

V&V Reference Report

L2 ASCDS Version : 10.5.1.1

Observation 19888 - L2 Version 1
Chandra X-Ray Center

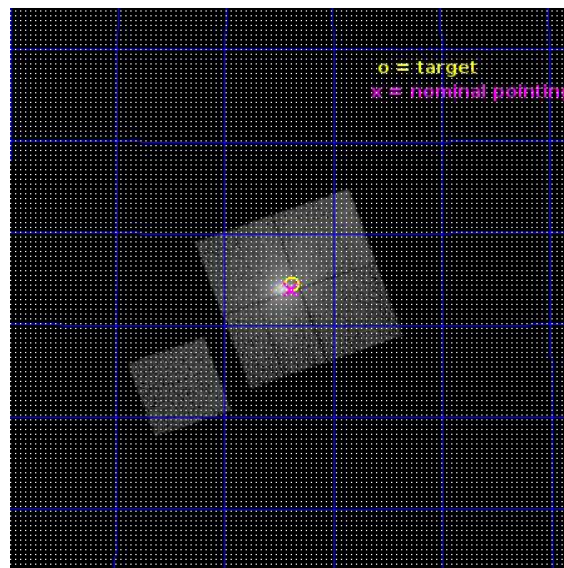
L2 Processing Date : Oct 2 2016

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1 Front

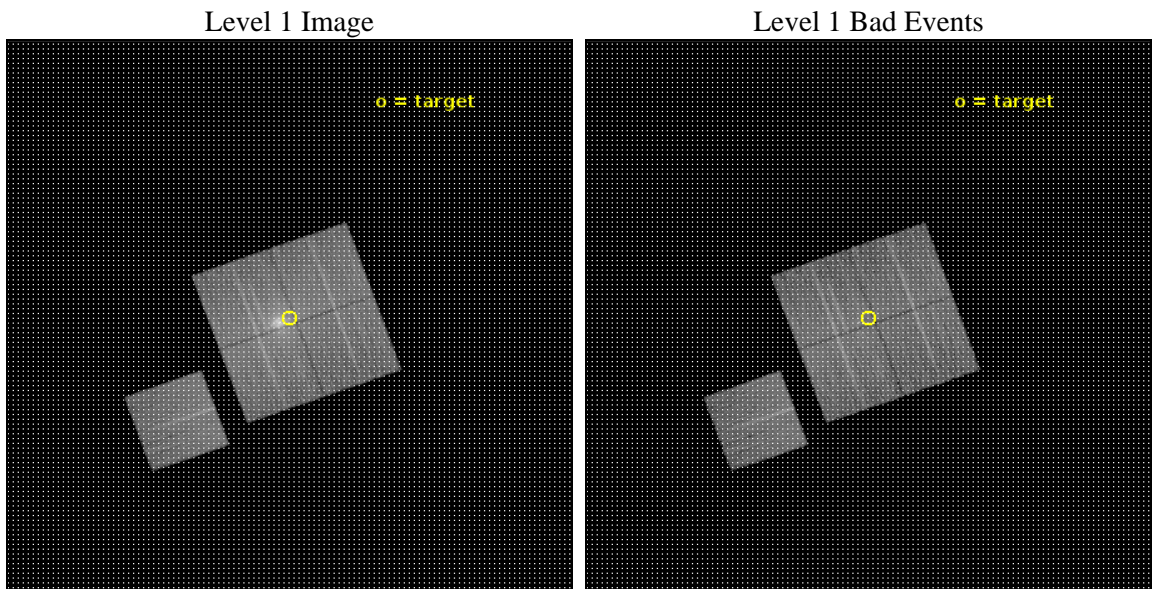
seq_num	703132	Sequence number
obs_id	19888	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - W Hotspot	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.845	Observer's specified target RA [deg]
dec_targ	40.740361	Observer's specified target Dec [deg]
ra_nom	299.84596732113	Nominal RA [deg]
dec_nom	40.731364474376	Nominal Dec [deg]
roll_nom	250.20804718131	Nominal Roll [deg]
revision	1	Processing version of data
ontime	19774.120832324	Sum of GTIs [s]
livetime	19515.757386154	Livetime [s]
ontime0	19773.997712374	Sum of GTIs [s]
ontime1	19774.038752317	Sum of GTIs [s]
ontime2	19774.07979238	Sum of GTIs [s]
ontime3	19774.120832324	Sum of GTIs [s]
ontime6	19773.956672311	Sum of GTIs [s]
l2events	165668	Number of level 2 events



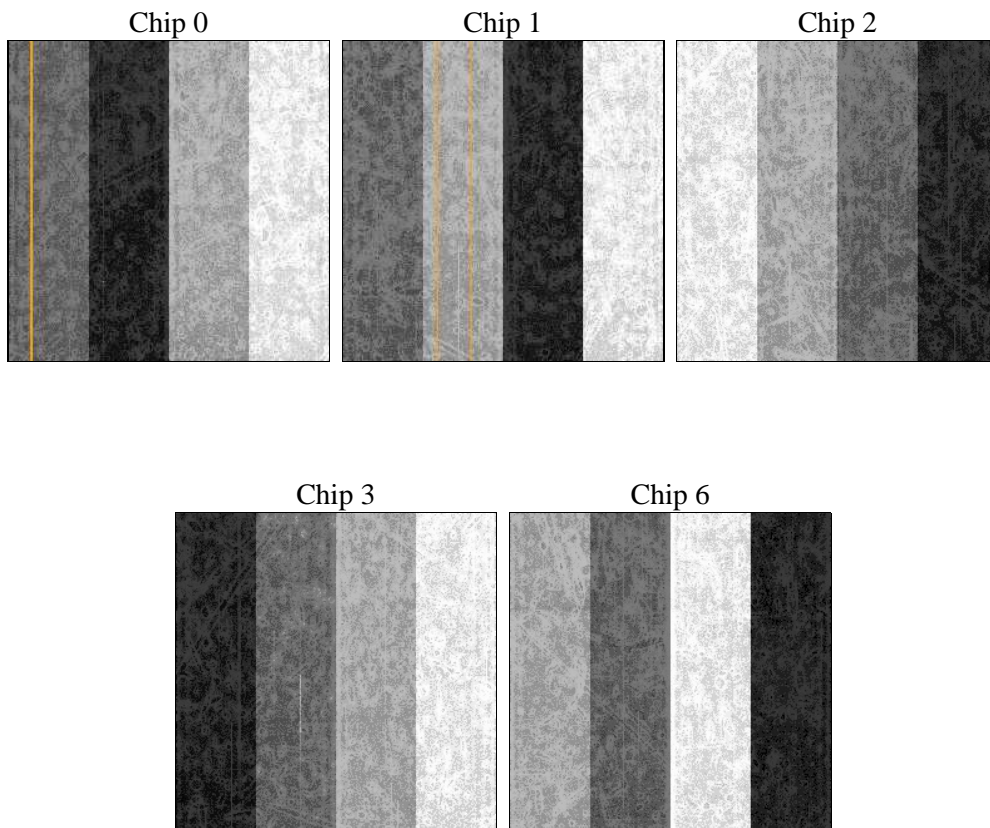
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19696.749000	[s] Scheduled observation exposure time
ascdsver	10.5.1.1	Processing system revision	ontime	19774.120832324	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	19773.997712374	Sum of GTIs [s]
date	2016-10-02T04:18:33	Date and time of file creation	ontime1	19774.038752317	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	19774.07979238	Sum of GTIs [s]
			ontime3	19774.120832324	Sum of GTIs [s]
			ontime6	19773.956672311	Sum of GTIs [s]
			l1events	727320	Number of level 1 events

2.1.4 Events

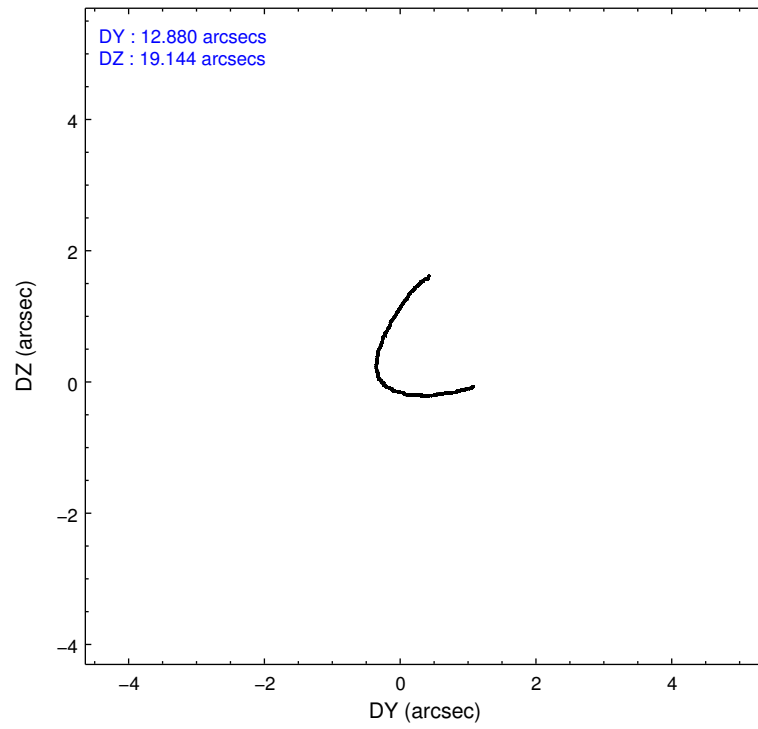
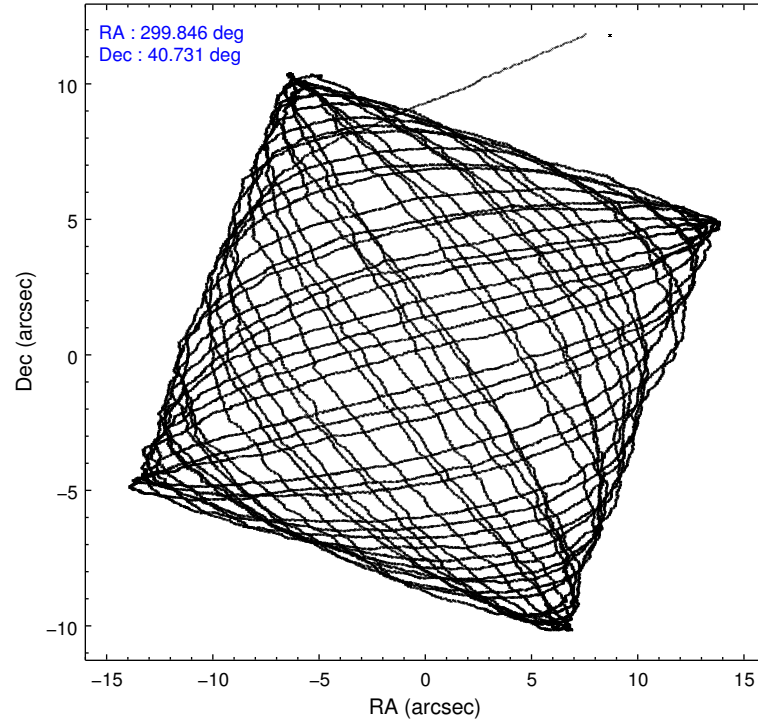
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	121187	141789	144489	192114	127741
rejected events	100205	105119	114564	113978	112413
rejected %	82%	74%	79%	59%	88%

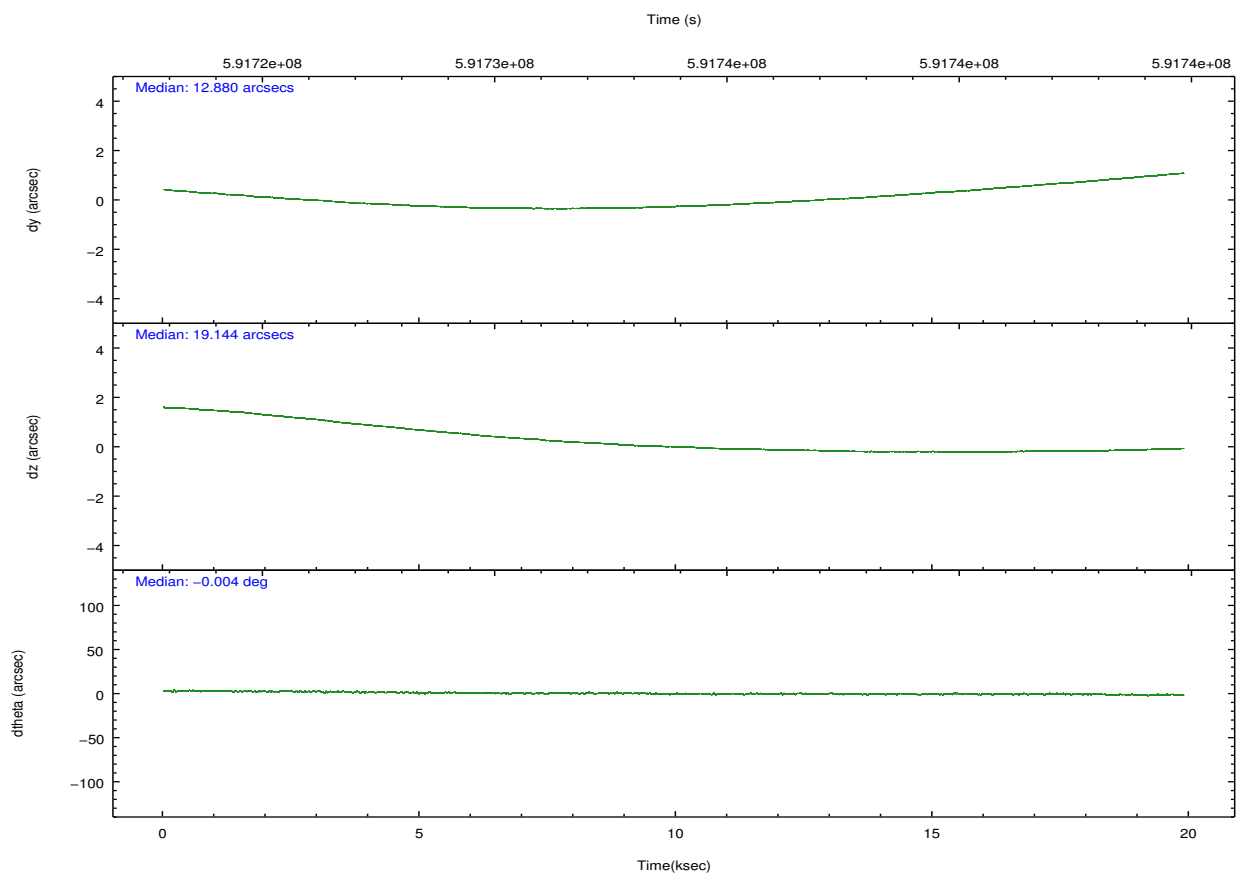
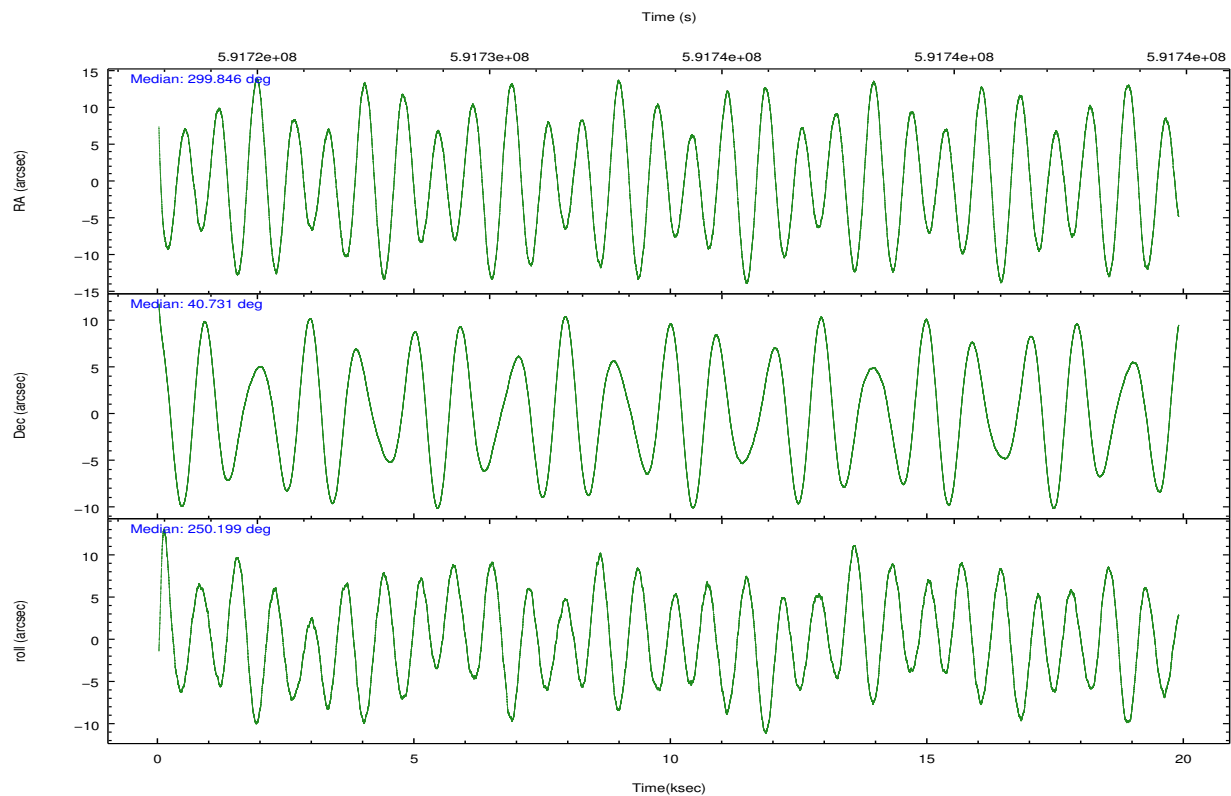
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9992	21252	17540	54755	5402
	8%	14%	12%	28%	4%
grade 1 events	92	134	139	597	72
	0%	0%	0%	0%	0%
grade 2 events	4442	6544	5221	10132	3495
	3%	4%	3%	5%	2%
grade 3 events	1710	2384	1886	3792	1465
	1%	1%	1%	1%	1%
grade 4 events	1599	2236	1996	3840	1543
	1%	1%	1%	1%	1%
grade 5 events	5562	6076	5369	7041	6164
	4%	4%	3%	3%	4%
grade 6 events	3247	4269	3291	5643	3429
	2%	3%	2%	2%	2%
grade 7 events	94543	98894	109047	106314	106171
	78%	69%	75%	55%	83%

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	299.839391	299.8459673211307	CCD I2 on	Y	Y
[deg] Pointing Dec	40.758525	40.73136447437614	CCD I3 on	Y	Y
[deg] Pointing Roll	250.003668	250.2080471813085	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)	591724118.184000	591722983.77027	CCD S5 on	N	N
Observation start date	2016-10-01T15:47:30	2016-10-01T15:29:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	591743815.184000	591744050.59648	On-chip summing requested	N	N
Observation end date	2016-10-01T21:15:47	2016-10-01T21:20:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



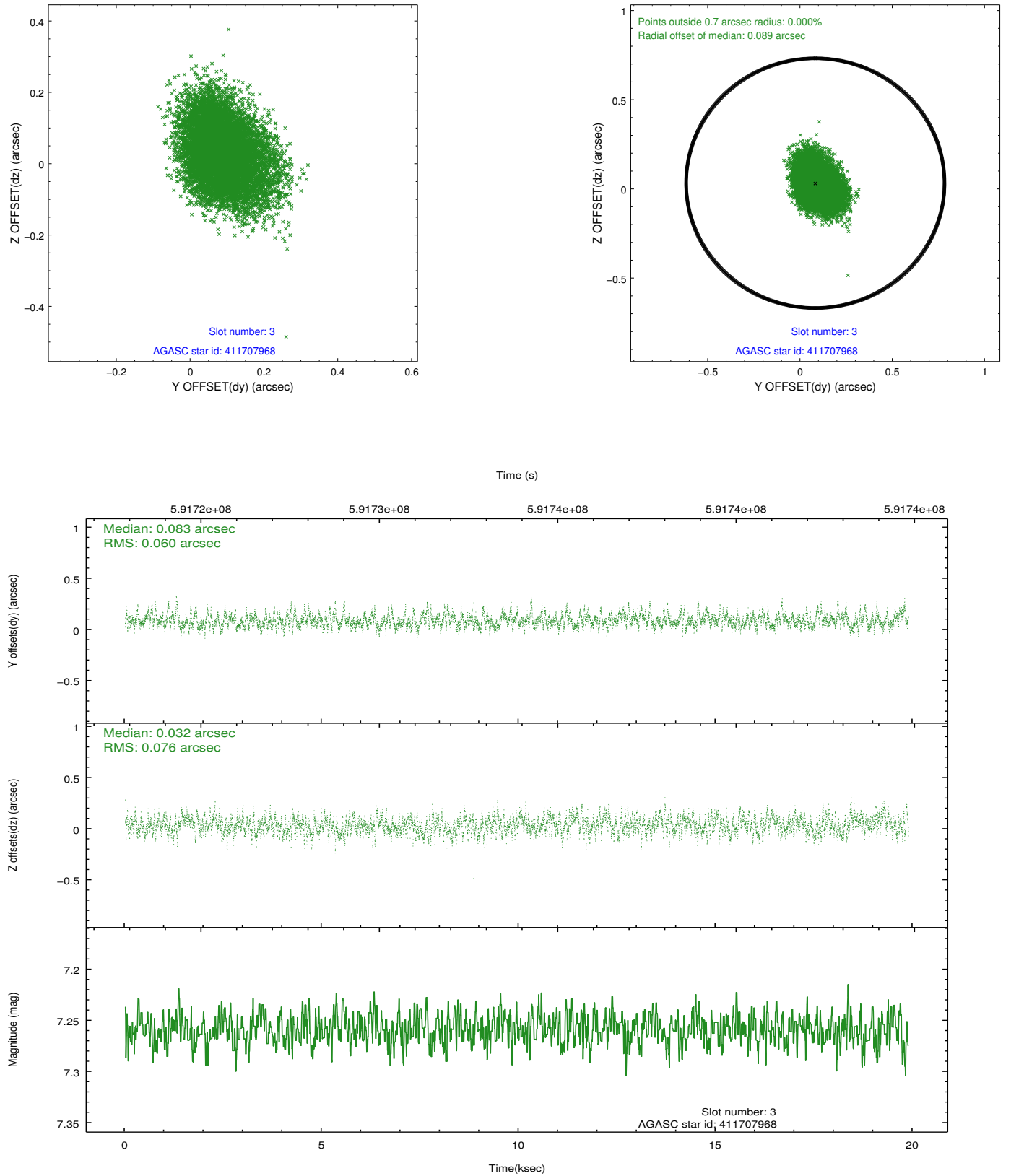


Slot Statistics

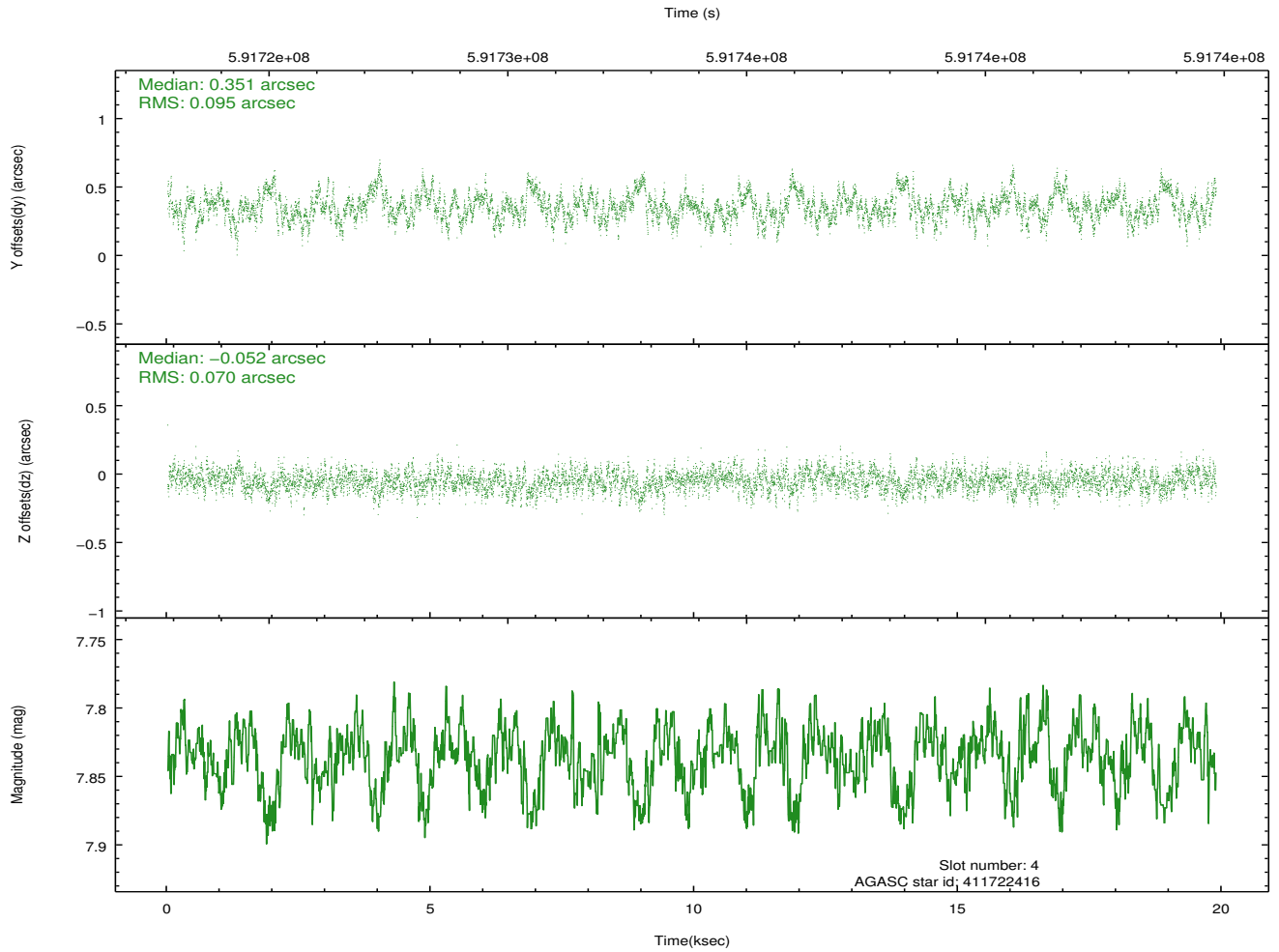
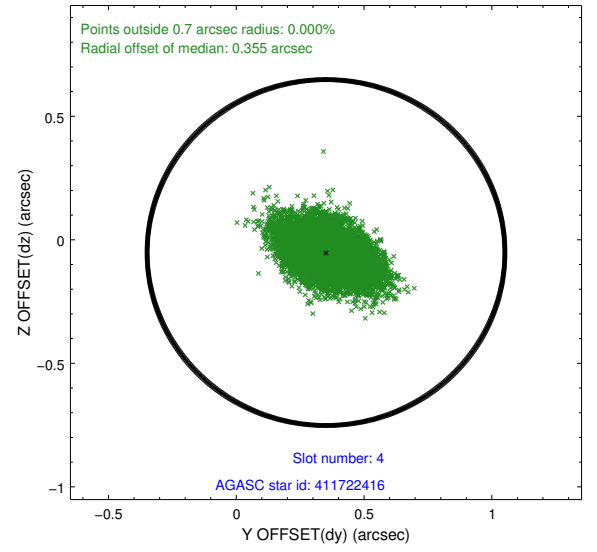
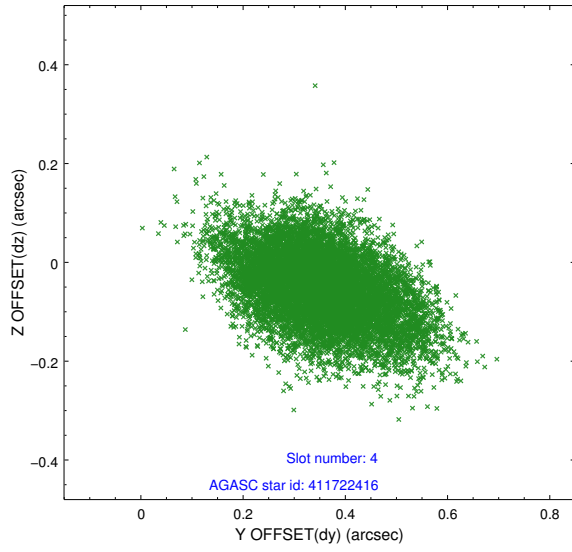
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.09	4848	0.047	0.001	0.022	0.059	0.000000	0.000000	926.62	-843.13
1	FID		ACIS-I-5	7.10	4850	-0.299	0.030	0.013	0.019	0.000000	0.000000	-1821.80	1054.21
2	FID		ACIS-I-6	7.10	4849	0.156	0.041	0.021	0.043	0.000000	0.000000	391.98	1699.01
3	GUIDE	used	411707968	7.26	9699	0.083	0.032	0.102	0.170	299.509933	40.926839	-264.27	-1049.67
4	GUIDE	used	411722416	7.83	9694	0.351	-0.052	0.124	0.211	298.936507	40.391736	2076.45	-1878.89
5	GUIDE	used	412240768	8.28	9696	0.011	0.558	0.106	0.164	299.999696	41.280279	-1913.16	-234.67
6	GUIDE	used	413425232	8.62	9694	-0.158	-0.296	0.091	0.147	300.417382	40.029012	1917.88	2393.74
7	GUIDE	used	413421016	8.70	9695	-0.290	-0.242	0.100	0.168	300.612426	40.446254	323.57	2371.55

2.4 Star Slots

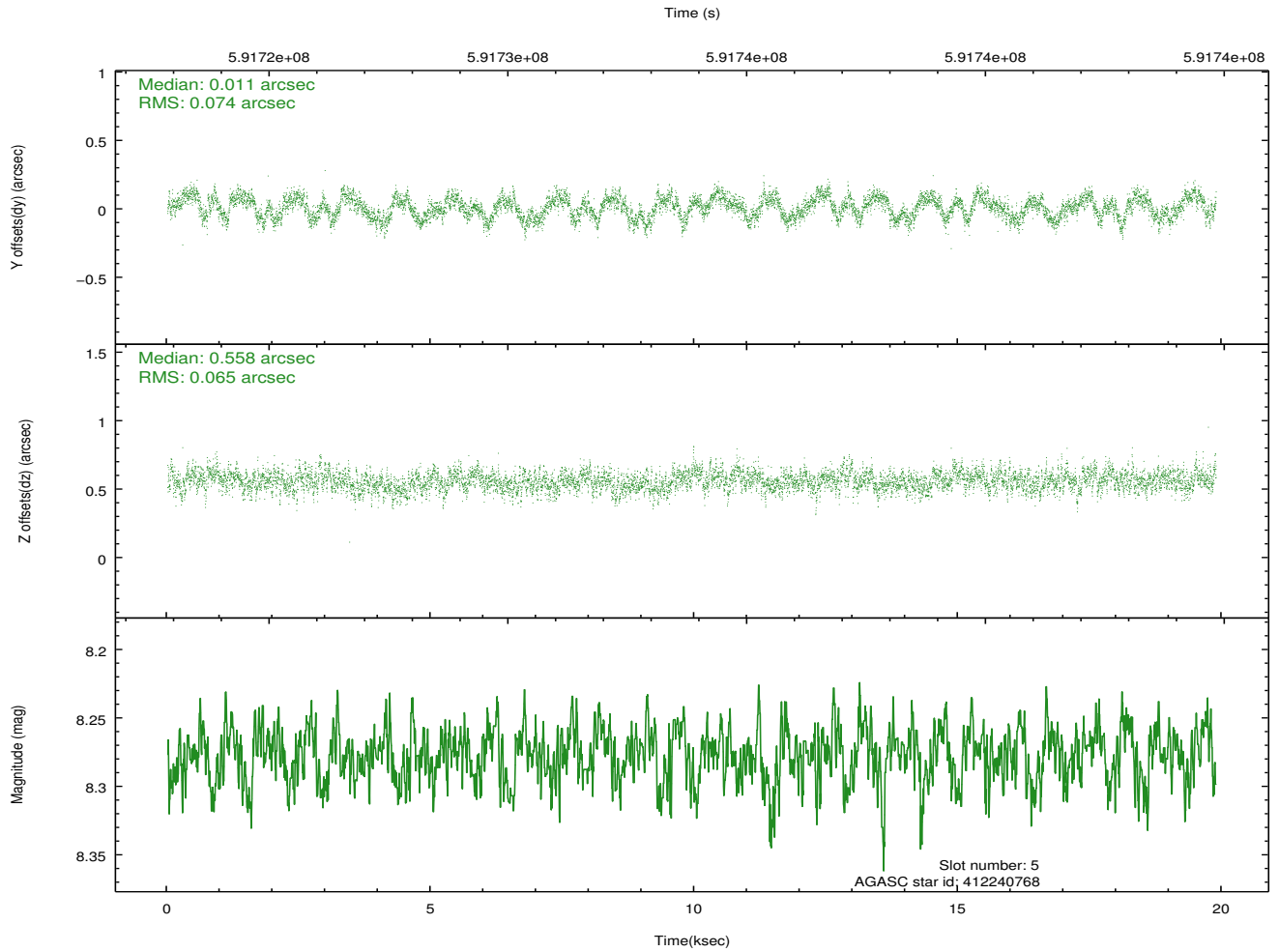
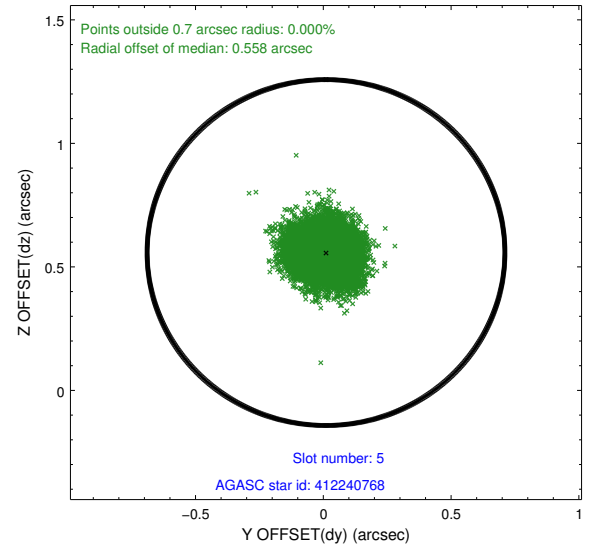
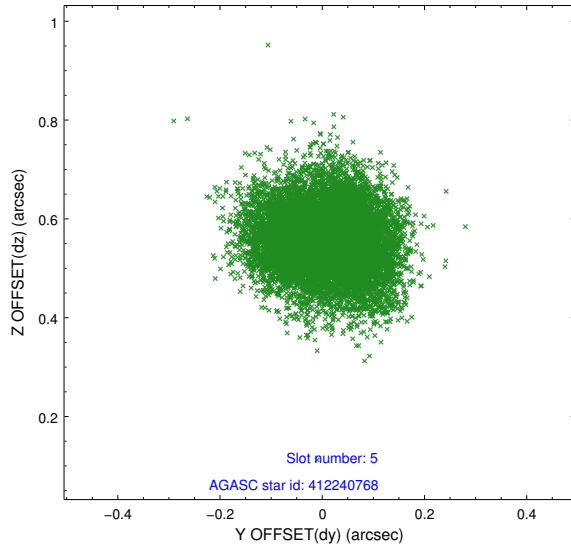
2.4.1 Slot 3



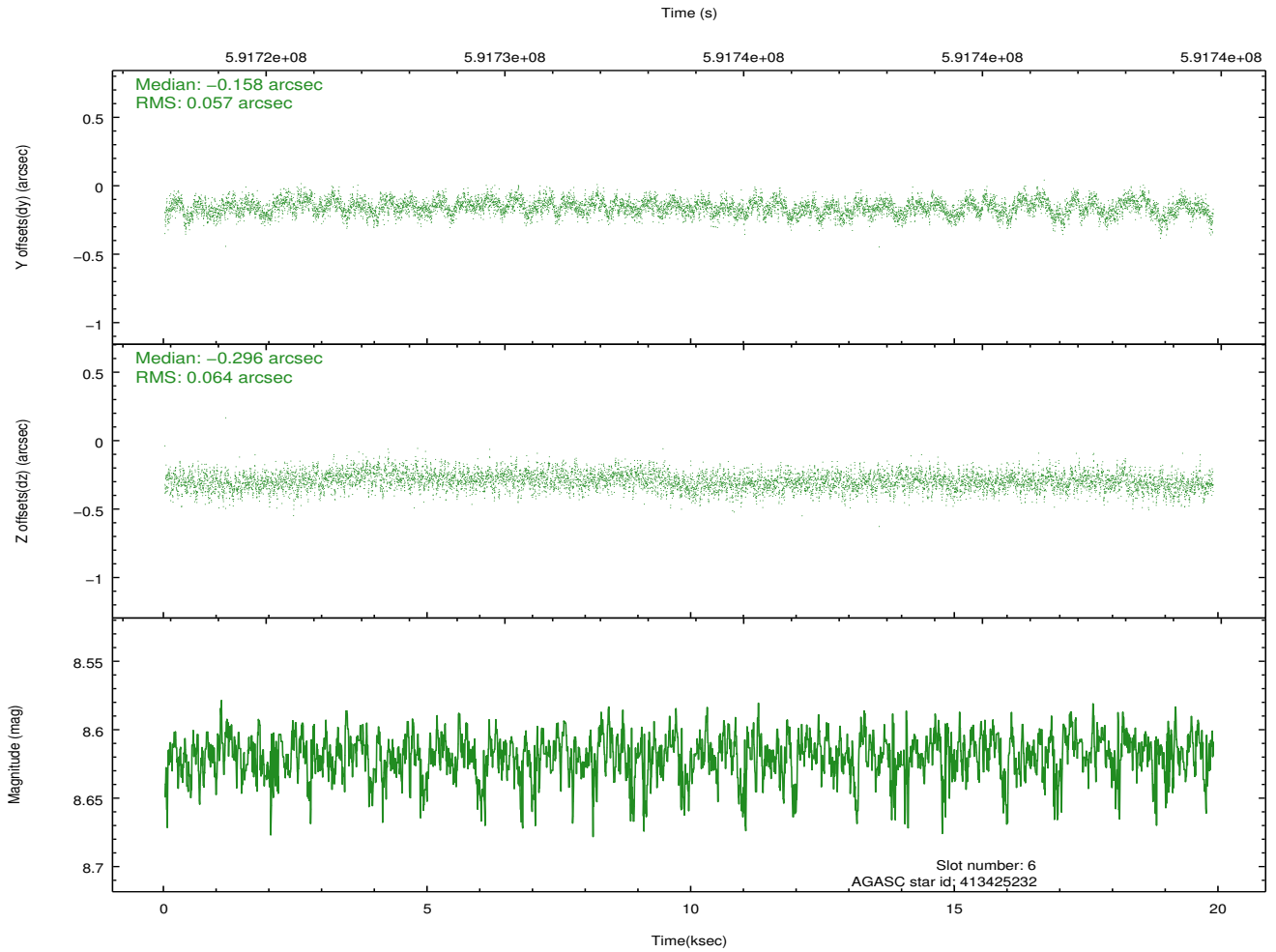
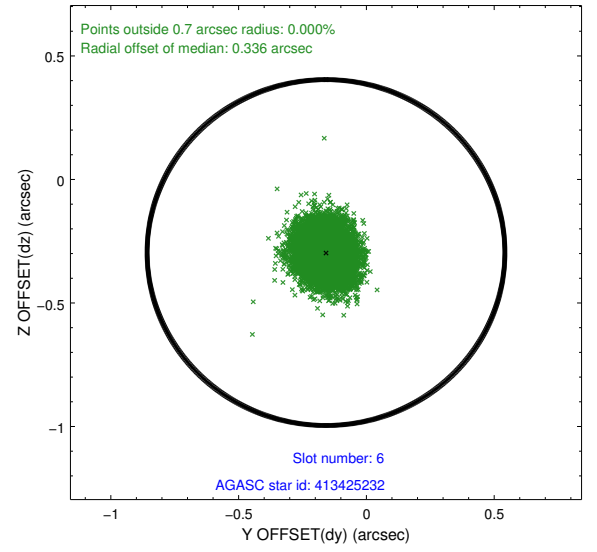
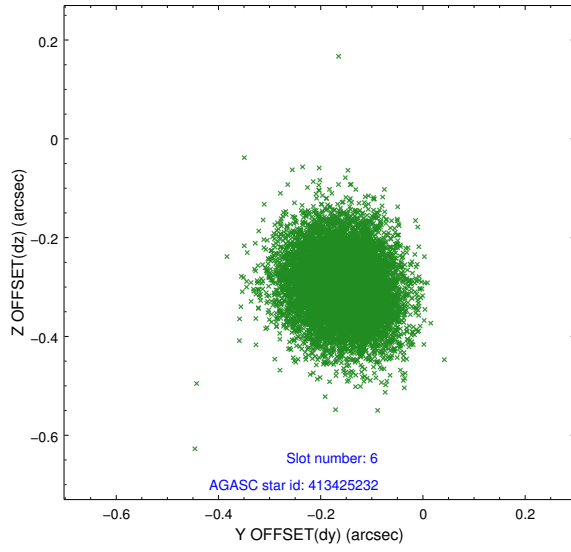
2.4.2 Slot 4



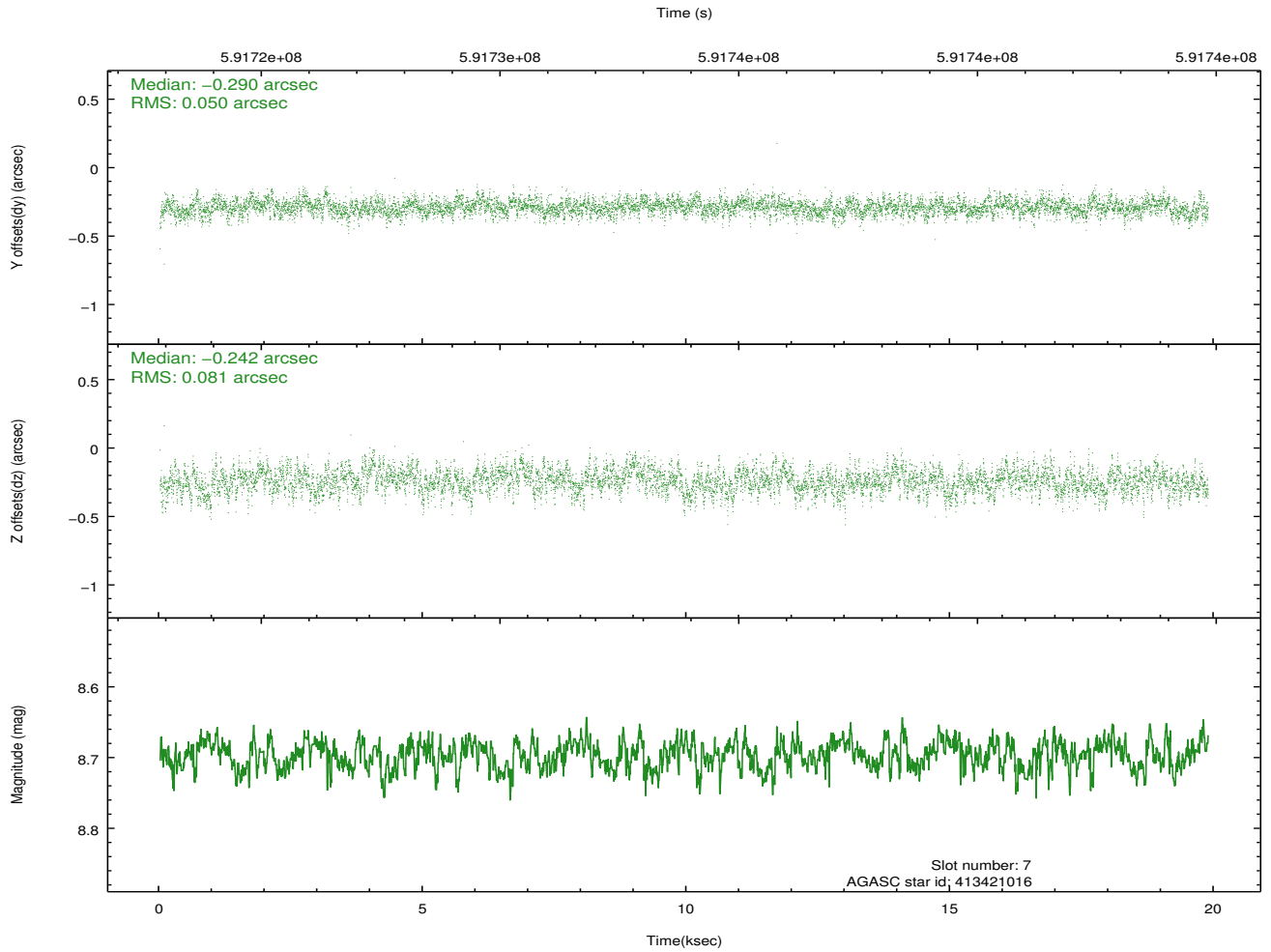
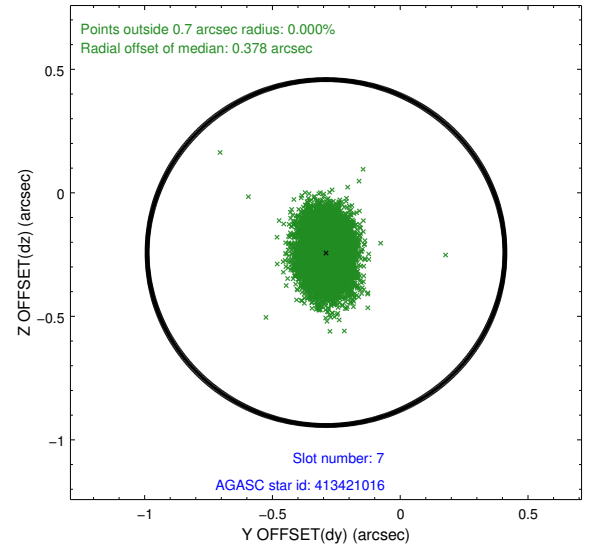
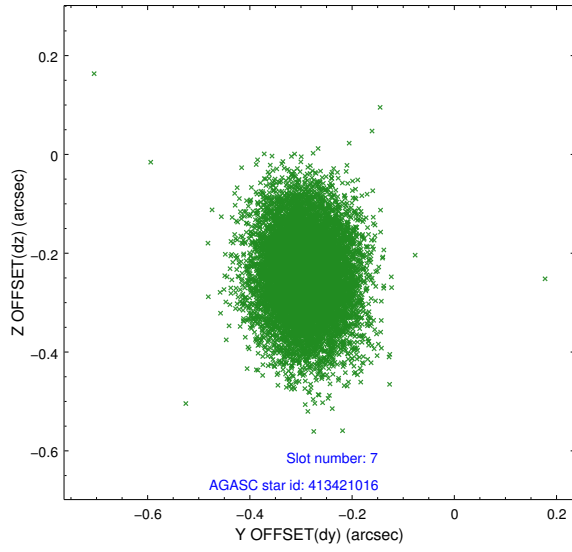
2.4.3 Slot 5



2.4.4 Slot 6

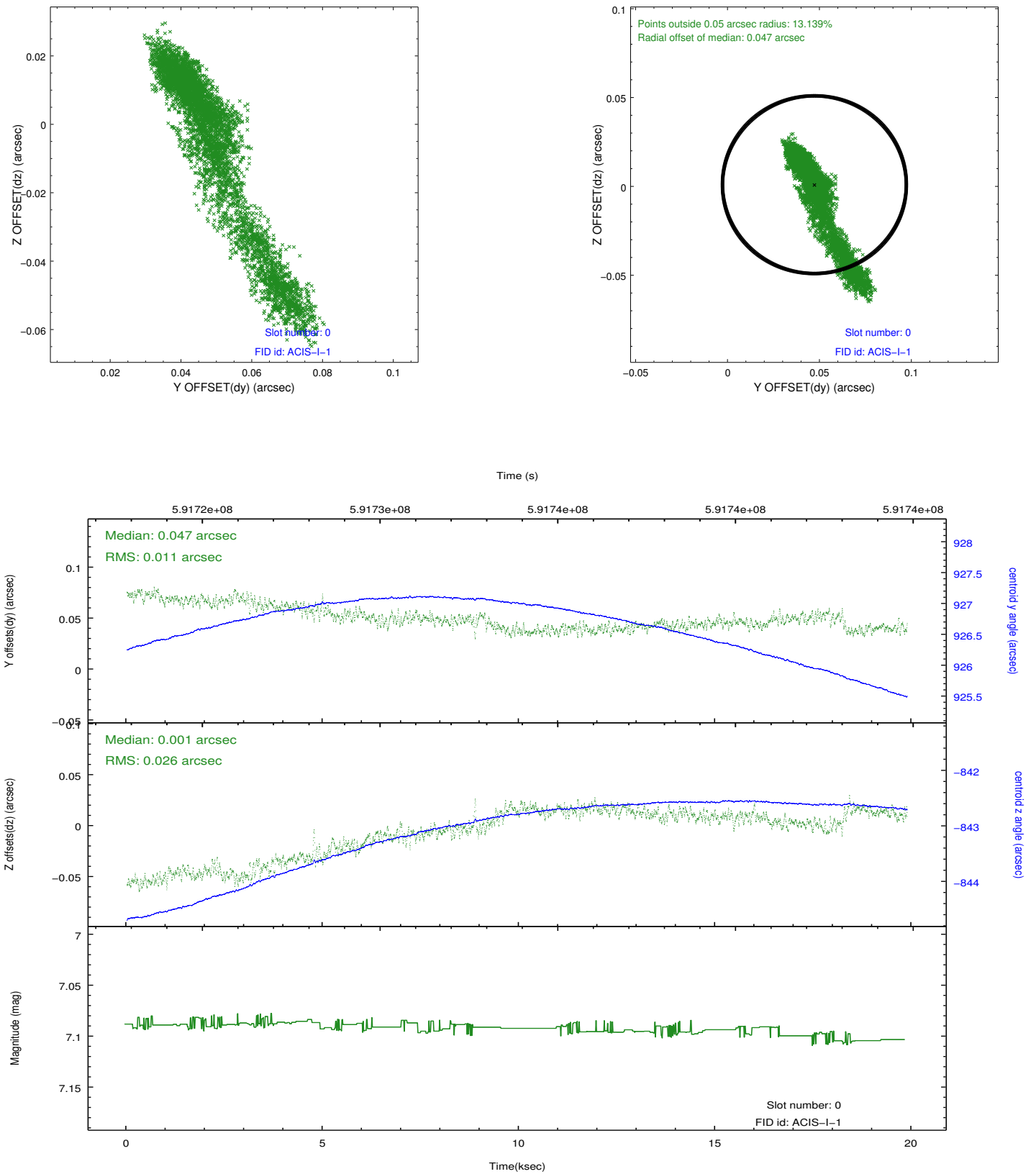


2.4.5 Slot 7

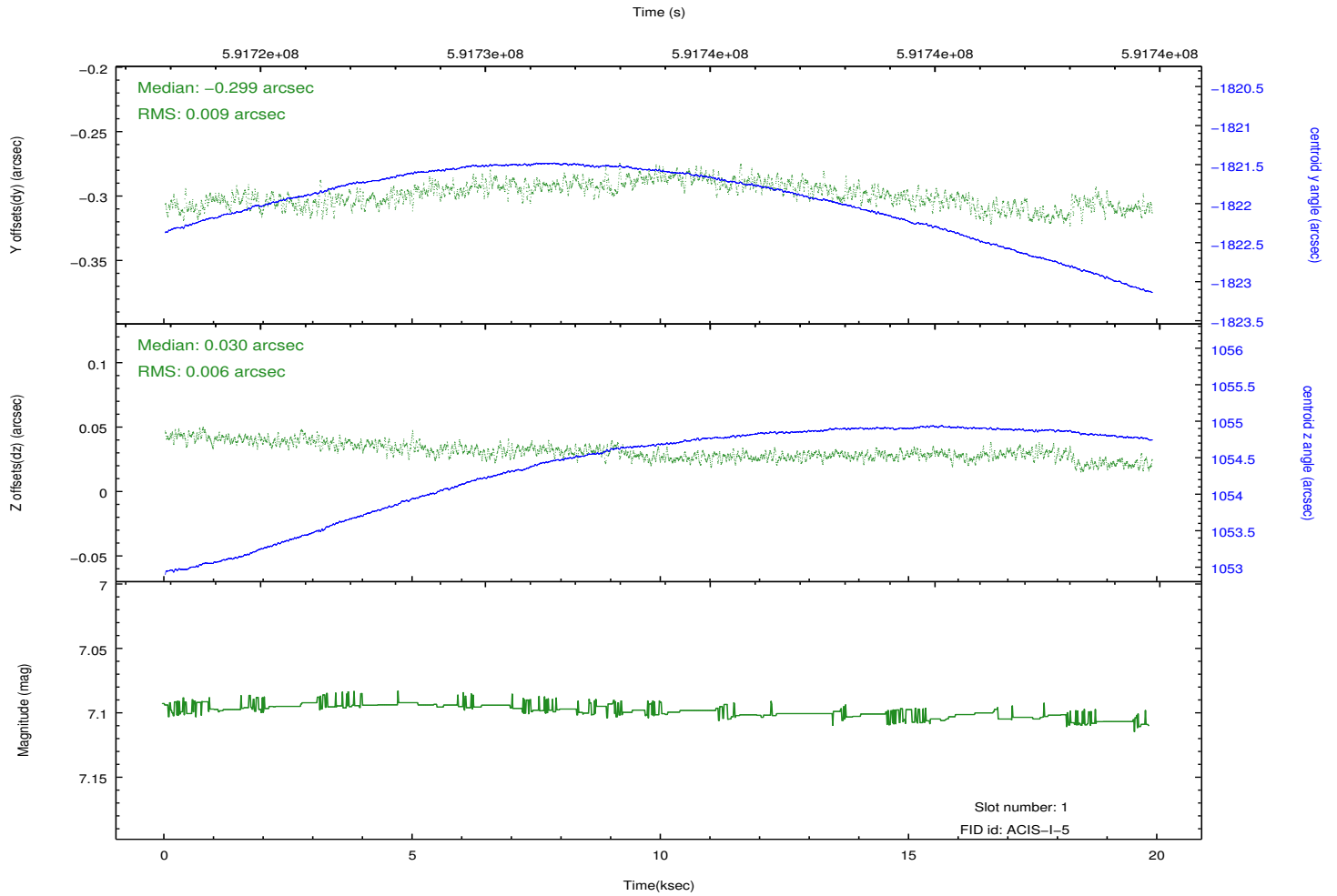
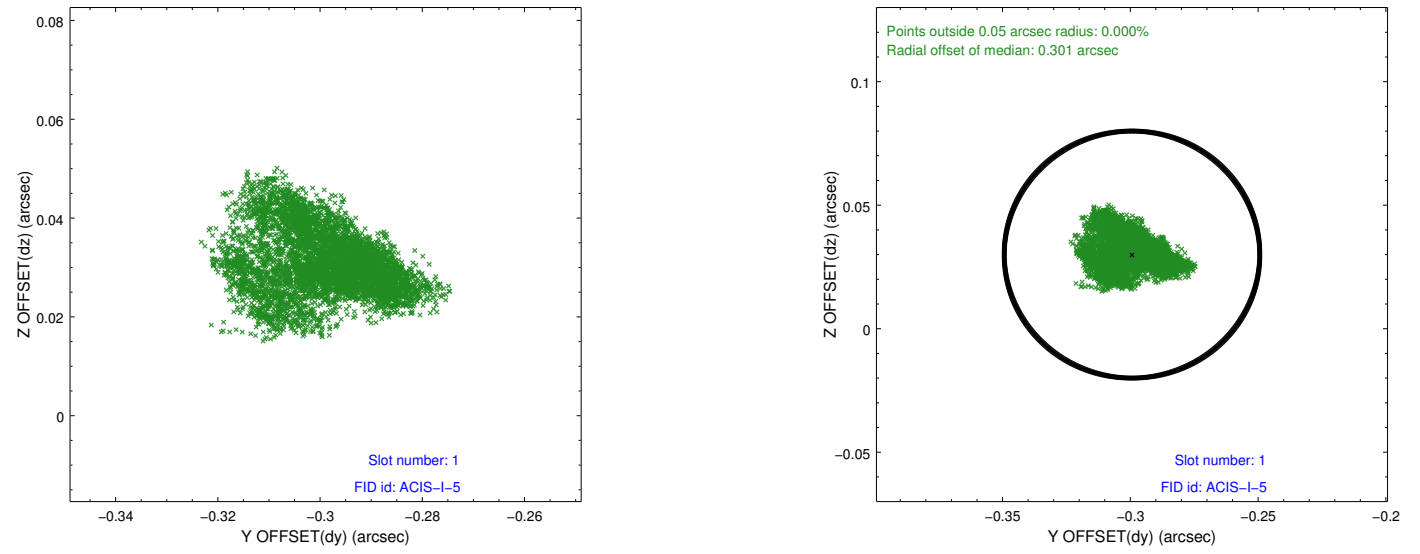


2.5 FID Slots

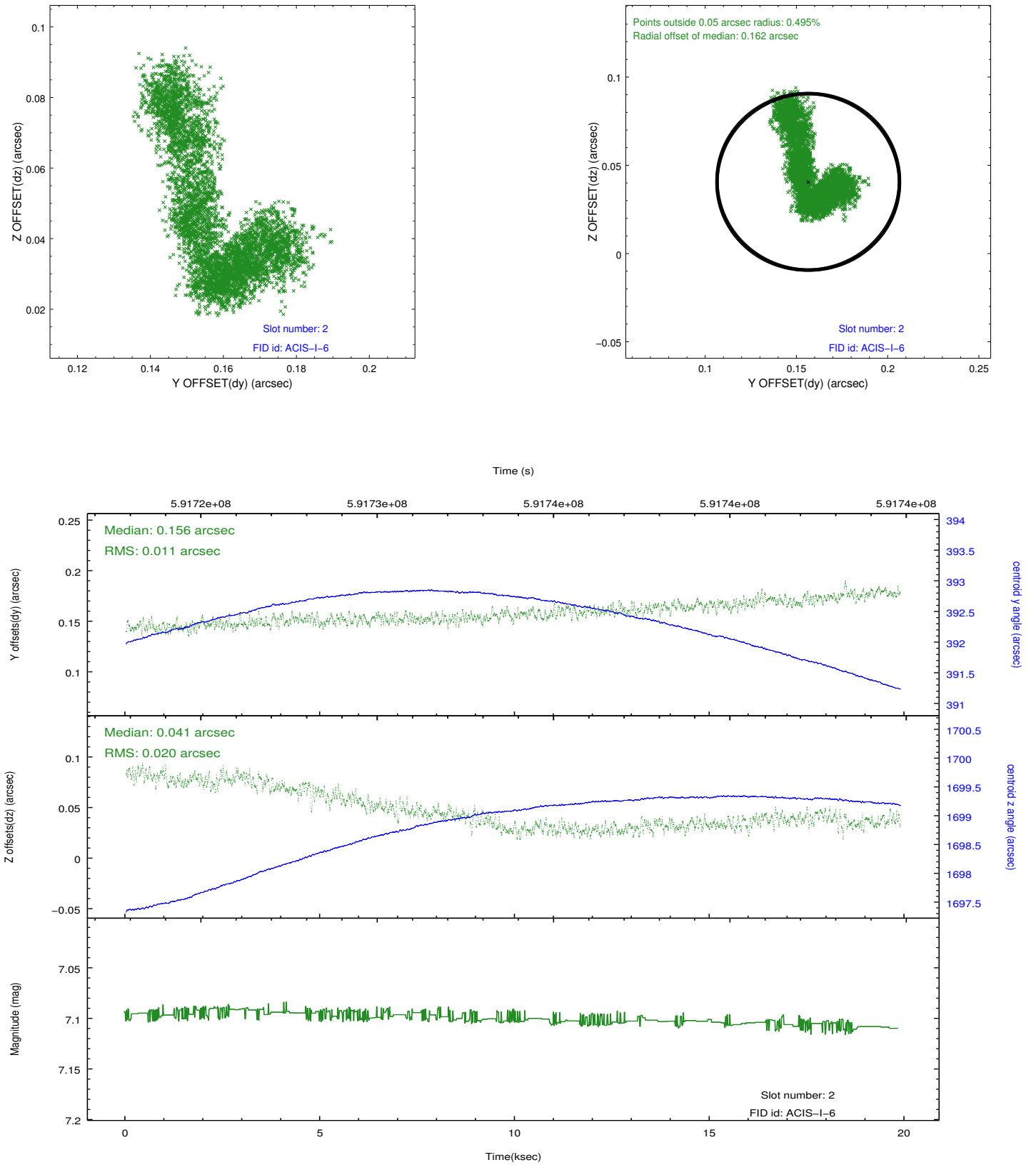
2.5.1 Slot 0



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)	2016.10.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.774120832324

A.2 Comments