

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12834 - L2 Version 2
Chandra X-Ray Center

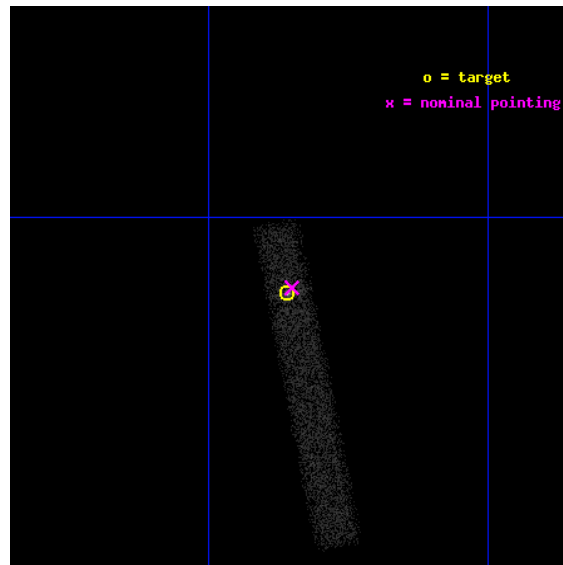
L2 Processing Date : Feb 26 2012

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1 Front

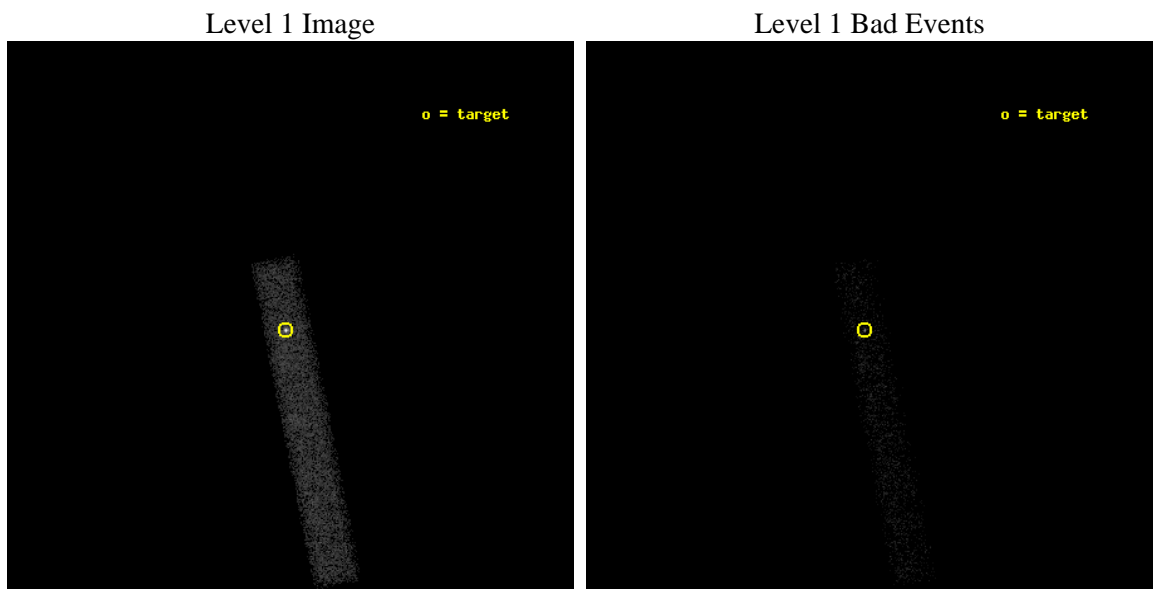
seq_num	702467	Sequence number
obs_id	12834	Observation id
title	Energy Dependent X-ray Microlensing	Proposal title
observer	Dr. Christopher Kochanek	Principal investigator
object	RXJ1131-1231	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.9627932393	Nominal RA [deg]
dec_nom	-12.530424178421	Nominal Dec [deg]
roll_nom	78.722127372746	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	14513	Number of level 2 events



2 OBI

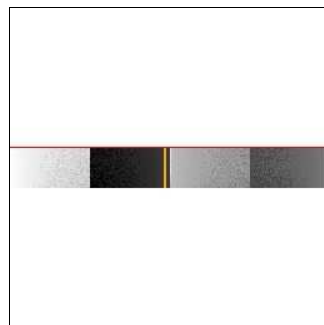
2.1 OBI

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]
caldsver	4.4.8	 	ontime7	15009.599105358	Sum of GTIs [s]
date	2012-02-26T05:42:02	Date and time of file creation	l1events	23051	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

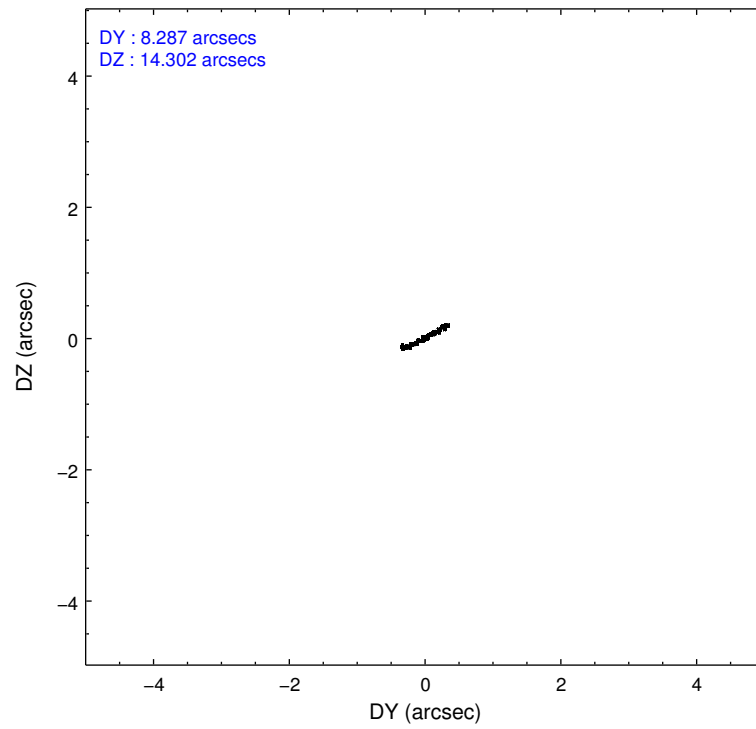
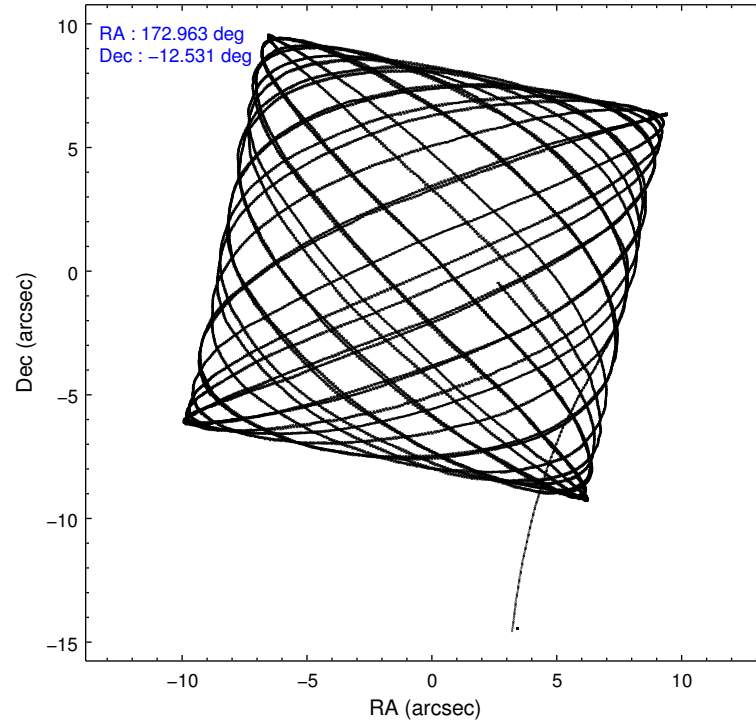
	ccd 7
level 1 events	23051
rejected events	8136
rejected %	35%

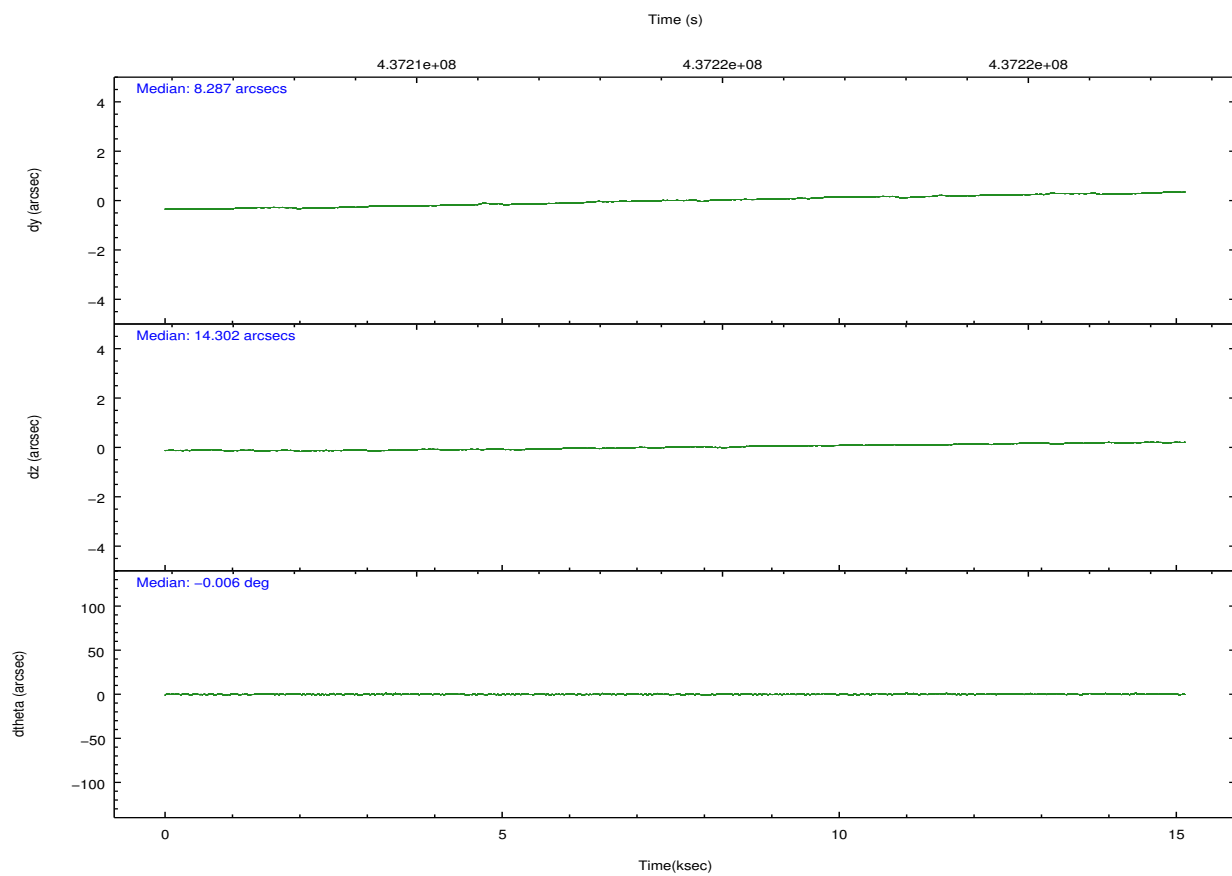
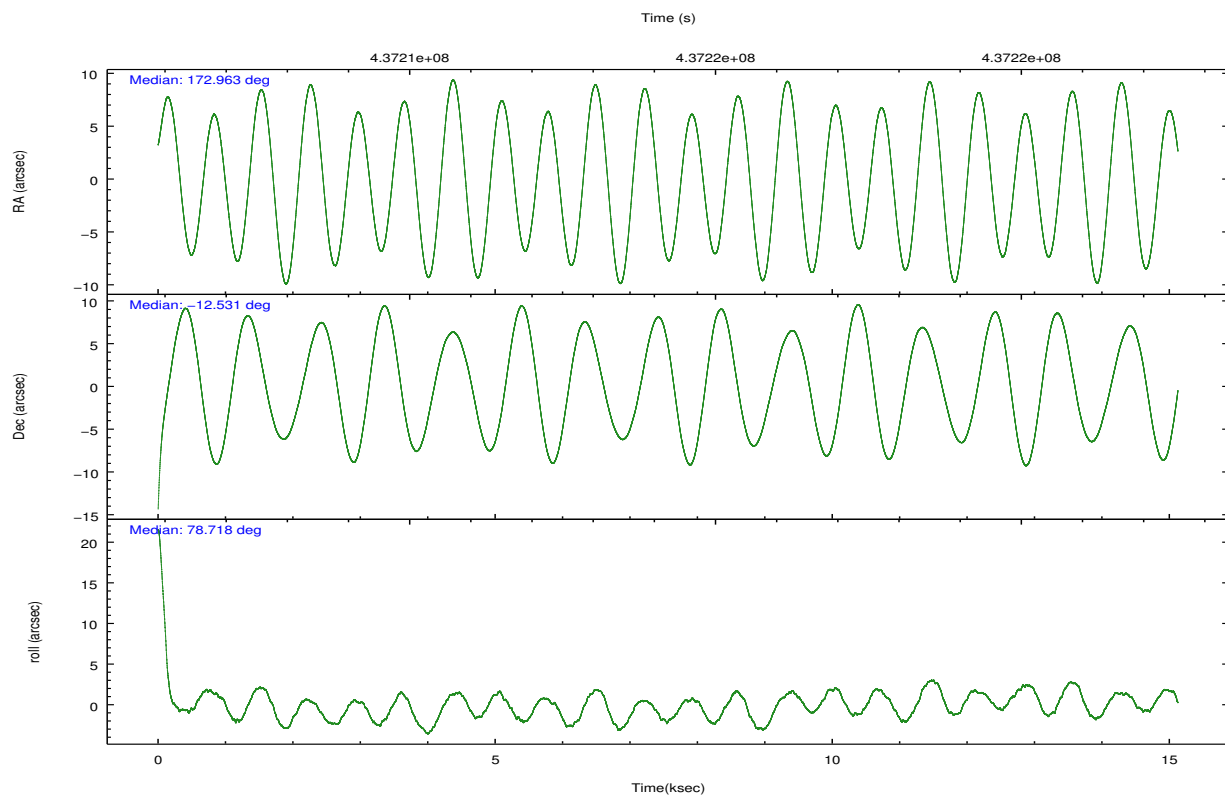
	ccd 7
grade 0 events	2809
	12%
grade 1 events	52
	0%
grade 2 events	3318
	14%
grade 3 events	1858
	8%
grade 4 events	1834
	7%
grade 5 events	1743
	7%
grade 6 events	5096
	22%
grade 7 events	6341
	27%

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	172.972108	172.9627932393038	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-12.556179	-12.53042417842076	Subarray start row	449	449
[deg] Pointing Roll	78.567512	78.72212737274575	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)	437206784.184000	437205586.24295			
Observation start date	2011-11-09T06:18:38	2011-11-09T05:59:46			
[s] Observation end time (MET)	437221784.184000	437222512.58134			
Observation end date	2011-11-09T10:28:38	2011-11-09T10:41:52			
Read mode	TIMED	TIMED			

2.3 Aspect



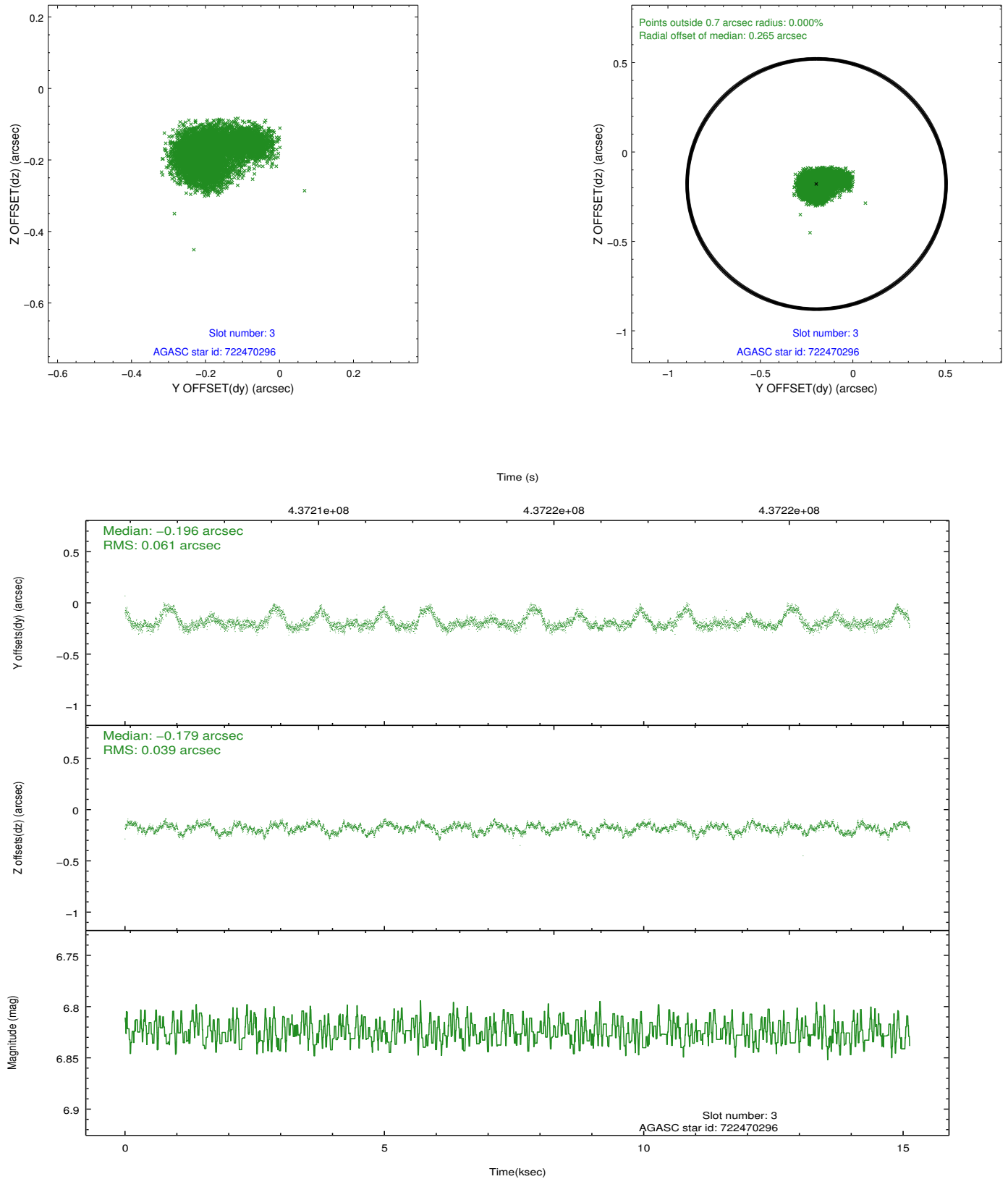


Slot Statistics

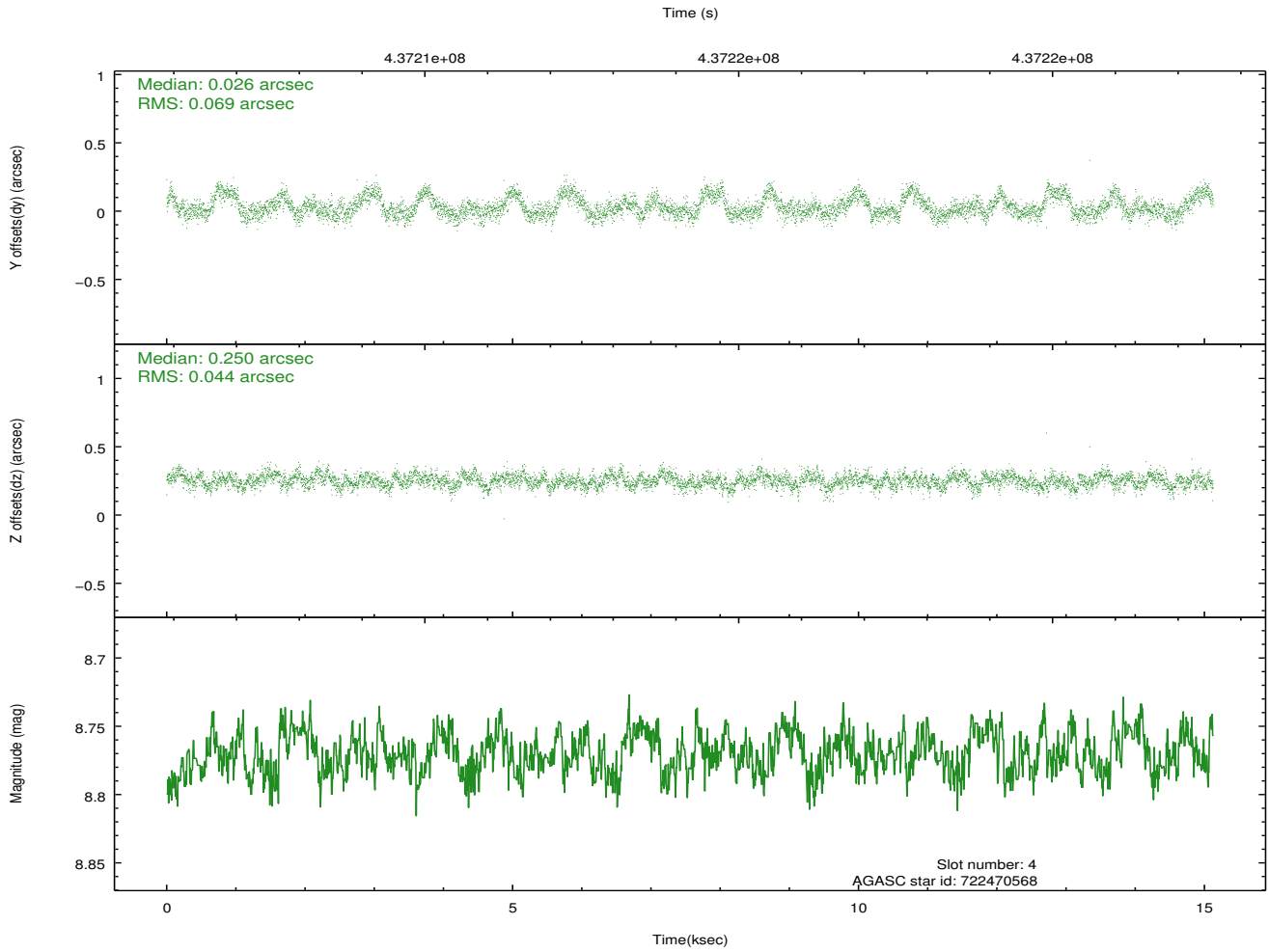
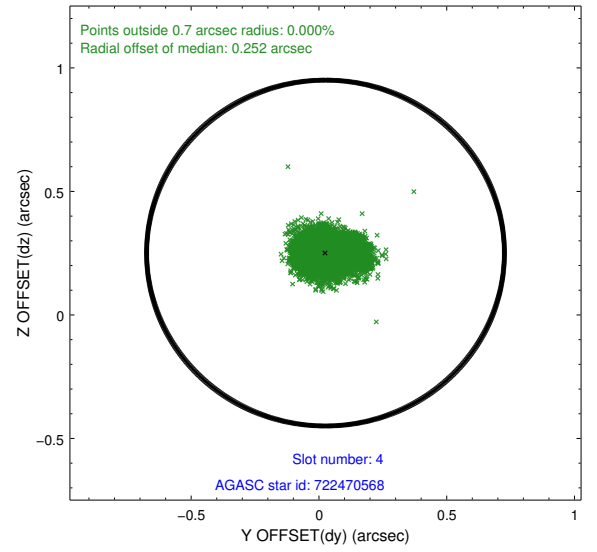
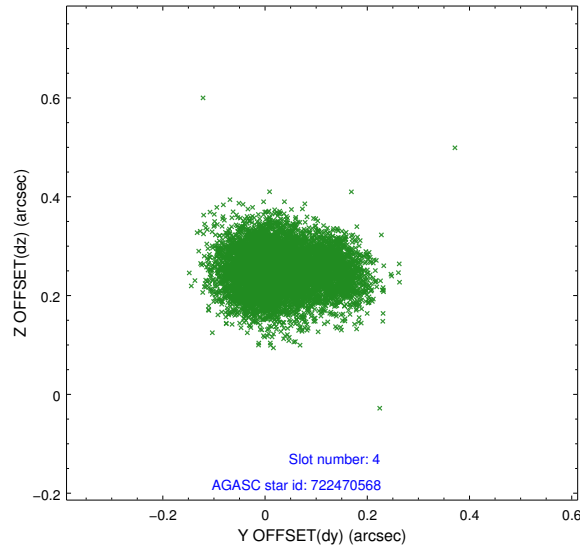
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.96	3690	0.087	-0.048	0.006	0.011	0.000000	0.000000	935.08	-1731.35
1	FID	ACIS-S-5	6.99	3690	-0.149	0.059	0.014	0.021	0.000000	0.000000	-1814.00	165.99
2	FID	ACIS-S-6	7.10	3690	0.039	0.002	0.014	0.020	0.000000	0.000000	400.24	810.24
3	GUIDE	722470296	6.83	7380	-0.196	-0.179	0.073	0.137	172.921689	-12.381367	581.83	298.93
4	GUIDE	722470568	8.77	7377	0.026	0.250	0.087	0.142	173.210269	-12.342558	919.87	-667.98
5	GUIDE	722473176	9.44	7350	0.022	-0.117	0.102	0.167	172.599746	-12.066793	1466.23	1634.31
6	GUIDE	722871728	9.67	7362	-0.030	0.130	0.172	0.327	173.202235	-12.568355	117.45	-800.52
7	GUIDE	722873464	7.30	7377	0.183	-0.088	0.085	0.142	172.661543	-13.050266	-1960.05	714.34

2.4 Star Slots

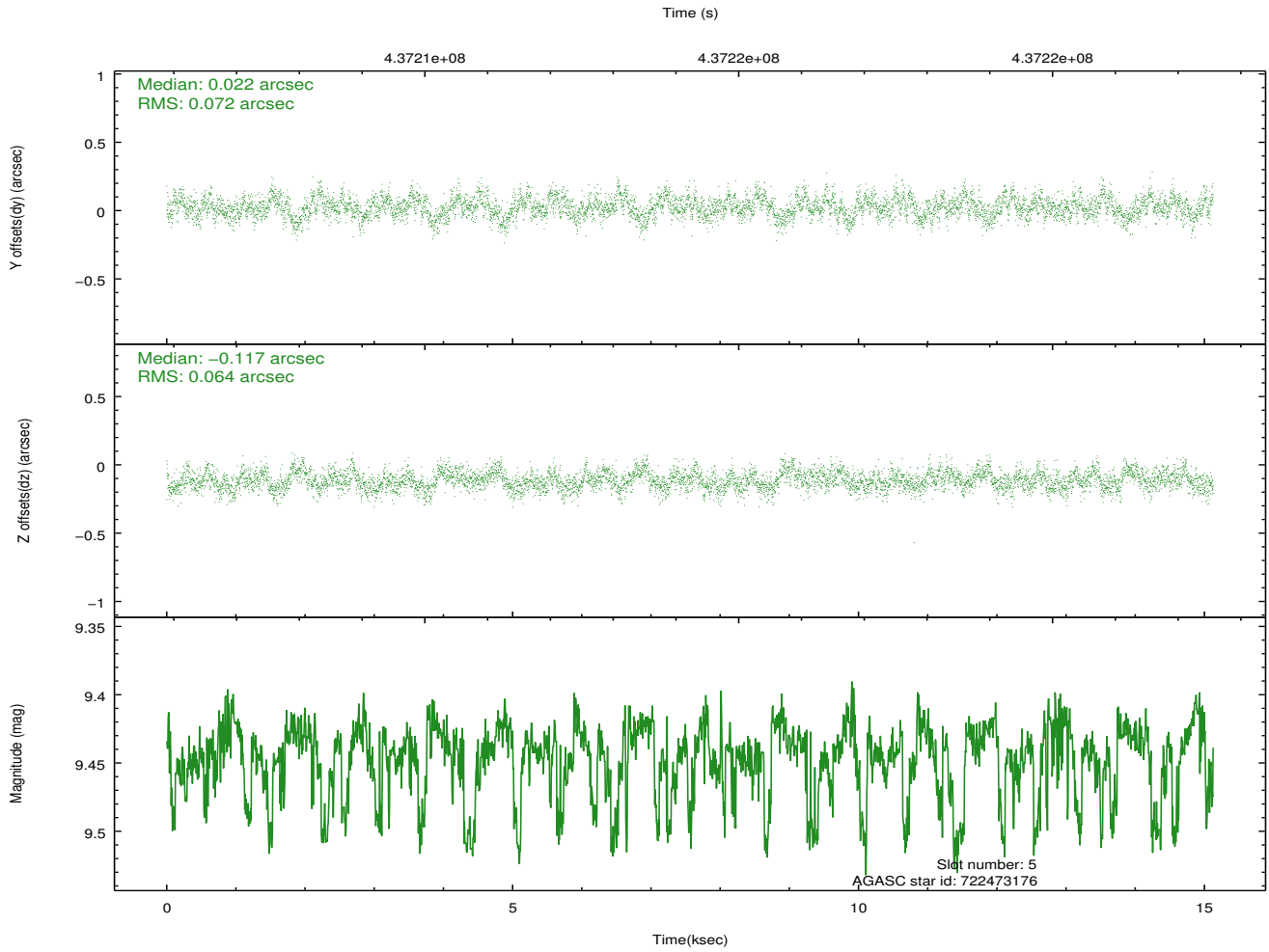
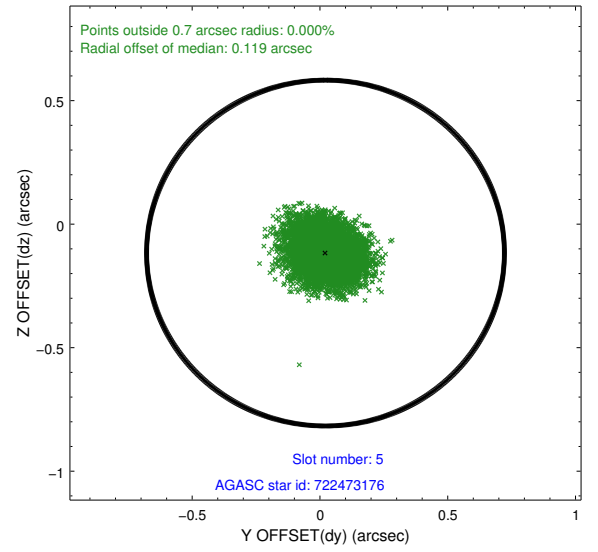
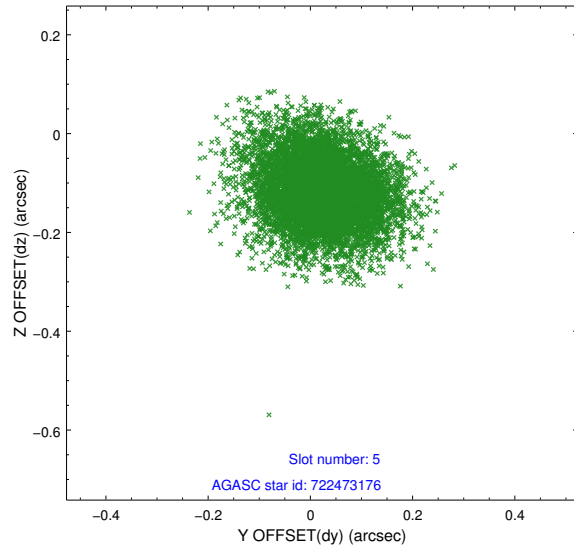
2.4.1 Slot 3



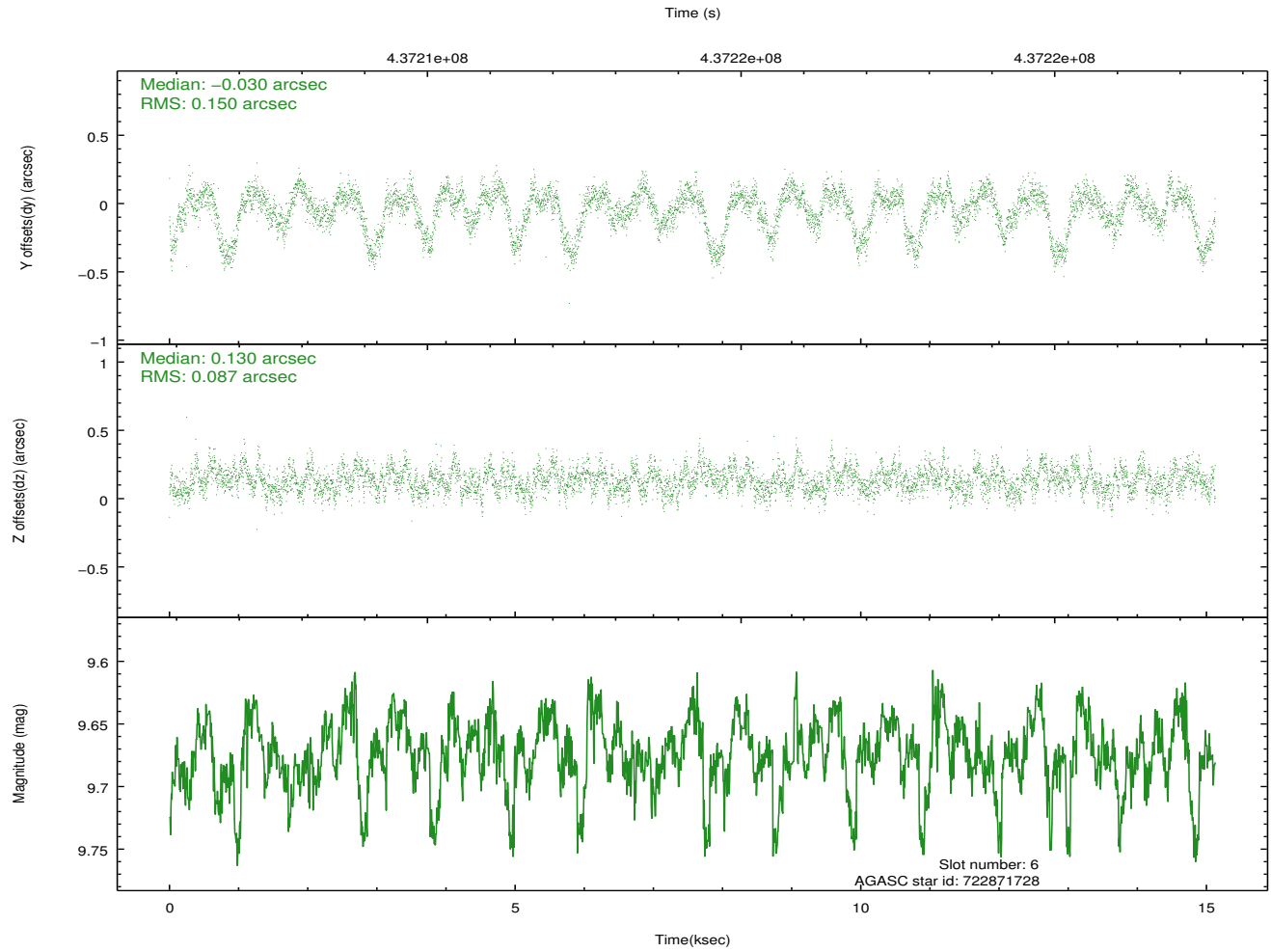
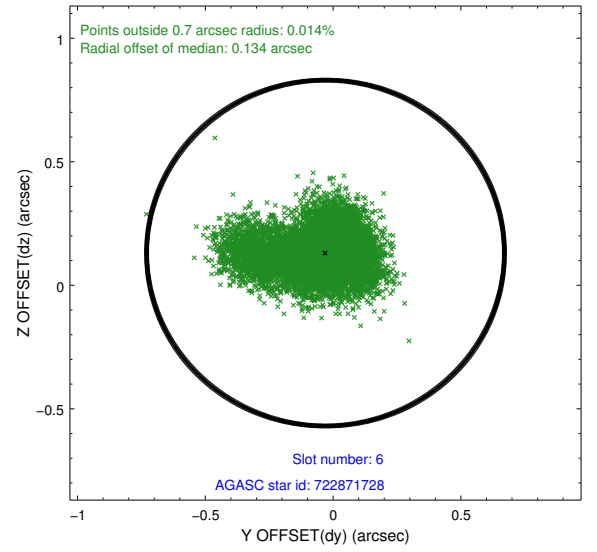
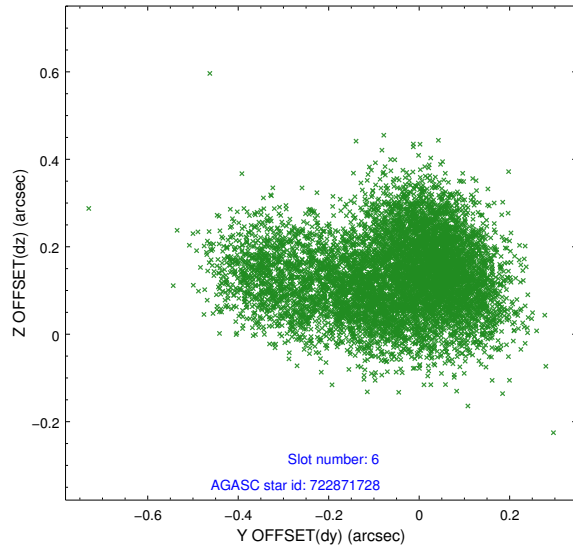
2.4.2 Slot 4



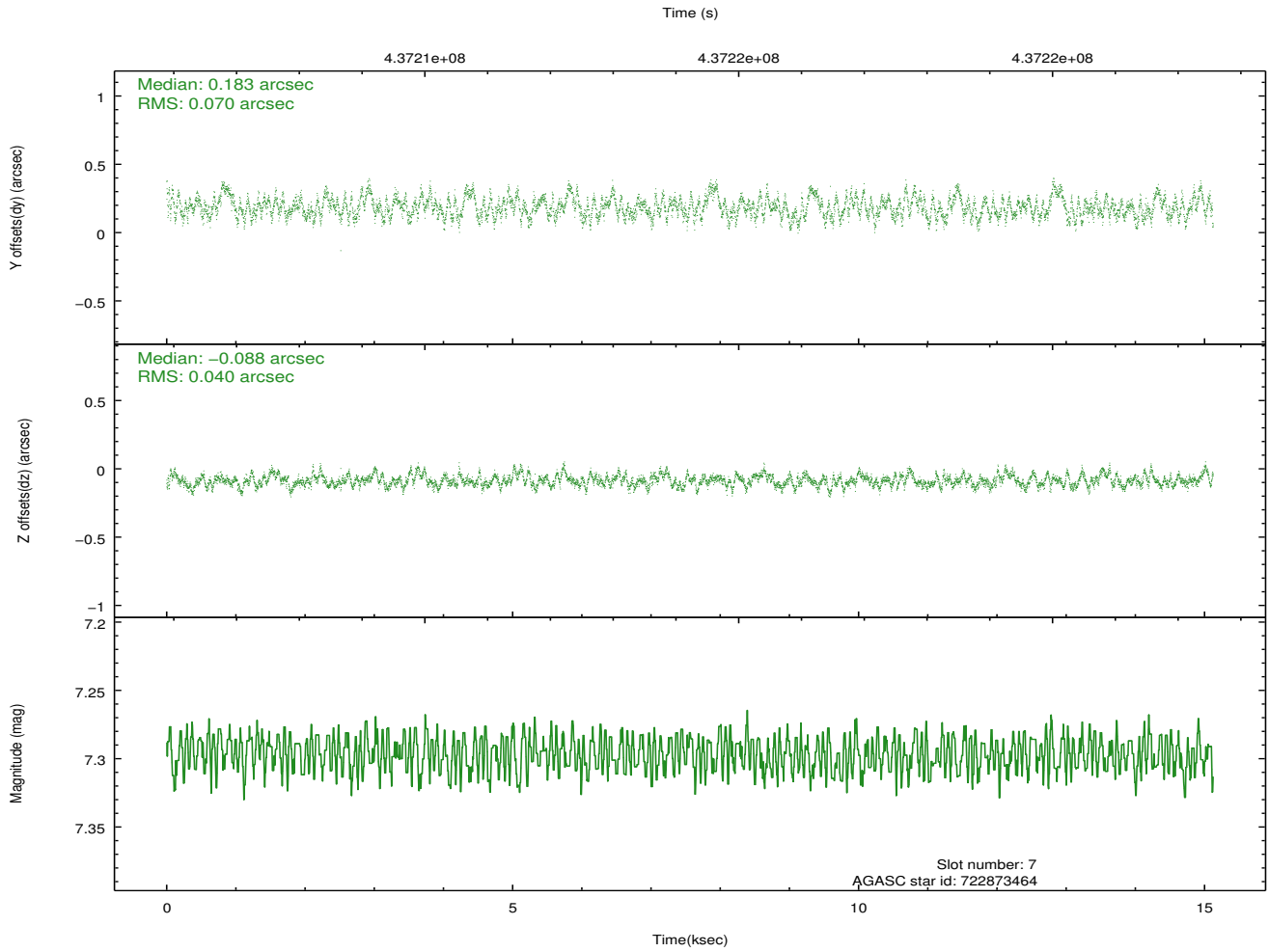
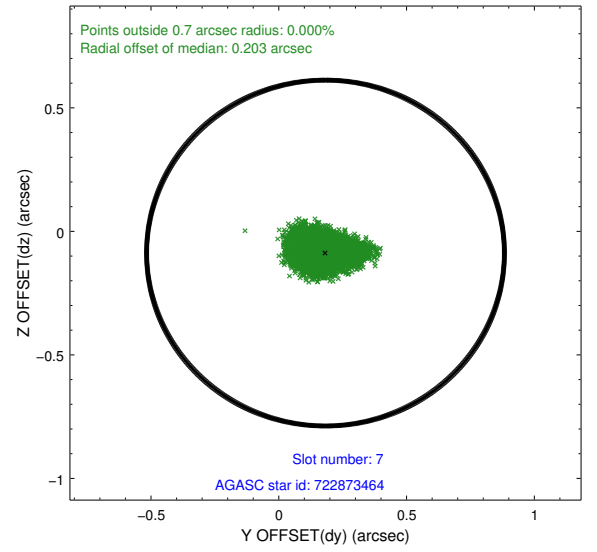
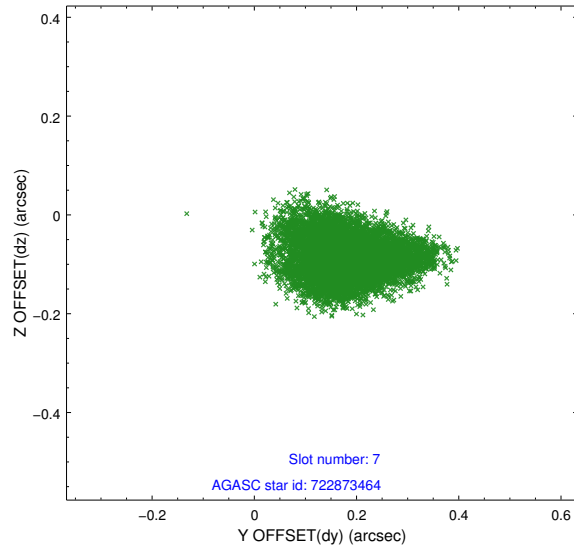
2.4.3 Slot 5



2.4.4 Slot 6

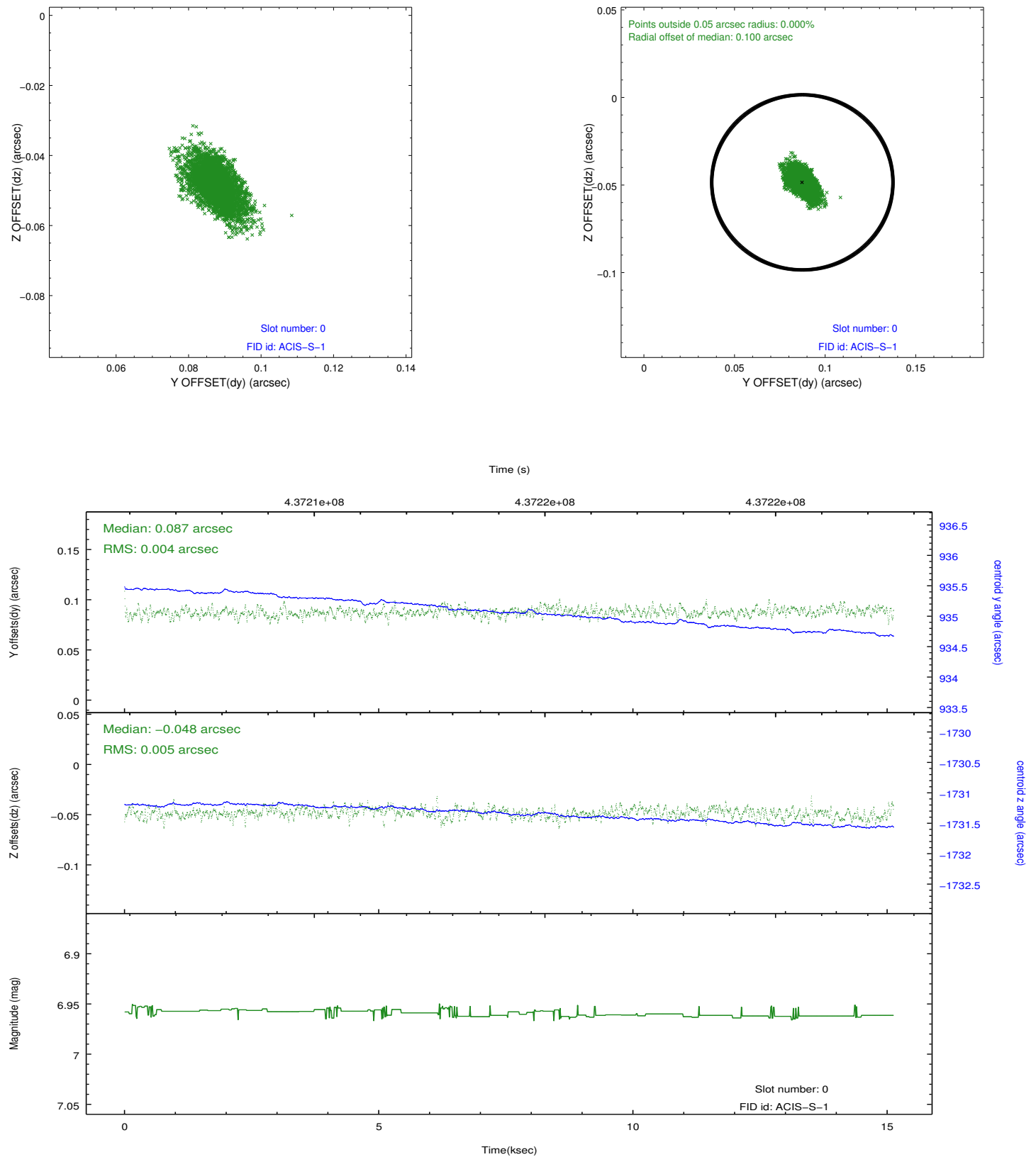


2.4.5 Slot 7

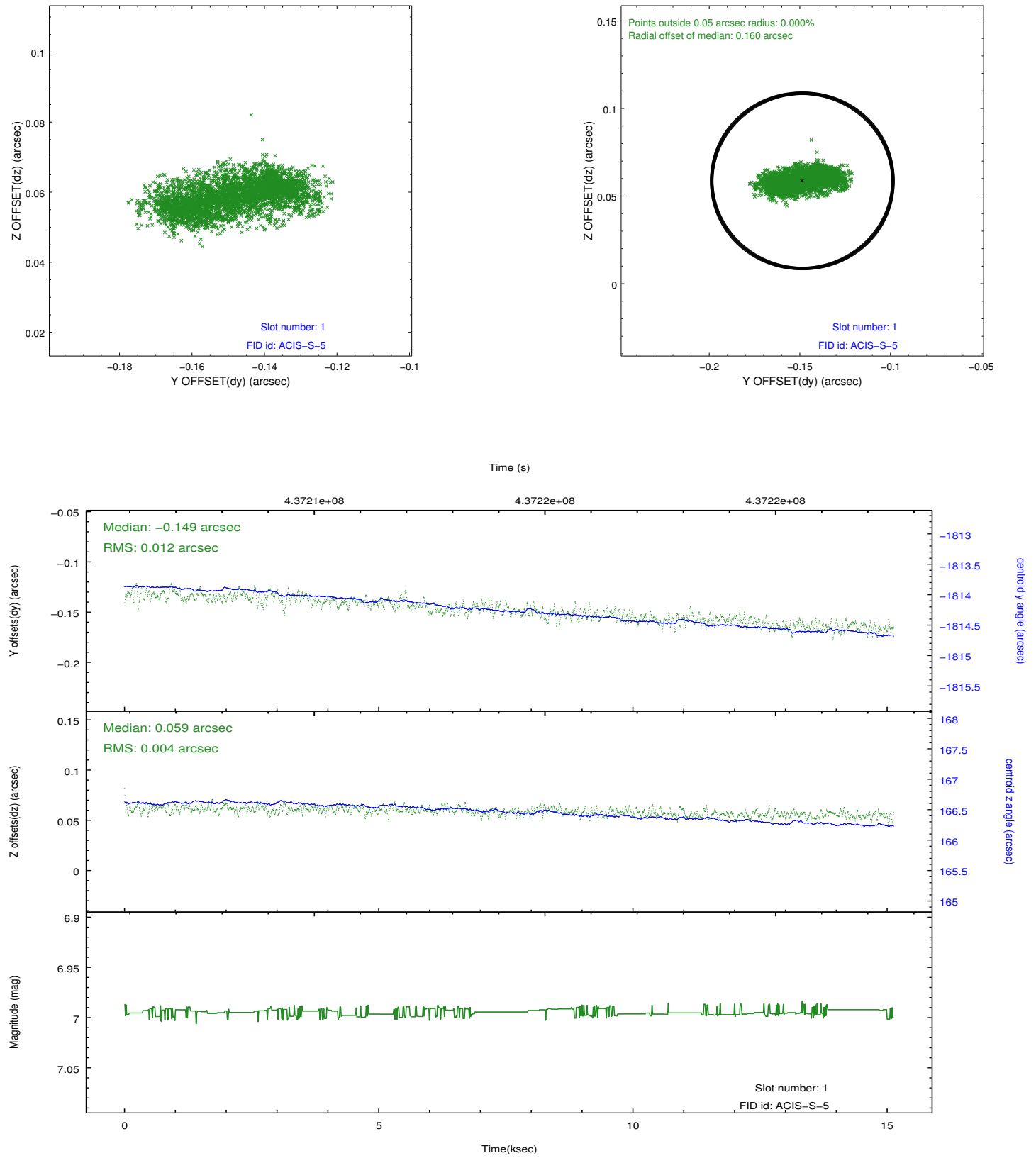


2.5 FID Slots

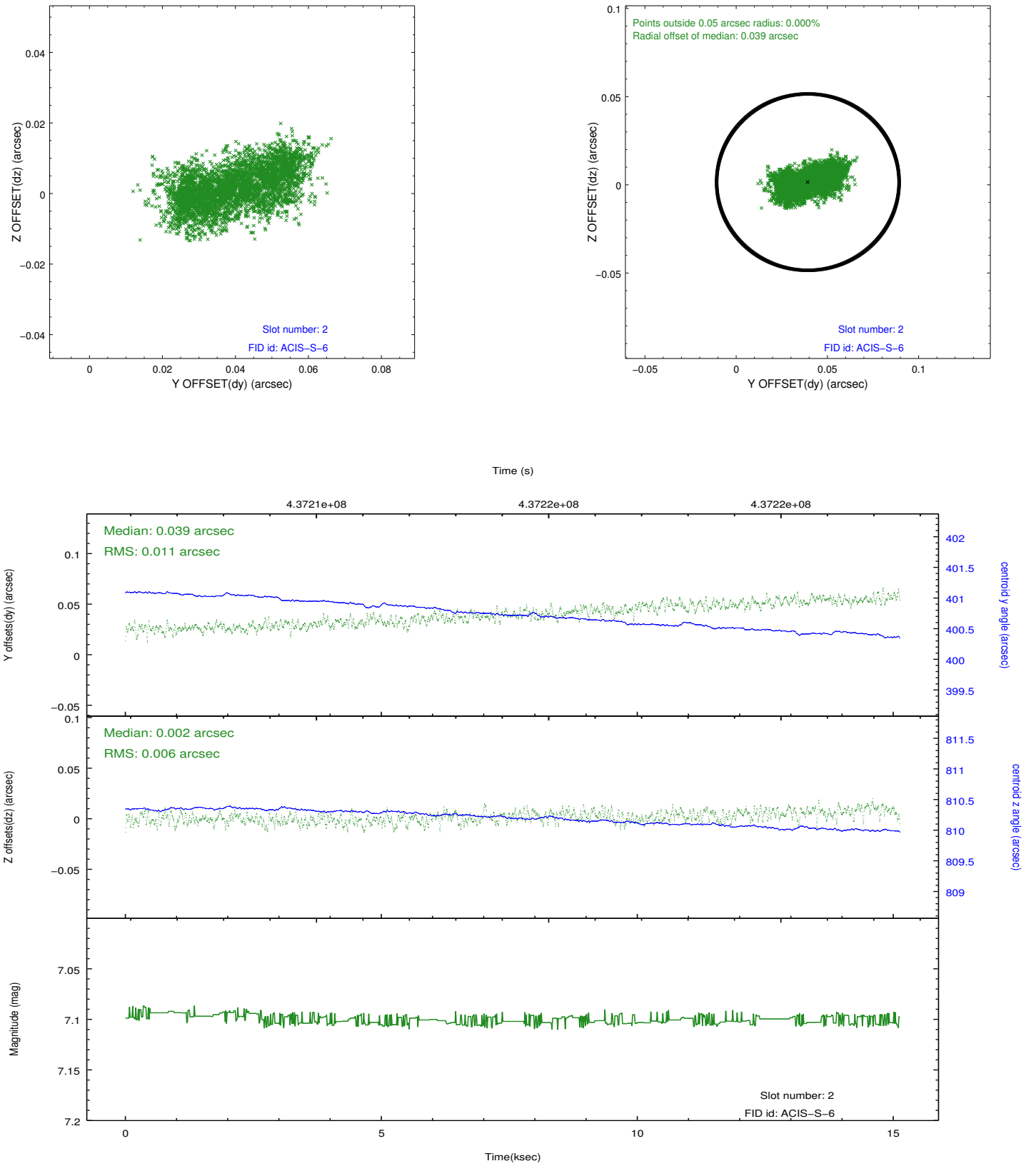
2.5.1 Slot 0



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)	2012.02.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.009599105358

A.2 Comments

The EXPOSURE (and LIVETIME) are 13612.914 s, which is 90.6947% (DTCOR) of the ONTIME of 15009.599 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 $0.4 / (0.4 + 0.04104) = 0.906947$. The EXPOSURE is consistent with the exposure expected if one counts the total number of valid frames (34035) and multiplies by the static exposure time (43104 axaff12834N002_VV001.0.4 s = 13614 s).