

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19768 - L2 Version 3
Chandra X-Ray Center

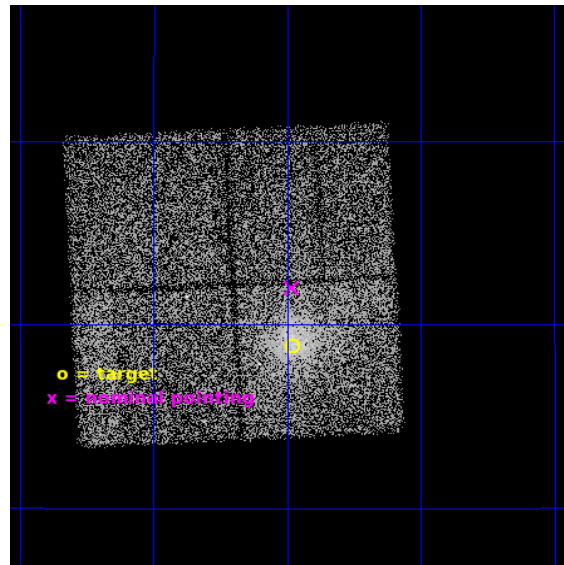
L2 Processing Date : Oct 24 2020

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1 Front

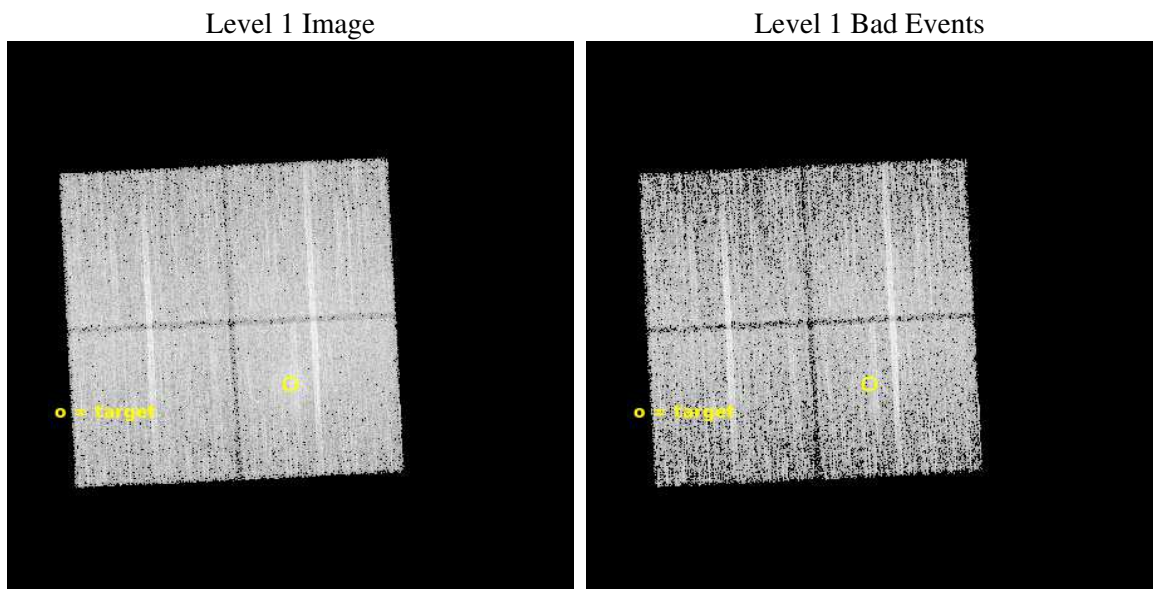
seq_num	801705	Sequence number
obs_id	19768	Observation id
title	Calibrating the Mass-Proxy vs. Mass Relation - from X-ray observables to Weak Lensing Masses	Proposal title
observer	Ralph Kraft	Principal investigator
object	A1246	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	170.995	Observer's specified target RA [deg]
dec_targ	21.480556	Observer's specified target Dec [deg]
ra_nom	170.9955482044	Nominal RA [deg]
dec_nom	21.53359875838	Nominal Dec [deg]
roll_nom	87.106952535387	Nominal Roll [deg]
revision	3	Processing version of data
ontime	15078.400116086	Sum of GTIs [s]
livetime	14881.389718013	Livetime [s]
ontime0	15078.400116086	Sum of GTIs [s]
ontime1	15078.400116086	Sum of GTIs [s]
ontime2	15078.400116086	Sum of GTIs [s]
ontime3	15078.400116086	Sum of GTIs [s]
l2events	47359	Number of level 2 events



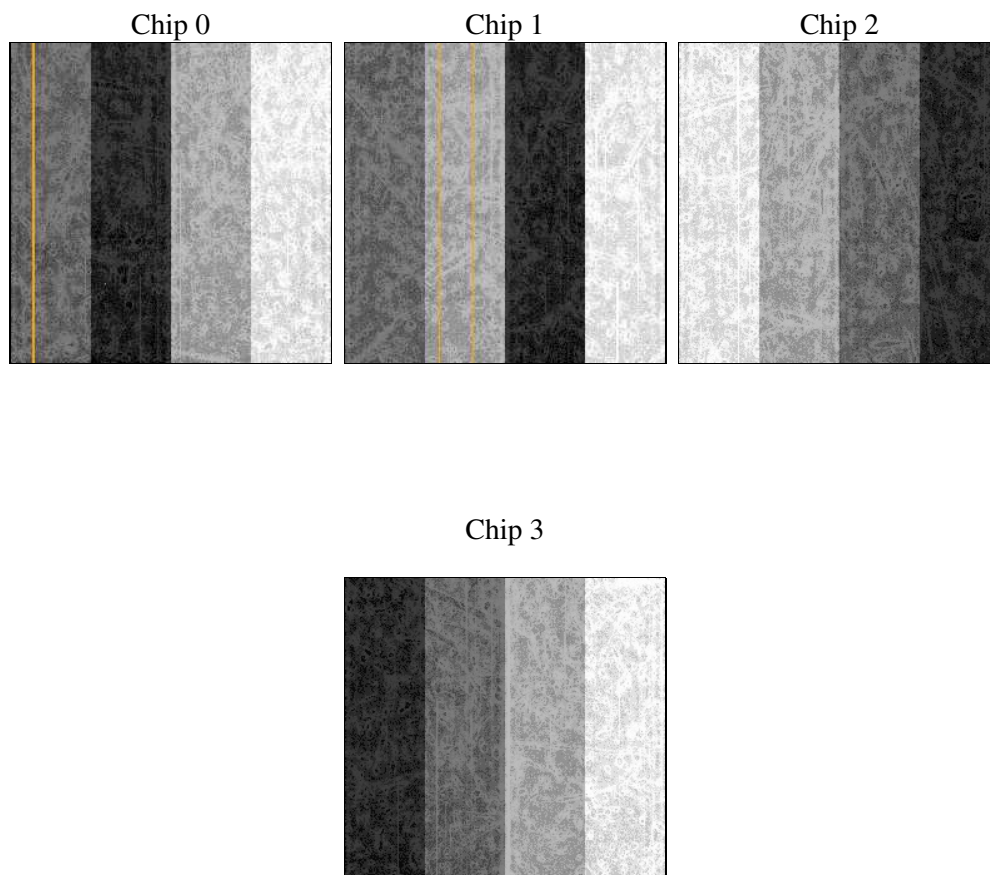
2 OBI

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	15078.400116086	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	15078.400116086	Sum of GTIs [s]
date	2020-10-24T09:33:50	Date and time of file creation	ontime1	15078.400116086	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	15078.400116086	Sum of GTIs [s]
			ontime3	15078.400116086	Sum of GTIs [s]
			l1events	426187	Number of level 1 events

2.1.4 Events

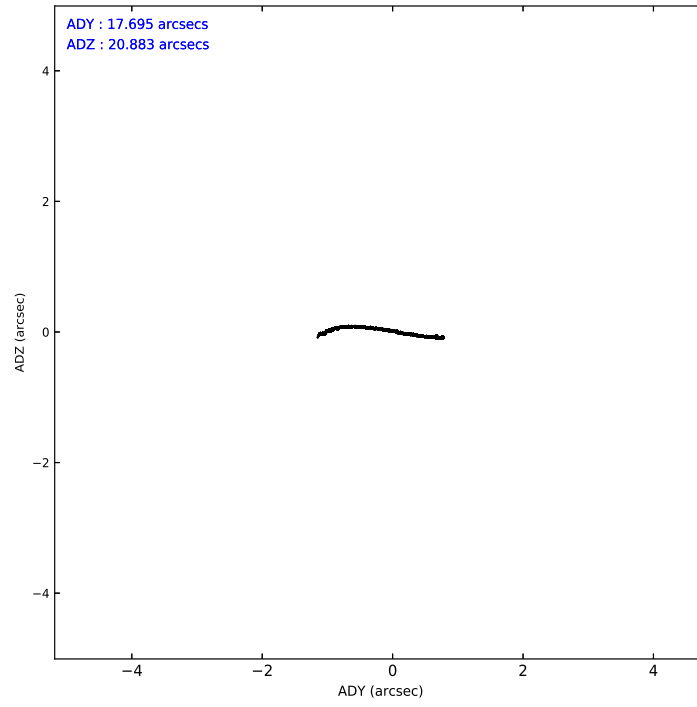
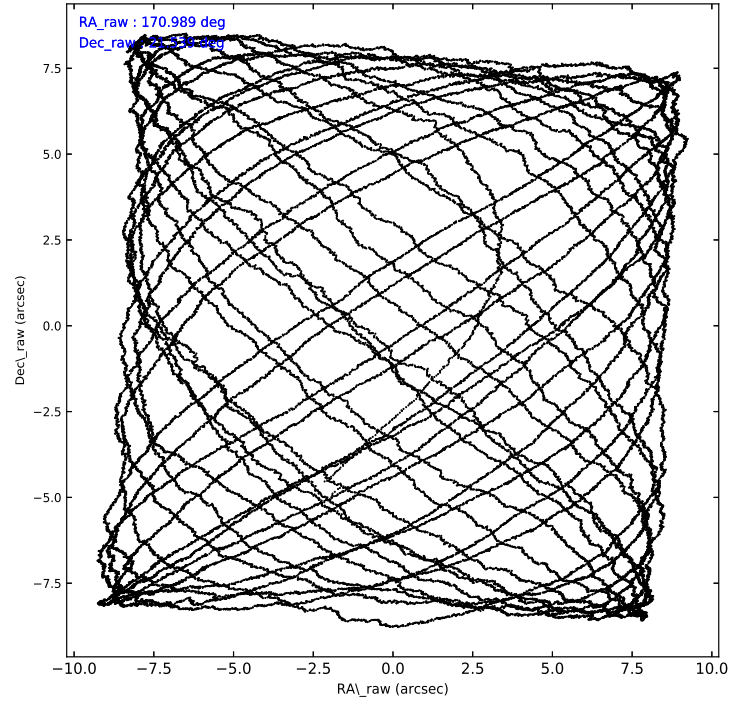
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	99485	102989	109825	113888
rejected events	87344	89347	97887	95816
rejected %	87%	86%	89%	84%

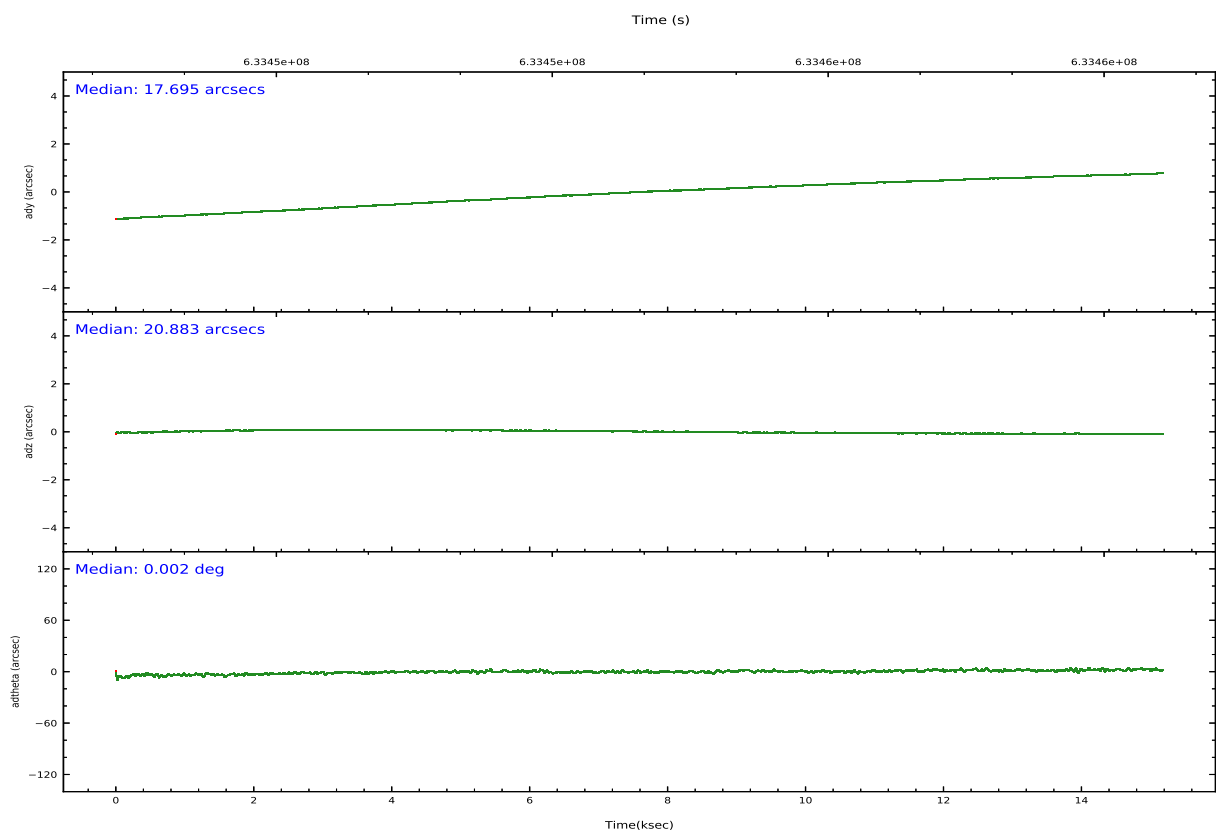
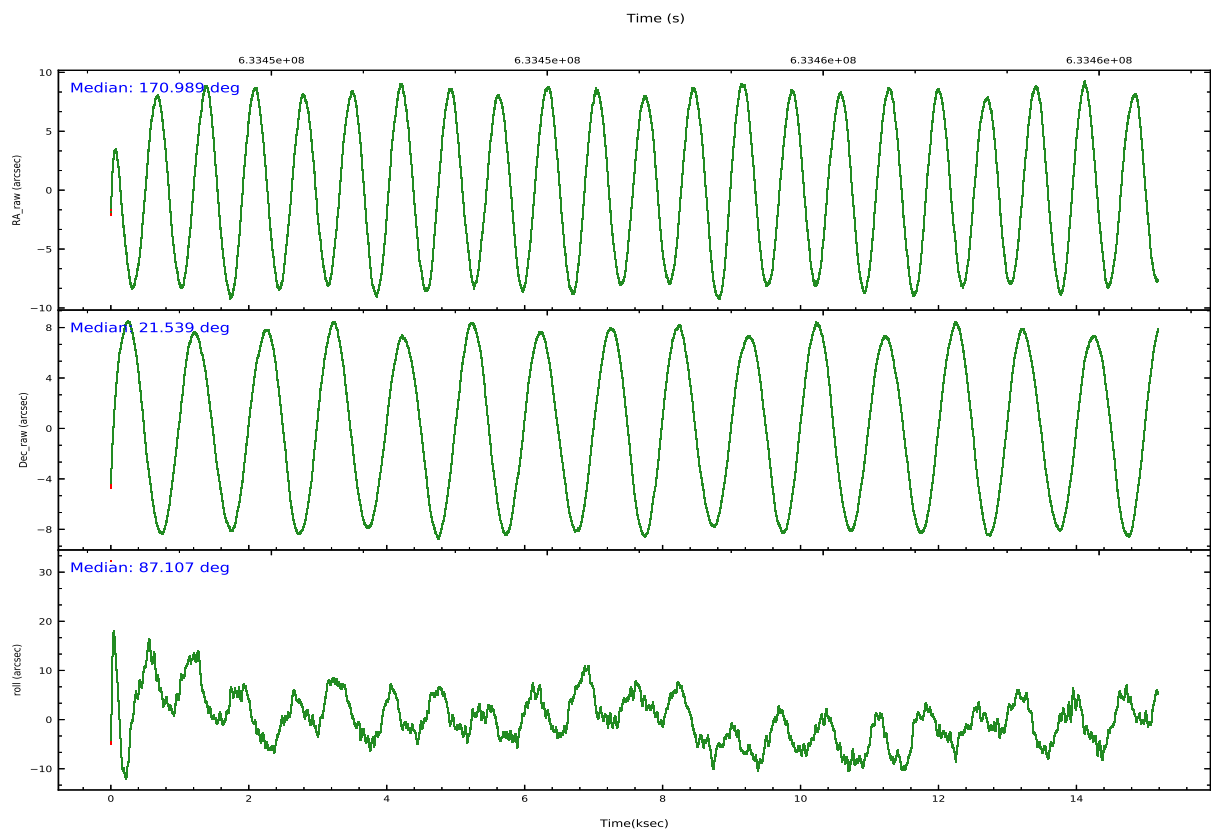
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4053	4528	4175	9237
	4%	4%	3%	8%
grade 1 events	50	60	63	94
	0%	0%	0%	0%
grade 2 events	3109	3467	2910	3319
	3%	3%	2%	2%
grade 3 events	1263	1288	1226	1450
	1%	1%	1%	1%
grade 4 events	1167	1315	1240	1409
	1%	1%	1%	1%
grade 5 events	4800	4769	4365	5143
	4%	4%	3%	4%
grade 6 events	2550	3047	2388	2660
	2%	2%	2%	2%
grade 7 events	82493	84515	93458	90576
	82%	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	171.003057	170.9955482044	CCD I2 on	Y	Y
[deg] Pointing Dec	21.514460	21.53359875838	CCD I3 on	Y	Y
[deg] Pointing Roll	86.904518	87.10695253538699	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	633445857.184000	633444752.76195	CCD S5 on	N	N
Observation start date	2018-01-27T13:09:48	2018-01-27T12:52:32	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	633460857.184000	633461179.92542	On-chip summing requested	N	N
Observation end date	2018-01-27T17:19:48	2018-01-27T17:26:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



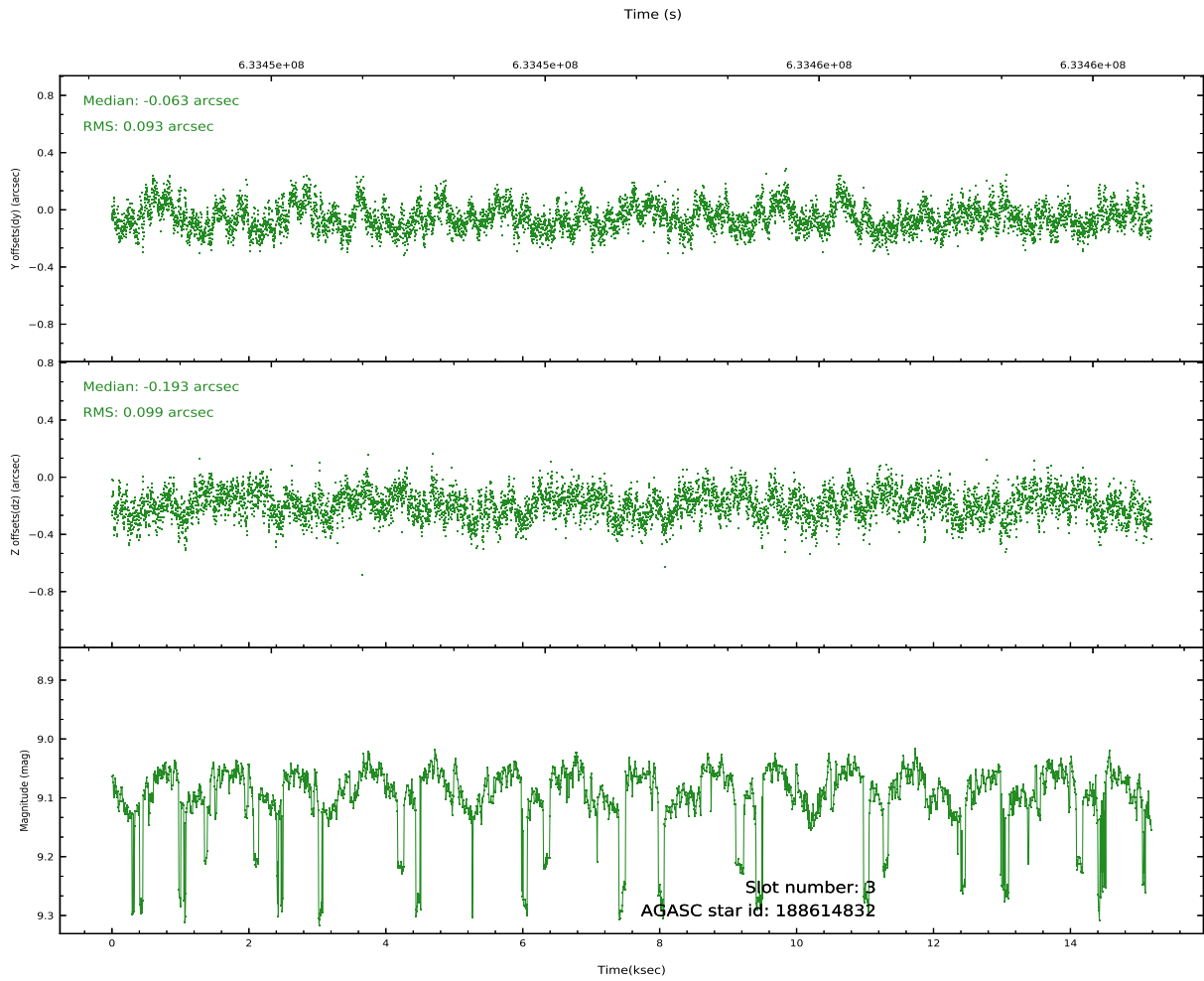
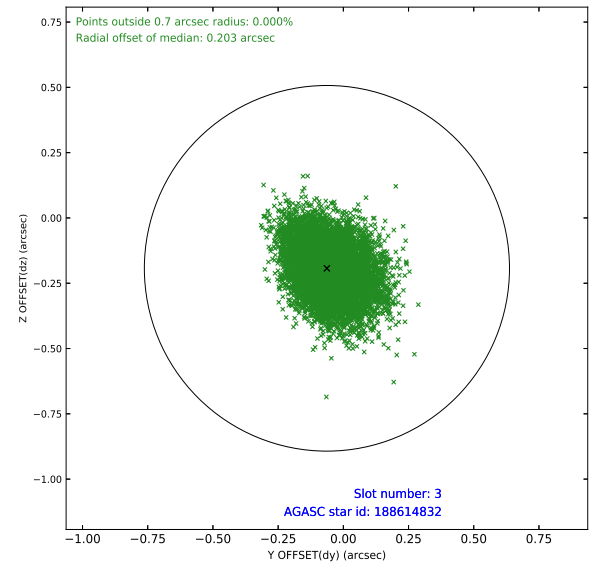
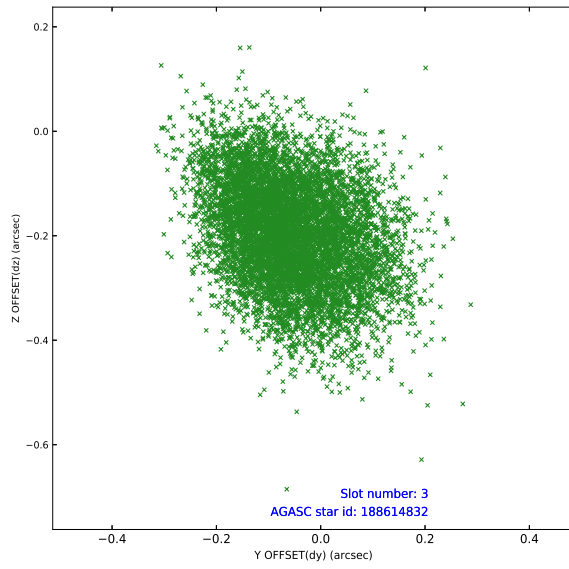


Slot Statistics

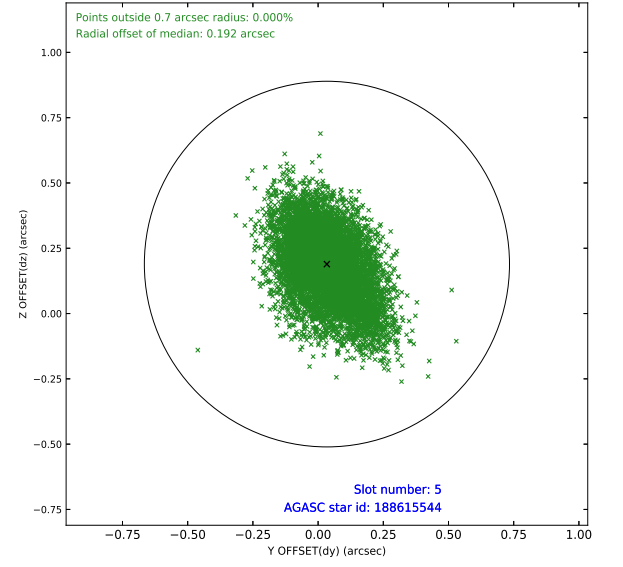
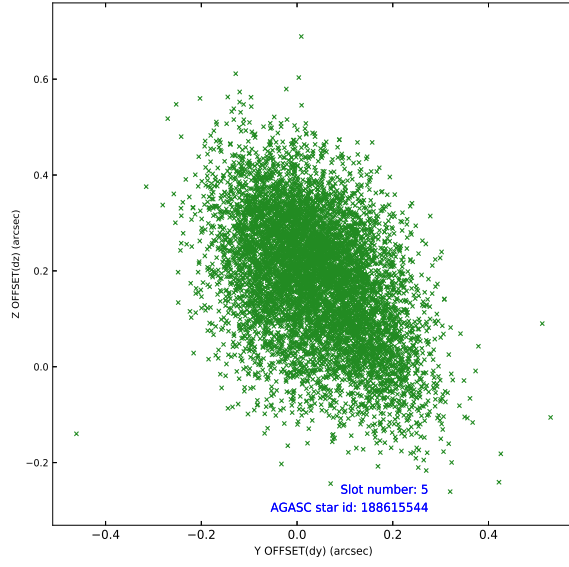
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	3704	1.000	0.210	-0.149	0.011	0.020	0.000000	0.000000	921.75	-1003
1	FID		ACIS-I-2	7.14	3704	1.000	-0.190	0.146	0.012	0.031	0.000000	0.000000	-772.98	-1009
2	FID		ACIS-I-4	7.08	3704	1.000	-0.117	0.069	0.014	0.031	0.000000	0.000000	2140.88	896
3	GUIDE	used	188614832	9.09	7402	1.000	-0.063	-0.193	0.146	0.231	170.375801	21.987686	1591.65	2183
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	188615544	9.13	7401	1.000	0.034	0.189	0.178	0.292	171.668254	21.828845	1255.21	-2158
6	GUIDE	used	188616816	8.29	7403	1.000	-0.075	0.230	0.118	0.201	171.676755	21.618349	500.52	-2230
7	GUIDE	used	188613736	7.65	7405	1.000	0.091	-0.220	0.115	0.205	171.763443	21.852279	1355.49	-2470

2.4 Star Slots

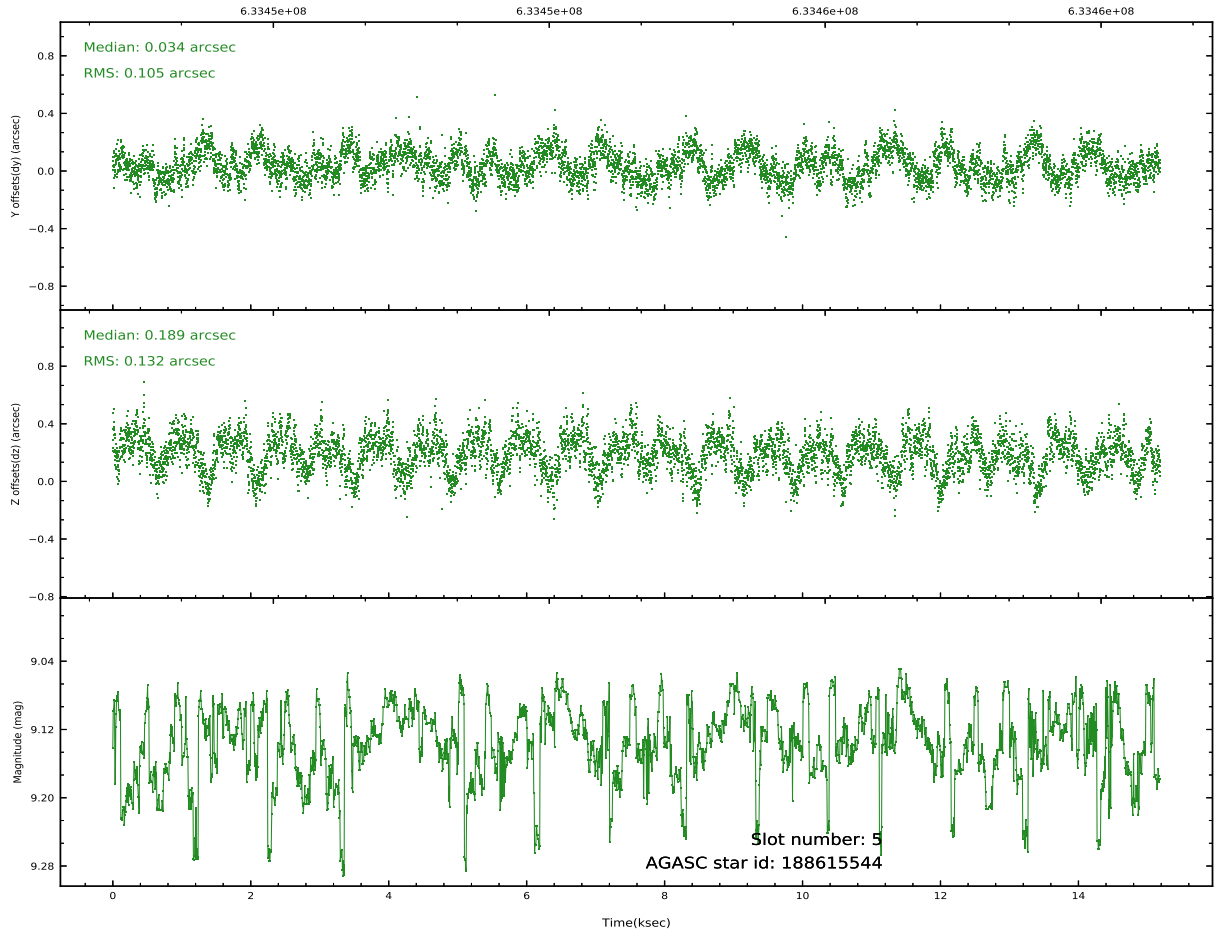
2.4.1 Slot 3



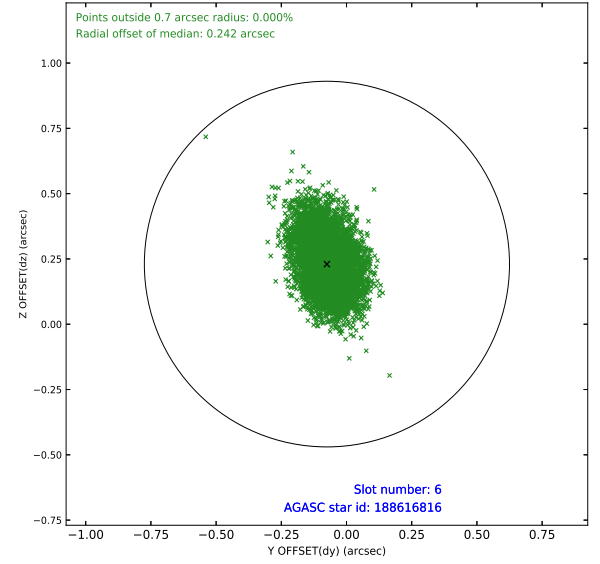
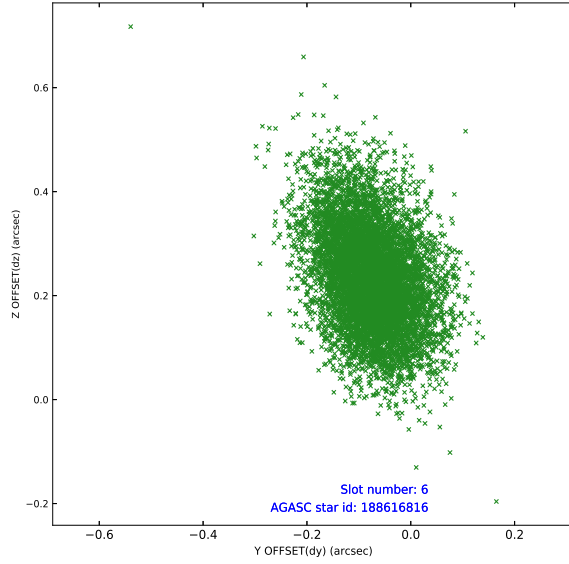
2.4.2 Slot 5



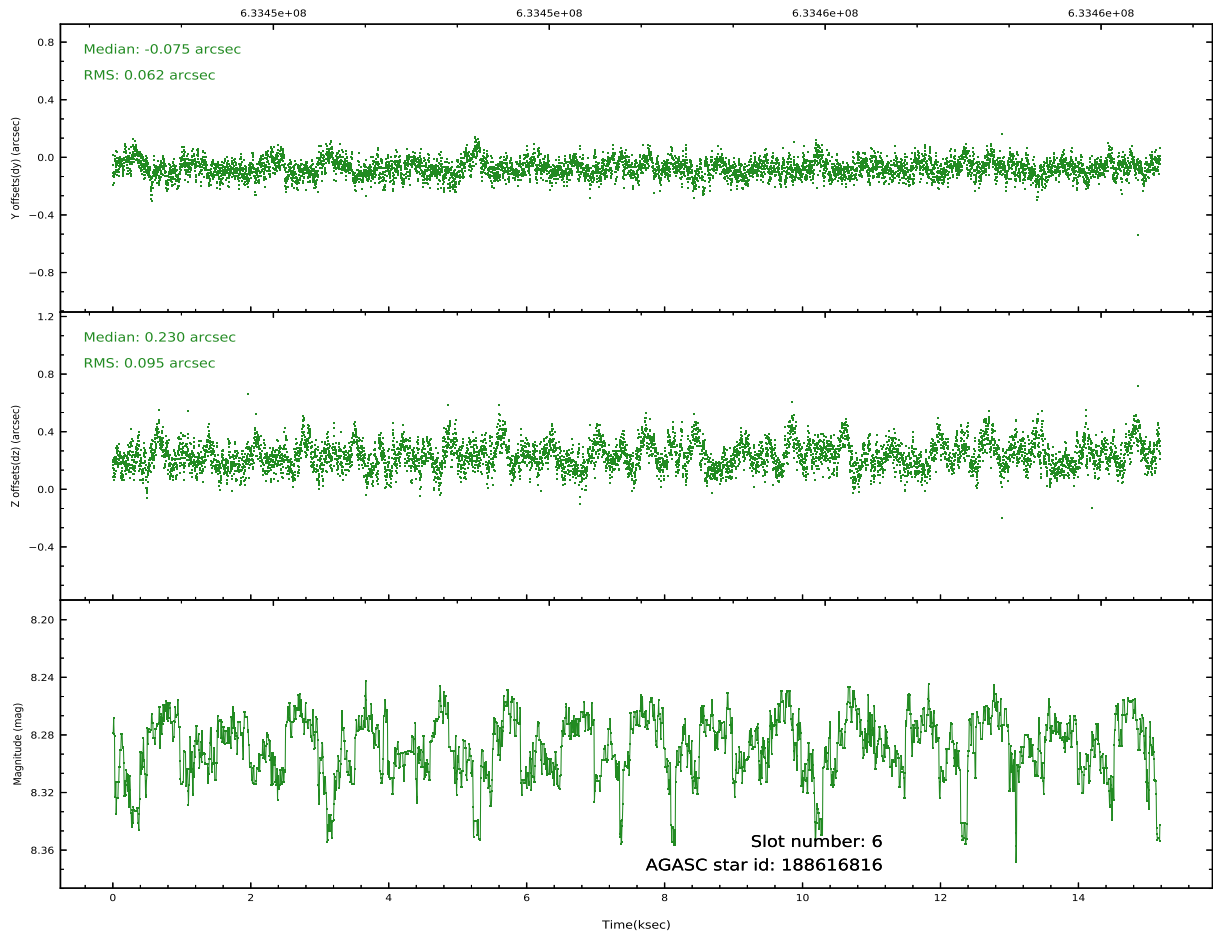
Time (s)



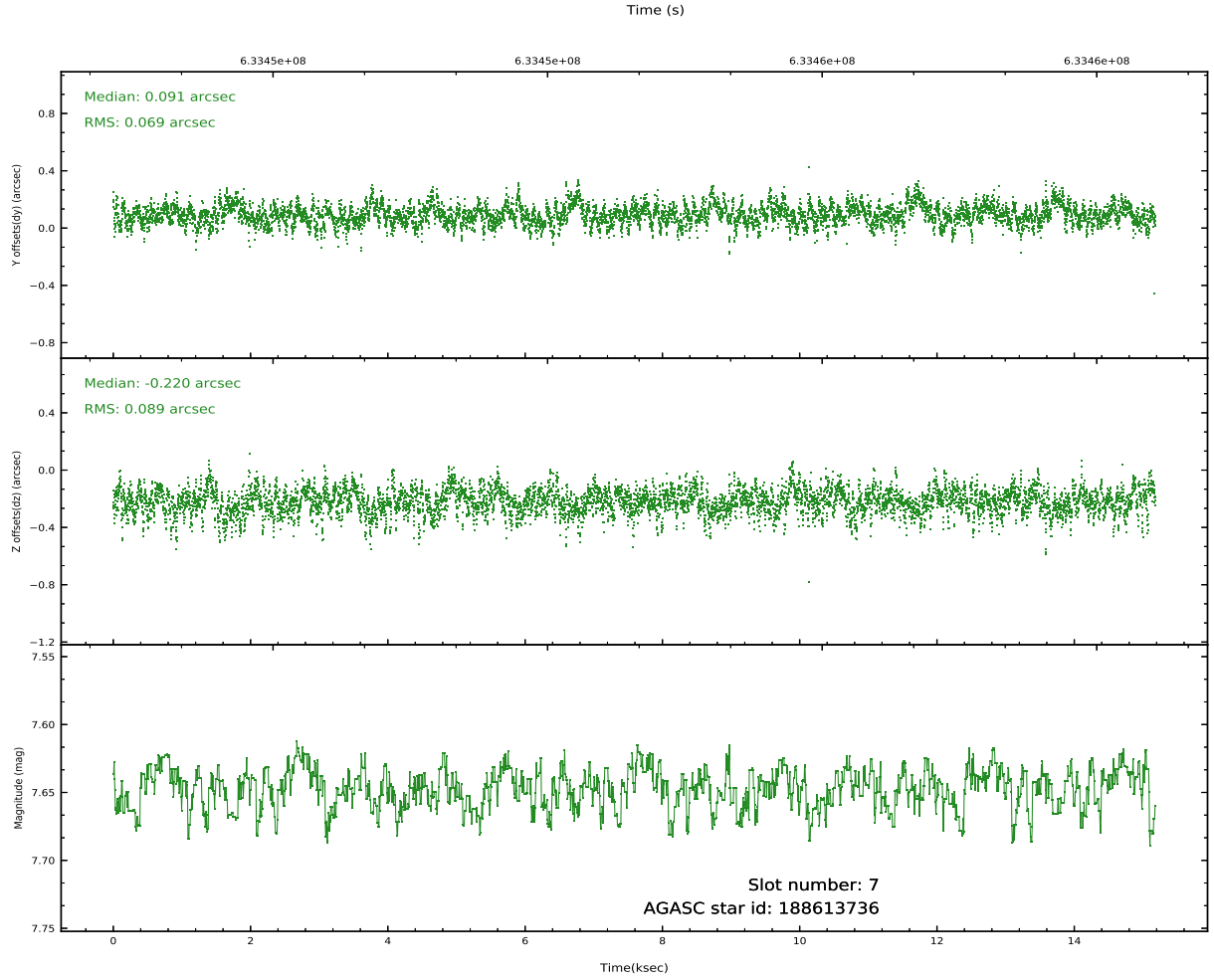
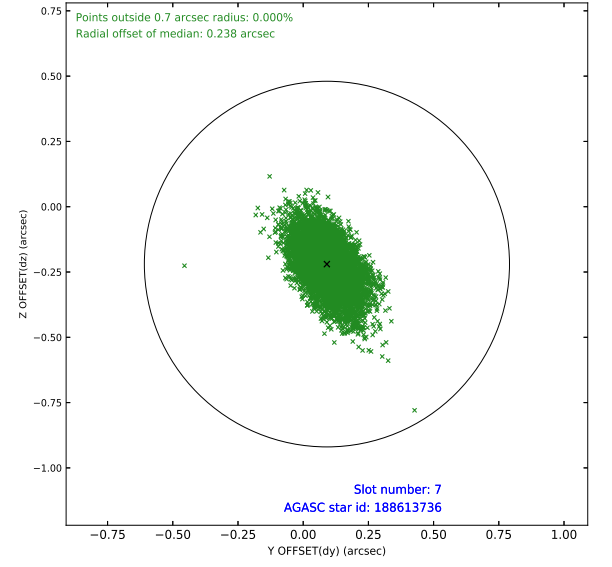
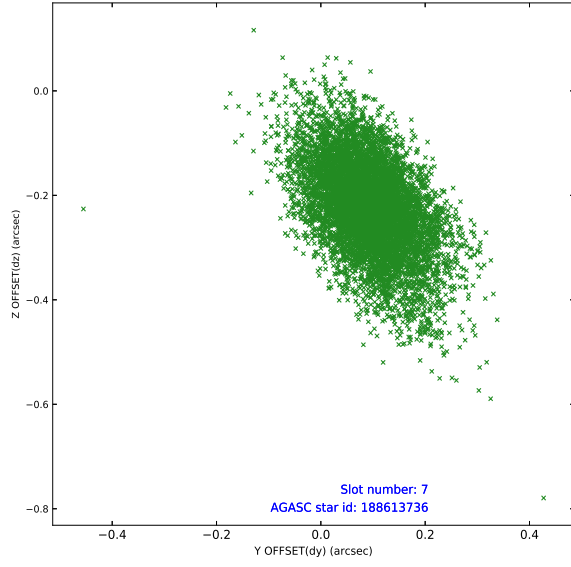
2.4.3 Slot 6



Time (s)

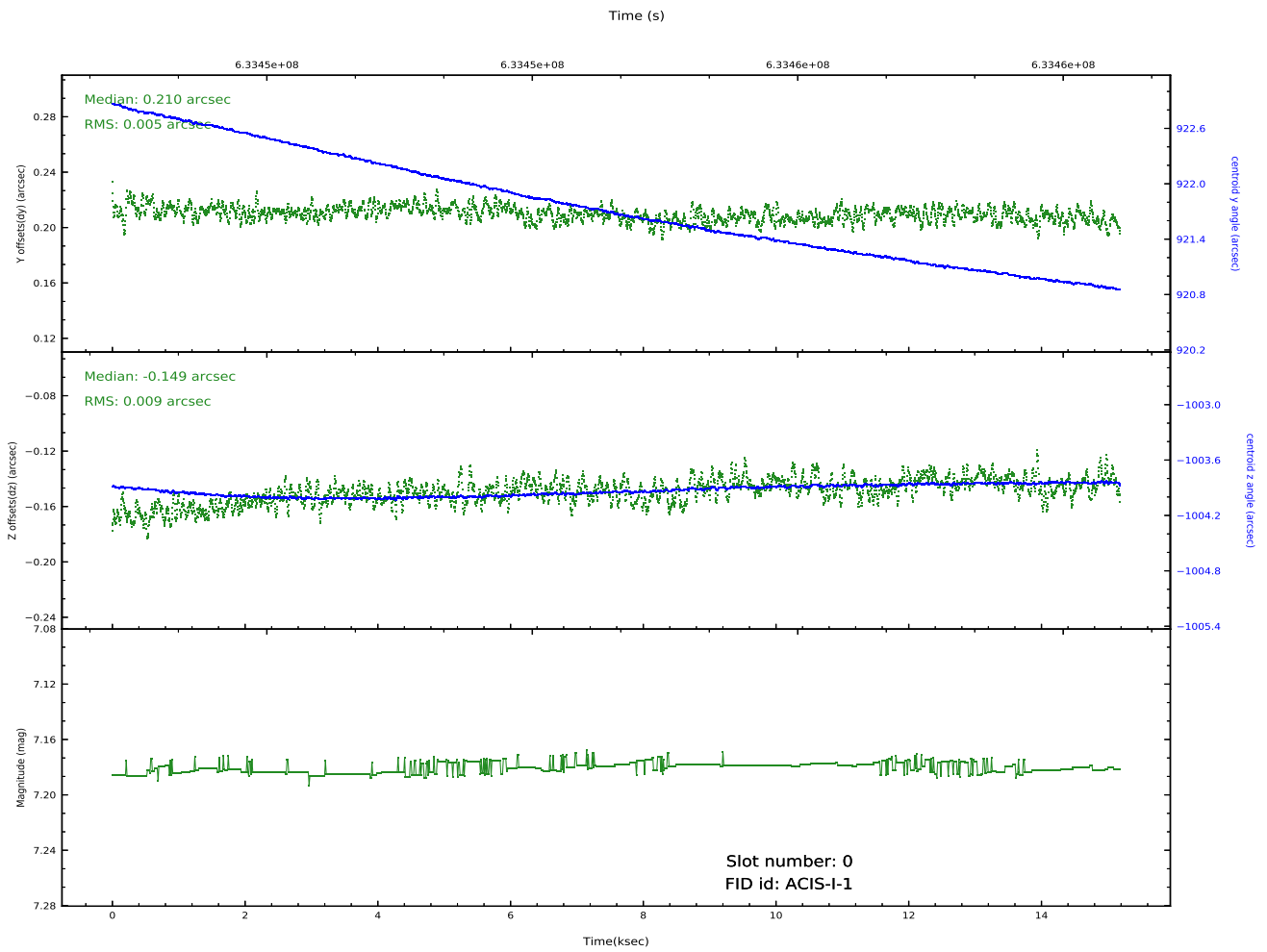
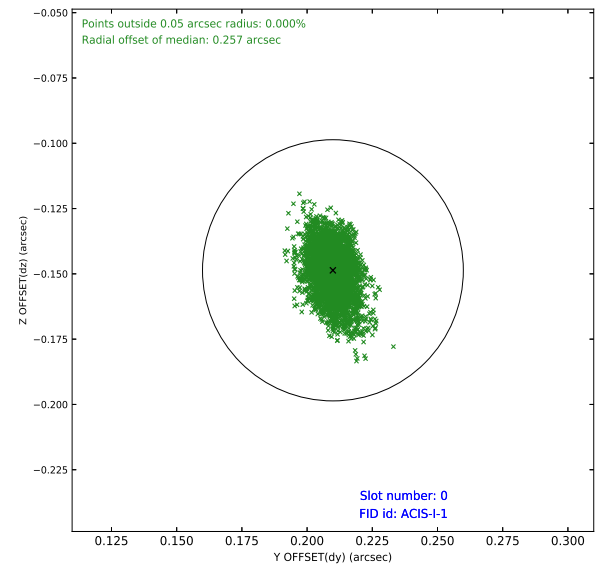
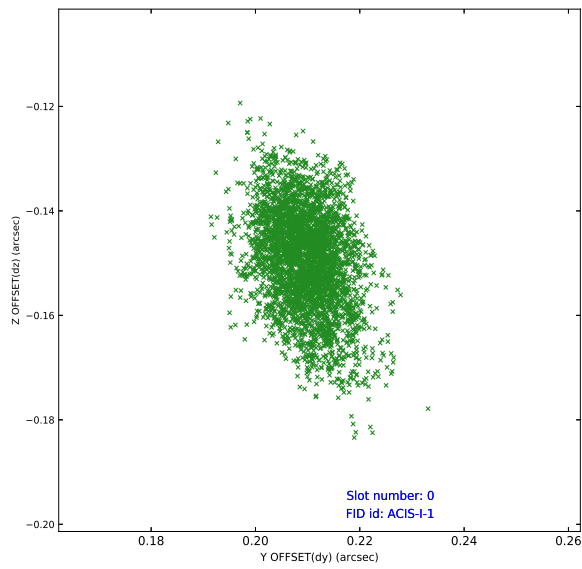


2.4.4 Slot 7

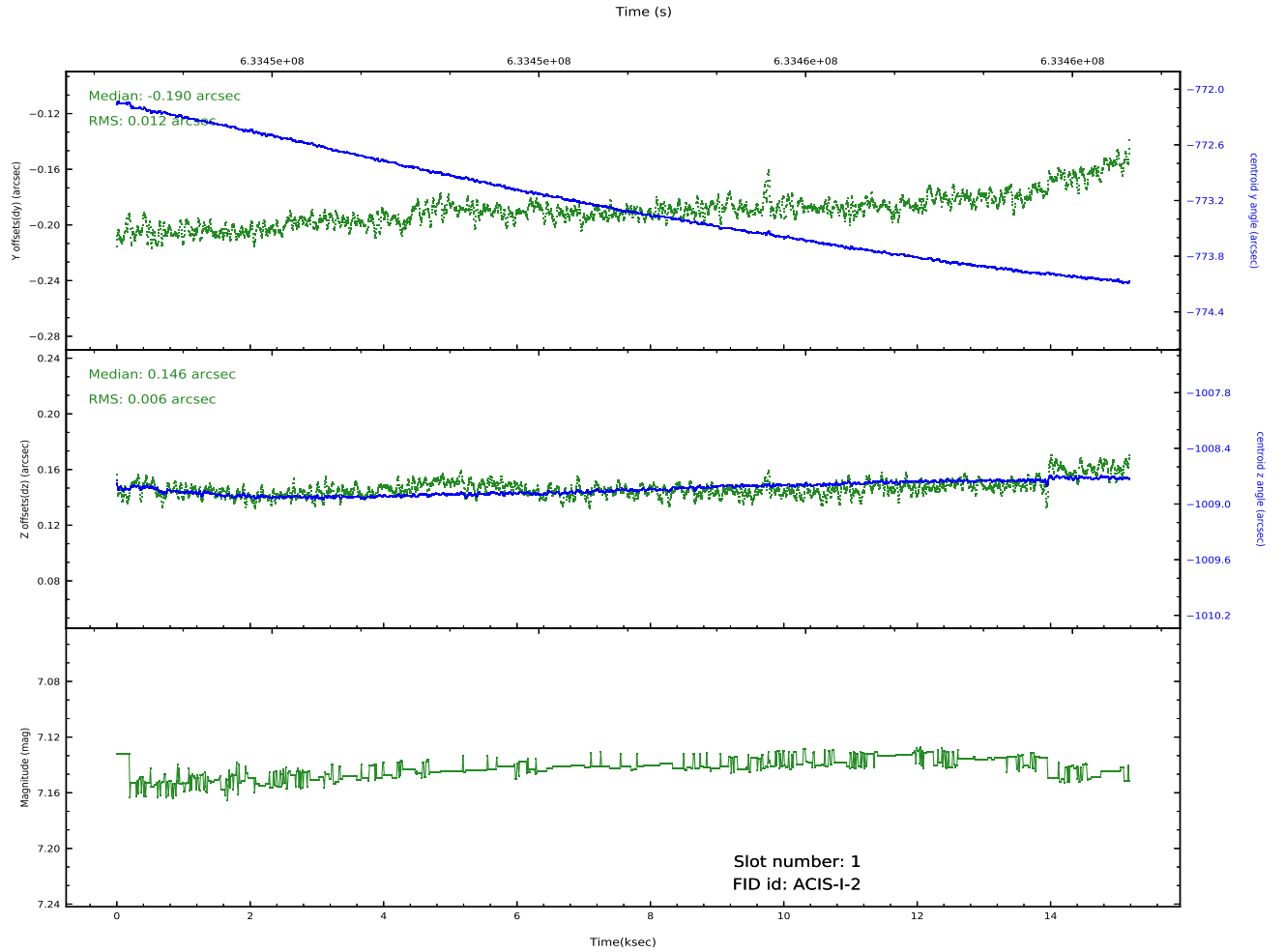
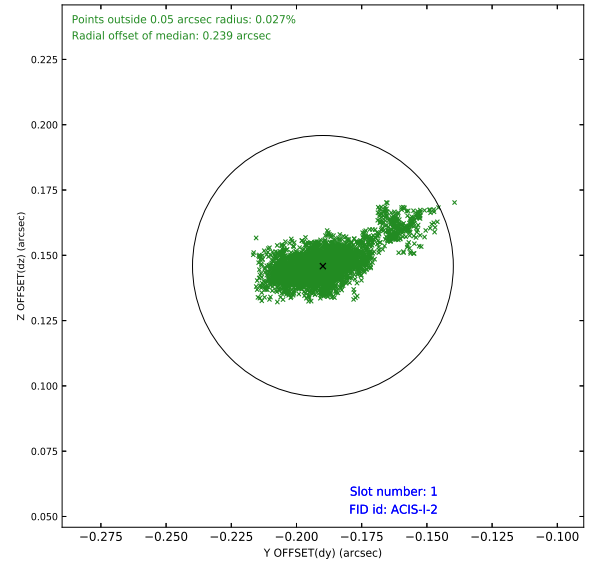
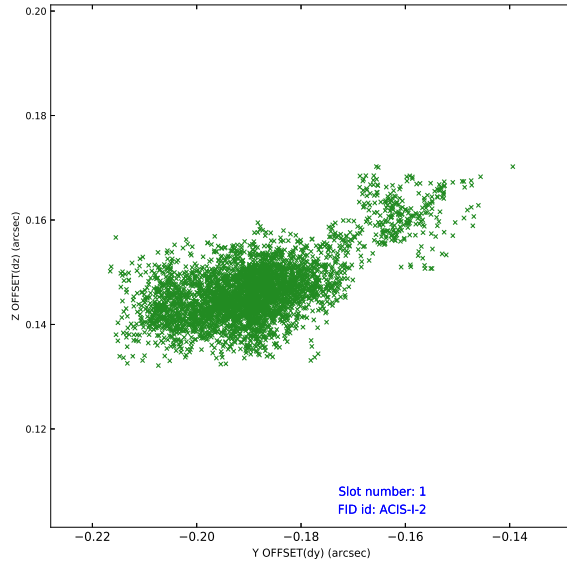


2.5 FID Slots

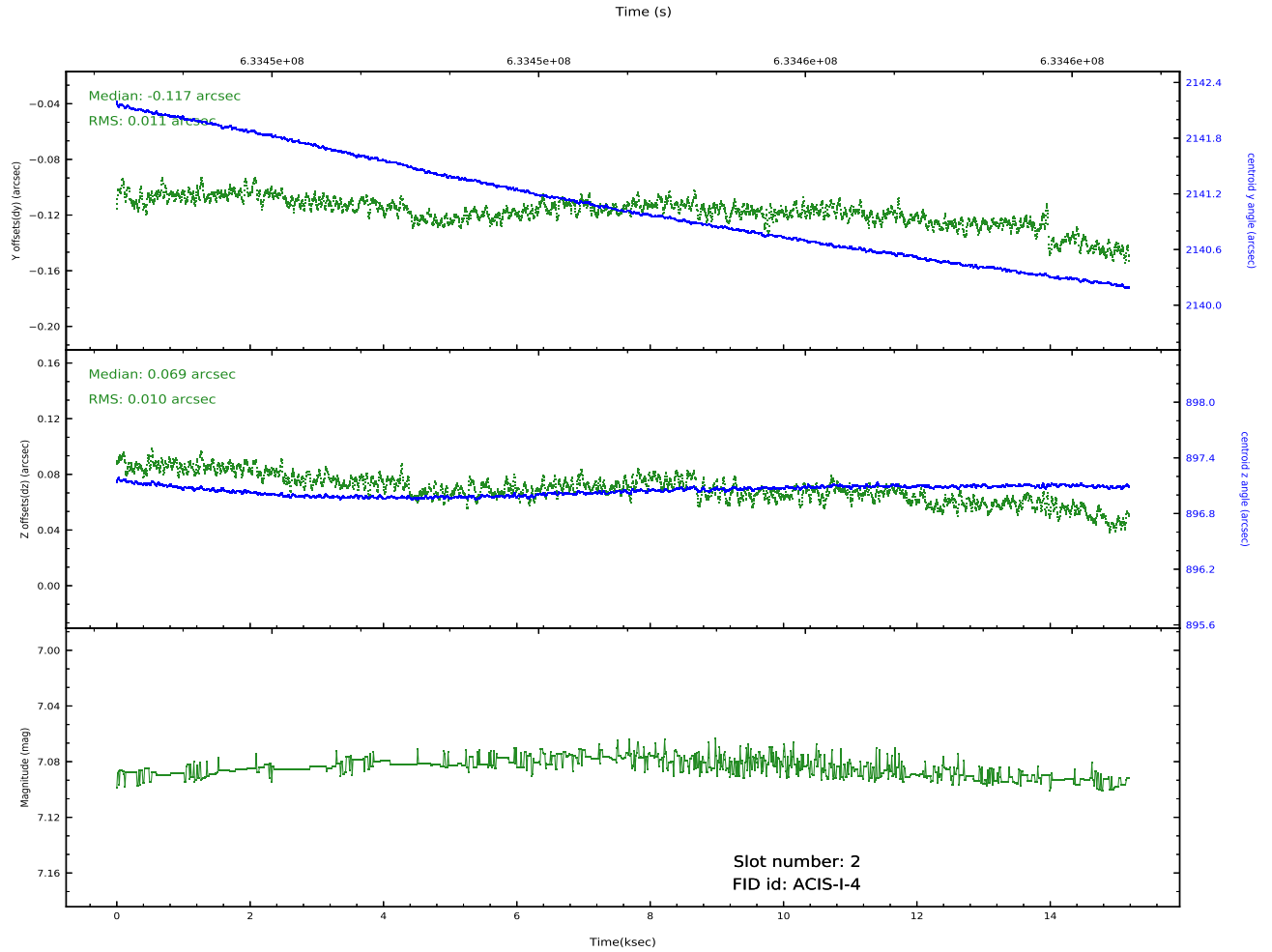
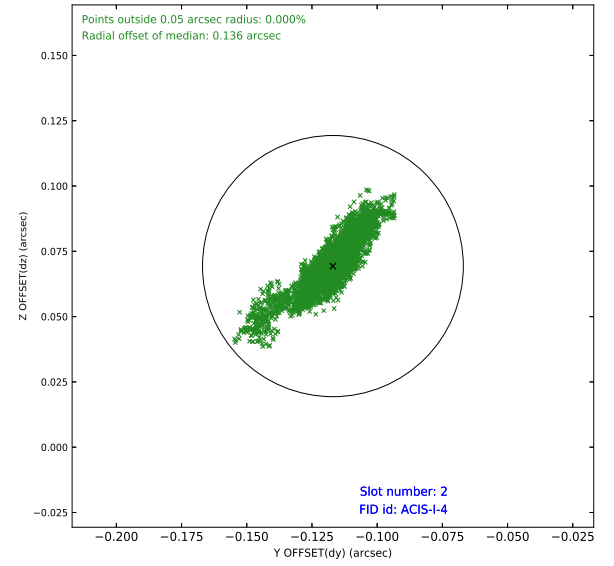
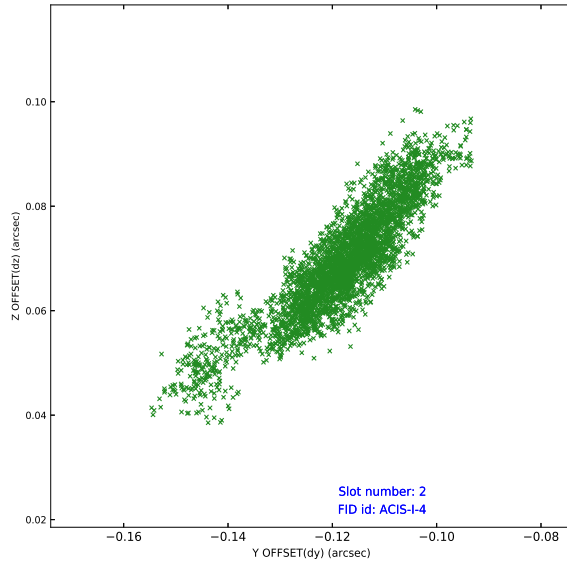
2.5.1 Slot 0



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	15.078400116086

A.2 Comments

One optional chip was dropped.

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The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.