

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12919 - L2 Version 2
Chandra X-Ray Center

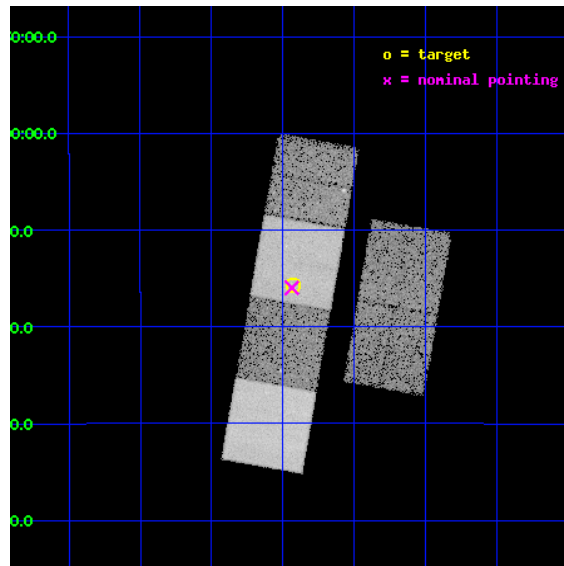
L2 Processing Date : Feb 6 2012

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1 Front

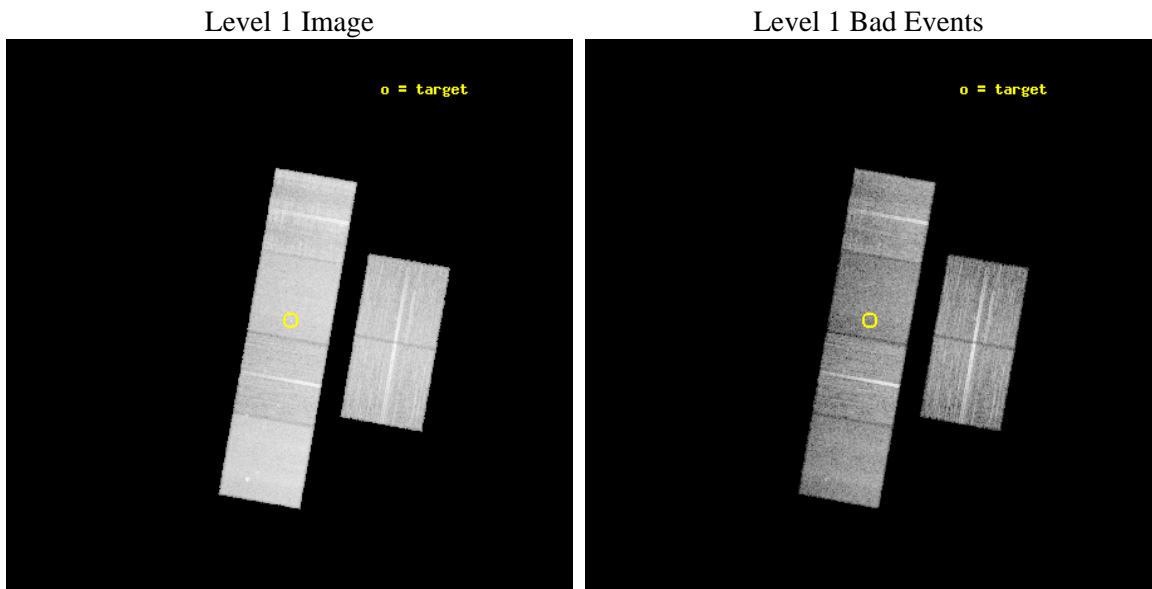
seq_num	900952	Sequence number
obs_id	12919	Observation id
title	The differing environments of dark gamma-ray bursts	Proposal title
observer	Dr Andrew Levan	Principal investigator
object	GRB110312A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	157.481125	Observer's specified target RA [deg]
dec_targ	-5.262556	Observer's specified target Dec [deg]
ra_nom	157.48437689553	Nominal RA [deg]
dec_nom	-5.2662063489977	Nominal Dec [deg]
roll_nom	280.03426427304	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15049.599943995	Sum of GTIs [s]
livetime	14859.032847723	Livetime [s]
ontime2	15046.358923614	Sum of GTIs [s]
ontime3	15046.358903766	Sum of GTIs [s]
ontime5	15049.599943995	Sum of GTIs [s]
ontime6	15049.599943995	Sum of GTIs [s]
ontime7	15049.599943995	Sum of GTIs [s]
ontime8	15049.599943995	Sum of GTIs [s]
l2events	170946	Number of level 2 events



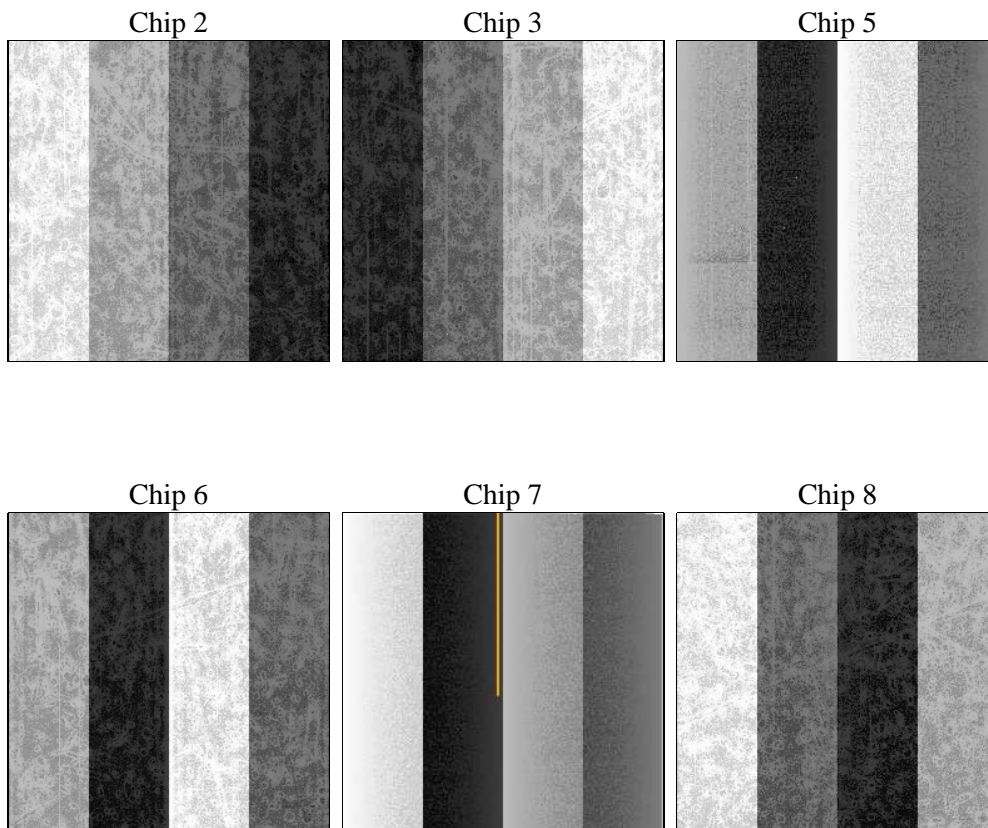
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	15049.599943995	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	15046.358923614	Sum of GTIs [s]
date	2012-02-06T21:42:46	Date and time of file creation	ontime3	15046.358903766	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	15049.599943995	Sum of GTIs [s]
			ontime6	15049.599943995	Sum of GTIs [s]
			ontime7	15049.599943995	Sum of GTIs [s]
			ontime8	15049.599943995	Sum of GTIs [s]
			l1events	738991	Number of level 1 events

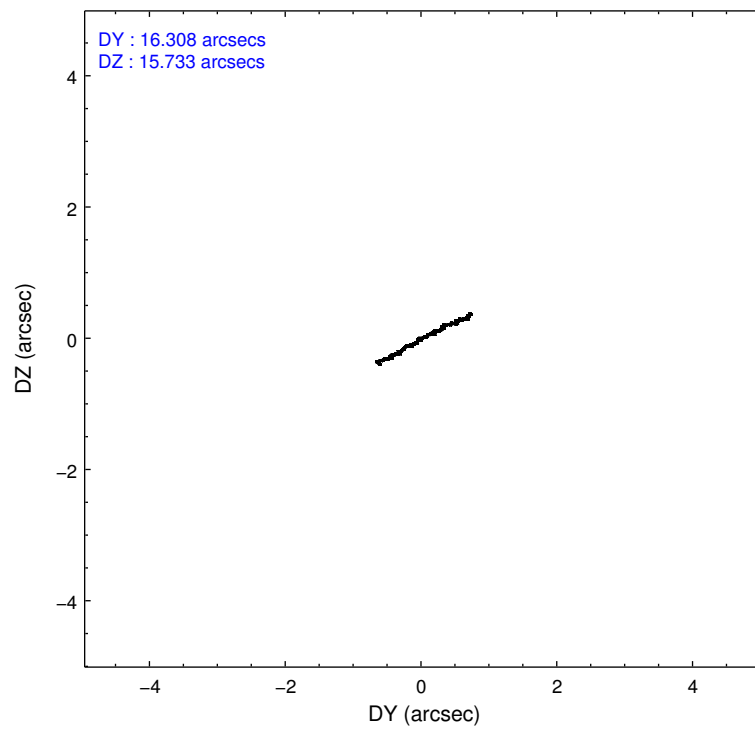
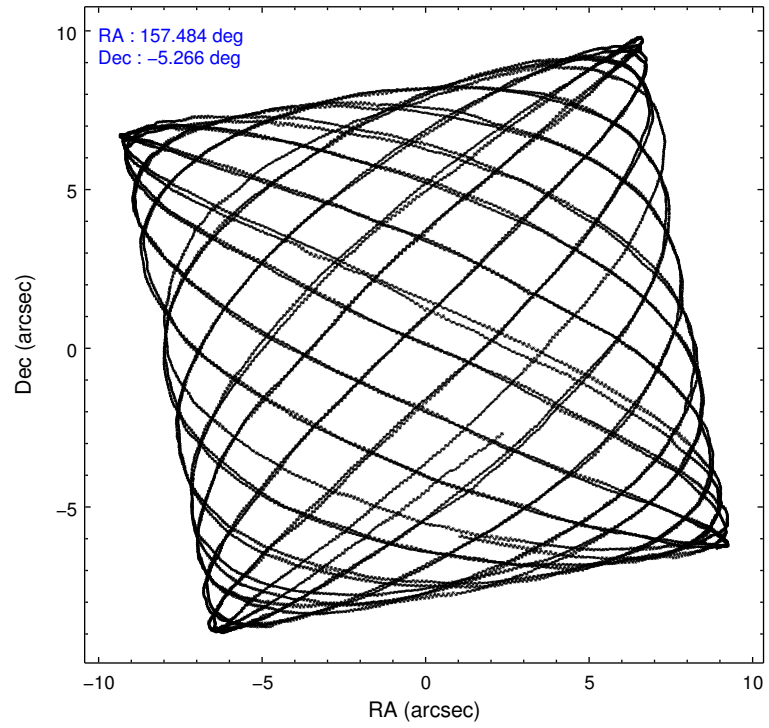
2.1.4 Events

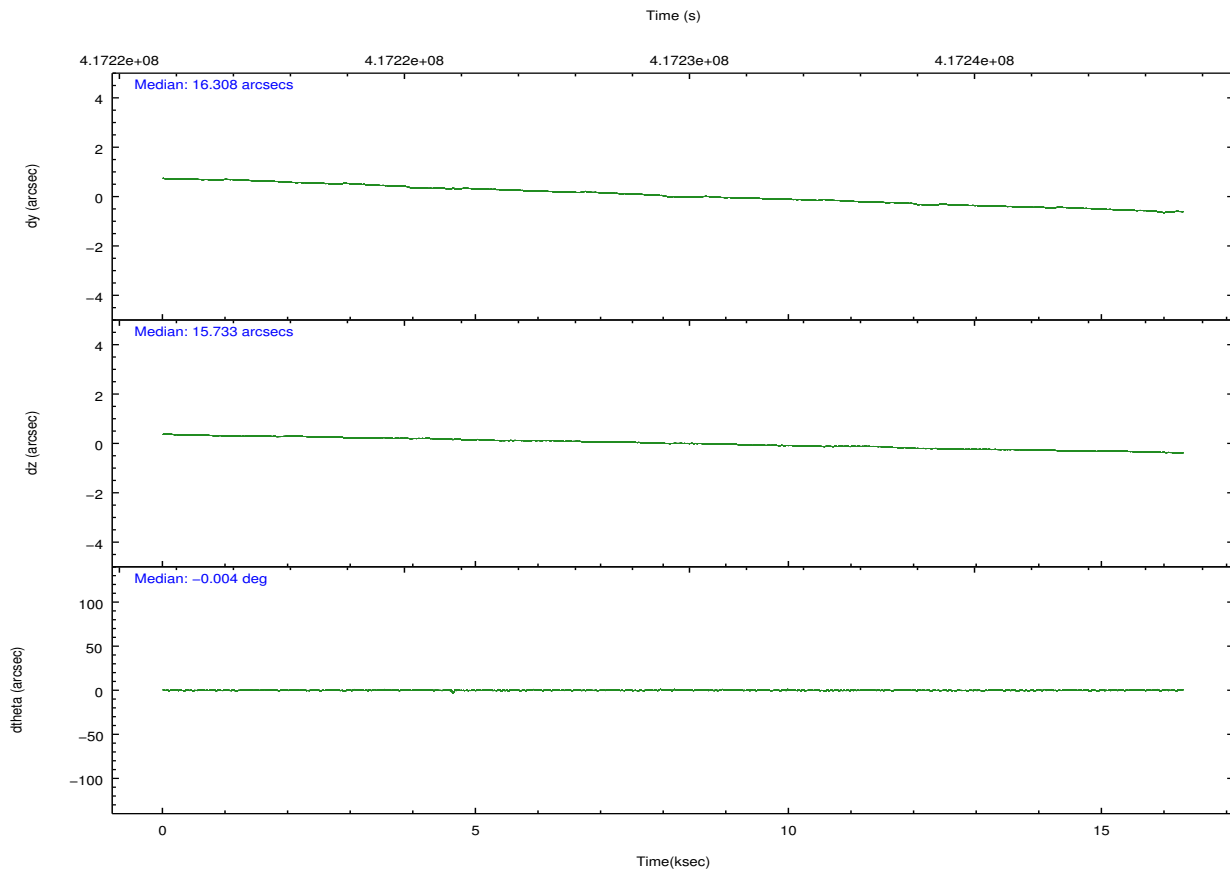
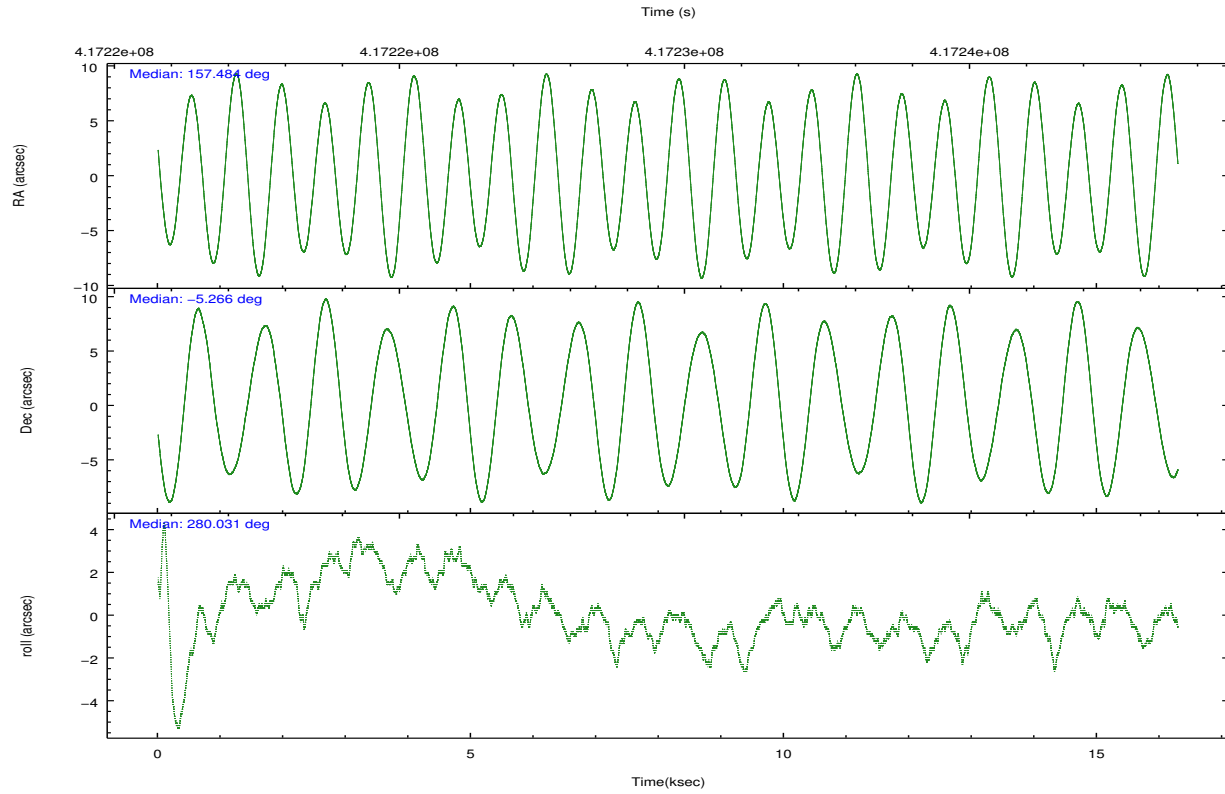
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	110532	100149	156645	107234	130207	134224	grade 0 events	3924	3691	5100	4144	5272	10401
rejected events	99434	89585	81070	95273	71881	98888		3%	3%	3%	3%	4%	7%
rejected %	89%	89%	51%	88%	55%	73%	grade 1 events	58	54	347	65	161	118
								0%	0%	0%	0%	0%	0%
							grade 2 events	2673	2298	22958	2632	11780	8393
								2%	2%	14%	2%	9%	6%
							grade 3 events	1162	1193	2813	1286	4958	3810
								1%	1%	1%	1%	3%	2%
							grade 4 events	1175	1186	2736	1240	5067	3457
								1%	1%	1%	1%	3%	2%
							grade 5 events	4351	4925	11745	4812	13318	7028
								3%	4%	7%	4%	10%	5%
							grade 6 events	2167	2197	41982	2663	31262	9277
								1%	2%	26%	2%	24%	6%
							grade 7 events	95022	84605	68964	90392	58389	91740
								85%	84%	44%	84%	44%	68%

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	157.466418	157.4843768955292	CCD I2 on	O1	Y
[deg] Pointing Dec	-5.245487	-5.266206348997669	CCD I3 on	O2	Y
[deg] Pointing Roll	279.875985	280.0342642730355	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	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	Y	Y
[s] Observation start time (MET)	417222871.184000	417221254.05948	CCD S5 on	N	N
Observation start date	2011-03-22T23:13:25	2011-03-22T22:47:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	417237871.184000	417238971.6979	On-chip summing requested	N	N
Observation end date	2011-03-23T03:23:25	2011-03-23T03:42:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



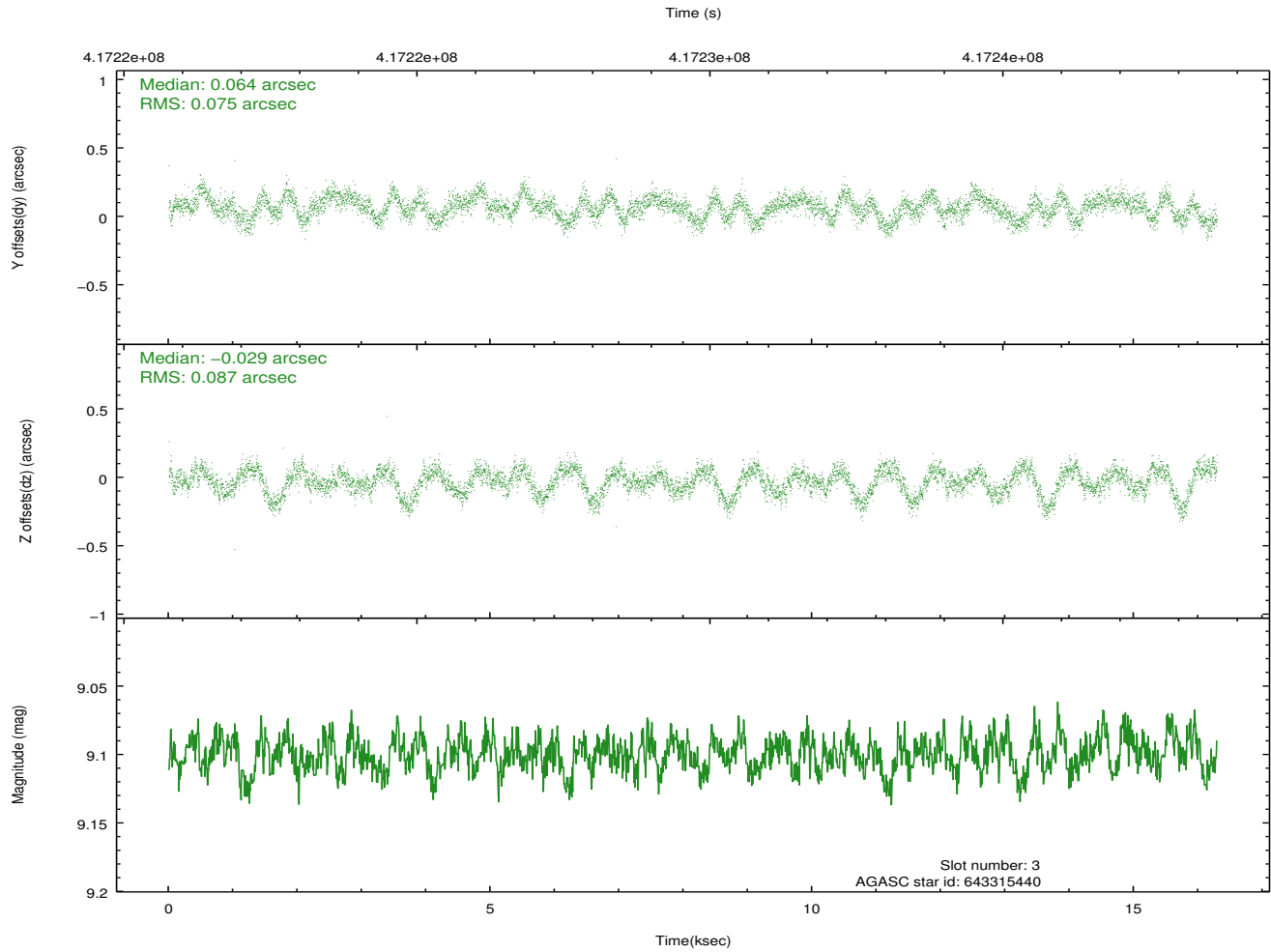
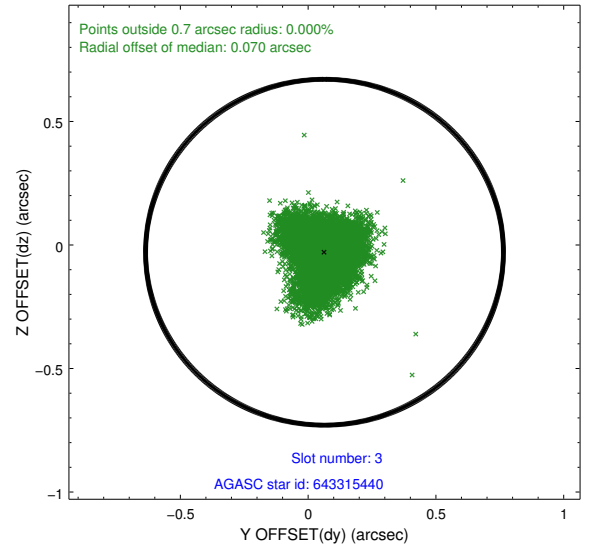
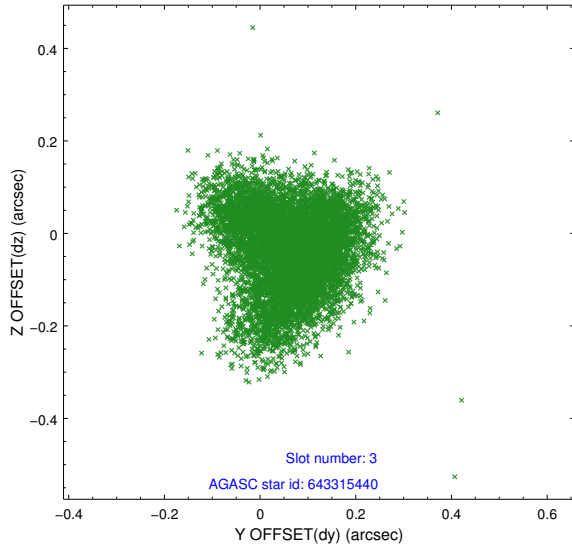


Slot Statistics

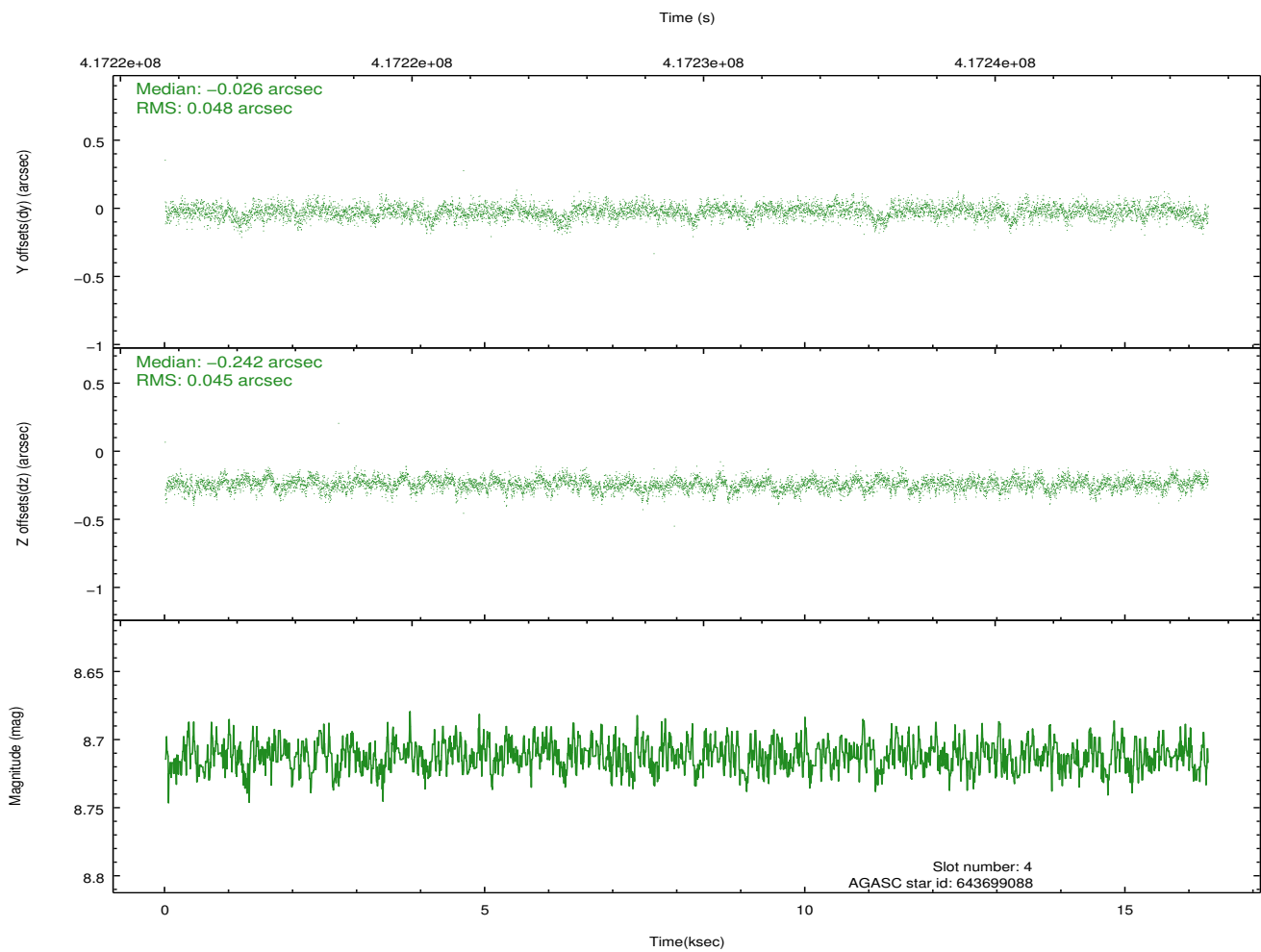
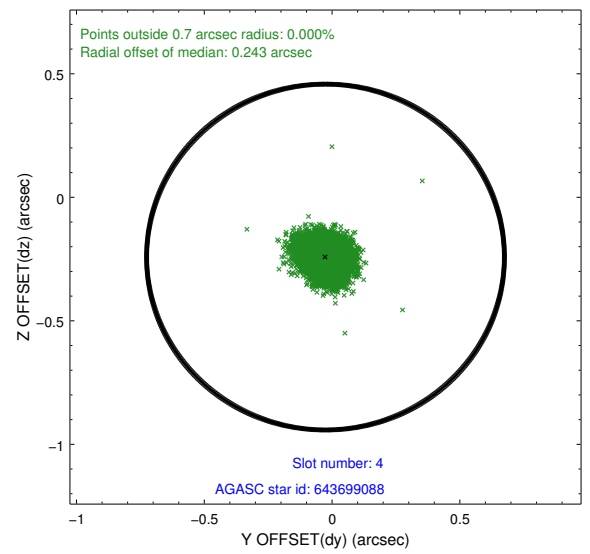
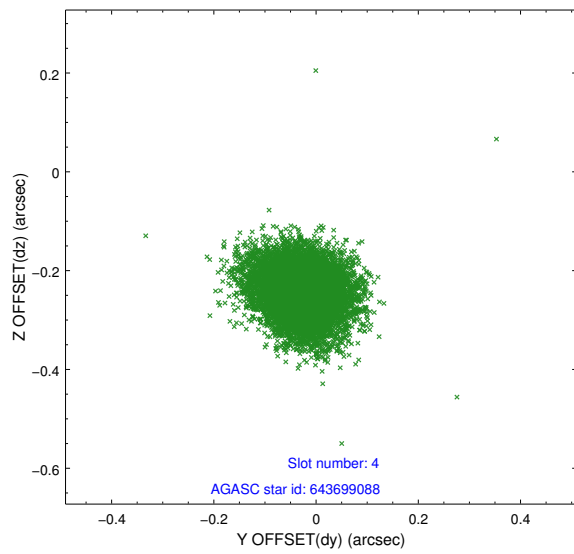
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	3973	-0.100	-0.013	0.011	0.019	0.000000	0.000000	-769.45	-1737.15
1	FID	ACIS-S-4	7.03	3973	0.184	0.052	0.010	0.016	0.000000	0.000000	2143.97	171.14
2	FID	ACIS-S-5	7.06	3974	-0.114	-0.030	0.008	0.018	0.000000	0.000000	-1821.98	165.01
3	GUIDE	643315440	9.10	7940	0.064	-0.029	0.123	0.198	157.096677	-4.814161	-1756.43	-1040.52
4	GUIDE	643699088	8.71	7942	-0.026	-0.242	0.069	0.116	156.974401	-5.675032	1222.09	-2002.02
5	GUIDE	643706064	9.32	7923	0.032	0.167	0.107	0.167	157.280021	-5.519048	856.48	-828.55
6	GUIDE	643707160	9.37	7940	-0.027	0.090	0.152	0.252	157.180579	-5.418015	437.09	-1115.56
7	GUIDE	644223864	8.98	7934	-0.053	0.026	0.099	0.163	157.677897	-4.843114	-1296.71	995.42

2.4 Star Slots

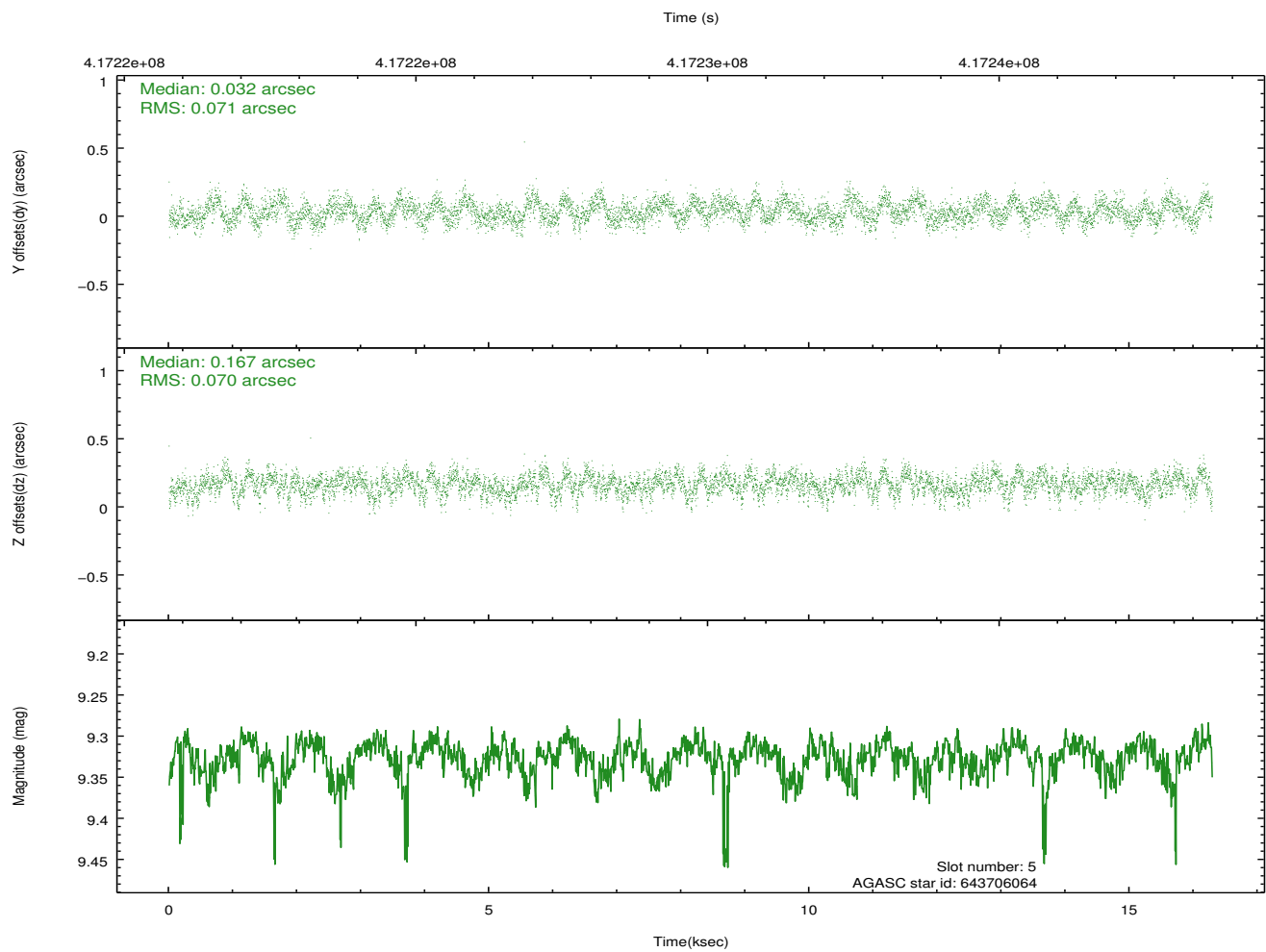
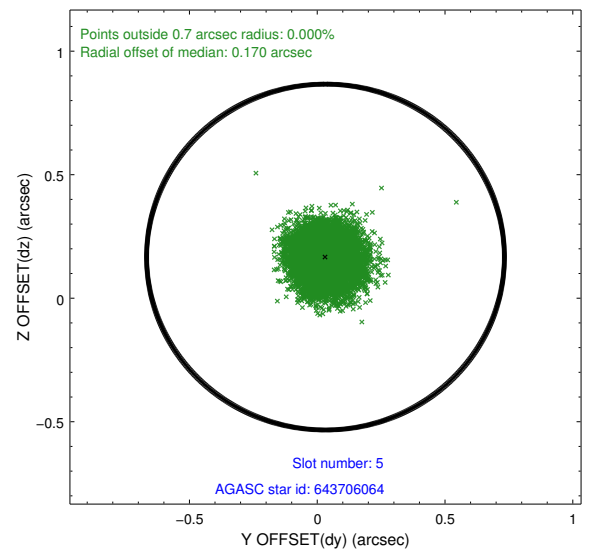
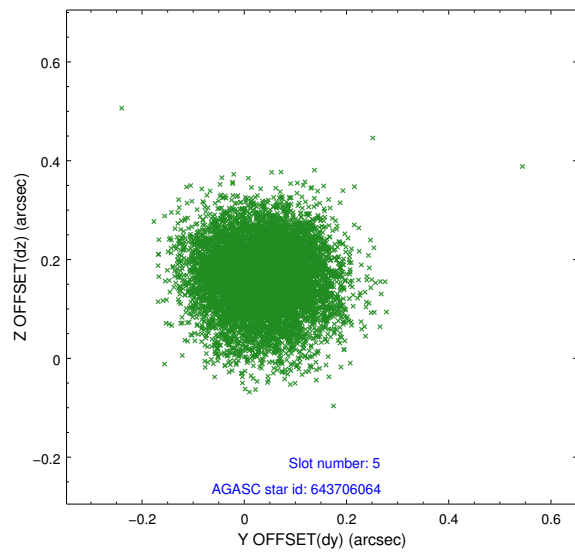
2.4.1 Slot 3



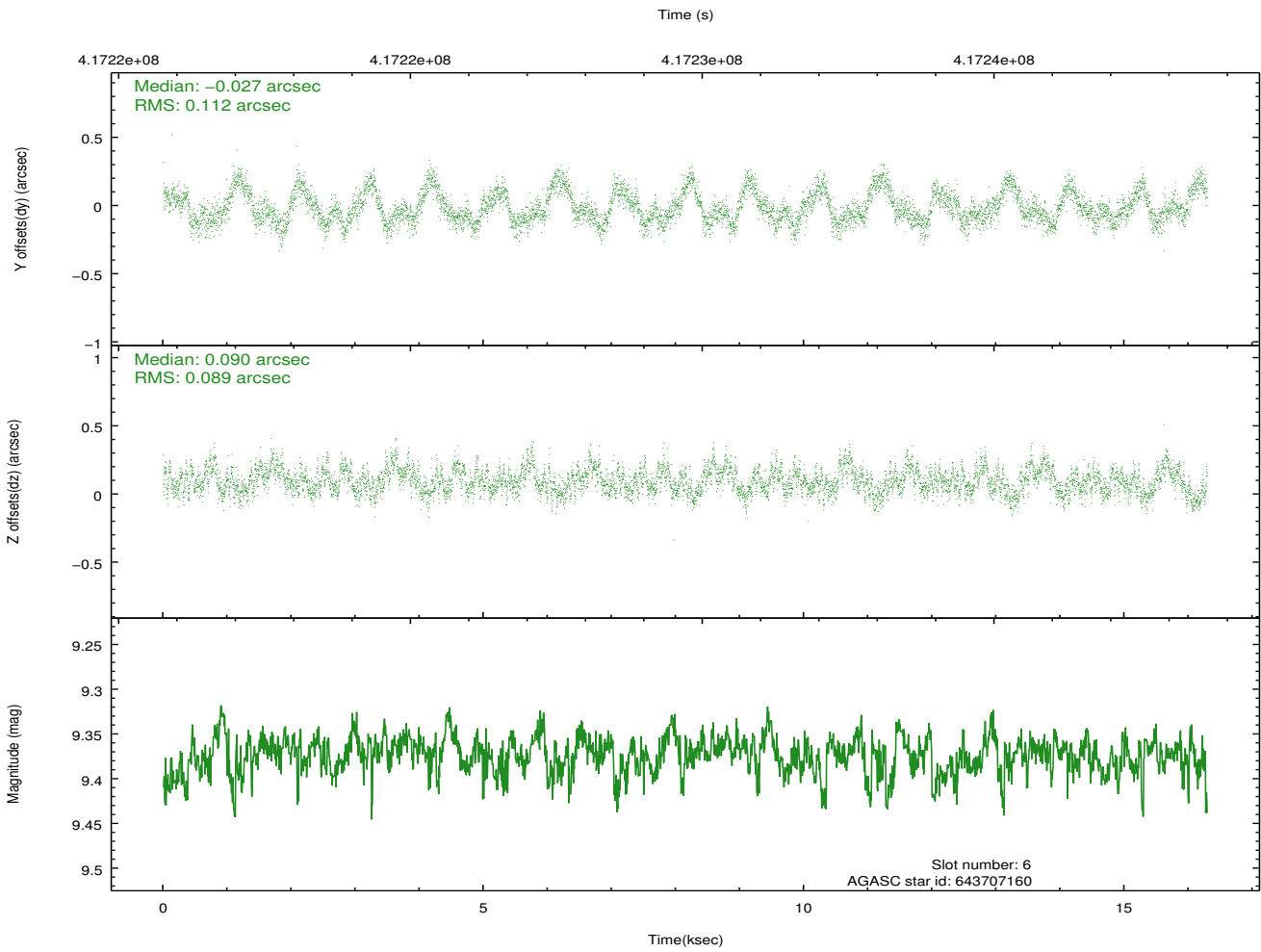
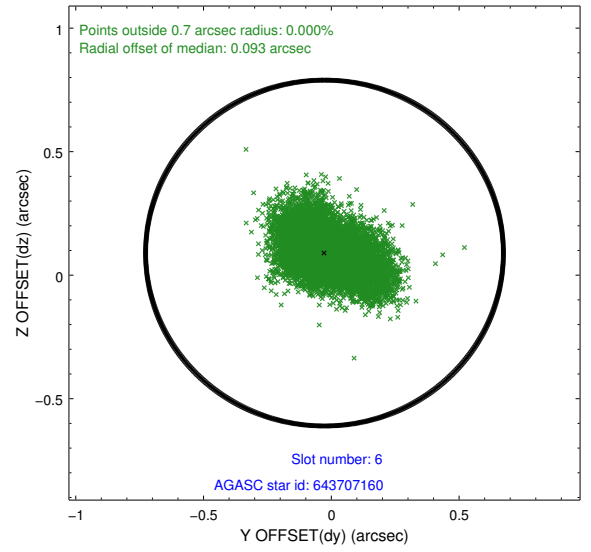
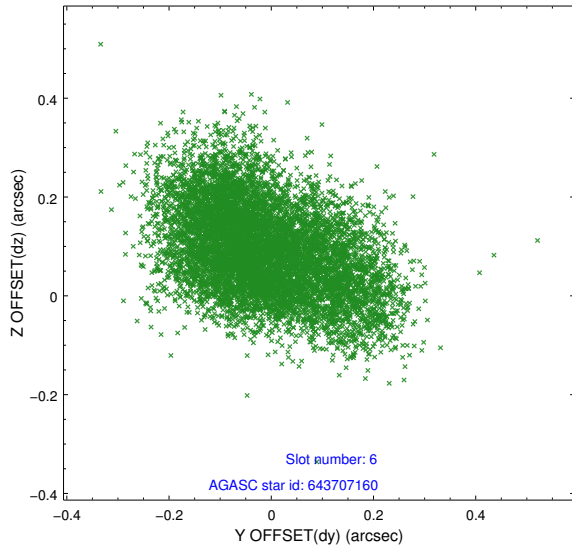
2.4.2 Slot 4



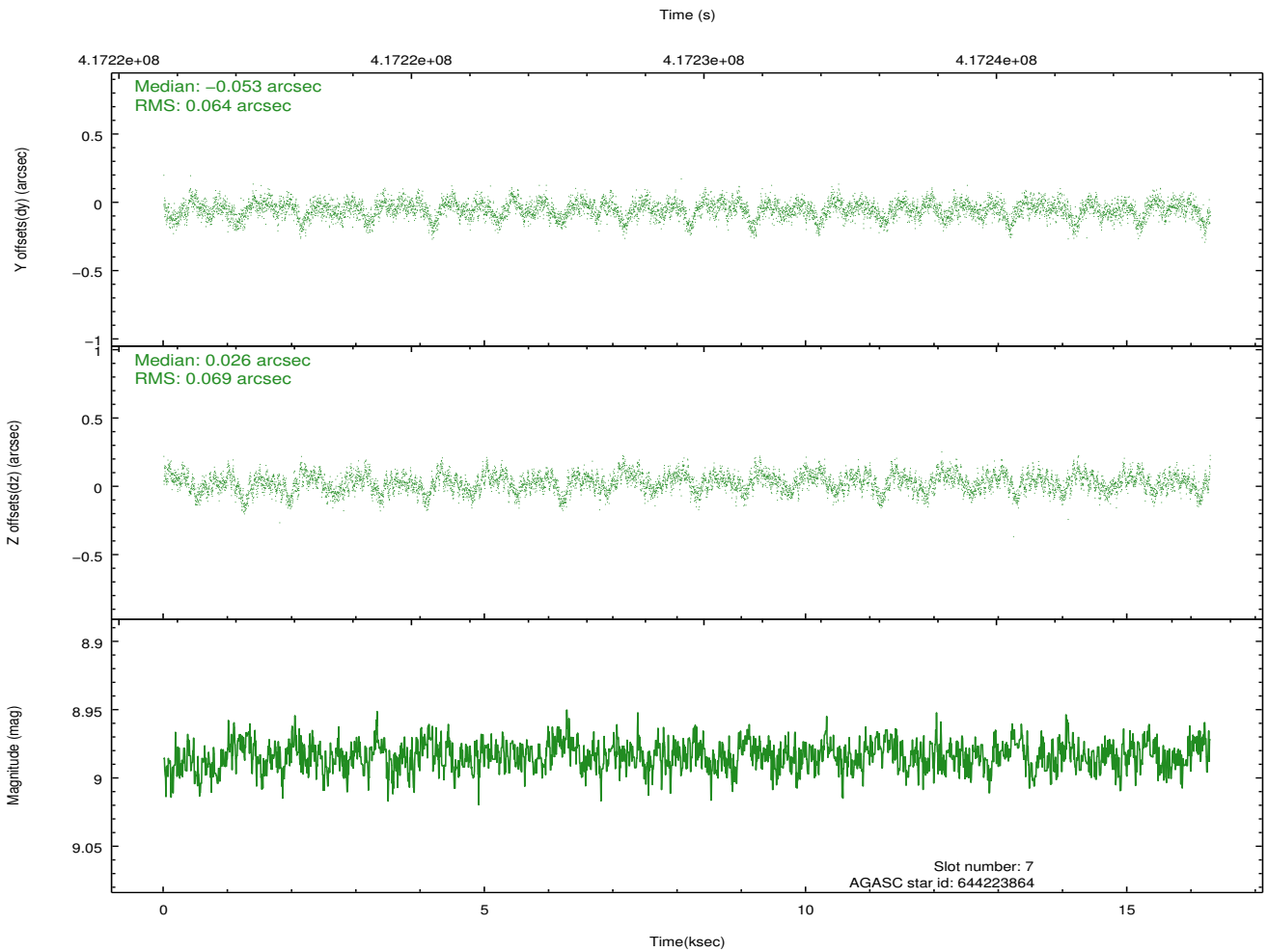
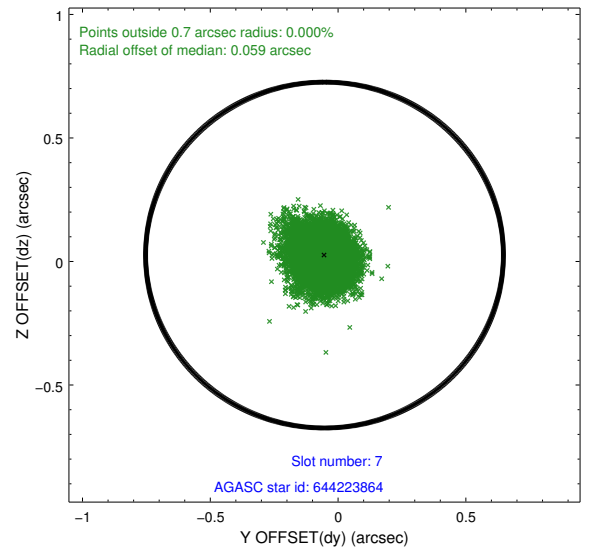
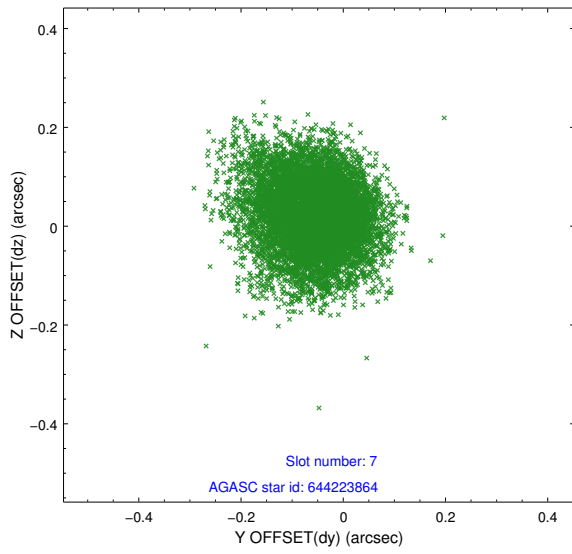
2.4.3 Slot 5



2.4.4 Slot 6

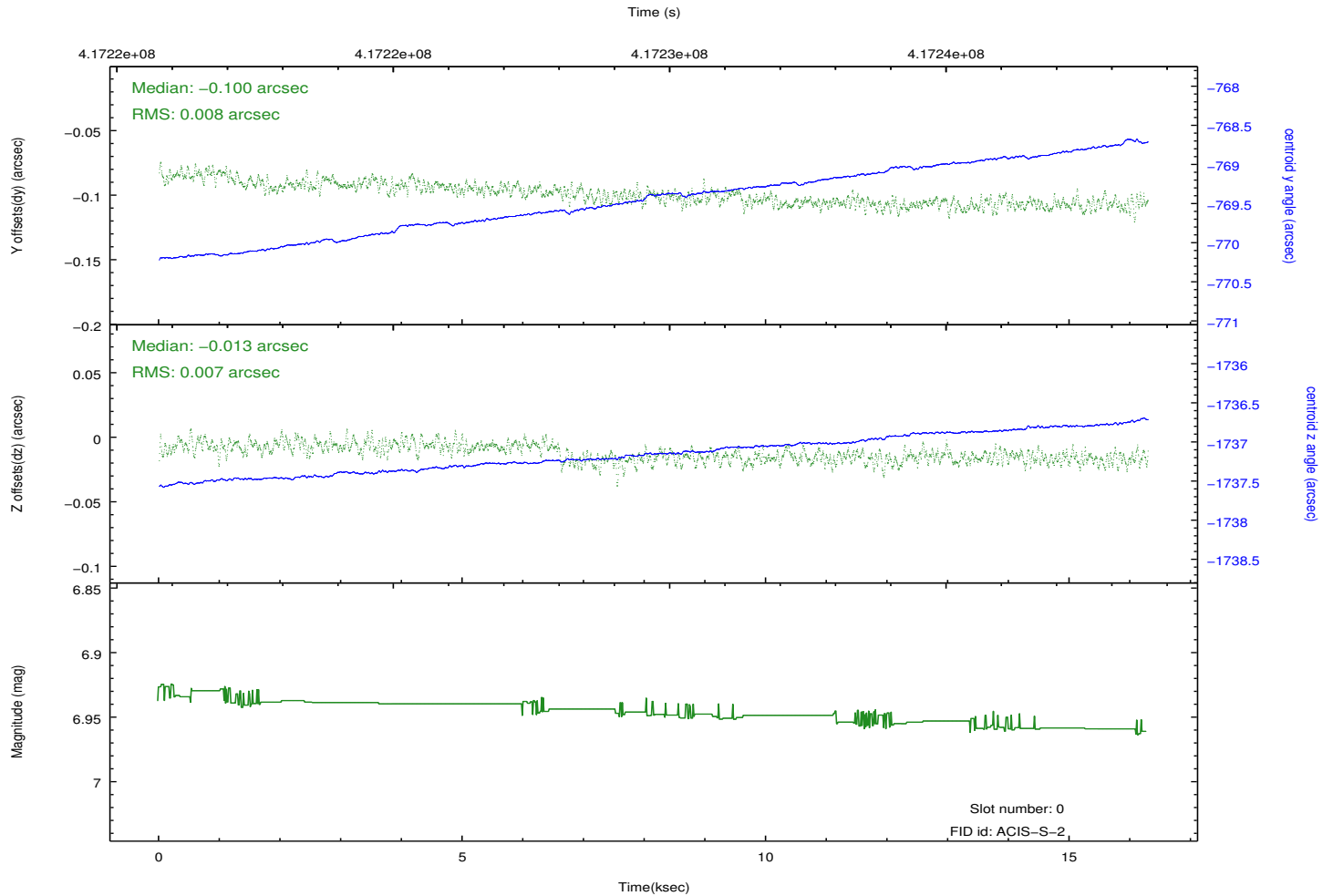
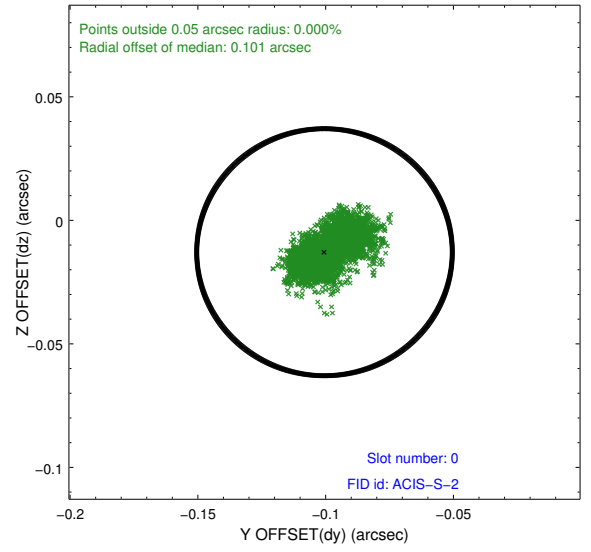
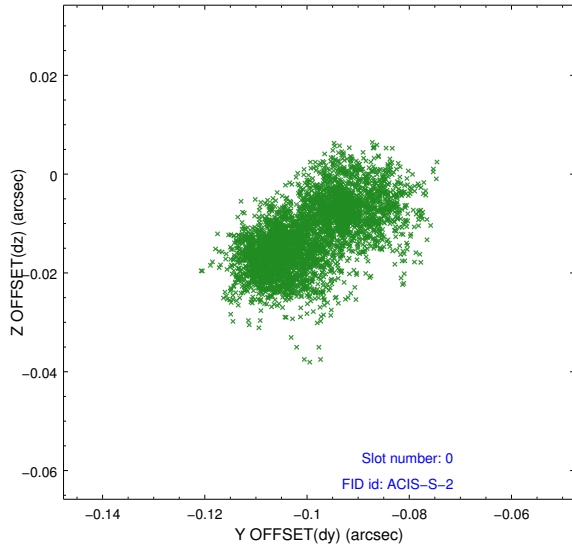


2.4.5 Slot 7

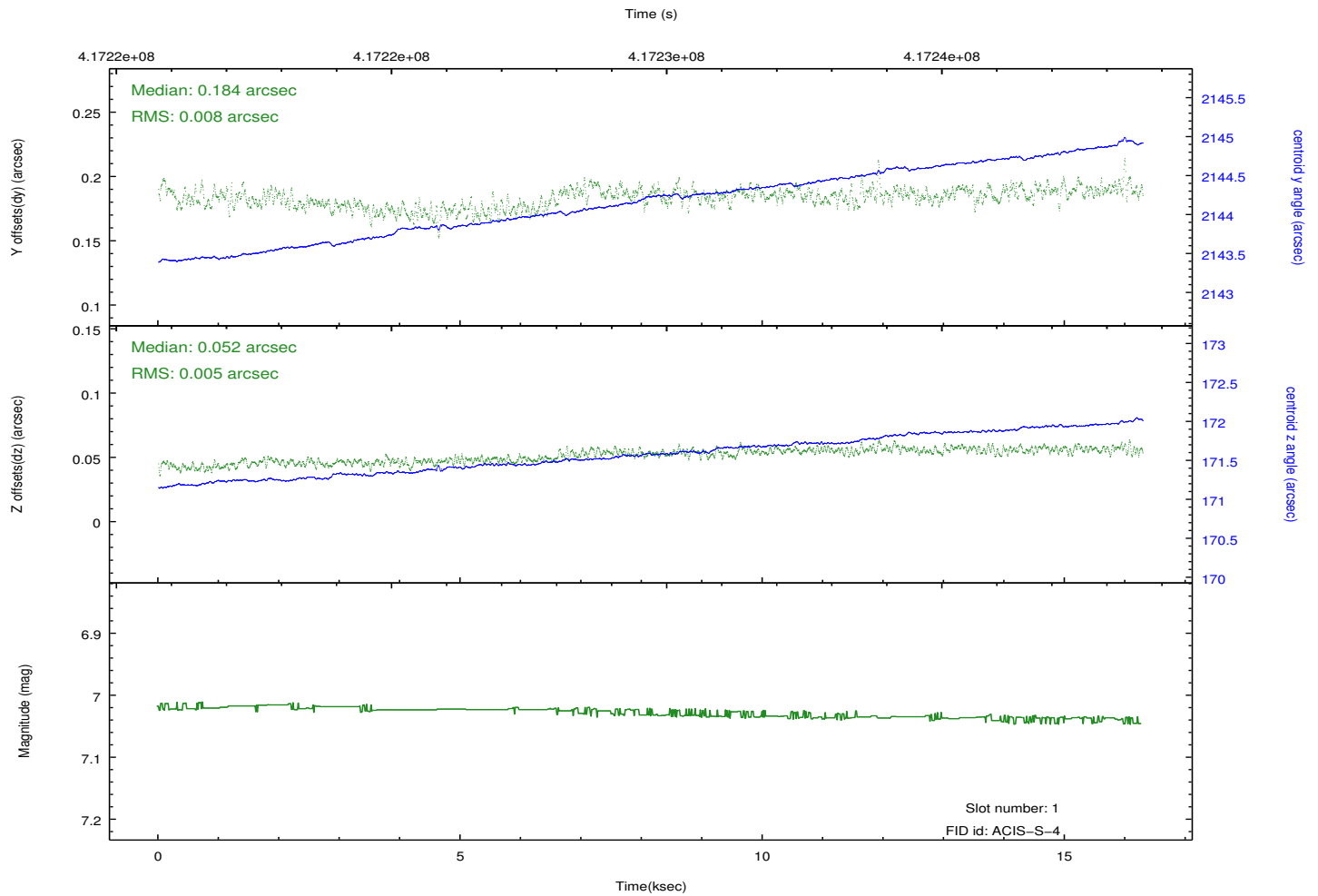
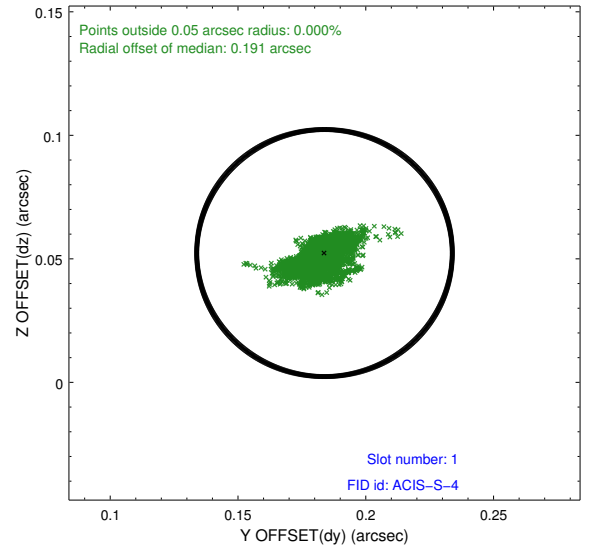
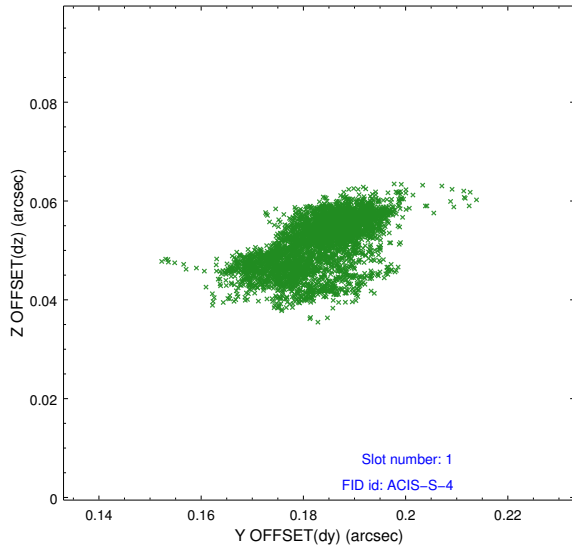


2.5 FID Slots

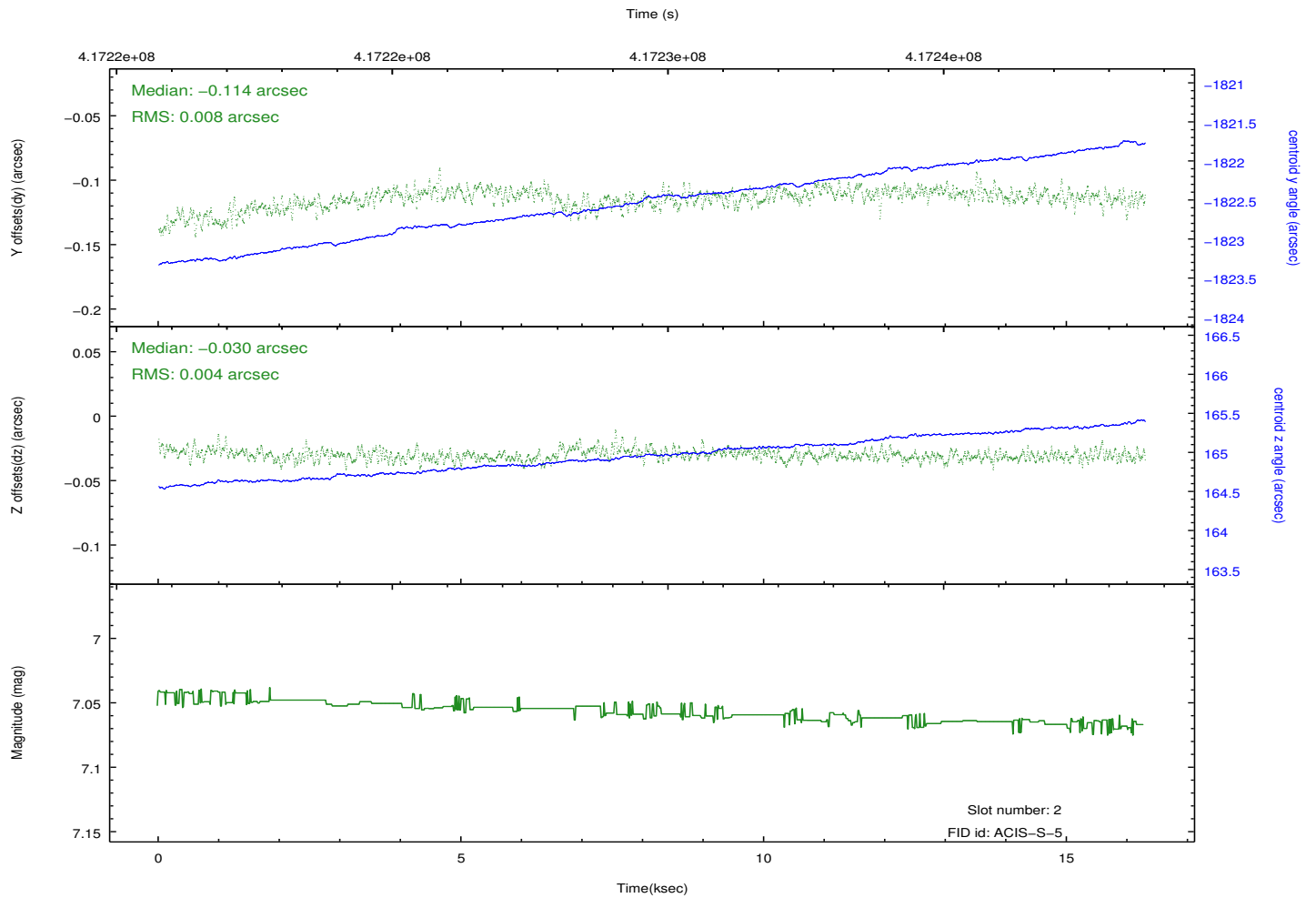
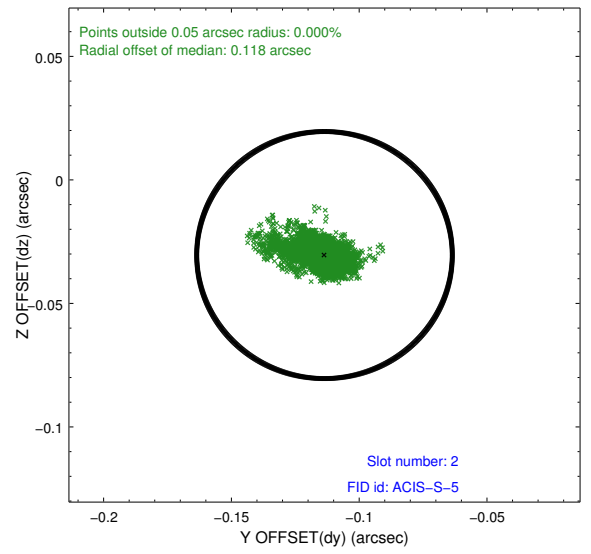
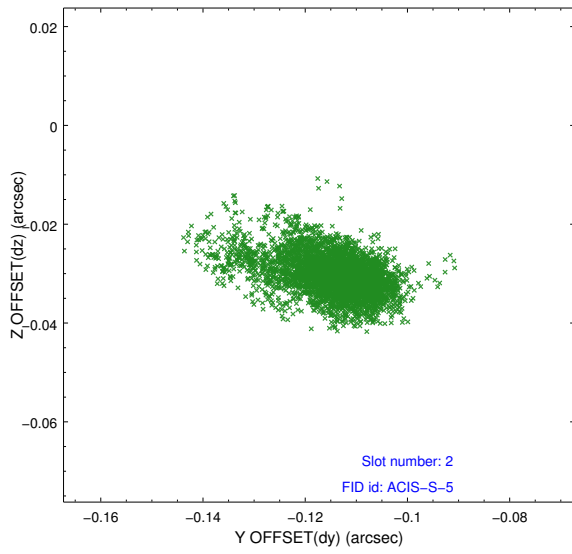
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.049599943995

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.

=====

Joint proposal: HST