

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4202 - L2 Version 3  
Chandra X-Ray Center

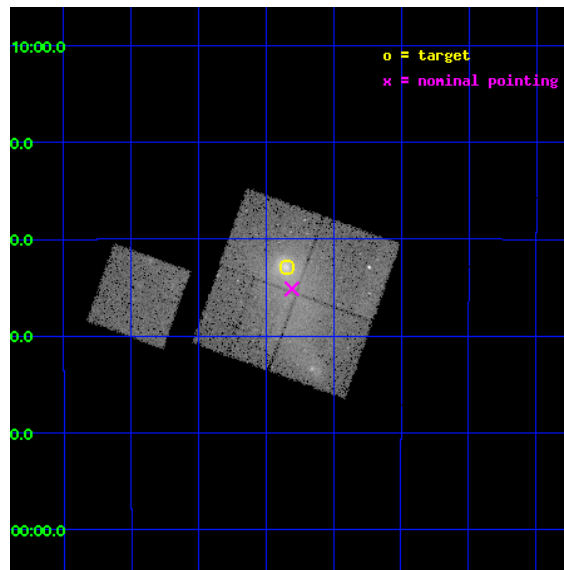
L2 Processing Date : Oct 17 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

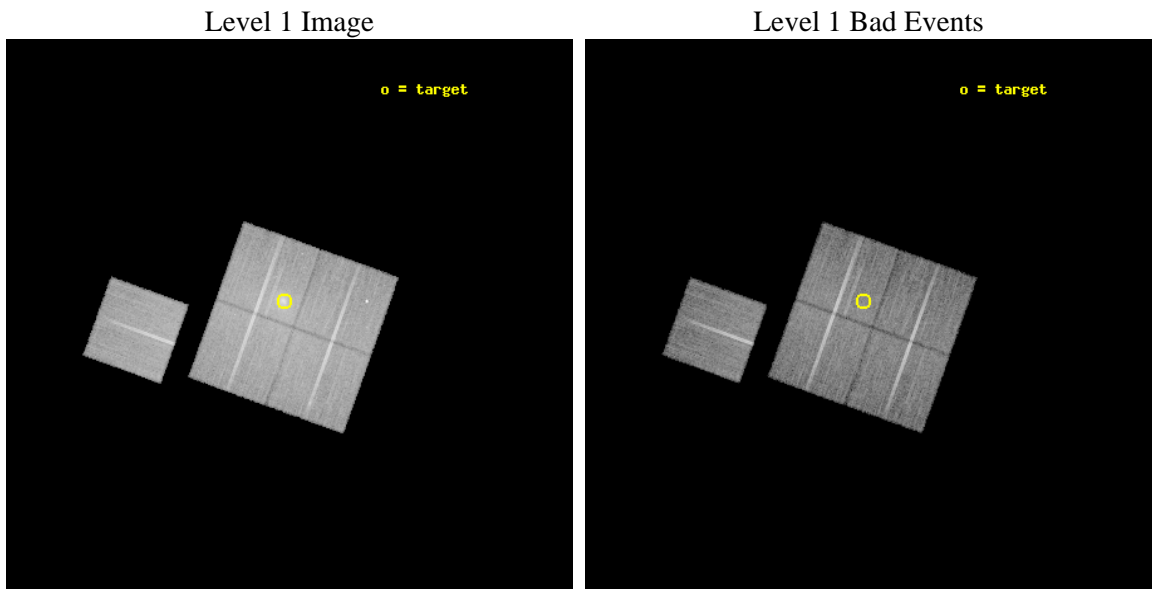
seq_num	800358	Sequence number
obs_id	4202	Observation id
title	CHANDRA OBSERVATIONS OF TWO DYNAMICALLY YOUNG GALAXY CLUSTERS A2069 AND A2384	Proposal title
observer	Dr Maxim Markevitch	Principal investigator
object	A2384	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	328.0875	Observer's specified target RA [deg]
dec_targ	-19.547778	Observer's specified target Dec [deg]
ra_nom	328.07729233761	Nominal RA [deg]
dec_nom	-19.585813529631	Nominal Dec [deg]
roll_nom	289.78960089127	Nominal Roll [deg]
revision	3	Processing version of data
ontime	31864.81799826	Sum of GTIs [s]
livetime	31448.480692575	Livetime [s]
ontime0	31871.099938691	Sum of GTIs [s]
ontime1	31864.817958385	Sum of GTIs [s]
ontime2	31867.958948553	Sum of GTIs [s]
ontime3	31864.81799826	Sum of GTIs [s]
ontime6	31861.676968217	Sum of GTIs [s]
l2events	120218	Number of level 2 events



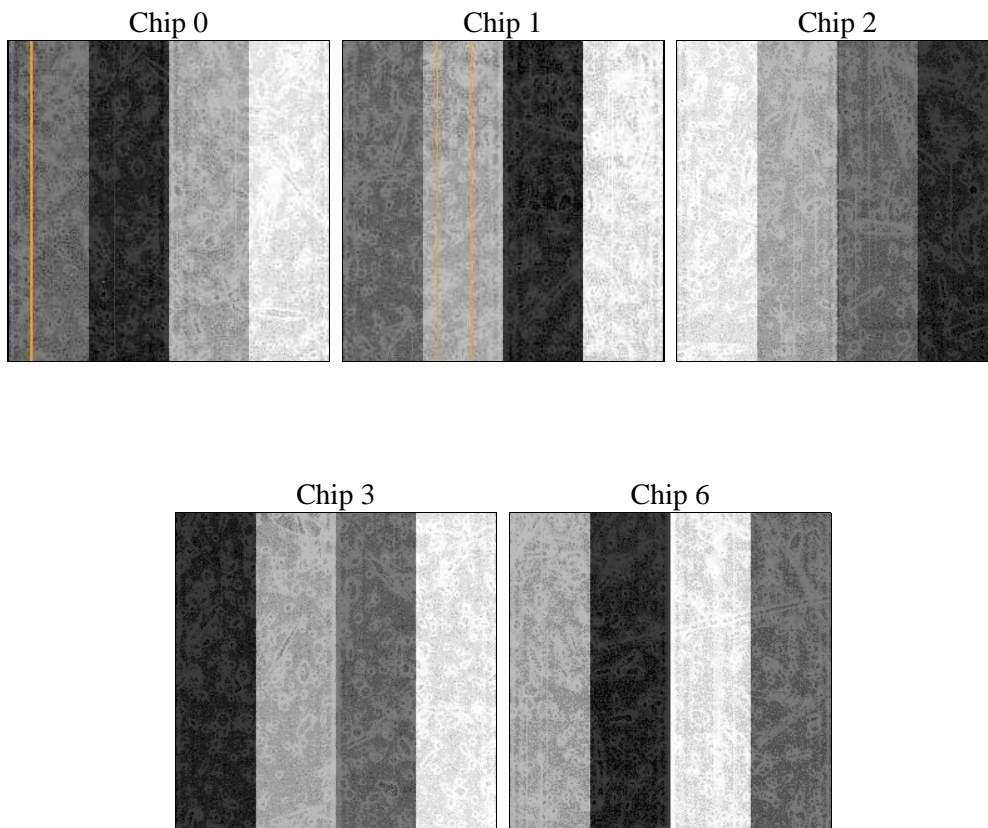
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31779.931000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	31864.81799826	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	31871.099938691	Sum of GTIs [s]
date	2012-10-17T12:21:49	Date and time of file creation	ontime1	31864.817958385	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	31867.958948553	Sum of GTIs [s]
			ontime3	31864.81799826	Sum of GTIs [s]
			ontime6	31861.676968217	Sum of GTIs [s]
			l1events	811500	Number of level 1 events

### 2.1.4 Events

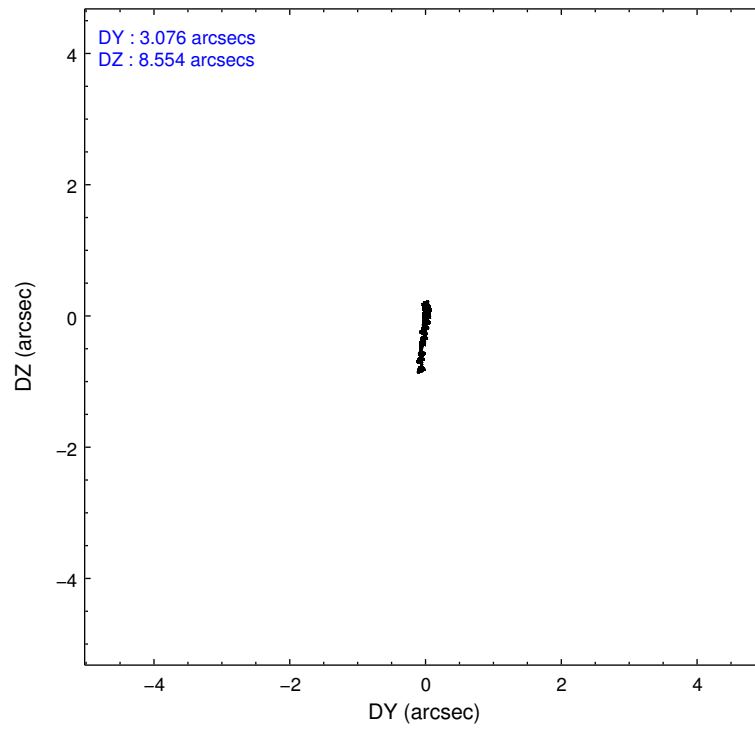
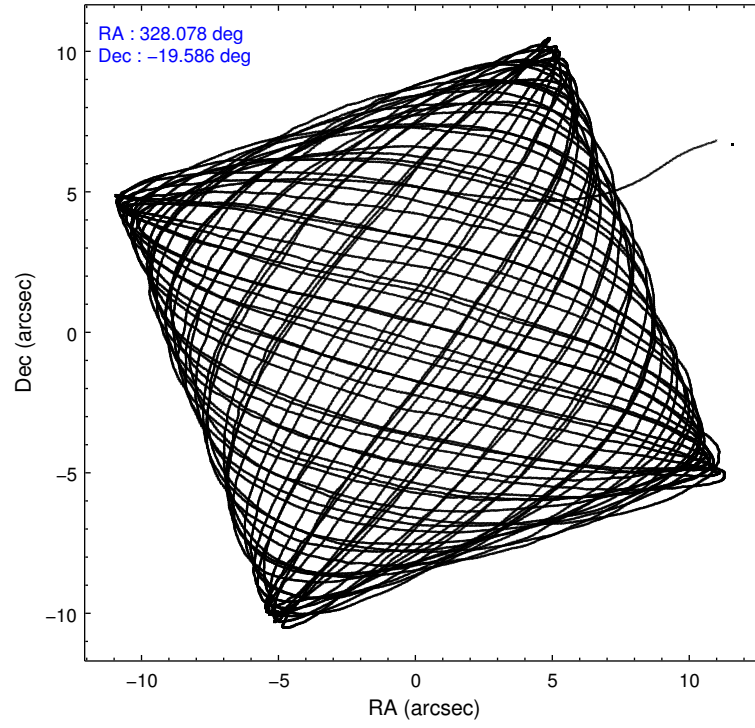
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	156937	148442	167446	182731	155944
rejected events	127822	122148	142887	142435	139878
rejected %	81%	82%	85%	77%	89%

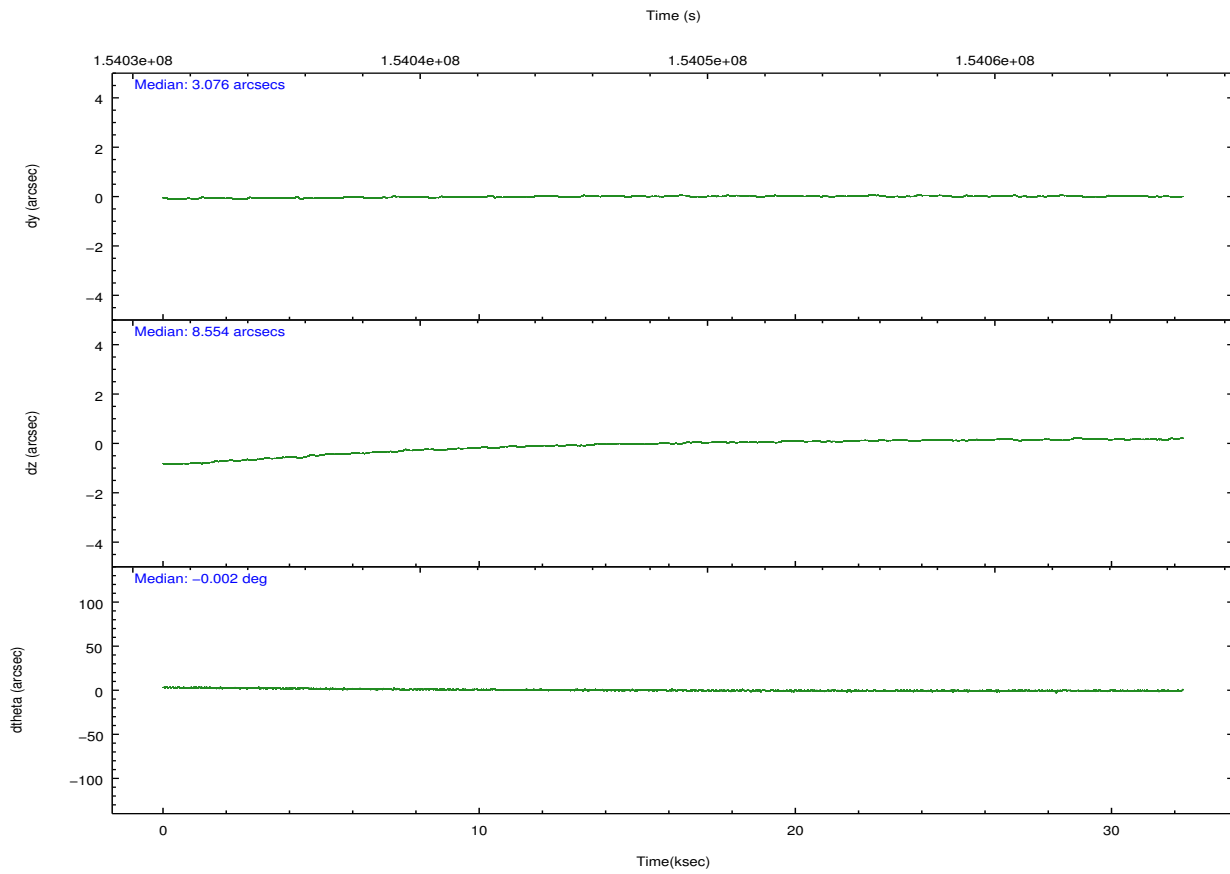
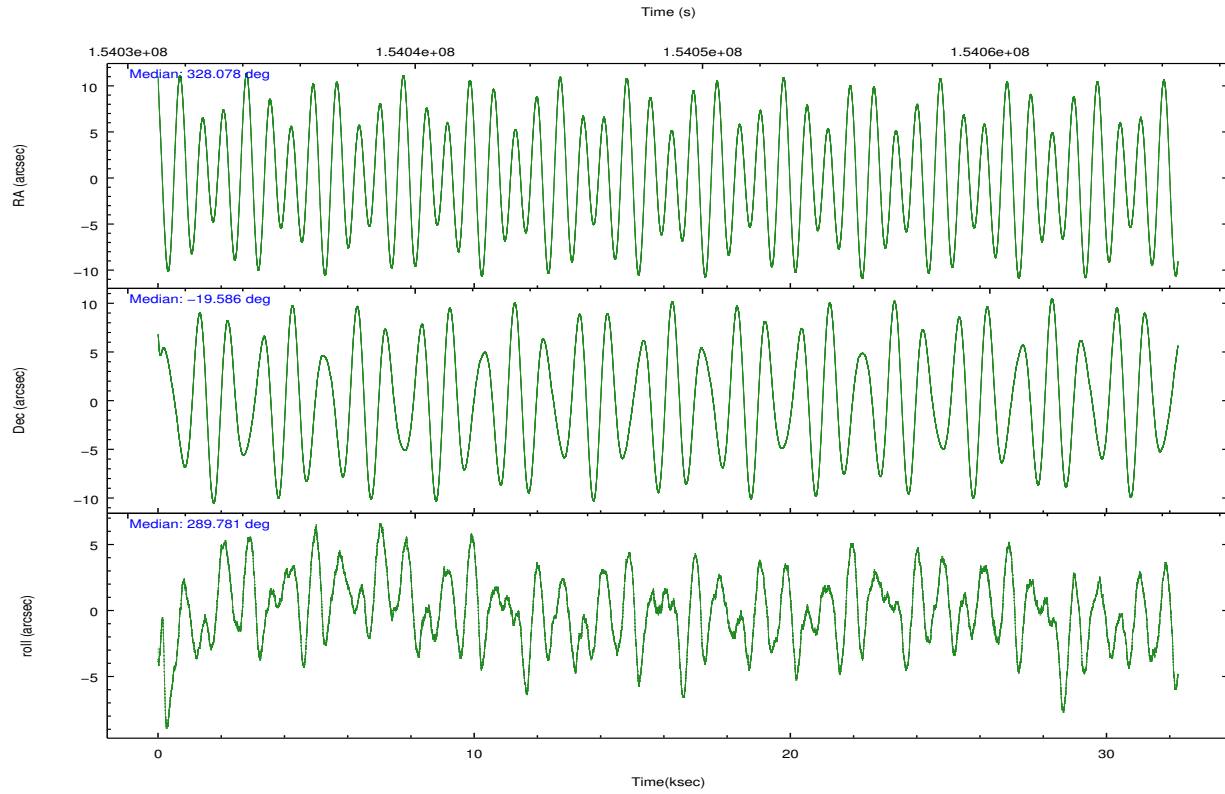
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	16733	14020	13514	26737	6000
	10%	9%	8%	14%	3%
grade 1 events	118	96	111	192	59
	0%	0%	0%	0%	0%
grade 2 events	4776	4445	4242	5356	3325
	3%	2%	2%	2%	2%
grade 3 events	2297	2121	1905	2368	1712
	1%	1%	1%	1%	1%
grade 4 events	2046	2169	1957	2474	1809
	1%	1%	1%	1%	1%
grade 5 events	5164	5563	5005	6010	5955
	3%	3%	2%	3%	3%
grade 6 events	3269	3543	2951	3370	3223
	2%	2%	1%	1%	2%
grade 7 events	122534	116485	137761	136224	133861
	78%	78%	82%	74%	85%

## 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	328.055045	328.077292337614	Subarray requested	NONE	NONE
[deg] Pointing Dec	-19.568213	-19.58581352963096	Alternating exposures requested	N	N
[deg] Pointing Roll	289.573468	289.7896008912746	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	154033152.184000	154032046.69901			
Observation start date	2002-11-18T18:58:08	2002-11-18T18:40:46			
[s] Observation end time (MET)	154064932.184000	154065176.75039			
Observation end date	2002-11-19T03:47:48	2002-11-19T03:52:56			
Read mode	TIMED	TIMED			

## 2.3 Aspect



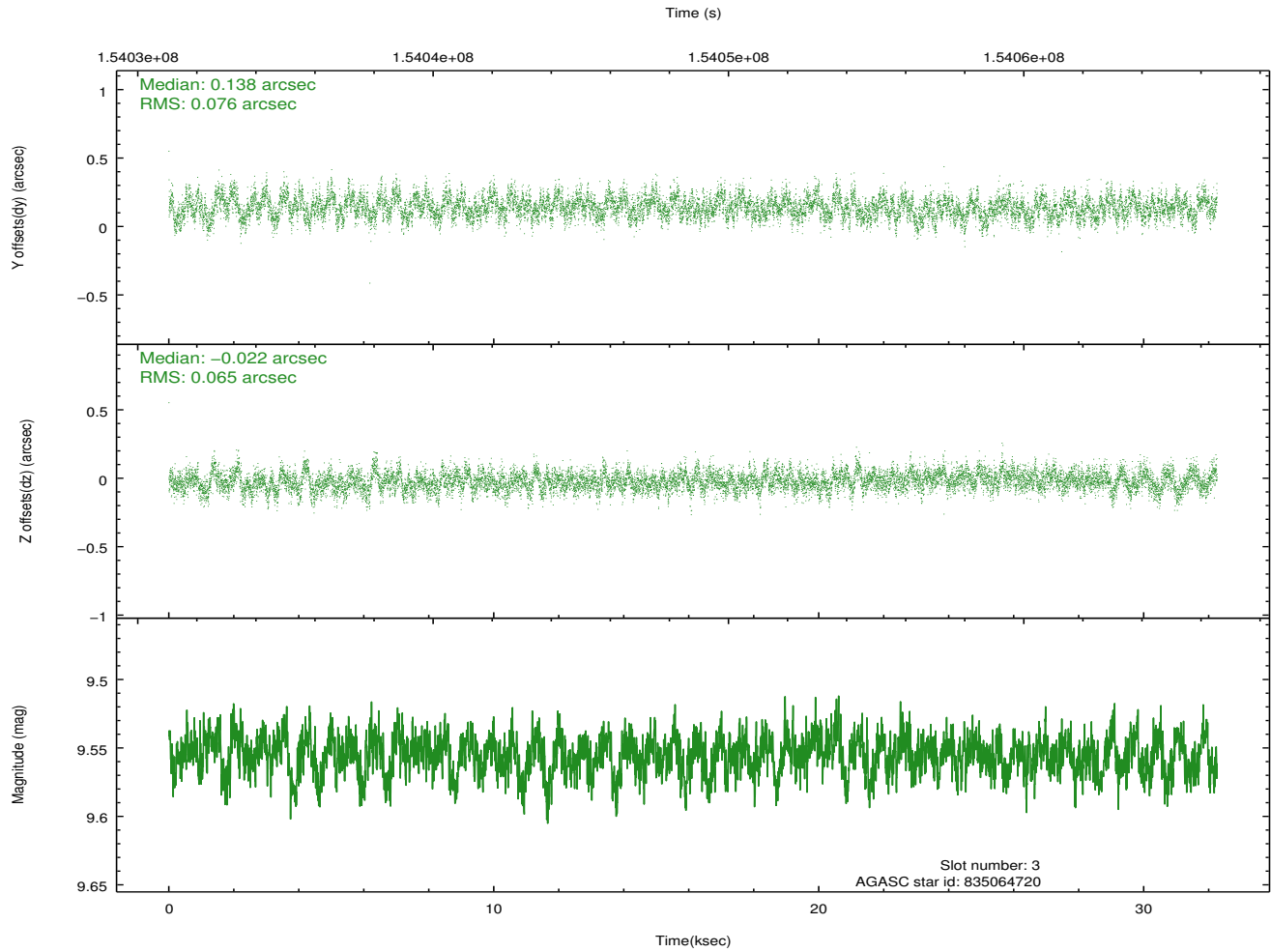
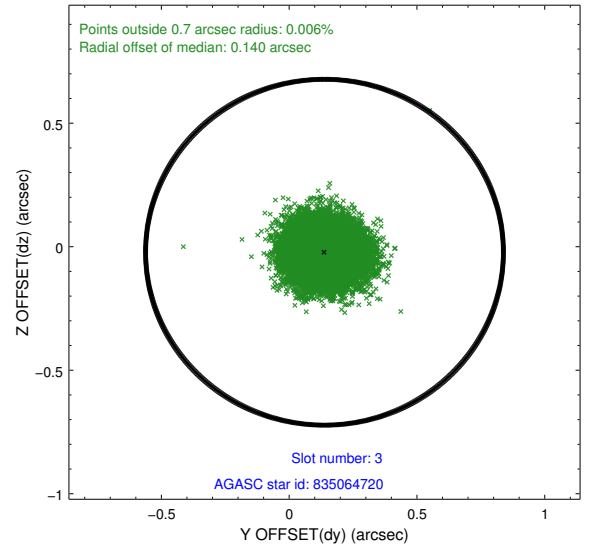
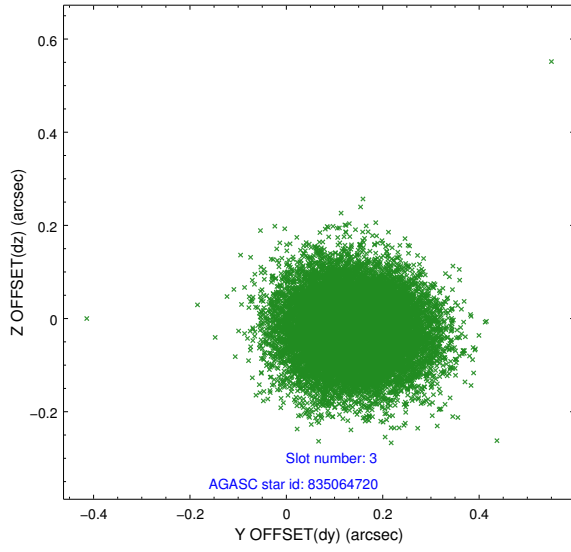


### Slot Statistics

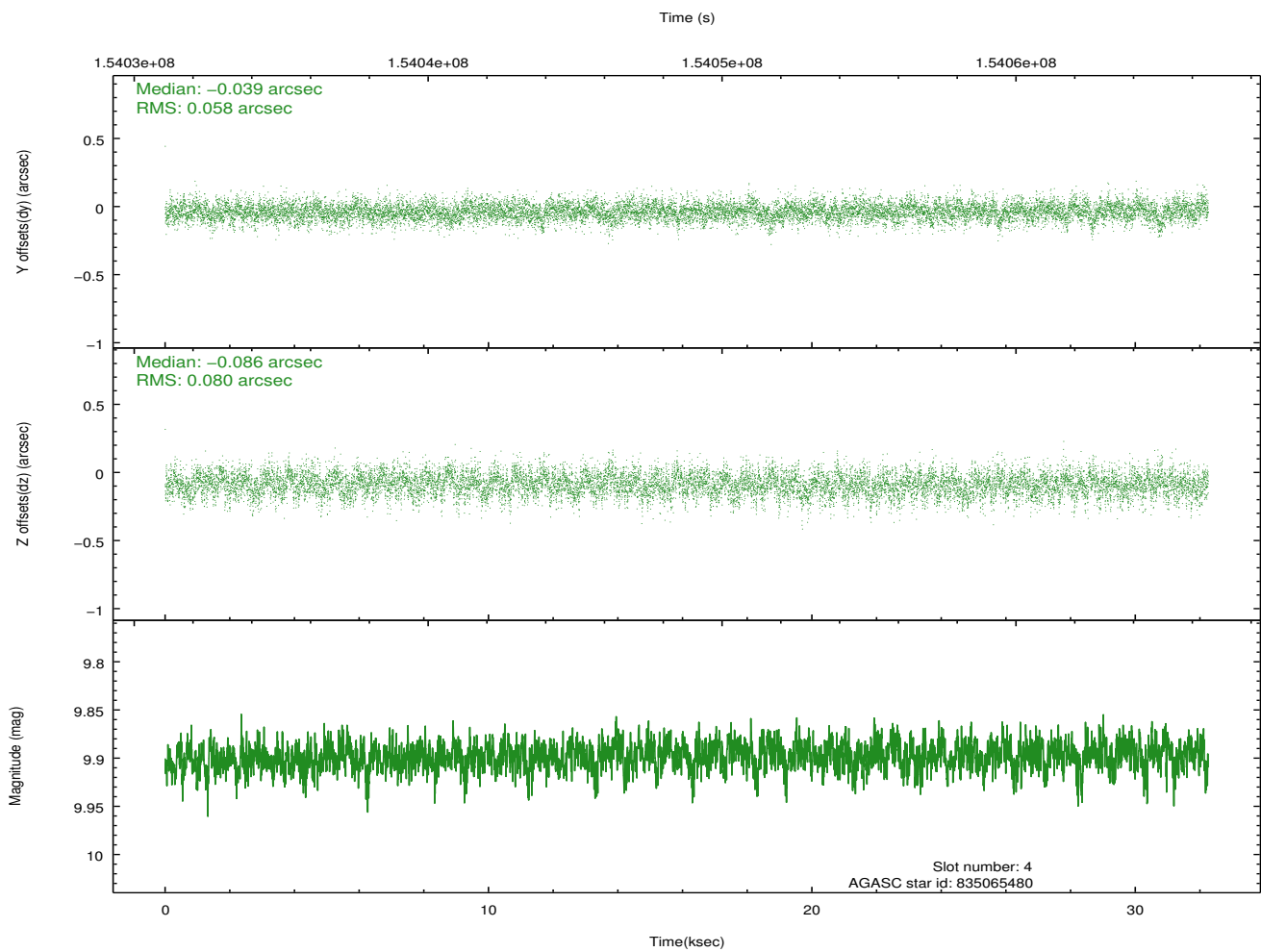
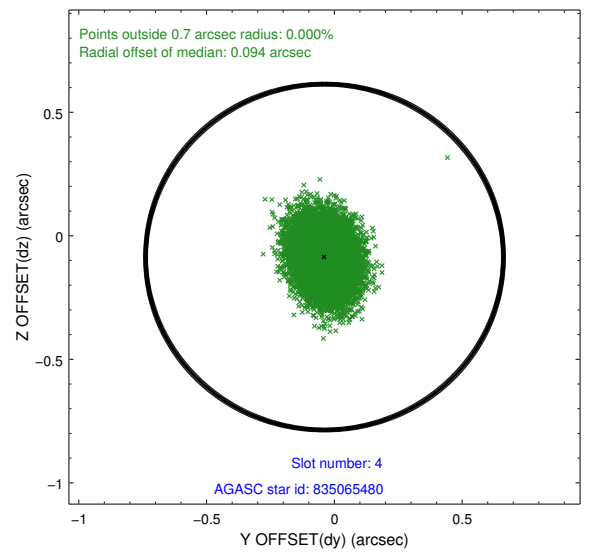
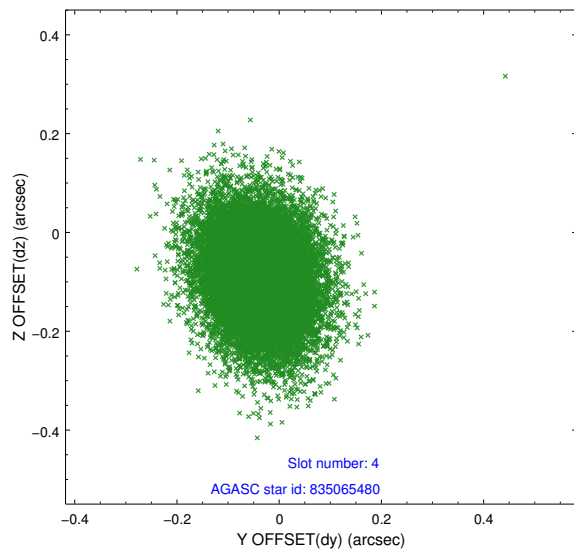
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	7867	-0.025	0.070	0.010	0.025	0.000000	0.000000	936.70	-831.81
1	FID	ACIS-I-5	7.24	7867	-0.060	0.033	0.009	0.015	0.000000	0.000000	-1811.41	1065.62
2	FID	ACIS-I-6	7.26	7867	-0.006	-0.033	0.009	0.019	0.000000	0.000000	402.20	1710.12
3	GUIDE	835064720	9.56	15726	0.138	-0.022	0.107	0.172	327.917987	-20.130051	1750.35	-1114.54
4	GUIDE	835065480	9.90	15724	-0.039	-0.086	0.104	0.173	327.496470	-19.795347	139.19	-2058.40
5	GUIDE	836112160	9.64	15724	-0.113	-0.062	0.115	0.190	328.033111	-19.133644	-1499.88	452.84
6	GUIDE	836112336	8.61	15731	-0.131	0.075	0.065	0.105	328.256038	-19.151604	-1184.75	1145.62
7	GUIDE	836112536	9.09	15731	0.147	0.094	0.095	0.153	328.827188	-19.639030	1121.93	2379.11

## 2.4 Star Slots

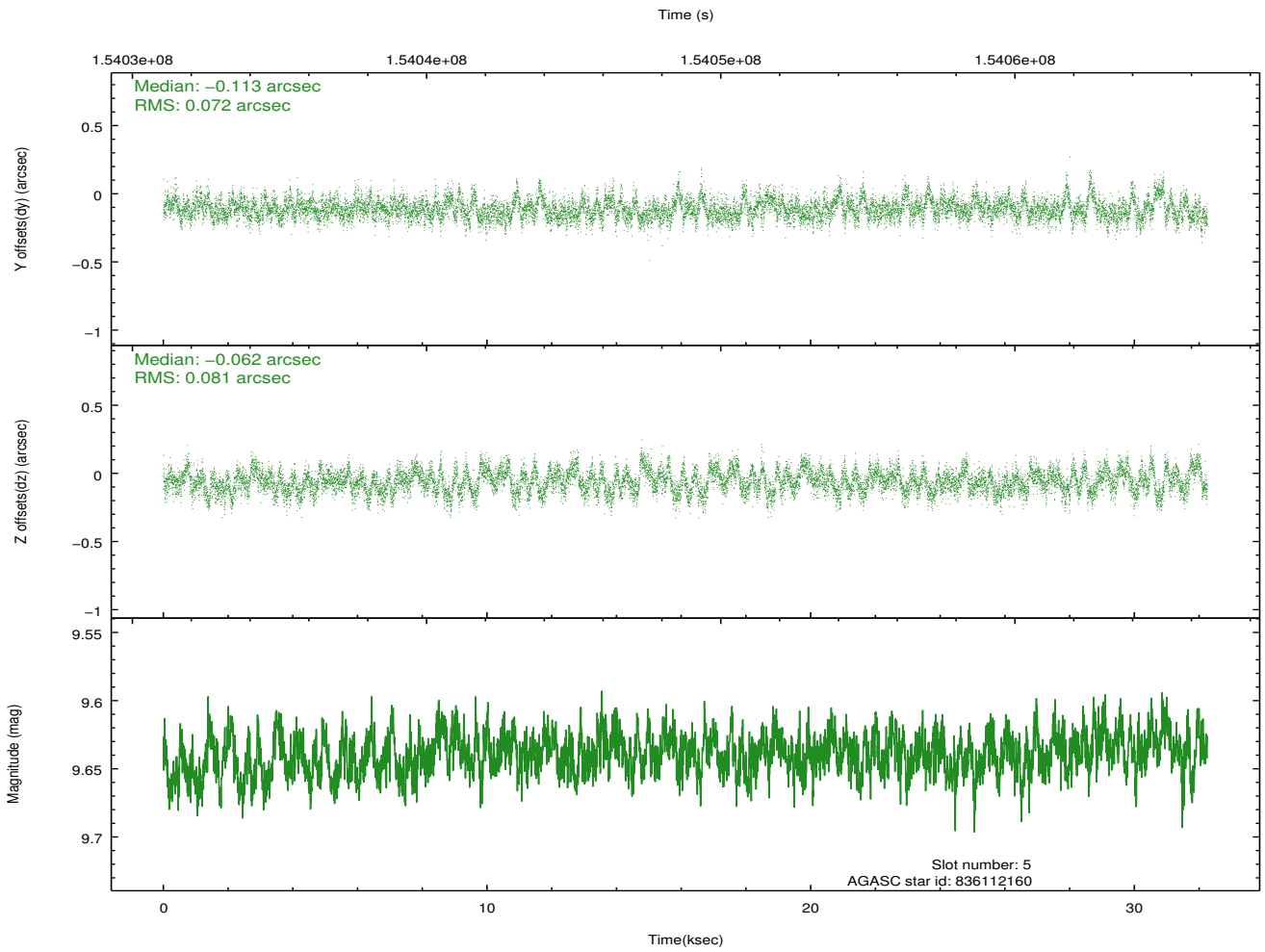
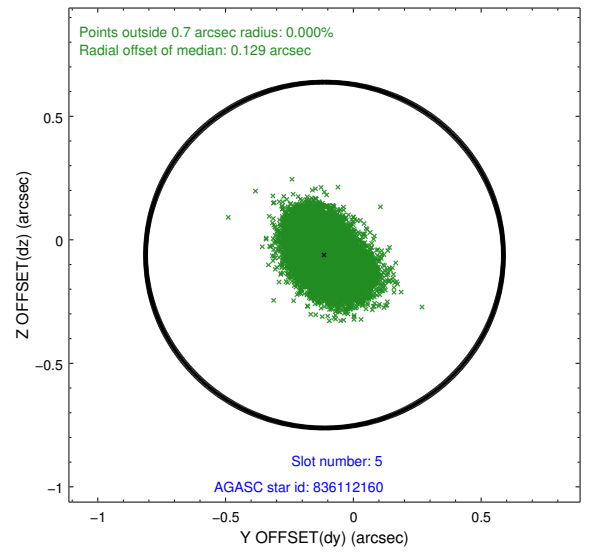
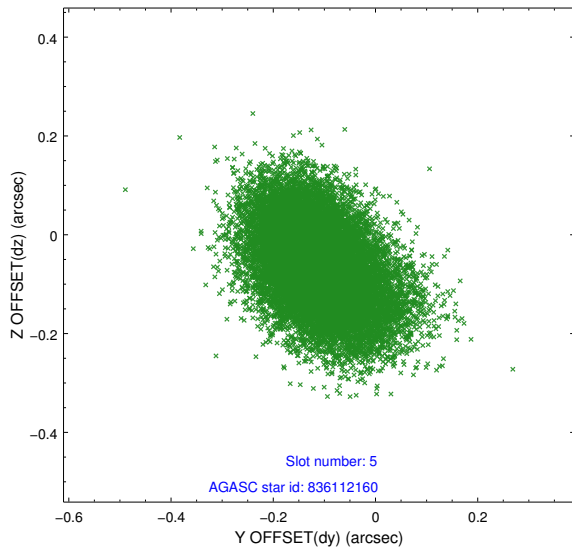
### 2.4.1 Slot 3



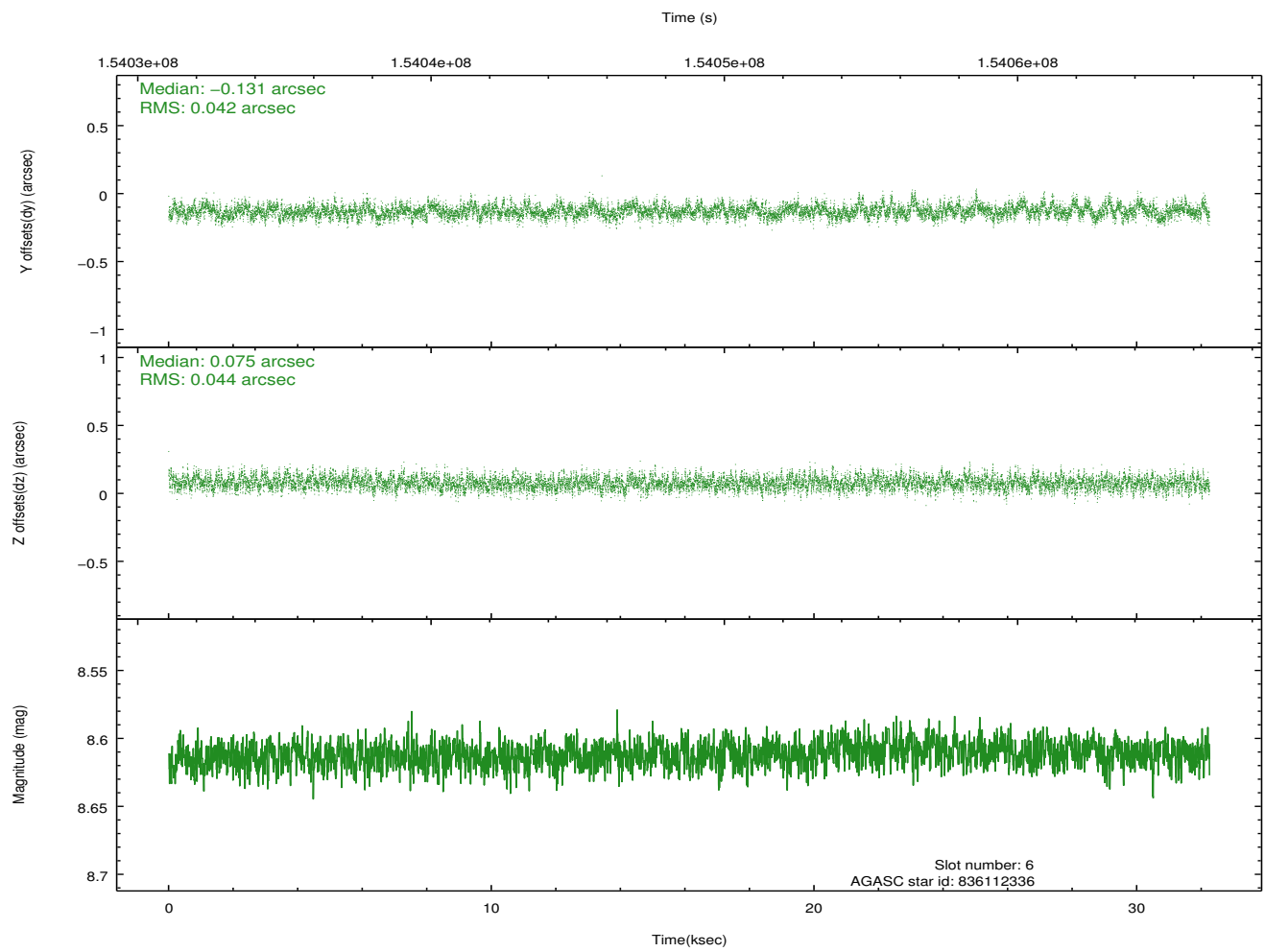
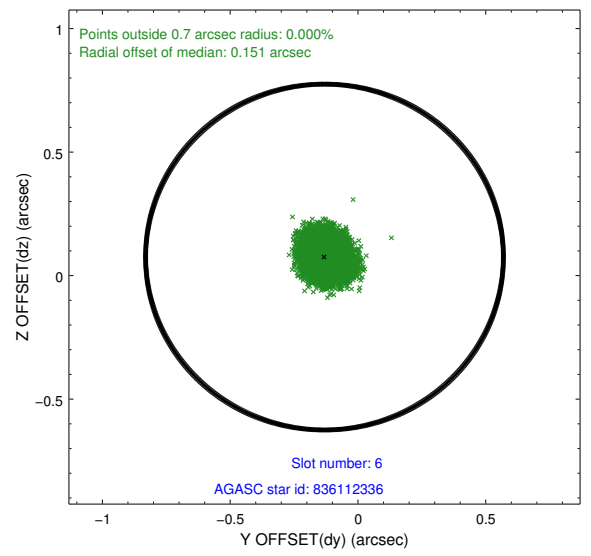
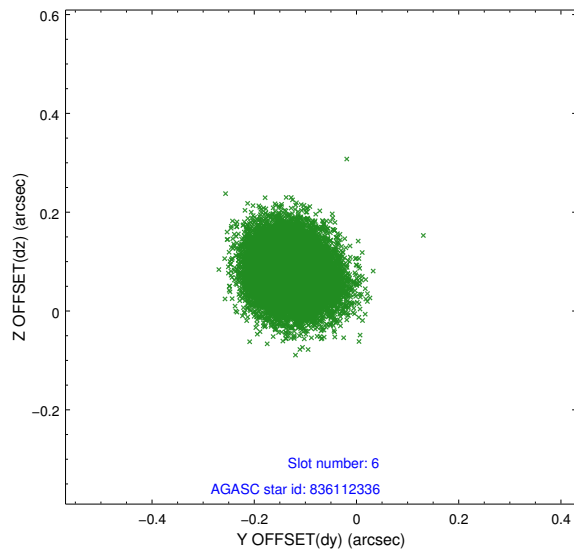
## 2.4.2 Slot 4



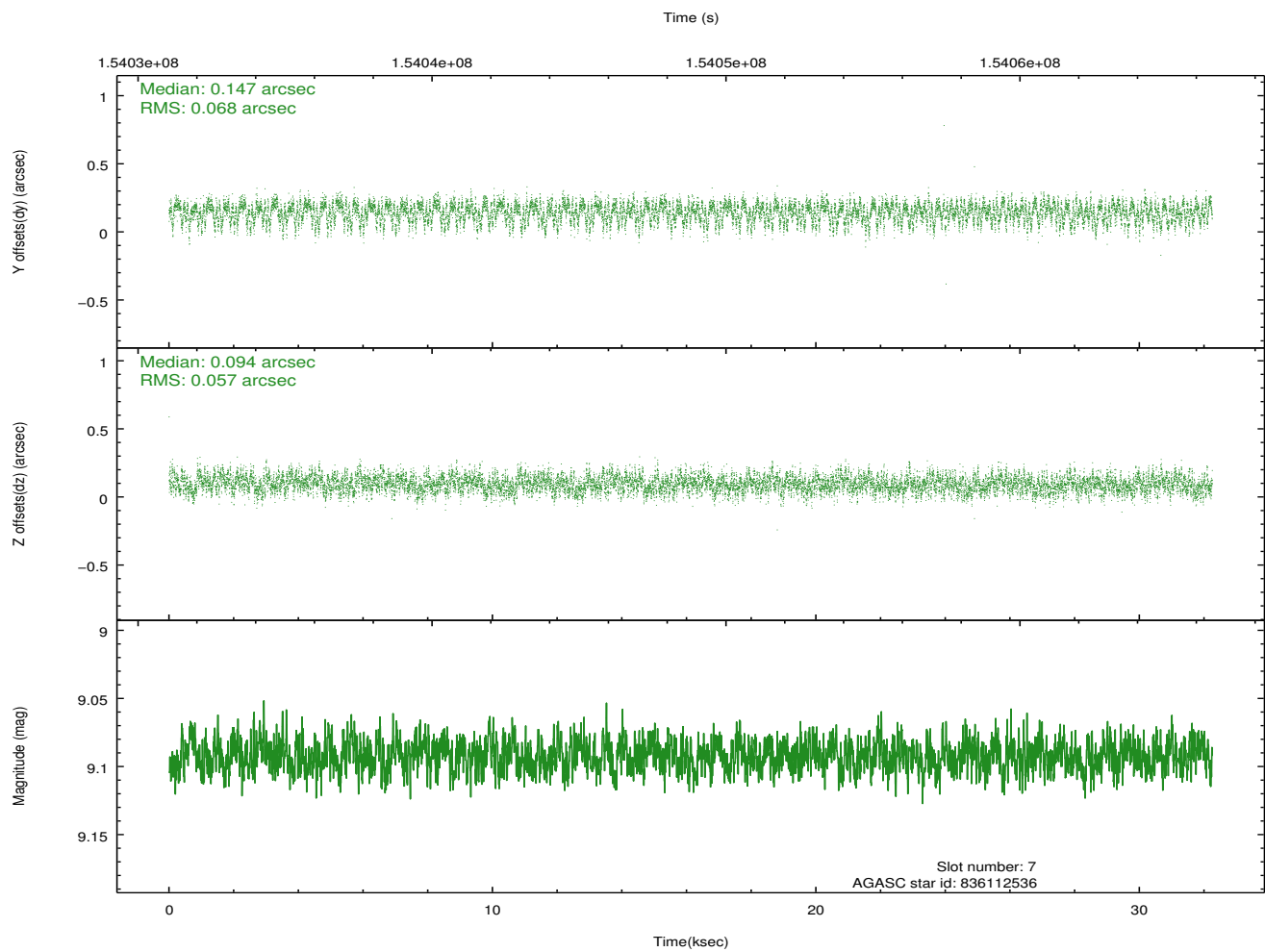
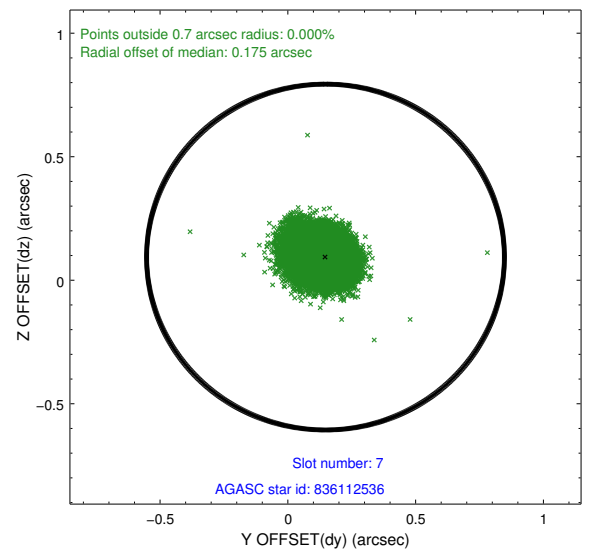
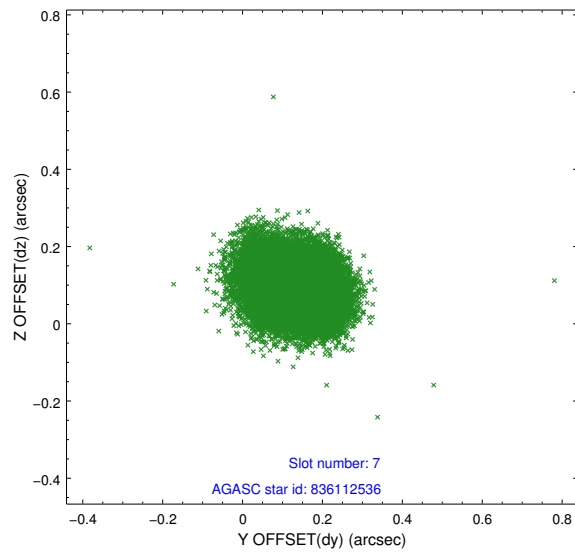
### 2.4.3 Slot 5



## 2.4.4 Slot 6

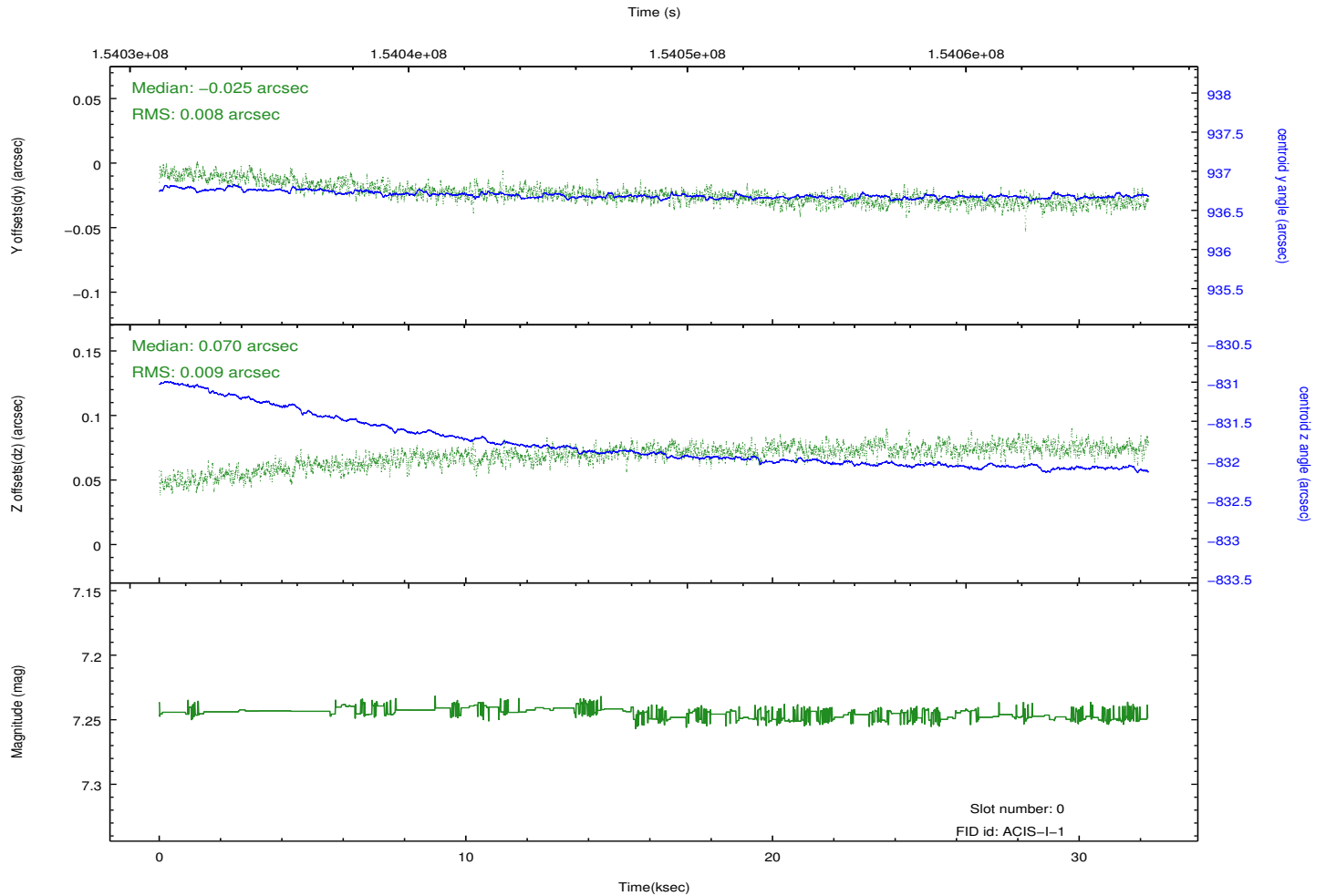
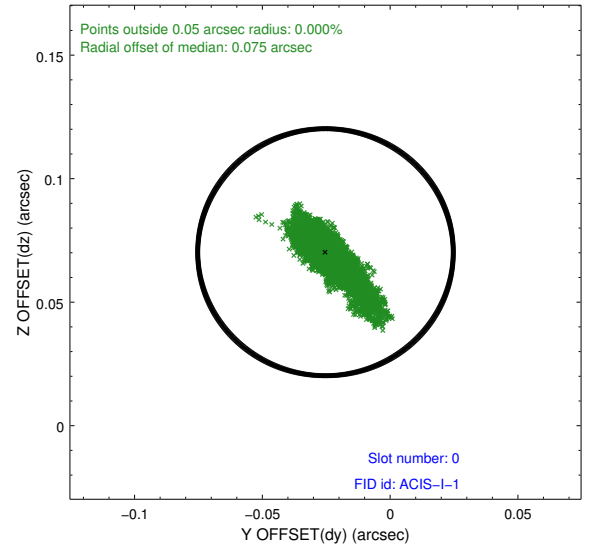
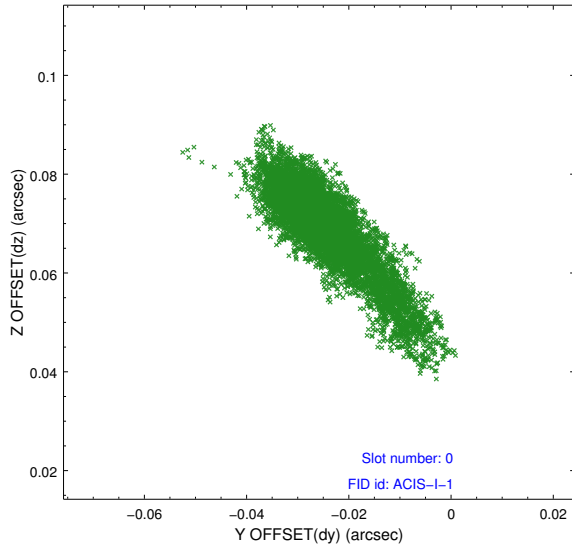


## 2.4.5 Slot 7

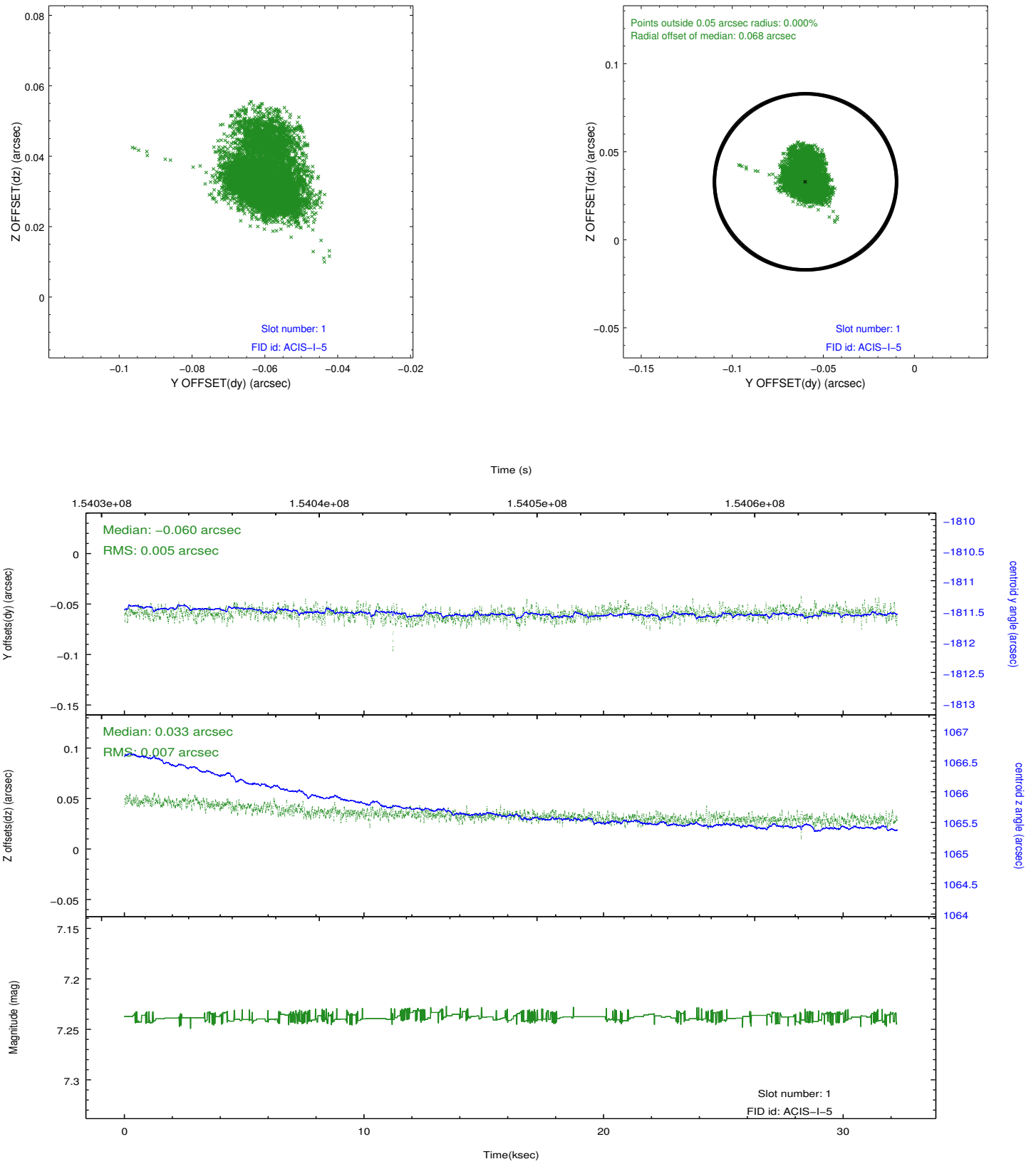


## 2.5 FID Slots

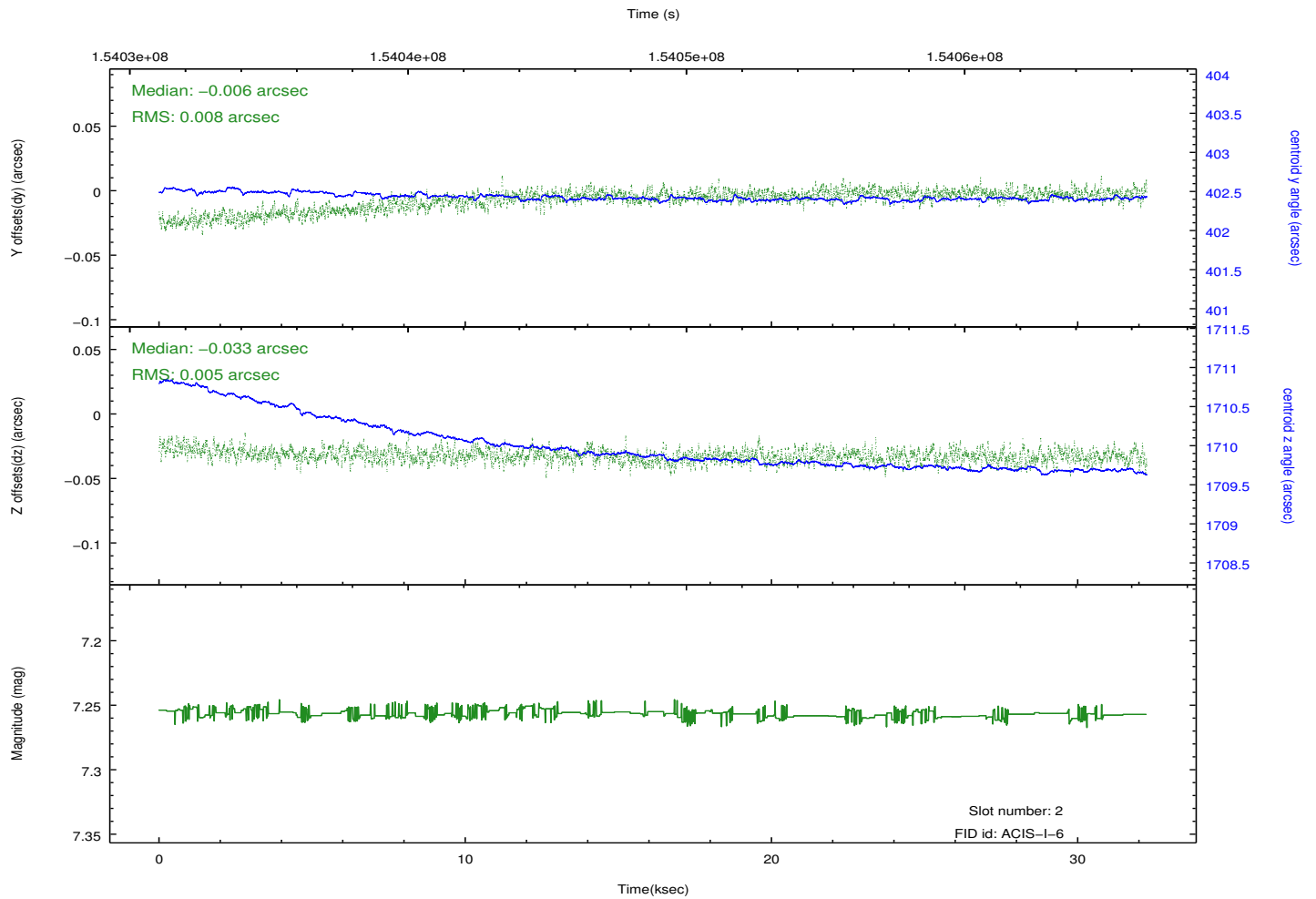
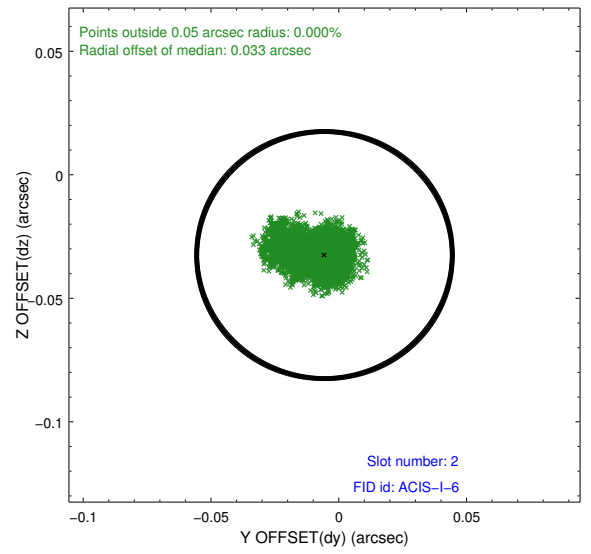
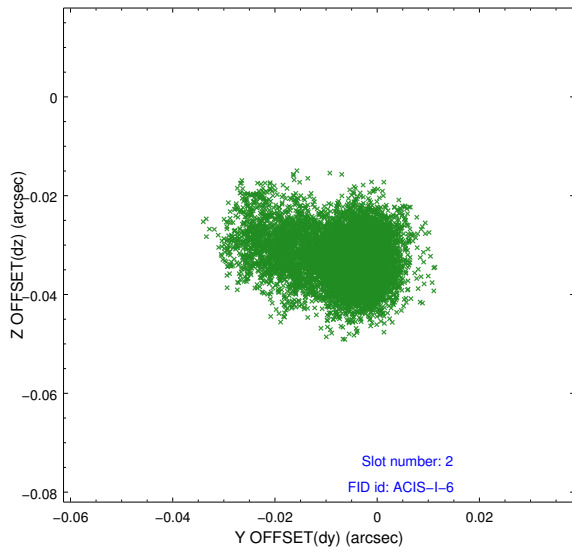
### 2.5.1 Slot 0



## 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)	2012.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.868

### A.2 Comments