

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12440 - L2 Version 2
Chandra X-Ray Center

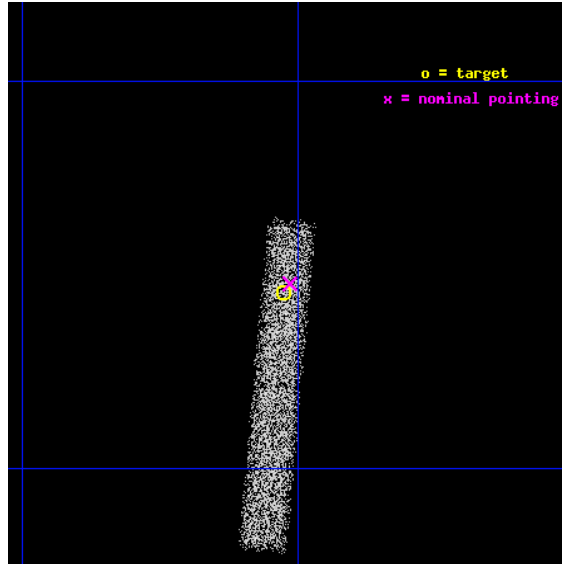
L2 Processing Date : Feb 9 2012

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1 Front

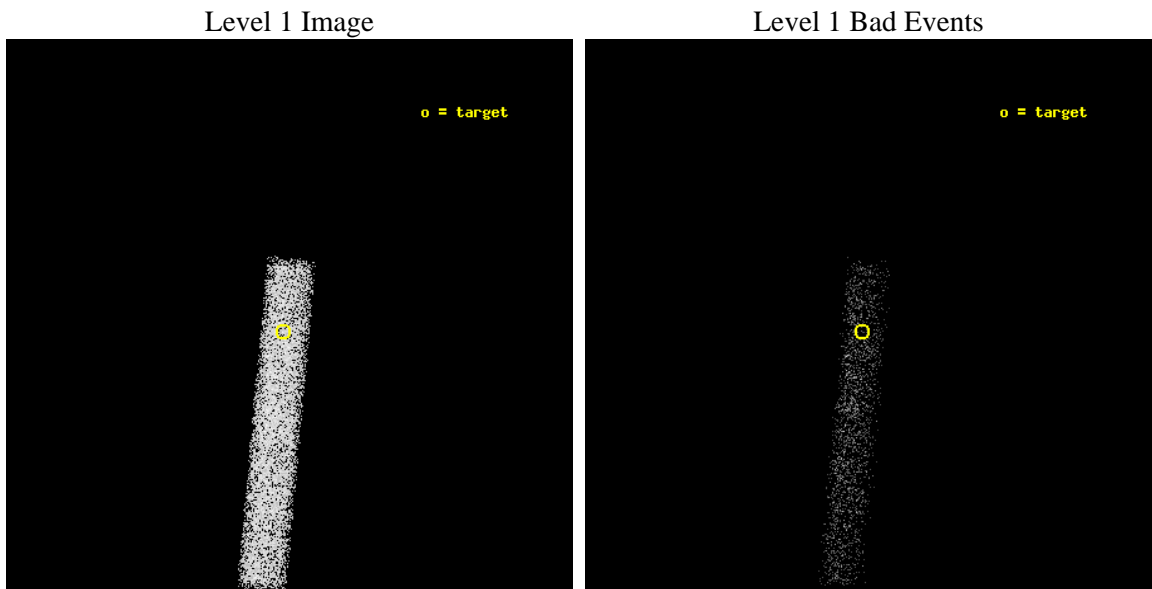
seq_num	401181	Sequence number
obs_id	12440	Observation id
title	Following a black hole candidate X-ray transient to quiescence	Pro
observer	dr P Jonker	Principal investigator
object	MAXIJ1659-152	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	254.757	Observer's specified target RA [deg]
dec_targ	-15.257972	Observer's specified target Dec [deg]
ra_nom	254.75400015187	Nominal RA [deg]
dec_nom	-15.254092833035	Nominal Dec [deg]
roll_nom	95.28115427549	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15009.599105358	Sum of GTIs [s]
livetime	13612.914116958	Livetime [s]
ontime7	15009.599105358	Sum of GTIs [s]
l2events	7700	Number of level 2 events



2 OBI

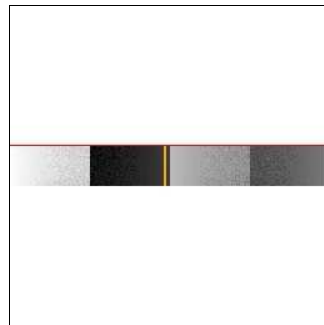
2.1 OBI

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	15009.599105358	Sum of GTIs [s]
caldbver	4.4.7	 	ontime7	15009.599105358	Sum of GTIs [s]
date	2012-02-09T14:29:43	Date and time of file creation	l1events	15875	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

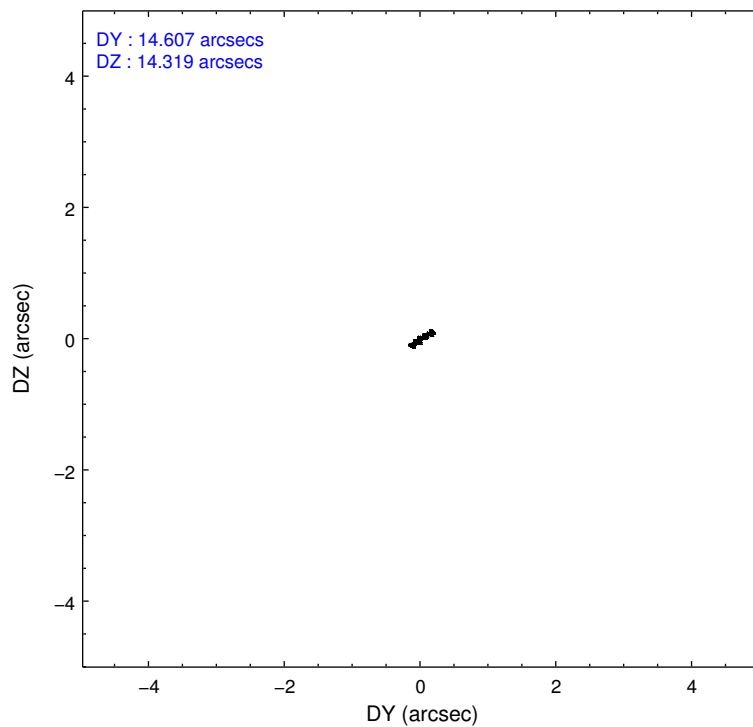
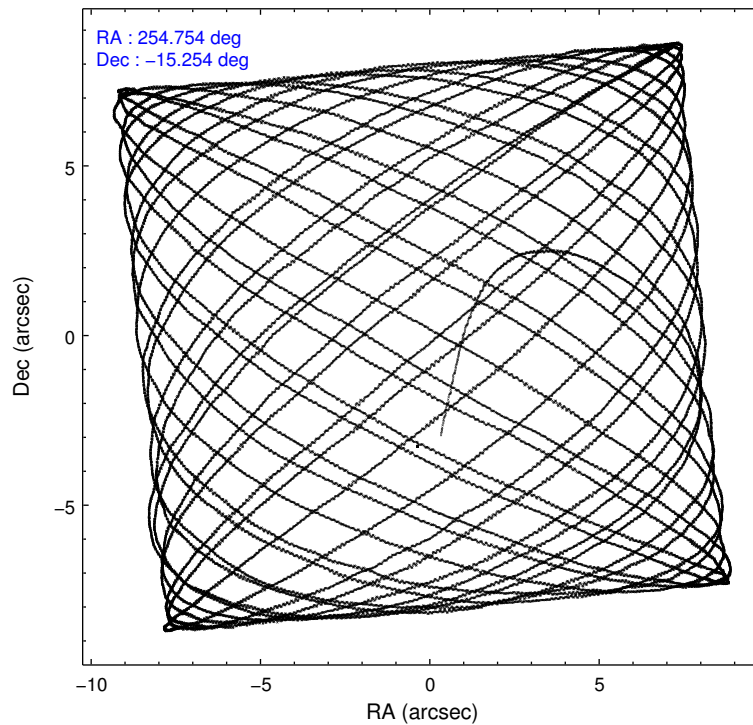
	ccd 7
level 1 events	15875
rejected events	7827
rejected %	49%

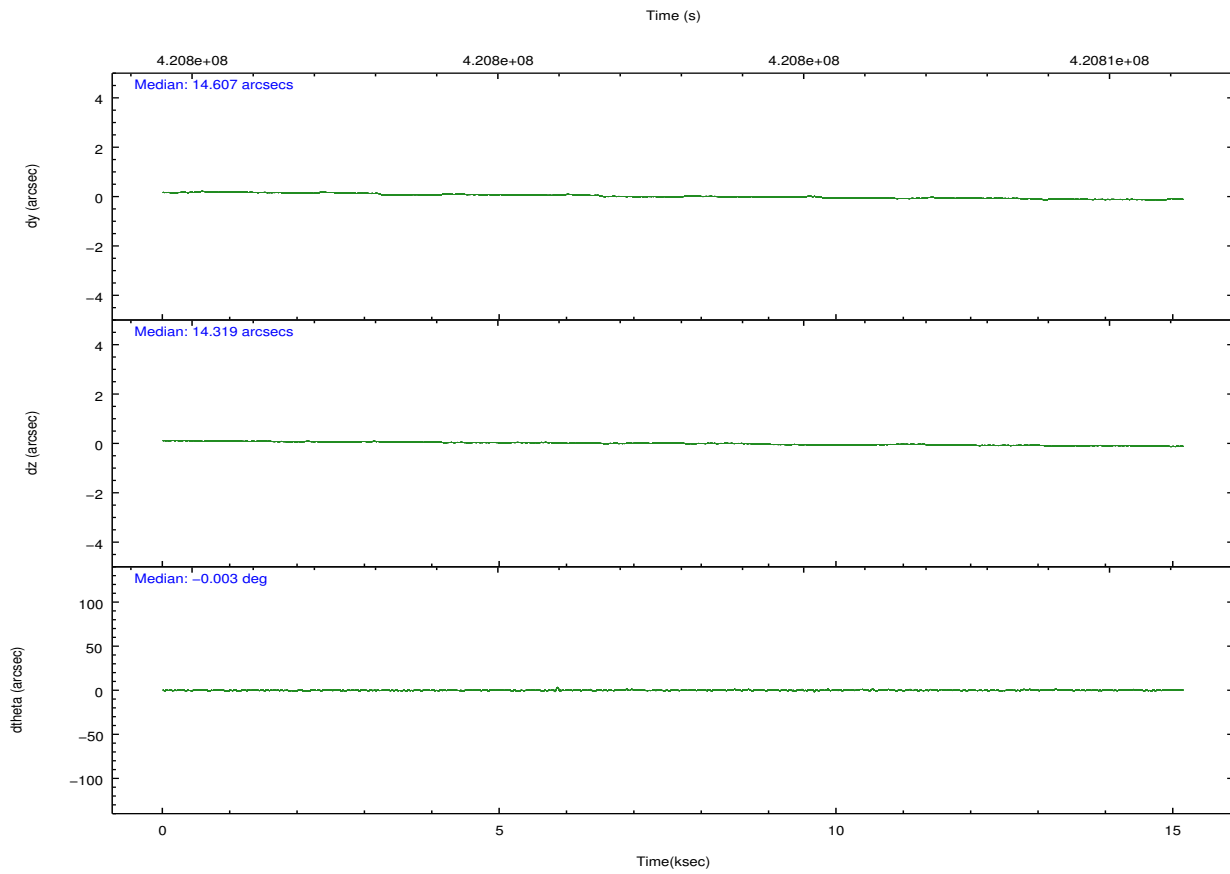
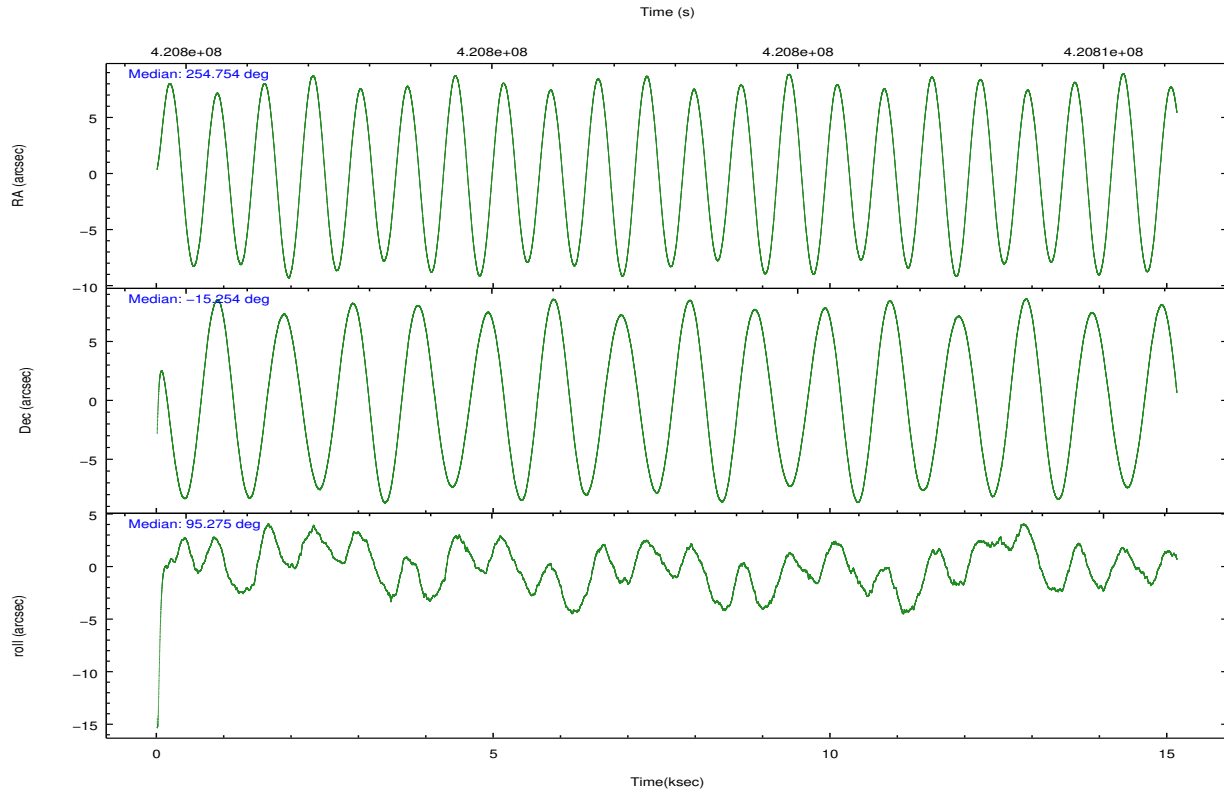
	ccd 7
grade 0 events	823
	5%
grade 1 events	20
	0%
grade 2 events	1603
	10%
grade 3 events	1025
	6%
grade 4 events	1019
	6%
grade 5 events	1643
	10%
grade 6 events	3578
	22%
grade 7 events	6164
	38%

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	254.770657	254.75400015187	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-15.276199	-15.25409283303545	Subarray start row	449	449
[deg] Pointing Roll	95.128921	95.28115427549008	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)	420795447.184000	420793785.14479			
Observation start date	2011-05-03T07:36:21	2011-05-03T07:09:45			
[s] Observation end time (MET)	420810447.184000	420811219.3707			
Observation end date	2011-05-03T11:46:21	2011-05-03T12:00:19			
Read mode	TIMED	TIMED			

2.3 Aspect



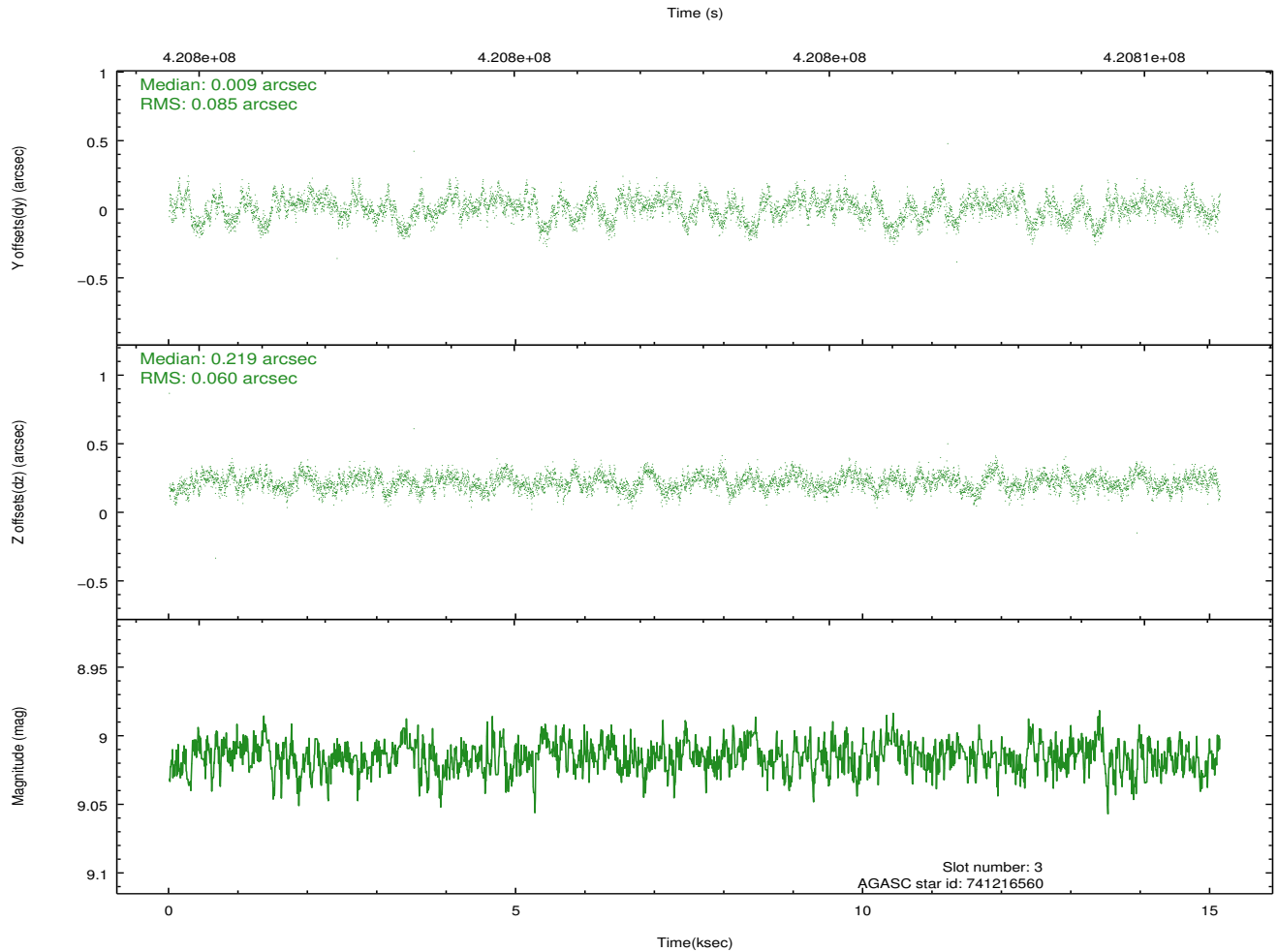
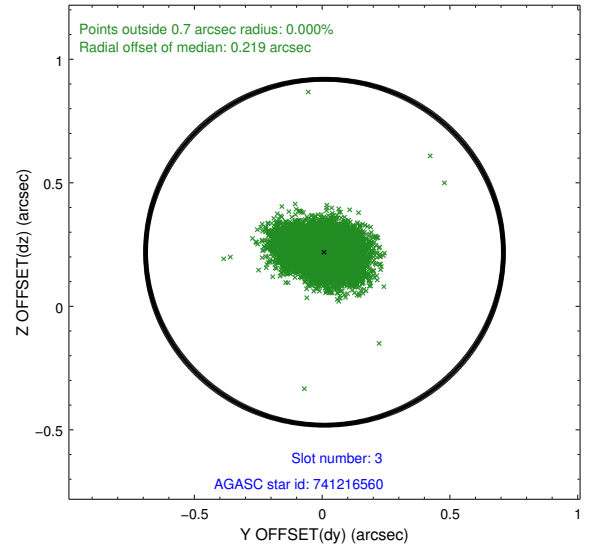
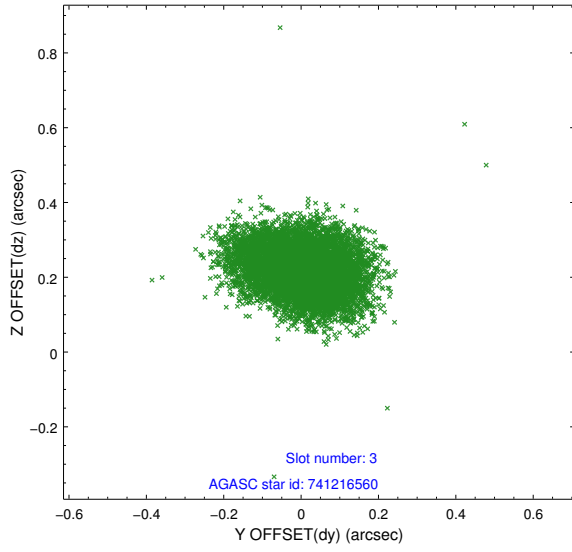


Slot Statistics

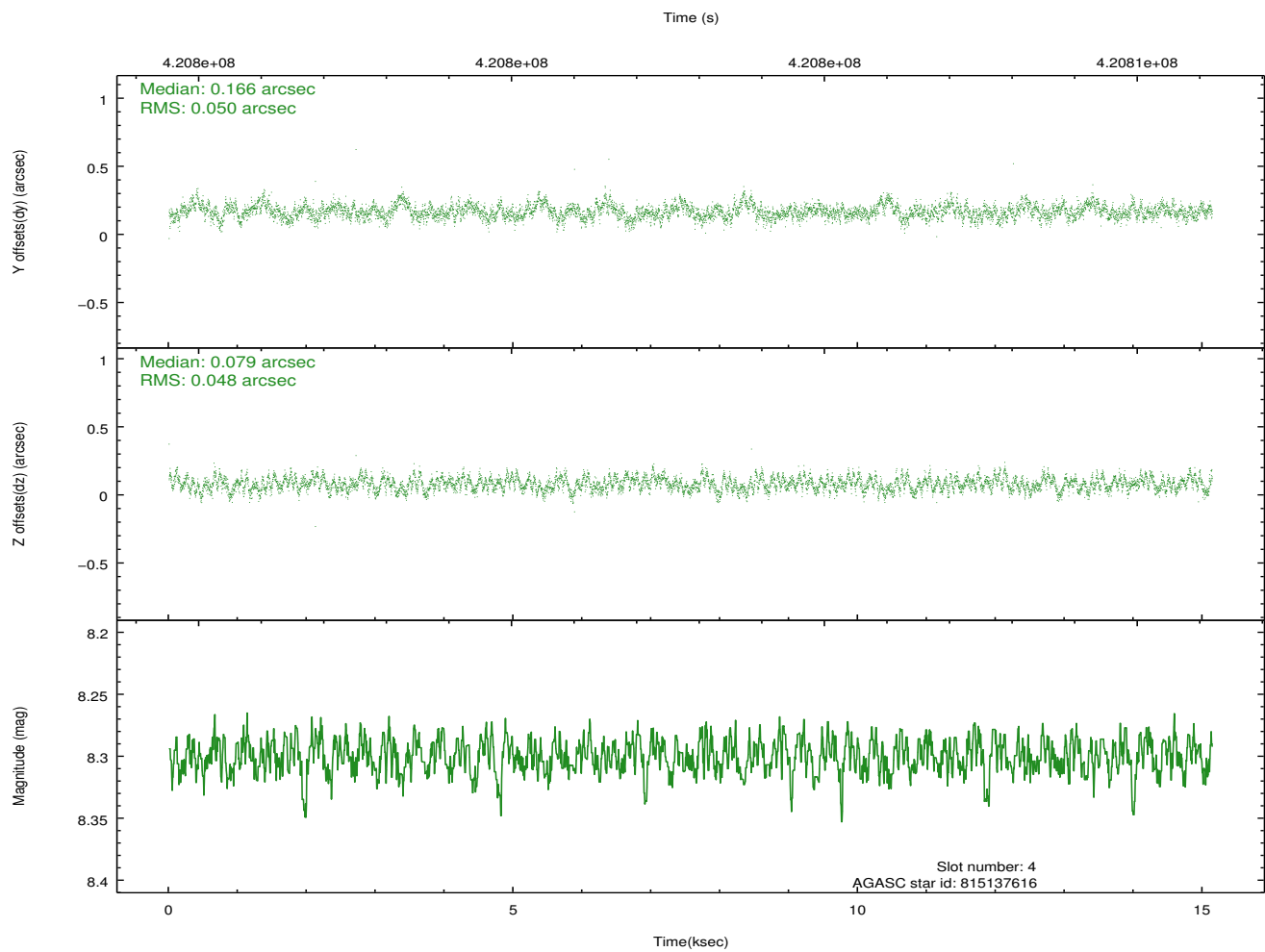
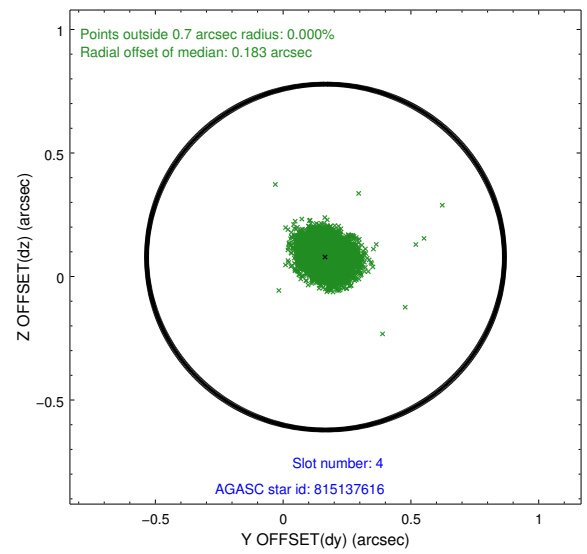
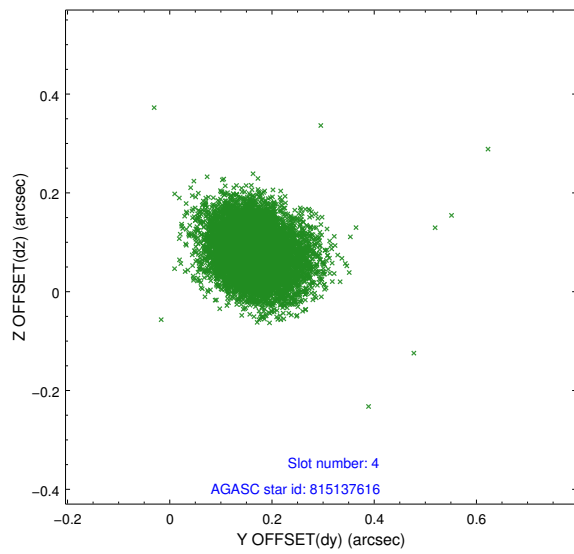
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.99	3693	-0.133	-0.090	0.006	0.011	0.000000	0.000000	-767.74	-1735.75
1	FID	ACIS-S-4	7.07	3693	0.134	0.072	0.007	0.011	0.000000	0.000000	2145.69	172.54
2	FID	ACIS-S-6	7.23	3691	-0.029	0.024	0.007	0.012	0.000000	0.000000	394.76	810.25
3	GUIDE	741216560	9.02	7378	0.009	0.219	0.111	0.179	254.839054	-14.734715	1920.53	-410.93
4	GUIDE	815137616	8.30	7381	0.166	0.079	0.073	0.118	254.741671	-15.811997	-1912.35	272.69
5	GUIDE	815143040	9.09	7368	0.150	0.126	0.100	0.161	254.348135	-15.924918	-2197.00	1665.98
6	GUIDE	815138728	6.69	7386	-0.086	-0.574	0.074	0.114	254.111345	-15.485495	-550.05	2345.68
7	GUIDE	741215872	9.34	7369	-0.241	0.152	0.097	0.158	255.173940	-14.942008	1071.50	-1503.77

2.4 Star Slots

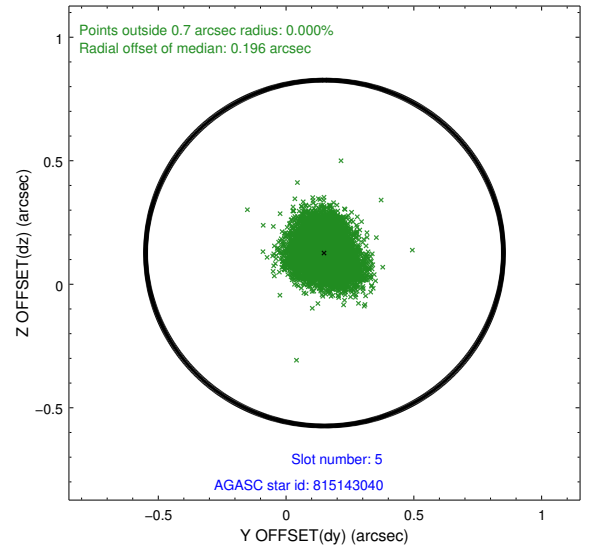
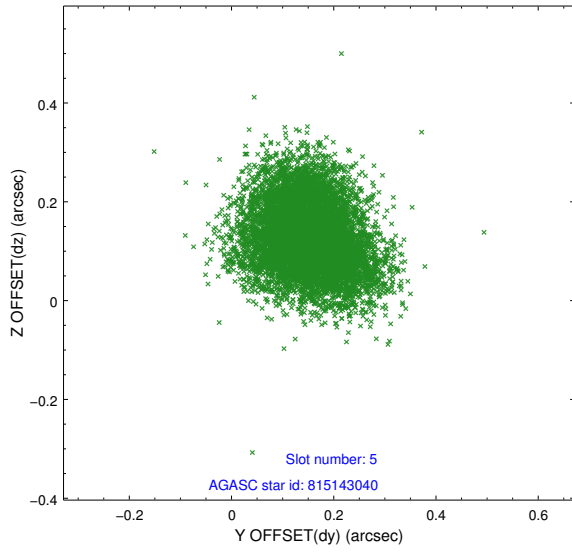
2.4.1 Slot 3



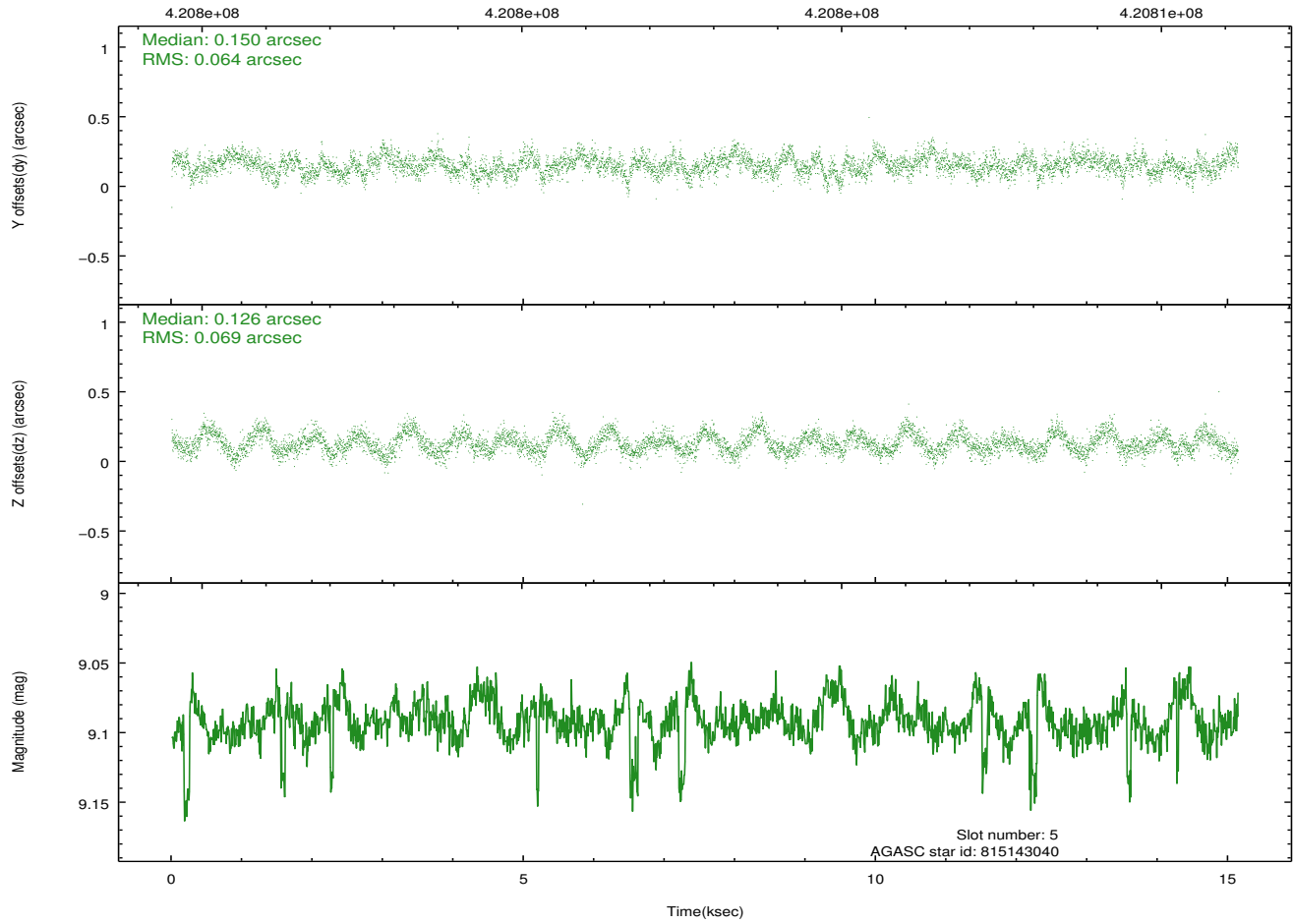
2.4.2 Slot 4



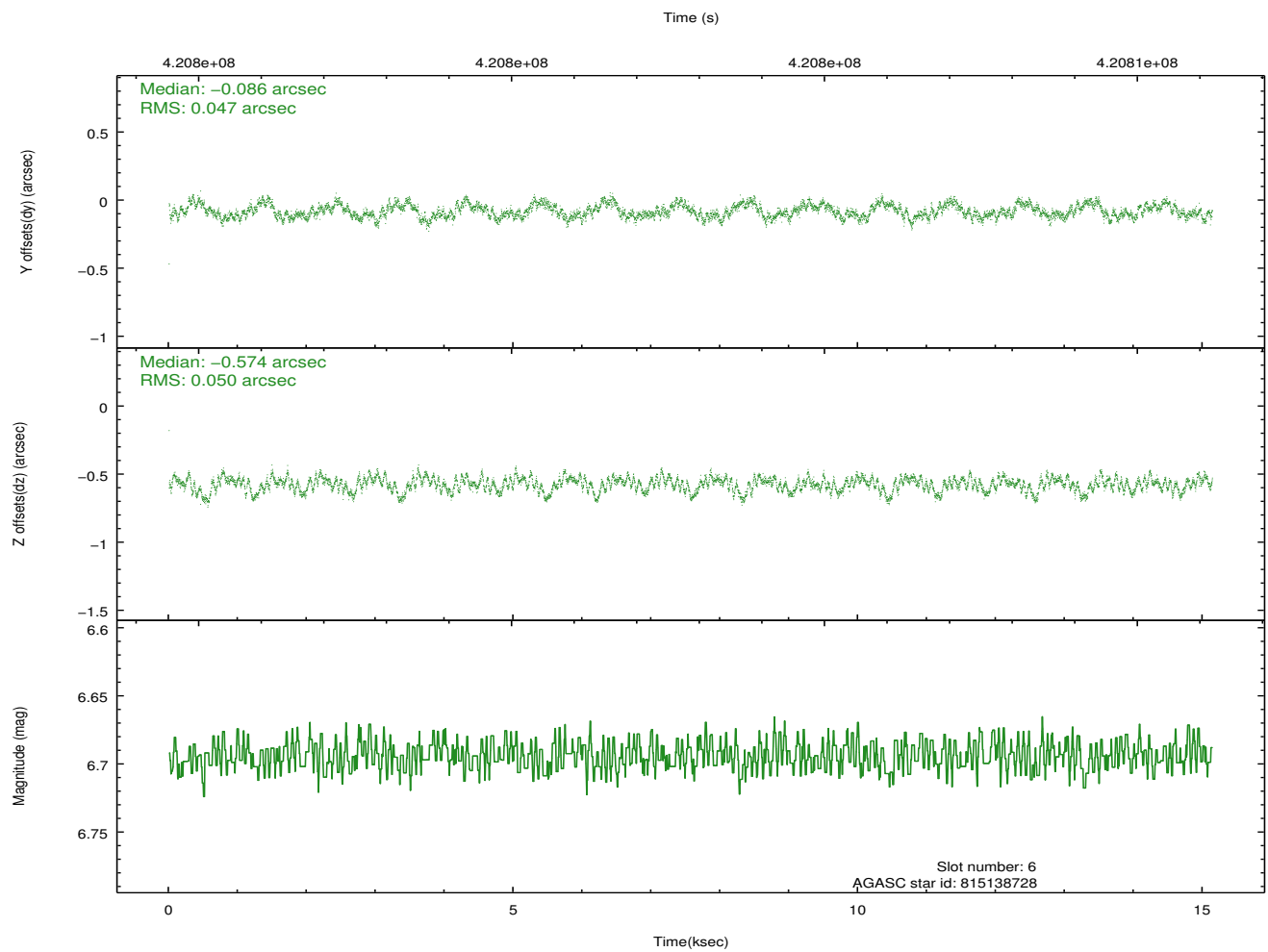
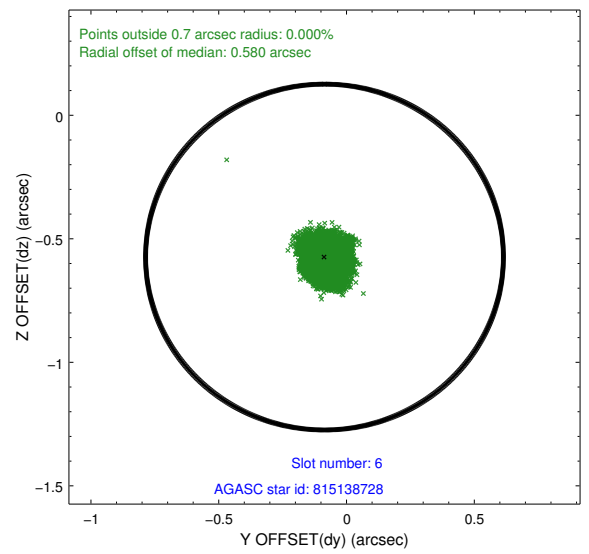
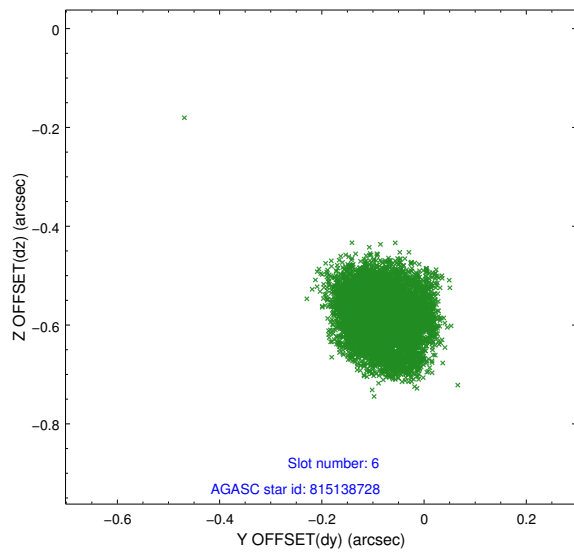
2.4.3 Slot 5



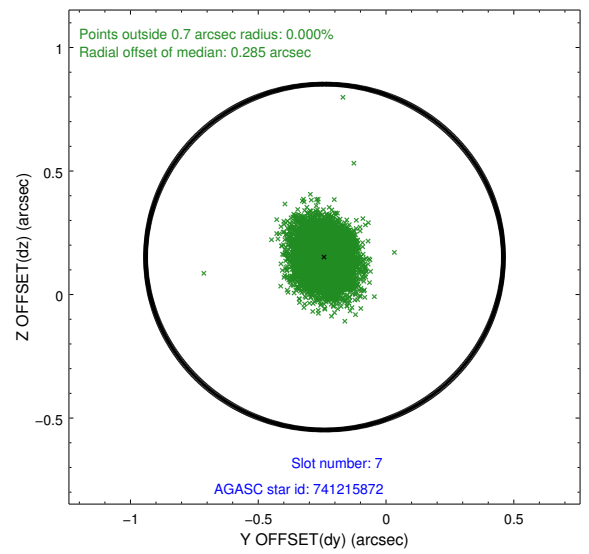
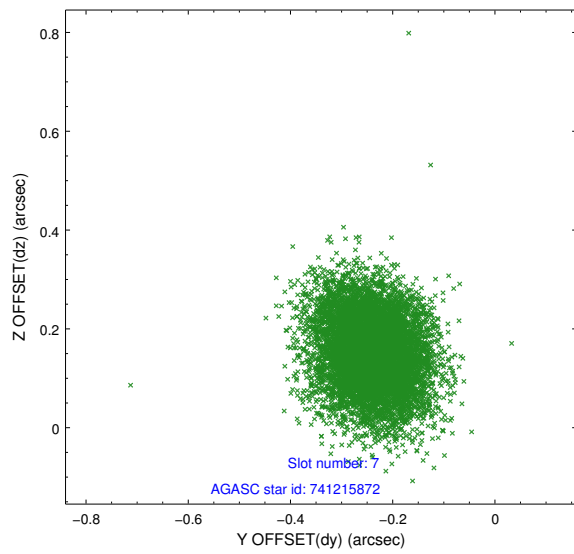
Time (s)



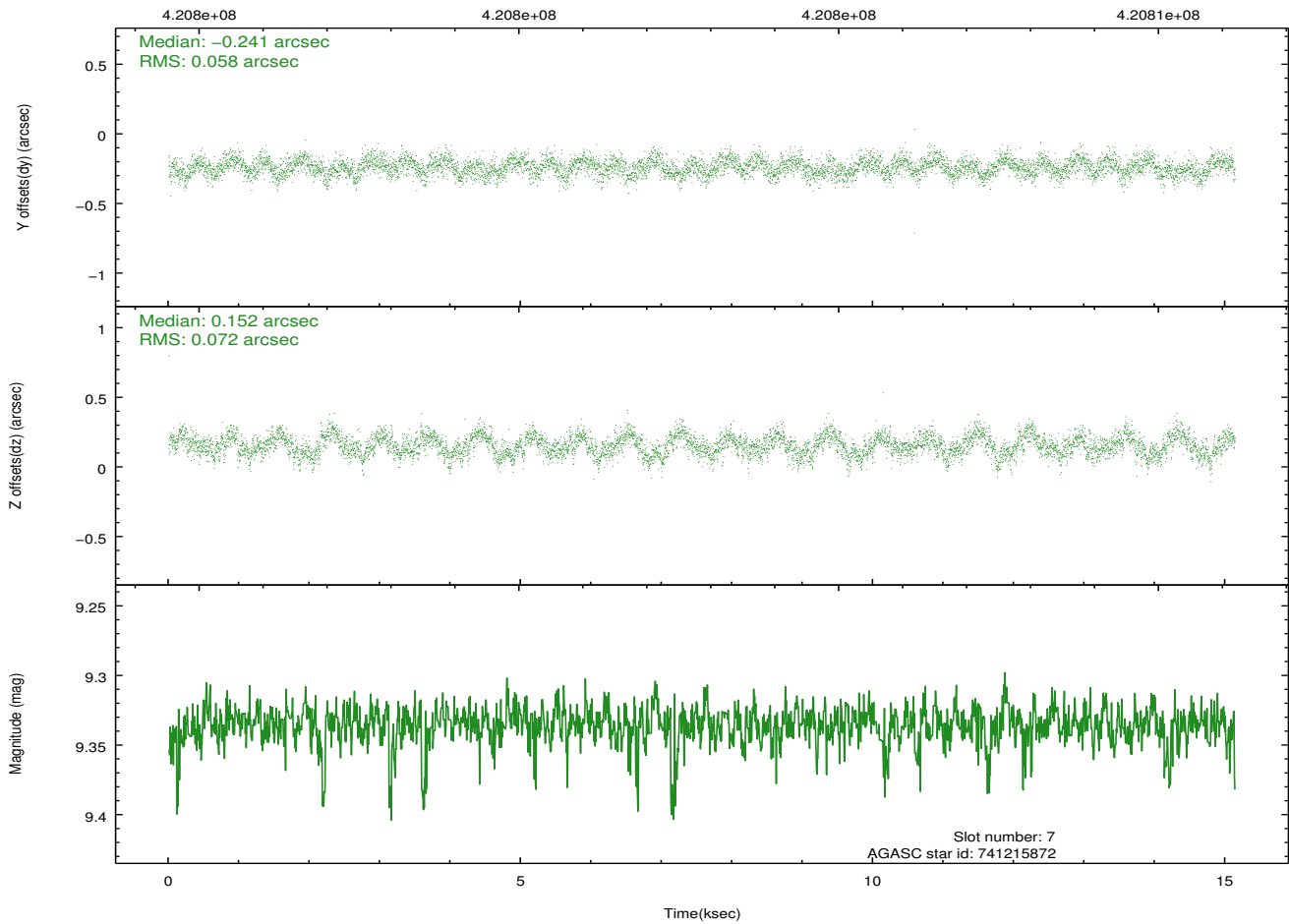
2.4.4 Slot 6



2.4.5 Slot 7

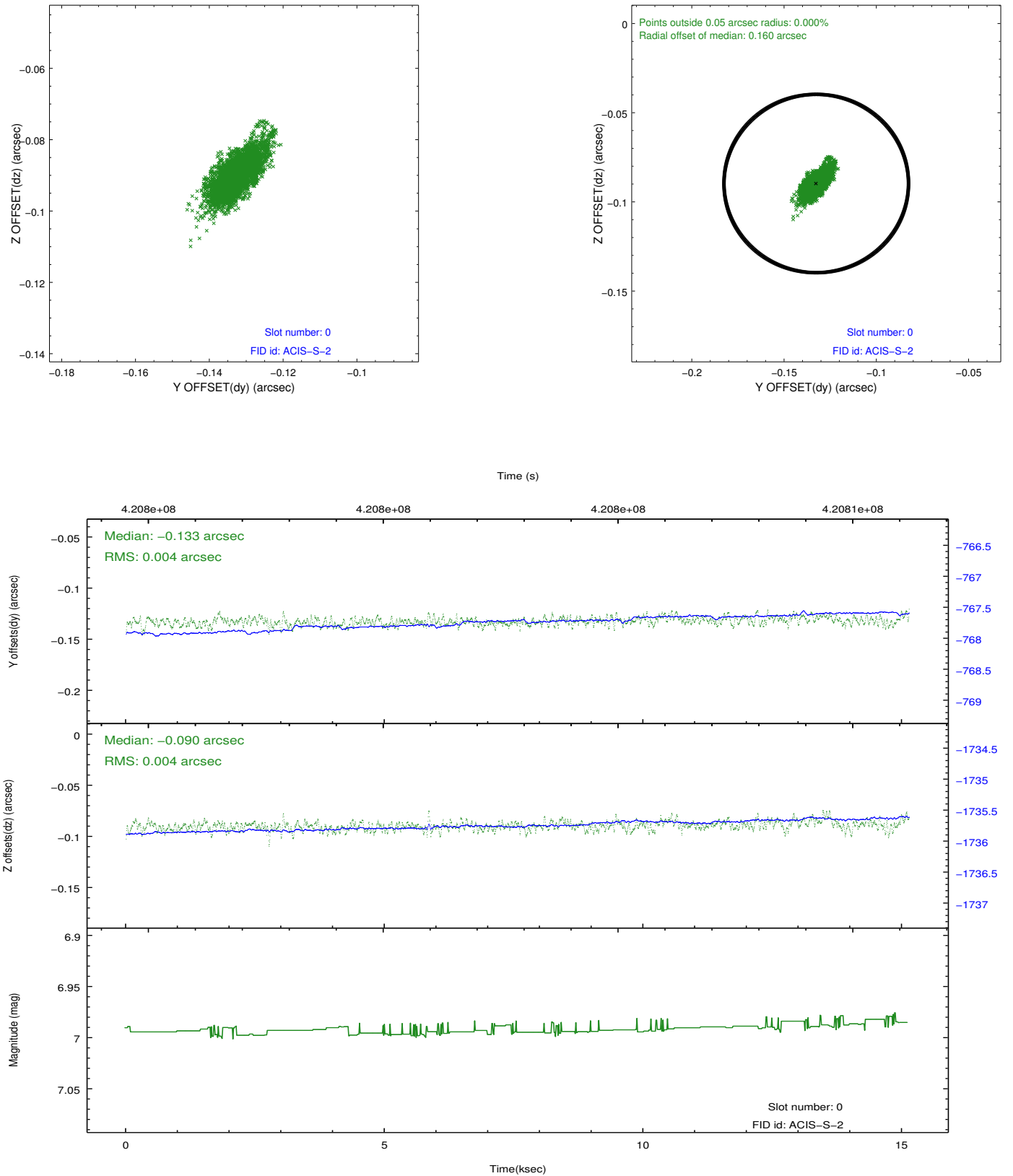


Time (s)

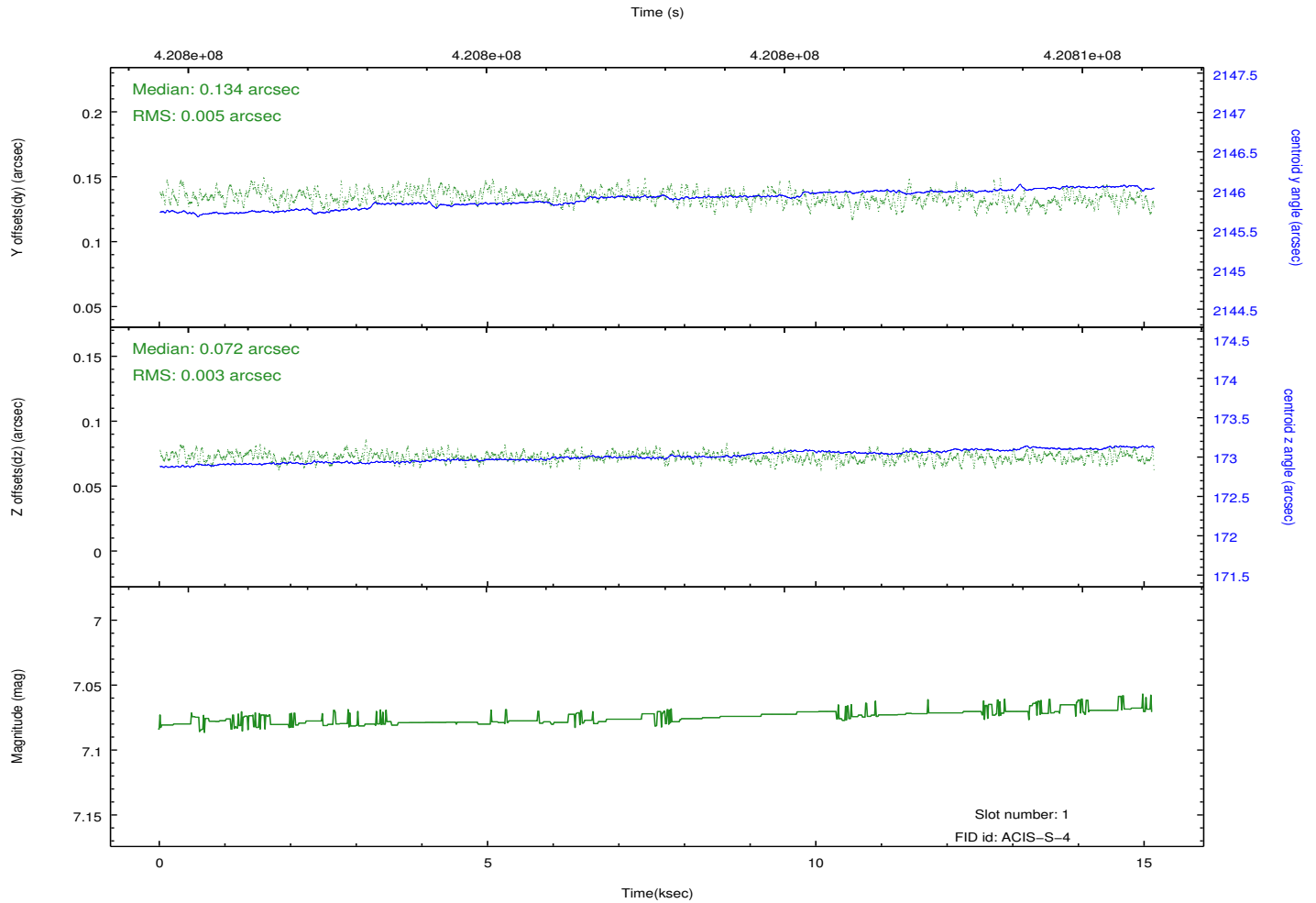
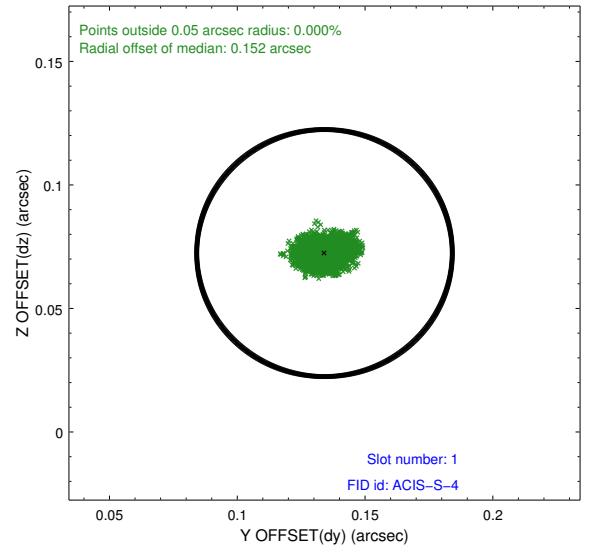
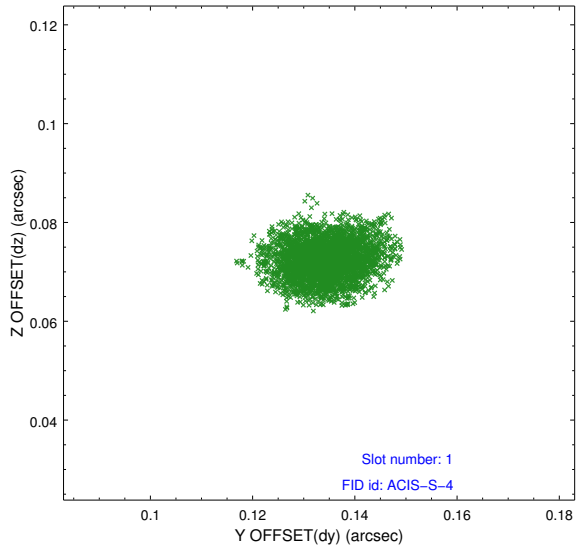


2.5 FID Slots

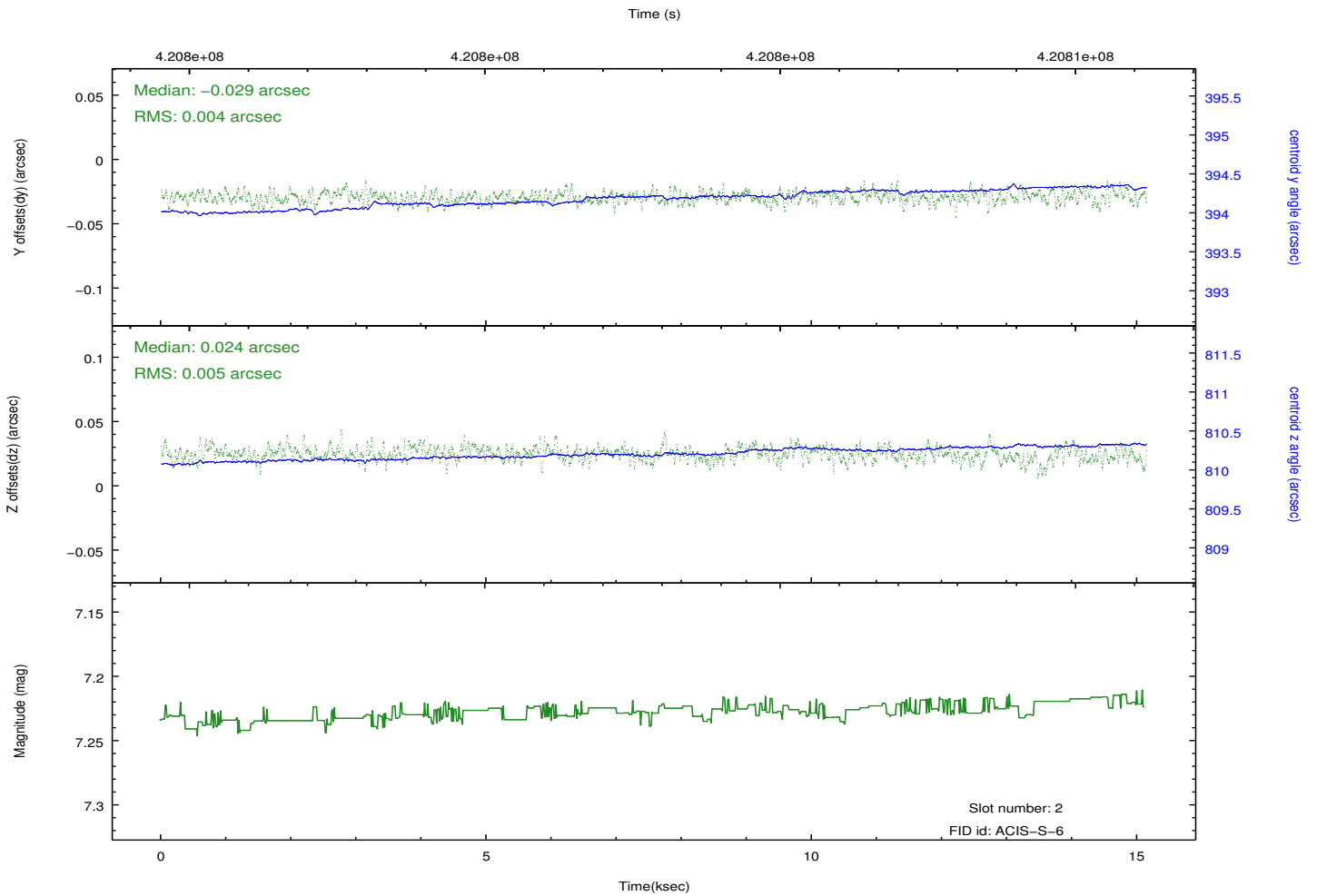
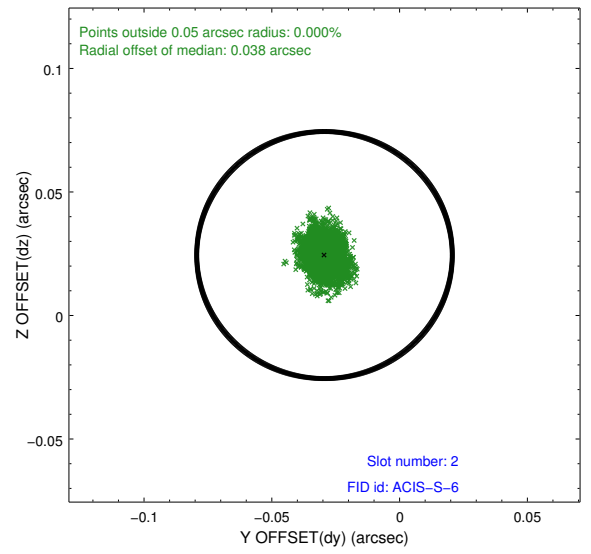
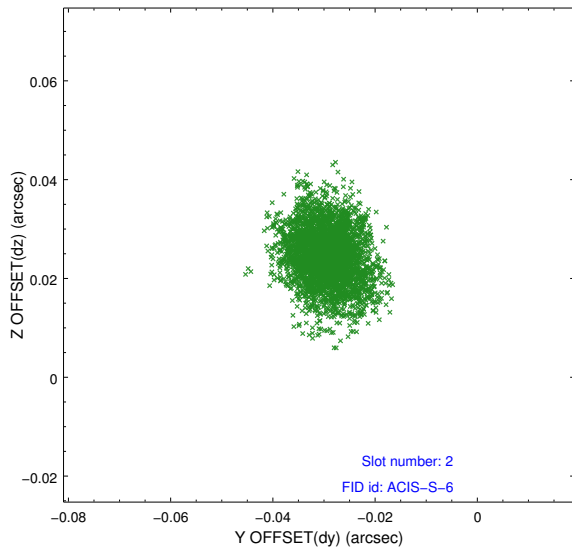
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	15.009599105358

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 NRAO.