

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16544 - L2 Version 2
Chandra X-Ray Center

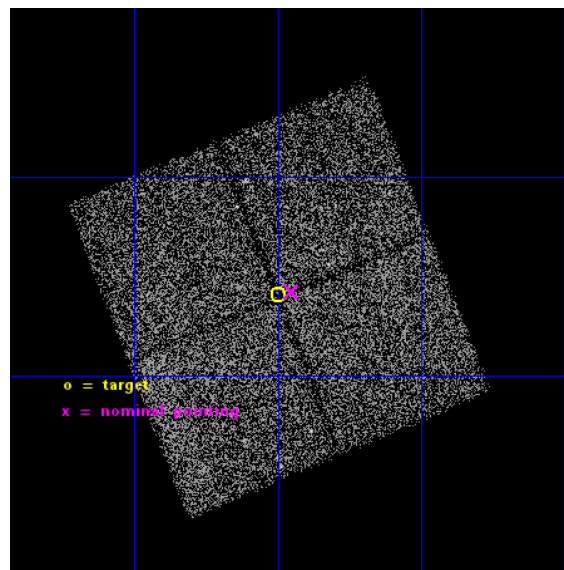
L2 Processing Date : Dec 8 2014

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1 Front

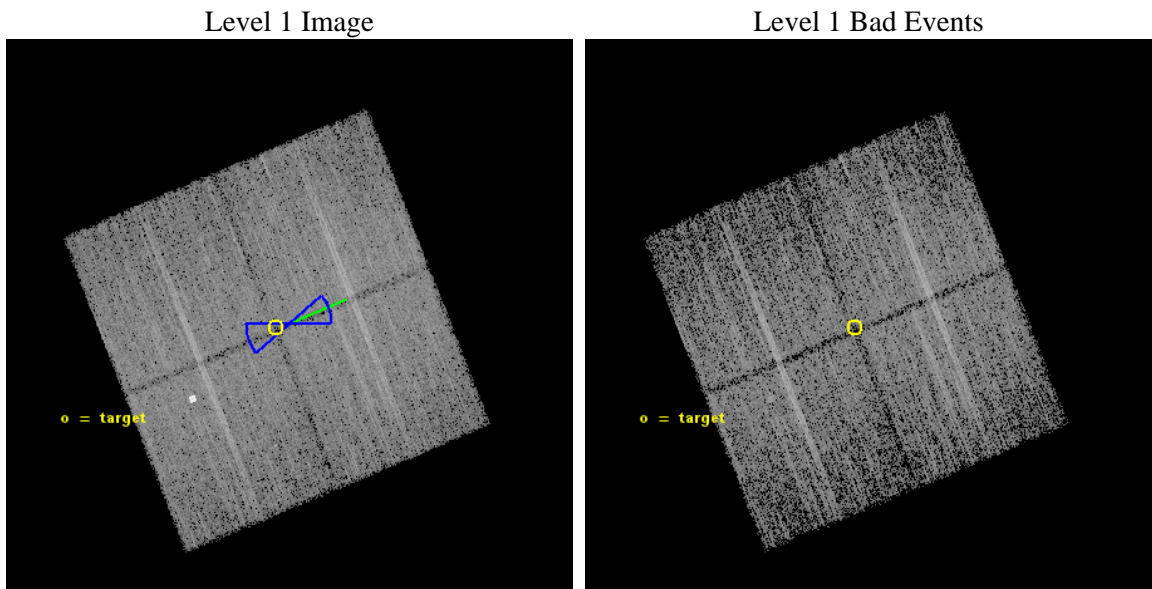
seq_num	901081	Sequence number
obs_id	16544	Observation id
title	The COSMOS Legacy Survey	Proposal title
observer	Dr Francesca Civano	Principal investigator
object	COSMOS Legacy	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.62428	Observer's specified target RA [deg]
dec_targ	1.901968	Observer's specified target Dec [deg]
ra_nom	150.61300804333	Nominal RA [deg]
dec_nom	1.9041219983685	Nominal Dec [deg]
roll_nom	67.909051747256	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20092.881852984	Sum of GTIs [s]
livetime	19830.353559411	Livetime [s]
ontime0	20089.699822605	Sum of GTIs [s]
ontime1	20092.881852984	Sum of GTIs [s]
ontime2	20092.922892988	Sum of GTIs [s]
ontime3	20089.822952628	Sum of GTIs [s]
l2events	37320	Number of level 2 events



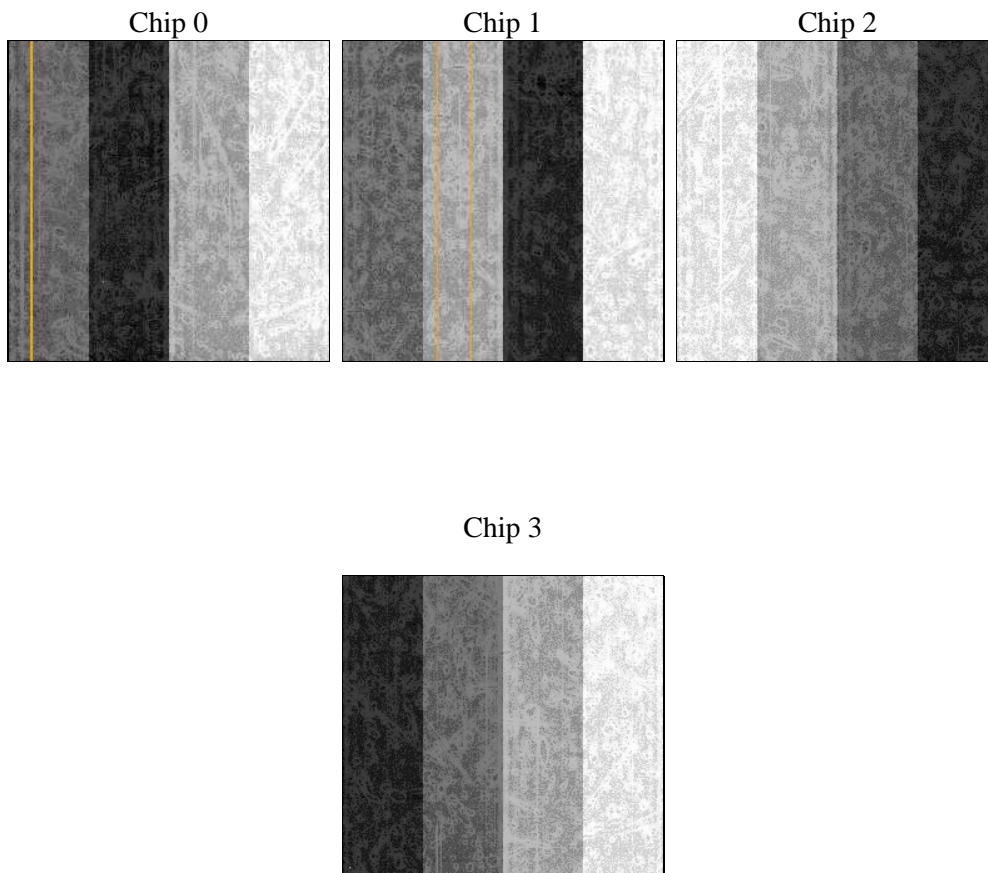
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20092.881852984	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	20089.699822605	Sum of GTIs [s]
date	2014-12-08T08:32:59	Date and time of file creation	ontime1	20092.881852984	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20092.922892988	Sum of GTIs [s]
			ontime3	20089.822952628	Sum of GTIs [s]
			l1events	360011	Number of level 1 events

2.1.4 Events

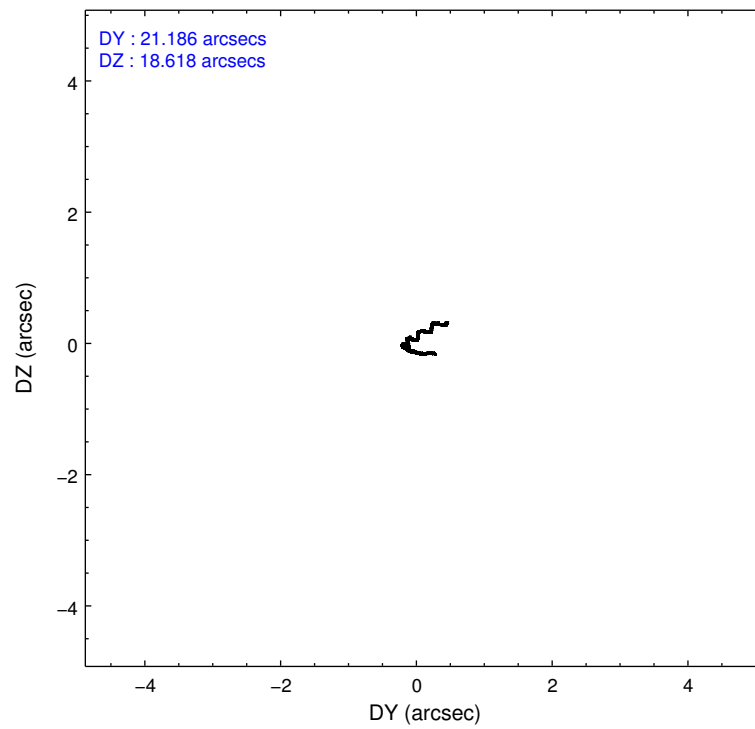
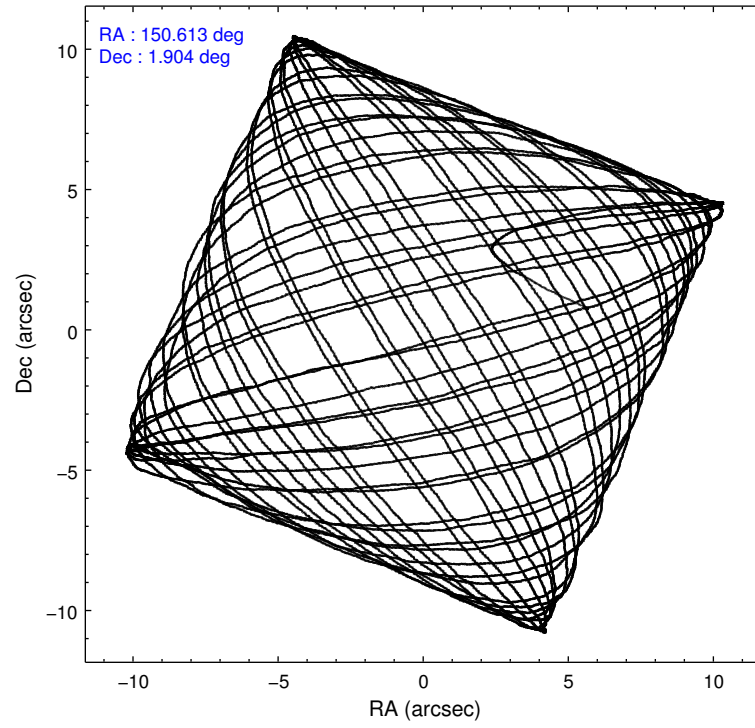
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	85542	89794	92963	91712
rejected events	74535	72217	82185	81359
rejected %	87%	80%	88%	88%

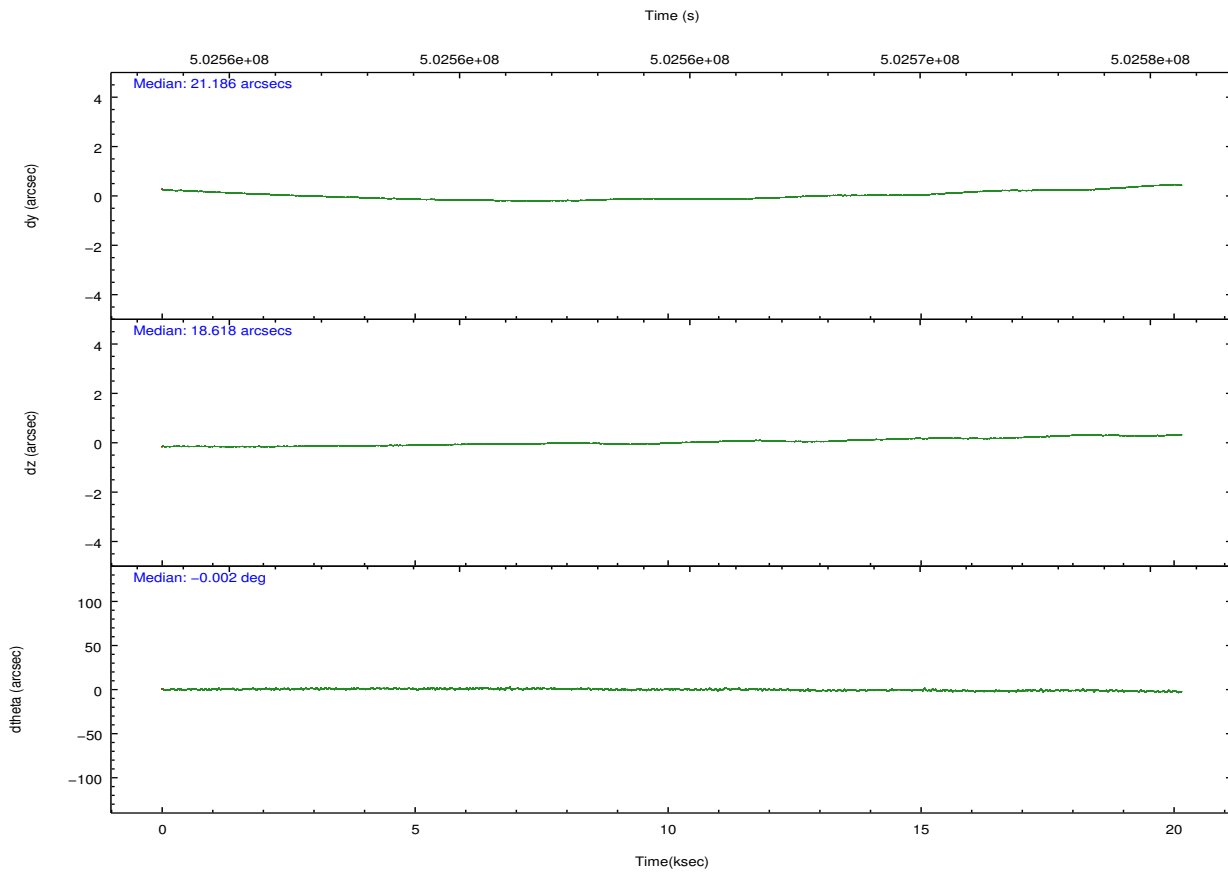
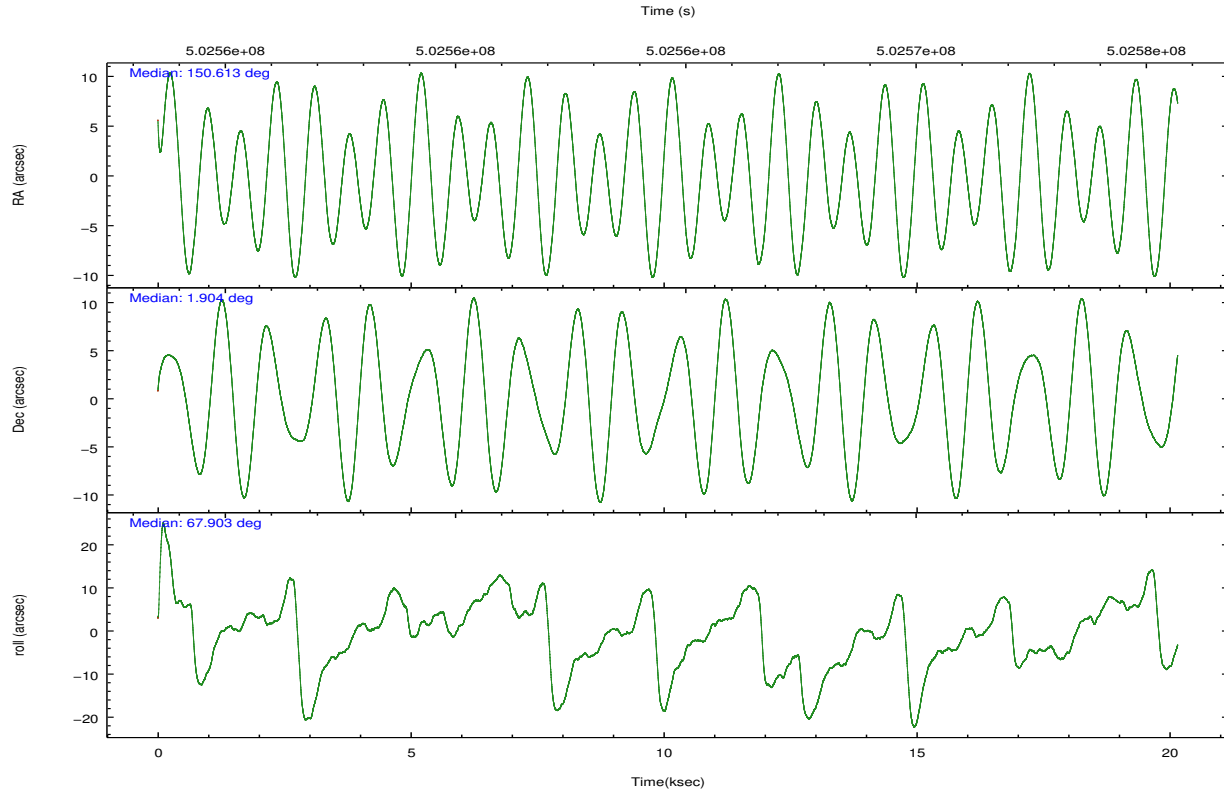
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	3818	4243	3821	3559
	4%	4%	4%	3%
grade 1 events	43	53	58	50
	0%	0%	0%	0%
grade 2 events	2702	8284	2664	2375
	3%	9%	2%	2%
grade 3 events	1132	1210	1120	1068
	1%	1%	1%	1%
grade 4 events	1091	1203	1057	1129
	1%	1%	1%	1%
grade 5 events	4415	4768	3954	5121
	5%	5%	4%	5%
grade 6 events	2265	2639	2123	2224
	2%	2%	2%	2%
grade 7 events	70076	67394	78166	76186
	81%	75%	84%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	150.616873	150.6130080433344	Subarray requested	NONE	NONE
[deg] Pointing Dec	1.876901	1.904121998368466	Alternating exposures requested	N	N
[deg] Pointing Roll	67.700246	67.90905174725647	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	250.000000	250.000000			
[deg] Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	Y	Y			
[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)	502554677.184000	502553747.25153			
Observation start date	2013-12-04T14:30:10	2013-12-04T14:15:47			
[s] Observation end time (MET)	502574677.184000	502575354.76522			
Observation end date	2013-12-04T20:03:30	2013-12-04T20:15:54			
Read mode	TIMED	TIMED			

2.3 Aspect



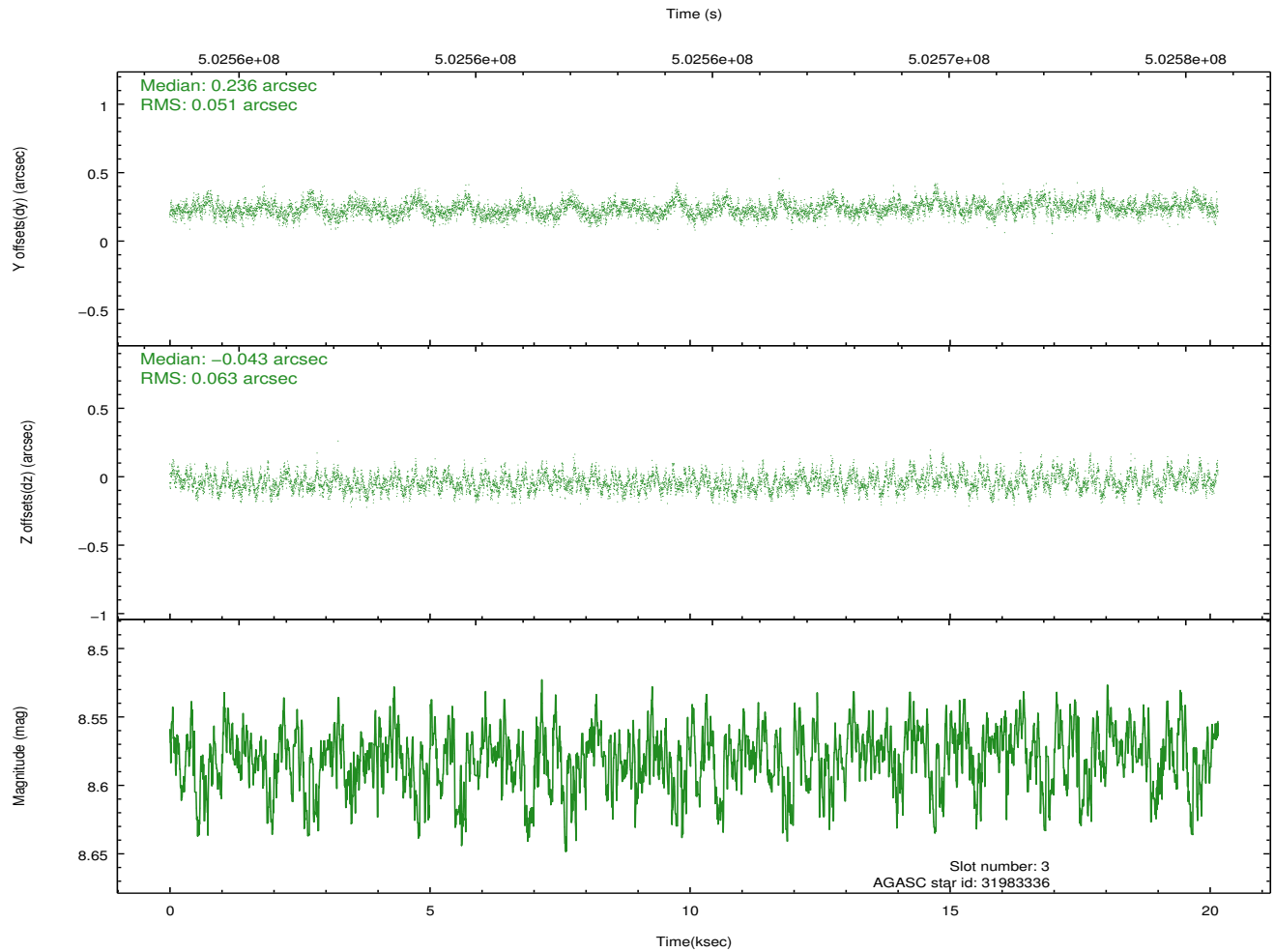
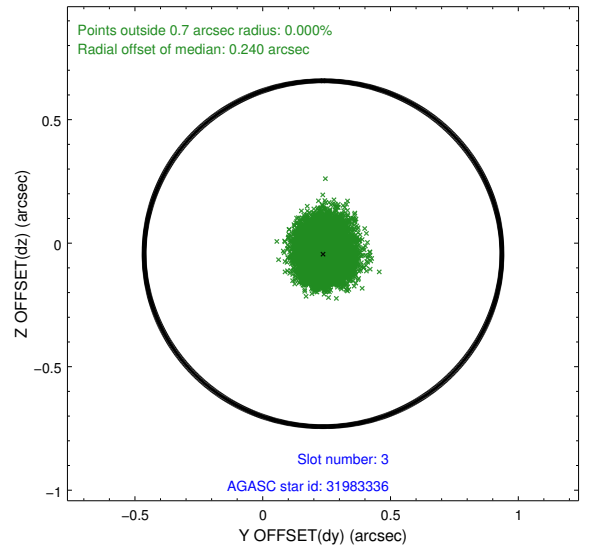
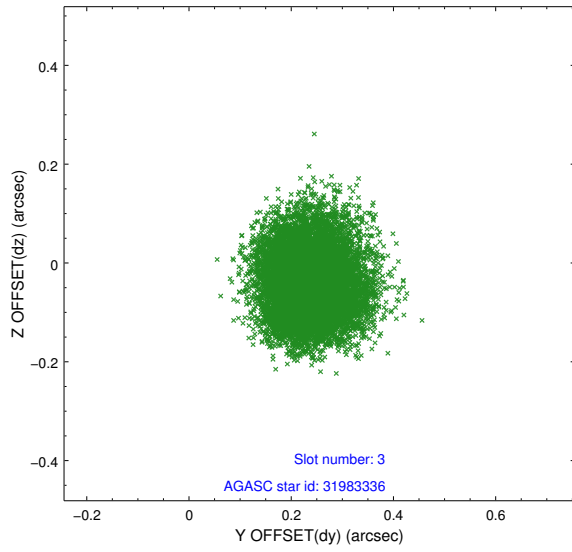


Slot Statistics

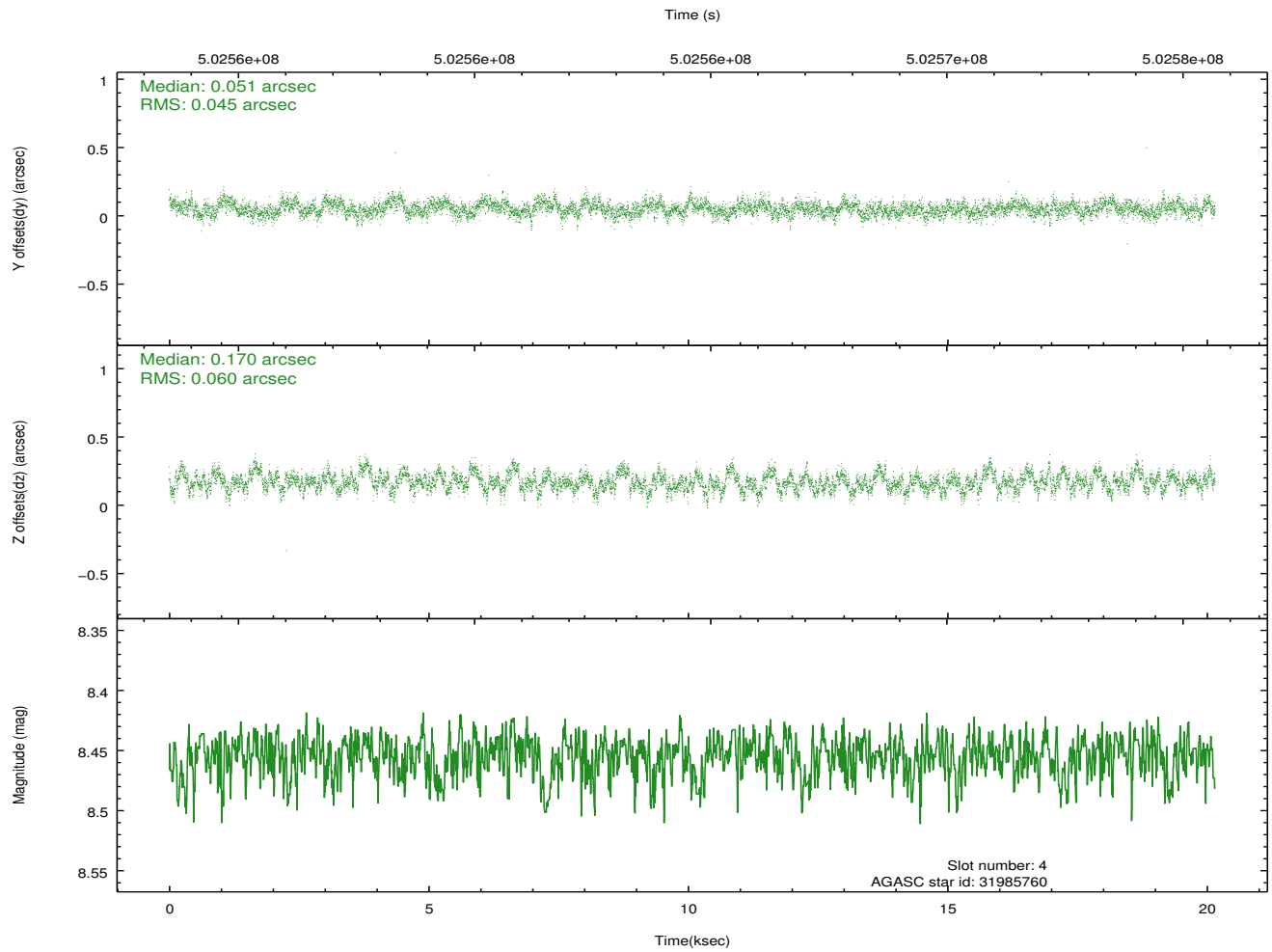
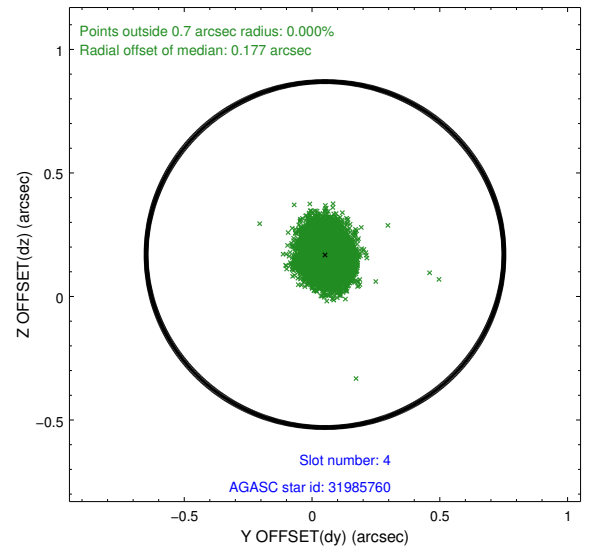
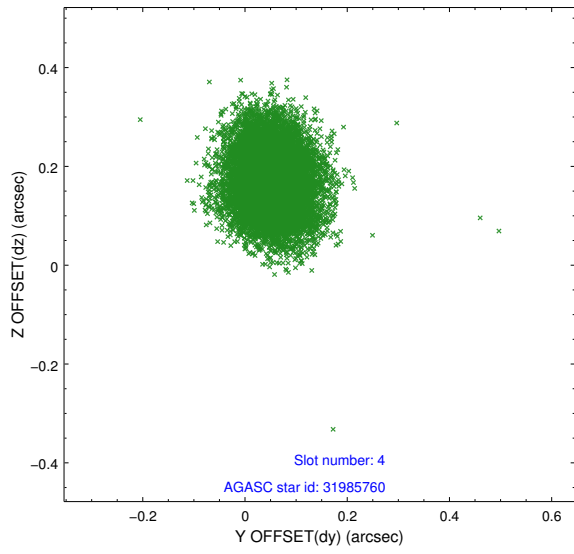
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.07	4917	0.018	-0.075	0.011	0.020	0.000000	0.000000	-776.07	-848.79
1	FID		ACIS-I-5	7.17	4917	-0.261	0.067	0.010	0.017	0.000000	0.000000	-1830.54	1055.10
2	FID		ACIS-I-6	7.18	4917	0.149	0.076	0.007	0.012	0.000000	0.000000	383.56	1699.84
3	GUIDE	used	31983336	8.58	9833	0.236	-0.043	0.087	0.139	150.429924	2.291234	1125.47	1188.42
4	GUIDE	used	31985760	8.45	9828	0.051	0.170	0.080	0.129	150.924581	2.094394	1144.82	-726.40
5	GUIDE	used	31986152	9.01	9828	0.056	0.111	0.137	0.222	150.840314	2.057585	907.22	-496.10
6	GUIDE	used	32374896	9.21	9828	-0.218	-0.030	0.166	0.240	150.682269	2.512794	2207.27	651.18
7	GUIDE	used	32375384	9.92	9526	-0.152	-0.227	0.190	0.293	150.238117	2.622063	1965.53	2279.28

2.4 Star Slots

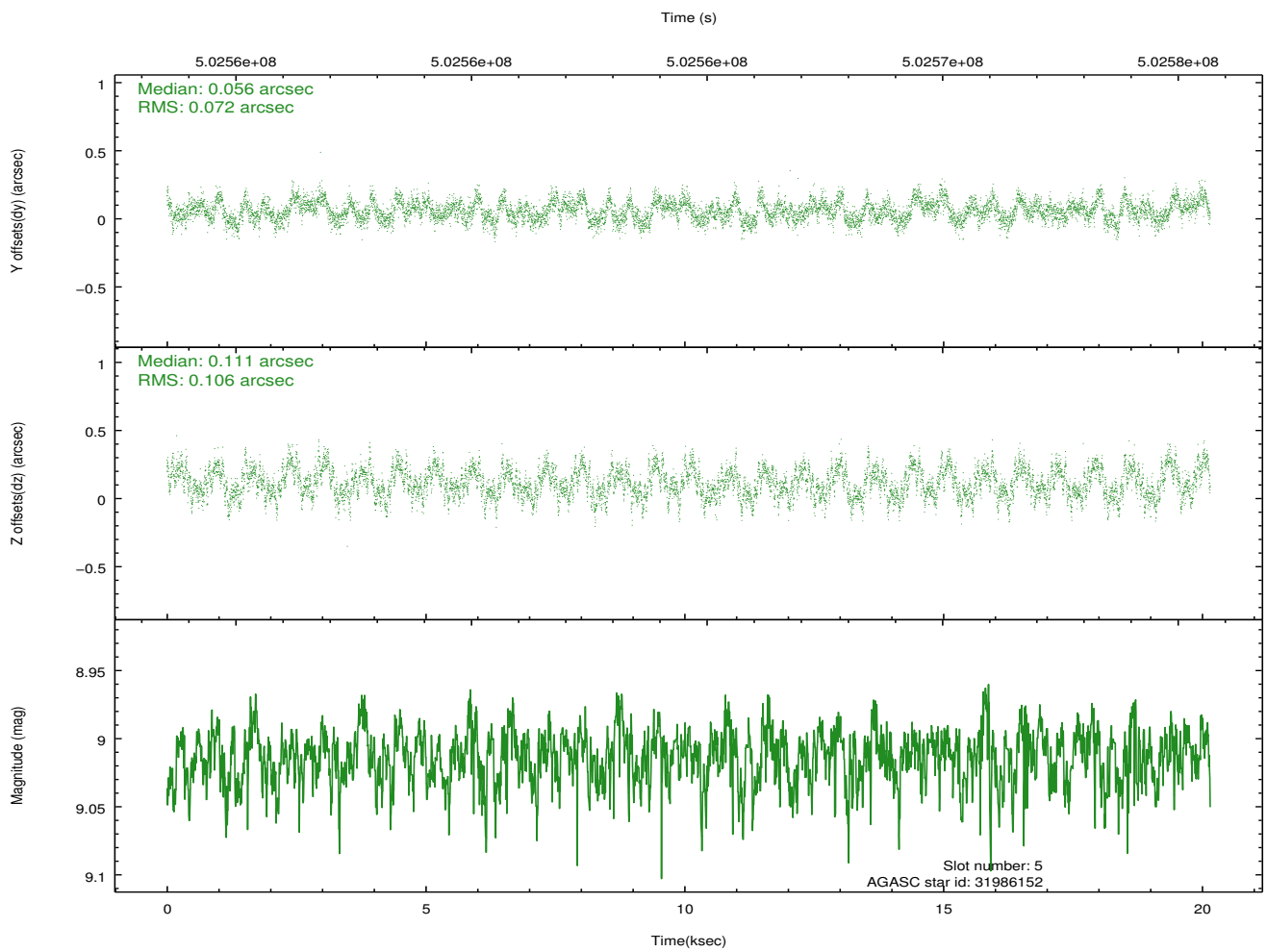
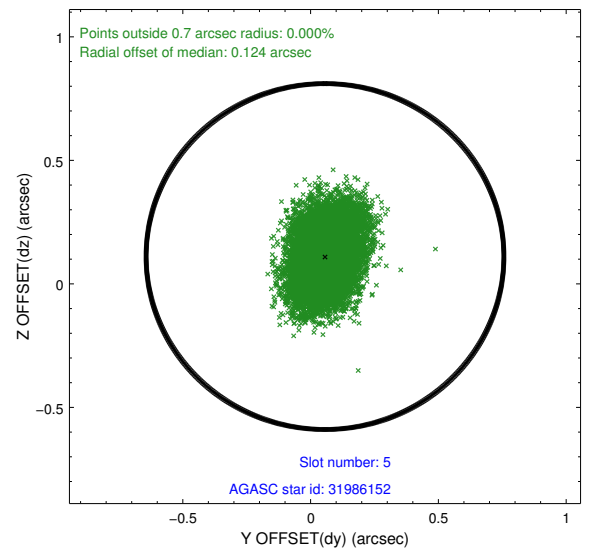
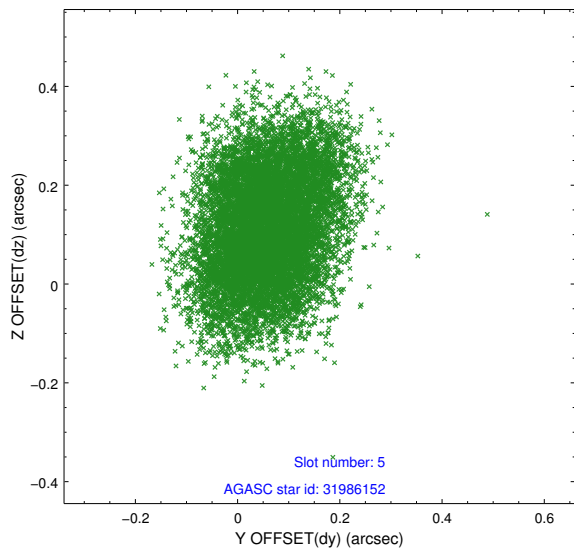
2.4.1 Slot 3



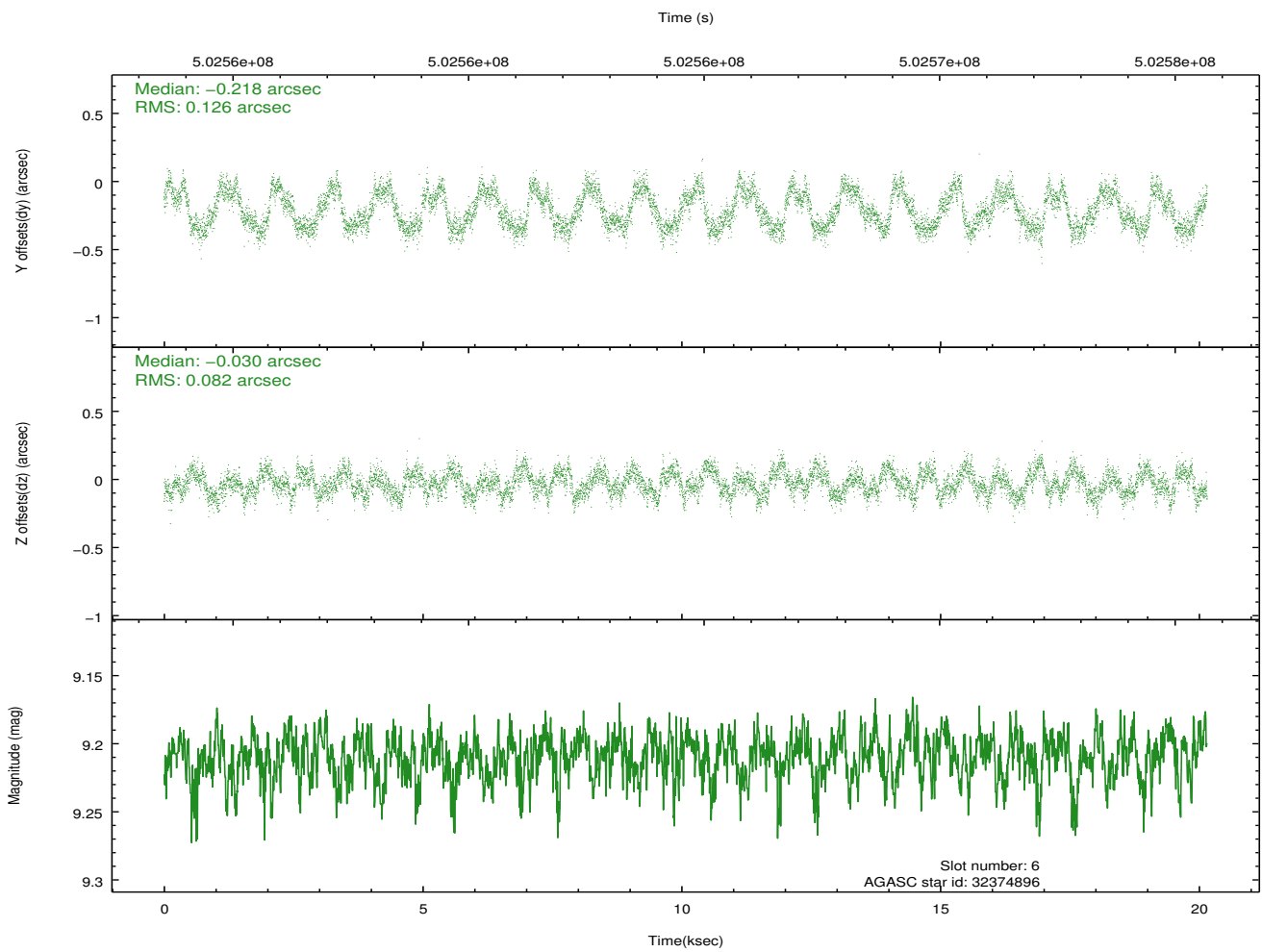
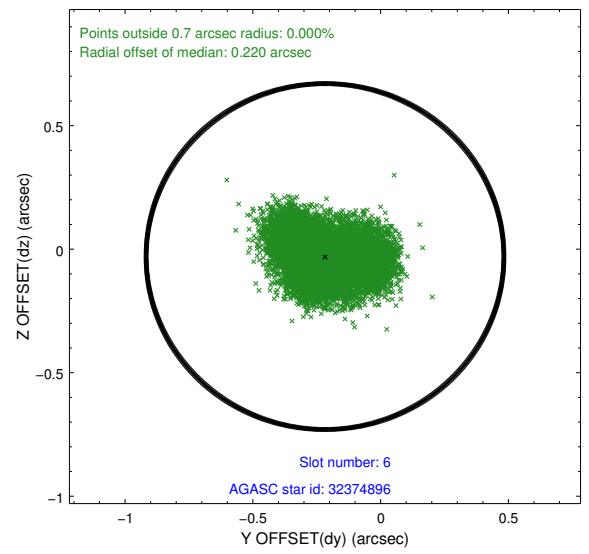
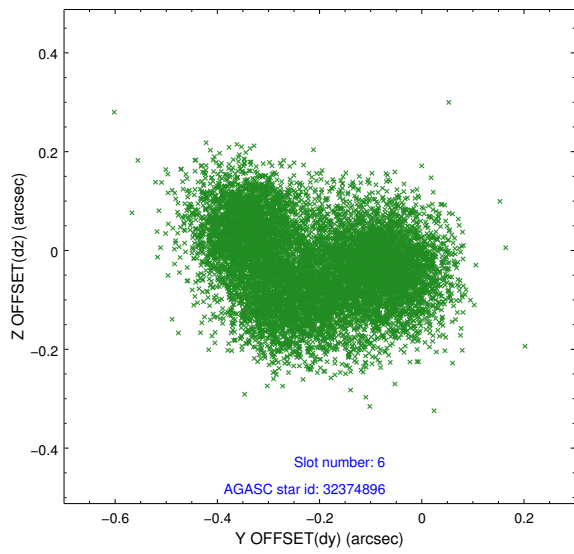
2.4.2 Slot 4



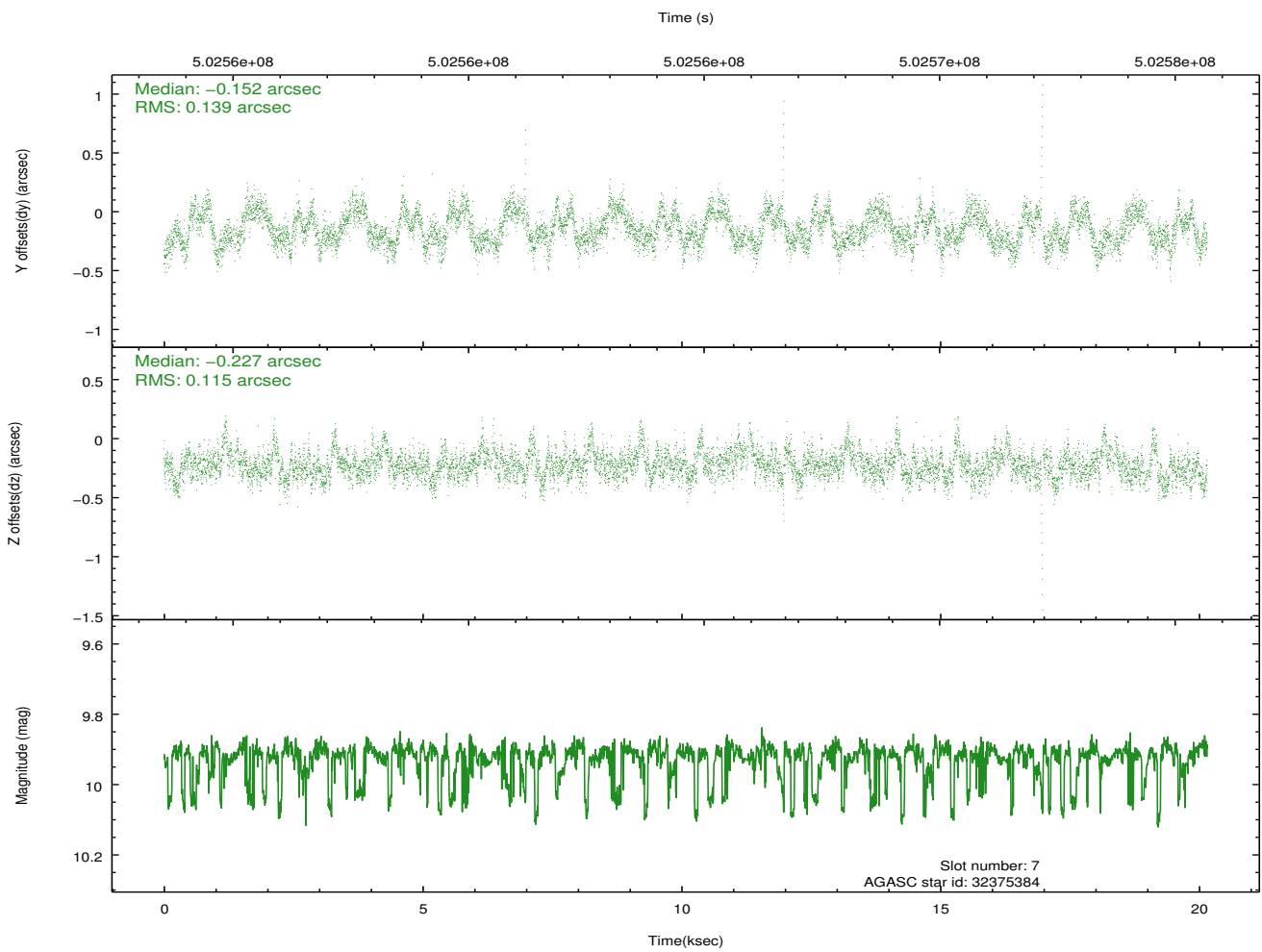
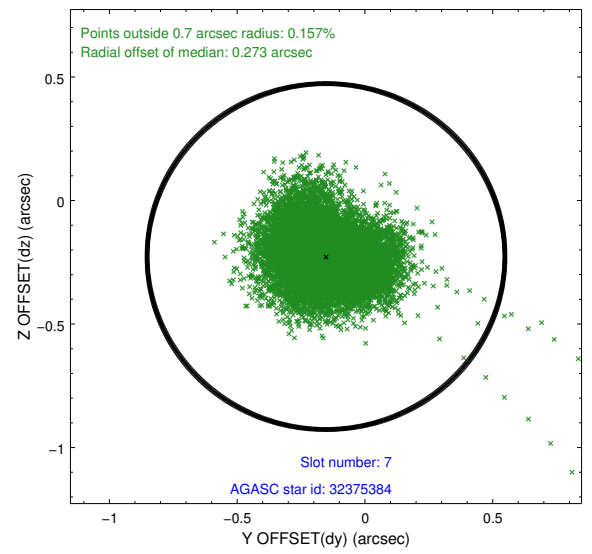
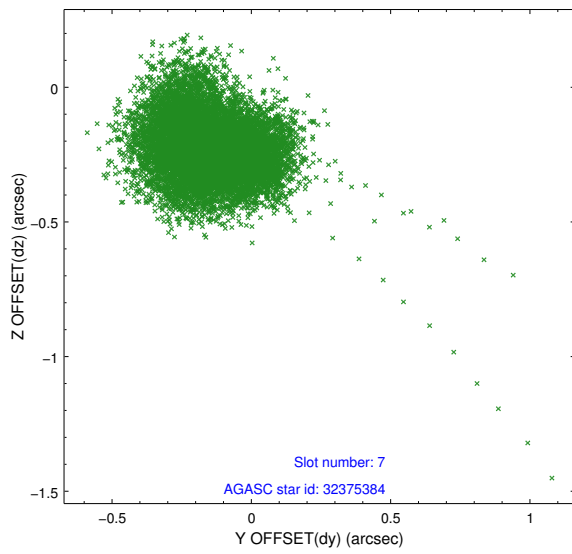
2.4.3 Slot 5



2.4.4 Slot 6

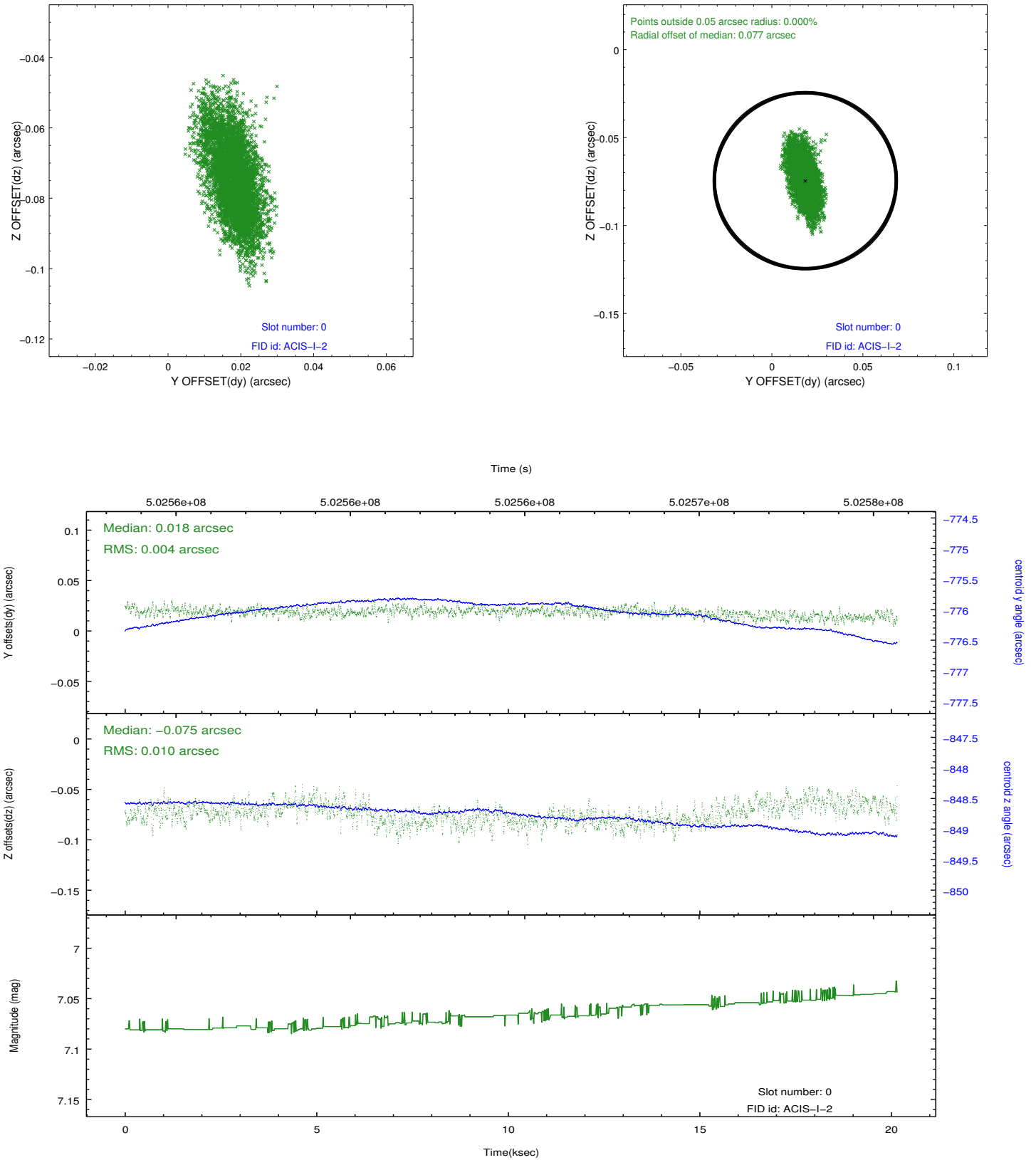


2.4.5 Slot 7

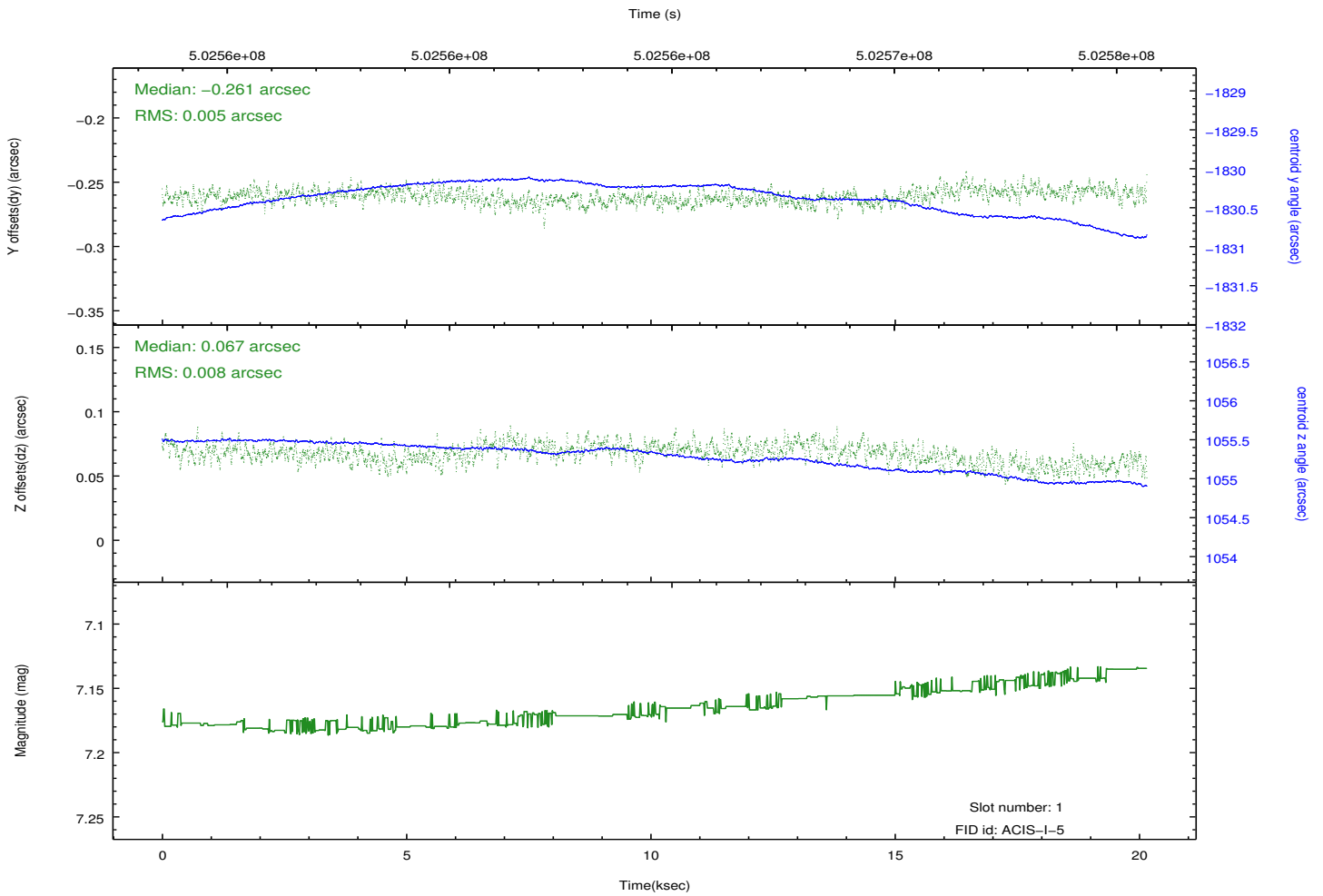
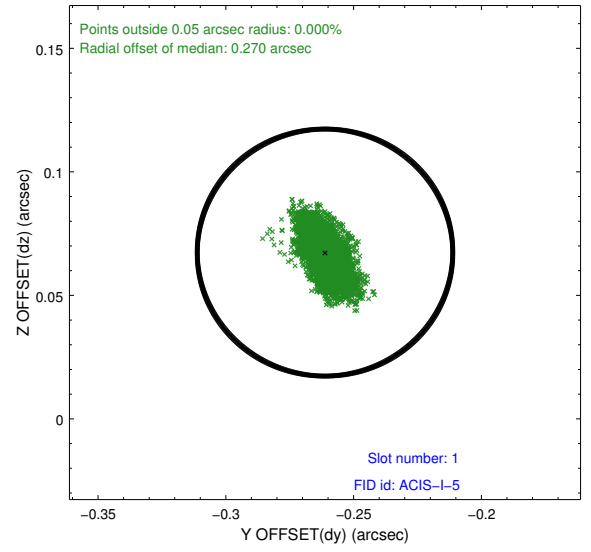
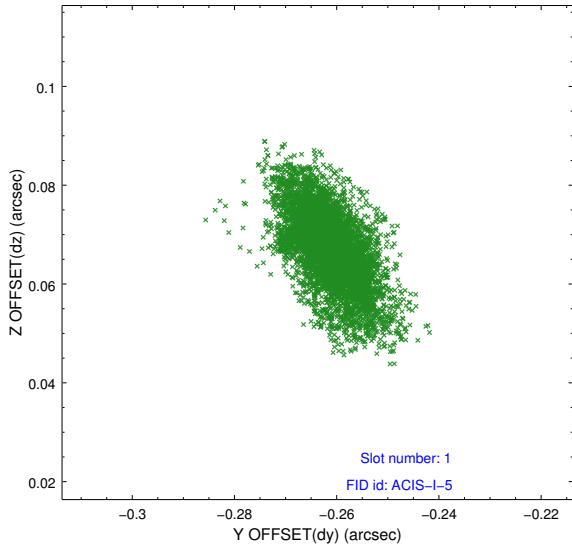


2.5 FID Slots

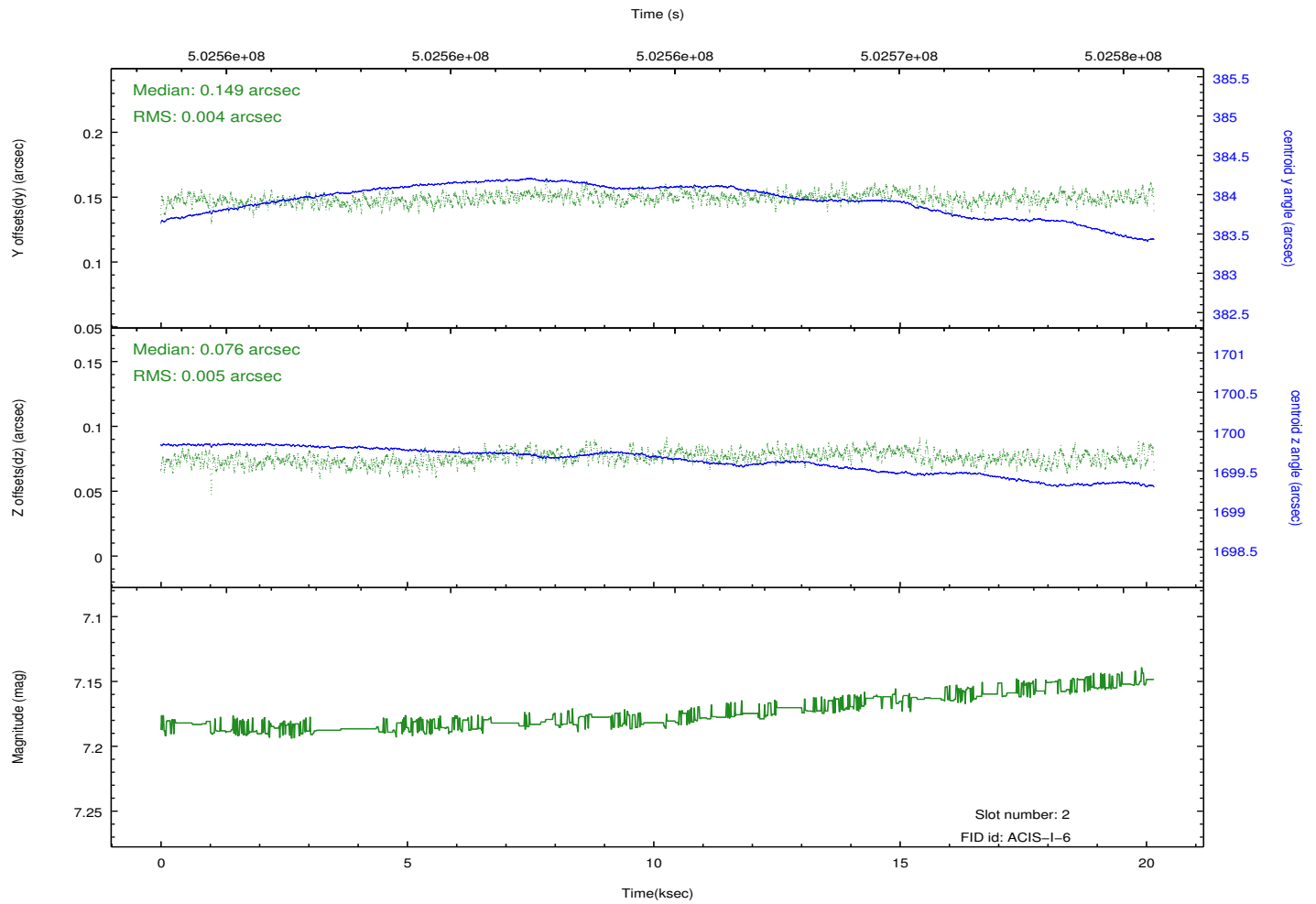
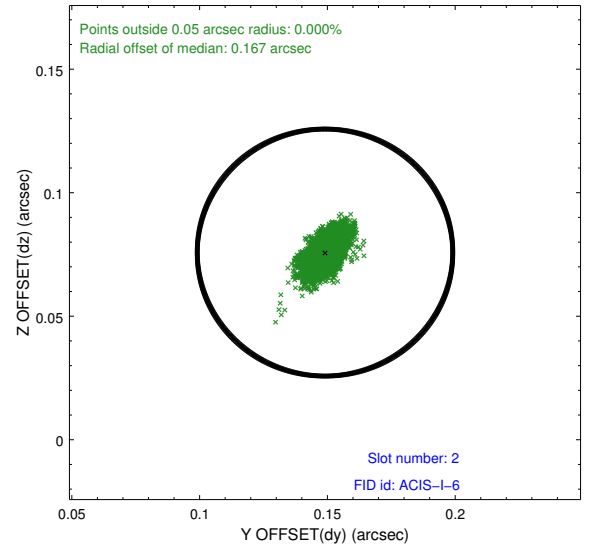
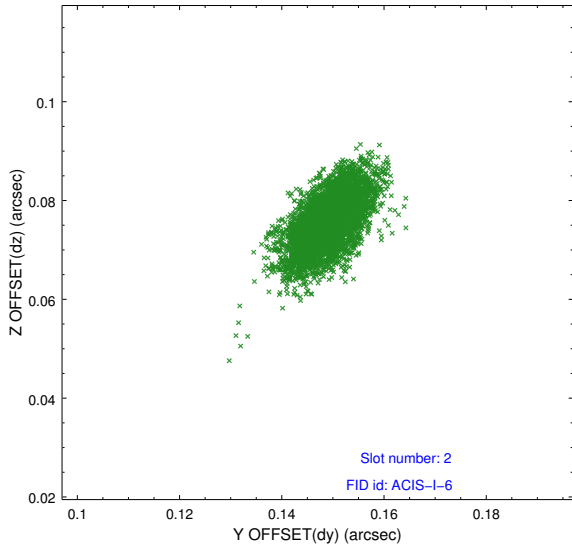
2.5.1 Slot 0



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	20.092881852984

A.2 Comments

Roll constraint met.

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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.