

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5796 - L2 Version 4
Chandra X-Ray Center

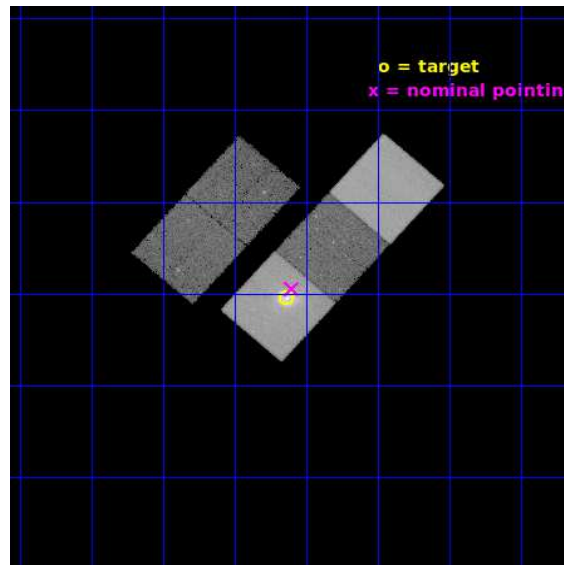
L2 Processing Date : Oct 8 2020

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1 Front

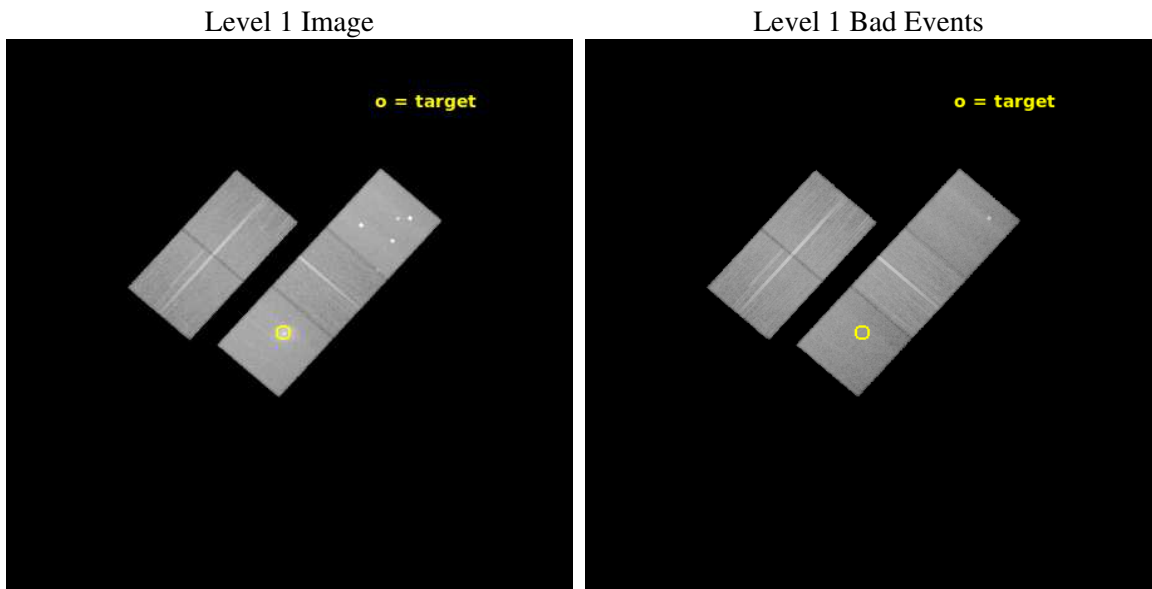
seq_num	800509	Sequence number
obs_id	5796	Observation id
title	The Outburst in Hercules A	Proposal title
observer	Paul Nulsen	Principal investigator
object	Hercules A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	252.784167	Observer's specified target RA [deg]
dec_targ	4.992722	Observer's specified target Dec [deg]
ra_nom	252.77537533199	Nominal RA [deg]
dec_nom	5.0096045765795	Nominal Dec [deg]
roll_nom	131.50158968087	Nominal Roll [deg]
revision	4	Processing version of data
ontime	48173.958917081	Sum of GTIs [s]
livetime	47544.530678677	Livetime [s]
ontime2	48164.535956293	Sum of GTIs [s]
ontime3	48170.817926943	Sum of GTIs [s]
ontime5	48177.099907339	Sum of GTIs [s]
ontime6	48177.099907339	Sum of GTIs [s]
ontime7	48173.958917081	Sum of GTIs [s]
l2events	447319	Number of level 2 events



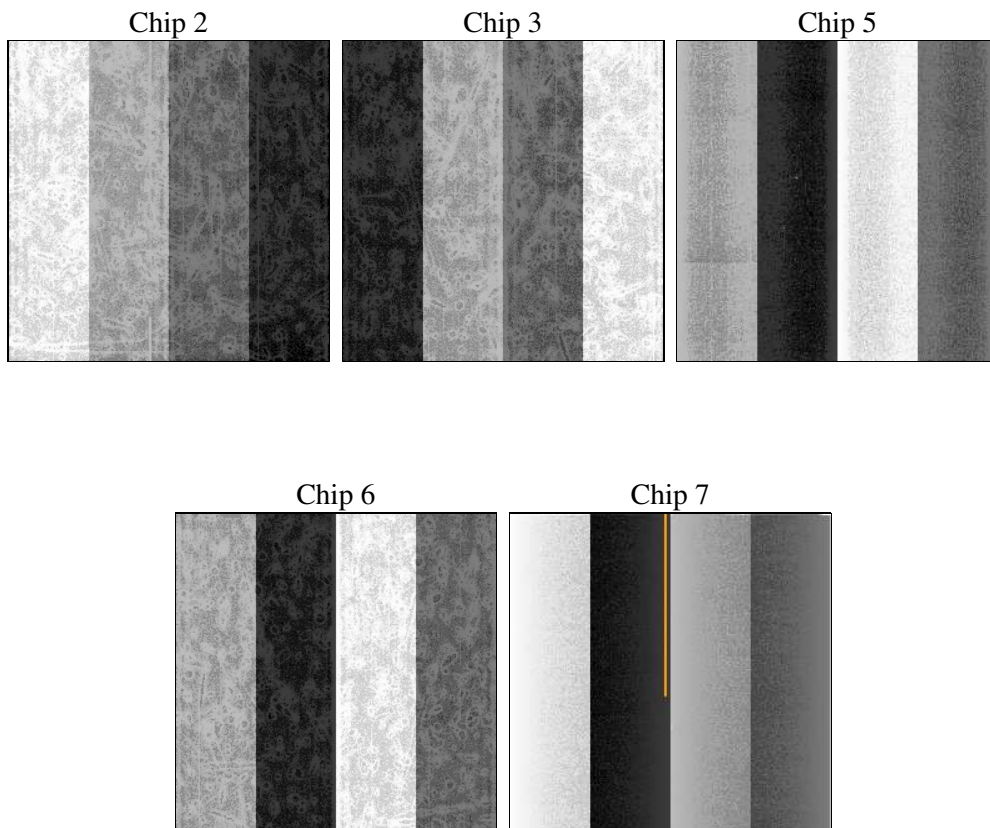
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	48000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	48173.958917081	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	48164.535956293	Sum of GTIs [s]
date	2020-10-08T07:40:32	Date and time of file creation	ontime3	48170.817926943	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	48177.099907339	Sum of GTIs [s]
			ontime6	48177.099907339	Sum of GTIs [s]
			ontime7	48173.958917081	Sum of GTIs [s]
			l1events	1641477	Number of level 1 events

2.1.4 Events

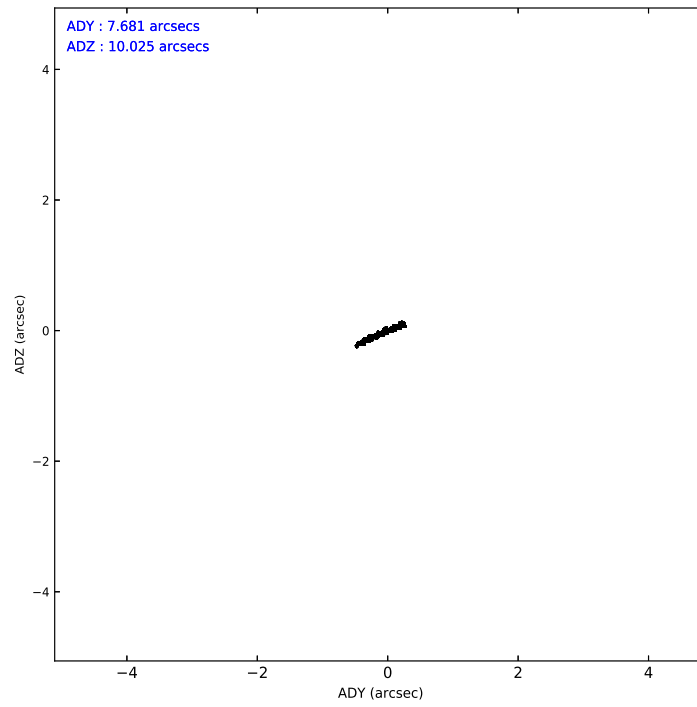
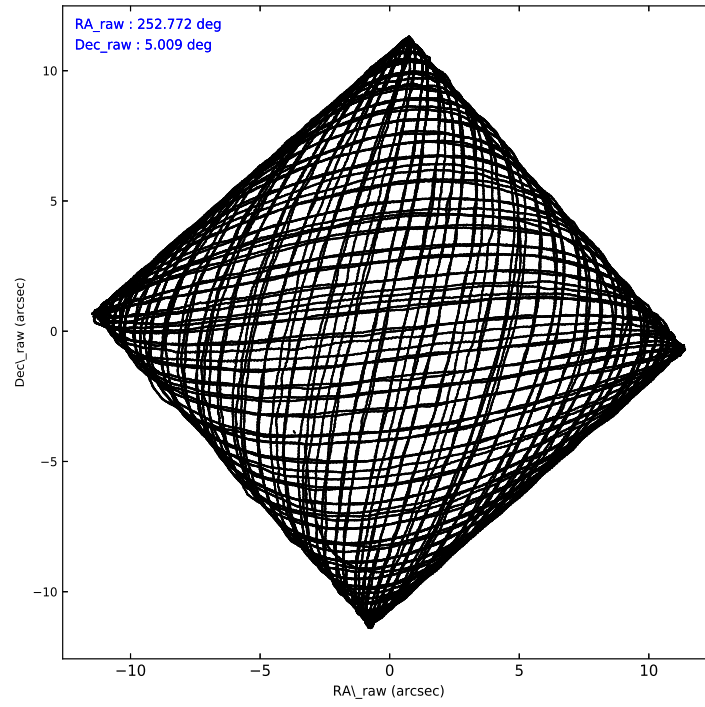
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	294983	272132	419160	288460	366742
rejected events	264402	243451	200344	253717	174494
rejected %	89%	89%	47%	87%	47%

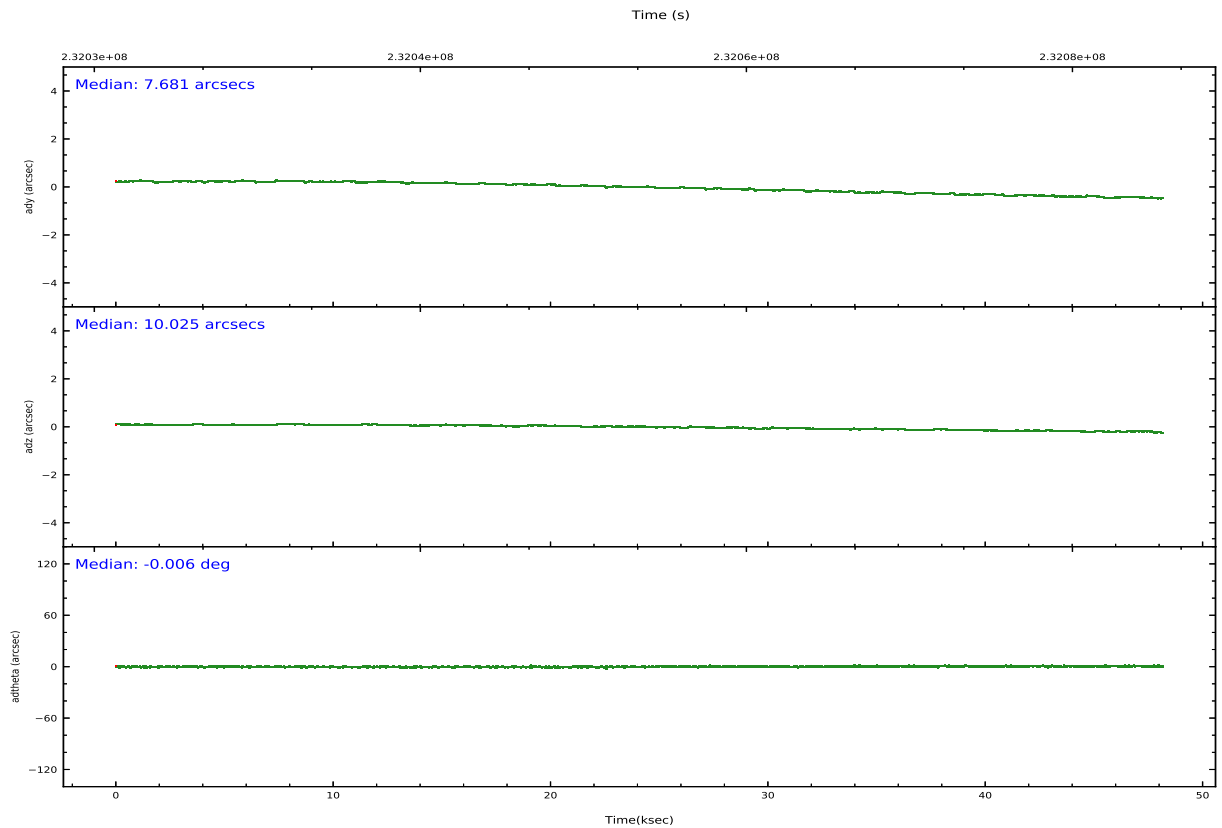
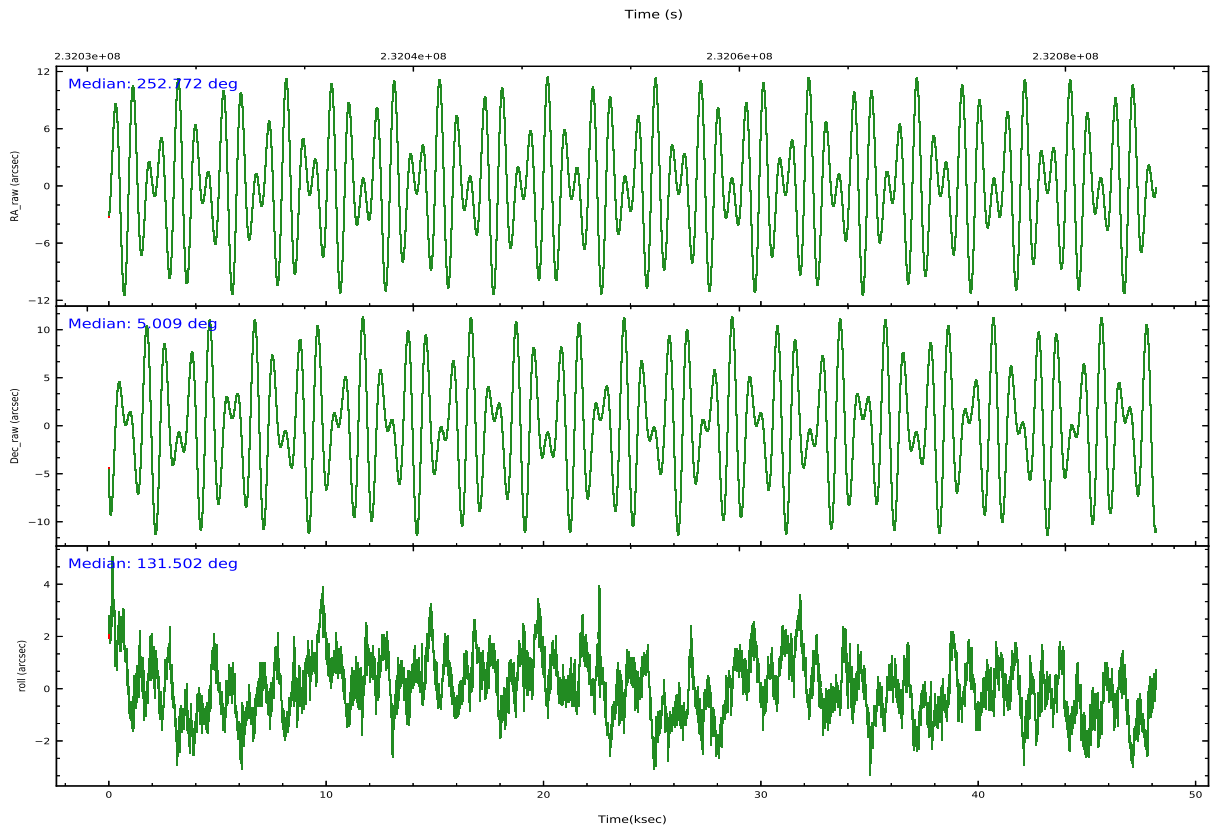
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	12977	11889	40977	15521	28750
	4%	4%	9%	5%	7%
grade 1 events	132	136	1919	140	271
	0%	0%	0%	0%	0%
grade 2 events	6672	5747	63107	6655	42644
	2%	2%	15%	2%	11%
grade 3 events	3047	3165	9453	3515	19388
	1%	1%	2%	1%	5%
grade 4 events	3226	3109	9232	3275	19191
	1%	1%	2%	1%	5%
grade 5 events	9334	11129	31209	11505	33323
	3%	4%	7%	3%	9%
grade 6 events	5104	5234	99125	6284	84650
	1%	1%	23%	2%	23%
grade 7 events	254491	231723	164138	241565	138525
	86%	85%	39%	83%	37%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23567	ACIS-23567	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	252.797737	252.77537533199	Subarray requested	NONE	NONE
[deg] Pointing Dec	5.001068	5.0096045765795	Alternating exposures requested	N	N
[deg] Pointing Roll	131.341431	131.50158968087	[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)	232031173.184000	232029829.97767			
Observation start date	2005-05-09T13:05:09	2005-05-09T12:43:49			
[s] Observation end time (MET)	232079173.184000	232079961.19245			
Observation end date	2005-05-10T02:25:09	2005-05-10T02:39:21			
Read mode	TIMED	TIMED			

2.3 Aspect





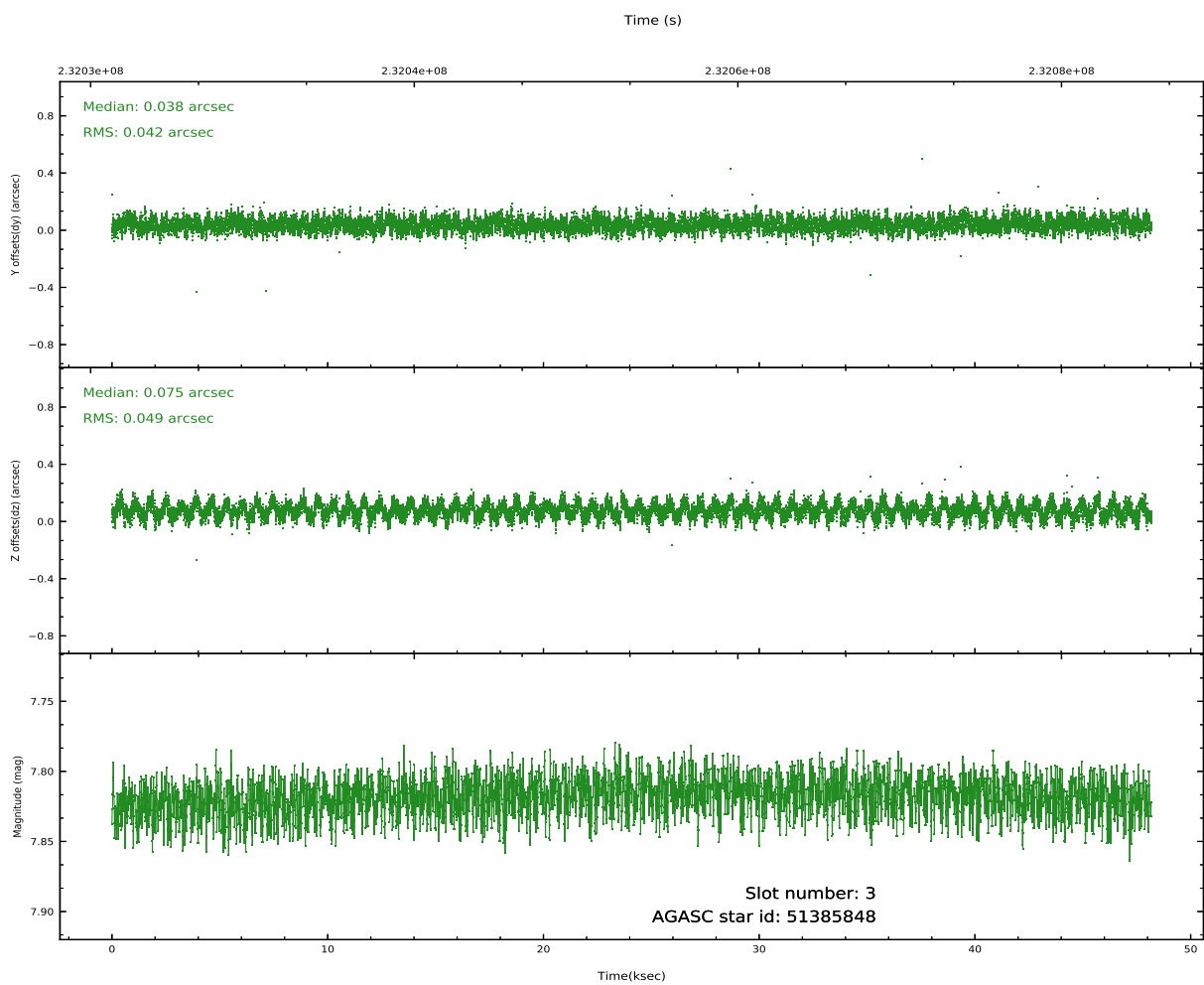
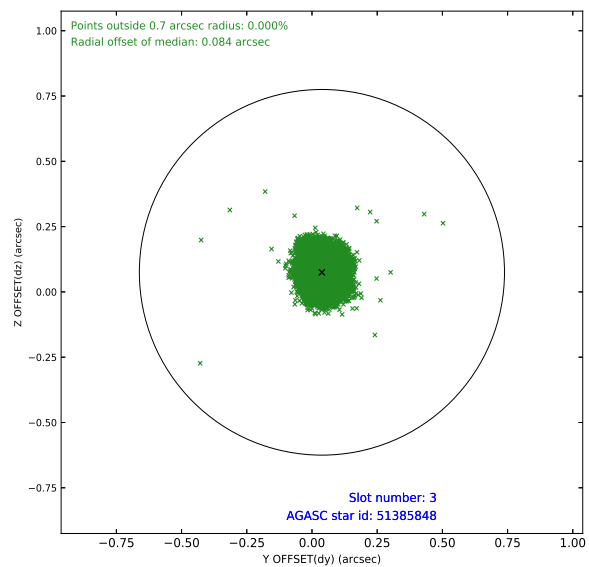
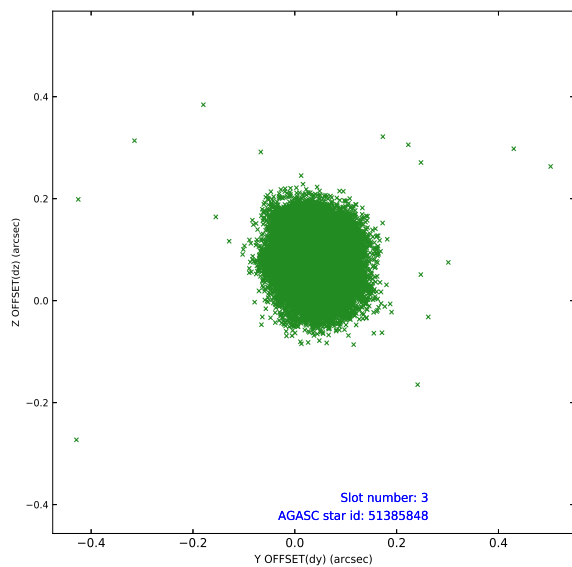
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.19	11752	1.000	0.056	-0.071	0.008	0.015	0.000000	0.000000	935.71	-1726
1	FID		ACIS-S-5	7.24	11749	1.000	-0.126	0.023	0.010	0.017	0.000000	0.000000	-1813.50	170
2	FID		ACIS-S-6	7.35	11751	1.000	0.050	0.060	0.010	0.016	0.000000	0.000000	401.24	814
3	GUIDE	used	51385848	7.82	23502	1.000	0.038	0.075	0.070	0.108	252.745605	5.488999	1442.62	-1019
4	GUIDE	used	51389856	8.57	23498	1.000	0.039	-0.072	0.065	0.104	252.375344	5.365072	1984.58	271
5	GUIDE	used	51390960	7.67	23502	1.000	-0.041	0.133	0.070	0.115	253.089716	4.810839	-1205.43	-333
6	GUIDE	used	51398584	8.21	23499	1.000	-0.010	-0.106	0.059	0.093	252.688107	4.451511	-1225.32	1602
7	GUIDE	used	51388904	8.22	23499	1.000	-0.028	-0.030	0.059	0.094	252.767239	4.783010	-517.38	601

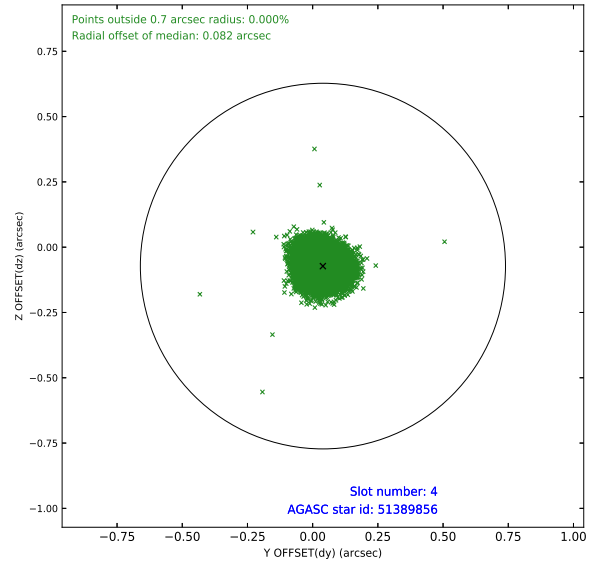
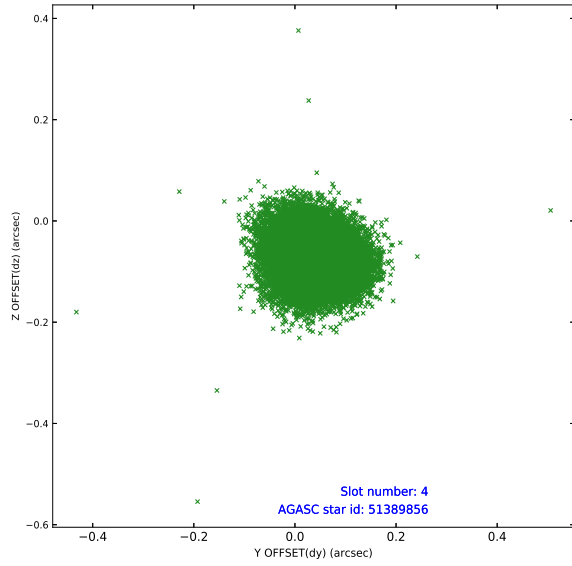
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2.4 Star Slots

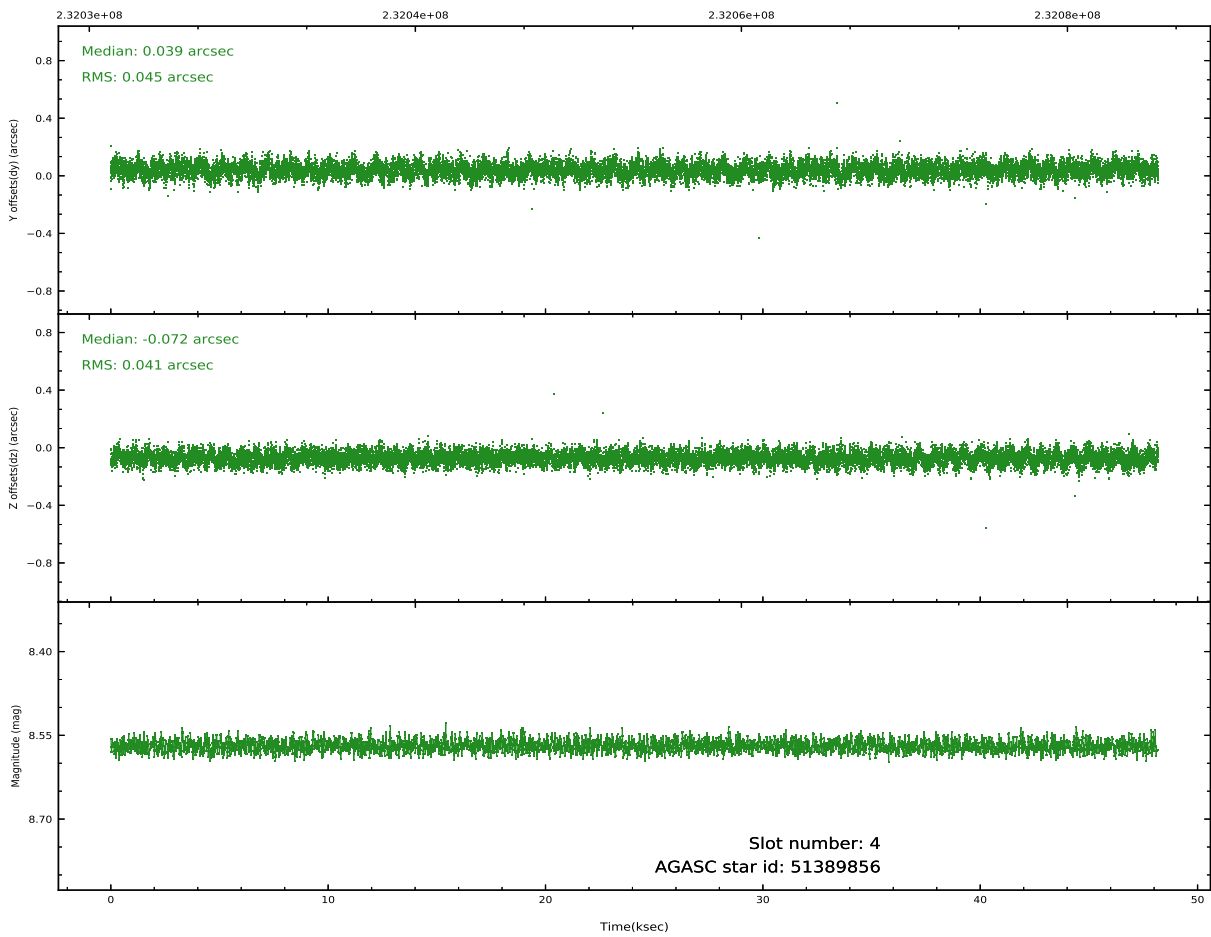
2.4.1 Slot 3



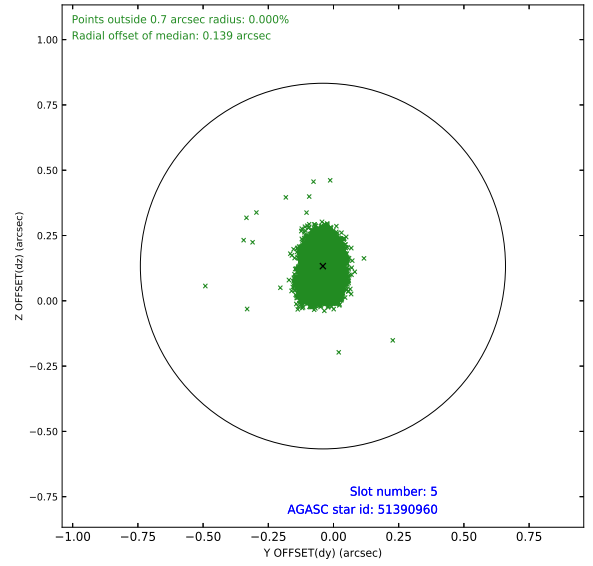
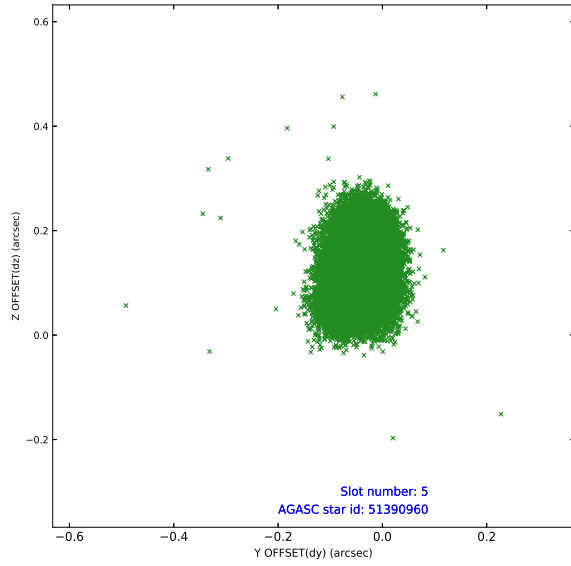
2.4.2 Slot 4



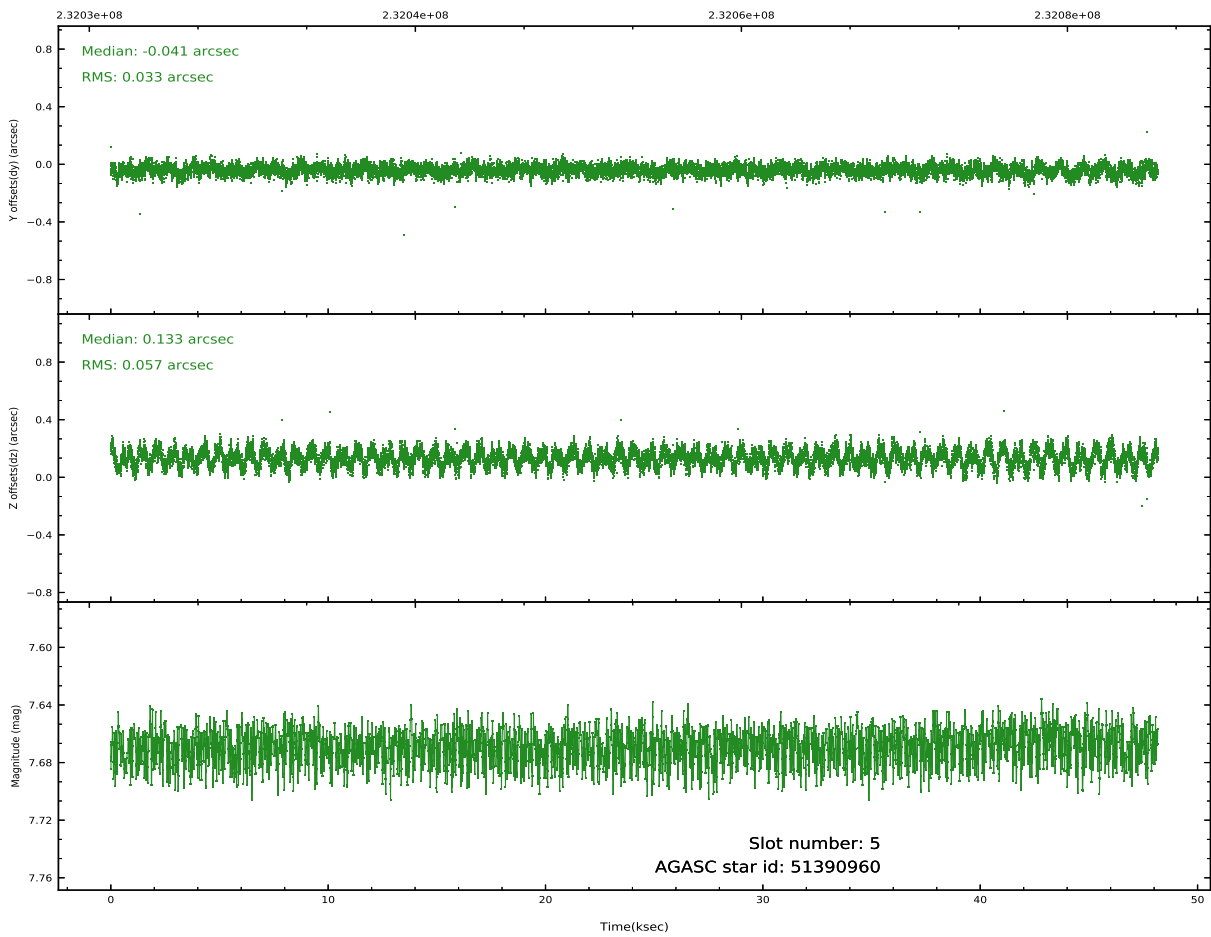
Time (s)



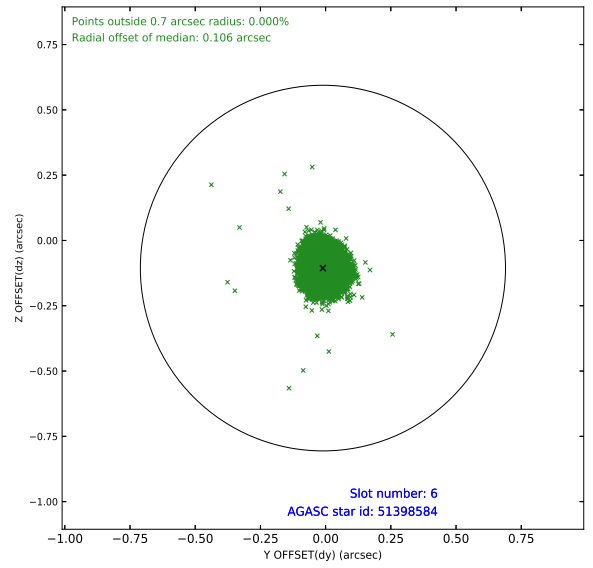
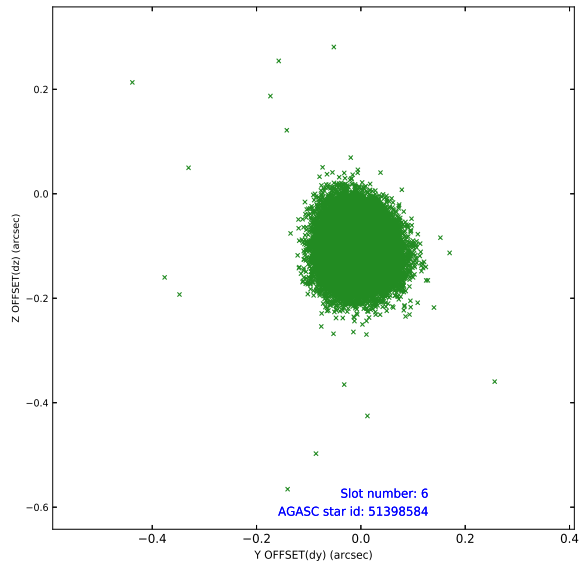
2.4.3 Slot 5



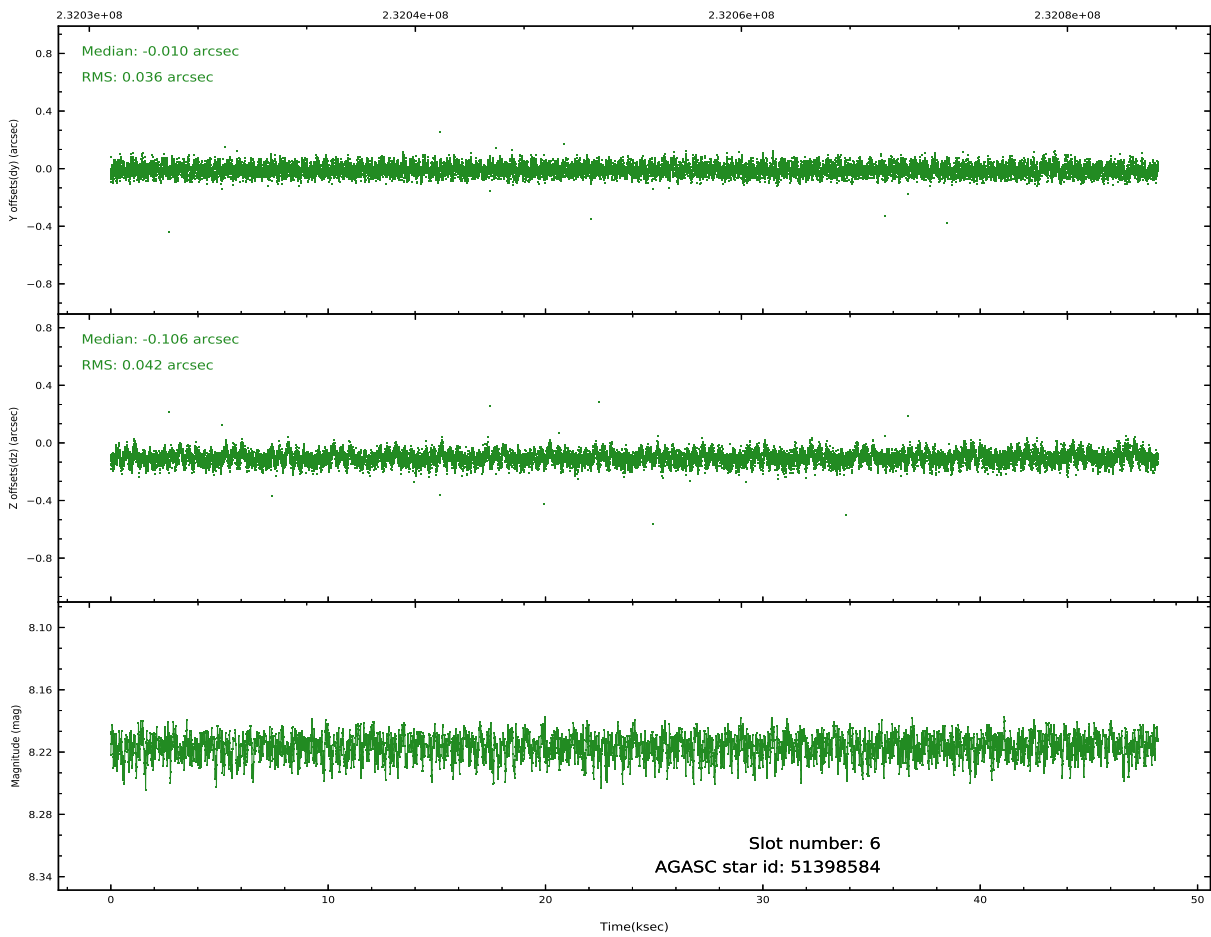
Time (s)



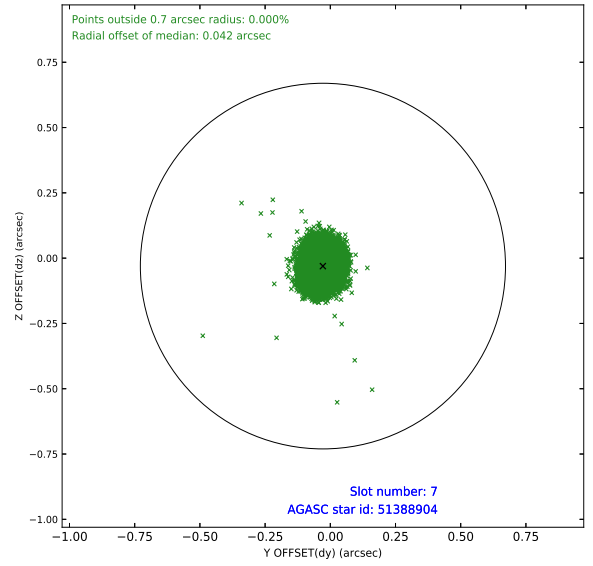
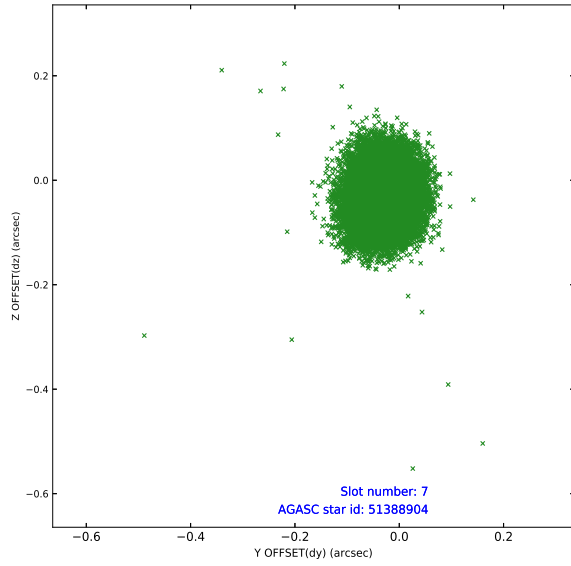
2.4.4 Slot 6



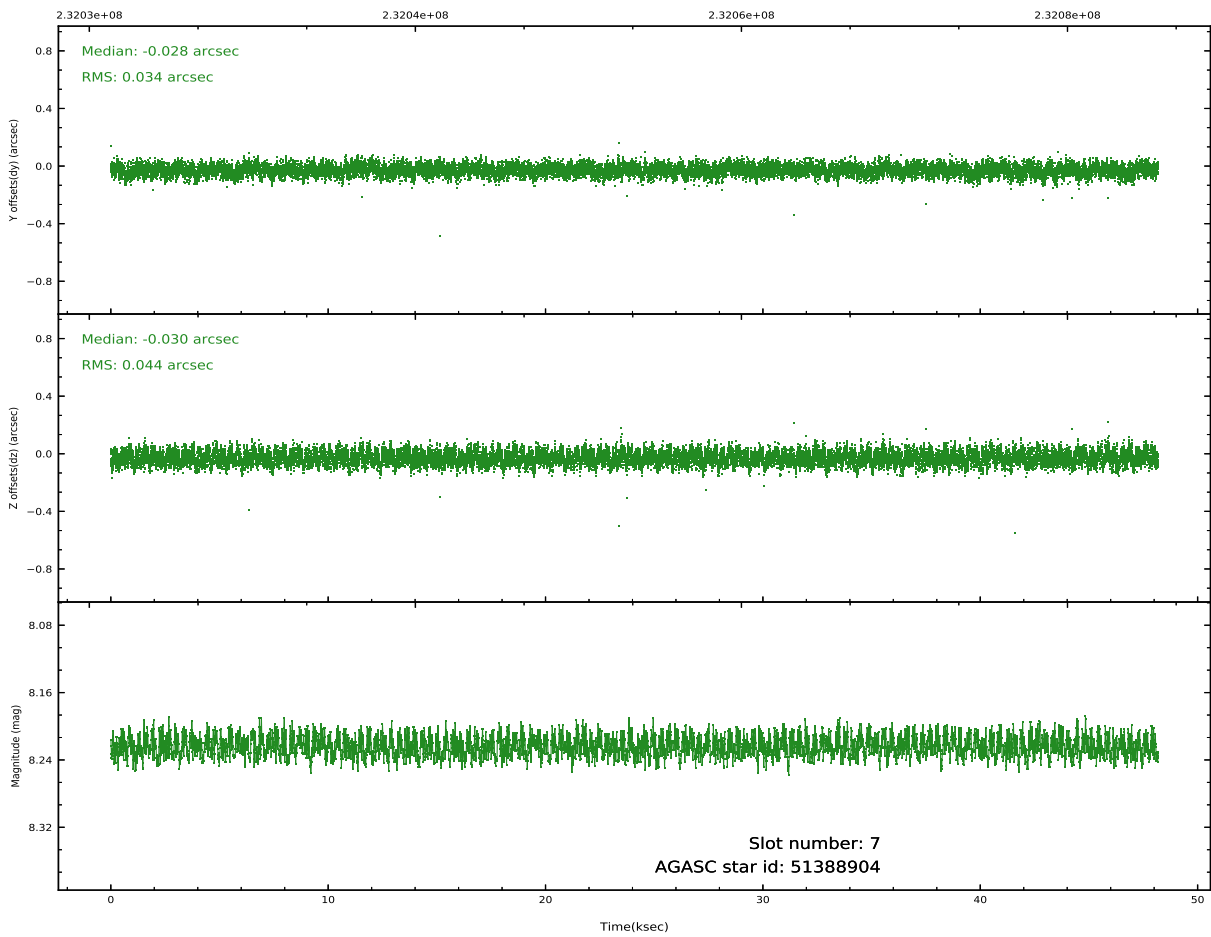
Time (s)



2.4.5 Slot 7

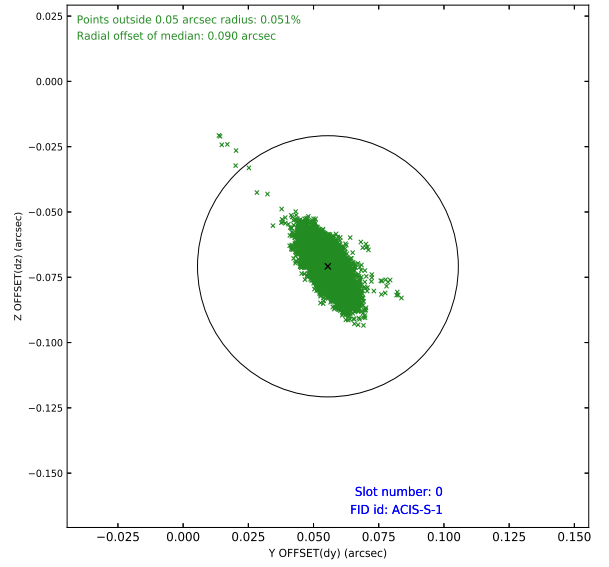
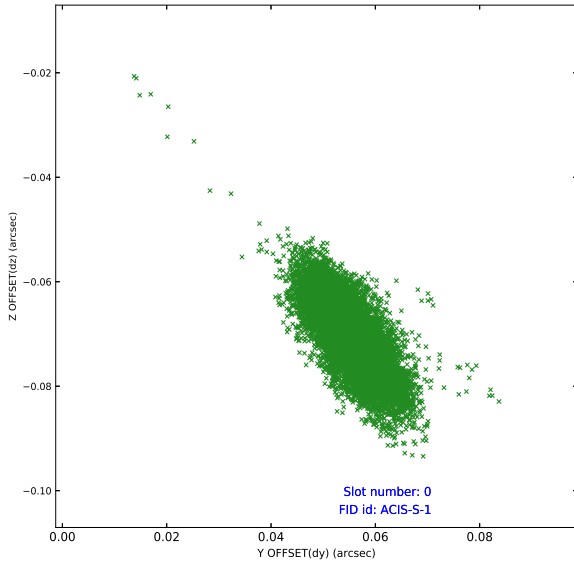


Time (s)

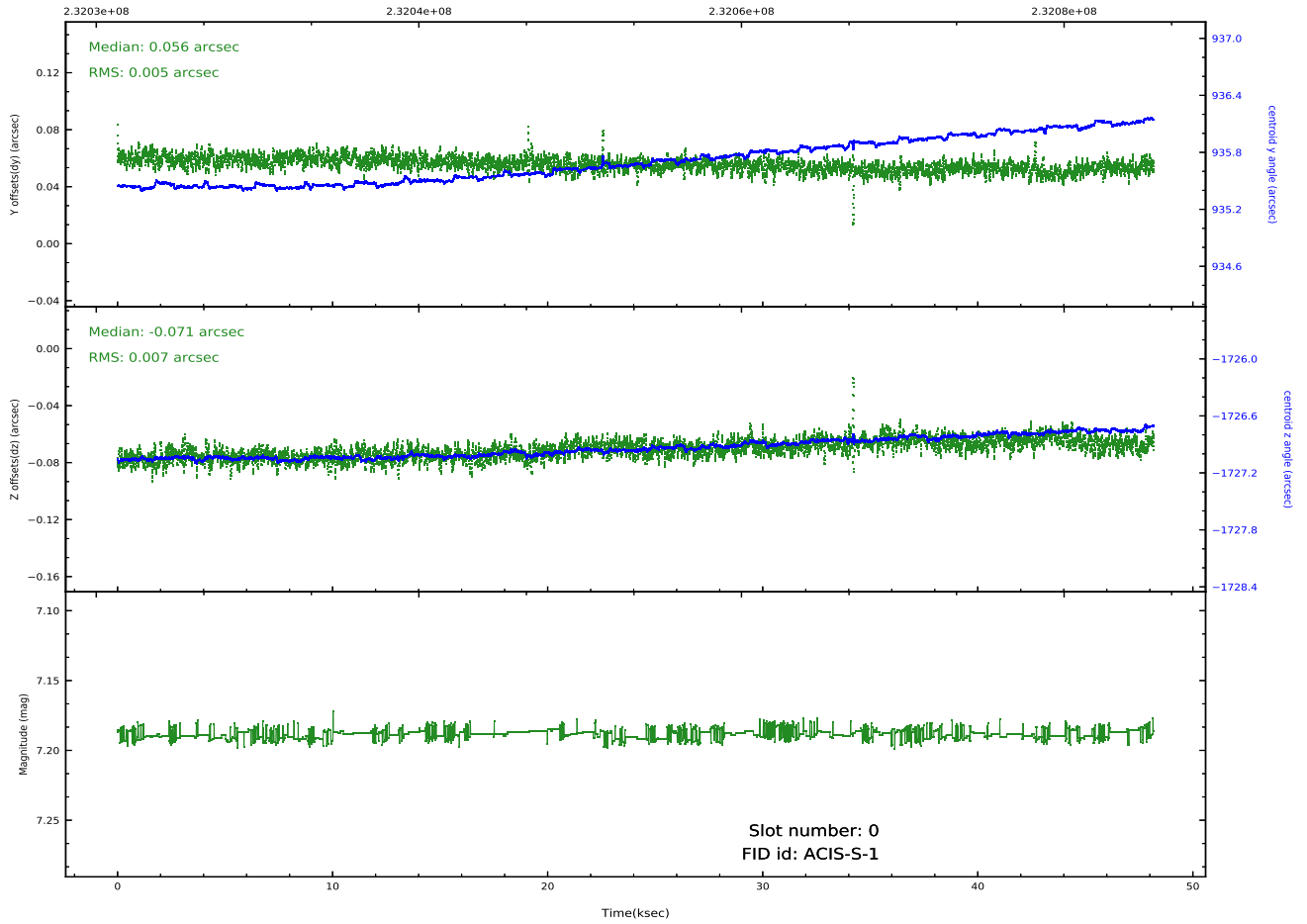


2.5 FID Slots

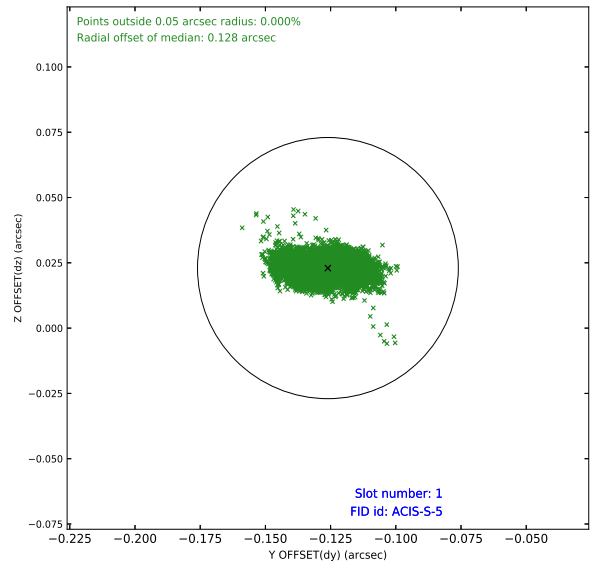
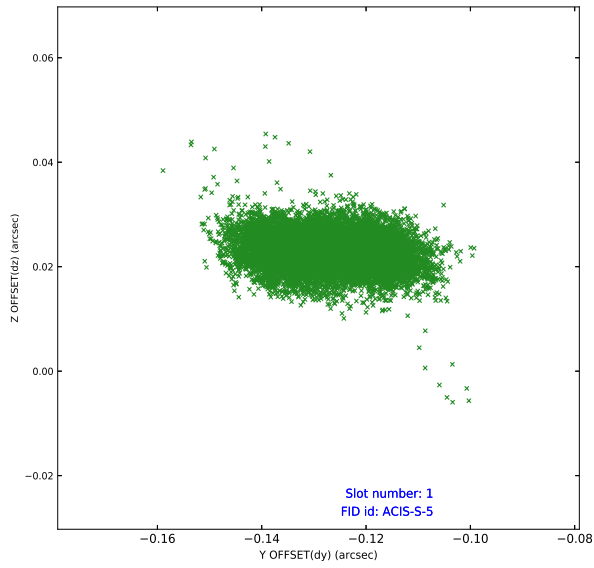
2.5.1 Slot 0



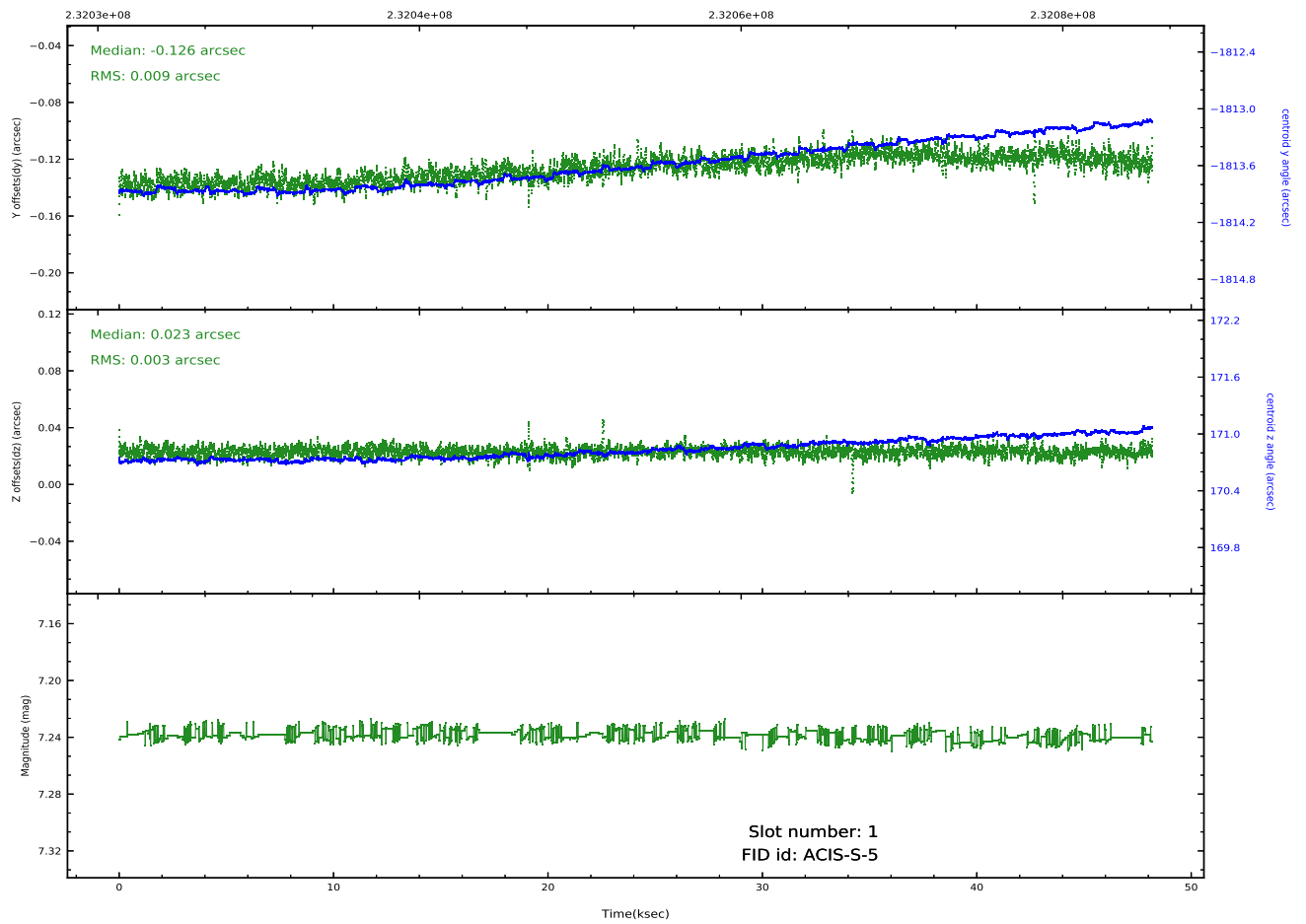
Time (s)



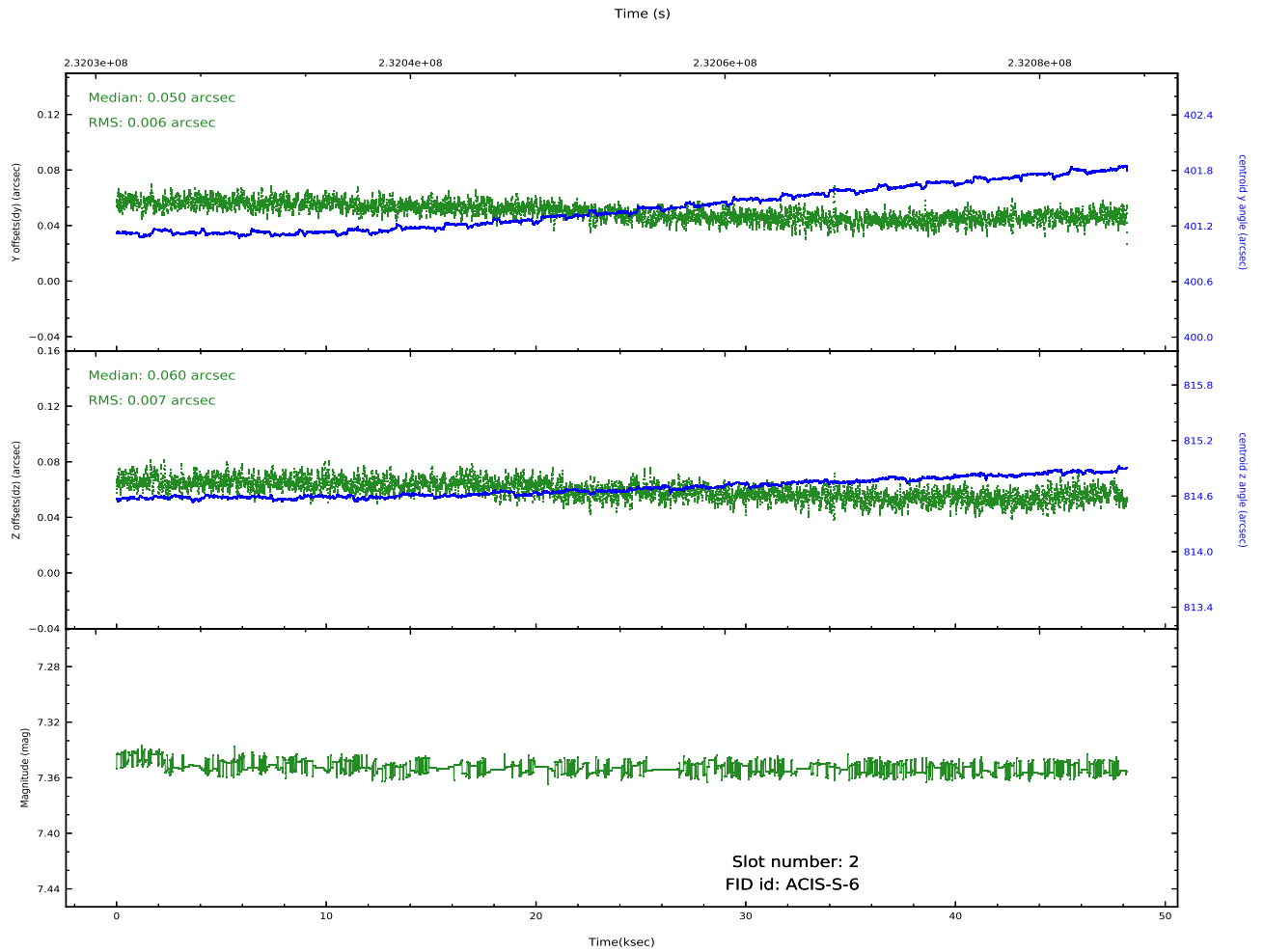
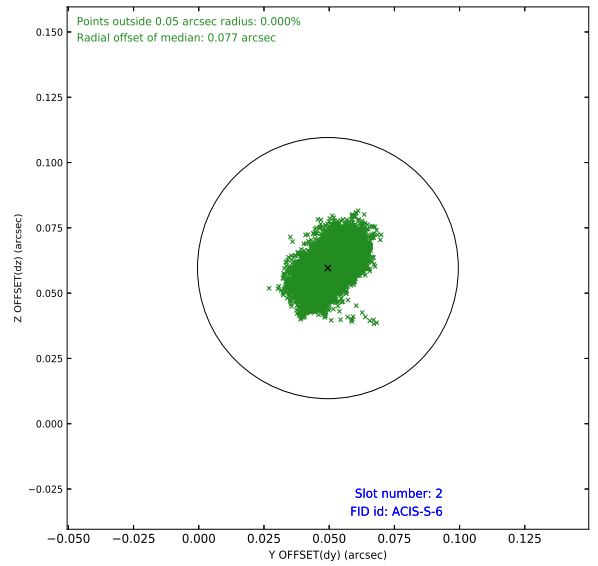
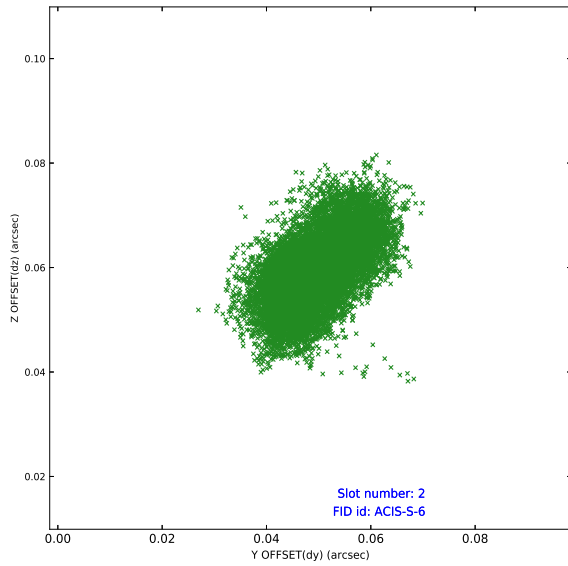
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.17395

A.2 Comments