

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13092 - L2 Version 2
Chandra X-Ray Center

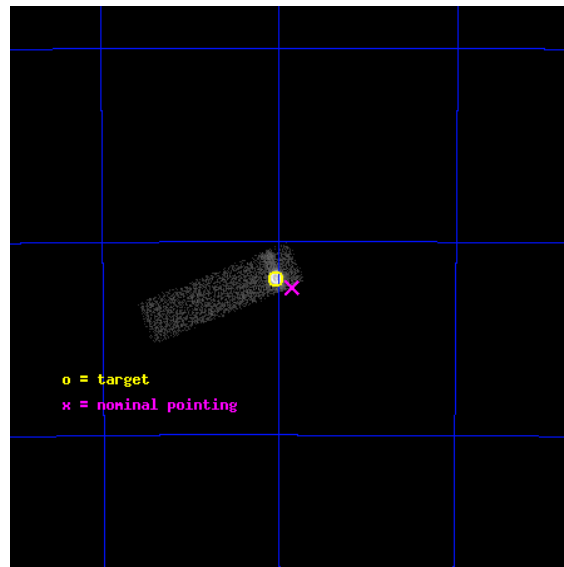
L2 Processing Date : Feb 3 2012

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1 Front

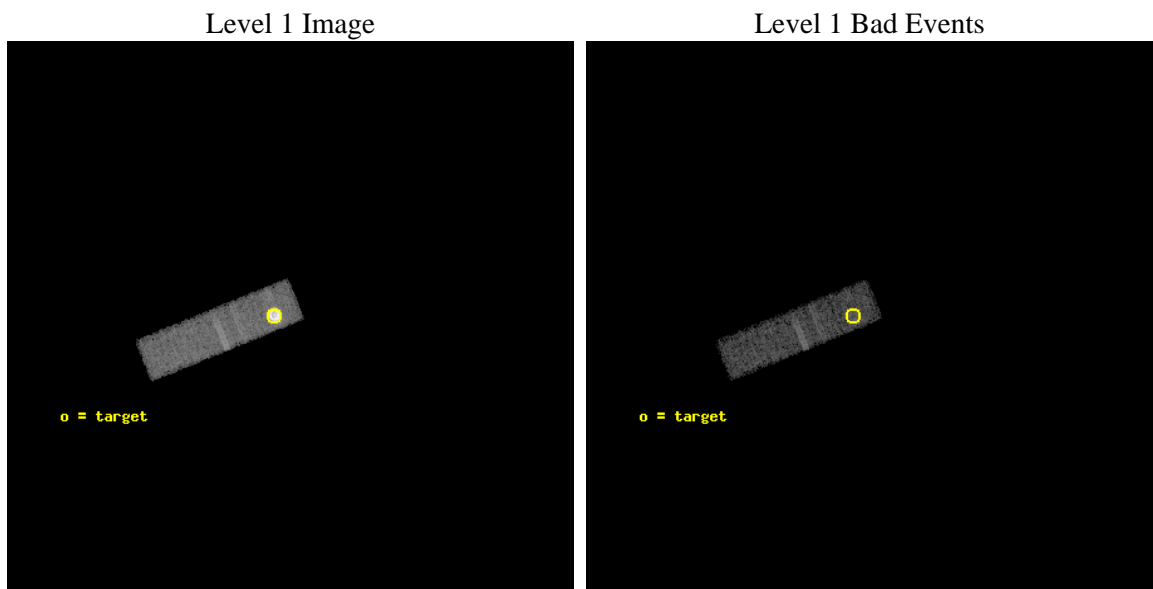
seq_num	590505	Sequence number
obs_id	13092	Observation id
title	AO-12 Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72 I3,-120,-0.5,0.5,0	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.964269664206	Nominal RA [deg]
dec_nom	-72.039991290599	Nominal Dec [deg]
roll_nom	248.08462521468	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20027.159288347	Sum of GTIs [s]
livetime	19049.89944673	Livetime [s]
ontime3	20027.159288347	Sum of GTIs [s]
l2events	59424	Number of level 2 events



2 OBI

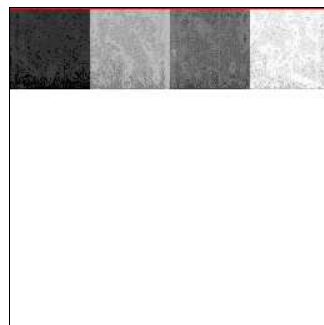
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 3



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	20027.159288347	Sum of GTIs [s]
caldsver	4.4.7	 	ontime3	20027.159288347	Sum of GTIs [s]
date	2012-02-03T14:16:33	Date and time of file creation	l1events	96969	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

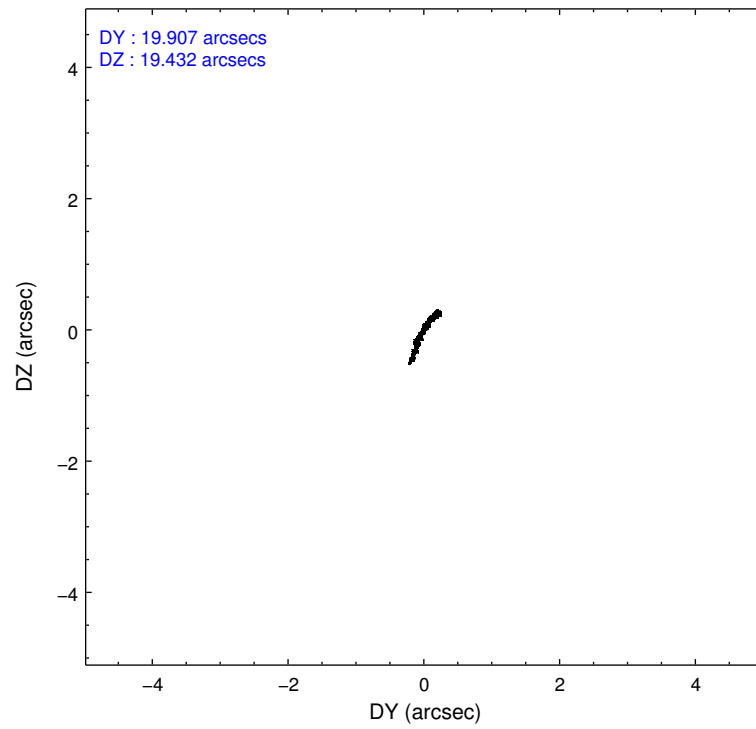
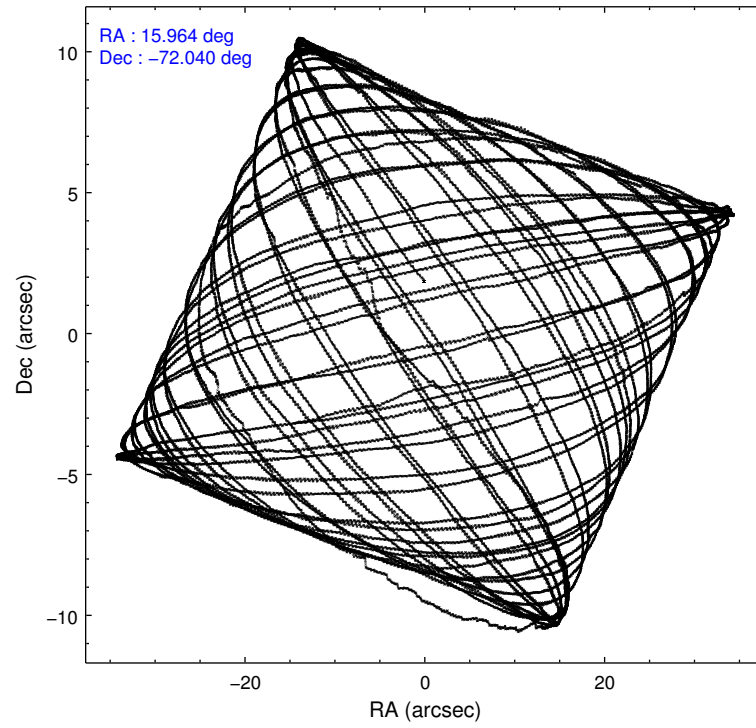
	ccd 3
level 1 events	96969
rejected events	36820
rejected %	37%

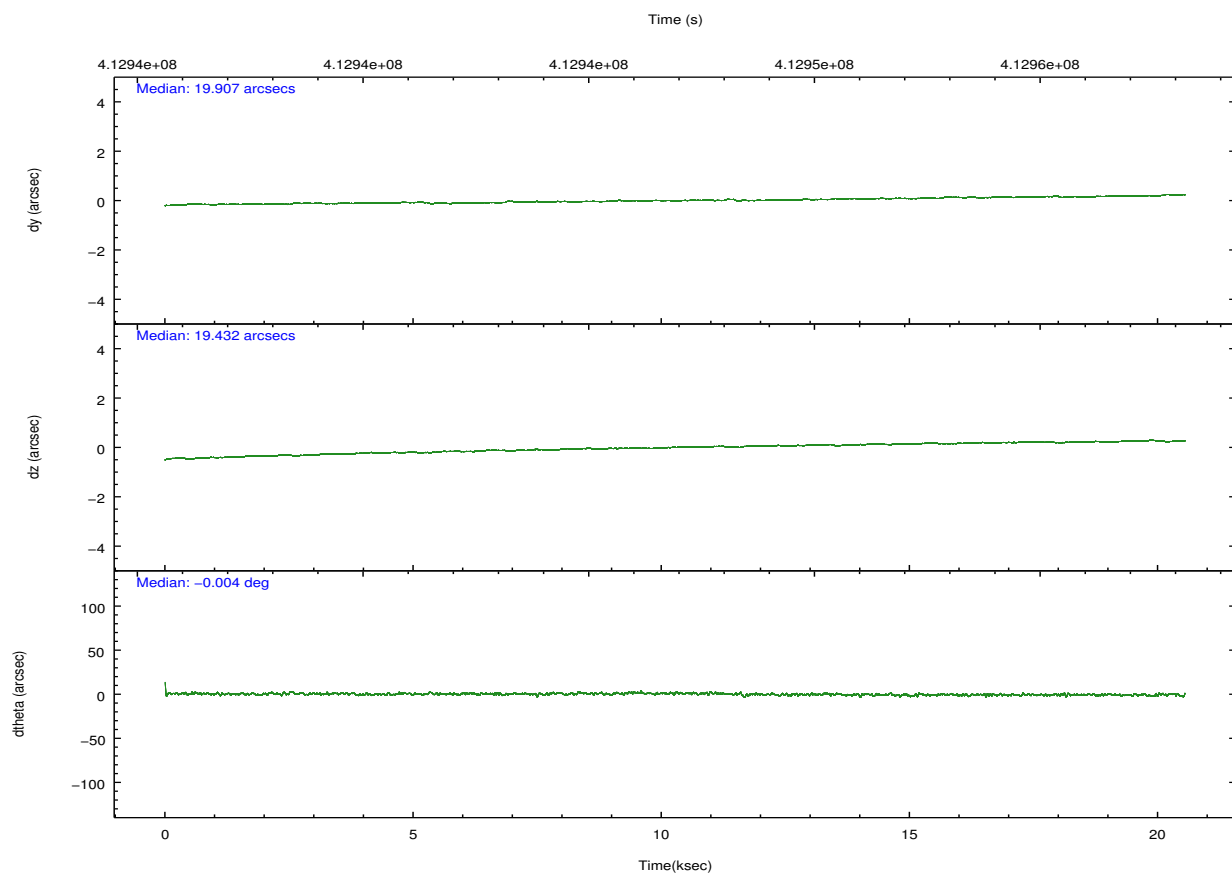
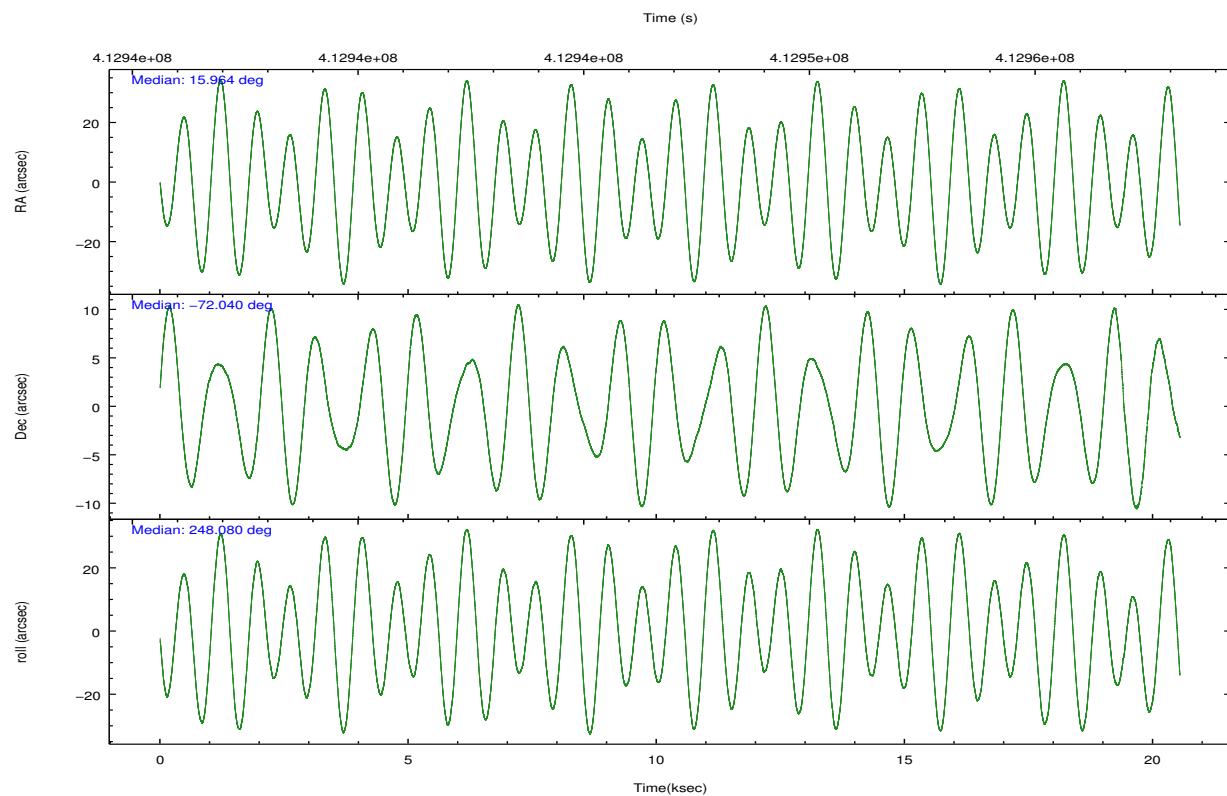
	ccd 3
grade 0 events	51964
	53%
grade 1 events	157
	0%
grade 2 events	4314
	4%
grade 3 events	1469
	1%
grade 4 events	1423
	1%
grade 5 events	1580
	1%
grade 6 events	984
	1%
grade 7 events	35078
	36%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3	ACIS-3	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	15.951361	15.96426966420647	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-72.012810	-72.03999129059871	Subarray start row	768	768
[deg] Pointing Roll	247.863667	248.0846252146848	Subarray row count	256	256
[s] Window start time (MET)	407548866.184000	407548866.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	420508866.184000	420508866.184000	[s] Primary exposure time	0.000000	0.8
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	412937192.184000	412936448.38763			
Observation start date	2011-02-01T08:45:26	2011-02-01T08:34:08			
[s] Observation end time (MET)	412957192.184000	412957935.46374			
Observation end date	2011-02-01T14:18:46	2011-02-01T14:32:15			
Read mode	TIMED	TIMED			

2.3 Aspect



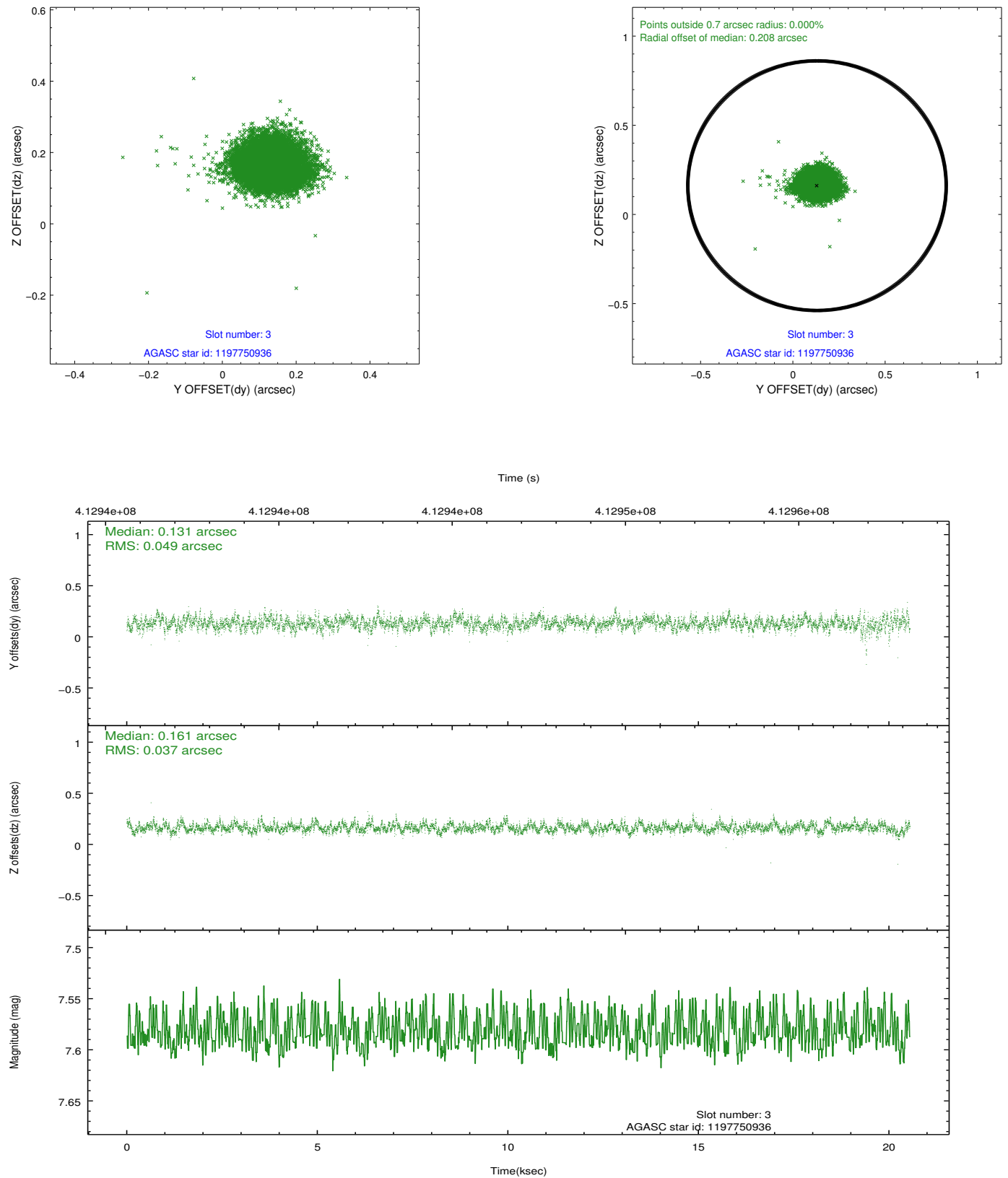


Slot Statistics

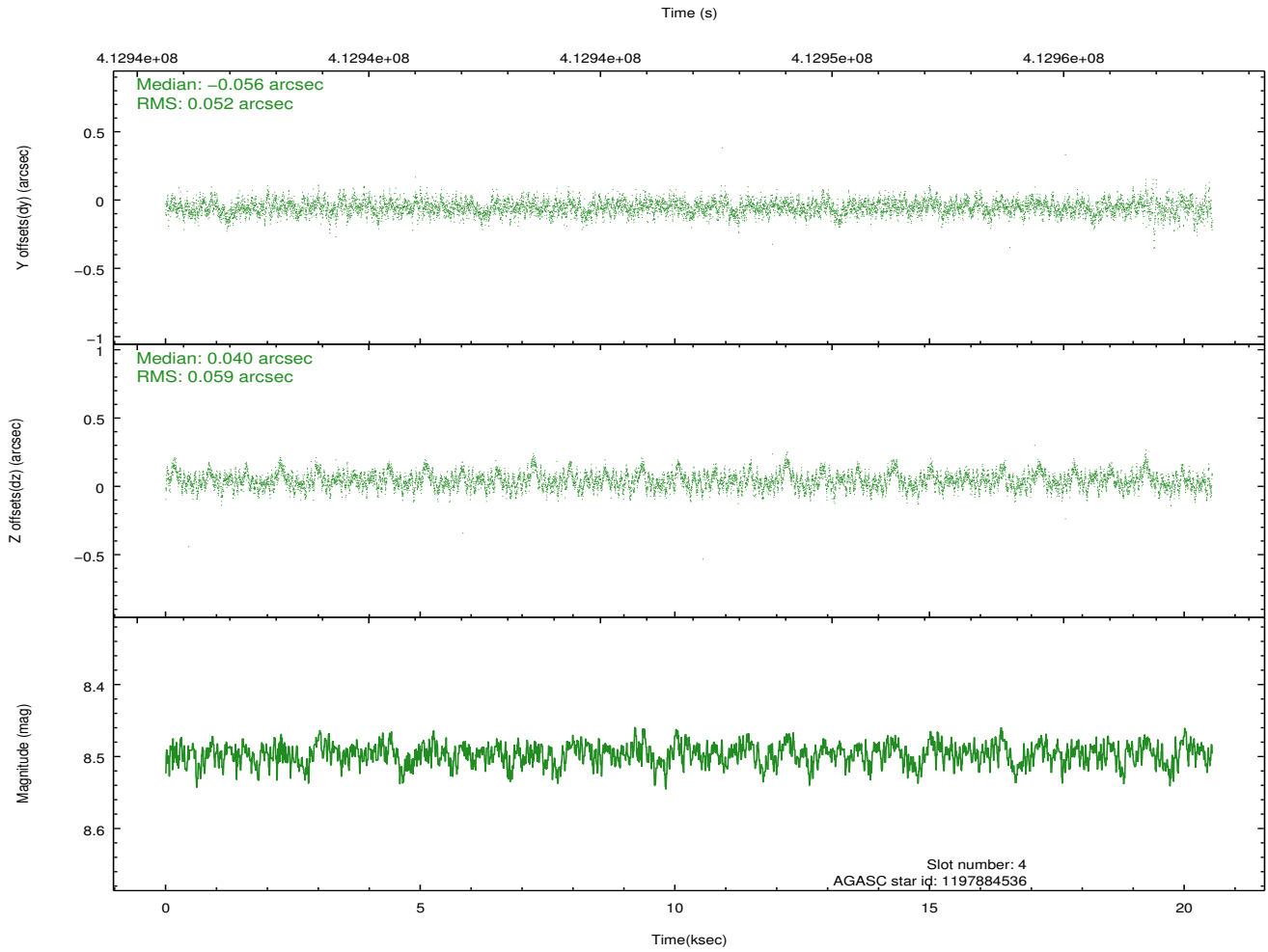
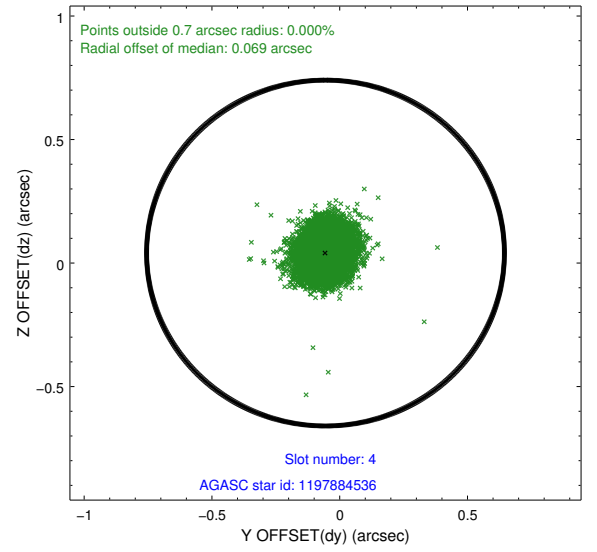
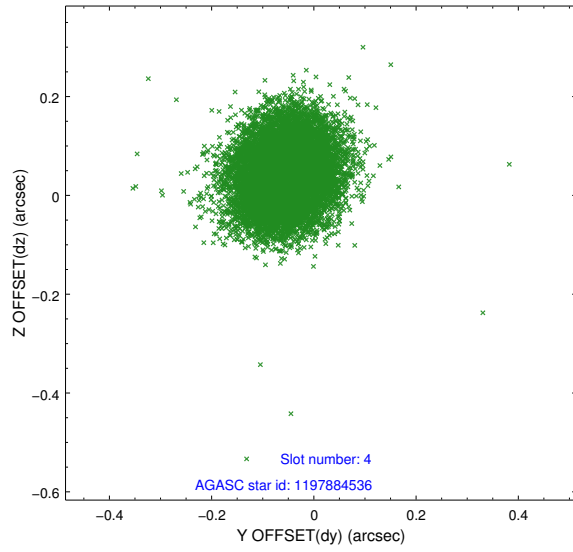
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.01	5012	-0.067	0.065	0.010	0.016	0.000000	0.000000	919.38	-843.02
1	FID	ACIS-I-2	6.93	5011	-0.124	-0.080	0.009	0.016	0.000000	0.000000	-774.67	-849.75
2	FID	ACIS-I-4	6.94	5010	0.094	0.083	0.008	0.015	0.000000	0.000000	2139.28	1056.75
3	GUIDE	1197750936	7.58	10024	0.131	0.161	0.064	0.105	15.387940	-71.549550	-1299.28	-1221.44
4	GUIDE	1197884536	8.50	10022	-0.056	0.040	0.084	0.134	17.160729	-71.835289	-1090.77	1021.43
5	GUIDE	1197884712	8.30	10020	-0.010	-0.020	0.078	0.130	16.087398	-72.252690	743.97	464.09
6	GUIDE	1197885104	9.36	10007	0.136	-0.111	0.114	0.186	17.845067	-72.189368	-165.38	2182.99
7	GUIDE	1198283128	7.76	10021	-0.204	-0.076	0.058	0.094	17.272580	-72.642428	1579.24	2174.73

2.4 Star Slots

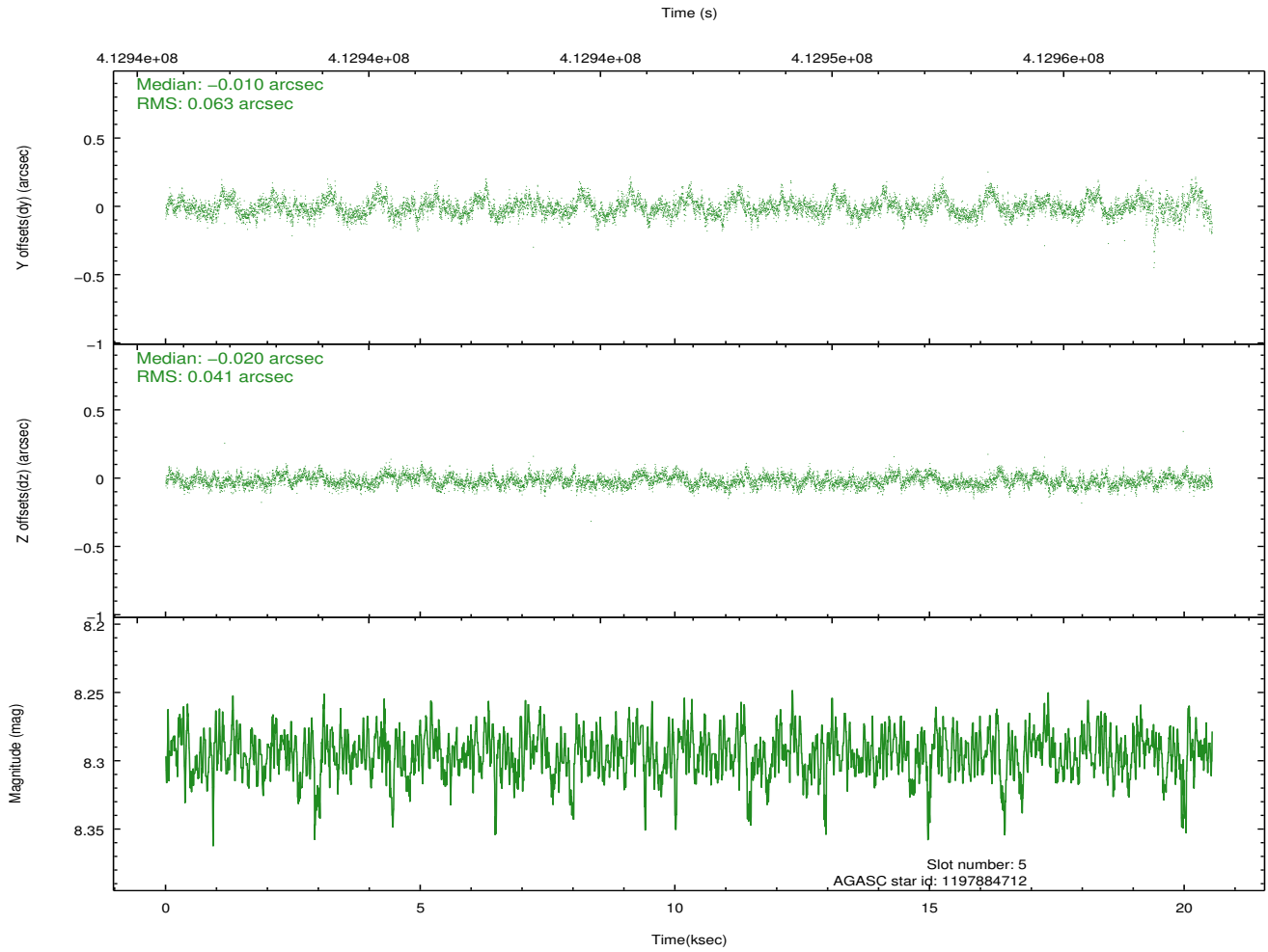
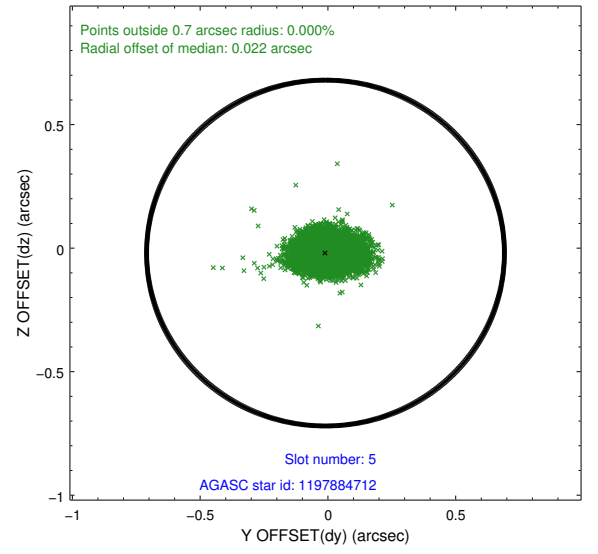
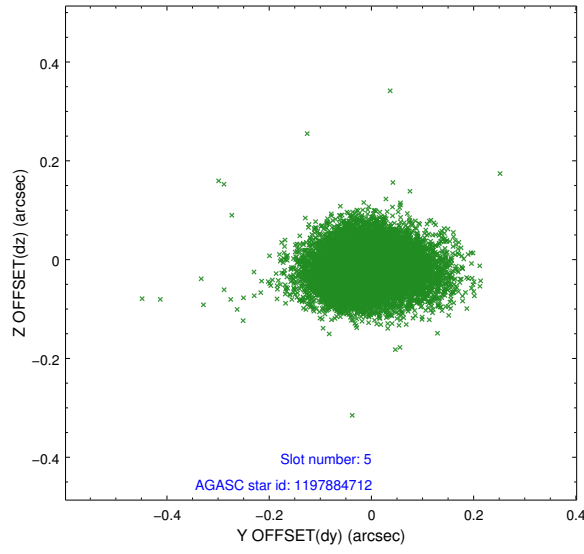
2.4.1 Slot 3



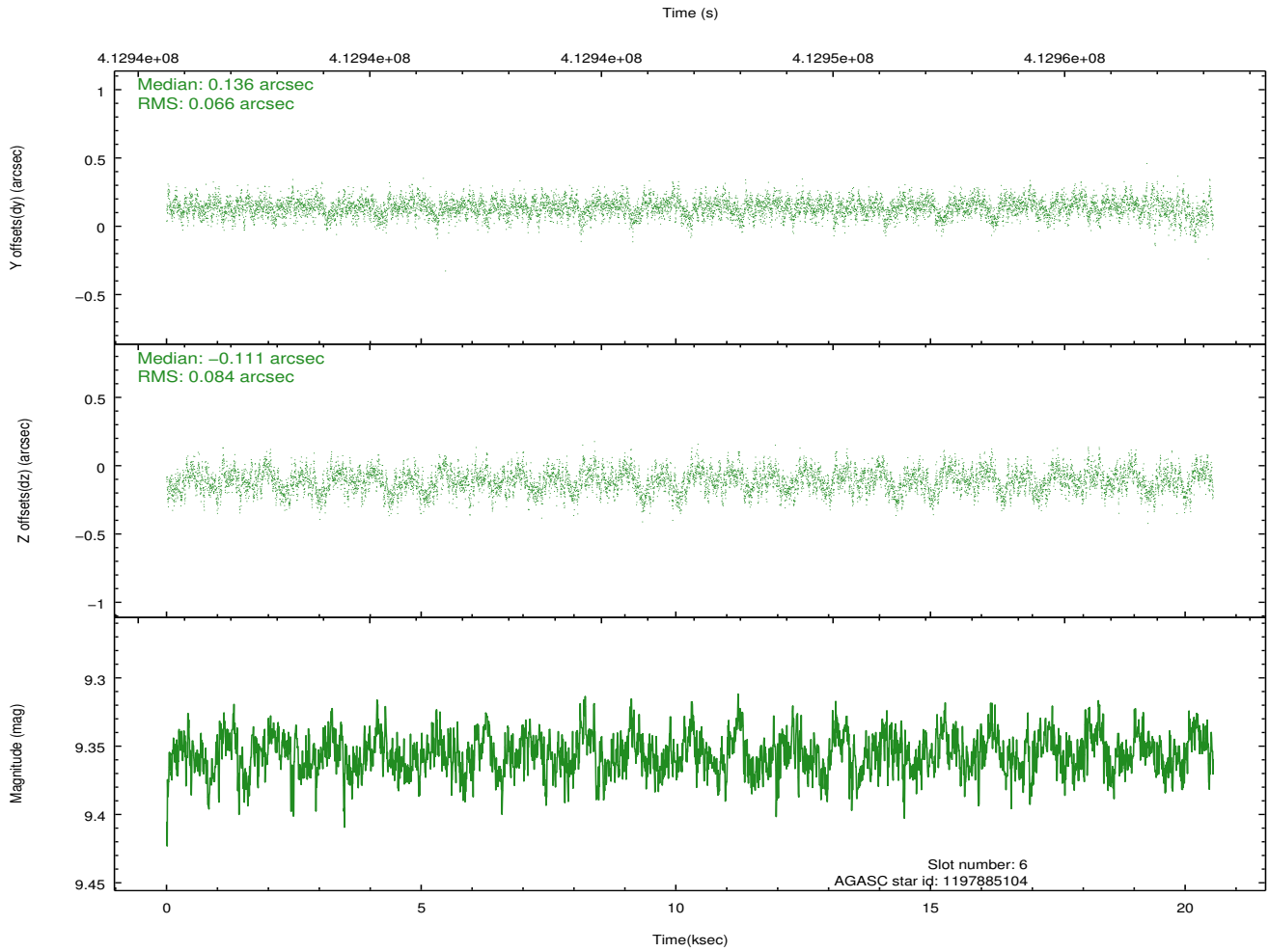
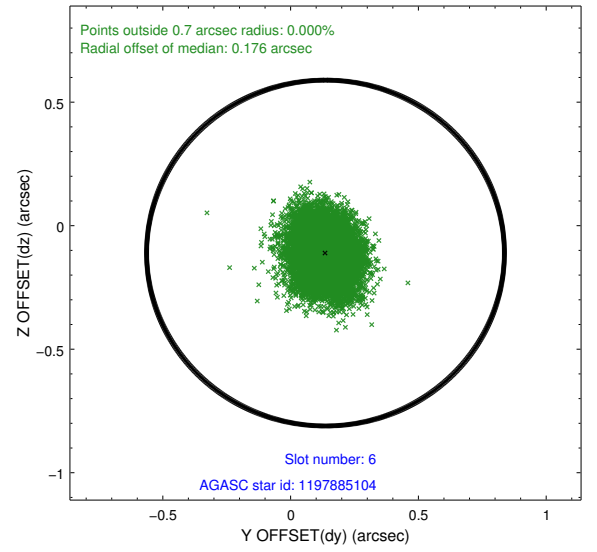
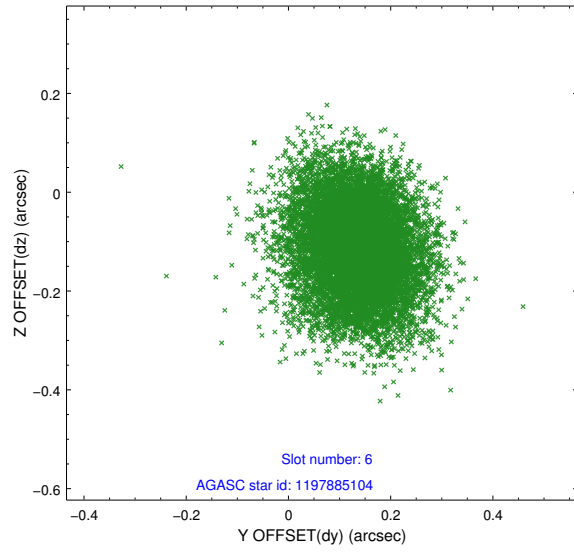
2.4.2 Slot 4



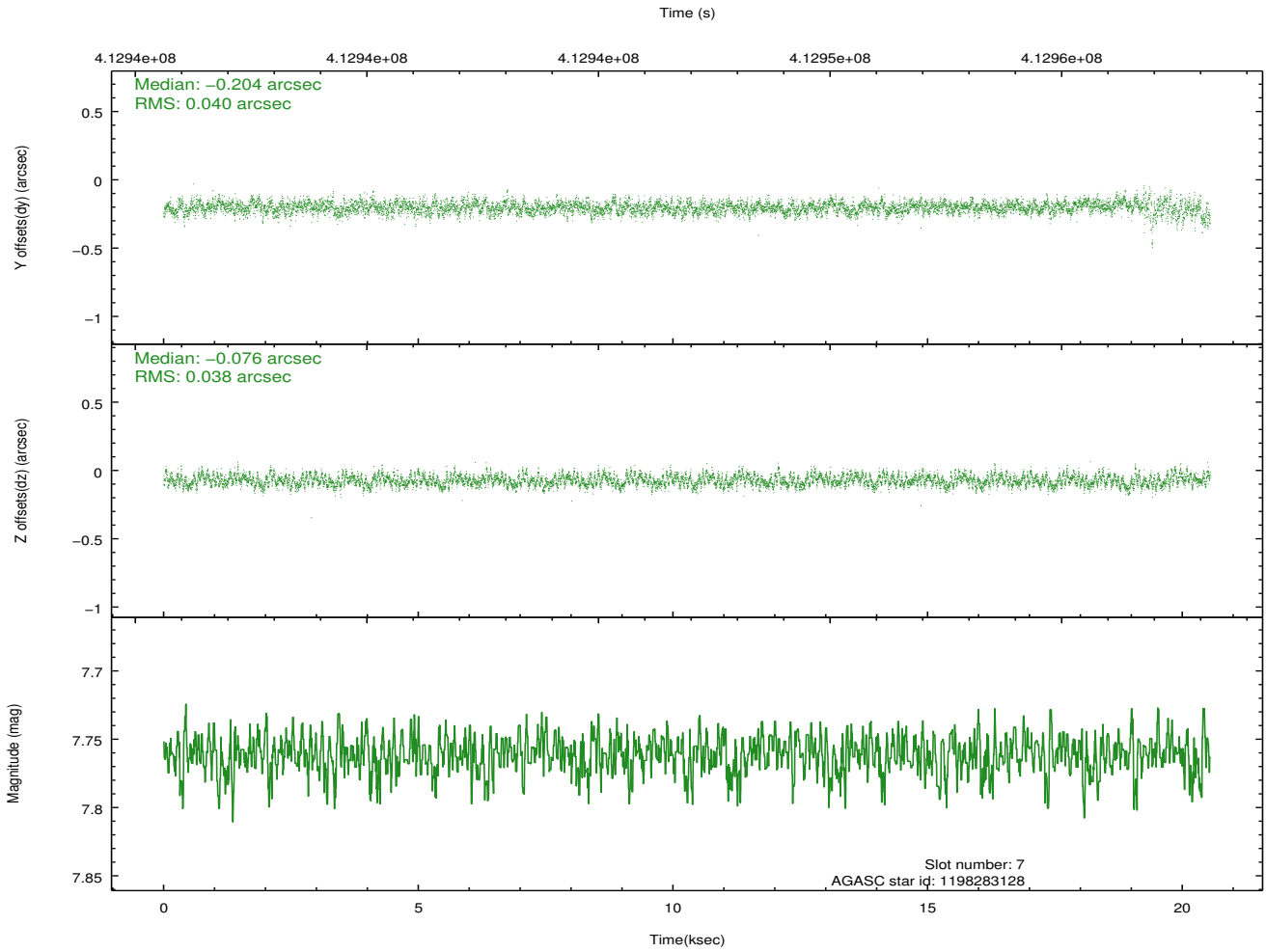
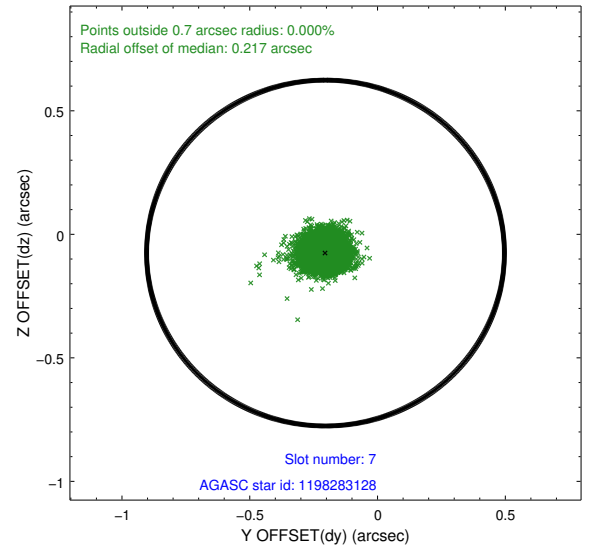
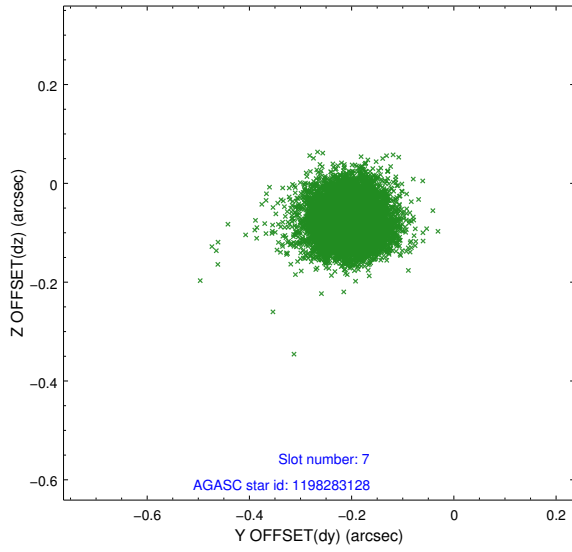
2.4.3 Slot 5



2.4.4 Slot 6

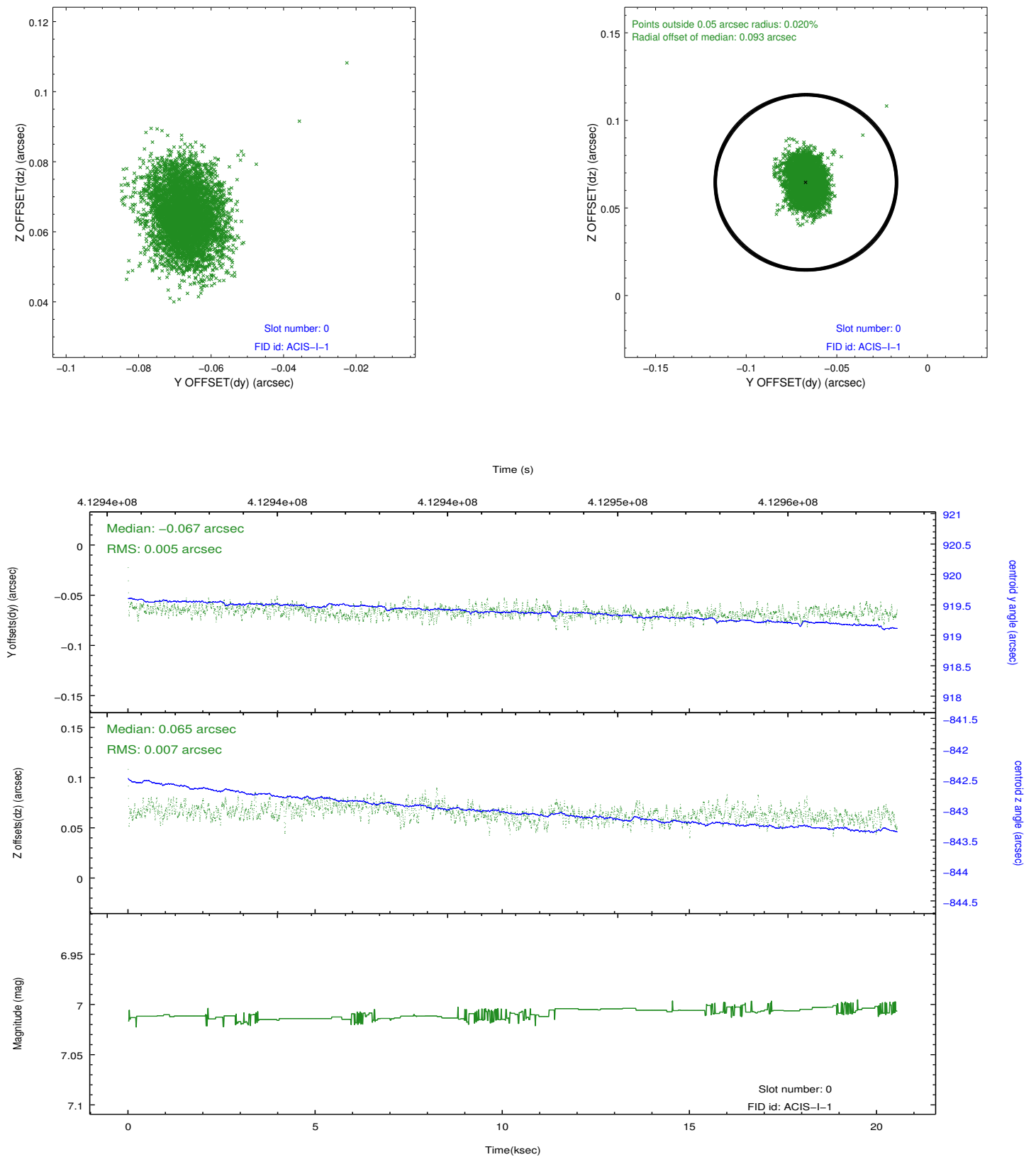


2.4.5 Slot 7

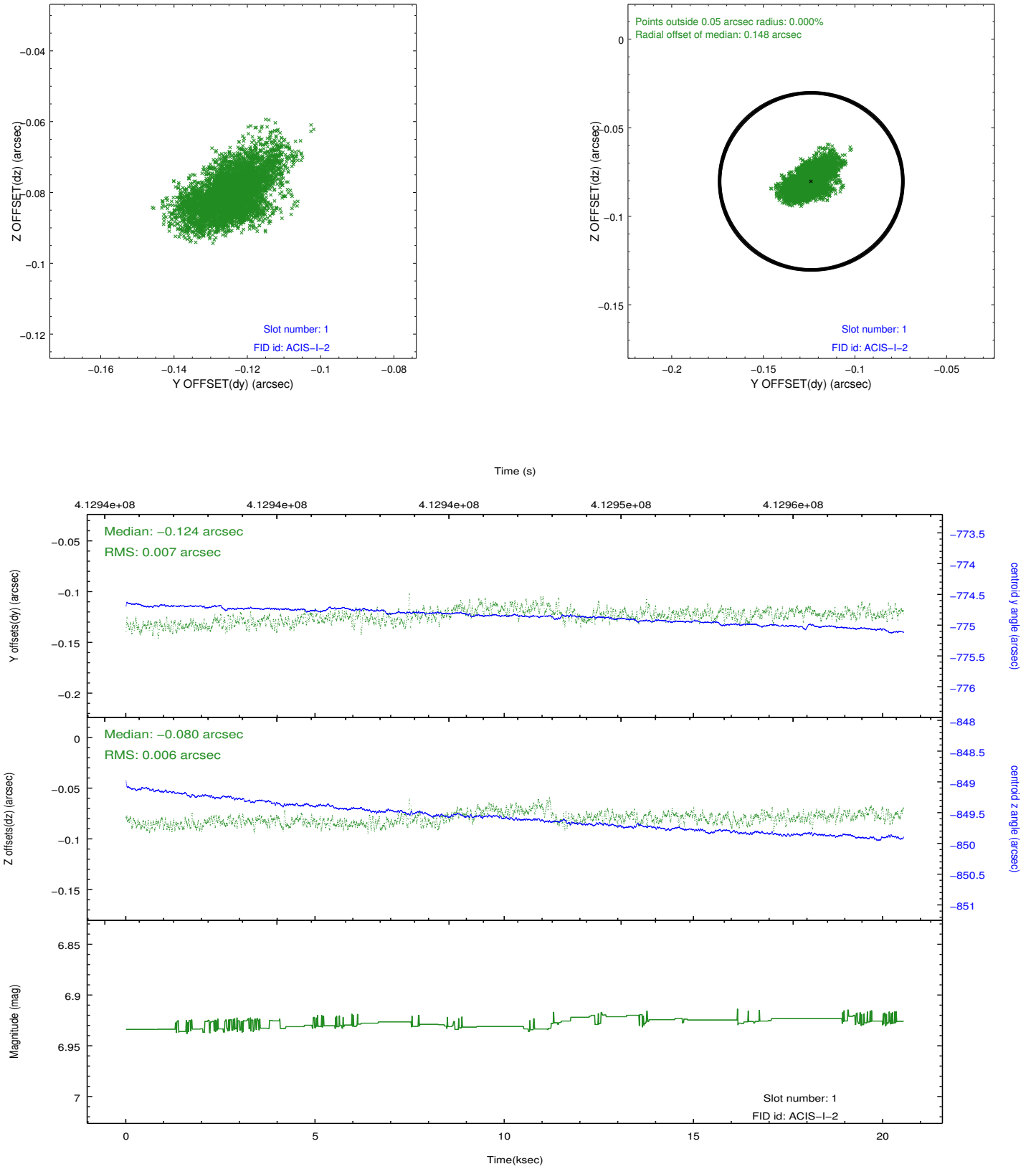


2.5 FID Slots

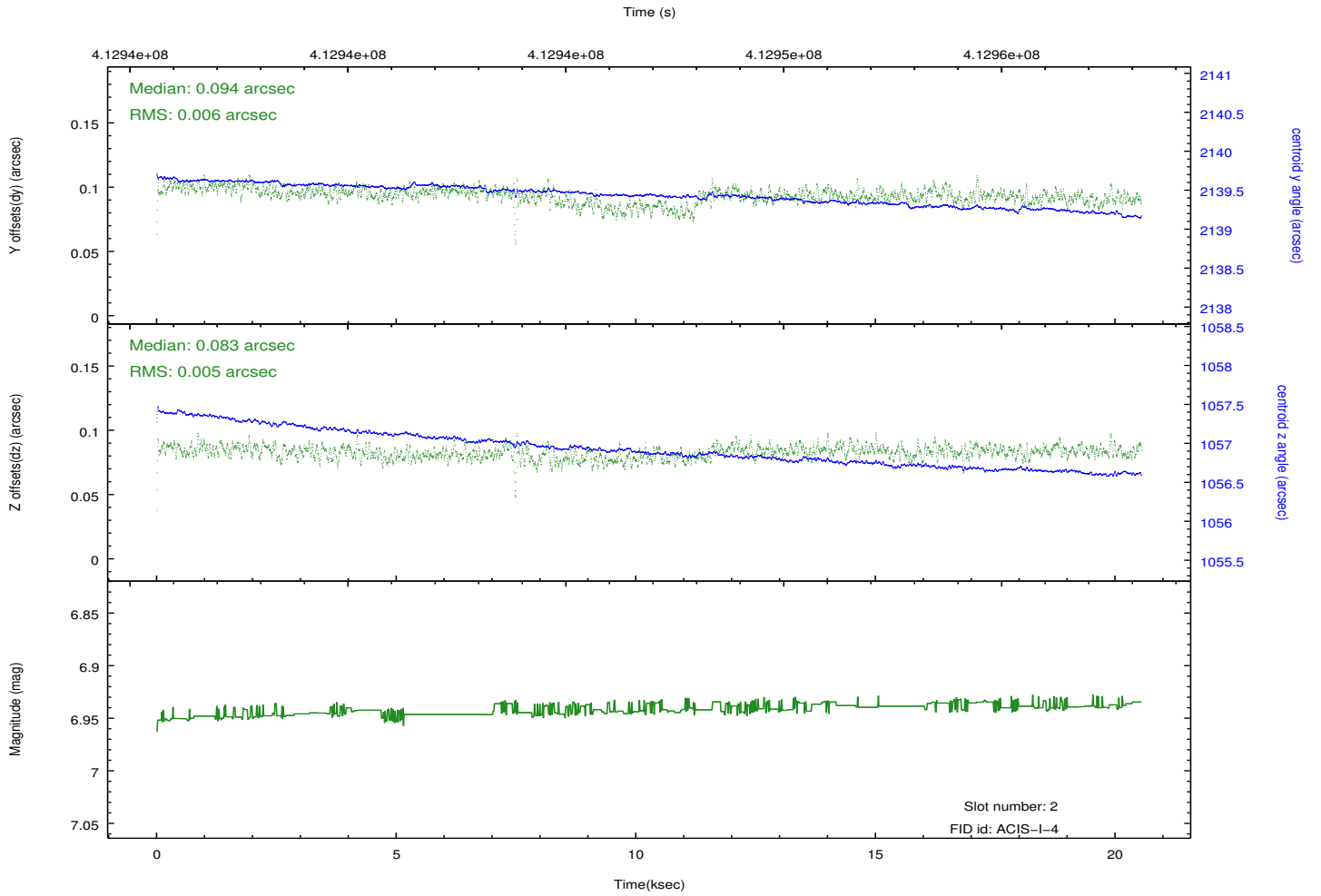
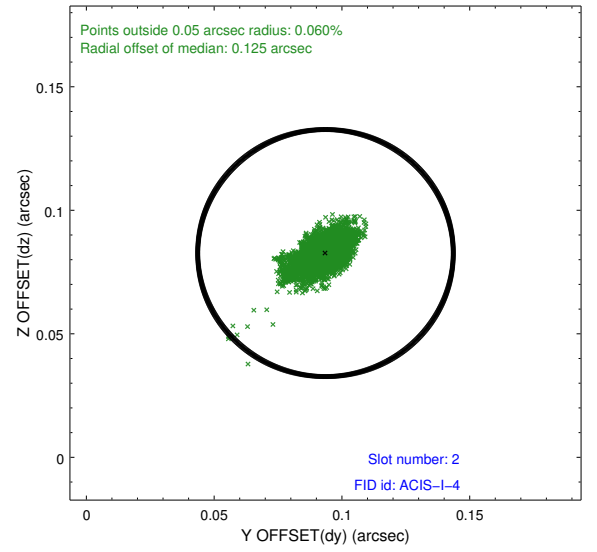
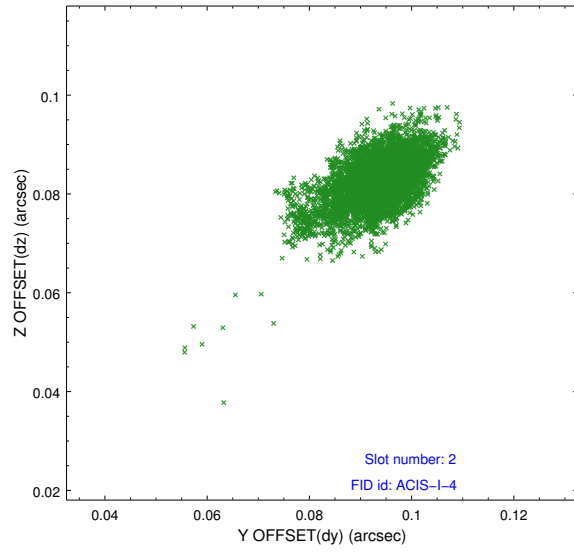
2.5.1 Slot 0



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)	2012.02.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.027159288347

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.

=====

Window constraint met.