

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19778 - L2 Version 2
Chandra X-Ray Center

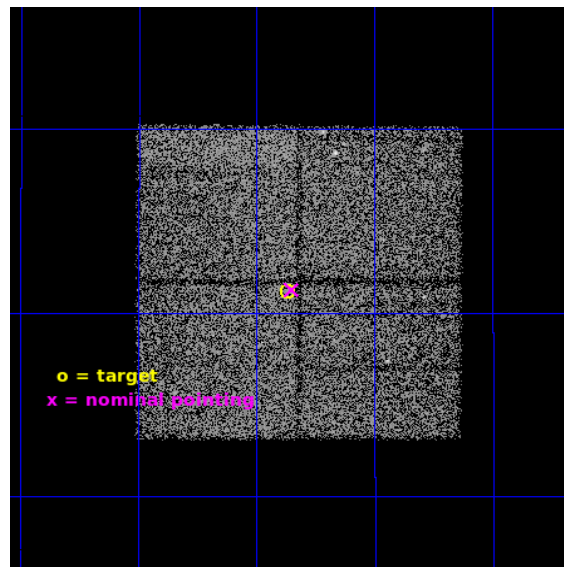
L2 Processing Date : Oct 25 2020

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1 Front

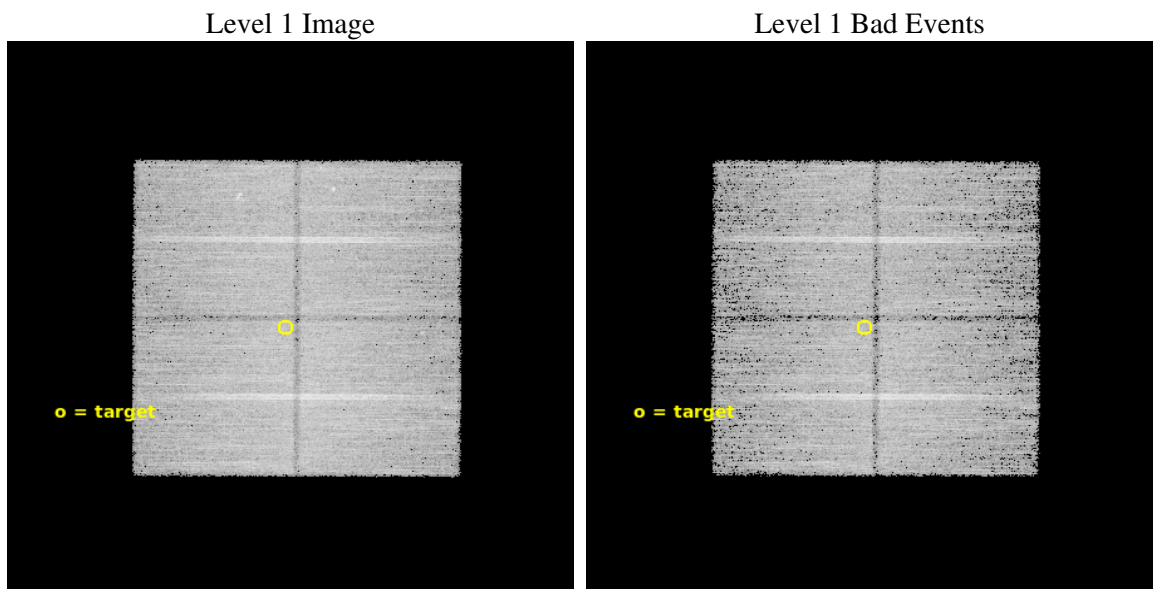
seq_num	901394	Sequence number
obs_id	19778	Observation id
title	An extended moderate-depth contiguous layer of the Chandra Bootes field -- additional pointings	Proposal title
observer	Ralph Kraft	Principal investigator
object	XBootes	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	216.46668	Observer's specified target RA [deg]
dec_targ	34.686545	Observer's specified target Dec [deg]
ra_nom	216.46258628879	Nominal RA [deg]
dec_nom	34.687787338988	Nominal Dec [deg]
roll_nom	180.20842183367	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22902.249441504	Sum of GTIs [s]
livetime	22603.01469216	Livetime [s]
ontime0	22902.126331687	Sum of GTIs [s]
ontime1	22905.30842185	Sum of GTIs [s]
ontime2	22908.490512013	Sum of GTIs [s]
ontime3	22902.249441504	Sum of GTIs [s]
l2events	62074	Number of level 2 events



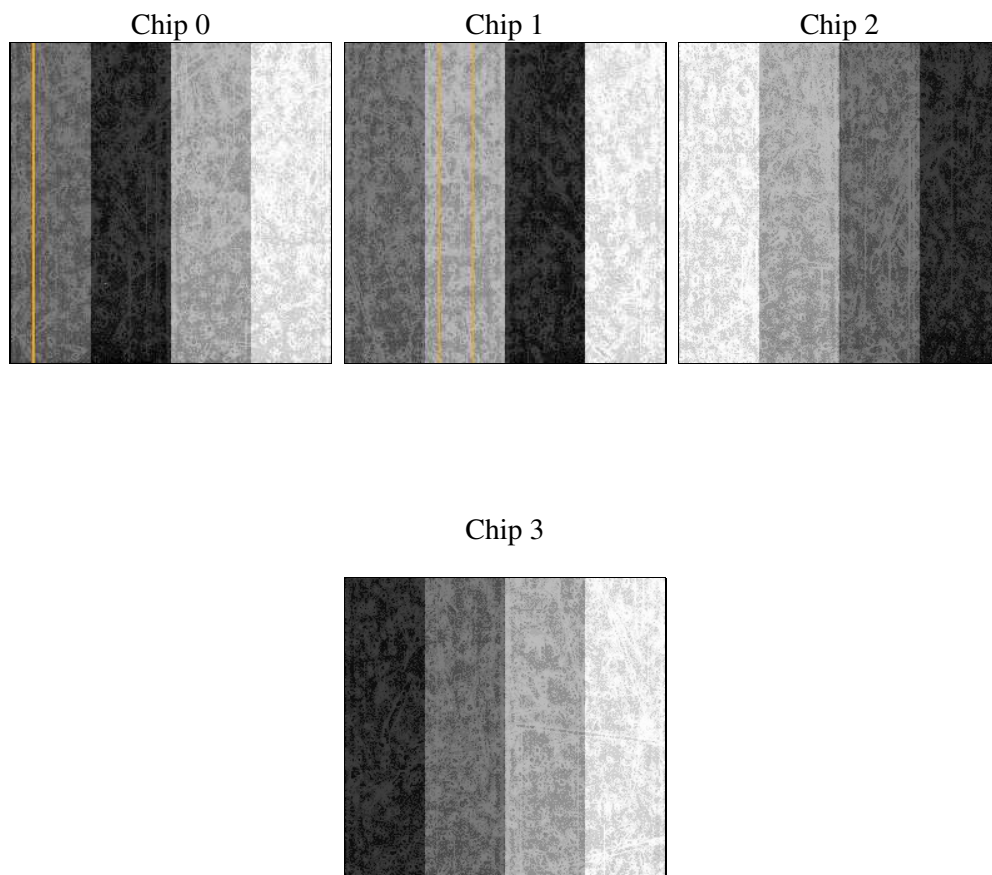
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	22902.249441504	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	22902.126331687	Sum of GTIs [s]
date	2020-10-25T15:37:37	Date and time of file creation	ontime1	22905.30842185	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	22908.490512013	Sum of GTIs [s]
			ontime3	22902.249441504	Sum of GTIs [s]
			l1events	638610	Number of level 1 events

2.1.4 Events

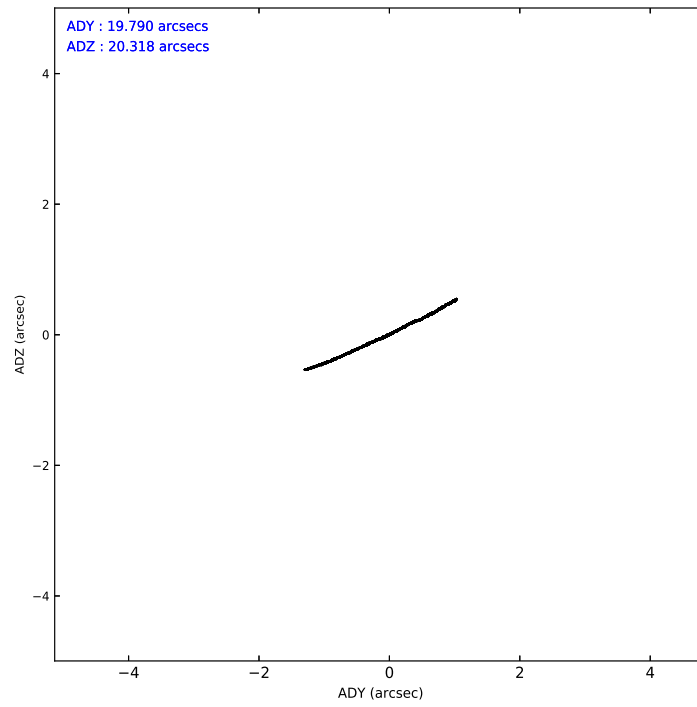
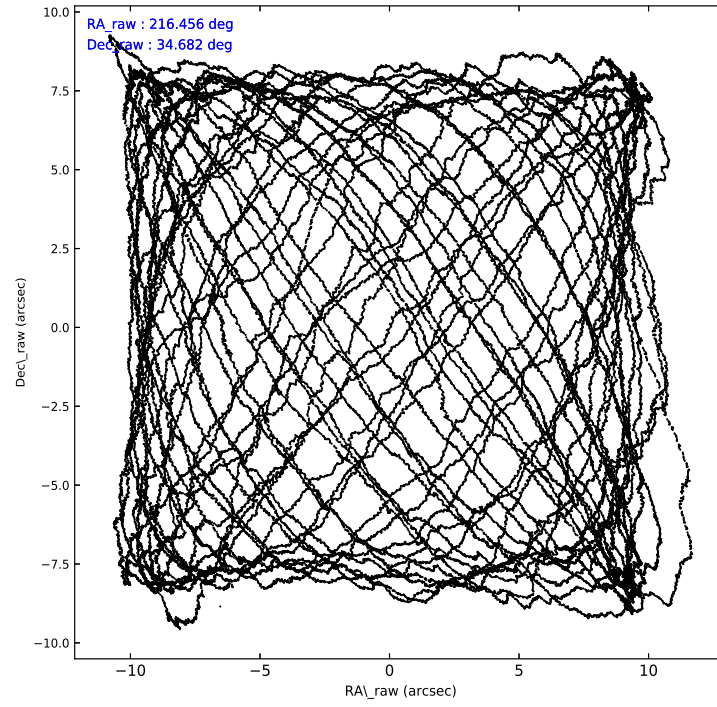
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	151124	155670	167134	164682
rejected events	132323	134862	148955	147416
rejected %	87%	86%	89%	89%

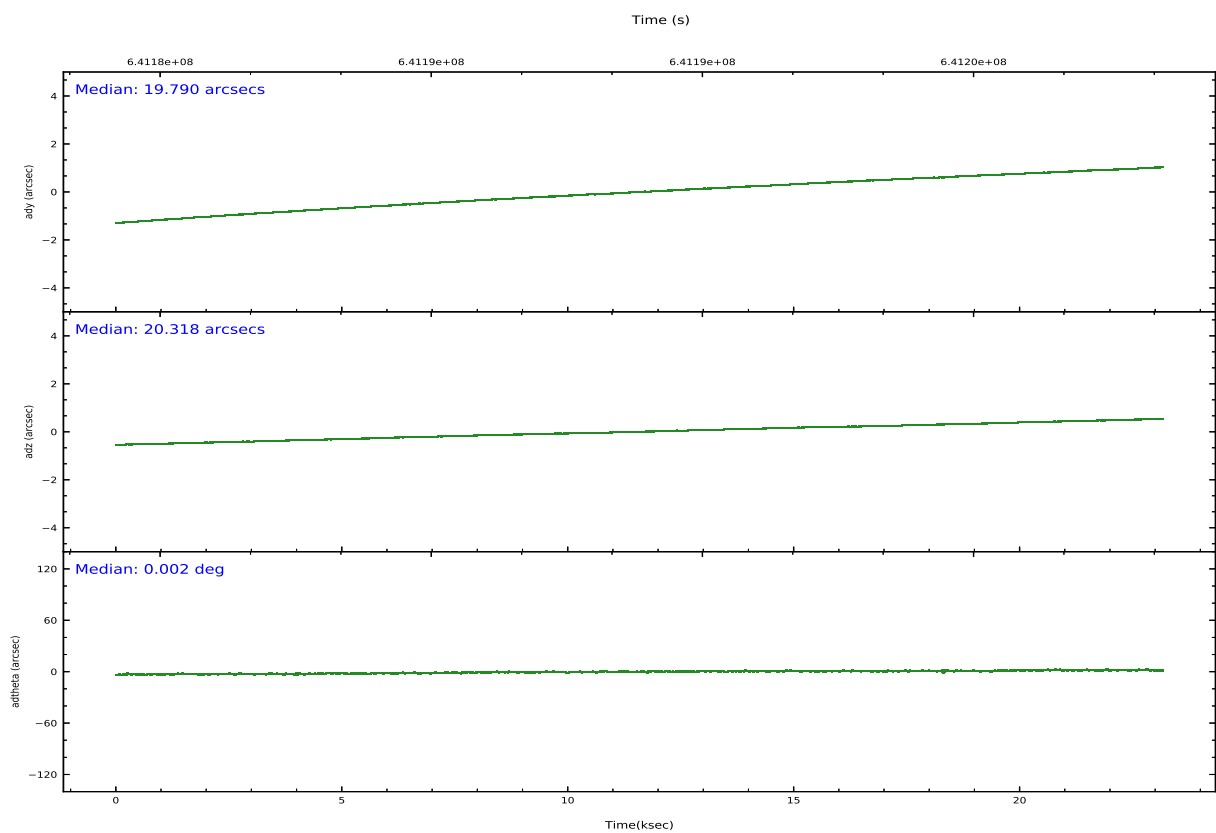
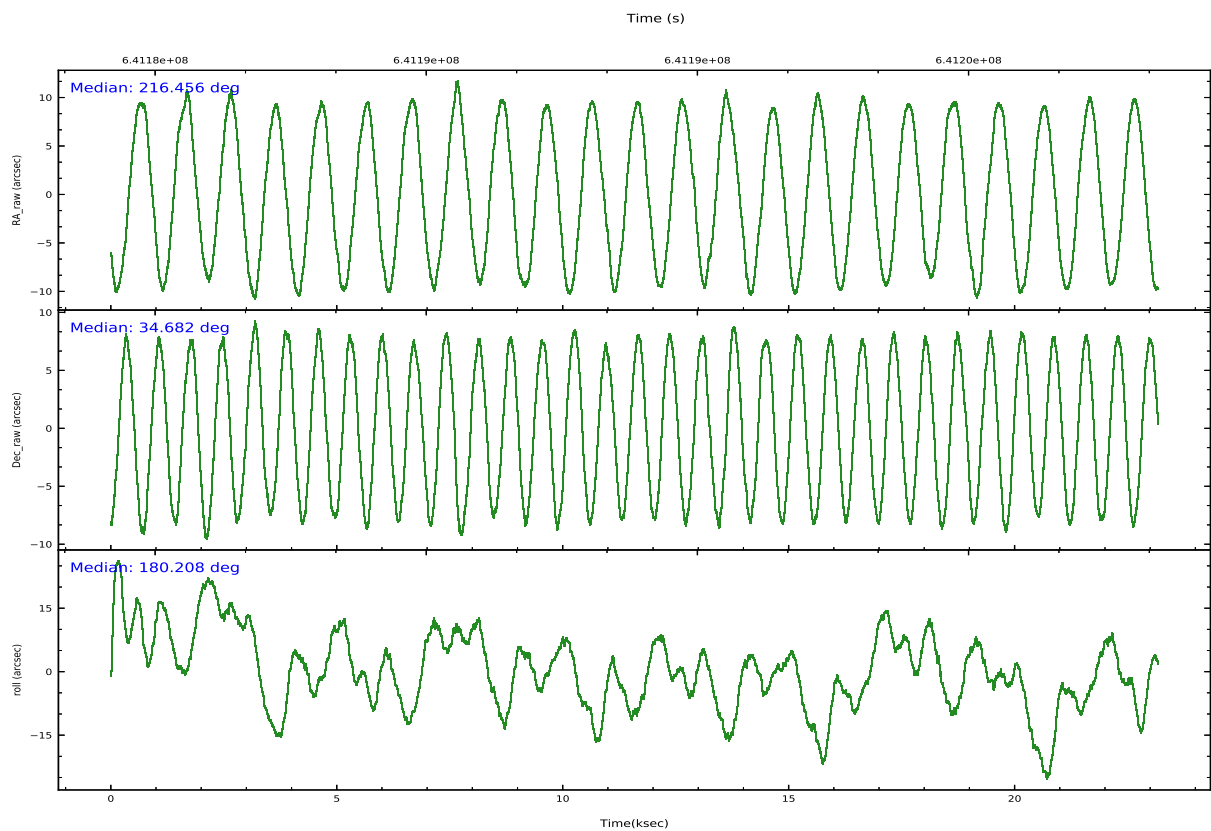
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	6491	7001	6288	5944
	4%	4%	3%	3%
grade 1 events	97	101	105	101
	0%	0%	0%	0%
grade 2 events	4588	5269	4566	3946
	3%	3%	2%	2%
grade 3 events	1968	1953	1818	1805
	1%	1%	1%	1%
grade 4 events	1832	1901	1837	1820
	1%	1%	1%	1%
grade 5 events	7309	7450	6714	7931
	4%	4%	4%	4%
grade 6 events	3931	4688	3675	3754
	2%	3%	2%	2%
grade 7 events	124908	127307	142131	139381
	82%	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	216.484601	216.46258628879	CCD I2 on	Y	Y
[deg] Pointing Dec	34.695859	34.687787338988	CCD I3 on	Y	Y
[deg] Pointing Roll	179.989802	180.20842183367	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	O2	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	641181196.184000	641180799.26811	CCD S5 on	N	N
Observation start date	2018-04-27T01:52:07	2018-04-27T01:46:39	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	641204196.184000	641204562.35701	On-chip summing requested	N	N
Observation end date	2018-04-27T08:15:27	2018-04-27T08:22:42	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



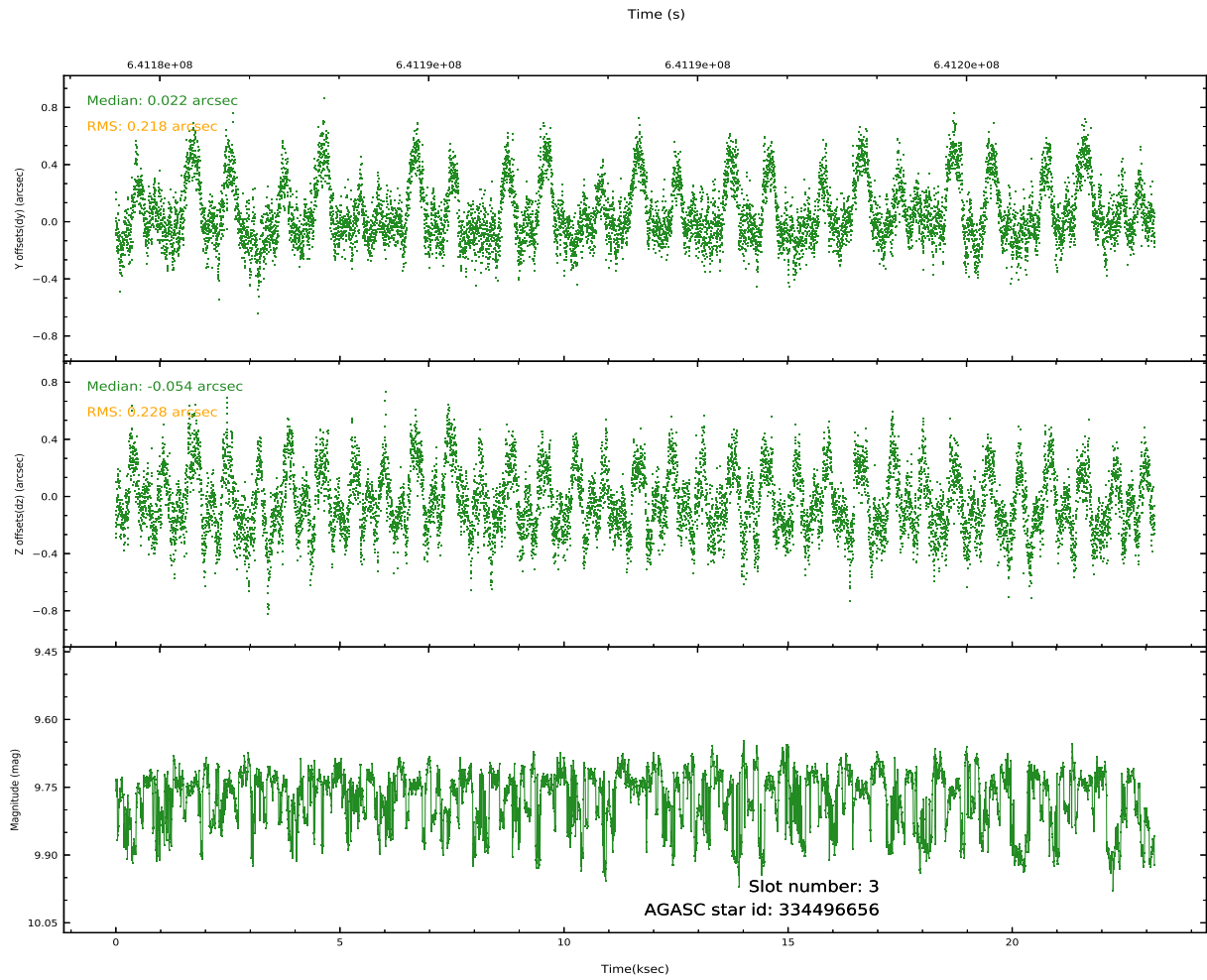
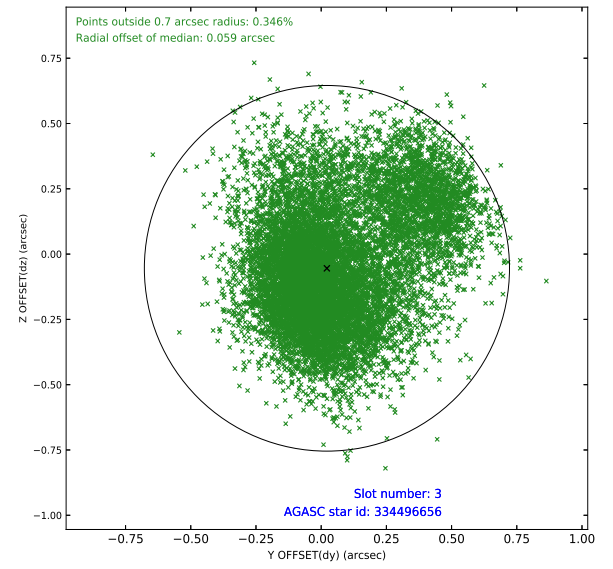
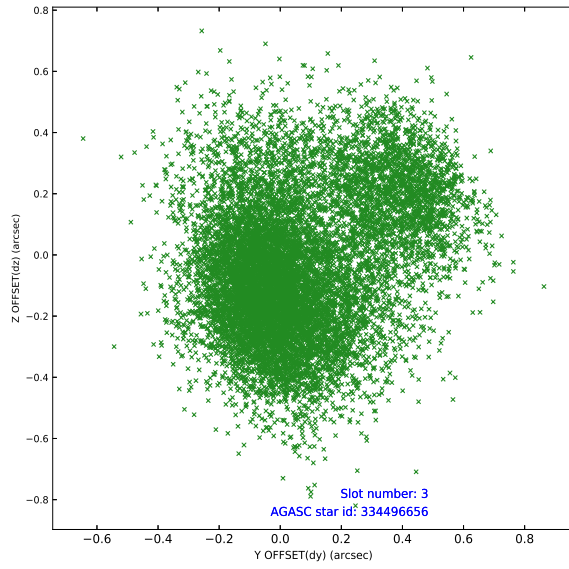


Slot Statistics

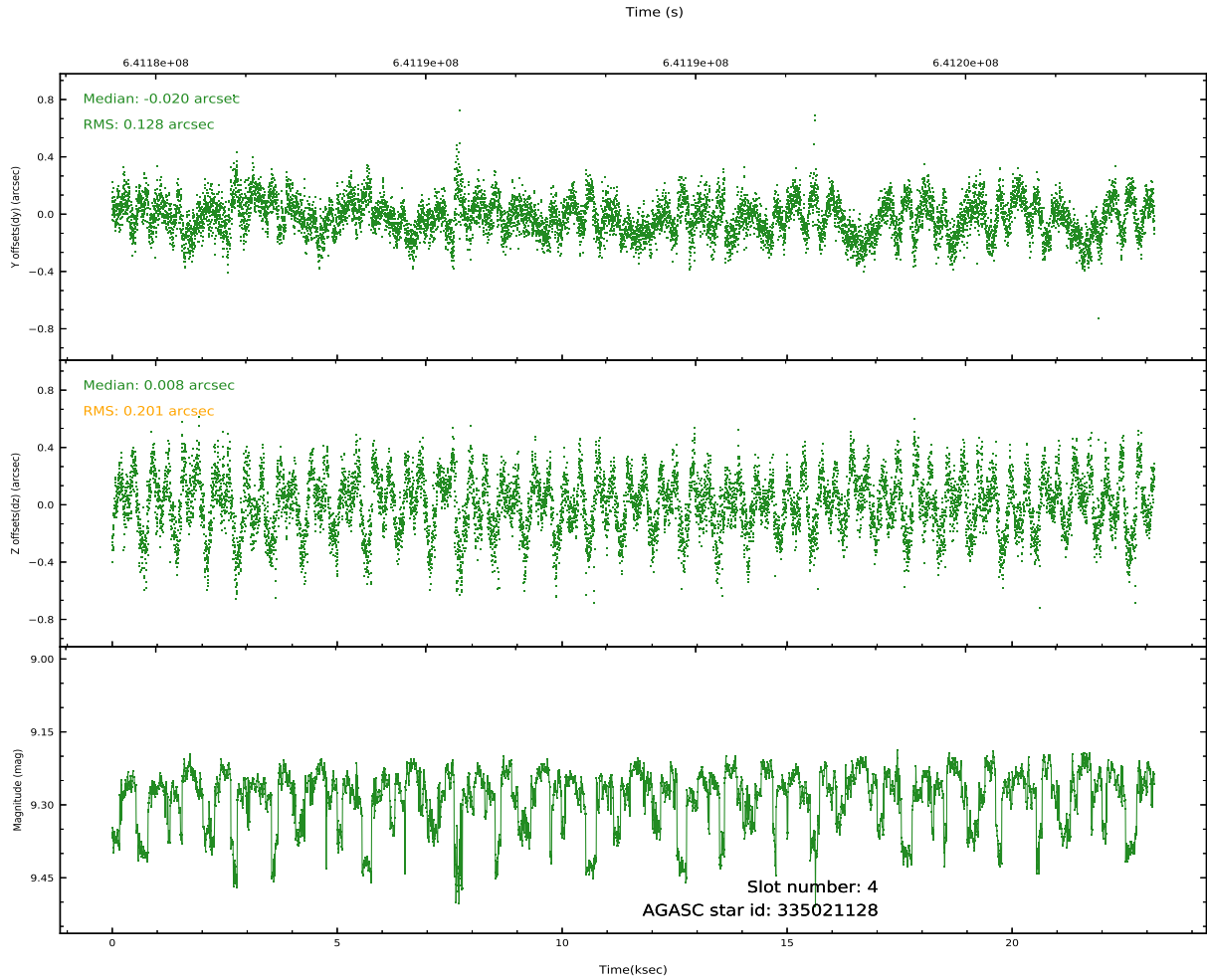
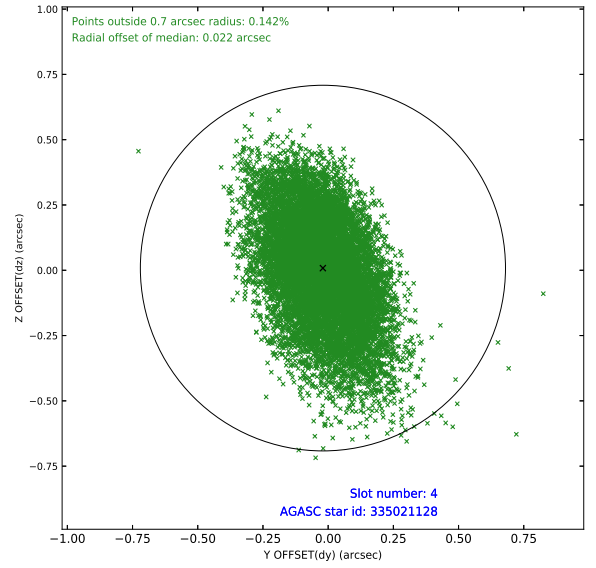
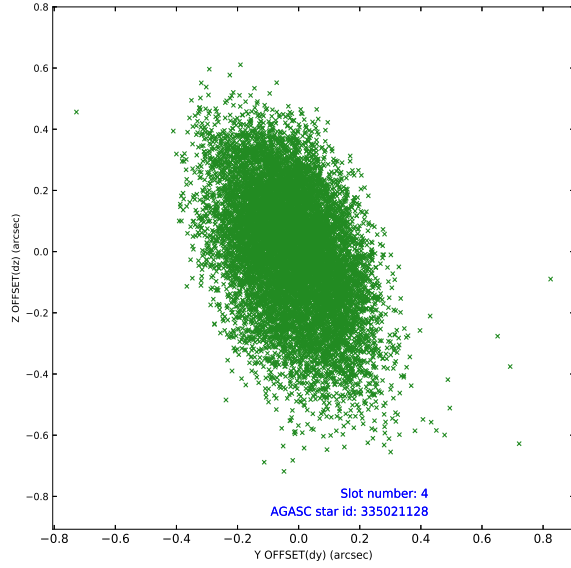
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.15	5653	1.000	0.195	-0.135	0.025	0.038	0.000000	0.000000	919.71	-844
1	FID		ACIS-I-5	7.15	5653	1.000	-0.304	0.166	0.017	0.024	0.000000	0.000000	-1828.68	1053
2	FID		ACIS-I-6	7.17	5652	1.000	0.016	0.038	0.014	0.021	0.000000	0.000000	385.11	1698
3	GUIDE	used	334496656	9.76	11283	1.000	0.022	-0.054	0.332	0.561	215.929218	35.031287	1637.94	-1211
4	GUIDE	used	335021128	9.27	11264	1.000	-0.020	0.008	0.249	0.421	216.159551	34.422539	966.75	982
5	GUIDE	used	335028336	9.38	11253	1.000	-0.014	-0.168	0.225	0.358	217.189840	34.665629	-2087.97	101
6	GUIDE	used	335030384	8.81	11285	1.000	-0.011	0.068	0.197	0.313	216.806407	34.722197	-951.98	-96
7	GUIDE	used	335419408	9.23	11293	1.000	-0.028	0.150	0.226	0.351	217.210194	35.075700	-2136.82	-1375

2.4 Star Slots

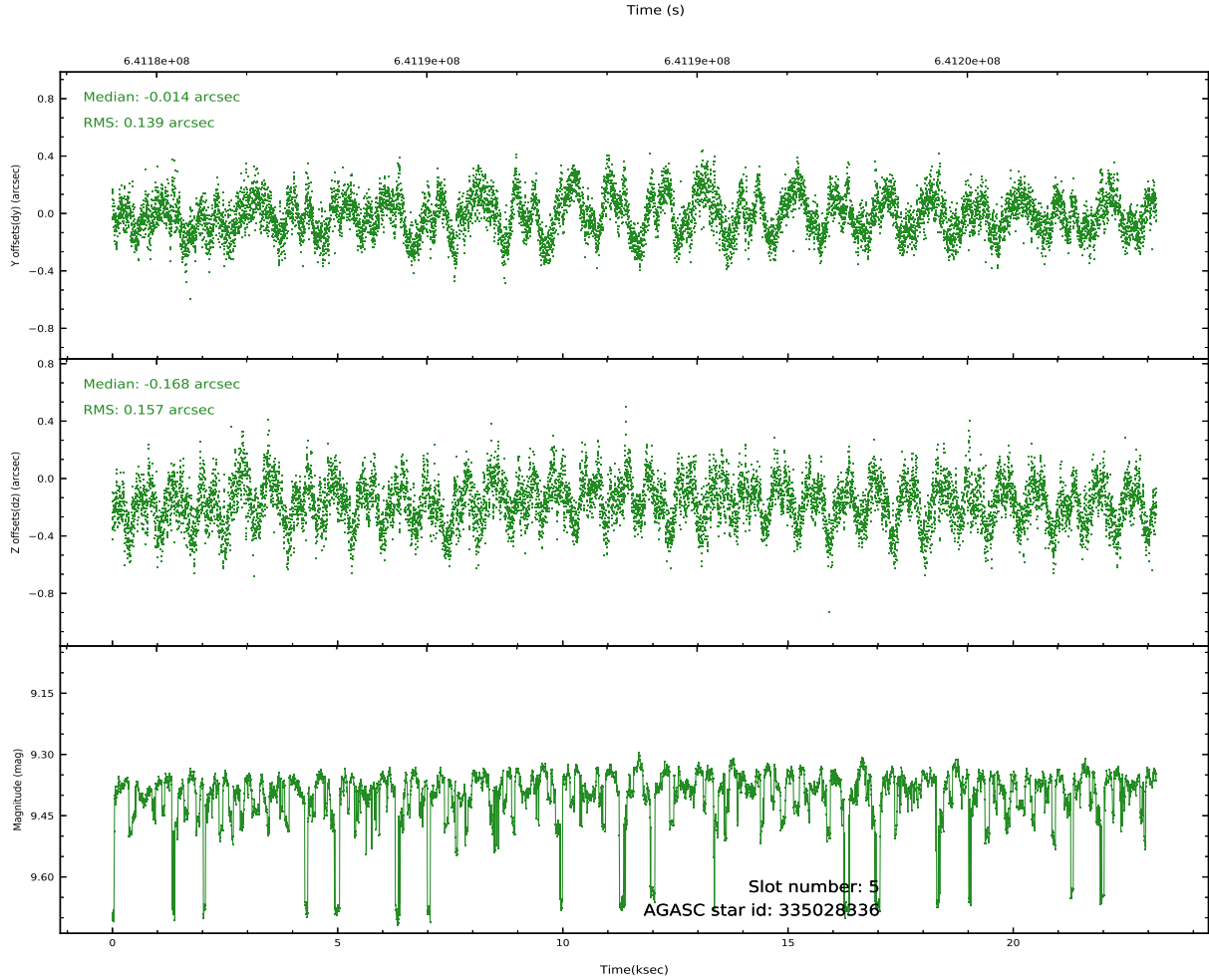
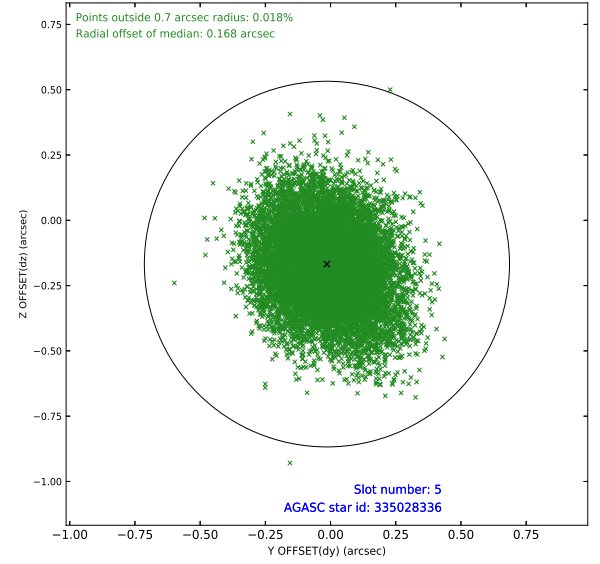
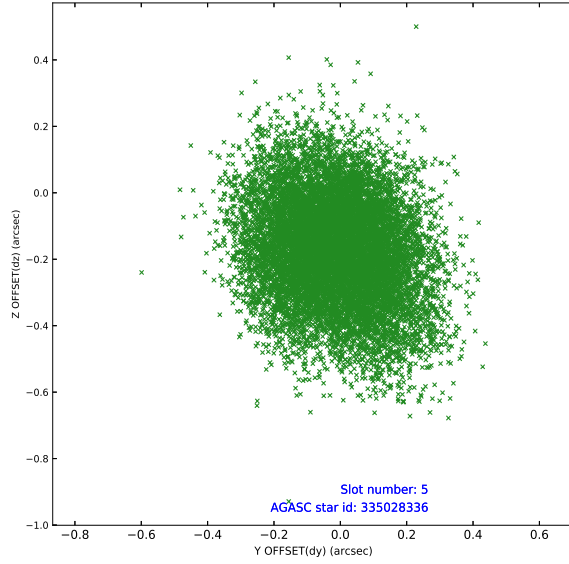
2.4.1 Slot 3



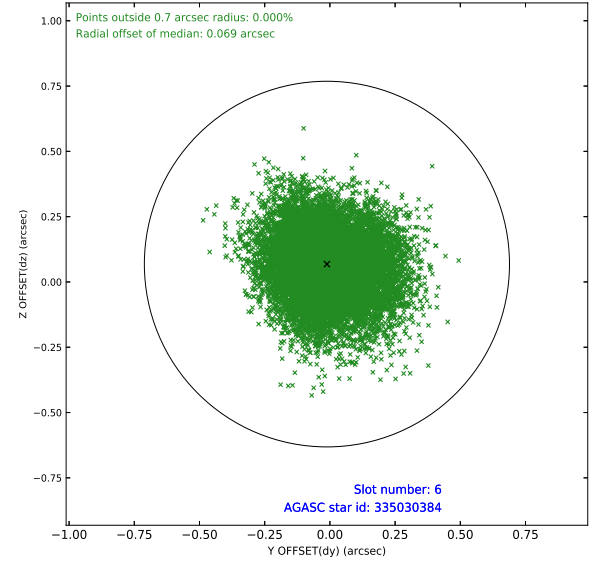
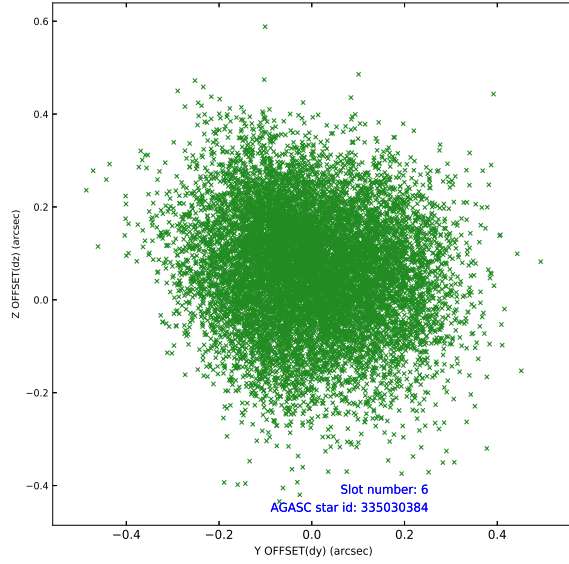
2.4.2 Slot 4



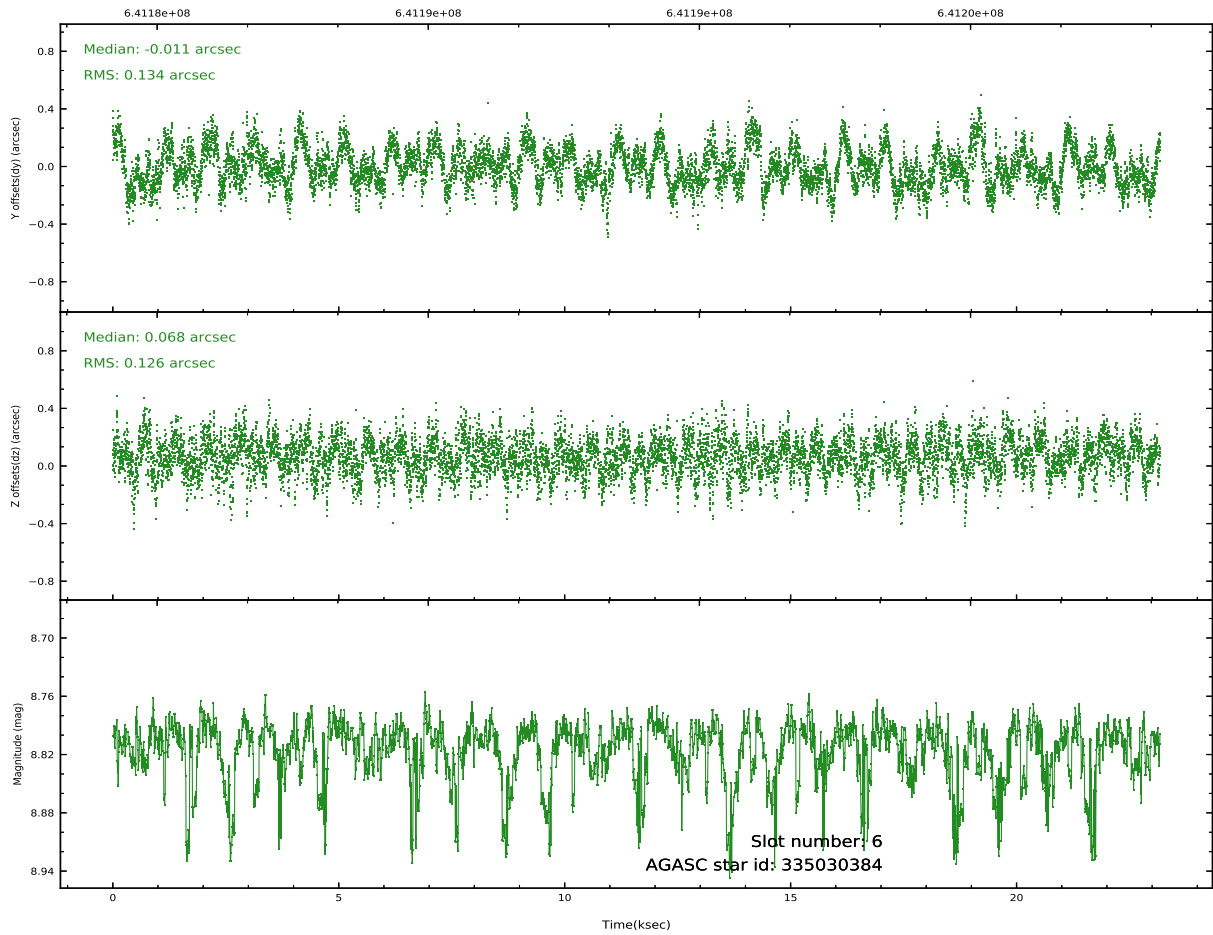
2.4.3 Slot 5



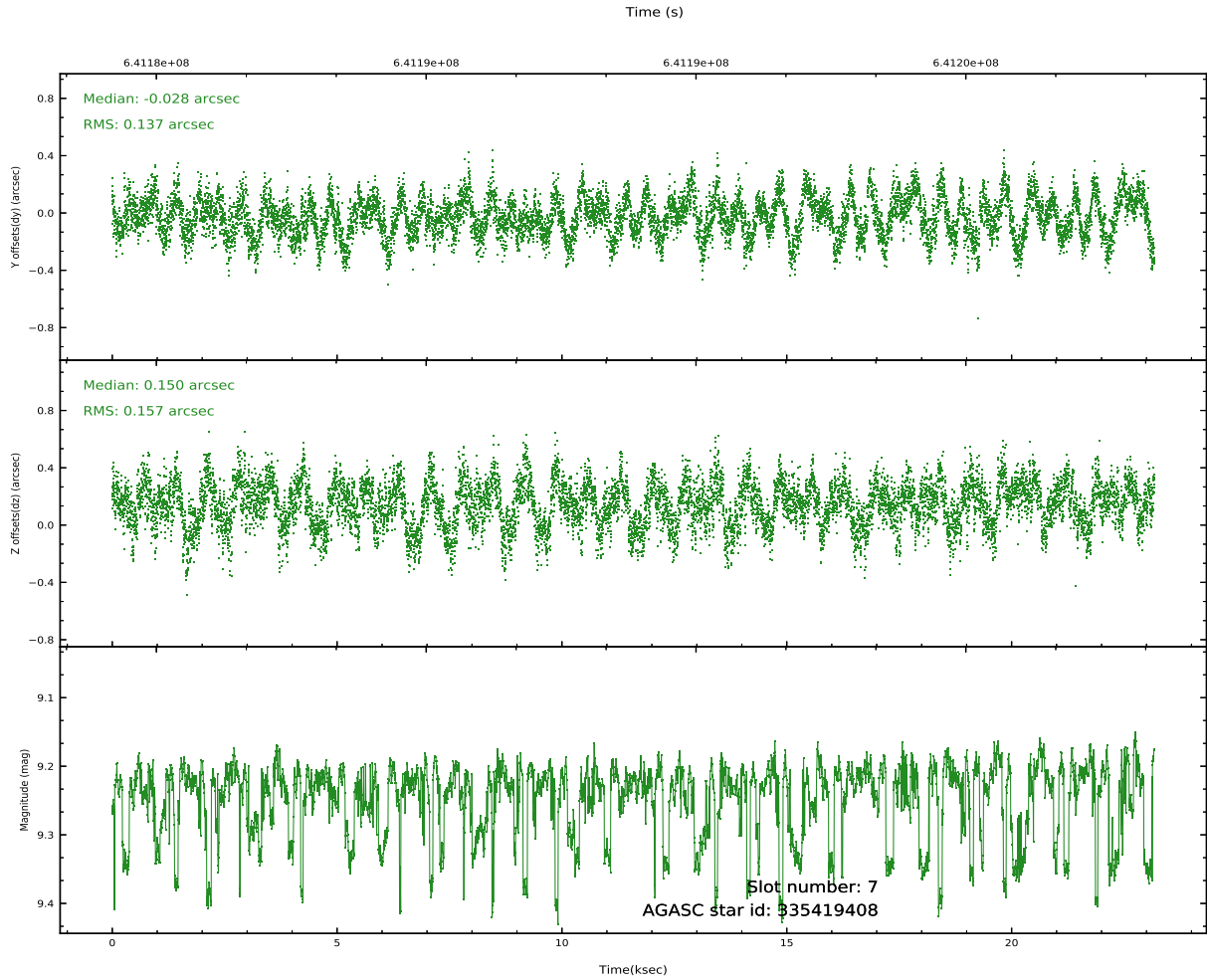
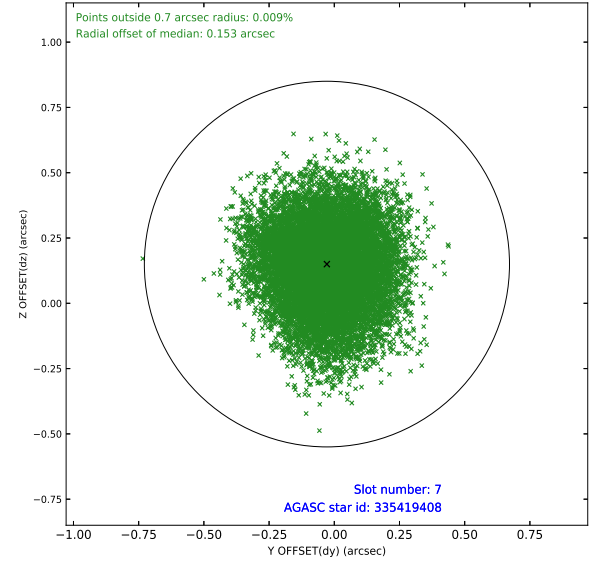
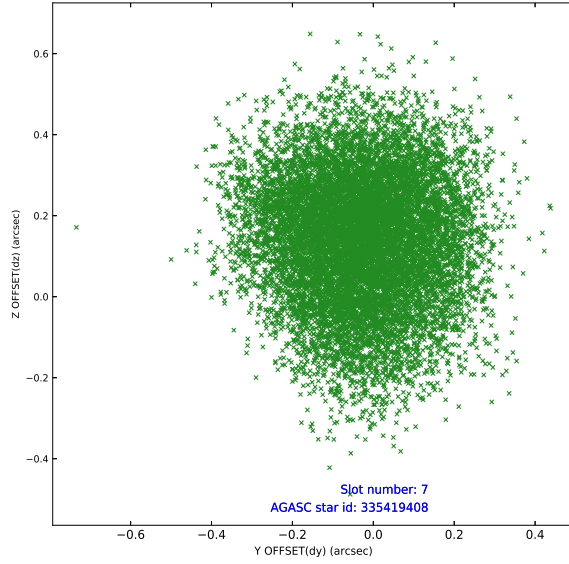
2.4.4 Slot 6



Time (s)

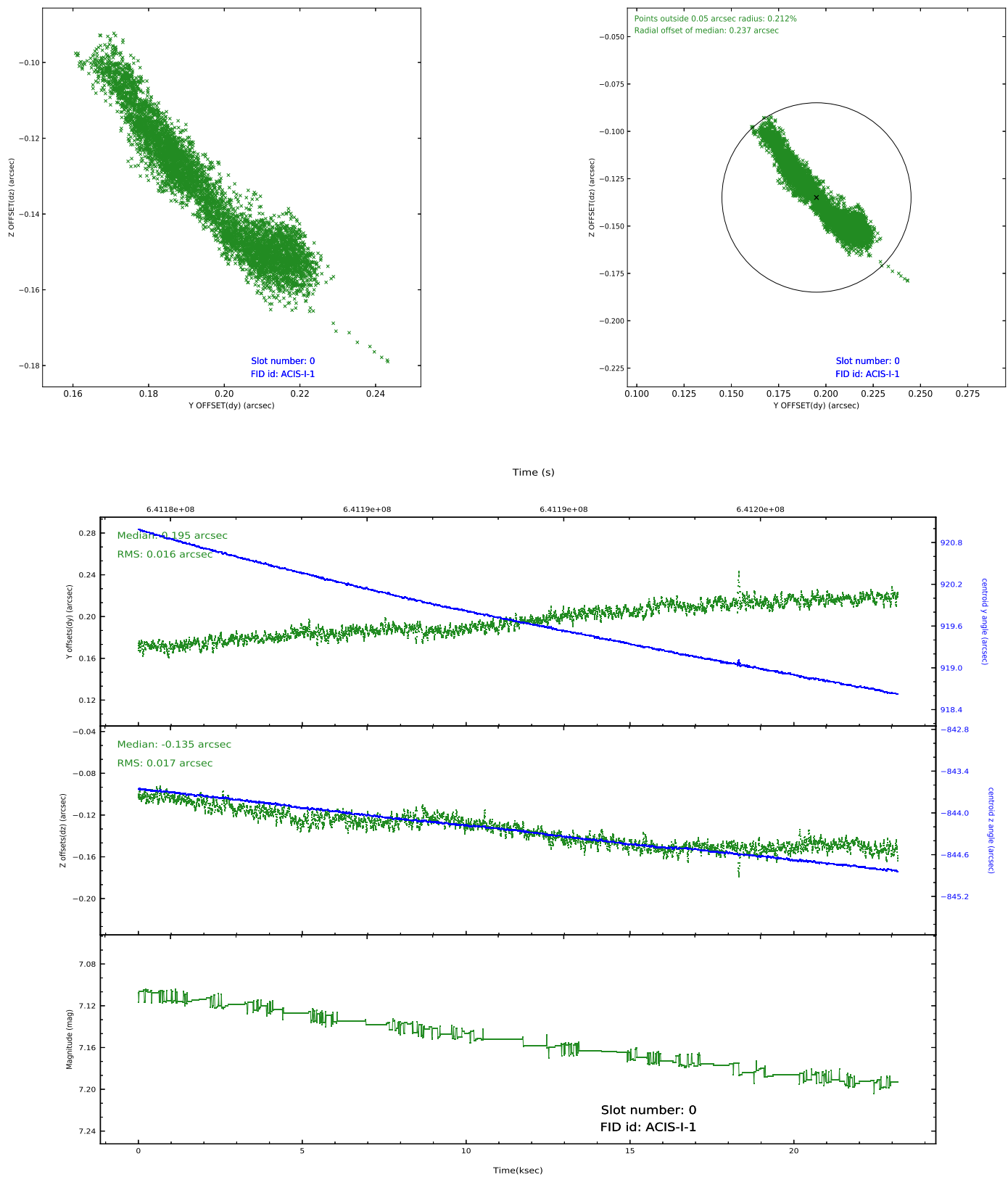


2.4.5 Slot 7

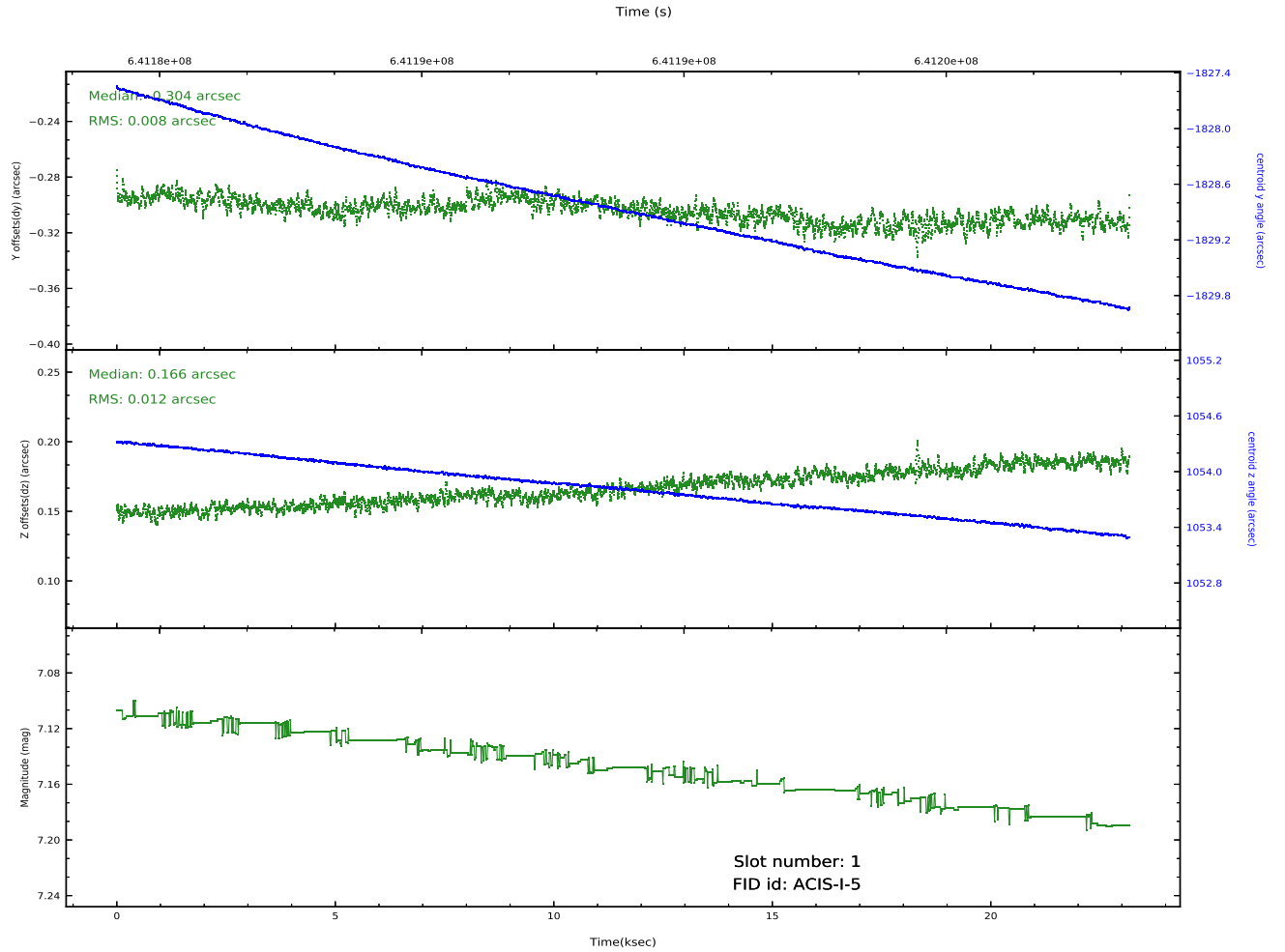
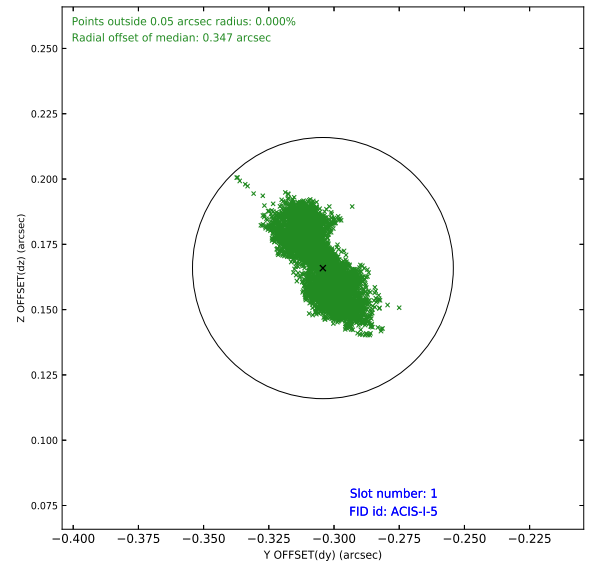
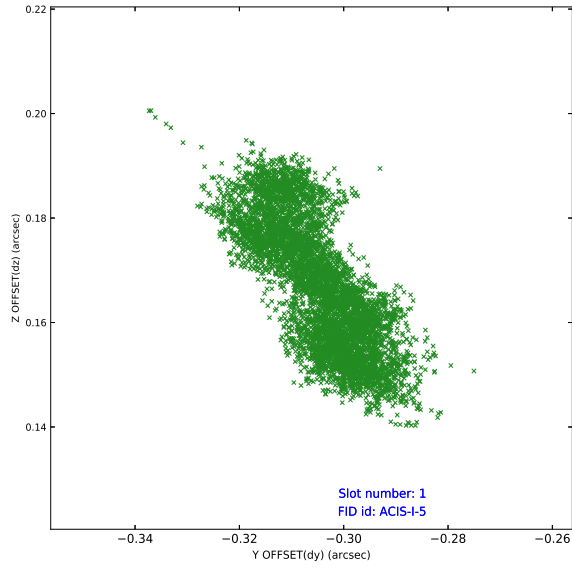


2.5 FID Slots

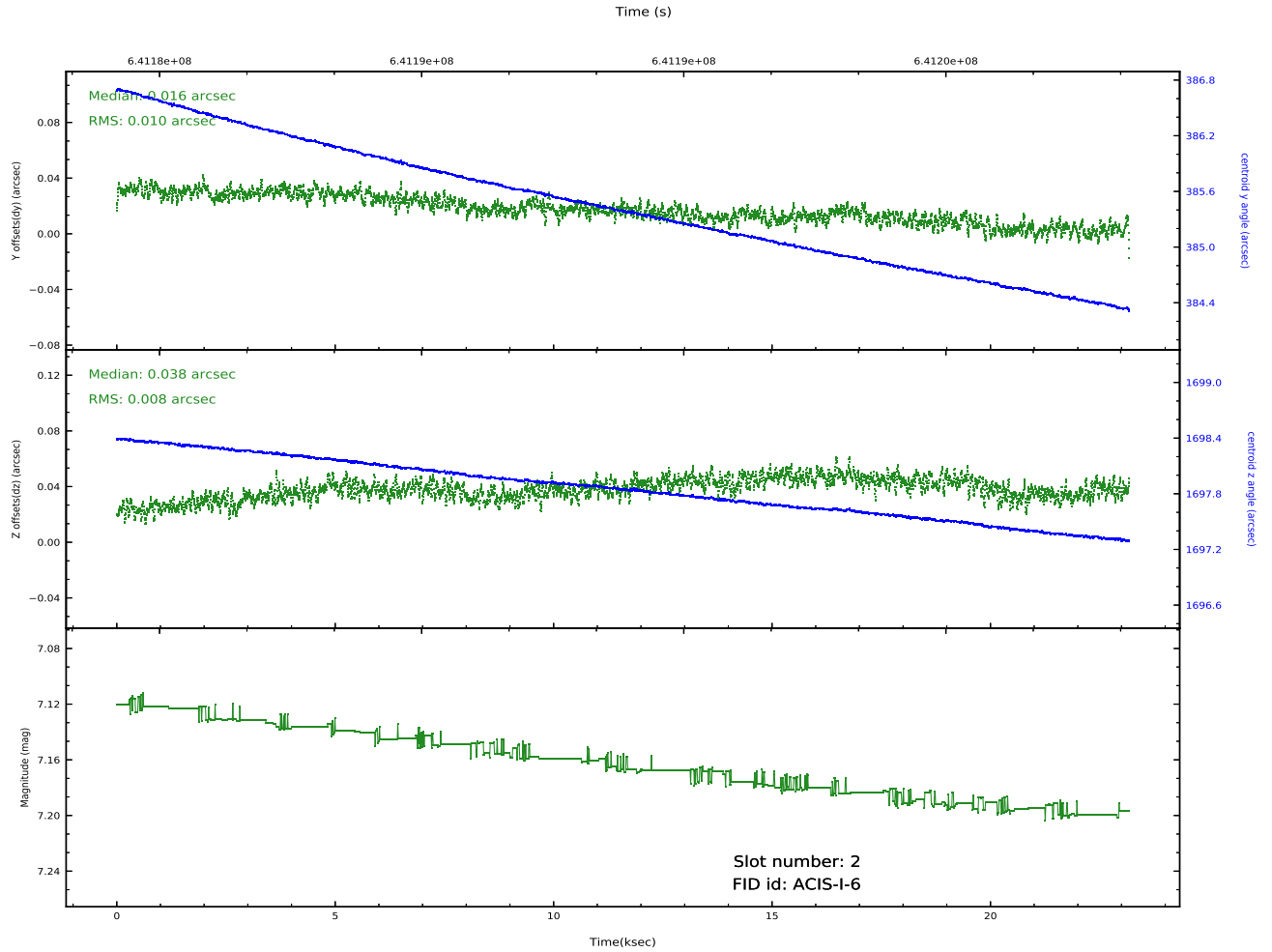
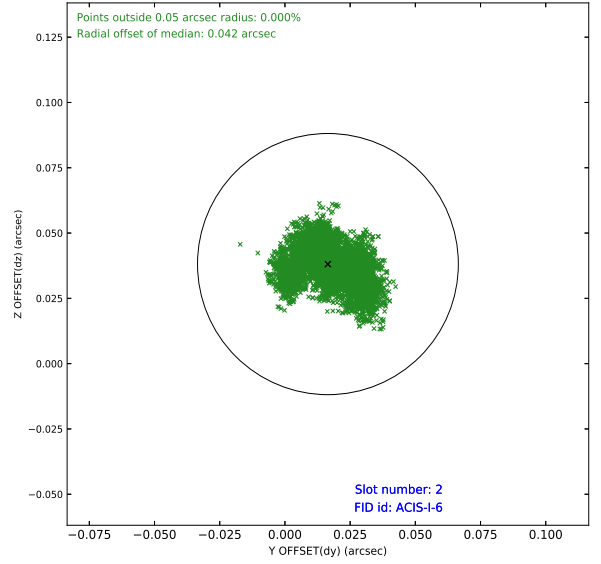
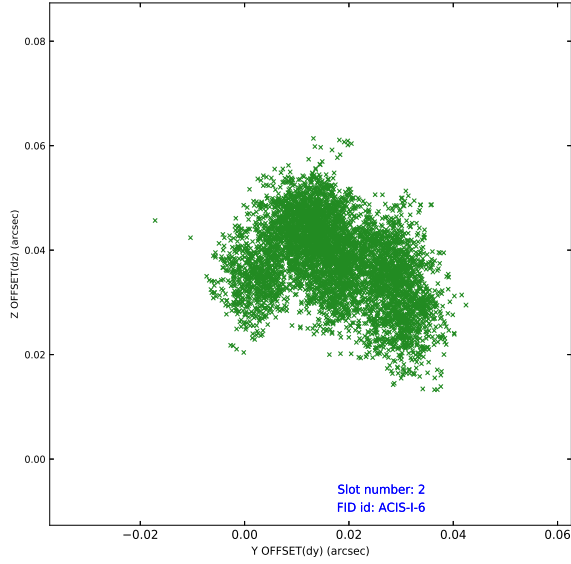
2.5.1 Slot 0



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)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.902249445438

A.2 Comments

Two optional chips were dropped.