

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 18886 - L2 Version 1
Chandra X-Ray Center

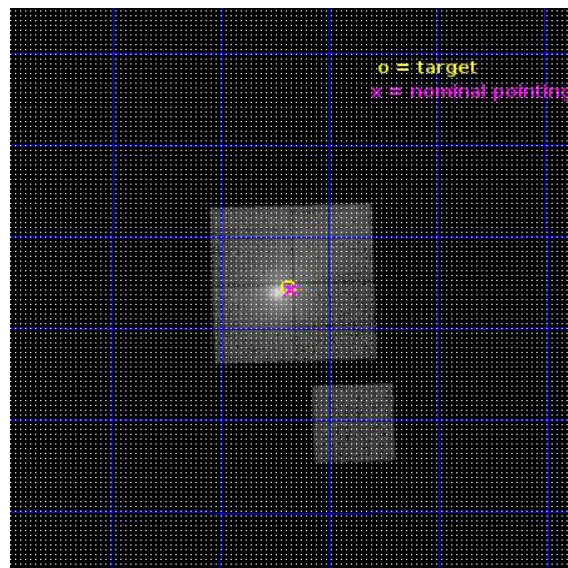
L2 Processing Date : Jul 23 2016

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1 Front

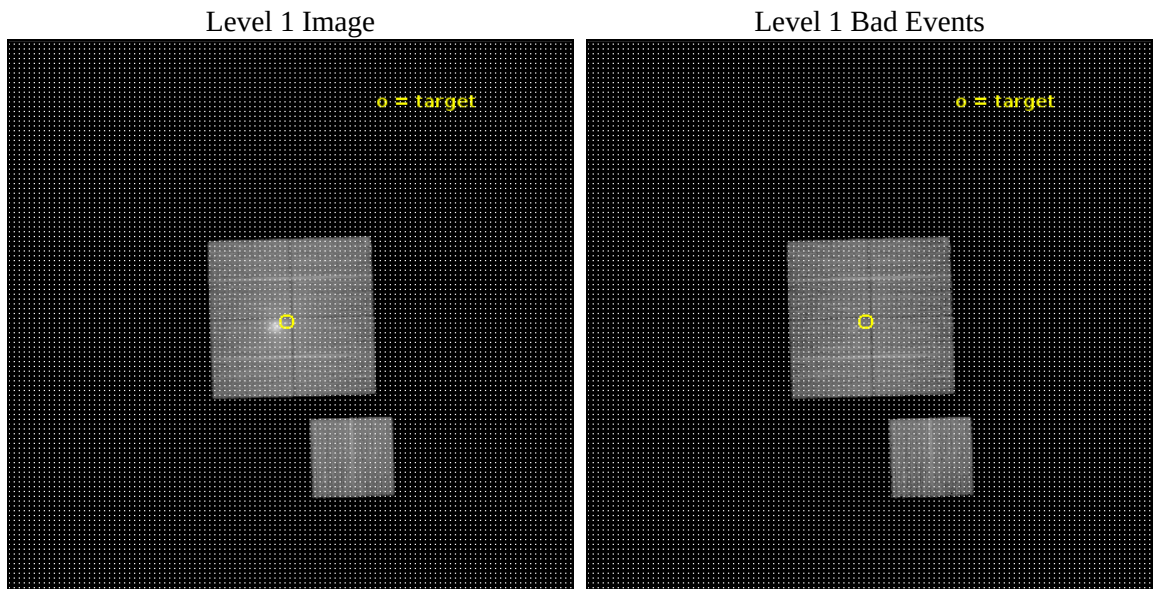
seq_num	703132	Sequence number
obs_id	18886	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - W Hotspot	Source name
dtcycle	0	
cycle	P	events from which 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	299.83658197319	Nominal RA [deg]
dec_nom	40.738027676081	Nominal Dec [deg]
roll_nom	178.21418275302	Nominal Roll [deg]
revision	1	Processing version of data
ontime	23054.700177431	Sum of GTIs [s]
livetime	22753.47354699	Livetime [s]
ontime0	23048.41820693	Sum of GTIs [s]
ontime1	23054.700177431	Sum of GTIs [s]
ontime2	23051.55917716	Sum of GTIs [s]
ontime3	23054.700177431	Sum of GTIs [s]
ontime6	23051.559157252	Sum of GTIs [s]
l2events	200191	Number of level 2 events



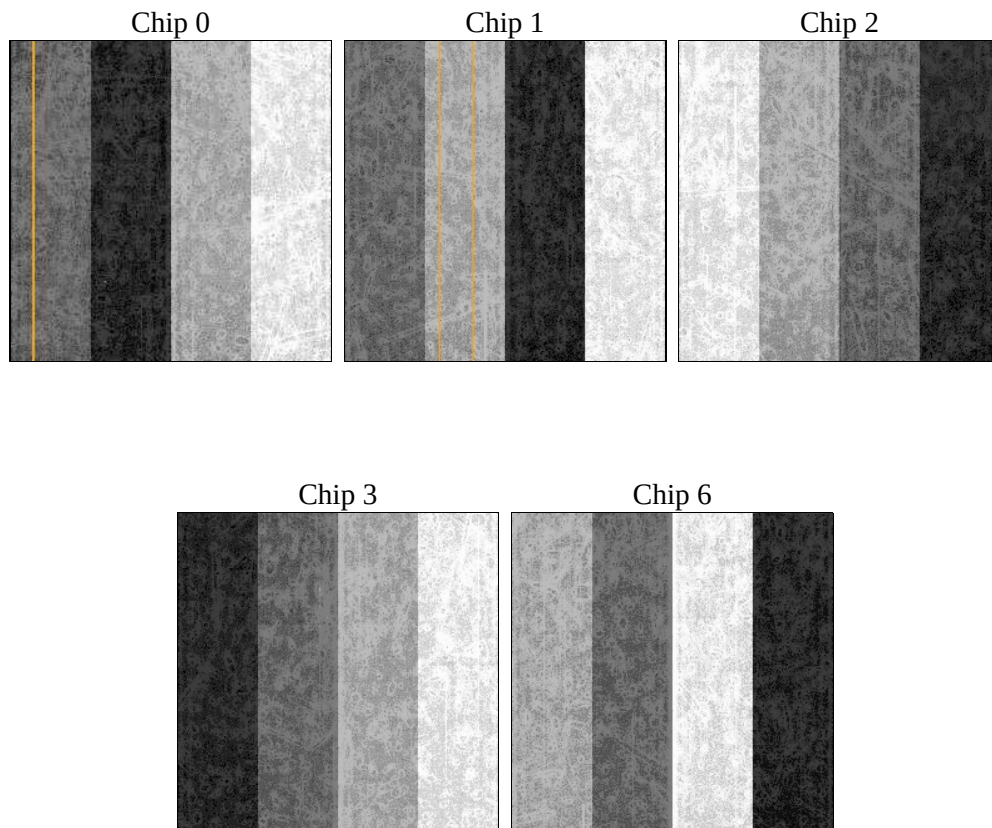
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	23054.700177431	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	23048.41820693	Sum of GTIs [s]
date	2016-07-23T19:22:23	Date and time of file creation	ontime1	23054.700177431	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	23051.55917716	Sum of GTIs [s]
			ontime3	23054.700177431	Sum of GTIs [s]
			ontime6	23051.559157252	Sum of GTIs [s]
			l1events	830796	Number of level 1 events

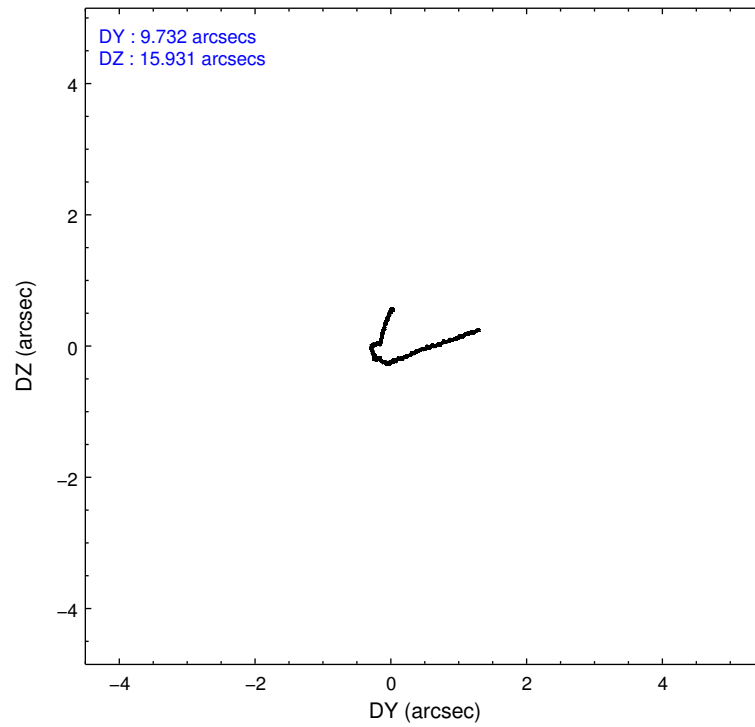
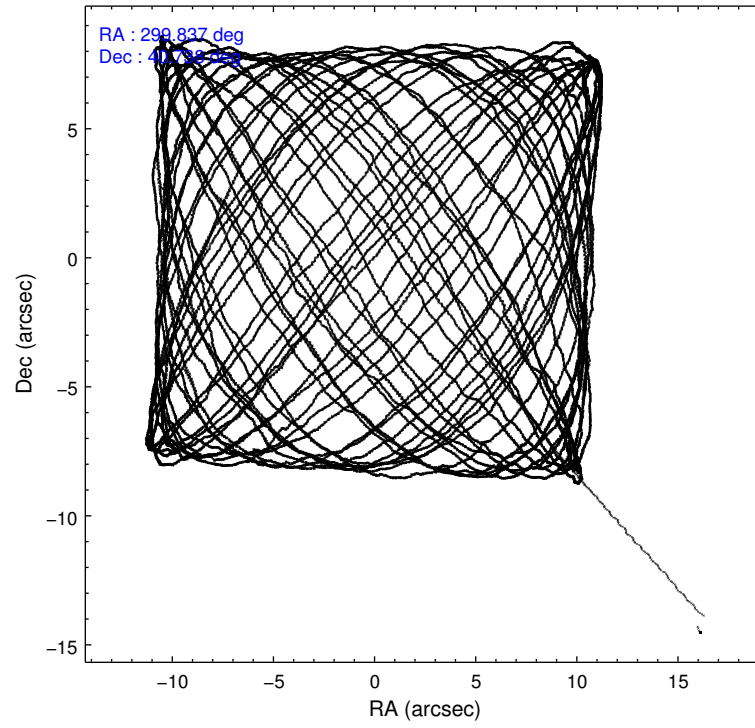
2.1.4 Events

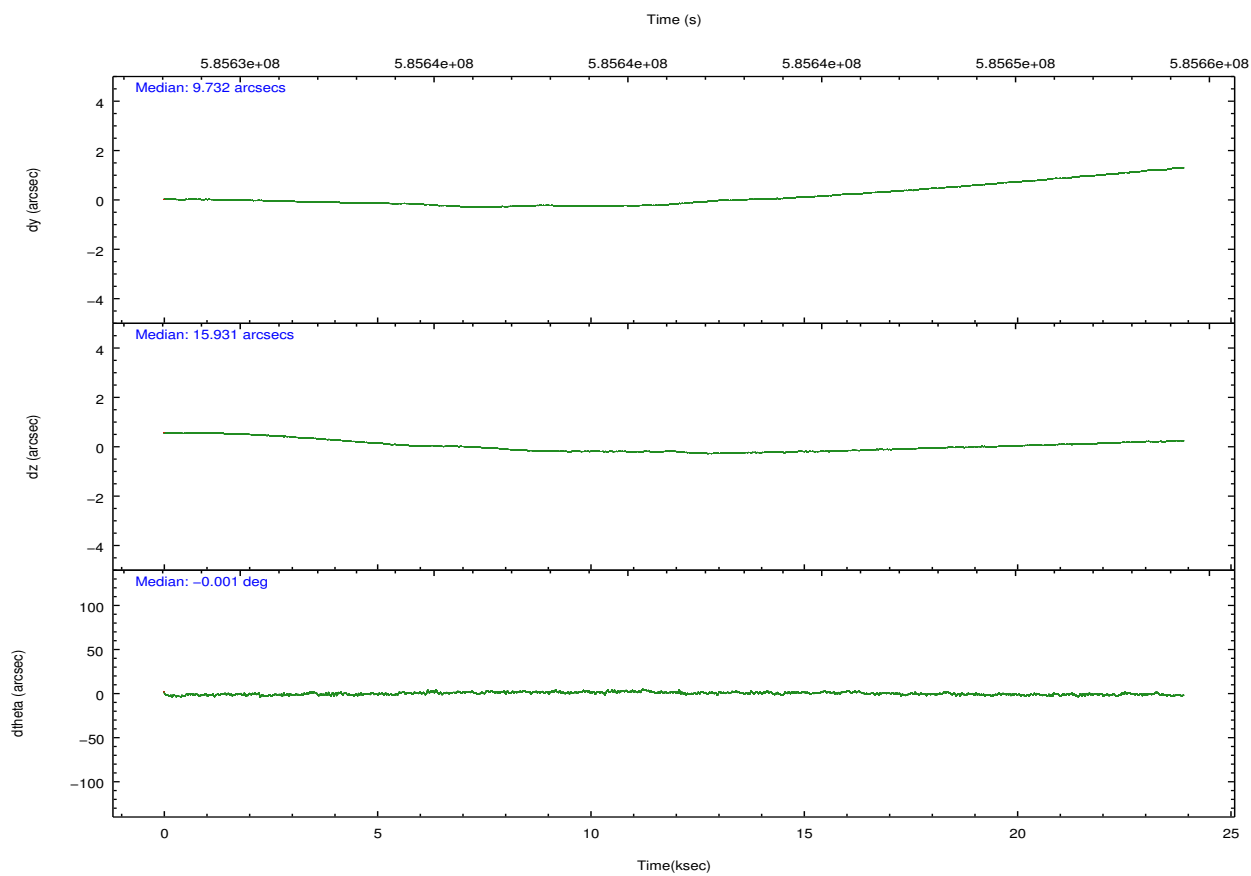
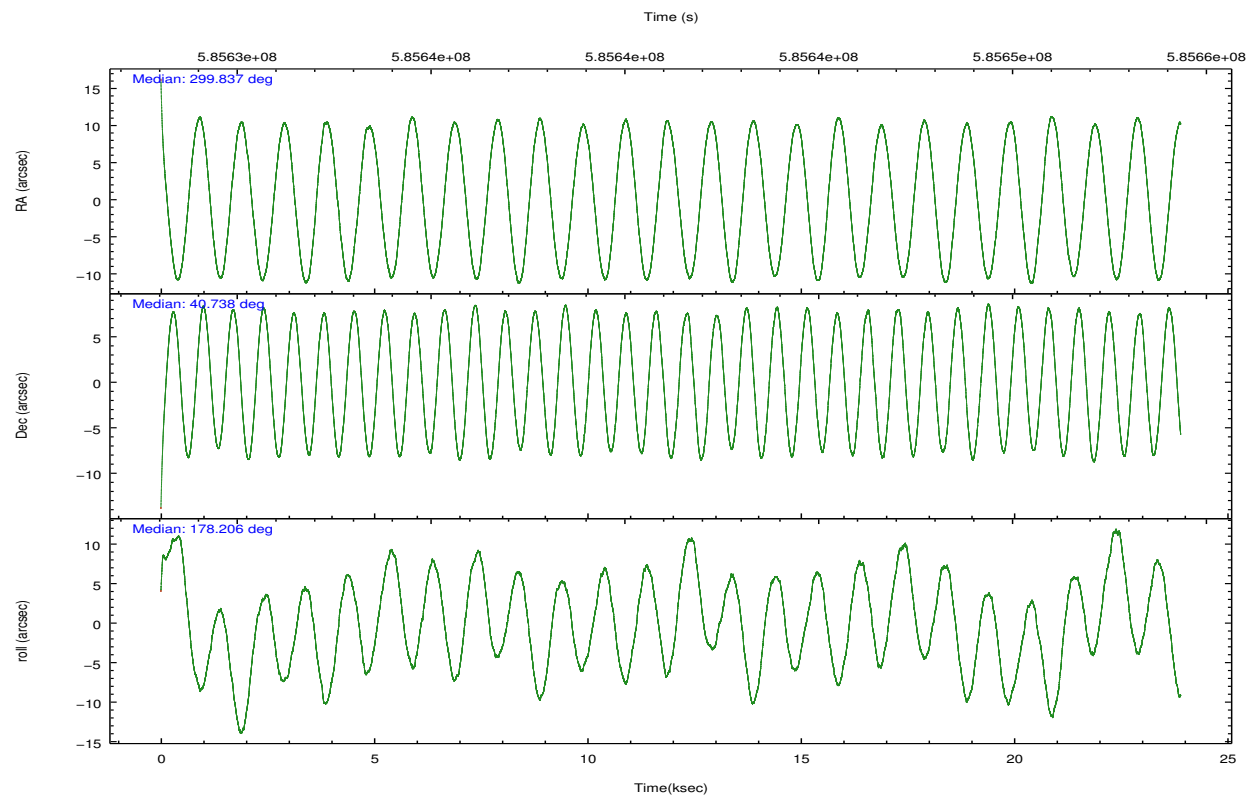
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	150853	156502	156454	222661	144326	grade 0 events	21694	22912	14603	65403	6287
rejected events	113050	116040	128577	129034	126255		14%	14%	9%	29%	4%
rejected %	74%	74%	82%	57%	87%	grade 1 events	136	141	132	703	86
							0%	0%	0%	0%	0%
						grade 2 events	6754	7360	5319	12348	4007
							4%	4%	3%	5%	2%
						grade 3 events	2430	2613	2044	4611	1758
							1%	1%	1%	2%	1%
						grade 4 events	2395	2542	2043	4531	1709
							1%	1%	1%	2%	1%
						grade 5 events	6453	6728	6228	7792	7057
							4%	4%	3%	3%	4%
						grade 6 events	4541	5045	3877	6761	4312
							3%	3%	2%	3%	2%
						grade 7 events	106450	109161	122208	120512	119110
							70%	69%	78%	54%	82%

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	299.868633	299.8365819731945	CCD I2 on	Y	Y
[deg] Pointing Dec	40.751156	40.73802767608062	CCD I3 on	Y	Y
[deg] Pointing Roll	177.984571	178.2141827530243	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)	585630139.184000	585628325.73227	CCD S5 on	N	N
Observation start date	2016-07-23T03:01:11	2016-07-23T02:32:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	585653139.184000	585653793.39623	On-chip summing requested	N	N
Observation end date	2016-07-23T09:24:31	2016-07-23T09:36:33	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



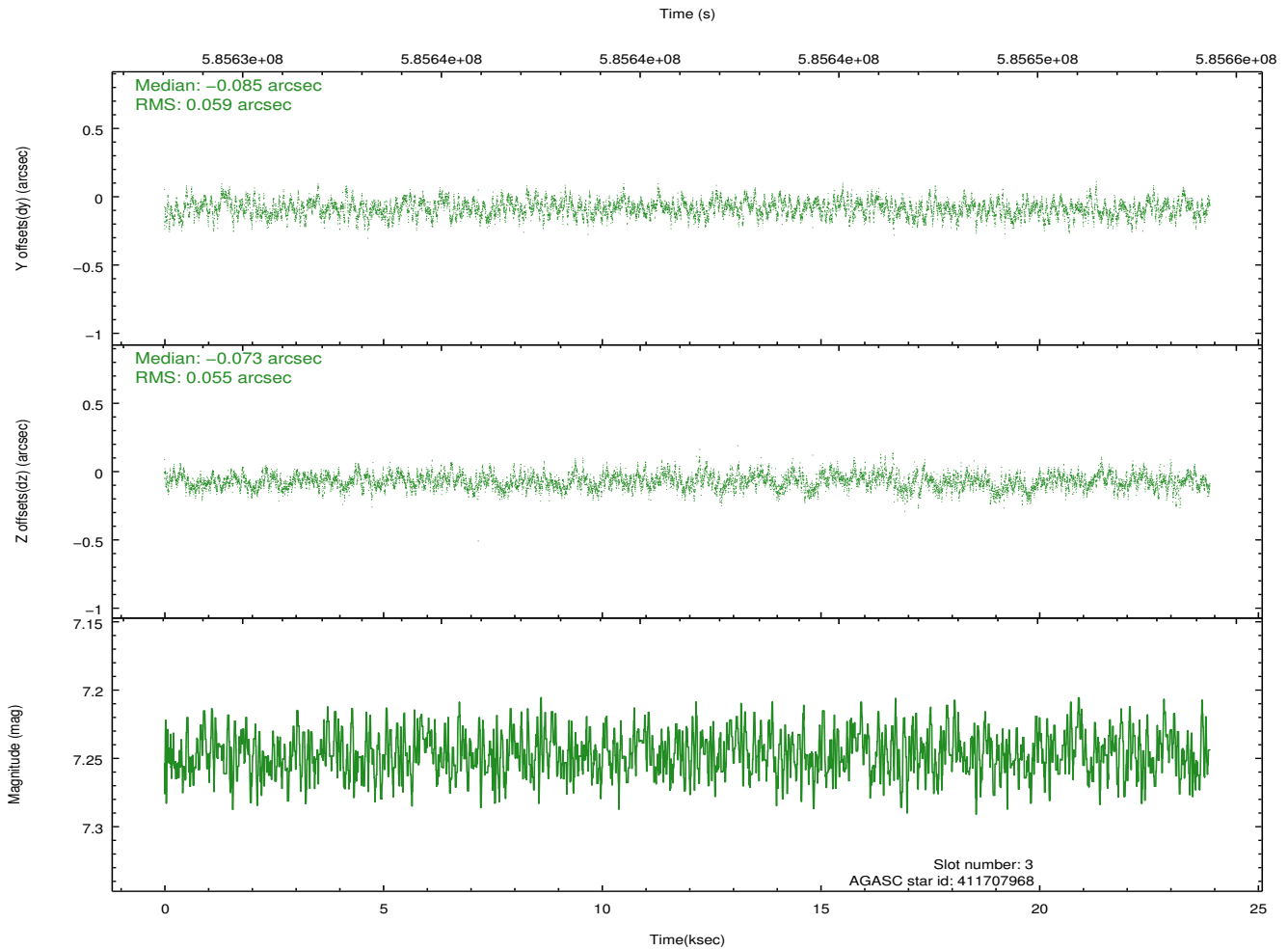
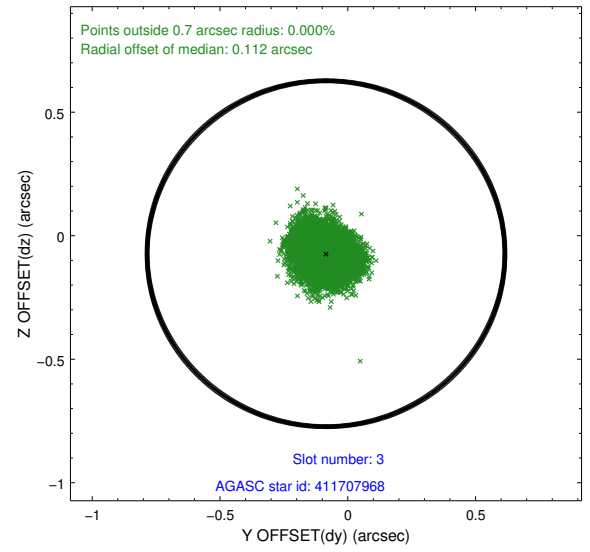
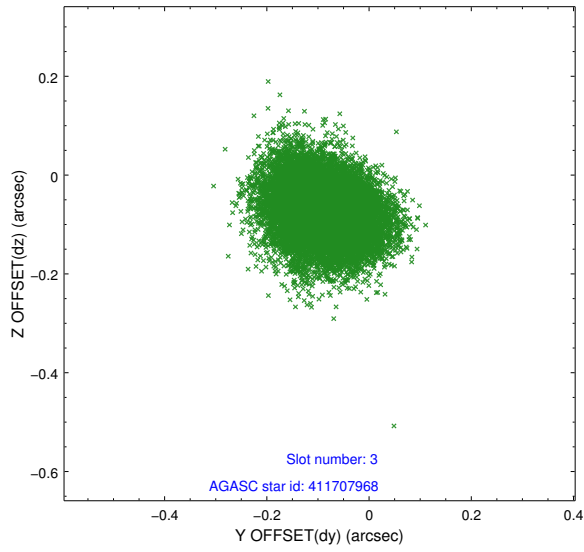


Slot Statistics

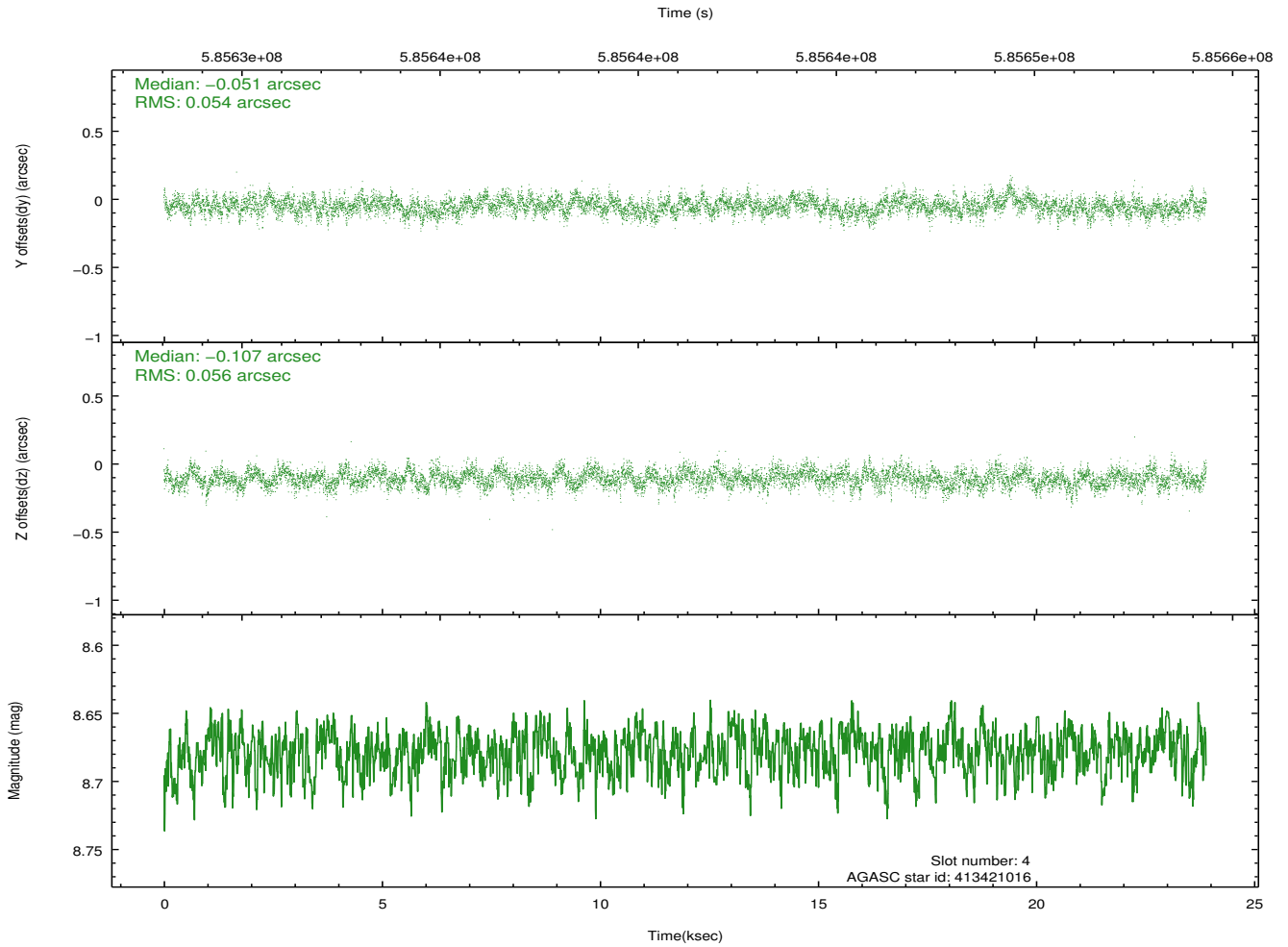
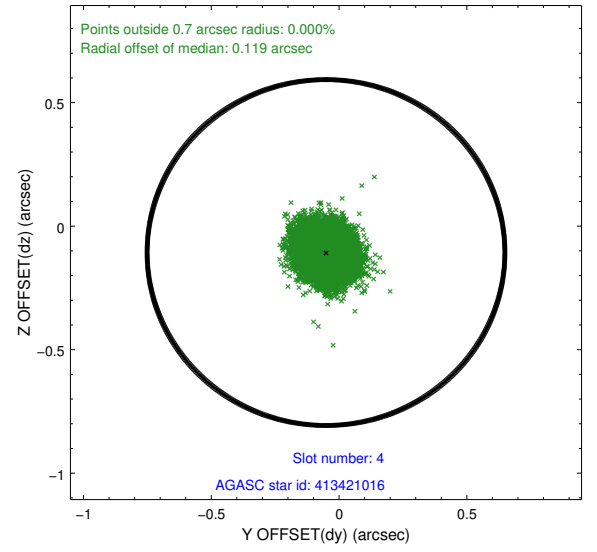
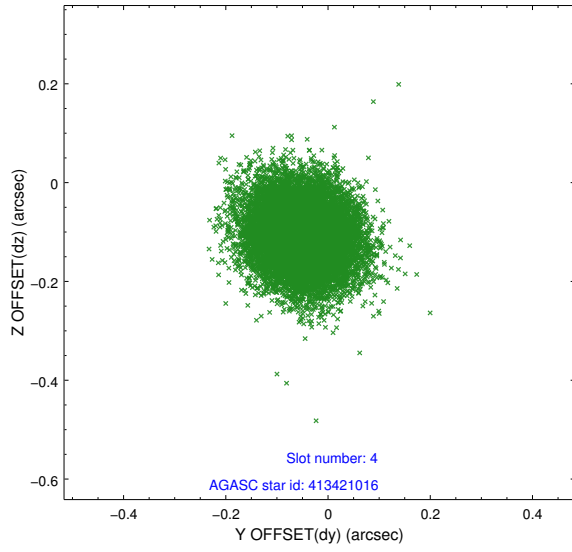
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	6.97	5828	-0.277	-0.184	0.012	0.019	0.000000	0.000000	-764.78	-846.12
1	FID		ACIS-I-4	7.01	5830	0.189	0.158	0.016	0.024	0.000000	0.000000	2149.73	1060.26
2	FID		ACIS-I-6	7.06	5829	-0.012	0.089	0.019	0.030	0.000000	0.000000	395.79	1702.56
3	GUIDE	used	411707968	7.25	11656	-0.085	-0.073	0.087	0.138	299.509933	40.926839	997.47	-599.55
4	GUIDE	used	413421016	8.68	11646	-0.051	-0.107	0.083	0.135	300.612426	40.446254	-2074.52	1016.85
5	GUIDE	used	413929808	8.43	11651	-0.003	-0.063	0.078	0.125	300.621353	41.348826	-1956.70	-2230.51
6	GUIDE	used	413936784	8.70	11656	0.017	0.258	0.096	0.160	300.698470	41.281929	-2175.67	-1999.12
7	GUIDE	used	412231648	9.27	11645	0.120	-0.017	0.147	0.236	299.266165	41.447461	1713.82	-2452.83

2.4 Star Slots

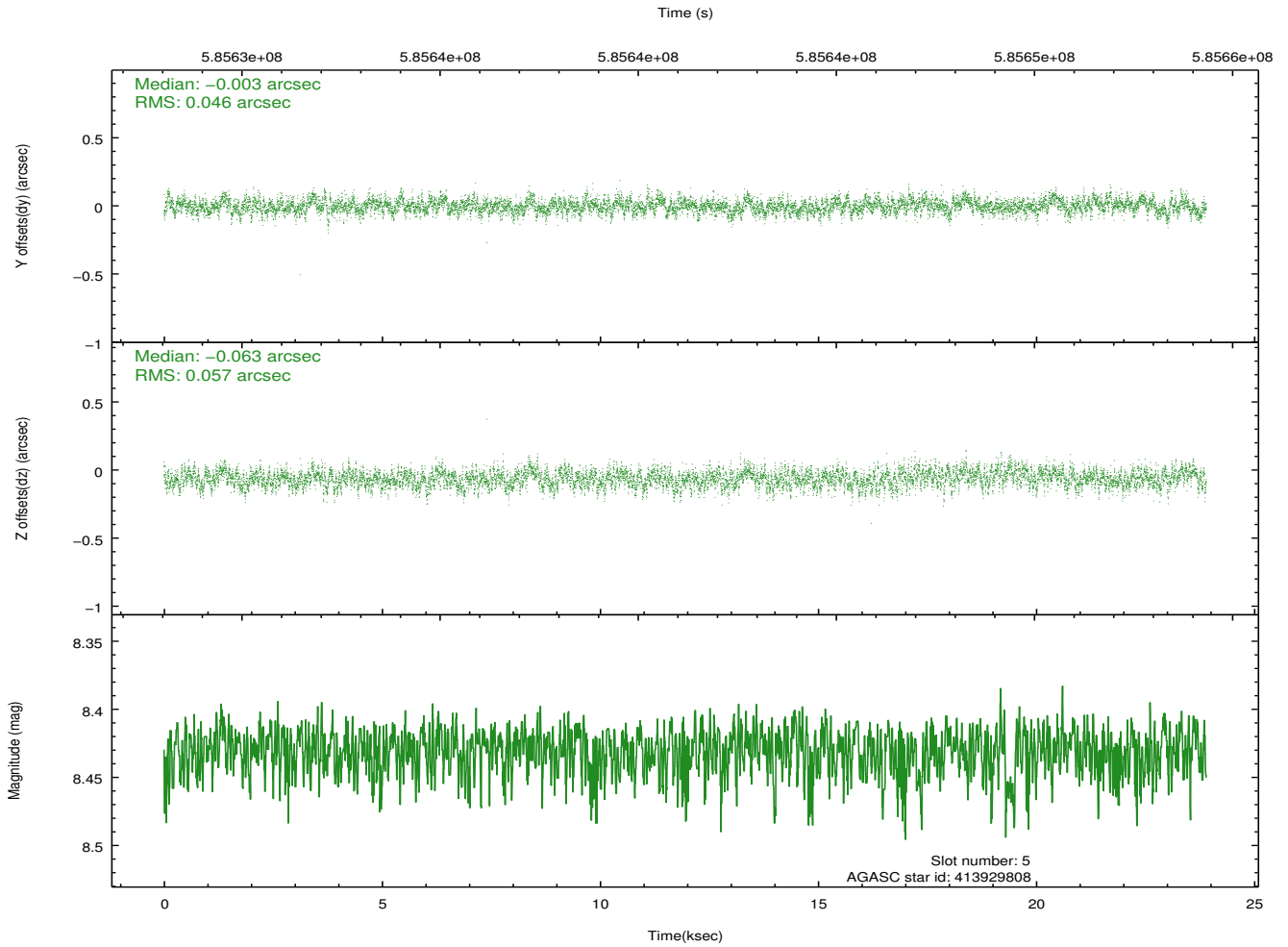
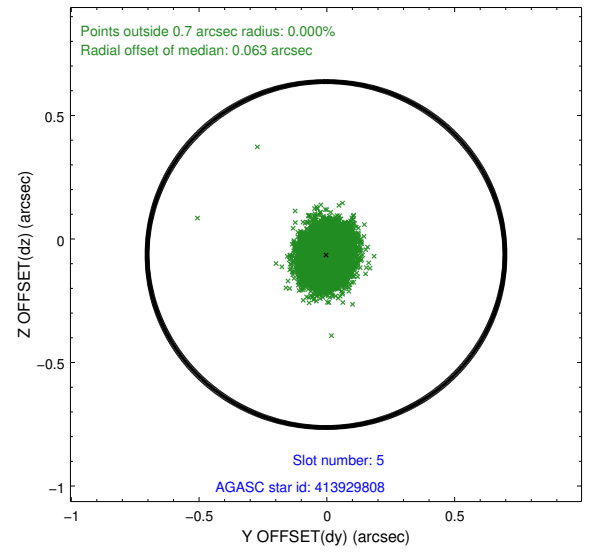
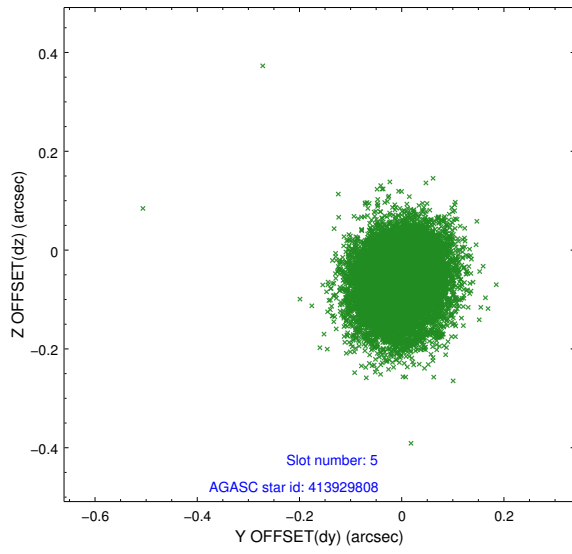
2.4.1 Slot 3



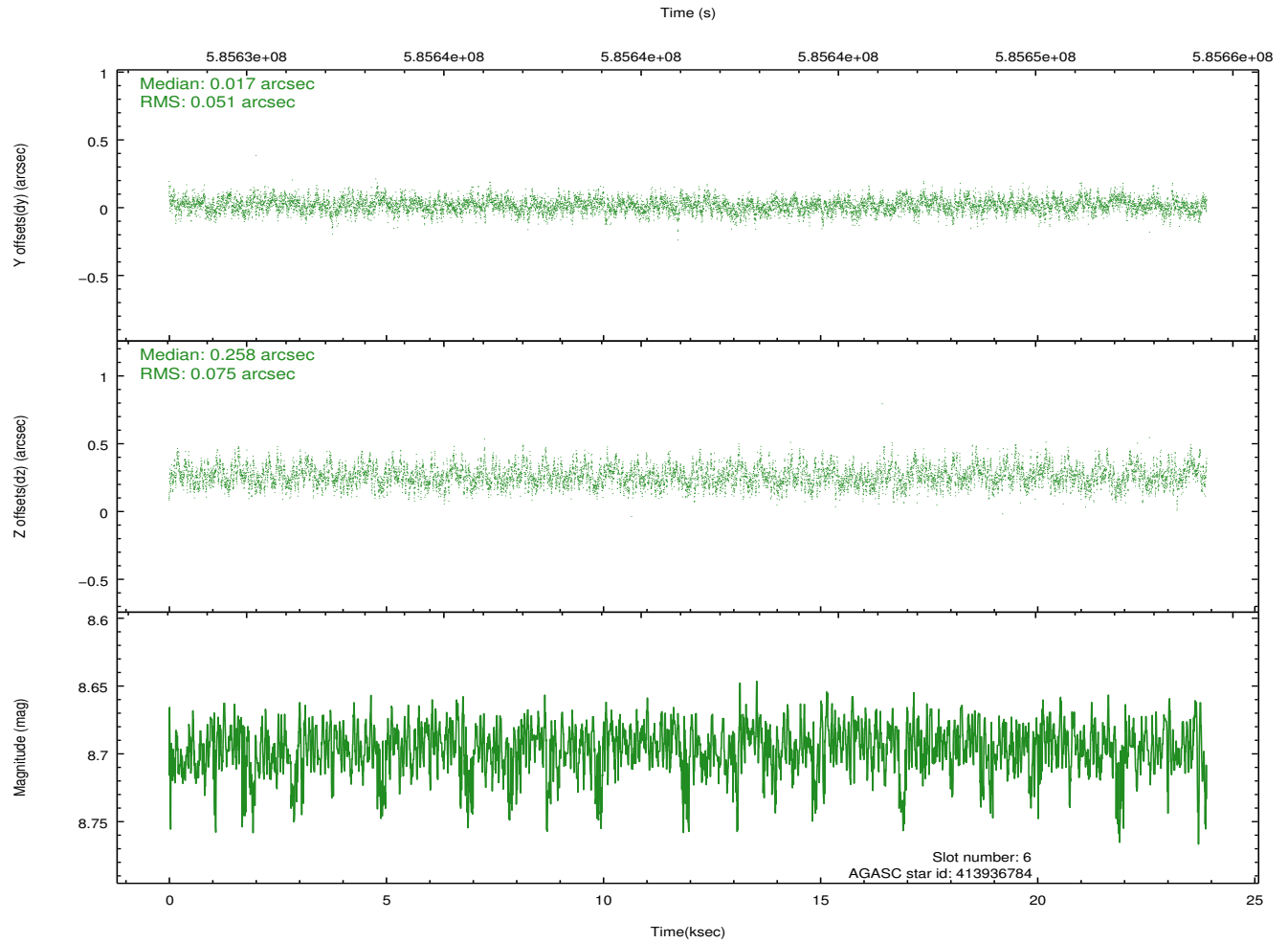
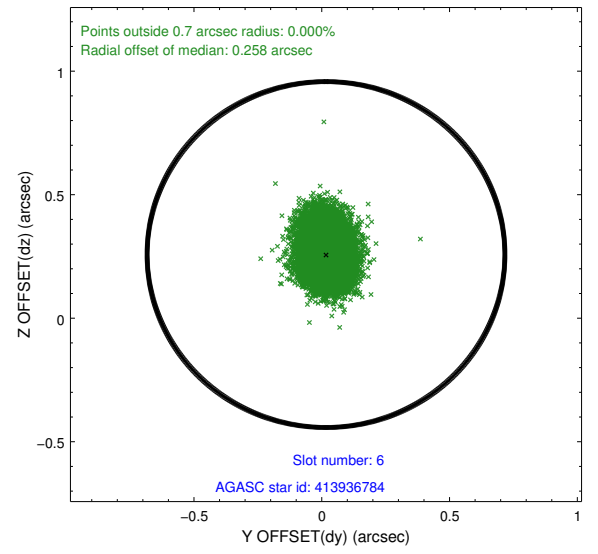
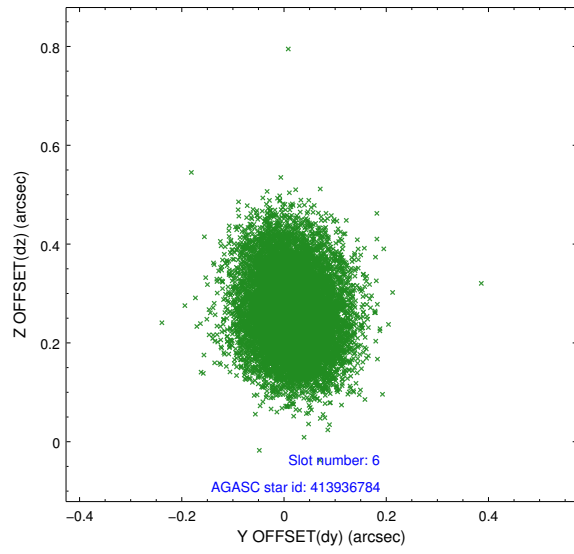
2.4.2 Slot 4



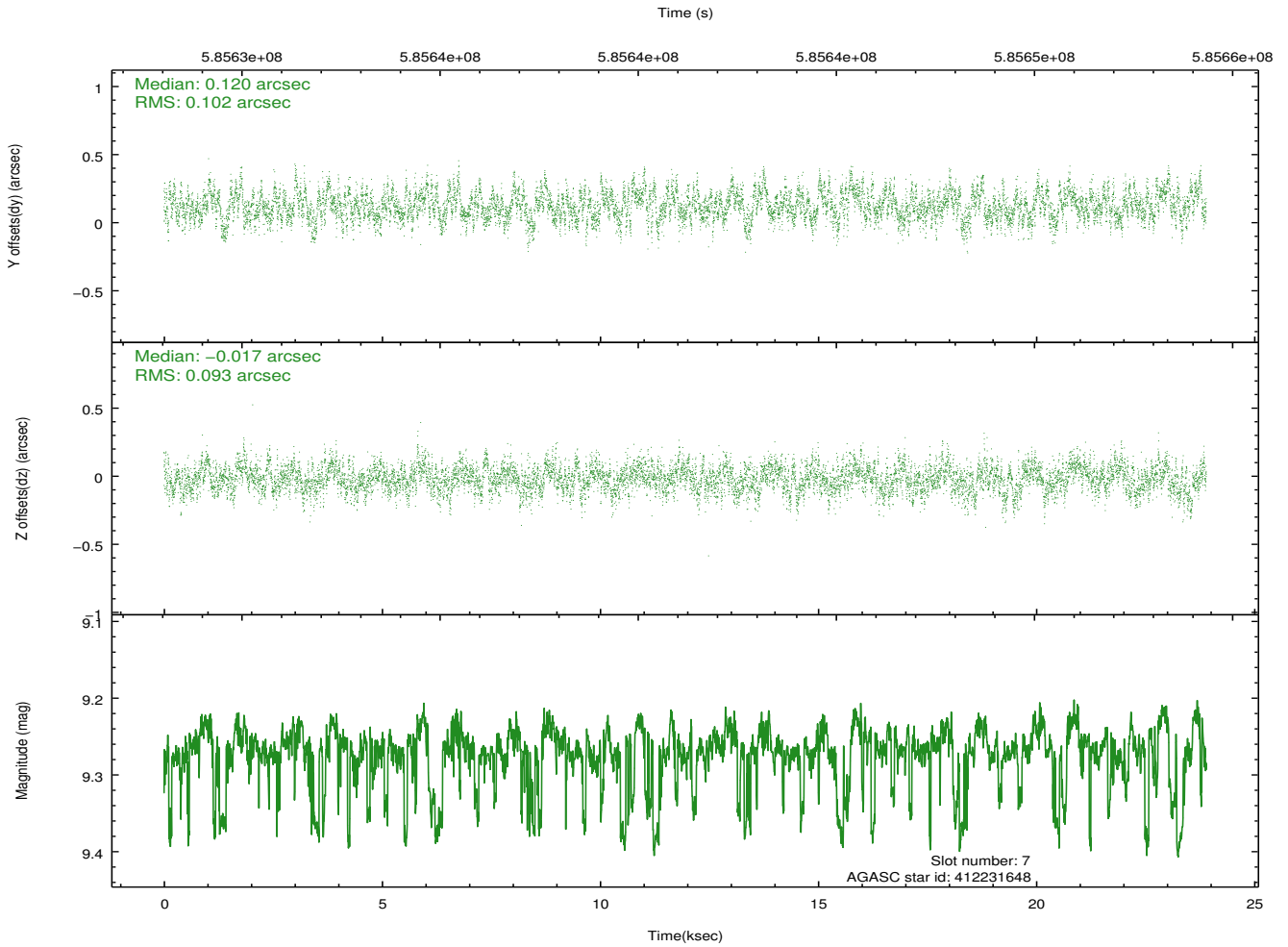
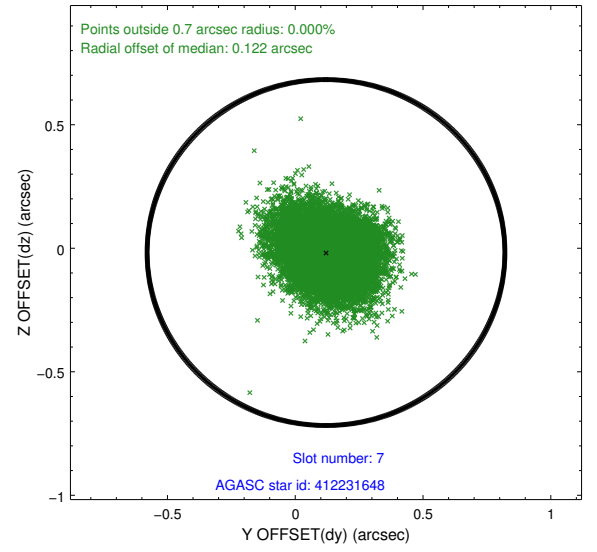
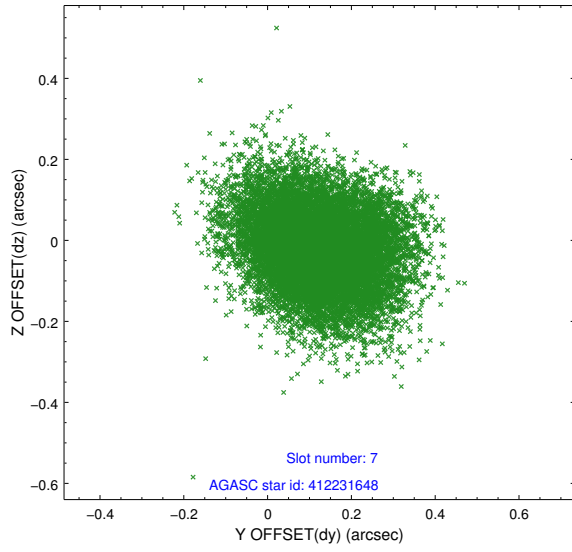
2.4.3 Slot 5



2.4.4 Slot 6

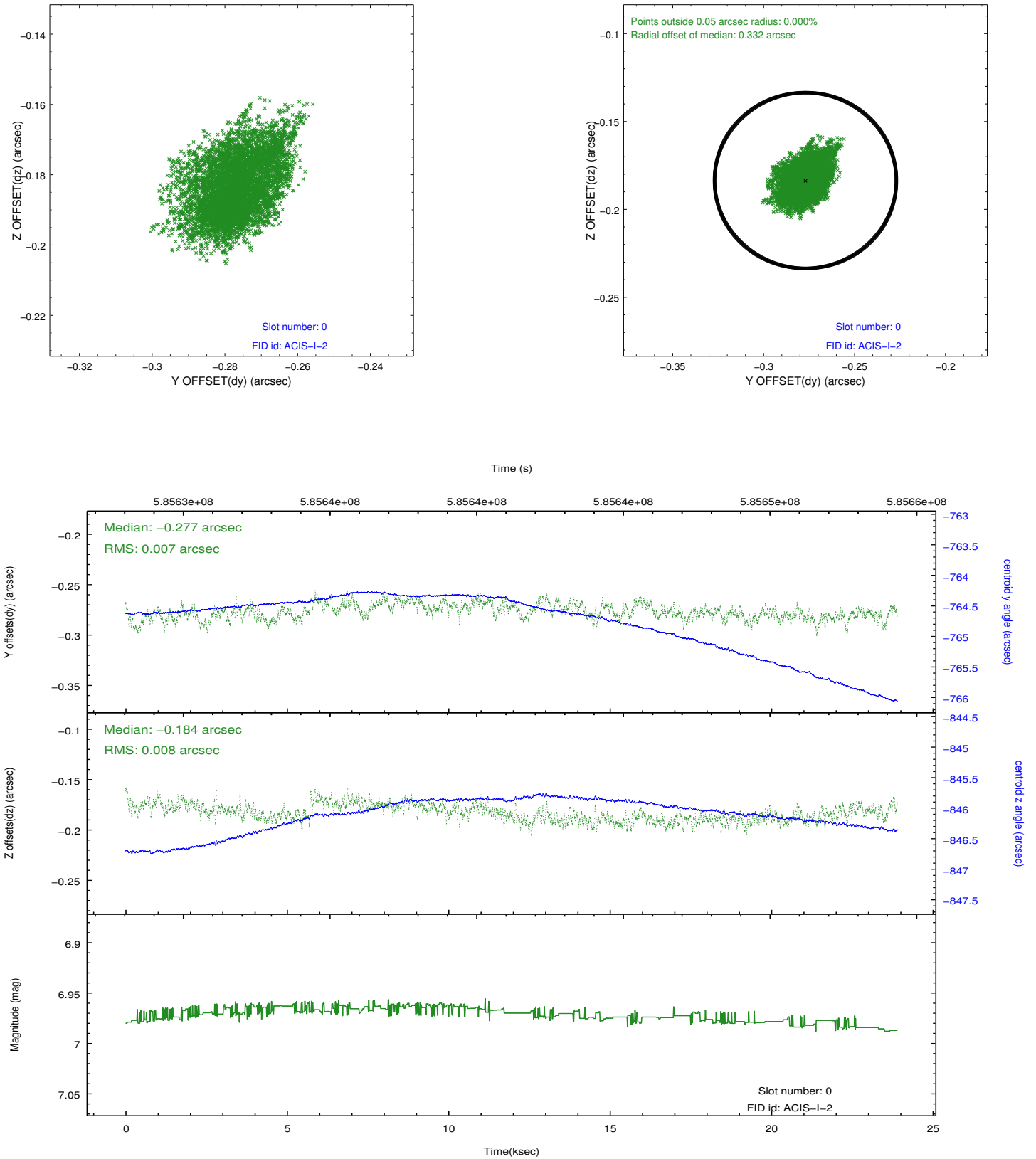


2.4.5 Slot 7

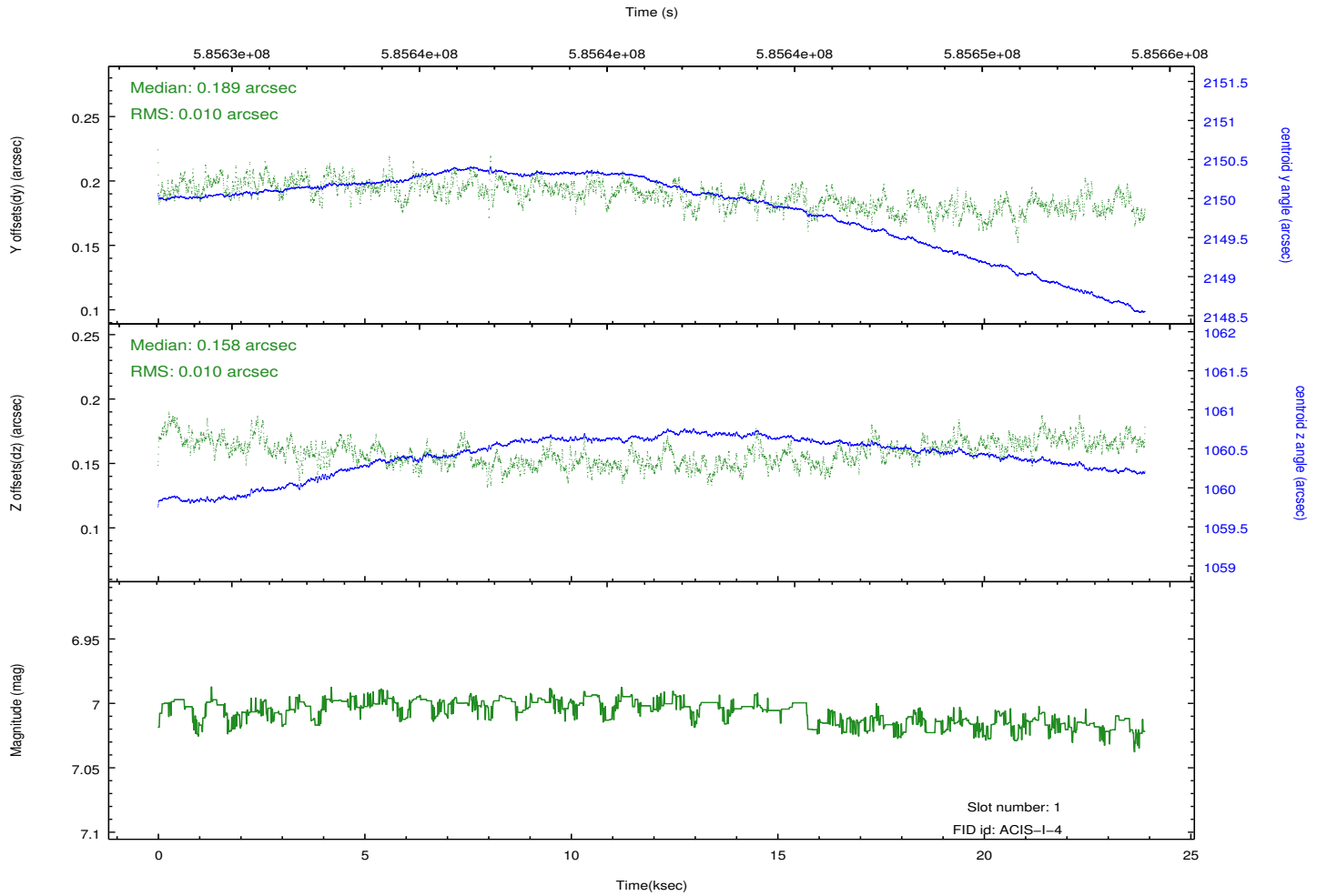
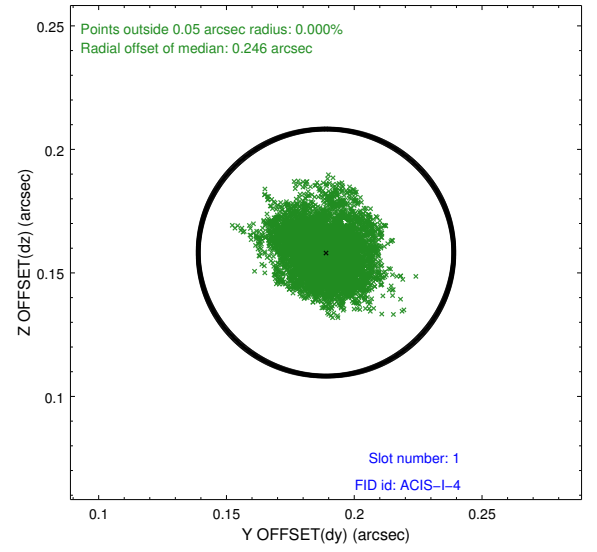
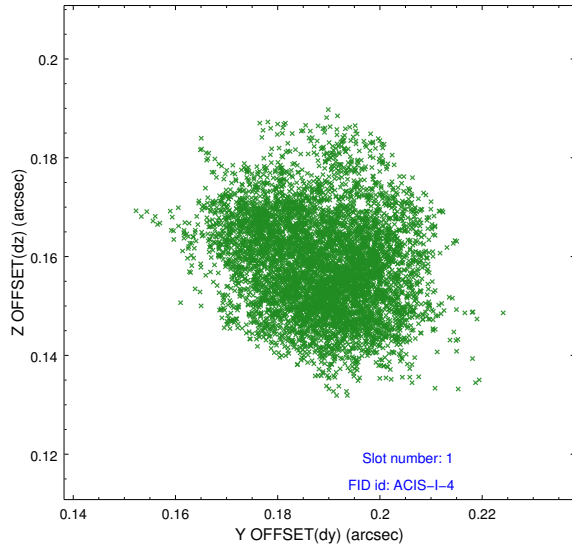


2.5 FID Slots

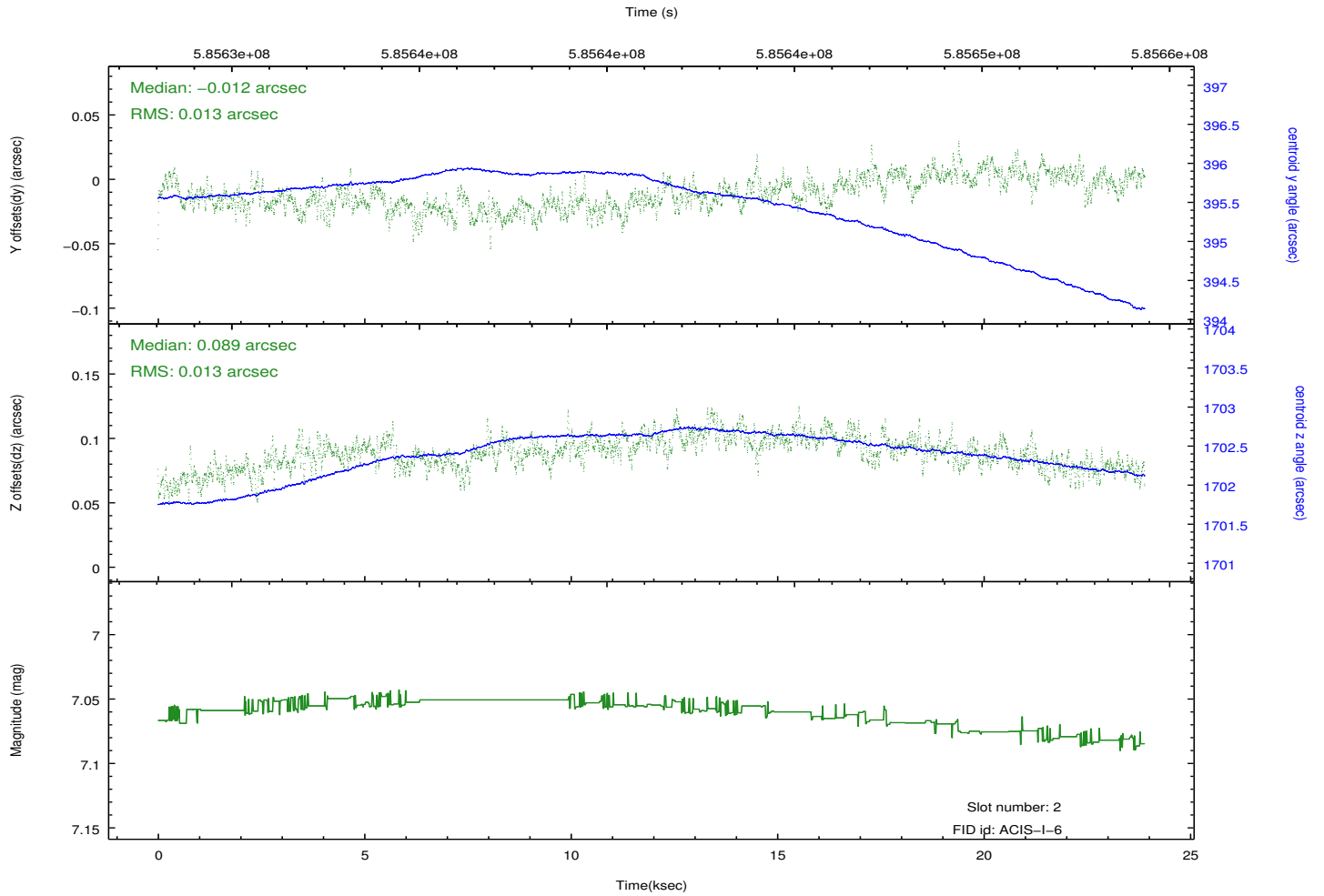
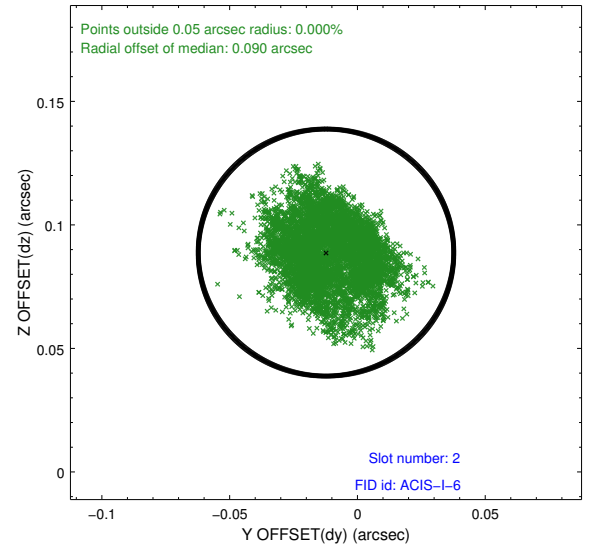
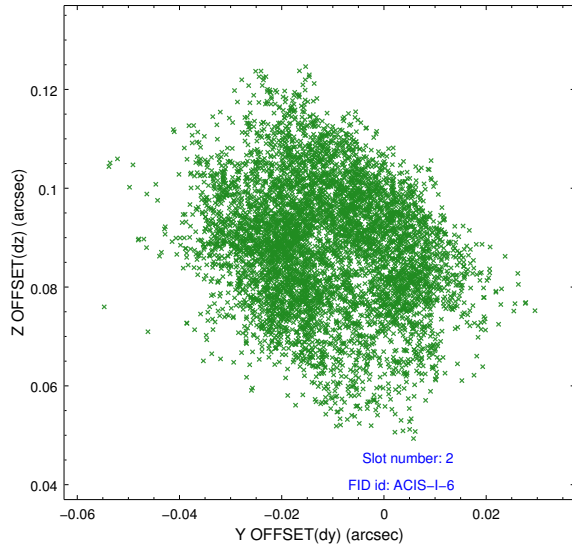
2.5.1 Slot 0



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)	2016.07.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.054700177431

A.2 Comments