

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10914 - L2 Version 2  
Chandra X-Ray Center

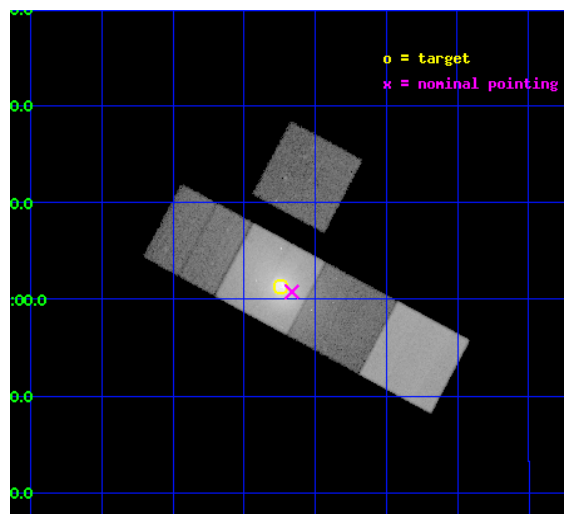
L2 Processing Date : Jun 8 2012

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# 1 Front

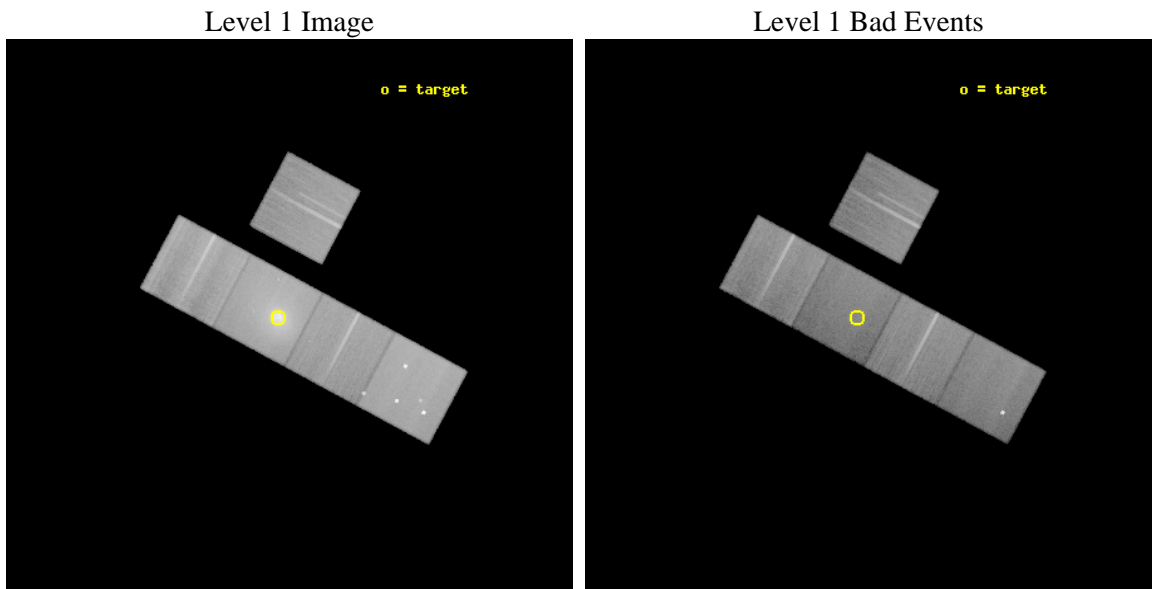
seq_num	800835	Sequence number
obs_id	10914	Observation id
title	Shocks, Ripples, and Bubbles: A Very Deep Observation of Abell 2052	&#160
observer	Prof. Elizabeth Blanton	Principal investigator
object	Abell 2052	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	229.185417	Observer's specified target RA [deg]
dec_targ	7.021278	Observer's specified target Dec [deg]
ra_nom	229.16614605975	Nominal RA [deg]
dec_nom	7.0129394981498	Nominal Dec [deg]
roll_nom	208.15898129255	Nominal Roll [deg]
revision	2	Processing version of data
ontime	39360.70030272	Sum of GTIs [s]
livetime	38846.423776339	Livetime [s]
ontime3	39354.418292046	Sum of GTIs [s]
ontime5	39360.70030272	Sum of GTIs [s]
ontime6	39357.559361875	Sum of GTIs [s]
ontime7	39360.70030272	Sum of GTIs [s]
ontime8	39354.418282151	Sum of GTIs [s]
l2events	781270	Number of level 2 events



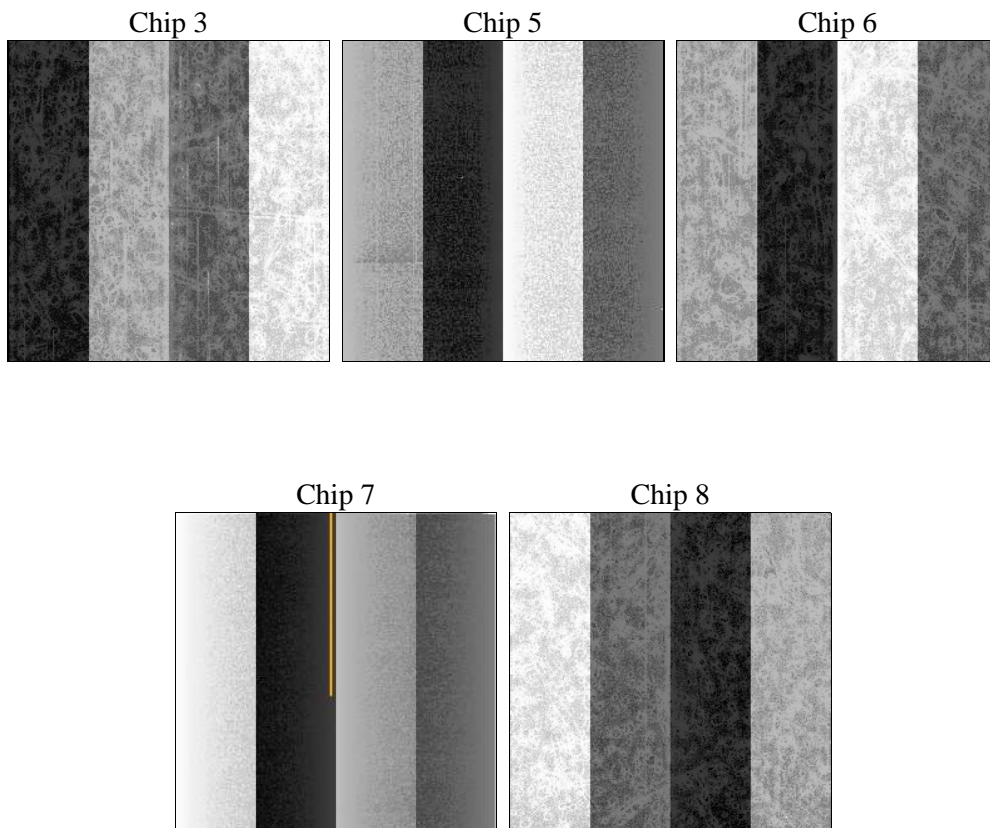
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39186.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	39360.70030272	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime3	39354.418292046	Sum of GTIs [s]
date	2012-06-08T07:43:46	Date and time of file creation	ontime5	39360.70030272	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	39357.559361875	Sum of GTIs [s]
			ontime7	39360.70030272	Sum of GTIs [s]
			ontime8	39354.418282151	Sum of GTIs [s]
			l1events	2366926	Number of level 1 events

### 2.1.4 Events

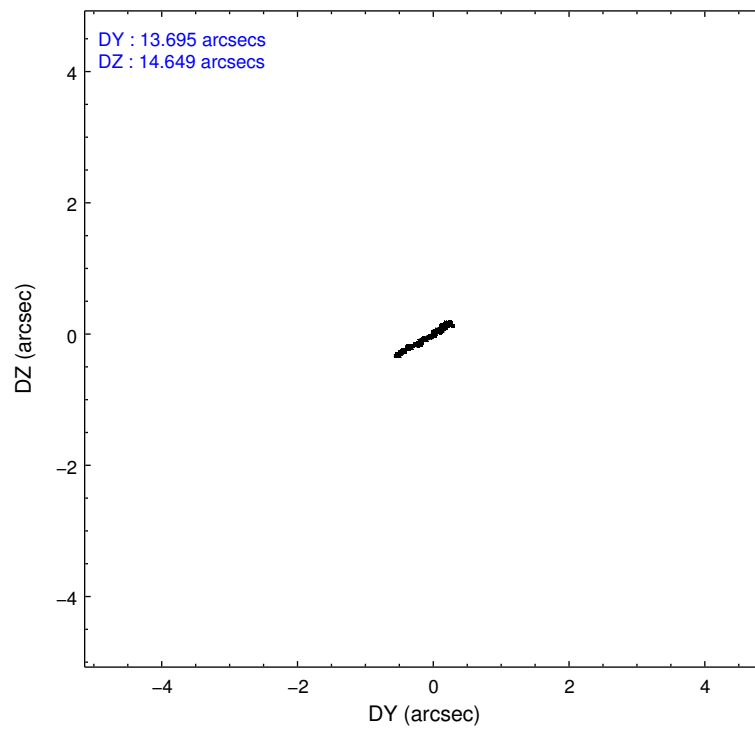
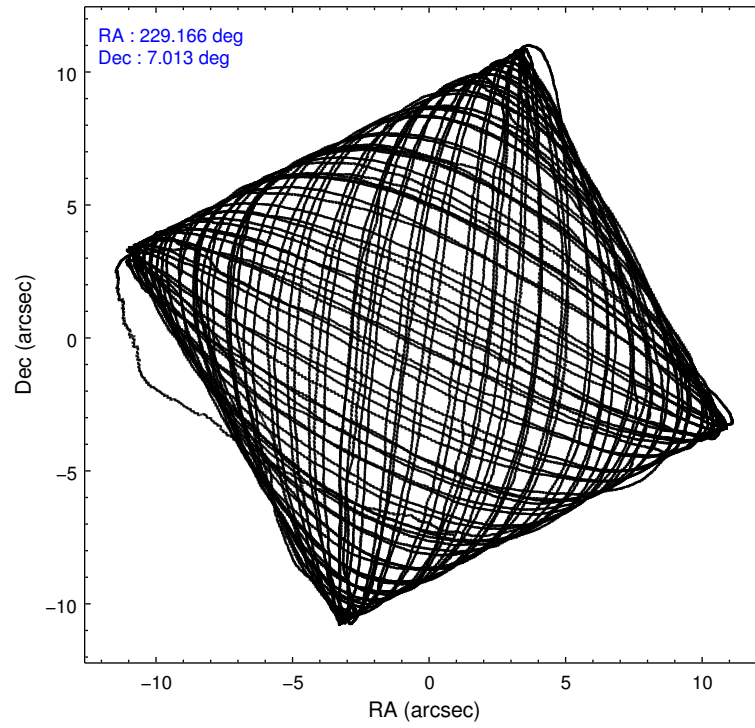
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	346890	524997	379548	658020	457471
rejected events	311134	262545	321654	226956	341376
rejected %	89%	50%	84%	34%	74%

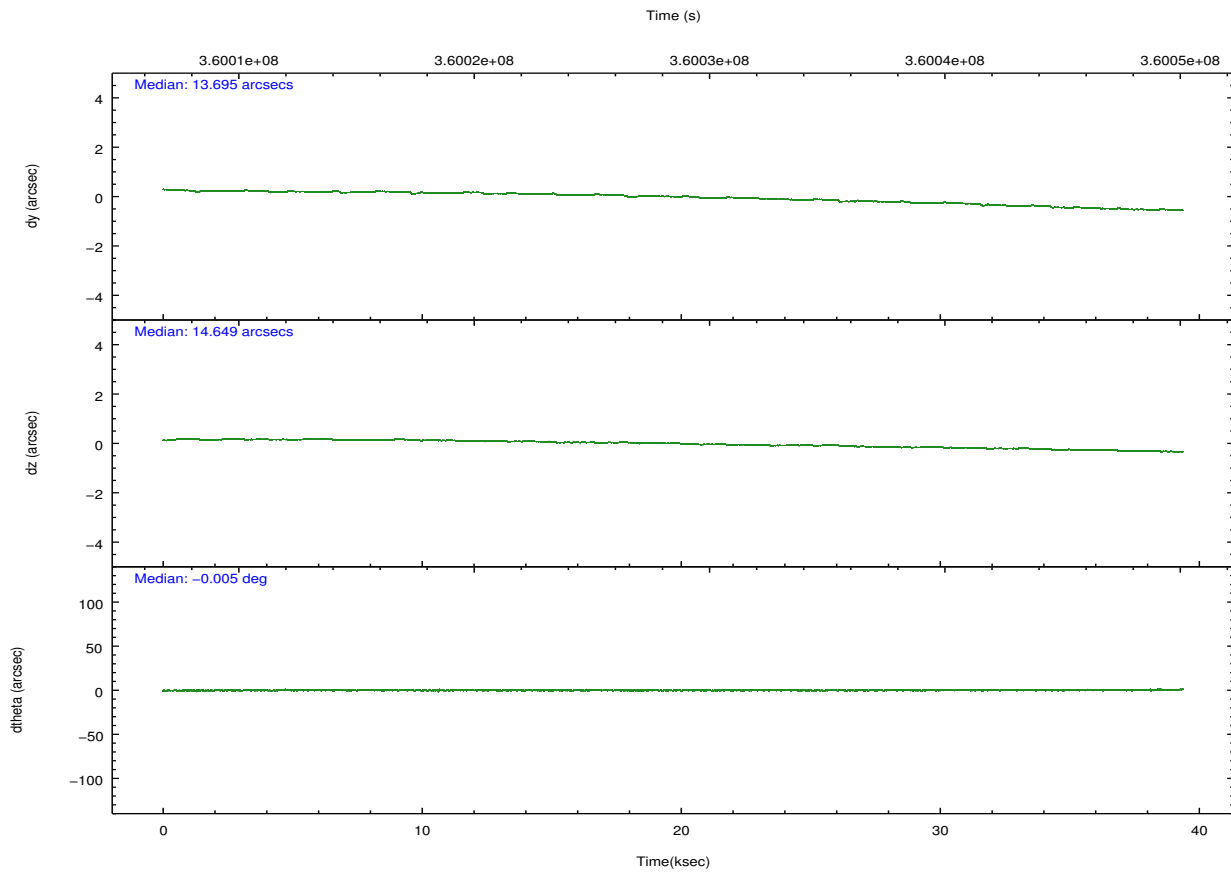
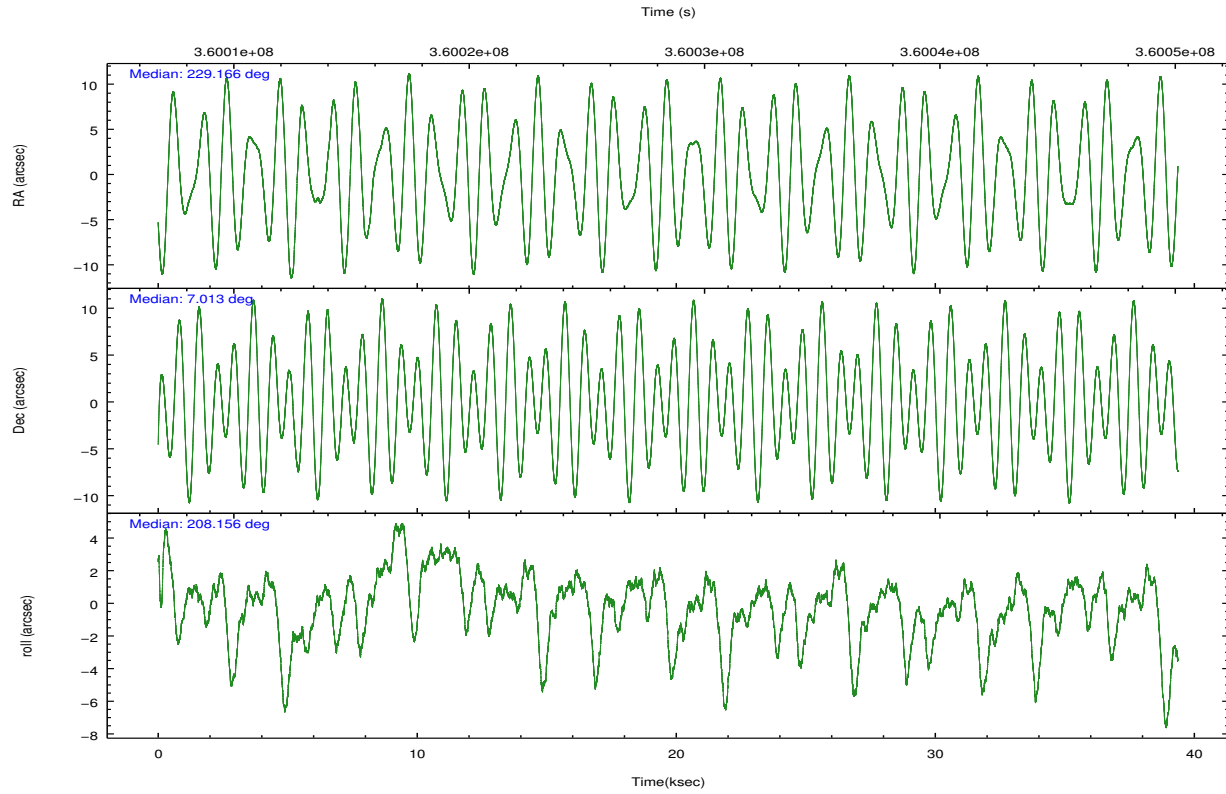
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	14555	40983	31343	96986	38363
	4%	7%	8%	14%	8%
grade 1 events	212	928	270	589	422
	0%	0%	0%	0%	0%
grade 2 events	7585	77818	10292	105001	26375
	2%	14%	2%	15%	5%
grade 3 events	3792	10117	4334	46057	12579
	1%	1%	1%	6%	2%
grade 4 events	3873	10098	4452	45321	11679
	1%	1%	1%	6%	2%
grade 5 events	14517	38735	14492	43893	21081
	4%	7%	3%	6%	4%
grade 6 events	6735	129490	8404	142817	29975
	1%	24%	2%	21%	6%
grade 7 events	295621	216828	305961	177356	316997
	85%	41%	80%	26%	69%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	229.180377	229.1661460597519	Subarray requested	NONE	NONE
[deg] Pointing Dec	7.036361	7.012939498149794	Alternating exposures requested	N	N
[deg] Pointing Roll	208.000618	208.1589812925548	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	360008948.184000	360007489.54854			
Observation start date	2009-05-29T18:28:02	2009-05-29T18:04:49			
[s] Observation end time (MET)	360048134.184000	360049181.93811			
Observation end date	2009-05-30T05:21:08	2009-05-30T05:39:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect



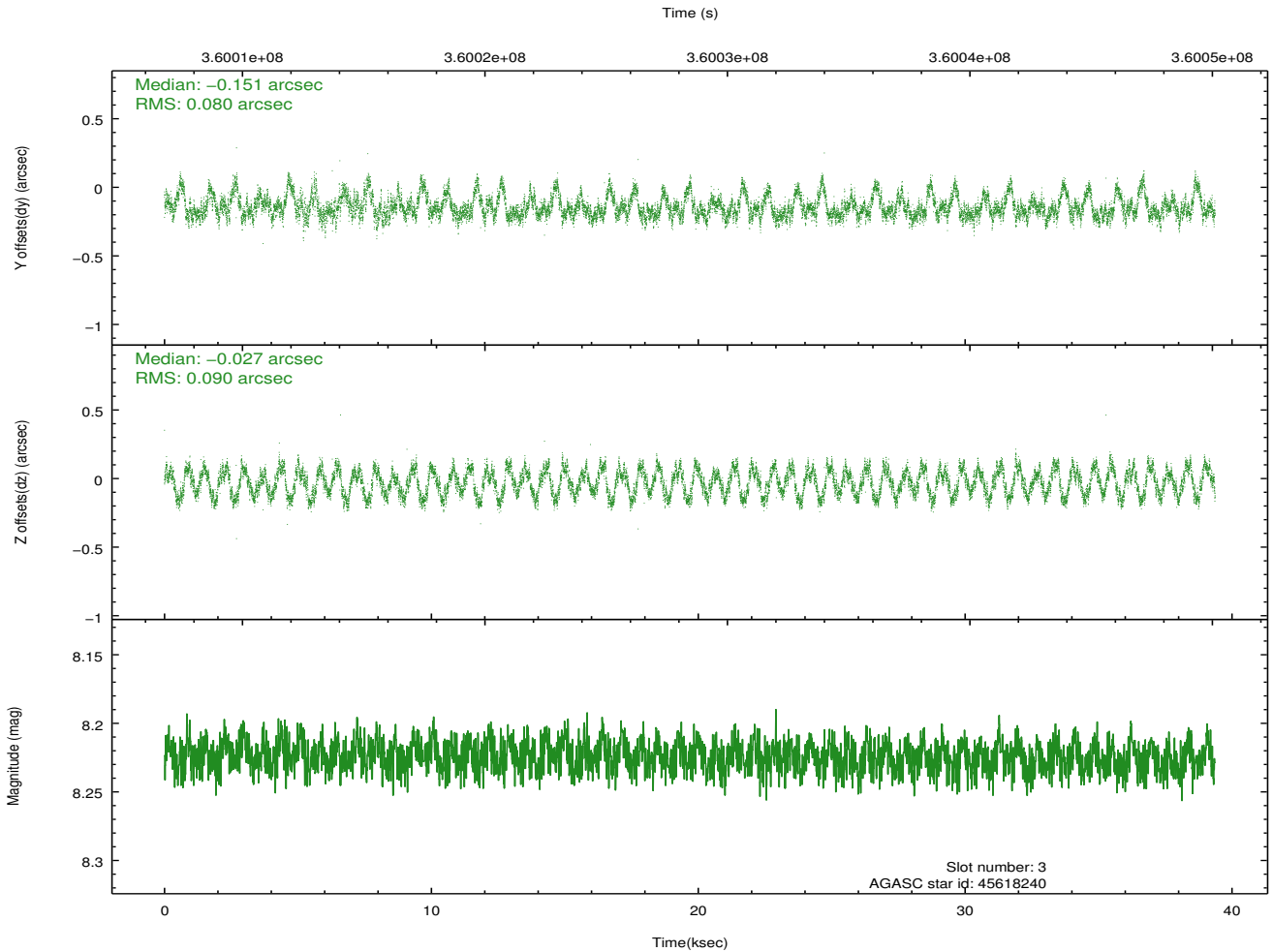
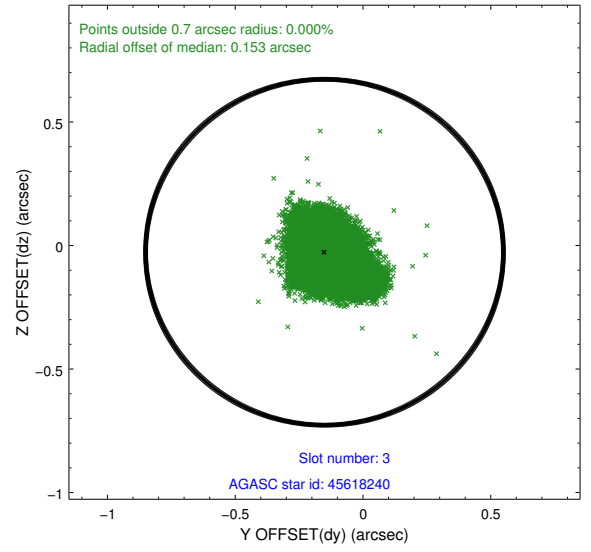
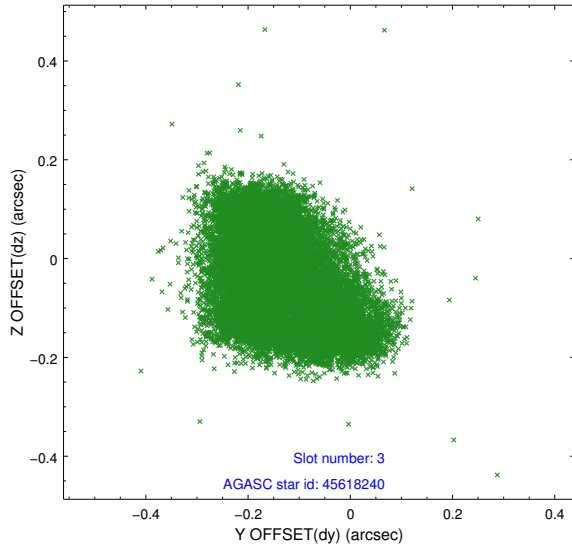


### Slot Statistics

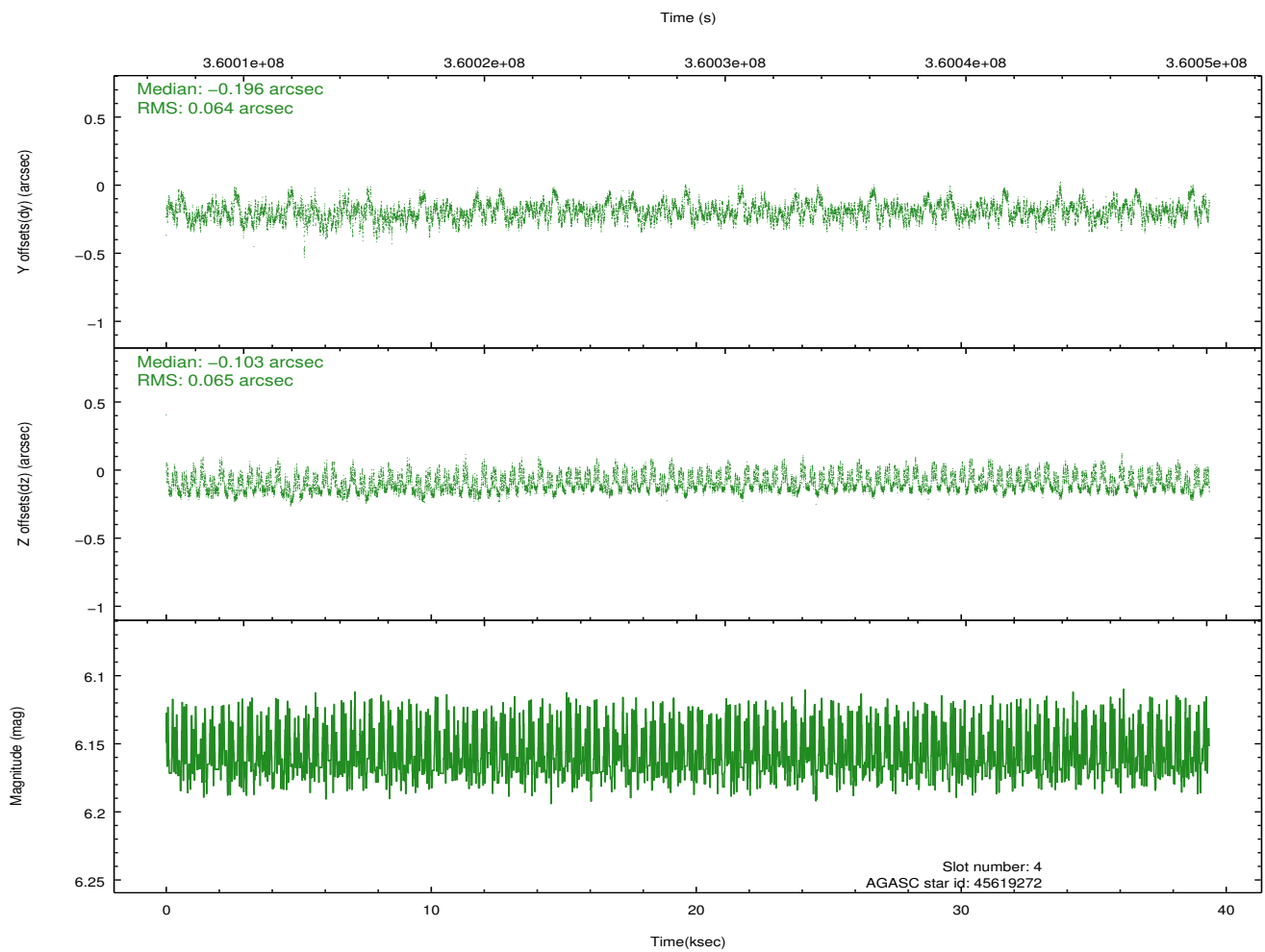
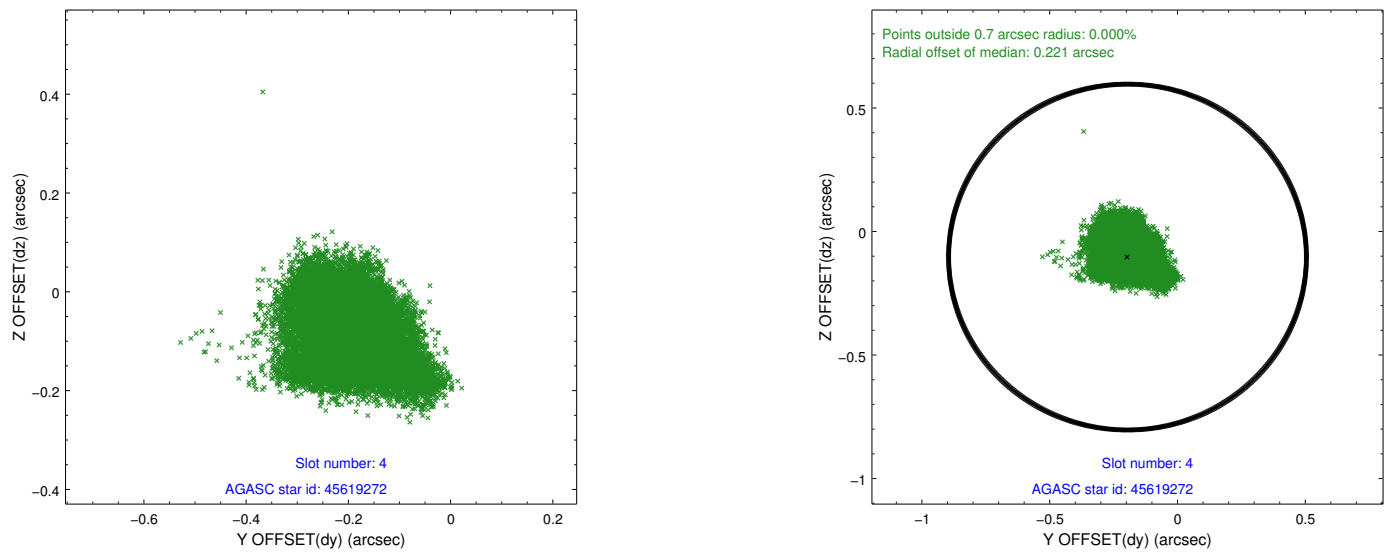
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	9602	-0.063	-0.030	0.013	0.021	0.000000	0.000000	-766.61	-1736.03
1	FID	ACIS-S-4	7.02	9601	0.191	0.038	0.014	0.034	0.000000	0.000000	2146.89	172.53
2	FID	ACIS-S-5	7.05	9602	-0.158	0.003	0.012	0.018	0.000000	0.000000	-1819.54	166.15
3	GUIDE	45618240	8.22	19197	-0.151	-0.027	0.129	0.206	229.756501	6.988062	-1736.42	1119.17
4	GUIDE	45619272	6.16	19205	-0.196	-0.103	0.097	0.158	228.973190	6.464840	1620.31	1468.97
5	GUIDE	120598184	10.14	19166	0.157	0.031	0.236	0.381	228.939530	7.597810	-188.57	-2186.53
6	GUIDE	120598552	8.09	19194	-0.137	-0.039	0.083	0.131	229.403482	7.844608	-2068.77	-2195.57
7	GUIDE	45615816	10.14	19162	0.310	0.132	0.232	0.355	228.938658	6.152215	2258.55	2404.40

## 2.4 Star Slots

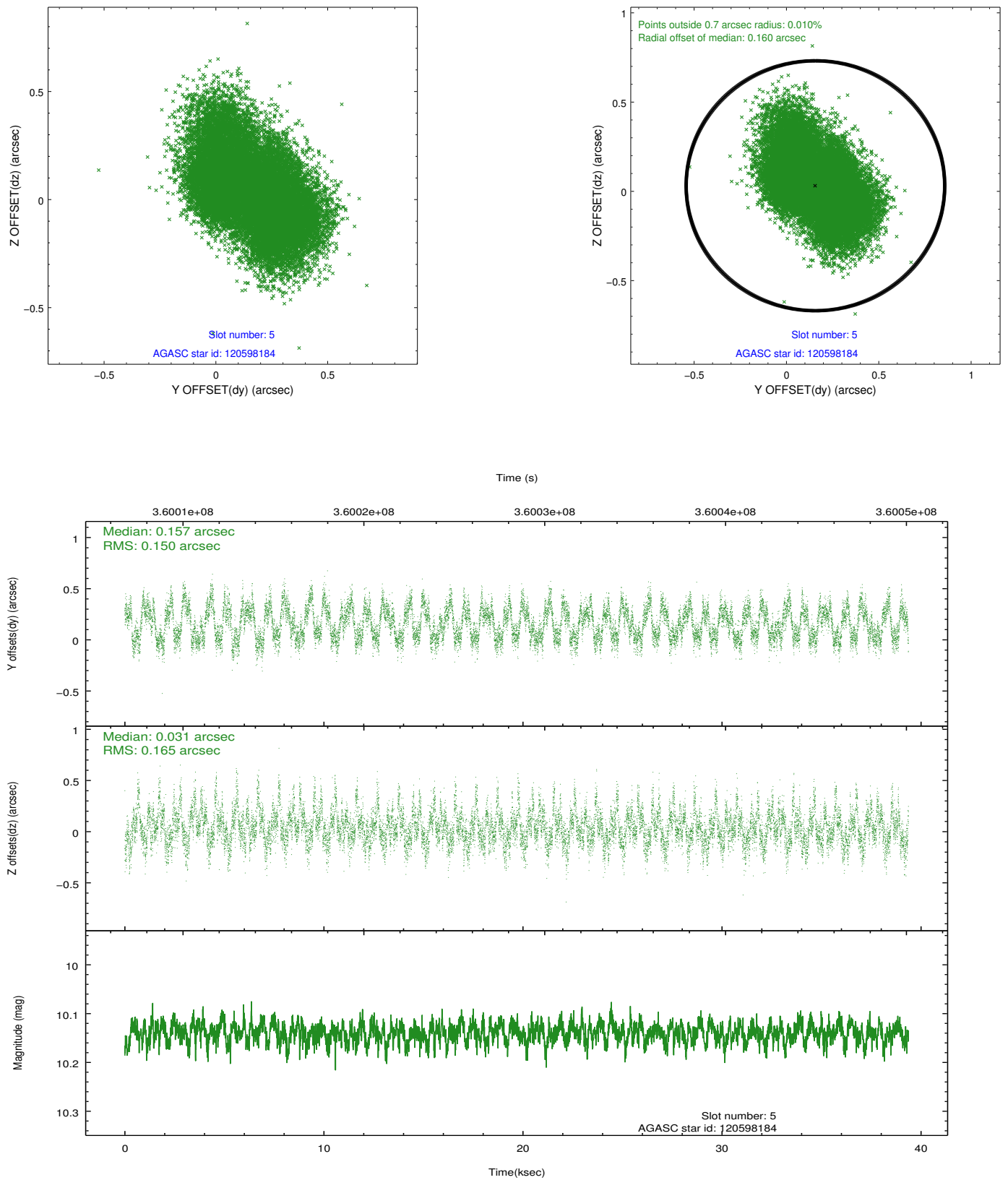
### 2.4.1 Slot 3



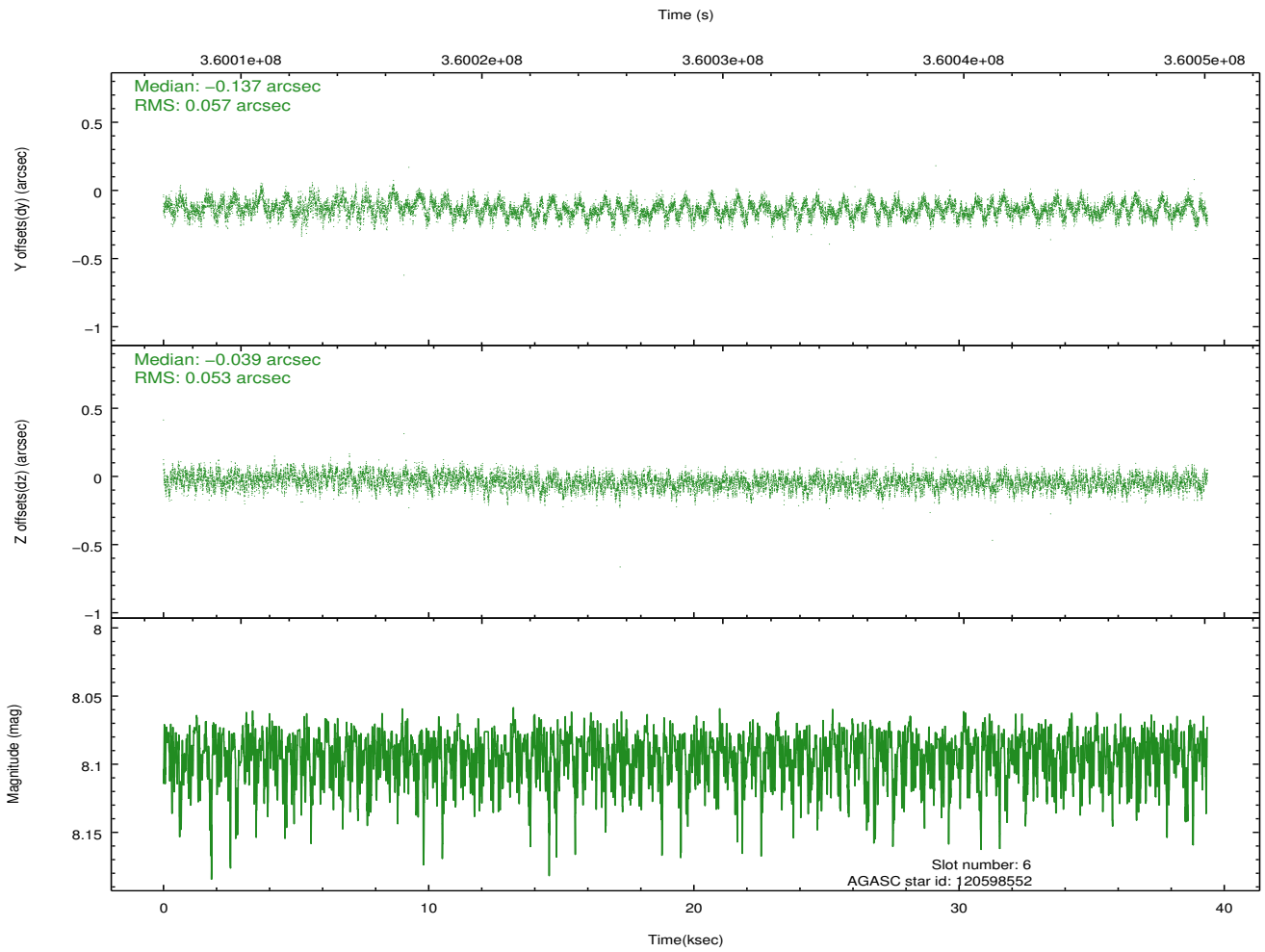
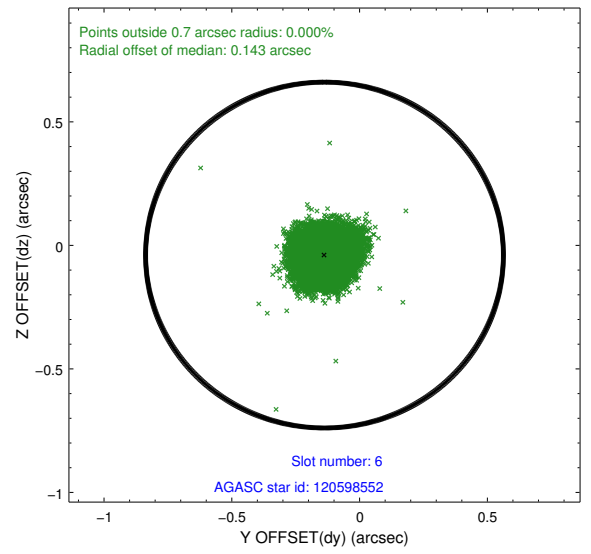
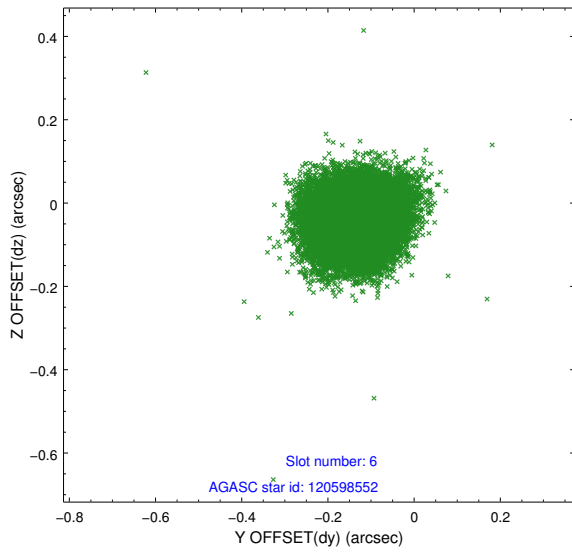
## 2.4.2 Slot 4



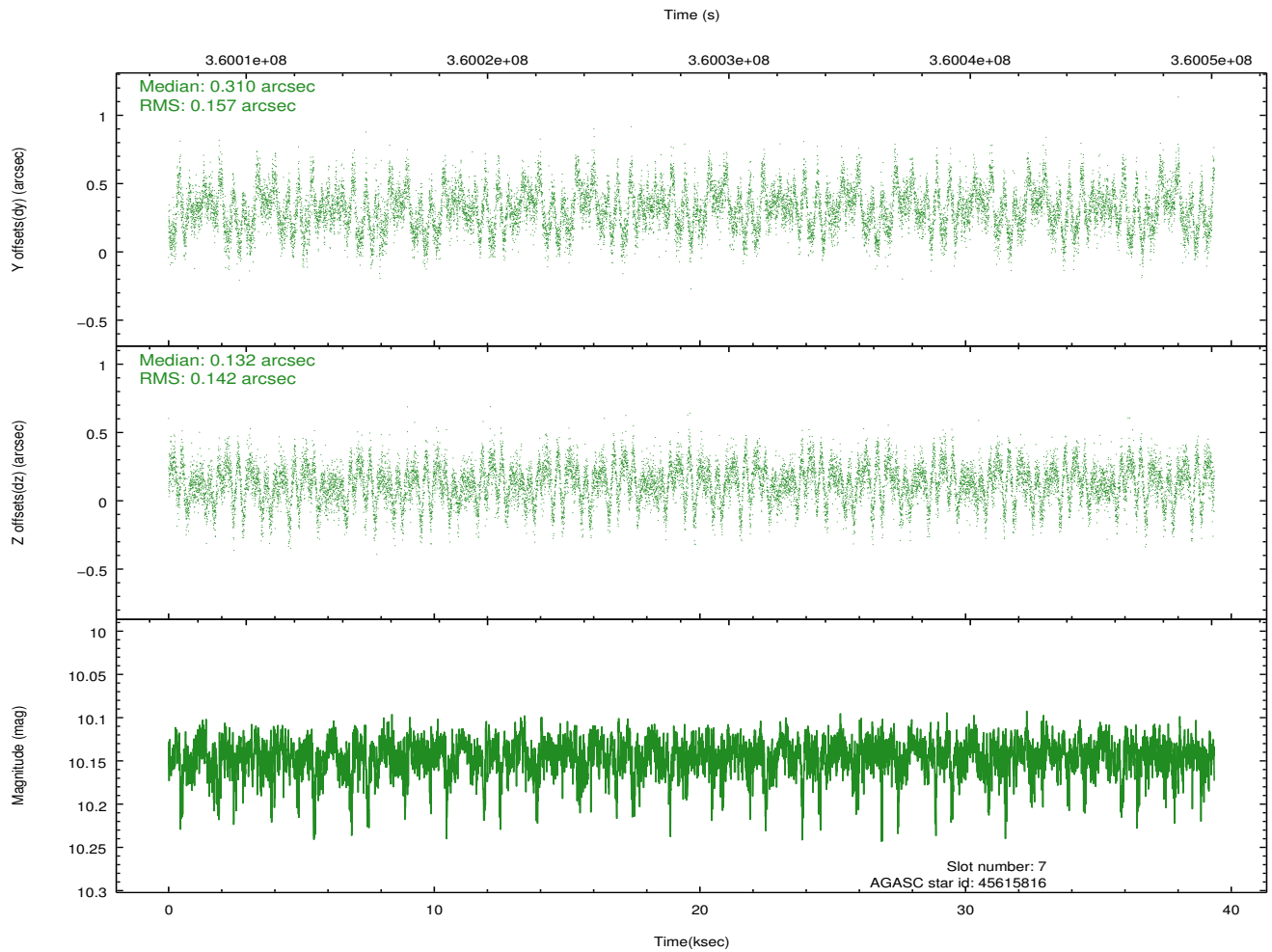
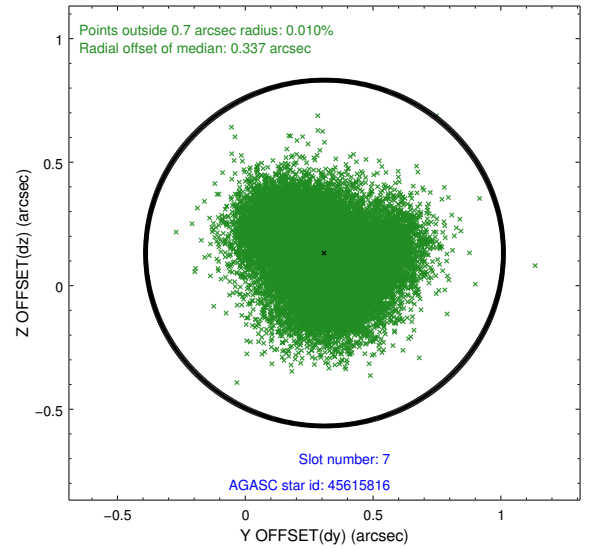
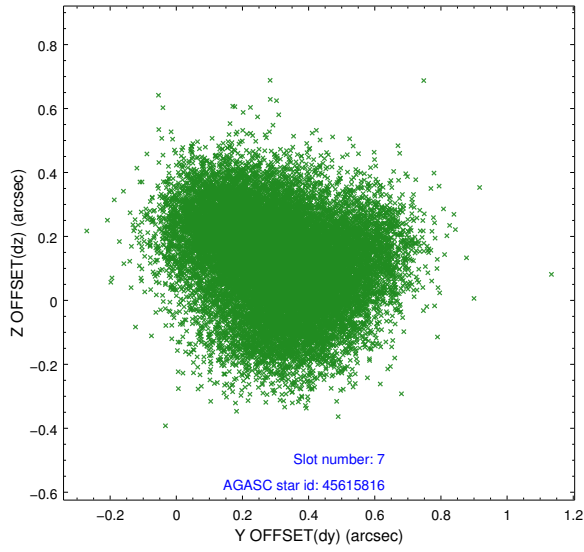
### 2.4.3 Slot 5



## 2.4.4 Slot 6

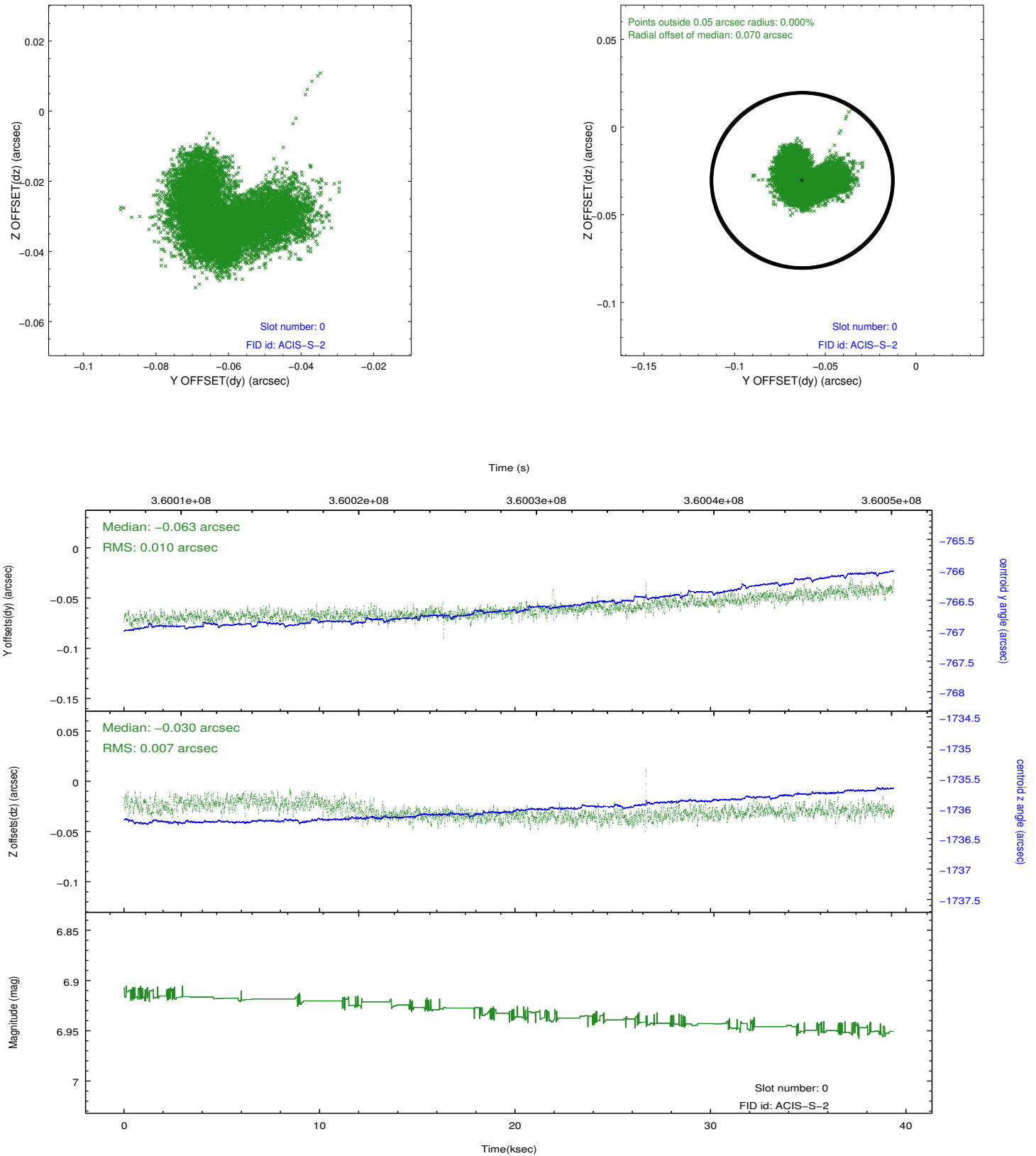


## 2.4.5 Slot 7

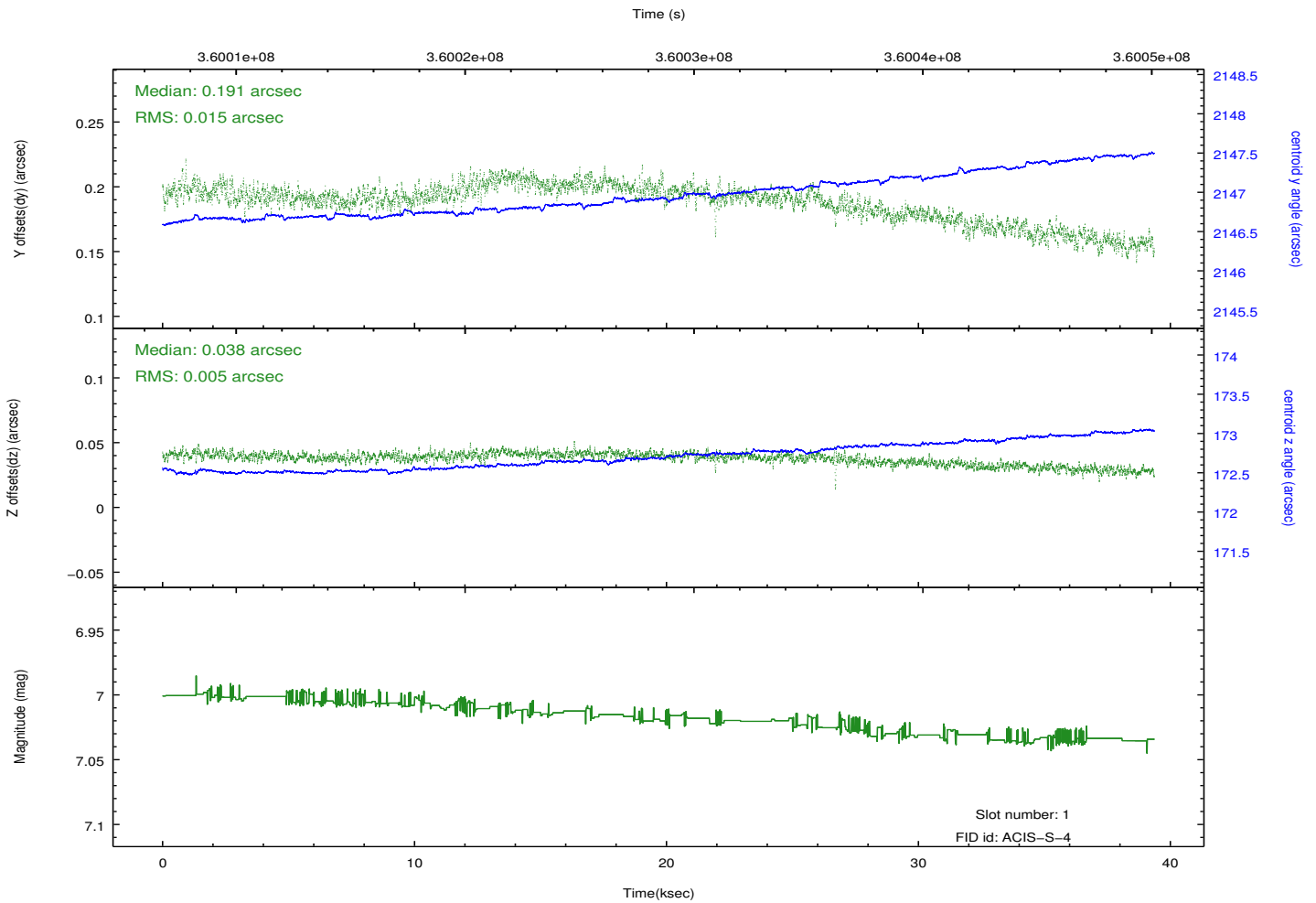
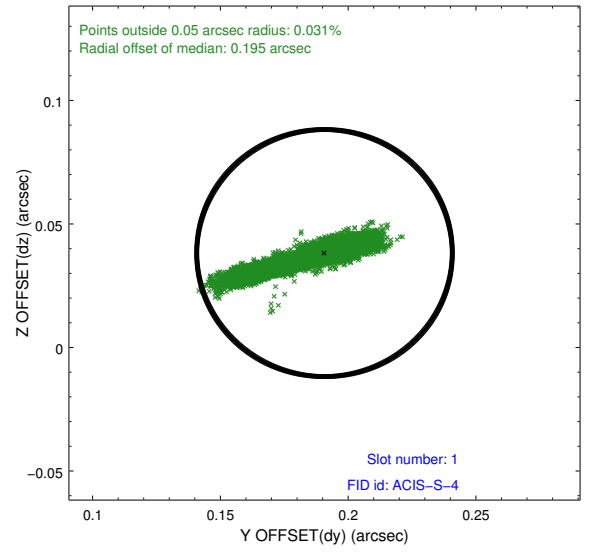
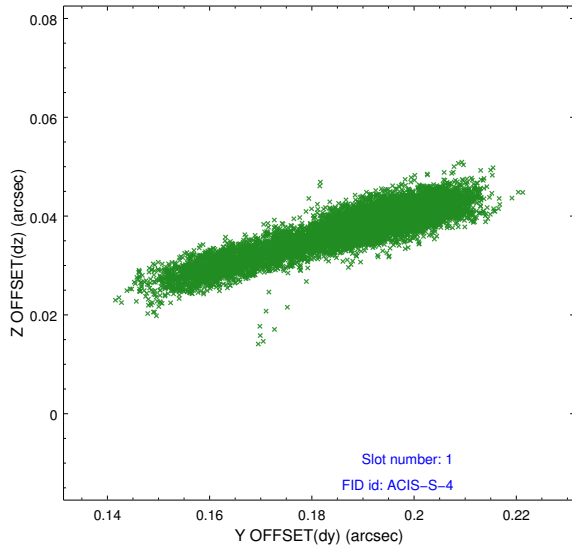


## 2.5 FID Slots

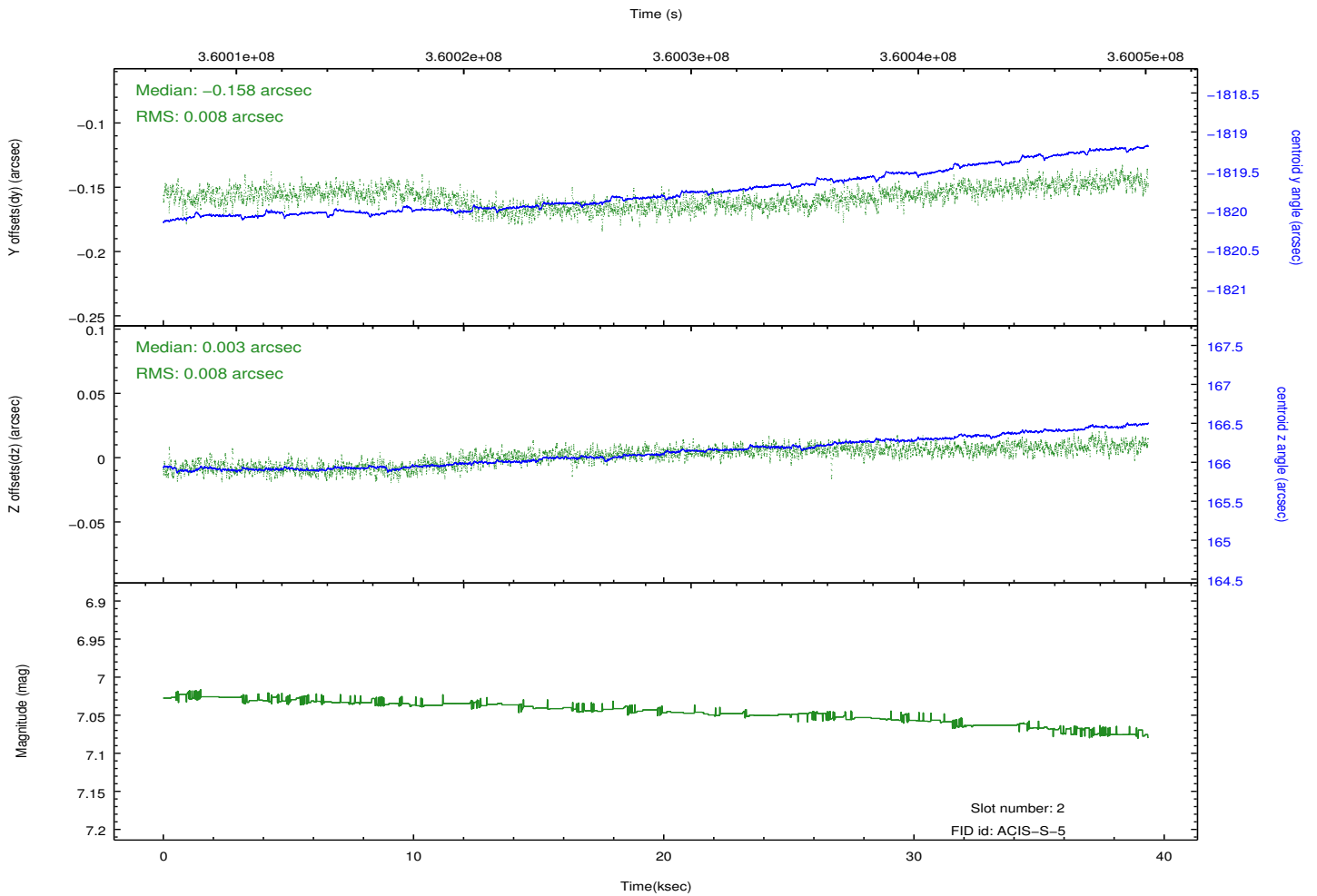
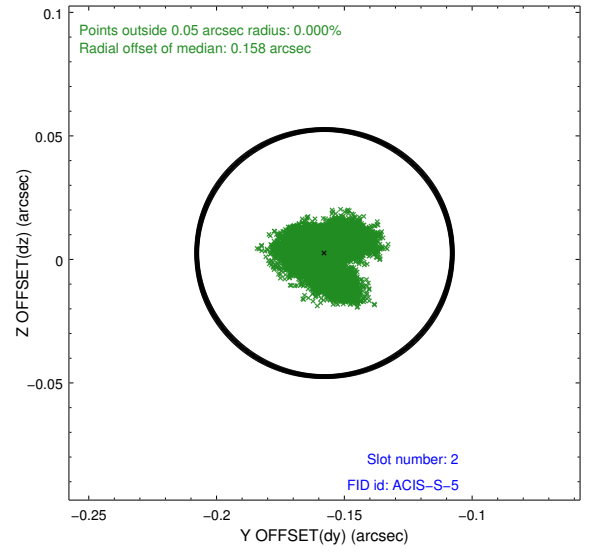
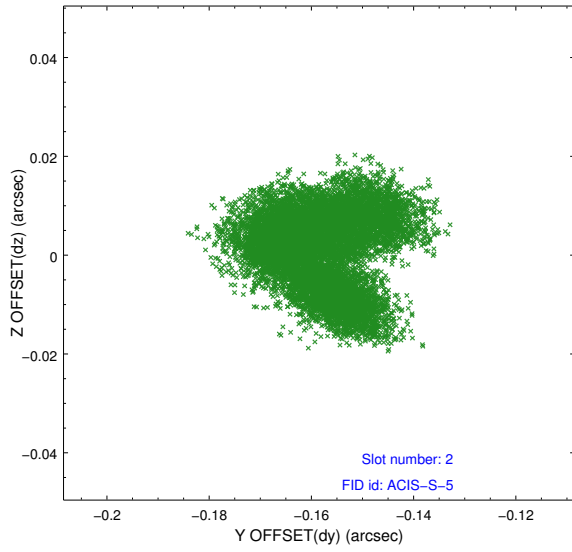
### 2.5.1 Slot 0



## 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)	2012.06.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.3607003

### A.2 Comments