

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13217 - L2 Version 2
Chandra X-Ray Center

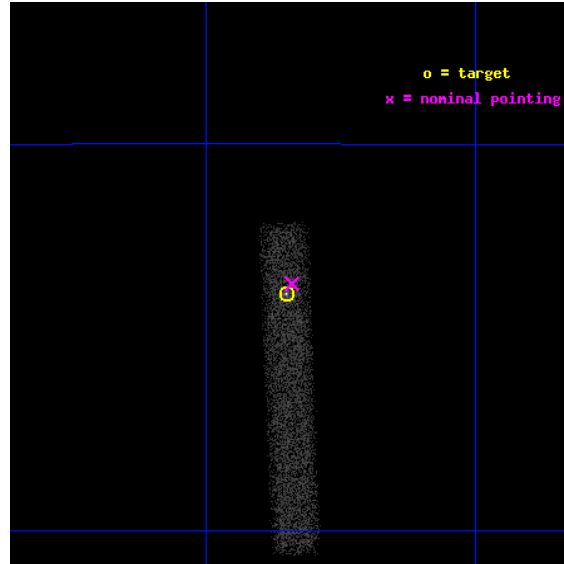
L2 Processing Date : Feb 3 2012

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1 Front

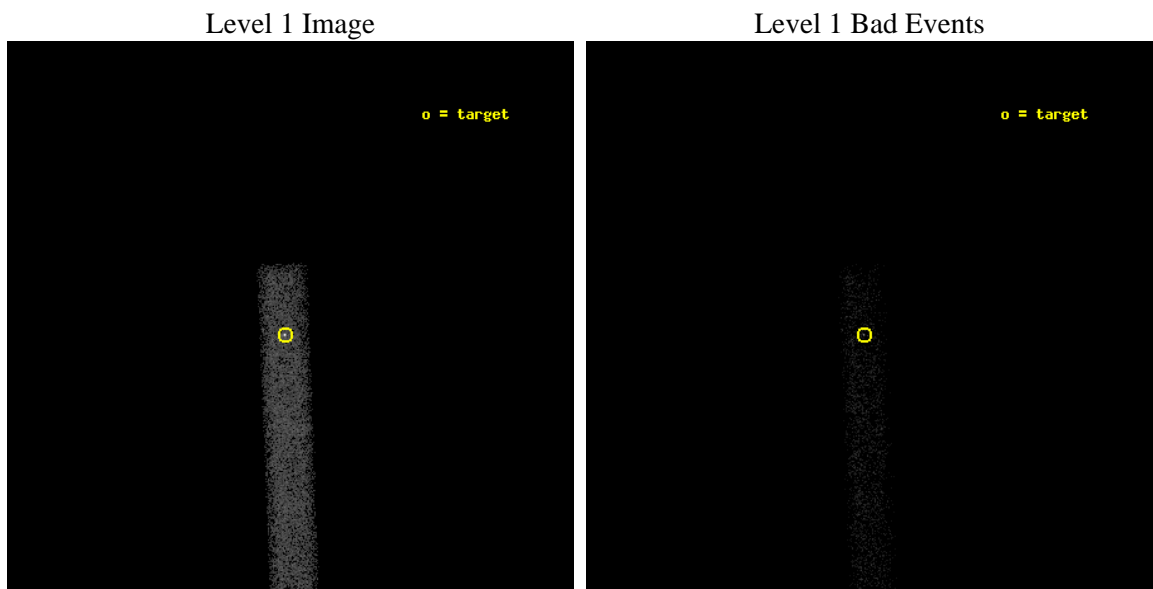
seq_num	501549	Sequence number
obs_id	13217	Observation id
title	Unveiling the nature of cyclic behavior in the period evolution of the Anomalous X ray Pulsar XTE j1810-197	Proposal title
observer	Dr. Rosalba Perna	Principal investigator
object	XTE J1810-197	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.462862	Observer's specified target RA [deg]
dec_targ	-19.731092	Observer's specified target Dec [deg]
ra_nom	272.46034026828	Nominal RA [deg]
dec_nom	-19.72688607736	Nominal Dec [deg]
roll_nom	87.726054315077	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15010.343212664	Sum of GTIs [s]
livetime	13613.588983008	Livetime [s]
ontime7	15010.343212664	Sum of GTIs [s]
l2events	11783	Number of level 2 events



2 OBI

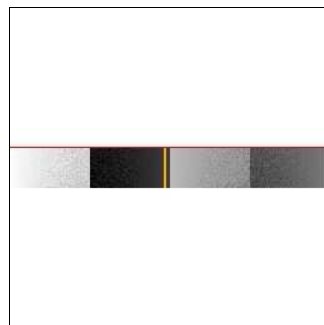
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



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	15010.343212664	Sum of GTIs [s]
caldsver	4.4.7	 	ontime7	15010.343212664	Sum of GTIs [s]
date	2012-02-03T16:28:37	Date and time of file creation	l1events	21158	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

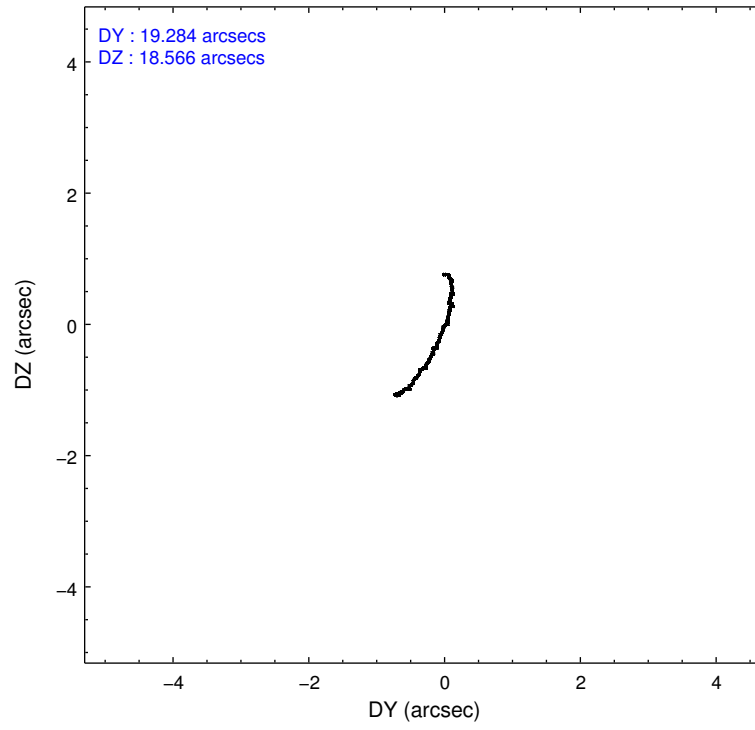
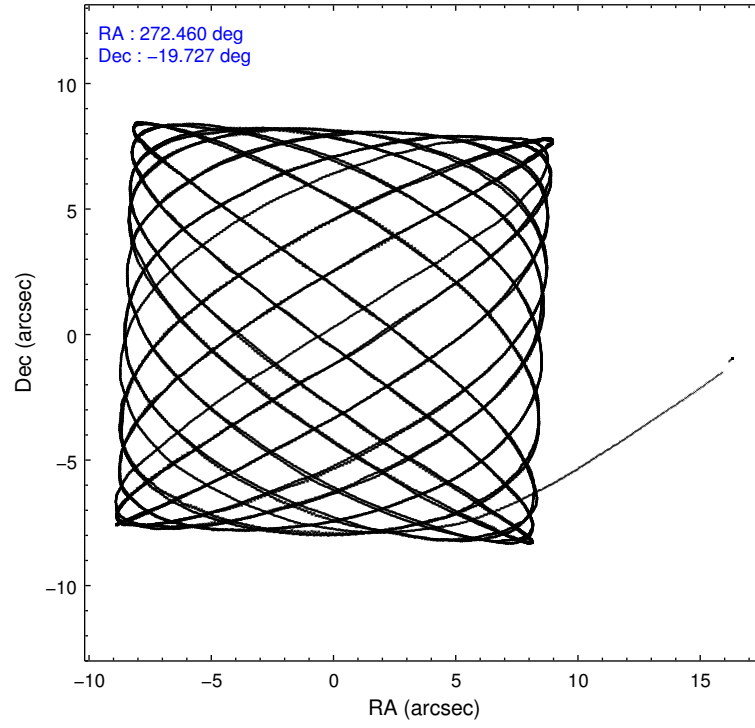
	ccd 7
level 1 events	21158
rejected events	8919
rejected %	42%

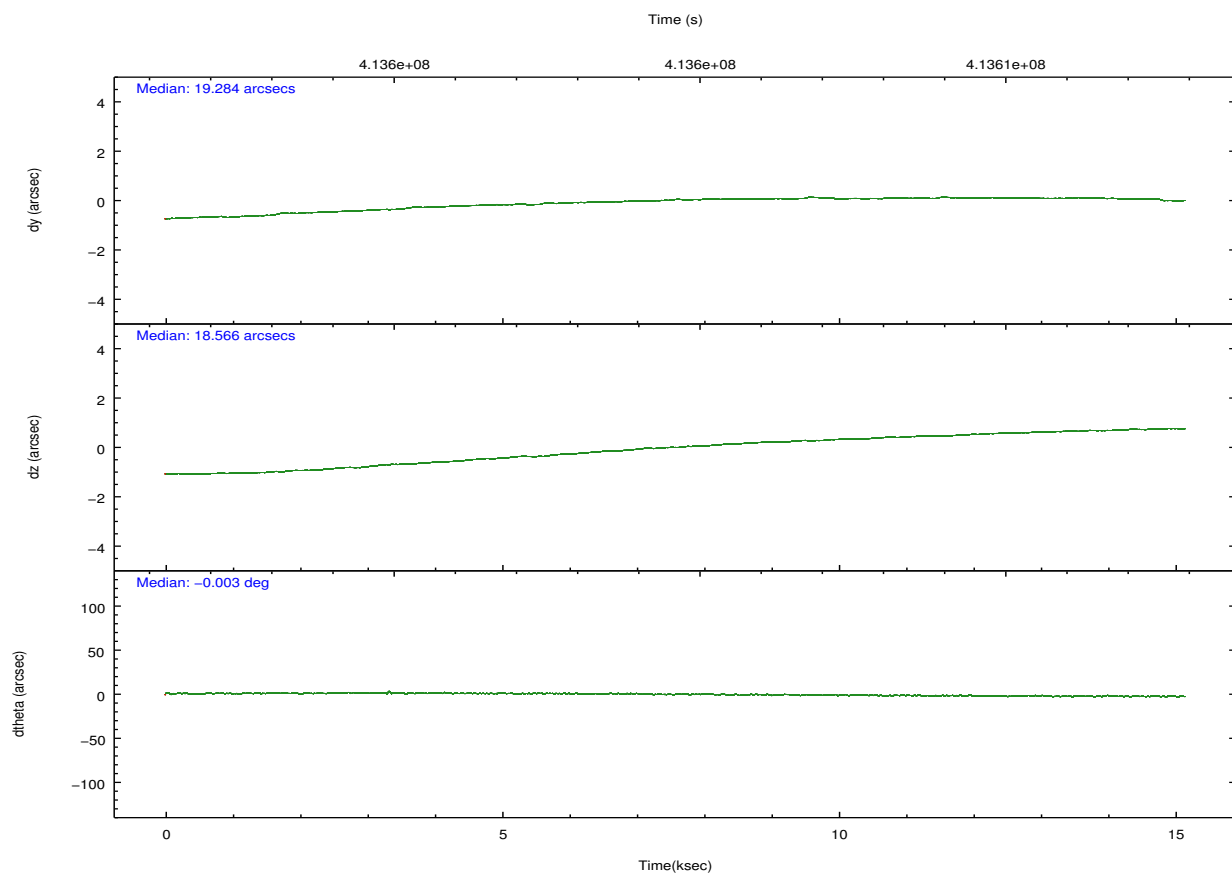
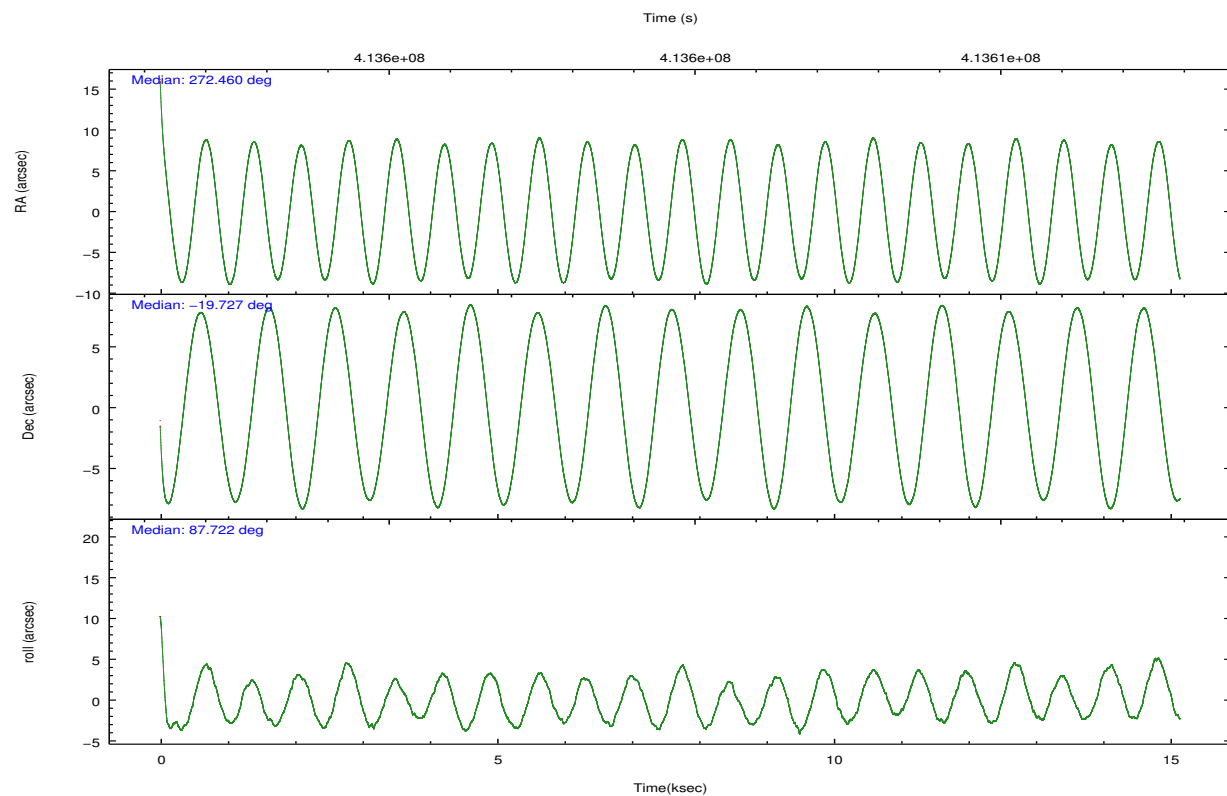
	ccd 7
grade 0 events	1884
	8%
grade 1 events	29
	0%
grade 2 events	2636
	12%
grade 3 events	1652
	7%
grade 4 events	1455
	6%
grade 5 events	1871
	8%
grade 6 events	4613
	21%
grade 7 events	7018
	33%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	272.474198	272.4603402682848	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-19.750896	-19.72688607736029	Subarray start row	449	449
[deg] Pointing Roll	87.574093	87.72605431507721	Subarray row count	128	128
[s] Window start time (MET)	413596866.184000	413596866.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	413856066.184000	413856066.184000	[s] Primary exposure time	0.000000	0.4
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	413597154.184000	413596144.05927			
Observation start date	2011-02-09T00:04:48	2011-02-08T23:49:04			
[s] Observation end time (MET)	413612154.184000	413612387.23511			
Observation end date	2011-02-09T04:14:48	2011-02-09T04:19:47			
Read mode	TIMED	TIMED			

2.3 Aspect



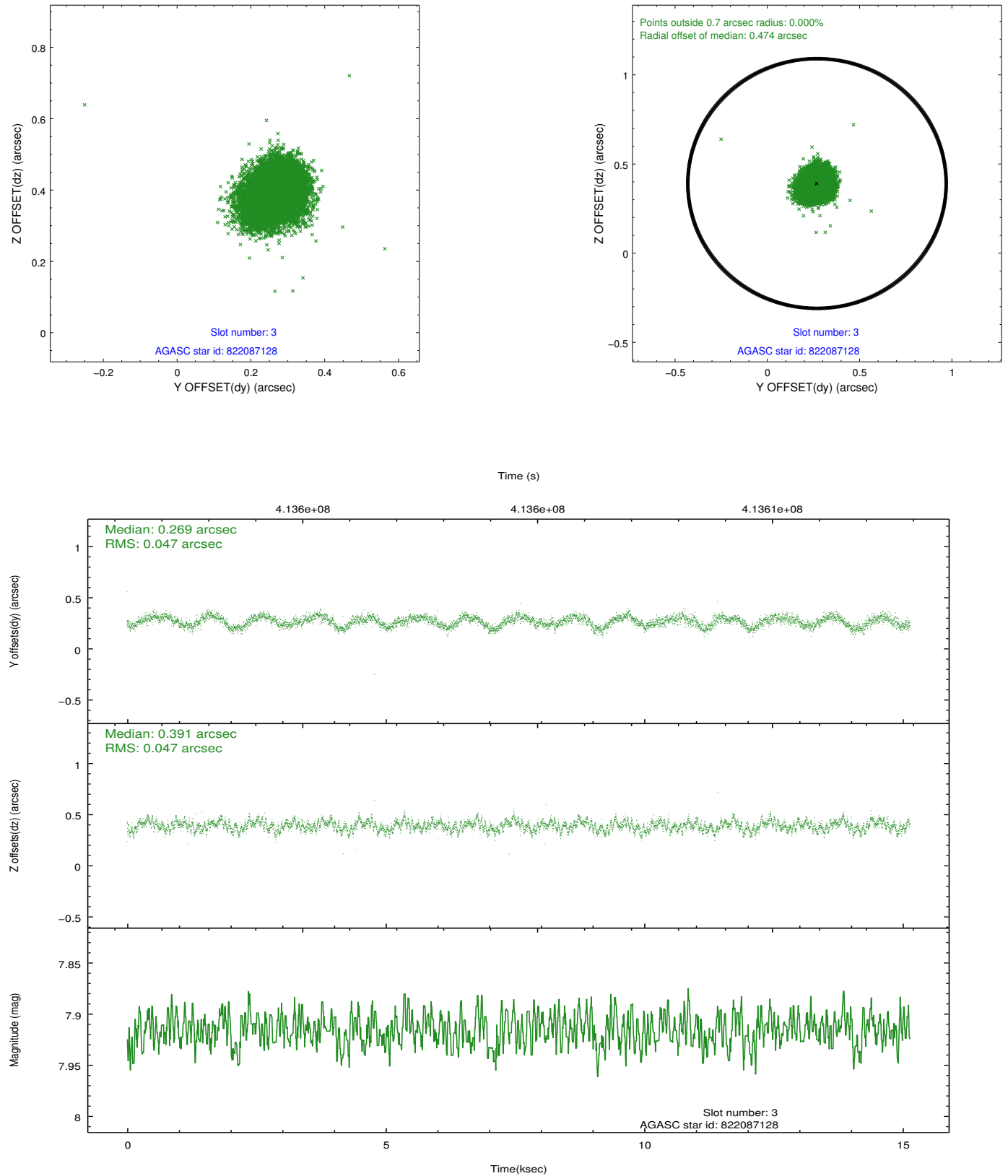


Slot Statistics

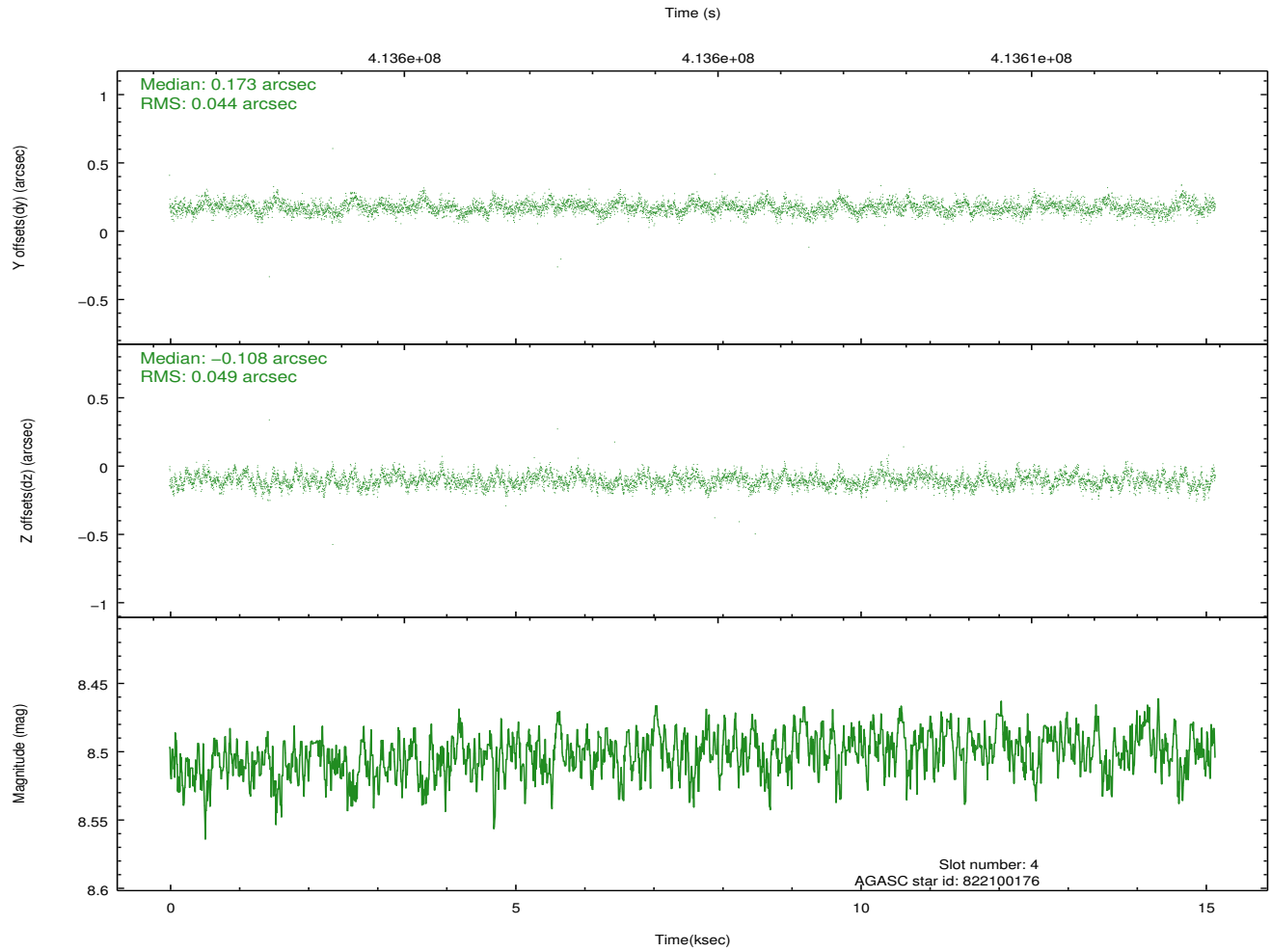
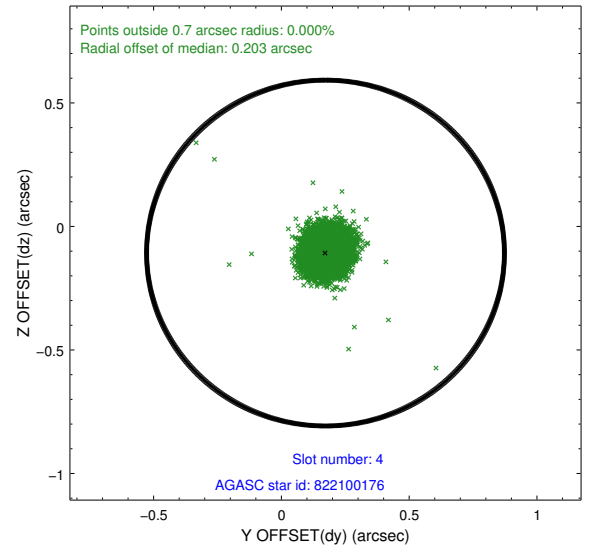
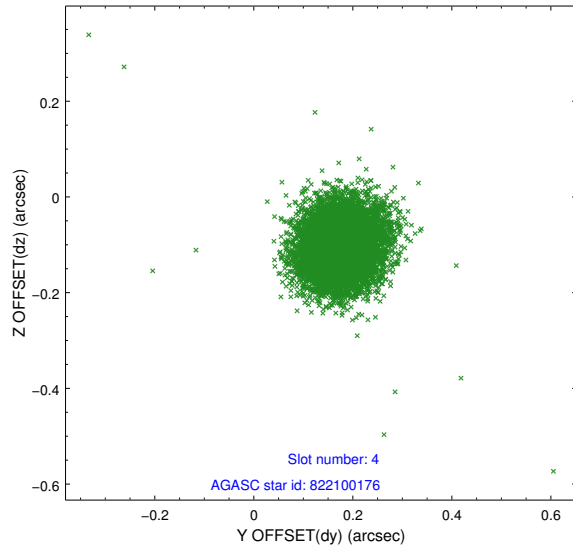
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	3695	-0.082	-0.037	0.016	0.027	0.000000	0.000000	-772.36	-1739.92
1	FID	ACIS-S-4	6.96	3695	0.210	0.051	0.011	0.022	0.000000	0.000000	2141.11	168.28
2	FID	ACIS-S-5	6.99	3693	-0.162	-0.002	0.012	0.021	0.000000	0.000000	-1824.86	162.31
3	GUIDE	822087128	7.92	7385	0.269	0.391	0.071	0.110	272.956072	-20.371006	-2163.30	-1719.15
4	GUIDE	822100176	8.50	7378	0.173	-0.108	0.068	0.111	272.112888	-19.868886	-477.44	1203.89
5	GUIDE	822101160	8.45	7387	0.083	-0.104	0.063	0.102	272.245889	-20.018987	-997.27	730.78
6	GUIDE	820401112	7.89	7389	-0.451	-0.415	0.071	0.119	271.884761	-19.293988	1554.71	2070.44
7	GUIDE	822096760	8.06	7386	-0.064	0.237	0.077	0.113	272.830526	-19.438690	1173.37	-1160.36

2.4 Star Slots

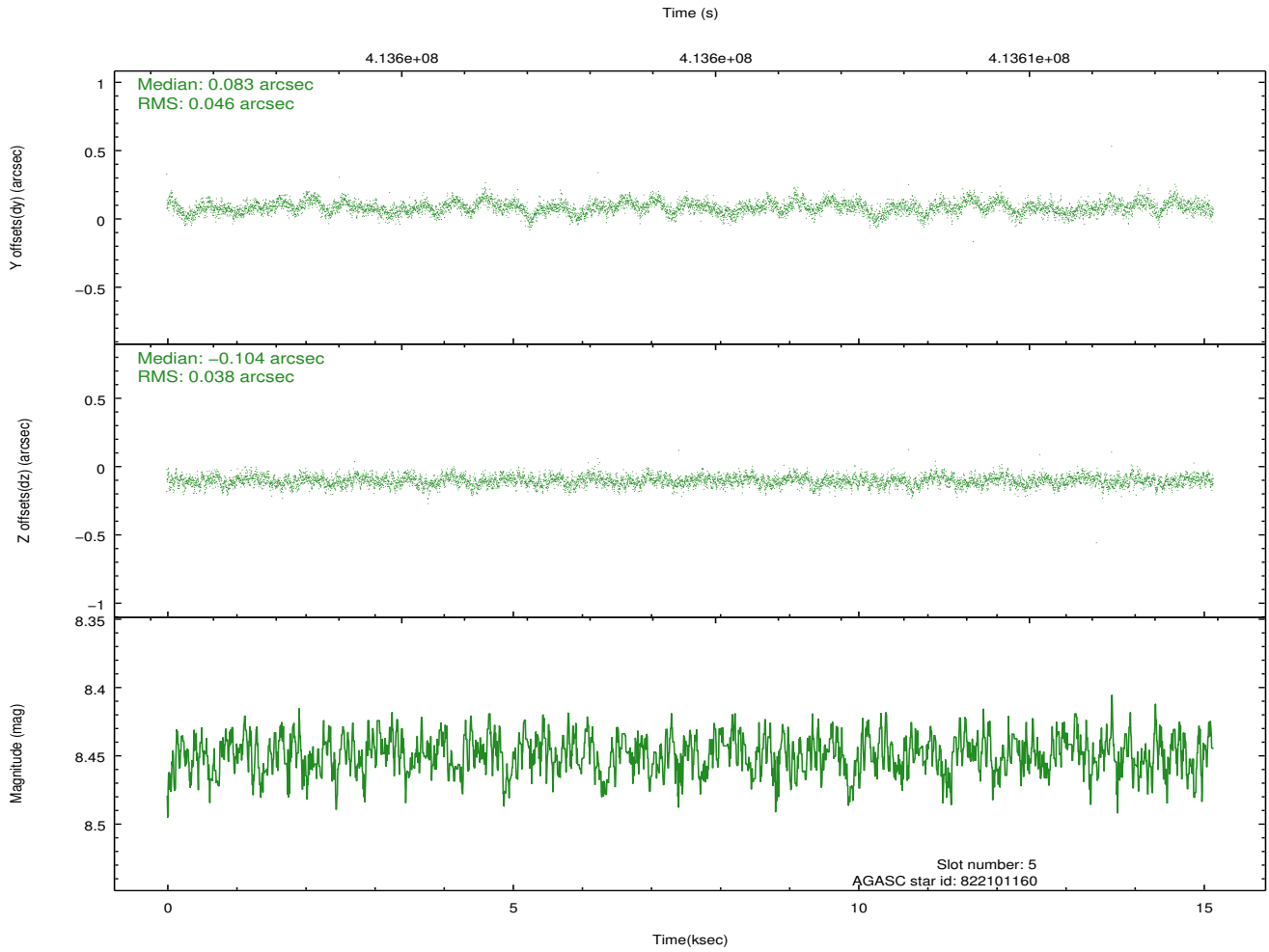
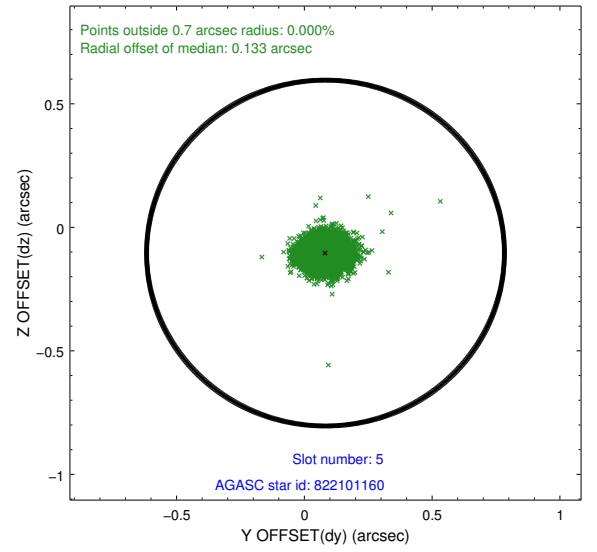
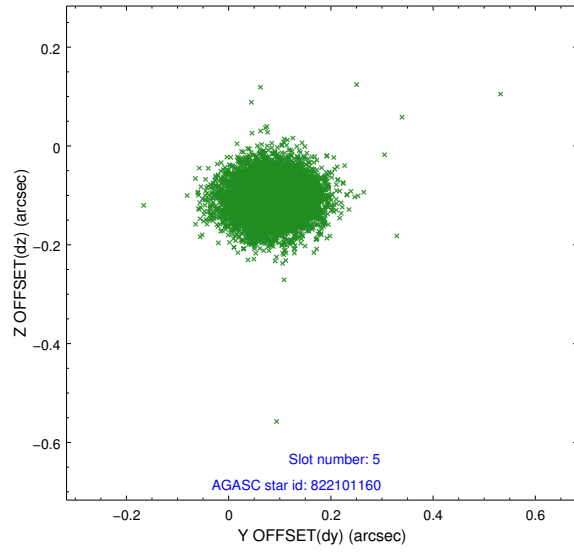
2.4.1 Slot 3



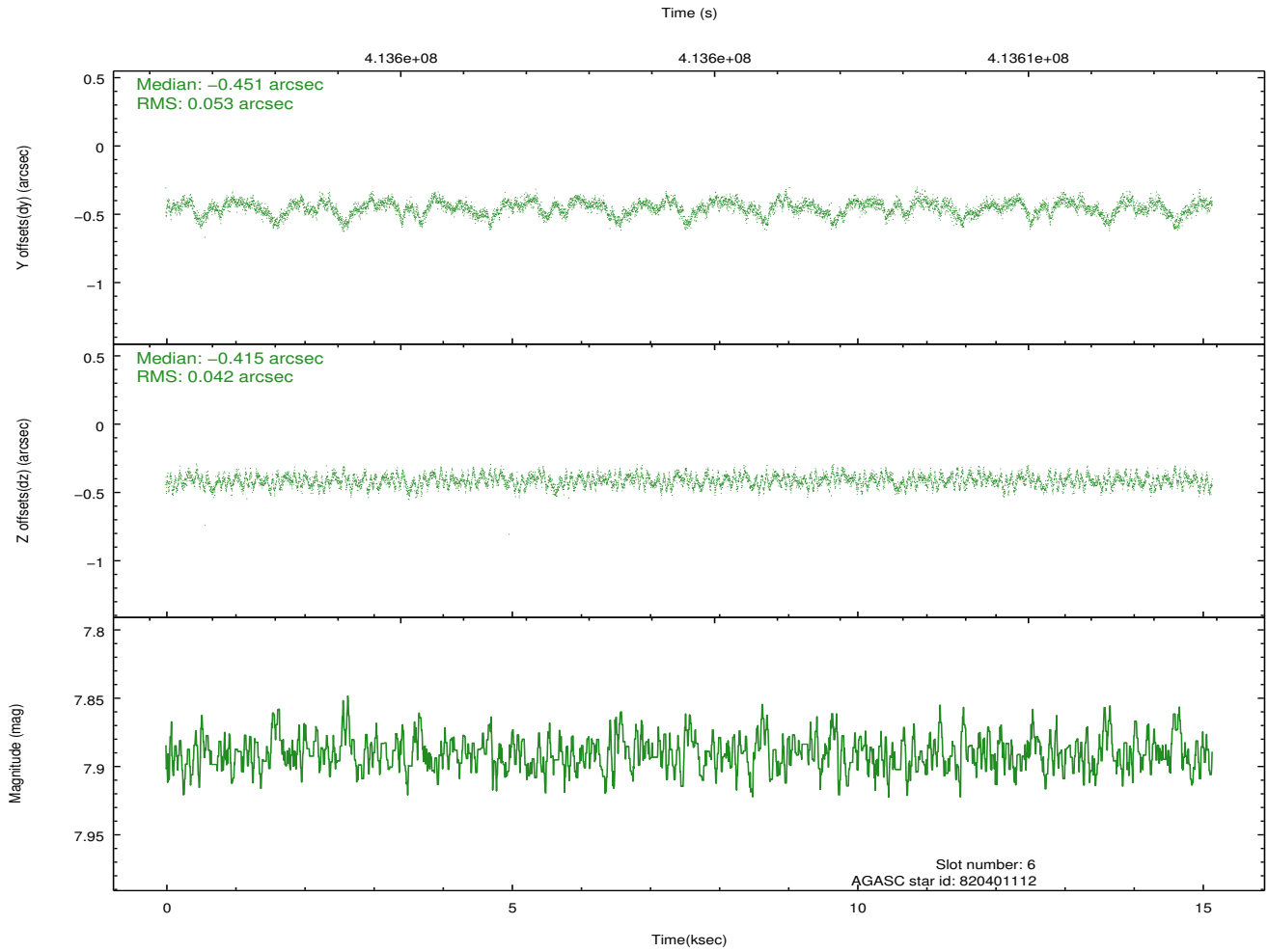
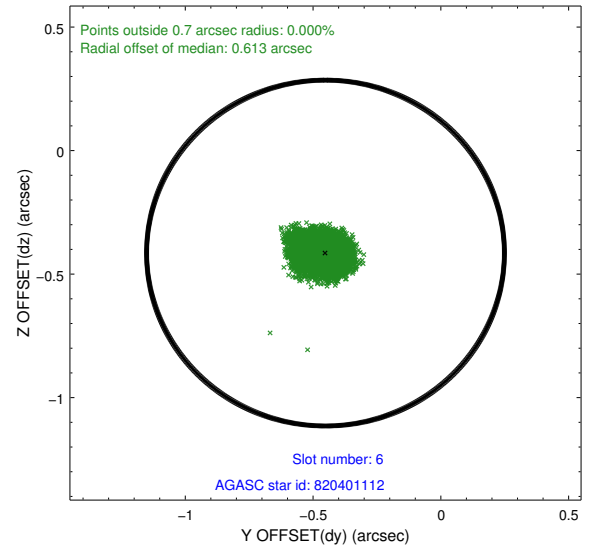
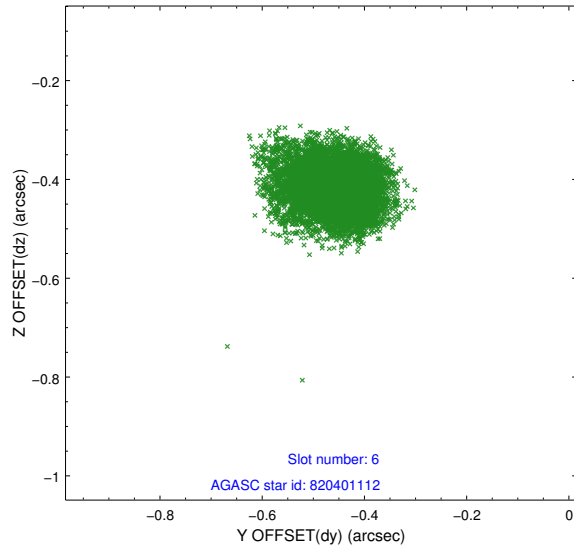
2.4.2 Slot 4



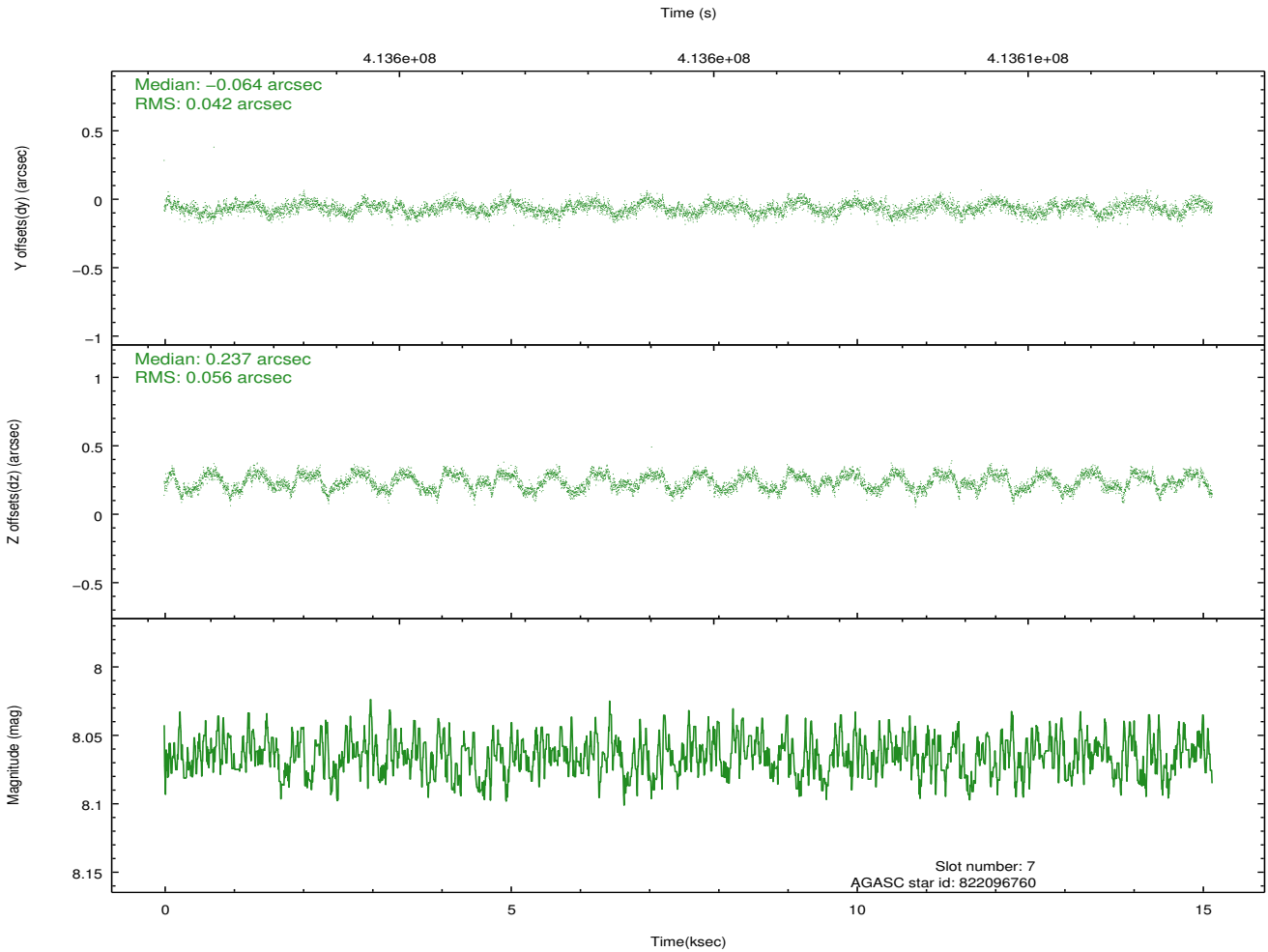
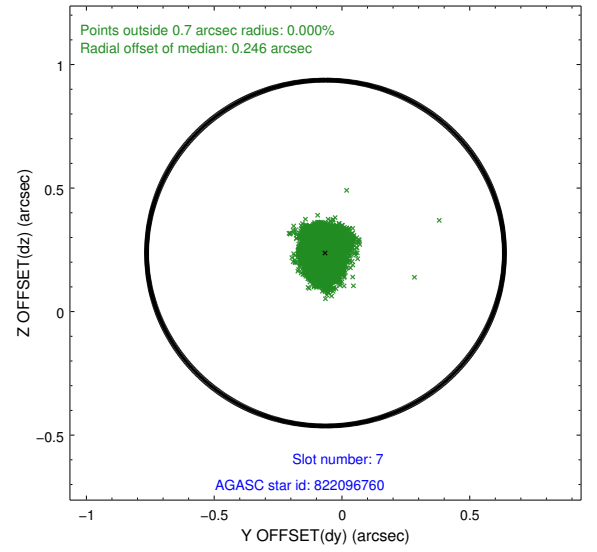
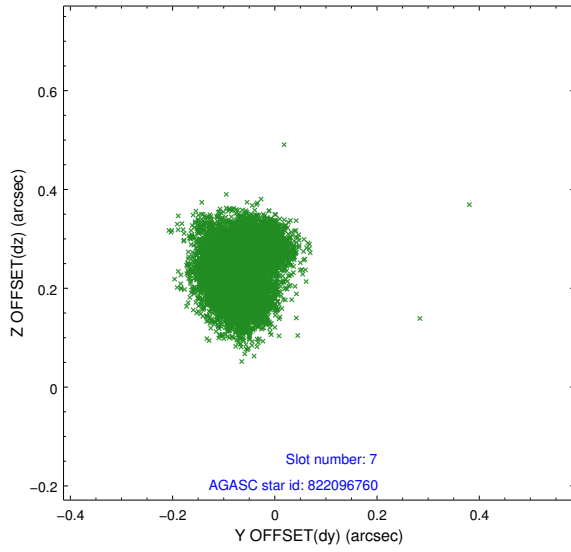
2.4.3 Slot 5



2.4.4 Slot 6

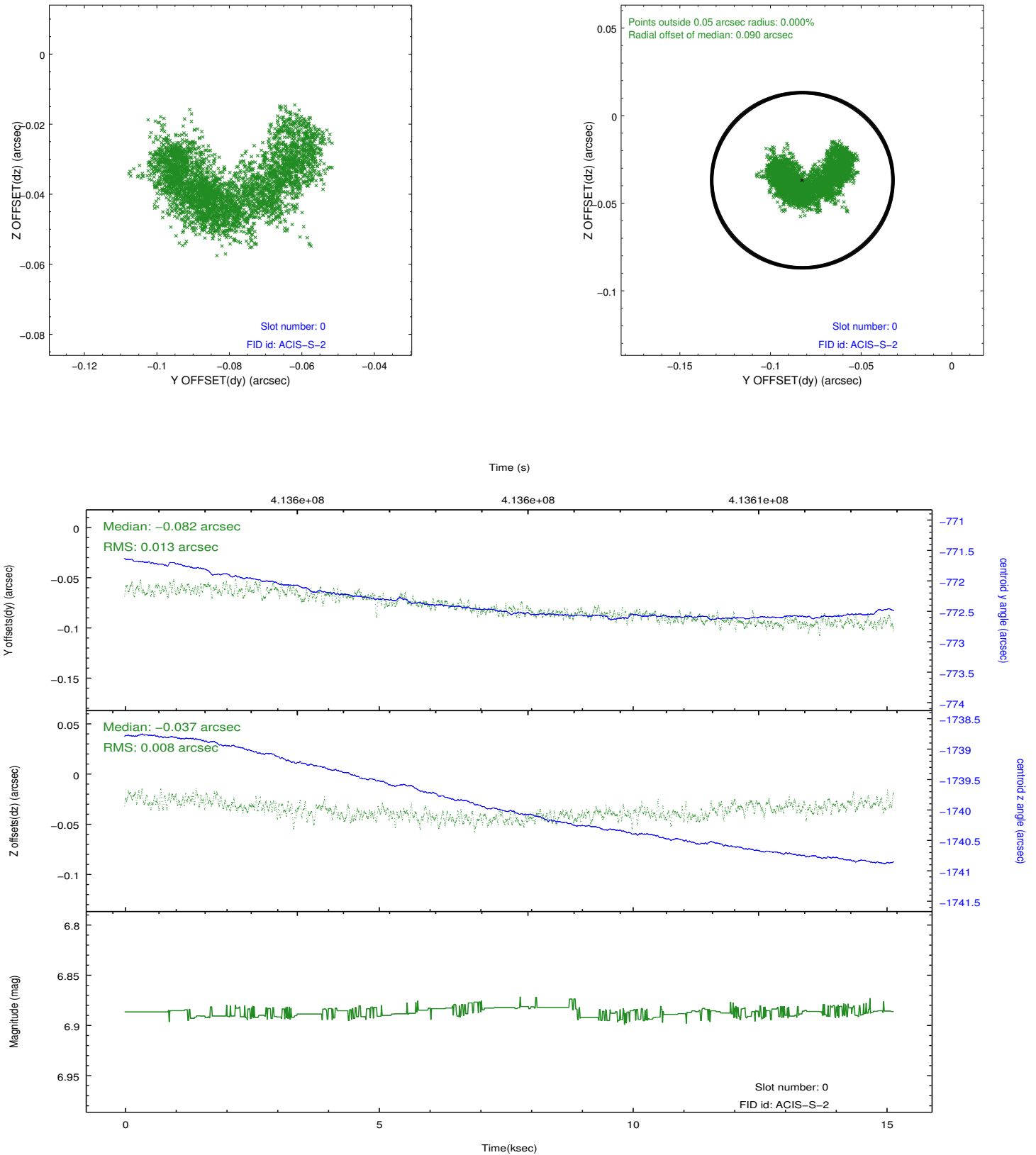


2.4.5 Slot 7

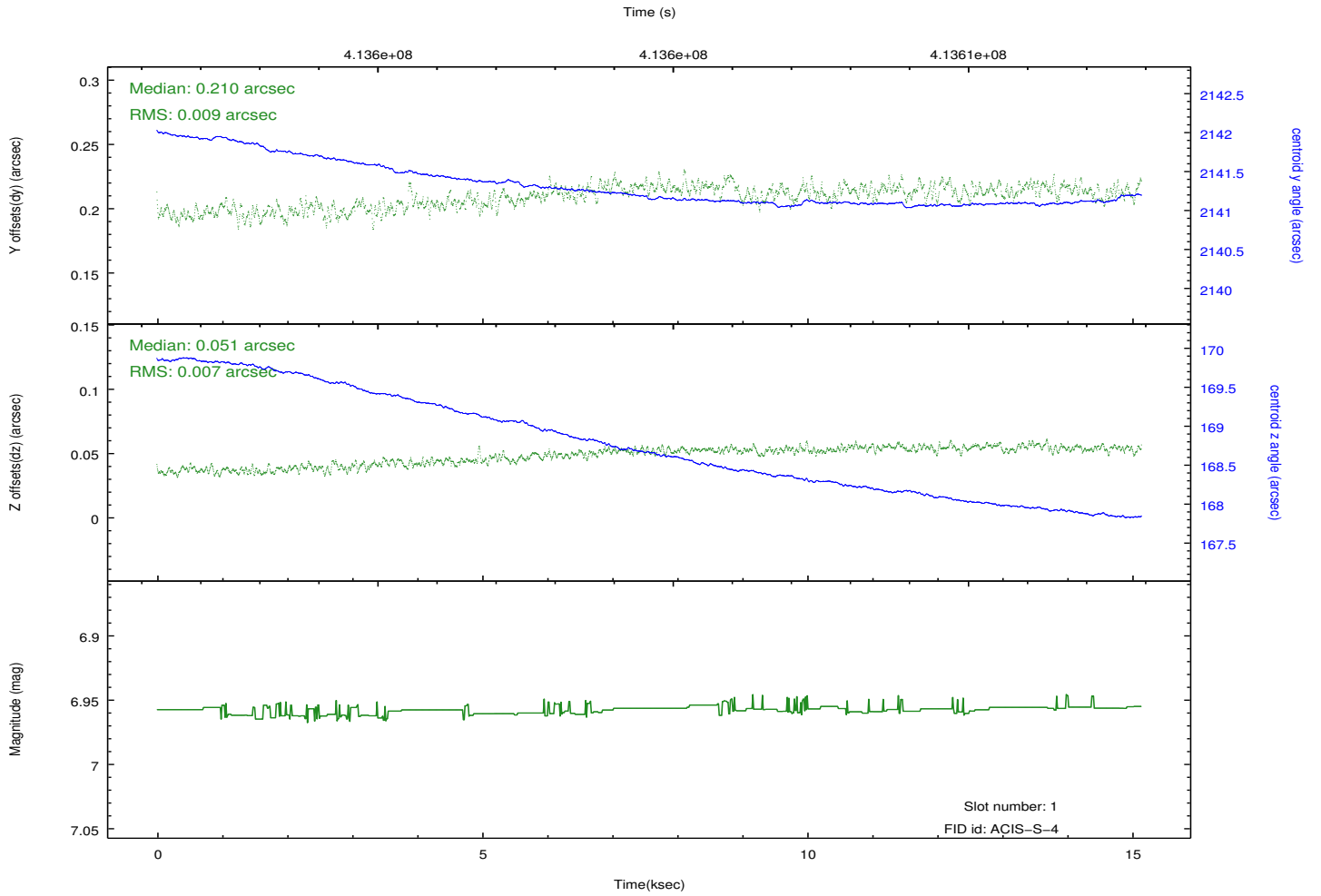
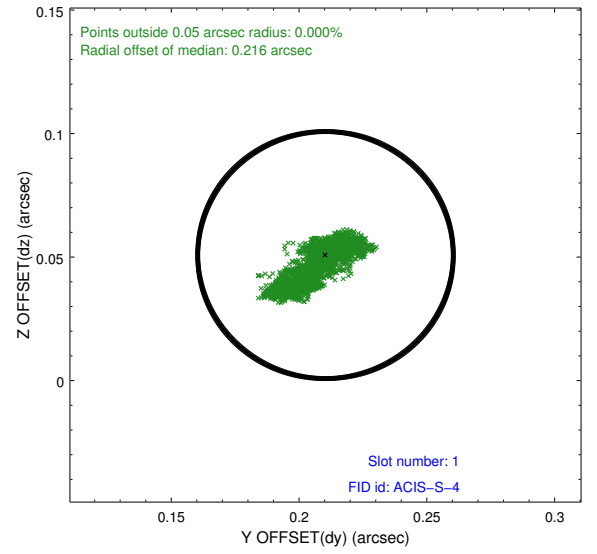
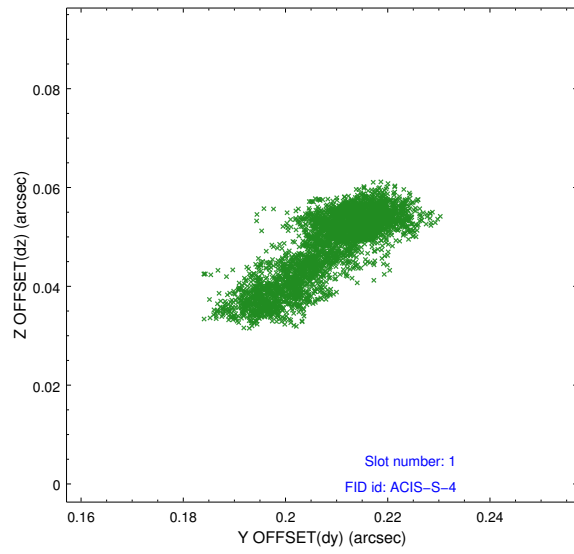


2.5 FID Slots

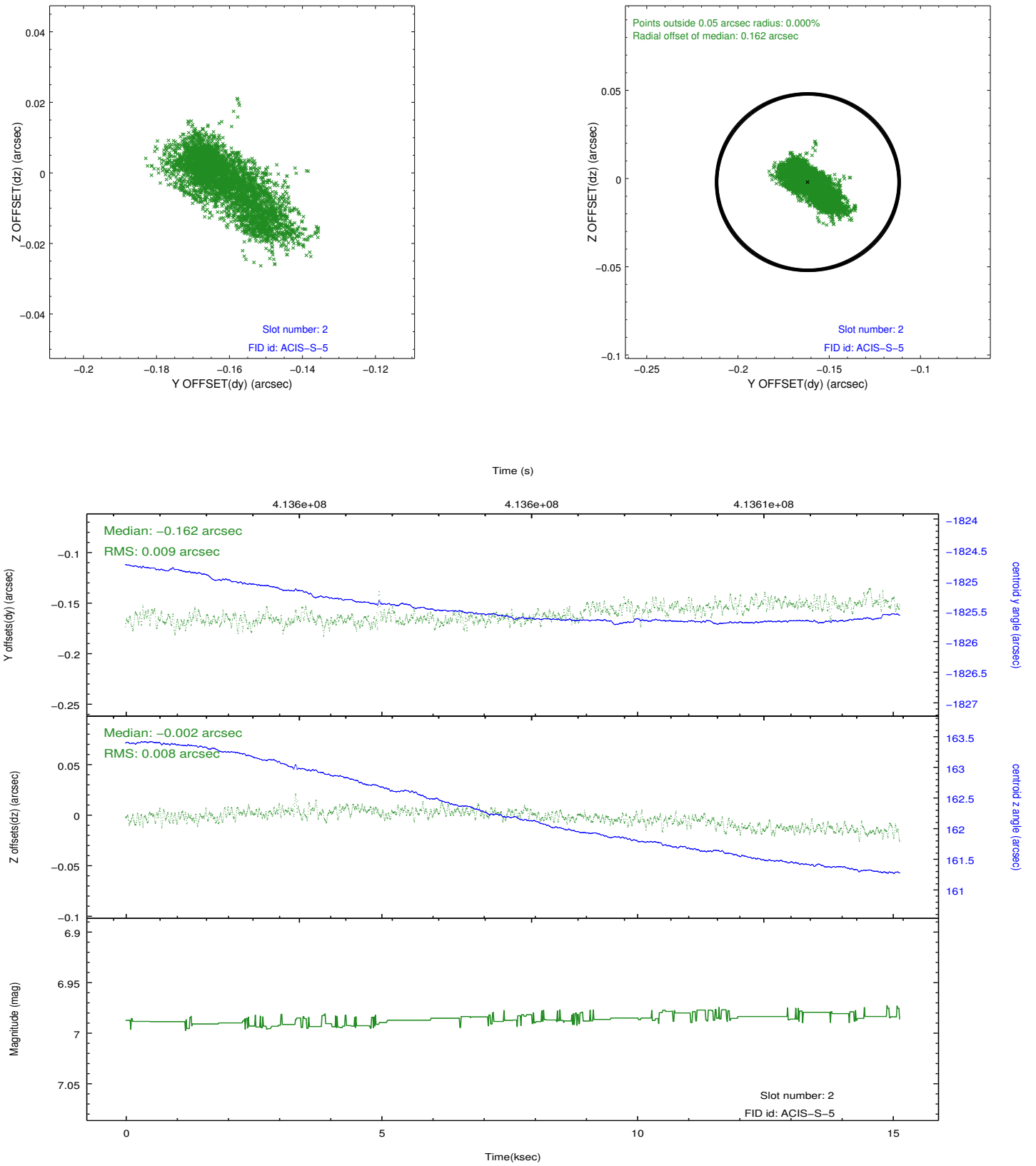
2.5.1 Slot 0



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	15.010343217969

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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Window constraint met.