

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 18691 - L2 Version 1
Chandra X-Ray Center

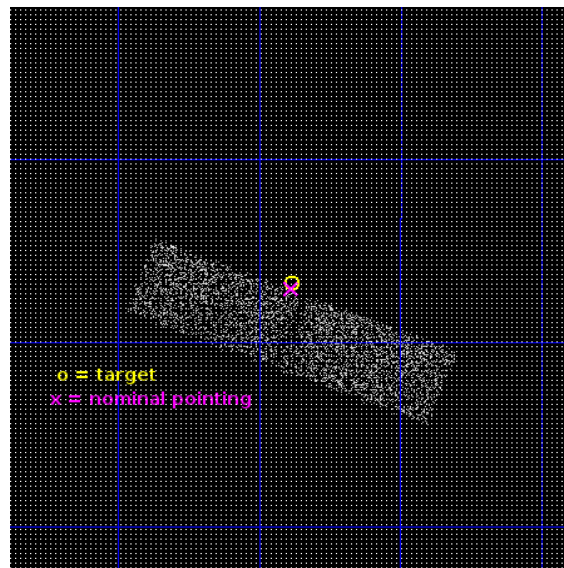
L2 Processing Date : Jan 11 2017

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 2	9
2.4.2	Slot 3	10
2.4.3	Slot 4	11
2.4.4	Slot 5	12
2.4.5	Slot 6	13
2.4.6	Slot 7	14
2.5	FID Slots	15
2.5.1	Slot 0	15
2.5.2	Slot 1	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

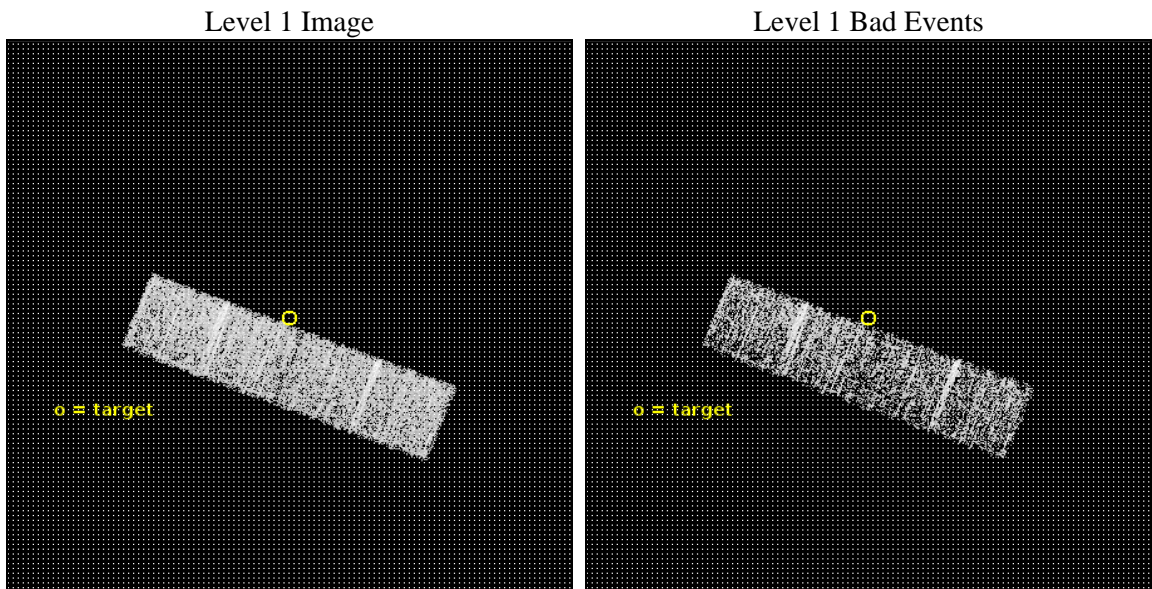
seq_num	100153	Sequence number
obs_id	18691	Observation id
title	Venus in an intermediate phase of the solar cycle	Proposal title
observer	Peter Predehl	Principal investigator
object	Venus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	338.721401	Observer's specified target RA [deg]
dec_targ	-9.779527	Observer's specified target Dec [deg]
ra_nom	338.72149783242	Nominal RA [deg]
dec_nom	-9.7843258556272	Nominal Dec [deg]
roll_nom	291.25888714341	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5833.6000870466	Sum of GTIs [s]
liveltime	5687.7103174052	Livetime [s]
ontime0	5833.6000870466	Sum of GTIs [s]
ontime2	5833.6000870466	Sum of GTIs [s]
l2events	3880	Number of level 2 events



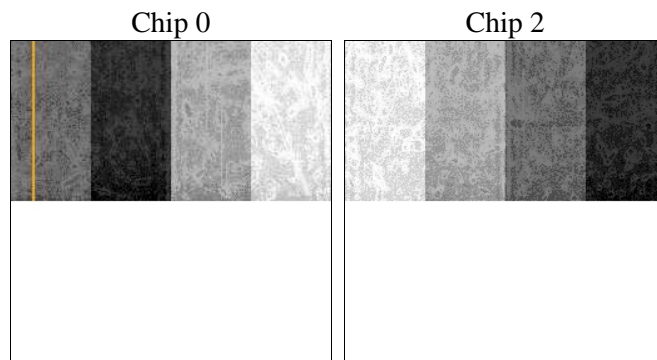
2 OBI

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	5833.6000870466	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	5833.6000870466	Sum of GTIs [s]
date	2017-01-11T11:41:43	Date and time of file creation	ontime2	5833.6000870466	Sum of GTIs [s]
revision	1	Processing version of data	l1events	44777	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 2
level 1 events	20766	24011
rejected events	18040	21624
rejected %	86%	90%

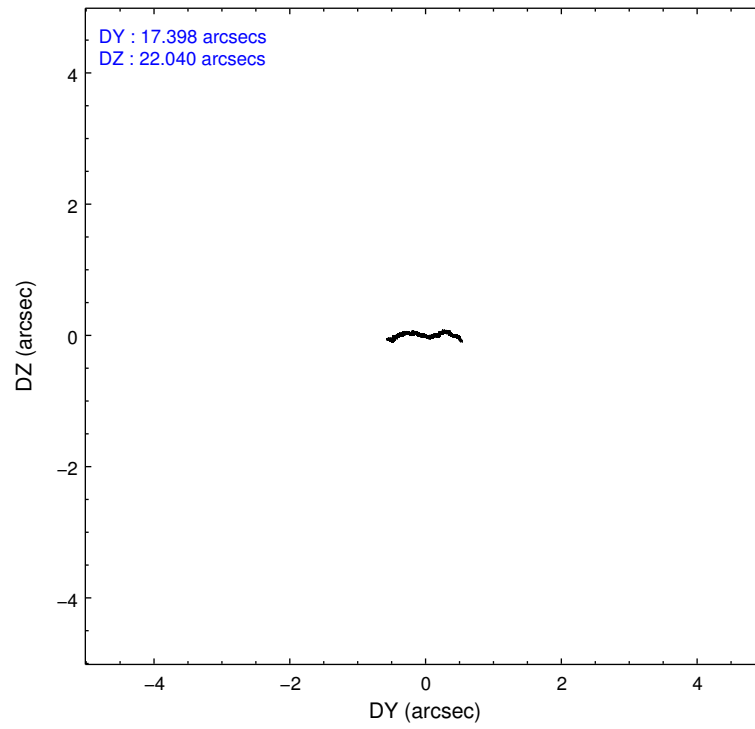
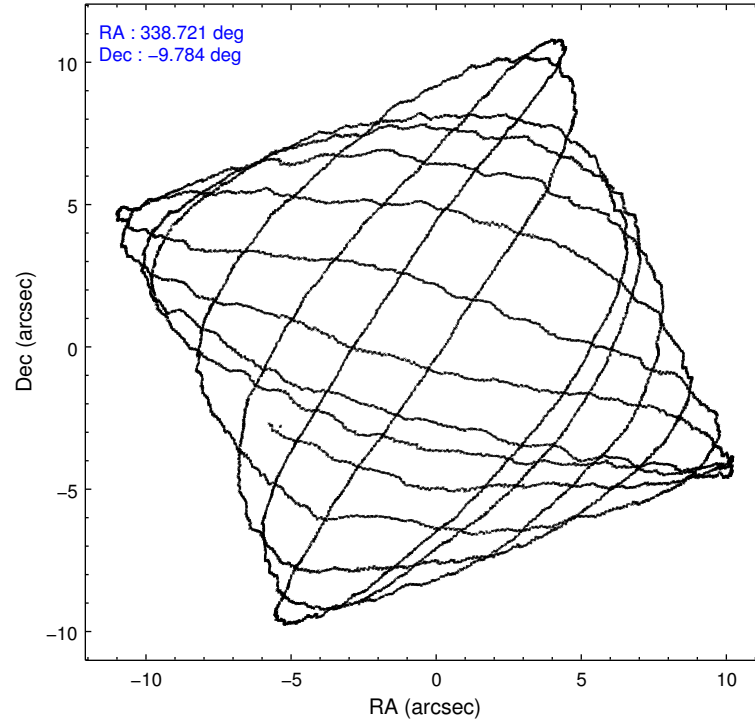
	ccd 0	ccd 2
grade 0 events	817	823
	3%	3%
grade 1 events	5	12
	0%	0%
grade 2 events	618	510
	2%	2%
grade 3 events	371	303
	1%	1%
grade 4 events	353	313
	1%	1%
grade 5 events	885	819
	4%	3%
grade 6 events	568	439
	2%	1%
grade 7 events	17149	20792
	82%	86%

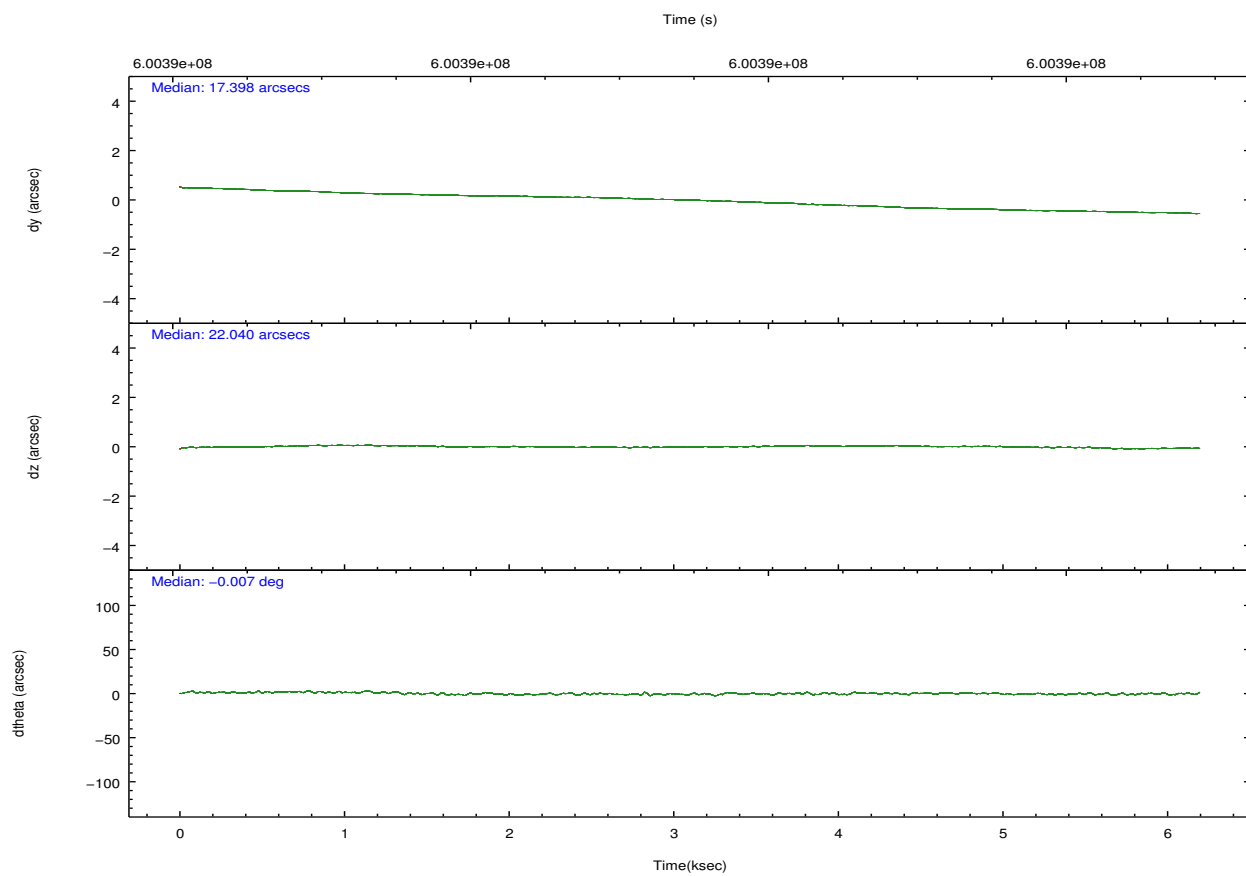
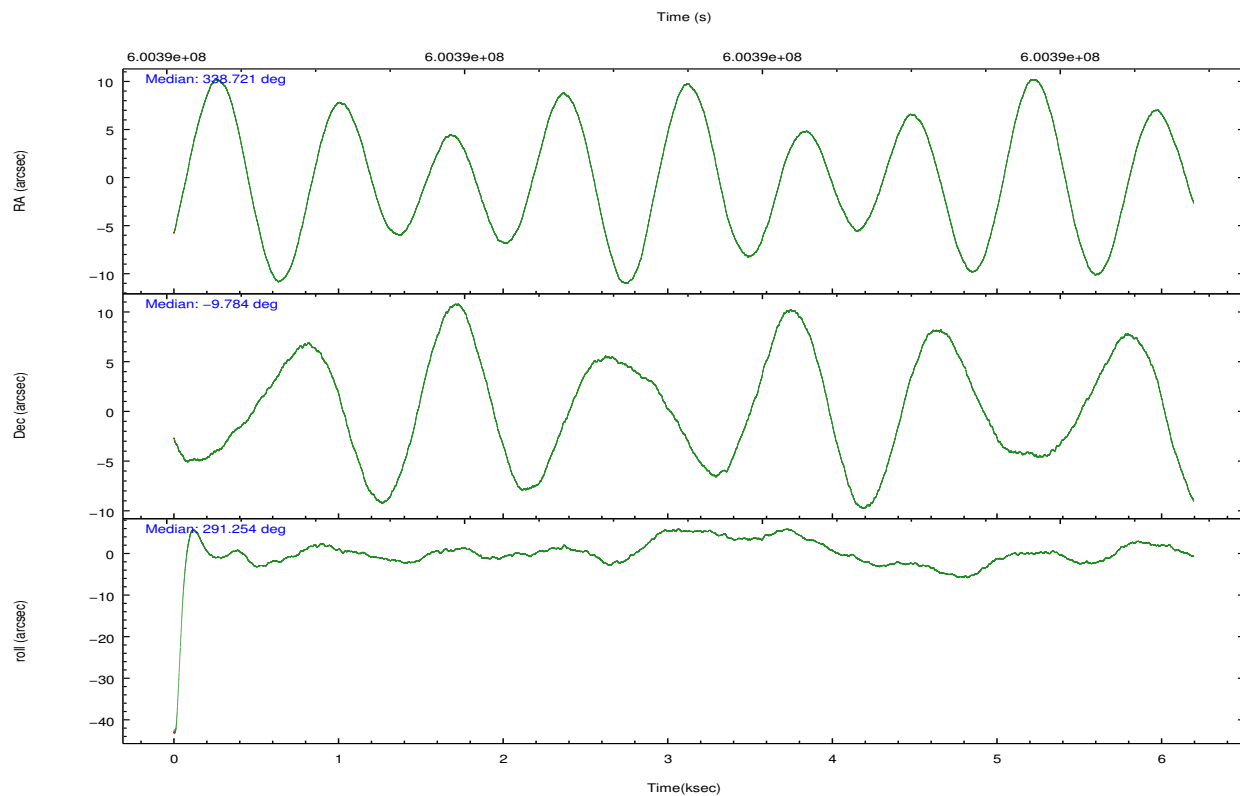
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-02	ACIS-02
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	338.699518	338.7214978324196
[deg] Pointing Dec	-9.767116	-9.784325855627193
[deg] Pointing Roll	291.046585	291.258887143411
[s] Window start time (MET)	600134469.184000	600134469.184000
[s] Window stop time (MET)	600652809.184000	600652809.184000
[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)	600386573.184000	600386196.6329401
Observation start date	2017-01-09T22:01:44	2017-01-09T21:56:36
[s] Observation end time (MET)	600392573.184000	600392706.40832
Observation end date	2017-01-09T23:41:44	2017-01-09T23:45:06
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/2
Subarray start row	513	513
Subarray row count	512	512
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	1.6

2.3 Aspect



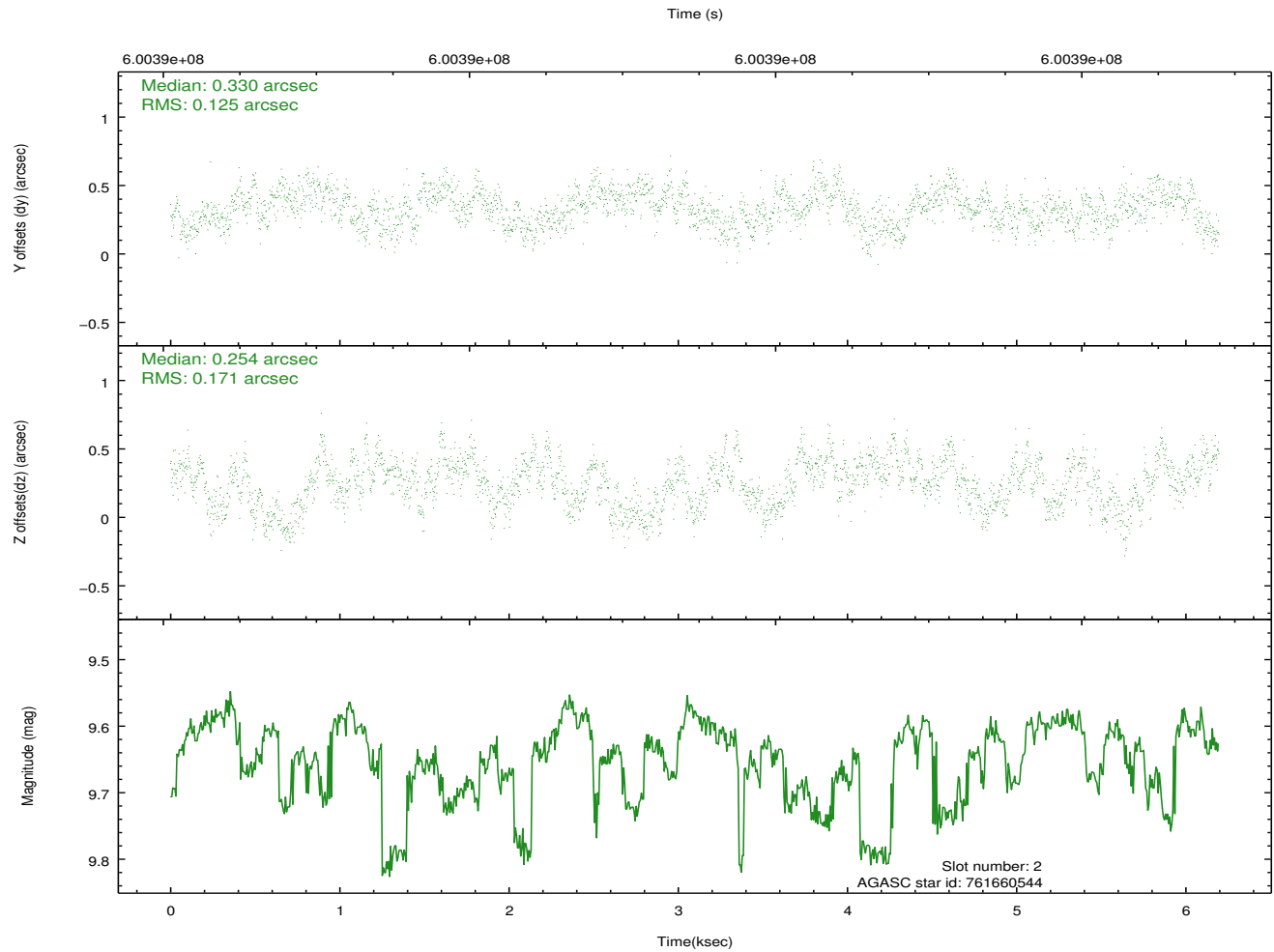
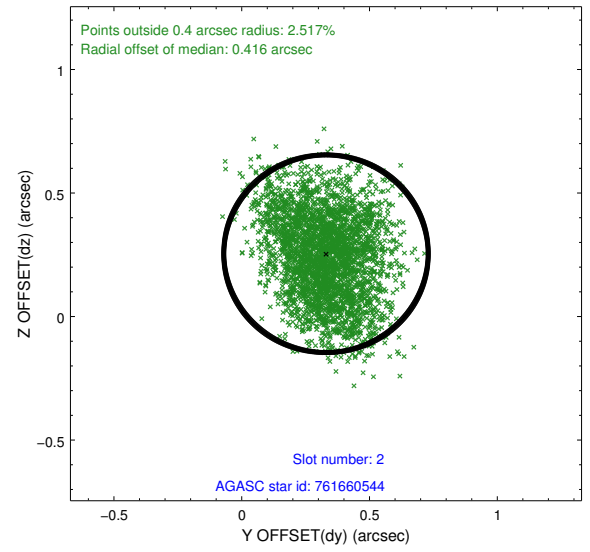
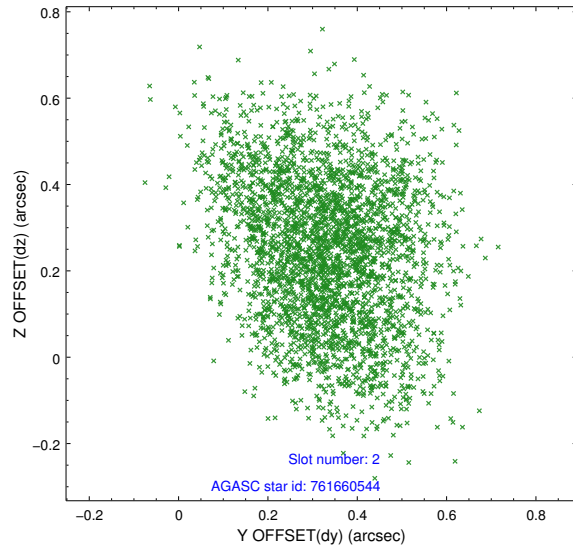


Slot Statistics

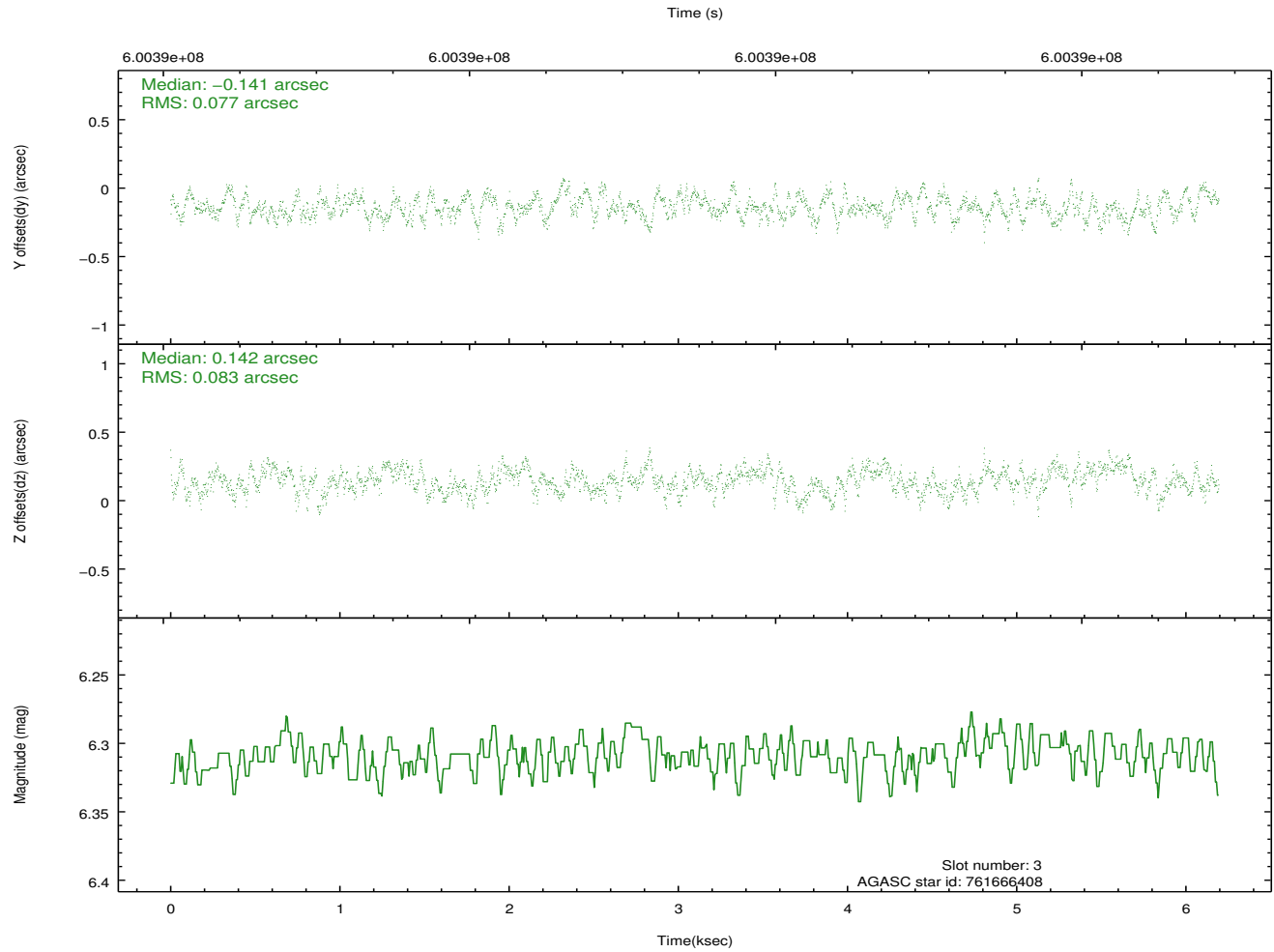
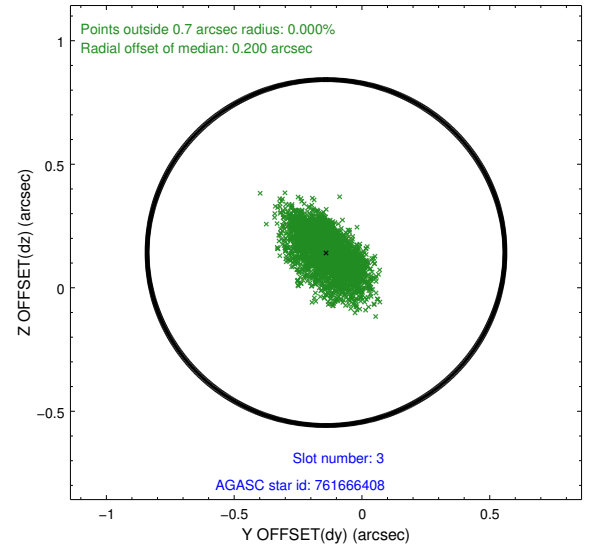
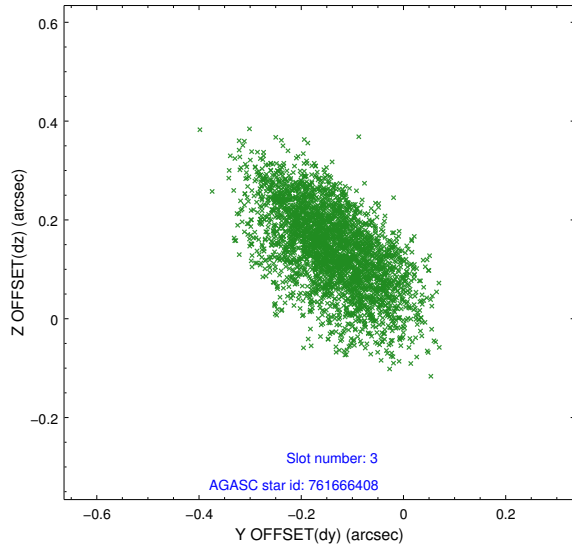
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.11	1512	0.007	-0.047	0.010	0.019	0.000000	0.000000	-772.05	-852.30
1	FID		ACIS-I-5	7.21	1512	-0.070	0.095	0.010	0.019	0.000000	0.000000	-1826.83	1051.11
2	GUIDE	used	761660544	9.65	3020	0.330	0.254	0.227	0.363	338.244590	-9.272592	-2239.65	-867.14
3	GUIDE	used	761666408	6.31	3023	-0.141	0.142	0.122	0.200	338.527561	-9.608492	-752.84	-364.95
4	GUIDE	used	761667240	9.09	3021	0.204	0.308	0.136	0.216	338.639466	-9.137380	-2192.54	615.19
5	GUIDE	used	761671528	9.54	3018	-0.069	-0.015	0.173	0.308	338.747457	-9.241198	-1707.00	838.62
6	GUIDE	used	761672120	8.09	3022	-0.141	-0.467	0.103	0.183	339.232283	-9.389338	-589.23	2253.90
7	GUIDE	used	761672136	8.54	3020	-0.198	-0.203	0.126	0.210	339.196147	-9.393141	-622.40	2129.97

2.4 Star Slots

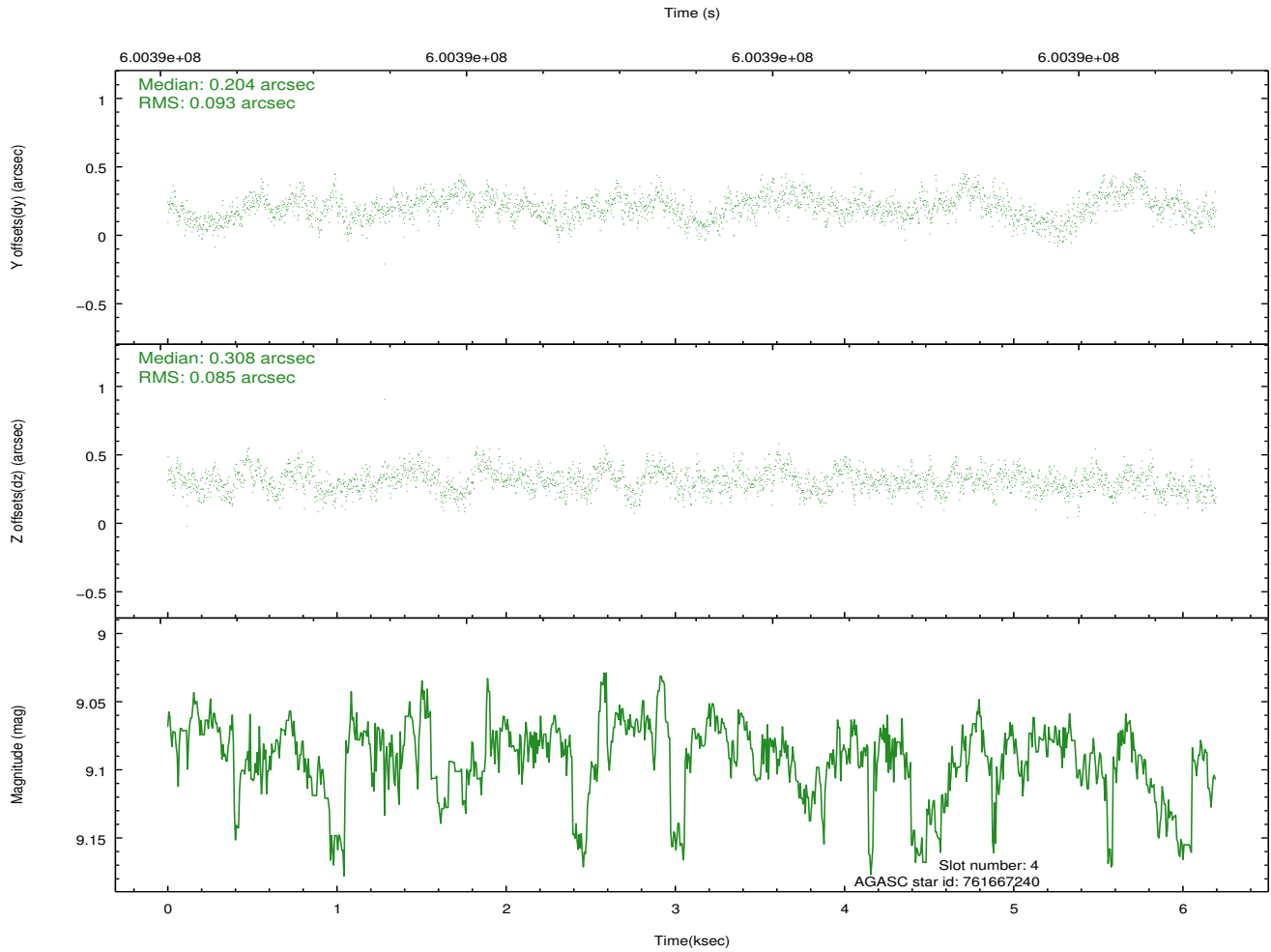
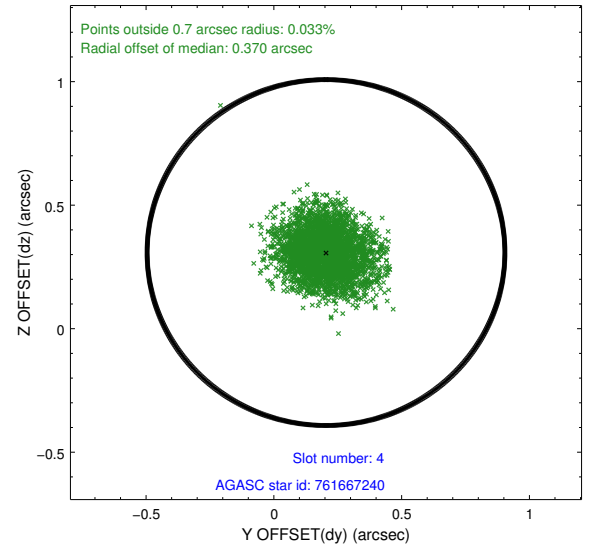
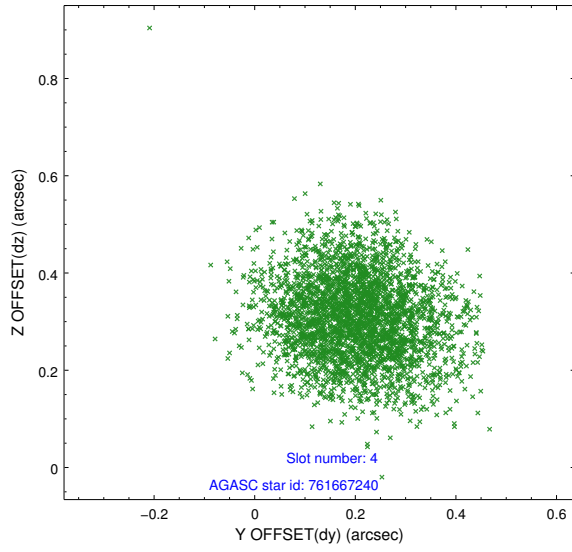
2.4.1 Slot 2



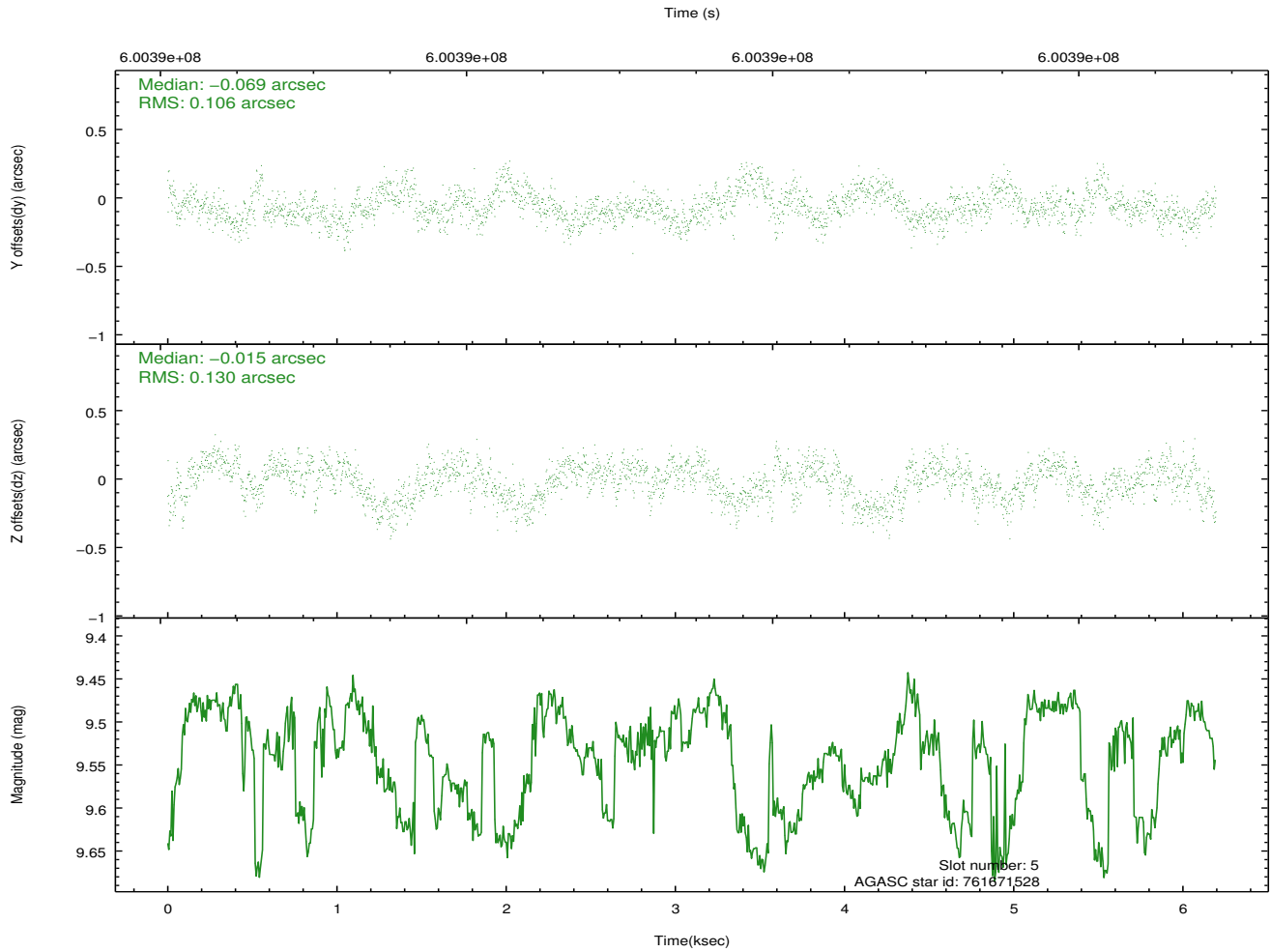
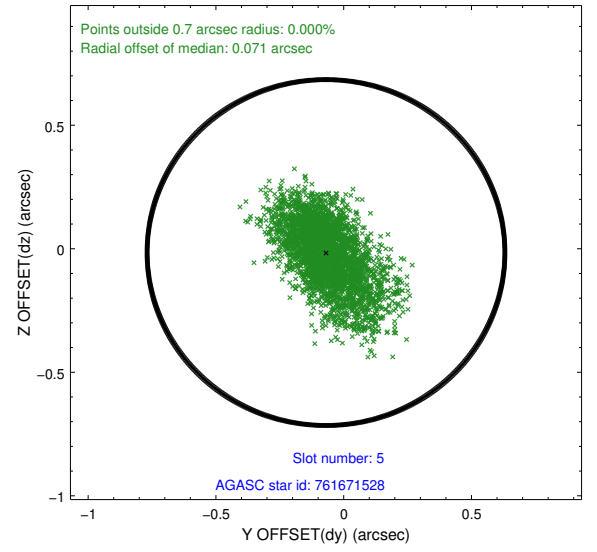
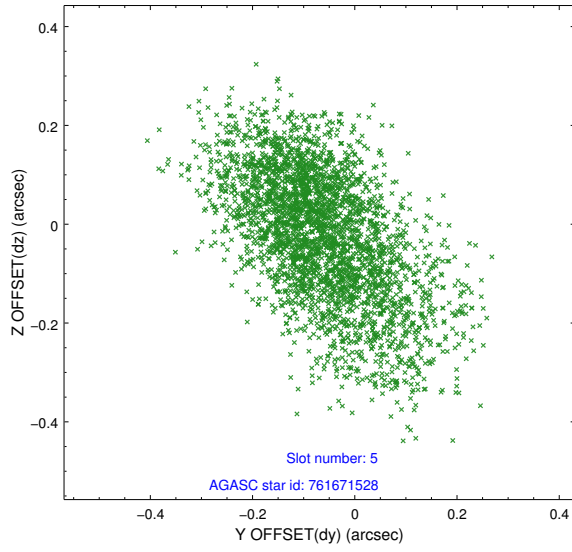
2.4.2 Slot 3



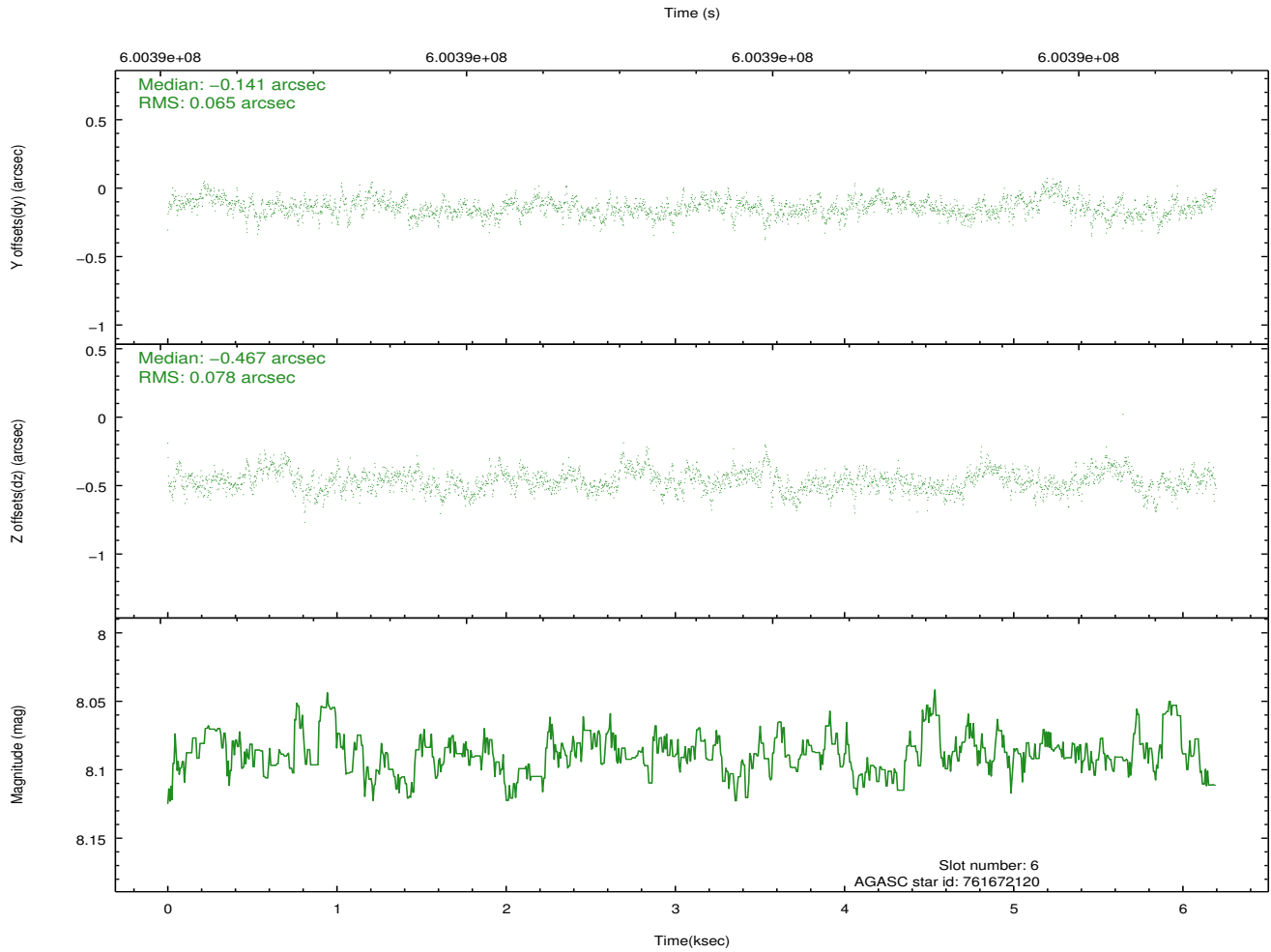
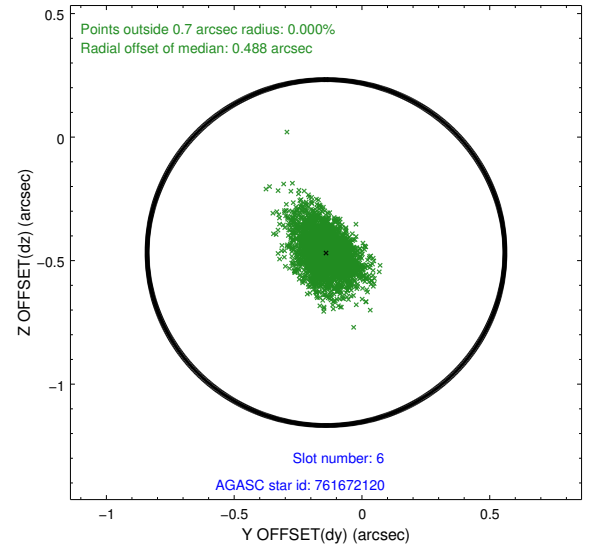
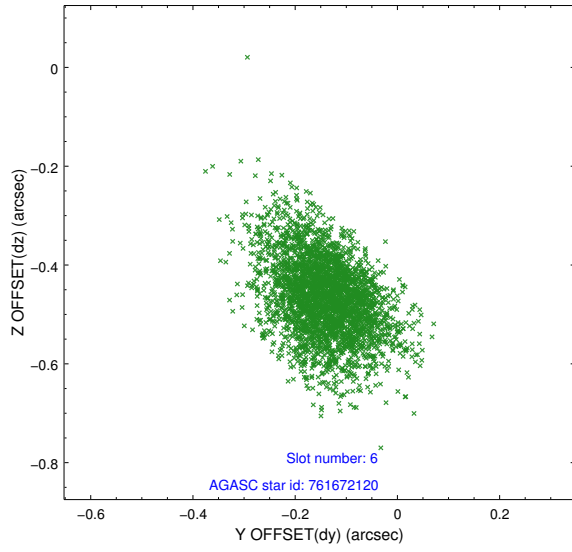
2.4.3 Slot 4



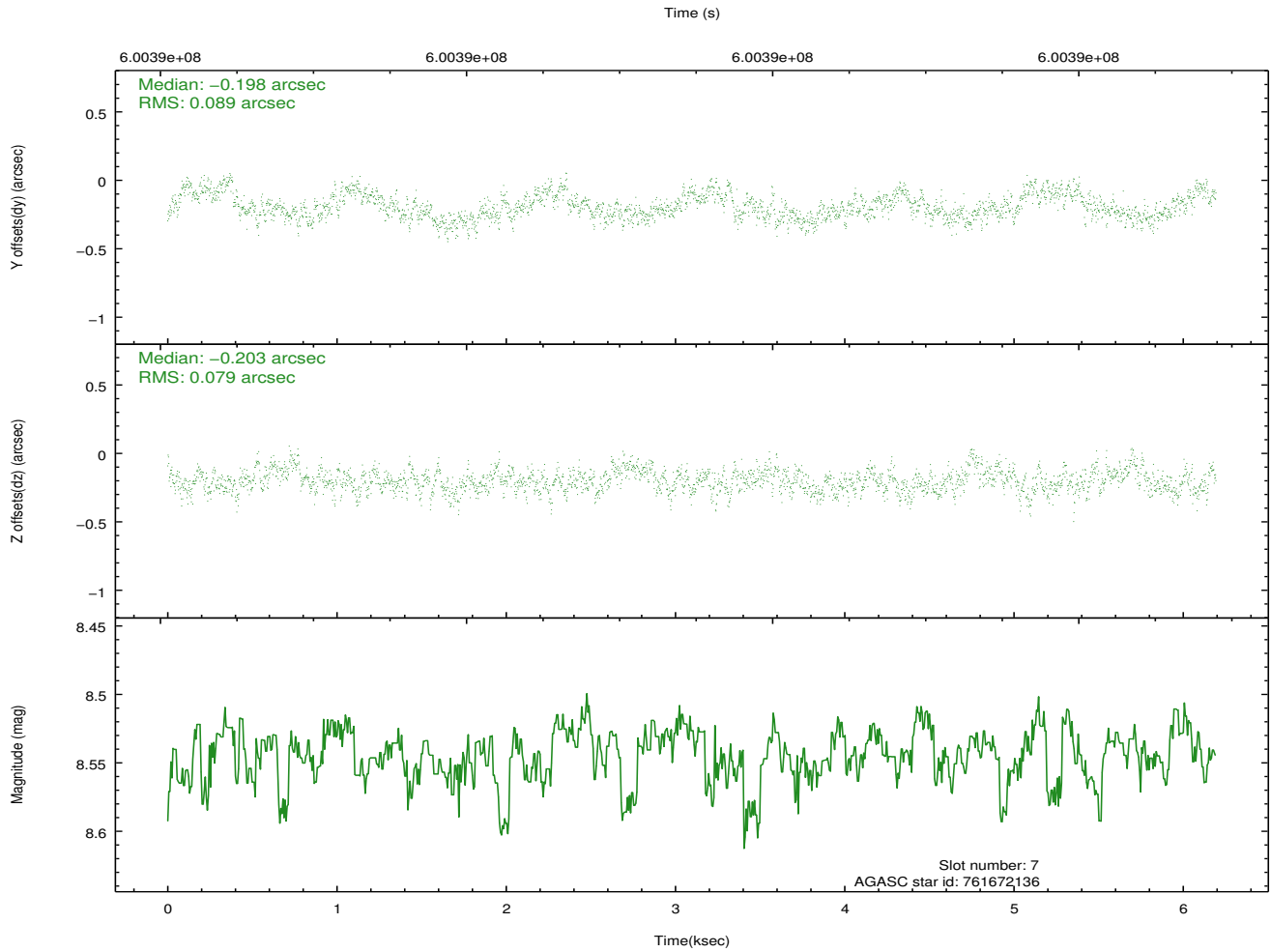
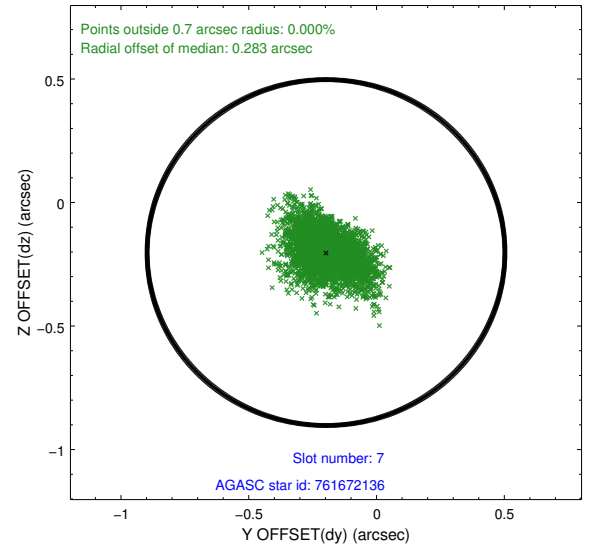
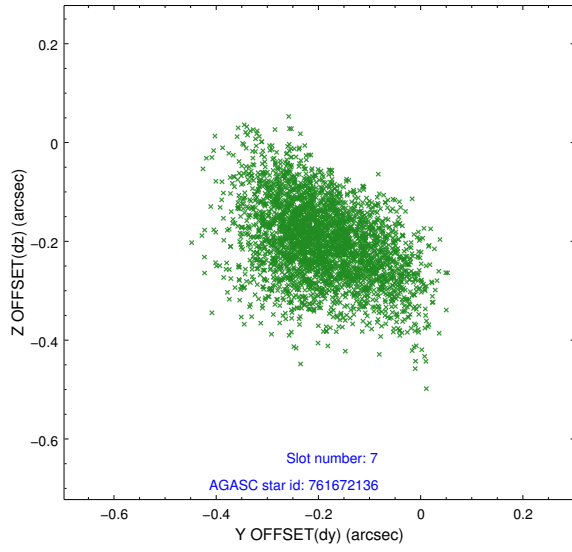
2.4.4 Slot 5



2.4.5 Slot 6

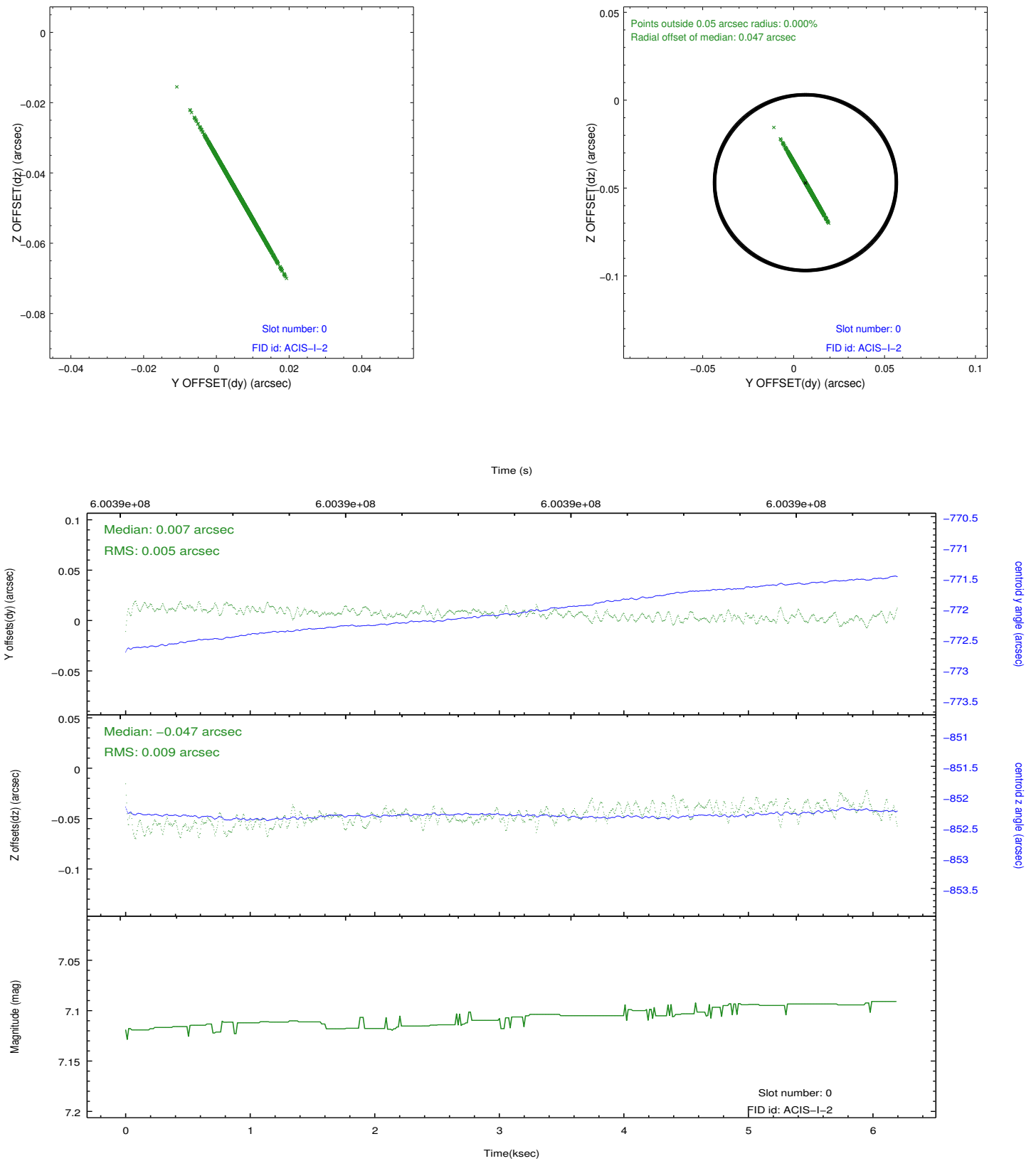


2.4.6 Slot 7

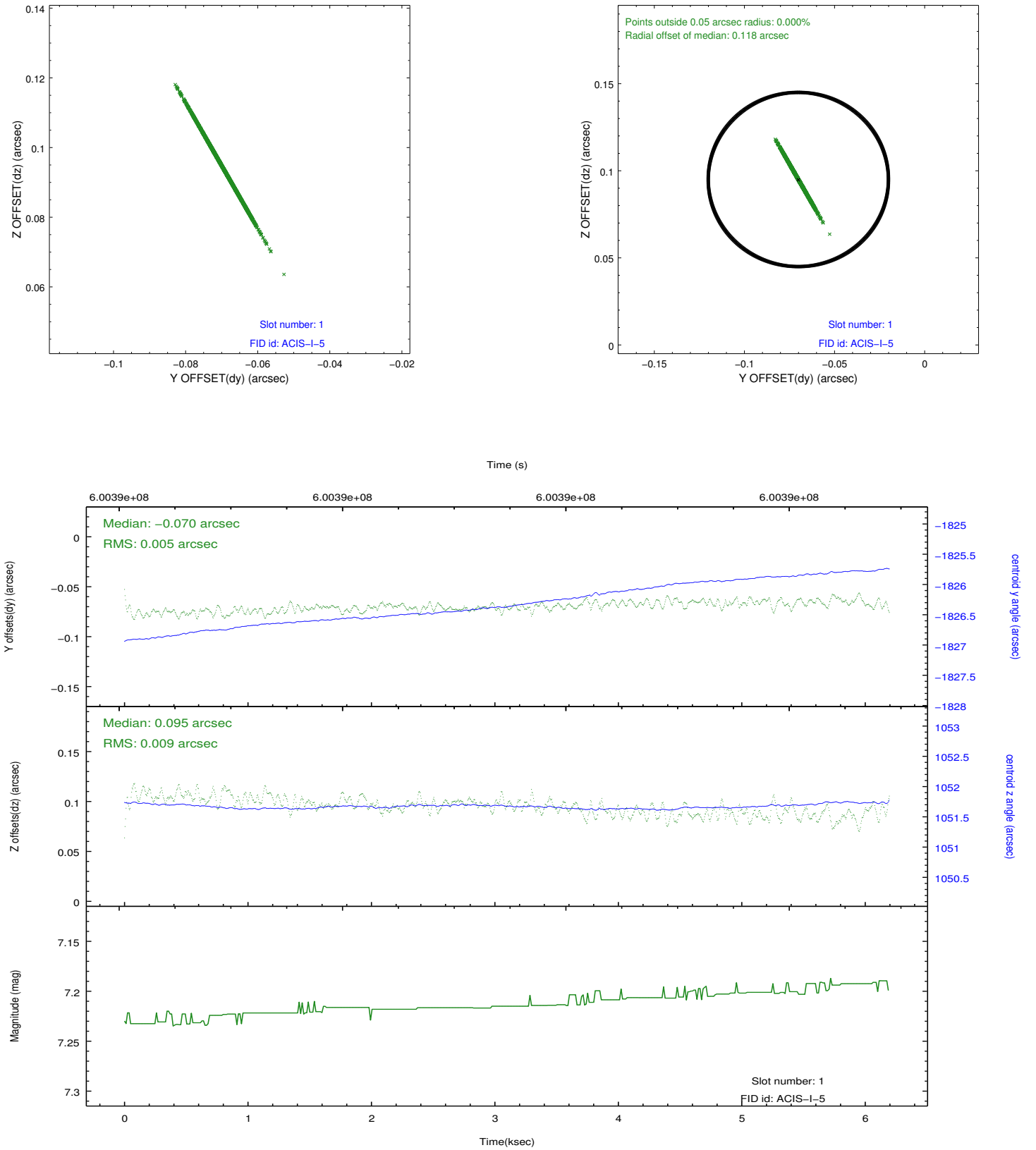


2.5 FID Slots

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	5.8336000870466

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.

=====

Nominal chip set to 2

=====

Window constraint met.