

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 741 - L2 Version 4  
Chandra X-Ray Center

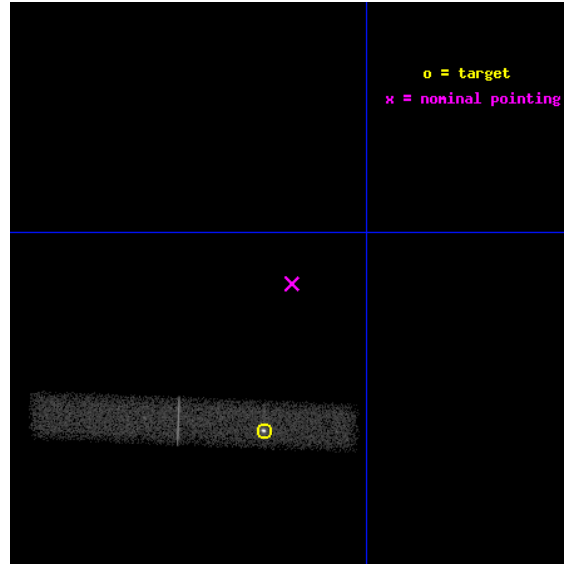
L2 Processing Date : Aug 28 2012

## 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

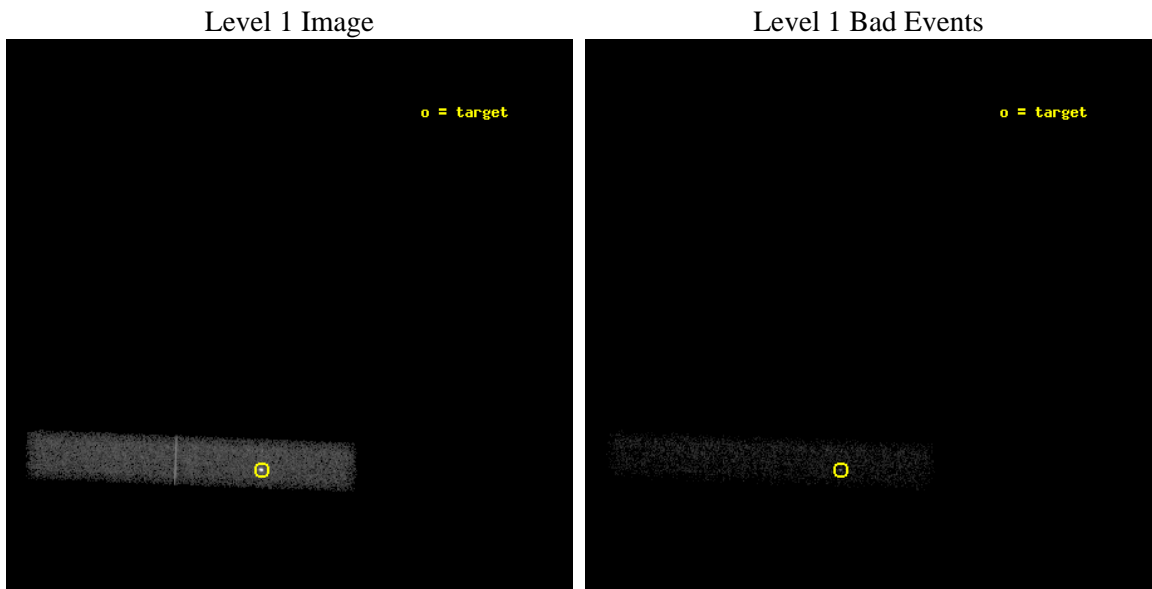
seq_num	500037	Sequence number
obs_id	741	Observation id
title	THE MILLISECOND PULSAR PSR J0437-4715: MAGNETOSPHERE OR ATMOSPHERE?	&#160
observer	Dr. George Pavlov	Principal investigator
object	PSR J0437-4715	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	69.31575	Observer's specified target RA [deg]
dec_targ	-47.252197	Observer's specified target Dec [deg]
ra_nom	69.297821316152	Nominal RA [deg]
dec_nom	-47.189116814776	Nominal Dec [deg]
roll_nom	182.25500648227	Nominal Roll [deg]
revision	4	Processing version of data
ontime	28167.959379748	Sum of GTIs [s]
livetime	25546.852330625	Livetime [s]
ontime7	28167.959379748	Sum of GTIs [s]
l2events	26949	Number of level 2 events



## 2 OBI

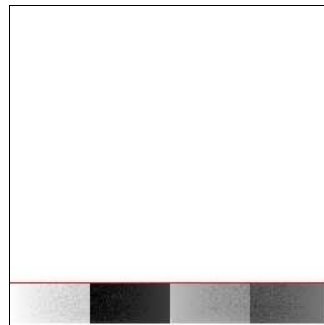
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	28167.959379748	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime7	28167.959379748	Sum of GTIs [s]
date	2012-08-28T06:55:23	Date and time of file creation	l1events	52283	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

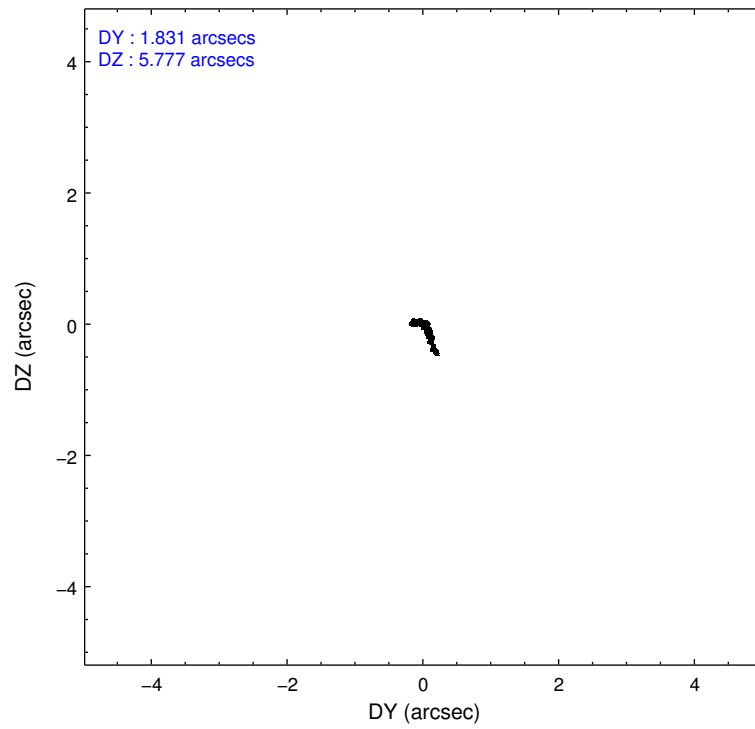
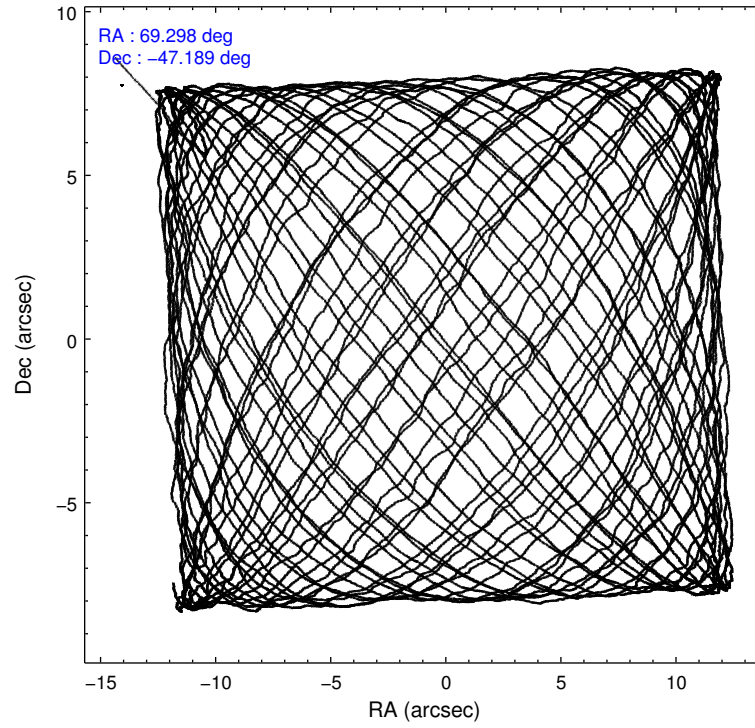
	<b>ccd 7</b>
level 1 events	52283
rejected events	24814
rejected %	47%

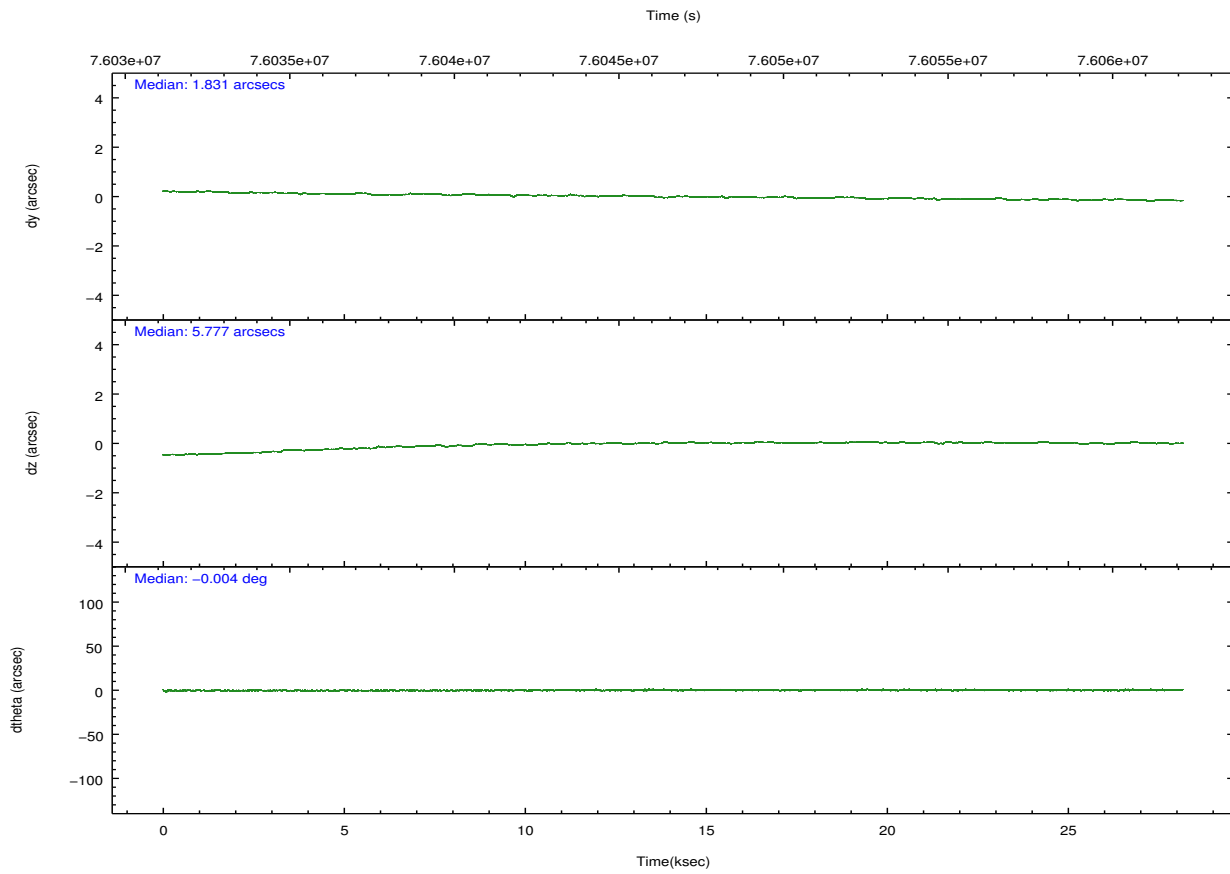
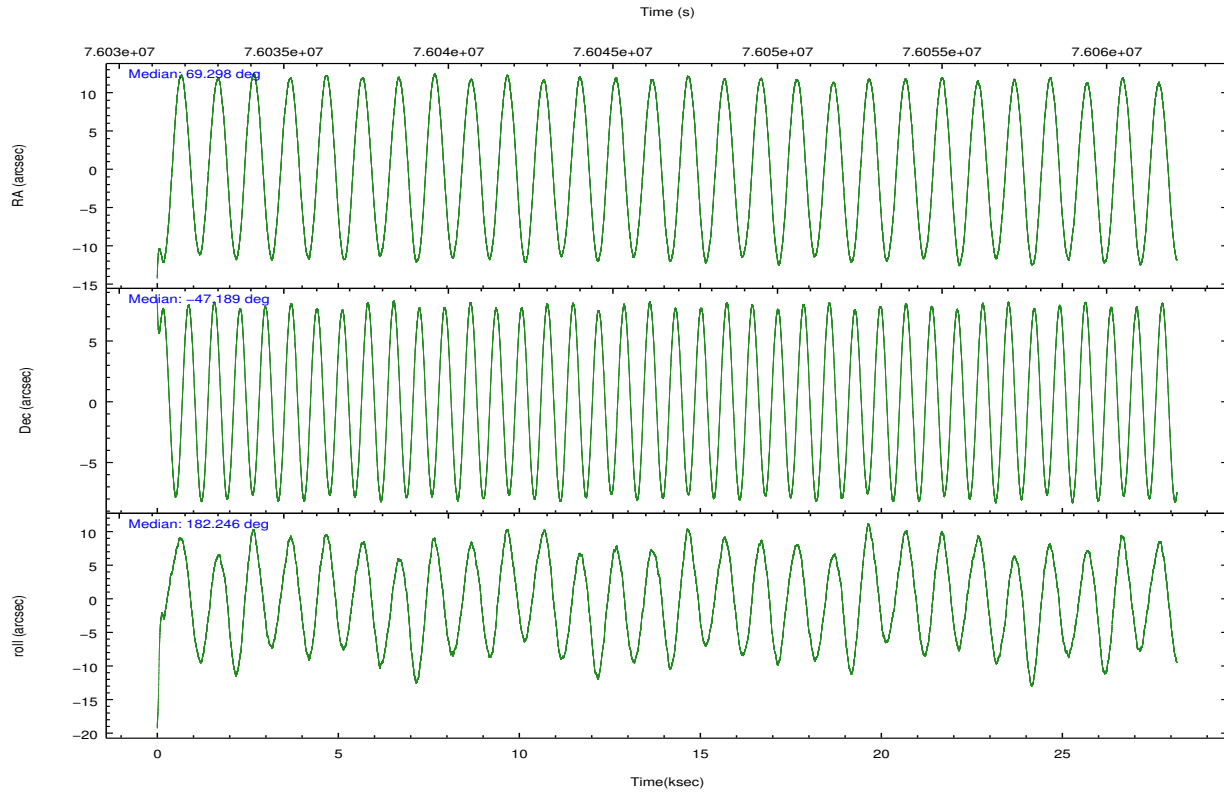
	<b>ccd 7</b>
grade 0 events	7786
	14%
grade 1 events	57
	0%
grade 2 events	7271
	13%
grade 3 events	4110
	7%
grade 4 events	4029
	7%
grade 5 events	2681
	5%
grade 6 events	13074
	25%
grade 7 events	13275
	25%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	69.331903	69.29782131615157	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-47.174408	-47.18911681477567	Subarray start row	10	10
[deg] Pointing Roll	182.123383	182.2550064822719	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)	76032725.184000	76031259.47536699			
Observation start date	2000-05-30T00:11:01	2000-05-29T23:47:39			
[s] Observation end time (MET)	76060725.184000	76061575.901482			
Observation end date	2000-05-30T07:57:41	2000-05-30T08:12:55			
Read mode	TIMED	TIMED			

## 2.3 Aspect



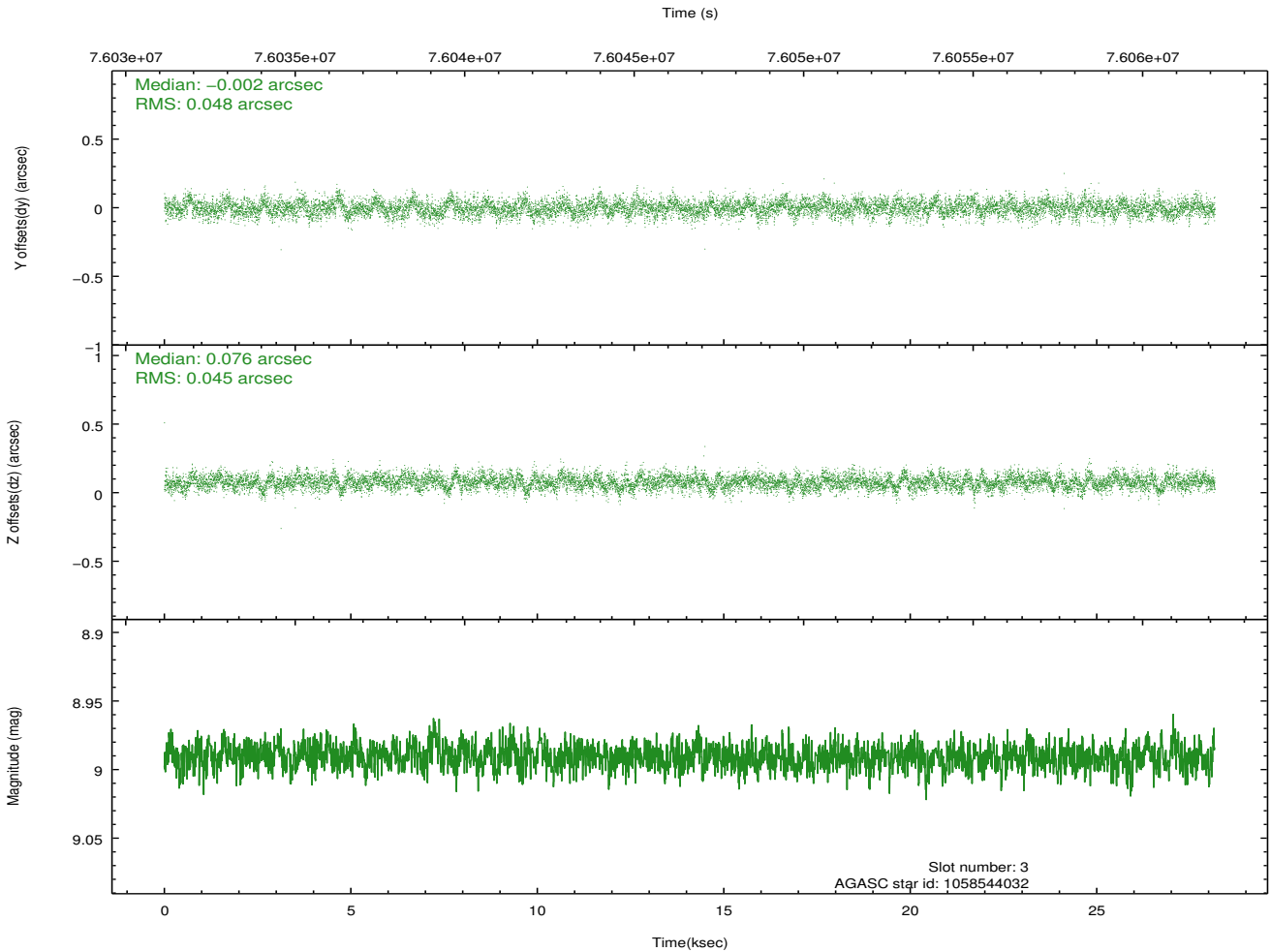
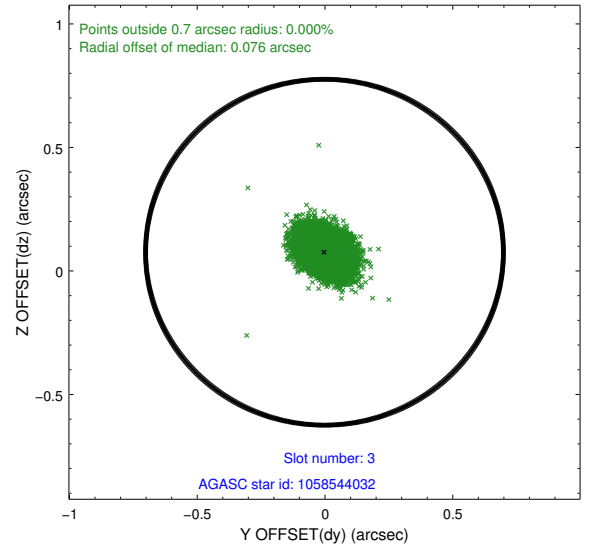
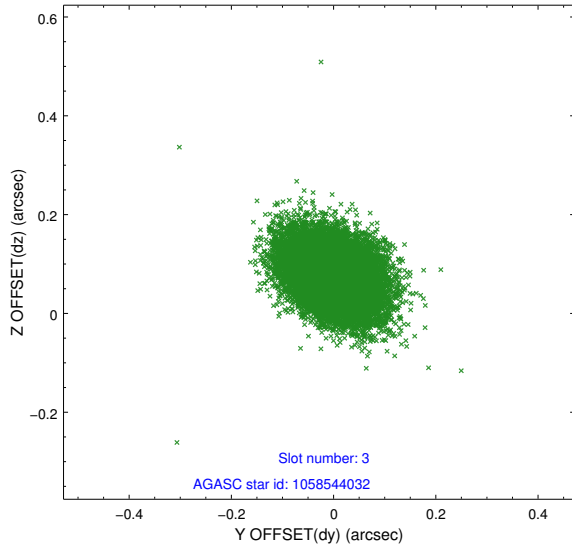


### Slot Statistics

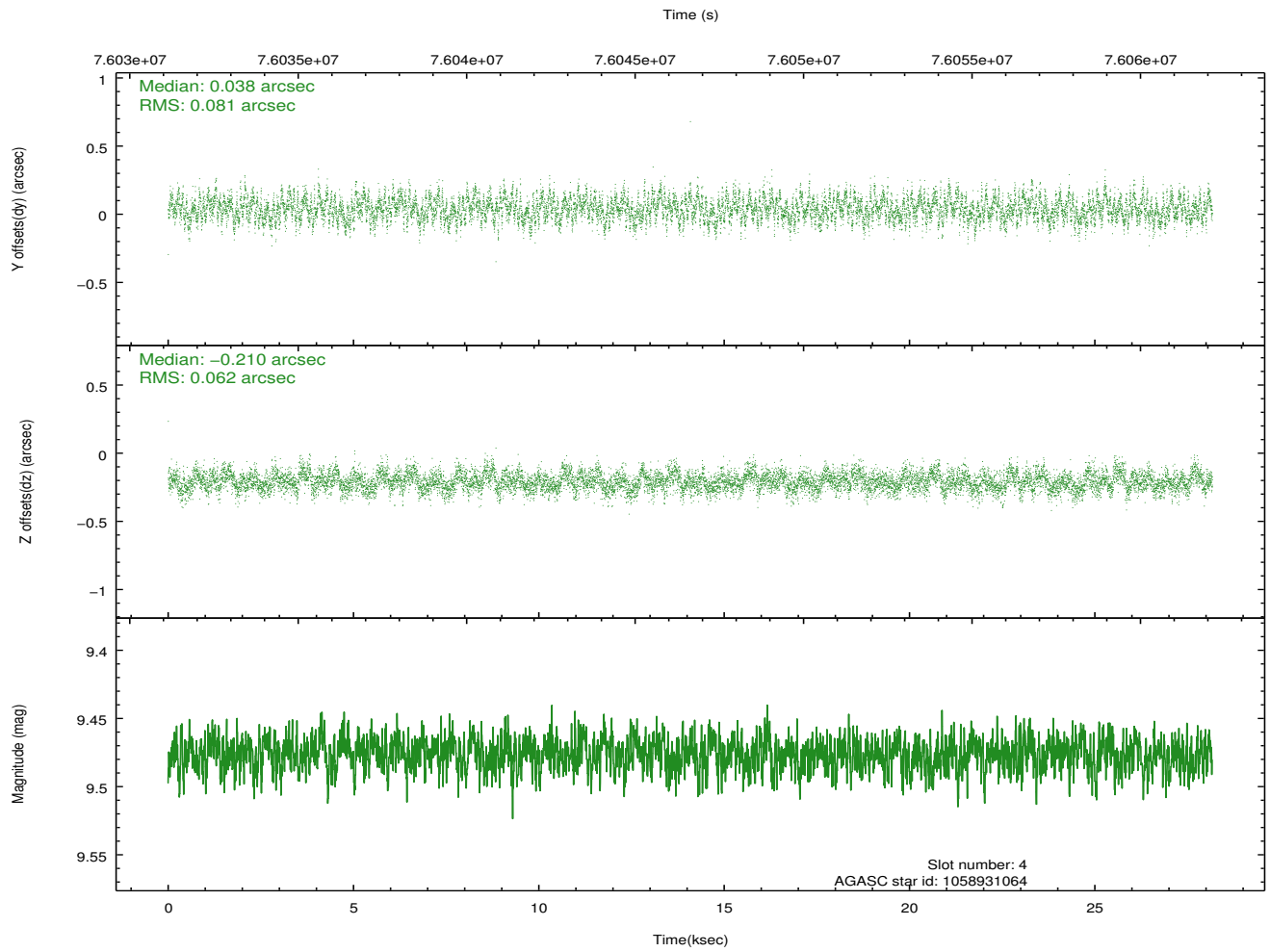
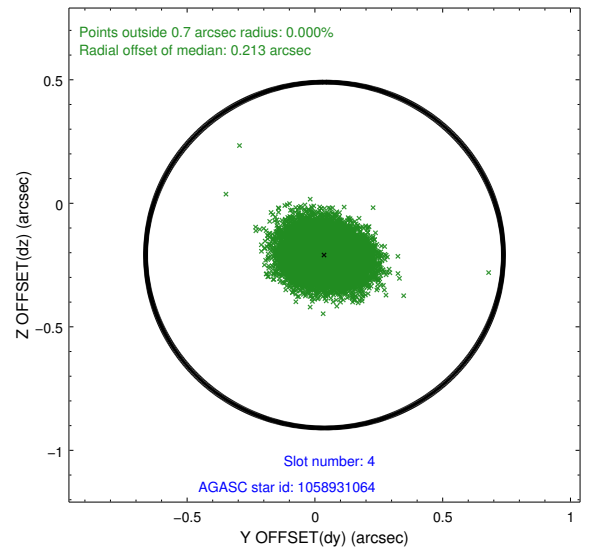
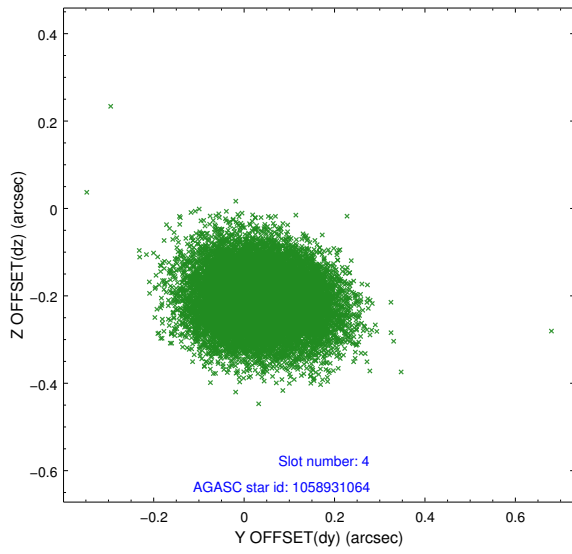
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	6871	-0.036	0.004	0.007	0.011	0.000000	0.000000	-754.47	-1726.84
1	FID	ACIS-S-4	7.21	6869	-0.010	0.016	0.006	0.011	0.000000	0.000000	2158.78	181.58
2	FID	ACIS-S-5	7.23	6869	0.015	-0.011	0.007	0.012	0.000000	0.000000	-1807.16	175.31
3	GUIDE	1058544032	8.99	13738	-0.002	0.076	0.070	0.115	69.576631	-47.141596	-603.25	-94.90
4	GUIDE	1058931064	9.48	13732	0.038	-0.210	0.109	0.173	69.760694	-47.722390	-964.98	2012.38
5	GUIDE	1058541272	9.24	13737	-0.040	0.049	0.108	0.170	68.392275	-46.921735	2275.51	-980.18
6	GUIDE	1058542336	9.62	13732	-0.033	0.051	0.107	0.178	69.740954	-46.597293	-1087.69	-2036.25
7	GUIDE	1058541248	10.18	13733	0.037	0.033	0.134	0.219	69.904987	-47.056466	-1420.16	-367.40

## 2.4 Star Slots

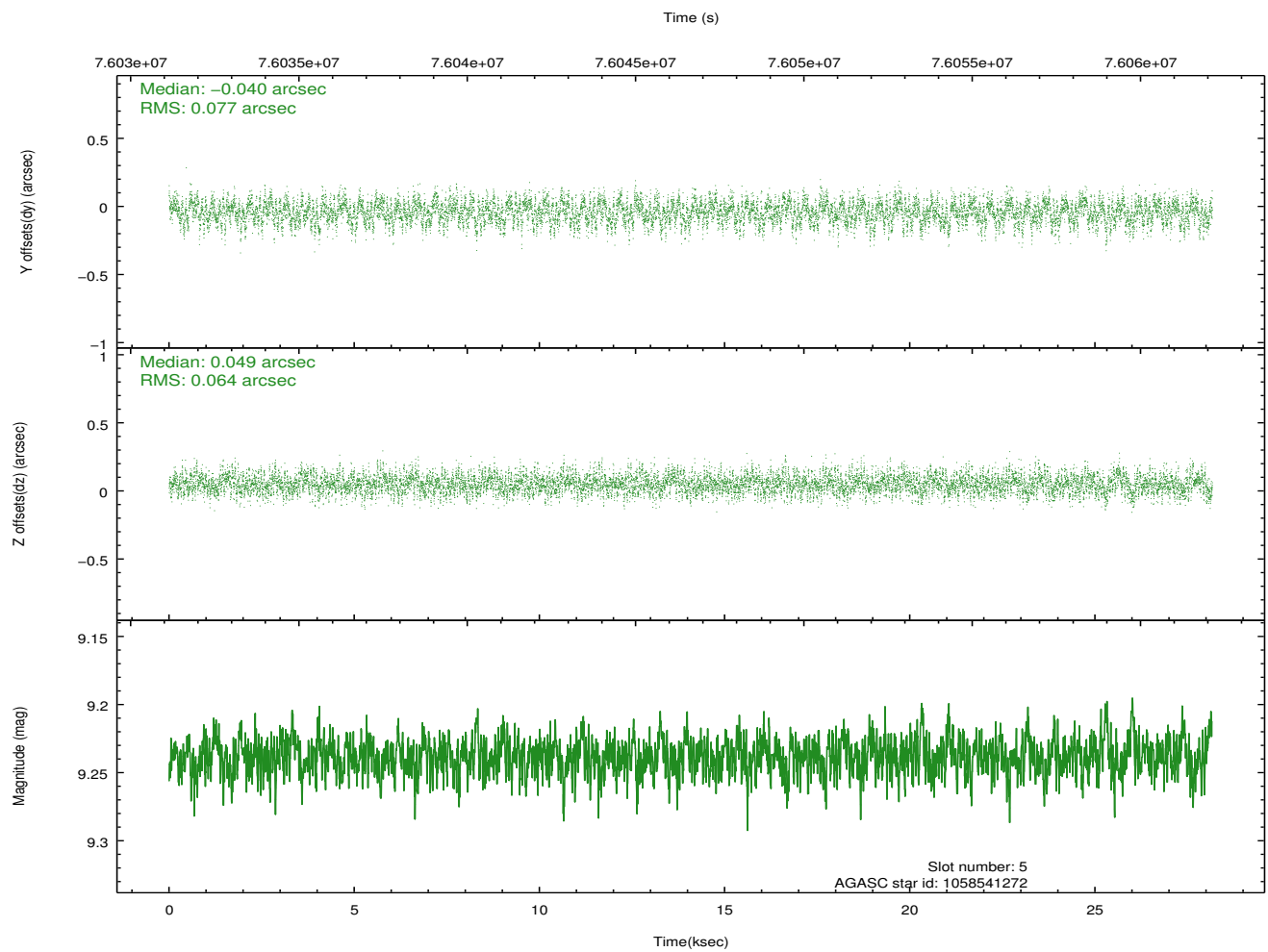
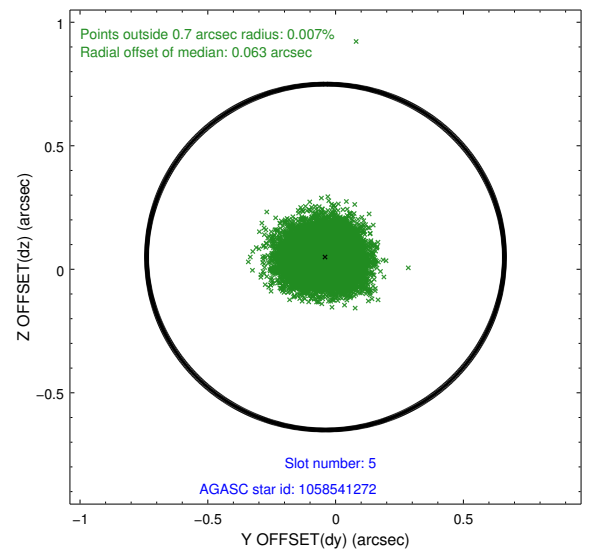
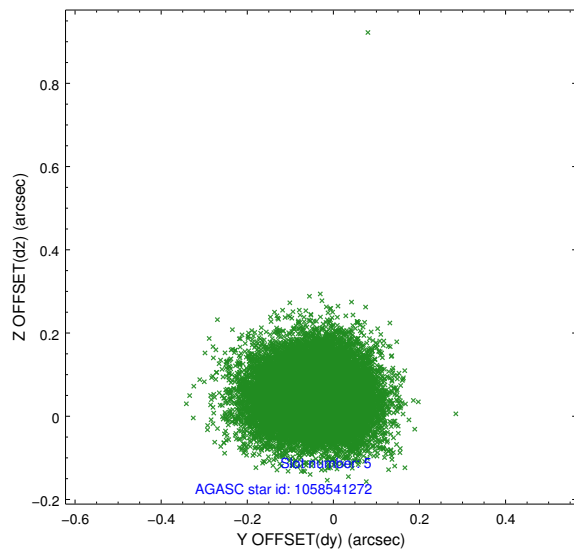
### 2.4.1 Slot 3



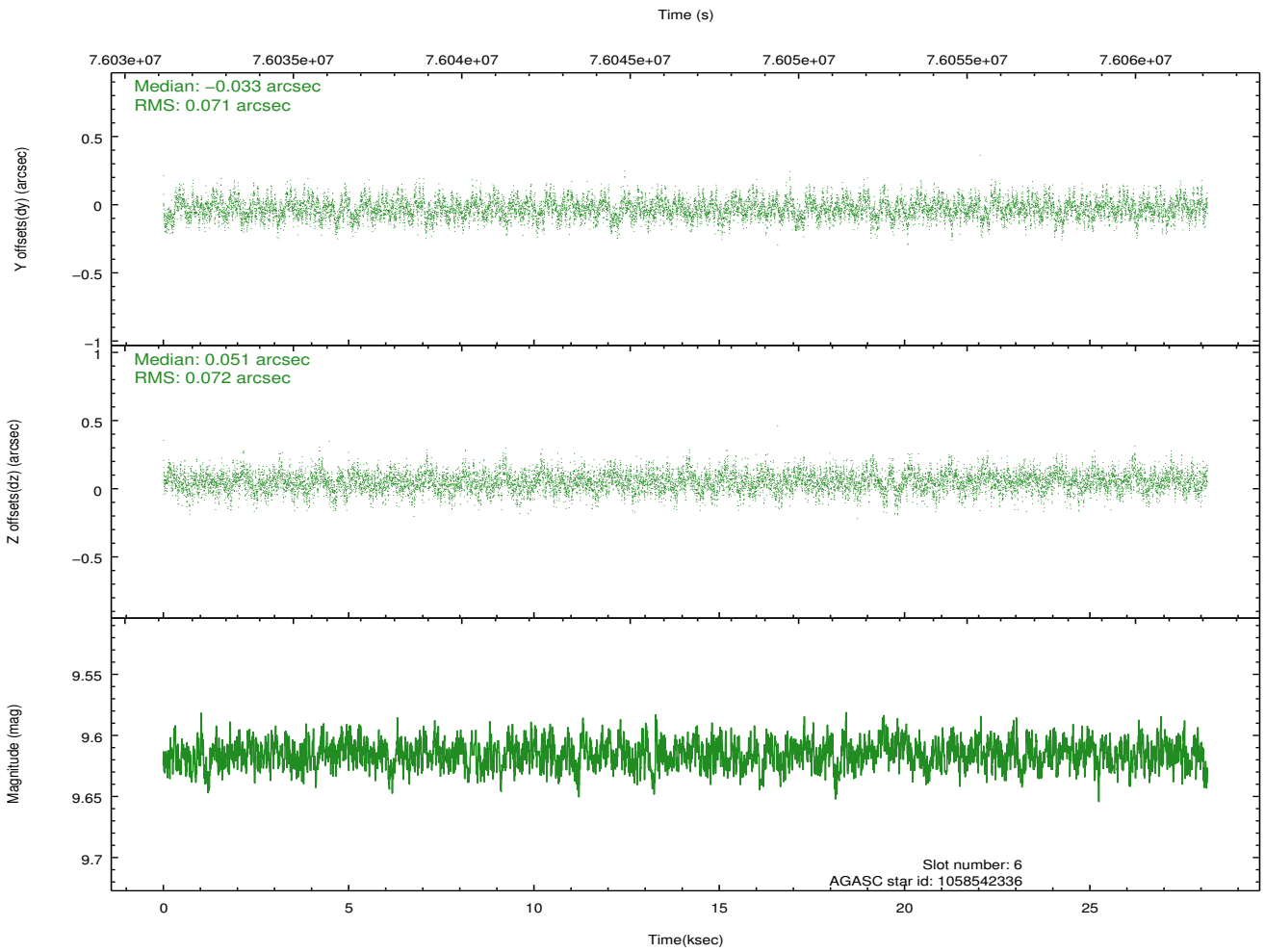
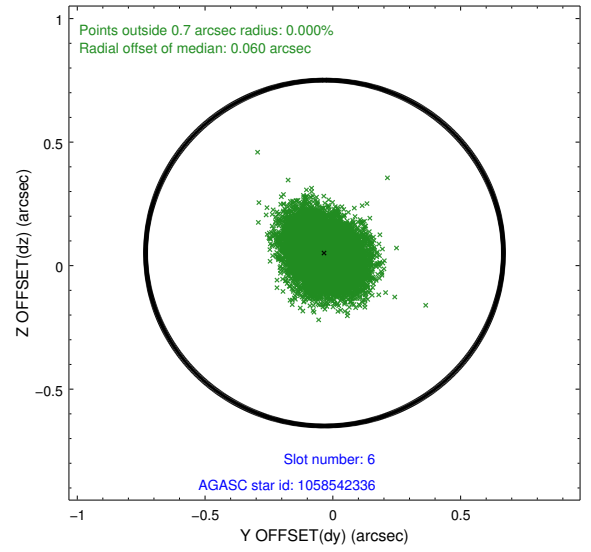
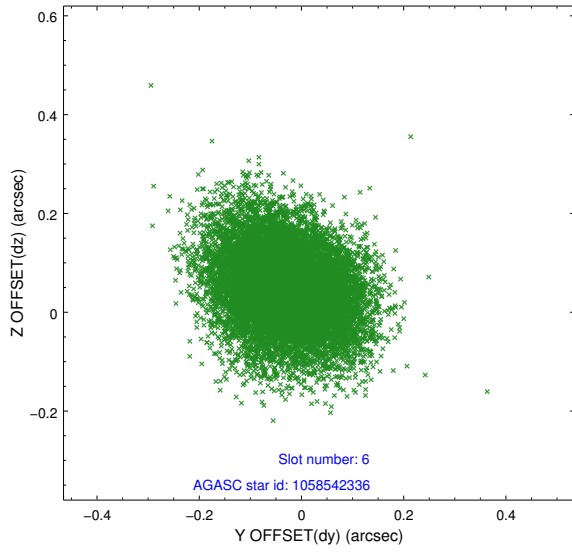
### 2.4.2 Slot 4



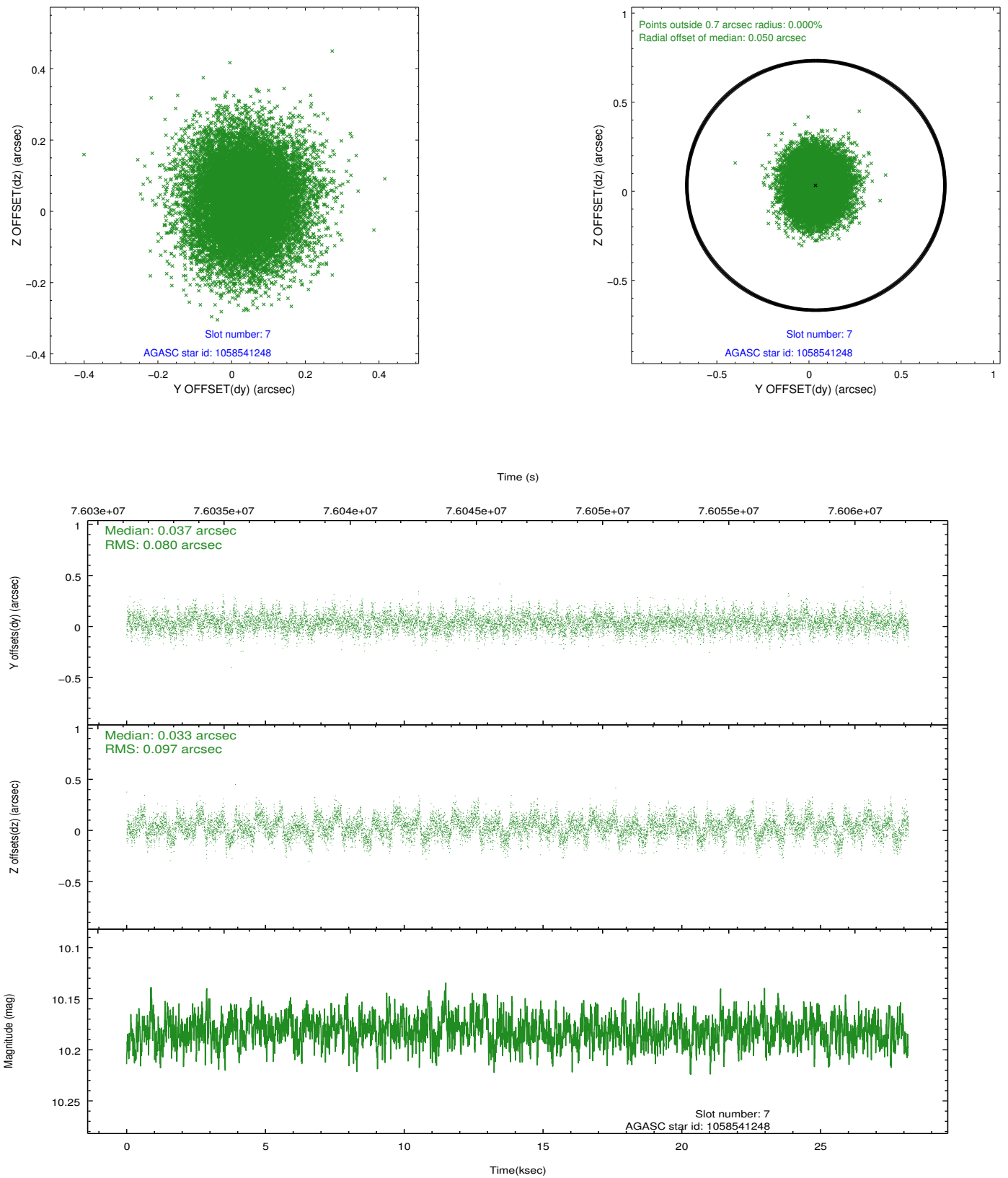
### 2.4.3 Slot 5



### 2.4.4 Slot 6

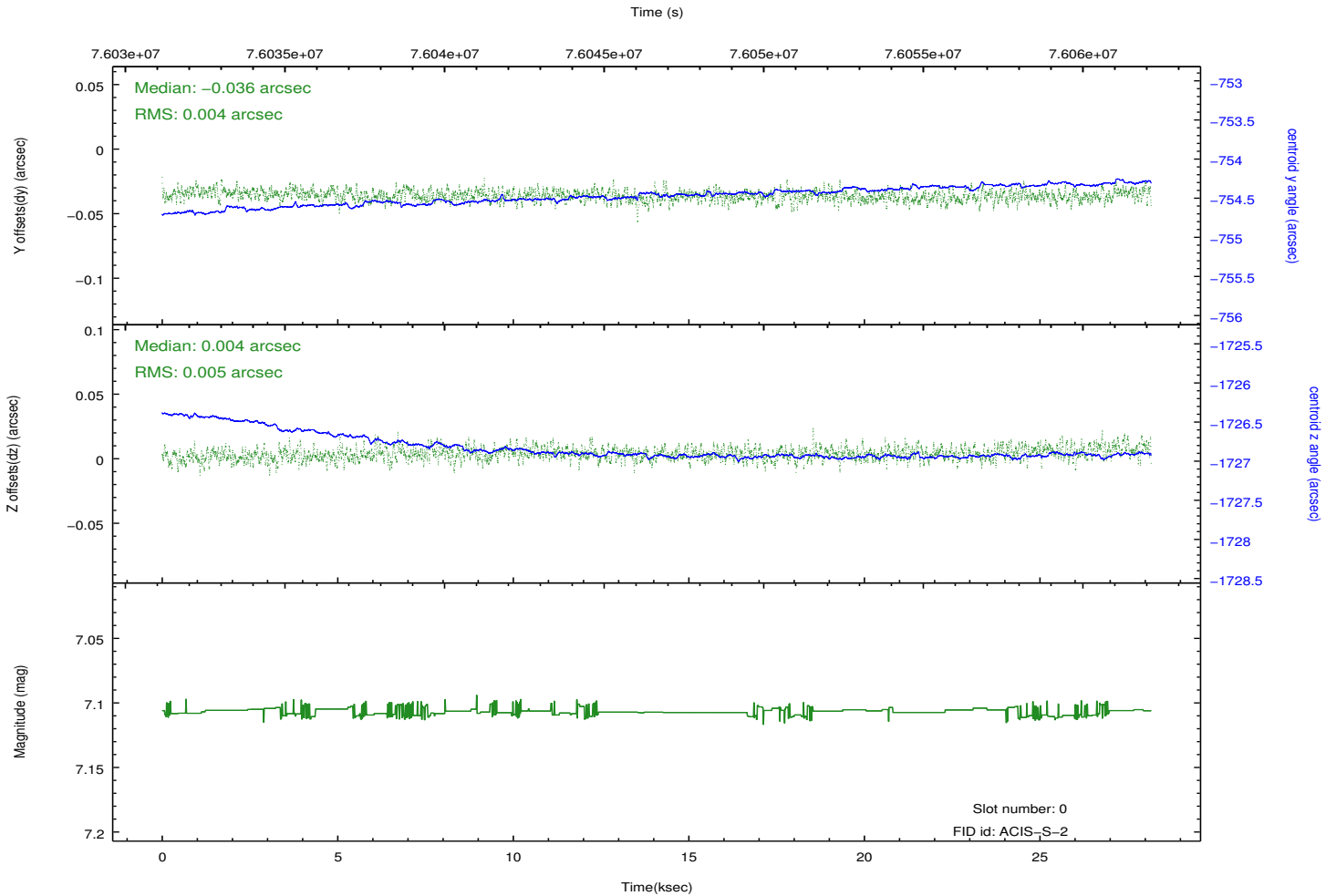
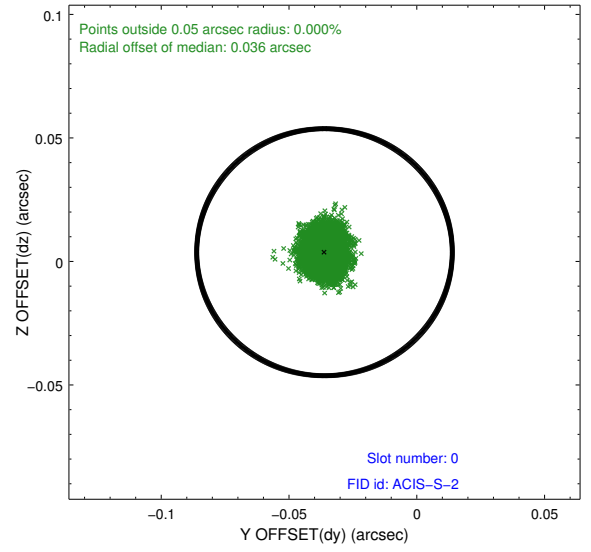
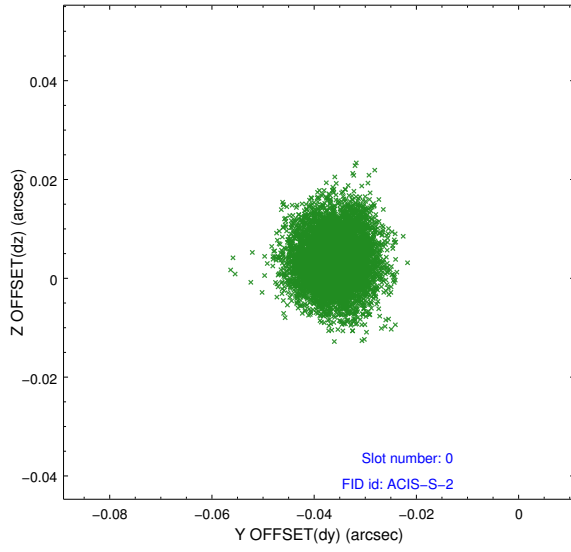


## 2.4.5 Slot 7

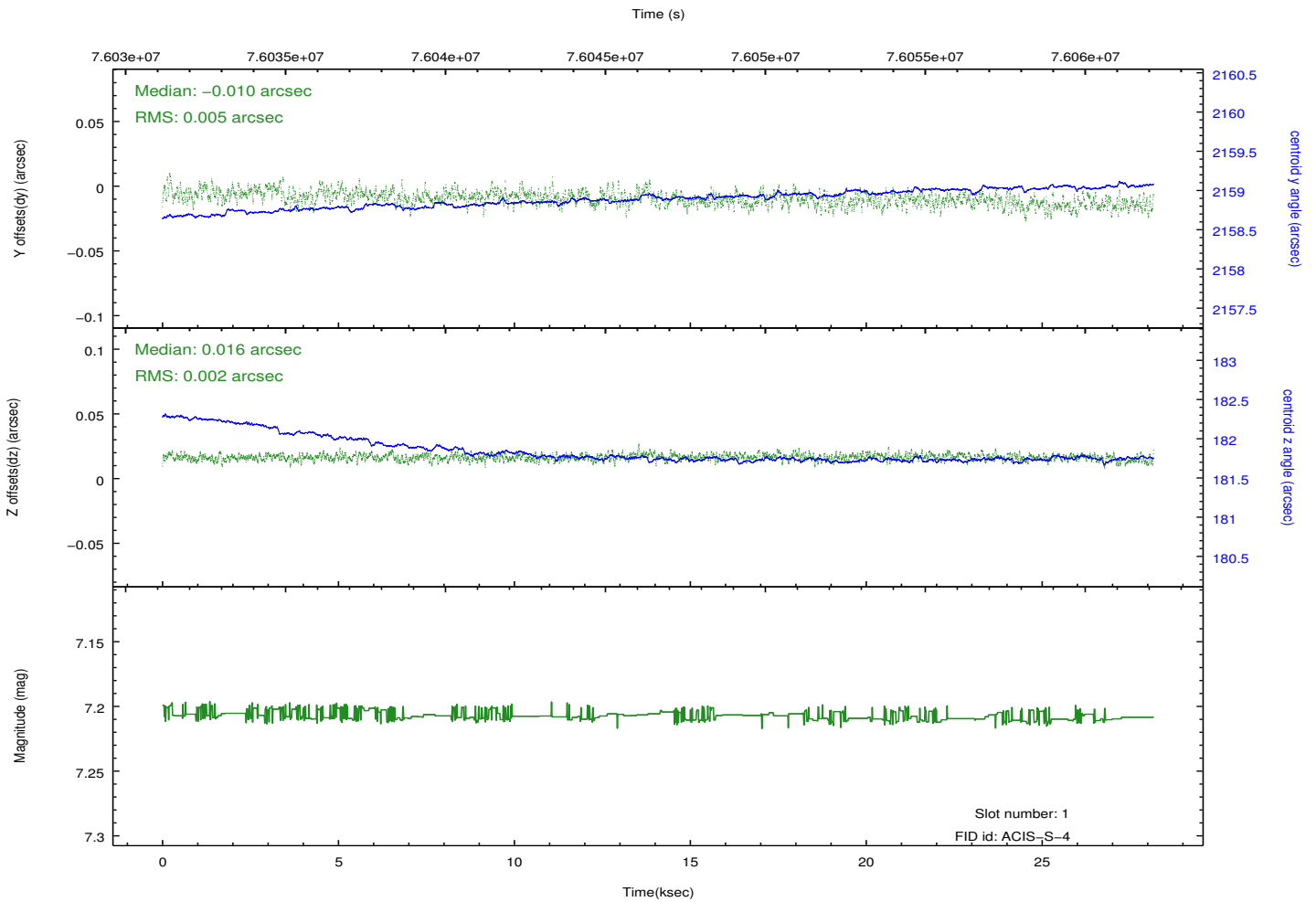
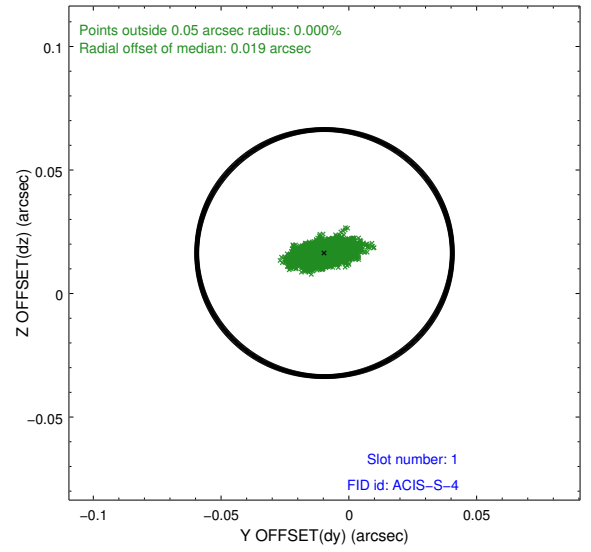
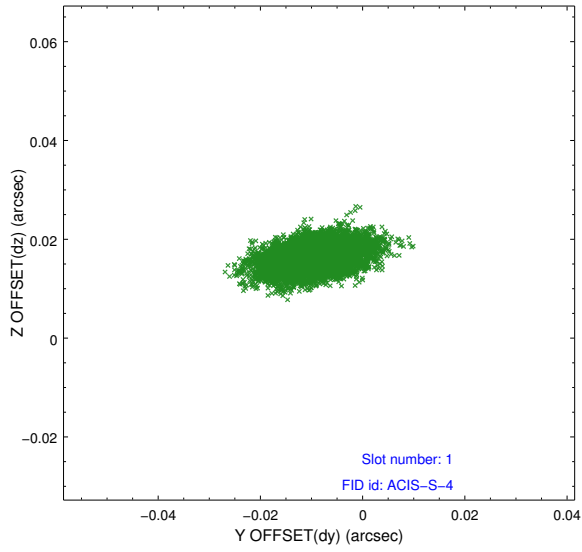


## 2.5 FID Slots

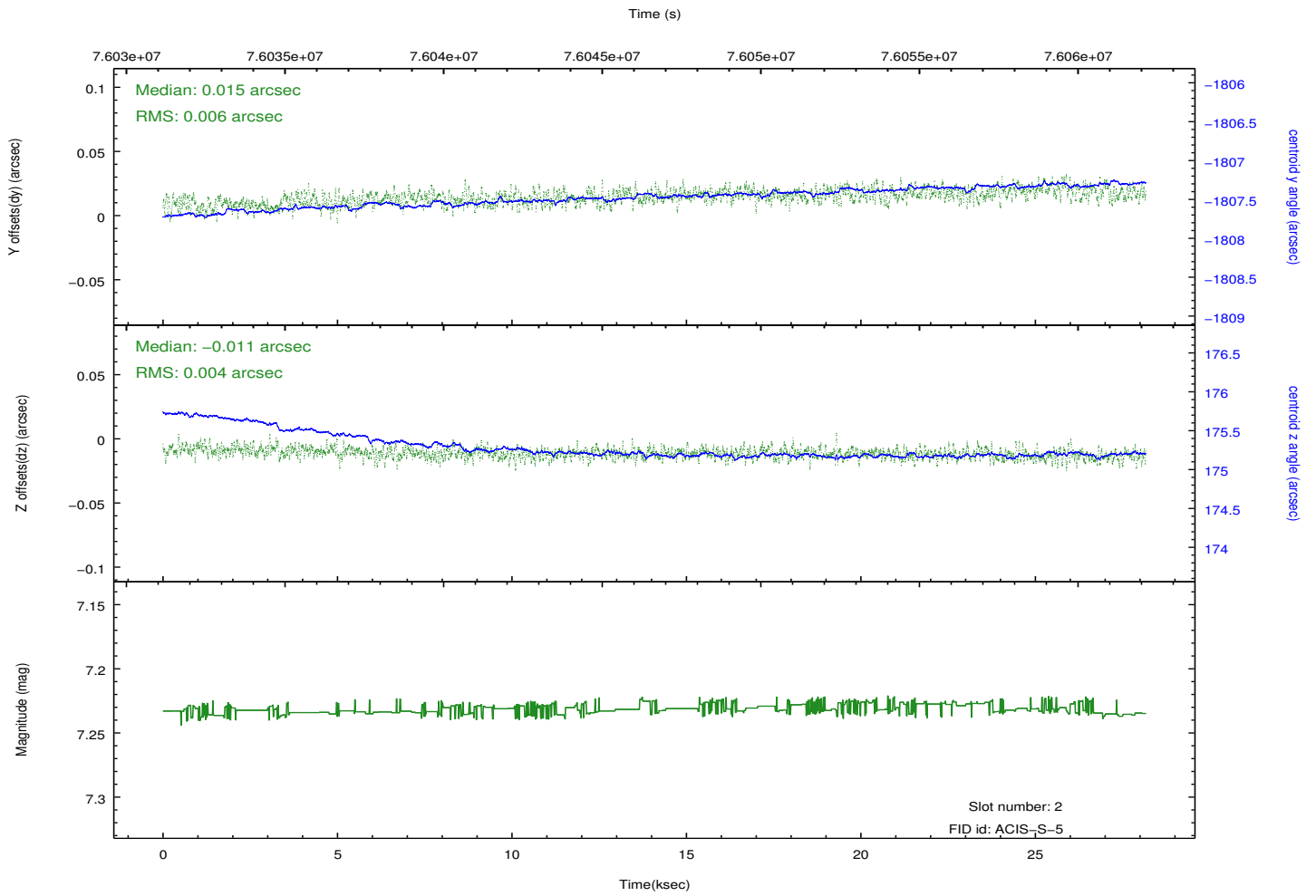
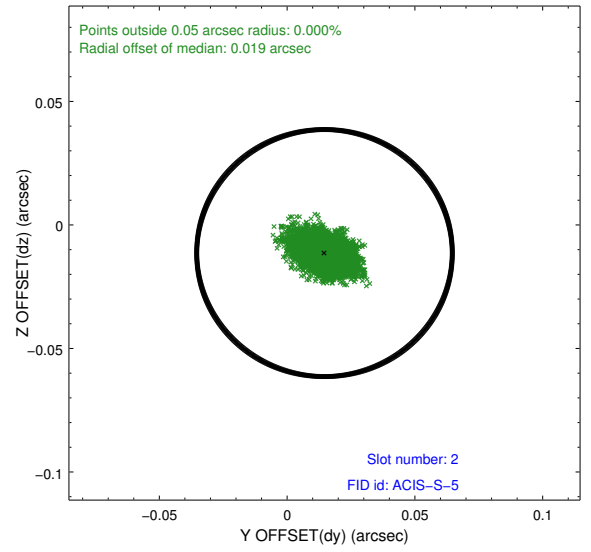
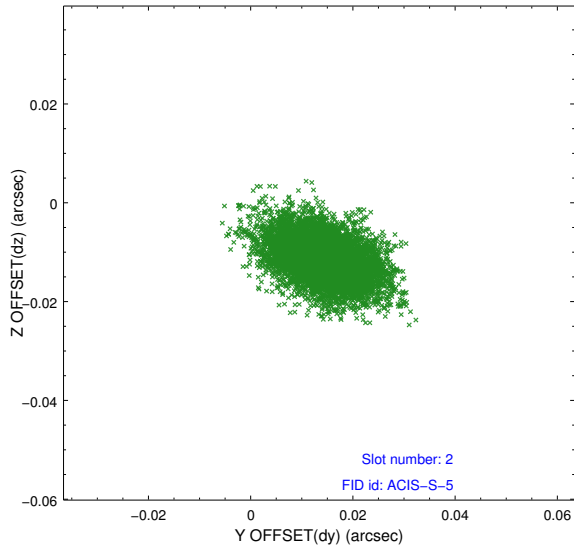
### 2.5.1 Slot 0



## 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)	2012.08.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.168

### A.2 Comments