

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15675 - L2 Version 4
Chandra X-Ray Center

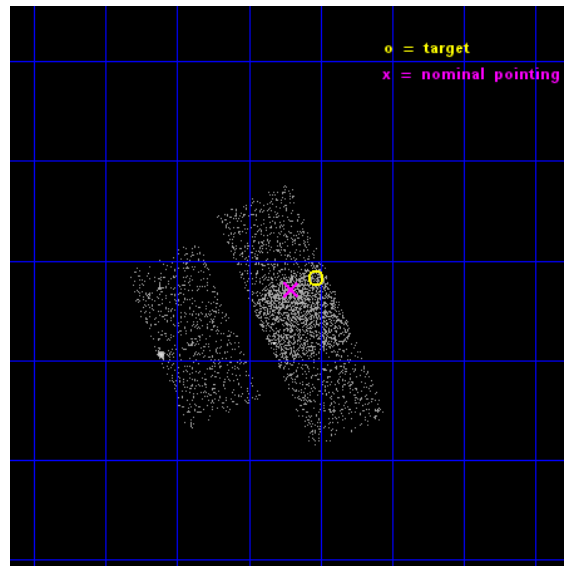
L2 Processing Date : Dec 7 2014

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1 Front

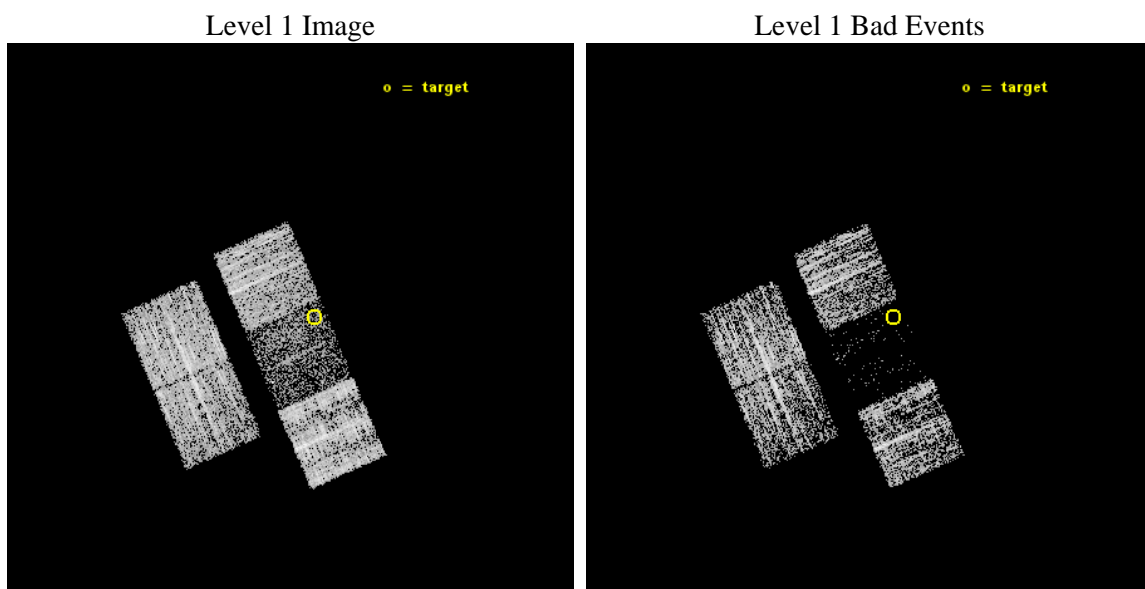
seq_num	100104	Sequence number
obs_id	15675	Observation id
title	Plumbing the Heights of the Solar Wind With Comet ISON	Proposal ti
observer	Dr. Carey Lisse	Principal investigator
object	Comet C/2012 S1 (ISON)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	175.759	Observer's specified target RA [deg]
dec_targ	2.304	Observer's specified target Dec [deg]
ra_nom	175.8007690313	Nominal RA [deg]
dec_nom	2.2856150267985	Nominal Dec [deg]
roll_nom	66.405975479494	Nominal Roll [deg]
revision	4	Processing version of data
ontime	4615.9000355005	Sum of GTIs [s]
livetime	4555.5899033605	Livetime [s]
ontime2	4615.9000355005	Sum of GTIs [s]
ontime3	4615.9000355005	Sum of GTIs [s]
ontime6	4615.9000355005	Sum of GTIs [s]
ontime7	4615.9000355005	Sum of GTIs [s]
ontime8	4615.9000355005	Sum of GTIs [s]
l2events	4423	Number of level 2 events



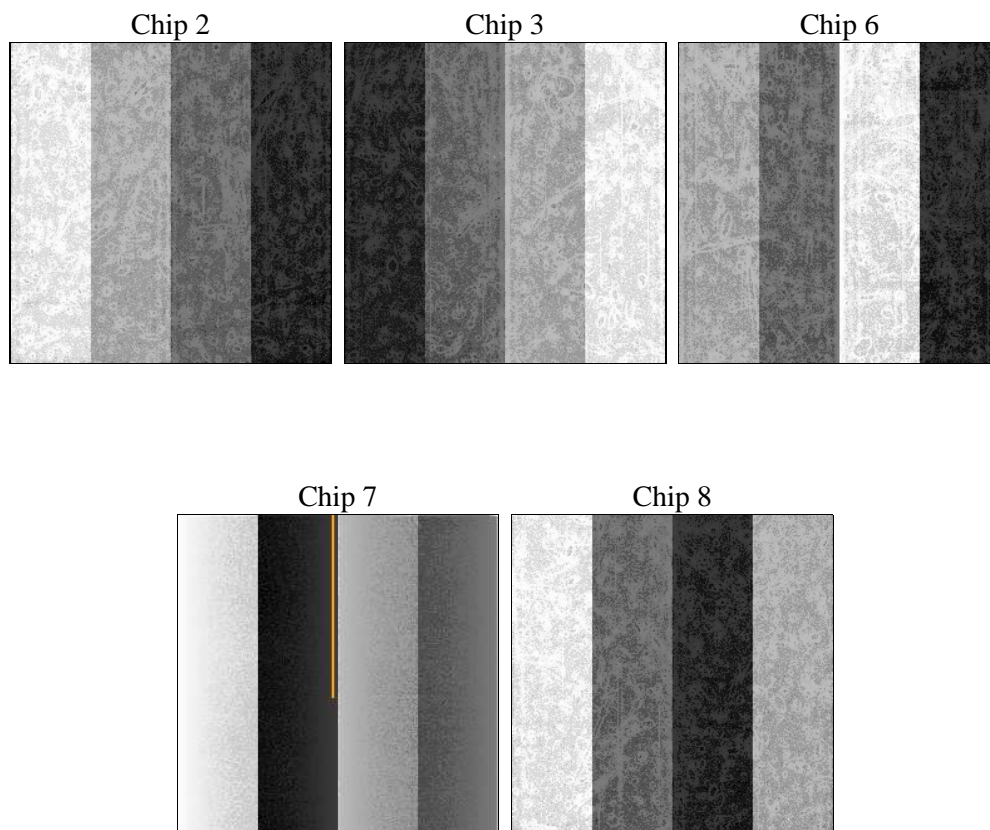
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4615.9000355005	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	4615.9000355005	Sum of GTIs [s]
date	2014-12-07T21:05:47	Date and time of file creation	ontime3	4615.9000355005	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	4615.9000355005	Sum of GTIs [s]
			ontime7	4615.9000355005	Sum of GTIs [s]
			ontime8	4615.9000355005	Sum of GTIs [s]
			l1events	65202	Number of level 1 events

2.1.4 Events

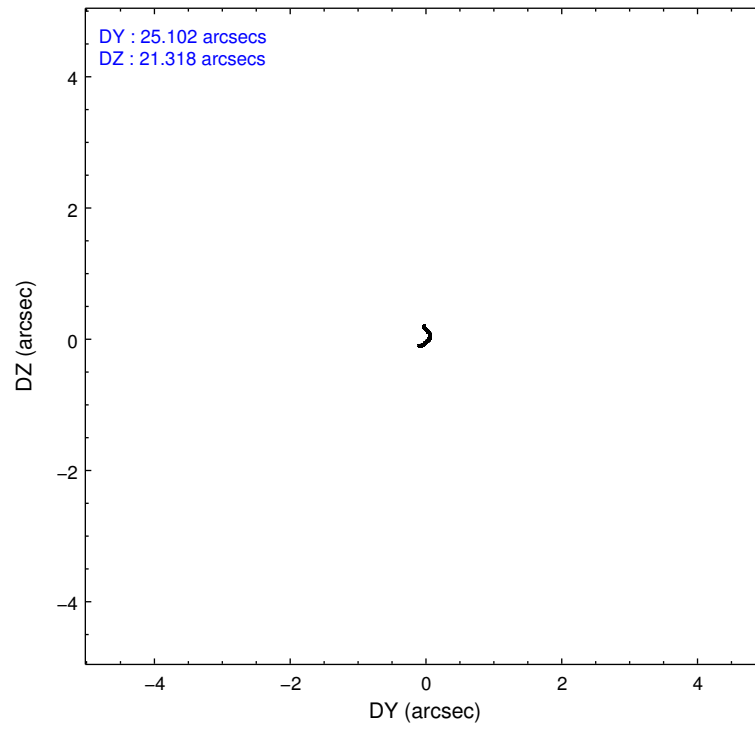
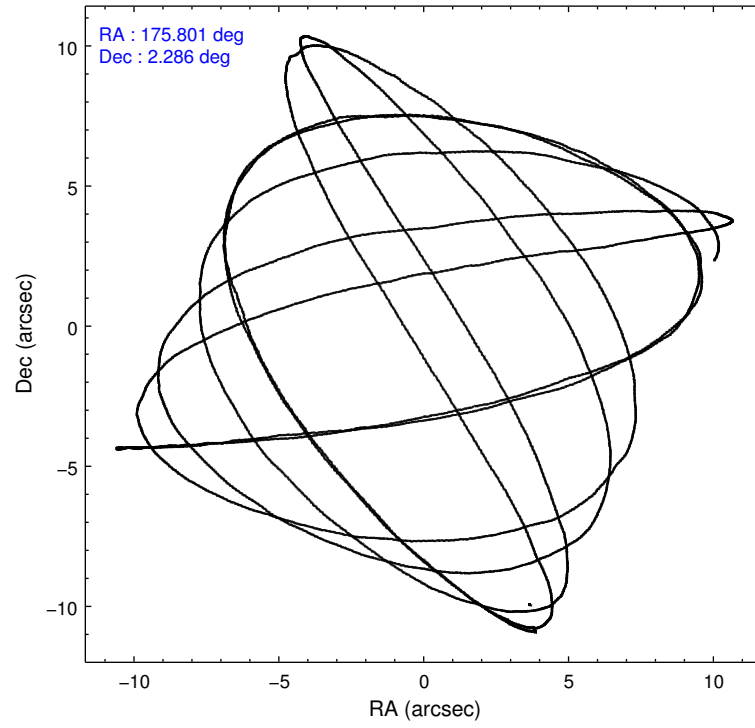
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	16654	12405	13932	3296	18915
rejected events	15828	11735	13130	725	12435
rejected %	95%	94%	94%	21%	65%

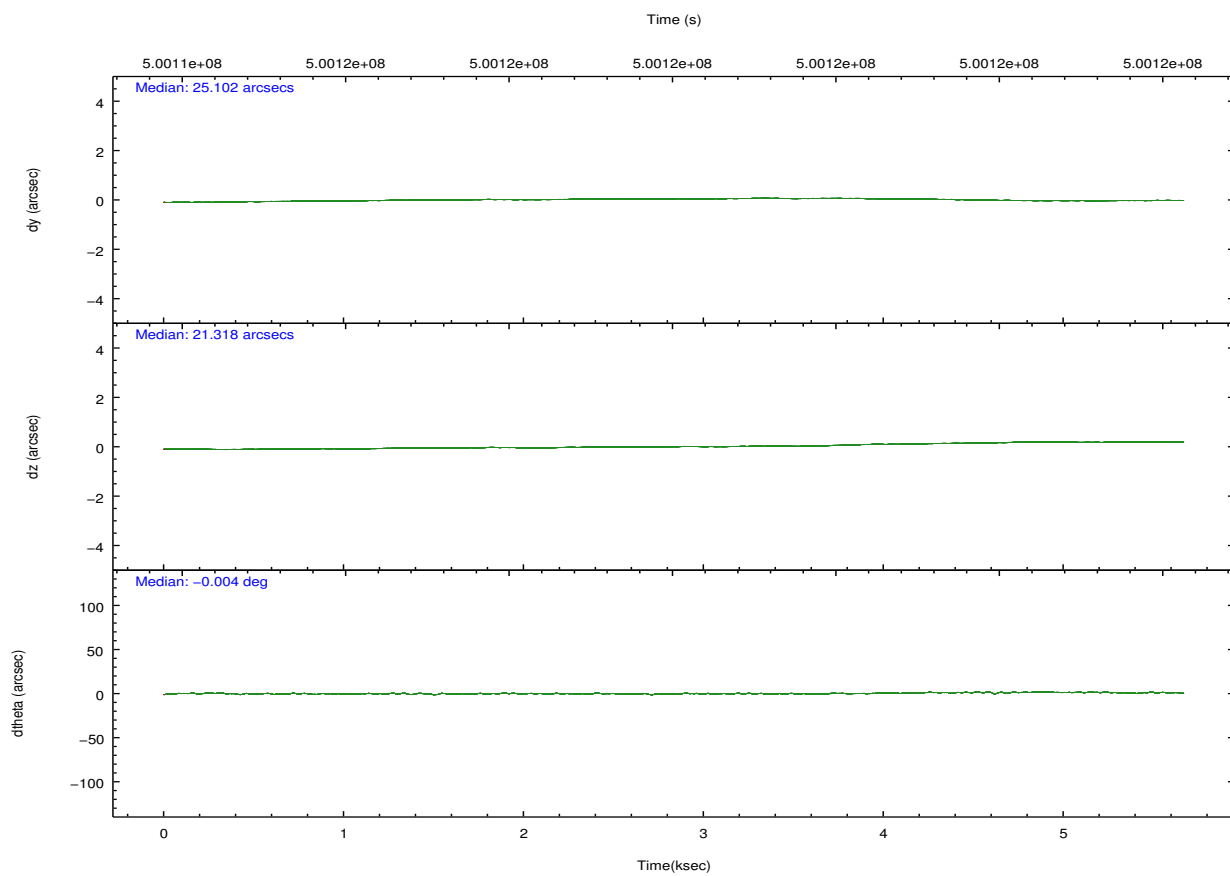
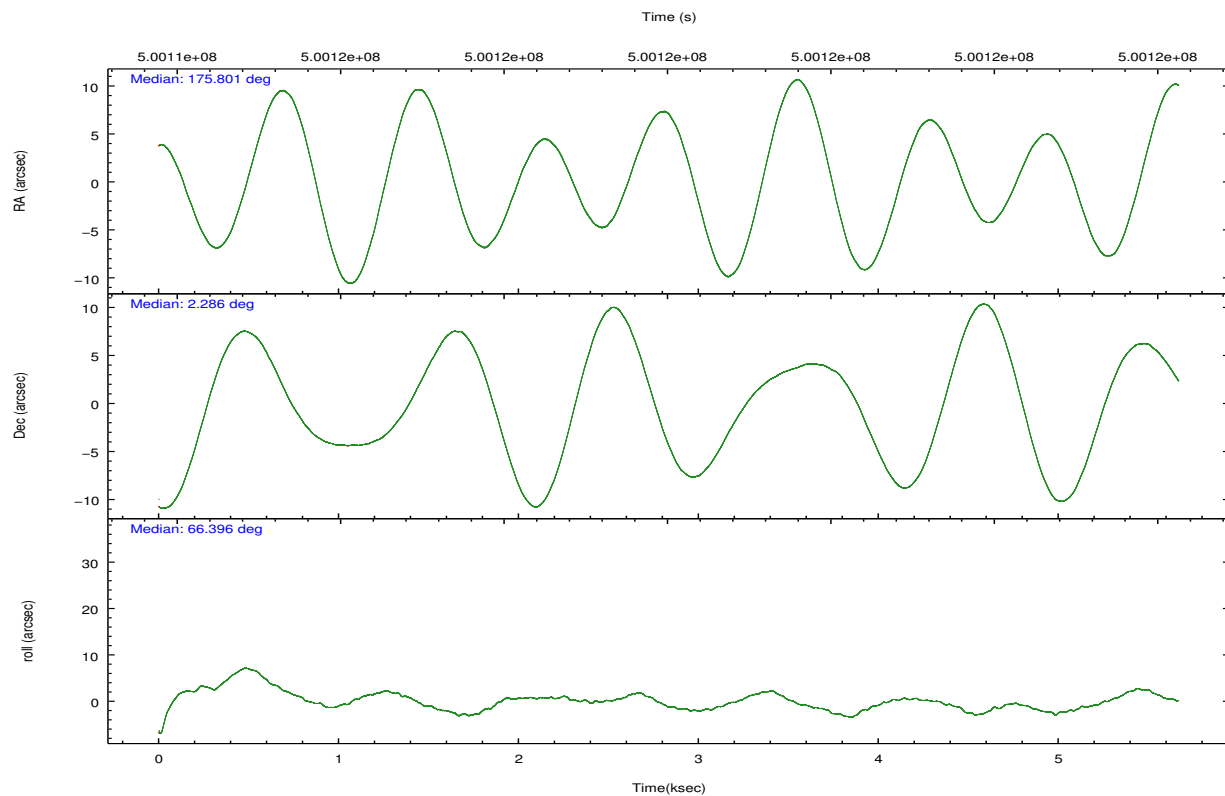
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	352	389	447	934	1912
	2%	3%	3%	28%	10%
grade 1 events	3	2	4	23	14
	0%	0%	0%	0%	0%
grade 2 events	220	110	162	768	1517
	1%	0%	1%	23%	8%
grade 3 events	82	80	76	310	847
	0%	0%	0%	9%	4%
grade 4 events	102	61	80	321	751
	0%	0%	0%	9%	3%
grade 5 events	30	13	20	101	152
	0%	0%	0%	3%	0%
grade 6 events	91	53	63	324	1681
	0%	0%	0%	9%	8%
grade 7 events	15774	11697	13080	515	12041
	94%	94%	93%	15%	63%

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	175.804191	175.8007690312976	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.258476	2.285615026798516	Alternating exposures requested	N	N
[deg] Pointing Roll	66.249222	66.40597547949363	[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)	500115347.184000	500113895.54283			
Observation start date	2013-11-06T08:54:40	2013-11-06T08:31:35			
[s] Observation end time (MET)	500119847.184000	500119980.96816			
Observation end date	2013-11-06T10:09:40	2013-11-06T10:13:00			
Read mode	TIMED	TIMED			

2.3 Aspect



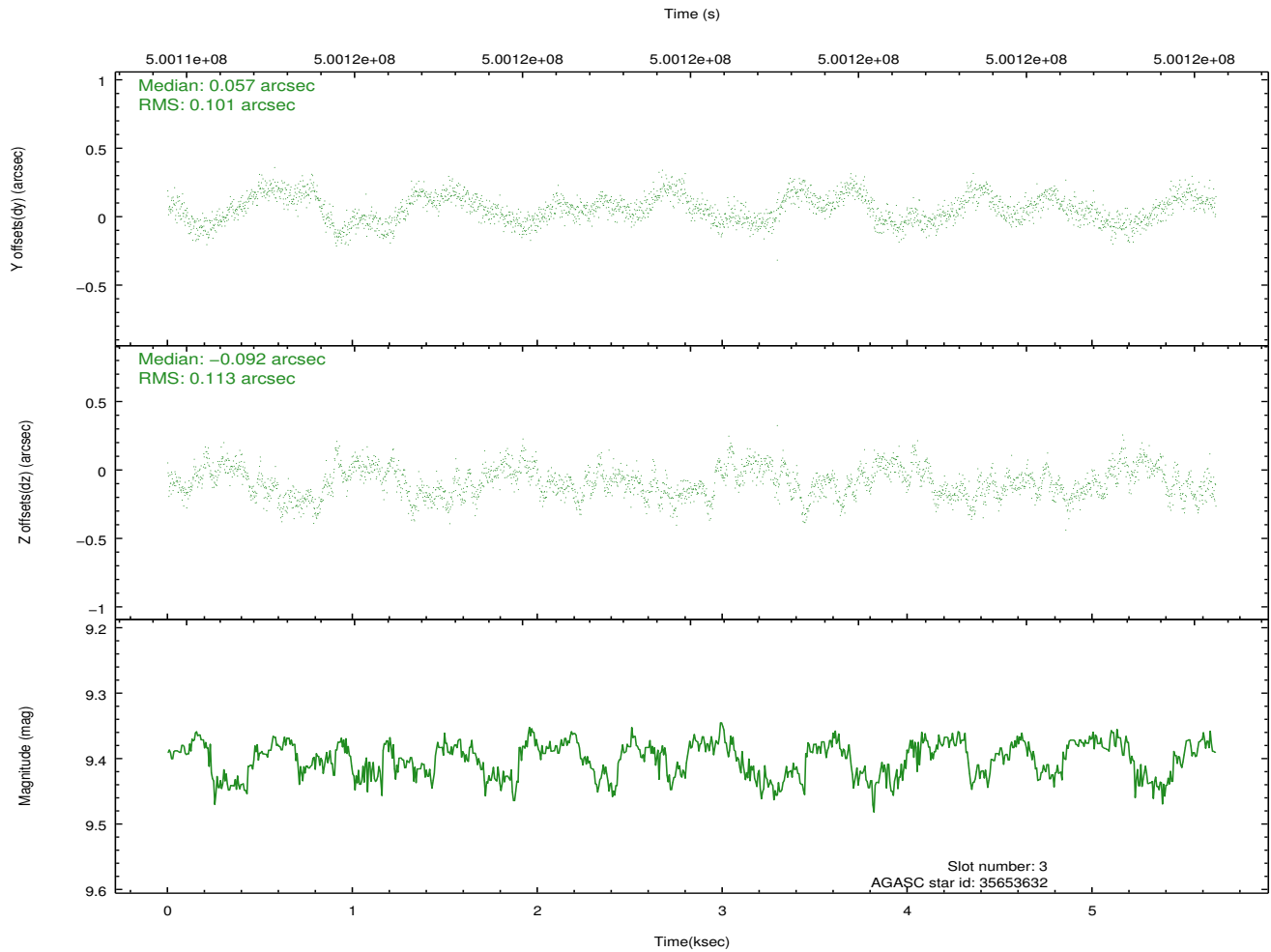
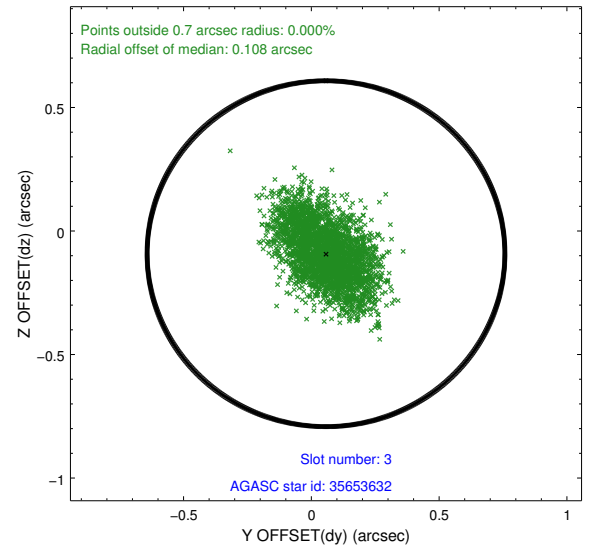
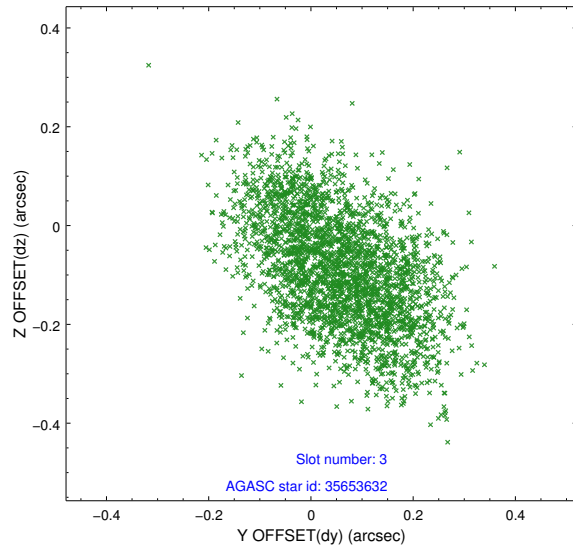


Slot Statistics

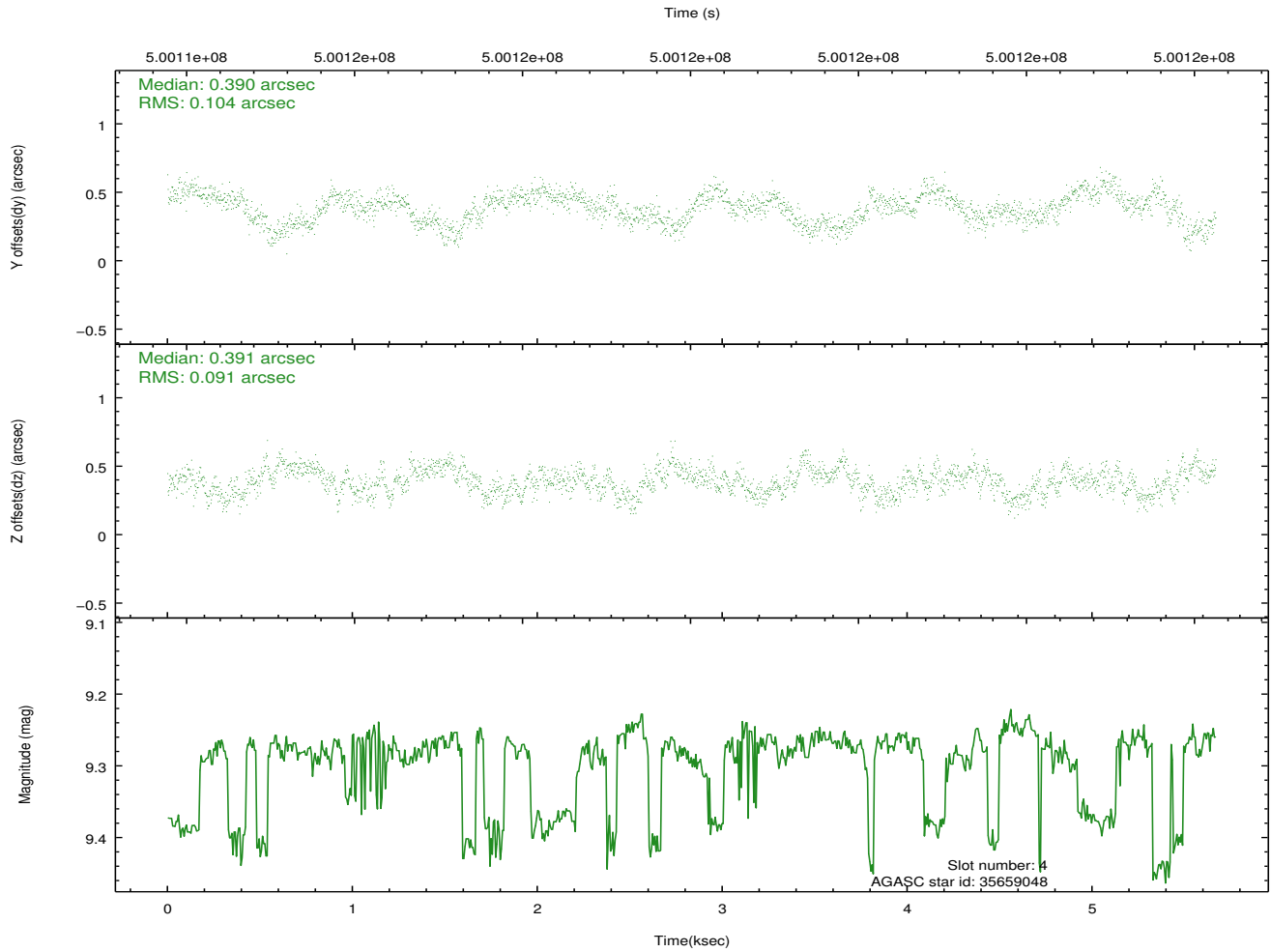
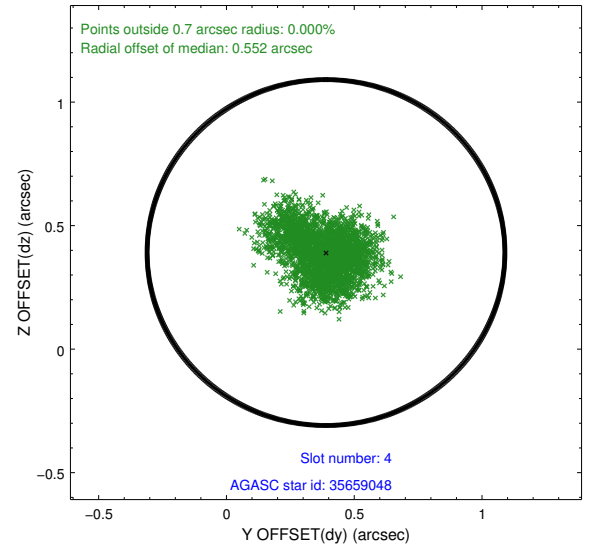
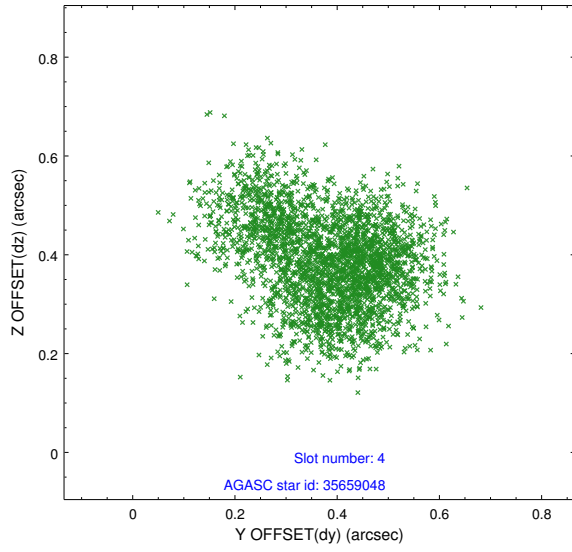
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	1383	-0.163	-0.011	0.007	0.012	0.000000	0.000000	-778.52	-1742.90
1	FID		ACIS-S-4	7.02	1383	0.323	0.082	0.005	0.011	0.000000	0.000000	2134.76	164.55
2	FID		ACIS-S-5	7.04	1383	-0.191	-0.061	0.007	0.011	0.000000	0.000000	-1830.03	159.32
3	GUIDE	used	35653632	9.40	2759	0.057	-0.092	0.161	0.259	175.530050	2.442815	210.29	1169.94
4	GUIDE	used	35659048	9.28	2766	0.390	0.391	0.147	0.233	175.742282	2.054880	-759.73	-90.43
5	GUIDE	used	36045208	8.32	2765	-0.047	-0.035	0.117	0.177	176.375467	2.647599	2108.49	-1314.66
6	GUIDE	used	36045264	8.54	2765	-0.245	-0.606	0.081	0.133	175.420365	2.870668	1461.90	2150.84
7	GUIDE	used	36045680	8.86	2765	-0.150	0.343	0.103	0.160	175.537896	2.878377	1657.56	1776.74

2.4 Star Slots

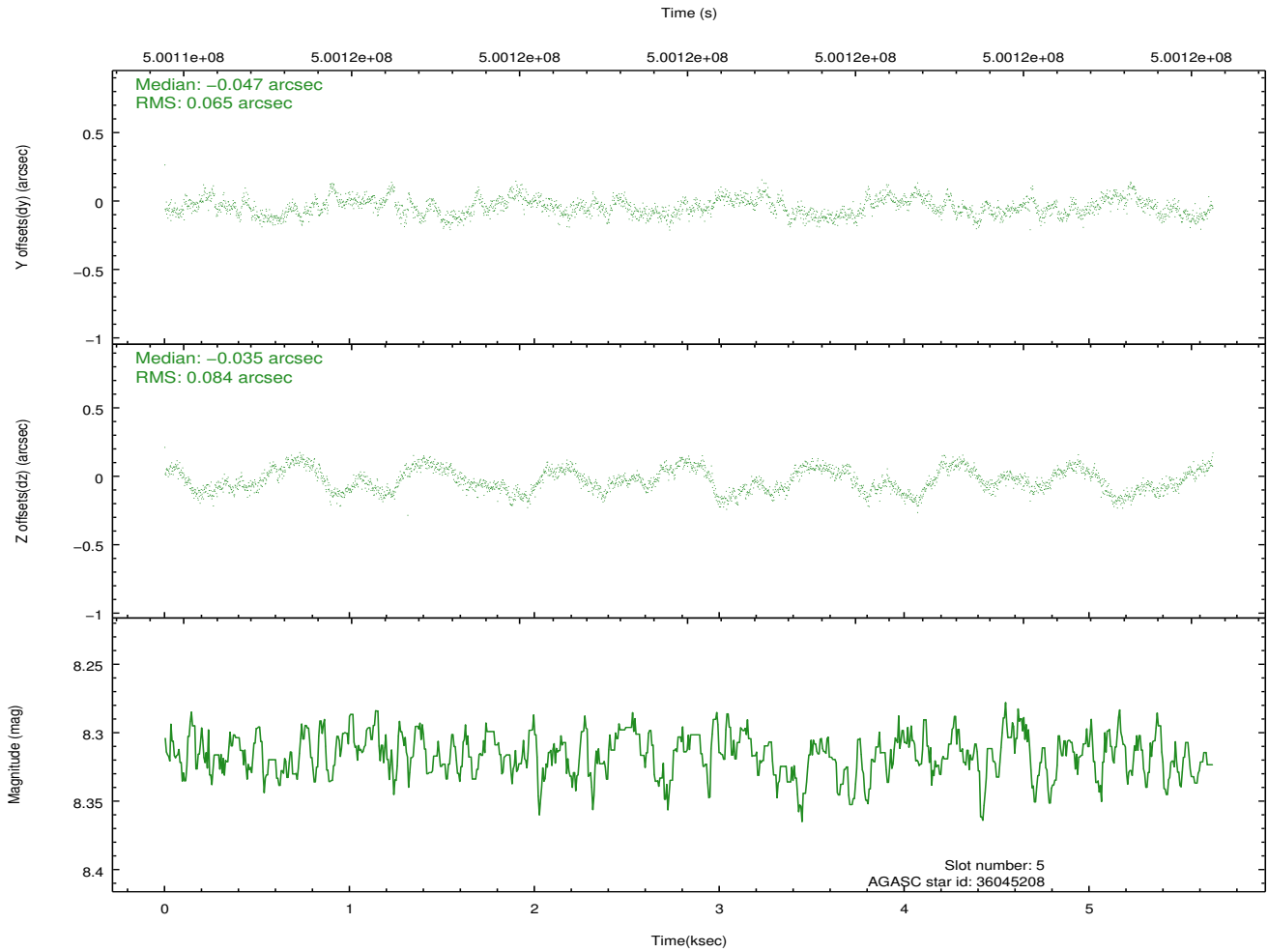
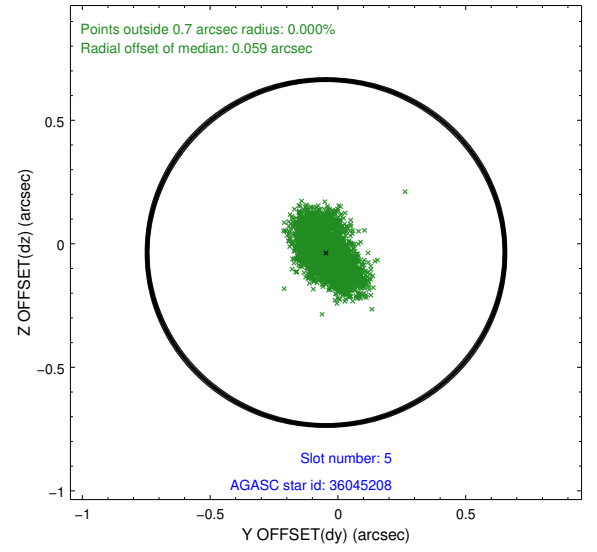
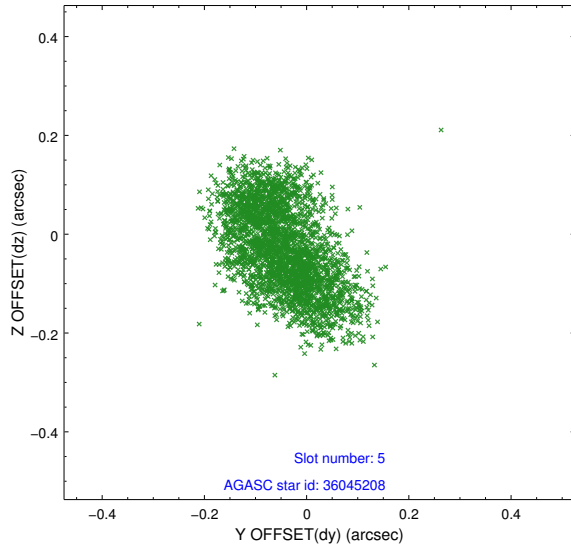
2.4.1 Slot 3



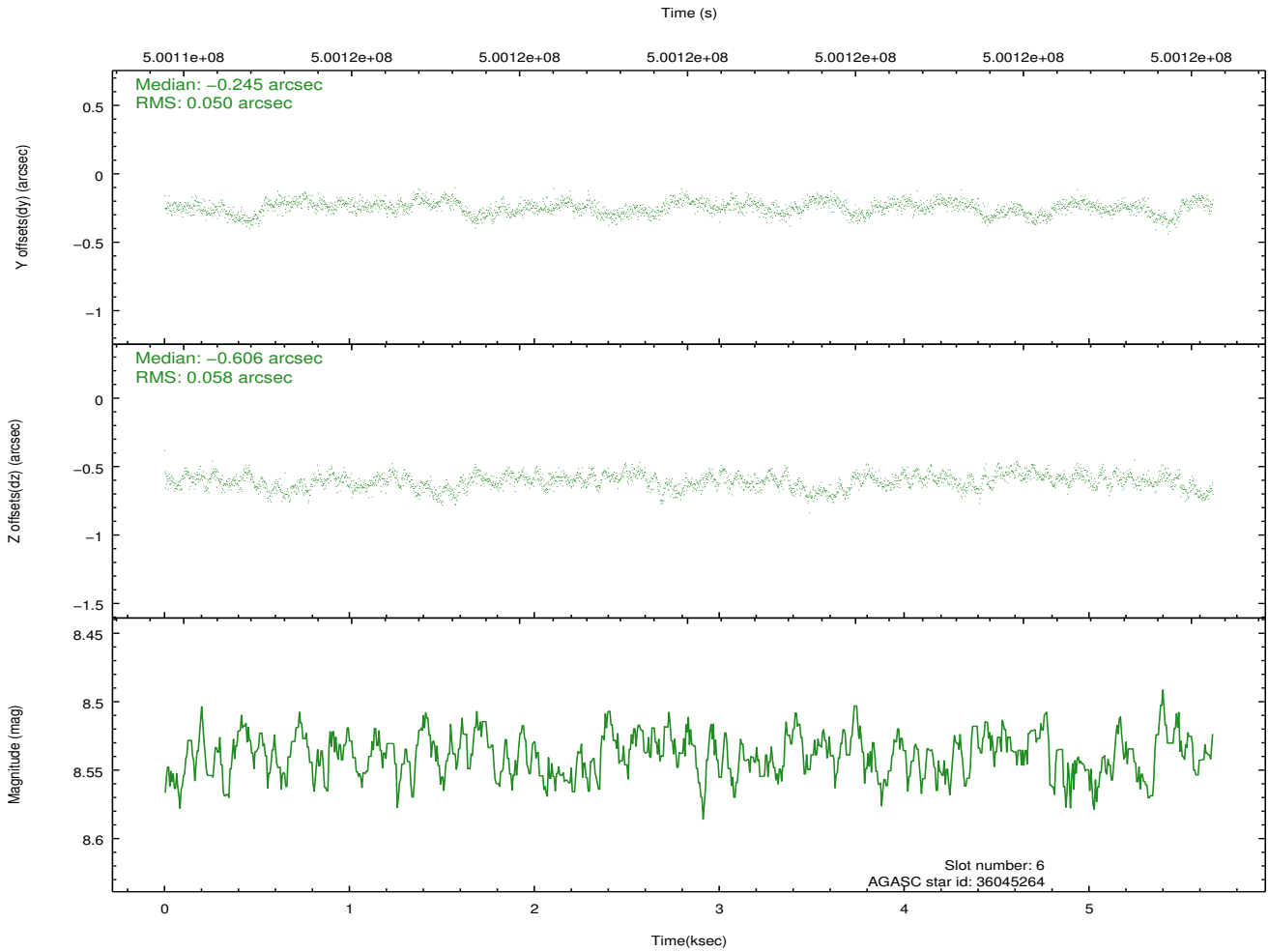
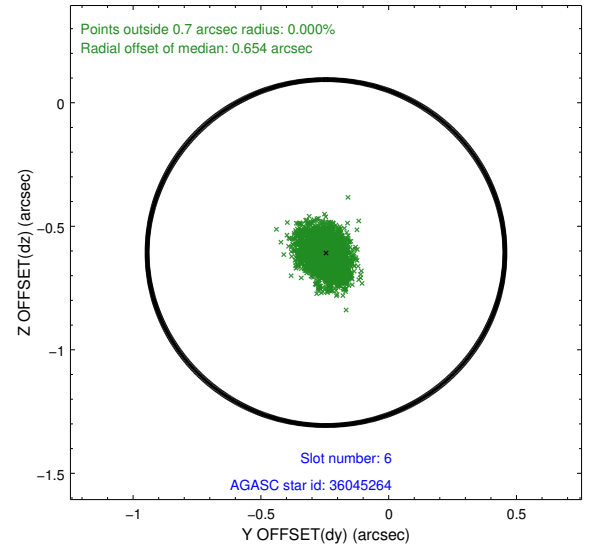
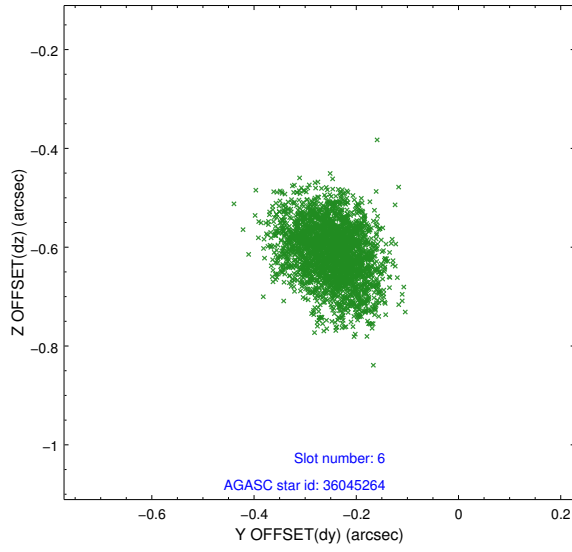
2.4.2 Slot 4



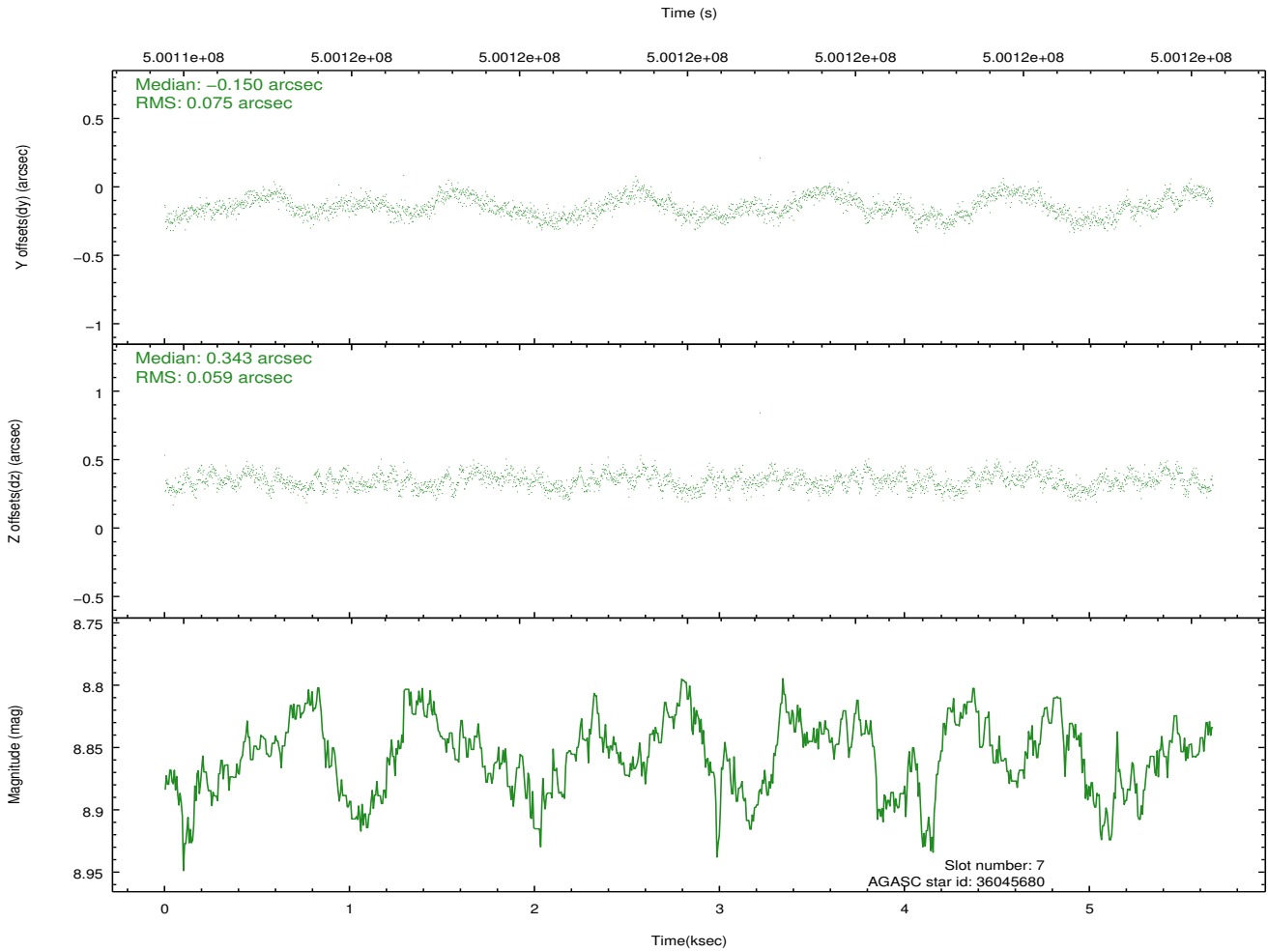
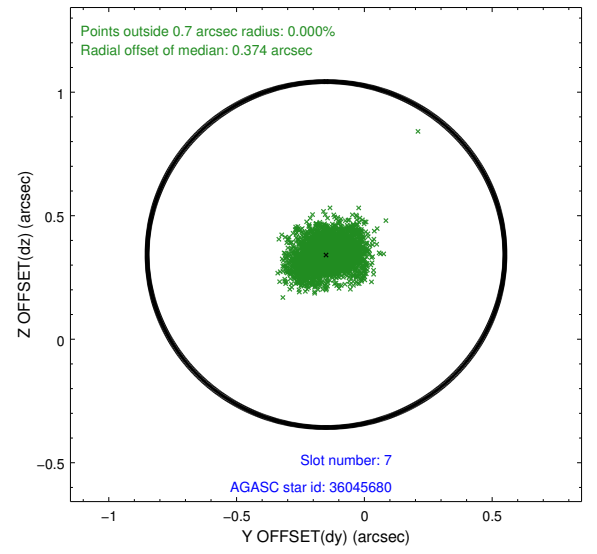
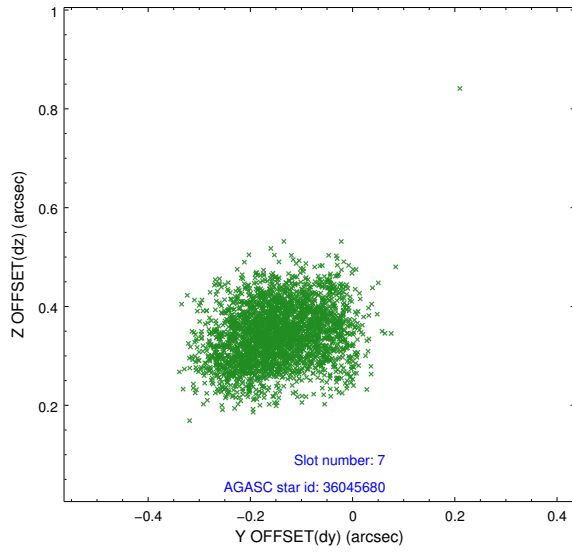
2.4.3 Slot 5



2.4.4 Slot 6

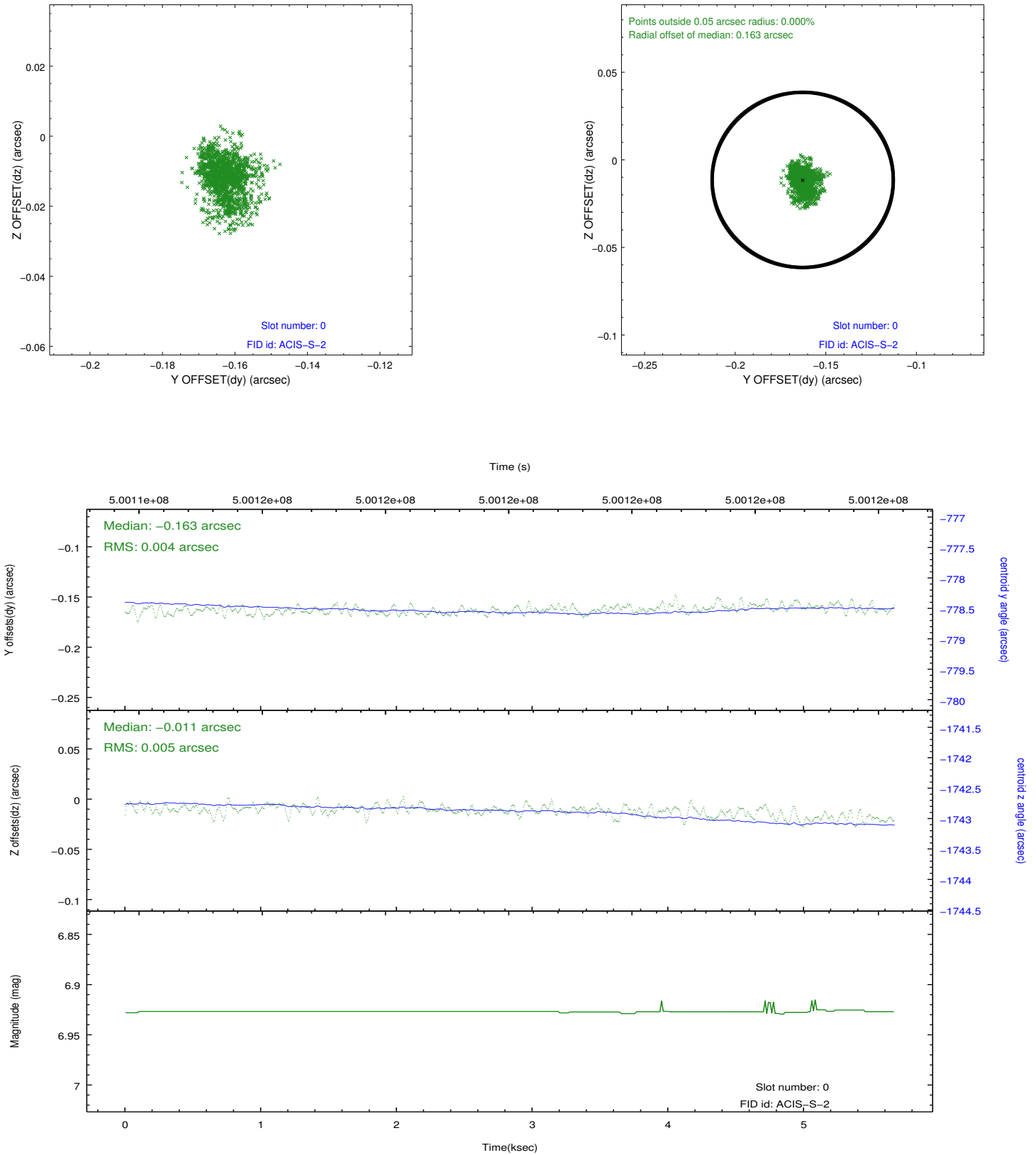


2.4.5 Slot 7

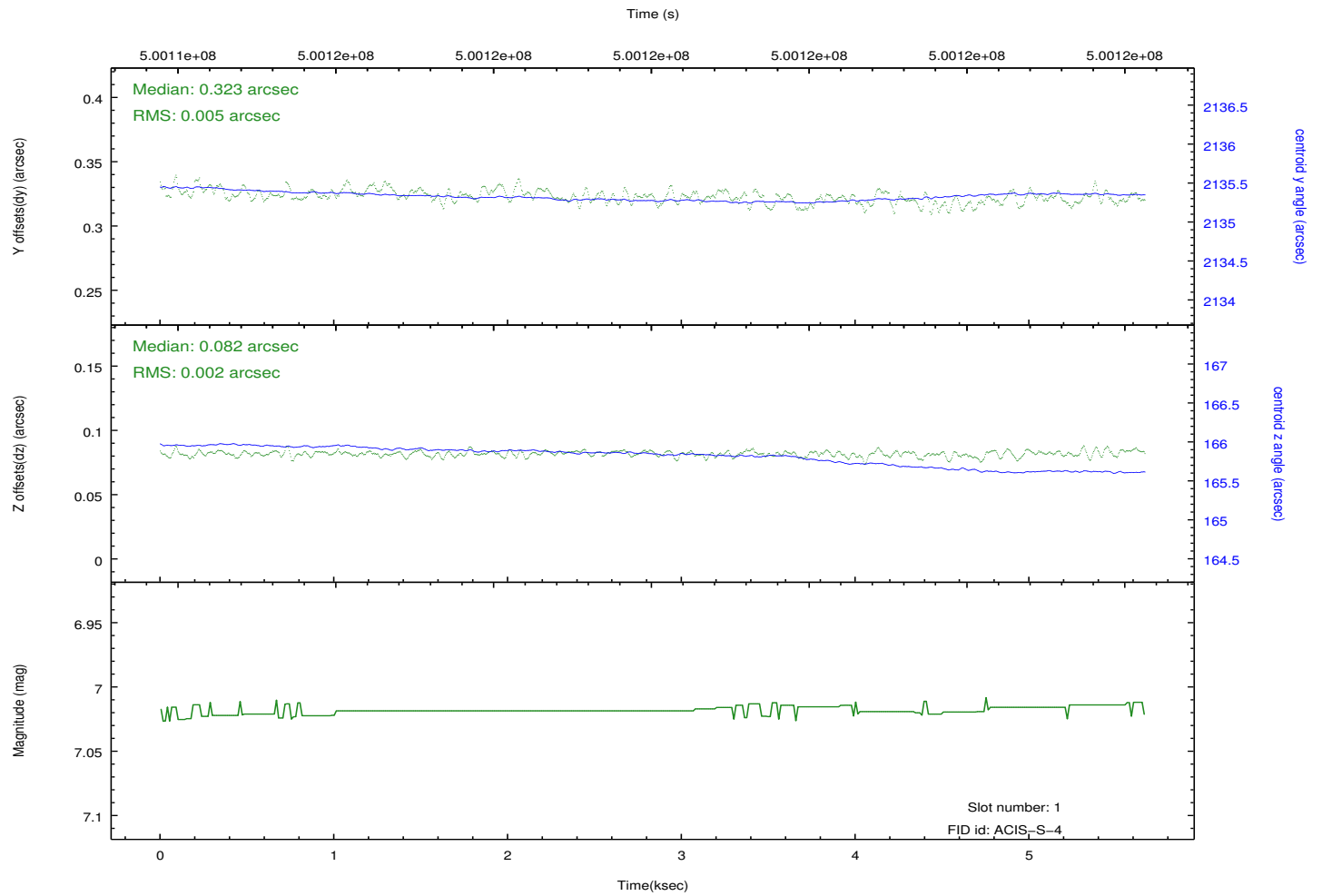
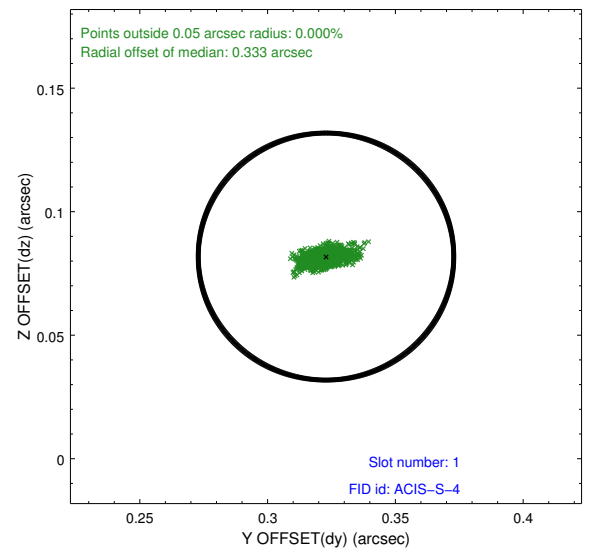
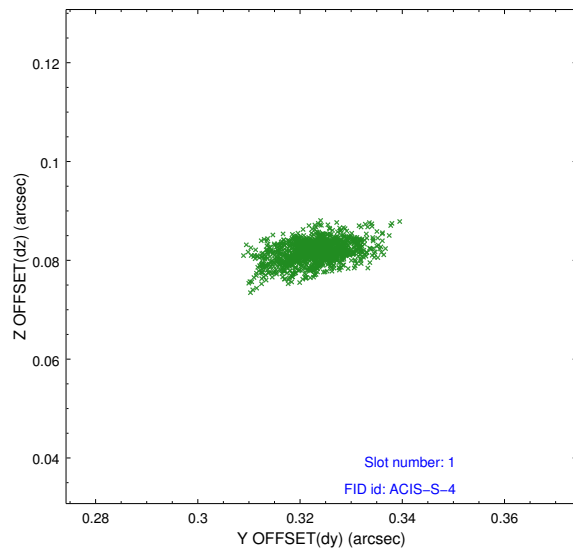


2.5 FID Slots

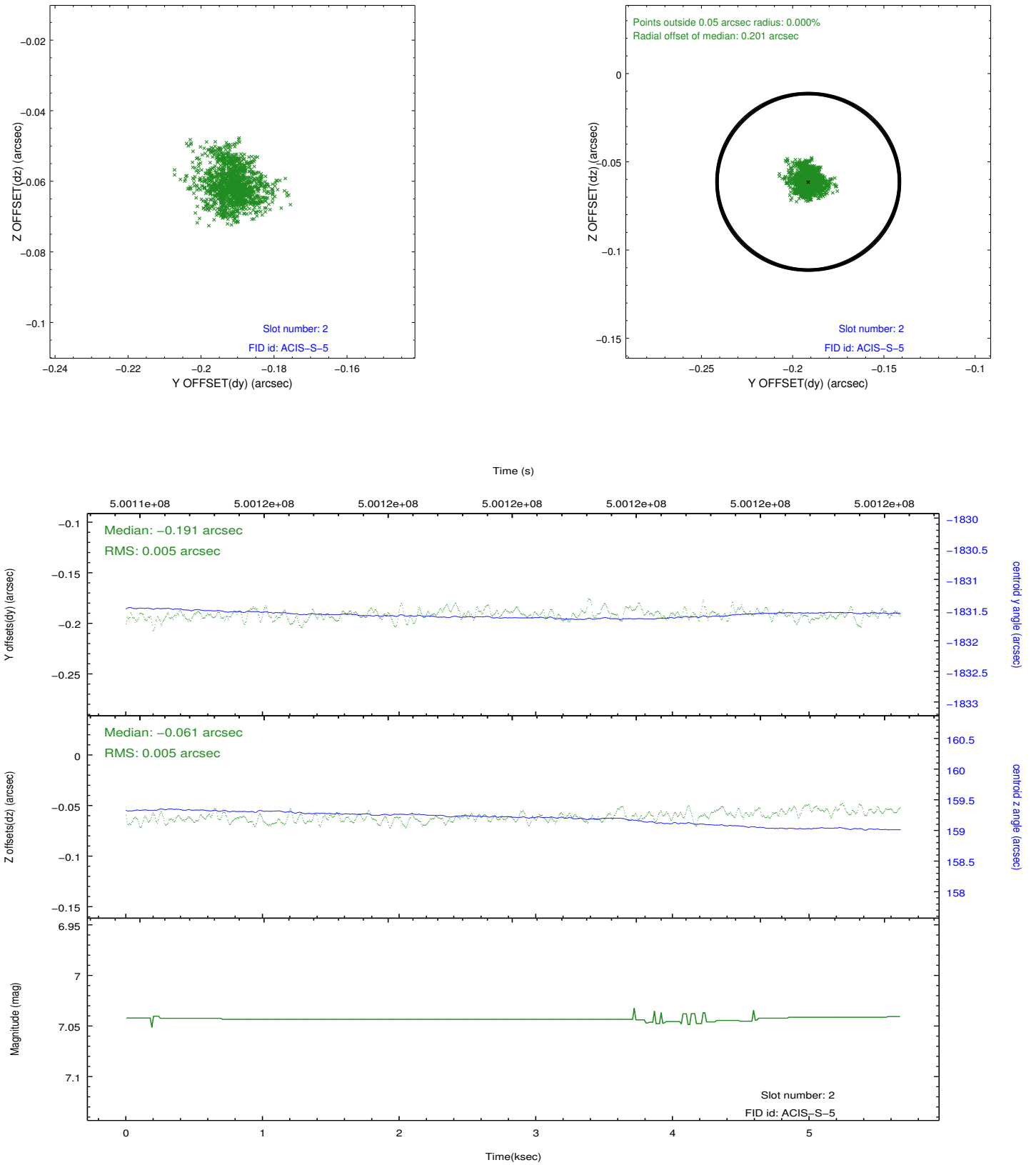
2.5.1 Slot 0



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	4.6159000355005

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.