

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 17136 - L2 Version 1
Chandra X-Ray Center

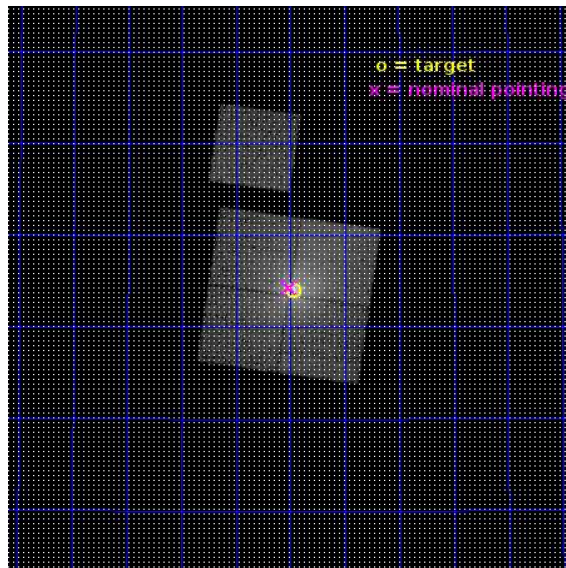
L2 Processing Date : Jan 30 2017

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1 Front

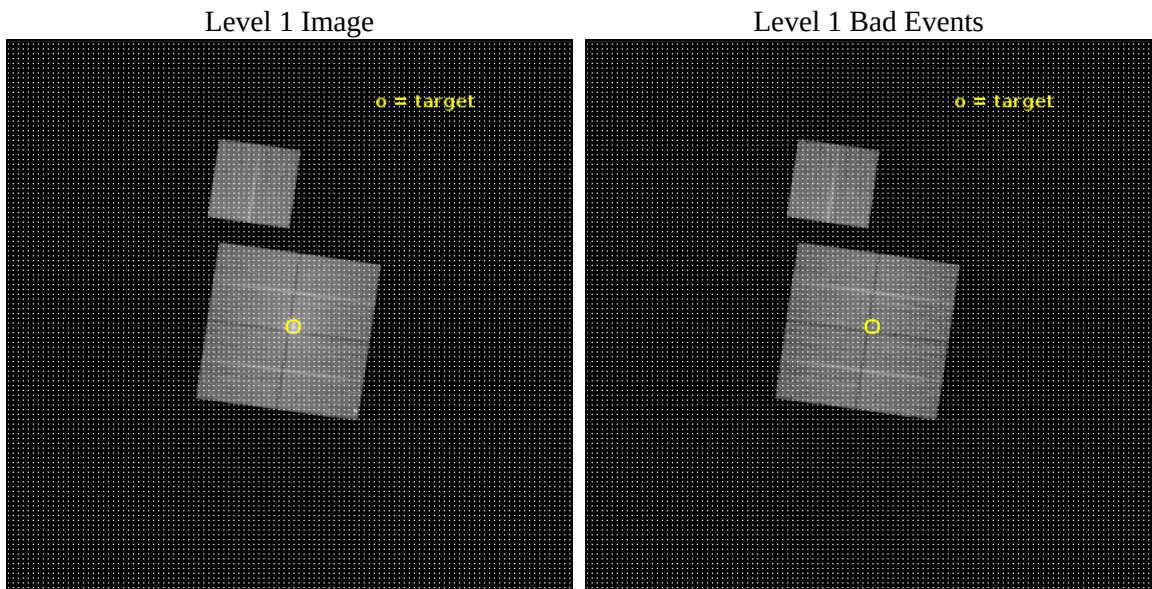
seq_num	703131	Sequence number
obs_id	17136	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - Nucleus	Source name
dtcycle	0	
cycle	P	events from which exps? 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	299.87765420072	Nominal RA [deg]
dec_nom	40.738642246552	Nominal Dec [deg]
roll_nom	8.2023284003346	Nominal Roll [deg]
revision	1	Processing version of data
ontime	22446.527845263	Sum of GTIs [s]
livetime	22153.247434072	Livetime [s]
ontime0	22446.404745579	Sum of GTIs [s]
ontime1	22440.16380465	Sum of GTIs [s]
ontime2	22446.486815572	Sum of GTIs [s]
ontime3	22446.527845263	Sum of GTIs [s]
ontime6	22449.504745603	Sum of GTIs [s]
l2events	179520	Number of level 2 events



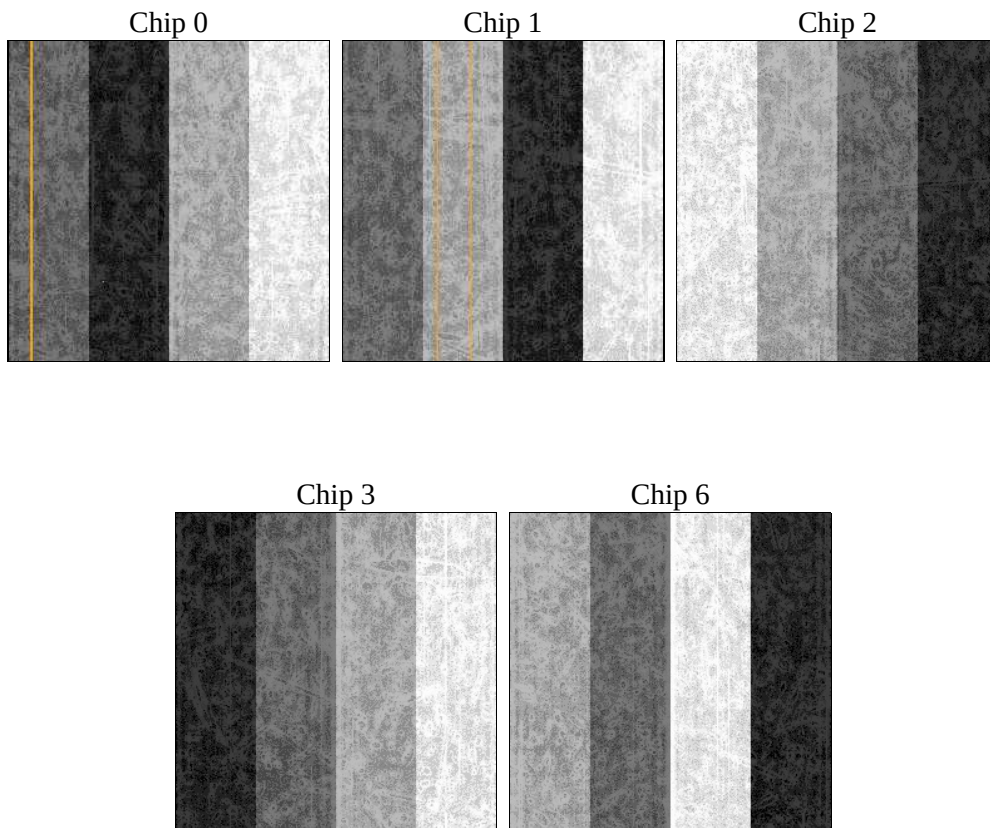
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22389.147000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	22446.527845263	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	22446.404745579	Sum of GTIs [s]
date	2017-01-31T00:57:46	Date and time of file creation	ontime1	22440.16380465	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	22446.486815572	Sum of GTIs [s]
			ontime3	22446.527845263	Sum of GTIs [s]
			ontime6	22449.504745603	Sum of GTIs [s]
			l1events	907865	Number of level 1 events

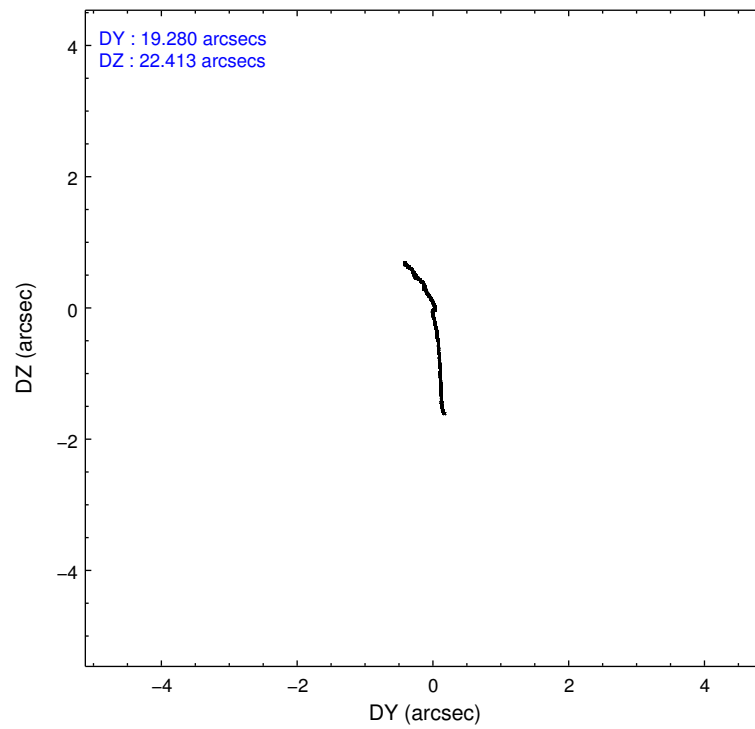
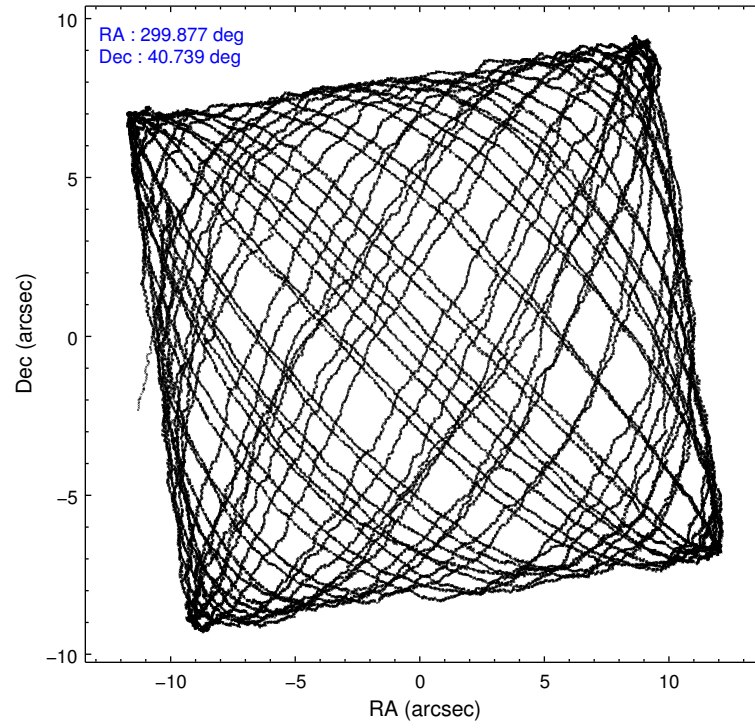
2.1.4 Events

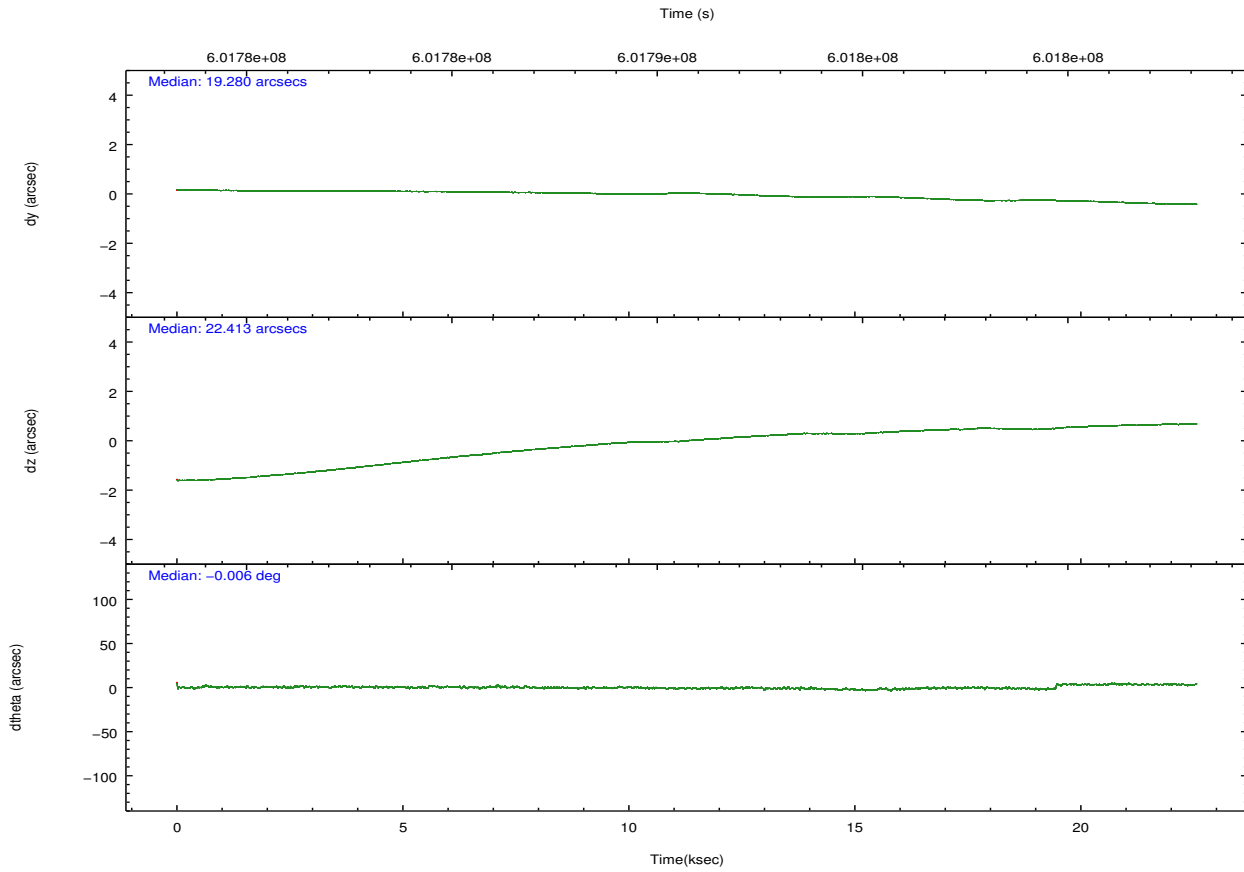
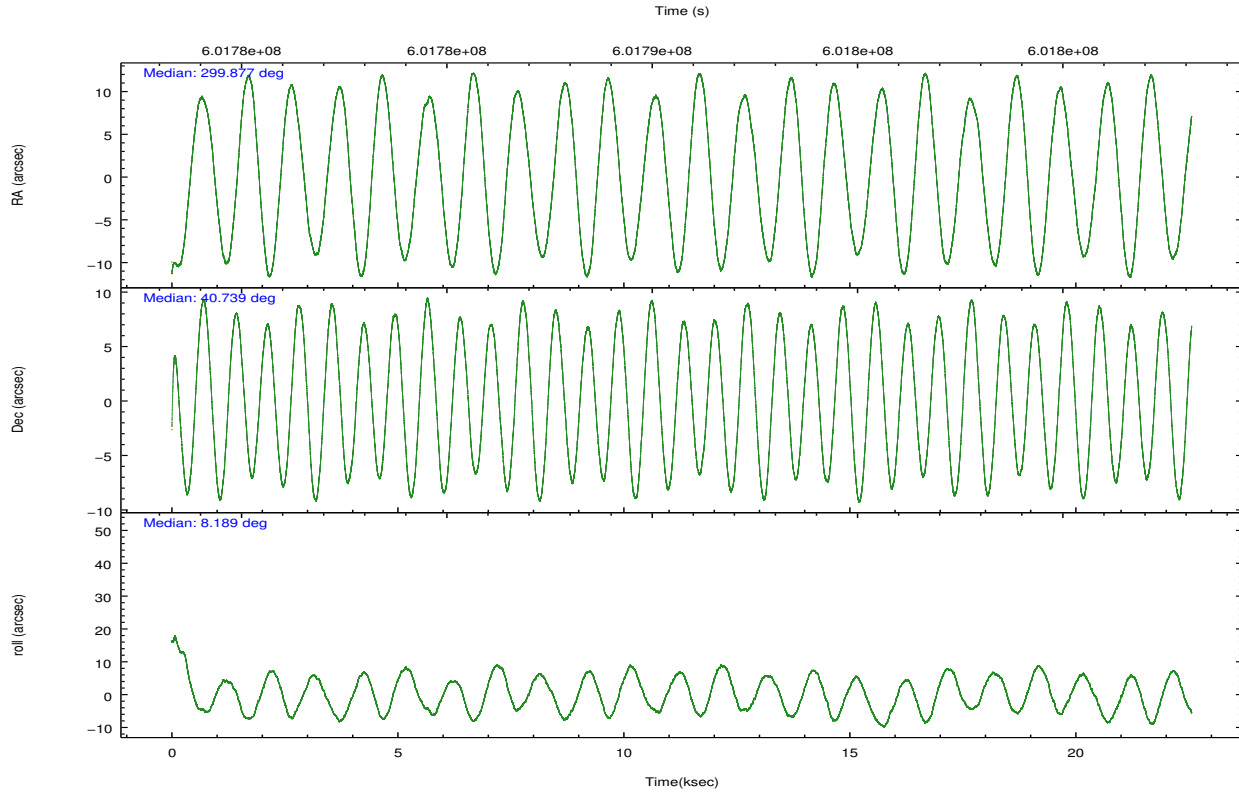
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	158660	171927	189558	223891	163829	grade 0 events	13170	16106	22744	55303	6861
rejected events	132110	136409	151403	143156	144640		8%	9%	11%	24%	4%
rejected %	83%	79%	79%	63%	88%	grade 1 events	109	93	195	652	60
							0%	0%	0%	0%	0%
						grade 2 events	5422	9917	6461	10663	4385
							3%	5%	3%	4%	2%
						grade 3 events	2128	2265	2380	4058	1754
							1%	1%	1%	1%	1%
						grade 4 events	1945	2296	2510	4216	1860
							1%	1%	1%	1%	1%
						grade 5 events	6327	6796	6088	8114	7005
							3%	3%	3%	3%	4%
						grade 6 events	3890	4945	4069	6526	4333
							2%	2%	2%	2%	2%
						grade 7 events	125669	129509	145111	134359	137571
							79%	75%	76%	60%	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	299.849154	299.8776542007162	CCD I2 on	Y	Y
[deg] Pointing Dec	40.721505	40.73864224655159	CCD I3 on	Y	Y
[deg] Pointing Roll	8.012246	8.20232840033464	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)	601779634.184000	601778533.65107	CCD S5 on	N	N
Observation start date	2017-01-26T00:59:25	2017-01-26T00:42:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	601802023.184000	601802253.68994	On-chip summing requested	N	N
Observation end date	2017-01-26T07:12:34	2017-01-26T07:17:33	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



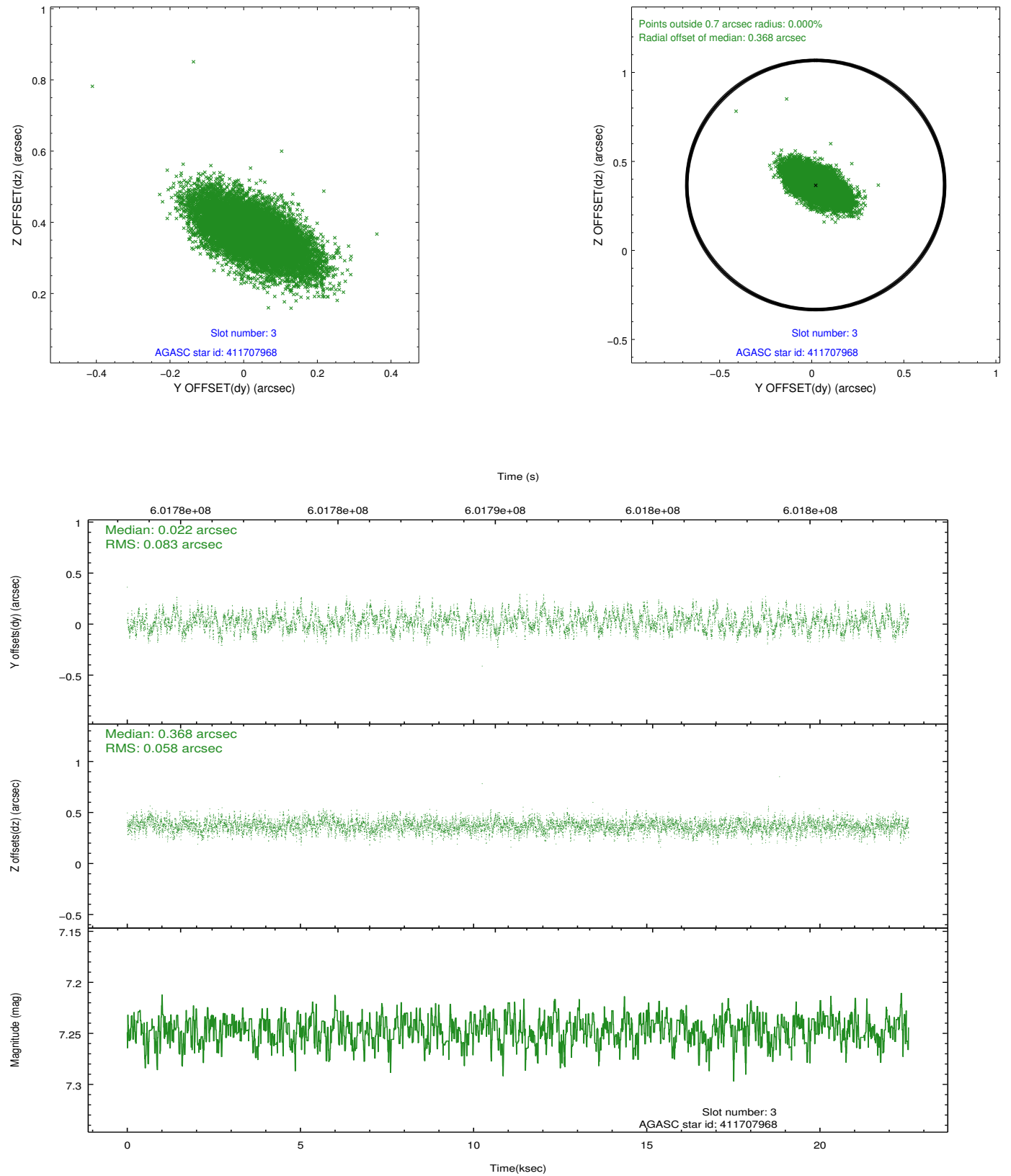


Slot Statistics

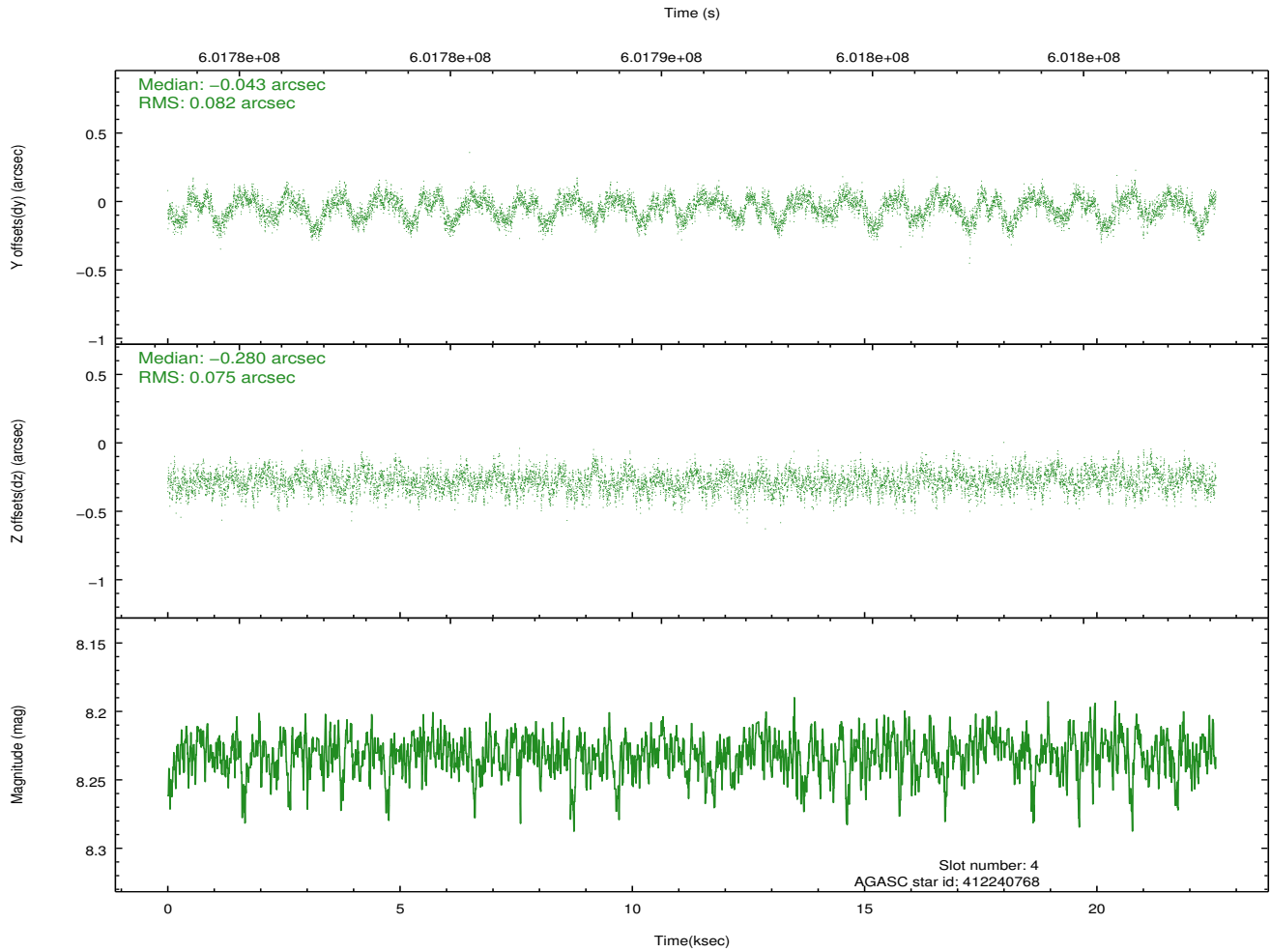
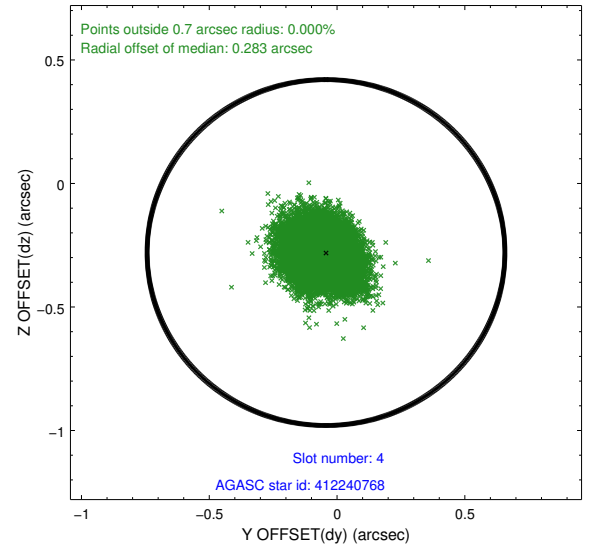
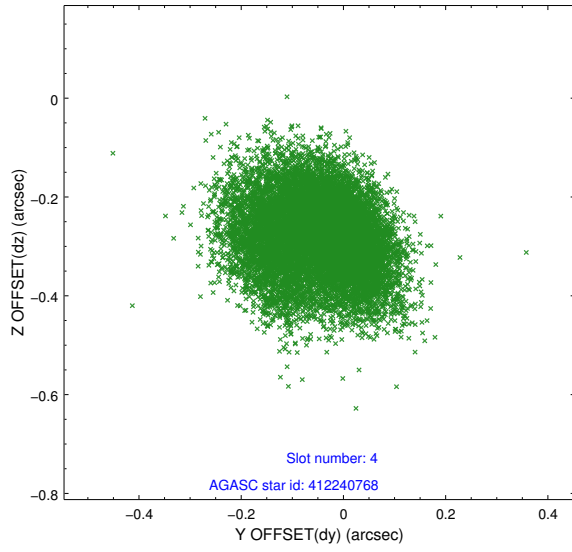
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	5504	-0.077	-0.086	0.054	0.084	0.000000	0.000000	920.10	-846.04
1	FID		ACIS-I-4	7.17	5501	0.450	0.121	0.027	0.057	0.000000	0.000000	2140.63	1053.97
2	FID		ACIS-I-5	7.23	5503	-0.473	0.036	0.028	0.038	0.000000	0.000000	-1828.23	1051.66
3	GUIDE	used	411707968	7.25	11004	0.022	0.368	0.106	0.182	299.509933	40.926839	-809.82	862.56
4	GUIDE	used	412240768	8.23	10998	-0.043	-0.280	0.120	0.188	299.999696	41.280279	683.74	1935.25
5	GUIDE	used	413405352	8.32	11000	-0.107	-0.163	0.091	0.154	300.290830	41.091941	1373.27	1156.50
6	GUIDE	used	413421016	8.70	10998	-0.080	0.127	0.159	0.255	300.612426	40.446254	1934.56	-1263.48
7	GUIDE	used	413425016	7.99	11003	0.210	-0.048	0.141	0.257	300.758532	40.173167	2204.98	-2290.74

2.4 Star Slots

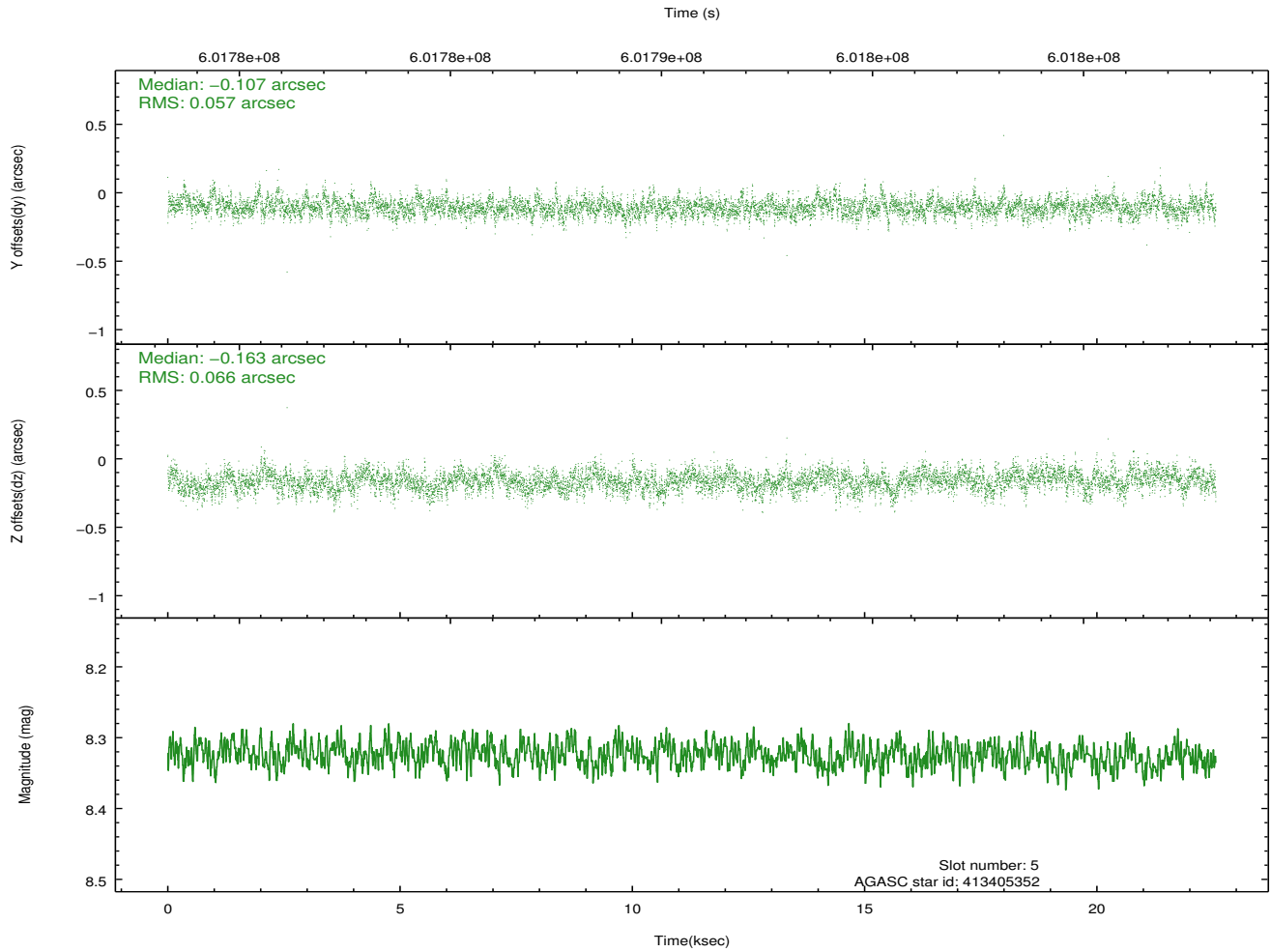
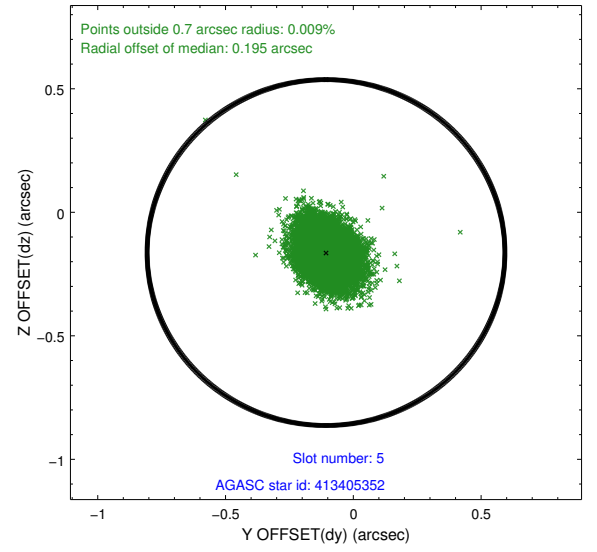
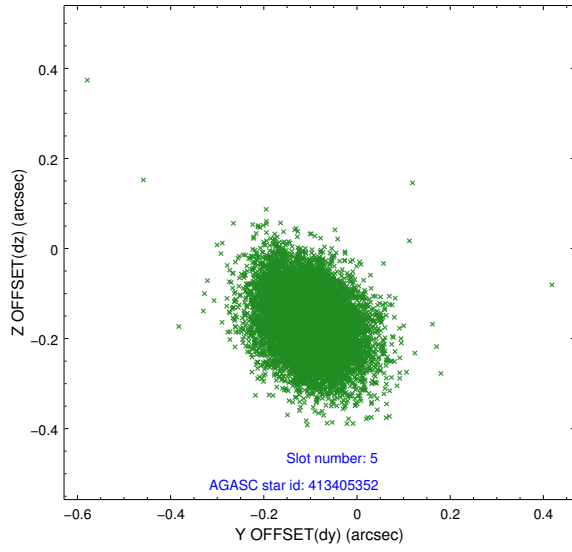
2.4.1 Slot 3



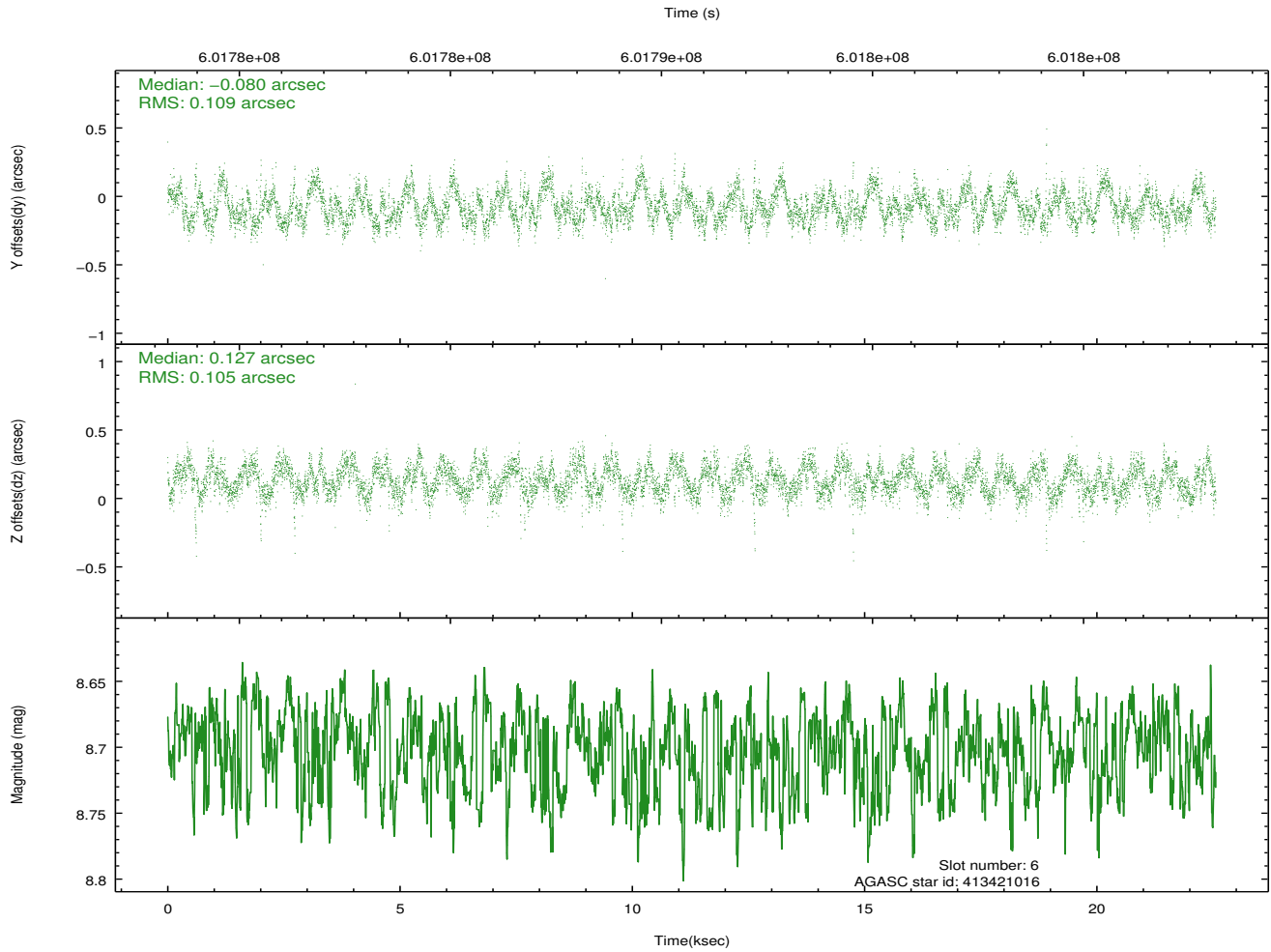
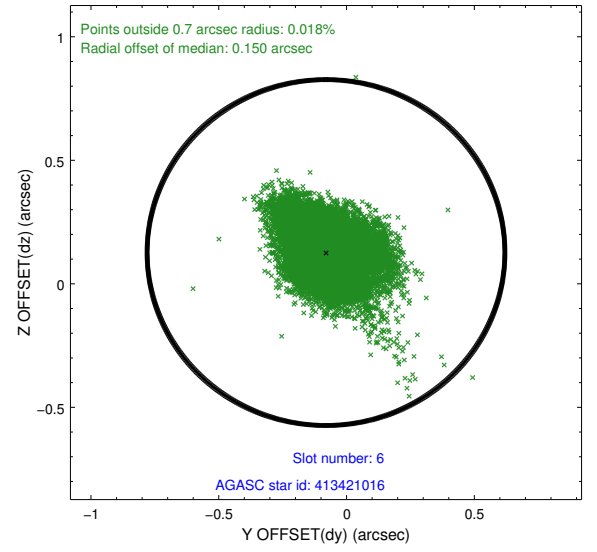
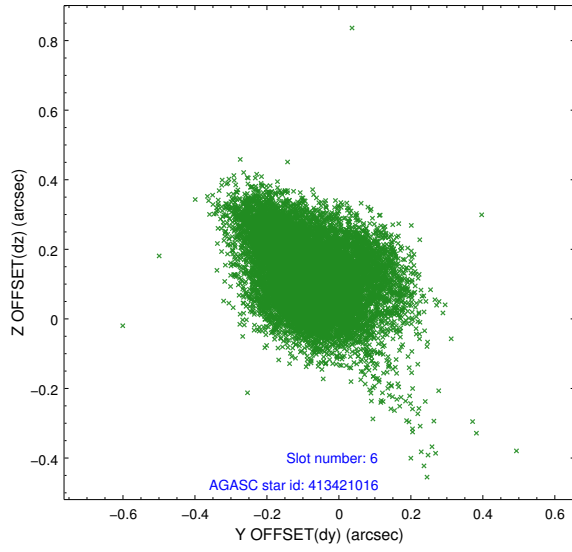
2.4.2 Slot 4



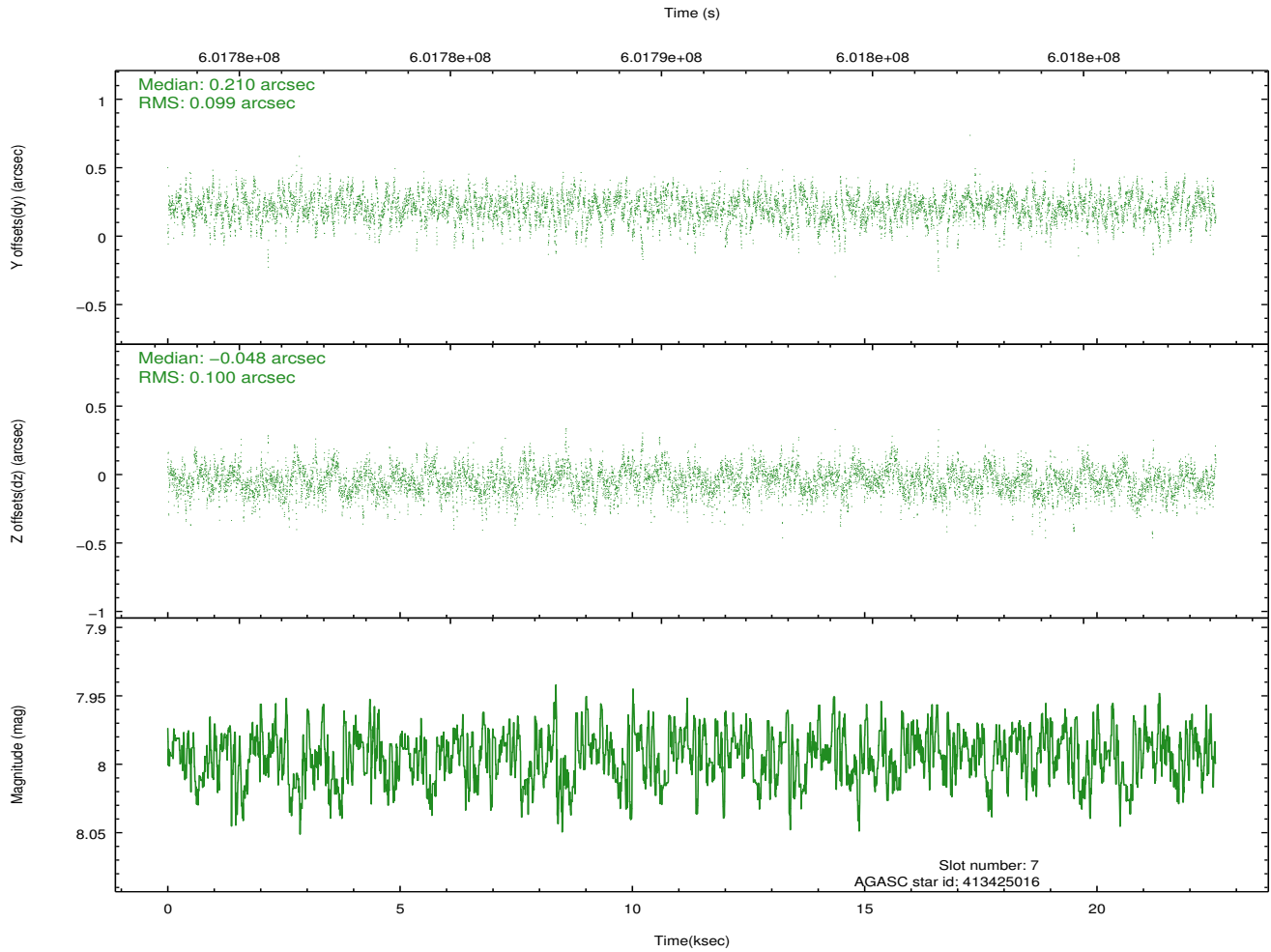
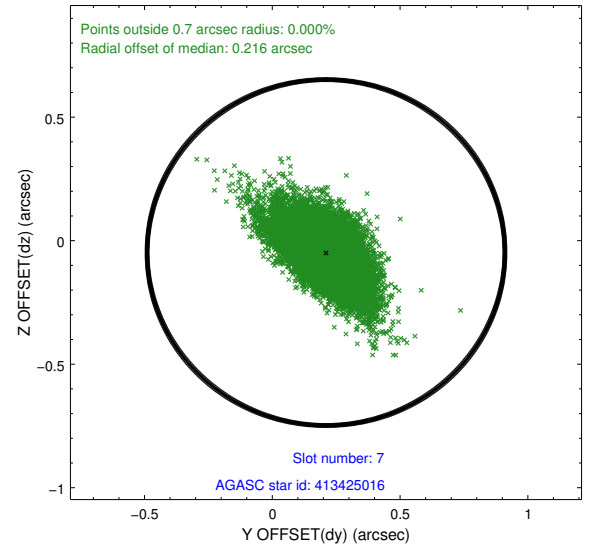
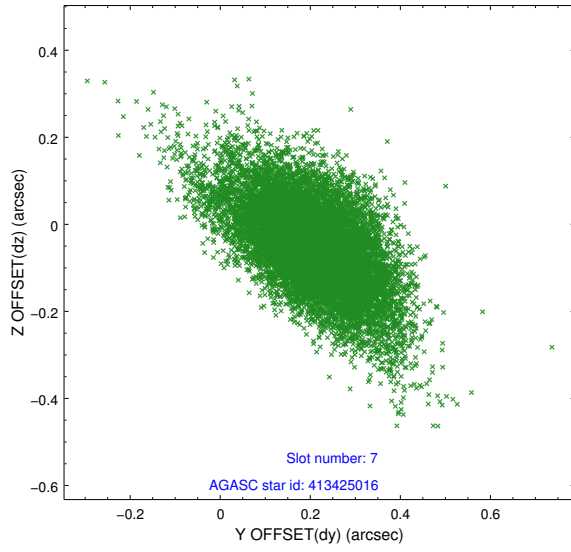
2.4.3 Slot 5



2.4.4 Slot 6

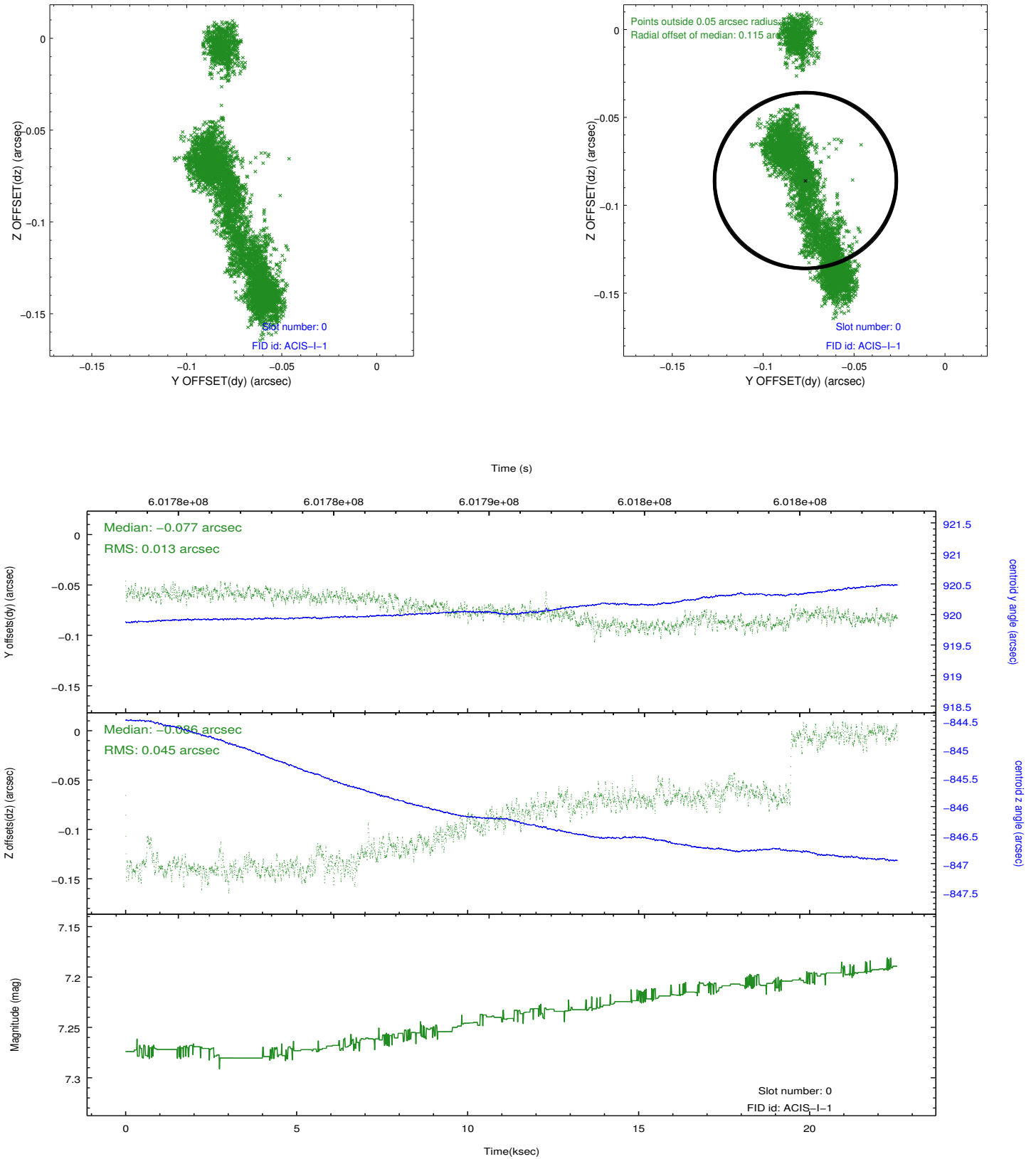


2.4.5 Slot 7

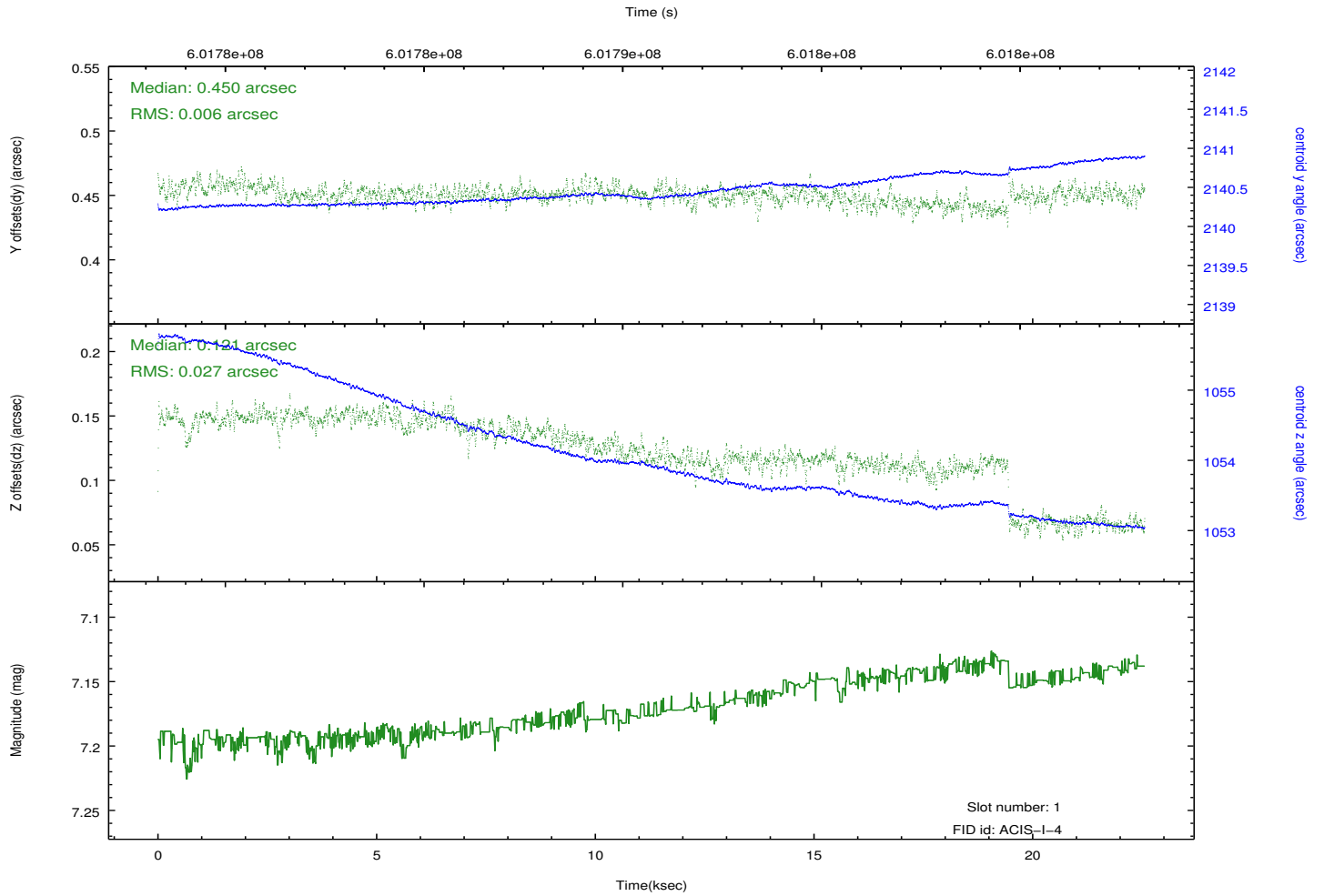
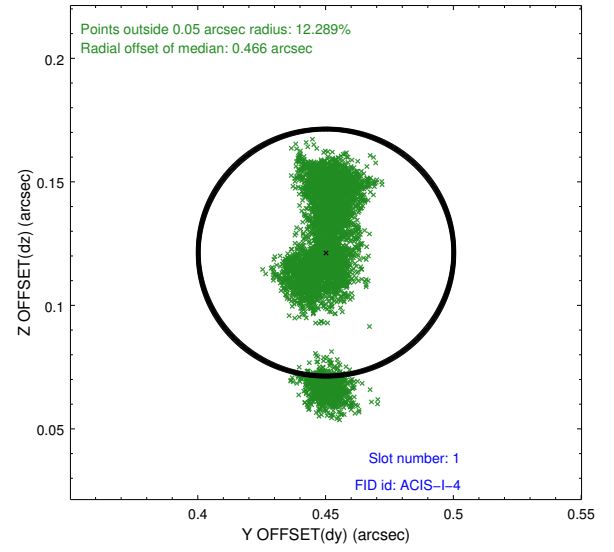
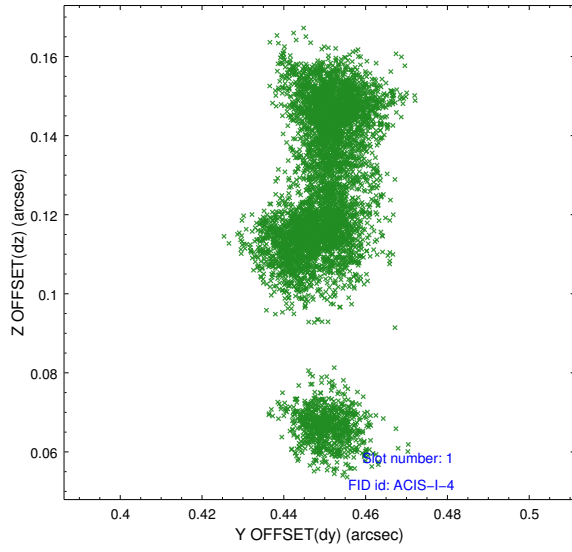


2.5 FID Slots

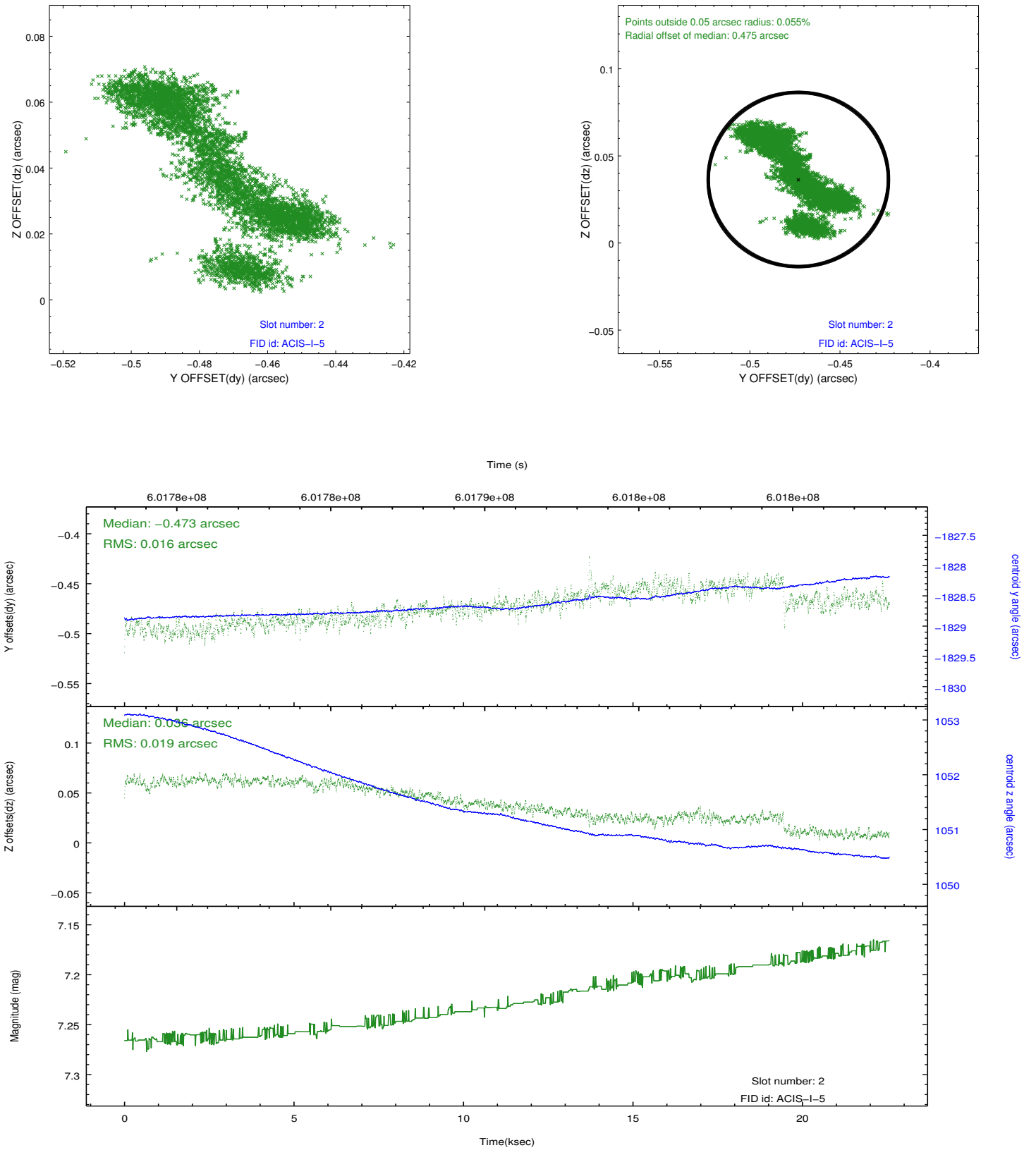
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.01.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.446527845263

A.2 Comments