

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12511 - L2 Version 4  
Chandra X-Ray Center

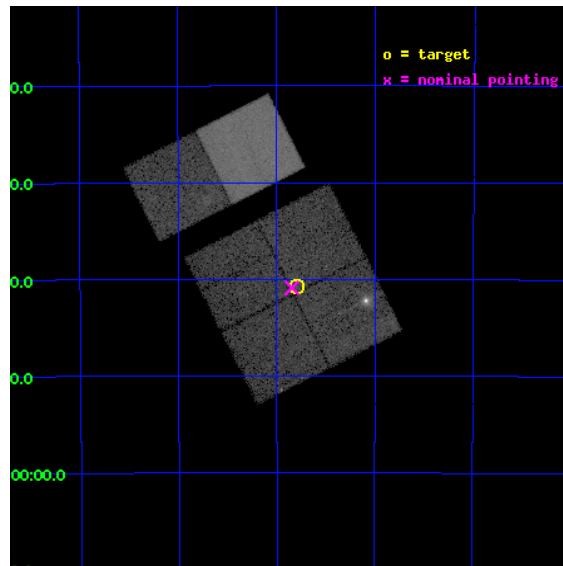
L2 Processing Date : Feb 12 2012

## 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

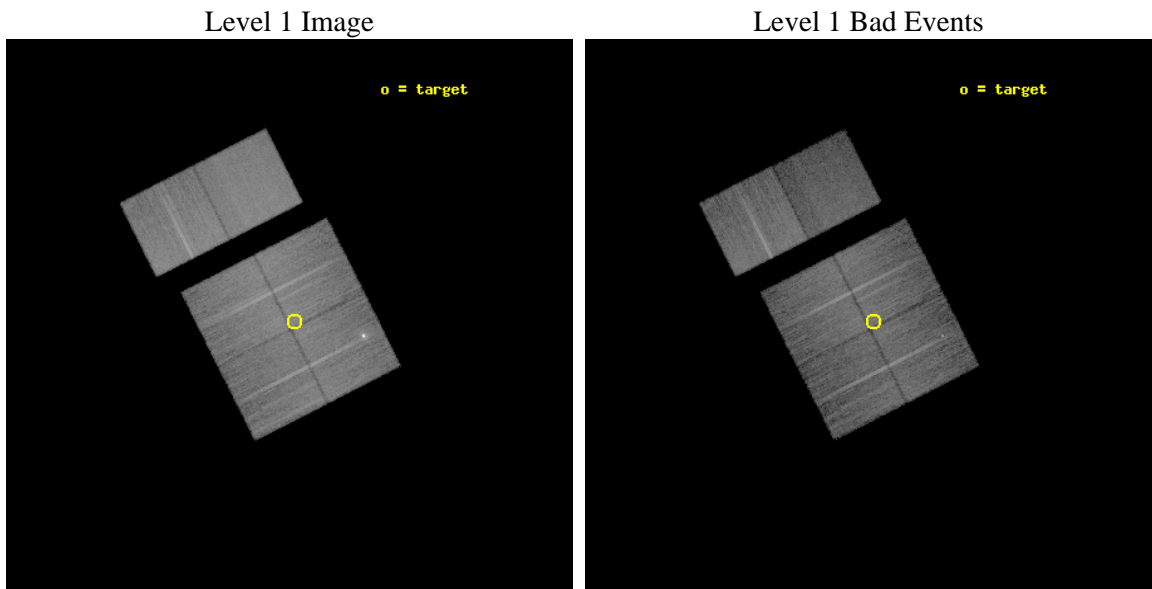
seq_num	401252	Sequence number
obs_id	12511	Observation id
title	Census of the Normal Spiral Arm Region	Proposal title
observer	Dr. John Tomsick	Principal investigator
object	Norma Region	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	249.950018	Observer's specified target RA [deg]
dec_targ	-46.680132	Observer's specified target Dec [deg]
ra_nom	249.96164647216	Nominal RA [deg]
dec_nom	-46.681456239503	Nominal Dec [deg]
roll_nom	333.21714914317	Nominal Roll [deg]
revision	4	Processing version of data
ontime	19561.599927187	Sum of GTIs [s]
livetime	19313.899170328	Livetime [s]
ontime0	19561.599927187	Sum of GTIs [s]
ontime1	19561.599927187	Sum of GTIs [s]
ontime2	19558.358866811	Sum of GTIs [s]
ontime3	19561.599927187	Sum of GTIs [s]
ontime6	19561.599927187	Sum of GTIs [s]
ontime7	19561.599927187	Sum of GTIs [s]
l2events	161376	Number of level 2 events



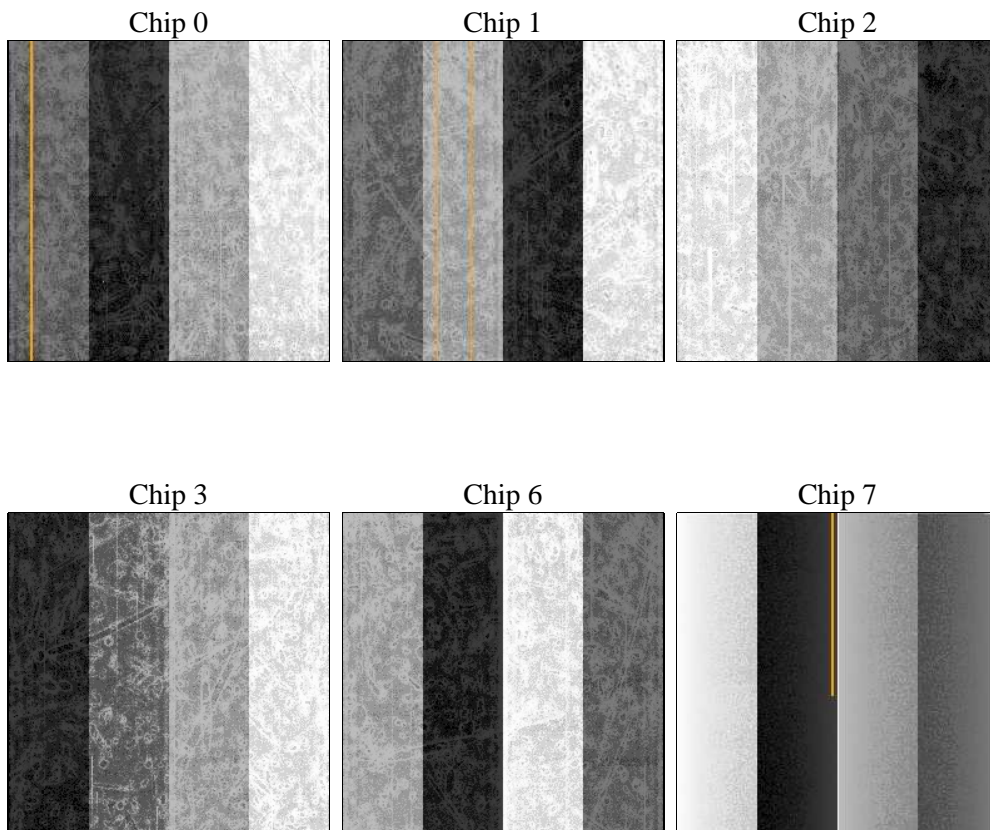
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	19802.782000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	19561.599927187	Sum of GTIs [s]
caldbver	4.4.7	&#160	ontime0	19561.599927187	Sum of GTIs [s]
date	2012-02-12T12:01:30	Date and time of file creation	ontime1	19561.599927187	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	19558.358866811	Sum of GTIs [s]
			ontime3	19561.599927187	Sum of GTIs [s]
			ontime6	19561.599927187	Sum of GTIs [s]
			ontime7	19561.599927187	Sum of GTIs [s]
			l1events	892161	Number of level 1 events

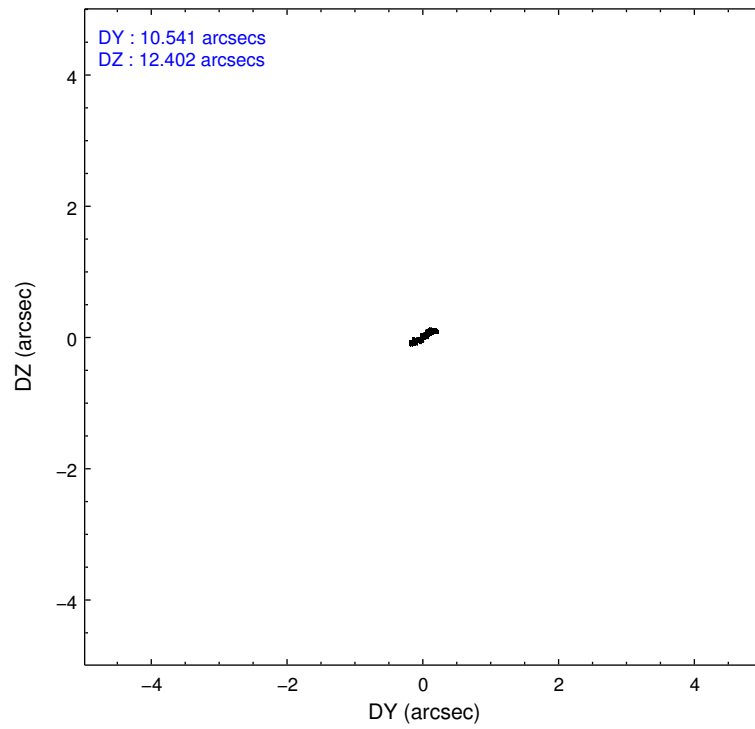
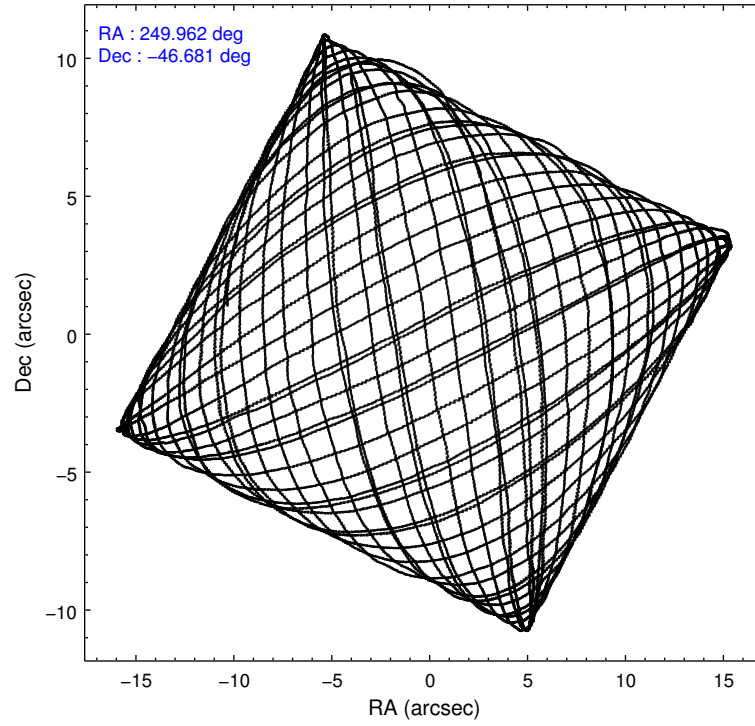
### 2.1.4 Events

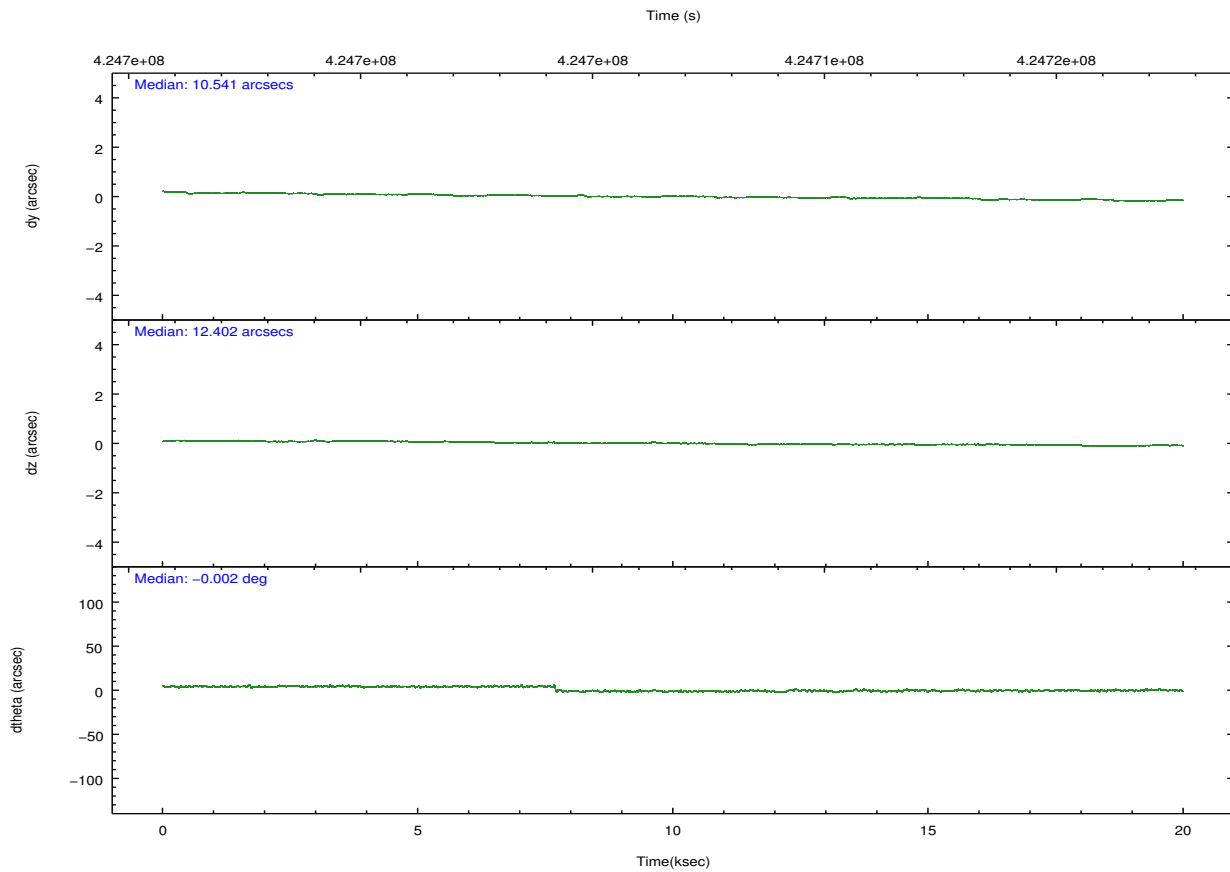
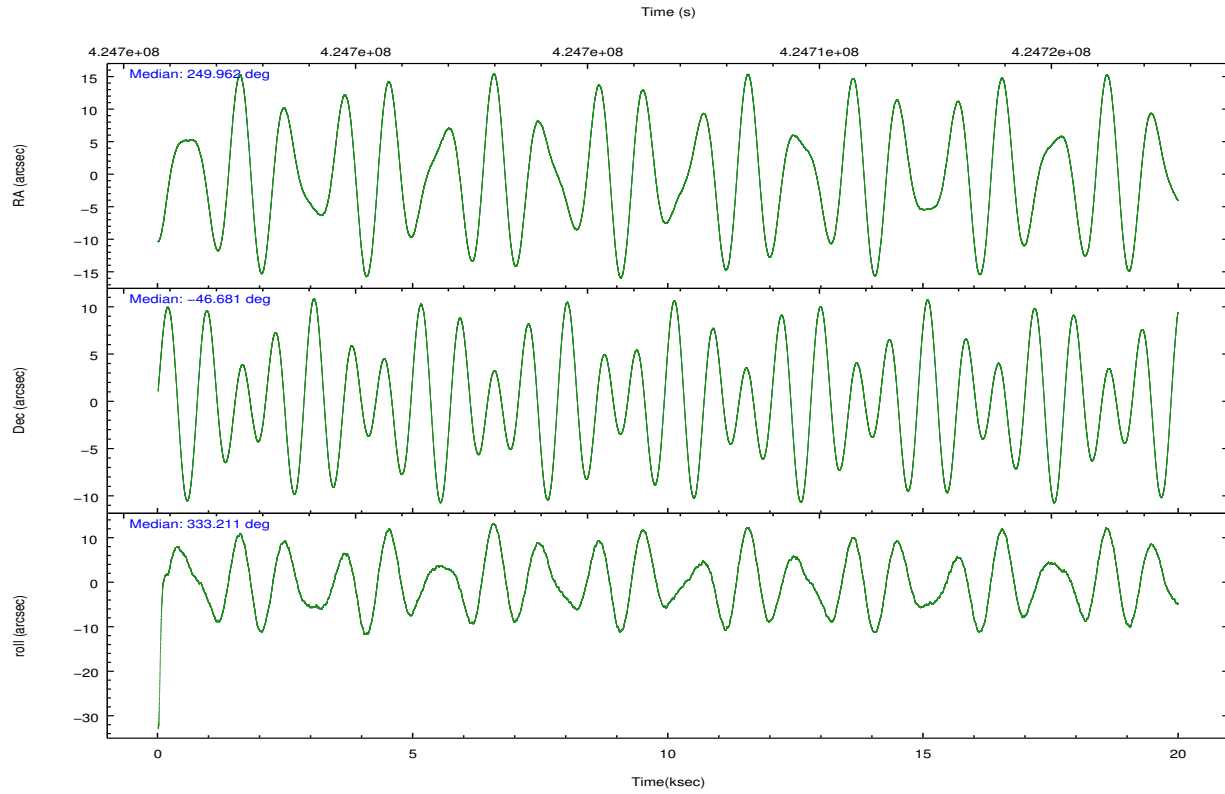
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	124620	142963	149488	144933	163727	166430	grade 0 events	8735	13808	9086	7408	9907	7591
rejected events	105258	113862	129674	128442	142526	88012		7%	9%	6%	5%	6%	4%
rejected %	84%	79%	86%	88%	87%	52%	grade 1 events	96	154	117	80	102	244
								0%	0%	0%	0%	0%	0%
							grade 2 events	4716	6008	4605	3402	4741	17678
								3%	4%	3%	2%	2%	10%
							grade 3 events	1591	2252	1472	1460	1517	6898
								1%	1%	0%	1%	0%	4%
							grade 4 events	1525	2288	1874	1468	1567	6894
								1%	1%	1%	1%	0%	4%
							grade 5 events	4819	5464	4655	5556	5715	16105
								3%	3%	3%	3%	3%	9%
							grade 6 events	2799	4750	2781	2759	3473	39363
								2%	3%	1%	1%	2%	23%
							grade 7 events	100339	108239	124898	122800	136705	71657
								80%	75%	83%	84%	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	249.921623	249.9616464721594	CCD I2 on	Y	Y
[deg] Pointing Dec	-46.683105	-46.68145623950279	CCD I3 on	Y	Y
[deg] Pointing Roll	332.979339	333.2171491431722	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)	424696931.184000	424696519.9976	CCD S5 on	N	N
Observation start date	2011-06-17T11:21:05	2011-06-17T11:15:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	424716733.184000	424716970.28616	On-chip summing requested	N	N
Observation end date	2011-06-17T16:51:07	2011-06-17T16:56:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





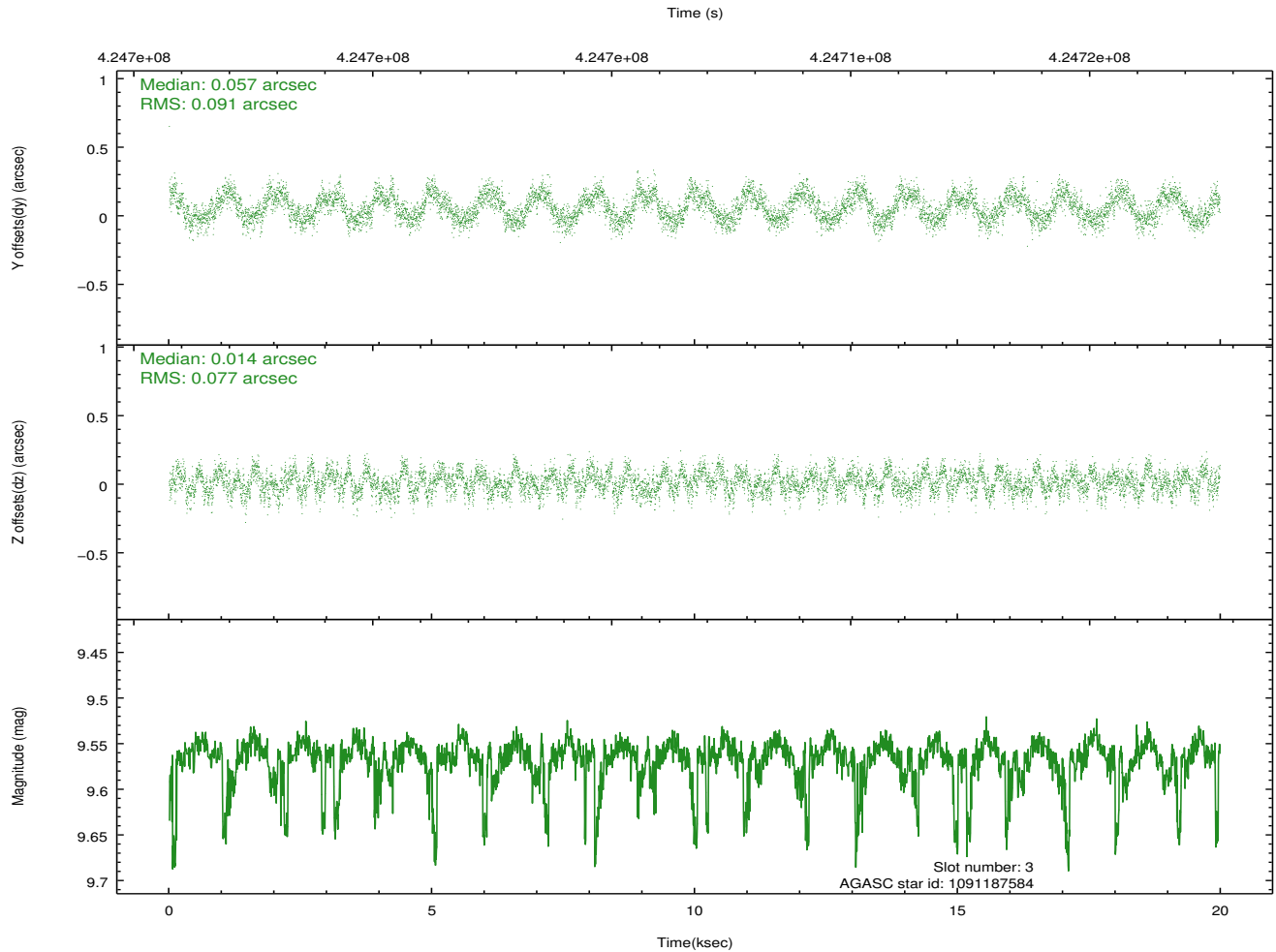
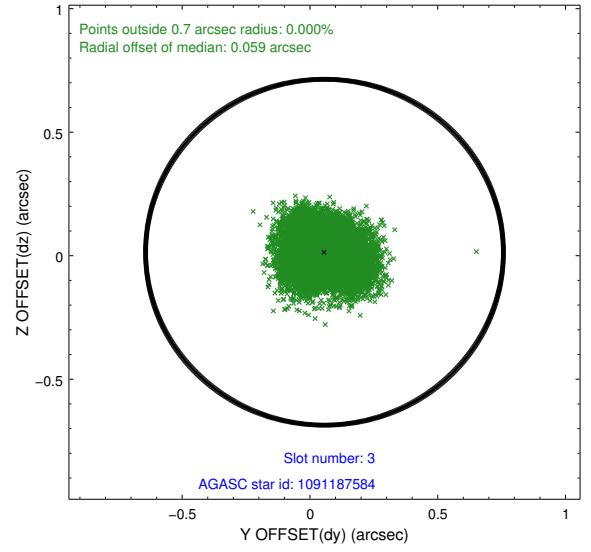
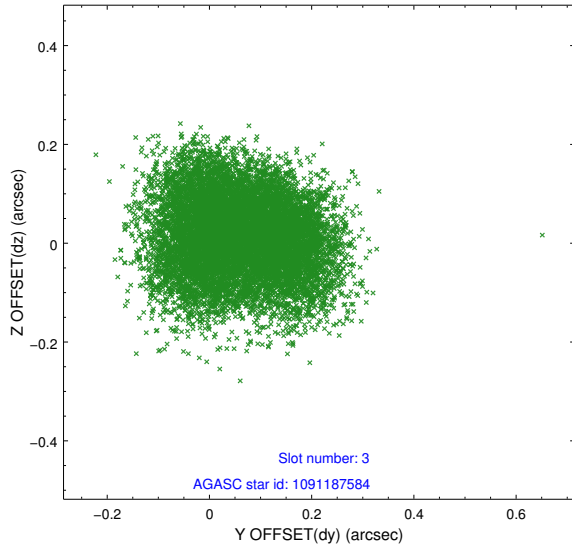
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.05	4874	-0.095	-0.117	0.023	0.034	0.000000	0.000000	-765.23	-842.41
1	FID	ACIS-I-4	7.07	4873	0.194	0.089	0.014	0.018	0.000000	0.000000	2149.05	1063.84
2	FID	ACIS-I-5	7.14	4874	-0.200	0.097	0.017	0.026	0.000000	0.000000	-1818.91	1061.95
3	GUIDE	1091187584	9.56	9695	0.057	0.014	0.130	0.198	249.154381	-46.614366	-1797.76	-649.70
4	GUIDE	1091703168	8.94	9716	0.105	0.101	0.104	0.162	249.174634	-47.078871	-979.75	-2108.81
5	GUIDE	1091709800	9.17	9739	-0.001	0.092	0.109	0.182	249.801955	-47.310212	766.80	-2145.03
6	GUIDE	1091699360	7.44	9674	-0.144	-0.082	0.071	0.113	248.660725	-47.004364	-2220.39	-2459.06
7	GUIDE	1091332544	9.91	9731	-0.021	-0.112	0.153	0.262	250.563424	-46.177197	600.55	2343.44

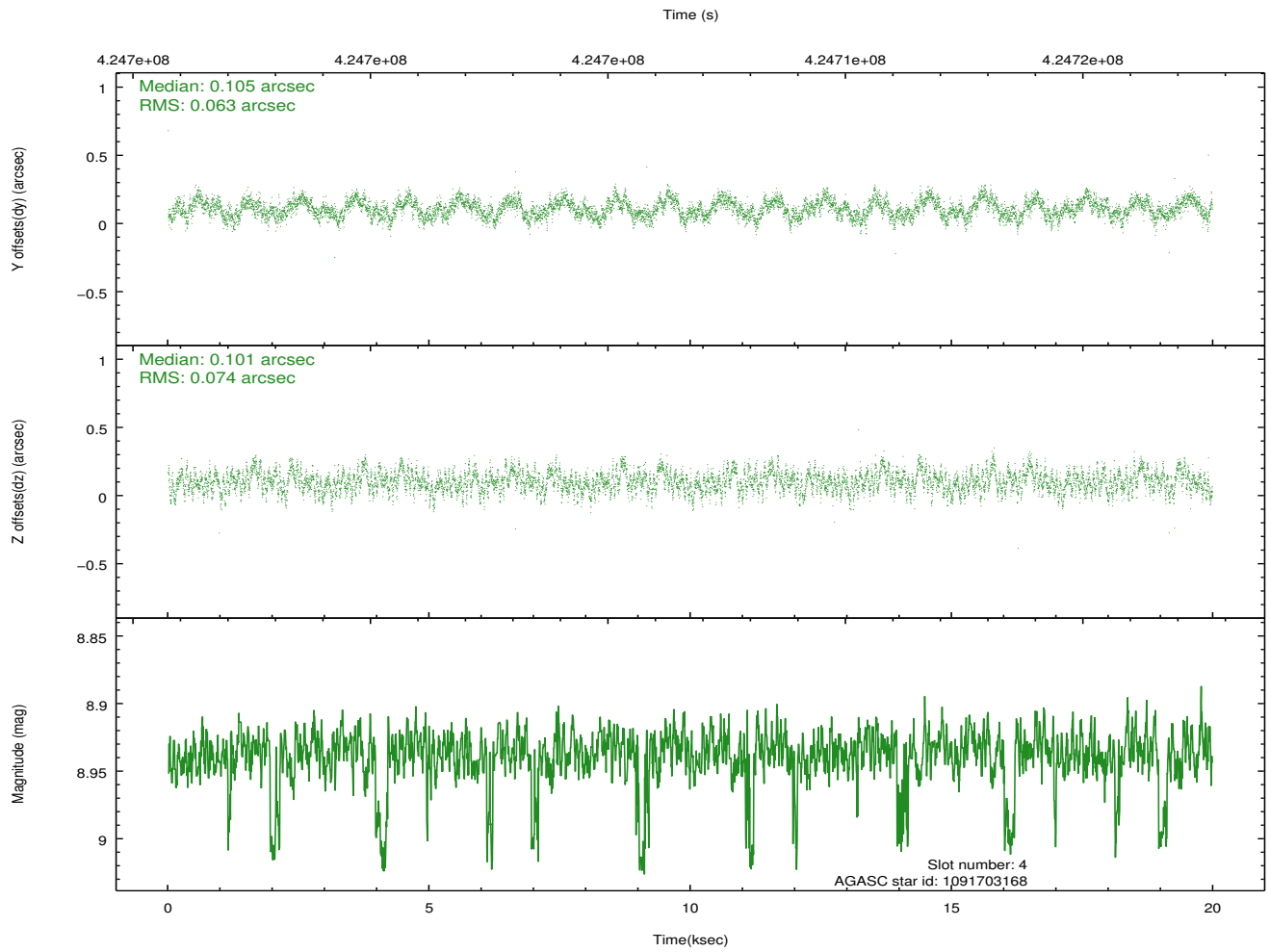
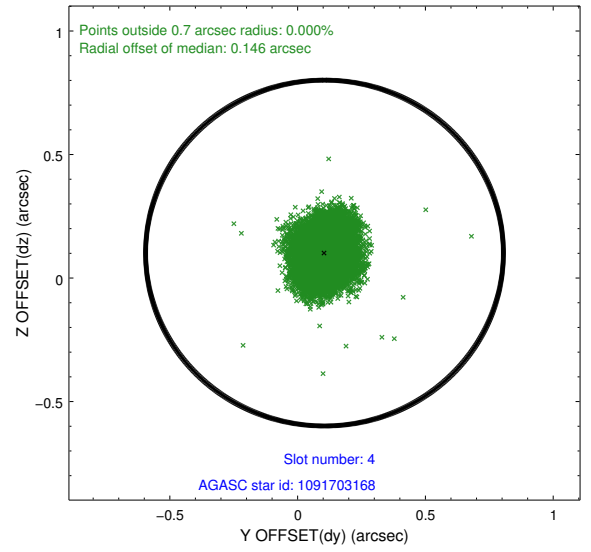
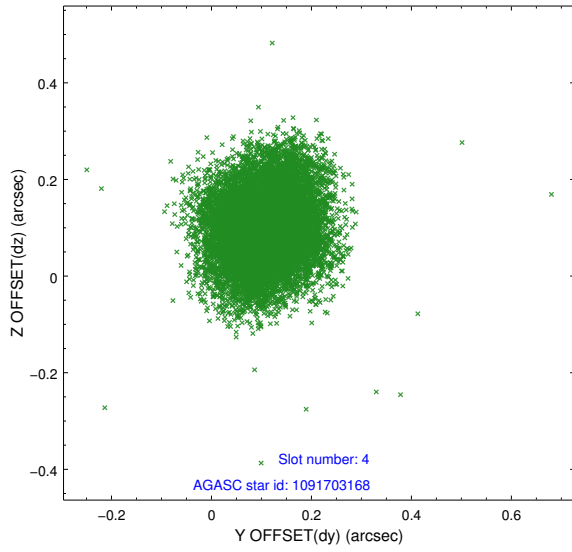
∞

## 2.4 Star Slots

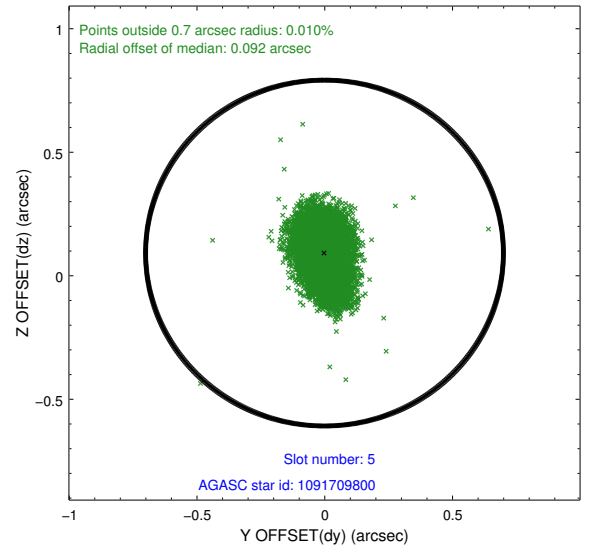
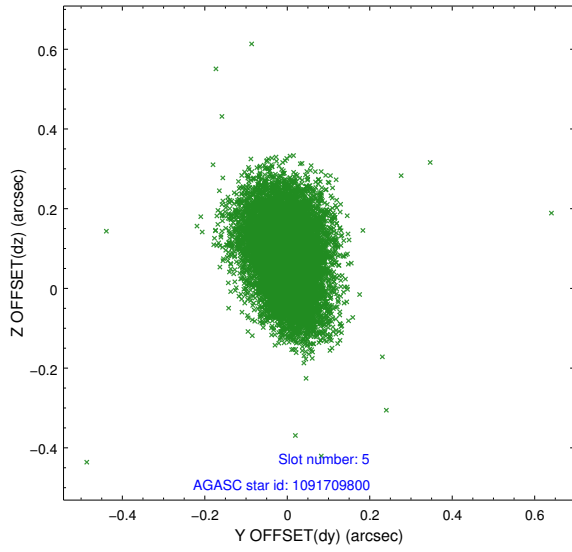
### 2.4.1 Slot 3



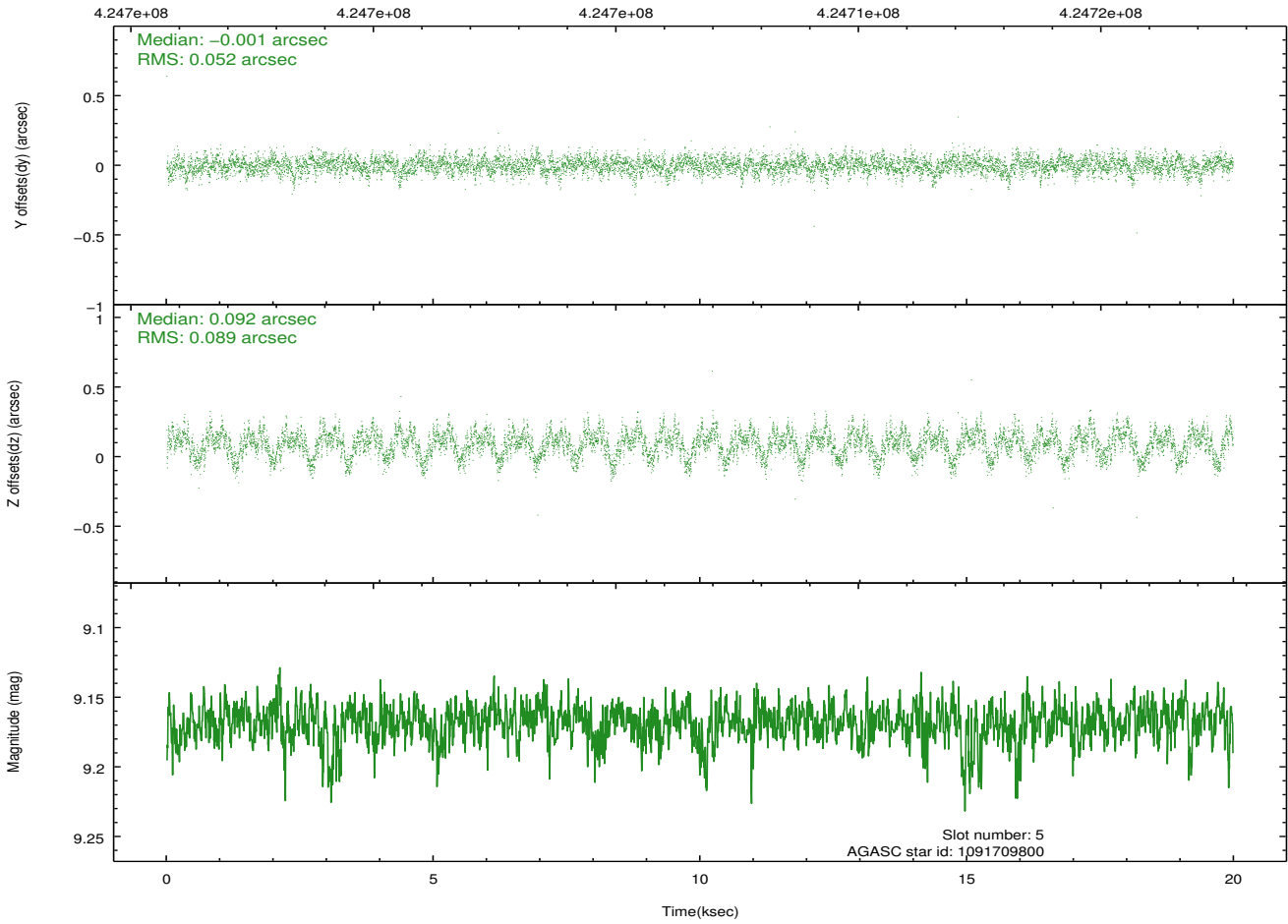
### 2.4.2 Slot 4



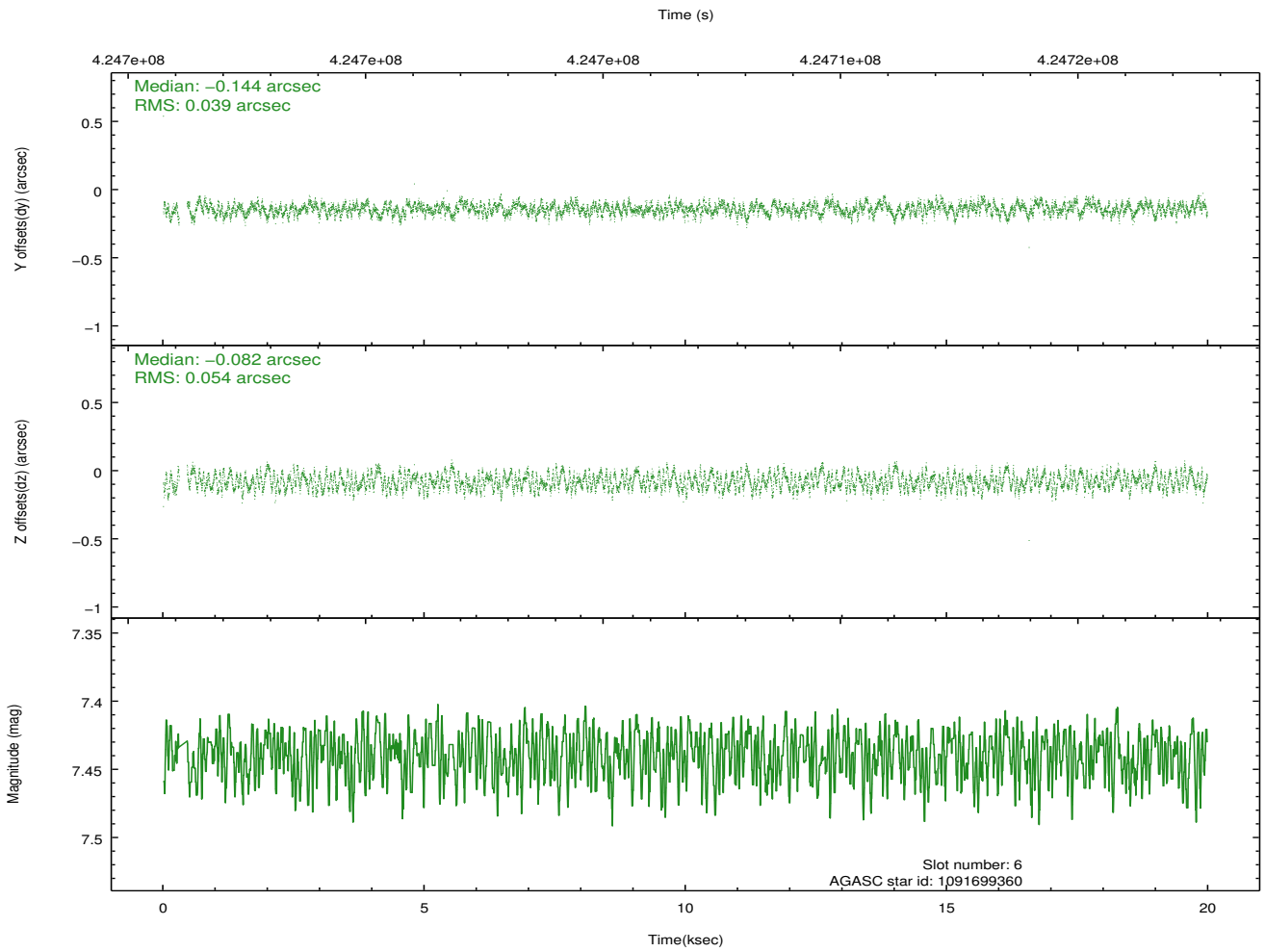
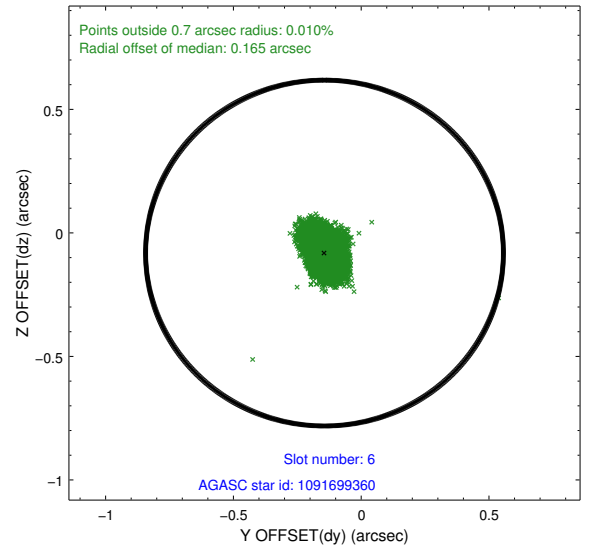
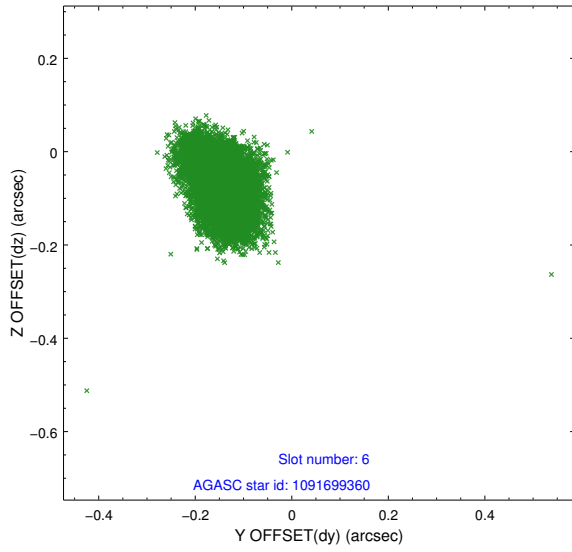
### 2.4.3 Slot 5



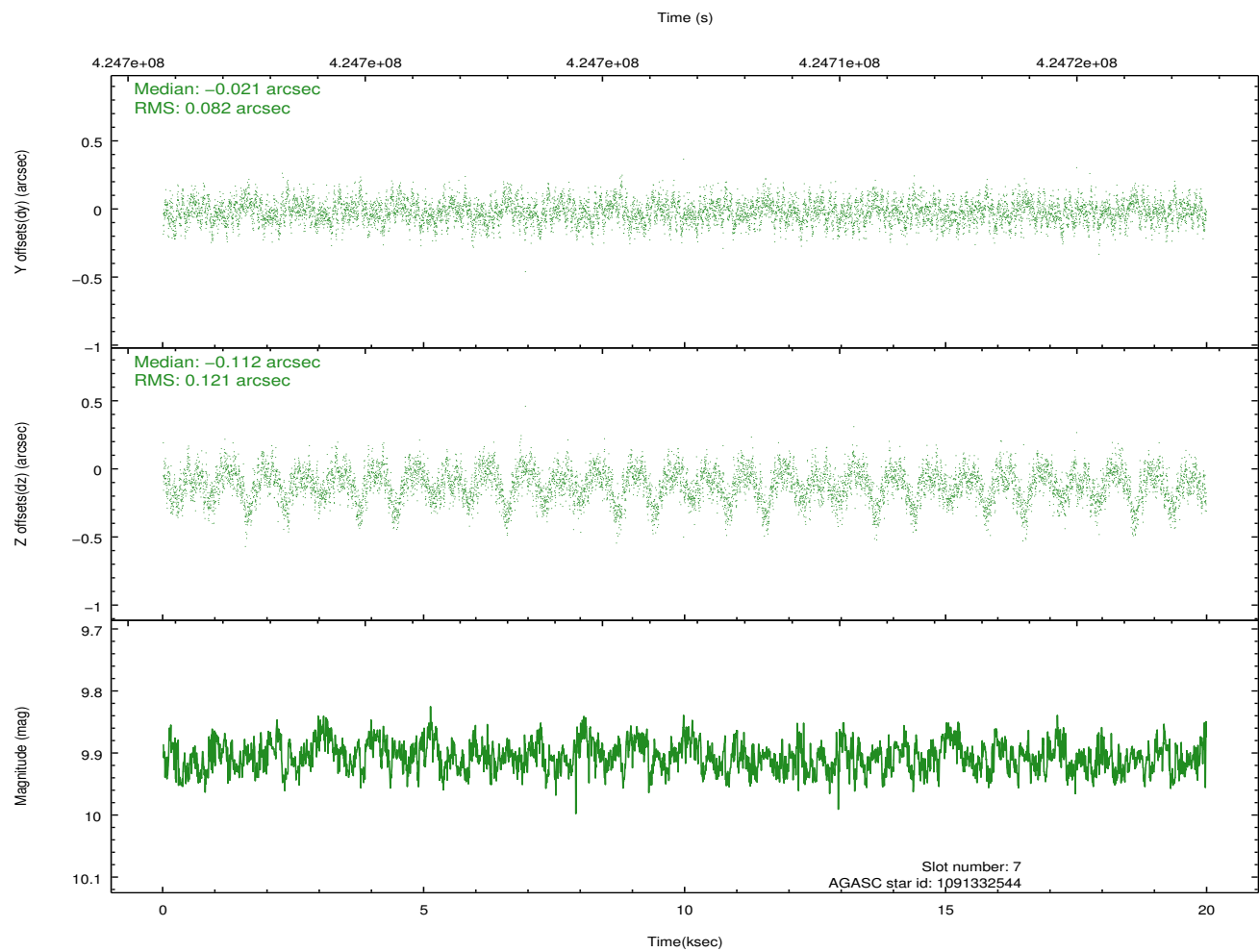
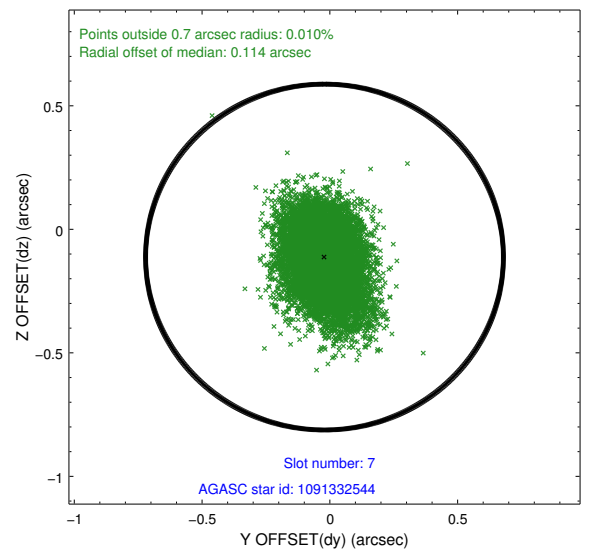
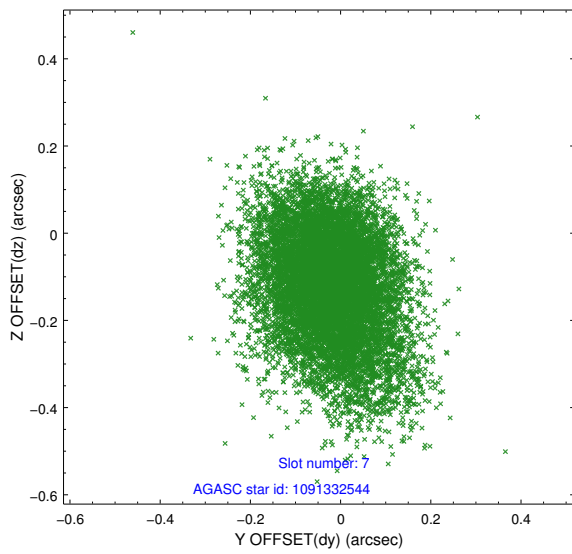
Time (s)



### 2.4.4 Slot 6

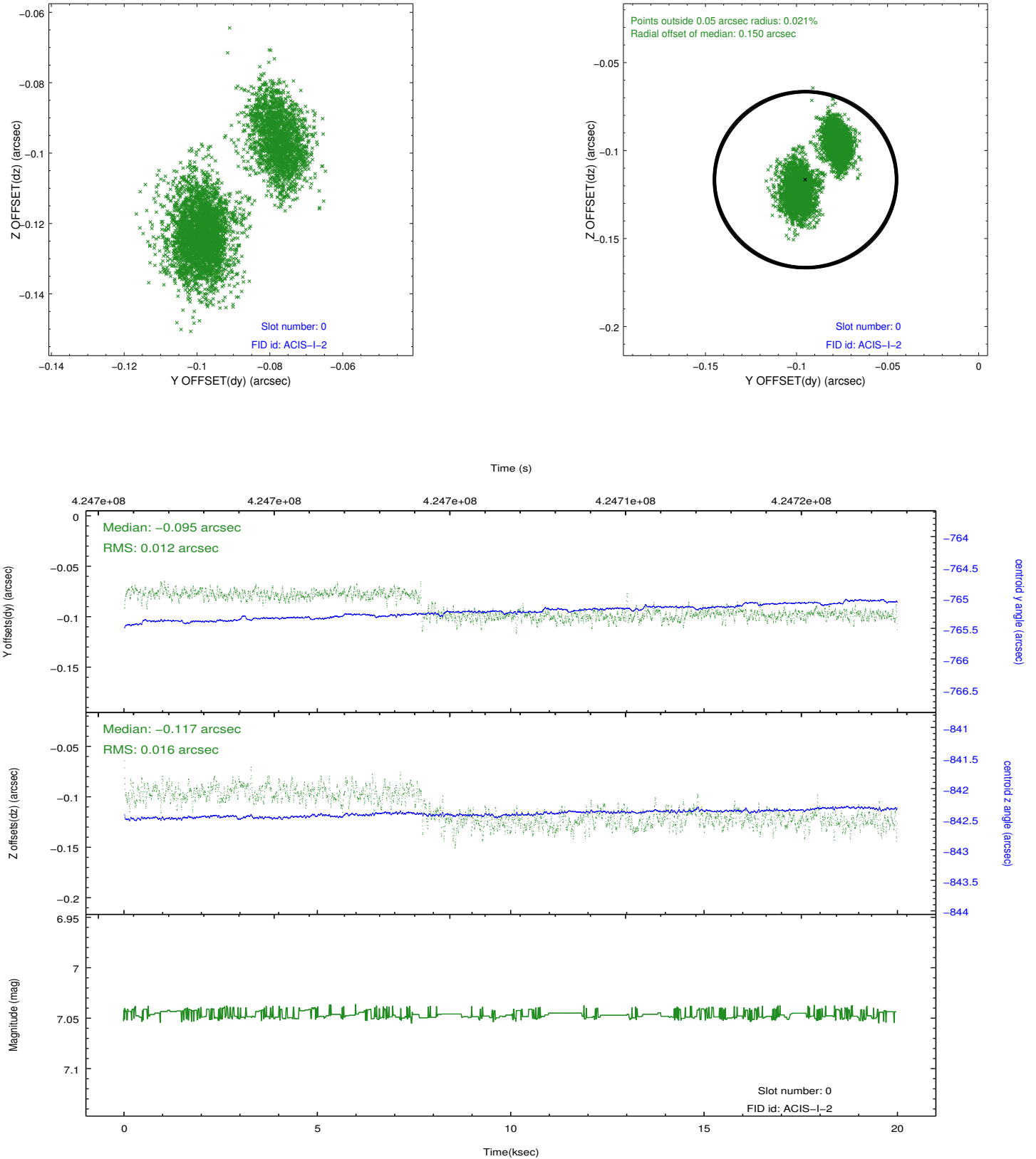


## 2.4.5 Slot 7

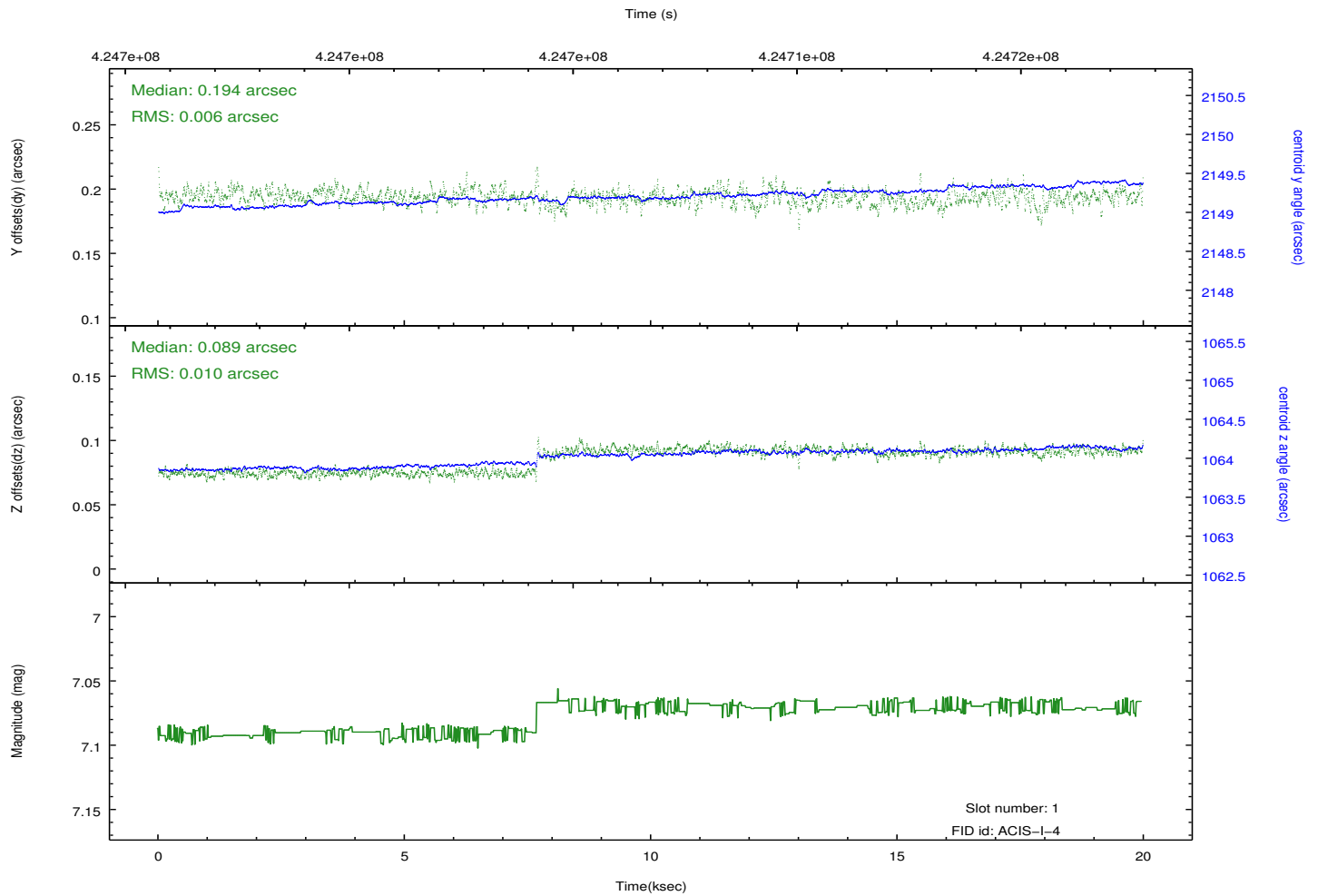
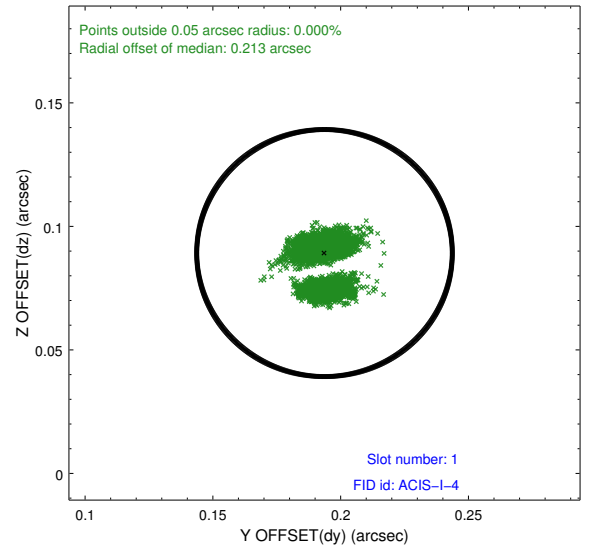
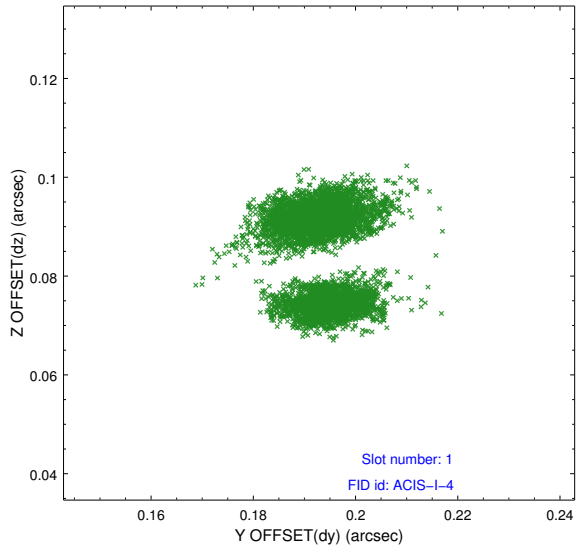


## 2.5 FID Slots

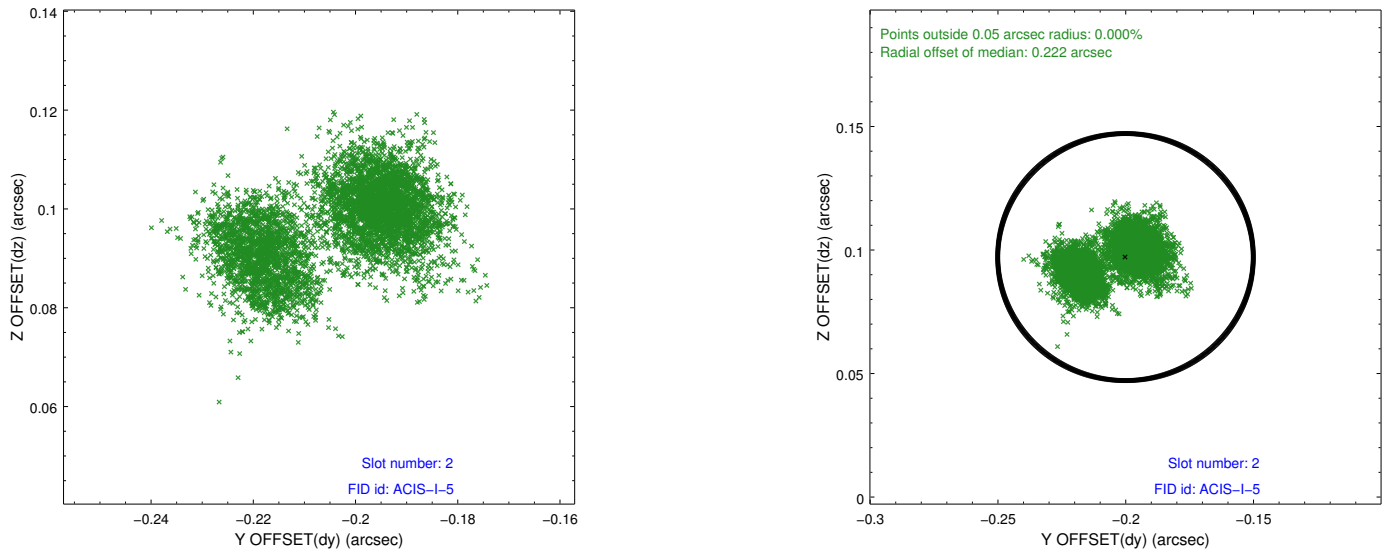
### 2.5.1 Slot 0



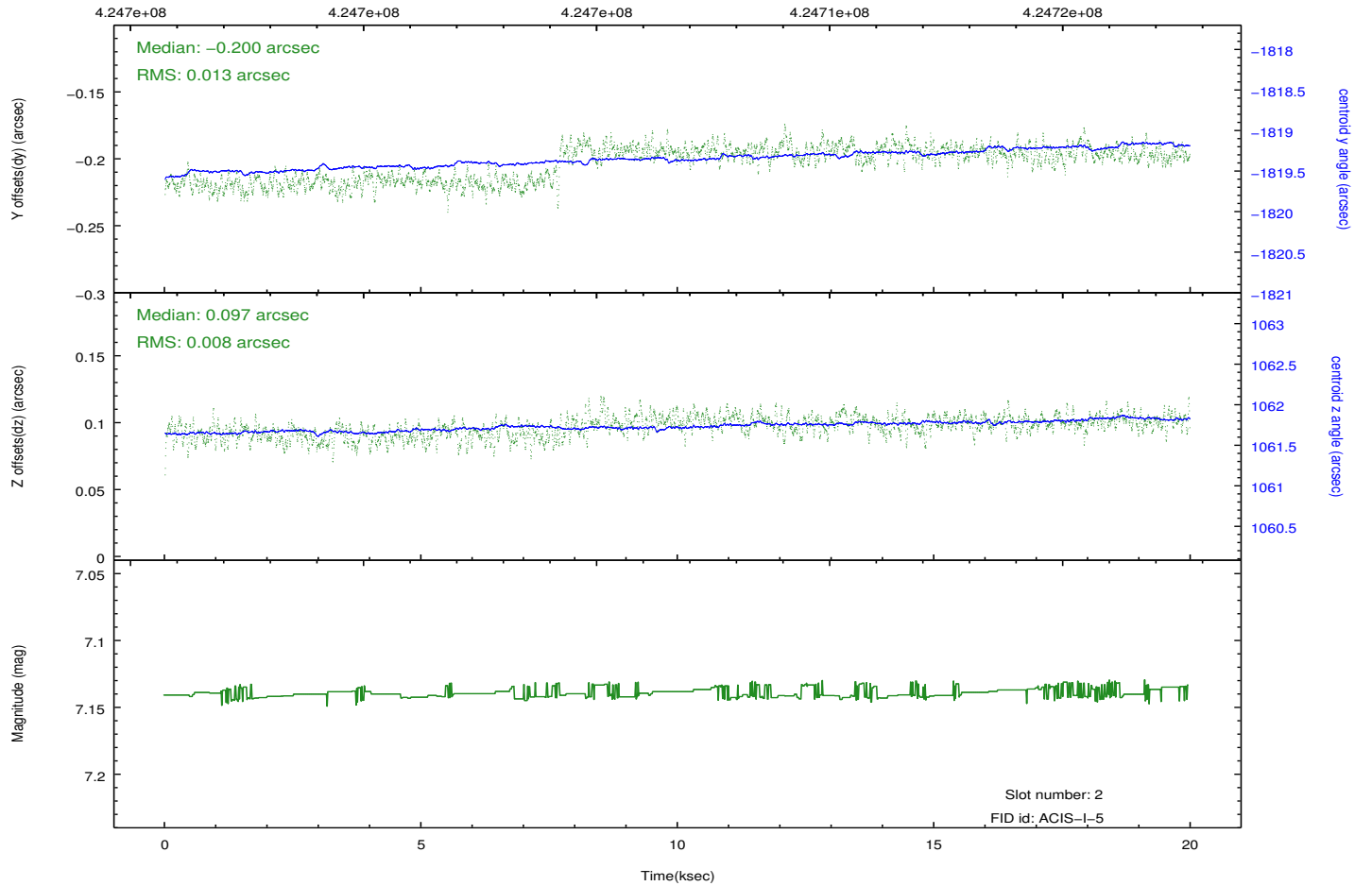
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# 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	19.561599927187

## A.2 Comments

Joint proposal: NOAO