

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18170 - L2 Version 1  
Chandra X-Ray Center

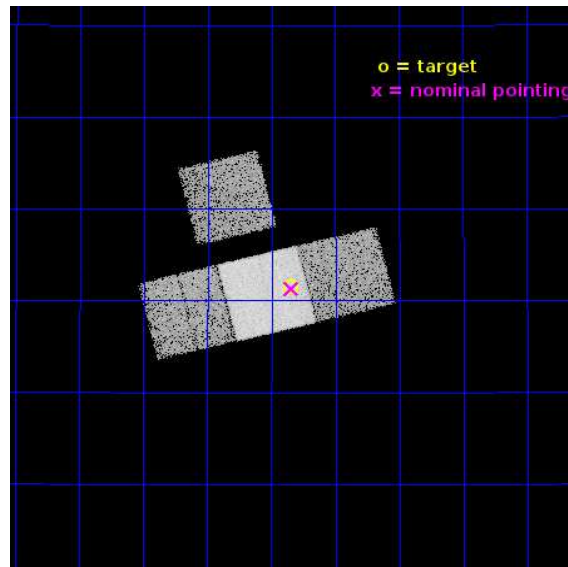
L2 Processing Date : Apr 17 2016

## 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	703235	Sequence number
obs_id	18170	Observation id
title	Chandra Legacy Survey of Merger Driven AGN Activation in Nearby X-ray Selected AGN	Proposal title
observer	Dr Michael Koss	Principal investigator
object	IC 4395	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.3375	Observer's specified target RA [deg]
dec_targ	26.8575	Observer's specified target Dec [deg]
ra_nom	214.3358644689	Nominal RA [deg]
dec_nom	26.855155376639	Nominal Dec [deg]
roll_nom	166.18001671999	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15056.700115919	Sum of GTIs [s]
livetime	14859.973244323	Livetime [s]
ontime3	15056.700115919	Sum of GTIs [s]
ontime6	15056.700115919	Sum of GTIs [s]
ontime7	15056.700115919	Sum of GTIs [s]
ontime8	15056.700115919	Sum of GTIs [s]
l2events	76751	Number of level 2 events

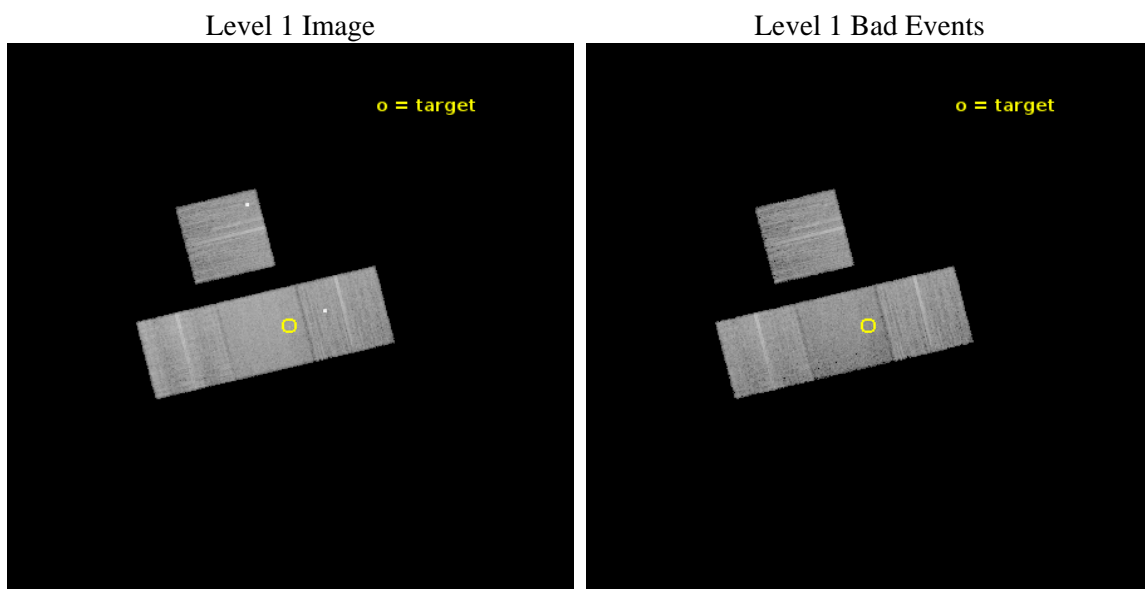




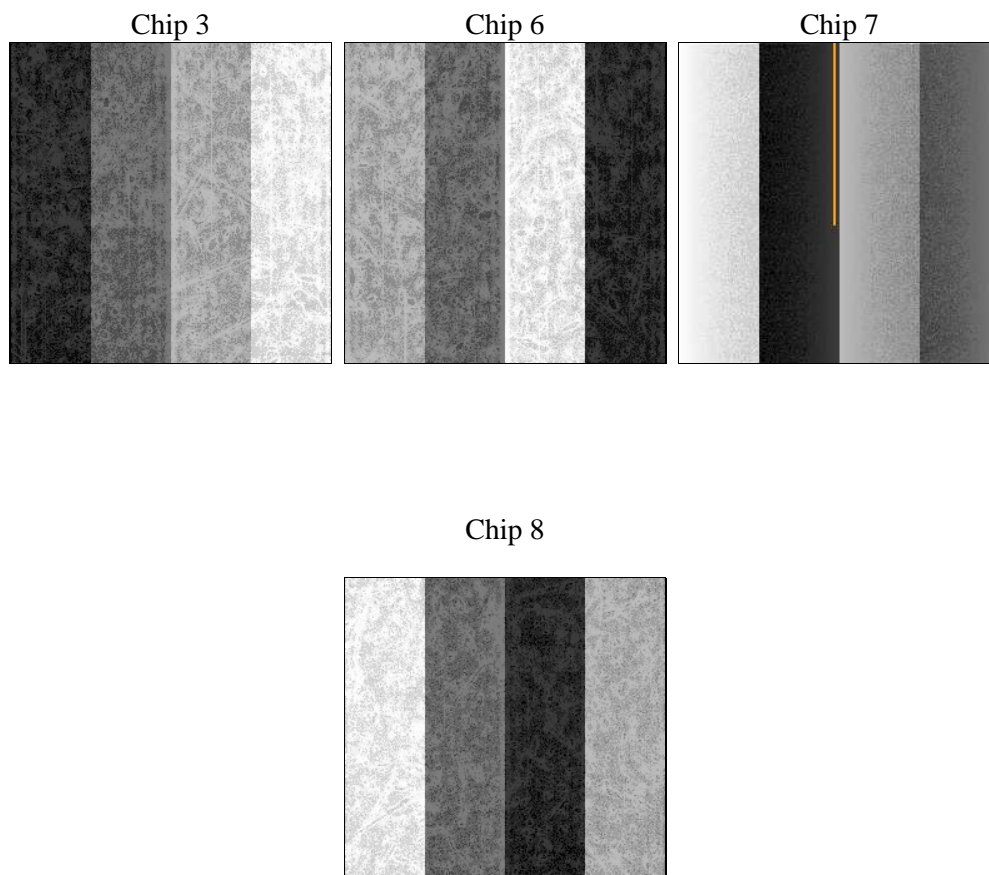
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	15056.700115919	Sum of GTIs [s]
caldbver	4.7.1	&#160	ontime3	15056.700115919	Sum of GTIs [s]
date	2016-04-18T00:33:37	Date and time of file creation	ontime6	15056.700115919	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	15056.700115919	Sum of GTIs [s]
			ontime8	15056.700115919	Sum of GTIs [s]
			l1events	442176	Number of level 1 events

### 2.1.4 Events

	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	97689	102941	119664	121882
rejected events	83851	87701	69584	91691
rejected %	85%	85%	58%	75%

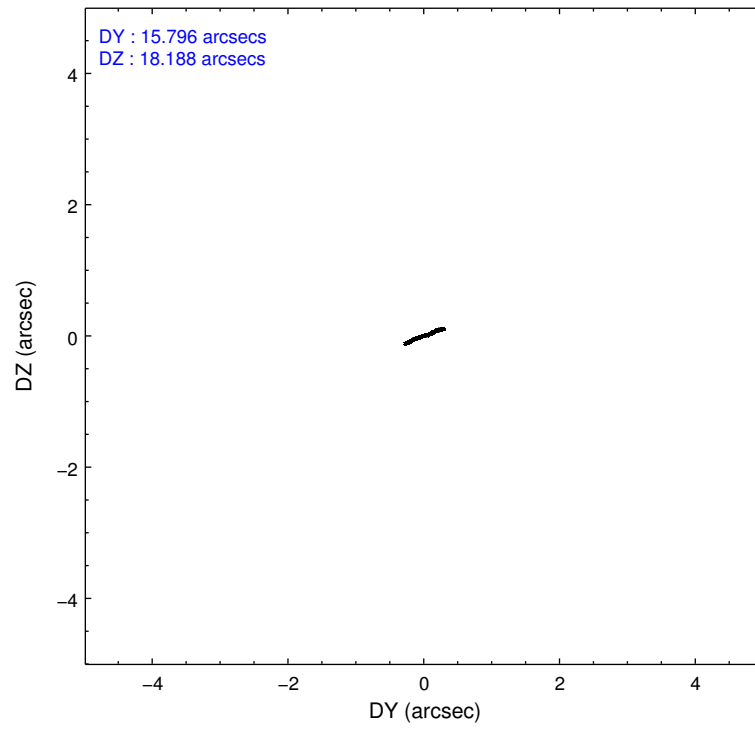
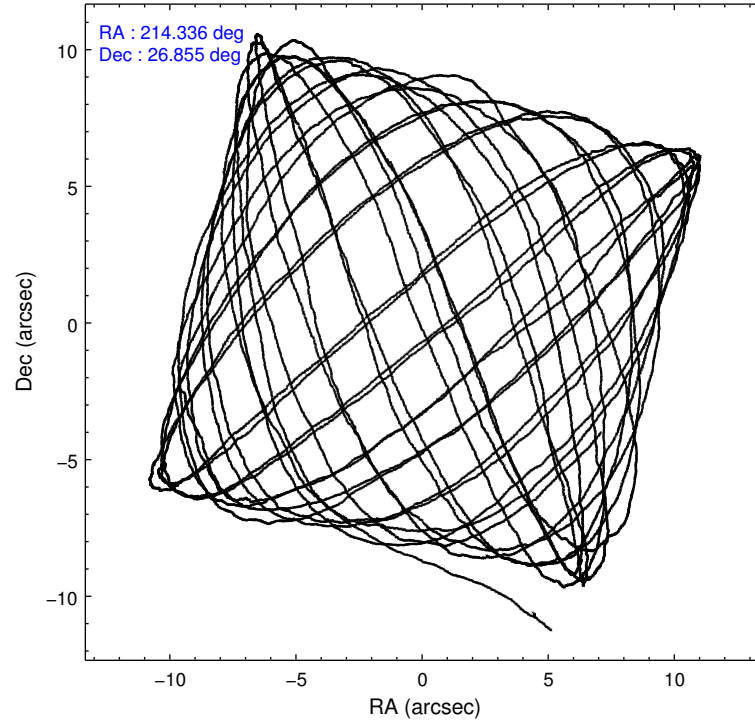
	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	7650	7760	3832	8457
	7%	7%	3%	6%
grade 1 events	76	70	148	82
	0%	0%	0%	0%
grade 2 events	1988	2650	10700	7494
	2%	2%	8%	6%
grade 3 events	1020	963	3615	3112
	1%	0%	3%	2%
grade 4 events	1047	999	3459	2821
	1%	0%	2%	2%
grade 5 events	4237	4079	11010	6370
	4%	3%	9%	5%
grade 6 events	2135	2870	28481	8346
	2%	2%	23%	6%
grade 7 events	79536	83550	58419	85200
	81%	81%	48%	69%

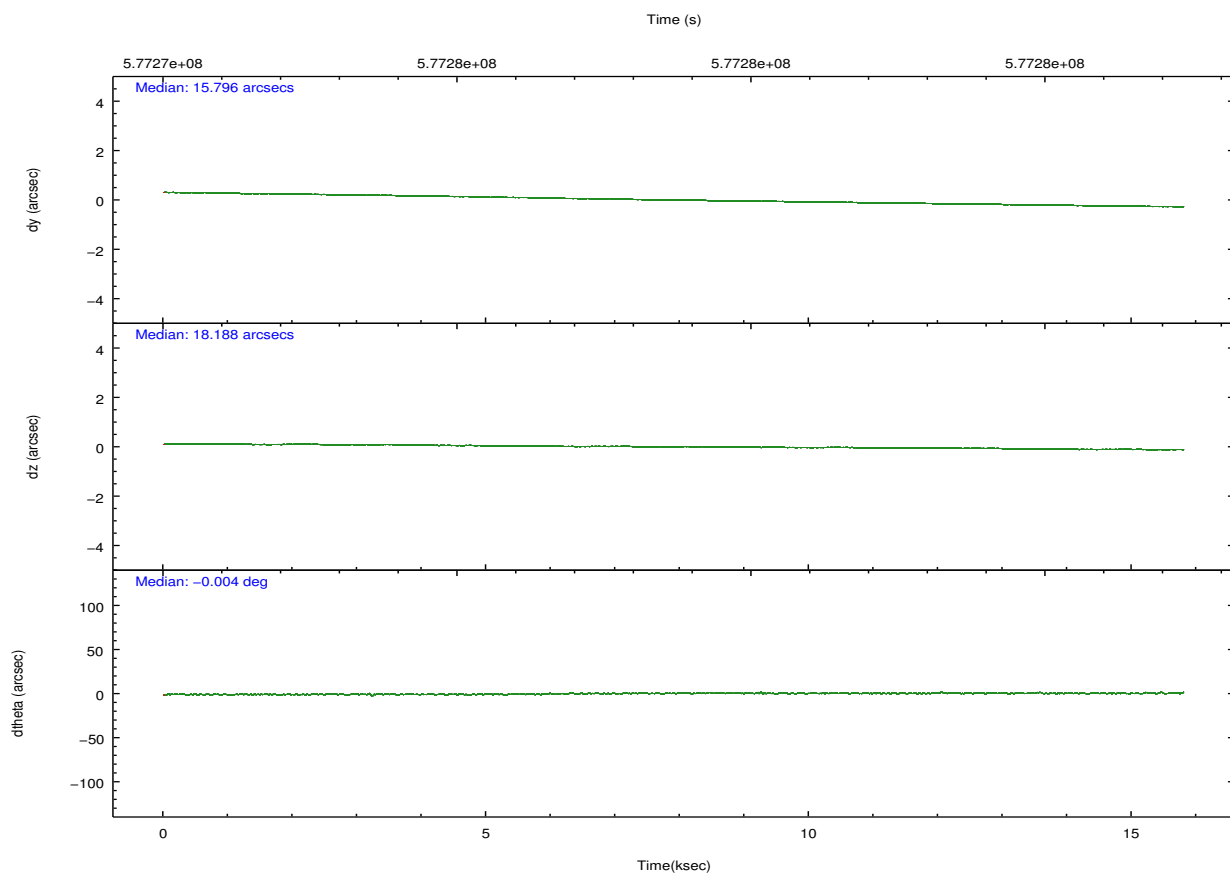
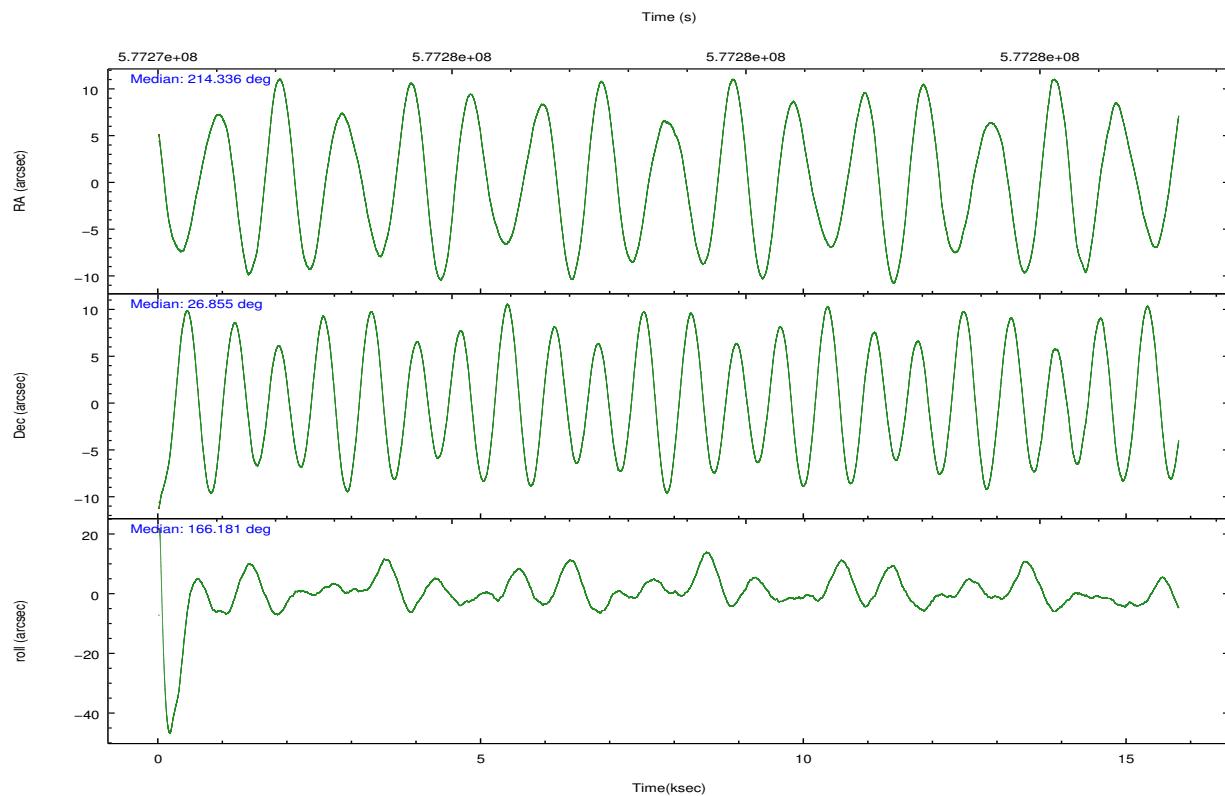
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-3678	ACIS-3678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	214.365323	214.3358644689019
[deg] Pointing Dec	26.863174	26.85515537663895
[deg] Pointing Roll	166.010009	166.1800167199931
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	577271599.184000	577270414.2661901
Observation start date	2016-04-17T09:12:11	2016-04-17T08:53:34
[s] Observation end time (MET)	577286599.184000	577287206.84215
Observation end date	2016-04-17T13:22:11	2016-04-17T13:33:26
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O2	N
CCD I3 on	O3	Y
CCD S0 on	N	N
CCD S1 on	O1	N
CCD S2 on	O4	Y
CCD S3 on	Y	Y
CCD S4 on	O5	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	2	2
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



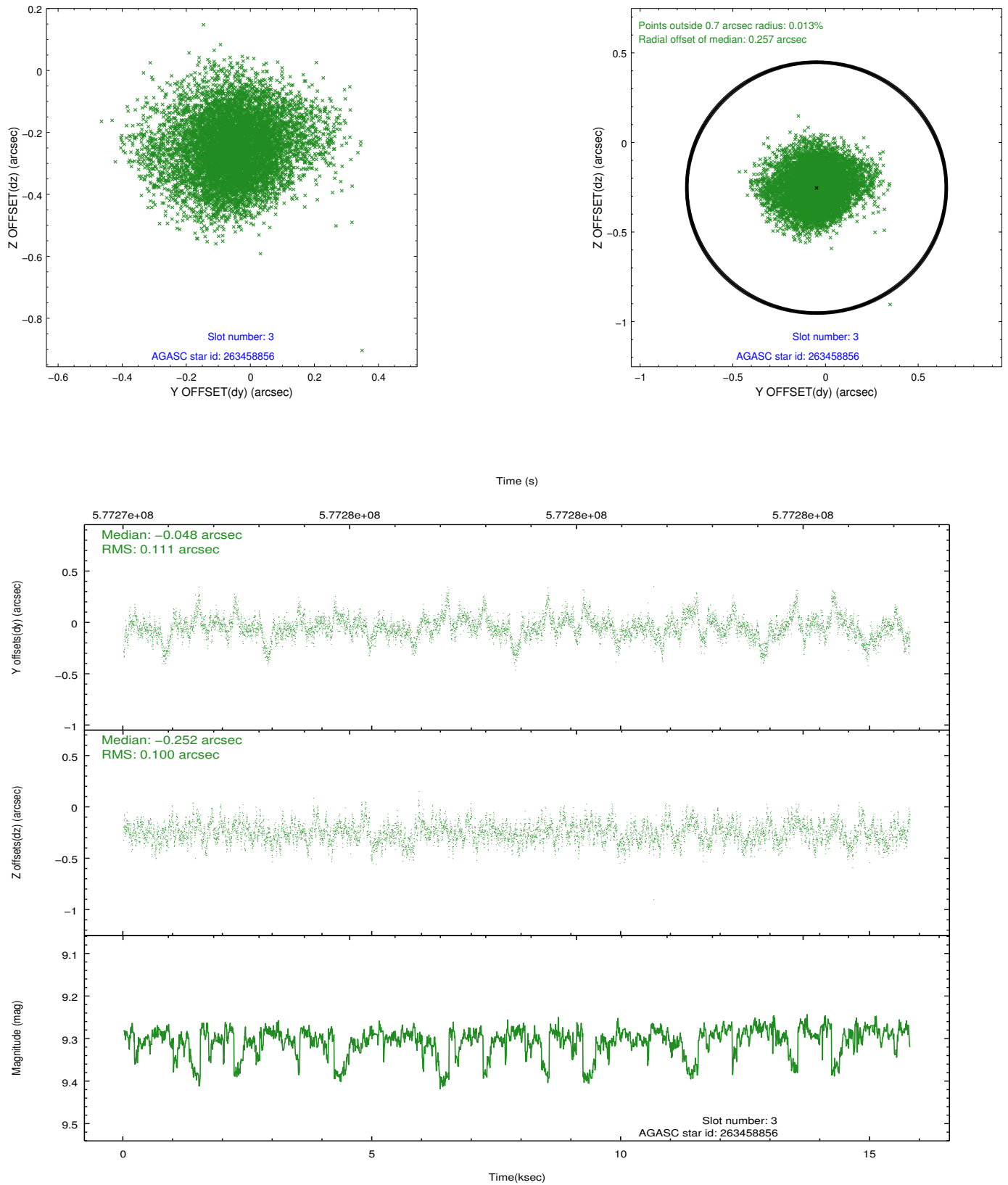


### Slot Statistics

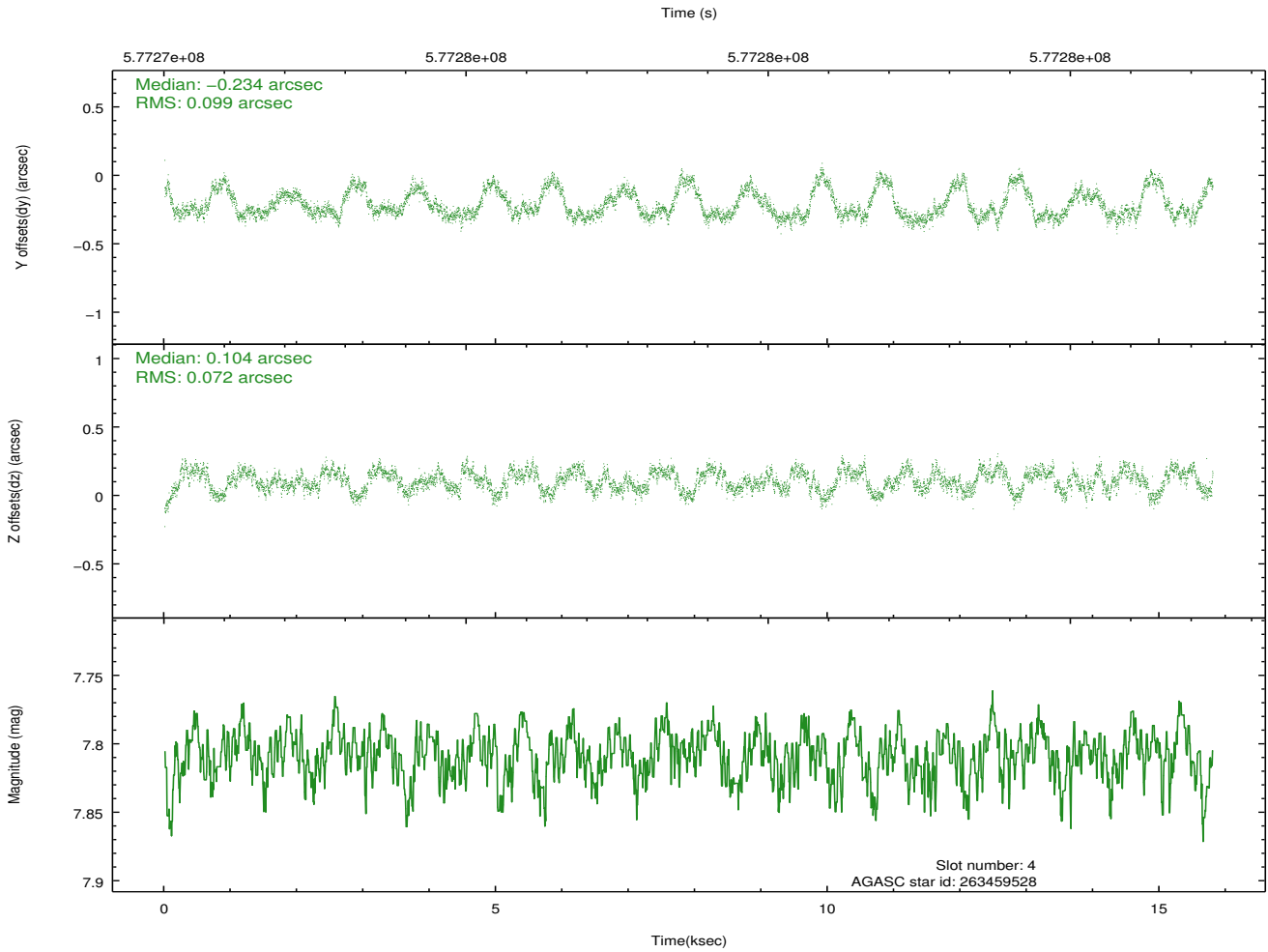
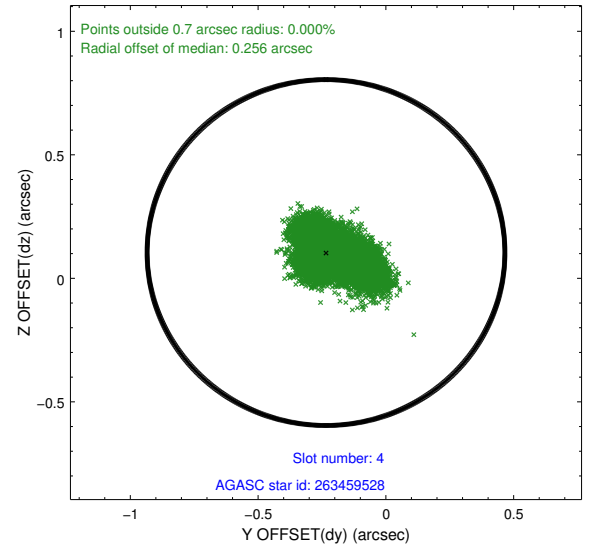
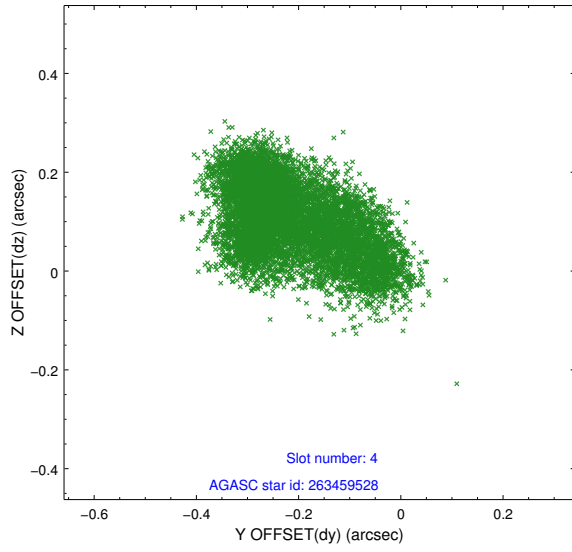
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.16	3854	-0.199	-0.175	0.009	0.015	0.000000	0.000000	-769.01	-1739.77
1	FID		ACIS-S-4	7.26	3854	0.500	0.143	0.008	0.014	0.000000	0.000000	2144.86	168.72
2	FID		ACIS-S-5	7.27	3853	-0.332	0.041	0.010	0.019	0.000000	0.000000	-1821.61	162.63
3	GUIDE	used	263458856	9.30	7698	-0.048	-0.252	0.158	0.266	214.297460	27.284111	577.42	-1418.32
4	GUIDE	used	263459528	7.81	7706	-0.234	0.104	0.126	0.224	214.587348	27.146768	-442.67	-1163.46
5	GUIDE	used	263459608	9.95	7694	0.084	-0.015	0.247	0.402	214.858921	27.290229	-1160.06	-1872.99
6	GUIDE	used	263460448	10.24	7625	0.264	0.241	0.341	0.539	214.670297	27.215946	-638.74	-1469.08
7	GUIDE	used	263589920	9.33	7698	-0.116	-0.079	0.221	0.339	215.086125	26.988335	-2133.08	-1002.83

## 2.4 Star Slots

### 2.4.1 Slot 3

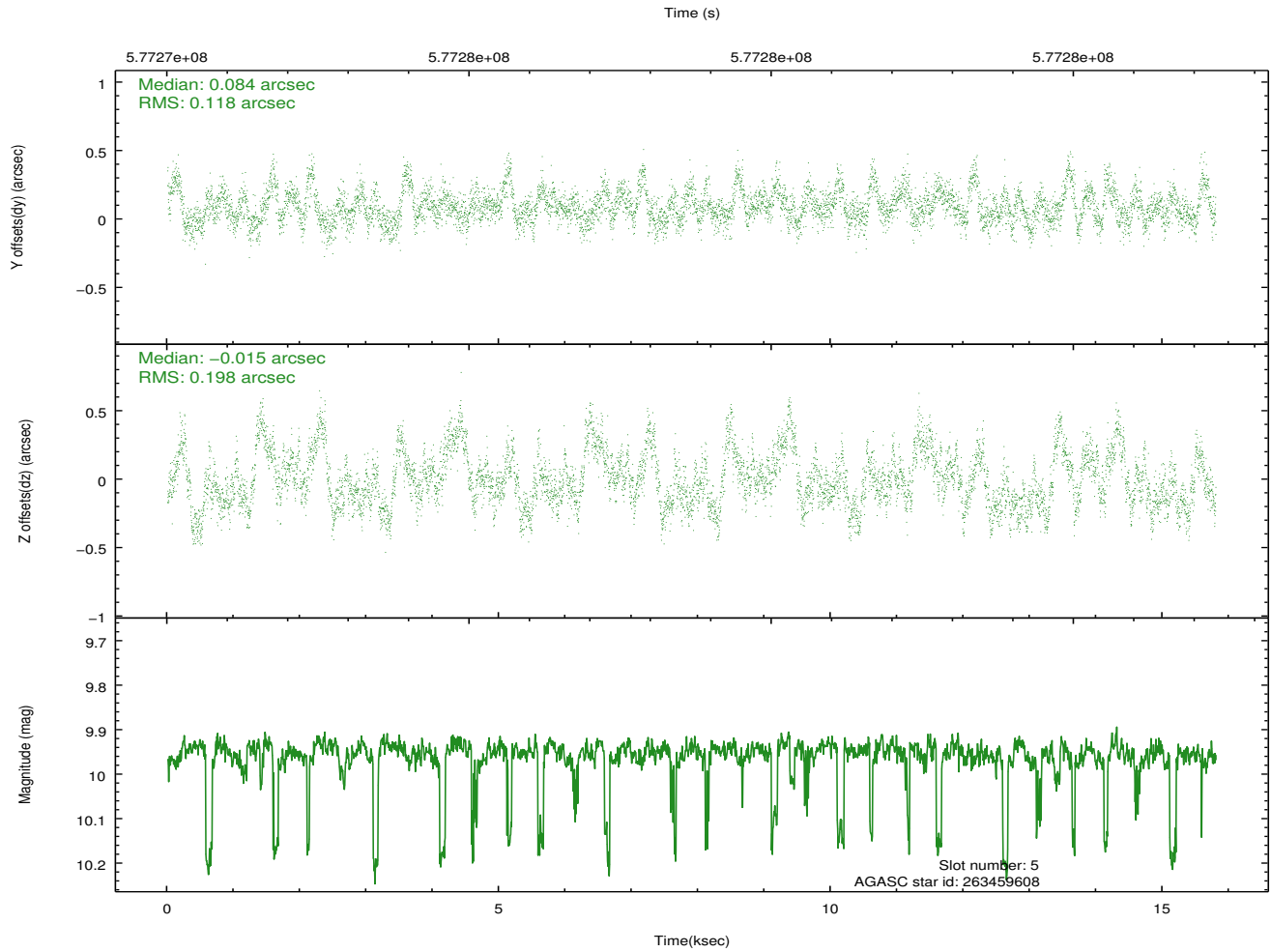
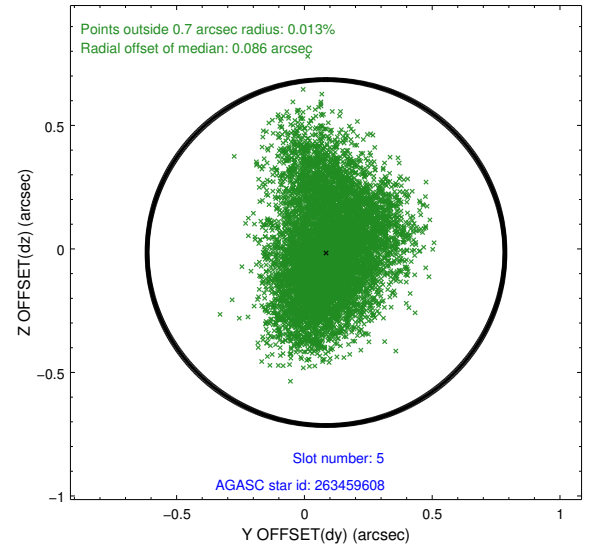
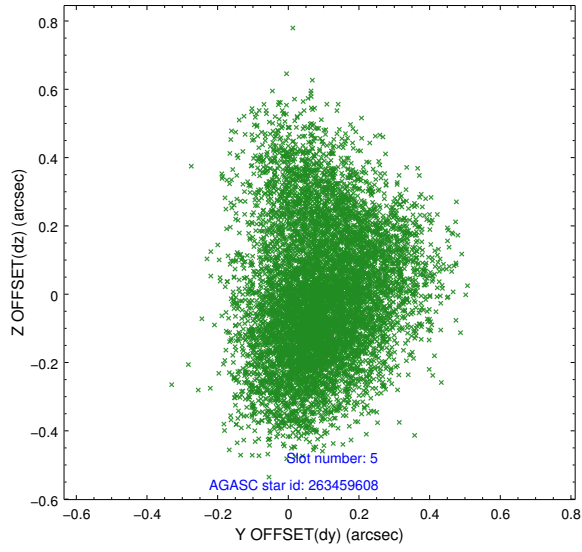


## 2.4.2 Slot 4

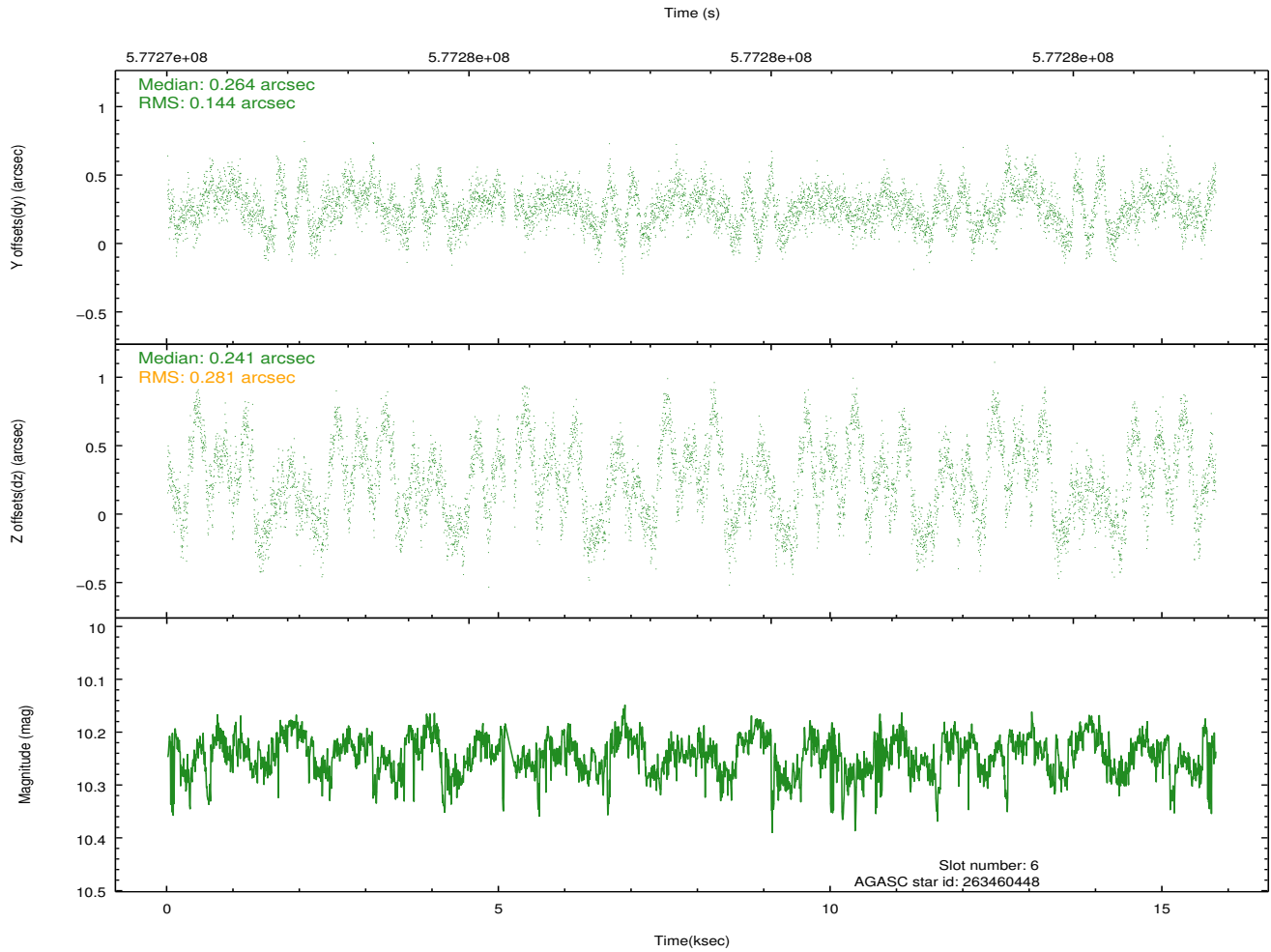
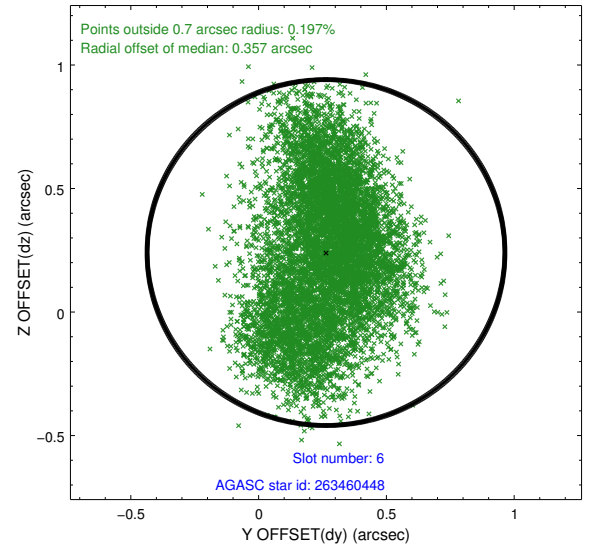
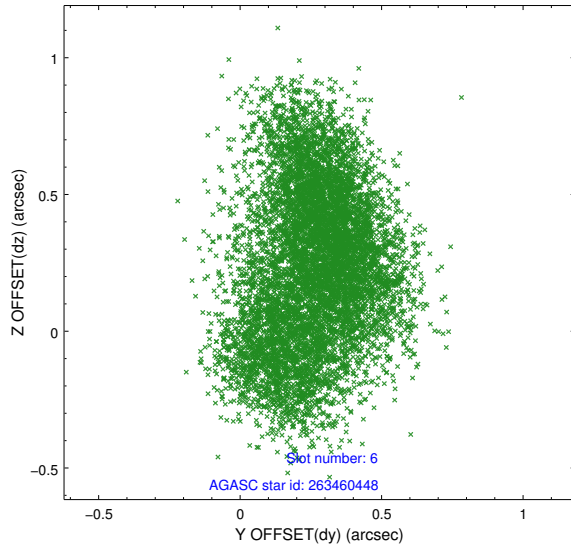




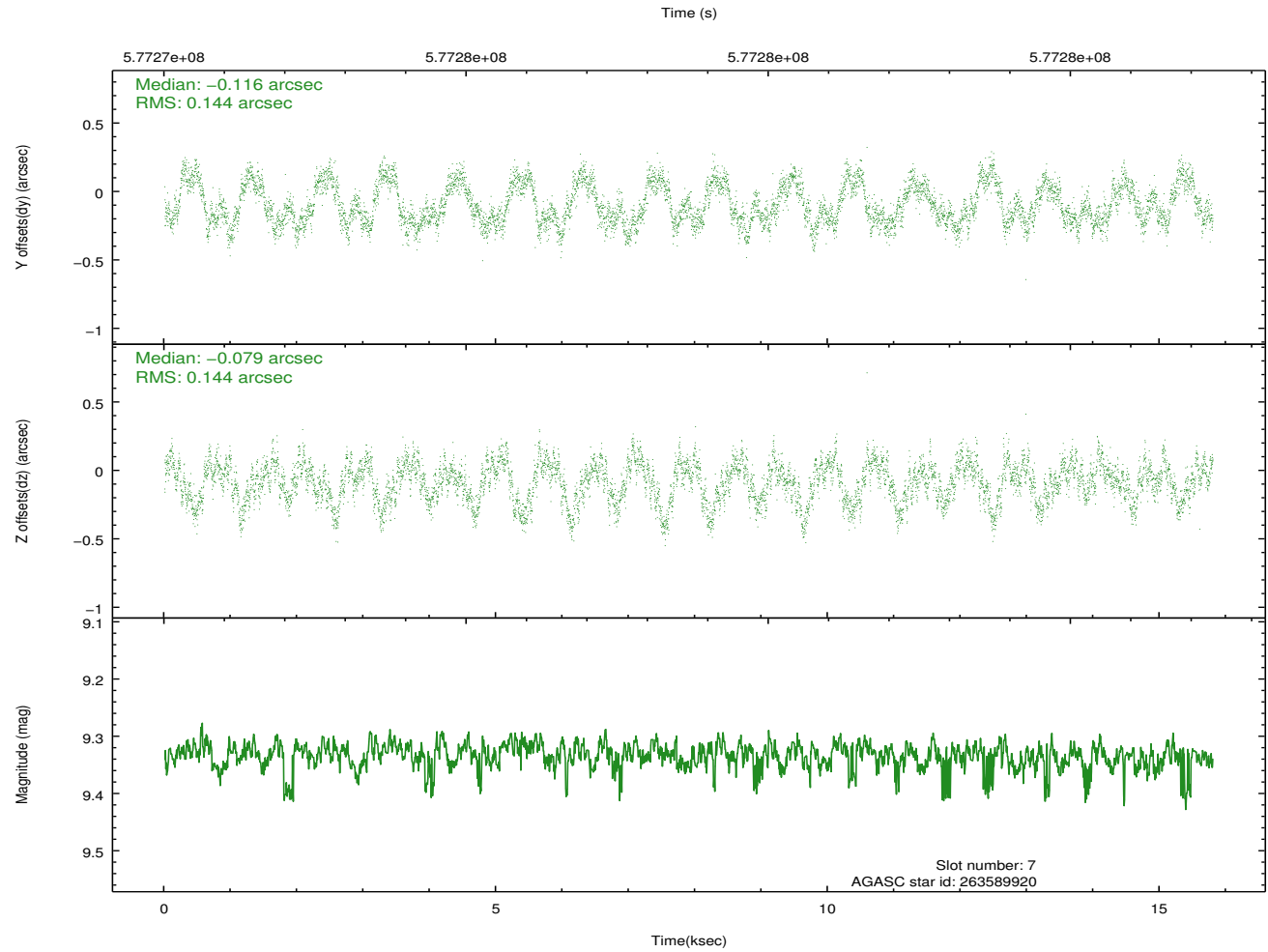
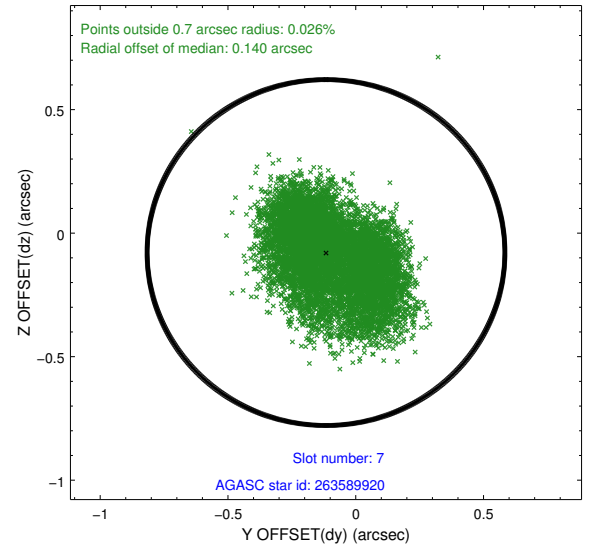
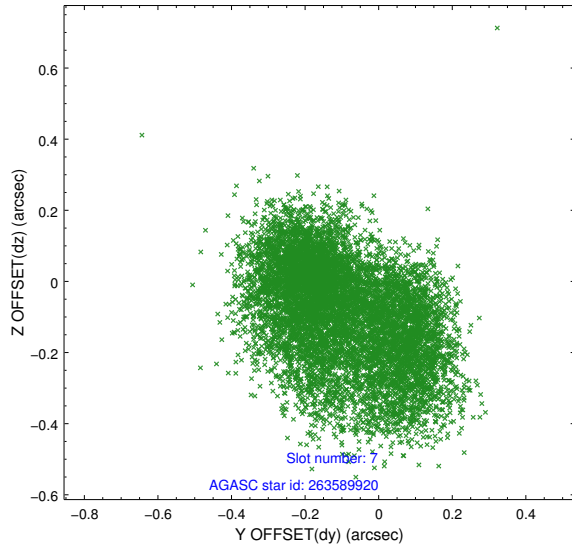
### 2.4.3 Slot 5



## 2.4.4 Slot 6

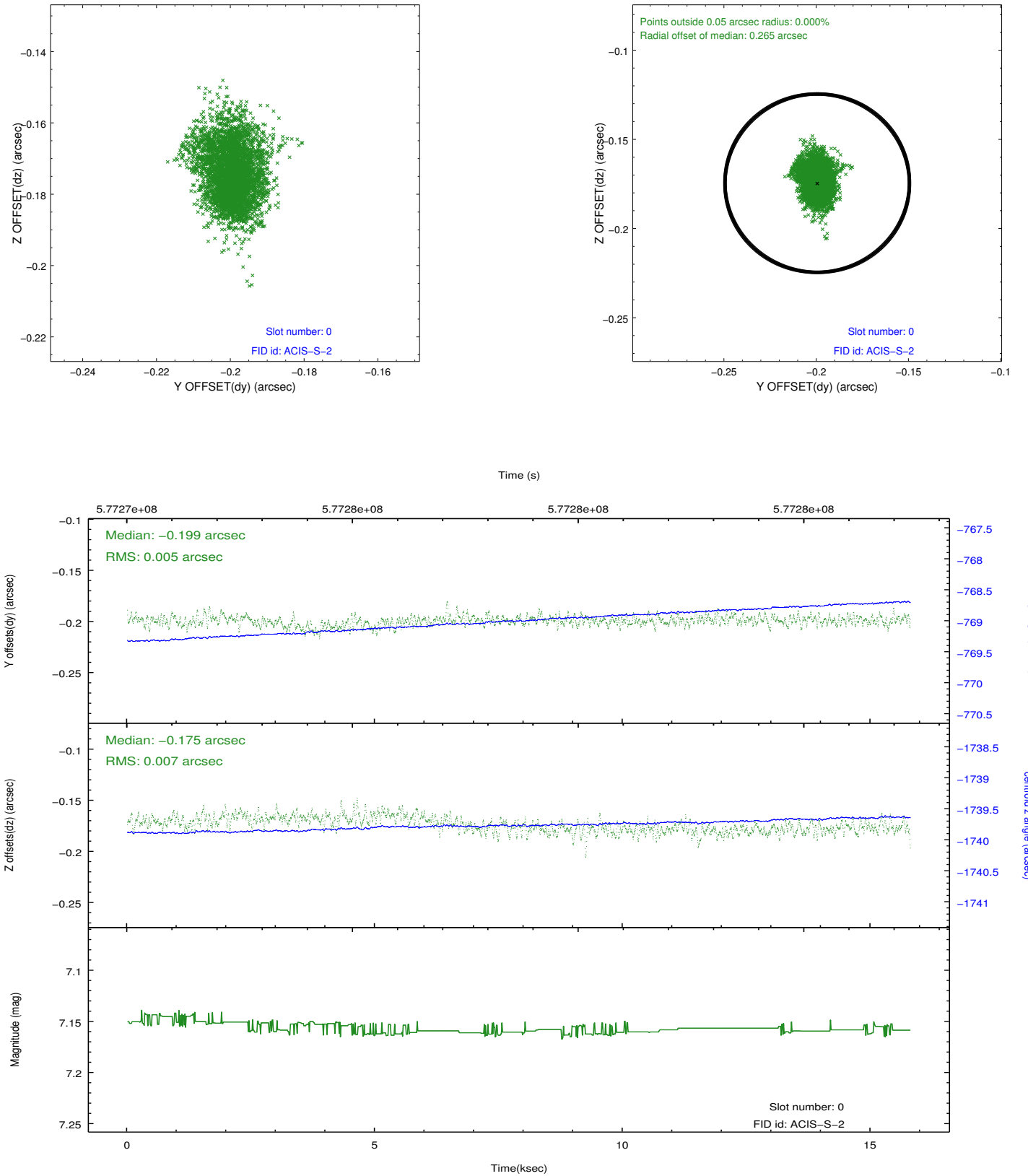


## 2.4.5 Slot 7

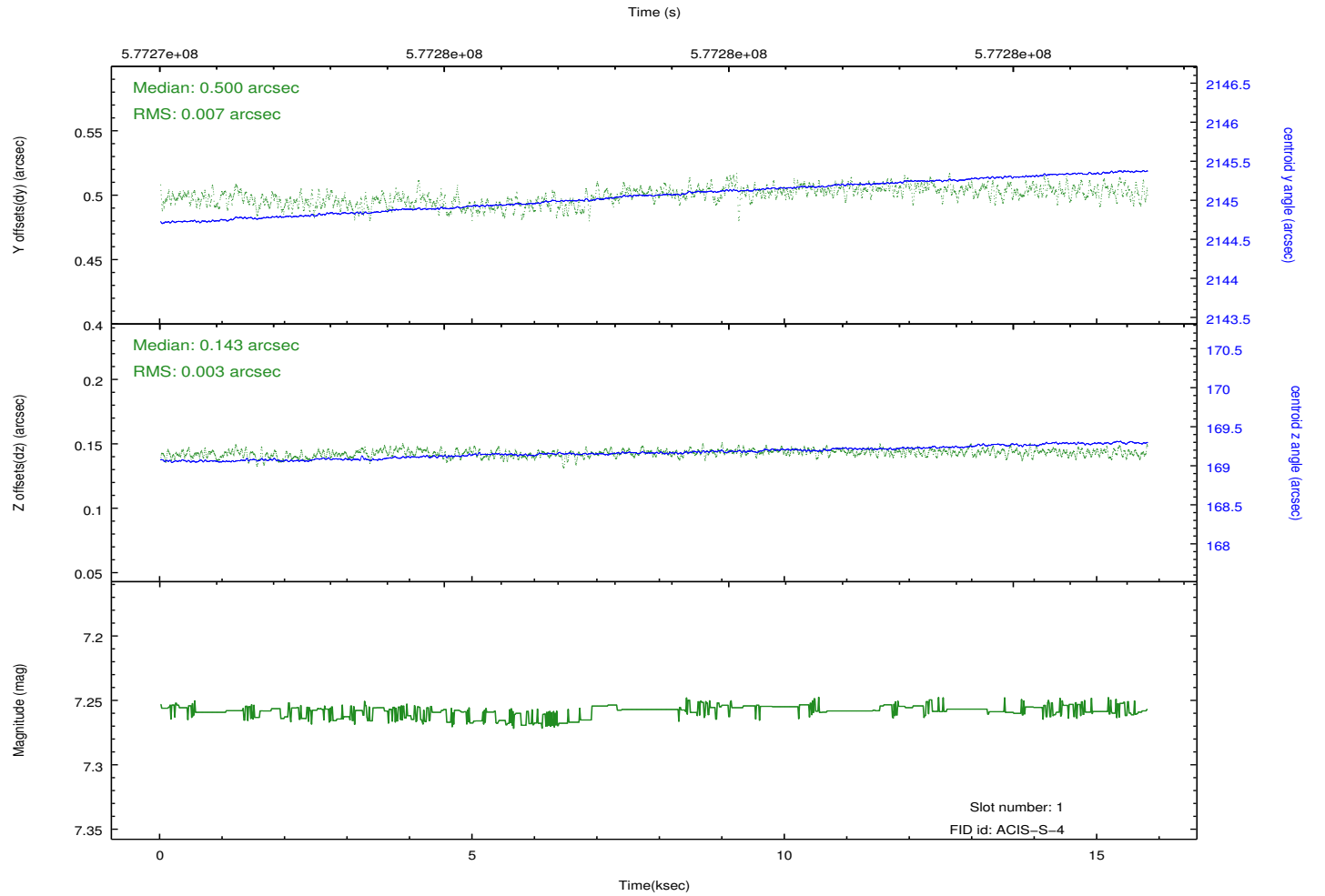
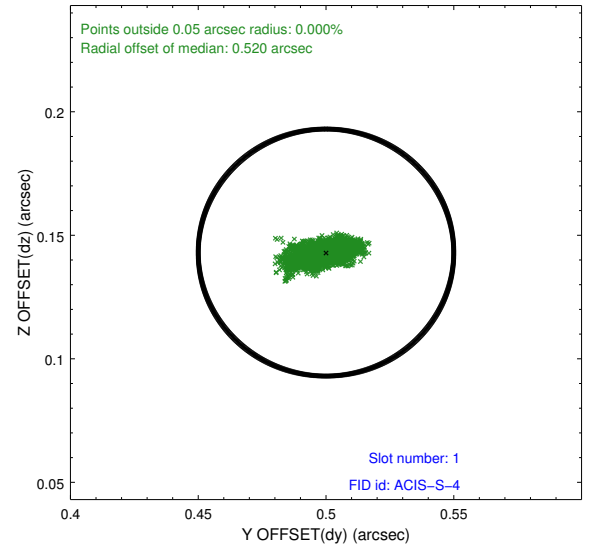
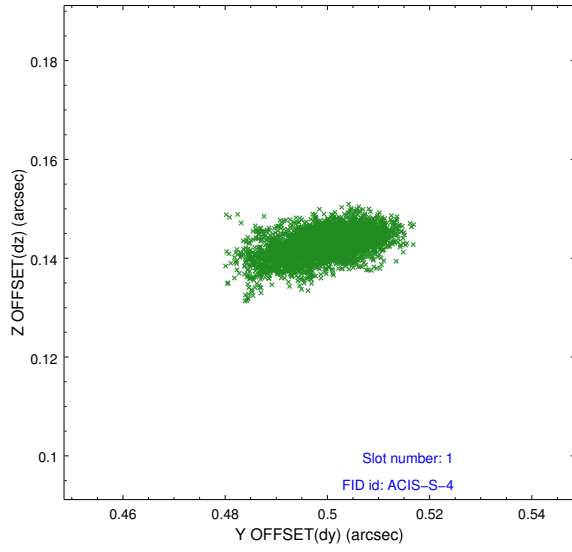


## 2.5 FID Slots

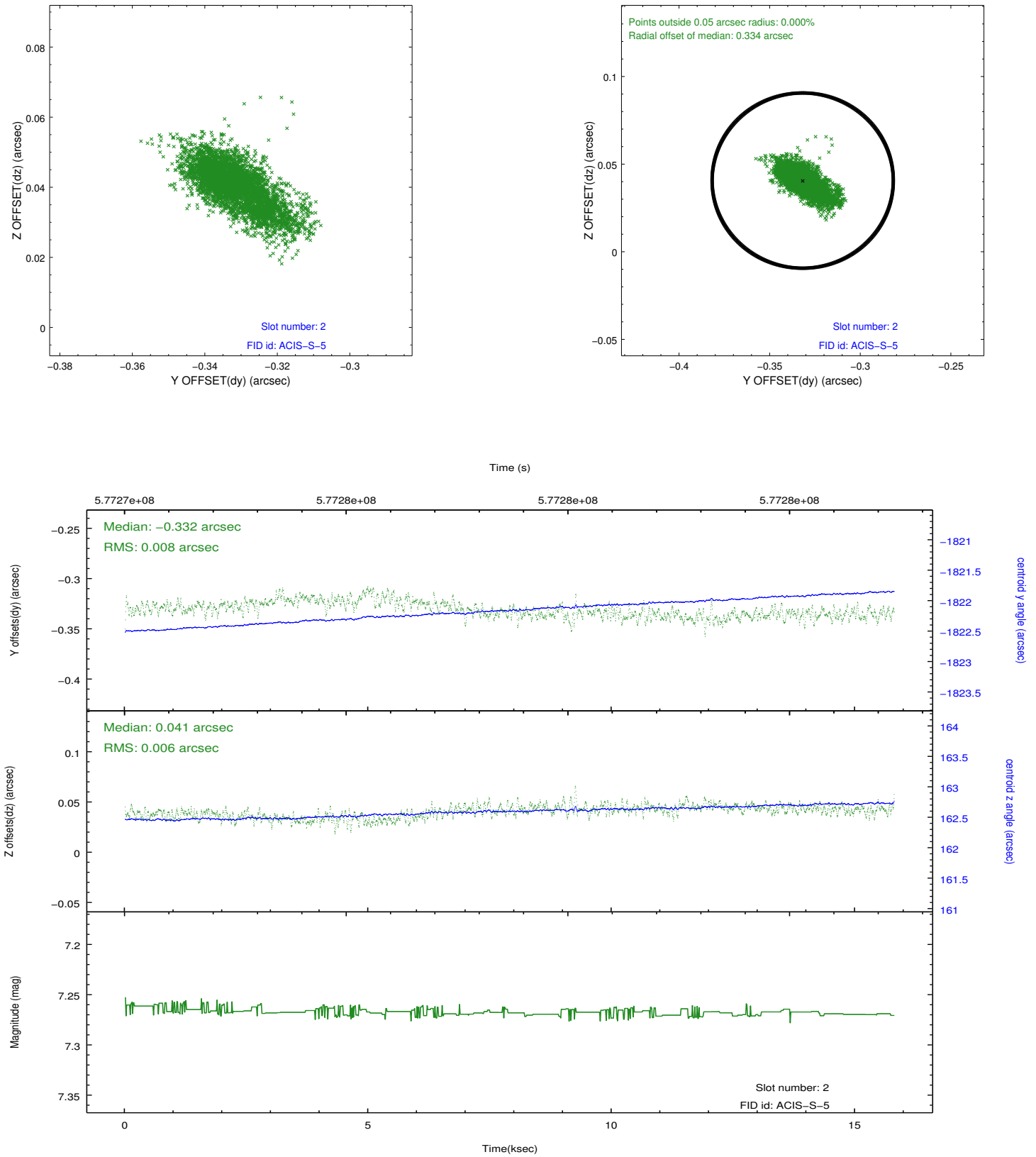
### 2.5.1 Slot 0



## 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)	2016.04.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.056700115919

### A.2 Comments

Two optional chips were dropped.