

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5744 - L2 Version 3  
Chandra X-Ray Center

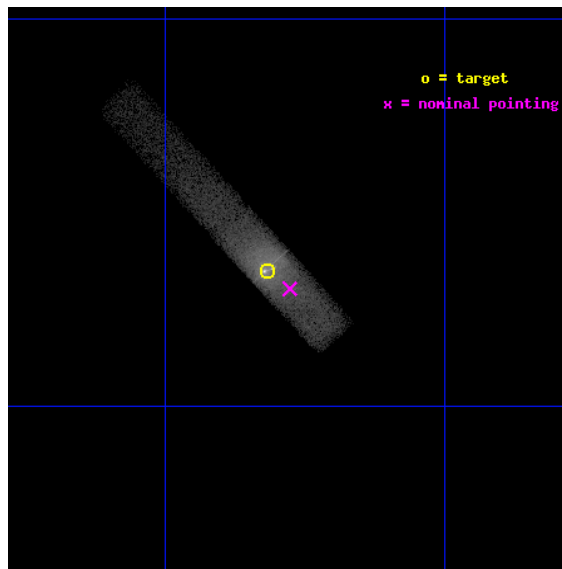
L2 Processing Date : Dec 22 2012

## 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

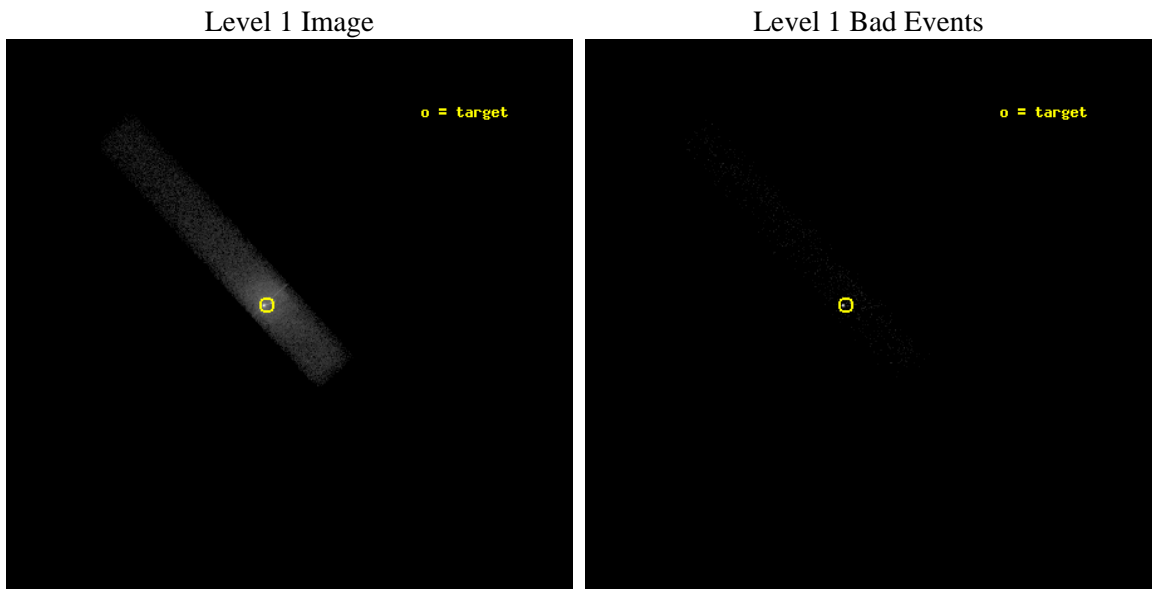
seq_num	701166	Sequence number
obs_id	5744	Observation id
title	The X-ray Flares of Knot 'HST-1' in the M87 Jet (monitoring)	Pro
observer	Dr. John Biretta	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.6944267128	Nominal RA [deg]
dec_nom	12.383671757033	Nominal Dec [deg]
roll_nom	227.41685236366	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5181.2000771761	Sum of GTIs [s]
liveltime	4699.0749838347	Livetime [s]
ontime7	5181.2000771761	Sum of GTIs [s]
l2events	59441	Number of level 2 events



## 2 OBI

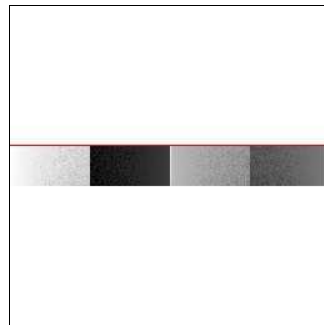
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	5181.2000771761	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime7	5181.2000771761	Sum of GTIs [s]
date	2012-12-22T15:45:21	Date and time of file creation	l1events	77431	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

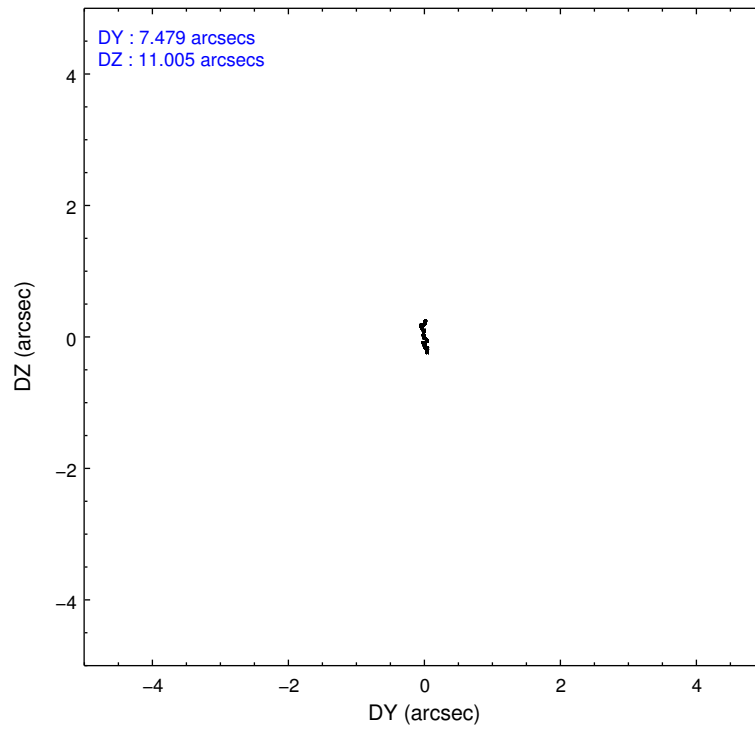
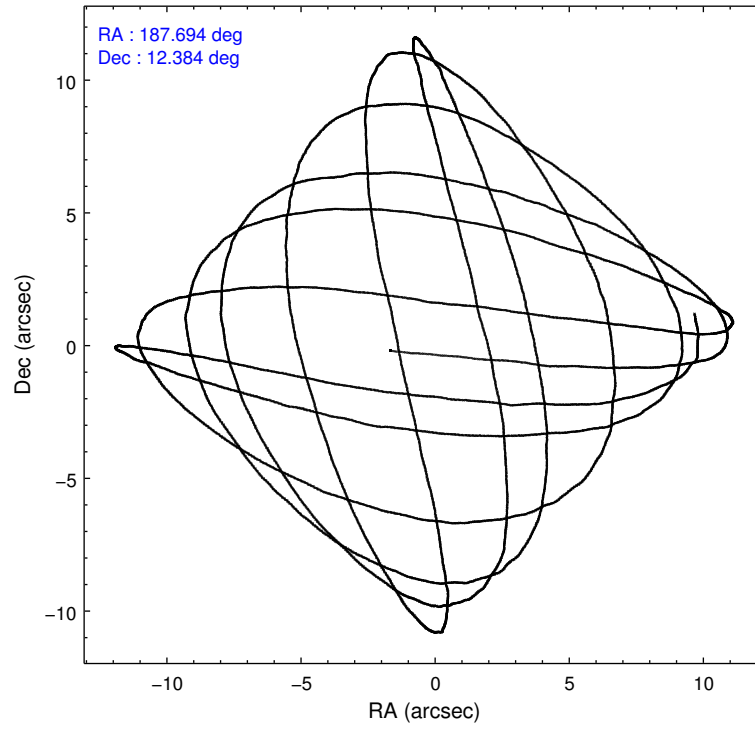
	<b>ccd 7</b>
level 1 events	77431
rejected events	17387
rejected %	22%

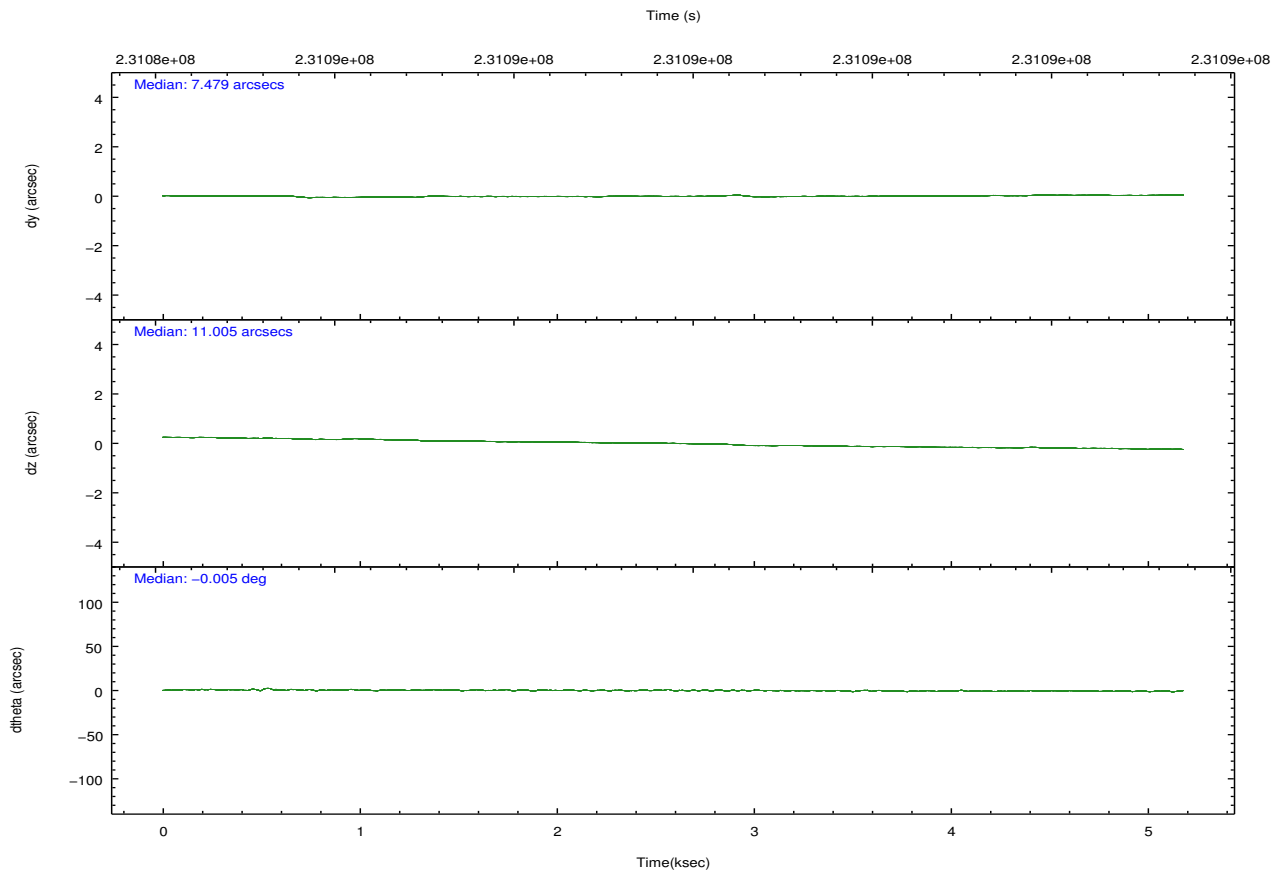
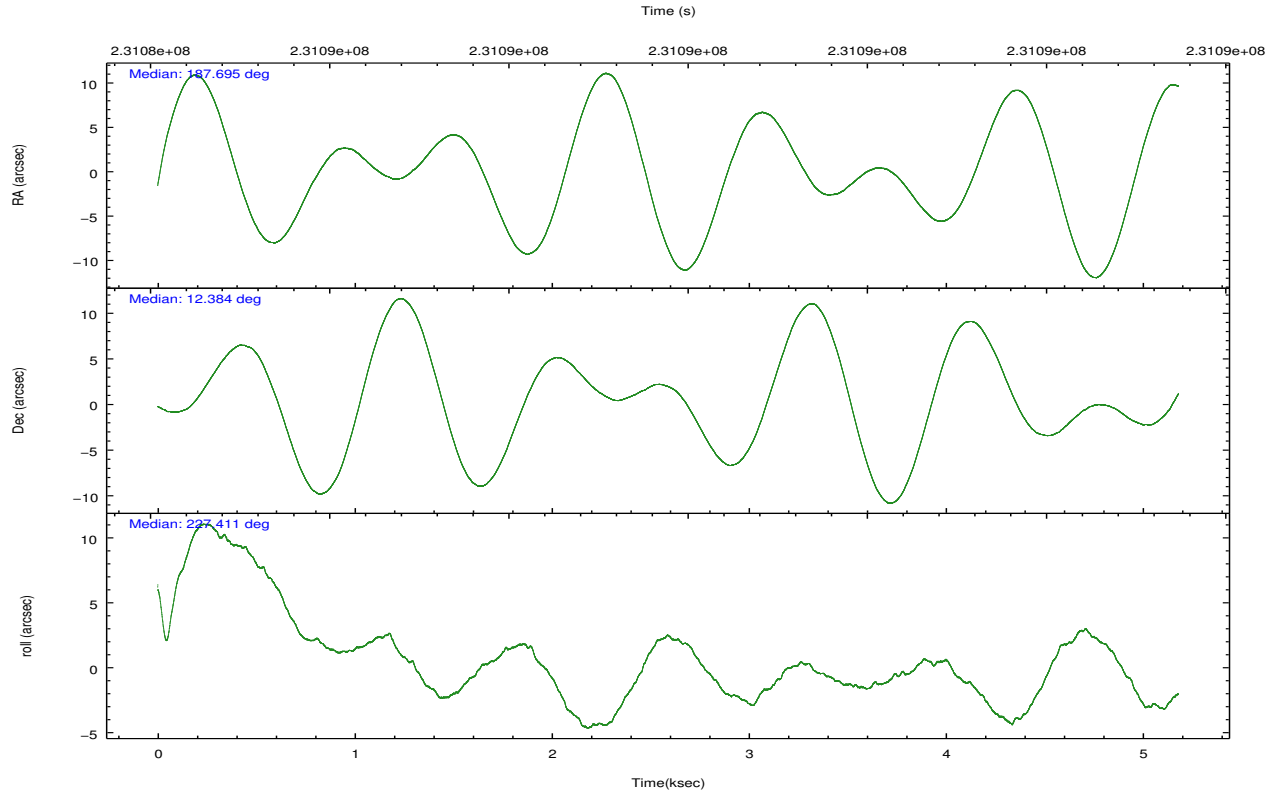
	<b>ccd 7</b>
grade 0 events	18353
	23%
grade 1 events	417
	0%
grade 2 events	15414
	19%
grade 3 events	7171
	9%
grade 4 events	7038
	9%
grade 5 events	3072
	3%
grade 6 events	14450
	18%
grade 7 events	11516
	14%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.700028	187.6944267128021	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.410376	12.38367175703302	Subarray start row	449	449
[deg] Pointing Roll	227.259019	227.4168523636575	Subarray row count	128	128
[s] Window start time (MET)	230774464.184000	230774464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	231379264.184000	231379264.184000	[s] Primary exposure time	0.000000	0.4
[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)	231085474.184000	231084105.48461			
Observation start date	2005-04-28T14:23:30	2005-04-28T14:01:45			
[s] Observation end time (MET)	231090474.184000	231090778.23491			
Observation end date	2005-04-28T15:46:50	2005-04-28T15:52:58			
Read mode	TIMED	TIMED			

## 2.3 Aspect



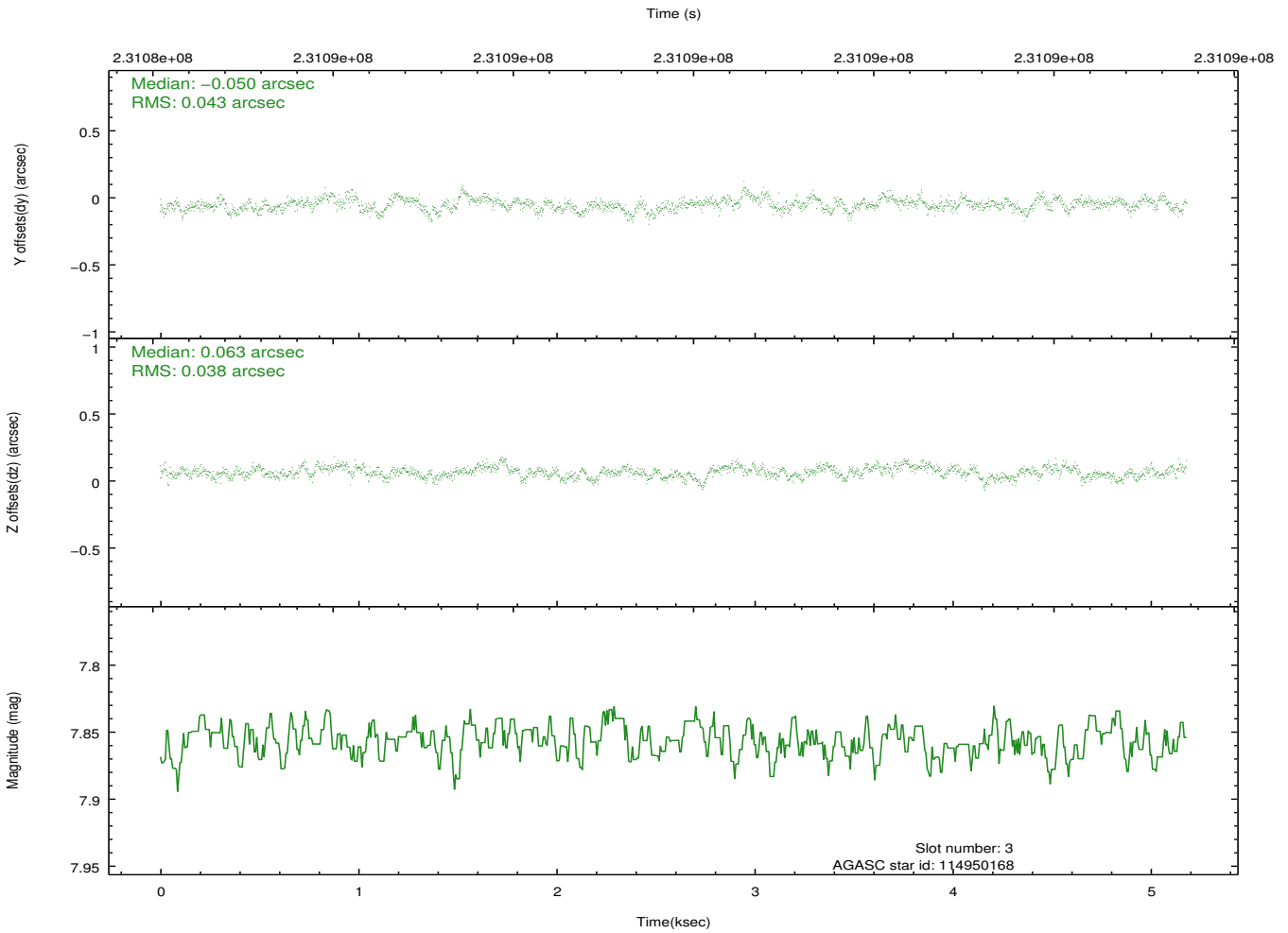
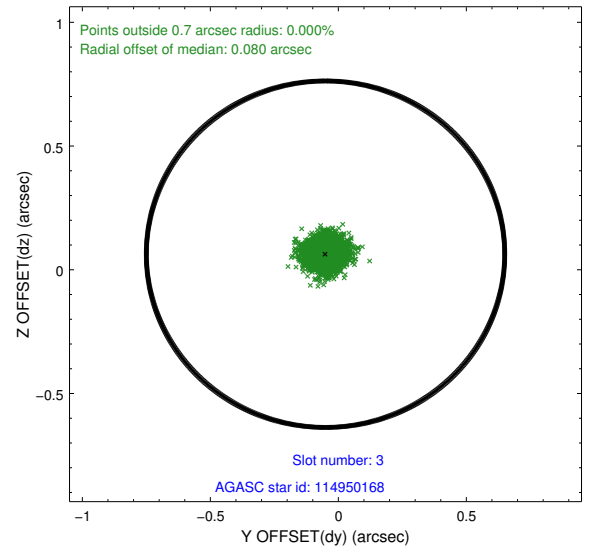
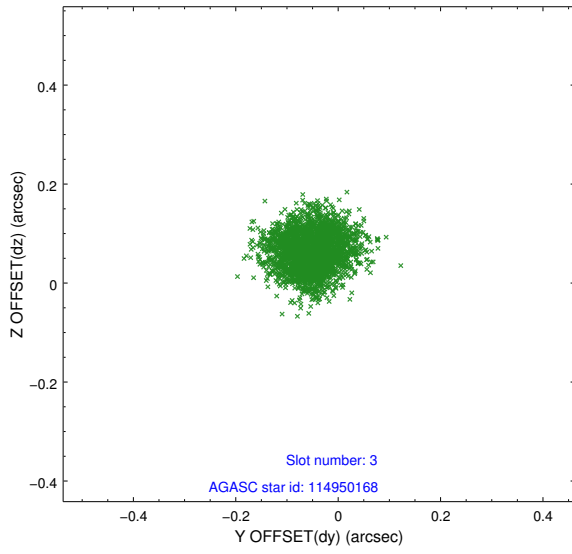


### Slot Statistics

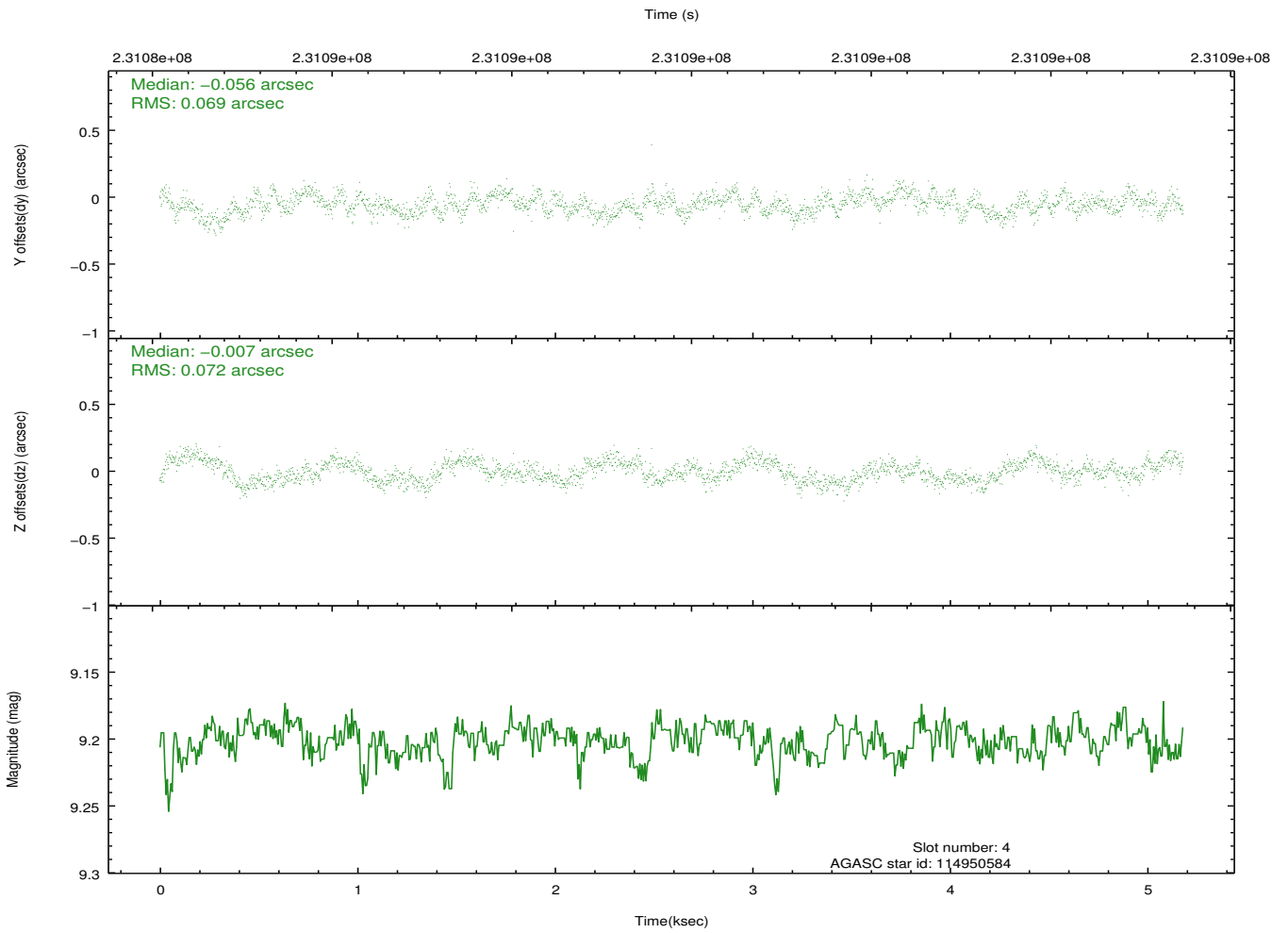
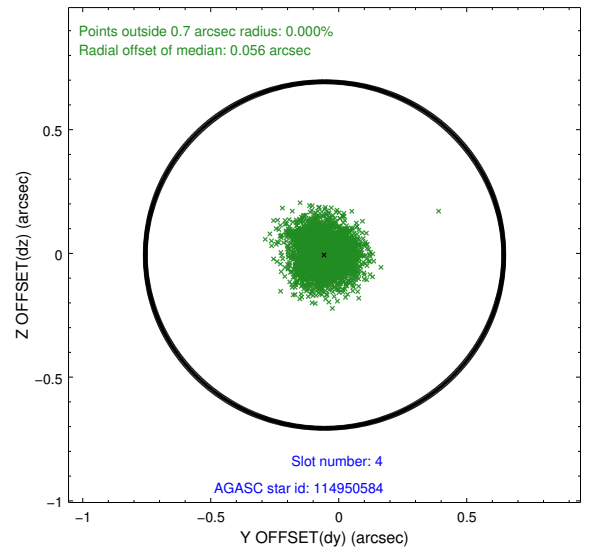
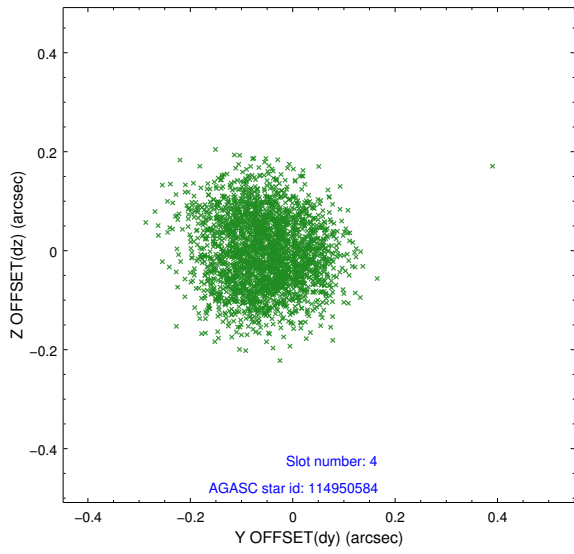
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1264	-0.042	-0.018	0.007	0.013	0.000000	0.000000	-760.25	-1732.30
1	FID	ACIS-S-4	7.21	1264	0.095	0.025	0.006	0.011	0.000000	0.000000	2152.60	175.07
2	FID	ACIS-S-5	7.23	1265	-0.085	0.002	0.007	0.011	0.000000	0.000000	-1811.67	169.97
3	GUIDE	114950168	7.86	2528	-0.050	0.063	0.061	0.096	187.143398	12.117441	2103.31	-724.52
4	GUIDE	114950584	9.20	2529	-0.056	-0.007	0.107	0.167	187.487323	11.827248	2051.55	873.64
5	GUIDE	114952824	8.58	2527	0.008	0.096	0.075	0.115	187.703904	12.486727	-209.61	-176.55
6	GUIDE	114955056	8.31	2529	0.038	-0.094	0.072	0.115	187.914001	12.127854	235.99	1242.68
7	GUIDE	114954440	9.19	2526	0.060	-0.058	0.104	0.168	186.915066	12.219118	2377.74	-1563.06

## 2.4 Star Slots

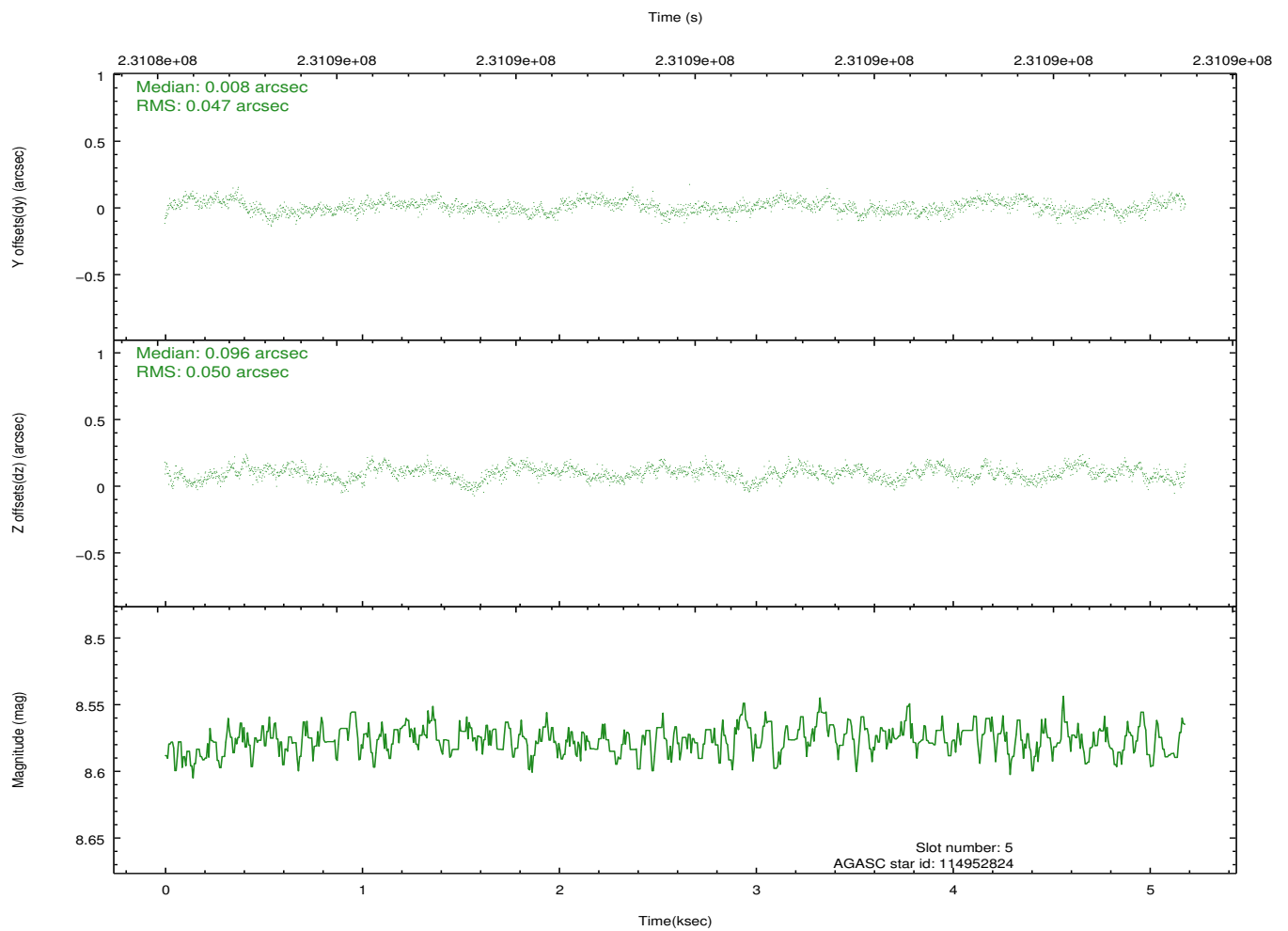
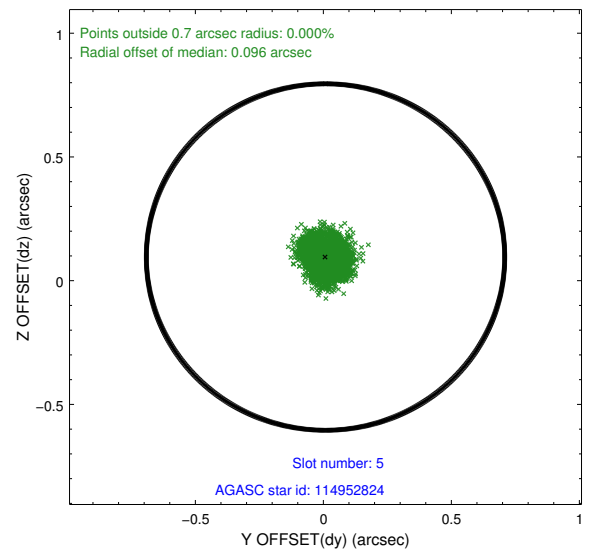
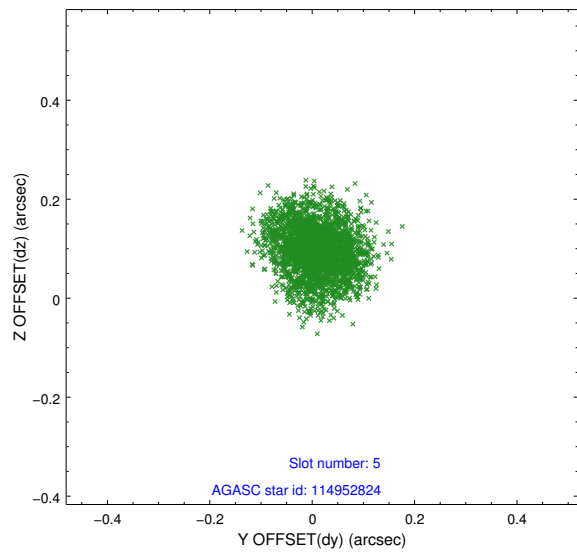
### 2.4.1 Slot 3



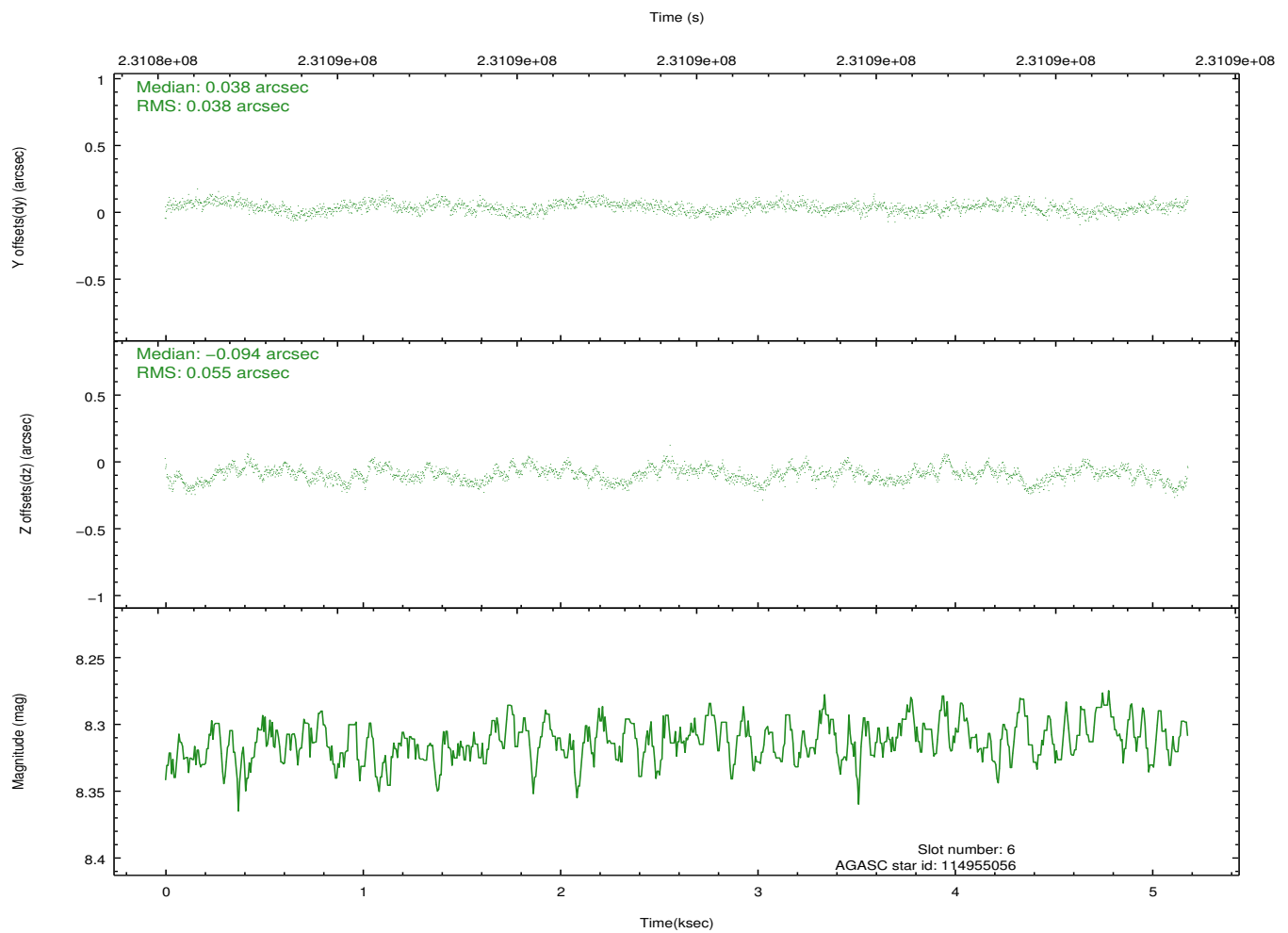
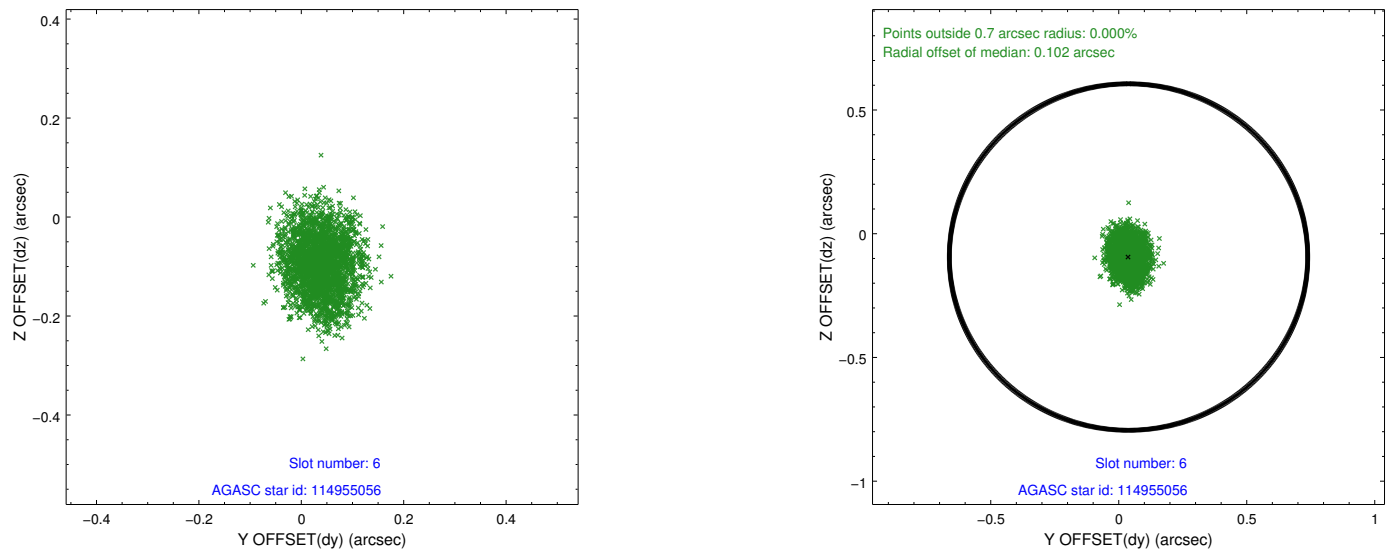
### 2.4.2 Slot 4



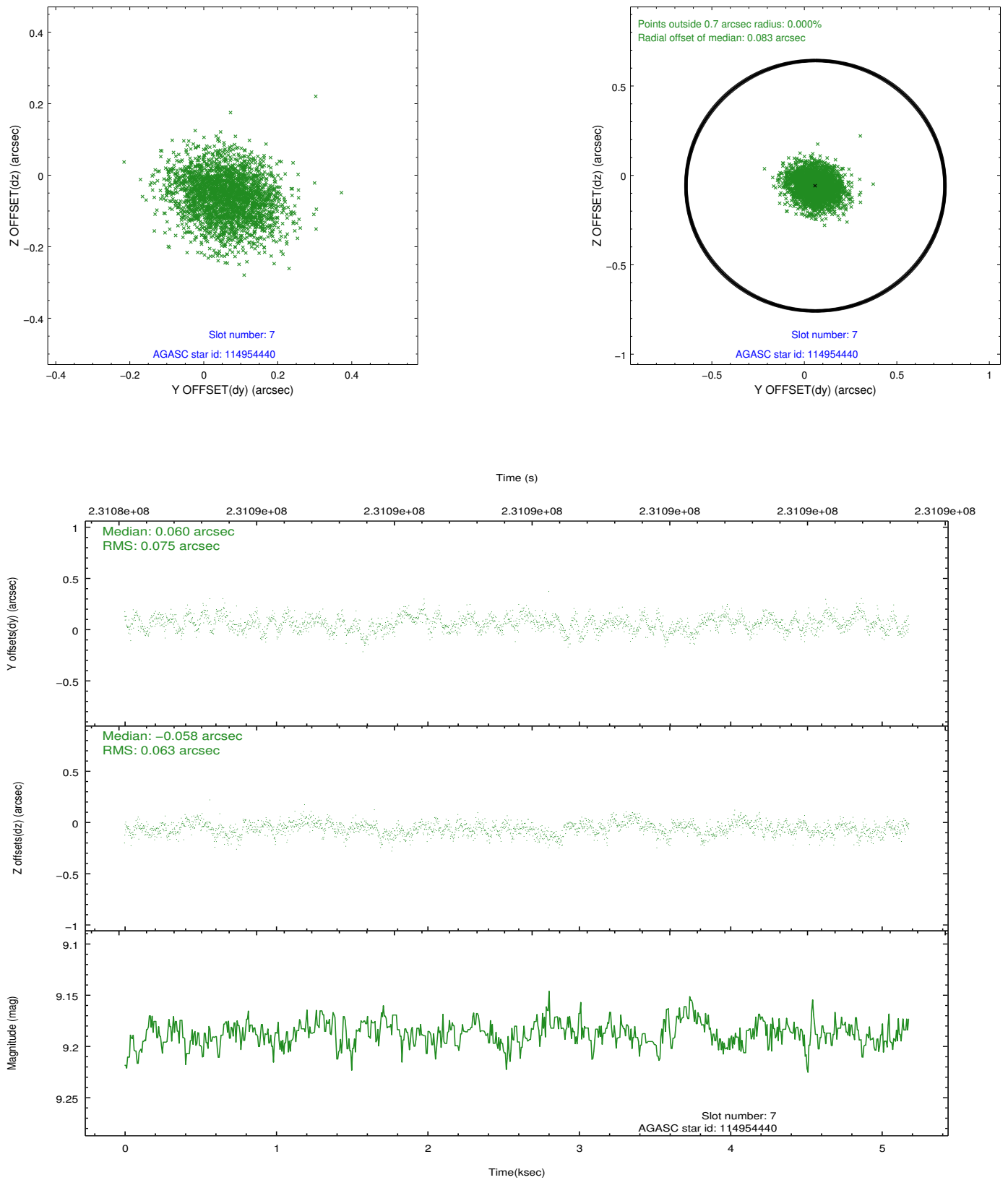
### 2.4.3 Slot 5



## 2.4.4 Slot 6

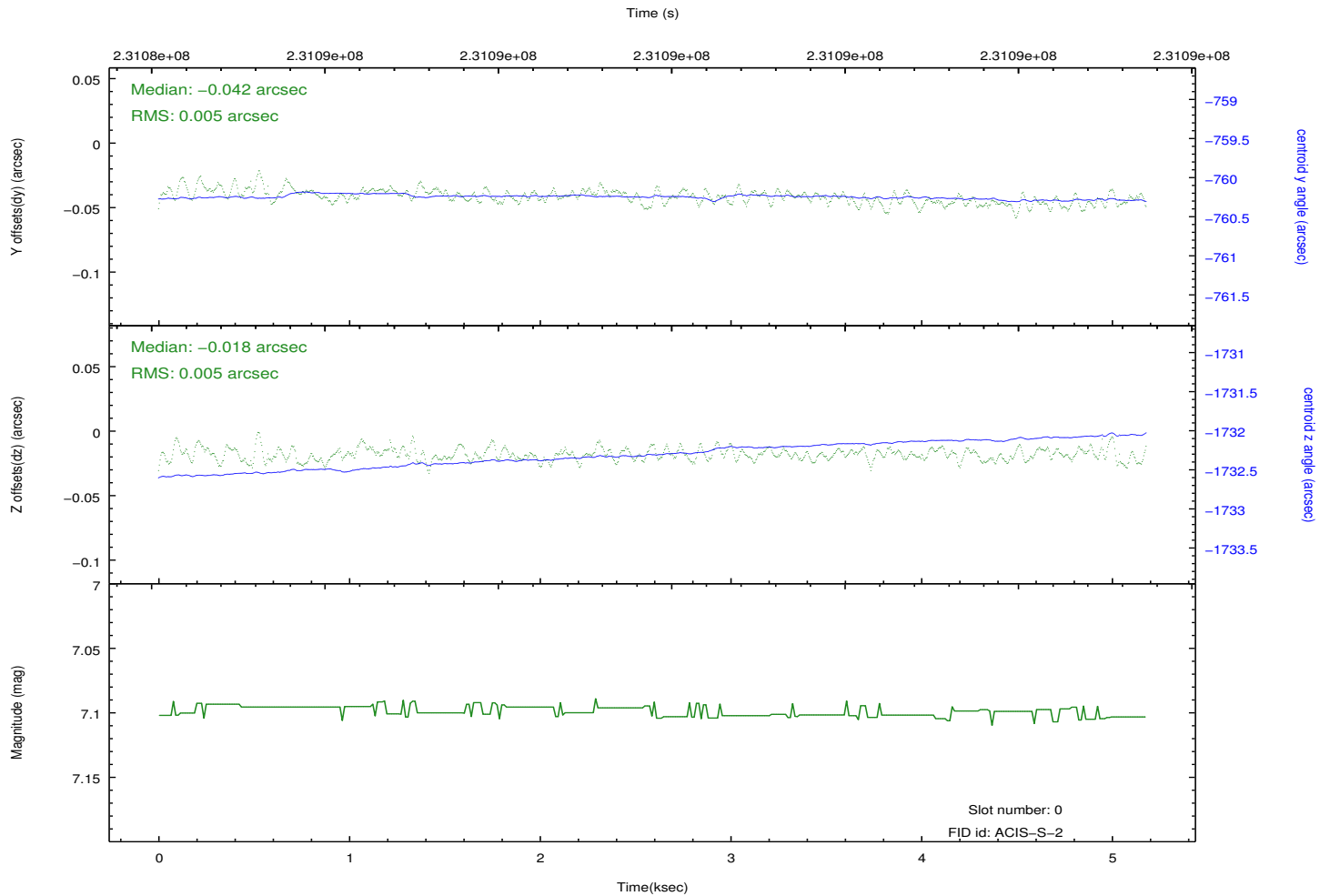
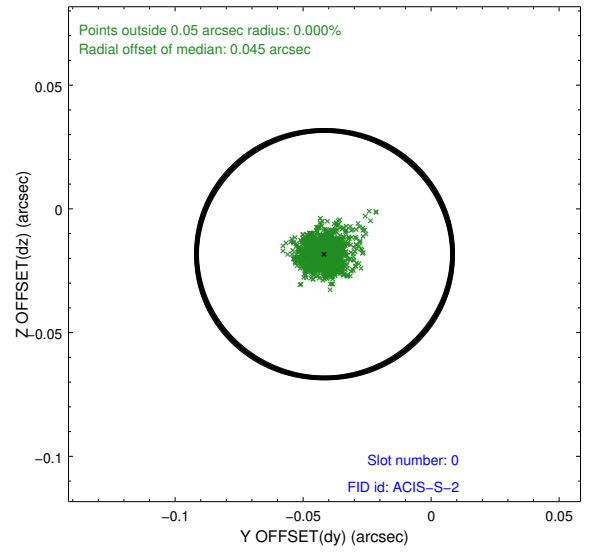
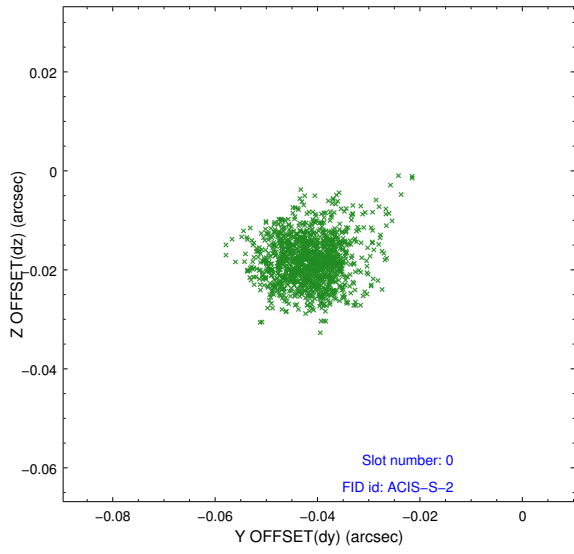


## 2.4.5 Slot 7

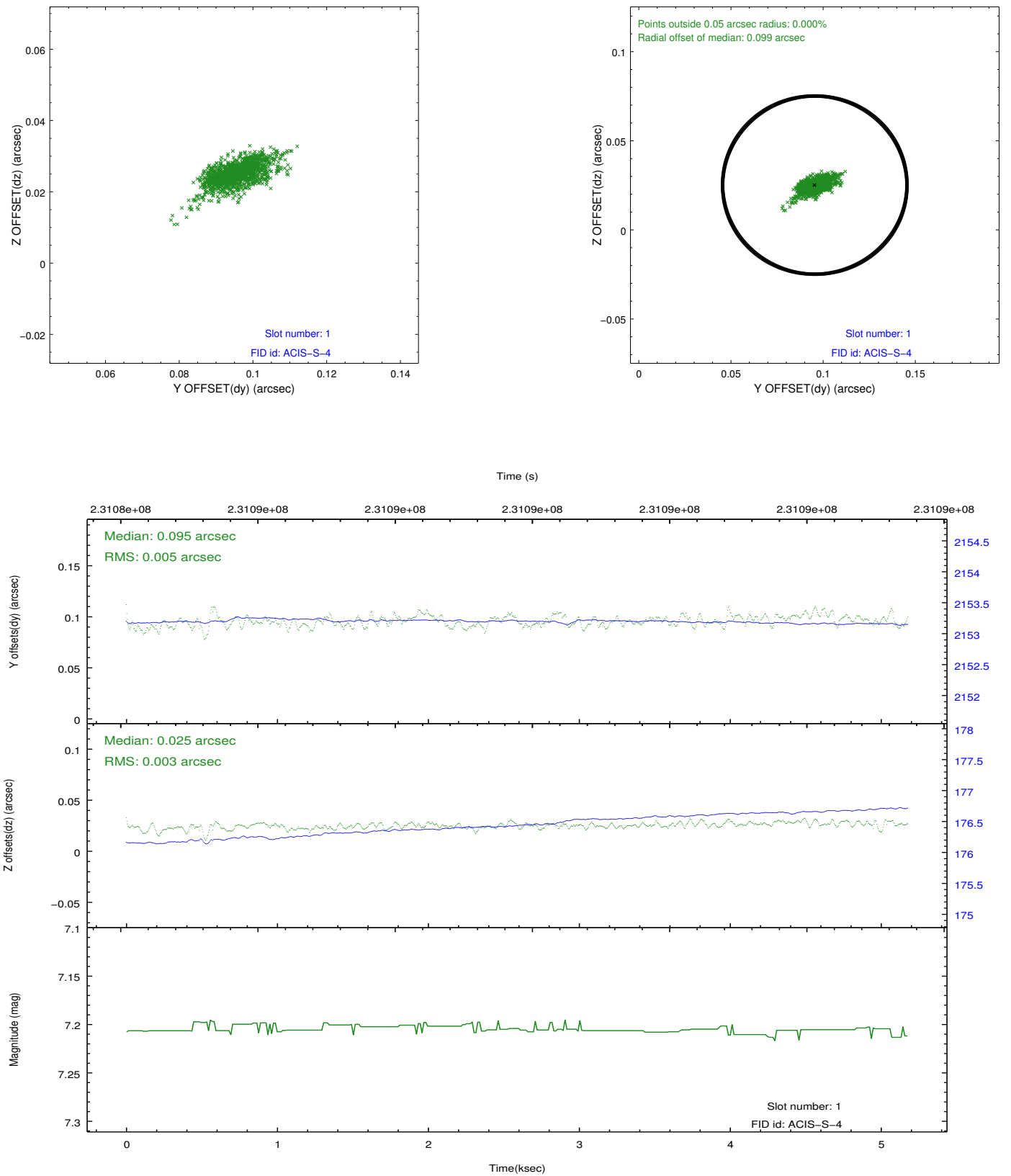


## 2.5 FID Slots

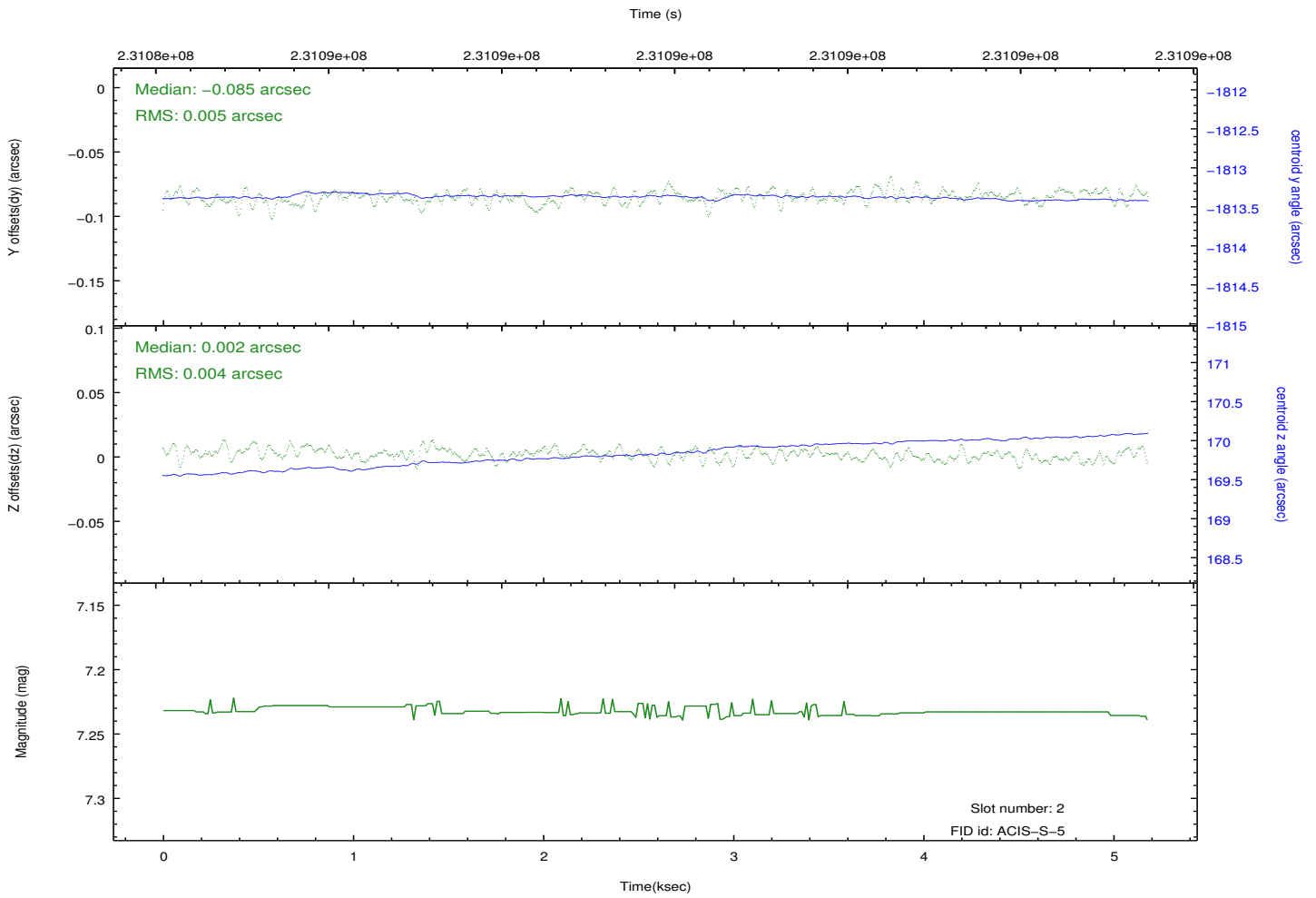
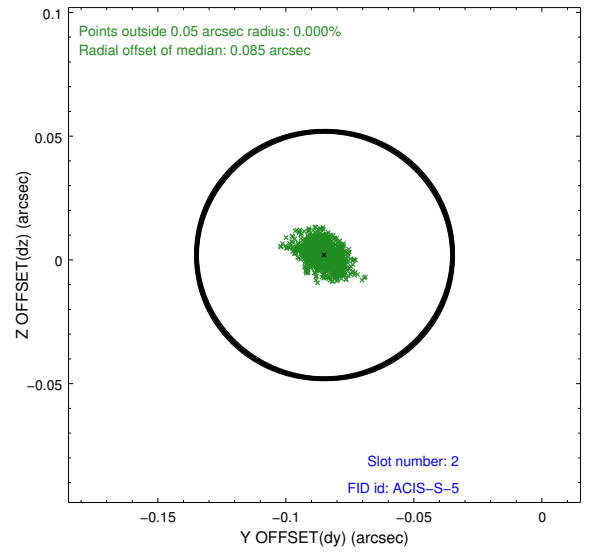
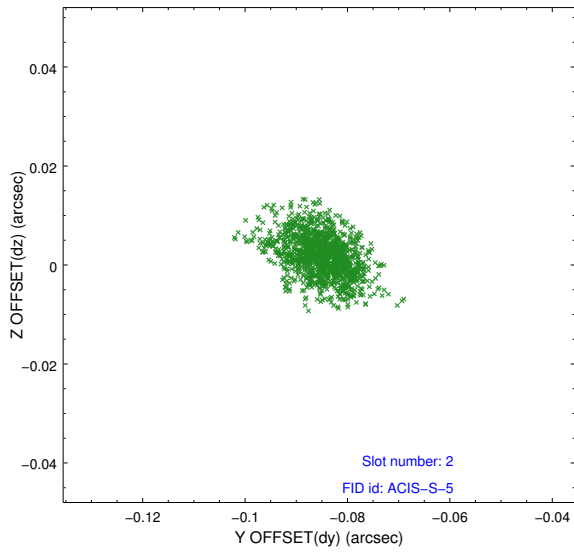
### 2.5.1 Slot 0



## 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)	2013.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1812

## A.2 Comments

Window constraint met. Joint Proposal: CX0-HST