

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 18690 - L2 Version 1
Chandra X-Ray Center

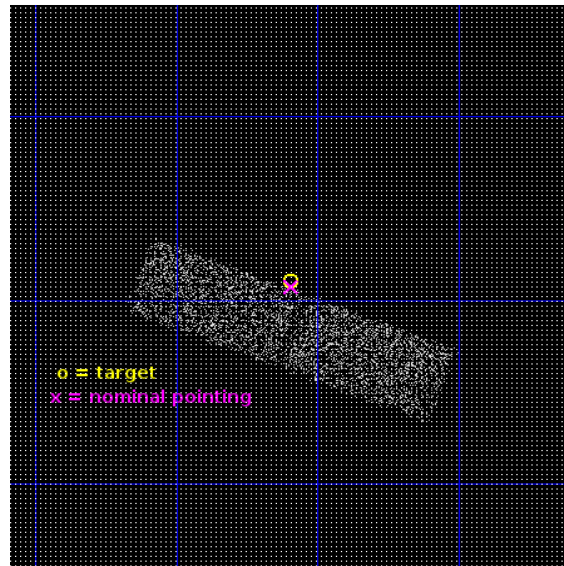
L2 Processing Date : Jan 11 2017

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1 Front

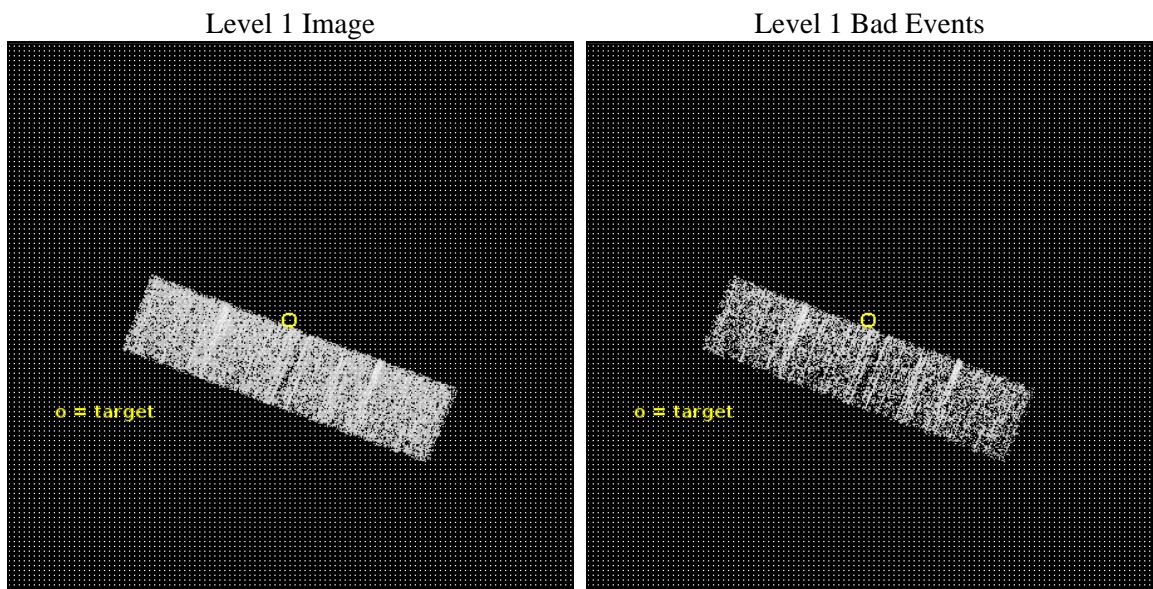
seq_num	100153	Sequence number
obs_id	18690	Observation id
title	Venus in an intermediate phase of the solar cycle	Proposal title
observer	Peter Predehl	Principal investigator
object	Venus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	338.648173	Observer's specified target RA [deg]
dec_targ	-9.81624	Observer's specified target Dec [deg]
ra_nom	338.64819971915	Nominal RA [deg]
dec_nom	-9.8209728398832	Nominal Dec [deg]
roll_nom	291.24087733352	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5831.6216212511	Sum of GTIs [s]
liveltime	5685.7813301332	Livetime [s]
ontime0	5831.5805813074	Sum of GTIs [s]
ontime2	5831.6216212511	Sum of GTIs [s]
l2events	3741	Number of level 2 events



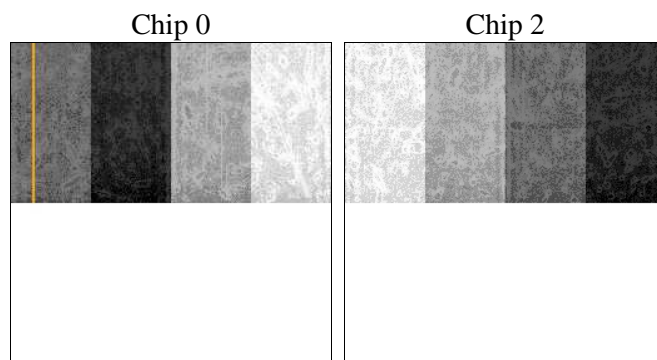
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	5831.6216212511	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	5831.5805813074	Sum of GTIs [s]
date	2017-01-11T11:39:42	Date and time of file creation	ontime2	5831.6216212511	Sum of GTIs [s]
revision	1	Processing version of data	l1events	44243	Number of level 1 events

2.1.4 Events

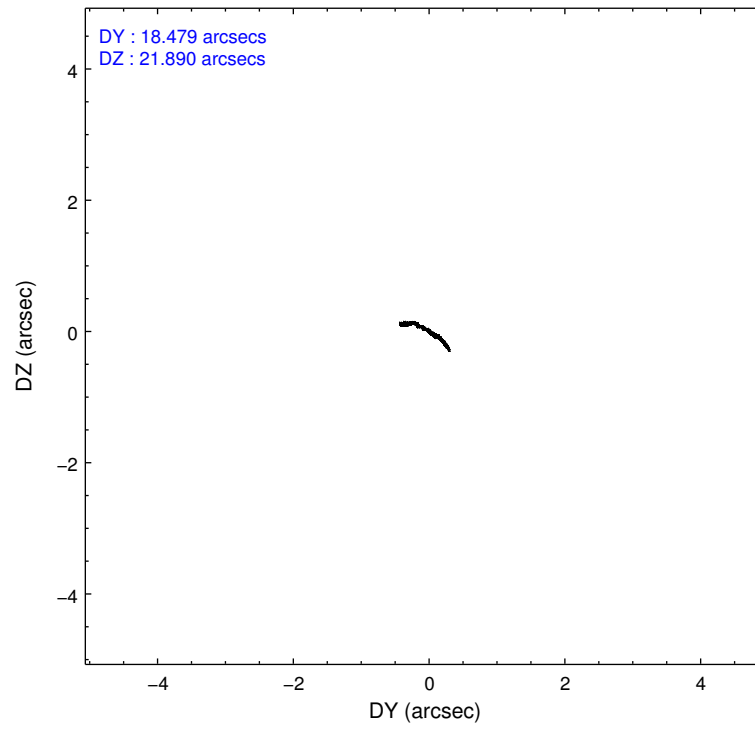
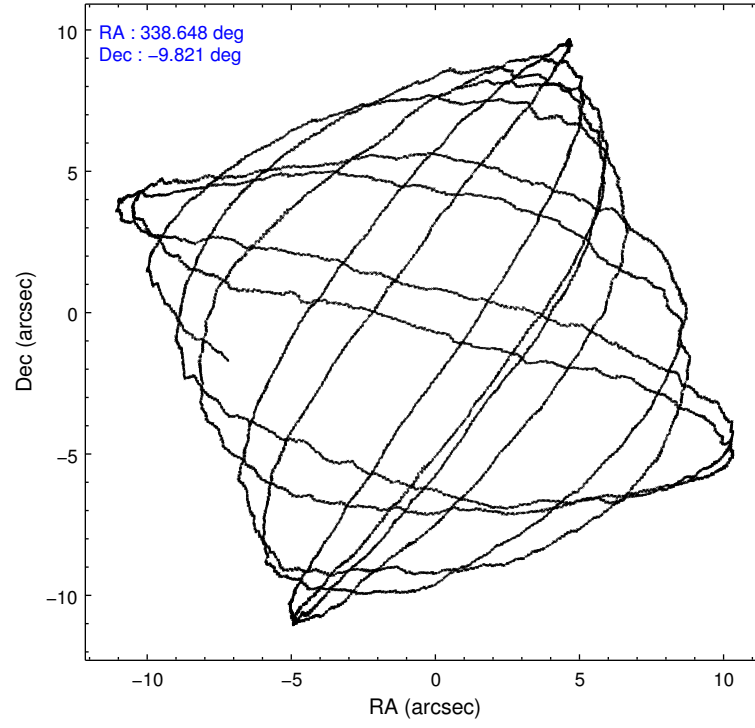
	ccd 0	ccd 2
level 1 events	21402	22841
rejected events	18940	20515
rejected %	88%	89%

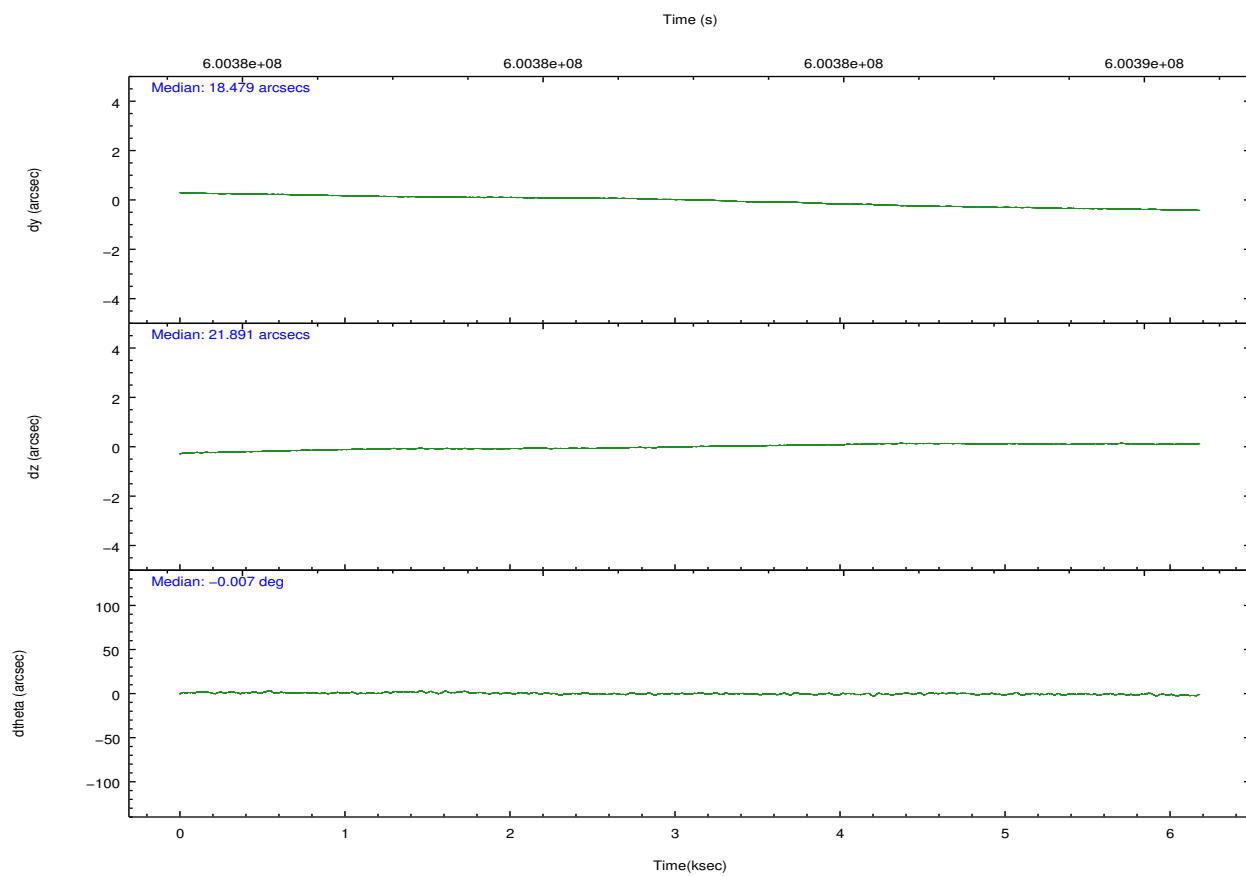
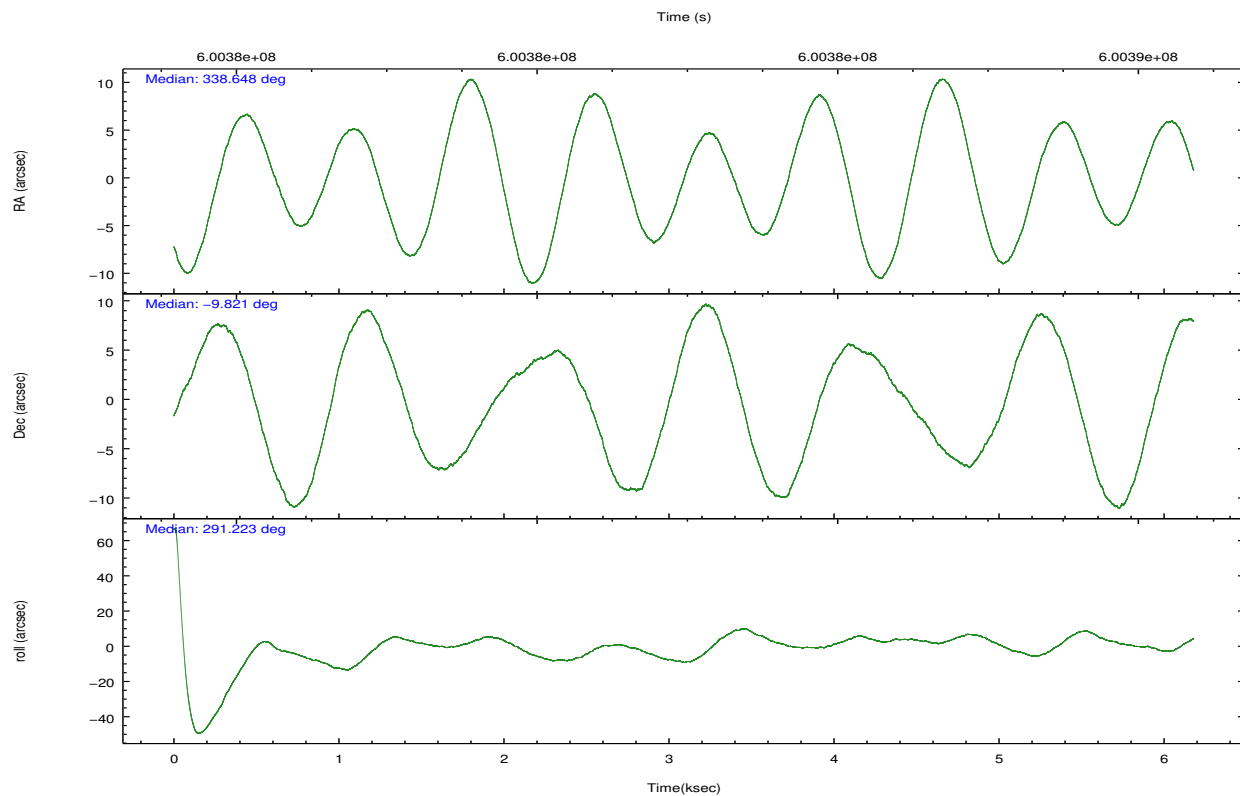
	ccd 0	ccd 2
grade 0 events	843	787
	3%	3%
grade 1 events	3	11
	0%	0%
grade 2 events	494	458
	2%	2%
grade 3 events	319	311
	1%	1%
grade 4 events	293	300
	1%	1%
grade 5 events	796	812
	3%	3%
grade 6 events	514	471
	2%	2%
grade 7 events	18140	19691
	84%	86%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-02	ACIS-02	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	338.626293	338.6481997191515	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	-9.803822	-9.82097283988319	Subarray start row	513	513
[deg] Pointing Roll	291.028472	291.2408773335217	Subarray row count	512	512
[s] Window start time (MET)	600134469.184000	600134469.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	600652809.184000	600652809.184000	[s] Primary exposure time	0.000000	1.6
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	600380063.184000	600379686.85756			
Observation start date	2017-01-09T20:13:14	2017-01-09T20:08:06			
[s] Observation end time (MET)	600386063.184000	600386196.6329401			
Observation end date	2017-01-09T21:53:14	2017-01-09T21:56:36			
Read mode	TIMED	TIMED			

2.3 Aspect



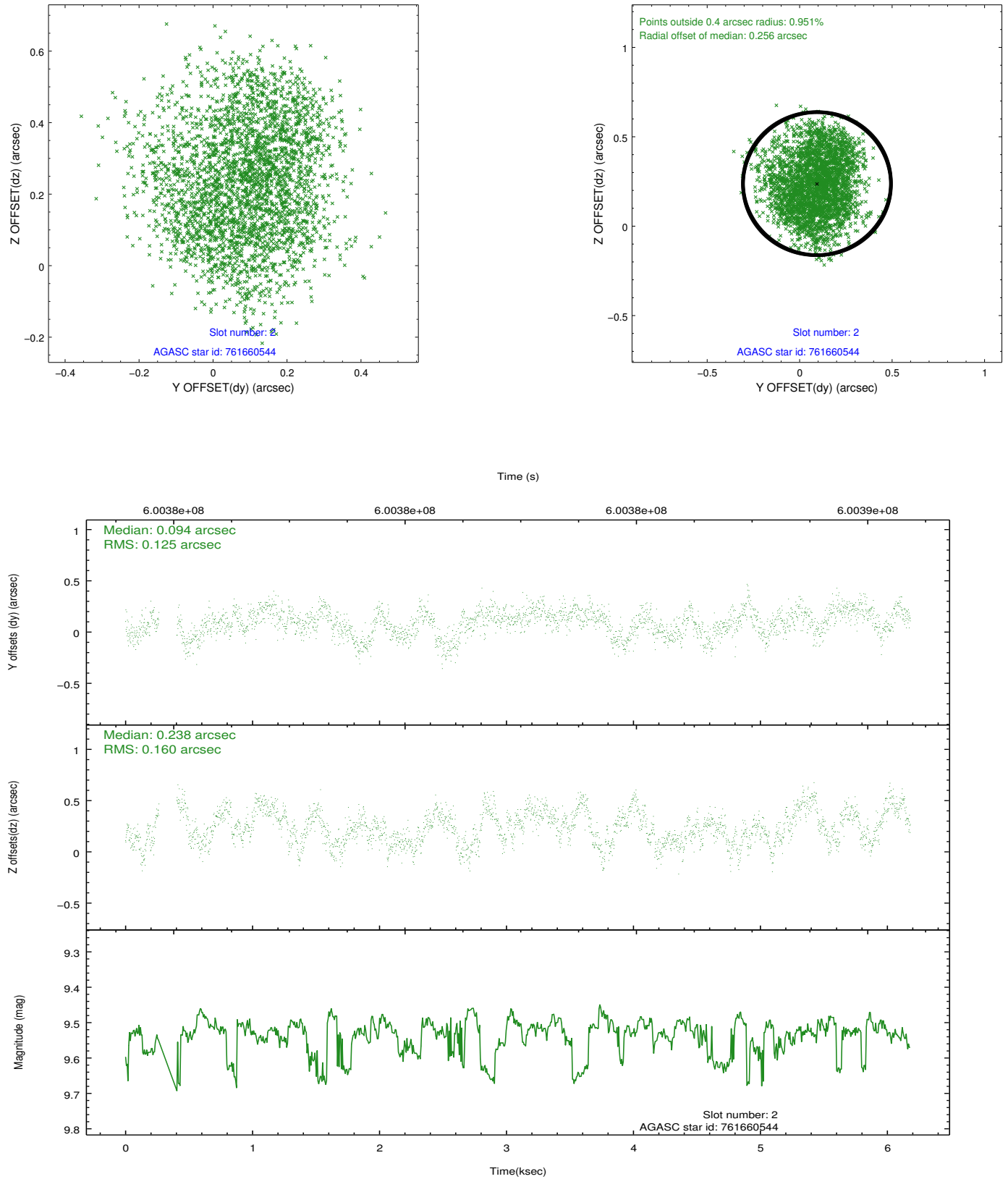


Slot Statistics

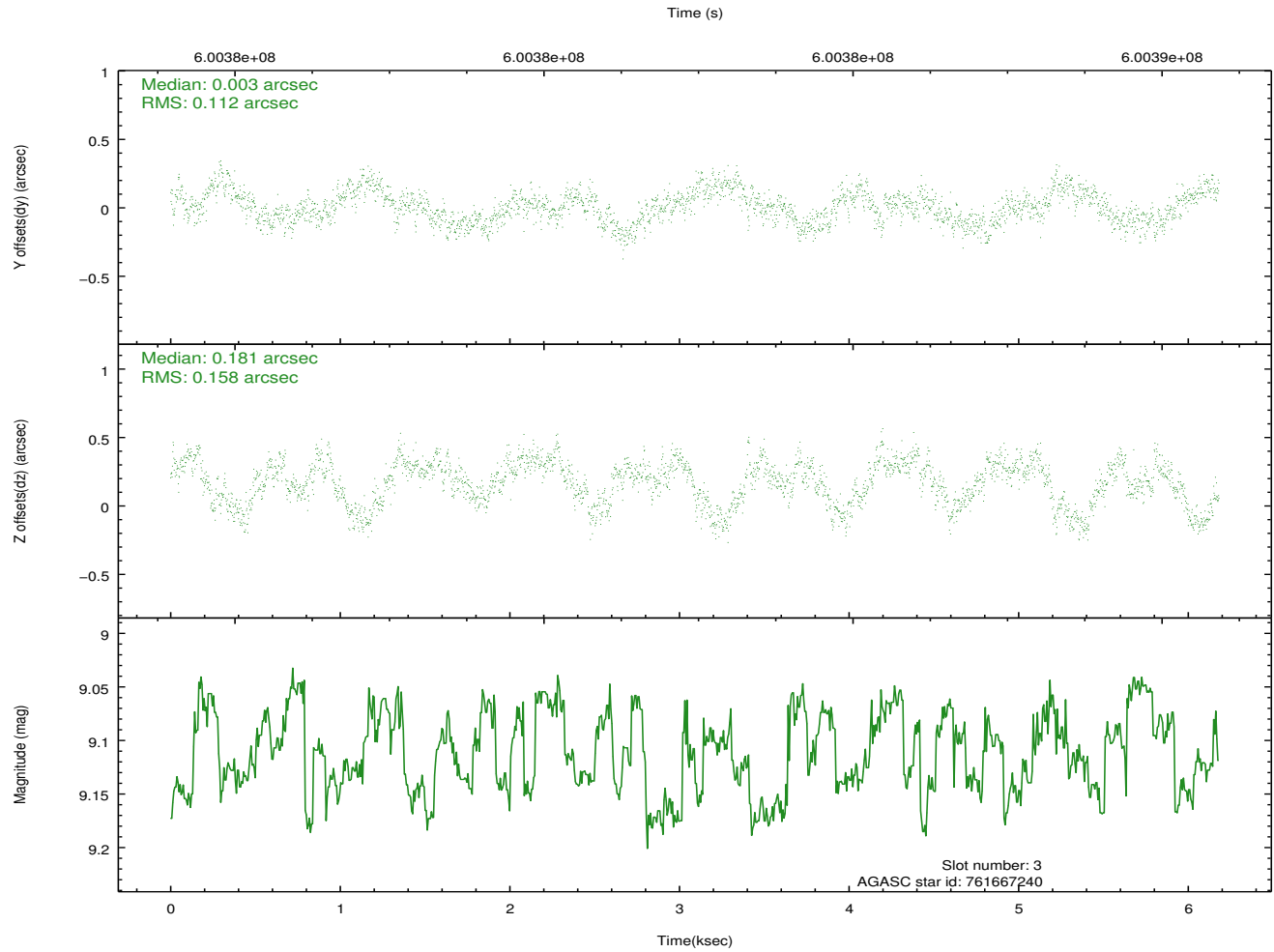
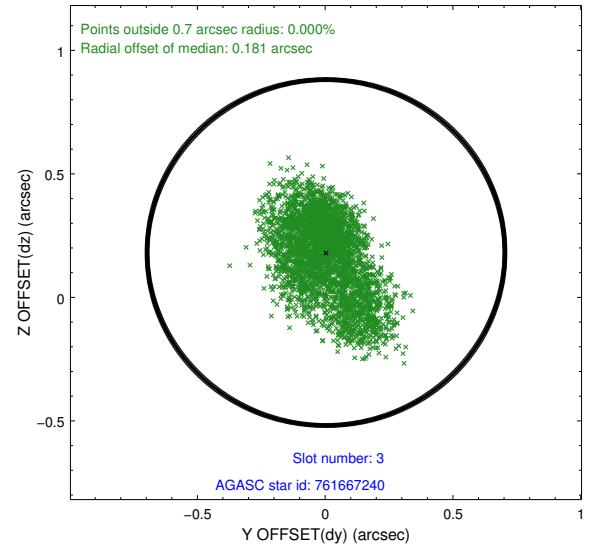
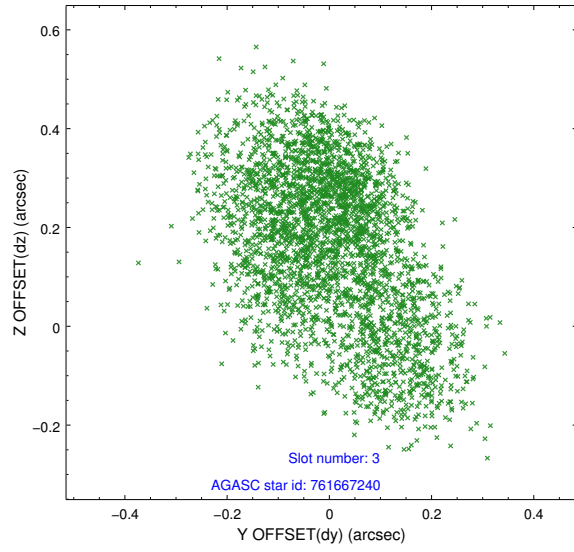
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.13	1508	0.007	-0.047	0.008	0.015	0.000000	0.000000	-773.17	-852.14
1	FID		ACIS-I-5	7.25	1505	-0.070	0.095	0.008	0.015	0.000000	0.000000	-1827.93	1051.28
2	GUIDE	used	761660544	9.53	2945	0.094	0.238	0.224	0.331	338.244590	-9.272592	-2269.23	-577.21
3	GUIDE	used	761667240	9.11	3016	0.003	0.181	0.203	0.345	338.639466	-9.137380	-2222.96	904.78
4	GUIDE	used	761660400	9.96	3006	0.189	-0.197	0.354	0.515	338.389006	-9.676743	-728.57	-621.20
5	GUIDE	used	761672136	8.52	3011	-0.311	-0.427	0.292	0.429	339.196147	-9.393141	-652.82	2419.13
6	GUIDE	used	761671528	9.54	3009	-0.027	-0.131	0.249	0.381	338.747457	-9.241198	-1736.24	1129.08
7	GUIDE	used	761670696	9.32	3010	0.094	0.348	0.164	0.266	338.284918	-9.212445	-2421.52	-367.99

2.4 Star Slots

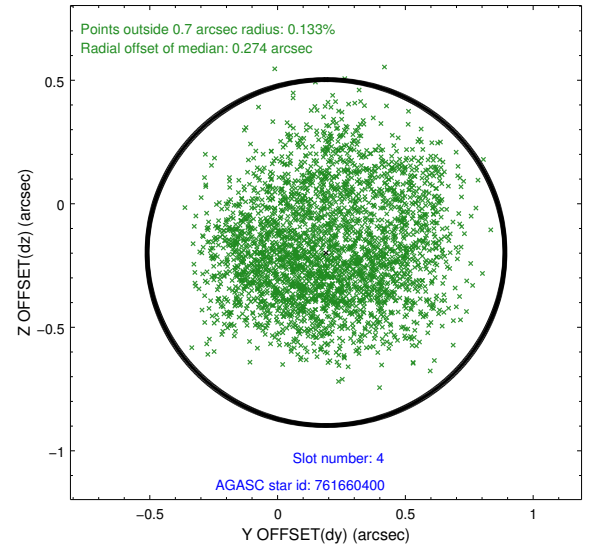
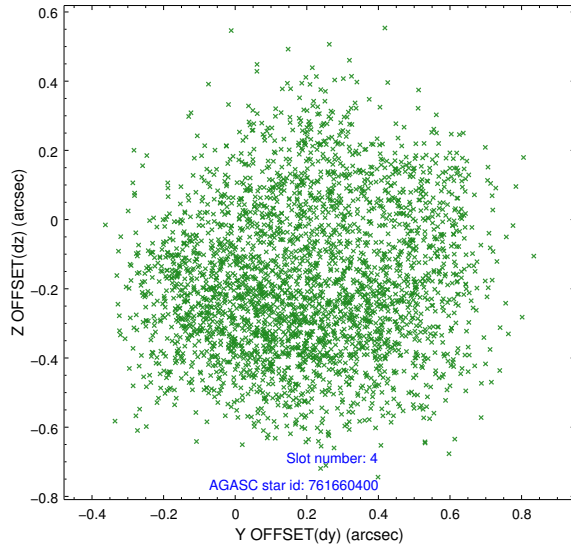
2.4.1 Slot 2



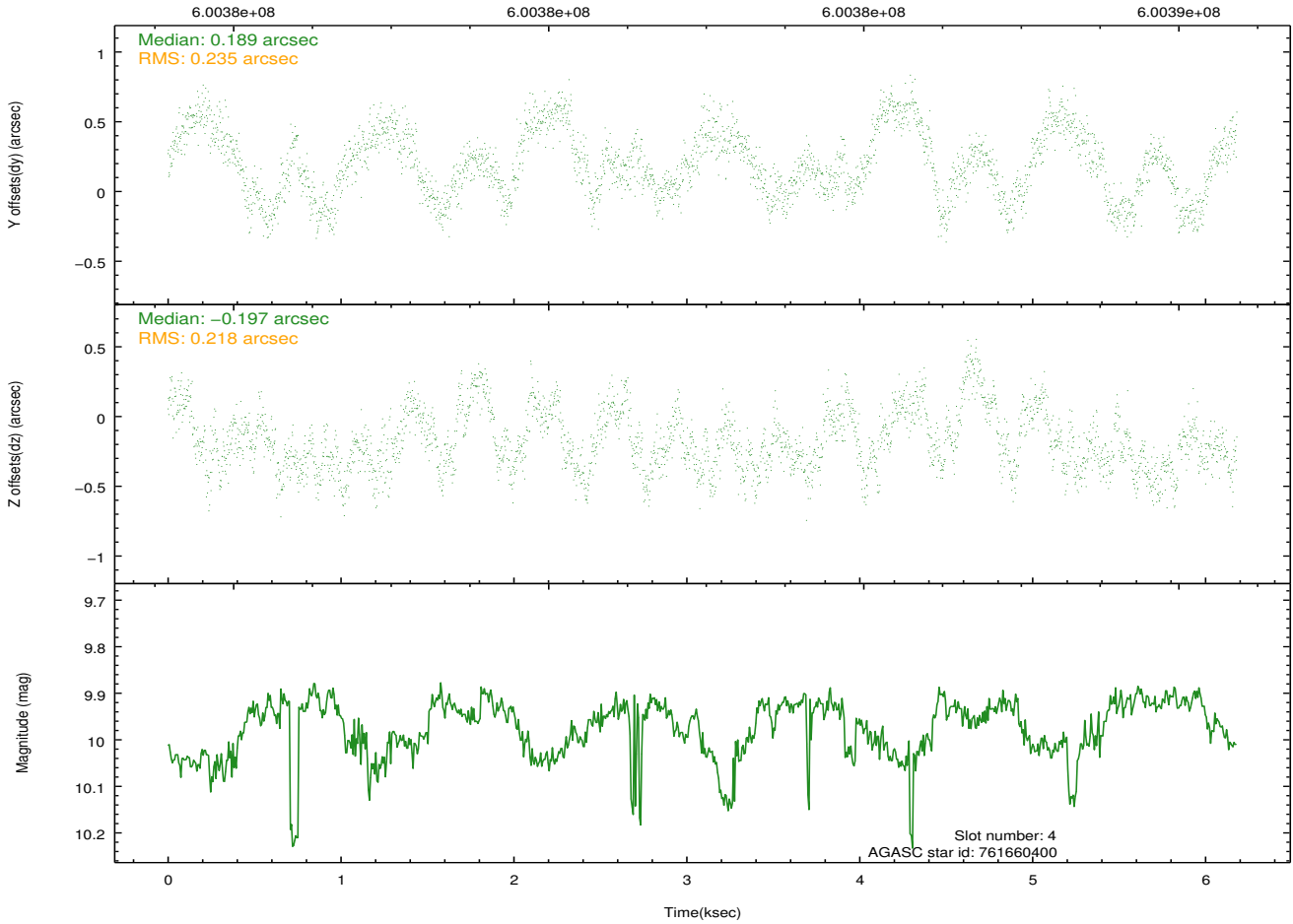
2.4.2 Slot 3



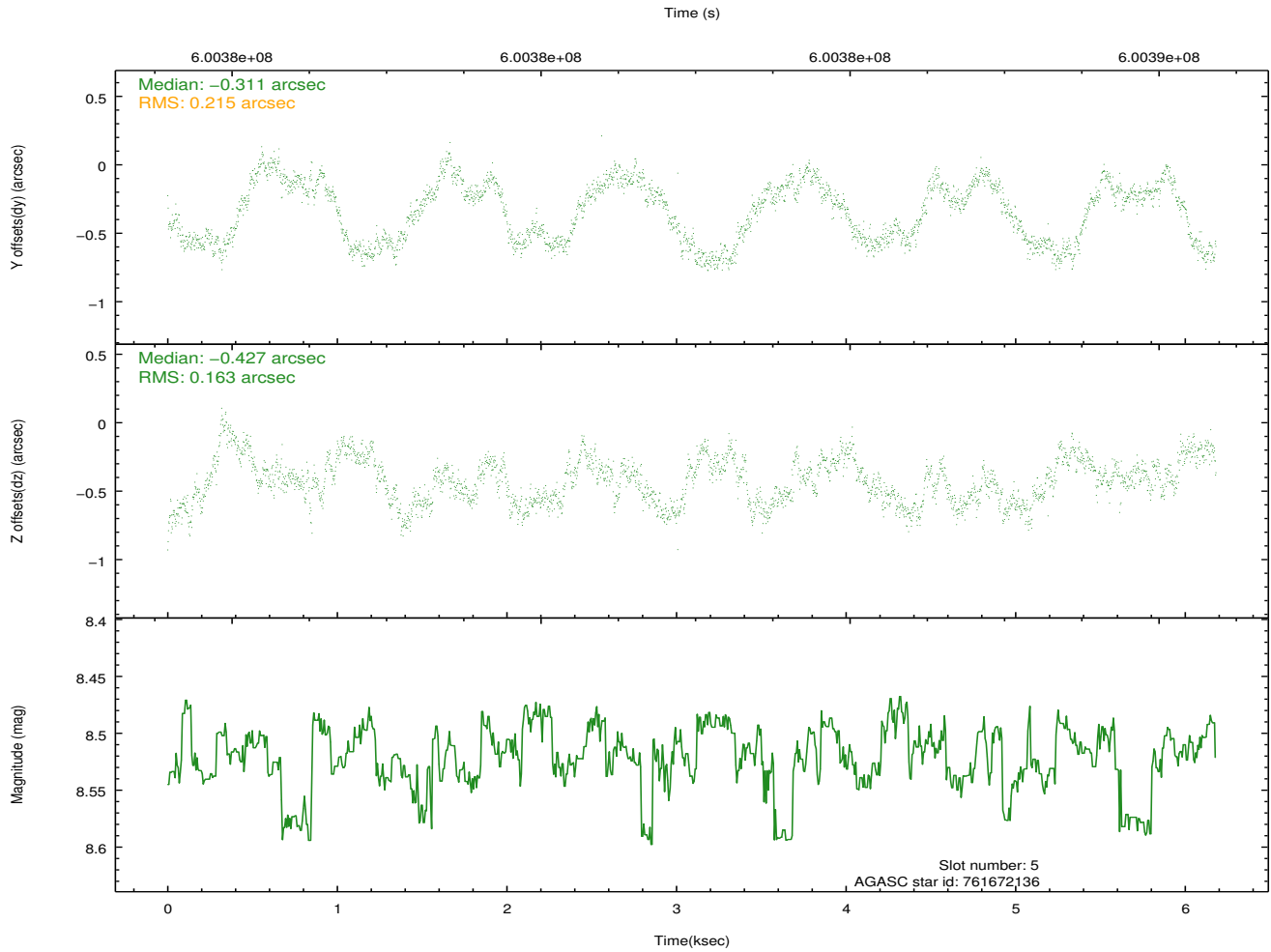
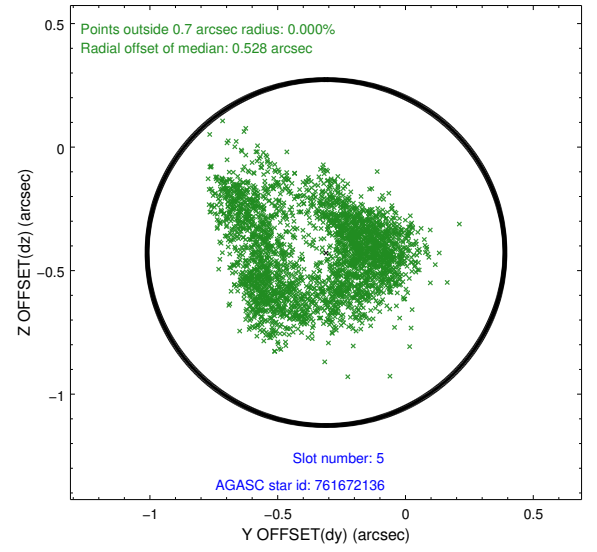
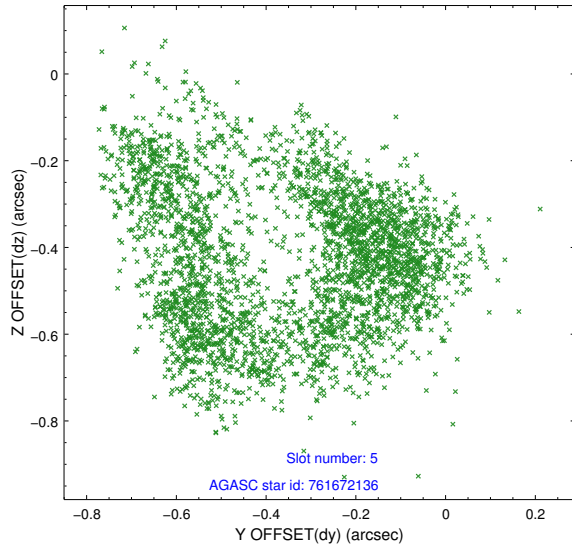
2.4.3 Slot 4



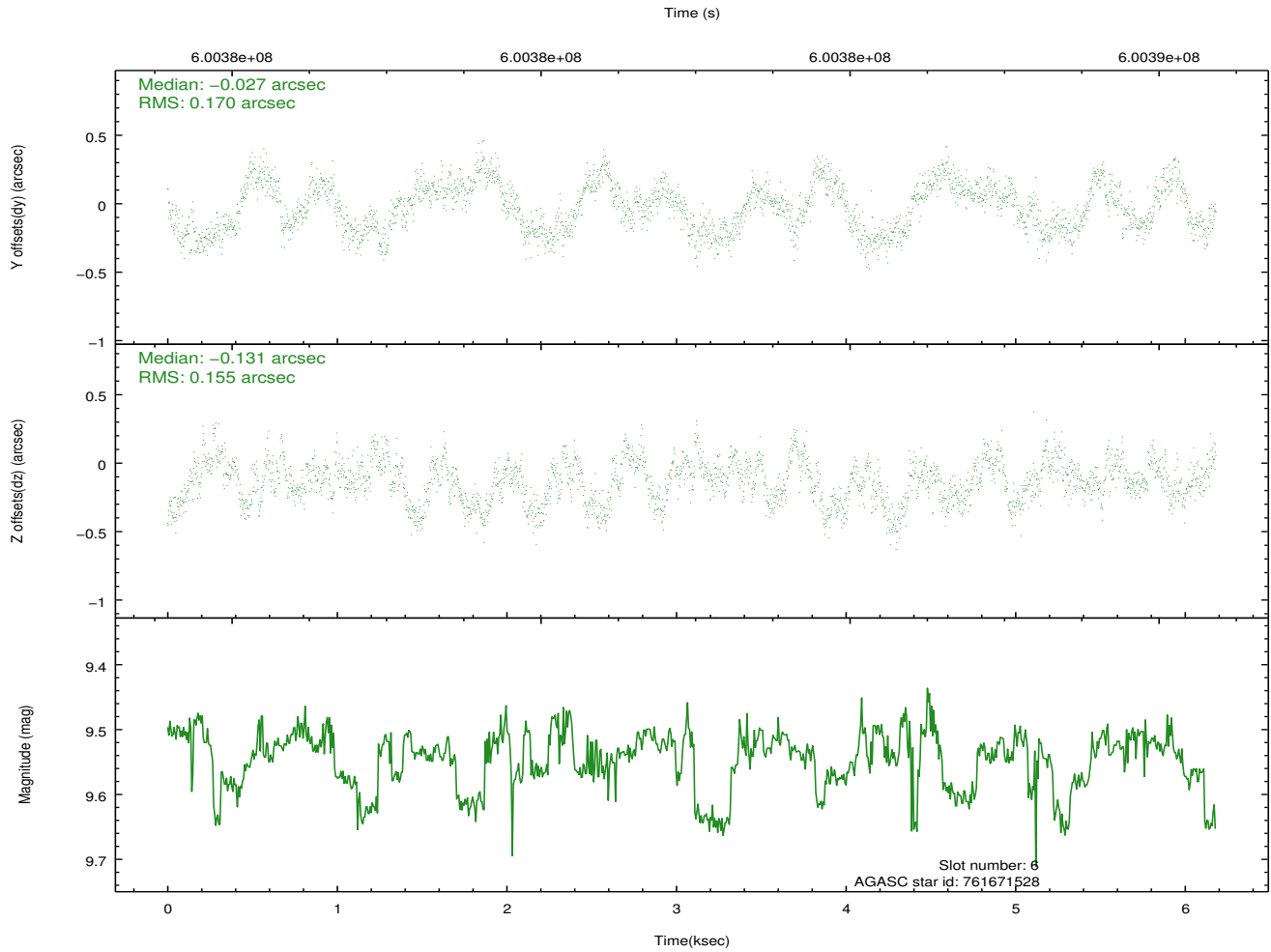
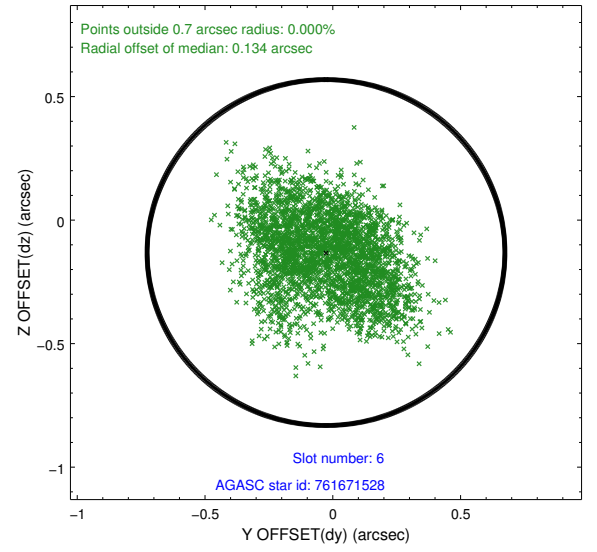
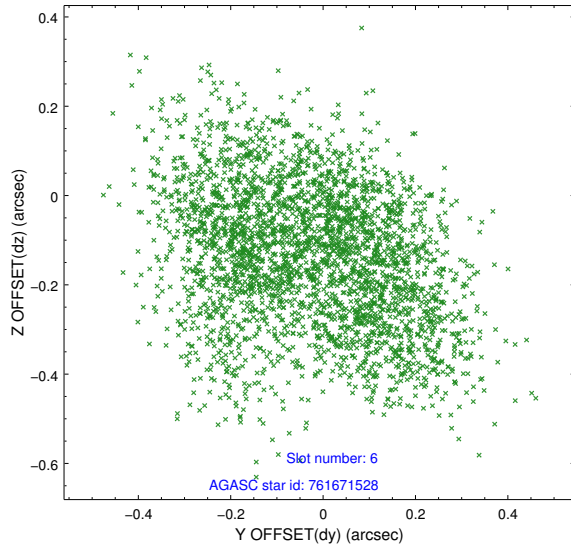
Time (s)



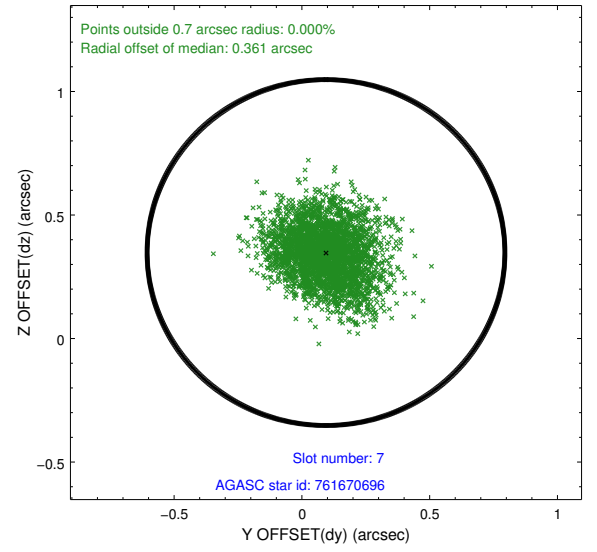
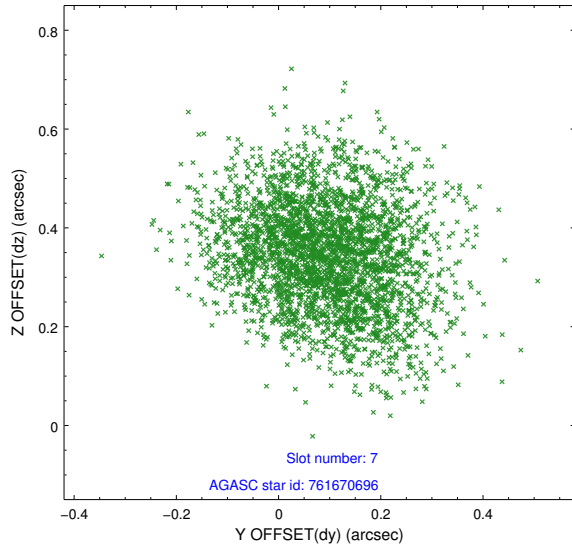
2.4.4 Slot 5



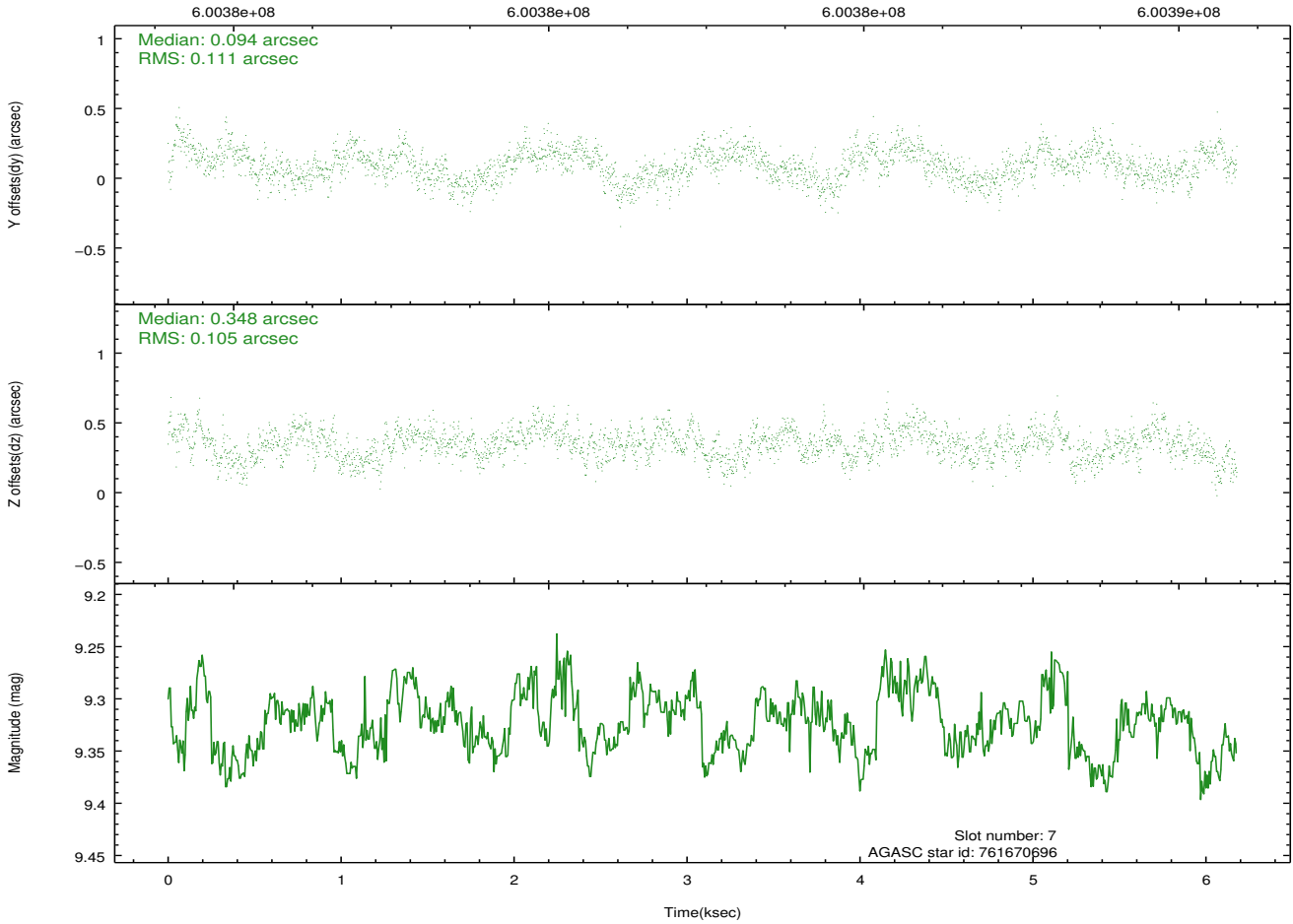
2.4.5 Slot 6



2.4.6 Slot 7

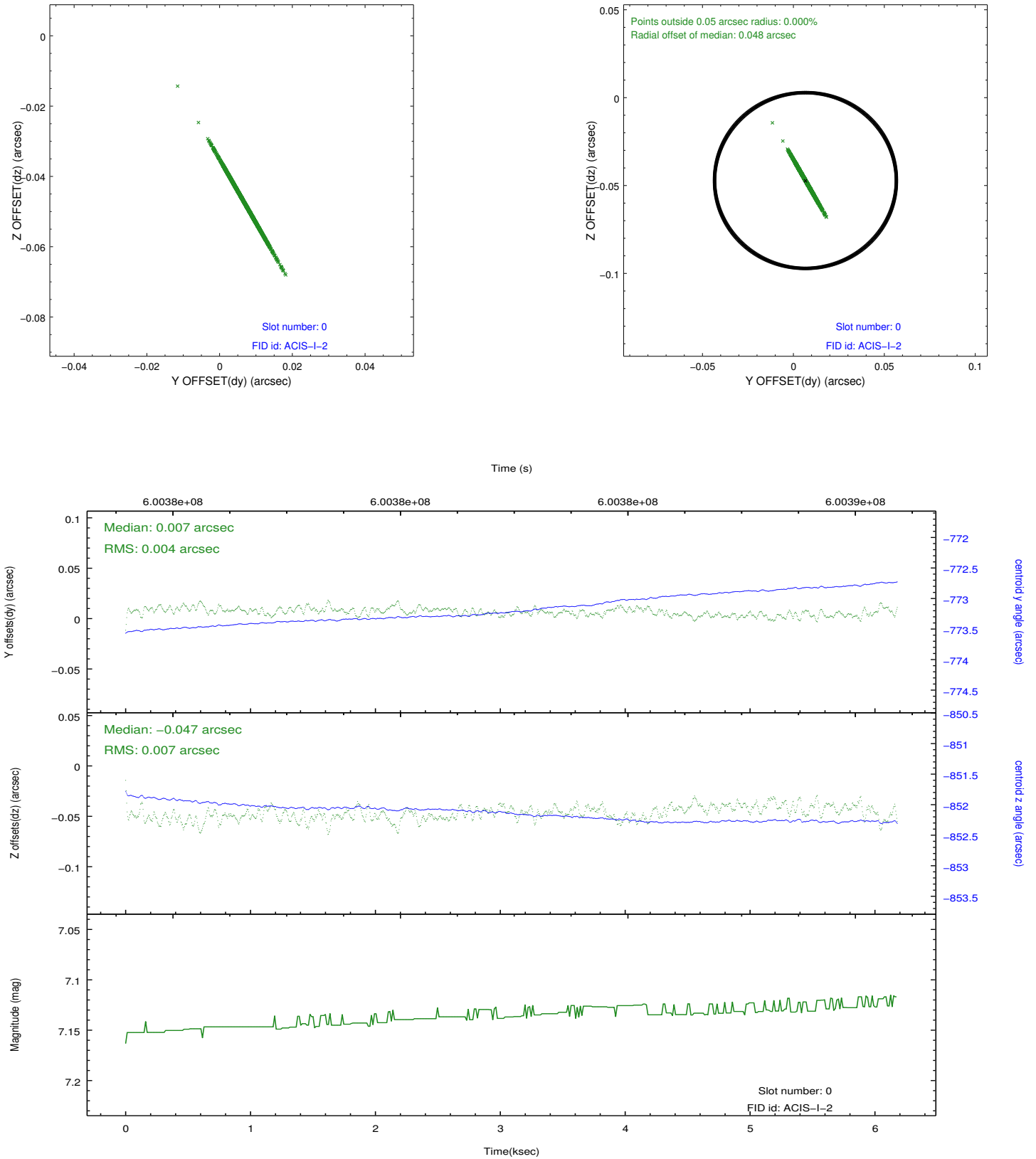


Time (s)

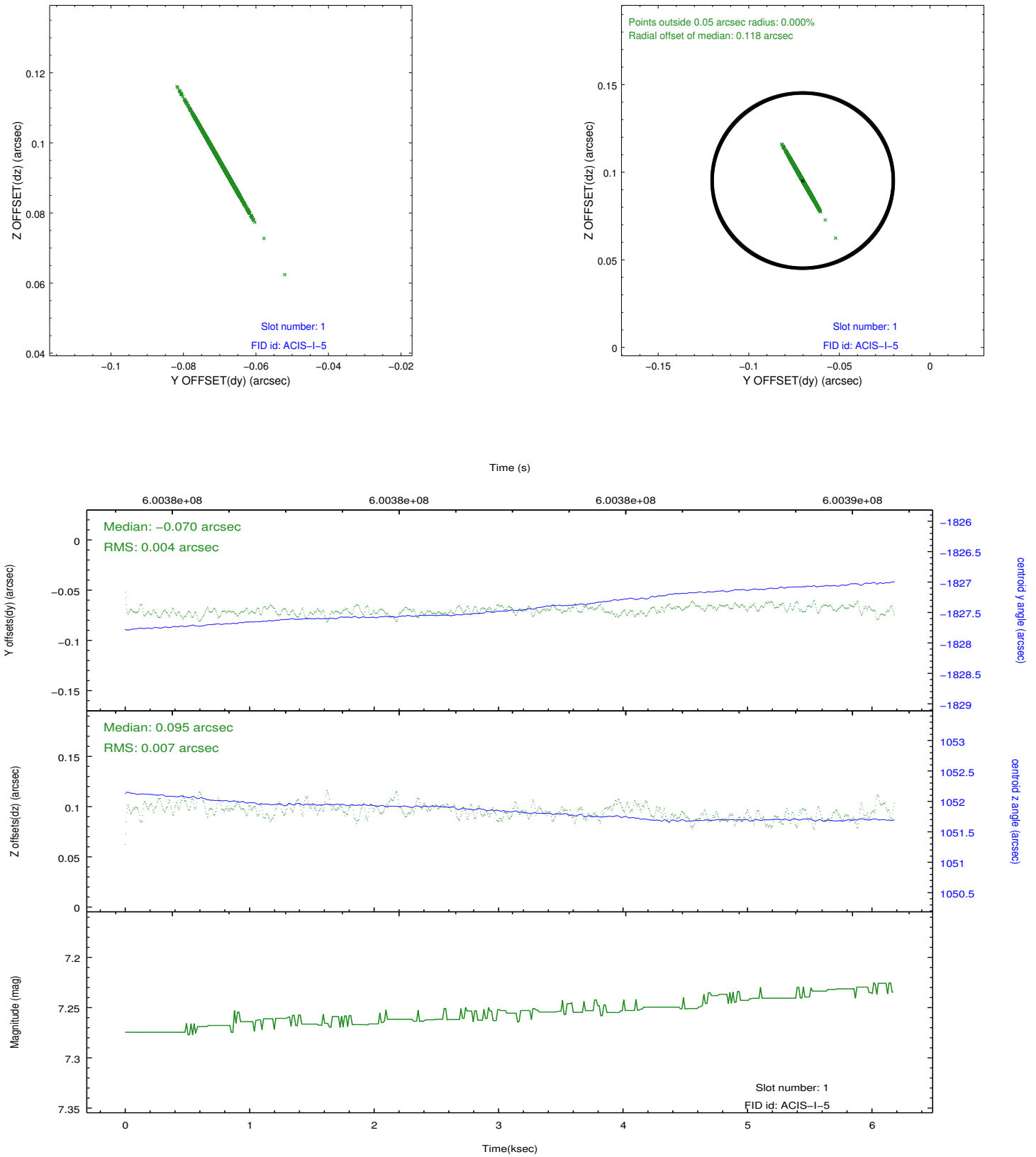


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.01.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.8316216212511

A.2 Comments

This is a moving target. Users will need to run sso_freeze or similar software to position the events in the reference frame of the target.

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Nominal chip is set to 2.

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Window constraint met.

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The yellow-limit RMS warnings on slots 4 and 5 are acceptable for aspect.