

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 14511 - L2 Version 3
Chandra X-Ray Center

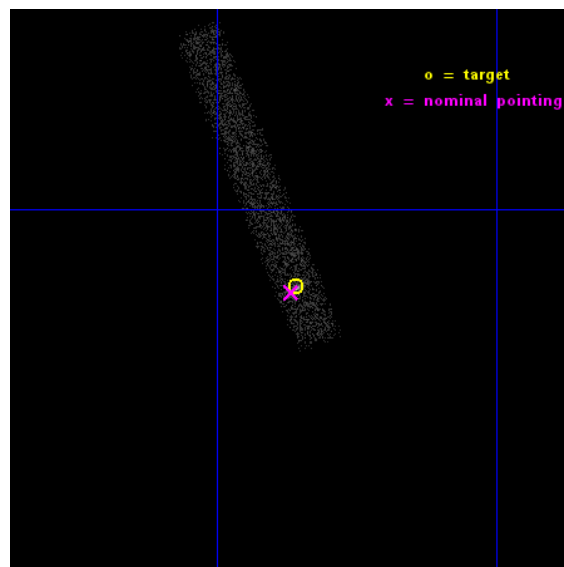
L2 Processing Date : Dec 11 2014

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1 Front

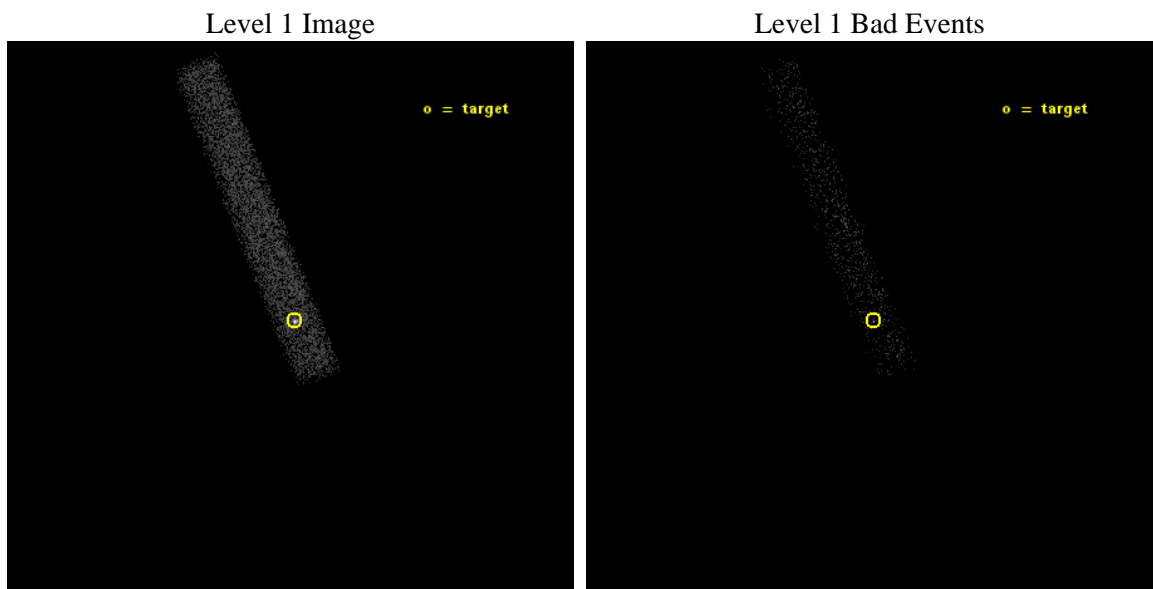
seq_num	702748	Sequence number
obs_id	14511	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	RXJ1131-1231	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96676962732	Nominal RA [deg]
dec_nom	-12.534933921188	Nominal Dec [deg]
roll_nom	247.68400362596	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10070.399399757	Sum of GTIs [s]
livetime	9133.3206963154	Livetime [s]
ontime7	10070.399399757	Sum of GTIs [s]
l2events	8465	Number of level 2 events



2 OBI

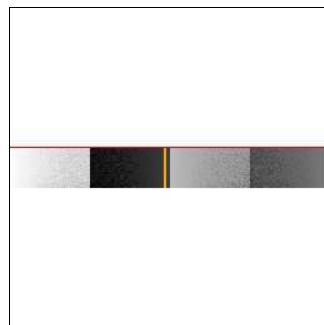
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	10070.399399757	Sum of GTIs [s]
caldsver	4.6.4	 	ontime7	10070.399399757	Sum of GTIs [s]
date	2014-12-12T04:22:45	Date and time of file creation	l1events	13288	Number of level 1 events
revision	3	Processing version of data			

2.1.4 Events

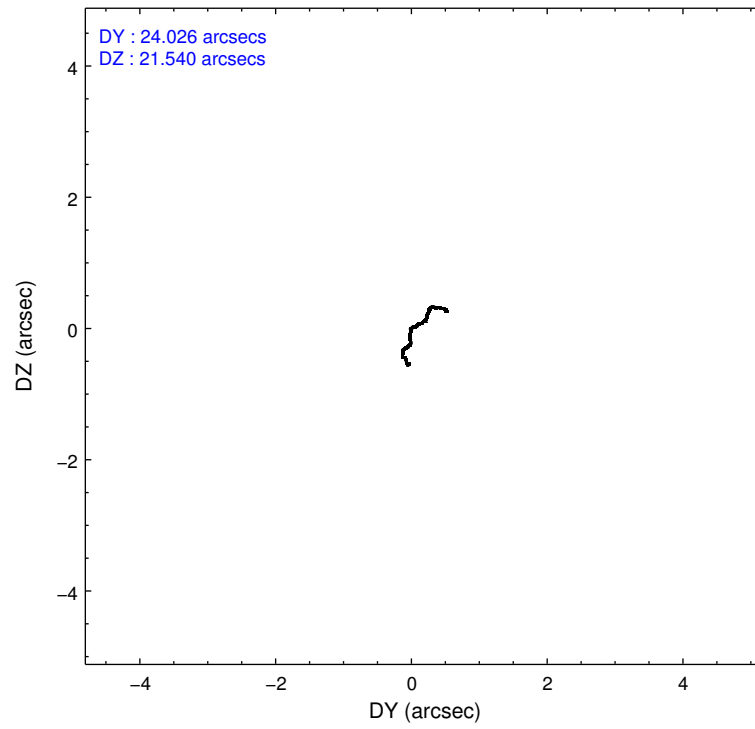
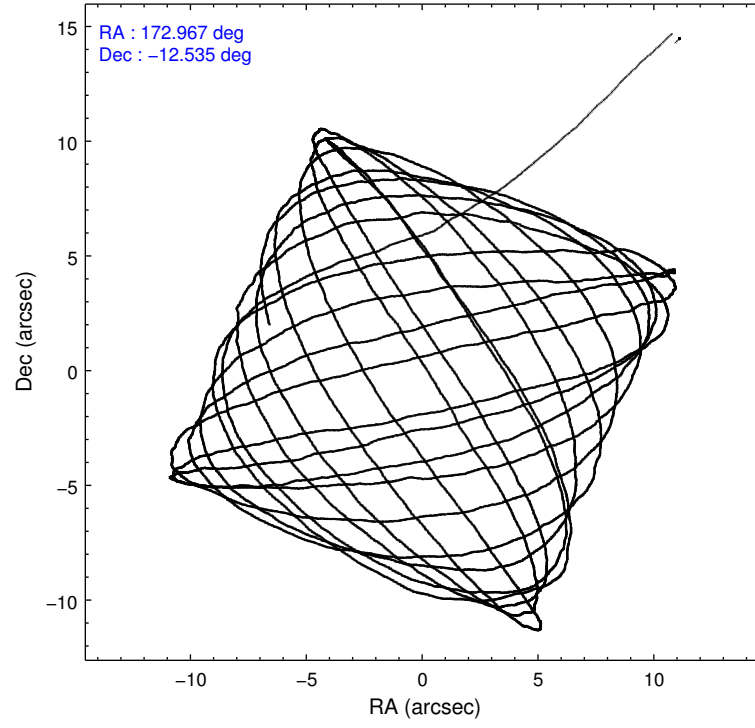
	ccd 7
level 1 events	13288
rejected events	4651
rejected %	35%

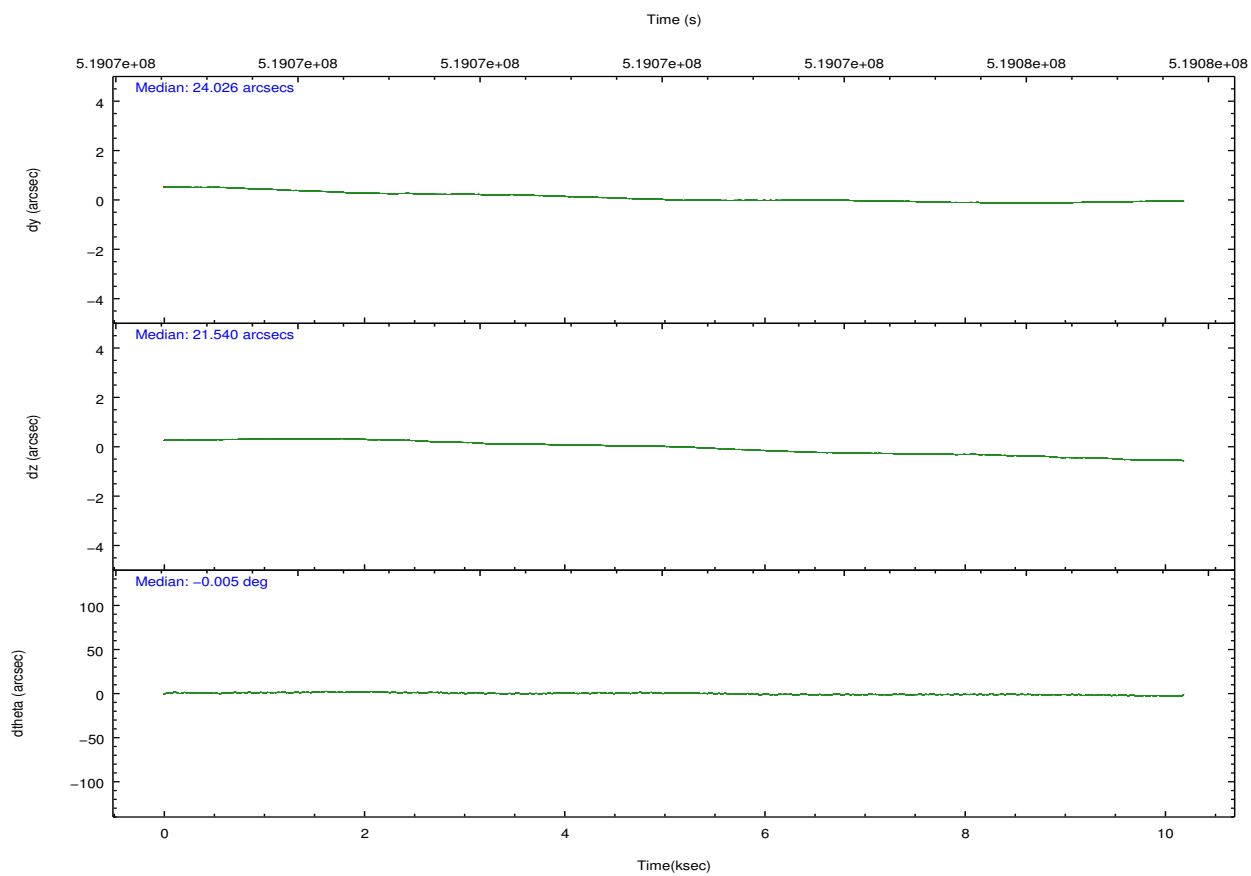
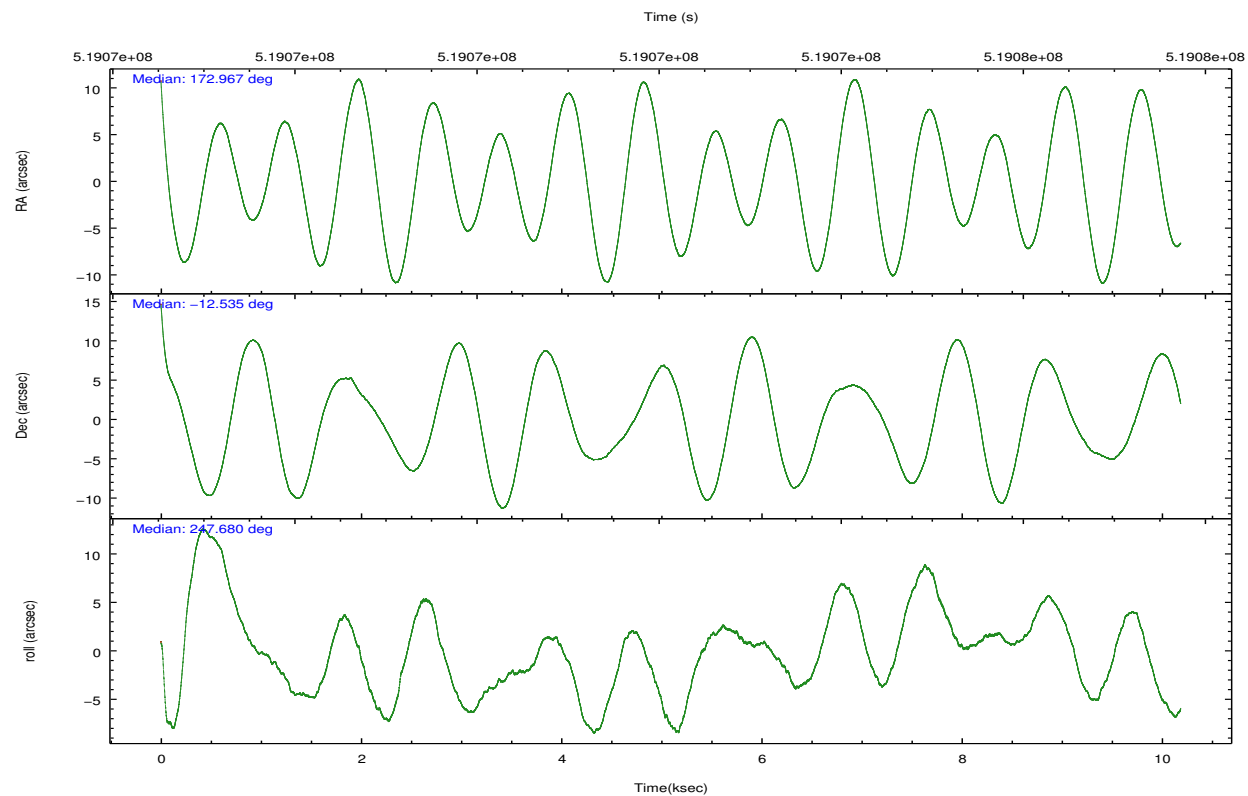
	ccd 7
grade 0 events	1575
	11%
grade 1 events	29
	0%
grade 2 events	1998
	15%
grade 3 events	1107
	8%
grade 4 events	1106
	8%
grade 5 events	946
	7%
grade 6 events	2854
	21%
grade 7 events	3673
	27%

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	172.962666	172.9667696273175	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-12.507935	-12.53493392118773	Subarray start row	449	449
[deg] Pointing Roll	247.526475	247.6840036259631	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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	519067222.184000	519066223.46109			
Observation start date	2014-06-13T17:19:15	2014-06-13T17:03:43			
[s] Observation end time (MET)	519077222.184000	519078249.78675			
Observation end date	2014-06-13T20:05:55	2014-06-13T20:24:09			
Read mode	TIMED	TIMED			

2.3 Aspect



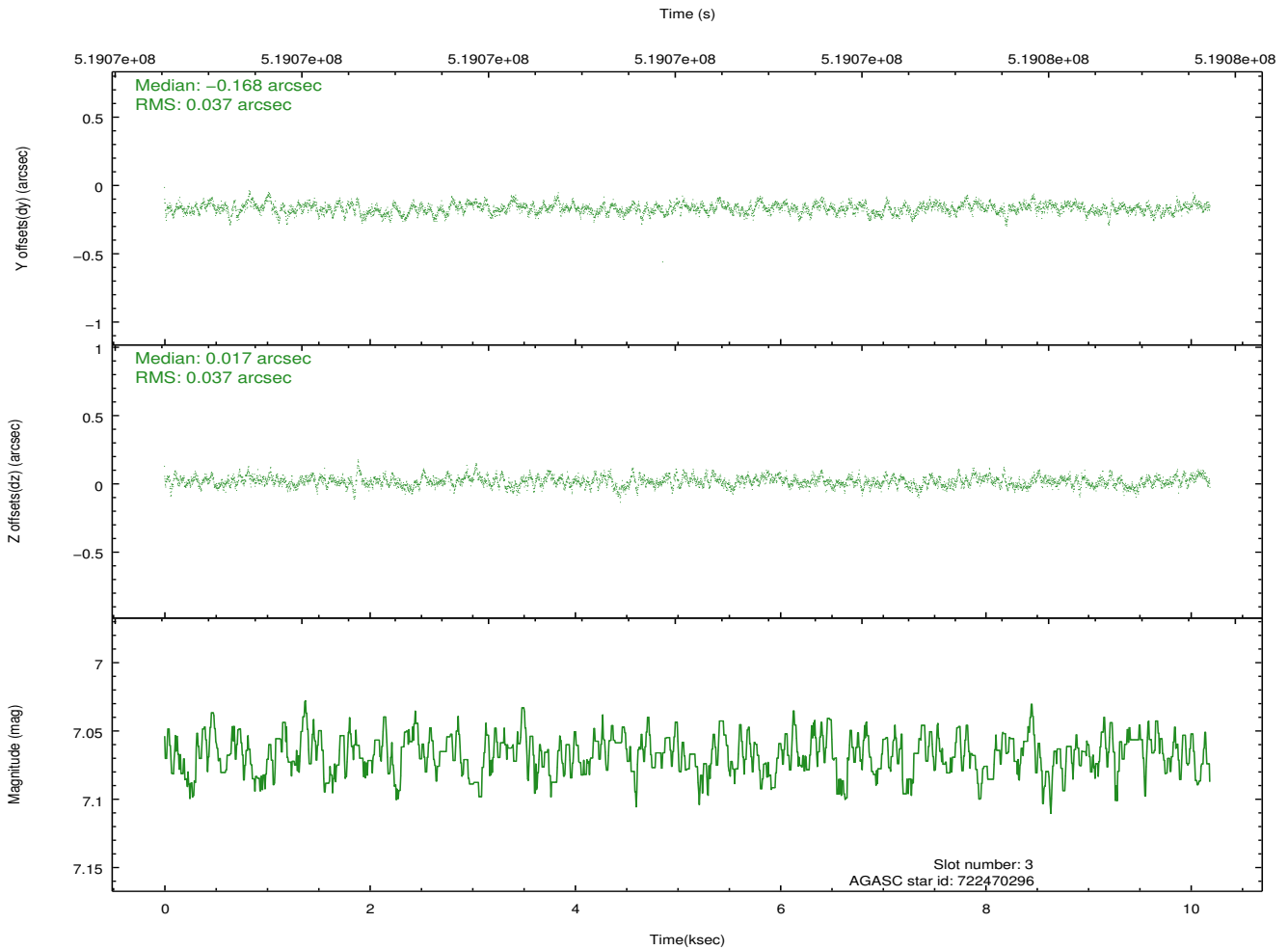
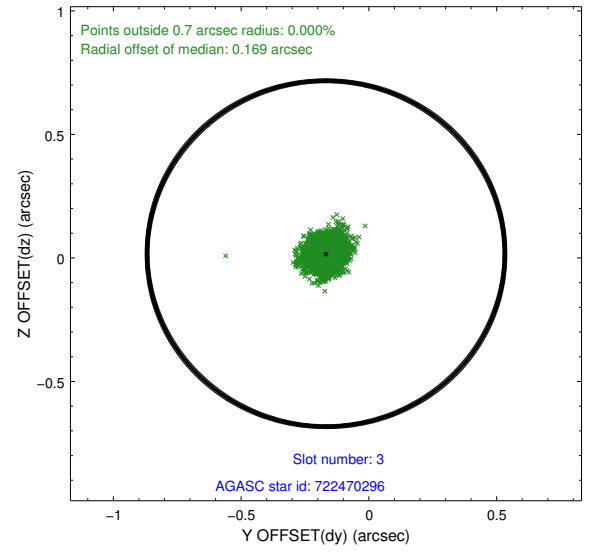
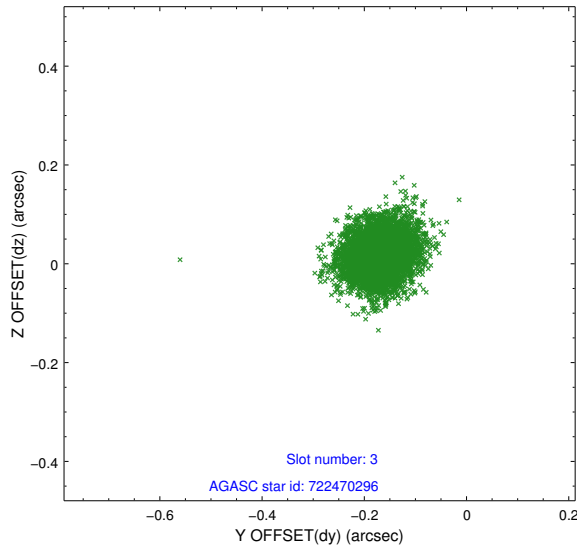


Slot Statistics

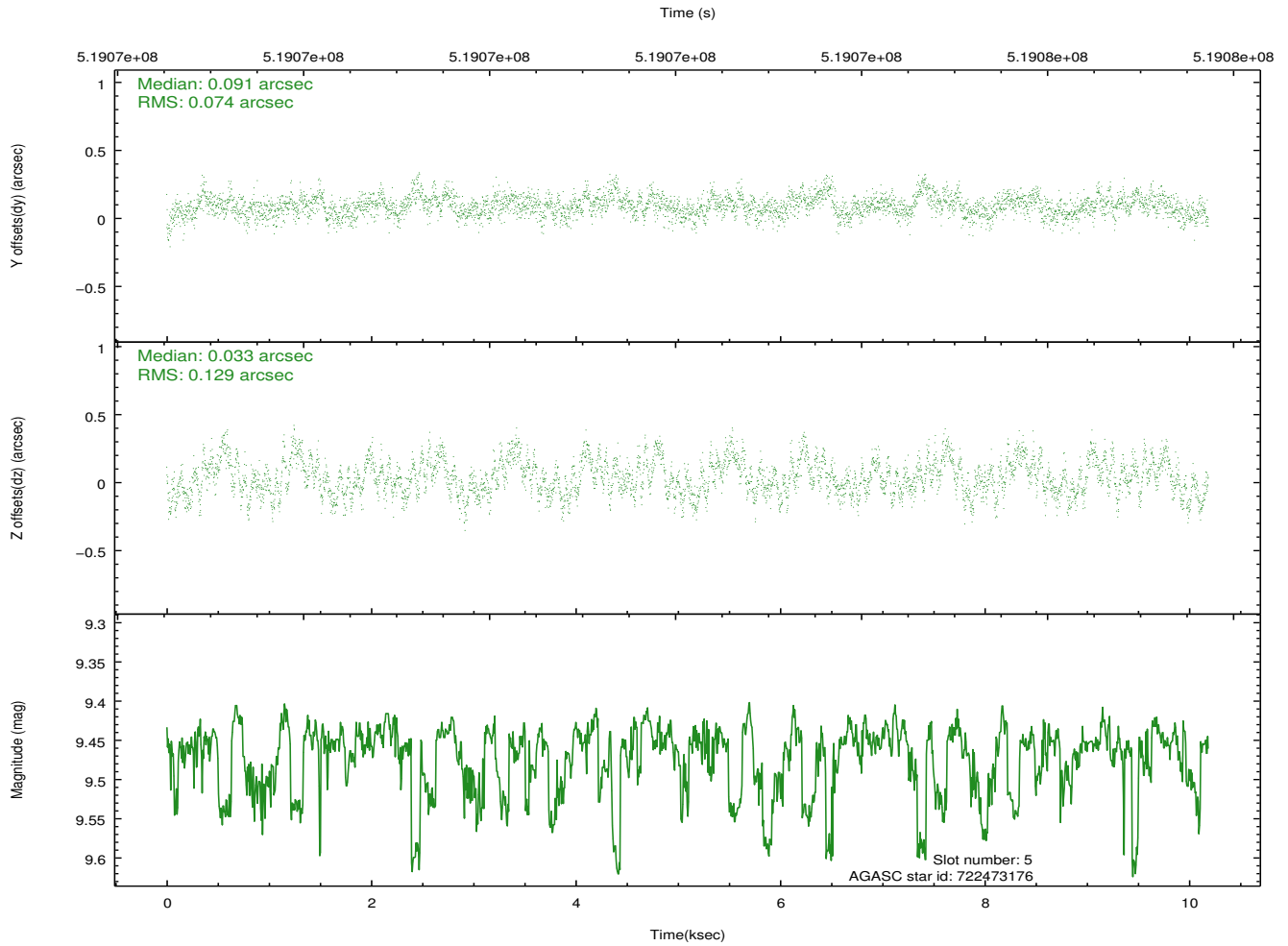
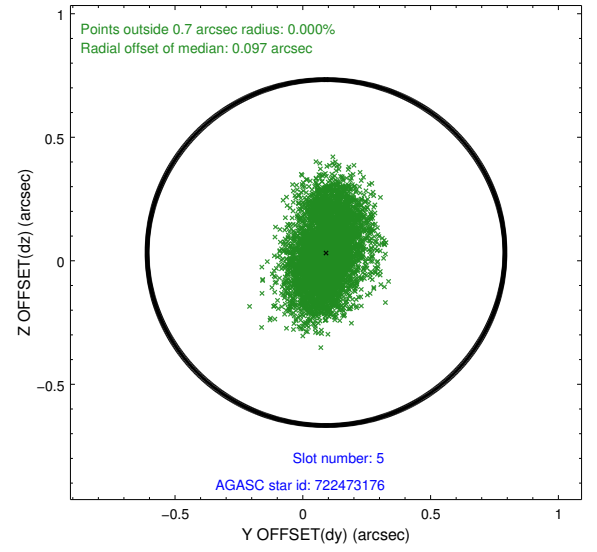
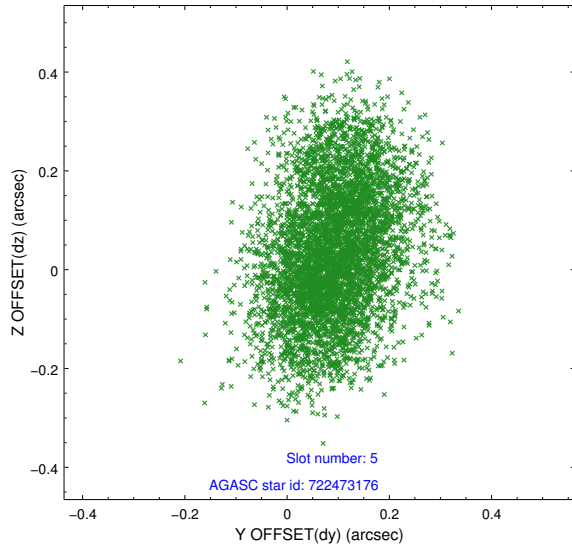
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.05	2485	0.010	-0.050	0.008	0.013	0.000000	0.000000	918.69	-1738.67
1	FID		ACIS-S-4	7.06	2485	0.276	0.035	0.006	0.011	0.000000	0.000000	2136.64	165.04
2	FID		ACIS-S-5	7.08	2485	-0.313	0.028	0.006	0.011	0.000000	0.000000	-1829.85	159.20
3	GUIDE	used	722470296	7.07	4970	-0.168	0.017	0.055	0.090	172.921689	-12.381367	-365.58	-307.42
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	722473176	9.46	4967	0.091	0.033	0.160	0.258	172.599746	-12.066793	-977.36	-1787.39
6	GUIDE	used	722871728	9.67	4965	0.055	-0.045	0.149	0.242	173.202235	-12.568355	-120.06	860.79
7	GUIDE	used	722873464	7.35	4968	0.021	-0.011	0.127	0.205	172.661543	-13.050266	2209.44	-228.03

2.4 Star Slots

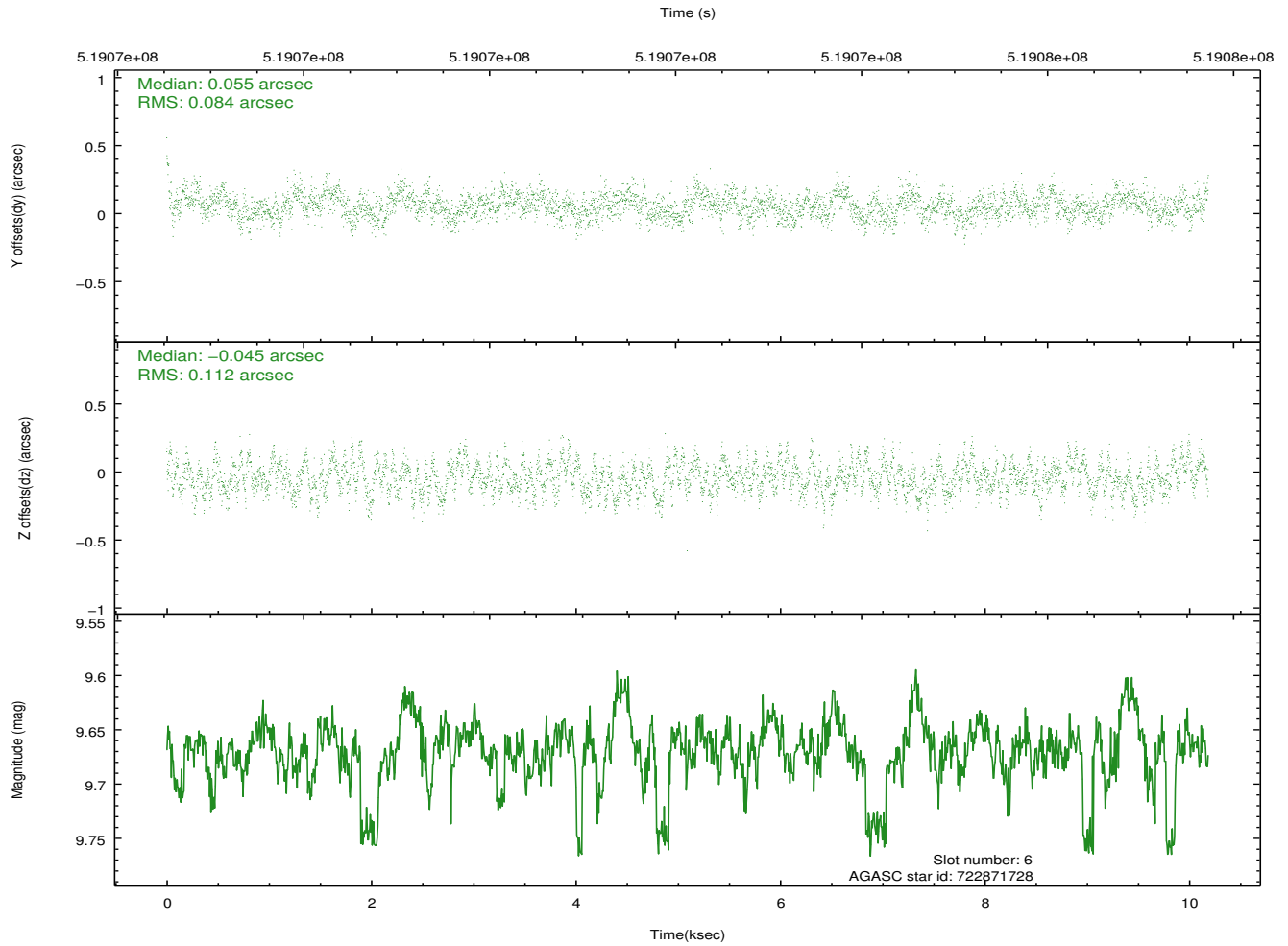
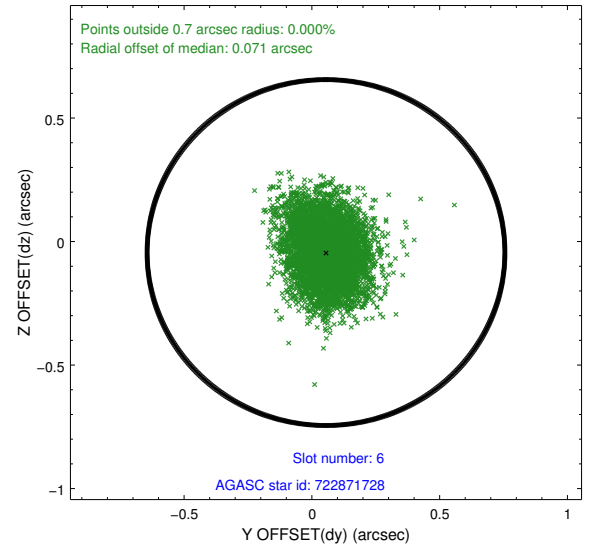
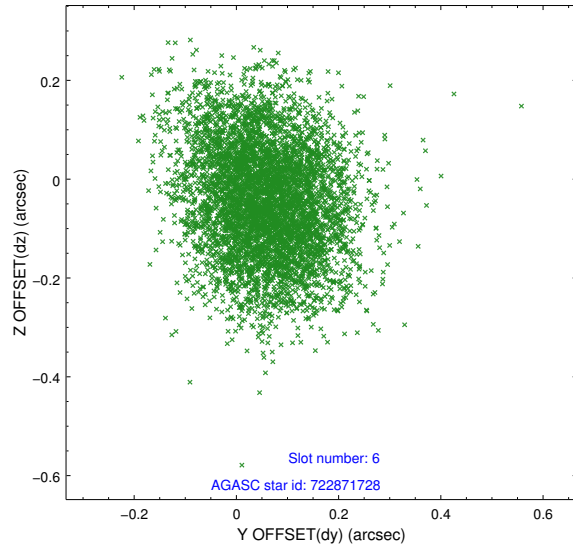
2.4.1 Slot 3



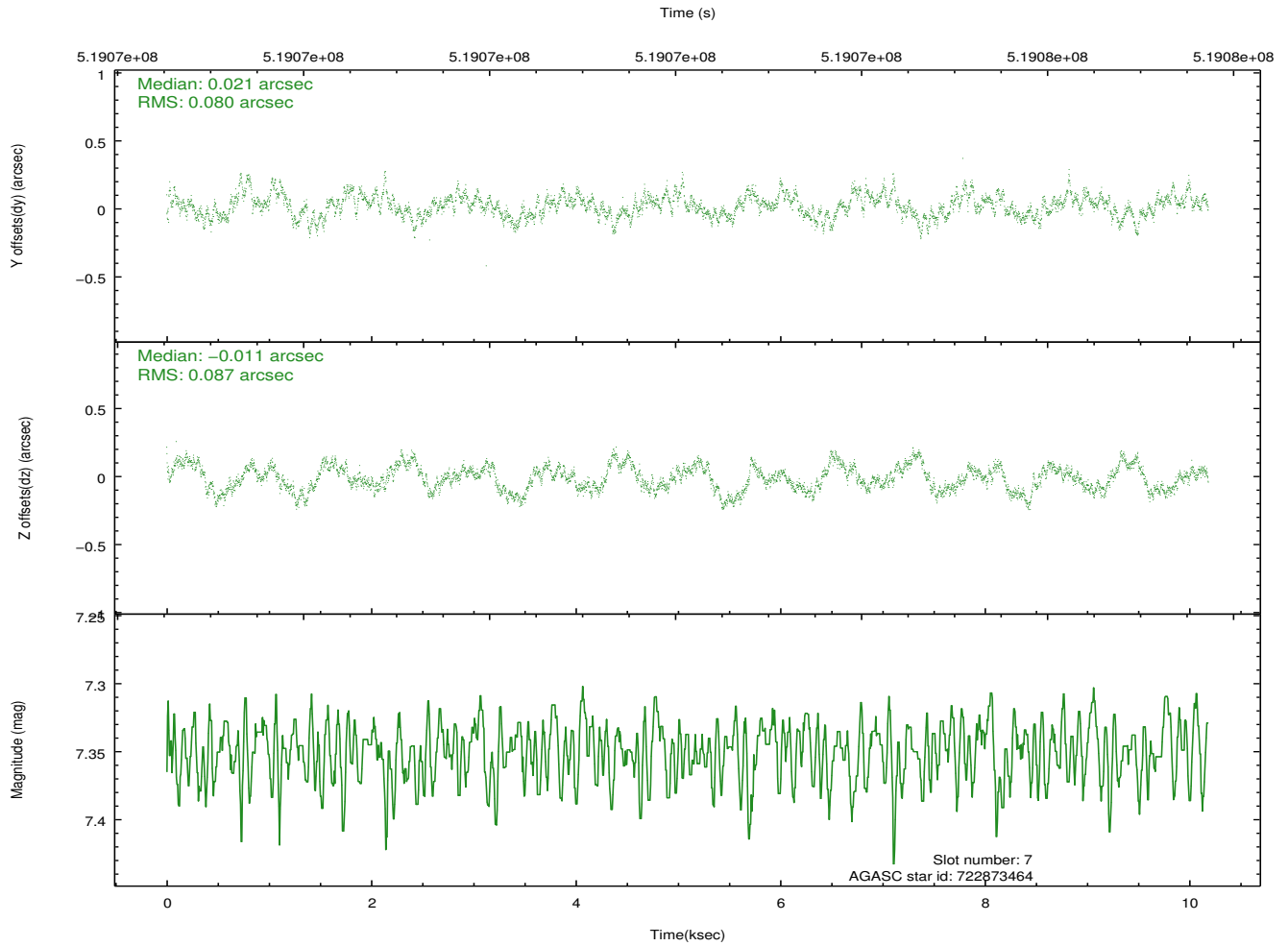
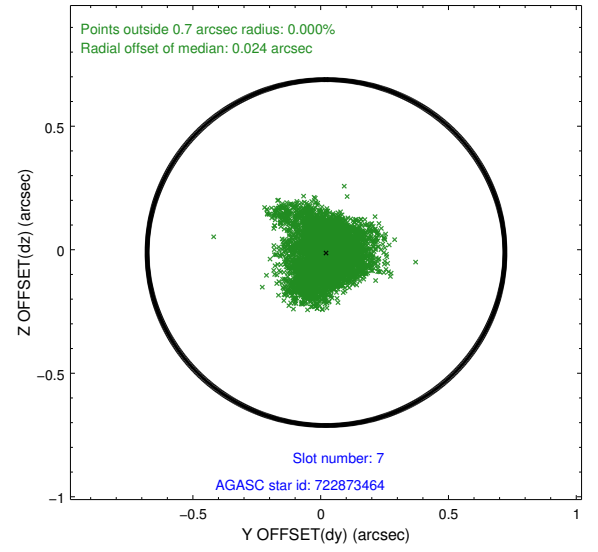
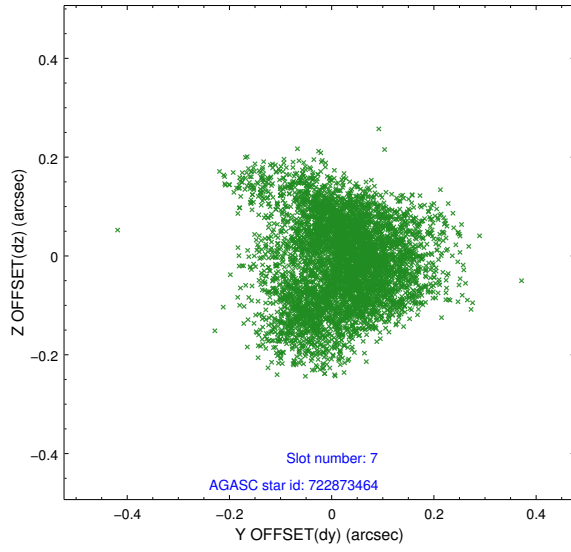
2.4.2 Slot 5



2.4.3 Slot 6

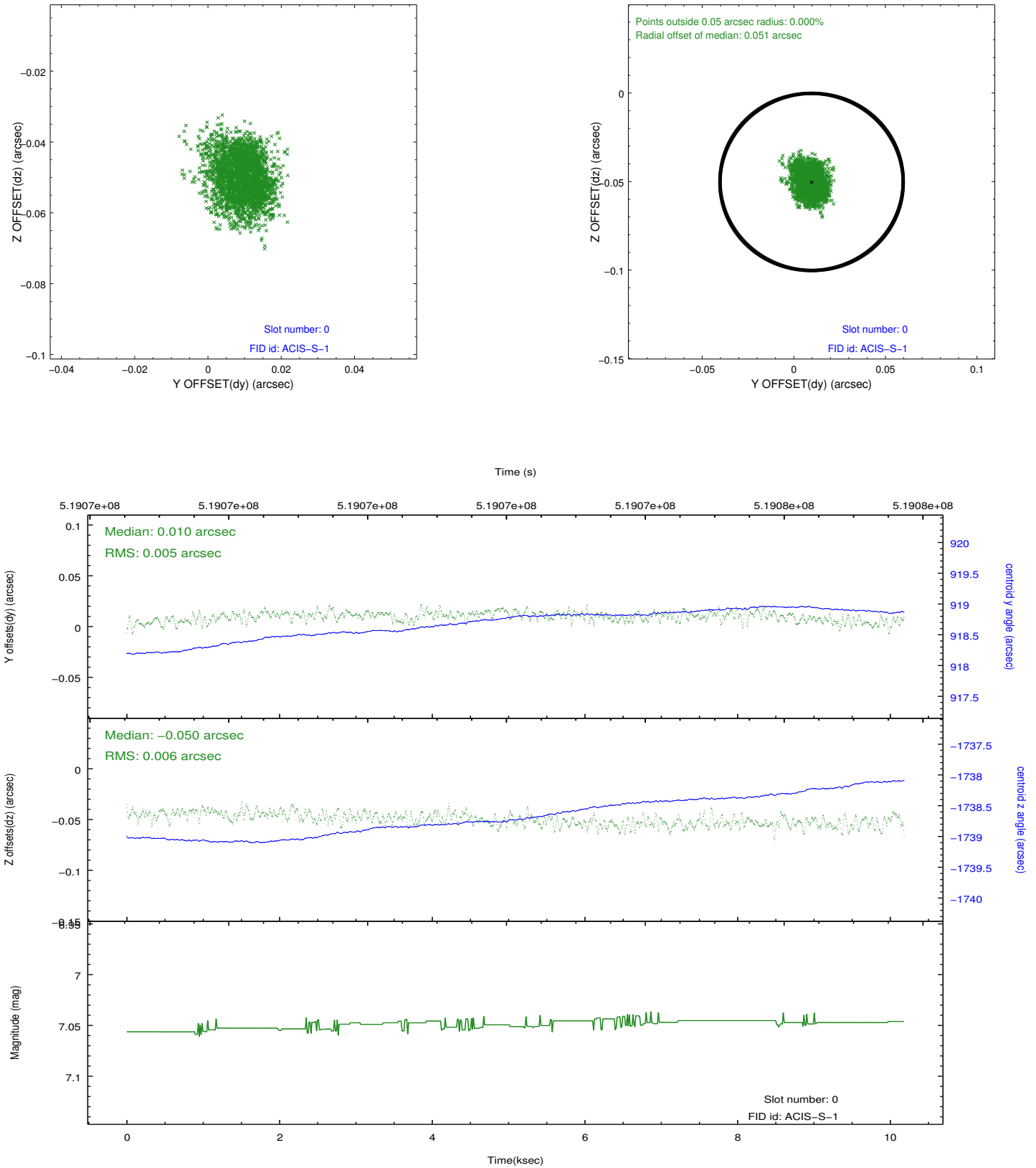


2.4.4 Slot 7

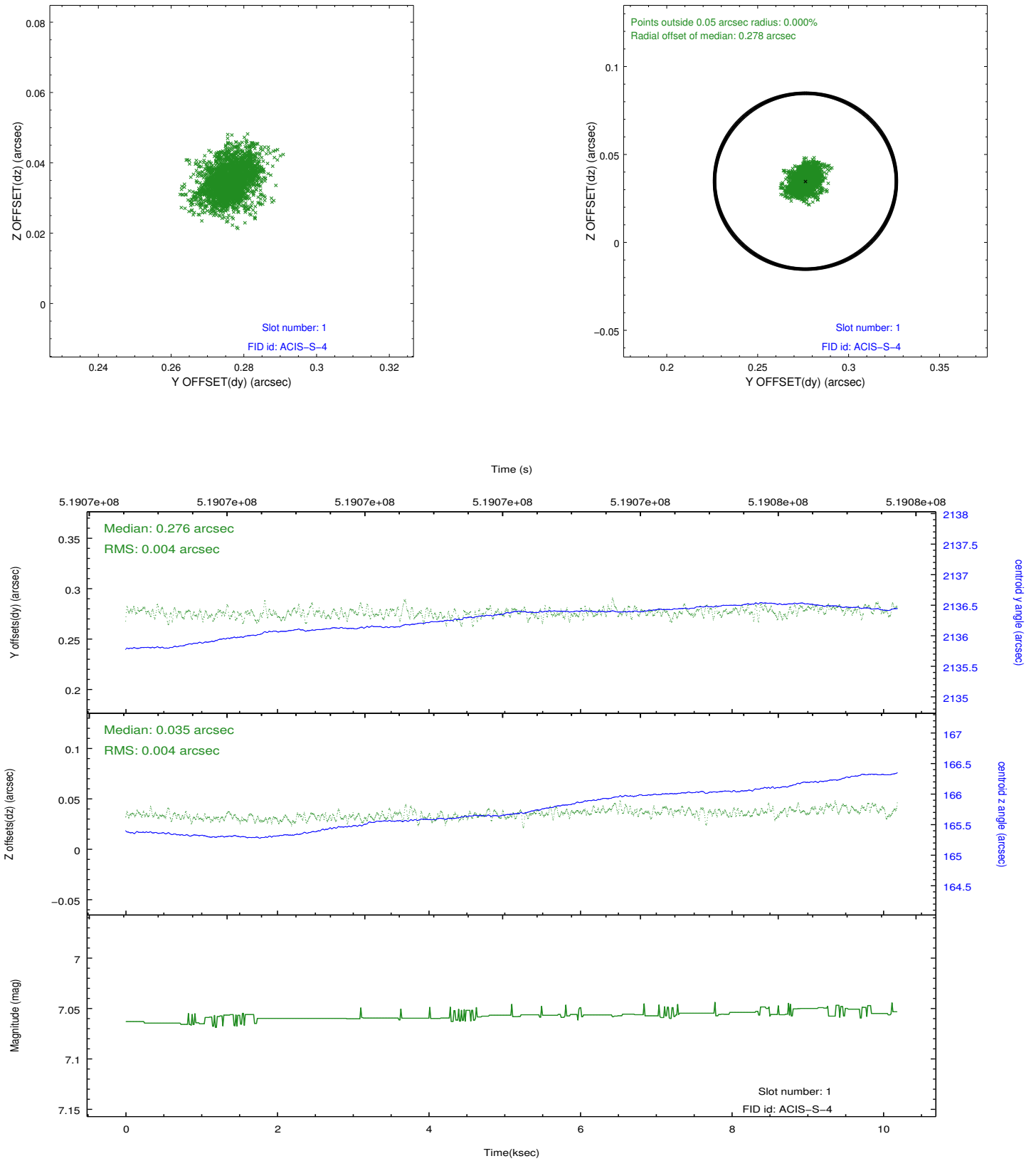


2.5 FID Slots

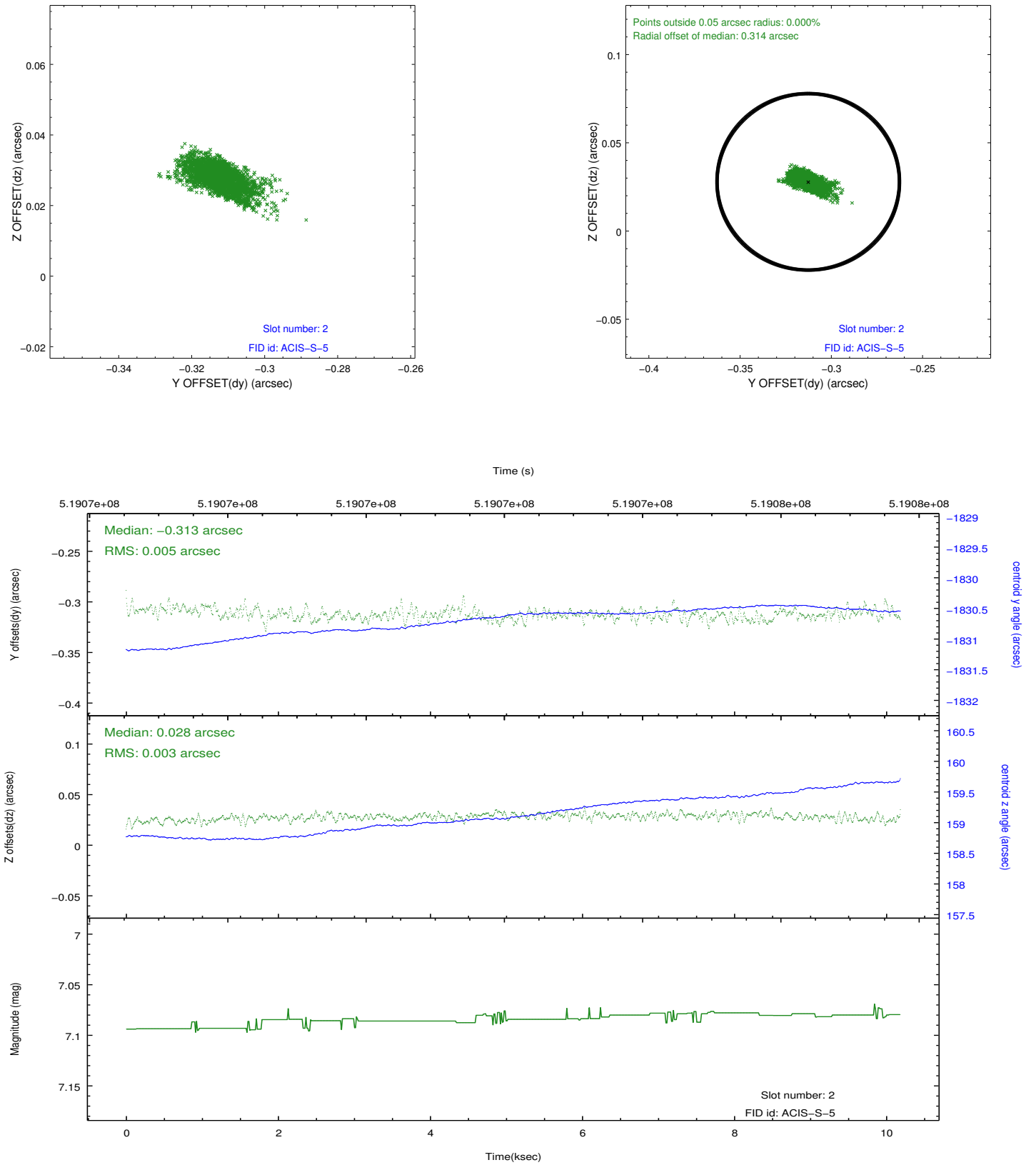
2.5.1 Slot 0



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)	2014.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.070399399757

A.2 Comments

Joint proposal with HST. The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.

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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.