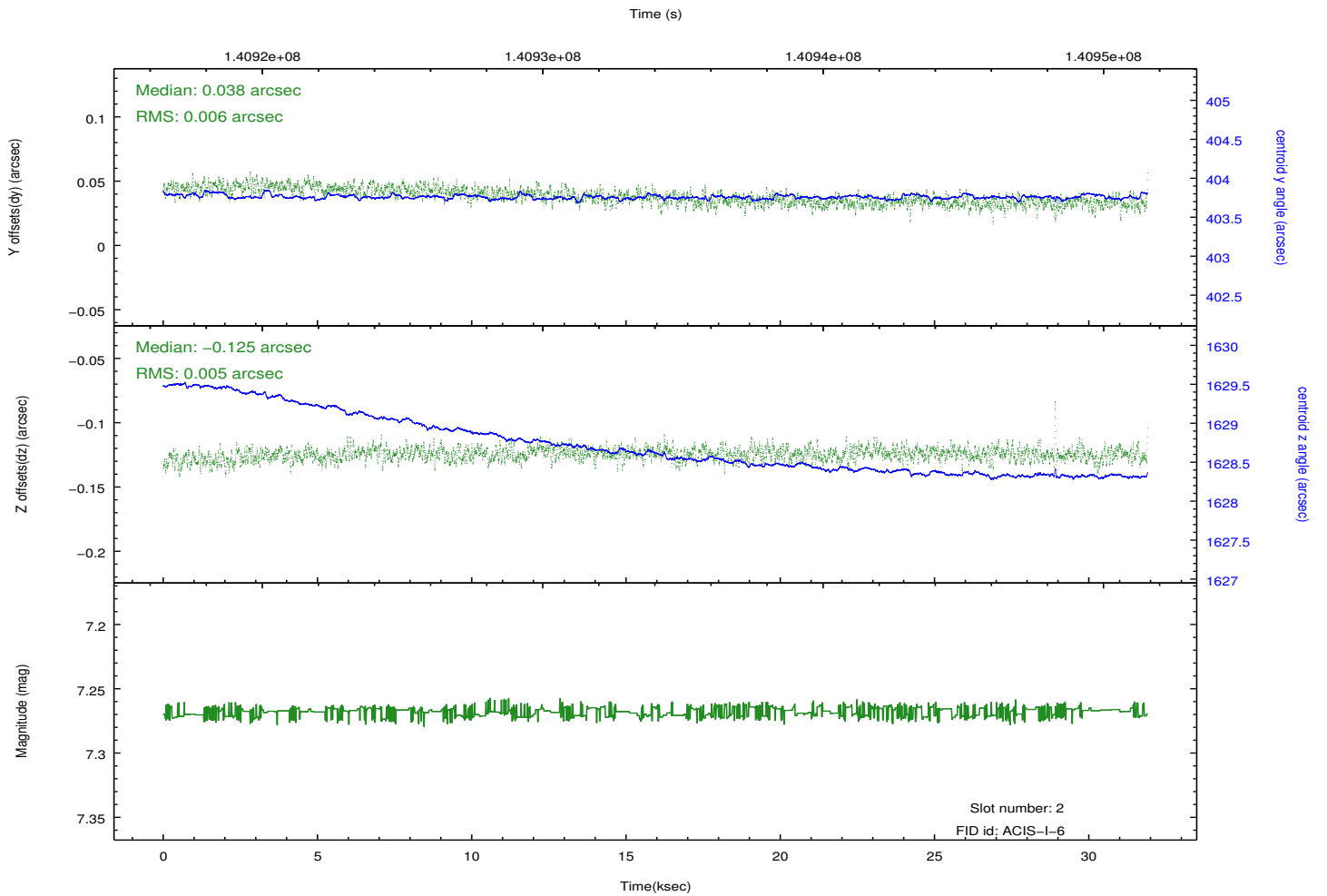
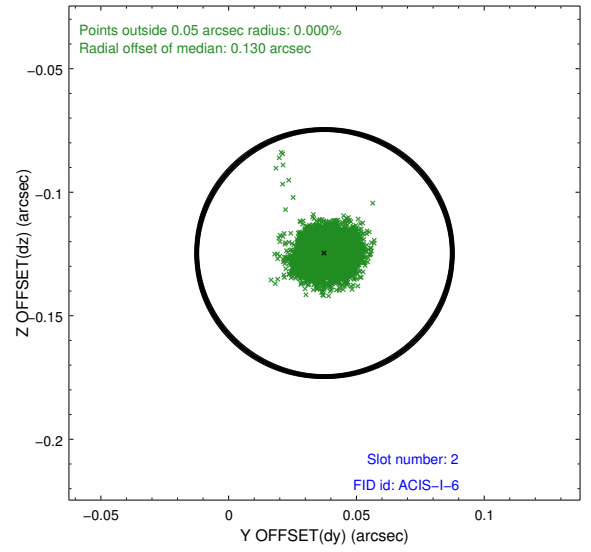
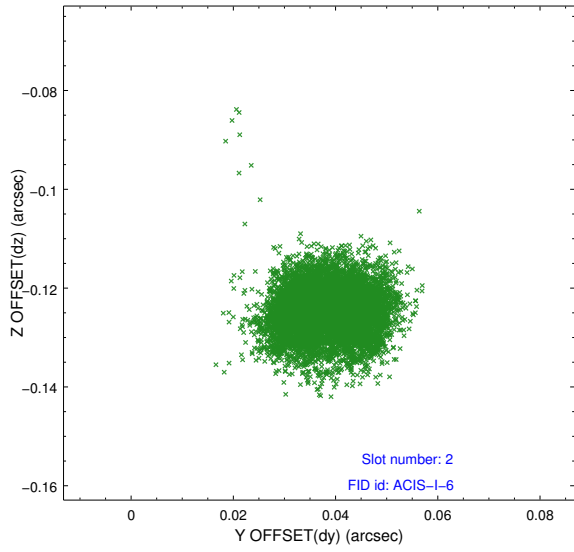
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.10.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.347

## A.2 Comments