

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 17511 - L2 Version 1
Chandra X-Ray Center

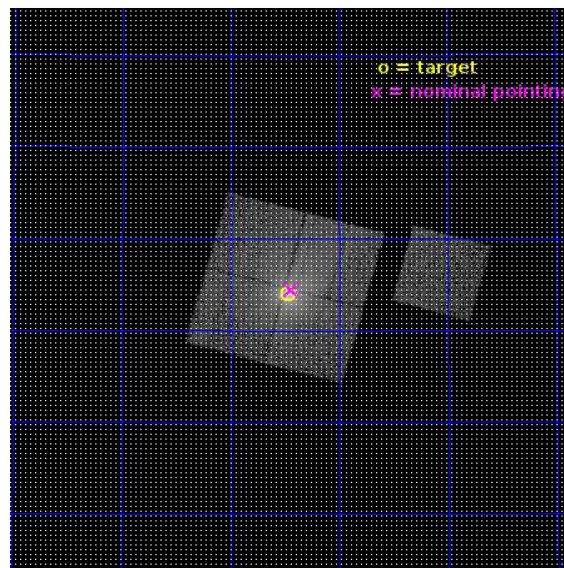
L2 Processing Date : May 10 2017

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1 Front

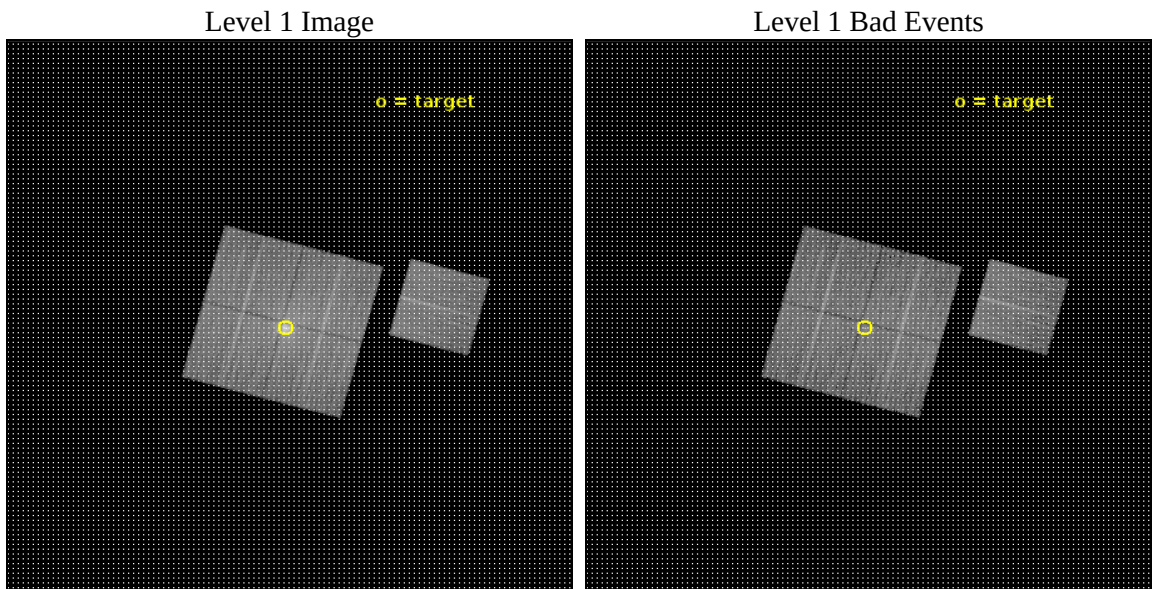
seq_num	703131	Sequence number
obs_id	17511	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - Nucleus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.867917	Observer's specified target RA [deg]
dec_targ	40.733889	Observer's specified target Dec [deg]
ra_nom	299.85983366602	Nominal RA [deg]
dec_nom	40.741170488207	Nominal Dec [deg]
roll_nom	105.2139557335	Nominal Roll [deg]
revision	1	Processing version of data
ontime	16072.41417408	Sum of GTIs [s]
livetime	15862.416250556	Livetime [s]
ontime0	16072.29105413	Sum of GTIs [s]
ontime1	16072.332094073	Sum of GTIs [s]
ontime2	16072.373134136	Sum of GTIs [s]
ontime3	16072.41417408	Sum of GTIs [s]
ontime6	16072.250014067	Sum of GTIs [s]
l2events	130257	Number of level 2 events



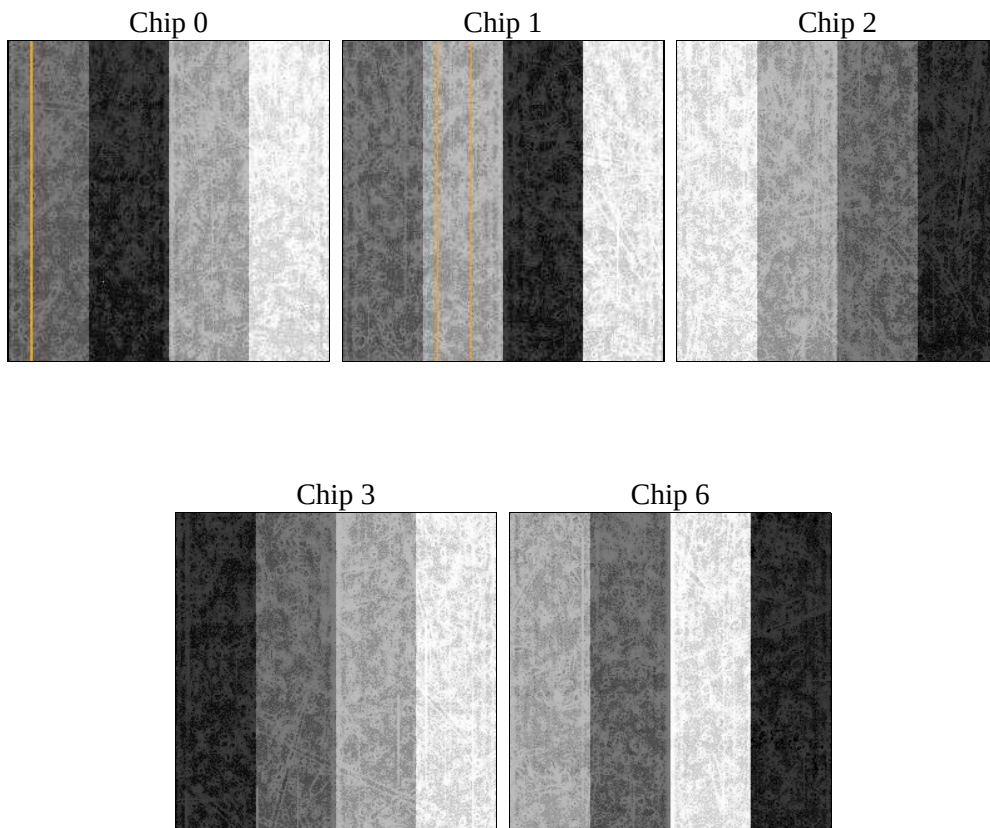
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	16072.41417408	Sum of GTIs [s]
caldsver	4.7.4	 	ontime0	16072.29105413	Sum of GTIs [s]
date	2017-05-10T20:32:49	Date and time of file creation	ontime1	16072.332094073	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	16072.373134136	Sum of GTIs [s]
			ontime3	16072.41417408	Sum of GTIs [s]
			ontime6	16072.250014067	Sum of GTIs [s]
			l1events	637171	Number of level 1 events

2.1.4 Events

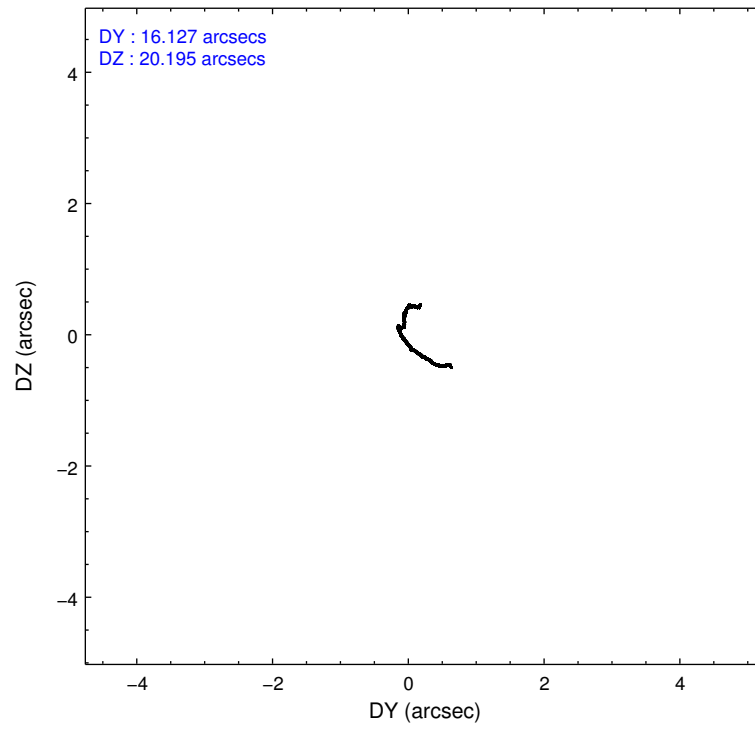
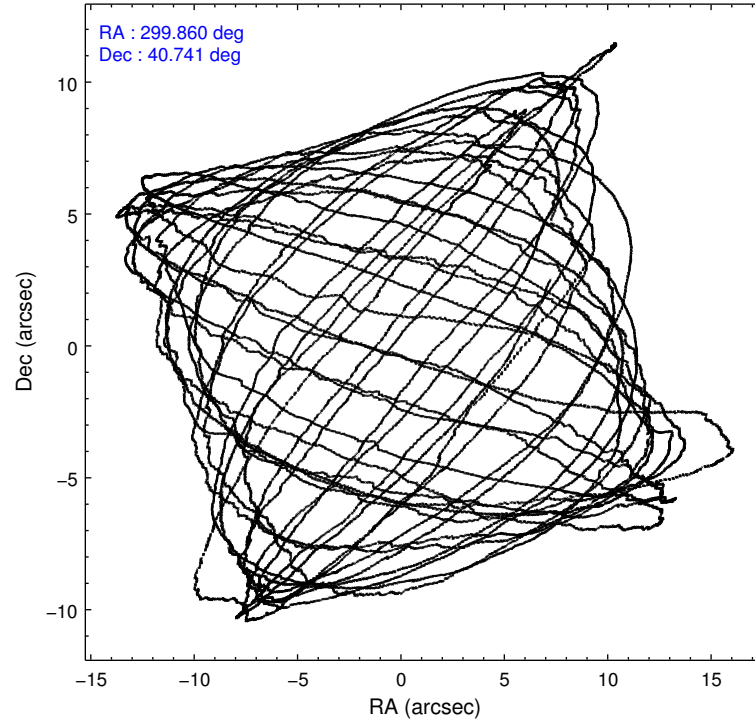
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	113843	123464	137142	147668	115054
rejected events	90905	97631	104620	98657	101219
rejected %	79%	79%	76%	66%	87%

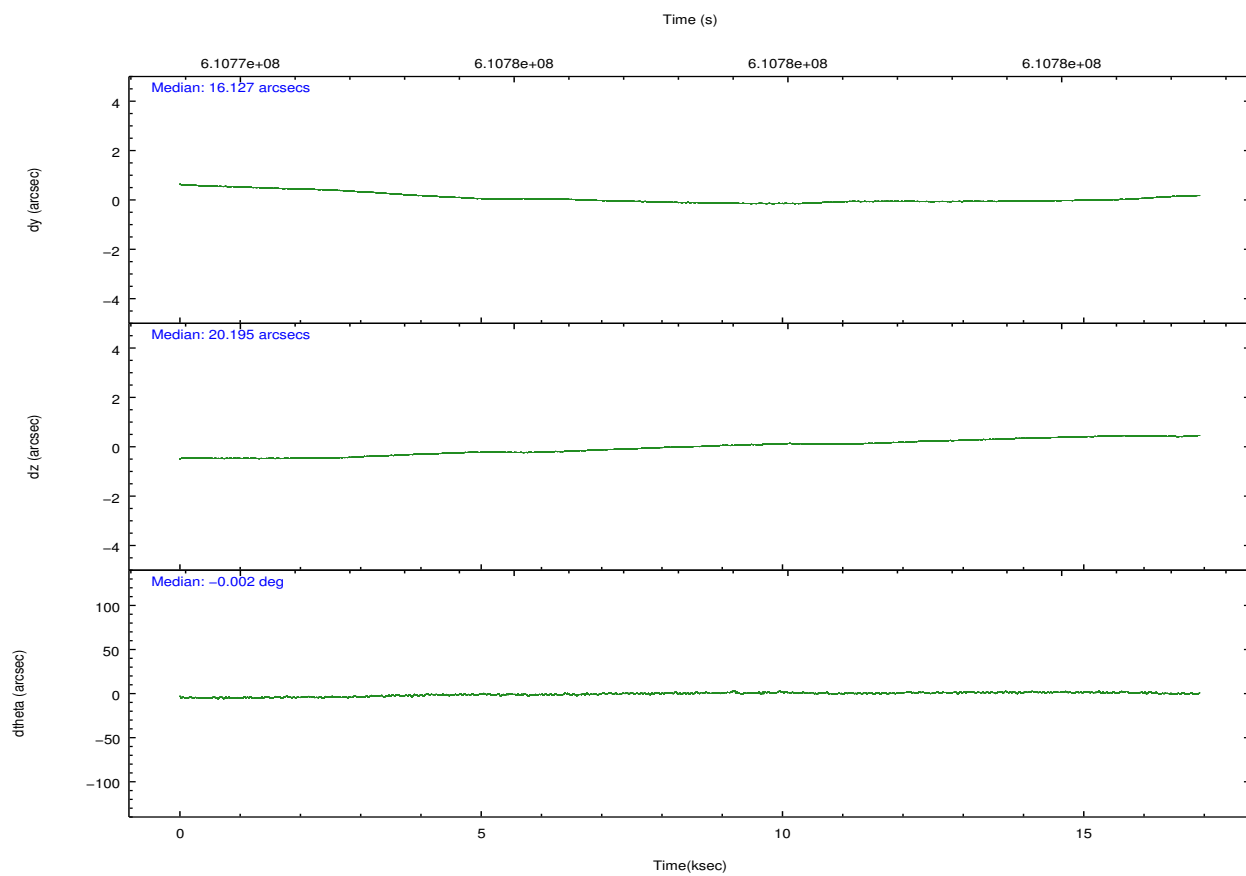
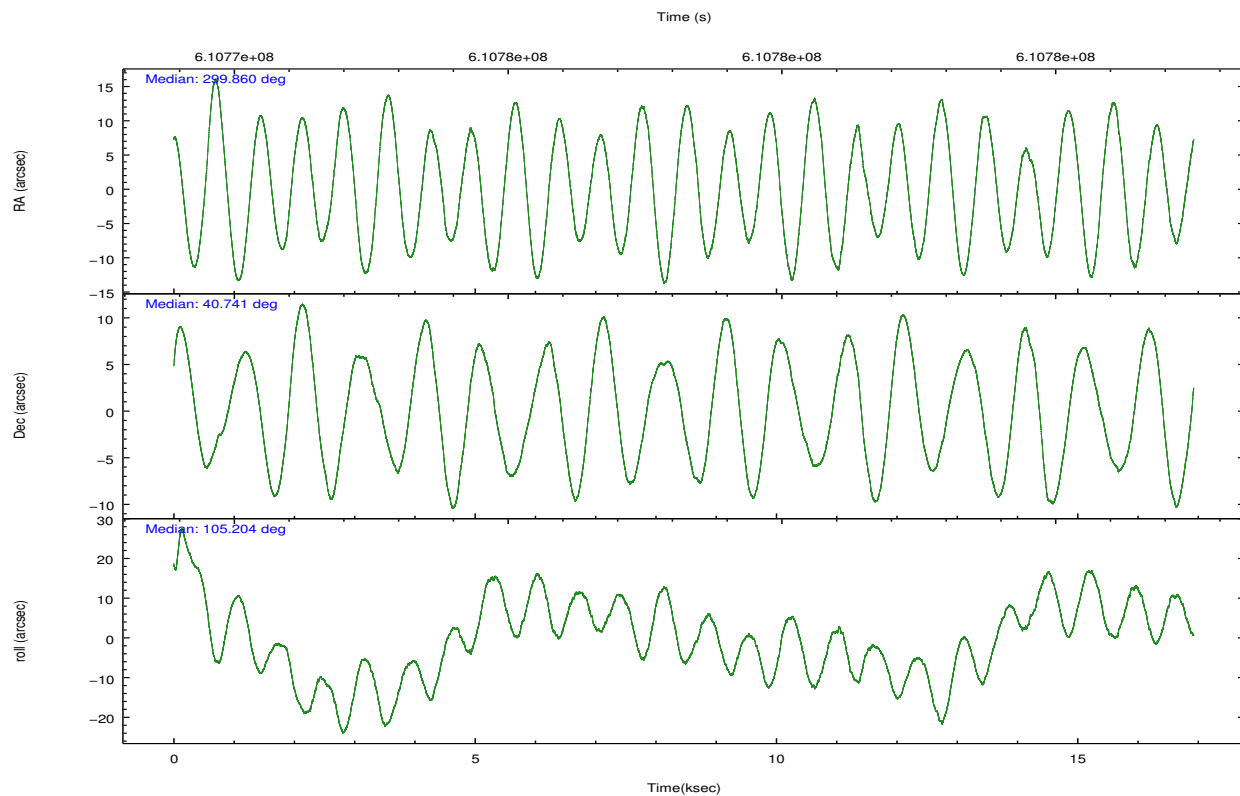
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	12263	13772	20189	32701	5013
	10%	11%	14%	22%	4%
grade 1 events	94	80	169	460	67
	0%	0%	0%	0%	0%
grade 2 events	4364	5239	5251	6861	3145
	3%	4%	3%	4%	2%
grade 3 events	1649	1678	1916	2590	1289
	1%	1%	1%	1%	1%
grade 4 events	1672	1666	1962	2601	1335
	1%	1%	1%	1%	1%
grade 5 events	4788	5210	4575	5788	5344
	4%	4%	3%	3%	4%
grade 6 events	3000	3486	3209	4266	3053
	2%	2%	2%	2%	2%
grade 7 events	86013	92333	99871	92401	95808
	75%	74%	72%	62%	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	299.885783	299.8598336660178	CCD I2 on	Y	Y
[deg] Pointing Dec	40.721798	40.74117048820669	CCD I3 on	Y	Y
[deg] Pointing Roll	104.988339	105.2139557335019	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)	610770695.184000	610768911.1602	CCD S5 on	N	N
Observation start date	2017-05-10T02:30:26	2017-05-10T02:01:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	610786695.184000	610787249.94877	On-chip summing requested	N	N
Observation end date	2017-05-10T06:57:06	2017-05-10T07:07:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



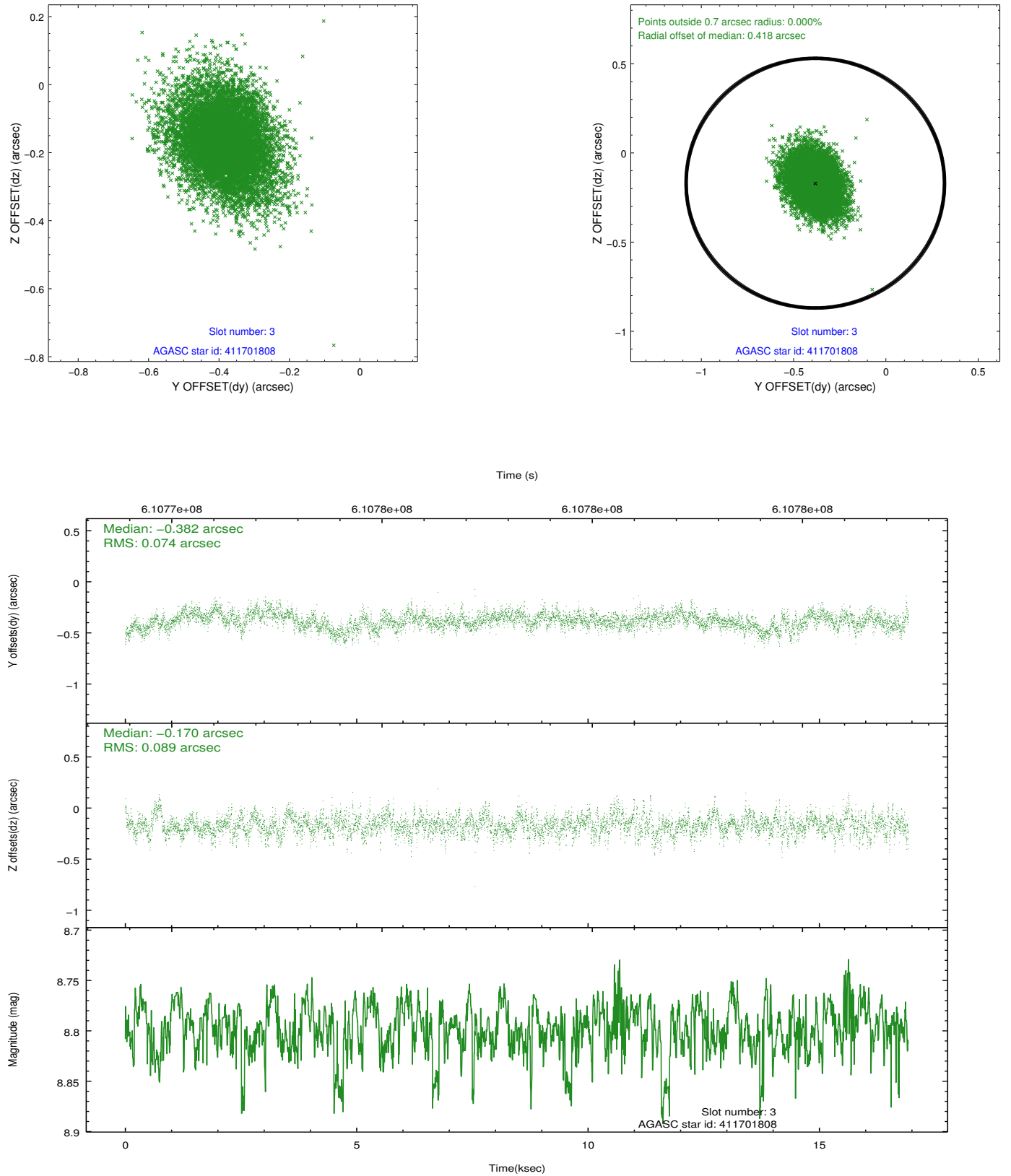


Slot Statistics

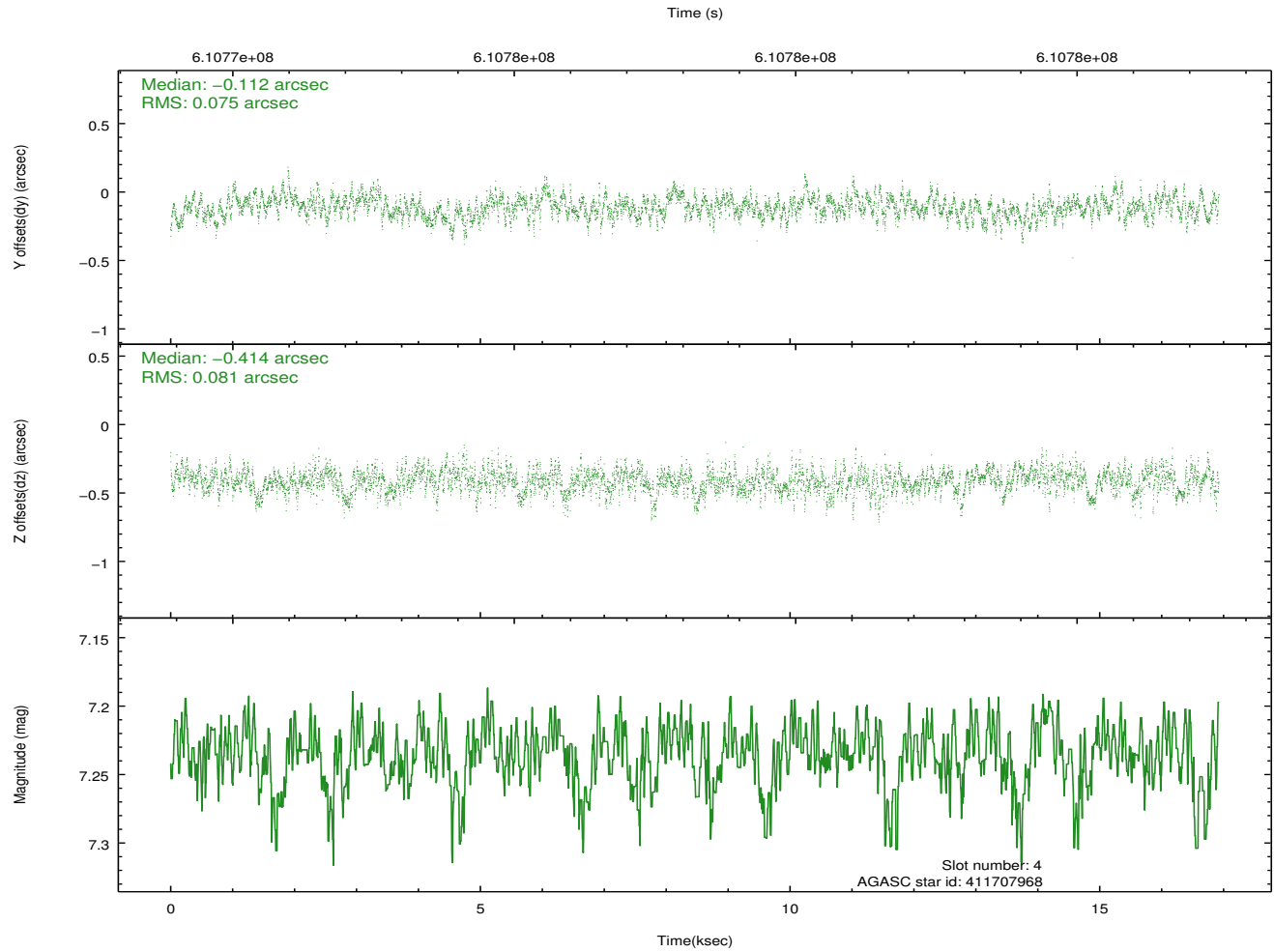
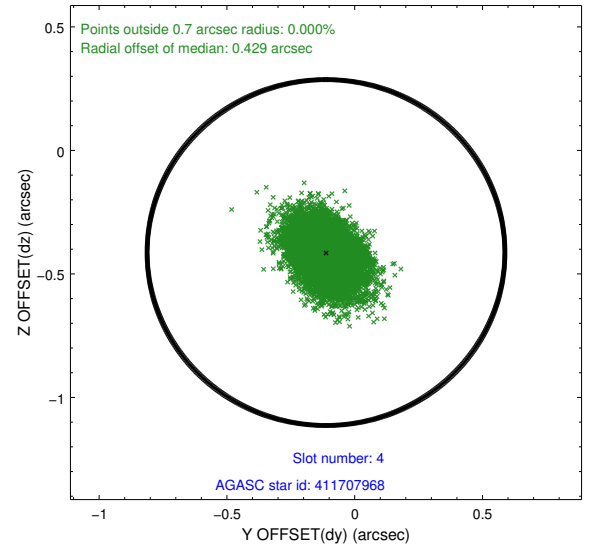
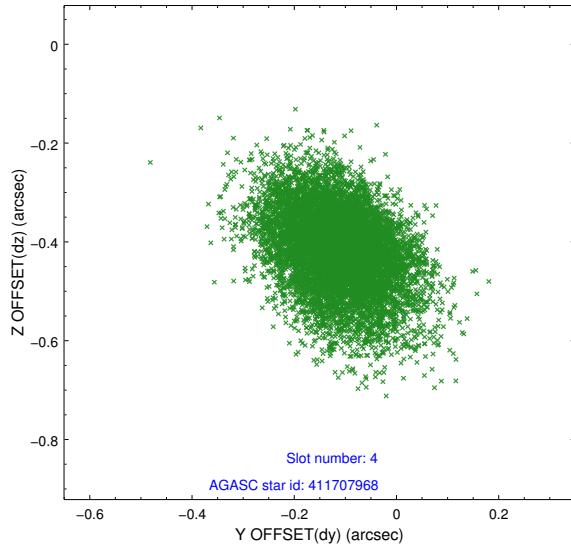
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.00	4128	-0.047	-0.066	0.013	0.027	0.000000	0.000000	-771.00	-850.34
1	FID		ACIS-I-5	7.10	4127	-0.300	-0.024	0.012	0.028	0.000000	0.000000	-1825.48	1053.41
2	FID		ACIS-I-6	7.11	4126	0.254	0.158	0.008	0.013	0.000000	0.000000	388.72	1698.40
3	GUIDE	used	411701808	8.80	8251	-0.382	-0.170	0.121	0.205	299.419536	40.880184	882.00	1077.71
4	GUIDE	used	411707968	7.24	8257	-0.112	-0.414	0.115	0.192	299.509933	40.926839	979.93	795.87
5	GUIDE	used	412240768	8.27	8255	-0.228	-0.060	0.112	0.192	299.999696	41.280279	1862.96	-817.23
6	GUIDE	used	413421016	8.67	8256	0.418	0.568	0.111	0.202	300.612426	40.446254	-1464.07	-1668.07
7	GUIDE	used	413414112	8.76	8254	0.304	0.081	0.110	0.187	300.390444	40.913917	317.53	-1506.02

2.4 Star Slots

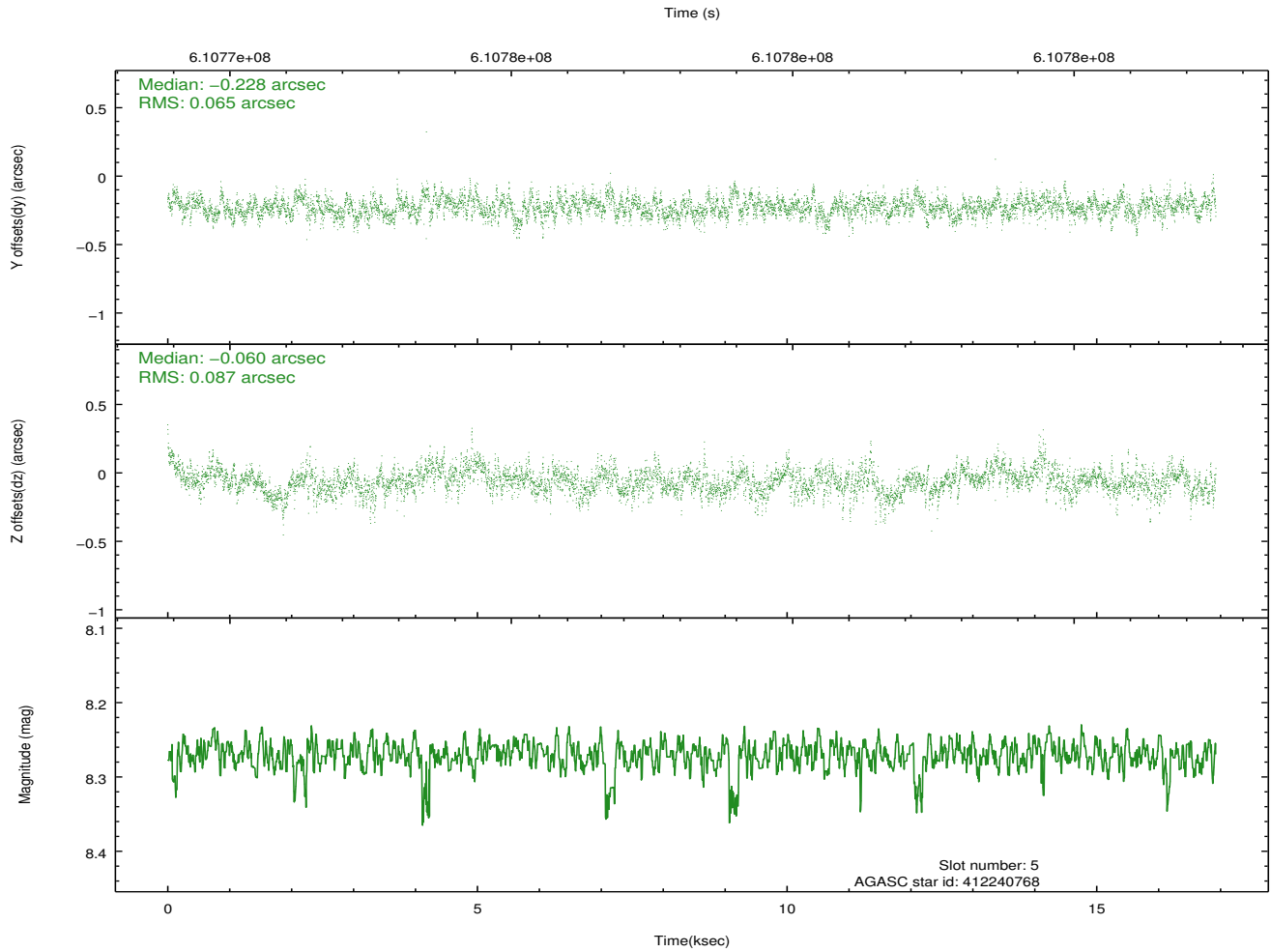
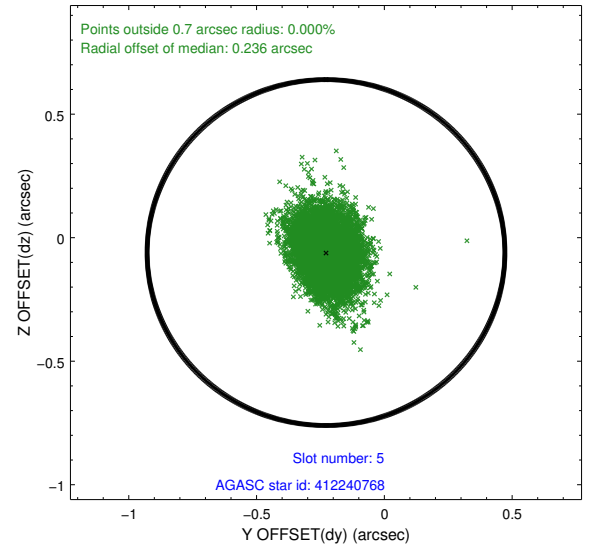
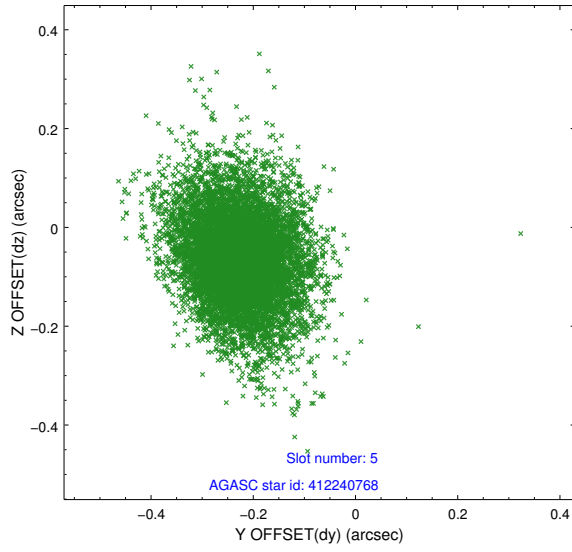
2.4.1 Slot 3



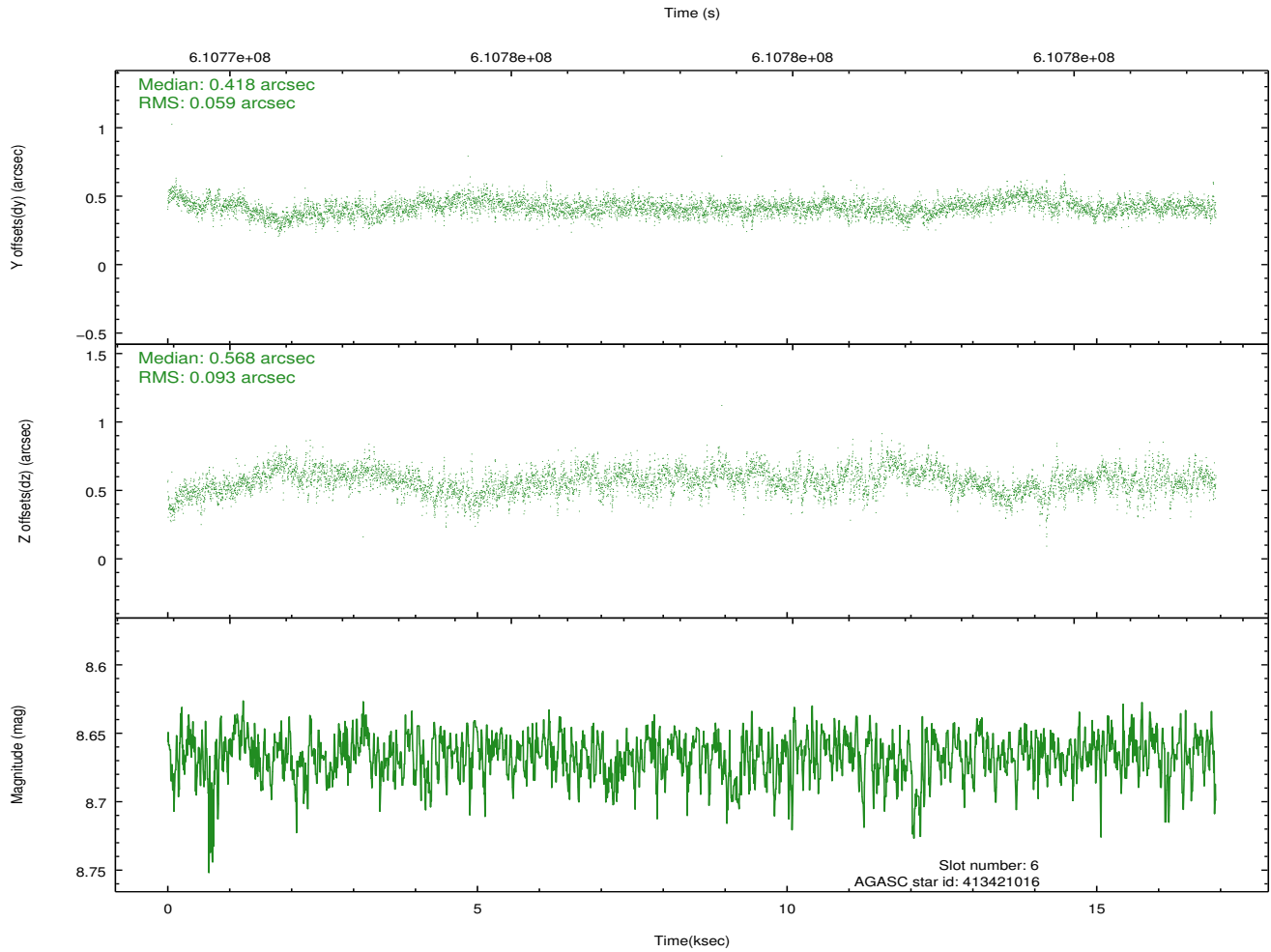
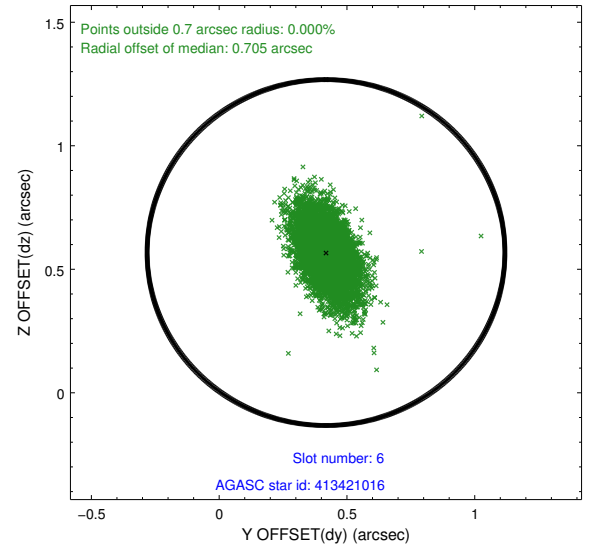
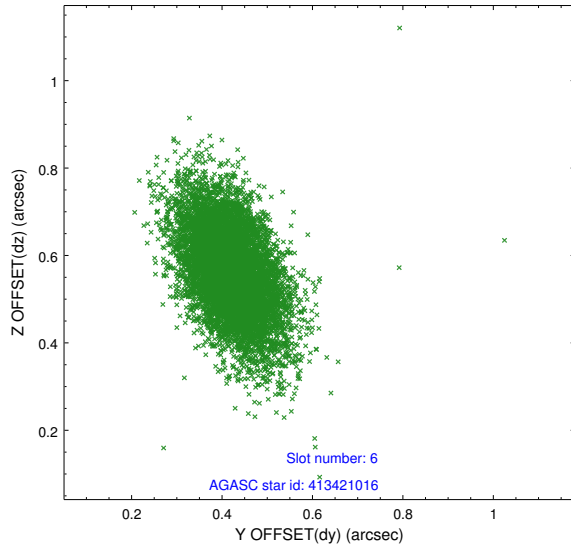
2.4.2 Slot 4



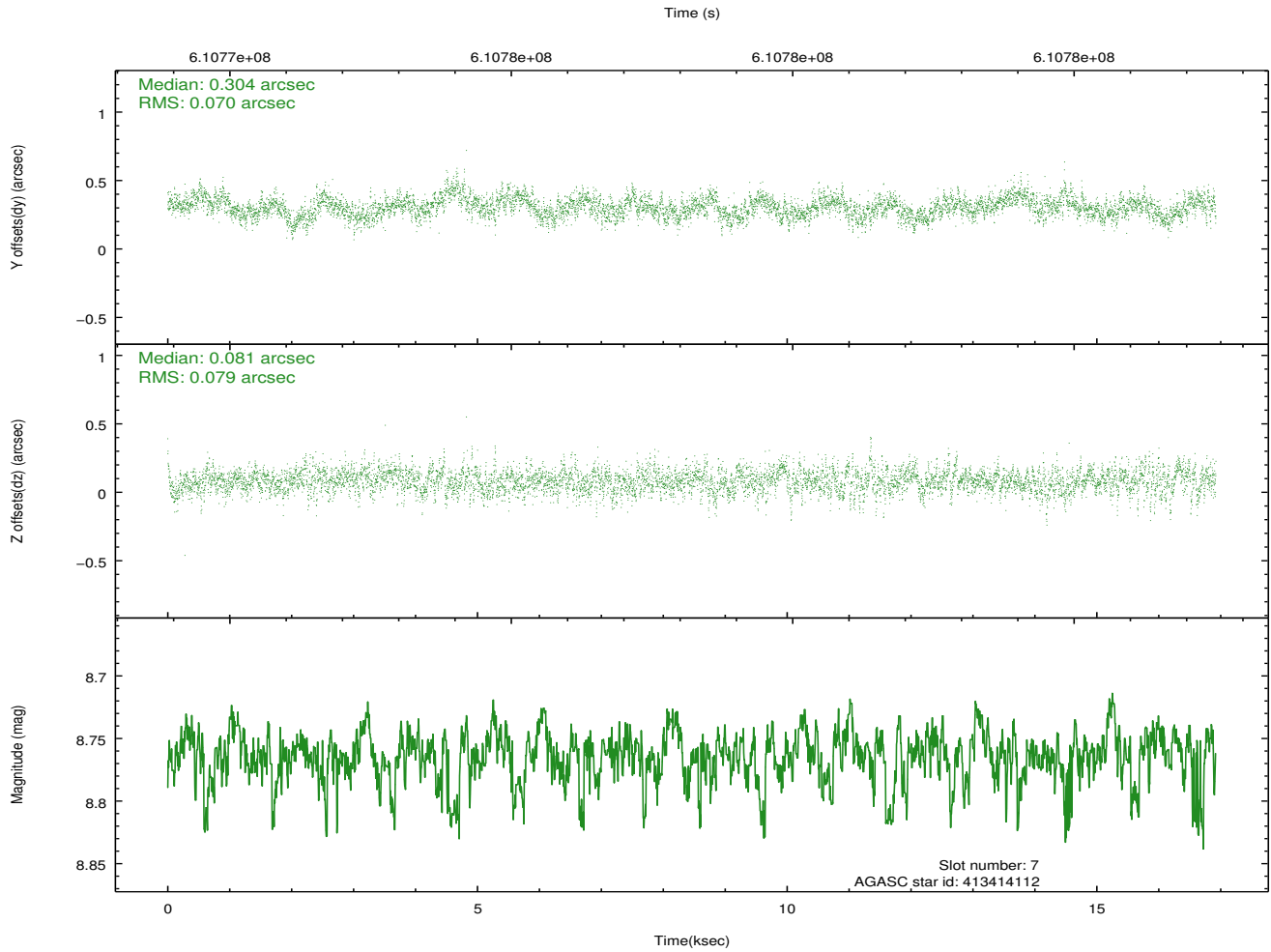
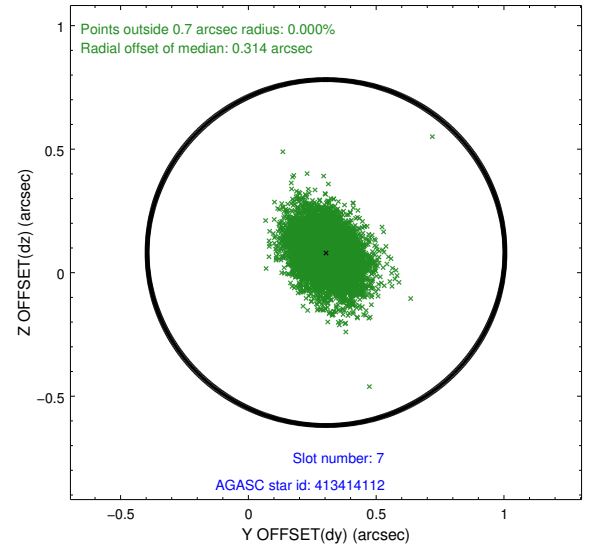
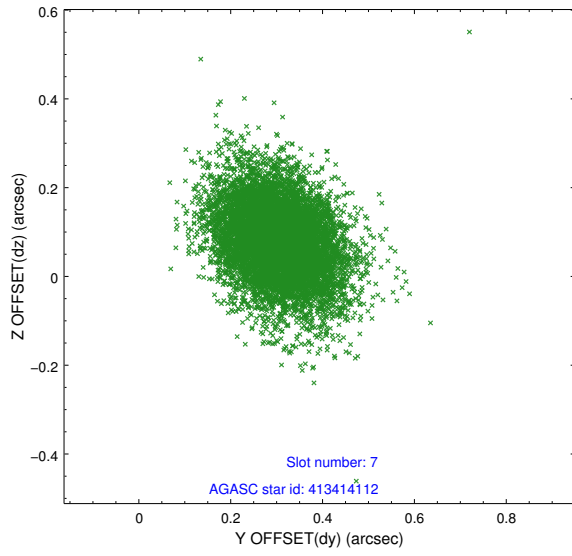
2.4.3 Slot 5



2.4.4 Slot 6

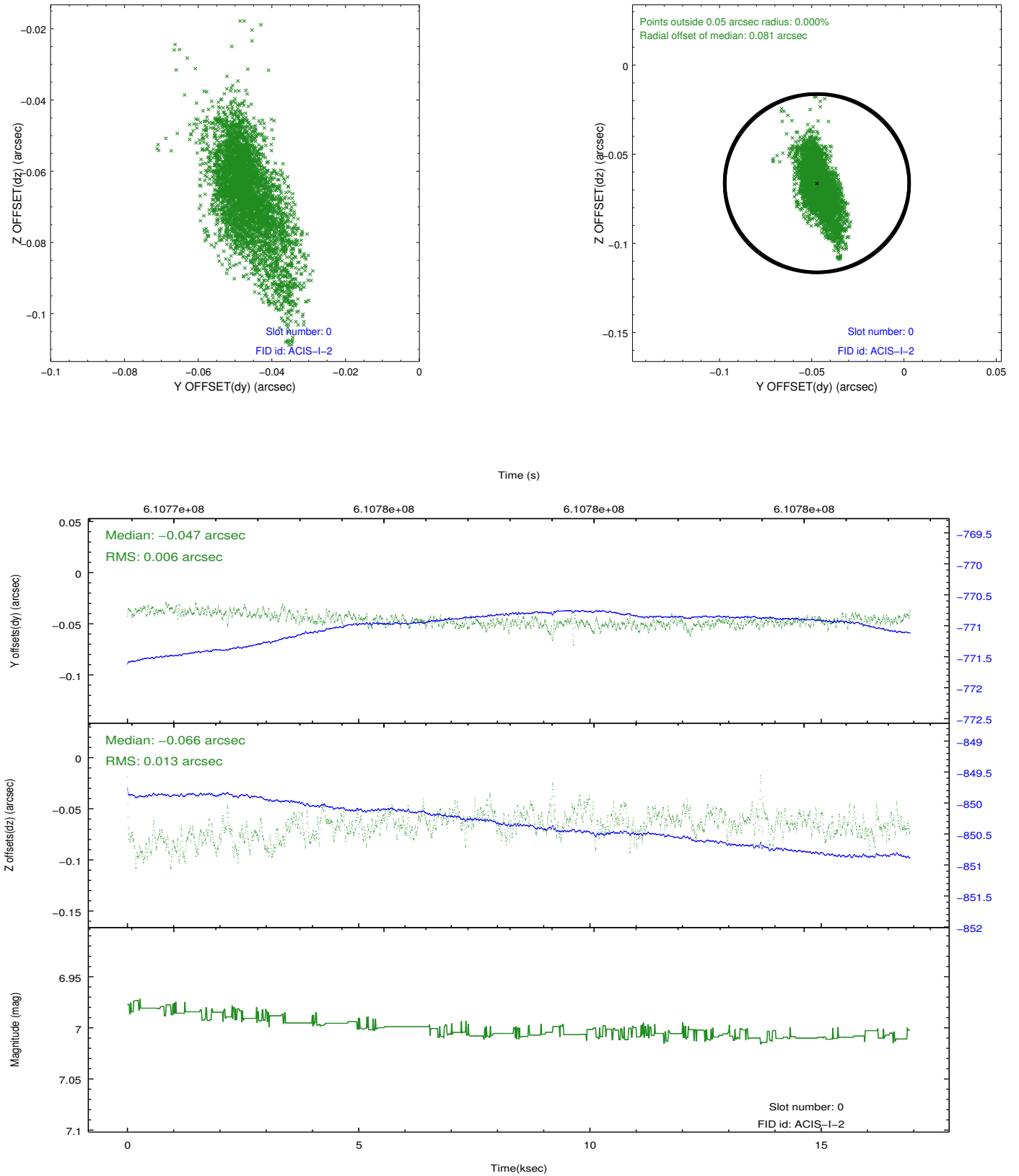


2.4.5 Slot 7

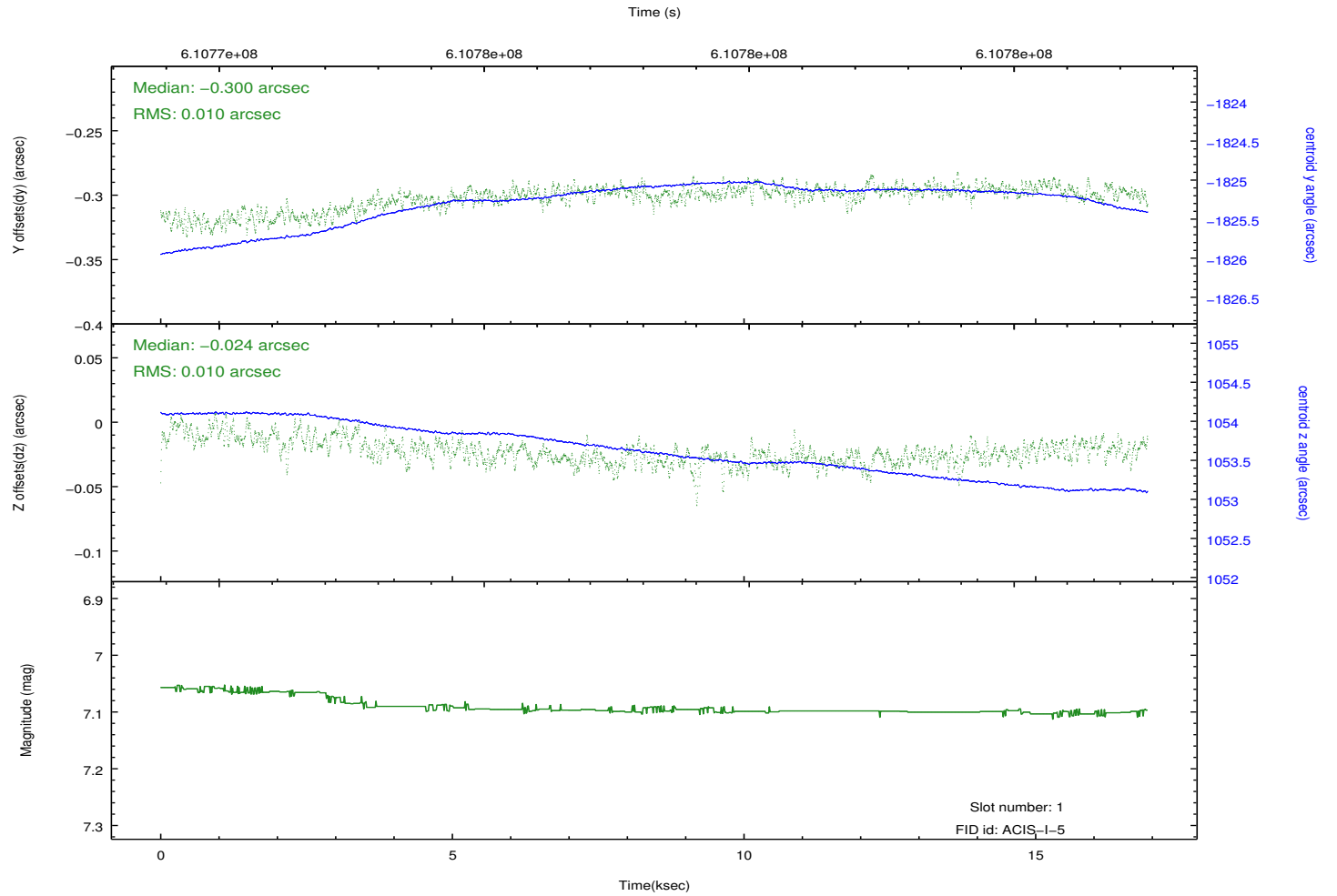
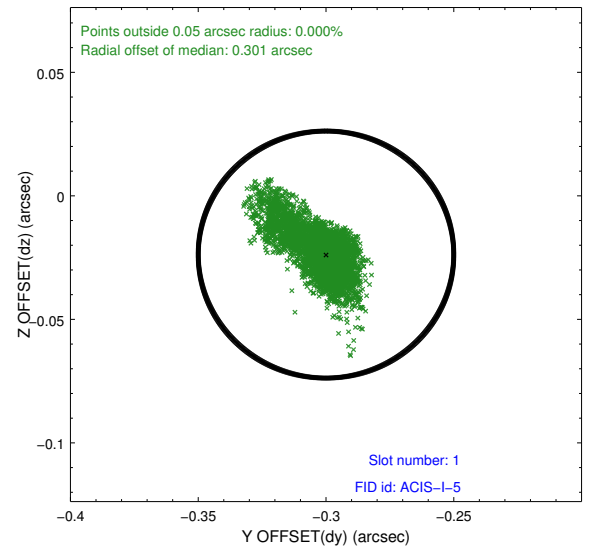
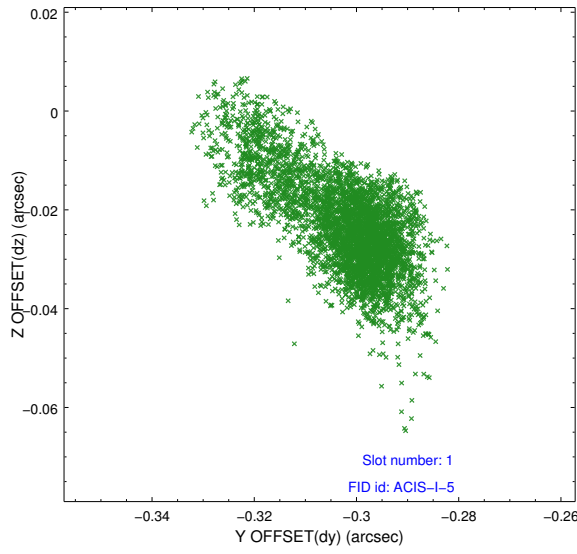


2.5 FID Slots

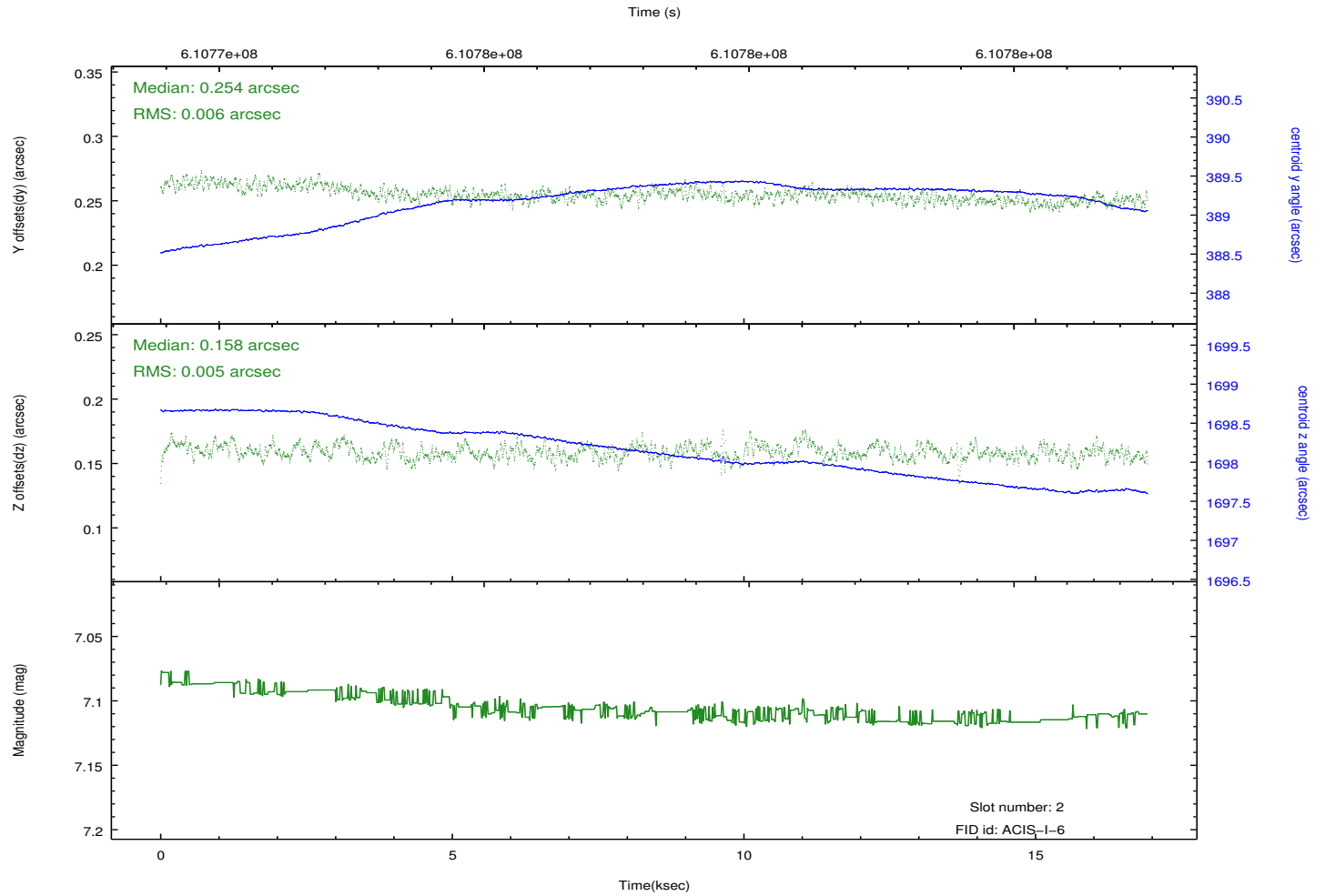
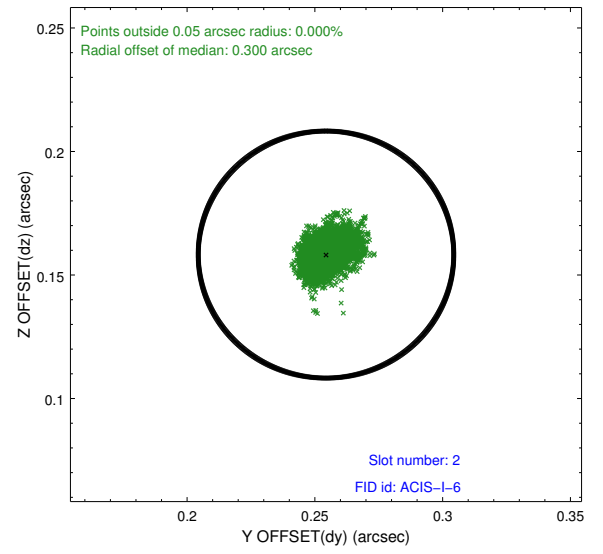
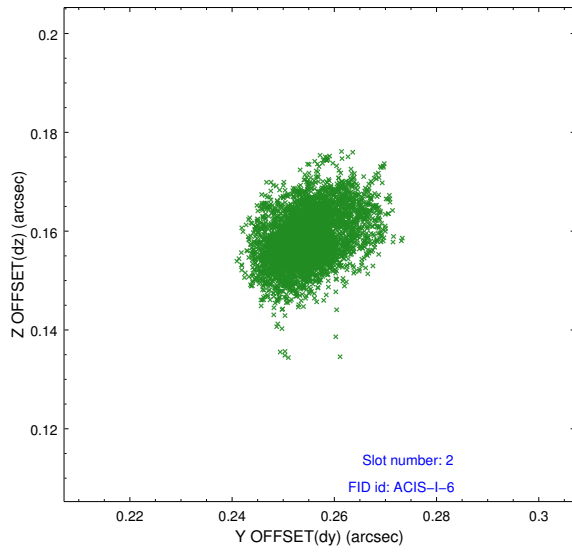
2.5.1 Slot 0



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)	2017.05.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.07241417408

A.2 Comments