

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6226 - L2 Version 4
Chandra X-Ray Center

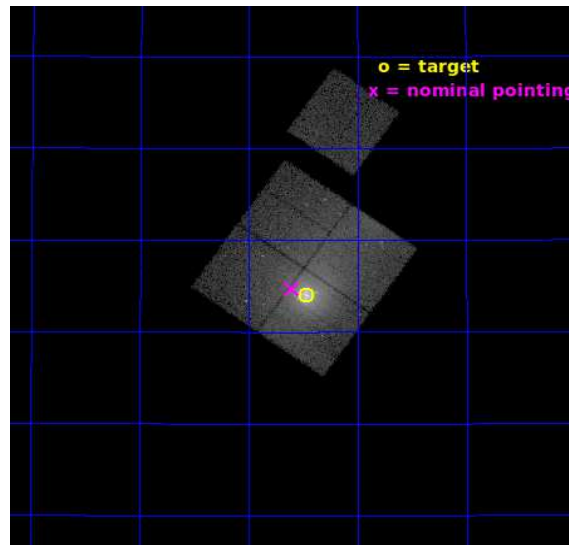
L2 Processing Date : Oct 6 2020

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1 Front

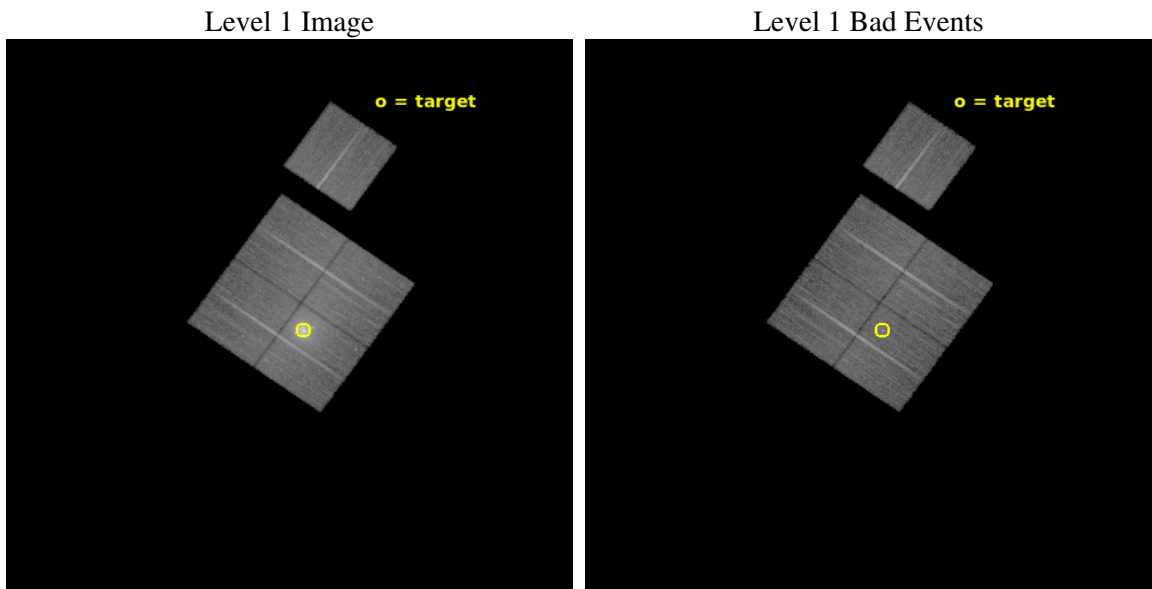
seq_num	800540	Sequence number
obs_id	6226	Observation id
title	Cygnus A --- Shock Heating of the Intra-Cluster Medium	Proposal ti
observer	Andrew Young	Principal investigator
object	Cygnus A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.867917	Observer's specified target RA [deg]
dec_targ	40.733889	Observer's specified target Dec [deg]
ra_nom	299.90106318396	Nominal RA [deg]
dec_nom	40.74539442487	Nominal Dec [deg]
roll_nom	35.184166025715	Nominal Roll [deg]
revision	4	Processing version of data
ontime	24148.877012938	Sum of GTIs [s]
livetime	23833.35415662	Livetime [s]
ontime0	24158.29995352	Sum of GTIs [s]
ontime1	24148.877012938	Sum of GTIs [s]
ontime2	24158.29995352	Sum of GTIs [s]
ontime3	24158.29995352	Sum of GTIs [s]
ontime6	24158.29995352	Sum of GTIs [s]
l2events	220503	Number of level 2 events



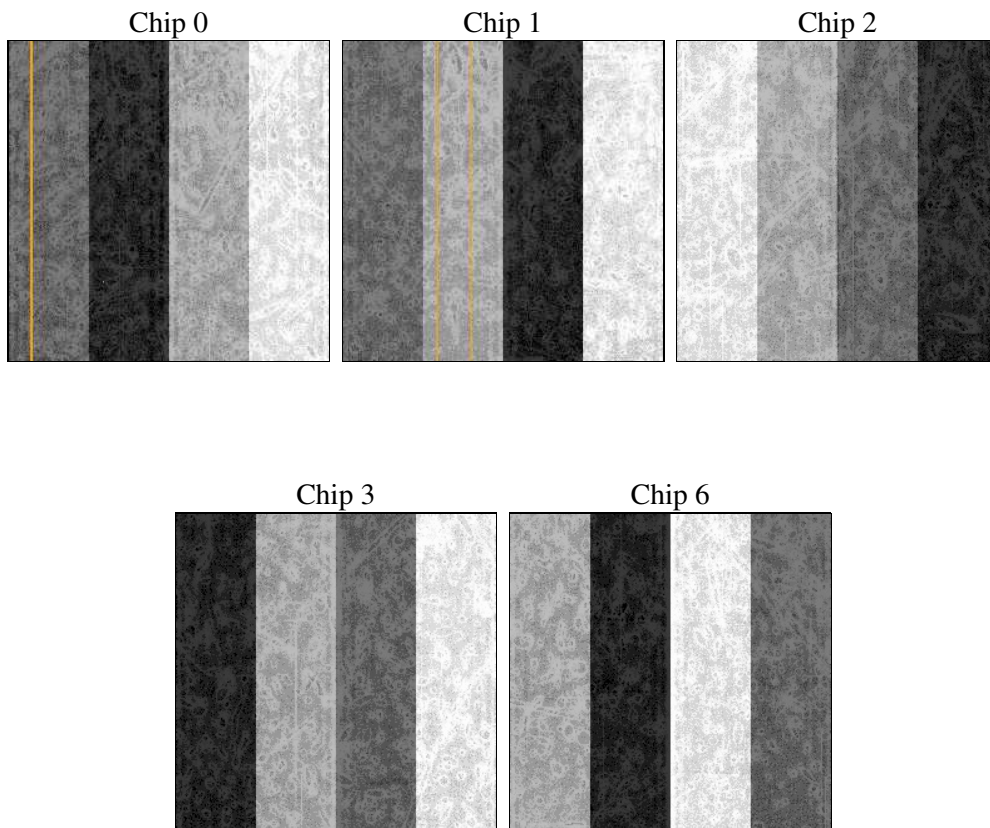
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	24148.877012938	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	24158.29995352	Sum of GTIs [s]
date	2020-10-06T21:46:21	Date and time of file creation	ontime1	24148.877012938	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	24158.29995352	Sum of GTIs [s]
			ontime3	24158.29995352	Sum of GTIs [s]
			ontime6	24158.29995352	Sum of GTIs [s]
			l1events	937513	Number of level 1 events

2.1.4 Events

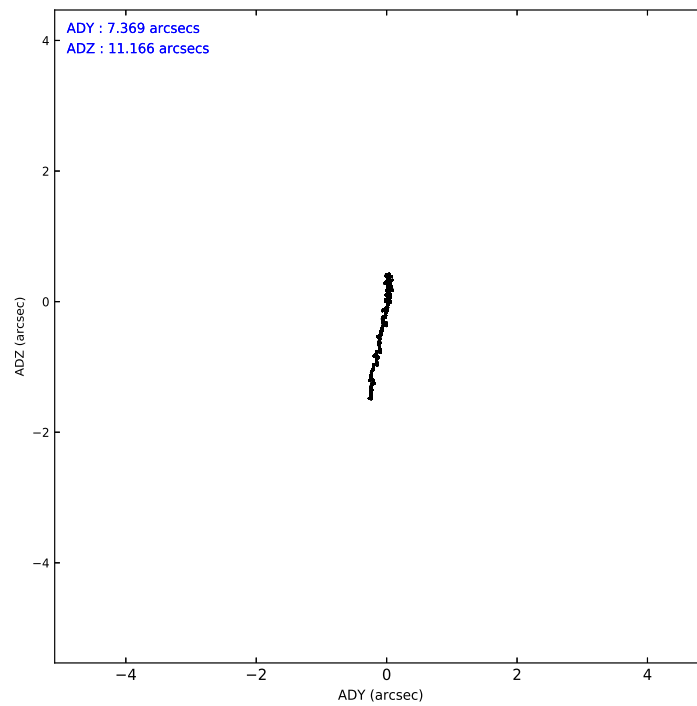
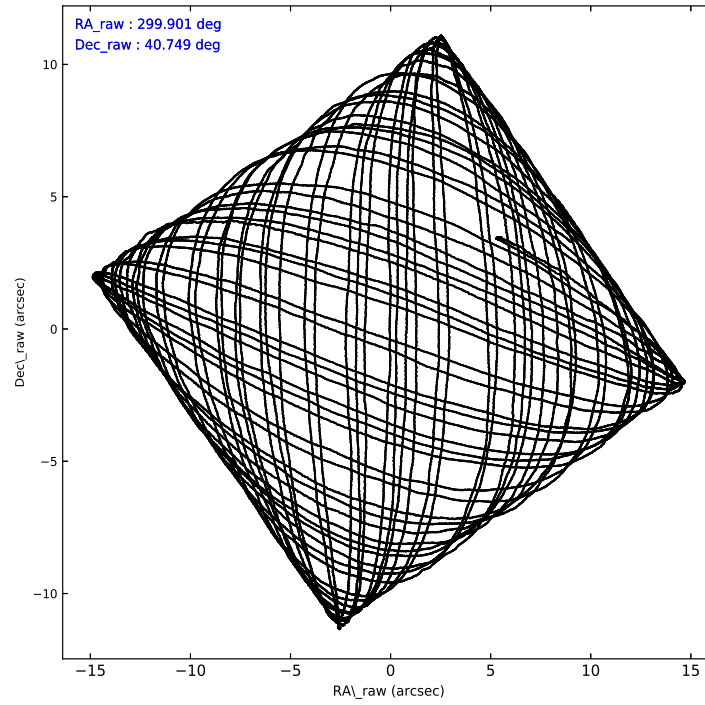
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	159470	263938	173530	183376	157199
rejected events	130285	137039	144900	141942	140018
rejected %	81%	51%	83%	77%	89%

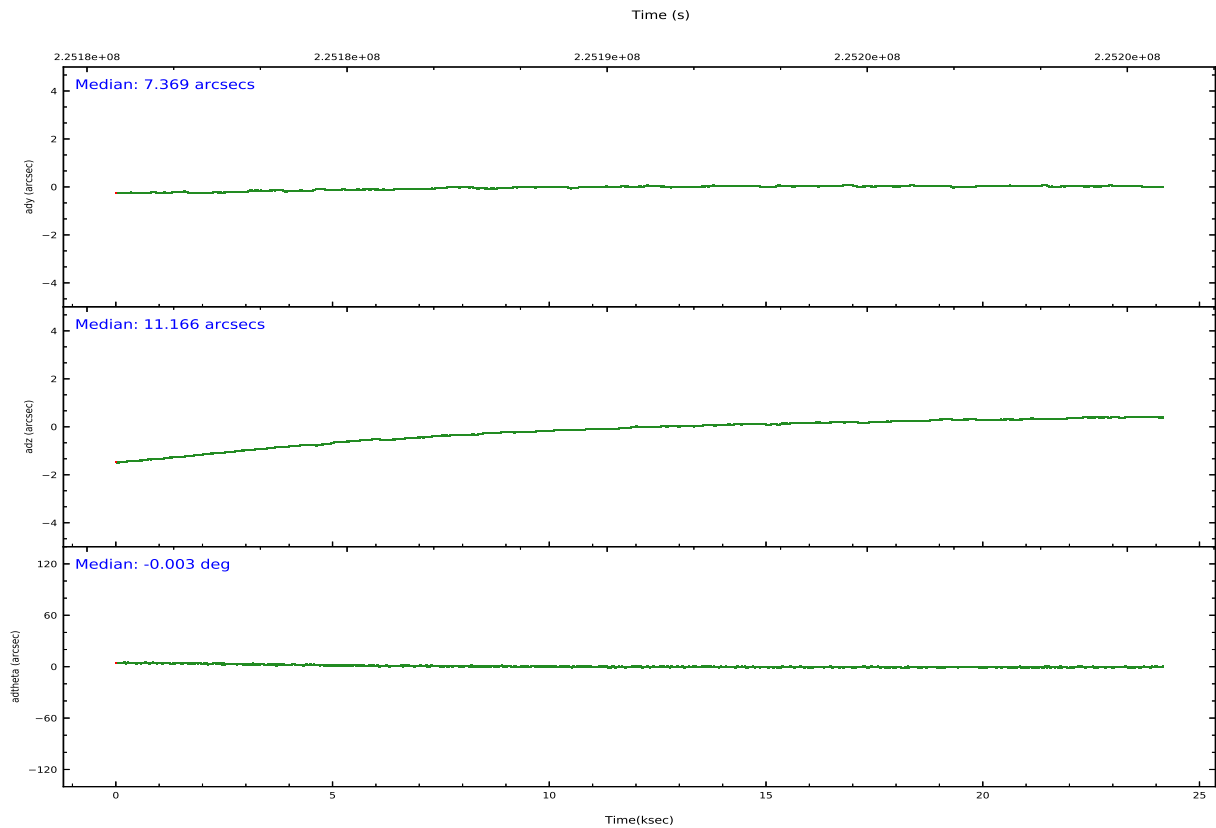
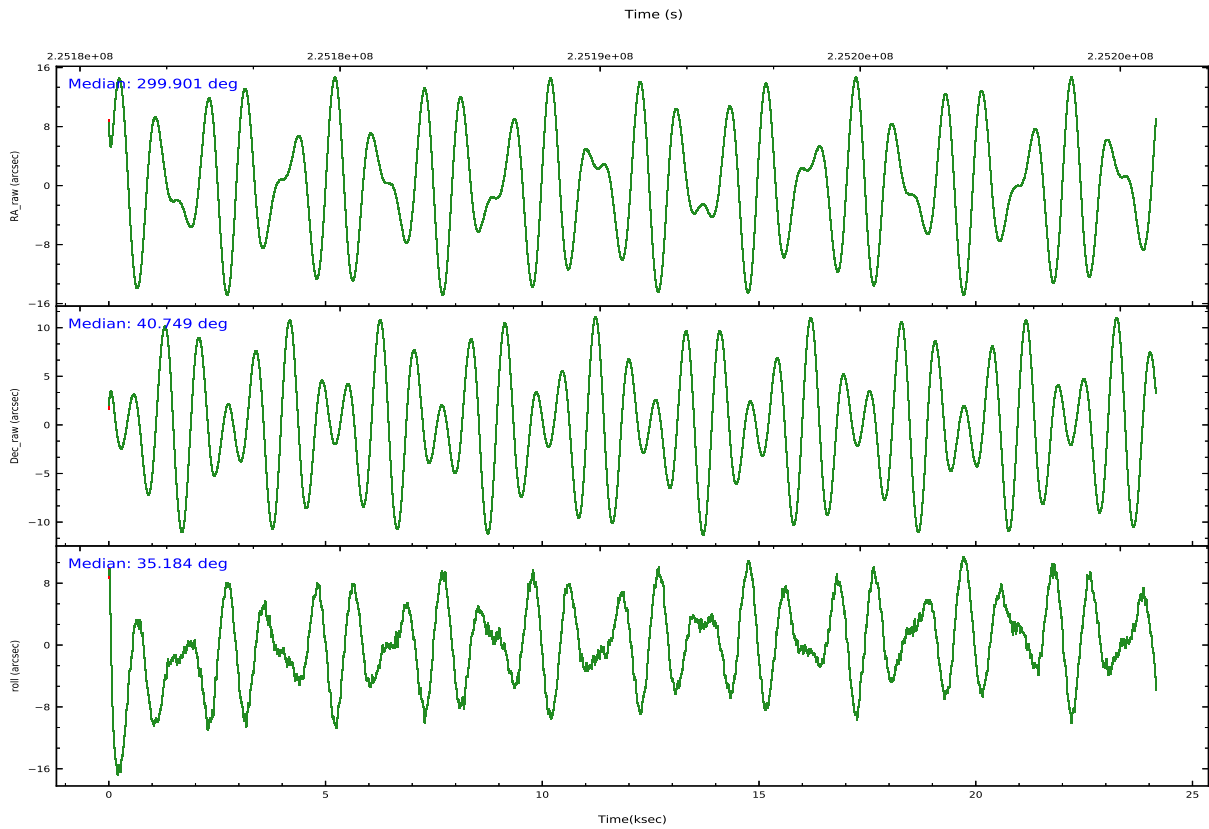
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	17252	92910	16850	27546	7490
	10%	35%	9%	15%	4%
grade 1 events	134	818	133	207	75
	0%	0%	0%	0%	0%
grade 2 events	5368	16627	5279	6017	3671
	3%	6%	3%	3%	2%
grade 3 events	2363	5804	2129	2573	1821
	1%	2%	1%	1%	1%
grade 4 events	2133	5702	2211	2687	1759
	1%	2%	1%	1%	1%
grade 5 events	5561	6694	5195	6213	5993
	3%	2%	2%	3%	3%
grade 6 events	3422	7681	3361	3751	3508
	2%	2%	1%	2%	2%
grade 7 events	123237	127702	138372	134382	132882
	77%	48%	79%	73%	84%

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	299.885900	299.90106318396	Subarray requested	NONE	NONE
[deg] Pointing Dec	40.724309	40.74539442487	Alternating exposures requested	N	N
[deg] Pointing Roll	34.988265	35.184166025715	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-242.392463	-242.3975952774949			
[mm] SIM translation stage offset	8.800000000000001	8.805142274565242			
[s] Observation start time (MET)	225178827.184000	225177032.77904			
Observation start date	2005-02-19T05:39:23	2005-02-19T05:10:32			
[s] Observation end time (MET)	225202827.184000	225203764.26775			
Observation end date	2005-02-19T12:19:23	2005-02-19T12:36:04			
Read mode	TIMED	TIMED			

2.3 Aspect



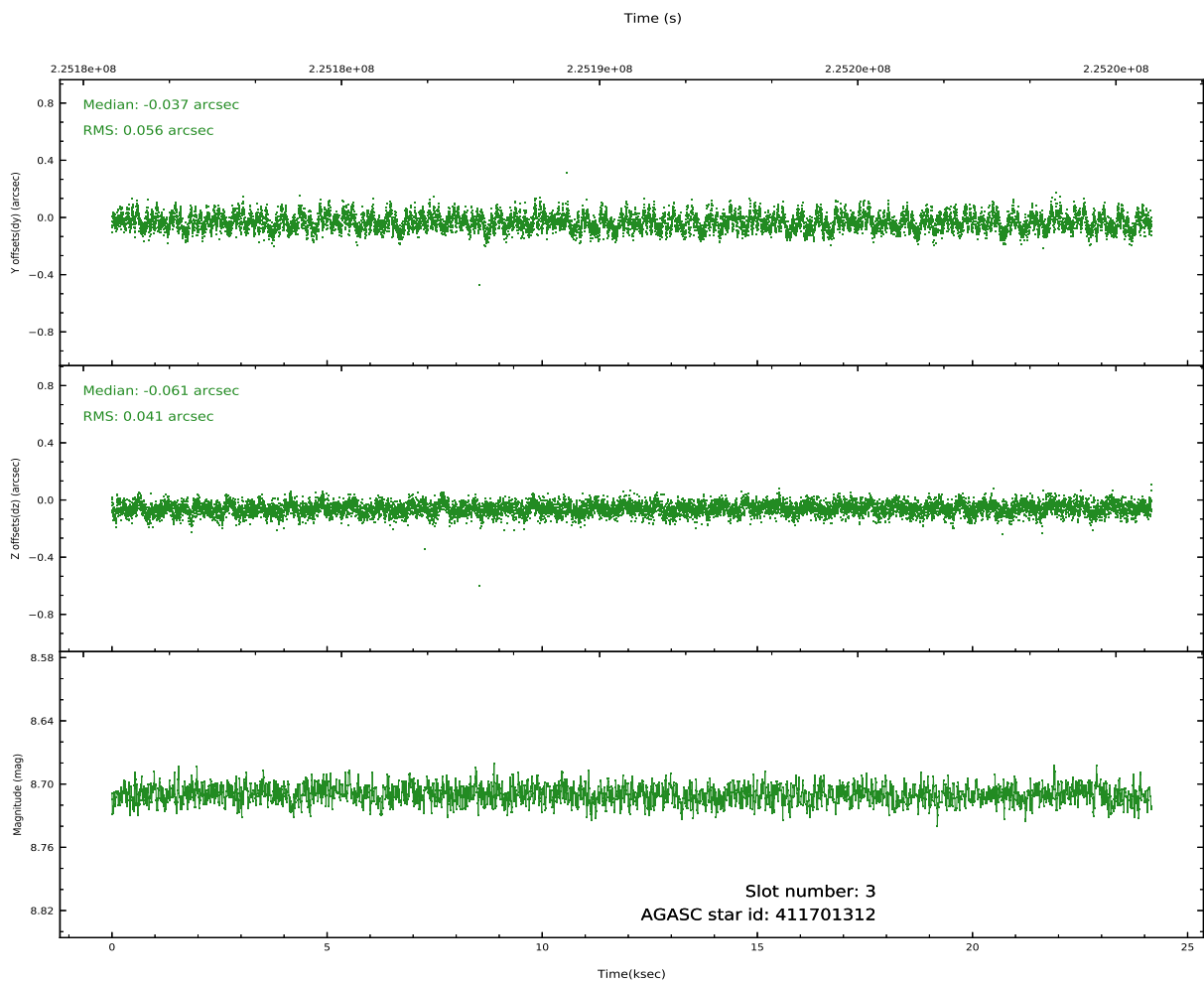
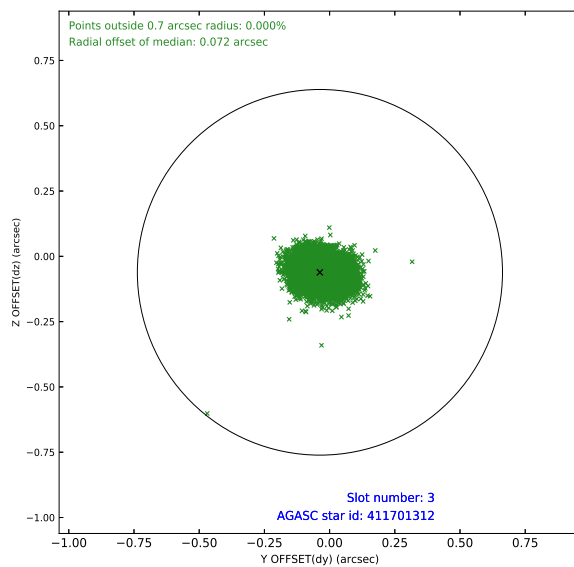
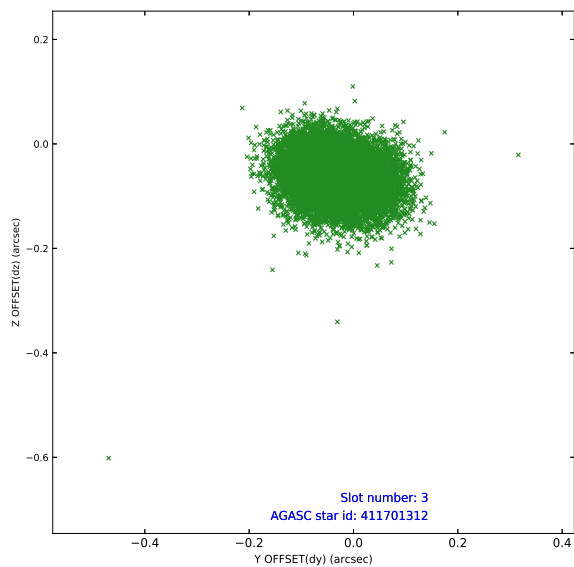


Slot Statistics

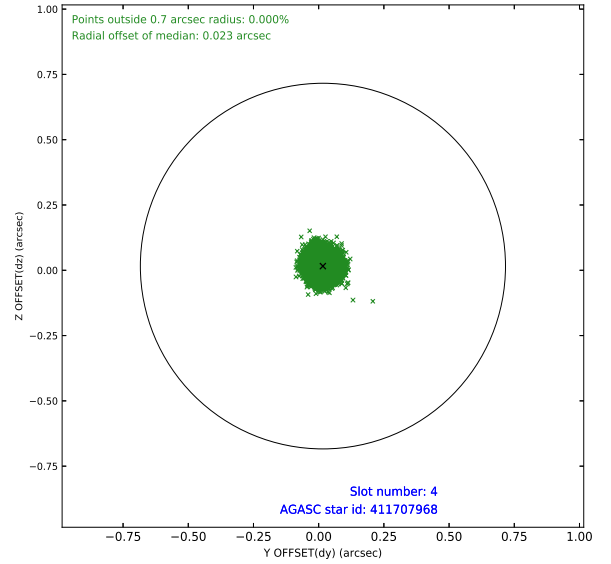
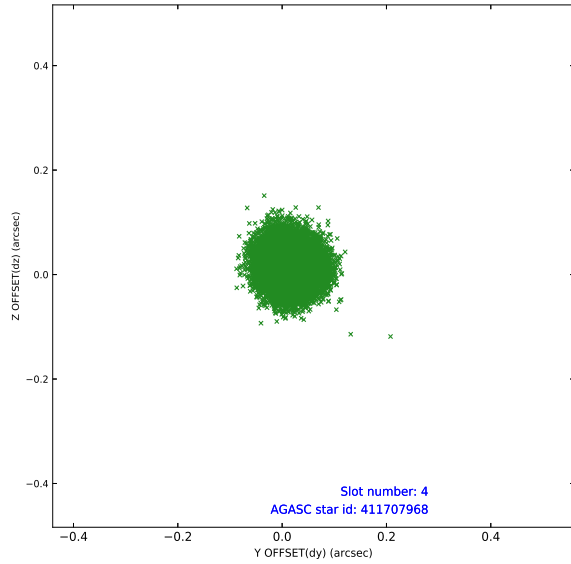
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.28	5894	1.000	-0.035	0.089	0.011	0.042	0.000000	0.000000	932.48	-653
1	FID		ACIS-I-5	7.24	5893	1.000	-0.142	0.003	0.008	0.014	0.000000	0.000000	-1815.69	1243
2	FID		ACIS-I-6	7.23	5893	1.000	0.085	-0.021	0.010	0.033	0.000000	0.000000	397.97	1888
3	GUIDE	used	411701312	8.71	11780	1.000	-0.037	-0.061	0.074	0.120	298.889956	40.820220	-2016.08	1851
4	GUIDE	used	411707968	7.25	11787	1.000	0.016	0.016	0.050	0.076	299.509933	40.926839	-418.48	1185
5	GUIDE	used	413421016	8.71	11778	1.000	-0.076	0.095	0.065	0.107	300.612426	40.446254	1061.64	-1954
6	GUIDE	used	413405352	8.36	11783	1.000	0.058	-0.129	0.062	0.098	300.290830	41.091941	1660.72	456
7	GUIDE	used	413421624	8.71	11782	1.000	0.036	0.081	0.064	0.106	300.399768	40.893051	1496.81	-300

2.4 Star Slots

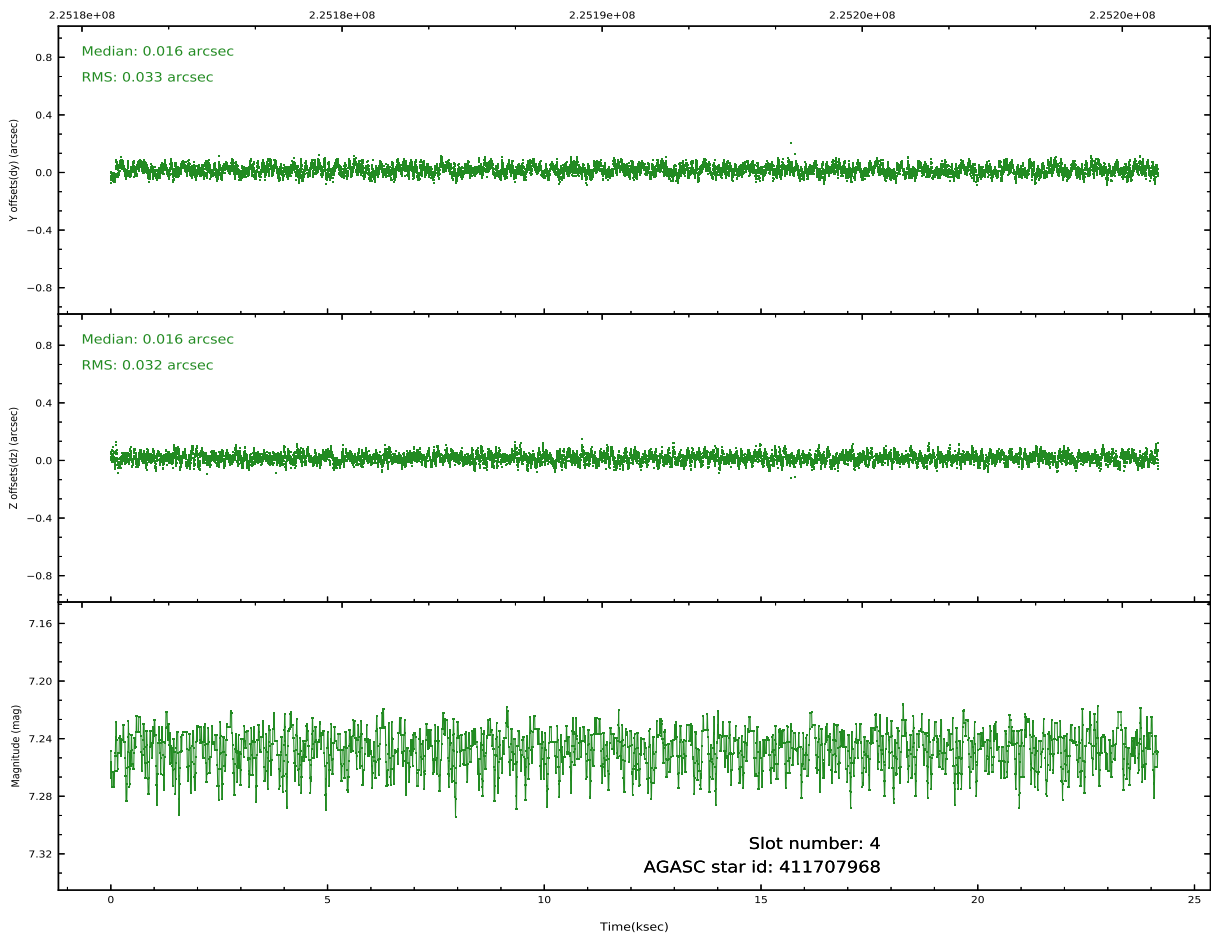
2.4.1 Slot 3



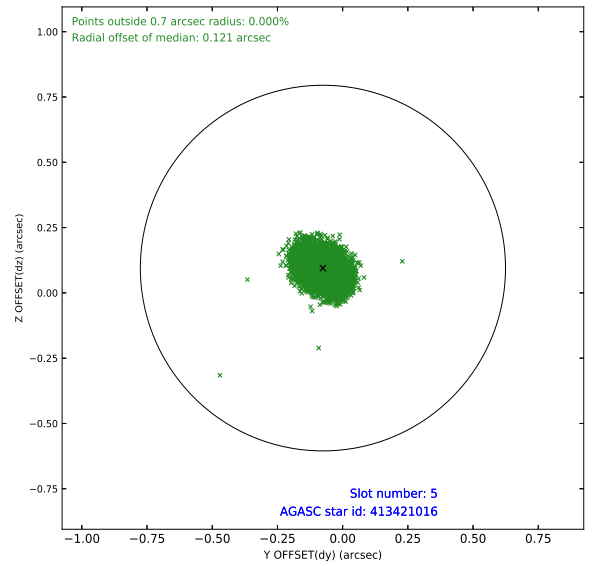
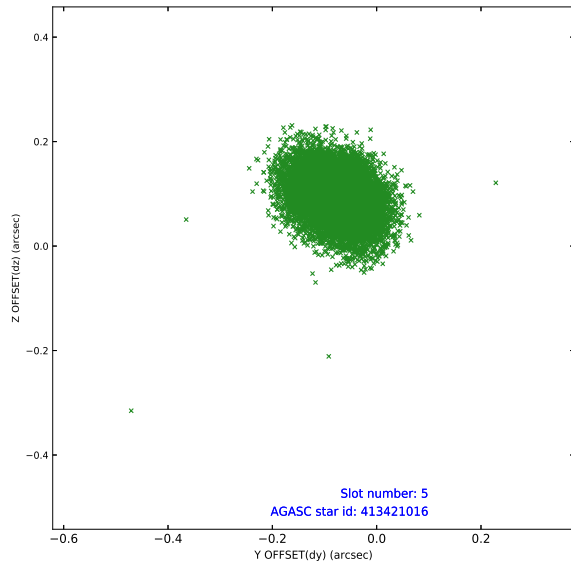
2.4.2 Slot 4



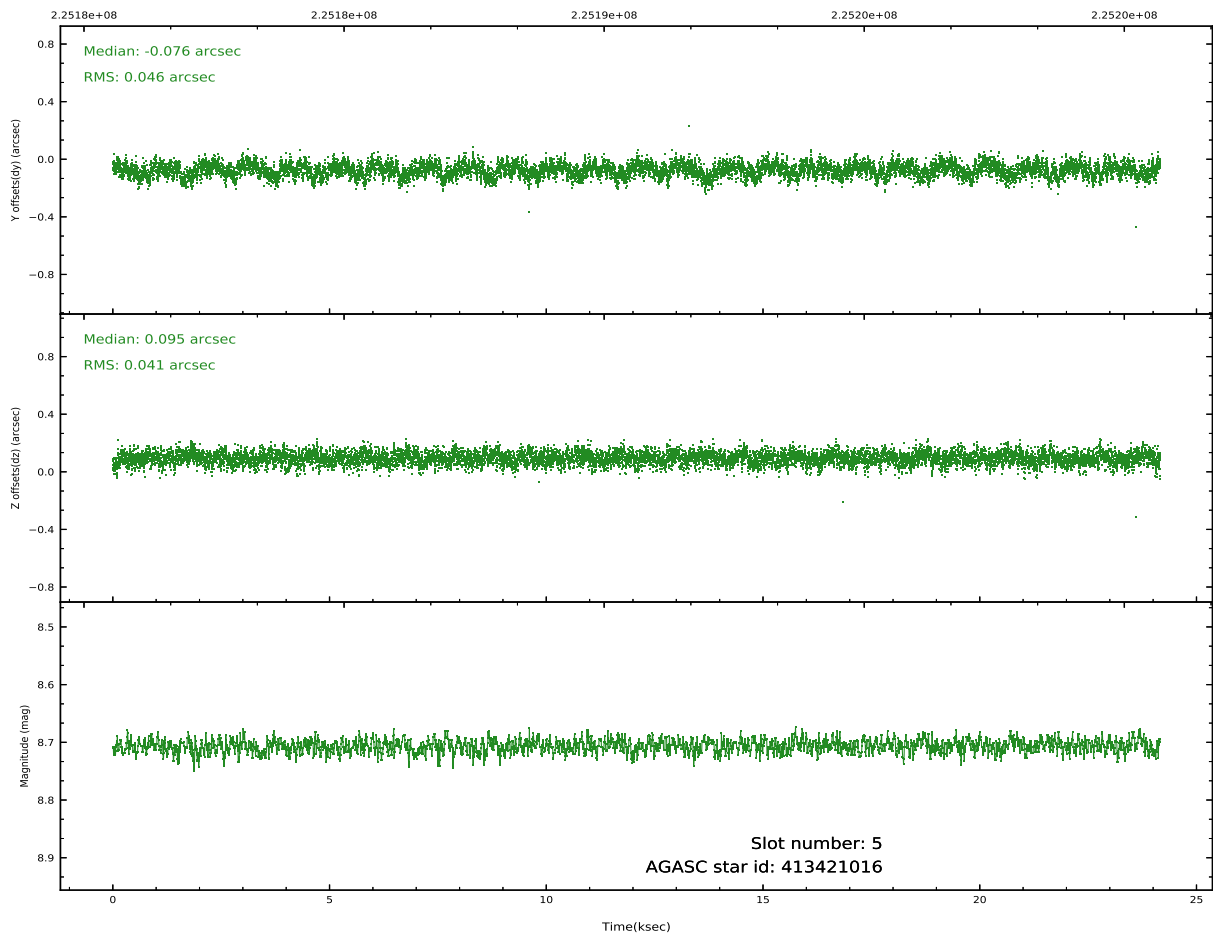
Time (s)



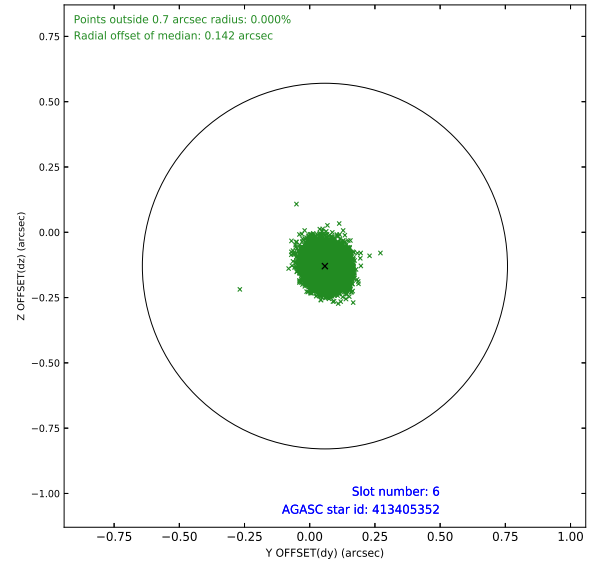
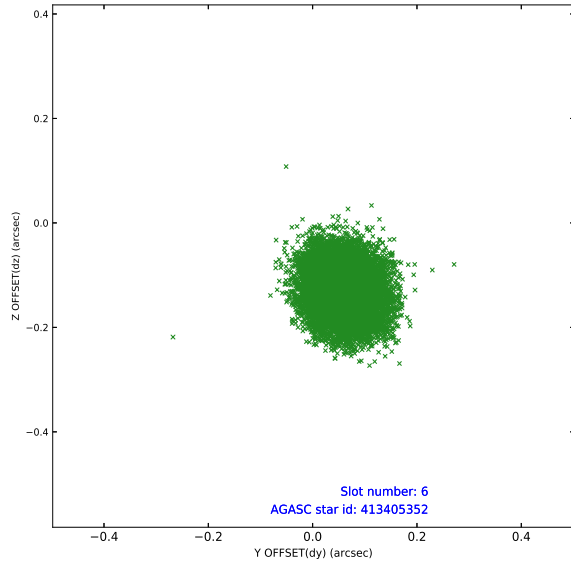
2.4.3 Slot 5



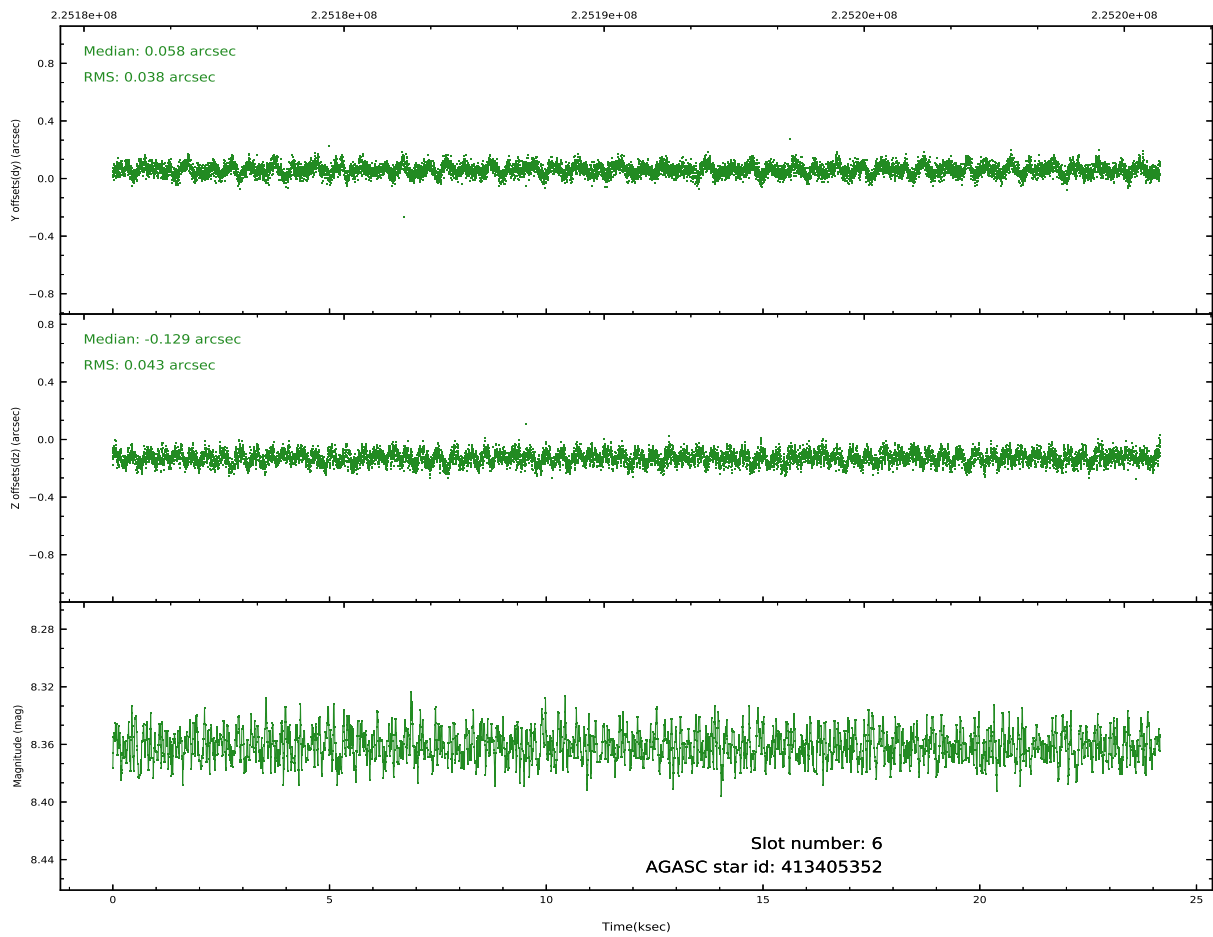
Time (s)



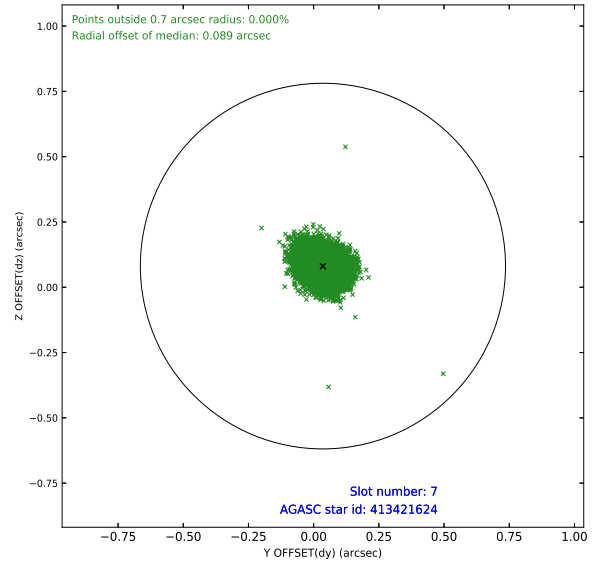
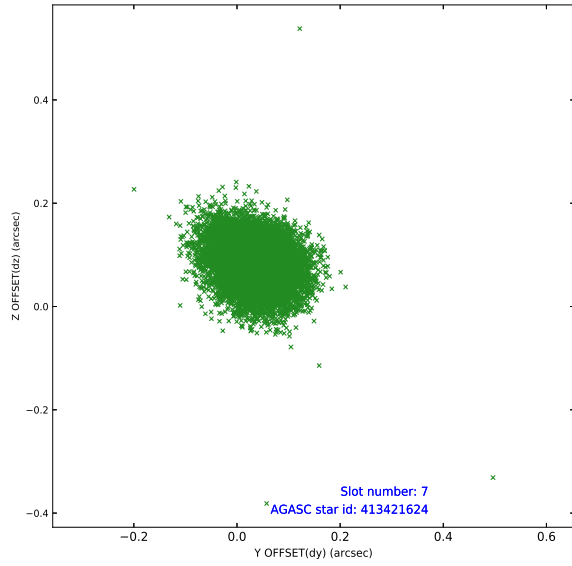
2.4.4 Slot 6



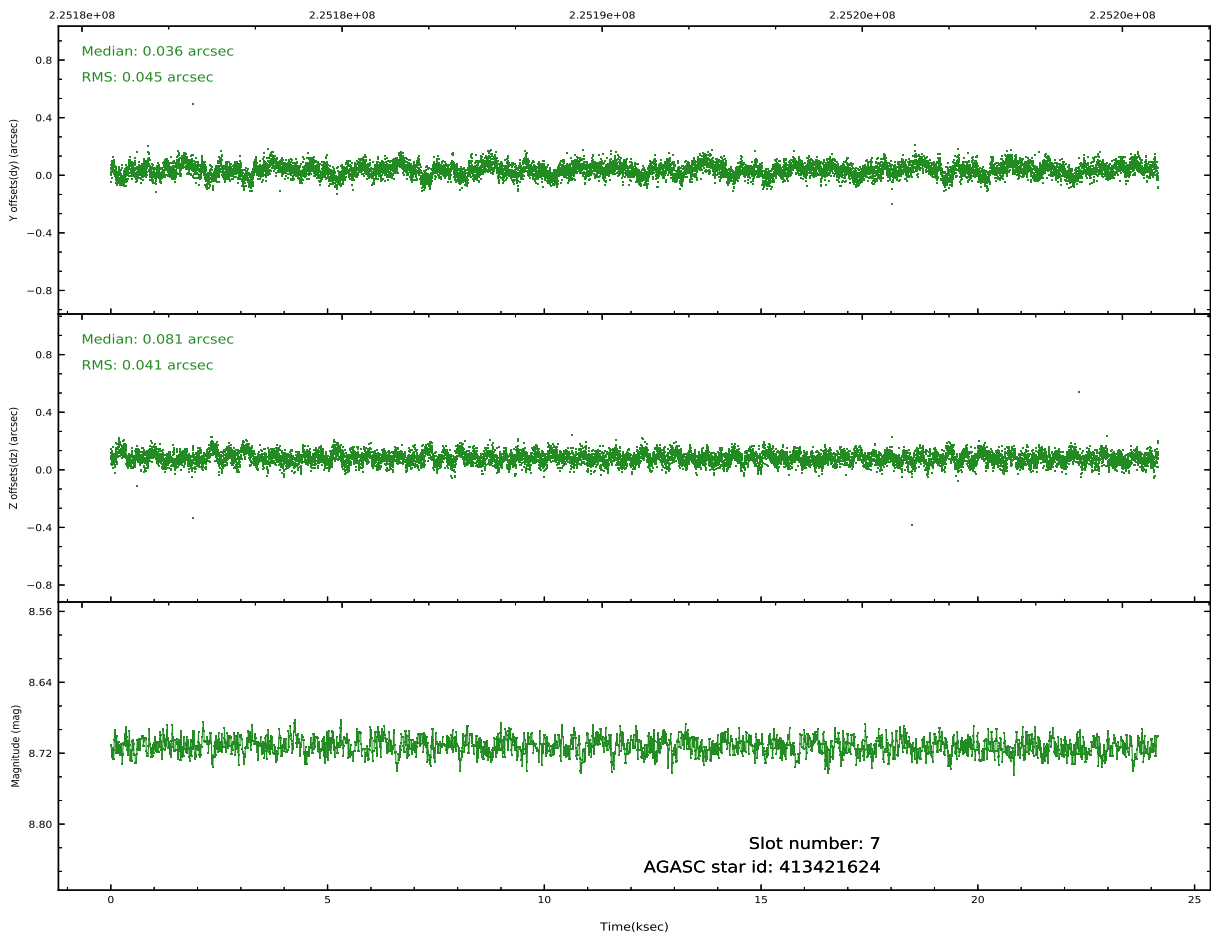
Time (s)



2.4.5 Slot 7

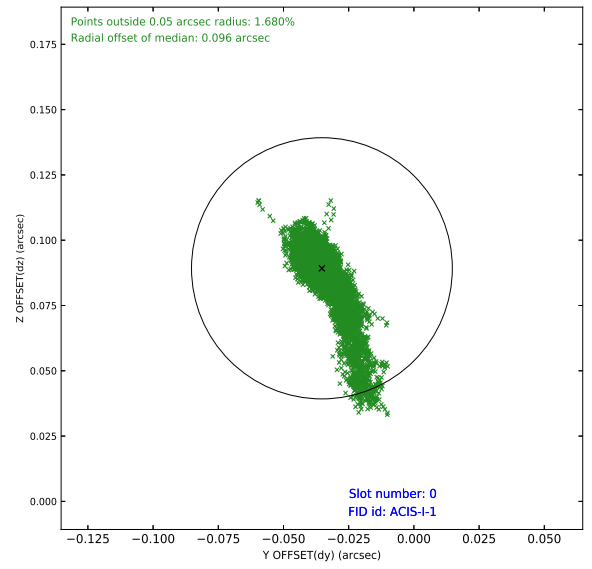
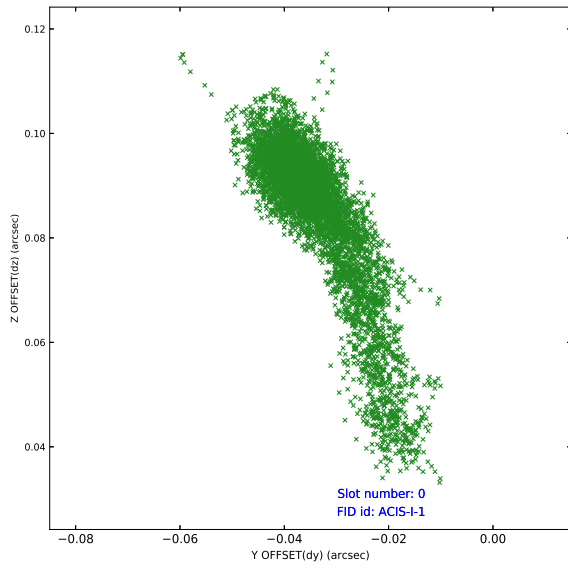


Time (s)

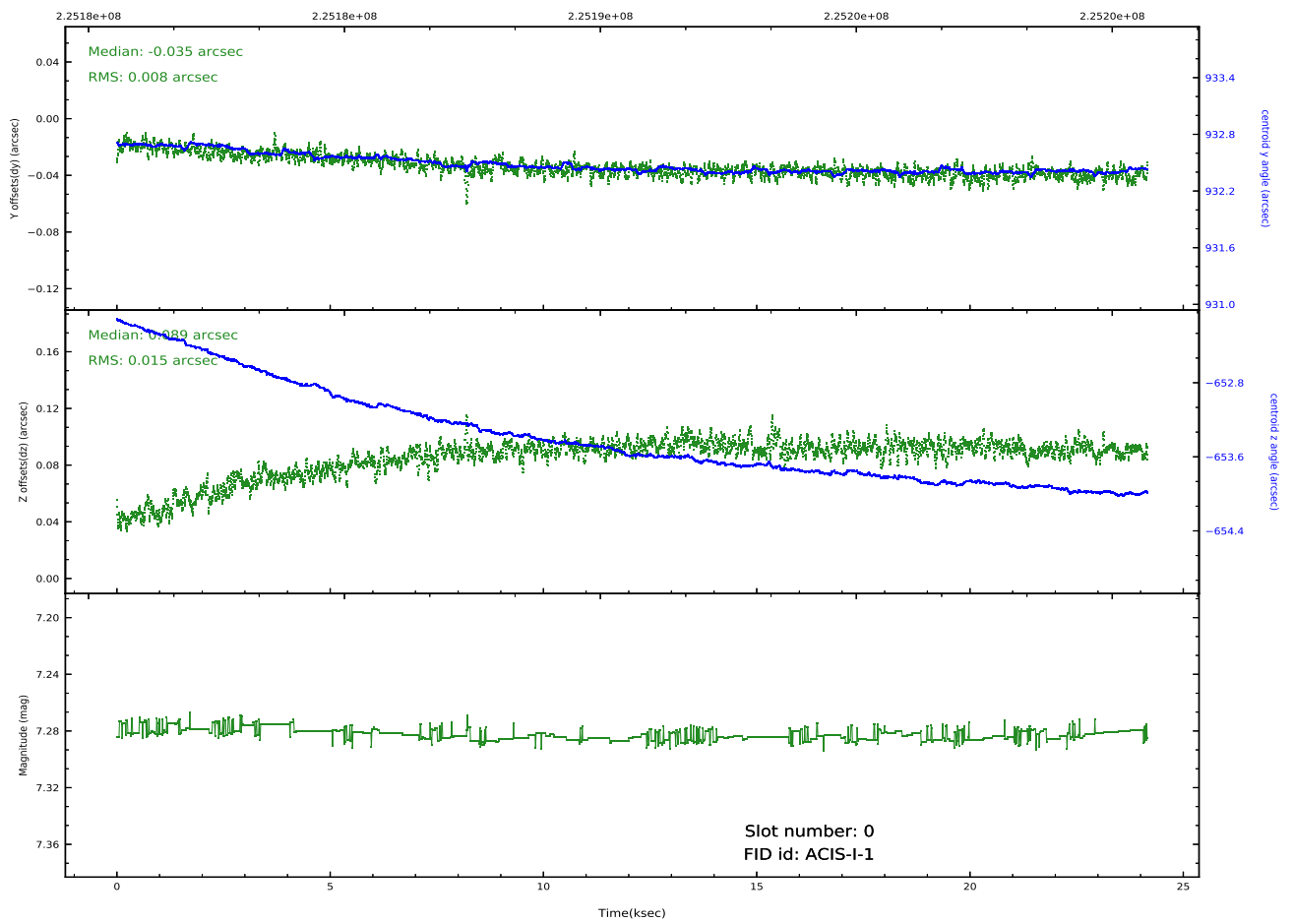


2.5 FID Slots

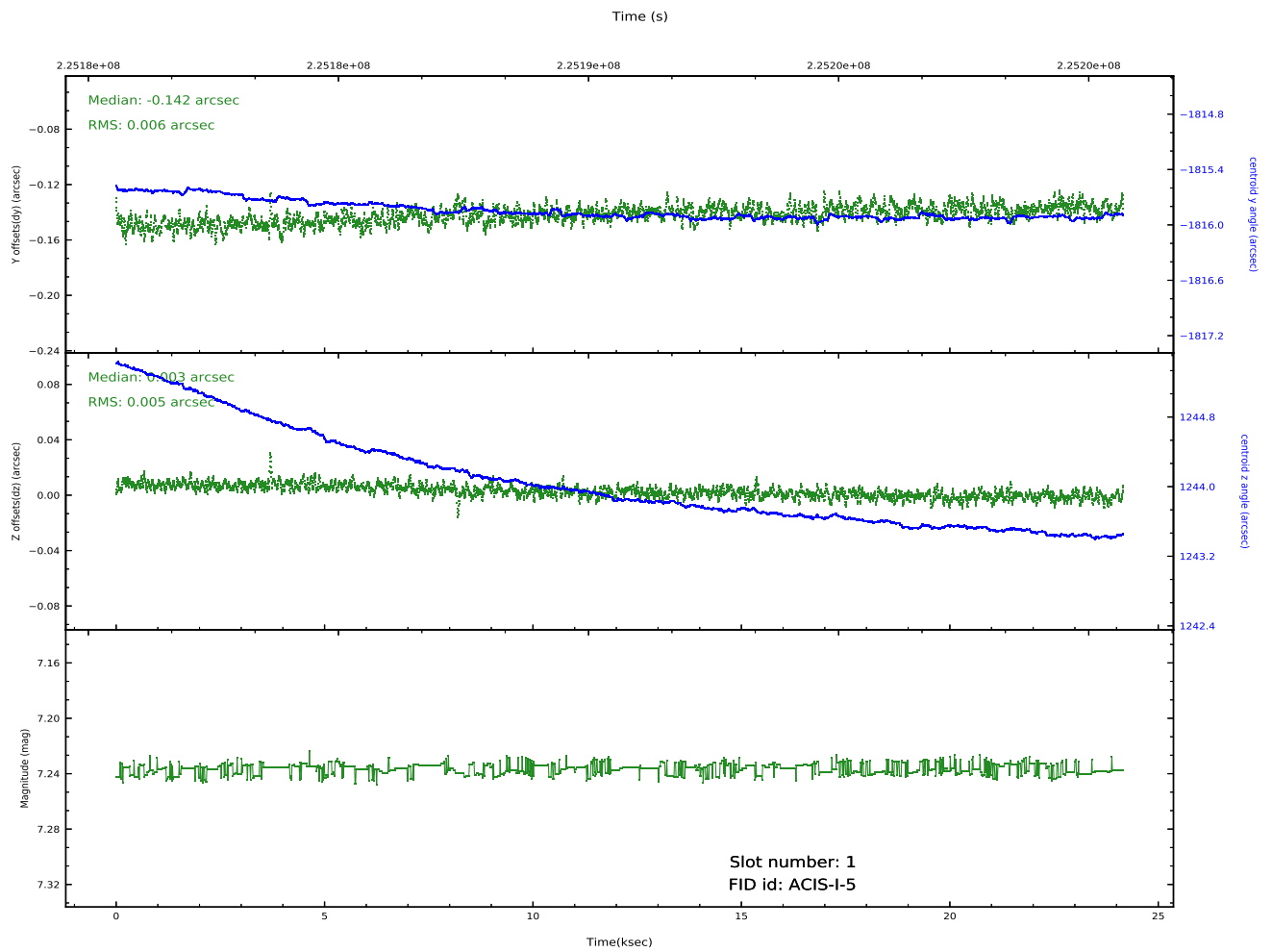
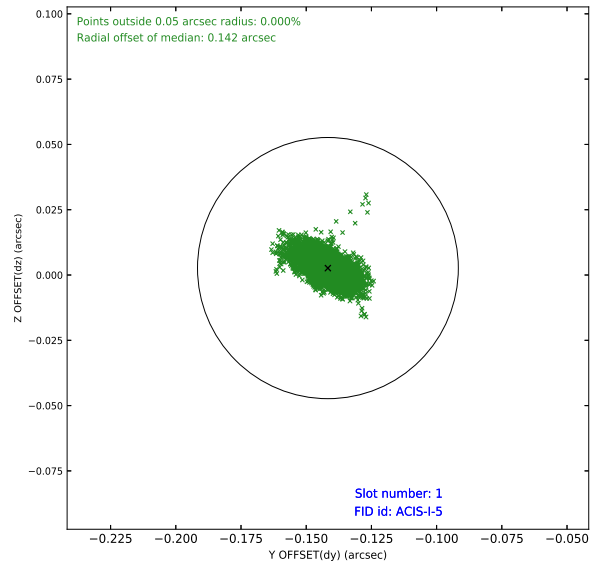
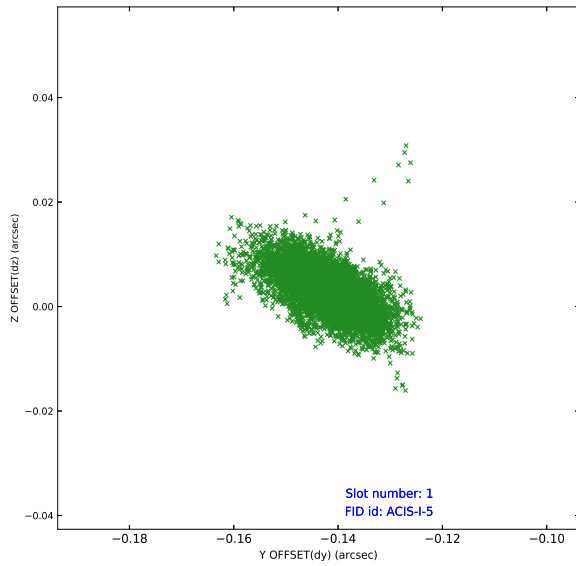
2.5.1 Slot 0



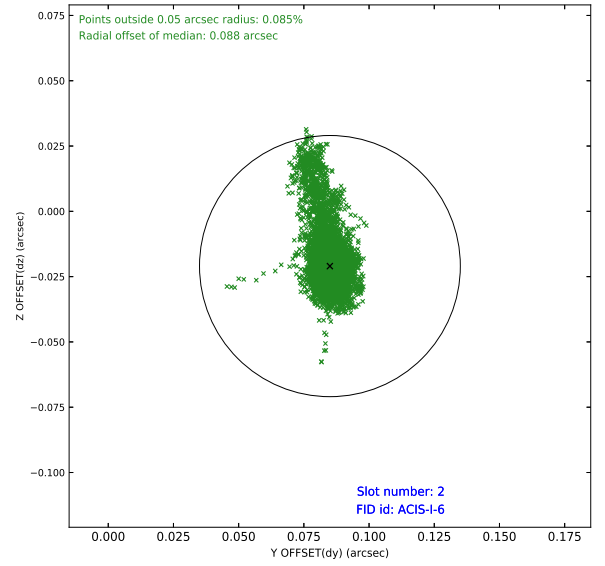
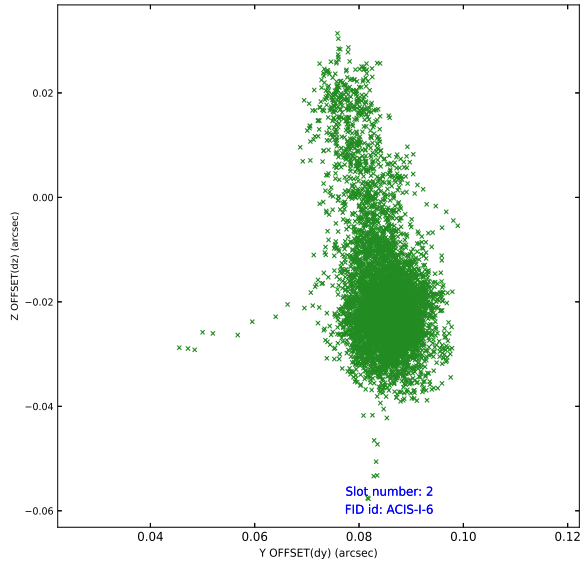
Time (s)



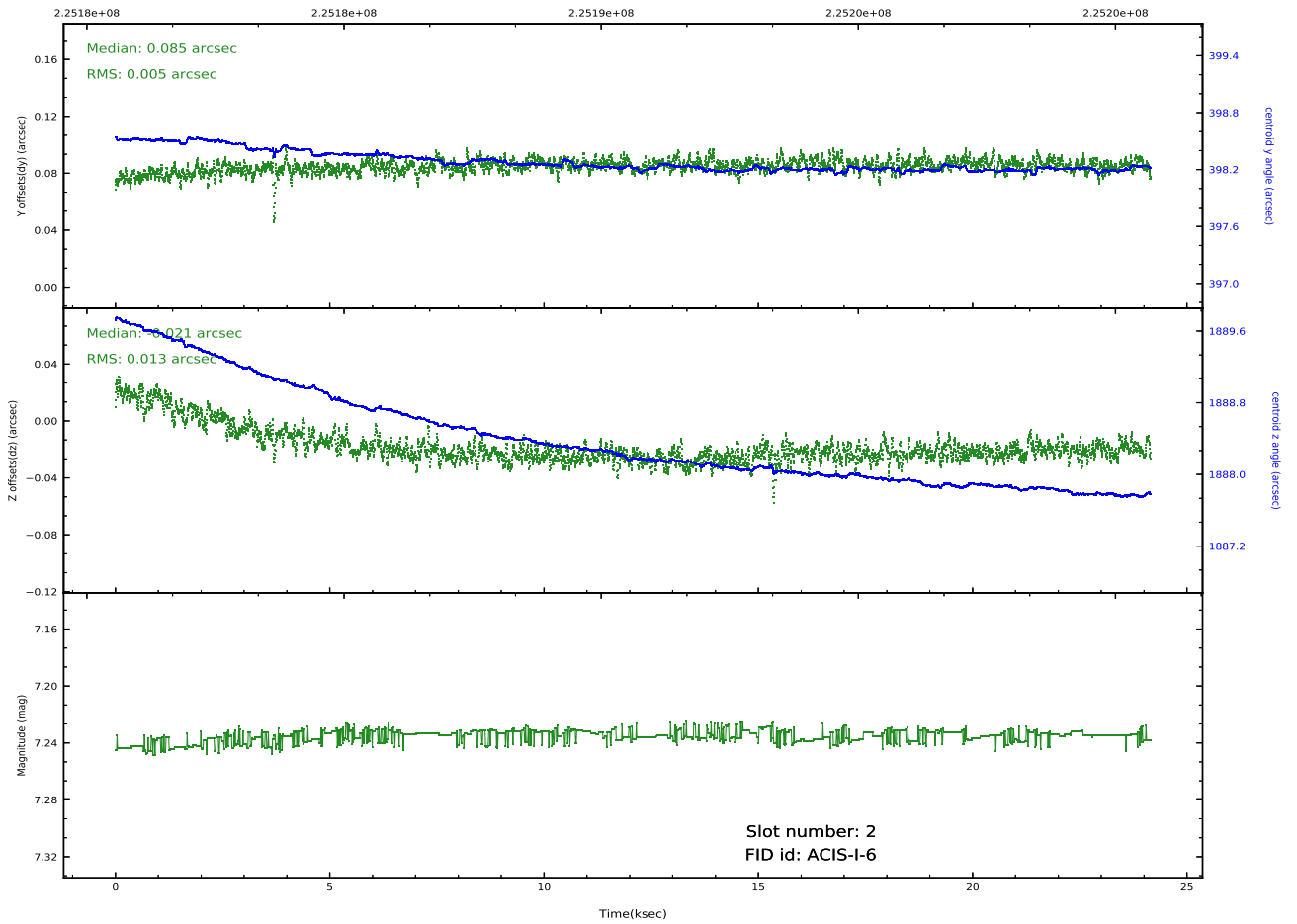
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.14887

A.2 Comments