

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 14942 - L2 Version 2  
Chandra X-Ray Center

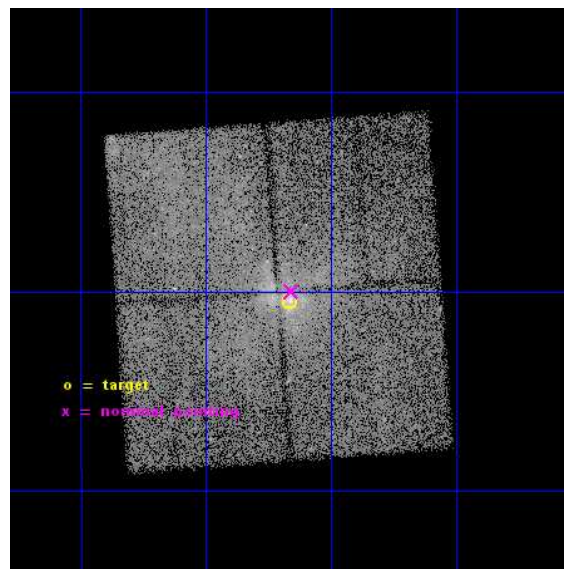
L2 Processing Date : Dec 2 2014

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# 1 Front

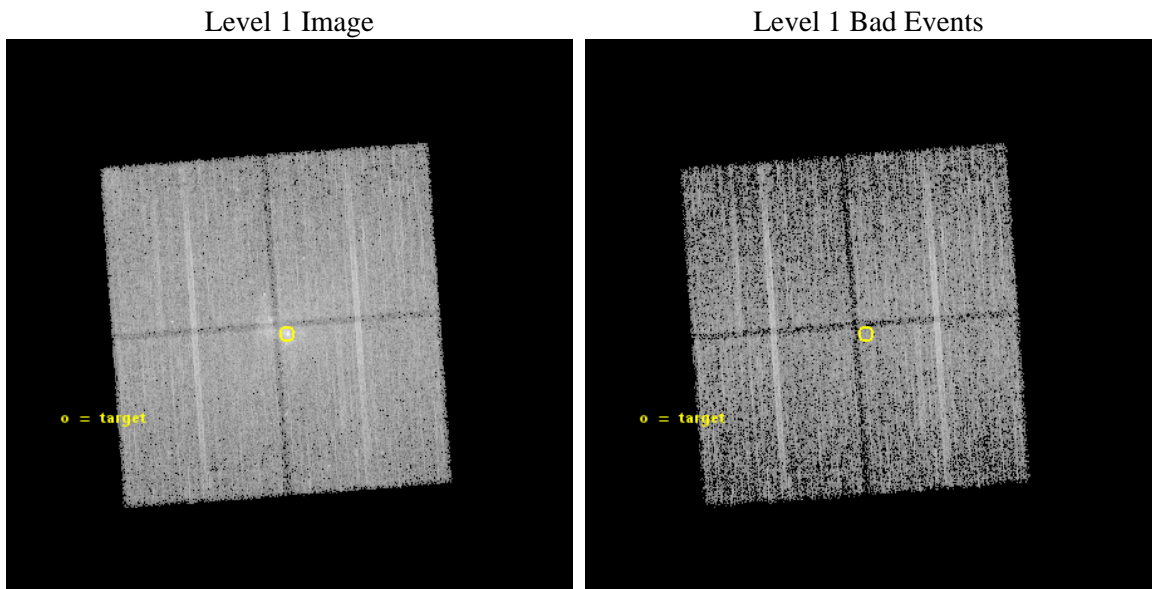
seq_num	601072	Sequence number
obs_id	14942	Observation id
title	Monitoring the Tidal Disruption of a Gas Cloud Approaching Sgr A*	&#160
observer	Dr. Frederick Baganoff	Principal investigator
object	Sgr A*	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007806	Observer's specified target Dec [deg]
ra_nom	266.41459154763	Nominal RA [deg]
dec_nom	-28.999959915518	Nominal Dec [deg]
roll_nom	85.795422991954	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20090.236345112	Sum of GTIs [s]
livetime	19827.742617047	Livetime [s]
ontime0	20090.113225102	Sum of GTIs [s]
ontime1	20090.154265106	Sum of GTIs [s]
ontime2	20090.195305109	Sum of GTIs [s]
ontime3	20090.236345112	Sum of GTIs [s]
l2events	124853	Number of level 2 events



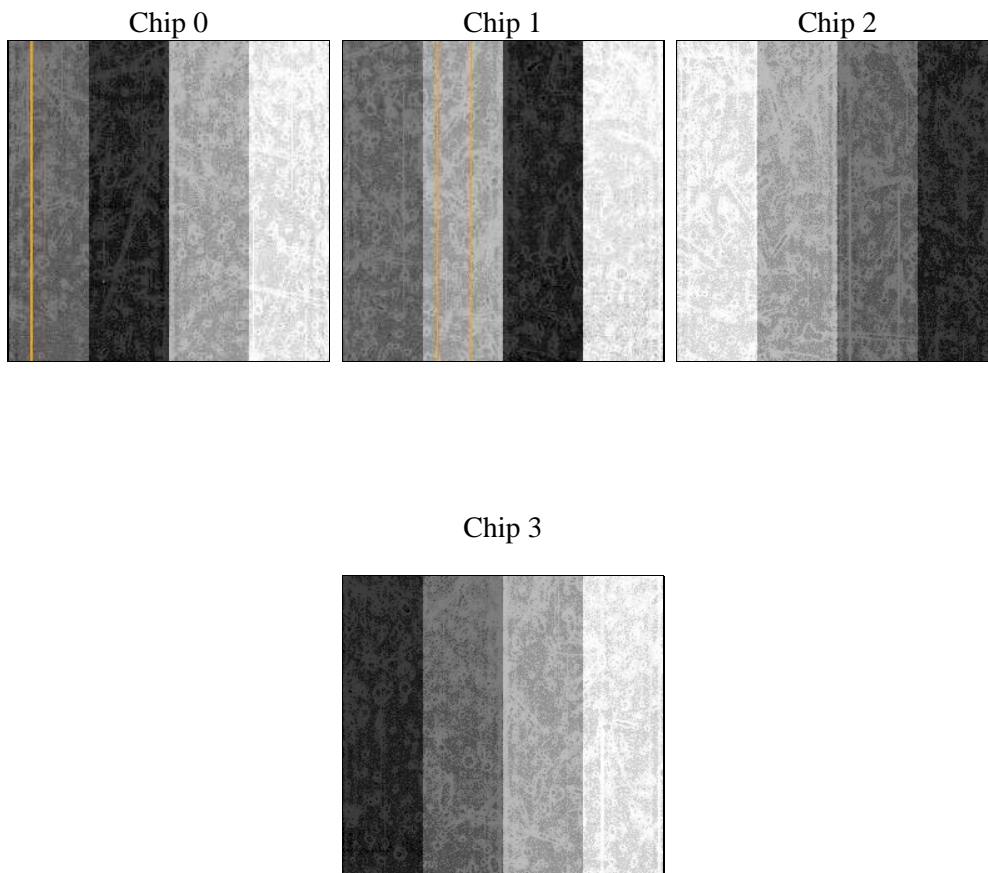
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	20090.236345112	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime0	20090.113225102	Sum of GTIs [s]
date	2014-12-02T18:18:57	Date and time of file creation	ontime1	20090.154265106	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20090.195305109	Sum of GTIs [s]
			ontime3	20090.236345112	Sum of GTIs [s]
			l1events	471353	Number of level 1 events

### 2.1.4 Events

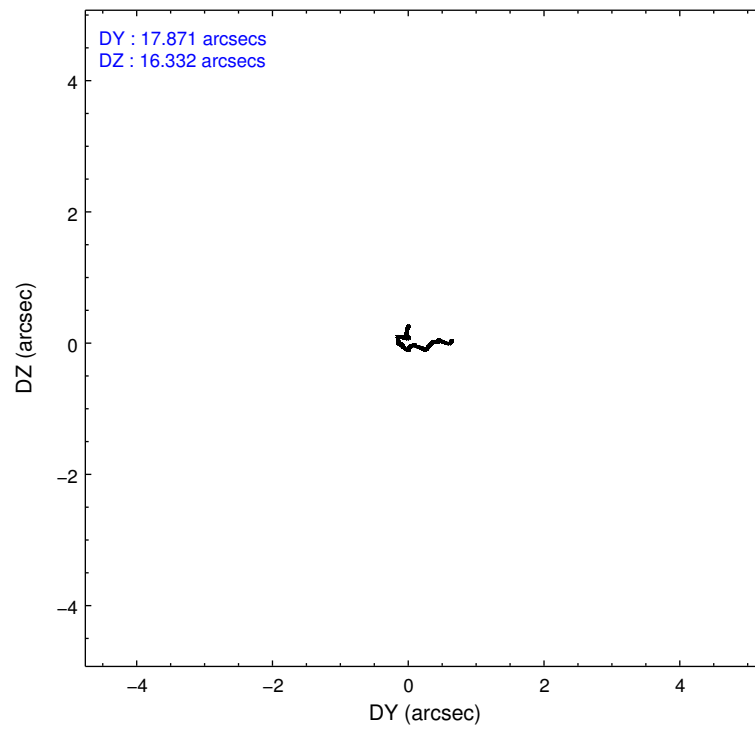
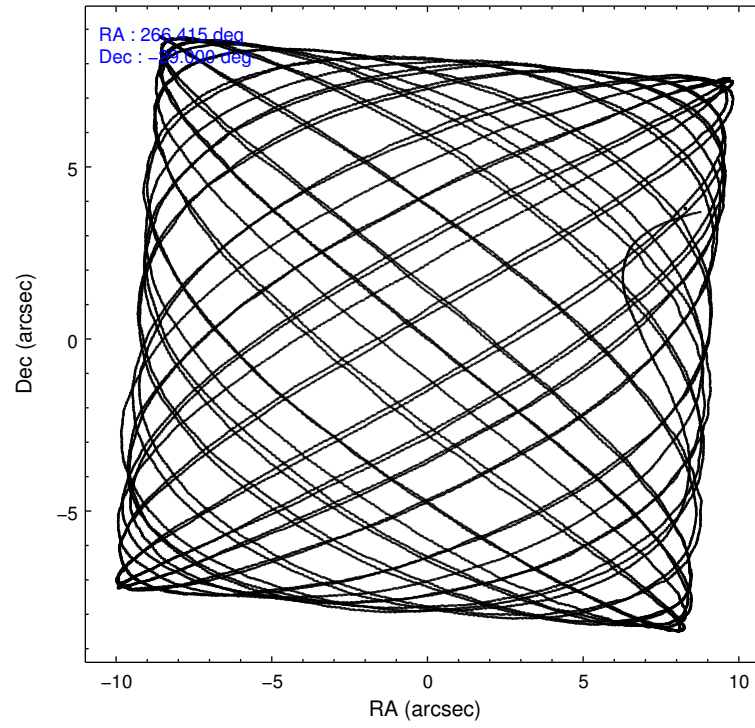
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	120603	110521	119948	120281
rejected events	77628	77817	91717	86467
rejected %	64%	70%	76%	71%

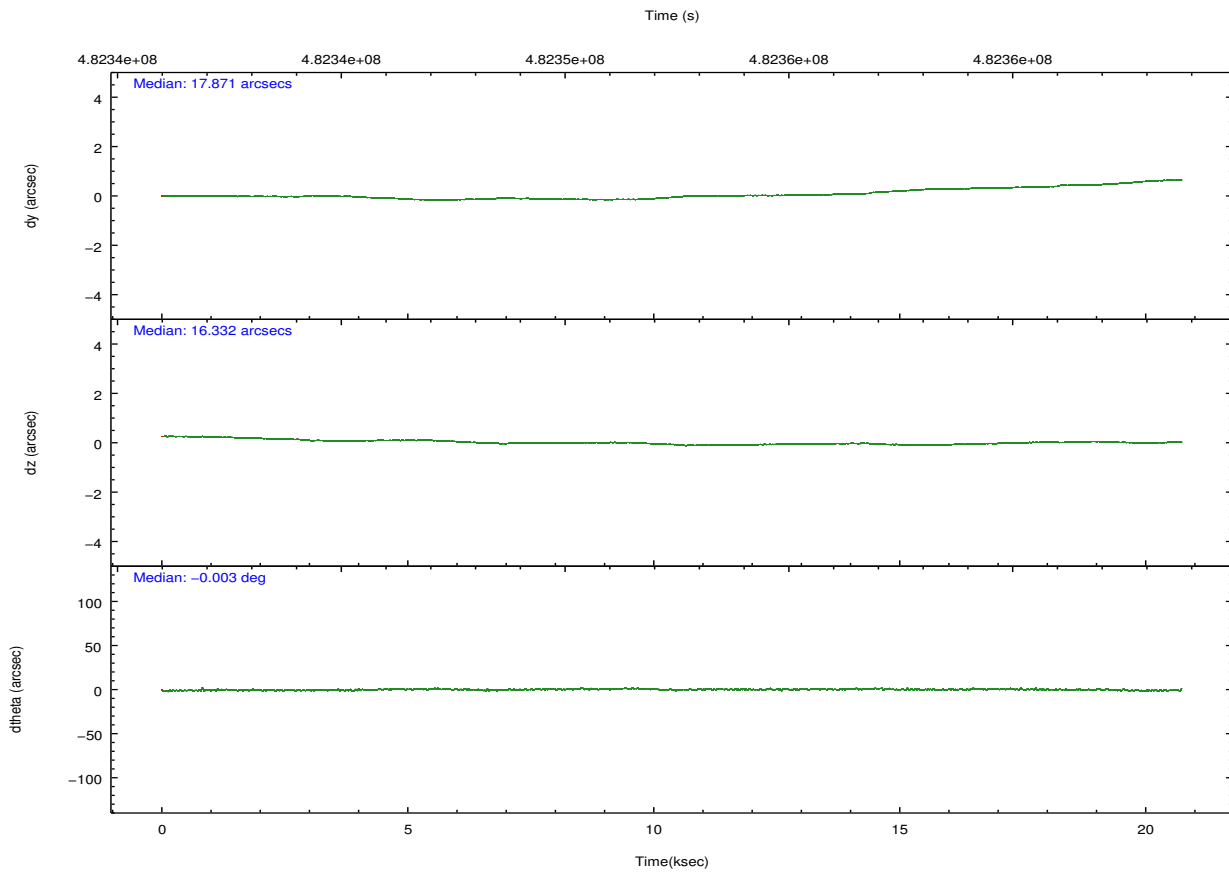
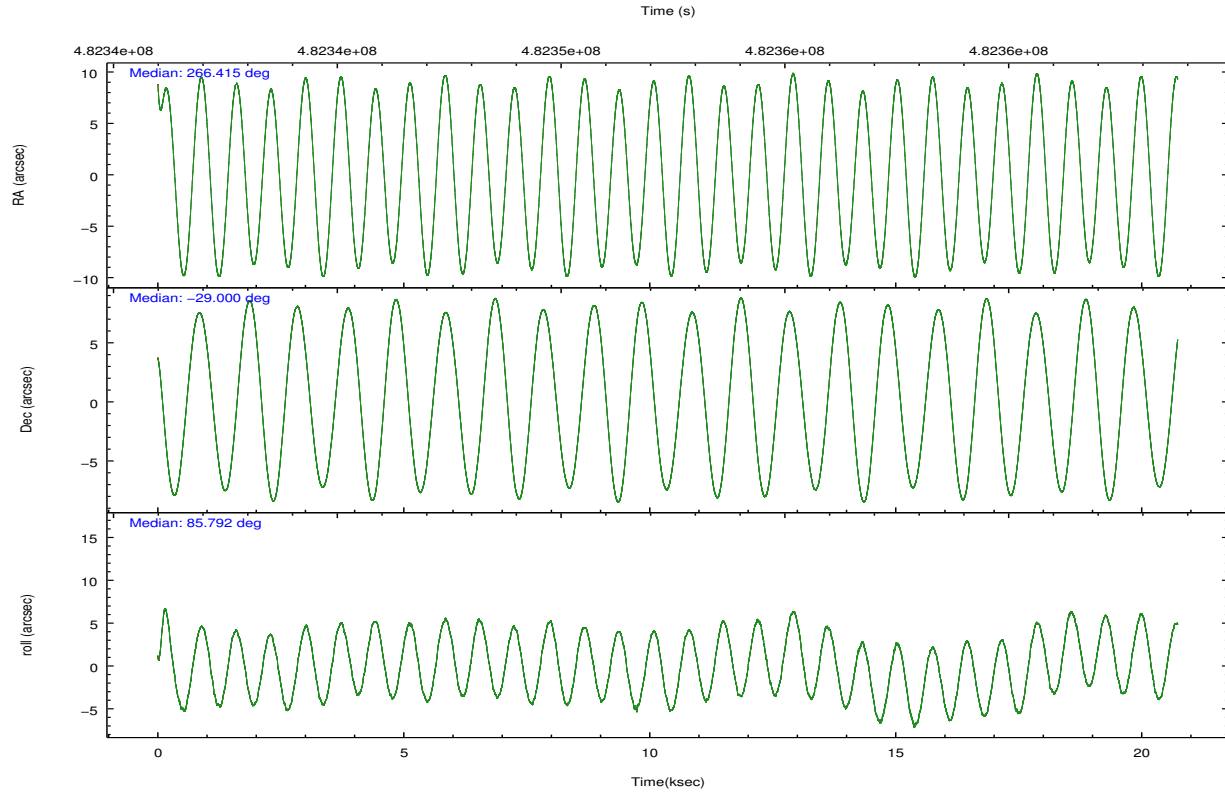
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	26030	18404	16102	19912
	21%	16%	13%	16%
grade 1 events	166	97	117	126
	0%	0%	0%	0%
grade 2 events	7190	6019	4991	5314
	5%	5%	4%	4%
grade 3 events	2692	2107	1987	2235
	2%	1%	1%	1%
grade 4 events	2585	2142	1853	2340
	2%	1%	1%	1%
grade 5 events	4661	5089	4247	5412
	3%	4%	3%	4%
grade 6 events	4491	4042	3312	4026
	3%	3%	2%	3%
grade 7 events	72788	72621	87339	80916
	60%	65%	72%	67%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.428370	266.4145915476253	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.024640	-28.99995991551848	Alternating exposures requested	N	N
[deg] Pointing Roll	85.593413	85.79542299195415	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	481680067.184000	481680067.184000			
[s] Window stop time (MET)	482976067.184000	482976067.184000			
[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)	482342748.184000	482341374.98768			
Observation start date	2013-04-14T16:04:41	2013-04-14T15:42:54			
[s] Observation end time (MET)	482362748.184000	482363483.21388			
Observation end date	2013-04-14T21:38:01	2013-04-14T21:51:23			
Read mode	TIMED	TIMED			

## 2.3 Aspect





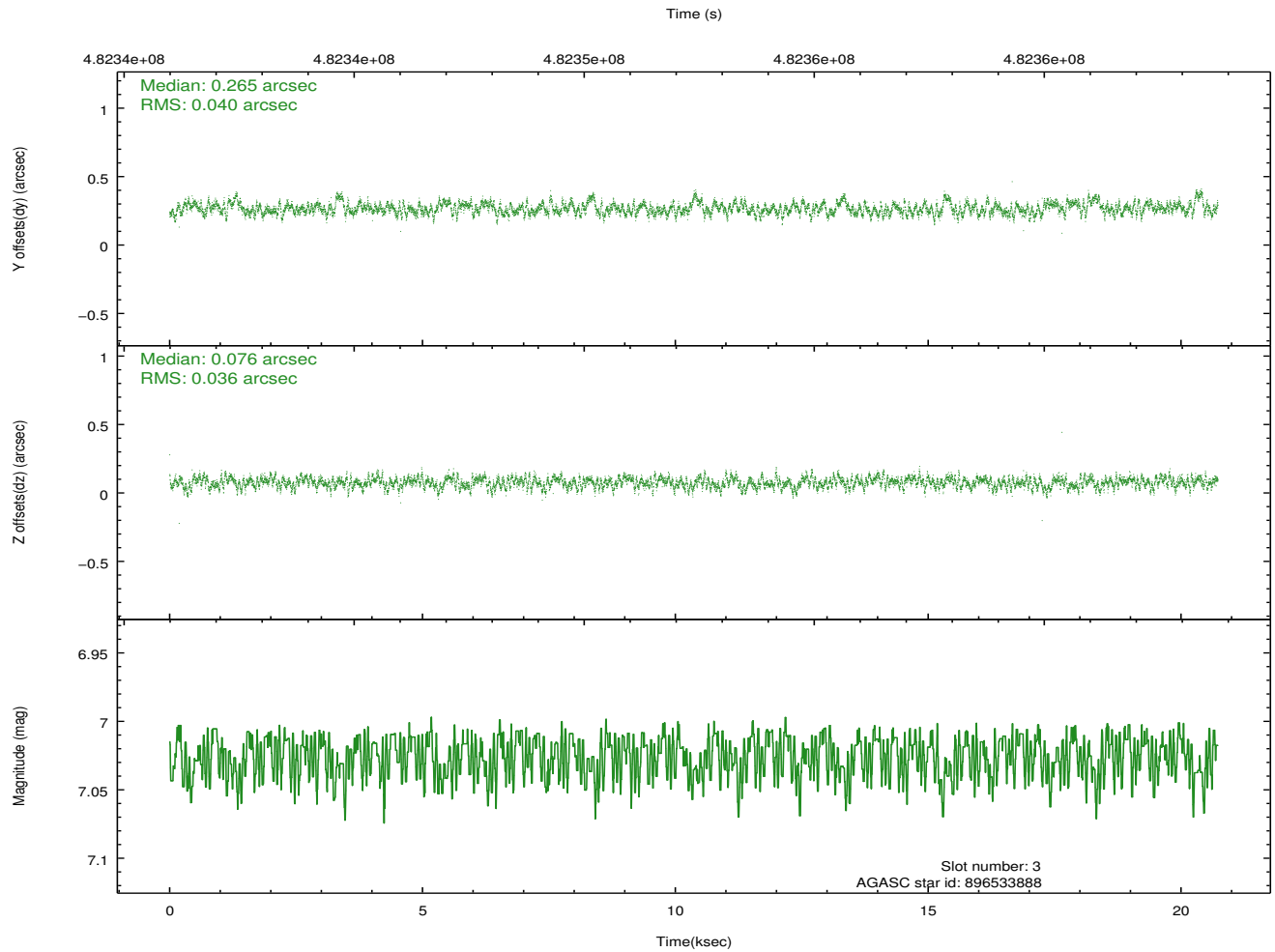
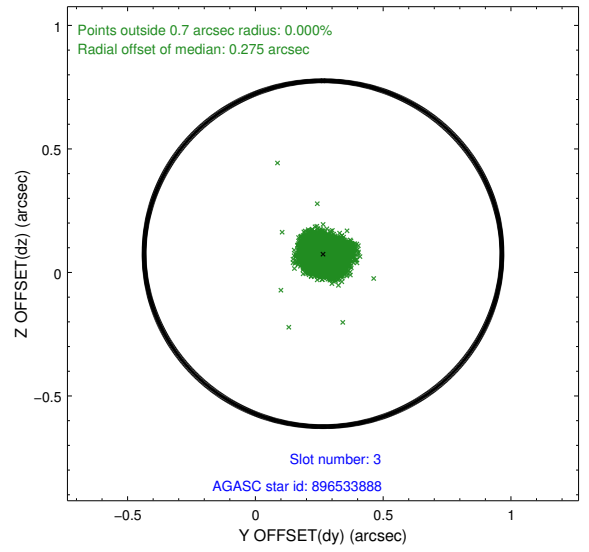
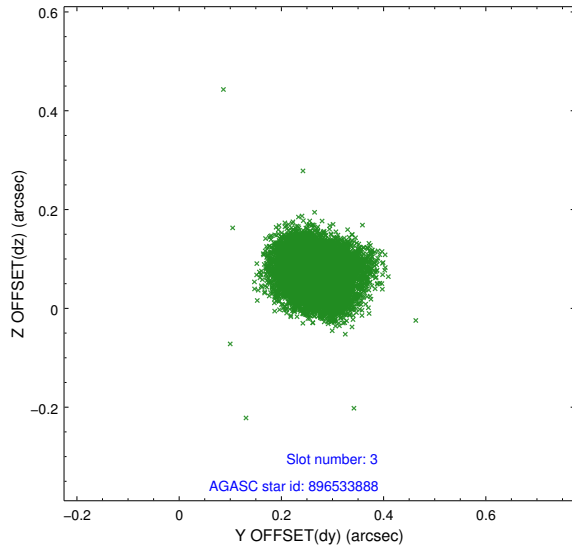
### Slot Statistics

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	5057	-0.027	-0.074	0.010	0.016	0.000000	0.000000	921.42	-840.04
1	FID		ACIS-I-4	7.00	5057	0.229	0.088	0.008	0.014	0.000000	0.000000	2141.78	1059.86
2	FID		ACIS-I-5	7.05	5057	-0.300	0.057	0.008	0.016	0.000000	0.000000	-1826.66	1057.81
3	GUIDE	used	896533888	7.03	10111	0.265	0.076	0.057	0.092	266.666434	-29.392757	-1264.15	-846.19
4	GUIDE	used	896534664	8.20	10109	-0.701	-0.397	0.057	0.100	266.405570	-28.407461	2209.10	242.58
5	GUIDE	used	896537176	8.03	10111	-0.063	-0.032	0.061	0.097	266.498272	-28.678259	1260.56	-124.03
6	GUIDE	used	896538208	7.96	10112	0.048	0.247	0.057	0.092	267.176969	-28.671626	1441.91	-2259.94
7	GUIDE	used	896537776	7.53	10112	0.454	0.106	0.056	0.093	266.655684	-29.665673	-2246.09	-886.42

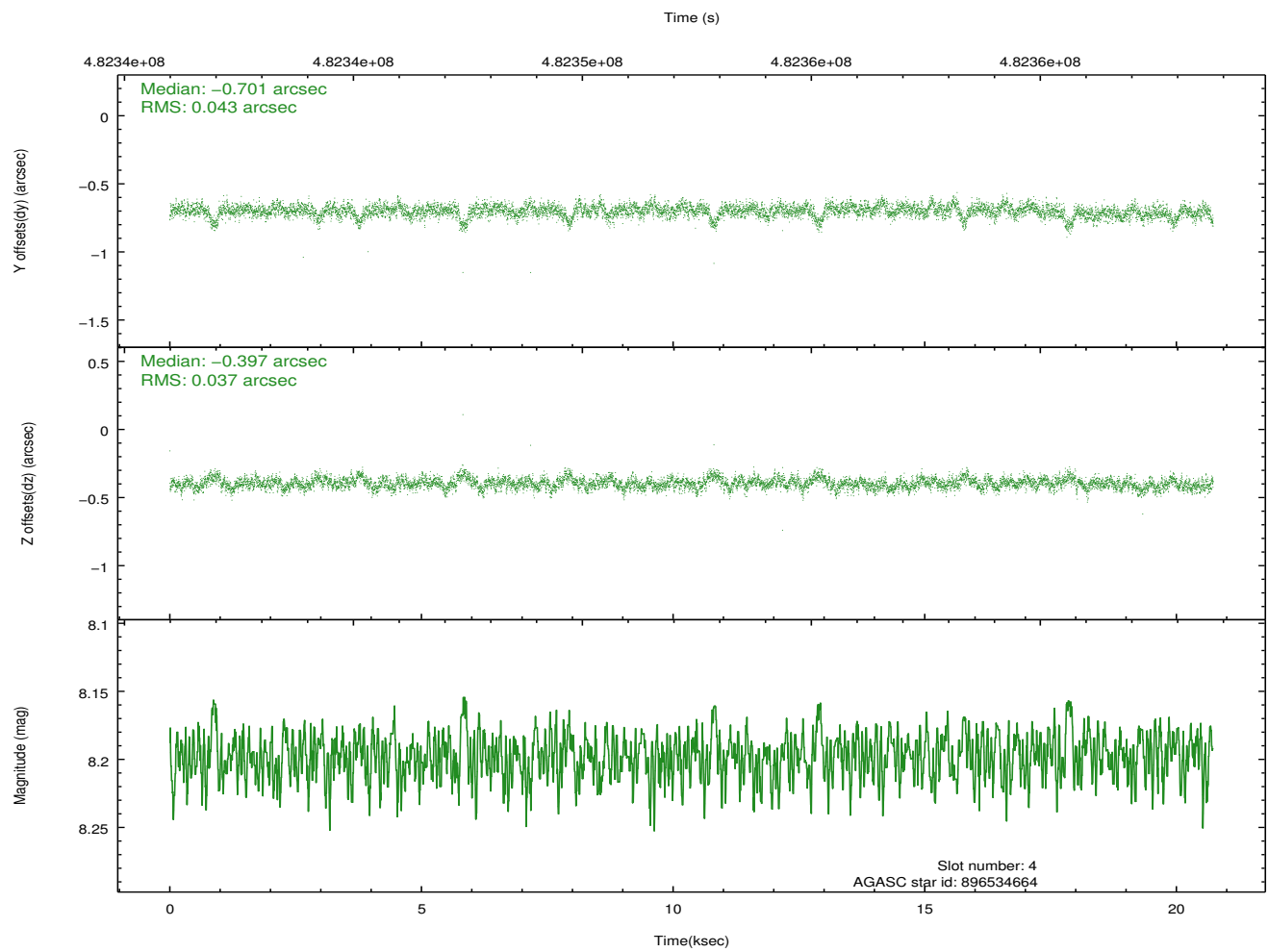
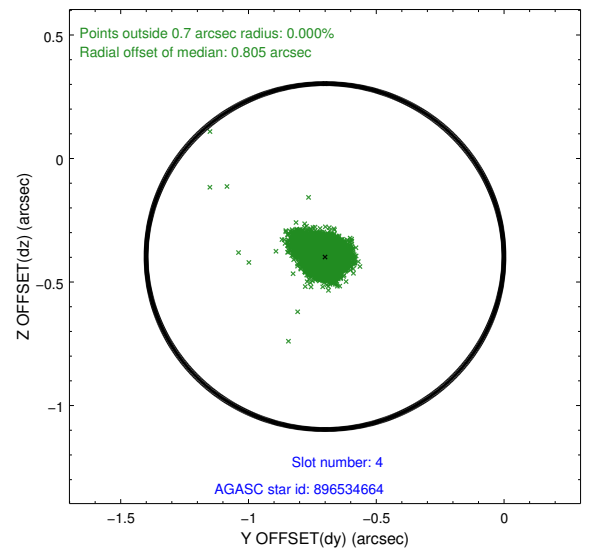
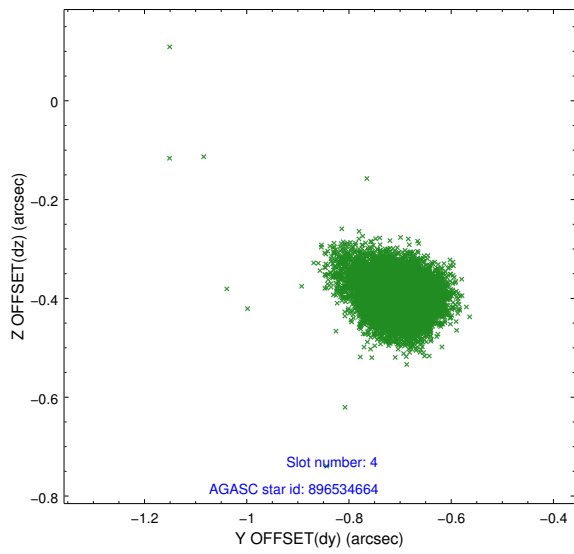
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## 2.4 Star Slots

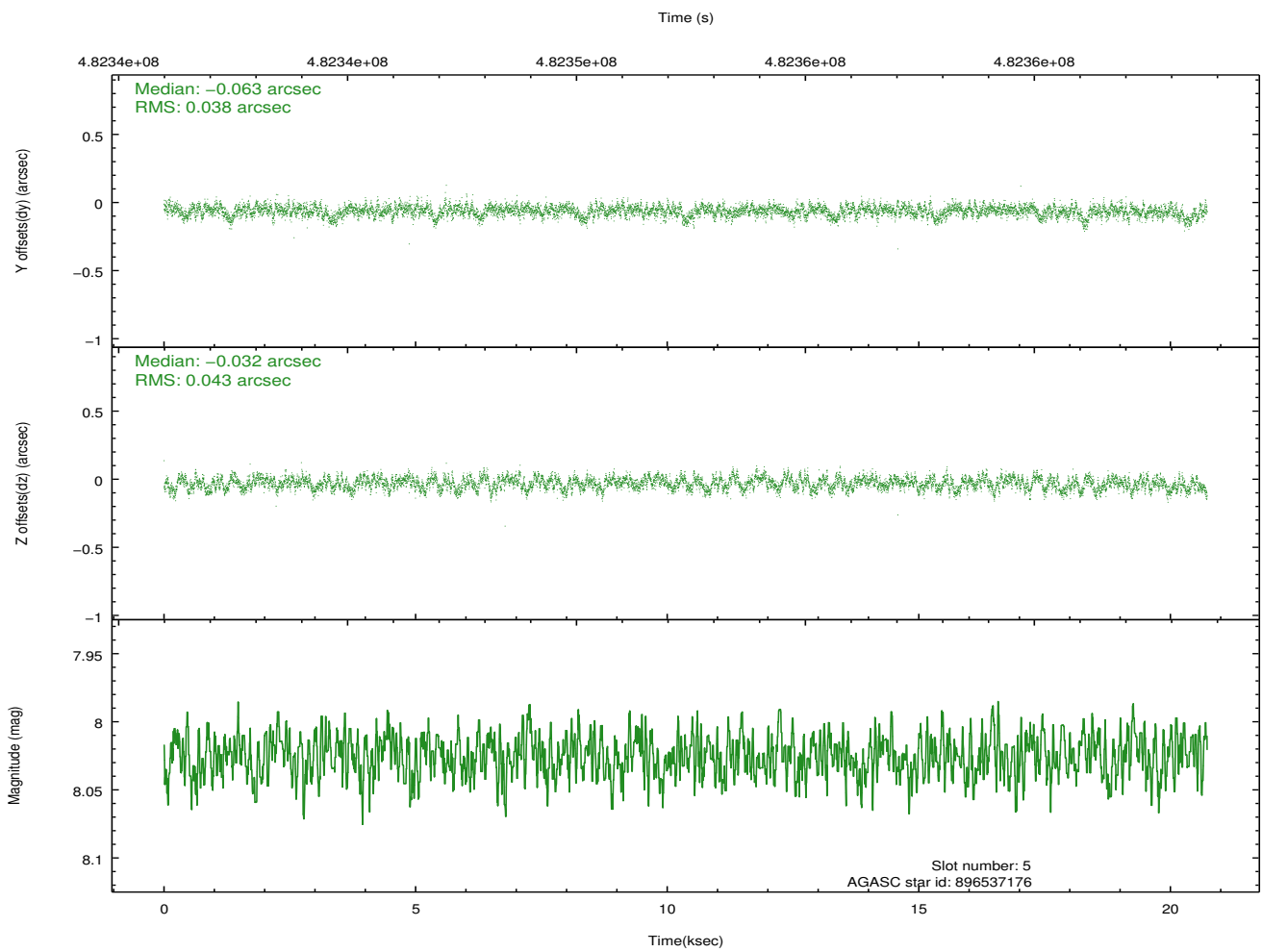
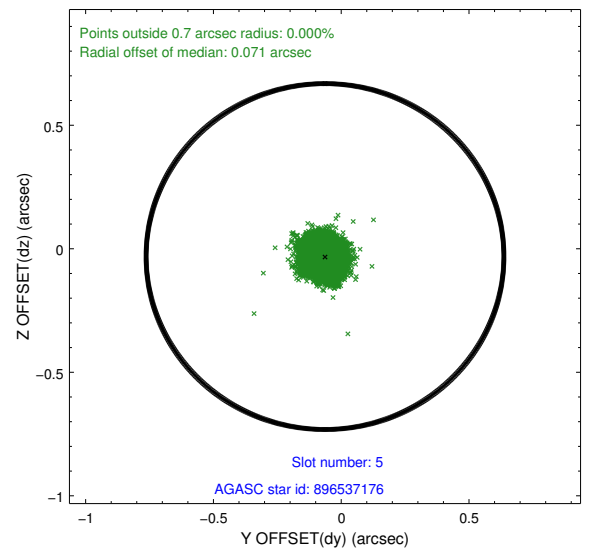
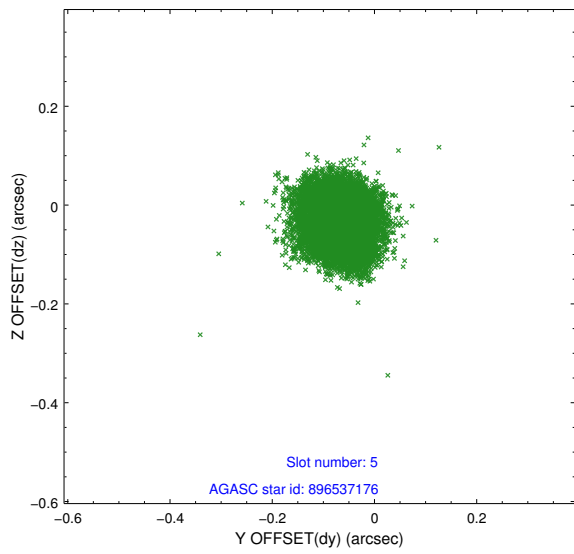
### 2.4.1 Slot 3



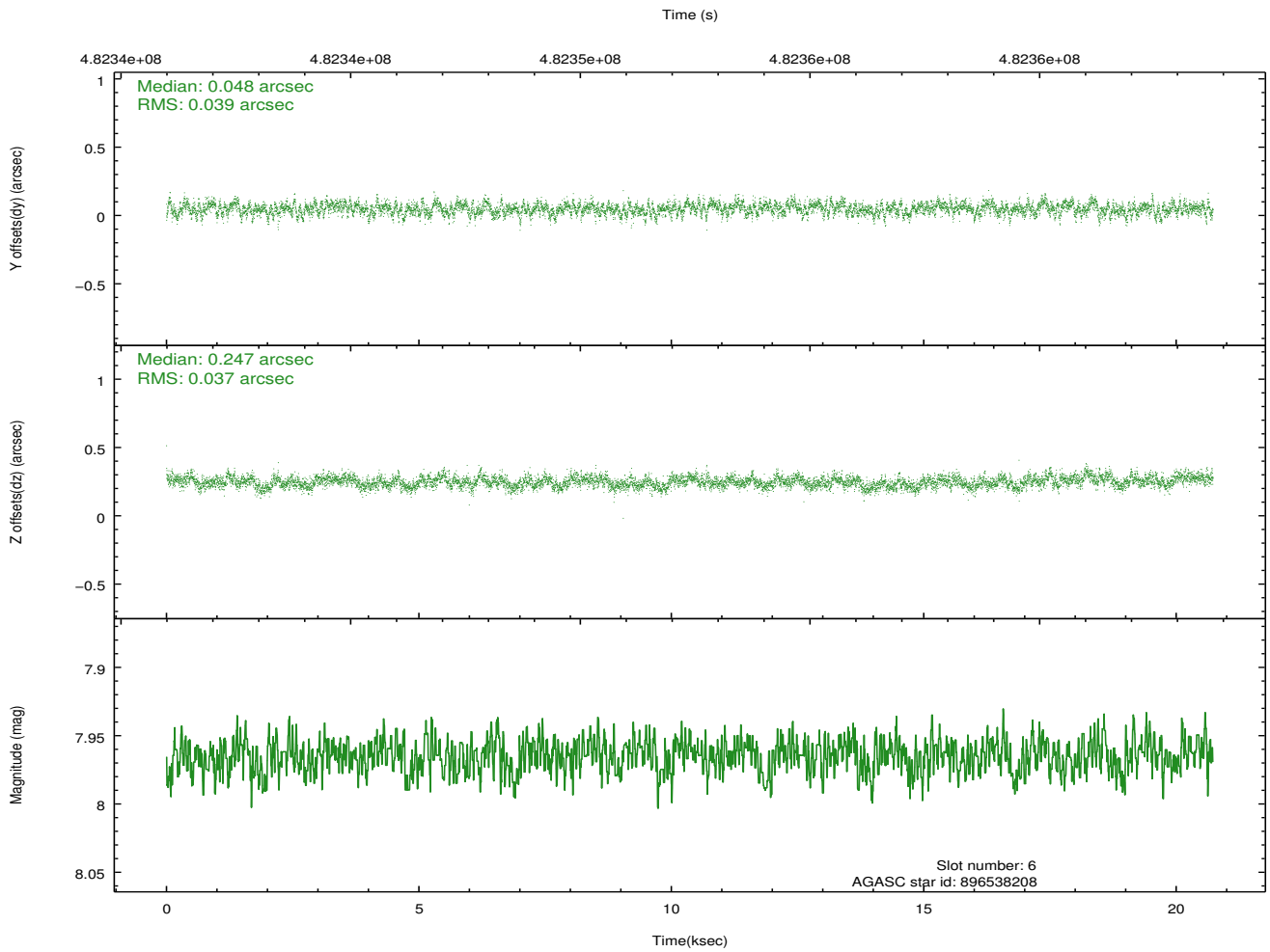
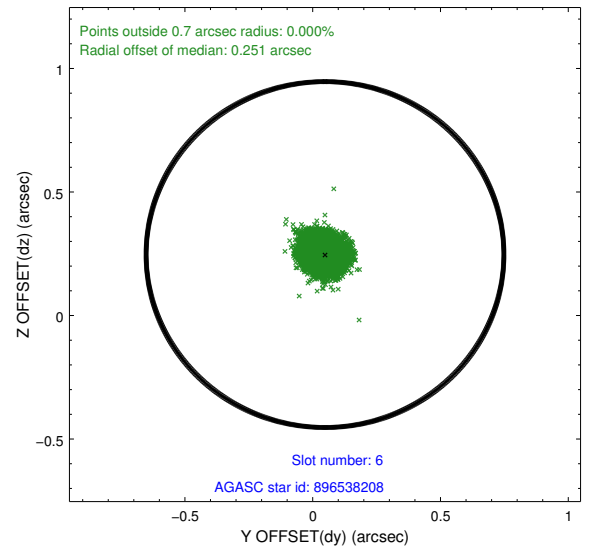
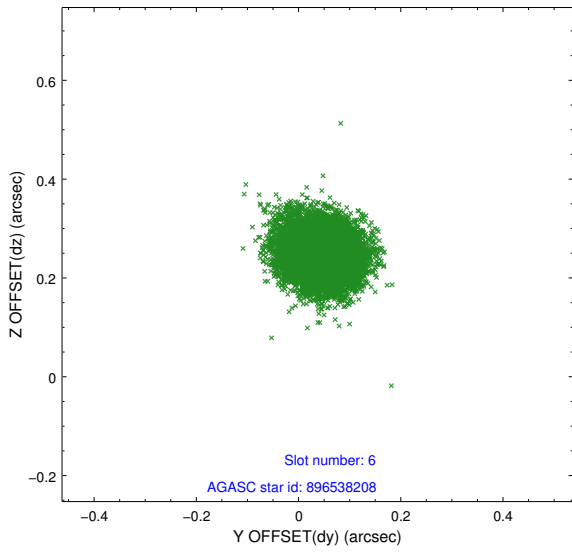
## 2.4.2 Slot 4



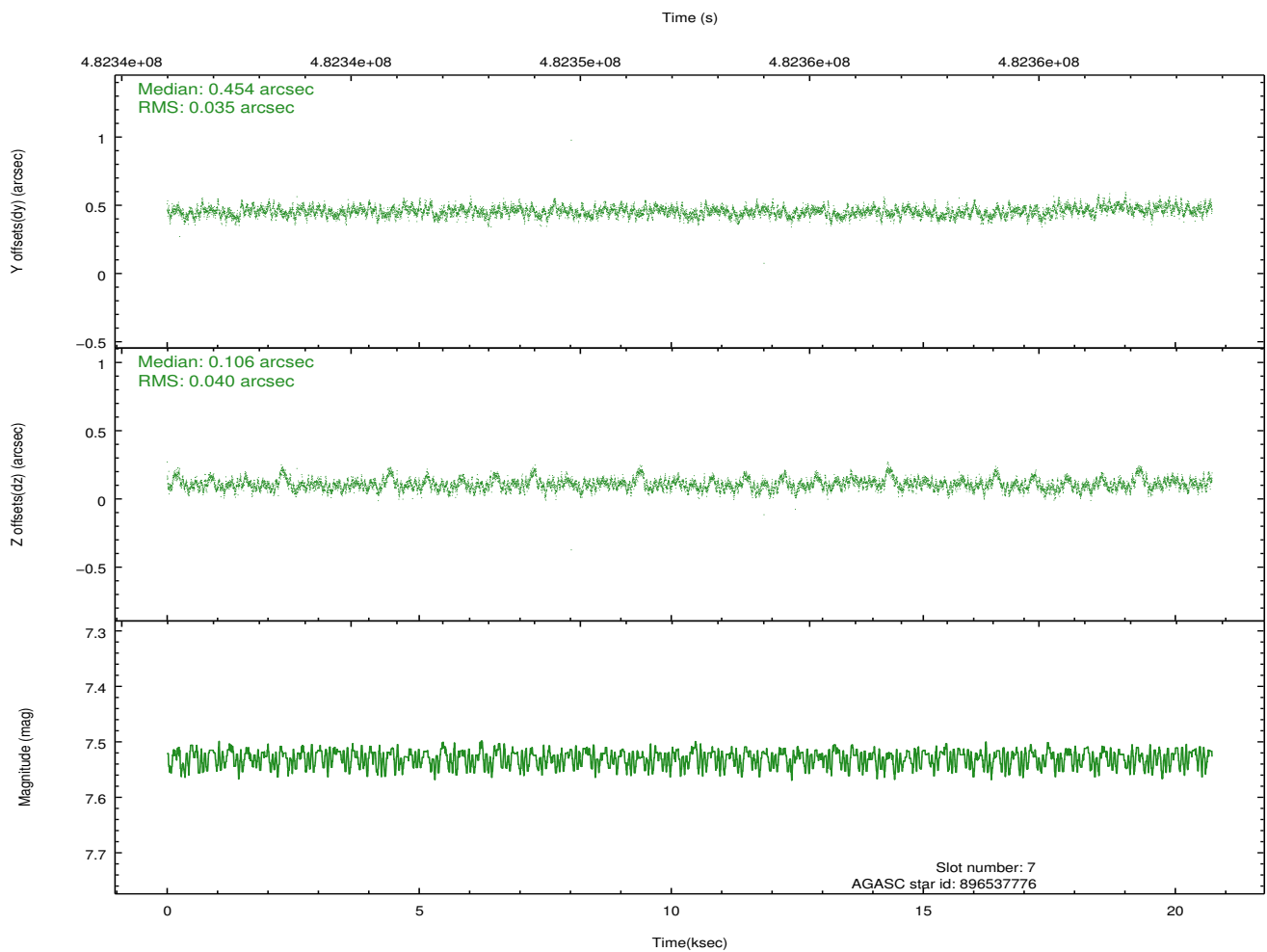
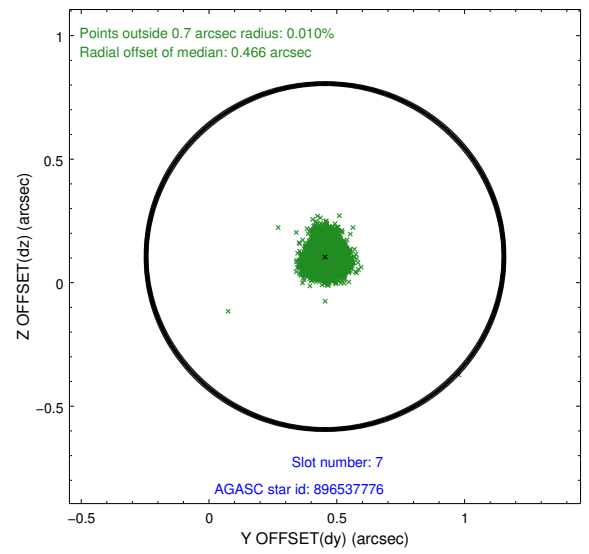
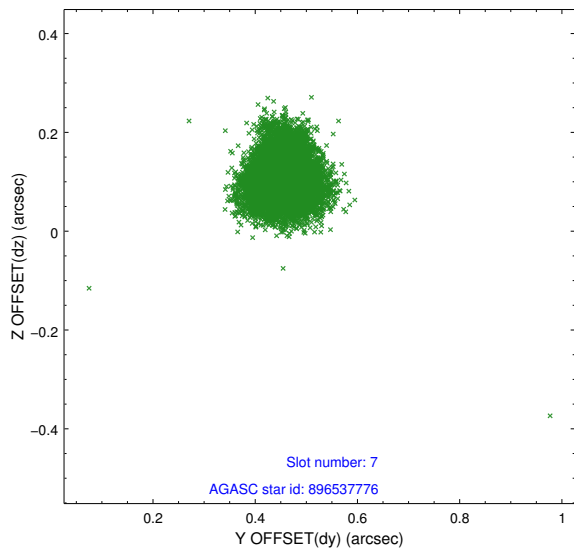
### 2.4.3 Slot 5



### 2.4.4 Slot 6

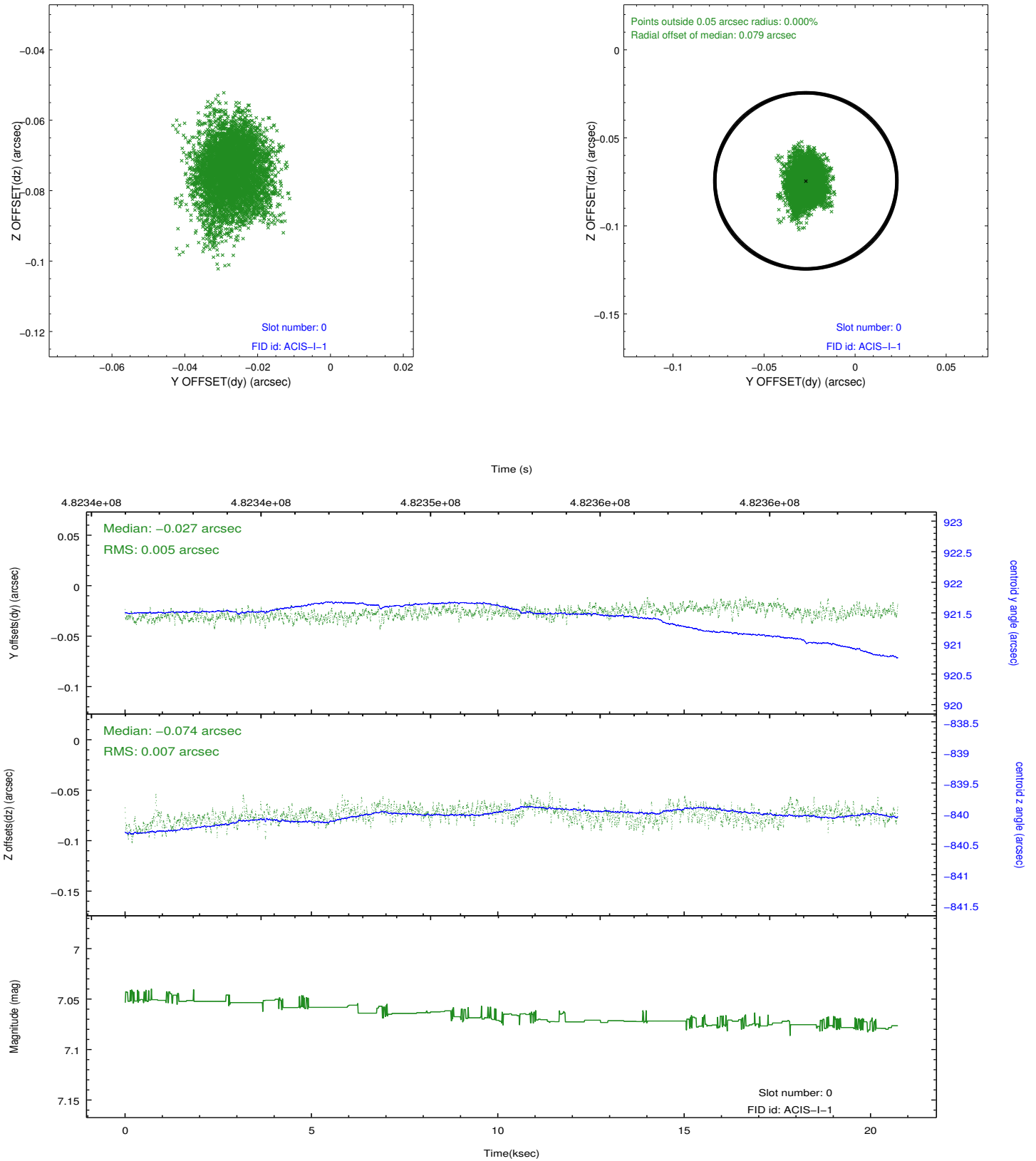


## 2.4.5 Slot 7

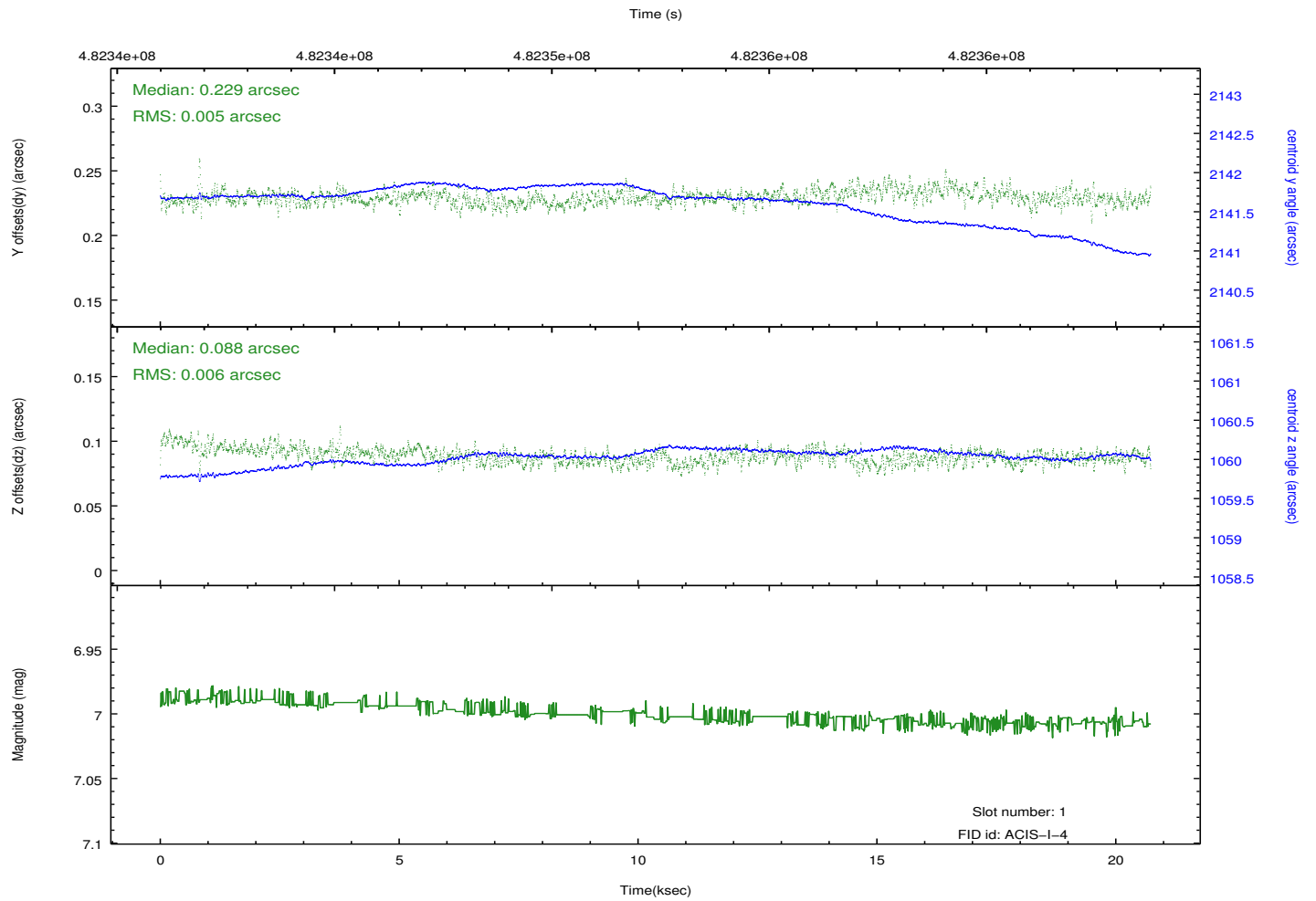
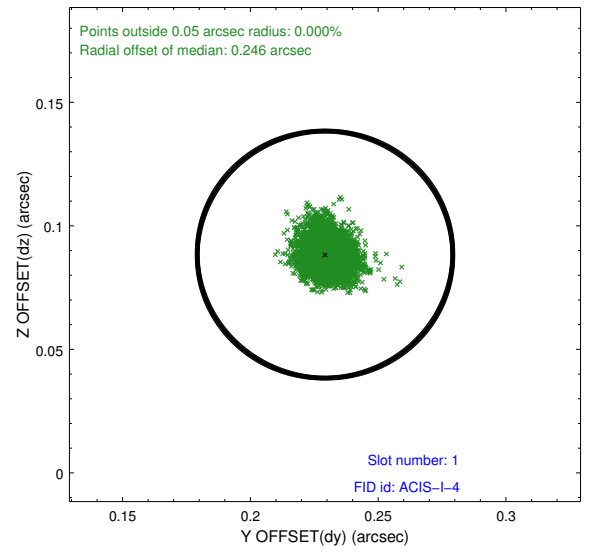
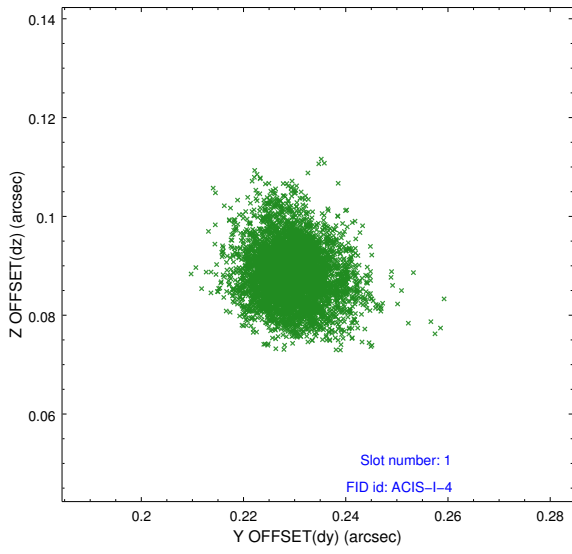


## 2.5 FID Slots

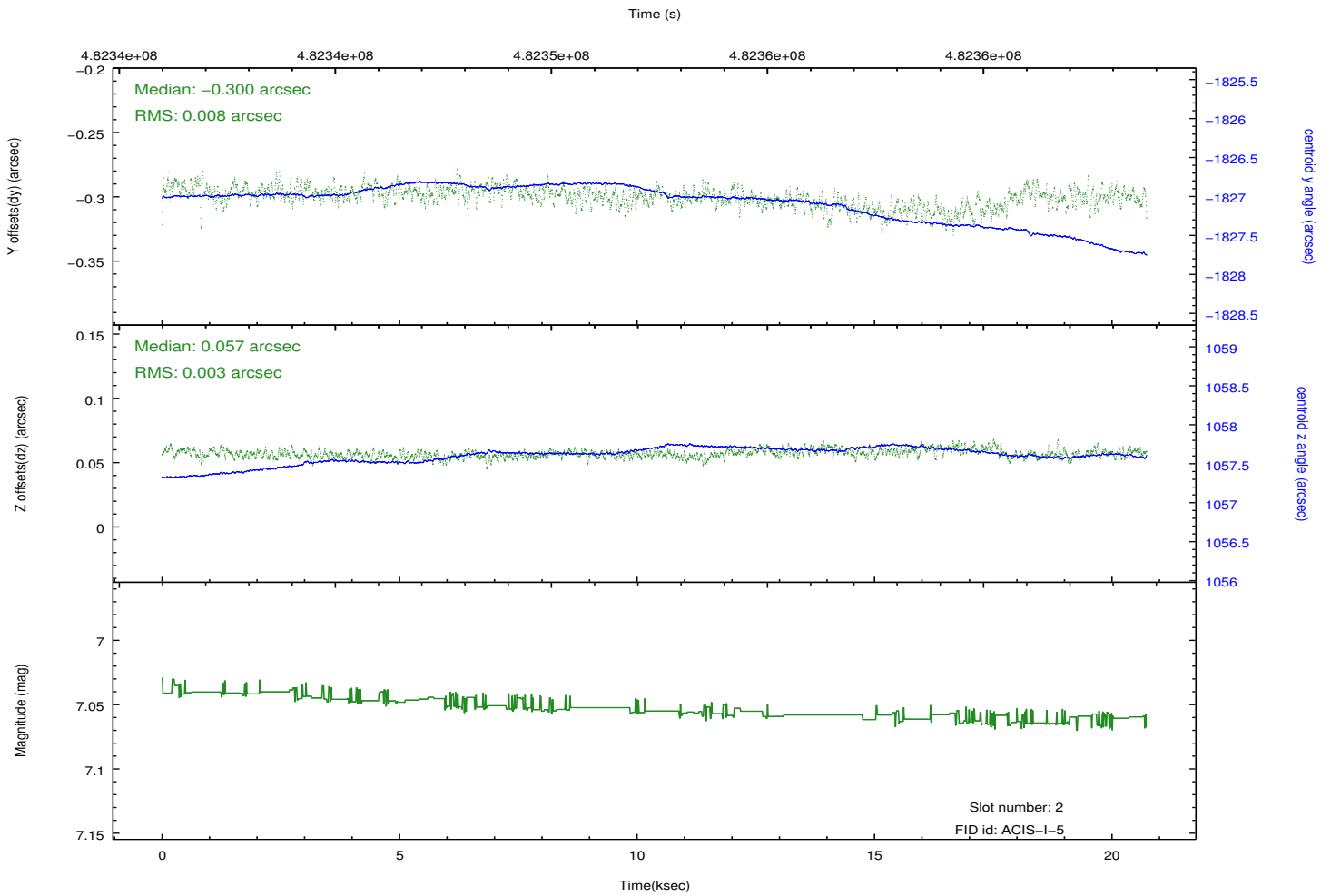
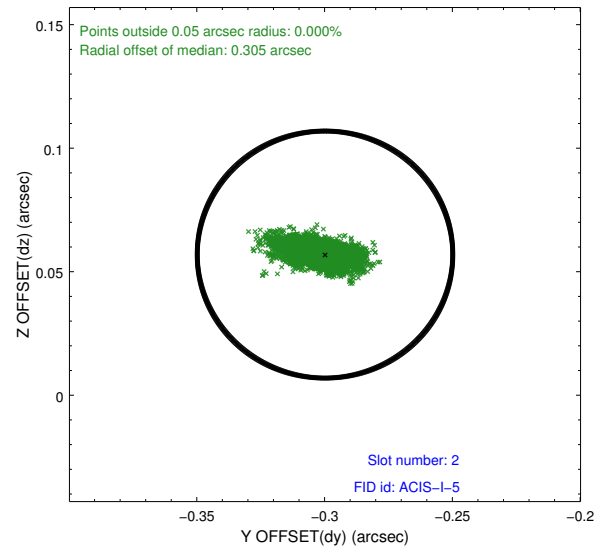
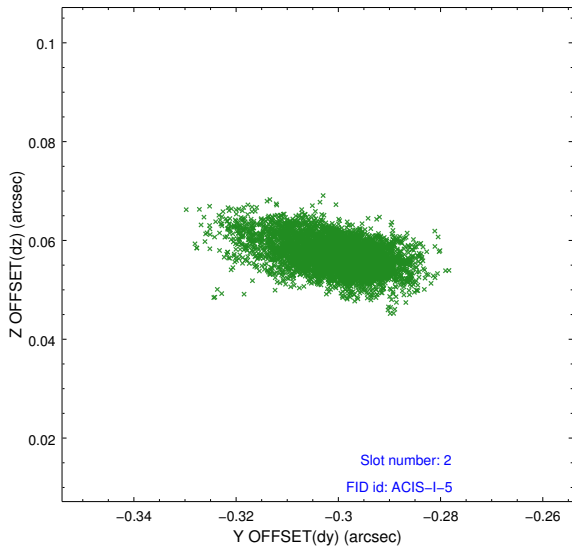
### 2.5.1 Slot 0



## 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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.090236345112

## A.2 Comments

Window preference met.

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.