

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16493 - L2 Version 3
Chandra X-Ray Center

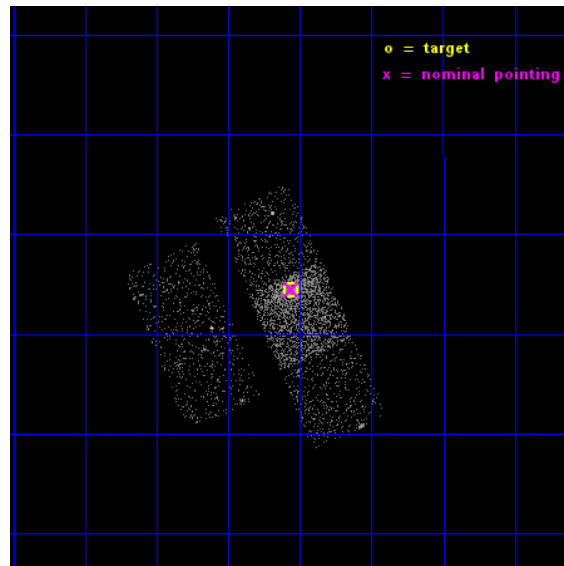
L2 Processing Date : Dec 7 2014

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1 Front

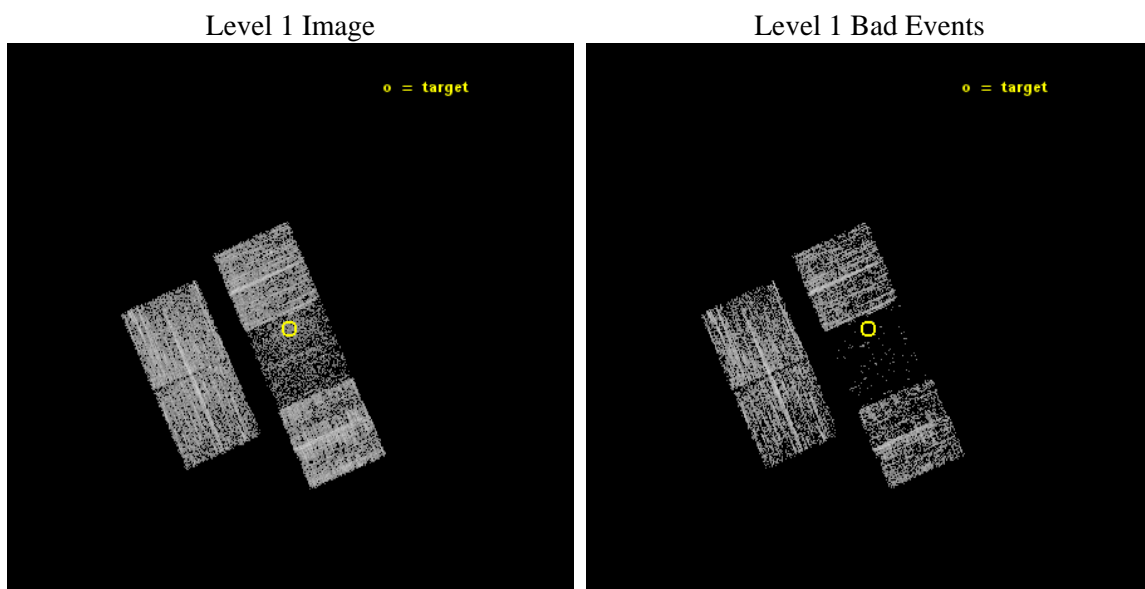
seq_num	100131	Sequence number
obs_id	16493	Observation id
title	Plumbing the Heights of the Solar Wind With Comet ISON	Proposal ti
observer	Dr. Carey Lisse	Principal investigator
object	Comet C/2012 S1 (ISON)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	175.89	Observer's specified target RA [deg]
dec_targ	2.24	Observer's specified target Dec [deg]
ra_nom	175.88981713941	Nominal RA [deg]
dec_nom	2.2412048366725	Nominal Dec [deg]
roll_nom	66.411727858632	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4681.0000360012	Sum of GTIs [s]
livetime	4619.8393244288	Livetime [s]
ontime2	4681.0000360012	Sum of GTIs [s]
ontime3	4681.0000360012	Sum of GTIs [s]
ontime6	4681.0000360012	Sum of GTIs [s]
ontime7	4681.0000360012	Sum of GTIs [s]
ontime8	4681.0000360012	Sum of GTIs [s]
l2events	4878	Number of level 2 events



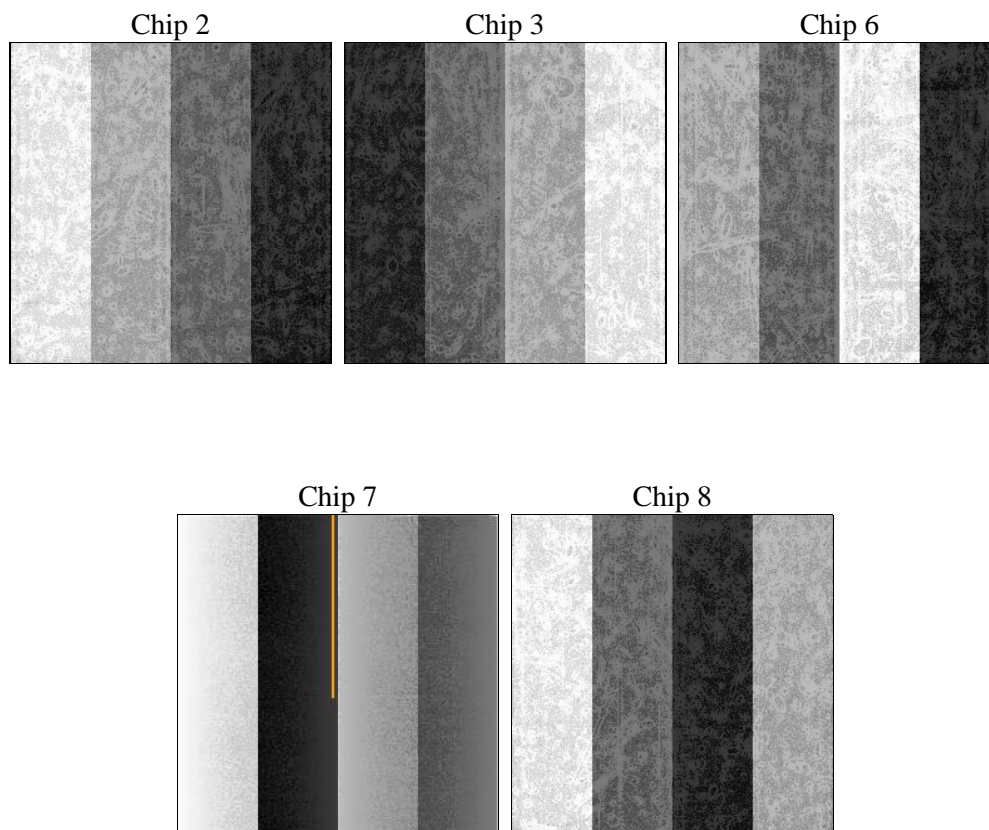
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4500.915000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4681.0000360012	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	4681.0000360012	Sum of GTIs [s]
date	2014-12-07T21:04:18	Date and time of file creation	ontime3	4681.0000360012	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	4681.0000360012	Sum of GTIs [s]
			ontime7	4681.0000360012	Sum of GTIs [s]
			ontime8	4681.0000360012	Sum of GTIs [s]
			l1events	66312	Number of level 1 events

2.1.4 Events

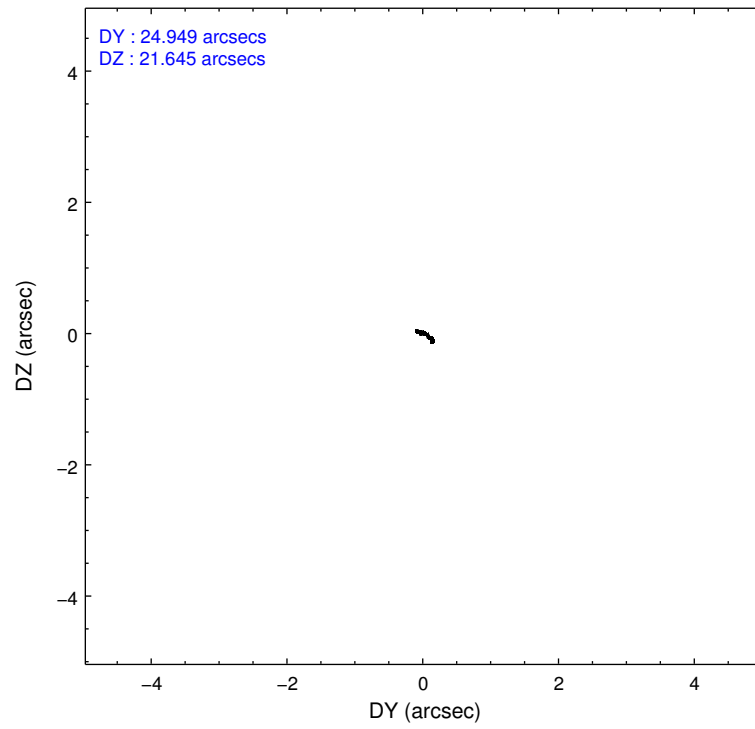
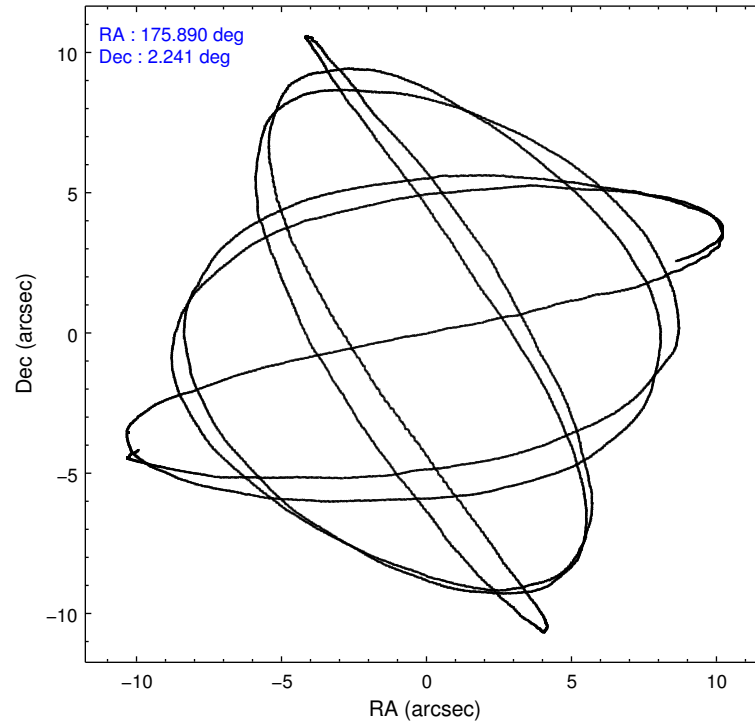
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	16521	13478	14904	3939	17470
rejected events	15706	12888	14031	879	11585
rejected %	95%	95%	94%	22%	66%

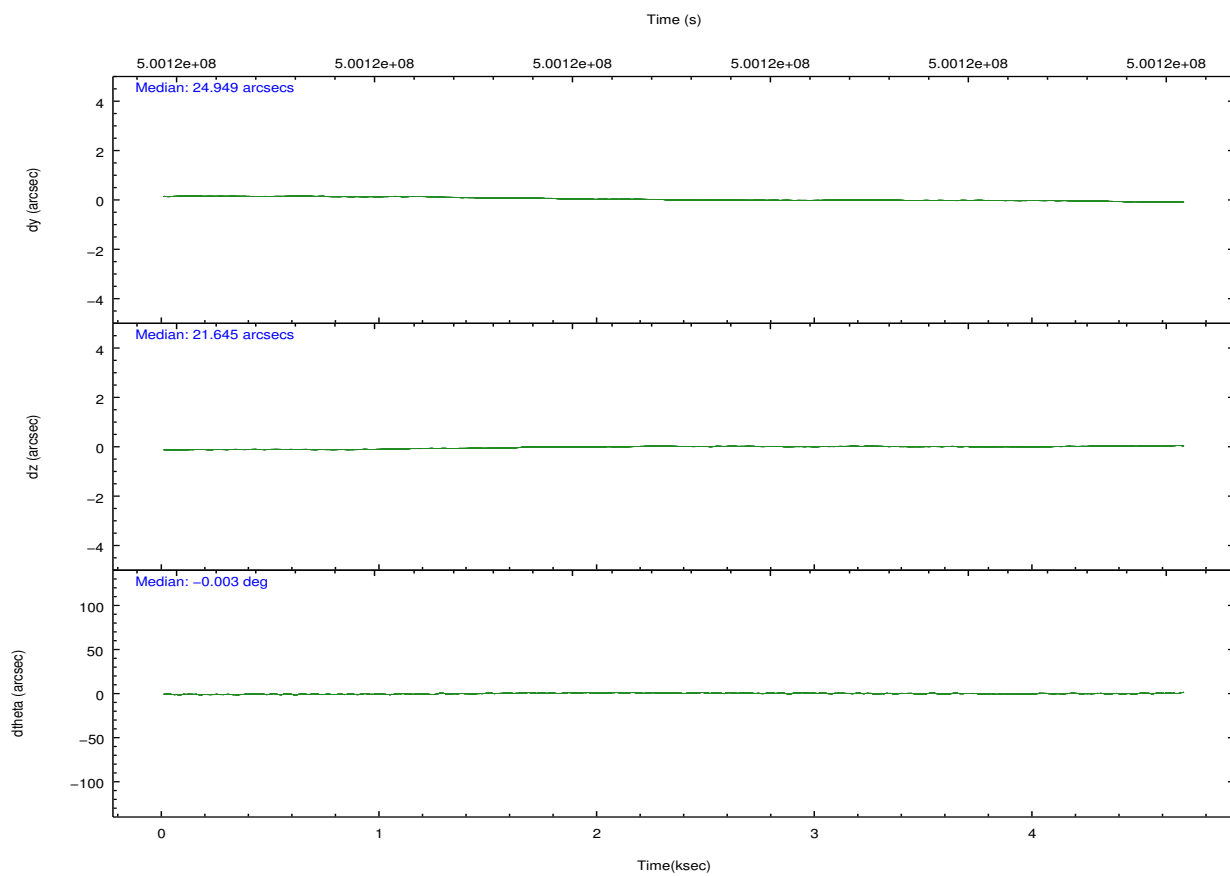
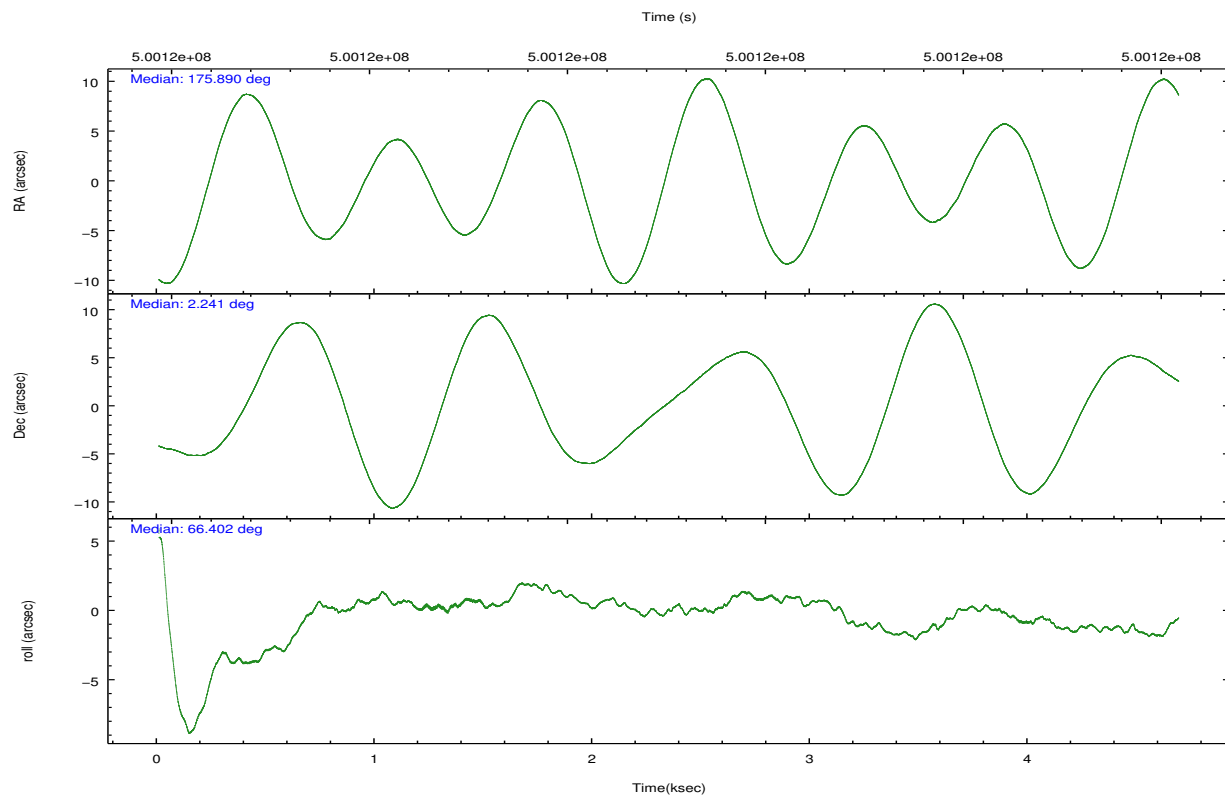
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	304	330	504	1203	1904
	1%	2%	3%	30%	10%
grade 1 events	7	6	4	20	9
	0%	0%	0%	0%	0%
grade 2 events	225	98	169	971	1260
	1%	0%	1%	24%	7%
grade 3 events	87	79	91	350	806
	0%	0%	0%	8%	4%
grade 4 events	110	72	93	334	760
	0%	0%	0%	8%	4%
grade 5 events	26	24	11	102	84
	0%	0%	0%	2%	0%
grade 6 events	120	41	65	338	1413
	0%	0%	0%	8%	8%
grade 7 events	15642	12828	13967	621	11234
	94%	95%	93%	15%	64%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	175.893222	175.8898171394091	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.214068	2.241204836672515	Alternating exposures requested	N	N
[deg] Pointing Roll	66.254991	66.41172785863233	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	500120357.184000	500119980.96816			
Observation start date	2013-11-06T10:18:10	2013-11-06T10:13:00			
[s] Observation end time (MET)	500124858.184000	500125083.93094			
Observation end date	2013-11-06T11:33:11	2013-11-06T11:38:03			
Read mode	TIMED	TIMED			

2.3 Aspect



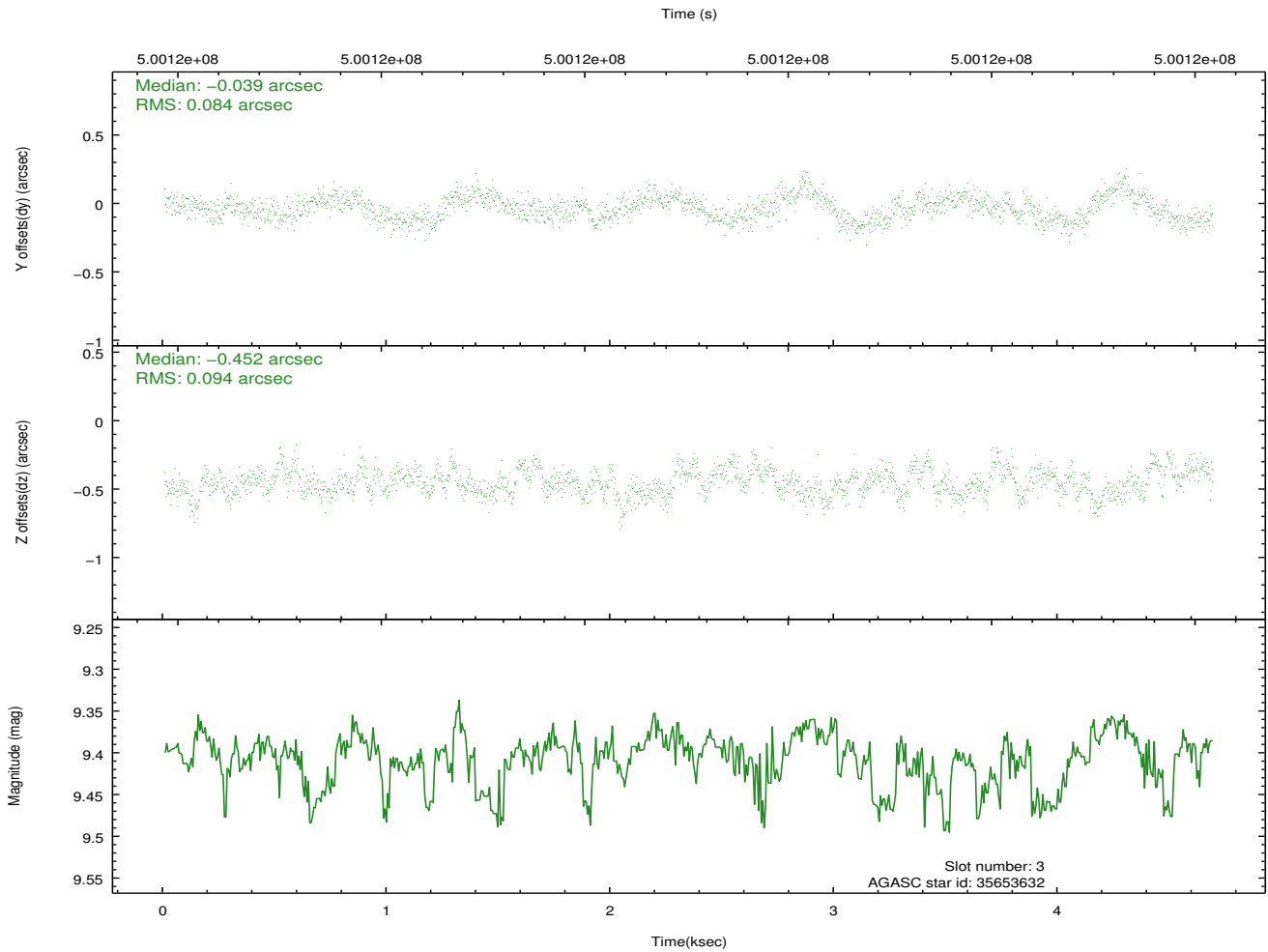
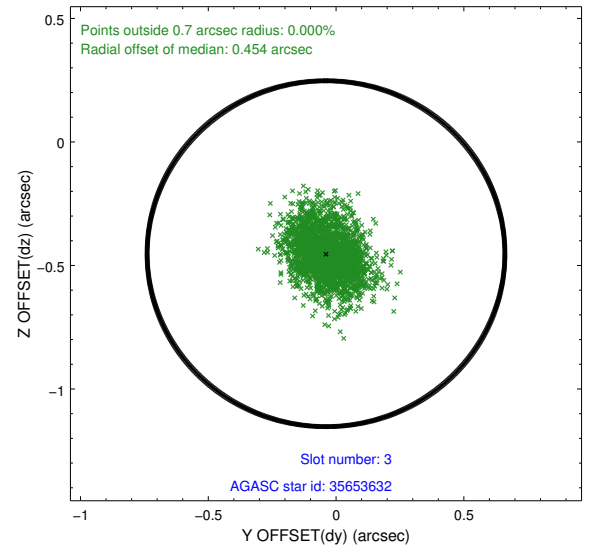
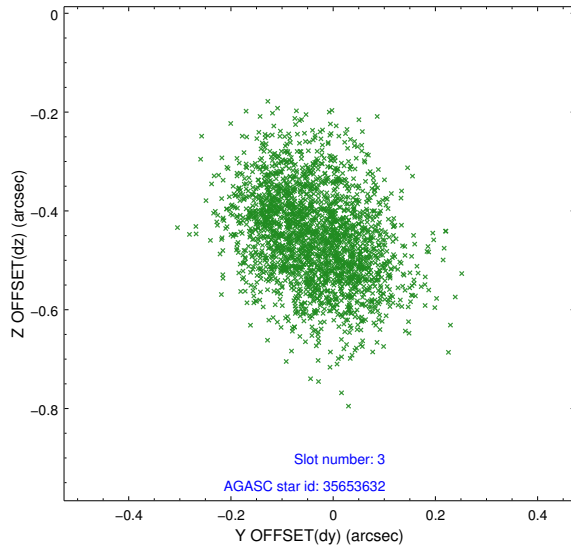


Slot Statistics

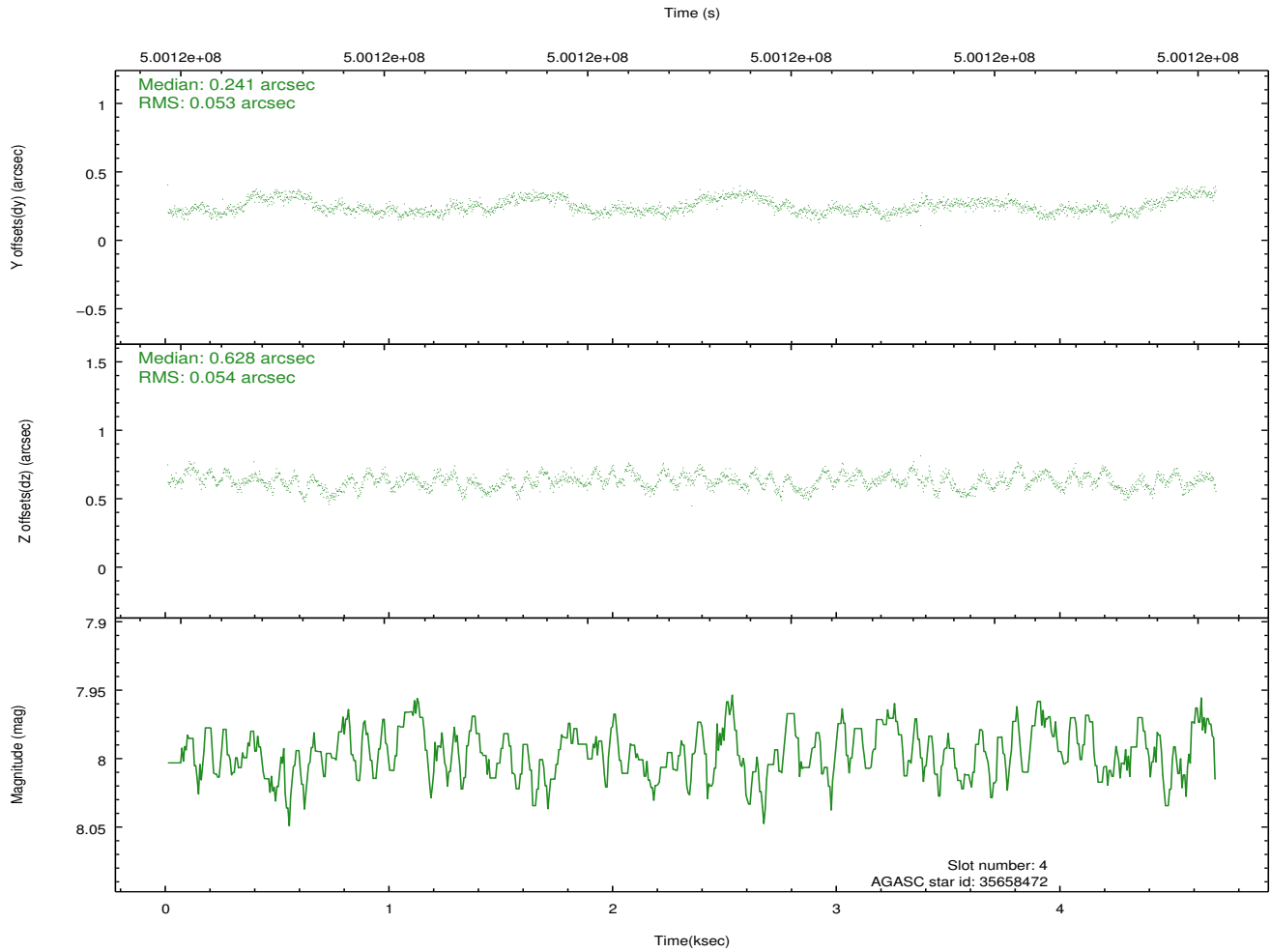
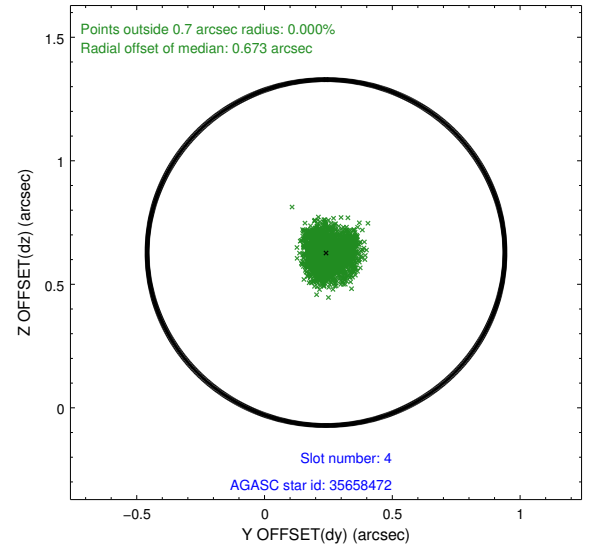
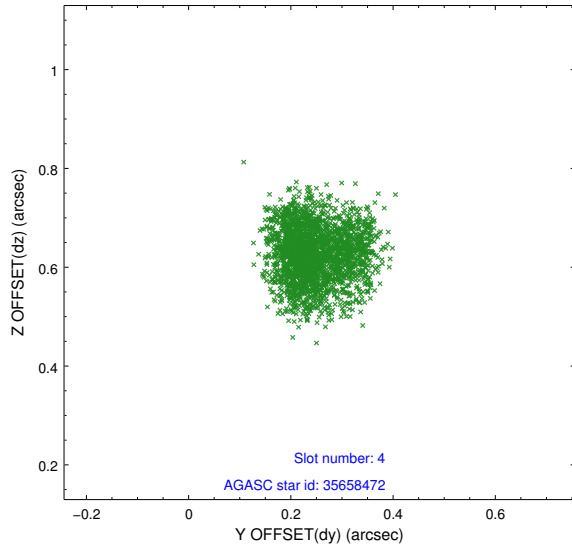
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.92	1143	-0.154	-0.017	0.007	0.011	0.000000	0.000000	-778.41	-1743.18
1	FID		ACIS-S-4	7.01	1143	0.313	0.079	0.005	0.009	0.000000	0.000000	2134.76	163.99
2	FID		ACIS-S-5	7.04	1143	-0.192	-0.053	0.007	0.011	0.000000	0.000000	-1829.59	159.08
3	GUIDE	used	35653632	9.40	2281	-0.039	-0.452	0.134	0.215	175.530050	2.442815	227.49	1527.34
4	GUIDE	used	35658472	8.00	2287	0.241	0.628	0.082	0.126	176.273065	1.578720	-1542.26	-2170.68
5	GUIDE	used	35659048	9.30	2286	0.282	-0.165	0.121	0.209	175.742282	2.054880	-743.51	265.60
6	GUIDE	used	36045208	8.32	2287	-0.179	-0.095	0.096	0.148	176.375467	2.647599	2125.13	-957.14
7	GUIDE	used	36045680	8.88	2286	-0.314	0.083	0.103	0.172	175.537896	2.878377	1675.22	2132.81

2.4 Star Slots

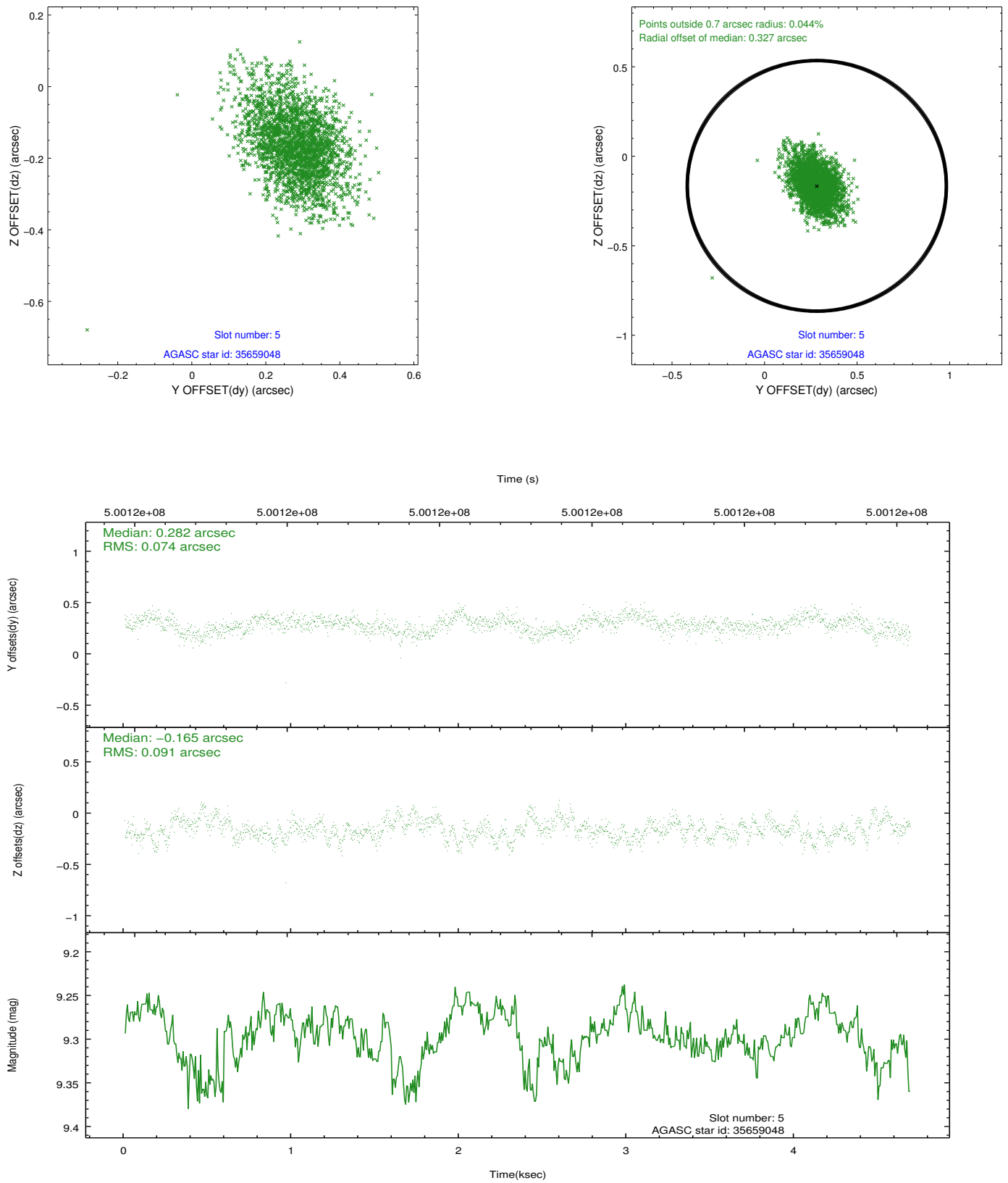
2.4.1 Slot 3



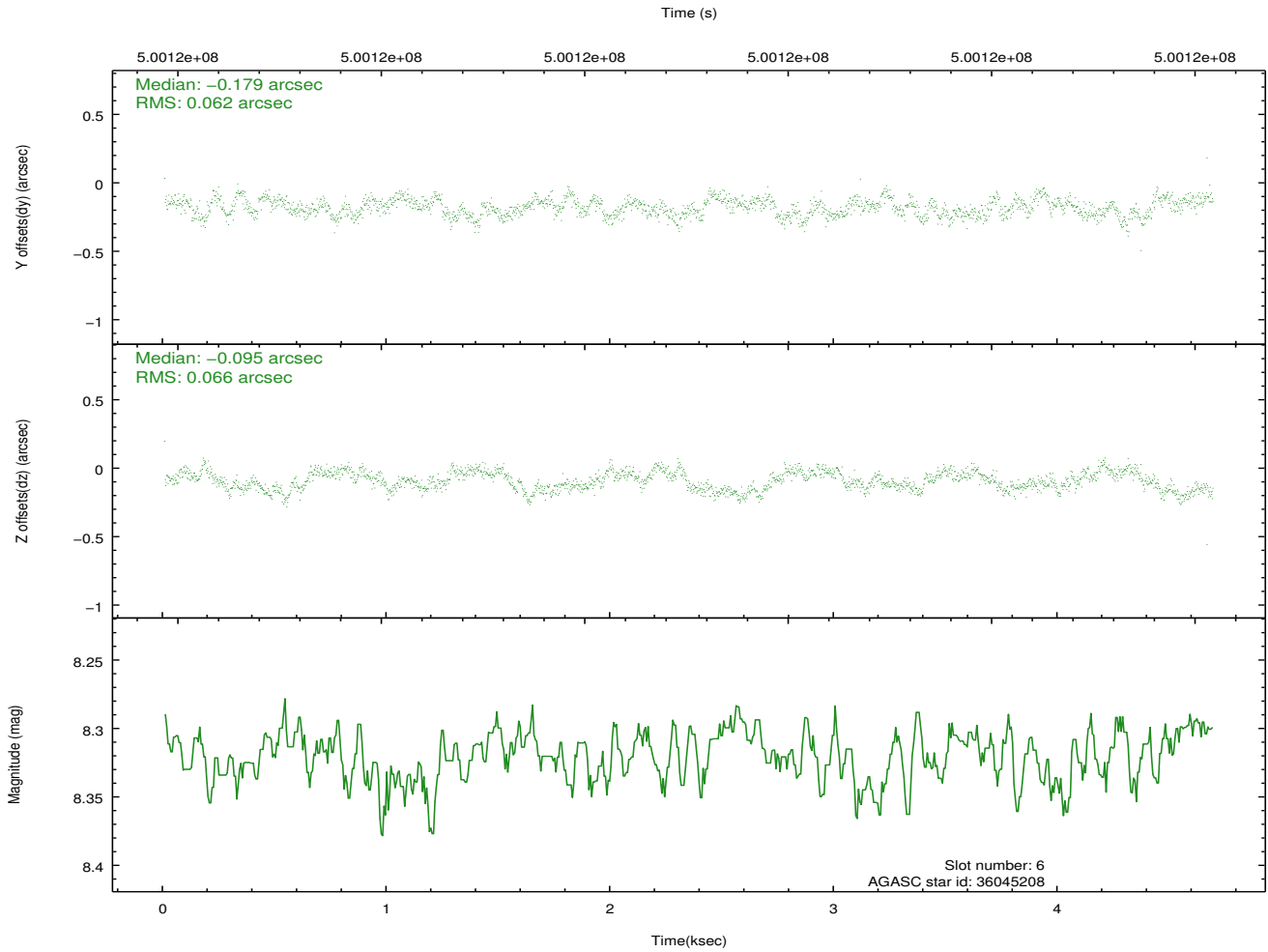
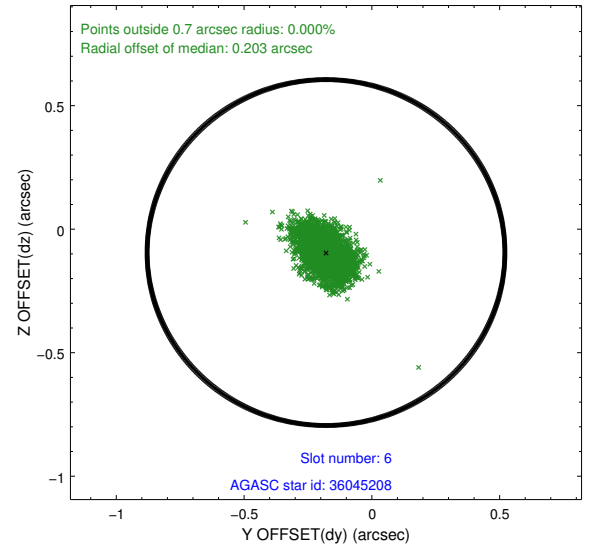
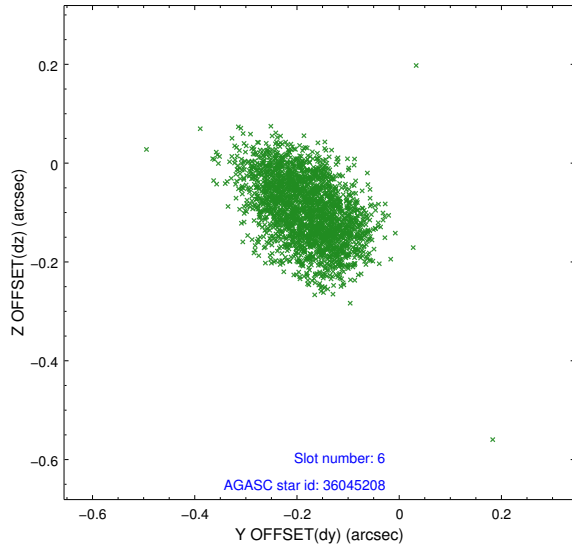
2.4.2 Slot 4



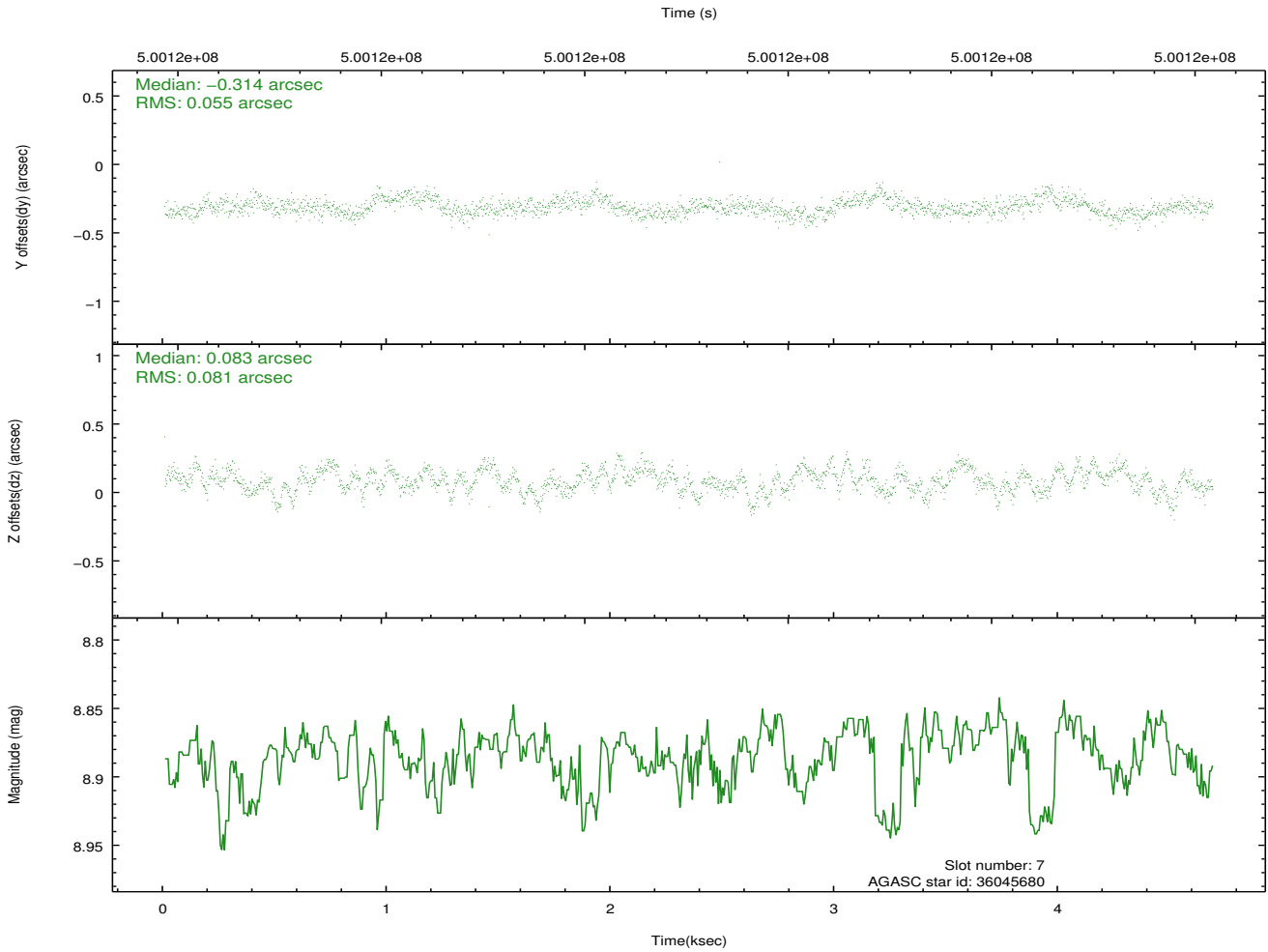
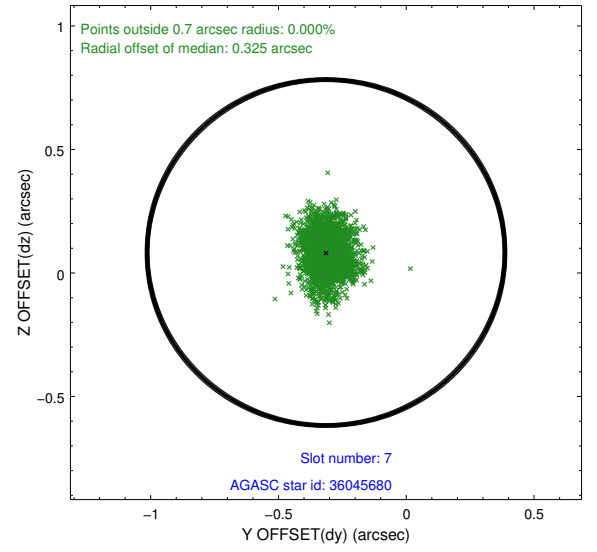
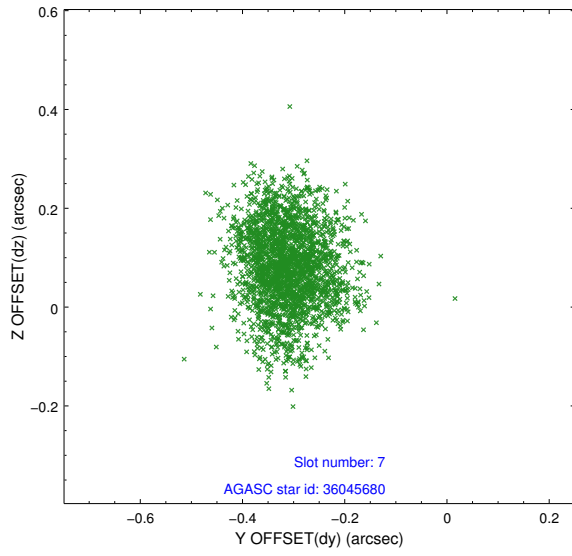
2.4.3 Slot 5



2.4.4 Slot 6

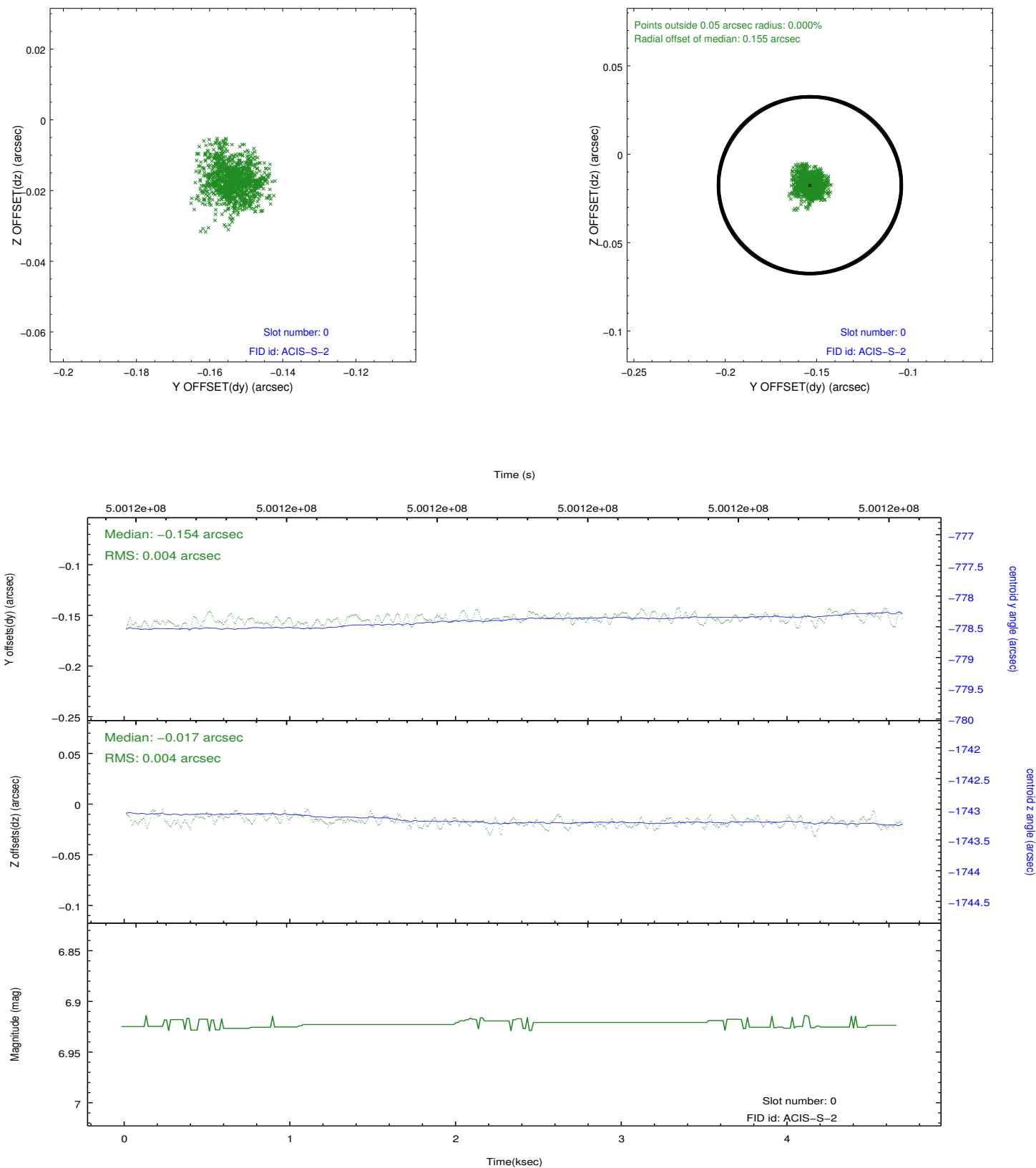


2.4.5 Slot 7

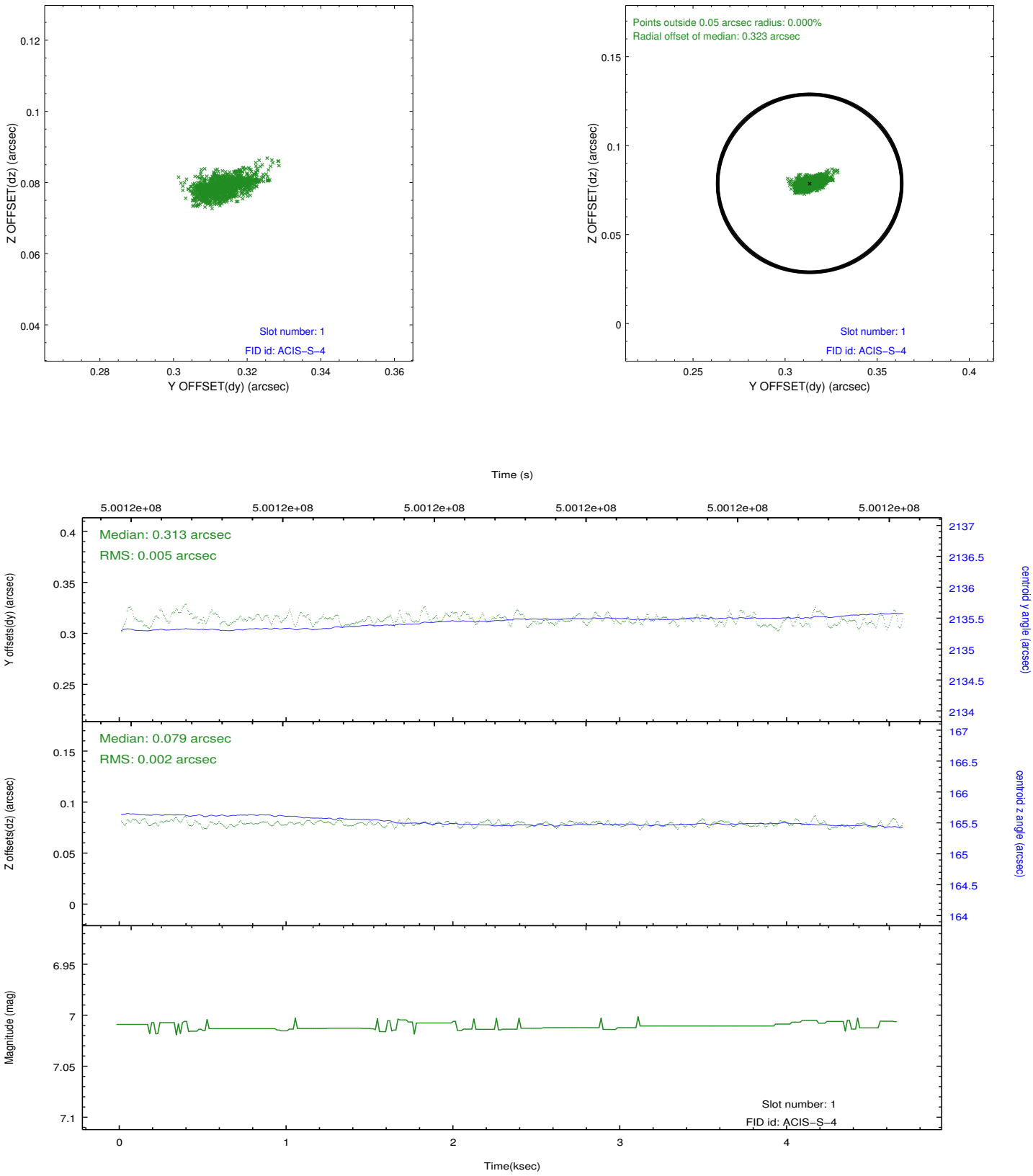


2.5 FID Slots

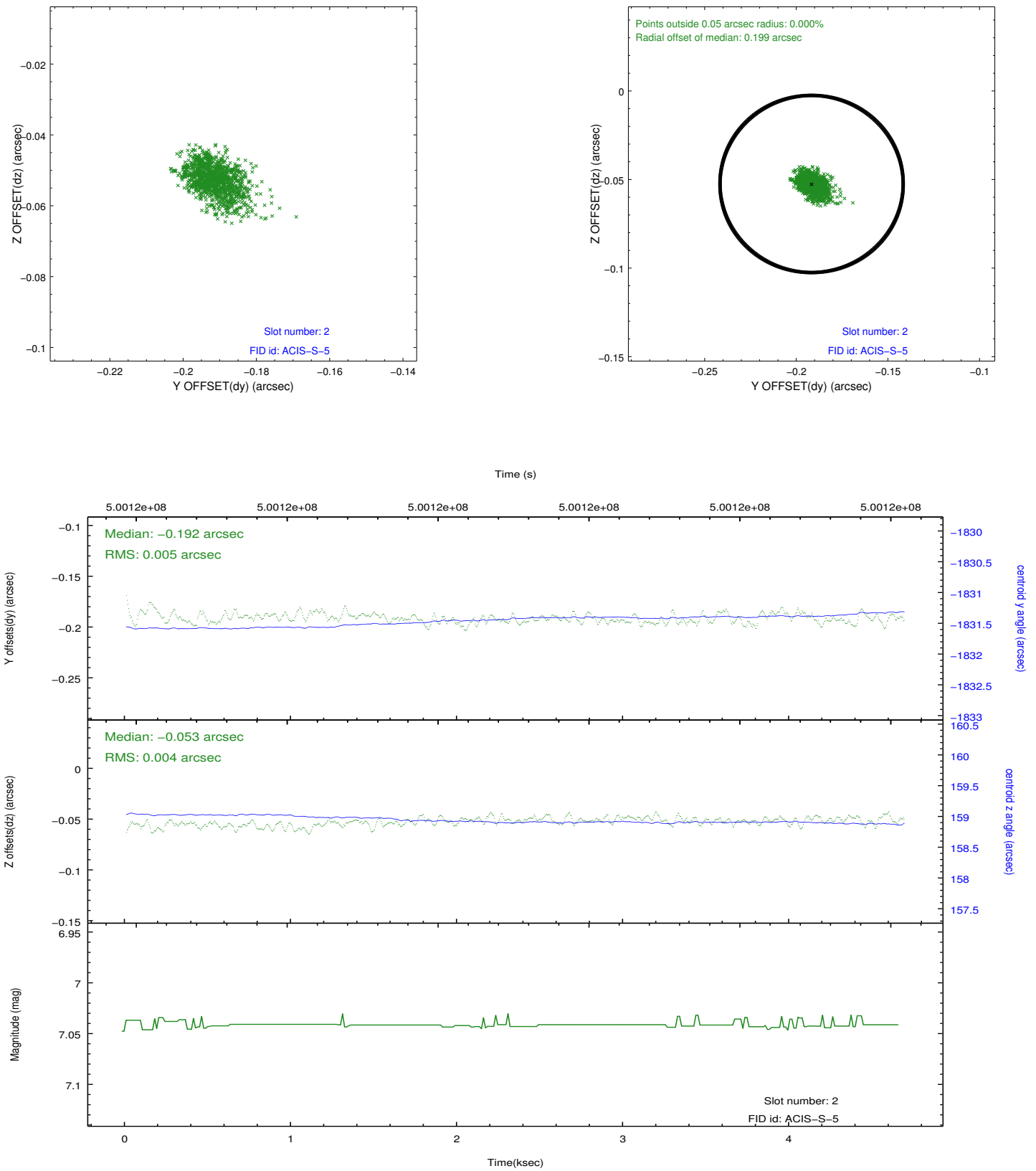
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.6810000360012

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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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.