

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12751 - L2 Version 2
Chandra X-Ray Center

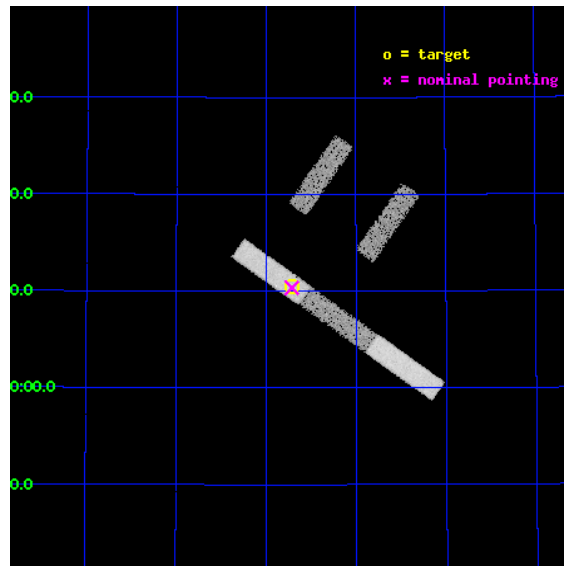
L2 Processing Date : Feb 8 2012

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1 Front

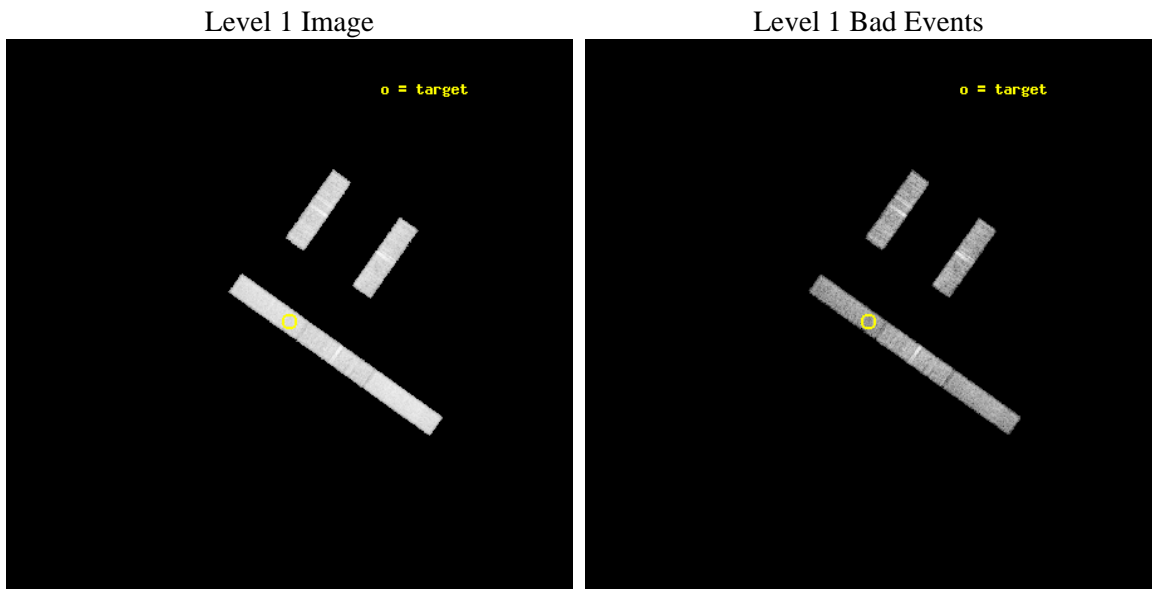
seq_num	702387	Sequence number
obs_id	12751	Observation id
title	X-ray and HST Imaging of Kpc-Scale Binary AGNs	Proposal title
observer	Dr Yue Shen	Principal investigator
object	SDSSJ1146+5110	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	176.677083	Observer's specified target RA [deg]
dec_targ	51.174889	Observer's specified target Dec [deg]
ra_nom	176.67841361425	Nominal RA [deg]
dec_nom	51.172337768427	Nominal Dec [deg]
roll_nom	215.22746701059	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16065.755149484	Sum of GTIs [s]
livetime	15432.409080807	Livetime [s]
ontime2	16065.59098947	Sum of GTIs [s]
ontime3	16065.632029474	Sum of GTIs [s]
ontime5	16065.71410948	Sum of GTIs [s]
ontime6	16065.673069477	Sum of GTIs [s]
ontime7	16065.755149484	Sum of GTIs [s]
l2events	44450	Number of level 2 events



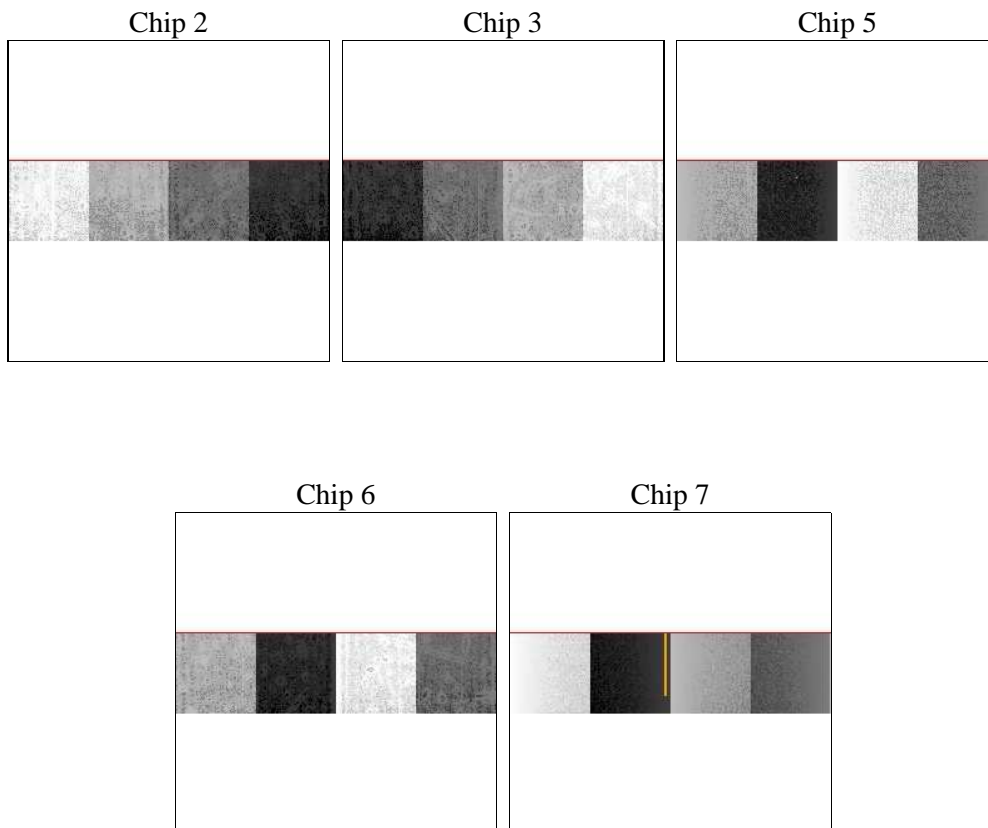
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.793000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	16065.755149484	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	16065.59098947	Sum of GTIs [s]
date	2012-02-08T22:11:30	Date and time of file creation	ontime3	16065.632029474	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	16065.71410948	Sum of GTIs [s]
			ontime6	16065.673069477	Sum of GTIs [s]
			ontime7	16065.755149484	Sum of GTIs [s]
			l1events	168856	Number of level 1 events

2.1.4 Events

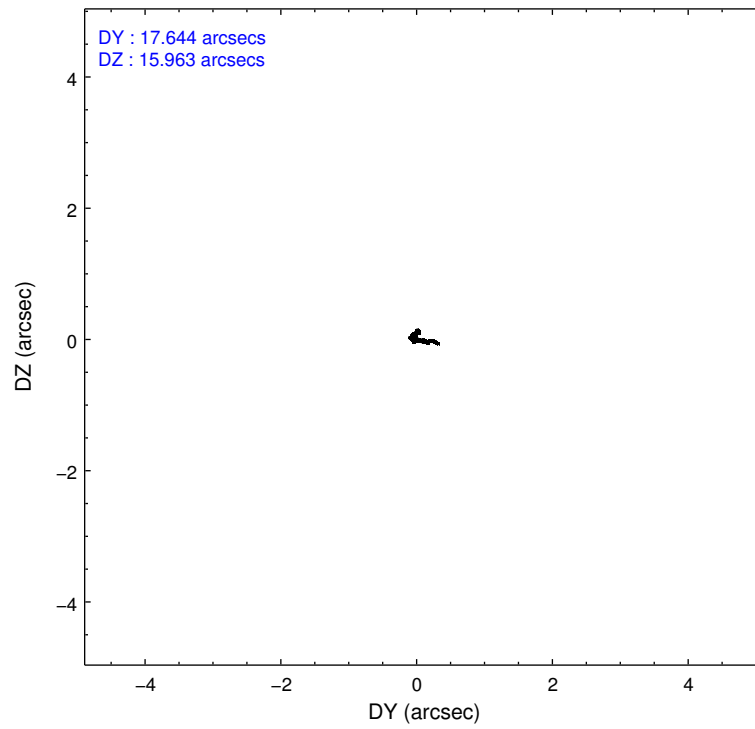
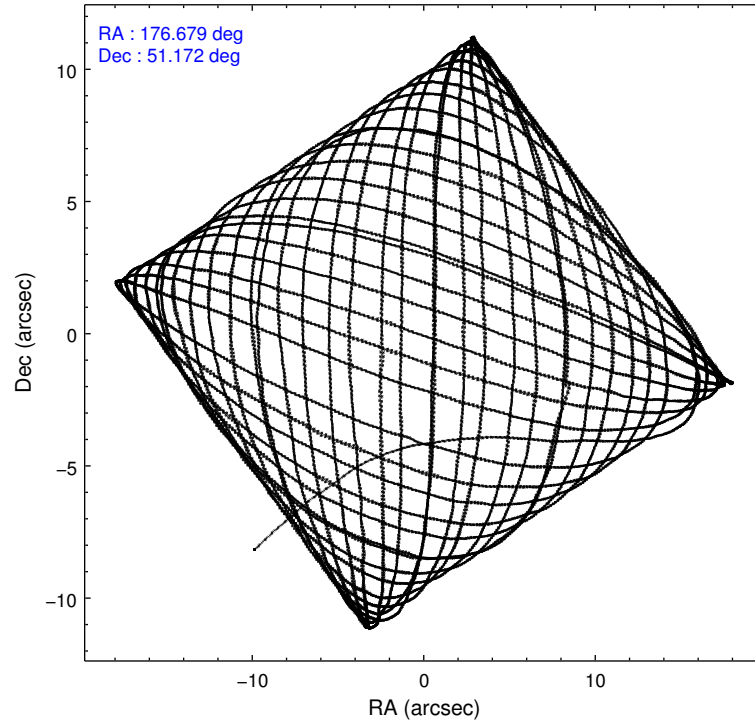
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	28991	29399	42620	31605	36241
rejected events	25648	26177	22164	27913	19604
rejected %	88%	89%	52%	88%	54%

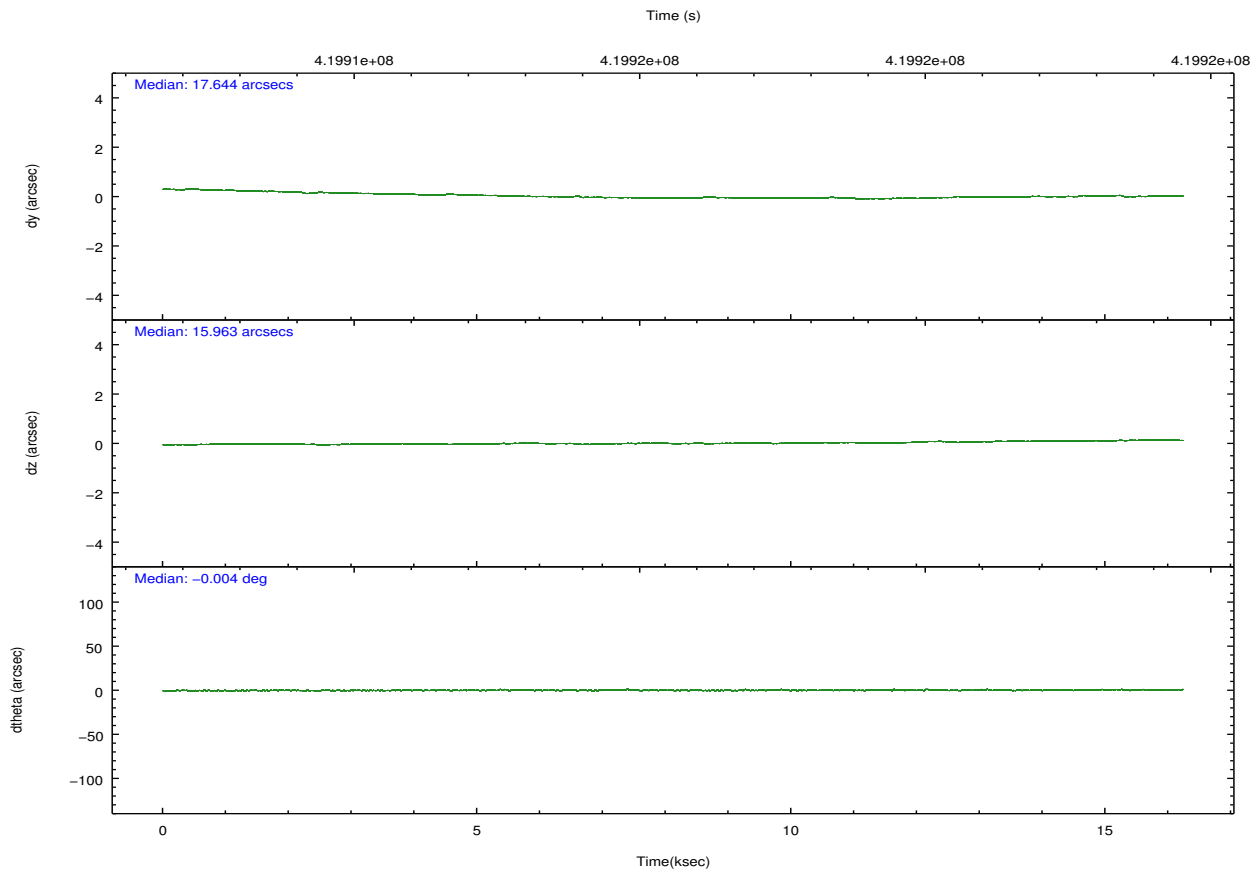
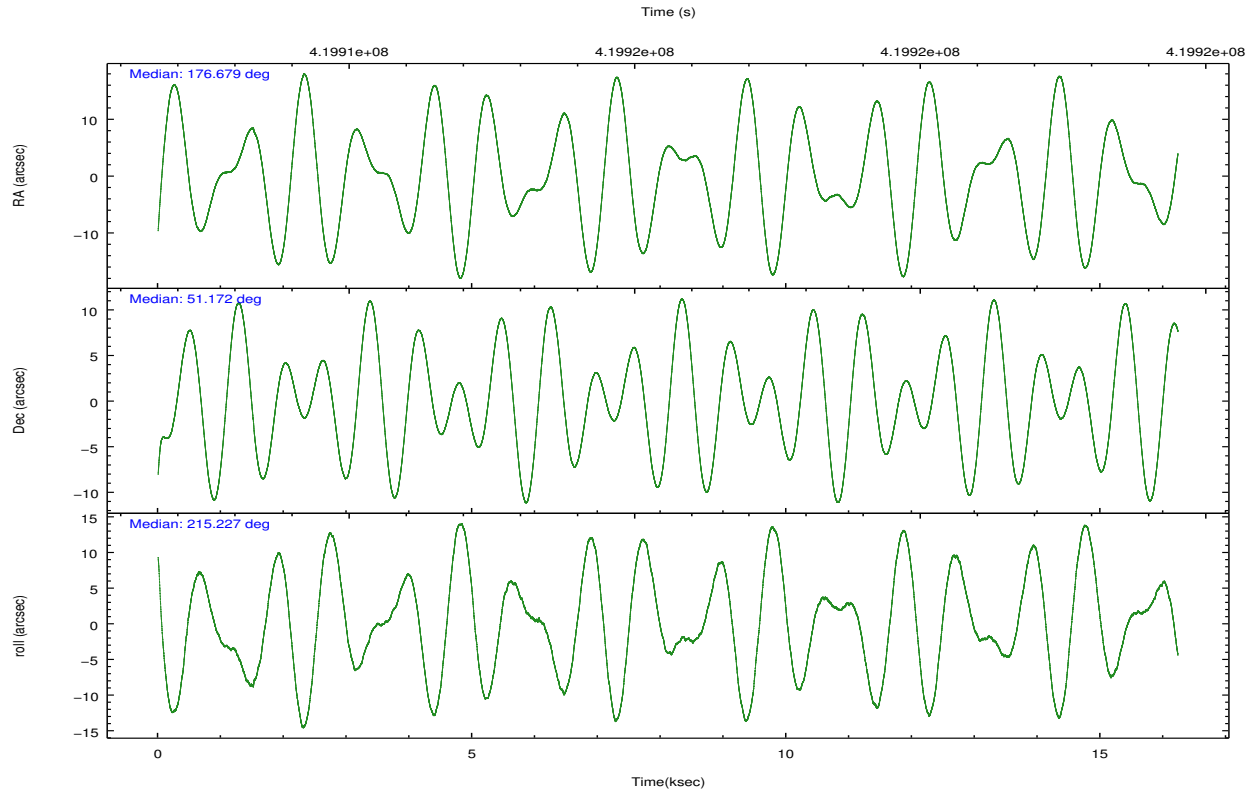
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	1046	933	1529	1121	1670
	3%	3%	3%	3%	4%
grade 1 events	13	14	71	10	35
	0%	0%	0%	0%	0%
grade 2 events	716	675	6129	722	3468
	2%	2%	14%	2%	9%
grade 3 events	502	529	1119	543	1775
	1%	1%	2%	1%	4%
grade 4 events	505	520	1031	527	1761
	1%	1%	2%	1%	4%
grade 5 events	1018	1272	3554	1313	3785
	3%	4%	8%	4%	10%
grade 6 events	575	565	10653	779	7967
	1%	1%	24%	2%	21%
grade 7 events	24616	24891	18534	26590	15780
	84%	84%	43%	84%	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	176.696143	176.6784136142522	CCD I2 on	Y	Y
[deg] Pointing Dec	51.197333	51.17233776842682	CCD I3 on	Y	Y
[deg] Pointing Roll	215.057016	215.2274670105938	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	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	N	N
[s] Observation start time (MET)	419907698.184000	419906841.32374	CCD S5 on	N	N
Observation start date	2011-04-23T01:00:32	2011-04-23T00:47:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	419923699.184000	419923924.48713	On-chip summing requested	N	N
Observation end date	2011-04-23T05:27:13	2011-04-23T05:32:04	Subarray requested	CUSTOM	1/4
Read mode	TIMED	TIMED	Subarray start row	385	385
			Subarray row count	256	256
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1

2.3 Aspect



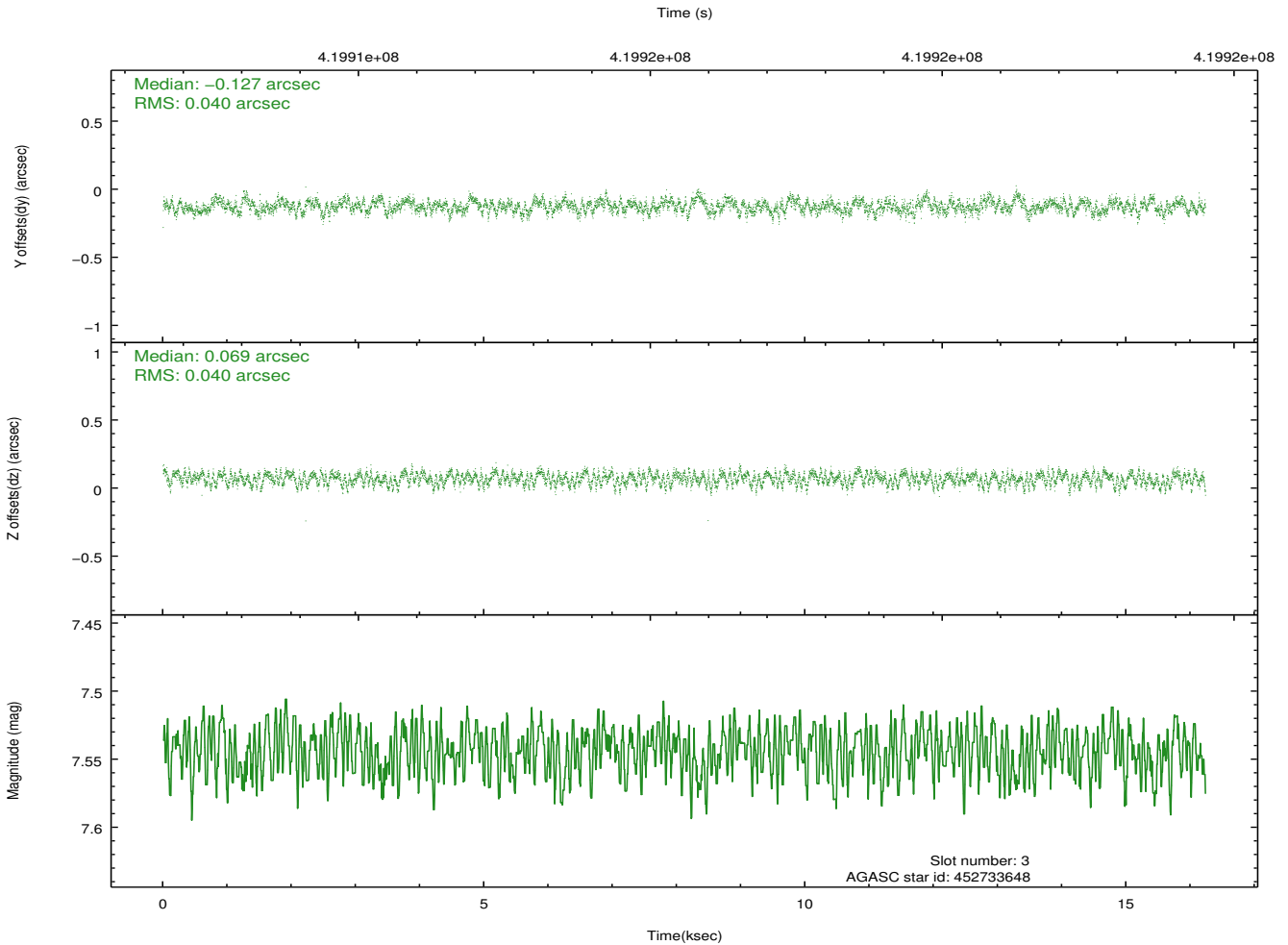
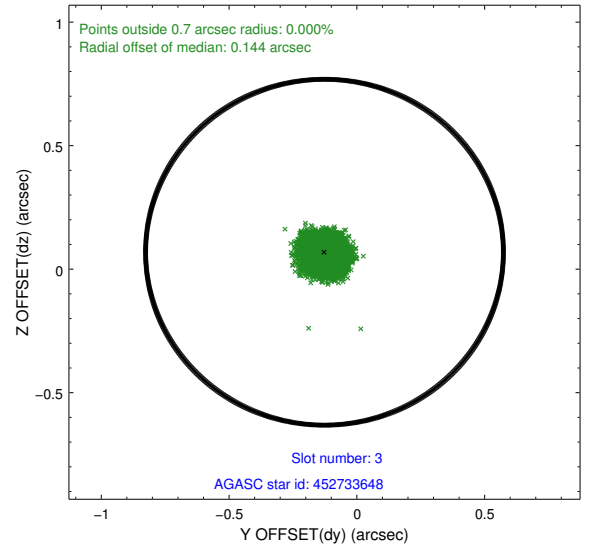
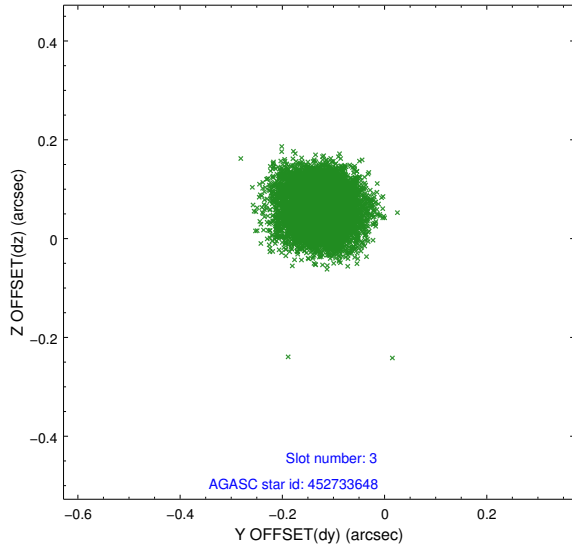


Slot Statistics

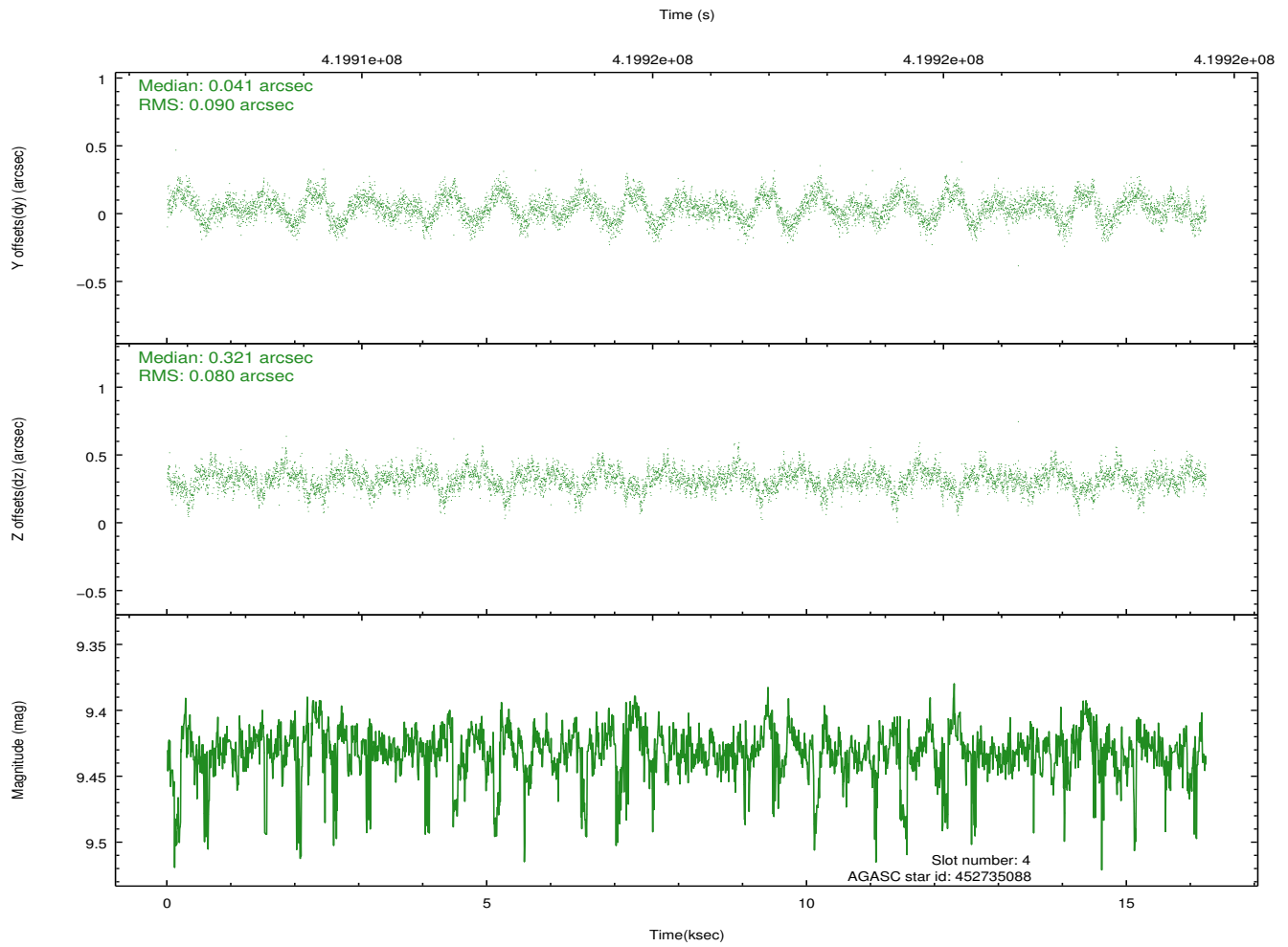
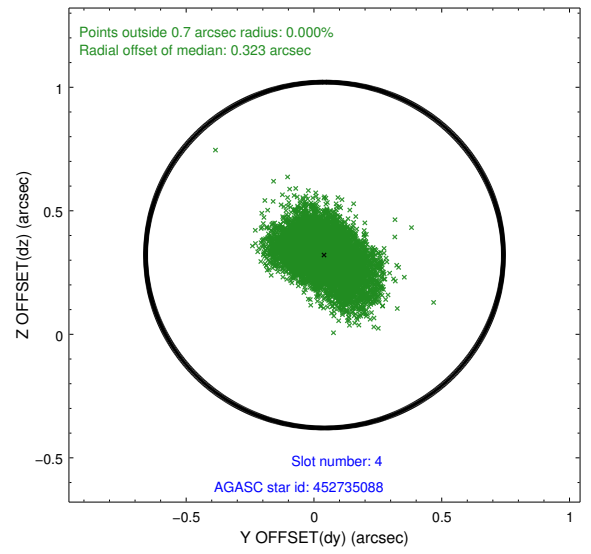
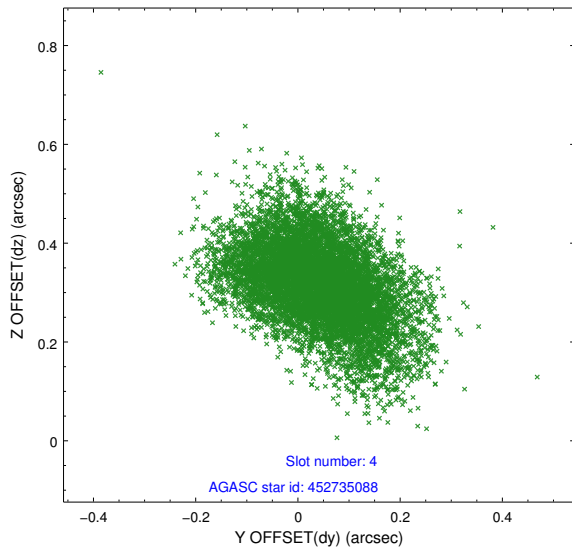
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.01	3960	-0.086	-0.020	0.007	0.011	0.000000	0.000000	-770.79	-1737.41
1	FID	ACIS-S-4	7.09	3959	0.202	0.047	0.007	0.012	0.000000	0.000000	2142.64	170.88
2	FID	ACIS-S-5	7.12	3959	-0.148	-0.018	0.007	0.012	0.000000	0.000000	-1823.37	164.77
3	GUIDE	452733648	7.54	7920	-0.127	0.069	0.061	0.096	176.604534	51.932873	-1354.37	-2284.34
4	GUIDE	452735088	9.43	7912	0.041	0.321	0.127	0.214	176.087412	51.094482	1336.25	-491.97
5	GUIDE	452736224	9.05	7914	-0.177	0.016	0.090	0.145	176.764586	50.971809	339.76	755.11
6	GUIDE	452736584	7.97	7918	0.332	-0.157	0.081	0.133	176.535690	50.563566	1611.41	1656.63
7	GUIDE	452724032	6.49	7919	-0.069	-0.242	0.049	0.082	177.710584	51.412748	-2318.46	660.69

2.4 Star Slots

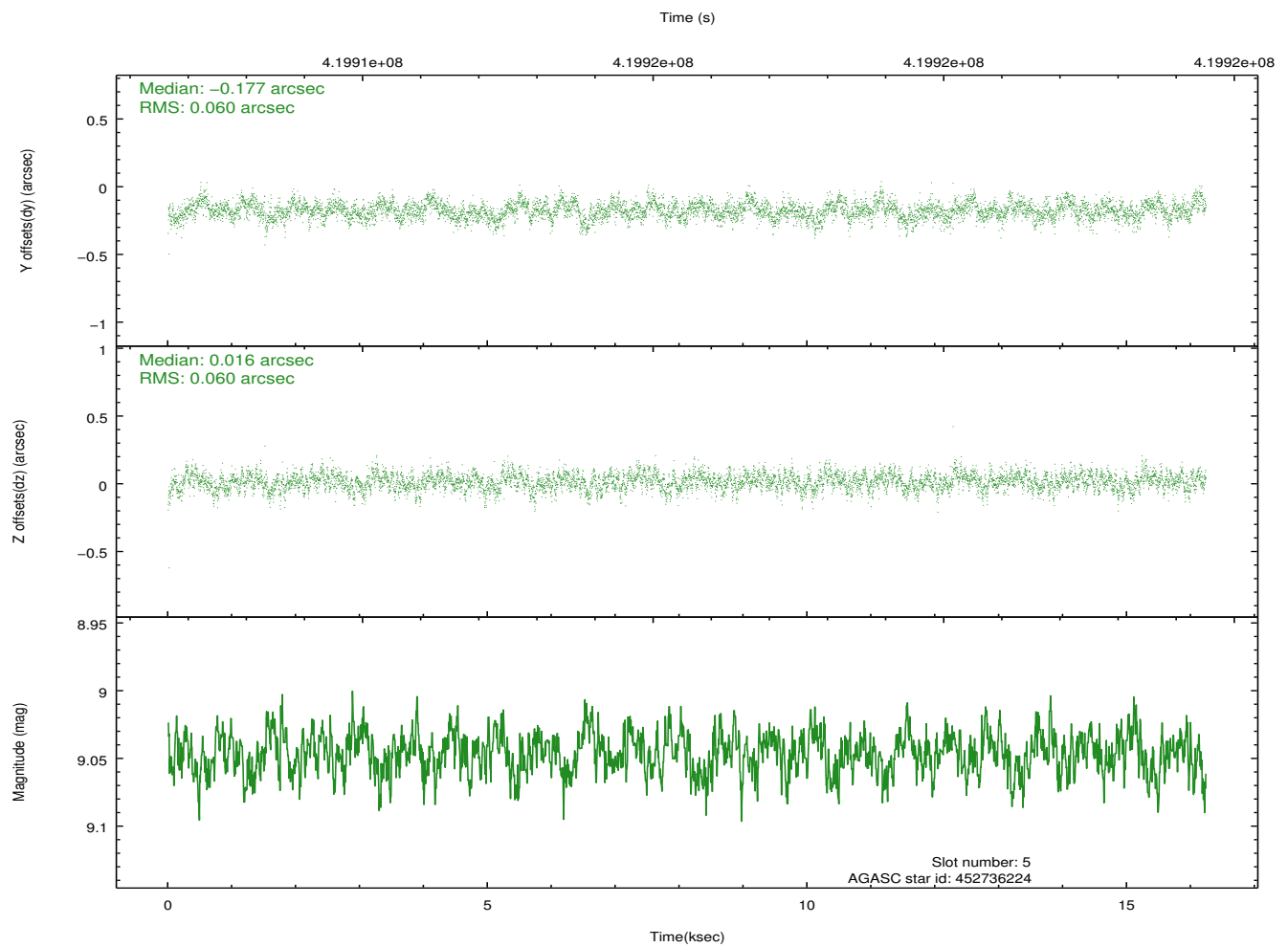
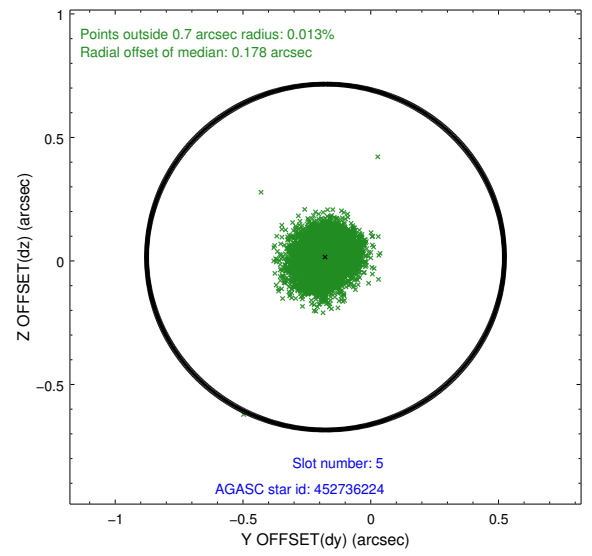
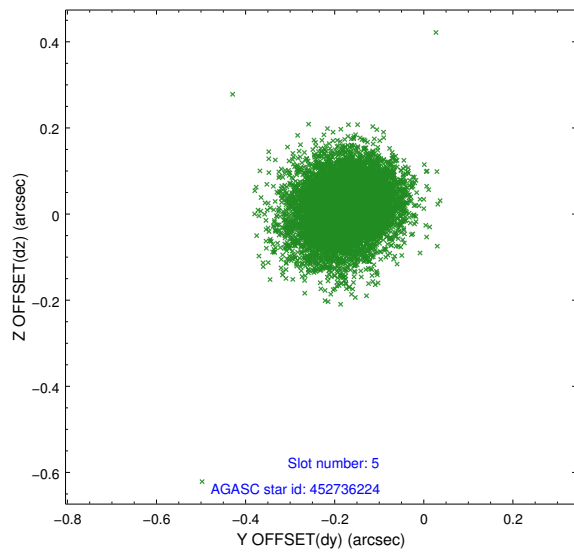
2.4.1 Slot 3



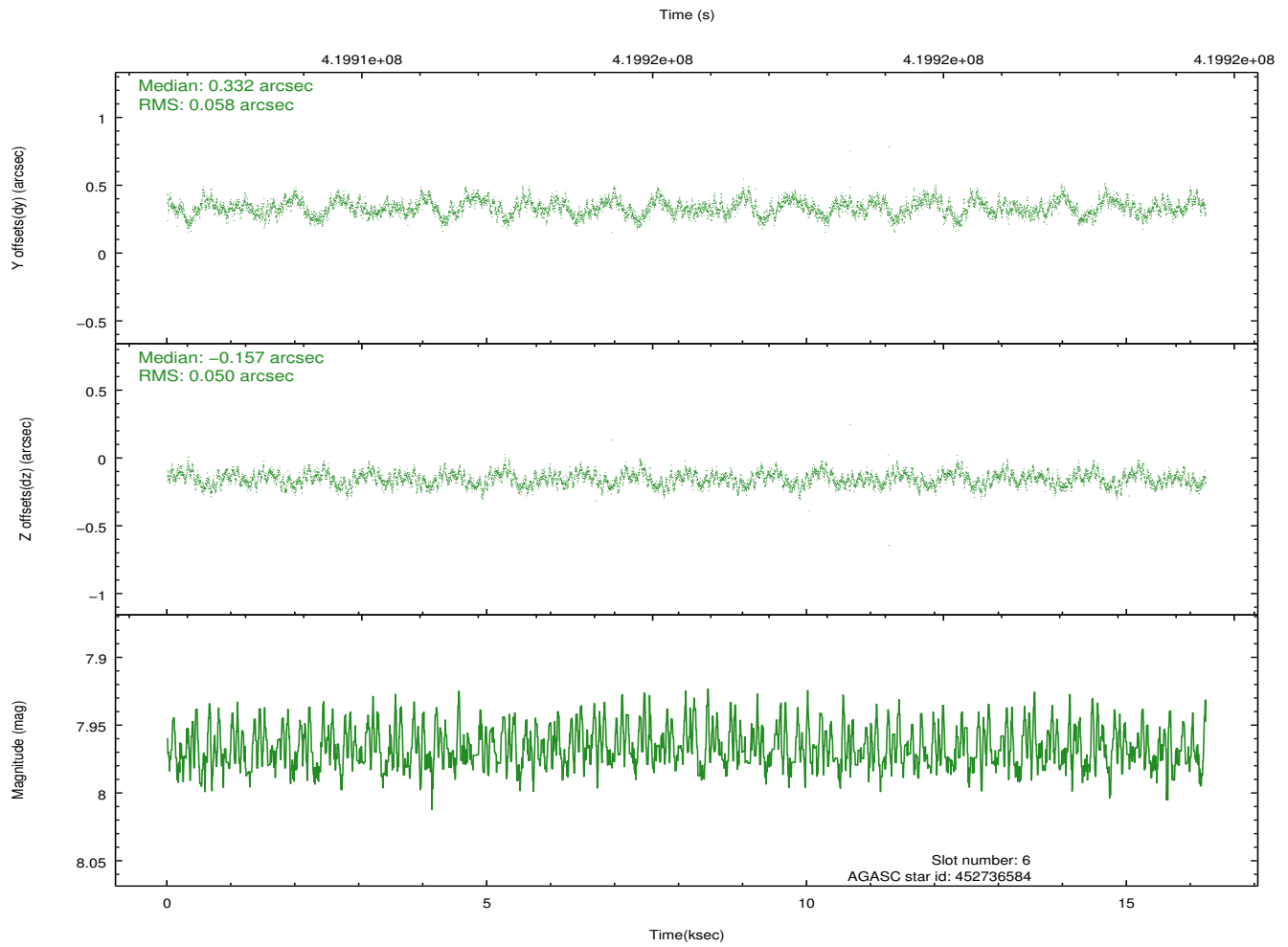
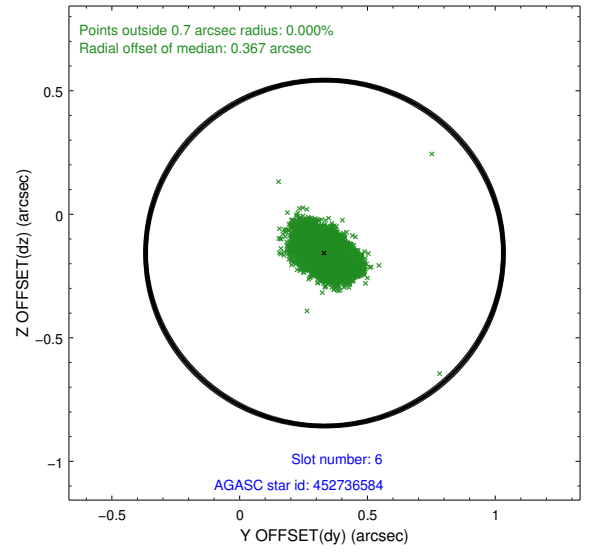
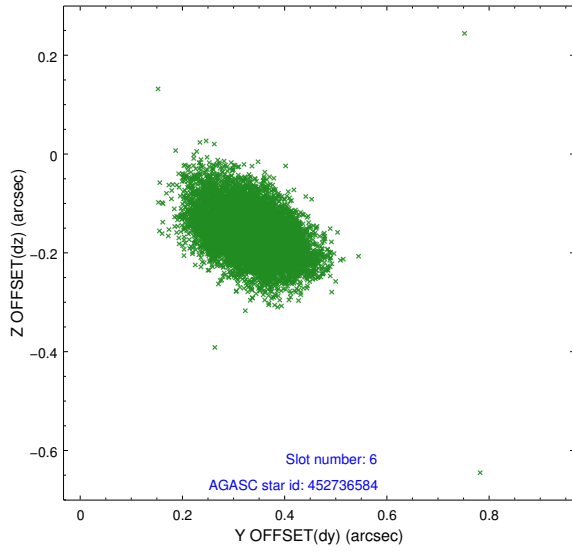
2.4.2 Slot 4



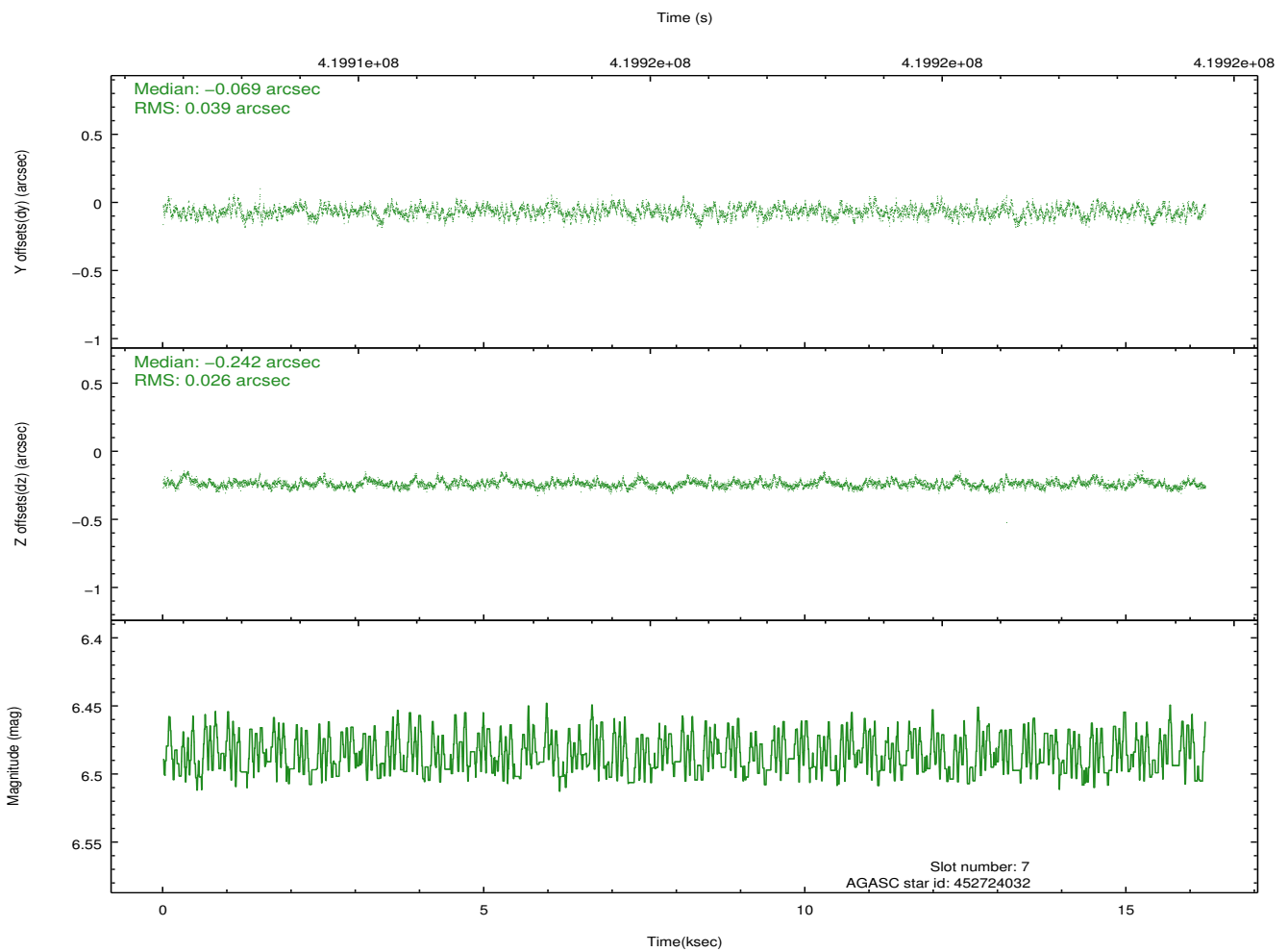
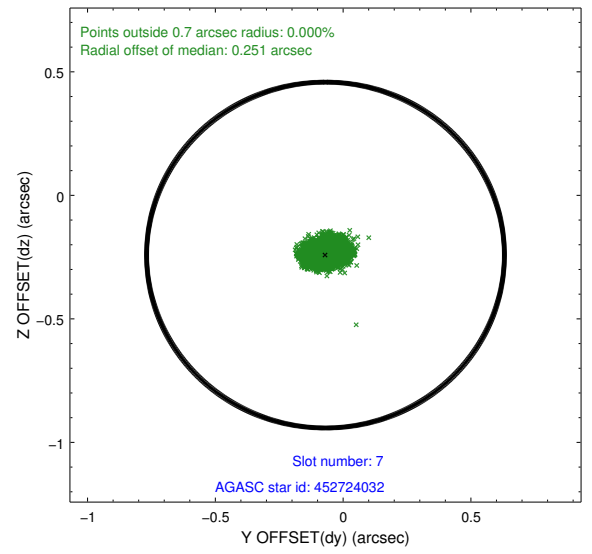
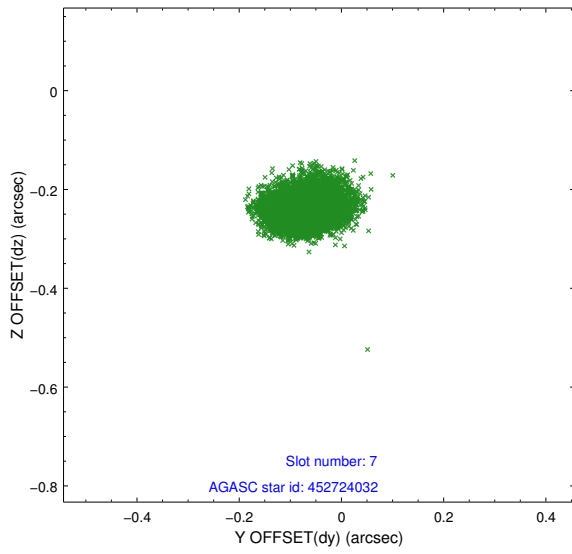
2.4.3 Slot 5



2.4.4 Slot 6

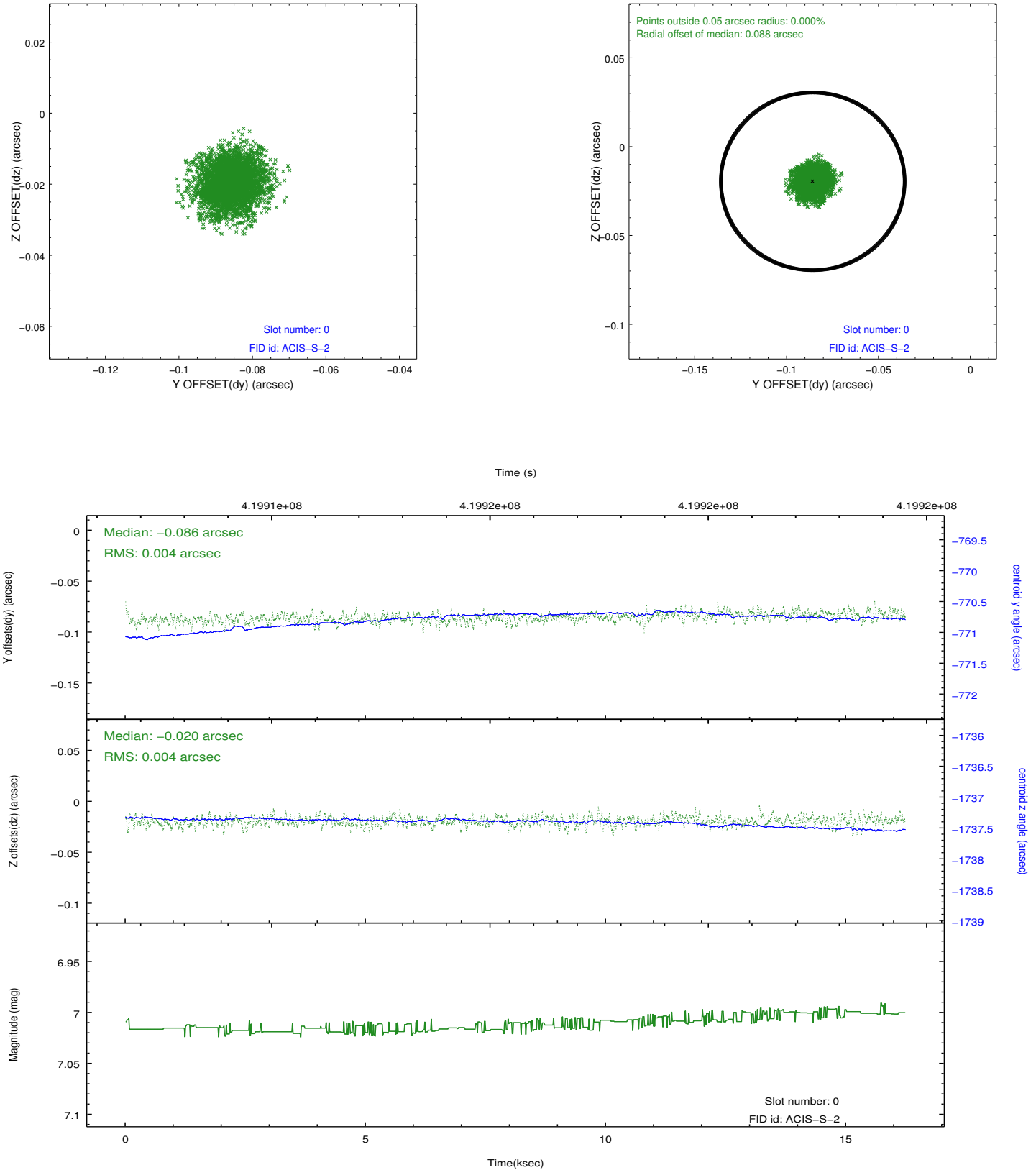


2.4.5 Slot 7

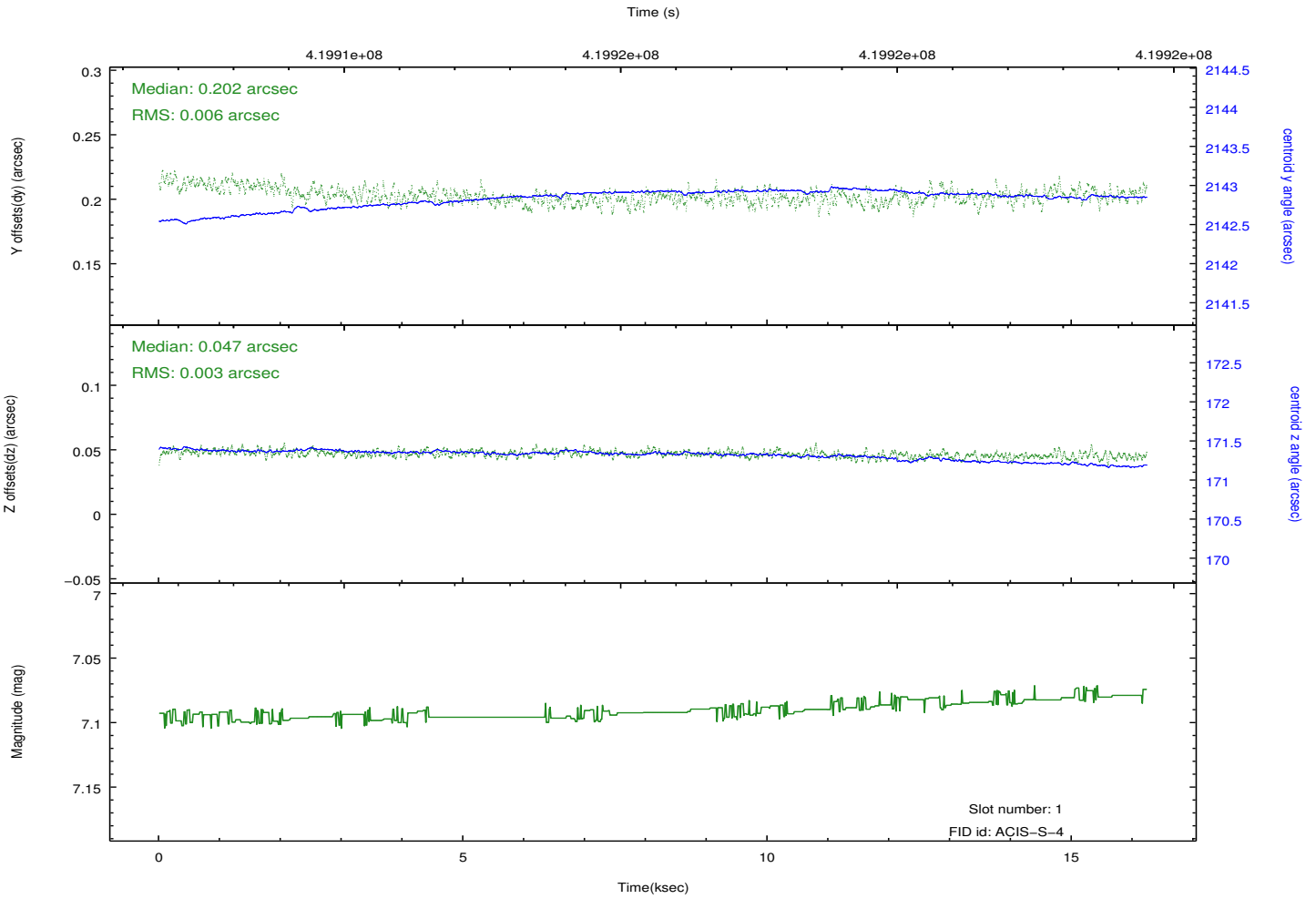
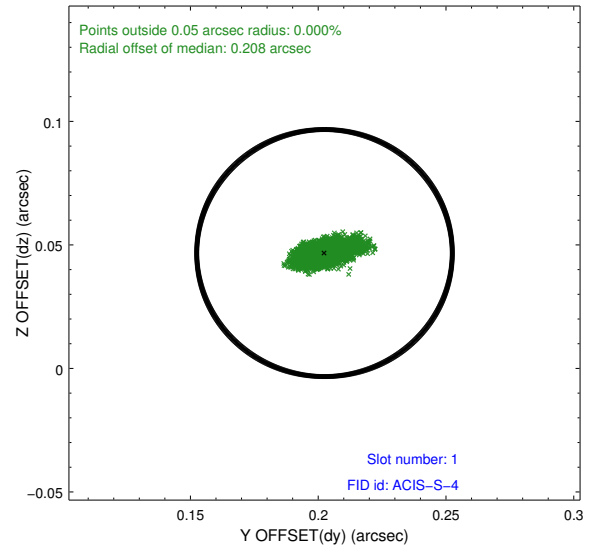
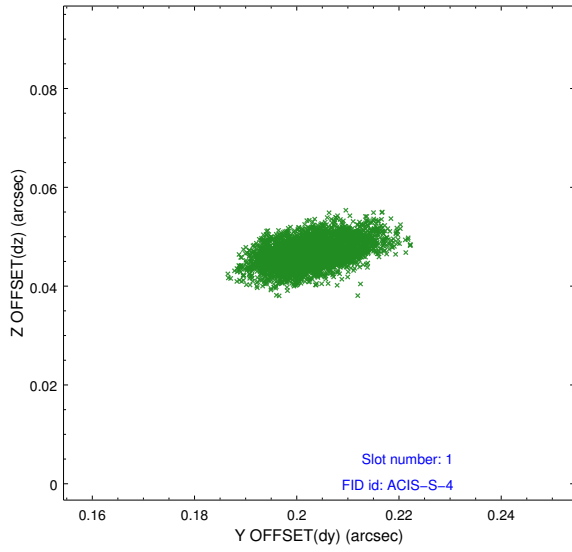


2.5 FID Slots

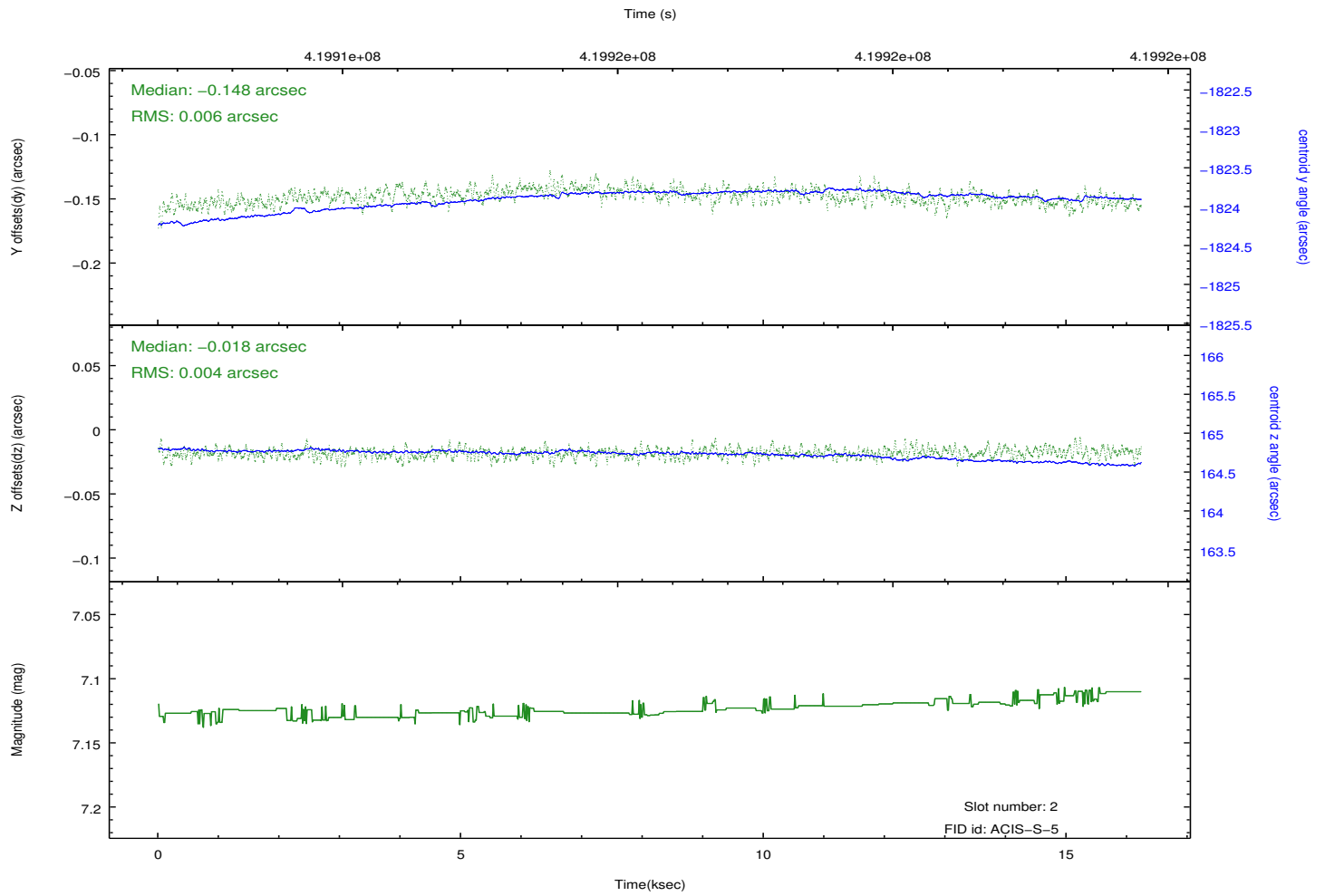
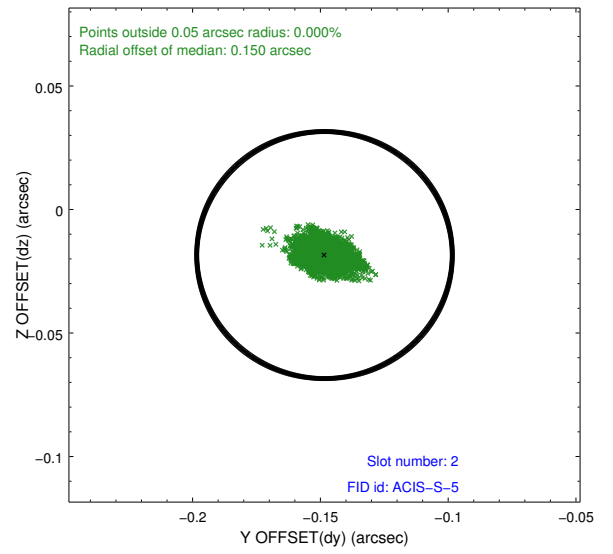
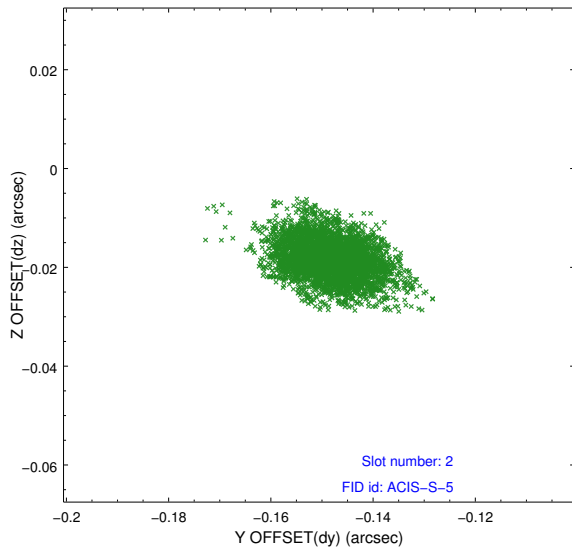
2.5.1 Slot 0



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)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.065755148888

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: HST