

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12389 - L2 Version 2
Chandra X-Ray Center

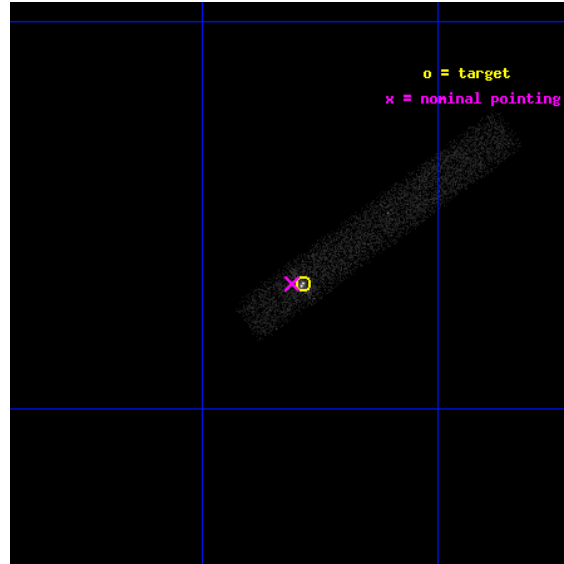
L2 Processing Date : Feb 7 2012

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1 Front

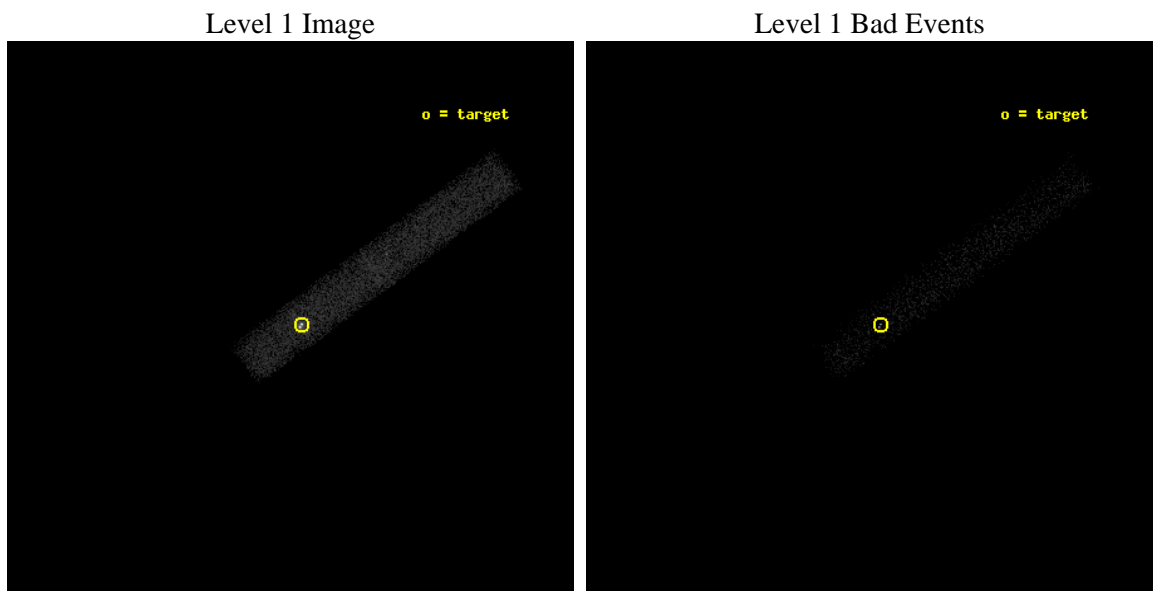
seq_num	200723	Sequence number
obs_id	12389	Observation id
title	CHANDRA X-RAY AND HST/COS+STIS UV SPECTROSCOPY OF LOW-MASS STARS IN THE 9 MYR OLD TW HYA ASSOCIATION	Proposal title
observer	Dr Alexander Brown	Principal investigator
object	TWA13 A+B	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	170.321667	Observer's specified target RA [deg]
dec_targ	-34.779306	Observer's specified target Dec [deg]
ra_nom	170.3275595988	Nominal RA [deg]
dec_nom	-34.779697250857	Nominal Dec [deg]
roll_nom	323.59912143024	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16063.886075199	Sum of GTIs [s]
livetime	14569.096748774	Livetime [s]
ontime7	16063.886075199	Sum of GTIs [s]
l2events	23373	Number of level 2 events



2 OBI

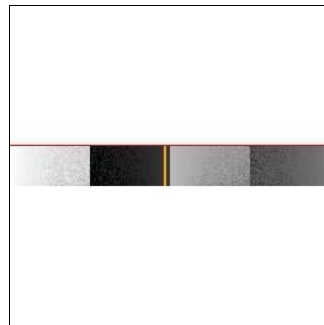
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16053.308000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	16063.886075199	Sum of GTIs [s]
caldsver	4.4.7	 	ontime7	16063.886075199	Sum of GTIs [s]
date	2012-02-07T13:40:52	Date and time of file creation	l1events	33166	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

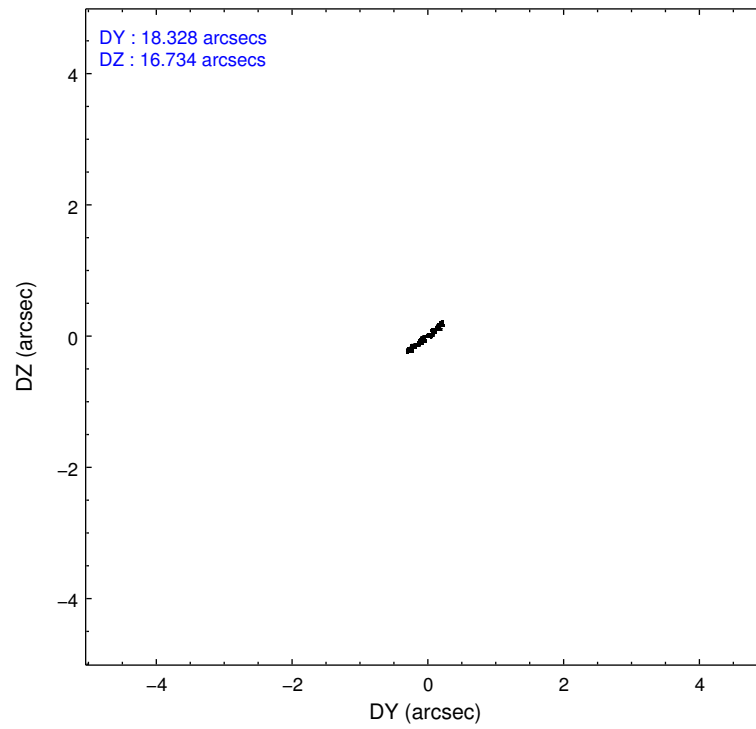
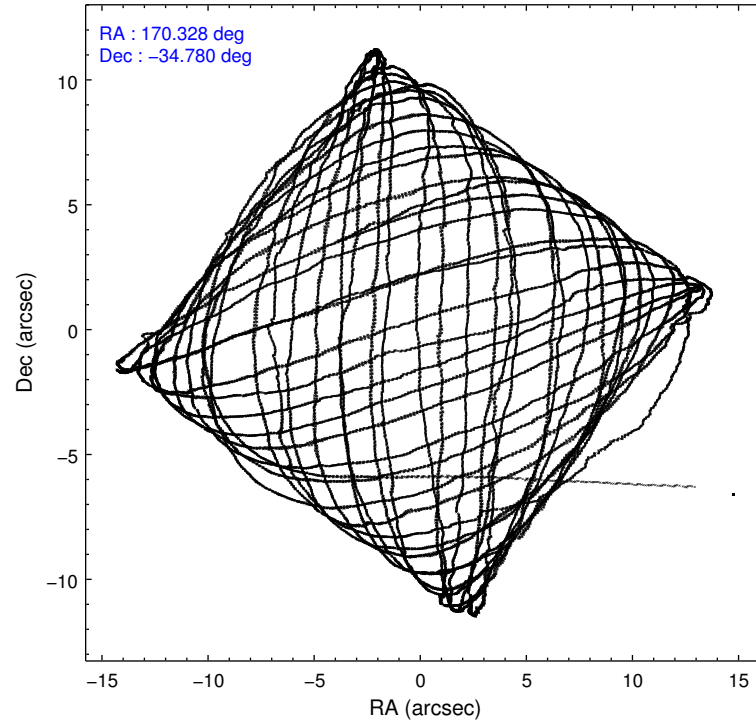
	ccd 7
level 1 events	33166
rejected events	9339
rejected %	28%

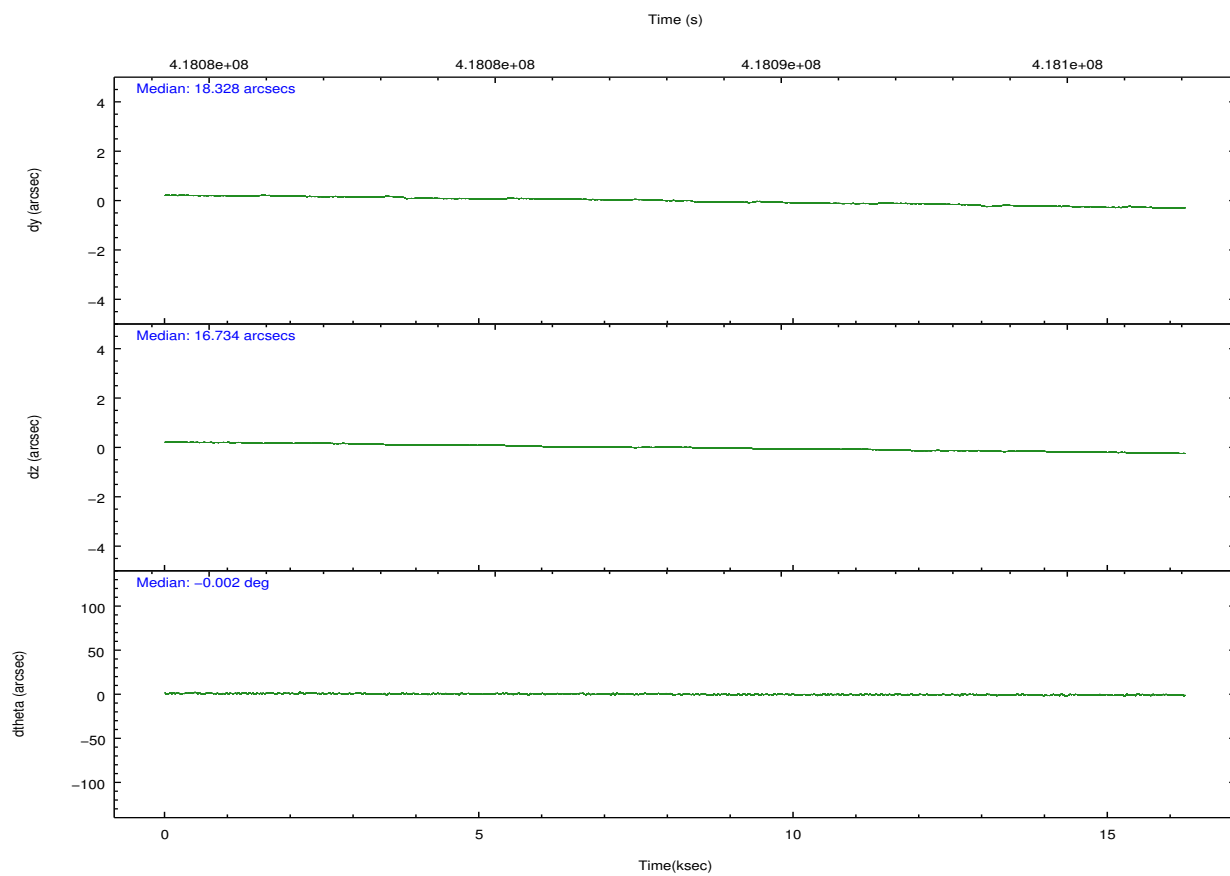
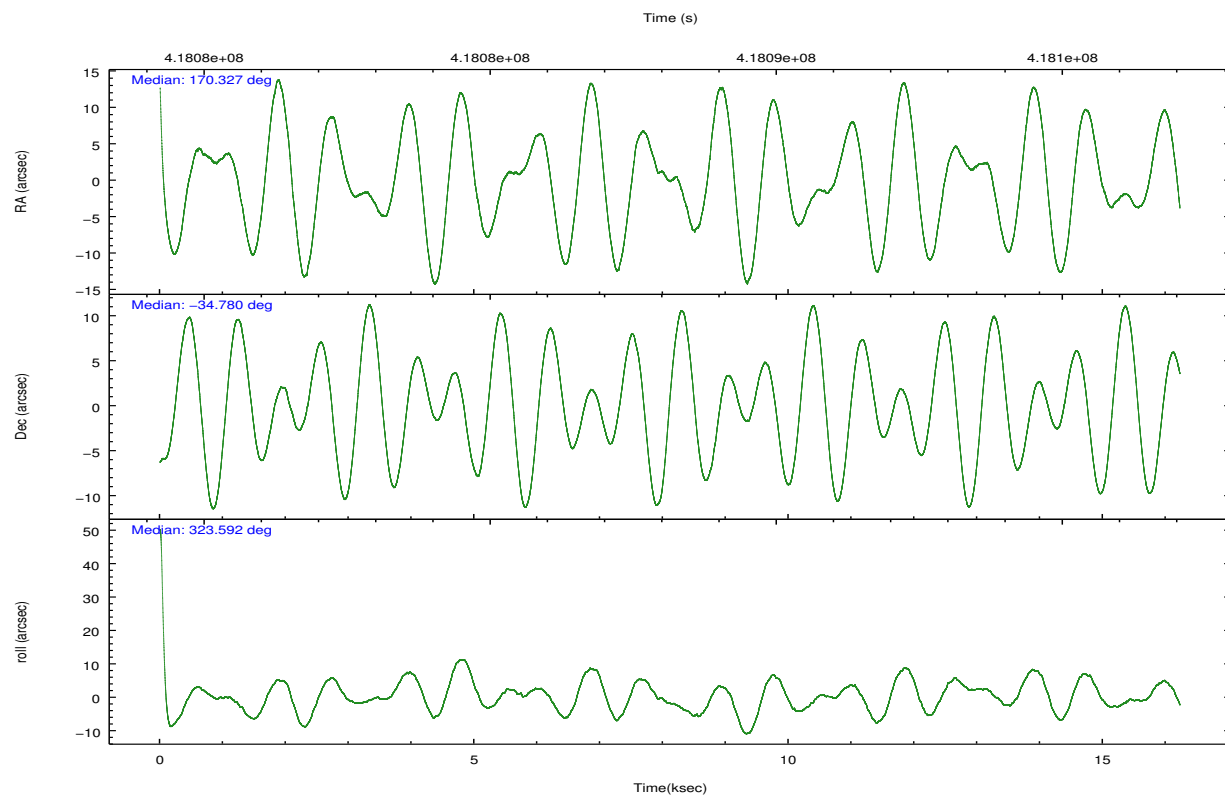
	ccd 7
grade 0 events	5798
	17%
grade 1 events	94
	0%
grade 2 events	5583
	16%
grade 3 events	2981
	8%
grade 4 events	2816
	8%
grade 5 events	2102
	6%
grade 6 events	6654
	20%
grade 7 events	7138
	21%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	170.294429	170.3275595988049	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-34.777019	-34.77969725085725	Subarray start row	449	449
[deg] Pointing Roll	323.423556	323.5991214302384	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	418080215.184000	418078448.27889			
Observation start date	2011-04-01T21:22:29	2011-04-01T20:54:08			
[s] Observation end time (MET)	418096268.184000	418096493.91733			
Observation end date	2011-04-02T01:50:02	2011-04-02T01:54:53			
Read mode	TIMED	TIMED			

2.3 Aspect



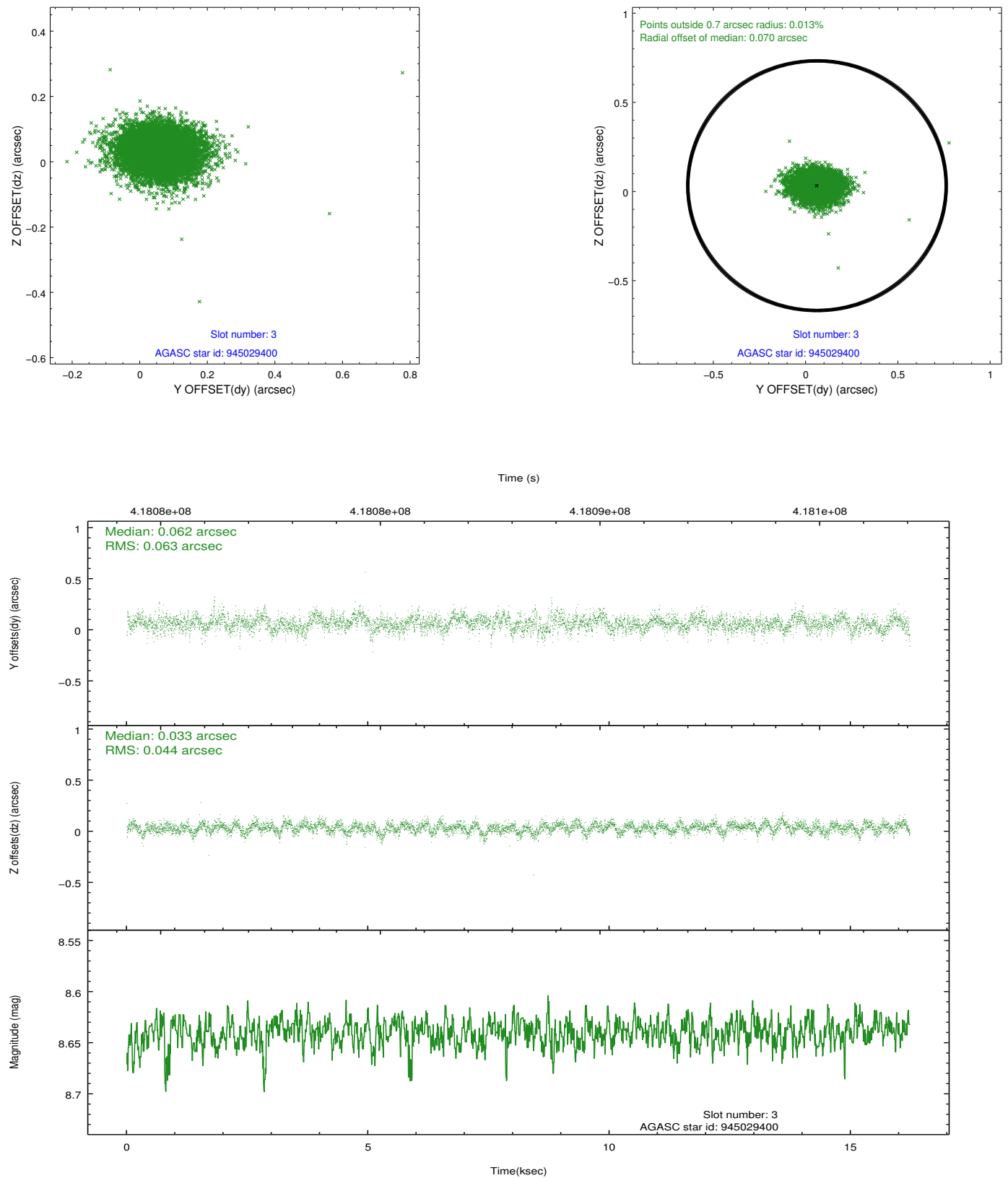


Slot Statistics

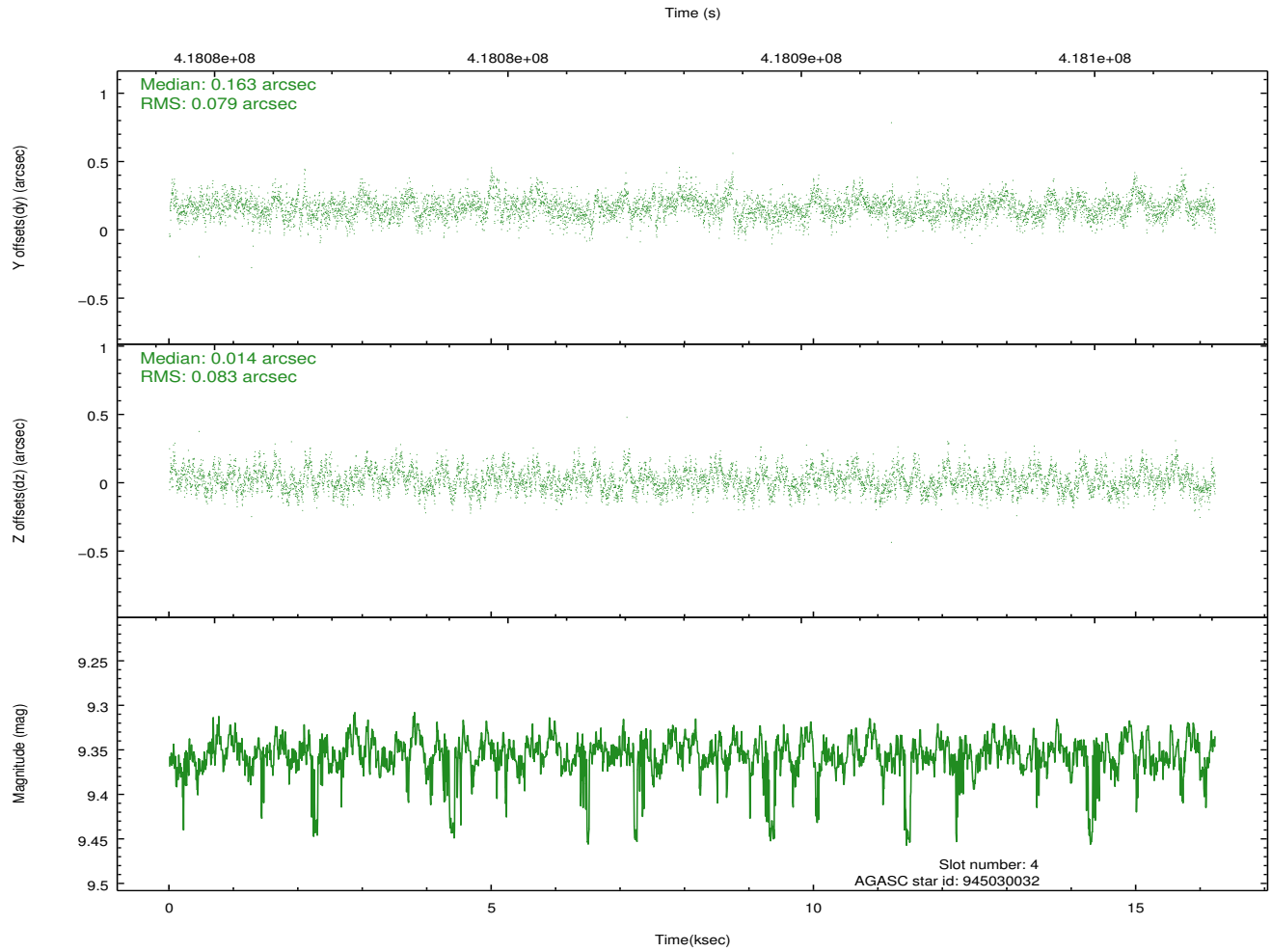
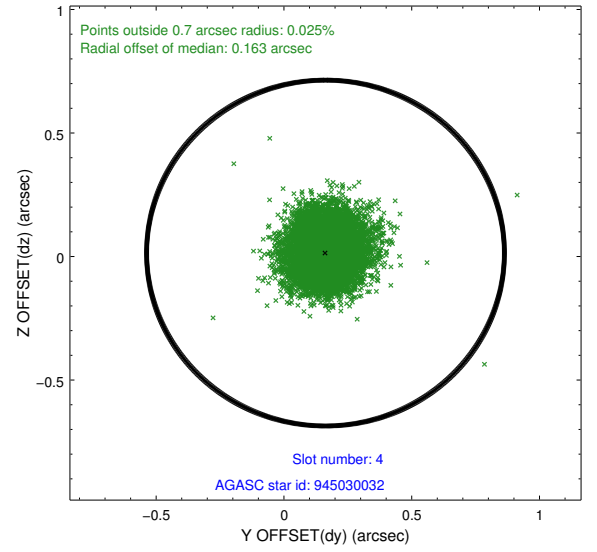
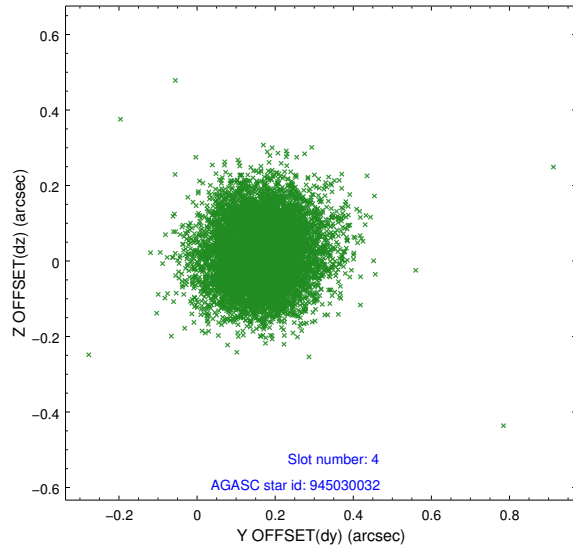
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.02	3958	0.091	-0.044	0.008	0.014	0.000000	0.000000	924.66	-1733.87
1	FID	ACIS-S-2	6.96	3958	-0.188	-0.036	0.006	0.011	0.000000	0.000000	-771.37	-1738.60
2	FID	ACIS-S-4	7.02	3958	0.071	0.086	0.006	0.010	0.000000	0.000000	2141.86	170.07
3	GUIDE	945029400	8.64	7913	0.062	0.033	0.079	0.134	170.723450	-35.274332	2081.42	-688.22
4	GUIDE	945030032	9.35	7894	0.163	0.014	0.122	0.195	170.818701	-34.446565	544.08	1879.60
5	GUIDE	945032440	6.64	7916	-0.192	-0.375	0.065	0.117	169.411900	-34.737303	-2174.80	-1450.52
6	GUIDE	945033824	7.70	7915	0.162	0.123	0.087	0.149	170.286314	-35.523934	1582.70	-2173.69
7	GUIDE	945039832	6.48	7914	-0.196	0.207	0.094	0.149	169.239926	-34.927338	-2166.83	-2302.68

2.4 Star Slots

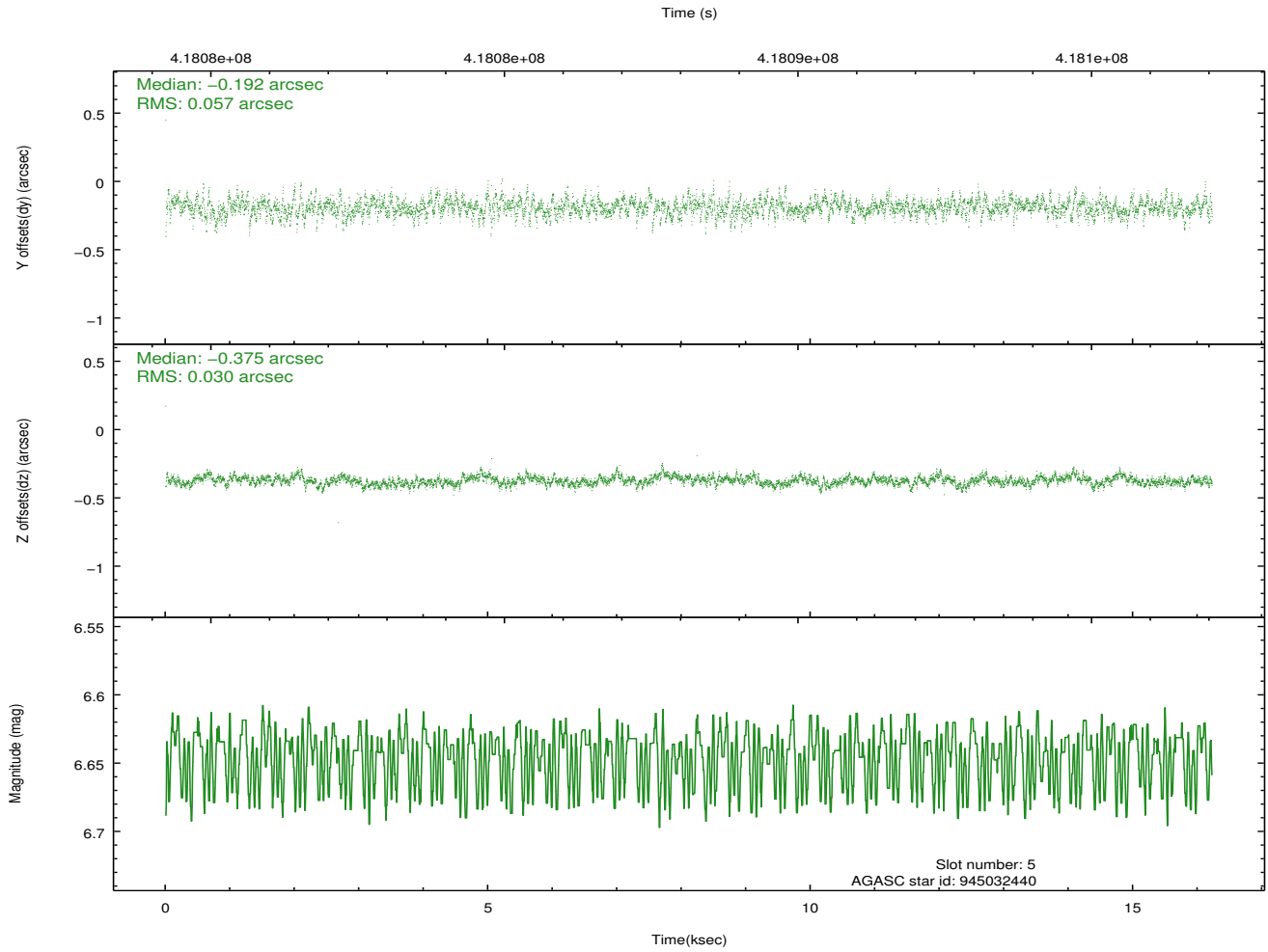
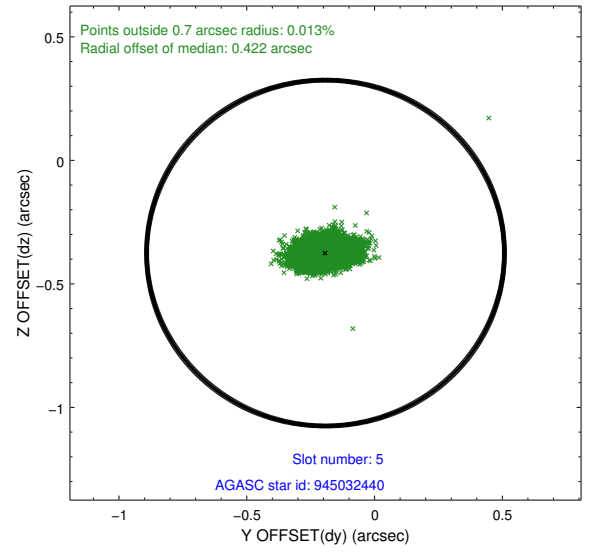
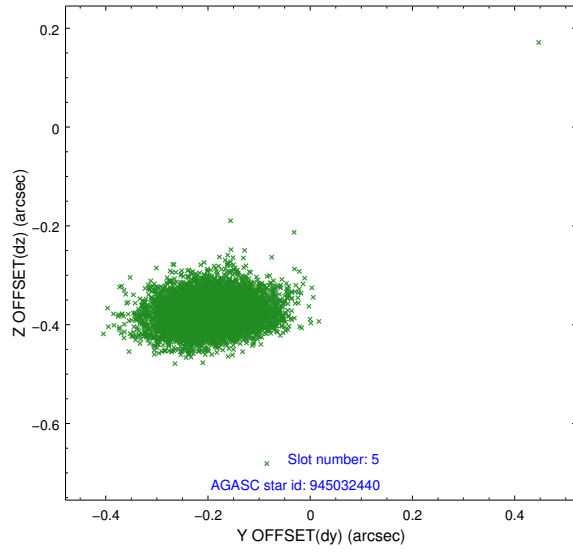
2.4.1 Slot 3



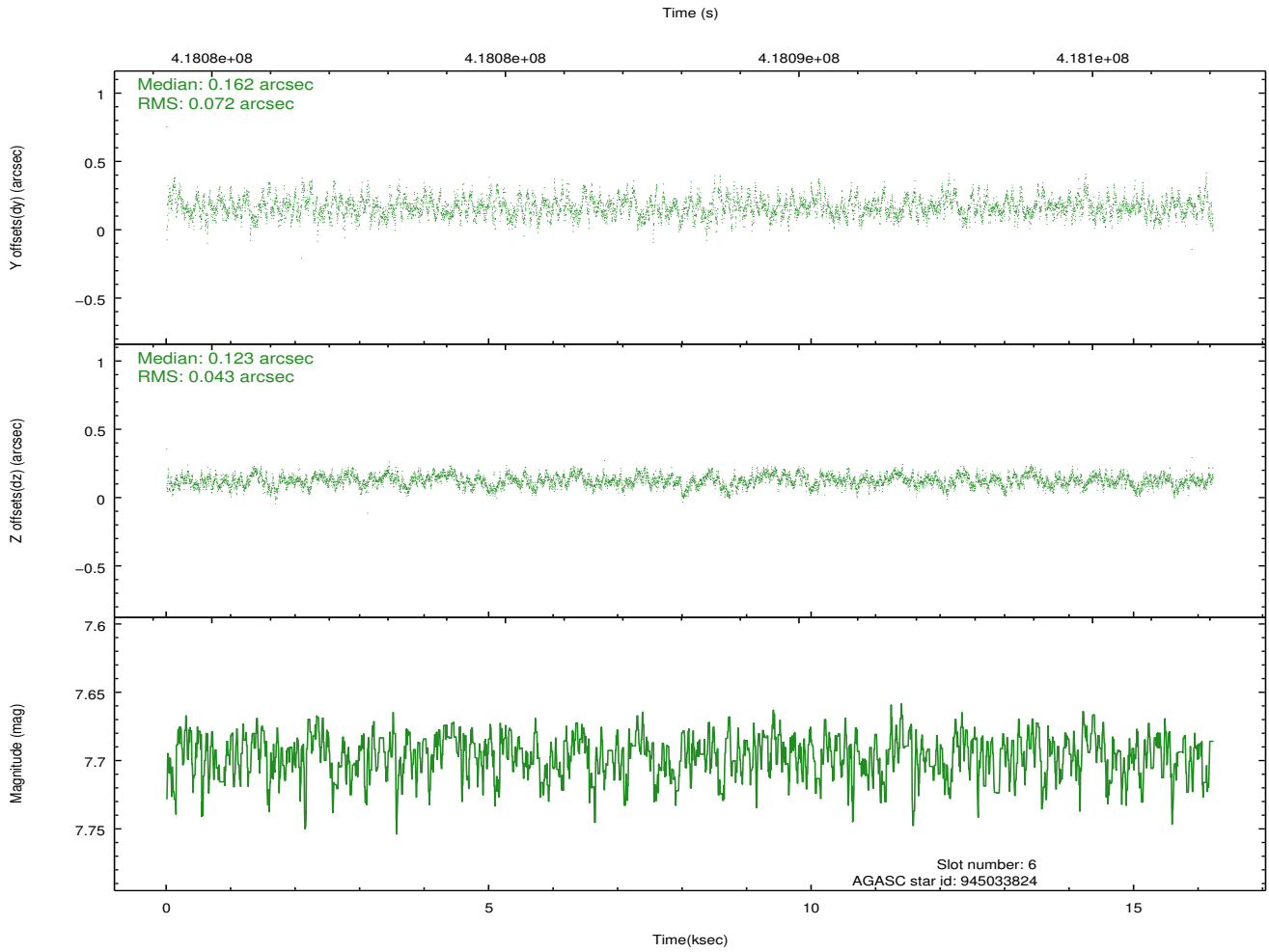
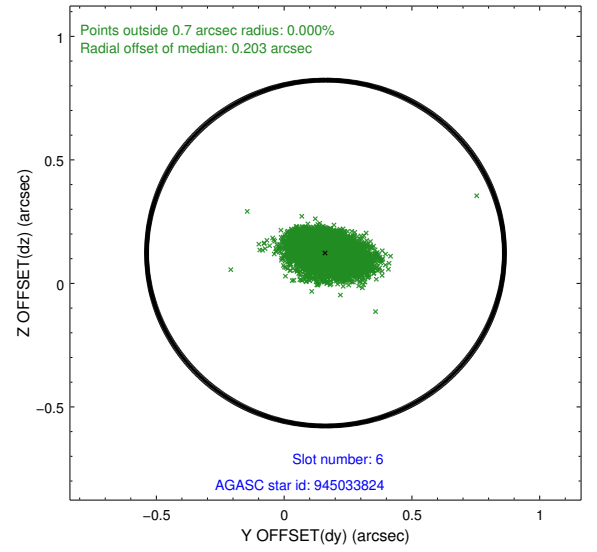
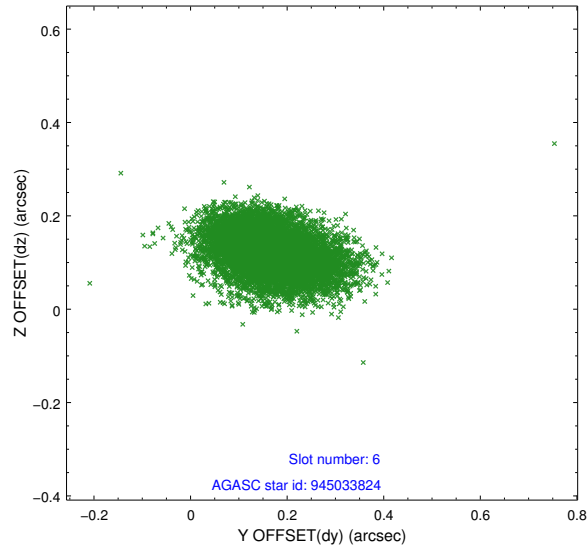
2.4.2 Slot 4



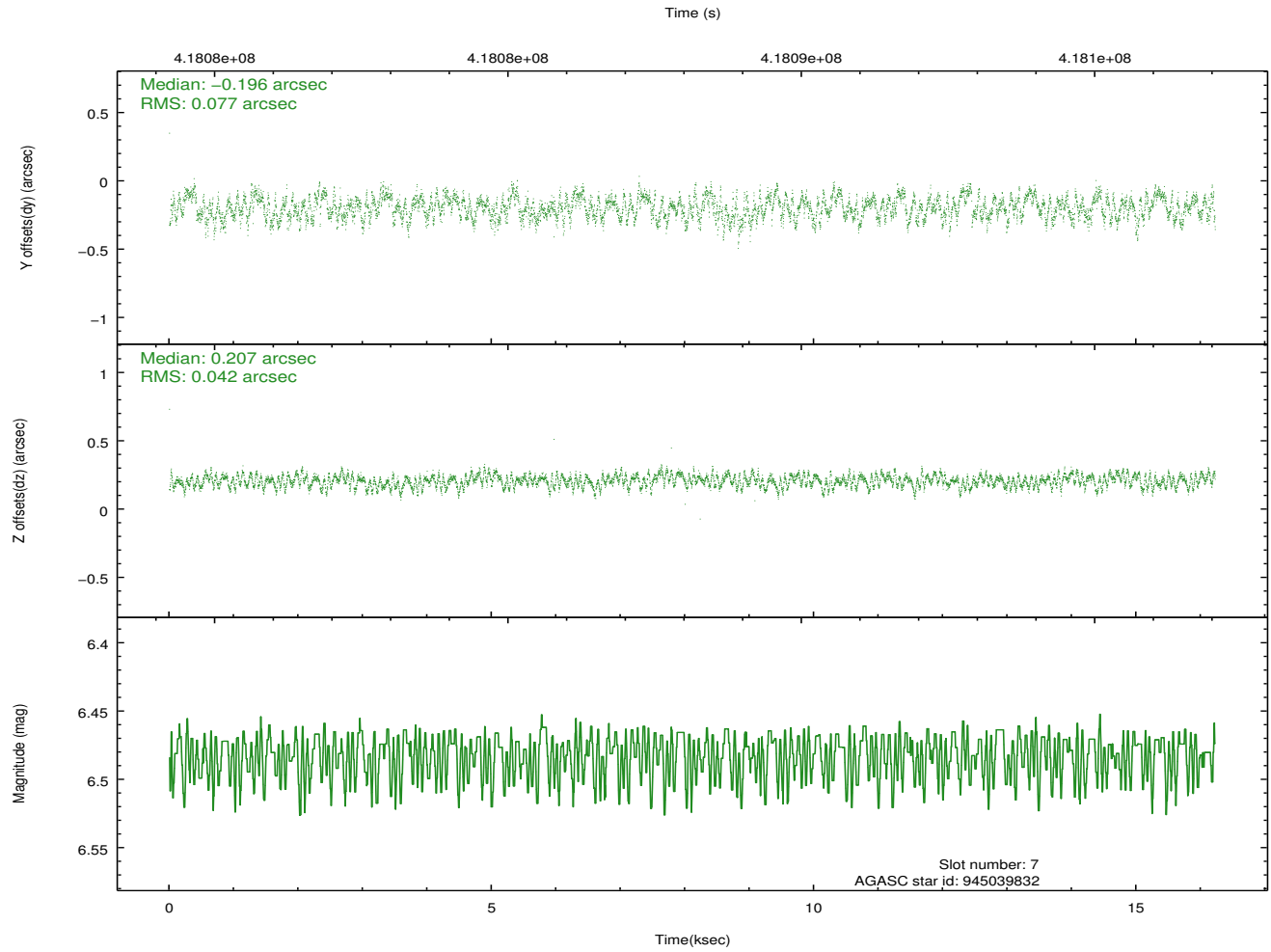
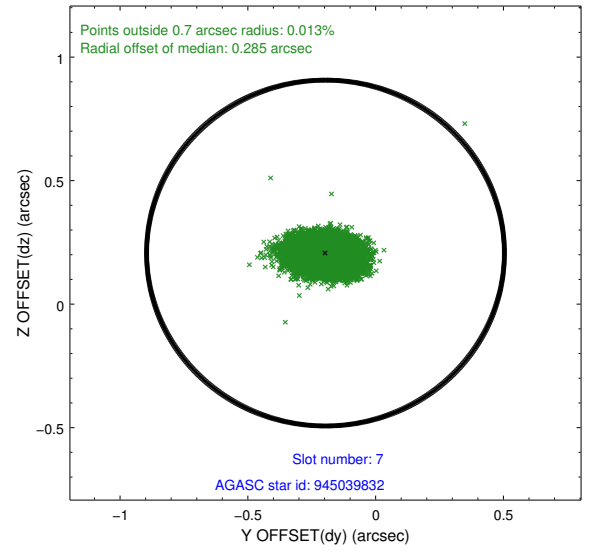
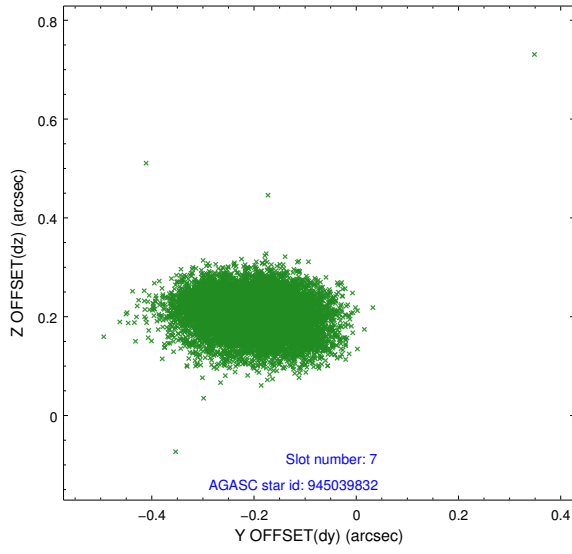
2.4.3 Slot 5



2.4.4 Slot 6

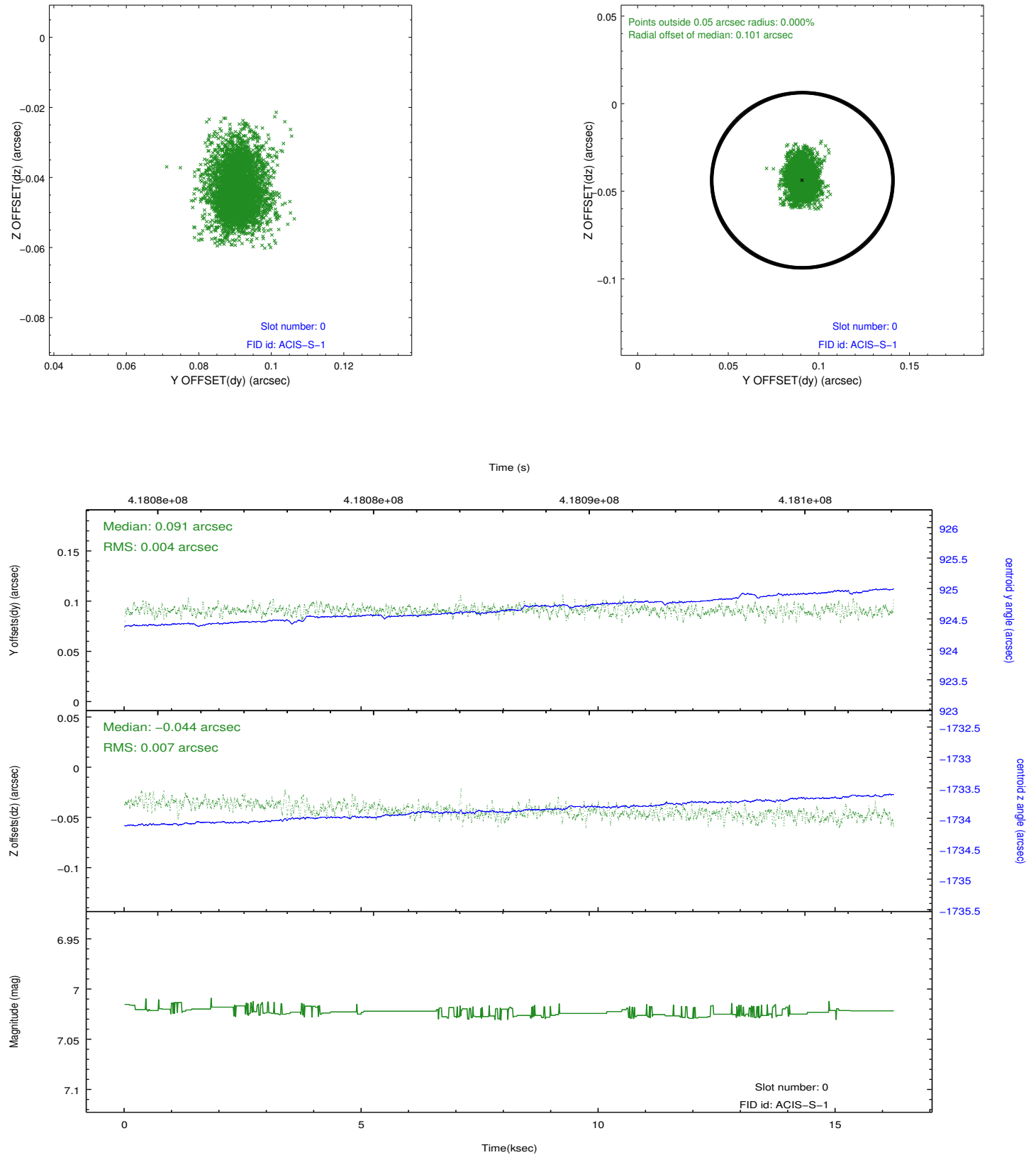


2.4.5 Slot 7

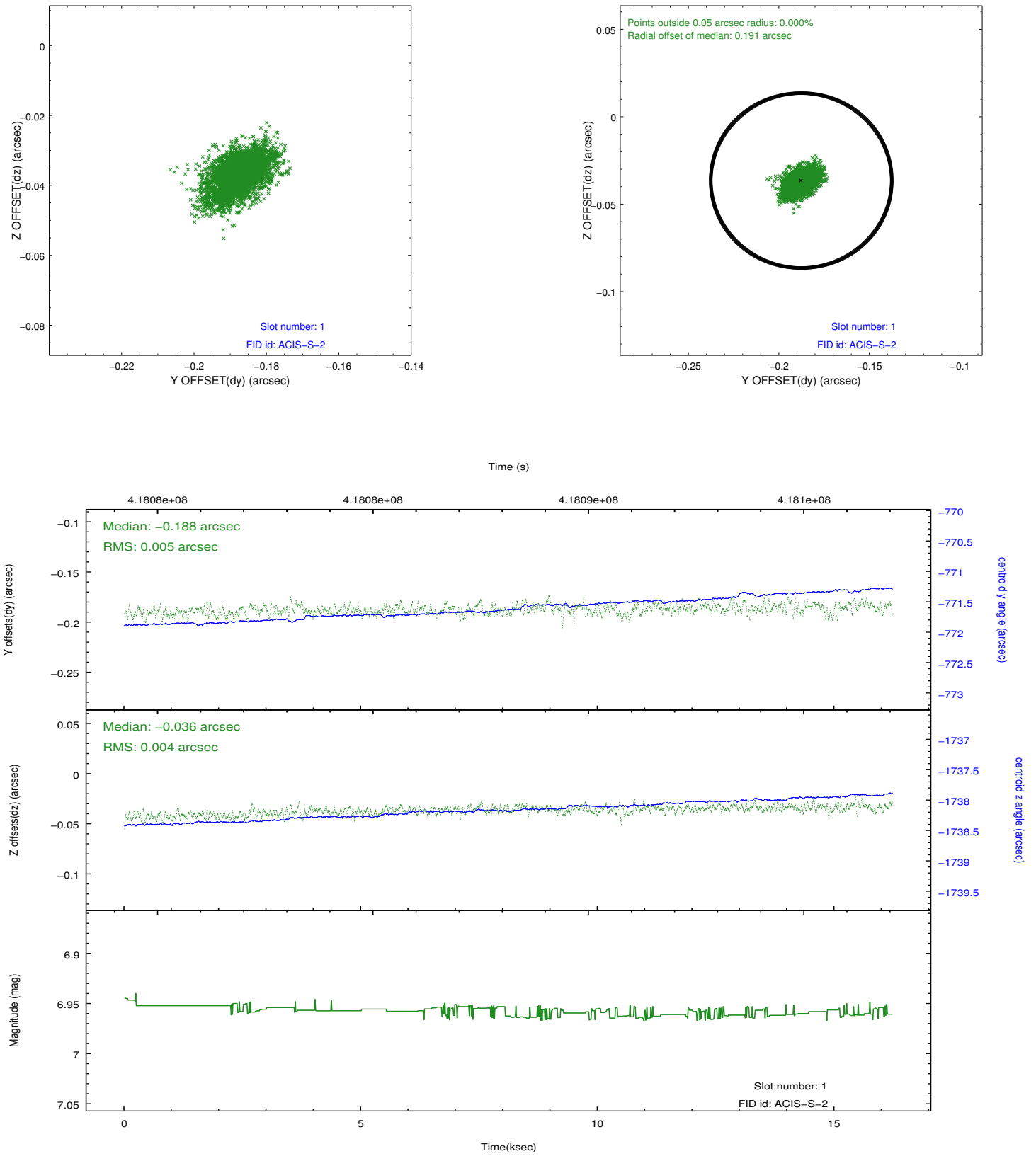


2.5 FID Slots

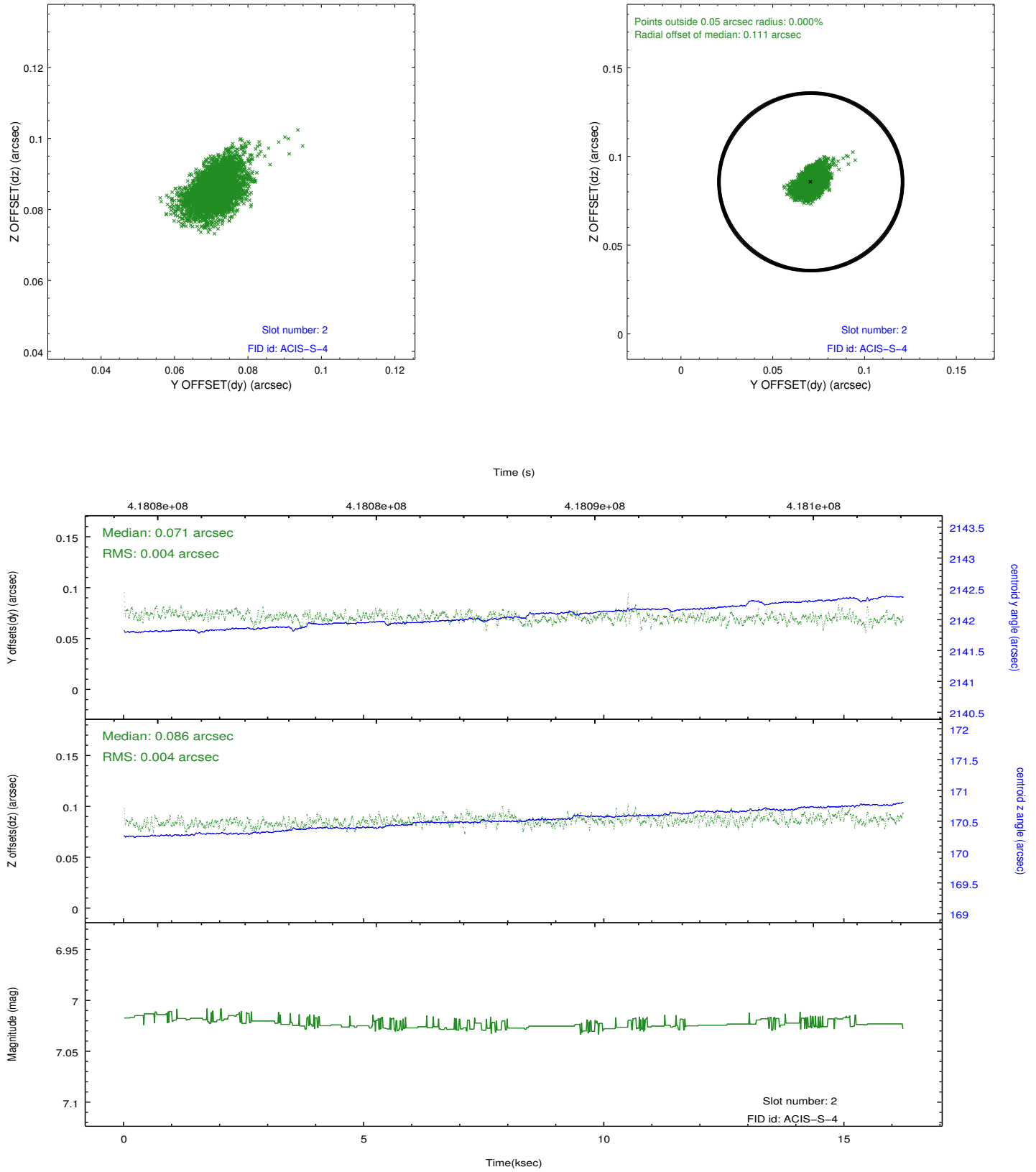
2.5.1 Slot 0



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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.063886077166

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 with HST COS/STIS.