

# V&V Reference Report

## L2 ASCDS Version : 10.5.2

Observation 19382 - L2 Version 1  
Chandra X-Ray Center

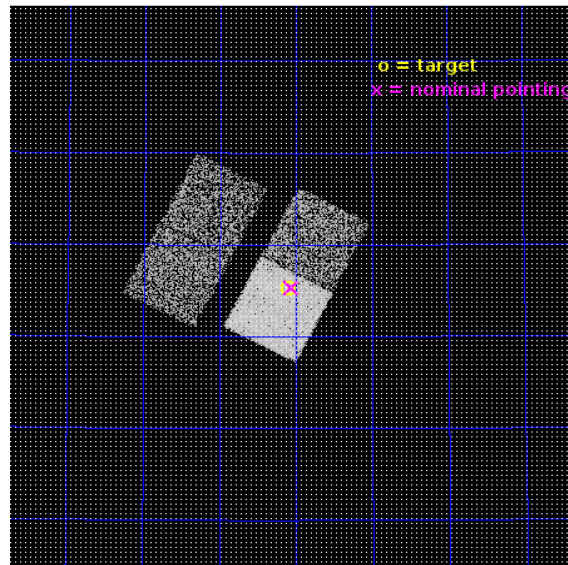
L2 Processing Date : Mar 2 2017

## 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

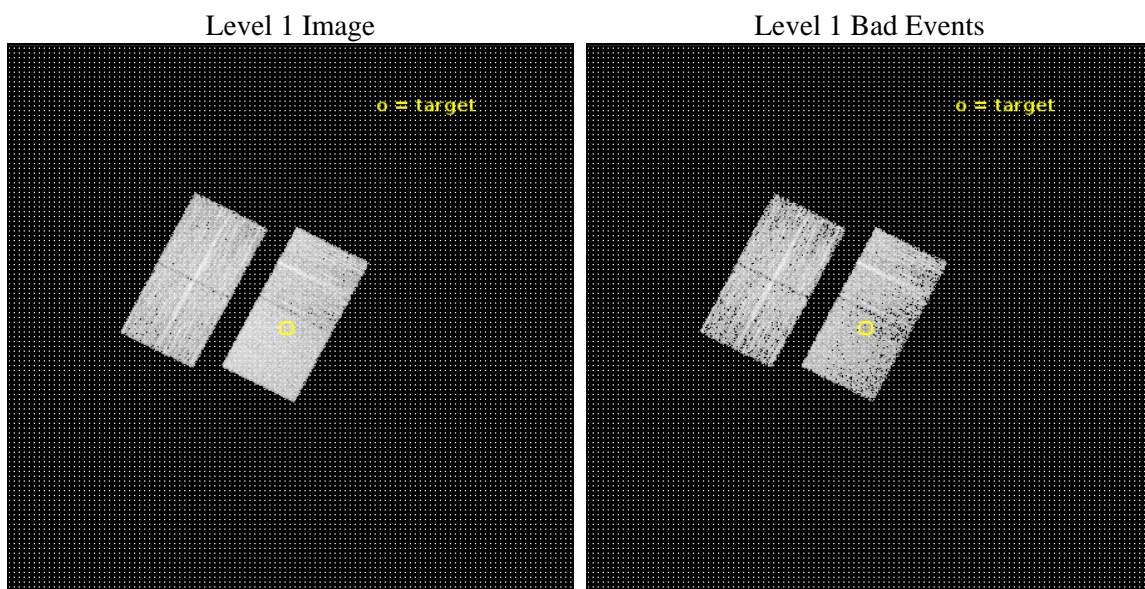
seq_num	601339	Sequence number
obs_id	19382	Observation id
title	A Statistically Complete High Resolution Chandra and Radio (eMERLIN) Survey of the Palomar Nearby Galaxies Sample	Proposal title
observer	Ian McHardy	Principal investigator
object	NGC 5678	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	218.023333	Observer's specified target RA [deg]
dec_targ	57.921444	Observer's specified target Dec [deg]
ra_nom	218.01473441809	Nominal RA [deg]
dec_nom	57.922069875086	Nominal Dec [deg]
roll_nom	117.28340229797	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5071.163574338	Sum of GTIs [s]
livetime	5004.9050889029	Livetime [s]
ontime2	5071.0404543877	Sum of GTIs [s]
ontime3	5071.0814943314	Sum of GTIs [s]
ontime6	5071.1225343943	Sum of GTIs [s]
ontime7	5071.163574338	Sum of GTIs [s]
l2events	28699	Number of level 2 events



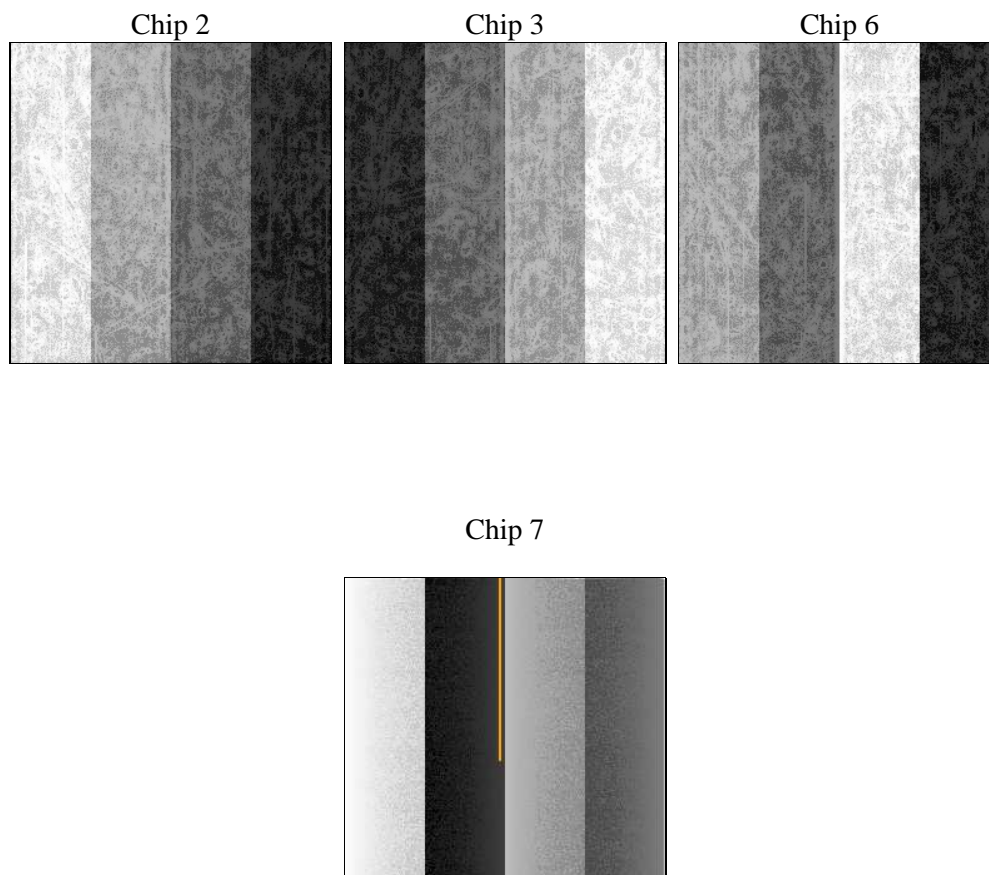
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	5071.163574338	Sum of GTIs [s]
caldsver	4.7.3	&#160	ontime2	5071.0404543877	Sum of GTIs [s]
date	2017-03-02T18:29:39	Date and time of file creation	ontime3	5071.0814943314	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	5071.1225343943	Sum of GTIs [s]
			ontime7	5071.163574338	Sum of GTIs [s]
			l1events	152255	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	36538	34351	36248	45118
rejected events	32923	30841	32171	25575
rejected %	90%	89%	88%	56%

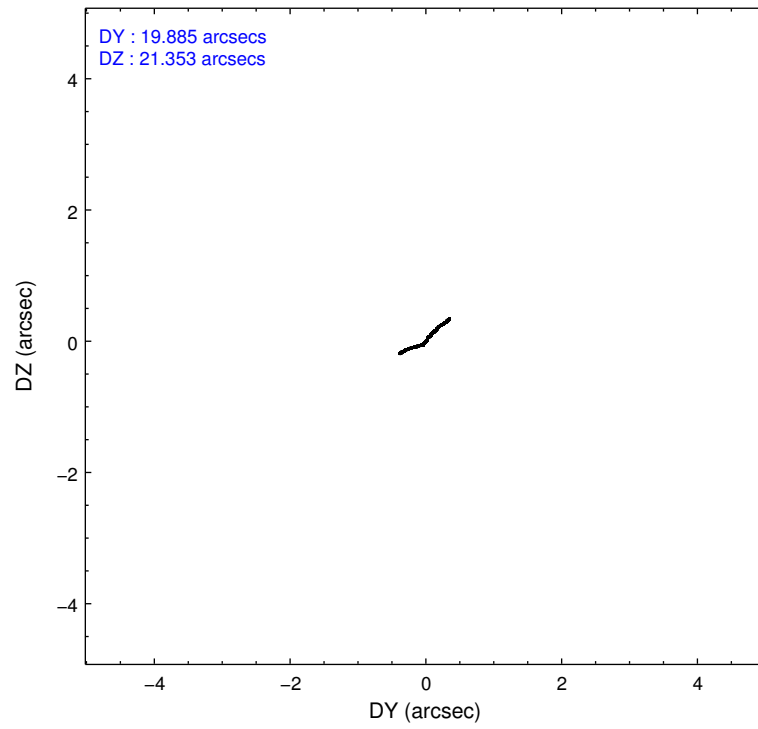
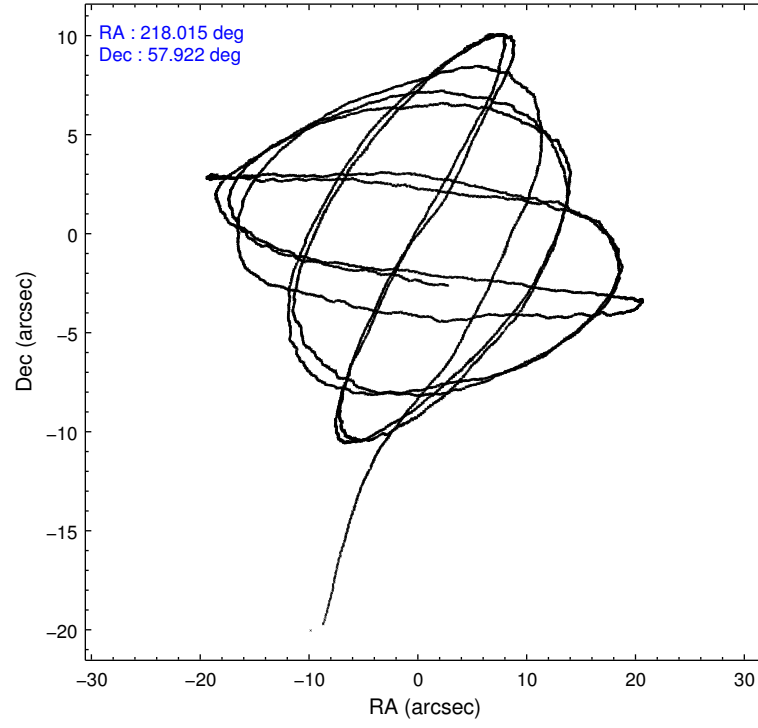
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1280	1209	1391	1602
	3%	3%	3%	3%
grade 1 events	18	17	13	68
	0%	0%	0%	0%
grade 2 events	873	782	950	4183
	2%	2%	2%	9%
grade 3 events	373	396	381	1530
	1%	1%	1%	3%
grade 4 events	392	365	360	1517
	1%	1%	0%	3%
grade 5 events	1290	1613	1596	4387
	3%	4%	4%	9%
grade 6 events	700	762	998	10732
	1%	2%	2%	23%
grade 7 events	31612	29207	30559	21099
	86%	85%	84%	46%

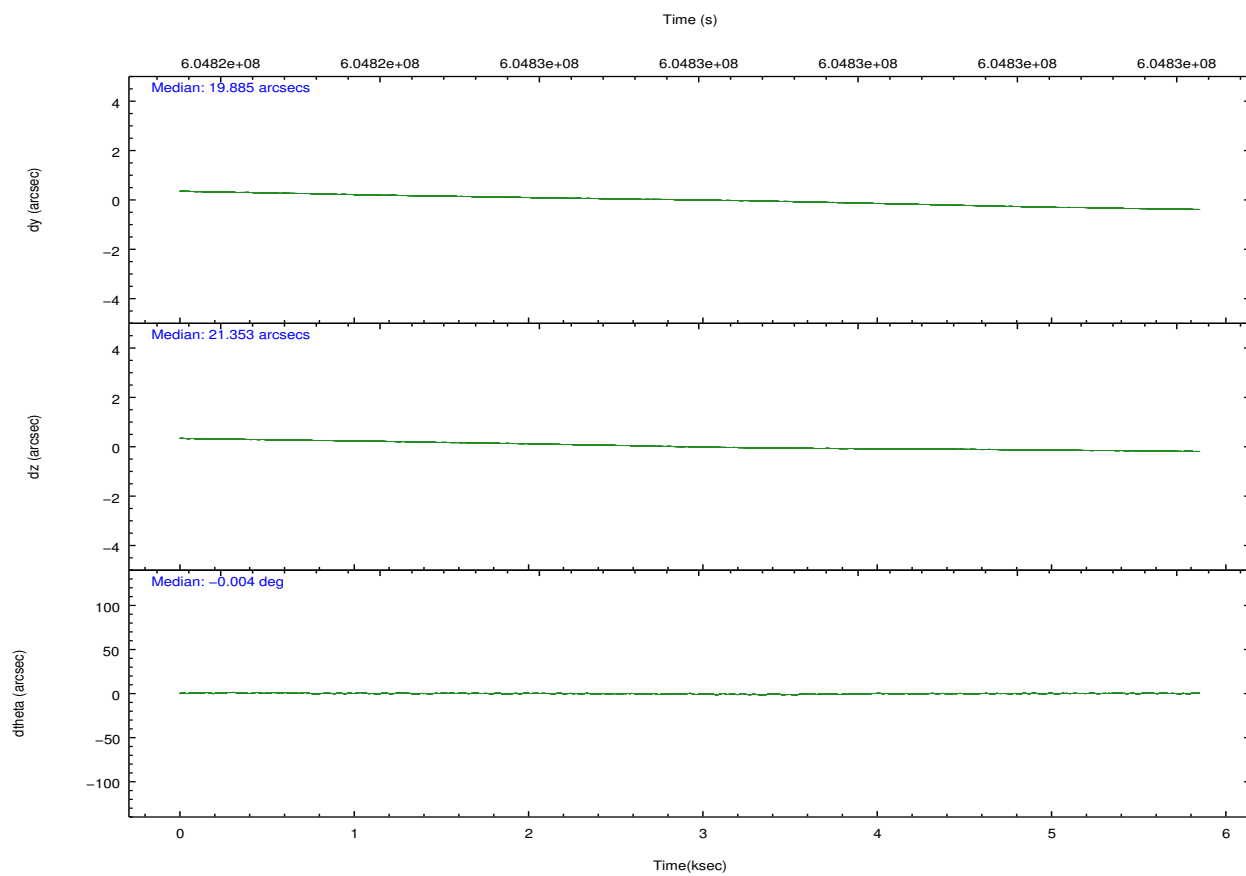
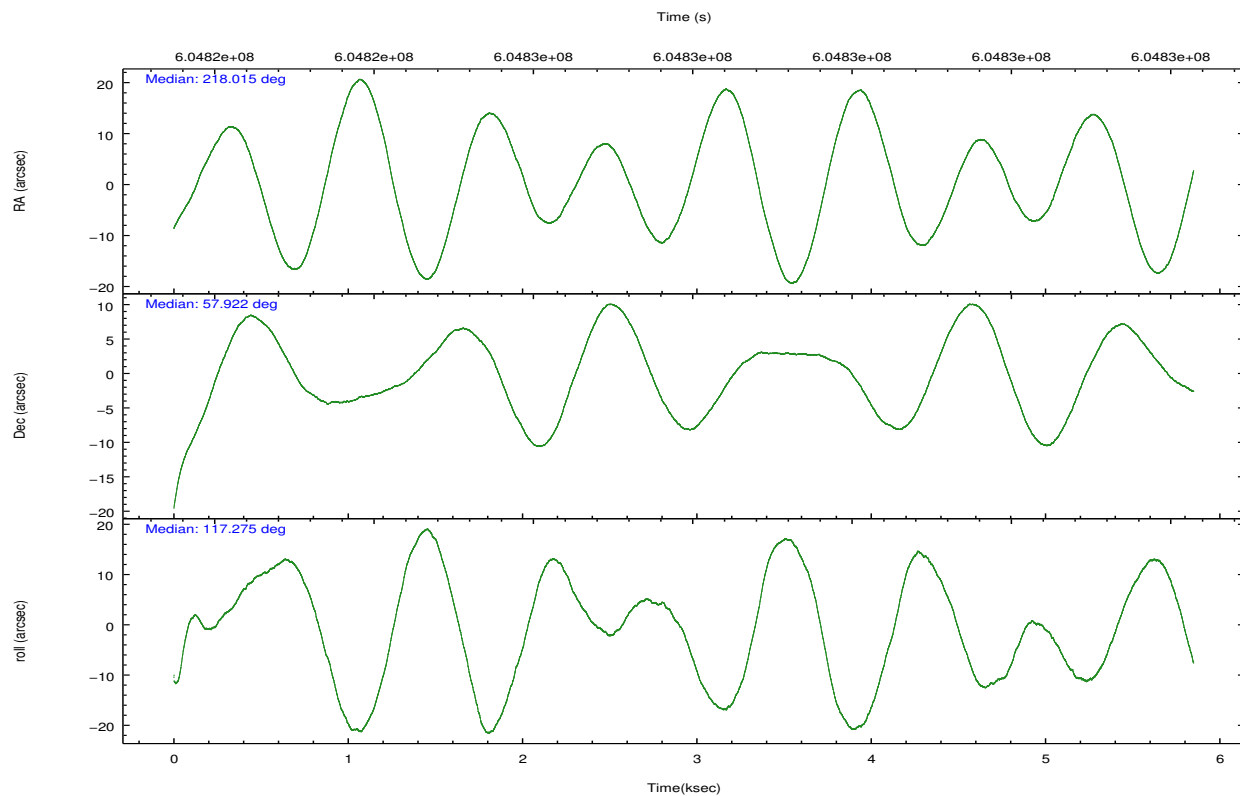


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	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	218.058720	218.0147344180876	Subarray requested	NONE	NONE
[deg] Pointing Dec	57.907542	57.92206987508568	Alternating exposures requested	N	N
[deg] Pointing Roll	117.089538	117.2834022979676	[s] Primary exposure time	0.000000	3.1
[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)	604824867.184000	604823295.30251			
Observation start date	2017-03-02T06:53:18	2017-03-02T06:28:15			
[s] Observation end time (MET)	604829867.184000	604830624.56543			
Observation end date	2017-03-02T08:16:38	2017-03-02T08:30:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect



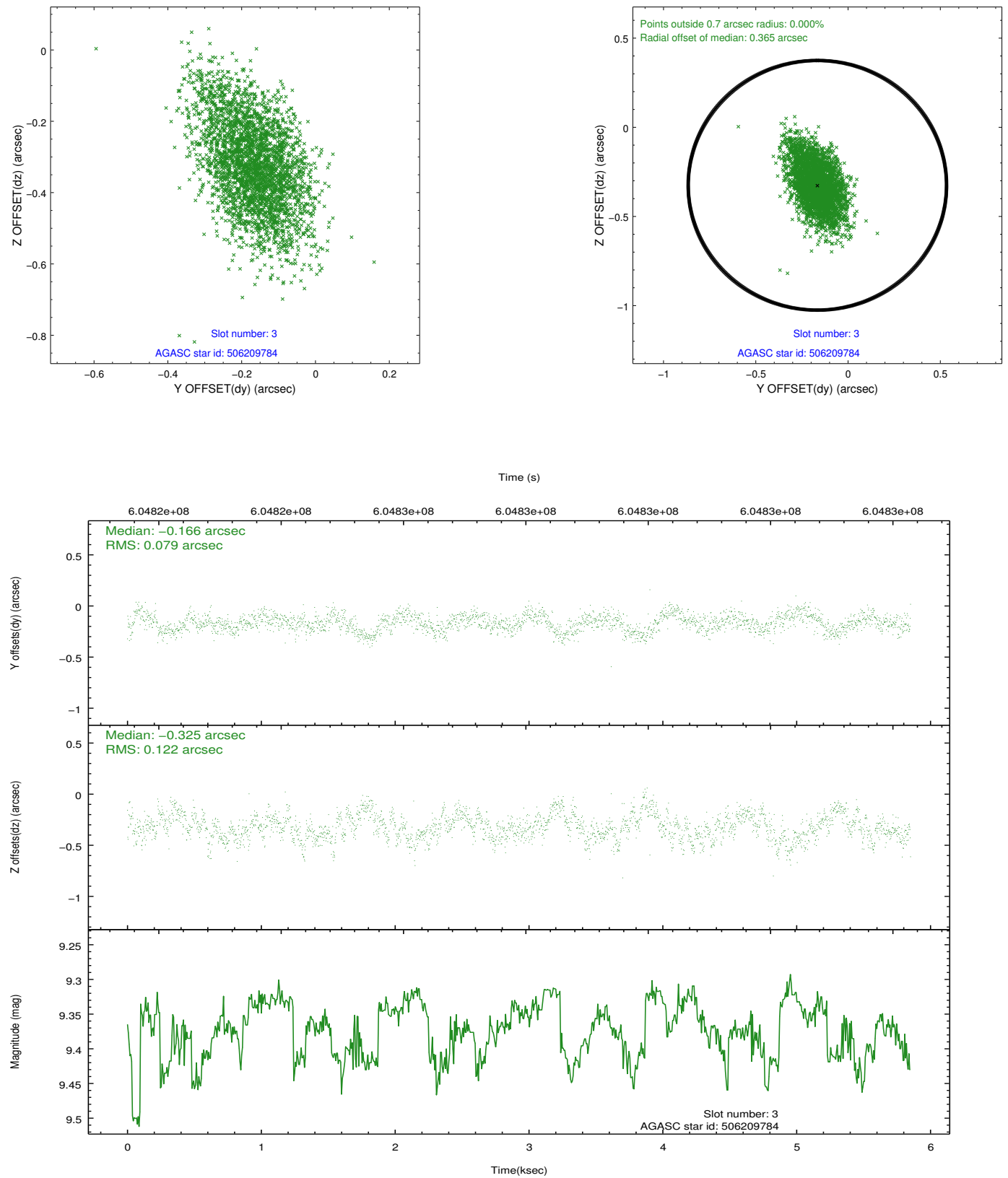


### Slot Statistics

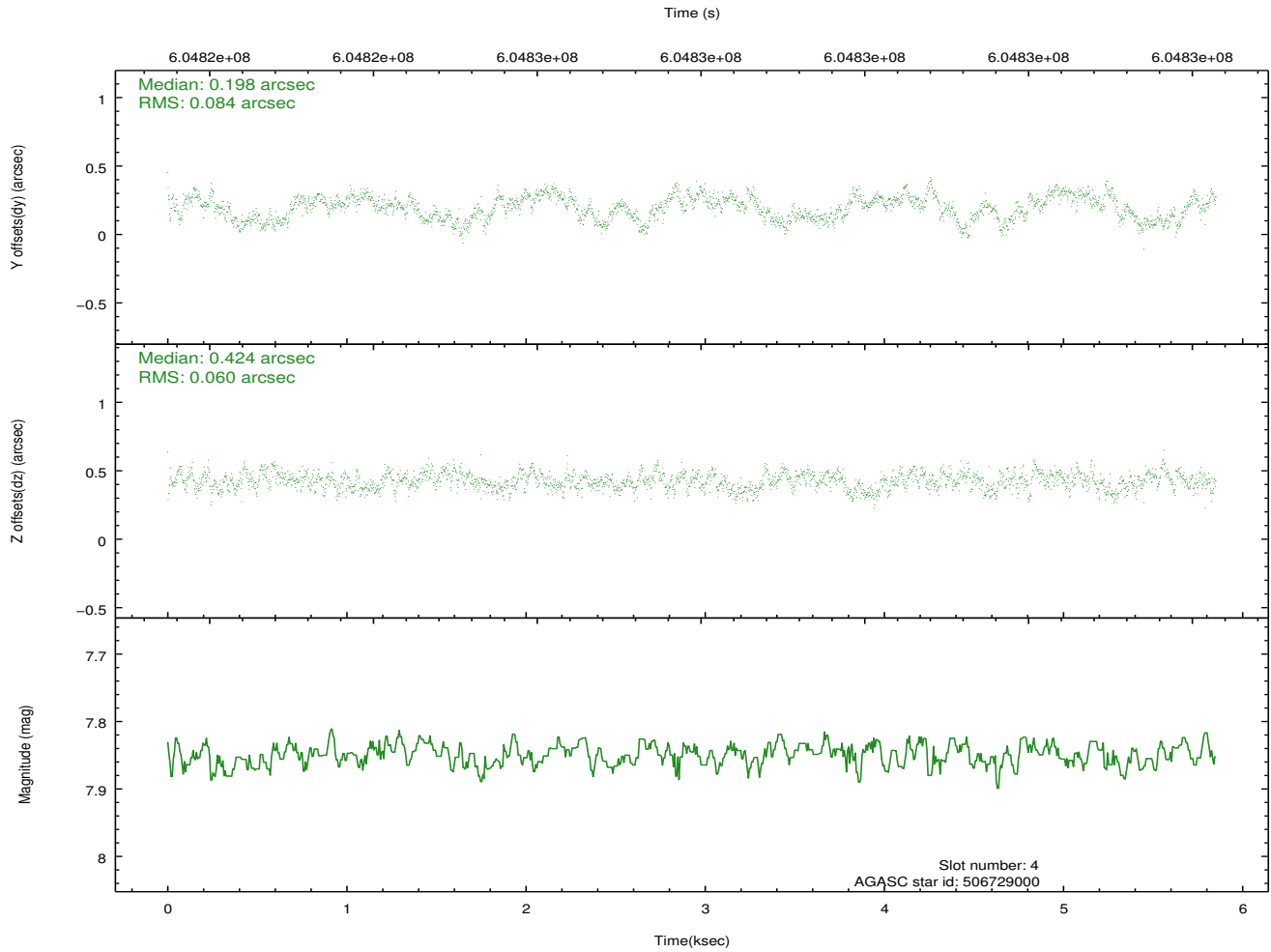
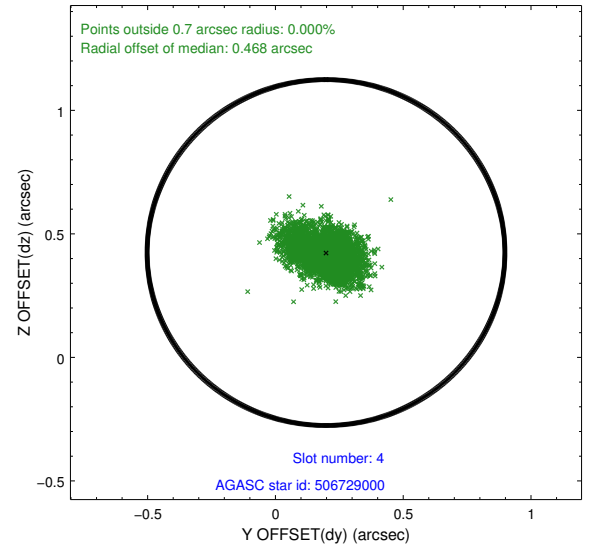
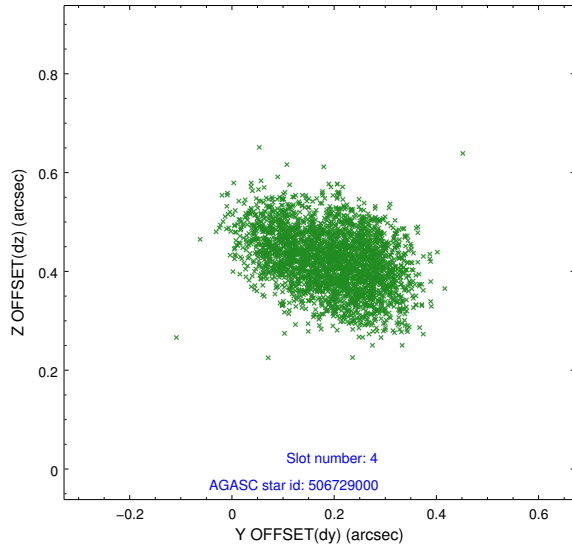
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.02	1427	-0.245	-0.135	0.008	0.014	0.000000	0.000000	-773.21	-1743.08
1	FID		ACIS-S-4	7.13	1427	0.520	0.154	0.009	0.015	0.000000	0.000000	2140.36	164.64
2	FID		ACIS-S-5	7.12	1427	-0.306	-0.011	0.009	0.015	0.000000	0.000000	-1824.82	159.30
3	GUIDE	used	506209784	9.37	2845	-0.166	-0.325	0.150	0.259	217.198701	57.472545	-627.25	2189.74
4	GUIDE	used	506729000	7.85	2854	0.198	0.424	0.110	0.174	218.197050	58.423283	1534.62	-1076.63
5	GUIDE	used	506729160	9.13	2850	-0.093	-0.622	0.139	0.218	217.778116	58.011567	580.62	304.53
6	GUIDE	used	506732712	9.29	2851	-0.121	-0.024	0.132	0.238	218.473410	58.459540	1416.06	-1601.28
7	GUIDE	used	506734224	8.41	2850	0.194	0.546	0.111	0.179	219.088834	57.560659	-2001.64	-1209.04

## 2.4 Star Slots

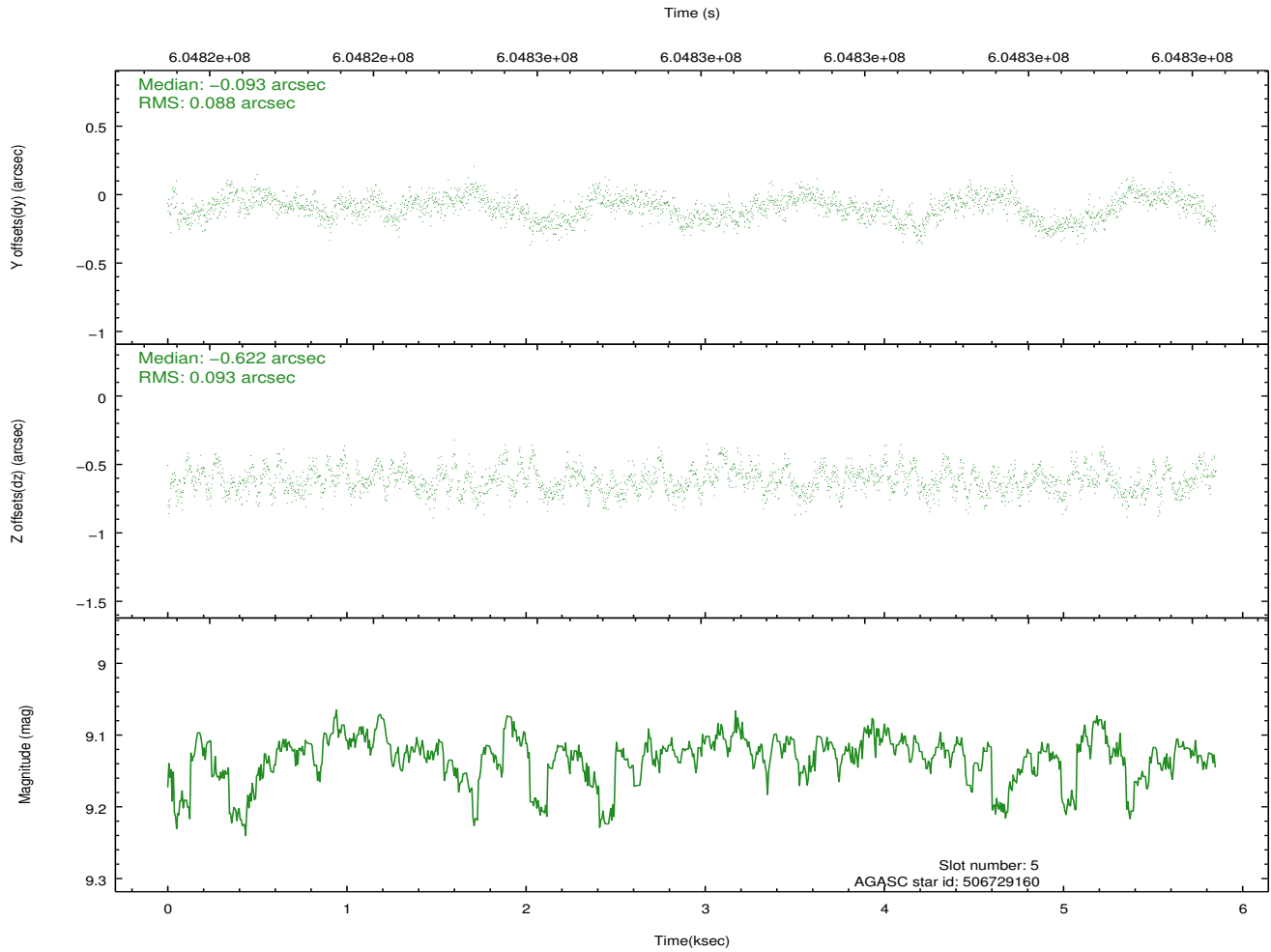
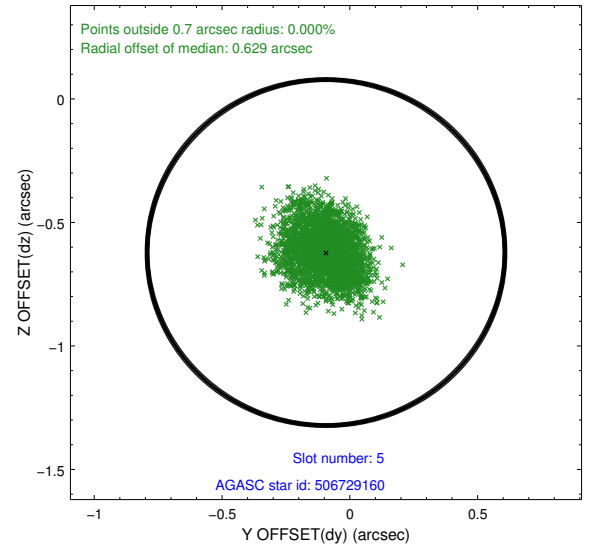
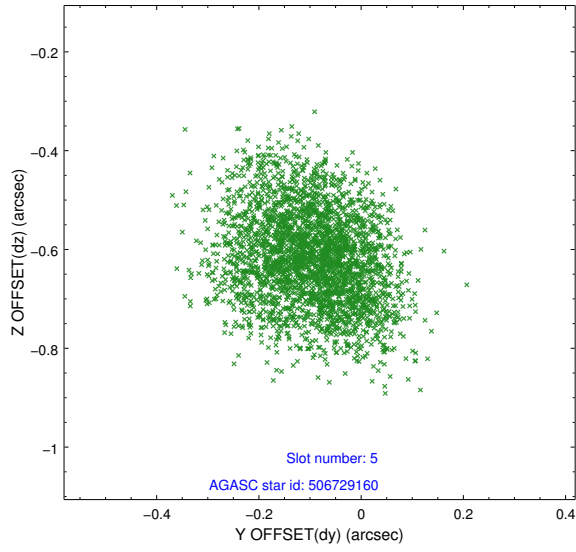
### 2.4.1 Slot 3



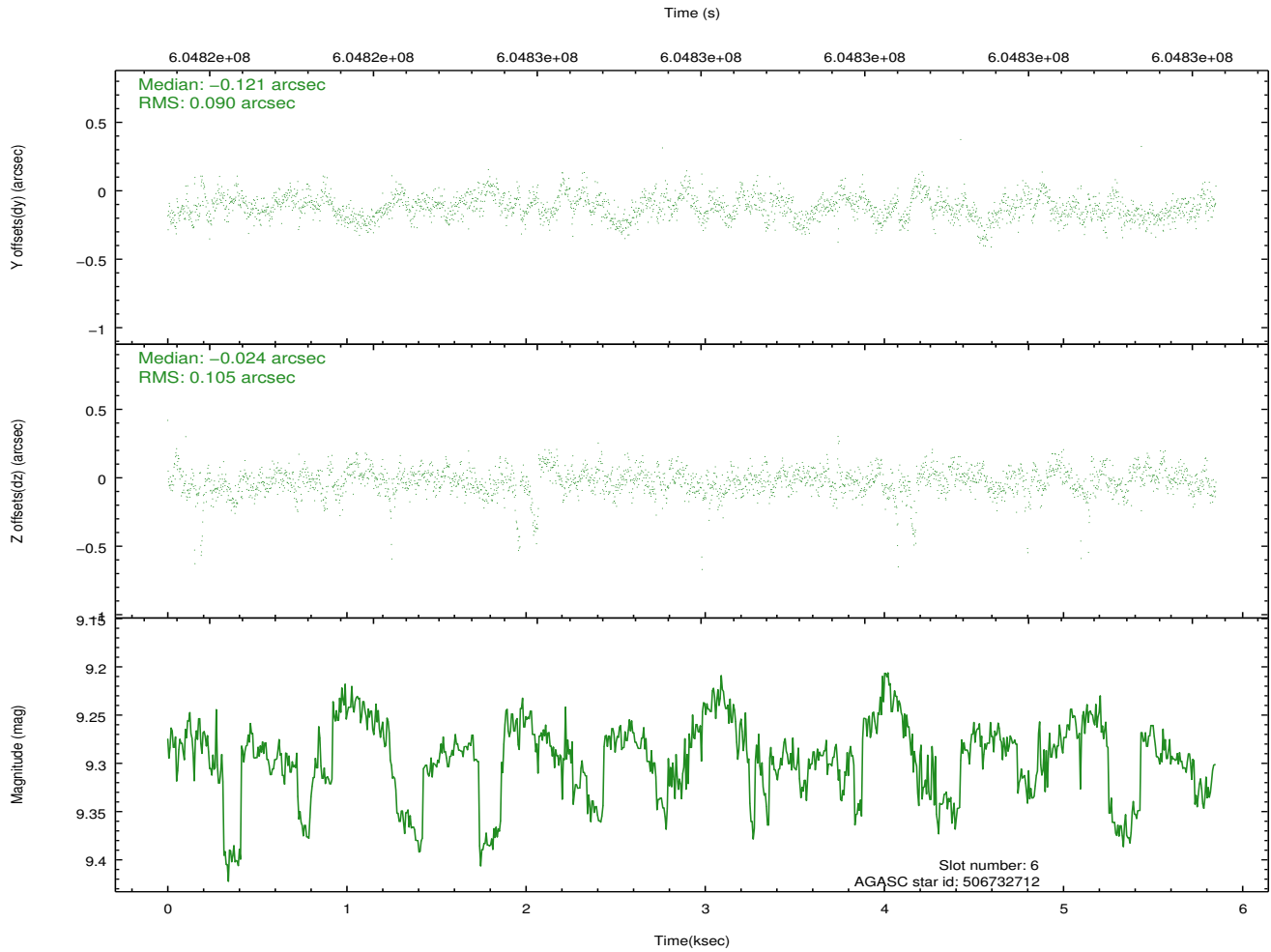
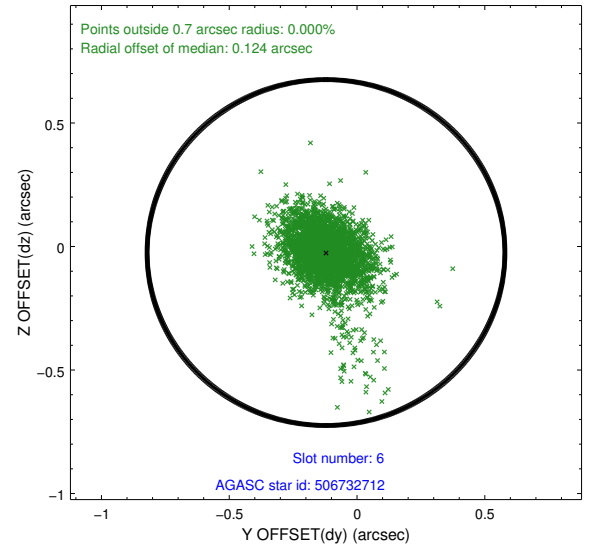
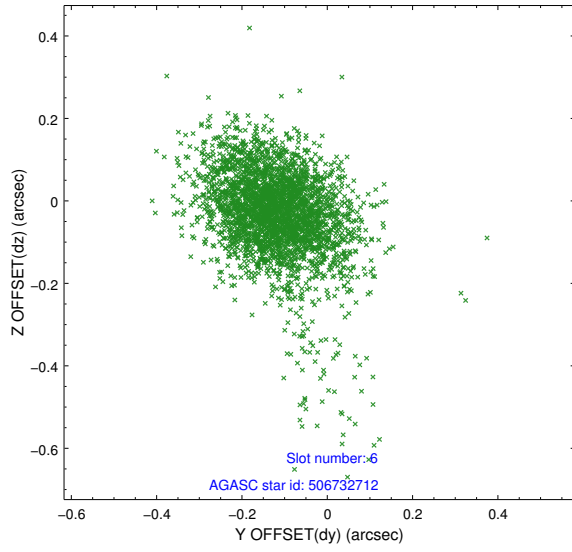
## 2.4.2 Slot 4



### 2.4.3 Slot 5

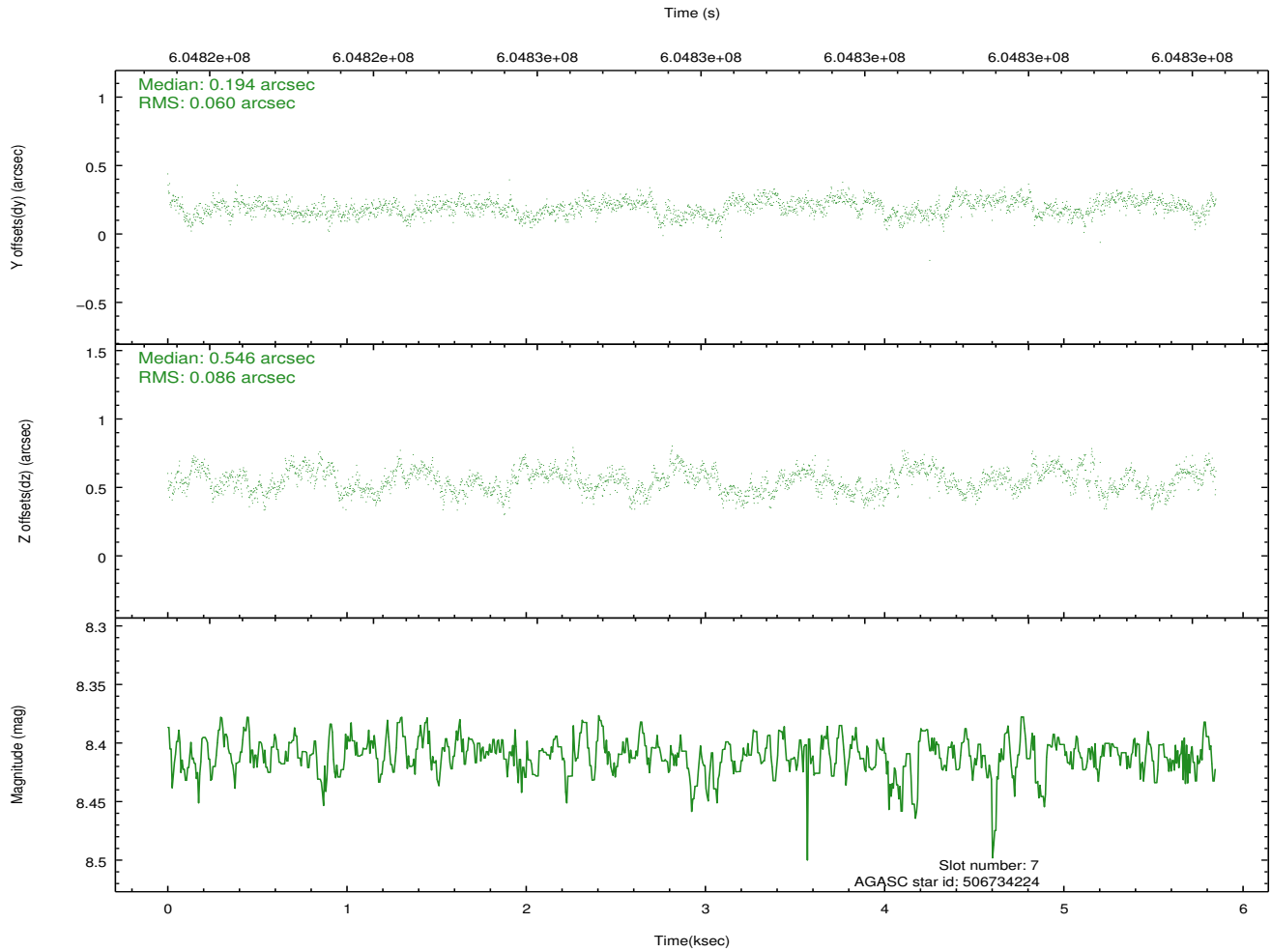
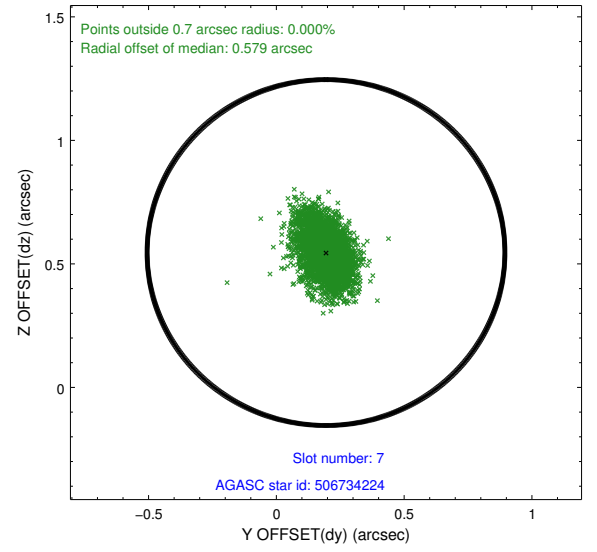
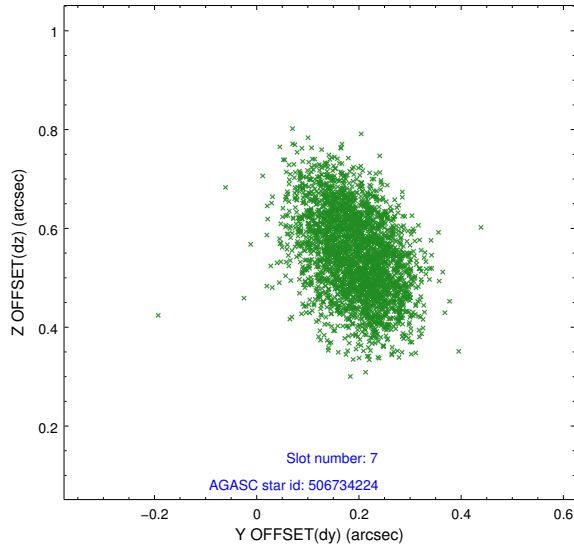


## 2.4.4 Slot 6



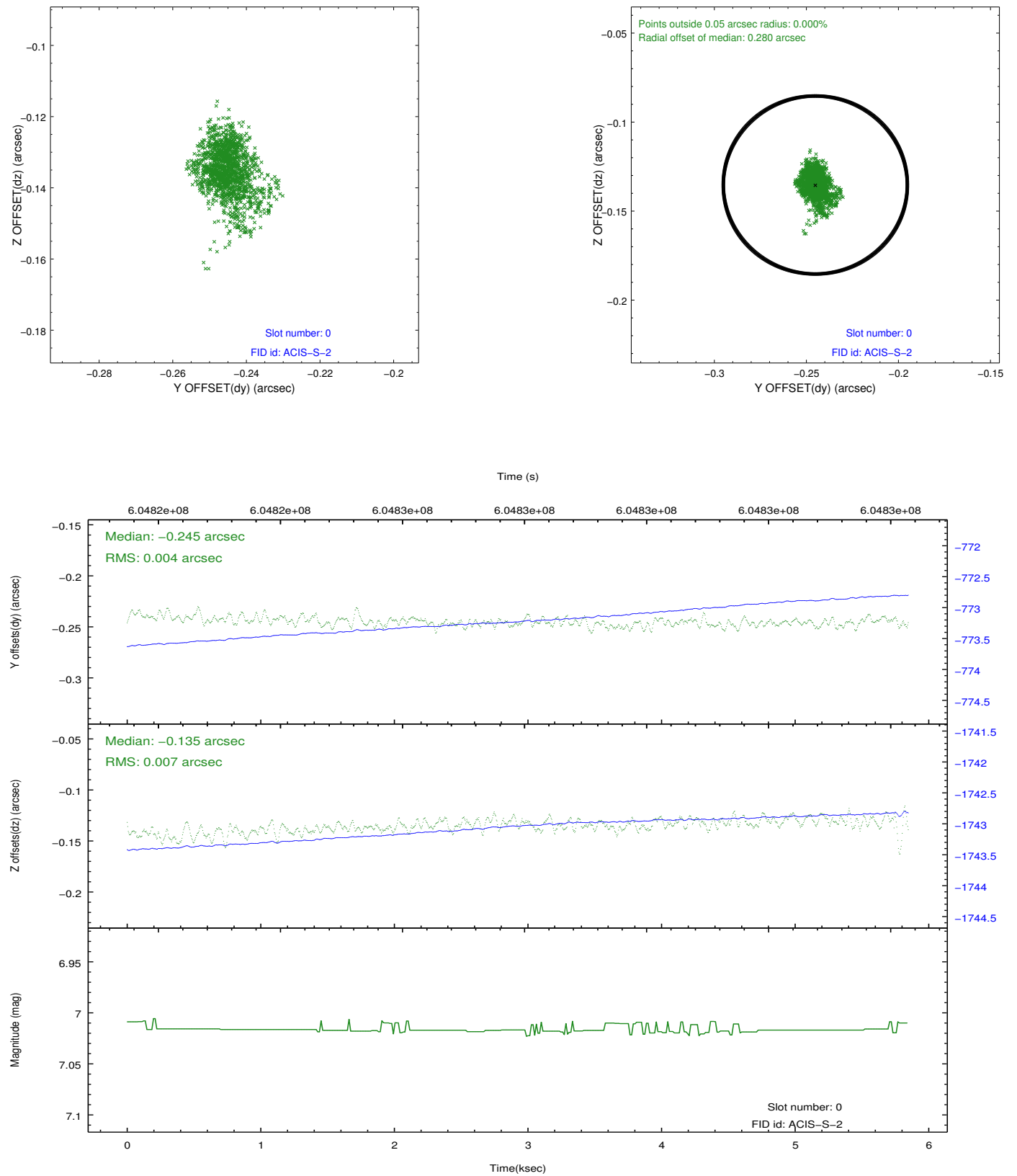


## 2.4.5 Slot 7

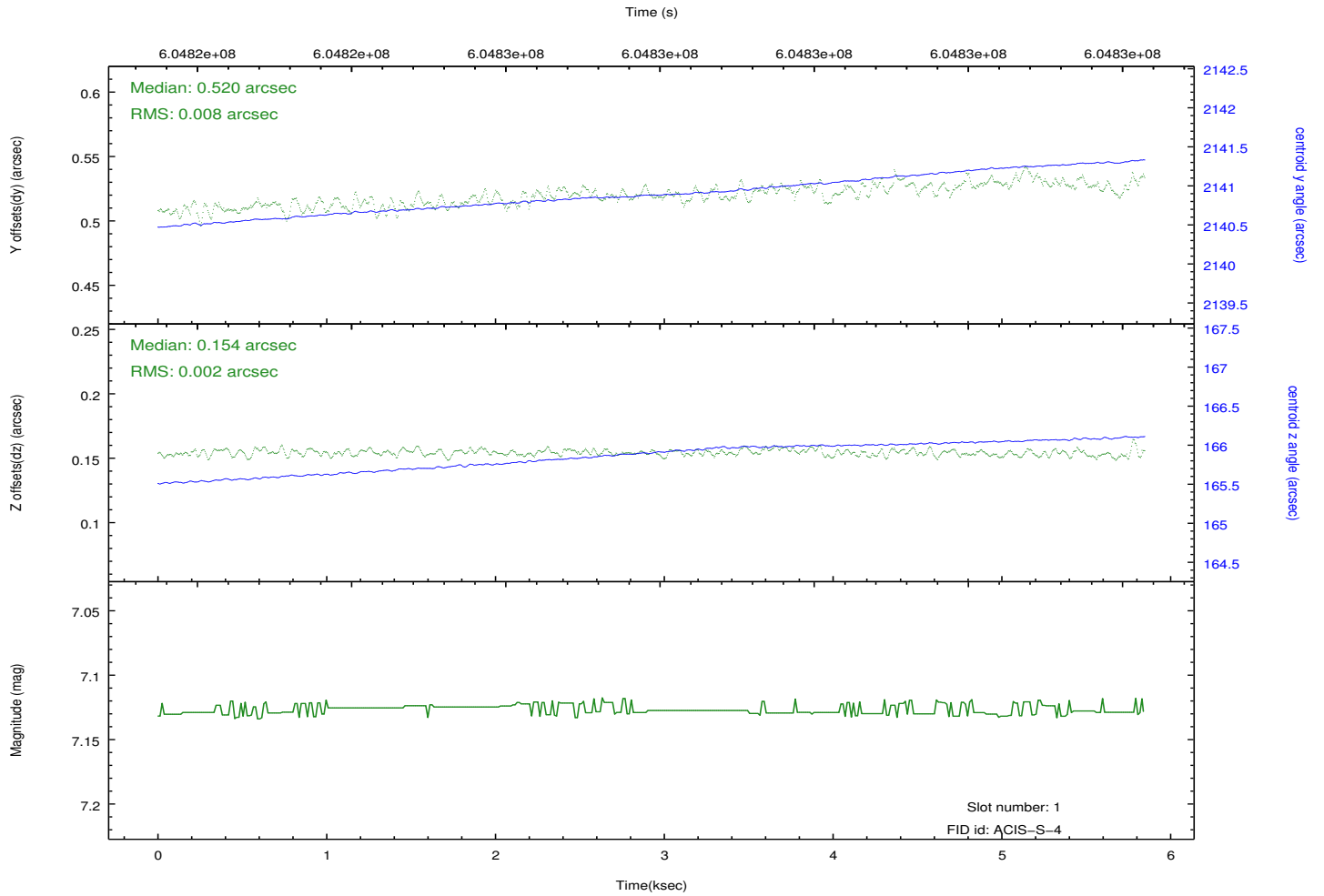
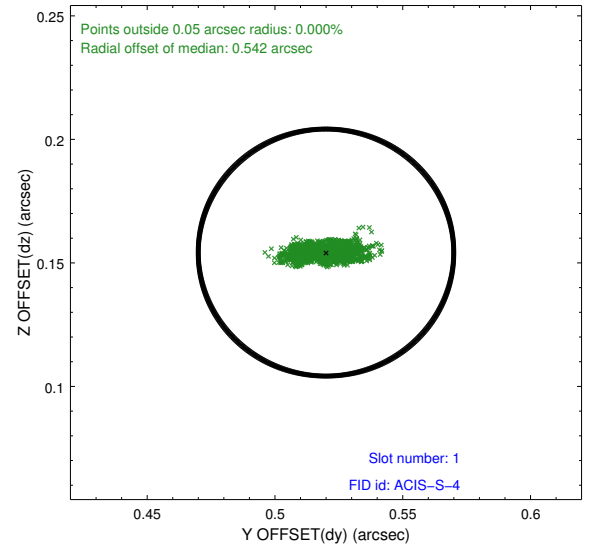
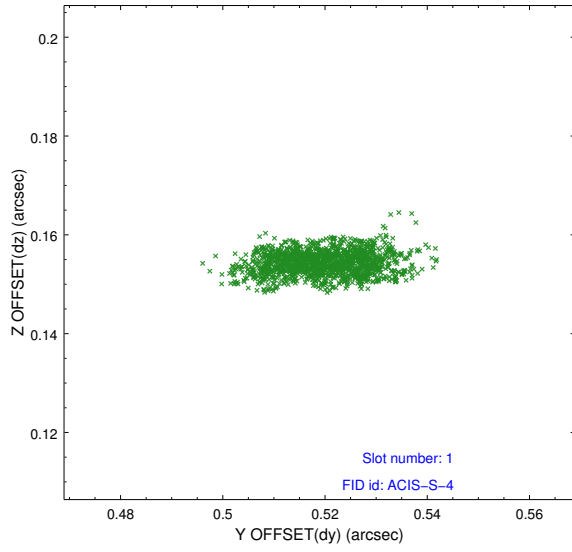


## 2.5 FID Slots

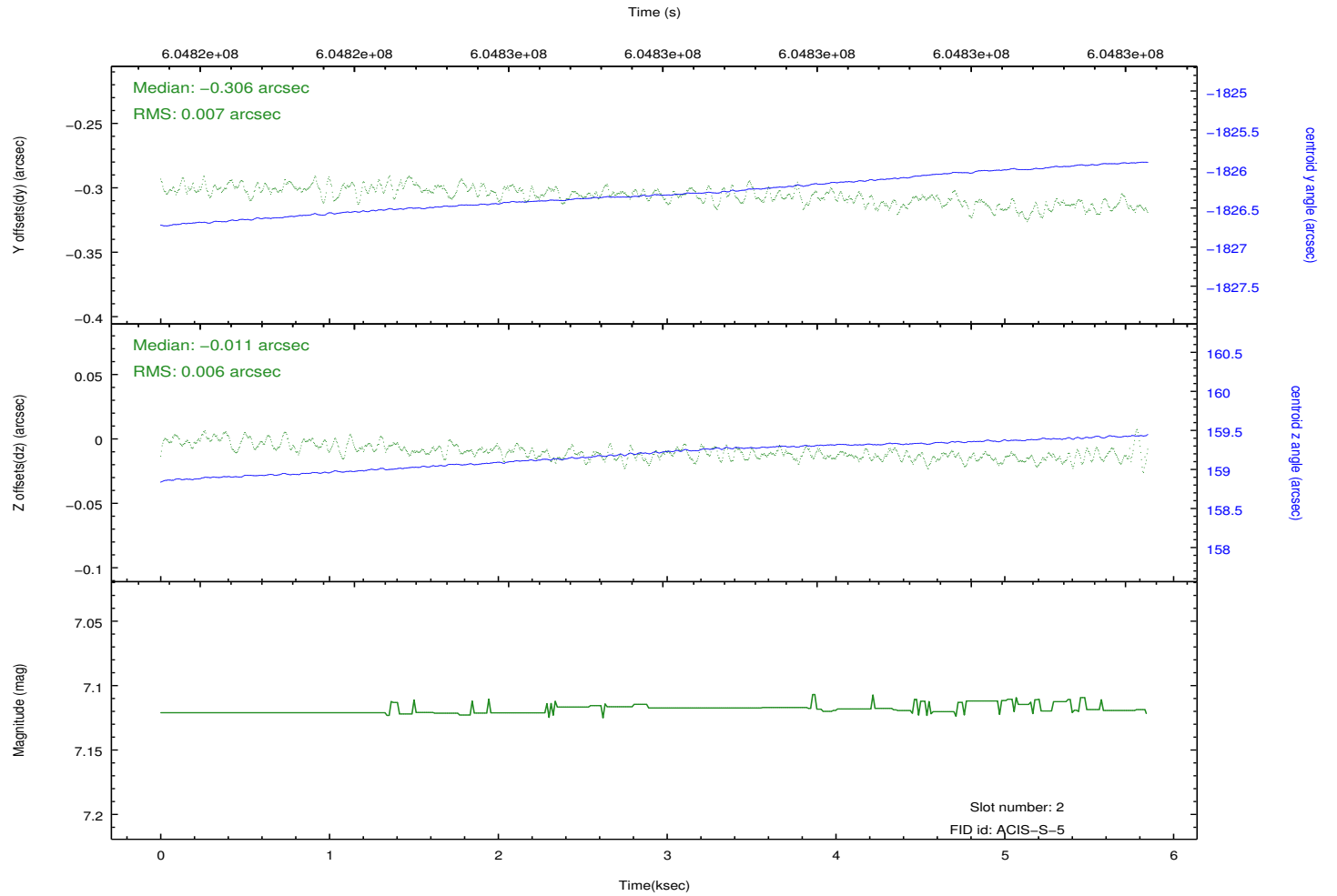
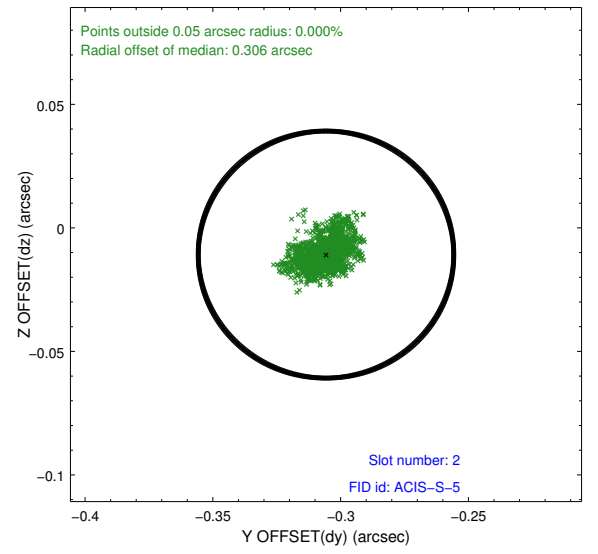
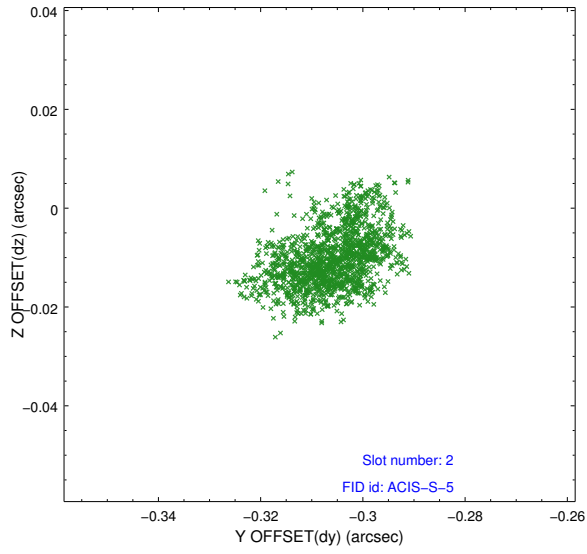
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.03.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.071163574338

### A.2 Comments