

# V&V Reference Report

## L2 ASCDS Version : 10.5

Observation 18652 - L2 Version 1  
Chandra X-Ray Center

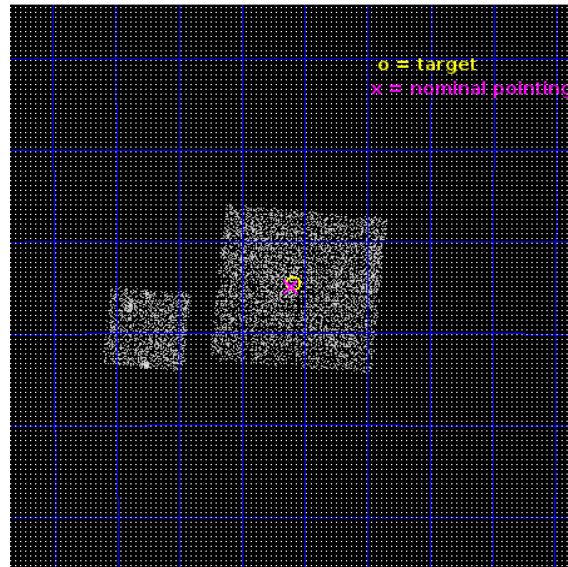
L2 Processing Date : Jul 25 2016

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# 1 Front

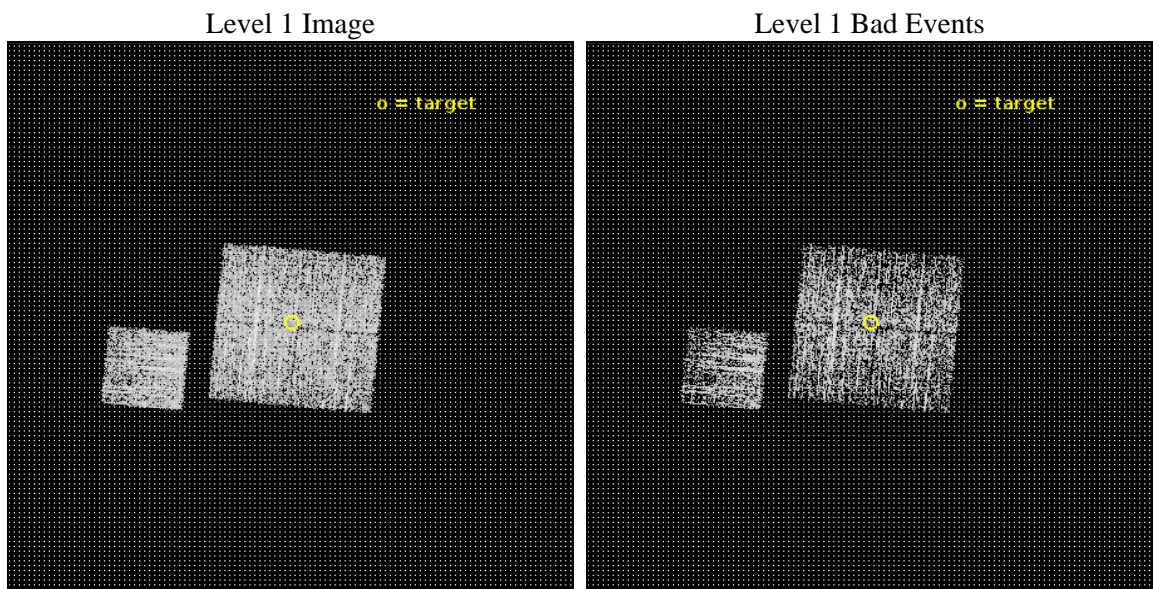
seq_num	300376	Sequence number
obs_id	18652	Observation id
title	X-raying the Galactic center/bulge interface	Proposal title
observer	Q. Daniel Wang	Principal investigator
object	GC-GB interface	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	264.77276	Observer's specified target RA [deg]
dec_targ	-28.90952	Observer's specified target Dec [deg]
ra_nom	264.77639506597	Nominal RA [deg]
dec_nom	-28.915464596944	Nominal Dec [deg]
roll_nom	275.2979381768	Nominal Roll [deg]
revision	1	Processing version of data
ontime	2070.8000160456	Sum of GTIs [s]
livetime	2043.7434893351	Livetime [s]
ontime0	2070.8000160456	Sum of GTIs [s]
ontime1	2070.8000160456	Sum of GTIs [s]
ontime2	2070.8000160456	Sum of GTIs [s]
ontime3	2070.8000160456	Sum of GTIs [s]
ontime6	2070.8000160456	Sum of GTIs [s]
l2events	7322	Number of level 2 events



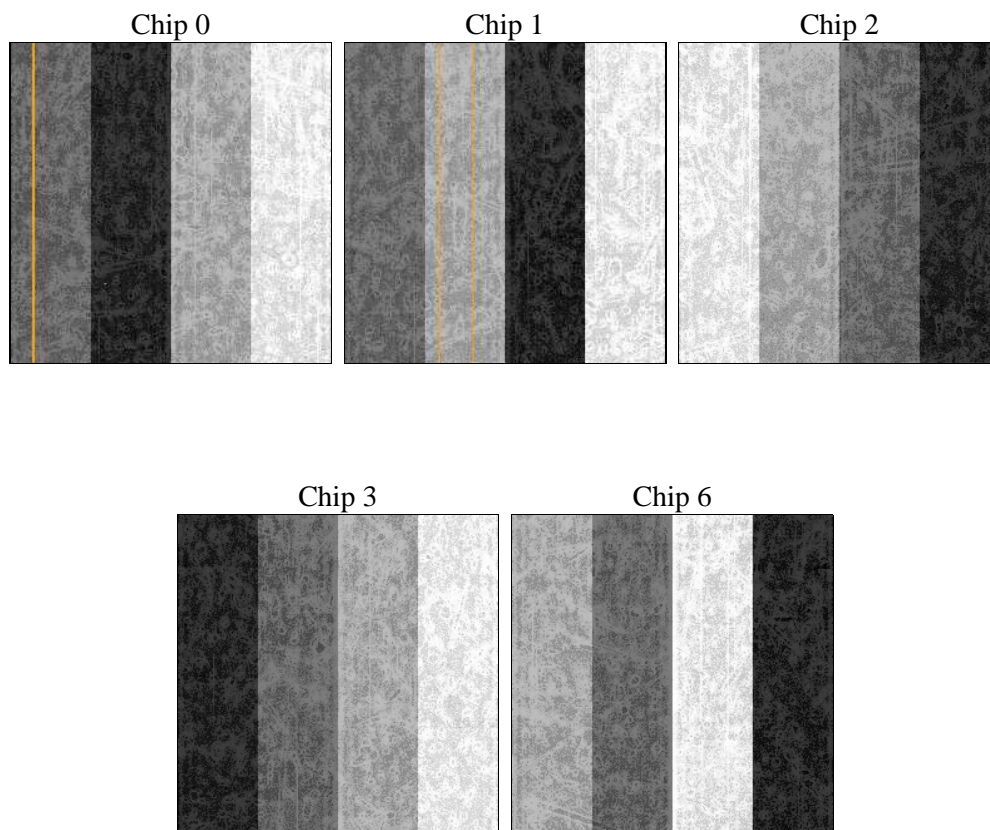
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	2070.8000160456	Sum of GTIs [s]
caldsver	4.7.2	&#160	ontime0	2070.8000160456	Sum of GTIs [s]
date	2016-07-26T03:13:19	Date and time of file creation	ontime1	2070.8000160456	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	2070.8000160456	Sum of GTIs [s]
			ontime3	2070.8000160456	Sum of GTIs [s]
			ontime6	2070.8000160456	Sum of GTIs [s]
			l1events	63190	Number of level 1 events

### 2.1.4 Events

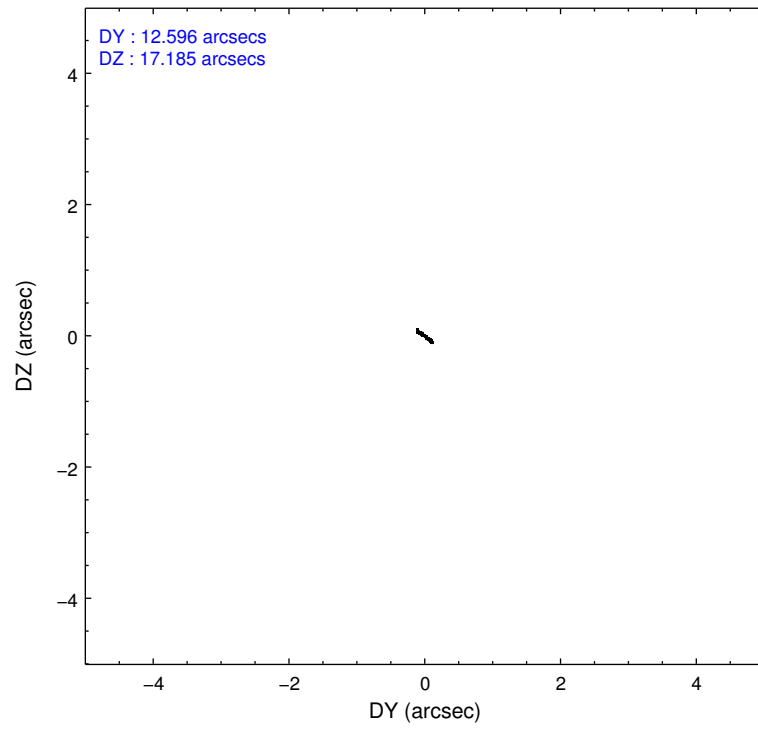
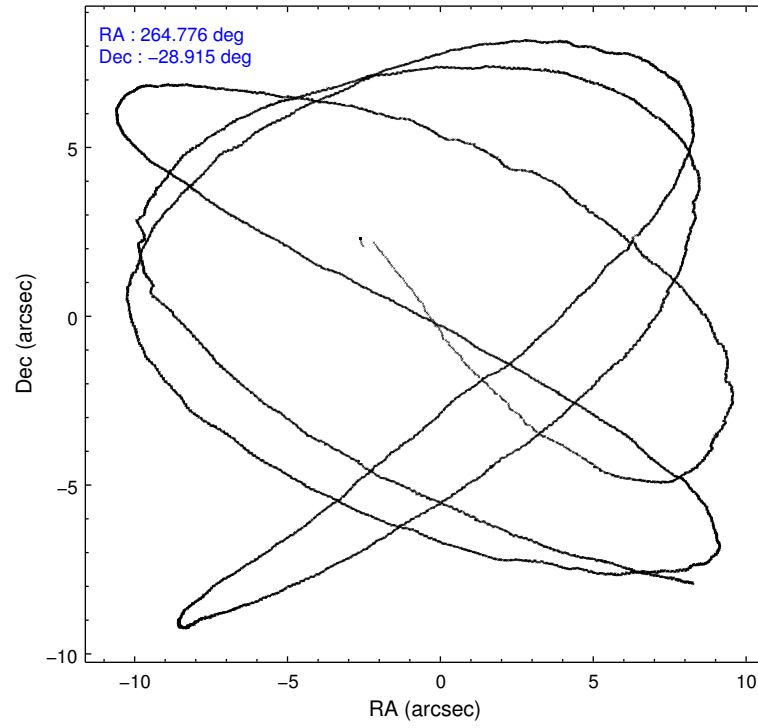
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	11681	11945	13429	13186	12949
rejected events	10028	10057	11785	11523	11184
rejected %	85%	84%	87%	87%	86%

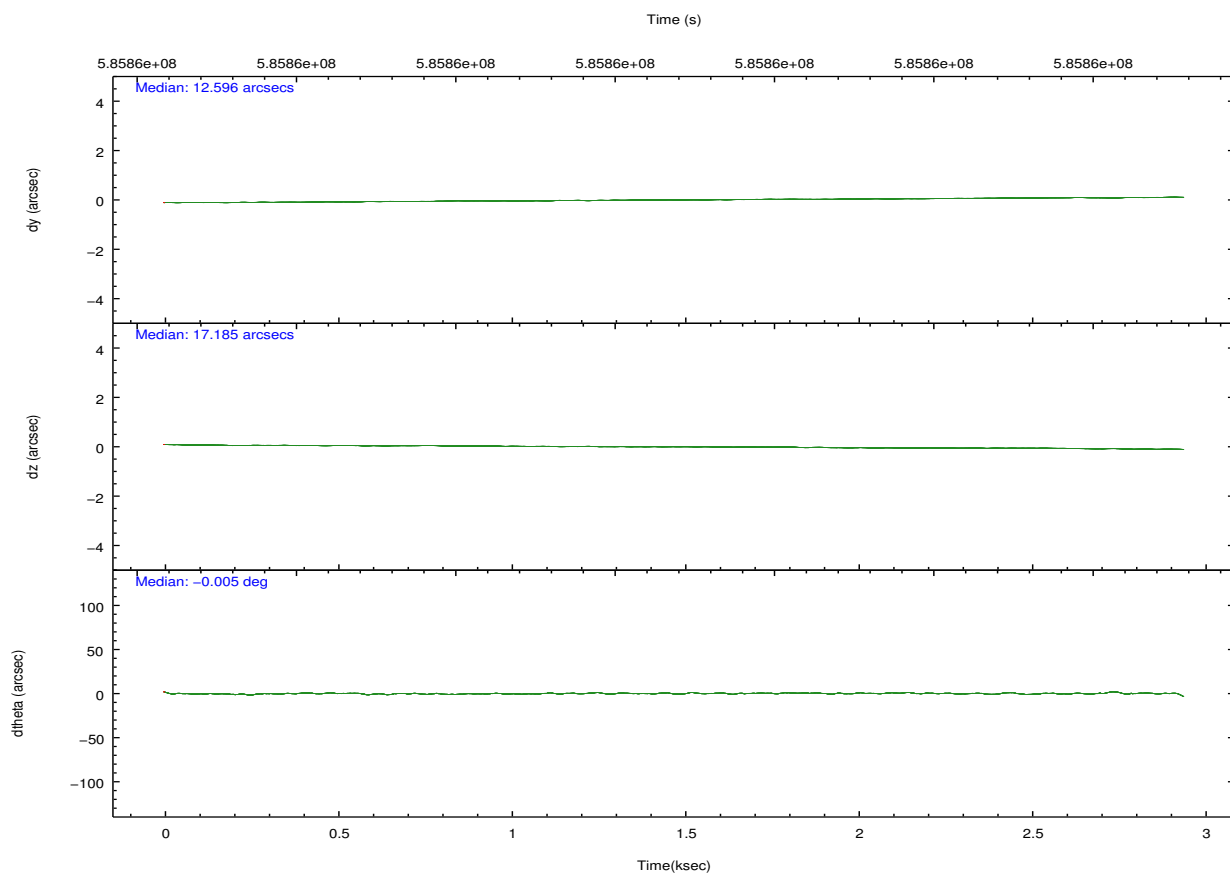
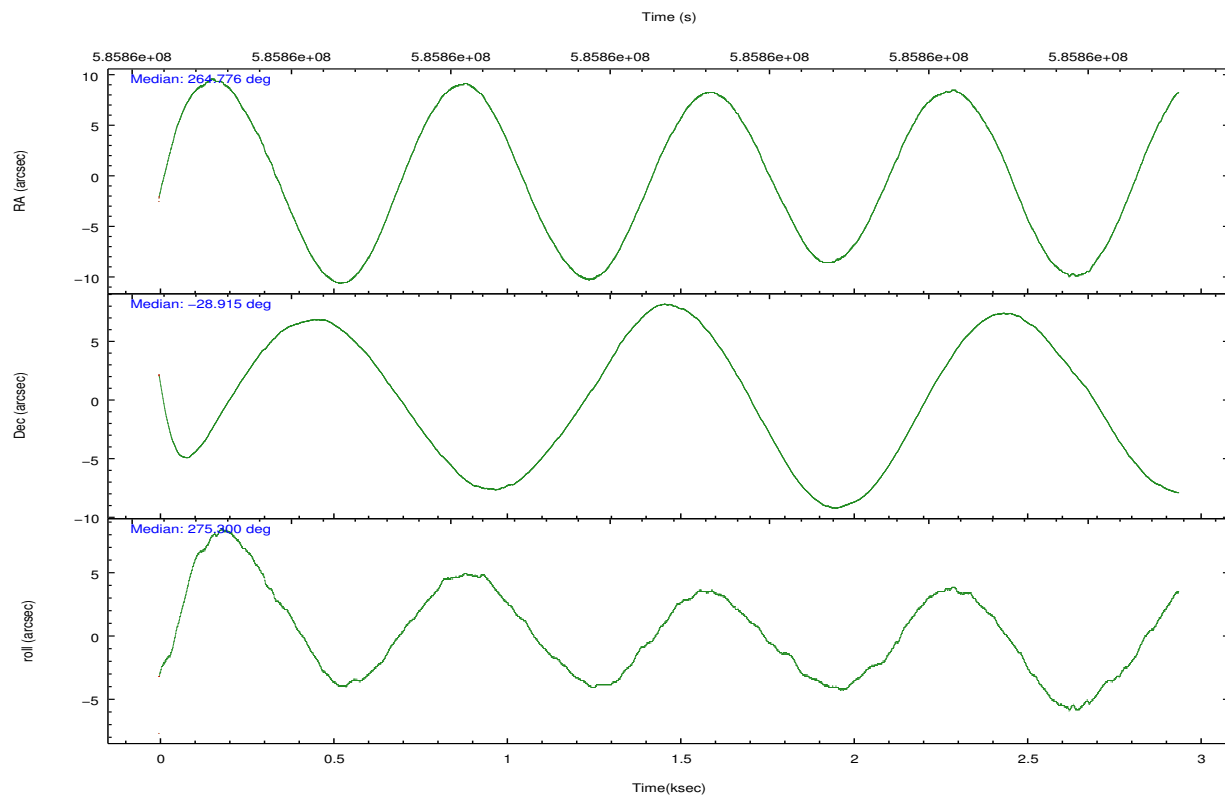
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	650	831	622	667	700
	5%	6%	4%	5%	5%
grade 1 events	9	7	9	10	8
	0%	0%	0%	0%	0%
grade 2 events	424	423	401	374	399
	3%	3%	2%	2%	3%
grade 3 events	141	164	160	161	155
	1%	1%	1%	1%	1%
grade 4 events	157	146	160	144	163
	1%	1%	1%	1%	1%
grade 5 events	551	618	592	675	590
	4%	5%	4%	5%	4%
grade 6 events	288	331	308	320	352
	2%	2%	2%	2%	2%
grade 7 events	9461	9425	11177	10835	10582
	80%	78%	83%	82%	81%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	264.758001	264.7763950659663	CCD I2 on	Y	Y
[deg] Pointing Dec	-28.893092	-28.91546459694448	CCD I3 on	Y	Y
[deg] Pointing Roll	275.080370	275.2979381767978	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	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	585860647.184000	585858489.49547	CCD S5 on	N	N
Observation start date	2016-07-25T19:02:59	2016-07-25T18:28:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	585862647.184000	585862781.17072	On-chip summing requested	N	N
Observation end date	2016-07-25T19:36:19	2016-07-25T19:39:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





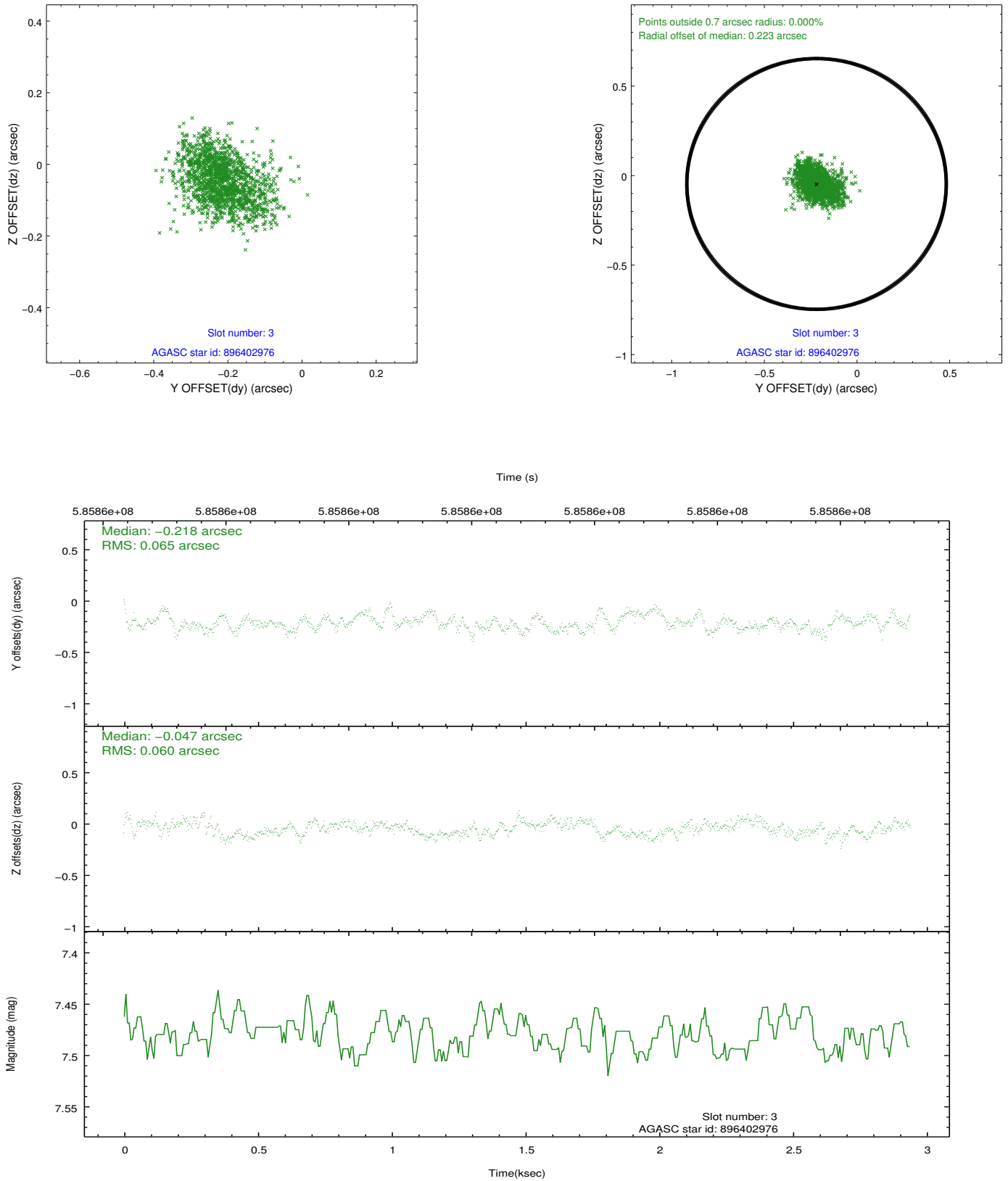
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.04	718	-0.049	-0.089	0.009	0.014	0.000000	0.000000	926.92	-840.88
1	FID		ACIS-I-4	6.97	718	0.303	0.109	0.007	0.013	0.000000	0.000000	2148.44	1058.08
2	FID		ACIS-I-5	7.04	718	-0.352	0.051	0.007	0.012	0.000000	0.000000	-1818.67	1058.16
3	GUIDE	used	896402976	7.48	1435	-0.218	-0.047	0.093	0.152	265.099474	-28.923203	205.32	1061.76
4	GUIDE	used	896404376	6.69	1435	0.102	-0.105	0.085	0.134	264.835179	-29.530972	2309.78	37.81
5	GUIDE	used	896405616	7.83	1435	-0.147	-0.195	0.095	0.149	264.752771	-28.412560	-1721.27	135.10
6	GUIDE	used	896405976	9.10	1434	0.092	0.175	0.103	0.162	264.638127	-28.604395	-1069.01	-285.26
7	GUIDE	used	896406568	8.23	1430	0.165	0.185	0.110	0.180	264.435951	-28.437282	-1723.28	-870.50

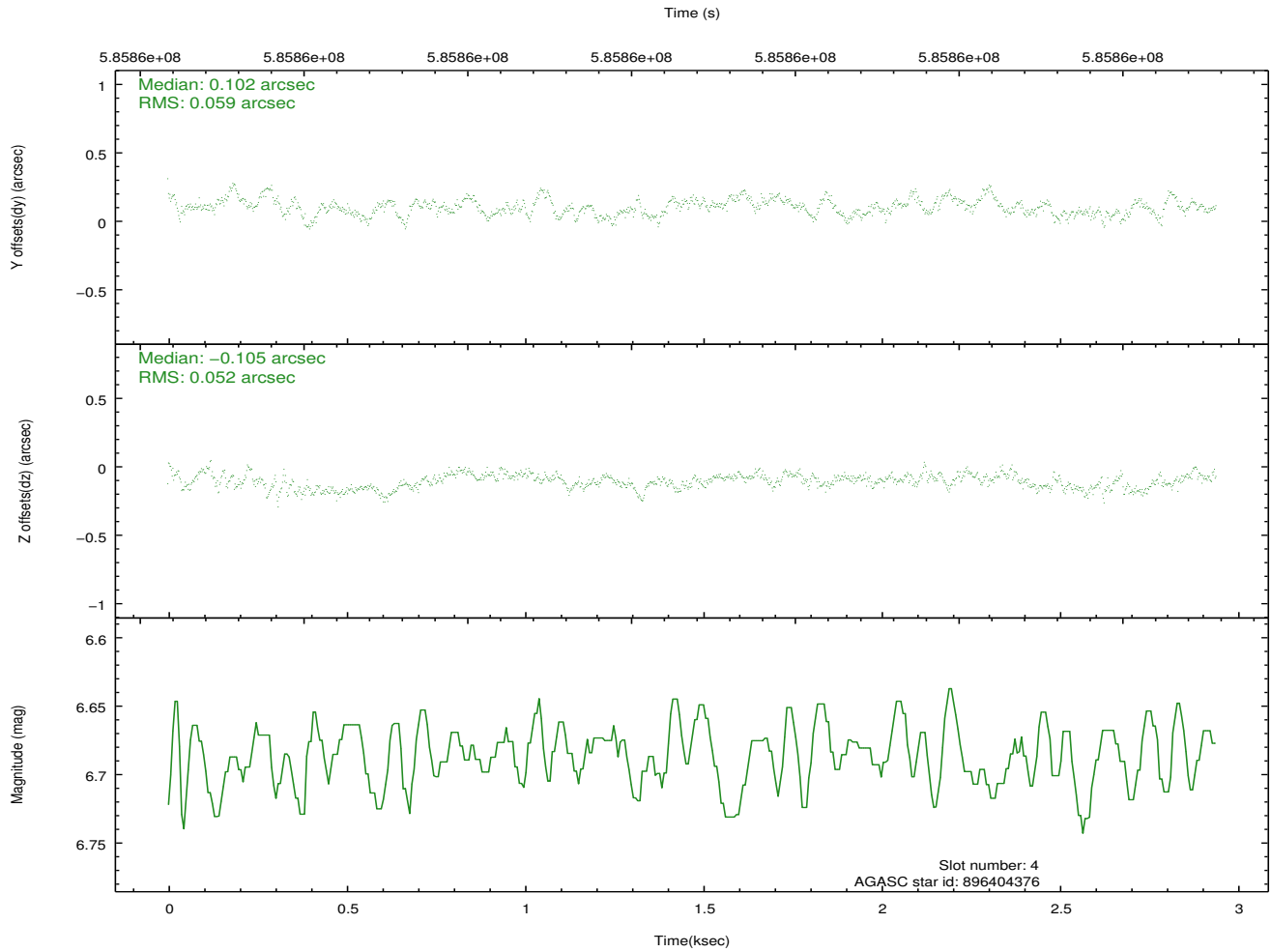
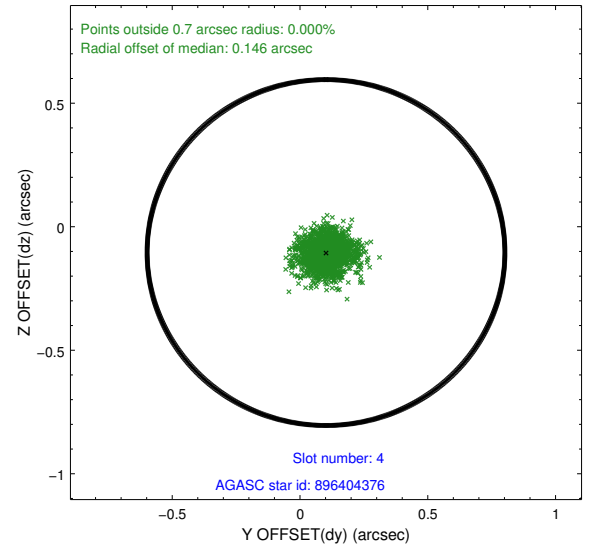
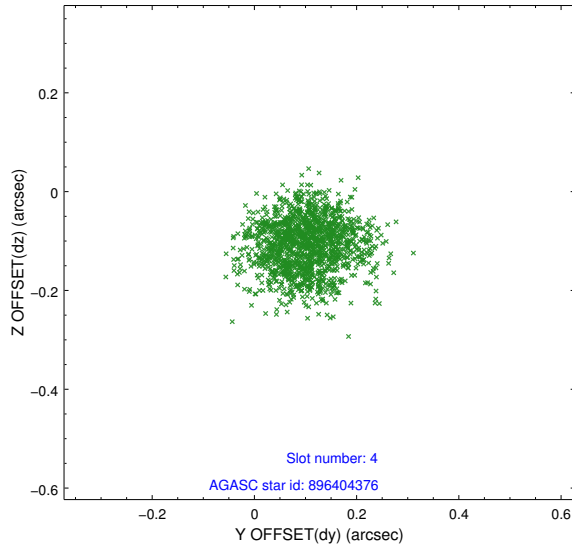


## 2.4 Star Slots

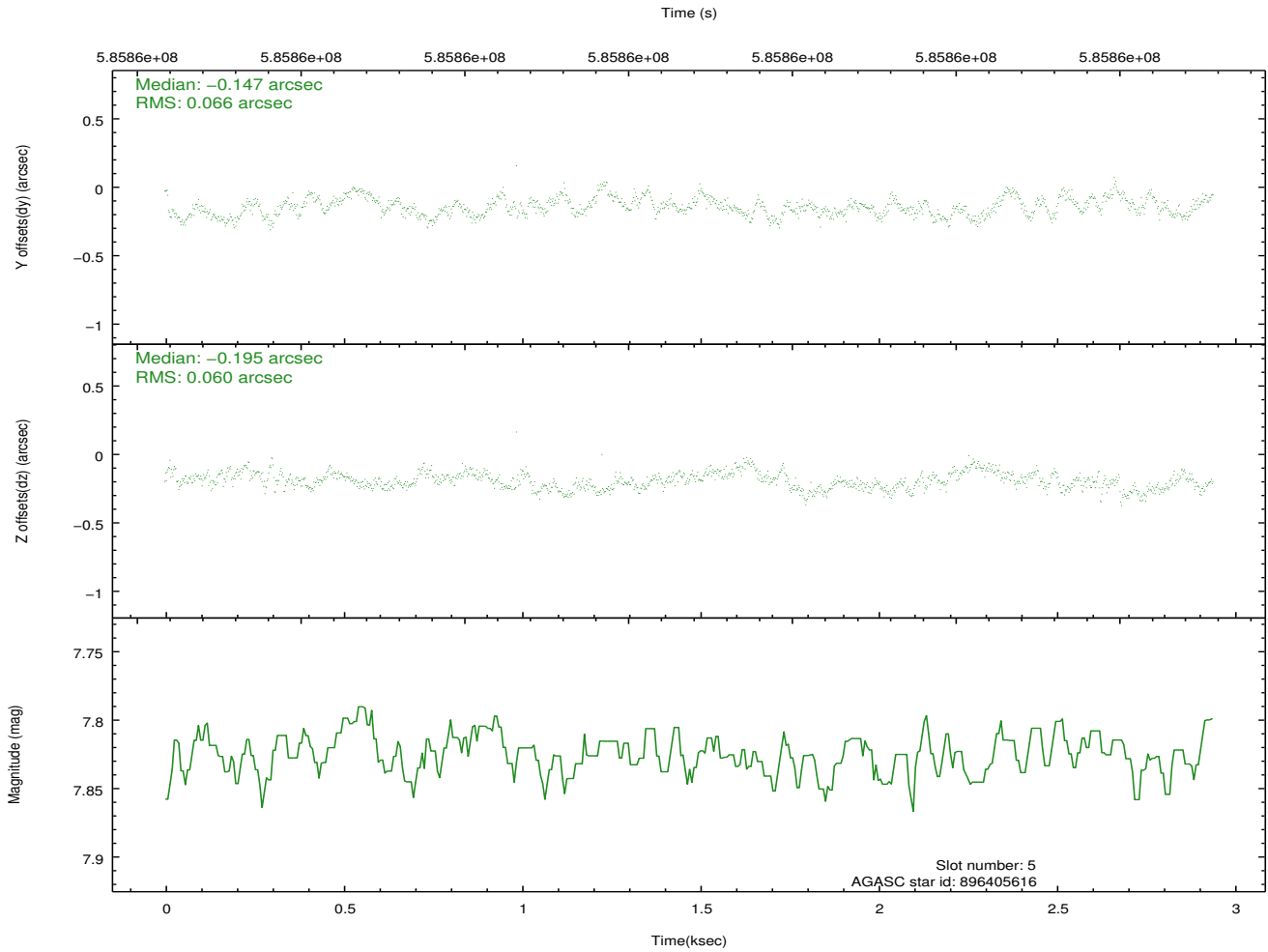
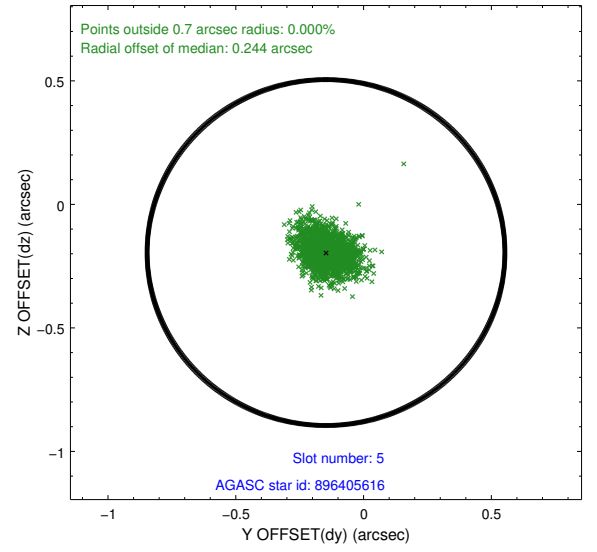
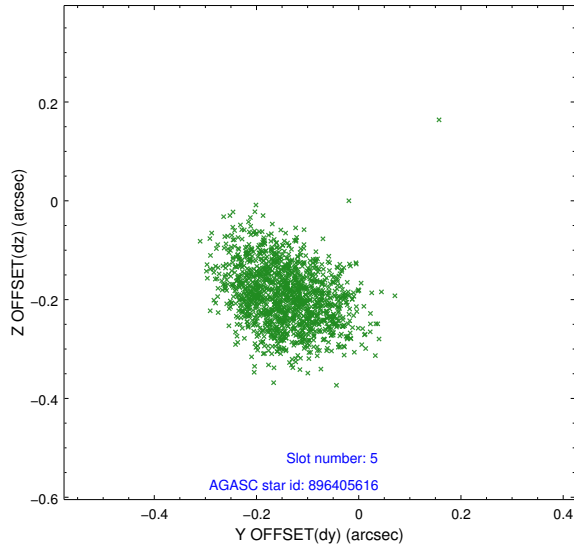
### 2.4.1 Slot 3



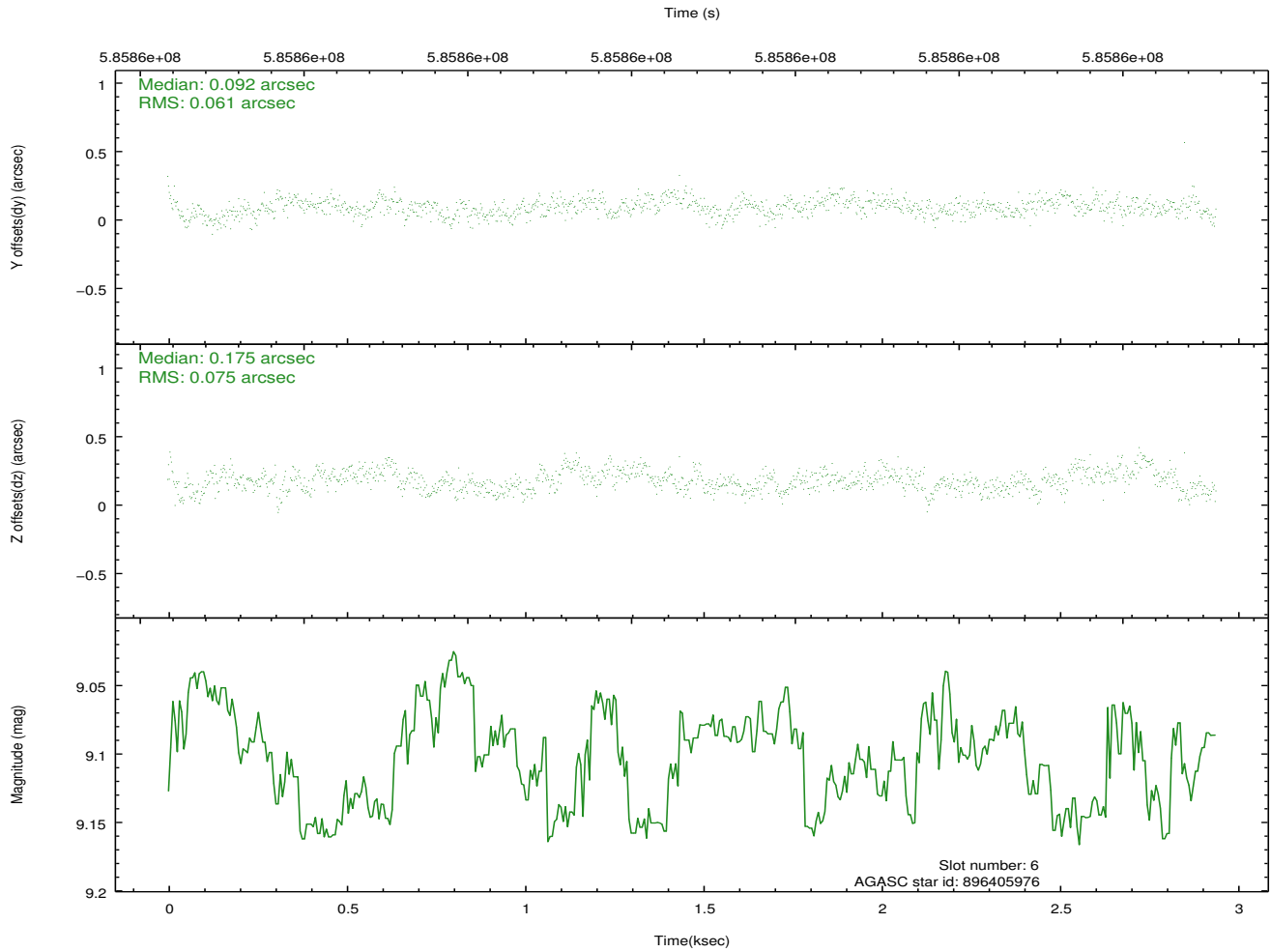
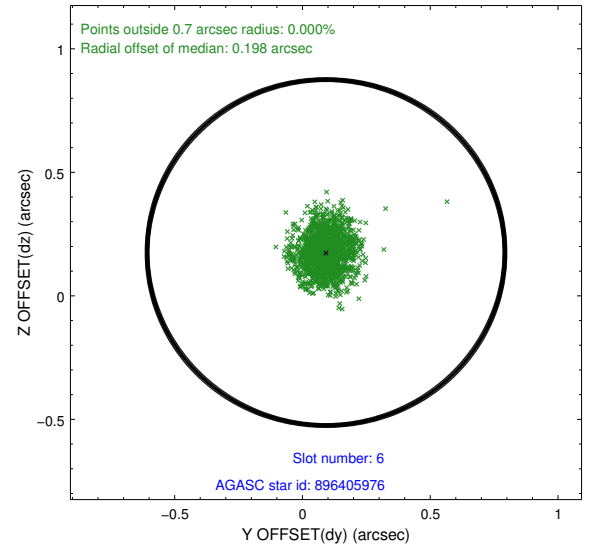
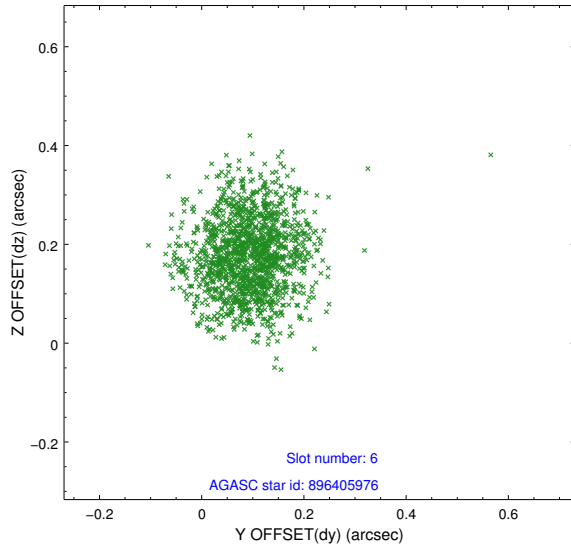
## 2.4.2 Slot 4



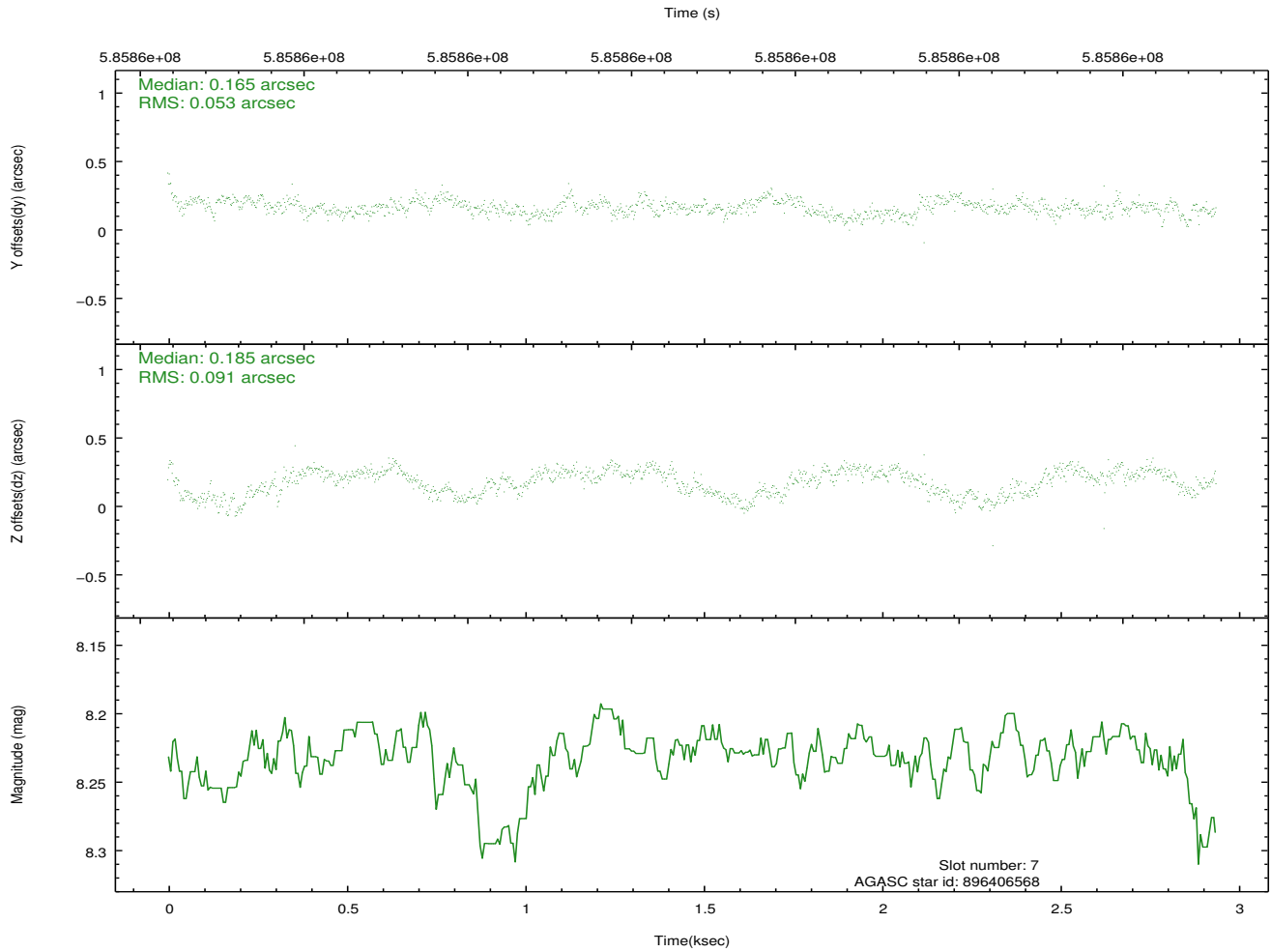
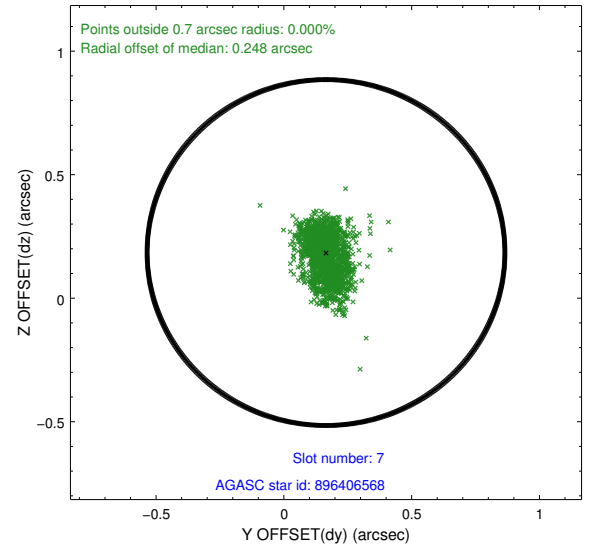
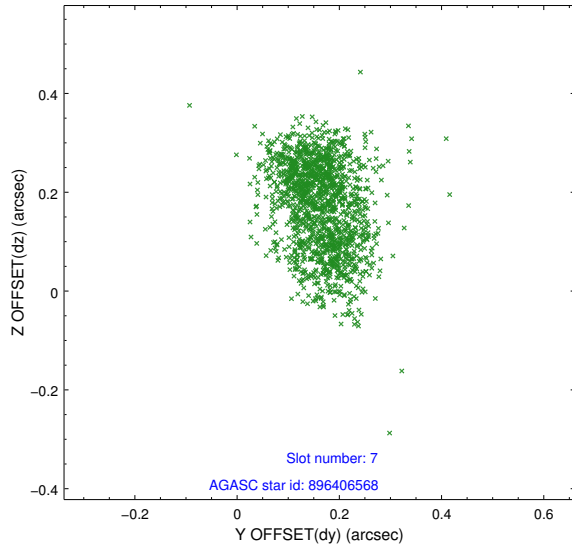
### 2.4.3 Slot 5



## 2.4.4 Slot 6

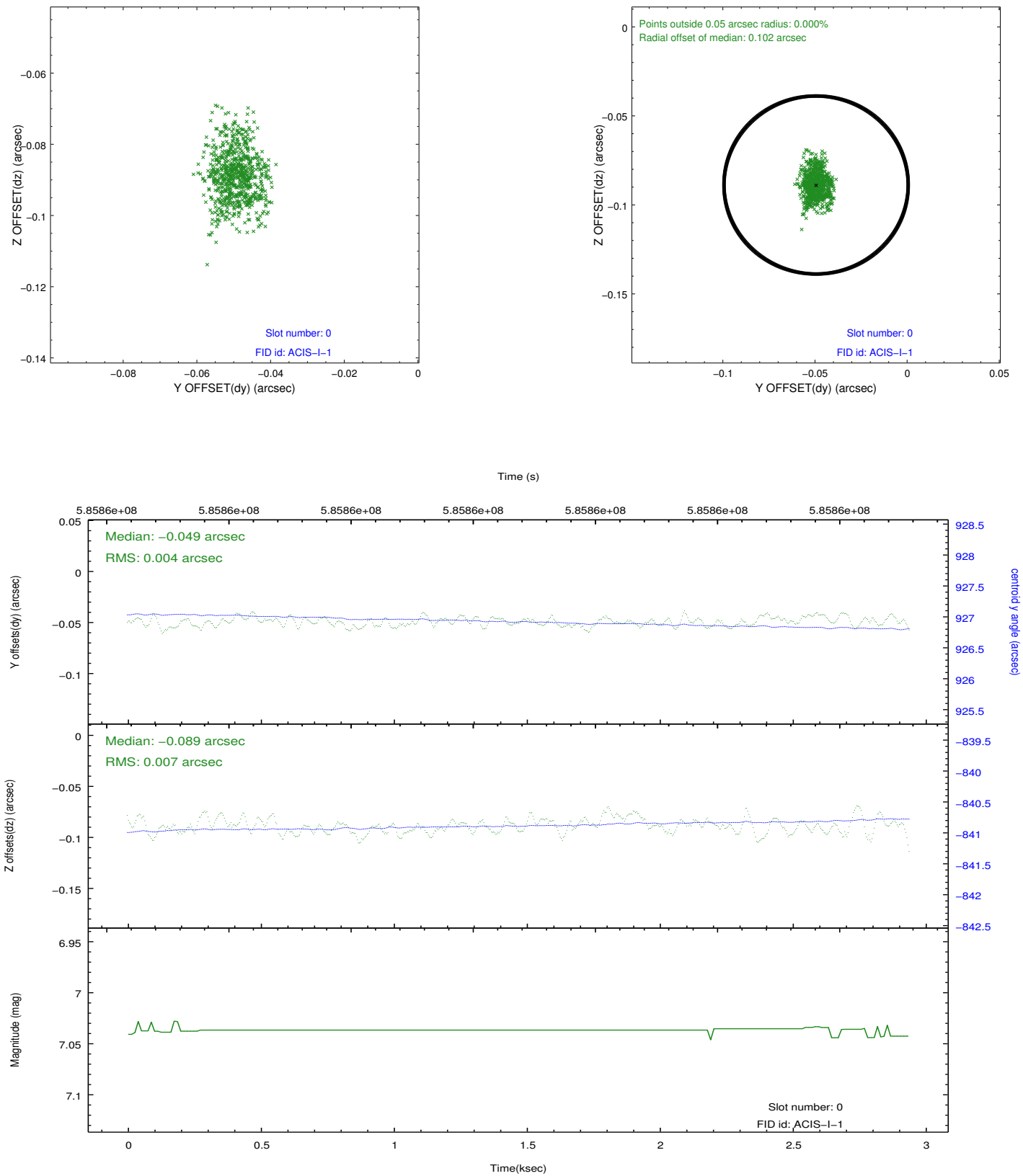


## 2.4.5 Slot 7

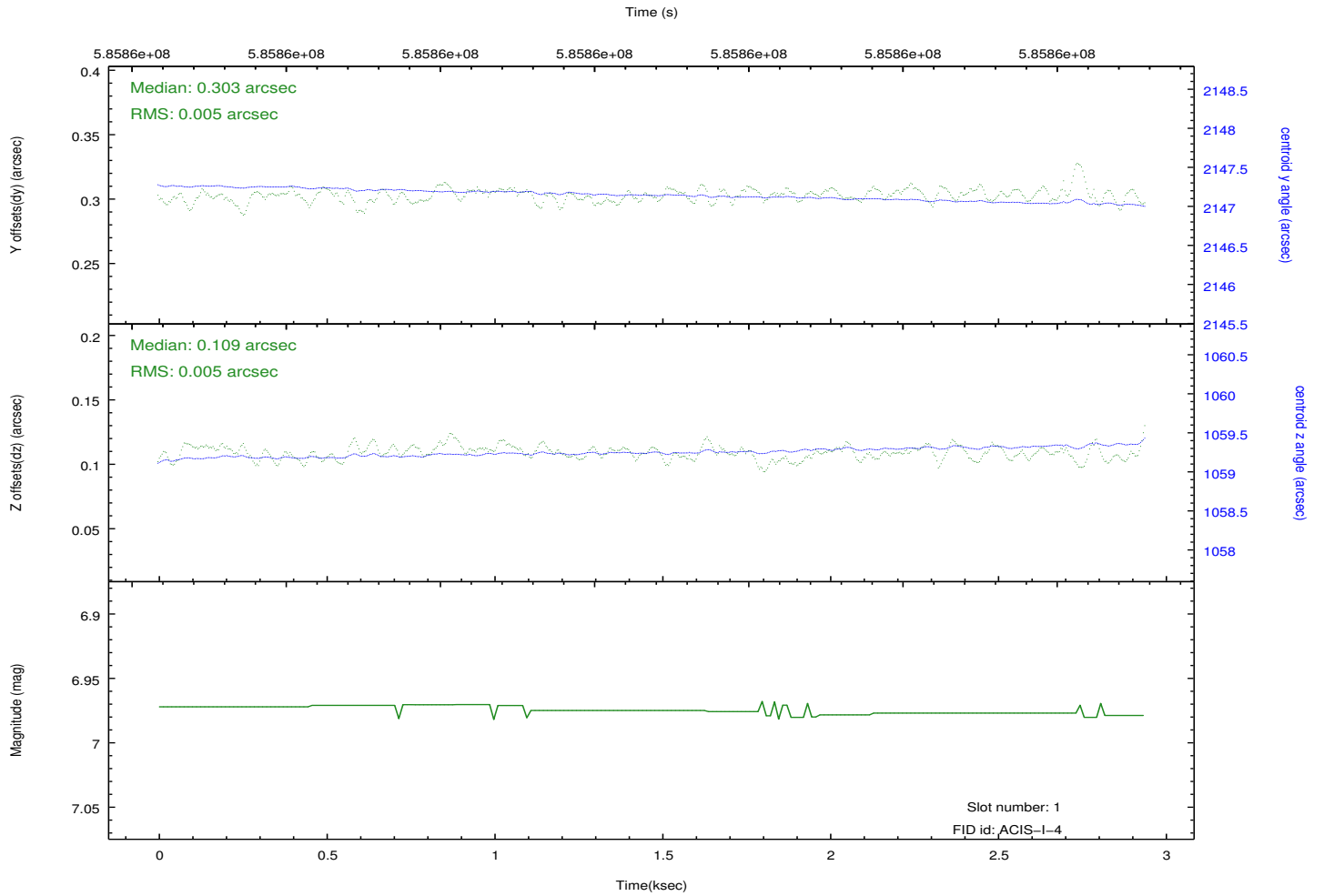
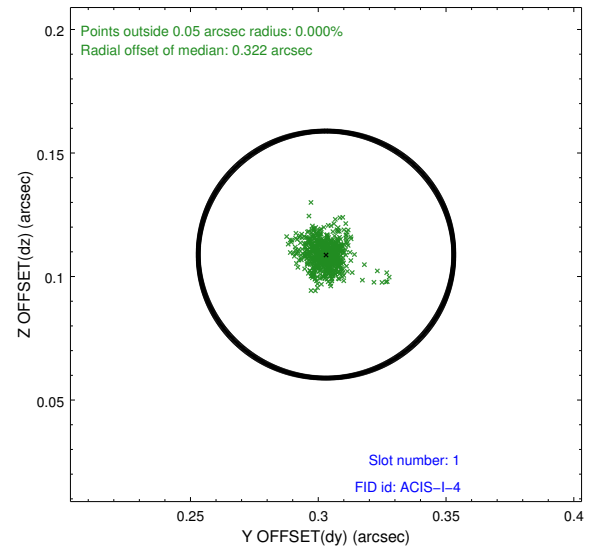
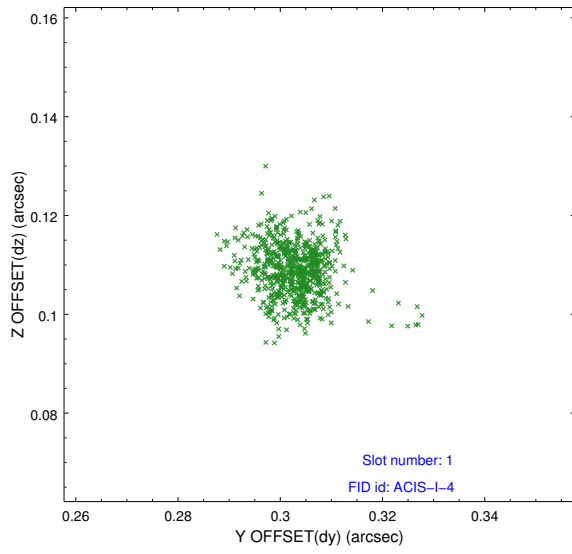


## 2.5 FID Slots

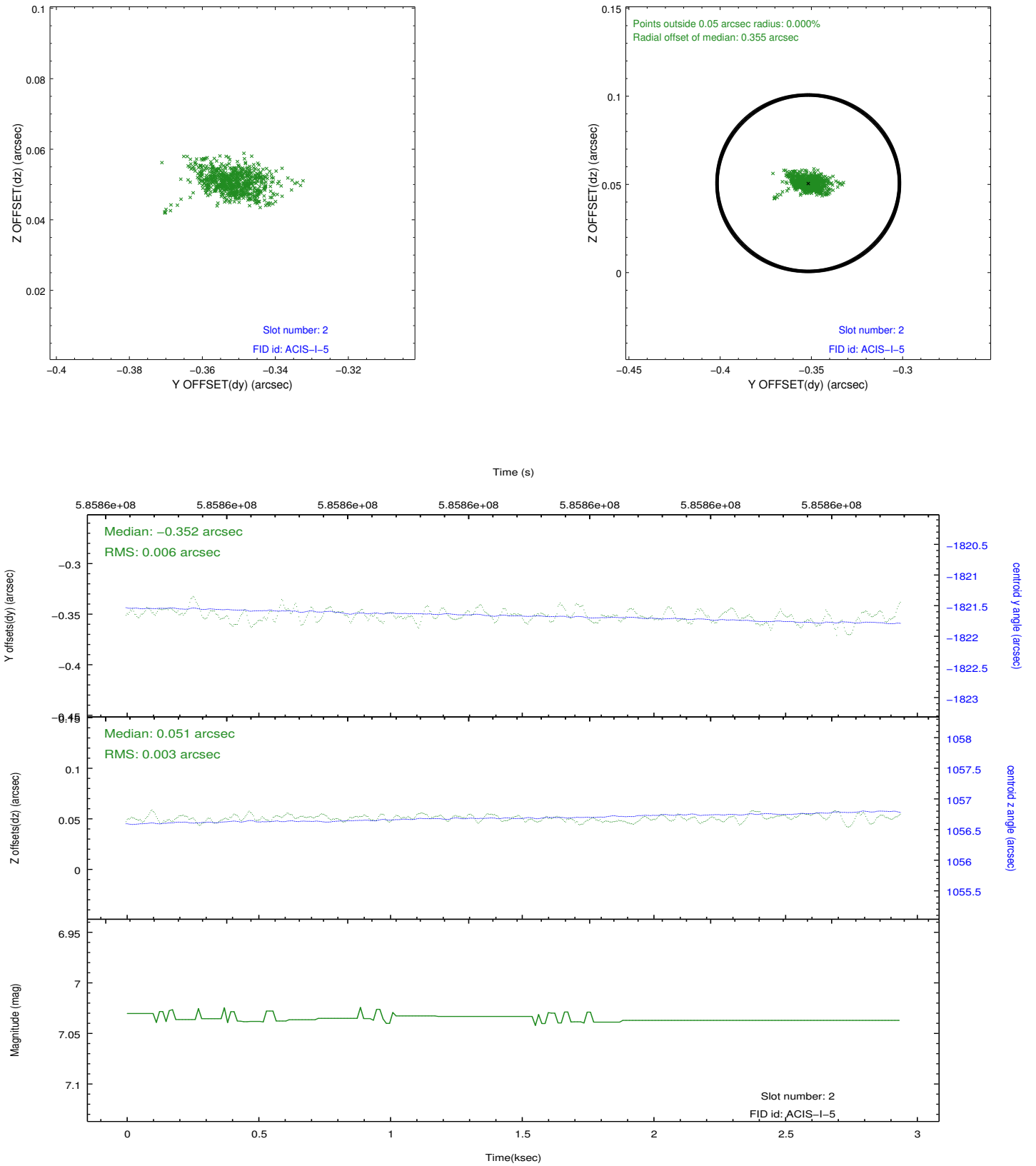
### 2.5.1 Slot 0



## 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)	2016.07.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0708000160456

### A.2 Comments