

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20565 - L2 Version 2
Chandra X-Ray Center

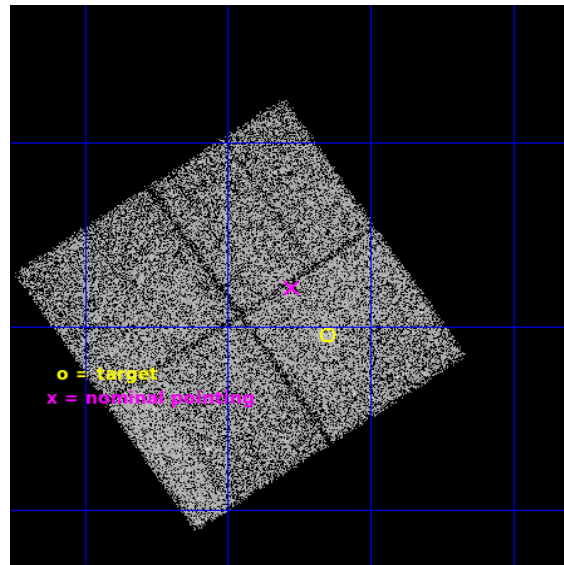
L2 Processing Date : Oct 24 2020

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1 Front

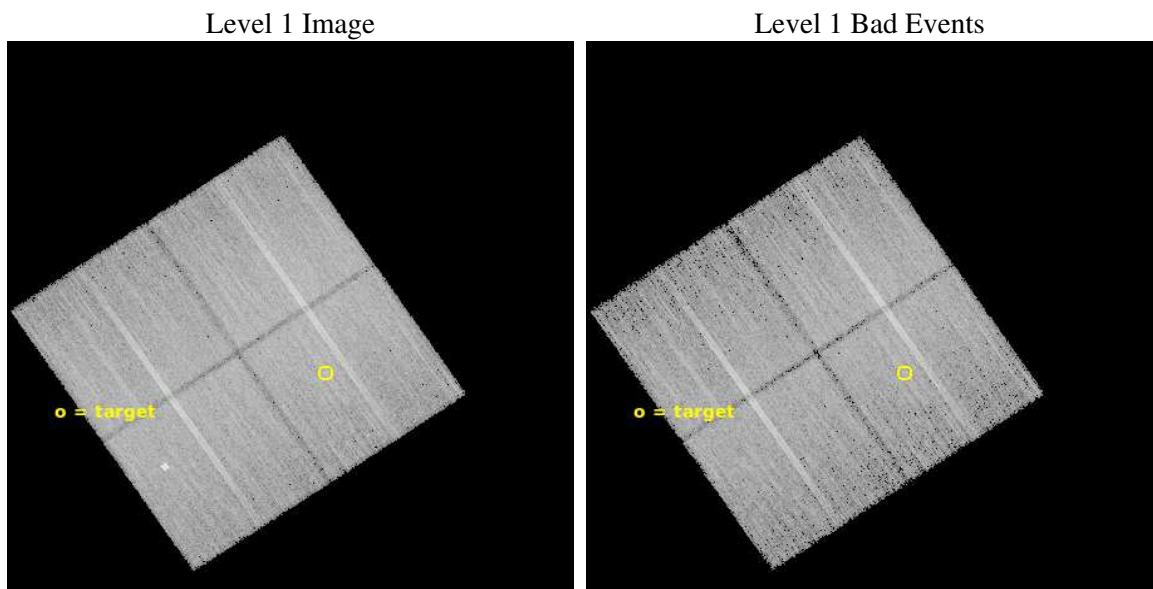
seq_num	801764	Sequence number
obs_id	20565	Observation id
title	The Chandra Strong Lens Sample: Revealing Baryonic Physics In Strong Lensing Selected Clusters	Proposal title
observer	Matthew Bayliss	Principal investigator
object	SDSSJ0957+0509	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	149.4125	Observer's specified target RA [deg]
dec_targ	5.158889	Observer's specified target Dec [deg]
ra_nom	149.44394238123	Nominal RA [deg]
dec_nom	5.2020292645814	Nominal Dec [deg]
roll_nom	55.930780975844	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28078.710720778	Sum of GTIs [s]
livetime	27711.841693964	Livetime [s]
ontime0	28075.446540356	Sum of GTIs [s]
ontime1	28078.628640771	Sum of GTIs [s]
ontime2	28078.669680834	Sum of GTIs [s]
ontime3	28078.710720778	Sum of GTIs [s]
l2events	75997	Number of level 2 events



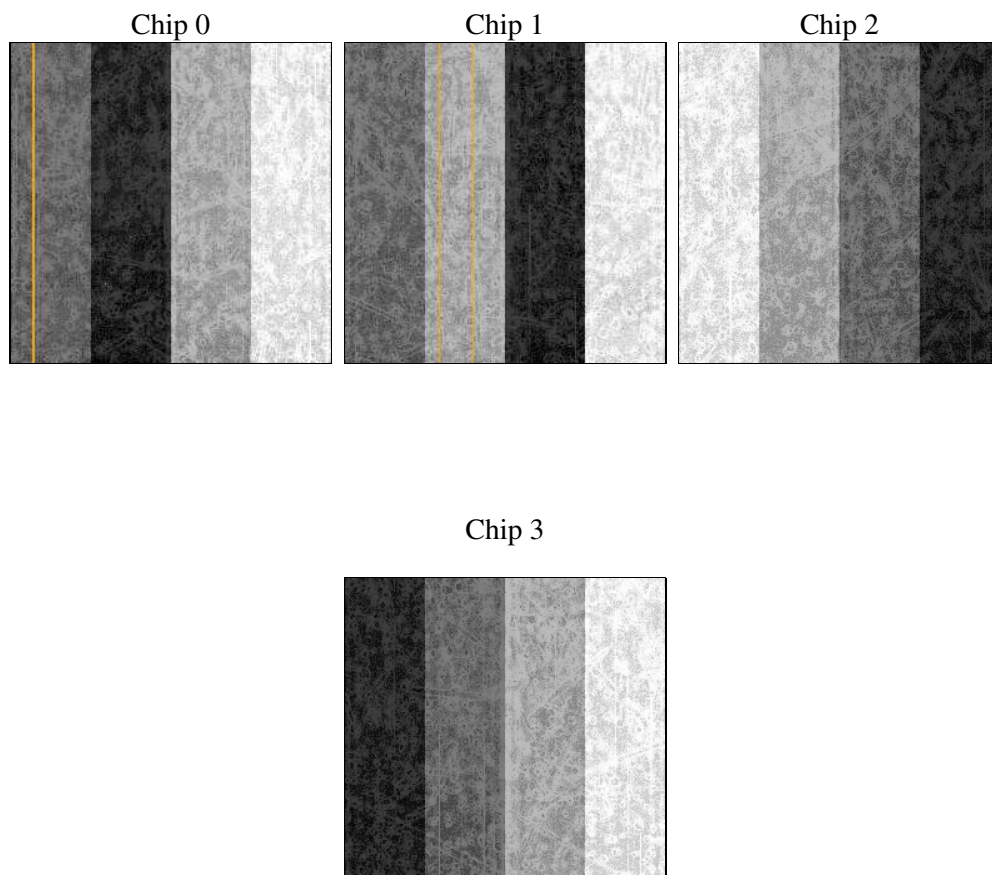
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	28078.710720778	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	28075.446540356	Sum of GTIs [s]
date	2020-10-24T09:03:35	Date and time of file creation	ontime1	28078.628640771	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	28078.669680834	Sum of GTIs [s]
			ontime3	28078.710720778	Sum of GTIs [s]
			l1events	809152	Number of level 1 events

2.1.4 Events

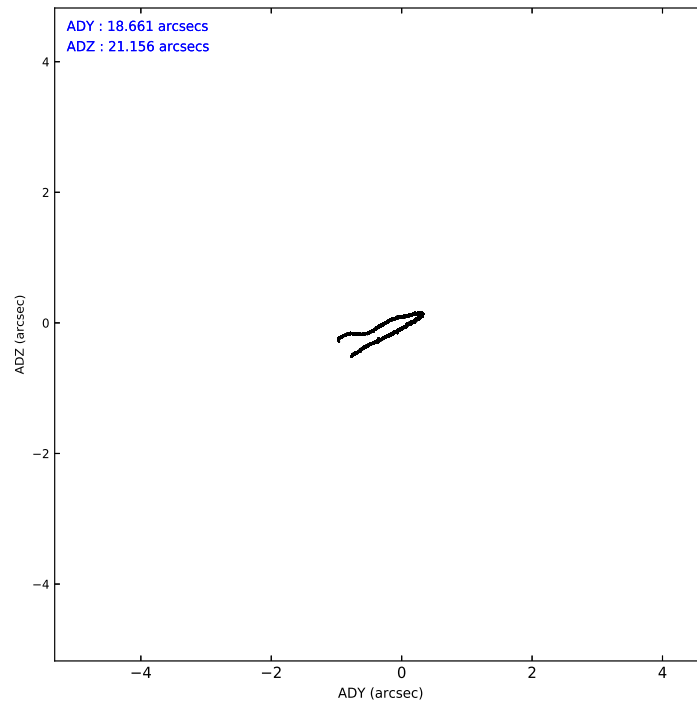
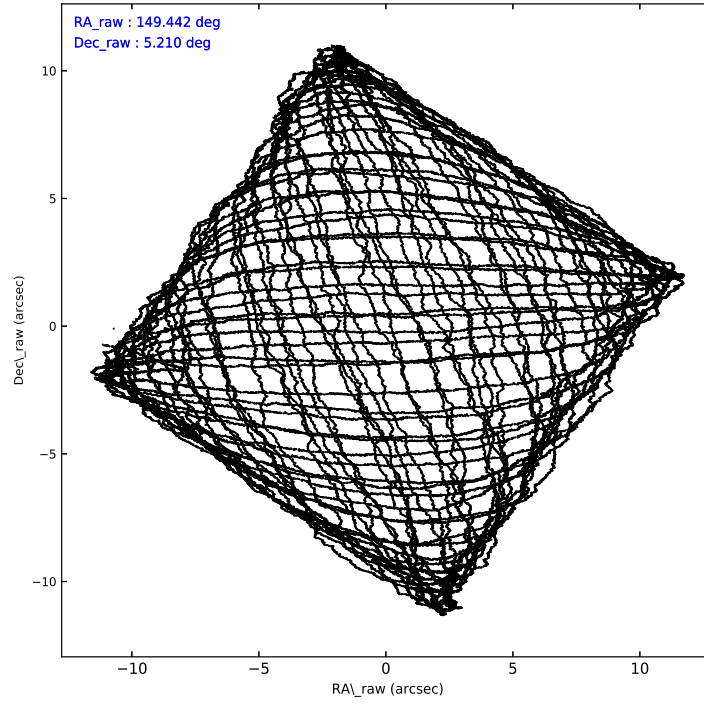
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	191798	198710	212566	206078
rejected events	169071	171884	190760	184216
rejected %	88%	86%	89%	89%

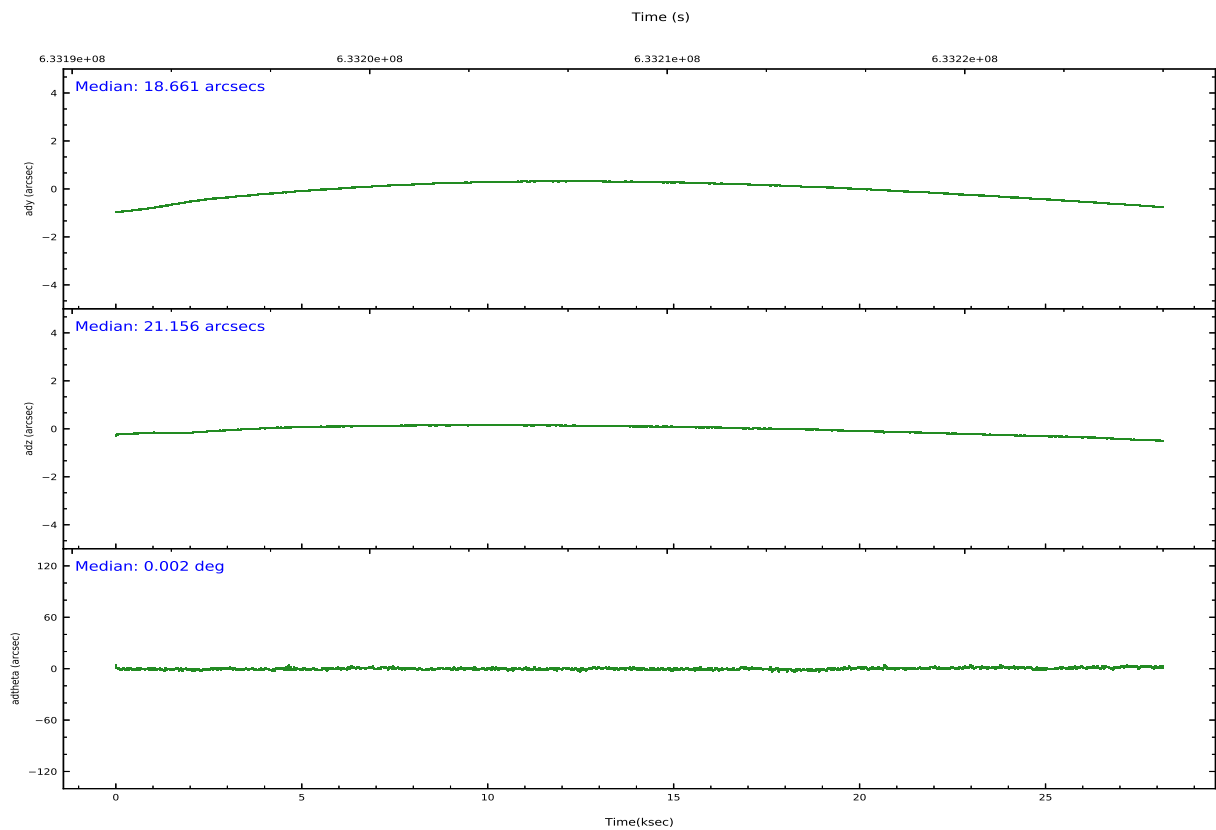
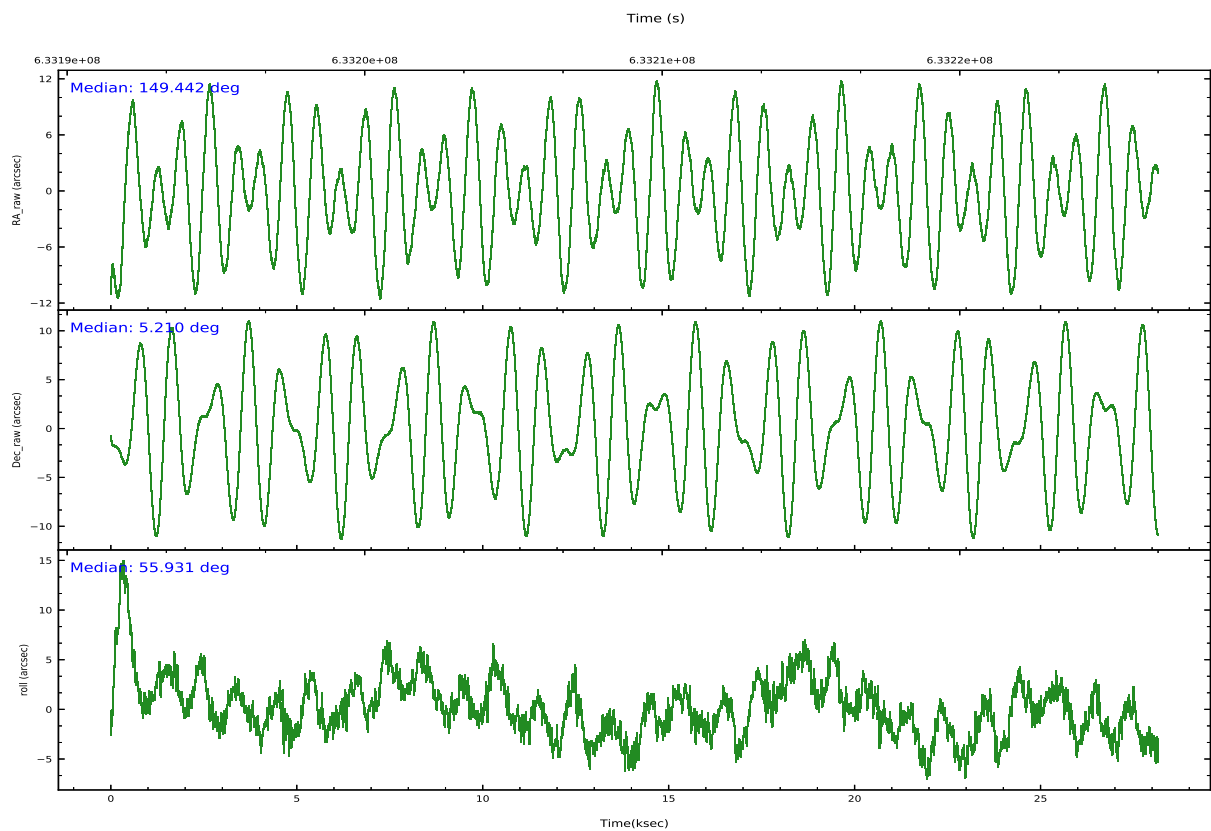
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	7387	9952	7543	7818
	3%	5%	3%	3%
grade 1 events	101	91	108	112
	0%	0%	0%	0%
grade 2 events	5687	6373	5527	4833
	2%	3%	2%	2%
grade 3 events	2420	2270	2178	2308
	1%	1%	1%	1%
grade 4 events	2258	2443	2246	2357
	1%	1%	1%	1%
grade 5 events	8977	9123	8113	9963
	4%	4%	3%	4%
grade 6 events	4982	5794	4315	4554
	2%	2%	2%	2%
grade 7 events	159986	162664	182536	174133
	83%	81%	85%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	149.440115	149.44394238123	CCD I2 on	Y	Y
[deg] Pointing Dec	5.182372	5.2020292645814	CCD I3 on	Y	Y
[deg] Pointing Roll	55.727995	55.930780975844	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	N
[mm] SIM translation stage pos	-225.840463	-225.8433433320239	CCD S3 on	O2	N
[mm] SIM translation stage offset	-7.752	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	633193335.184000	633192383.39709	CCD S5 on	N	N
Observation start date	2018-01-24T15:01:06	2018-01-24T14:46:23	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	633221335.184000	633221932.09883	On-chip summing requested	N	N
Observation end date	2018-01-24T22:47:46	2018-01-24T22:58:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



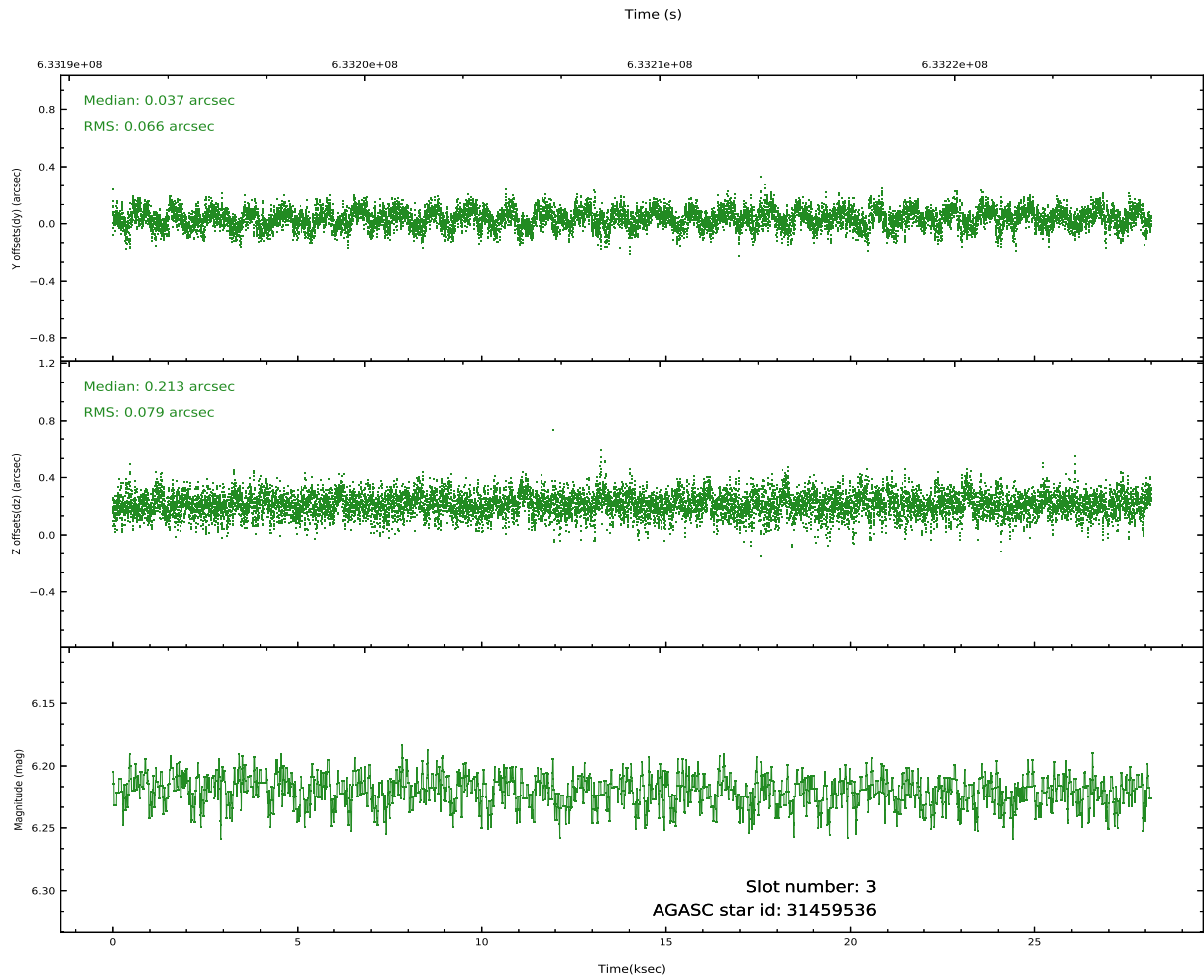
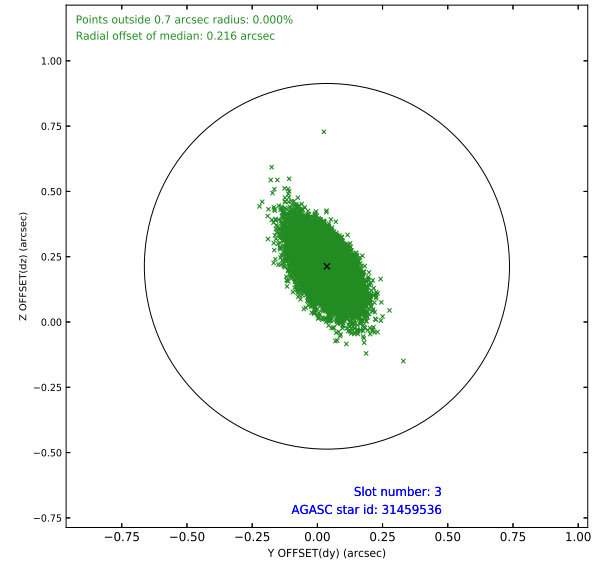
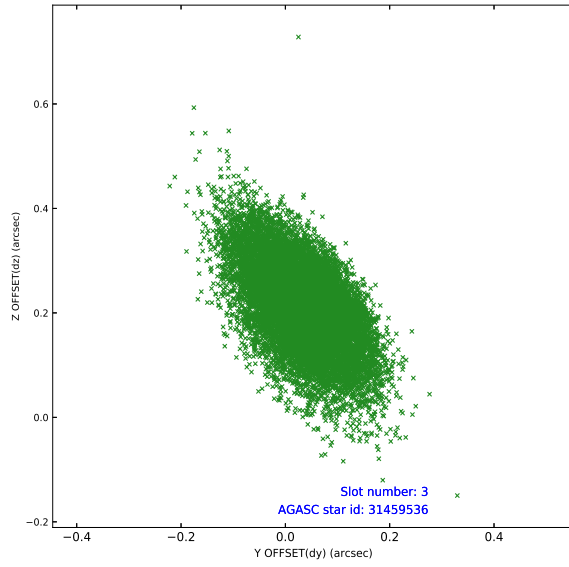


Slot Statistics

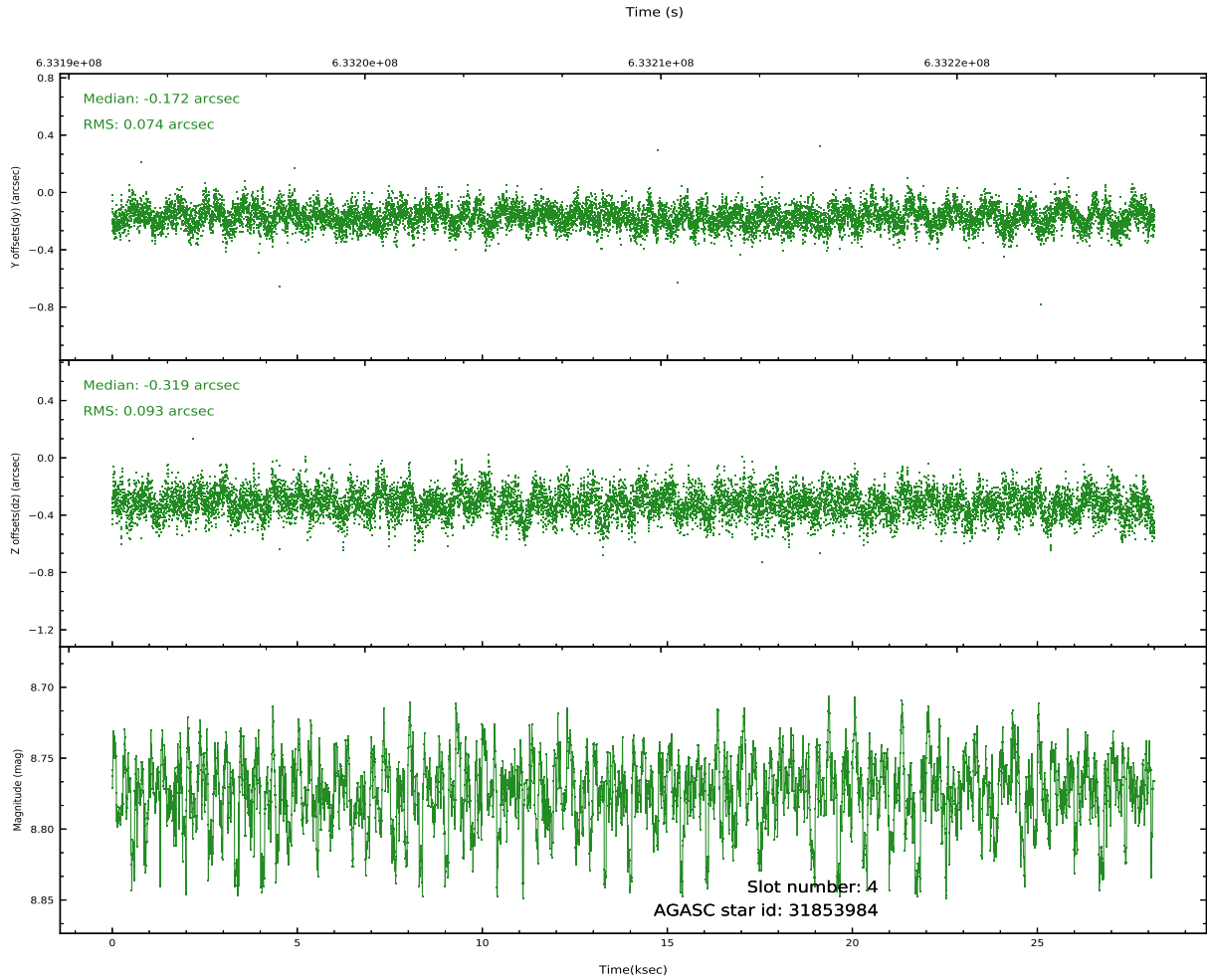
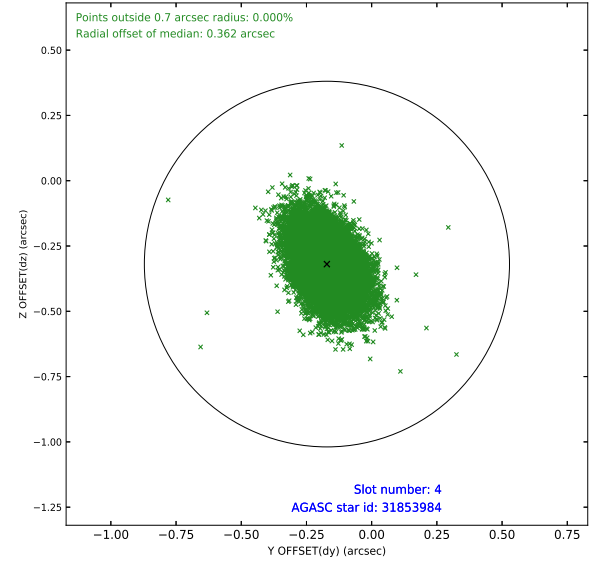
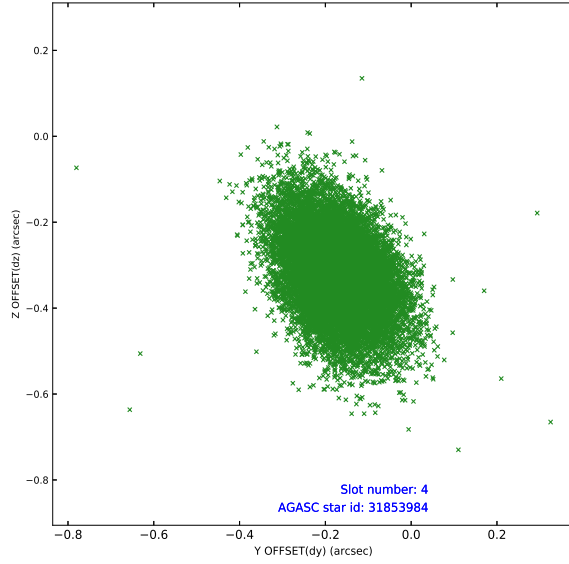
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.16	6869	1.000	0.198	-0.146	0.011	0.018	0.000000	0.000000	920.77	-1004
1	FID		ACIS-I-2	7.11	6868	1.000	-0.212	0.123	0.010	0.015	0.000000	0.000000	-774.09	-1009
2	FID		ACIS-I-4	7.06	6863	1.000	-0.084	0.090	0.010	0.016	0.000000	0.000000	2140.02	896
3	GUIDE	used	31459536	6.22	13739	1.000	0.037	0.213	0.105	0.187	149.703223	4.808529	-580.23	-1538
4	GUIDE	used	31853984	8.77	13725	1.000	-0.172	-0.319	0.124	0.211	149.421703	5.871344	2012.66	1451
5	GUIDE	used	31855496	8.08	13732	1.000	-0.028	0.108	0.114	0.199	149.960203	5.609808	2321.98	-672
6	GUIDE	used	31857360	8.48	13731	1.000	0.116	-0.105	0.156	0.253	149.375816	5.103356	-364.42	30
7	GUIDE	used	31857600	7.85	13733	1.000	0.058	0.105	0.114	0.194	149.926117	5.221614	1098.40	-1358

2.4 Star Slots

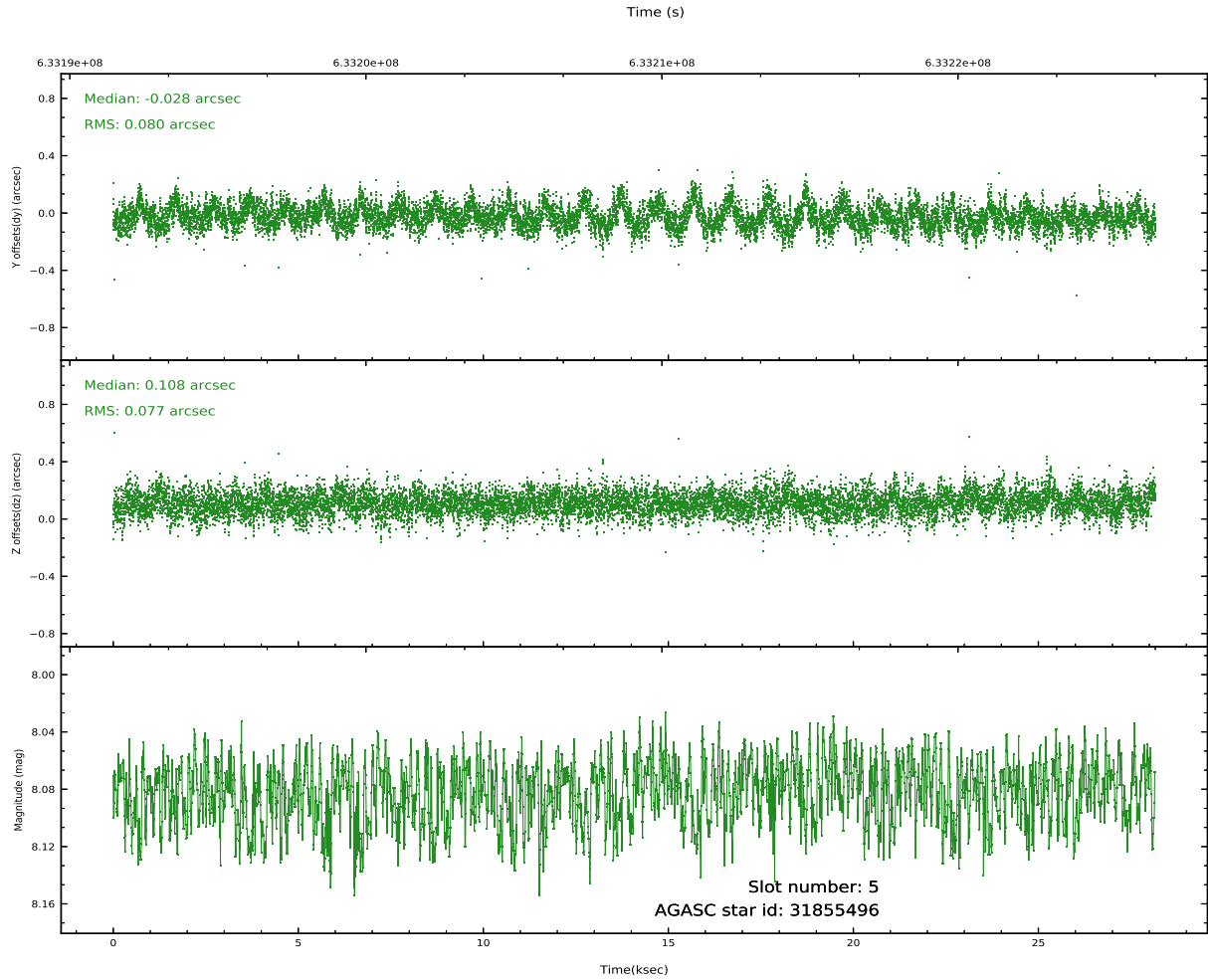
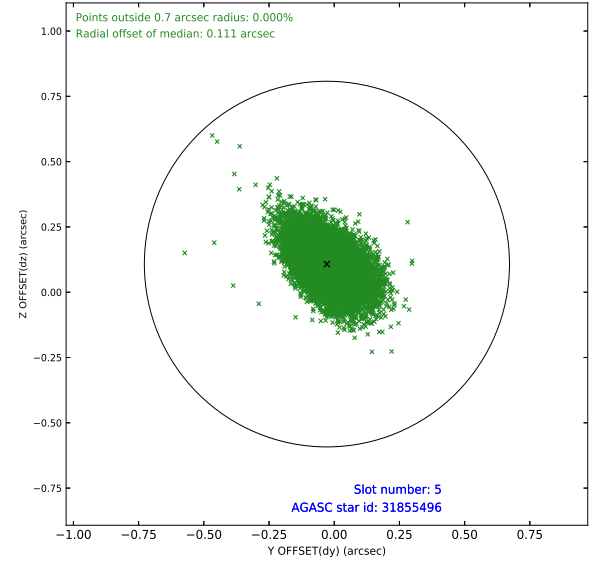
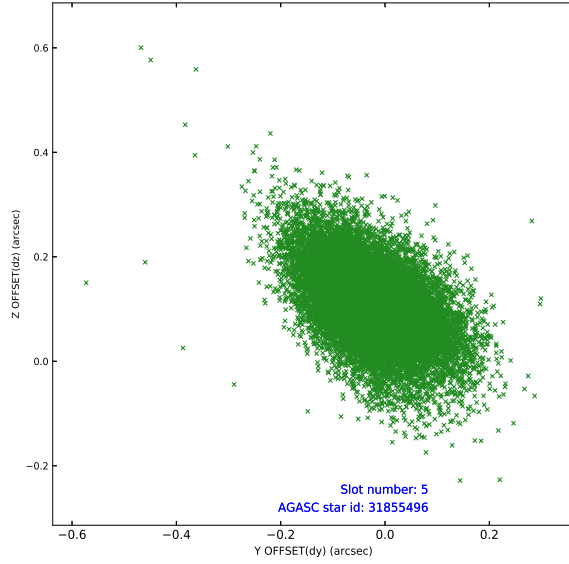
2.4.1 Slot 3



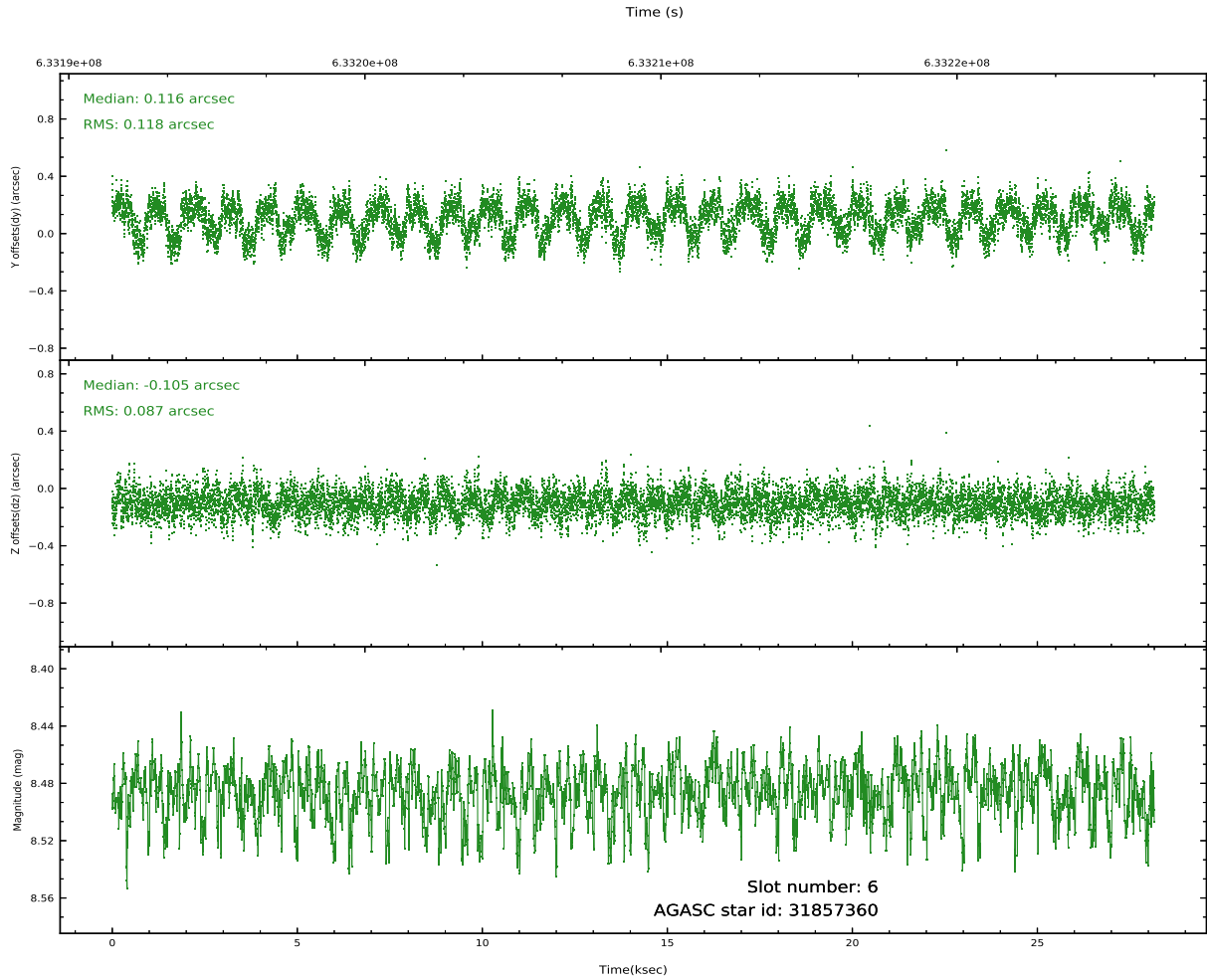
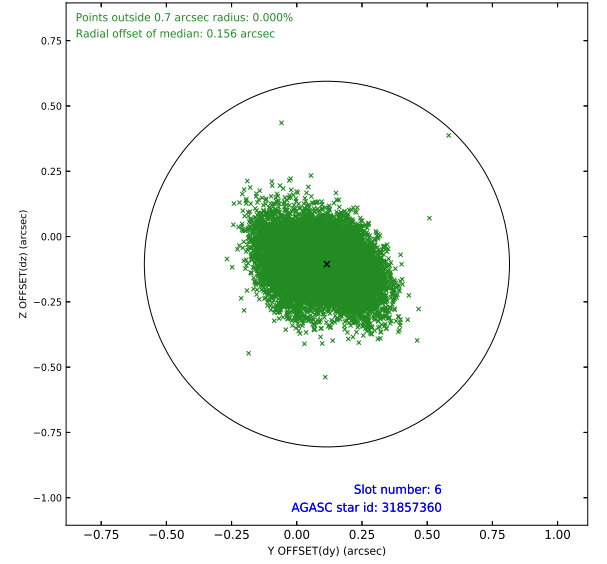
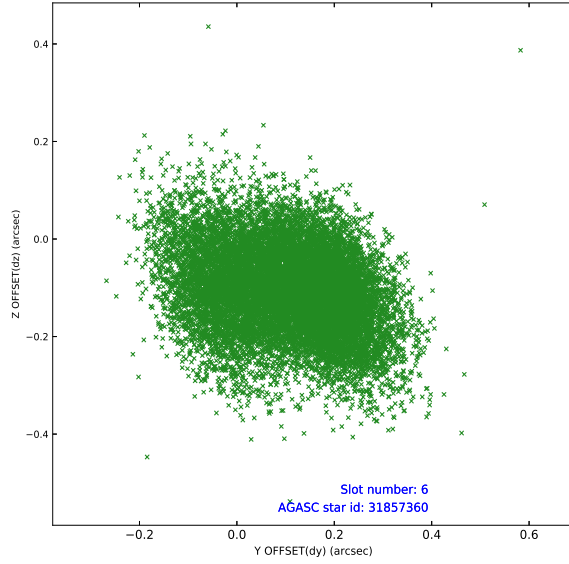
2.4.2 Slot 4



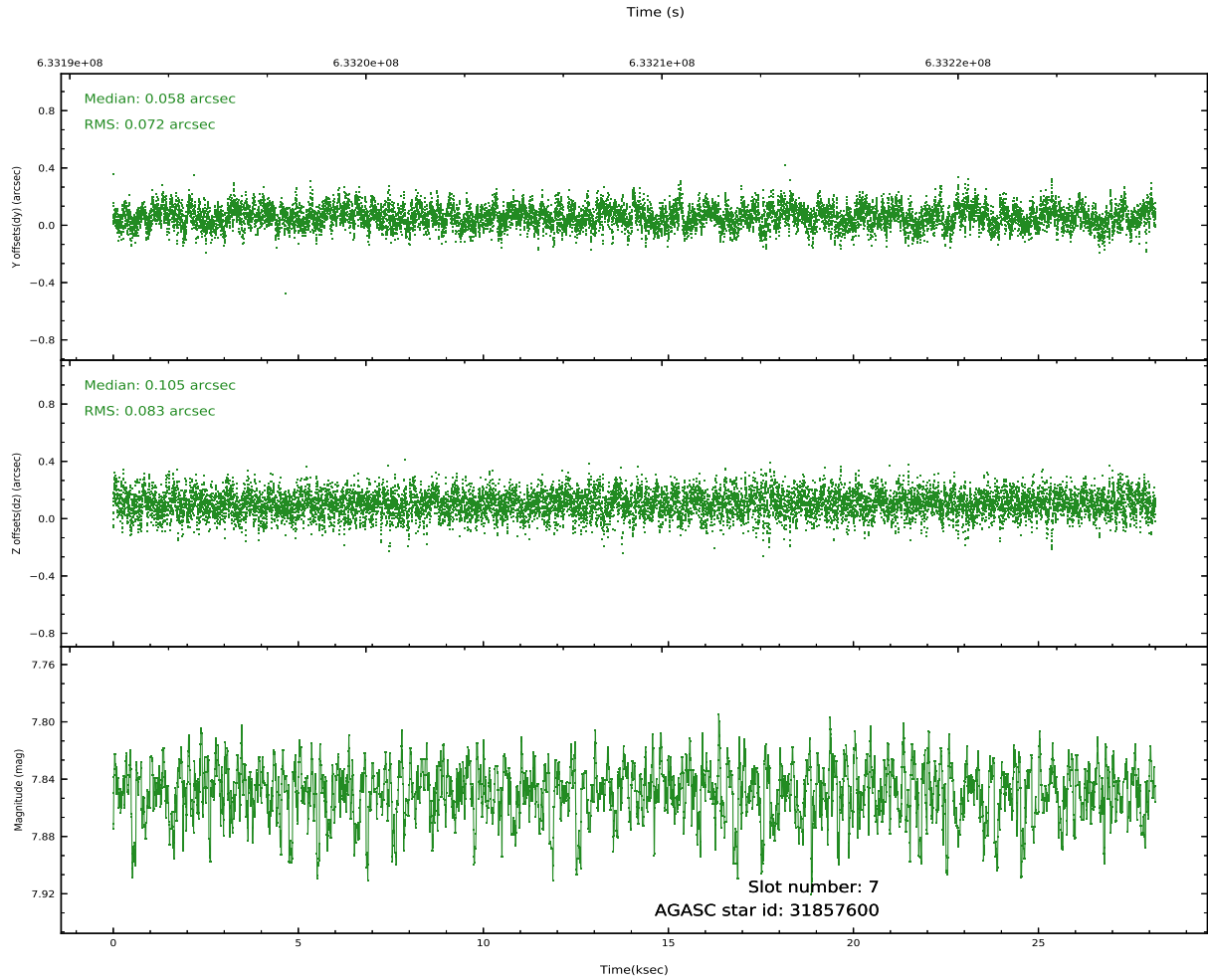
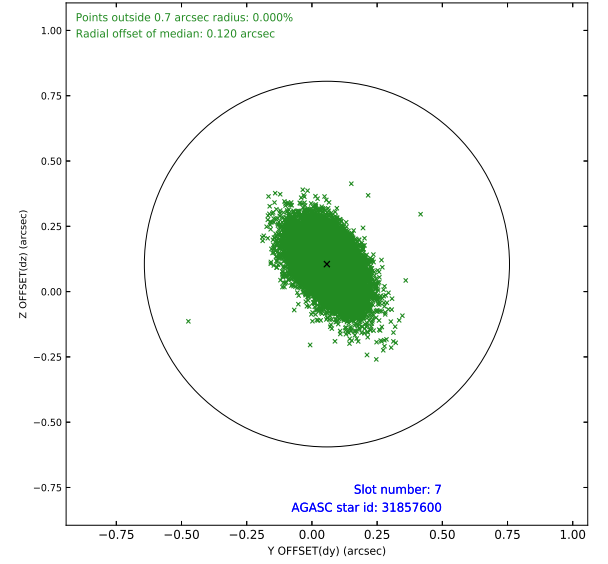
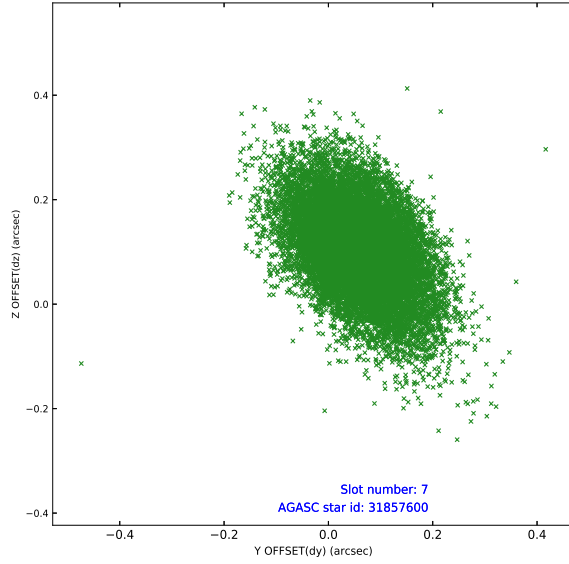
2.4.3 Slot 5



2.4.4 Slot 6

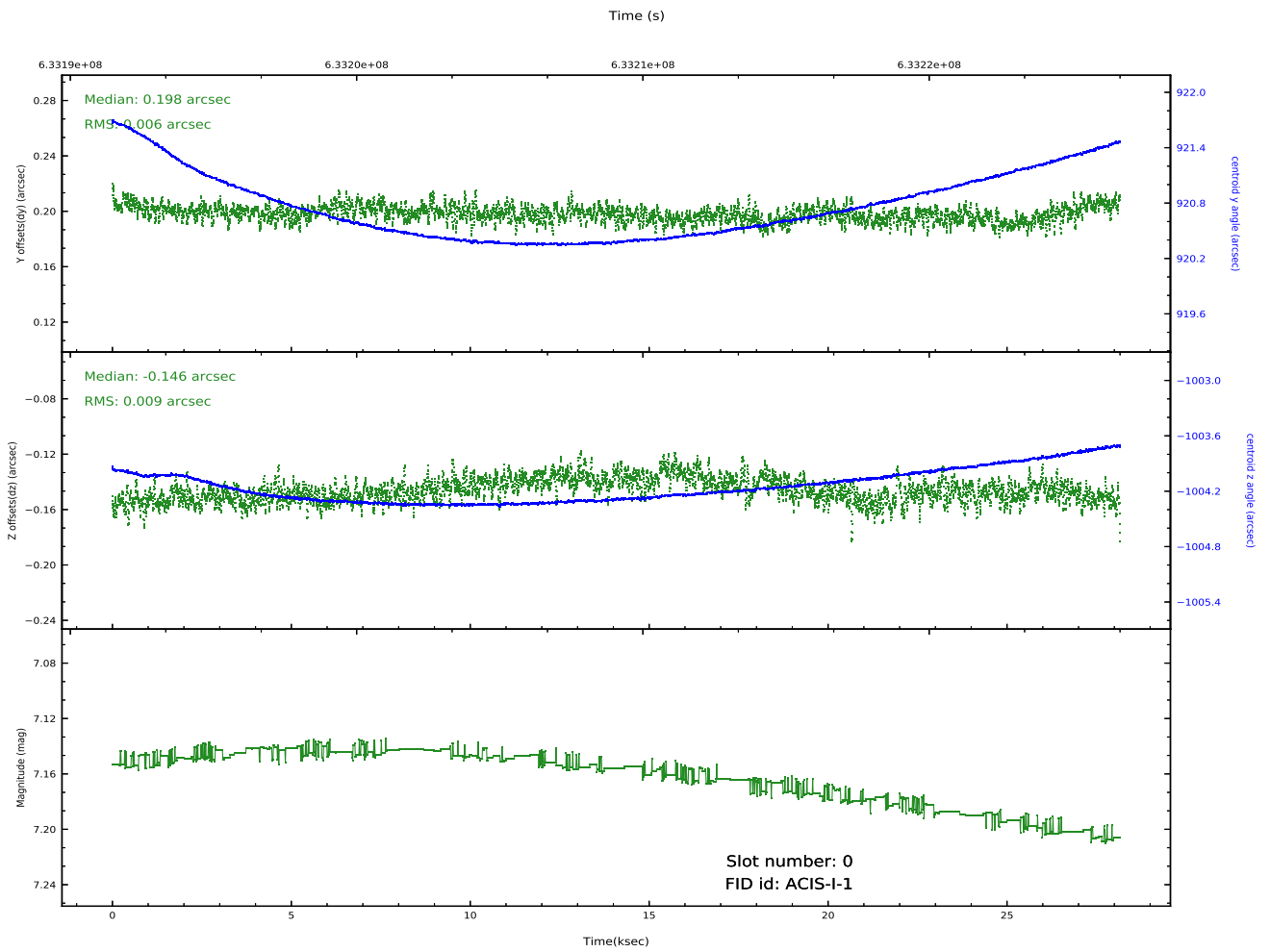
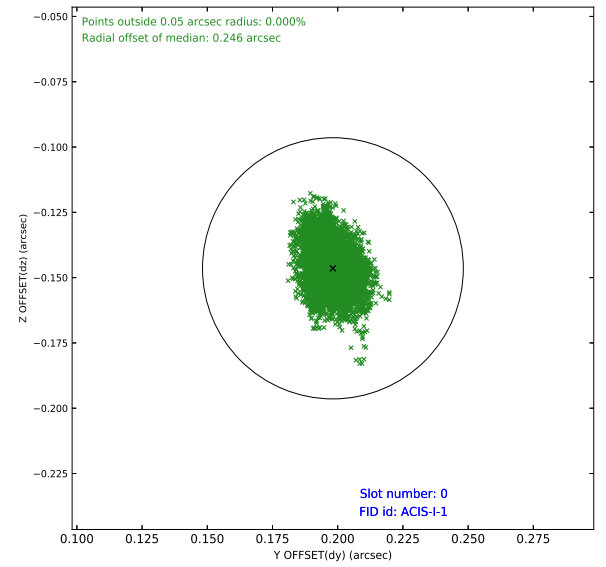
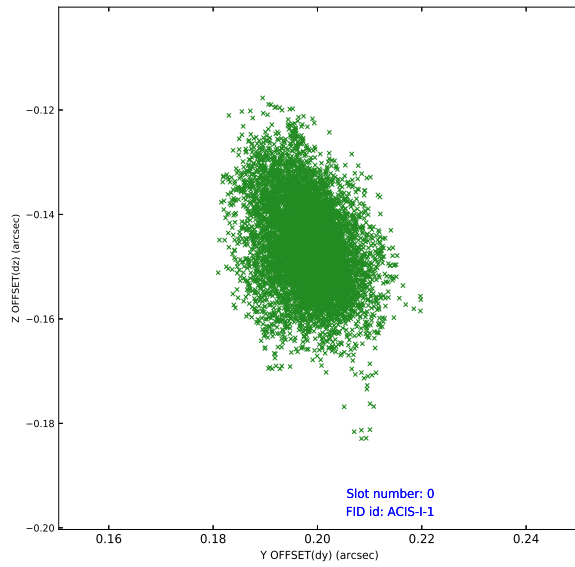


2.4.5 Slot 7

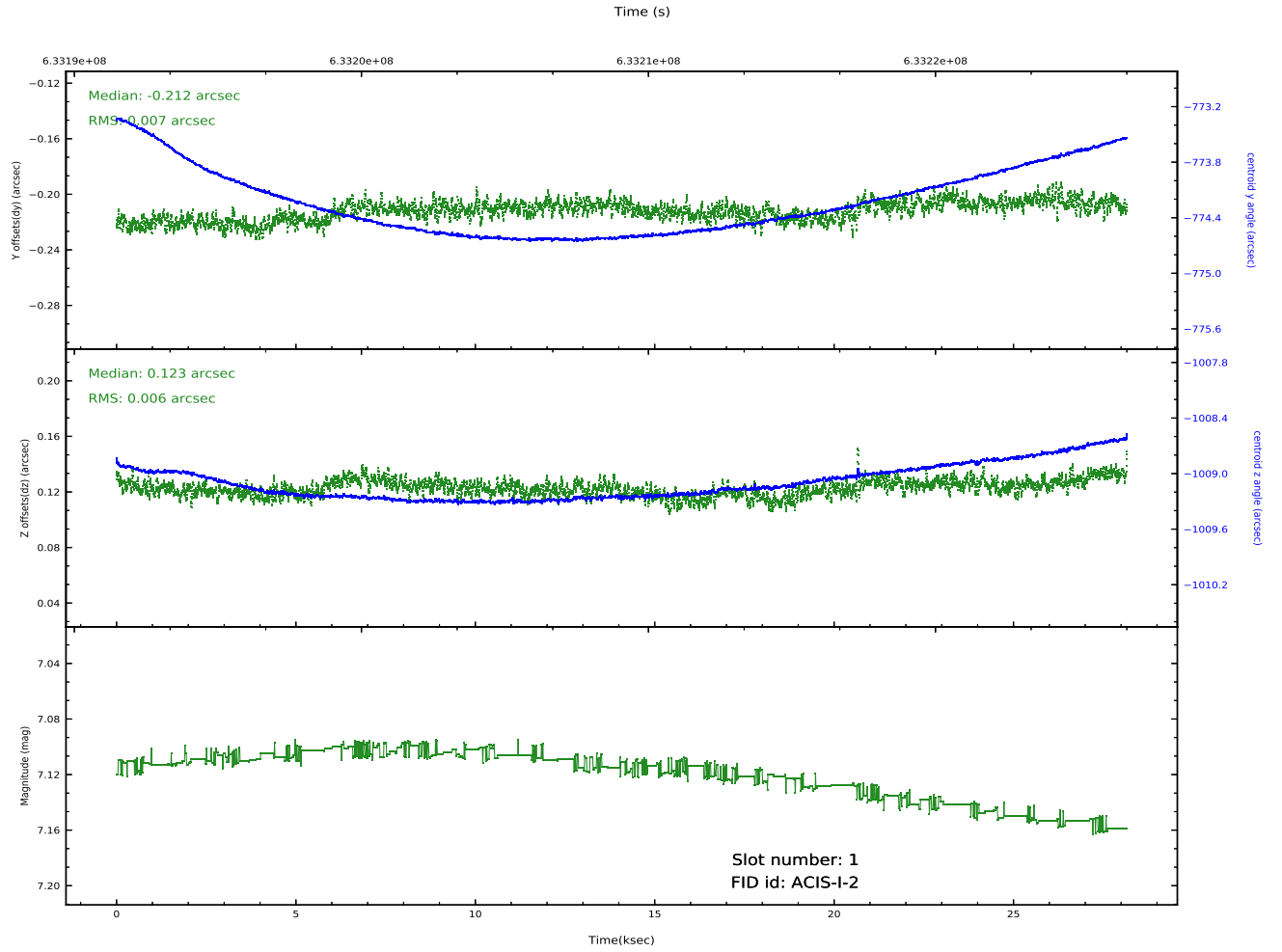
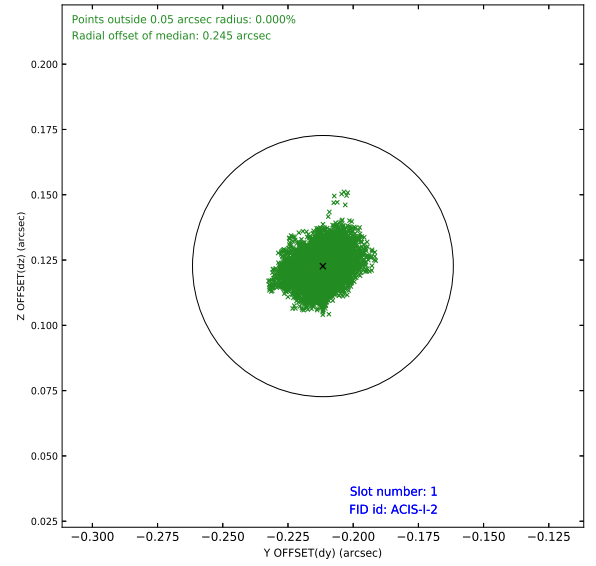
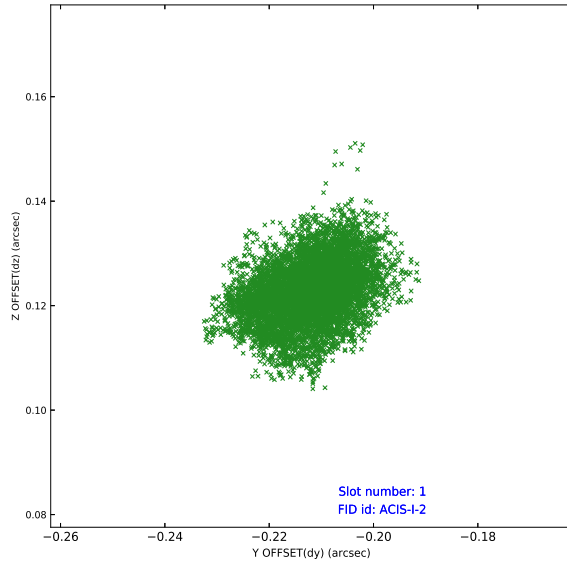


2.5 FID Slots

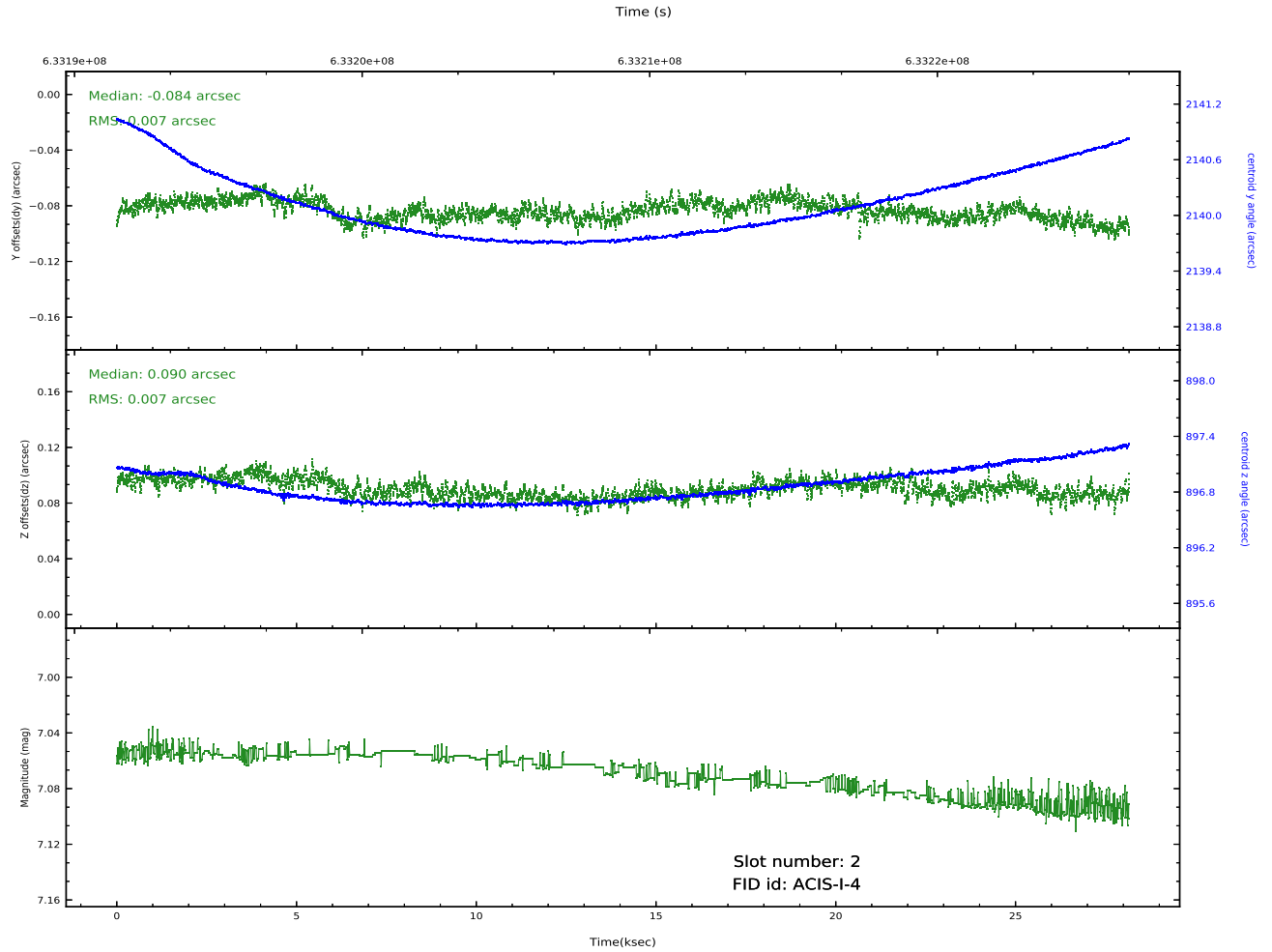
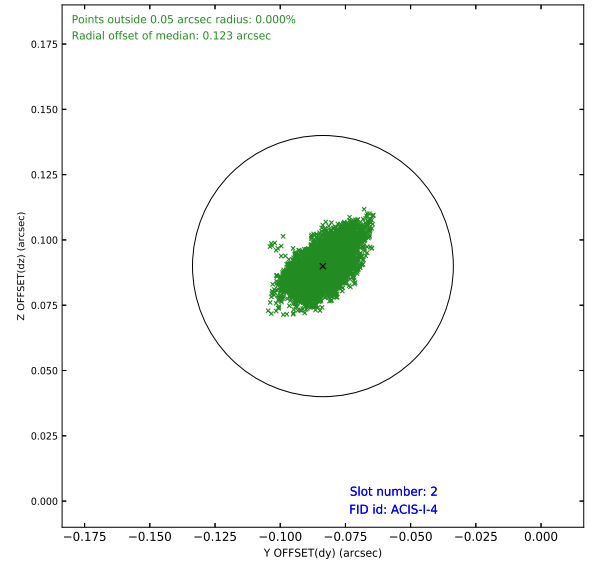
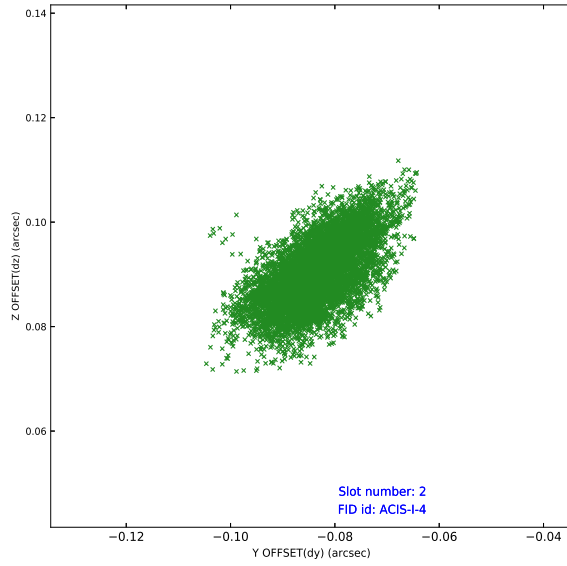
2.5.1 Slot 0



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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.078710720778

A.2 Comments

Joint proposal with HST.

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Two optional chips were dropped.