

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 17137 - L2 Version 1
Chandra X-Ray Center

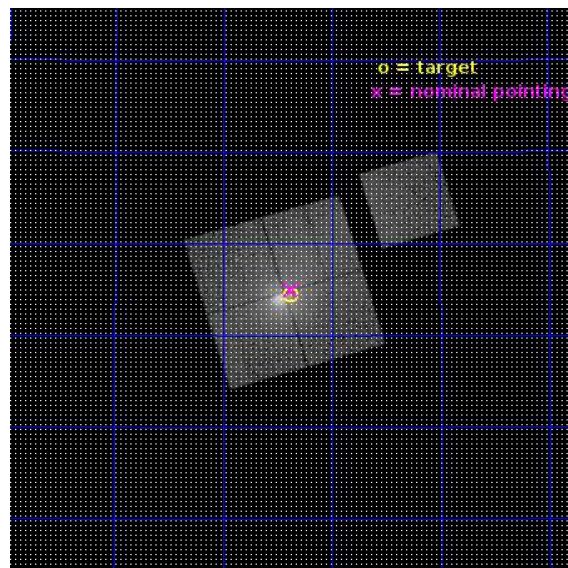
L2 Processing Date : Mar 30 2017

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1 Front

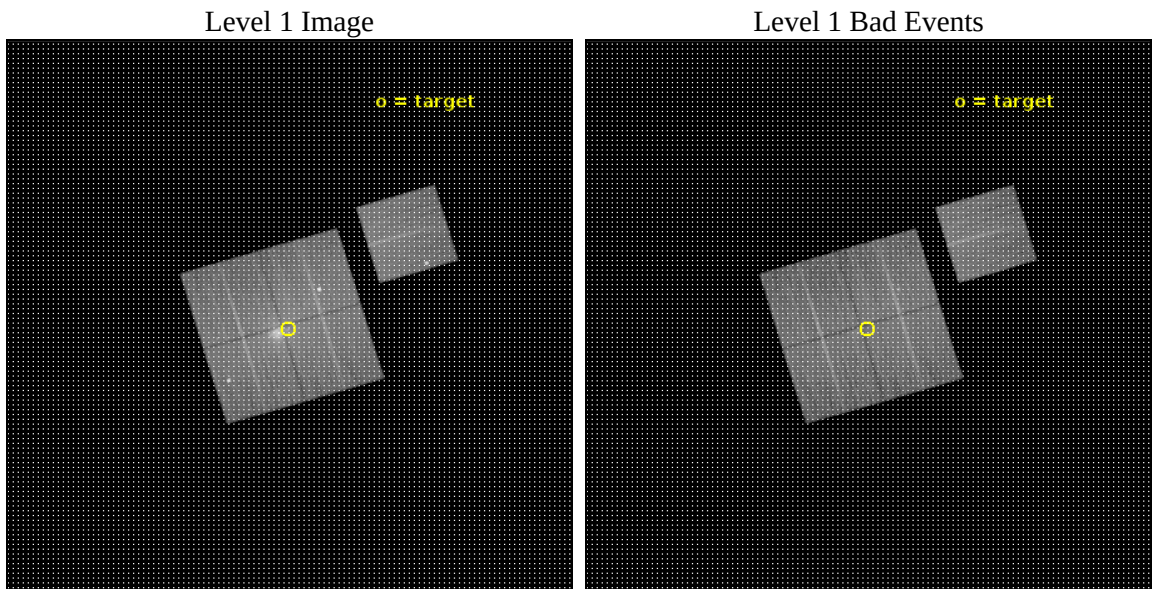
seq_num	703132	Sequence number
obs_id	17137	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - W Hotspot	Source name
dtcycle	0	
cycle	P	events from which 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	299.84319642133	Nominal RA [deg]
dec_nom	40.750044163601	Nominal Dec [deg]
roll_nom	73.209856632021	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25565.429967165	Sum of GTIs [s]
livetime	25231.398803648	Livetime [s]
ontime0	25568.447927594	Sum of GTIs [s]
ontime1	25562.206837296	Sum of GTIs [s]
ontime2	25562.248057246	Sum of GTIs [s]
ontime3	25565.429967165	Sum of GTIs [s]
ontime6	25568.406887531	Sum of GTIs [s]
l2events	210558	Number of level 2 events



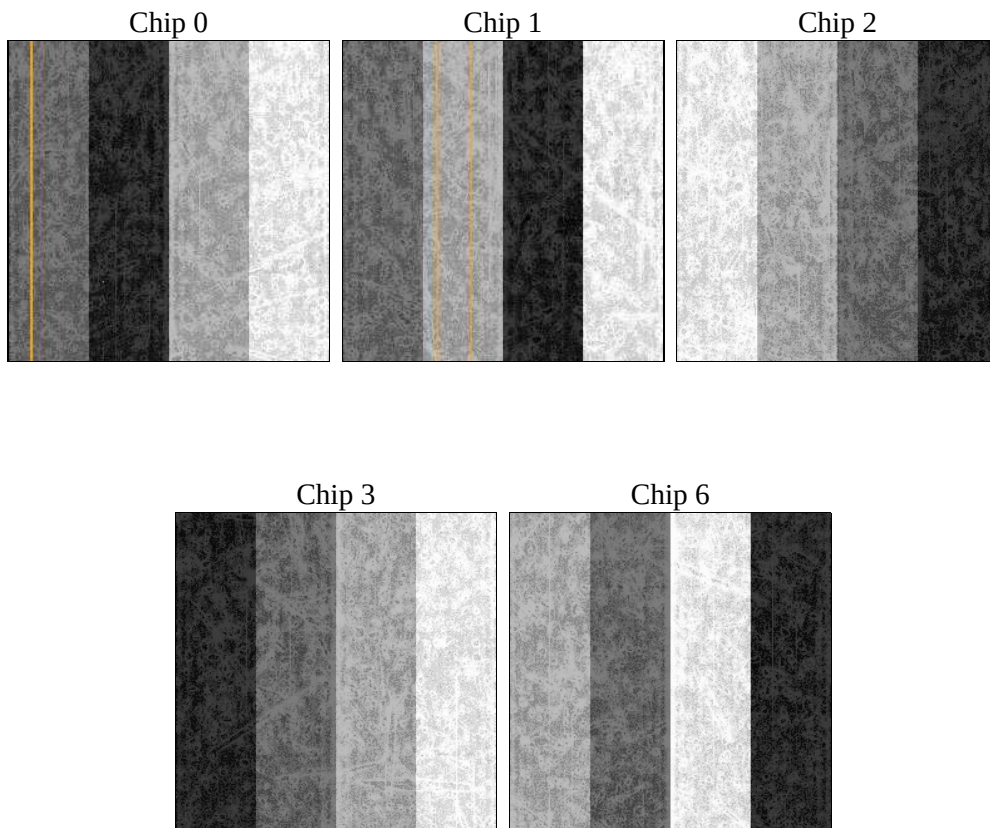
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25500.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	25565.429967165	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	25568.447927594	Sum of GTIs [s]
date	2017-03-30T04:49:57	Date and time of file creation	ontime1	25562.206837296	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	25562.248057246	Sum of GTIs [s]
			ontime3	25565.429967165	Sum of GTIs [s]
			ontime6	25568.406887531	Sum of GTIs [s]
			l1events	1071760	Number of level 1 events

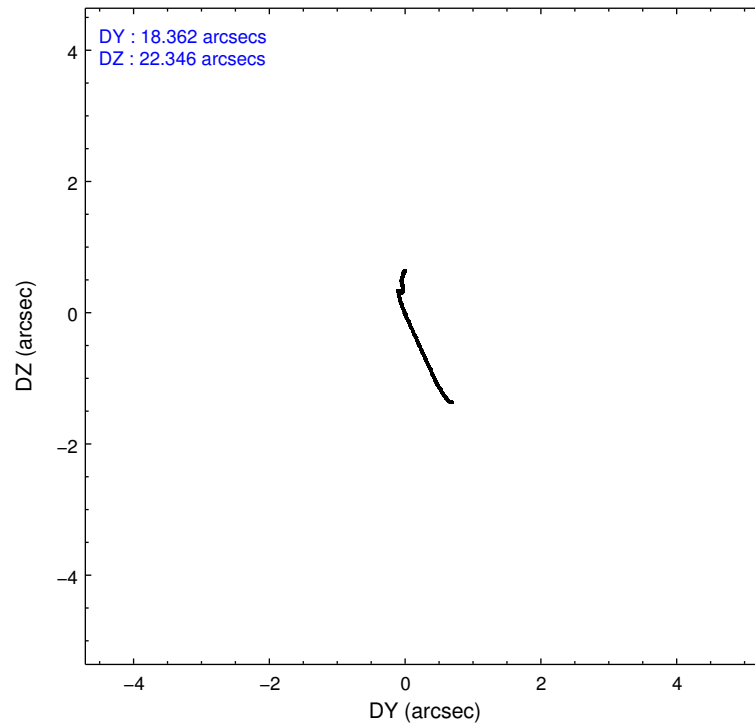
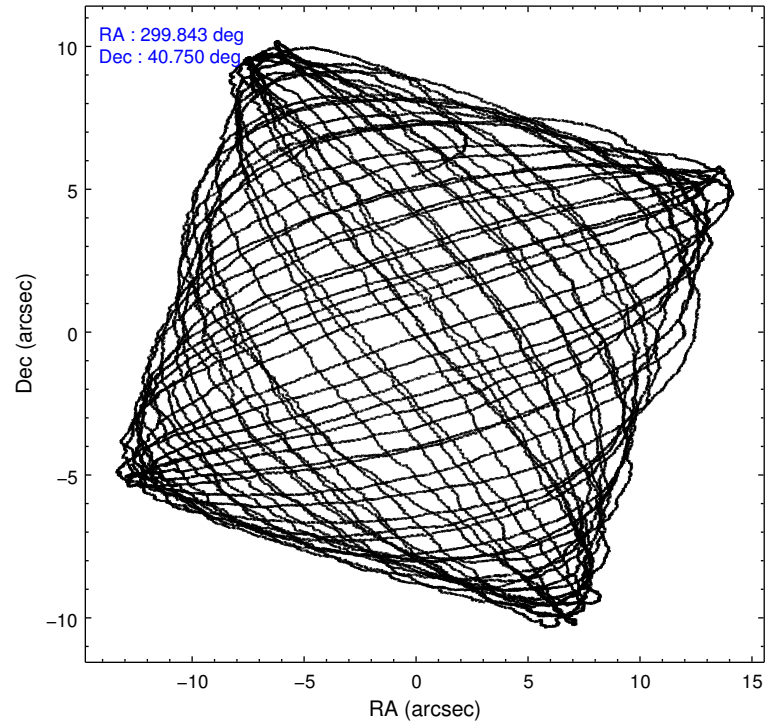
2.1.4 Events

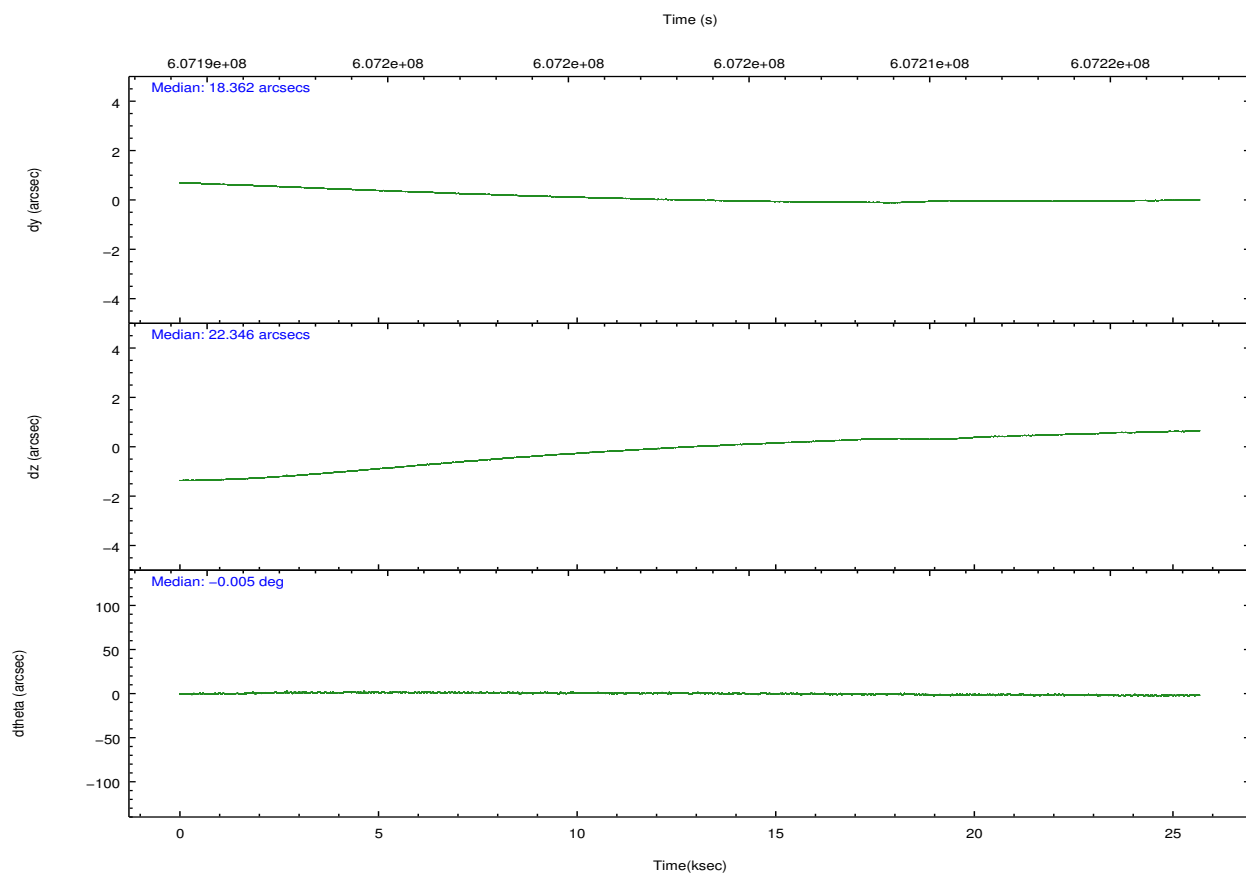
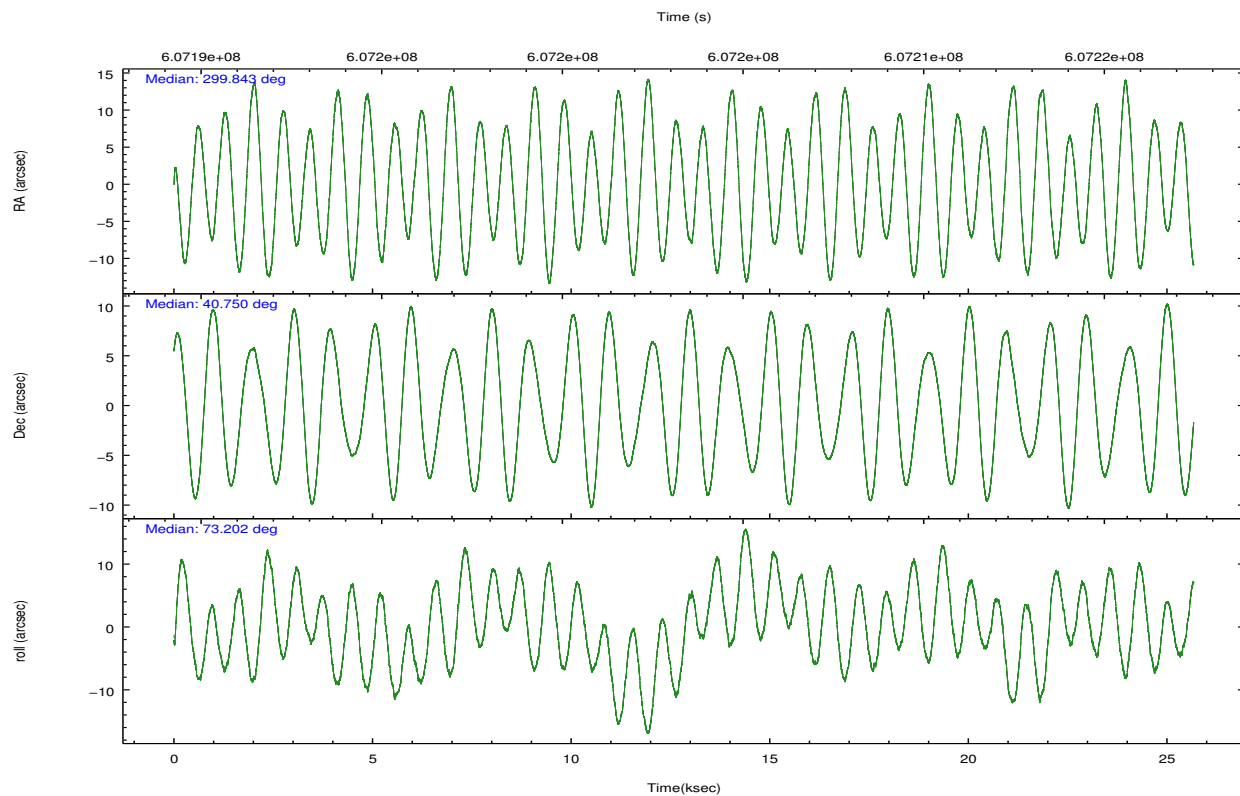
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	187689	247764	230100	203491	202716	grade 0 events	21558	59744	27826	23390	18554
rejected events	148514	155359	169808	163255	169243		11%	24%	12%	11%	9%
rejected %	79%	62%	73%	80%	83%	grade 1 events	181	524	221	197	156
							0%	0%	0%	0%	0%
						grade 2 events	7309	15984	21969	6418	5505
							3%	6%	9%	3%	2%
						grade 3 events	2728	4192	2856	2817	2149
							1%	1%	1%	1%	1%
						grade 4 events	2626	4120	2968	2689	2137
							1%	1%	1%	1%	1%
						grade 5 events	7415	8662	7135	8683	8191
							3%	3%	3%	4%	4%
						grade 6 events	4966	8396	4690	4929	5135
							2%	3%	2%	2%	2%
						grade 7 events	140906	146142	162435	154368	160889
							75%	58%	70%	75%	79%

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	299.851654	299.843196421326	CCD I2 on	Y	Y
[deg] Pointing Dec	40.723208	40.7500441636006	CCD I3 on	Y	Y
[deg] Pointing Roll	72.995650	73.20985663202096	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)	607190699.184000	607189550.47728	CCD S5 on	N	N
Observation start date	2017-03-29T16:03:50	2017-03-29T15:45:50	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	607216199.184000	607217106.06637	On-chip summing requested	N	N
Observation end date	2017-03-29T23:08:50	2017-03-29T23:25:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



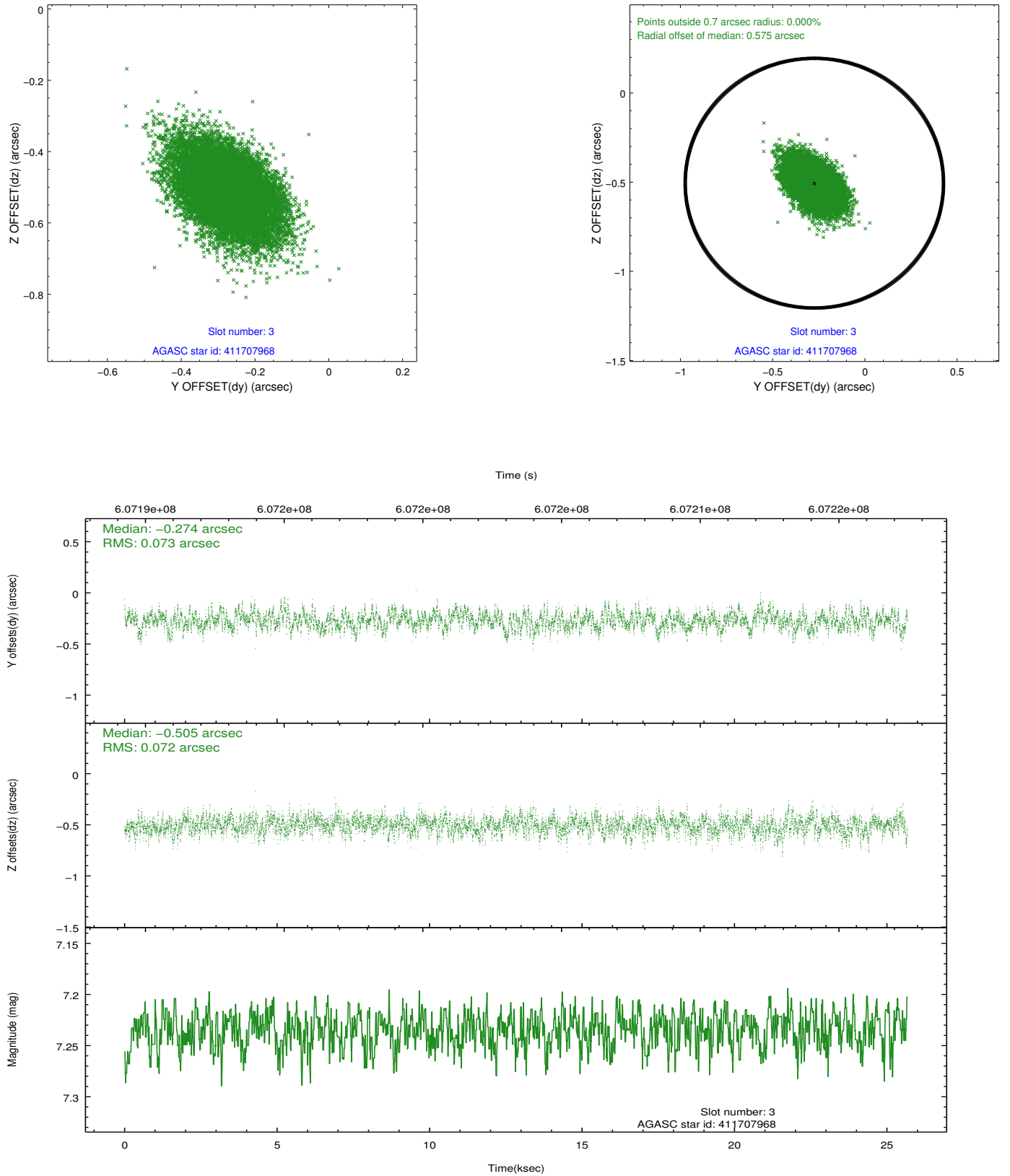


Slot Statistics

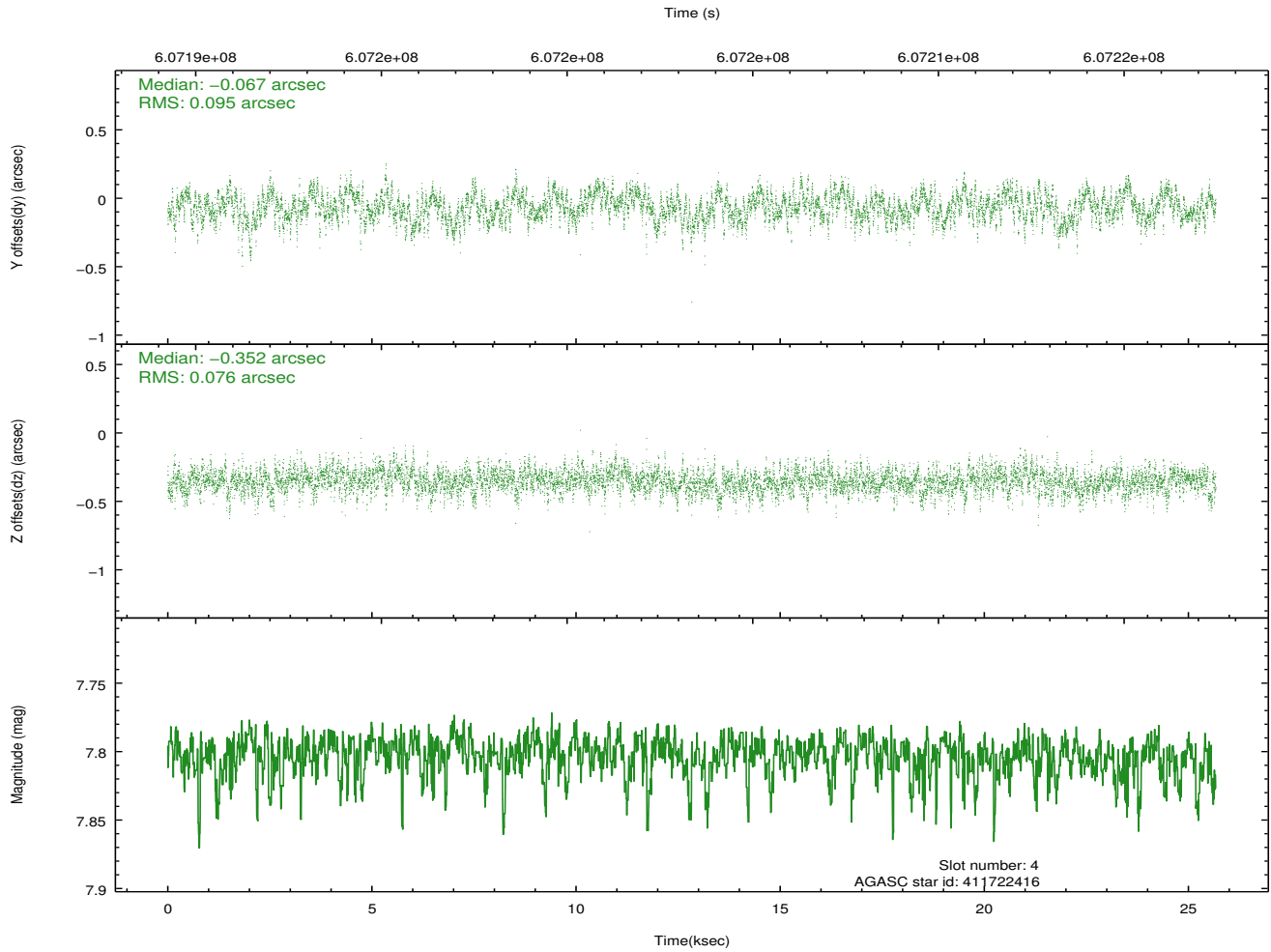
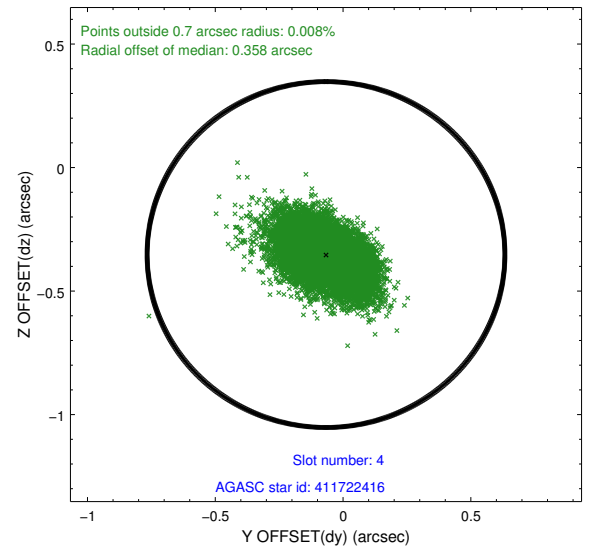
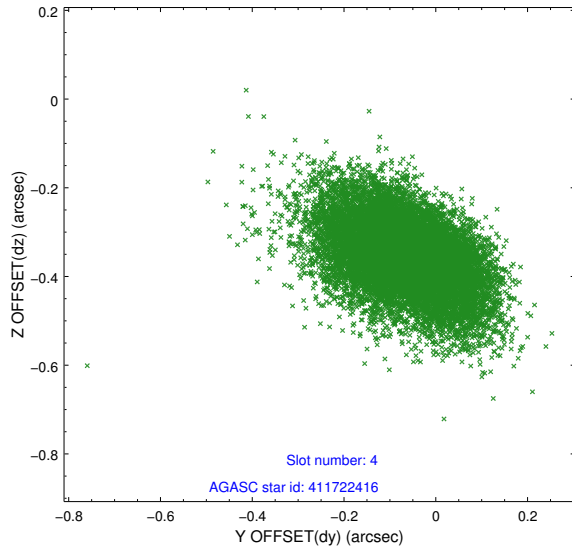
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.23	6261	0.077	-0.035	0.048	0.066	0.000000	0.000000	920.99	-845.96
1	FID		ACIS-I-5	7.21	6262	-0.374	0.032	0.018	0.028	0.000000	0.000000	-1827.61	1051.41
2	FID		ACIS-I-6	7.24	6261	0.207	0.071	0.038	0.072	0.000000	0.000000	386.41	1696.20
3	GUIDE	used	411707968	7.23	12523	-0.274	-0.505	0.108	0.183	299.509933	40.926839	431.07	1103.55
4	GUIDE	used	411722416	7.80	12523	-0.067	-0.352	0.126	0.215	298.936507	40.391736	-1862.59	2054.19
5	GUIDE	used	413405352	8.33	12520	-0.113	-0.196	0.120	0.199	300.290830	41.091941	1620.74	-750.01
6	GUIDE	used	413425232	8.66	12519	0.239	0.723	0.109	0.186	300.417382	40.029012	-1928.17	-2220.06
7	GUIDE	used	413421016	8.69	12509	0.219	0.334	0.115	0.194	300.612426	40.446254	-334.93	-2281.55

2.4 Star Slots

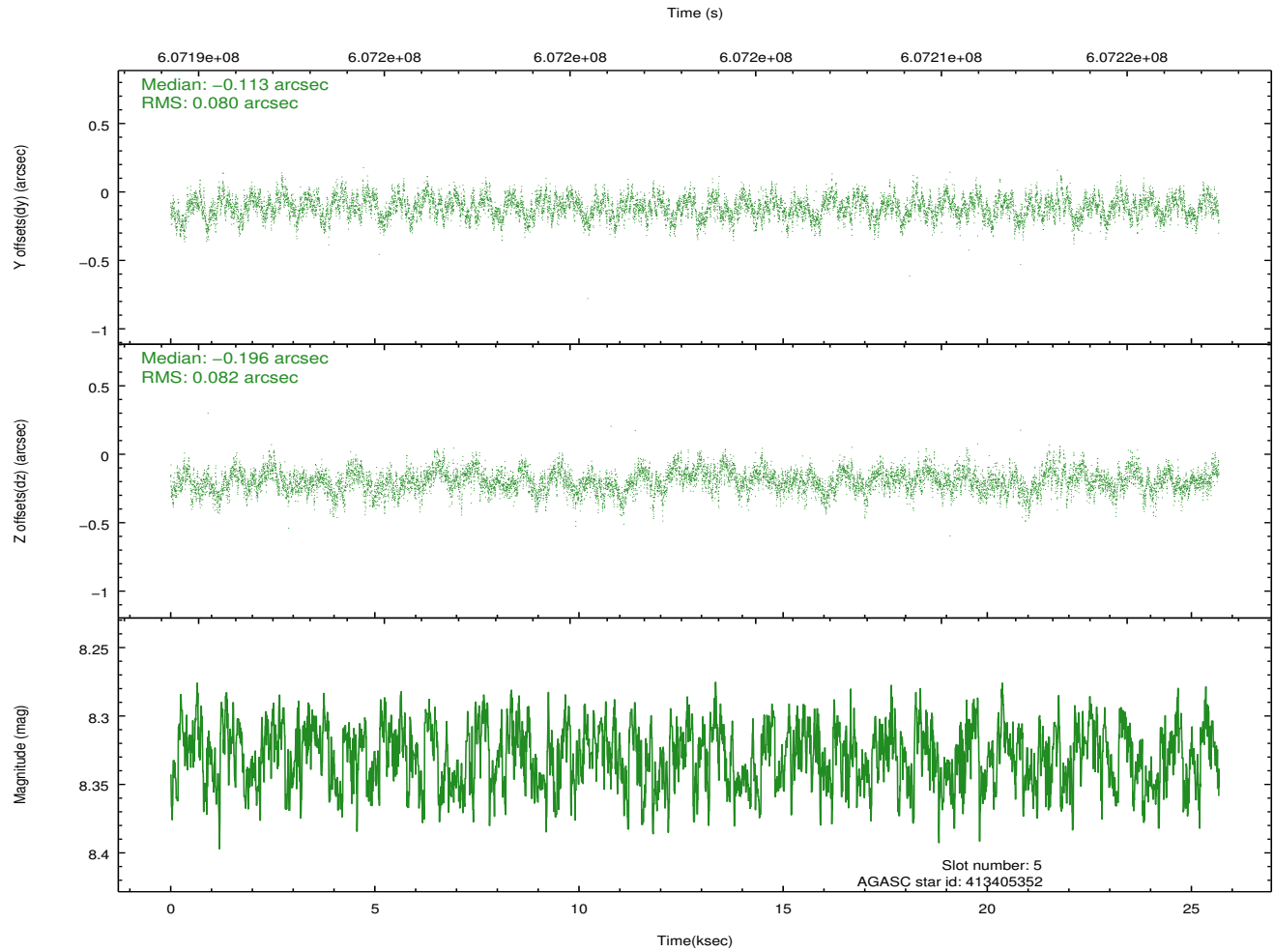
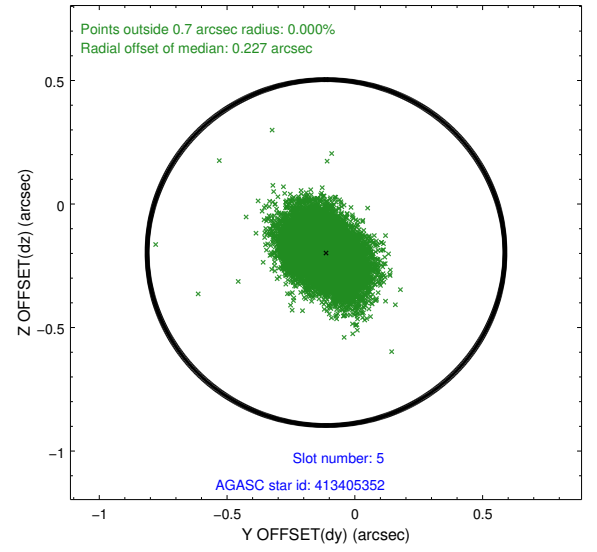
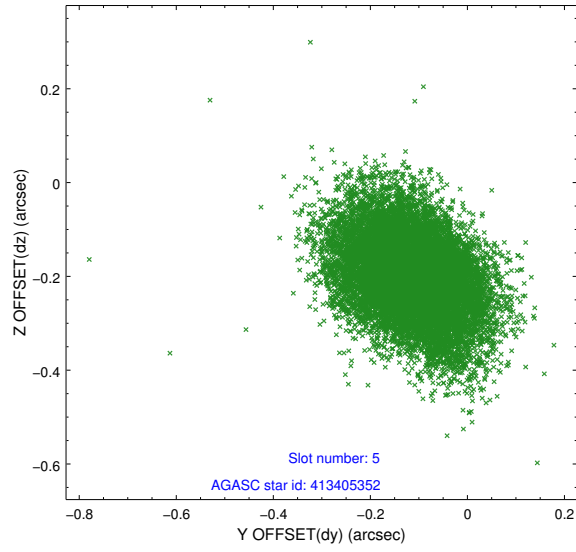
2.4.1 Slot 3



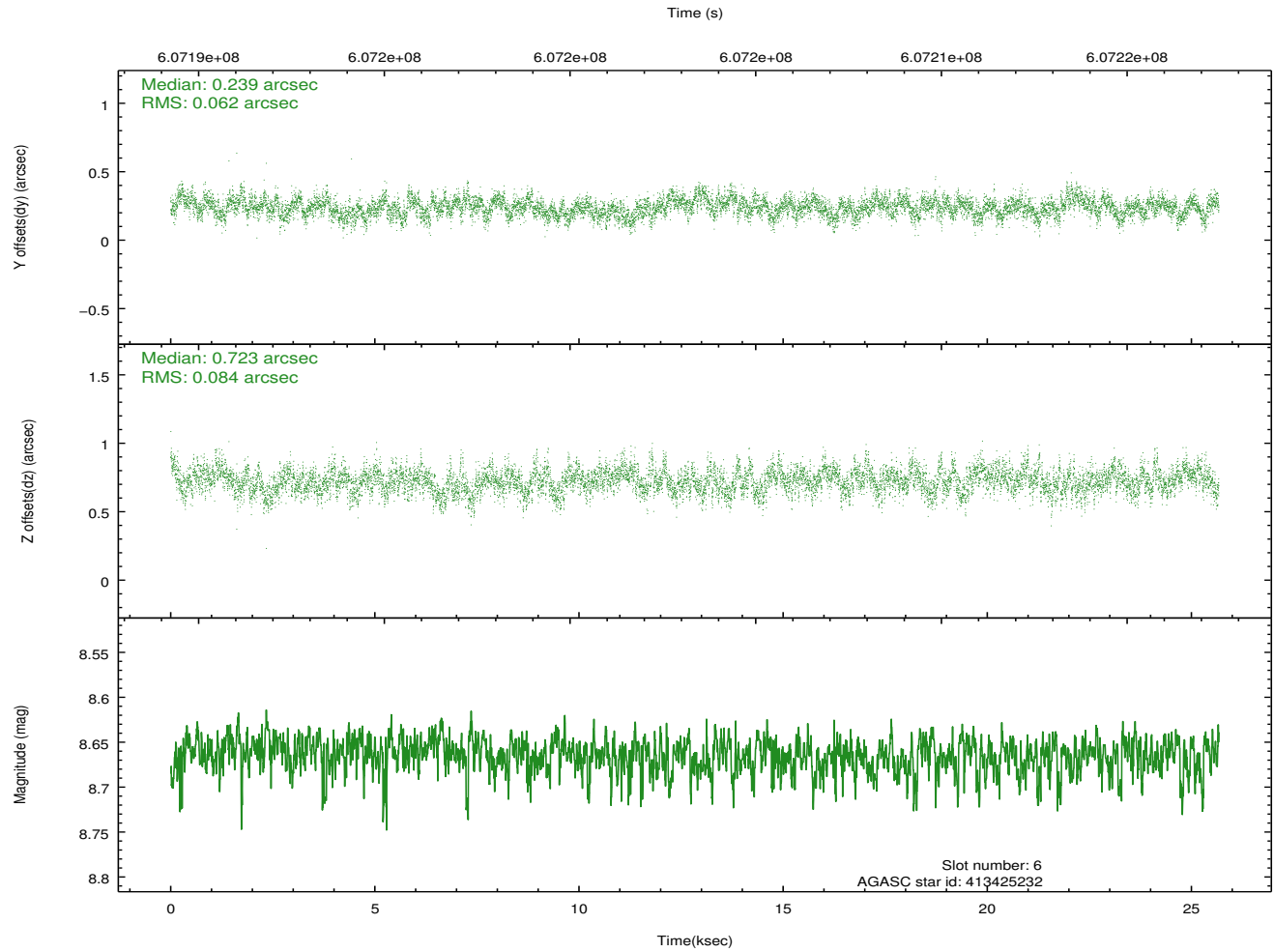
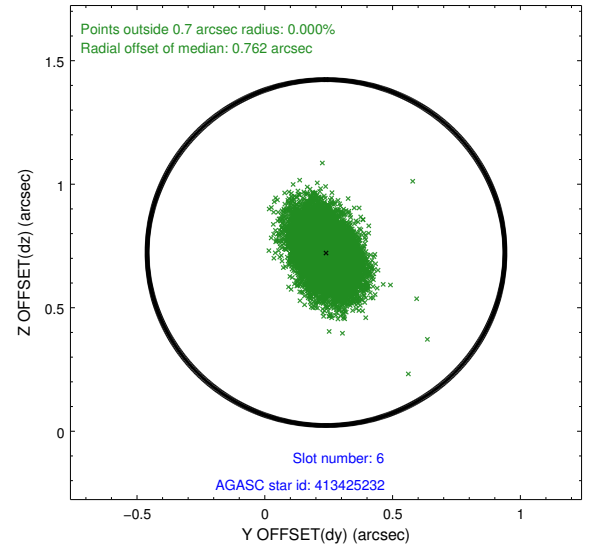
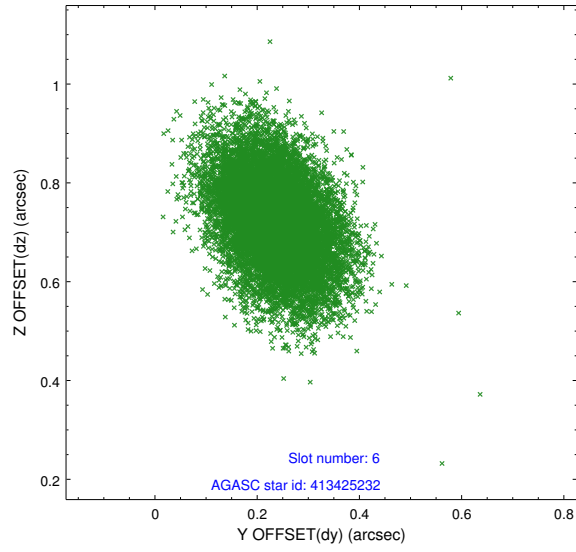
2.4.2 Slot 4



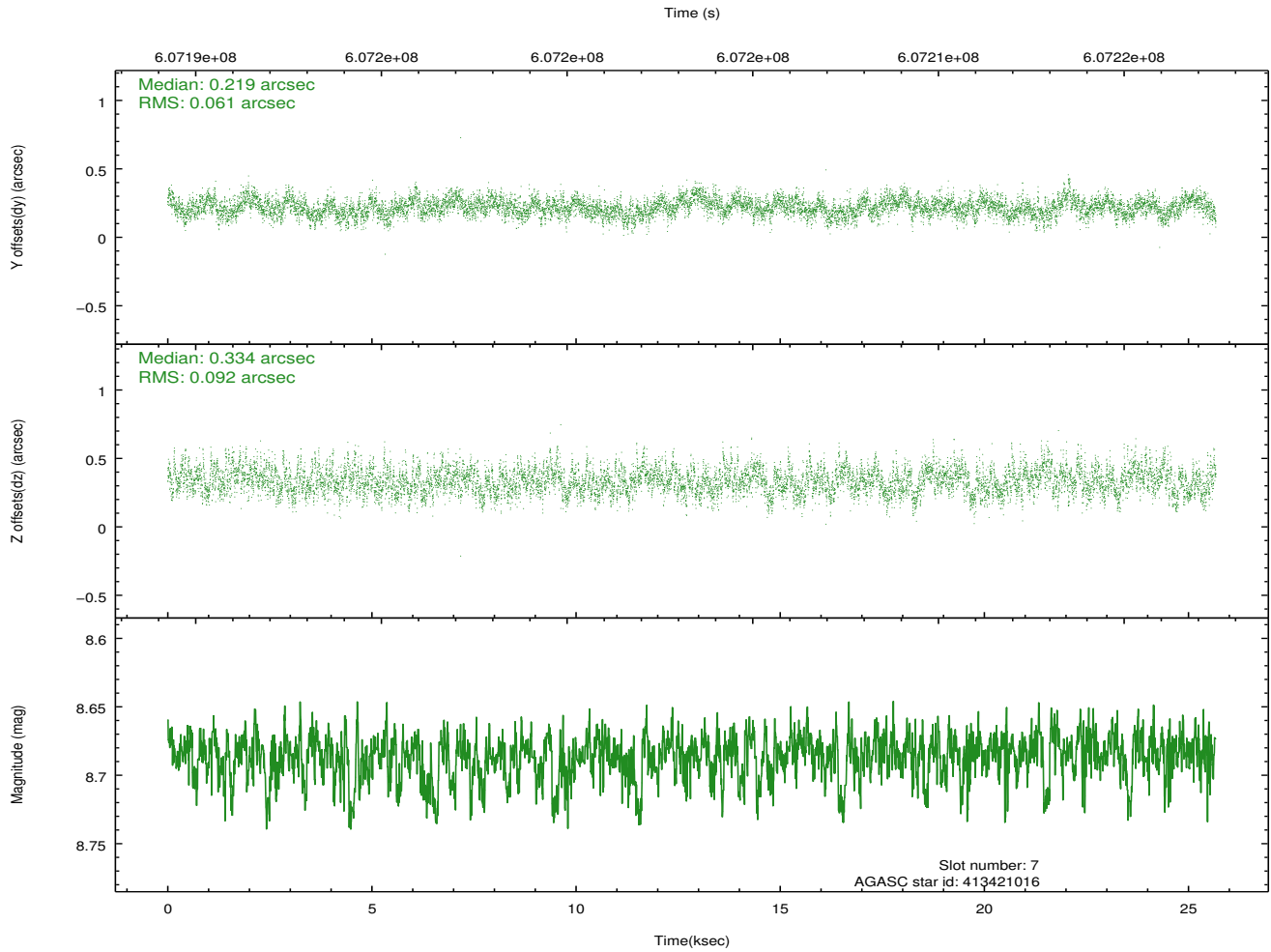
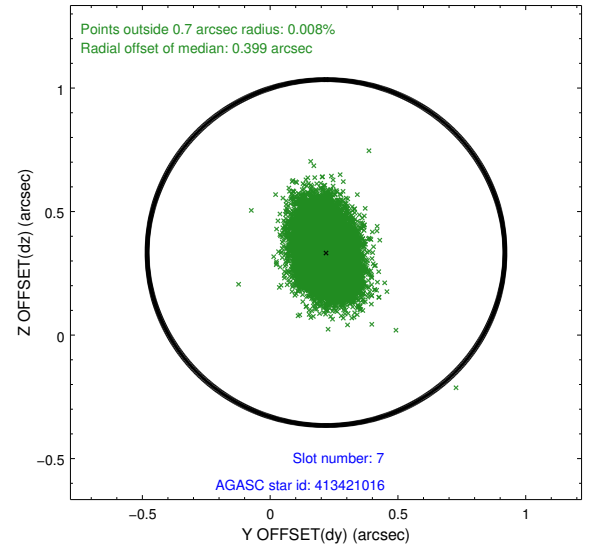
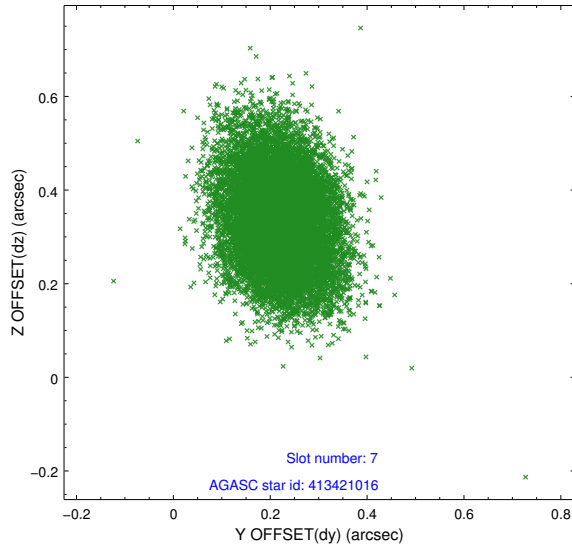
2.4.3 Slot 5



2.4.4 Slot 6

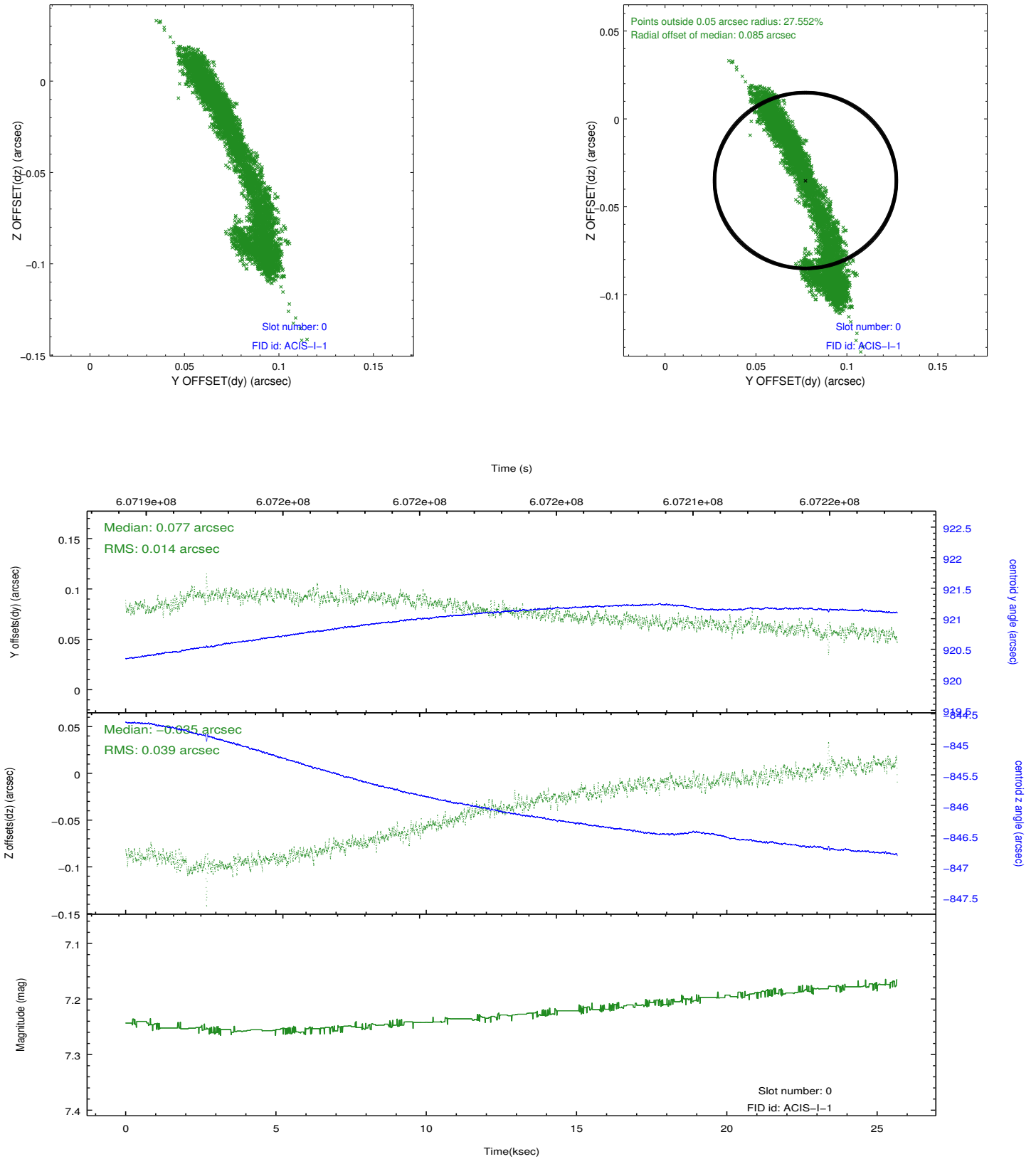


2.4.5 Slot 7

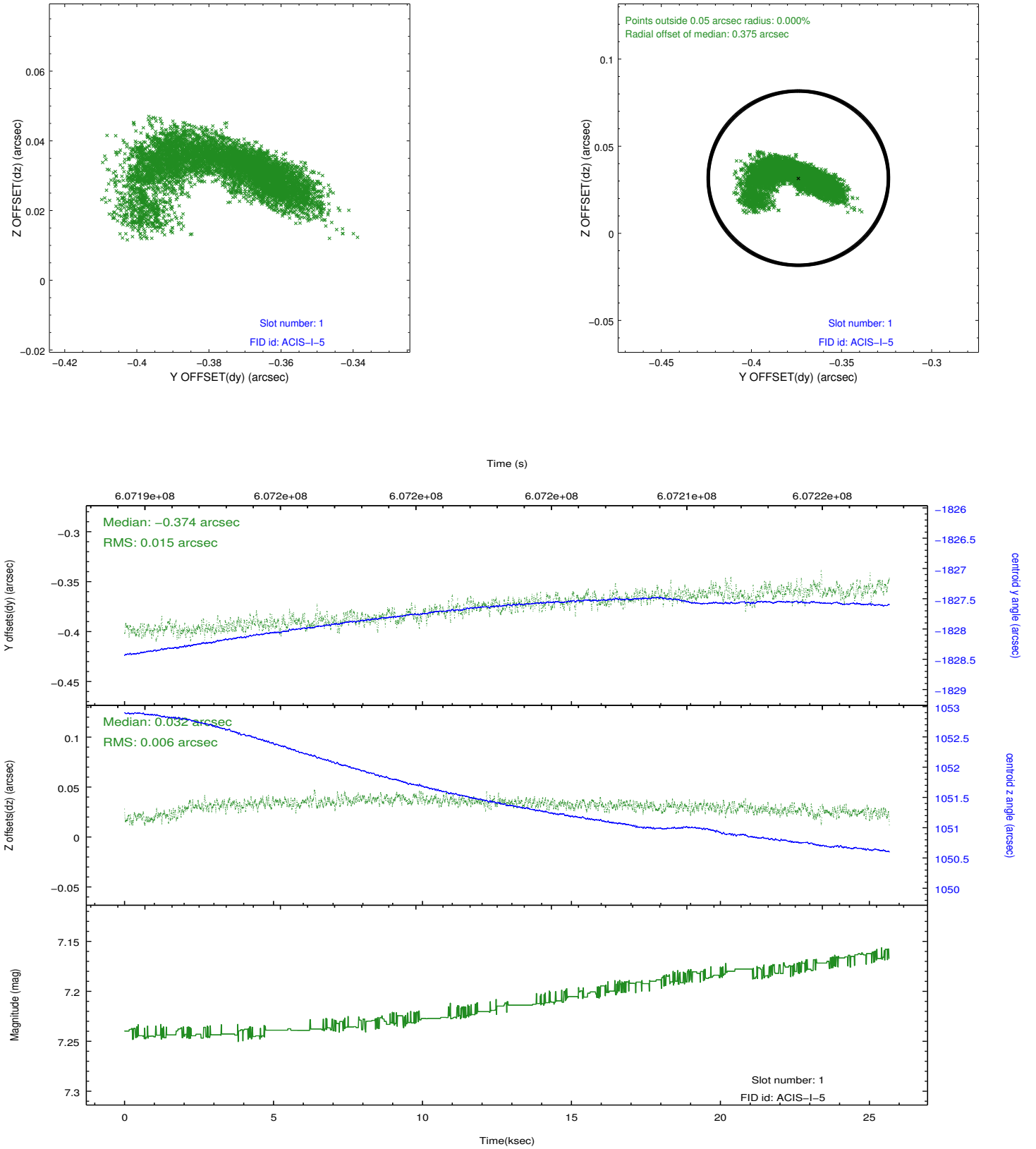


2.5 FID Slots

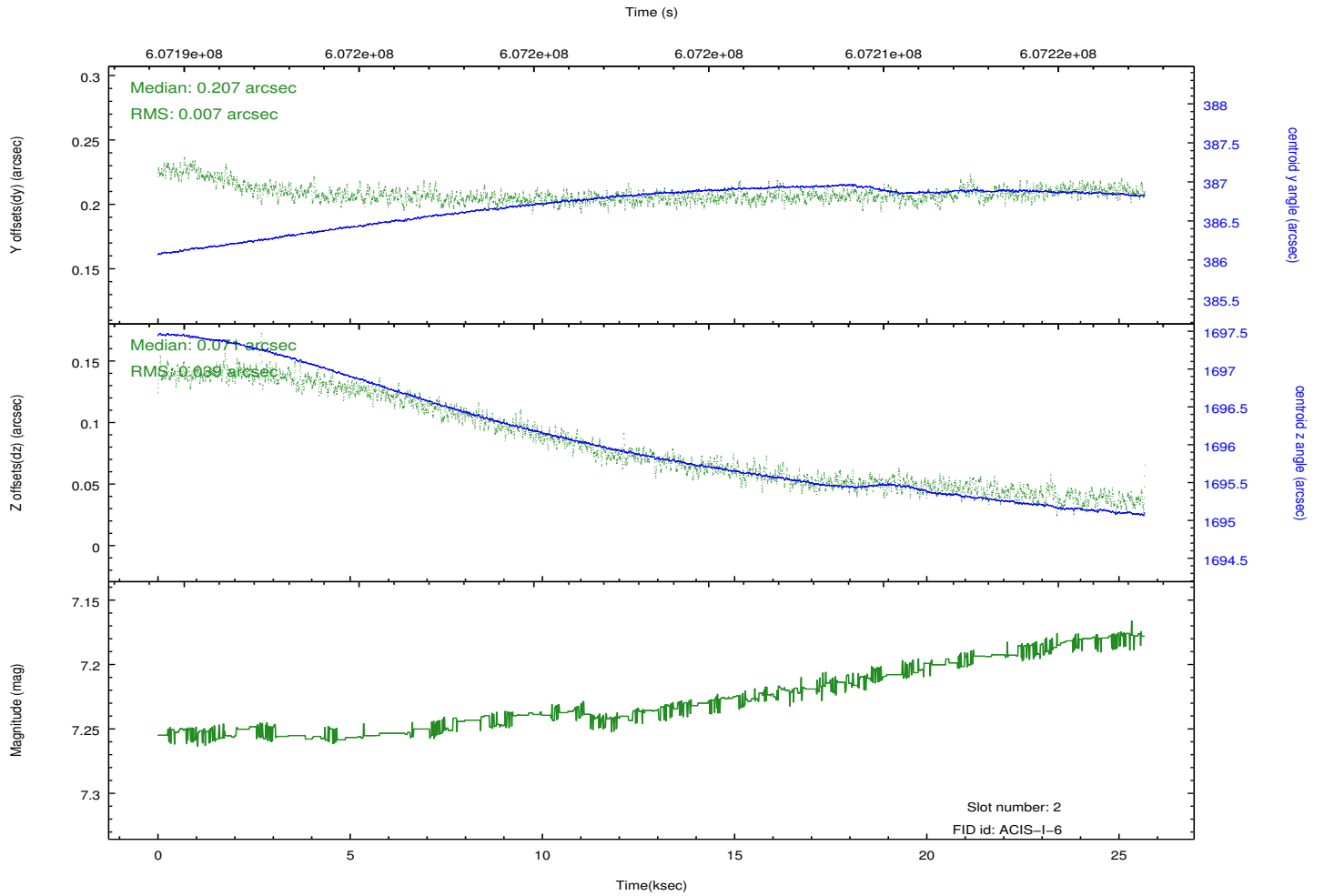
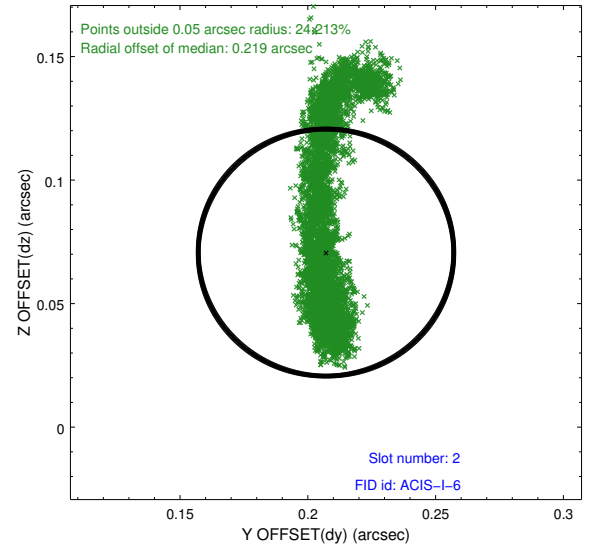
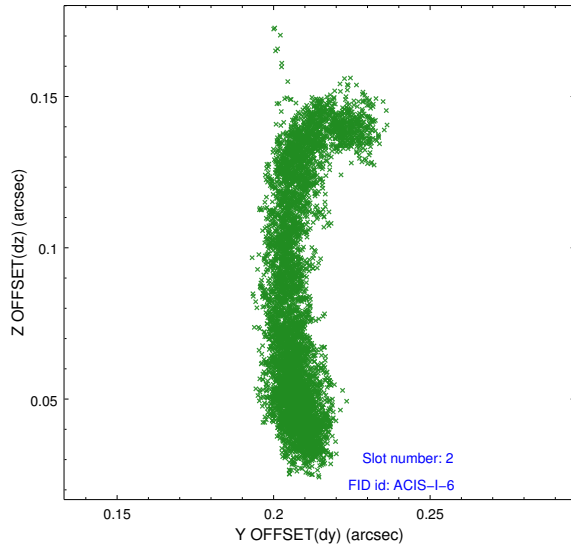
2.5.1 Slot 0



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)	2017.03.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.565429967165

A.2 Comments