

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13013 - L2 Version 3
Chandra X-Ray Center

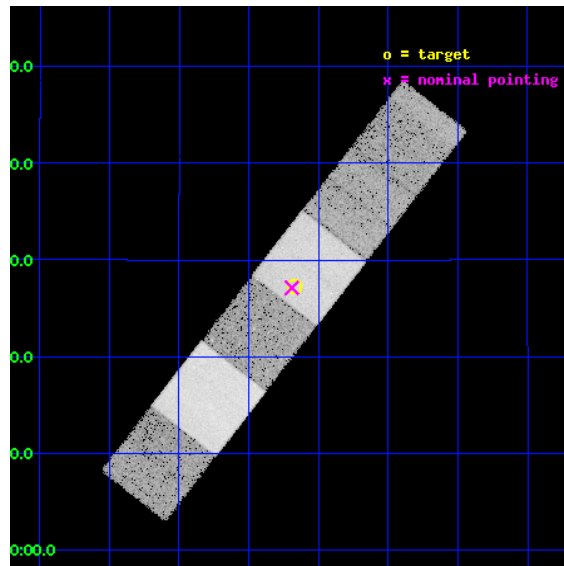
L2 Processing Date : Feb 2 2012

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1 Front

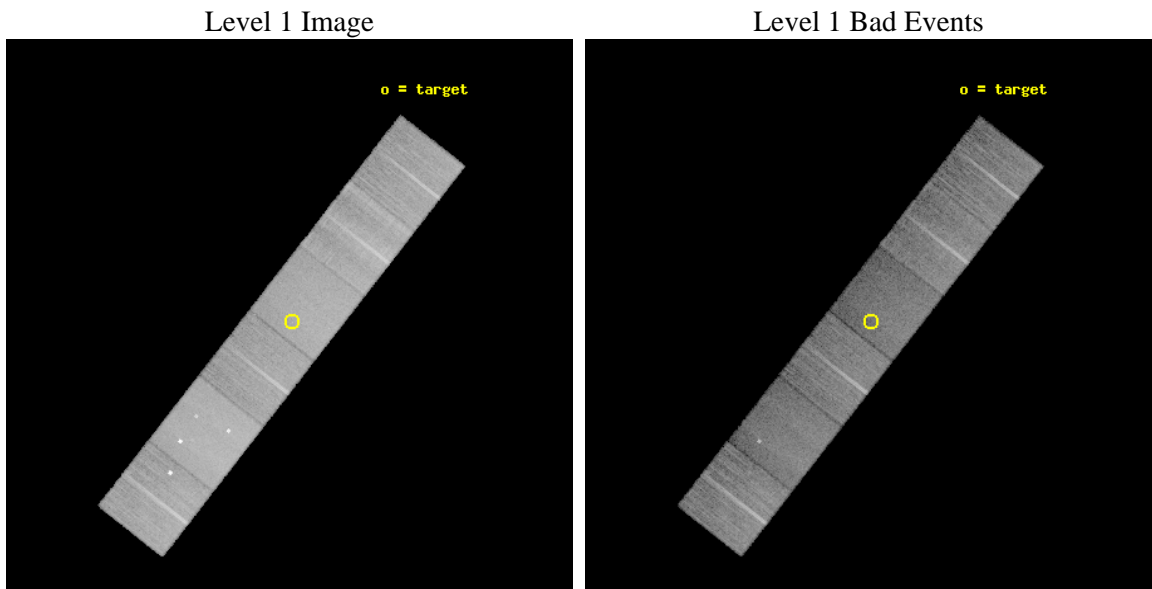
seq_num	600977	Sequence number
obs_id	13013	Observation id
title	Chandra Observations of Local Lyman Break Galaxy Analogs	Proposal
observer	Dr. Antara Basu-Zych	Principal investigator
object	J225140.3+132713.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	342.917917	Observer's specified target RA [deg]
dec_targ	13.453722	Observer's specified target Dec [deg]
ra_nom	342.92258534184	Nominal RA [deg]
dec_nom	13.452028168257	Nominal Dec [deg]
roll_nom	308.01941867266	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19820.799926221	Sum of GTIs [s]
livetime	19569.817022903	Livetime [s]
ontime4	19820.799926221	Sum of GTIs [s]
ontime5	19820.799926221	Sum of GTIs [s]
ontime6	19820.799926221	Sum of GTIs [s]
ontime7	19820.799926221	Sum of GTIs [s]
ontime8	19820.799926221	Sum of GTIs [s]
ontime9	19820.799926221	Sum of GTIs [s]
l2events	236388	Number of level 2 events



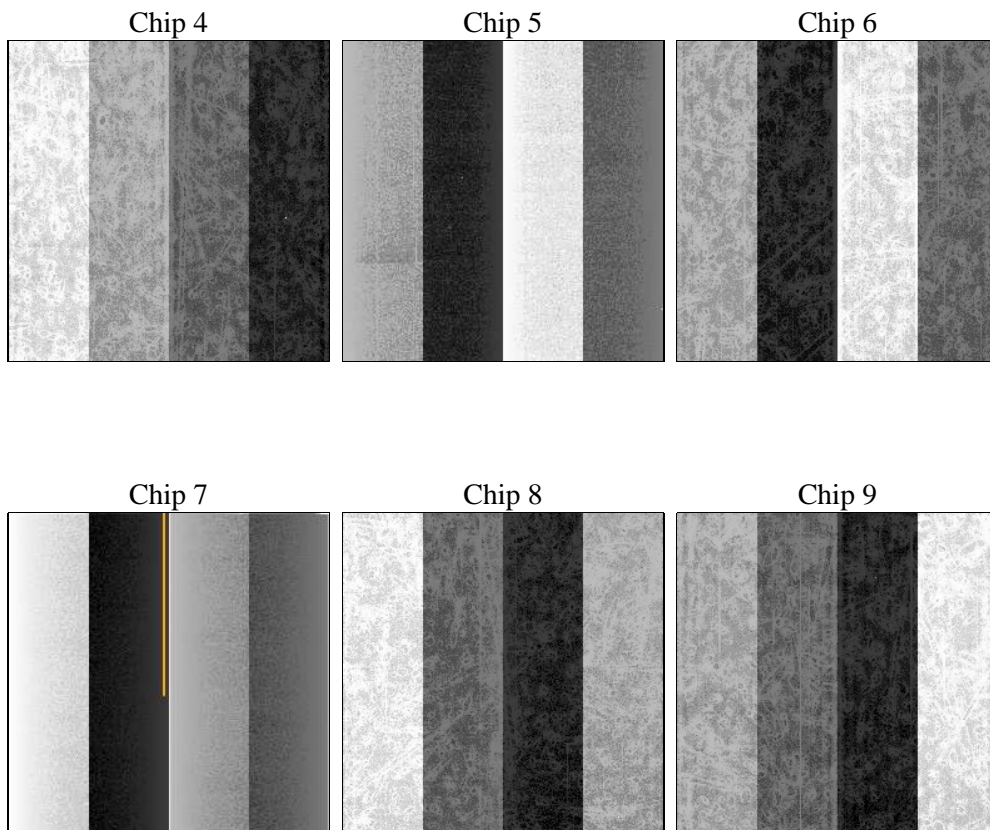
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19774.804000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	19820.799926221	Sum of GTIs [s]
caldbver	4.4.7	 	ontime4	19820.799926221	Sum of GTIs [s]
date	2012-02-02T10:58:10	Date and time of file creation	ontime5	19820.799926221	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	19820.799926221	Sum of GTIs [s]
			ontime7	19820.799926221	Sum of GTIs [s]
			ontime8	19820.799926221	Sum of GTIs [s]
			ontime9	19820.799926221	Sum of GTIs [s]
			l1events	1023570	Number of level 1 events

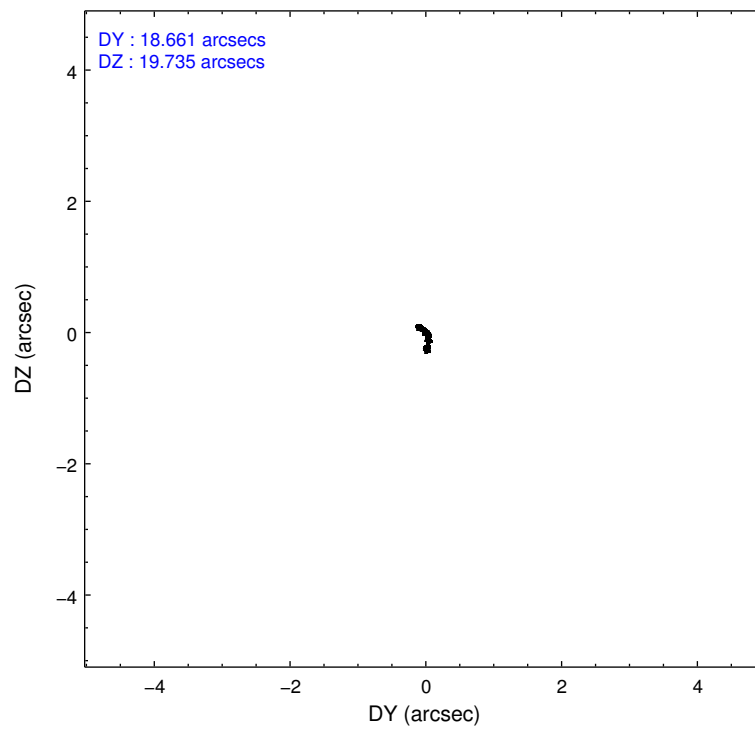
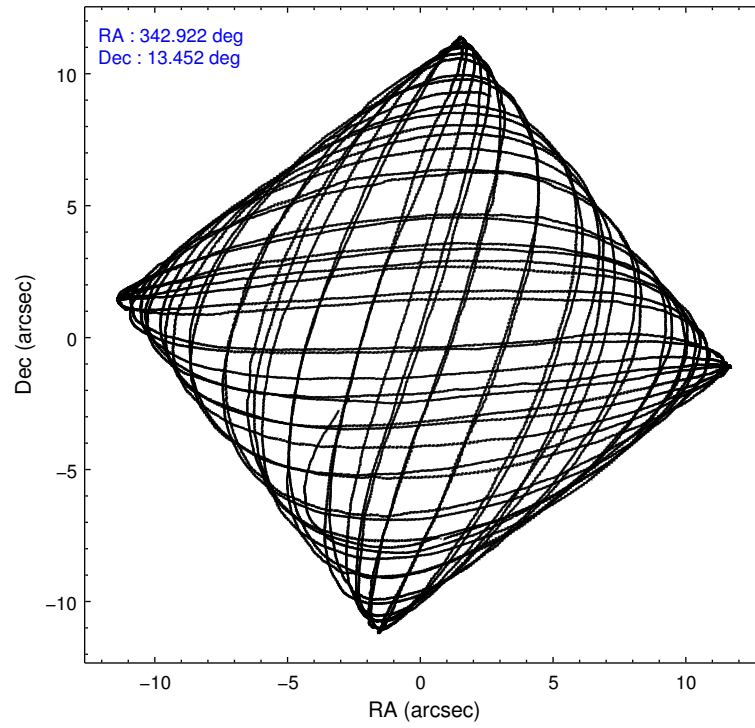
2.1.4 Events

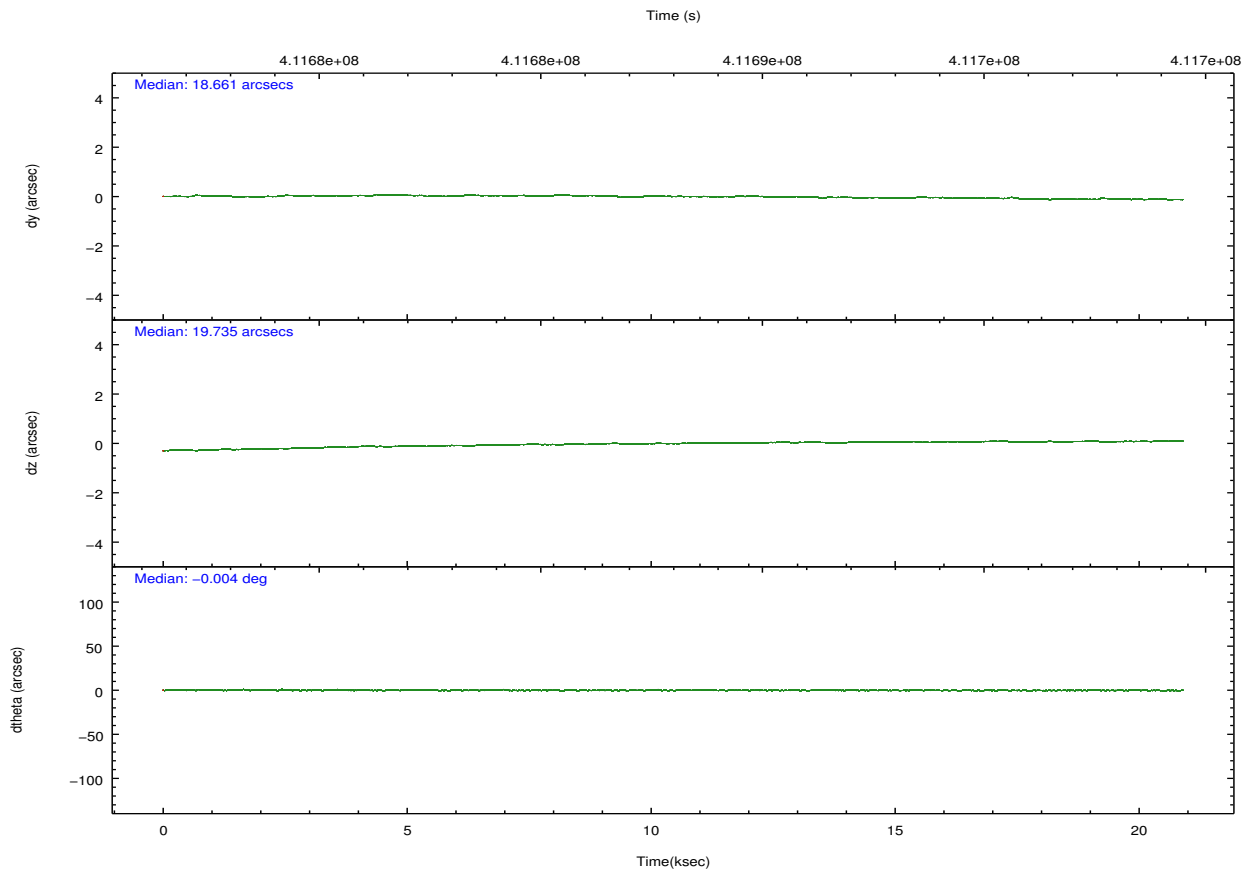
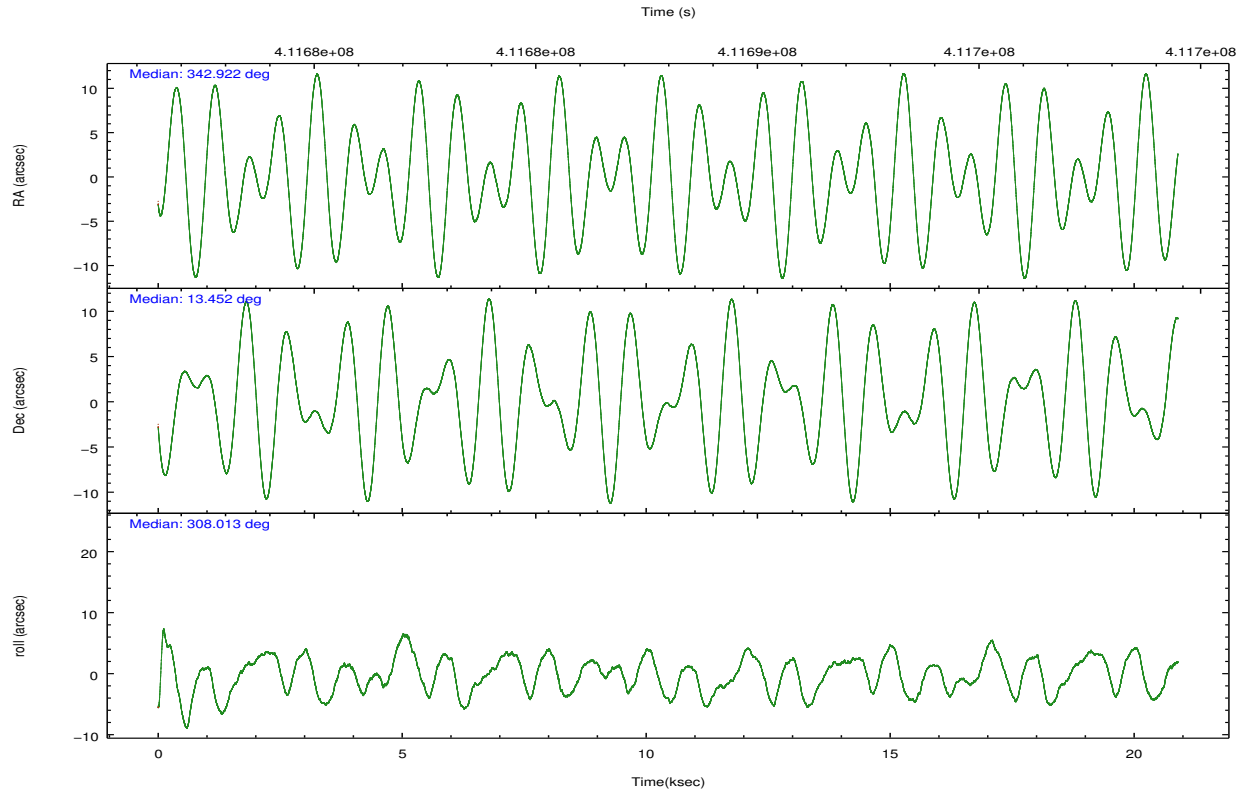
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	166127	218762	142280	173675	183858	138868	grade 0 events	11871	12127	5975	7207	15070	6478
rejected events	143681	108754	125919	95173	134632	121574		7%	5%	4%	4%	8%	4%
rejected %	86%	49%	88%	54%	73%	87%	grade 1 events	162	402	72	205	141	77
								0%	0%	0%	0%	0%	0%
							grade 2 events	4181	34091	3659	15955	11396	3604
								2%	15%	2%	9%	6%	2%
							grade 3 events	1828	4201	1595	6847	5217	1820
								1%	1%	1%	3%	2%	1%
							grade 4 events	1665	3869	1630	6861	4770	1745
								1%	1%	1%	3%	2%	1%
							grade 5 events	6316	16072	6362	18101	9380	7151
								3%	7%	4%	10%	5%	5%
							grade 6 events	2906	55760	3509	41662	12835	3654
								1%	25%	2%	23%	6%	2%
							grade 7 events	137198	92240	119478	76837	125049	114339
								82%	42%	83%	44%	68%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	342.896376	342.9225853418373	CCD I2 on	N	N
[deg] Pointing Dec	13.461929	13.45202816825715	CCD I3 on	N	N
[deg] Pointing Roll	307.868900	308.0194186726613	CCD S0 on	O3	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	411678660.184000	411677185.085	CCD S5 on	O1	Y
Observation start date	2011-01-17T19:09:54	2011-01-17T18:46:25	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411698435.184000	411698661.39861	On-chip summing requested	N	N
Observation end date	2011-01-18T00:39:29	2011-01-18T00:44:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



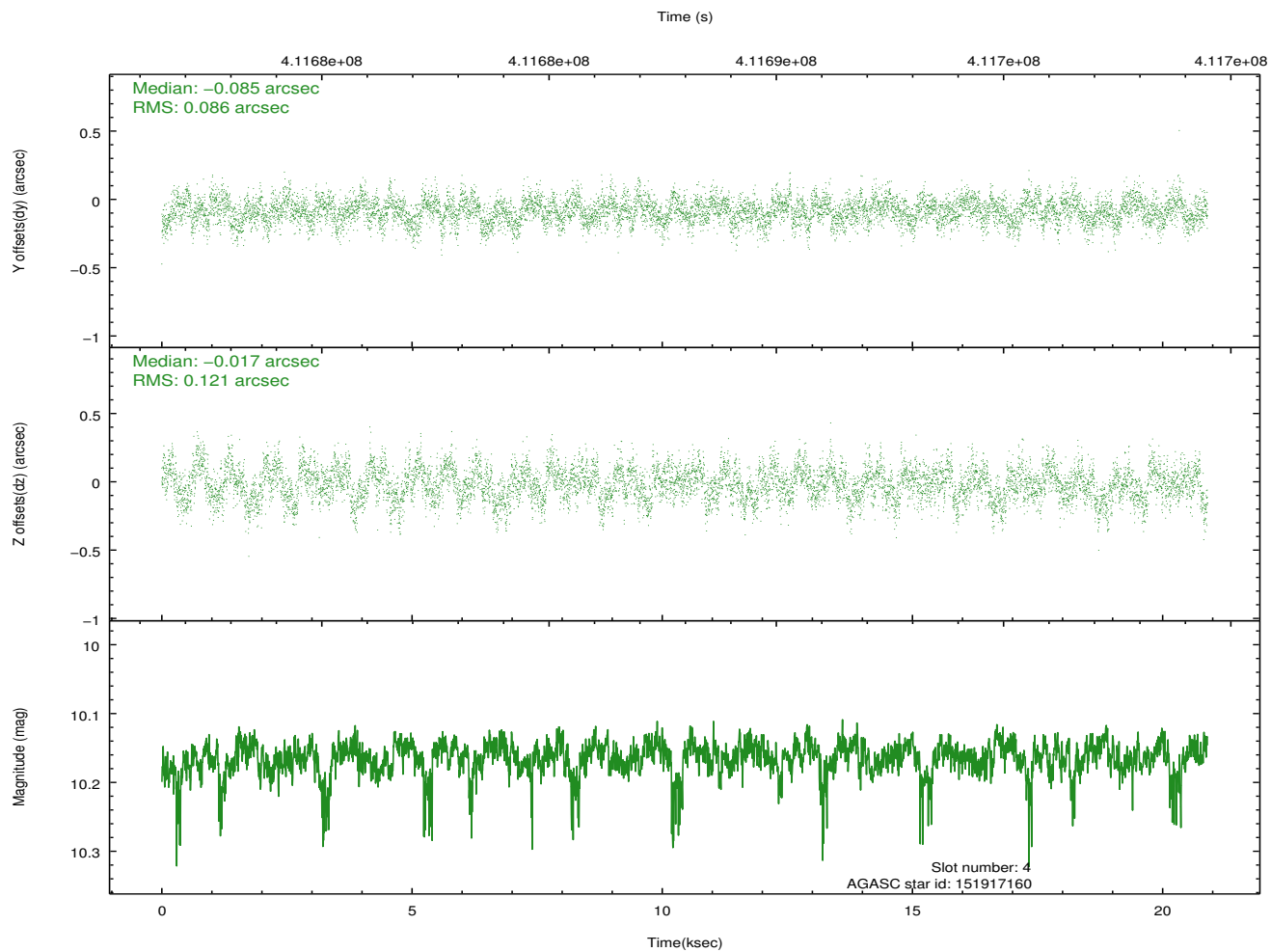
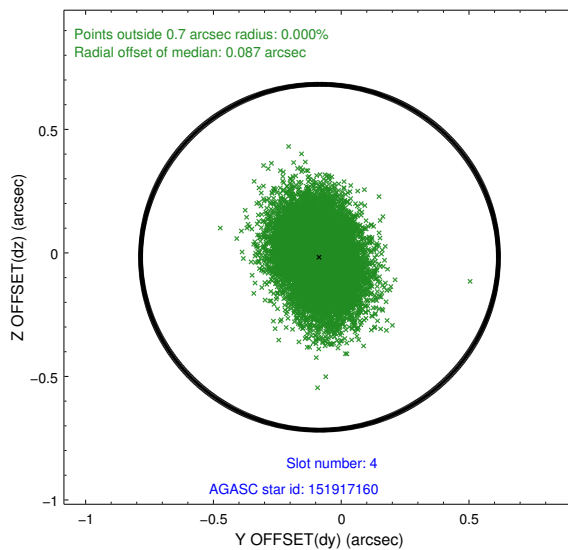
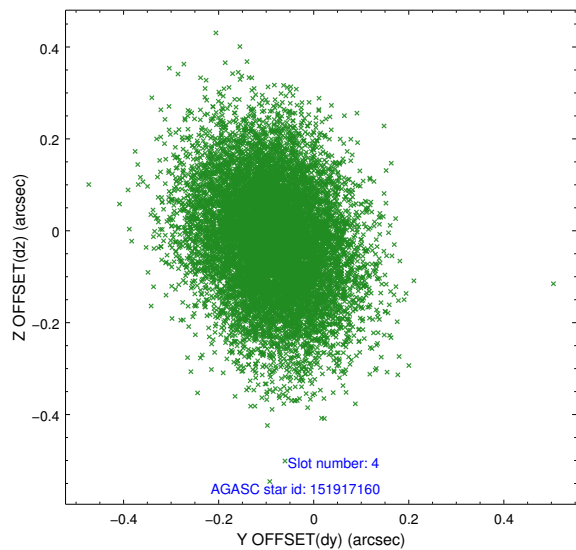


Slot Statistics

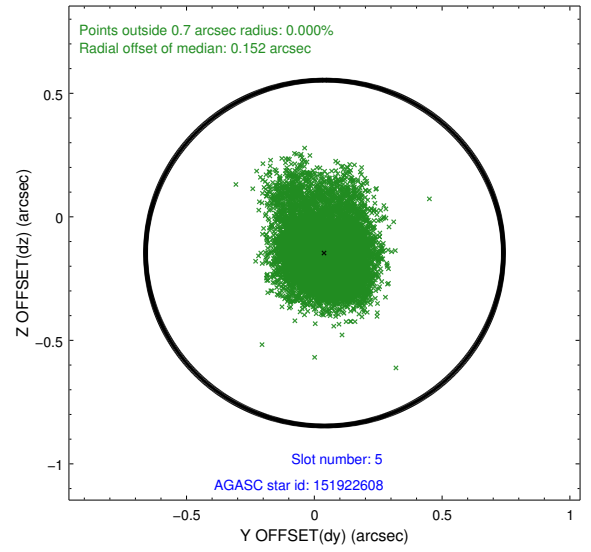
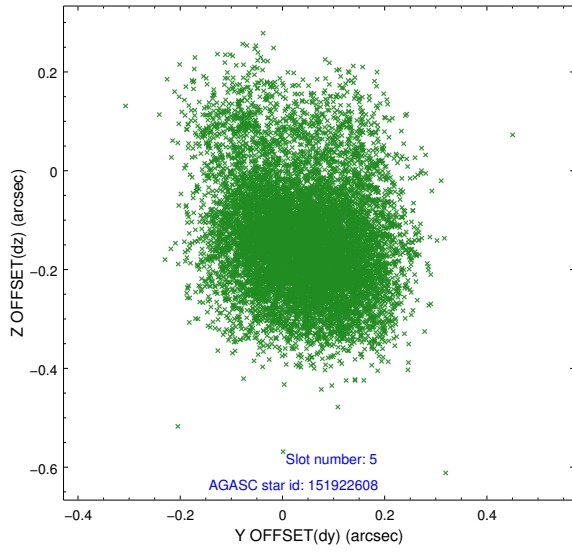
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	5098	-0.096	-0.032	0.007	0.012	0.000000	0.000000	-771.81	-1741.18
1	FID	ACIS-S-4	6.97	5097	0.229	0.055	0.005	0.010	0.000000	0.000000	2141.71	167.20
2	FID	ACIS-S-5	7.00	5098	-0.164	-0.014	0.007	0.012	0.000000	0.000000	-1824.50	161.00
3	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	151917160	10.16	10177	-0.085	-0.017	0.157	0.258	343.271058	14.021512	-787.77	2270.58
5	GUIDE	151922608	9.44	10183	0.040	-0.147	0.151	0.263	343.093682	13.288006	918.58	162.06
6	GUIDE	151923416	9.33	10184	0.030	0.053	0.132	0.205	342.565800	12.806105	1151.84	-2364.88
7	GUIDE	151924000	10.09	10170	0.029	0.105	0.169	0.276	342.160327	13.685019	-2216.88	-1536.91

2.4 Star Slots

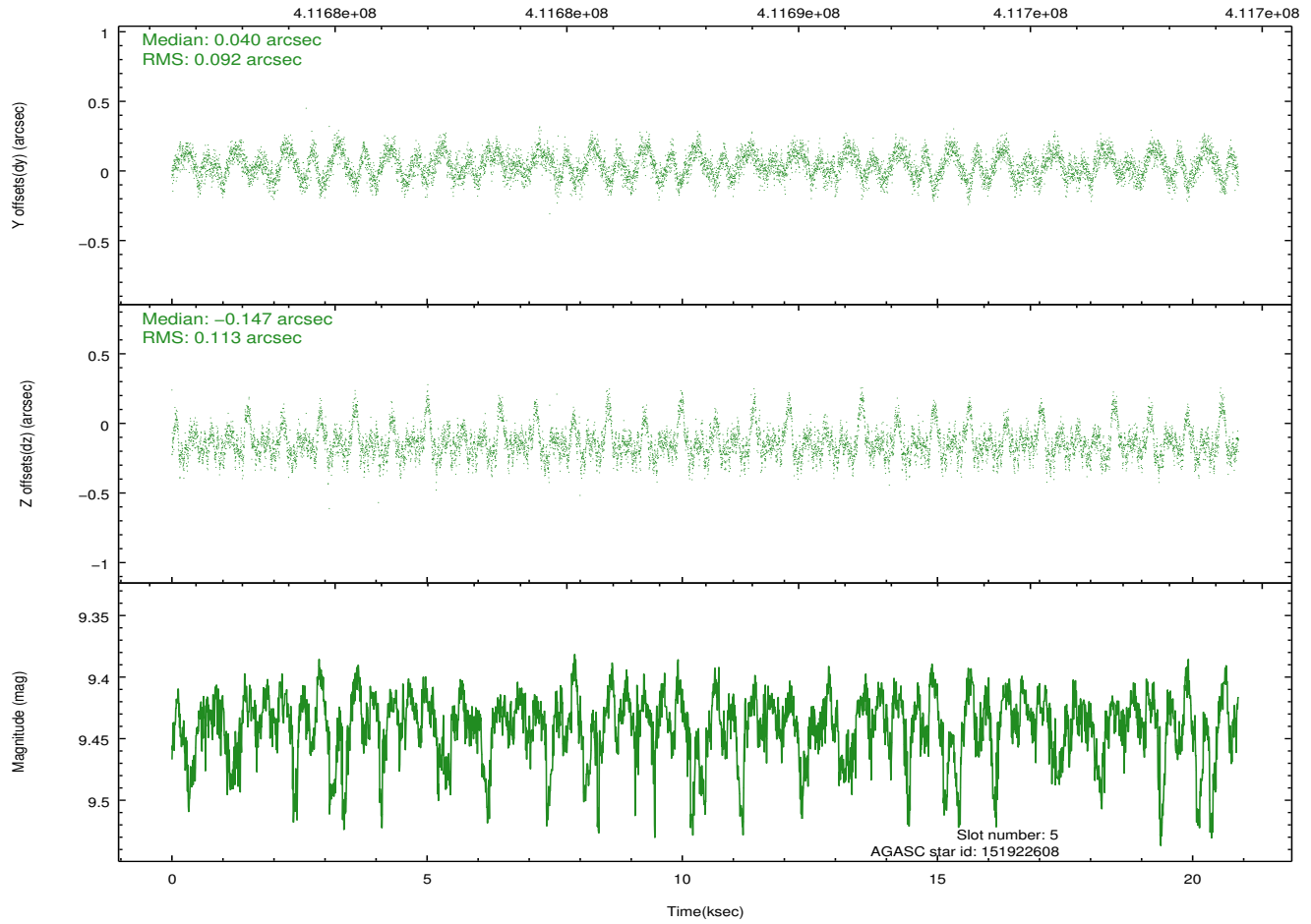
2.4.1 Slot 4



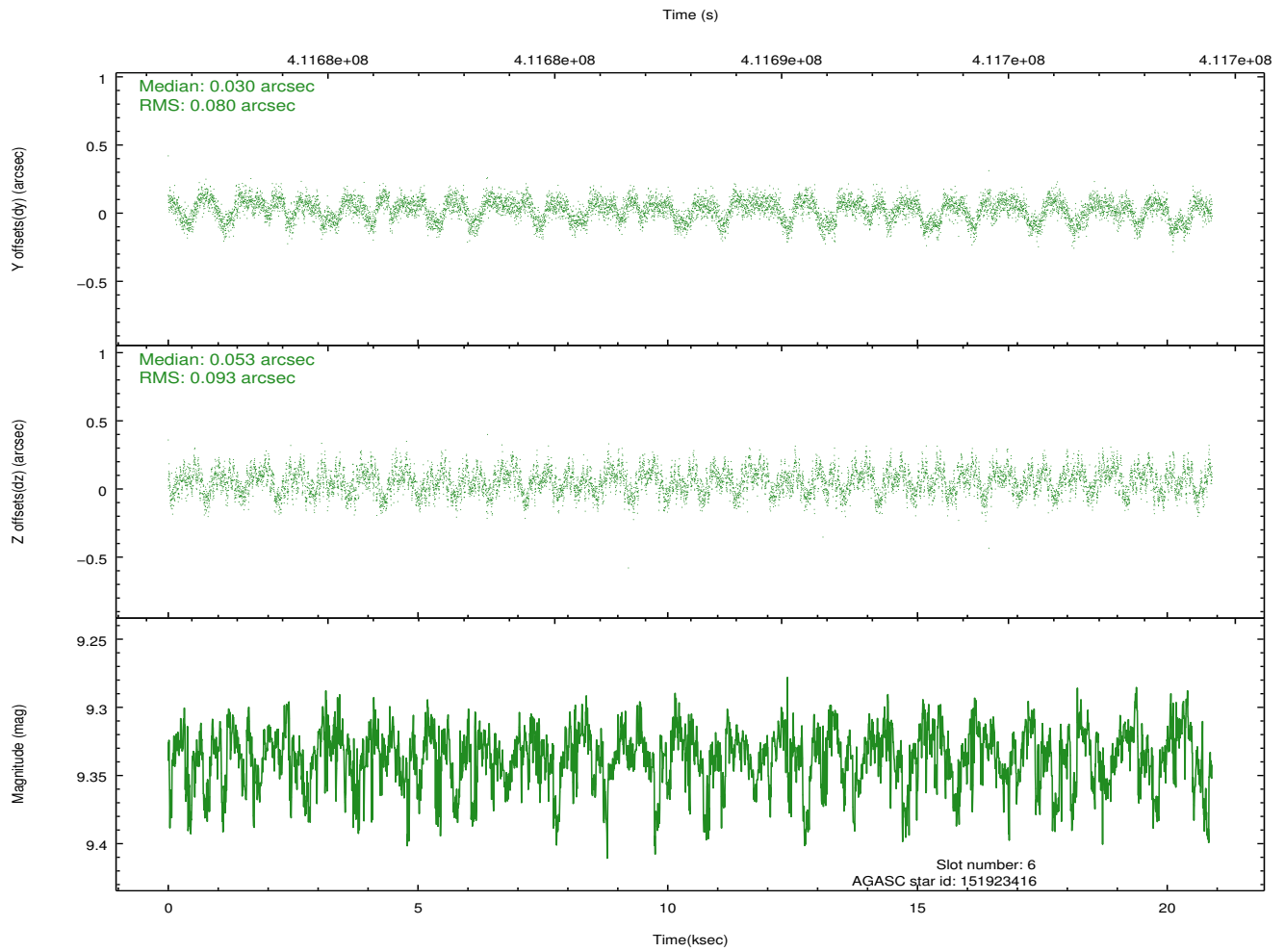
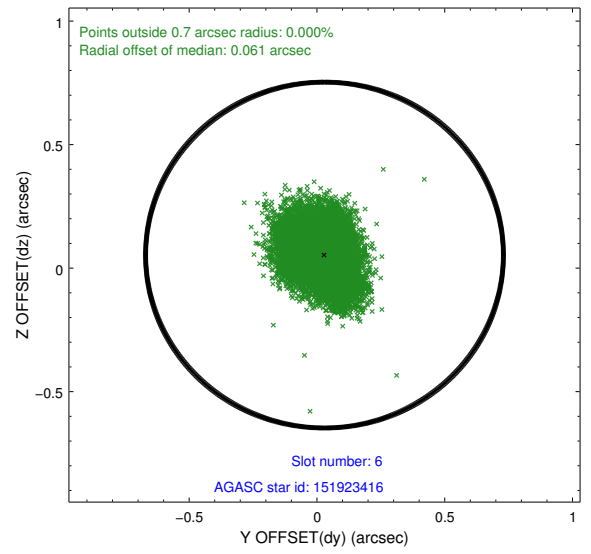
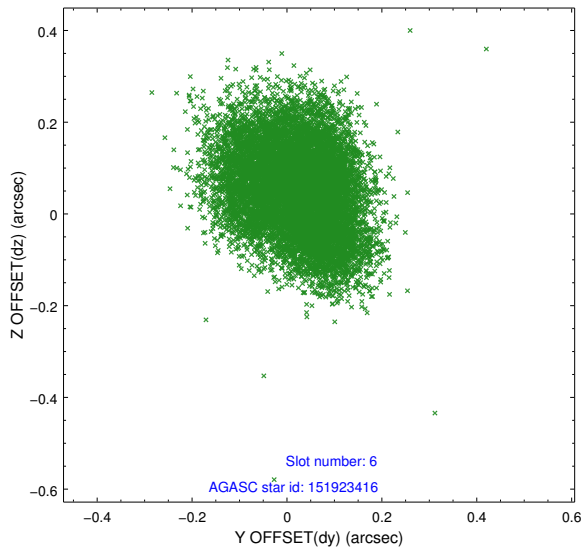
2.4.2 Slot 5



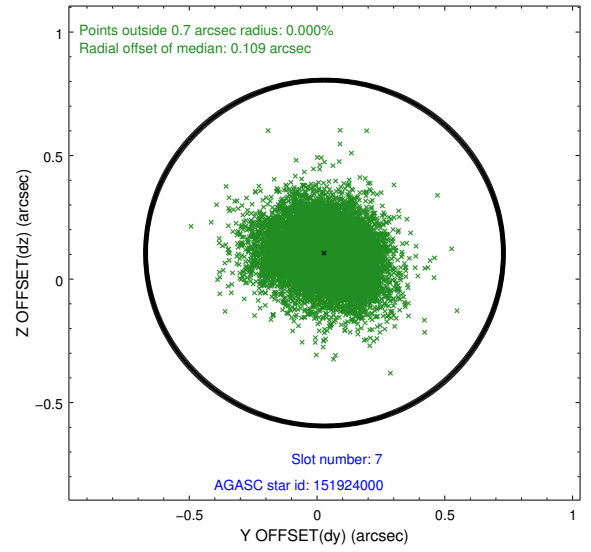
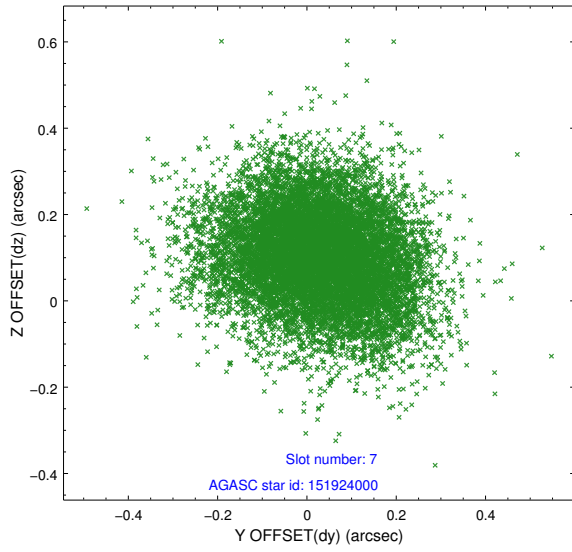
Time (s)



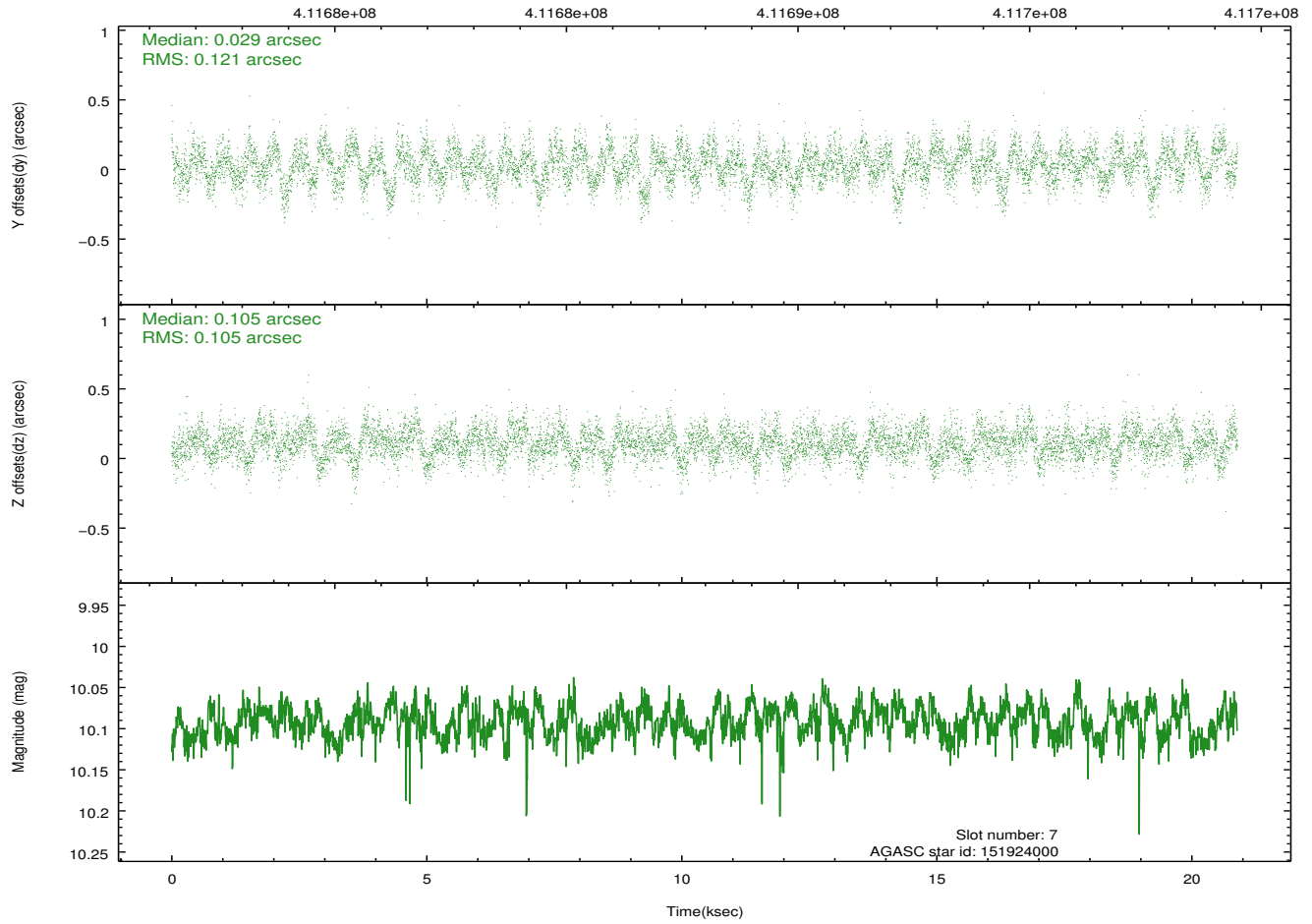
2.4.3 Slot 6



2.4.4 Slot 7

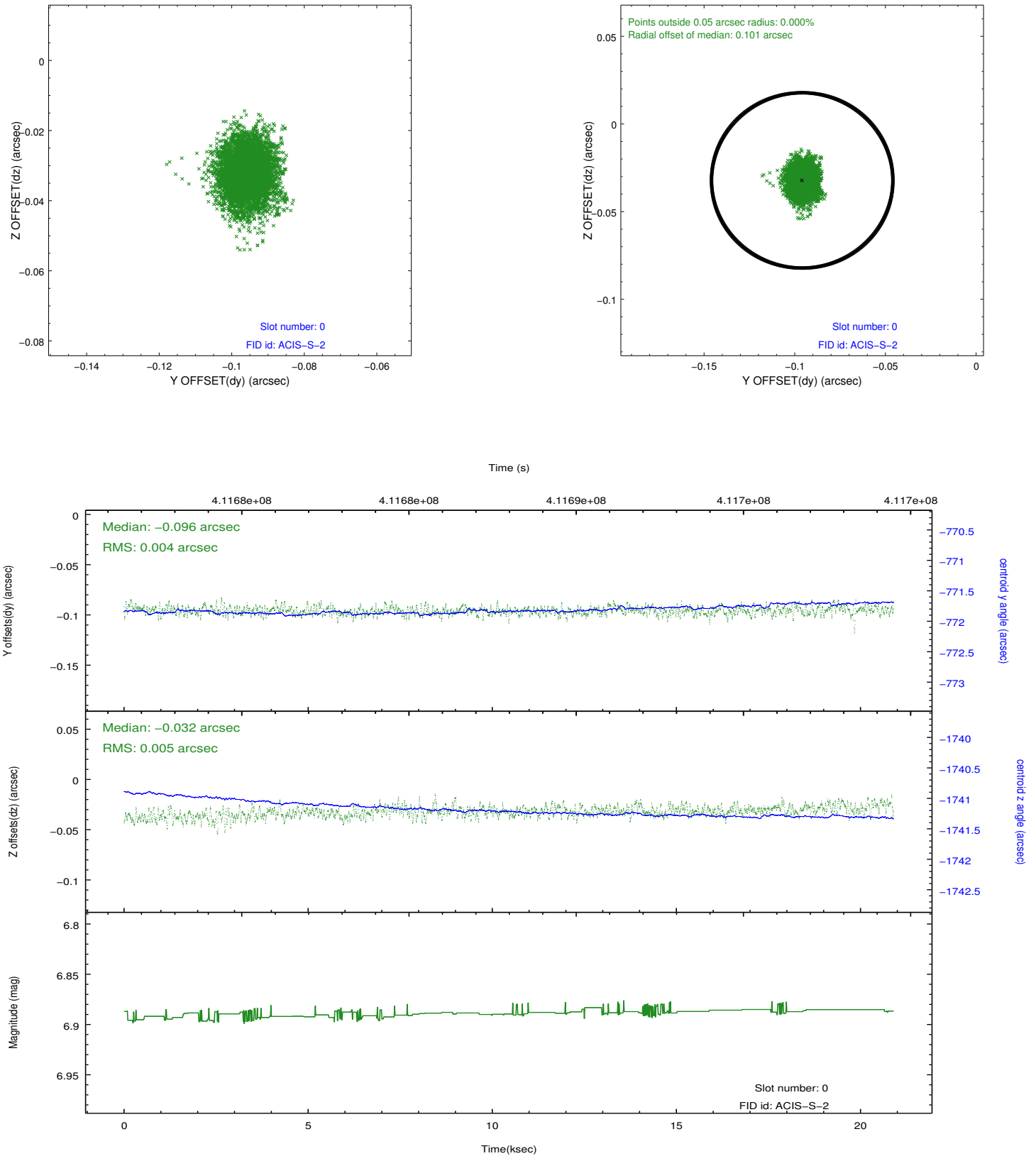


Time (s)

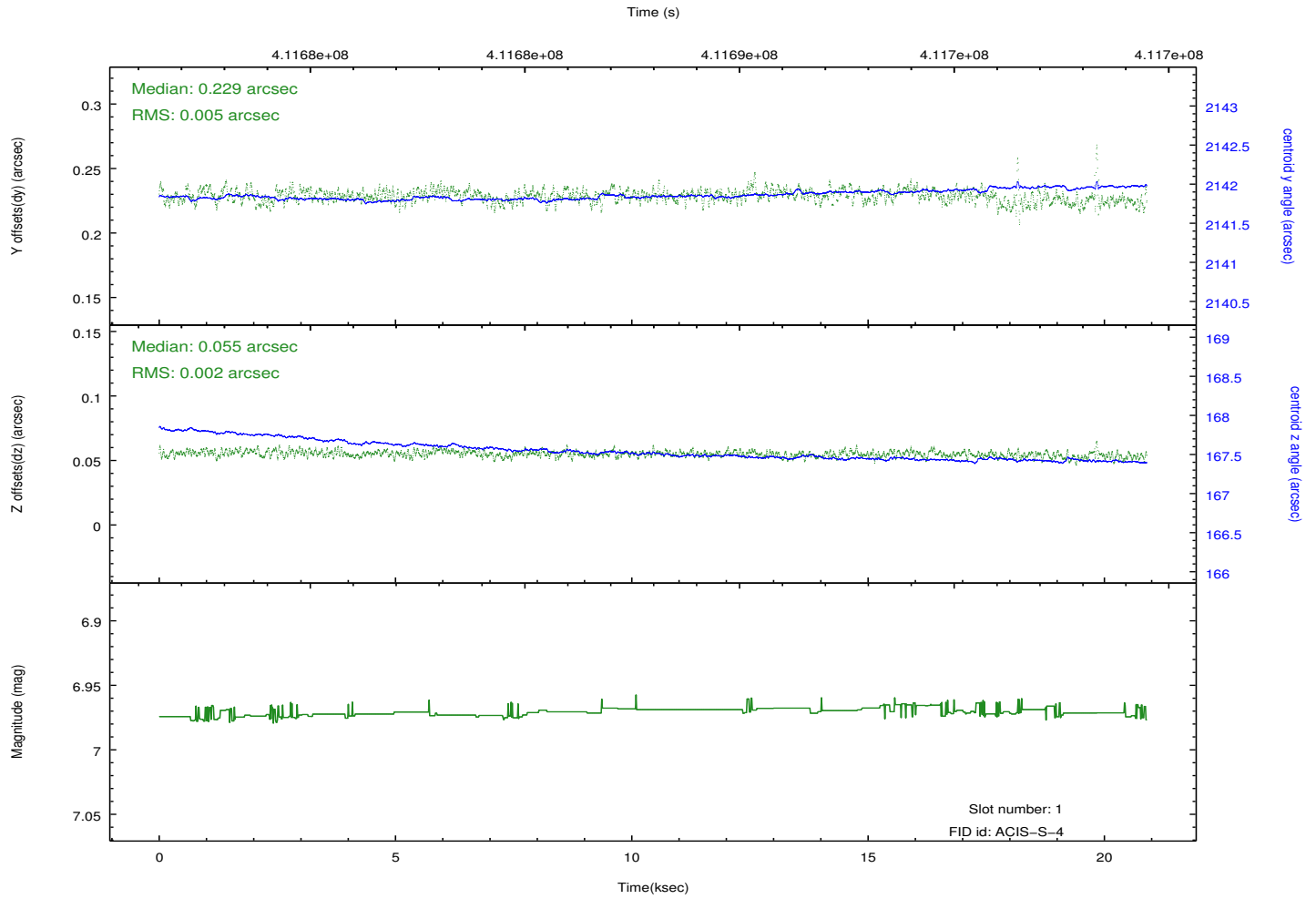
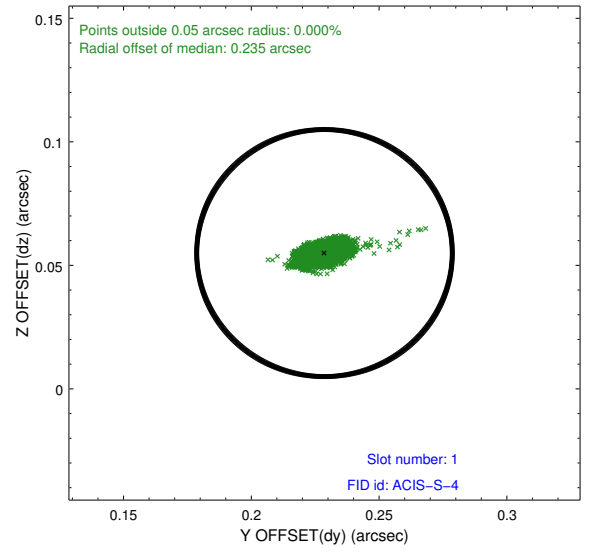
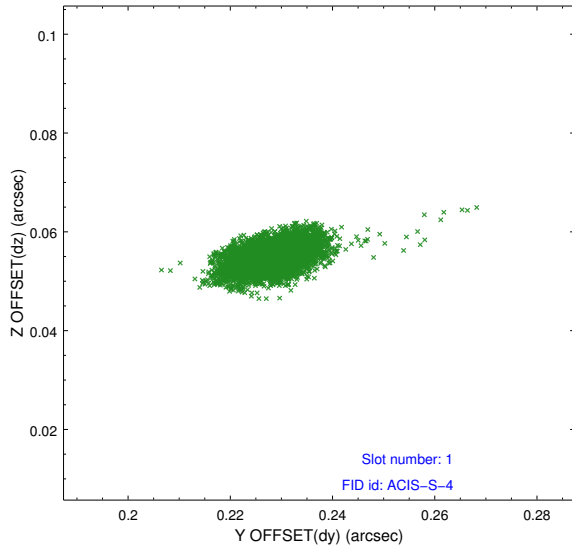


2.5 FID Slots

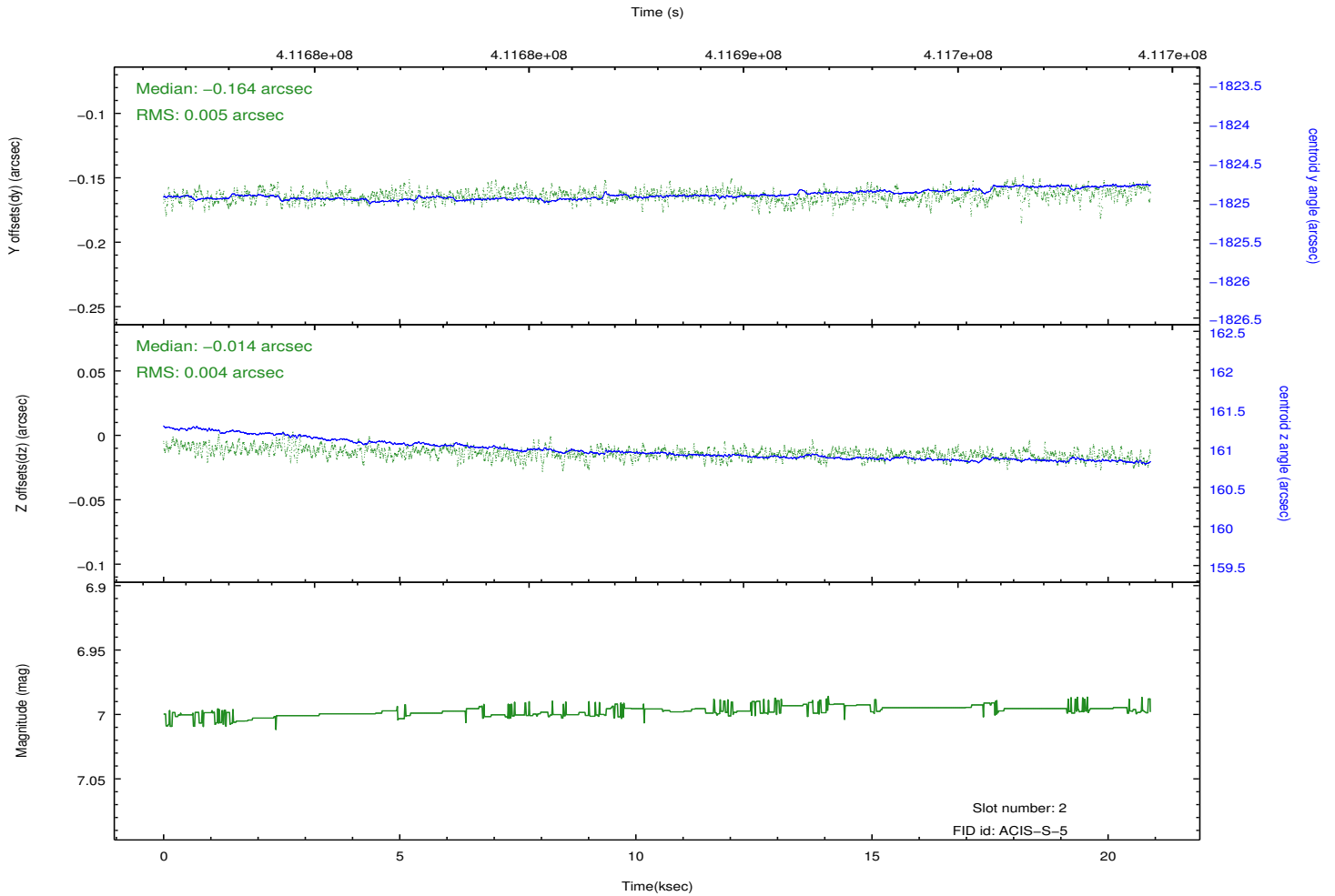
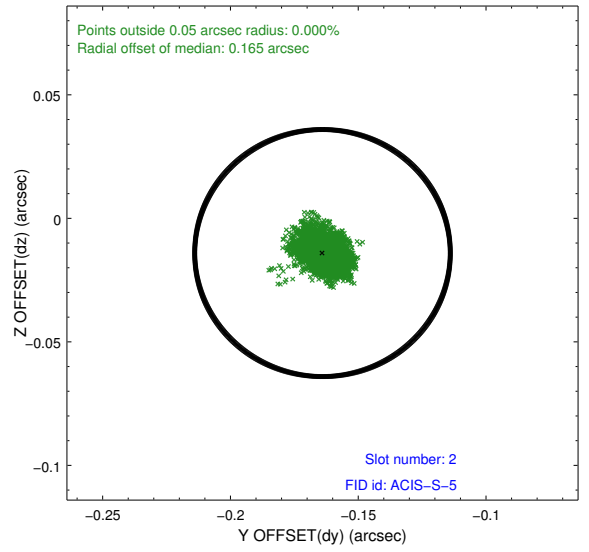
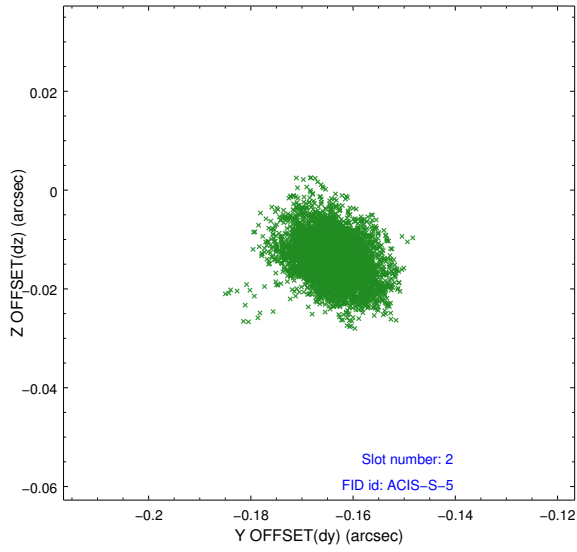
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.820799926221

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.

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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.