

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6250 - L2 Version 4
Chandra X-Ray Center

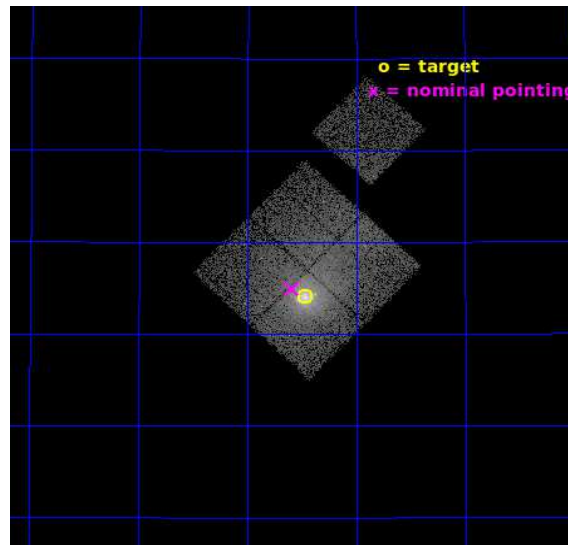
L2 Processing Date : Oct 6 2020

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1 Front

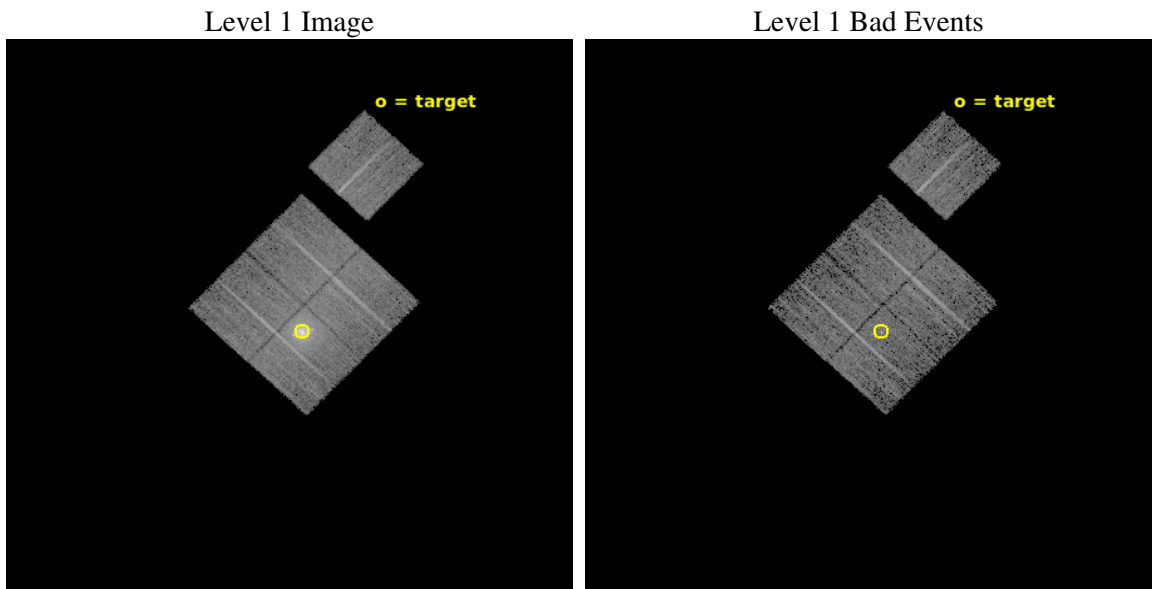
seq_num	800540	Sequence number
obs_id	6250	Observation id
title	Cygnus A --- Shock Heating of the Intra-Cluster Medium	Proposal ti
observer	Andrew Young	Principal investigator
object	Cygnus A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.867917	Observer's specified target RA [deg]
dec_targ	40.733889	Observer's specified target Dec [deg]
ra_nom	299.89823417608	Nominal RA [deg]
dec_nom	40.749127996006	Nominal Dec [deg]
roll_nom	43.682951539801	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7049.3589962721	Sum of GTIs [s]
livetime	6957.2539313232	Livetime [s]
ontime0	7052.4999864101	Sum of GTIs [s]
ontime1	7049.3589962721	Sum of GTIs [s]
ontime2	7052.4999864101	Sum of GTIs [s]
ontime3	7049.3590261638	Sum of GTIs [s]
ontime6	7052.4999864101	Sum of GTIs [s]
l2events	64369	Number of level 2 events



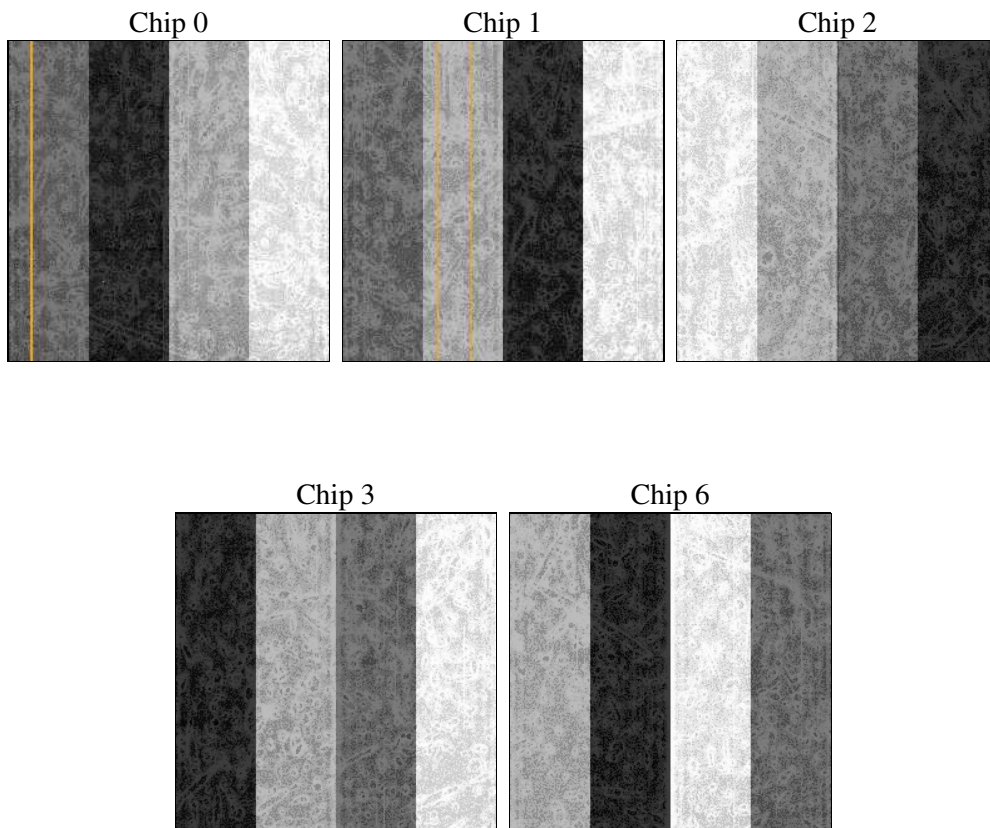
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	7049.3589962721	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	7052.4999864101	Sum of GTIs [s]
date	2020-10-06T21:55:16	Date and time of file creation	ontime1	7049.3589962721	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	7052.4999864101	Sum of GTIs [s]
			ontime3	7049.3590261638	Sum of GTIs [s]
			ontime6	7052.4999864101	Sum of GTIs [s]
			l1events	252334	Number of level 1 events

2.1.4 Events

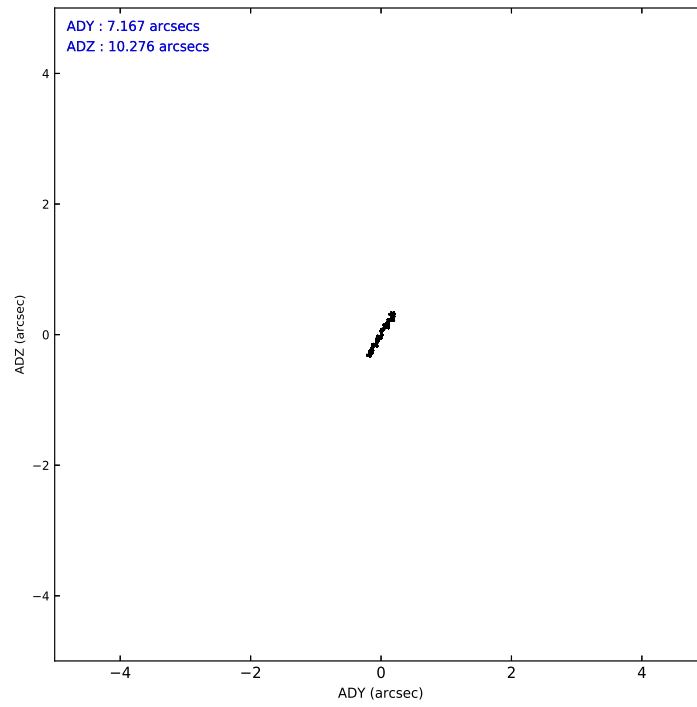
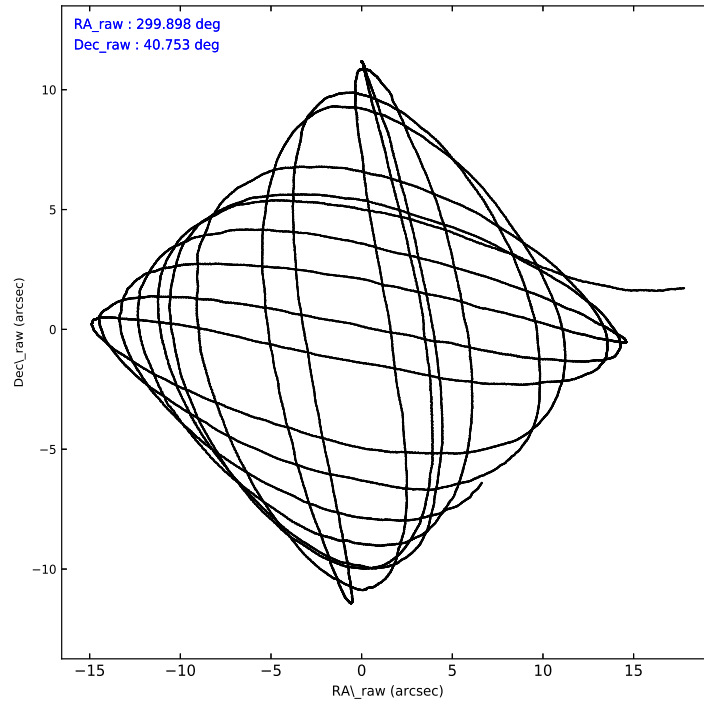
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	43317	73098	45074	48579	42266
rejected events	34771	35925	36329	37300	37221
rejected %	80%	49%	80%	76%	88%

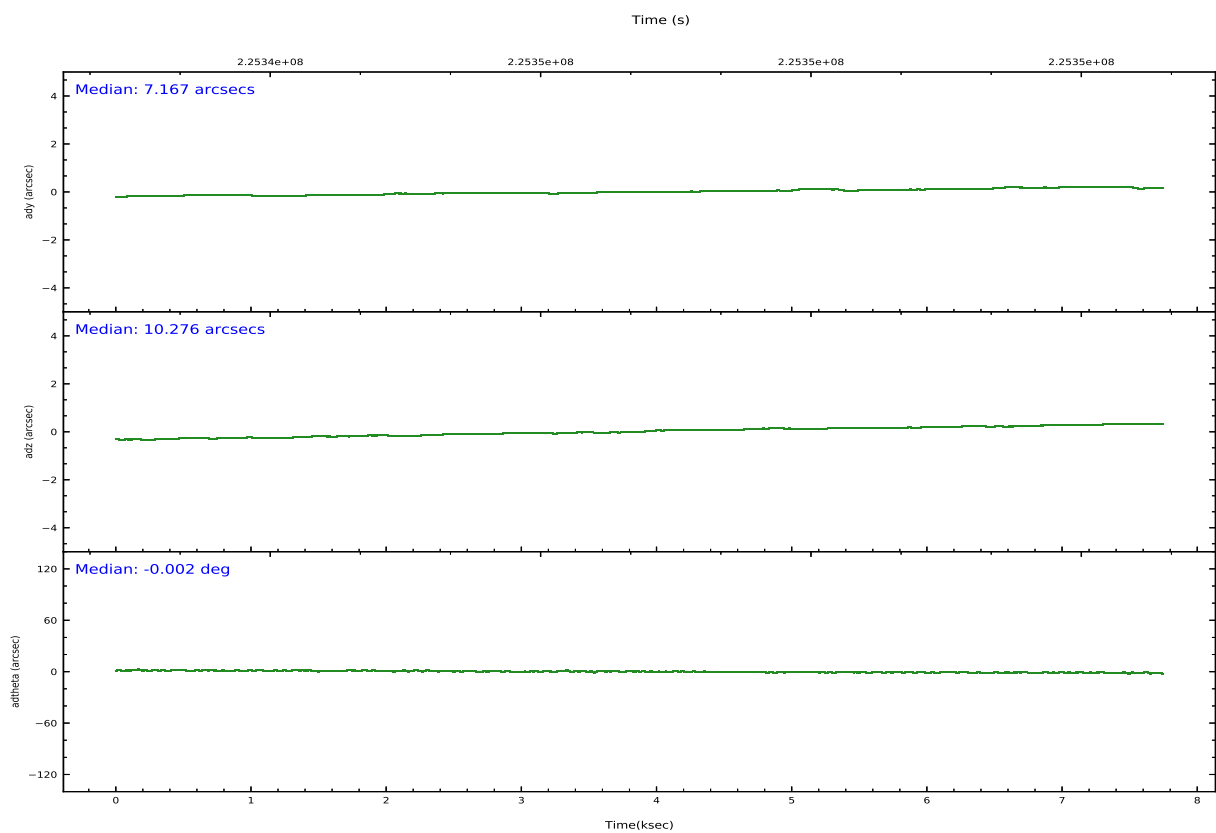
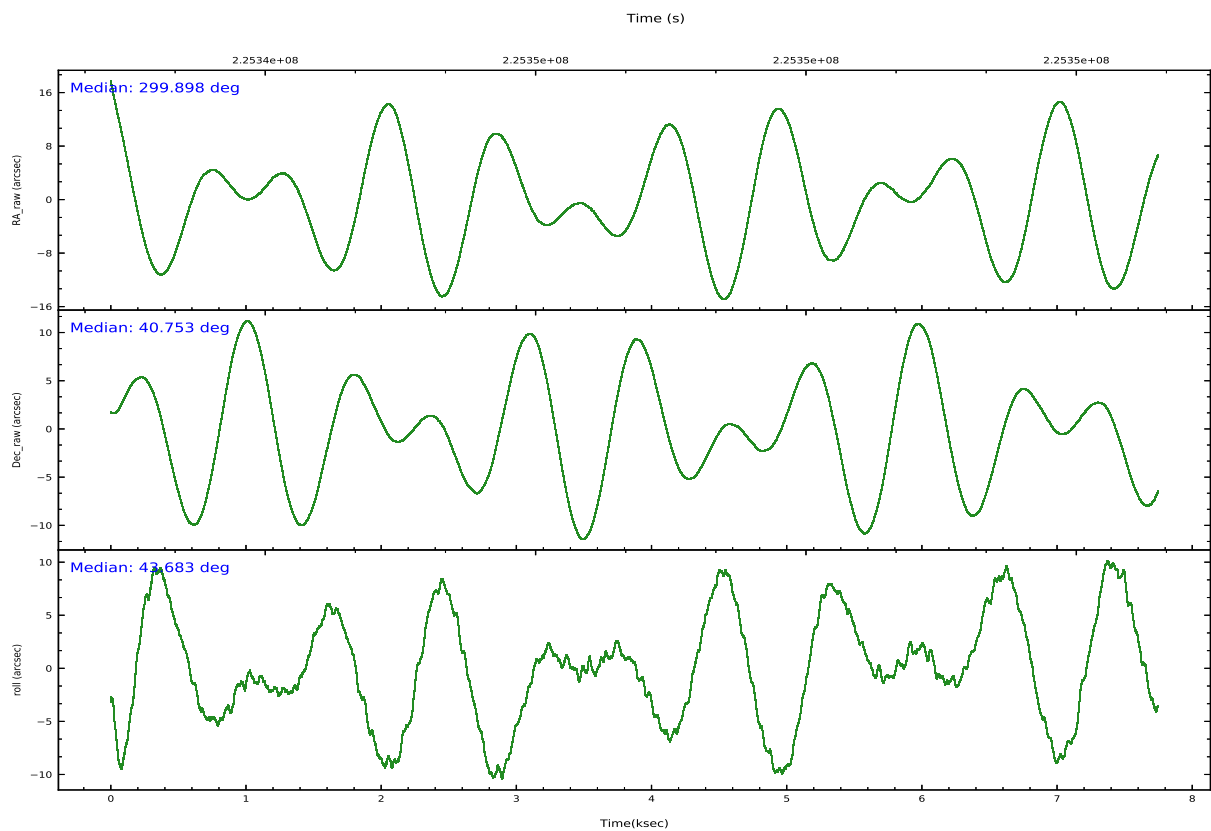
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4905	26943	5210	7191	2149
	11%	36%	11%	14%	5%
grade 1 events	39	211	34	50	15
	0%	0%	0%	0%	0%
grade 2 events	1447	4722	1403	1637	974
	3%	6%	3%	3%	2%
grade 3 events	681	1696	612	681	492
	1%	2%	1%	1%	1%
grade 4 events	568	1663	579	716	495
	1%	2%	1%	1%	1%
grade 5 events	1552	1775	1494	1743	1696
	3%	2%	3%	3%	4%
grade 6 events	954	2160	942	1058	935
	2%	2%	2%	2%	2%
grade 7 events	33171	33928	34800	35503	35510
	76%	46%	77%	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	299.887572	299.89823417608	Subarray requested	NONE	NONE
[deg] Pointing Dec	40.726424	40.749127996006	Alternating exposures requested	N	N
[deg] Pointing Roll	43.487167	43.682951539801	[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	8.8000000000000001	8.805142274565242			
[s] Observation start time (MET)	225343605.184000	225342396.03652			
Observation start date	2005-02-21T03:25:41	2005-02-21T03:06:36			
[s] Observation end time (MET)	225350605.184000	225351695.34944			
Observation end date	2005-02-21T05:22:21	2005-02-21T05:41:35			
Read mode	TIMED	TIMED			

2.3 Aspect



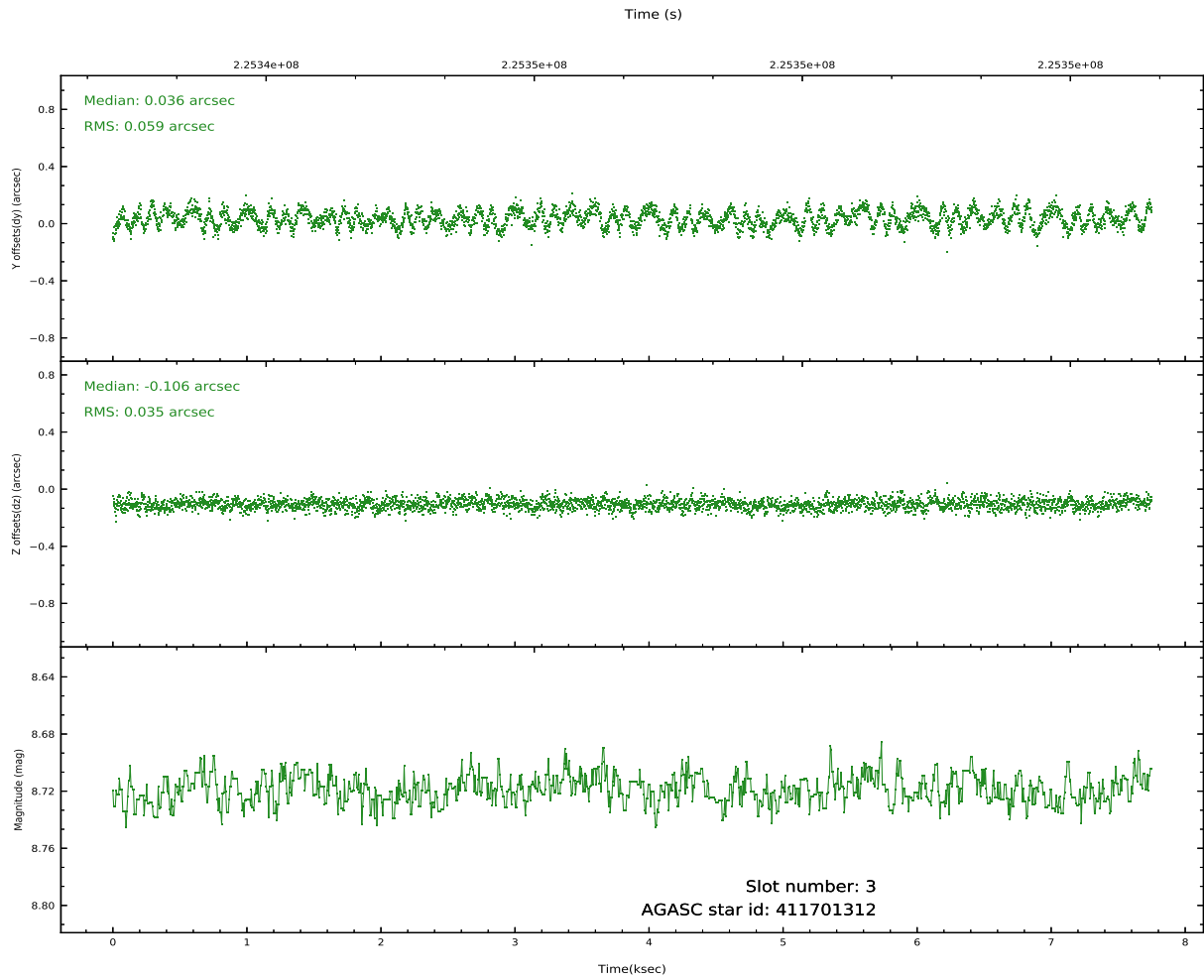
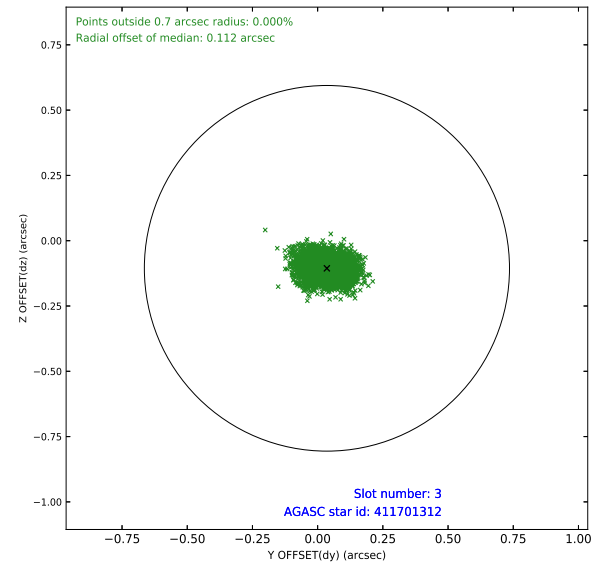
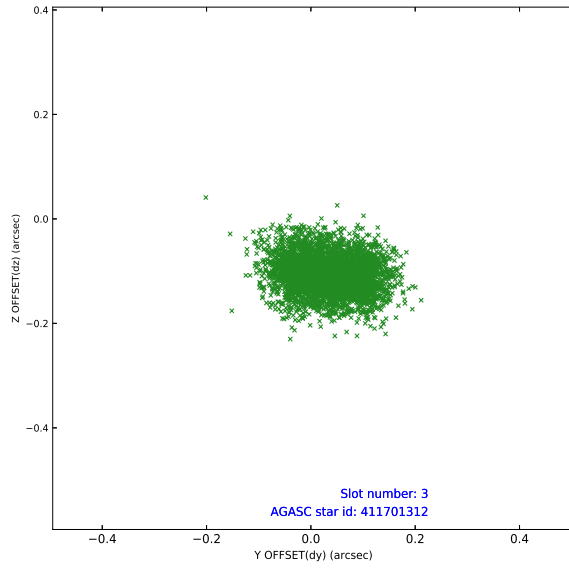


Slot Statistics

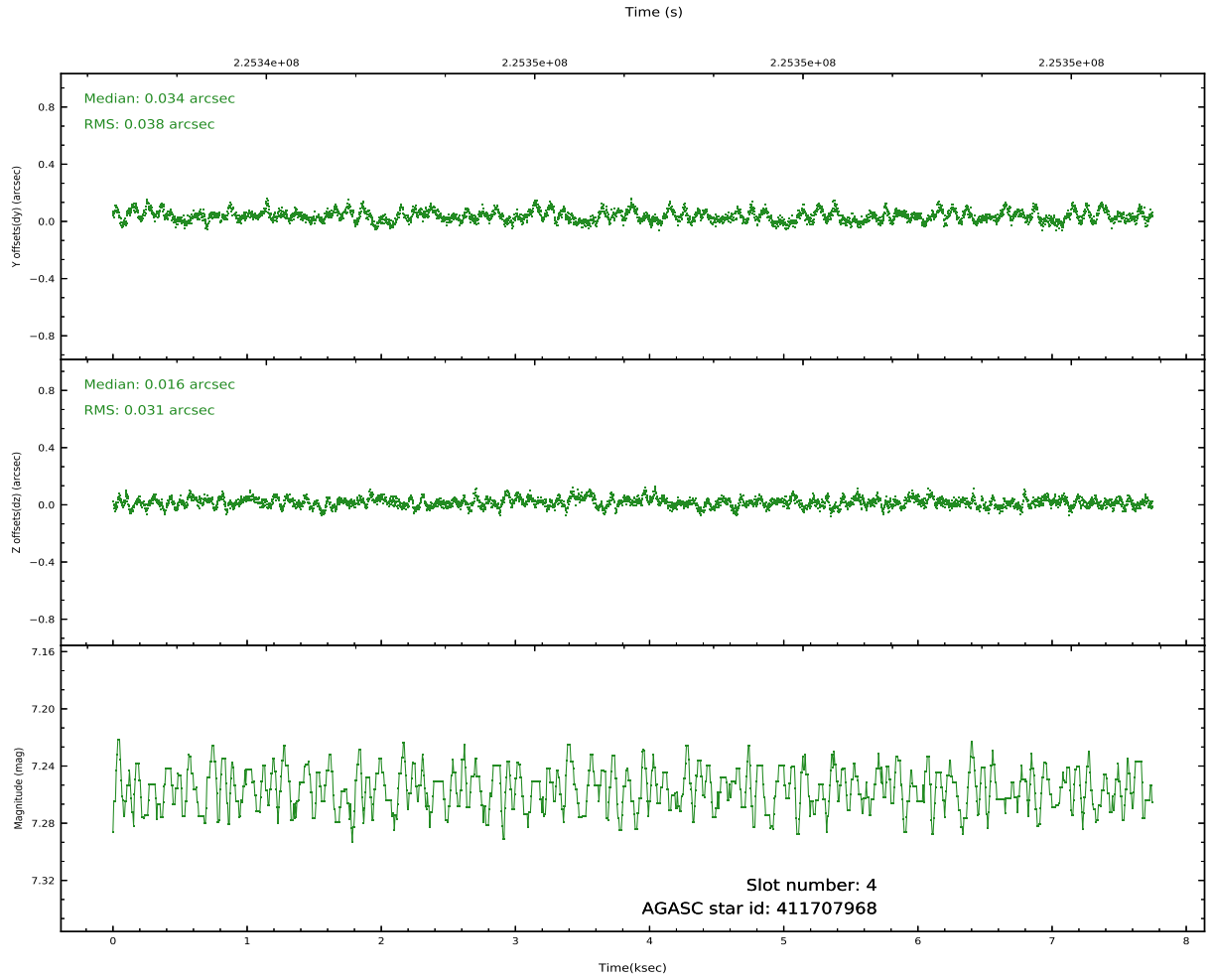
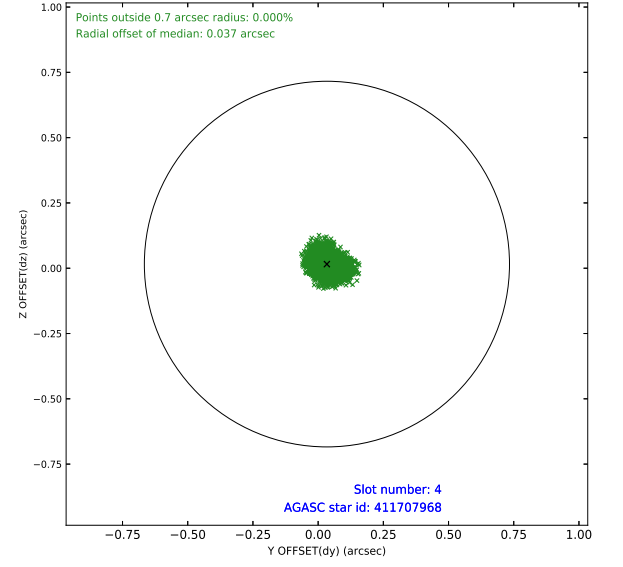
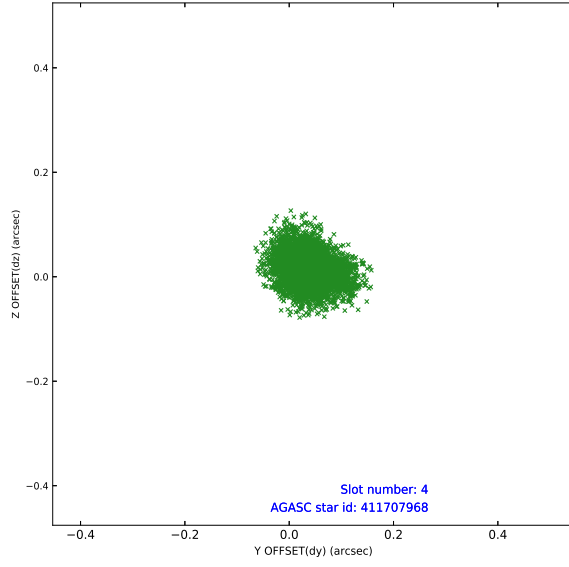
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.28	1890	1.000	-0.030	0.076	0.010	0.016	0.000000	0.000000	932.64	-652
1	FID		ACIS-I-5	7.23	1888	1.000	-0.138	0.006	0.006	0.011	0.000000	0.000000	-1815.18	1244
2	FID		ACIS-I-6	7.24	1890	1.000	0.077	-0.012	0.010	0.016	0.000000	0.000000	397.49	1889
3	GUIDE	used	411701312	8.72	3779	1.000	0.036	-0.106	0.075	0.117	298.889956	40.820220	-1728.69	2126
4	GUIDE	used	411707968	7.26	3780	1.000	0.034	0.016	0.053	0.085	299.509933	40.926839	-247.31	1232
5	GUIDE	used	413405352	8.35	3780	1.000	0.019	-0.185	0.057	0.090	300.290830	41.091941	1701.42	204
6	GUIDE	used	413418680	9.30	3776	1.000	0.060	0.212	0.095	0.154	300.860298	40.740057	1969.77	-1779
7	GUIDE	used	413421016	8.71	3778	1.000	-0.149	0.062	0.068	0.112	300.612426	40.446254	753.34	-2092

2.4 Star Slots

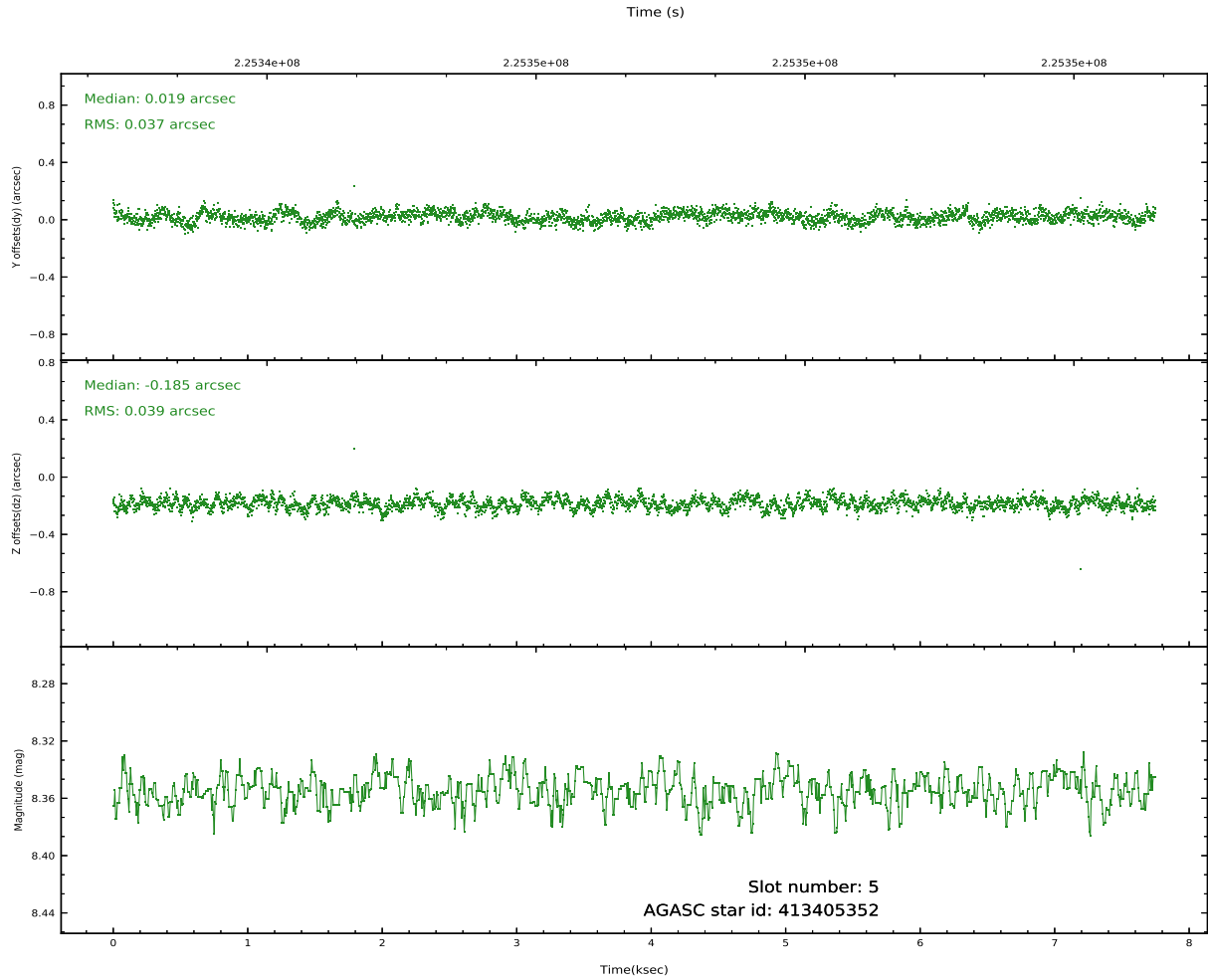
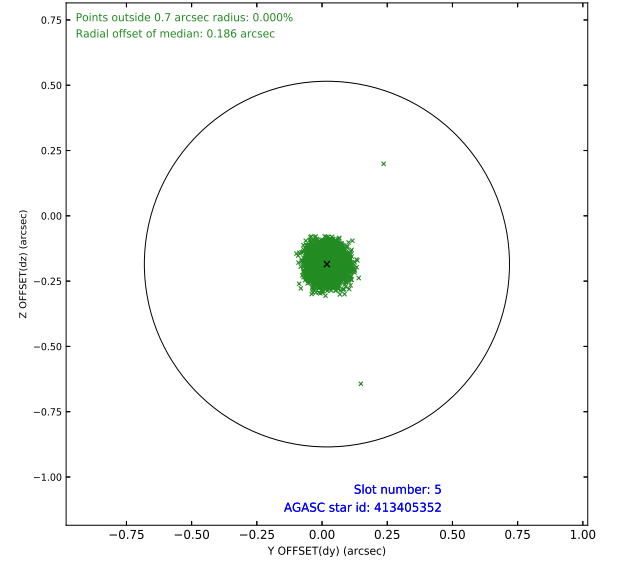
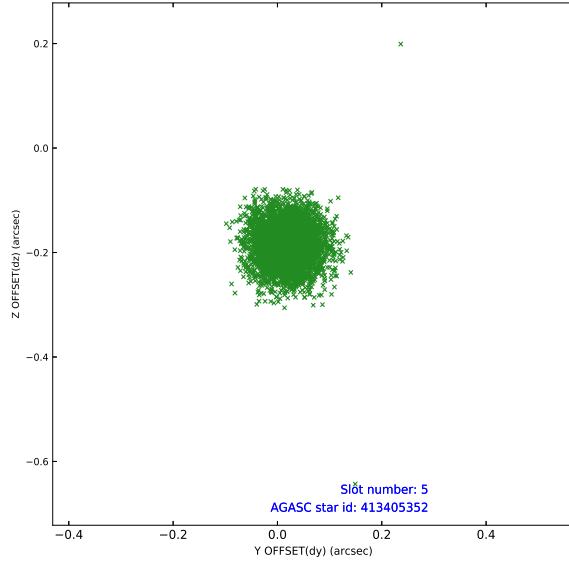
2.4.1 Slot 3



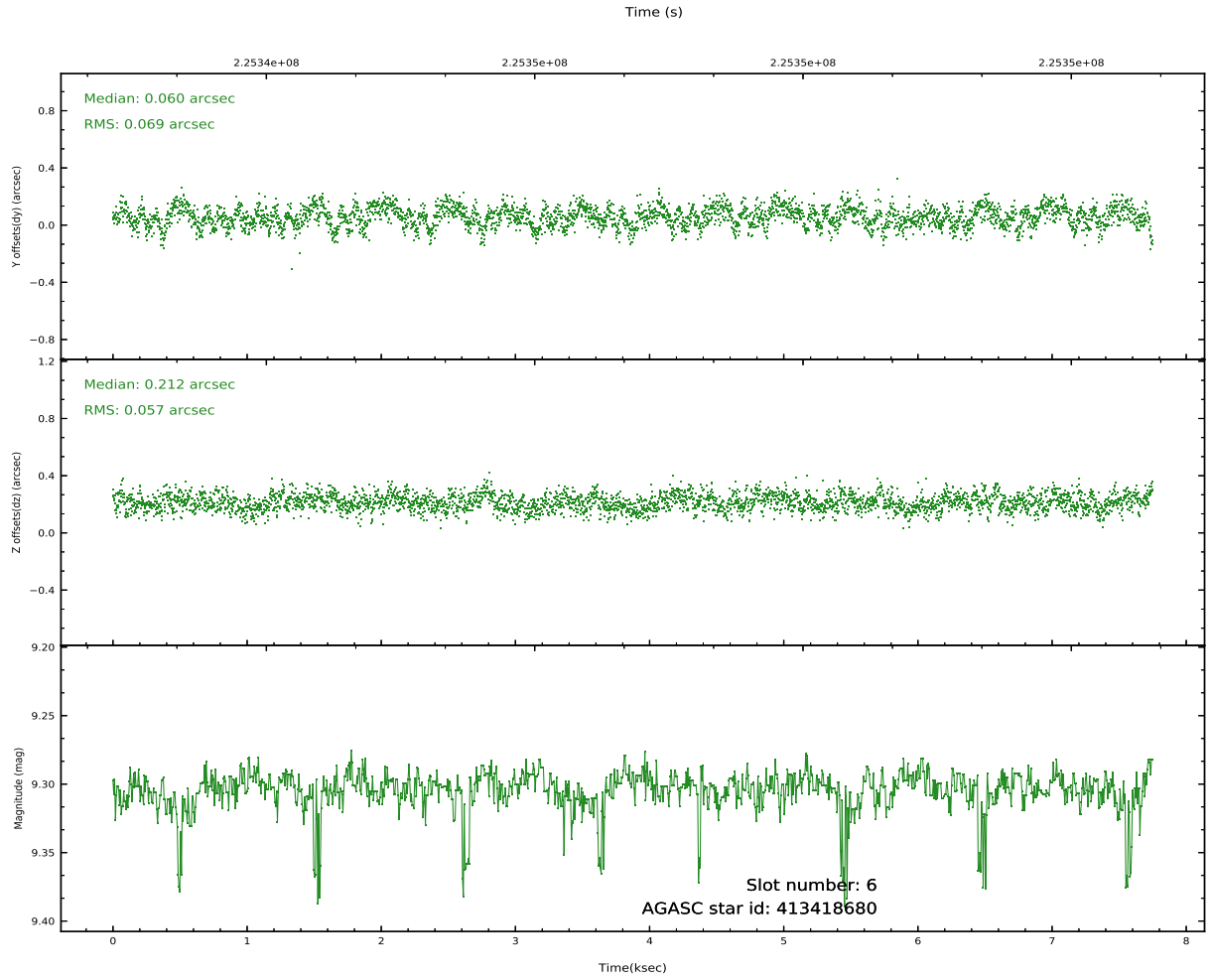
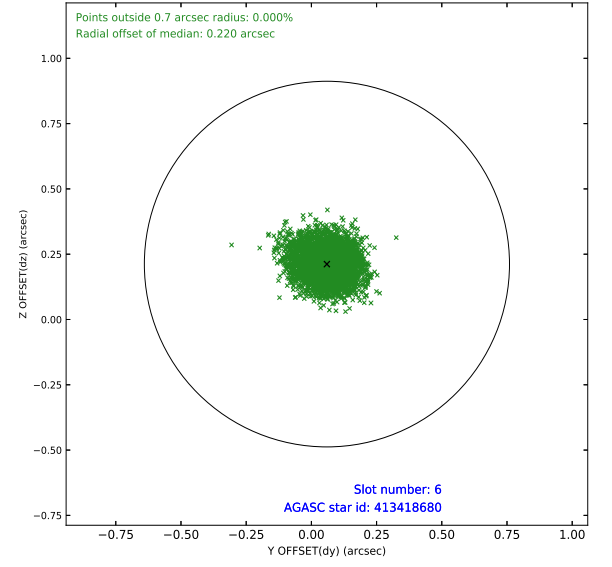
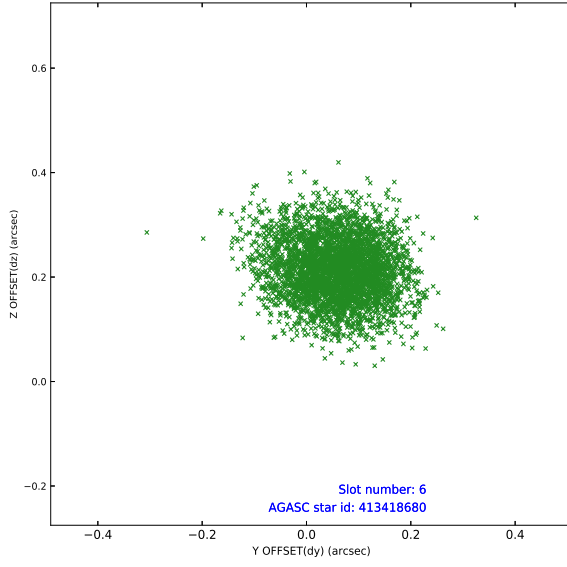
2.4.2 Slot 4



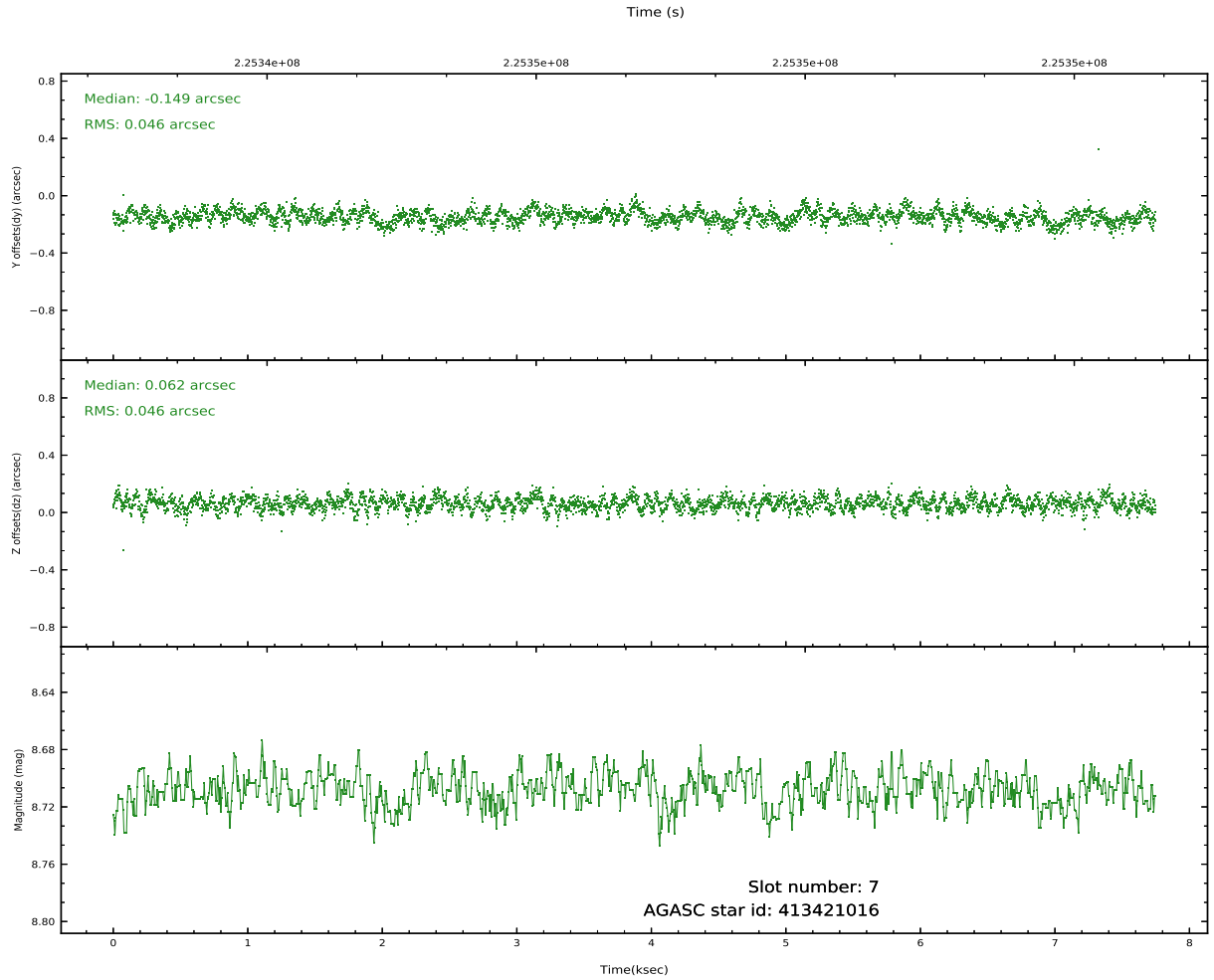
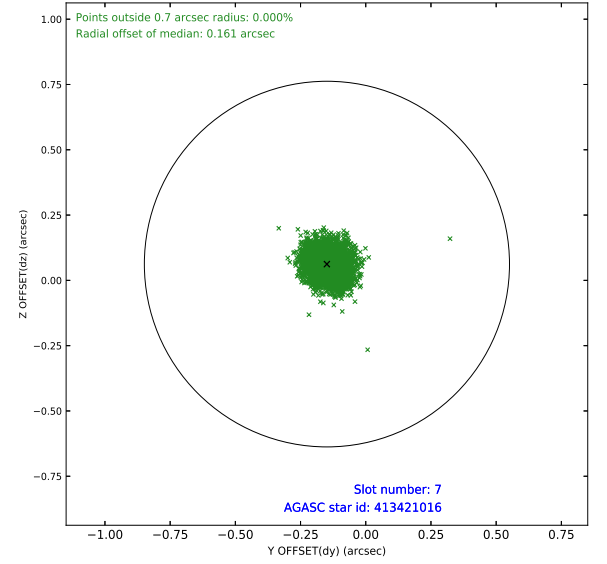
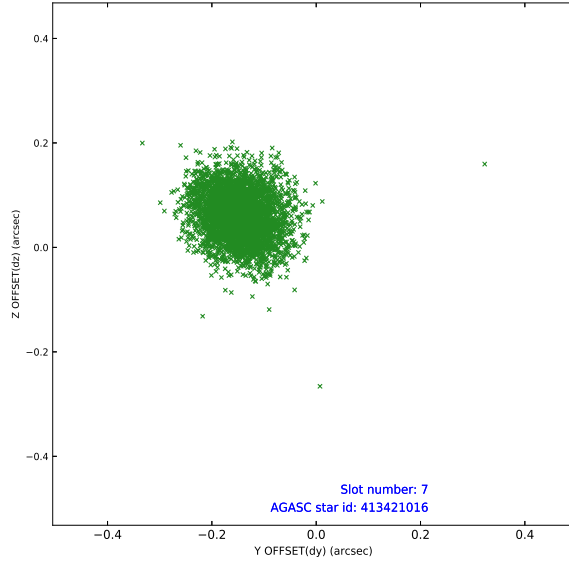
2.4.3 Slot 5



2.4.4 Slot 6

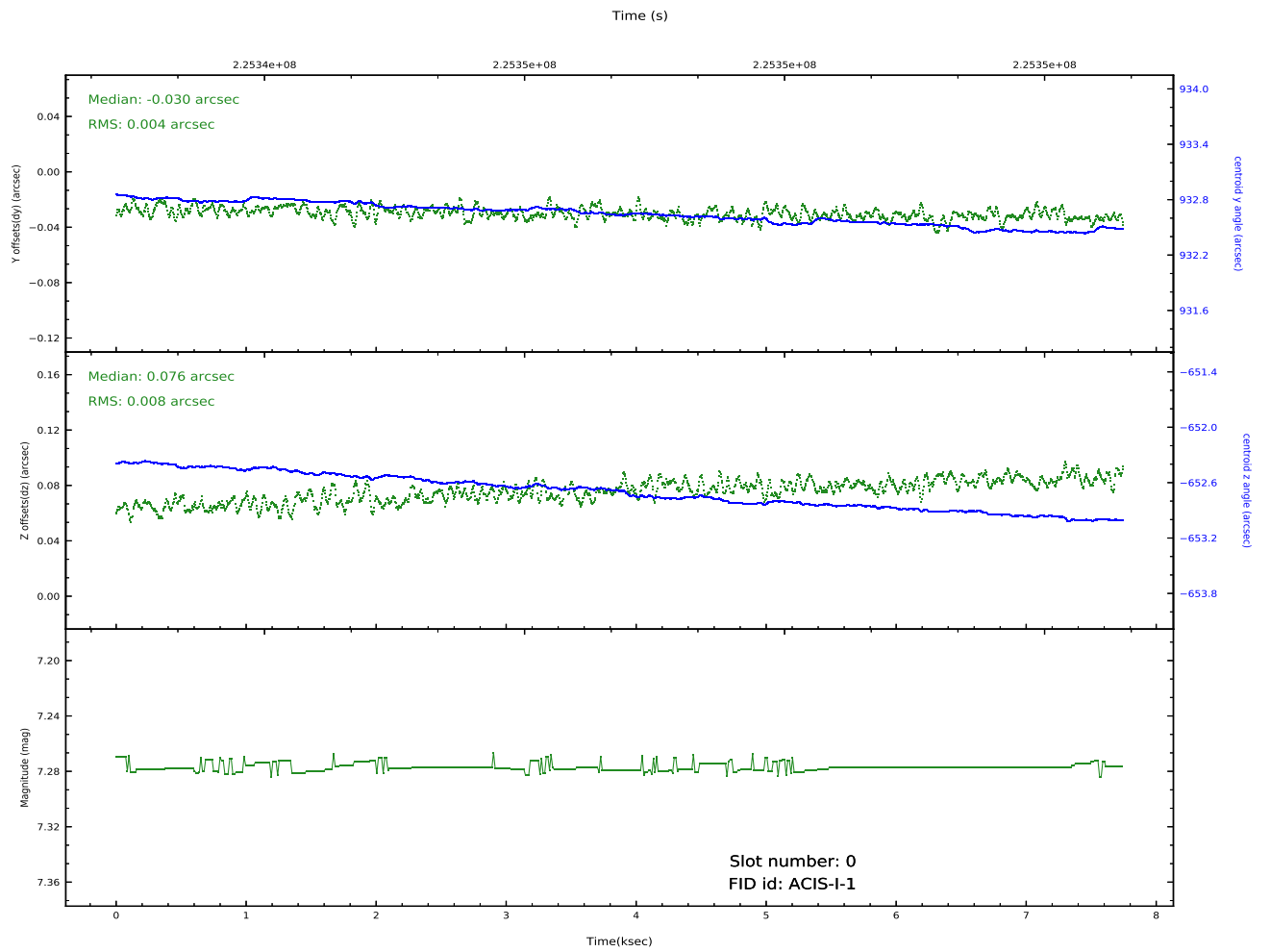
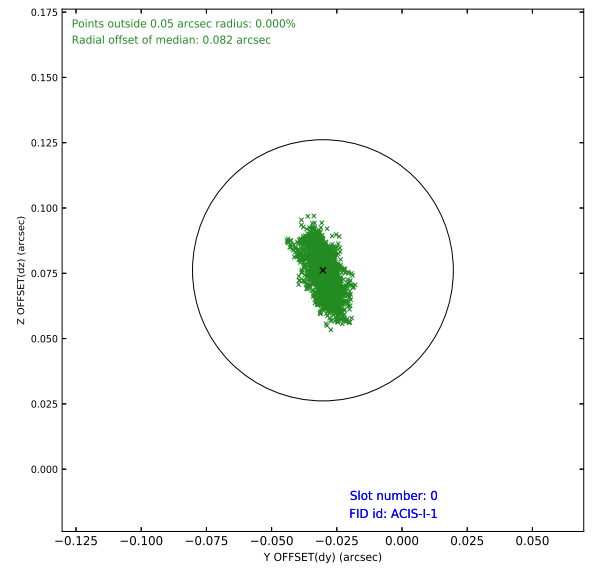
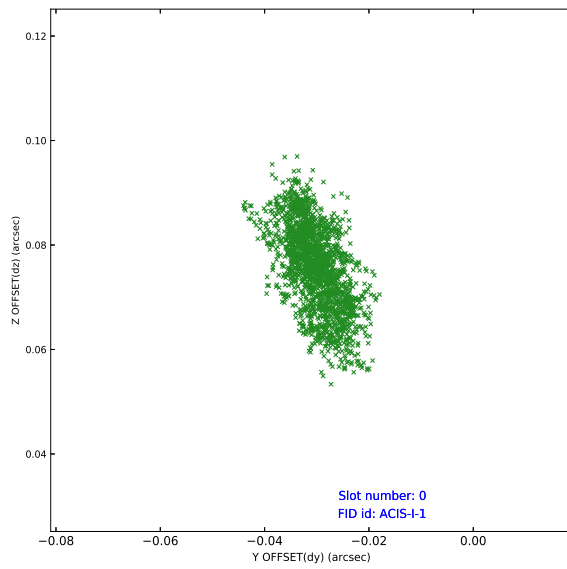


2.4.5 Slot 7

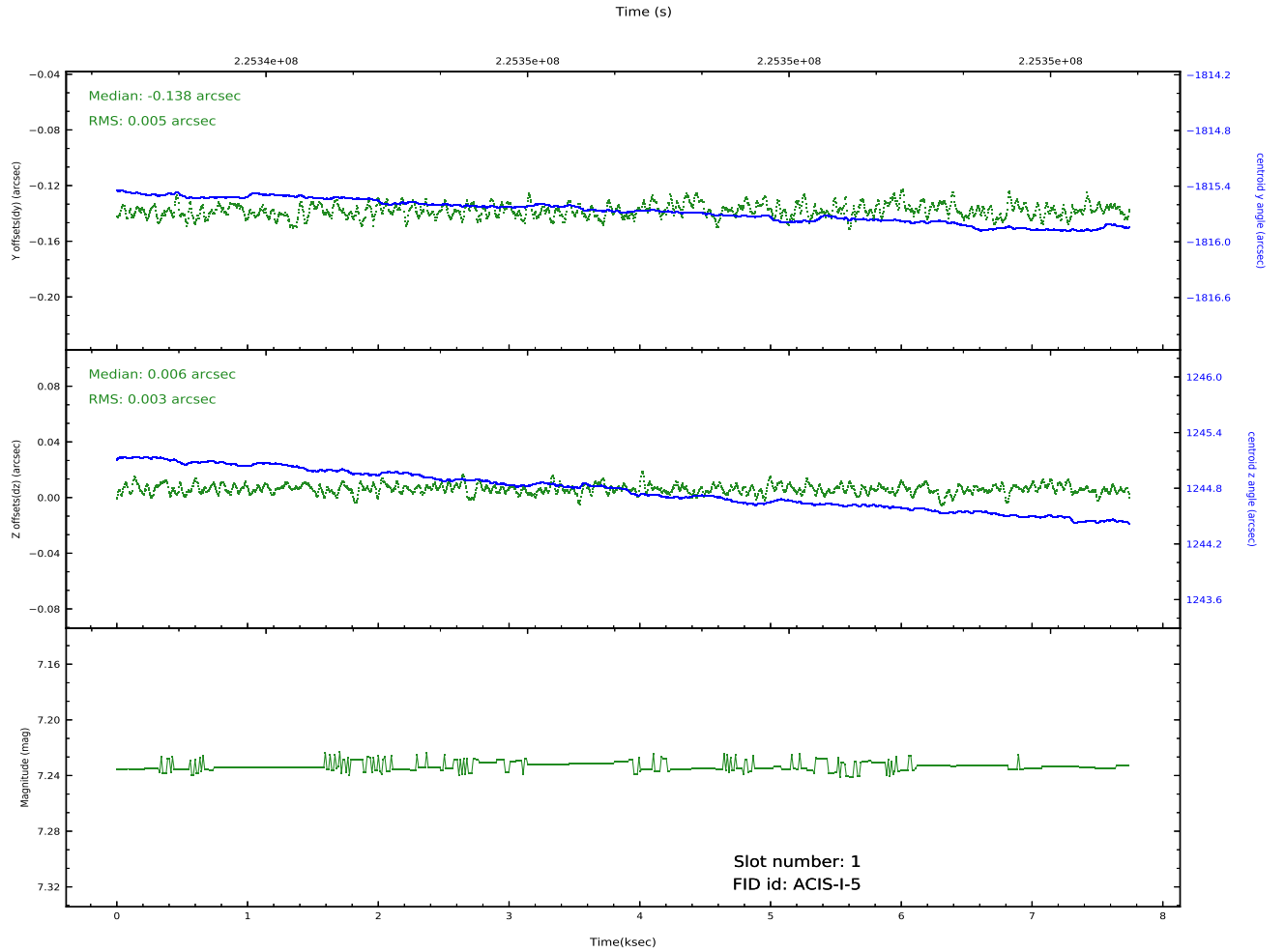
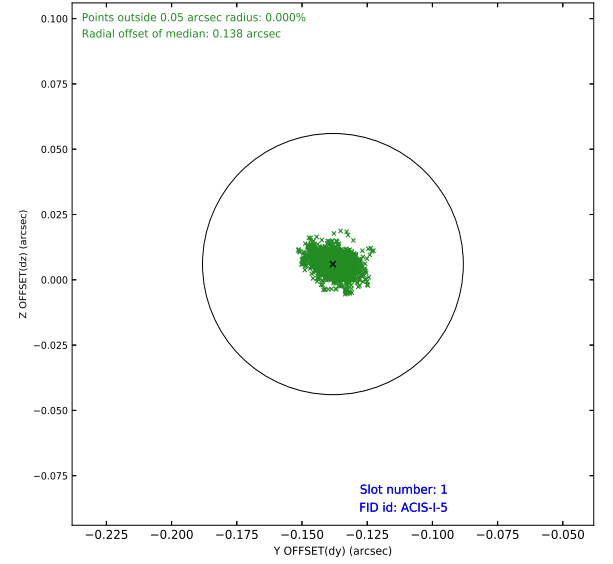
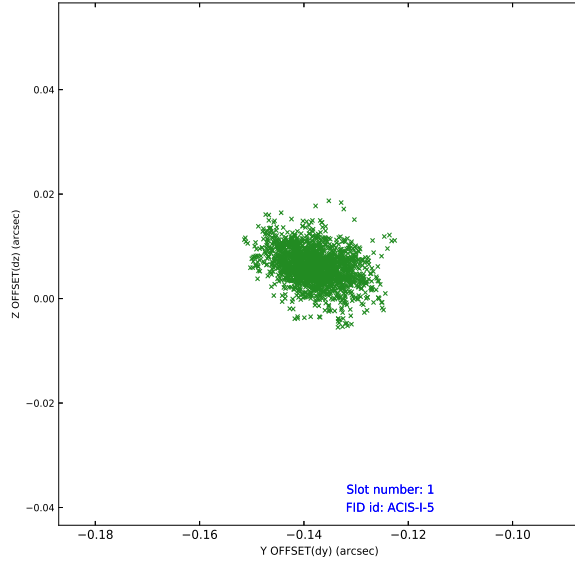


2.5 FID Slots

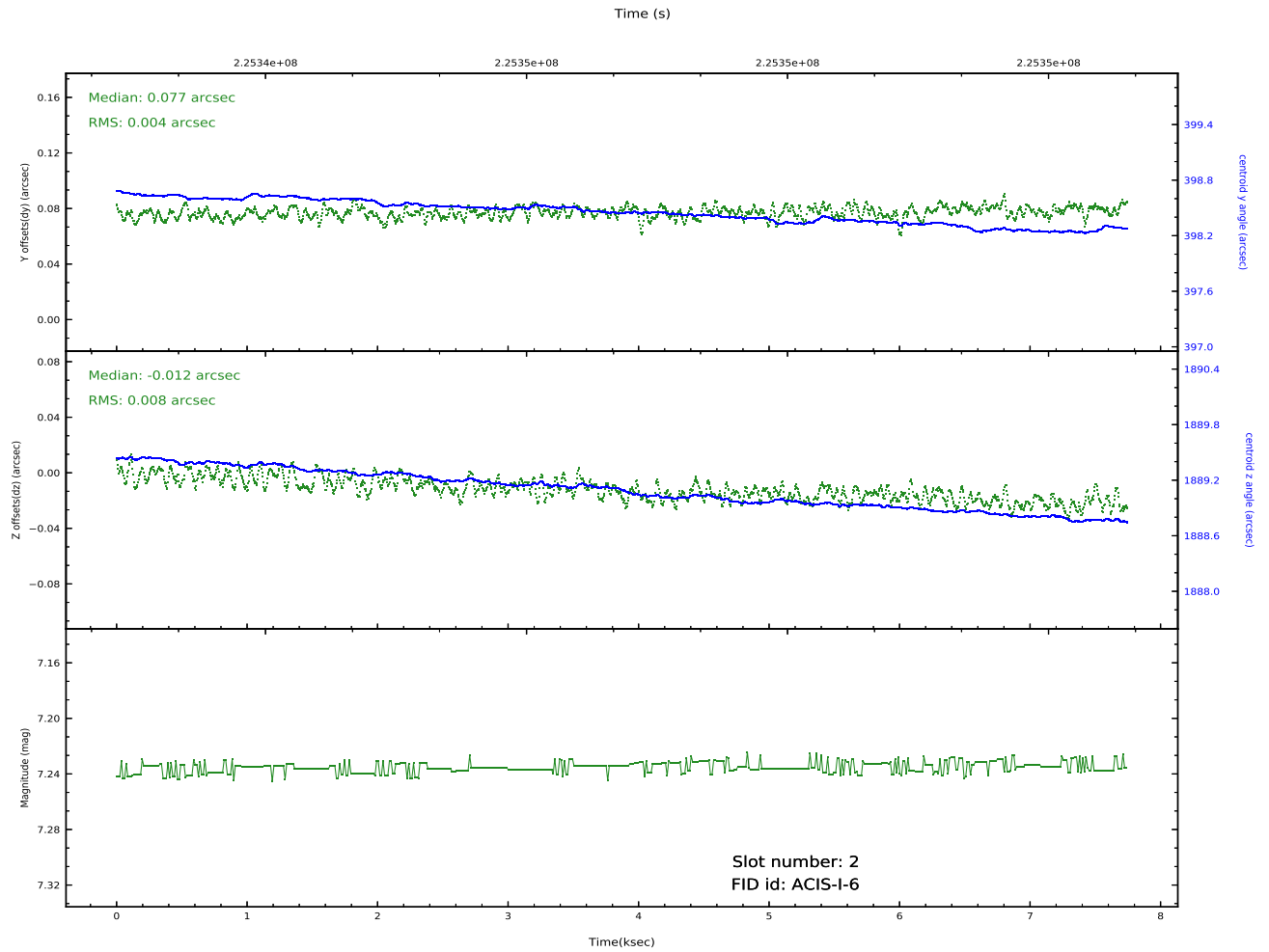
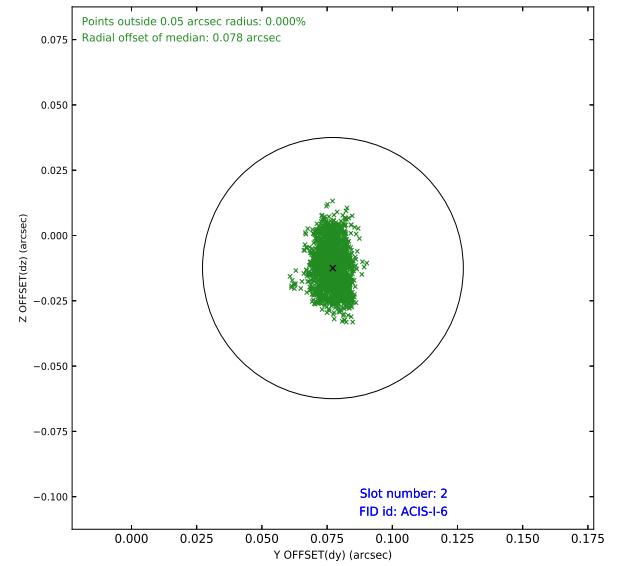
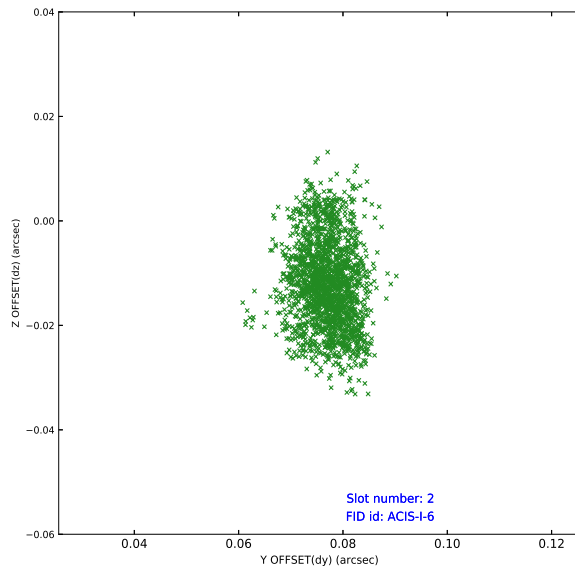
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	7.049358

A.2 Comments