

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 17515 - L2 Version 1
Chandra X-Ray Center

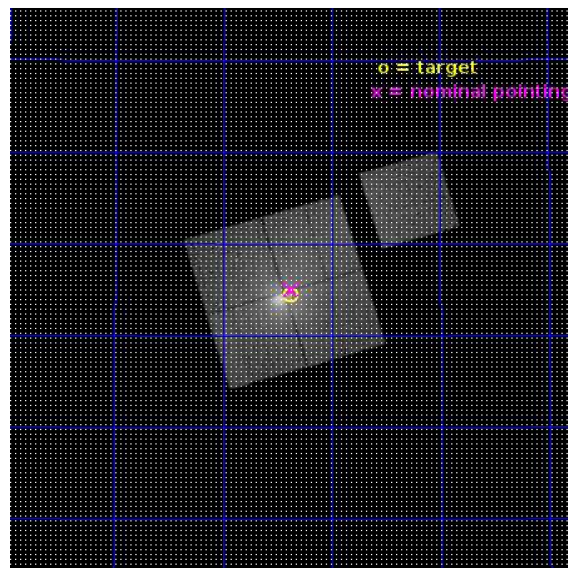
L2 Processing Date : Mar 22 2017

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1 Front

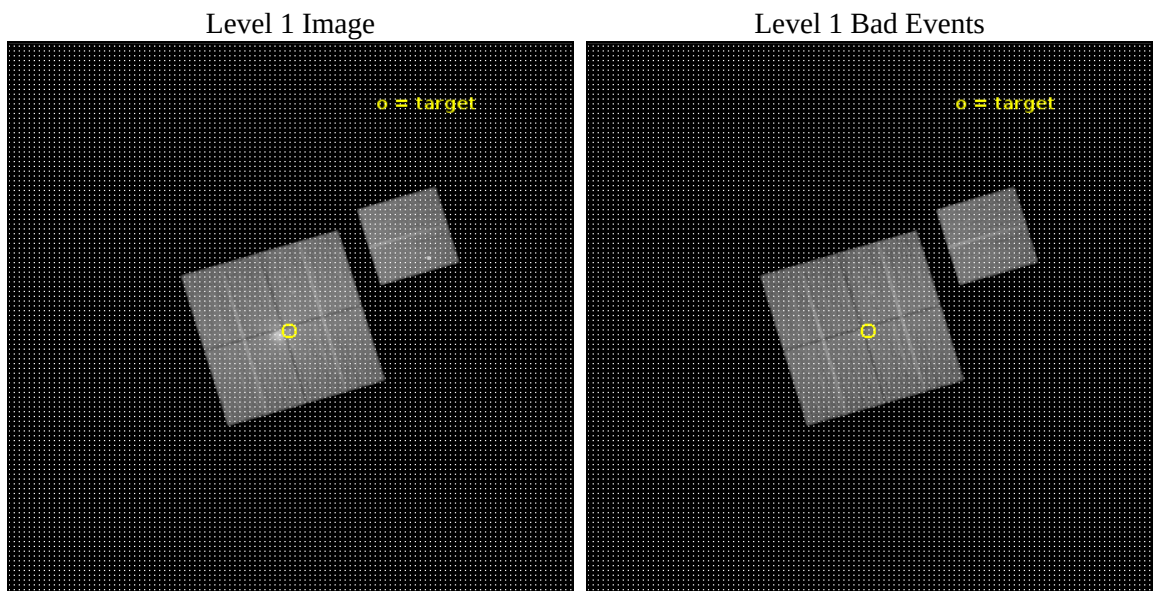
seq_num	703132	Sequence number
obs_id	17515	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - W Hotspot	Source name
dtcycle	0	
cycle	P	events from which 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	299.8431492332	Nominal RA [deg]
dec_nom	40.75032416483	Nominal Dec [deg]
roll_nom	73.209898761687	Nominal Roll [deg]
revision	1	Processing version of data
ontime	40060.389282346	Sum of GTIs [s]
livetime	39536.970804342	Livetime [s]
ontime0	40063.407142639	Sum of GTIs [s]
ontime1	40054.025212049	Sum of GTIs [s]
ontime2	40060.348252296	Sum of GTIs [s]
ontime3	40060.389282346	Sum of GTIs [s]
ontime6	40063.366102576	Sum of GTIs [s]
l2events	331796	Number of level 2 events



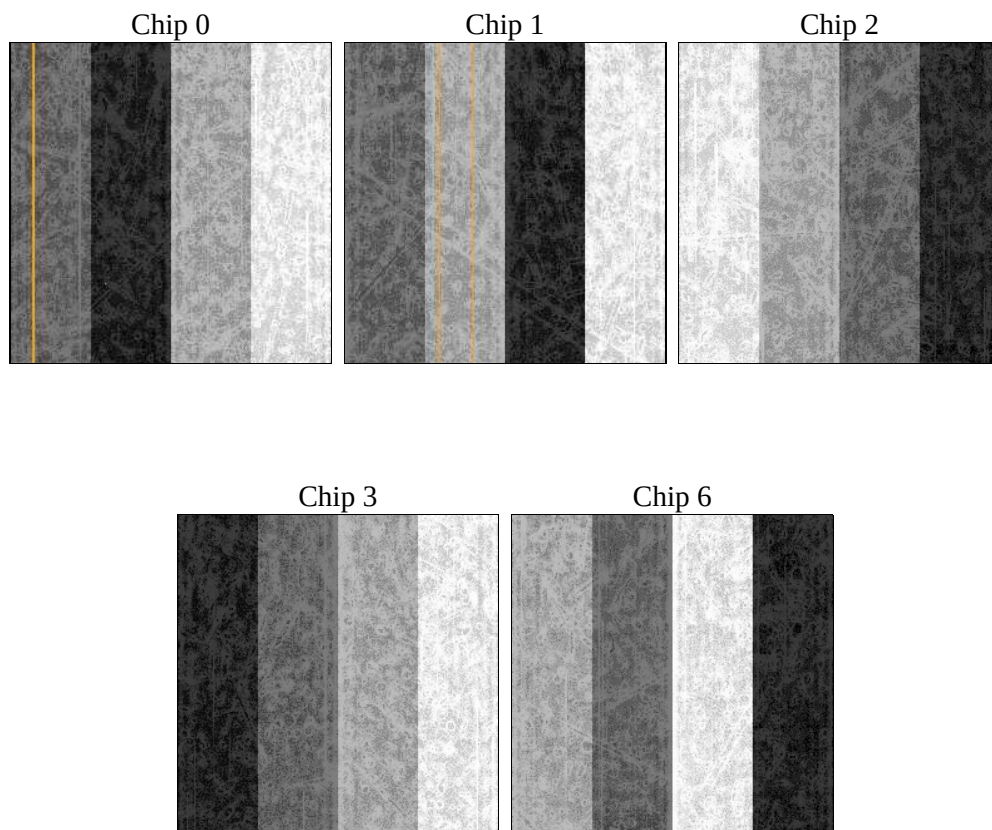
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	40060.389282346	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	40063.407142639	Sum of GTIs [s]
date	2017-03-22T14:12:36	Date and time of file creation	ontime1	40054.025212049	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	40060.348252296	Sum of GTIs [s]
			ontime3	40060.389282346	Sum of GTIs [s]
			ontime6	40063.366102576	Sum of GTIs [s]
			l1events	1646576	Number of level 1 events

2.1.4 Events

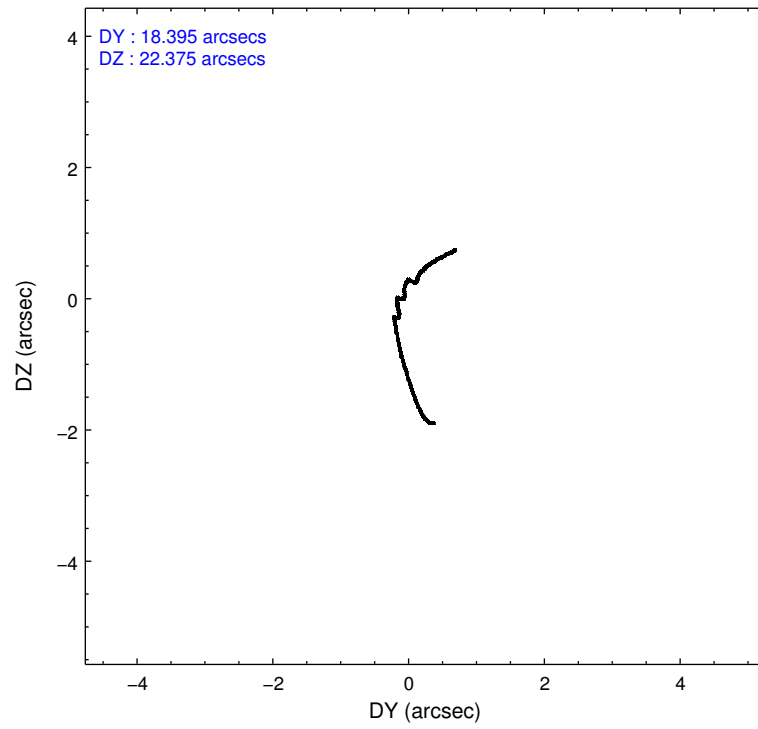
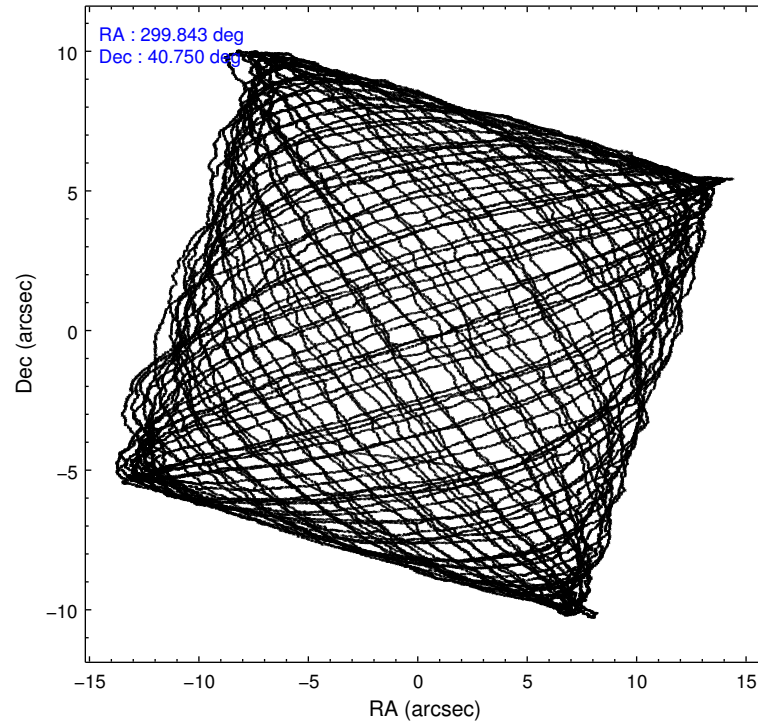
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	294647	378930	341934	319548	311517
rejected events	233880	244232	269319	255123	259572
rejected %	79%	64%	78%	79%	83%

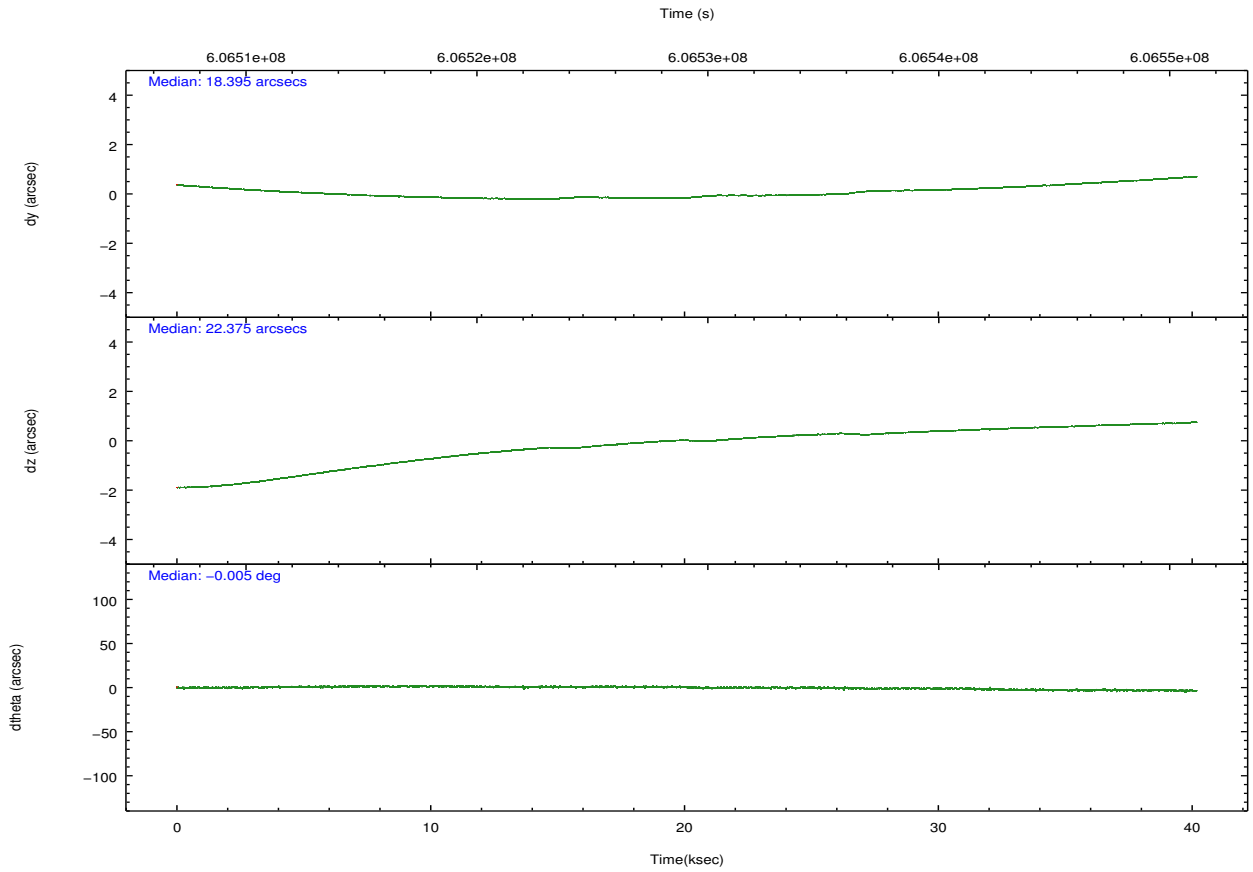
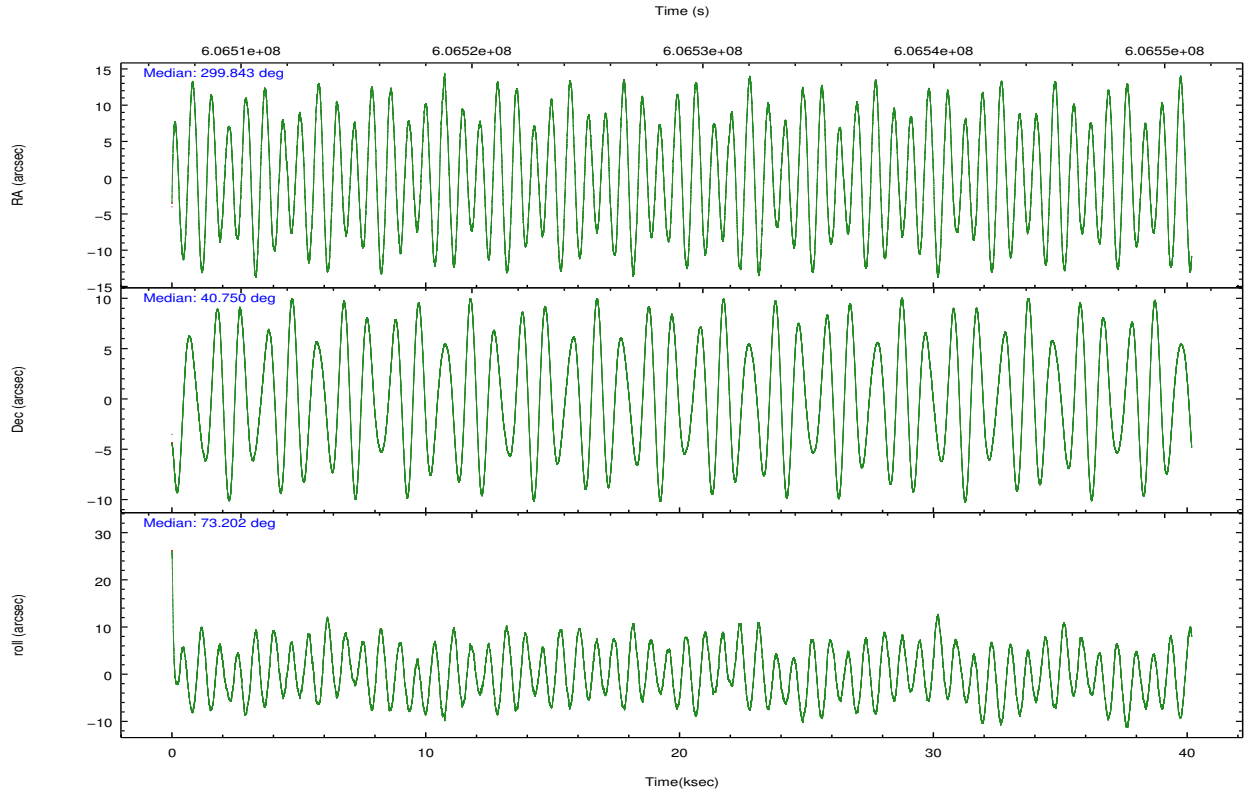
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	33097	84141	43548	37452	28492
	11%	22%	12%	11%	9%
grade 1 events	255	771	364	335	232
	0%	0%	0%	0%	0%
grade 2 events	11494	24357	12408	10575	8594
	3%	6%	3%	3%	2%
grade 3 events	4280	6653	4434	4477	3449
	1%	1%	1%	1%	1%
grade 4 events	4085	6561	4706	4338	3416
	1%	1%	1%	1%	1%
grade 5 events	11794	13300	11329	13757	13287
	4%	3%	3%	4%	4%
grade 6 events	7818	12996	7526	7588	8001
	2%	3%	2%	2%	2%
grade 7 events	221824	230151	257619	241026	246046
	75%	60%	75%	75%	78%

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	299.851605	299.8431492332036	CCD I2 on	Y	Y
[deg] Pointing Dec	40.723478	40.75032416483033	CCD I3 on	Y	Y
[deg] Pointing Roll	72.995686	73.20989876168713	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)	606509173.184000	606508038.18773	CCD S5 on	N	N
Observation start date	2017-03-21T18:45:04	2017-03-21T18:27:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	606549173.184000	606550038.07767	On-chip summing requested	N	N
Observation end date	2017-03-22T05:51:44	2017-03-22T06:07:18	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



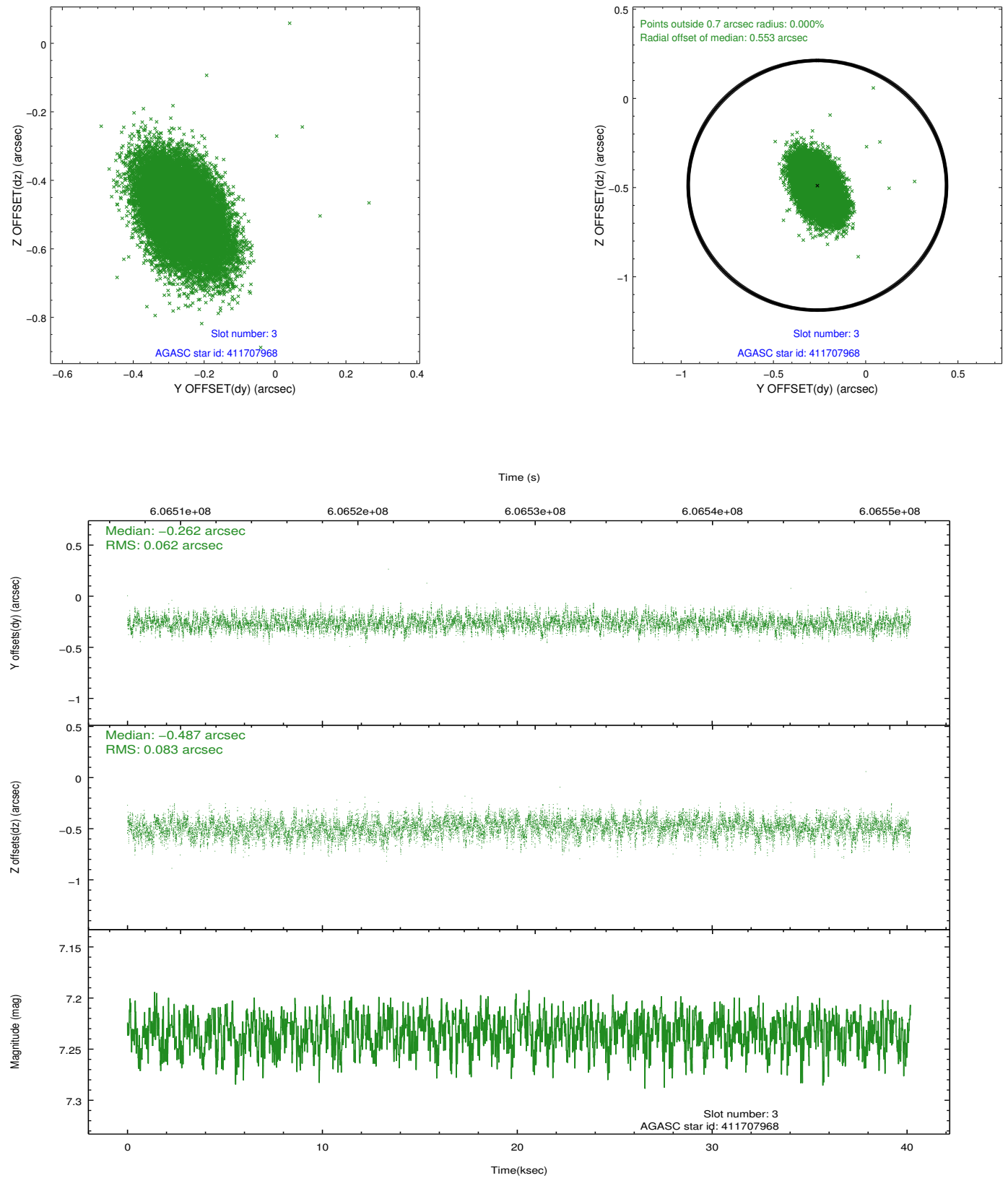


Slot Statistics

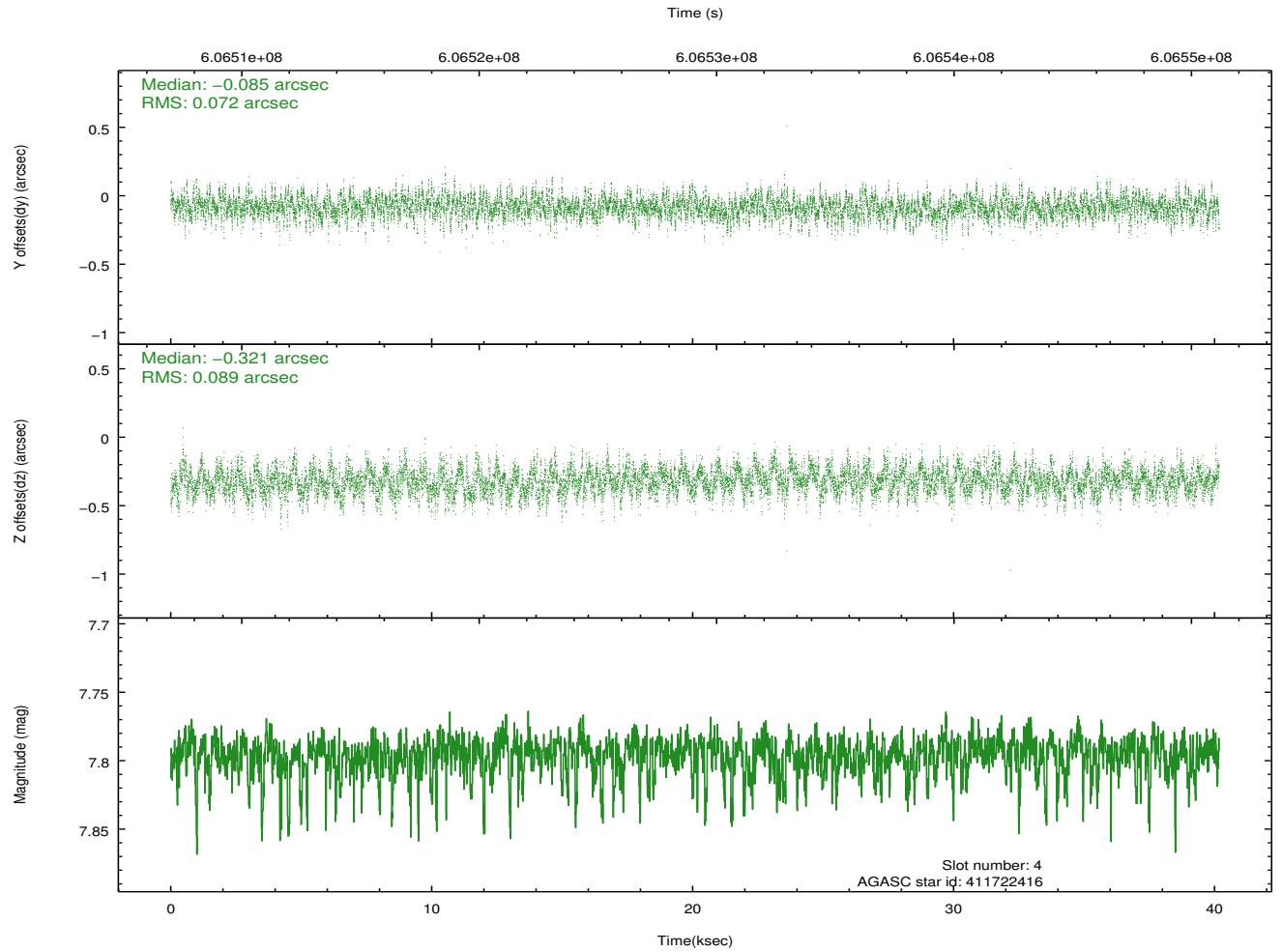
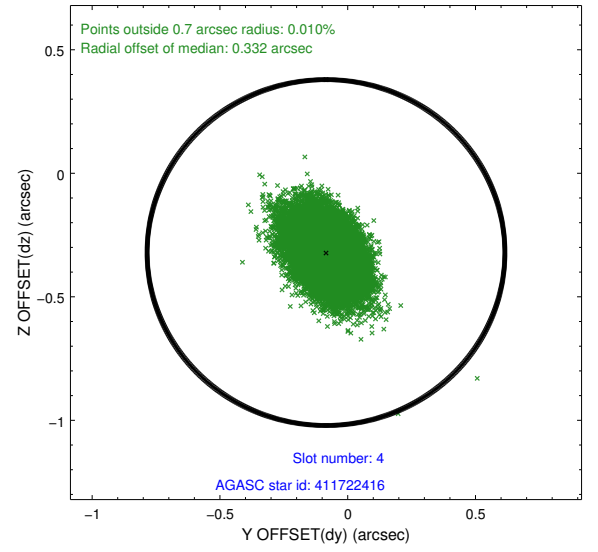
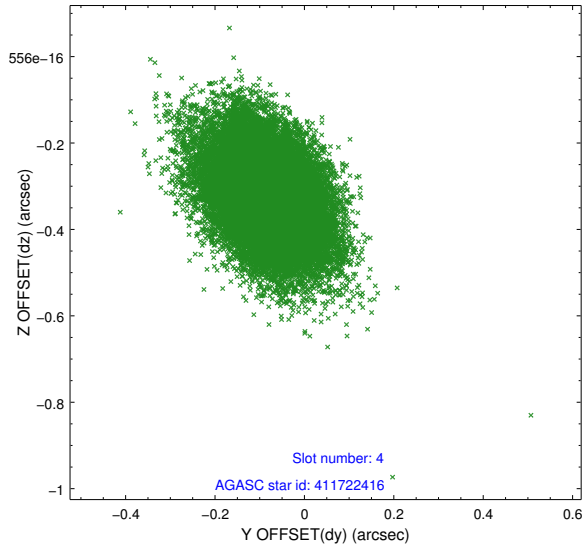
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.20	9799	0.077	-0.032	0.049	0.061	0.000000	0.000000	921.00	-845.93
1	FID		ACIS-I-5	7.19	9800	-0.365	0.034	0.018	0.031	0.000000	0.000000	-1827.63	1051.48
2	FID		ACIS-I-6	7.20	9800	0.200	0.063	0.037	0.078	0.000000	0.000000	386.53	1696.15
3	GUIDE	used	411707968	7.23	19599	-0.262	-0.487	0.107	0.183	299.509933	40.926839	430.15	1103.15
4	GUIDE	used	411722416	7.80	19591	-0.085	-0.321	0.120	0.201	298.936507	40.391736	-1863.56	2053.76
5	GUIDE	used	413405352	8.33	19580	-0.096	-0.201	0.127	0.201	300.290830	41.091941	1619.89	-750.48
6	GUIDE	used	413425232	8.65	19593	0.231	0.698	0.110	0.190	300.417382	40.029012	-1929.13	-2220.49
7	GUIDE	used	413421016	8.69	19585	0.214	0.311	0.110	0.190	300.612426	40.446254	-335.78	-2281.93

2.4 Star Slots

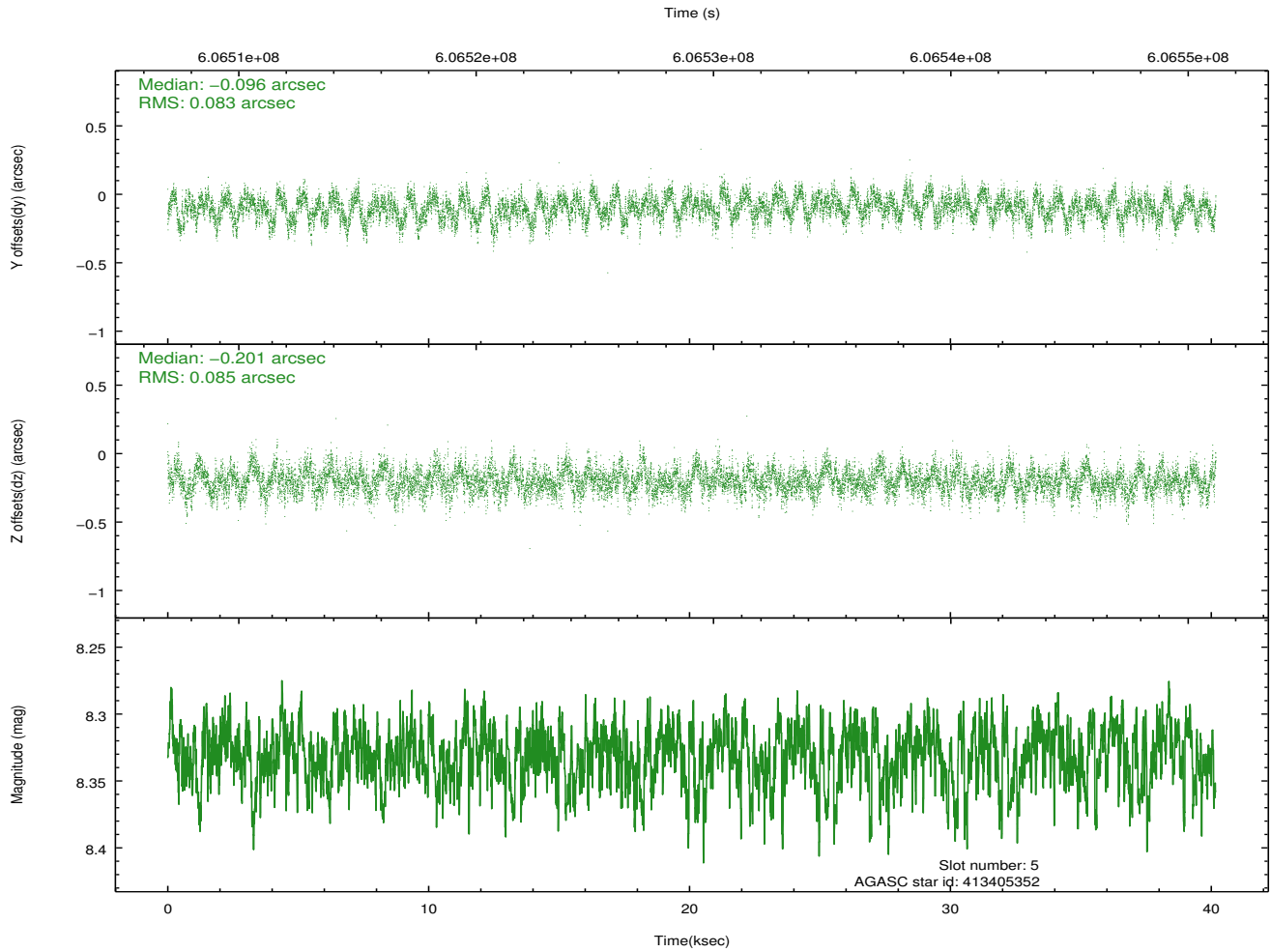
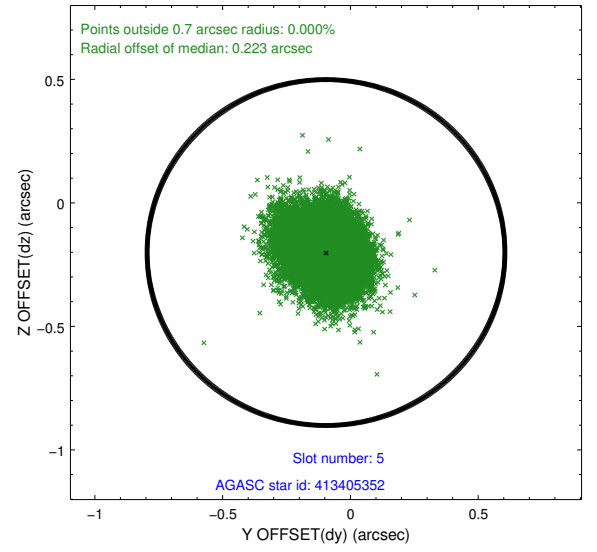
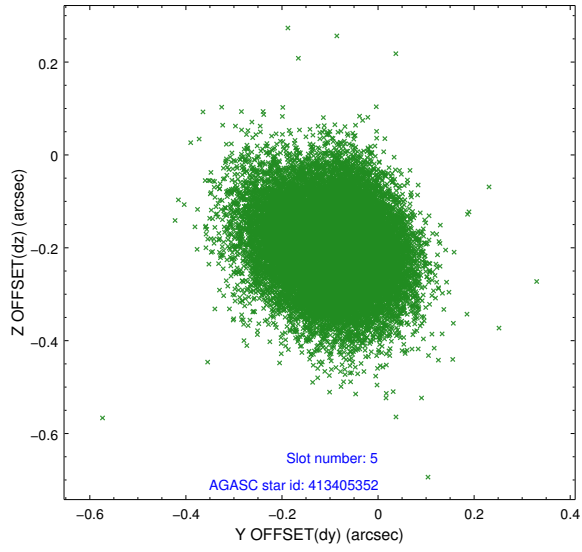
2.4.1 Slot 3



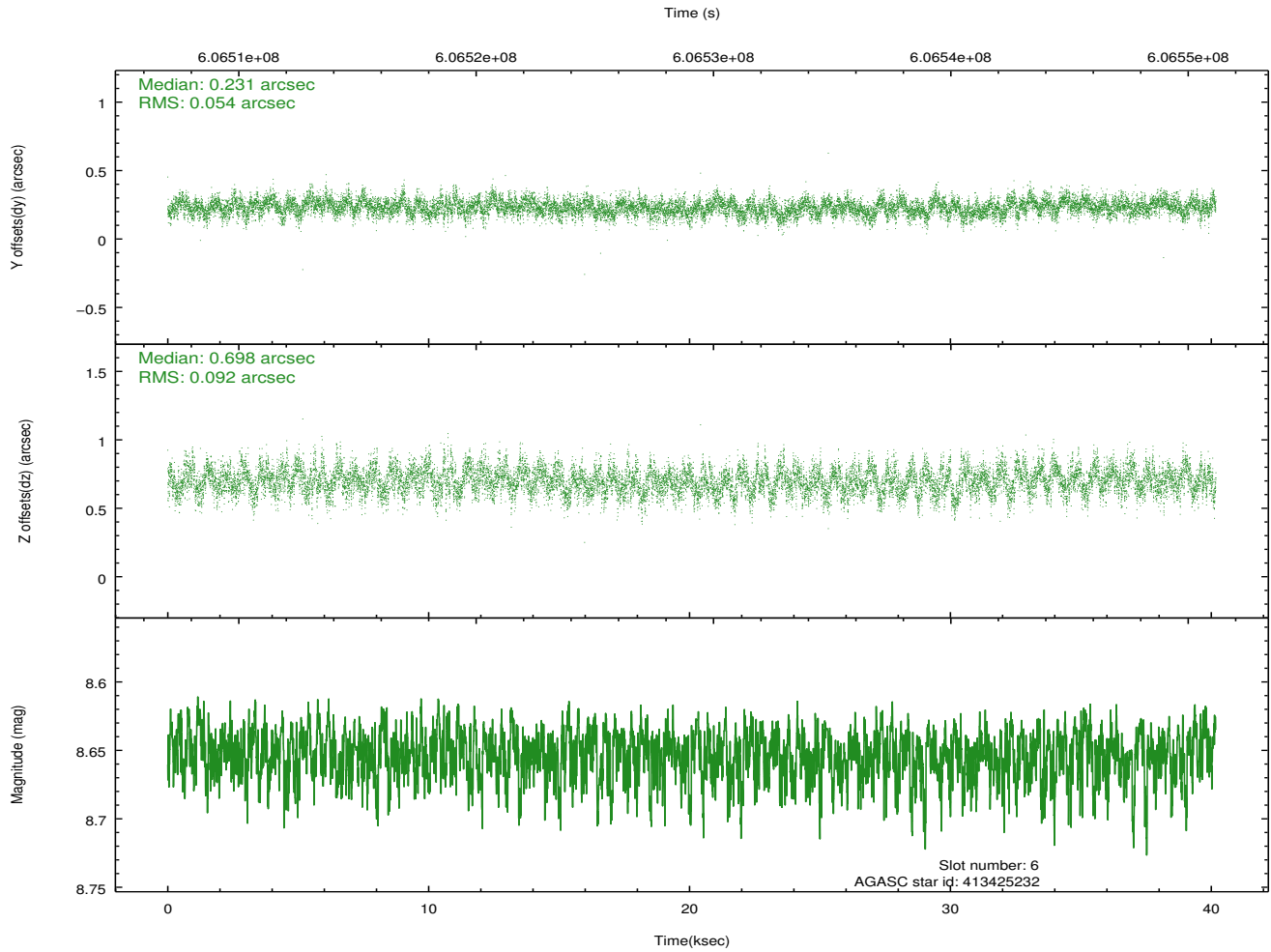
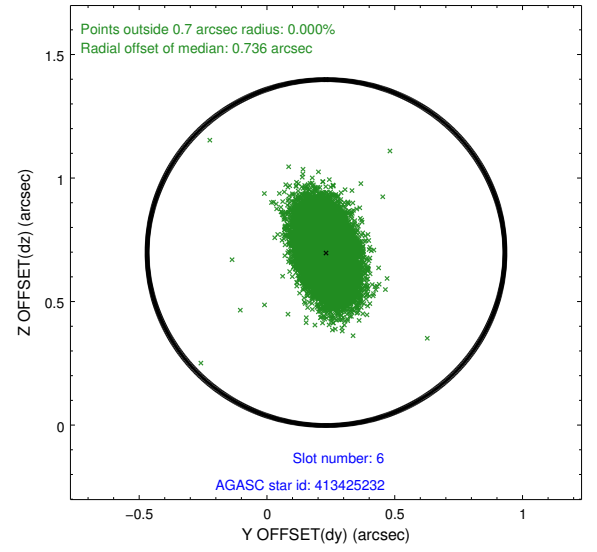
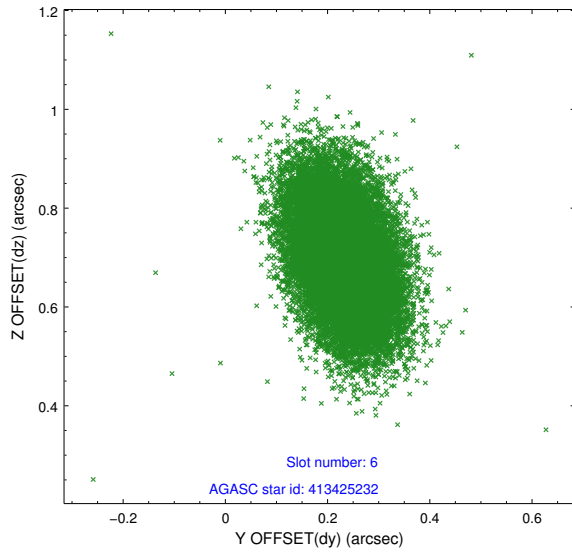
2.4.2 Slot 4



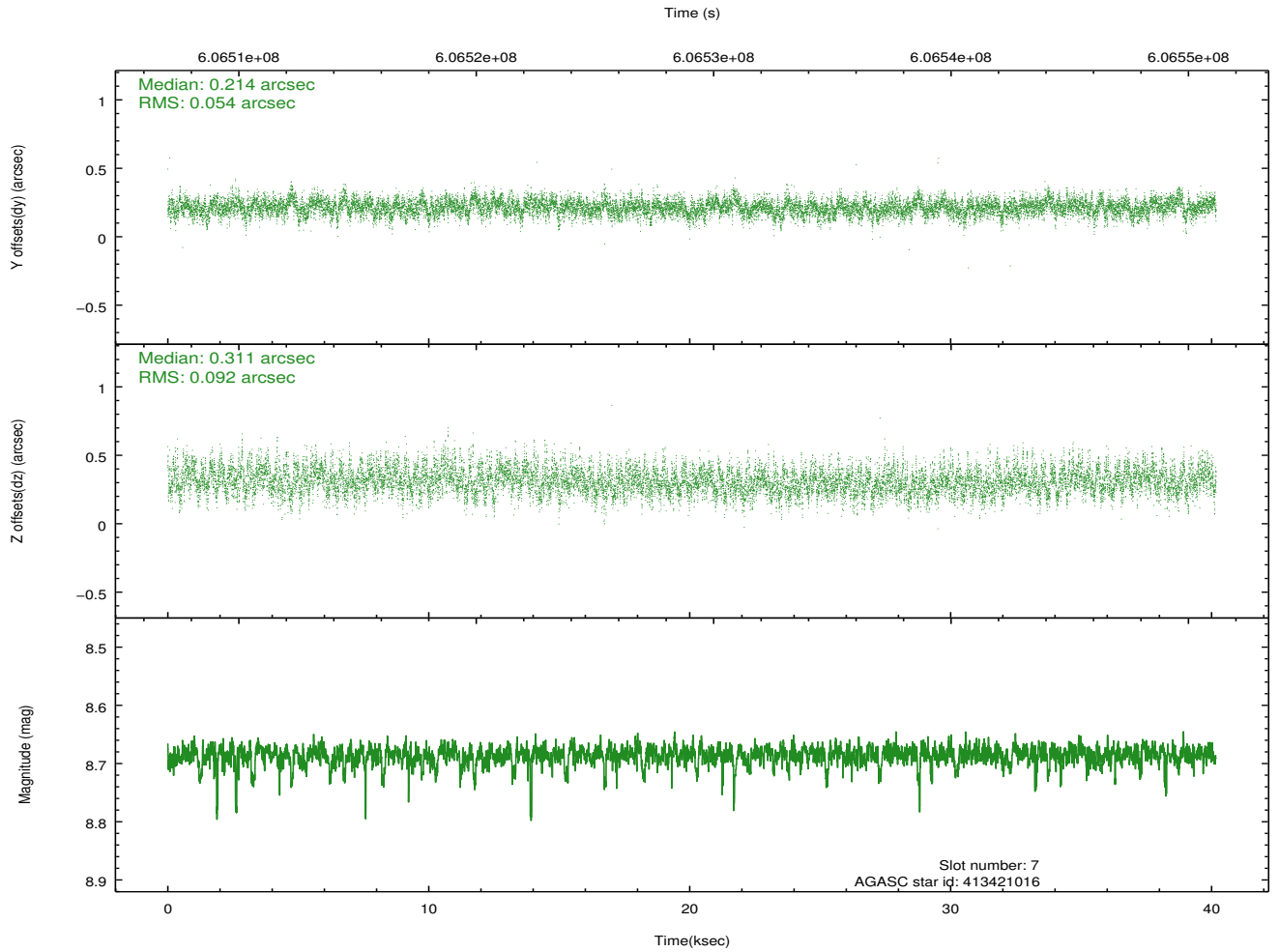
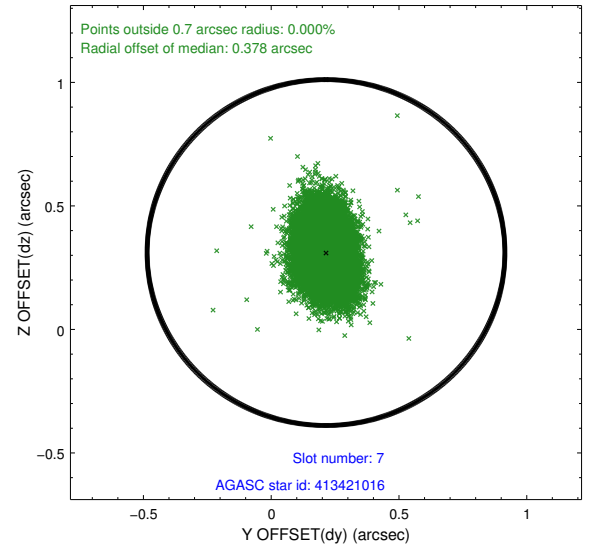
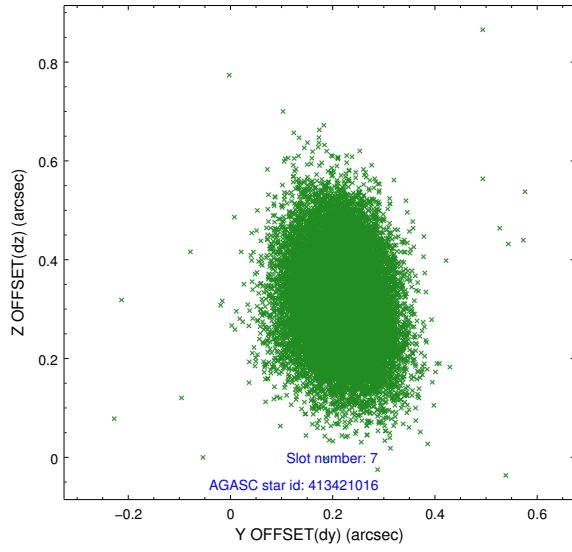
2.4.3 Slot 5



2.4.4 Slot 6

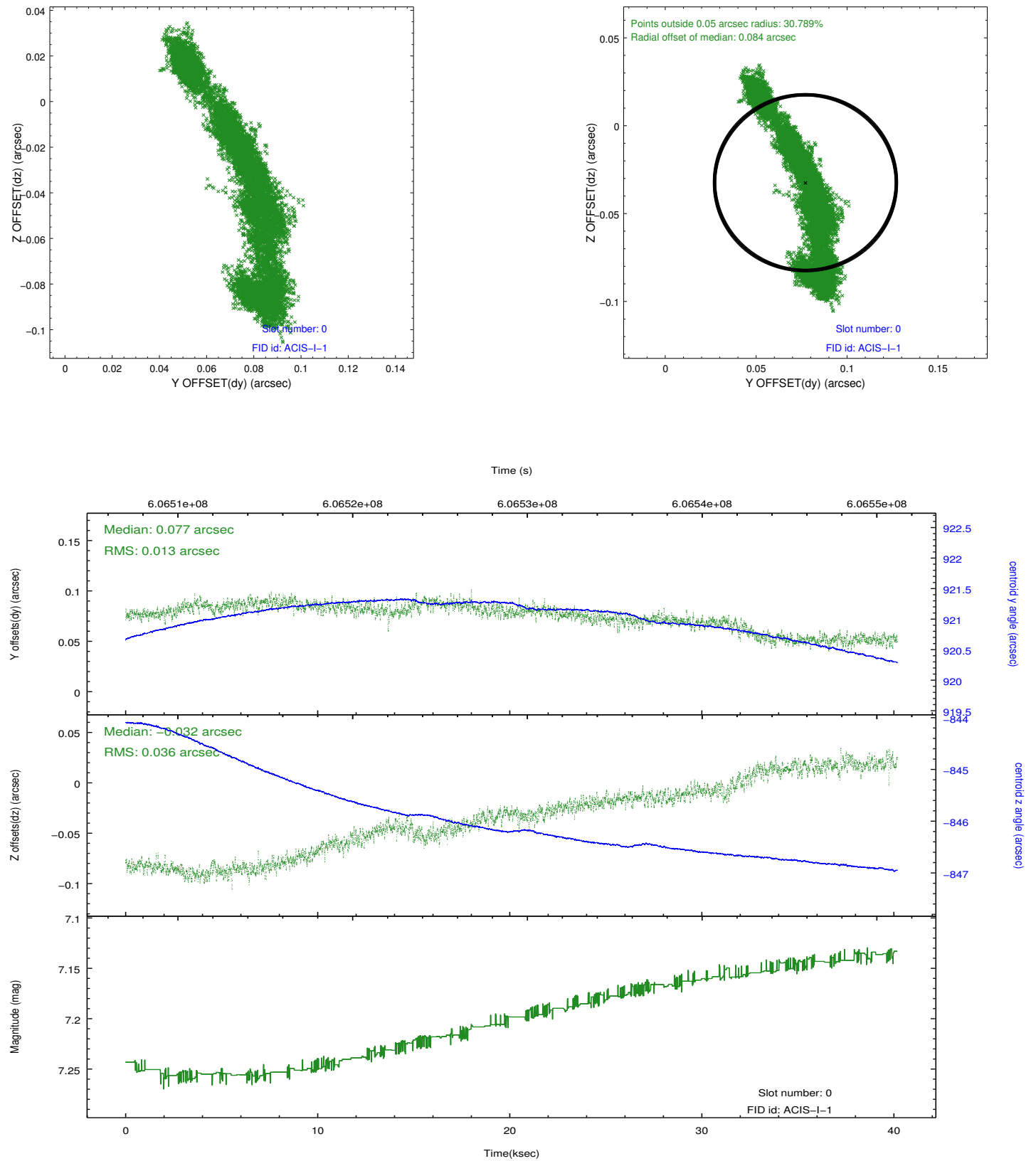


2.4.5 Slot 7

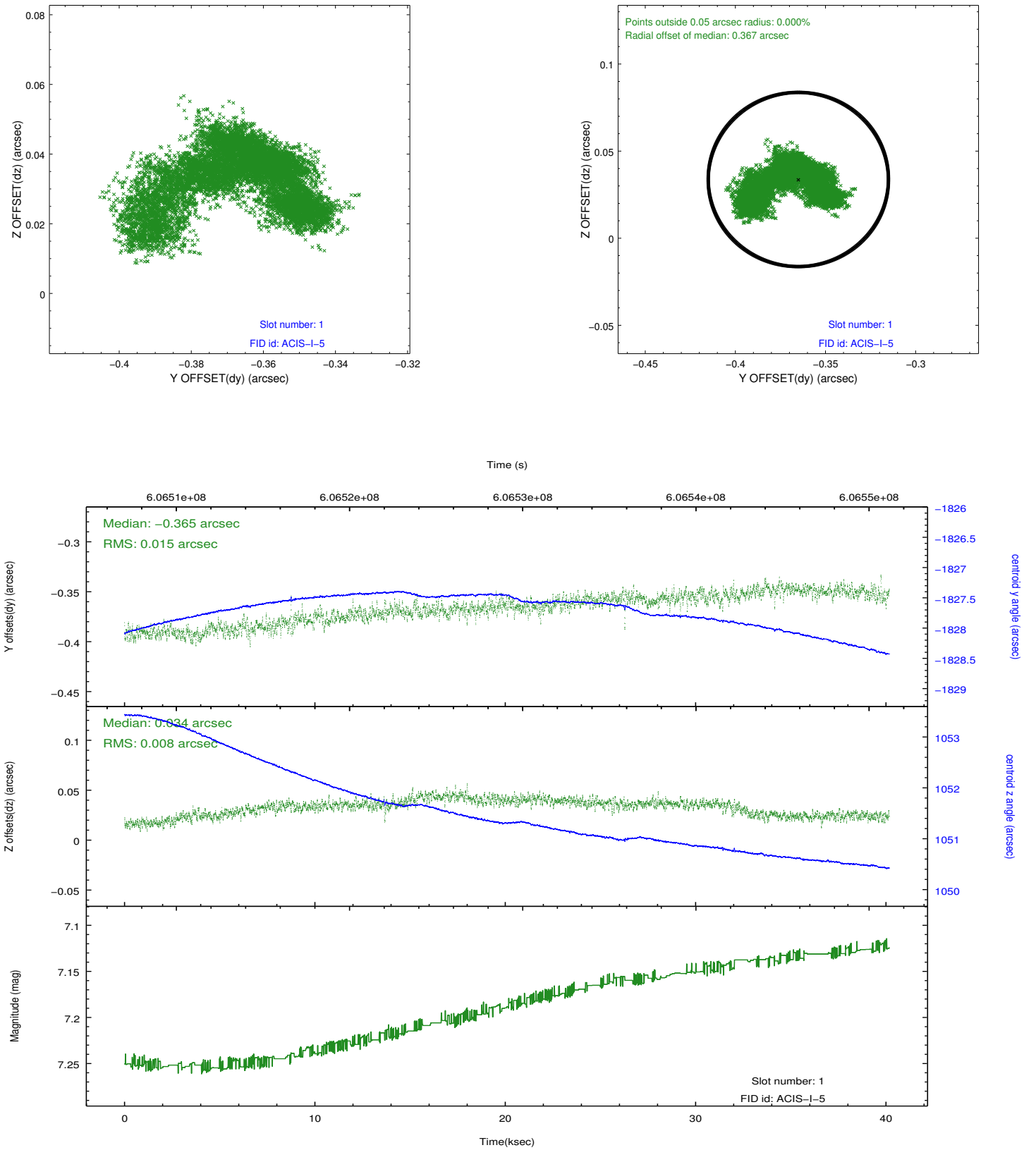


2.5 FID Slots

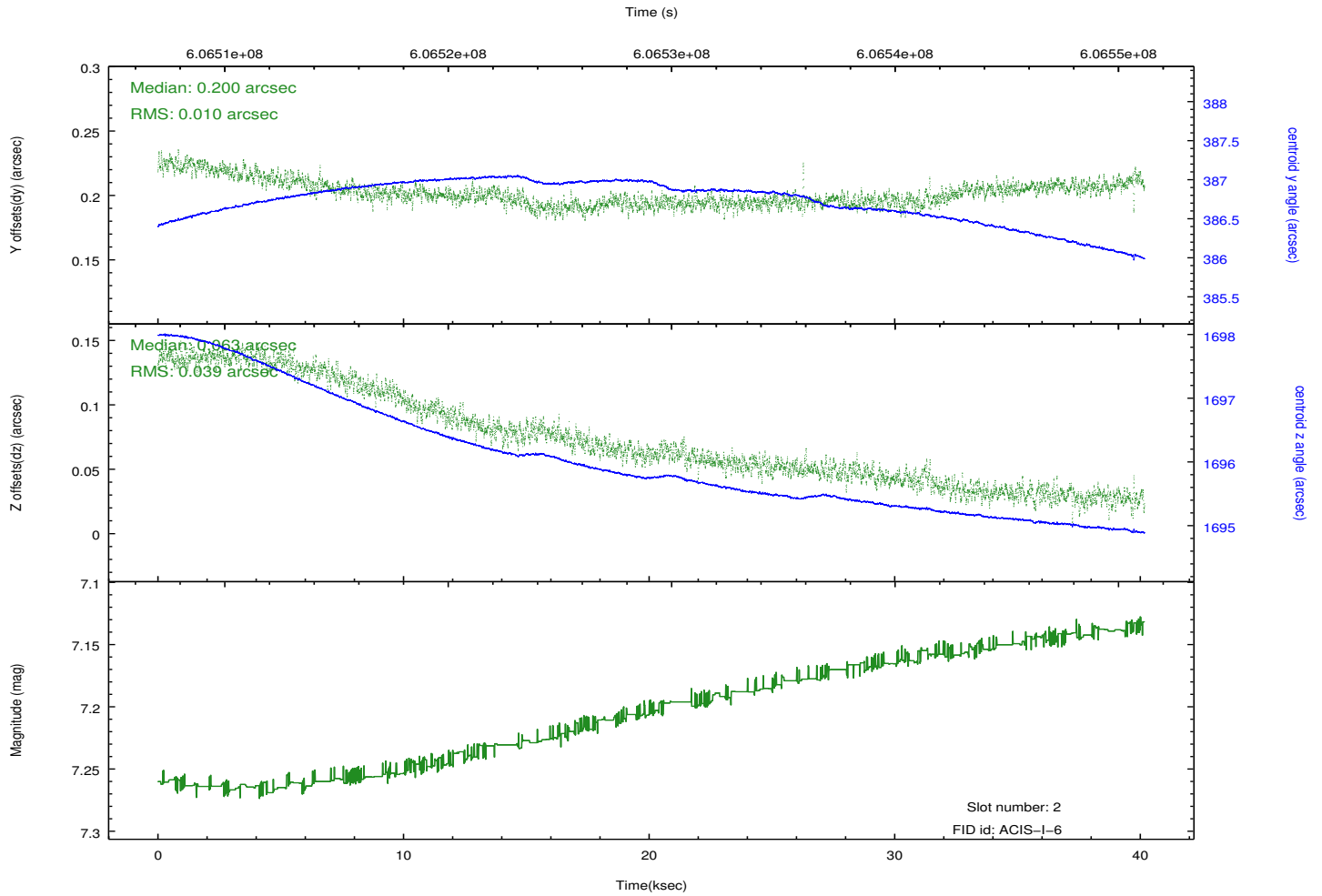
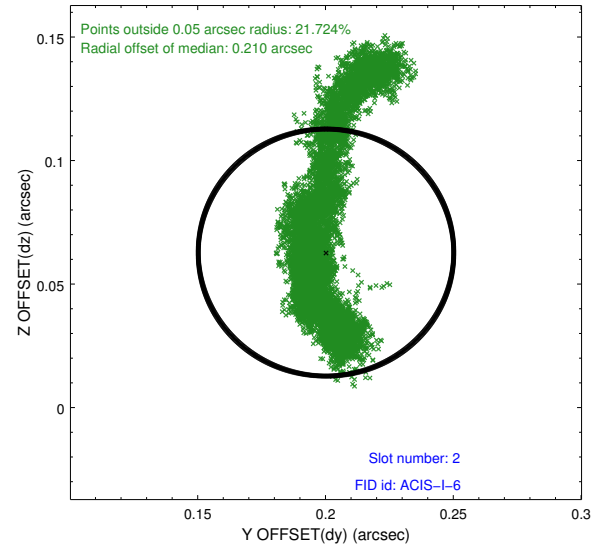
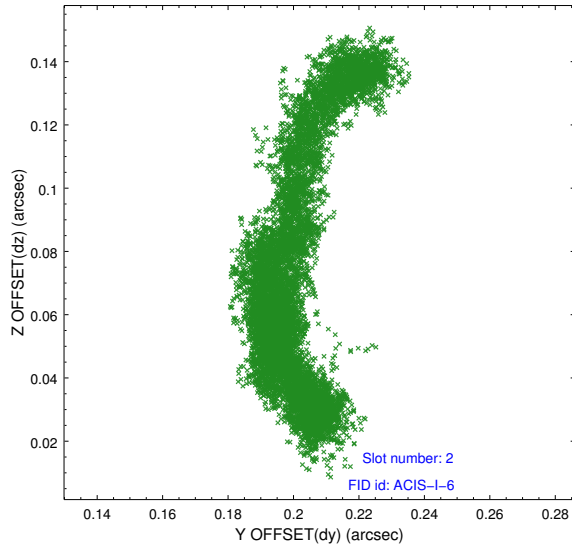
2.5.1 Slot 0



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)	2017.03.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.060389282346

A.2 Comments