

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13252 - L2 Version 2
Chandra X-Ray Center

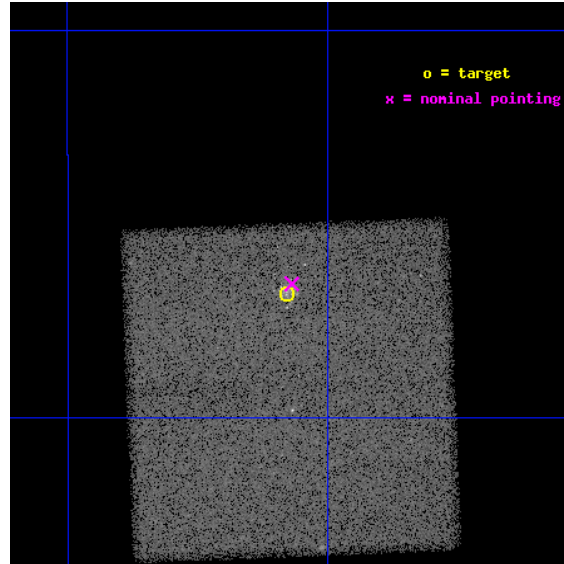
L2 Processing Date : Feb 8 2012

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1 Front

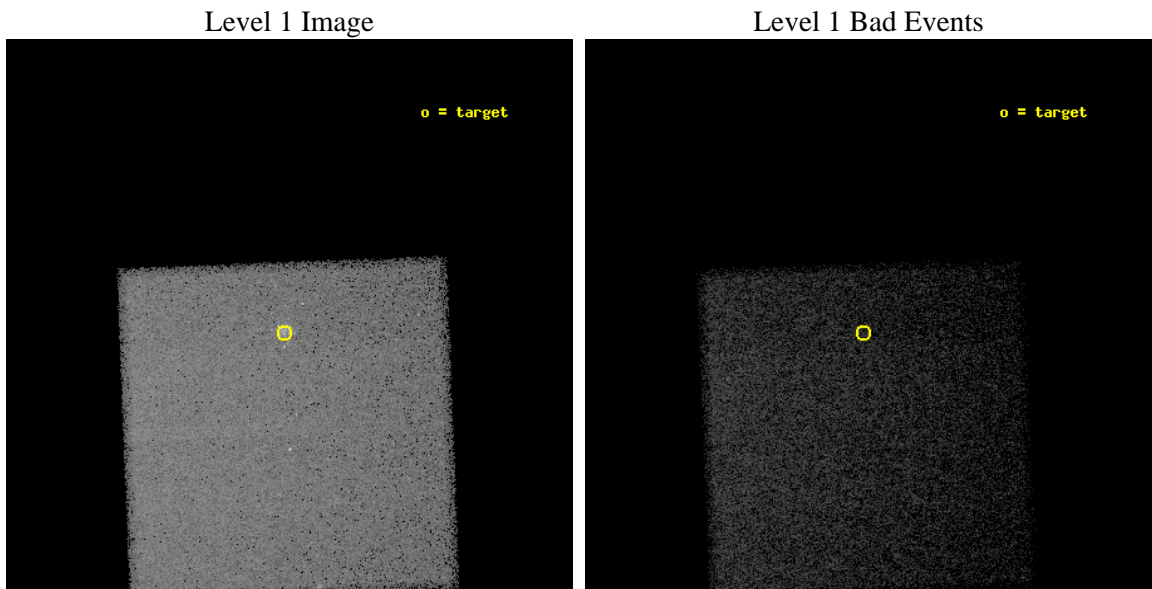
seq_num	401297	Sequence number
obs_id	13252	Observation id
title	Probing the neutron star crust of the new transiently accreting 11 Hz X-ray pulsar in the globular cluster Terzan 5	Proposal title
observer	Nathalie Degenaar	Principal investigator
object	CXOGC1b J174804.8-244648	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.02	Observer's specified target RA [deg]
dec_targ	-24.78	Observer's specified target Dec [deg]
ra_nom	267.01738994472	Nominal RA [deg]
dec_nom	-24.775777813667	Nominal Dec [deg]
roll_nom	87.686412661334	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40080.0	Sum of GTIs [s]
livetime	39539.105043012	Livetime [s]
ontime7	40080.0	Sum of GTIs [s]
l2events	150054	Number of level 2 events



2 OBI

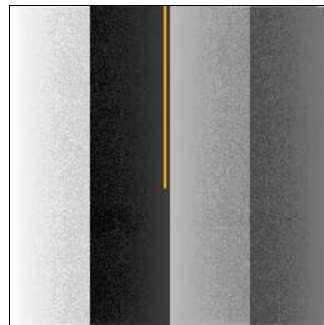
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	40080.0	Sum of GTIs [s]
caldbver	4.4.7	 	ontime7	40080.0	Sum of GTIs [s]
date	2012-02-09T00:52:26	Date and time of file creation	l1events	329838	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

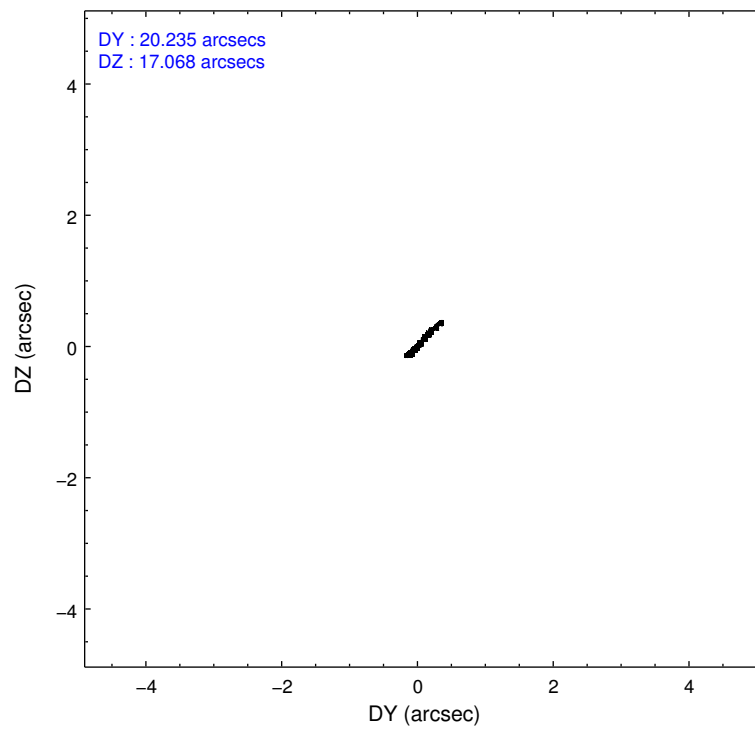
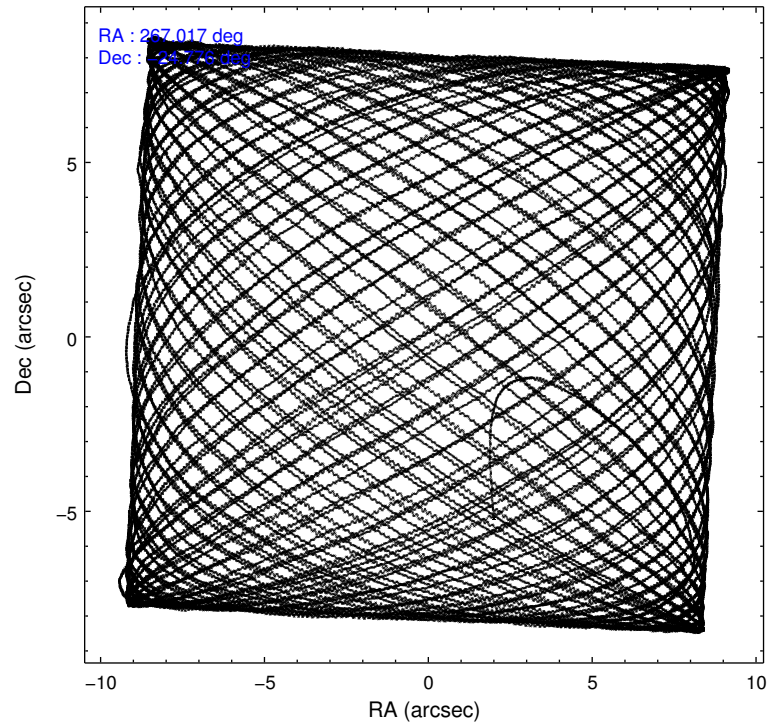
	ccd 7
level 1 events	329838
rejected events	175833
rejected %	53%

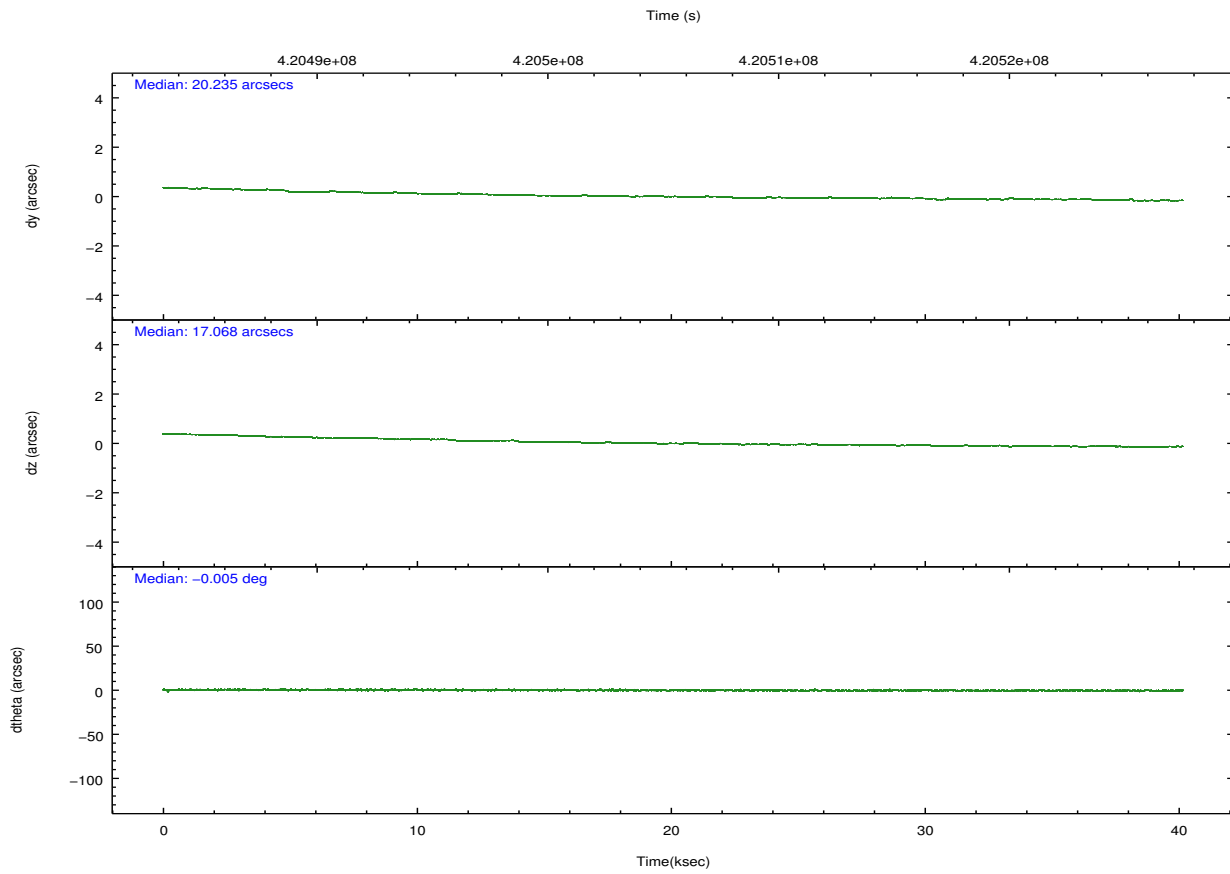
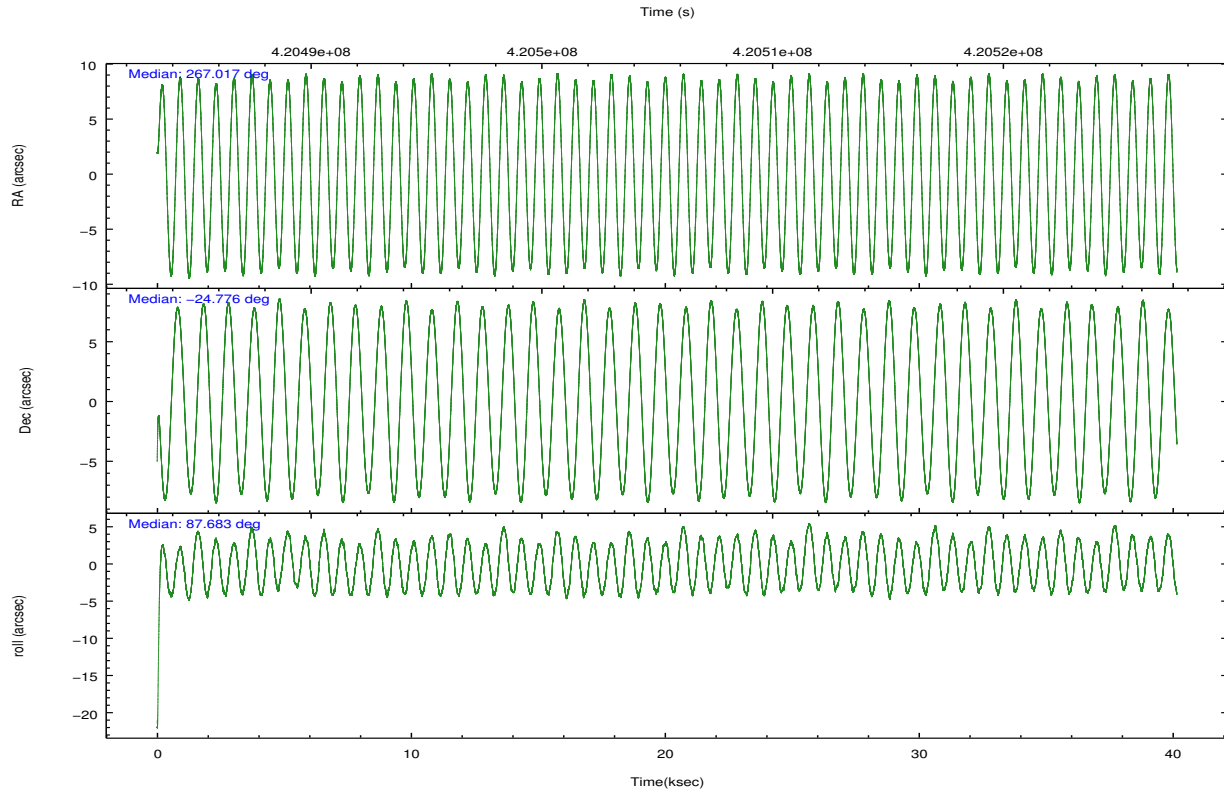
	ccd 7
grade 0 events	15173
	4%
grade 1 events	403
	0%
grade 2 events	31554
	9%
grade 3 events	13905
	4%
grade 4 events	13900
	4%
grade 5 events	33963
	10%
grade 6 events	79482
	24%
grade 7 events	141458
	42%

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	267.031742	267.017389944722	Subarray requested	NONE	NONE
[deg] Pointing Dec	-24.799808	-24.77577781366664	Alternating exposures requested	N	N
[deg] Pointing Roll	87.535803	87.68641266133449	[s] Primary exposure time	0.000000	3
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	420485491.184000	420484056.77871			
Observation start date	2011-04-29T17:30:25	2011-04-29T17:07:36			
[s] Observation end time (MET)	420525491.184000	420526103.30589			
Observation end date	2011-04-30T04:37:05	2011-04-30T04:48:23			
Read mode	TIMED	TIMED			

2.3 Aspect



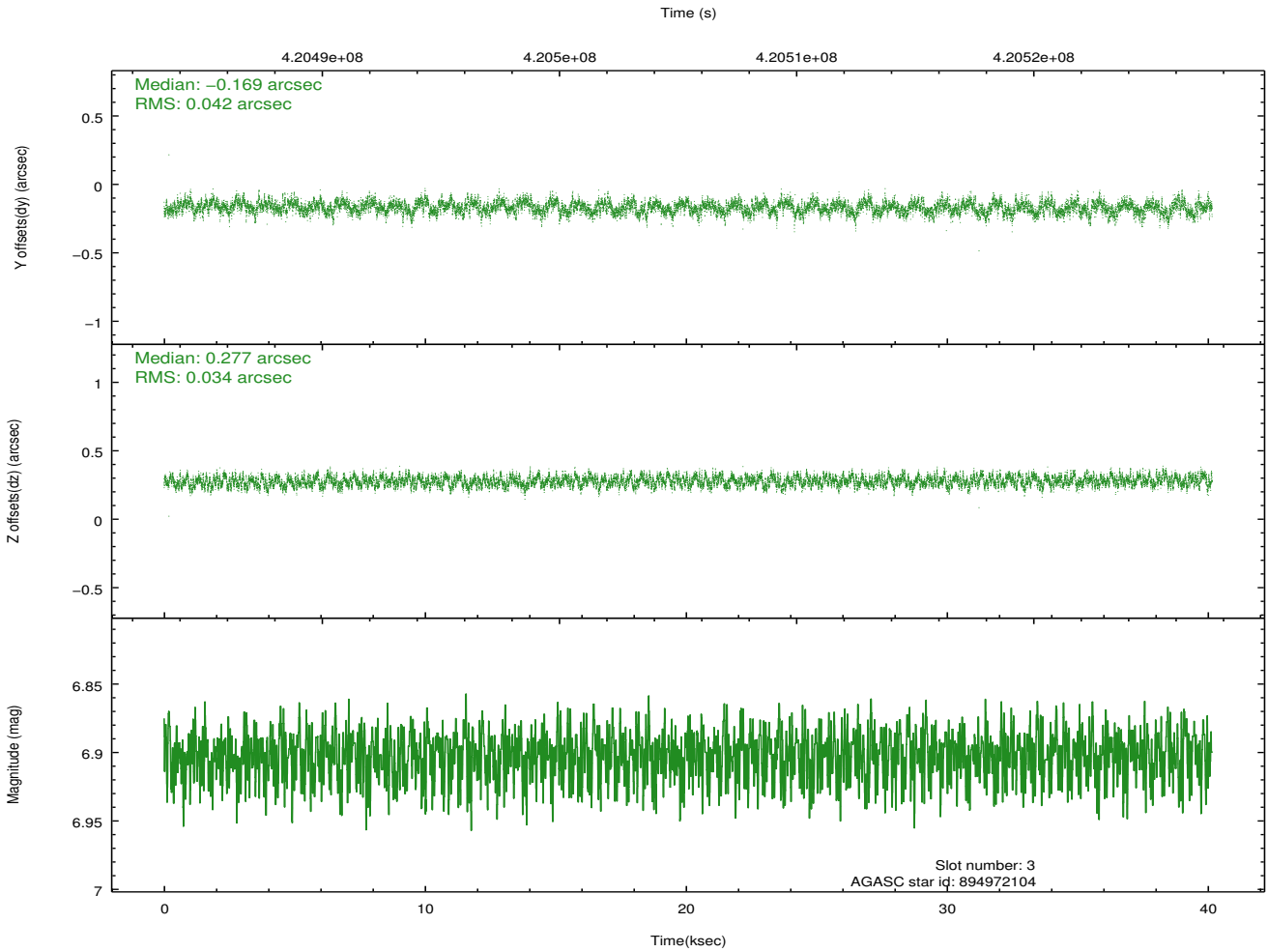
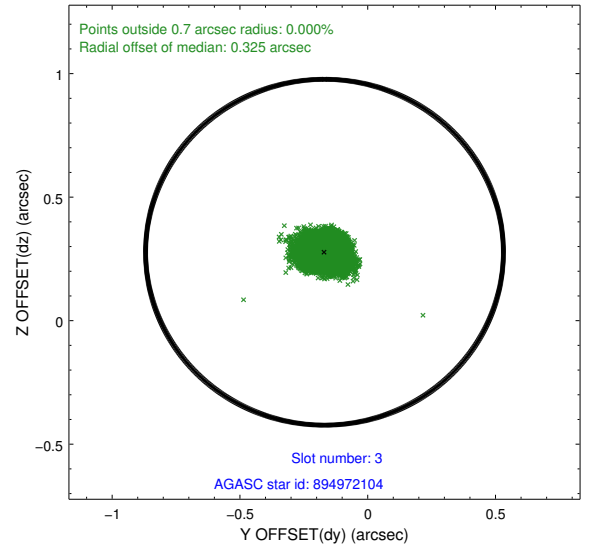
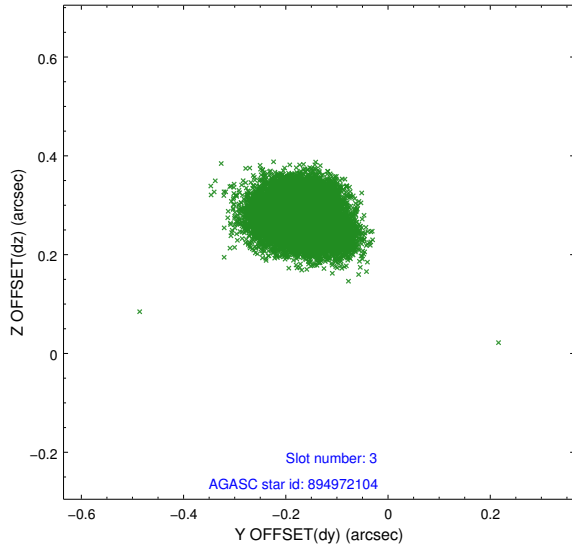


Slot Statistics

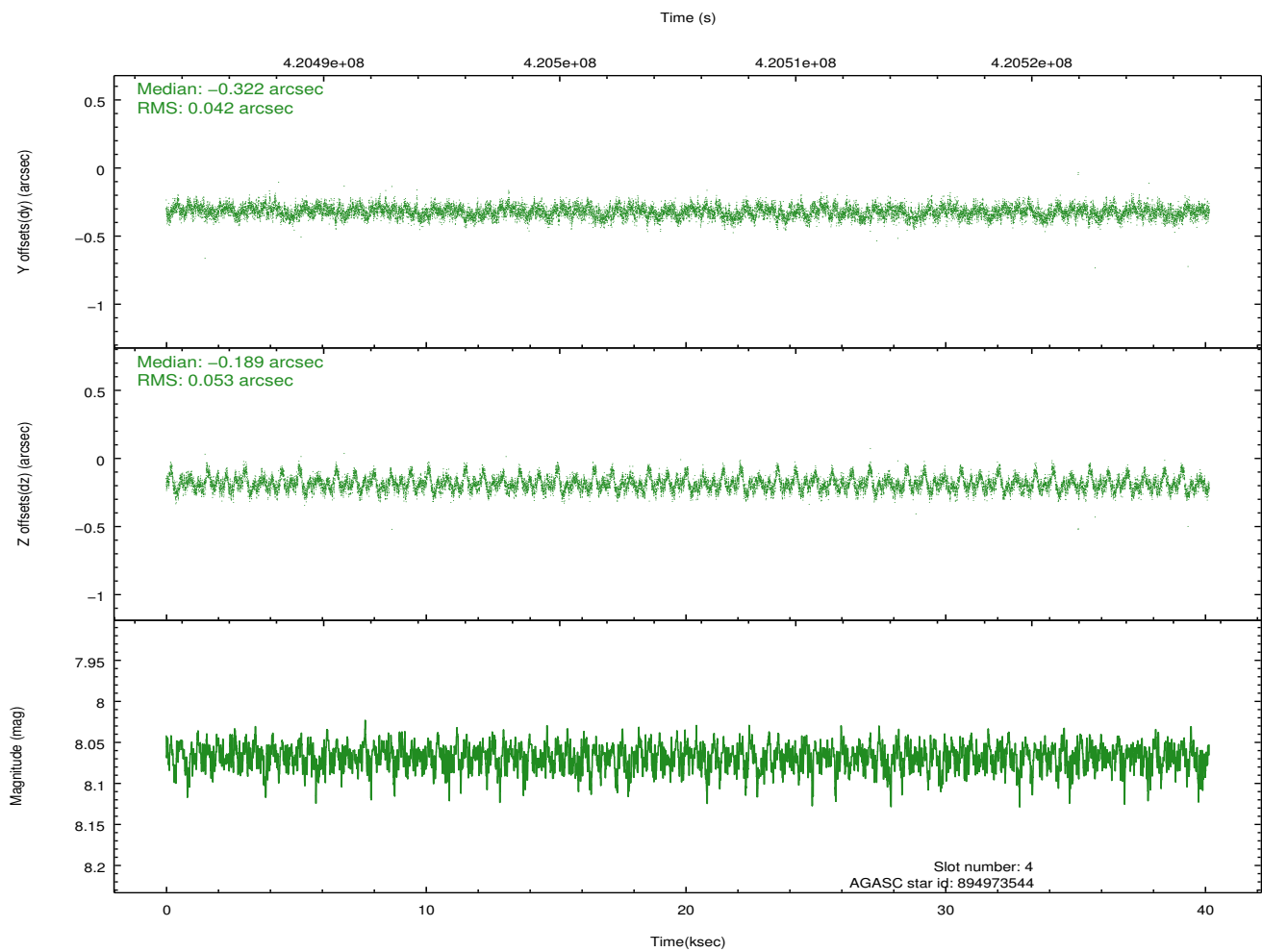
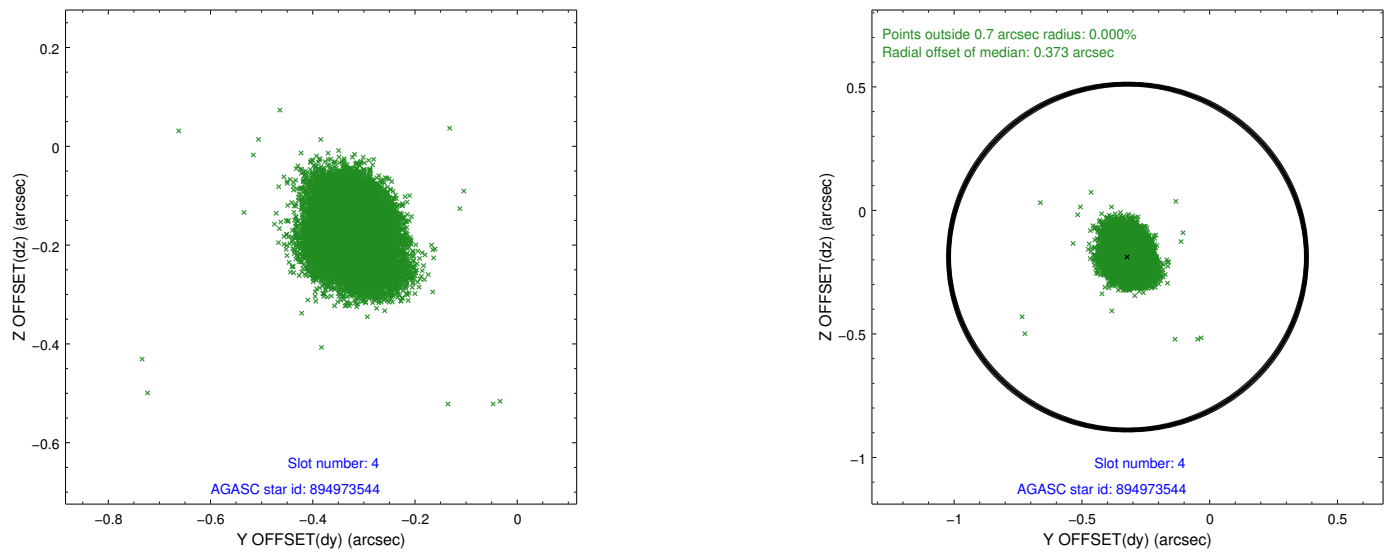
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.04	9795	0.098	-0.093	0.009	0.016	0.000000	0.000000	922.74	-1734.28
1	FID	ACIS-S-5	7.09	9795	-0.155	0.058	0.009	0.014	0.000000	0.000000	-1826.48	163.44
2	FID	ACIS-S-6	7.19	9795	0.036	0.047	0.013	0.025	0.000000	0.000000	388.24	807.38
3	GUIDE	894972104	6.90	19584	-0.169	0.277	0.058	0.092	267.489380	-24.207054	2193.67	-1408.52
4	GUIDE	894973544	8.07	19587	-0.322	-0.189	0.071	0.117	266.605572	-24.141151	2306.21	1500.89
5	GUIDE	895485920	8.65	19578	0.196	-0.003	0.097	0.153	266.932426	-25.188840	-1412.86	263.19
6	GUIDE	895488888	8.55	19581	0.035	0.015	0.075	0.120	266.751949	-24.913497	-449.11	895.22
7	GUIDE	895489704	8.79	19577	0.256	-0.107	0.094	0.156	266.328076	-25.361339	-2124.68	2199.64

2.4 Star Slots

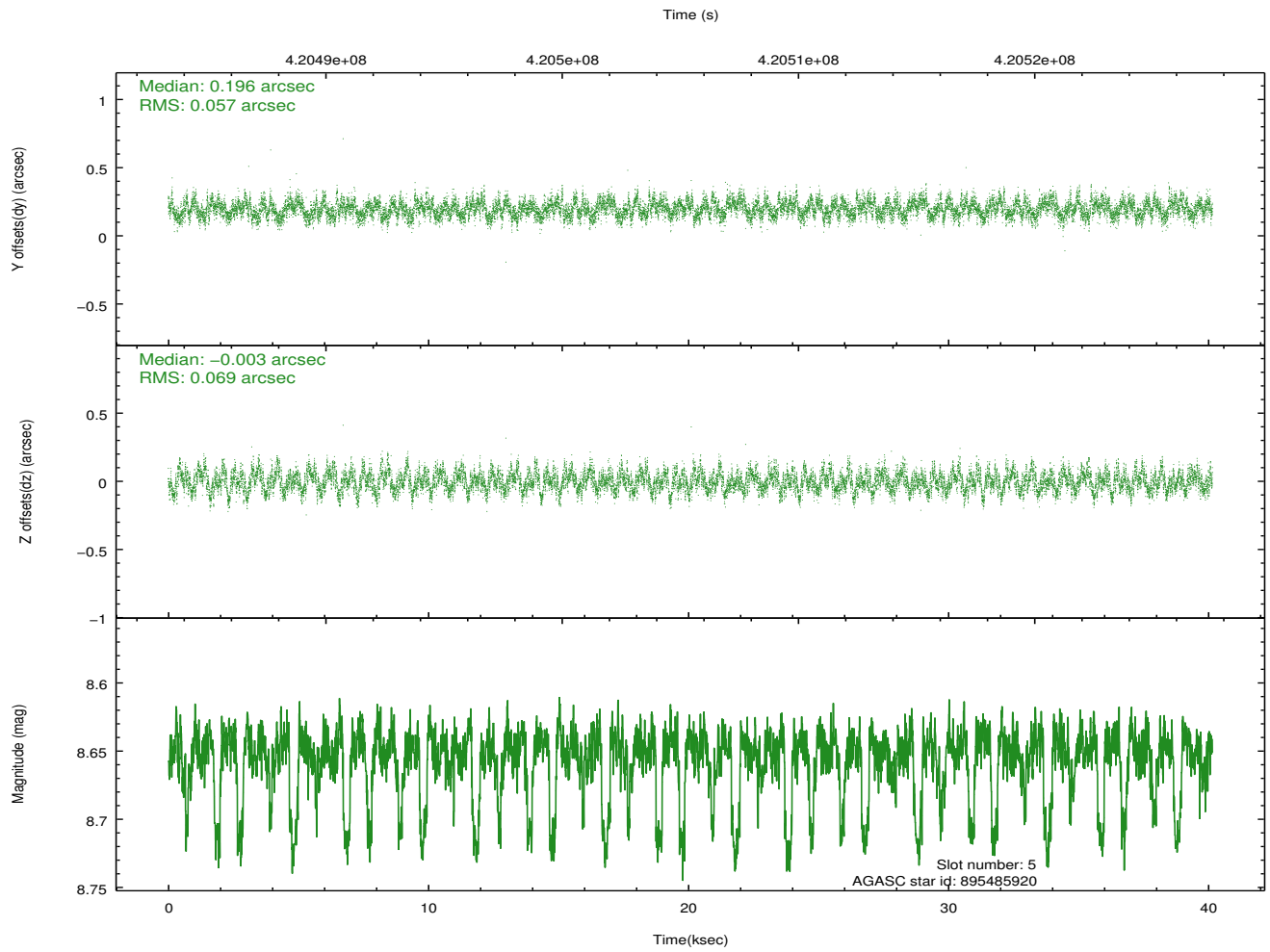
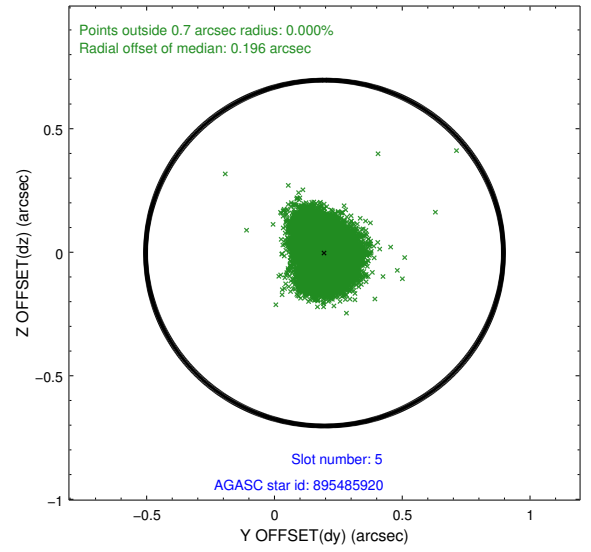
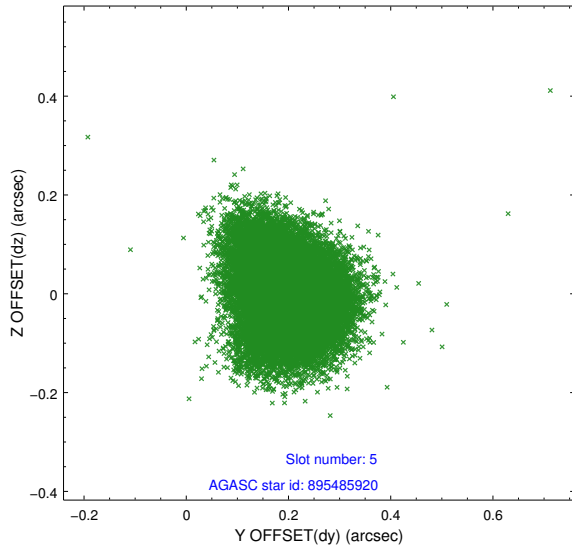
2.4.1 Slot 3



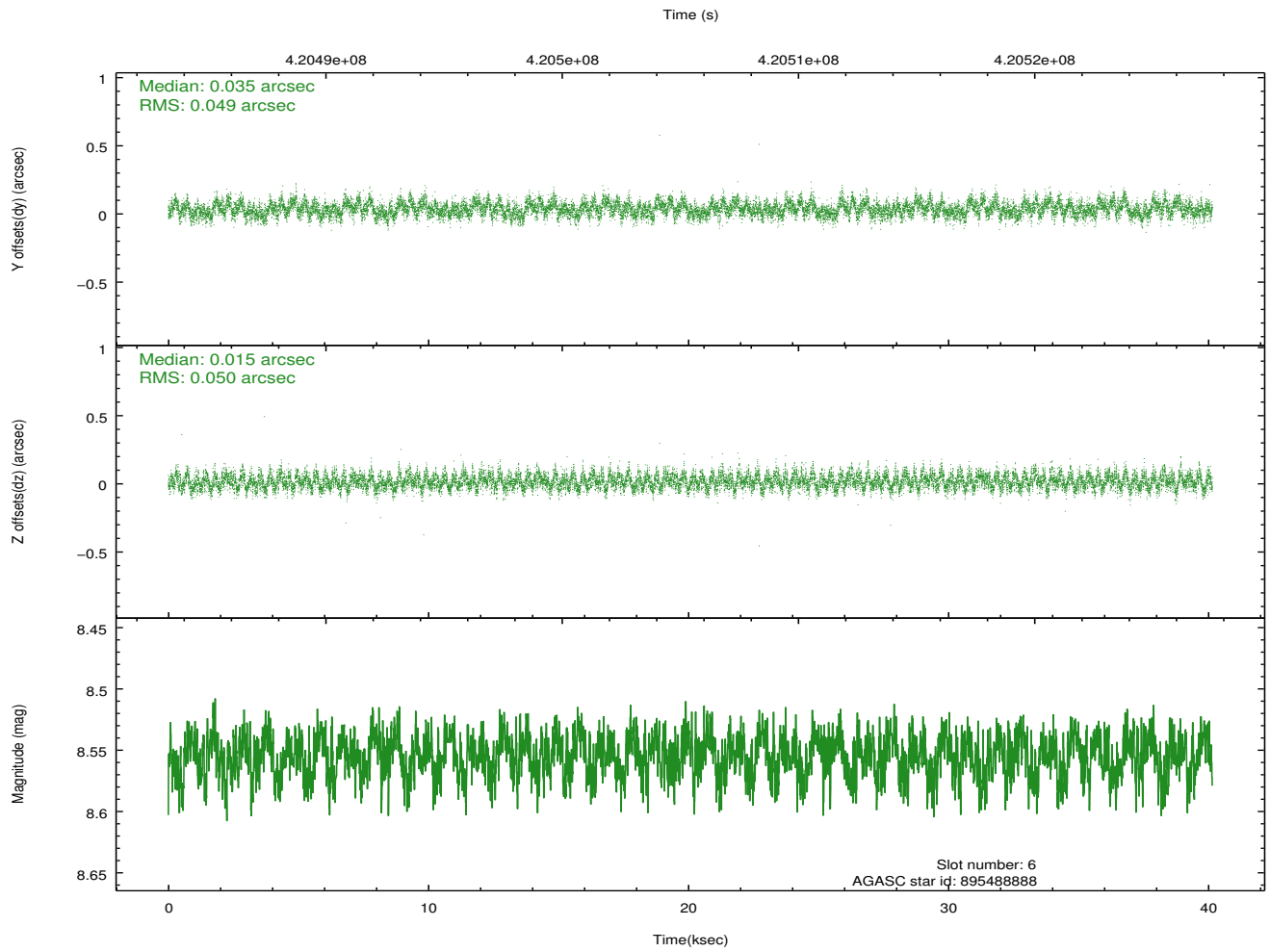
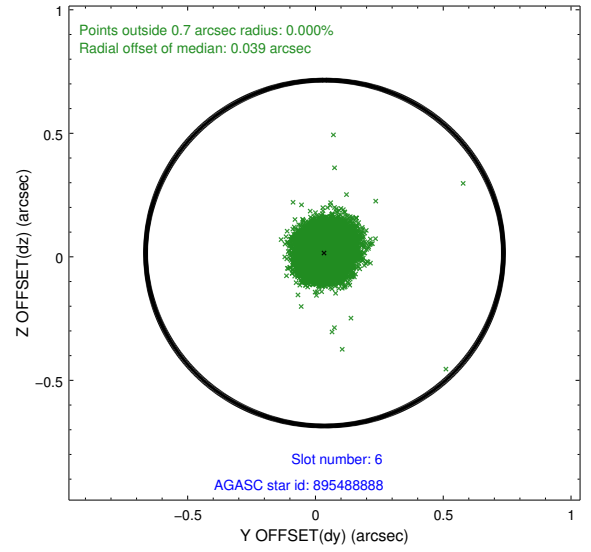
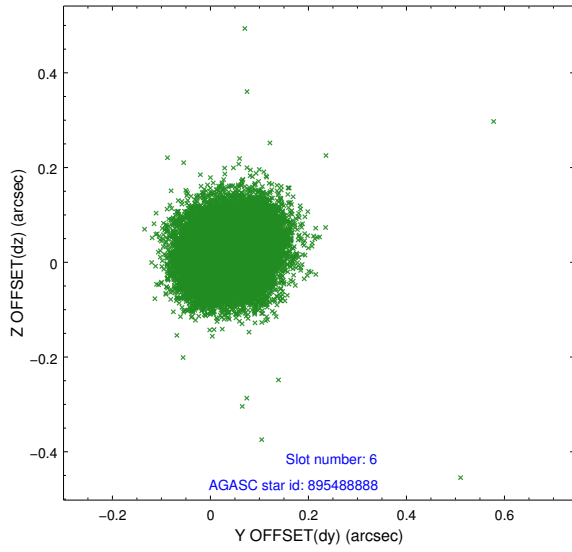
2.4.2 Slot 4



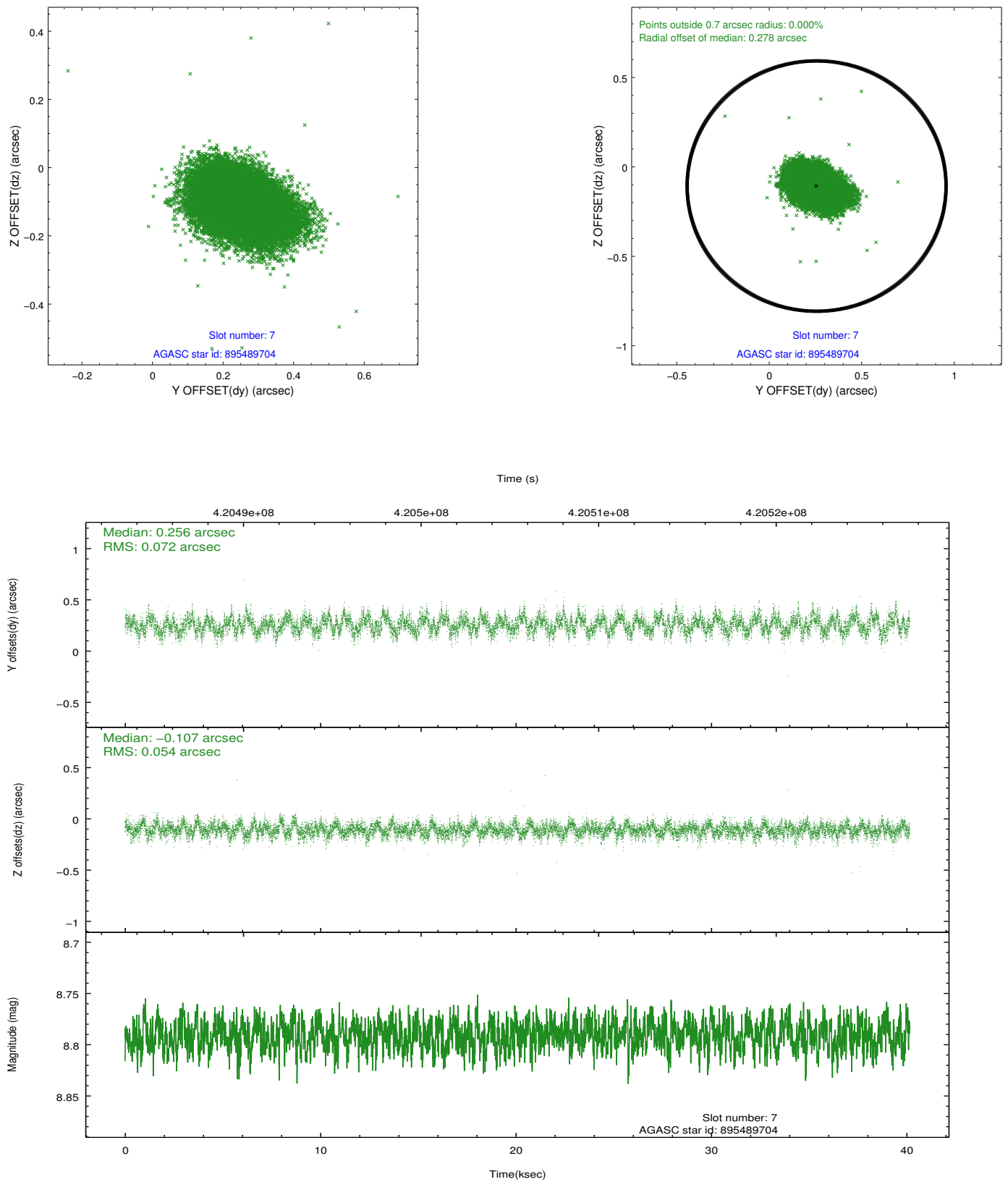
2.4.3 Slot 5



2.4.4 Slot 6

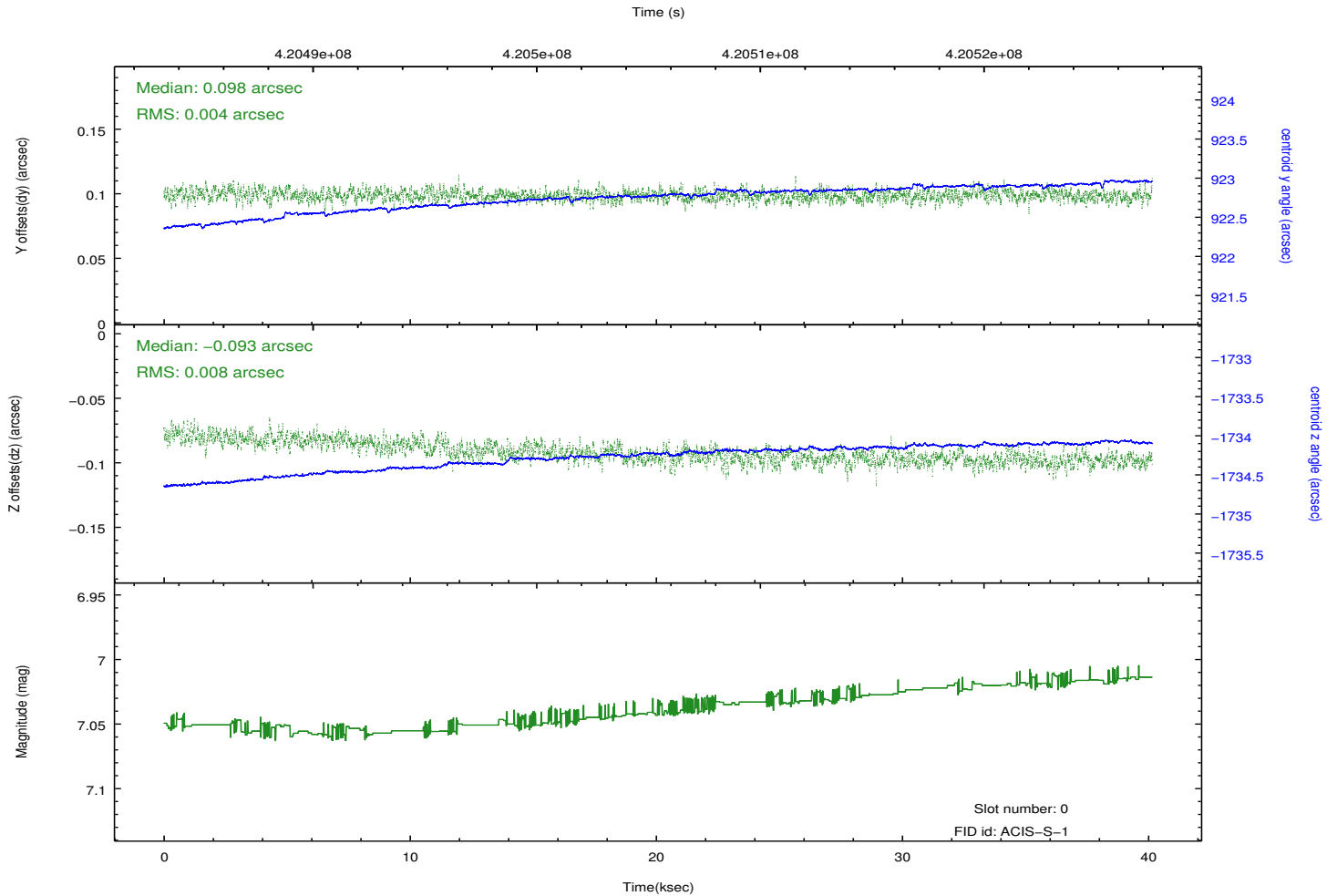
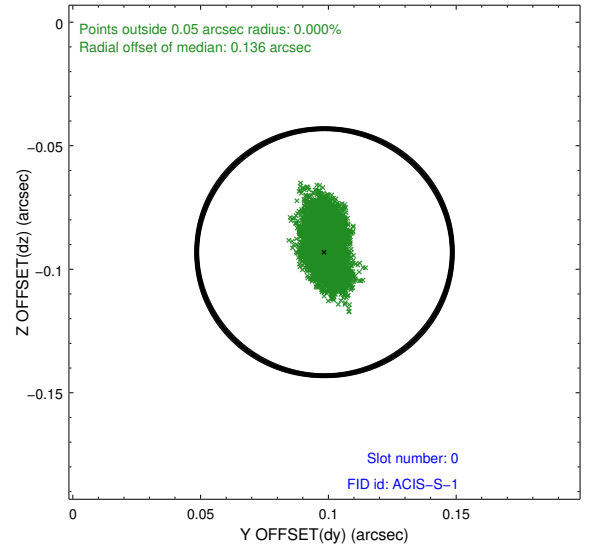
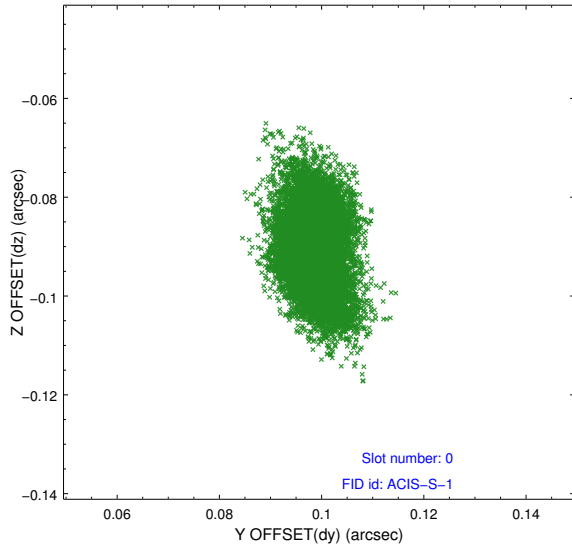


2.4.5 Slot 7

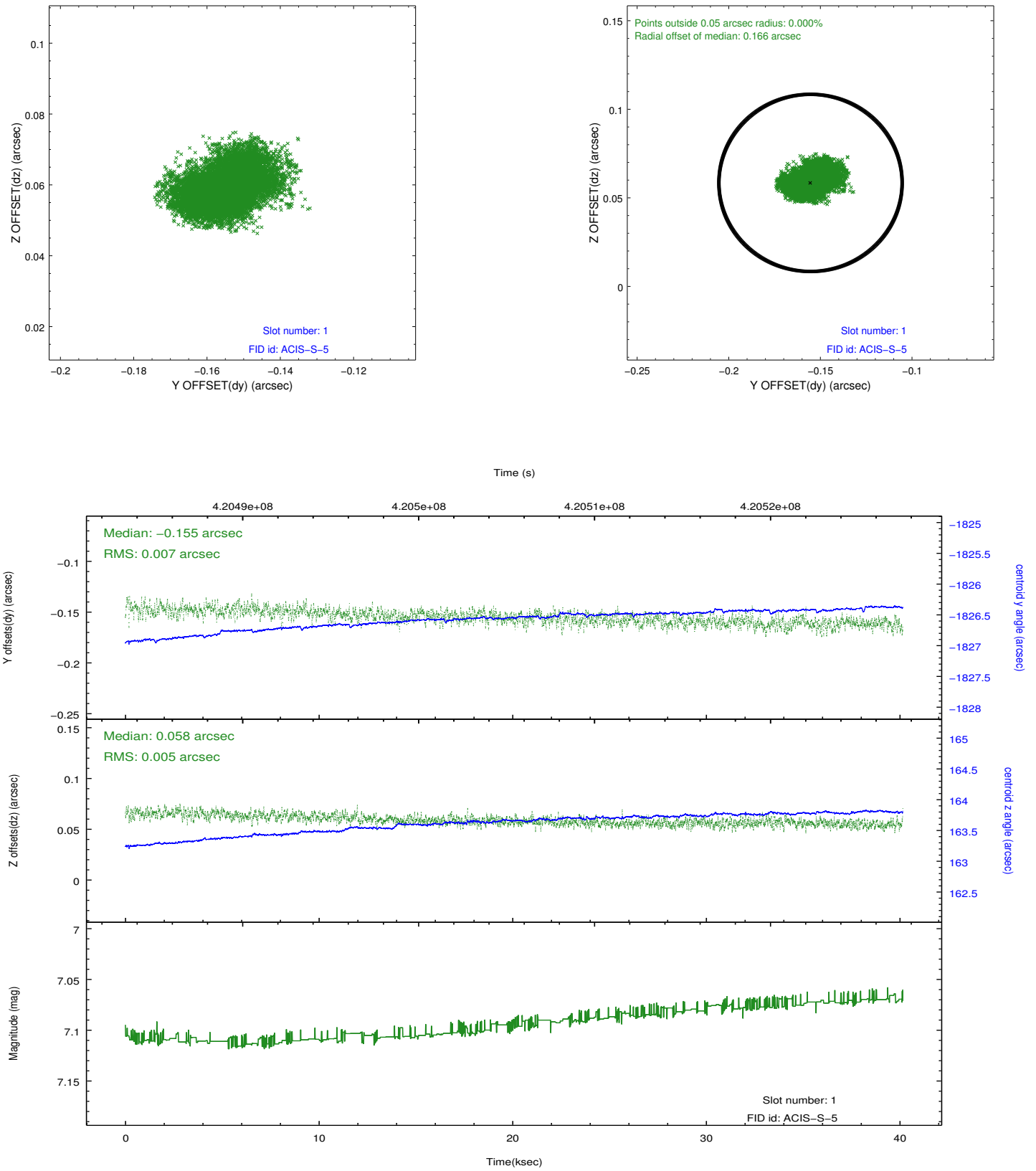


2.5 FID Slots

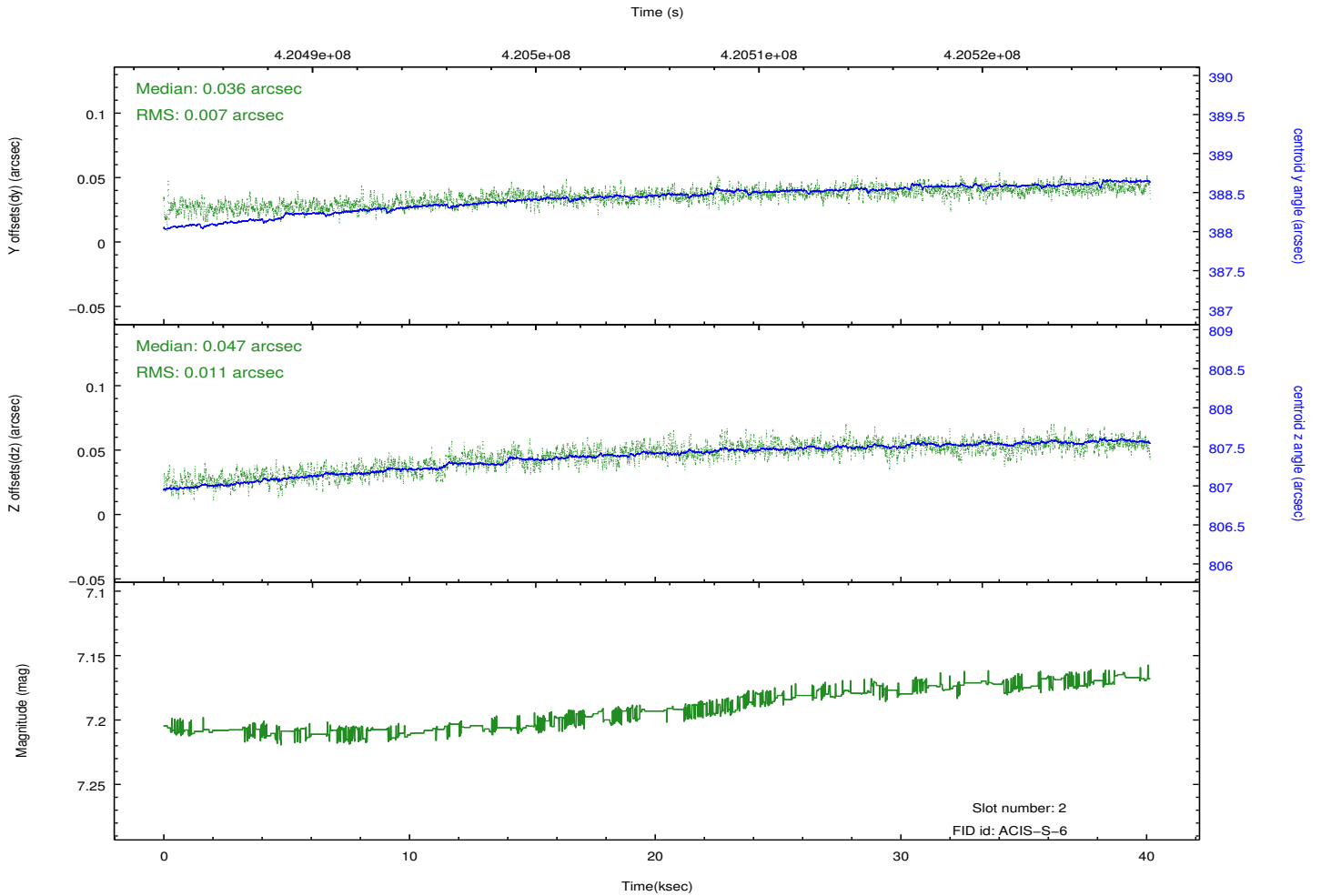
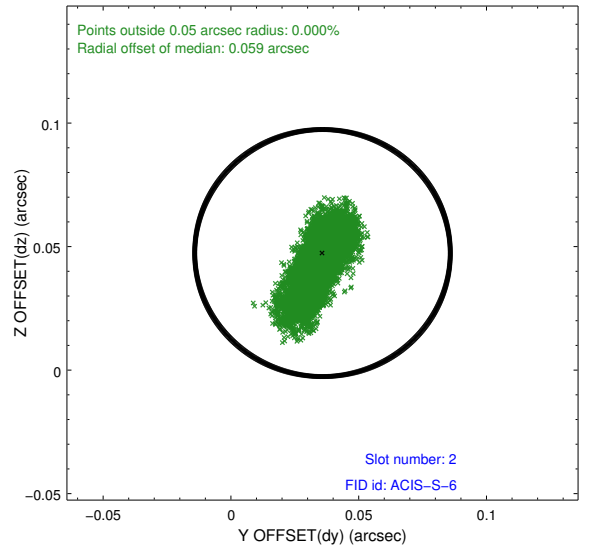
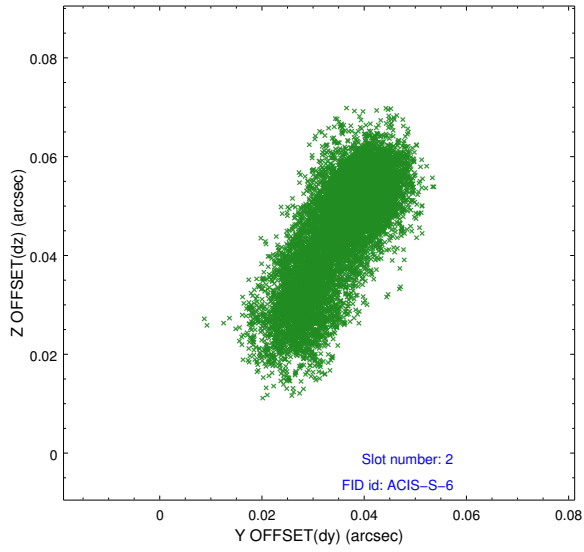
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.08

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.