

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 17138 - L2 Version 1
Chandra X-Ray Center

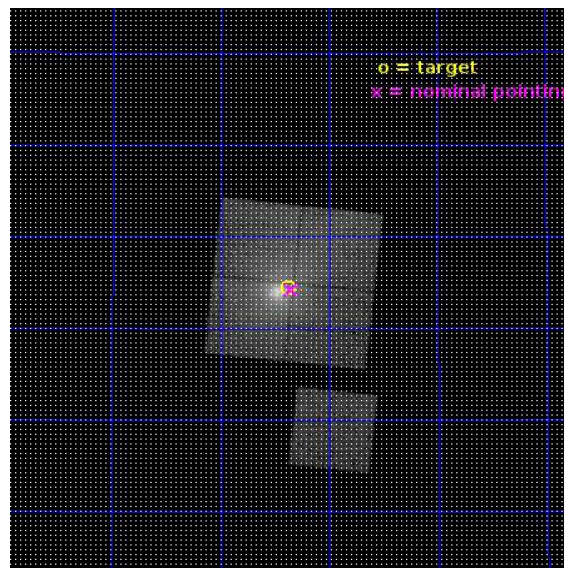
L2 Processing Date : Jul 26 2016

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1 Front

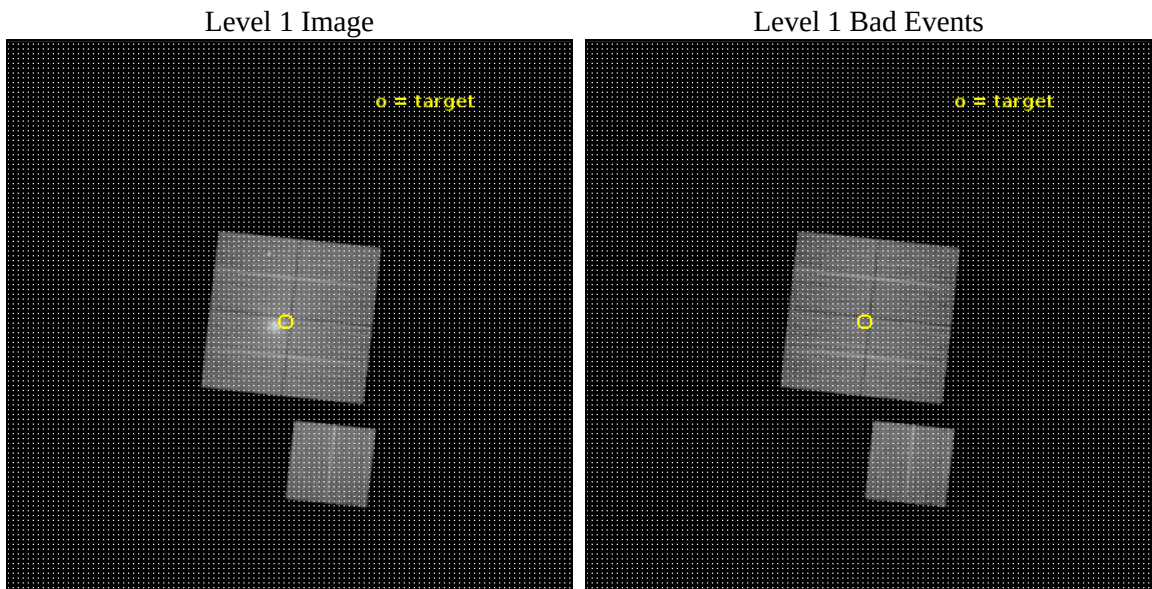
seq_num	703132	Sequence number
obs_id	17138	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - W Hotspot	Source name
dtcycle	0	
cycle	P	events from which 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	299.83711495089	Nominal RA [deg]
dec_nom	40.737138913207	Nominal Dec [deg]
roll_nom	186.22662386145	Nominal Roll [deg]
revision	1	Processing version of data
ontime	26776.625199914	Sum of GTIs [s]
livetime	26426.768879012	Livetime [s]
ontime0	26773.361039758	Sum of GTIs [s]
ontime1	26773.402079582	Sum of GTIs [s]
ontime2	26773.443120003	Sum of GTIs [s]
ontime3	26776.625199914	Sum of GTIs [s]
ontime6	26776.461039901	Sum of GTIs [s]
l2events	226552	Number of level 2 events



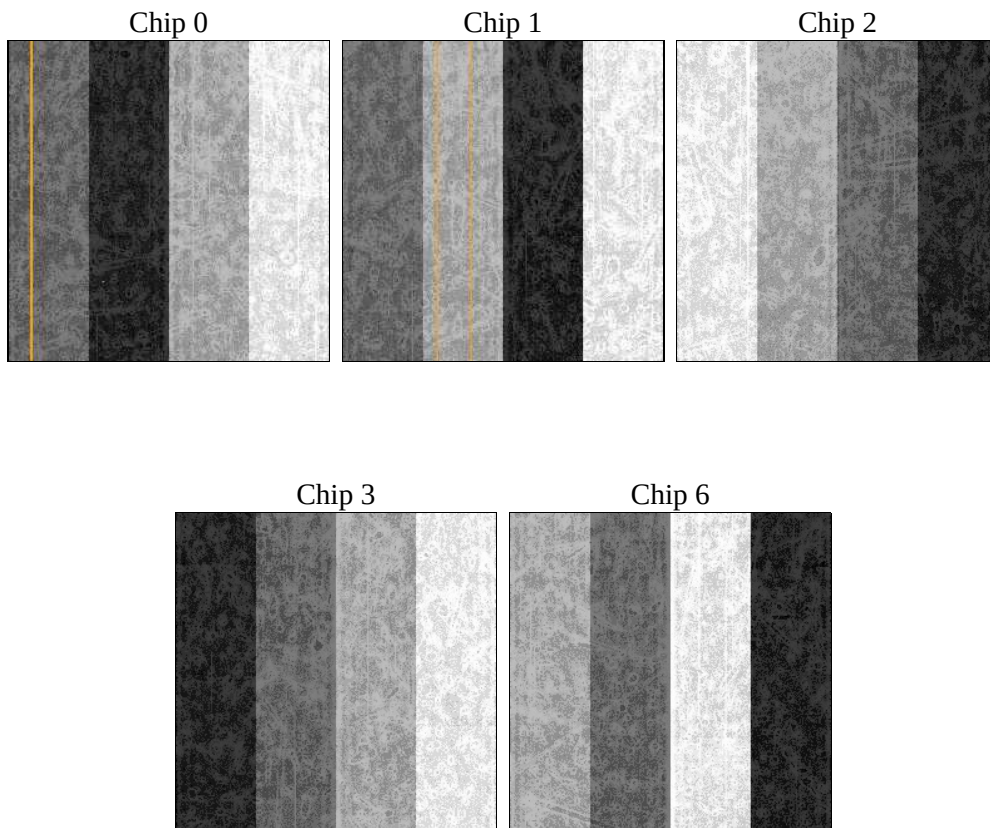
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	26776.625199914	Sum of GTIs [s]
caldbver	4.7.2	 	ontime0	26773.361039758	Sum of GTIs [s]
date	2016-07-26T20:07:26	Date and time of file creation	ontime1	26773.402079582	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	26773.443120003	Sum of GTIs [s]
			ontime3	26776.625199914	Sum of GTIs [s]
			ontime6	26776.461039901	Sum of GTIs [s]
			l1events	967045	Number of level 1 events

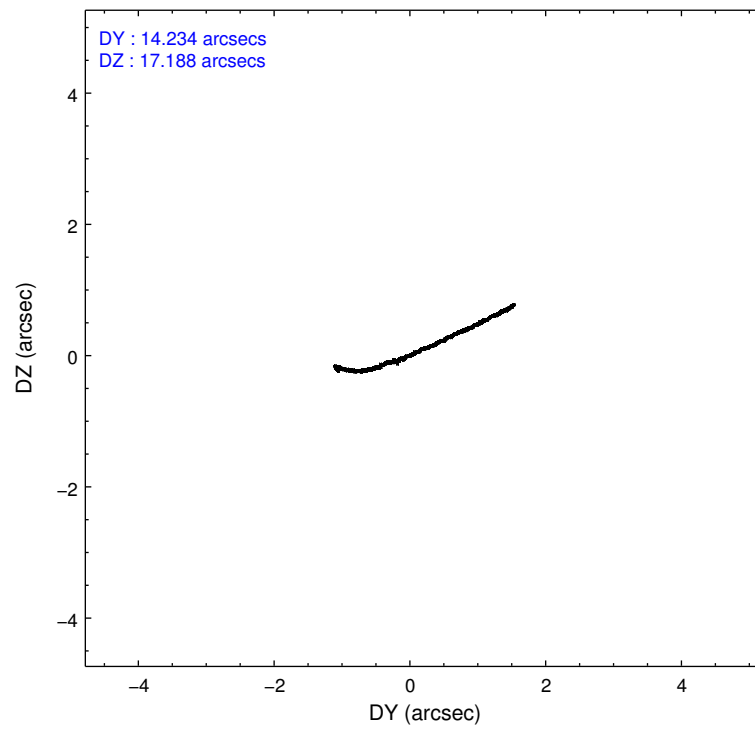
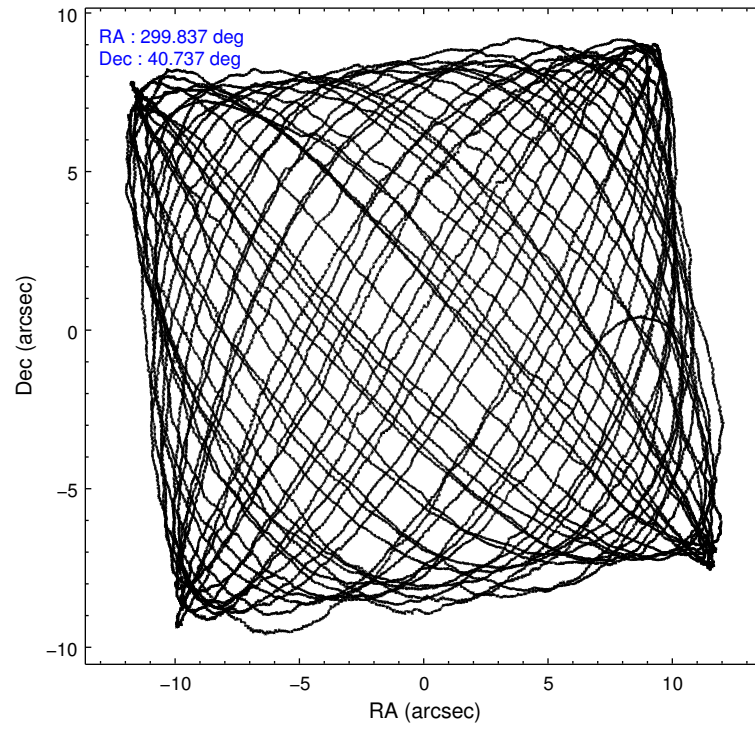
2.1.4 Events

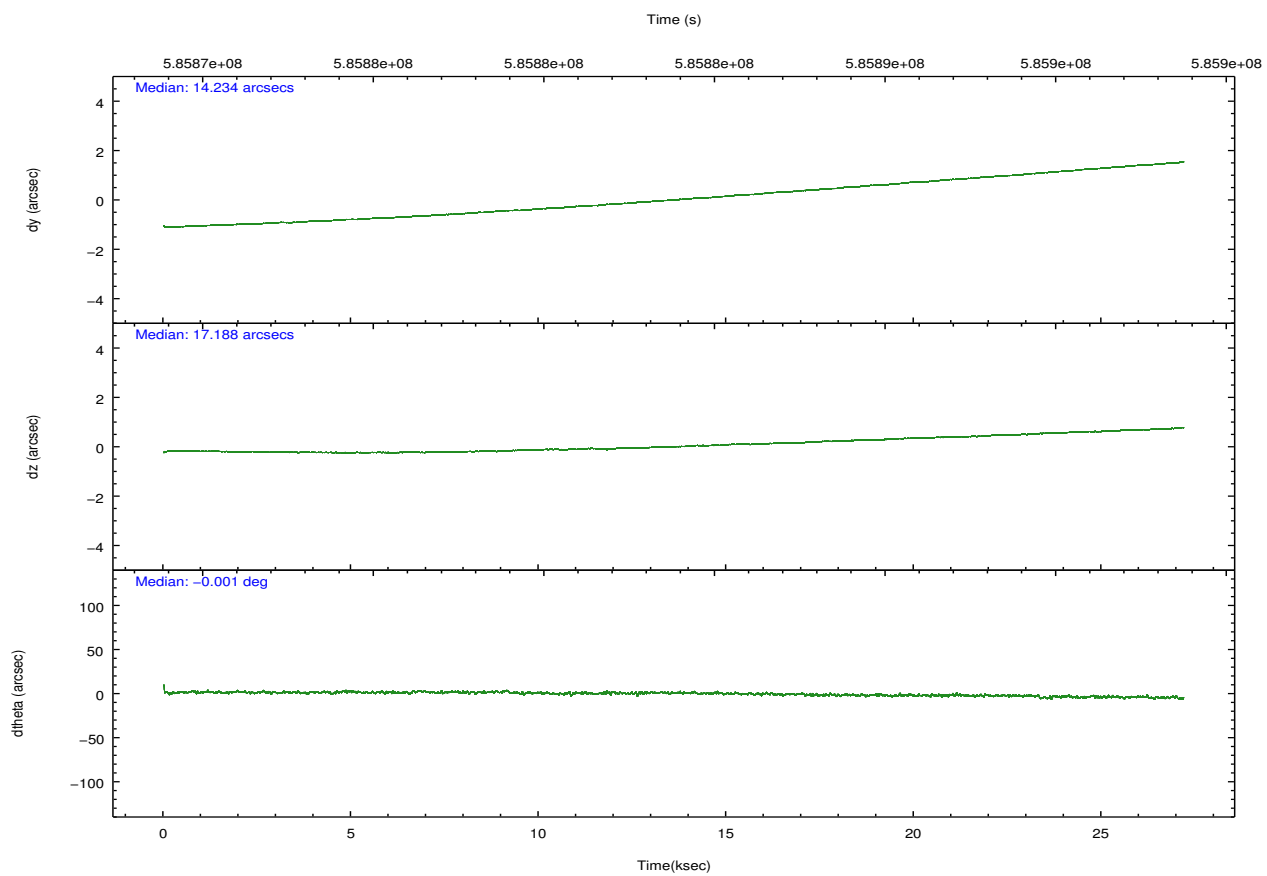
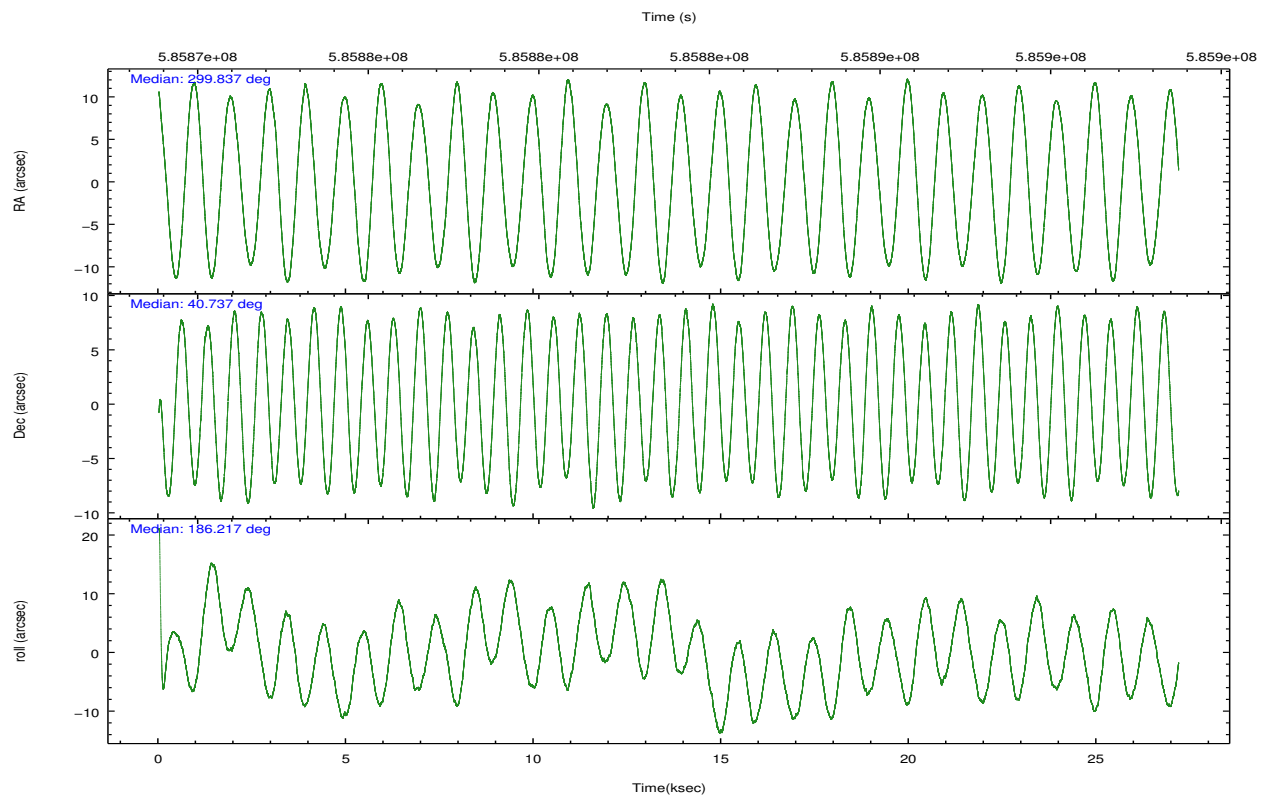
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	173231	186060	181264	257814	168676	grade 0 events	23527	27603	16777	75974	7068
rejected events	132092	138806	149585	149670	148620		13%	14%	9%	29%	4%
rejected %	76%	74%	82%	58%	88%	grade 1 events	178	172	136	847	72
							0%	0%	0%	0%	0%
						grade 2 events	7342	8306	6110	14160	4501
							4%	4%	3%	5%	2%
						grade 3 events	2777	2862	2324	5237	2001
							1%	1%	1%	2%	1%
						grade 4 events	2577	2951	2309	5169	1946
							1%	1%	1%	2%	1%
						grade 5 events	7726	8088	7299	9320	8255
							4%	4%	4%	3%	4%
						grade 6 events	4922	5535	4162	7620	4542
							2%	2%	2%	2%	2%
						grade 7 events	124182	130543	142147	139487	140291
							71%	70%	78%	54%	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	299.866417	299.8371149508914	CCD I2 on	Y	Y
[deg] Pointing Dec	40.753533	40.73713891320741	CCD I3 on	Y	Y
[deg] Pointing Roll	185.998800	186.2266238614475	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)	585870417.184000	585869100.80858	CCD S5 on	N	N
Observation start date	2016-07-25T21:45:49	2016-07-25T21:25:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	585897417.184000	585898489.61031	On-chip summing requested	N	N
Observation end date	2016-07-26T05:15:49	2016-07-26T05:34:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



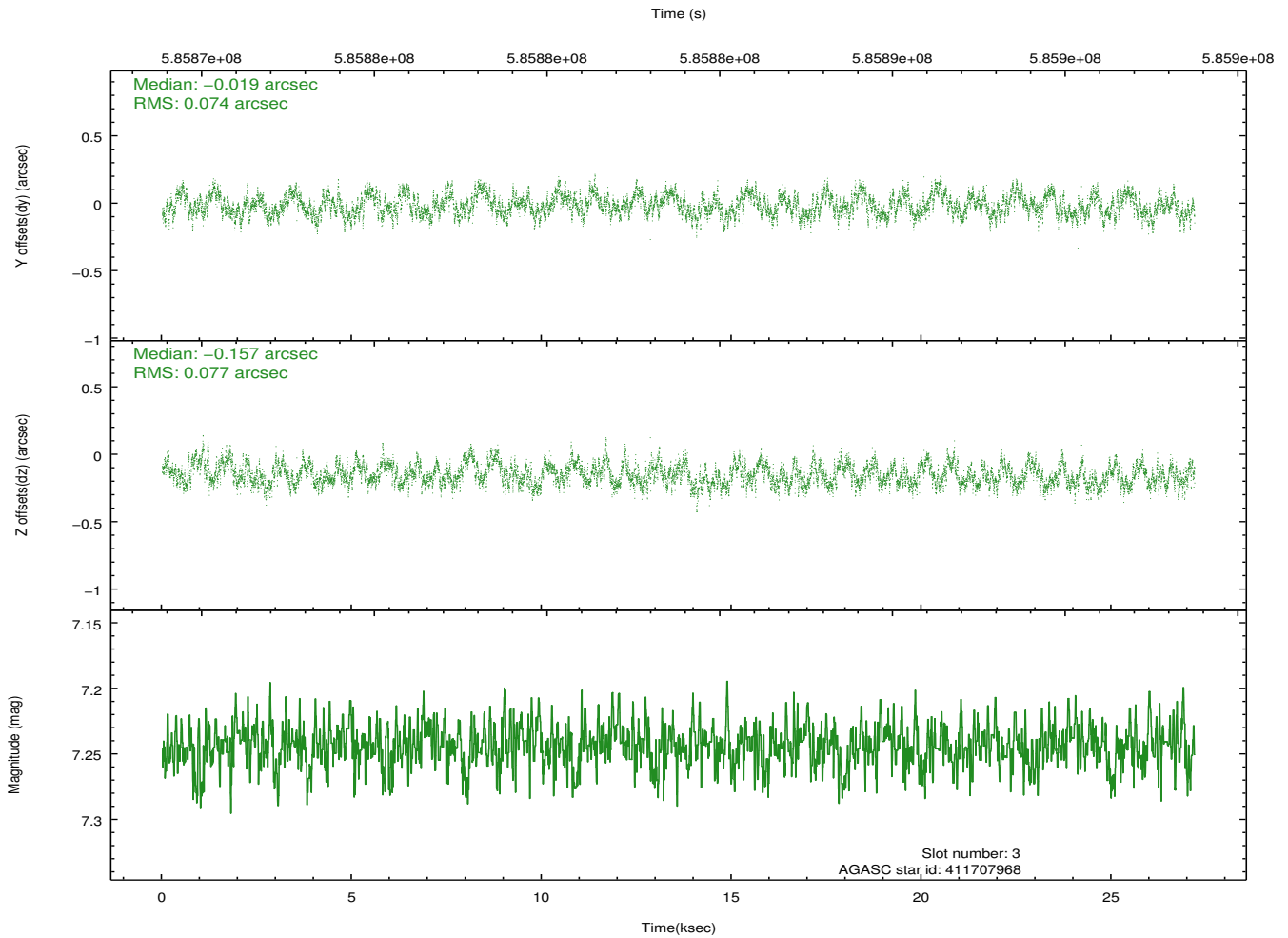
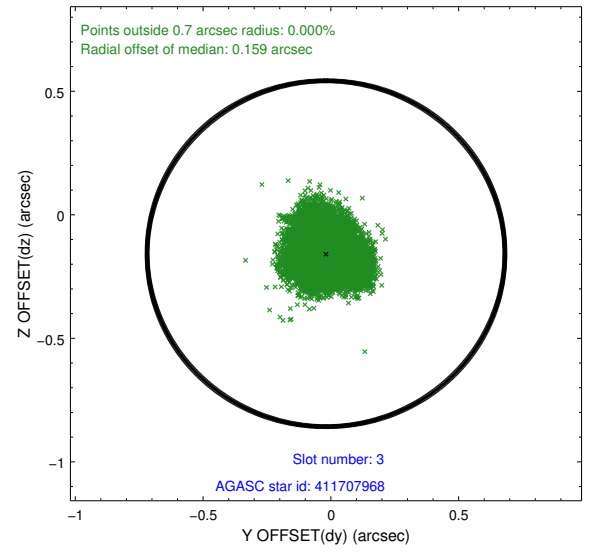
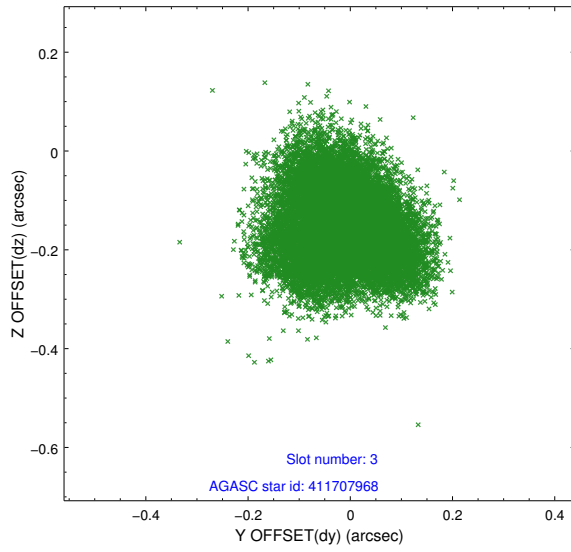


Slot Statistics

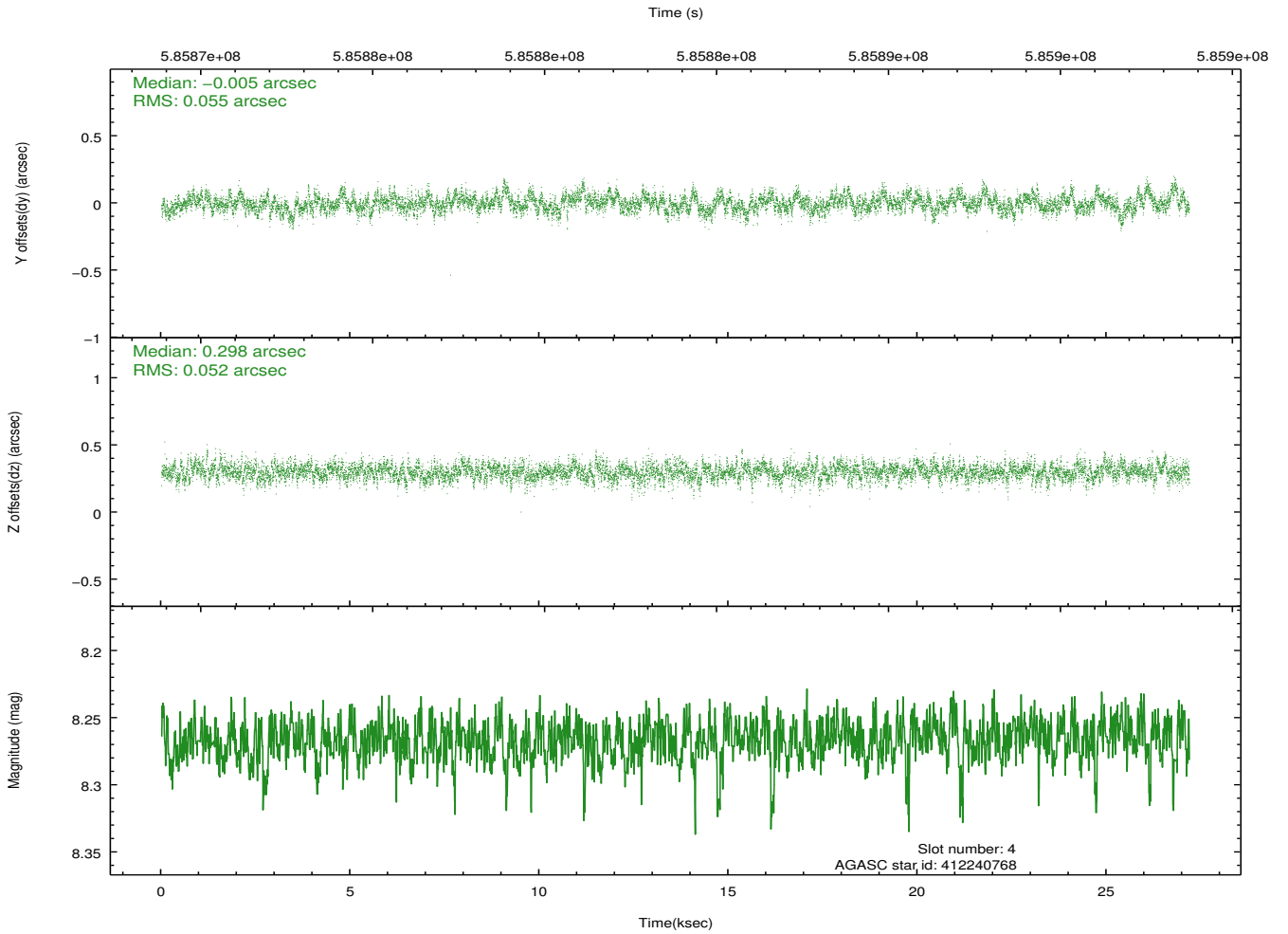
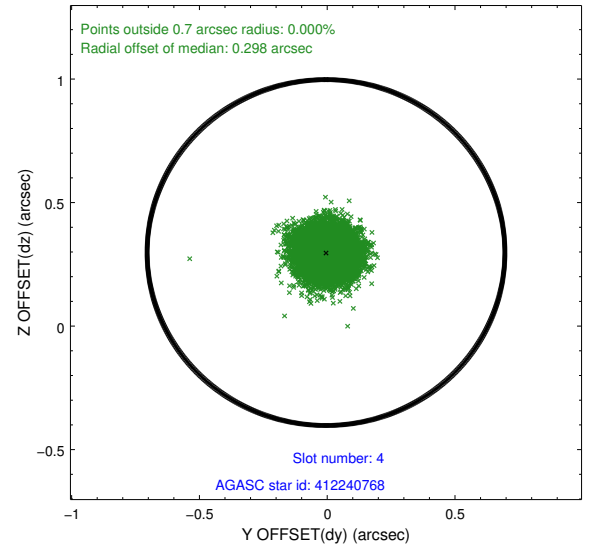
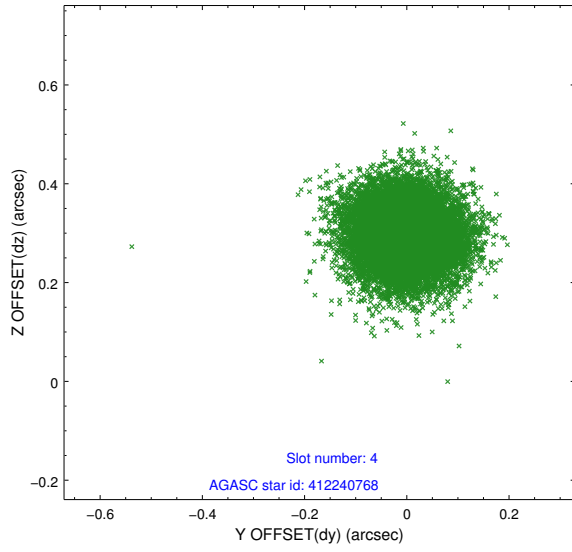
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.02	6630	-0.320	-0.162	0.013	0.031	0.000000	0.000000	-769.33	-847.47
1	FID		ACIS-I-4	7.05	6630	0.246	0.215	0.018	0.028	0.000000	0.000000	2145.27	1059.00
2	FID		ACIS-I-6	7.11	6629	-0.023	0.012	0.022	0.033	0.000000	0.000000	391.20	1701.12
3	GUIDE	used	411707968	7.24	13258	-0.019	-0.157	0.116	0.175	299.509933	40.926839	899.11	-723.55
4	GUIDE	used	412240768	8.27	13257	-0.005	0.298	0.080	0.132	299.999696	41.280279	-556.17	-1847.87
5	GUIDE	used	413421016	8.67	13255	0.084	-0.150	0.143	0.238	300.612426	40.446254	-1917.68	1305.20
6	GUIDE	used	413425016	7.99	13255	-0.068	-0.122	0.100	0.172	300.758532	40.173167	-2223.70	2322.28
7	GUIDE	used	413929808	8.46	13254	0.010	0.120	0.186	0.265	300.621353	41.348826	-2253.60	-1926.56

2.4 Star Slots

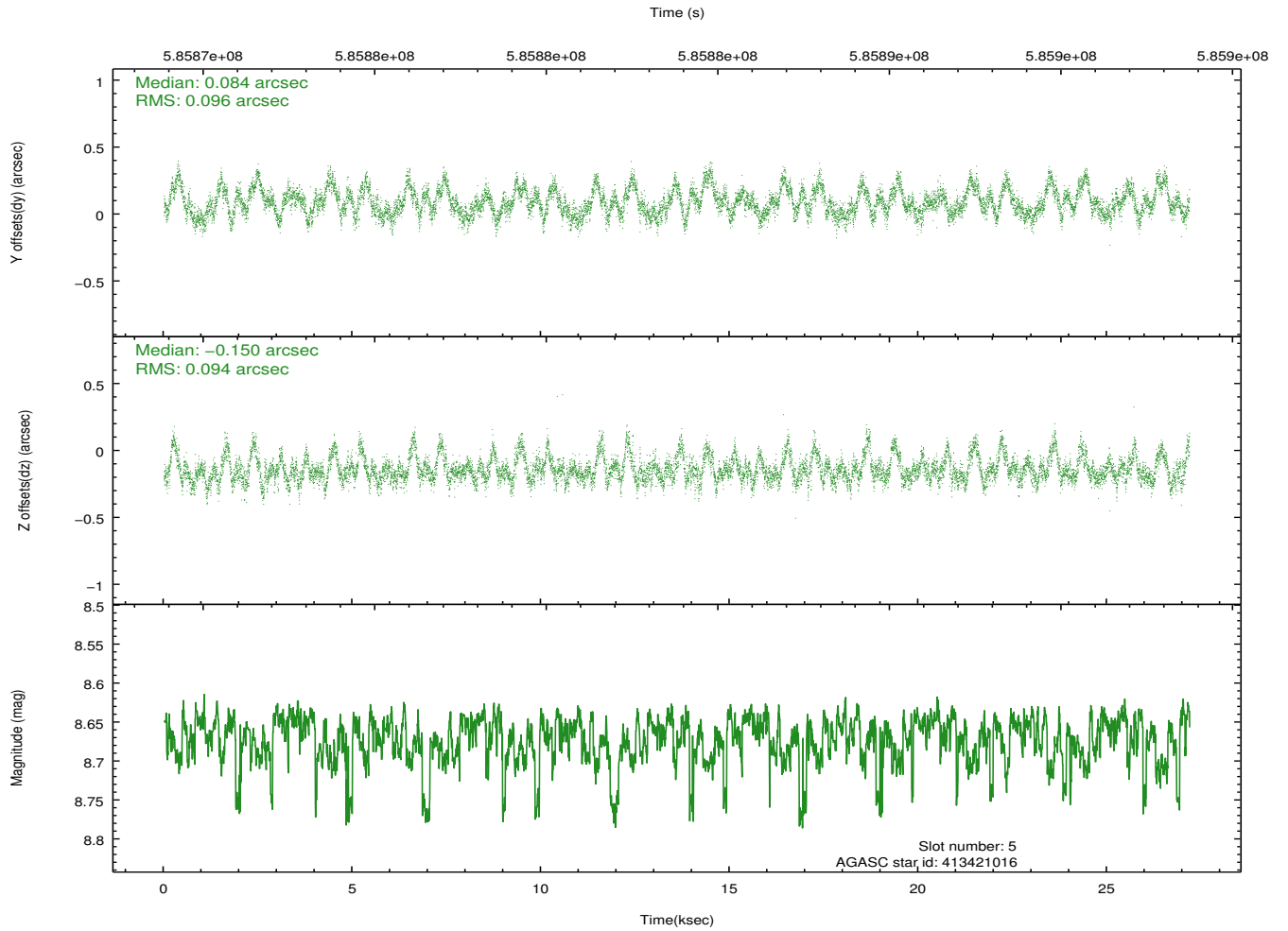
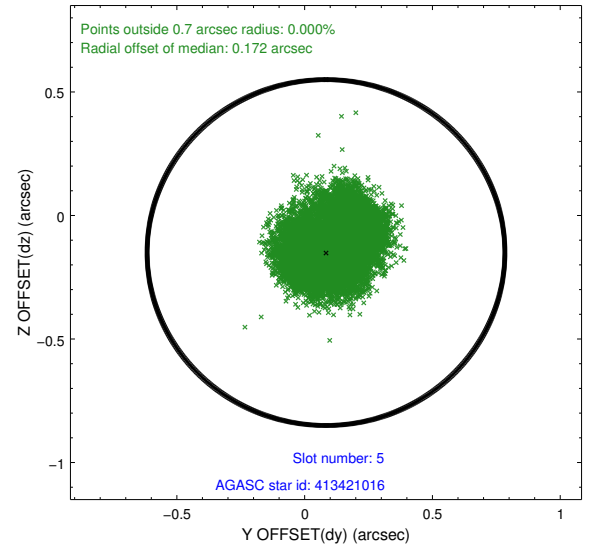
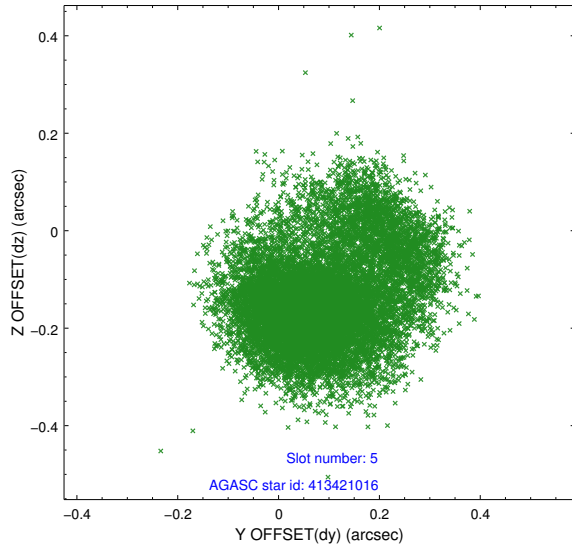
2.4.1 Slot 3



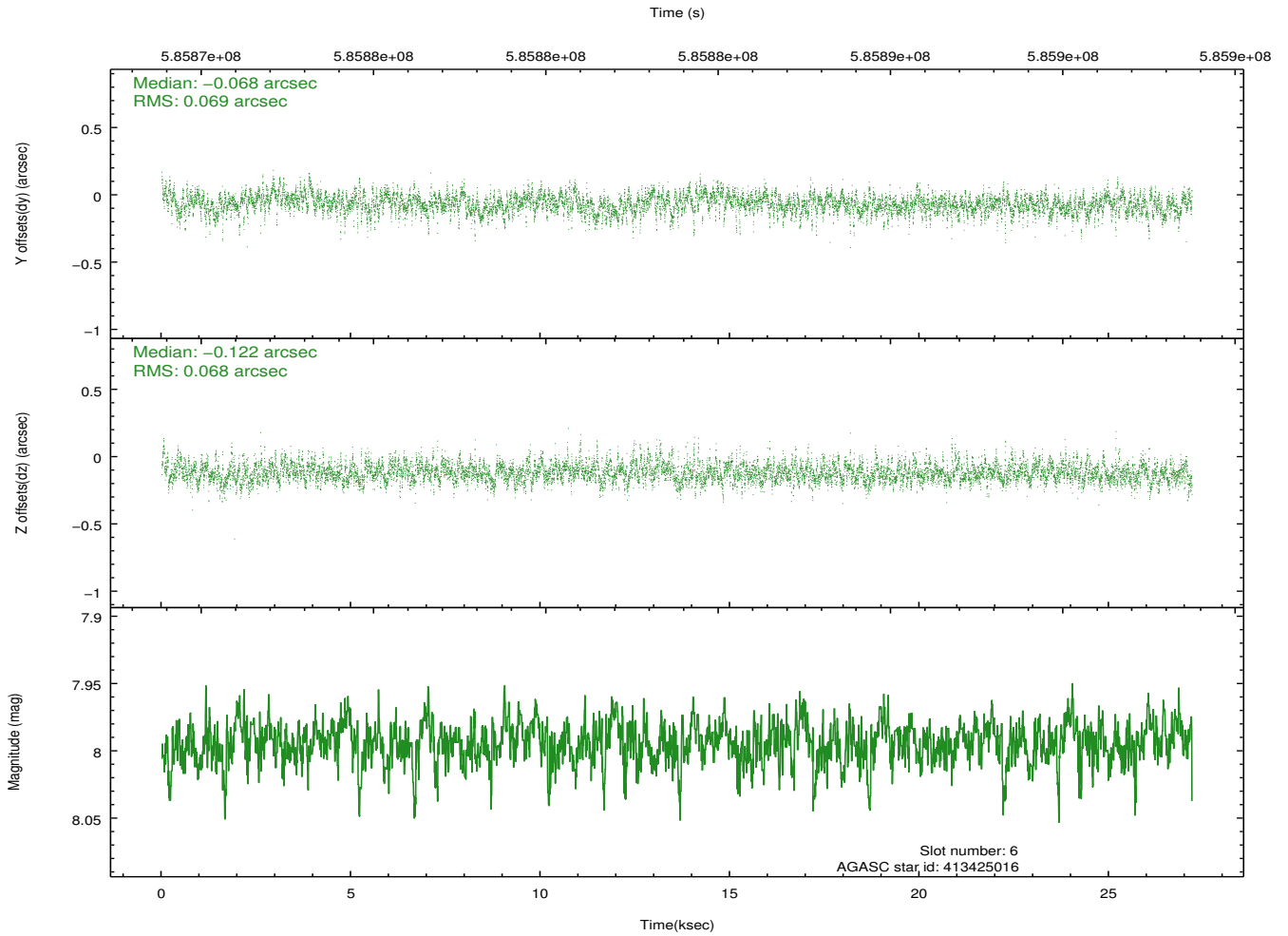
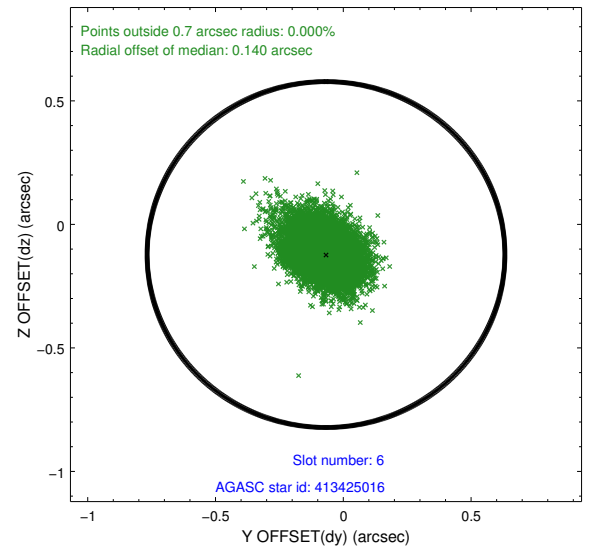
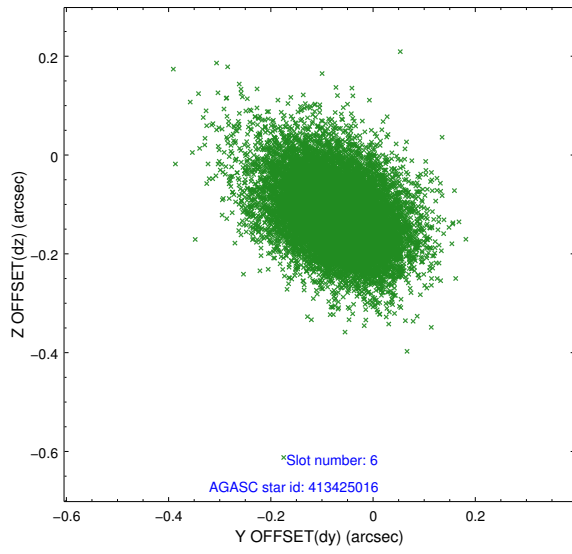
2.4.2 Slot 4



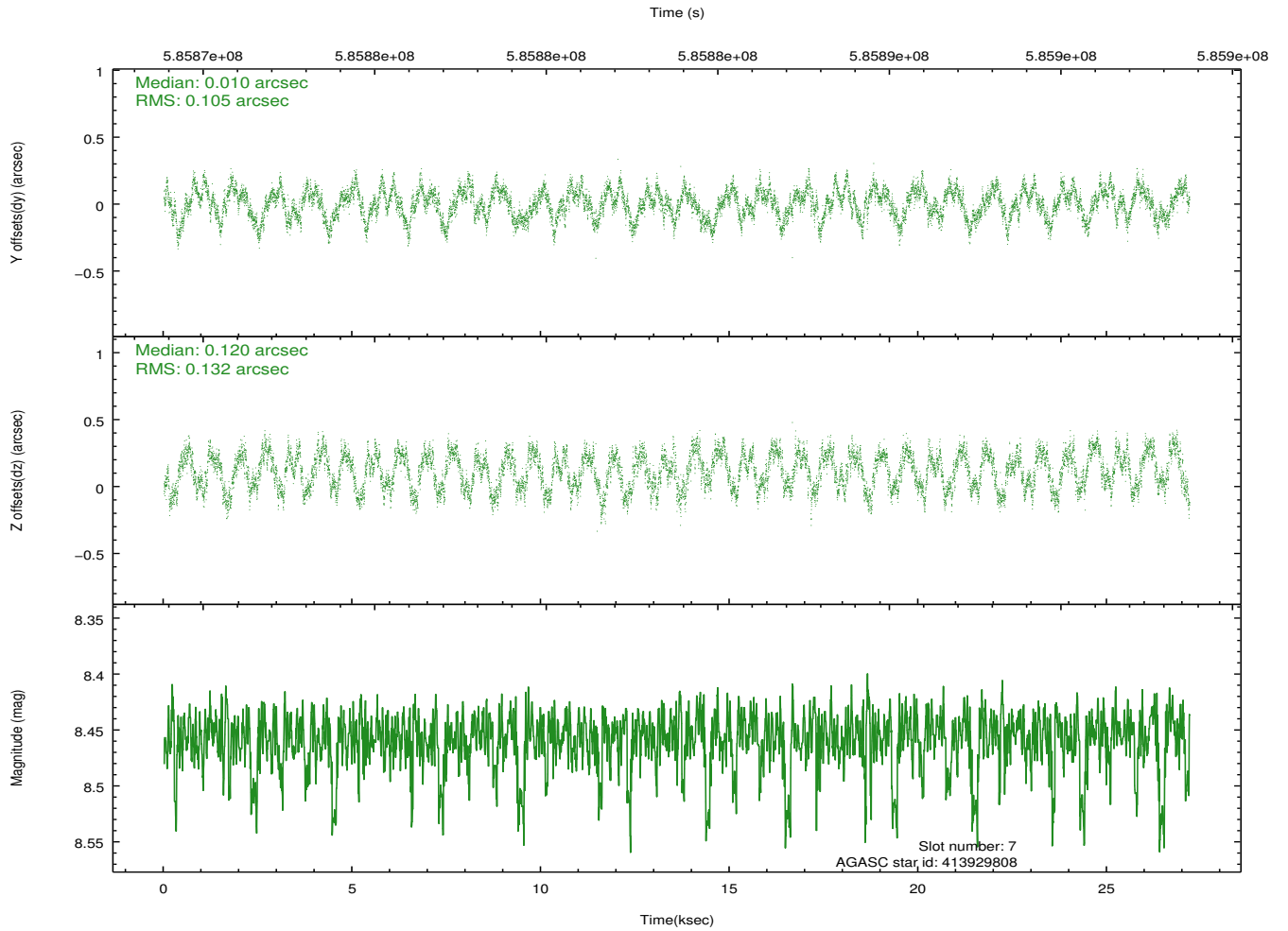
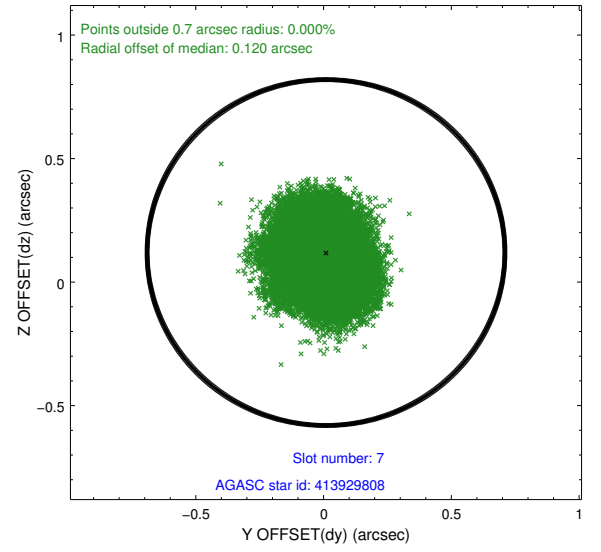
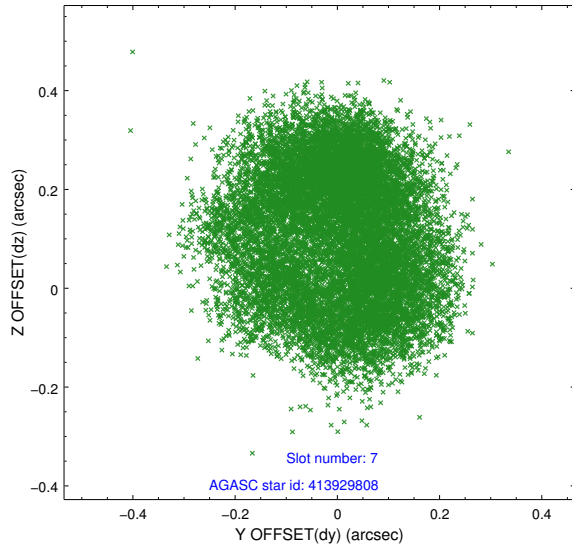
2.4.3 Slot 5



2.4.4 Slot 6

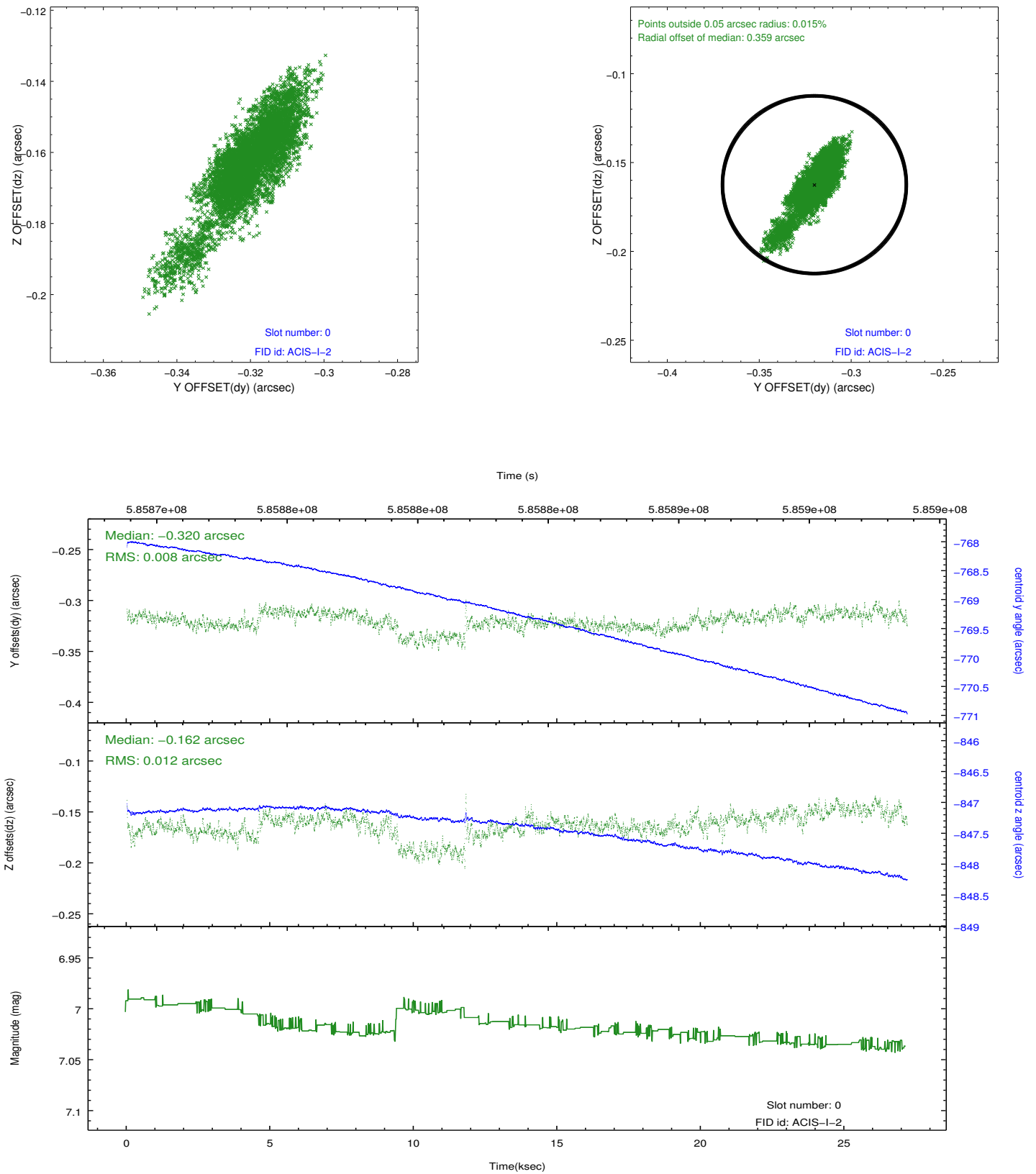


2.4.5 Slot 7

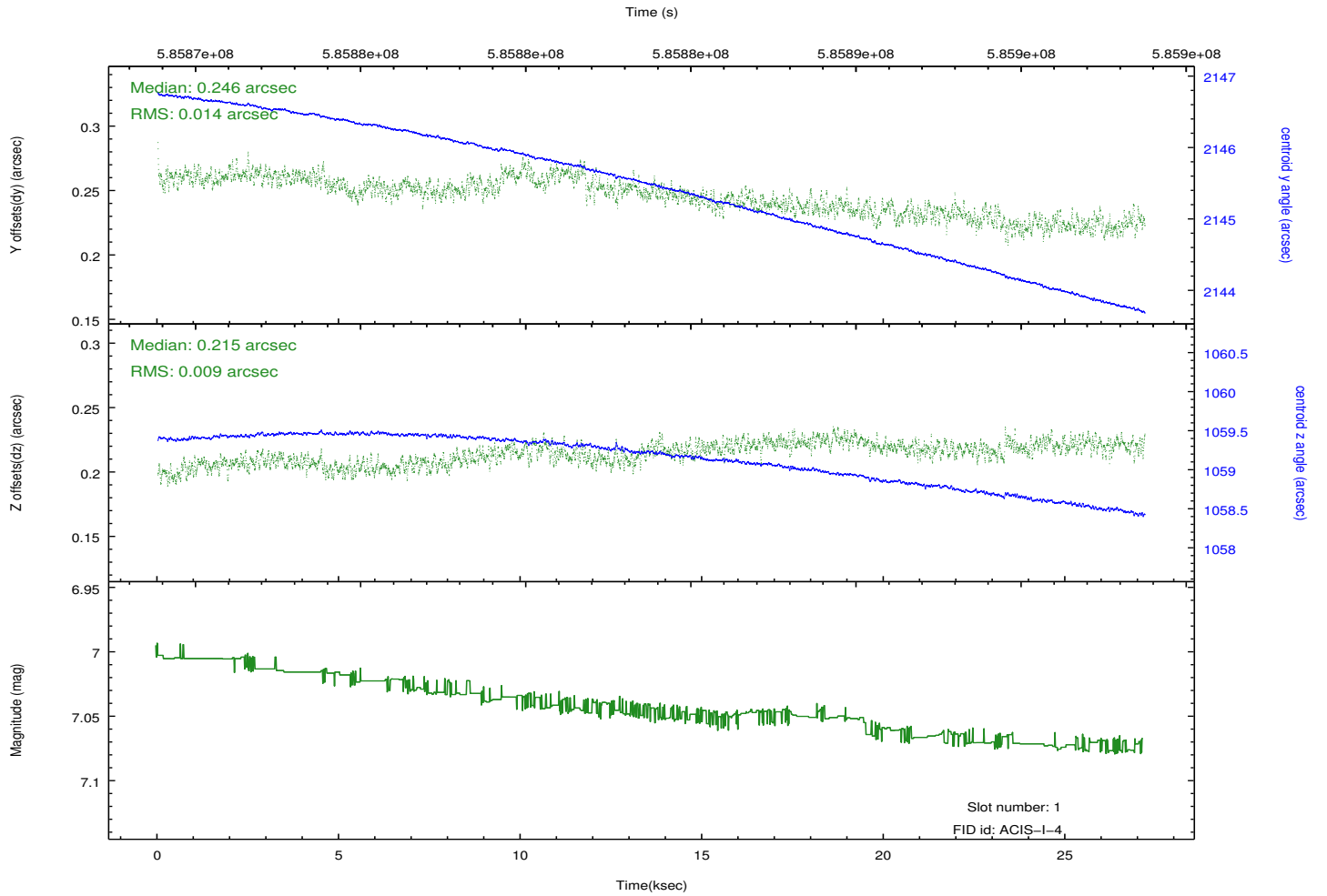
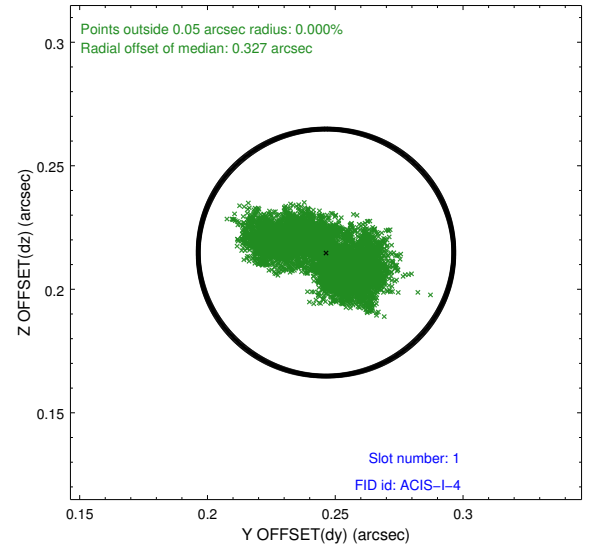
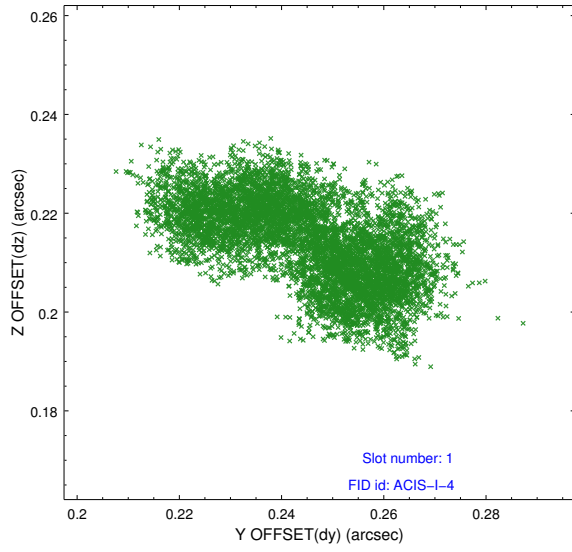


2.5 FID Slots

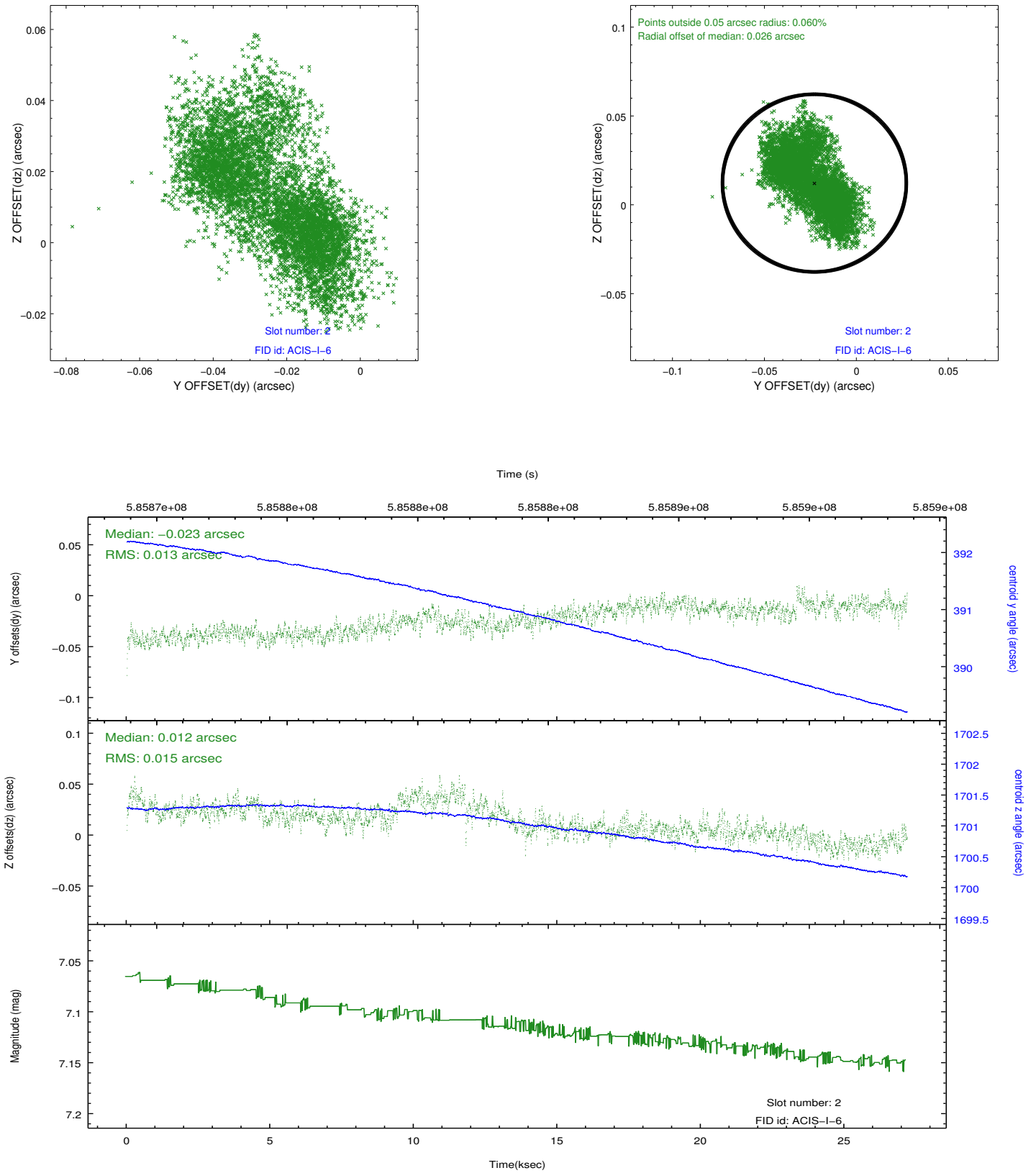
2.5.1 Slot 0



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)	2016.07.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.776625199914

A.2 Comments