

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 17439 - L2 Version 2
Chandra X-Ray Center

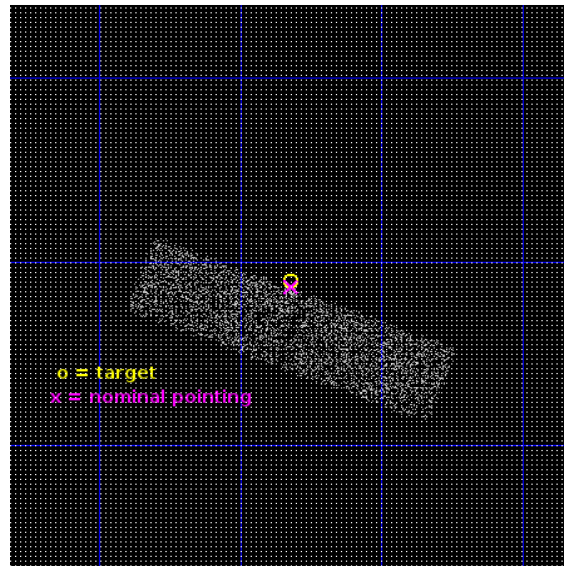
L2 Processing Date : Jan 11 2017

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1 Front

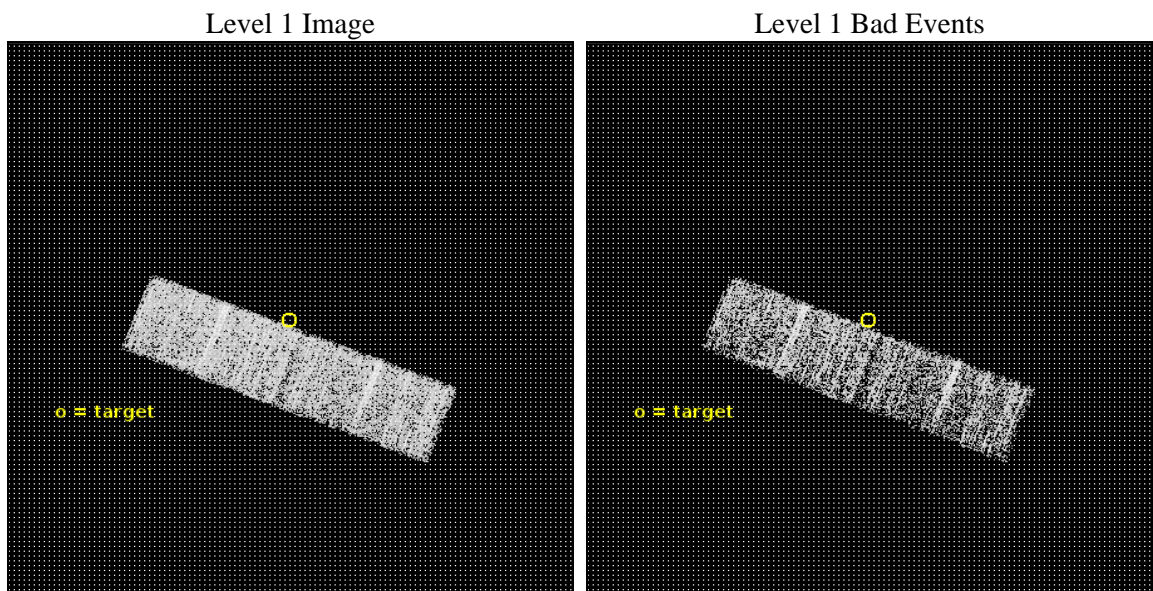
seq_num	100153	Sequence number
obs_id	17439	Observation id
title	Venus in an intermediate phase of the solar cycle	Proposal title
observer	Peter Predehl	Principal investigator
object	Venus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	338.579686	Observer's specified target RA [deg]
dec_targ	-9.851121	Observer's specified target Dec [deg]
ra_nom	338.57968510647	Nominal RA [deg]
dec_nom	-9.8559397038197	Nominal Dec [deg]
roll_nom	291.22310816985	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6078.1282855272	Sum of GTIs [s]
livetime	5926.1232248108	Livetime [s]
ontime0	6078.0872455835	Sum of GTIs [s]
ontime2	6078.1282855272	Sum of GTIs [s]
l2events	3930	Number of level 2 events



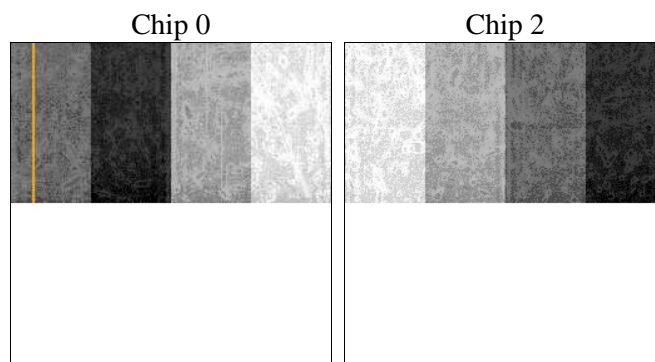
2 OBI

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	6078.1282855272	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	6078.0872455835	Sum of GTIs [s]
date	2017-01-11T22:37:12	Date and time of file creation	ontime2	6078.1282855272	Sum of GTIs [s]
revision	2	Processing version of data	l1events	47357	Number of level 1 events

2.1.4 Events

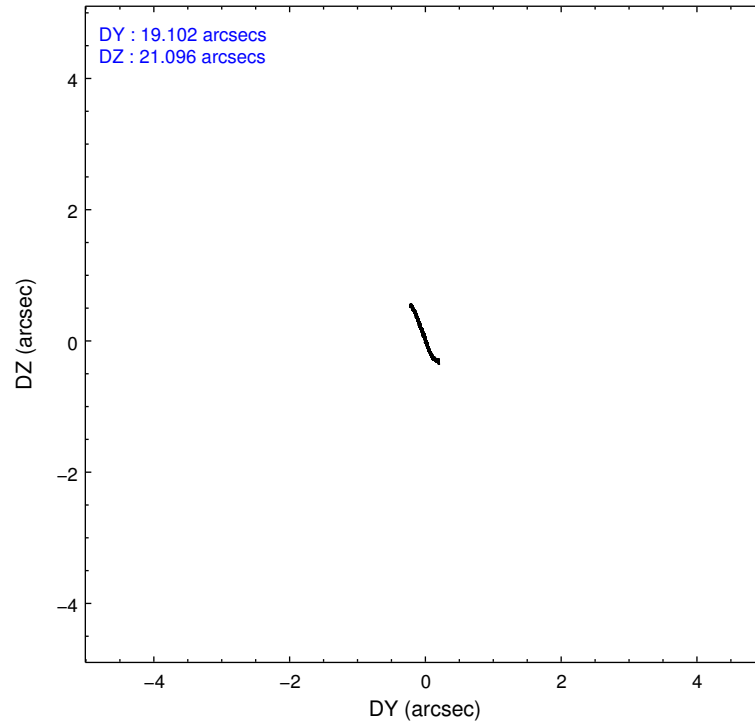
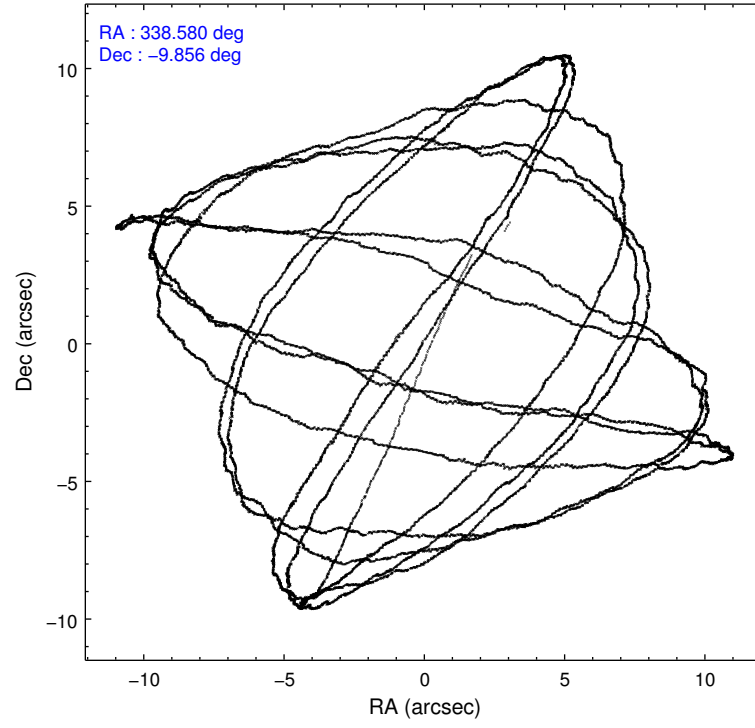
	ccd 0	ccd 2
level 1 events	21629	25728
rejected events	19067	23252
rejected %	88%	90%

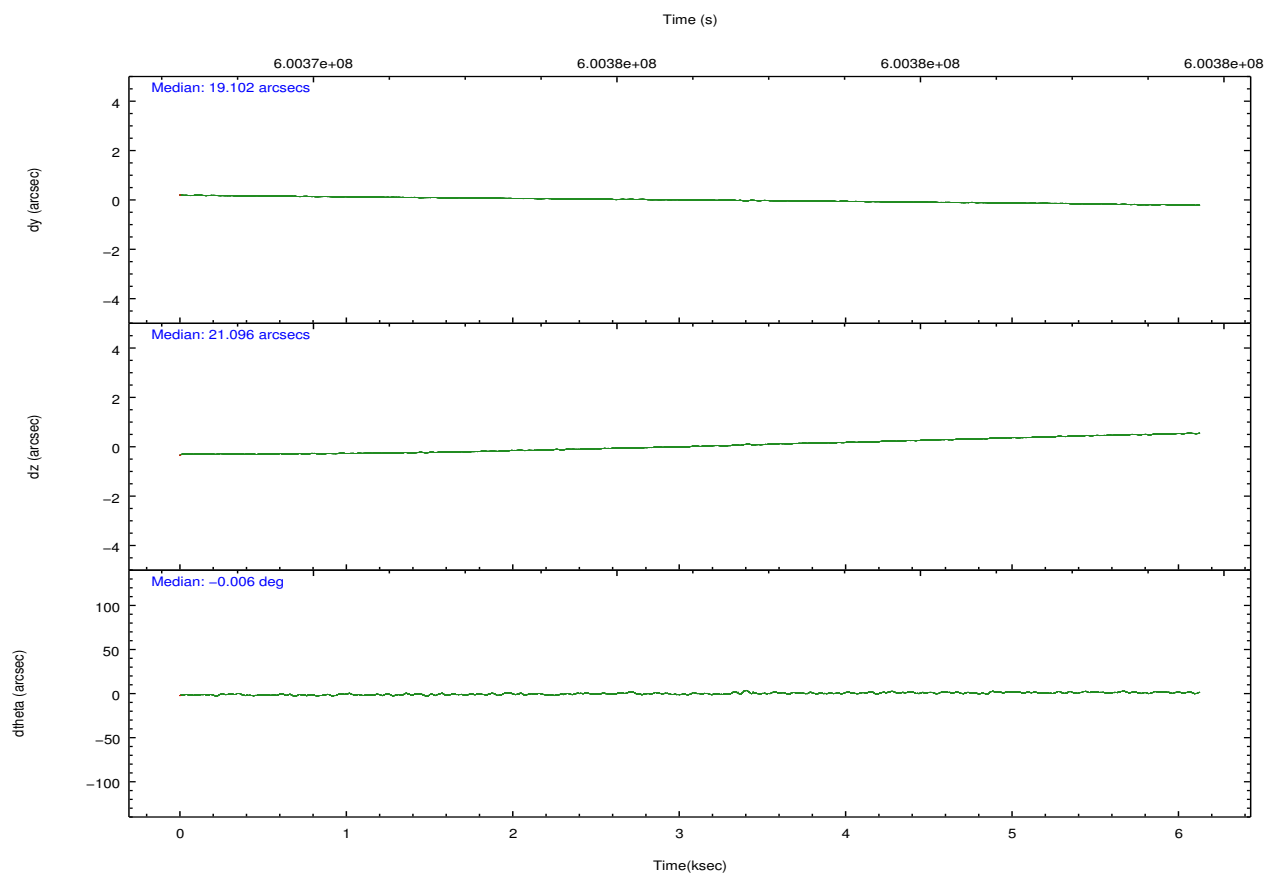
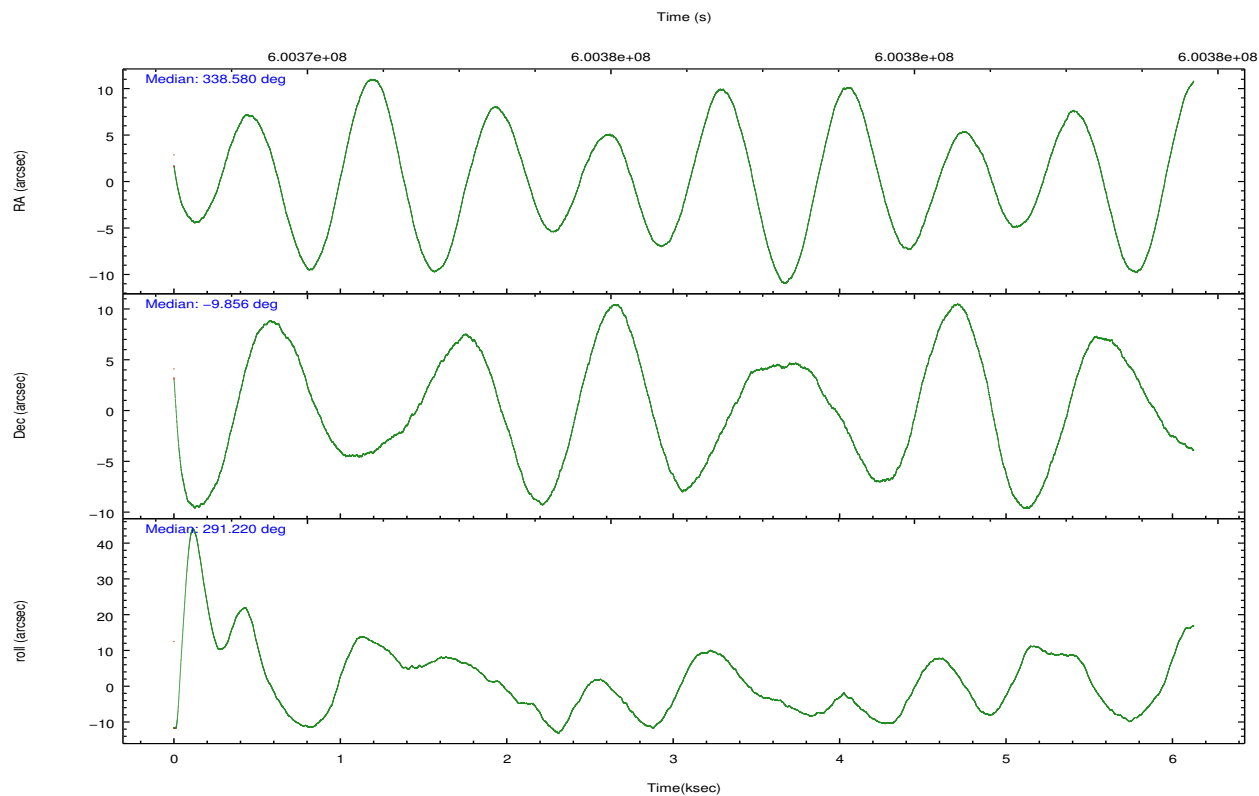
	ccd 0	ccd 2
grade 0 events	822	874
	3%	3%
grade 1 events	10	7
	0%	0%
grade 2 events	543	467
	2%	1%
grade 3 events	331	309
	1%	1%
grade 4 events	334	331
	1%	1%
grade 5 events	912	823
	4%	3%
grade 6 events	532	496
	2%	1%
grade 7 events	18145	22421
	83%	87%

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	338.557807	338.5796851064669	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	-9.838690	-9.85593970381969	Subarray start row	513	513
[deg] Pointing Roll	291.010862	291.2231081698527	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)	600373553.184000	600372285.33213			
Observation start date	2017-01-09T18:24:44	2017-01-09T18:04:45			
[s] Observation end time (MET)	600379553.184000	600379686.85756			
Observation end date	2017-01-09T20:04:44	2017-01-09T20:08:06			
Read mode	TIMED	TIMED			

2.3 Aspect



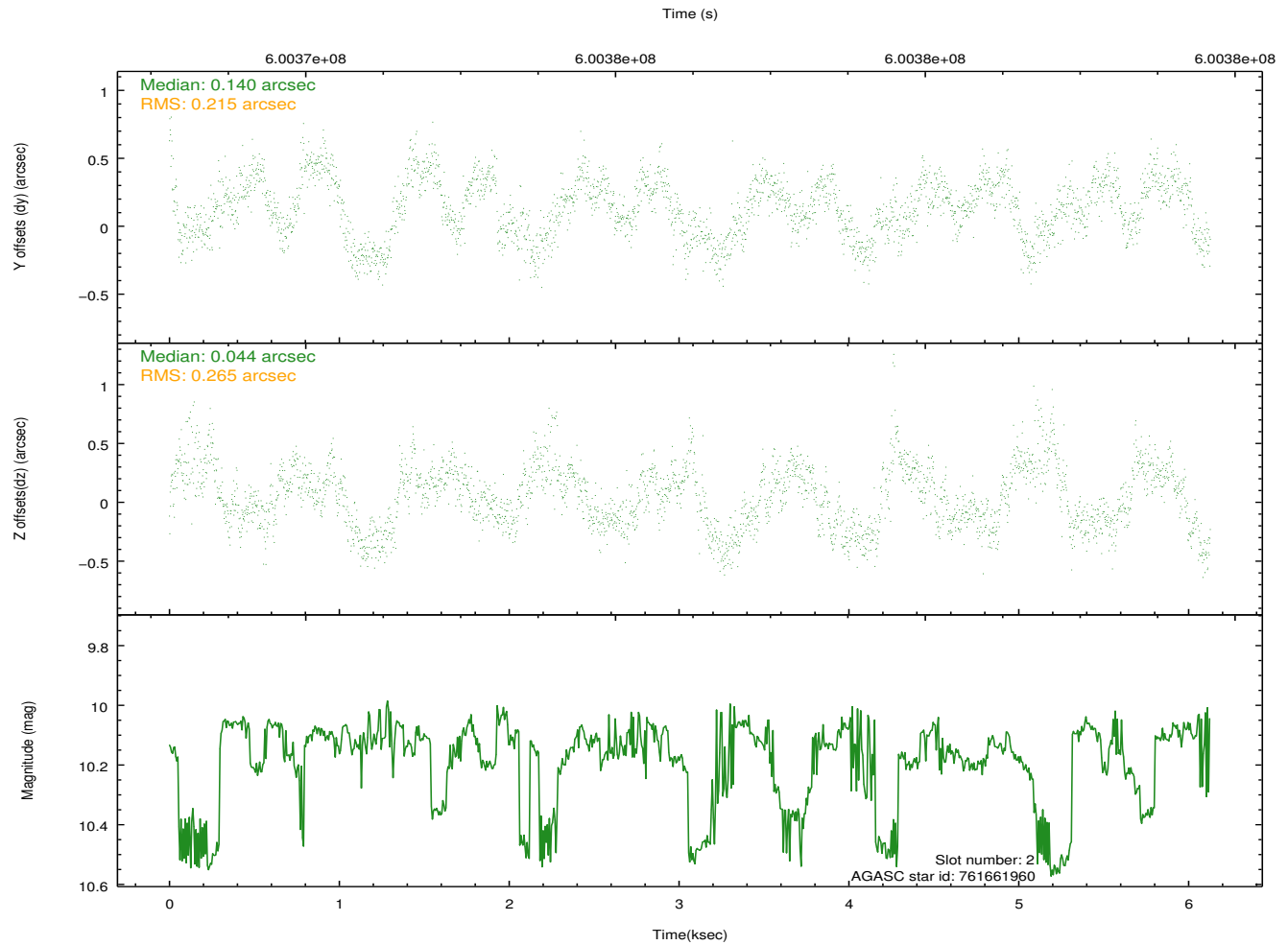
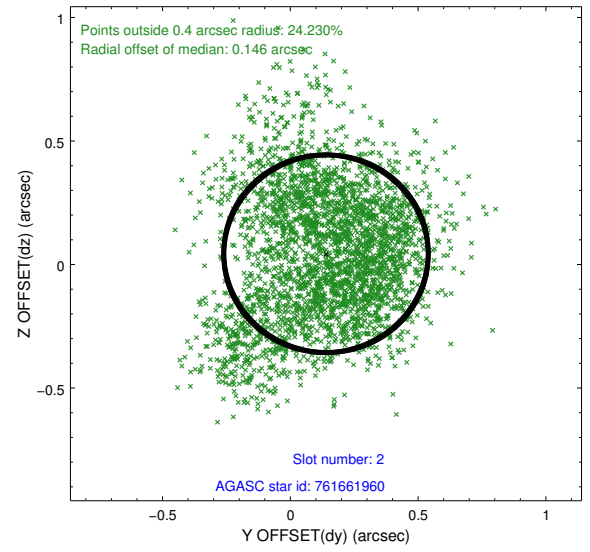
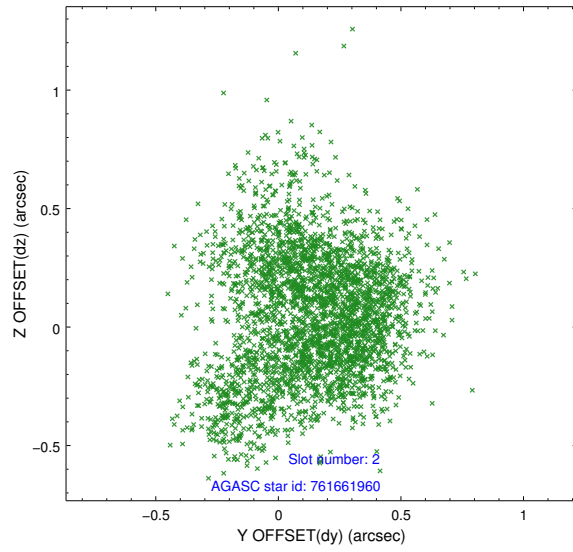


Slot Statistics

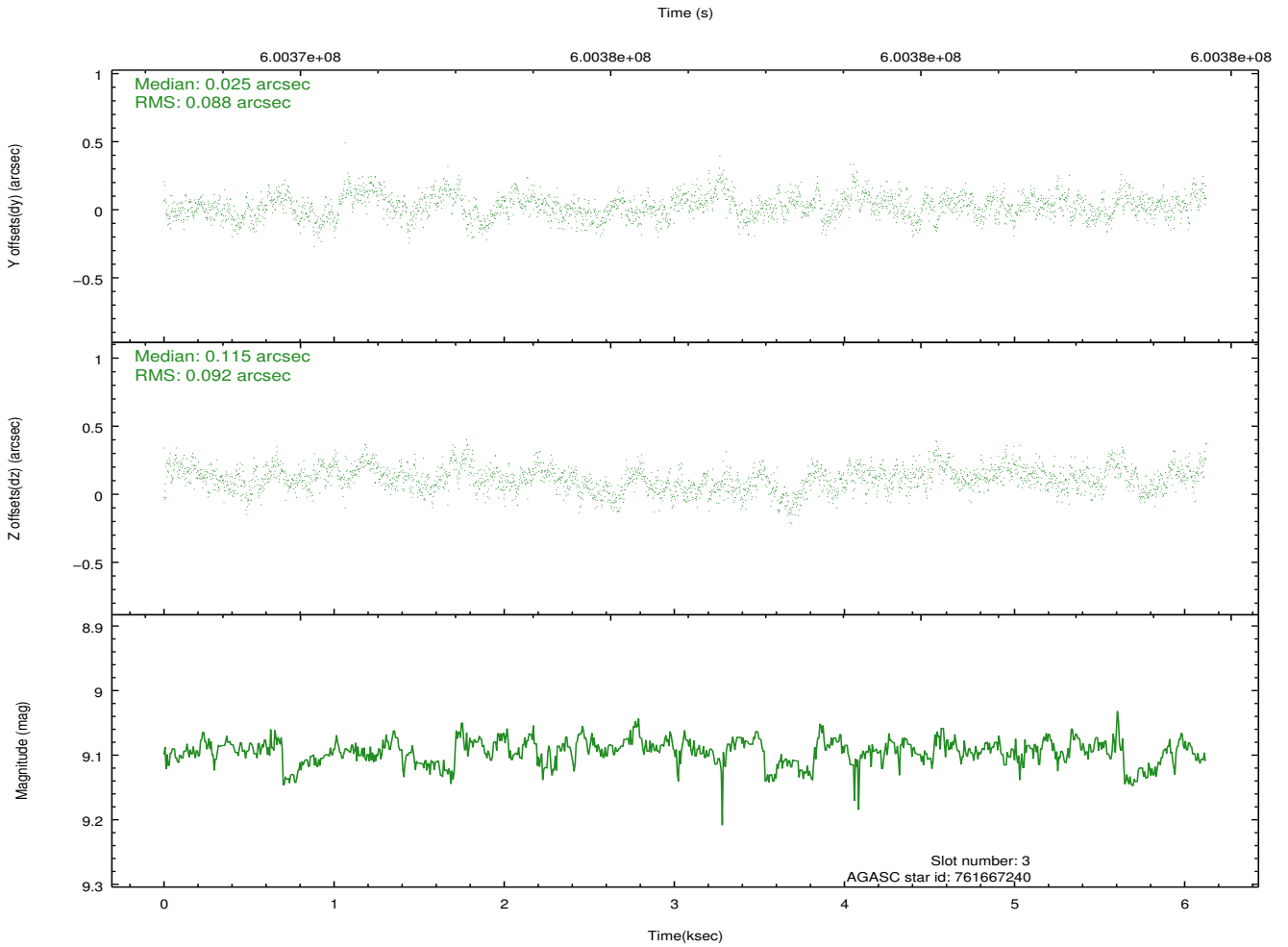
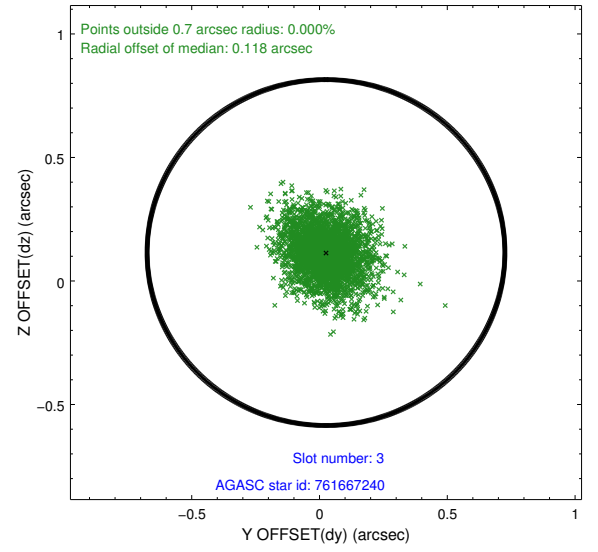
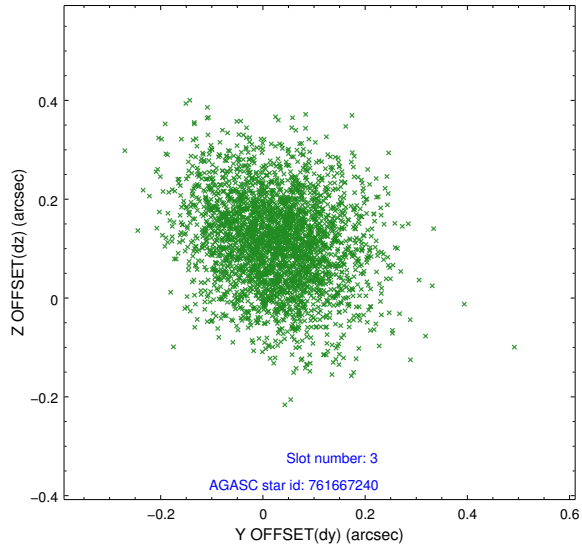
lot	status	used	id	mag	n_pts	med_dy	med_dz	drl	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-2	7.16	1494	0.018	-0.068	0.009	0.018	0.000000	0.000000	-773.84	-851.40
1	FID		ACIS-I-5	7.29	1494	-0.082	0.116	0.009	0.018	0.000000	0.000000	-1828.63	1052.06
2	GUIDE	used	761661960	10.15	2955	0.140	0.044	0.356	0.597	337.767793	-9.482399	-2198.06	-2159.58
3	GUIDE	used	761667240	9.09	2983	0.025	0.115	0.135	0.223	338.639466	-9.137380	-2253.39	1176.00
4	GUIDE	used	761671528	9.51	2983	-0.122	-0.122	0.263	0.417	338.747457	-9.241198	-1767.31	1400.38
5	BAD	used	761666408	6.31	2149	-0.078	-0.354	0.147	0.228	338.527561	-9.608492	-813.64	197.34
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	used	761660544	9.62	2987	0.015	0.235	0.216	0.354	338.244590	-9.272592	-2300.13	-305.45

2.4 Star Slots

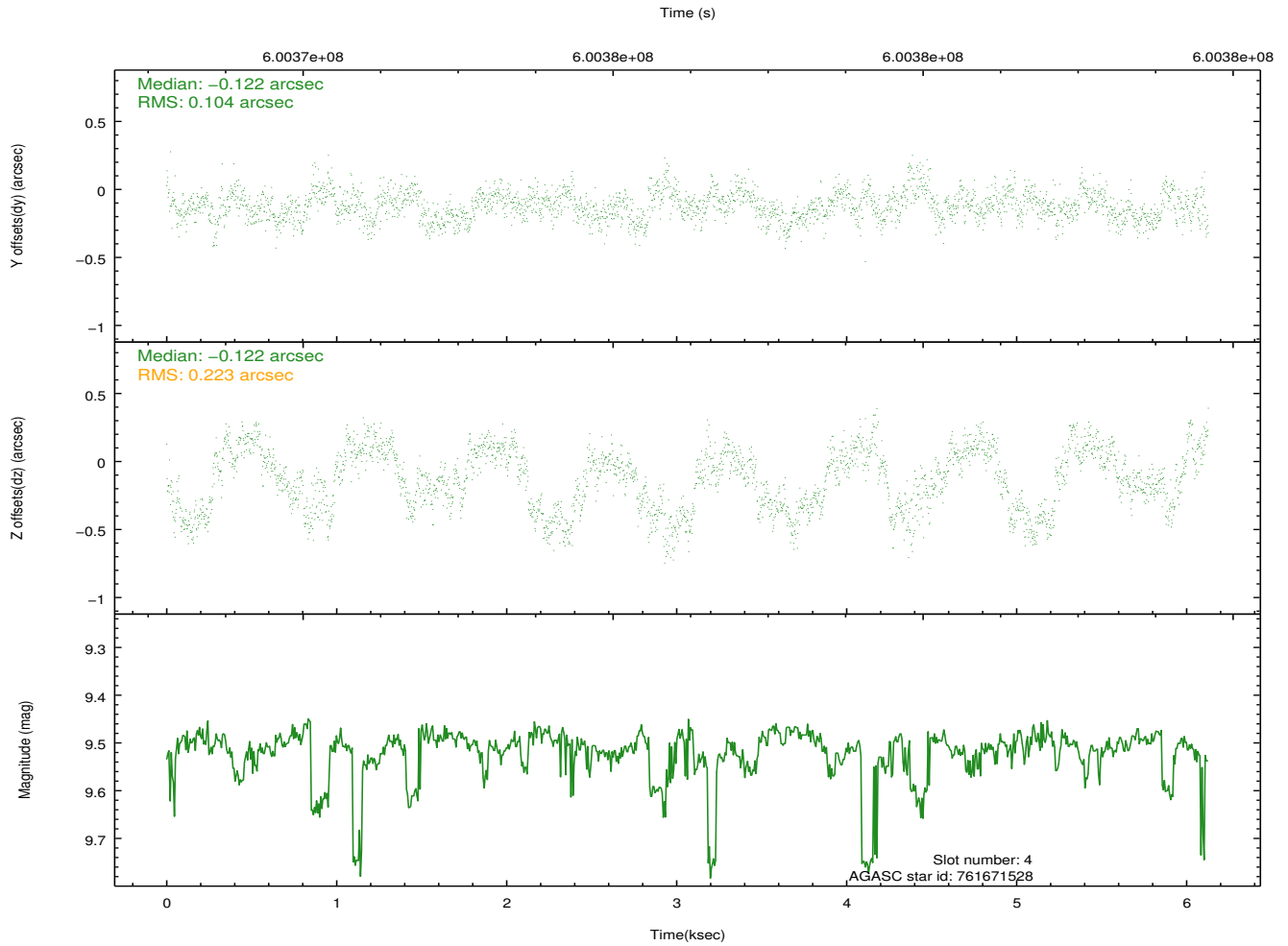
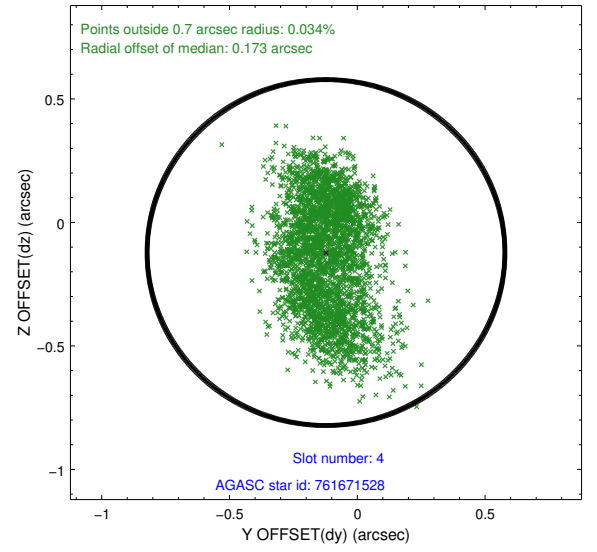
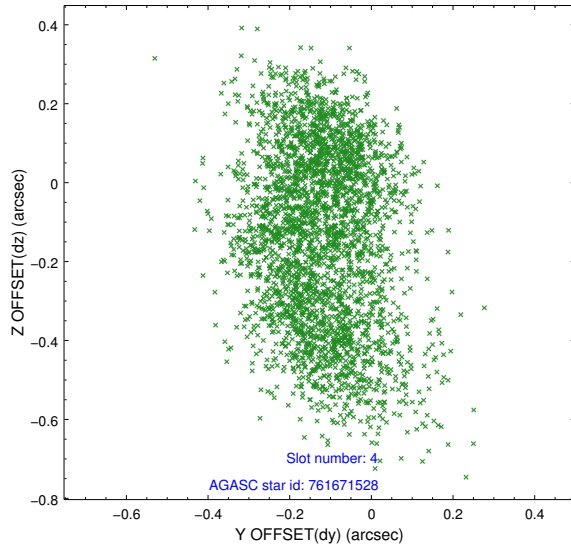
2.4.1 Slot 2



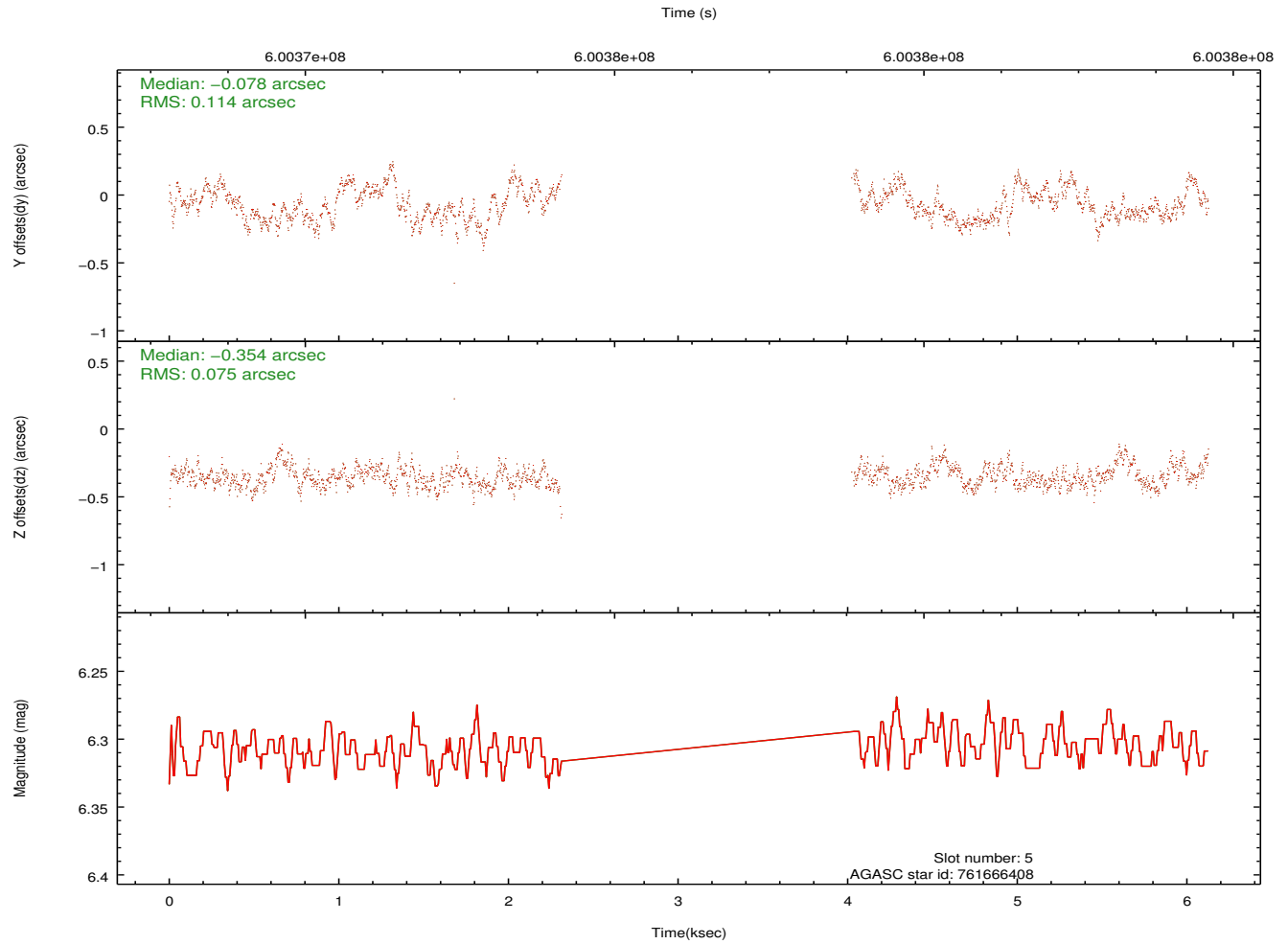
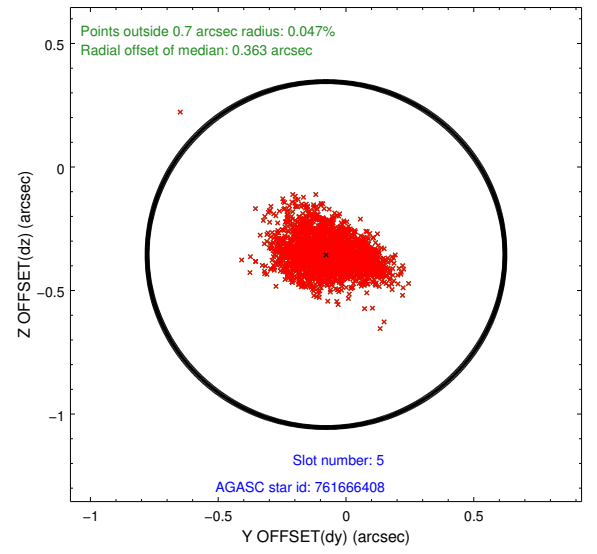
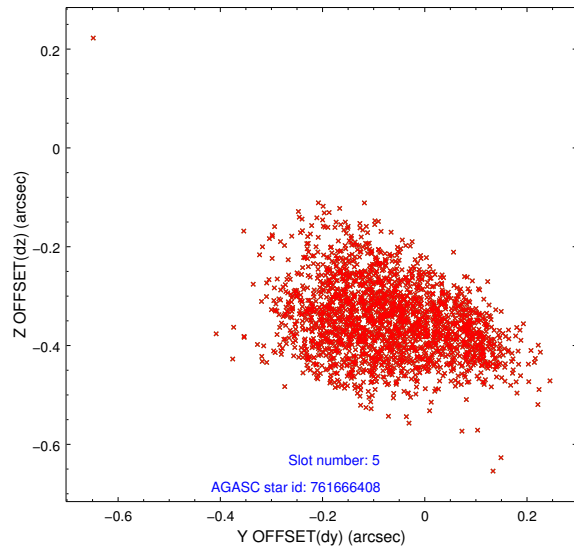
2.4.2 Slot 3



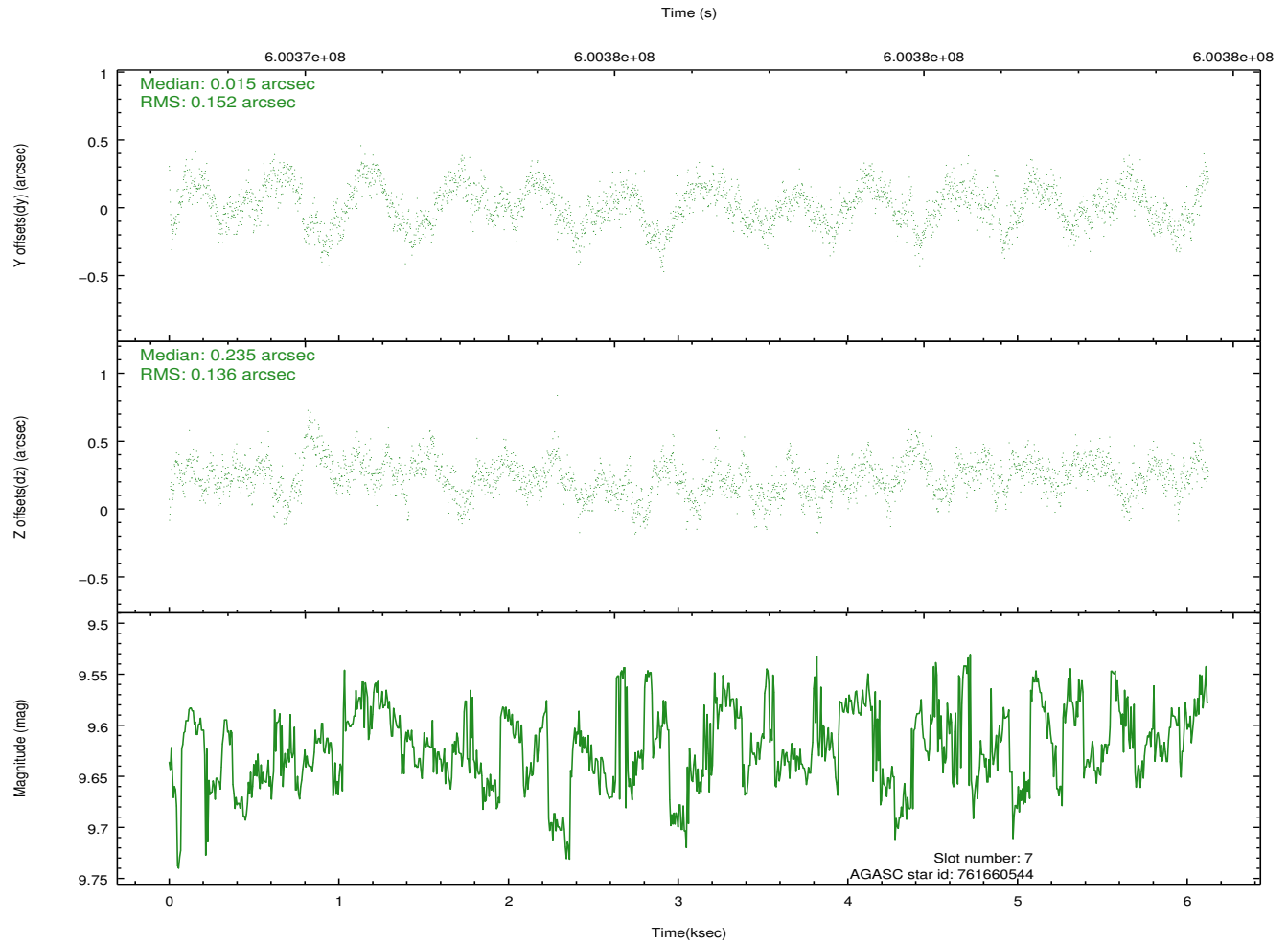
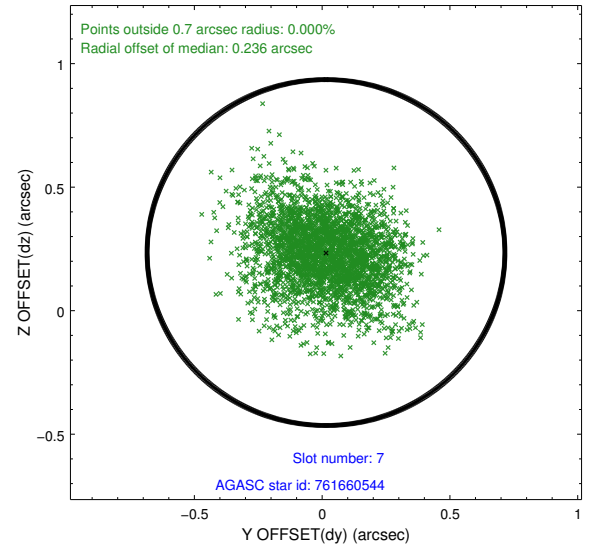
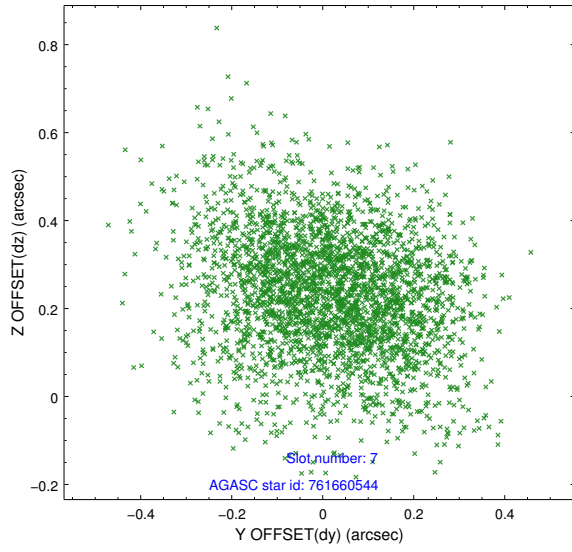
2.4.3 Slot 4



2.4.4 Slot 5

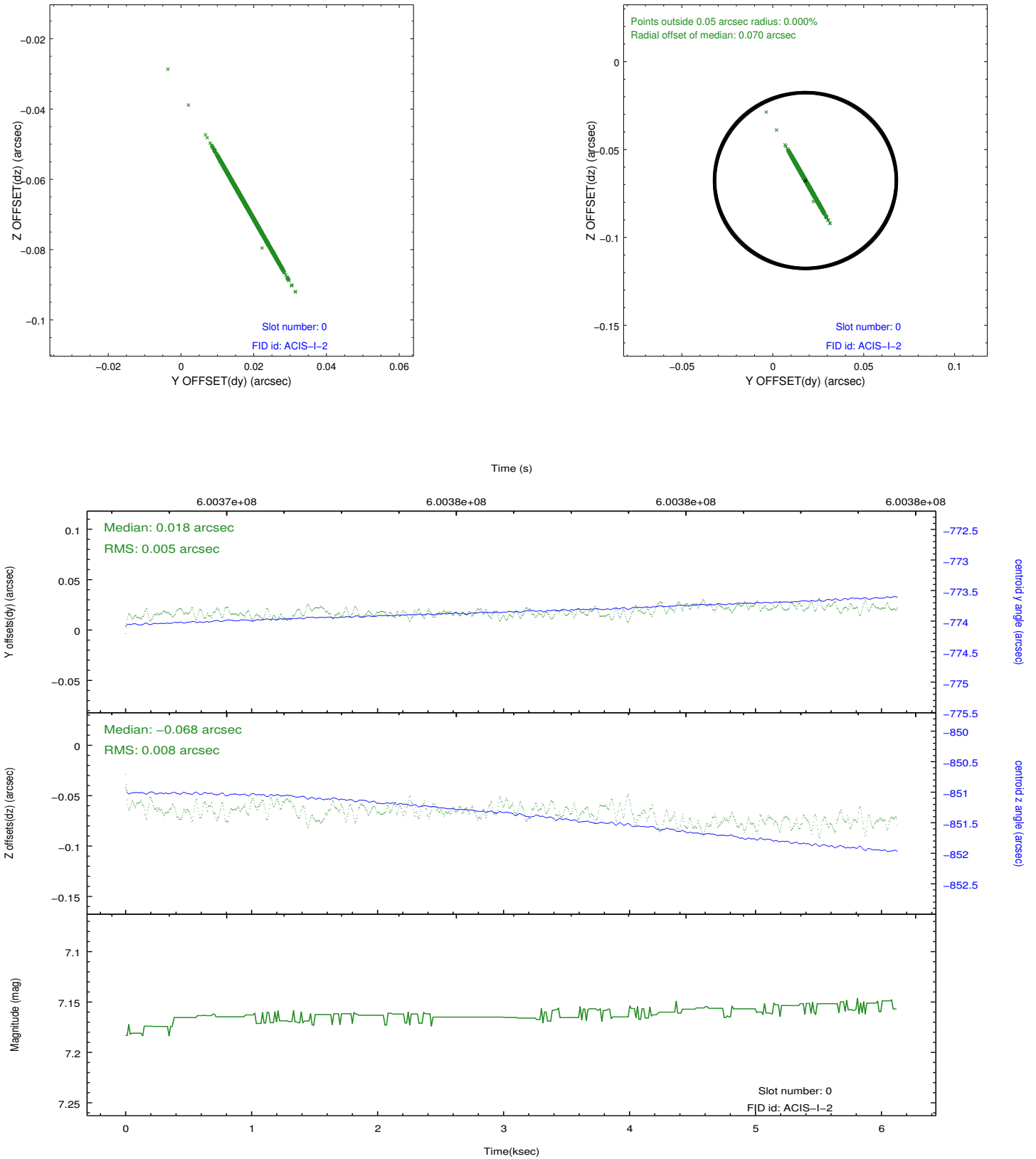


2.4.5 Slot 7

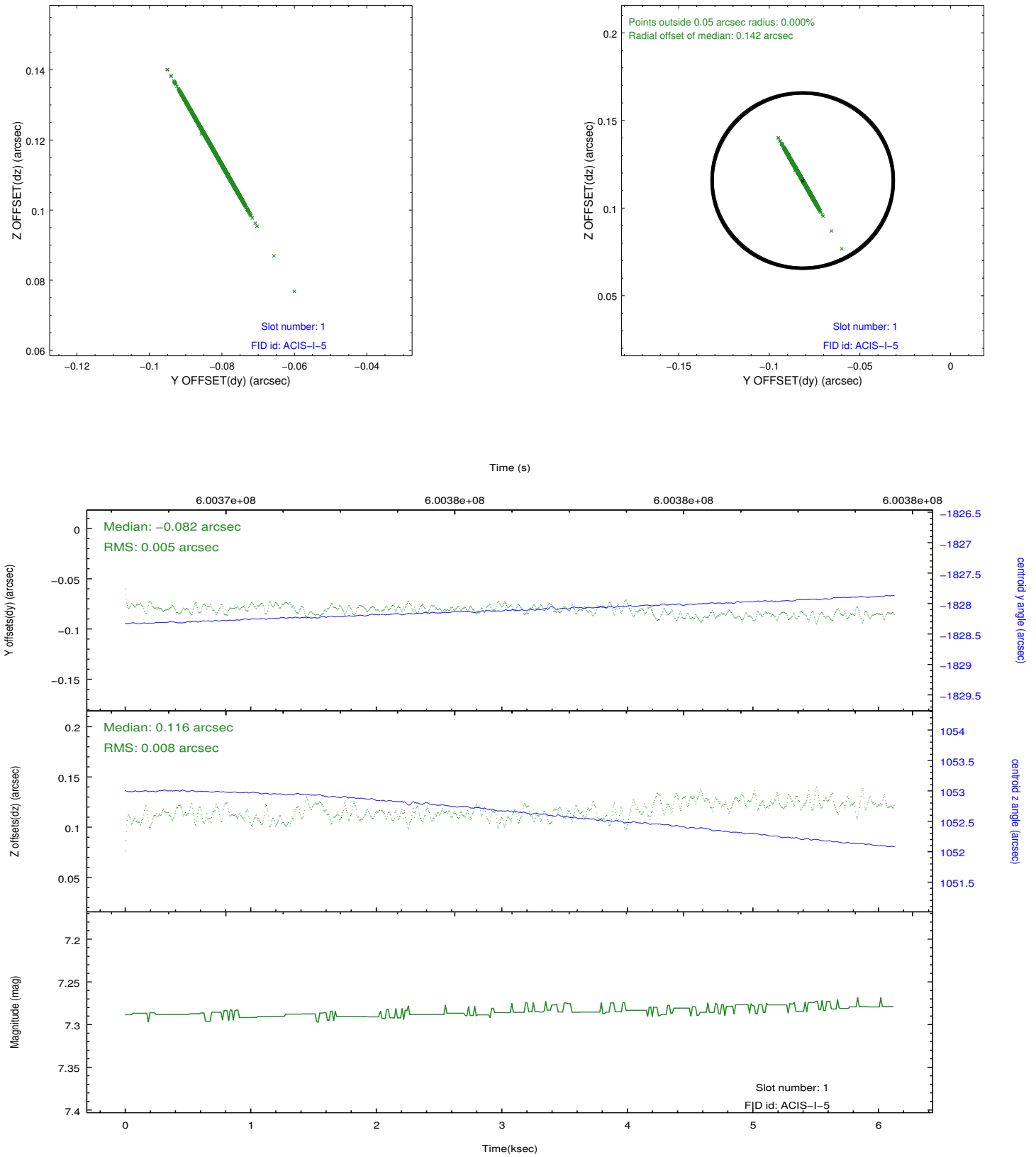


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 1



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.01.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.0781282855272

A.2 Comments

Window preference met.

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The guide star in slot 6 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.

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This is an observation of 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 was set to 2 by using pset to override the acis_lev1.par.