

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8459 - L2 Version 4  
Chandra X-Ray Center

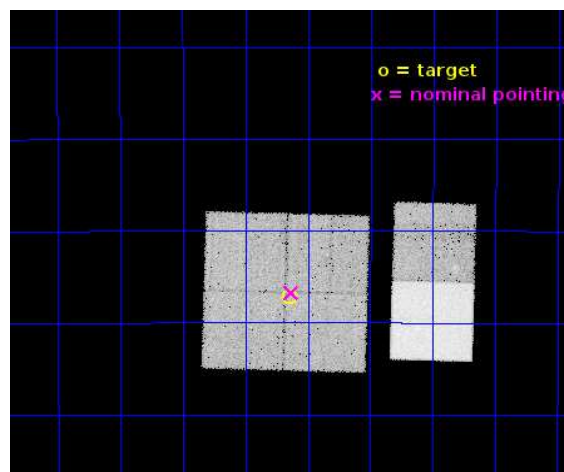
L2 Processing Date : Jul 16 2015

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# 1 Front

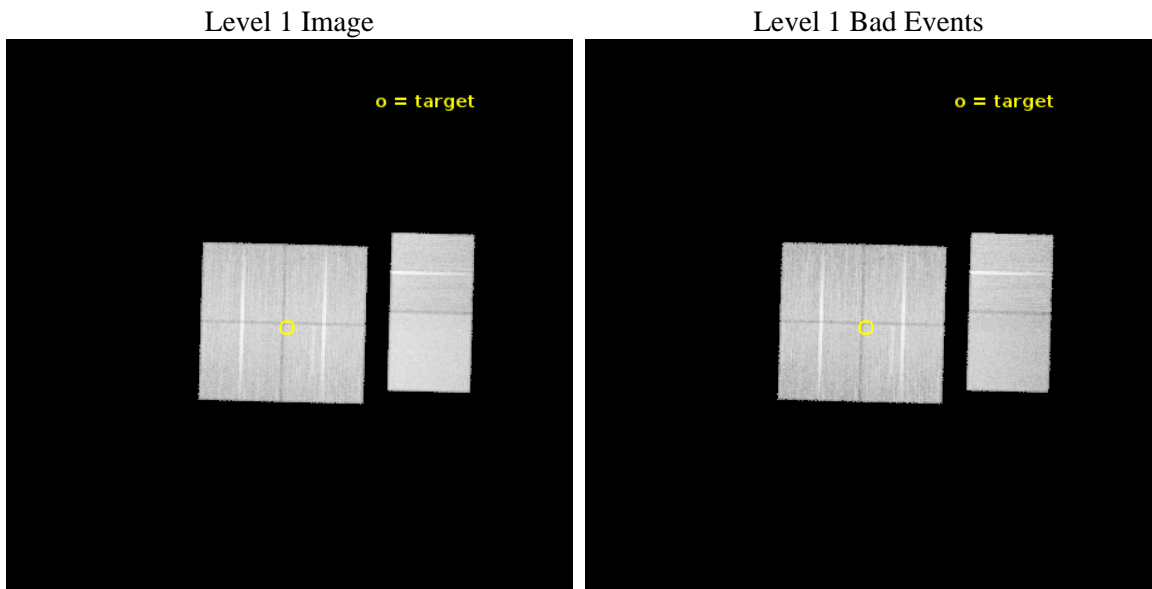
seq_num	900454	Sequence number
obs_id	8459	Observation id
title	A Legacy Study of Stellar Life Cycles at the Galactic Center	Propo
observer	Dr. Michael Muno	Principal investigator
object	Deep GCS 6	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.160833	Observer's specified target RA [deg]
dec_targ	-29.2865	Observer's specified target Dec [deg]
ra_nom	266.15781468558	Nominal RA [deg]
dec_nom	-29.278886685008	Nominal Dec [deg]
roll_nom	91.587369712837	Nominal Roll [deg]
revision	4	Processing version of data
ontime	19538.649874151	Sum of GTIs [s]
livetime	19291.239724682	Livetime [s]
ontime0	19538.649874151	Sum of GTIs [s]
ontime1	19538.649874151	Sum of GTIs [s]
ontime2	19538.649874151	Sum of GTIs [s]
ontime3	19538.649874151	Sum of GTIs [s]
ontime6	19538.649874151	Sum of GTIs [s]
ontime7	19538.649874151	Sum of GTIs [s]
l2events	218002	Number of level 2 events



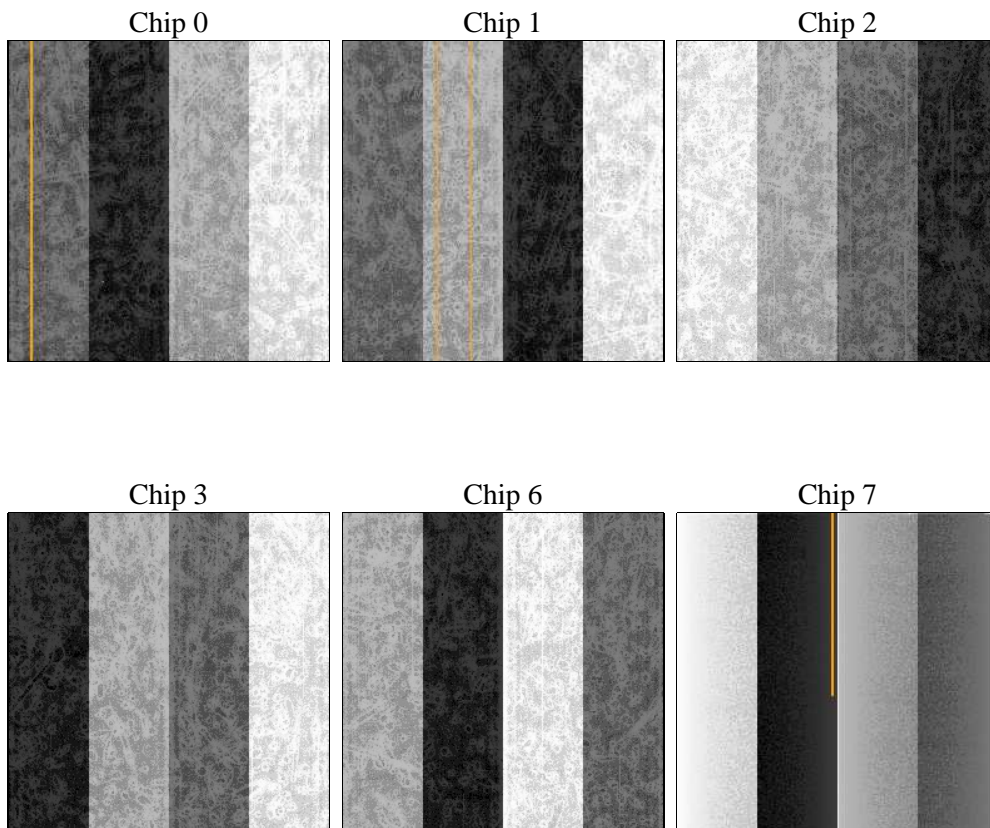
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19403.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	19538.649874151	Sum of GTIs [s]
caldbver	4.6.8	&#160	ontime0	19538.649874151	Sum of GTIs [s]
date	2015-07-16T14:46:43	Date and time of file creation	ontime1	19538.649874151	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	19538.649874151	Sum of GTIs [s]
			ontime3	19538.649874151	Sum of GTIs [s]
			ontime6	19538.649874151	Sum of GTIs [s]
			ontime7	19538.649874151	Sum of GTIs [s]
			l1events	1151432	Number of level 1 events

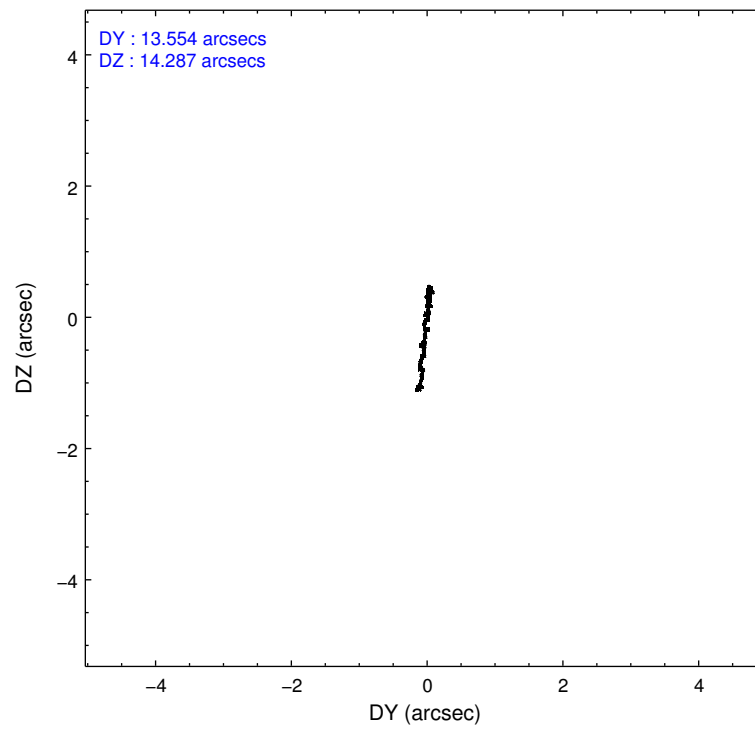
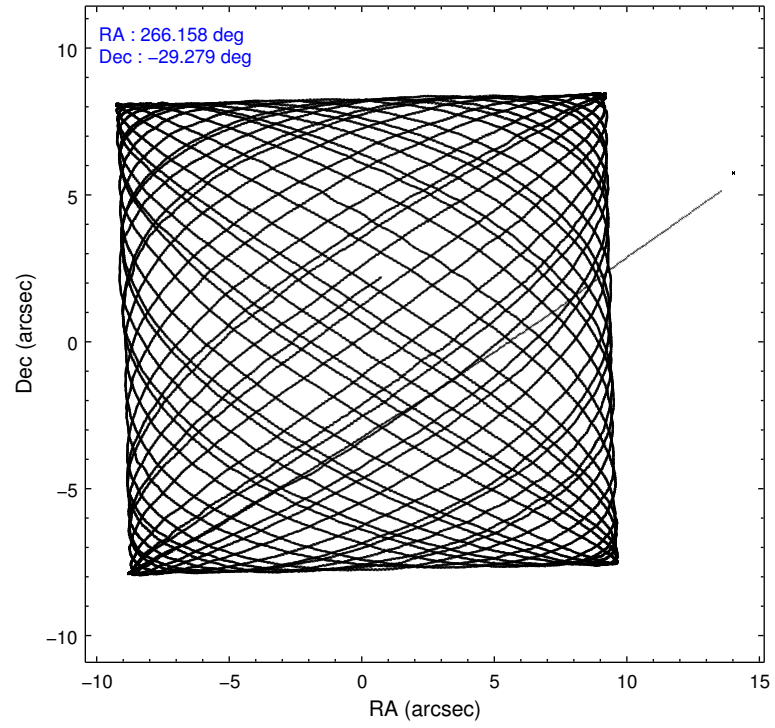
### 2.1.4 Events

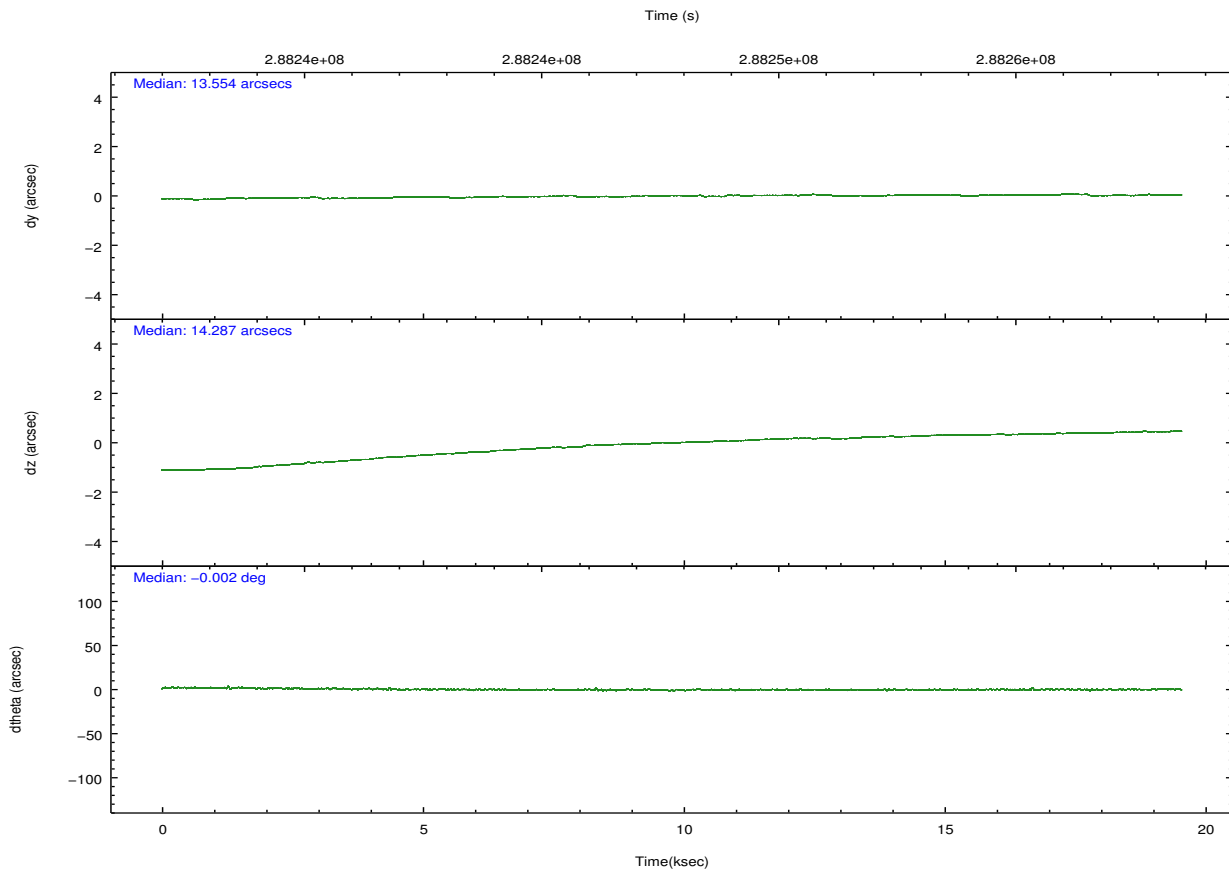
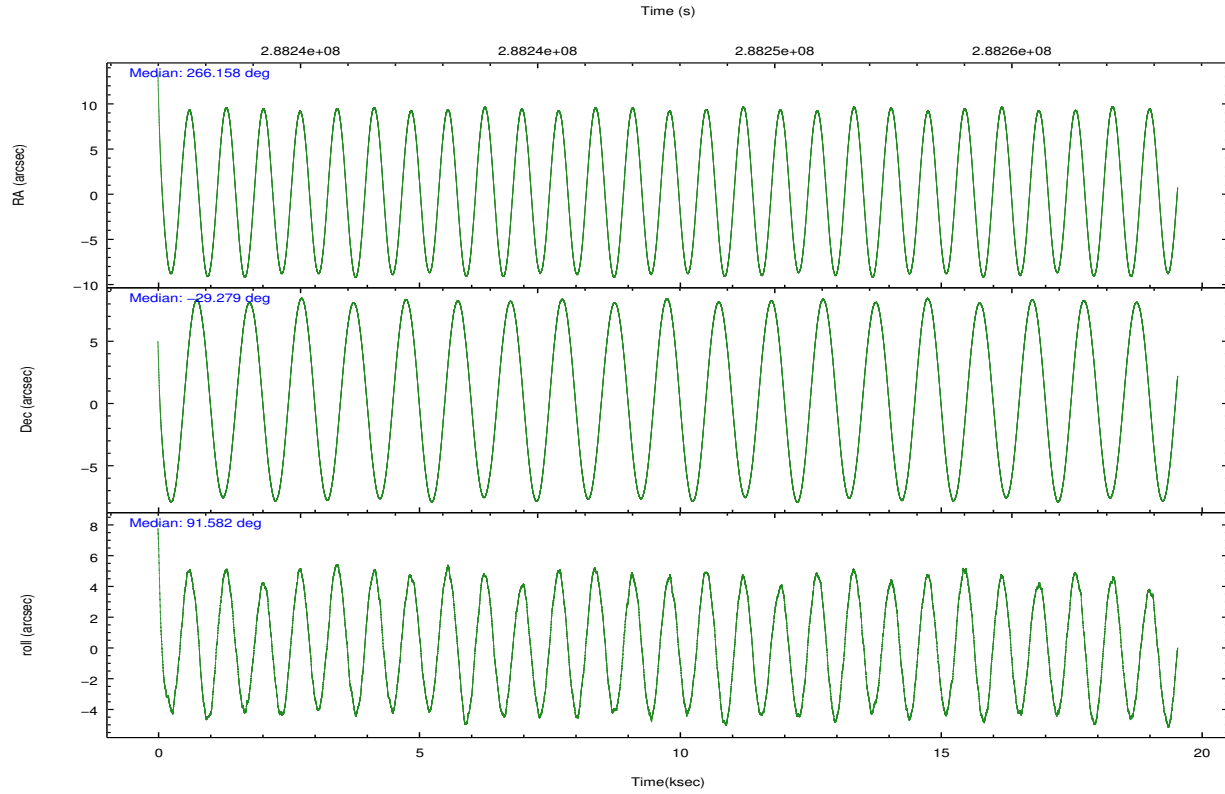
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	175297	169752	181974	185579	189444	249386	grade 0 events	14372	12486	12866	12614	10163	9172
rejected events	146360	141530	156103	159567	165491	145705		8%	7%	7%	6%	5%	3%
rejected %	83%	83%	85%	85%	87%	58%	grade 1 events	150	124	155	144	108	252
								0%	0%	0%	0%	0%	0%
							grade 2 events	5880	6023	5025	4884	5109	21129
								3%	3%	2%	2%	2%	8%
							grade 3 events	2394	2482	2200	2316	2221	9166
								1%	1%	1%	1%	1%	3%
							grade 4 events	2328	2512	2181	2383	2118	8956
								1%	1%	1%	1%	1%	3%
							grade 5 events	7252	7818	7012	8166	8680	23321
								4%	4%	3%	4%	4%	9%
							grade 6 events	4325	5024	3879	4140	4616	56496
								2%	2%	2%	2%	2%	22%
							grade 7 events	138596	133283	148656	150932	156429	120894
								79%	78%	81%	81%	82%	48%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	266.174459	266.1578146855764	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.302208	-29.27888668500795	Alternating exposures requested	N	N
[deg] Pointing Roll	91.386825	91.58736971283651	[s] Primary exposure time	0.000000	3.2
[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)	288238113.184000	288236947.33119			
Observation start date	2007-02-19T02:07:28	2007-02-19T01:49:07			
[s] Observation end time (MET)	288257516.184000	288257853.74468			
Observation end date	2007-02-19T07:30:51	2007-02-19T07:37:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect





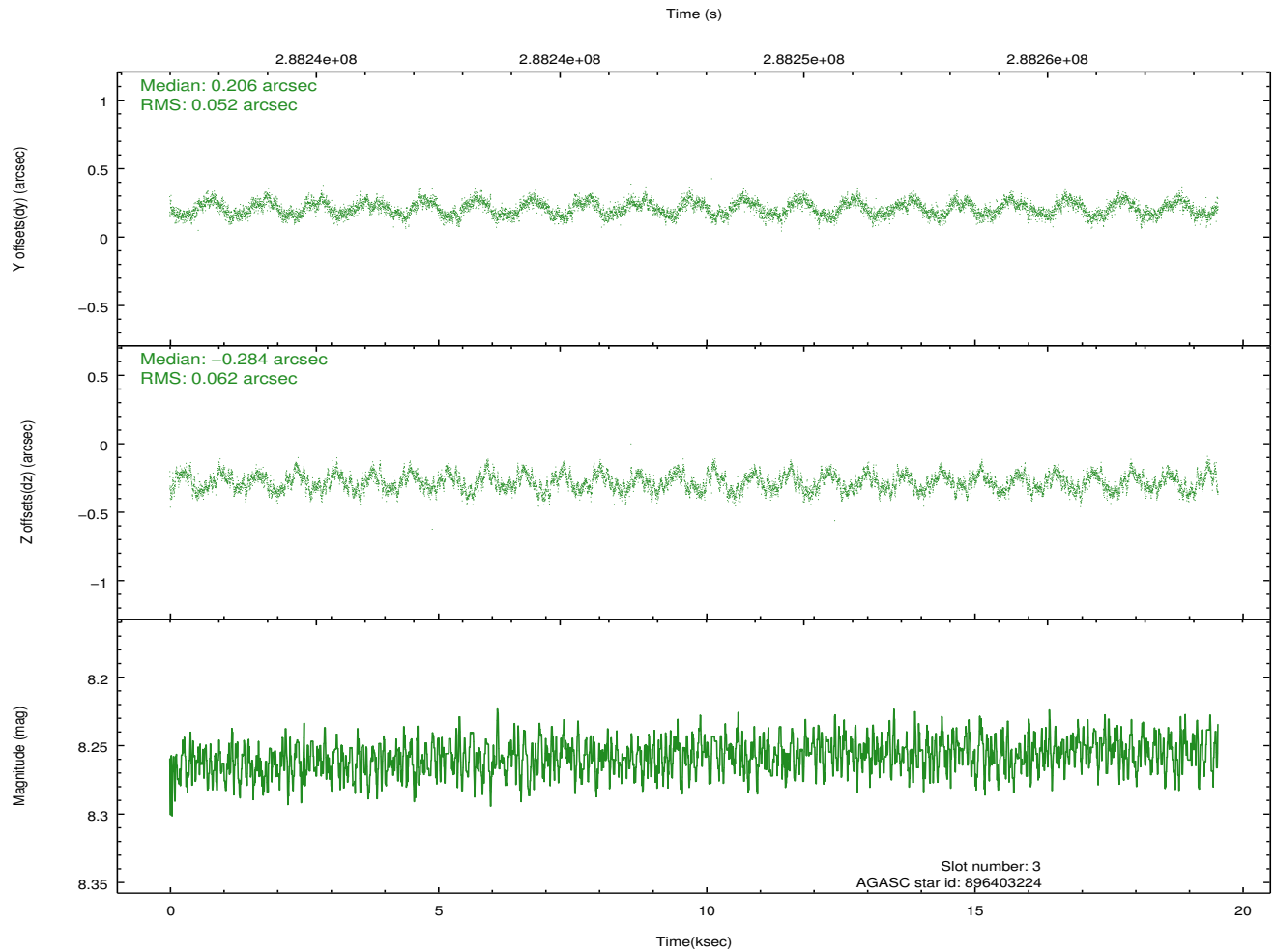
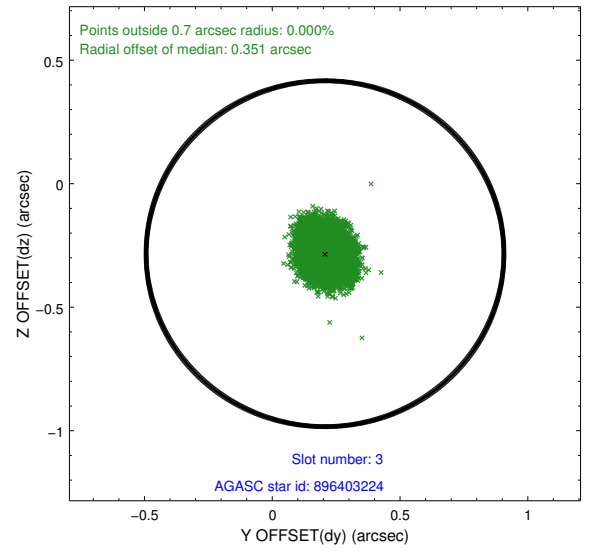
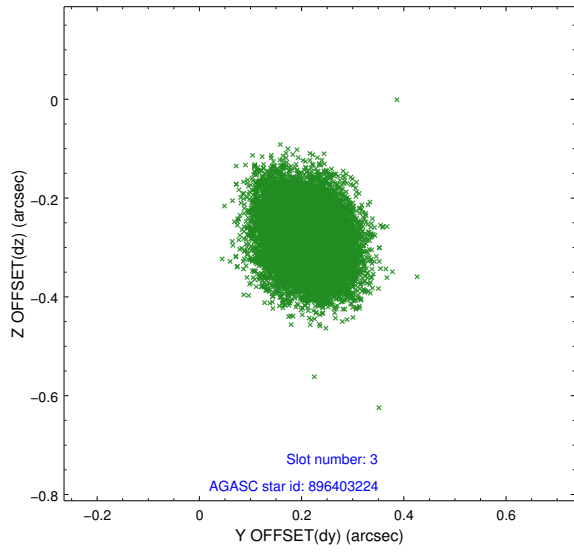
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.23	4767	0.042	-0.009	0.012	0.018	0.000000	0.000000	926.01	-837.73
1	FID		ACIS-I-5	7.22	4766	-0.225	0.042	0.009	0.018	0.000000	0.000000	-1822.26	1059.71
2	FID		ACIS-I-6	7.24	4766	0.092	0.037	0.016	0.024	0.000000	0.000000	391.38	1704.43
3	GUIDE	used	896403224	8.26	9534	0.206	-0.284	0.088	0.132	265.612825	-29.438915	-453.46	1771.94
4	GUIDE	used	896533888	7.03	9535	0.098	0.130	0.046	0.072	266.666434	-29.392757	-366.02	-1534.41
5	GUIDE	used	896537176	8.04	9533	-0.213	0.175	0.065	0.108	266.498272	-28.678259	2219.53	-1076.61
6	GUIDE	used	896541168	8.15	9531	0.269	0.174	0.057	0.089	266.319970	-29.850801	-1984.92	-406.41
7	GUIDE	used	896403520	9.02	9530	-0.362	-0.195	0.073	0.121	265.626481	-28.748780	2029.19	1680.95

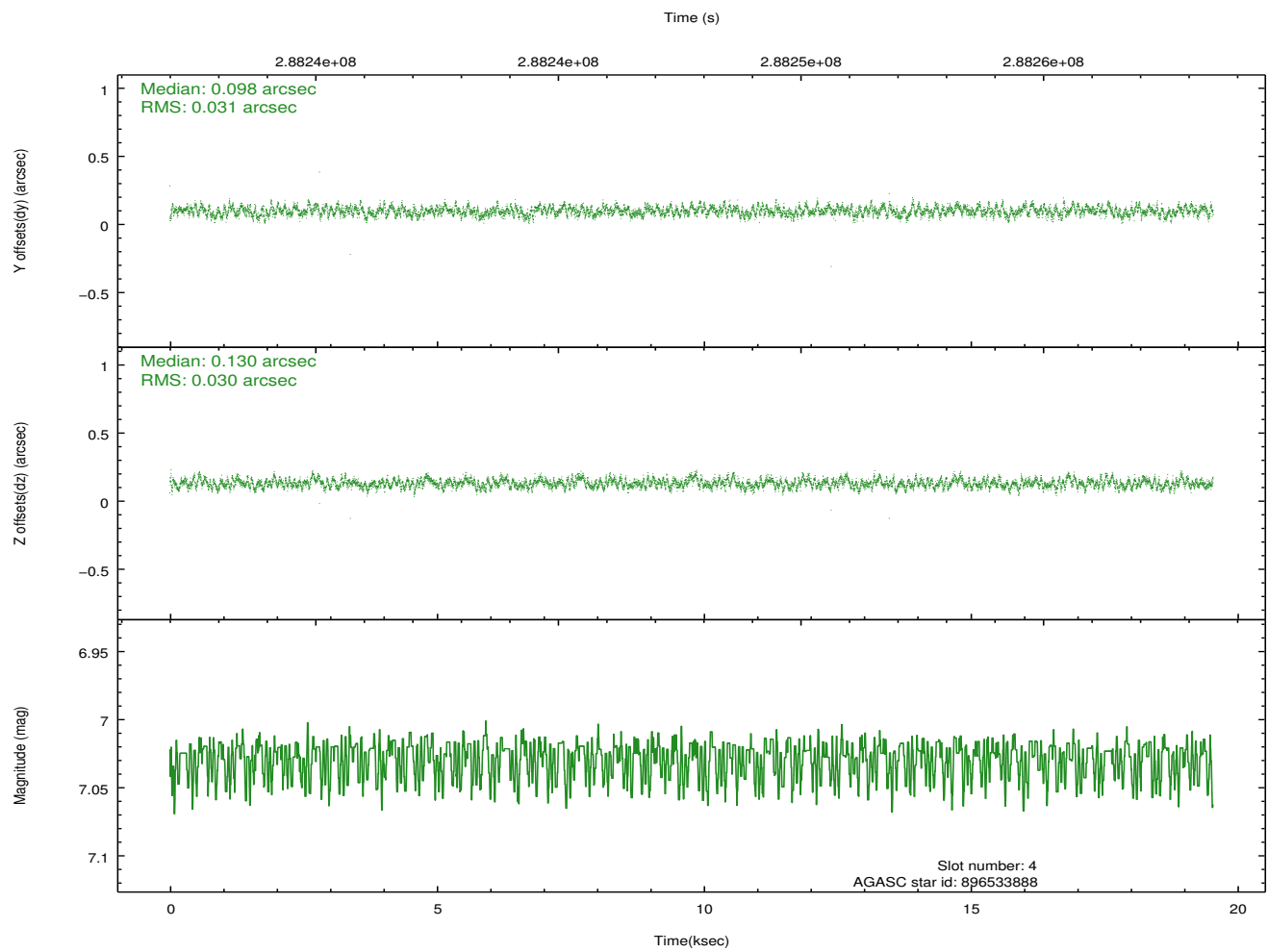
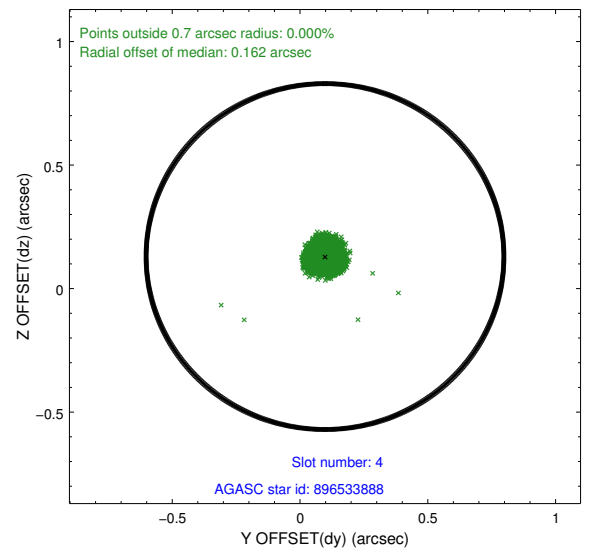
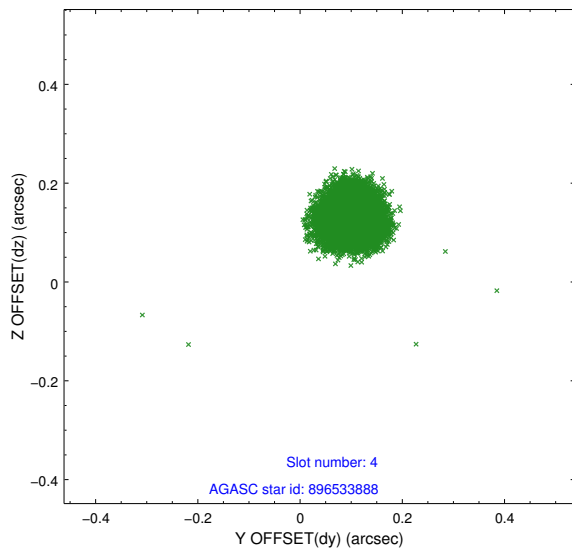
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## 2.4 Star Slots

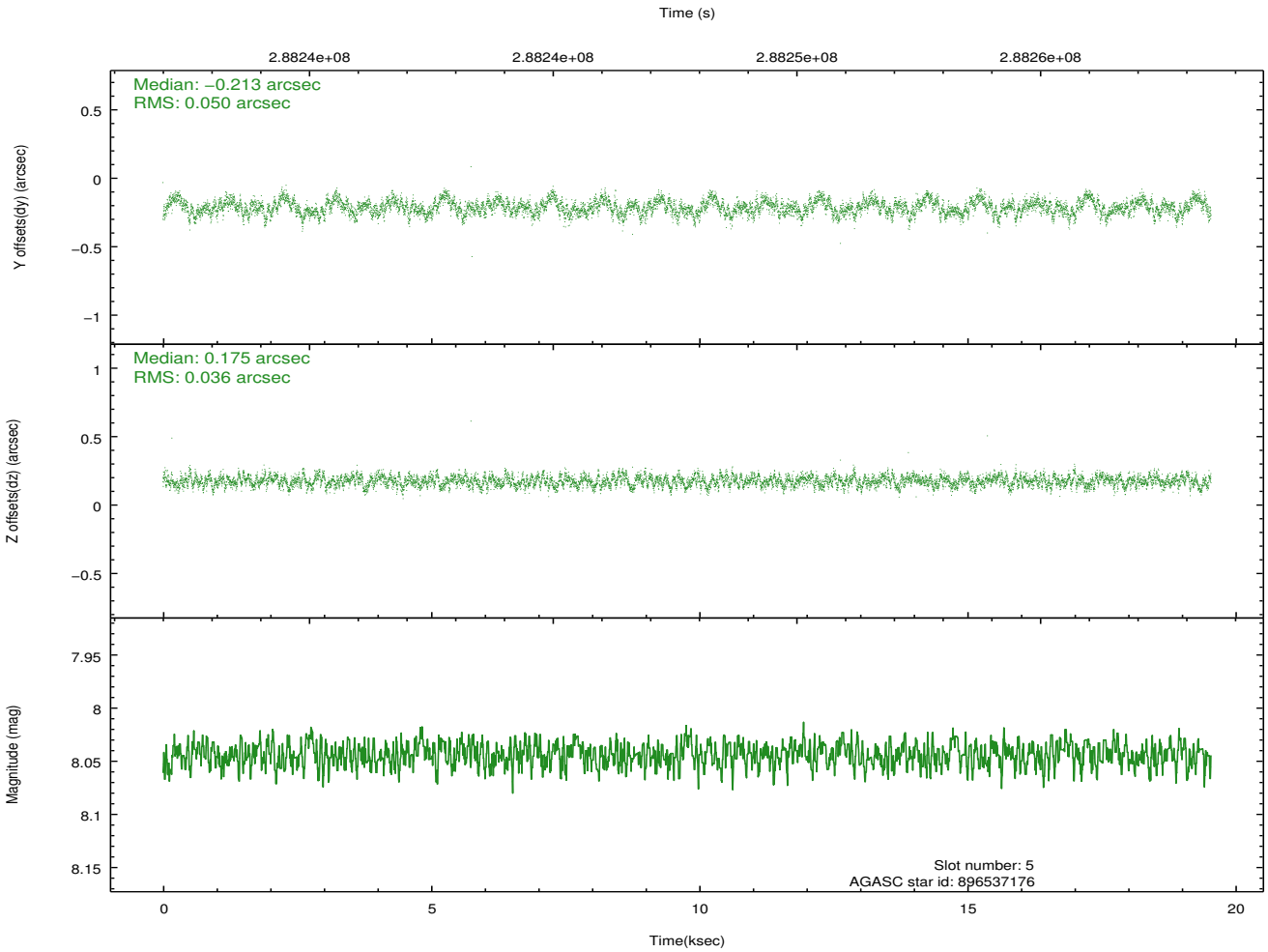
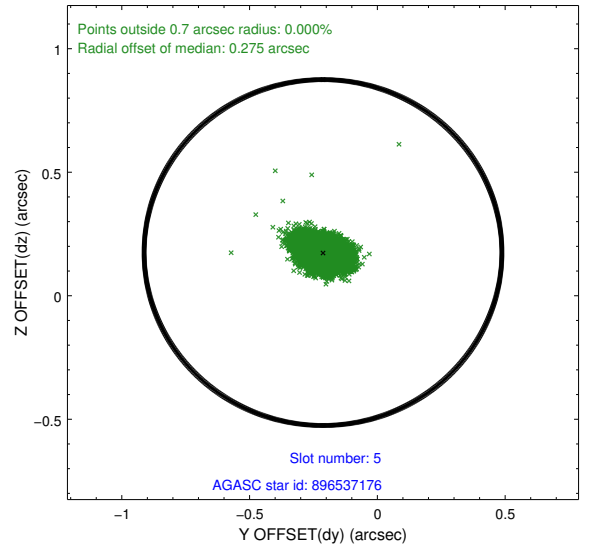
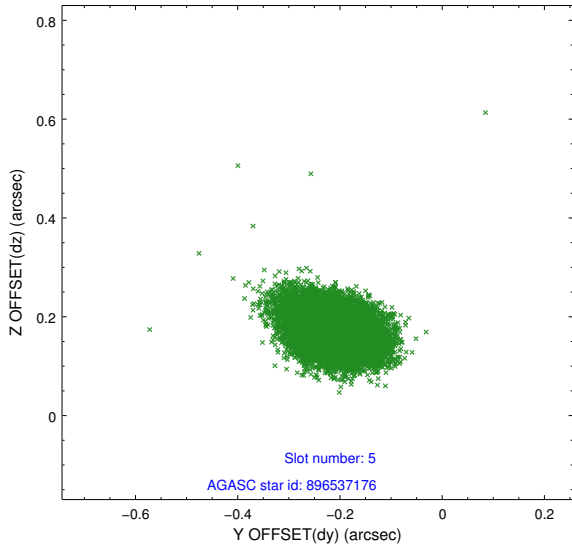
### 2.4.1 Slot 3



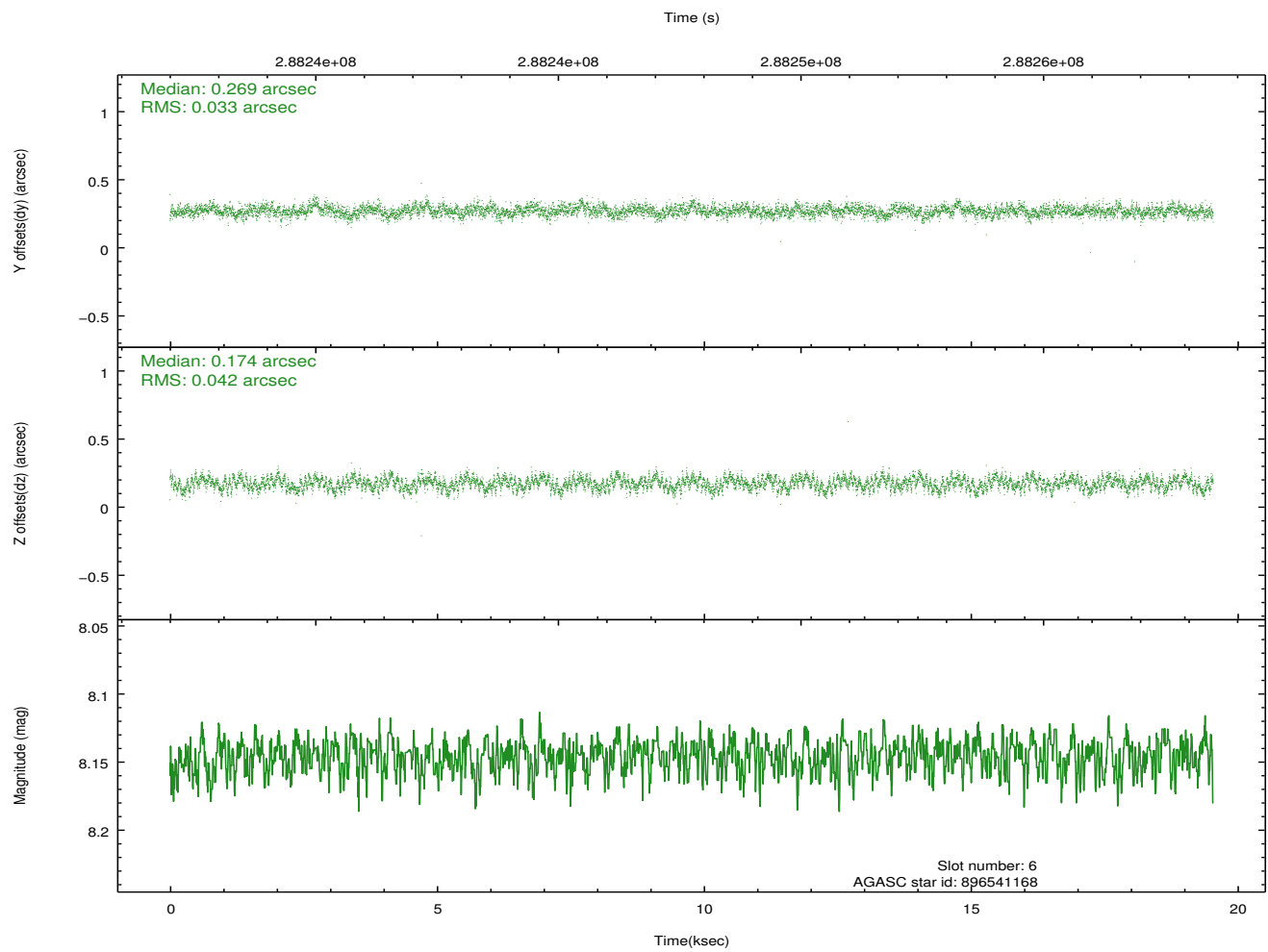
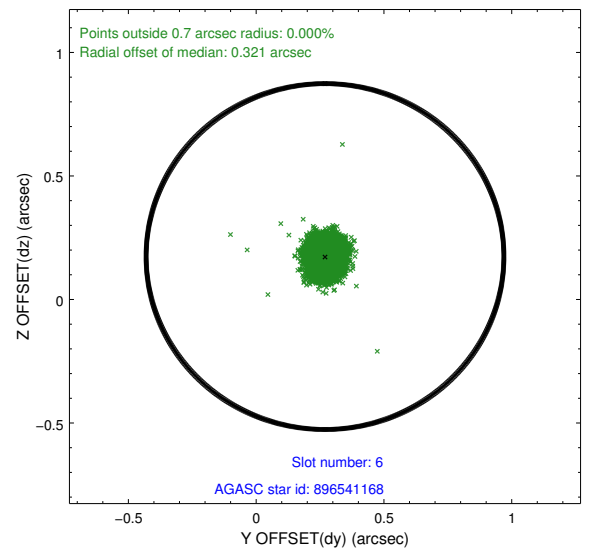
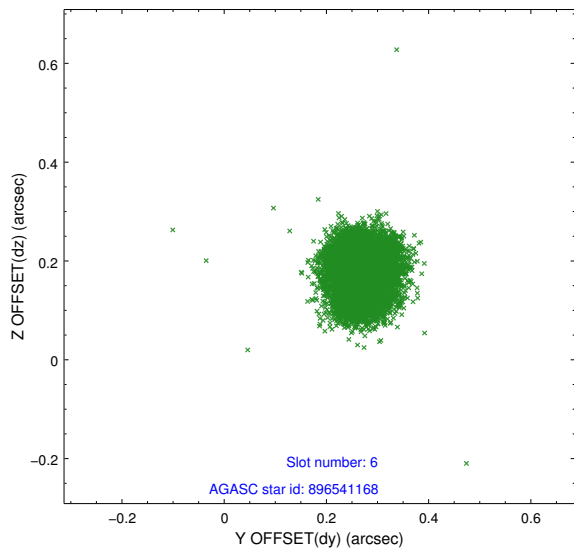
## 2.4.2 Slot 4



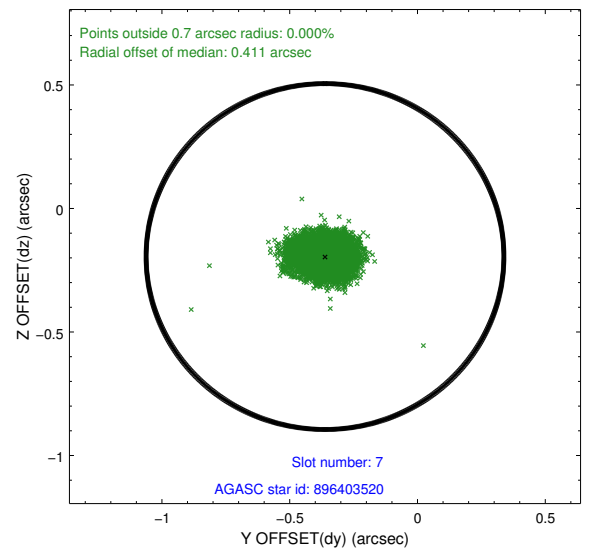
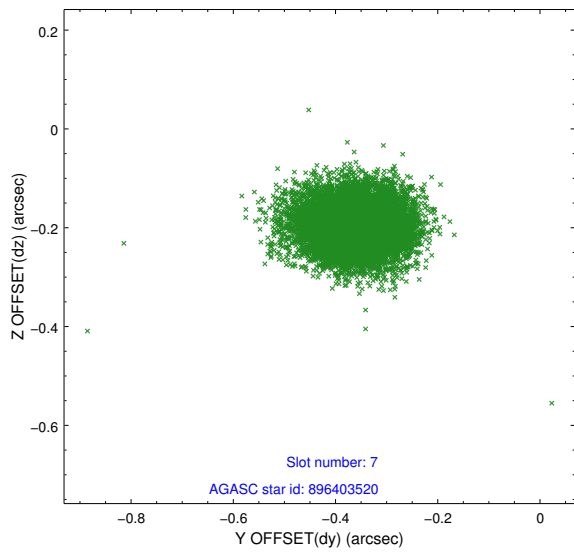
### 2.4.3 Slot 5



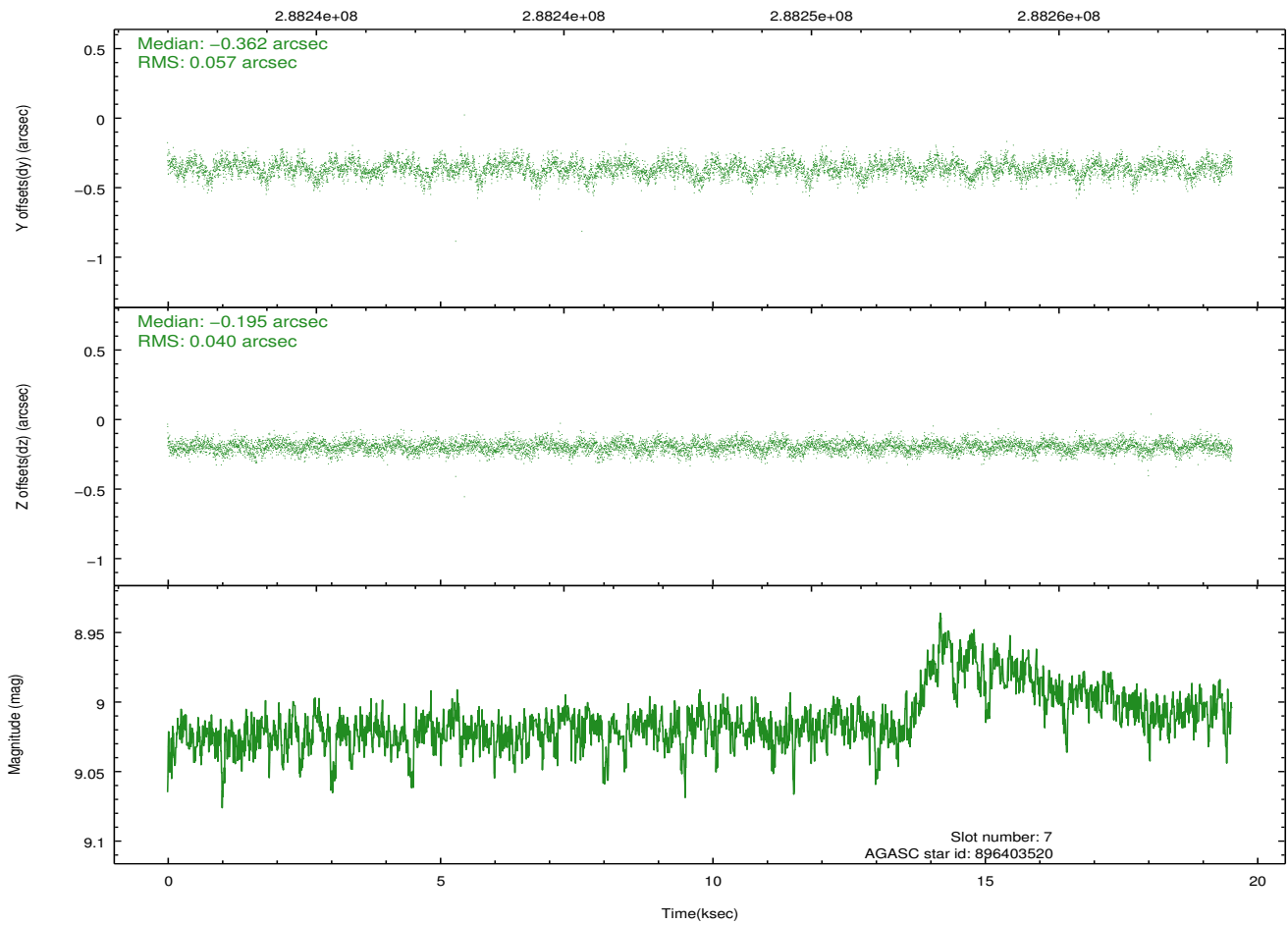
## 2.4.4 Slot 6



## 2.4.5 Slot 7

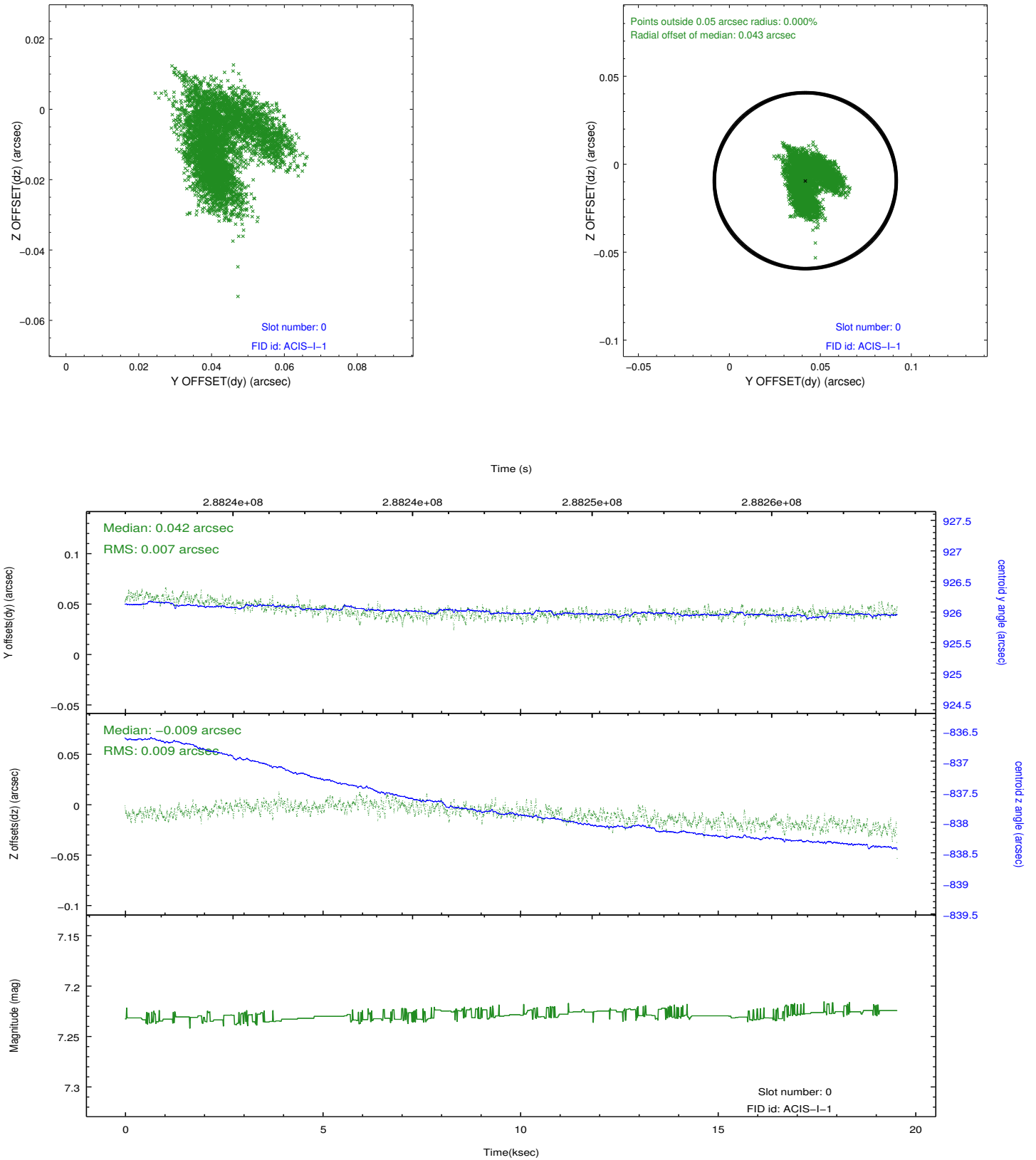


Time (s)

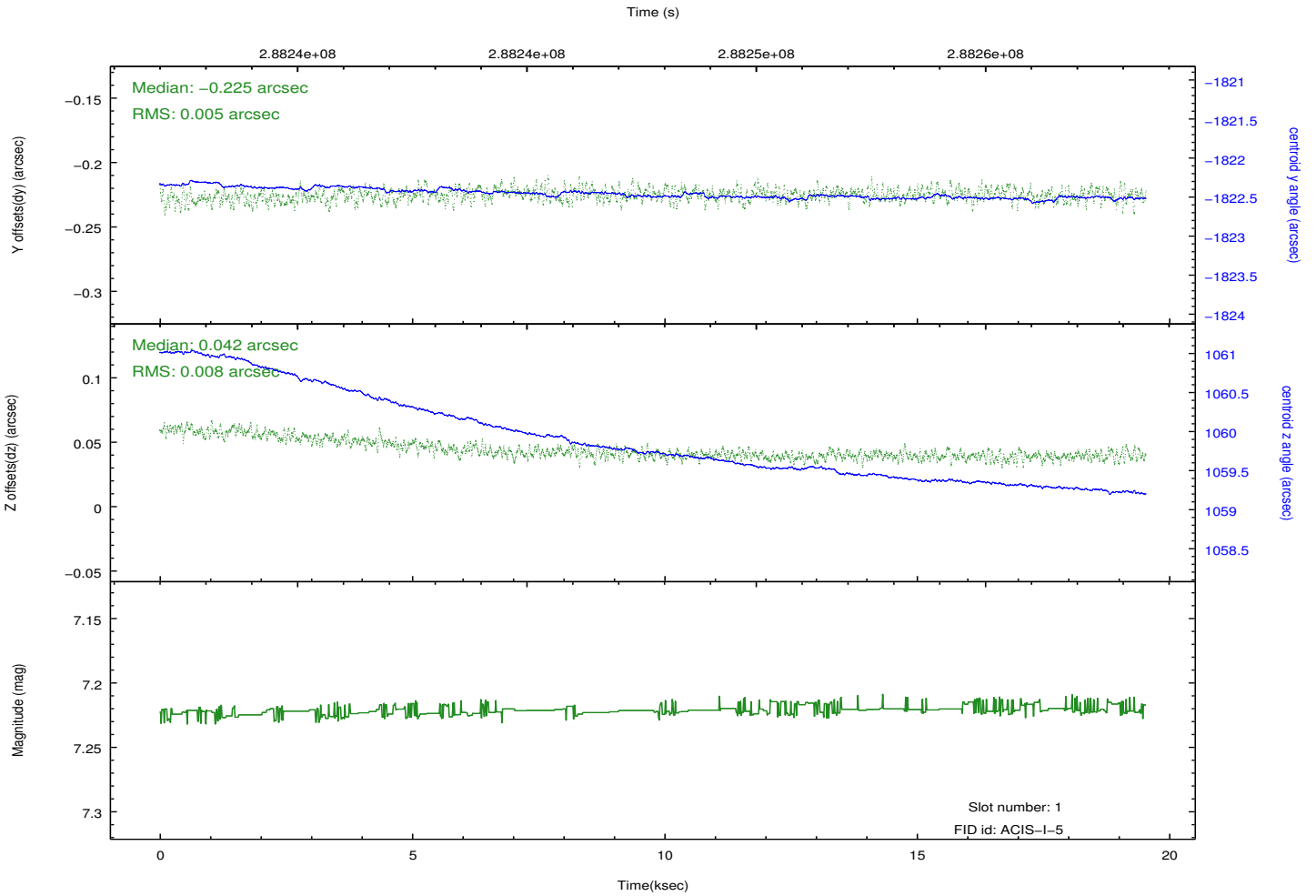
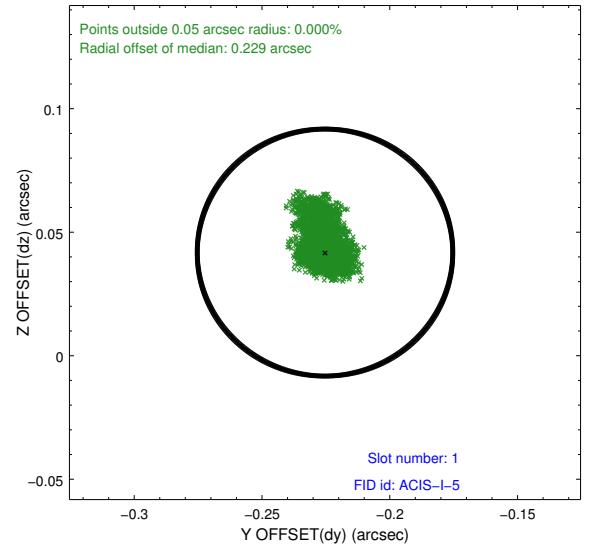
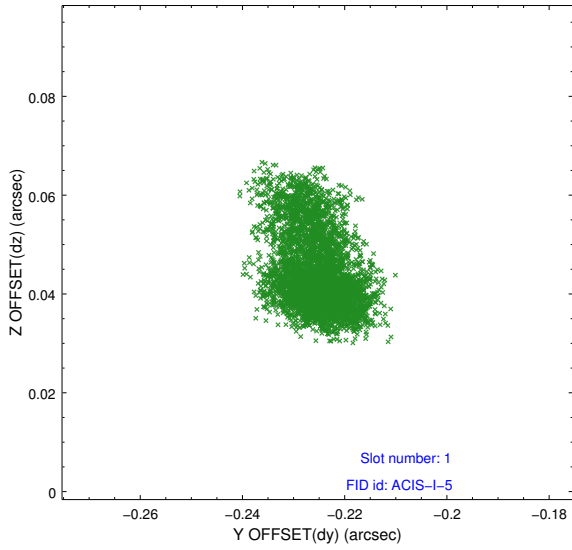


## 2.5 FID Slots

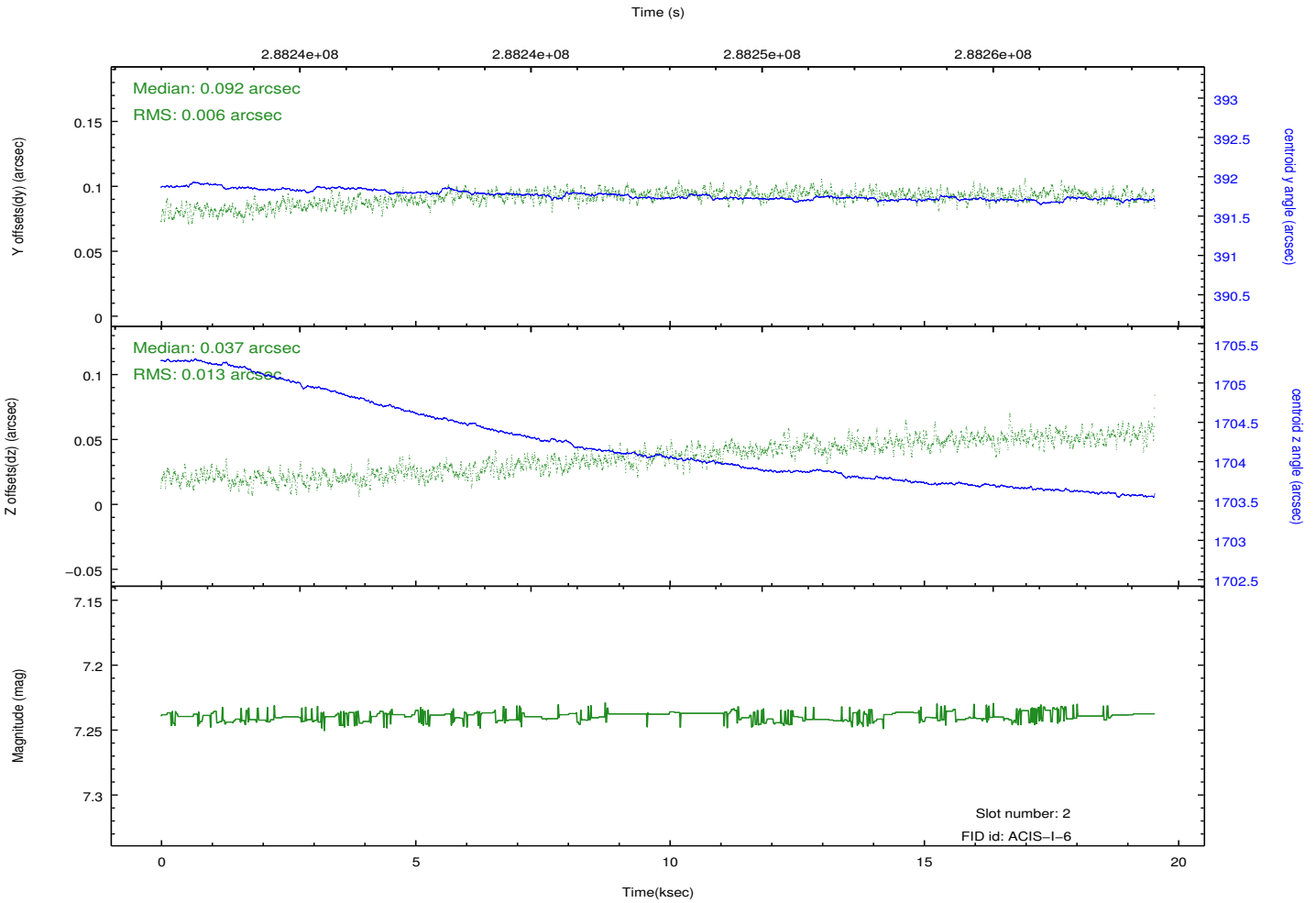
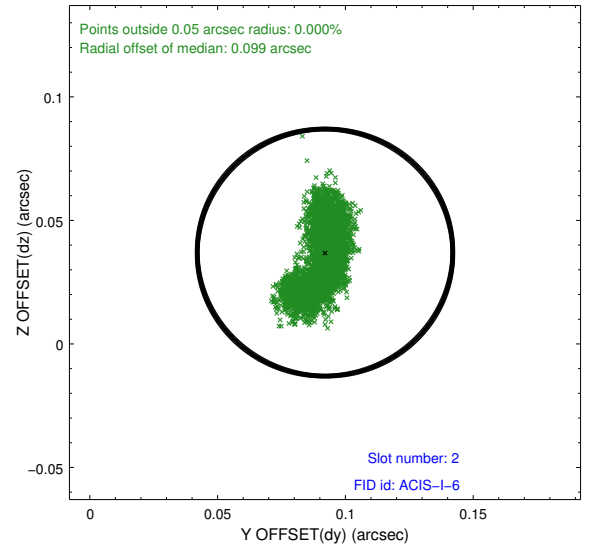
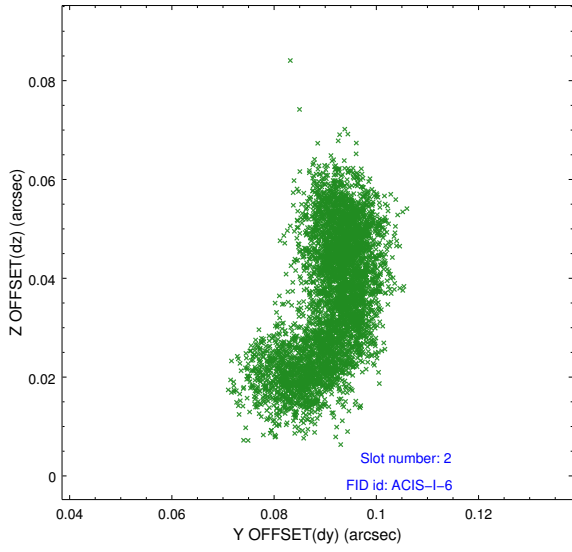
### 2.5.1 Slot 0



## 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)	2015.07.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.5391999

## A.2 Comments

Because an aspect solution is determined in a finite time interval, a small number of events registered within the delta time before the first aspect solution do not have proper sky coordinates. We apply a manual workaround to exclude those events with incorrect sky positions until the complete s/w resolution is obtained.