

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5848 - L2 Version 4
Chandra X-Ray Center

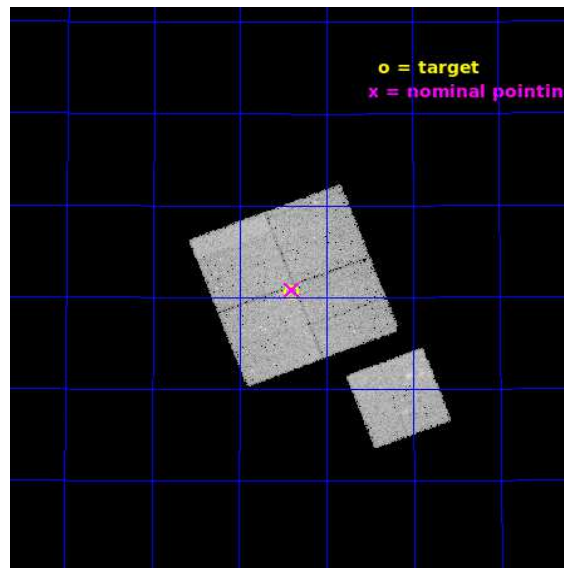
L2 Processing Date : Oct 7 2020

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 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

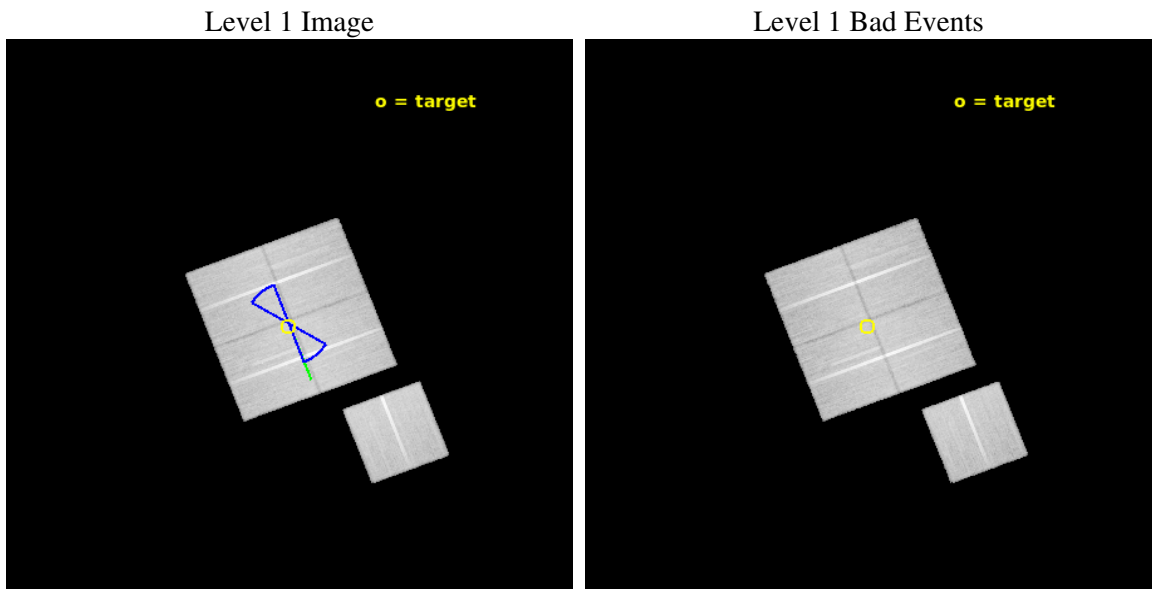
seq_num	900351	Sequence number
obs_id	5848	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	Extended Groth Strip (EGS)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.849579	Observer's specified target RA [deg]
dec_targ	52.842415	Observer's specified target Dec [deg]
ra_nom	214.84909947572	Nominal RA [deg]
dec_nom	52.847466682224	Nominal Dec [deg]
roll_nom	159.01046389561	Nominal Roll [deg]
revision	4	Processing version of data
ontime	45036.492927939	Sum of GTIs [s]
livetime	44448.057992451	Livetime [s]
ontime0	45045.79274863	Sum of GTIs [s]
ontime1	45045.833768755	Sum of GTIs [s]
ontime2	45042.733838469	Sum of GTIs [s]
ontime3	45036.492927939	Sum of GTIs [s]
ontime6	45045.751708627	Sum of GTIs [s]
l2events	119139	Number of level 2 events



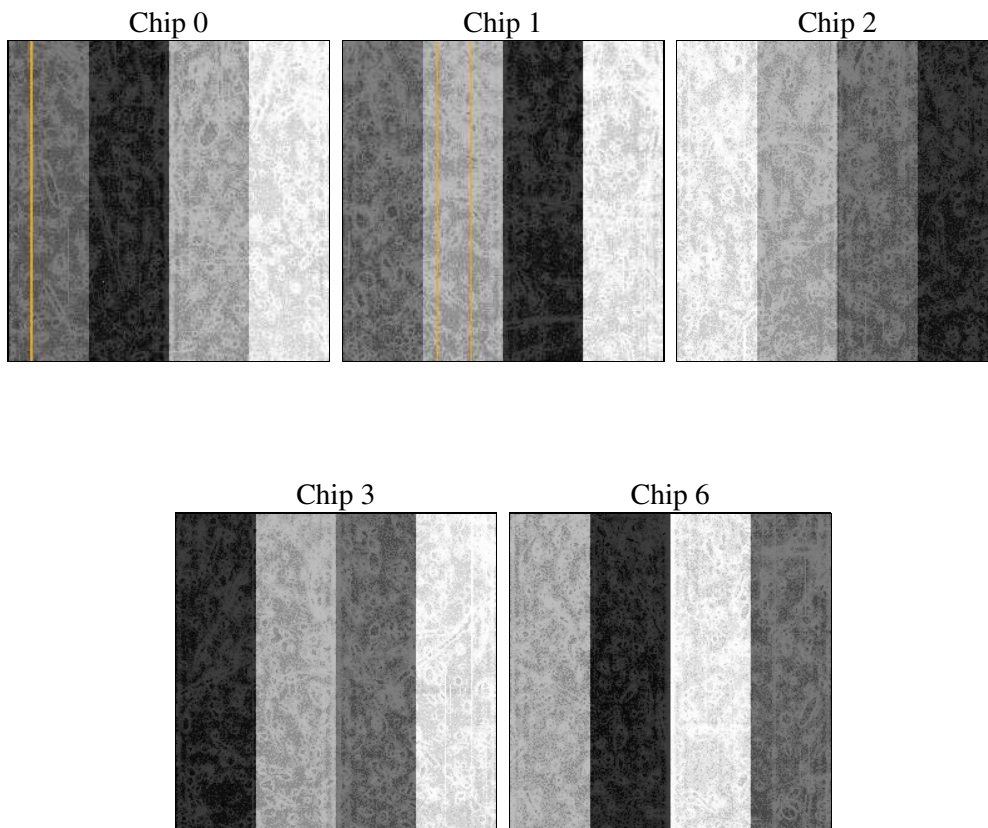
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	45036.492927939	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	45045.79274863	Sum of GTIs [s]
date	2020-10-07T16:28:53	Date and time of file creation	ontime1	45045.833768755	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	45042.733838469	Sum of GTIs [s]
			ontime3	45036.492927939	Sum of GTIs [s]
			ontime6	45045.751708627	Sum of GTIs [s]
			l1events	1399371	Number of level 1 events

2.1.4 Events

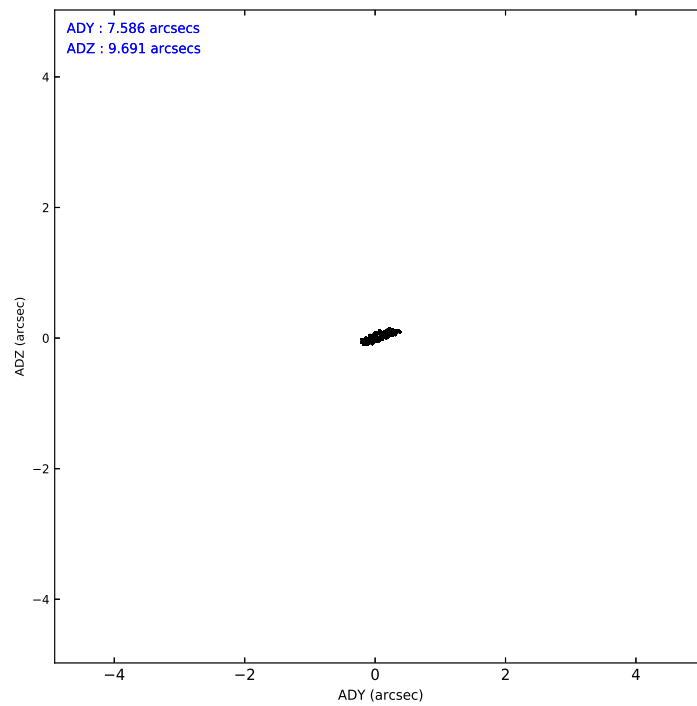
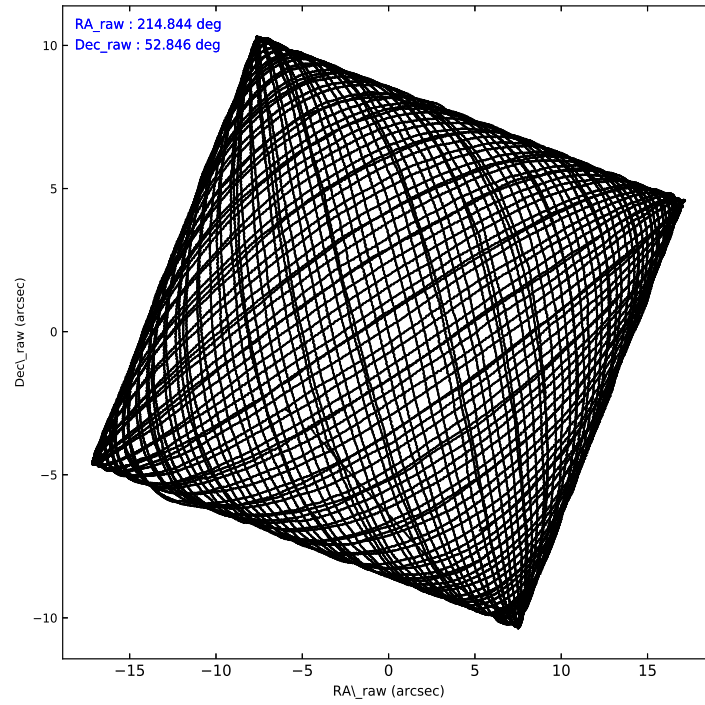
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	263864	265571	296307	284804	288825
rejected events	235920	233693	269141	257686	259211
rejected %	89%	87%	90%	90%	89%

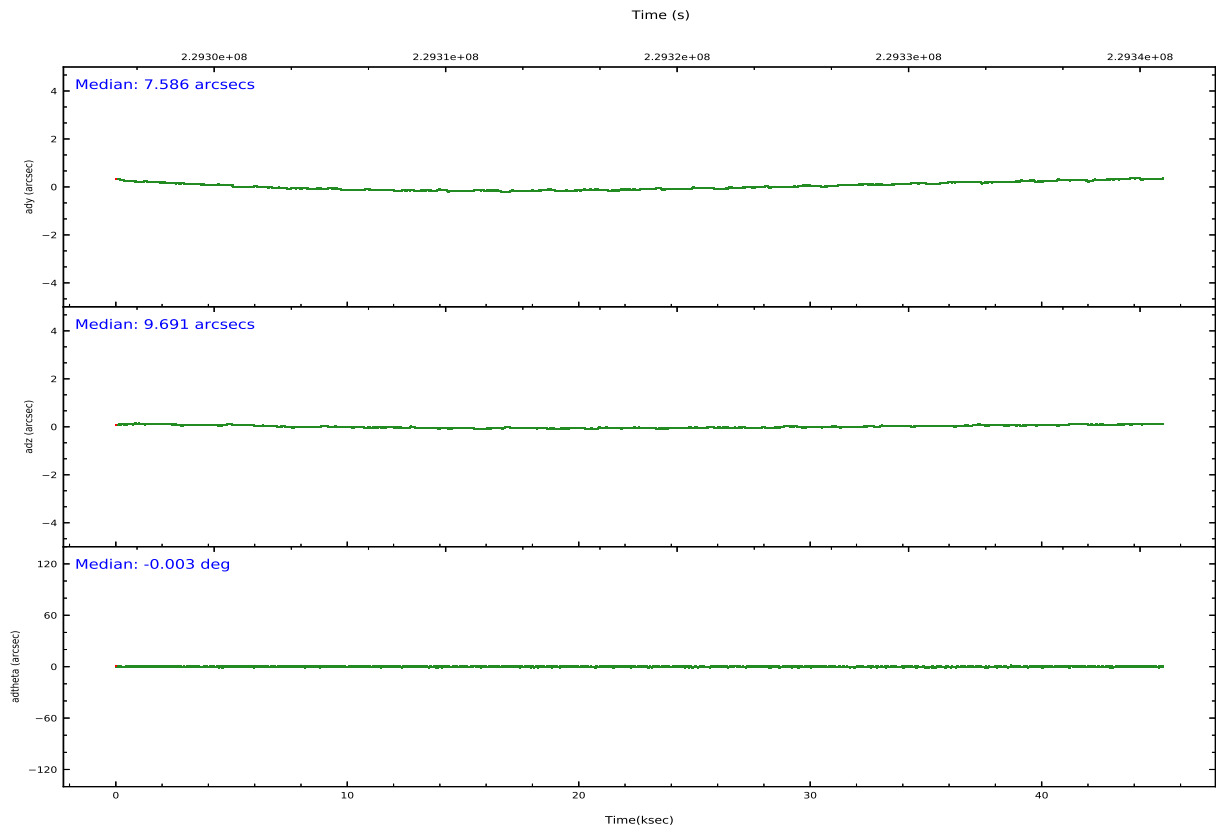
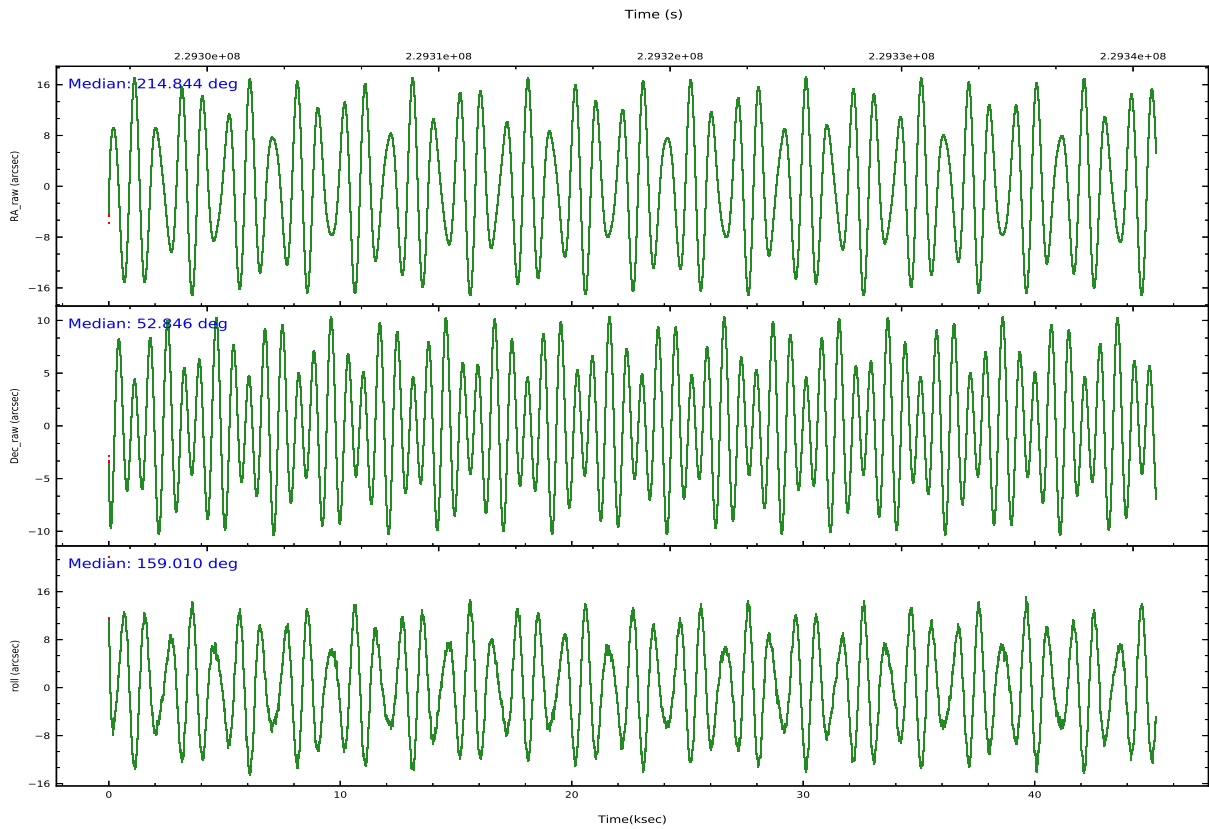
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9439	11514	9591	9530	10531
	3%	4%	3%	3%	3%
grade 1 events	141	142	158	143	141
	0%	0%	0%	0%	0%
grade 2 events	6689	6980	6305	5917	6311
	2%	2%	2%	2%	2%
grade 3 events	3300	3478	3116	3212	3281
	1%	1%	1%	1%	1%
grade 4 events	3014	3540	3130	3079	3312
	1%	1%	1%	1%	1%
grade 5 events	10219	11220	9579	11382	11281
	3%	4%	3%	3%	3%
grade 6 events	5509	6367	5026	5384	6190
	2%	2%	1%	1%	2%
grade 7 events	225553	222330	259402	246157	247778
	85%	83%	87%	86%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	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	214.888811	214.84909947572	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.850024	52.847466682224	Alternating exposures requested	N	N
[deg] Pointing Roll	158.768723	159.01046389561	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	50.756000	50.756000			
[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)	229295997.184000	229295039.14077			
Observation start date	2005-04-07T21:18:53	2005-04-07T21:03:59			
[s] Observation end time (MET)	229340997.184000	229341438.33038			
Observation end date	2005-04-08T09:48:53	2005-04-08T09:57:18			
Read mode	TIMED	TIMED			

2.3 Aspect





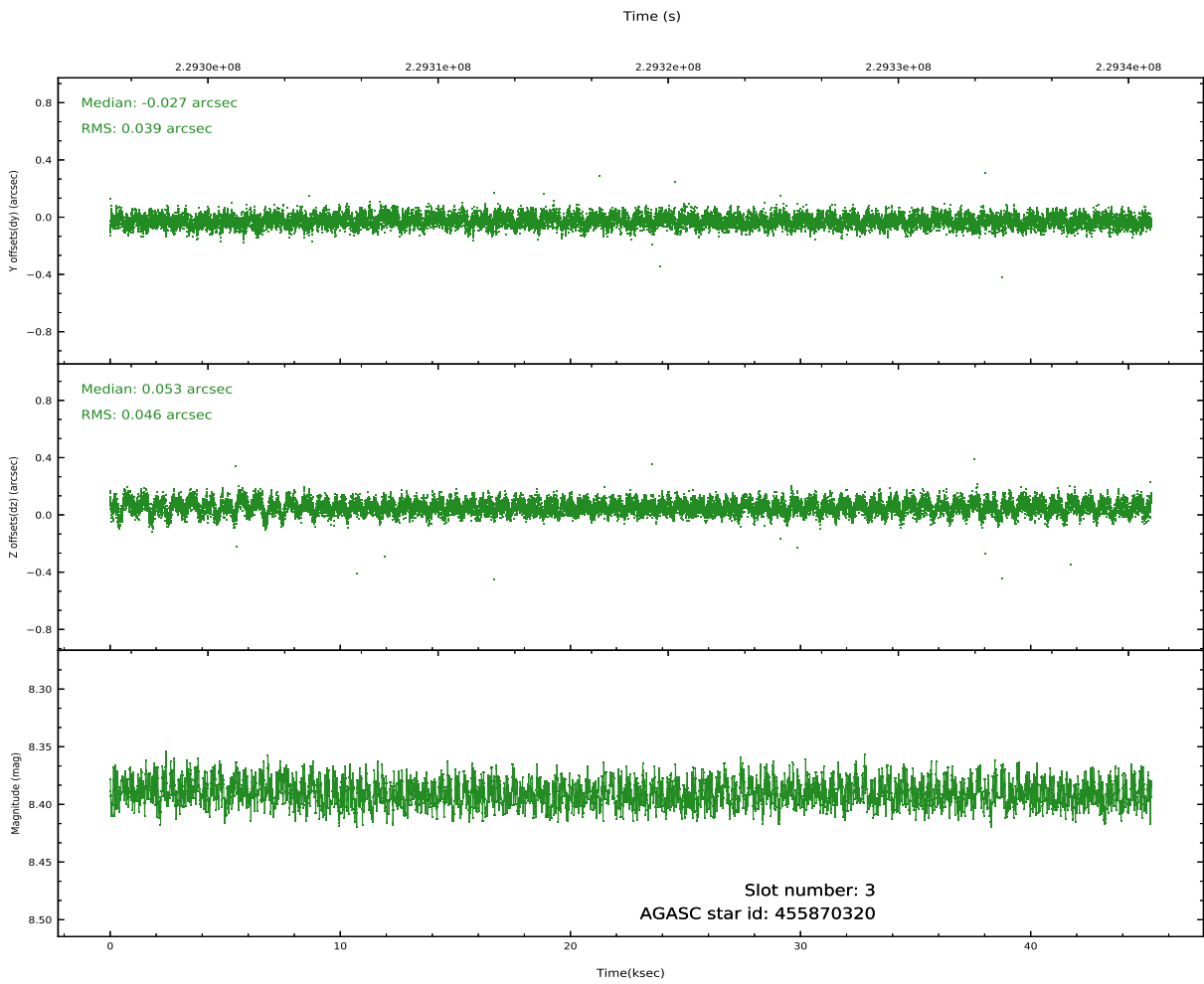
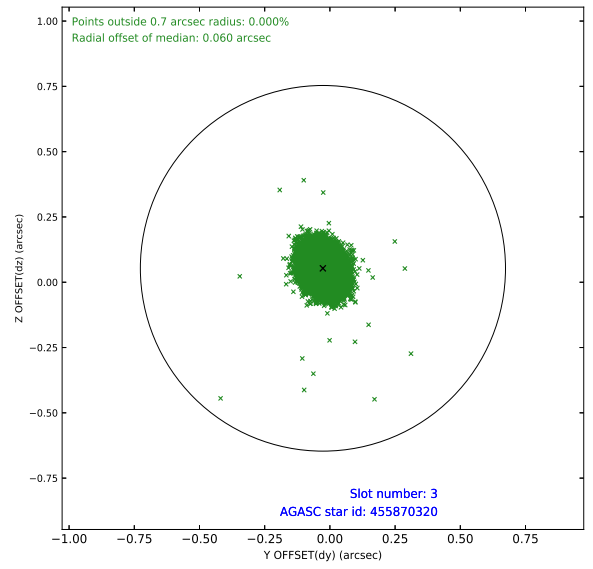
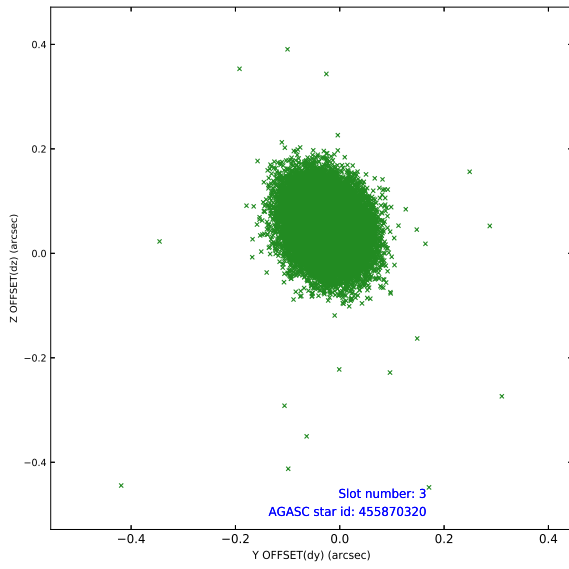
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	11037	1.000	0.019	-0.005	0.009	0.015	0.000000	0.000000	932.07	-833
1	FID		ACIS-I-5	7.23	11037	1.000	-0.212	0.021	0.010	0.017	0.000000	0.000000	-1816.29	1064
2	FID		ACIS-I-6	7.25	11034	1.000	0.102	0.054	0.008	0.014	0.000000	0.000000	397.68	1708
3	GUIDE	used	455870320	8.39	22067	1.000	-0.027	0.053	0.064	0.102	214.874440	52.401638	-555.24	1516
4	GUIDE	used	455871352	8.11	22064	1.000	-0.024	0.002	0.064	0.107	215.099961	52.172669	-1317.52	2103
5	GUIDE	used	505806936	7.00	22073	1.000	0.032	0.033	0.063	0.104	213.820815	52.535927	1776.72	1885
6	GUIDE	used	505812088	8.17	22004	1.000	0.098	0.068	0.062	0.100	214.186617	53.263562	1951.65	-846
7	GUIDE	used	505812376	7.60	22070	1.000	-0.087	-0.150	0.047	0.079	214.039537	52.937930	1836.36	362

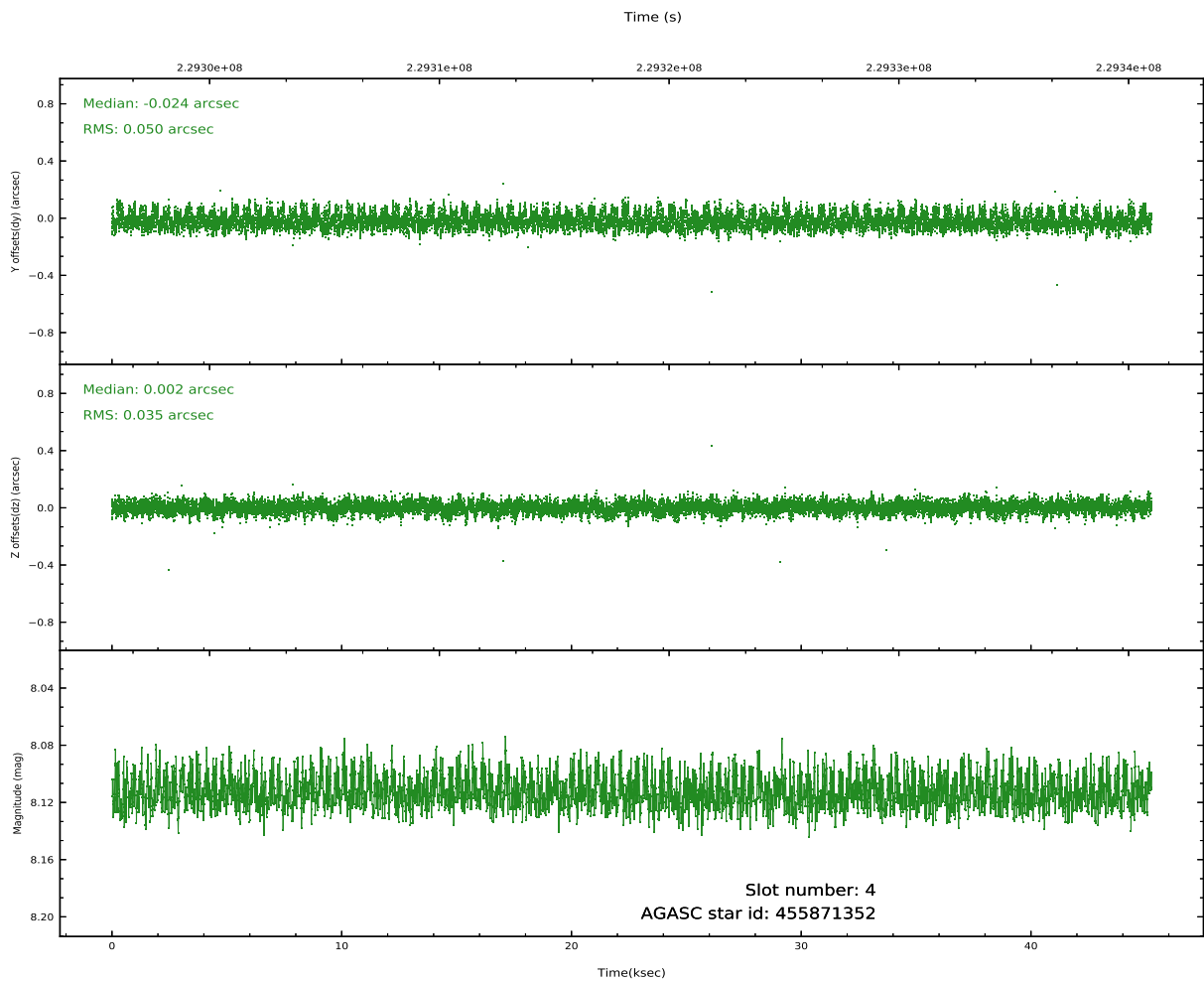
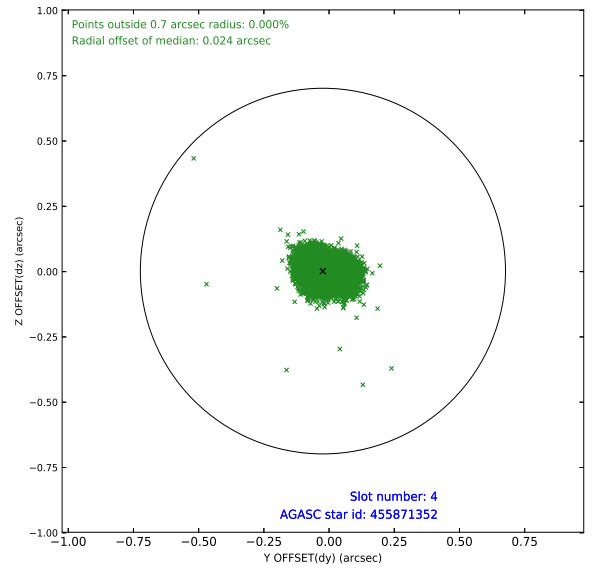
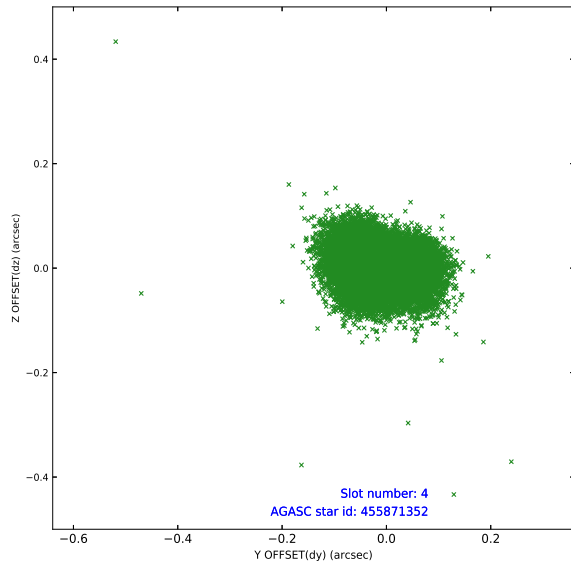
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2.4 Star Slots

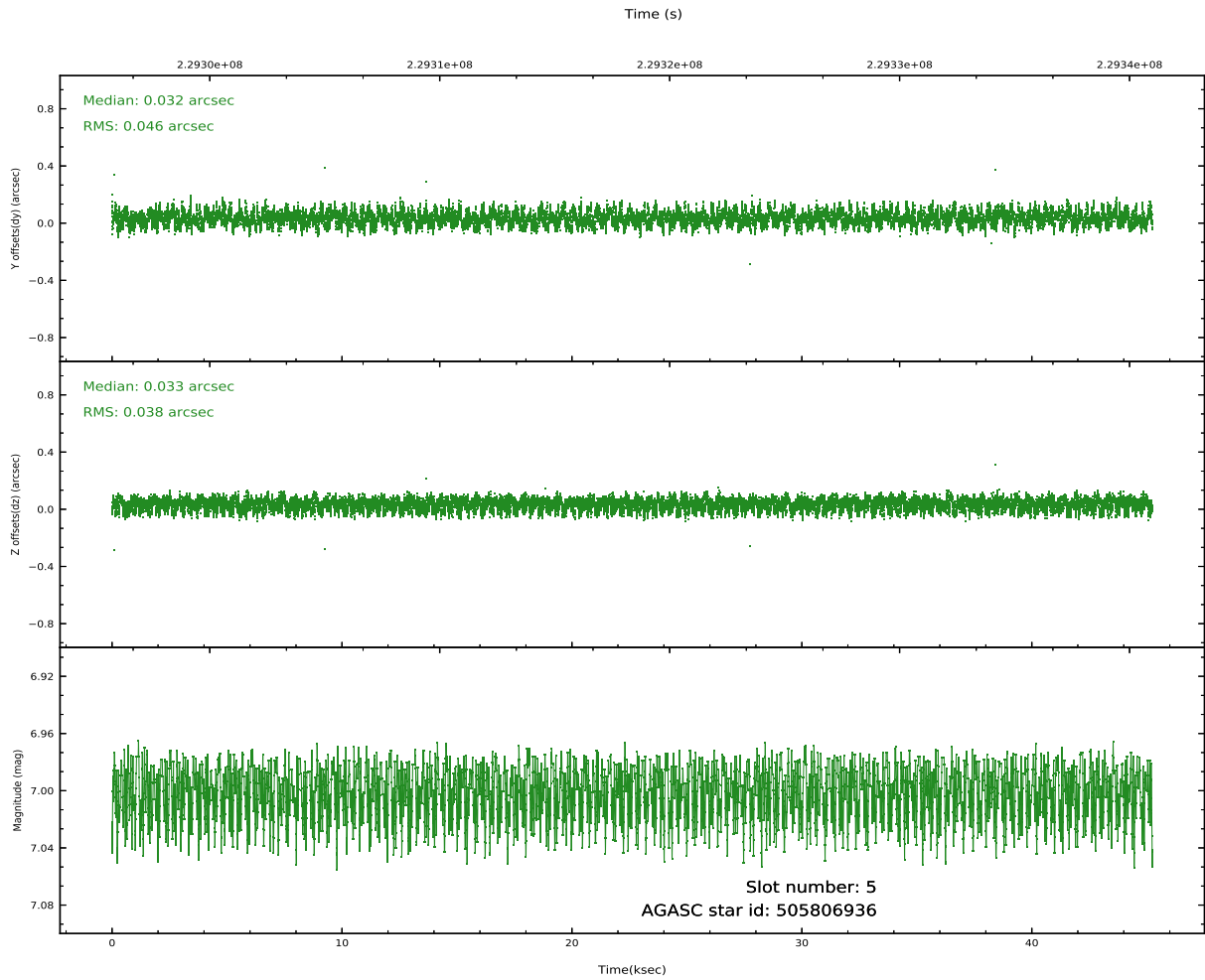
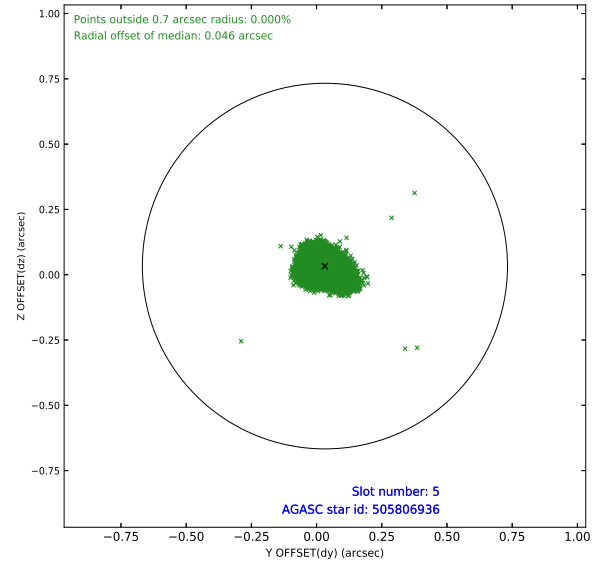
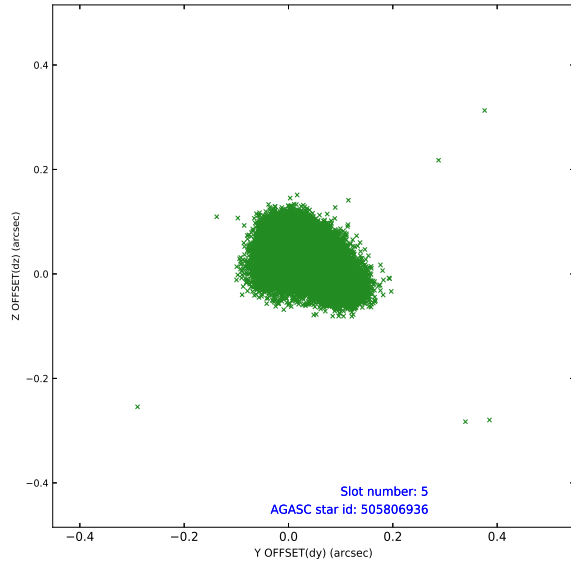
2.4.1 Slot 3



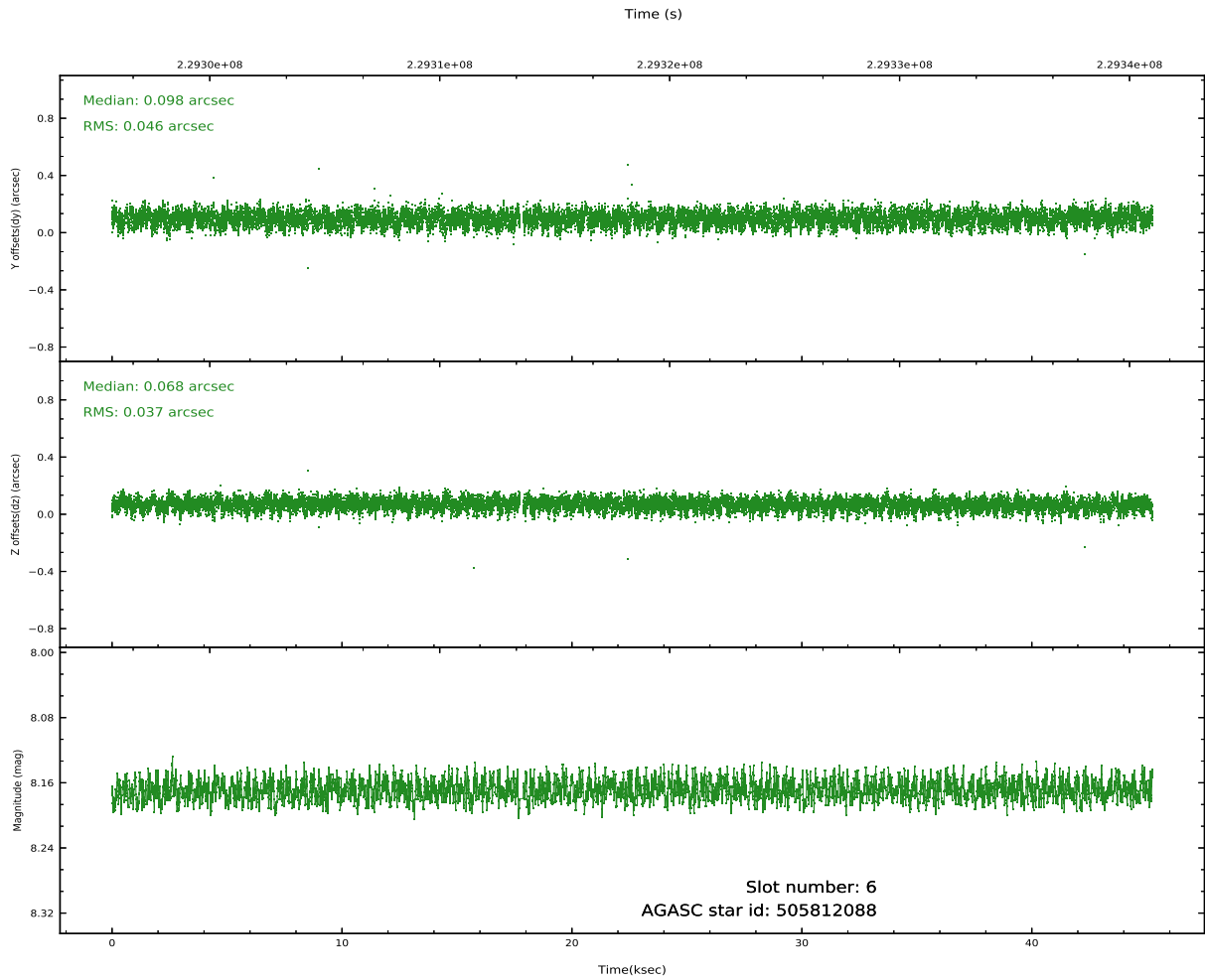
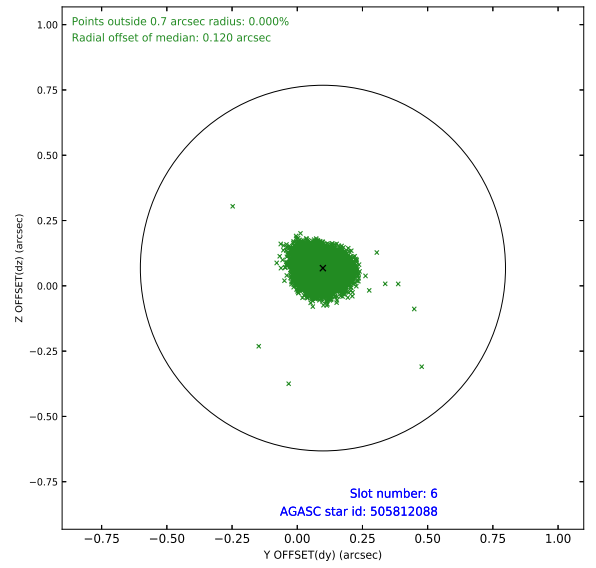
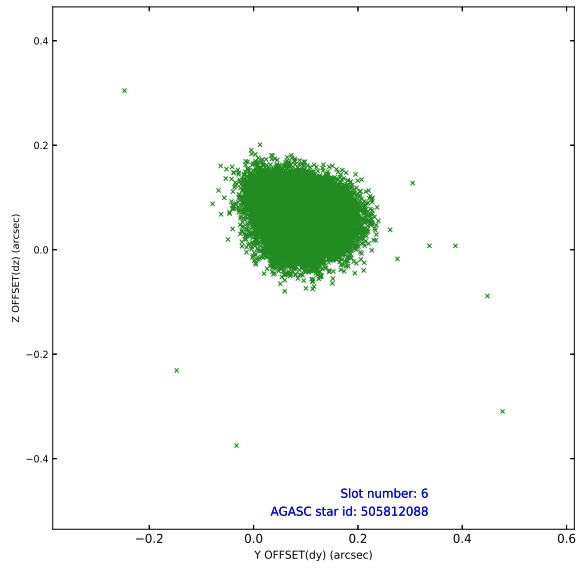
2.4.2 Slot 4



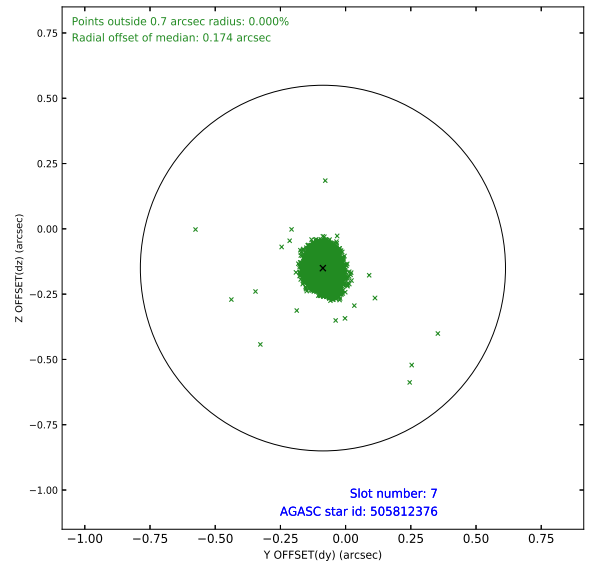
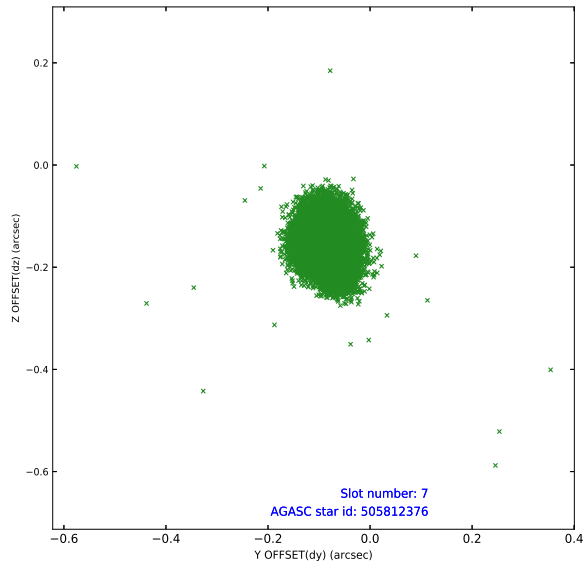
2.4.3 Slot 5



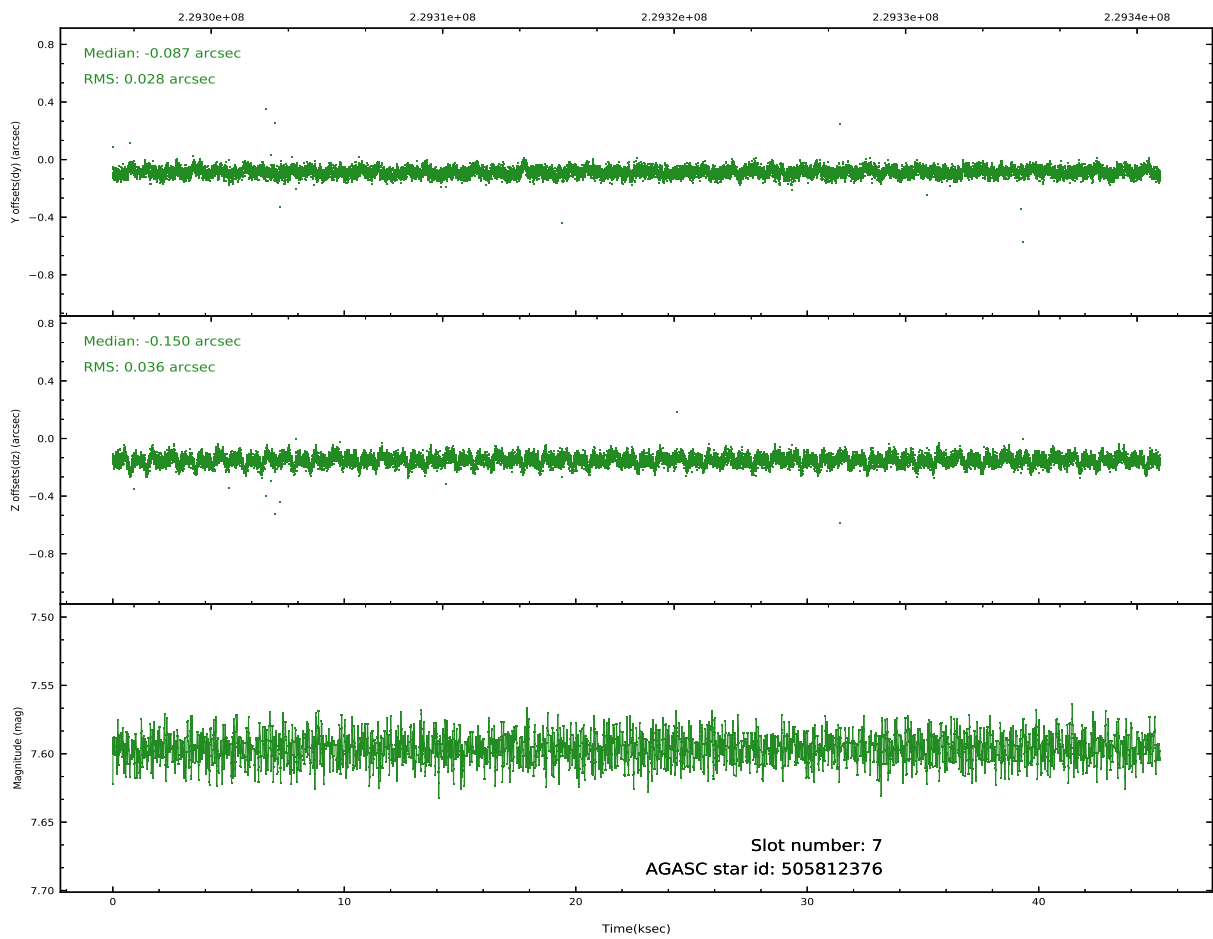
2.4.4 Slot 6



2.4.5 Slot 7

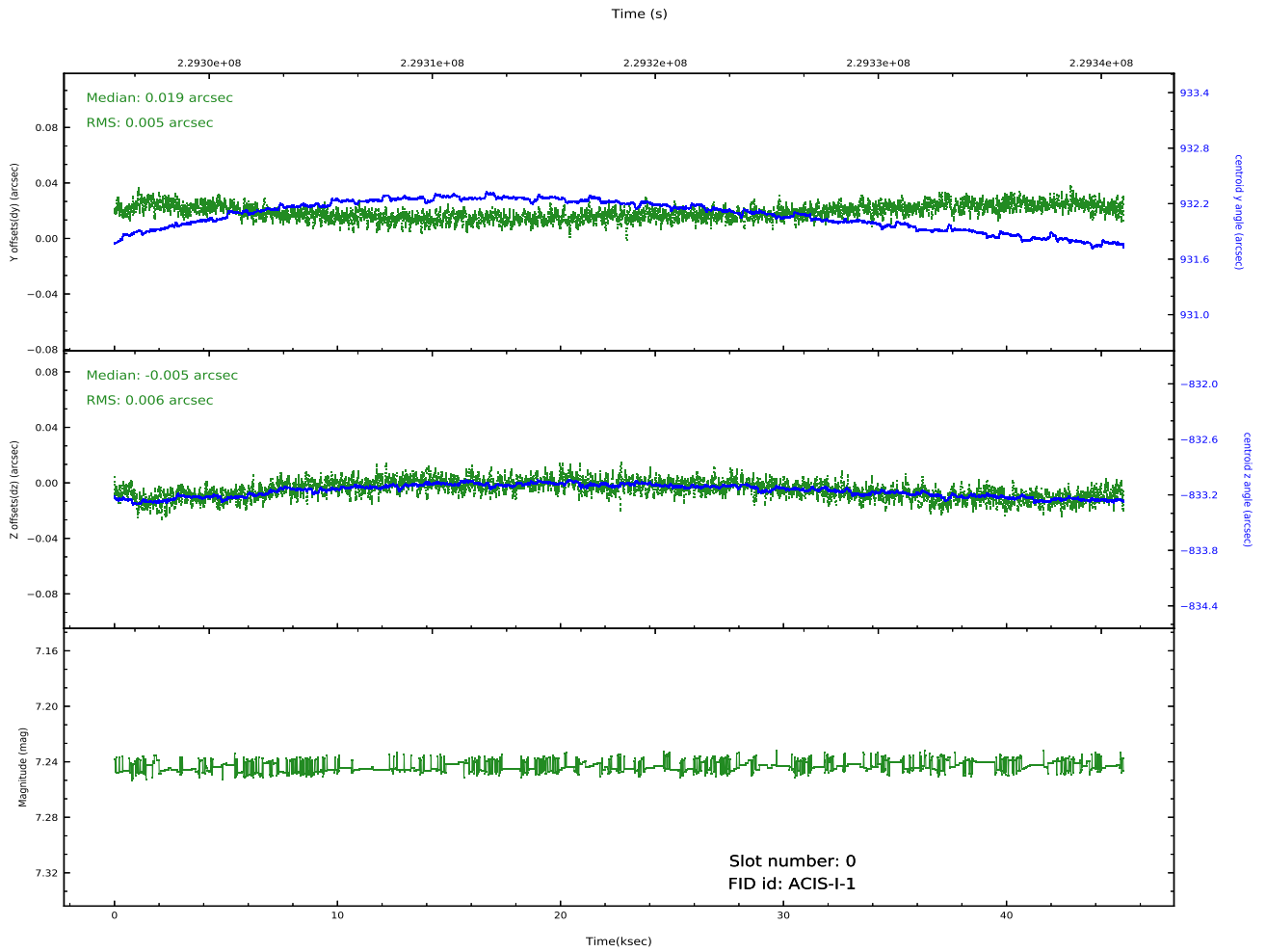
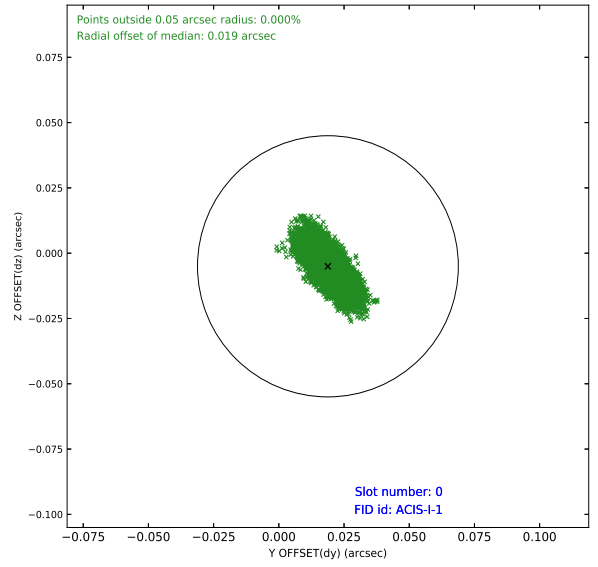
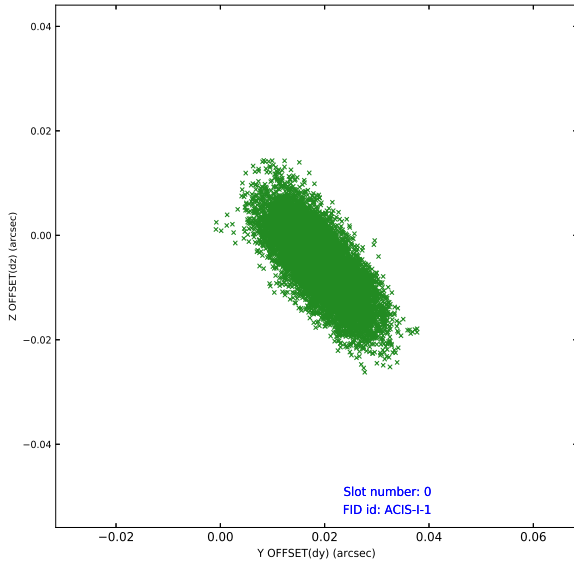


Time (s)

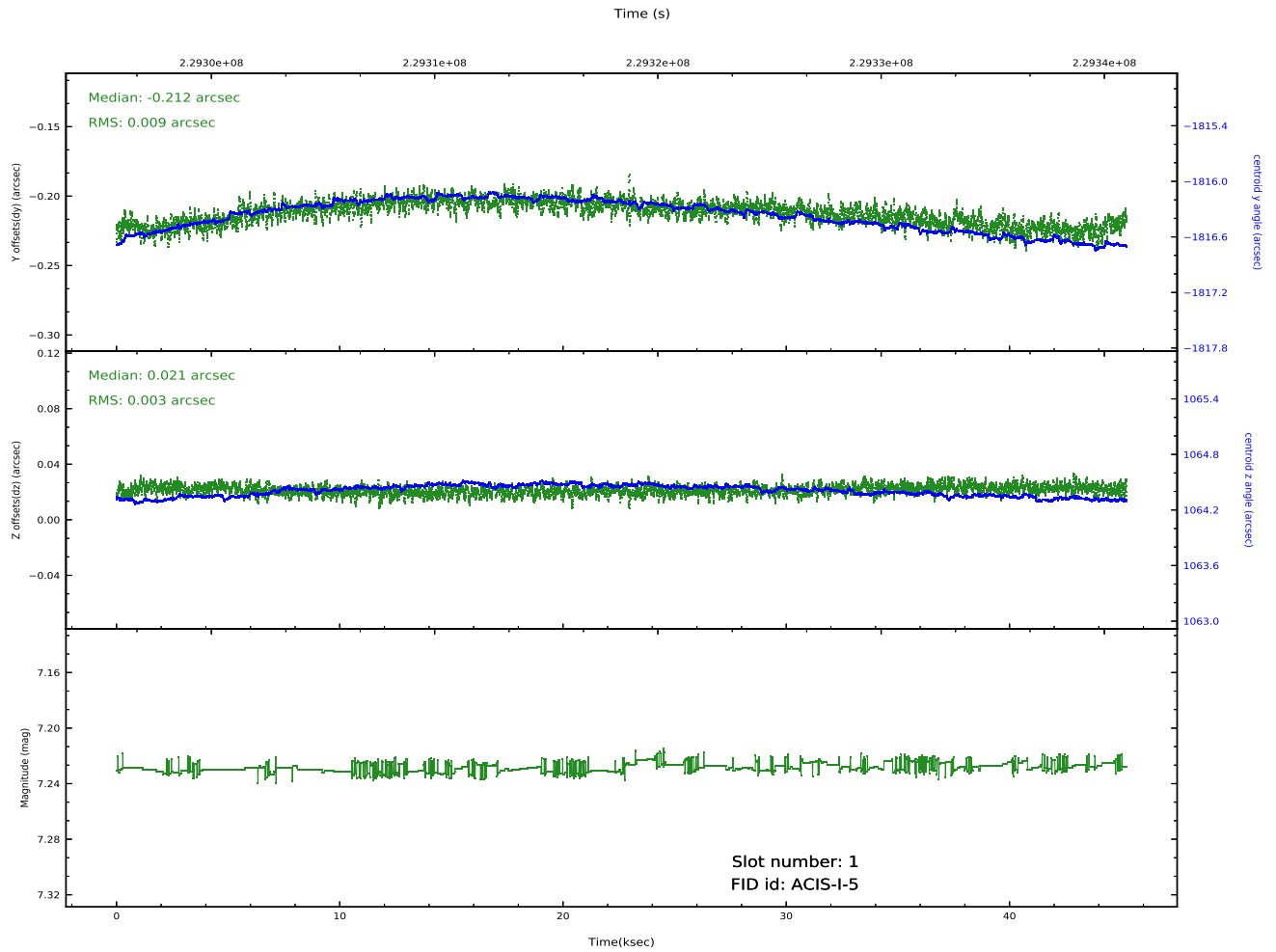
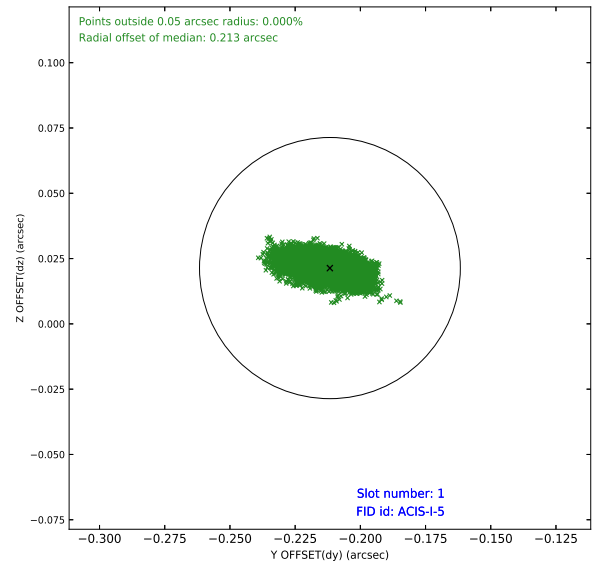
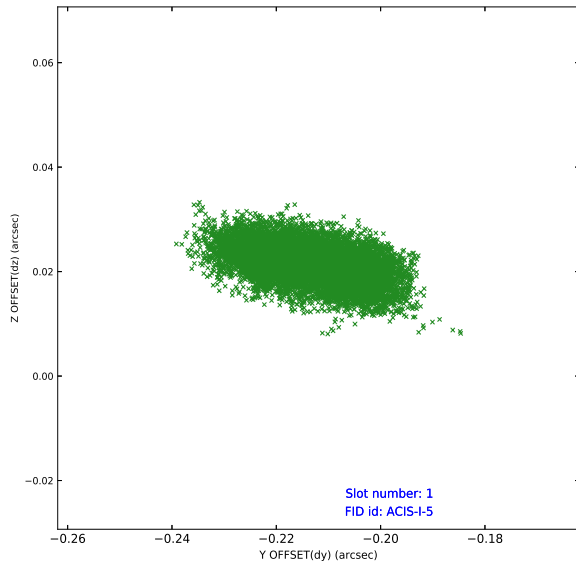


2.5 FID Slots

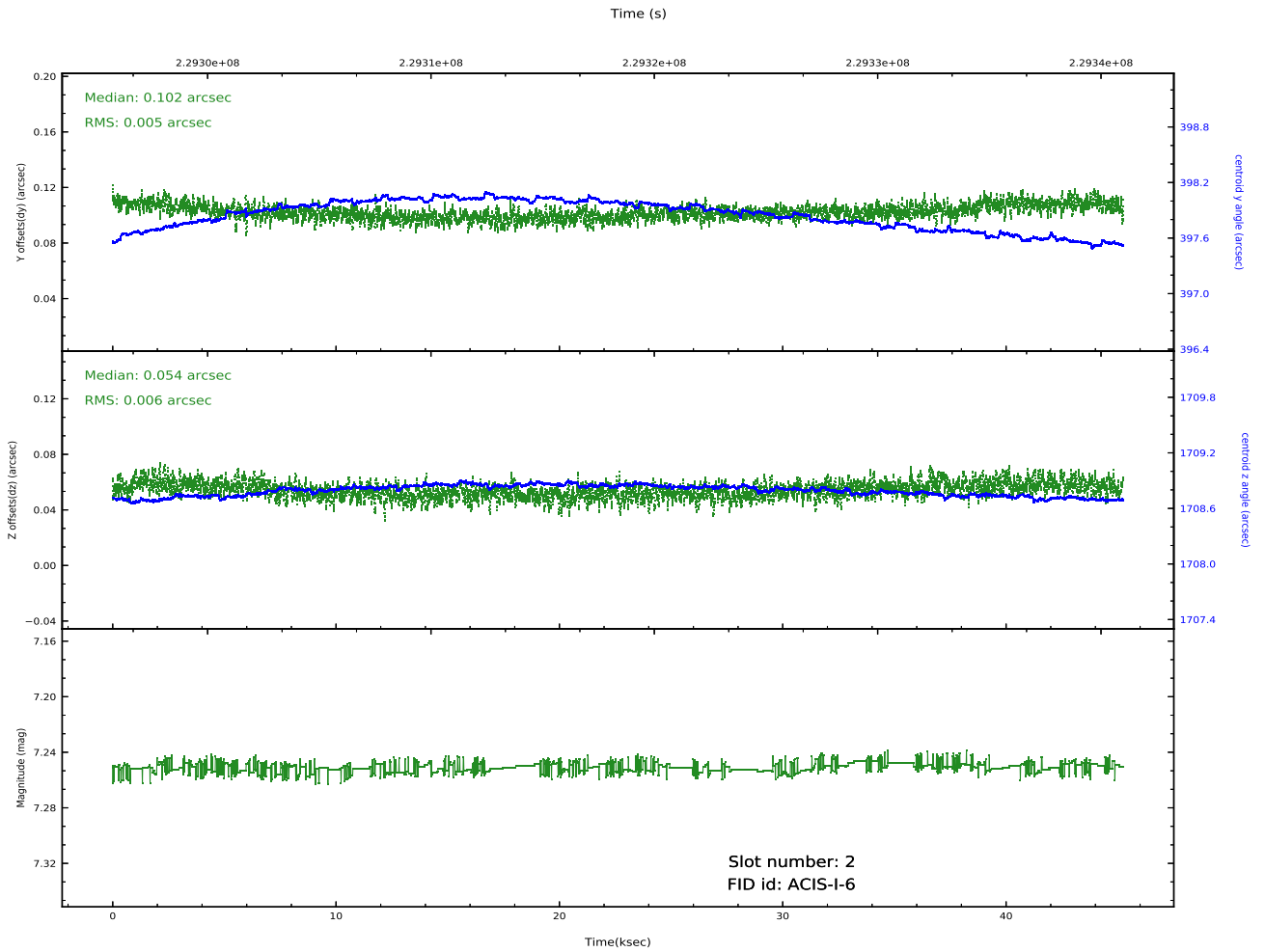
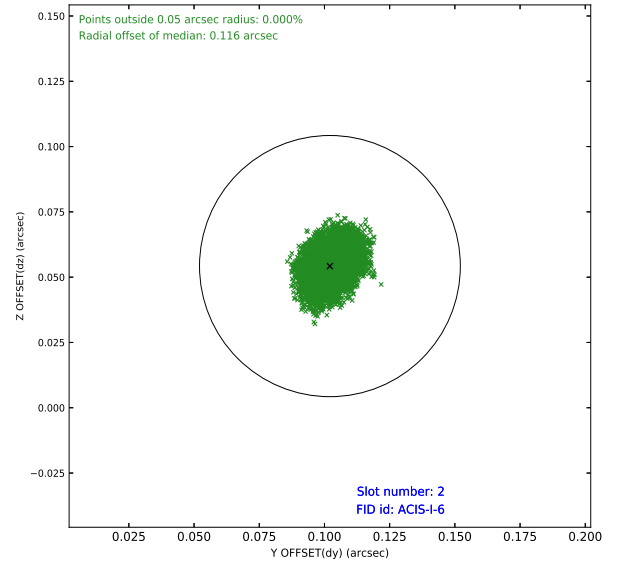
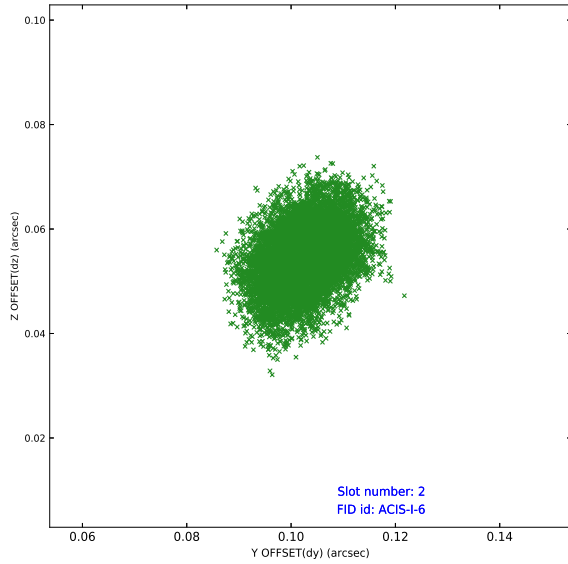
2.5.1 Slot 0



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)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.03663

A.2 Comments

Roll constraint satisfied.