

# V&V Reference Report

## L2 ASCDS Version : 10.3.3

Observation 16063 - L2 Version 1  
Chandra X-Ray Center

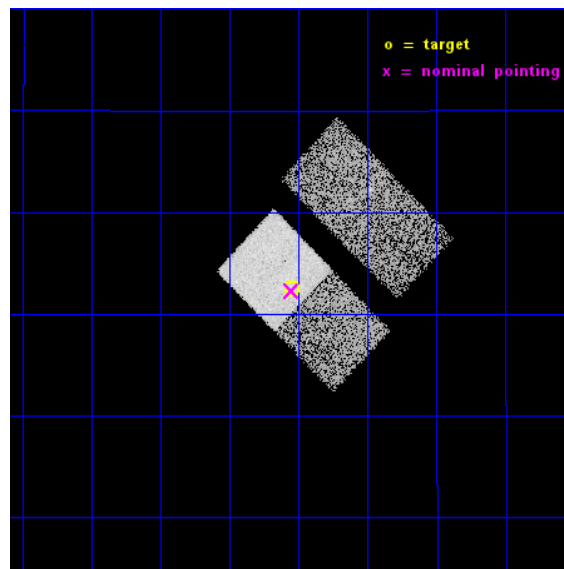
L2 Processing Date : May 7 2015

## 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

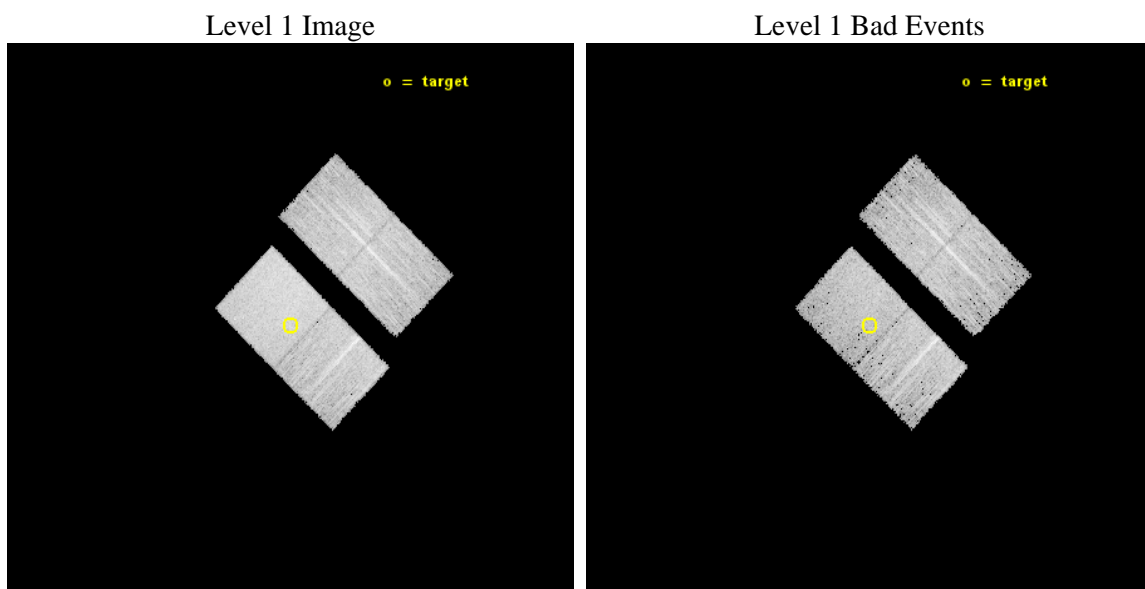
seq_num	702957	Sequence number
obs_id	16063	Observation id
title	Continuing the Chandra 3CR Snapshot Survey: 23 Radio Sources with 0.5	Proposal title
observer	Dr Francesco Massaro	Principal investigator
object	3C277.2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	193.3875	Observer's specified target RA [deg]
dec_targ	15.708111	Observer's specified target Dec [deg]
ra_nom	193.38808566248	Nominal RA [deg]
dec_nom	15.705015737859	Nominal Dec [deg]
roll_nom	224.23127903301	Nominal Roll [deg]
revision	1	Processing version of data
ontime	12068.300092936	Sum of GTIs [s]
livetime	11910.618867668	Livetime [s]
ontime2	12068.300092936	Sum of GTIs [s]
ontime3	12068.300092936	Sum of GTIs [s]
ontime6	12068.300092936	Sum of GTIs [s]
ontime7	12068.300092936	Sum of GTIs [s]
l2events	46731	Number of level 2 events



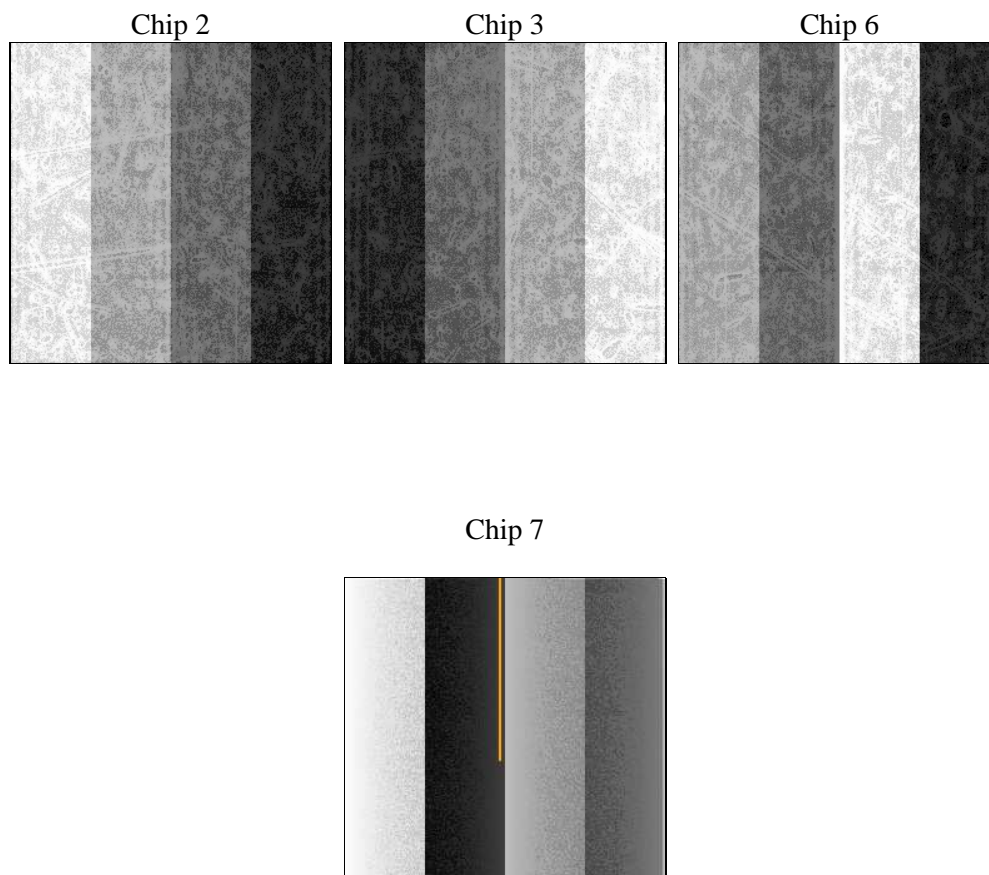
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	12068.300092936	Sum of GTIs [s]
caldsver	4.6.7	&#160	ontime2	12068.300092936	Sum of GTIs [s]
date	2015-05-07T17:33:02	Date and time of file creation	ontime3	12068.300092936	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	12068.300092936	Sum of GTIs [s]
			ontime7	12068.300092936	Sum of GTIs [s]
			l1events	237130	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	53054	53453	56643	73980
rejected events	47252	47356	50171	42539
rejected %	89%	88%	88%	57%

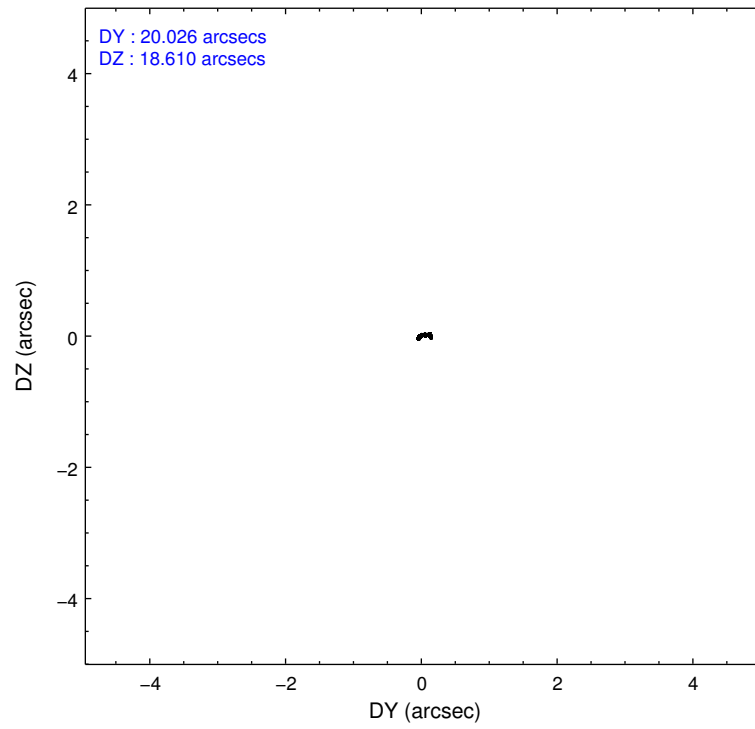
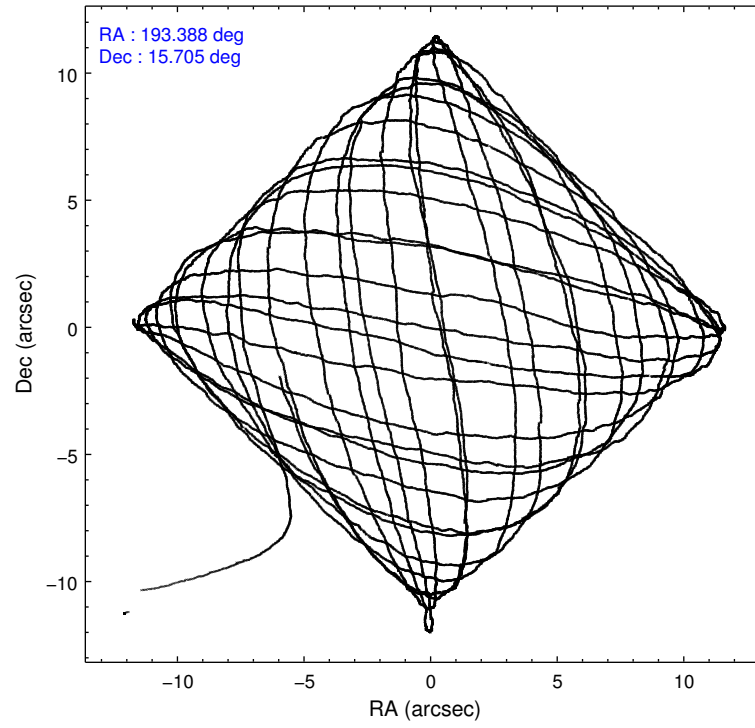
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2021	2268	2067	2663
	3%	4%	3%	3%
grade 1 events	27	29	30	77
	0%	0%	0%	0%
grade 2 events	1371	1240	1541	6566
	2%	2%	2%	8%
grade 3 events	589	674	660	2351
	1%	1%	1%	3%
grade 4 events	588	639	595	2417
	1%	1%	1%	3%
grade 5 events	2205	2778	2690	7161
	4%	5%	4%	9%
grade 6 events	1233	1277	1610	17451
	2%	2%	2%	23%
grade 7 events	45020	44548	47450	35294
	84%	83%	83%	47%

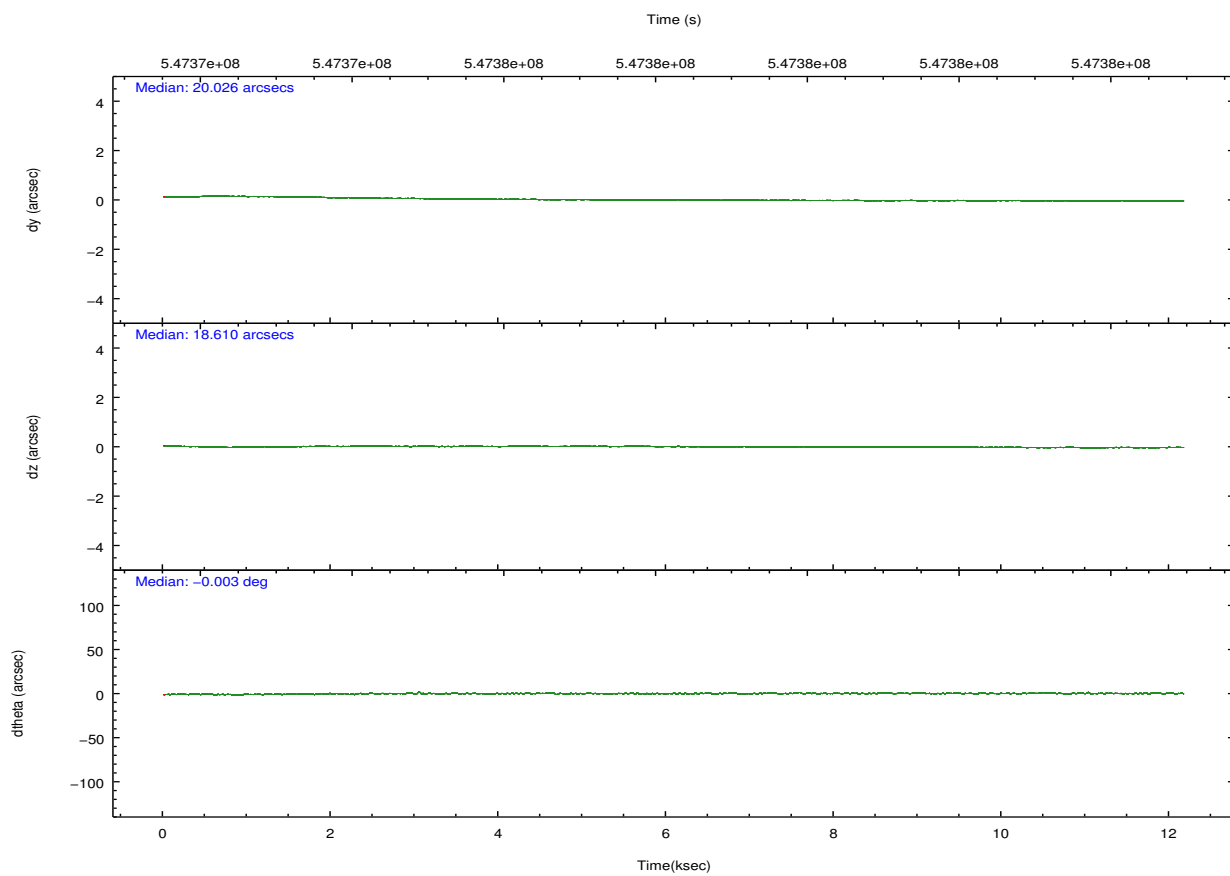
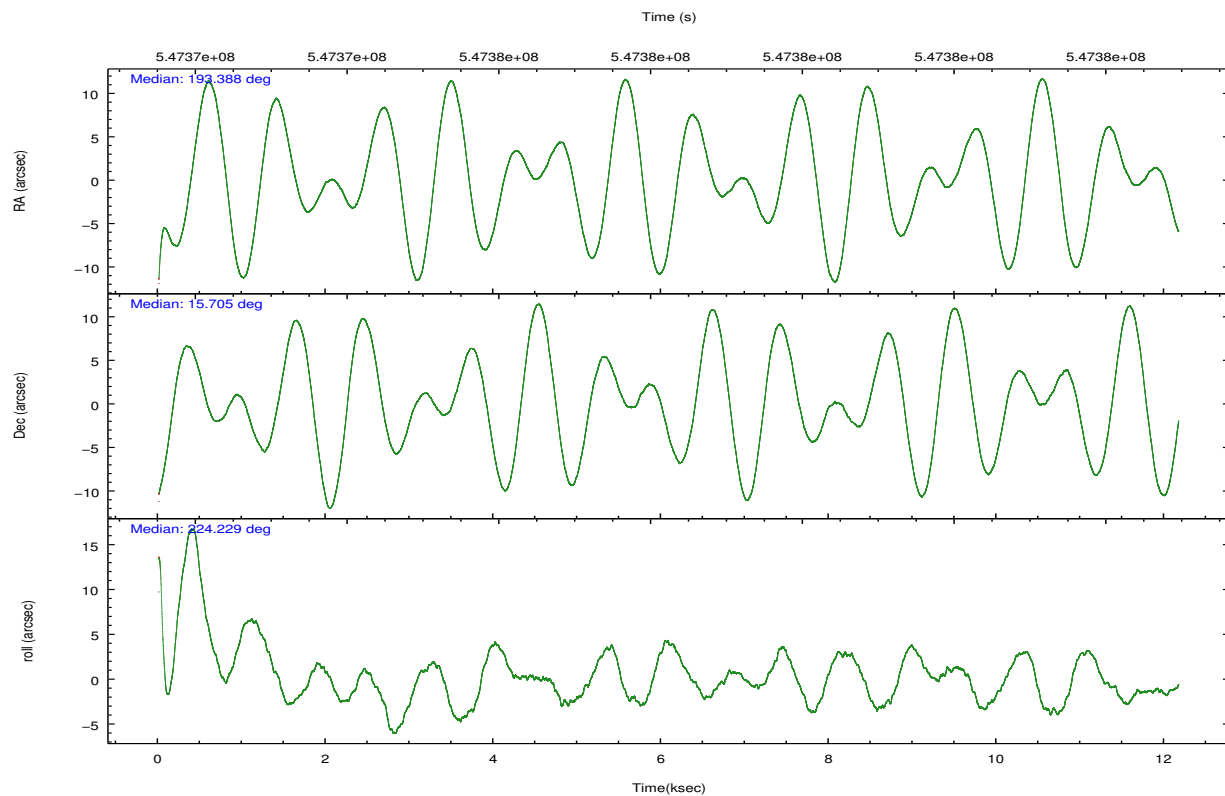


## 2.2 Compared Parameters

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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	193.395479	193.3880856624829	CCD I2 on	O1	Y
[deg] Pointing Dec	15.731560	15.70501573785917	CCD I3 on	O2	Y
[deg] Pointing Roll	224.072625	224.2312790330148	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	547372341.184000	547370867.67483	CCD S5 on	N	N
Observation start date	2015-05-07T07:51:14	2015-05-07T07:27:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	547384341.184000	547385019.33812	On-chip summing requested	N	N
Observation end date	2015-05-07T11:11:14	2015-05-07T11:23:39	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



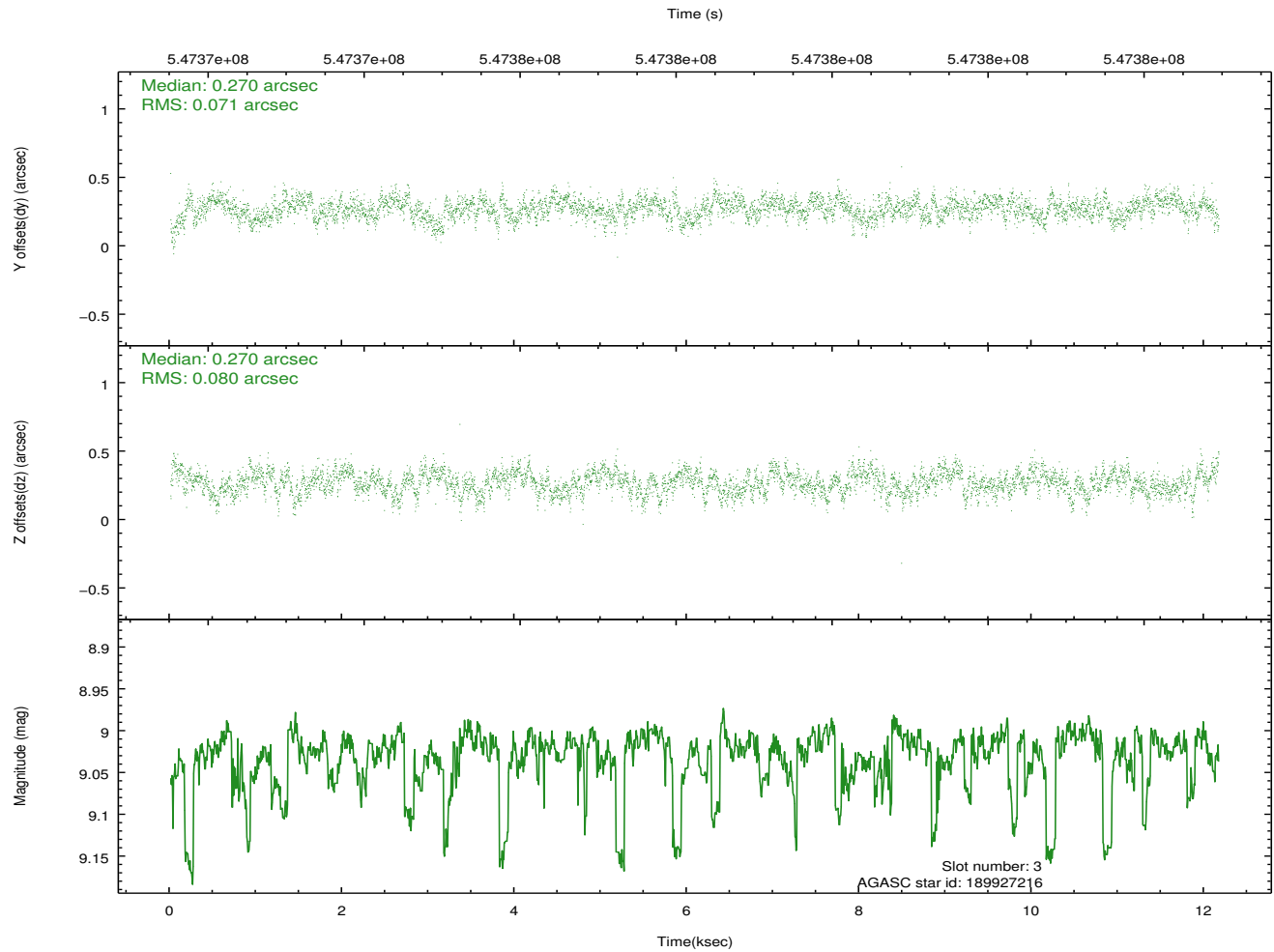
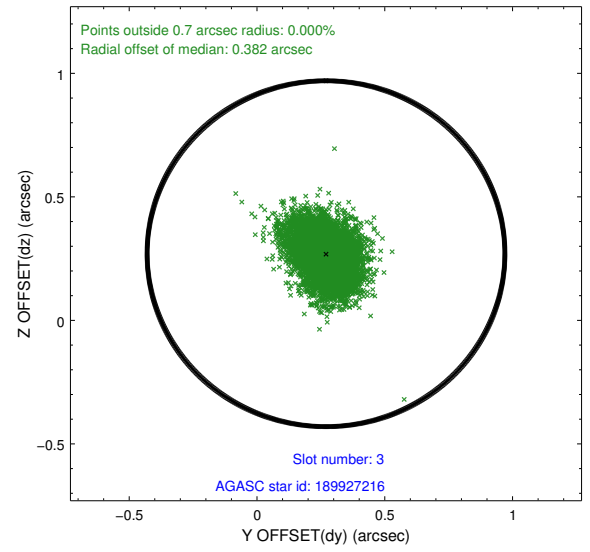
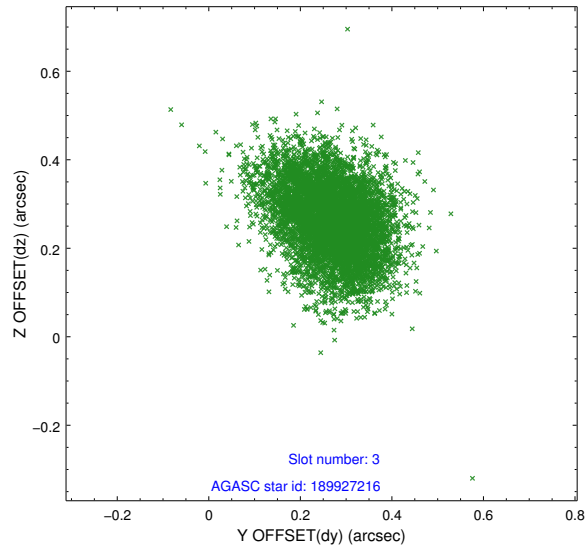


### Slot Statistics

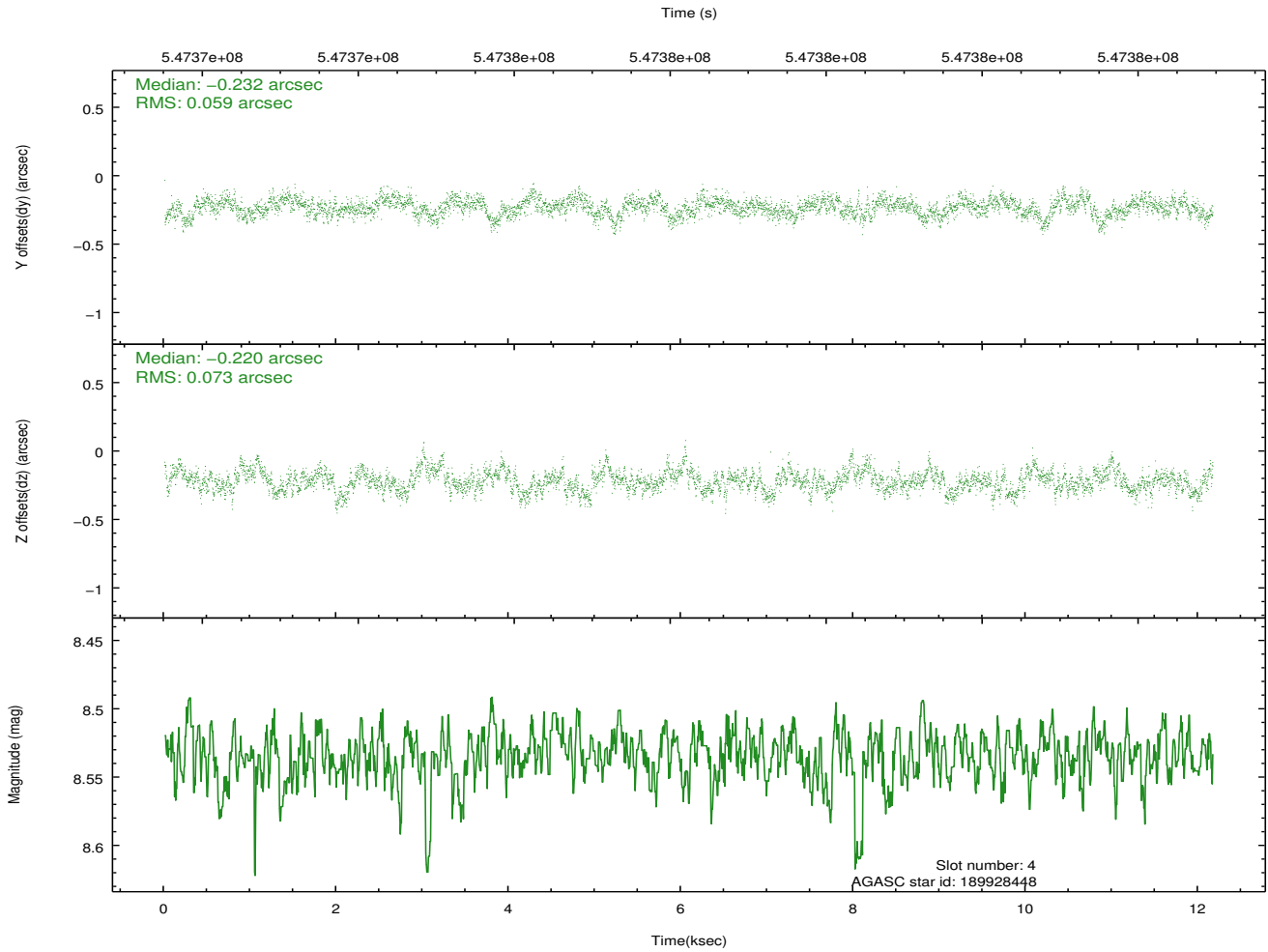
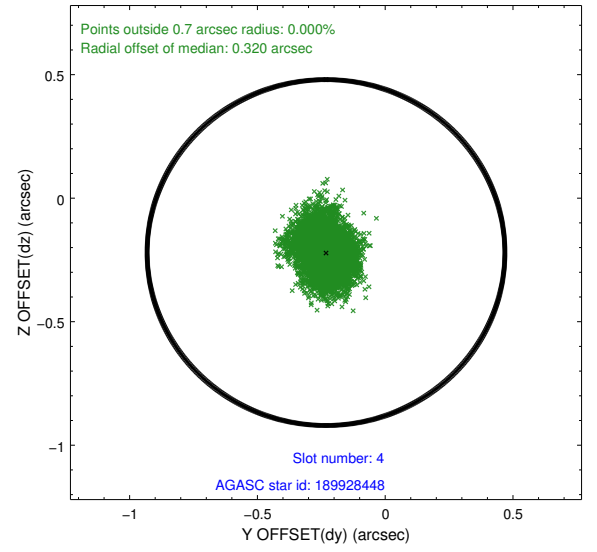
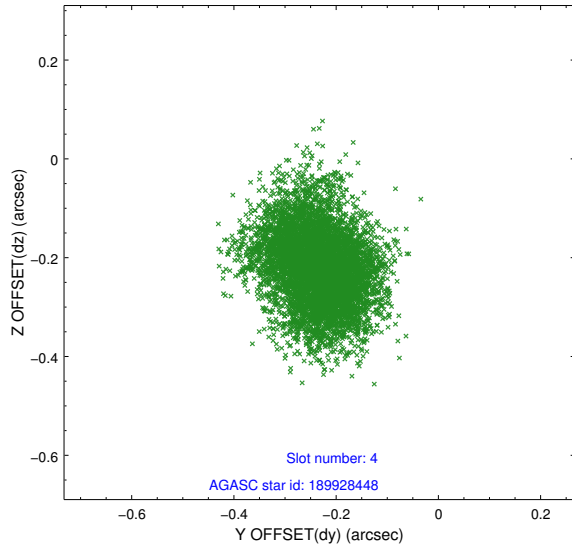
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.13	2967	-0.152	-0.096	0.007	0.012	0.000000	0.000000	-773.32	-1740.17
1	FID		ACIS-S-4	7.22	2967	0.360	0.099	0.005	0.011	0.000000	0.000000	2140.30	168.05
2	FID		ACIS-S-5	7.23	2967	-0.239	0.006	0.007	0.012	0.000000	0.000000	-1825.71	162.13
3	GUIDE	used	189927216	9.03	5926	0.270	0.270	0.112	0.184	194.006011	15.810382	-1718.46	1265.48
4	GUIDE	used	189928448	8.53	5931	-0.232	-0.220	0.100	0.161	193.522048	15.329857	690.12	1345.14
5	GUIDE	used	189928968	9.28	5932	0.204	0.169	0.160	0.258	193.468024	15.836163	-441.93	-95.11
6	GUIDE	used	189930656	9.79	5926	-0.232	-0.179	0.169	0.291	194.072197	15.572458	-1289.44	2040.42
7	GUIDE	used	189931264	6.68	5933	-0.021	-0.031	0.110	0.174	193.114554	16.122491	-280.60	-1687.11

## 2.4 Star Slots

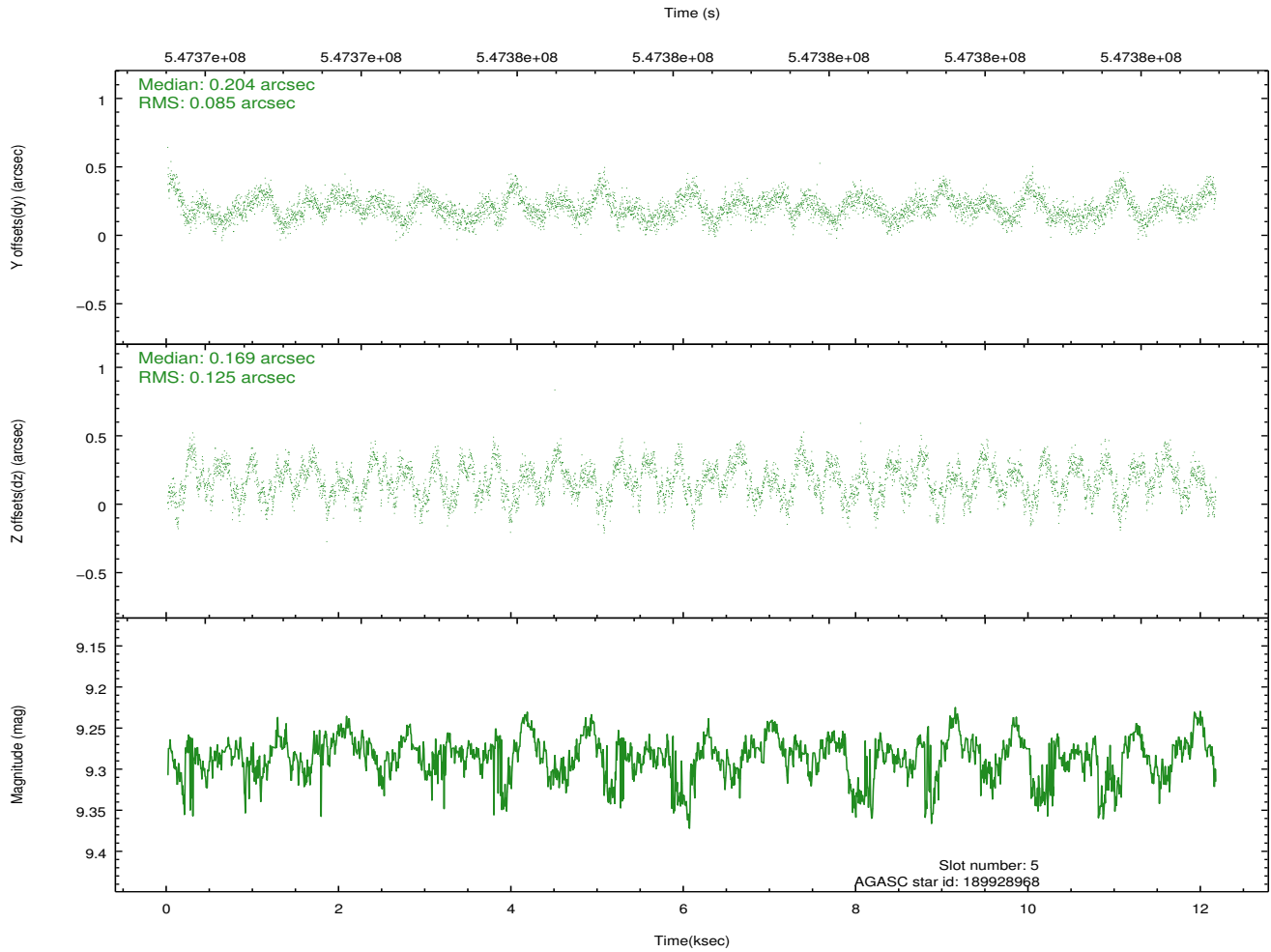
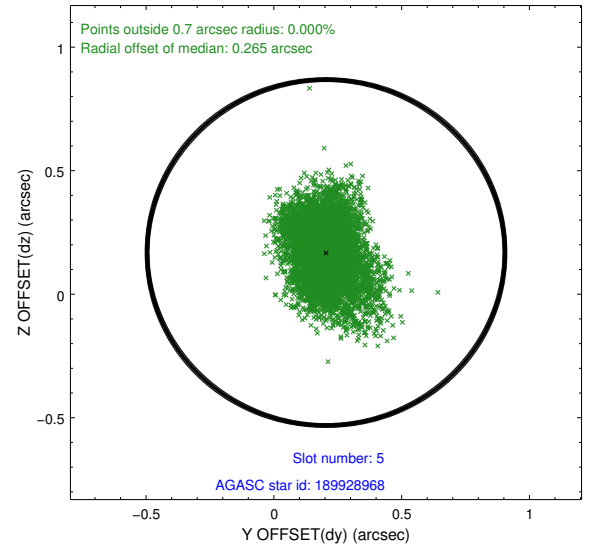
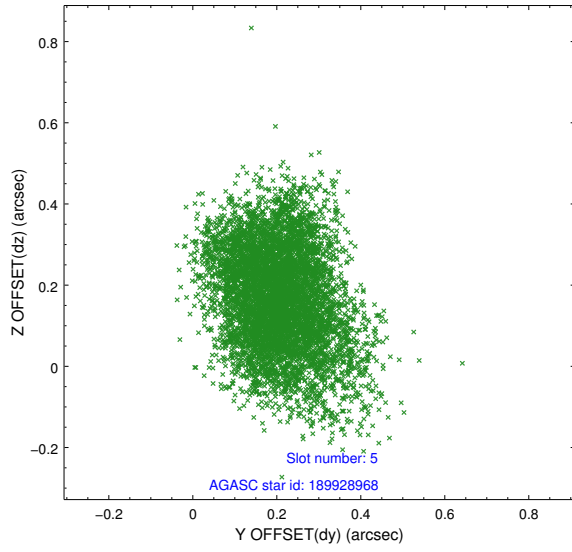
### 2.4.1 Slot 3



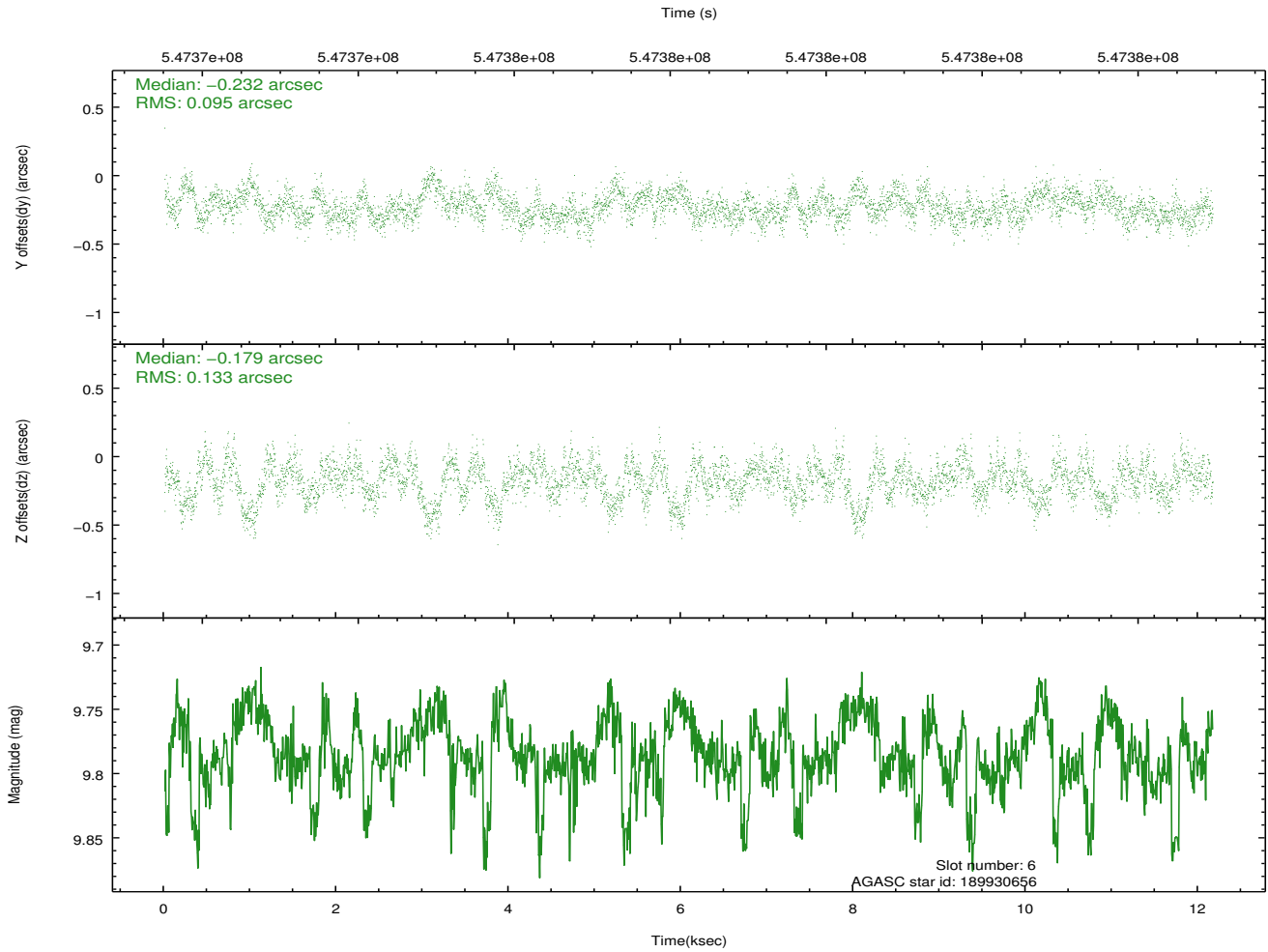
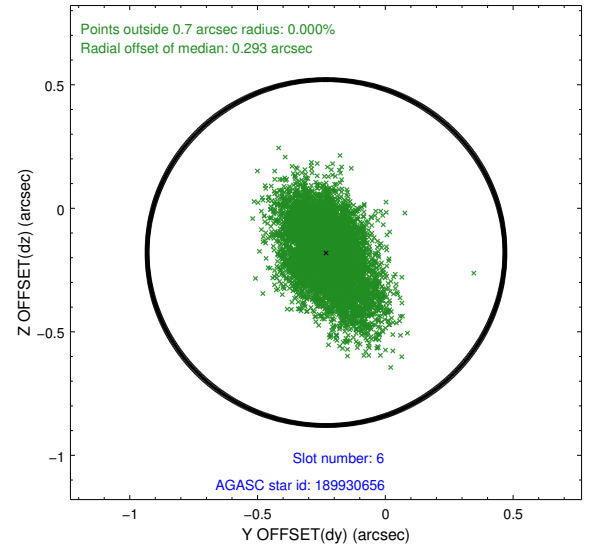
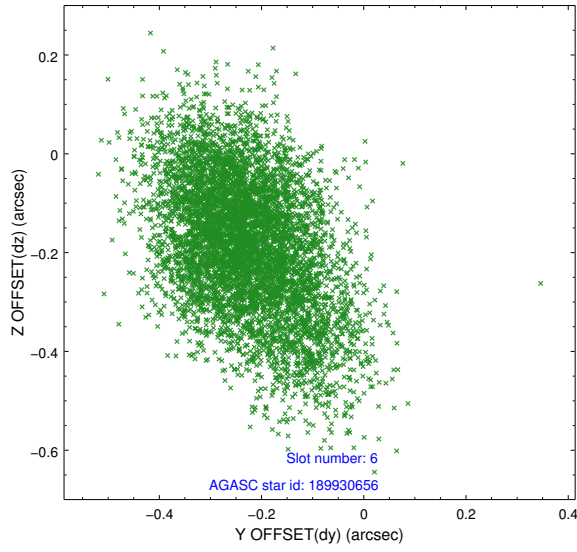
## 2.4.2 Slot 4



### 2.4.3 Slot 5

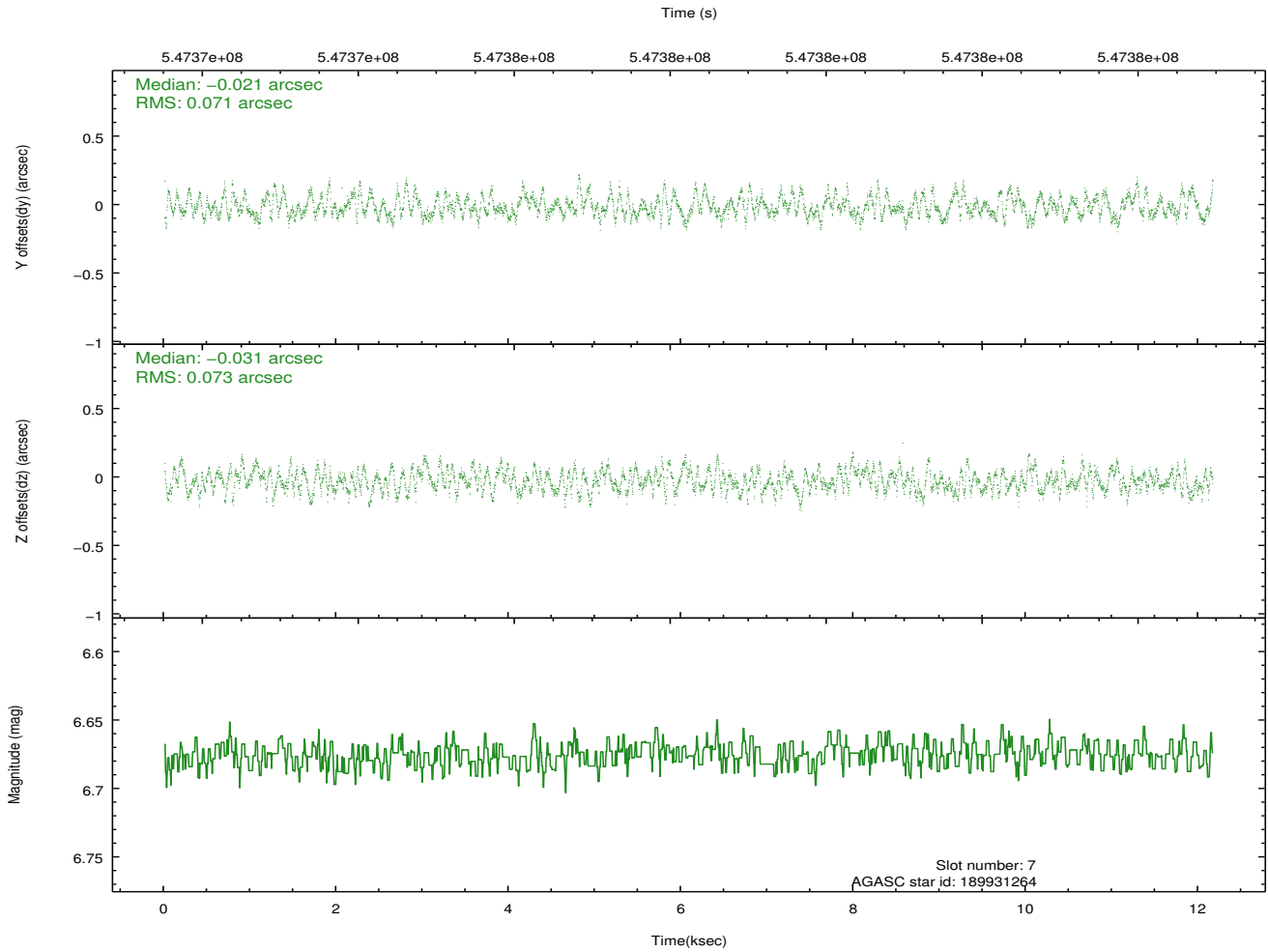
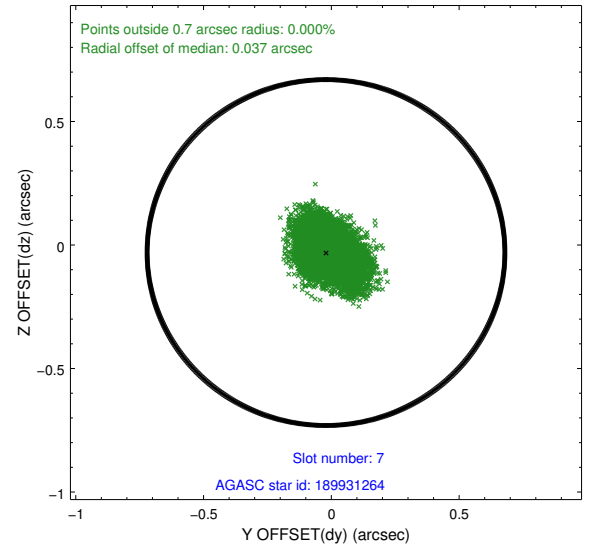
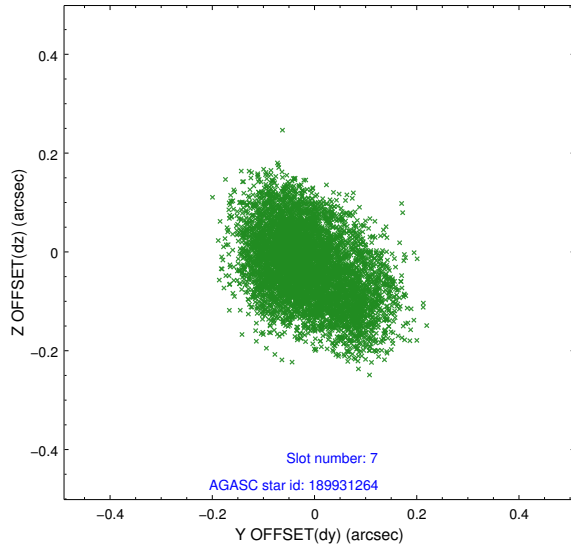


## 2.4.4 Slot 6



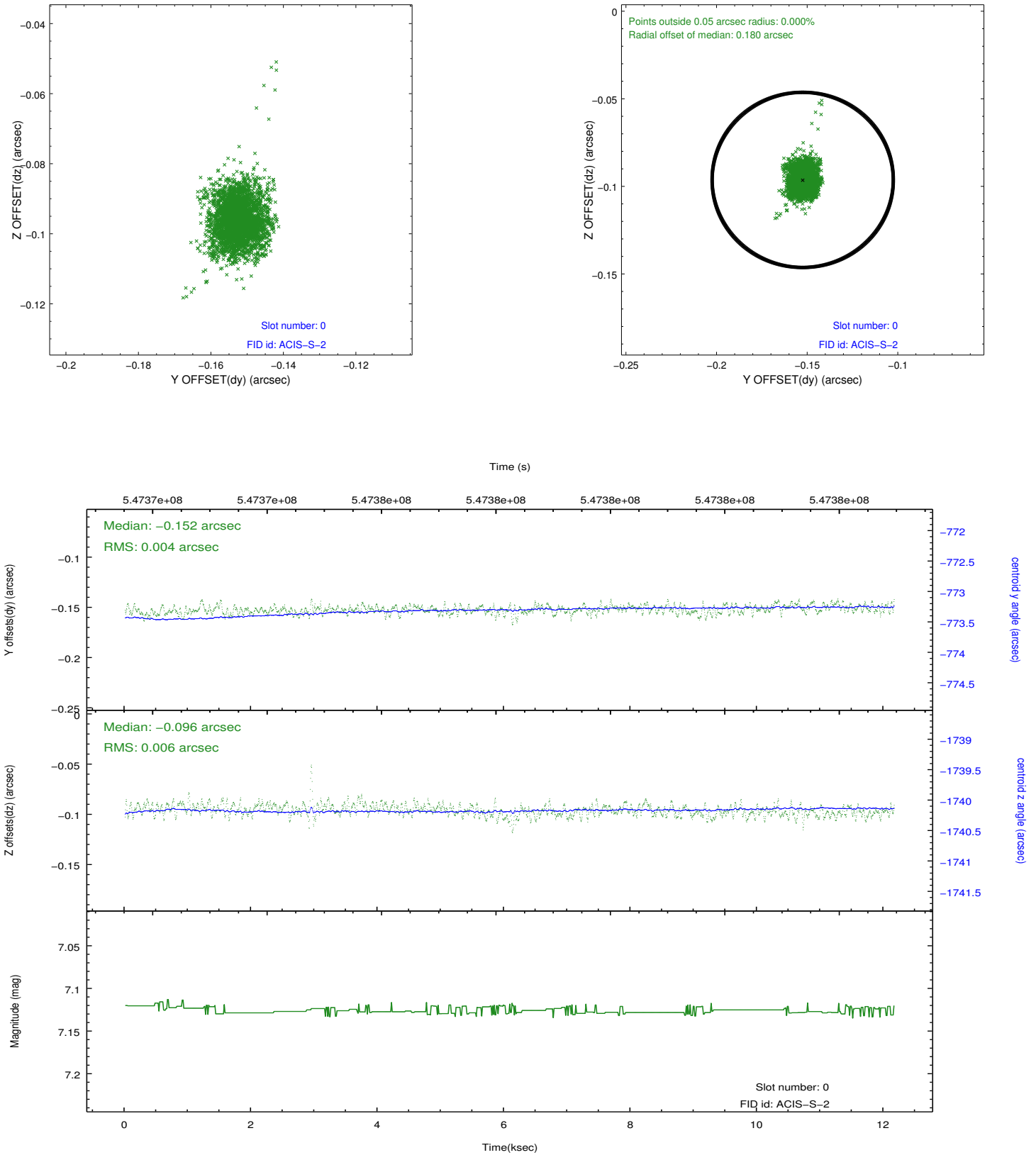


## 2.4.5 Slot 7

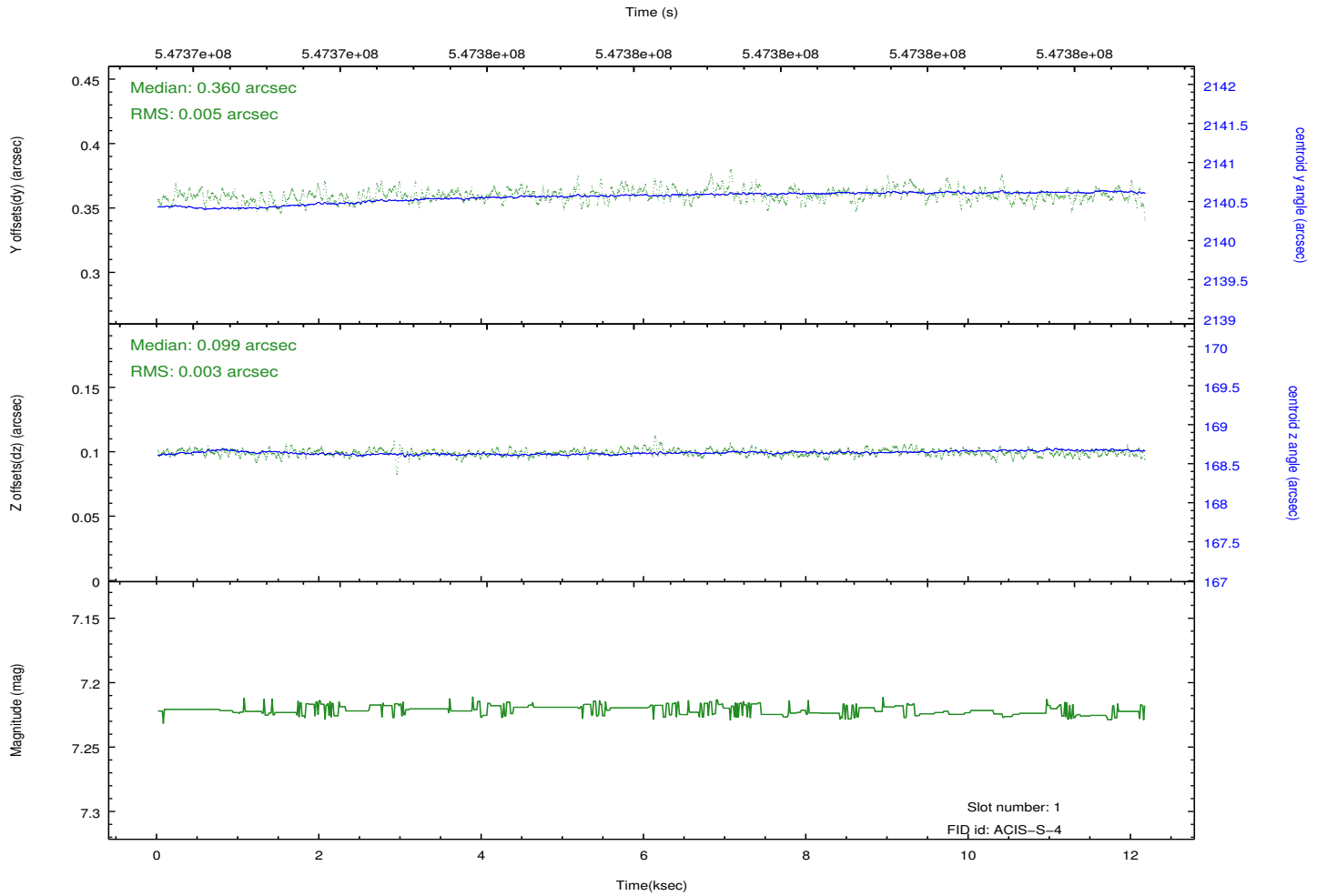
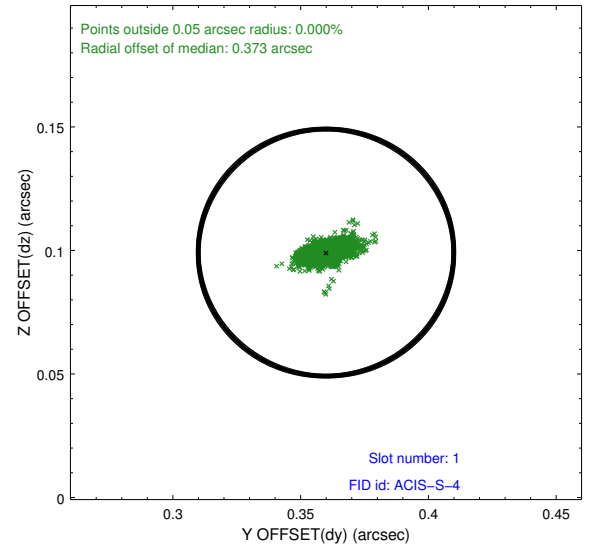
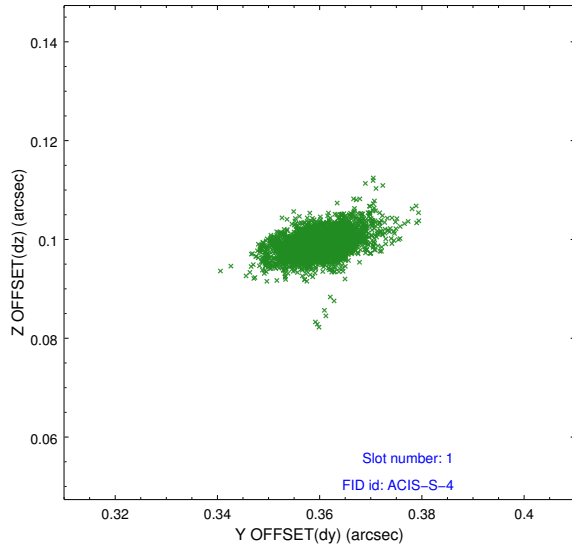


## 2.5 FID Slots

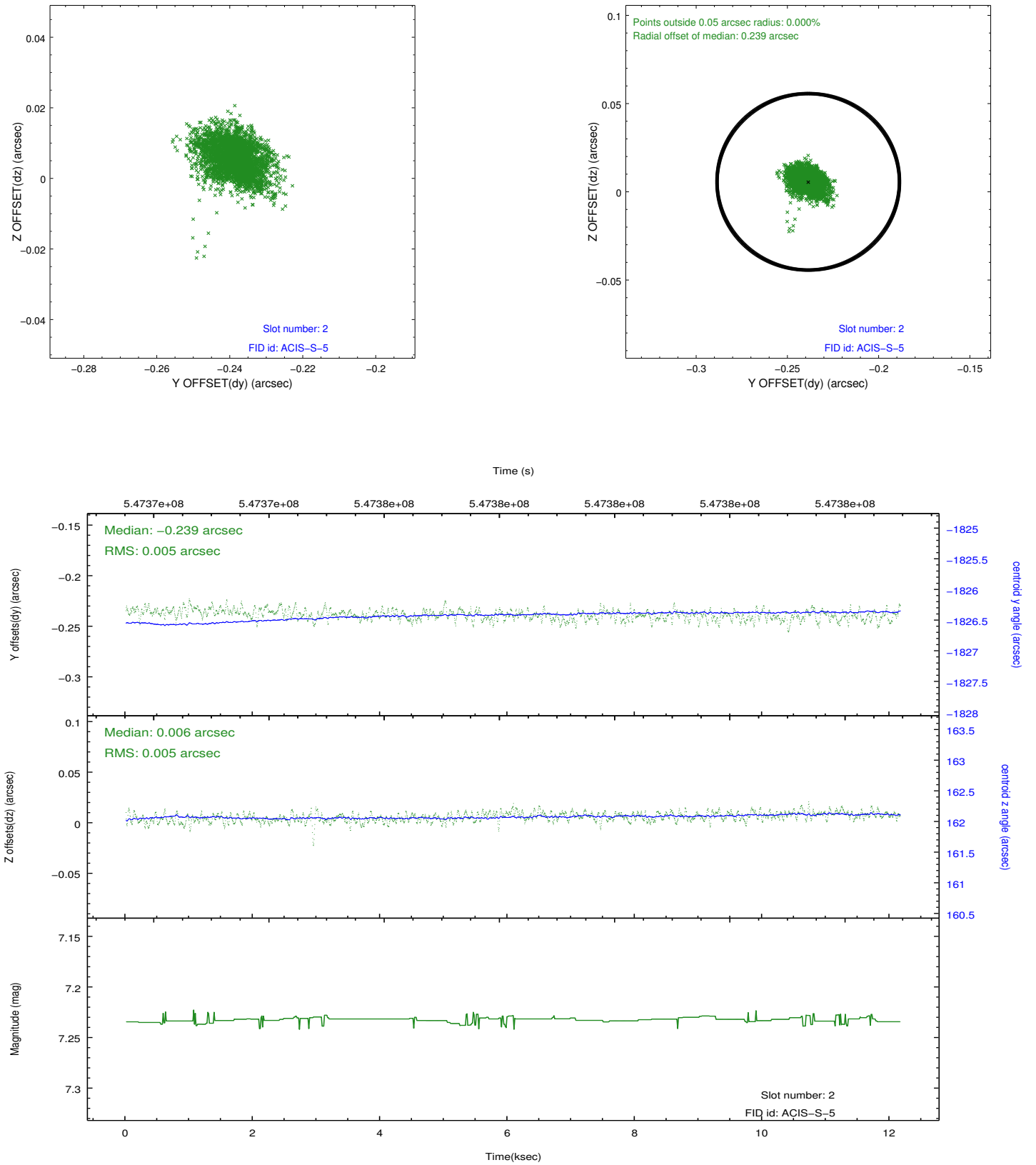
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.05.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.068300092936

### A.2 Comments