

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8516 - L2 Version 3  
Chandra X-Ray Center

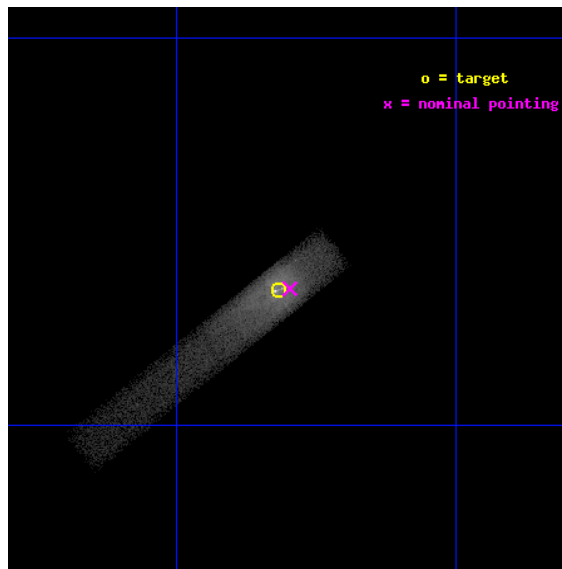
L2 Processing Date : Apr 21 2012

## 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

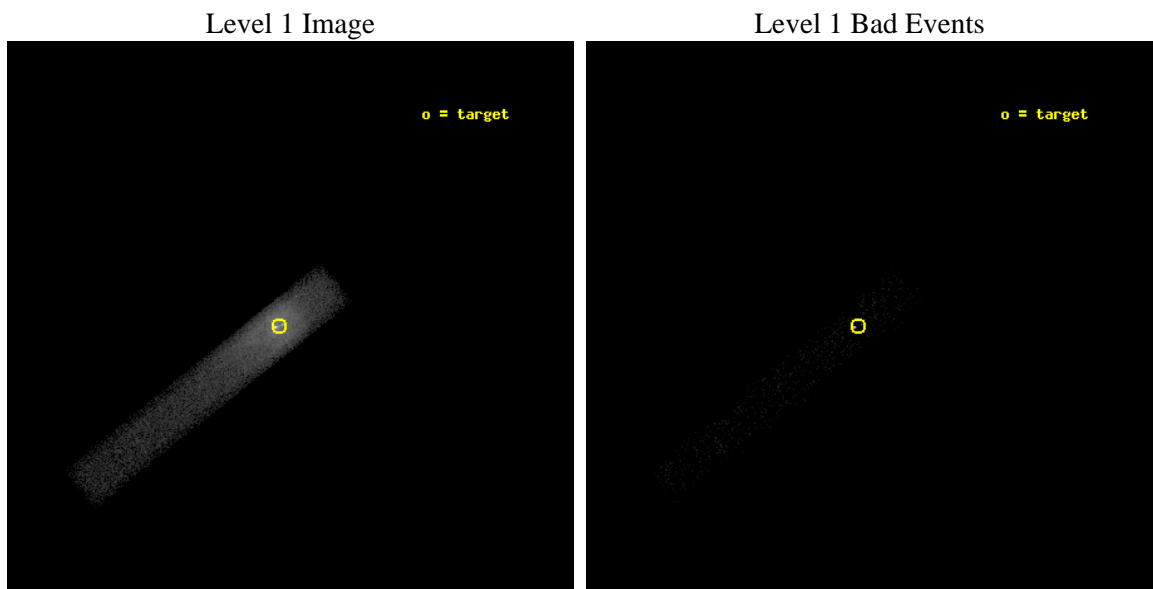
seq_num	701582	Sequence number
obs_id	8516	Observation id
title	Short Timescale X-ray Variability in the M87 Jet: the TeV connection	&#160
observer	Dr. Daniel Harris	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.69919194309	Nominal RA [deg]
dec_nom	12.3921711171503	Nominal Dec [deg]
roll_nom	141.28598226912	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5159.1996924877	Sum of GTIs [s]
livetime	4679.1217961978	Livetime [s]
ontime7	5159.1996924877	Sum of GTIs [s]
l2events	59145	Number of level 2 events



## 2 OBI

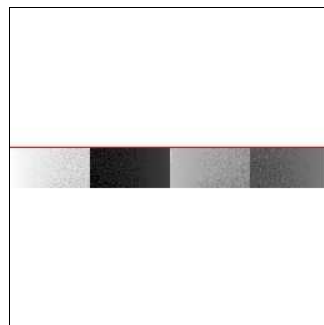
### 2.1 OBI

#### 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	8.4.4	Processing system revision	ontime	5159.1996924877	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime7	5159.1996924877	Sum of GTIs [s]
date	2012-04-21T14:09:53	Date and time of file creation	l1events	70763	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

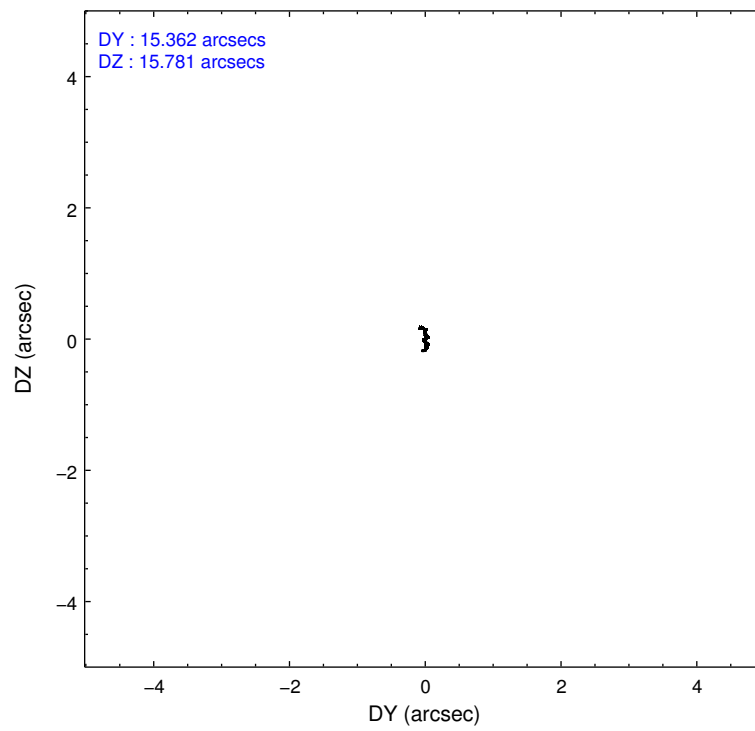
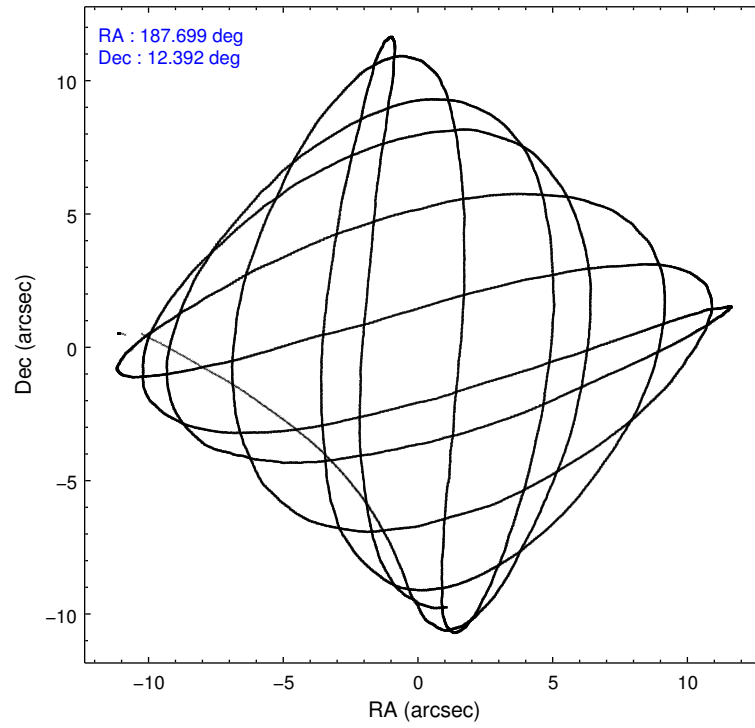
	<b>ccd 7</b>
level 1 events	70763
rejected events	10968
rejected %	15%

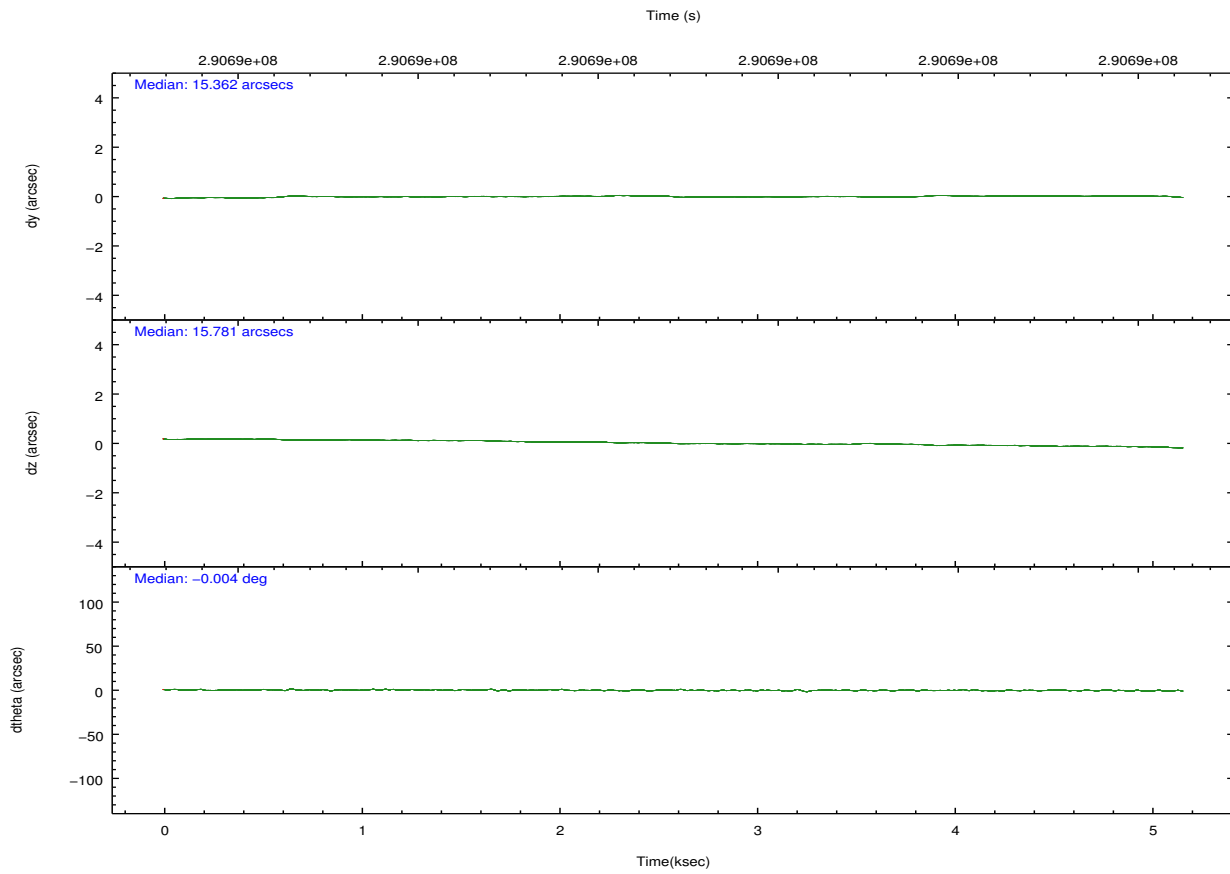
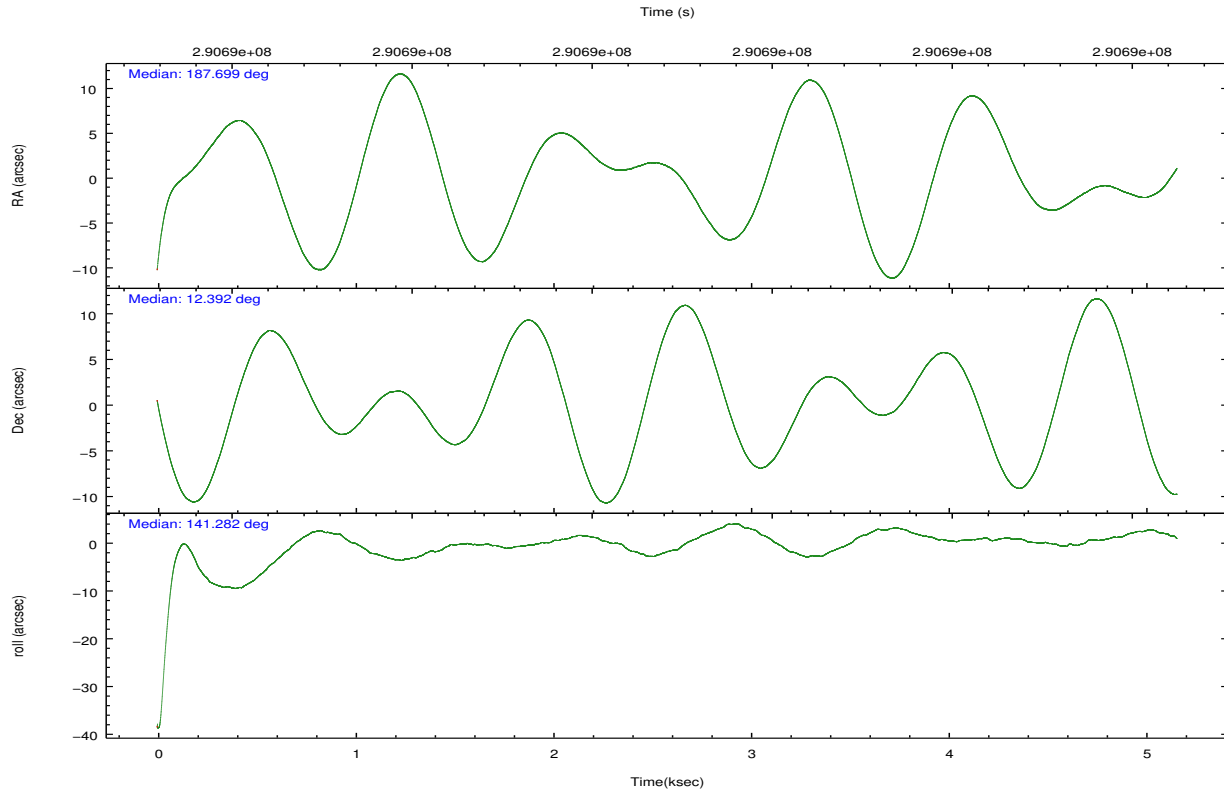
	<b>ccd 7</b>
grade 0 events	18156
	25%
grade 1 events	327
	0%
grade 2 events	15782
	22%
grade 3 events	7345
	10%
grade 4 events	7027
	9%
grade 5 events	2274
	3%
grade 6 events	13762
	19%
grade 7 events	6090
	8%

## 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	187.726963	187.699191943093	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.388490	12.39217117150344	Subarray start row	449	449
[deg] Pointing Roll	141.123496	141.2859822691182	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	290687993.184000	290686895.78518			
Observation start date	2007-03-19T10:38:48	2007-03-19T10:21:35			
[s] Observation end time (MET)	290692993.184000	290693441.4355			
Observation end date	2007-03-19T12:02:08	2007-03-19T12:10:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect



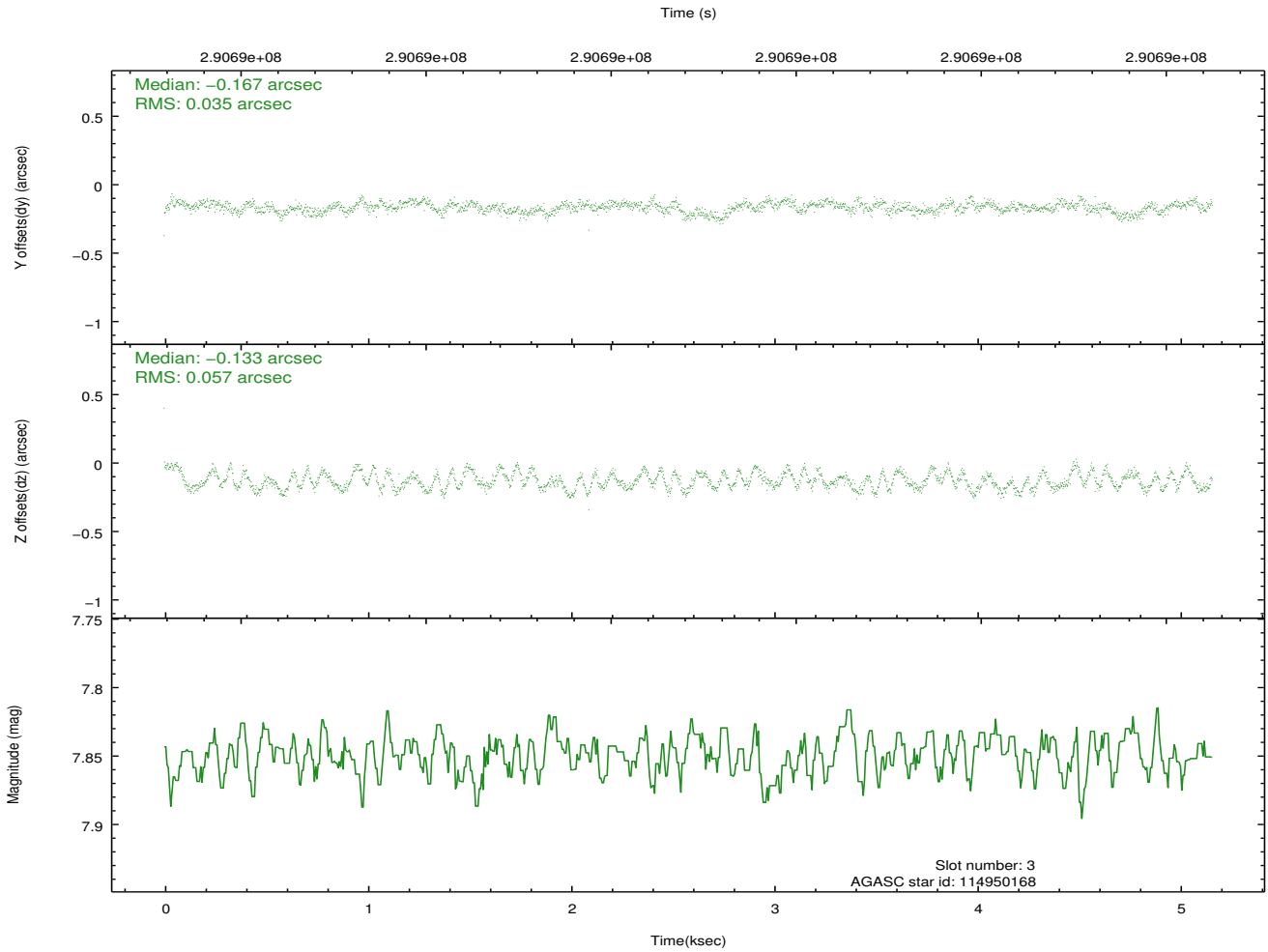
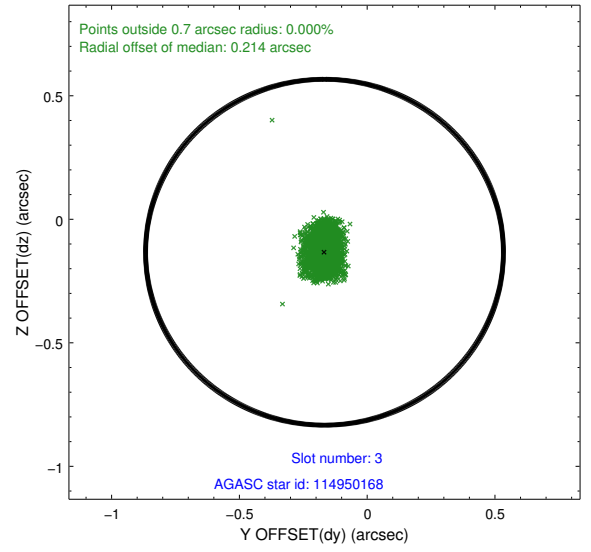
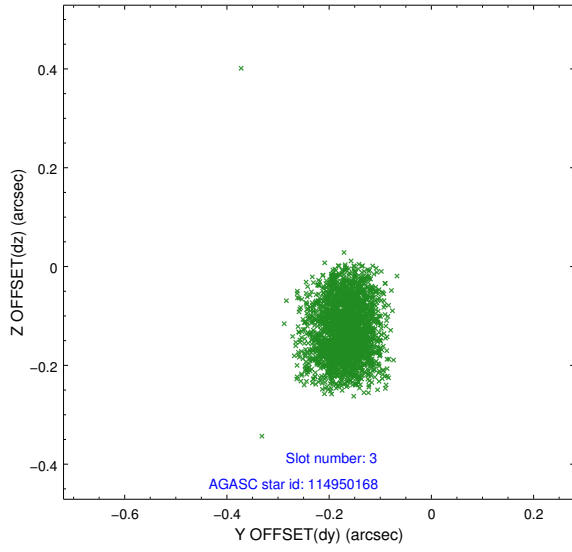


### Slot Statistics

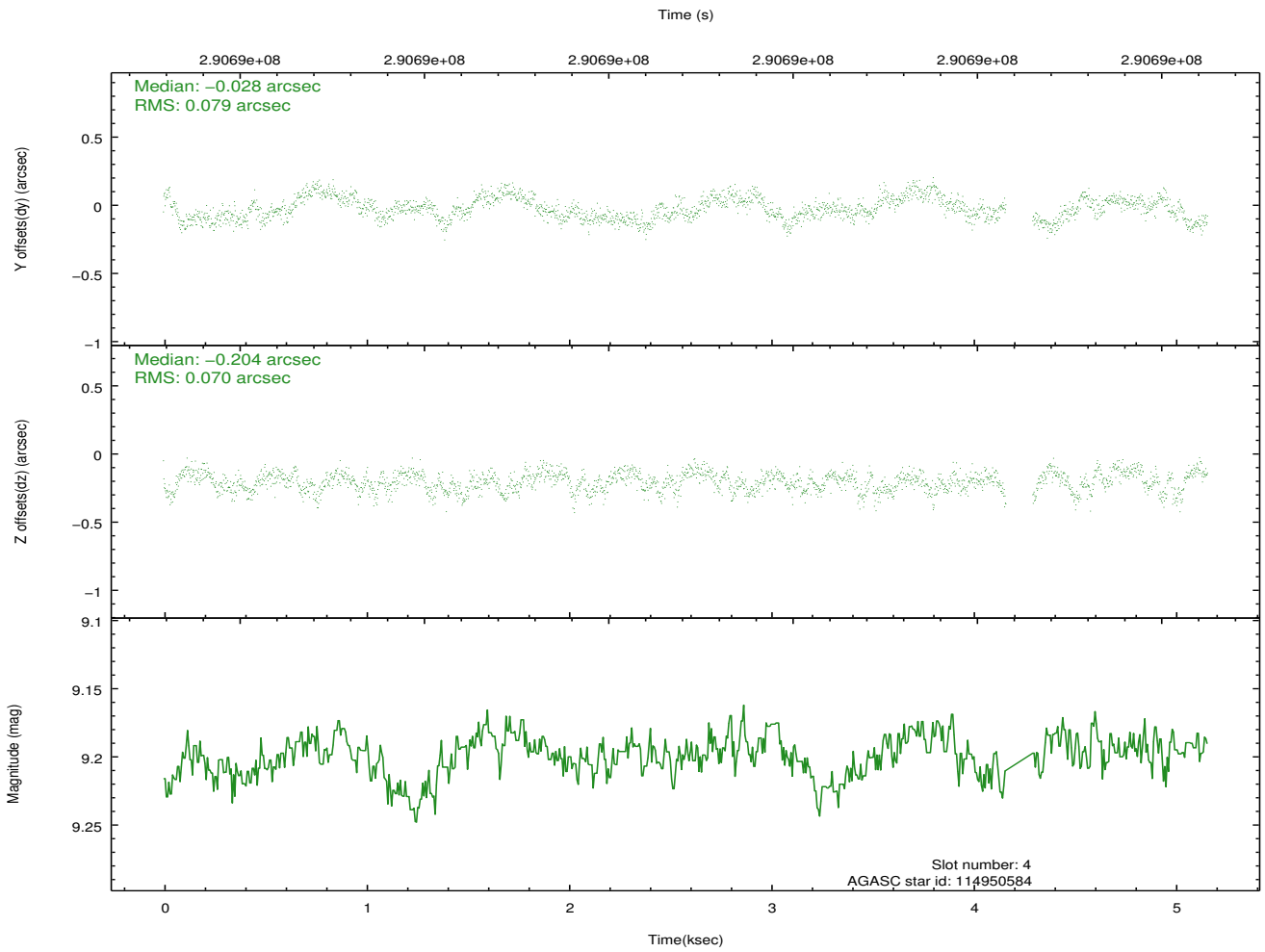
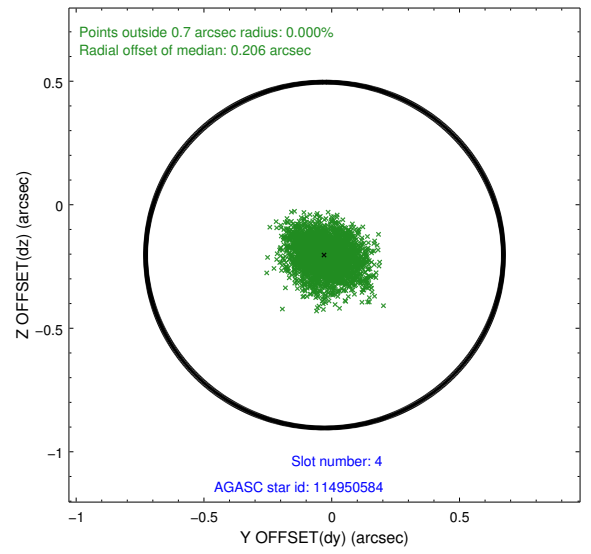
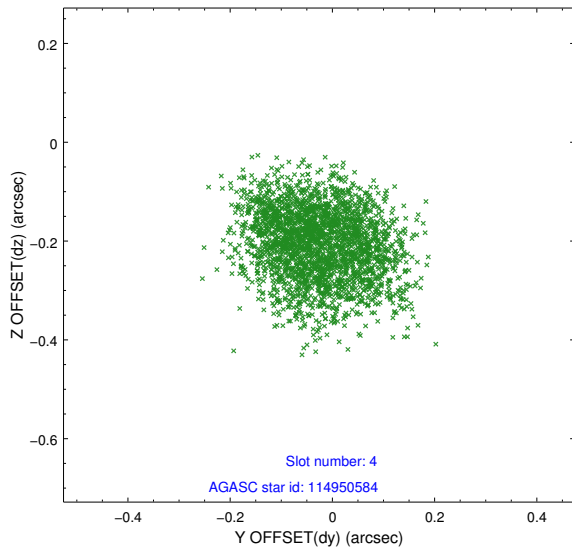
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1258	-0.106	-0.037	0.006	0.010	0.000000	0.000000	-768.44	-1737.24
1	FID	ACIS-S-4	7.19	1259	0.216	0.061	0.005	0.009	0.000000	0.000000	2144.61	170.12
2	FID	ACIS-S-5	7.22	1259	-0.141	-0.015	0.006	0.010	0.000000	0.000000	-1819.82	165.05
3	GUIDE	114950168	7.85	2517	-0.167	-0.133	0.072	0.114	187.143398	12.117441	987.78	2046.92
4	GUIDE	114950584	9.20	2454	-0.028	-0.204	0.115	0.174	187.487323	11.827248	-610.23	2103.15
5	GUIDE	114952824	8.57	2517	-0.055	0.223	0.069	0.110	187.703904	12.486727	285.15	-223.41
6	GUIDE	114954440	9.20	2517	0.016	-0.071	0.102	0.155	186.915066	12.219118	1843.45	2263.77
7	GUIDE	114955056	8.33	2516	0.231	0.179	0.074	0.116	187.914001	12.127854	-1100.08	317.90

## 2.4 Star Slots

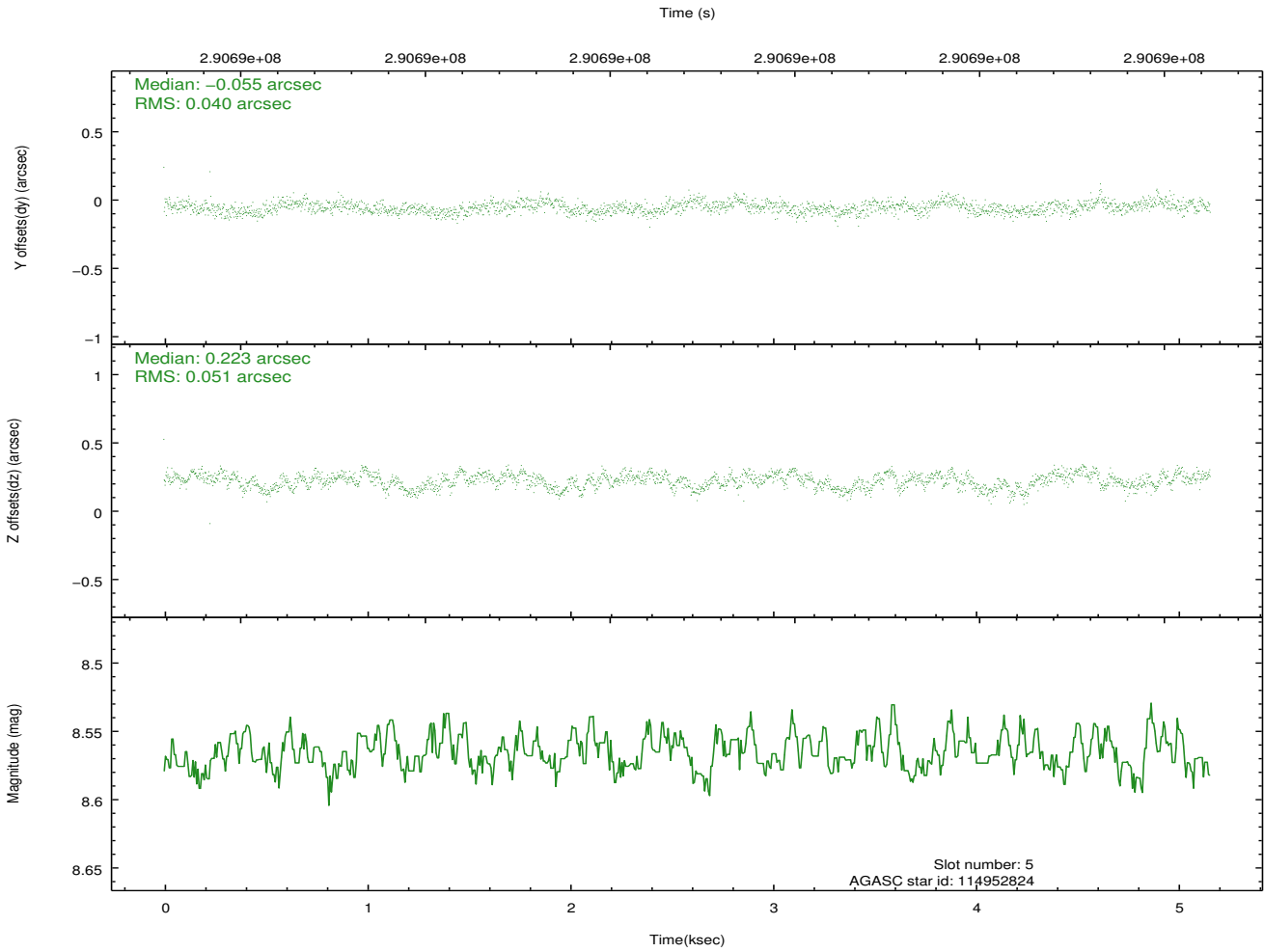
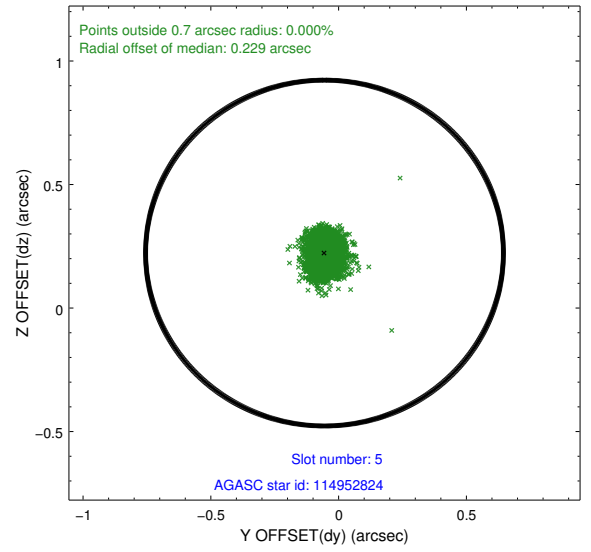
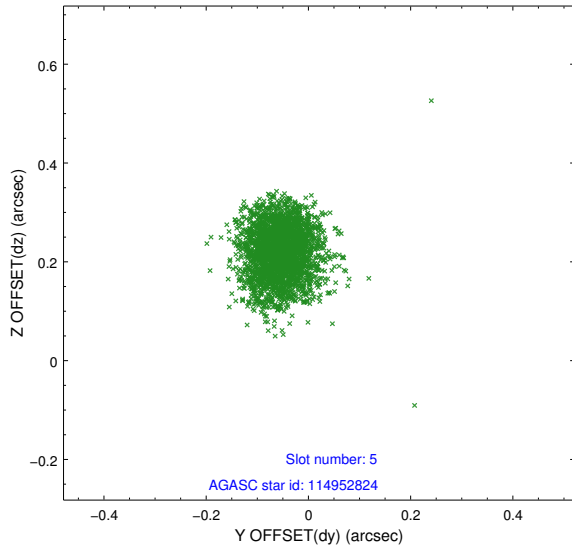
### 2.4.1 Slot 3



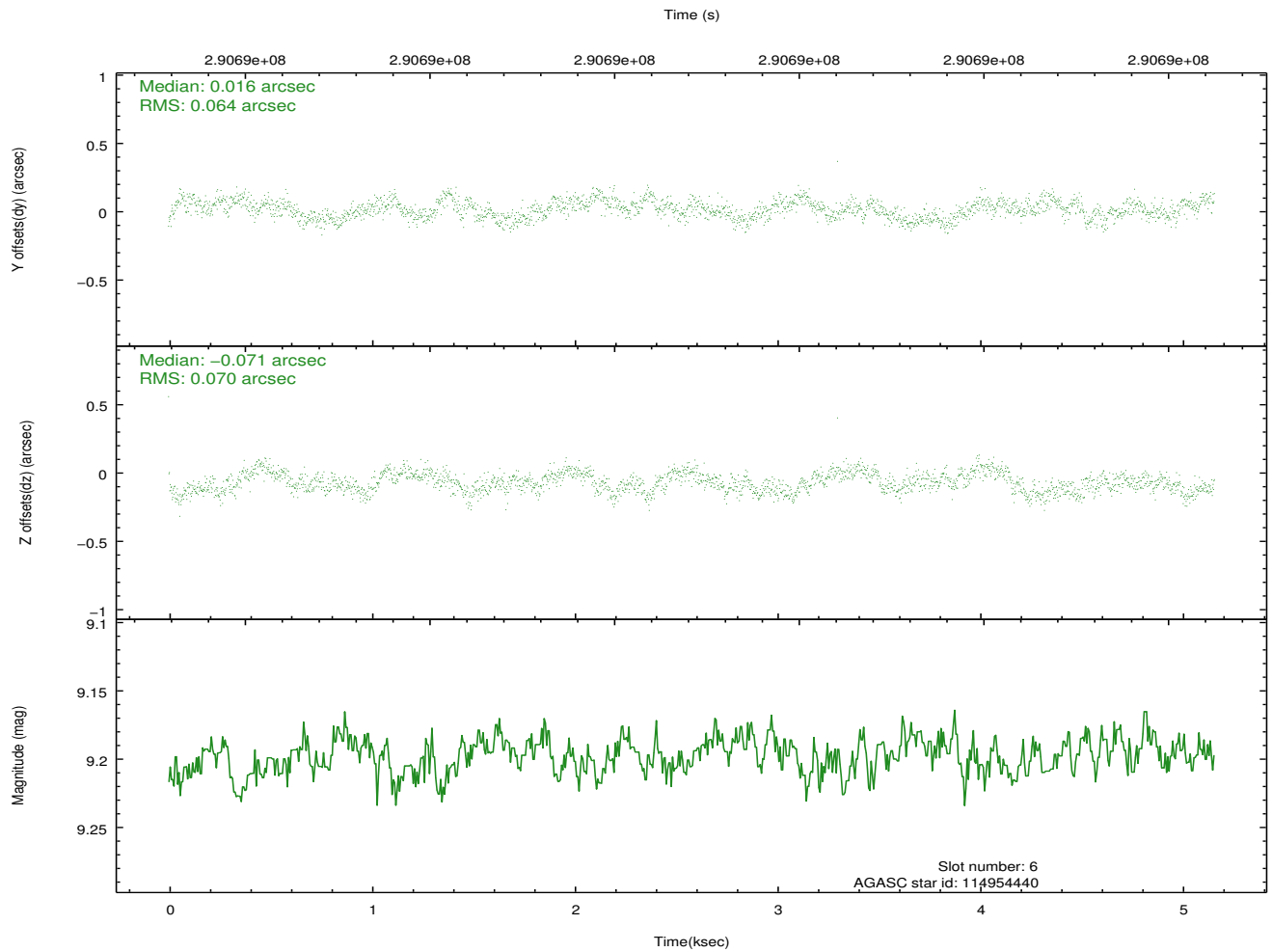
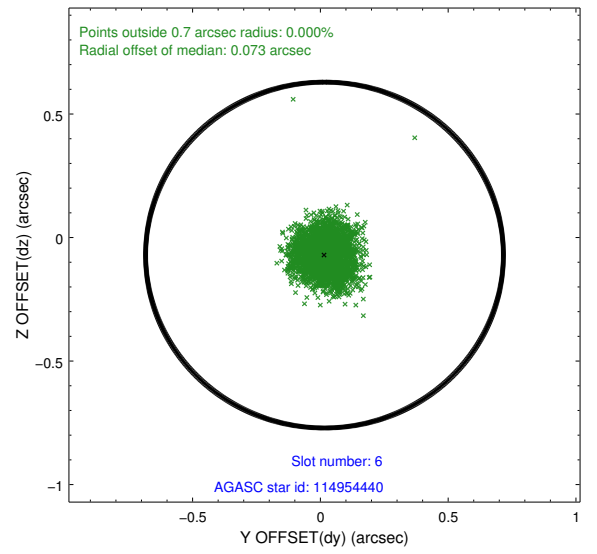
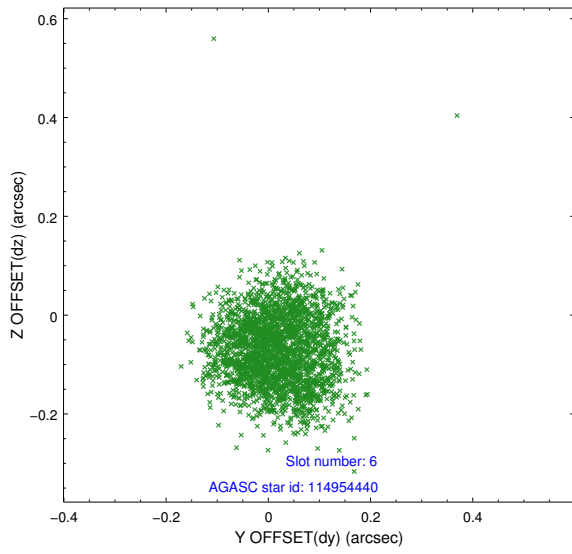
### 2.4.2 Slot 4



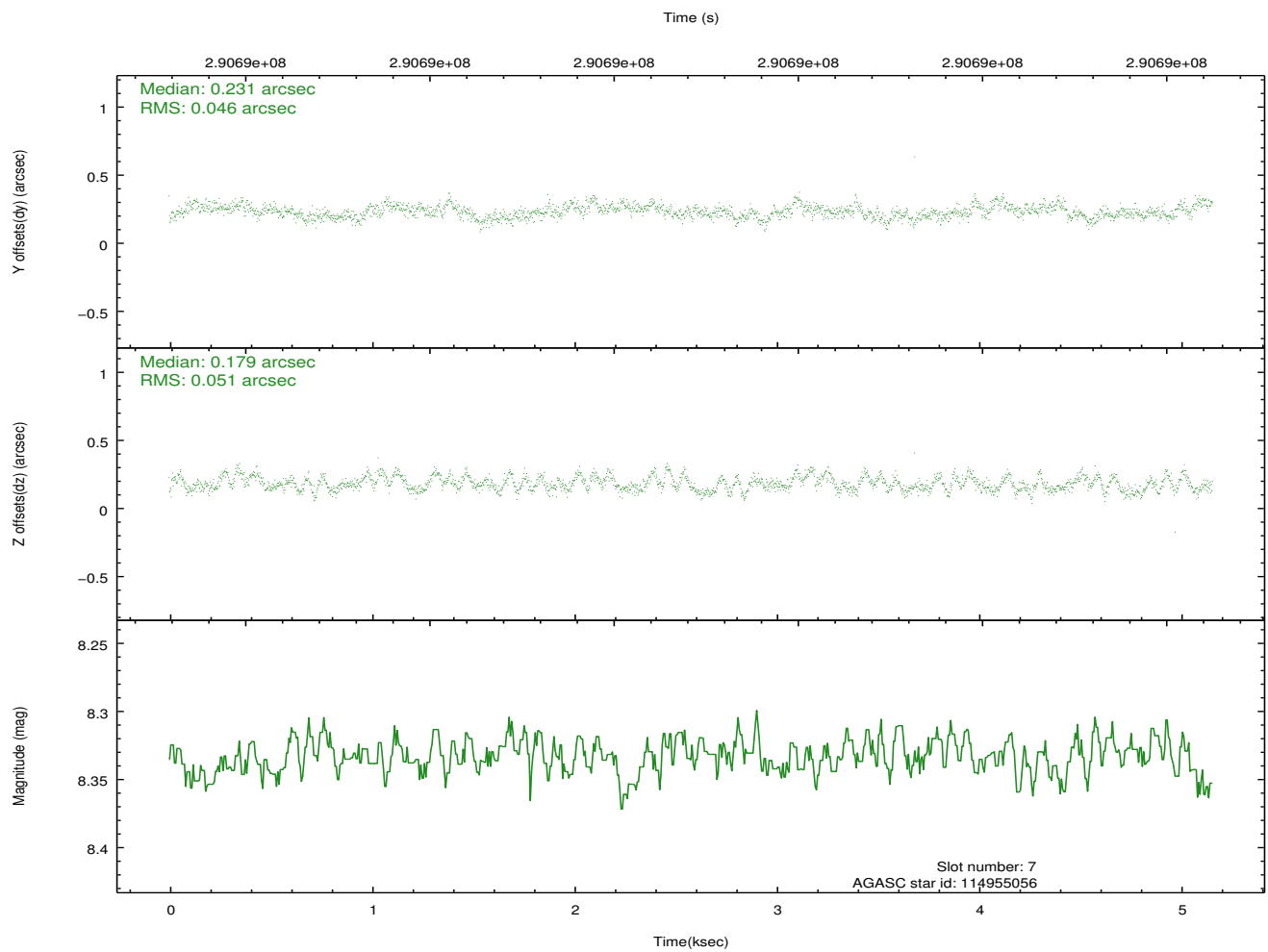
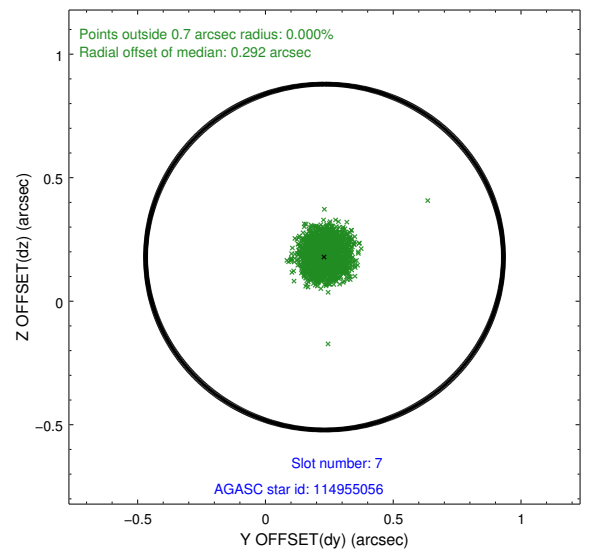
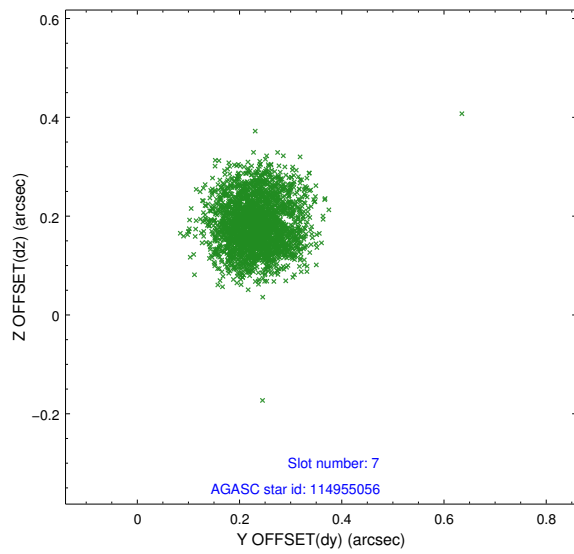
### 2.4.3 Slot 5



### 2.4.4 Slot 6

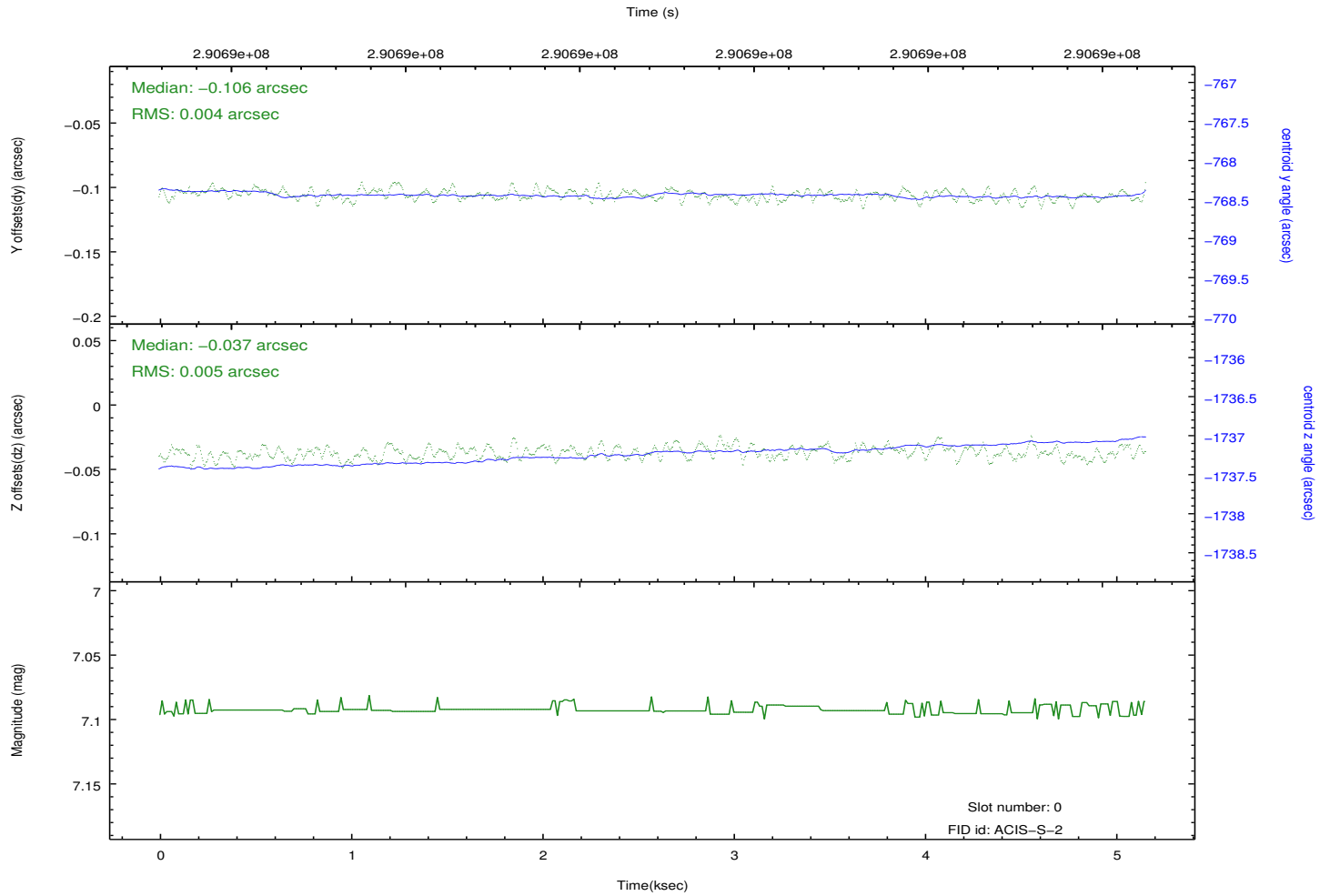
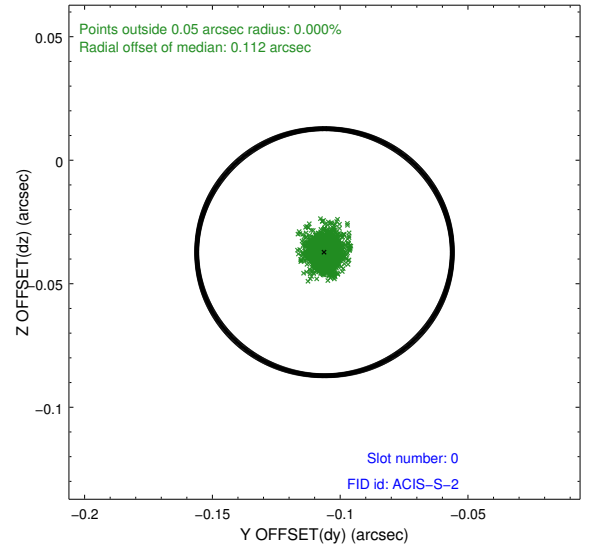
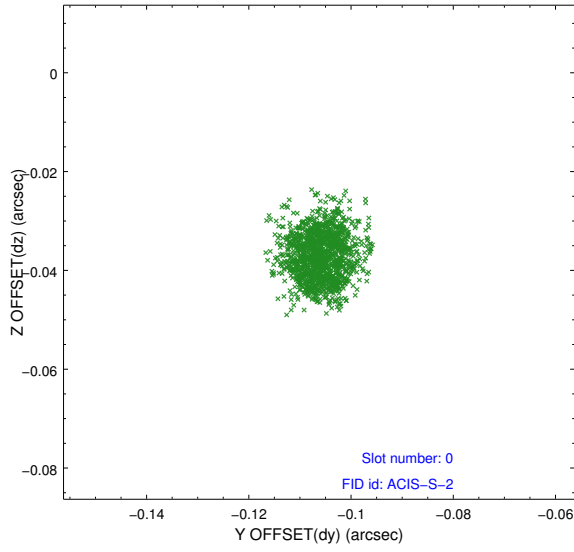


## 2.4.5 Slot 7

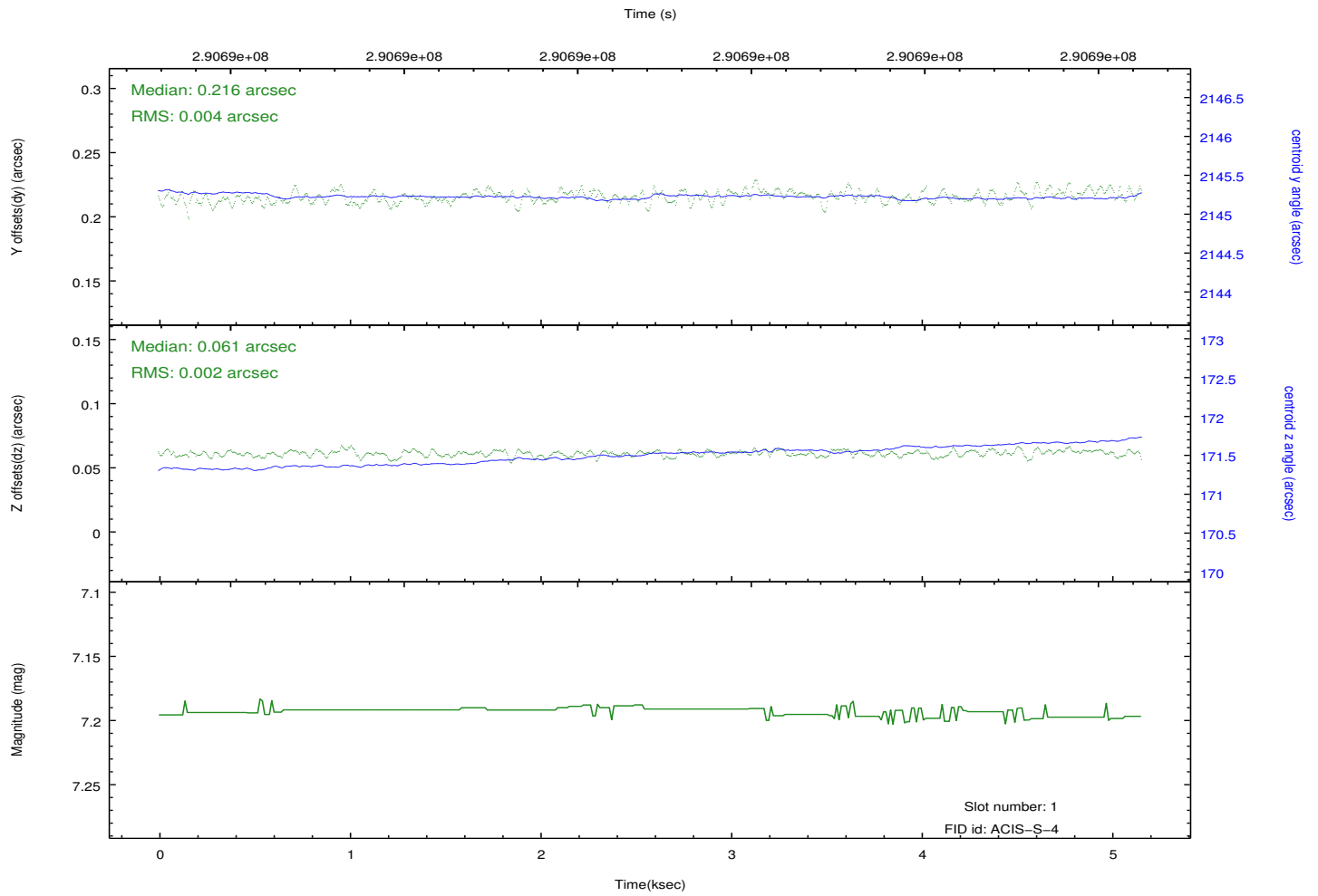
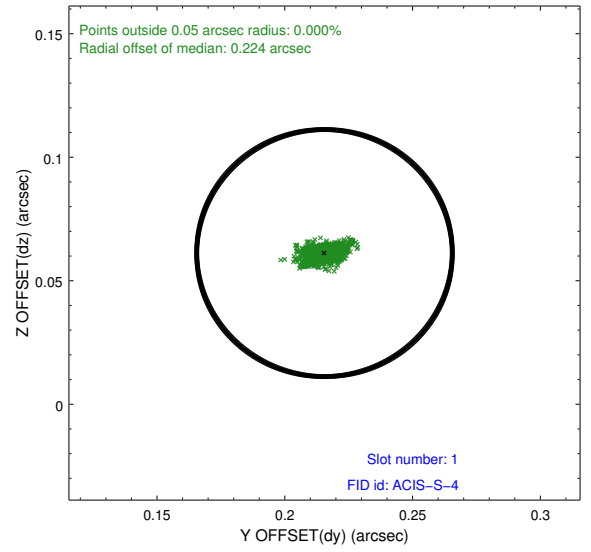
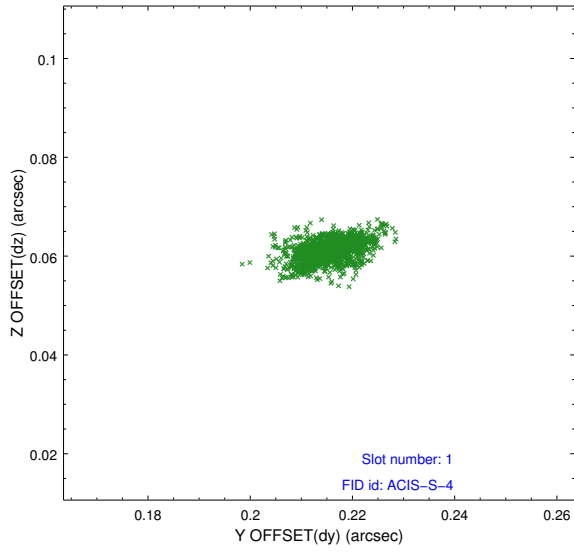


## 2.5 FID Slots

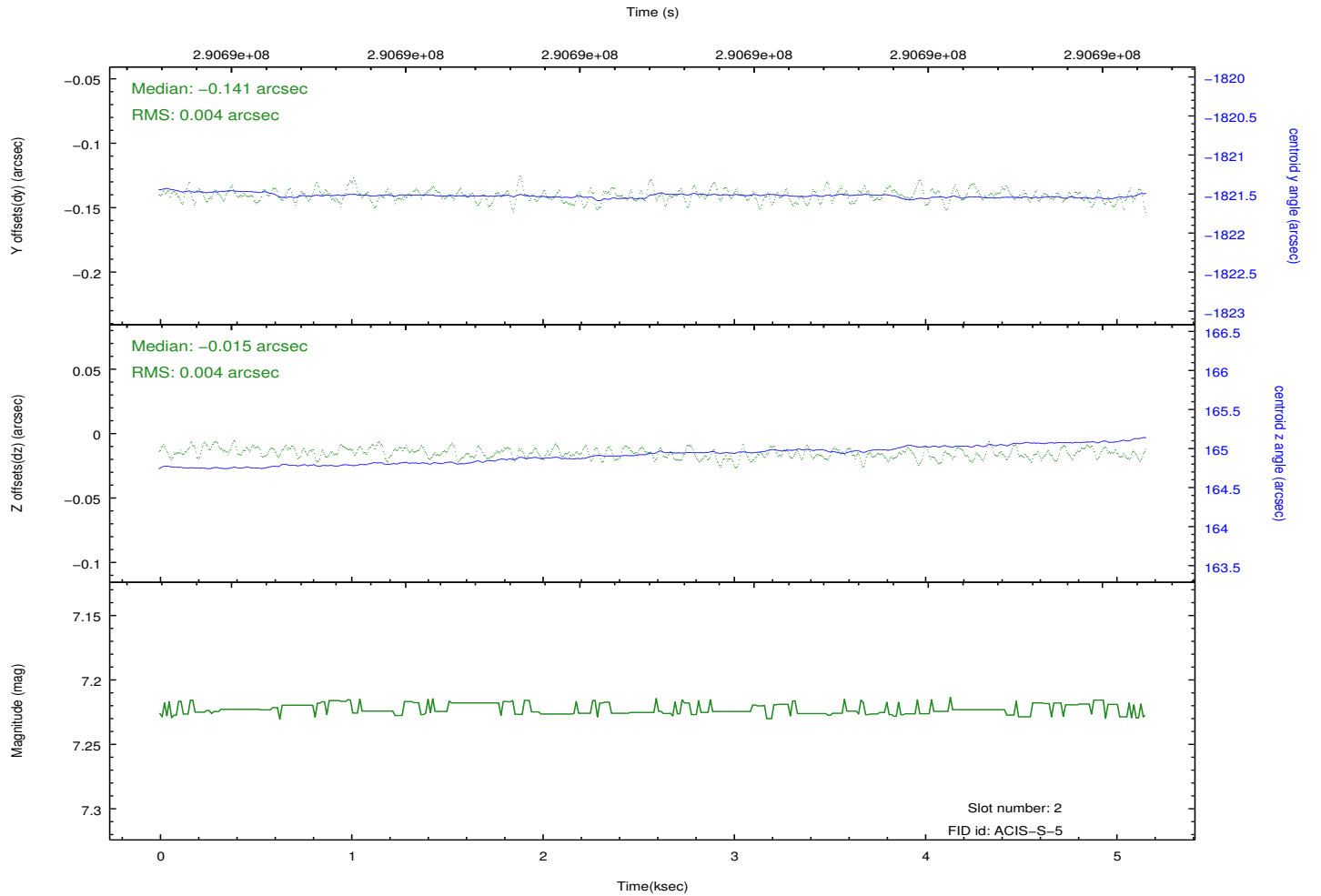
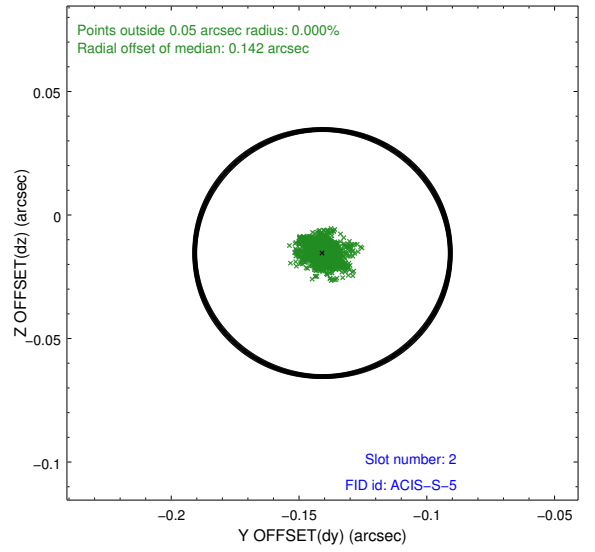
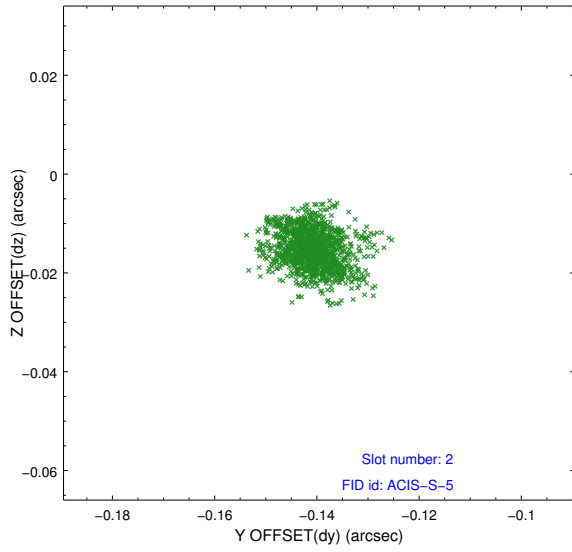
### 2.5.1 Slot 0



## 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)	2012.04.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.15919969

## A.2 Comments

Monitor constraint not met. Follows obs8515 by 4.83 days instead of 2.01 - 3.99 days.