

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13185 - L2 Version 2
Chandra X-Ray Center

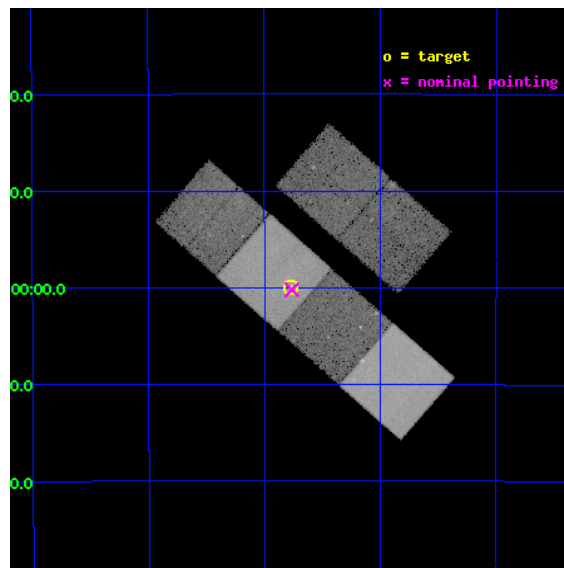
L2 Processing Date : Feb 8 2012

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1 Front

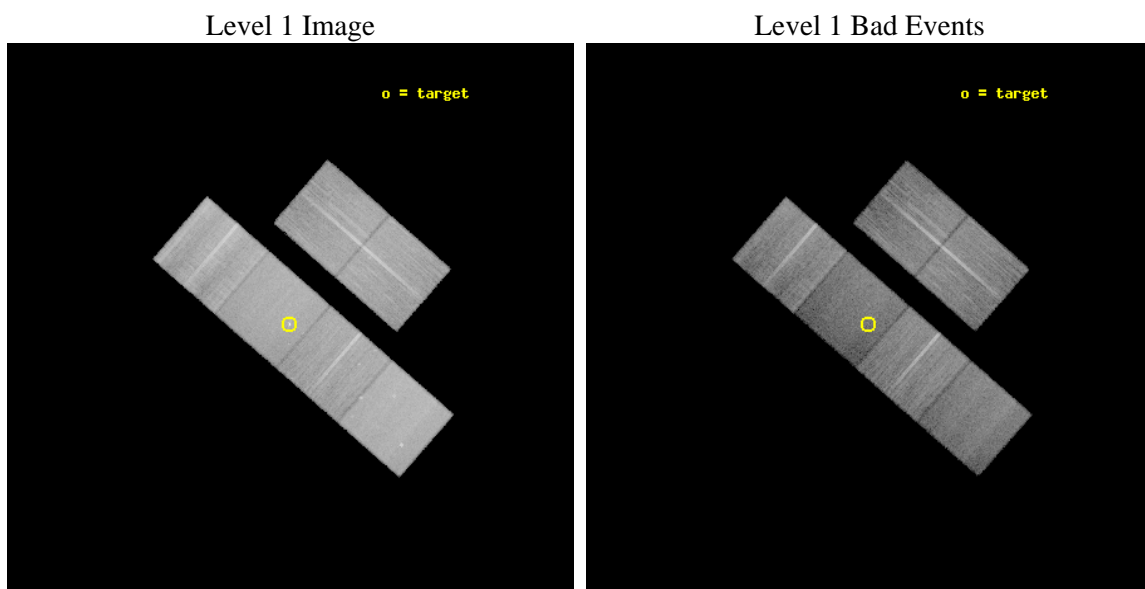
seq_num	900944	Sequence number
obs_id	13185	Observation id
title	A CHandra survey of Extended Emission-line Regions in nearby Seyfert galaxies (CHEERS)	Proposal title
observer	Dr. Junfeng Wang	Principal investigator
object	NGC 1386	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	54.1925	Observer's specified target RA [deg]
dec_targ	-35.99925	Observer's specified target Dec [deg]
ra_nom	54.190736970275	Nominal RA [deg]
dec_nom	-36.003881100629	Nominal Dec [deg]
roll_nom	221.15558168325	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30051.19988811	Sum of GTIs [s]
livetime	29670.673500467	Livetime [s]
ontime2	30047.958917737	Sum of GTIs [s]
ontime3	30051.19988811	Sum of GTIs [s]
ontime5	30051.19988811	Sum of GTIs [s]
ontime6	30051.19988811	Sum of GTIs [s]
ontime7	30051.19988811	Sum of GTIs [s]
ontime8	30051.19988811	Sum of GTIs [s]
l2events	298841	Number of level 2 events



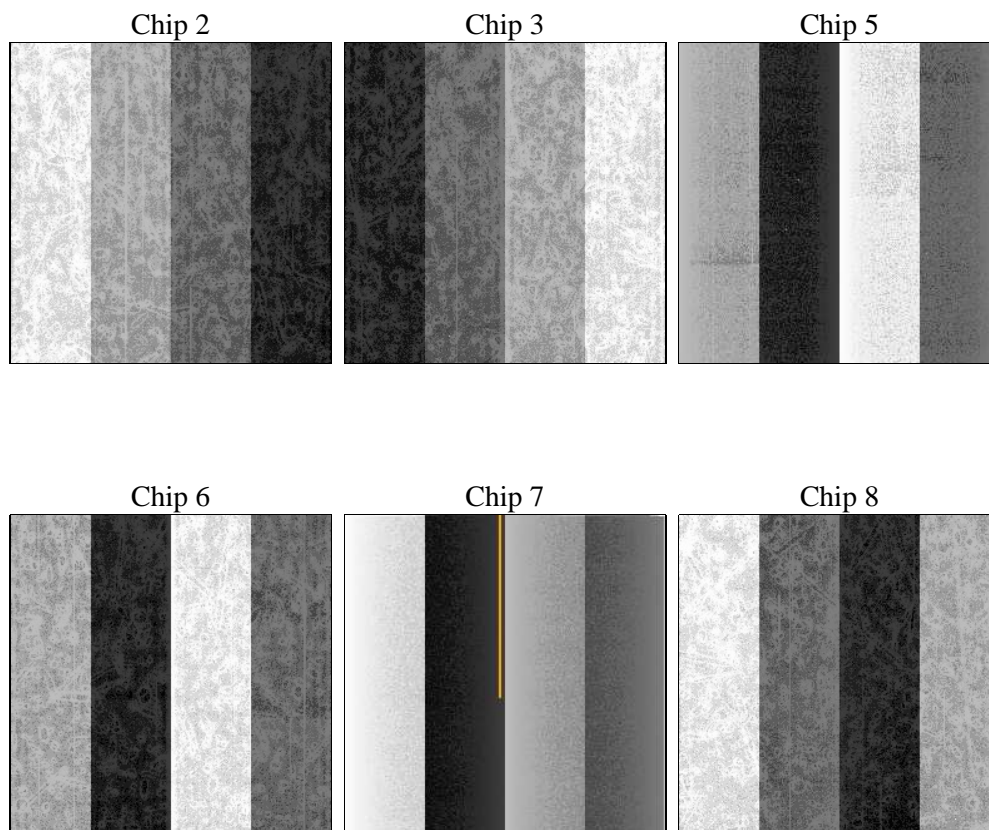
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	30051.19988811	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	30047.958917737	Sum of GTIs [s]
date	2012-02-08T04:02:29	Date and time of file creation	ontime3	30051.19988811	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	30051.19988811	Sum of GTIs [s]
			ontime6	30051.19988811	Sum of GTIs [s]
			ontime7	30051.19988811	Sum of GTIs [s]
			ontime8	30051.19988811	Sum of GTIs [s]
			l1events	1193160	Number of level 1 events

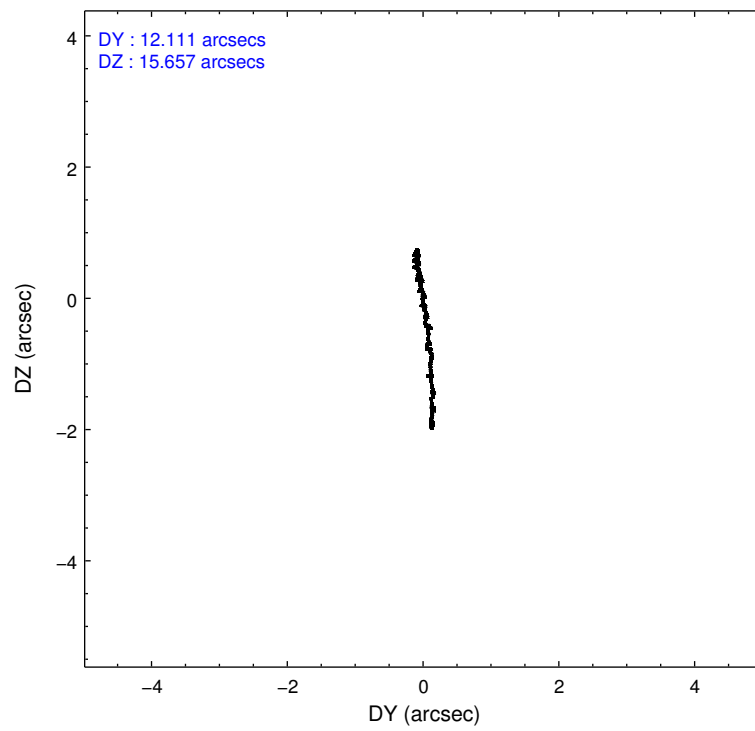
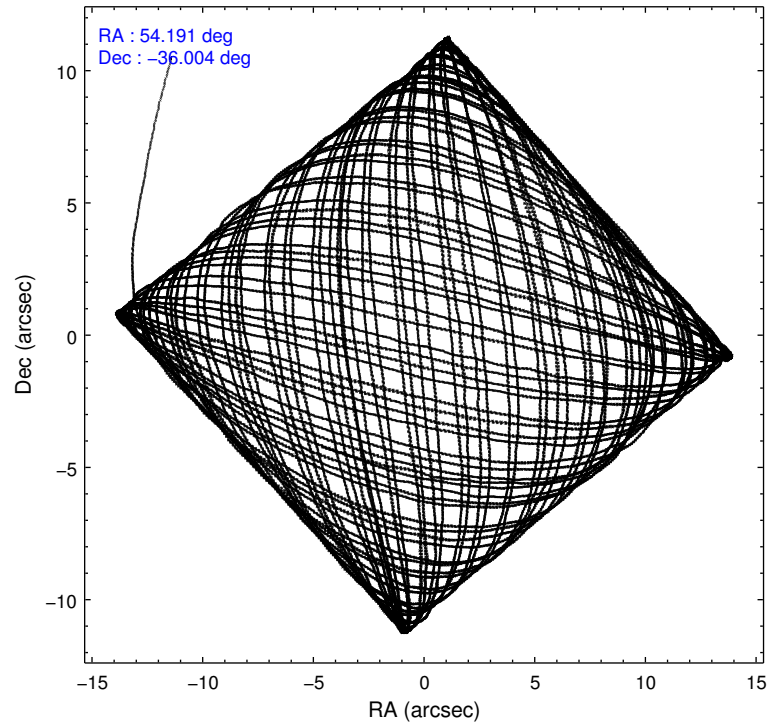
2.1.4 Events

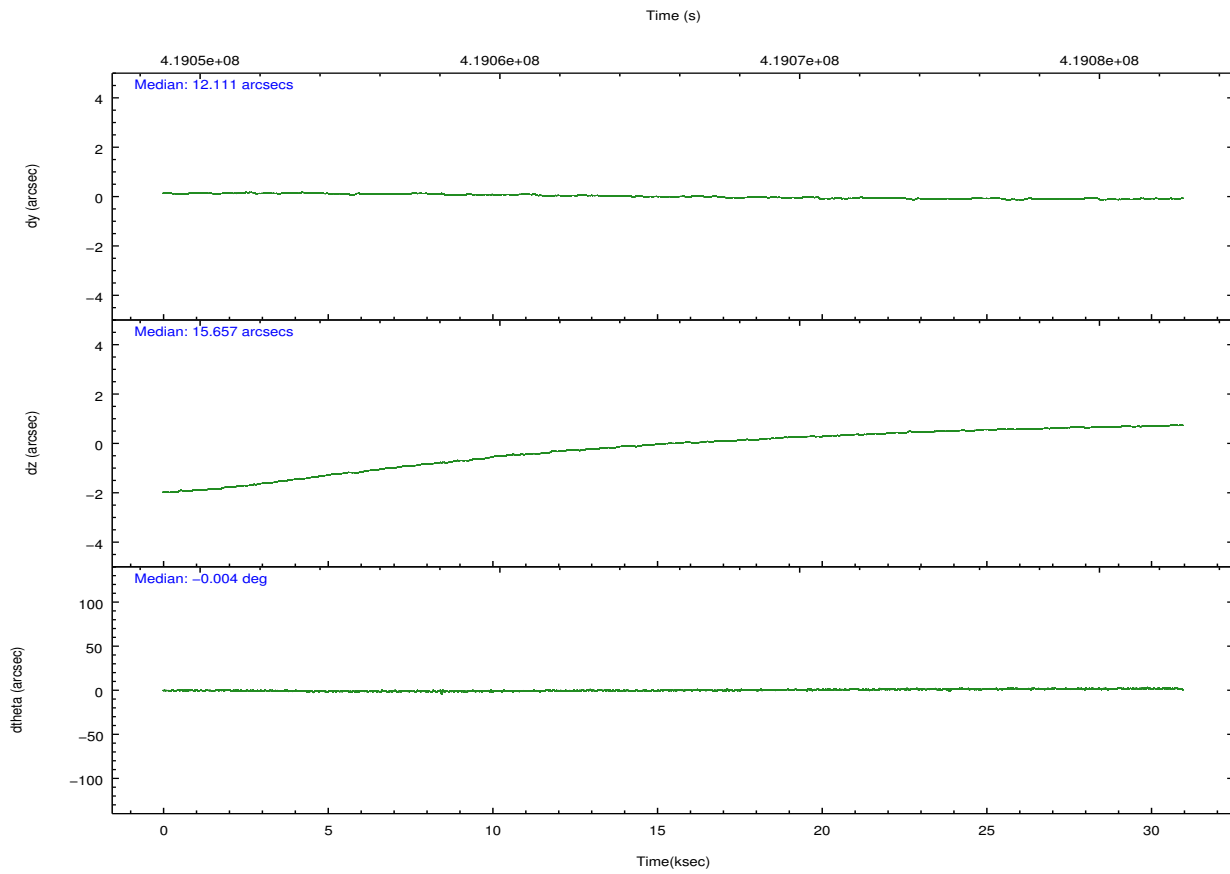
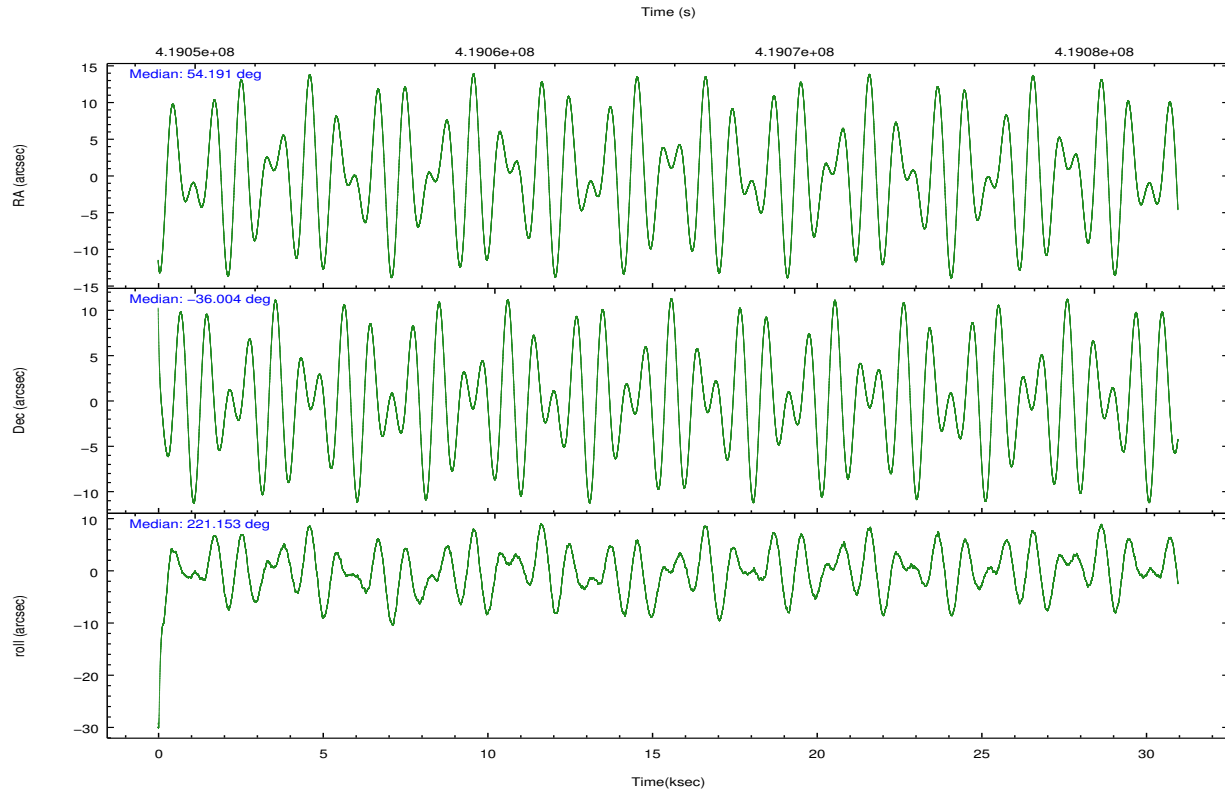
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	180776	164411	247502	179083	199086	222302	grade 0 events	7914	7686	11017	9020	11382	18477
rejected events	160768	145354	117300	156965	97312	160450		4%	4%	4%	5%	5%	8%
rejected %	88%	88%	47%	87%	48%	72%	grade 1 events	113	106	489	92	297	183
								0%	0%	0%	0%	0%	0%
							grade 2 events	4797	3948	40575	4752	21402	14533
								2%	2%	16%	2%	10%	6%
							grade 3 events	1968	1947	5635	2108	9250	6427
								1%	1%	2%	1%	4%	2%
							grade 4 events	1925	1996	5510	2086	9031	5900
								1%	1%	2%	1%	4%	2%
							grade 5 events	5810	7001	19370	7076	20273	10732
								3%	4%	7%	3%	10%	4%
							grade 6 events	3408	3481	67483	4153	50720	16517
								1%	2%	27%	2%	25%	7%
							grade 7 events	154841	138246	97423	149796	76731	149533
								85%	84%	39%	83%	38%	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	54.201200	54.19073697027453	CCD I2 on	O4	Y
[deg] Pointing Dec	-35.977892	-36.00388110062919	CCD I3 on	O3	Y
[deg] Pointing Roll	221.005111	221.1555816832467	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O5	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	O2	Y
[s] Observation start time (MET)	419051257.184000	419049182.77924	CCD S5 on	N	N
Observation start date	2011-04-13T03:06:31	2011-04-13T02:33:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	419081257.184000	419082165.74345	On-chip summing requested	N	N
Observation end date	2011-04-13T11:26:31	2011-04-13T11:42:45	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



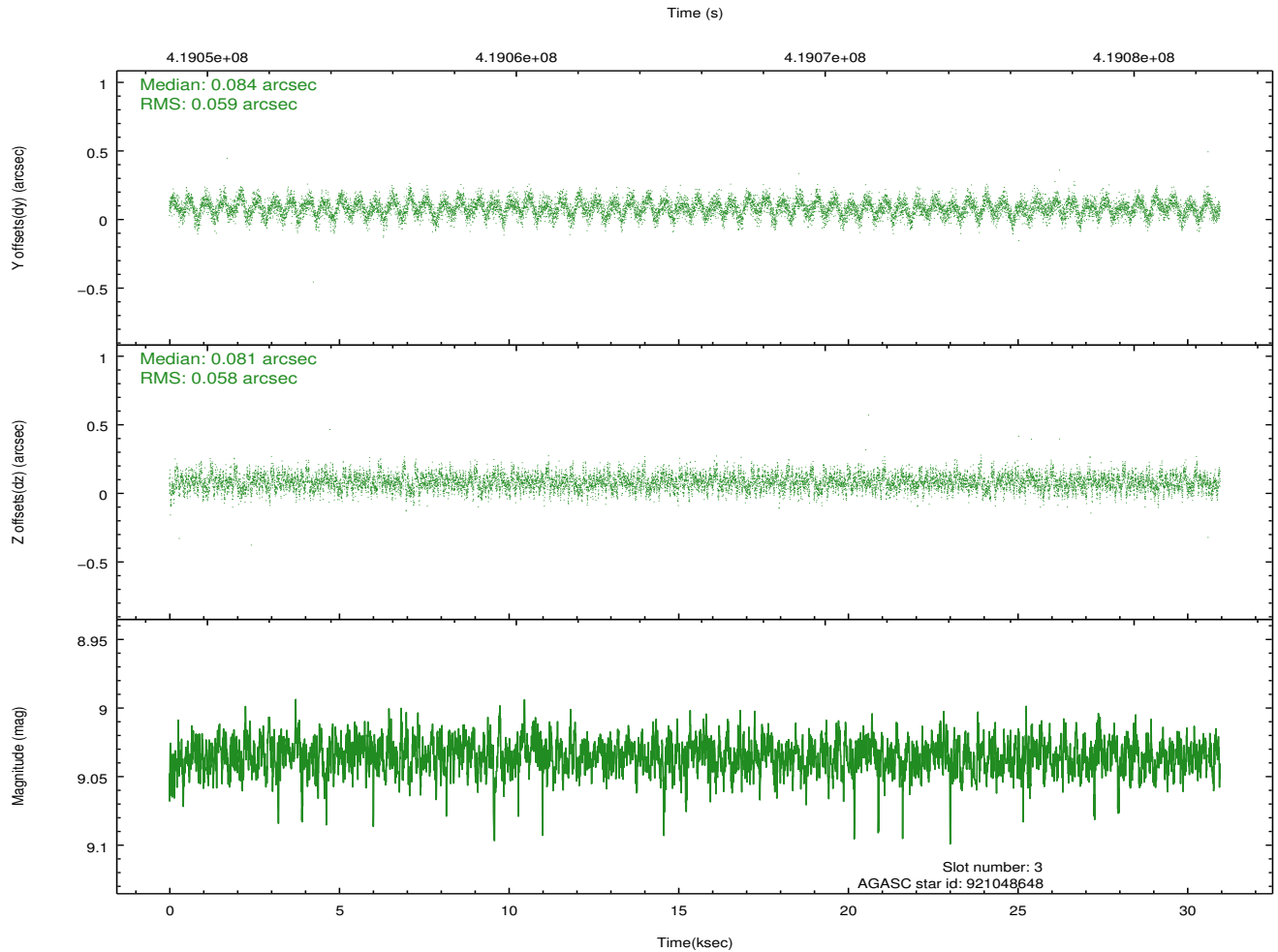
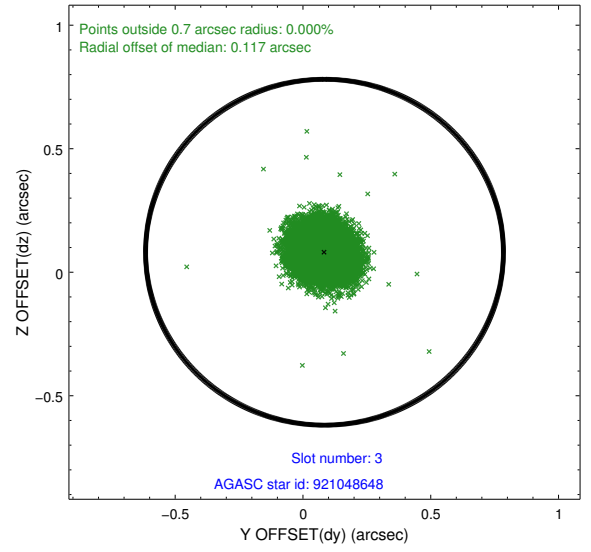
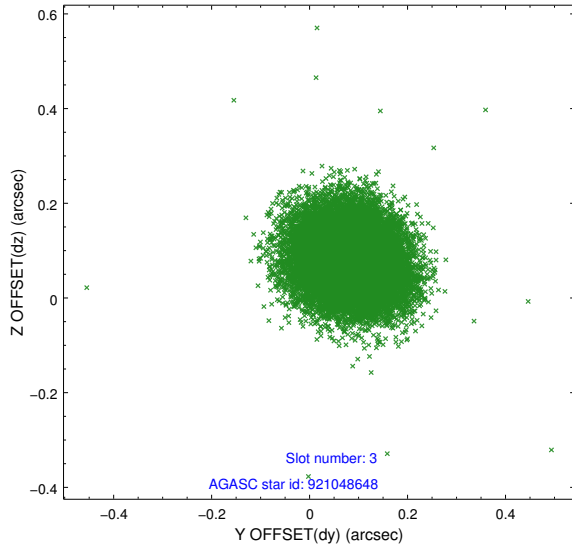


Slot Statistics

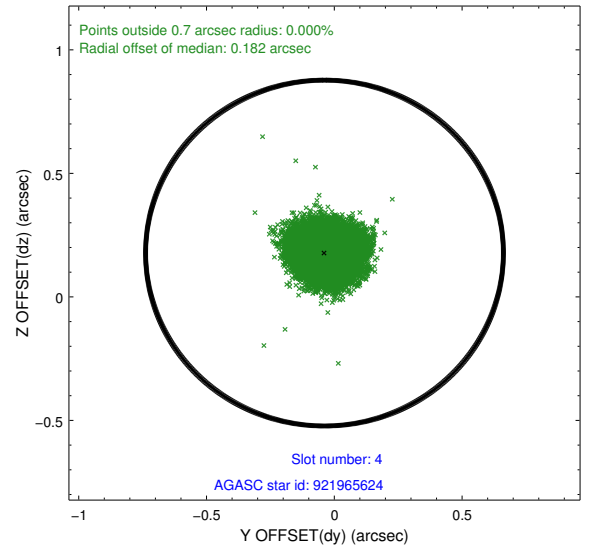
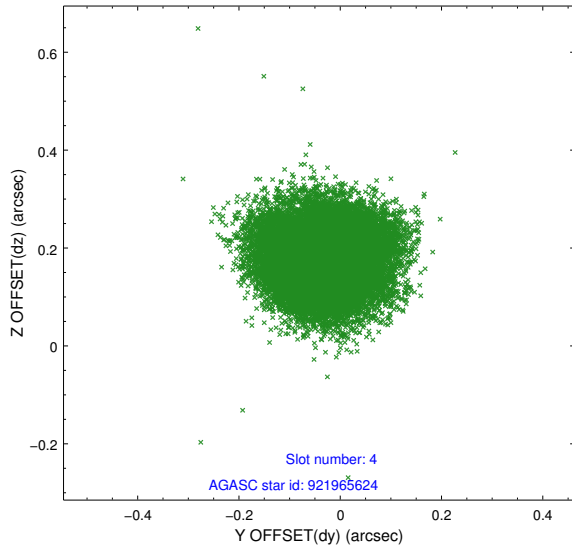
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.99	7552	0.040	-0.047	0.032	0.068	0.000000	0.000000	931.01	-1732.48
1	FID	ACIS-S-2	6.91	7553	-0.102	-0.014	0.023	0.036	0.000000	0.000000	-764.99	-1737.04
2	FID	ACIS-S-4	6.99	7553	0.037	0.064	0.018	0.036	0.000000	0.000000	2148.27	171.67
3	GUIDE	921048648	9.04	15101	0.084	0.081	0.088	0.140	53.884610	-35.870023	443.09	-897.85
4	GUIDE	921965624	8.62	15096	-0.038	0.177	0.097	0.148	54.900706	-35.940077	-1622.85	1240.83
5	GUIDE	921966544	7.91	15105	0.001	-0.081	0.061	0.097	54.743508	-35.636012	-2001.24	115.76
6	GUIDE	921967072	7.66	15100	-0.021	-0.069	0.077	0.123	54.269247	-36.292226	593.67	983.79
7	GUIDE	921970016	9.39	15061	-0.028	-0.110	0.112	0.185	54.228536	-36.081558	183.29	335.32

2.4 Star Slots

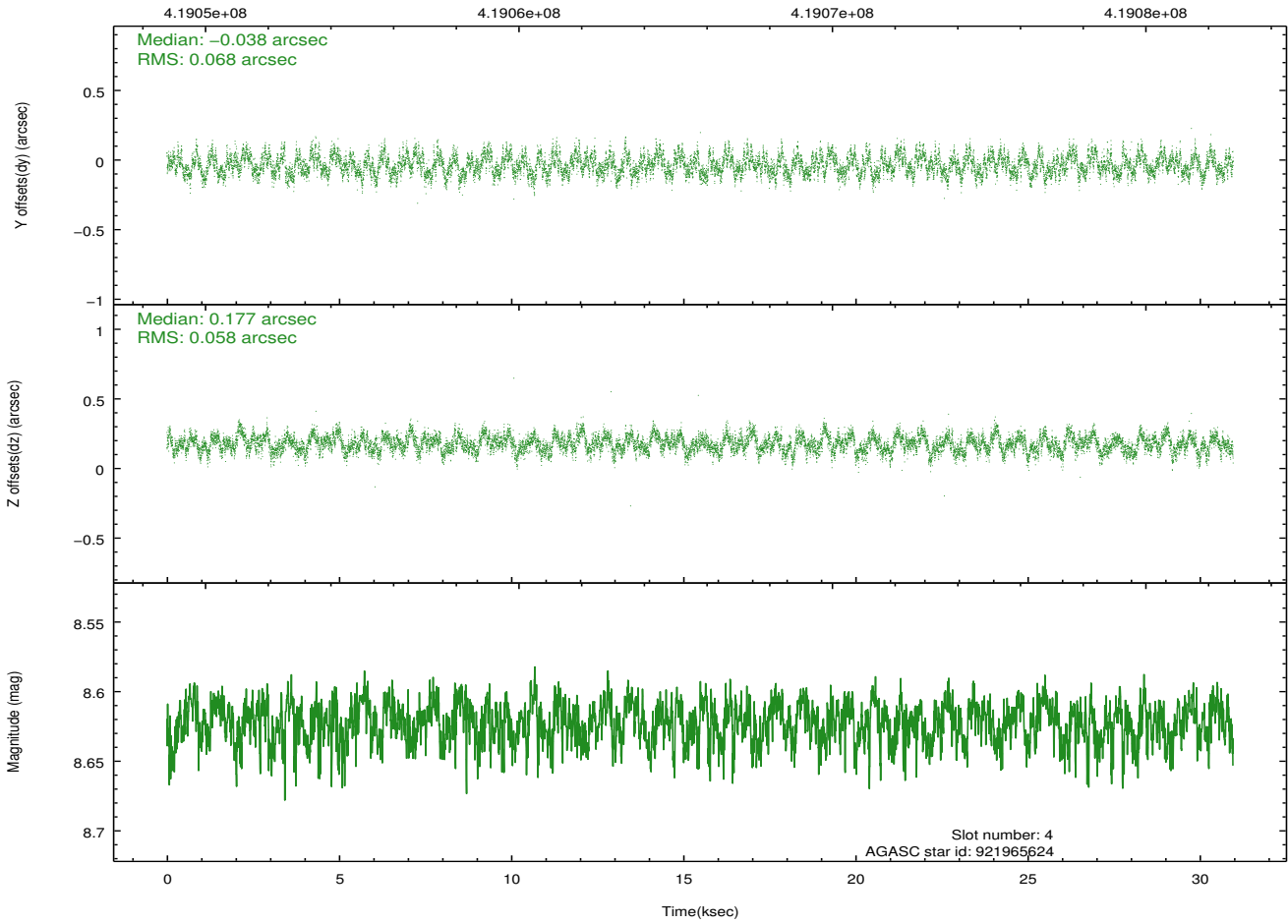
2.4.1 Slot 3



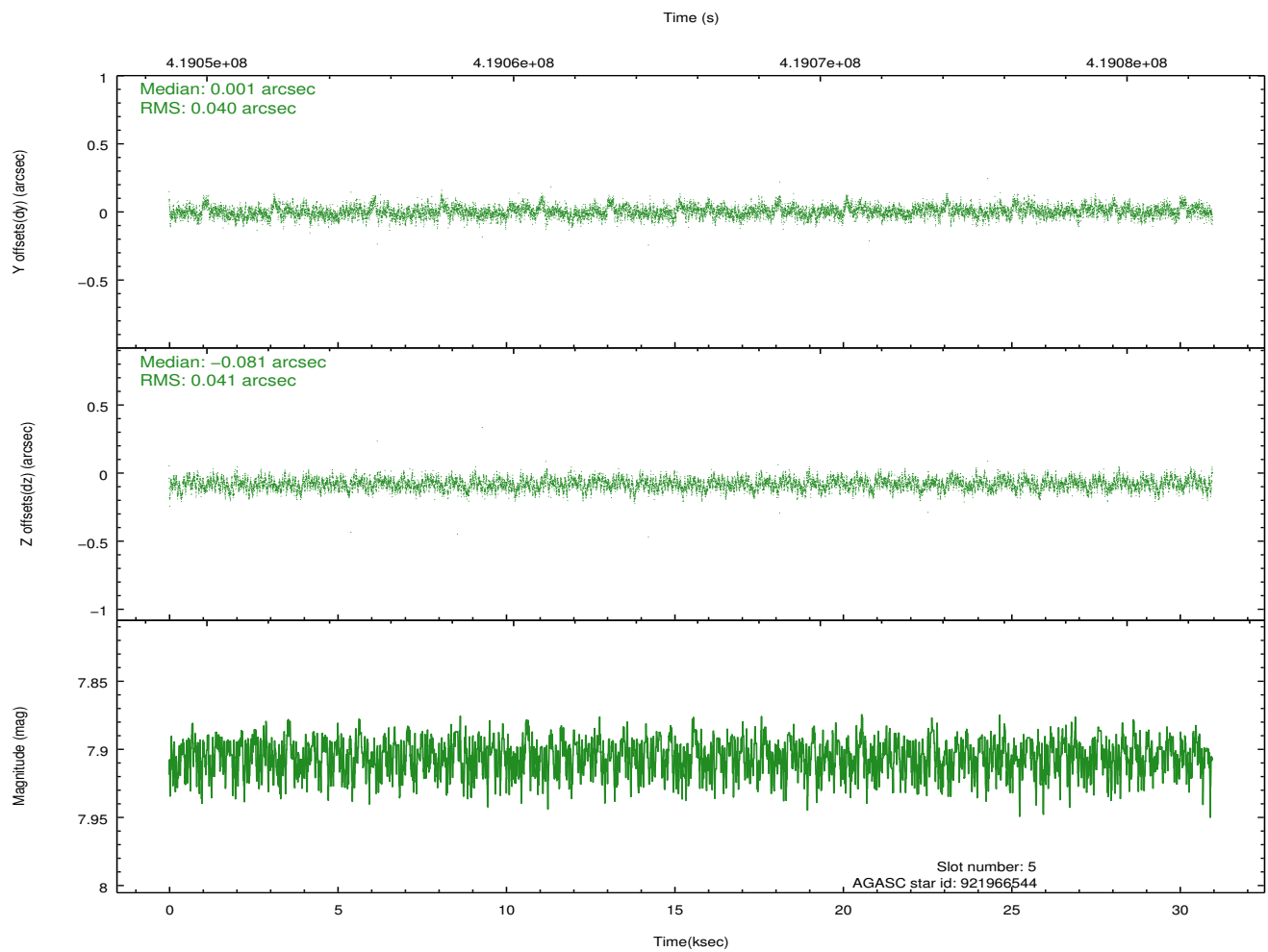
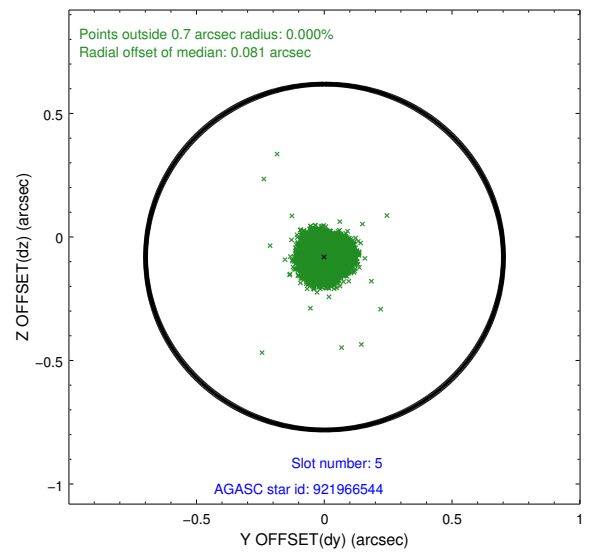
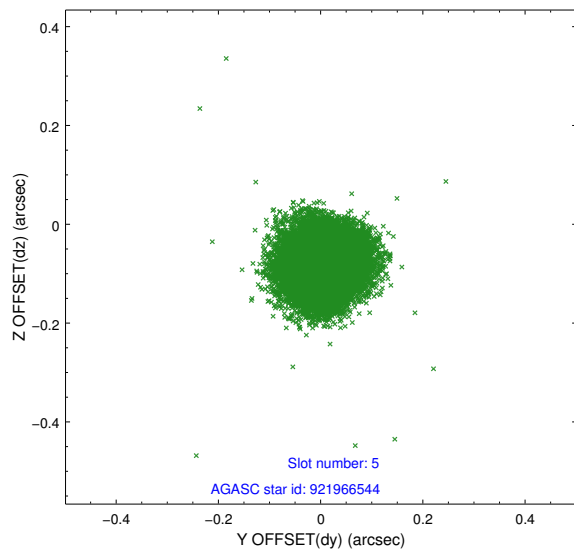
2.4.2 Slot 4



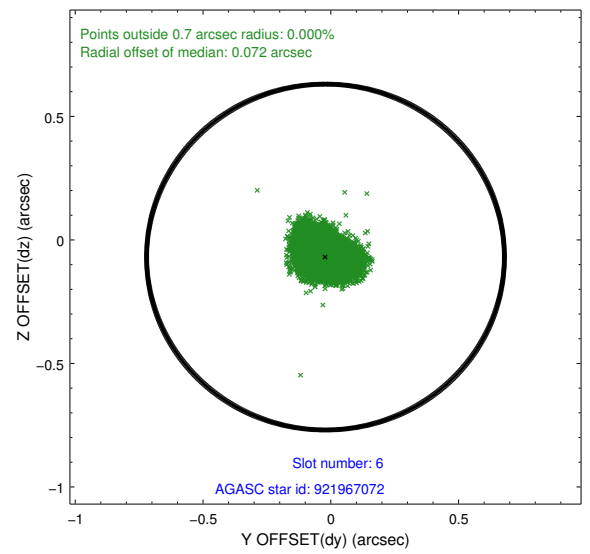
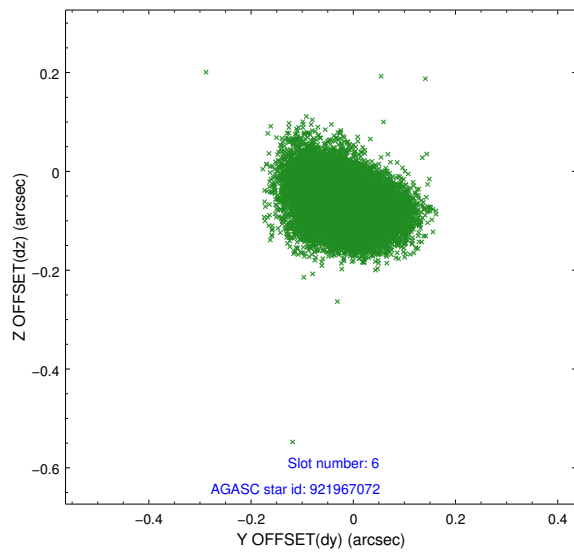
Time (s)



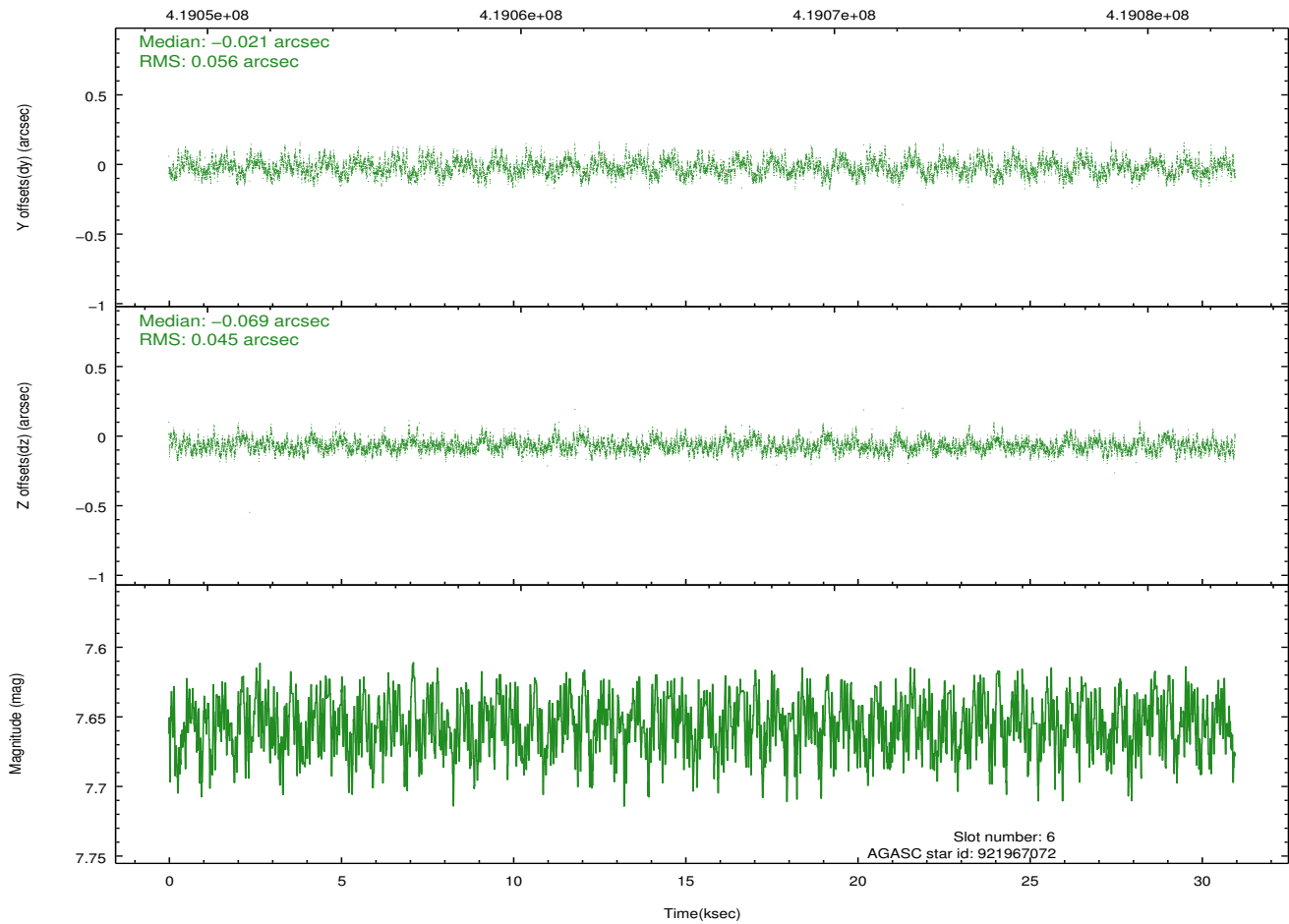
2.4.3 Slot 5



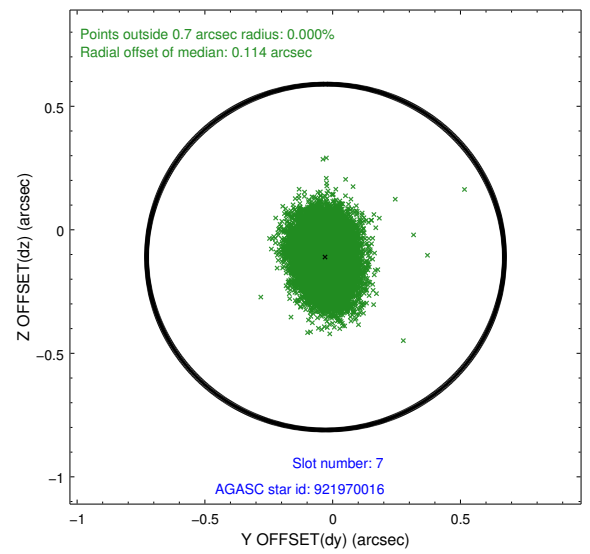
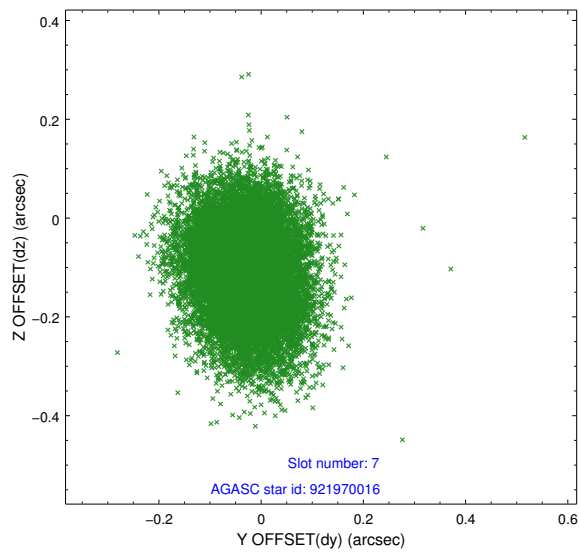
2.4.4 Slot 6



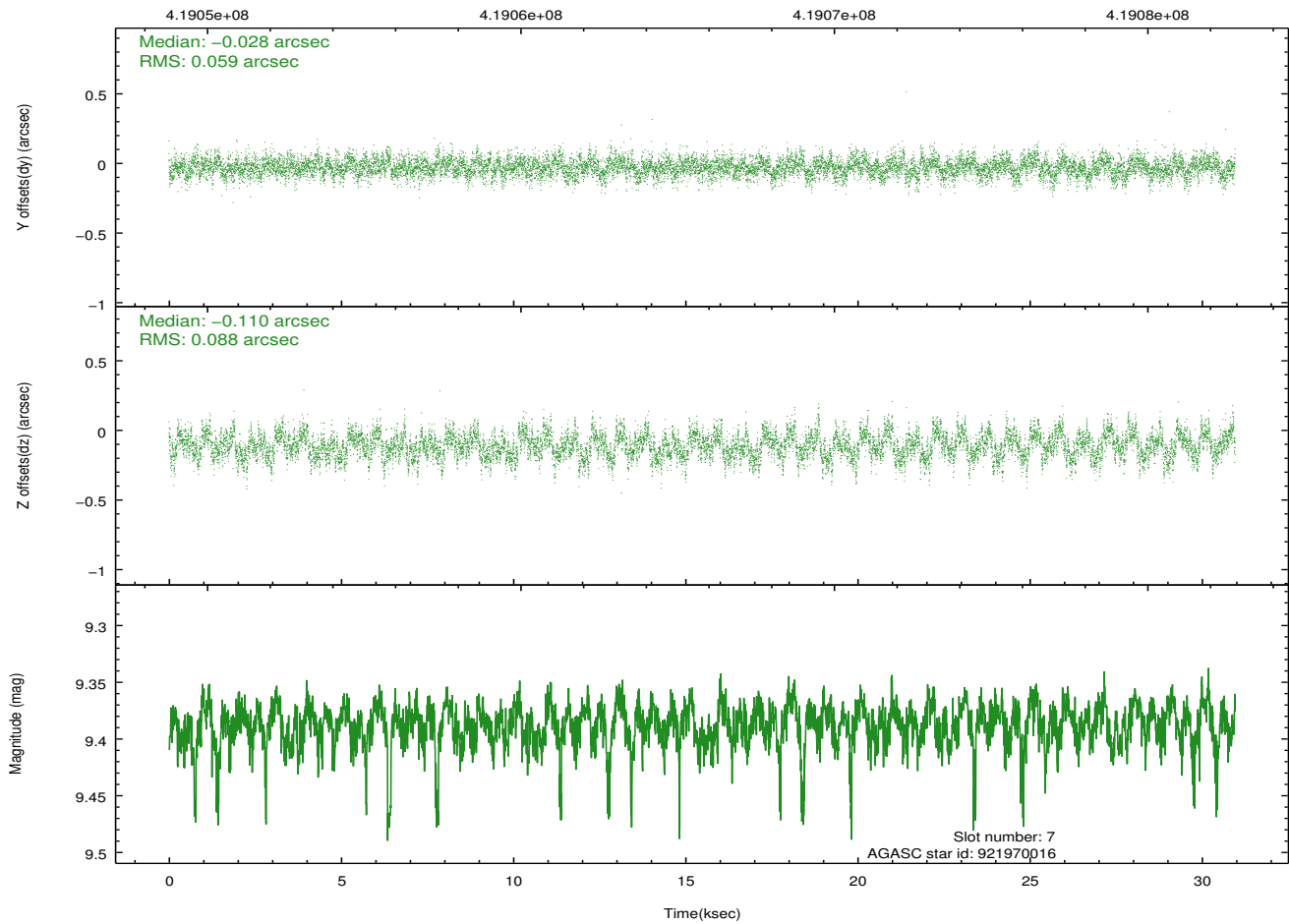
Time (s)



2.4.5 Slot 7

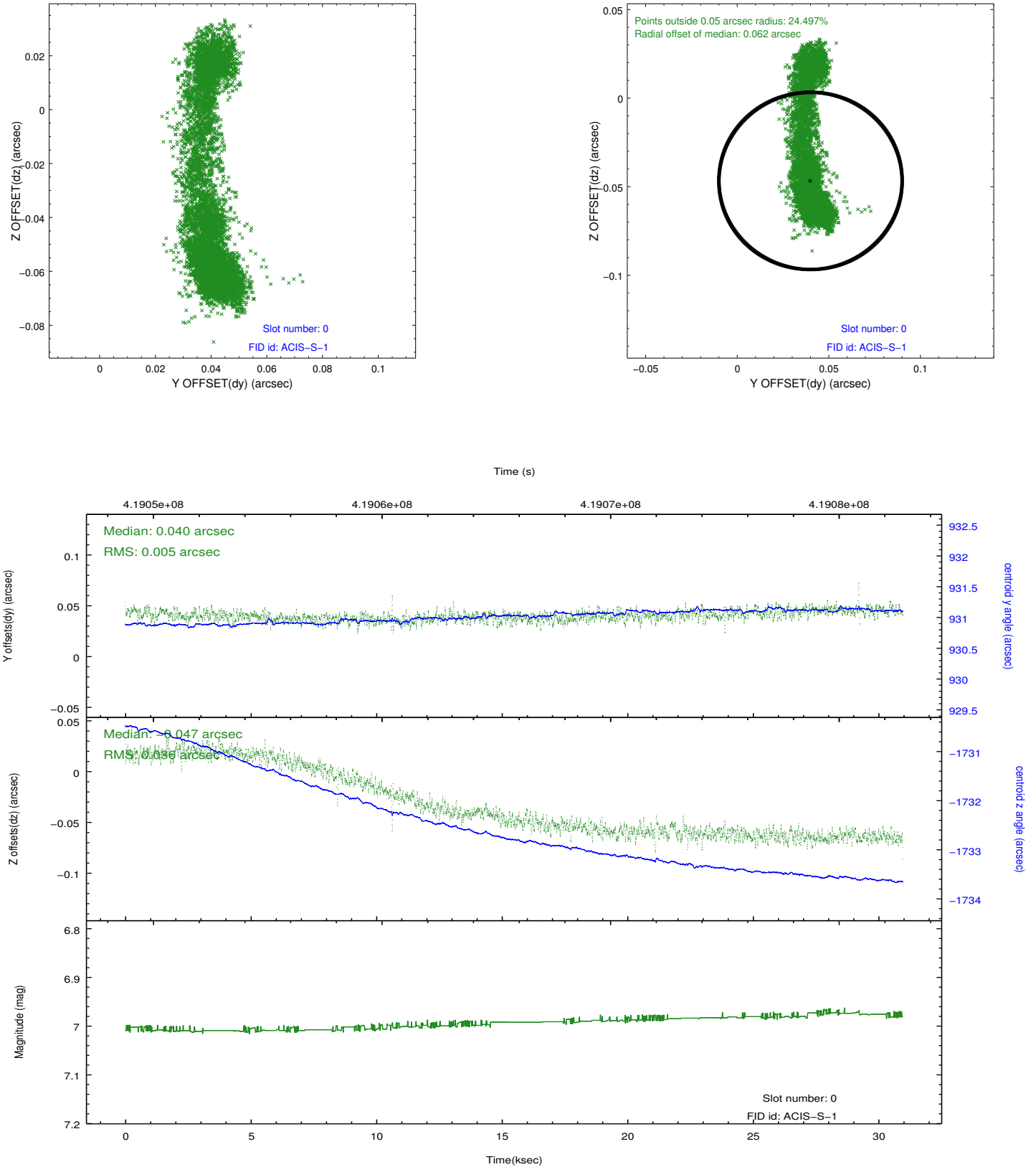


Time (s)

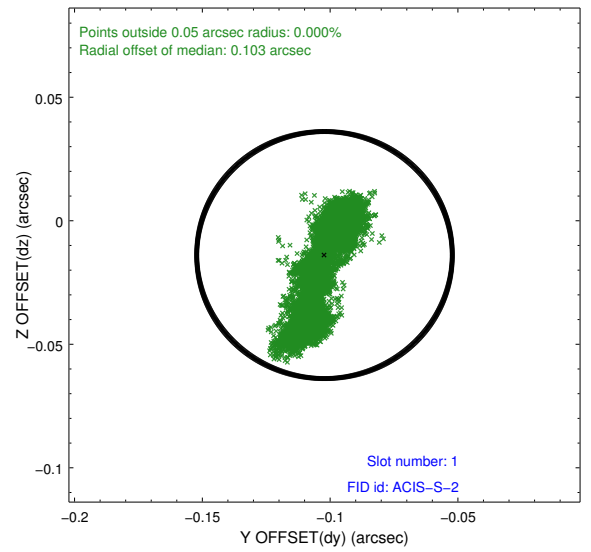
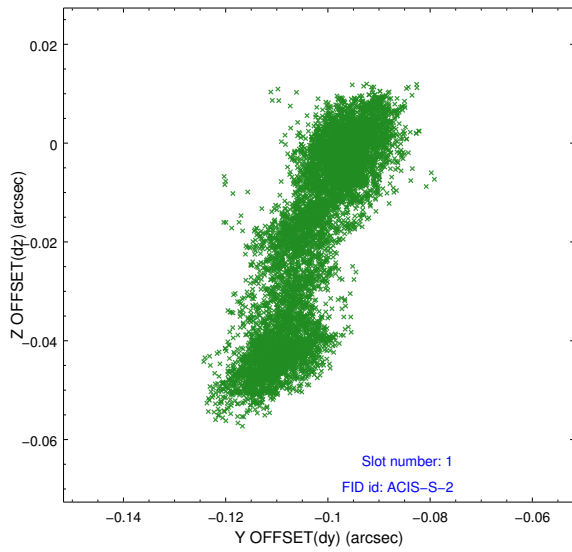


2.5 FID Slots

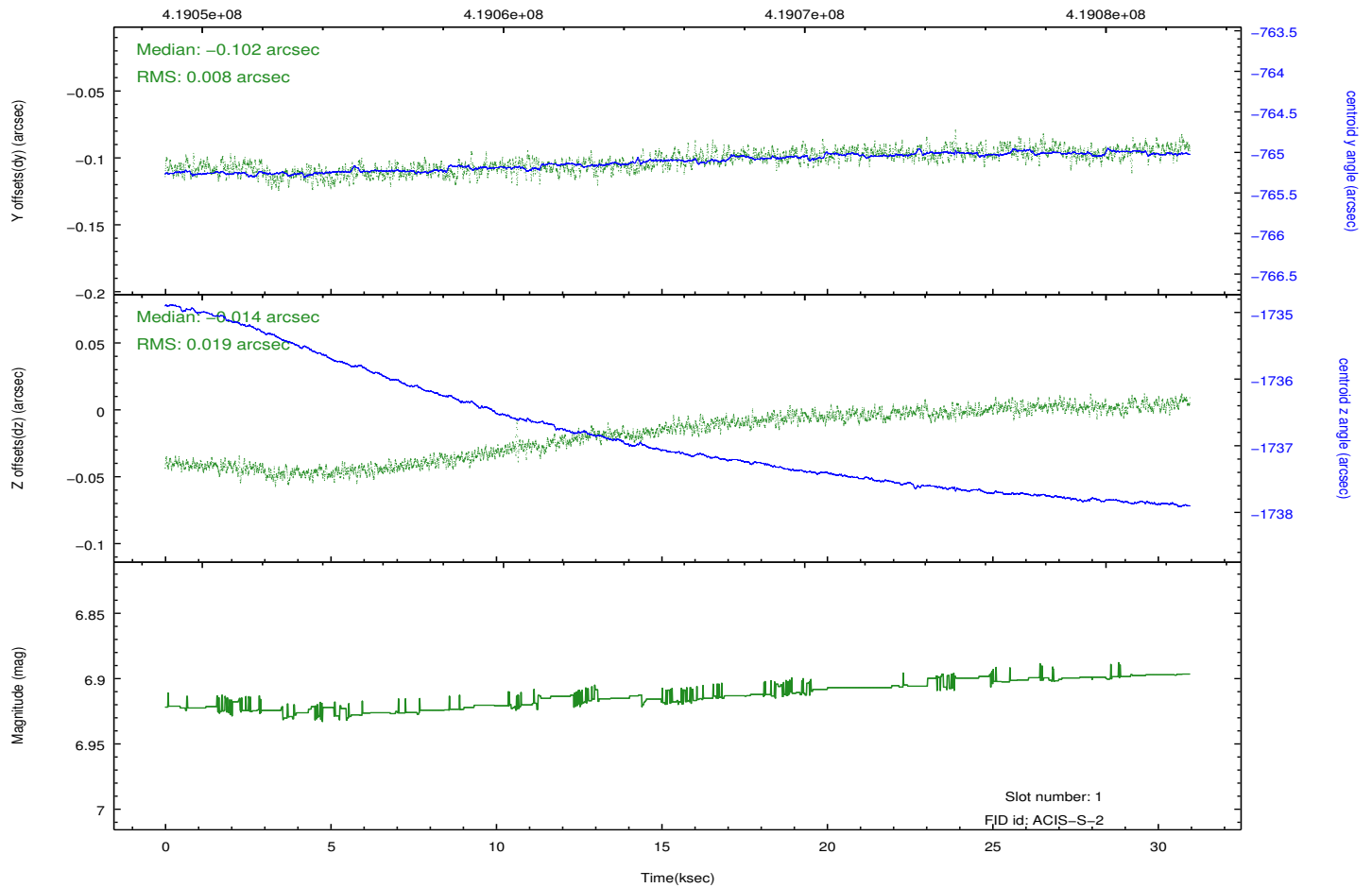
2.5.1 Slot 0



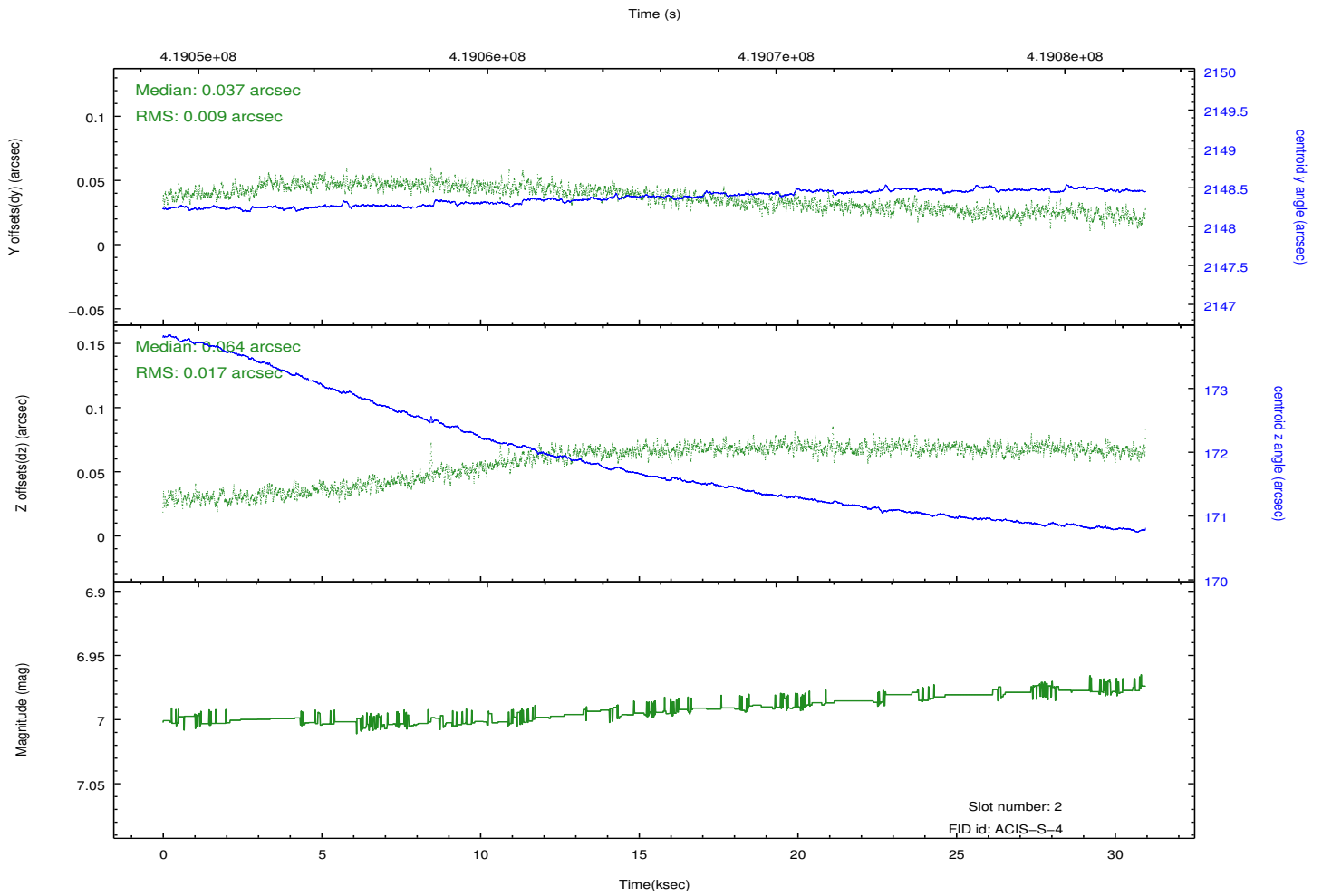
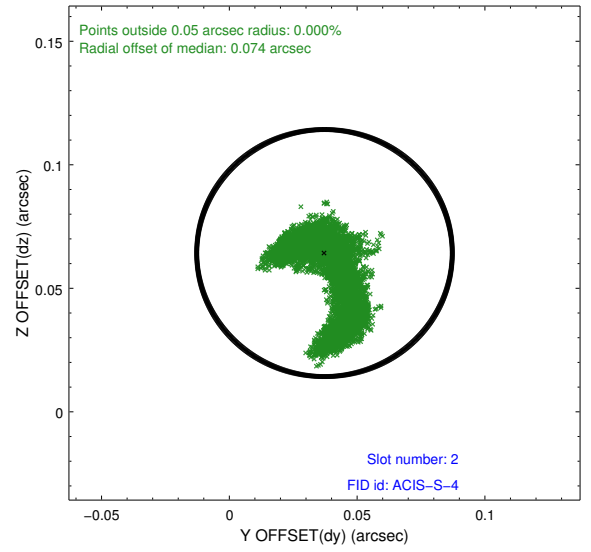
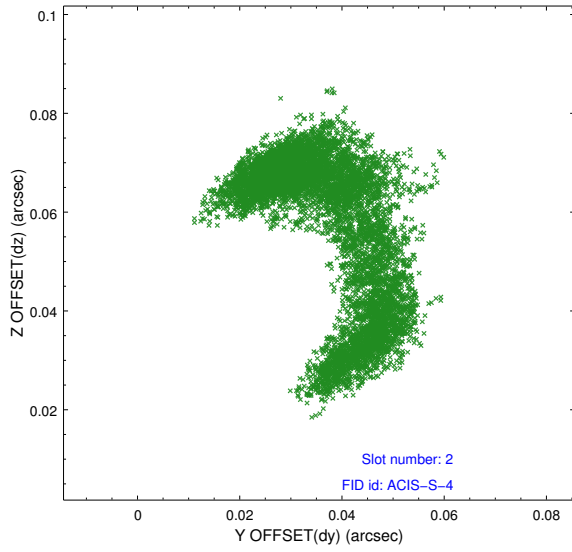
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.05119988811

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 with HST.