

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 5021 - L2 Version 3  
Chandra X-Ray Center

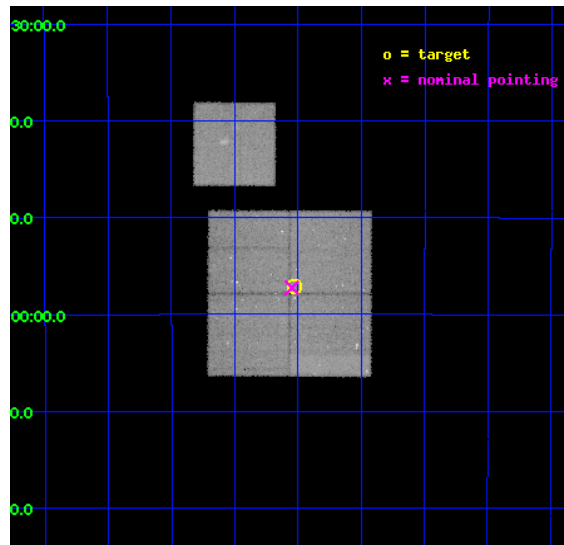
L2 Processing Date : Dec 11 2012

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# 1 Front

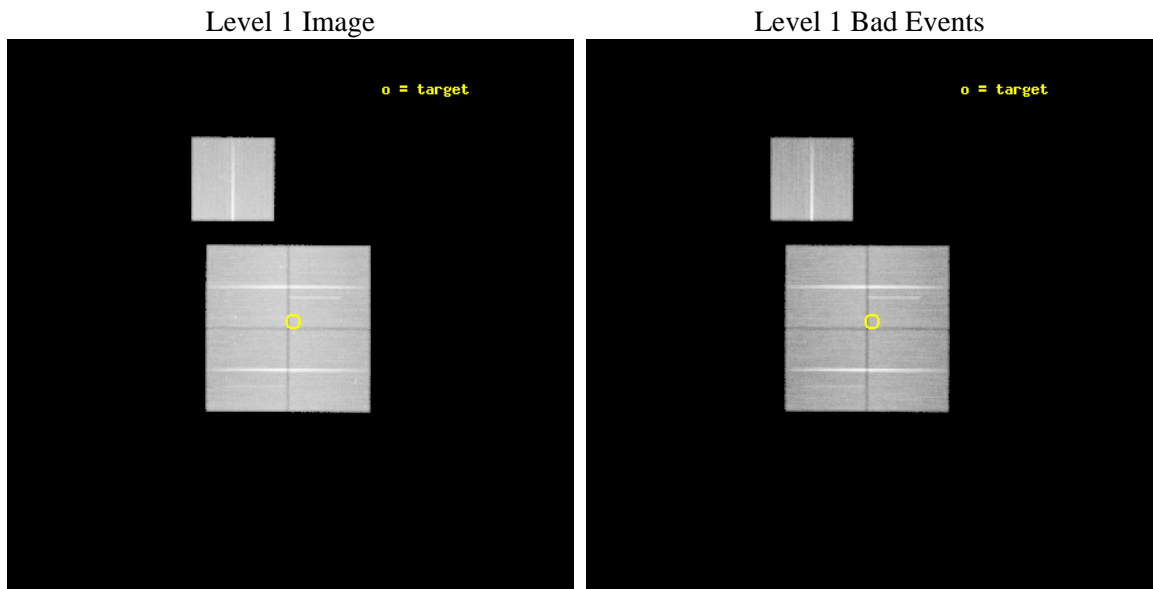
seq_num	900329	Sequence number
obs_id	5021	Observation id
title	The Extended Chandra Deep Field-South Survey: A Public Chandra Legacy	Proposal title
observer	Prof. William Brandt	Principal investigator
object	Extended CDF-S #4	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	53.2574	Observer's specified target RA [deg]
dec_targ	-27.95267	Observer's specified target Dec [deg]
ra_nom	53.262253860353	Nominal RA [deg]
dec_nom	-27.954467572803	Nominal Dec [deg]
roll_nom	0.21095789197174	Nominal Roll [deg]
revision	3	Processing version of data
ontime	99072.256474674	Sum of GTIs [s]
livetime	97777.804507898	Livetime [s]
ontime0	99072.133364677	Sum of GTIs [s]
ontime1	99084.738435179	Sum of GTIs [s]
ontime2	99072.21553424	Sum of GTIs [s]
ontime3	99072.256474674	Sum of GTIs [s]
ontime6	99075.233324736	Sum of GTIs [s]
l2events	269161	Number of level 2 events



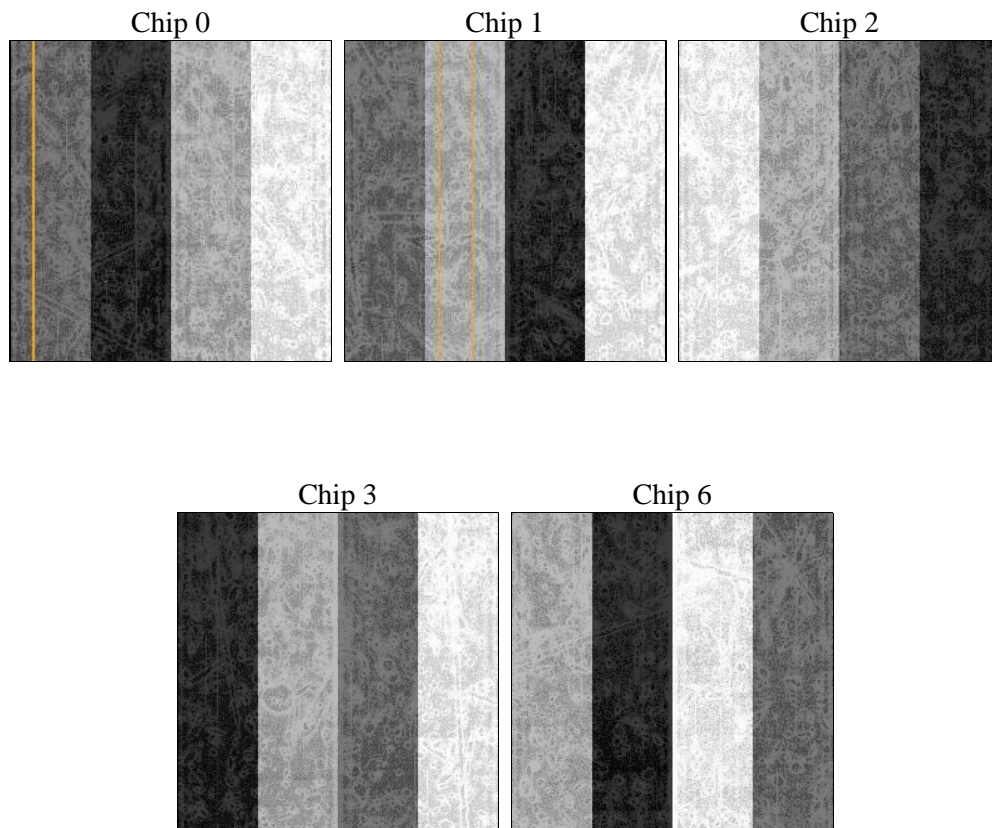
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	99058.599000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	99072.256474674	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime0	99072.133364677	Sum of GTIs [s]
date	2012-12-11T08:34:26	Date and time of file creation	ontime1	99084.738435179	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	99072.21553424	Sum of GTIs [s]
			ontime3	99072.256474674	Sum of GTIs [s]
			ontime6	99075.233324736	Sum of GTIs [s]
			l1events	2926971	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	544721	563340	629229	590370	599311
rejected events	479826	491022	561416	531862	531597
rejected %	88%	87%	89%	90%	88%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	23712	27919	26595	21397	25337
	4%	4%	4%	3%	4%
grade 1 events	314	266	345	327	264
	0%	0%	0%	0%	0%
grade 2 events	16139	15802	16372	12687	15239
	2%	2%	2%	2%	2%
grade 3 events	6826	7372	6325	6469	6778
	1%	1%	1%	1%	1%
grade 4 events	6212	7318	6871	6510	6636
	1%	1%	1%	1%	1%
grade 5 events	20012	21394	18809	22493	22240
	3%	3%	2%	3%	3%
grade 6 events	12007	13910	11656	11446	13731
	2%	2%	1%	1%	2%
grade 7 events	459499	469359	542256	509041	509086
	84%	83%	86%	86%	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	53.235516	53.26225386035305	Subarray requested	NONE	NONE
[deg] Pointing Dec	-27.968328	-27.95446757280318	Alternating exposures requested	N	N
[deg] Pointing Roll	359.989737	0.2109578919717399	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	0.000000	0.000000			
[deg] Roll tolerance	2.000000	2.000000			
Roll constraint allows 180D rotation	N	N			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	216704764.184000	216703675.65966			
Observation start date	2004-11-13T03:45:00	2004-11-13T03:27:55			
[s] Observation end time (MET)	216803822.184000	216804059.03917			
Observation end date	2004-11-14T07:15:58	2004-11-14T07:20:59			
Read mode	TIMED	TIMED			

## 2.3 Aspect

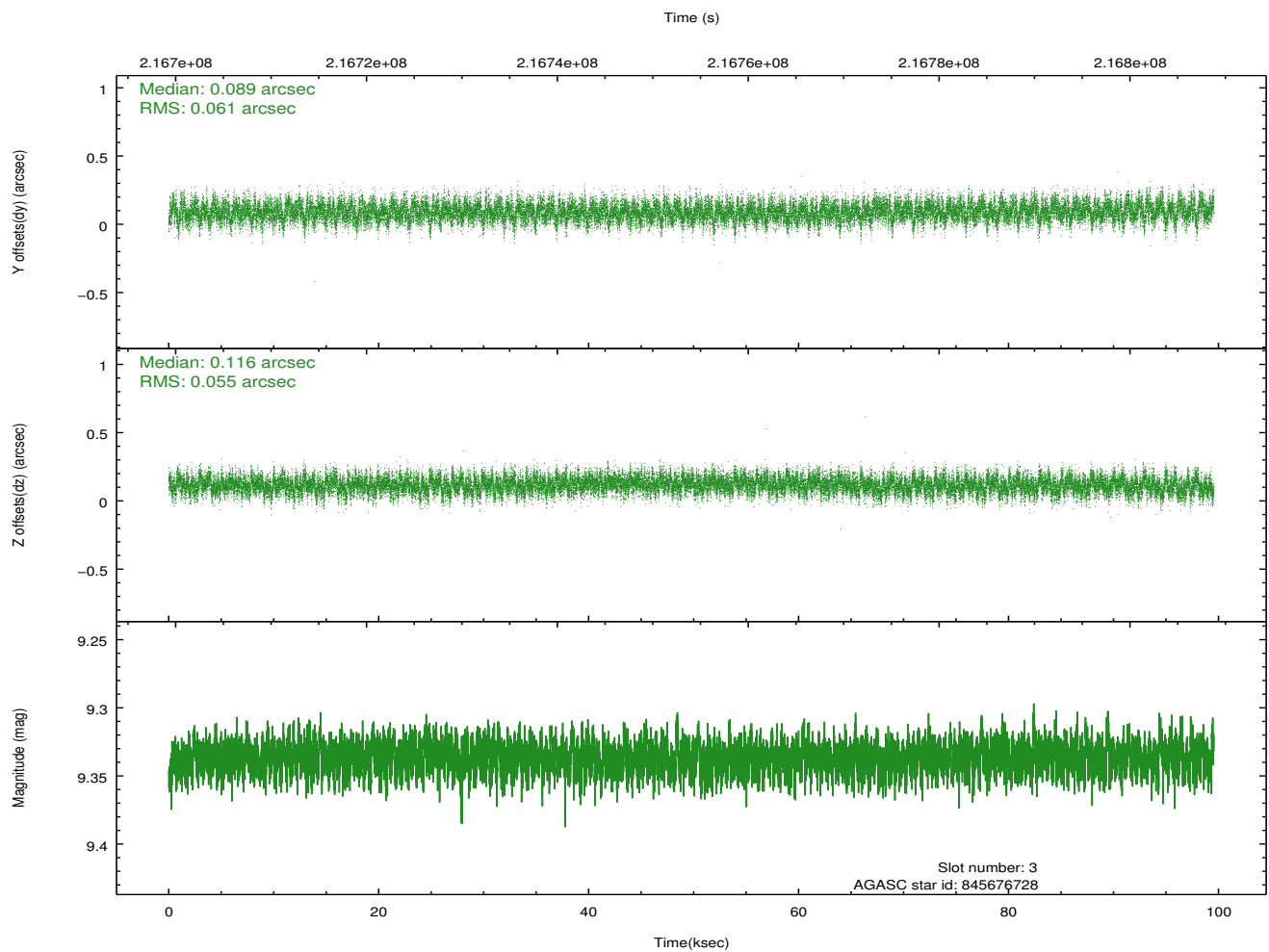


### Slot Statistics

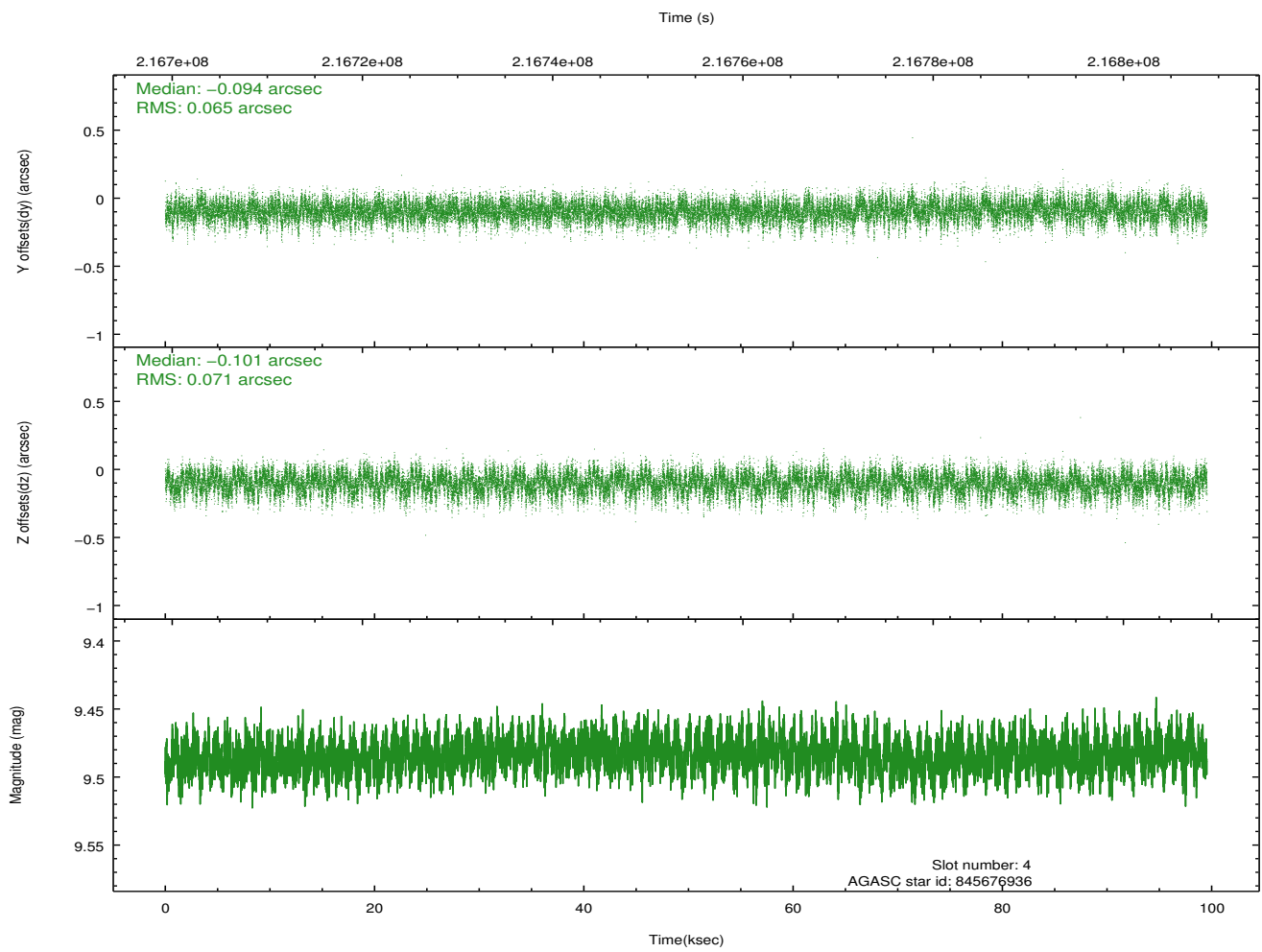
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	24256	0.055	0.002	0.015	0.024	0.000000	0.000000	934.52	-832.43
1	FID	ACIS-I-5	7.23	24253	-0.058	0.104	0.019	0.025	0.000000	0.000000	-1813.83	1065.09
2	FID	ACIS-I-6	7.24	24252	-0.077	-0.035	0.021	0.037	0.000000	0.000000	399.91	1709.45
3	GUIDE	845676728	9.34	48500	0.089	0.116	0.087	0.142	52.877179	-27.664318	-1142.44	1092.76
4	GUIDE	845676936	9.48	48510	-0.094	-0.101	0.104	0.165	52.843773	-27.880153	-1246.22	315.25
5	GUIDE	845807880	8.81	48525	-0.009	-0.111	0.079	0.124	53.382027	-27.886093	466.46	296.07
6	GUIDE	845814592	9.04	48497	0.037	0.016	0.094	0.150	53.853010	-28.336603	1958.16	-1330.51
7	GUIDE	845816224	10.20	48479	-0.019	0.084	0.144	0.234	53.578992	-28.631005	1086.62	-2386.52

## 2.4 Star Slots

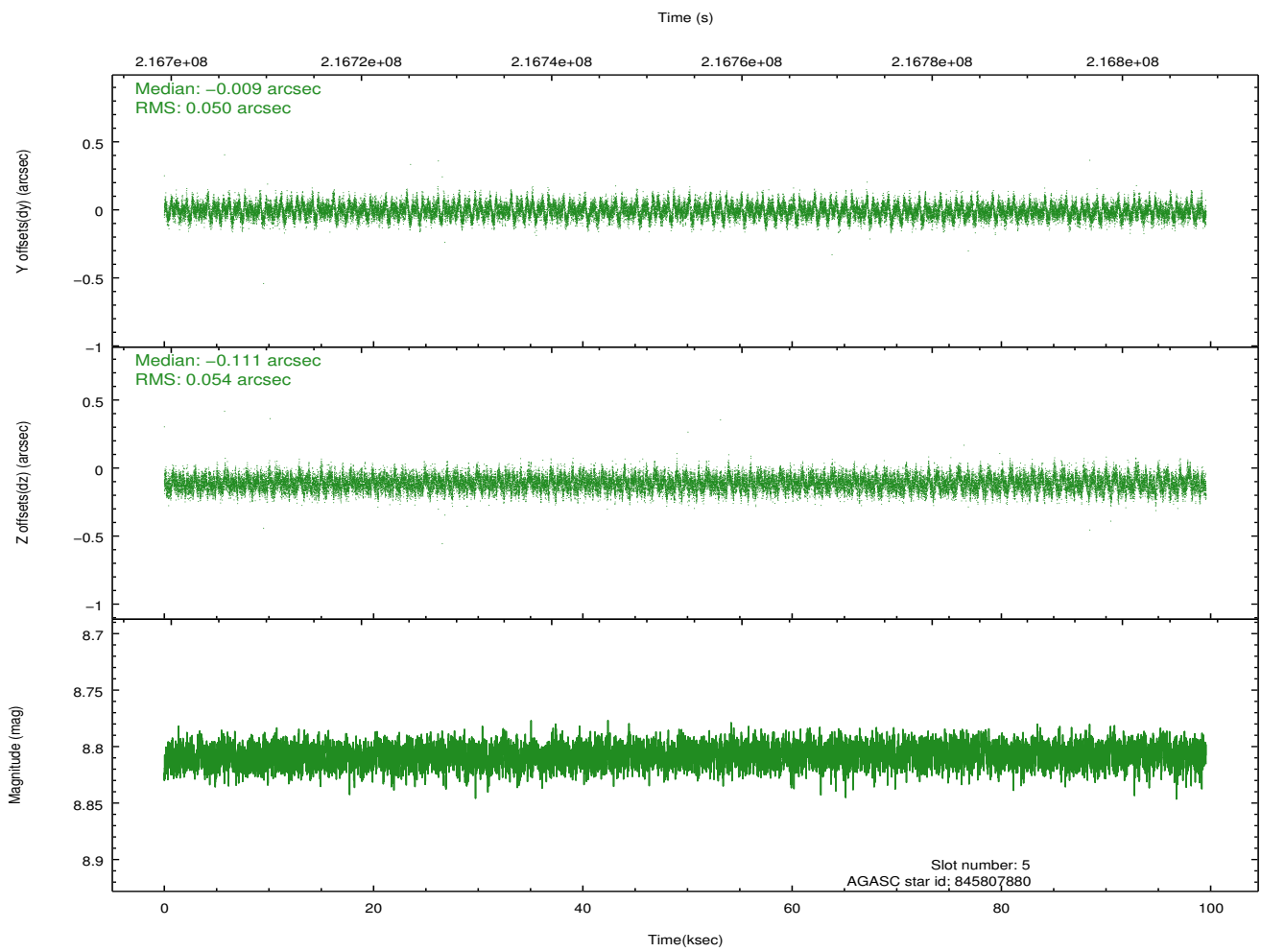
### 2.4.1 Slot 3



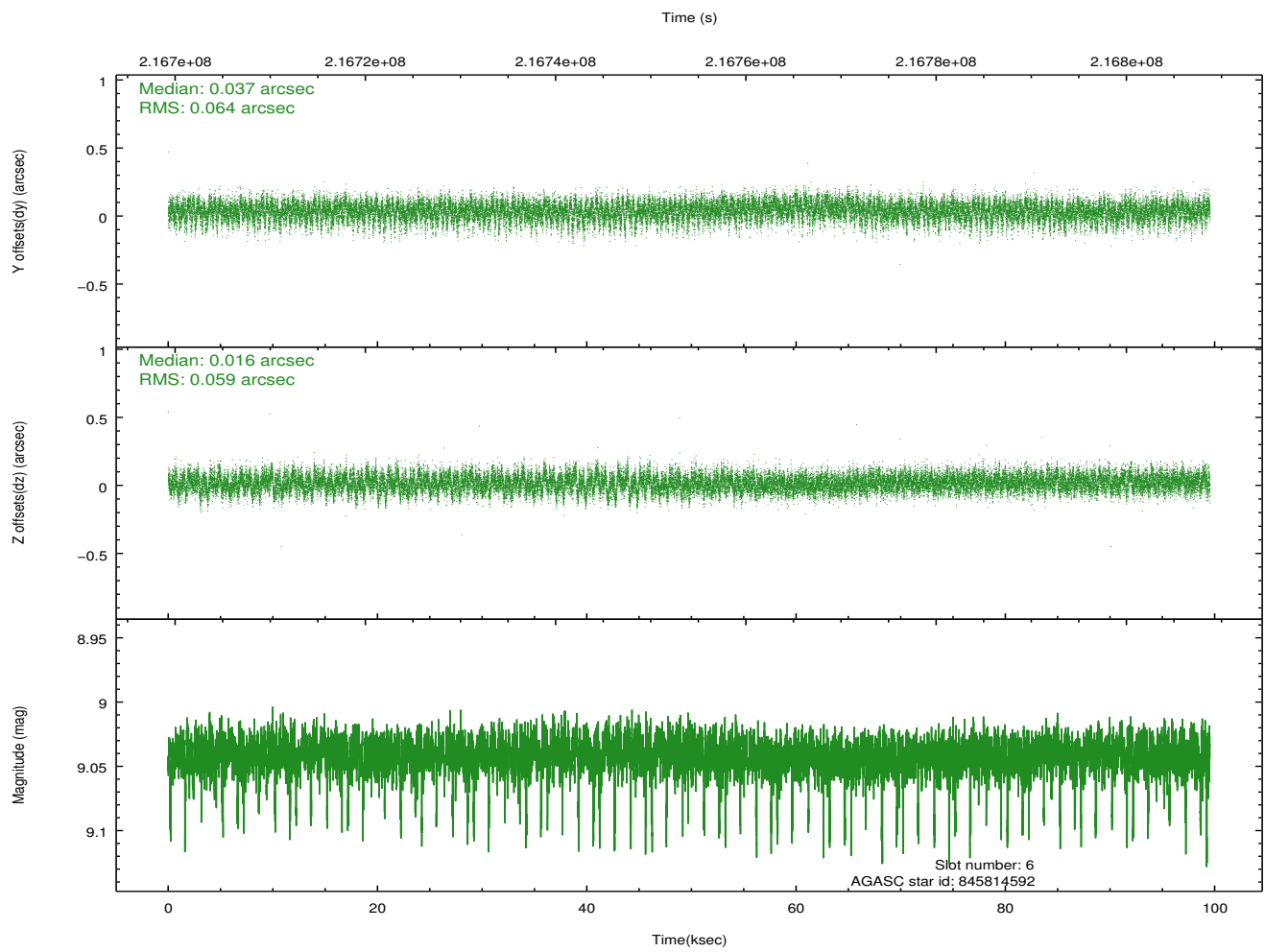
## 2.4.2 Slot 4



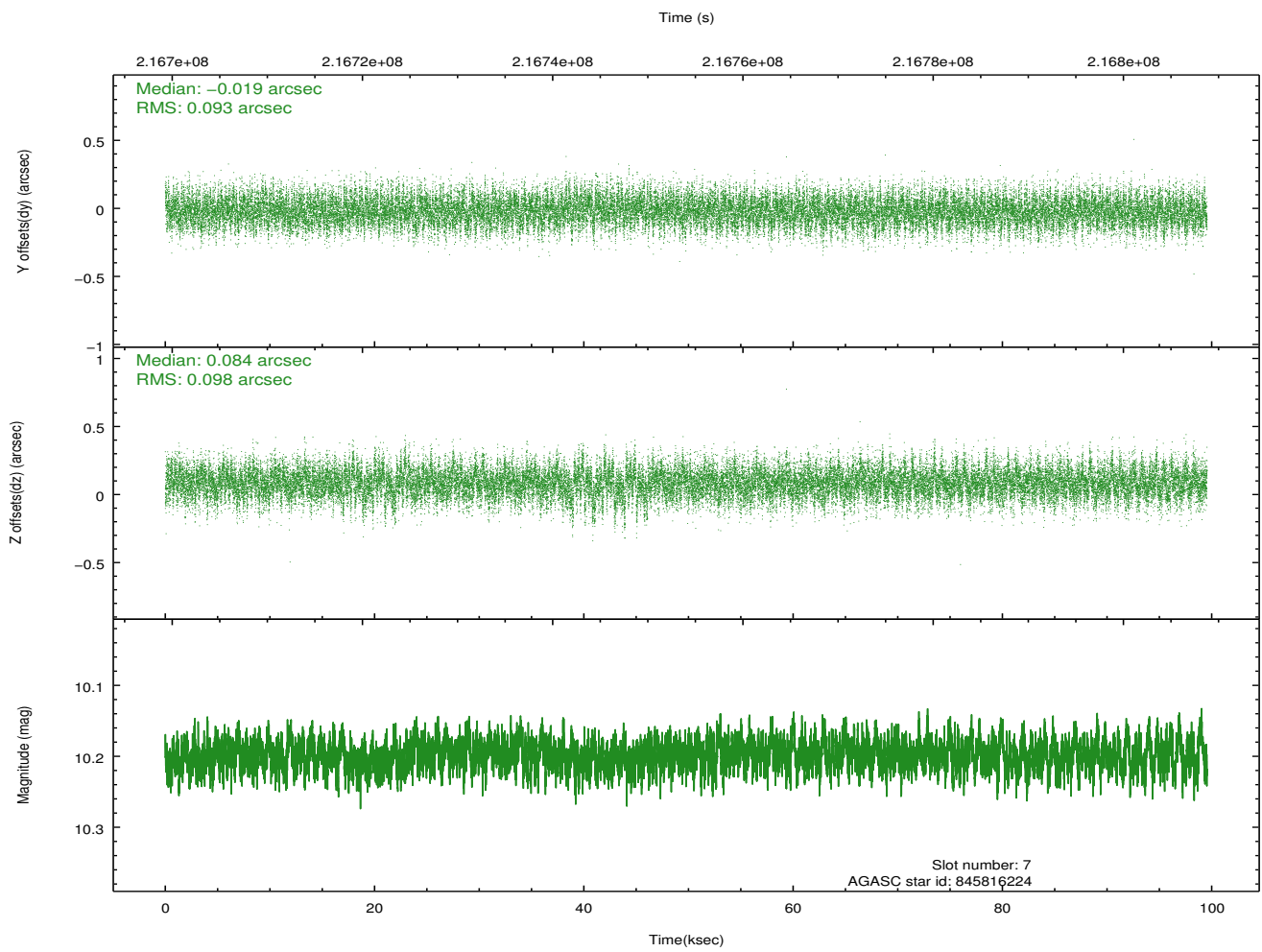
### 2.4.3 Slot 5



## 2.4.4 Slot 6

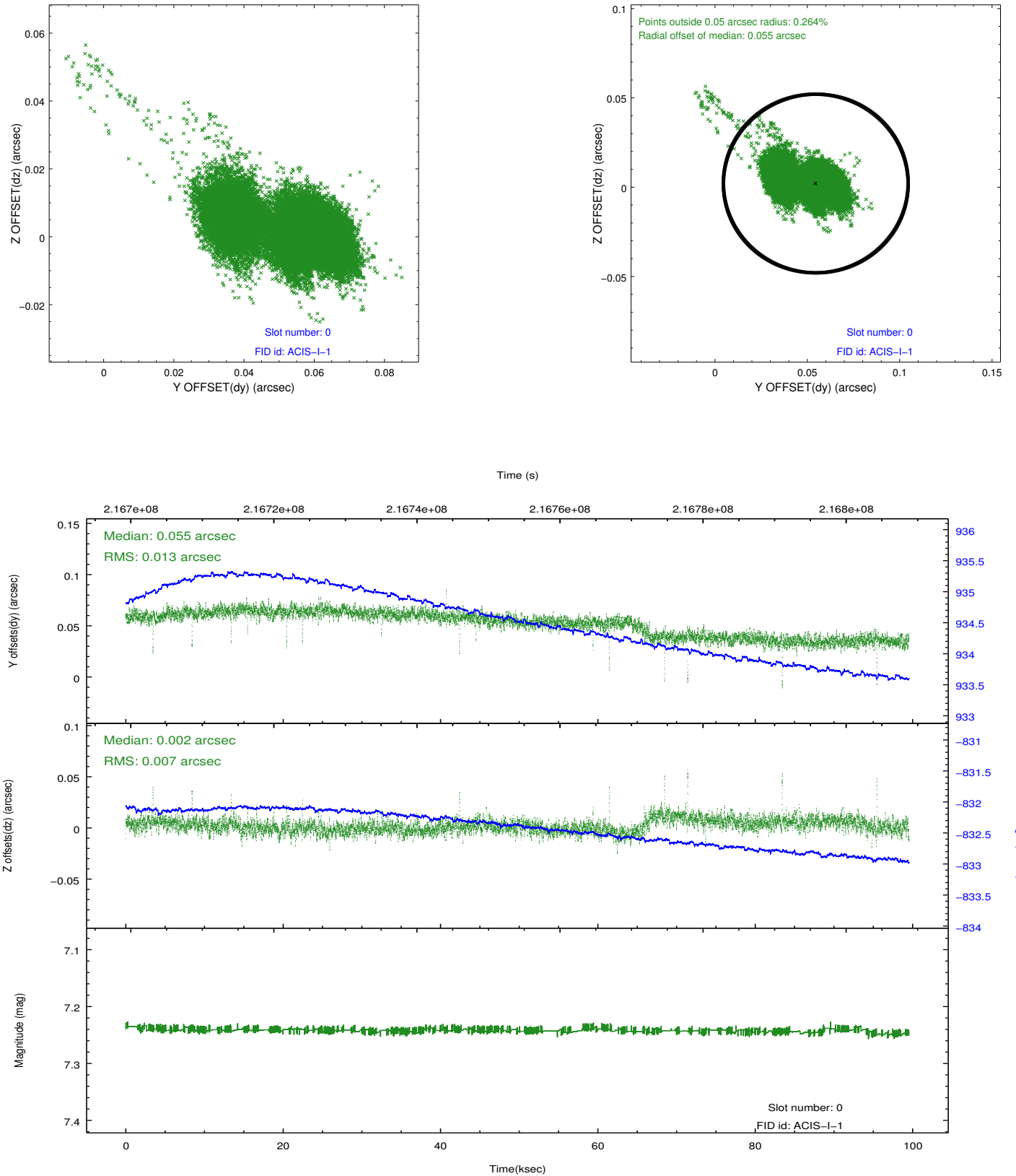


## 2.4.5 Slot 7

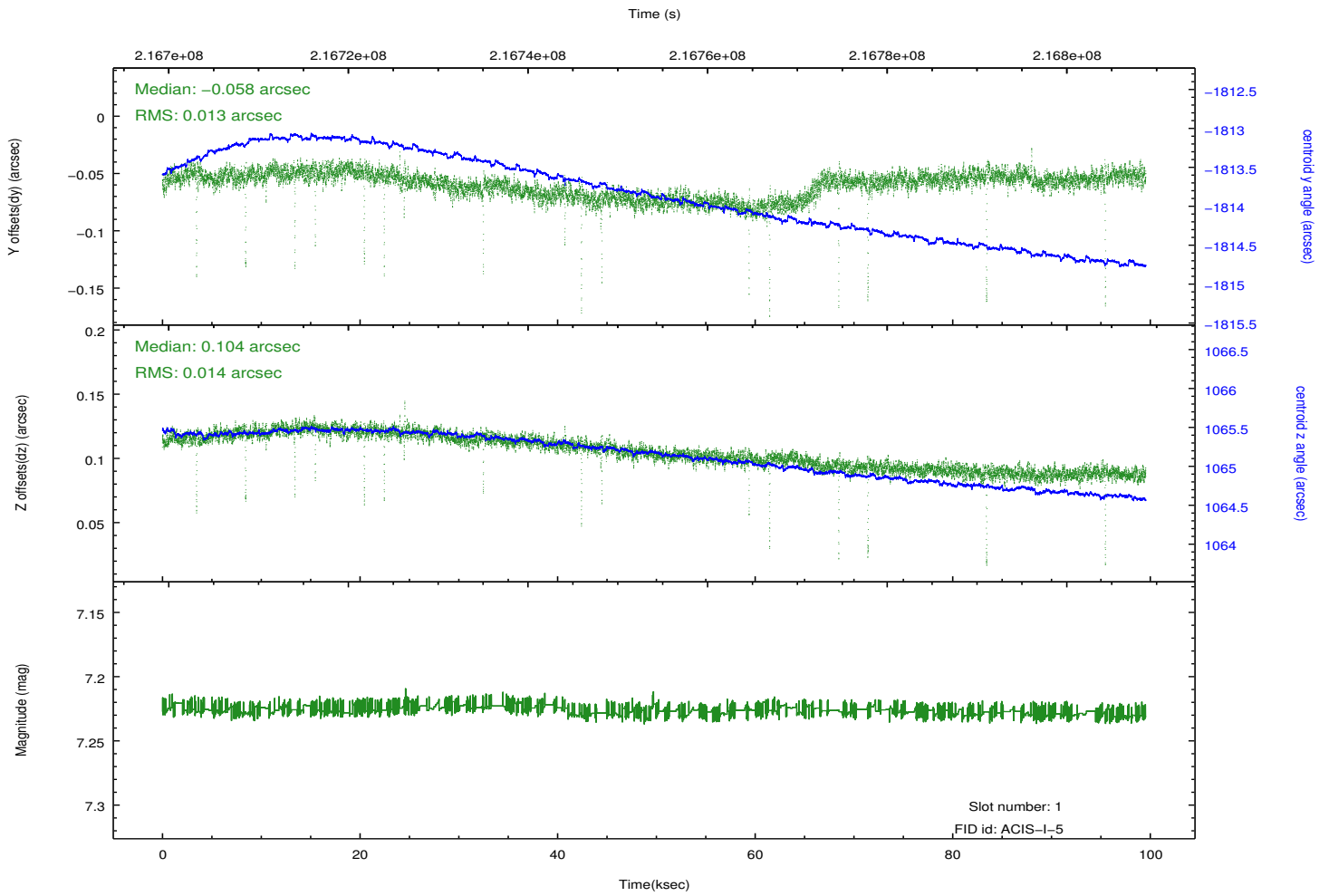
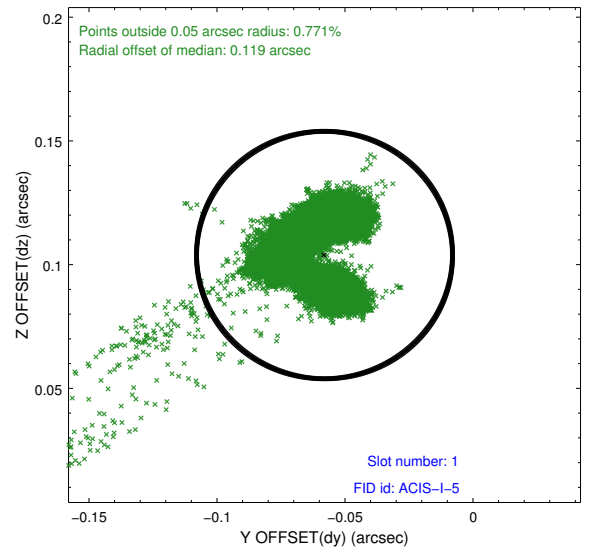
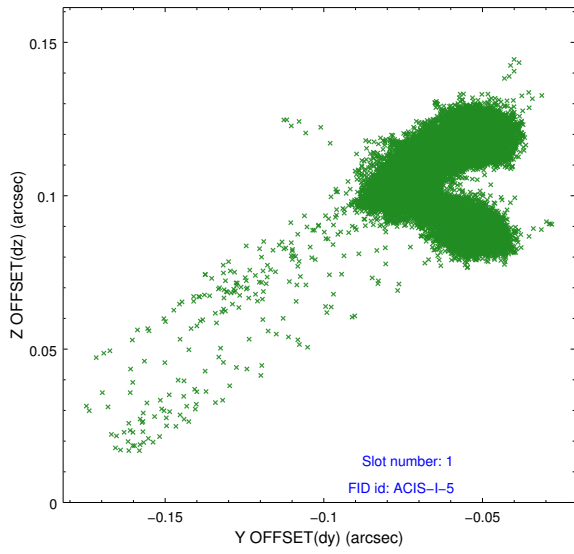


## 2.5 FID Slots

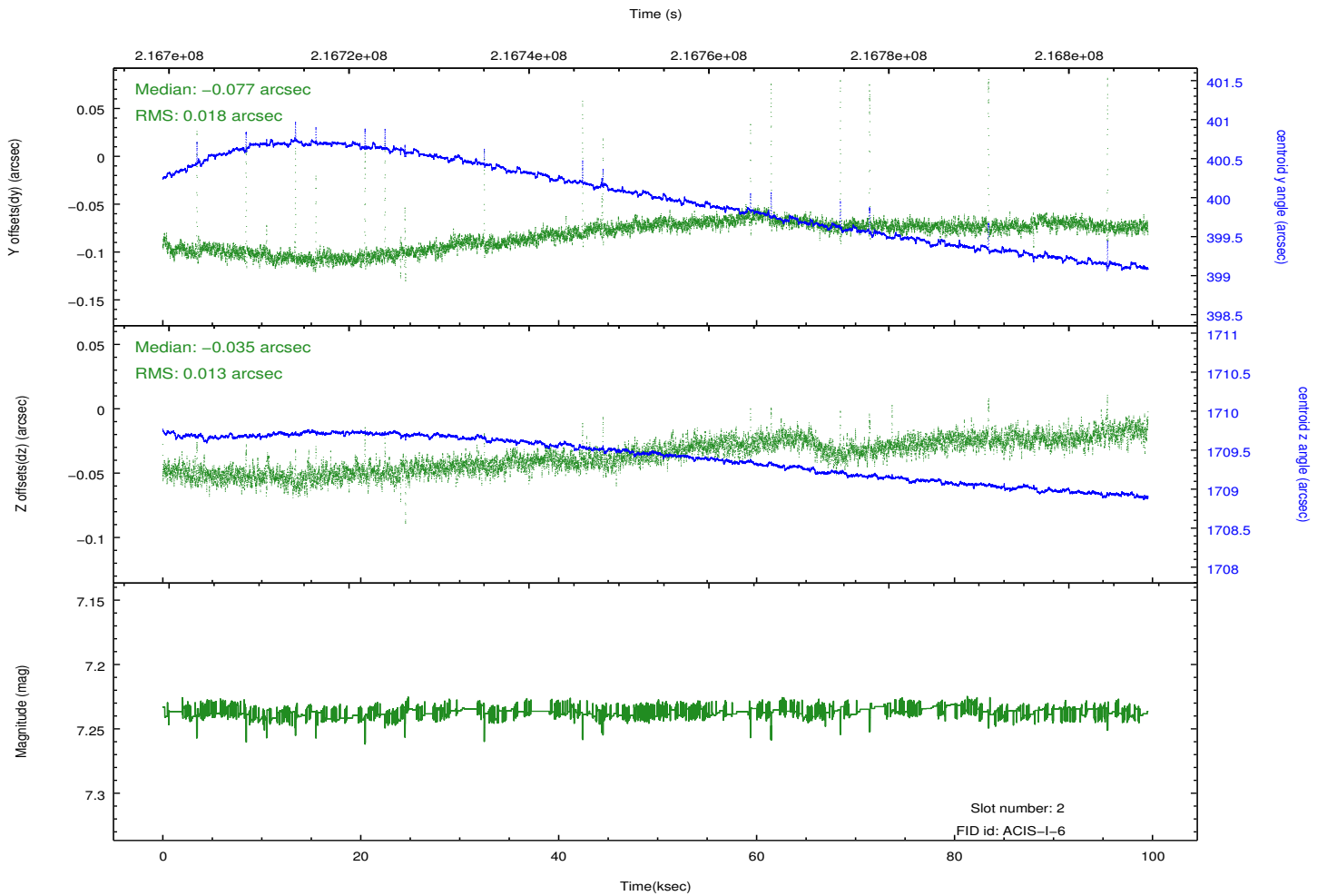
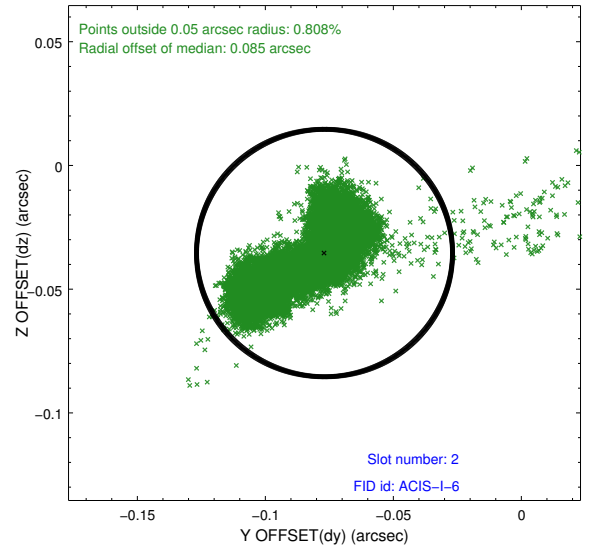
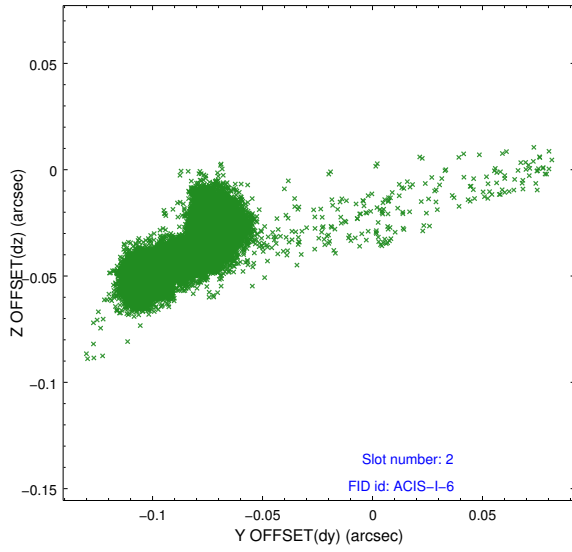
### 2.5.1 Slot 0



## 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)	2013.01.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	99.072

## A.2 Comments

Roll constraint satisfied.