

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19620 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Nov 21 2017

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1 Front

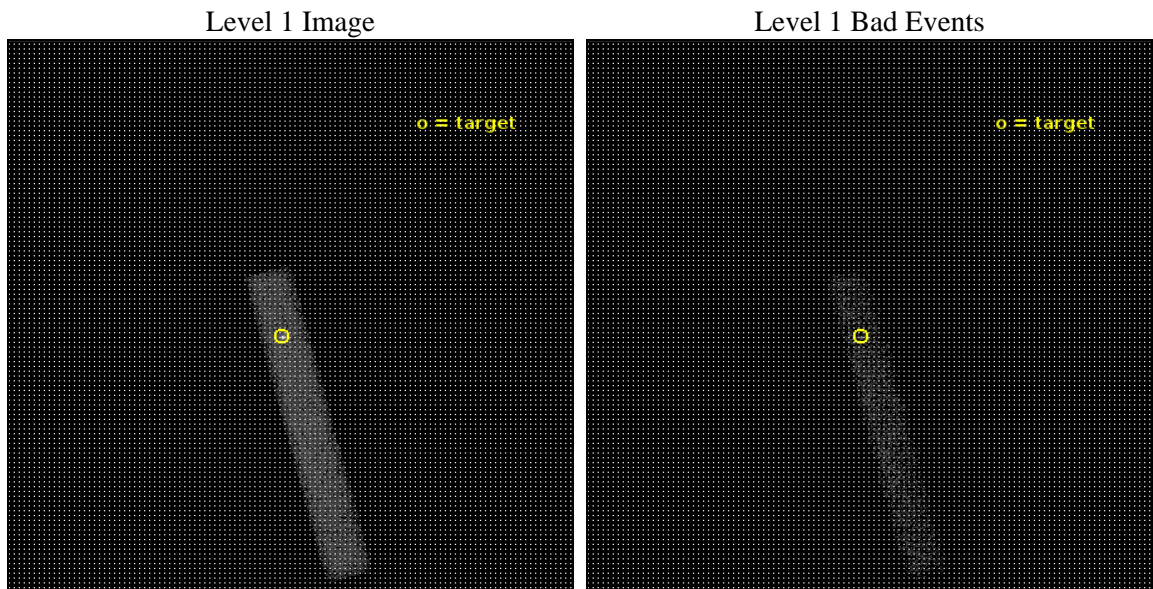
seq_num	703417	Sequence number
obs_id	19620	Observation id
title	MEASURING THE INNERMOST STABLE ORBIT USING MICROLENSING OF THE FE K LINE	Proposal title
observer	George Chartas	Principal investigator
object	RXJ1131-1231	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96151315965	Nominal RA [deg]
dec_nom	-12.526893754728	Nominal Dec [deg]
roll_nom	75.39310492514	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25069.174206138	Sum of GTIs [s]
livetime	22736.417745454	Livetime [s]
ontime7	25069.174206138	Sum of GTIs [s]
l2events	22622	Number of level 2 events



2 OBI

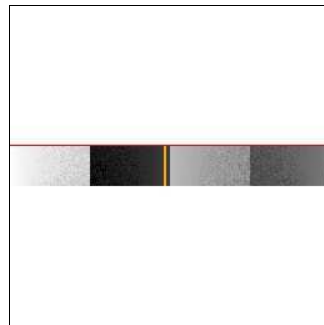
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	25069.174206138	Sum of GTIs [s]
caldbver	4.7.6	 	ontime7	25069.174206138	Sum of GTIs [s]
date	2017-11-21T19:16:02	Date and time of file creation	l1events	38600	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

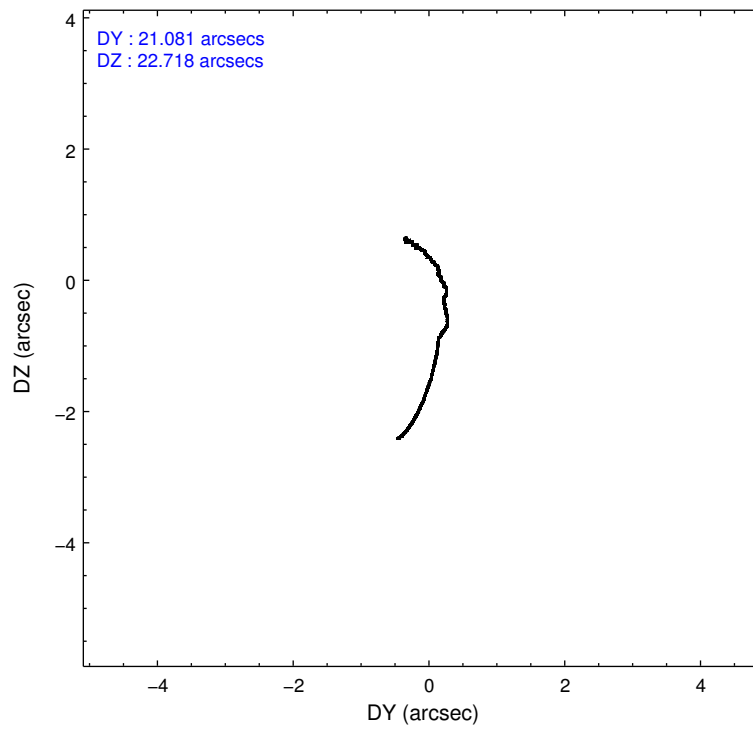
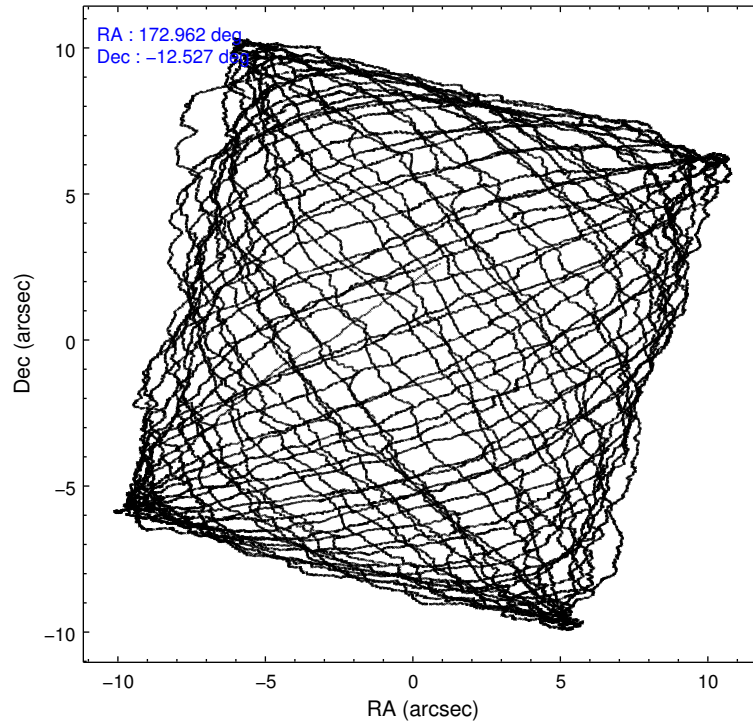
	ccd 7
level 1 events	38600
rejected events	15303
rejected %	39%

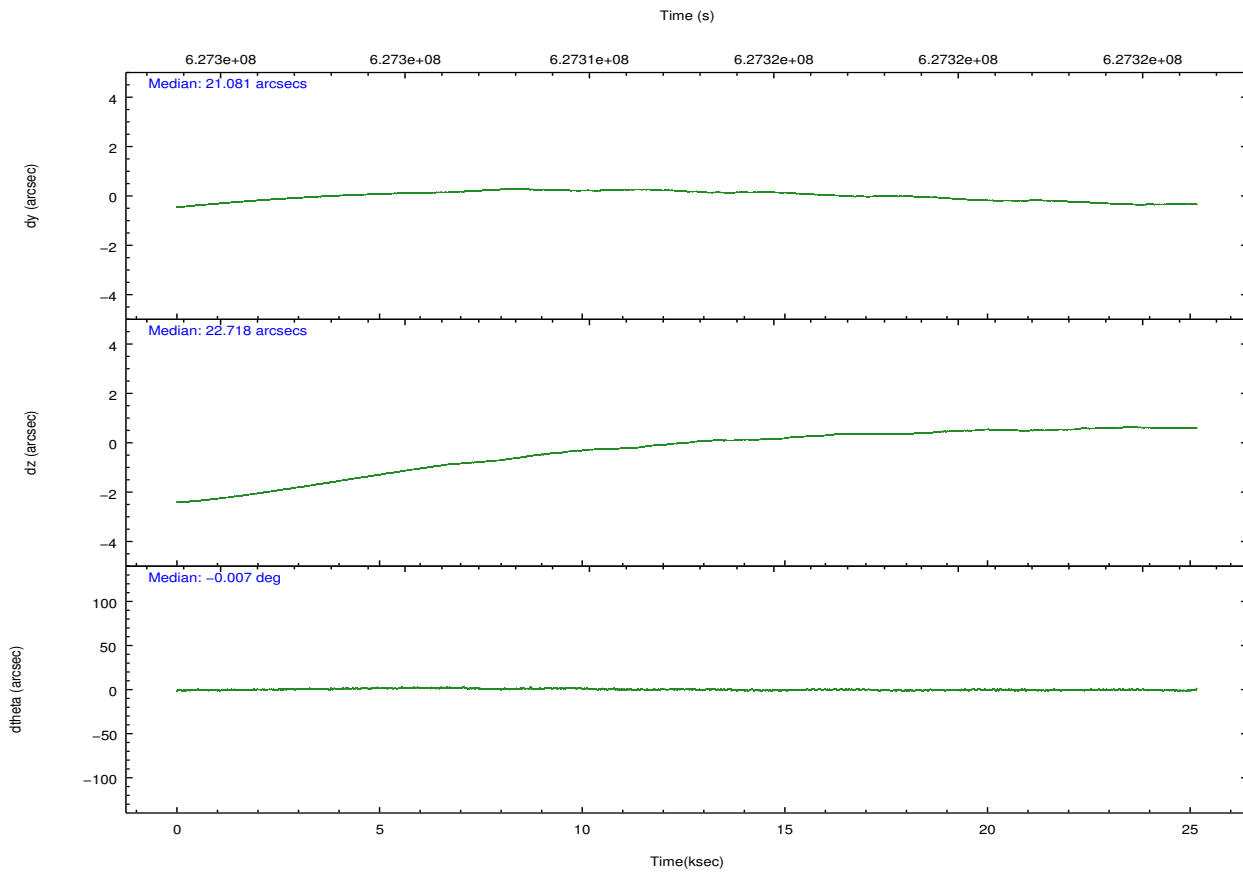
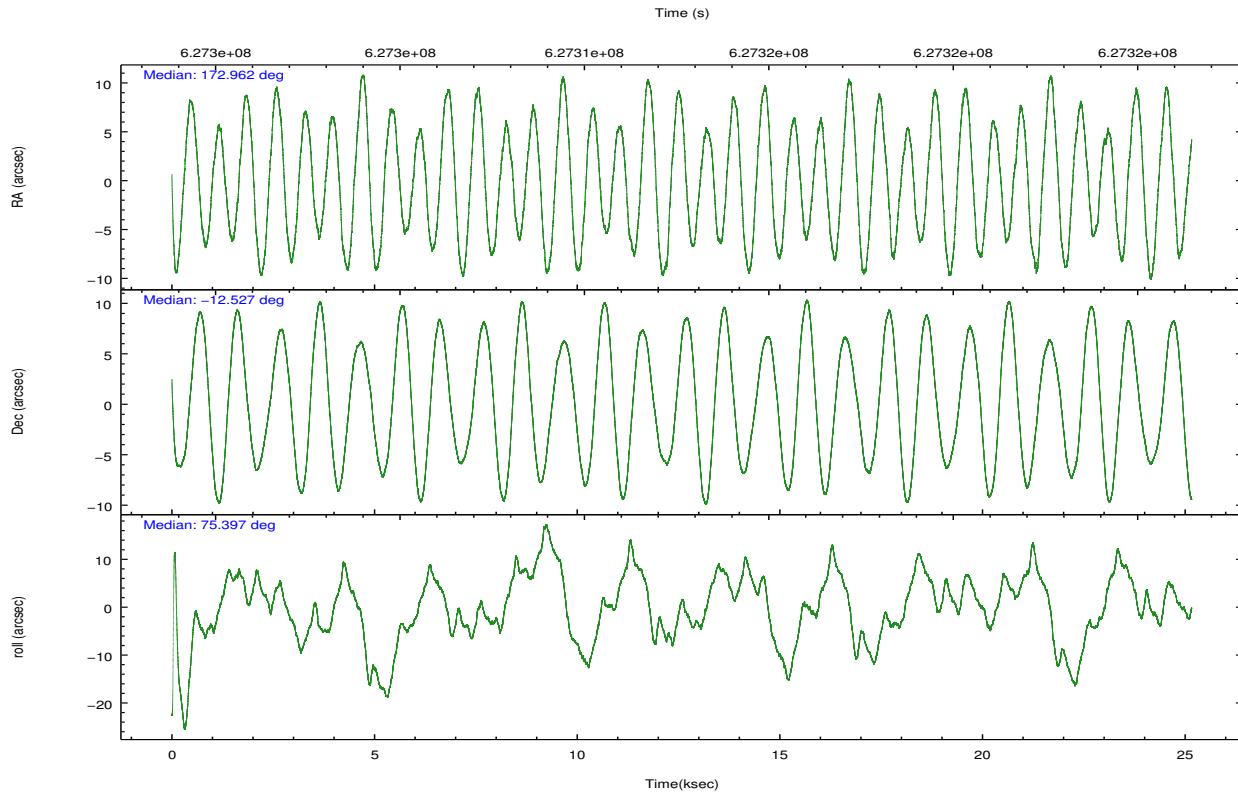
	ccd 7
grade 0 events	3704
	9%
grade 1 events	68
	0%
grade 2 events	5013
	12%
grade 3 events	2978
	7%
grade 4 events	2918
	7%
grade 5 events	3209
	8%
grade 6 events	8686
	22%
grade 7 events	12024
	31%

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	172.969349	172.9615131596484	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-12.553252	-12.52689375472828	Subarray start row	449	449
[deg] Pointing Roll	75.238202	75.39310492513961	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)	627300231.184000	627299158.36323			
Observation start date	2017-11-17T10:02:42	2017-11-17T09:45:58			
[s] Observation end time (MET)	627325231.184000	627326426.95233			
Observation end date	2017-11-17T16:59:22	2017-11-17T17:20:26			
Read mode	TIMED	TIMED			

2.3 Aspect



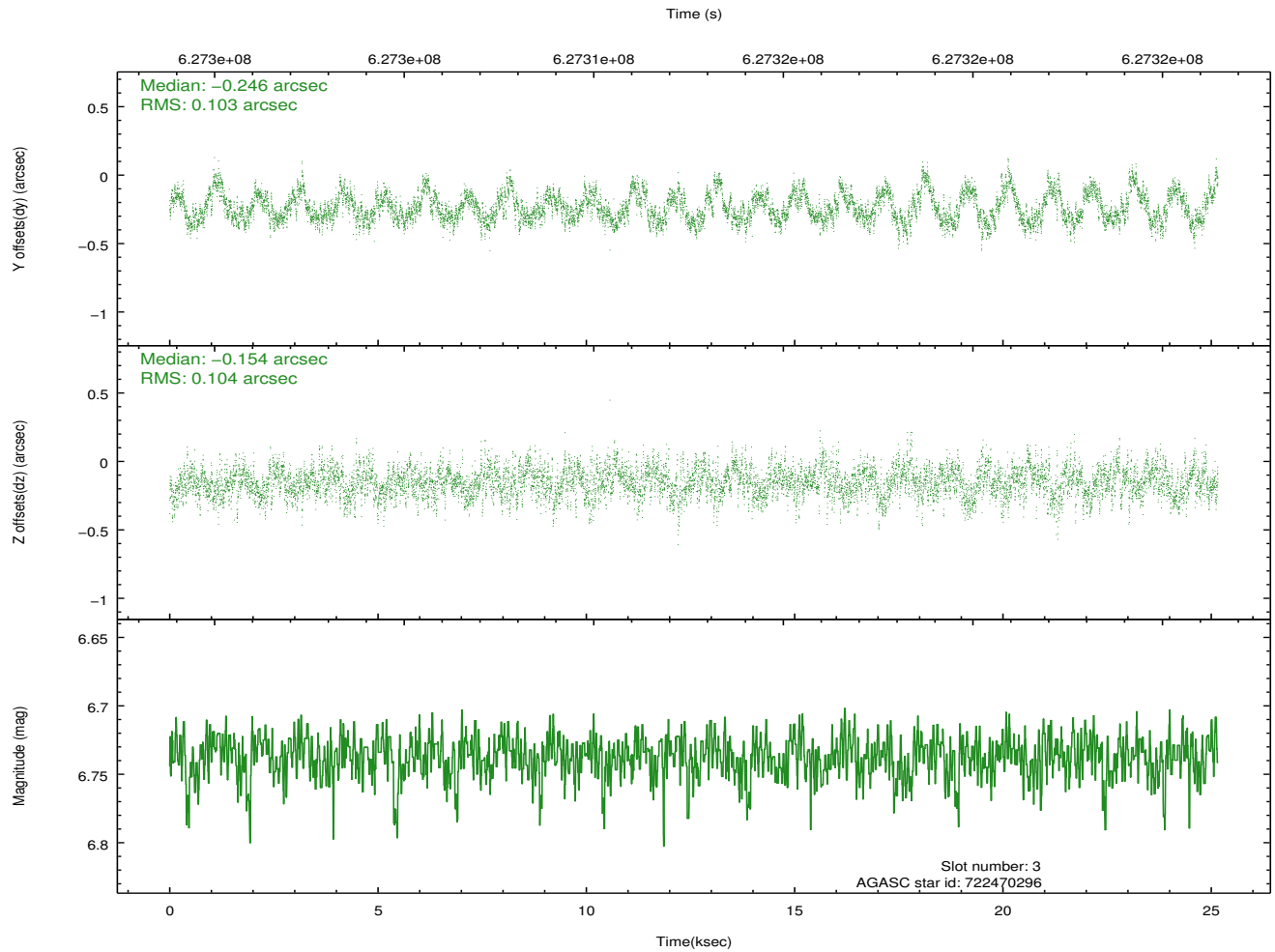
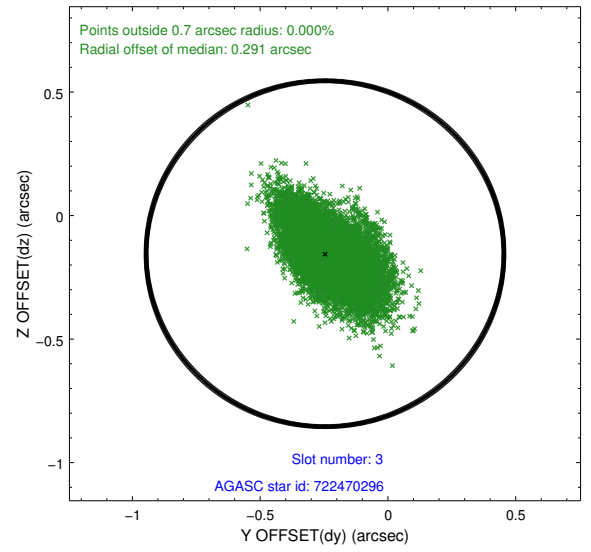
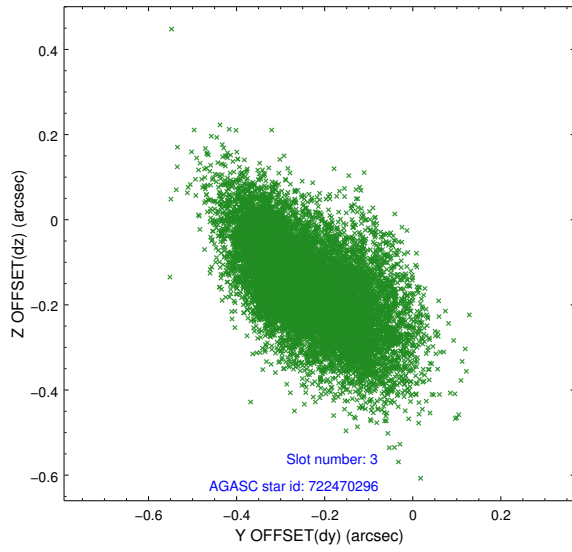


Slot Statistics

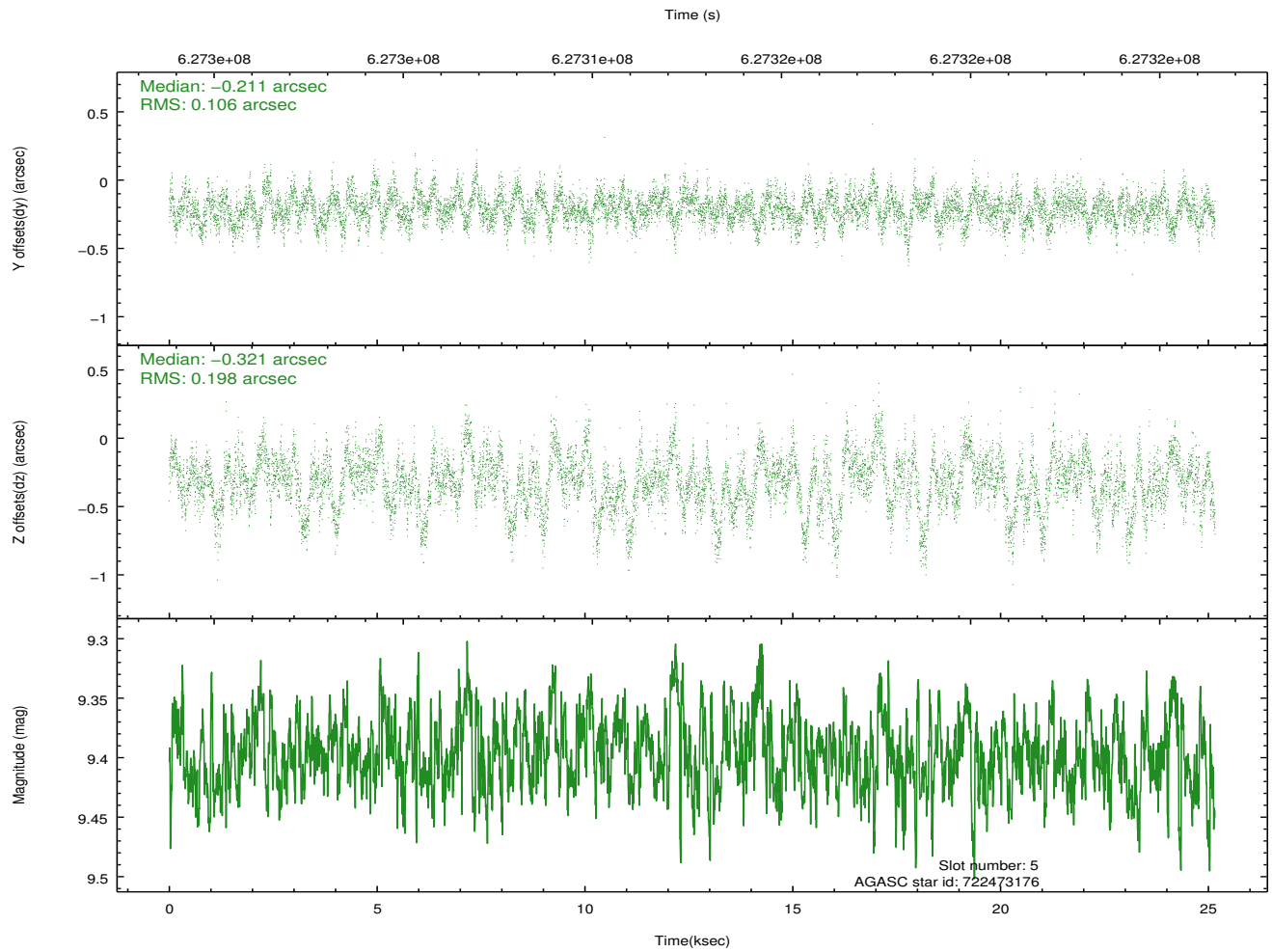
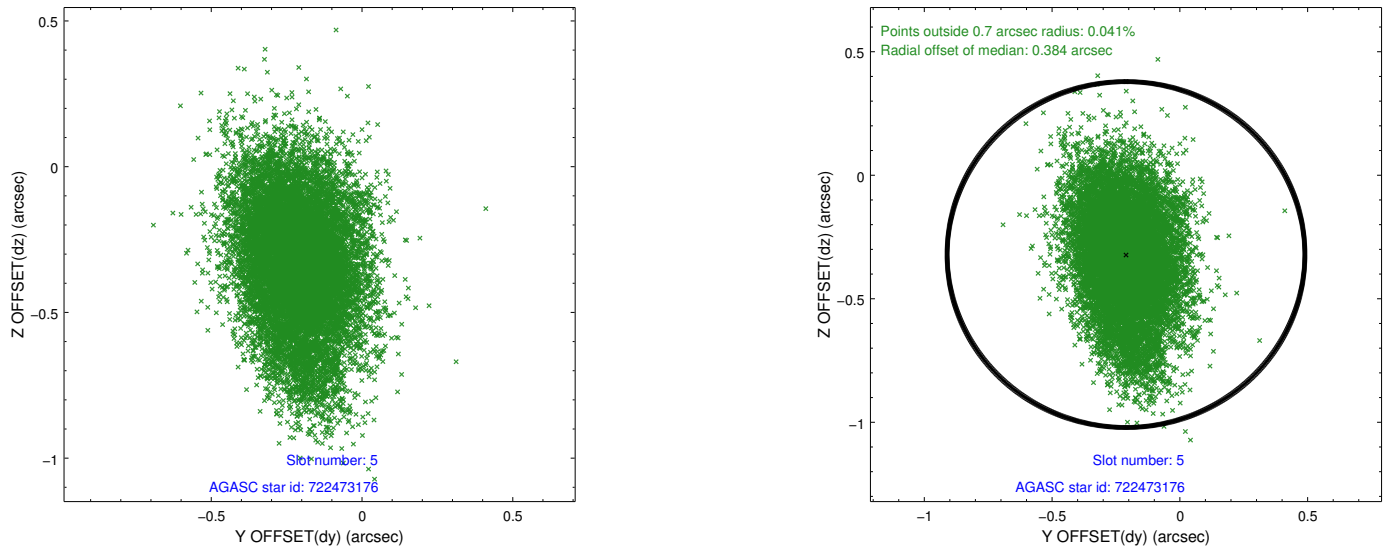
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.15	6137	0.114	-0.038	0.048	0.075	0.000000	0.000000	922.00	-1739.59
1	FID		ACIS-S-5	7.18	6136	-0.302	0.042	0.014	0.021	0.000000	0.000000	-1827.40	157.84
2	FID		ACIS-S-6	7.34	6137	0.168	0.002	0.034	0.080	0.000000	0.000000	387.41	801.98
3	GUIDE	used	722470296	6.74	12270	-0.246	-0.154	0.153	0.260	172.921689	-12.381367	555.87	320.01
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	9.40	12239	-0.211	-0.321	0.229	0.415	172.599746	-12.066793	1361.04	1704.19
6	GUIDE	used	722871728	9.62	12244	0.157	0.491	0.279	0.476	173.202235	-12.568355	156.16	-804.29
7	GUIDE	used	722873464	7.29	12269	0.286	-0.033	0.130	0.233	172.661543	-13.050266	-2005.94	587.08

2.4 Star Slots

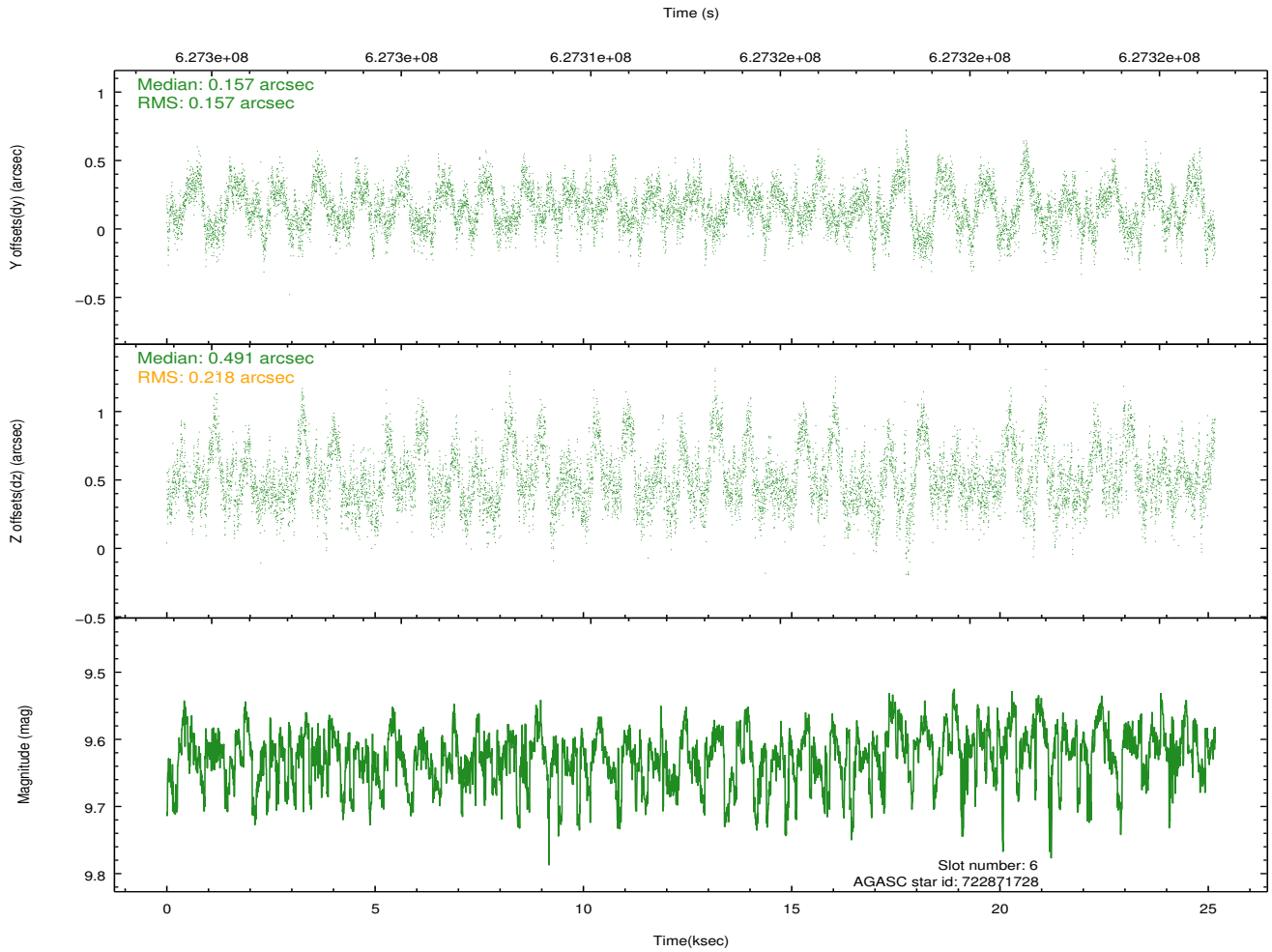
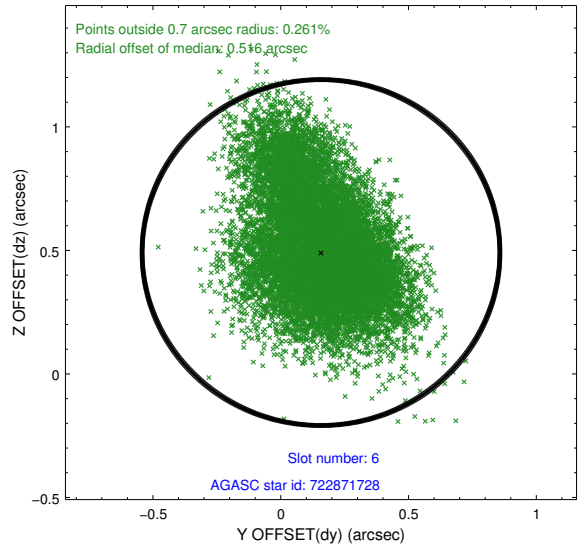
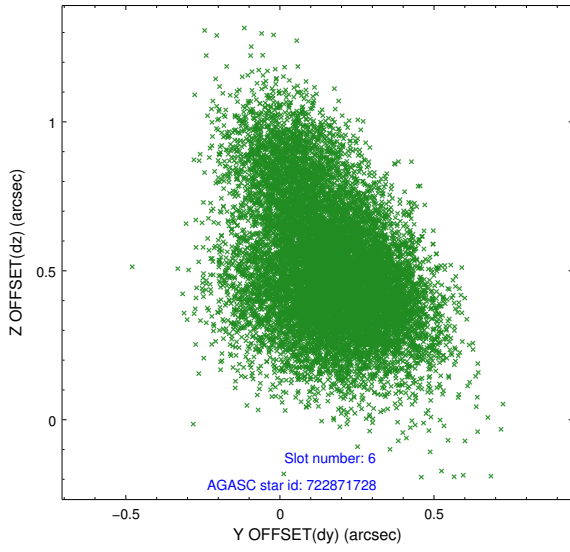
2.4.1 Slot 3



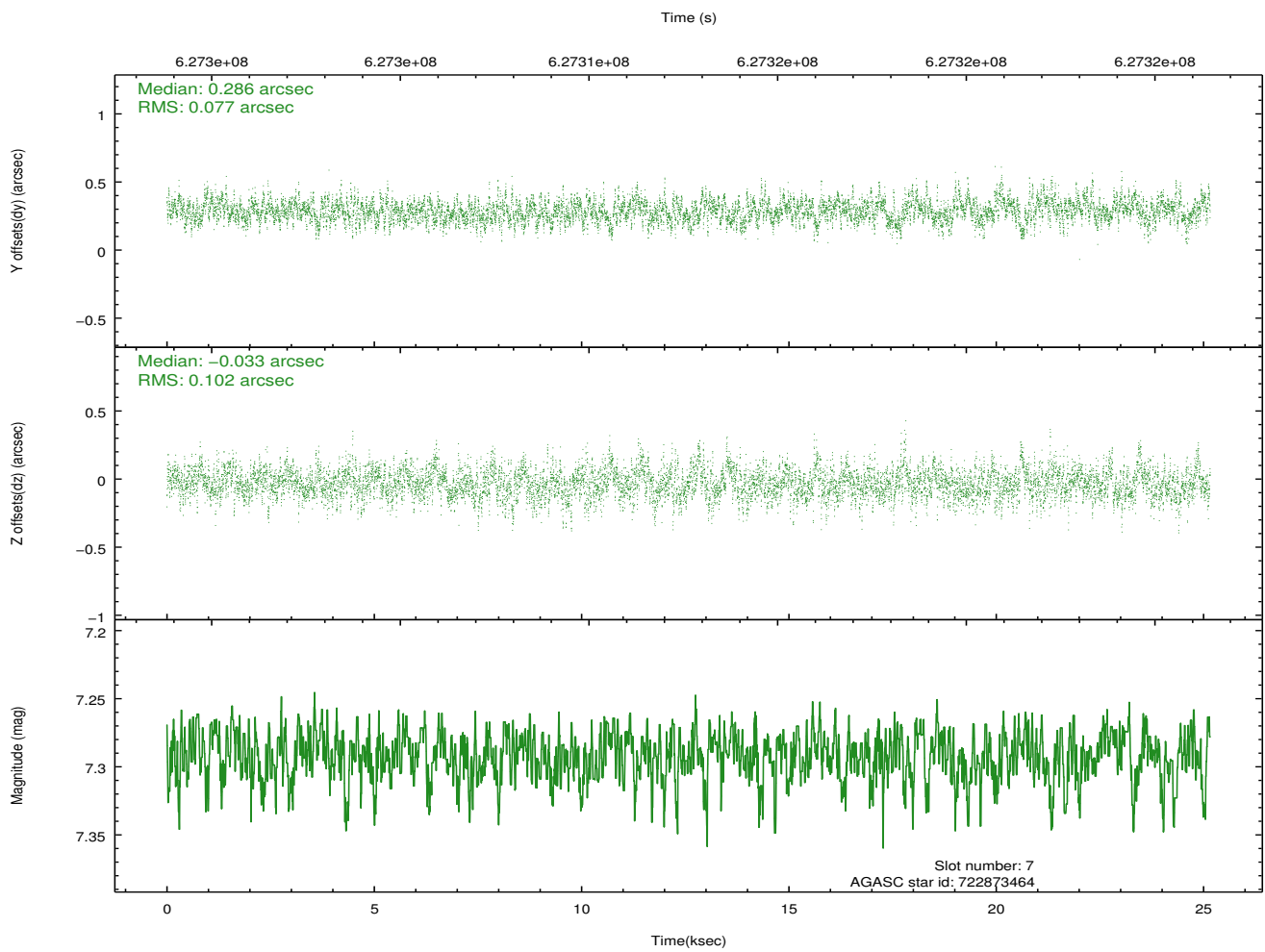
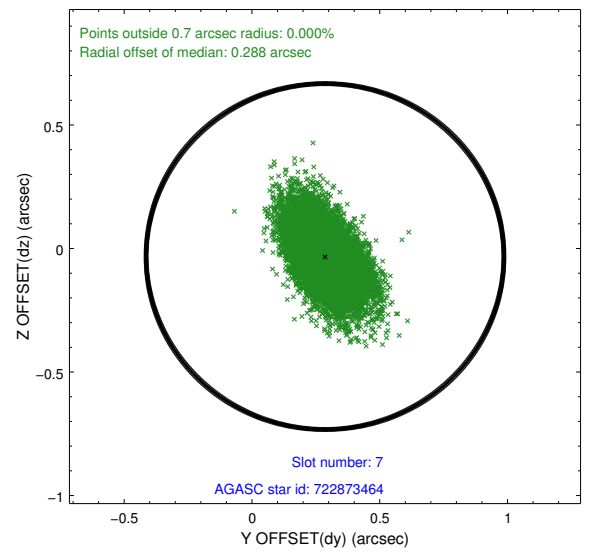
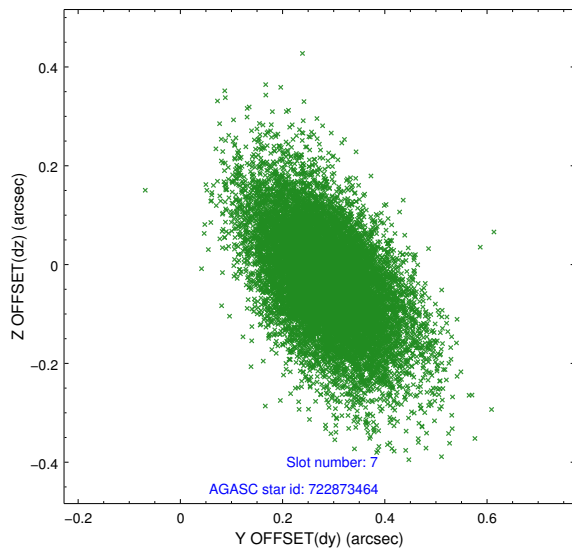
2.4.2 Slot 5



2.4.3 Slot 6

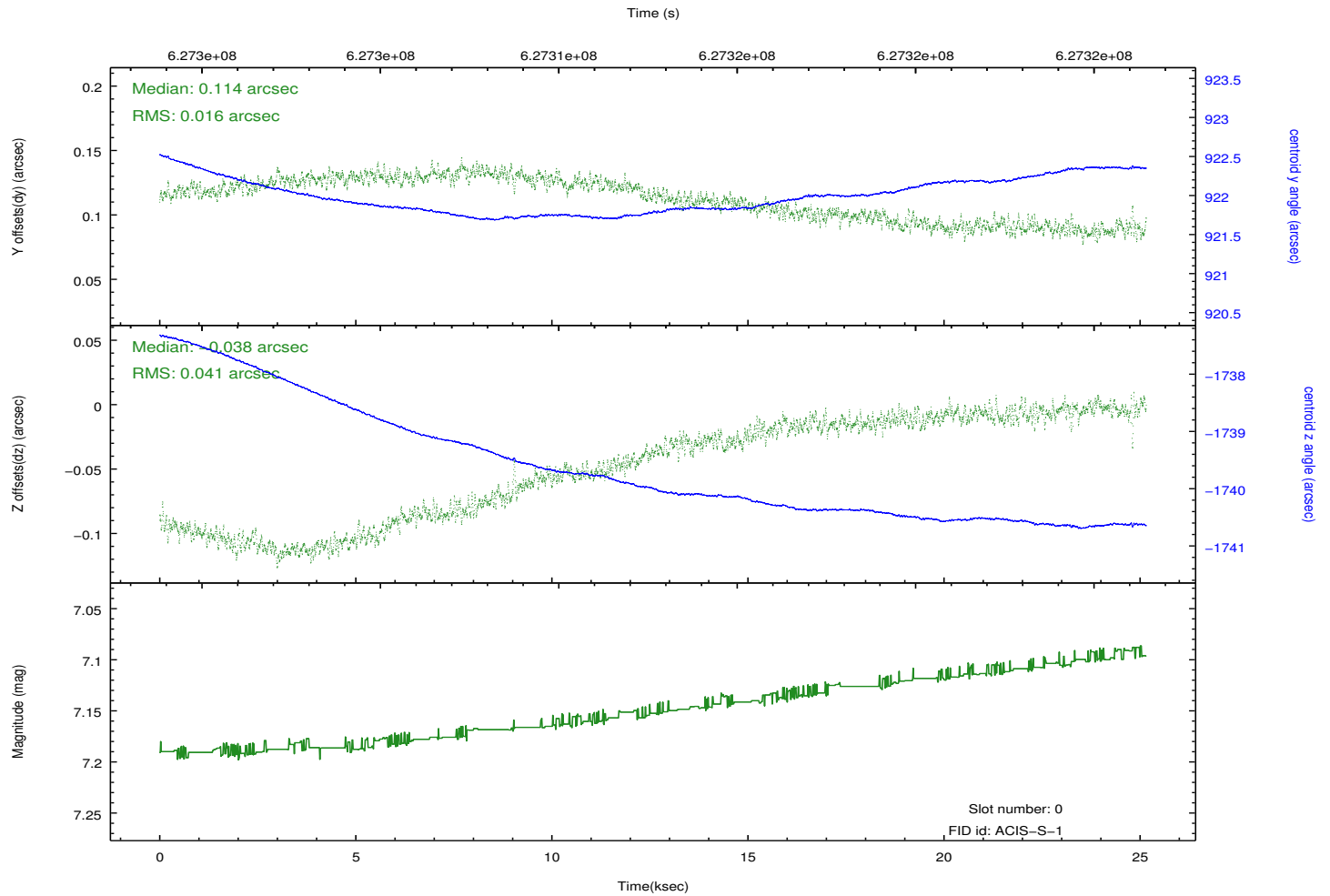
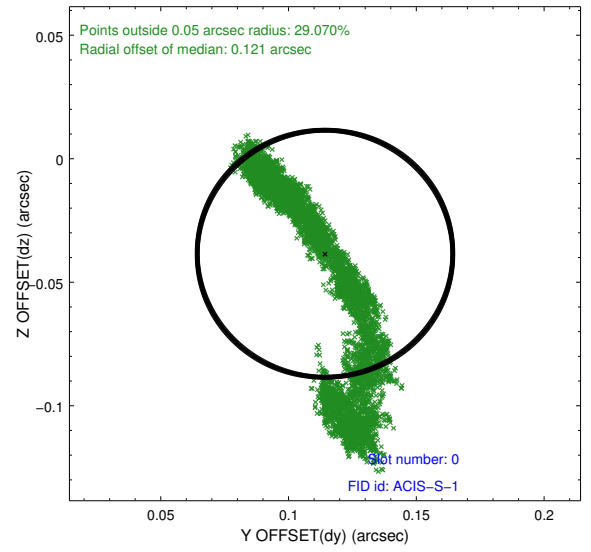
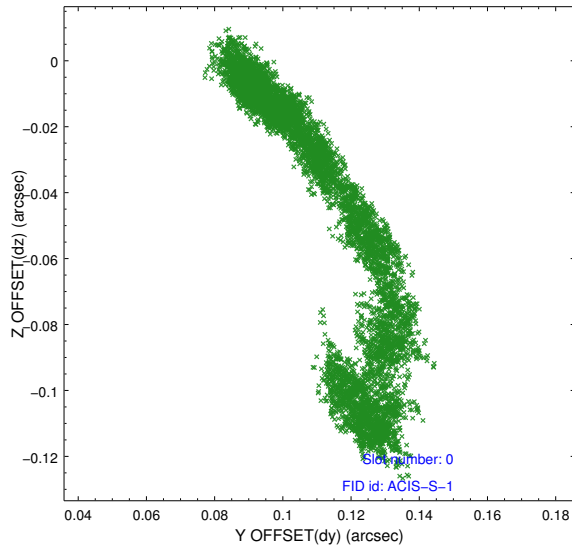


2.4.4 Slot 7

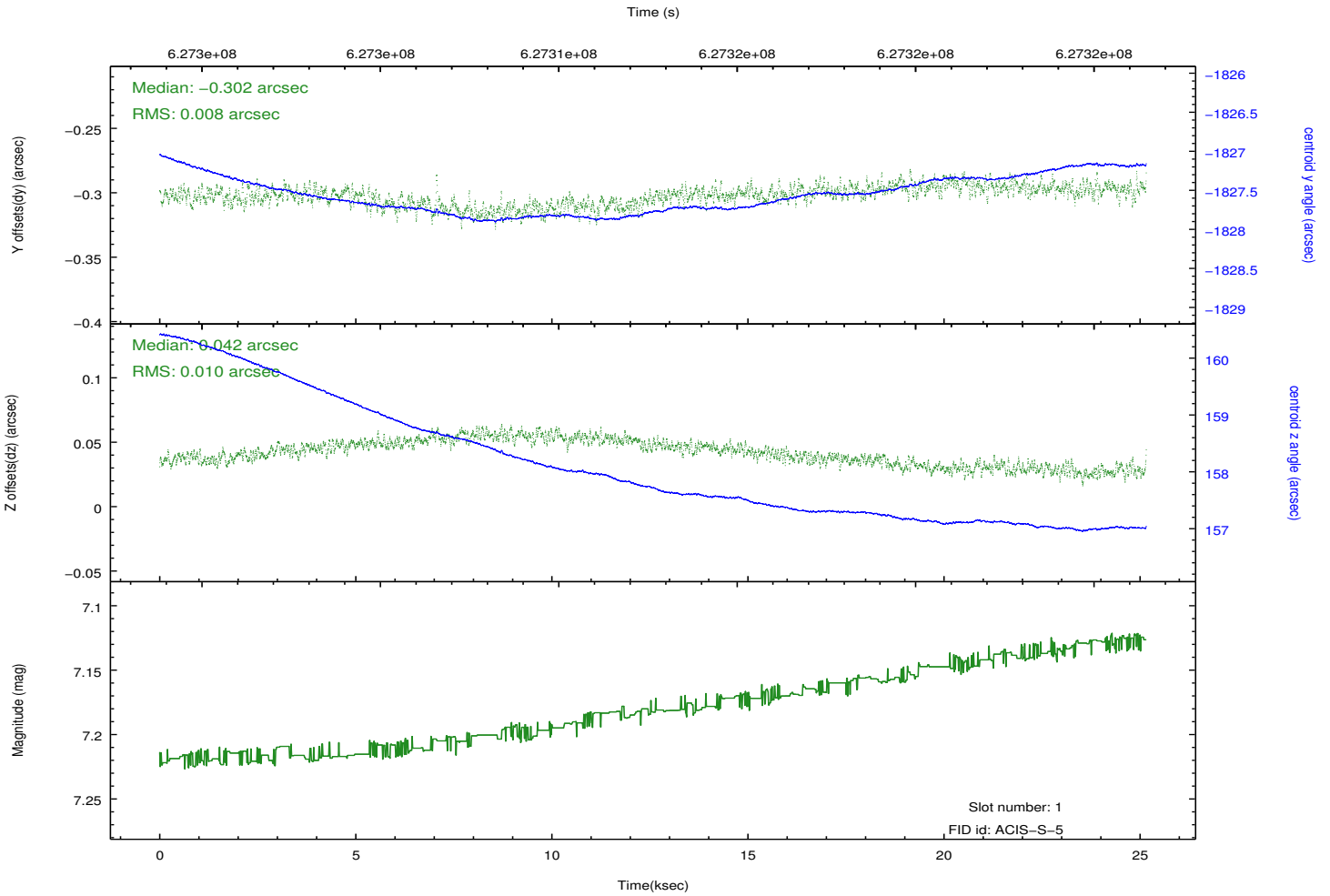
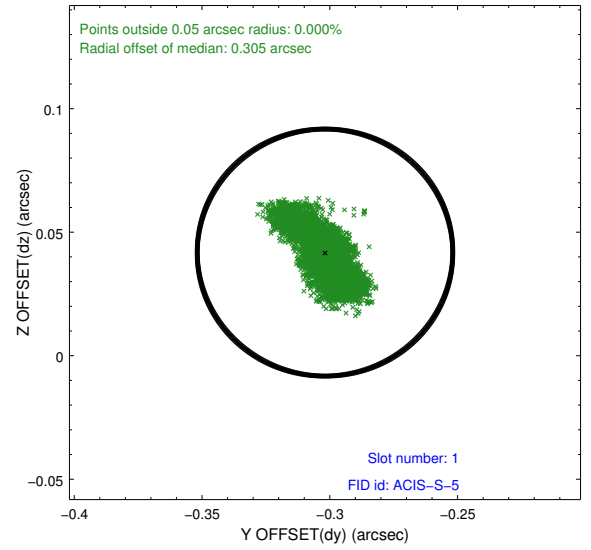
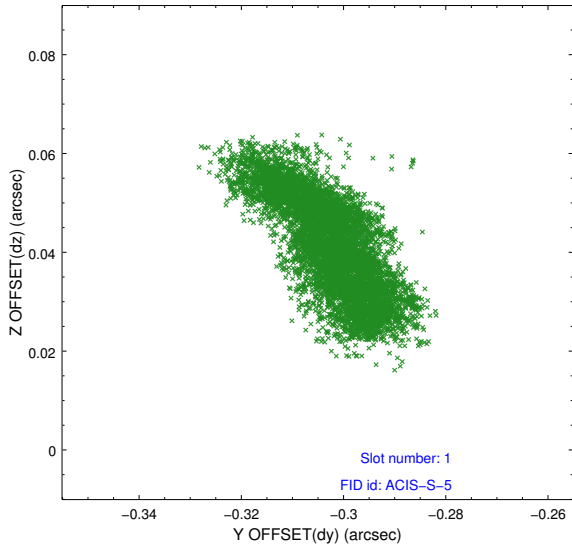


2.5 FID Slots

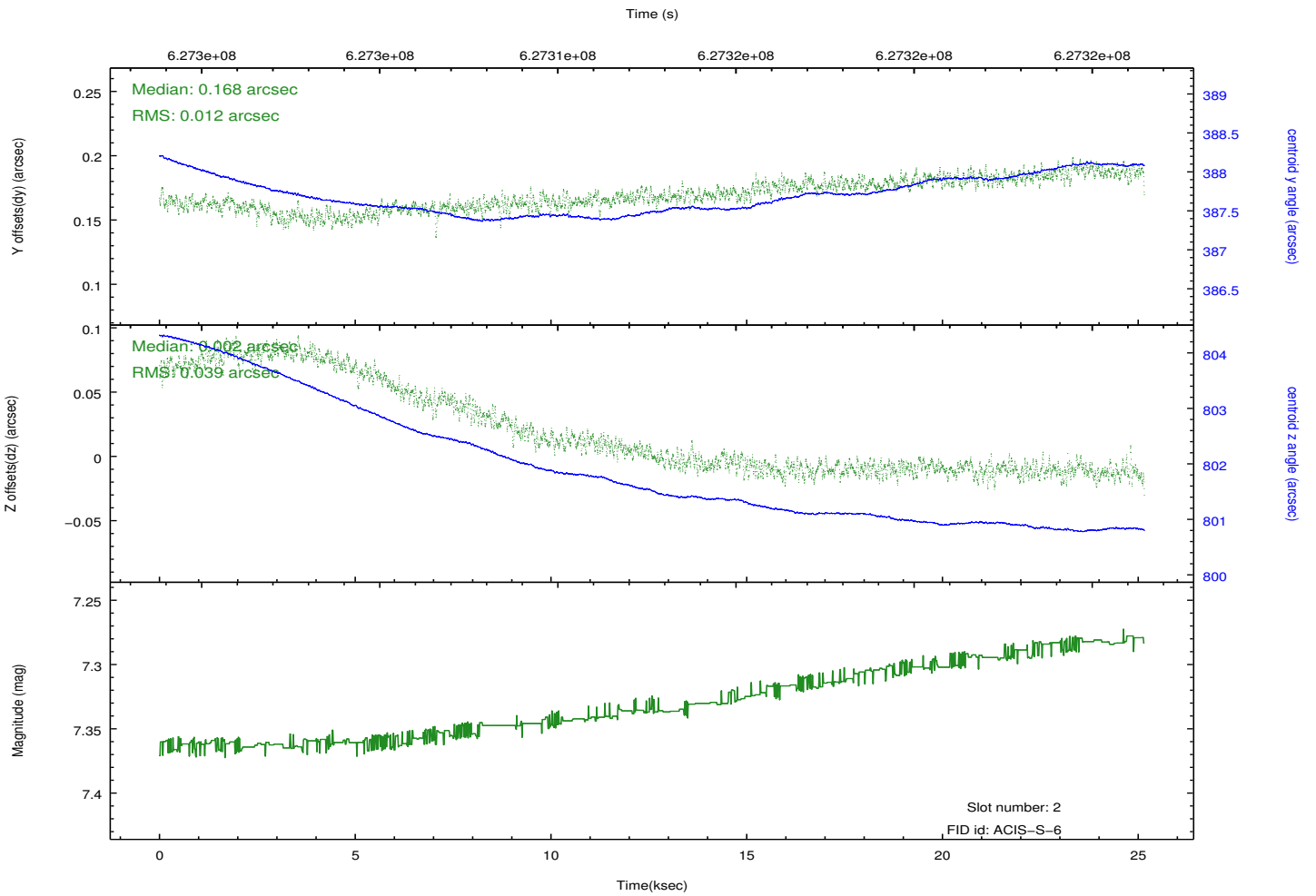
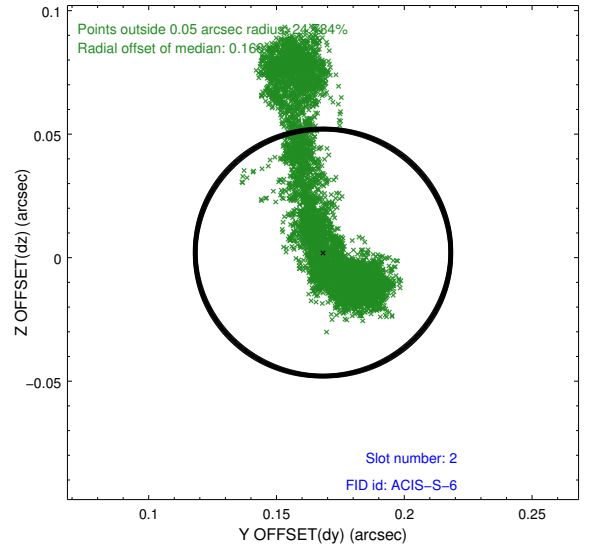
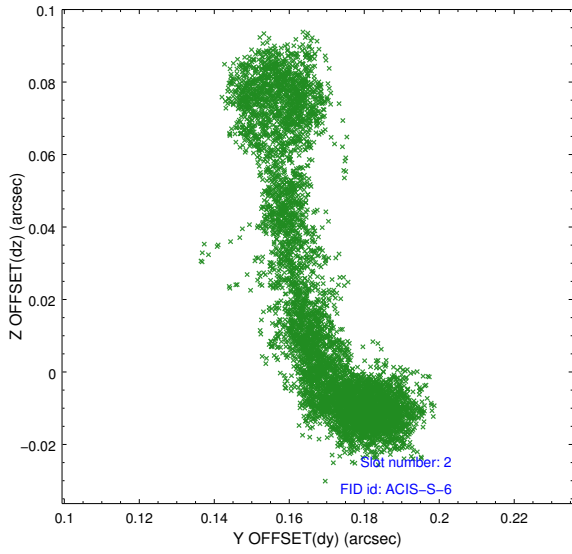
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.11.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.069174206138

A.2 Comments

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 slot from the solution.