

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 14057 - L2 Version 2
Chandra X-Ray Center

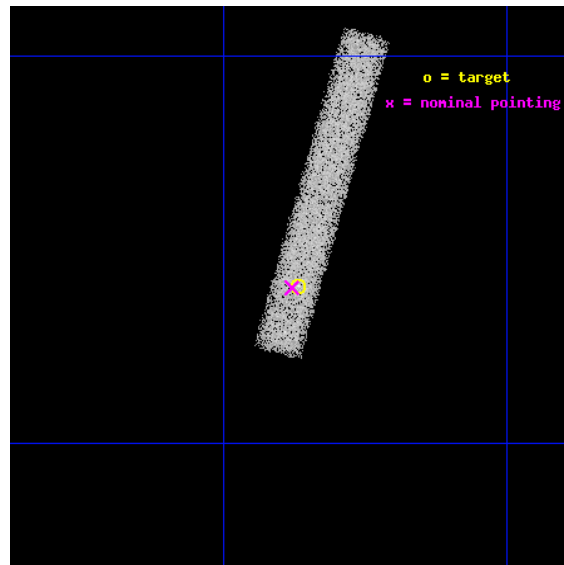
L2 Processing Date : Feb 26 2012

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1 Front

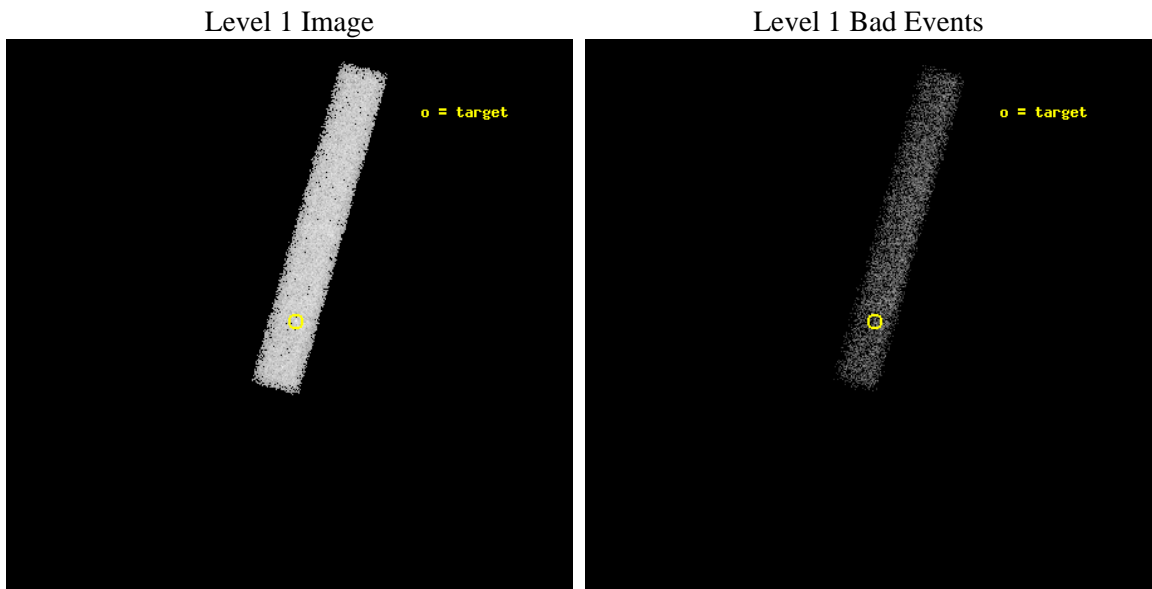
seq_num	501642	Sequence number
obs_id	14057	Observation id
title	PROMPT STUDY OF MAGNETAR OUTBURSTS WITH CHANDRA	Proposal title
observer	Dr. Nanda Rea	Principal investigator
object	Swift J1834.9-0846	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.717167	Observer's specified target RA [deg]
dec_targ	-8.765547	Observer's specified target Dec [deg]
ra_nom	278.72009235536	Nominal RA [deg]
dec_nom	-8.7664099486004	Nominal Dec [deg]
roll_nom	285.80938852063	Nominal Roll [deg]
revision	2	Processing version of data
ontime	41433.997530341	Sum of GTIs [s]
livetime	37578.448694306	Livetime [s]
ontime7	41433.997530341	Sum of GTIs [s]
l2events	22055	Number of level 2 events



2 OBI

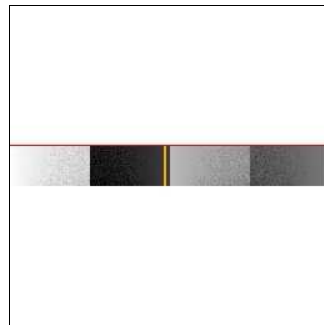
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	41424.946000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	41433.997530341	Sum of GTIs [s]
caldbver	4.4.8	 	ontime7	41433.997530341	Sum of GTIs [s]
date	2012-02-26T16:09:45	Date and time of file creation	l1events	45027	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

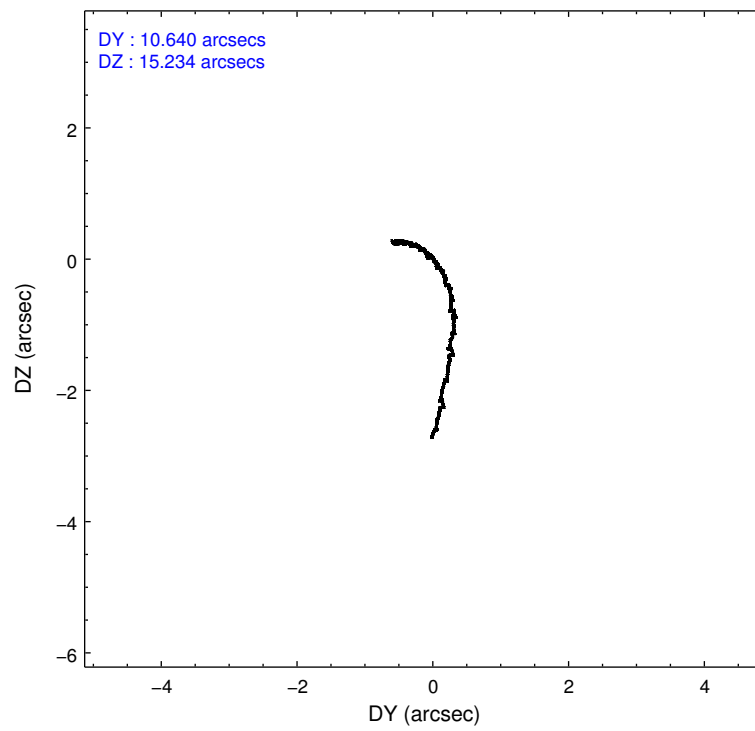
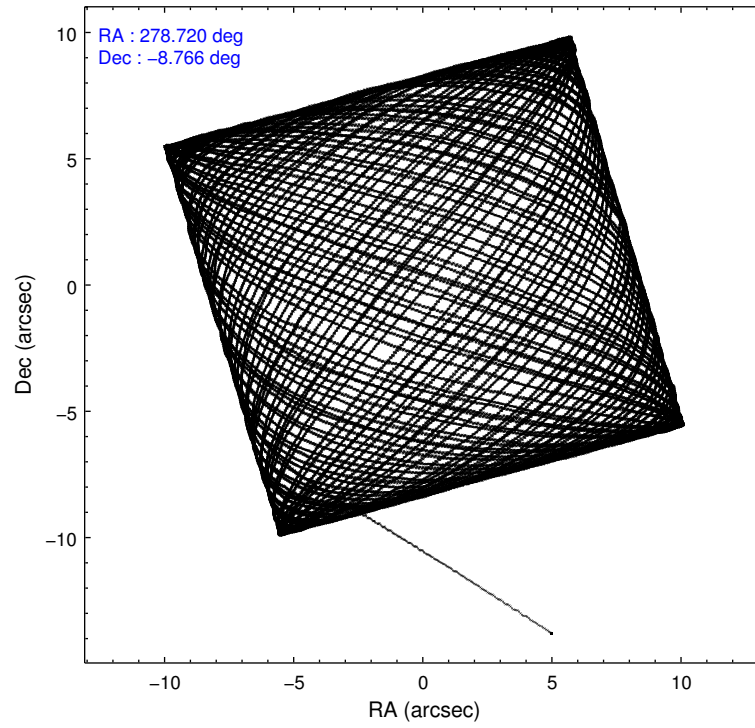
	ccd 7
level 1 events	45027
rejected events	22009
rejected %	48%

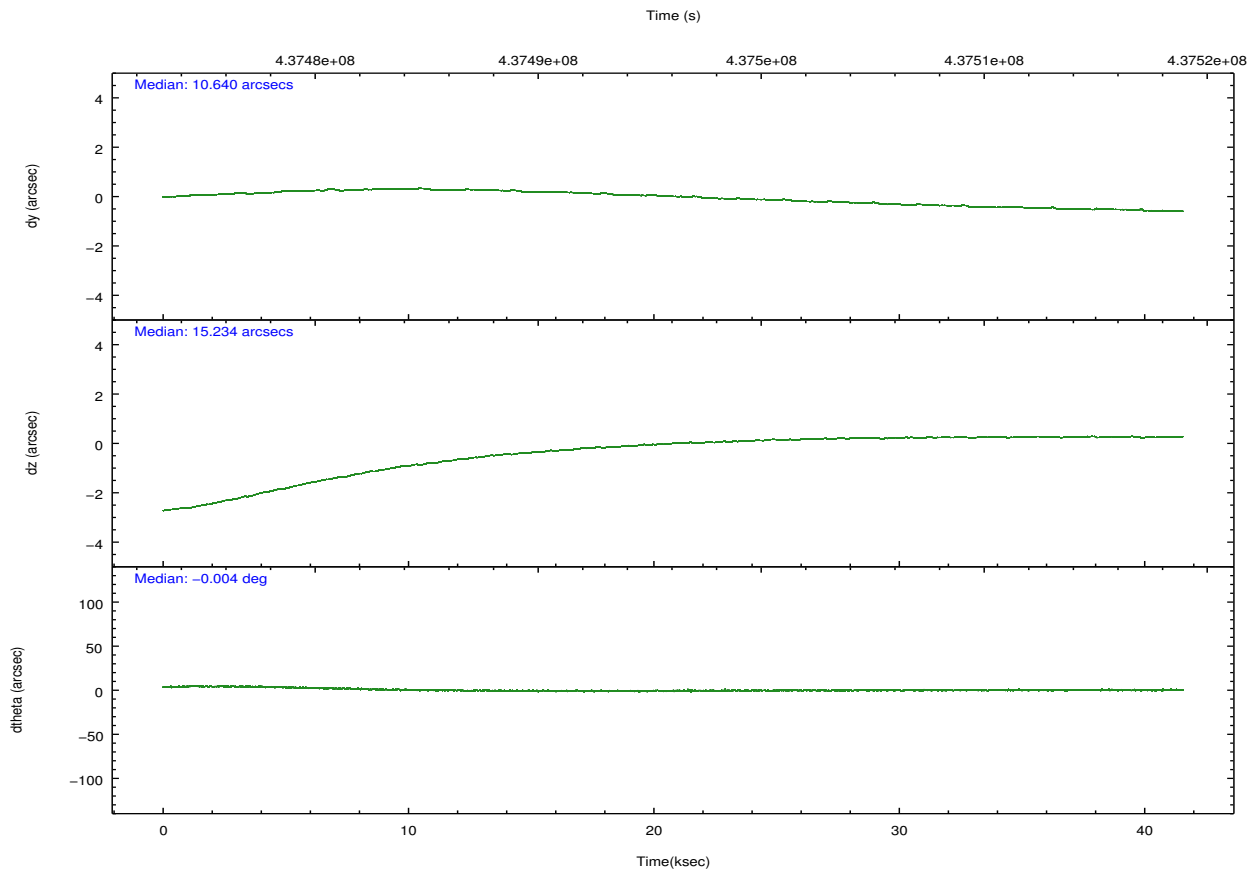
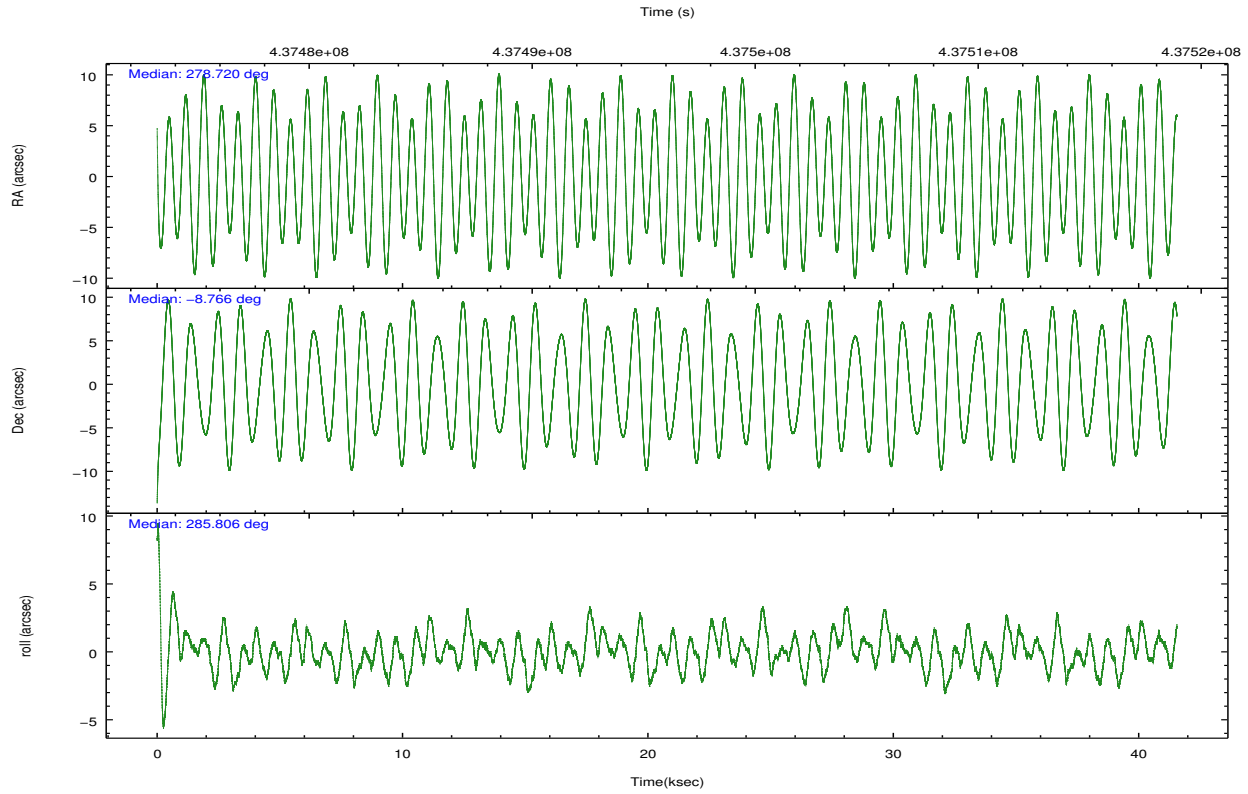
	ccd 7
grade 0 events	2449
	5%
grade 1 events	79
	0%
grade 2 events	4524
	10%
grade 3 events	3026
	6%
grade 4 events	2964
	6%
grade 5 events	4383
	9%
grade 6 events	10055
	22%
grade 7 events	17547
	38%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	278.700000	278.7200923553581	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-8.747623	-8.766409948600392	Subarray start row	449	449
[deg] Pointing Roll	285.649708	285.8093885206318	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)	437475398.184000	437474162.3946			
Observation start date	2011-11-12T08:55:32	2011-11-12T08:36:02			
[s] Observation end time (MET)	437516823.184000	437517052.49686			
Observation end date	2011-11-12T20:25:57	2011-11-12T20:30:52			
Read mode	TIMED	TIMED			

2.3 Aspect



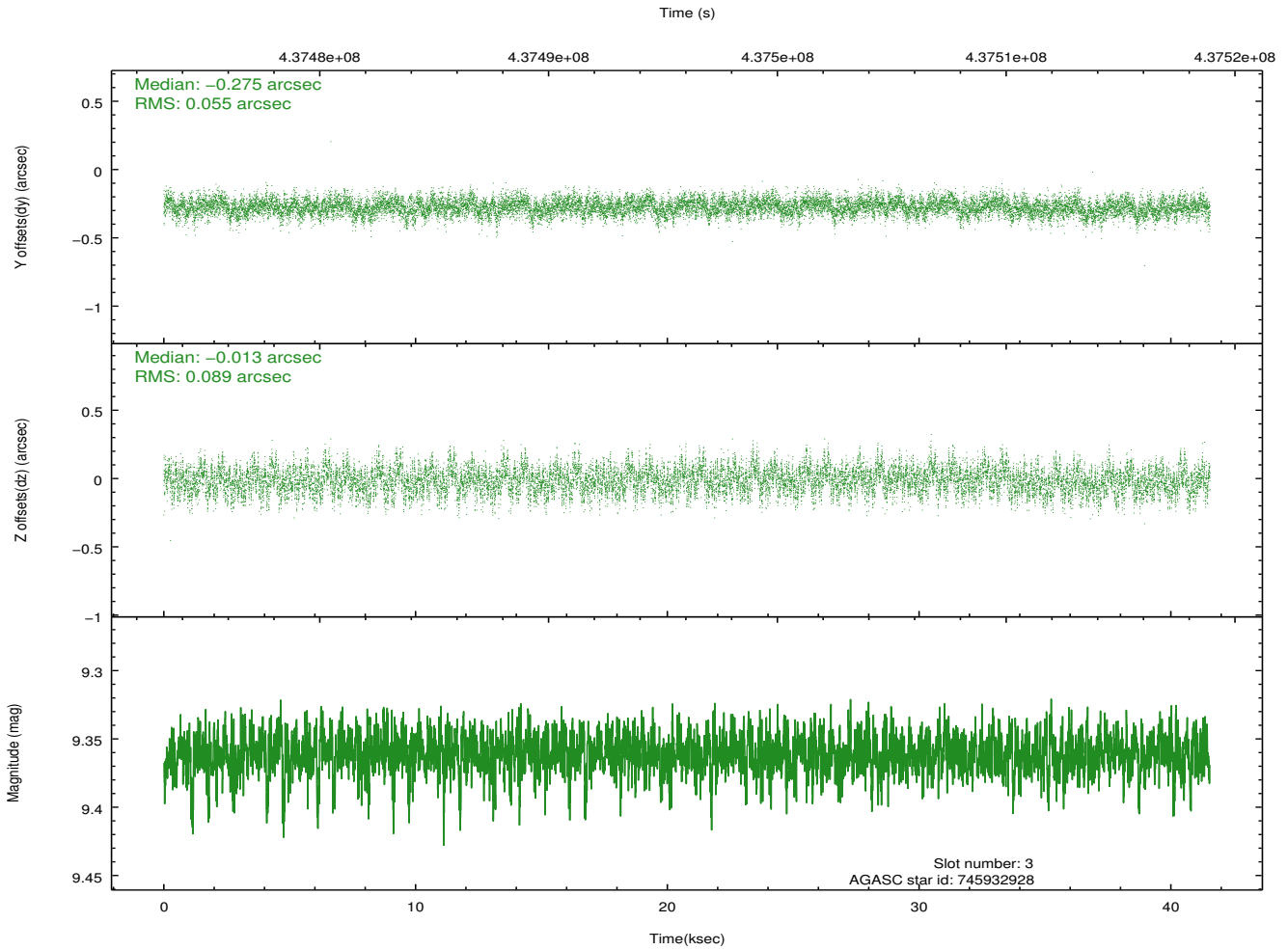
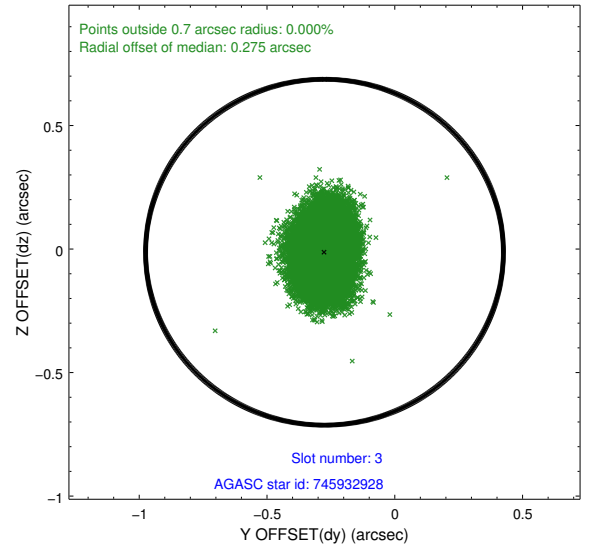
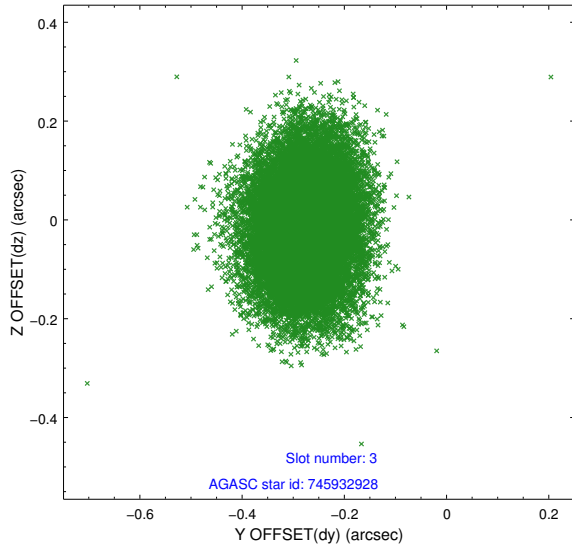


Slot Statistics

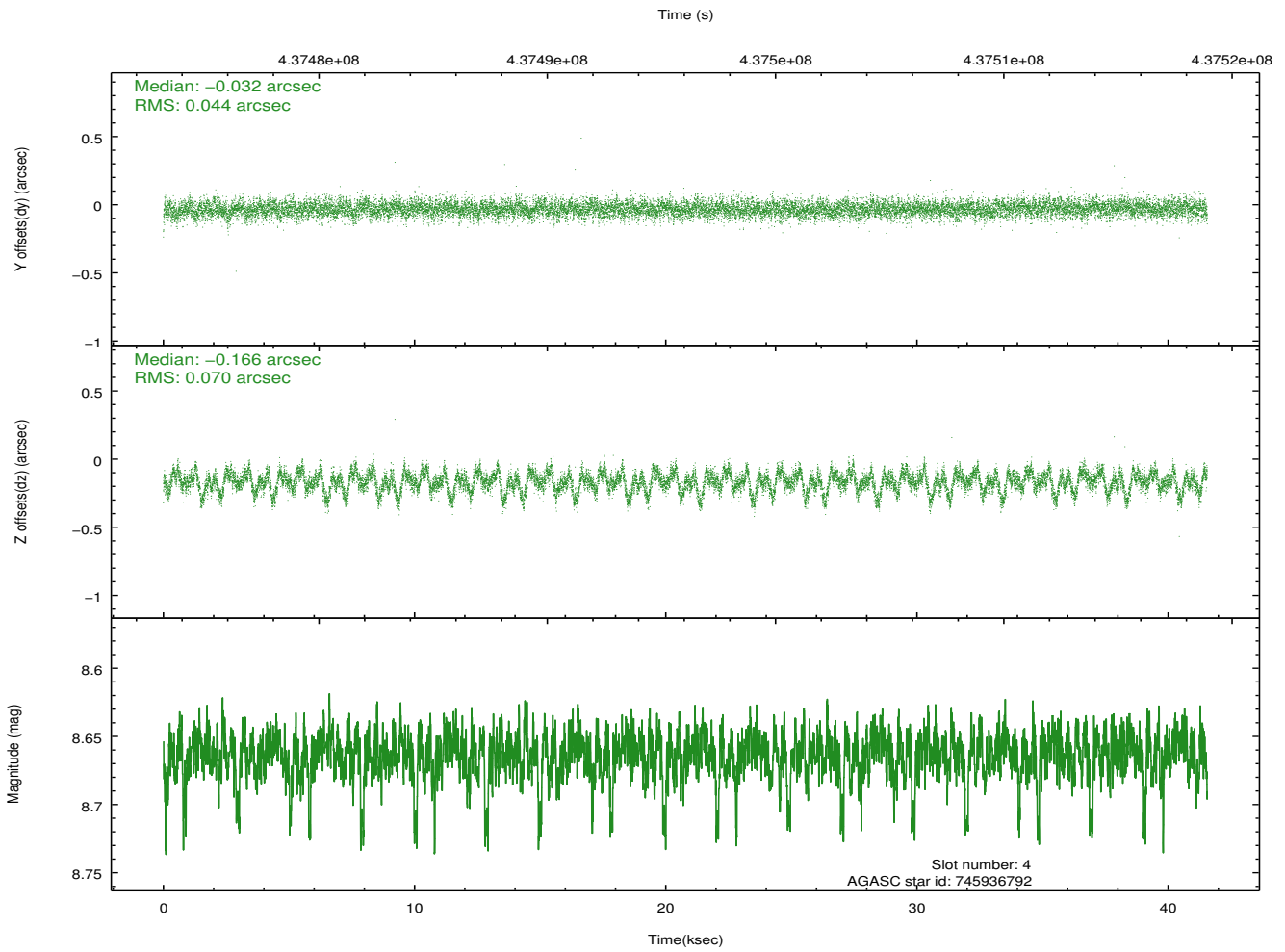
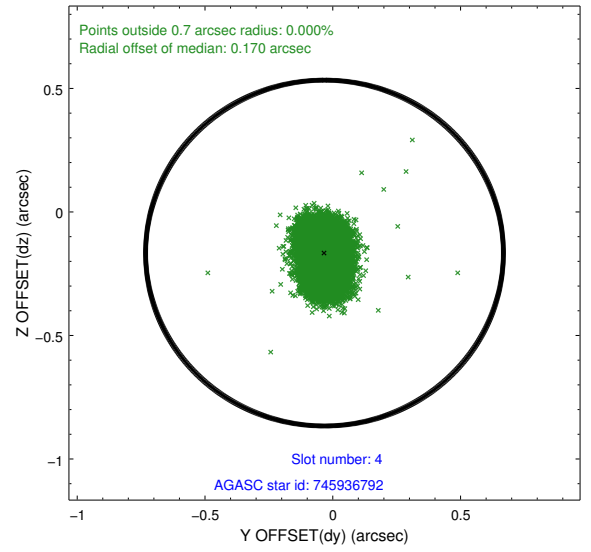
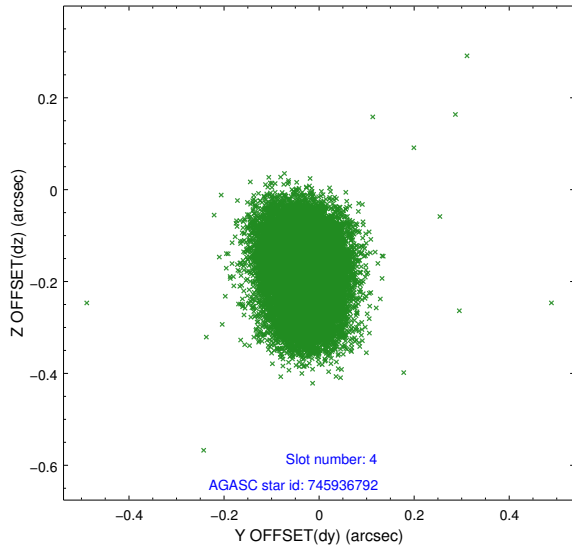
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	10136	-0.070	-0.031	0.014	0.038	0.000000	0.000000	-763.49	-1736.21
1	FID	ACIS-S-4	7.02	10136	0.206	0.042	0.015	0.026	0.000000	0.000000	2150.06	172.34
2	FID	ACIS-S-5	7.05	10136	-0.169	-0.003	0.018	0.034	0.000000	0.000000	-1816.42	165.99
3	GUIDE	745932928	9.36	20250	-0.275	-0.013	0.111	0.184	278.034432	-8.686351	-849.17	-2221.75
4	GUIDE	745936792	8.66	20255	-0.032	-0.166	0.086	0.149	278.841392	-9.051493	1189.30	188.87
5	GUIDE	745938104	8.06	20265	-0.038	0.021	0.074	0.128	279.090231	-8.877678	826.23	1210.29
6	GUIDE	745939984	9.63	20243	-0.112	-0.007	0.111	0.186	279.137319	-8.258661	-1273.79	1975.03
7	GUIDE	746460752	8.69	20267	0.454	0.164	0.076	0.125	278.807572	-9.403686	2378.12	-268.68

2.4 Star Slots

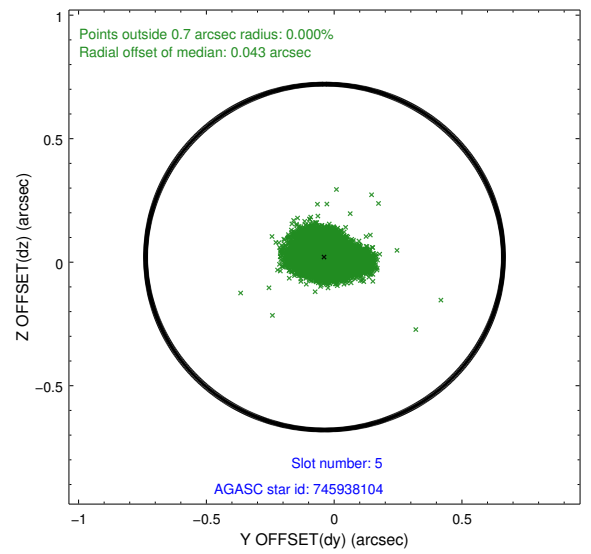
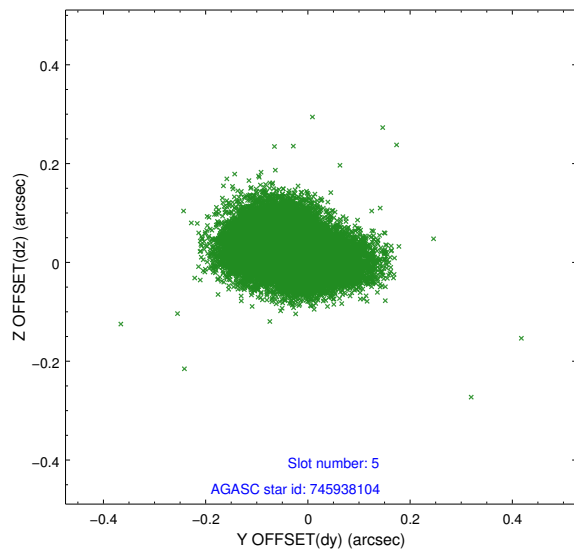
2.4.1 Slot 3



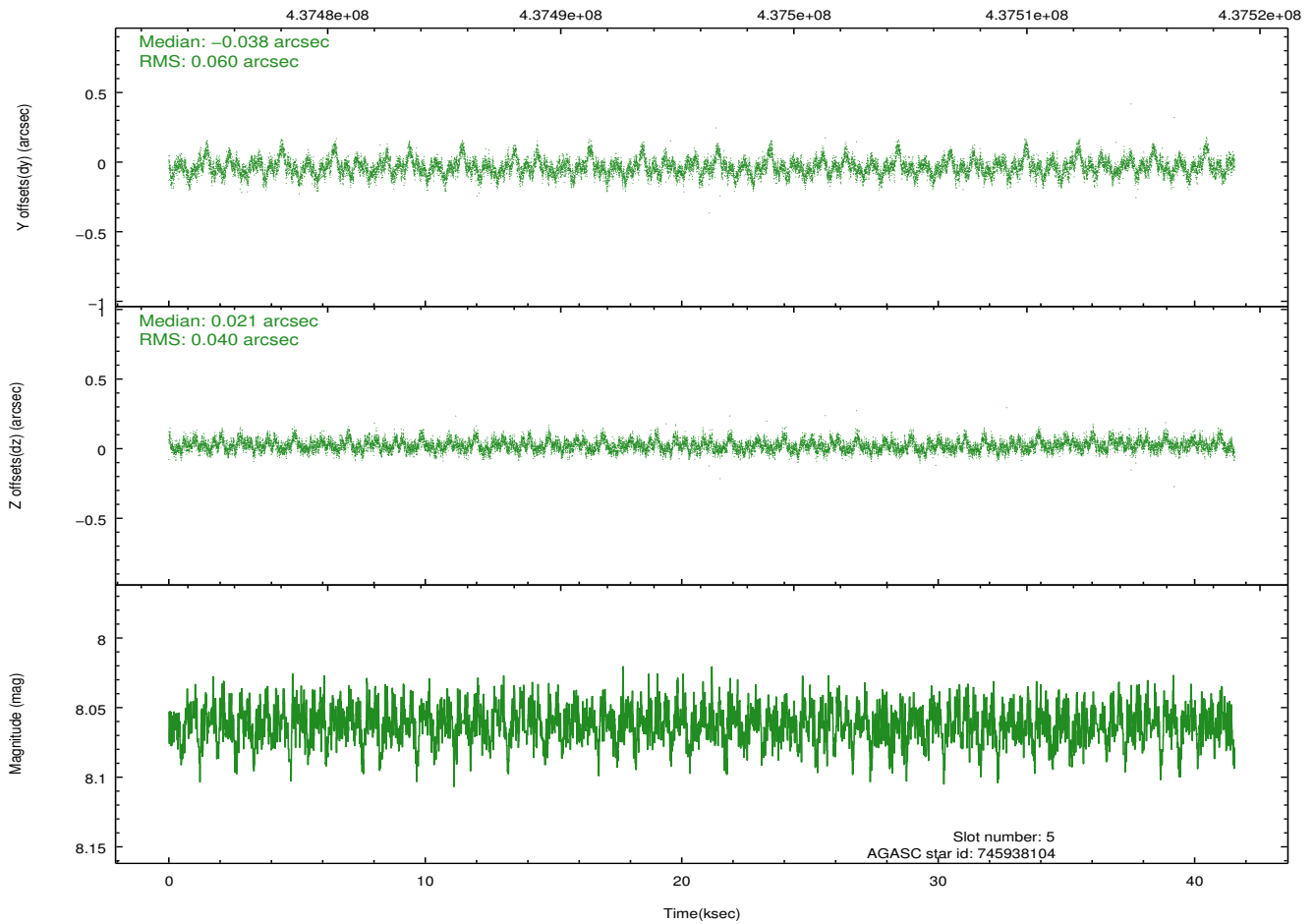
2.4.2 Slot 4



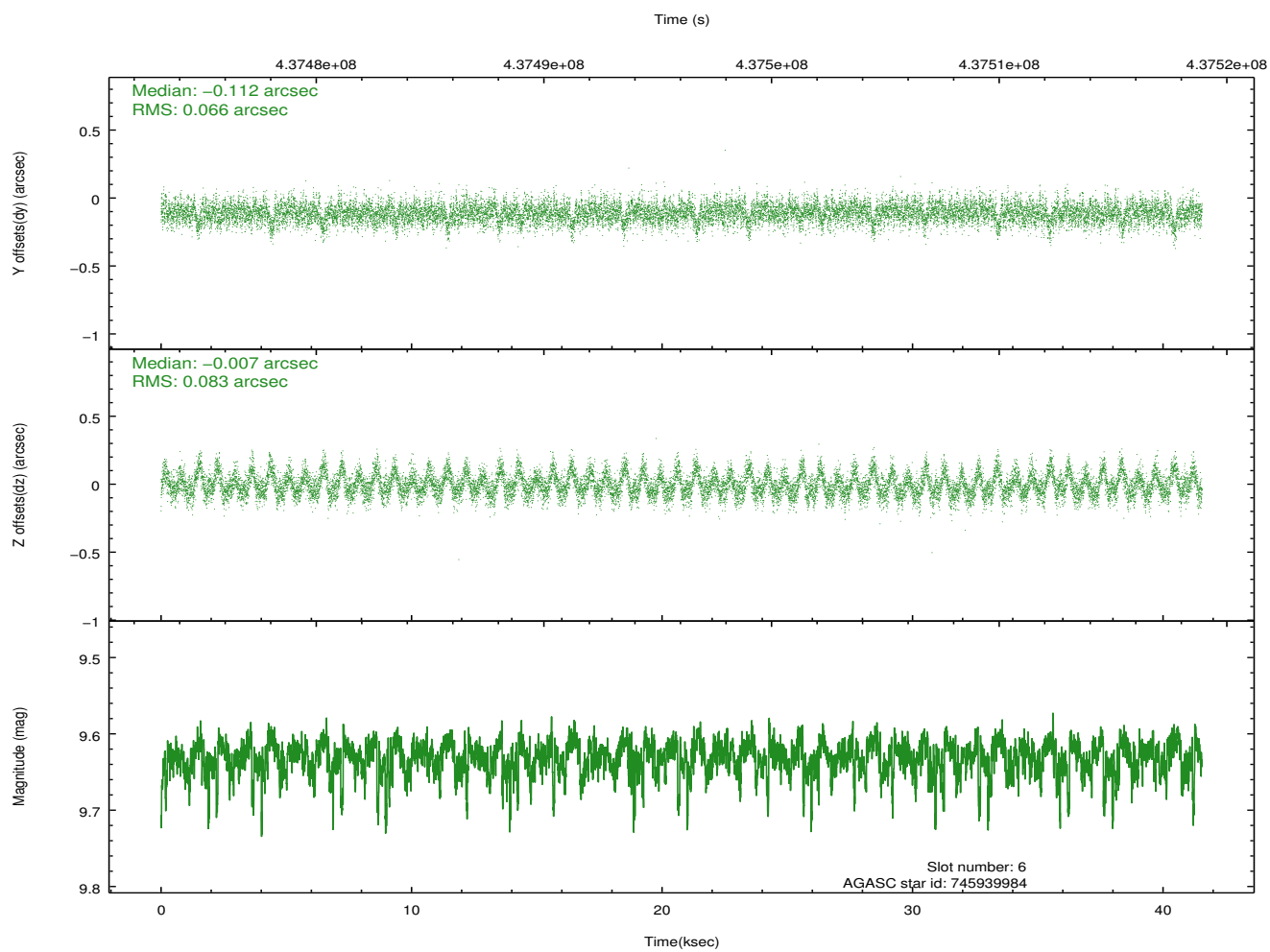
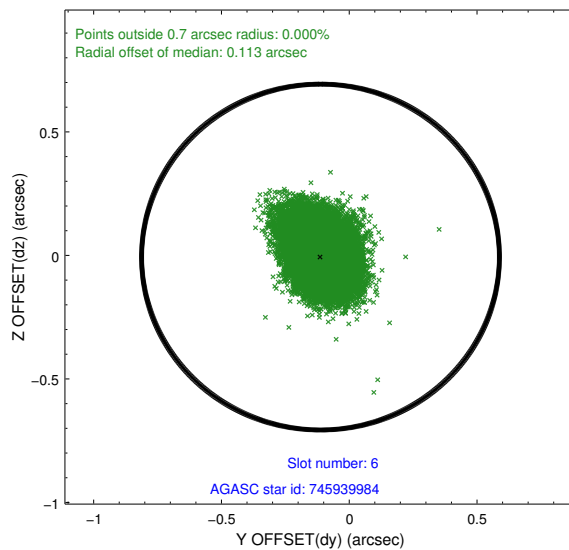
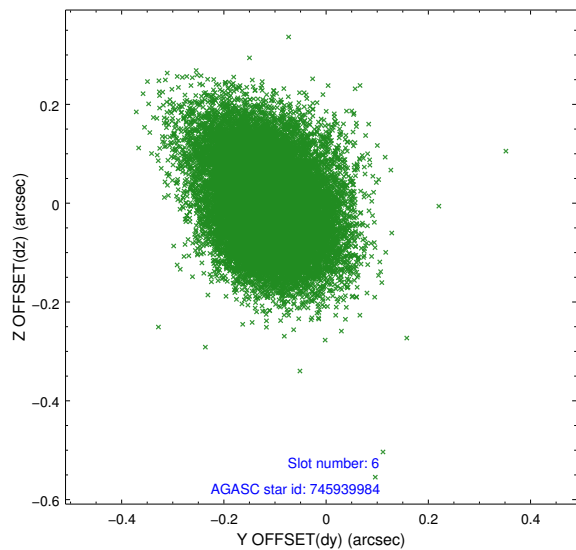
2.4.3 Slot 5



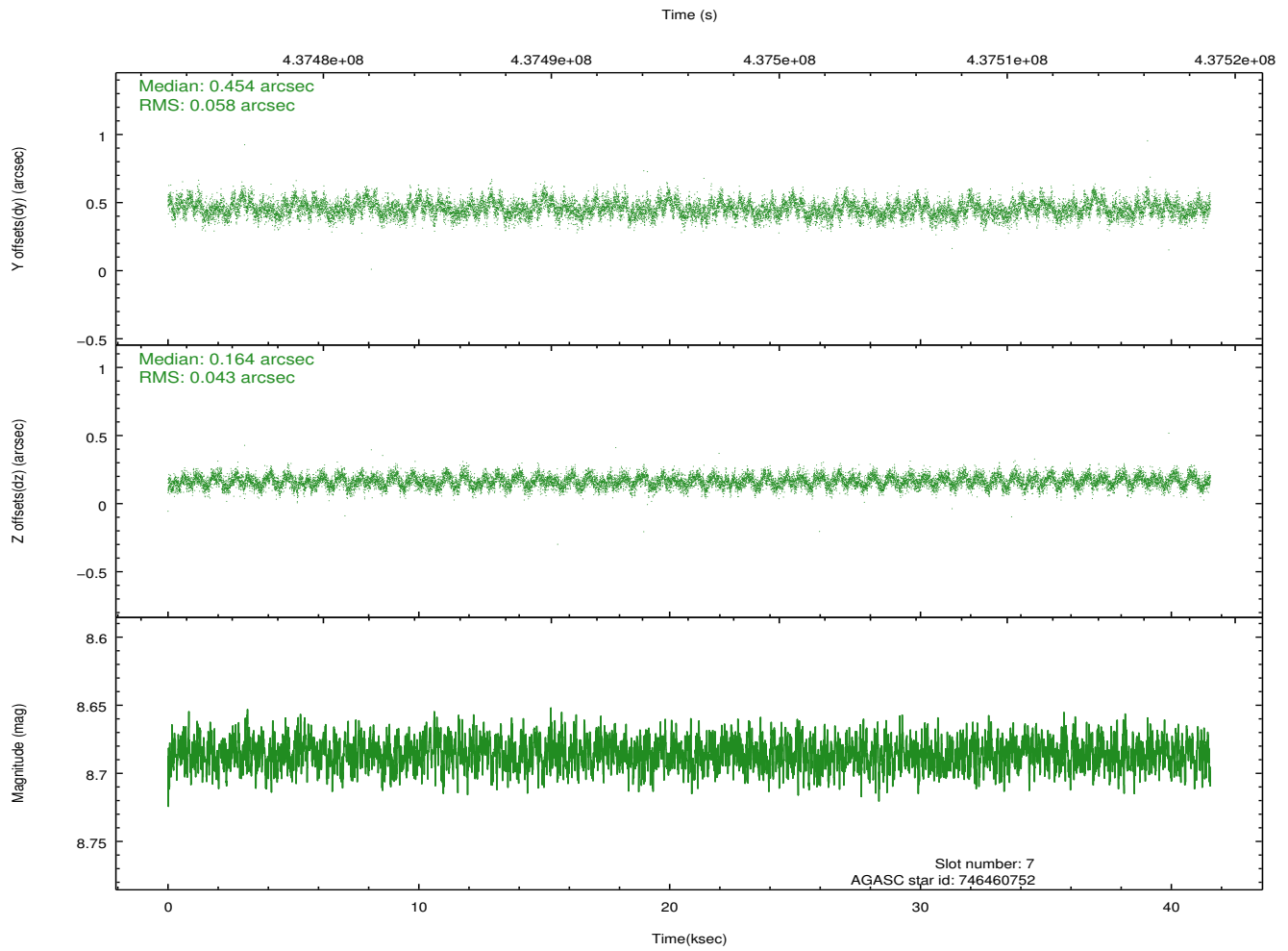
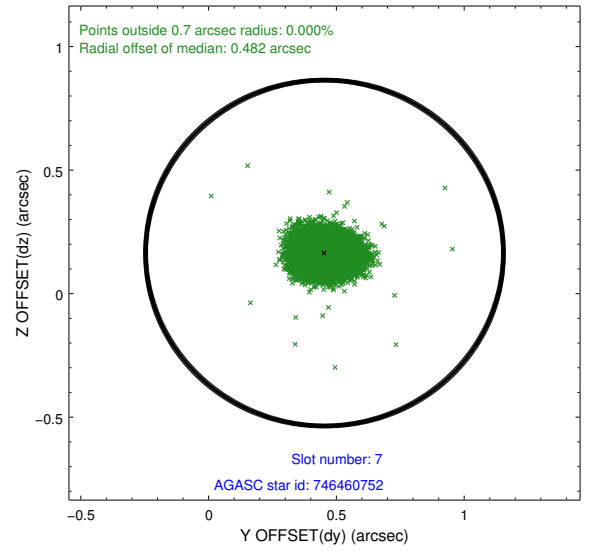
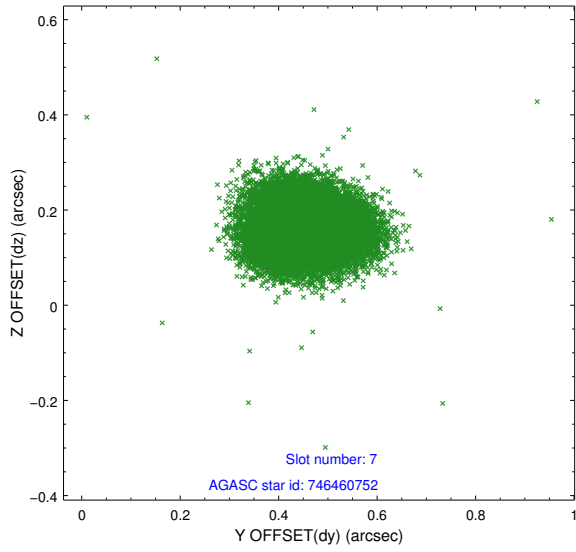
Time (s)



2.4.4 Slot 6

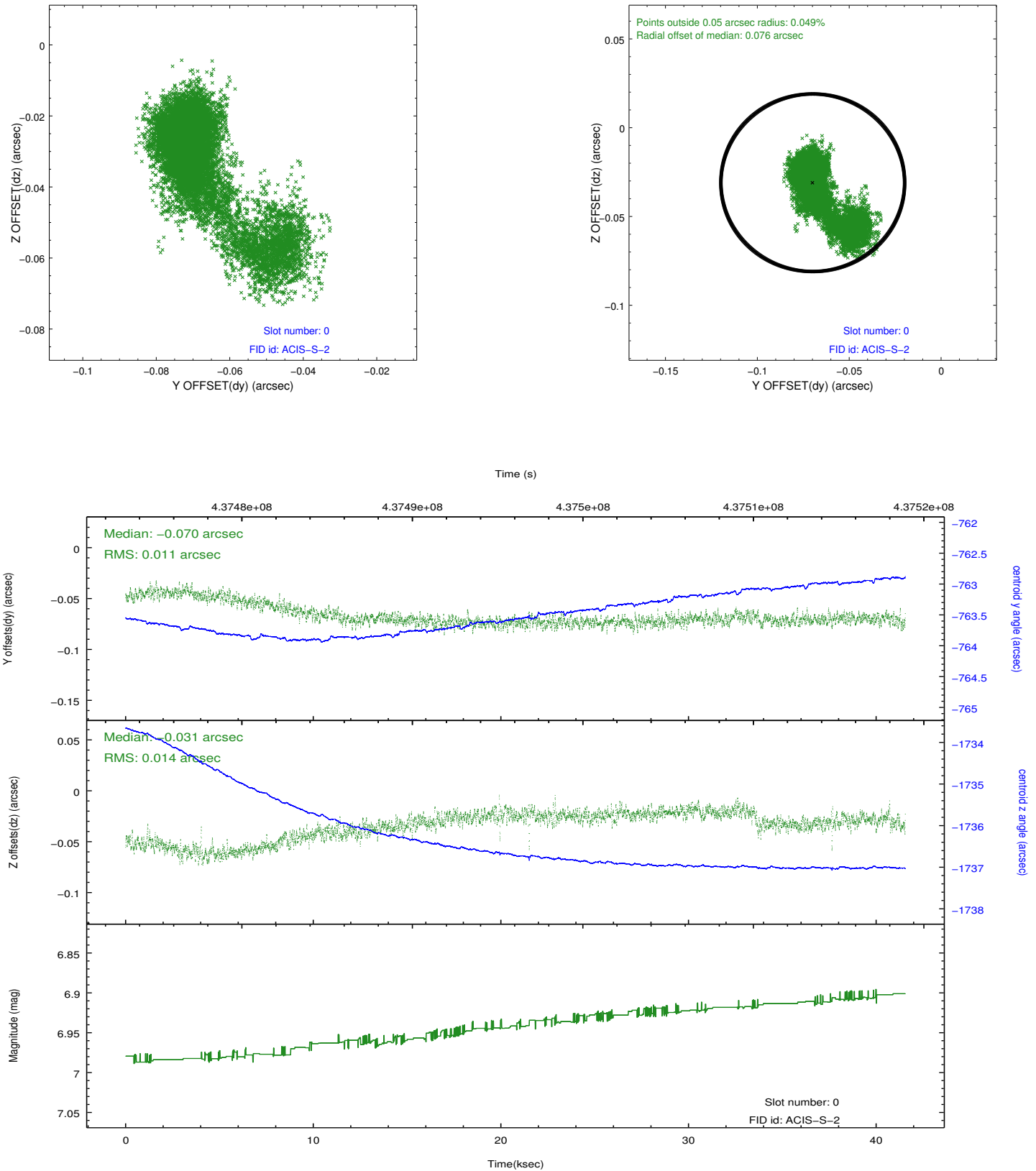


2.4.5 Slot 7

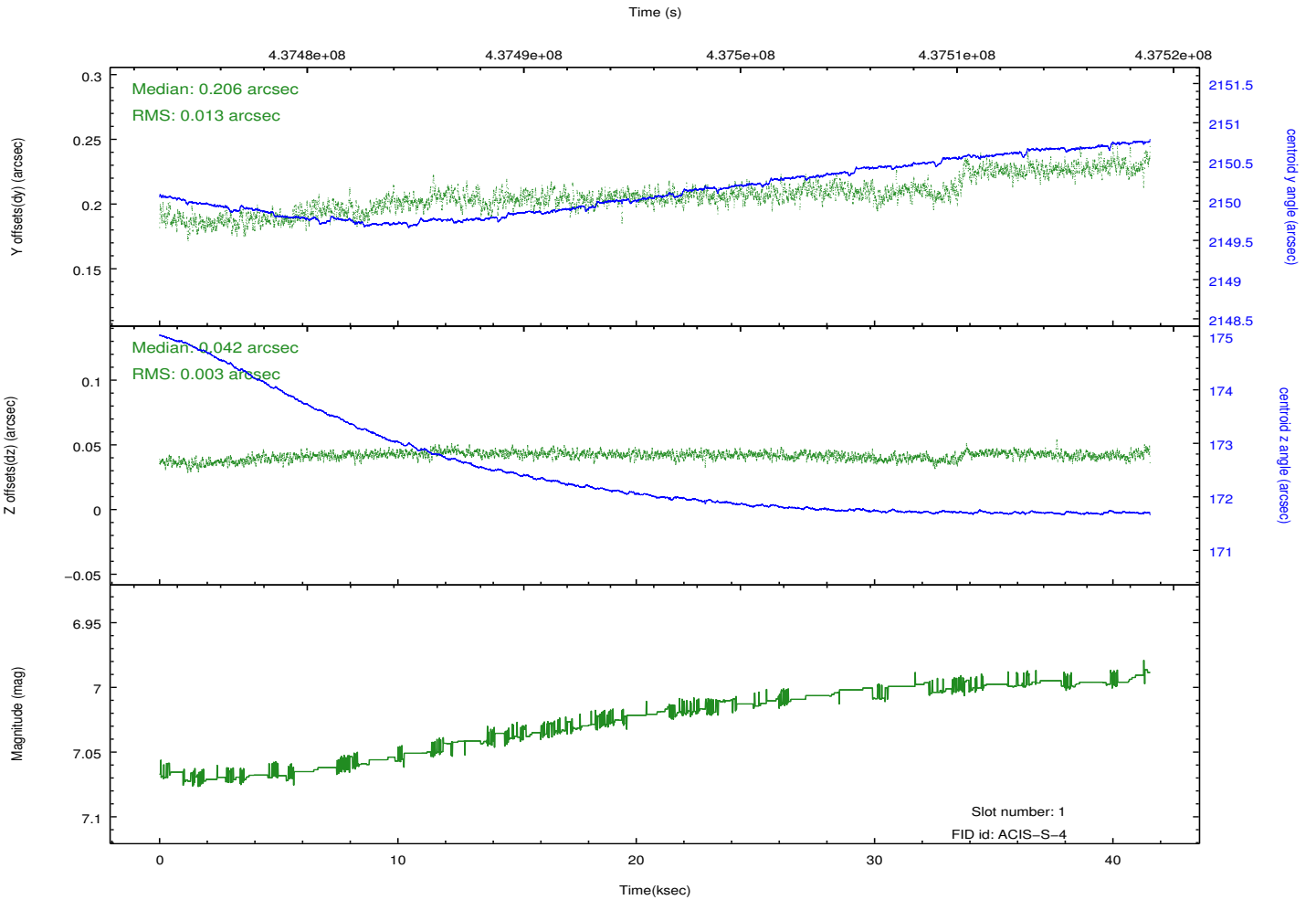
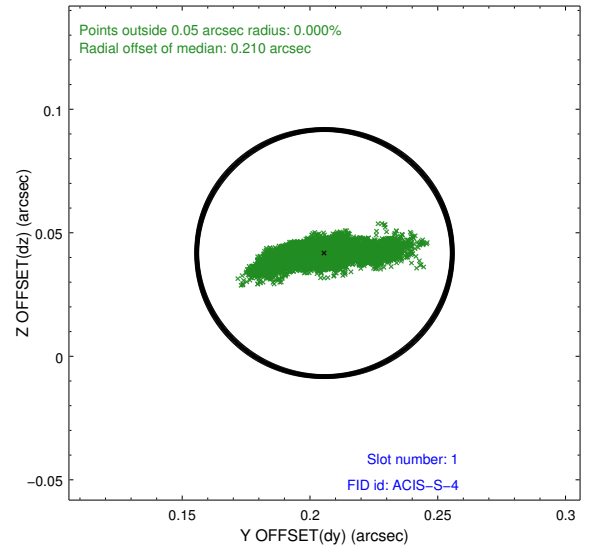
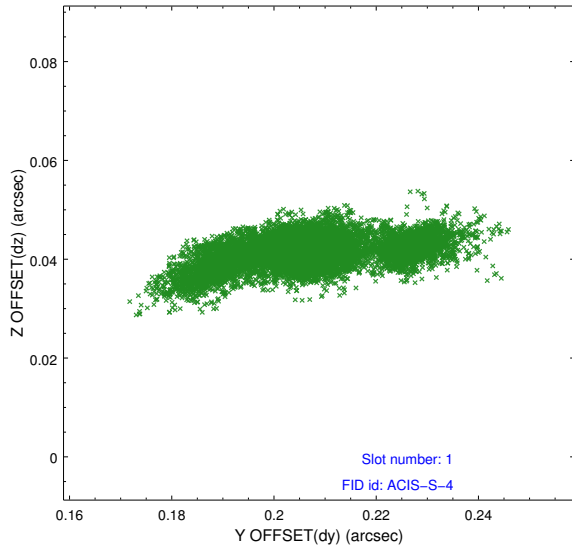


2.5 FID Slots

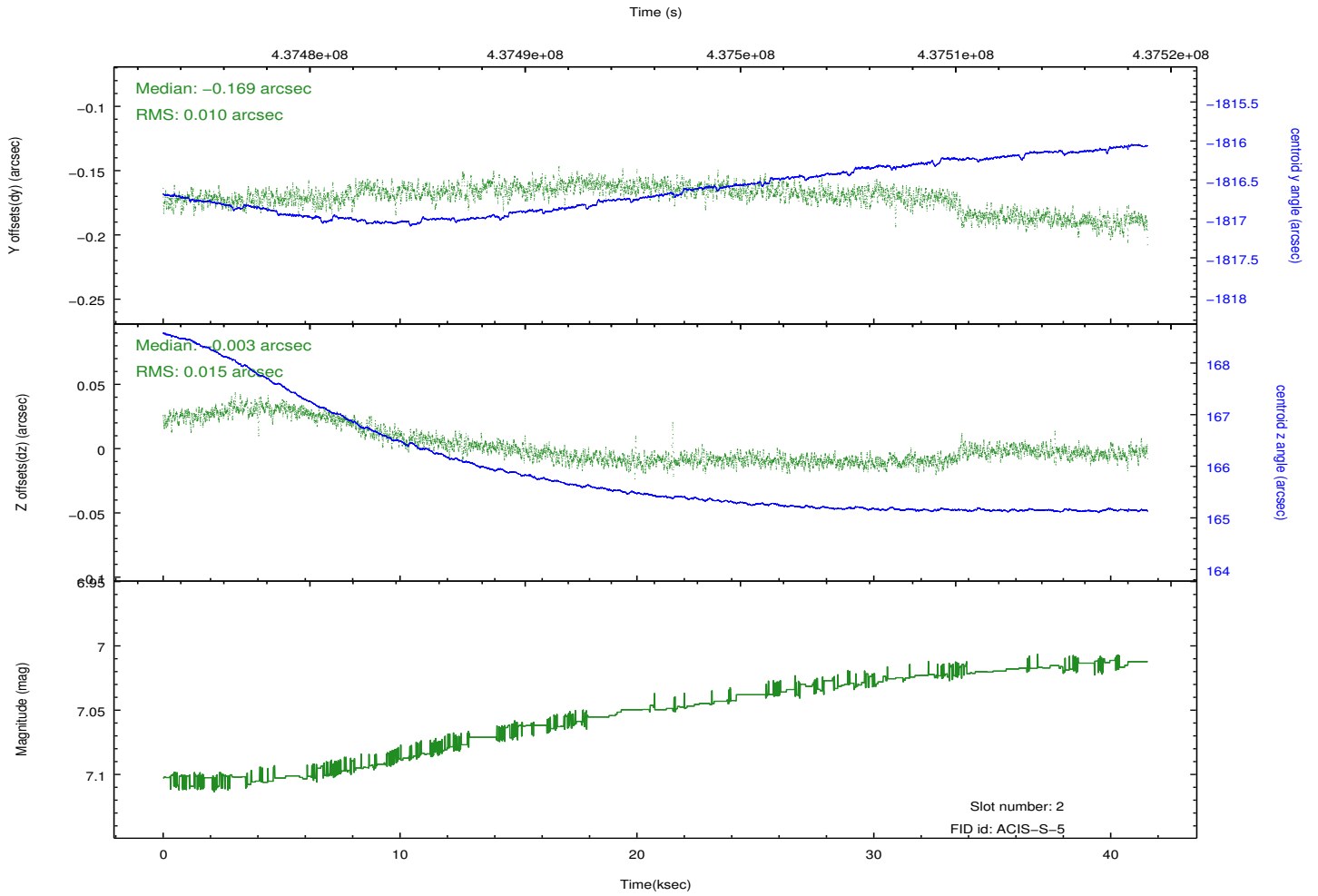
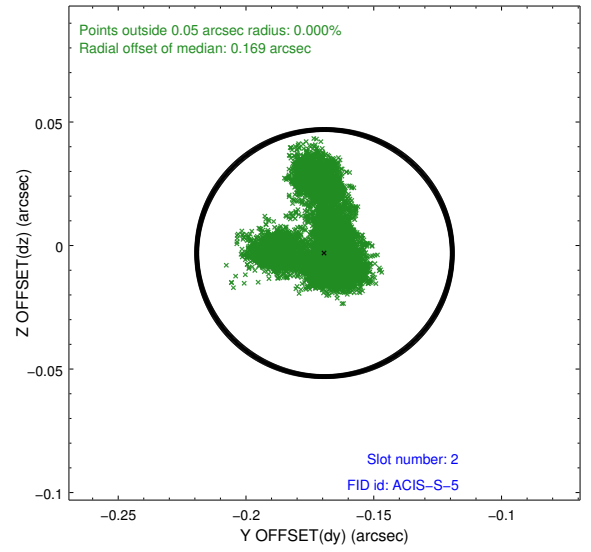
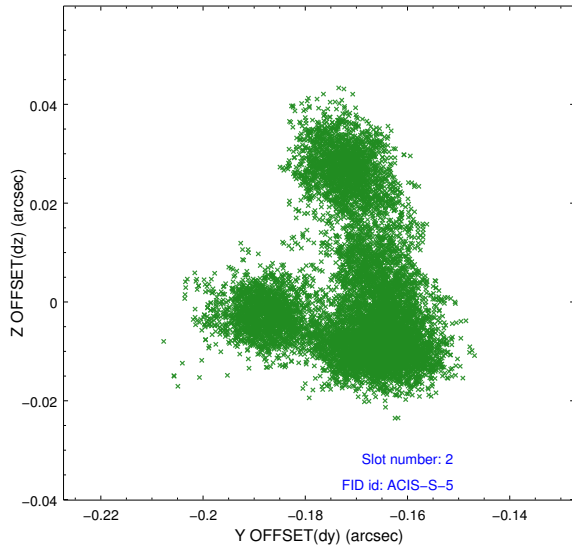
2.5.1 Slot 0



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	41.433997530341

A.2 Comments

Monitor constraint met, follows obs14056 by 41 days. === The EXPOSURE (and LIVETIME) are 37578.45 s, which is 90.69% (DTCOR) of the ONTIME of 41434.00 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 $0.4 / (0.4 + 0.04104) = 0.9069$. The EXPOSURE is consistent with the exposure expected if one counts the total number of valid frames (93954) and multiplies by the static exposure time (93954 axaff14057N002_VV001_vv2.txt vrc.9754.axaff14