

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12533 - L2 Version 5  
Chandra X-Ray Center

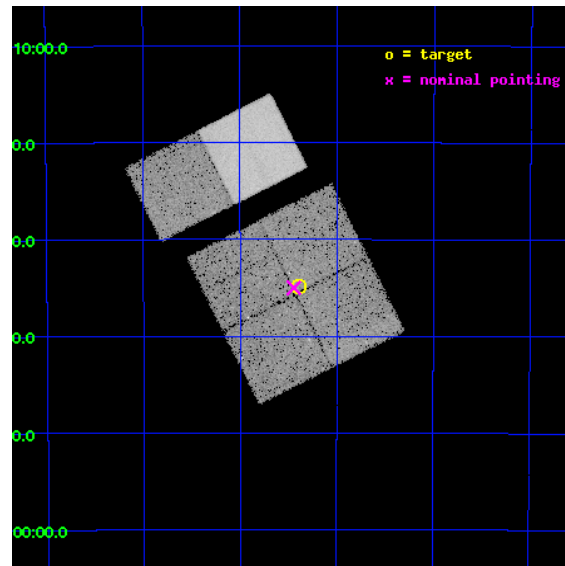
L2 Processing Date : Feb 12 2012

## 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	401274	Sequence number
obs_id	12533	Observation id
title	Census of the Normal Spiral Arm Region	Proposal title
observer	Dr. John Tomsick	Principal investigator
object	Norma Region	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	248.348967	Observer's specified target RA [deg]
dec_targ	-47.582196	Observer's specified target Dec [deg]
ra_nom	248.36082278397	Nominal RA [deg]
dec_nom	-47.583518449851	Nominal Dec [deg]
roll_nom	333.217450719	Nominal Roll [deg]
revision	5	Processing version of data
ontime	19753.558825672	Sum of GTIs [s]
livetime	19503.427369656	Livetime [s]
ontime0	19756.79992646	Sum of GTIs [s]
ontime1	19753.558835804	Sum of GTIs [s]
ontime2	19753.558866203	Sum of GTIs [s]
ontime3	19753.558825672	Sum of GTIs [s]
ontime6	19753.558866143	Sum of GTIs [s]
ontime7	19756.79992646	Sum of GTIs [s]
l2events	141060	Number of level 2 events

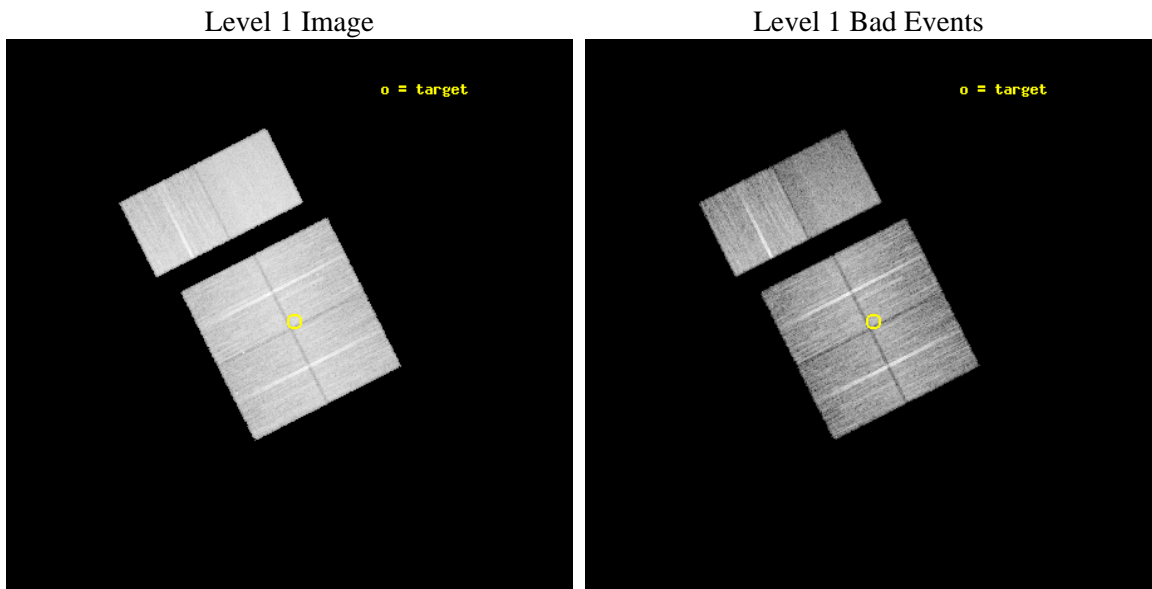




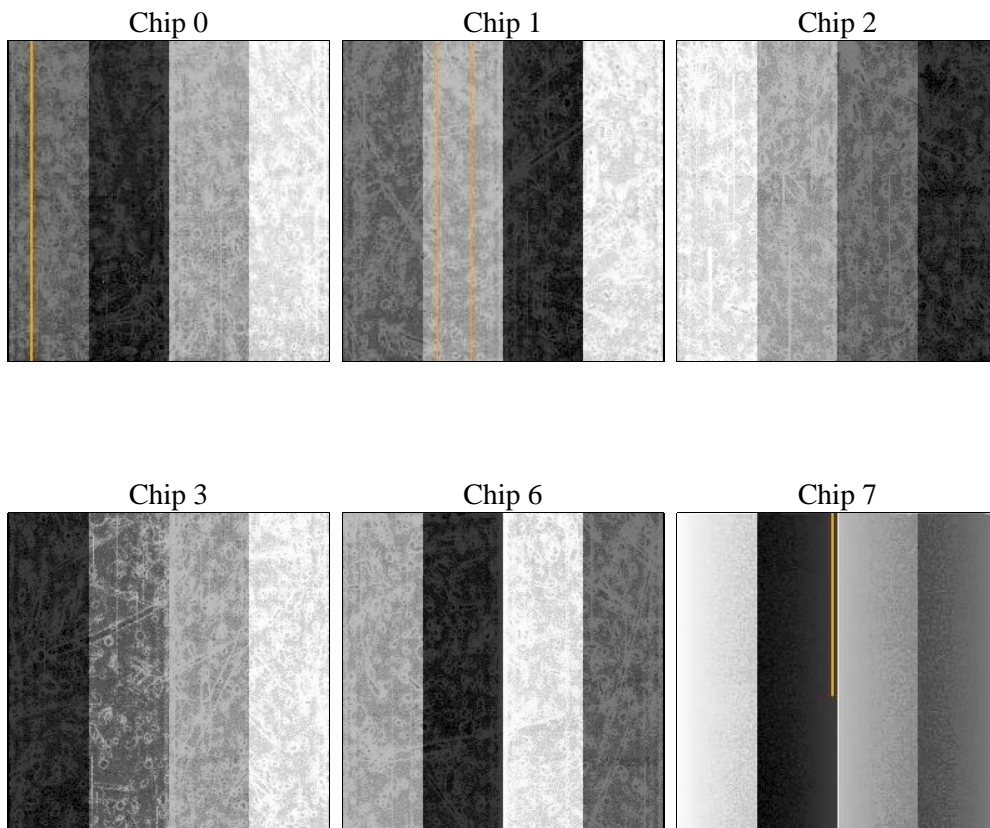
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	19753.558825672	Sum of GTIs [s]
caldsver	4.4.7	&#160	ontime0	19756.79992646	Sum of GTIs [s]
date	2012-02-12T12:01:24	Date and time of file creation	ontime1	19753.558835804	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	19753.558866203	Sum of GTIs [s]
			ontime3	19753.558825672	Sum of GTIs [s]
			ontime6	19753.558866143	Sum of GTIs [s]
			ontime7	19756.79992646	Sum of GTIs [s]
			l1events	815584	Number of level 1 events

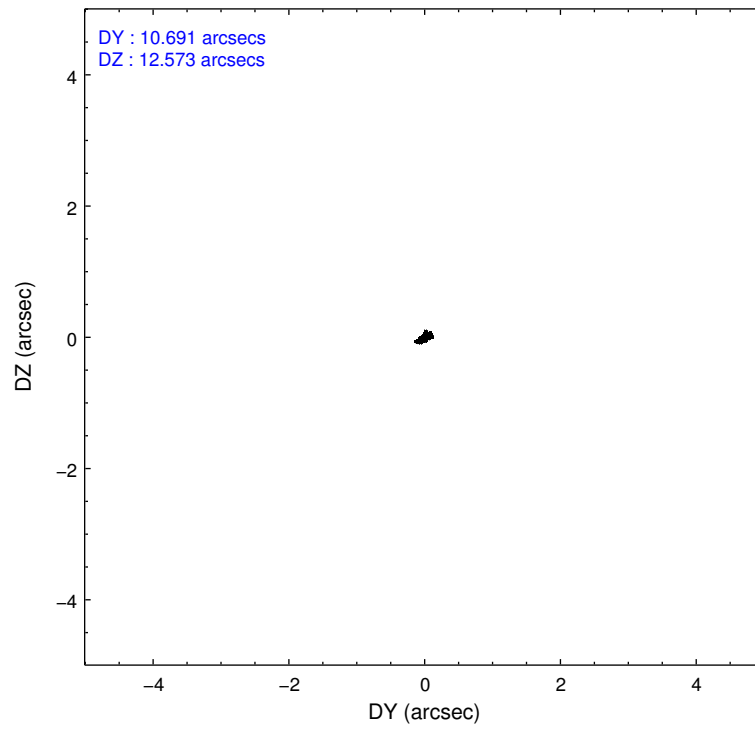
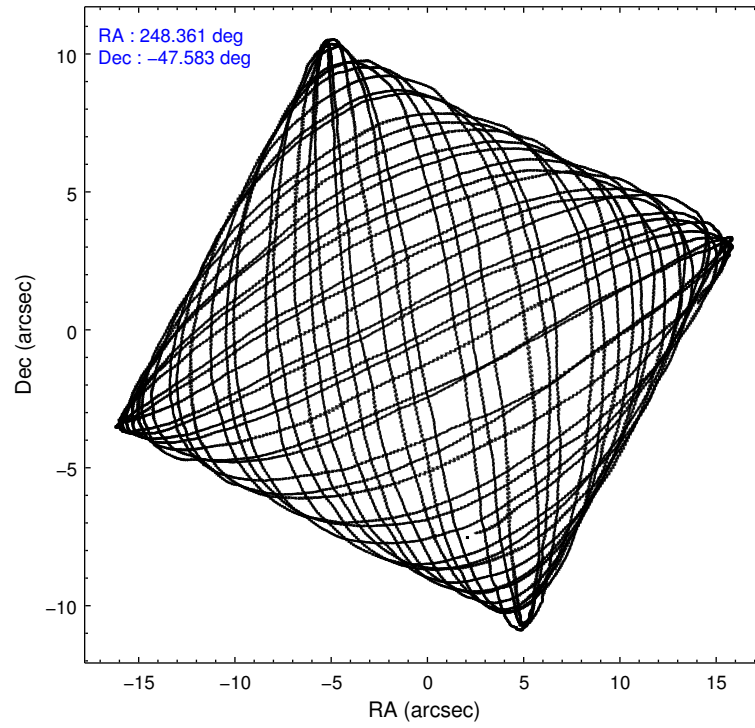
### 2.1.4 Events

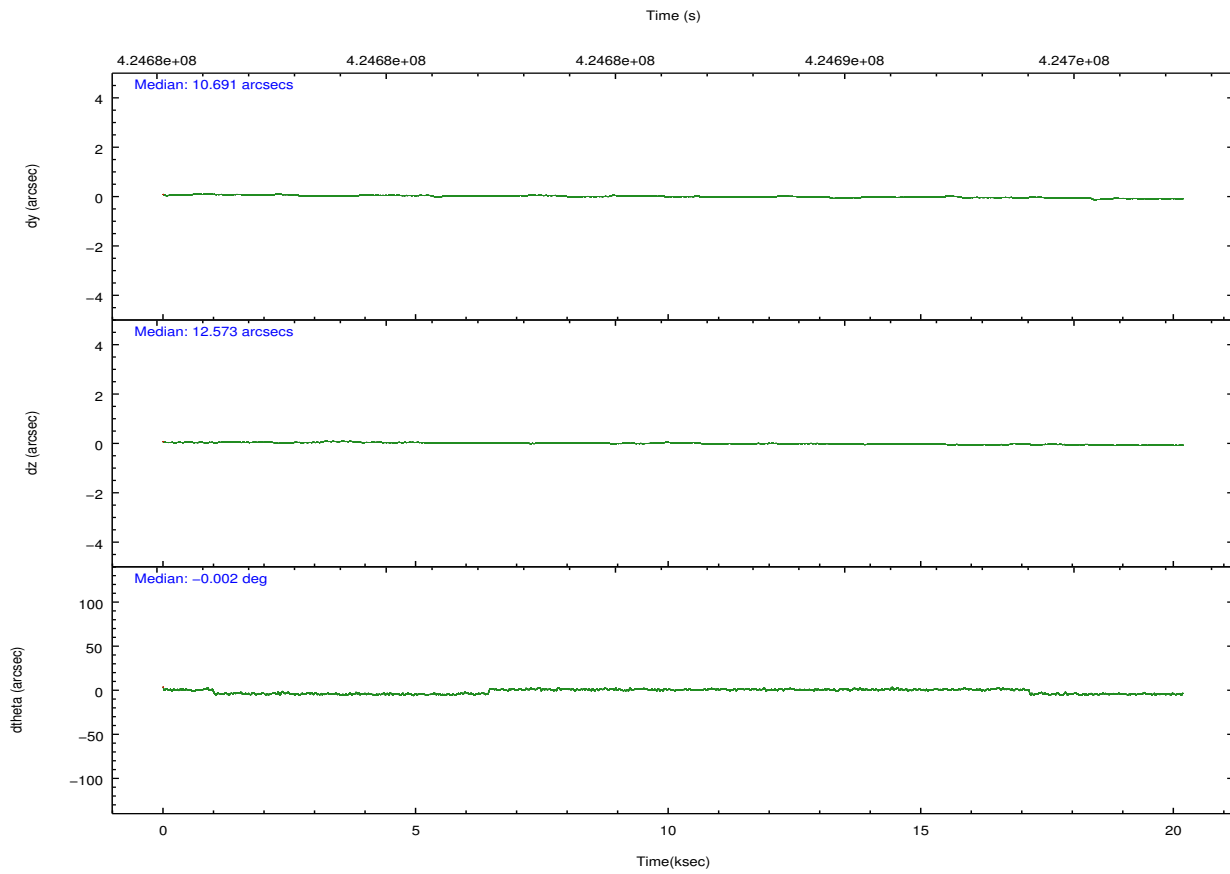
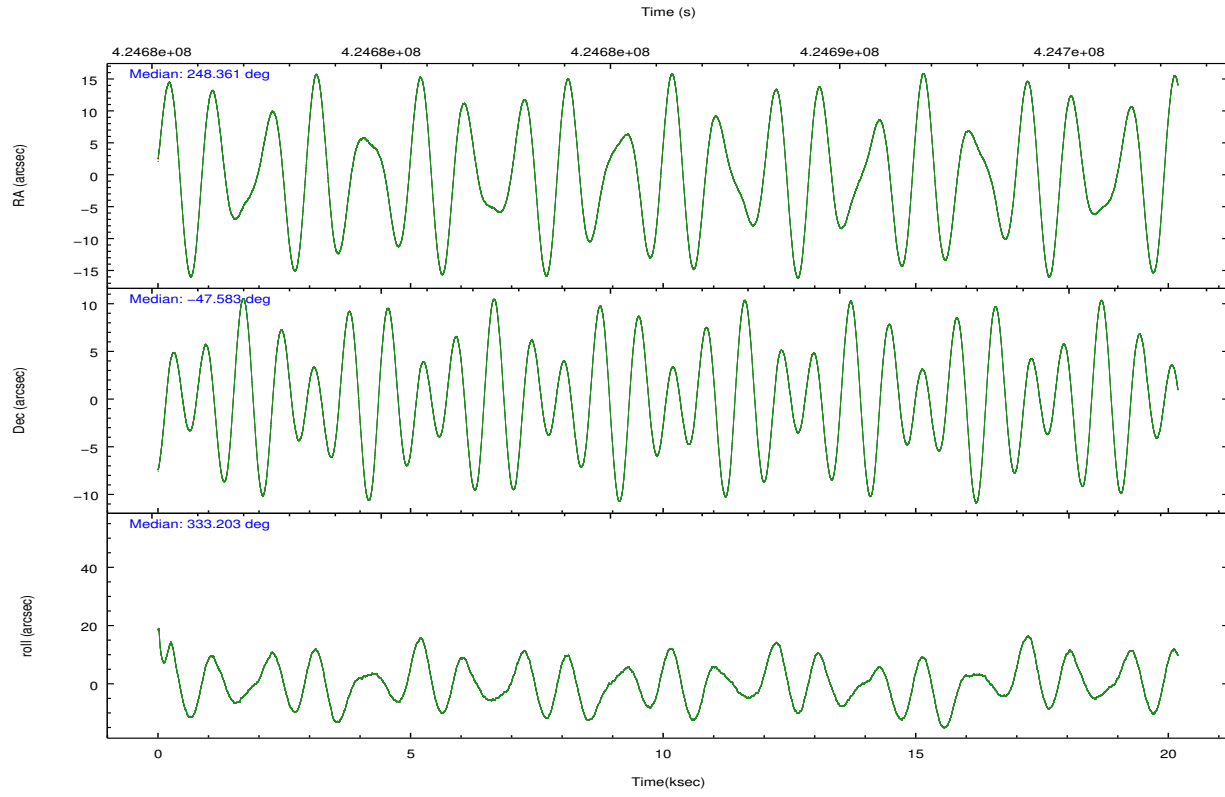
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	118617	122131	136126	131005	146134	161571	grade 0 events	7358	7022	7396	6230	7411	6958
rejected events	101336	104732	119066	115867	128390	87647		6%	5%	5%	4%	5%	4%
rejected %	85%	85%	87%	88%	87%	54%	grade 1 events	92	75	83	91	65	235
								0%	0%	0%	0%	0%	0%
							grade 2 events	4096	3922	3916	3130	4004	15651
								3%	3%	2%	2%	2%	9%
							grade 3 events	1541	1574	1446	1509	1551	6355
								1%	1%	1%	1%	1%	3%
							grade 4 events	1449	1563	1610	1479	1468	6329
								1%	1%	1%	1%	1%	3%
							grade 5 events	5045	5513	4688	5774	5627	16294
								4%	4%	3%	4%	3%	10%
							grade 6 events	2843	3327	2699	2793	3318	38659
								2%	2%	1%	2%	2%	23%
							grade 7 events	96193	99135	114288	109999	122690	71090
								81%	81%	83%	83%	83%	43%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	248.320092	248.3608227839722	CCD I2 on	Y	Y
[deg] Pointing Dec	-47.585181	-47.58351844985102	CCD I3 on	Y	Y
[deg] Pointing Roll	332.978678	333.2174507189999	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	424676351.184000	424675974.89653	CCD S5 on	N	N
Observation start date	2011-06-17T05:38:05	2011-06-17T05:32:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	424696351.184000	424696519.9976	On-chip summing requested	N	N
Observation end date	2011-06-17T11:11:25	2011-06-17T11:15:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



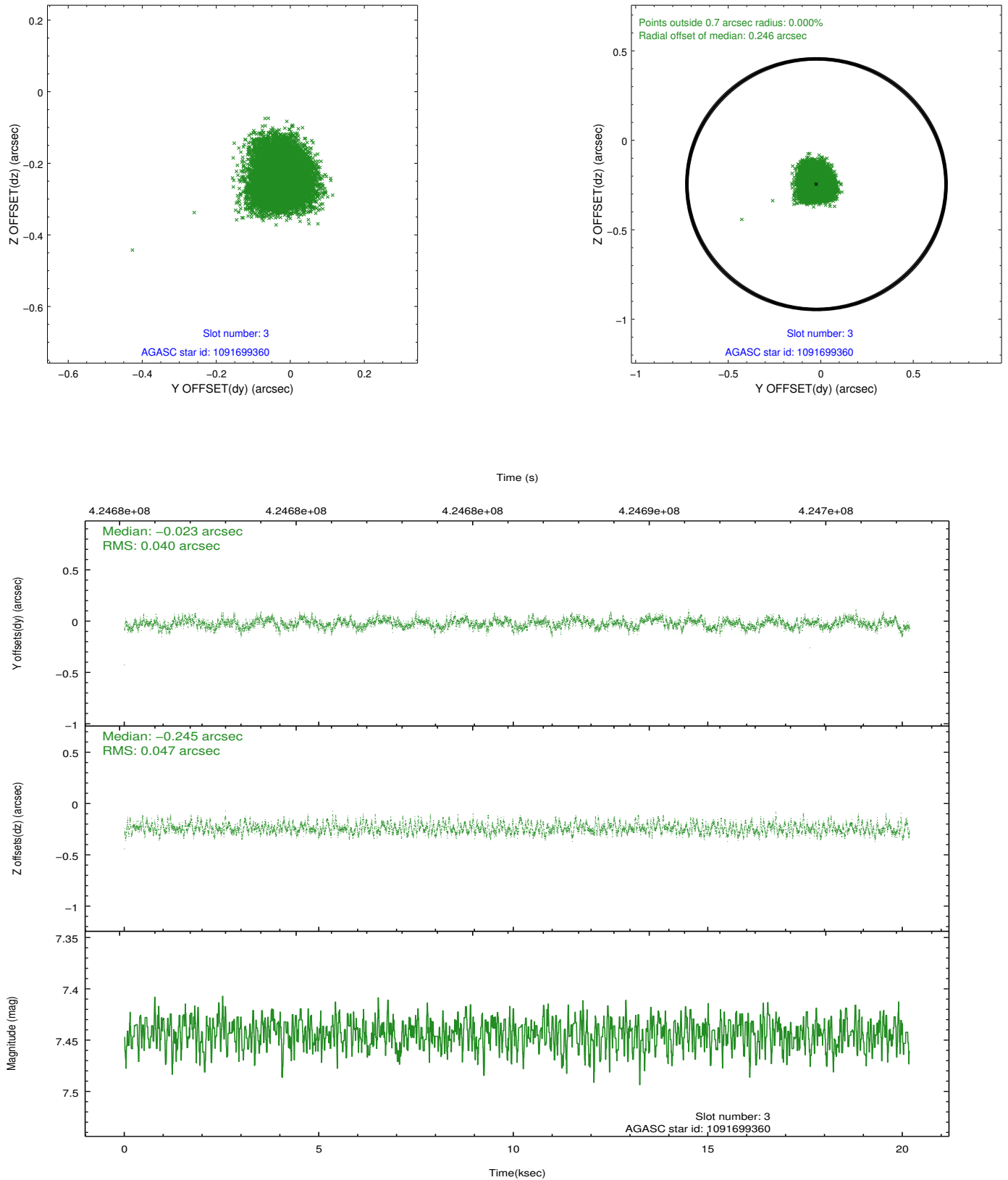


### Slot Statistics

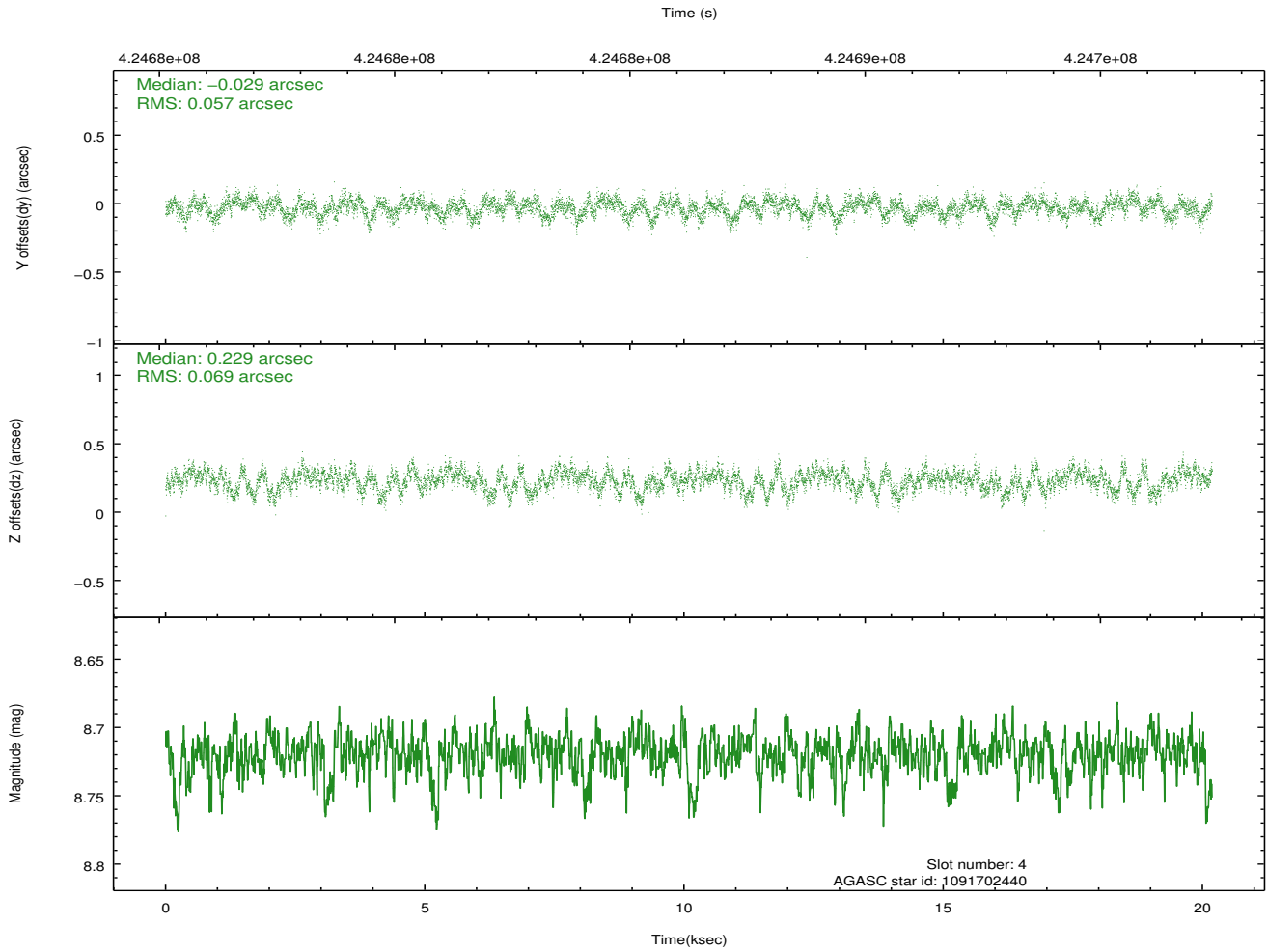
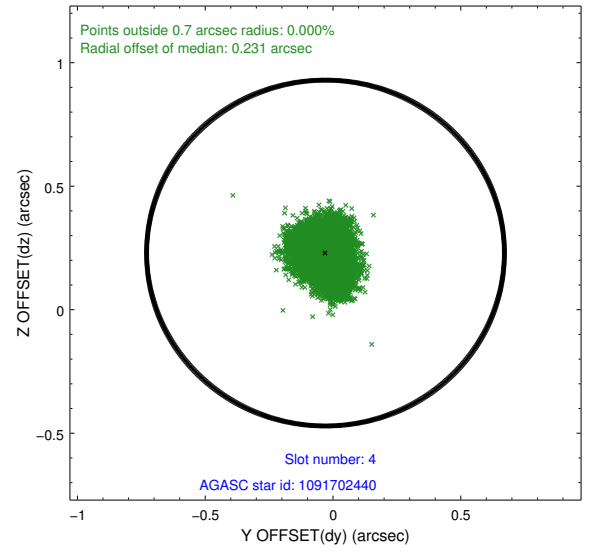
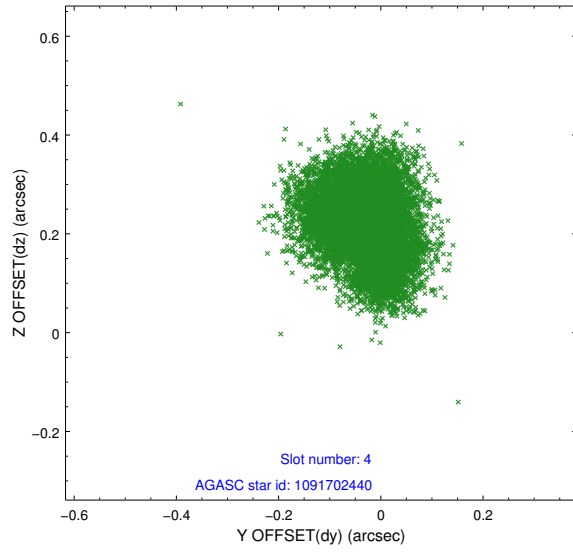
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.16	4924	-0.054	-0.009	0.033	0.045	0.000000	0.000000	928.83	-836.12
1	FID	ACIS-I-4	7.09	4923	0.056	0.031	0.040	0.053	0.000000	0.000000	2149.09	1063.65
2	FID	ACIS-I-6	7.15	4924	-0.101	0.040	0.027	0.040	0.000000	0.000000	394.94	1706.04
3	GUIDE	1091699360	7.44	9846	-0.023	-0.245	0.066	0.106	248.660725	-47.004364	-204.38	2240.59
4	GUIDE	1091702440	8.72	9838	-0.029	0.229	0.097	0.152	248.295809	-47.683380	108.58	-341.56
5	GUIDE	1091705224	9.19	9781	0.001	0.038	0.104	0.166	248.613211	-47.940846	1212.64	-820.68
6	GUIDE	1091698696	8.80	9841	-0.008	0.045	0.083	0.131	248.529134	-48.079711	1257.93	-1358.29
7	GUIDE	1091704824	9.12	9815	0.066	-0.072	0.103	0.174	249.173141	-47.336759	1452.97	1732.13

## 2.4 Star Slots

### 2.4.1 Slot 3

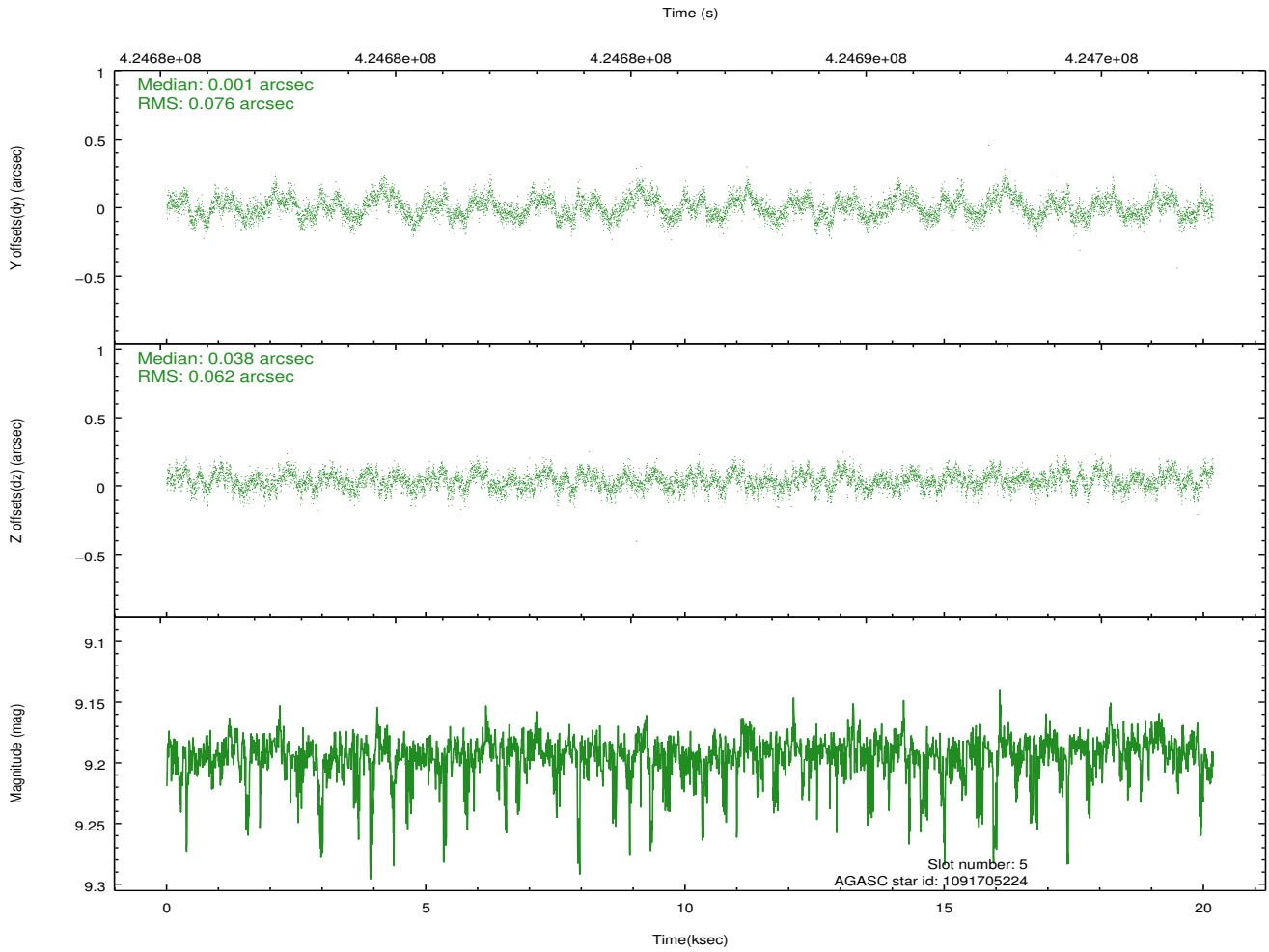
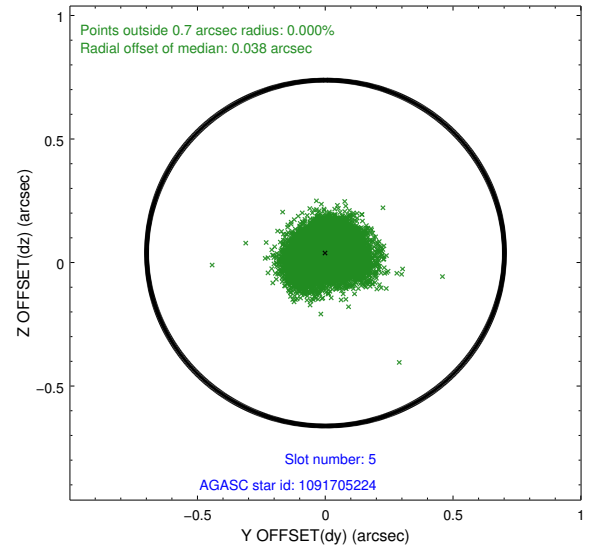
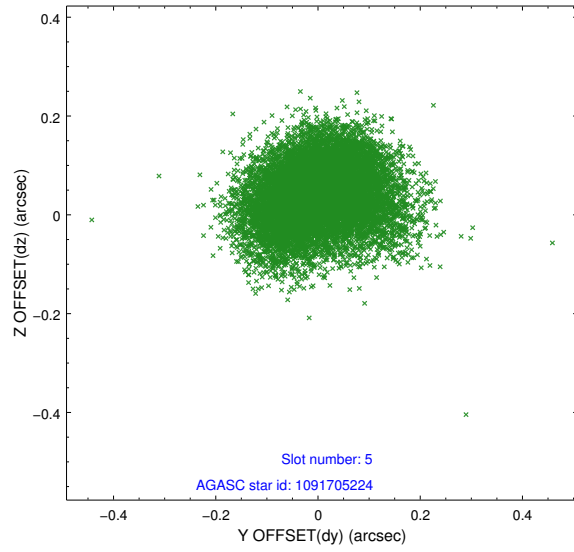


## 2.4.2 Slot 4

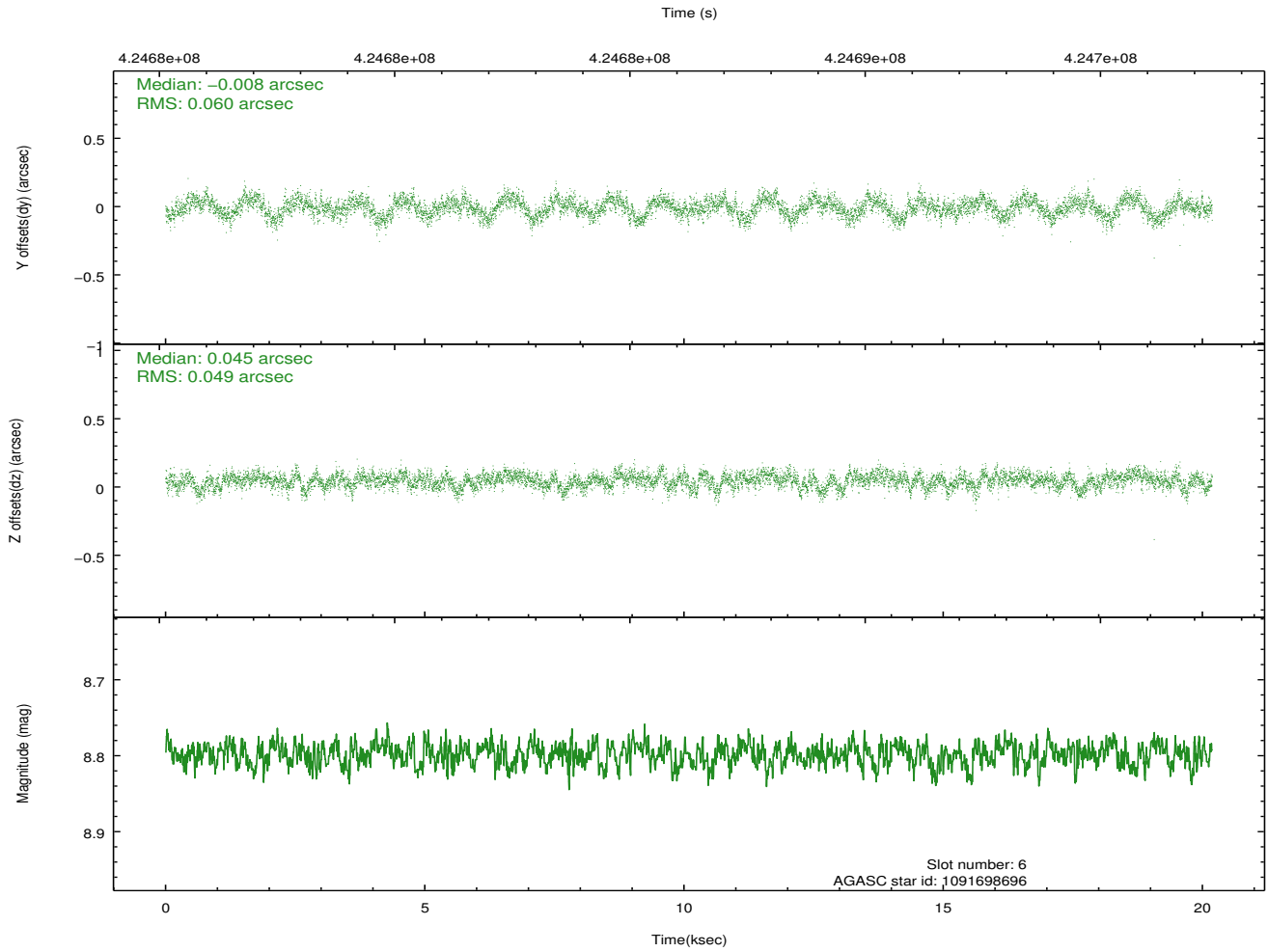
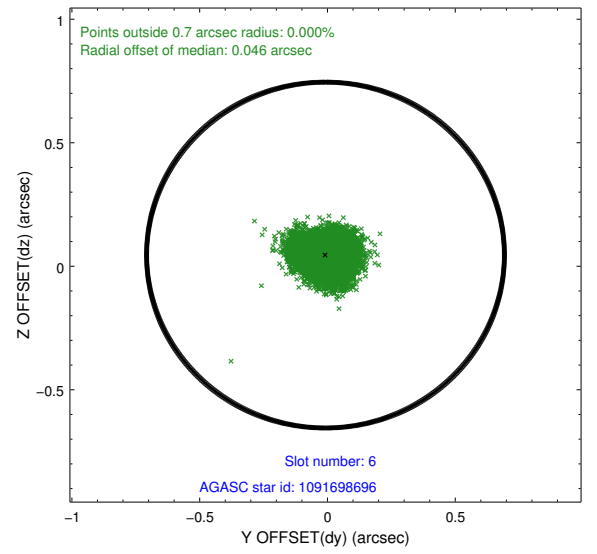
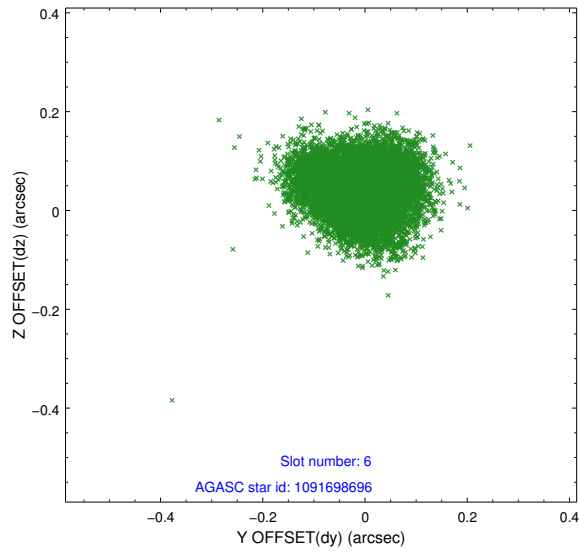




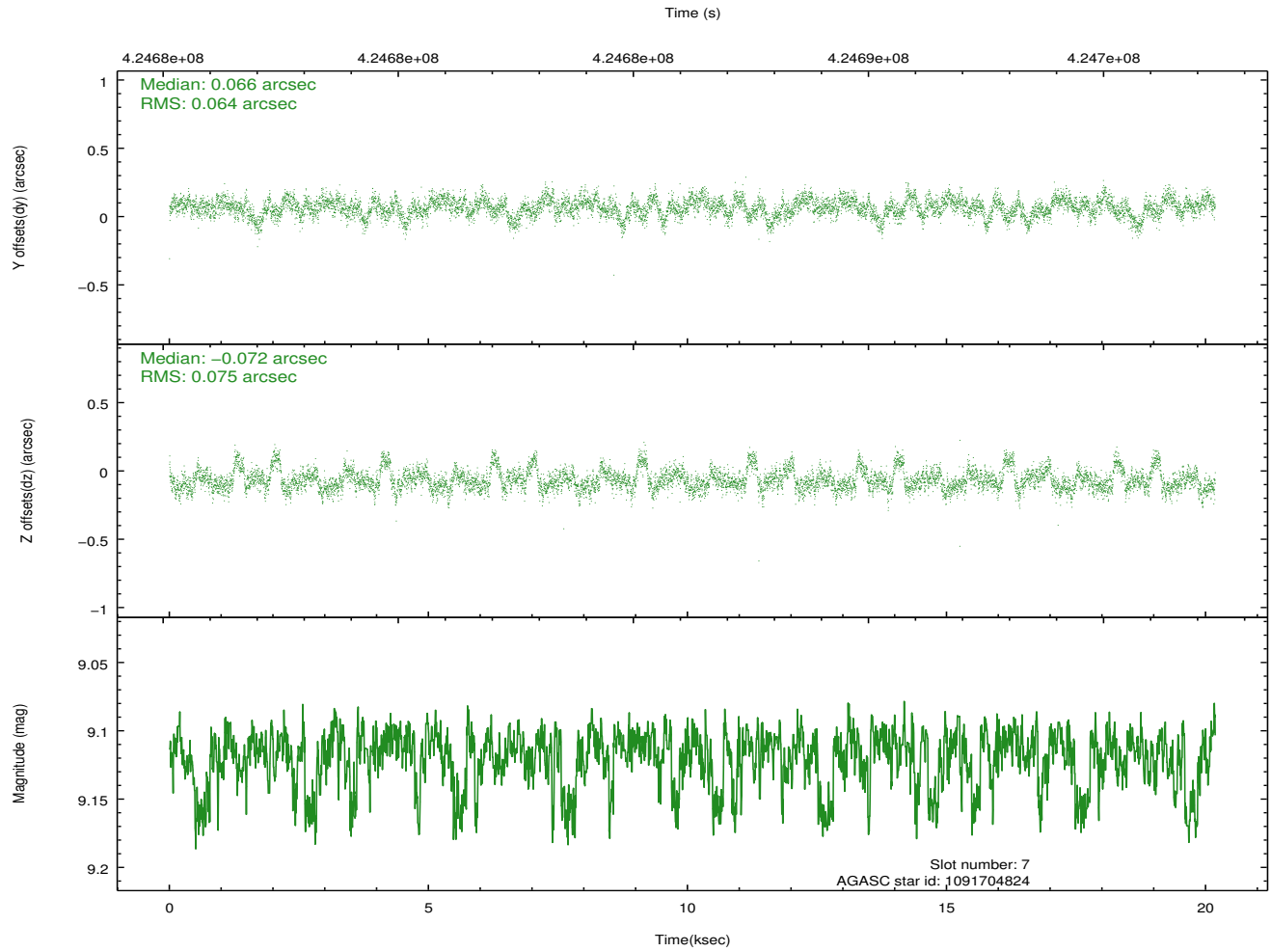
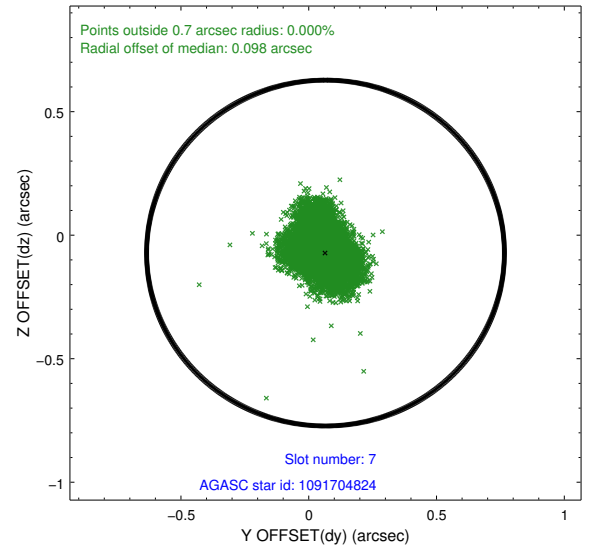
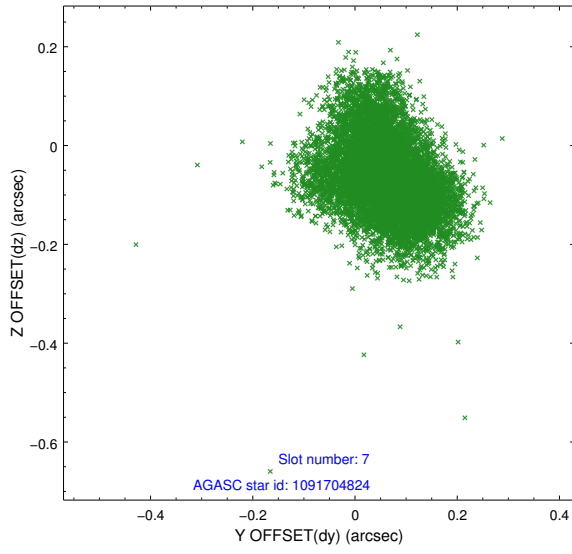
### 2.4.3 Slot 5



## 2.4.4 Slot 6

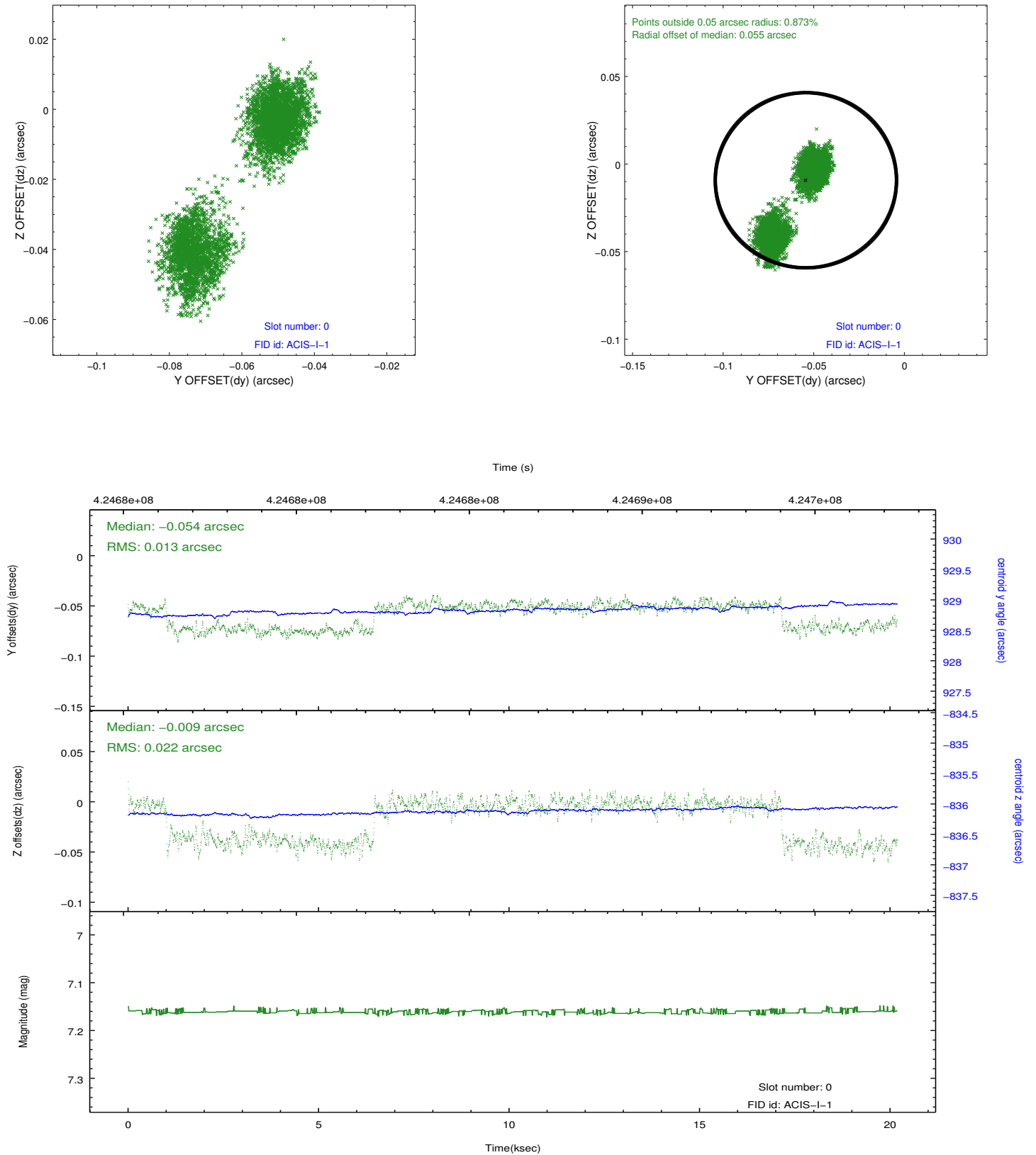


## 2.4.5 Slot 7

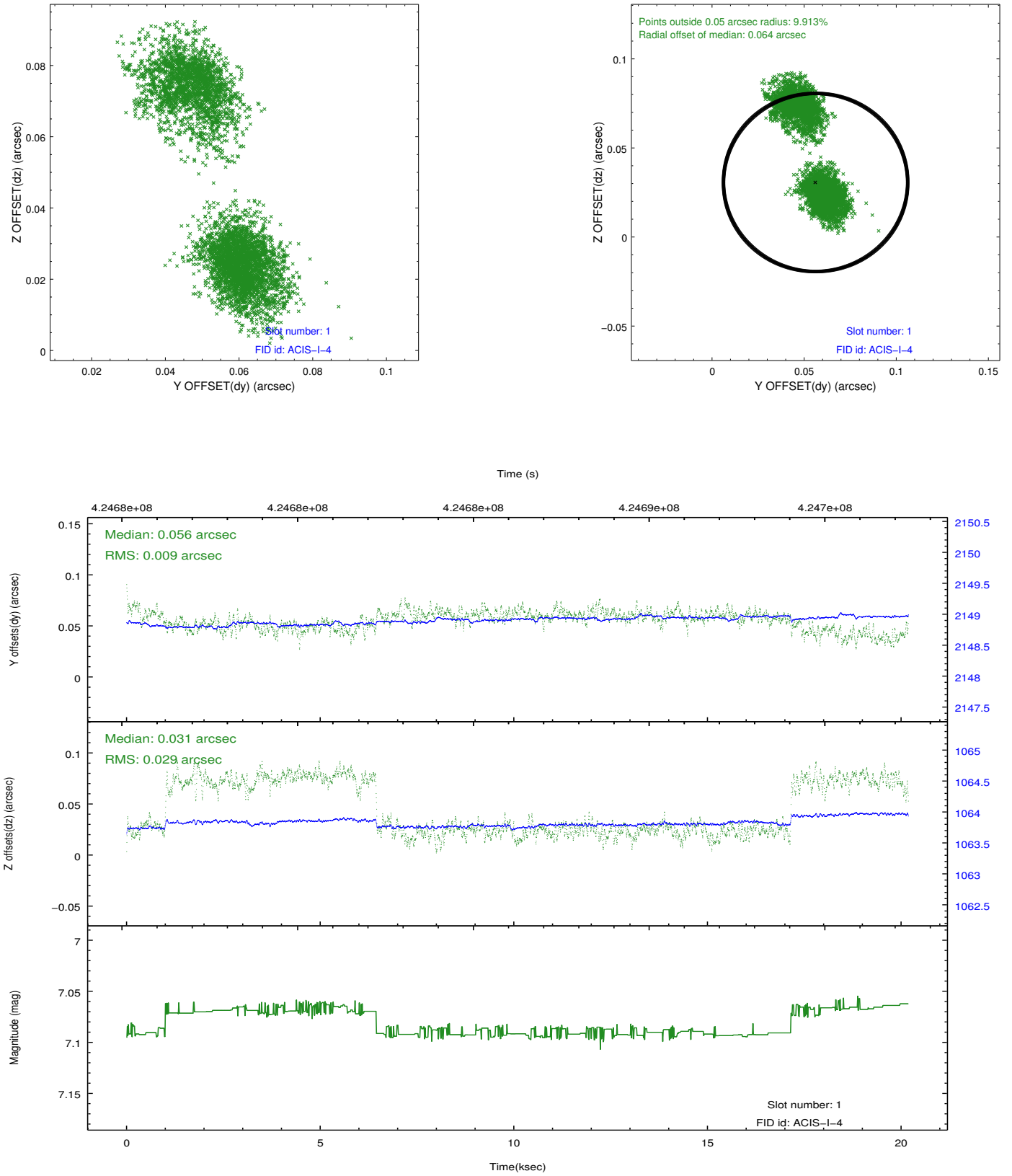


## 2.5 FID Slots

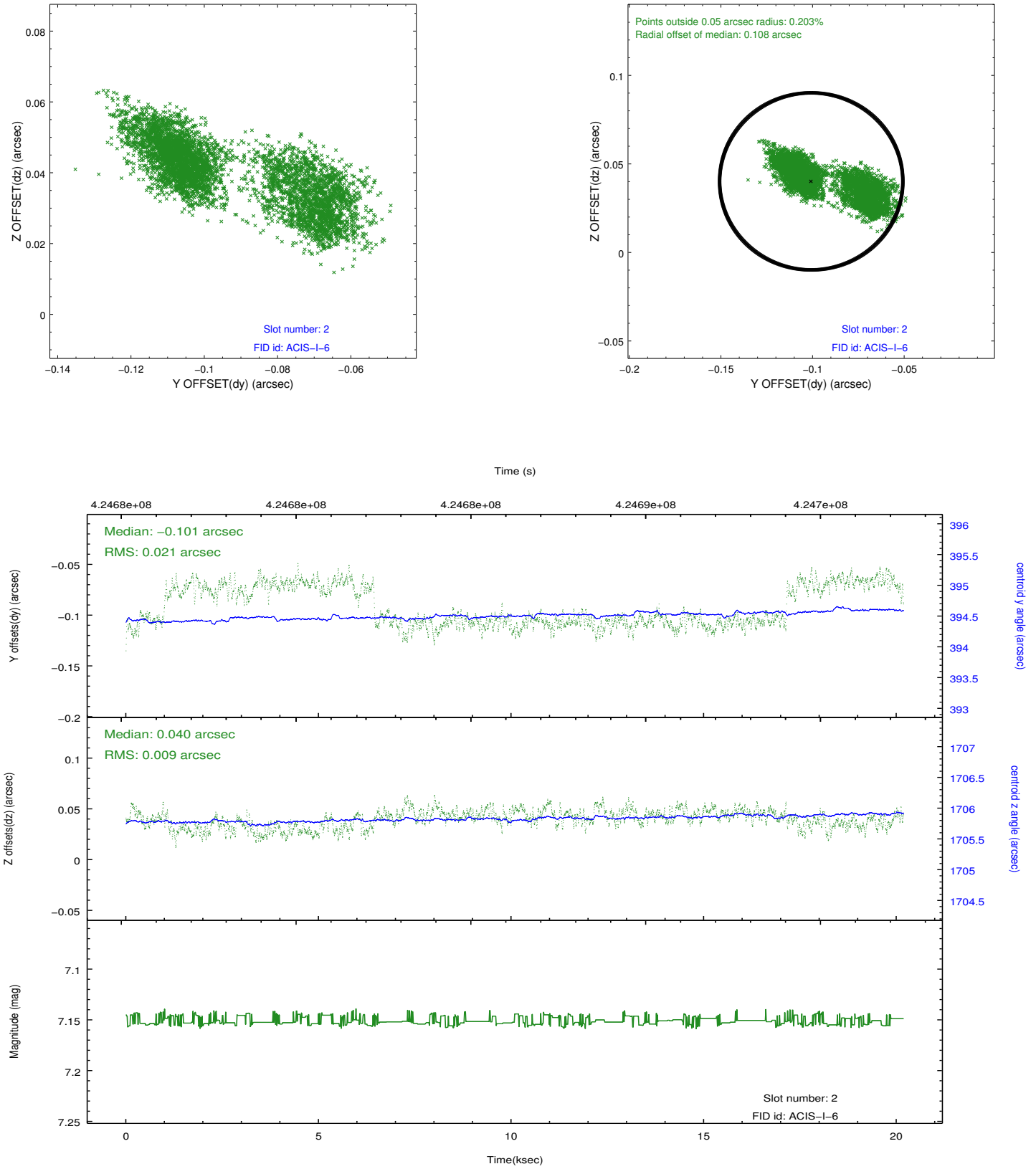
### 2.5.1 Slot 0



## 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)	2012.02.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.753558825612

### A.2 Comments

Joint proposal: NOAO