

# V&V Reference Report

## L2 ASCDS Version : 10.5.2

Observation 18465 - L2 Version 1  
Chandra X-Ray Center

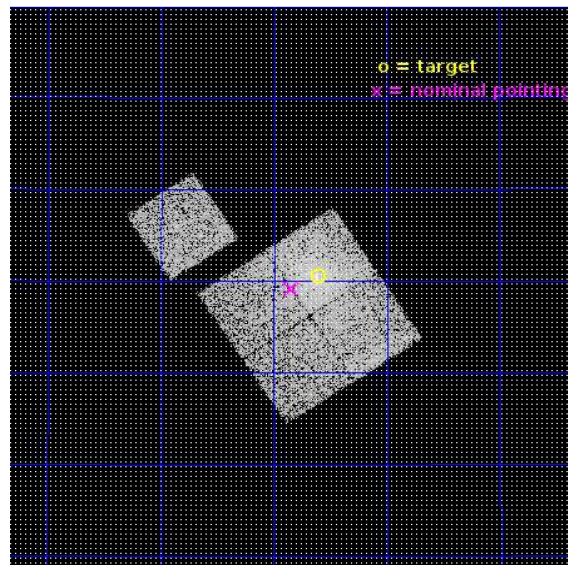
L2 Processing Date : Dec 4 2016

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# 1 Front

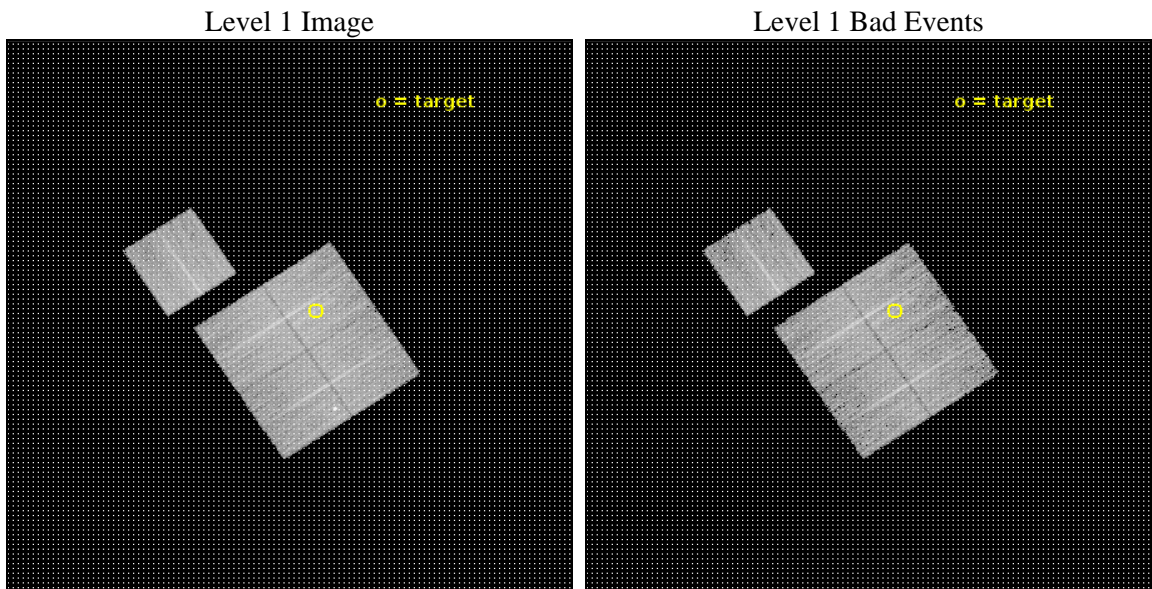
seq_num	801624	Sequence number
obs_id	18465	Observation id
title	Completing Chandra Snapshots of the Planck Cosmology Sample	Propos
observer	Ralph Kraft	Principal investigator
object	G068.23+15.20	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	284.4	Observer's specified target RA [deg]
dec_targ	38.01	Observer's specified target Dec [deg]
ra_nom	284.46114301082	Nominal RA [deg]
dec_nom	37.986379308364	Nominal Dec [deg]
roll_nom	326.65635260406	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9702.8151189089	Sum of GTIs [s]
livetime	9576.0406962718	Livetime [s]
ontime0	9702.6919989586	Sum of GTIs [s]
ontime1	9702.7330389023	Sum of GTIs [s]
ontime2	9702.7740789652	Sum of GTIs [s]
ontime3	9702.8151189089	Sum of GTIs [s]
ontime6	9702.6509588957	Sum of GTIs [s]
l2events	41420	Number of level 2 events



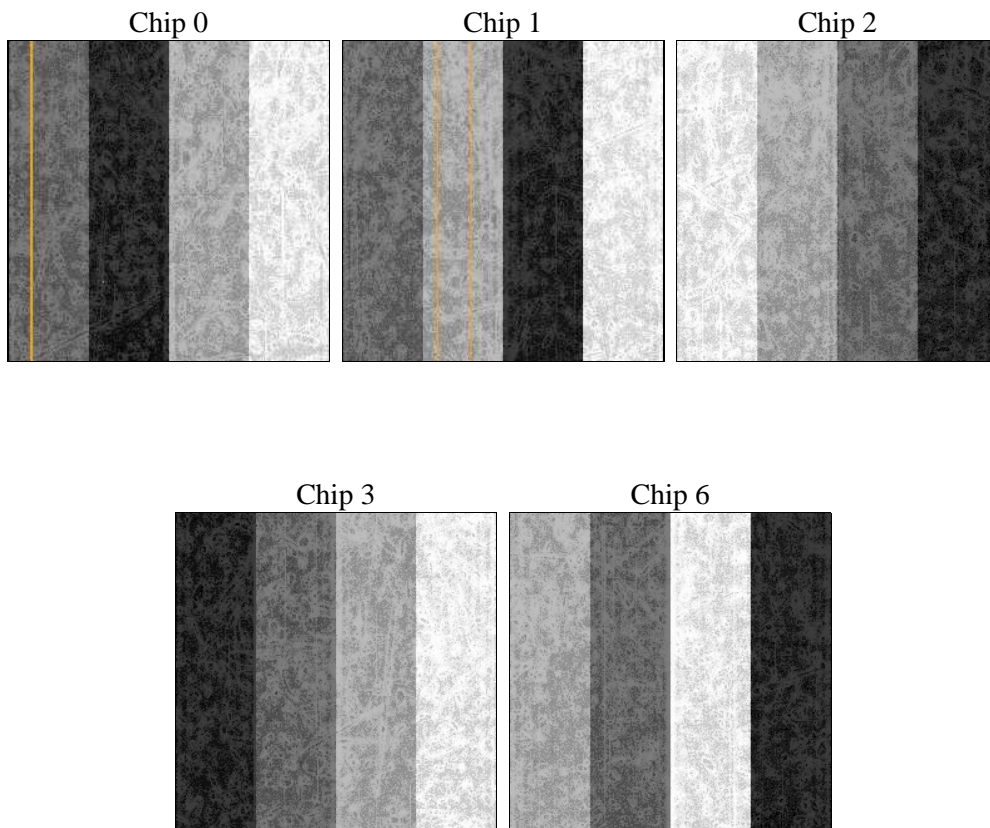
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9930.769000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	9702.8151189089	Sum of GTIs [s]
caldsver	4.7.2	&#160	ontime0	9702.6919989586	Sum of GTIs [s]
date	2016-12-04T19:10:31	Date and time of file creation	ontime1	9702.7330389023	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	9702.7740789652	Sum of GTIs [s]
			ontime3	9702.8151189089	Sum of GTIs [s]
			ontime6	9702.6509588957	Sum of GTIs [s]
			l1events	341900	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	63648	64125	71812	74108	68207
rejected events	54041	54344	63193	60458	60307
rejected %	84%	84%	87%	81%	88%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2924	3950	3533	7847	2691
	4%	6%	4%	10%	3%
grade 1 events	30	45	41	79	36
	0%	0%	0%	0%	0%
grade 2 events	3581	2285	1996	2233	1825
	5%	3%	2%	3%	2%
grade 3 events	816	826	831	1005	801
	1%	1%	1%	1%	1%
grade 4 events	727	832	749	948	806
	1%	1%	1%	1%	1%
grade 5 events	2864	3058	2698	3302	3131
	4%	4%	3%	4%	4%
grade 6 events	1564	1894	1513	1627	1783
	2%	2%	2%	2%	2%
grade 7 events	51142	51235	60451	57067	57134
	80%	79%	84%	77%	83%

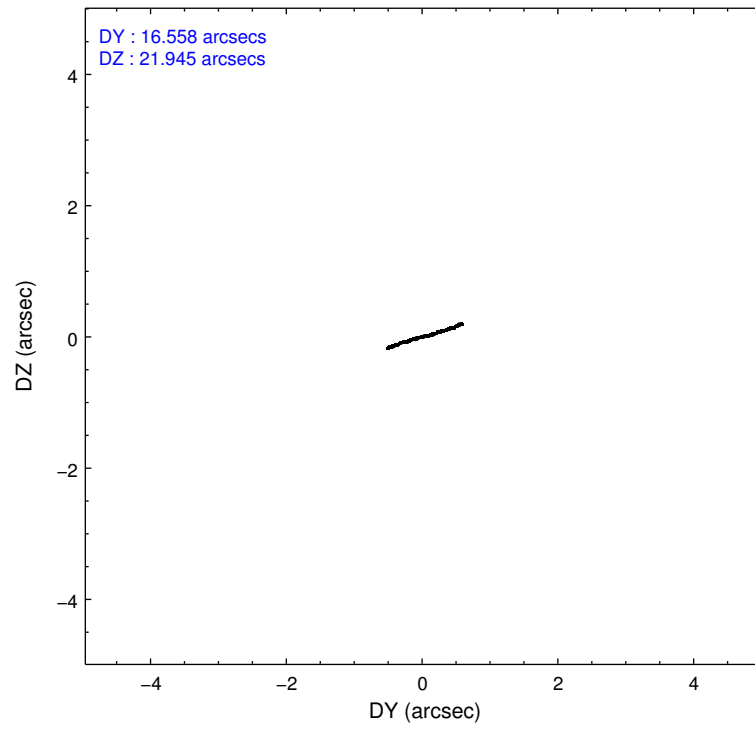
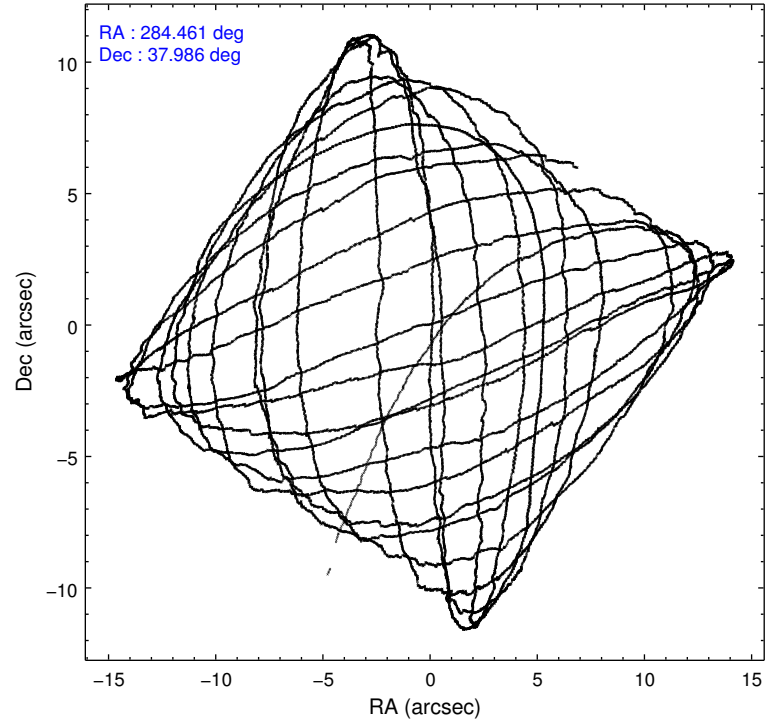


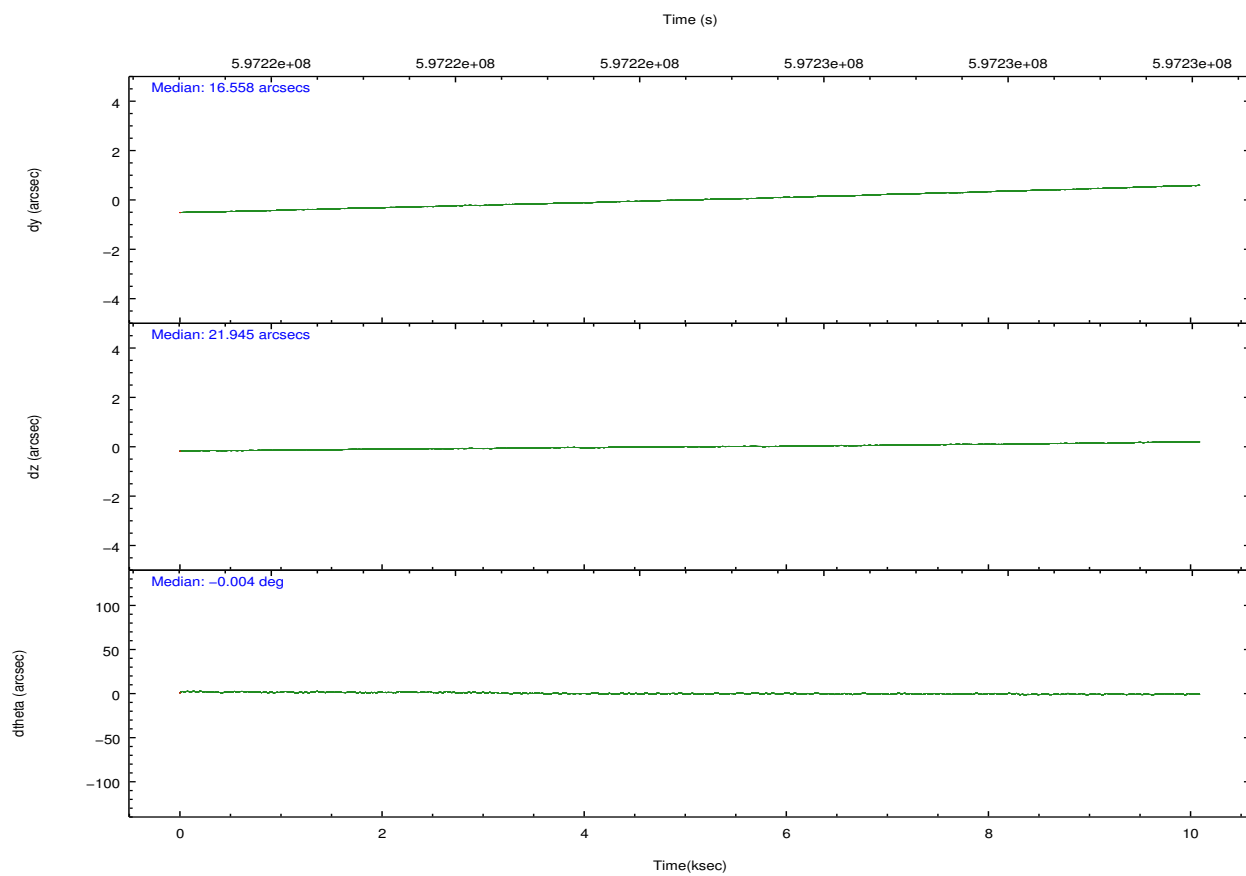
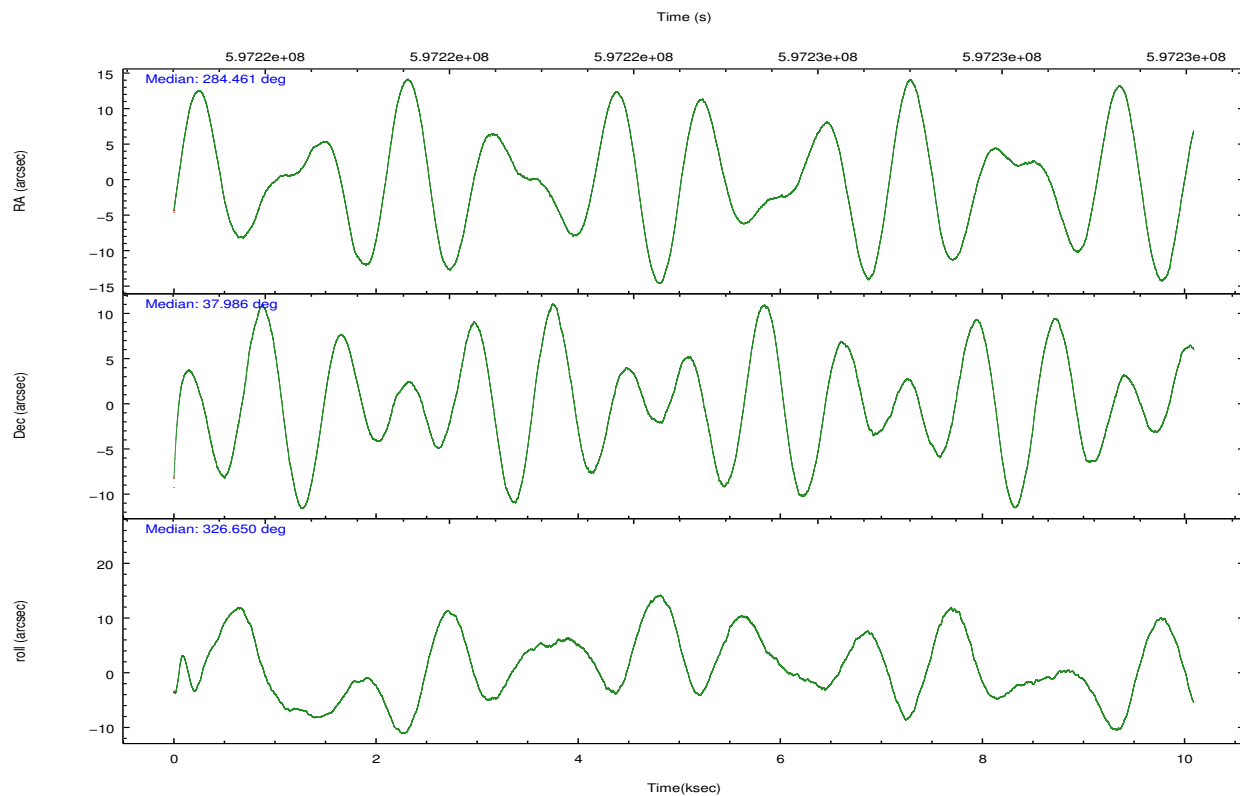
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	284.426153	284.4611430108152
[deg] Pointing Dec	37.987882	37.98637930836355
[deg] Pointing Roll	326.469224	326.6563526040646
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-225.840463	-225.8458576473255
[mm] SIM translation stage offset	-7.752	-7.746595355604228
[s] Observation start time (MET)	597219671.184000	597218614.34978
Observation start date	2016-12-04T06:20:03	2016-12-04T06:03:34
[s] Observation end time (MET)	597229602.184000	597229825.8004301
Observation end date	2016-12-04T09:05:34	2016-12-04T09:10:25
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	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
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



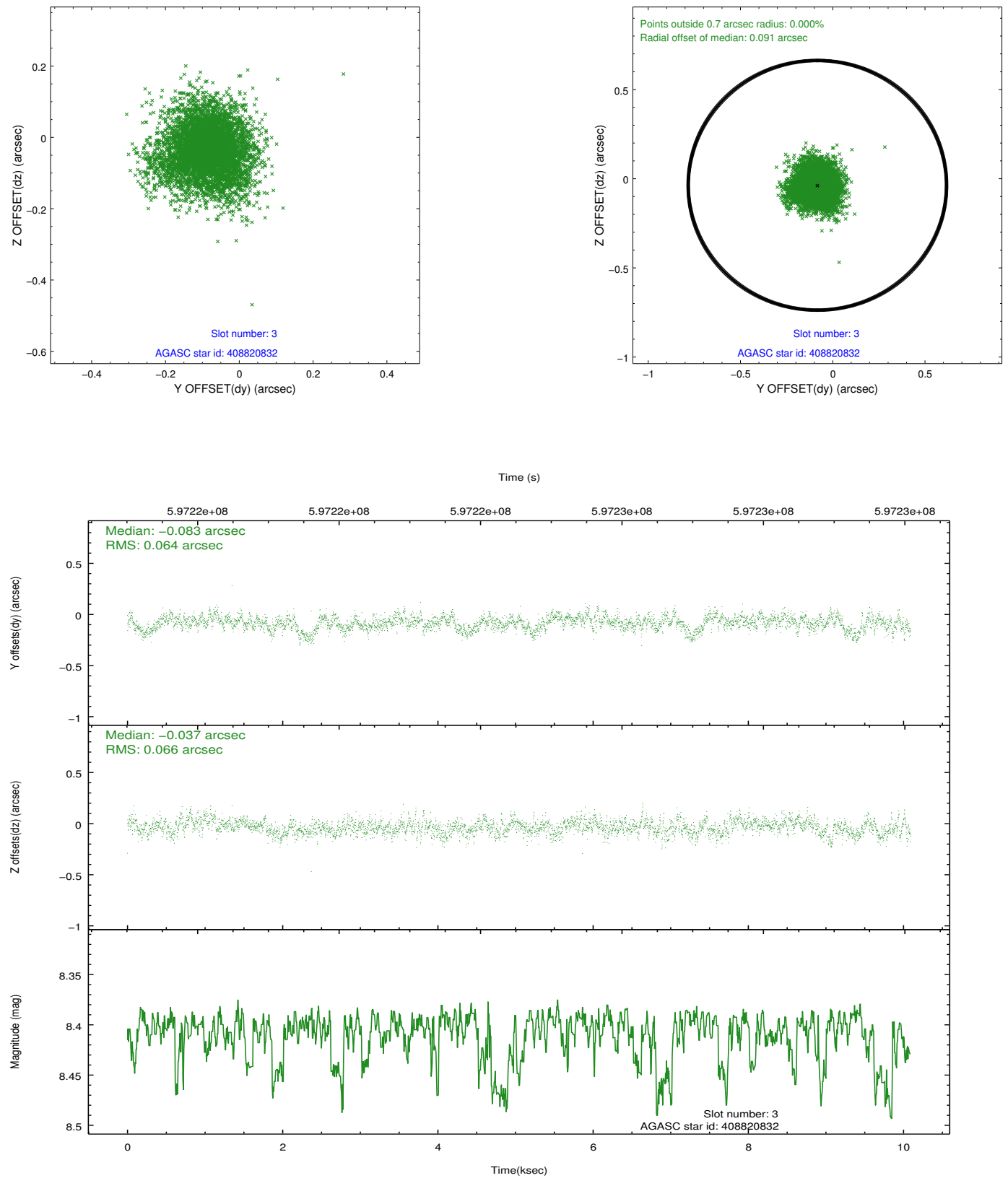


### Slot Statistics

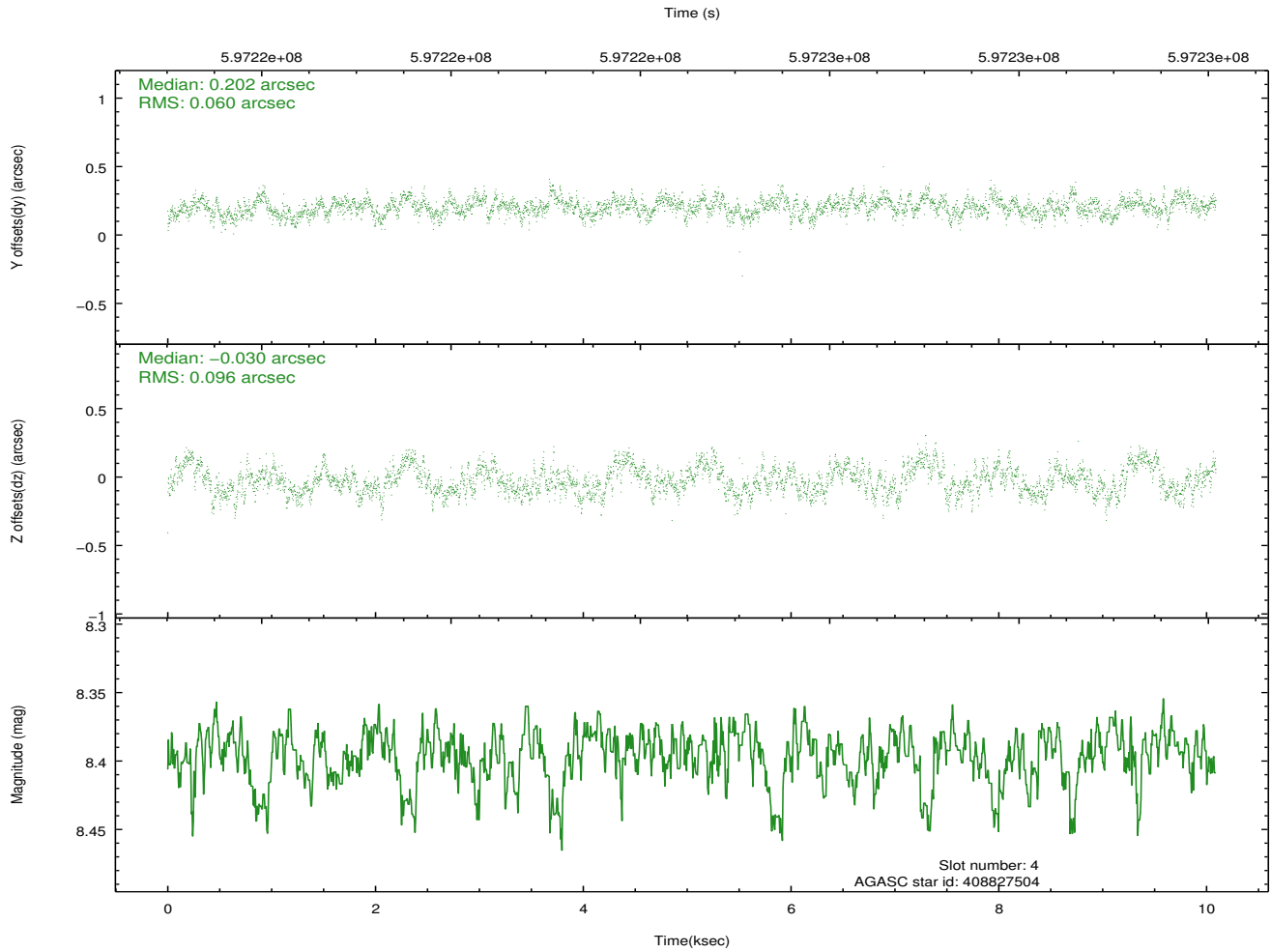
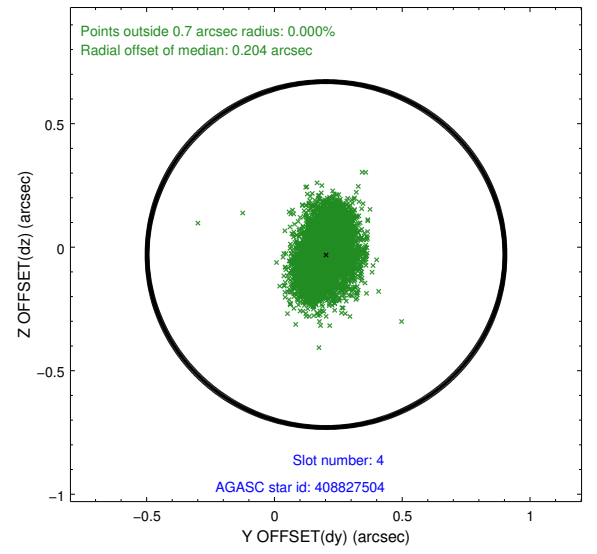
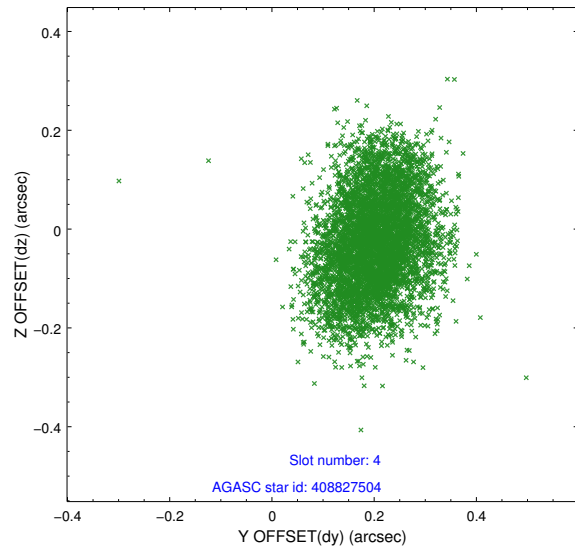
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	2462	0.153	-0.114	0.011	0.021	0.000000	0.000000	922.89	-1004.84
1	FID		ACIS-I-5	7.09	2462	-0.379	0.101	0.007	0.012	0.000000	0.000000	-1825.54	892.42
2	FID		ACIS-I-6	7.10	2462	0.134	0.085	0.011	0.019	0.000000	0.000000	387.74	1537.60
3	GUIDE	used	408820832	8.41	4922	-0.083	-0.037	0.097	0.160	283.916292	38.515147	-2247.66	792.16
4	GUIDE	used	408827504	8.40	4922	0.202	-0.030	0.122	0.195	283.811943	38.045720	-1569.49	-783.40
5	GUIDE	used	408829224	9.23	4917	0.158	0.185	0.166	0.273	283.938153	37.923057	-1027.76	-956.37
6	GUIDE	used	408829664	8.37	4920	-0.229	0.121	0.113	0.179	284.523665	37.894679	416.18	-126.40
7	GUIDE	used	408945824	8.09	4920	-0.050	-0.246	0.096	0.153	285.092283	37.995775	1556.22	1073.33

## 2.4 Star Slots

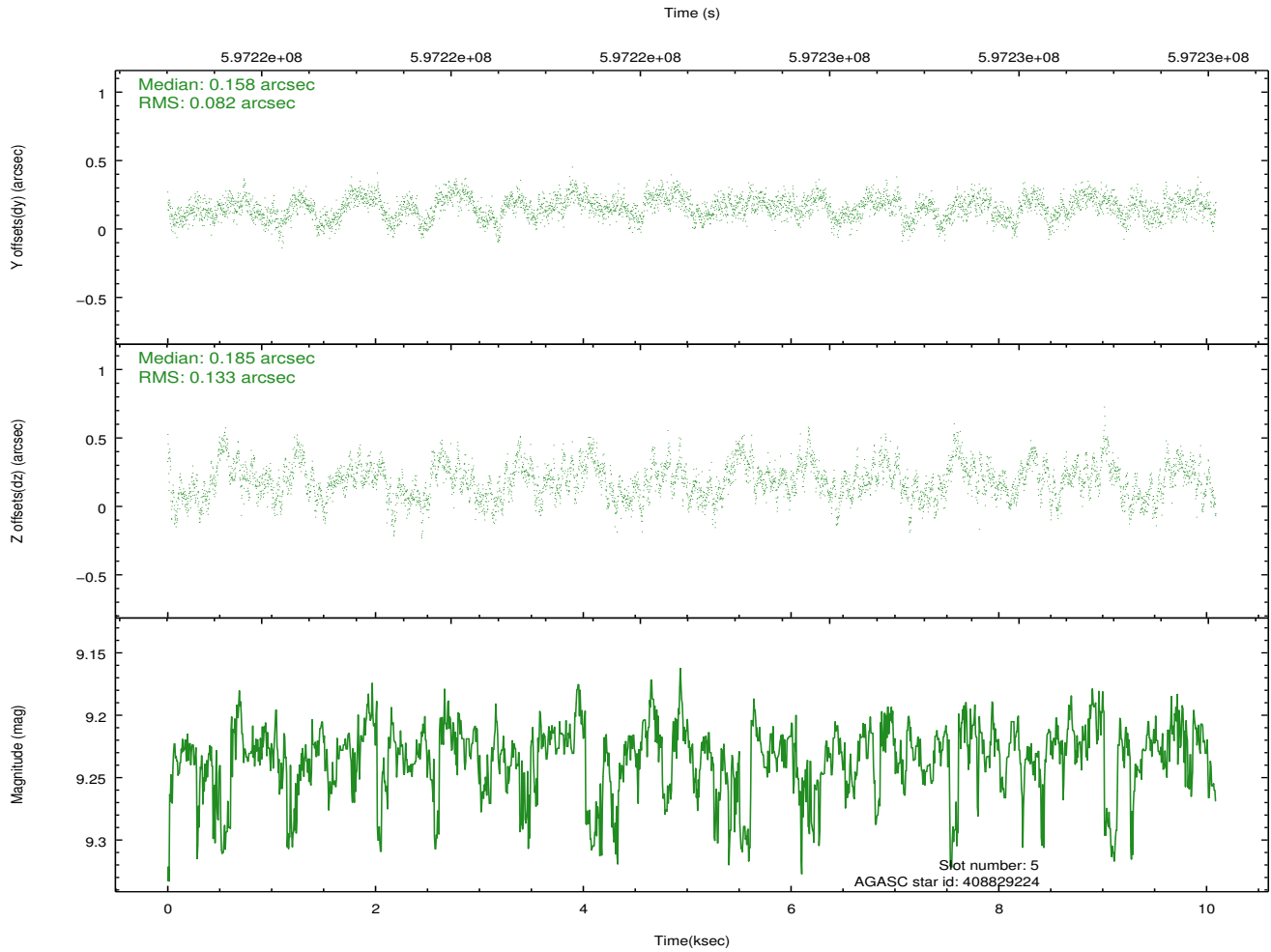
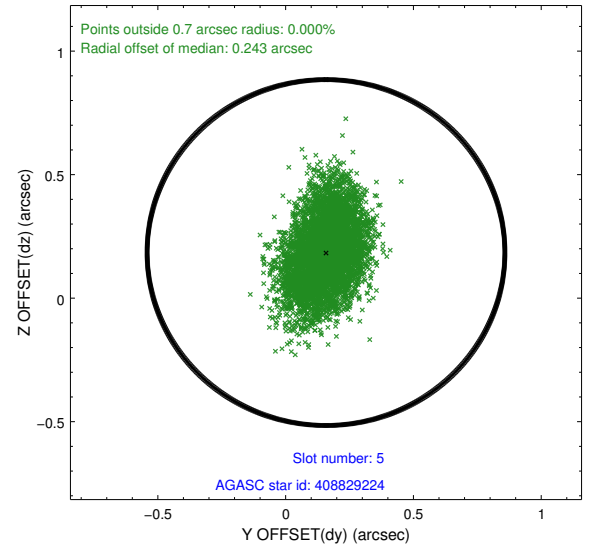
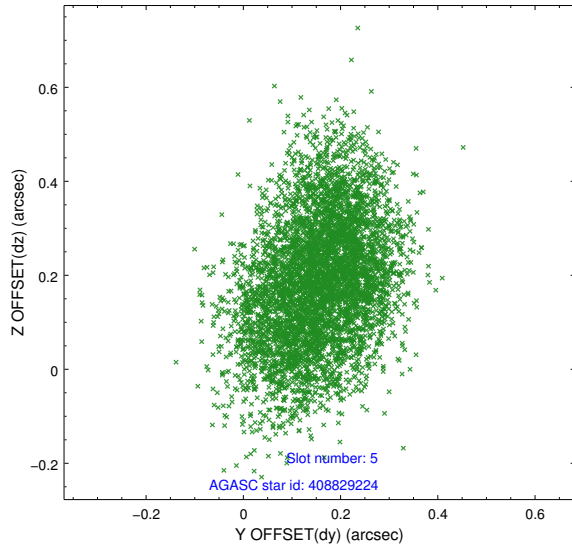
### 2.4.1 Slot 3



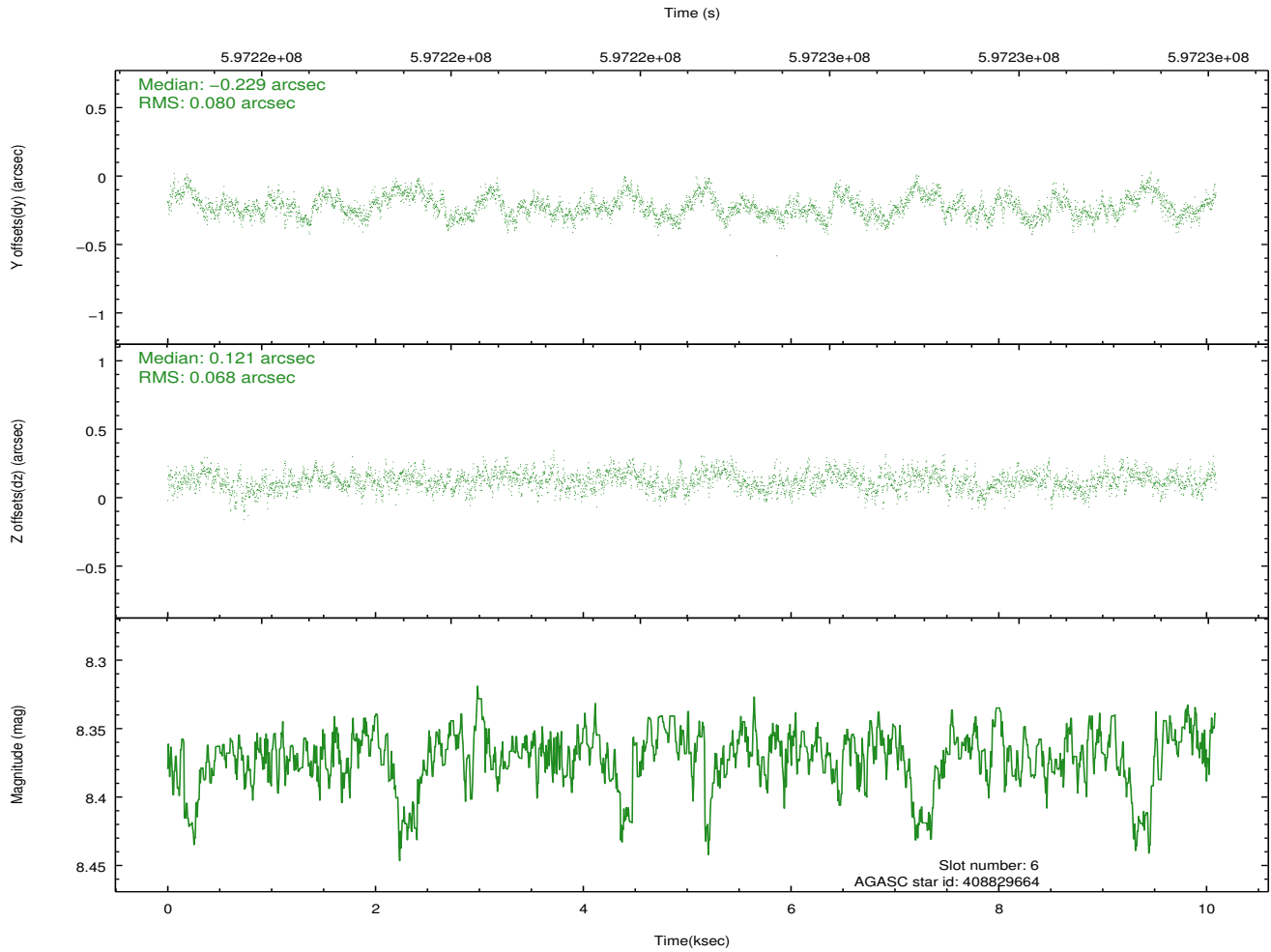
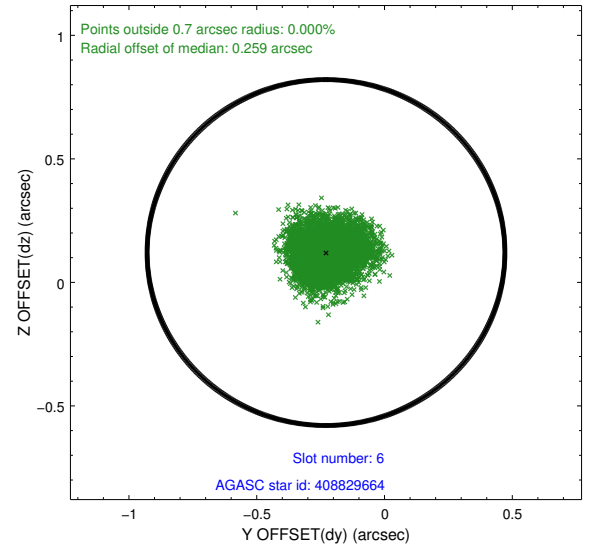
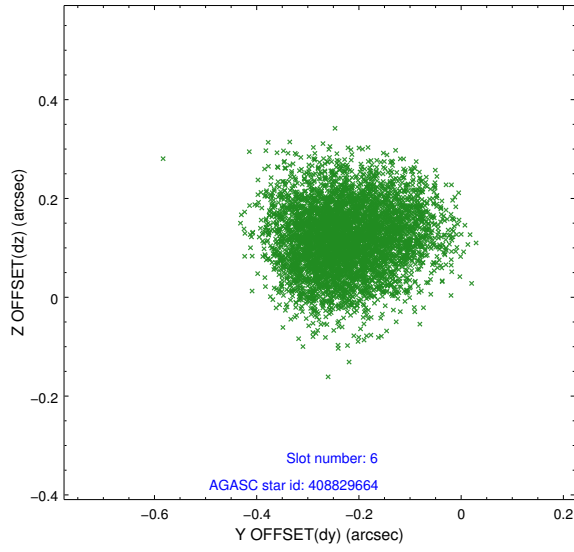
## 2.4.2 Slot 4



### 2.4.3 Slot 5

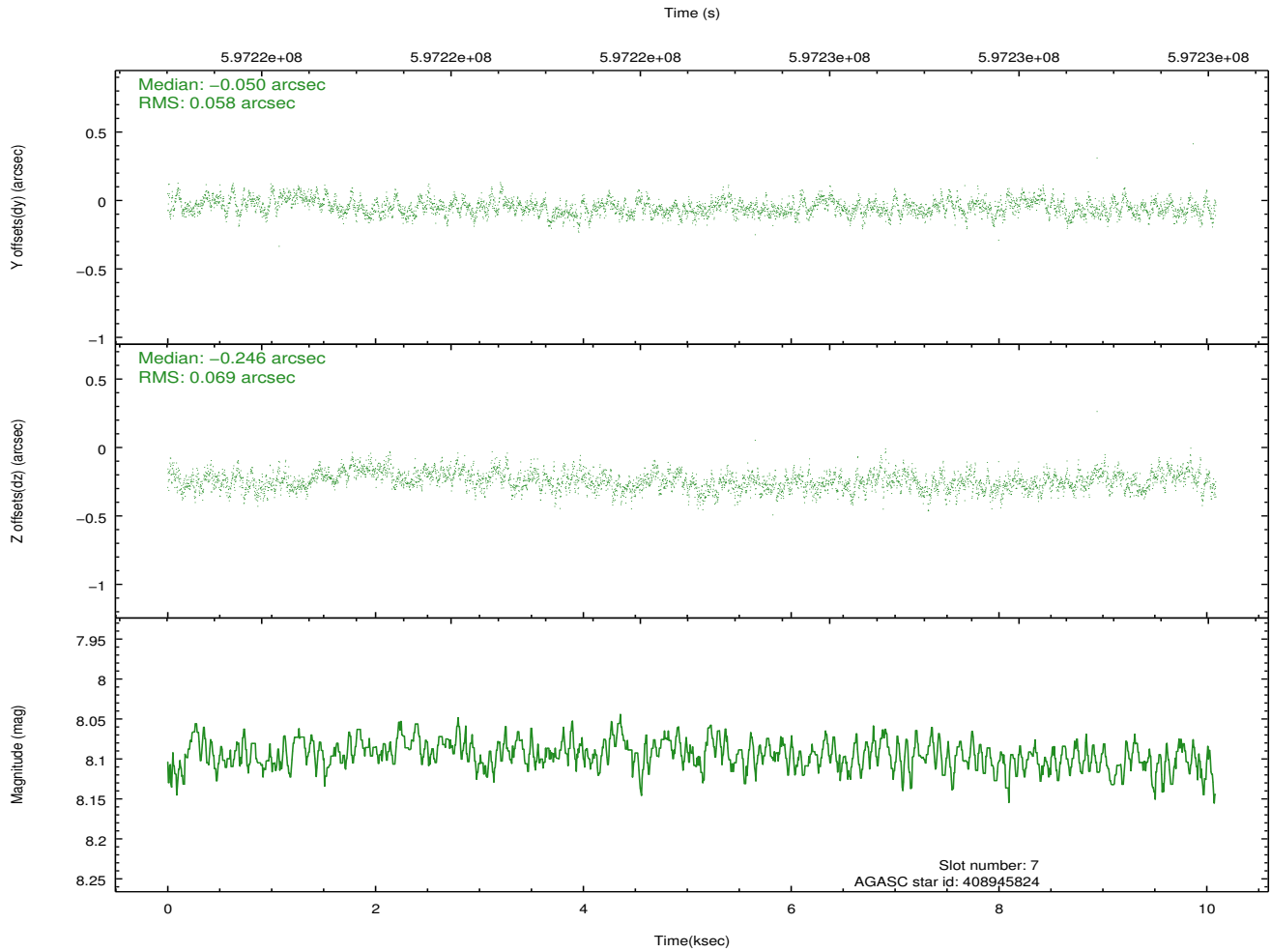
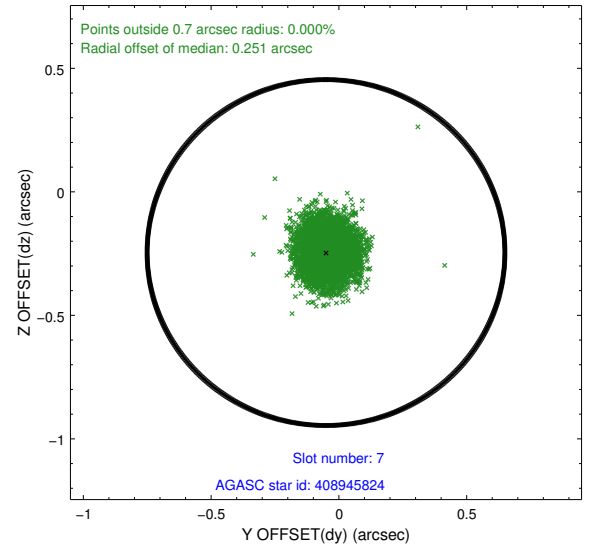
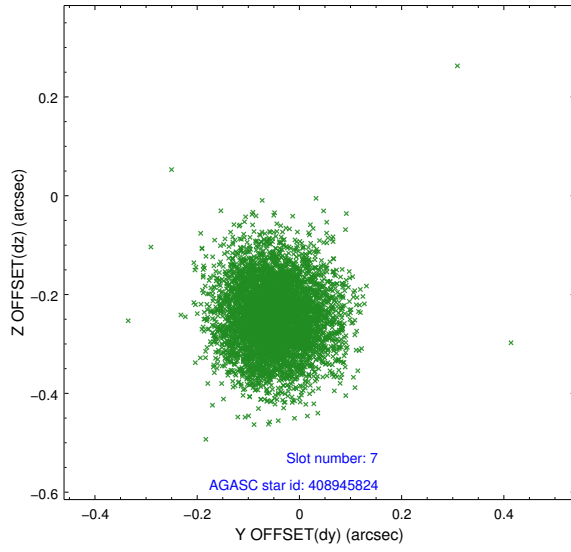


## 2.4.4 Slot 6



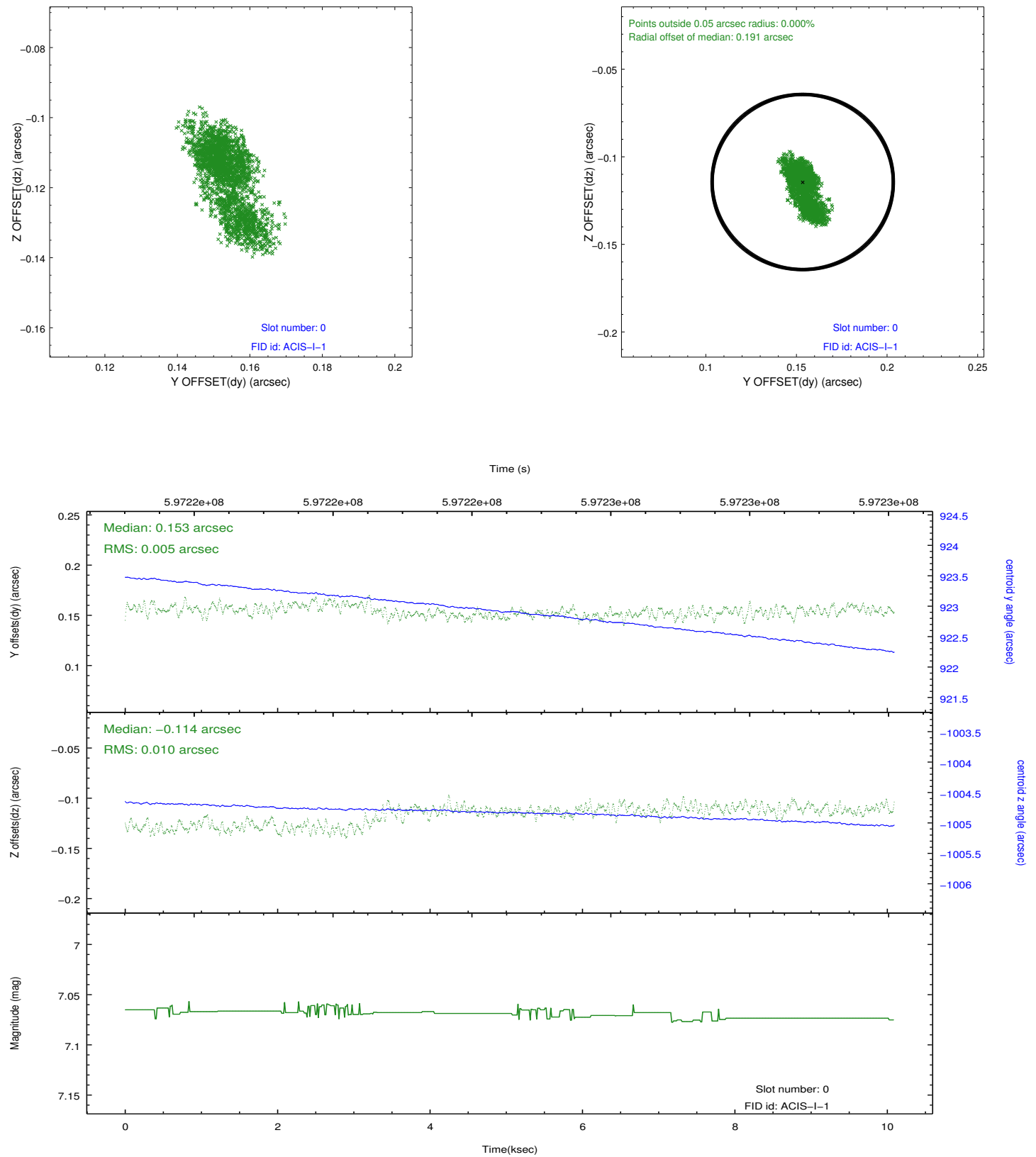


## 2.4.5 Slot 7

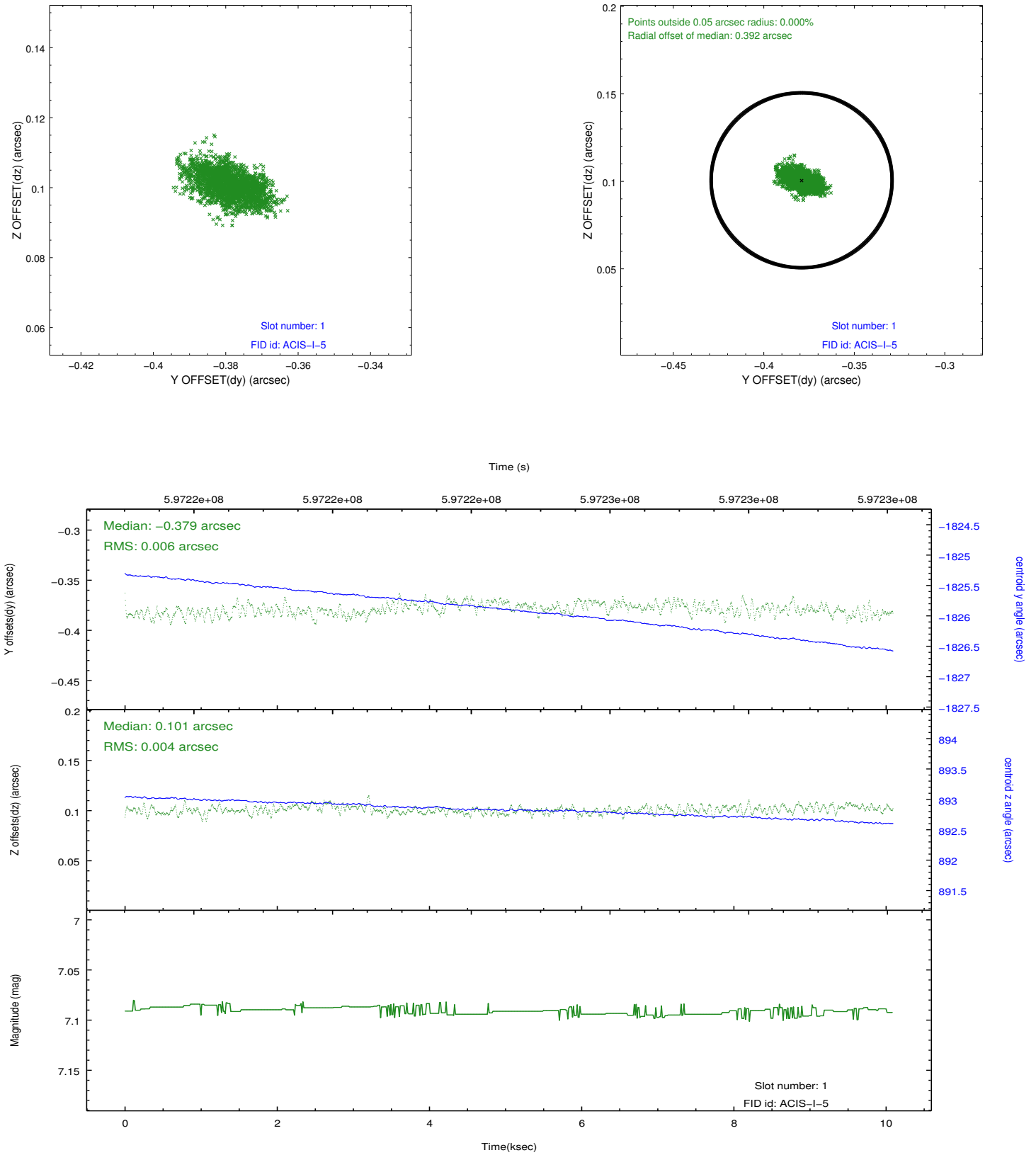


## 2.5 FID Slots

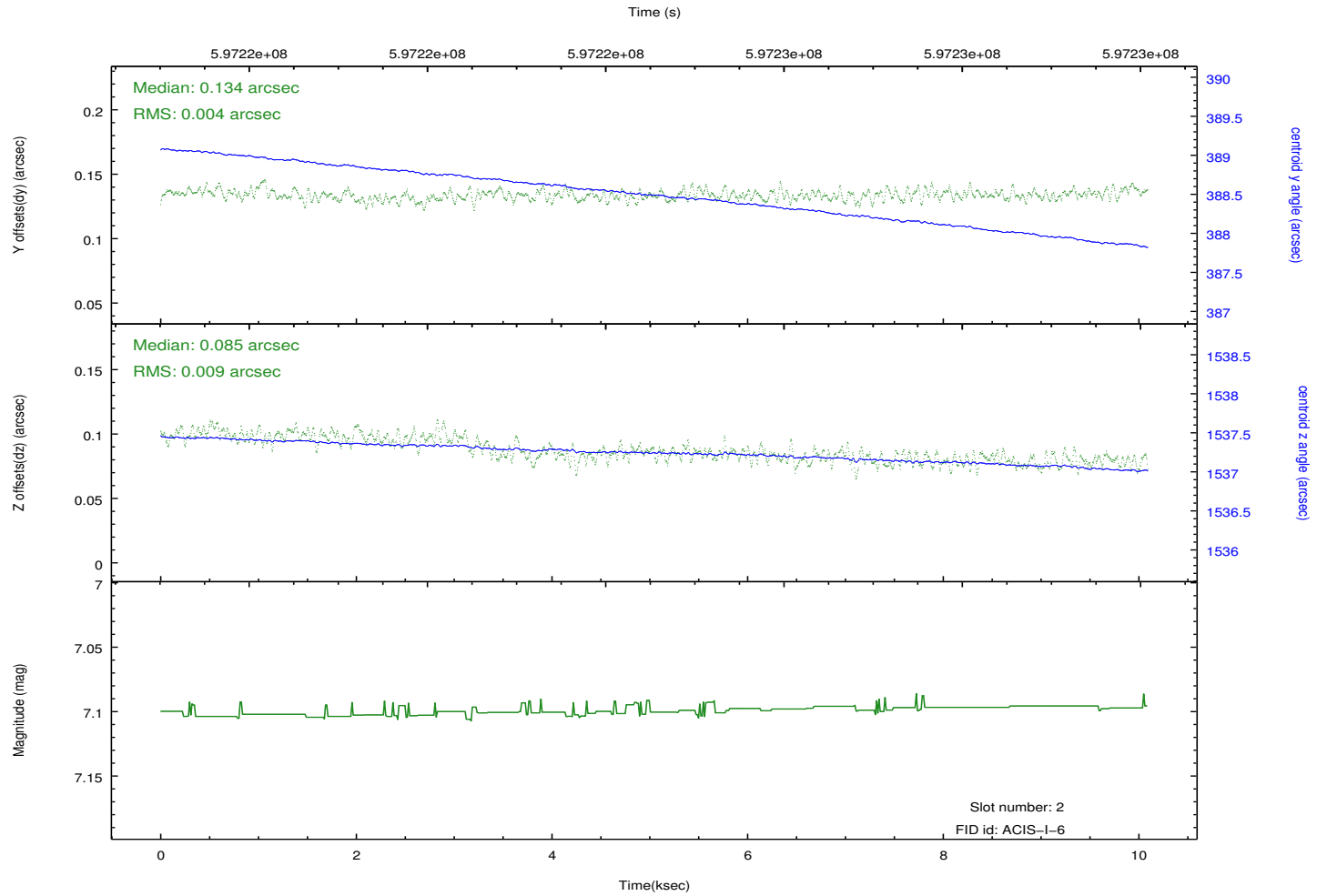
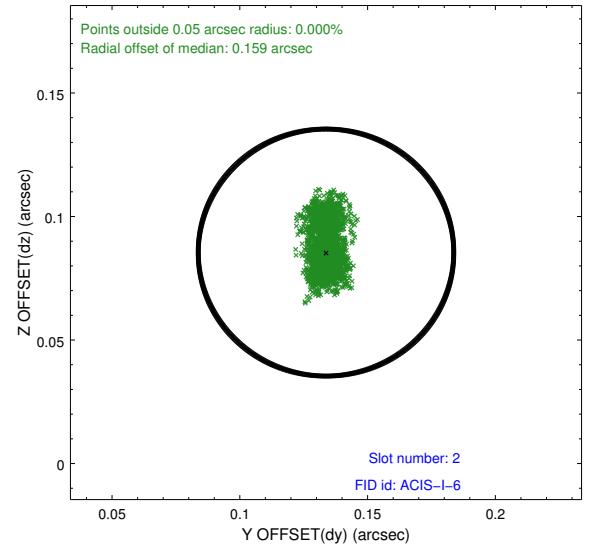
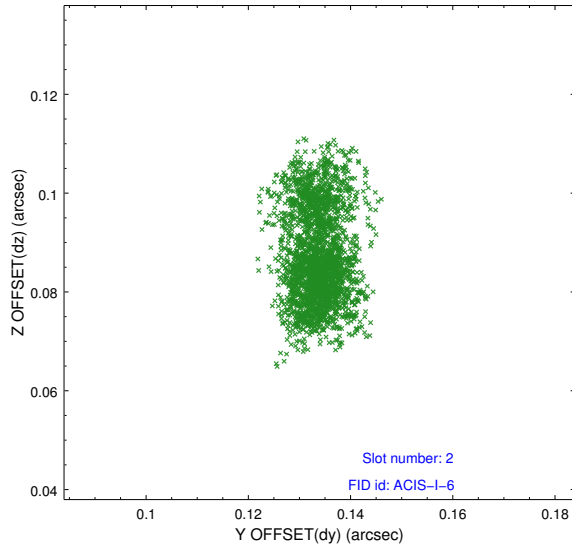
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.12.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.7028151189089

### A.2 Comments