

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 17510 - L2 Version 1
Chandra X-Ray Center

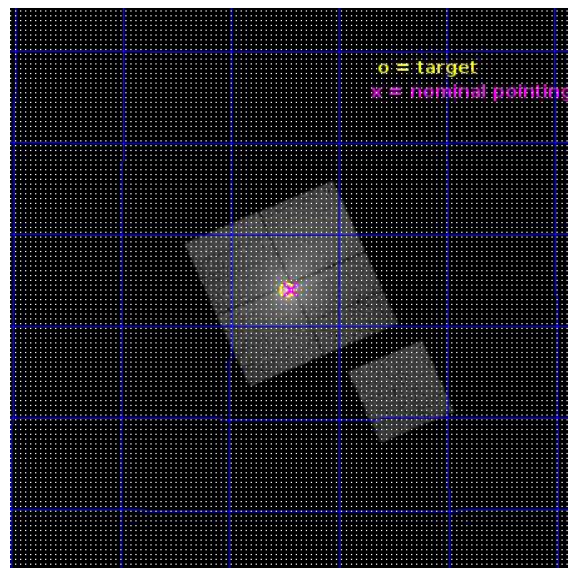
L2 Processing Date : Jun 27 2016

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1 Front

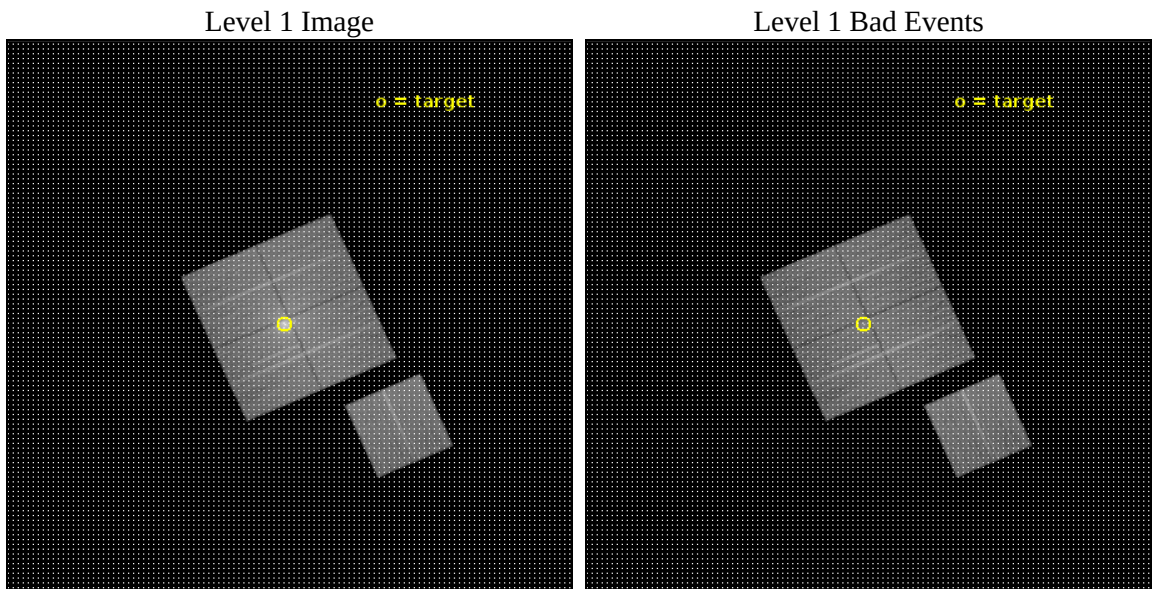
seq_num	703131	Sequence number
obs_id	17510	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - Nucleus	Source name
dtcycle	0	
cycle	P	events from which exps? 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	299.85897874013	Nominal RA [deg]
dec_nom	40.734107781398	Nominal Dec [deg]
roll_nom	156.28805027273	Nominal Roll [deg]
revision	1	Processing version of data
ontime	38038.801929474	Sum of GTIs [s]
livetime	37541.796978507	Livetime [s]
ontime0	38048.101940274	Sum of GTIs [s]
ontime1	38041.860839367	Sum of GTIs [s]
ontime2	38045.042990088	Sum of GTIs [s]
ontime3	38038.801929474	Sum of GTIs [s]
ontime6	38048.060900211	Sum of GTIs [s]
l2events	302743	Number of level 2 events



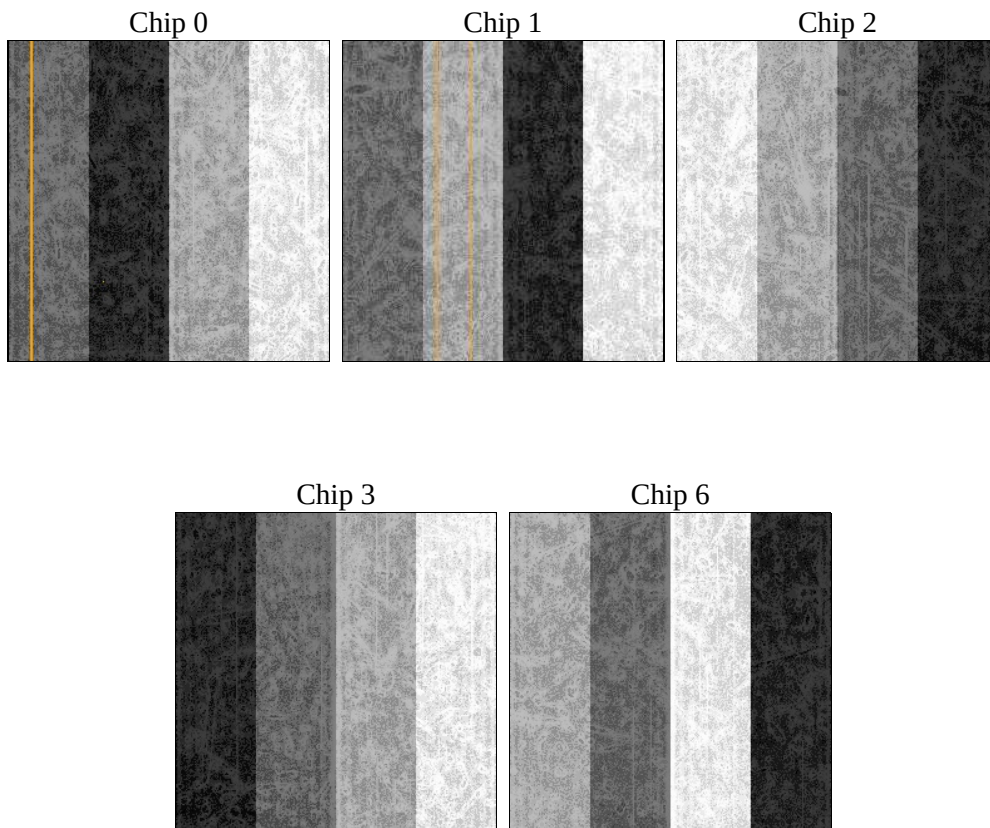
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	38038.801929474	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	38048.101940274	Sum of GTIs [s]
date	2016-06-27T15:35:39	Date and time of file creation	ontime1	38041.860839367	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	38045.042990088	Sum of GTIs [s]
			ontime3	38038.801929474	Sum of GTIs [s]
			ontime6	38048.060900211	Sum of GTIs [s]
			l1events	1385606	Number of level 1 events

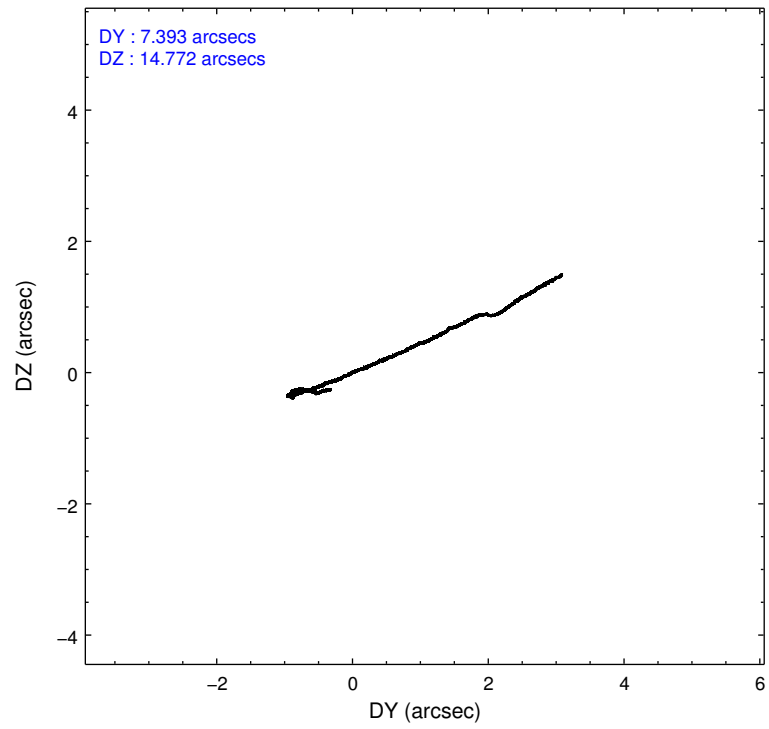
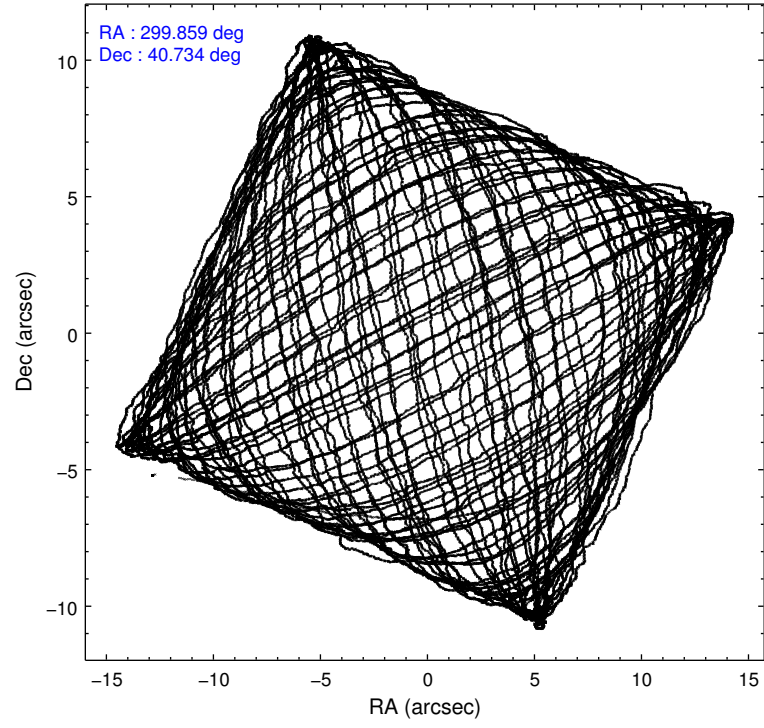
2.1.4 Events

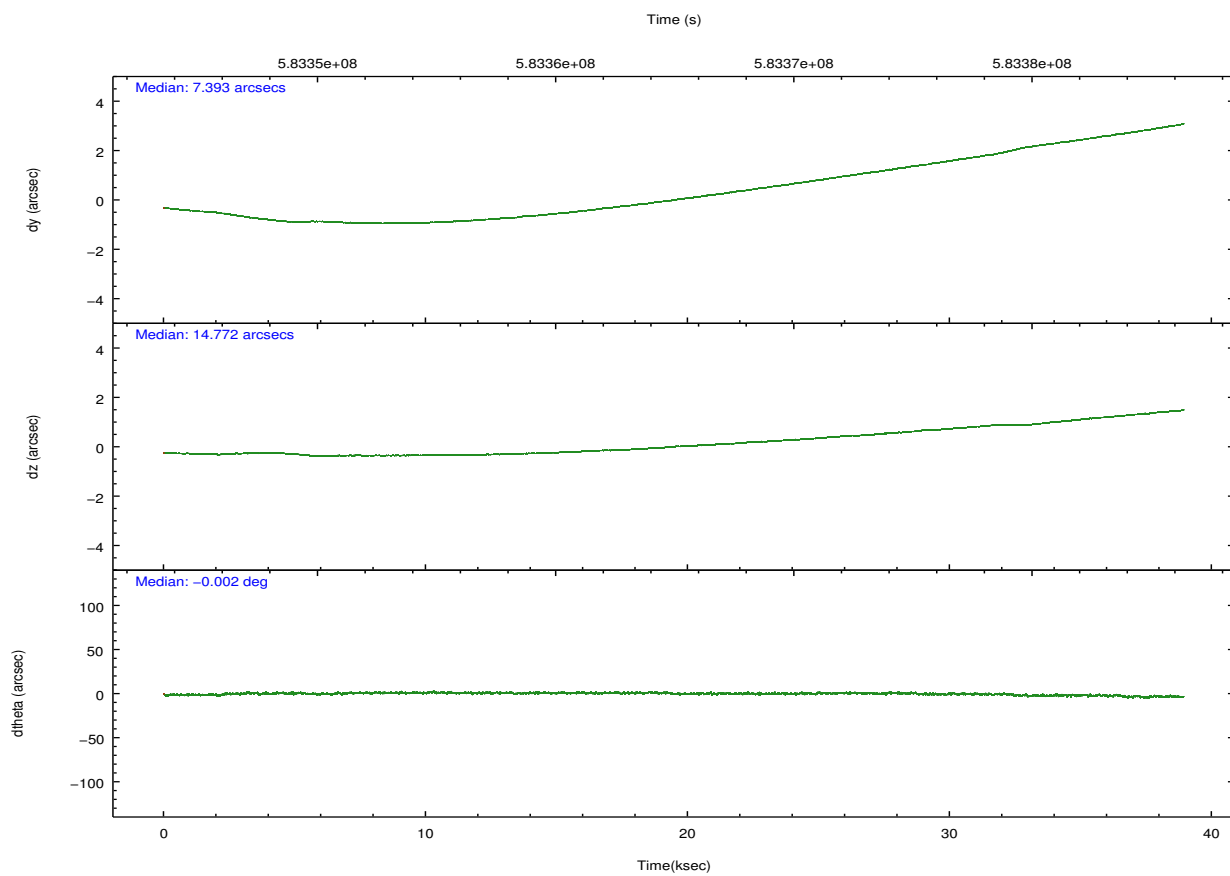
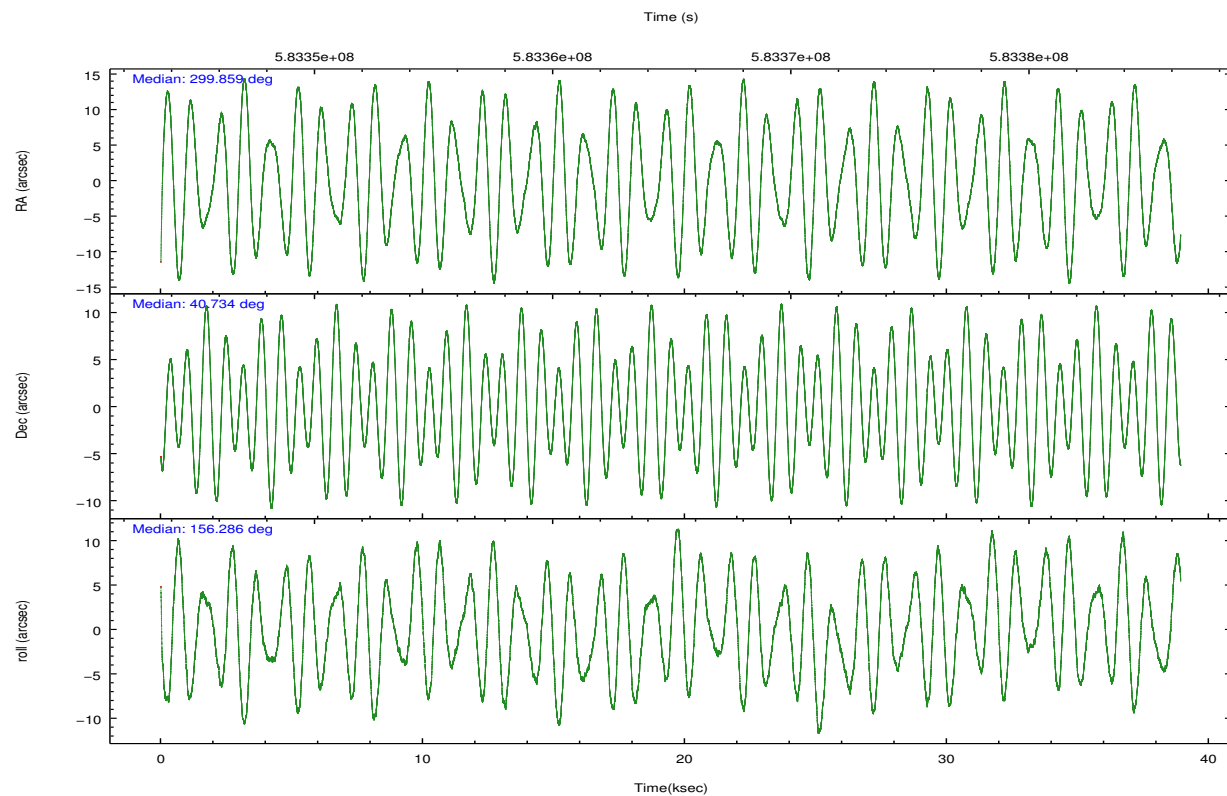
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	264340	258794	280523	337097	244852	grade 0 events	39068	32465	34670	82468	9784
rejected events	199080	199026	222672	216973	216697		14%	12%	12%	24%	3%
rejected %	75%	76%	79%	64%	88%	grade 1 events	234	200	297	1032	136
							0%	0%	0%	0%	0%
						grade 2 events	11061	12005	9679	15925	6395
							4%	4%	3%	4%	2%
						grade 3 events	4146	3765	3667	5957	2642
							1%	1%	1%	1%	1%
						grade 4 events	3936	3721	3693	6042	2633
							1%	1%	1%	1%	1%
						grade 5 events	10224	10686	9435	12631	10751
							3%	4%	3%	3%	4%
						grade 6 events	7061	7823	6149	9747	6704
							2%	3%	2%	2%	2%
						grade 7 events	188610	188129	212933	203295	205807
							71%	72%	75%	60%	84%

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	299.895178	299.8589787401275	CCD I2 on	Y	Y
[deg] Pointing Dec	40.737232	40.73410778139781	CCD I3 on	Y	Y
[deg] Pointing Roll	156.055742	156.2880502727299	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)	583346417.184000	583344803.9513	CCD S5 on	N	N
Observation start date	2016-06-26T16:39:09	2016-06-26T16:13:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	583384417.184000	583385484.6661299	On-chip summing requested	N	N
Observation end date	2016-06-27T03:12:29	2016-06-27T03:31:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



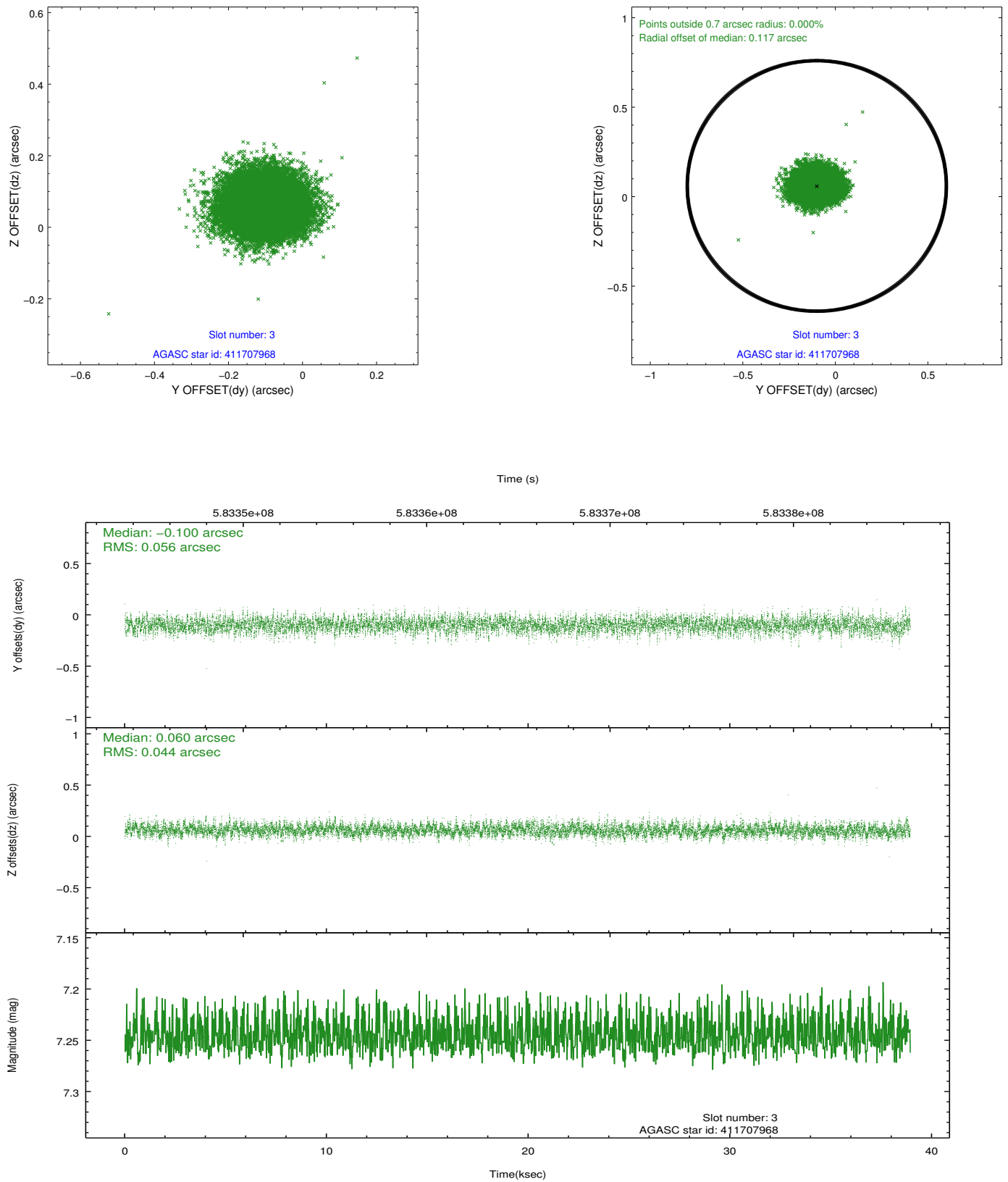


Slot Statistics

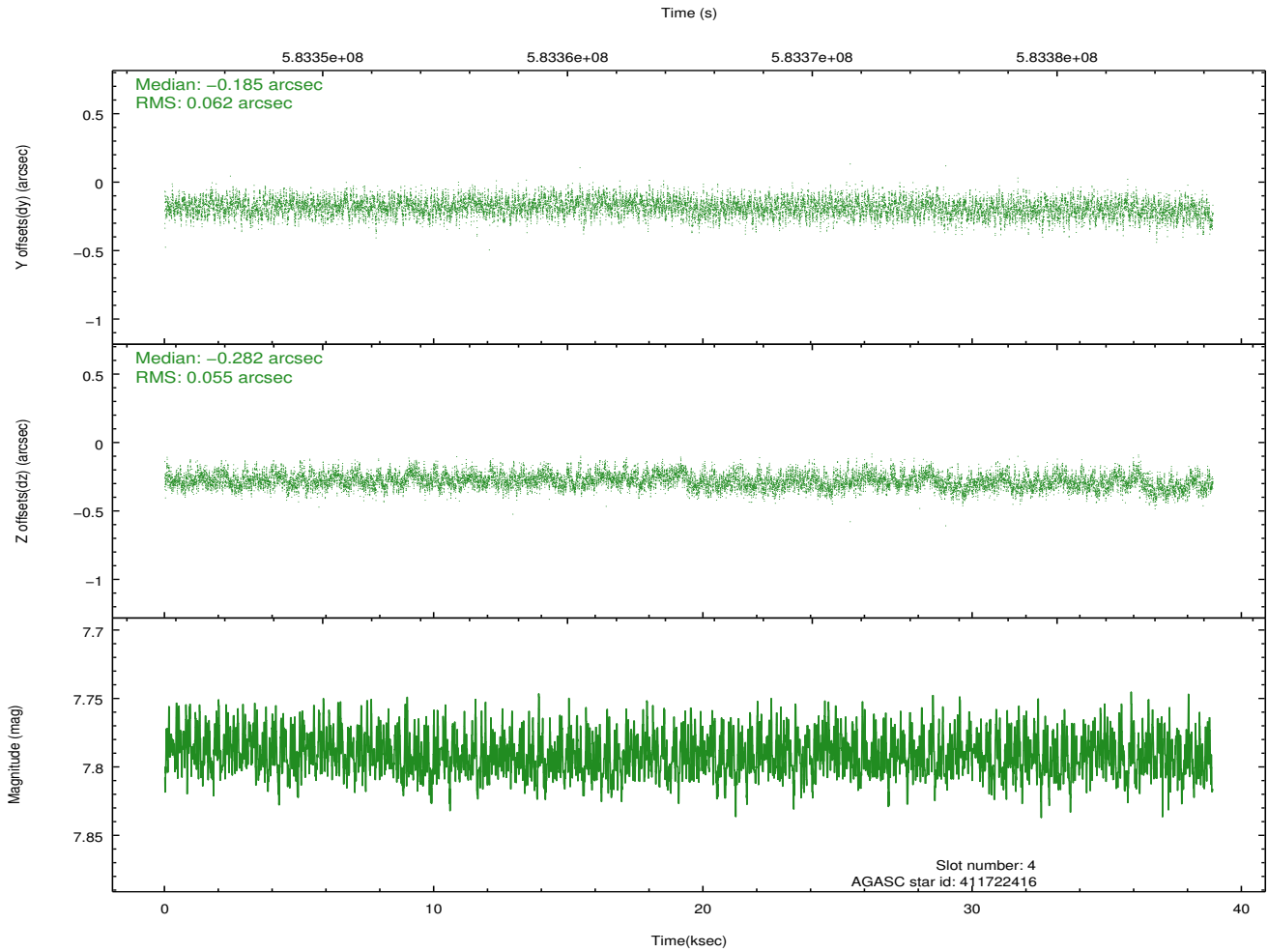
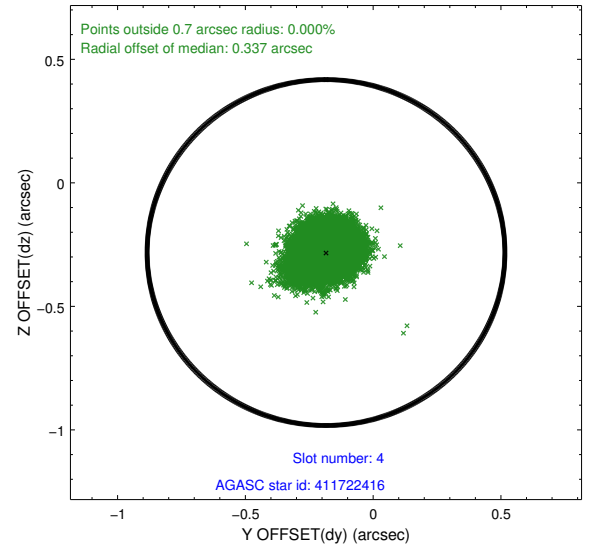
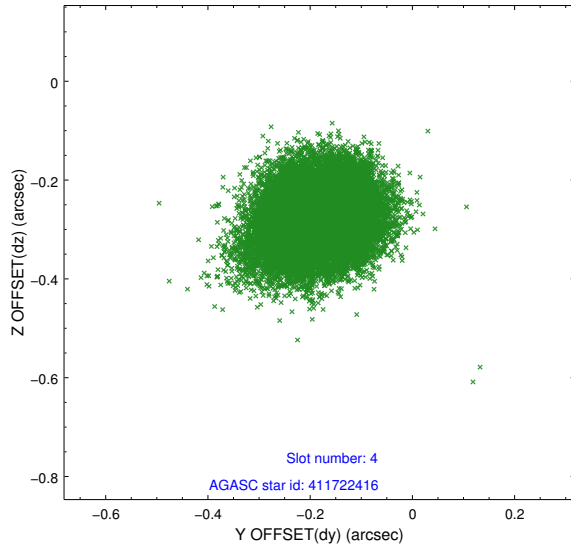
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-4	7.19	9492	0.238	0.006	0.022	0.035	0.000000	0.000000	2152.04	1061.32
1	FID		ACIS-I-5	7.24	9495	-0.364	-0.001	0.019	0.028	0.000000	0.000000	-1816.50	1059.08
2	FID		ACIS-I-6	7.24	9495	0.021	0.062	0.014	0.034	0.000000	0.000000	397.37	1703.49
3	GUIDE	used	411707968	7.25	18988	-0.100	0.060	0.076	0.124	299.509933	40.926839	1235.66	-200.62
4	GUIDE	used	411722416	7.79	18985	-0.185	-0.282	0.089	0.141	298.936507	40.391736	1903.34	2190.54
5	GUIDE	used	413405352	8.33	18982	0.143	0.243	0.089	0.145	300.290830	41.091941	-461.53	-1604.29
6	GUIDE	used	413421016	8.67	18983	0.091	0.033	0.083	0.136	300.612426	40.446254	-2217.53	152.90
7	GUIDE	used	413425232	8.61	18977	0.053	-0.056	0.100	0.166	300.417382	40.029012	-2348.71	1742.24

2.4 Star Slots

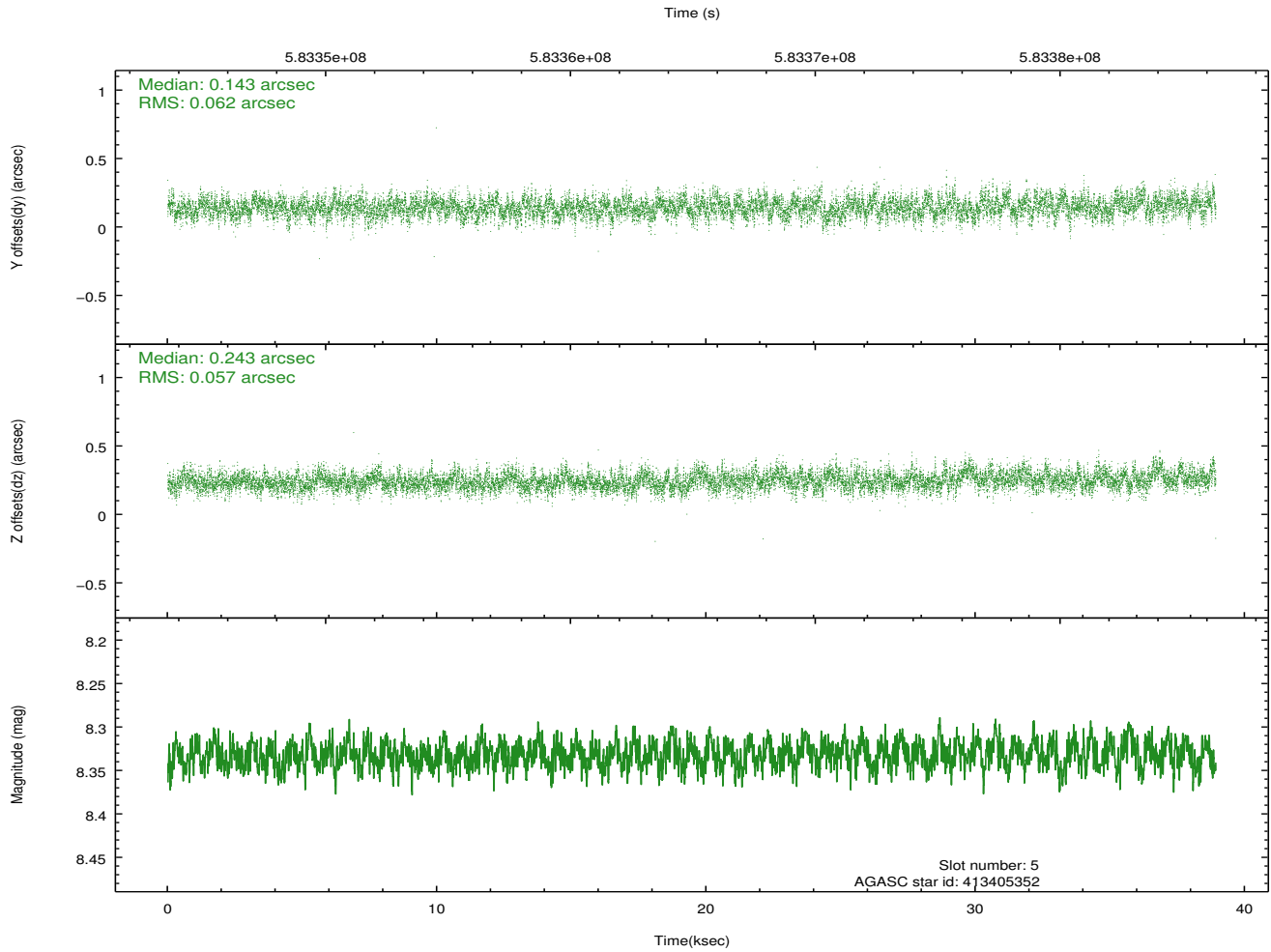
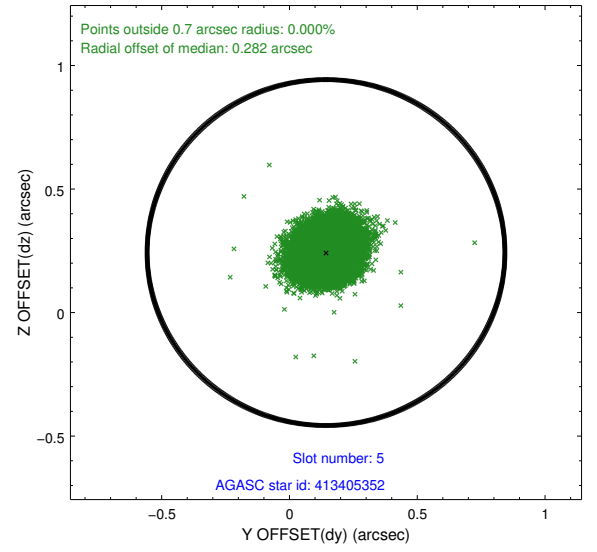
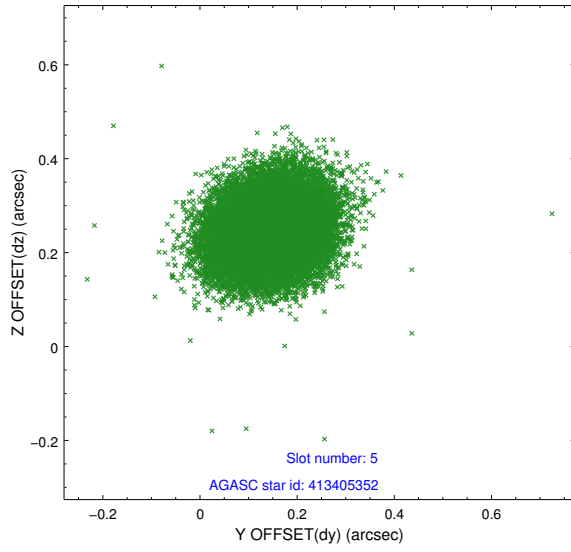
2.4.1 Slot 3



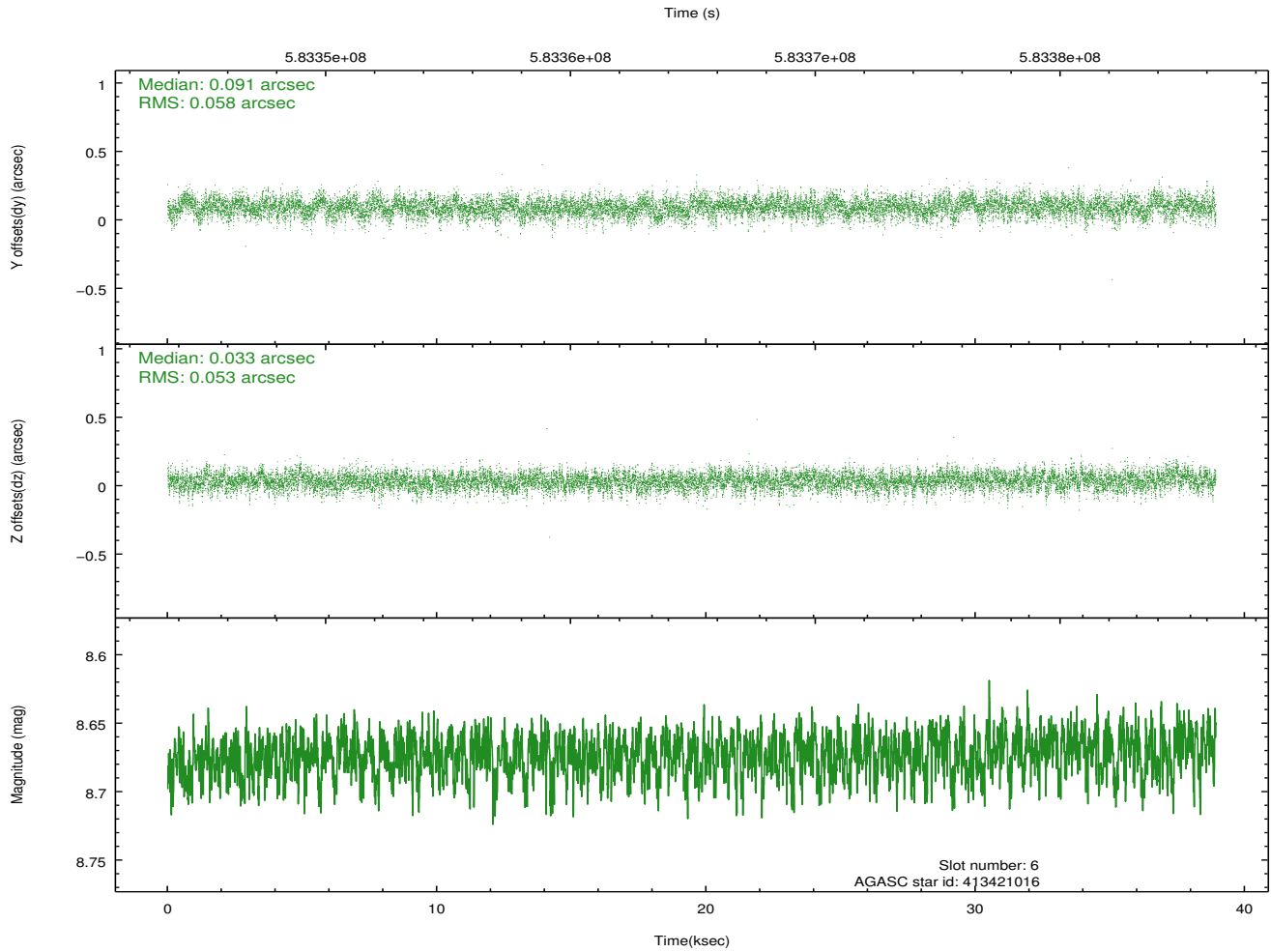
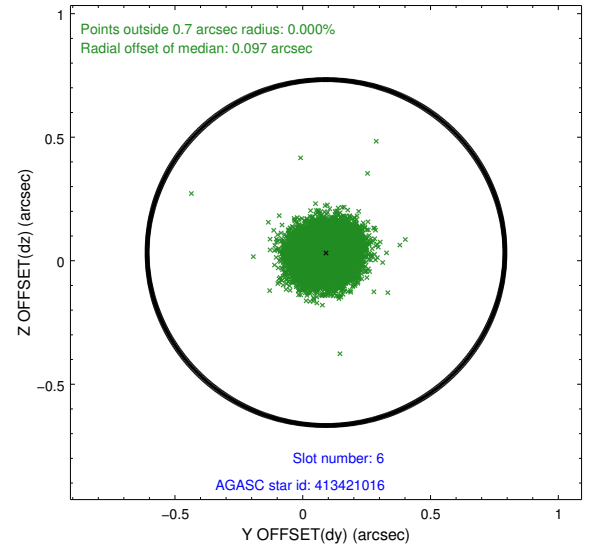
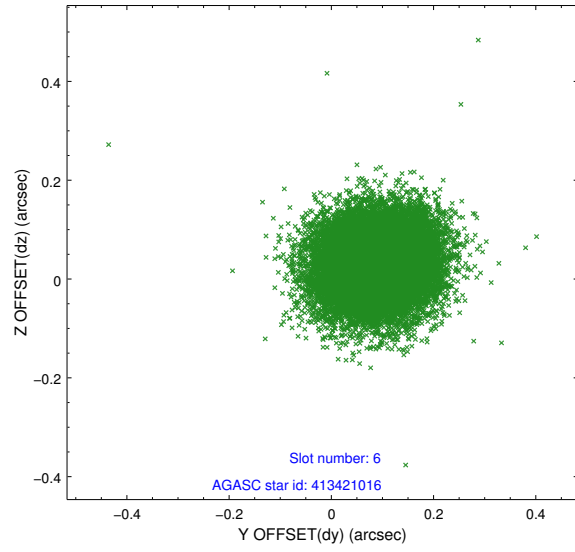
2.4.2 Slot 4



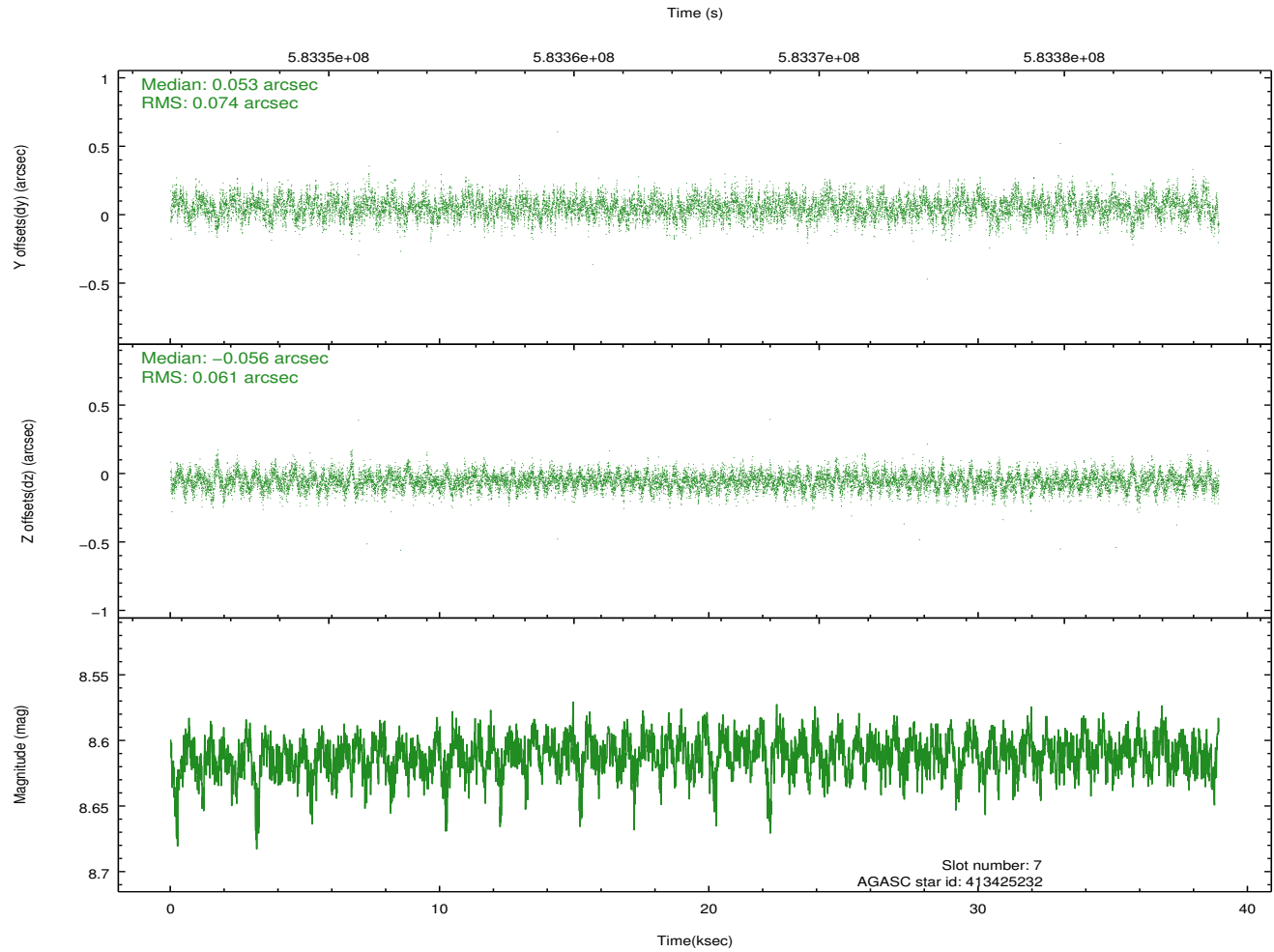
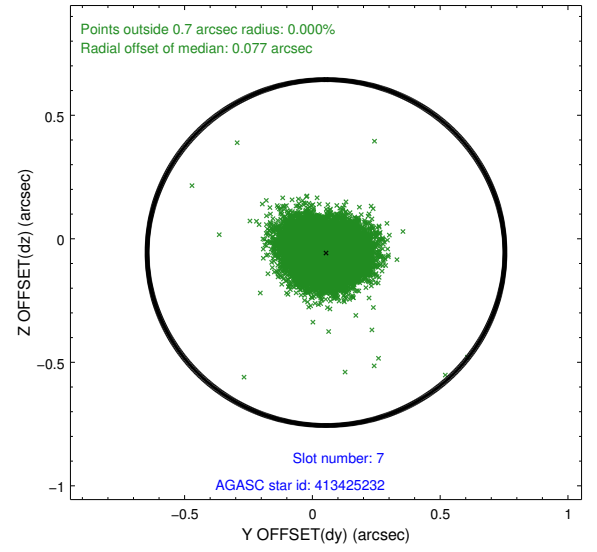
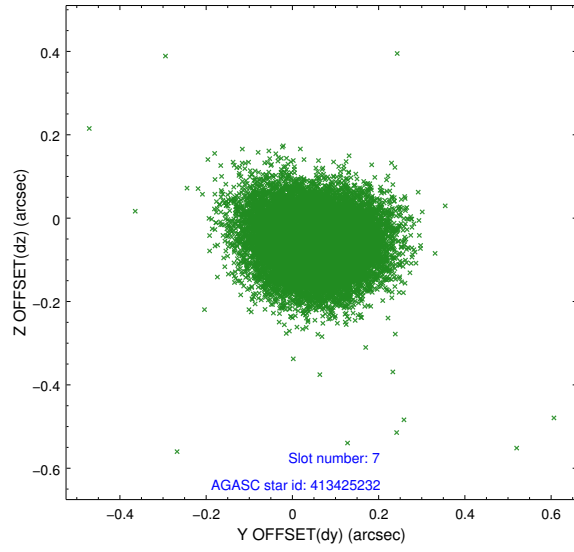
2.4.3 Slot 5



2.4.4 Slot 6

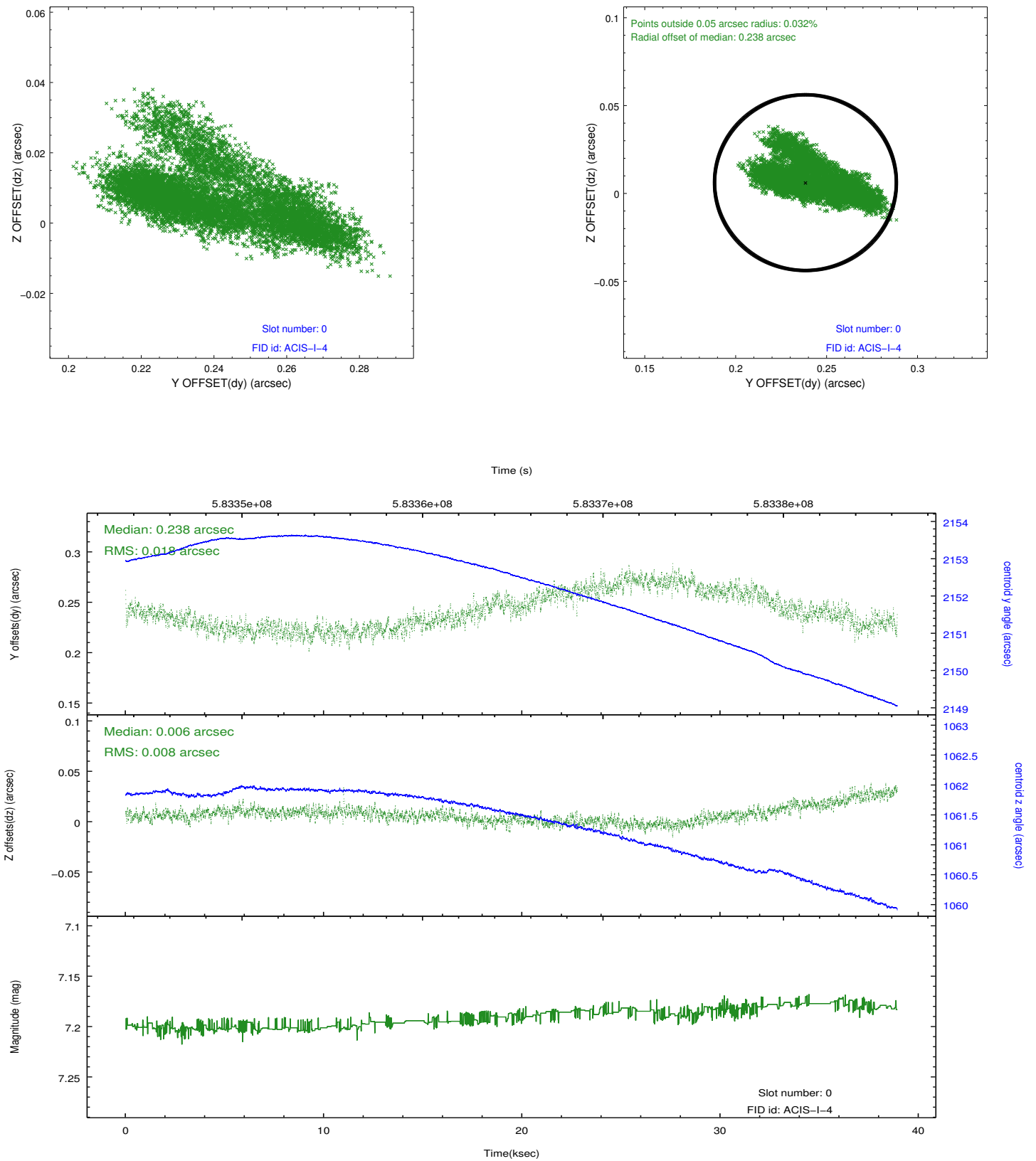


2.4.5 Slot 7

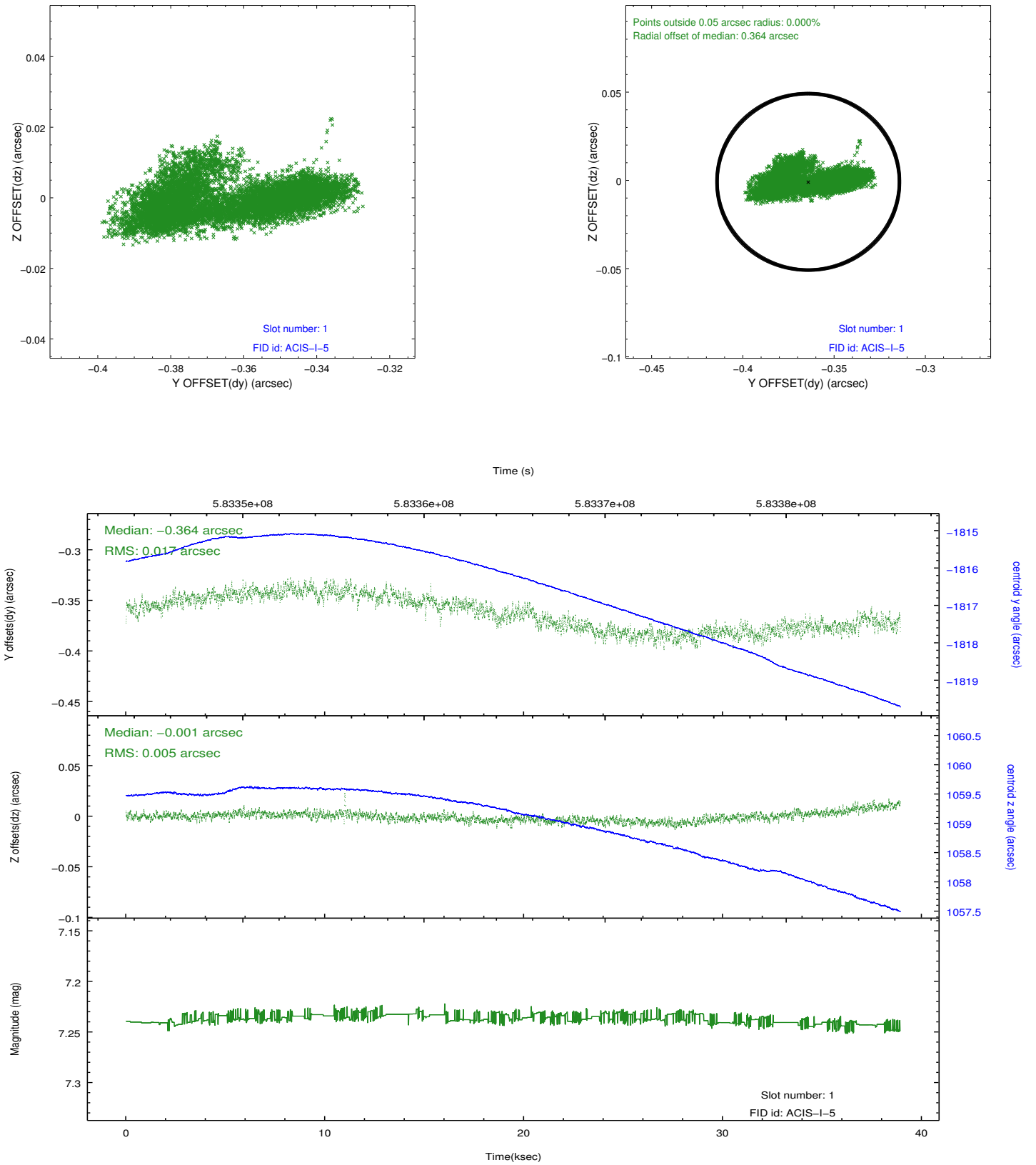


2.5 FID Slots

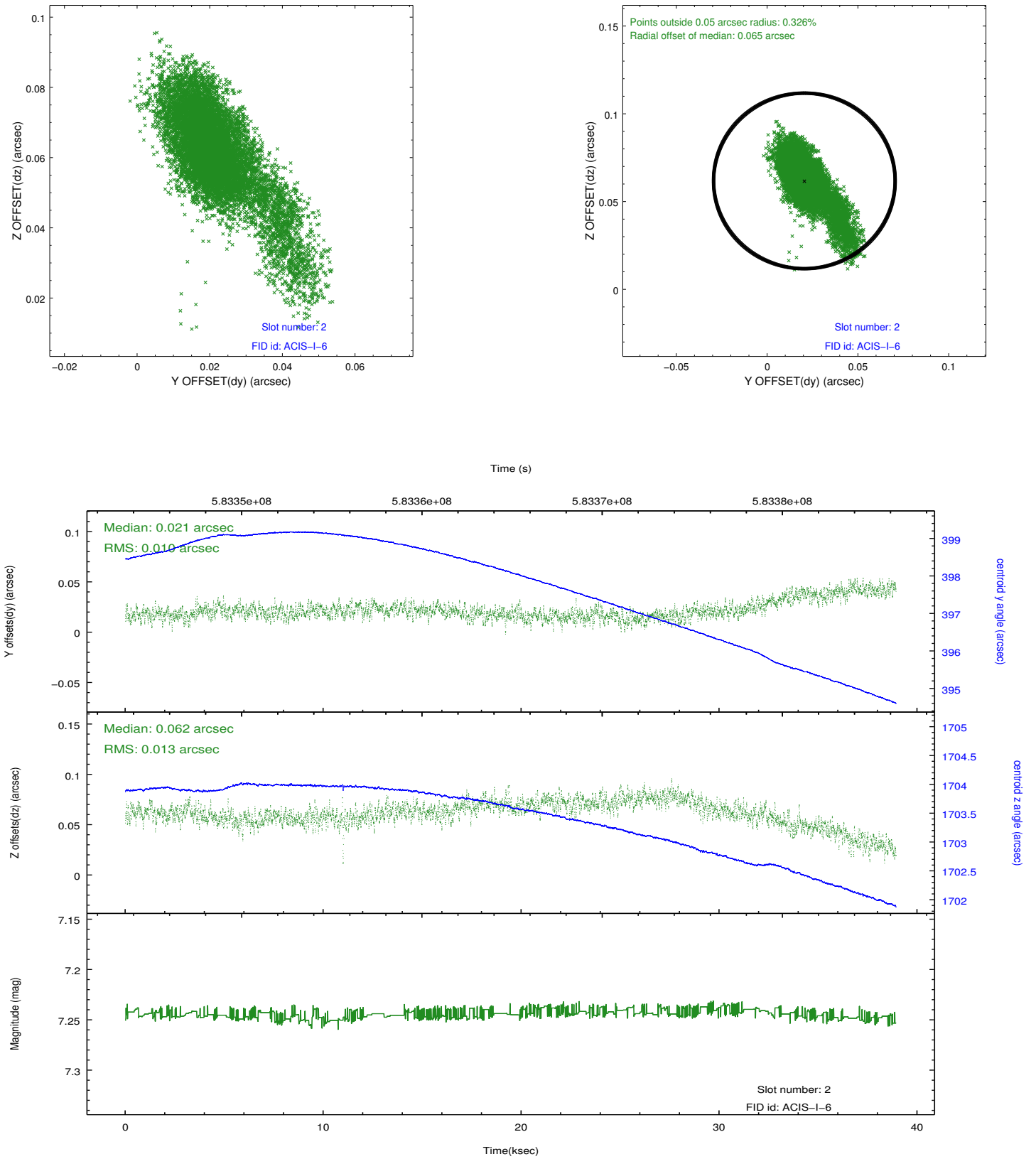
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.06.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.038801929474

A.2 Comments