

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 17843 - L2 Version 1
Chandra X-Ray Center

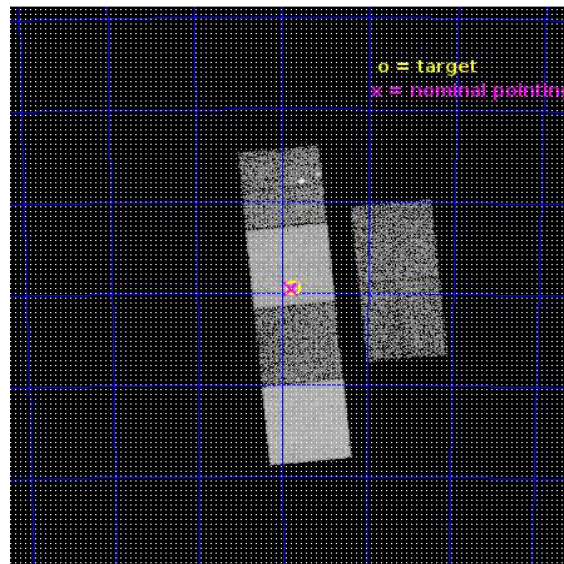
L2 Processing Date : Jun 26 2016

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1 Front

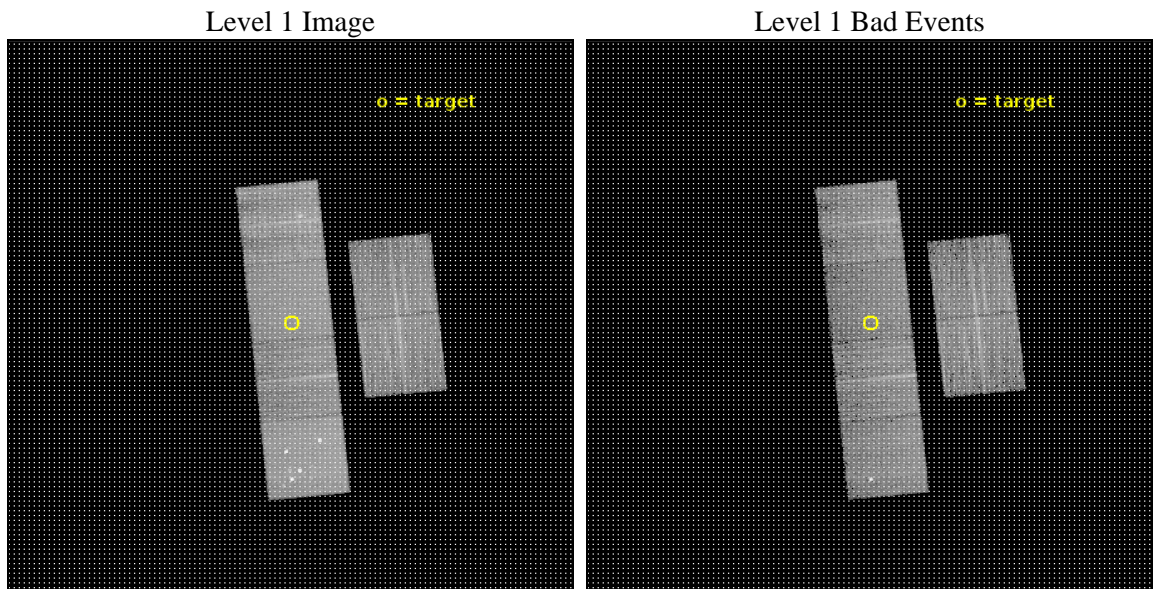
seq_num	401775	Sequence number
obs_id	17843	Observation id
title	The Black Hole Population in Galactic Globular Clusters	Proposal t
observer	Prof Laura Chomiuk	Principal investigator
object	NGC 4372	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.439167	Observer's specified target RA [deg]
dec_targ	-72.659	Observer's specified target Dec [deg]
ra_nom	186.4475211778	Nominal RA [deg]
dec_nom	-72.659579050403	Nominal Dec [deg]
roll_nom	264.25913702504	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10393.50503099	Sum of GTIs [s]
livetime	10261.89621207	Livetime [s]
ontime2	10393.546070933	Sum of GTIs [s]
ontime3	10393.38191092	Sum of GTIs [s]
ontime5	10393.463990927	Sum of GTIs [s]
ontime6	10393.422950983	Sum of GTIs [s]
ontime7	10393.50503099	Sum of GTIs [s]
ontime8	10393.340870976	Sum of GTIs [s]
l2events	107585	Number of level 2 events



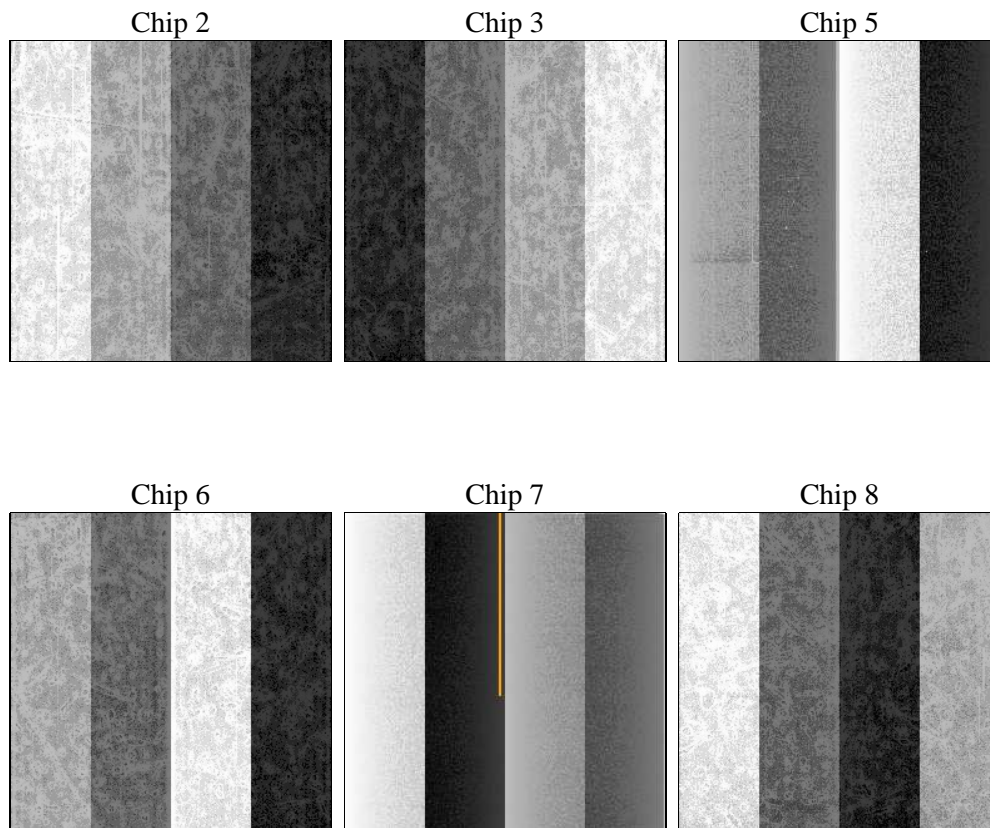
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10434.829000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	10393.50503099	Sum of GTIs [s]
caldbver	4.7.2	 	ontime2	10393.546070933	Sum of GTIs [s]
date	2016-06-26T12:55:48	Date and time of file creation	ontime3	10393.38191092	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	10393.463990927	Sum of GTIs [s]
			ontime6	10393.422950983	Sum of GTIs [s]
			ontime7	10393.50503099	Sum of GTIs [s]
			ontime8	10393.340870976	Sum of GTIs [s]
			l1events	485829	Number of level 1 events

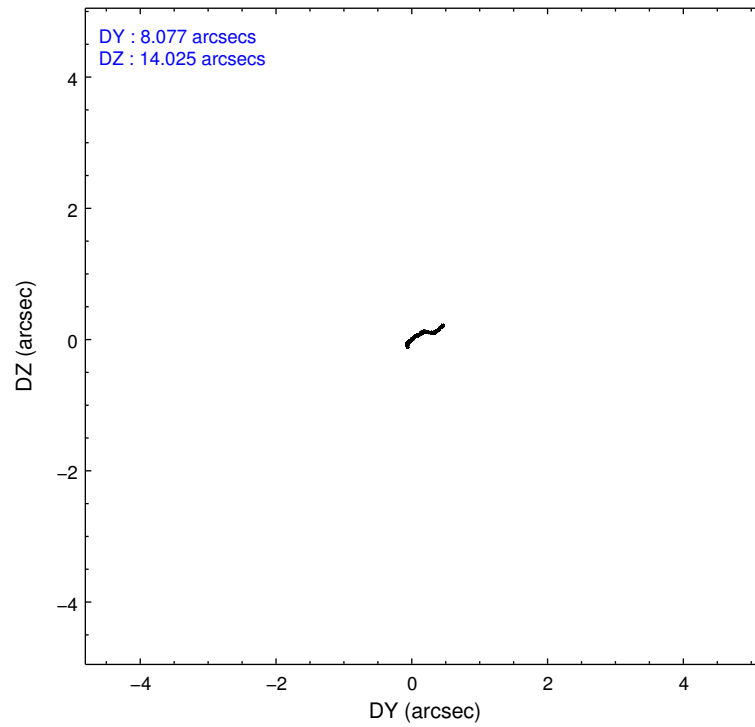
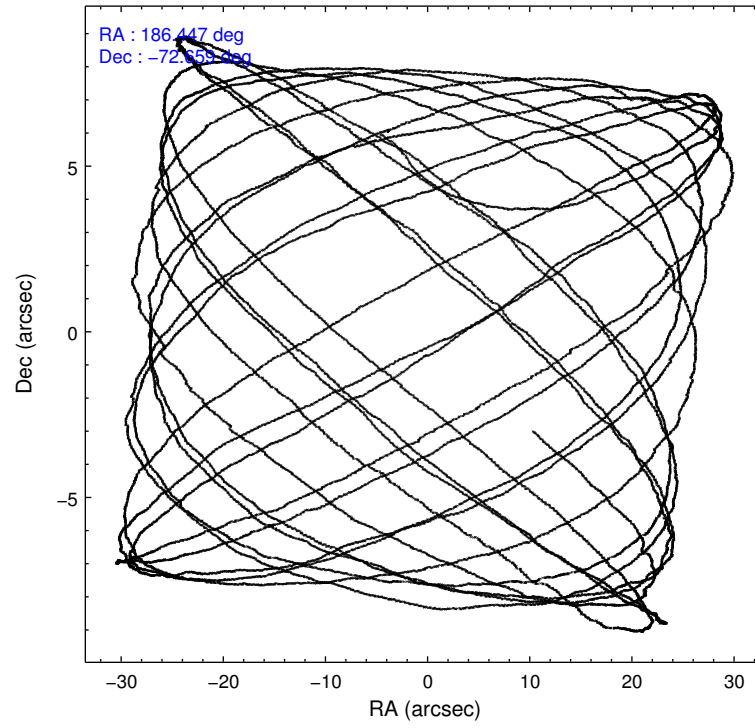
2.1.4 Events

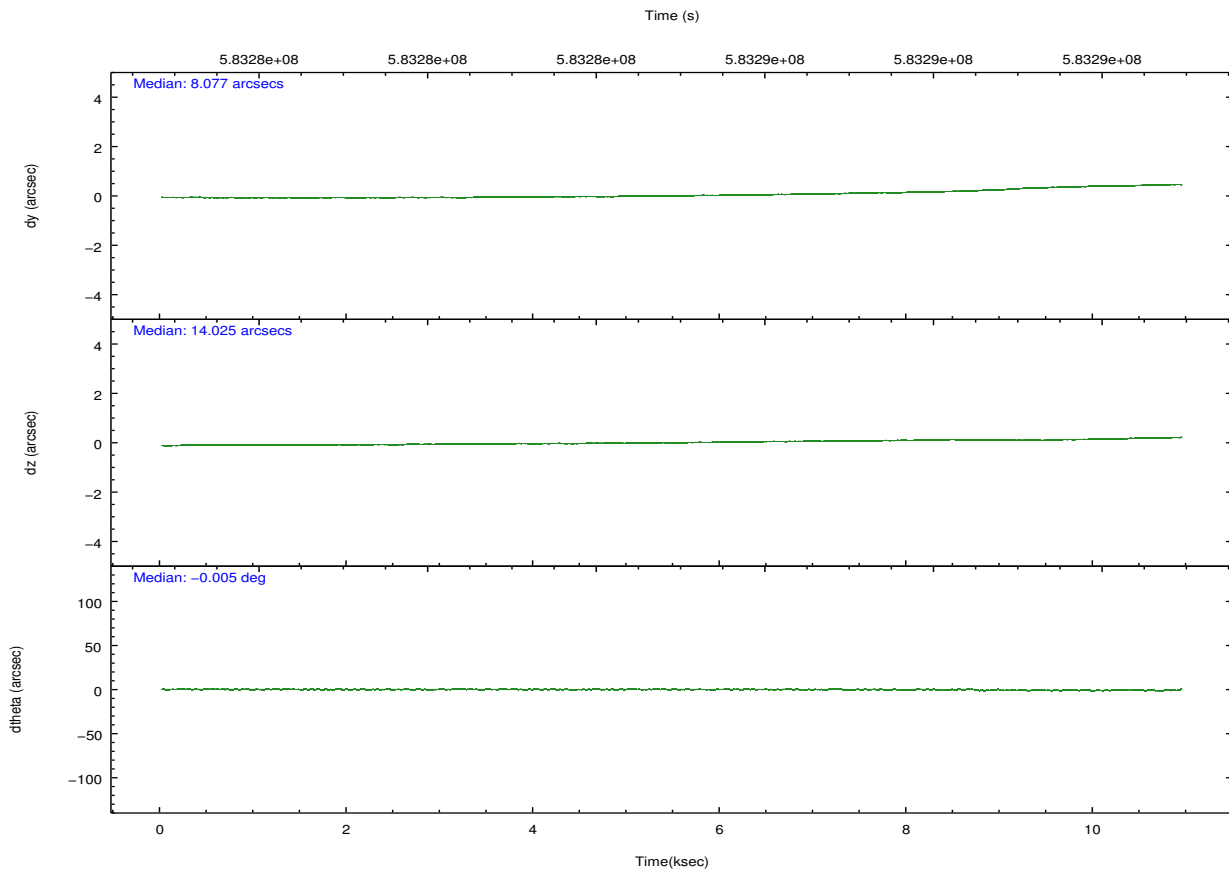
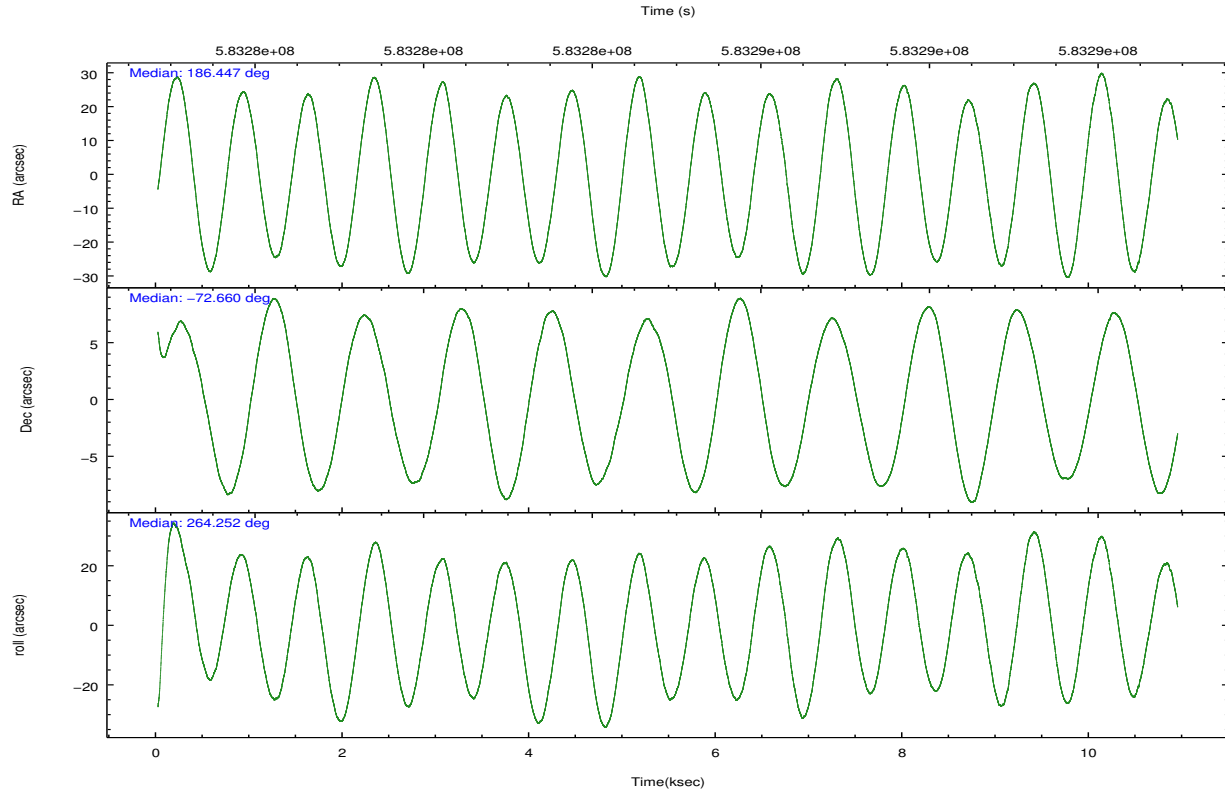
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	67850	64265	116143	66501	83459	87611	grade 0 events	2363	2289	13072	2416	2904	7521
rejected events	61124	57712	56981	59135	47647	63781		3%	3%	11%	3%	3%	8%
rejected %	90%	89%	49%	88%	57%	72%	grade 1 events	38	35	238	28	105	54
								0%	0%	0%	0%	0%	0%
							grade 2 events	1663	1398	15916	1736	7614	5610
								2%	2%	13%	2%	9%	6%
							grade 3 events	634	726	1460	712	2700	2241
								0%	1%	1%	1%	3%	2%
							grade 4 events	706	733	1486	684	2698	2114
								1%	1%	1%	1%	3%	2%
							grade 5 events	2541	3075	6907	2911	8206	4635
								3%	4%	5%	4%	9%	5%
							grade 6 events	1365	1409	27241	1823	19903	6345
								2%	2%	23%	2%	23%	7%
							grade 7 events	58540	54600	49823	56191	39329	59091
								86%	84%	42%	84%	47%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	186.408455	186.4475211778021	CCD I2 on	O1	Y
[deg] Pointing Dec	-72.634714	-72.65957905040261	CCD I3 on	O2	Y
[deg] Pointing Roll	264.065250	264.259137025041	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O4	Y
[s] Observation start time (MET)	583279948.184000	583278831.36002	CCD S5 on	N	N
Observation start date	2016-06-25T22:11:20	2016-06-25T21:53:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	583290382.184000	583290601.43569	On-chip summing requested	N	N
Observation end date	2016-06-26T01:05:14	2016-06-26T01:10:01	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





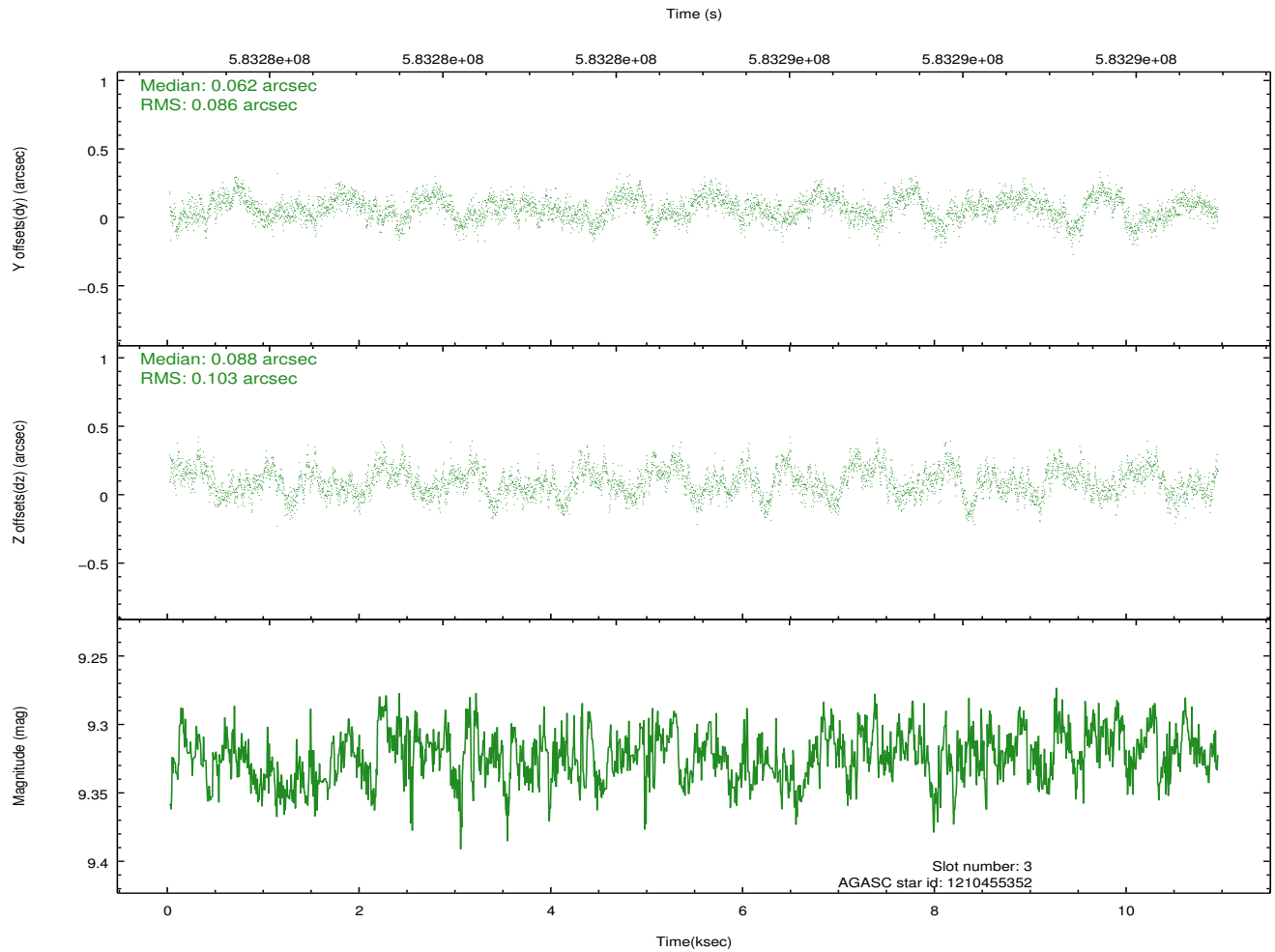
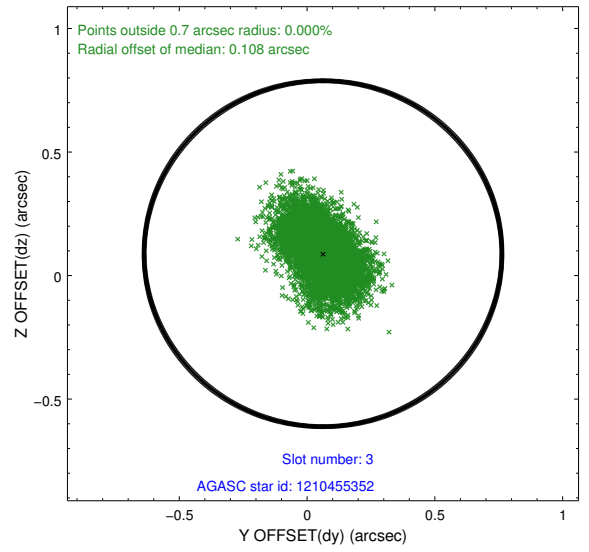
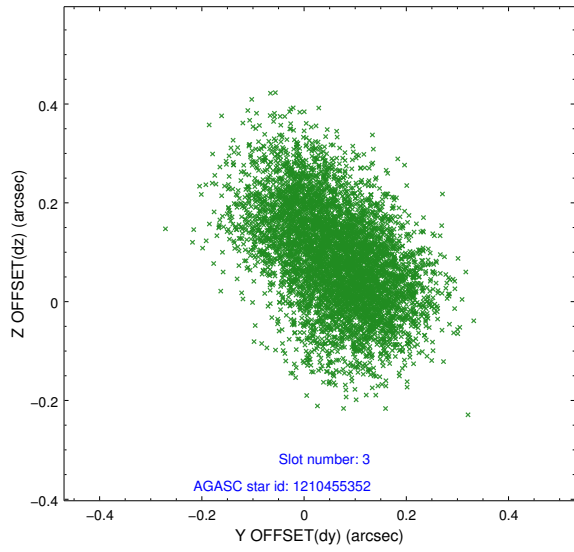
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.12	2667	-0.113	-0.075	0.007	0.011	0.000000	0.000000	-761.03	-1735.48
1	FID		ACIS-S-4	7.23	2667	0.318	0.075	0.010	0.017	0.000000	0.000000	2152.45	172.69
2	FID		ACIS-S-5	7.24	2666	-0.237	0.009	0.010	0.017	0.000000	0.000000	-1813.41	166.80
3	GUIDE	used	1210455352	9.32	5328	0.062	0.088	0.145	0.231	185.266165	-72.815409	785.58	-1140.11
4	GUIDE	used	1210593920	7.38	5334	-0.062	-0.134	0.087	0.136	187.573720	-72.985235	1140.47	1351.85
5	GUIDE	used	1210600032	7.09	5333	0.072	0.316	0.114	0.202	186.216325	-72.603899	-87.82	-217.11
6	GUIDE	used	1210594744	8.01	5333	-0.129	-0.169	0.089	0.144	187.397764	-73.015621	1265.06	1177.30
7	GUIDE	used	1210596968	8.34	5330	0.059	-0.095	0.090	0.159	188.200048	-72.373037	-1109.64	1848.08

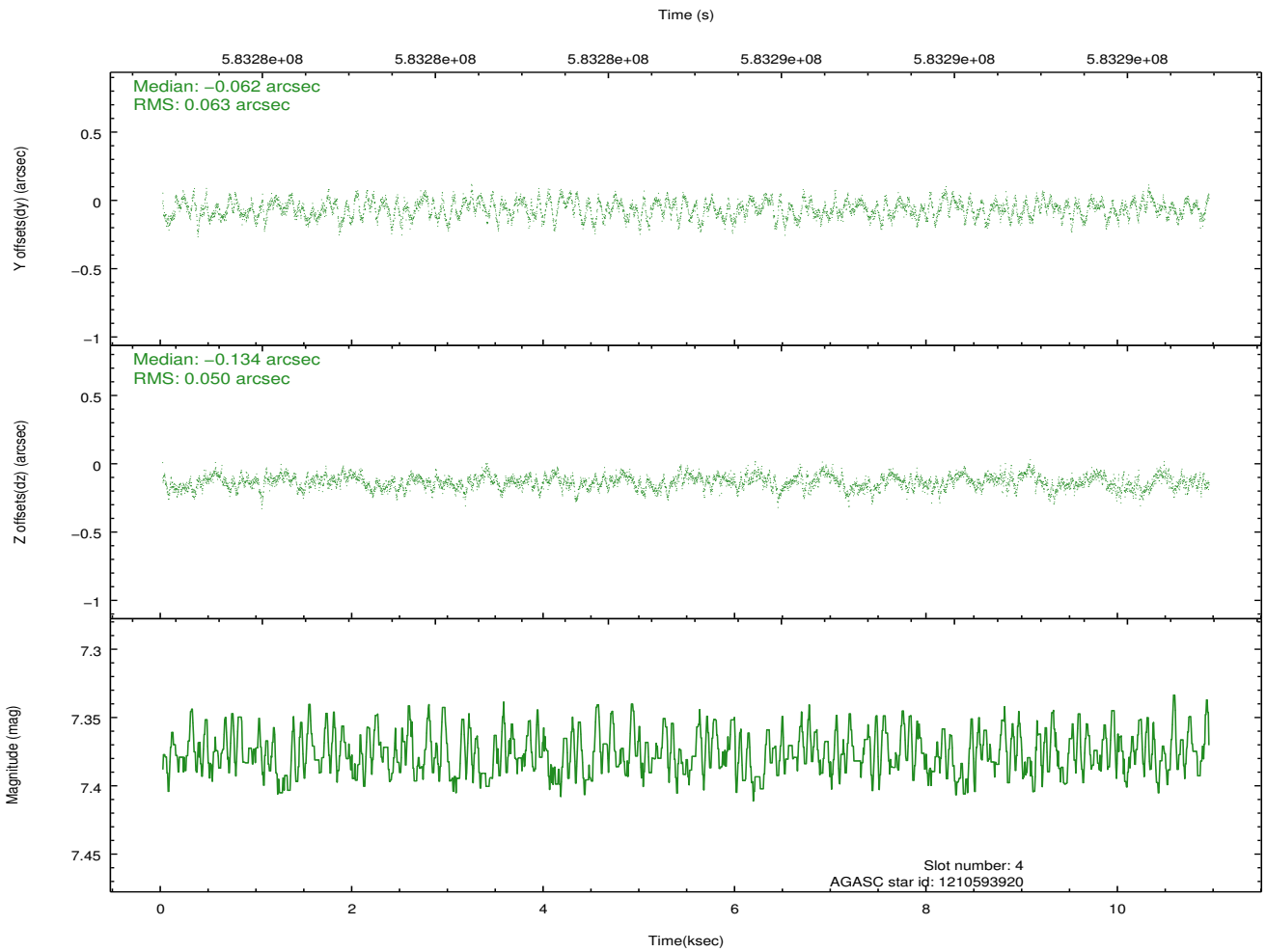
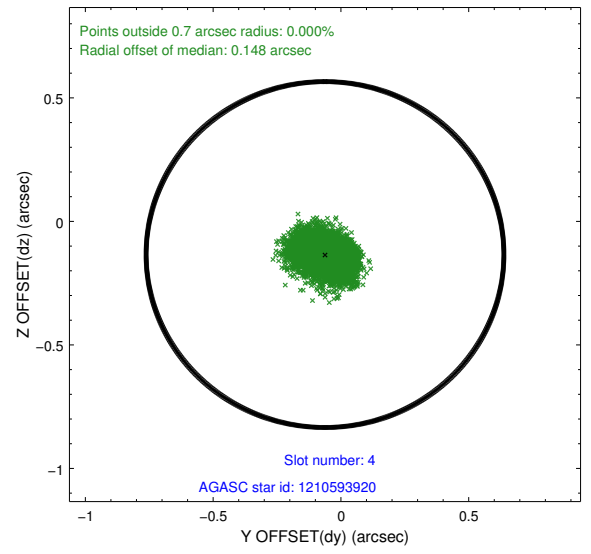
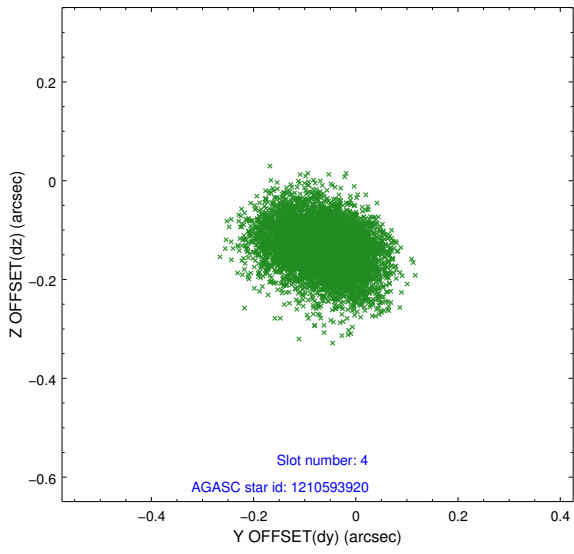
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2.4 Star Slots

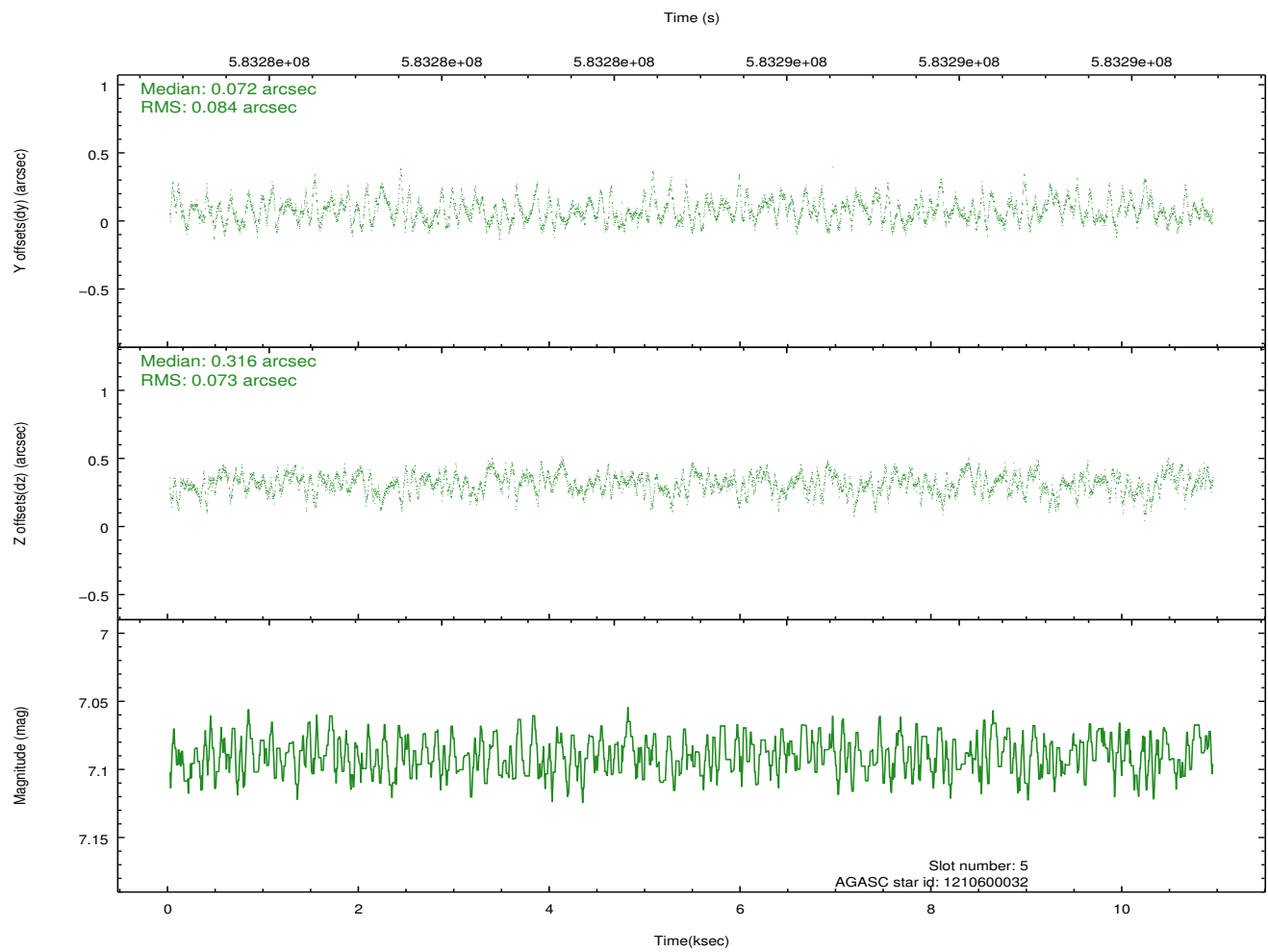
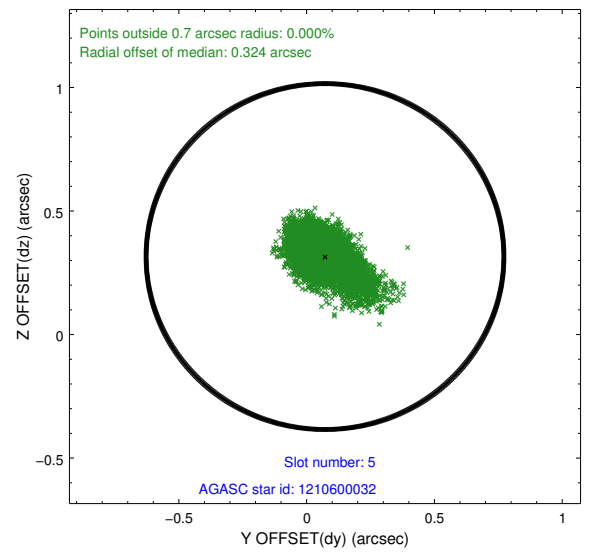
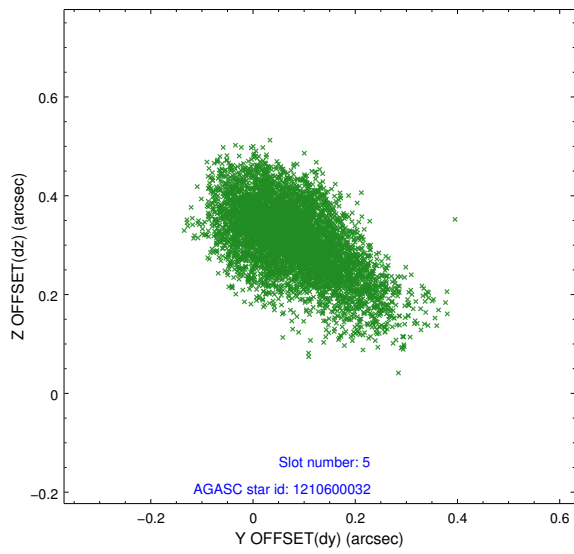
2.4.1 Slot 3



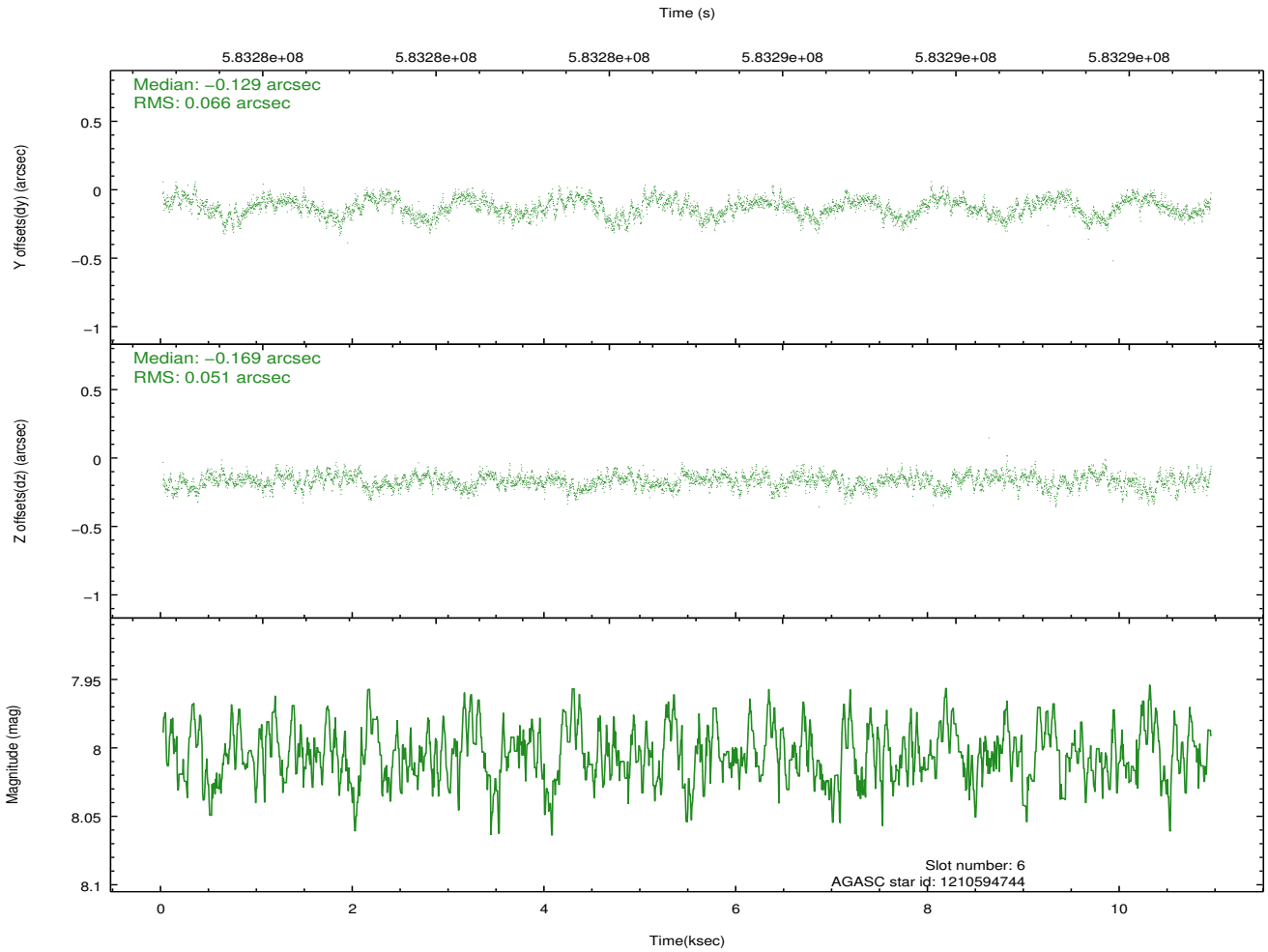
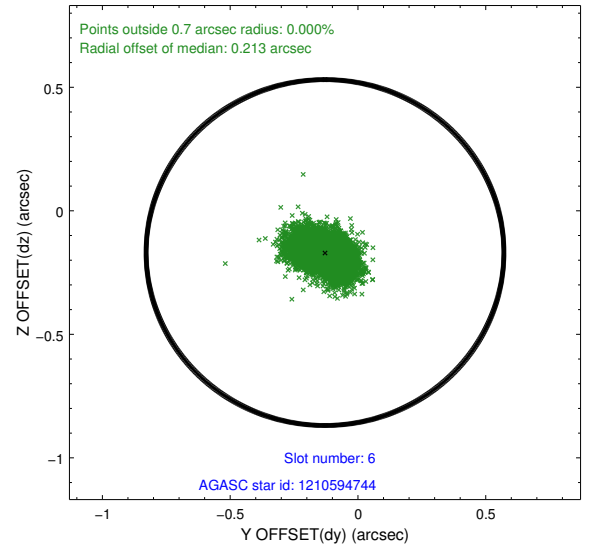
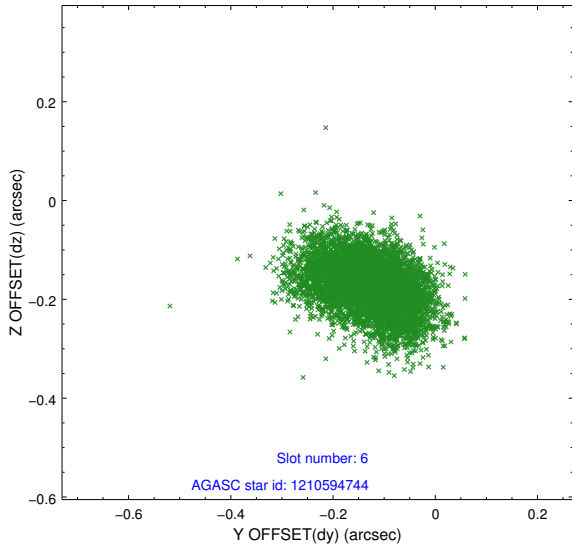
2.4.2 Slot 4



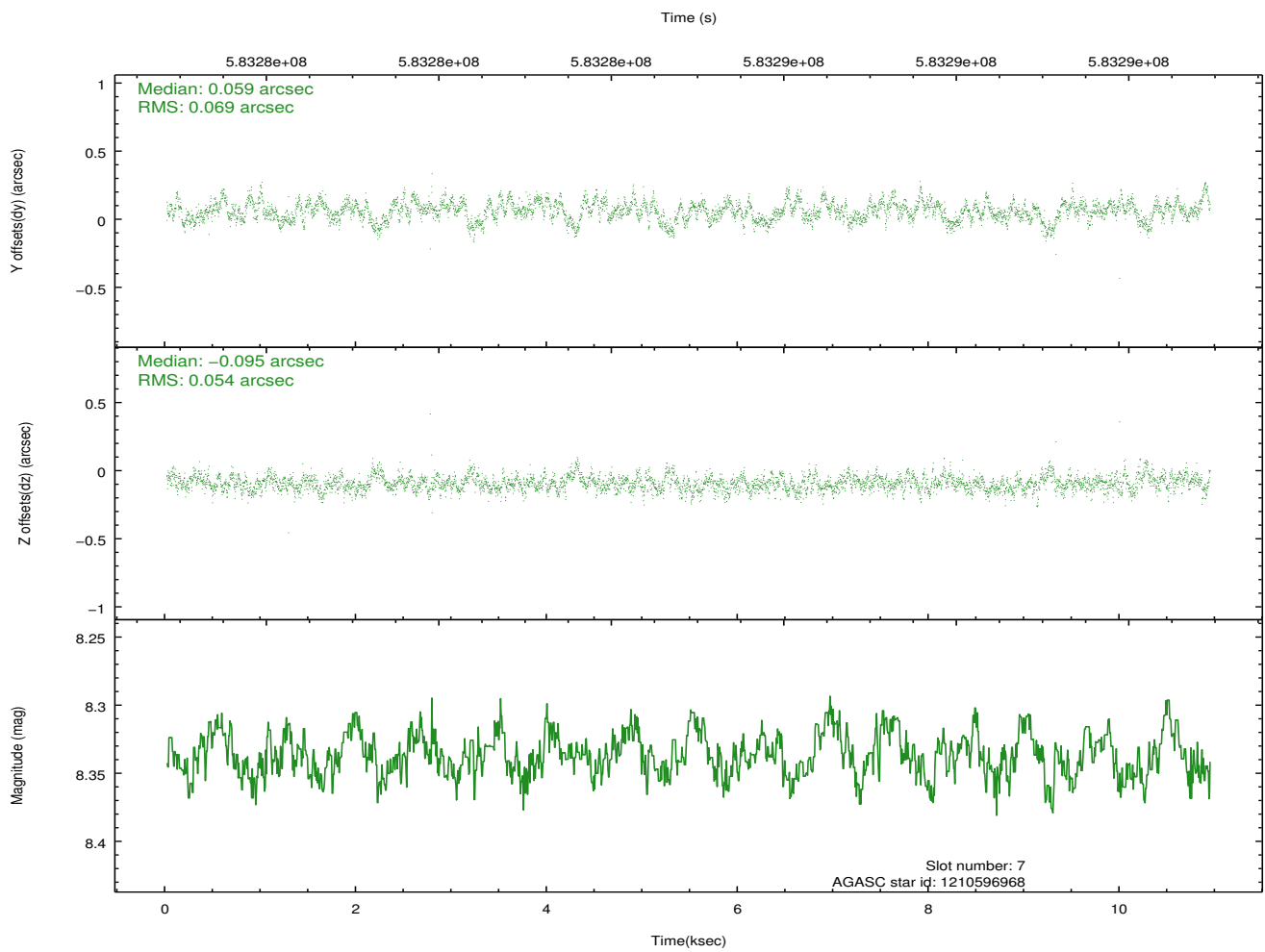
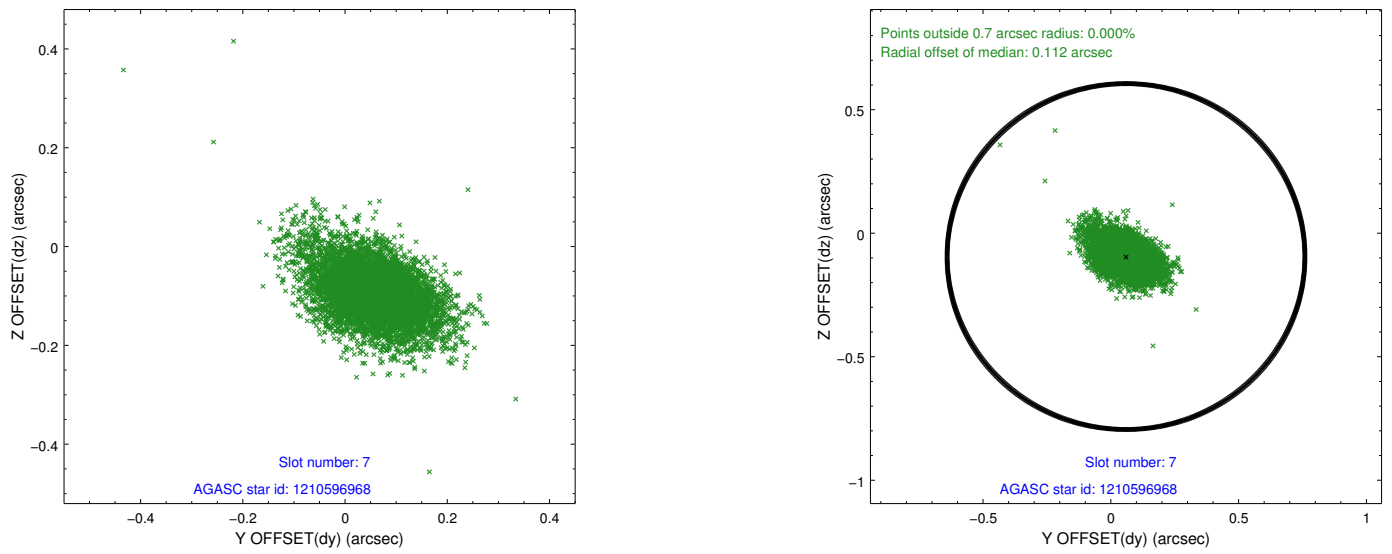
2.4.3 Slot 5



2.4.4 Slot 6

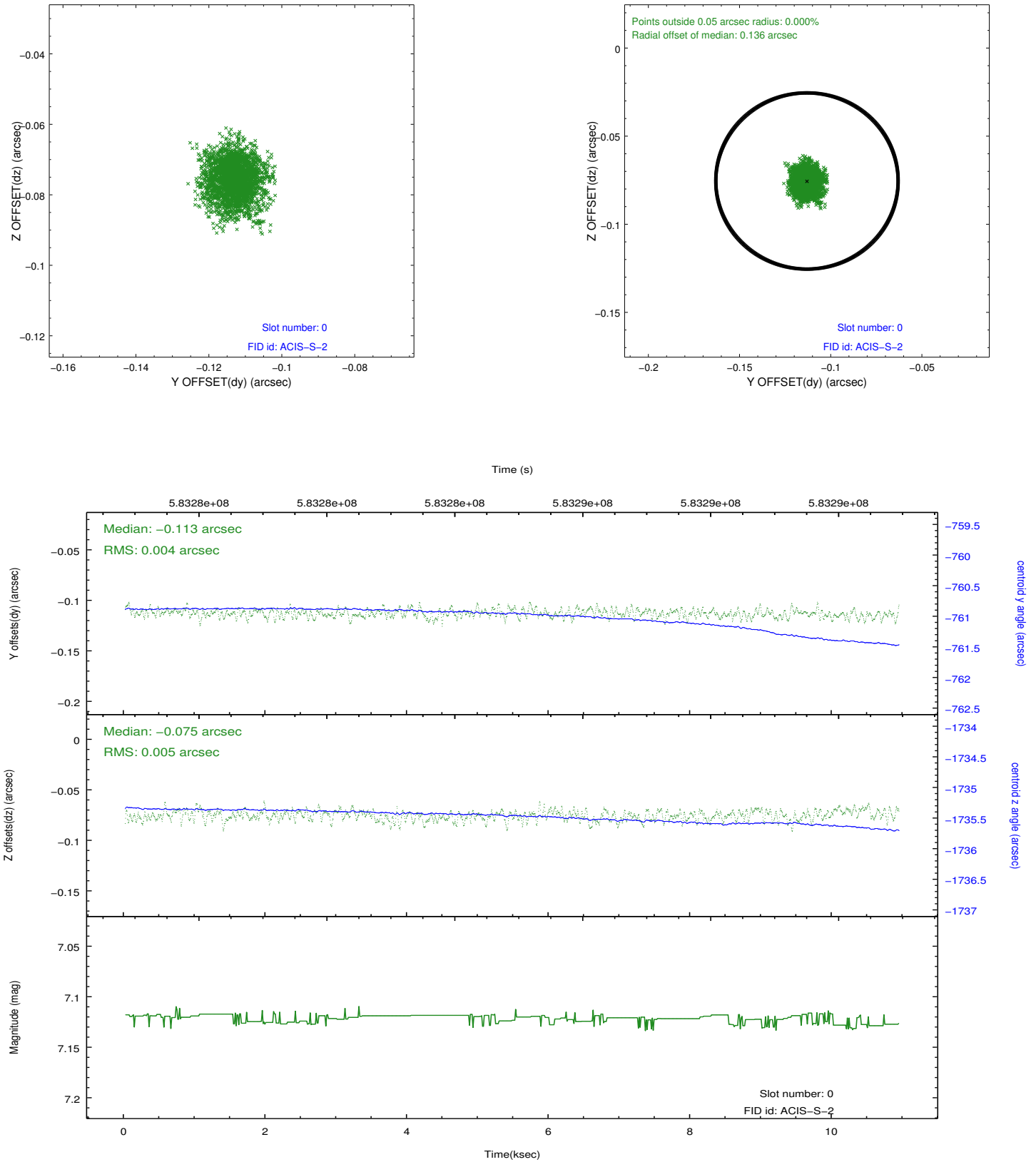


2.4.5 Slot 7

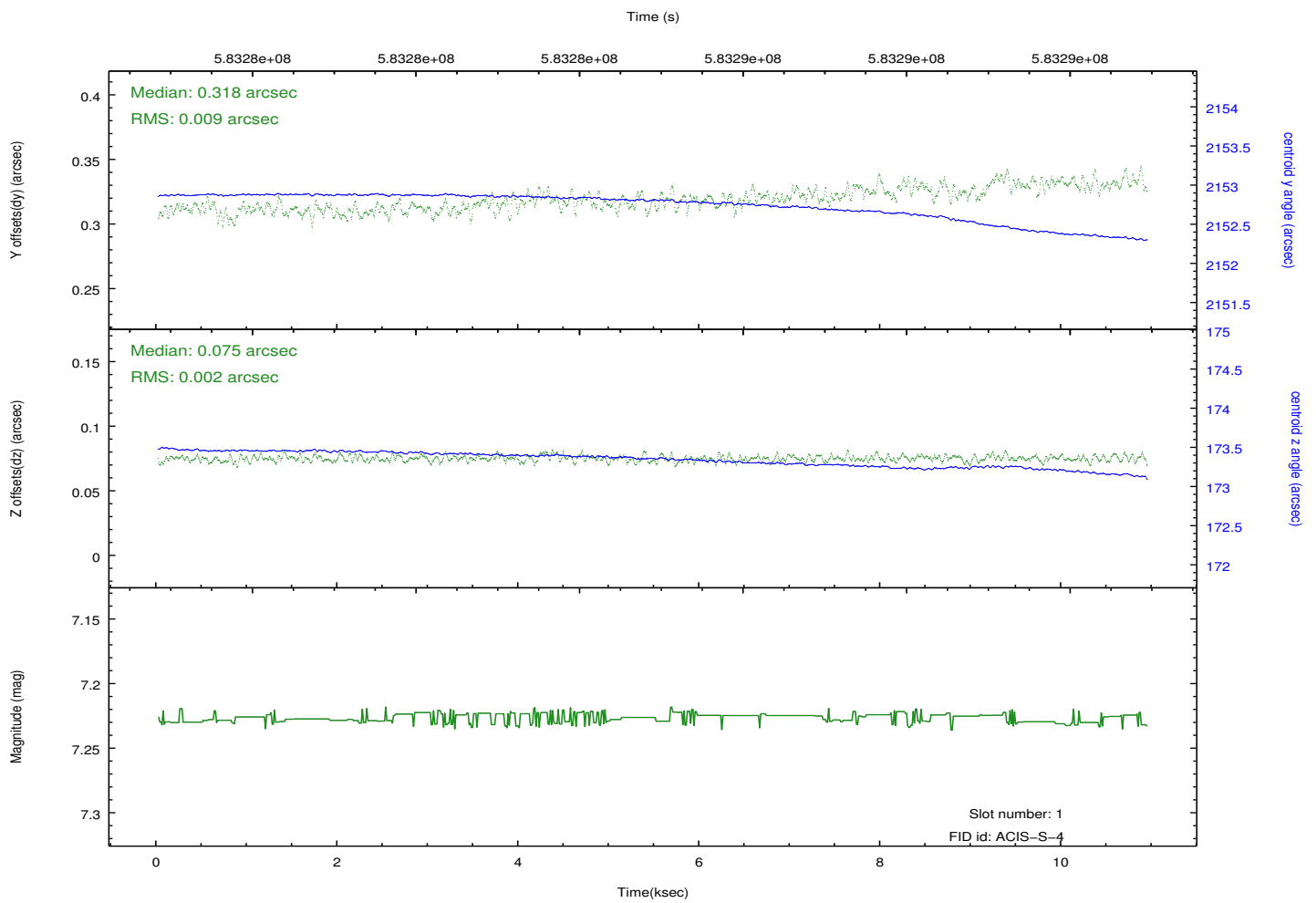
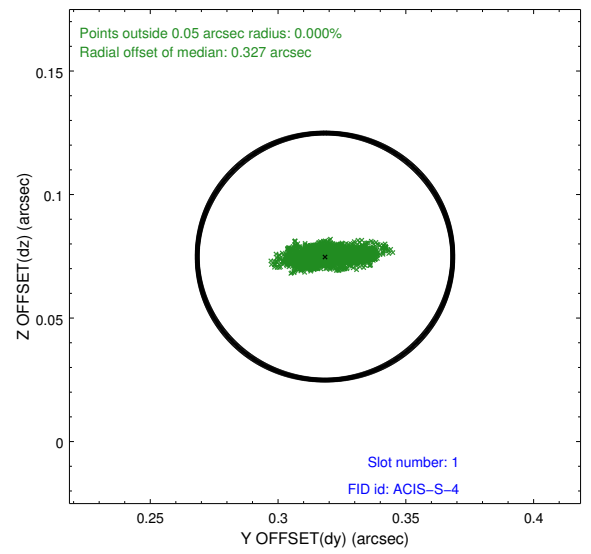
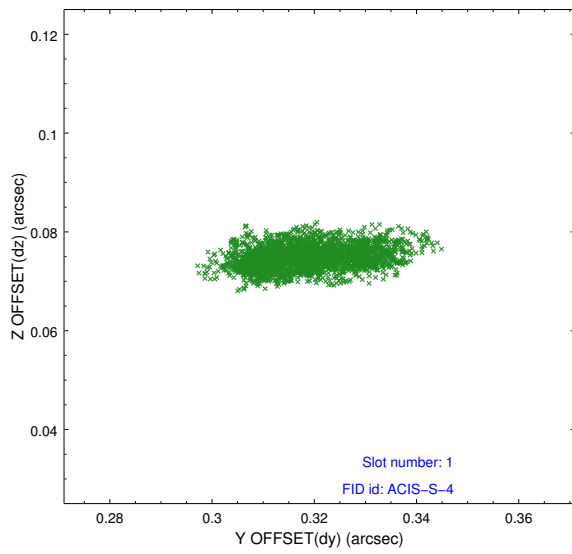


2.5 FID Slots

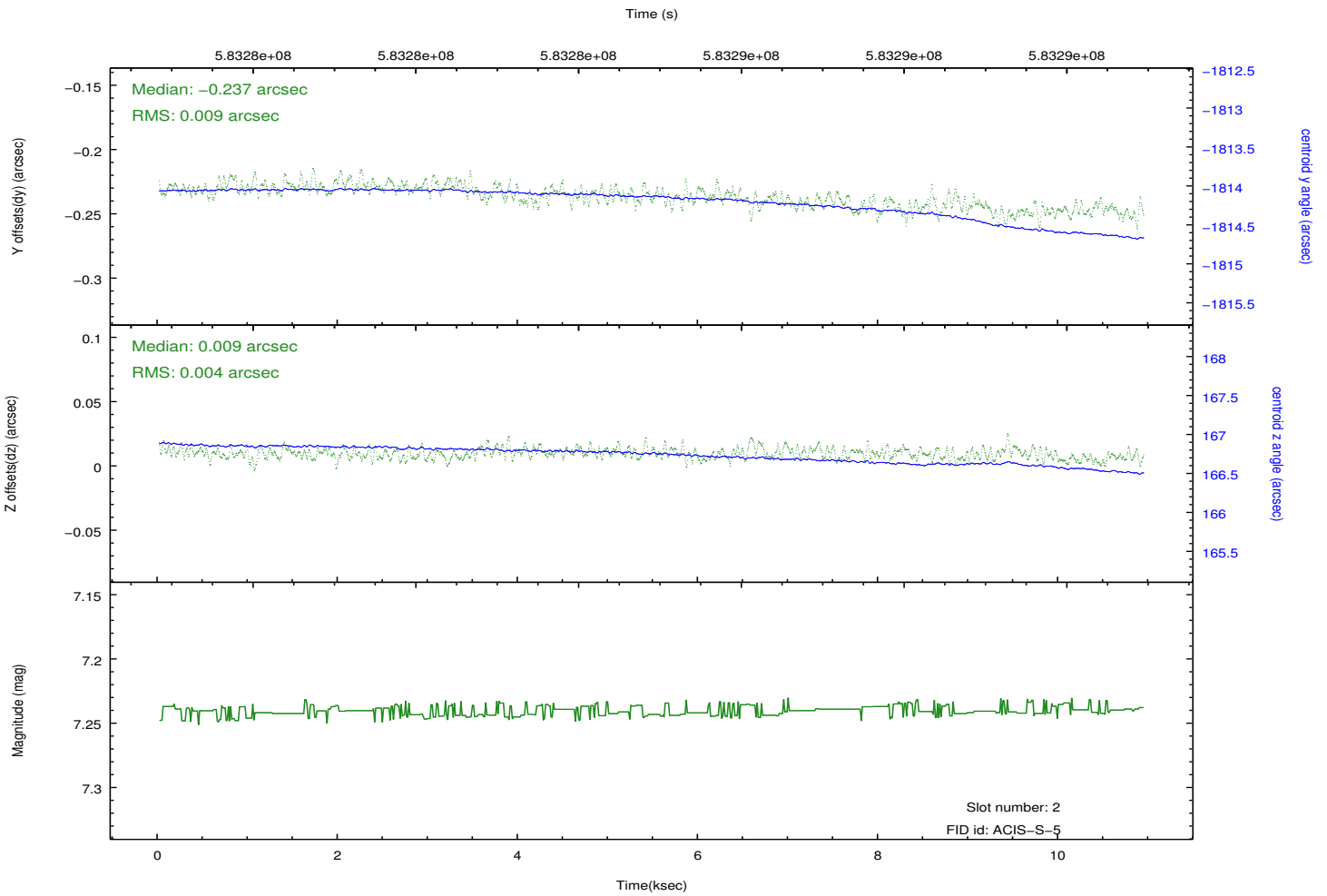
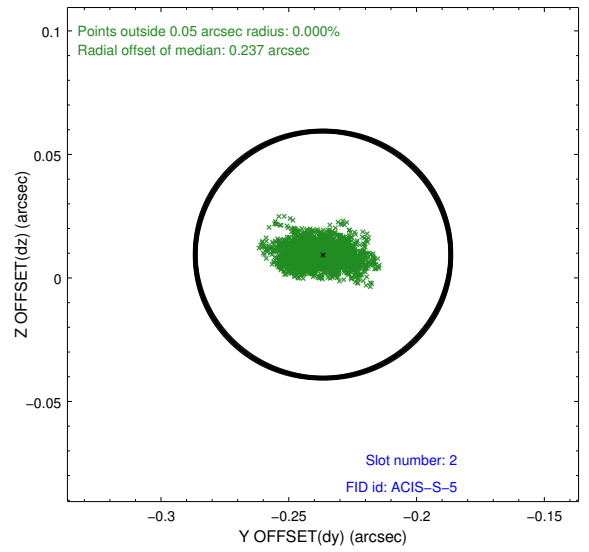
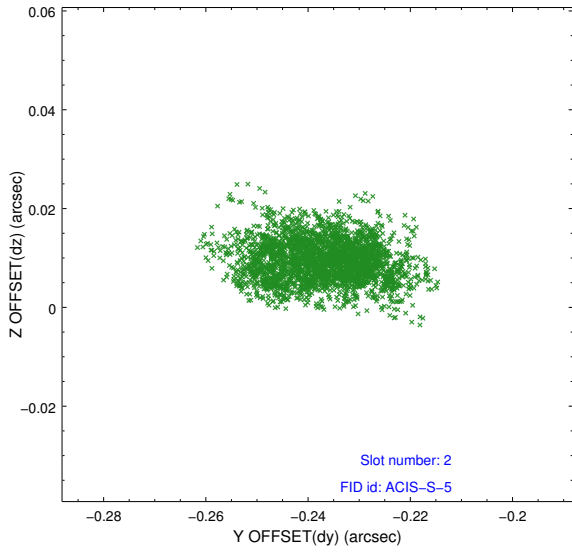
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.06.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.39350503099

A.2 Comments