

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21594 - L2 Version 1  
Chandra X-Ray Center

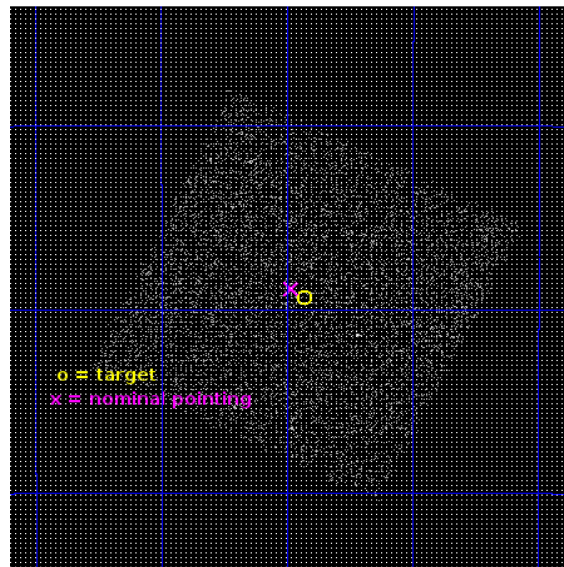
L2 Processing Date : Jul 3 2019

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# 1 Front

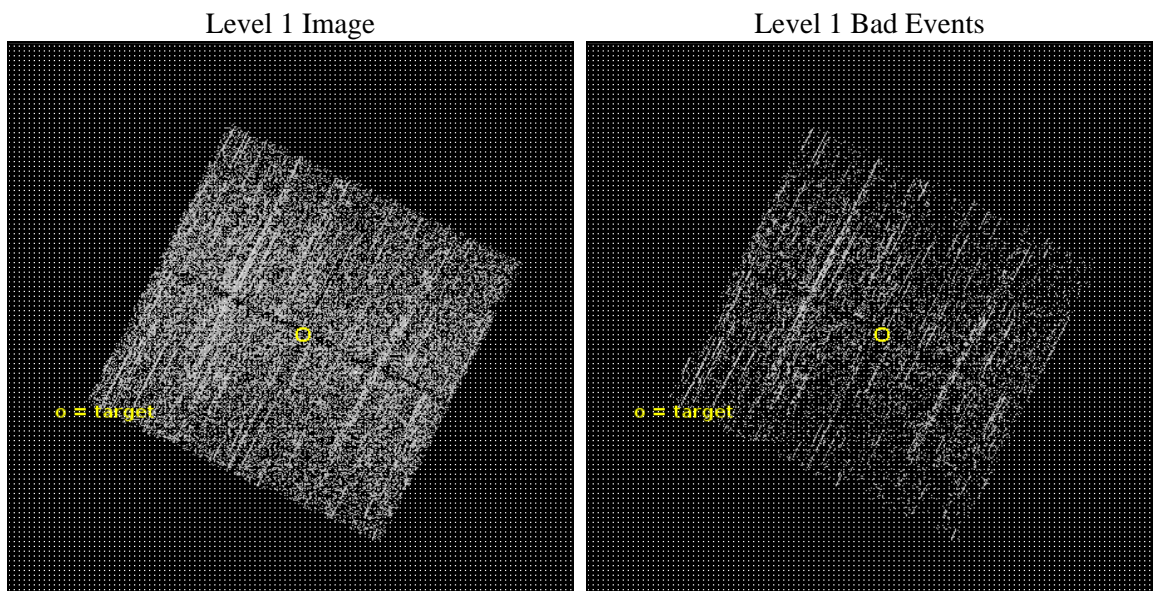
seq_num	300426	Sequence number
obs_id	21594	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.10707	Observer's specified target RA [deg]
dec_targ	-28.655812	Observer's specified target Dec [deg]
ra_nom	267.12055634149	Nominal RA [deg]
dec_nom	-28.647812550229	Nominal Dec [deg]
roll_nom	296.21517758105	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1908.3432241678	Sum of GTIs [s]
livetime	1883.4093150422	Livetime [s]
ontime0	1908.3021842241	Sum of GTIs [s]
ontime1	1908.3432241678	Sum of GTIs [s]
ontime2	1908.3842642307	Sum of GTIs [s]
ontime3	1908.4253041744	Sum of GTIs [s]
l2events	6534	Number of level 2 events



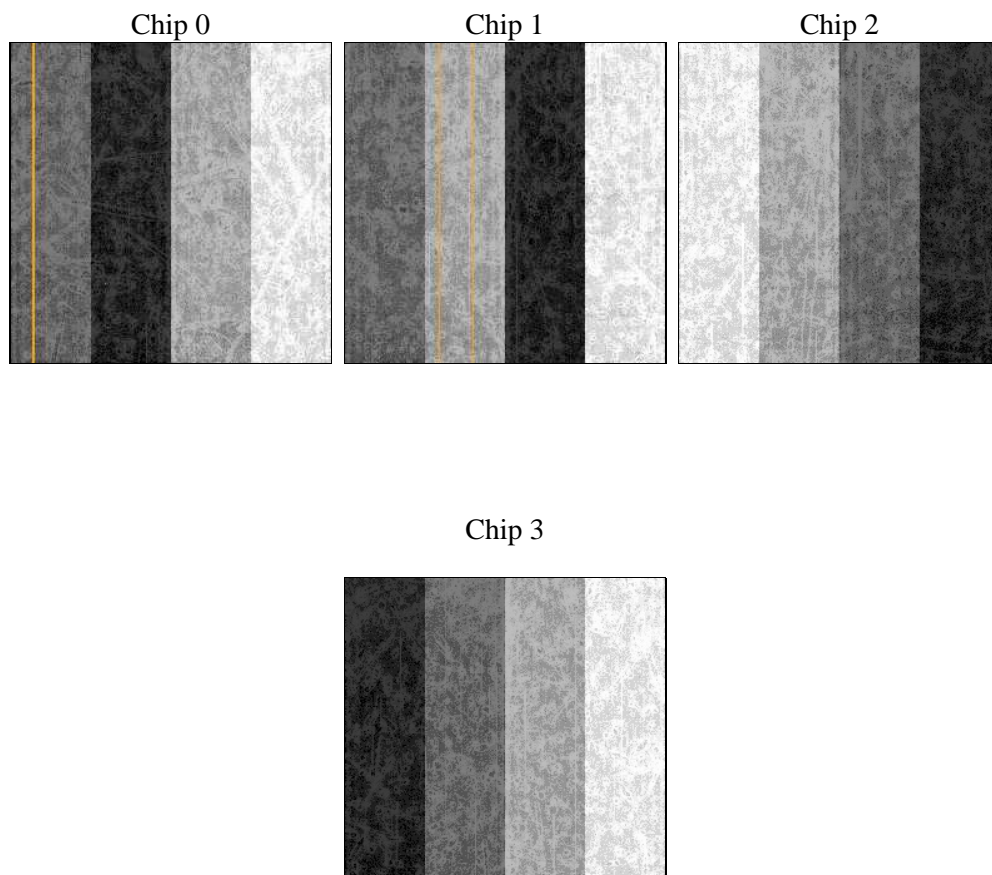
## 2 OBI

### 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	1908.3432241678	Sum of GTIs [s]
caldsver	4.8.3.1	&#160	ontime0	1908.3021842241	Sum of GTIs [s]
date	2019-07-03T20:55:10	Date and time of file creation	ontime1	1908.3432241678	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1908.3842642307	Sum of GTIs [s]
			ontime3	1908.4253041744	Sum of GTIs [s]
			l1events	55780	Number of level 1 events

### 2.1.4 Events

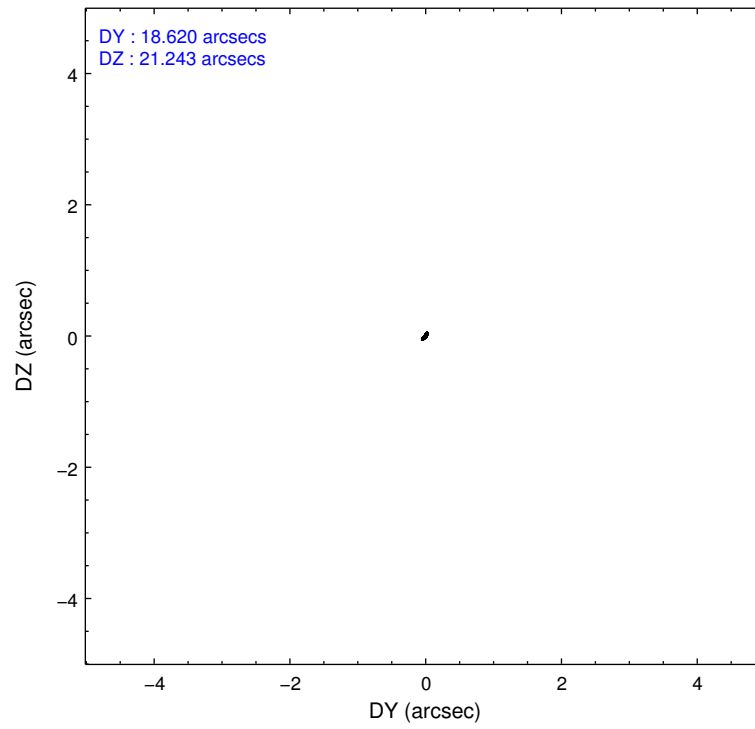
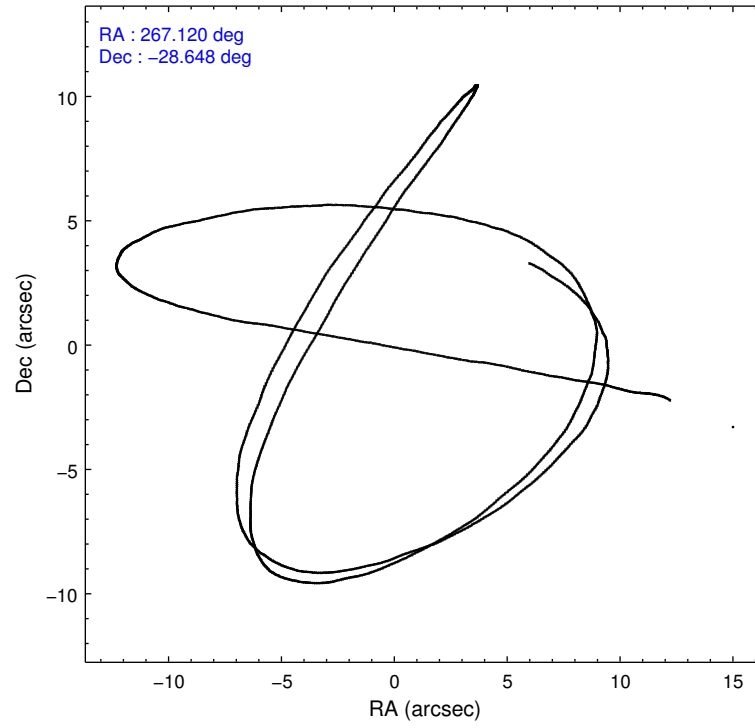
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	12173	12849	15265	15493
rejected events	10211	10759	13362	13721
rejected %	83%	83%	87%	88%

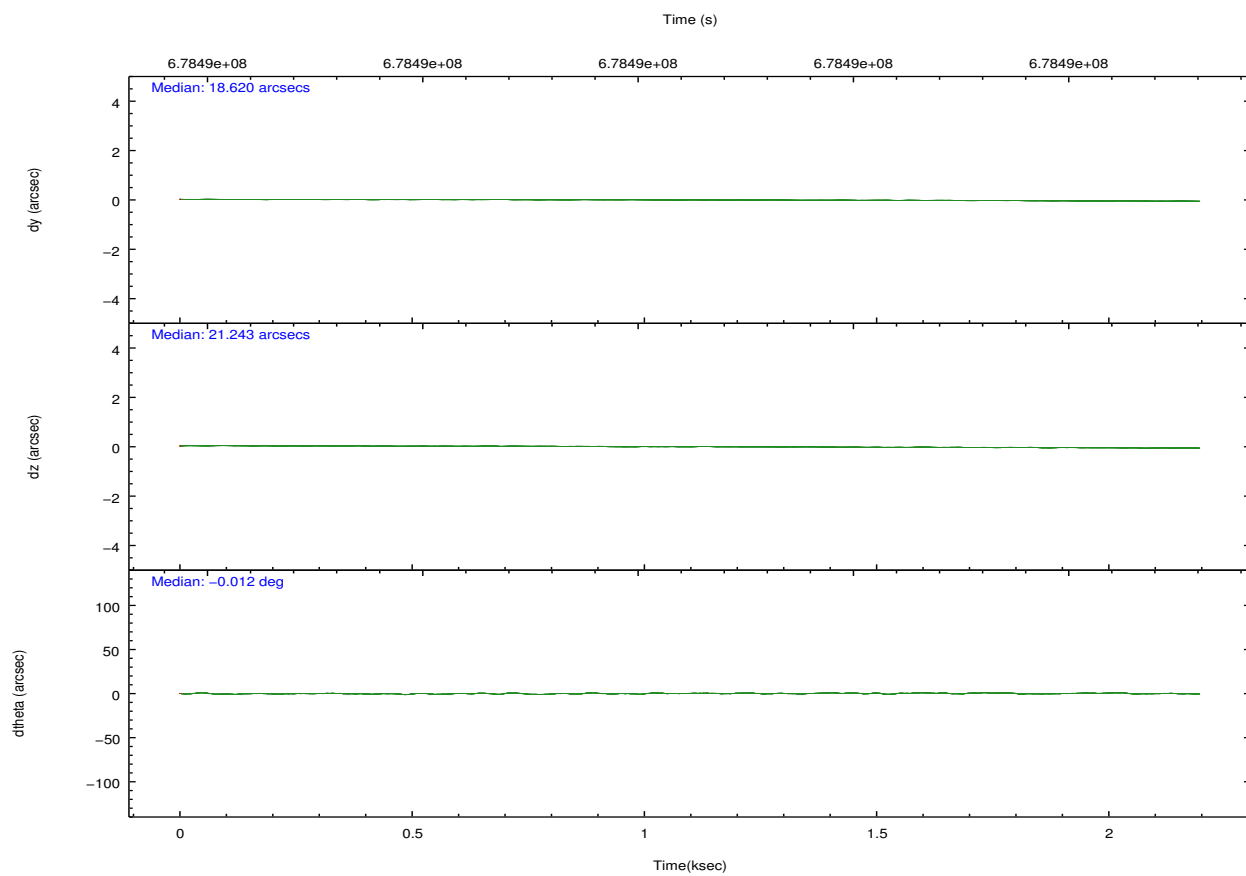
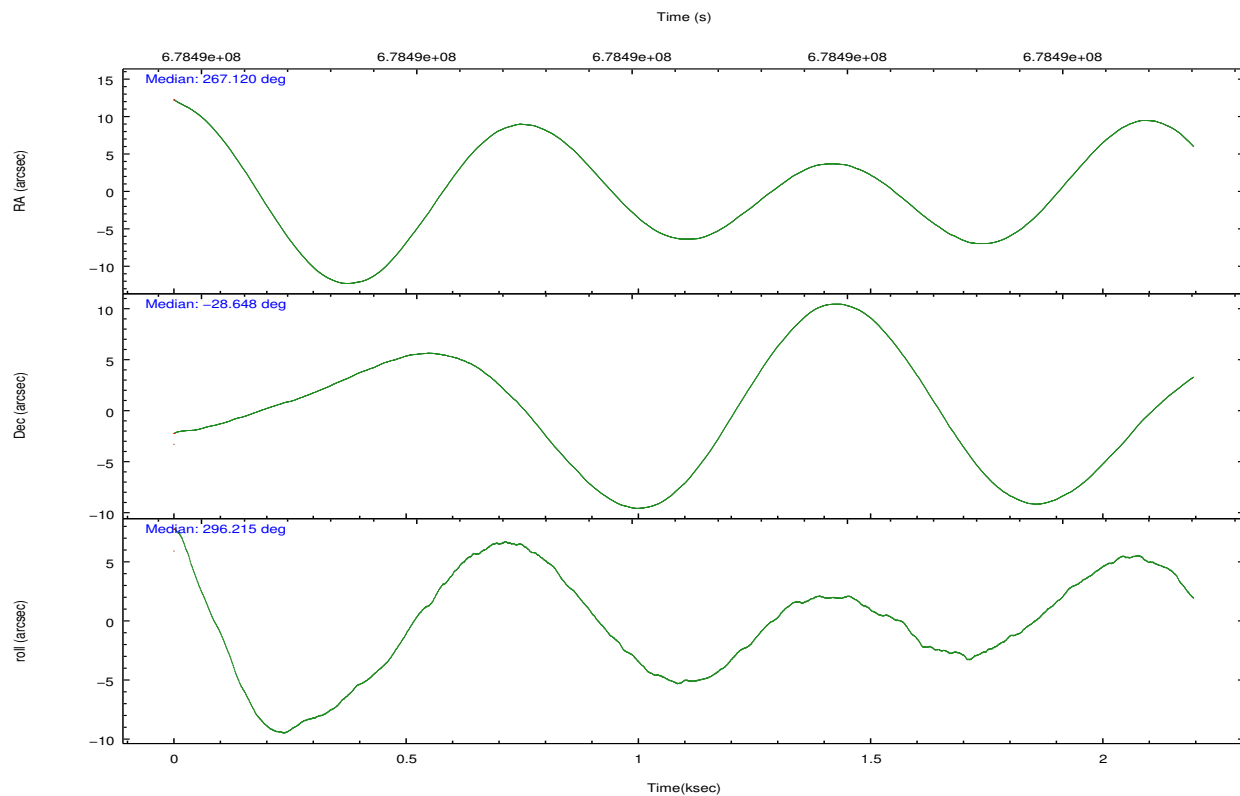
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	813	782	787	701
	6%	6%	5%	4%
grade 1 events	9	12	18	11
	0%	0%	0%	0%
grade 2 events	474	497	421	381
	3%	3%	2%	2%
grade 3 events	177	169	183	169
	1%	1%	1%	1%
grade 4 events	177	201	176	192
	1%	1%	1%	1%
grade 5 events	664	656	648	749
	5%	5%	4%	4%
grade 6 events	325	446	338	332
	2%	3%	2%	2%
grade 7 events	9534	10086	12694	12958
	78%	78%	83%	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	267.094205	267.1205563414933	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.632506	-28.64781255022919	Alternating exposures requested	N	N
[deg] Pointing Roll	295.993837	296.2151775810514	[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)	678488220.184000	678487844.44523			
Observation start date	2019-07-02T20:55:51	2019-07-02T20:50:44			
[s] Observation end time (MET)	678490220.184000	678490354.67038			
Observation end date	2019-07-02T21:29:11	2019-07-02T21:32:34			
Read mode	TIMED	TIMED			

## 2.3 Aspect





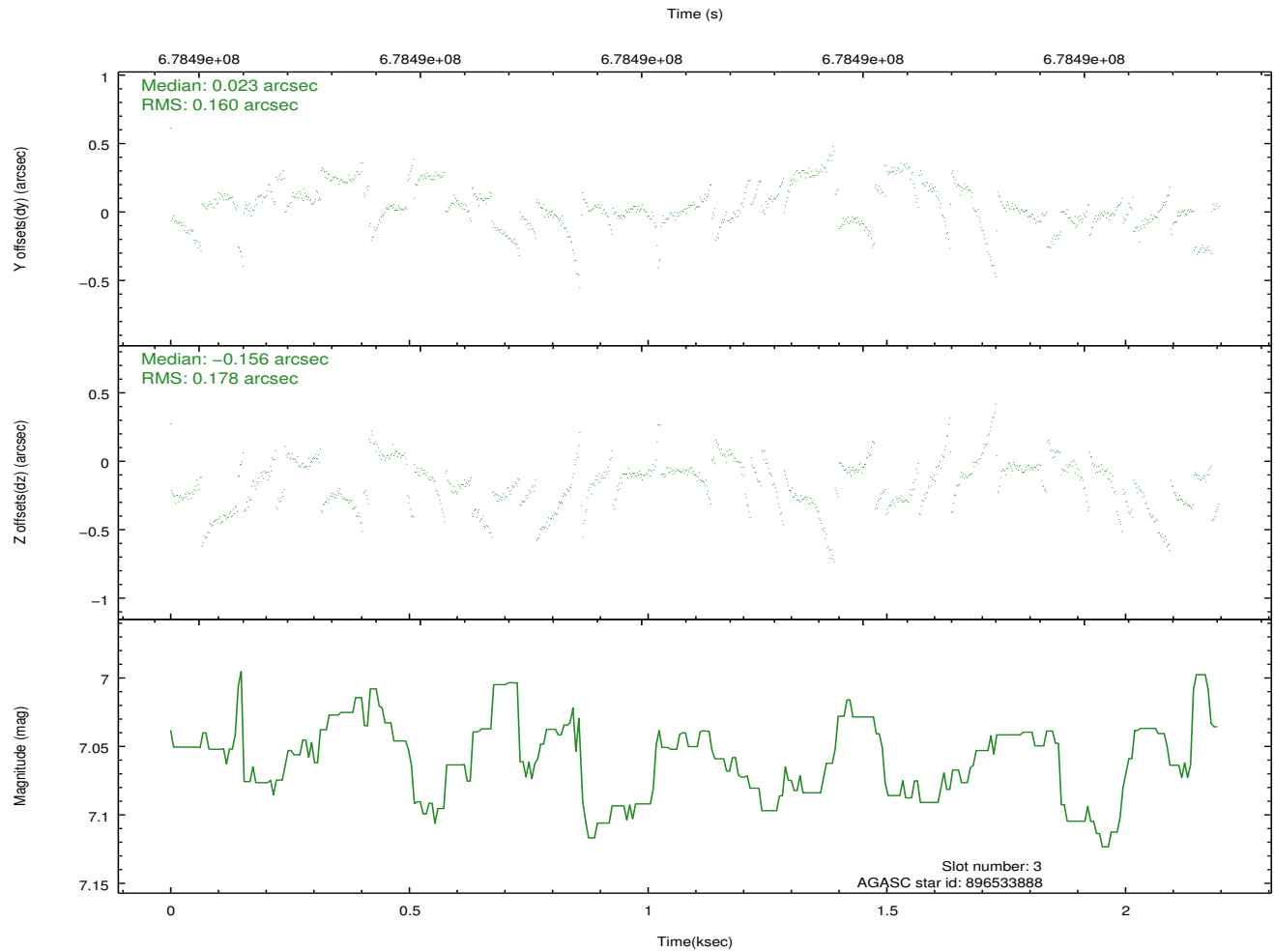
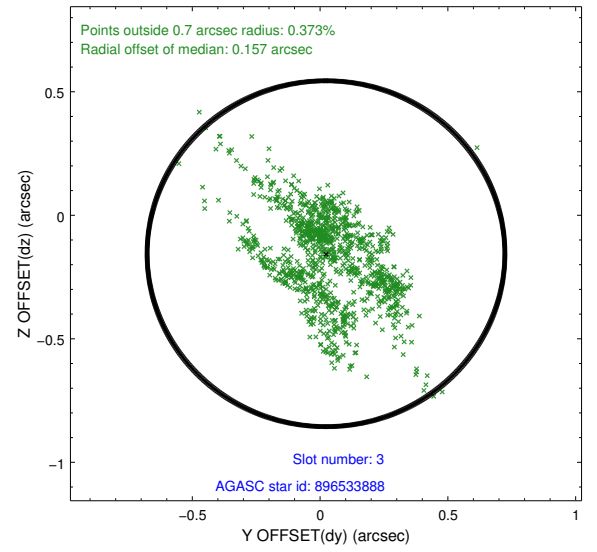
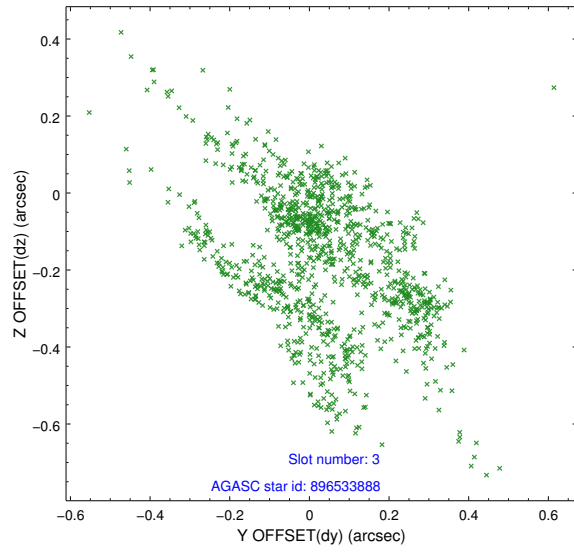
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.17	536	1.000	0.259	-0.265	0.006	0.011	0.000000	0.000000	921.16	-845
1	FID		ACIS-I-3	7.43	536	1.000	-0.070	0.199	0.007	0.011	0.000000	0.000000	39.98	-979
2	FID		ACIS-I-5	7.14	536	1.000	-0.279	0.138	0.006	0.010	0.000000	0.000000	-1827.83	1050
3	GUIDE	used	896533888	7.06	1071	1.000	0.023	-0.156	0.246	0.408	266.666434	-29.392757	1874.84	-2405
4	GUIDE	used	896538696	6.88	1072	1.000	0.038	0.448	0.086	0.158	266.298470	-28.325572	-2088.70	-1786
5	GUIDE	used	896540888	7.87	1070	1.000	-0.399	-0.367	0.112	0.178	267.212234	-28.246138	-1087.93	945
6	GUIDE	used	896541360	7.74	1072	1.000	0.255	-0.117	0.172	0.361	266.684478	-29.453744	2096.11	-2449
7	GUIDE	used	896537176	8.01	1071	1.000	0.087	0.220	0.109	0.165	266.498272	-28.678259	-669.97	-1767

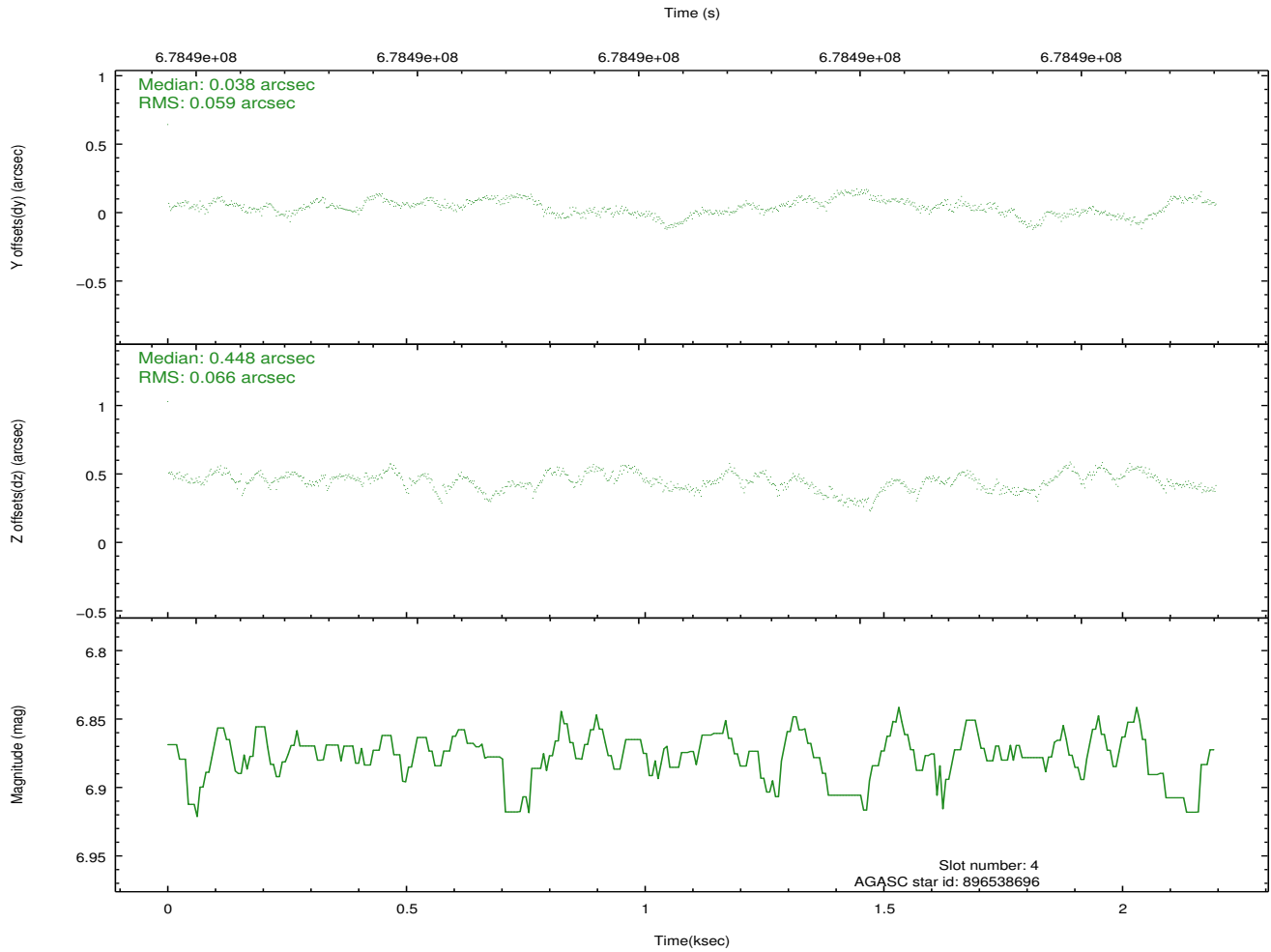
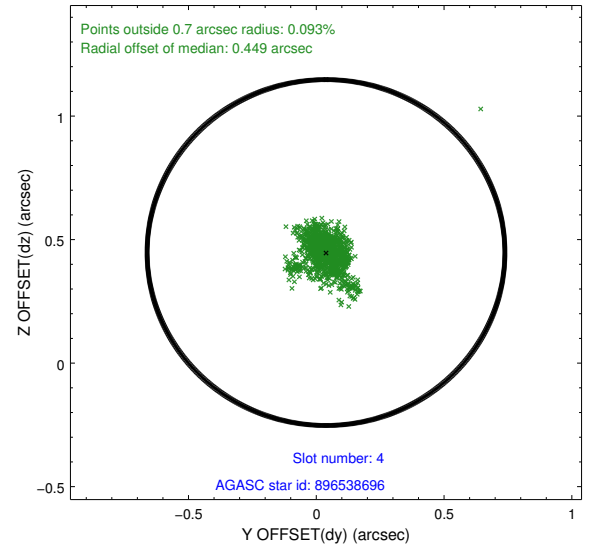
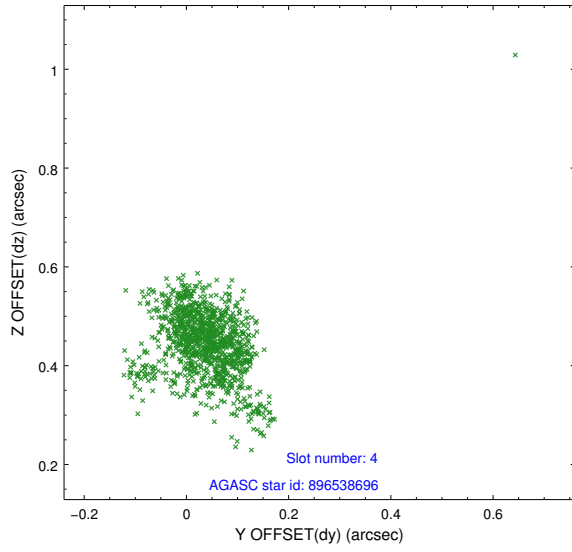


## 2.4 Star Slots

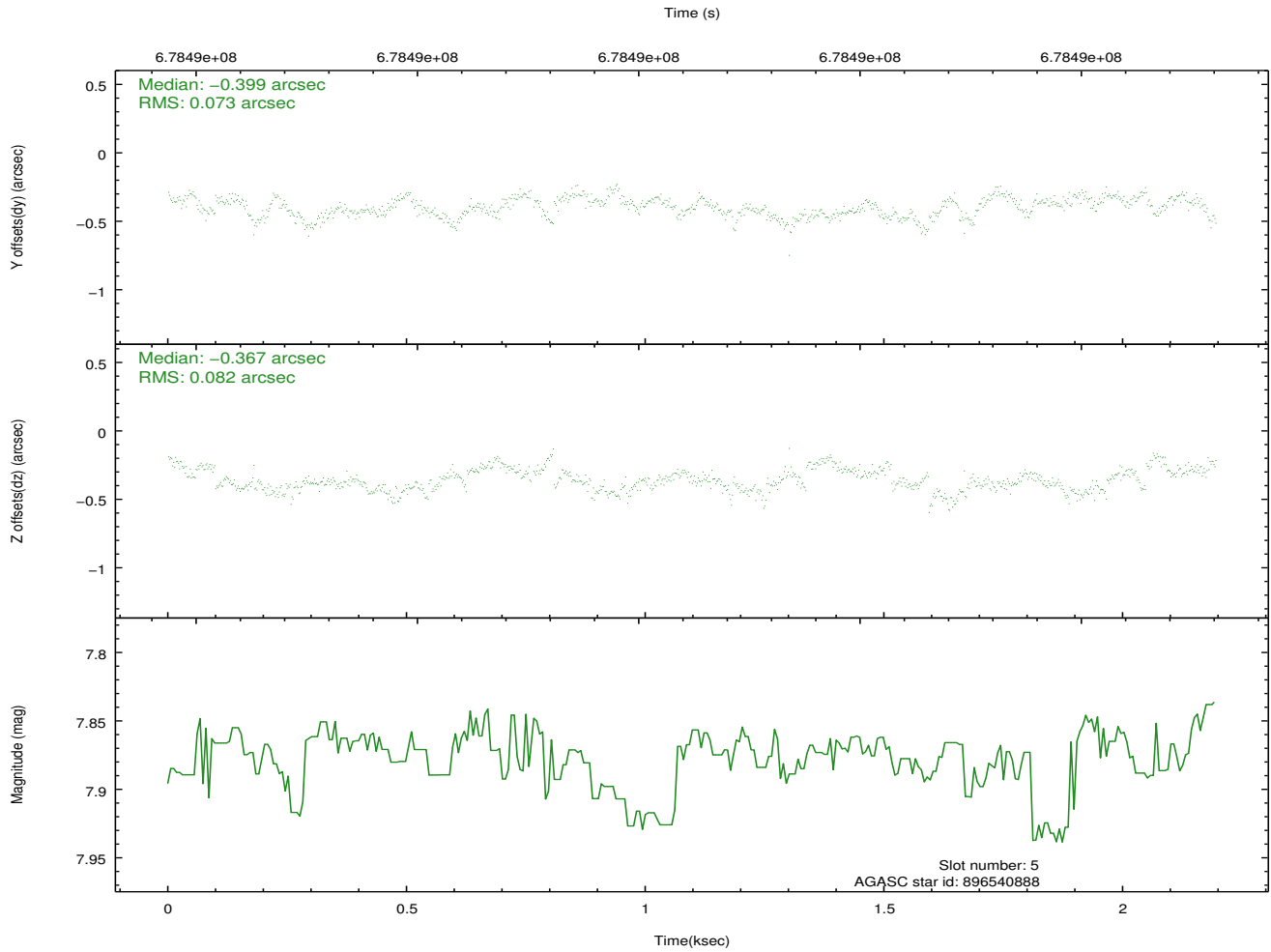
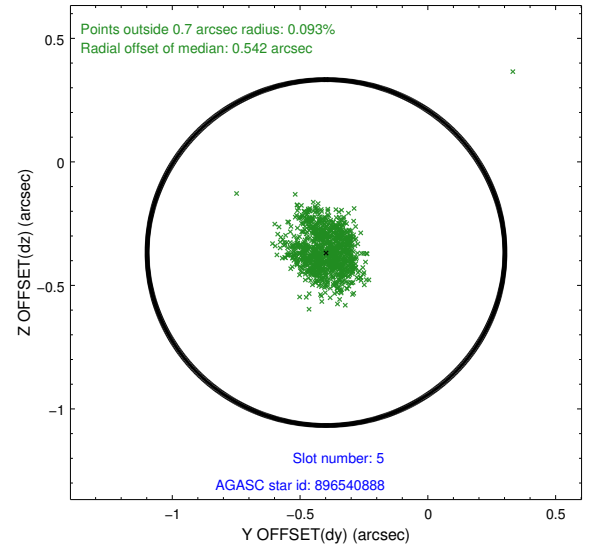
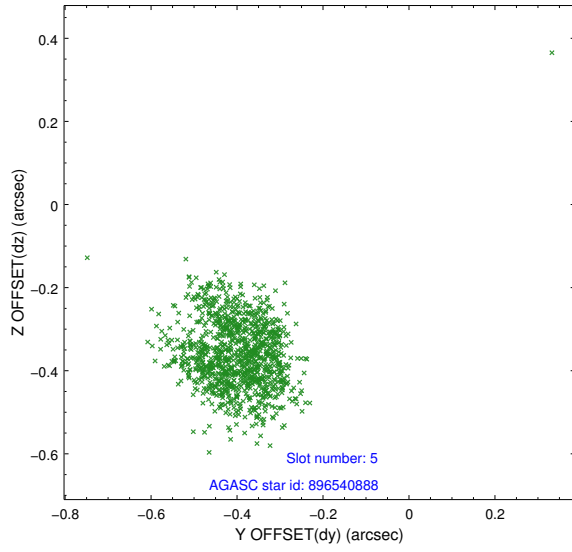
### 2.4.1 Slot 3



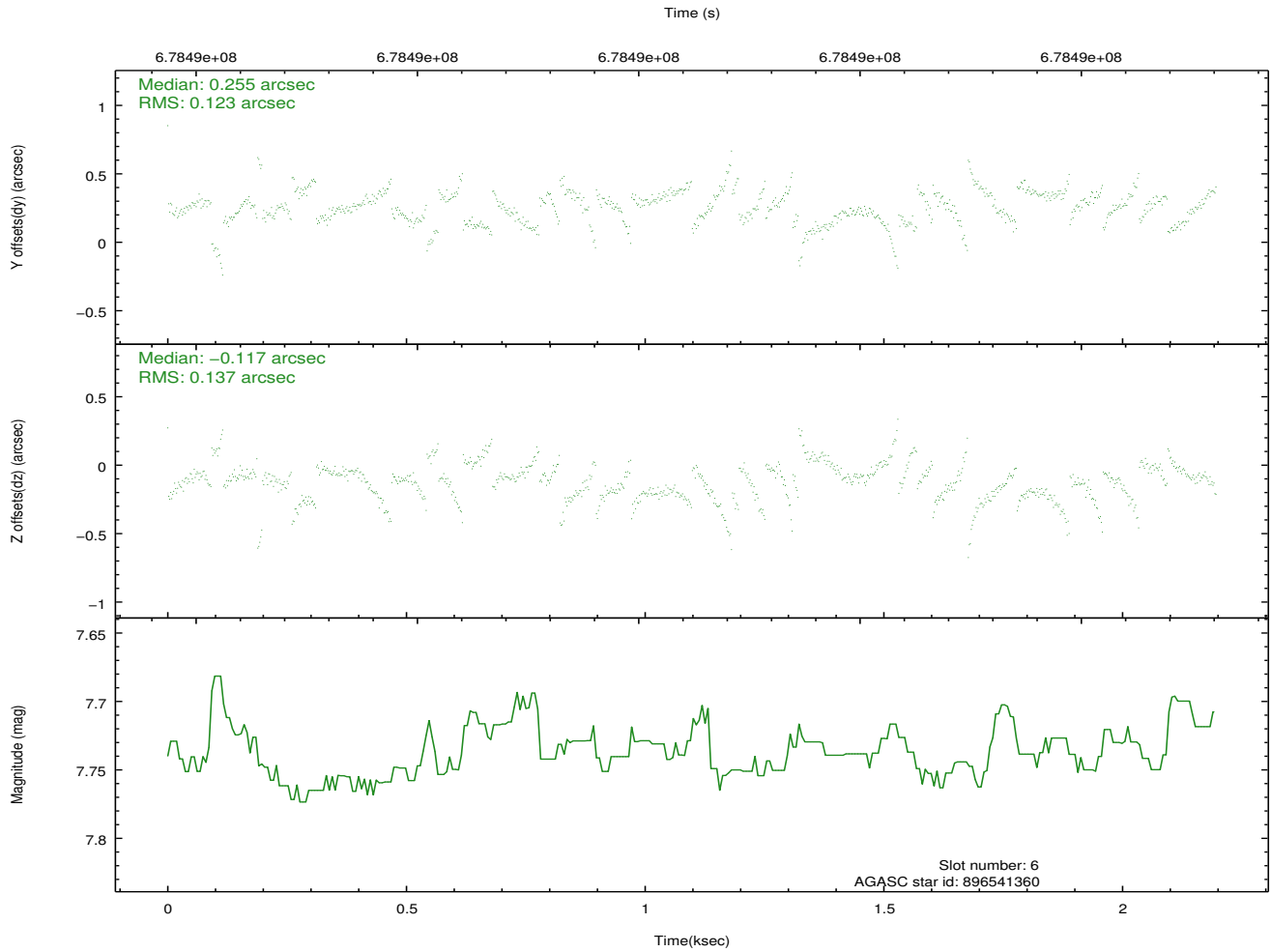
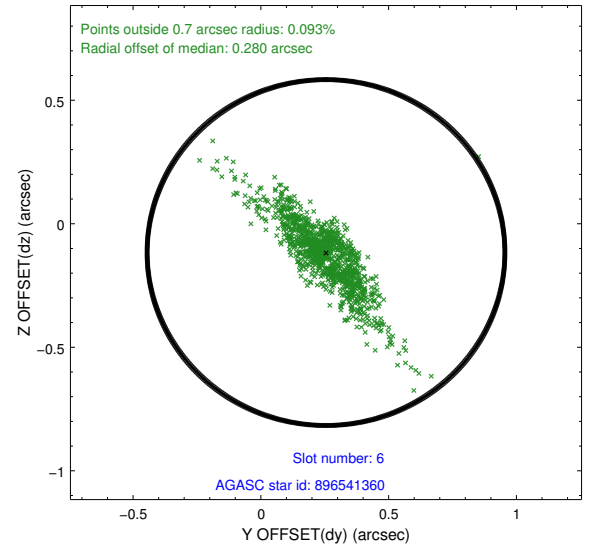
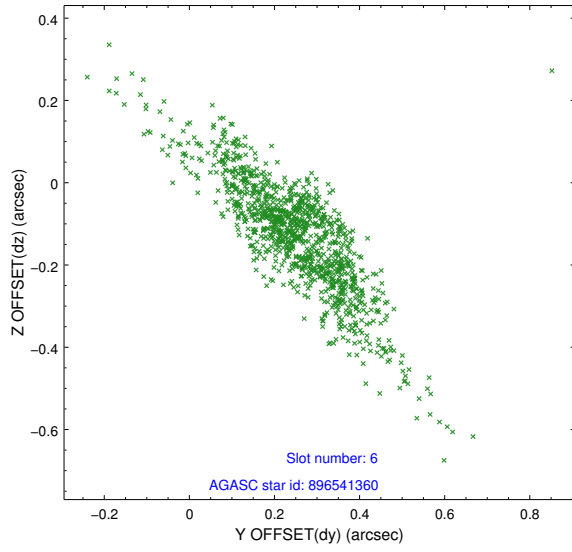
## 2.4.2 Slot 4



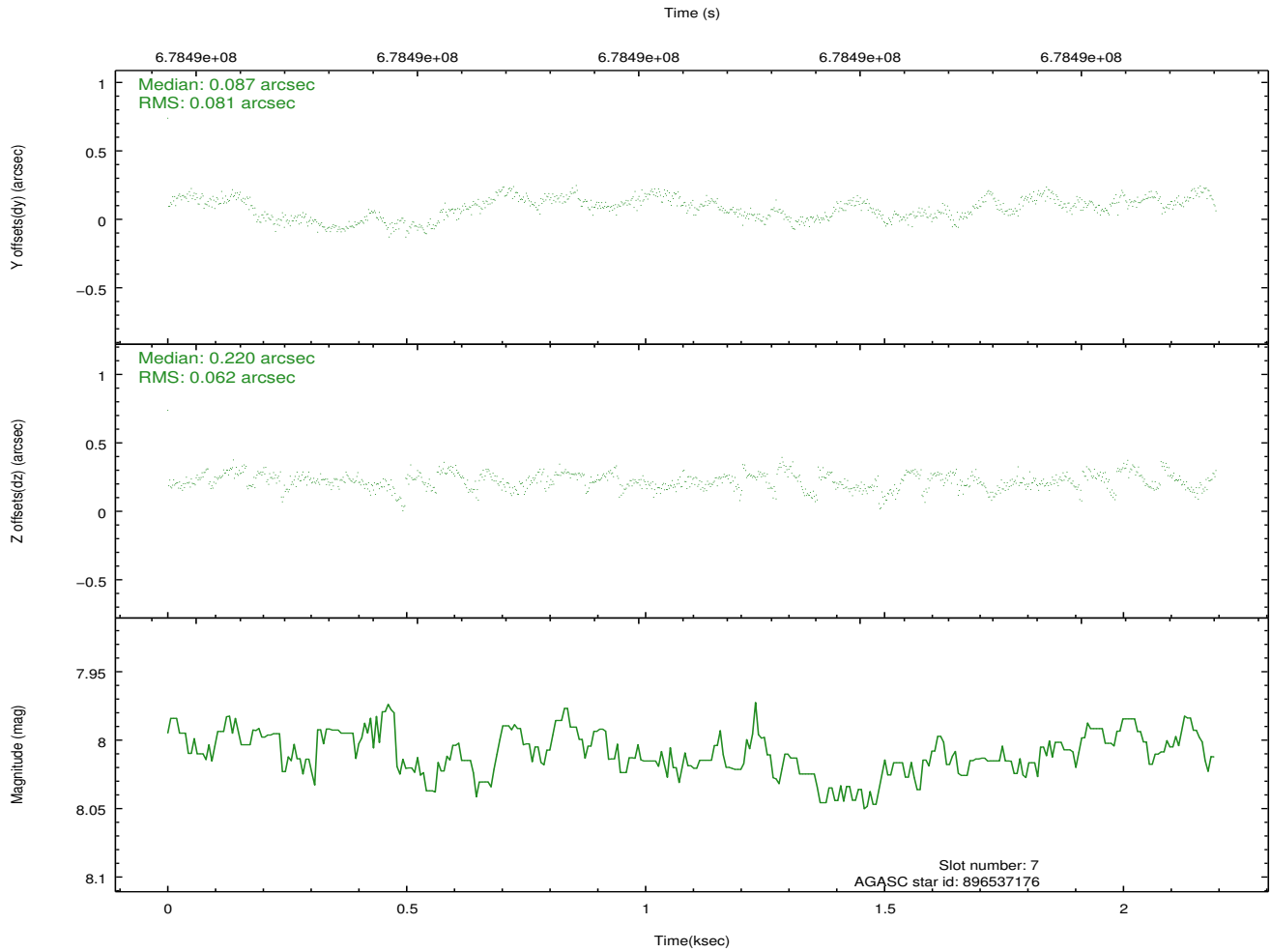
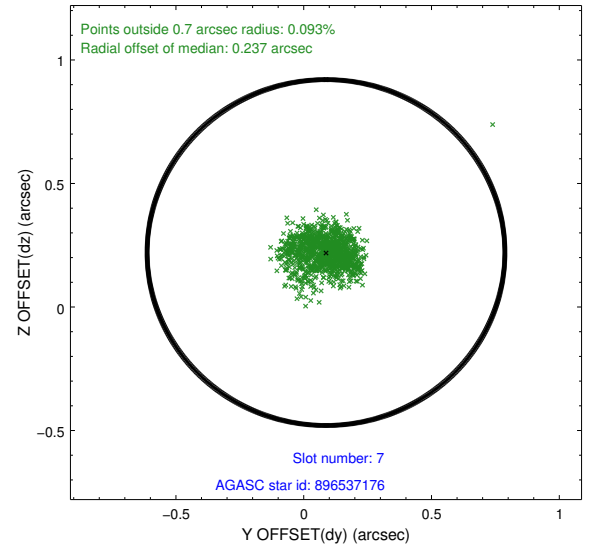
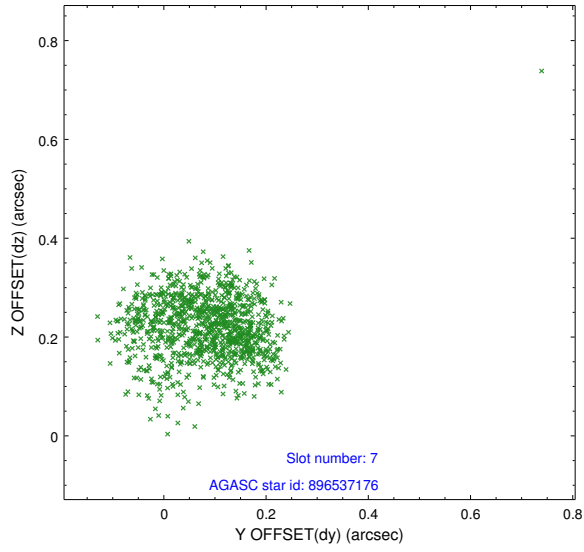
### 2.4.3 Slot 5



## 2.4.4 Slot 6

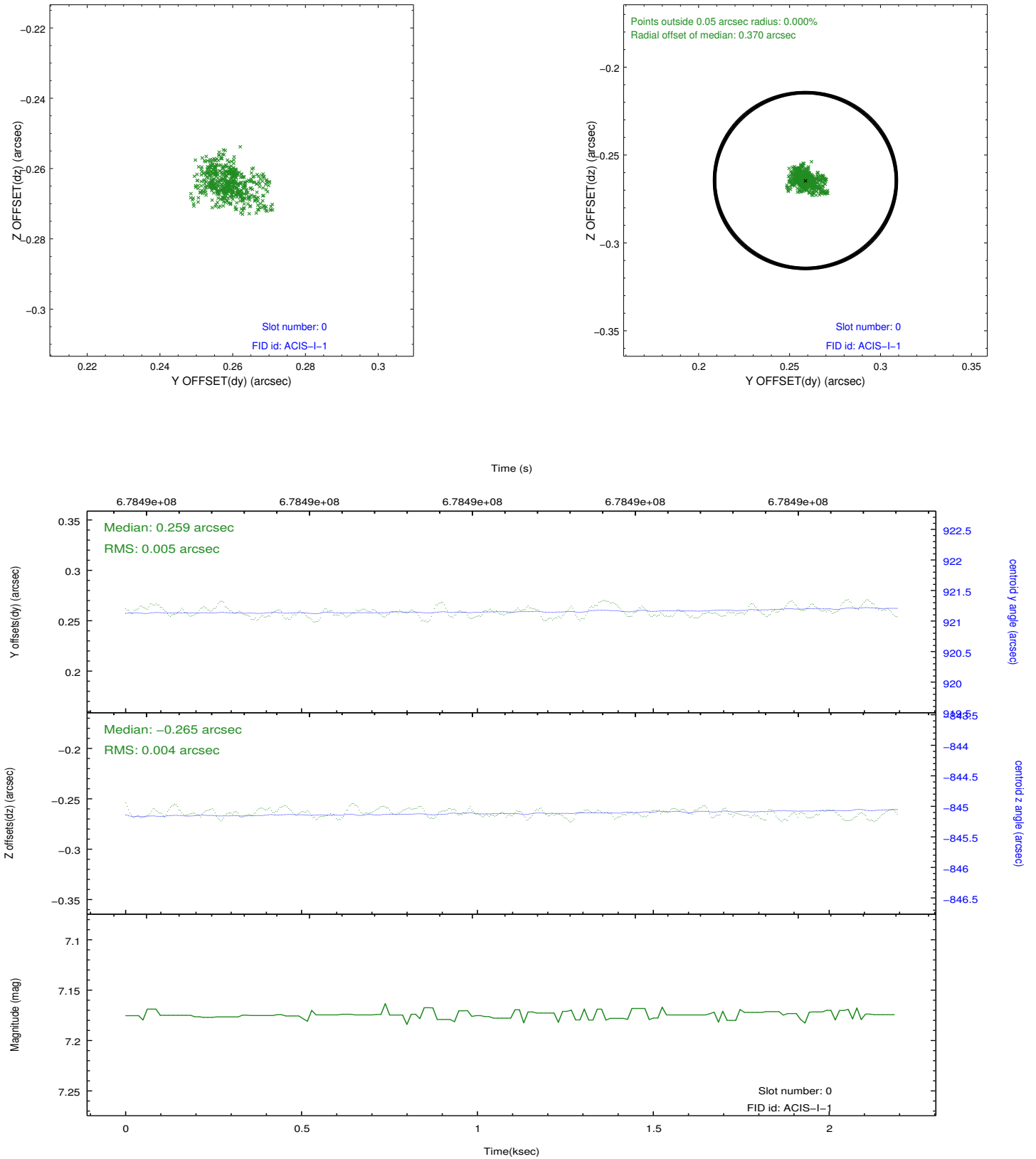


## 2.4.5 Slot 7

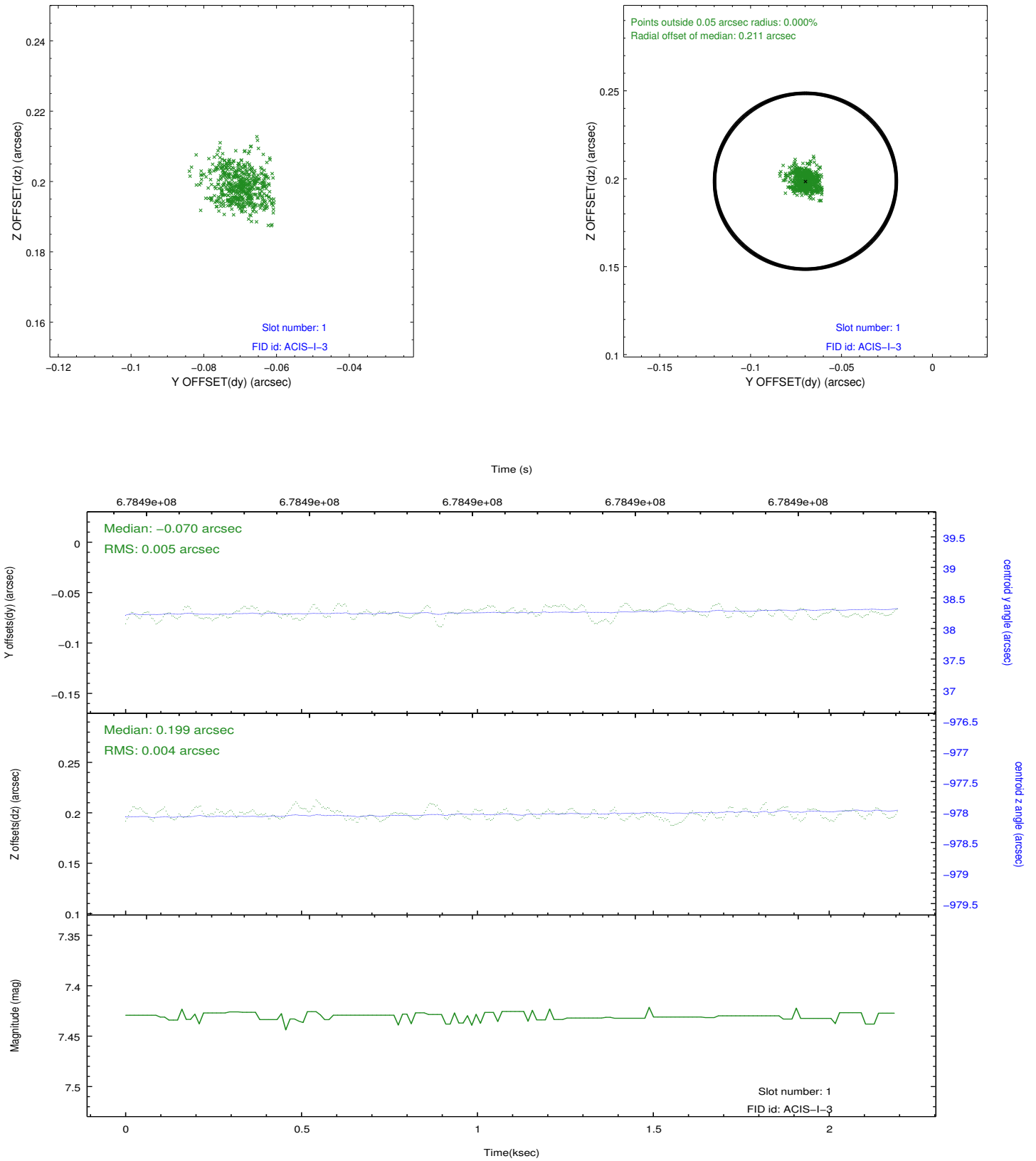


## 2.5 FID Slots

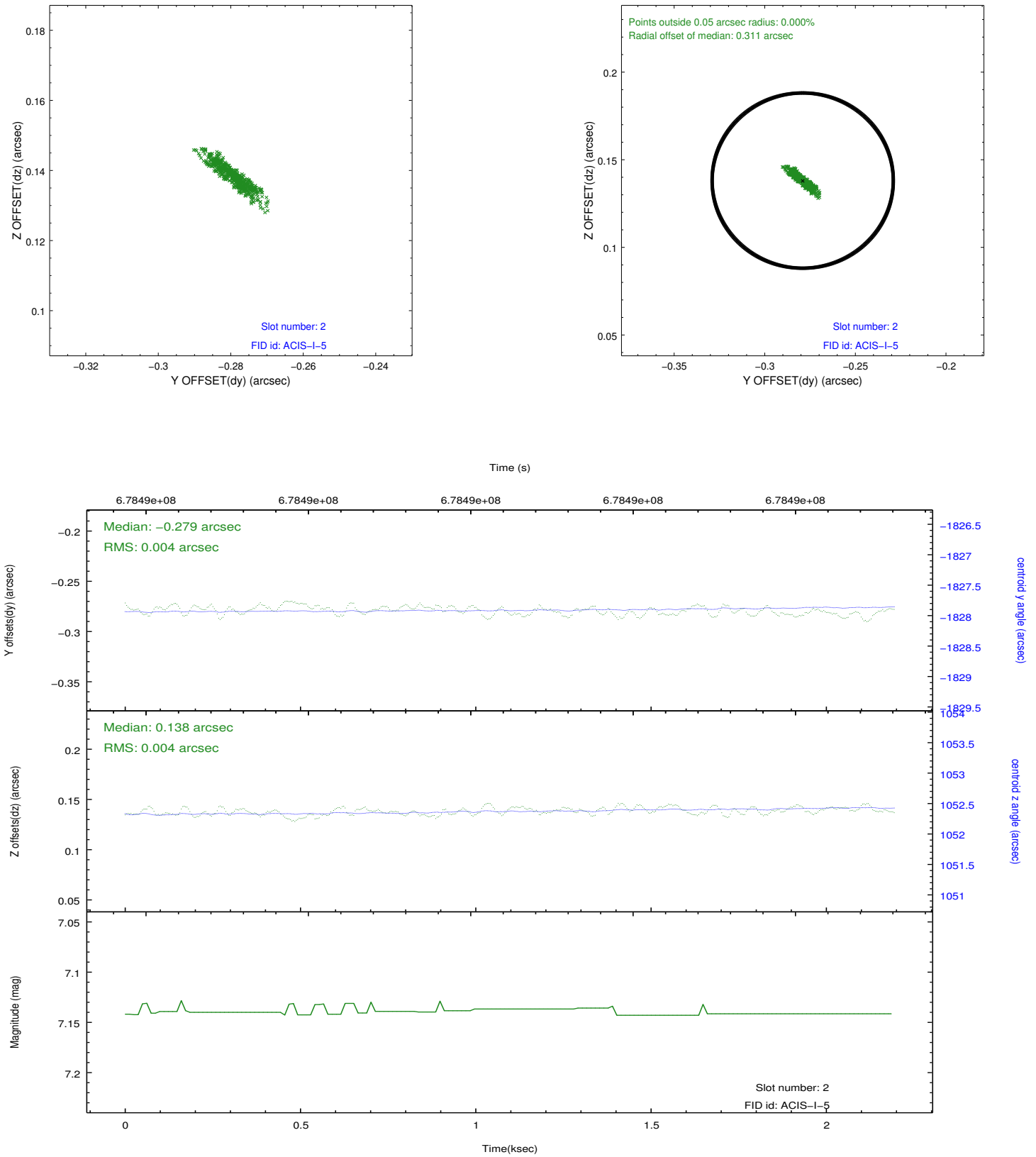
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.07.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9083432241678

### A.2 Comments