

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6220 - L2 Version 4
Chandra X-Ray Center

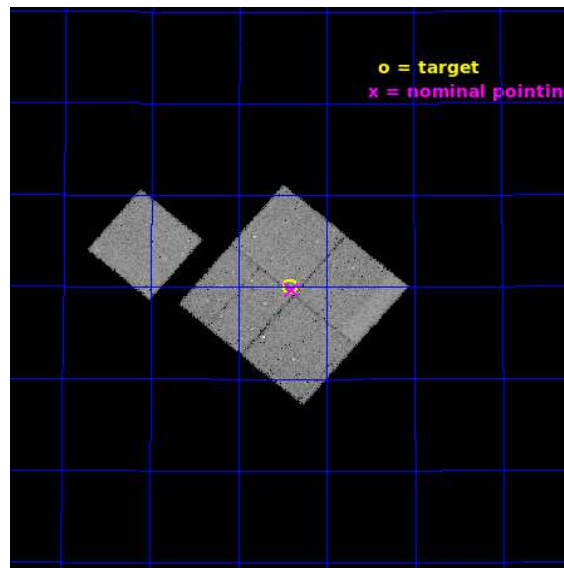
L2 Processing Date : Oct 10 2020

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1 Front

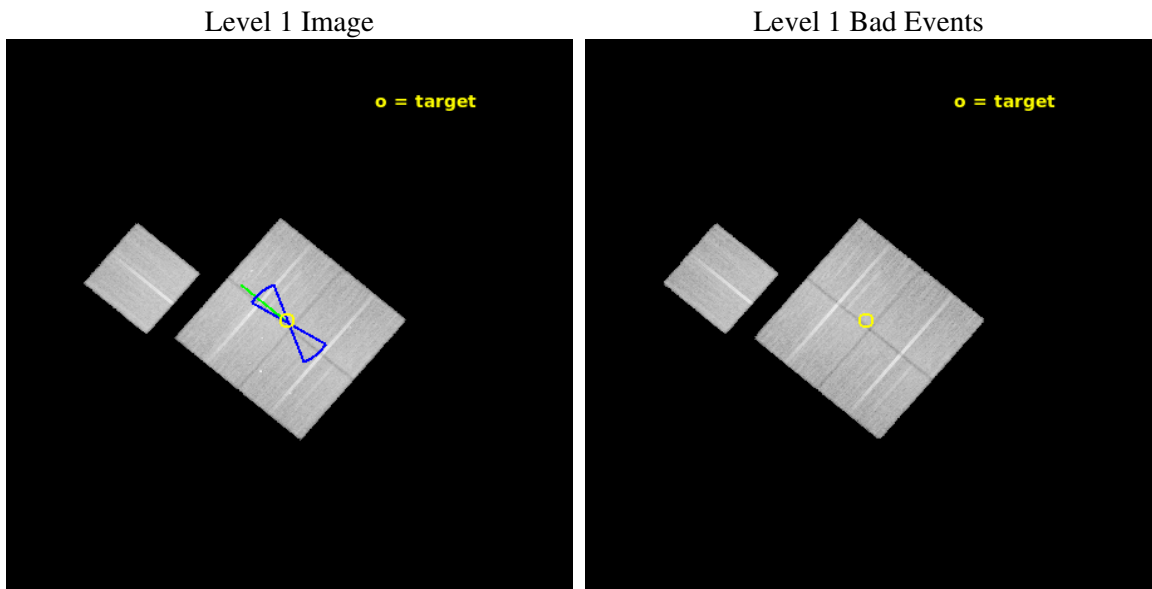
seq_num	900353	Sequence number
obs_id	6220	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	Extended Groth Strip (EGS)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.102081	Observer's specified target RA [deg]
dec_targ	52.334053	Observer's specified target Dec [deg]
ra_nom	214.09830100273	Nominal RA [deg]
dec_nom	52.328880976644	Nominal Dec [deg]
roll_nom	310.20808509714	Nominal Roll [deg]
revision	4	Processing version of data
ontime	38123.799926668	Sum of GTIs [s]
livetime	37625.684414293	Livetime [s]
ontime0	38123.799926668	Sum of GTIs [s]
ontime1	38123.799926668	Sum of GTIs [s]
ontime2	38123.799926668	Sum of GTIs [s]
ontime3	38123.799926668	Sum of GTIs [s]
ontime6	38123.799926668	Sum of GTIs [s]
l2events	130291	Number of level 2 events



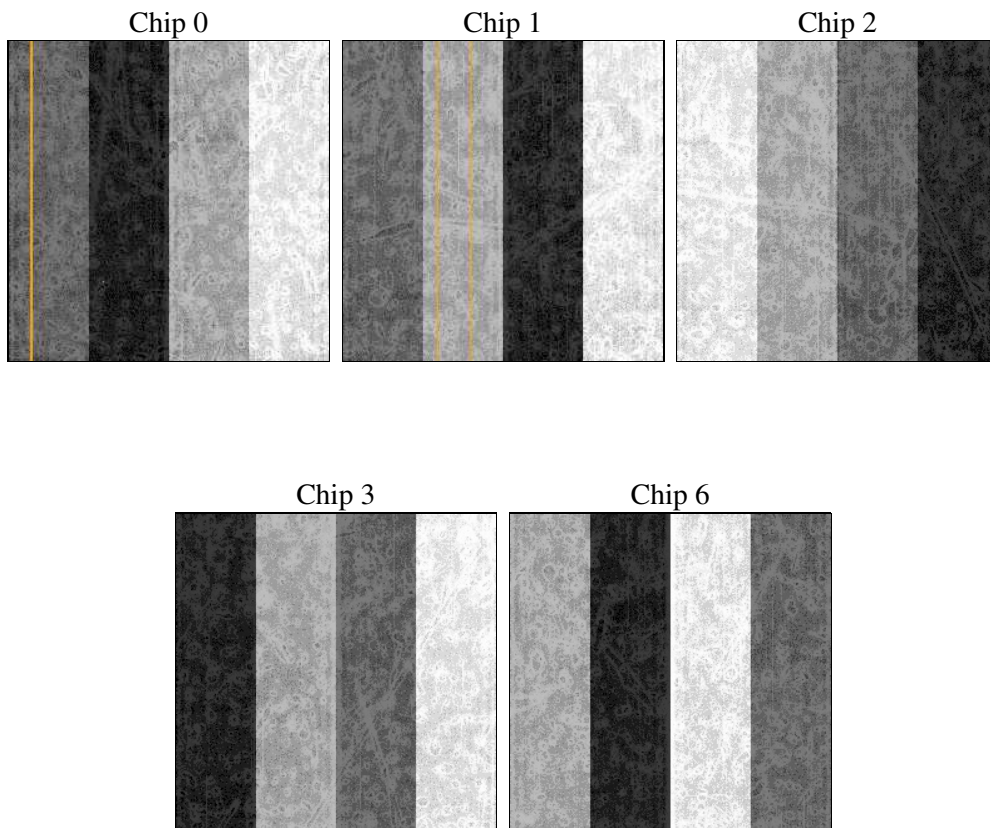
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	38123.799926668	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	38123.799926668	Sum of GTIs [s]
date	2020-10-10T09:22:00	Date and time of file creation	ontime1	38123.799926668	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	38123.799926668	Sum of GTIs [s]
			ontime3	38123.799926668	Sum of GTIs [s]
			ontime6	38123.799926668	Sum of GTIs [s]
			l1events	1046978	Number of level 1 events

2.1.4 Events

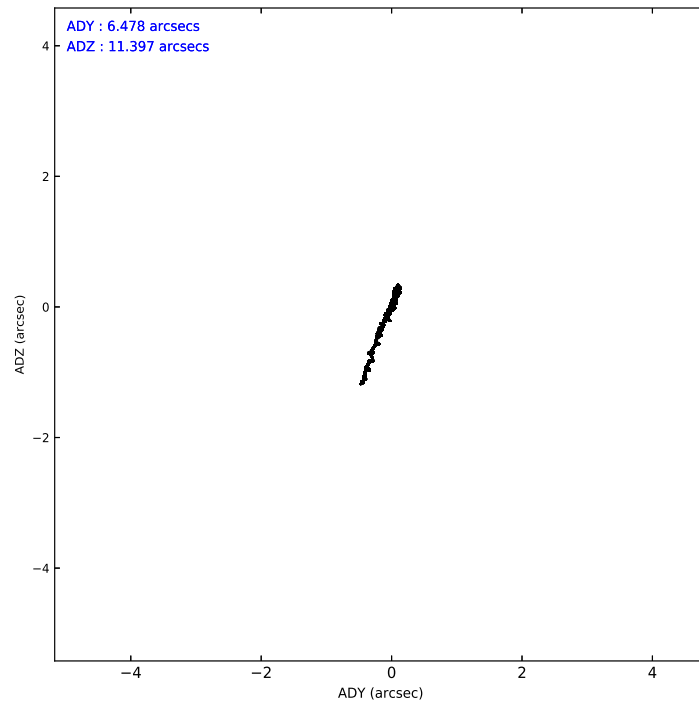
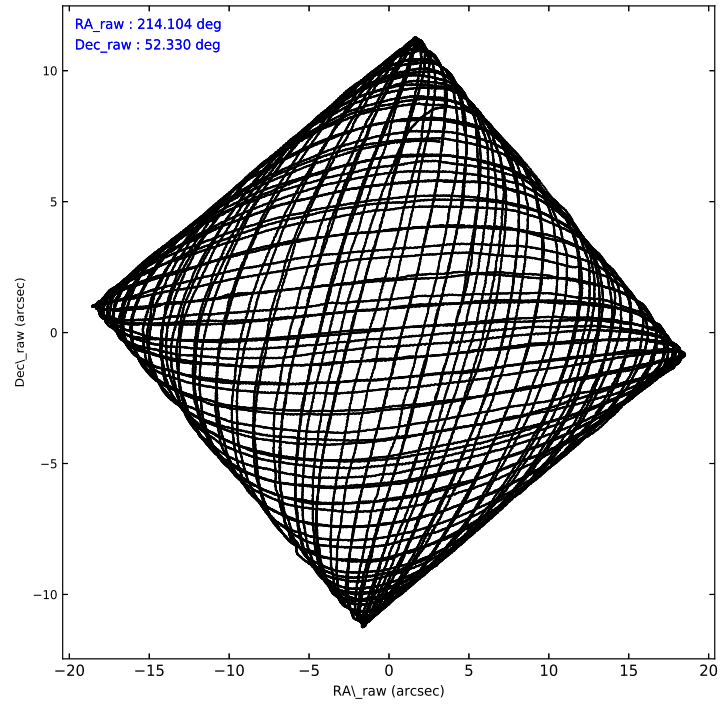
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	195492	194832	225629	212566	218459
rejected events	165583	162654	193398	183481	185903
rejected %	84%	83%	85%	86%	85%

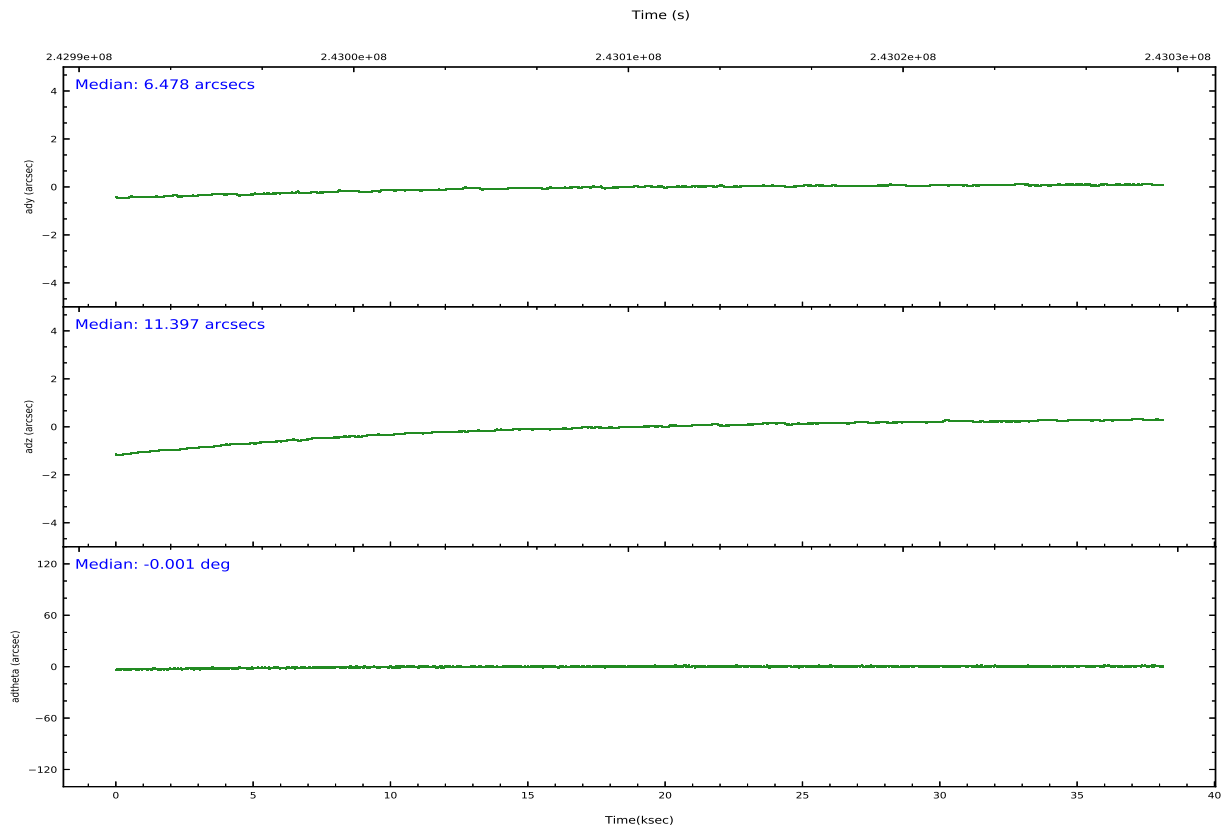
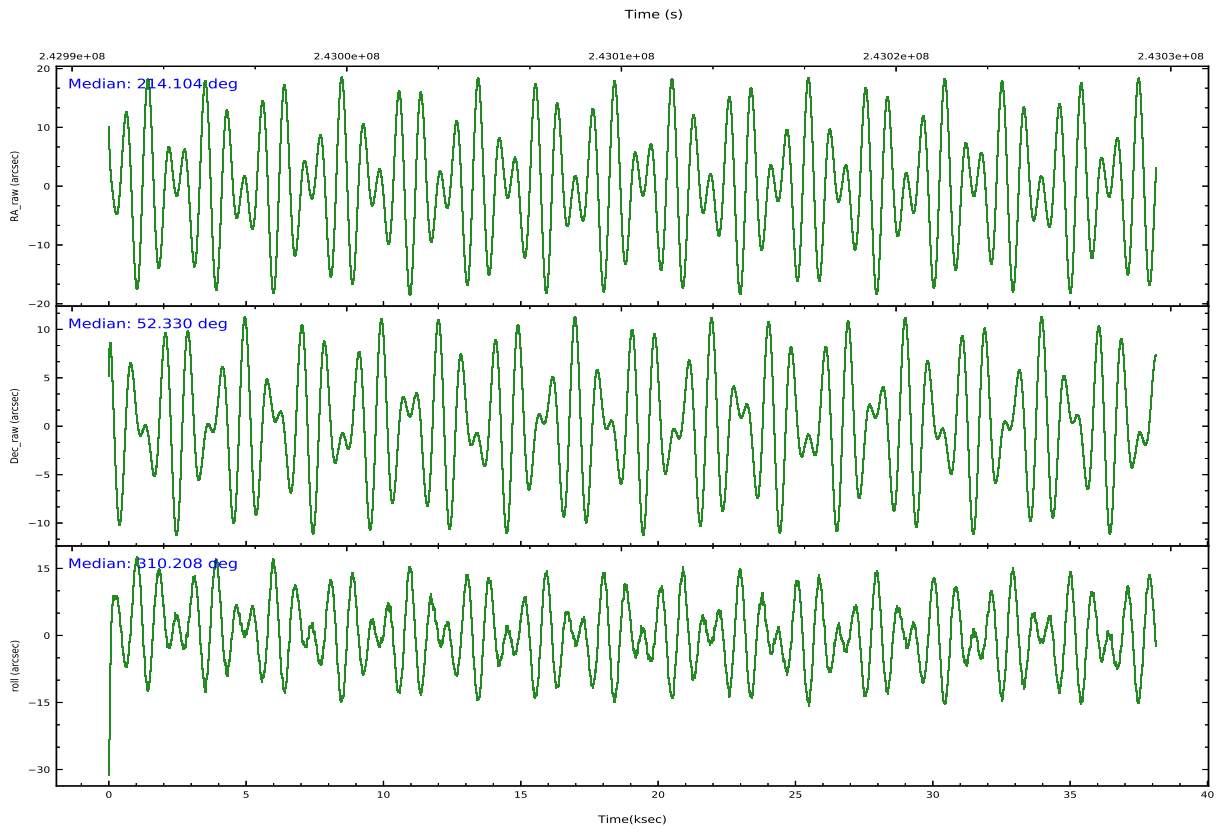
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	12428	13332	13620	11852	12905
	6%	6%	6%	5%	5%
grade 1 events	108	134	143	129	118
	0%	0%	0%	0%	0%
grade 2 events	6707	6857	7253	5898	6694
	3%	3%	3%	2%	3%
grade 3 events	2715	2933	2629	2768	2882
	1%	1%	1%	1%	1%
grade 4 events	2607	2888	3048	2701	2860
	1%	1%	1%	1%	1%
grade 5 events	6551	7229	6213	7620	7514
	3%	3%	2%	3%	3%
grade 6 events	5669	6440	5915	6081	7452
	2%	3%	2%	2%	3%
grade 7 events	158707	155019	186808	175517	178034
	81%	79%	82%	82%	81%

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	214.062099	214.09830100273	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.338792	52.328880976644	Alternating exposures requested	N	N
[deg] Pointing Roll	310.031650	310.20808509714	[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)	242991467.184000	242990221.59151			
Observation start date	2005-09-13T09:36:43	2005-09-13T09:17:01			
[s] Observation end time (MET)	243029467.184000	243029836.30583			
Observation end date	2005-09-13T20:10:03	2005-09-13T20:17:16			
Read mode	TIMED	TIMED			

2.3 Aspect





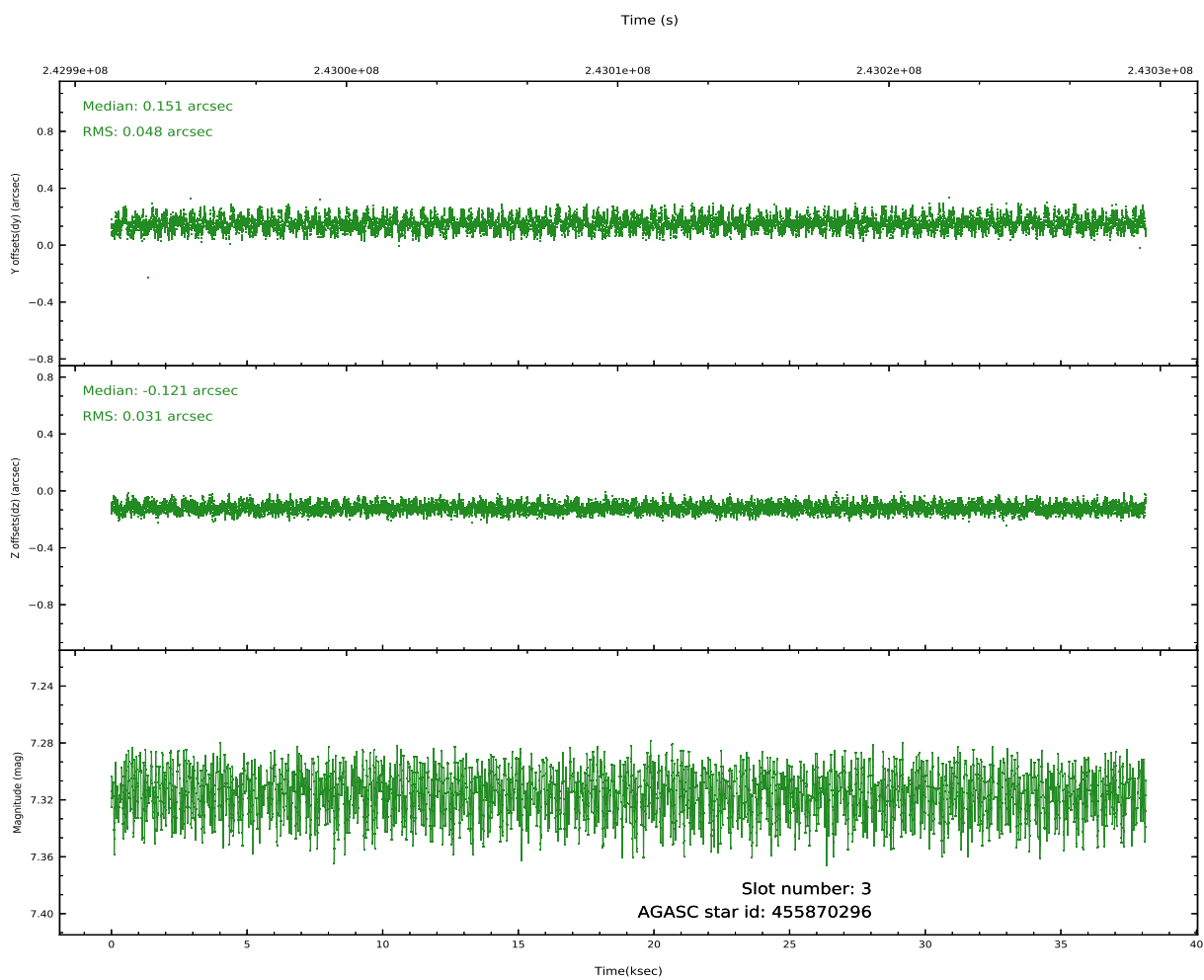
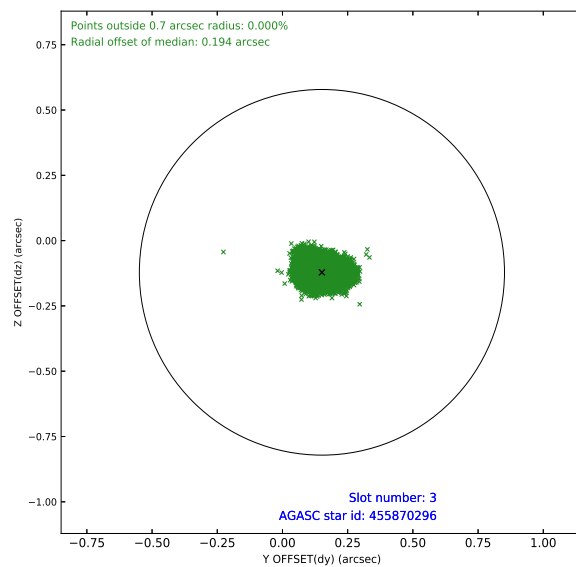
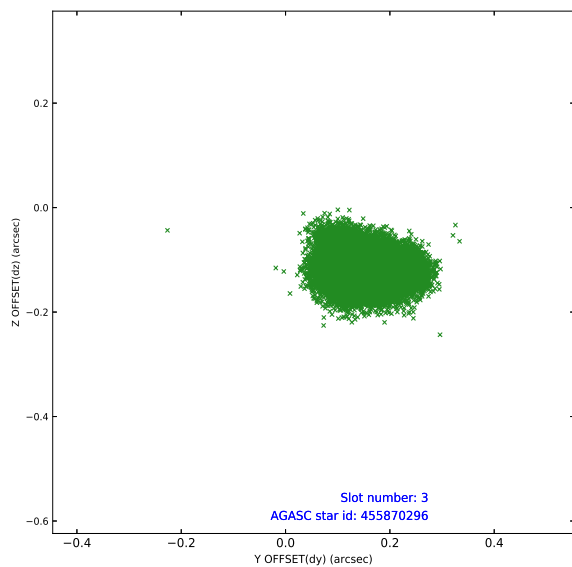
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.24	9301	1.000	0.053	-0.046	0.009	0.030	0.000000	0.000000	933.32	-834
1	FID		ACIS-I-5	7.23	9301	1.000	-0.205	0.052	0.009	0.023	0.000000	0.000000	-1815.01	1062
2	FID		ACIS-I-6	7.25	9301	1.000	0.062	0.066	0.010	0.019	0.000000	0.000000	398.88	1707
3	GUIDE	used	455870296	7.31	18602	1.000	0.151	-0.121	0.061	0.099	214.629779	52.033323	1647.01	258
4	GUIDE	used	455871352	8.10	18601	1.000	0.030	0.106	0.048	0.077	215.099961	52.172669	1919.32	1380
5	GUIDE	used	505806936	7.02	18602	1.000	-0.019	-0.179	0.070	0.115	213.820815	52.535927	-883.91	52
6	GUIDE	used	505812376	7.60	18600	1.000	-0.046	0.020	0.058	0.090	214.039537	52.937930	-1683.28	1350
7	GUIDE	used	505812088	8.17	18542	1.000	-0.129	0.168	0.086	0.140	214.186617	53.263562	-2377.21	2347

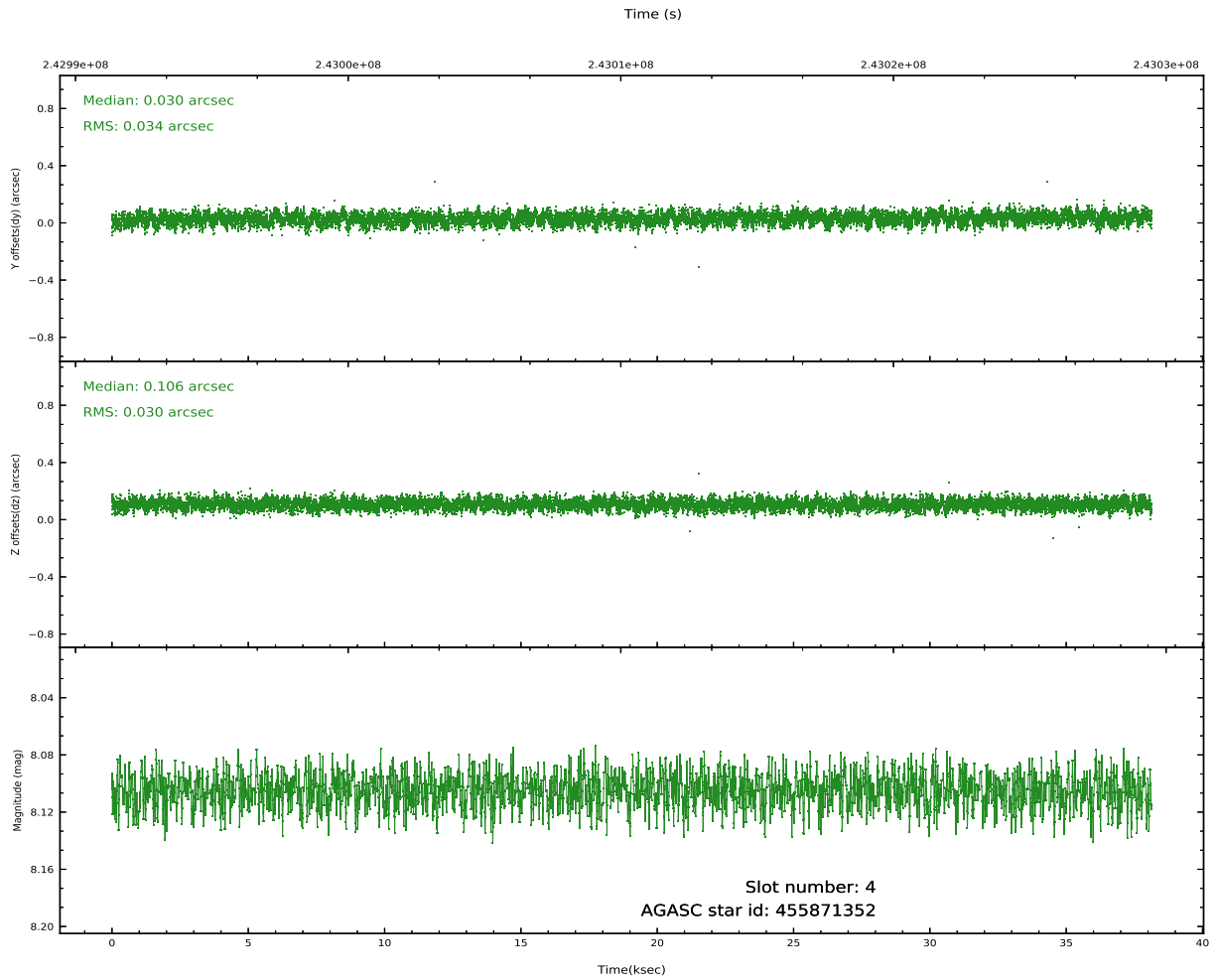
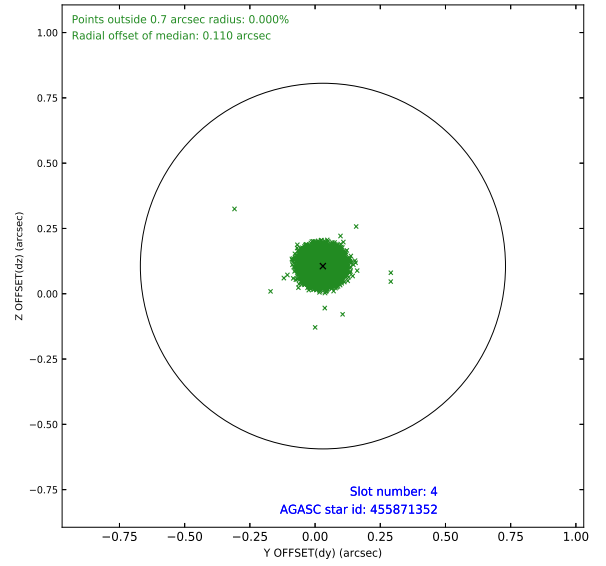
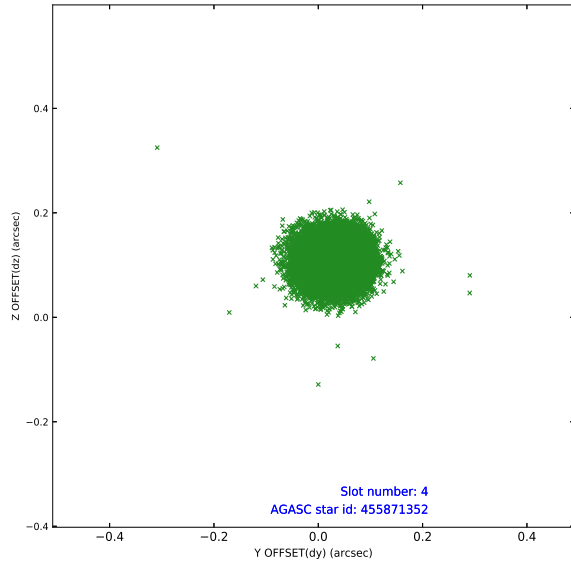
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2.4 Star Slots

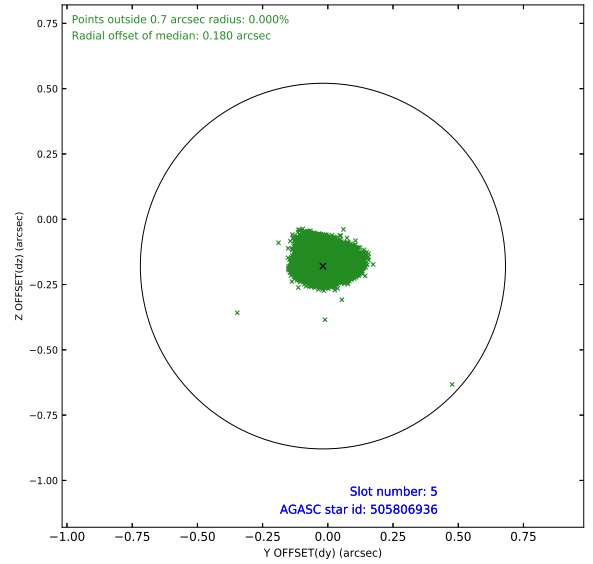
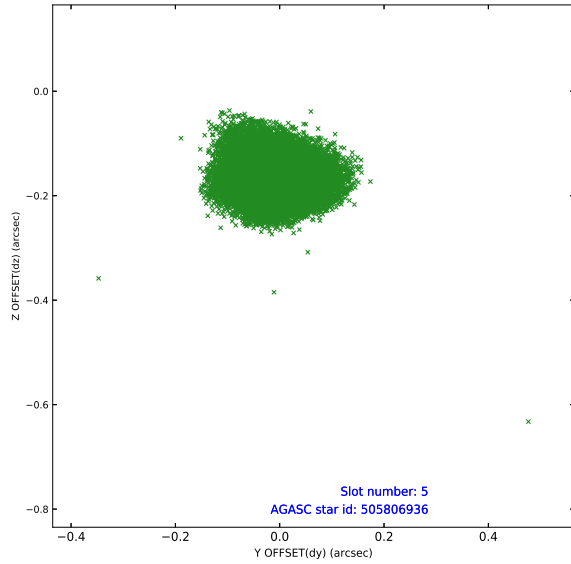
2.4.1 Slot 3



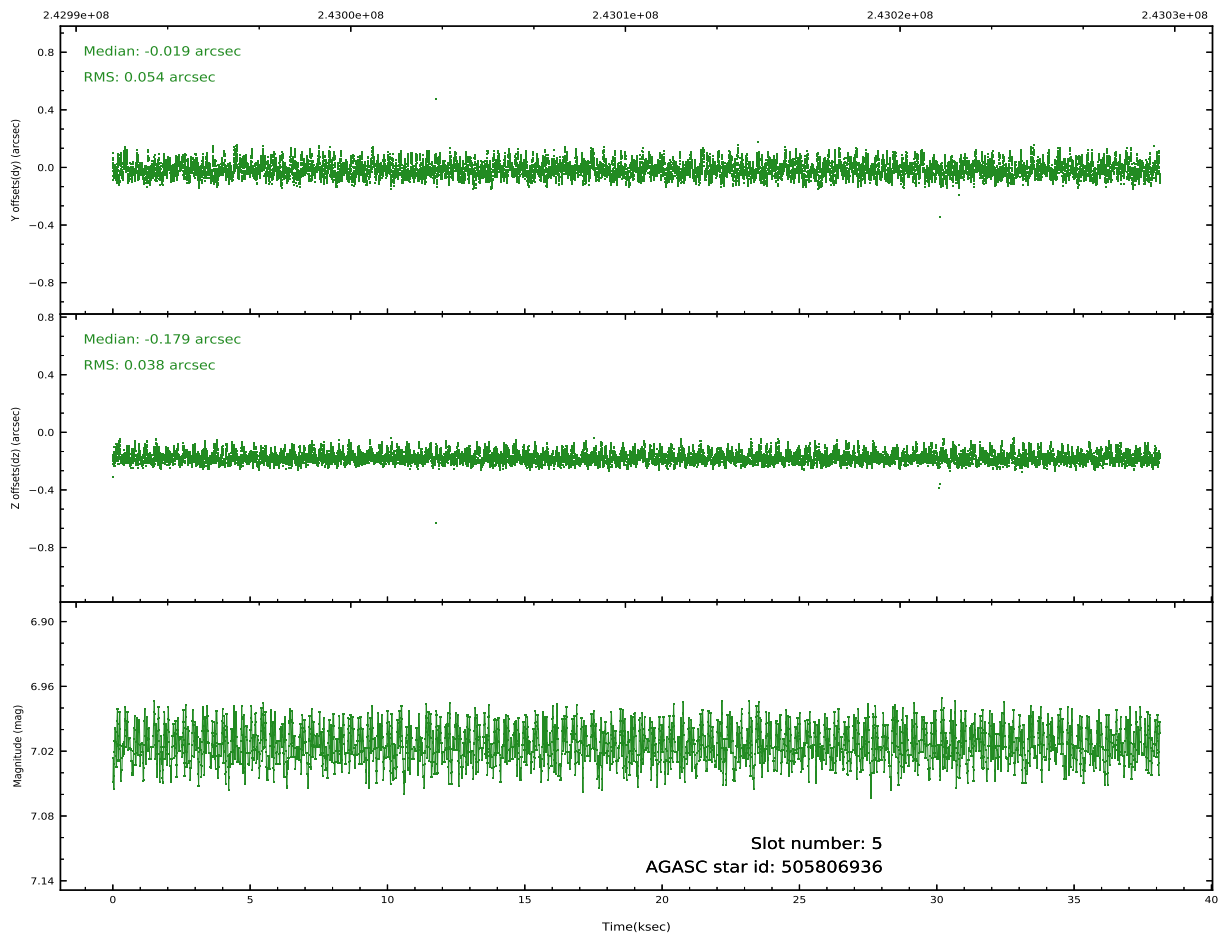
2.4.2 Slot 4



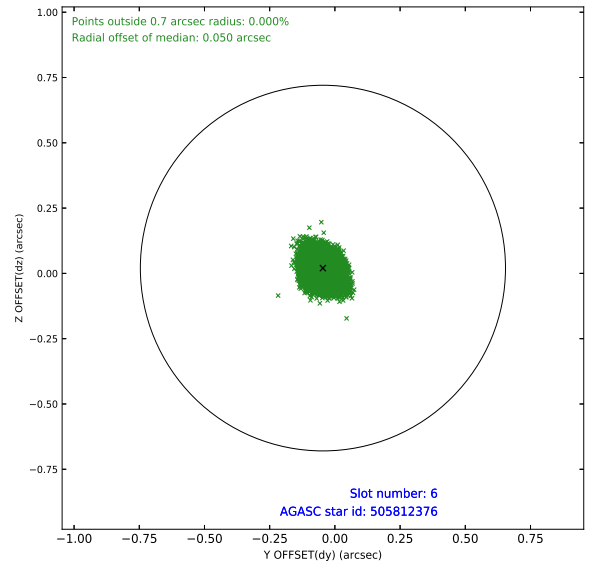
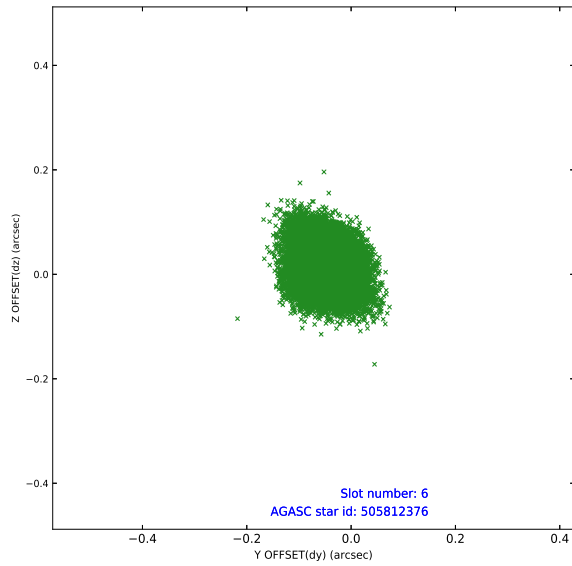
2.4.3 Slot 5



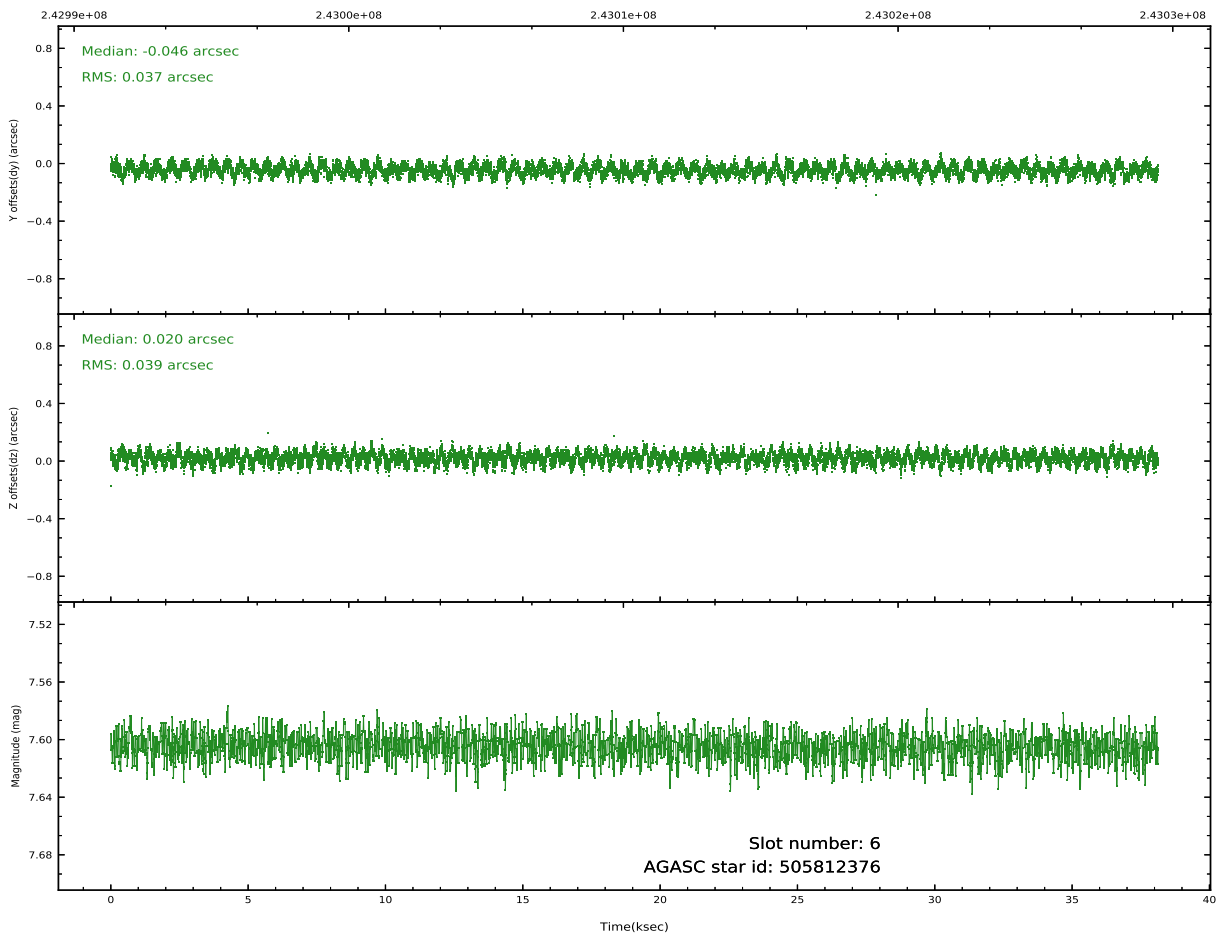
Time (s)



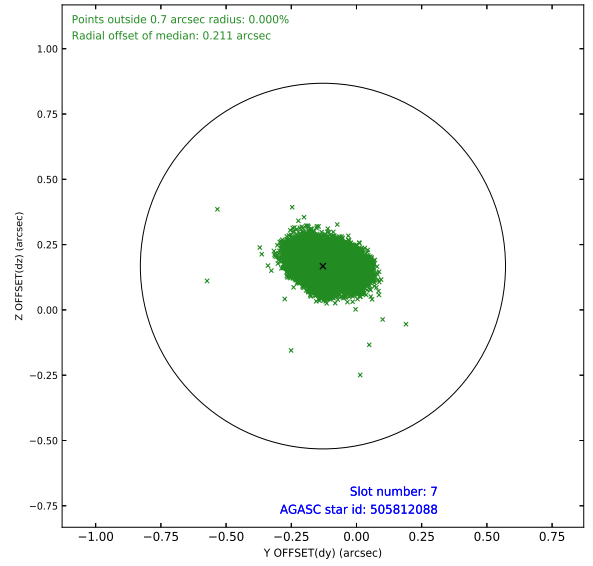
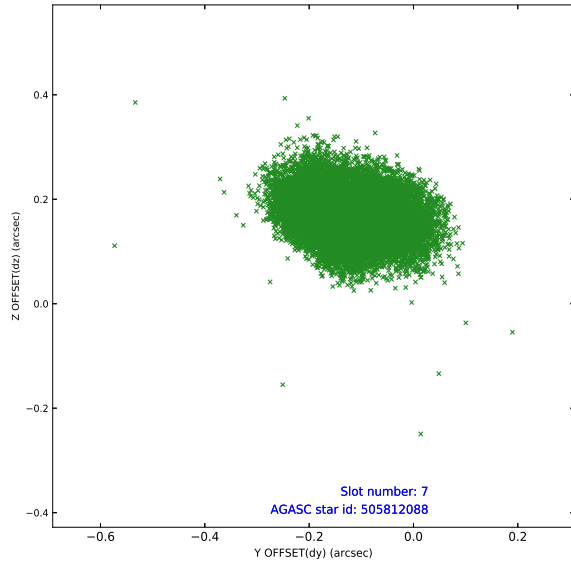
2.4.4 Slot 6



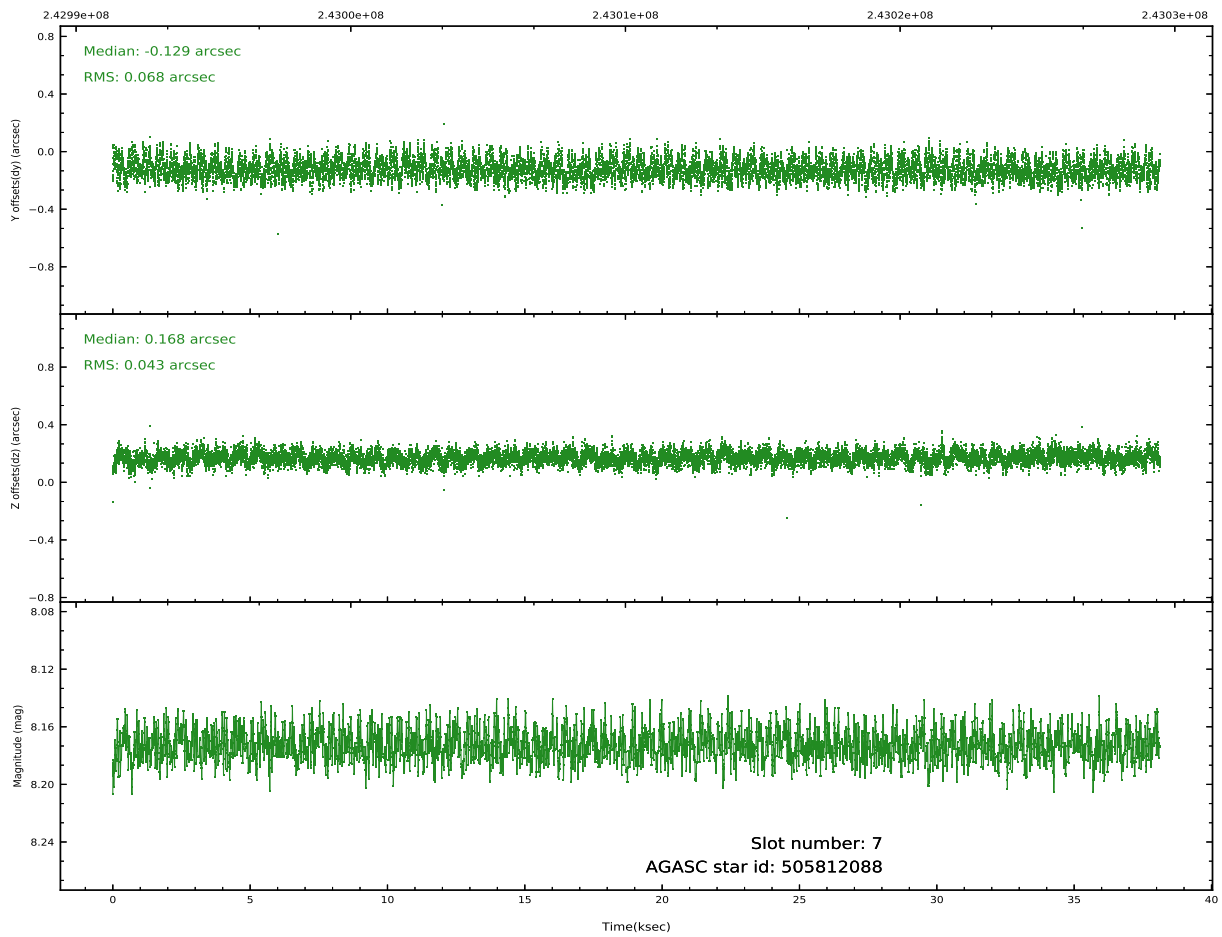
Time (s)



2.4.5 Slot 7

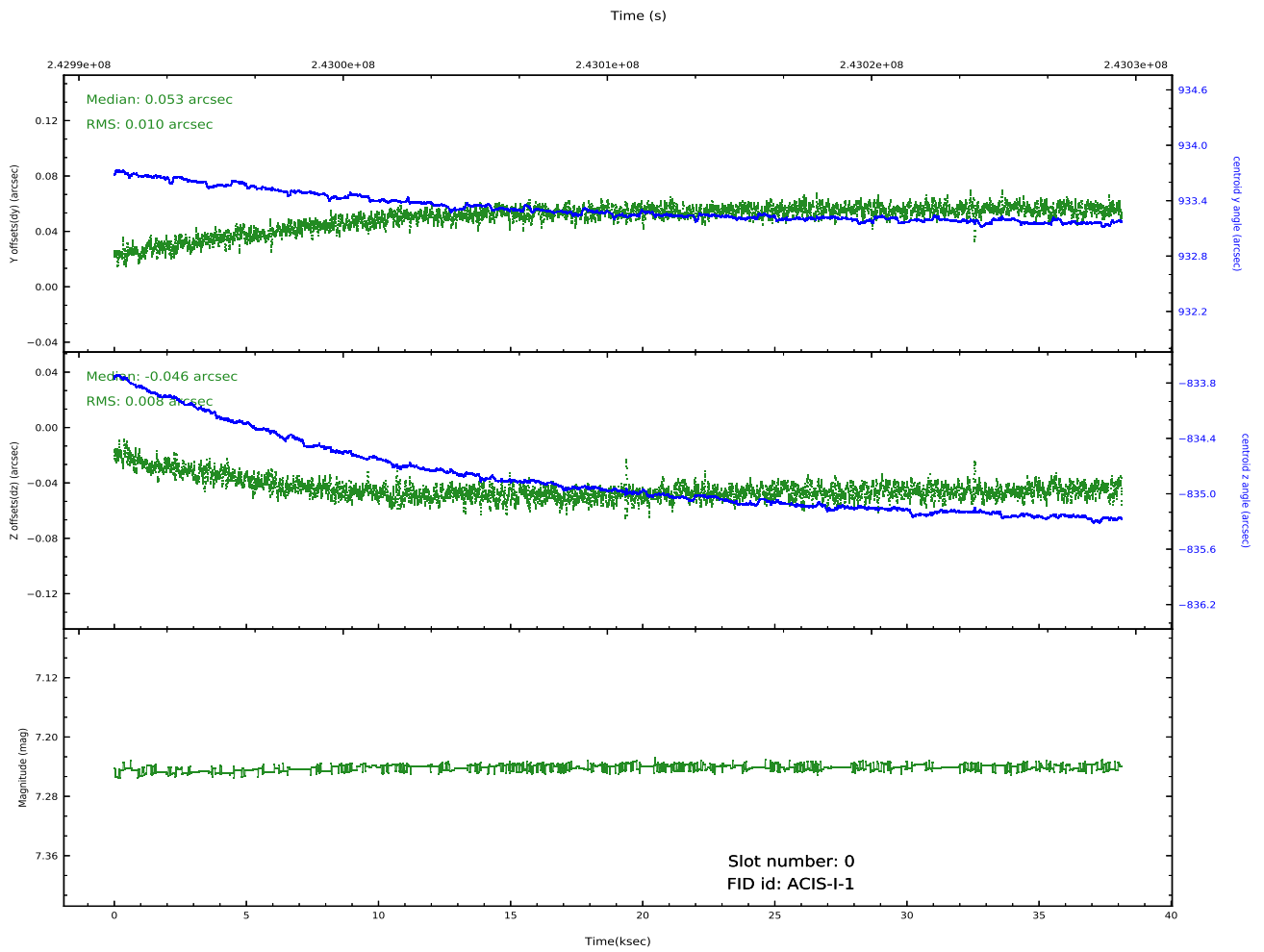
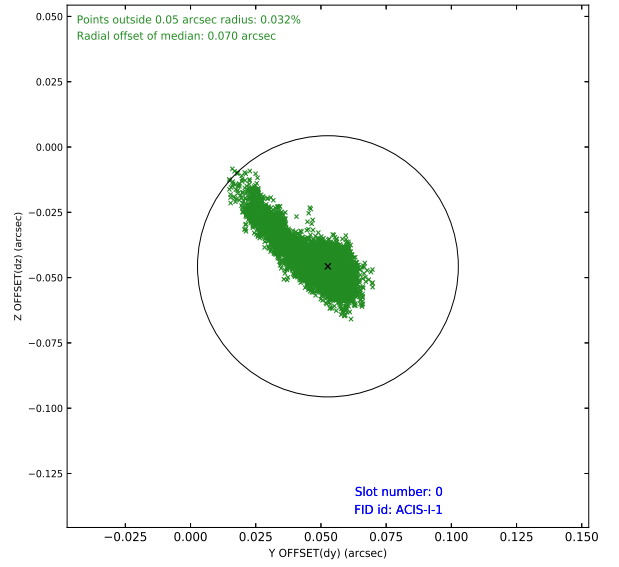
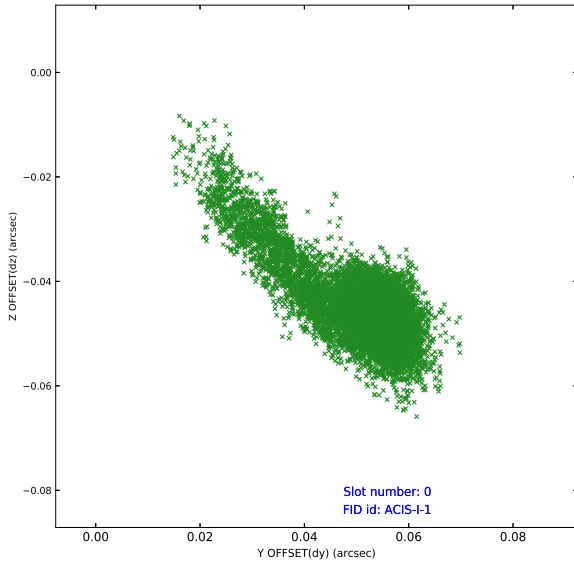


Time (s)

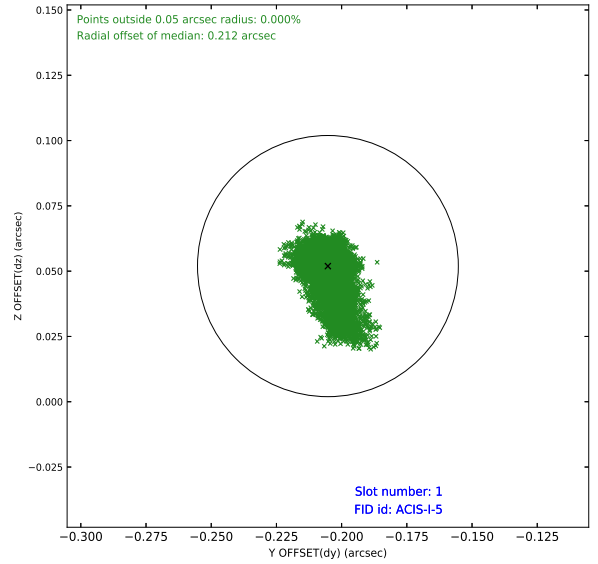
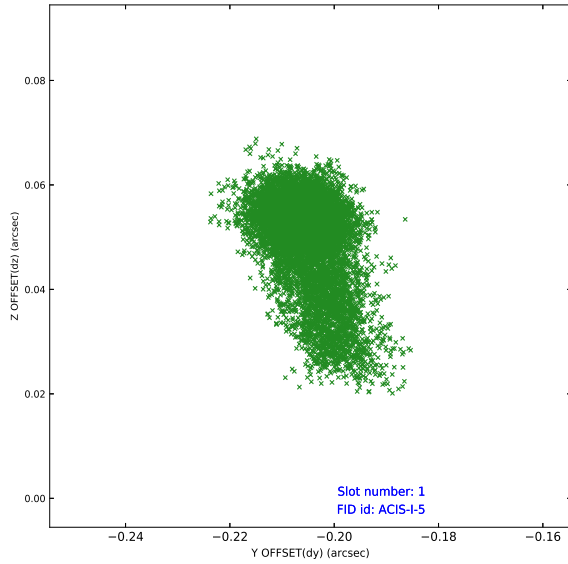


2.5 FID Slots

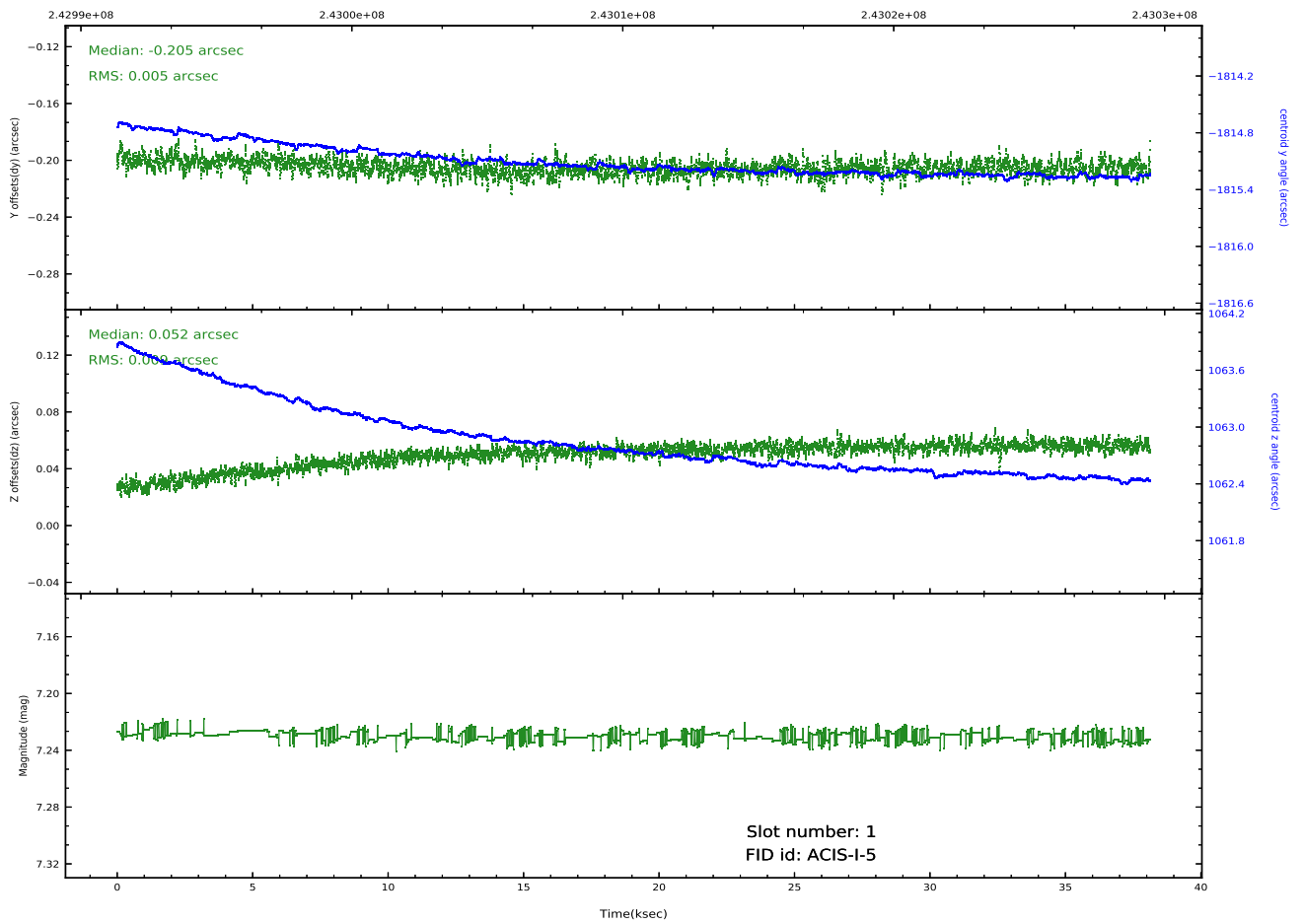
2.5.1 Slot 0



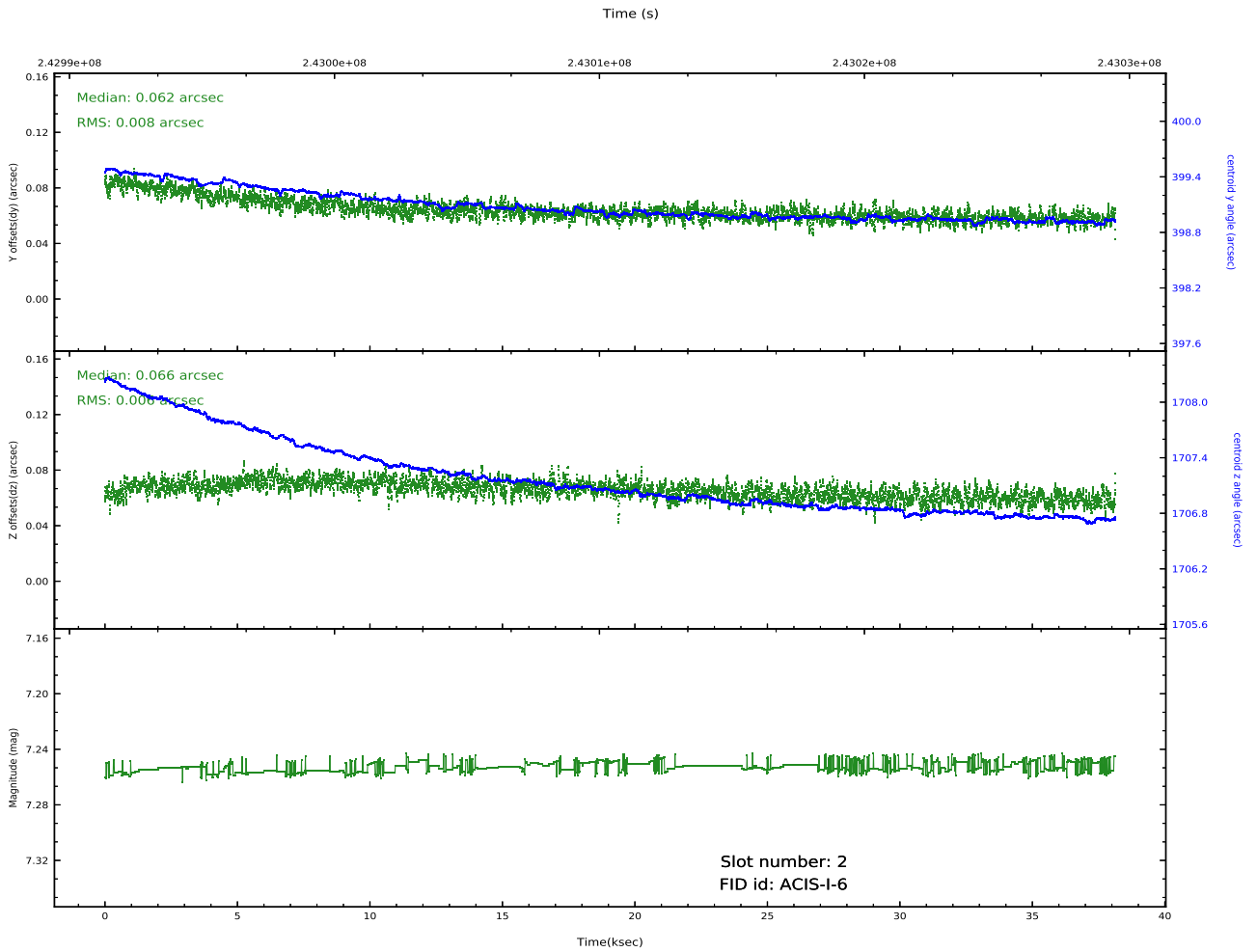
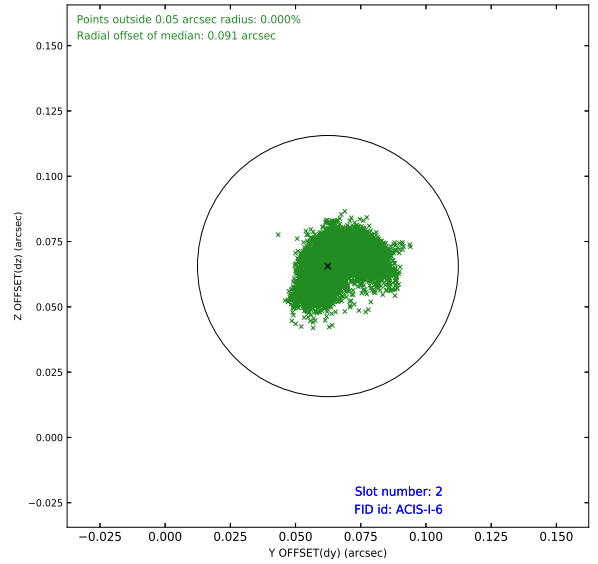
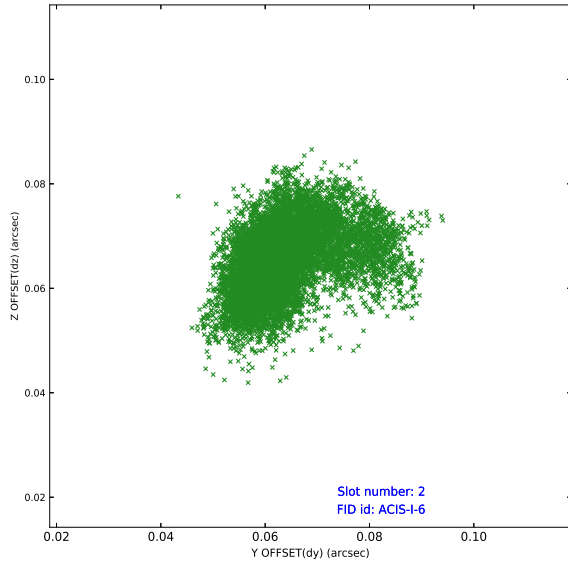
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.12379

A.2 Comments

Roll constraint was met.