

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12913 - L2 Version 2
Chandra X-Ray Center

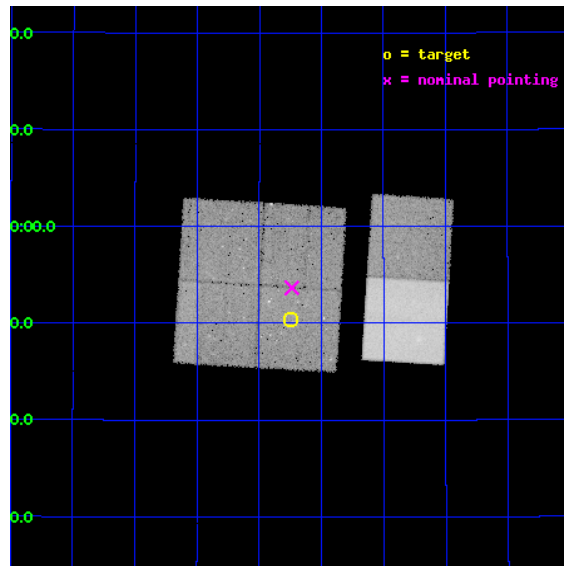
L2 Processing Date : Feb 1 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

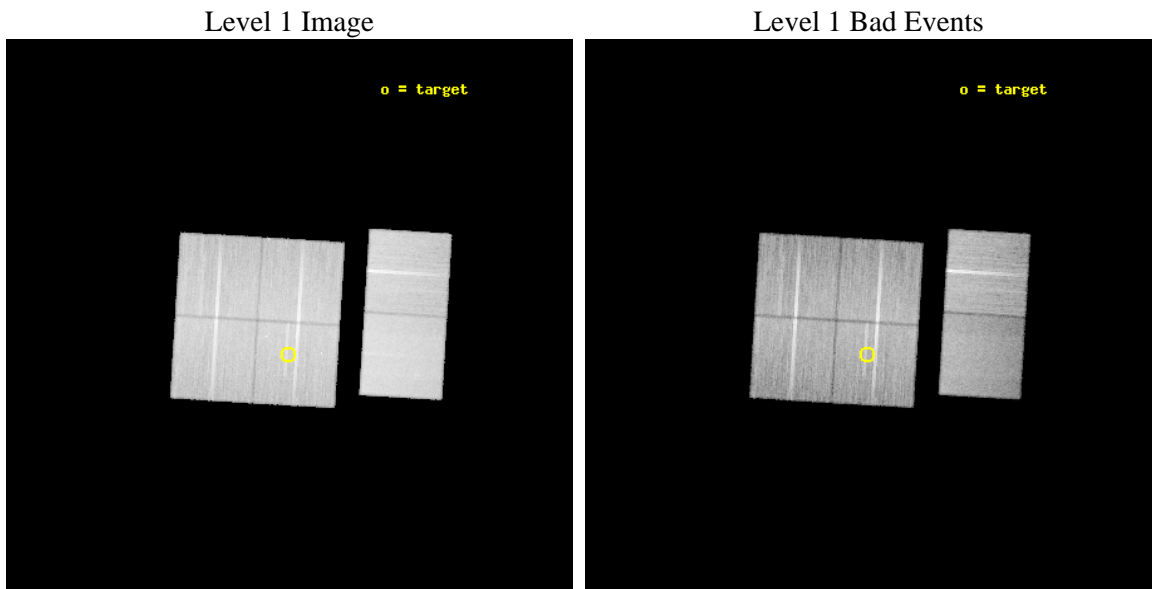
seq_num	801050	Sequence number
obs_id	12913	Observation id
title	DLSCL J0916+2953: A New Transverse Cluster Merger	Proposal title
observer	William Dawson	Principal investigator
object	DLSCL J0916+2953	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	139.061	Observer's specified target RA [deg]
dec_targ	29.84	Observer's specified target Dec [deg]
ra_nom	139.05940734845	Nominal RA [deg]
dec_nom	29.894388450464	Nominal Dec [deg]
roll_nom	93.497431150165	Nominal Roll [deg]
revision	2	Processing version of data
ontime	39051.667812049	Sum of GTIs [s]
liveltime	38557.172080122	Livetime [s]
ontime0	39051.544692039	Sum of GTIs [s]
ontime1	39045.10366112	Sum of GTIs [s]
ontime2	39048.385721803	Sum of GTIs [s]
ontime3	39051.667812049	Sum of GTIs [s]
ontime6	39045.267881453	Sum of GTIs [s]
ontime7	39051.708852053	Sum of GTIs [s]
l2events	281529	Number of level 2 events



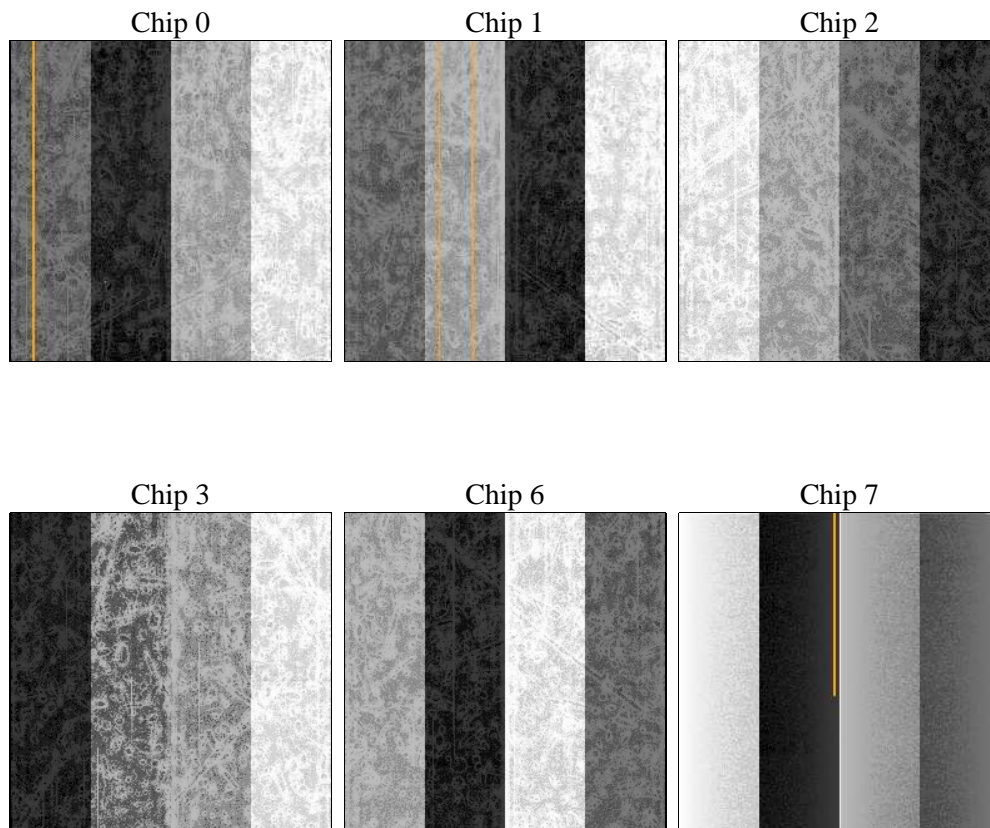
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	39051.667812049	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	39051.544692039	Sum of GTIs [s]
date	2012-02-01T09:00:07	Date and time of file creation	ontime1	39045.10366112	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	39048.385721803	Sum of GTIs [s]
			ontime3	39051.667812049	Sum of GTIs [s]
			ontime6	39045.267881453	Sum of GTIs [s]
			ontime7	39051.708852053	Sum of GTIs [s]
			l1events	1680524	Number of level 1 events

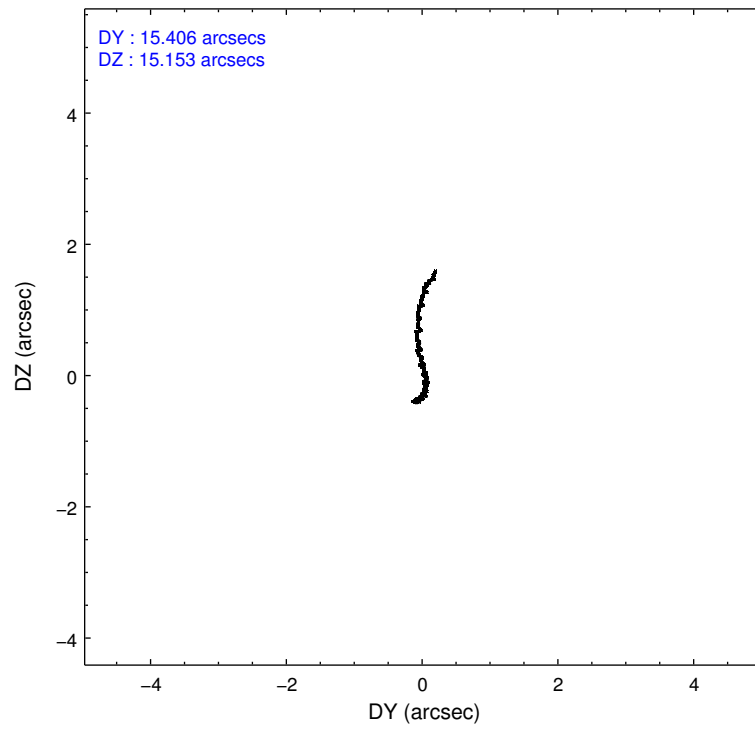
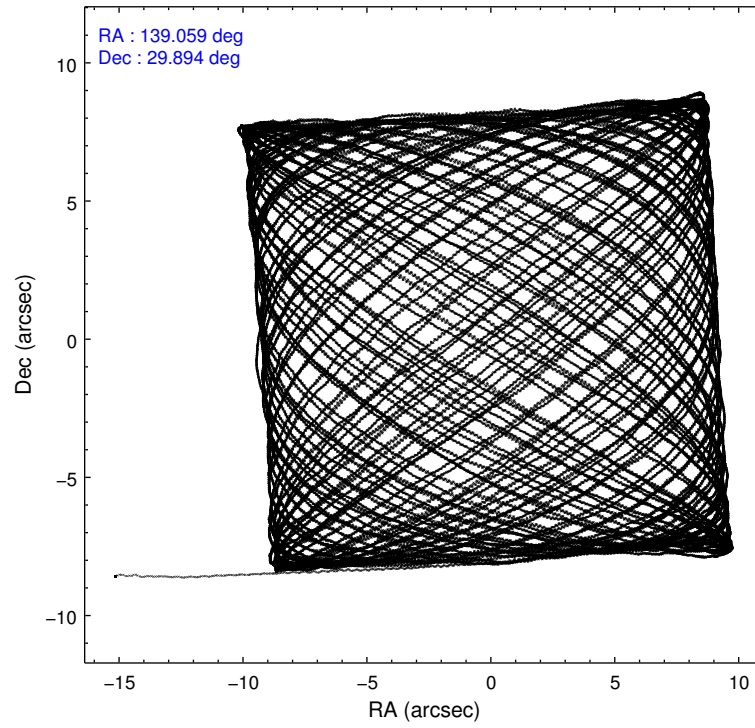
2.1.4 Events

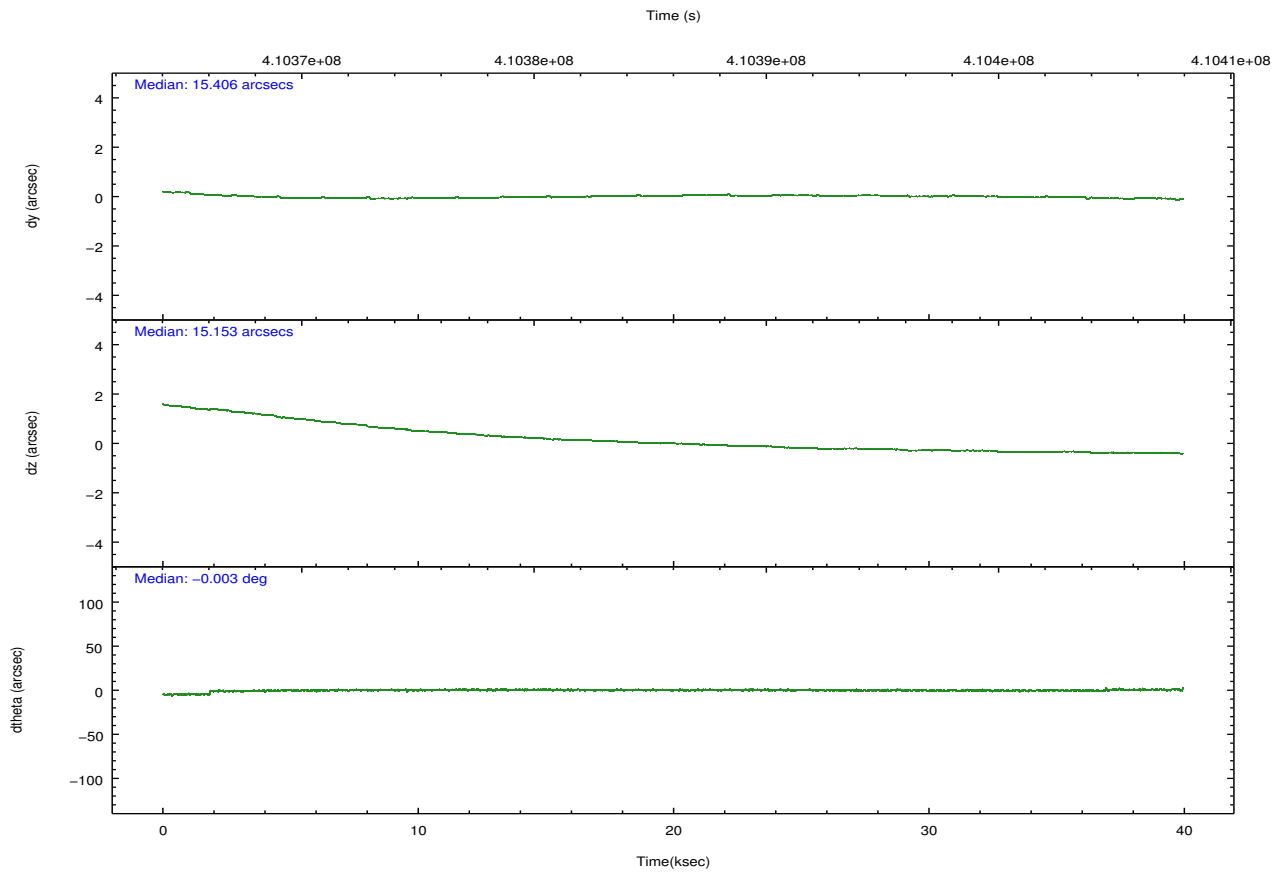
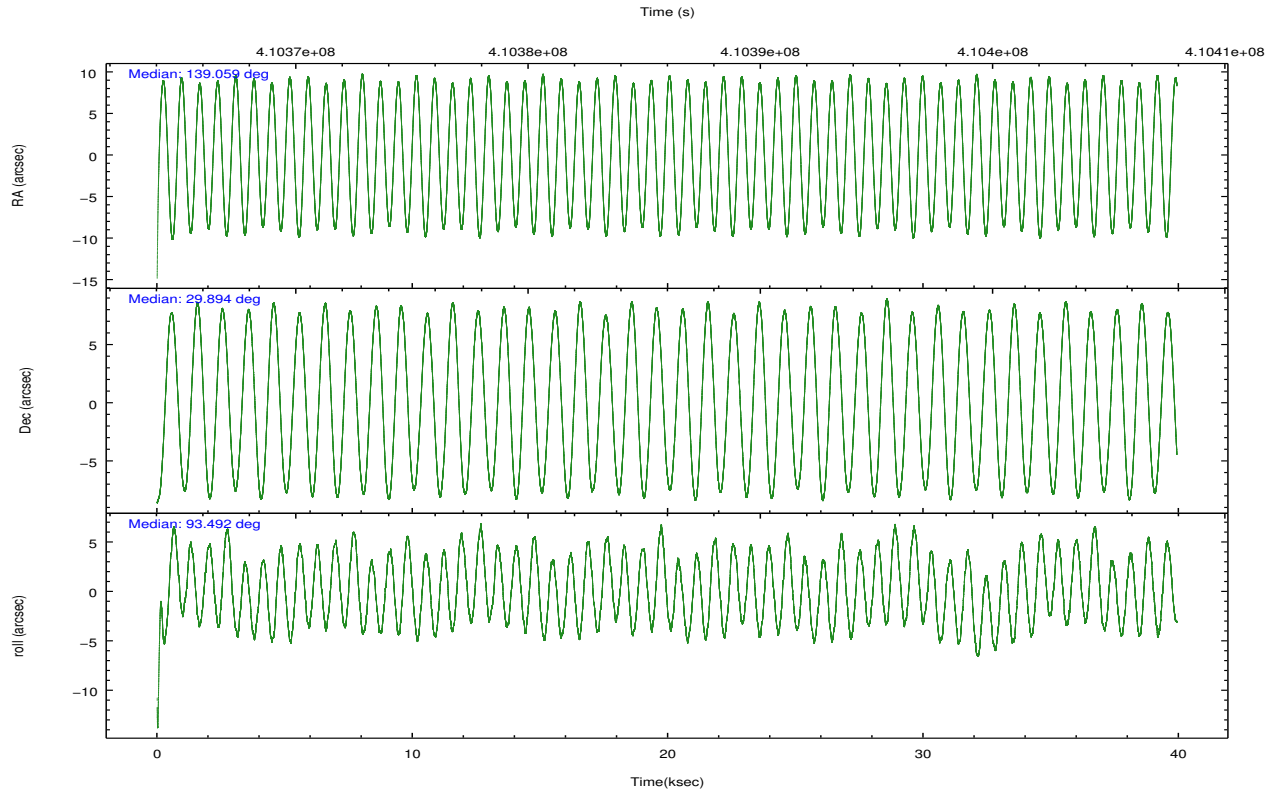
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	254348	256747	269250	266938	288844	344397	grade 0 events	10846	12113	10674	11473	10660	13847
rejected events	223523	223020	239615	236713	257135	190180		4%	4%	3%	4%	3%	4%
rejected %	87%	86%	88%	88%	89%	55%	grade 1 events	152	131	181	157	168	420
								0%	0%	0%	0%	0%	0%
							grade 2 events	7511	7852	7091	6524	7229	31555
								2%	3%	2%	2%	2%	9%
							grade 3 events	3359	3407	3087	3092	3411	13685
								1%	1%	1%	1%	1%	3%
							grade 4 events	3107	3386	3219	3124	3239	13676
								1%	1%	1%	1%	1%	3%
							grade 5 events	11480	12176	10741	12715	13140	36207
								4%	4%	3%	4%	4%	10%
							grade 6 events	6006	6976	5569	6013	7174	81467
								2%	2%	2%	2%	2%	23%
							grade 7 events	211887	210706	228688	223840	243823	153540
								83%	82%	84%	83%	84%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	139.077011	139.0594073484506	CCD I2 on	Y	Y
[deg] Pointing Dec	29.871516	29.89438845046416	CCD I3 on	Y	Y
[deg] Pointing Roll	93.279975	93.49743115016486	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	O2	Y
[mm] SIM translation stage pos	-225.792463	-225.7829997647864	CCD S3 on	O1	Y
[mm] SIM translation stage offset	-7.8	-7.809453238143249	CCD S4 on	N	N
[s] Observation start time (MET)	410366960.184000	410364882.12969	CCD S5 on	N	N
Observation start date	2011-01-02T14:48:14	2011-01-02T14:14:42	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	410405960.184000	410406309.55683	On-chip summing requested	N	N
Observation end date	2011-01-03T01:38:14	2011-01-03T01:45:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





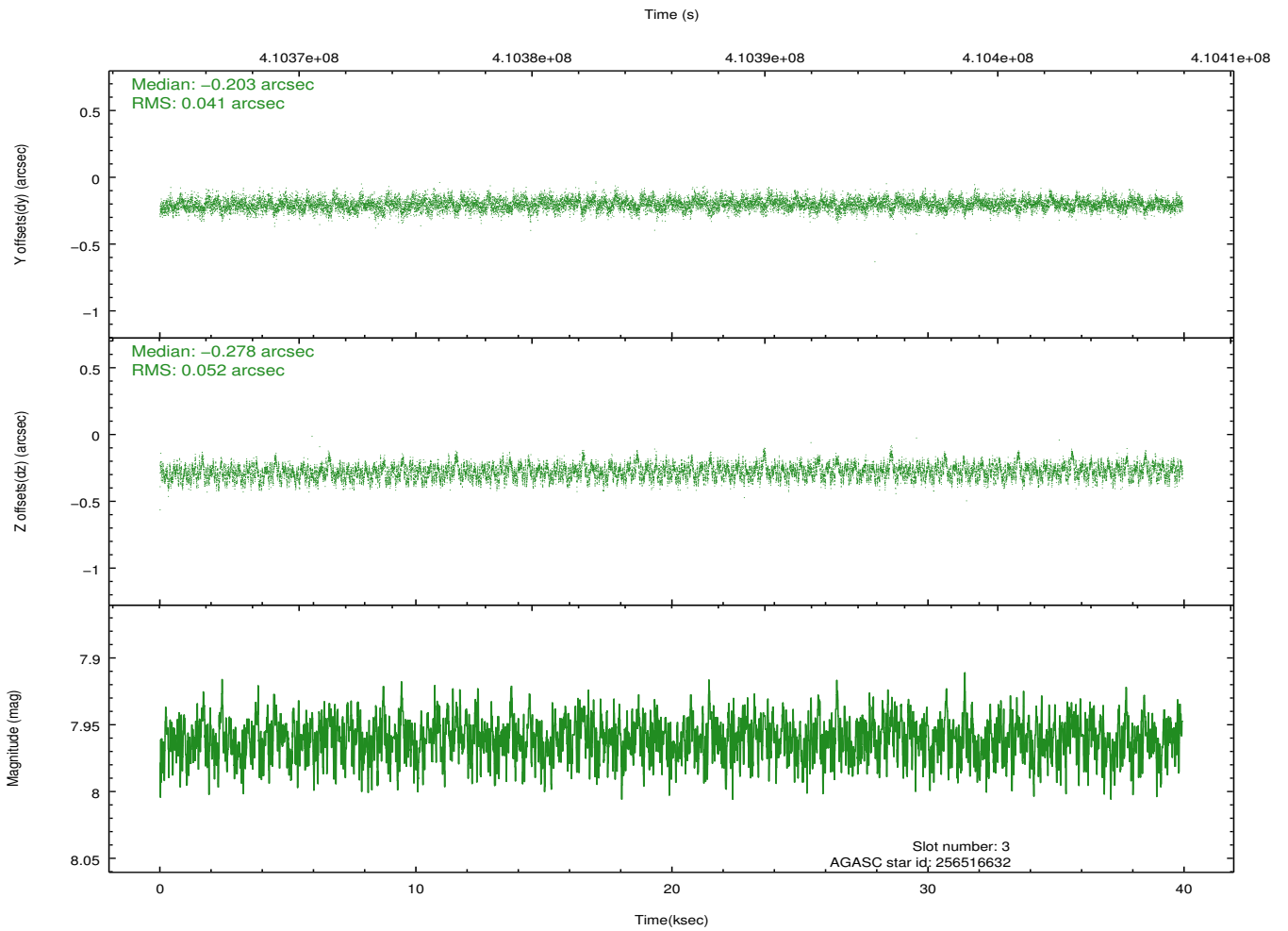
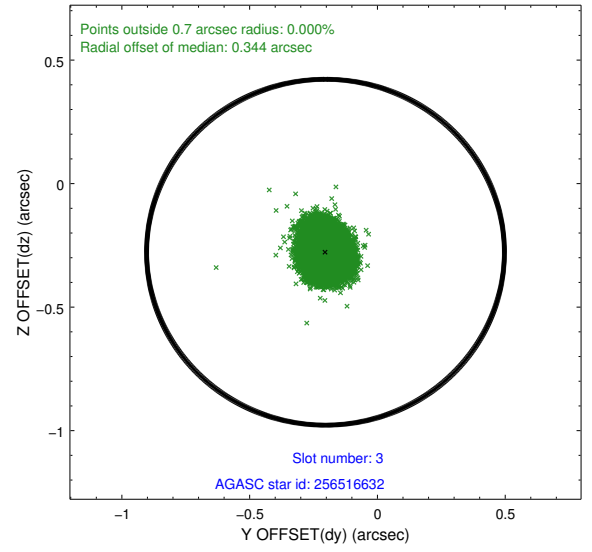
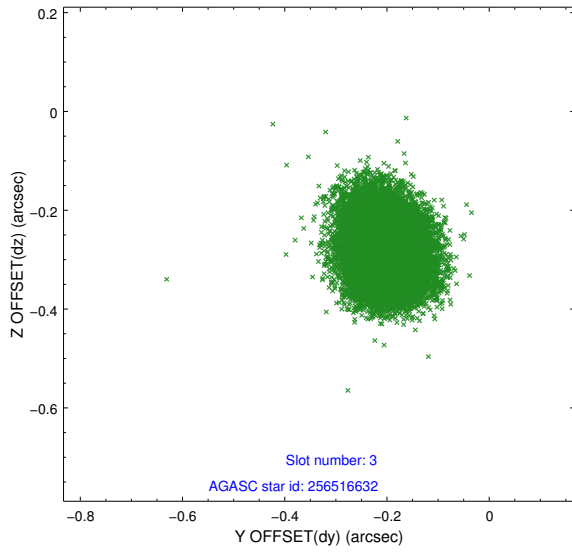
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	9740	0.127	-0.142	0.012	0.026	0.000000	0.000000	924.05	-999.39
1	FID	ACIS-I-4	6.91	9740	0.035	0.062	0.018	0.027	0.000000	0.000000	2143.53	901.60
2	FID	ACIS-I-5	6.98	9740	-0.259	0.151	0.017	0.025	0.000000	0.000000	-1824.35	898.50
3	GUIDE	256516632	7.96	19476	-0.203	-0.278	0.071	0.114	138.597890	29.944780	352.01	1476.76
4	GUIDE	256645296	9.43	19454	-0.086	0.238	0.112	0.182	139.853345	29.315976	-2127.51	-2318.75
5	GUIDE	256645808	9.16	19472	0.223	-0.005	0.096	0.153	139.646005	29.740726	-567.53	-1748.40
6	GUIDE	256646640	8.18	19473	0.088	0.053	0.078	0.120	139.706384	29.820517	-290.27	-1951.11
7	GUIDE	326772968	8.62	19395	-0.020	-0.009	0.081	0.132	139.254366	30.374631	1777.55	-653.42

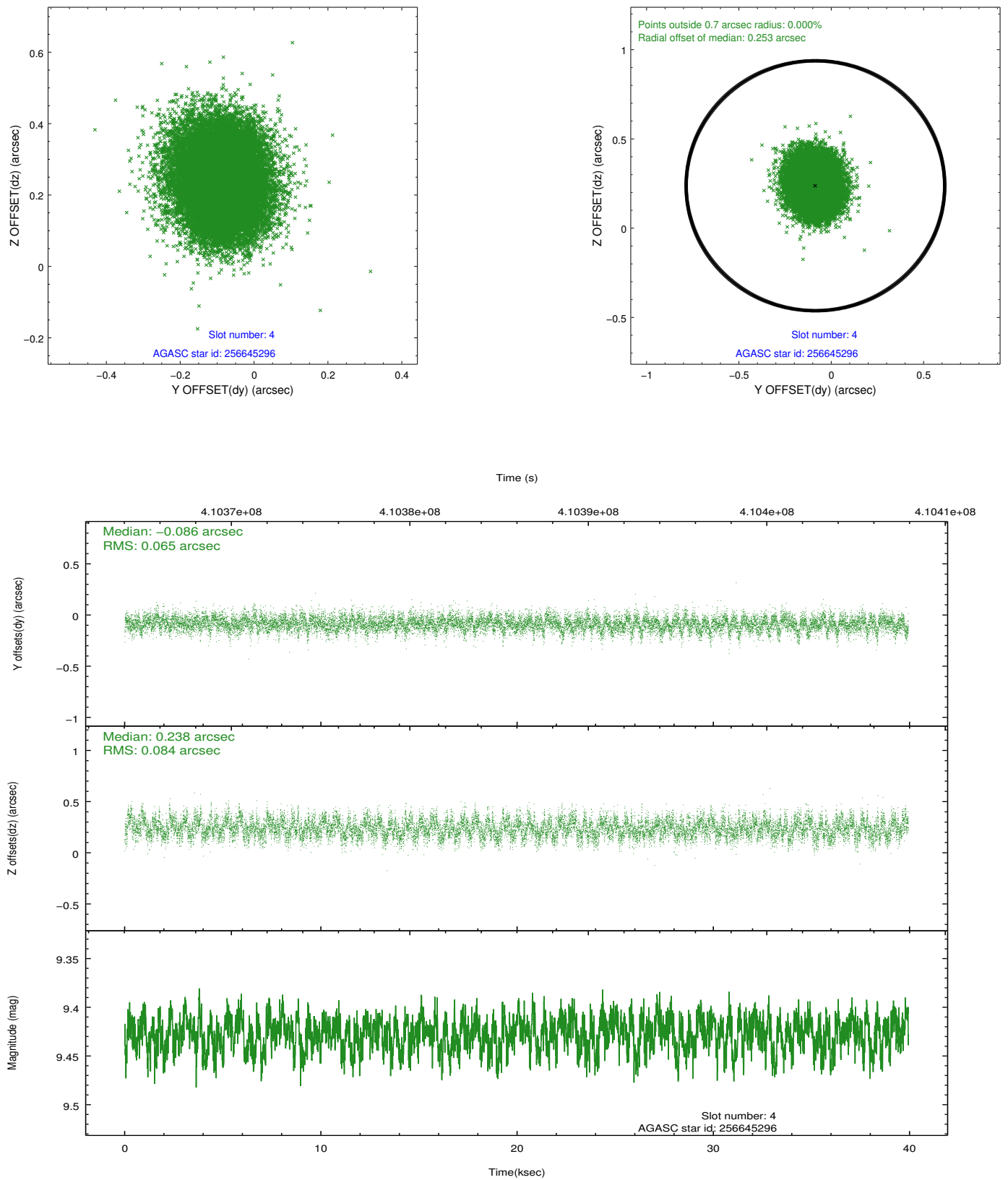
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2.4 Star Slots

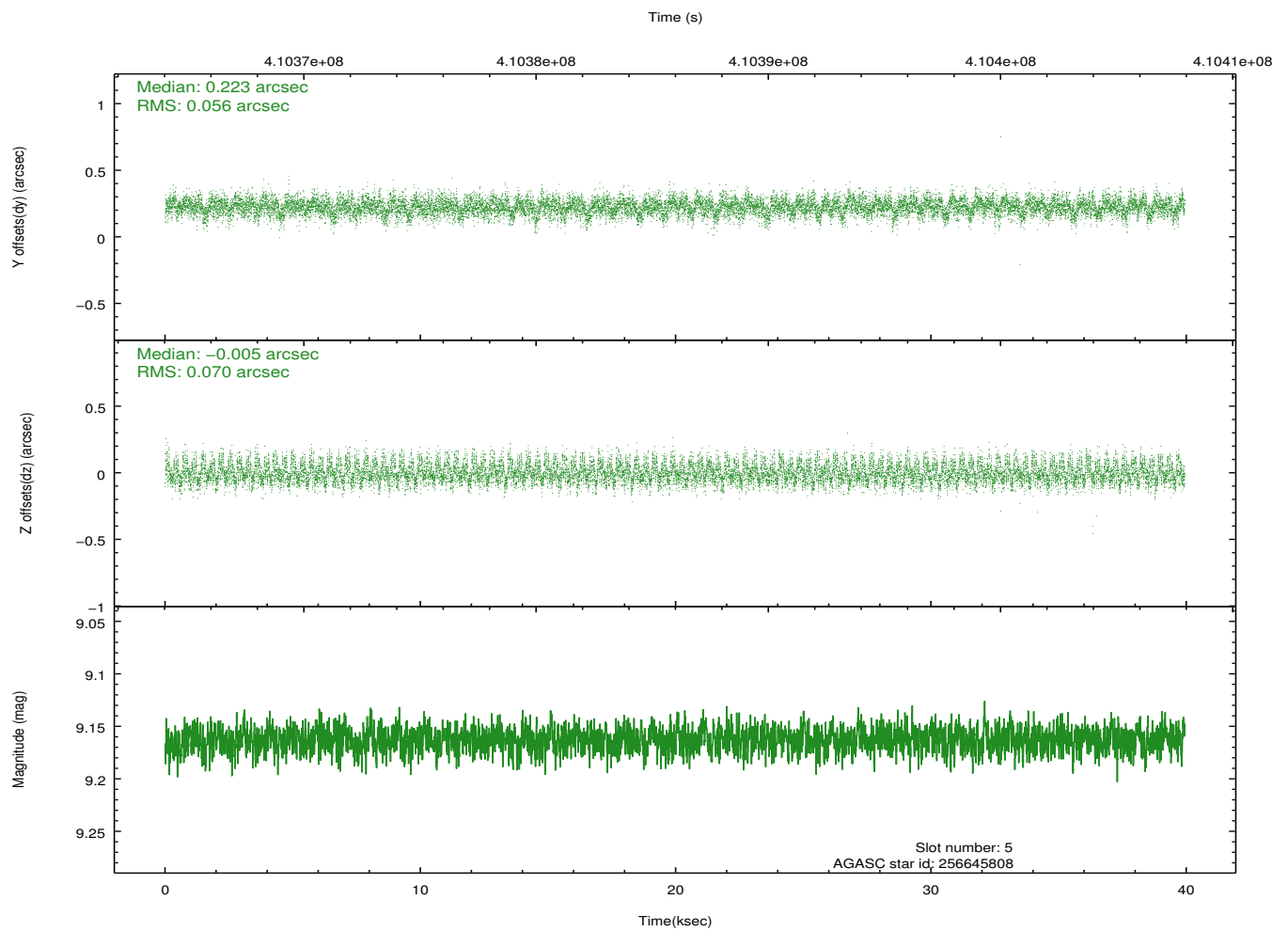
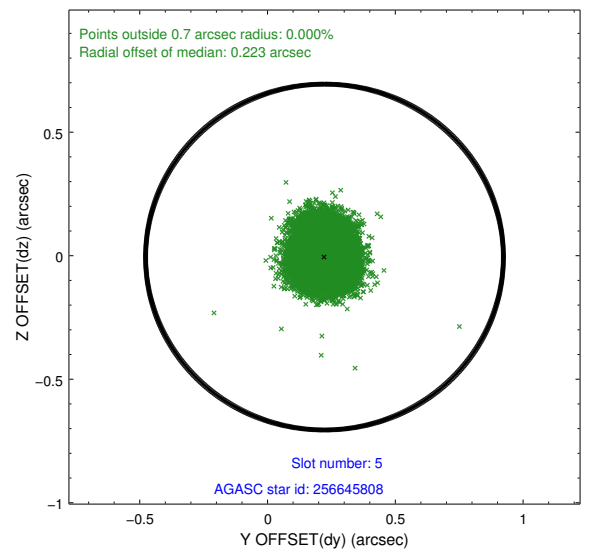
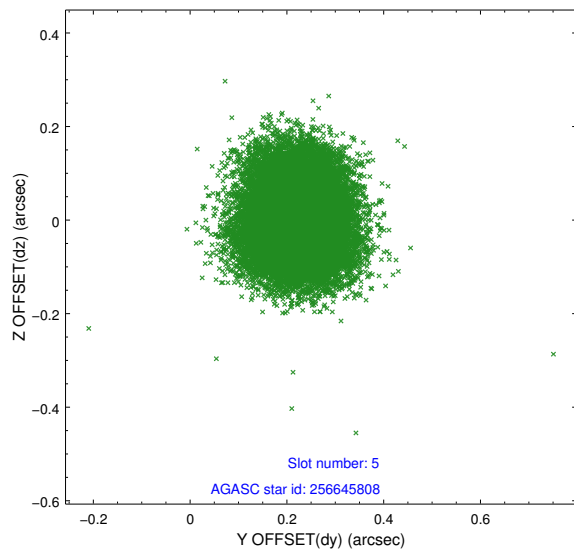
2.4.1 Slot 3



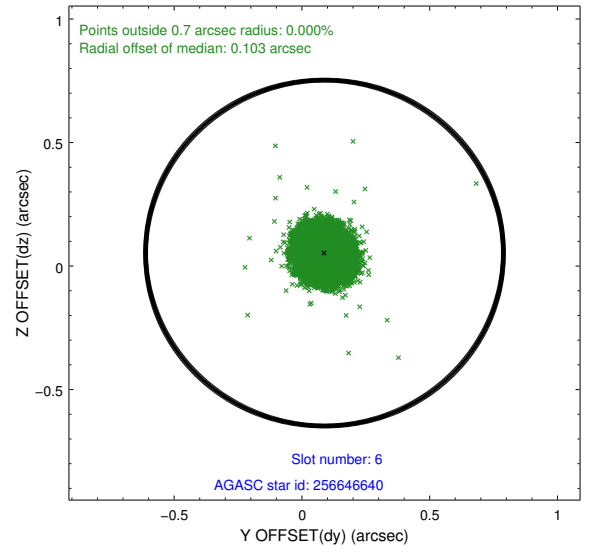
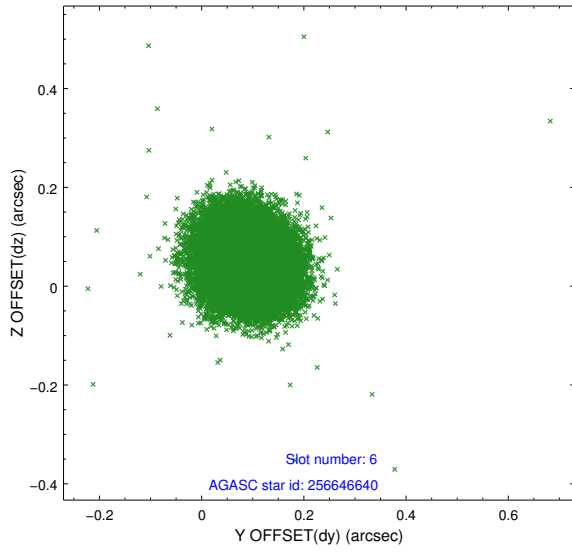
2.4.2 Slot 4



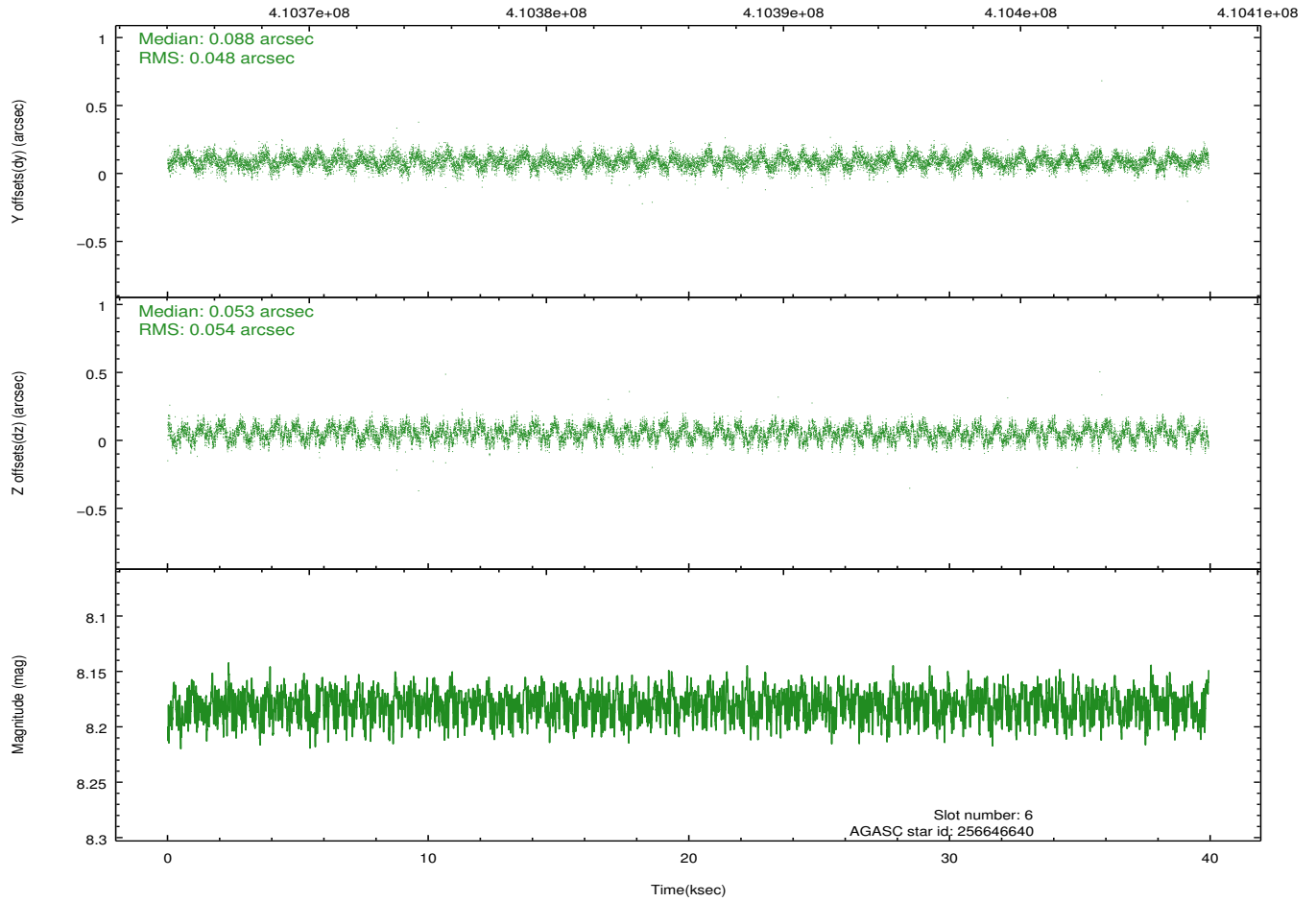
2.4.3 Slot 5



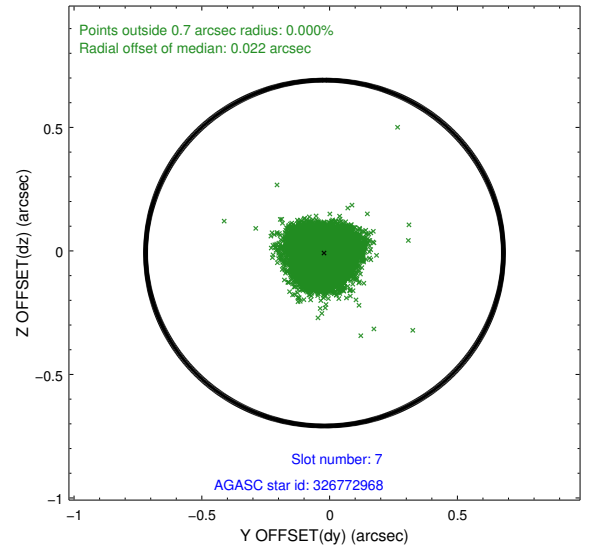
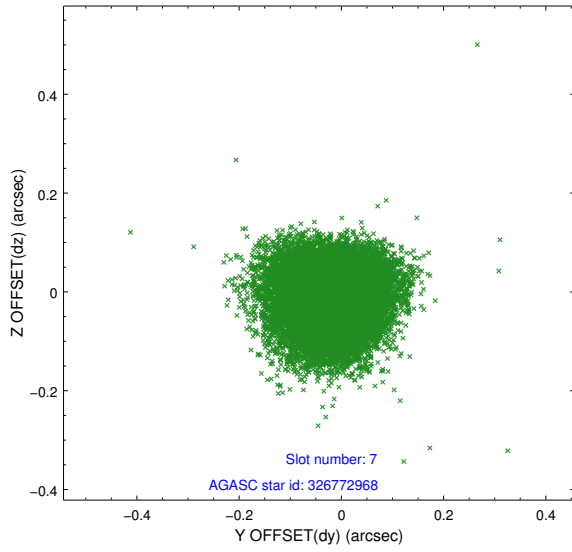
2.4.4 Slot 6



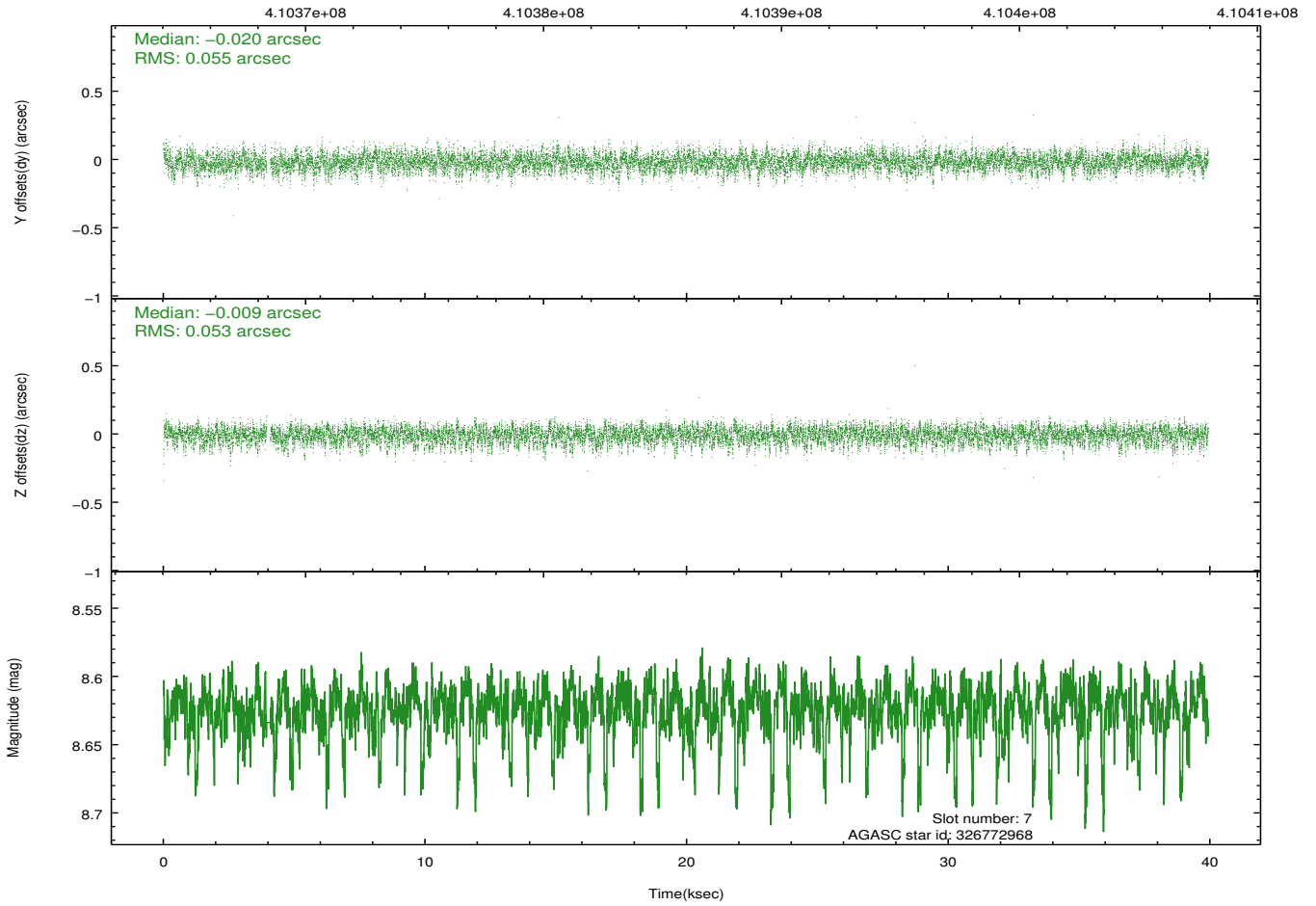
Time (s)



2.4.5 Slot 7

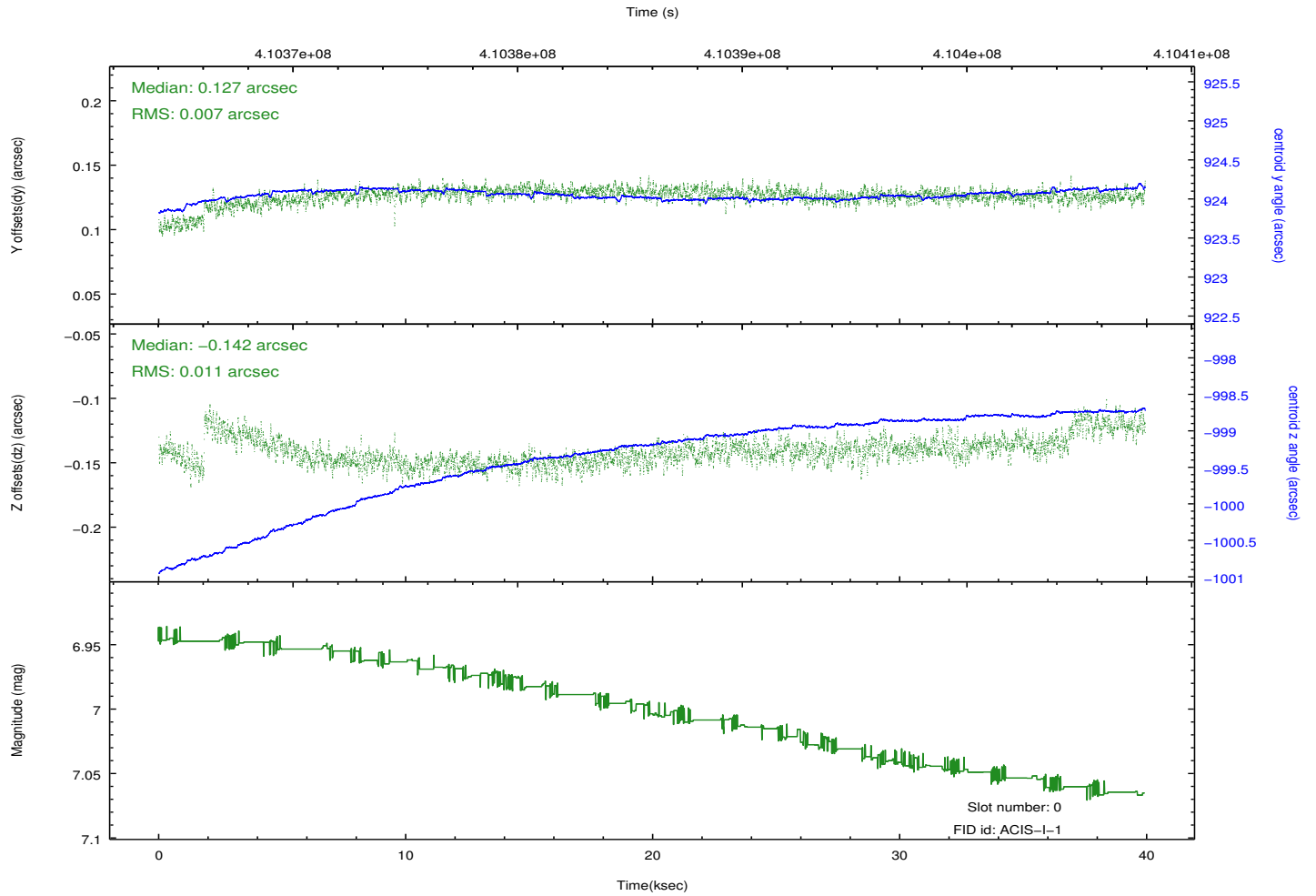
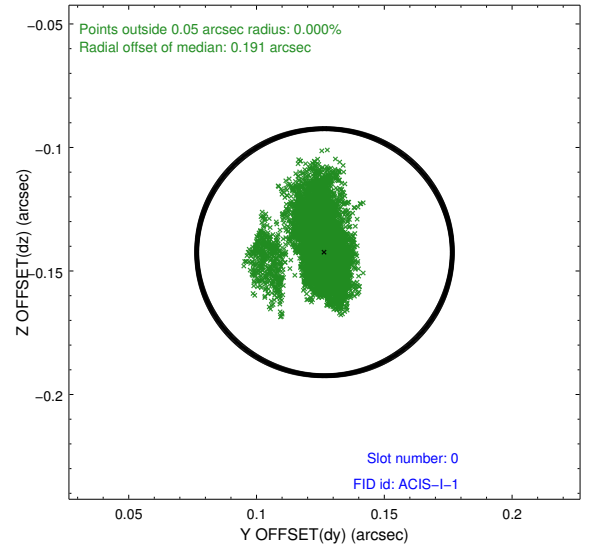
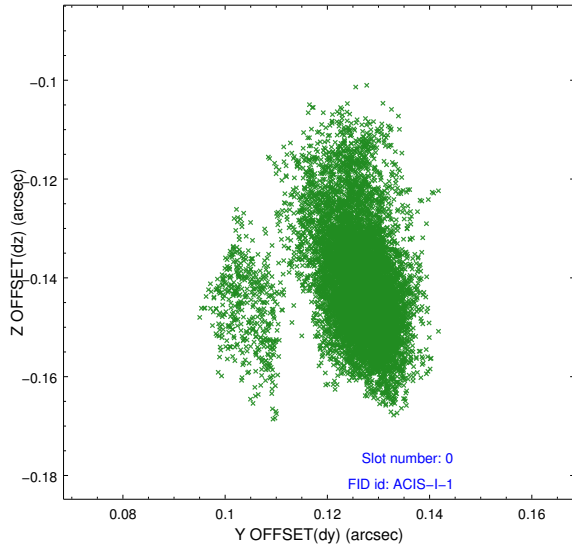


Time (s)

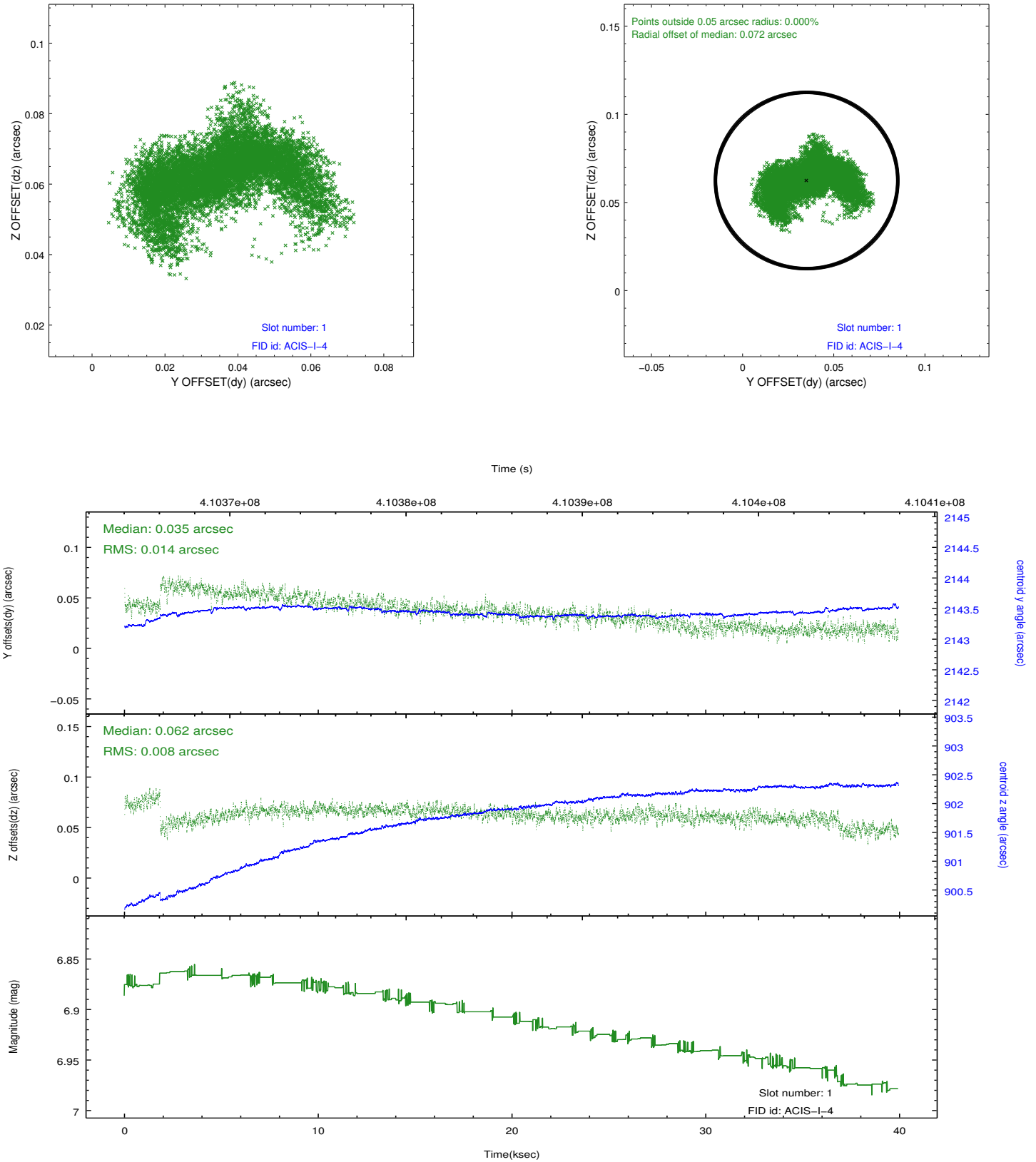


2.5 FID Slots

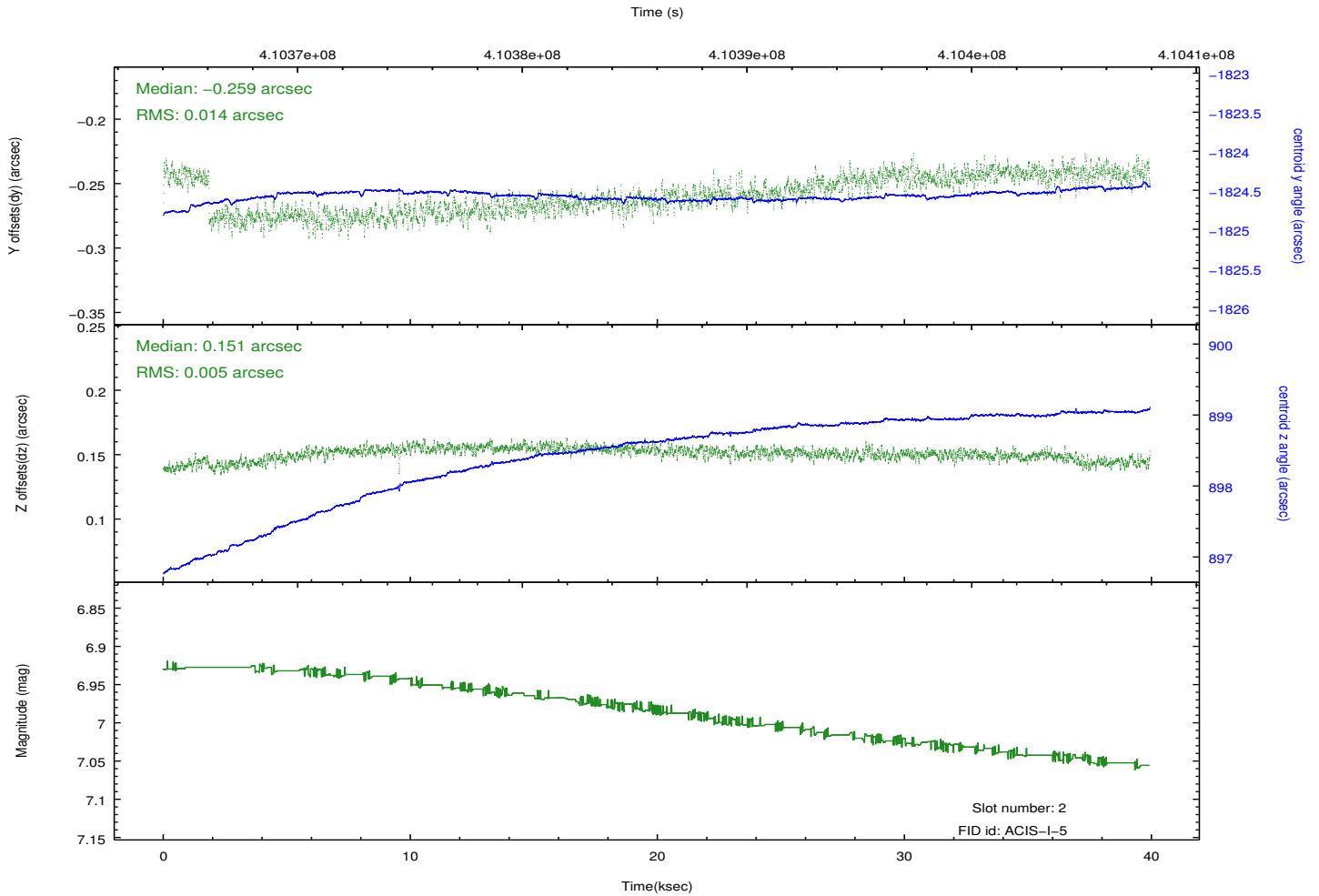
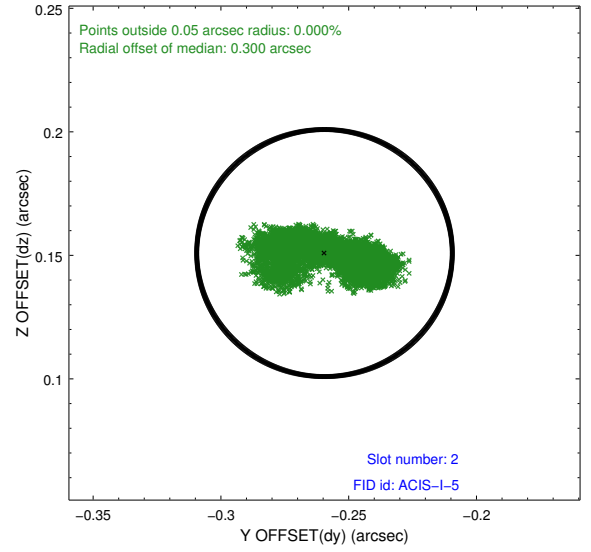
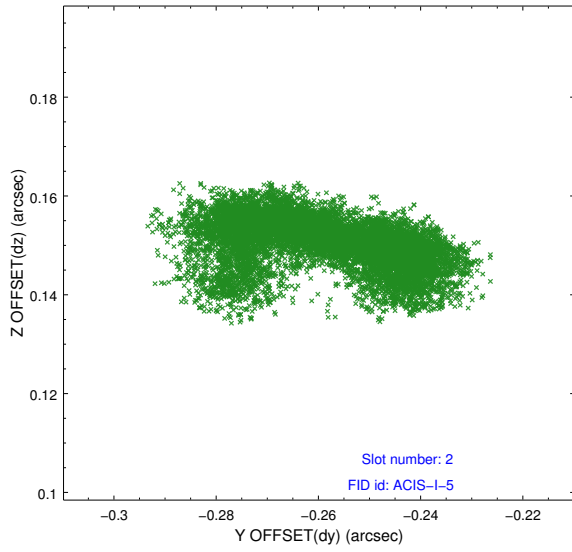
2.5.1 Slot 0



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)	2012.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.05166781348

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.

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Joint proposal with HST.