

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20990 - L2 Version 2
Chandra X-Ray Center

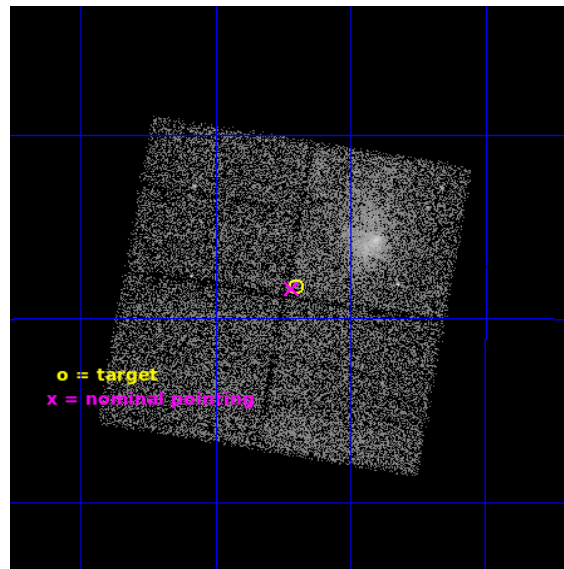
L2 Processing Date : Oct 24 2020

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1 Front

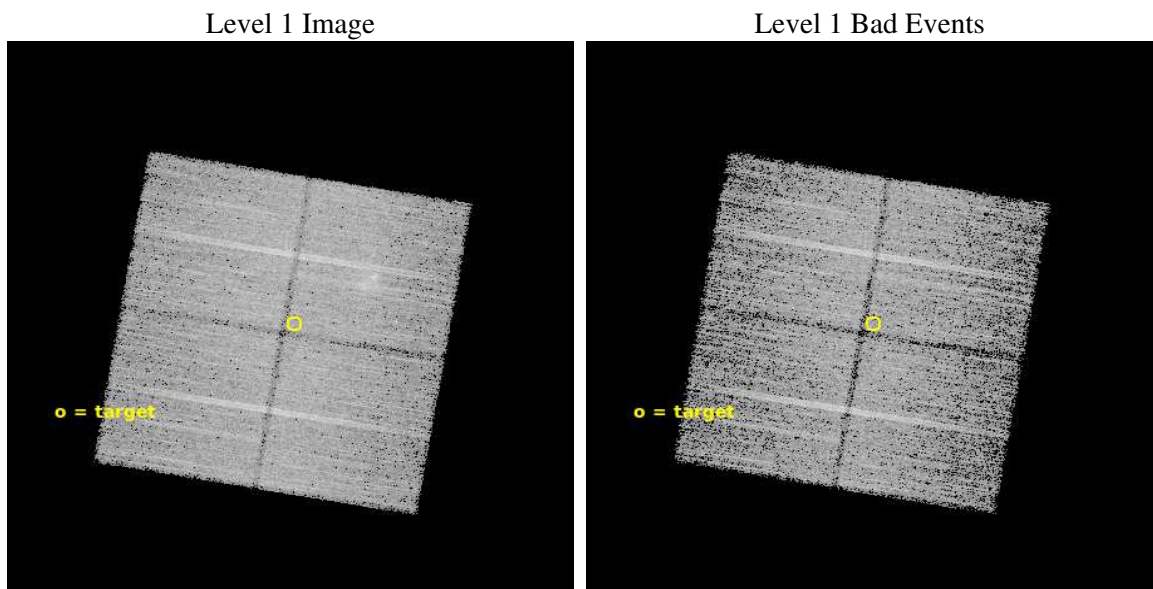
seq_num	801712	Sequence number
obs_id	20990	Observation id
title	Deep observation of a merging cluster with a radio halo and a radio relic	Proposal title
observer	Ralph Kraft	Principal investigator
object	Abell 1300	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	173.050546	Observer's specified target RA [deg]
dec_targ	-19.9715	Observer's specified target Dec [deg]
ra_nom	173.05424257821	Nominal RA [deg]
dec_nom	-19.972787402127	Nominal Dec [deg]
roll_nom	9.7028476160176	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15075.259105802	Sum of GTIs [s]
livetime	14878.28974734	Livetime [s]
ontime0	15078.400116086	Sum of GTIs [s]
ontime1	15078.400116086	Sum of GTIs [s]
ontime2	15075.259085774	Sum of GTIs [s]
ontime3	15075.259105802	Sum of GTIs [s]
l2events	47491	Number of level 2 events



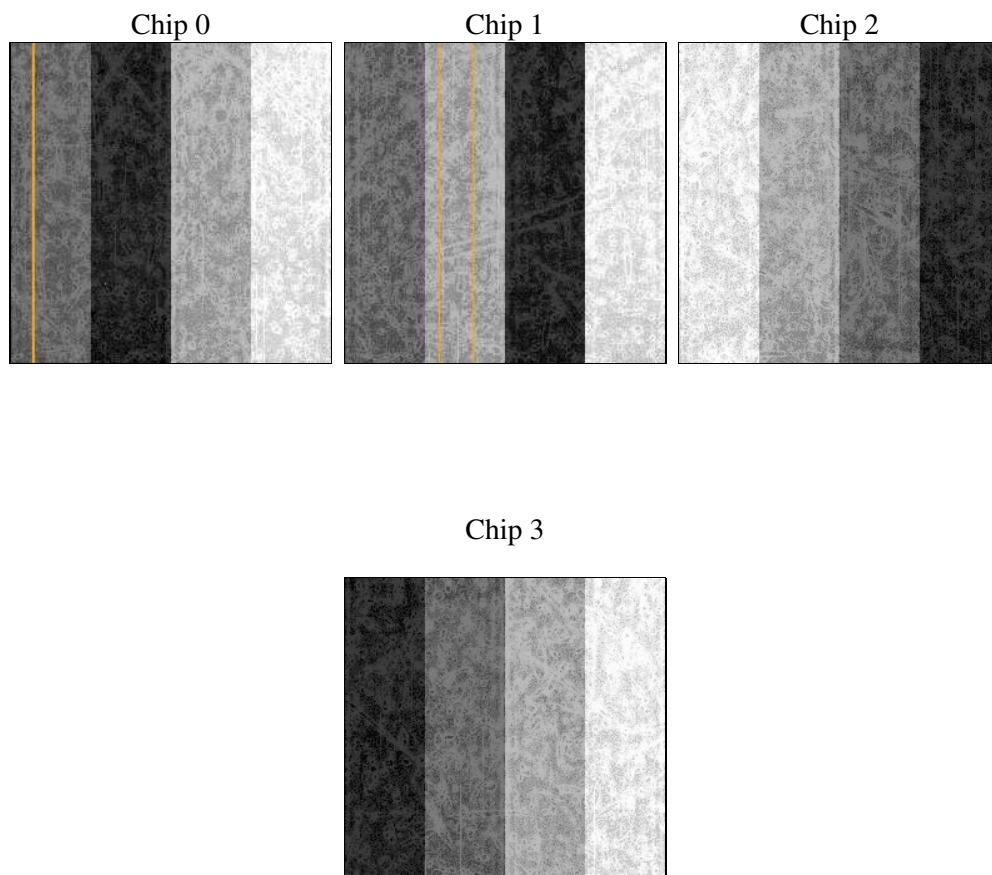
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	15075.259105802	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	15078.400116086	Sum of GTIs [s]
date	2020-10-25T02:34:53	Date and time of file creation	ontime1	15078.400116086	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15075.259085774	Sum of GTIs [s]
			ontime3	15075.259105802	Sum of GTIs [s]
			l1events	435952	Number of level 1 events

2.1.4 Events

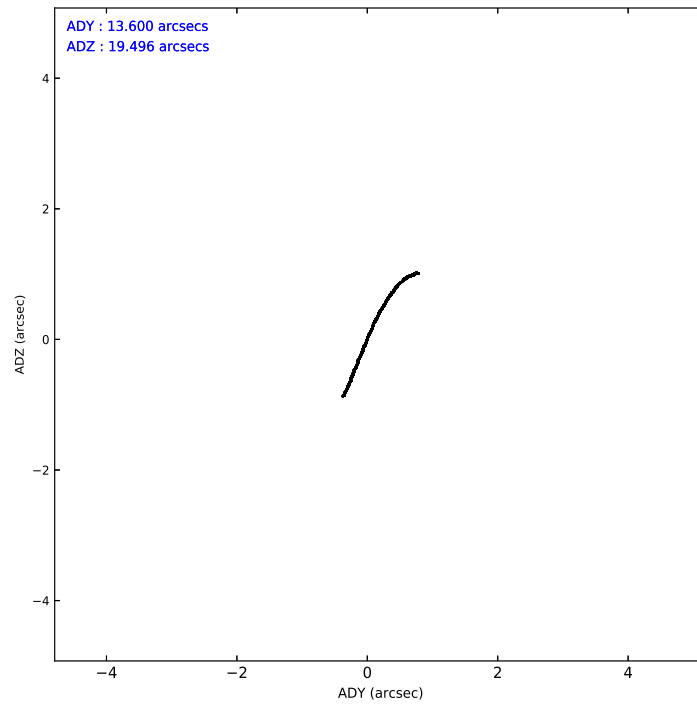
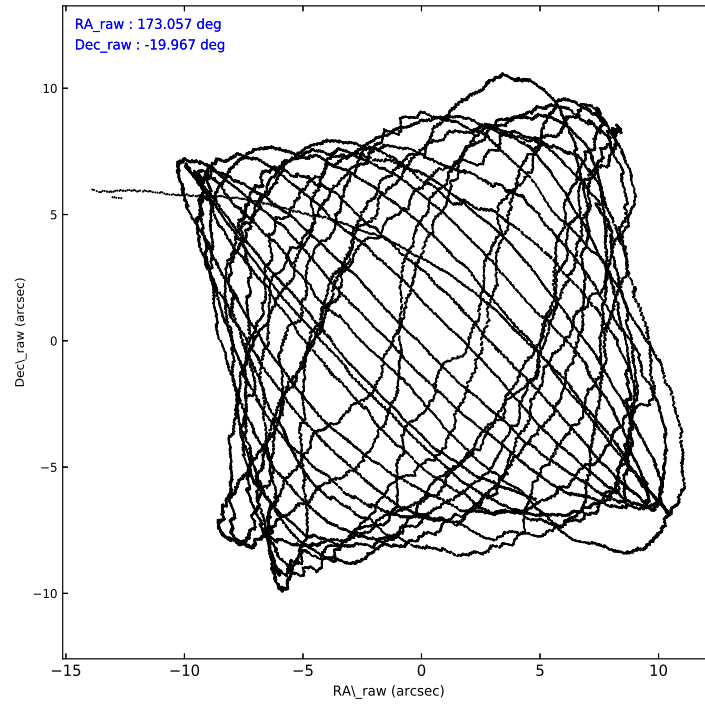
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	101989	105091	113925	114947
rejected events	89704	91685	102150	96635
rejected %	87%	87%	89%	84%

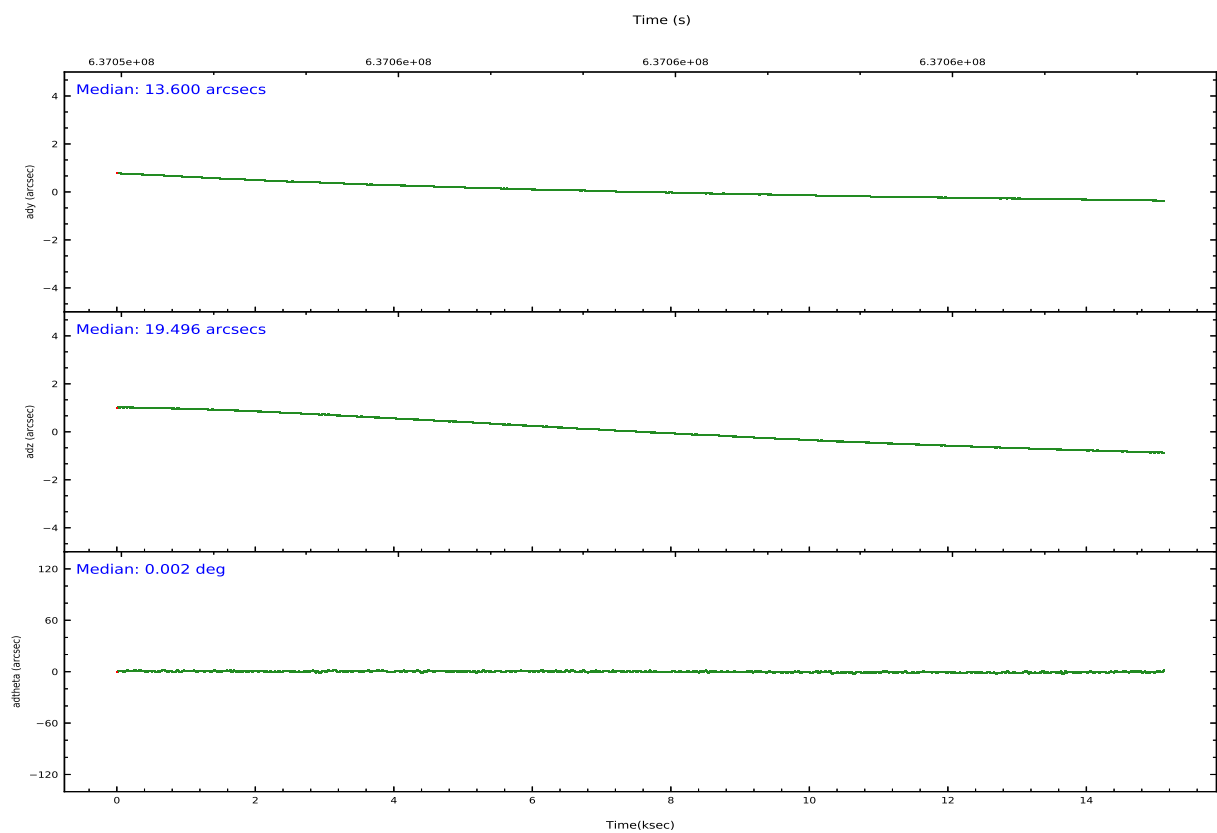
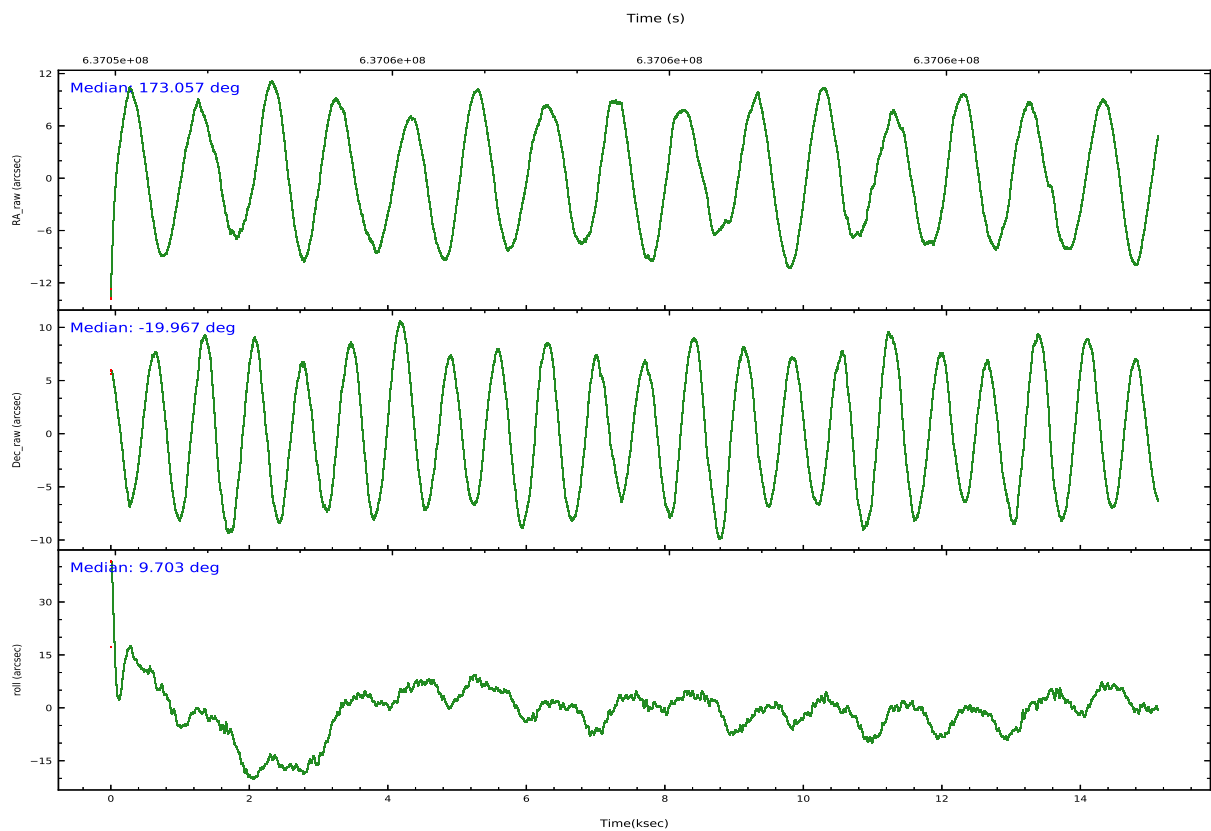
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4129	4327	4200	9392
	4%	4%	3%	8%
grade 1 events	60	73	76	79
	0%	0%	0%	0%
grade 2 events	3078	3491	2947	3240
	3%	3%	2%	2%
grade 3 events	1261	1315	1121	1495
	1%	1%	0%	1%
grade 4 events	1222	1194	1169	1443
	1%	1%	1%	1%
grade 5 events	4657	4810	4288	5423
	4%	4%	3%	4%
grade 6 events	2596	3081	2342	2745
	2%	2%	2%	2%
grade 7 events	84986	86800	97782	91130
	83%	82%	85%	79%

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	173.034944	173.05424257821	CCD I2 on	Y	Y
[deg] Pointing Dec	-19.984320	-19.972787402127	CCD I3 on	Y	Y
[deg] Pointing Roll	9.494666	9.7028476160176	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	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	637052056.184000	637050766.52441	CCD S5 on	N	N
Observation start date	2018-03-10T06:53:07	2018-03-10T06:32:46	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	637067056.184000	637068502.61295	On-chip summing requested	N	N
Observation end date	2018-03-10T11:03:07	2018-03-10T11:28:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



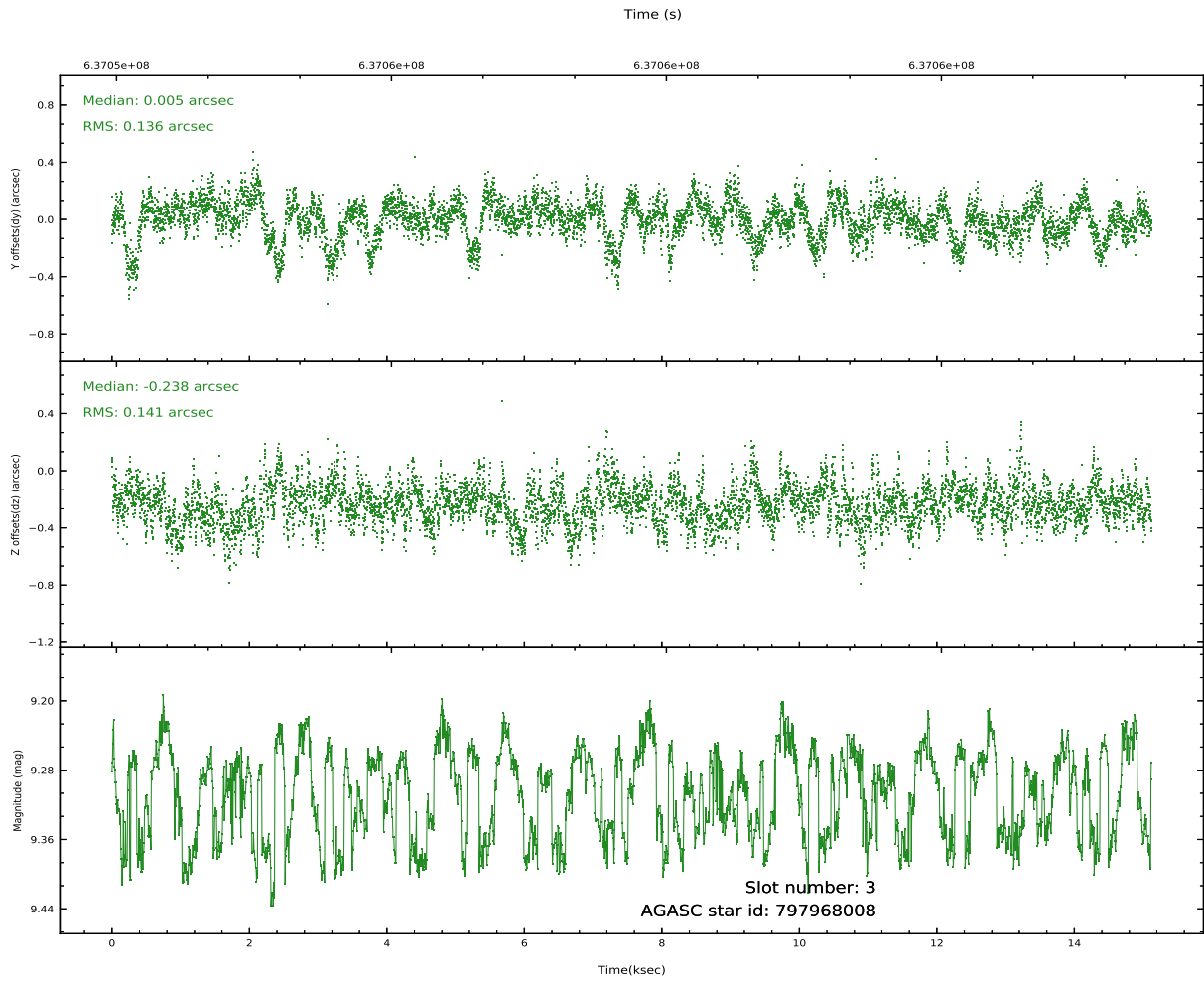
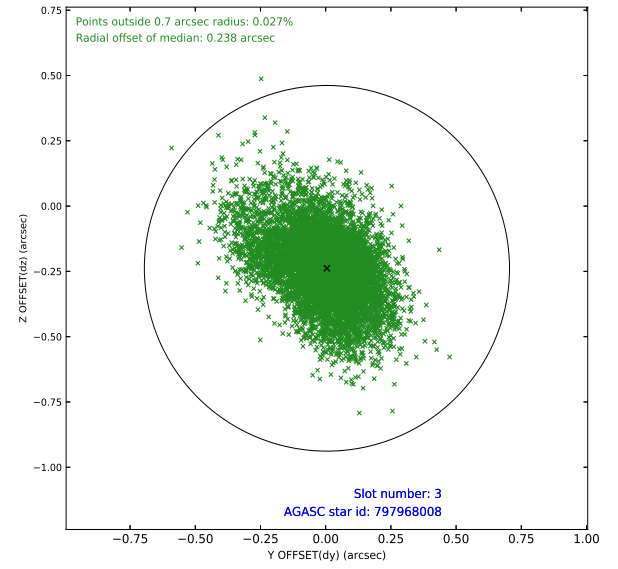
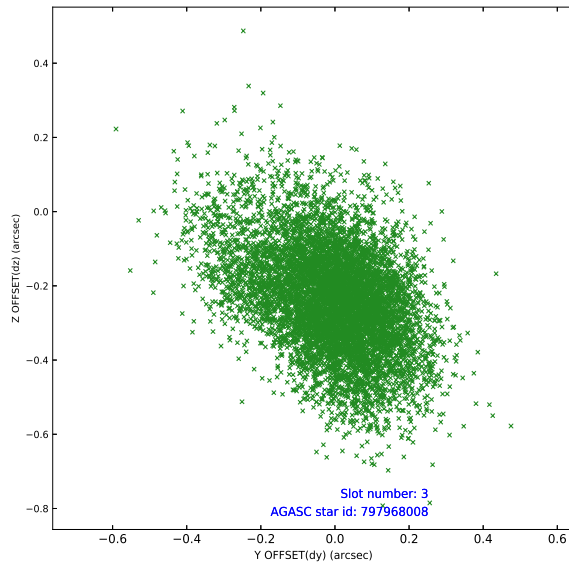


Slot Statistics

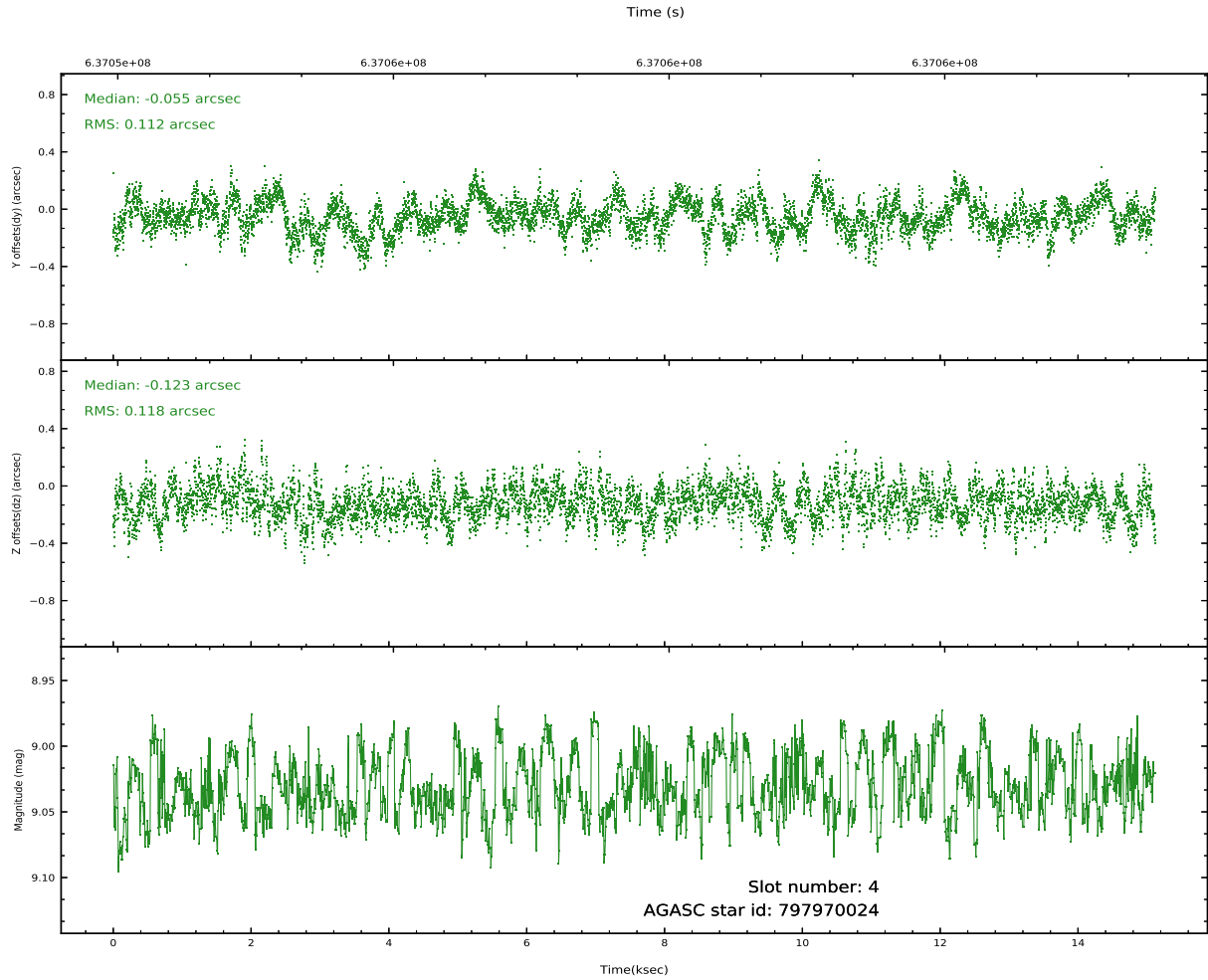
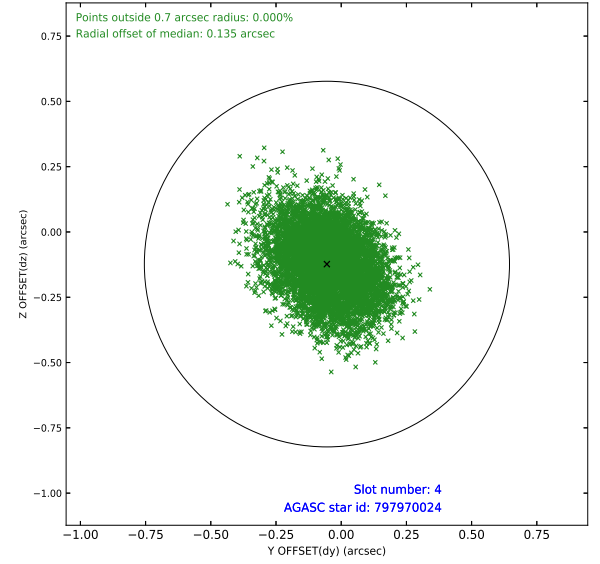
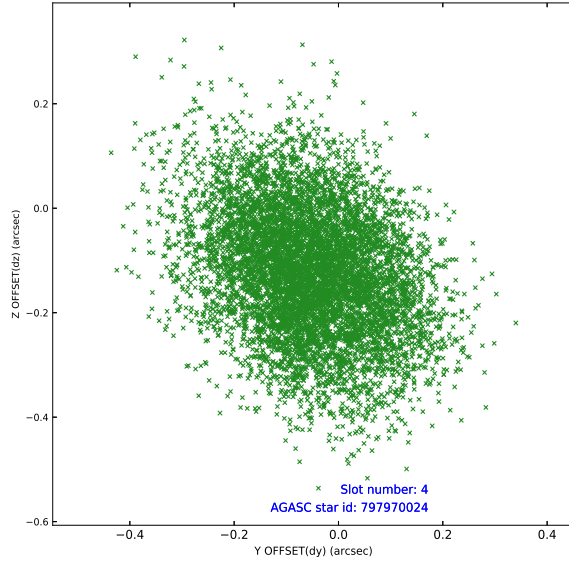
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	3688	1.000	0.115	-0.048	0.022	0.052	0.000000	0.000000	925.88	-843
1	FID		ACIS-I-4	7.14	3689	1.000	0.110	0.005	0.021	0.030	0.000000	0.000000	2146.22	1056
2	FID		ACIS-I-5	7.18	3689	1.000	-0.328	0.115	0.015	0.025	0.000000	0.000000	-1822.05	1054
3	GUIDE	used	797968008	9.30	7361	1.000	0.005	-0.238	0.200	0.354	173.274298	-19.815834	899.94	463
4	GUIDE	used	797970024	9.03	7375	1.000	-0.055	-0.123	0.175	0.281	172.716766	-19.832014	-972.13	717
5	GUIDE	used	798375016	9.25	7373	1.000	0.009	0.184	0.158	0.276	172.536267	-20.217781	-1800.47	-553
6	GUIDE	used	798492464	8.97	7369	1.000	-0.054	0.059	0.158	0.269	173.652158	-20.299483	1868.04	-1466
7	GUIDE	used	798495824	8.69	7373	1.000	0.104	0.113	0.168	0.281	173.403222	-20.546440	890.61	-2201

2.4 Star Slots

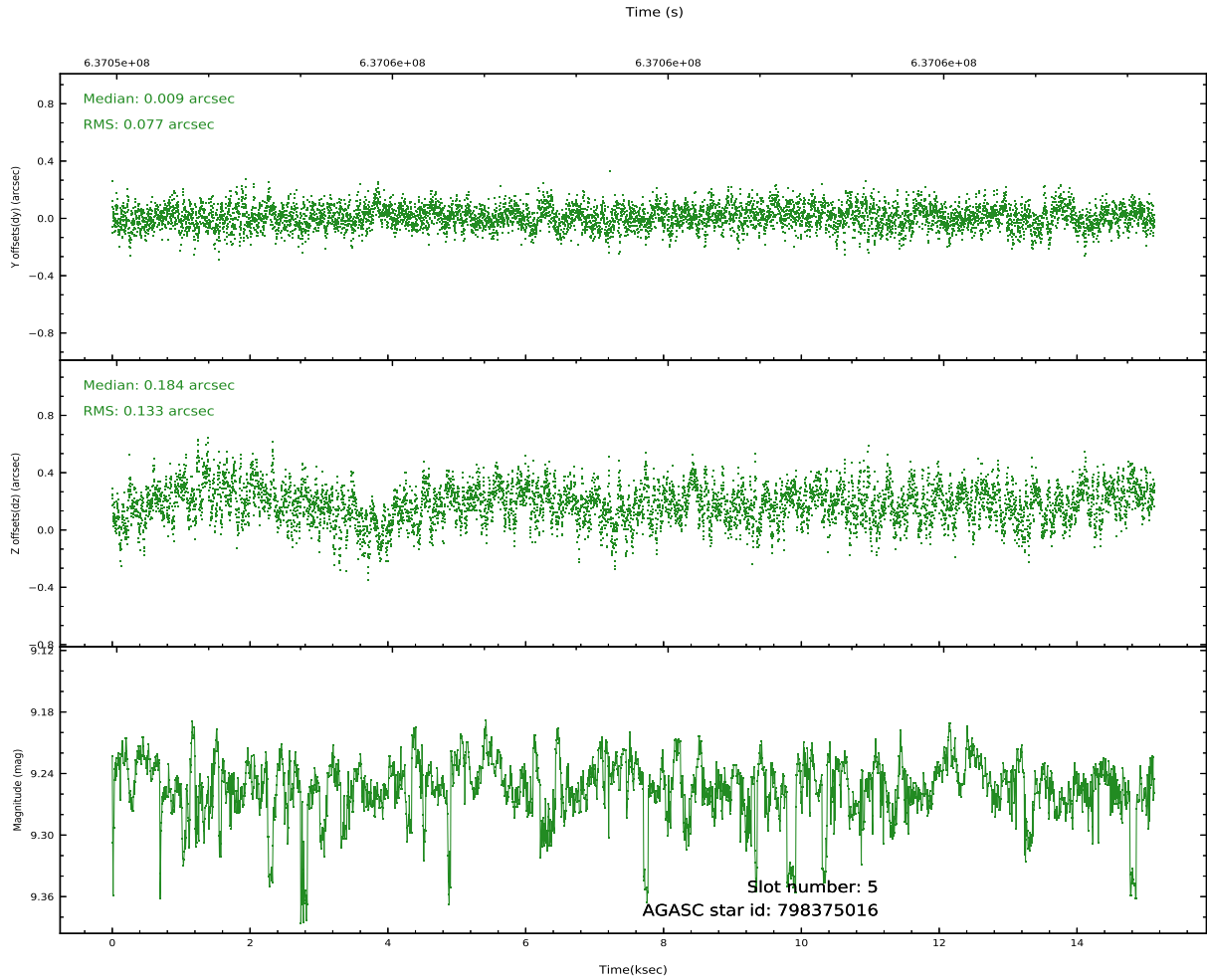
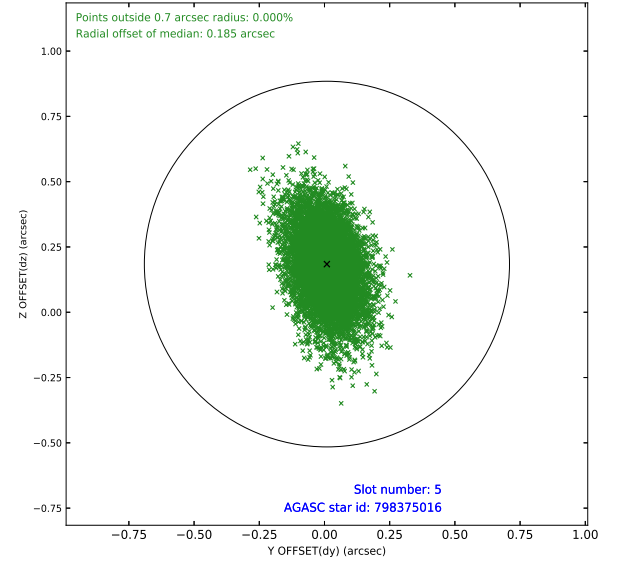
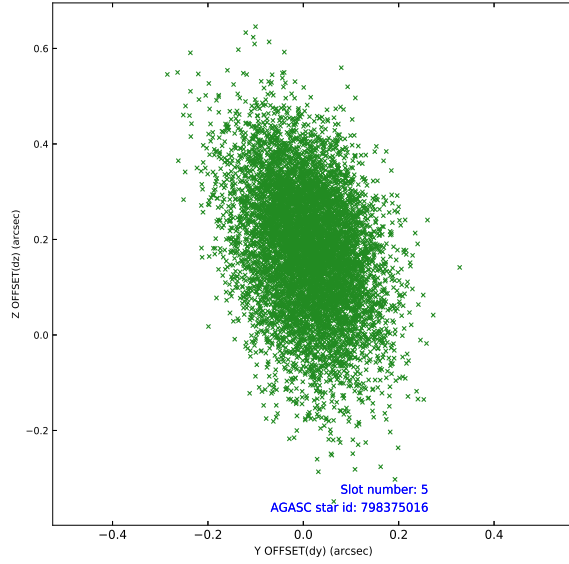
2.4.1 Slot 3



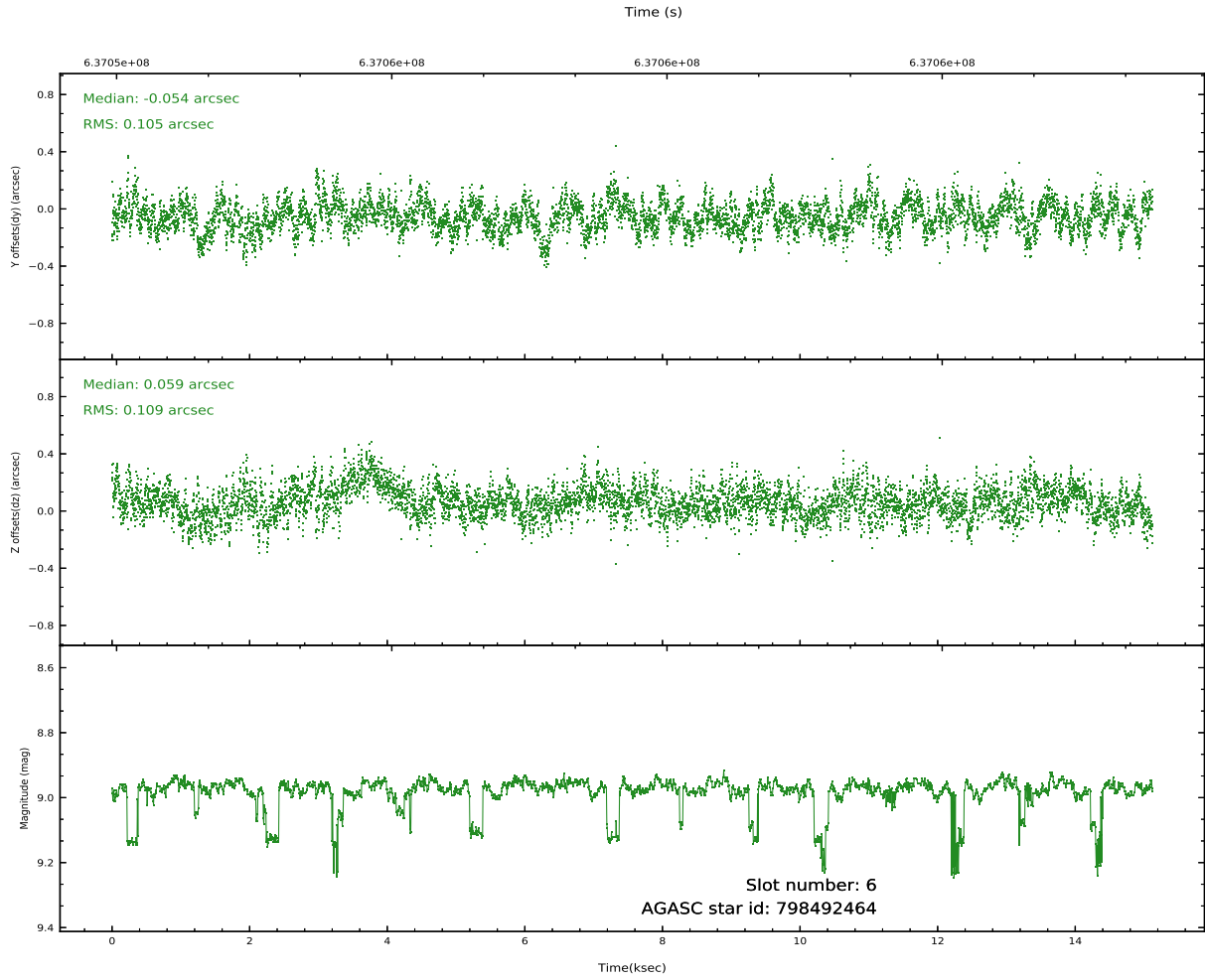
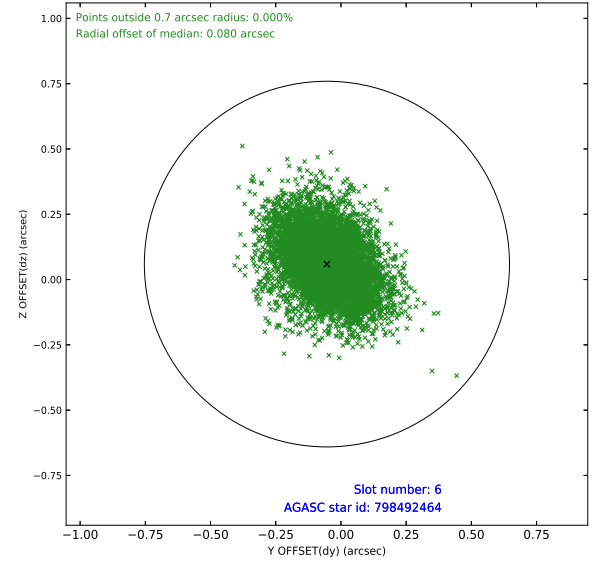
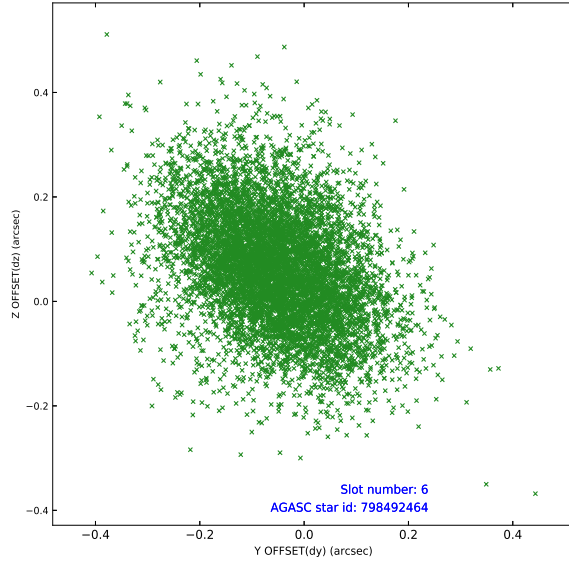
2.4.2 Slot 4



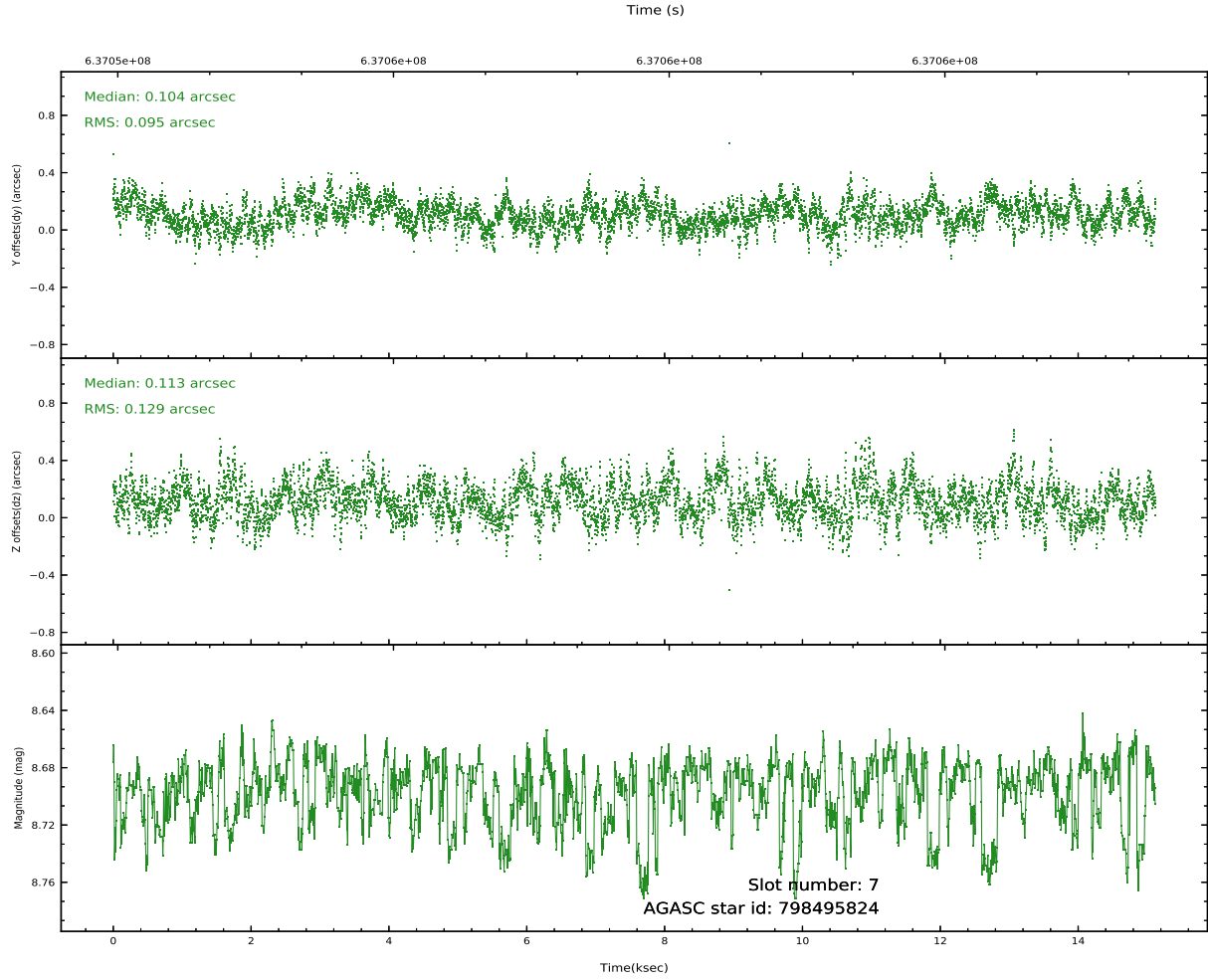
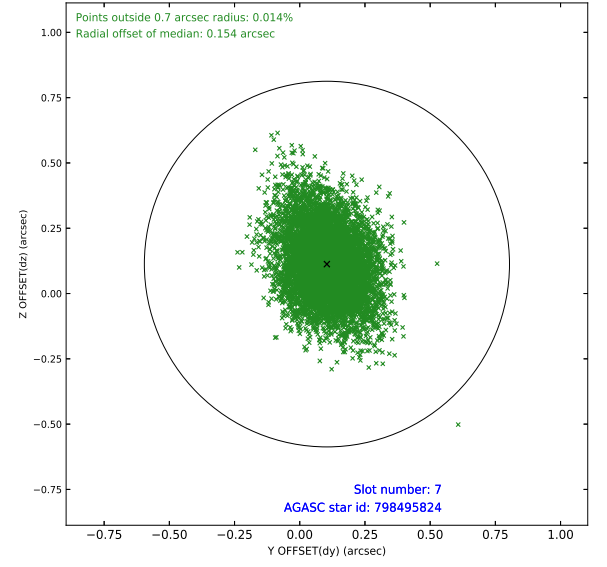
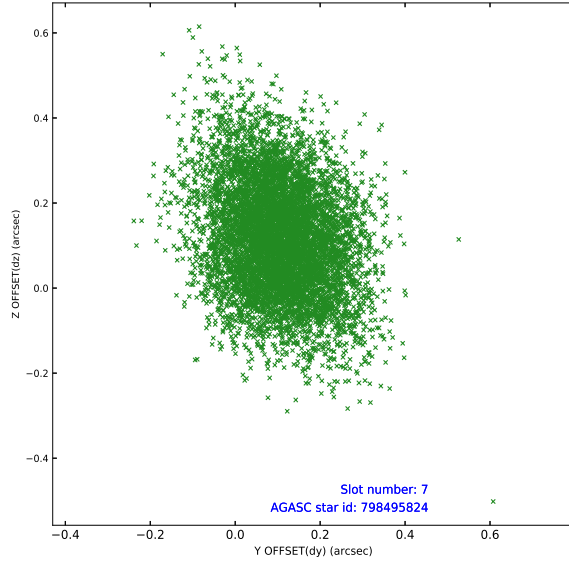
2.4.3 Slot 5



2.4.4 Slot 6

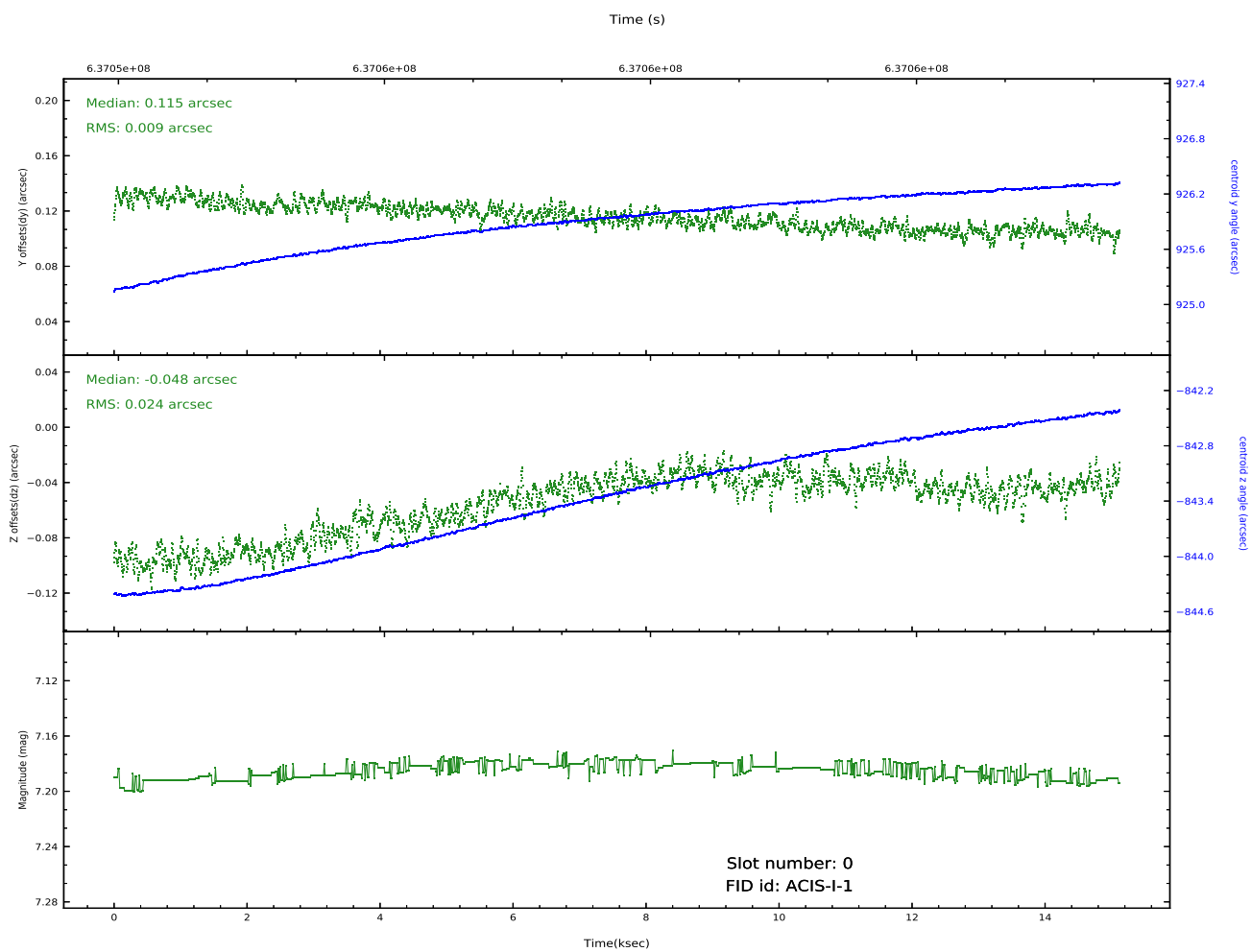
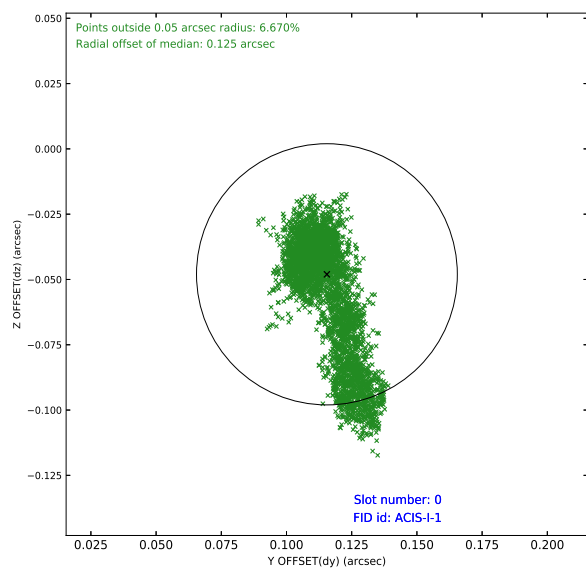
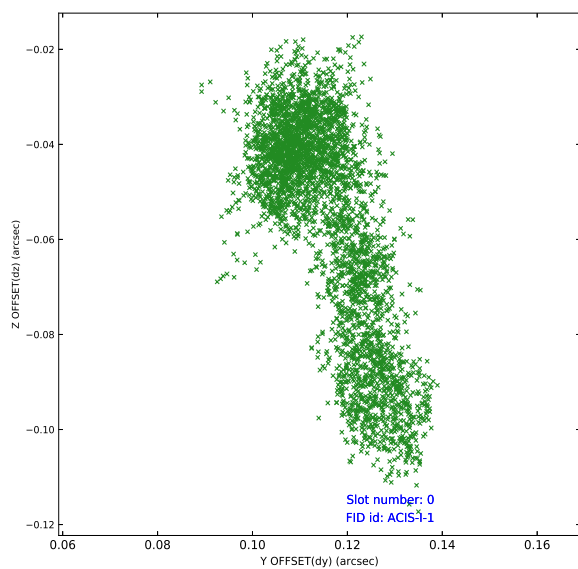


2.4.5 Slot 7

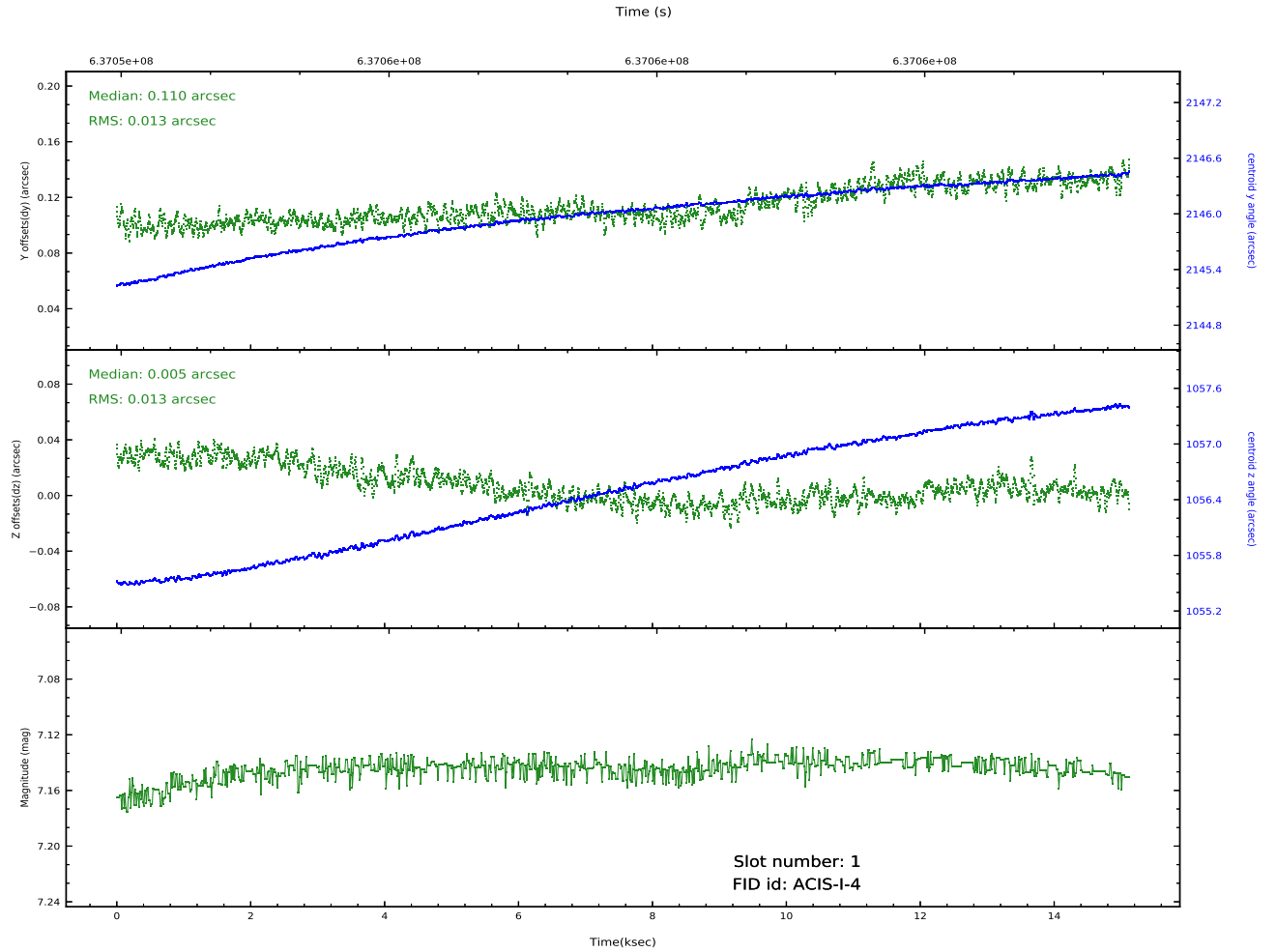
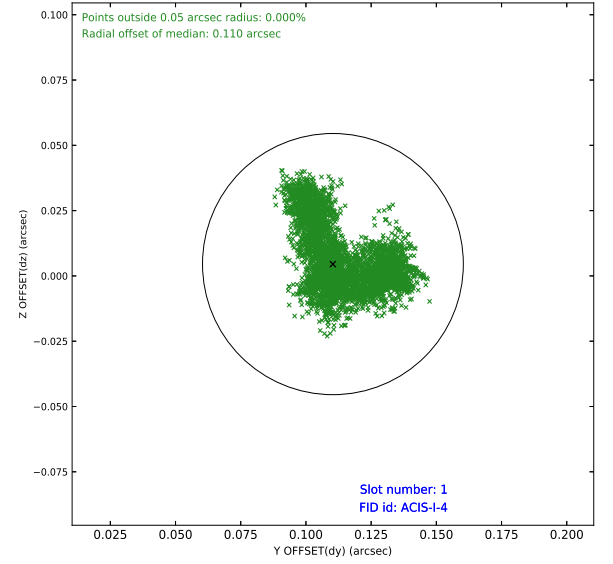
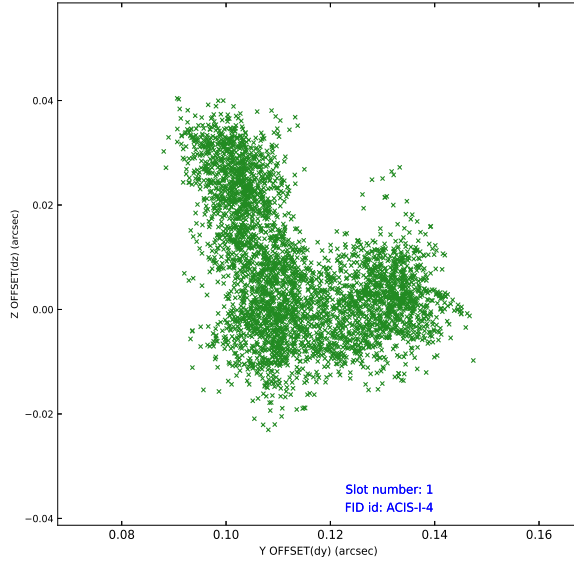


2.5 FID Slots

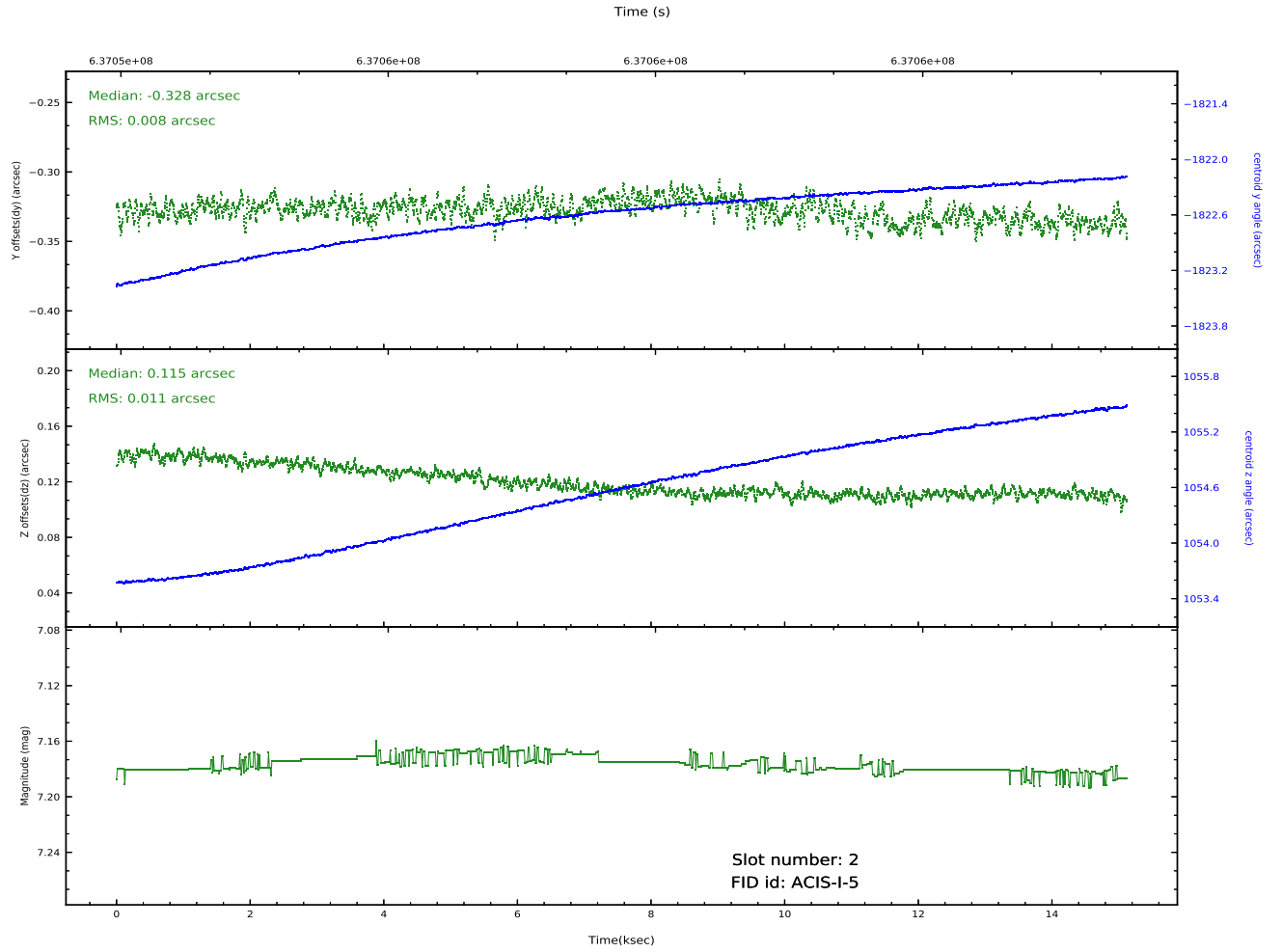
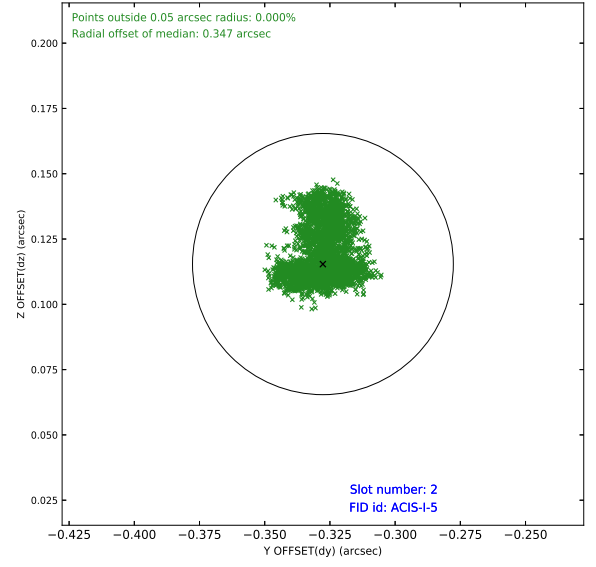
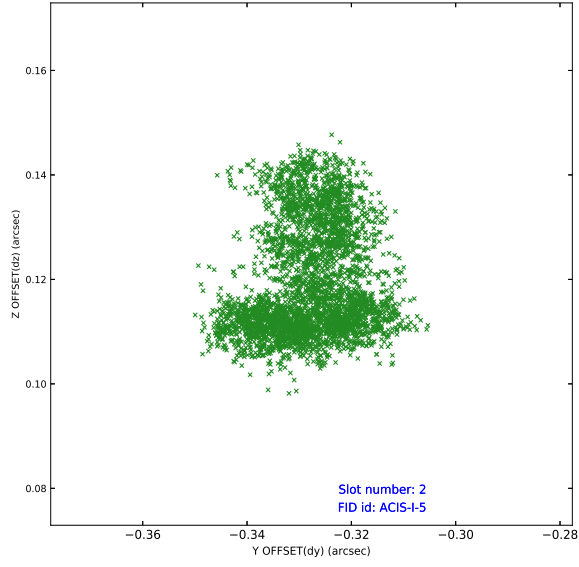
2.5.1 Slot 0



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)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.075259105802

A.2 Comments

One optional chip was dropped.