

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13634 - L2 Version 2
Chandra X-Ray Center

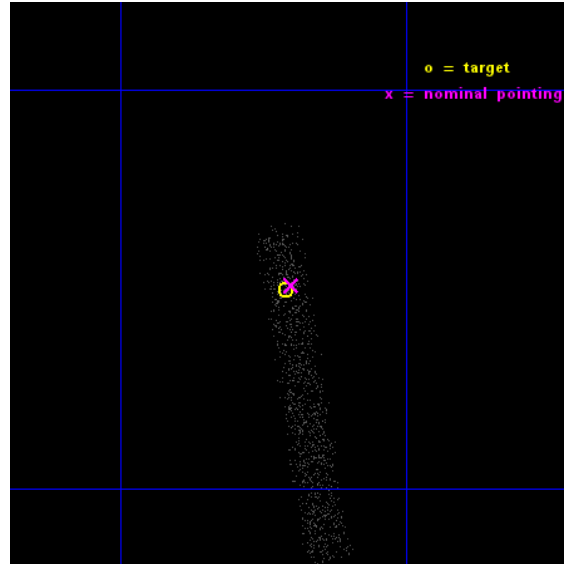
L2 Processing Date : Nov 28 2014

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1 Front

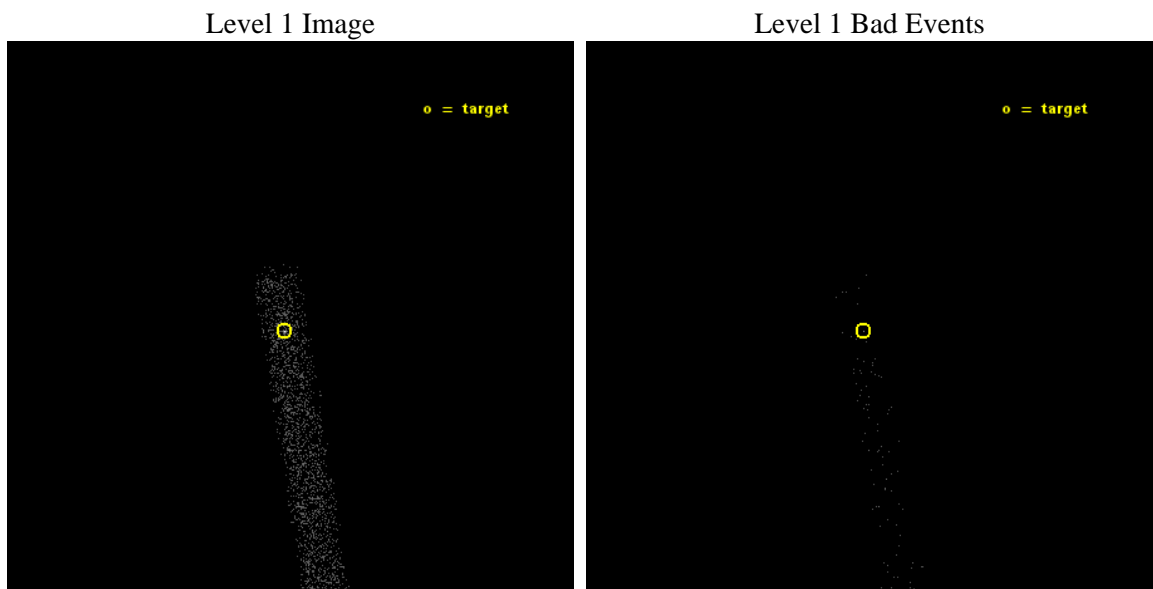
seq_num	200788	Sequence number
obs_id	13634	Observation id
title	A Search for X-ray Emission from Colliding Magnetospheres in Young Eccentric Stellar Binaries	Proposal title
observer	Dr. Konstantin Getman	Principal investigator
object	Parenago523_P2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	82.6775	Observer's specified target RA [deg]
dec_targ	-4.583861	Observer's specified target Dec [deg]
ra_nom	82.675254167555	Nominal RA [deg]
dec_nom	-4.5817998331663	Nominal Dec [deg]
roll_nom	80.68541892394	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3069.5998170376	Sum of GTIs [s]
livetime	2783.9650072897	Livetime [s]
ontime7	3069.5998170376	Sum of GTIs [s]
l2events	1585	Number of level 2 events



2 OBI

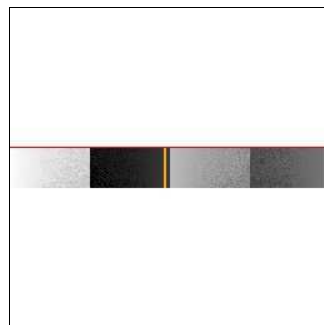
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	3069.5998170376	Sum of GTIs [s]
caldsver	4.6.4	 	ontime7	3069.5998170376	Sum of GTIs [s]
date	2014-11-28T10:15:10	Date and time of file creation	l1events	2696	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

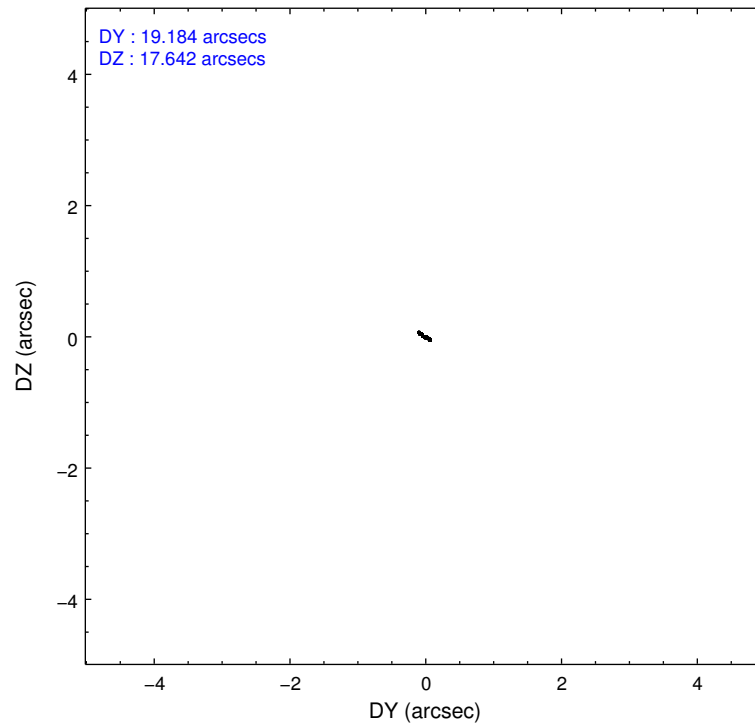
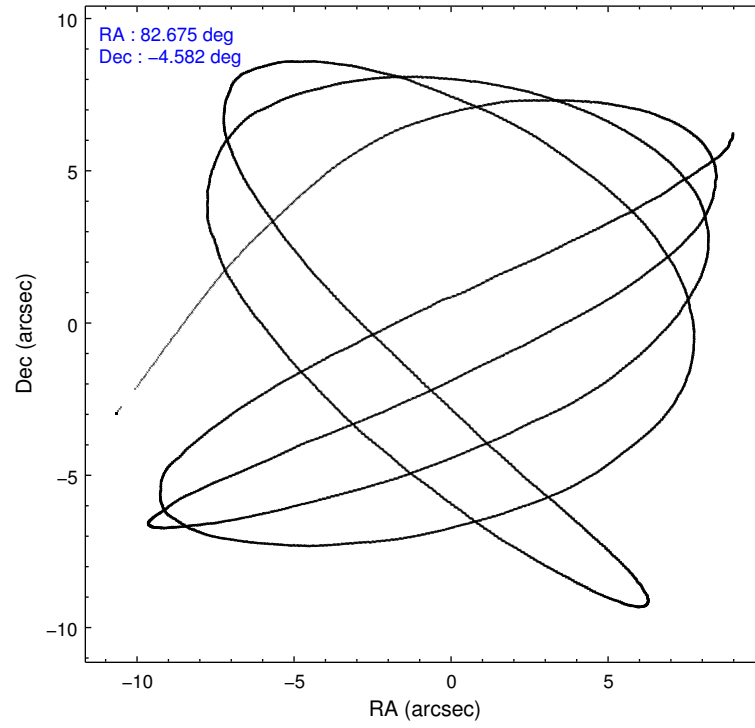
	ccd 7
level 1 events	2696
rejected events	1057
rejected %	39%

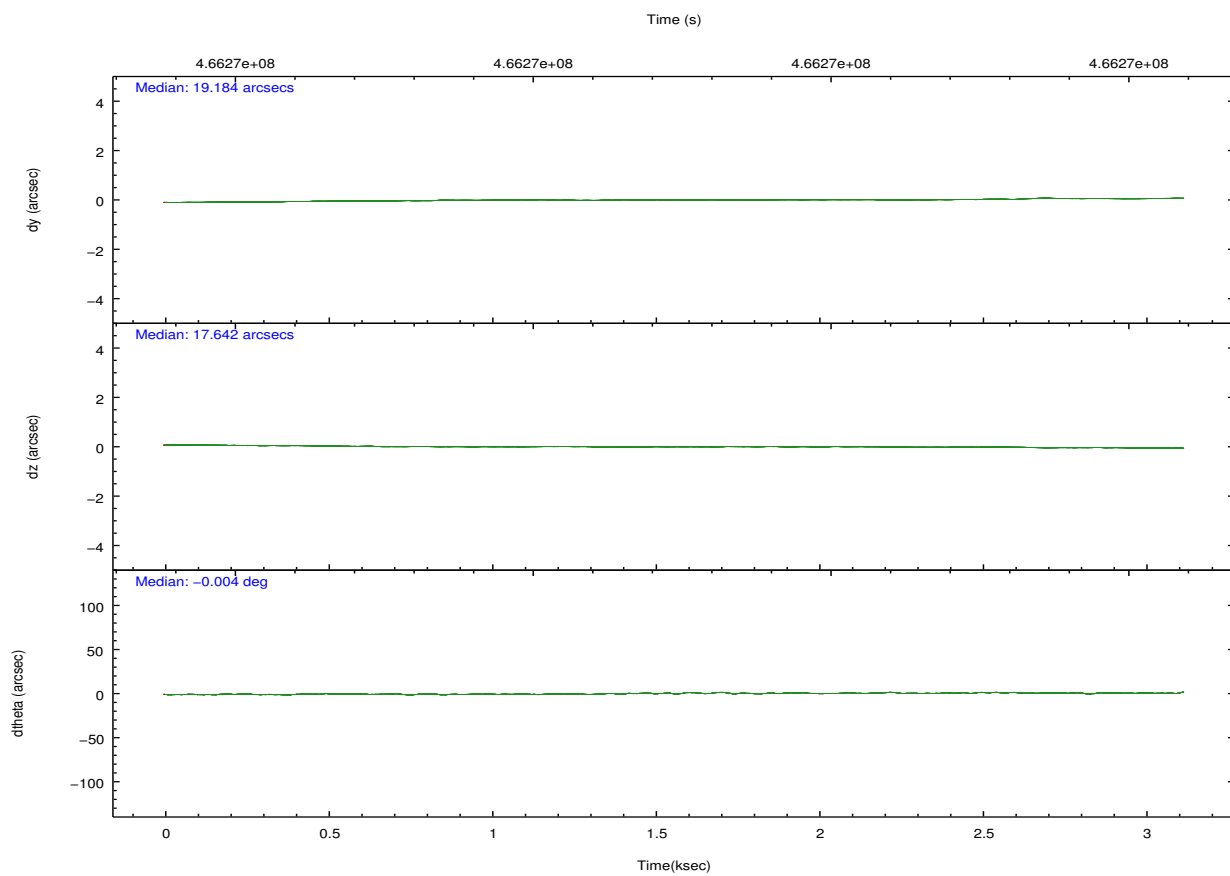
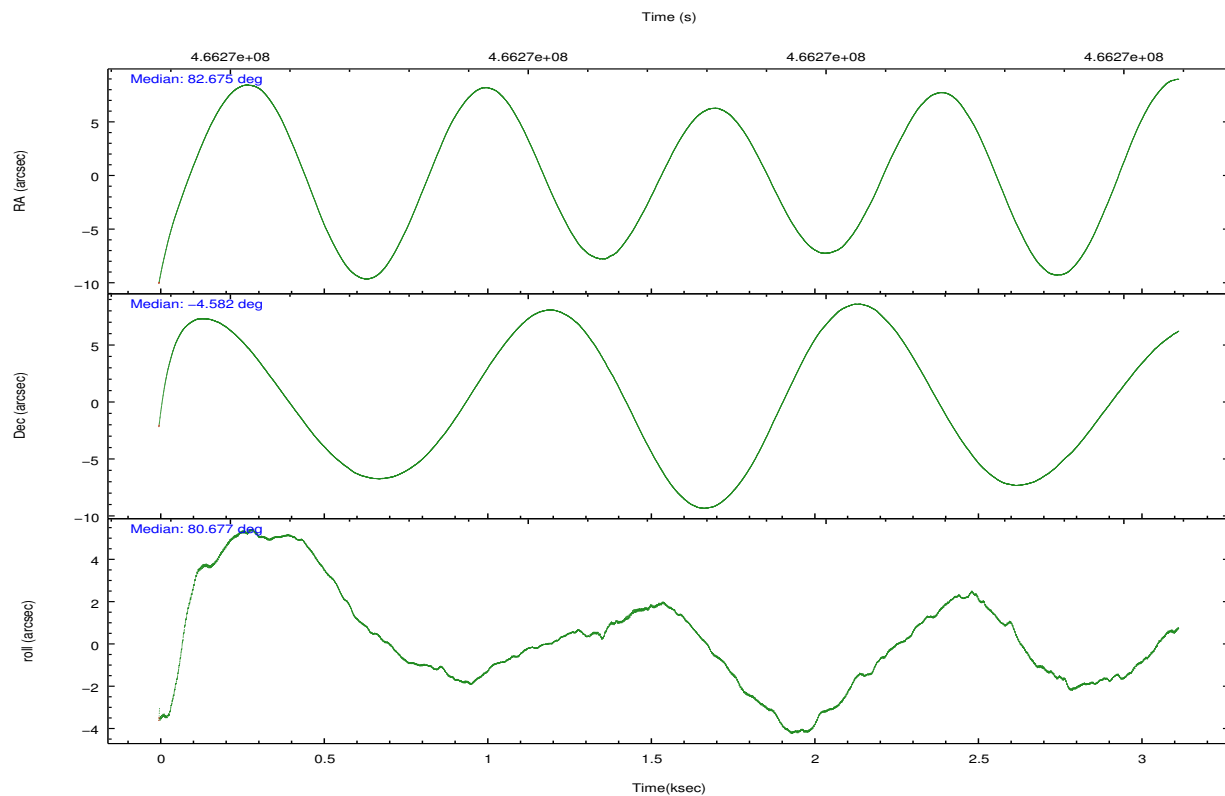
	ccd 7
grade 0 events	264
	9%
grade 1 events	6
	0%
grade 2 events	350
	12%
grade 3 events	230
	8%
grade 4 events	204
	7%
grade 5 events	230
	8%
grade 6 events	591
	21%
grade 7 events	821
	30%

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	82.685279	82.67525416755547	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-4.607284	-4.581799833166265	Subarray start row	449	449
[deg] Pointing Roll	80.529615	80.68541892394008	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			
Phase constraints	Y	Y			
[d] Phase period	40.573800	40.573800			
[d] Phase epoch (MJD)	55602.135800	55602.135800			
Phase start	0.990000	0.990000			
Phase end	1.000000	1.000000			
Phase start error	0.005000	0.005000			
Phase end error	0.005000	0.005000			
[s] Observation start time (MET)	466270033.184000	466268453.67102			
Observation start date	2012-10-10T15:26:06	2012-10-10T15:00:53			
[s] Observation end time (MET)	466273033.184000	466273686.2963			
Observation end date	2012-10-10T16:16:06	2012-10-10T16:28:06			
Read mode	TIMED	TIMED			

2.3 Aspect



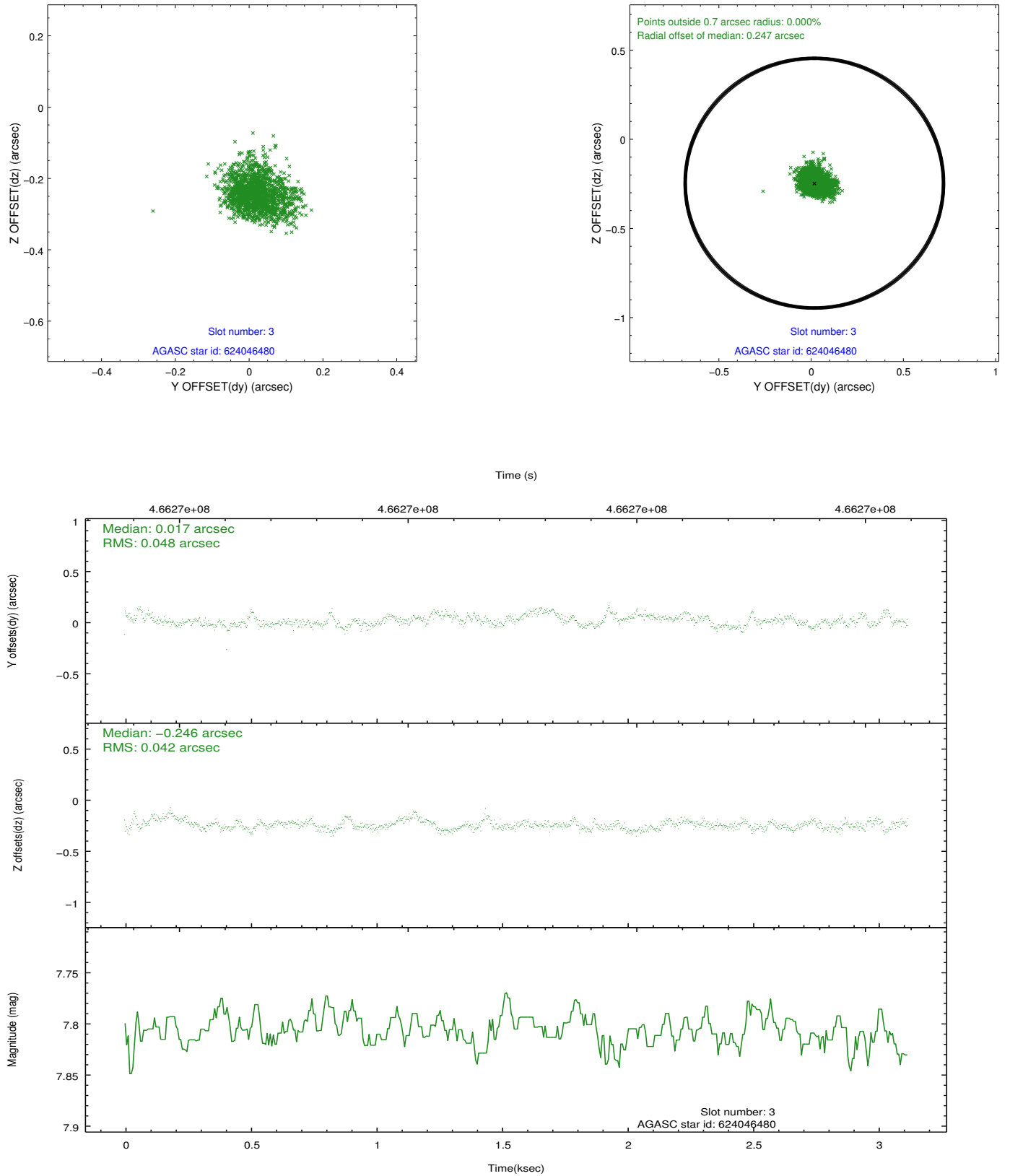


Slot Statistics

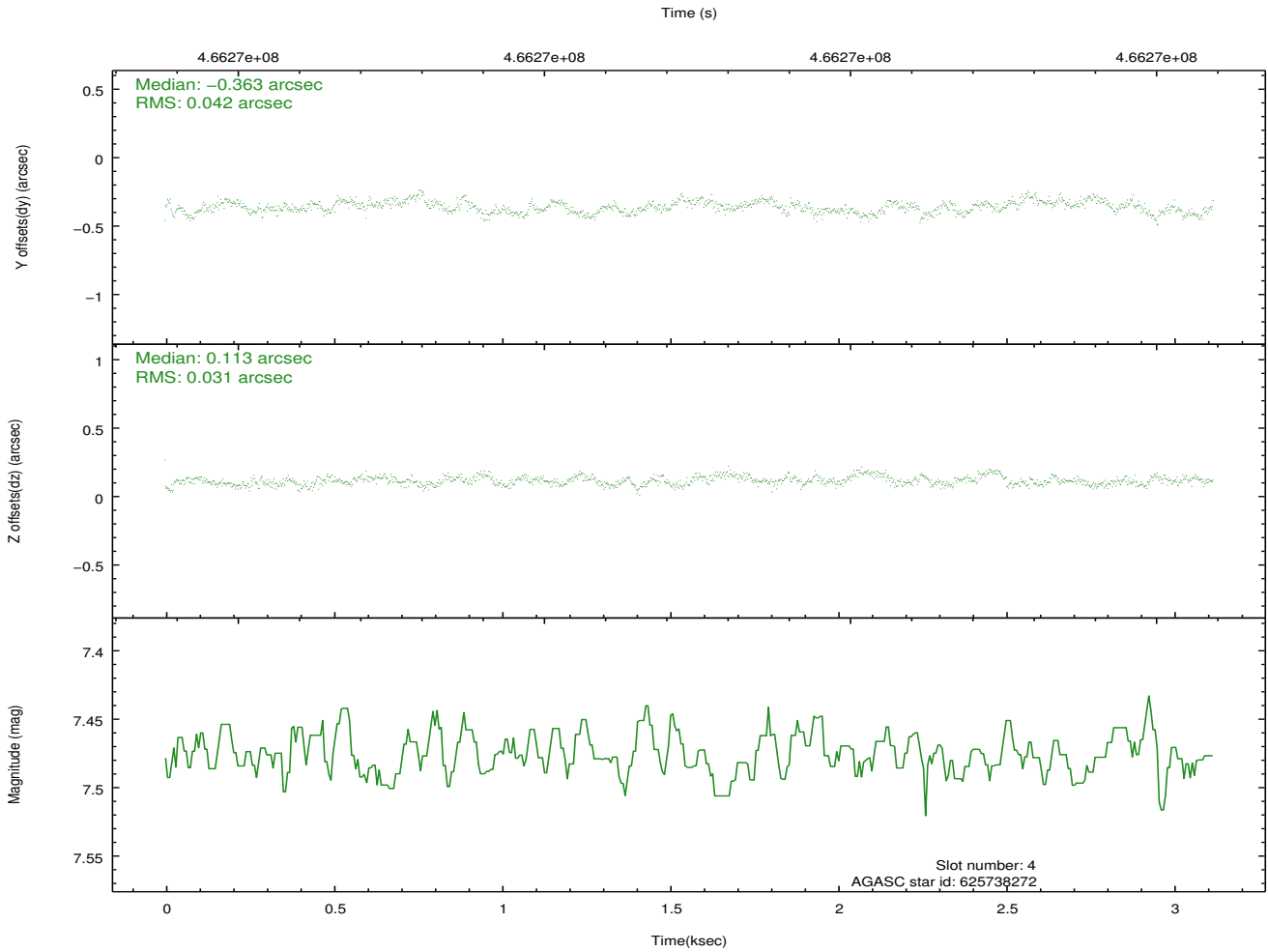
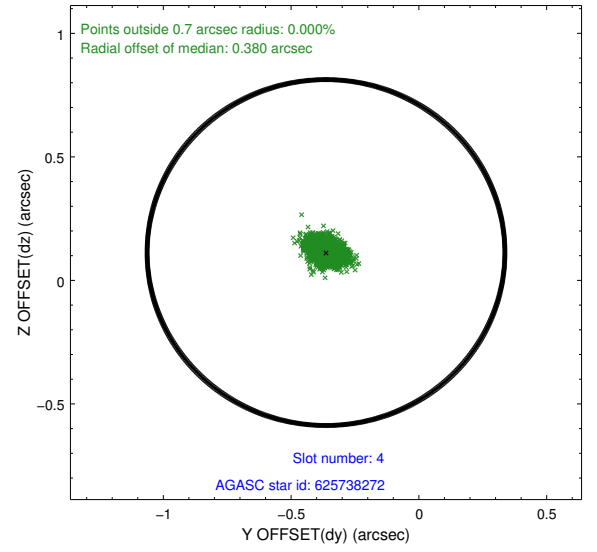
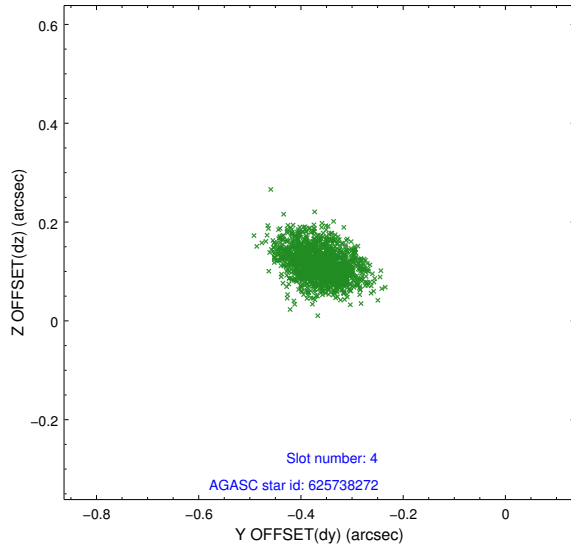
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	6.98	761	0.066	-0.041	0.007	0.012	0.000000	0.000000	923.81	-1734.78
1	FID		ACIS-S-4	6.99	761	0.202	0.001	0.007	0.010	0.000000	0.000000	2142.50	167.28
2	FID		ACIS-S-5	7.02	761	-0.295	0.052	0.005	0.010	0.000000	0.000000	-1822.78	163.31
3	GUIDE	used	624046480	7.81	1522	0.017	-0.246	0.067	0.111	82.138440	-4.697024	-642.48	1881.76
4	GUIDE	used	625738272	7.48	1520	-0.363	0.113	0.056	0.090	83.057652	-4.171284	1767.28	-1058.87
5	GUIDE	used	625740992	9.07	1521	0.336	0.346	0.131	0.204	83.193672	-4.960928	-954.61	-2008.51
6	GUIDE	used	625745120	8.06	1522	0.062	0.259	0.089	0.144	83.237850	-4.566478	470.19	-1932.75
7	GUIDE	used	624034448	8.33	1520	-0.054	-0.484	0.103	0.151	82.155578	-4.175293	1220.39	2130.28

2.4 Star Slots

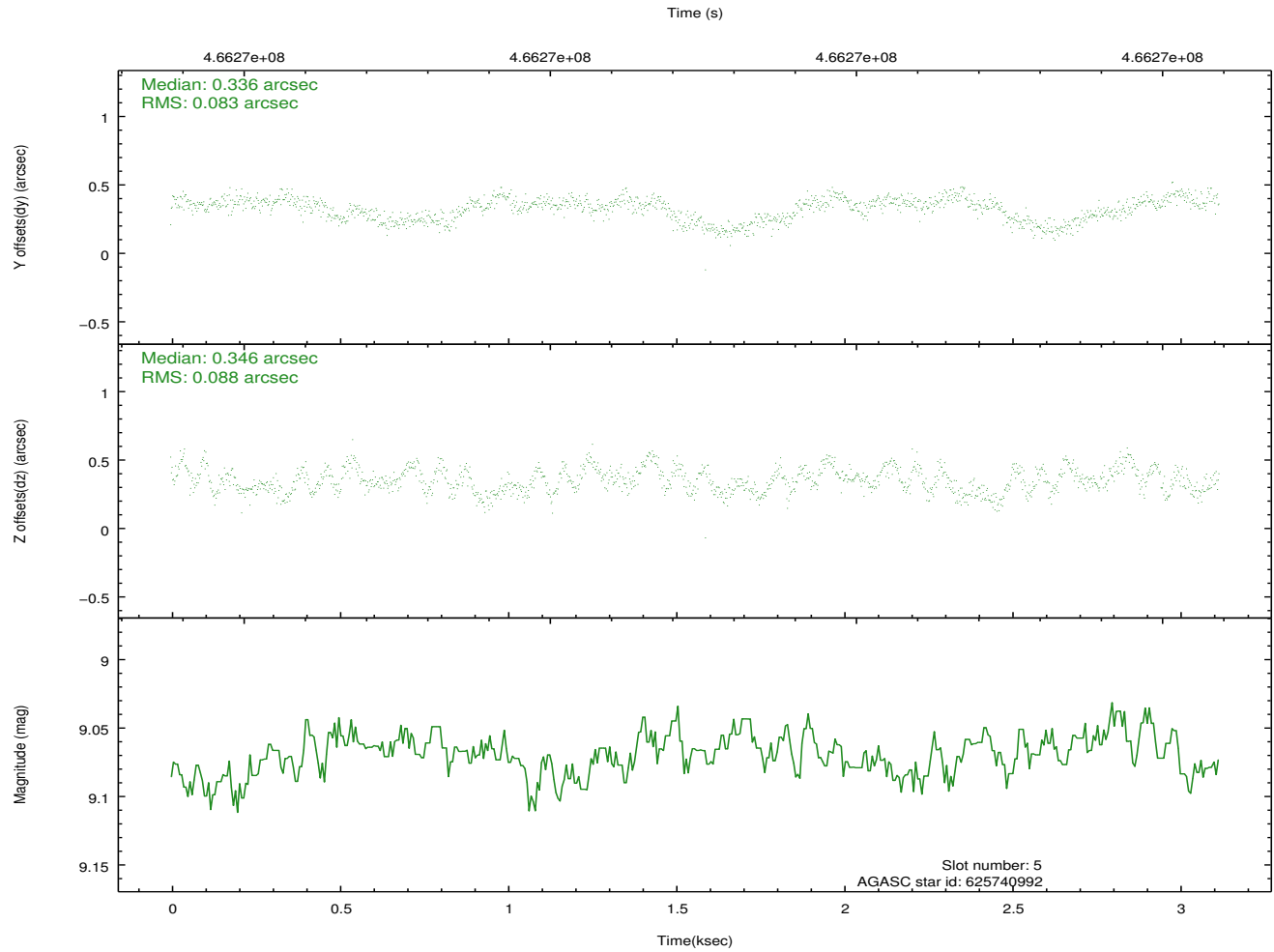
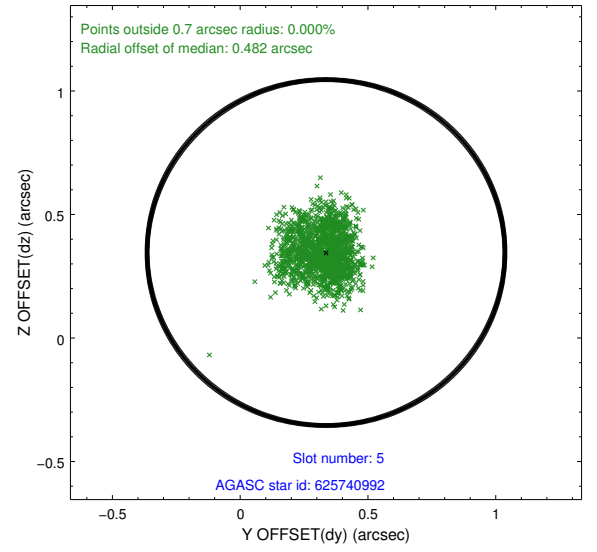
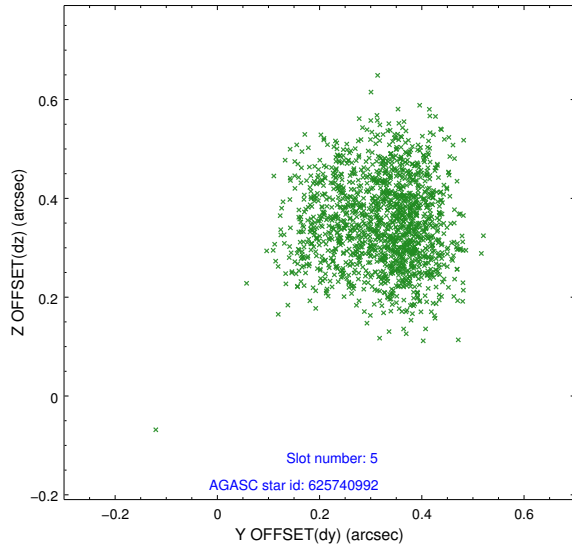
2.4.1 Slot 3



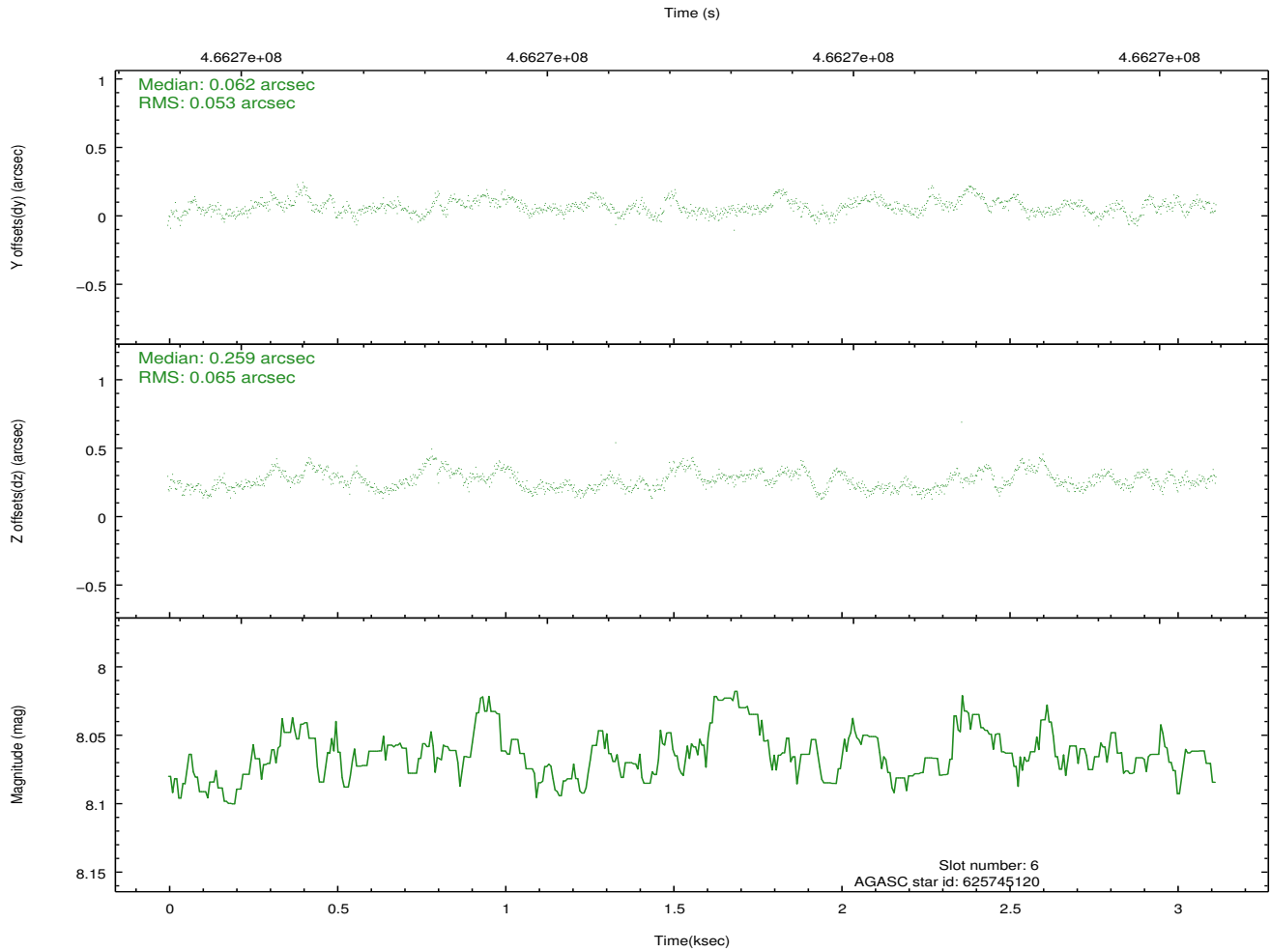
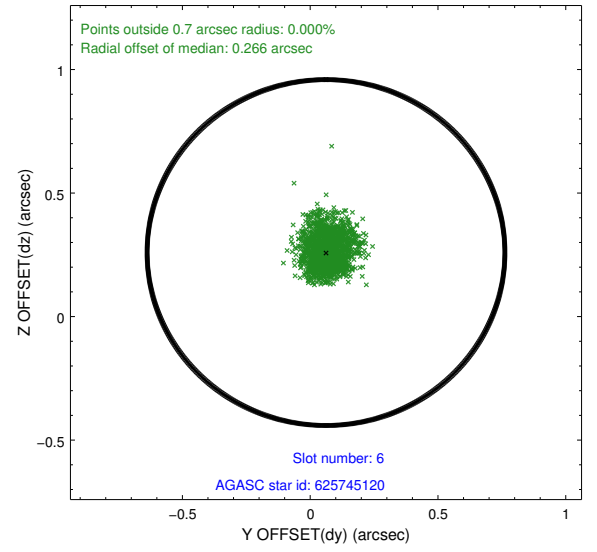
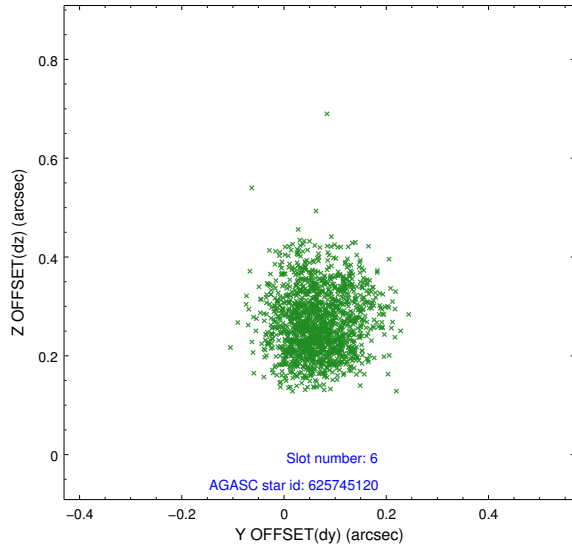
2.4.2 Slot 4



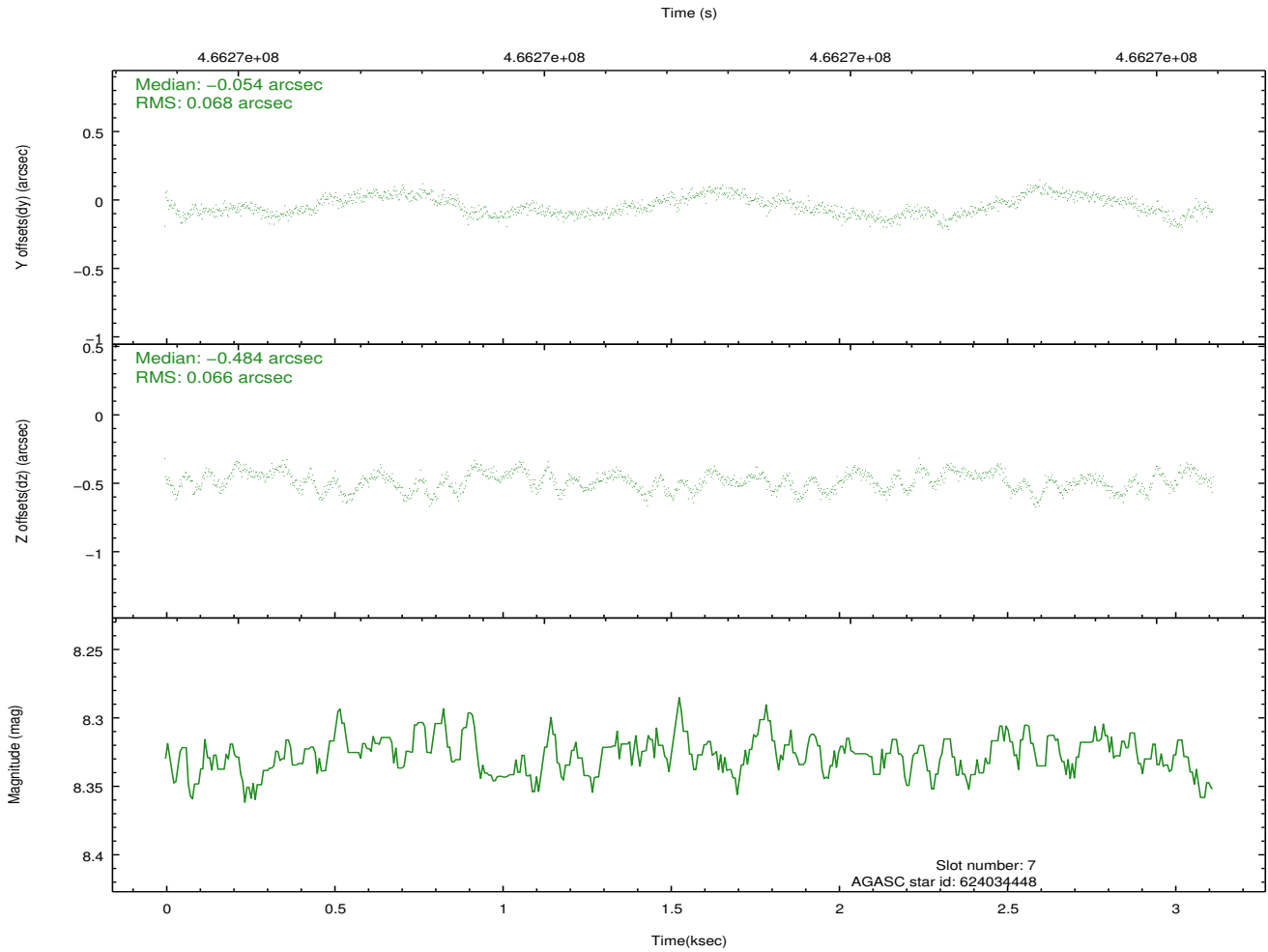
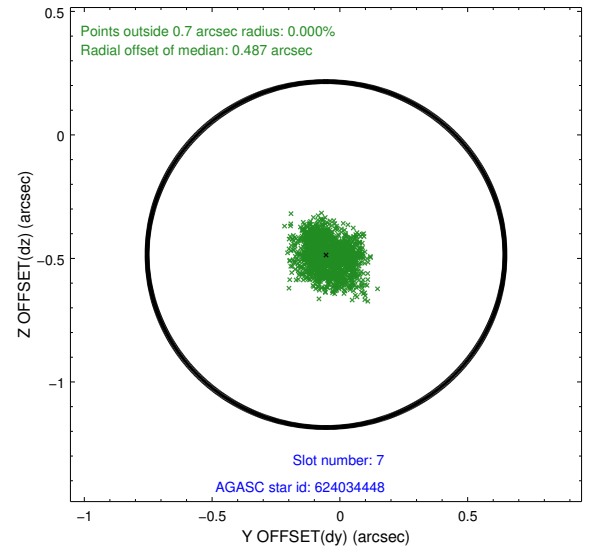
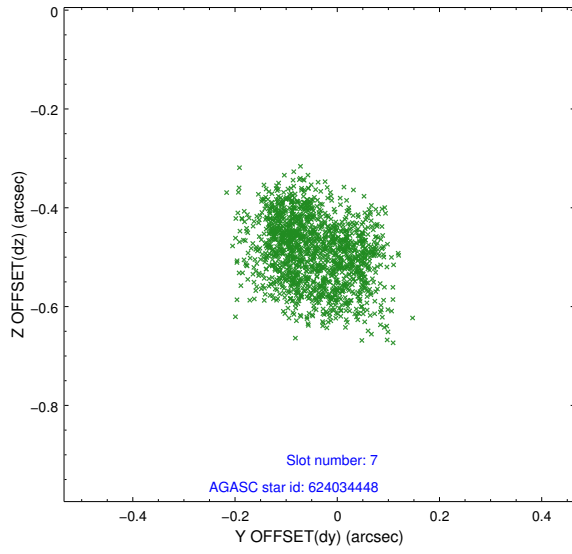
2.4.3 Slot 5



2.4.4 Slot 6

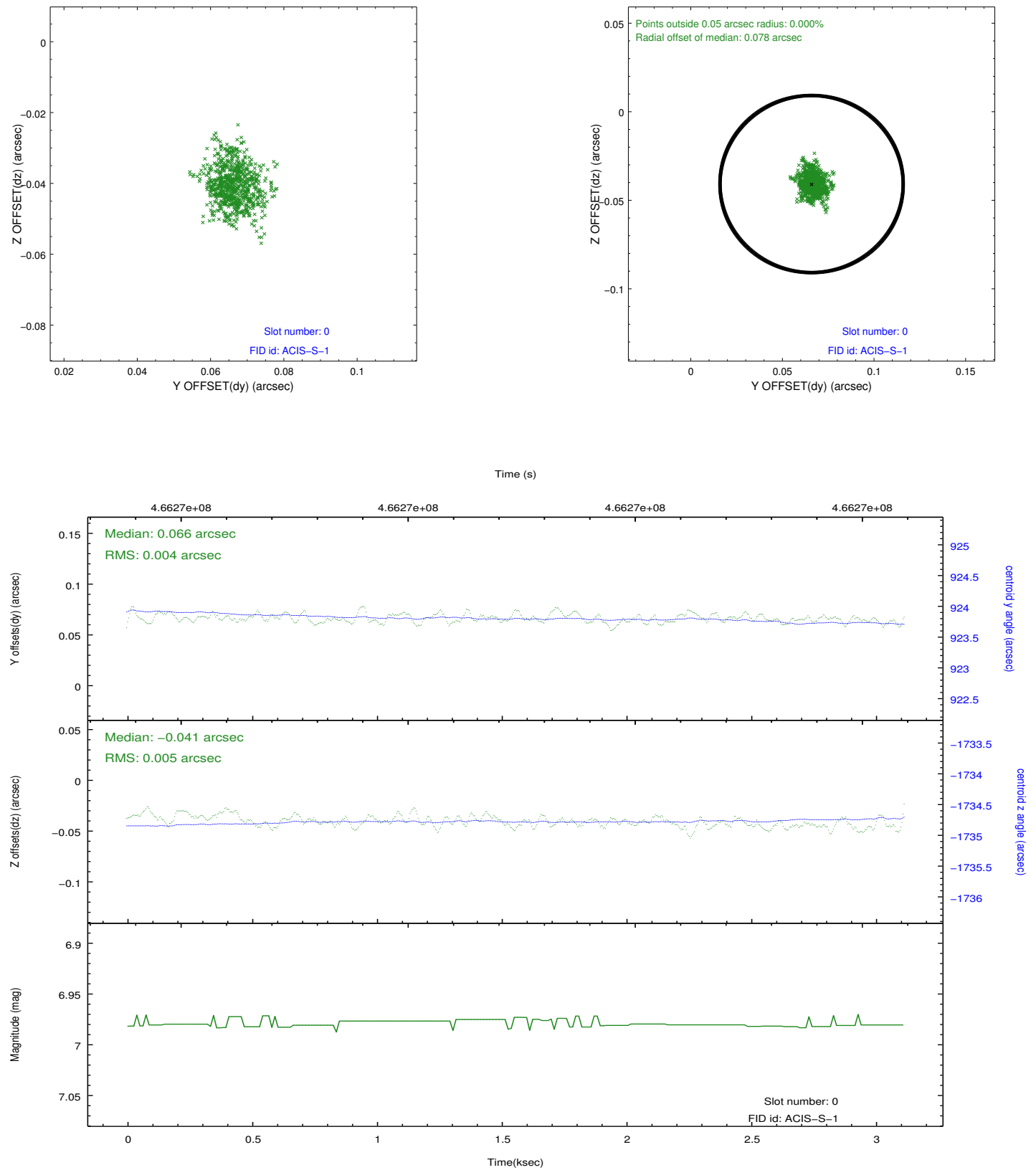


2.4.5 Slot 7

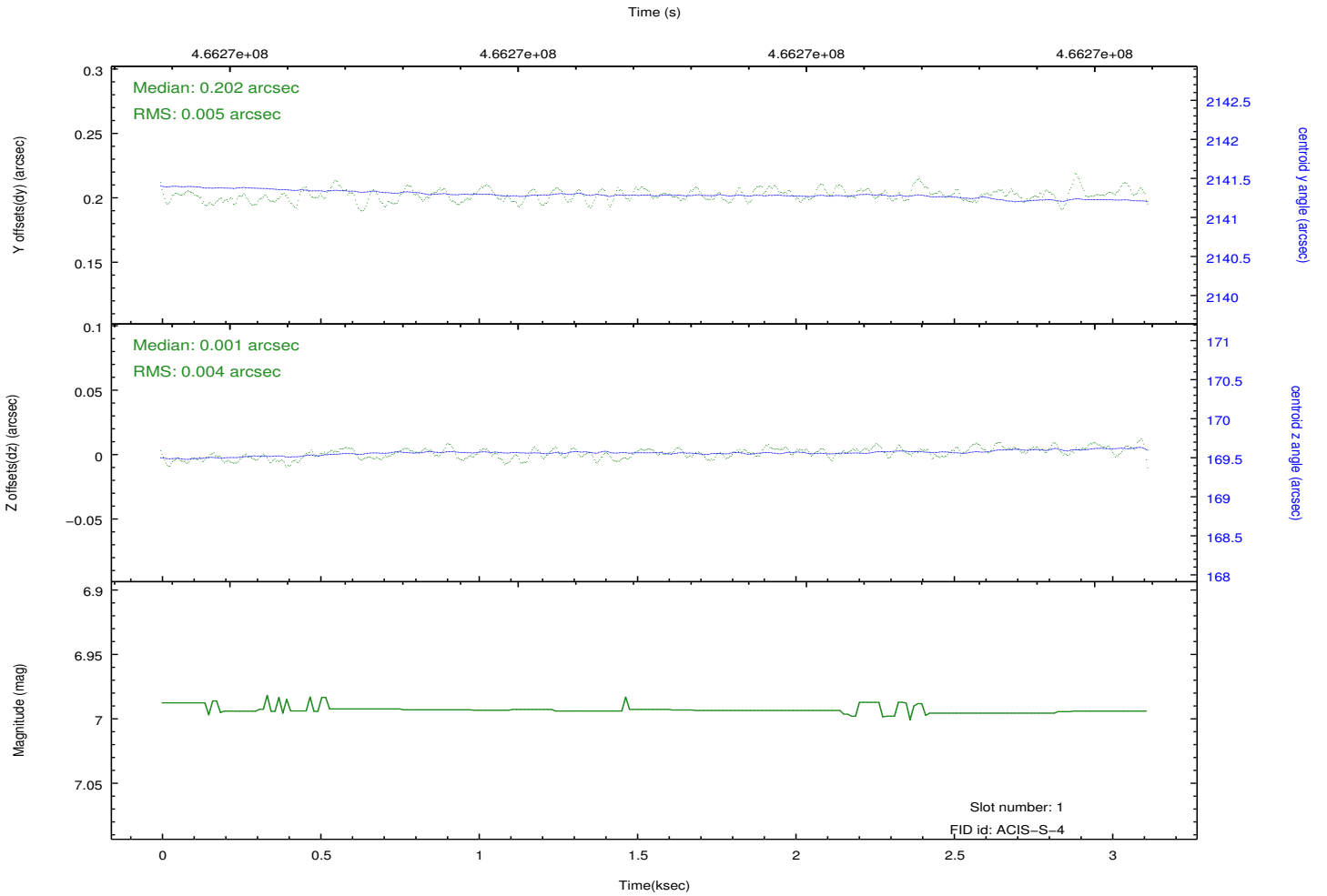
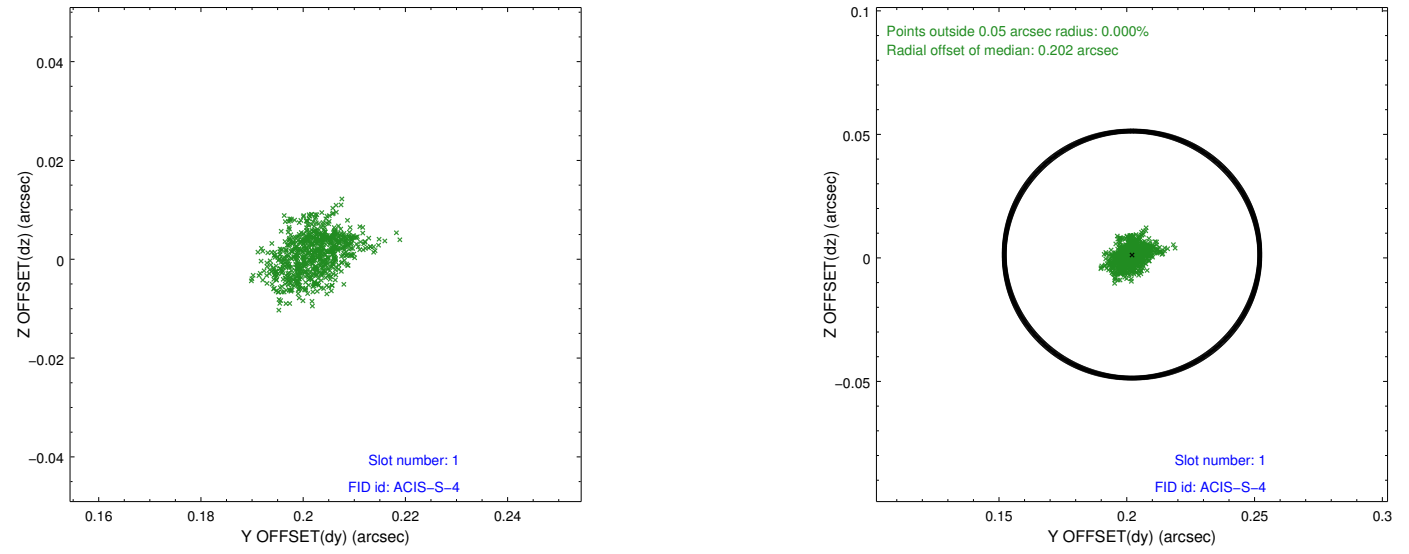


2.5 FID Slots

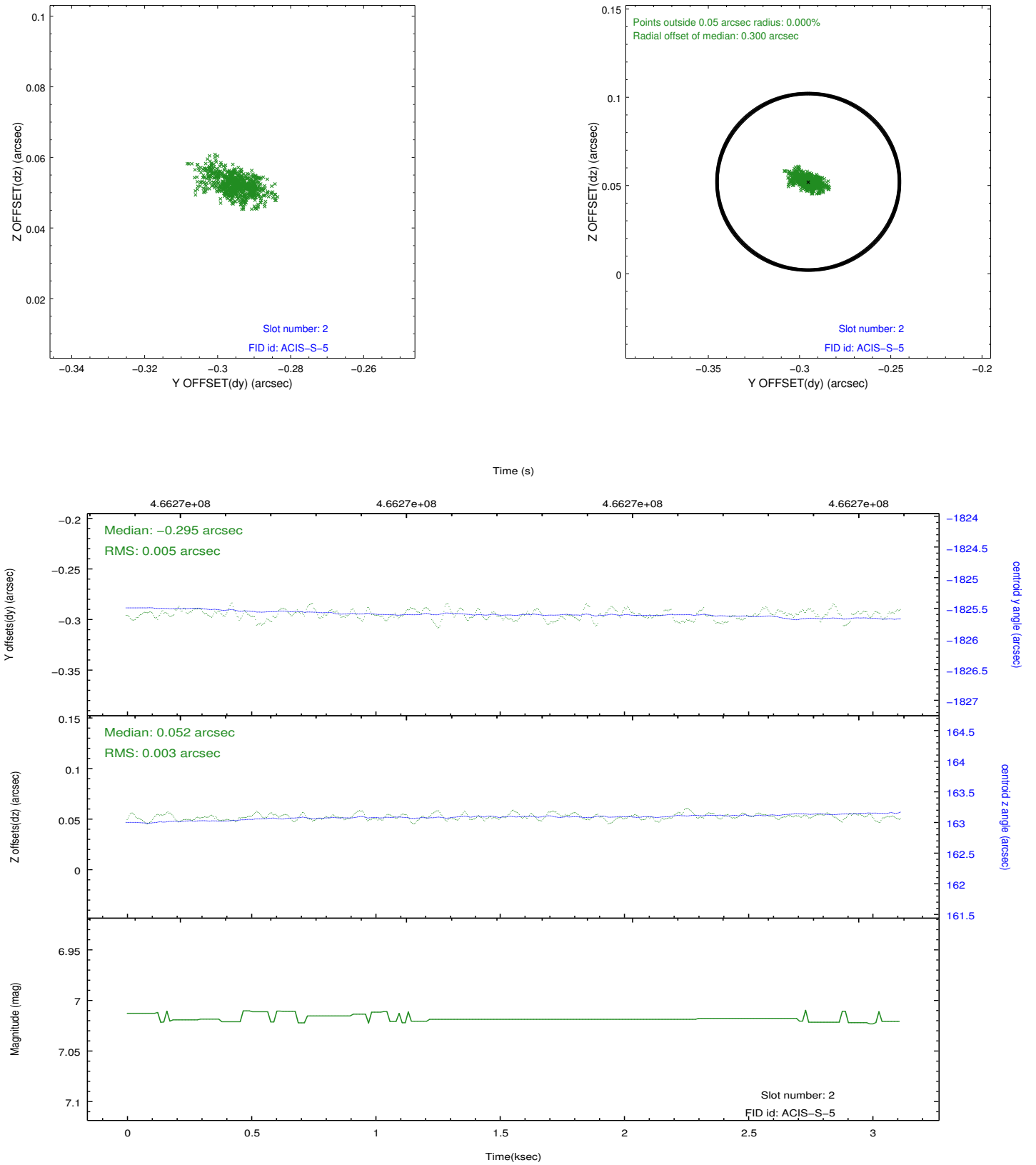
2.5.1 Slot 0



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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.0695998170376

A.2 Comments

The EXPOSURE (and LIVETIME) are 2784 s, which is 90.6947% (DTCOR) of the ONTIME of 3069.6 s. The reason that DTCOR is about 0.91 instead of about 0.99 is that the frame time is only 0.4 s. Since the frame transfer time is 0.04104 s, the fraction of the time spent in the static exposure is $0.4 / (0.4 + 0.04104) = 0.906947$.

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These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.