

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21610 - L2 Version 1  
Chandra X-Ray Center

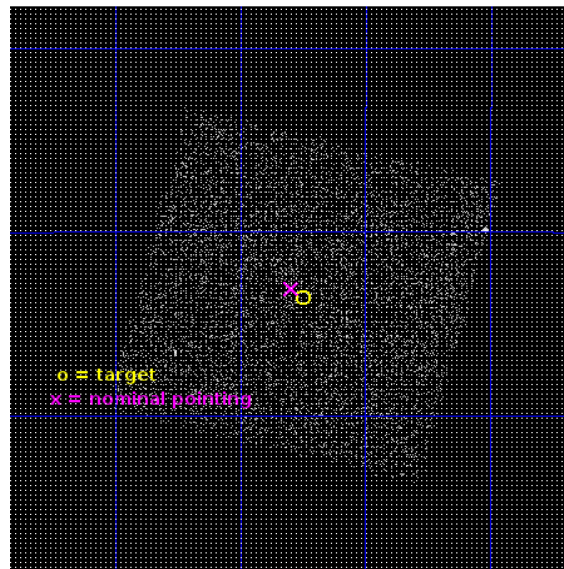
L2 Processing Date : Jul 8 2019

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# 1 Front

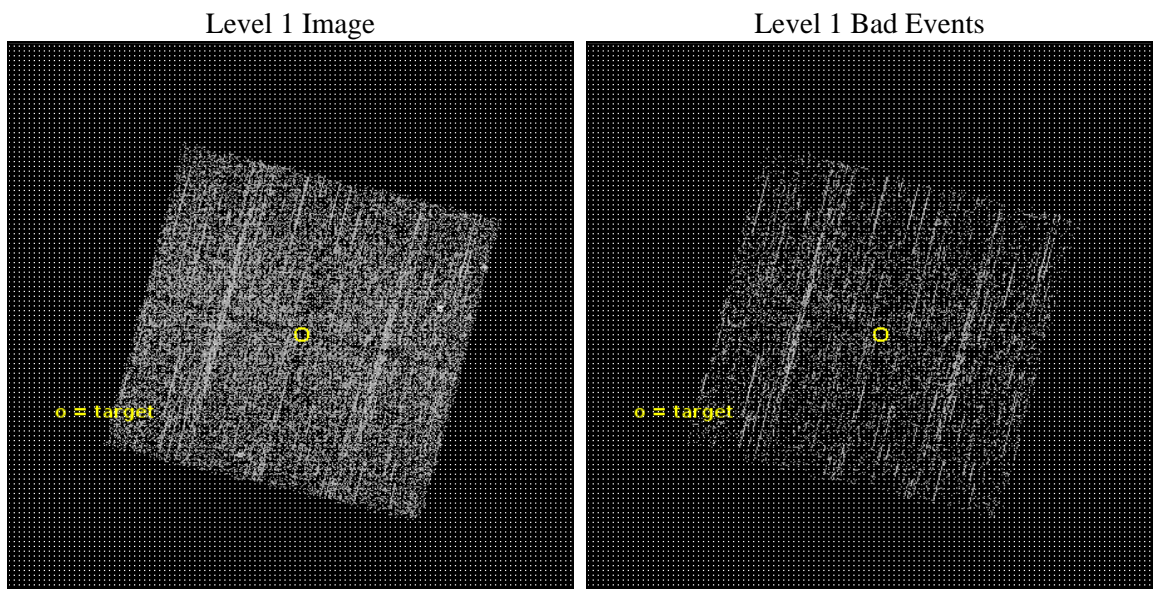
seq_num	300442	Sequence number
obs_id	21610	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.06145	Observer's specified target RA [deg]
dec_targ	-29.226778	Observer's specified target Dec [deg]
ra_nom	265.07377860918	Nominal RA [deg]
dec_nom	-29.21836340415	Nominal Dec [deg]
roll_nom	284.21470473492	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1908.176384449	Sum of GTIs [s]
livetime	1883.2446552072	Livetime [s]
ontime0	1908.0532644987	Sum of GTIs [s]
ontime1	1904.9532543421	Sum of GTIs [s]
ontime2	1904.9942742586	Sum of GTIs [s]
ontime3	1908.176384449	Sum of GTIs [s]
l2events	6008	Number of level 2 events



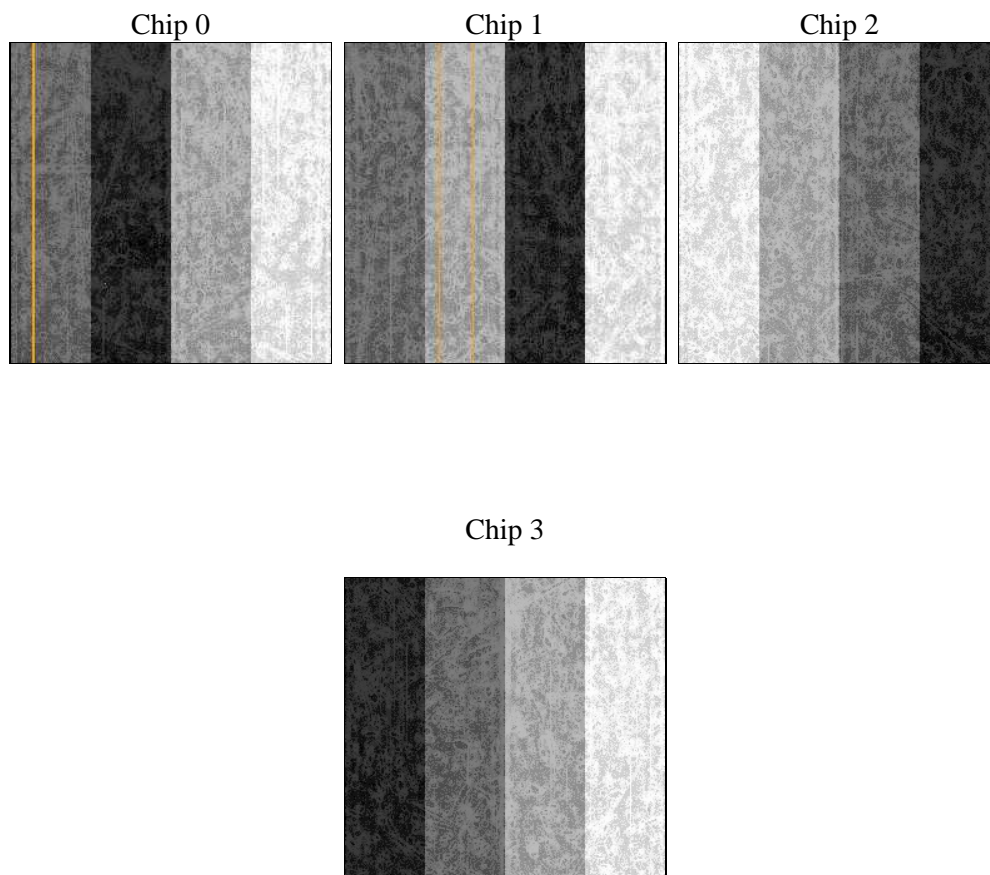
## 2 OBI

### 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	10.8	Processing system revision	ontime	1908.176384449	Sum of GTIs [s]
caldsver	4.8.3.1	&#160	ontime0	1908.0532644987	Sum of GTIs [s]
date	2019-07-08T11:15:43	Date and time of file creation	ontime1	1904.9532543421	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1904.9942742586	Sum of GTIs [s]
			ontime3	1908.176384449	Sum of GTIs [s]
			l1events	56408	Number of level 1 events

### 2.1.4 Events

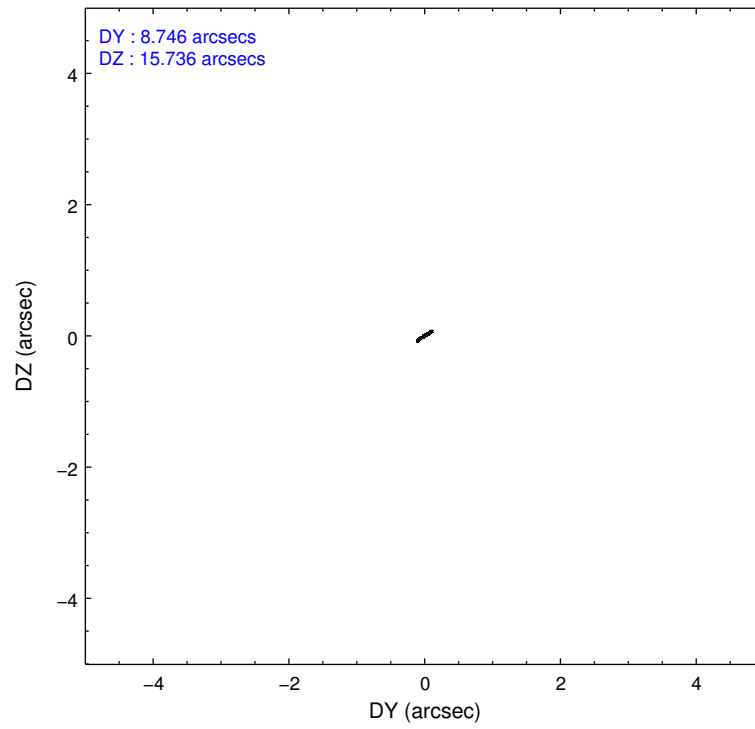
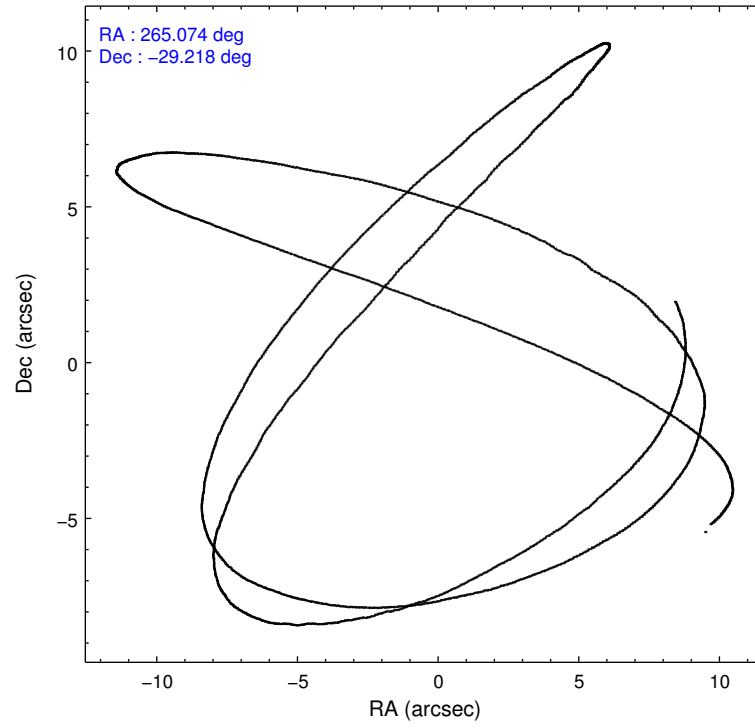
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	13198	14549	14248	14413
rejected events	11373	12063	12380	12827
rejected %	86%	82%	86%	88%

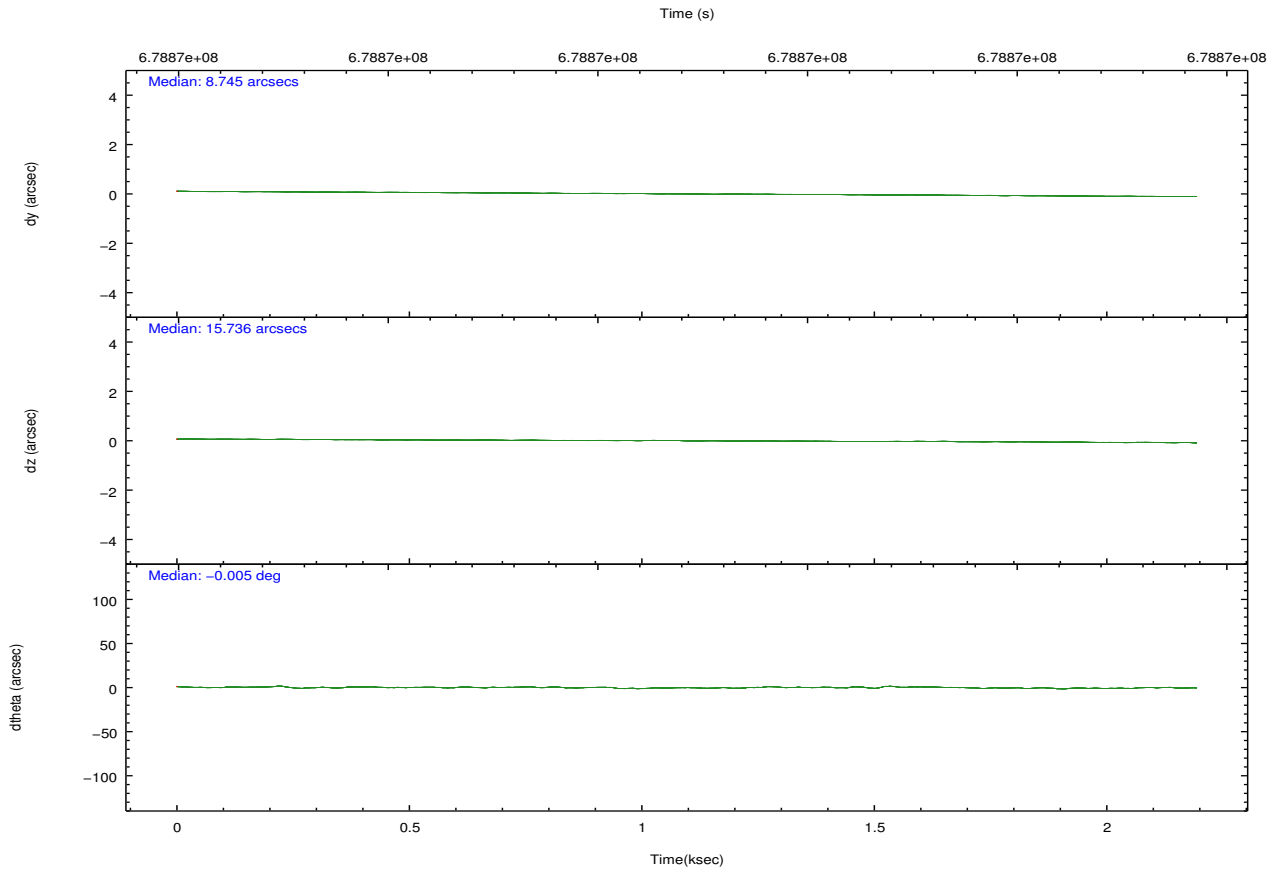
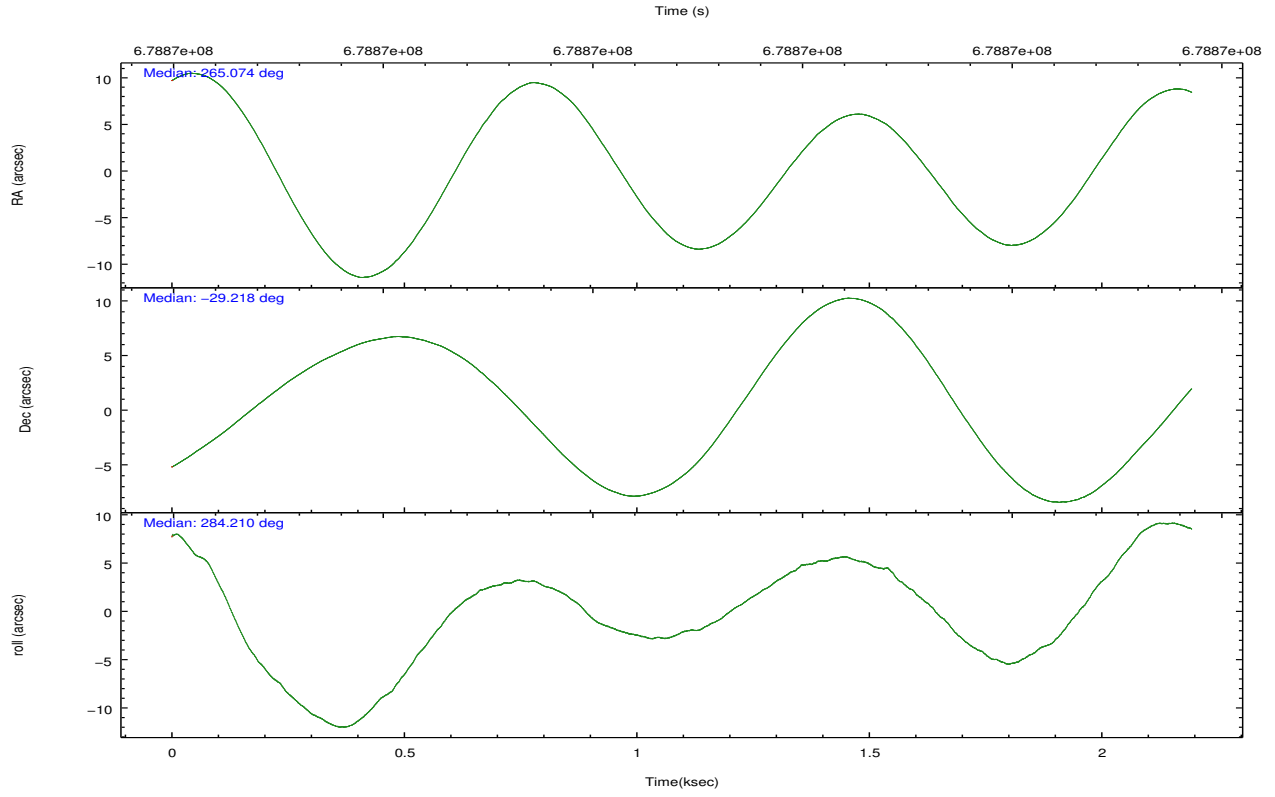
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	651	1238	805	582
	4%	8%	5%	4%
grade 1 events	6	14	12	2
	0%	0%	0%	0%
grade 2 events	448	485	419	339
	3%	3%	2%	2%
grade 3 events	184	213	165	174
	1%	1%	1%	1%
grade 4 events	181	169	154	174
	1%	1%	1%	1%
grade 5 events	653	648	567	752
	4%	4%	3%	5%
grade 6 events	365	387	337	324
	2%	2%	2%	2%
grade 7 events	10710	11395	11789	12066
	81%	78%	82%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	265.051489	265.0737786091775	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.198563	-29.21836340414989	Alternating exposures requested	N	N
[deg] Pointing Roll	283.995146	284.21470473492	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	678866805.184000	678866429.24296			
Observation start date	2019-07-07T06:05:36	2019-07-07T06:00:29			
[s] Observation end time (MET)	678868805.184000	678868939.46811			
Observation end date	2019-07-07T06:38:56	2019-07-07T06:42:19			
Read mode	TIMED	TIMED			

## 2.3 Aspect





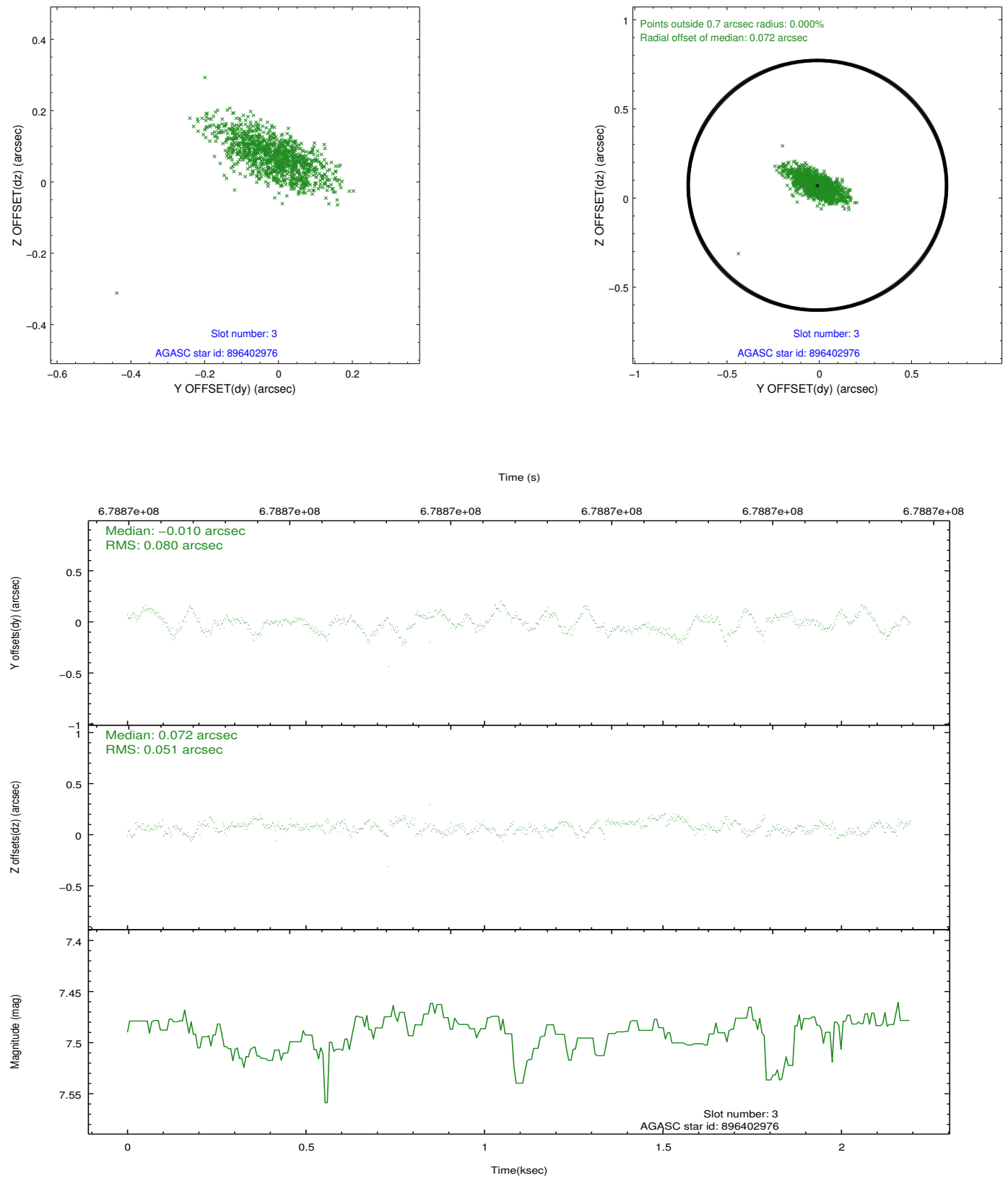
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-3	7.36	536	1.000	-0.069	0.088	0.008	0.013	0.000000	0.000000	48.29	-972
1	FID		ACIS-I-5	7.13	536	1.000	-0.345	-0.123	0.007	0.013	0.000000	0.000000	-1817.63	1056
2	FID		ACIS-I-6	7.12	535	1.000	0.322	0.104	0.007	0.011	0.000000	0.000000	393.42	1704
3	GUIDE	used	896402976	7.49	1071	1.000	-0.010	0.072	0.096	0.173	265.099474	-28.923203	-925.25	386
4	GUIDE	used	896403224	8.24	1071	1.000	-0.081	-0.005	0.123	0.183	265.612825	-29.438915	1268.65	1497
5	GUIDE	used	896404376	6.67	1071	1.000	0.188	0.234	0.158	0.231	264.835179	-29.530972	999.58	-945
6	GUIDE	used	896405480	8.25	1070	1.000	-0.115	-0.146	0.214	0.296	265.220460	-29.599691	1530.34	162
7	GUIDE	used	896406848	9.04	1068	1.000	0.014	-0.180	0.125	0.191	265.339785	-29.588751	1583.67	535

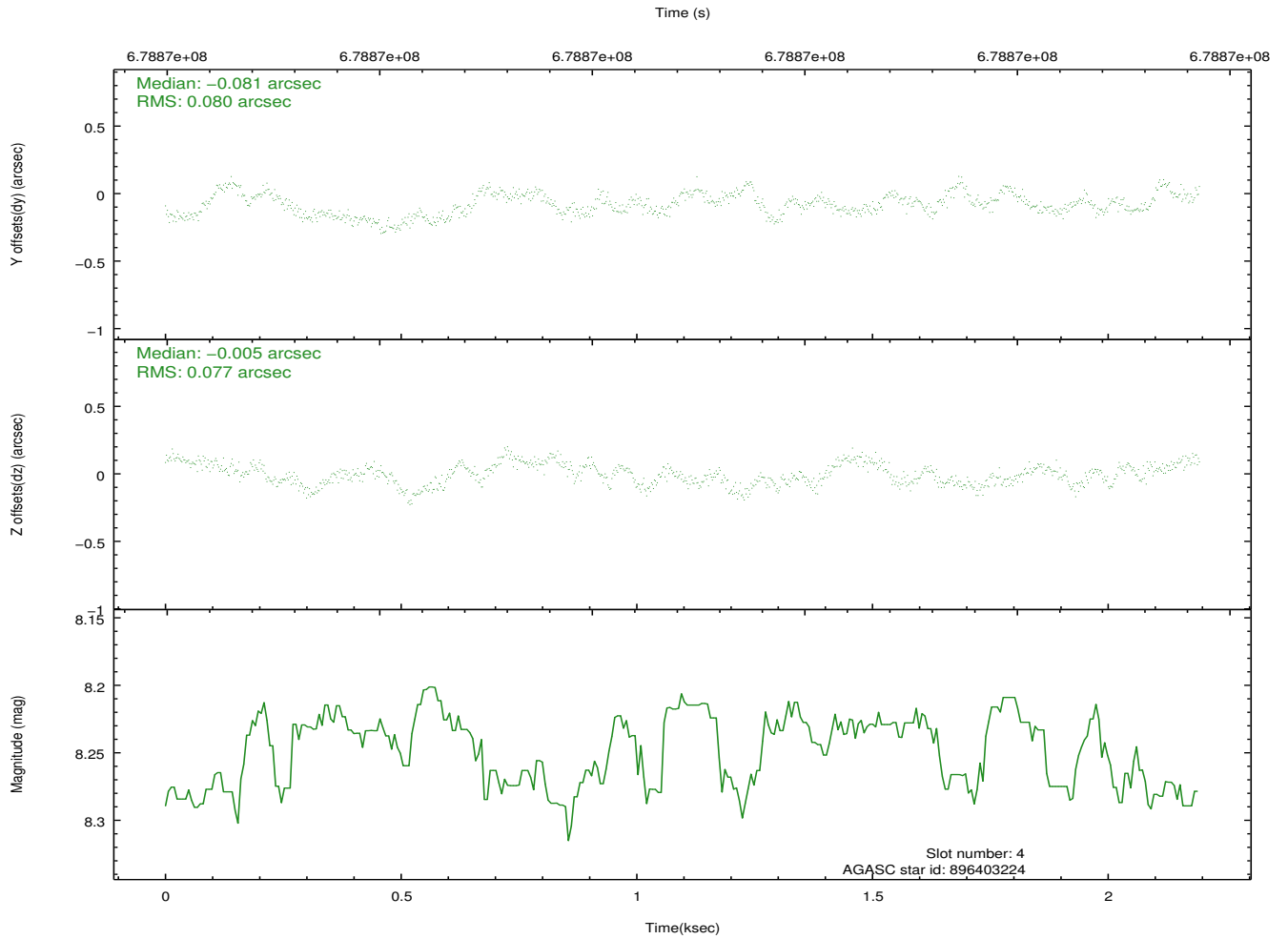
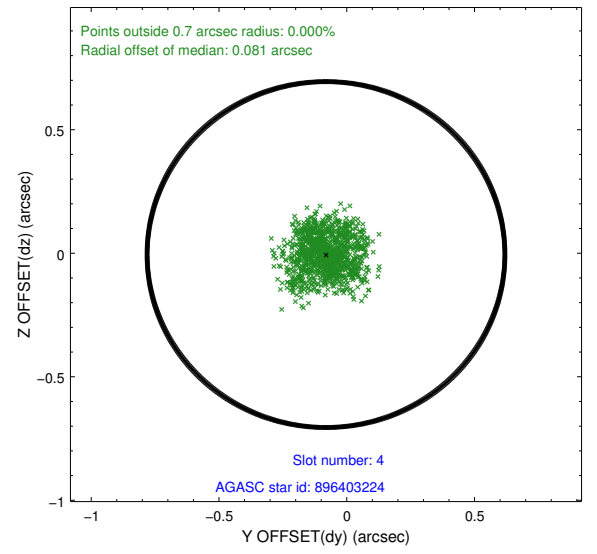
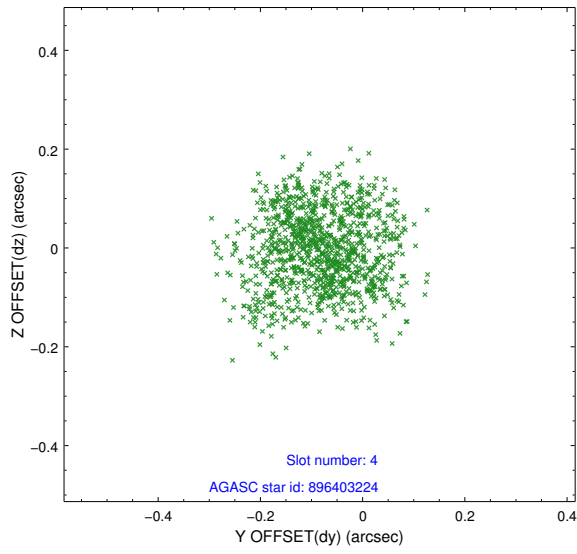


## 2.4 Star Slots

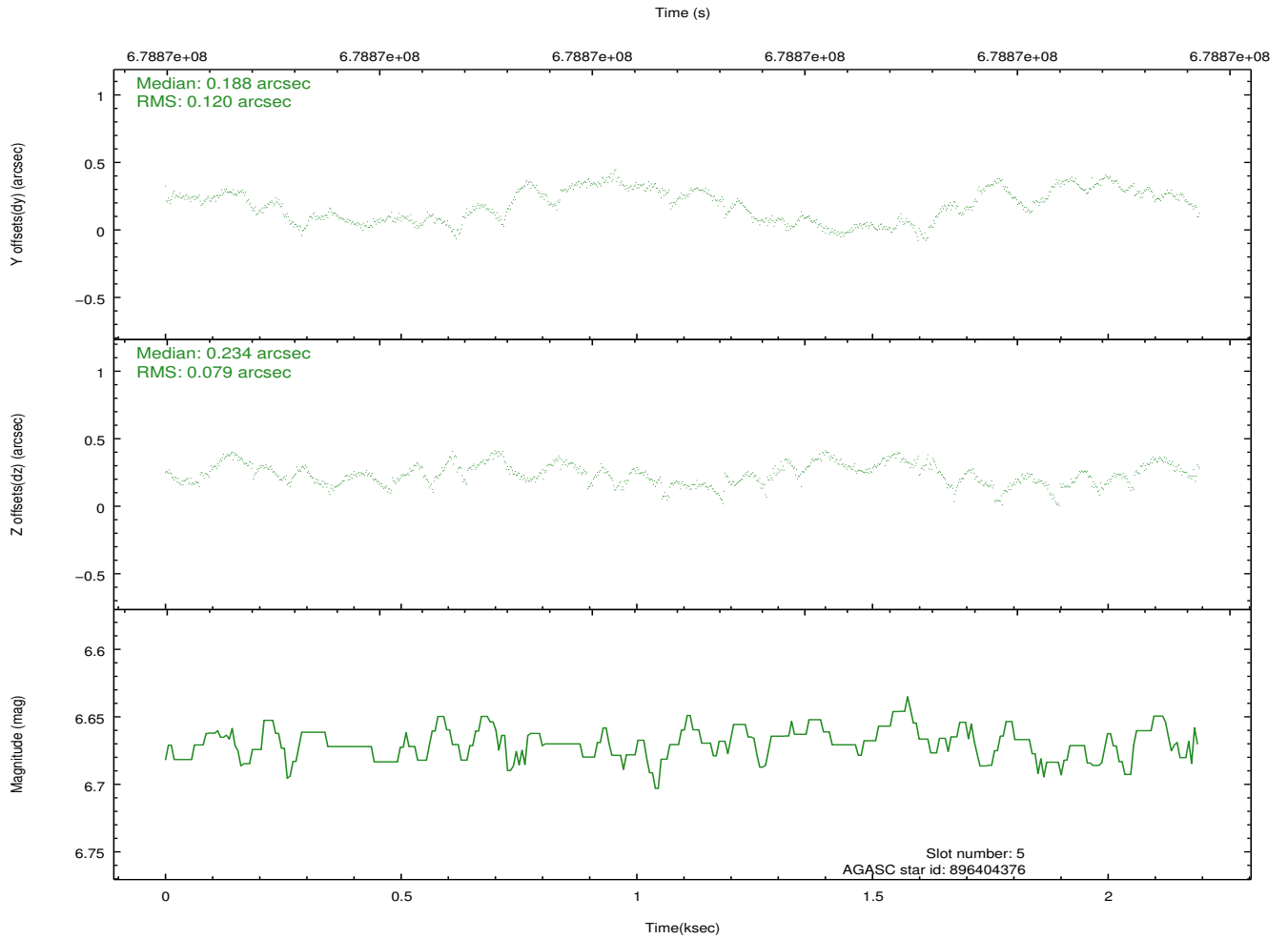
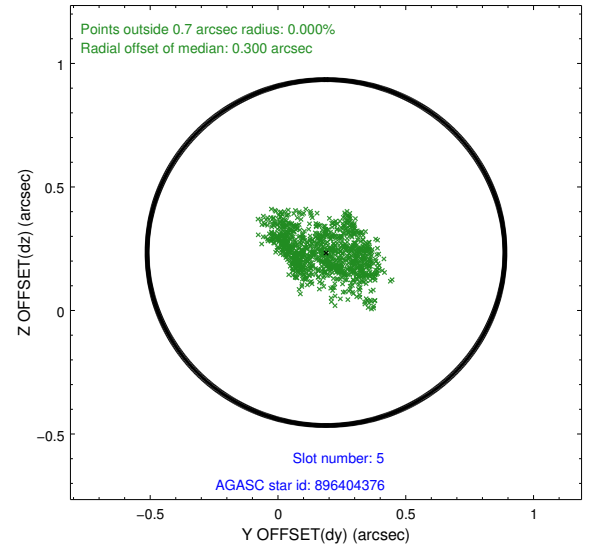
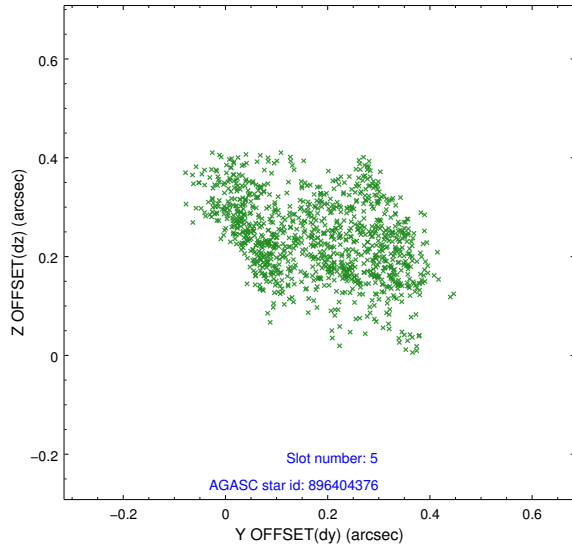
### 2.4.1 Slot 3



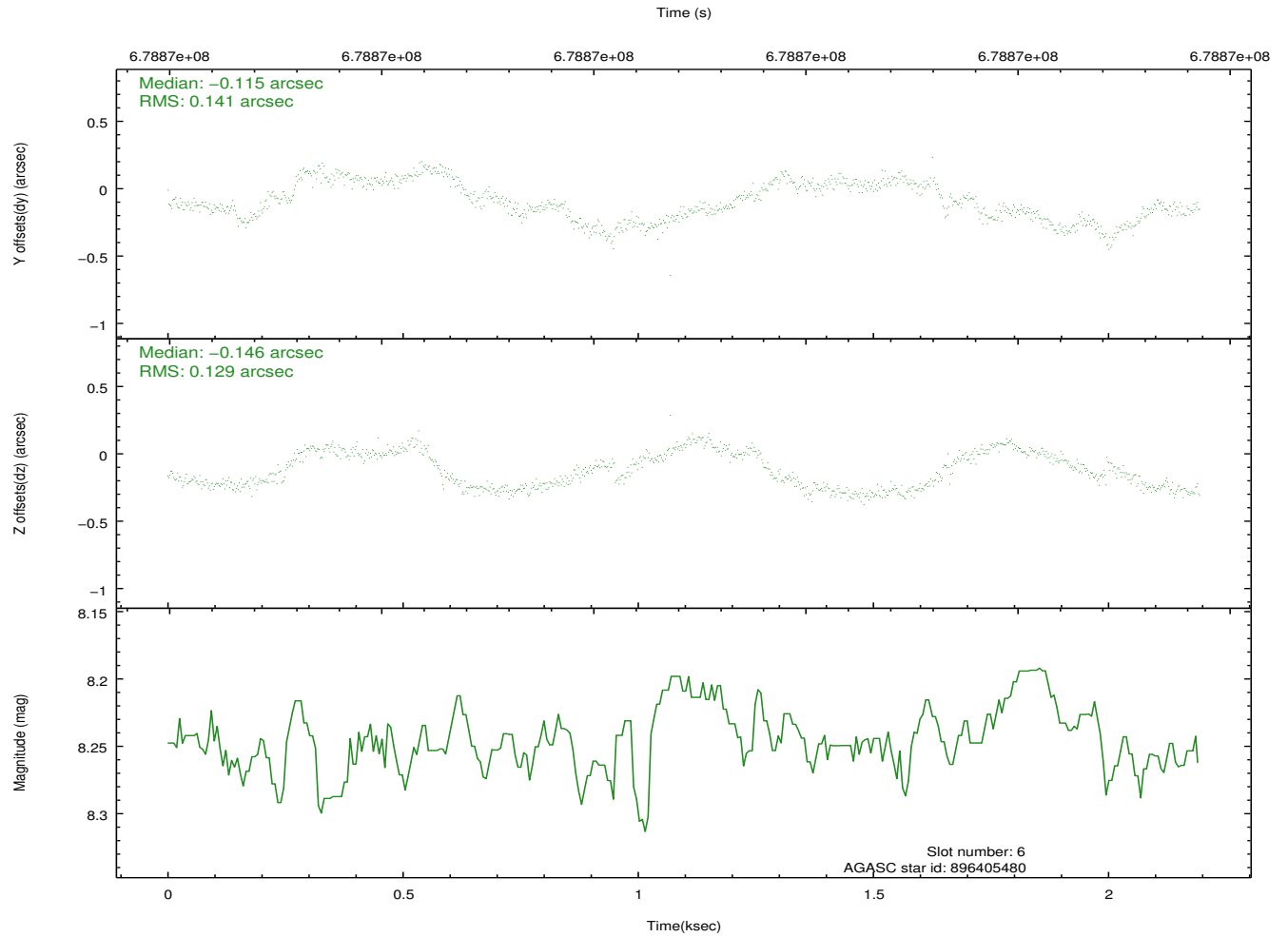
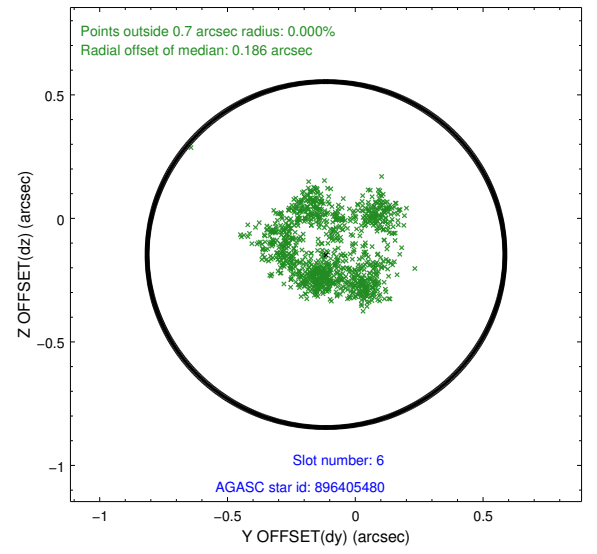
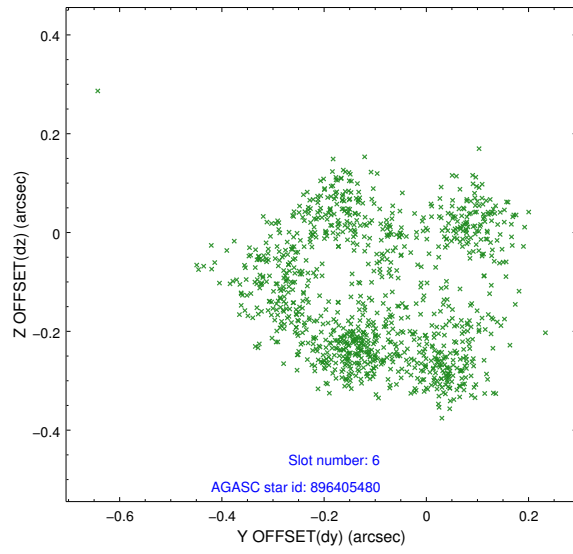
## 2.4.2 Slot 4



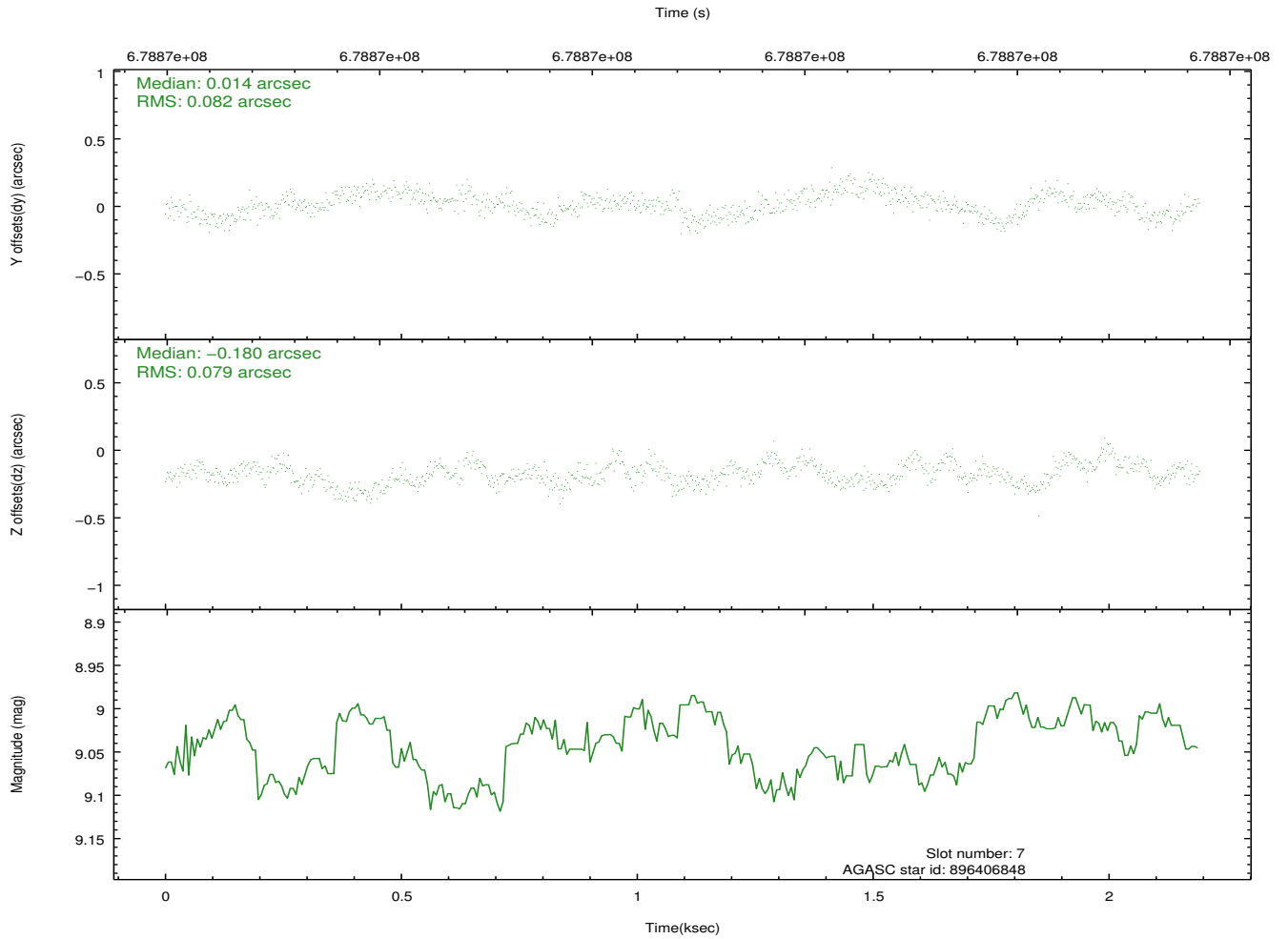
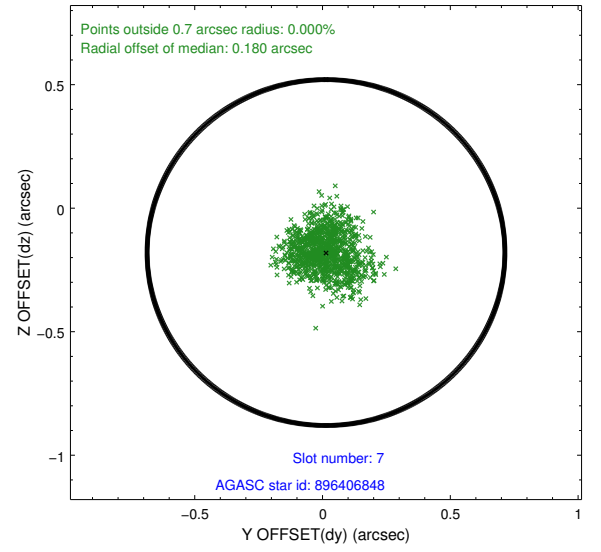
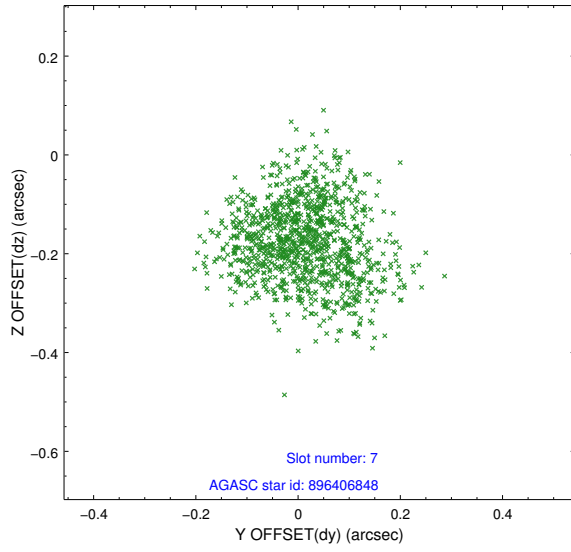
### 2.4.3 Slot 5



## 2.4.4 Slot 6

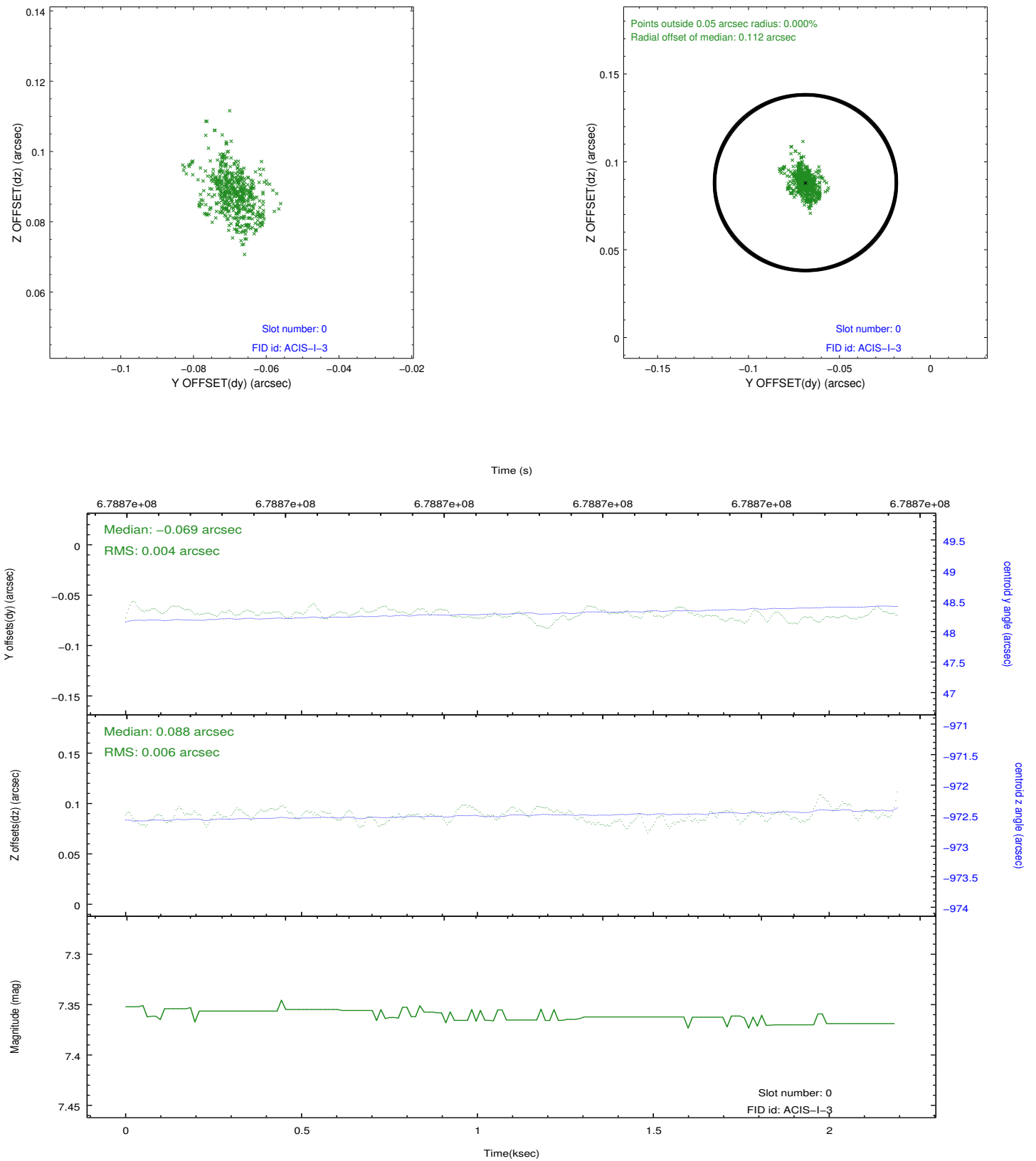


## 2.4.5 Slot 7

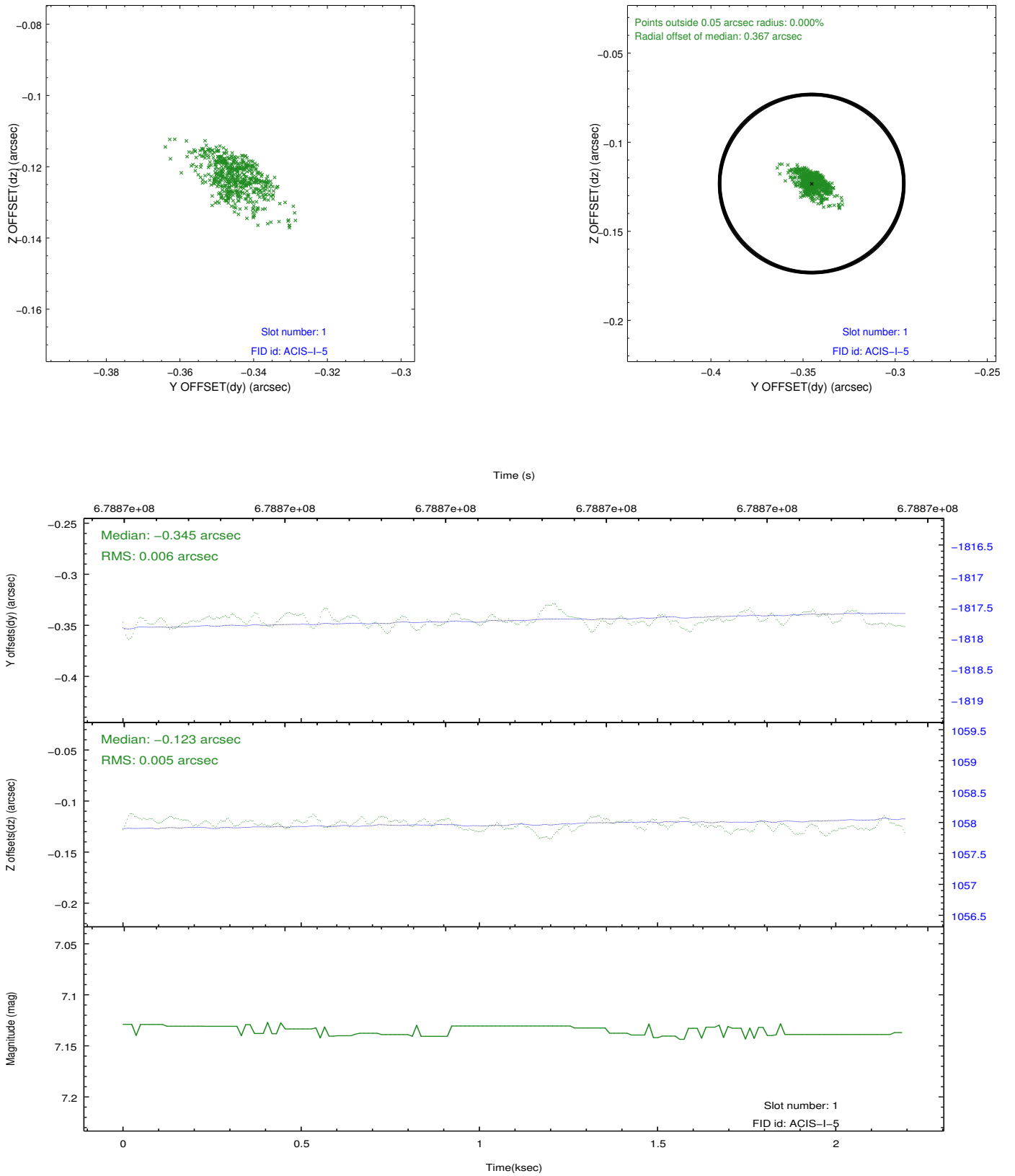


## 2.5 FID Slots

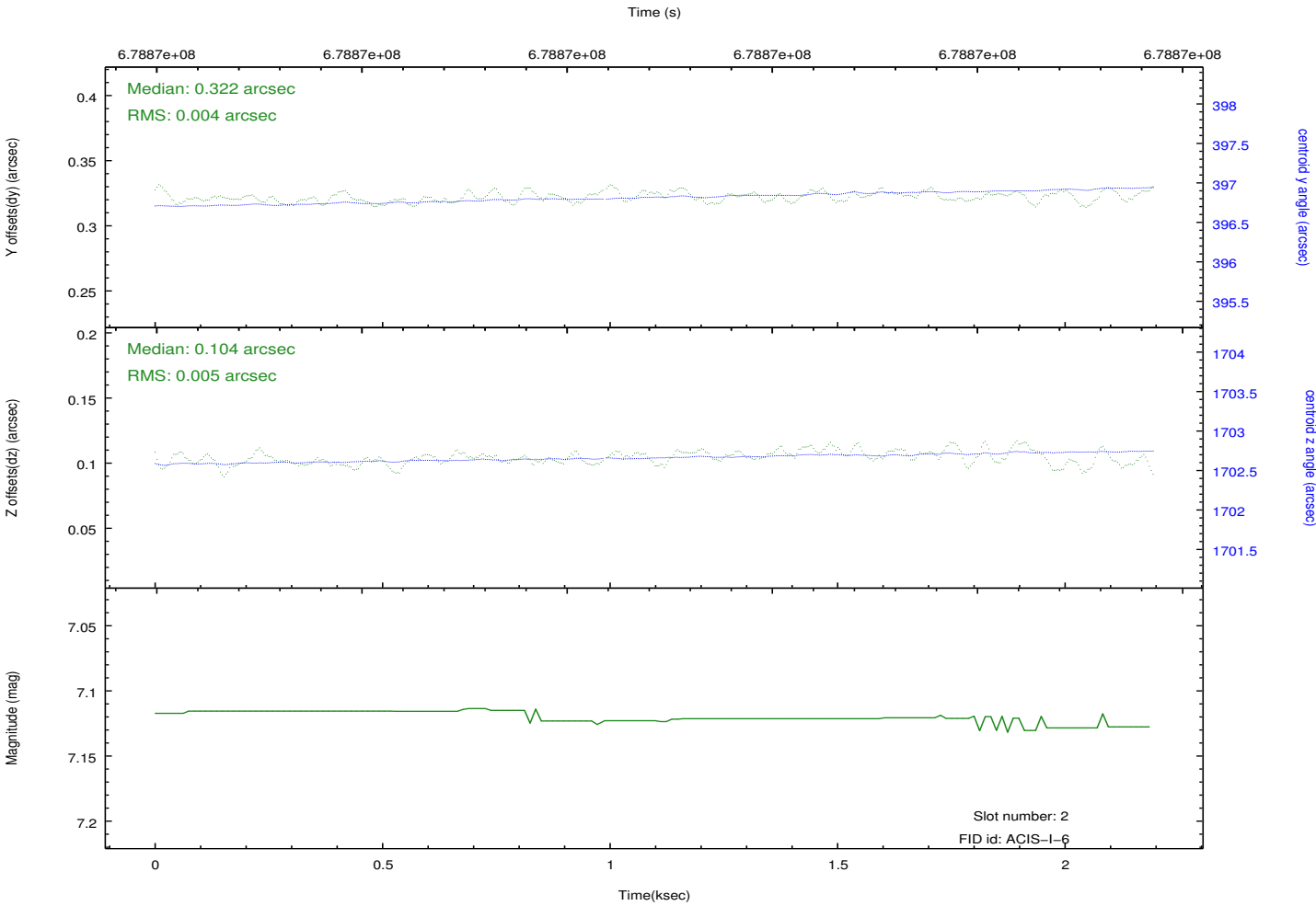
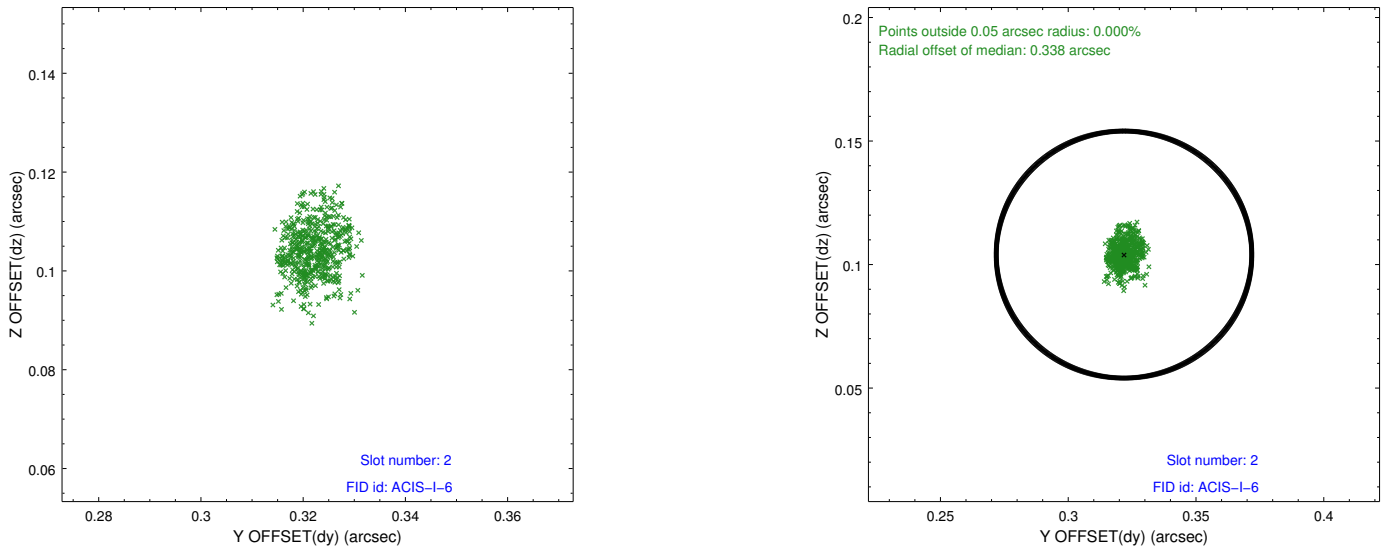
### 2.5.1 Slot 0



## 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)	2019.07.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.908176384449

### A.2 Comments