

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21078 - L2 Version 2
Chandra X-Ray Center

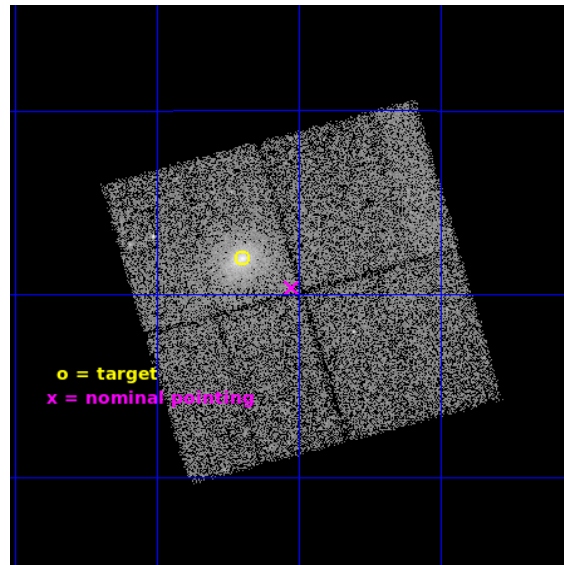
L2 Processing Date : Oct 25 2020

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1 Front

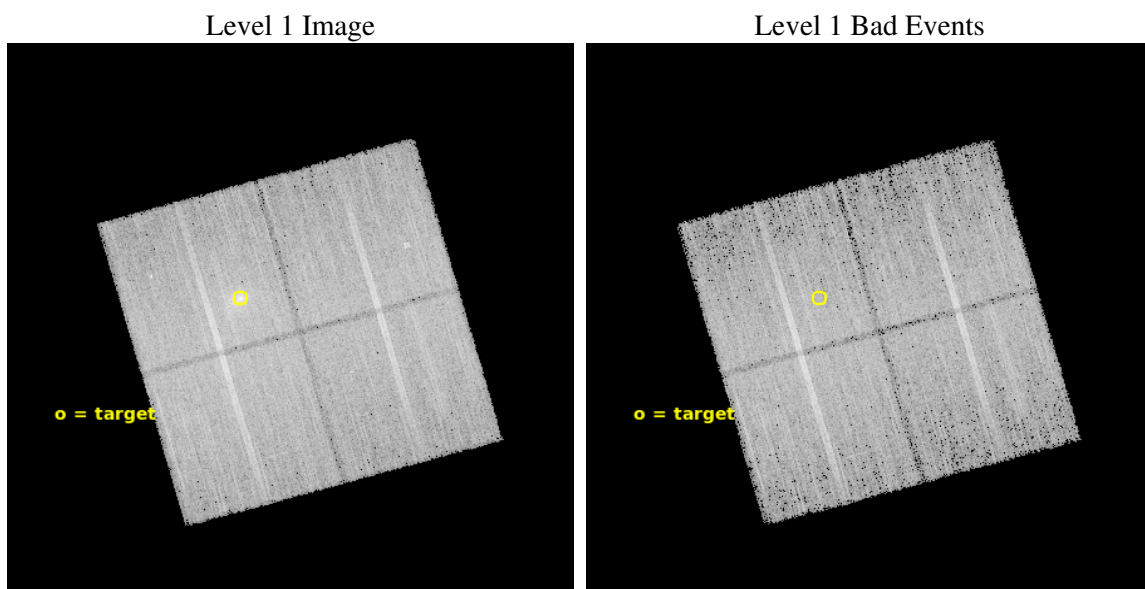
seq_num	801754	Sequence number
obs_id	21078	Observation id
title	Measuring the mass distribution with unprecedented accuracy: the CLASH cluster MACSJ1206	Proposal title
observer	Stefano Ettori	Principal investigator
object	MACS J1206-0847	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	181.550417	Observer's specified target RA [deg]
dec_targ	-8.800917	Observer's specified target Dec [deg]
ra_nom	181.50631870992	Nominal RA [deg]
dec_nom	-8.8273937005676	Nominal Dec [deg]
roll_nom	254.19790548232	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26356.159152627	Sum of GTIs [s]
livetime	26011.796530176	Livetime [s]
ontime0	26359.300202847	Sum of GTIs [s]
ontime1	26356.159172654	Sum of GTIs [s]
ontime2	26353.018092155	Sum of GTIs [s]
ontime3	26356.159152627	Sum of GTIs [s]
l2events	82610	Number of level 2 events



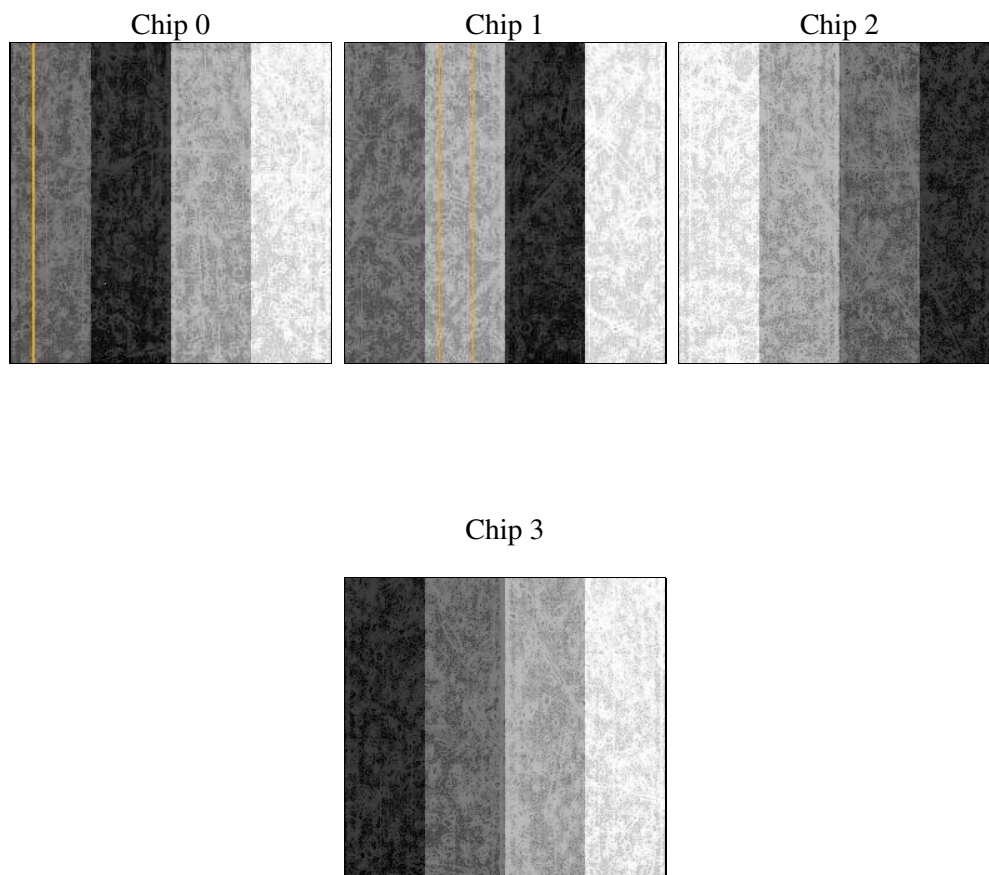
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26278.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	26356.159152627	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	26359.300202847	Sum of GTIs [s]
date	2020-10-25T14:37:20	Date and time of file creation	ontime1	26356.159172654	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	26353.018092155	Sum of GTIs [s]
			ontime3	26356.159152627	Sum of GTIs [s]
			l1events	733243	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	173650	174020	190621	194952
rejected events	152058	149990	169441	163891
rejected %	87%	86%	88%	84%

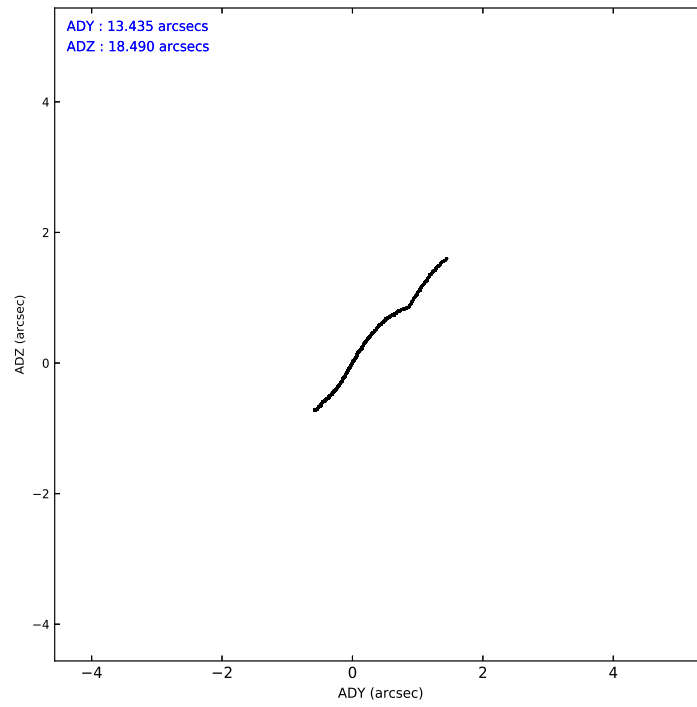
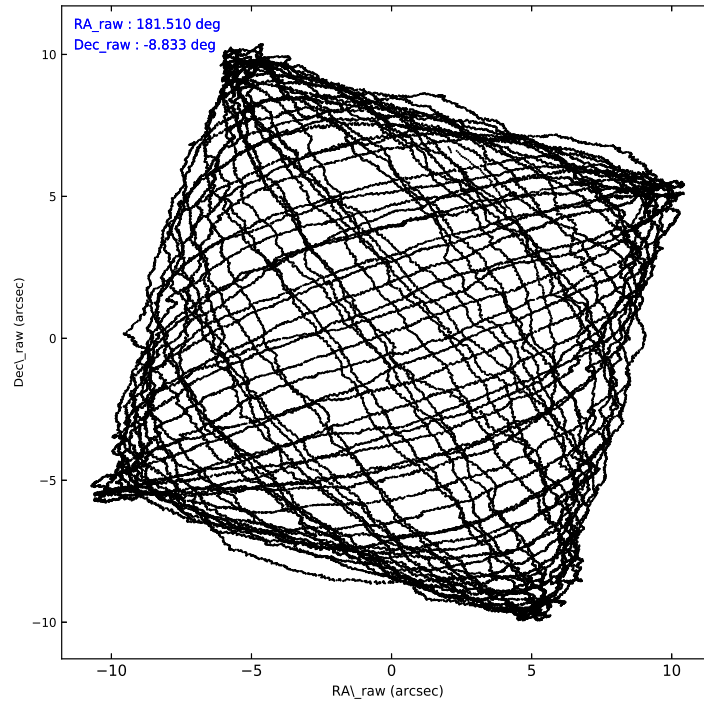
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	7225	8522	7450	15544
	4%	4%	3%	7%
grade 1 events	103	109	122	157
	0%	0%	0%	0%
grade 2 events	5515	5858	5397	5808
	3%	3%	2%	2%
grade 3 events	2205	2213	2090	2436
	1%	1%	1%	1%
grade 4 events	2022	2202	2143	2538
	1%	1%	1%	1%
grade 5 events	8407	8859	7831	9460
	4%	5%	4%	4%
grade 6 events	4627	5241	4109	4741
	2%	3%	2%	2%
grade 7 events	143546	141016	161479	154268
	82%	81%	84%	79%

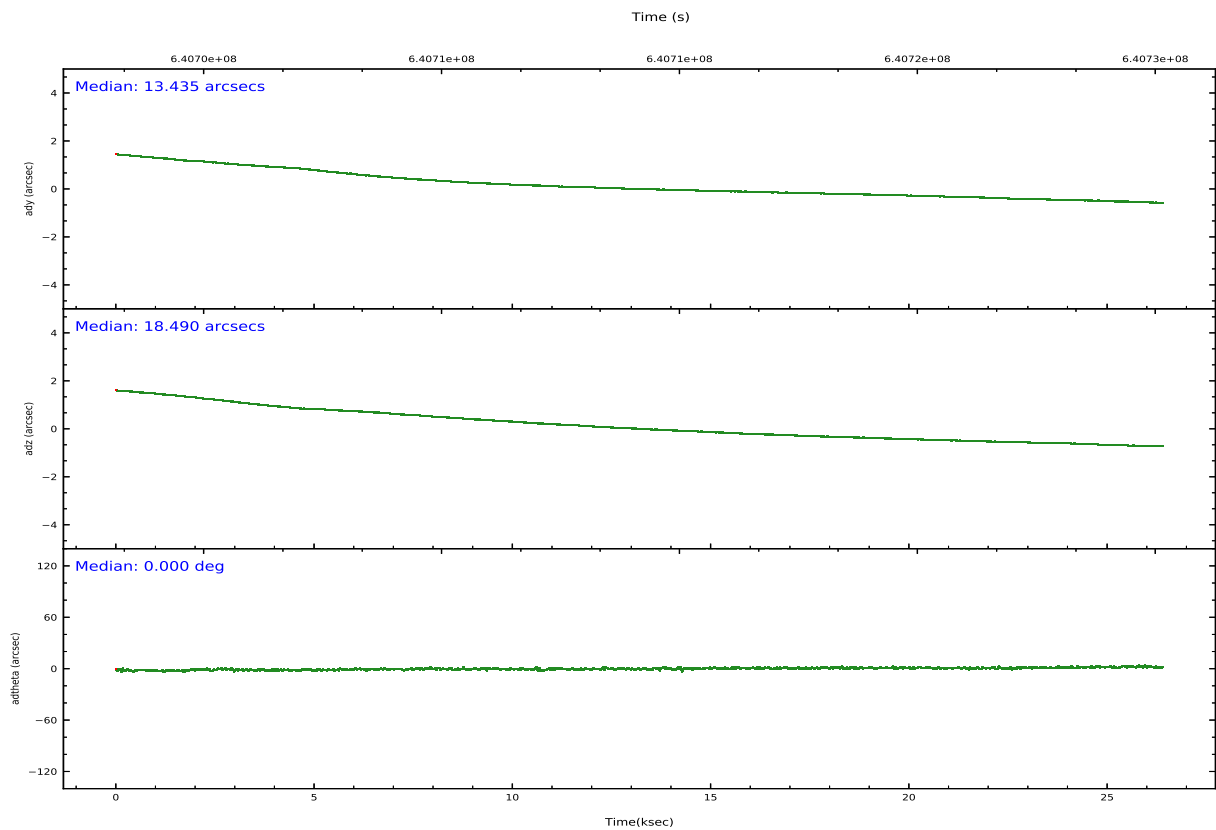
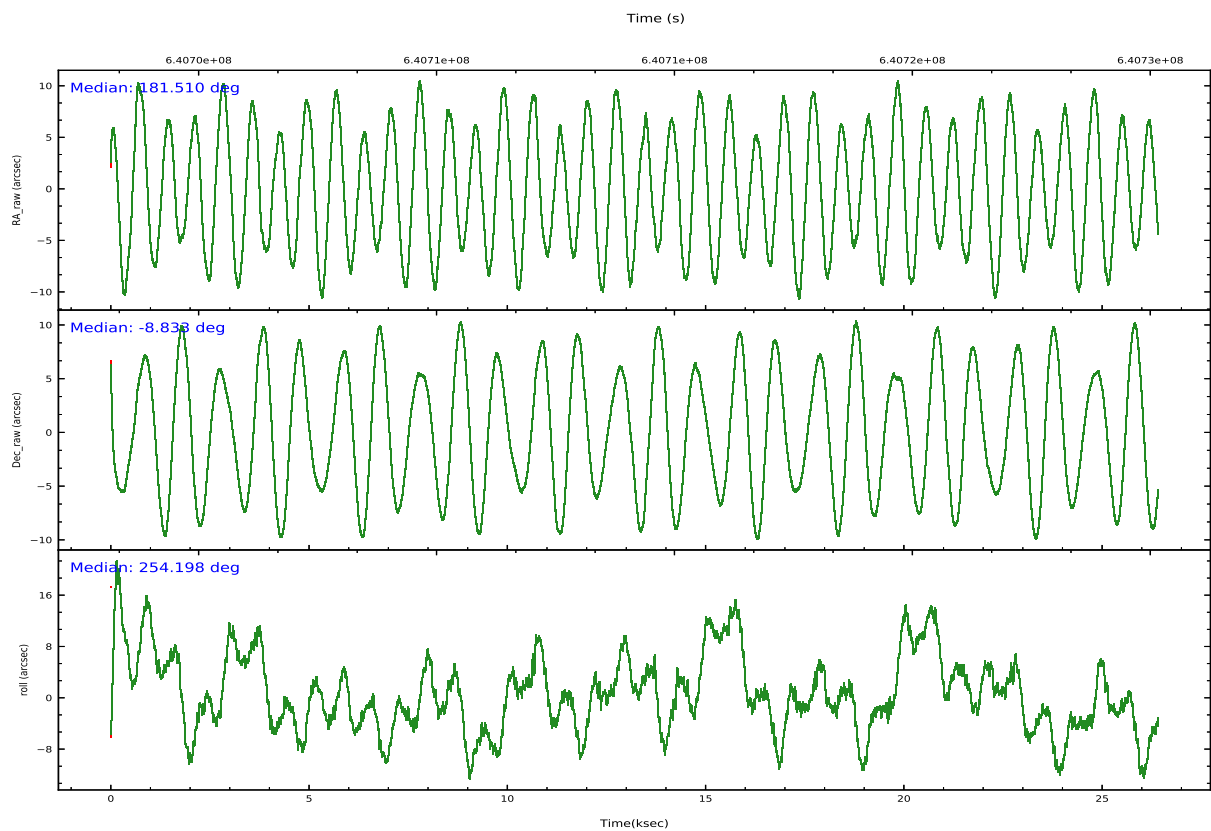
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	181.503542	181.50631870992
[deg] Pointing Dec	-8.805884	-8.827393700567599
[deg] Pointing Roll	253.992831	254.19790548232
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	640699920.184000	640698624.37713
Observation start date	2018-04-21T12:10:51	2018-04-21T11:50:24
[s] Observation end time (MET)	640726198.184000	640726762.1663001
Observation end date	2018-04-21T19:28:49	2018-04-21T19:39:22
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O2	N
CCD S3 on	O1	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	2	2
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



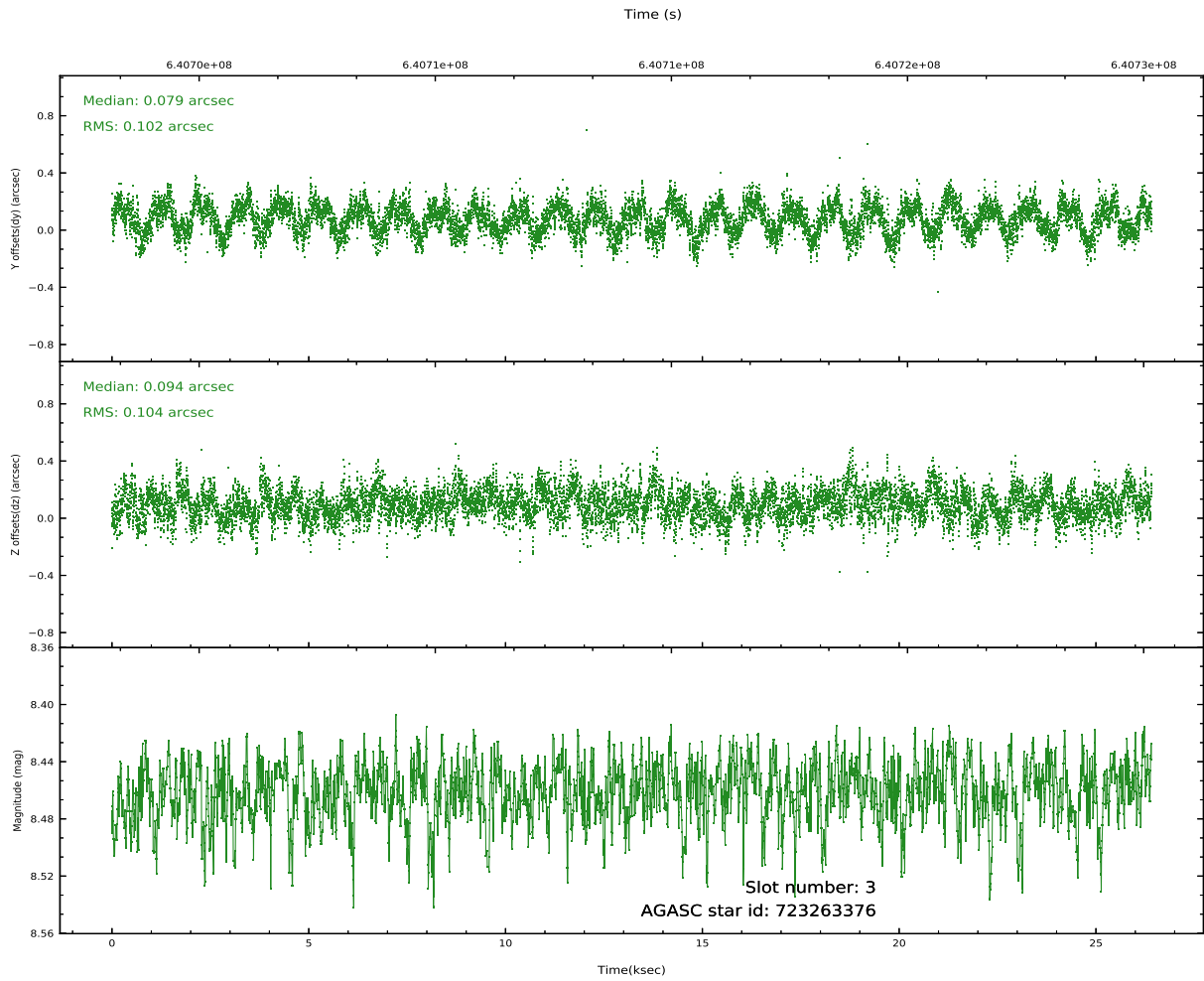
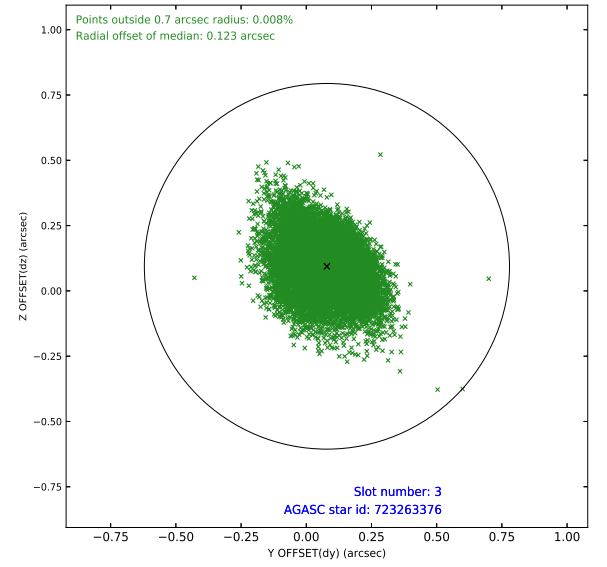
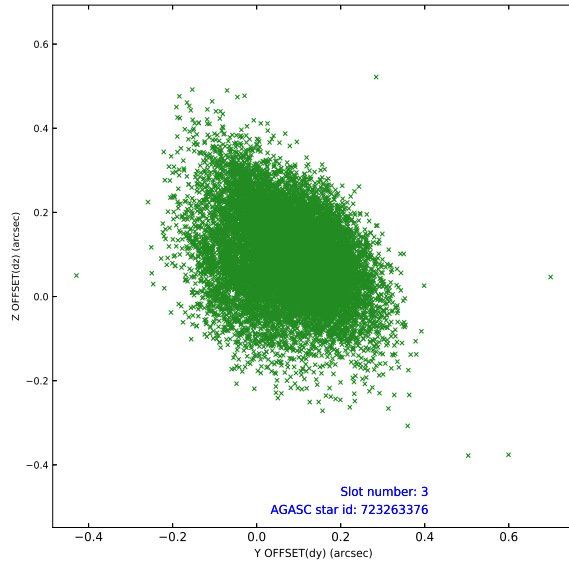


Slot Statistics

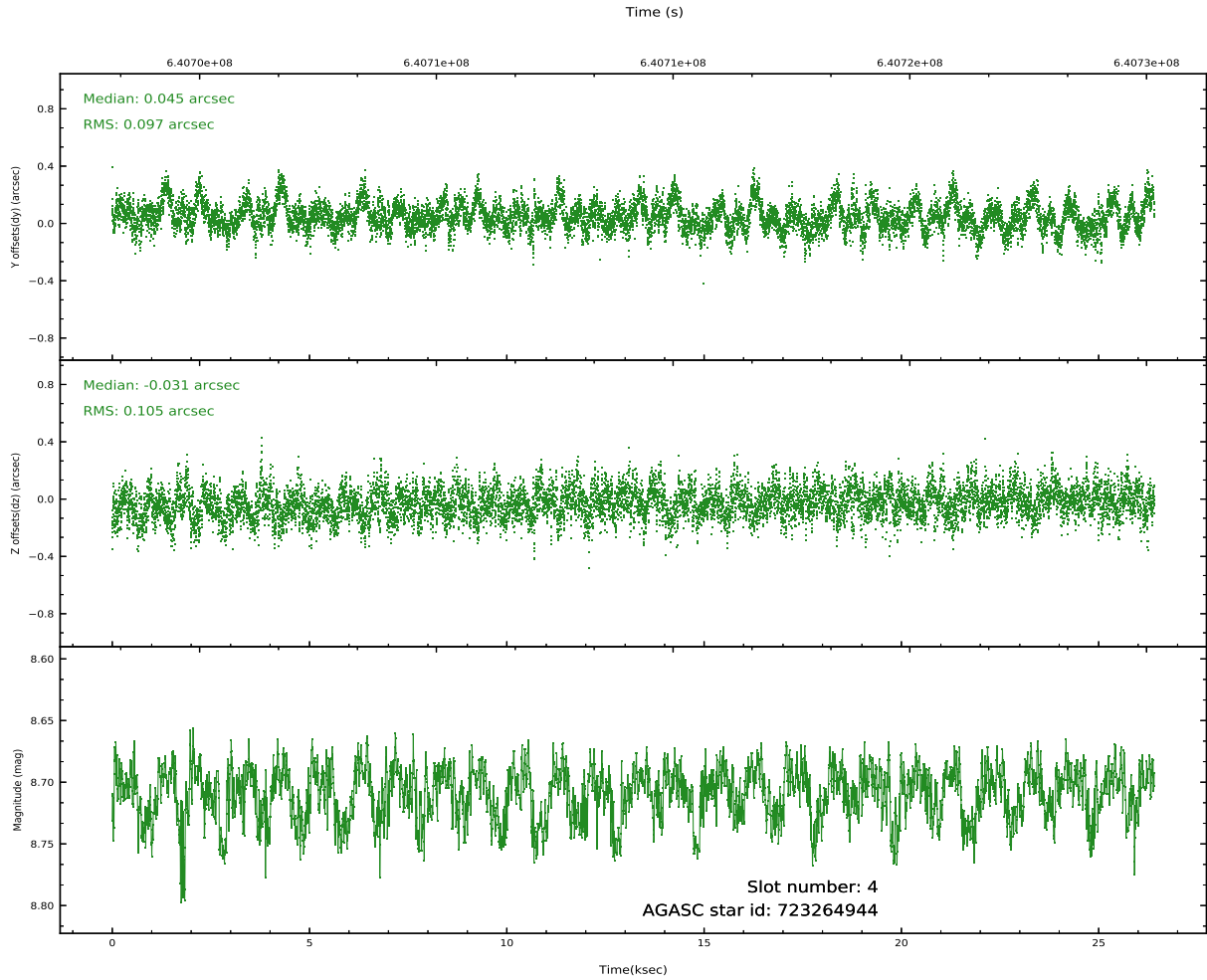
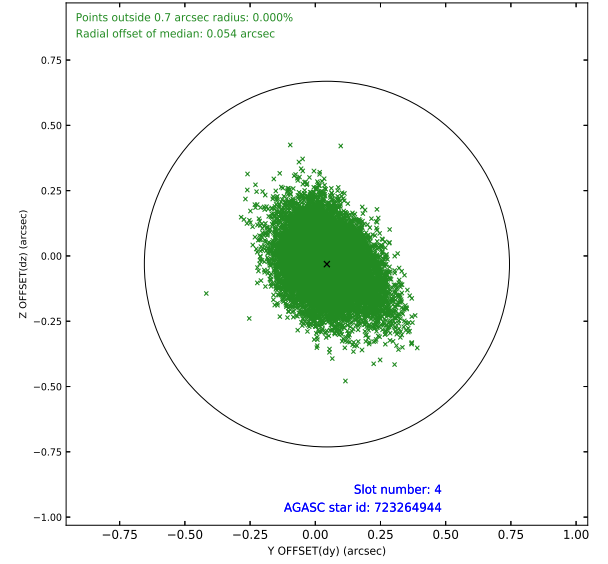
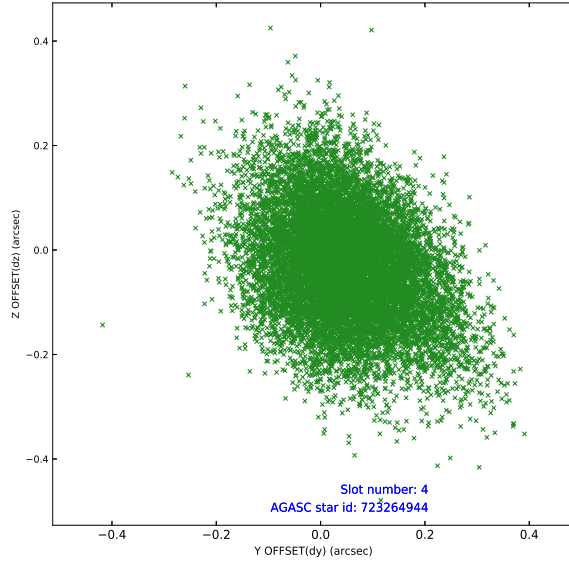
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.08	6442	1.000	-0.027	-0.011	0.011	0.026	0.000000	0.000000	925.84	-842
1	FID		ACIS-I-4	7.04	6443	1.000	0.045	0.000	0.015	0.047	0.000000	0.000000	2146.08	1057
2	FID		ACIS-I-6	7.08	6443	1.000	-0.112	0.076	0.018	0.038	0.000000	0.000000	391.89	1699
3	GUIDE	used	723263376	8.46	12870	1.000	0.079	0.094	0.151	0.251	181.274677	-9.308585	1964.61	-282
4	GUIDE	used	723264944	8.71	12880	1.000	0.045	-0.031	0.150	0.252	181.255643	-8.527713	-718.04	-1123
5	GUIDE	used	723397104	7.71	12881	1.000	-0.320	0.106	0.149	0.258	181.946290	-8.486028	-1540.05	1195
6	GUIDE	used	723263288	9.32	12872	1.000	0.244	-0.232	0.204	0.333	181.077399	-9.358326	2330.45	-906
7	GUIDE	used	723394376	9.69	12852	1.000	-0.018	0.070	0.315	0.502	181.467227	-8.140366	-2266.80	-784

2.4 Star Slots

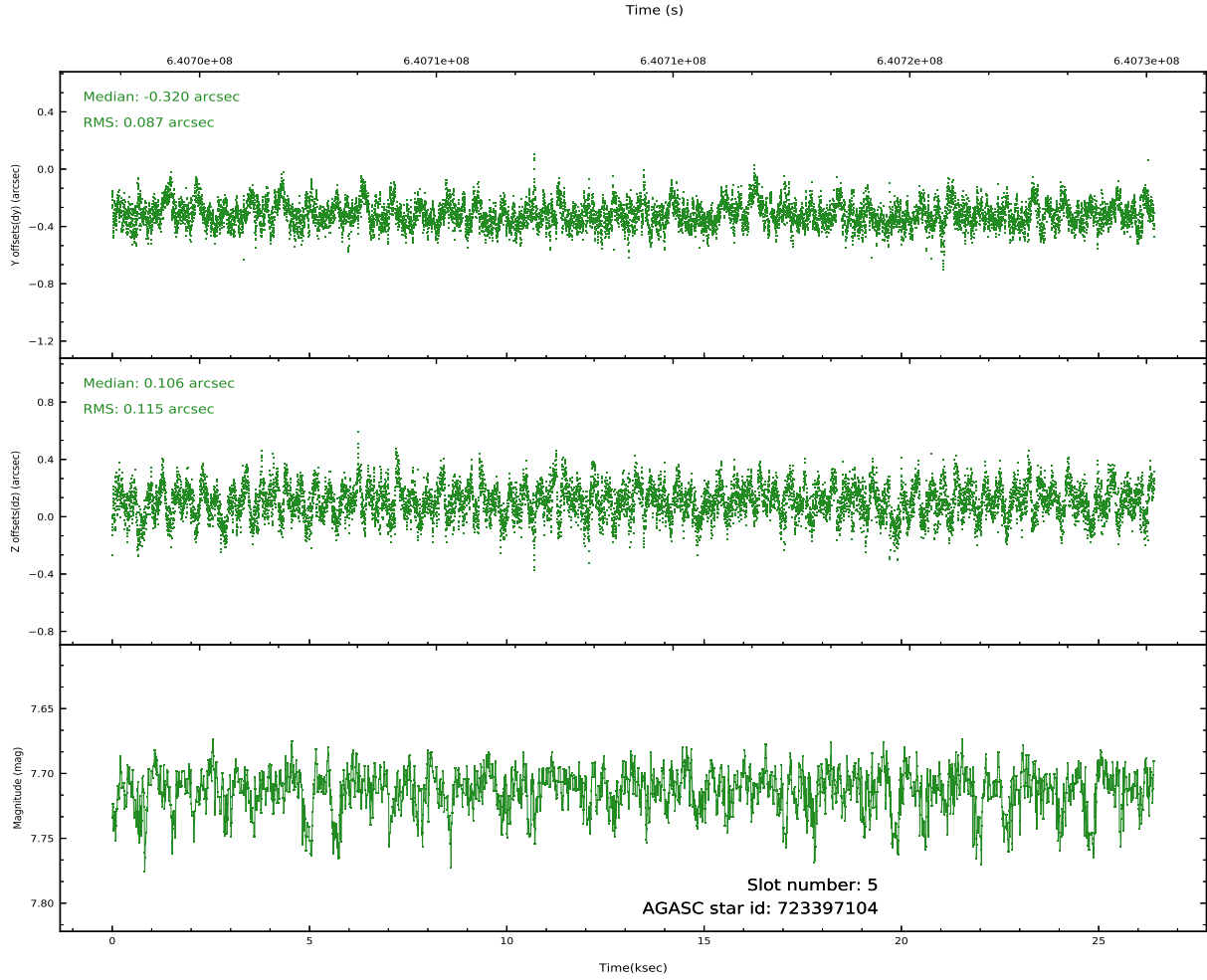
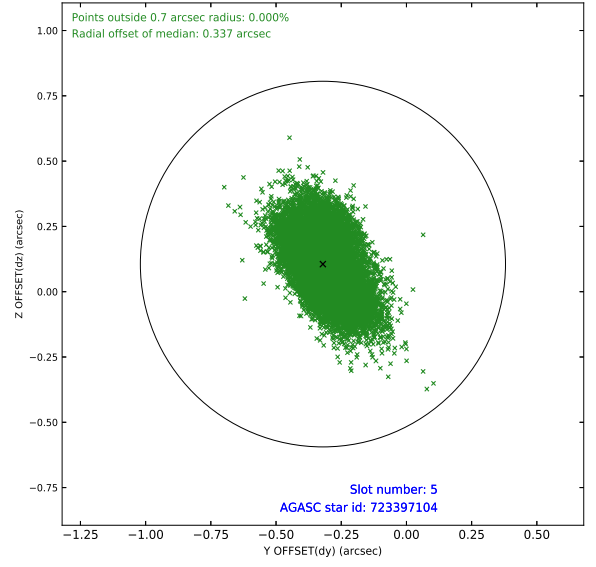
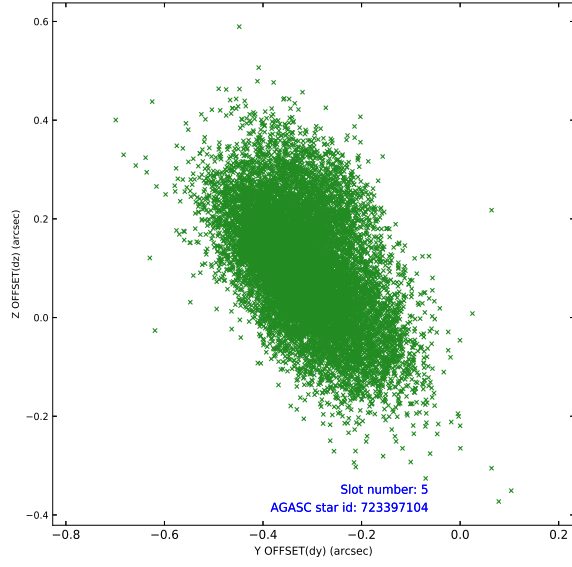
2.4.1 Slot 3



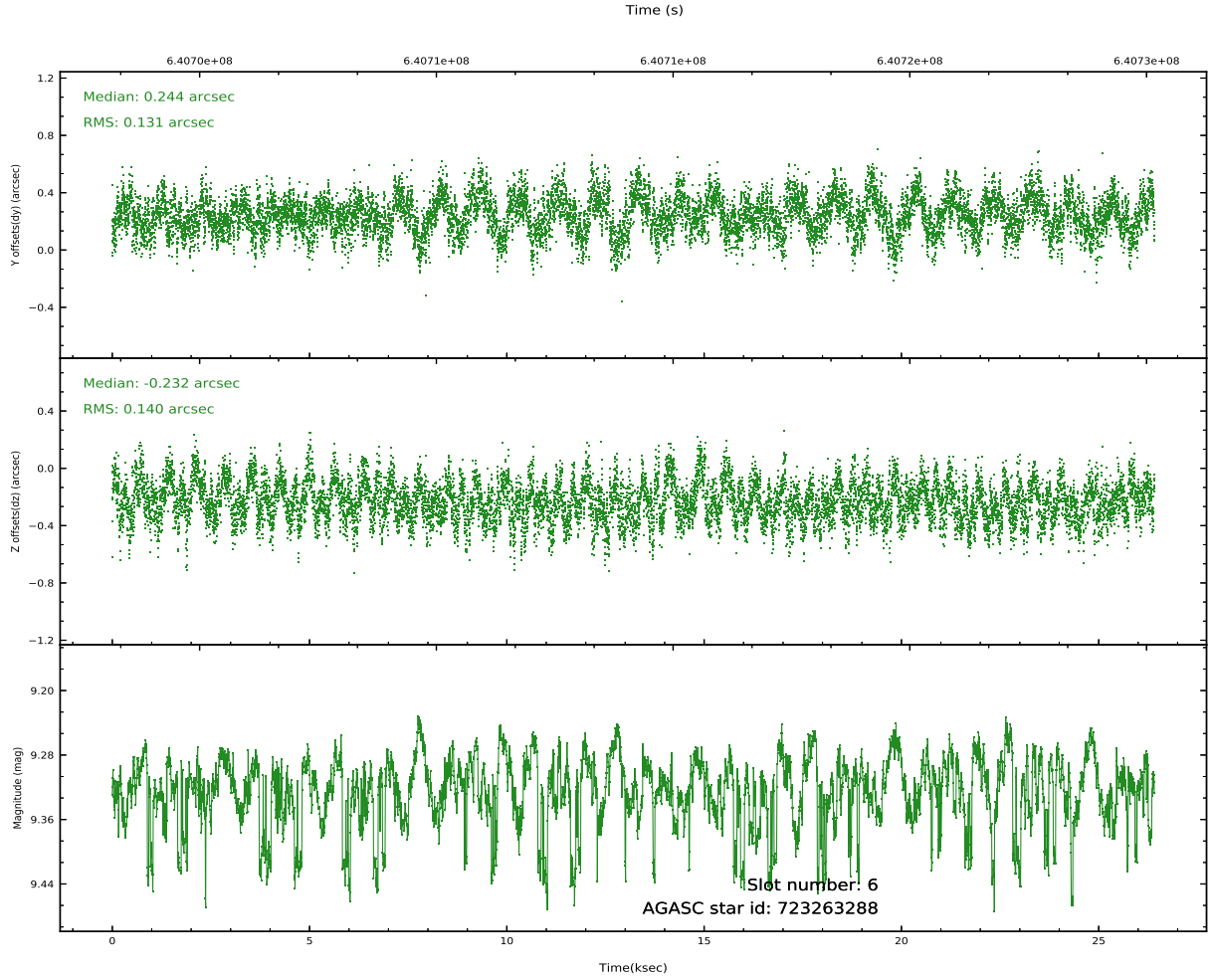
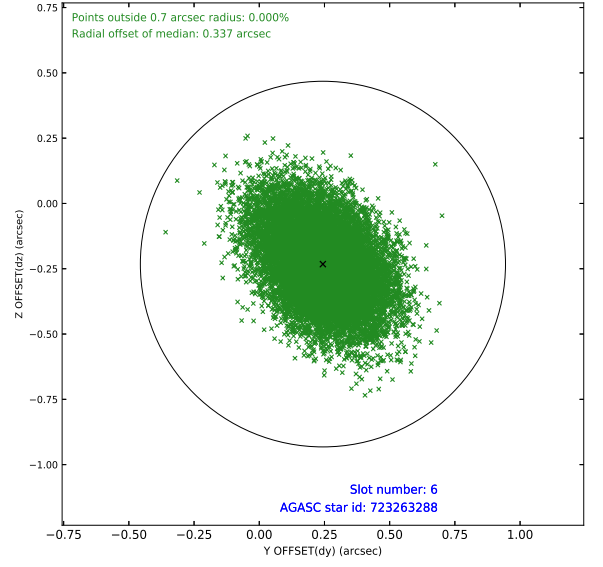
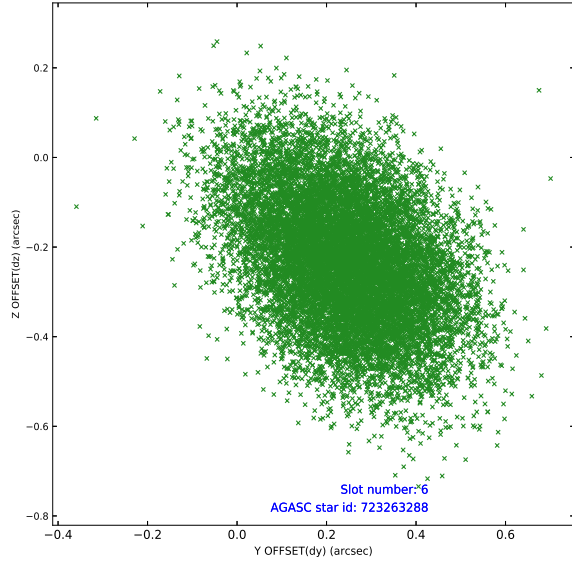
2.4.2 Slot 4



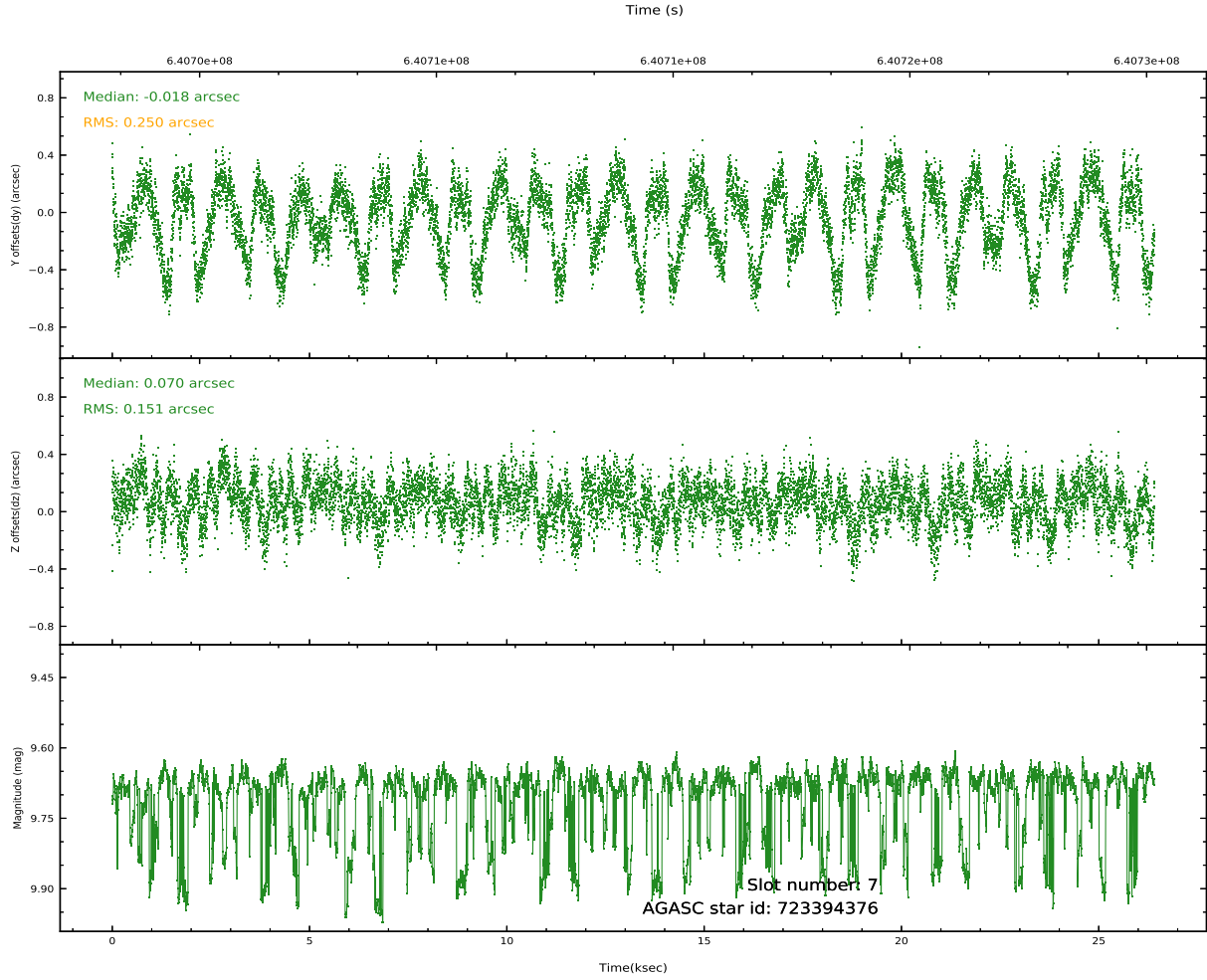
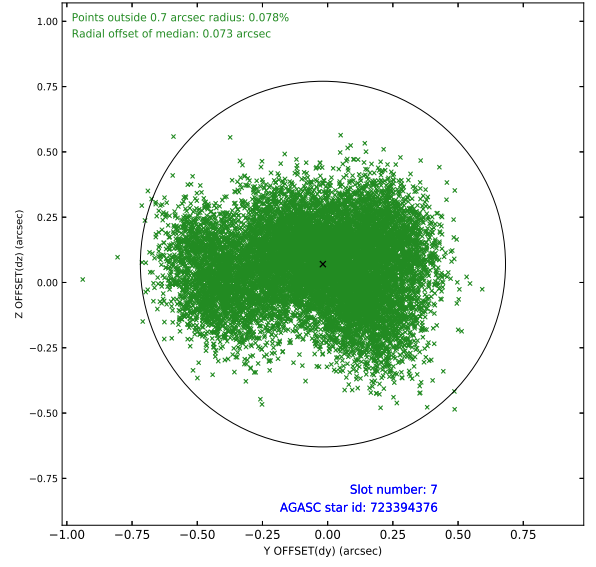
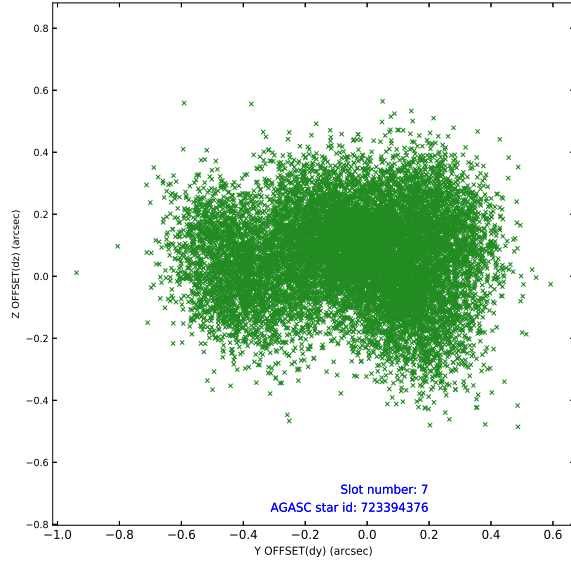
2.4.3 Slot 5



2.4.4 Slot 6

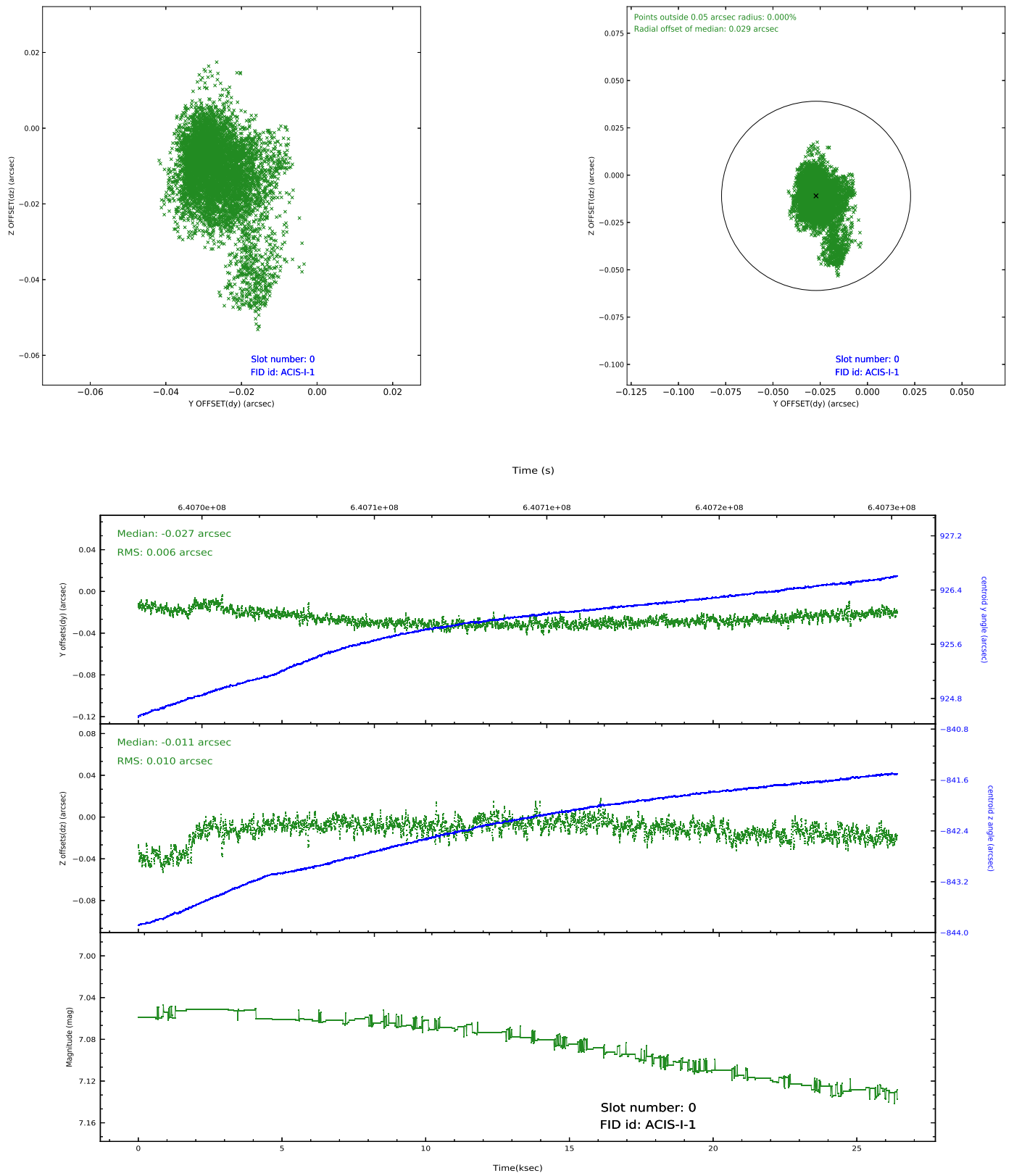


2.4.5 Slot 7

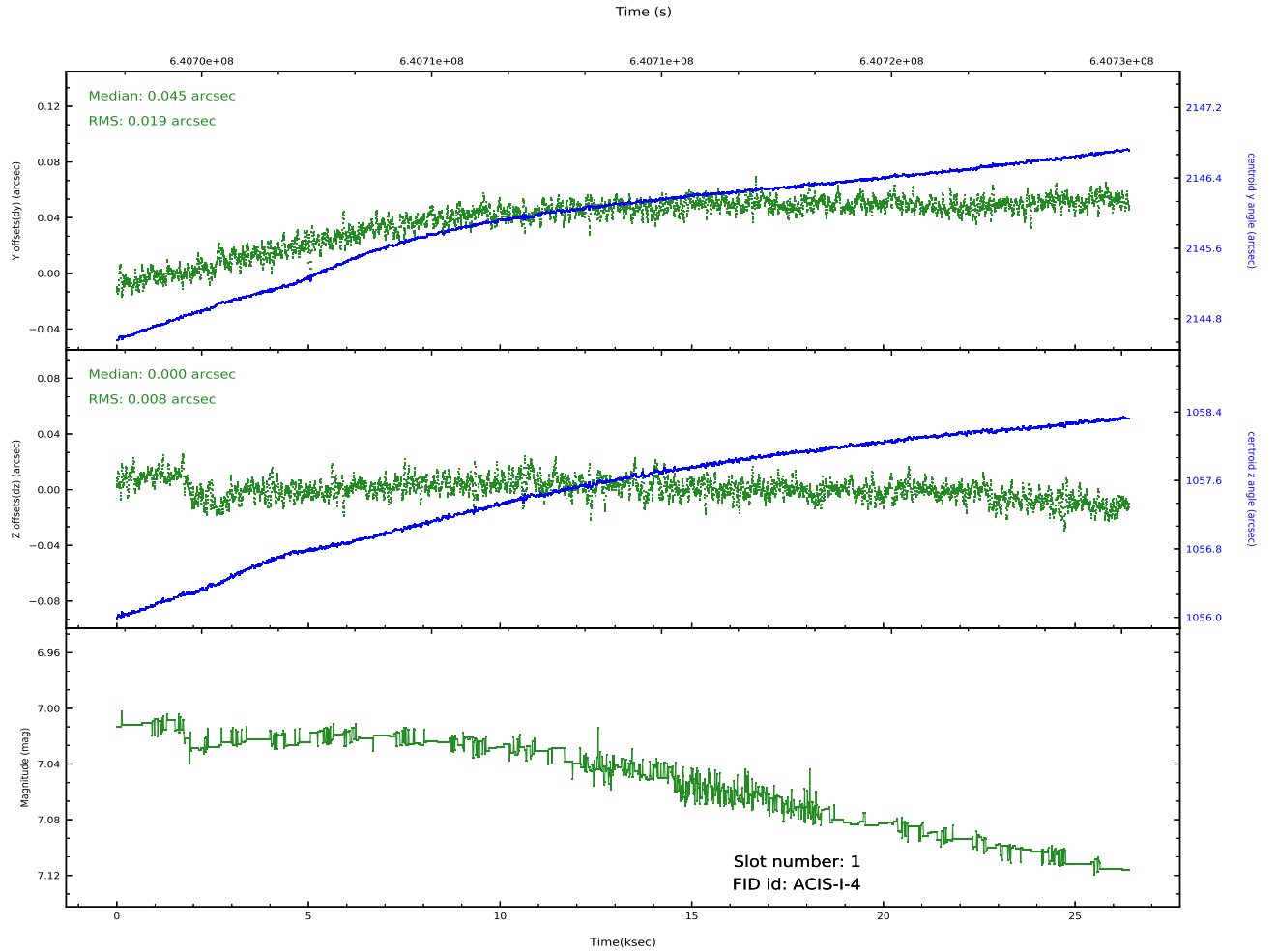
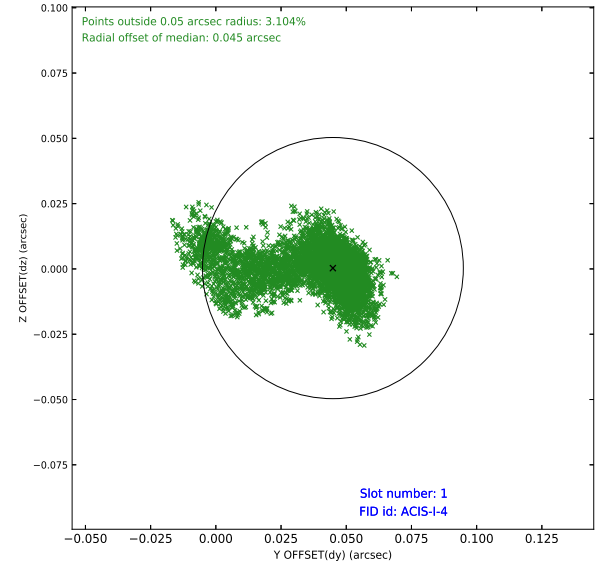
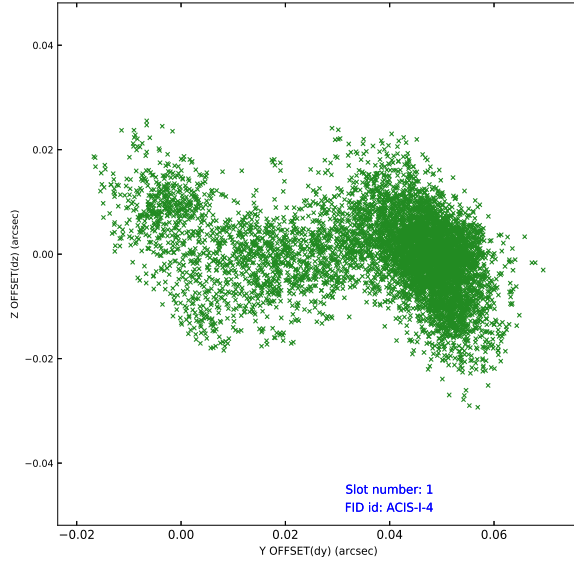


2.5 FID Slots

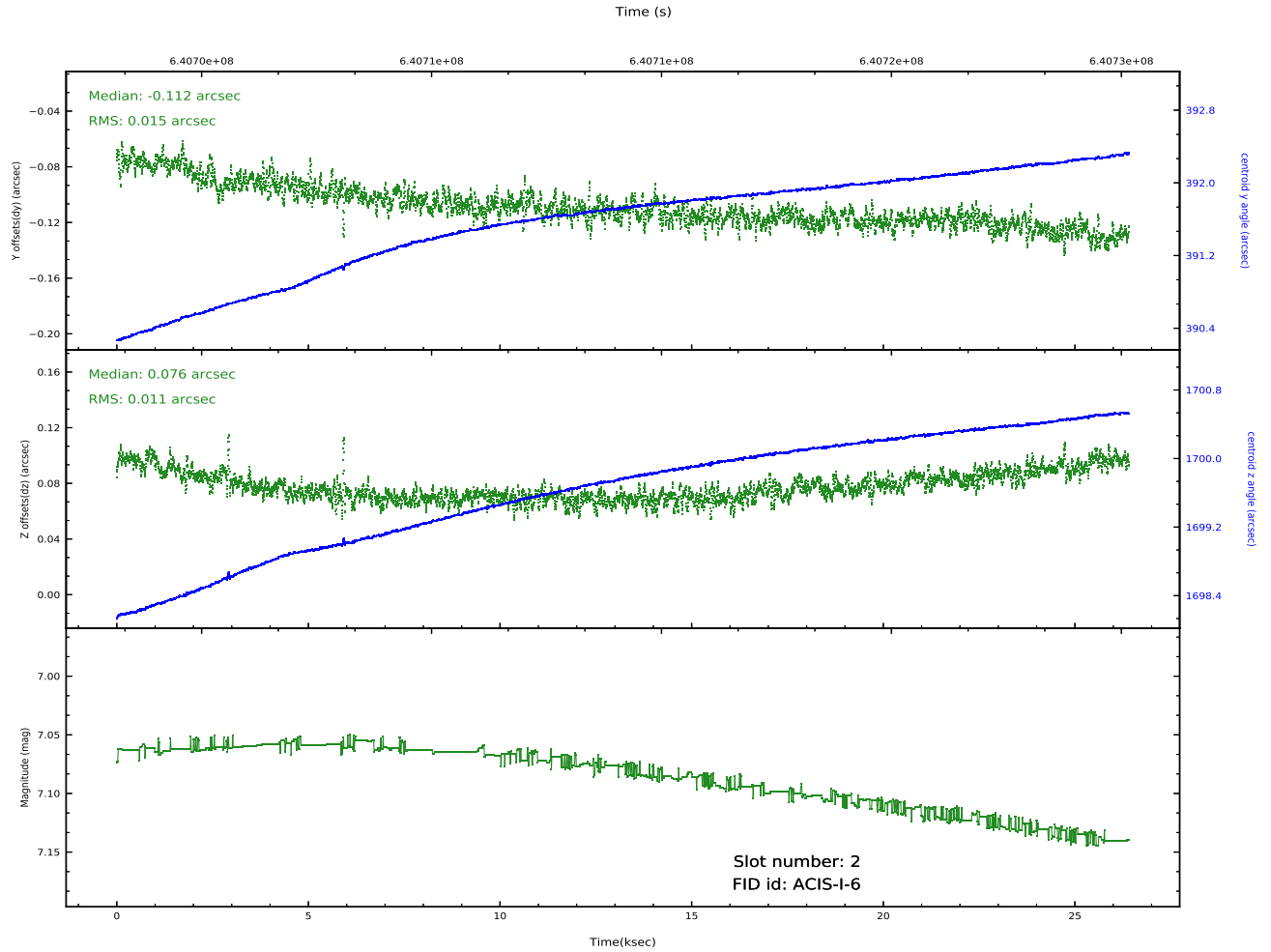
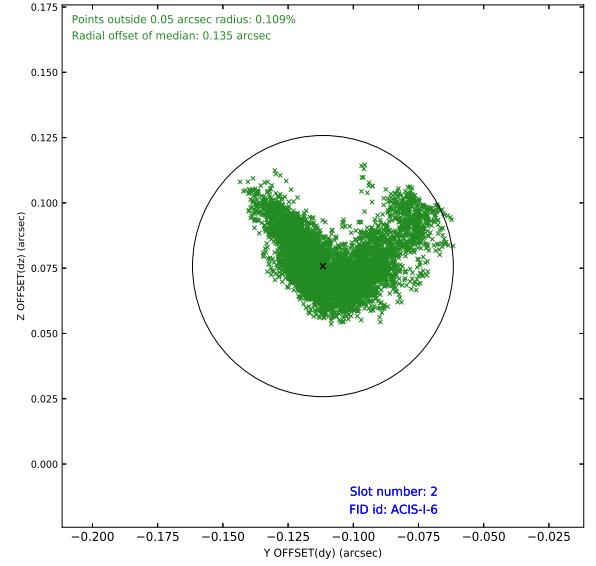
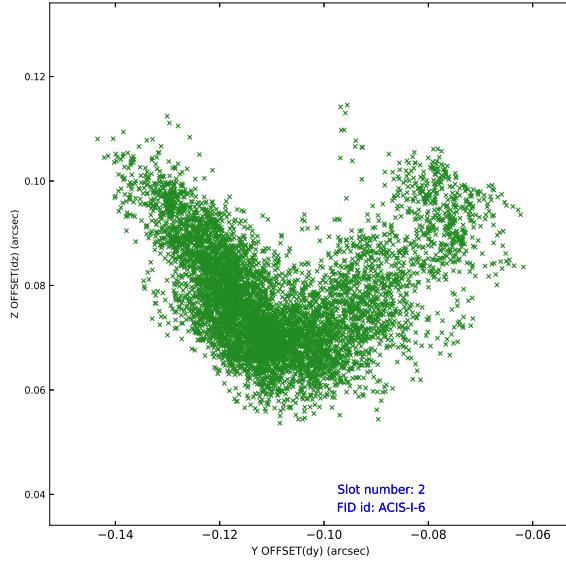
2.5.1 Slot 0



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)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.356159152627

A.2 Comments

Two optional chips were dropped.