

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19767 - L2 Version 3
Chandra X-Ray Center

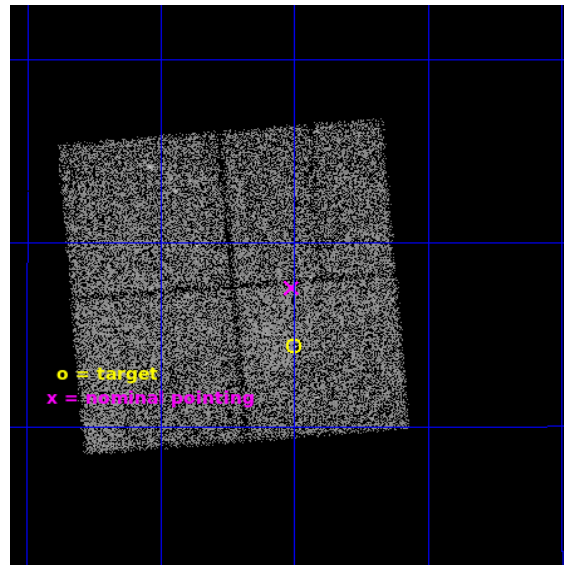
L2 Processing Date : Oct 24 2020

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1 Front

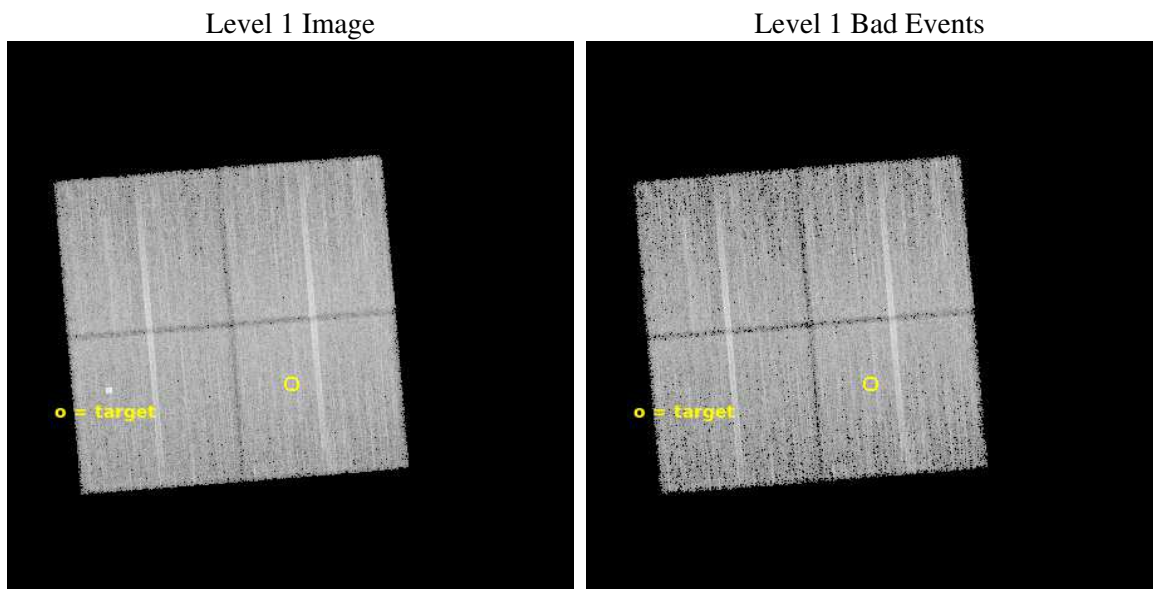
seq_num	801704	Sequence number
obs_id	19767	Observation id
title	Calibrating the Mass-Proxy vs. Mass Relation - from X-ray observables to Weak Lensing Masses	Proposal title
observer	Ralph Kraft	Principal investigator
object	A1234	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	170.625	Observer's specified target RA [deg]
dec_targ	21.406111	Observer's specified target Dec [deg]
ra_nom	170.62716866809	Nominal RA [deg]
dec_nom	21.459309249025	Nominal Dec [deg]
roll_nom	85.207122193846	Nominal Roll [deg]
revision	3	Processing version of data
ontime	22983.359106779	Sum of GTIs [s]
livetime	22683.064599946	Livetime [s]
ontime0	22986.500176907	Sum of GTIs [s]
ontime1	22983.359096646	Sum of GTIs [s]
ontime2	22986.500176907	Sum of GTIs [s]
ontime3	22983.359106779	Sum of GTIs [s]
l2events	62312	Number of level 2 events



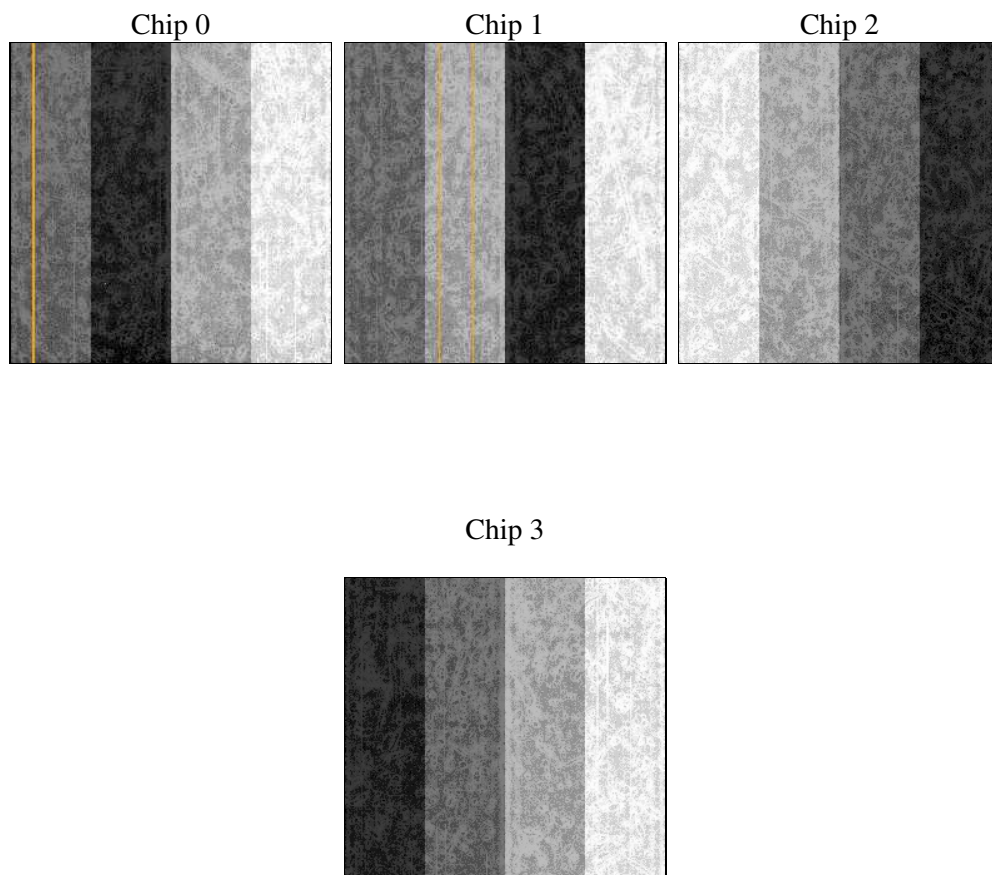
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22908.752000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	22983.359106779	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	22986.500176907	Sum of GTIs [s]
date	2020-10-24T07:21:49	Date and time of file creation	ontime1	22983.359096646	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	22986.500176907	Sum of GTIs [s]
			ontime3	22983.359106779	Sum of GTIs [s]
			l1events	676718	Number of level 1 events

2.1.4 Events

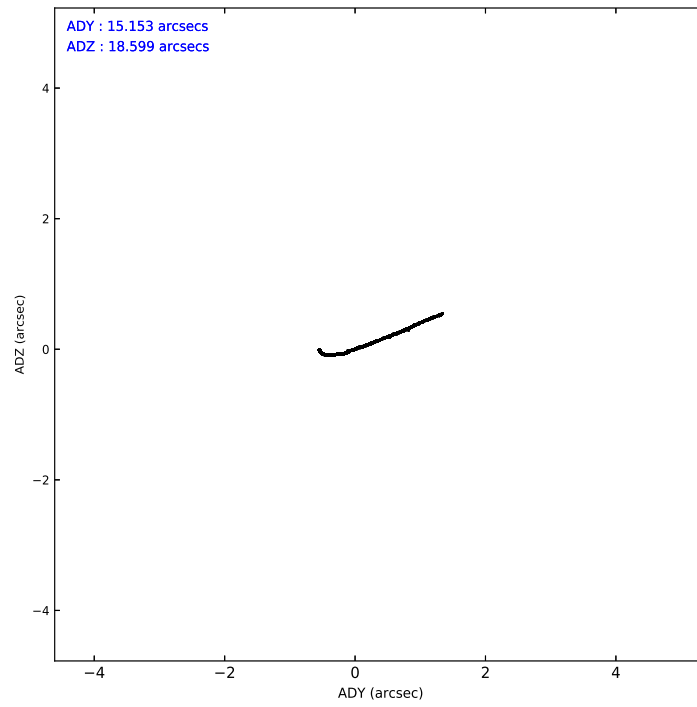
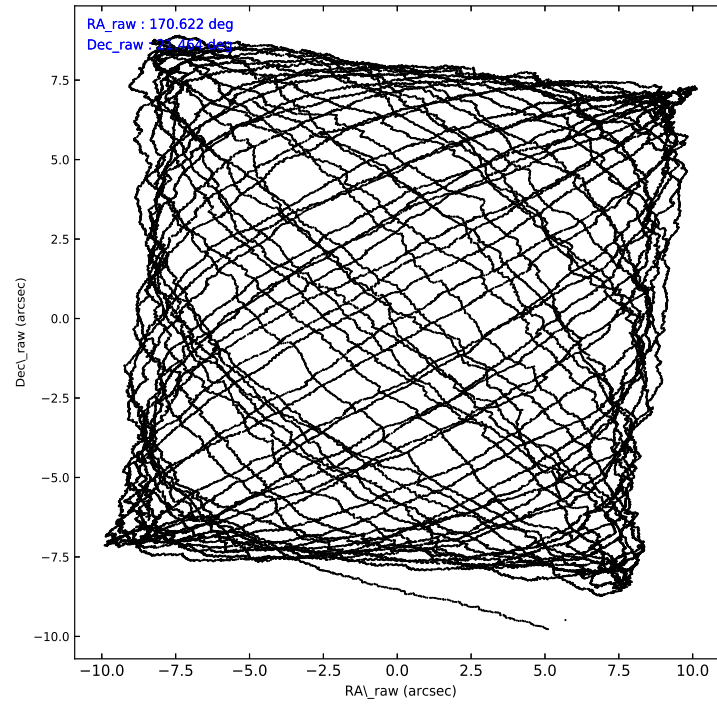
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	160887	161187	179487	175157
rejected events	142351	139693	161963	156932
rejected %	88%	86%	90%	89%

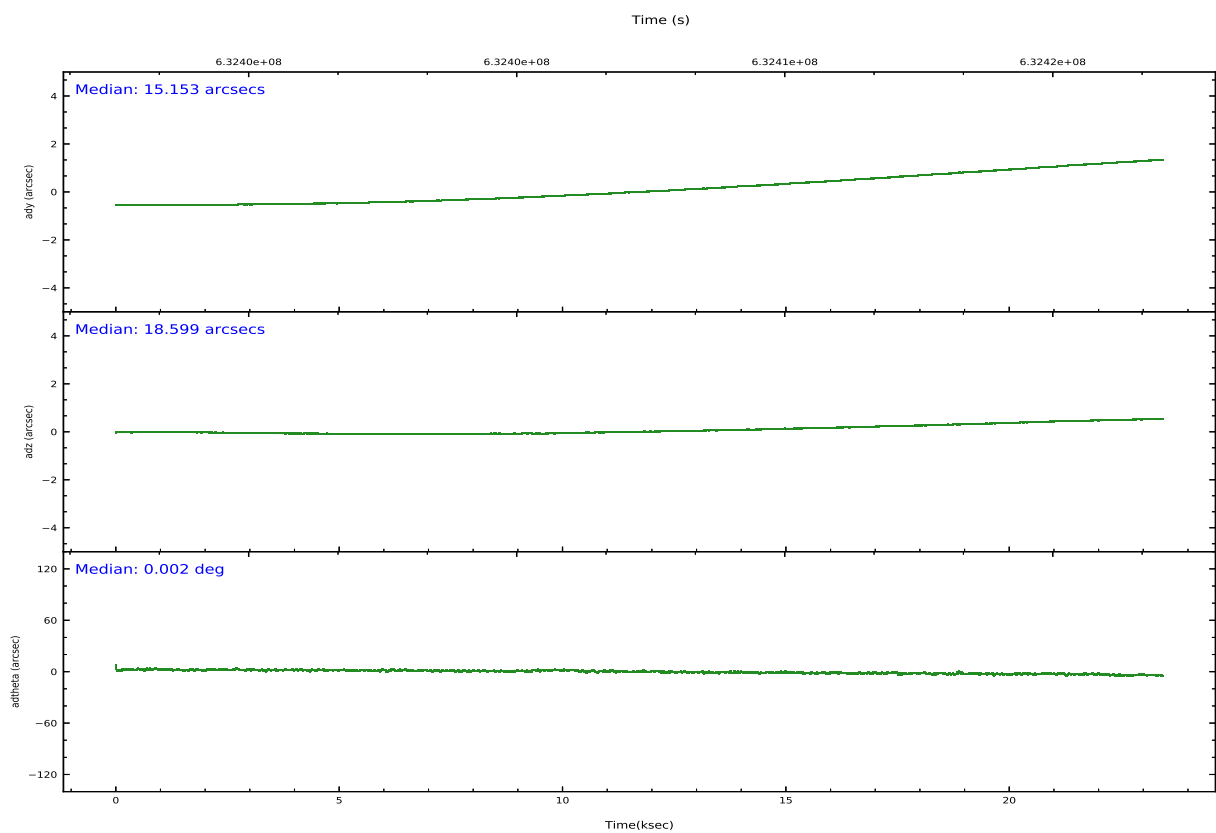
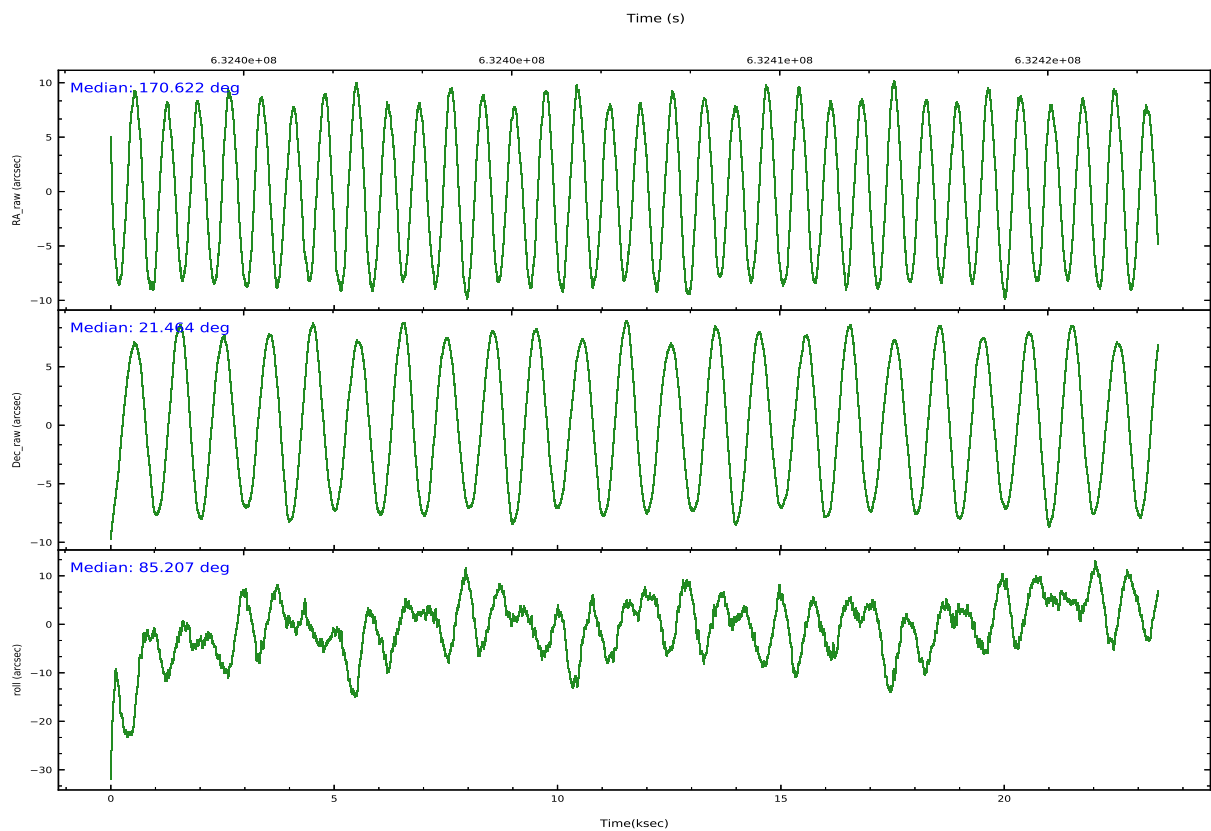
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	6140	7783	6230	6792
	3%	4%	3%	3%
grade 1 events	76	88	92	83
	0%	0%	0%	0%
grade 2 events	4747	5070	4061	3897
	2%	3%	2%	2%
grade 3 events	1912	1794	1763	1885
	1%	1%	0%	1%
grade 4 events	1755	1815	1835	1839
	1%	1%	1%	1%
grade 5 events	6704	6885	6379	7669
	4%	4%	3%	4%
grade 6 events	3989	5034	3644	3818
	2%	3%	2%	2%
grade 7 events	135564	132718	155483	149174
	84%	82%	86%	85%

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	170.634453	170.62716866809	CCD I2 on	Y	Y
[deg] Pointing Dec	21.439302	21.459309249025	CCD I3 on	Y	Y
[deg] Pointing Roll	84.996542	85.207122193846	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)	632395561.184000	632394504.90013	CCD S5 on	N	N
Observation start date	2018-01-15T09:24:52	2018-01-15T09:08:24	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	632418470.184000	632419319.12659	On-chip summing requested	N	N
Observation end date	2018-01-15T15:46:41	2018-01-15T16:01:59	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



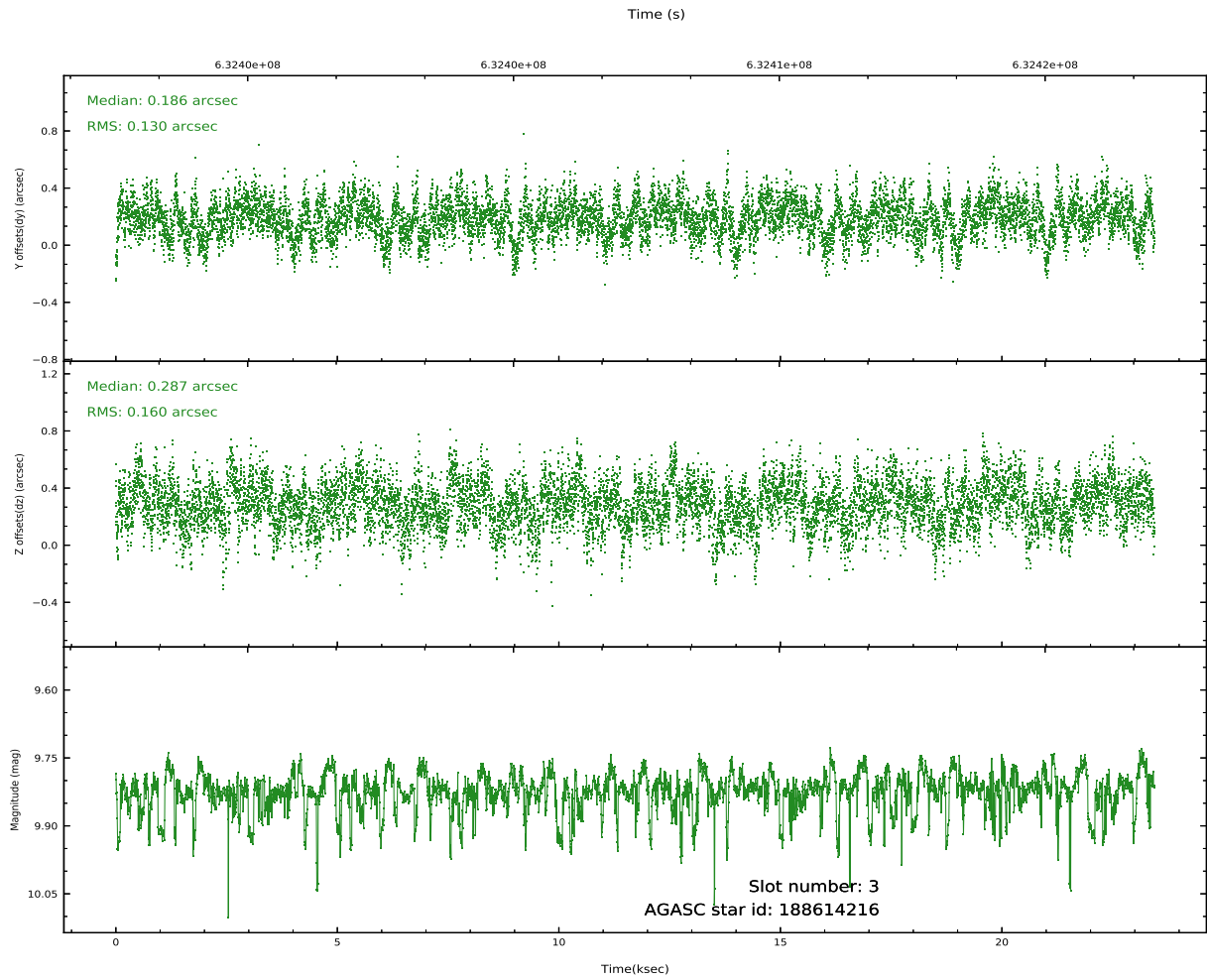
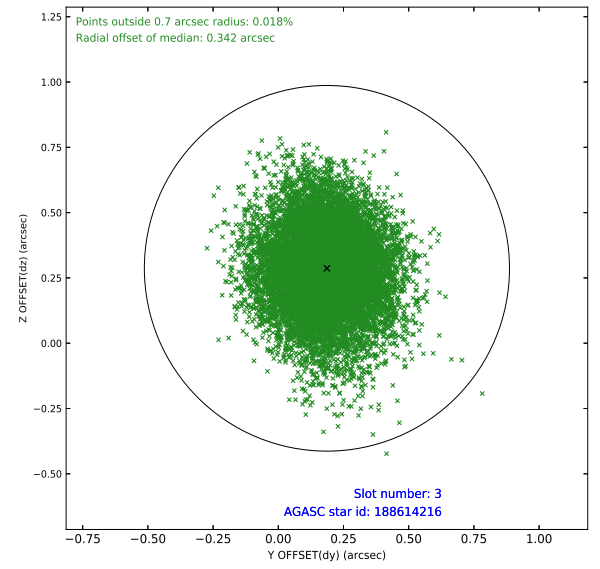
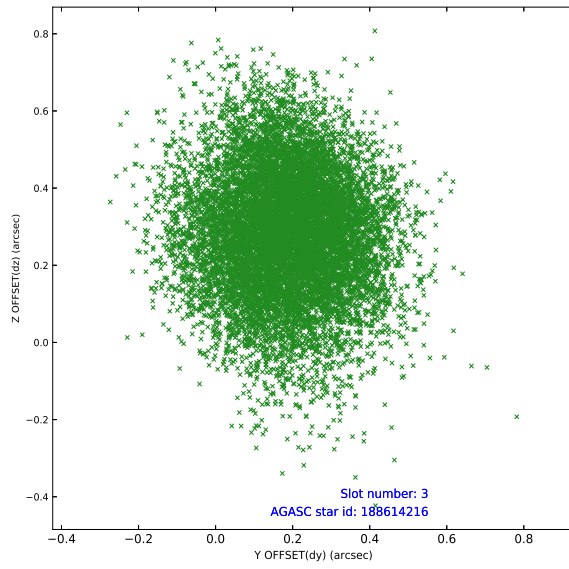


Slot Statistics

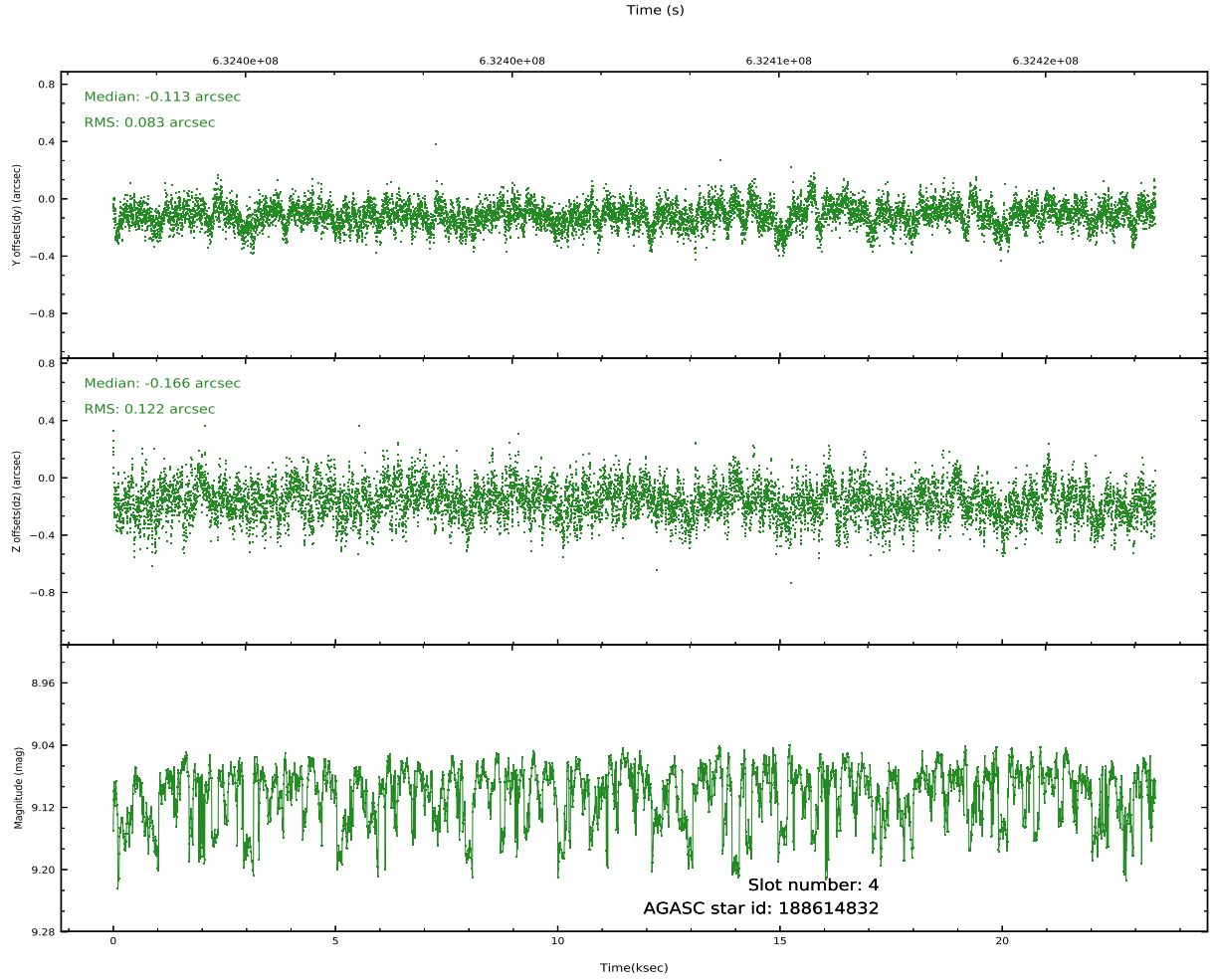
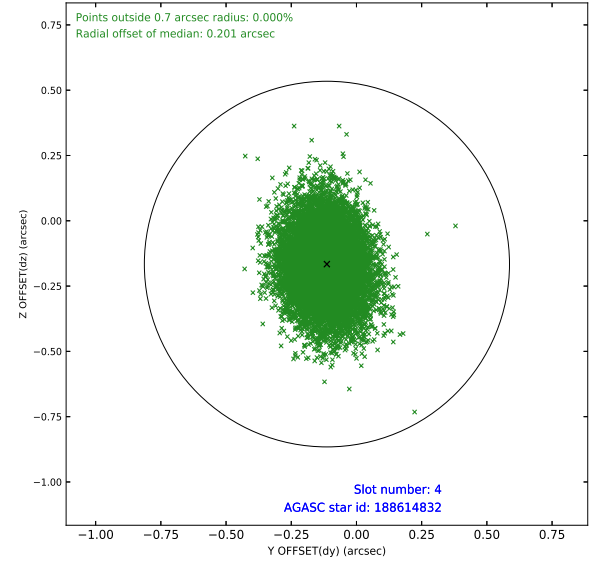
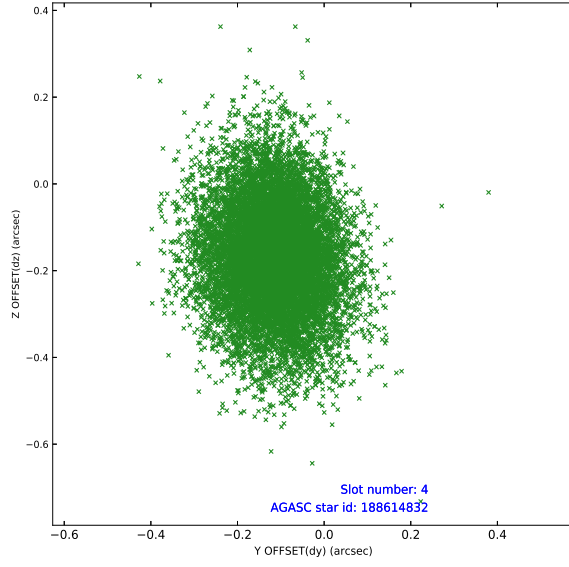
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.28	5719	1.000	0.172	-0.066	0.024	0.050	0.000000	0.000000	924.12	-1001
1	FID		ACIS-I-2	7.20	5717	1.000	-0.210	0.026	0.016	0.037	0.000000	0.000000	-770.68	-1006
2	FID		ACIS-I-6	7.30	5719	1.000	-0.052	0.106	0.015	0.026	0.000000	0.000000	389.63	1540
3	GUIDE	used	188614216	9.82	11398	1.000	0.186	0.287	0.219	0.354	171.138967	21.779325	1369.94	-1572
4	GUIDE	used	188614832	9.10	11426	1.000	-0.113	-0.166	0.156	0.259	170.375801	21.987686	1891.96	1032
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
6	GUIDE	used	188615912	8.38	11433	1.000	0.101	0.152	0.141	0.241	170.246329	20.858006	-2196.33	1119
7	GUIDE	used	188622880	7.55	11437	1.000	-0.171	-0.270	0.130	0.226	170.025103	21.913955	1528.14	2176

2.4 Star Slots

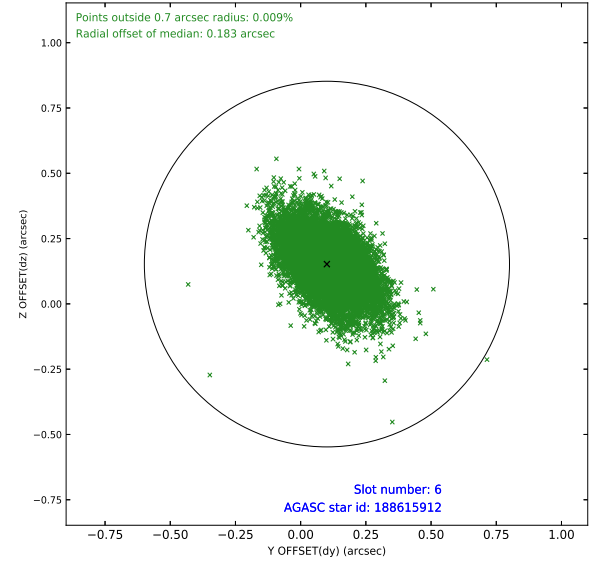
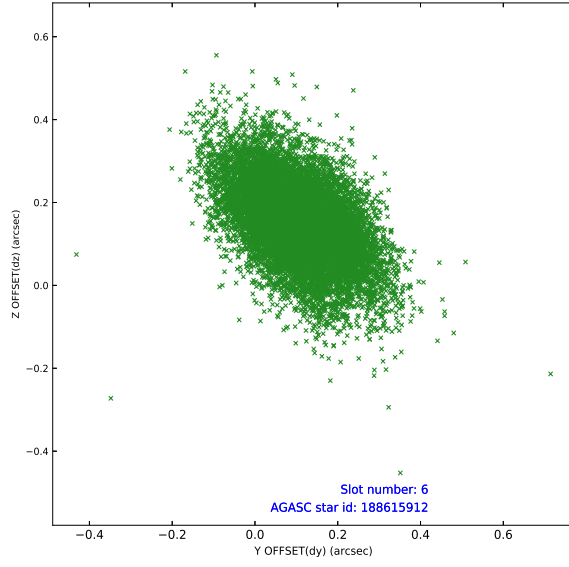
2.4.1 Slot 3



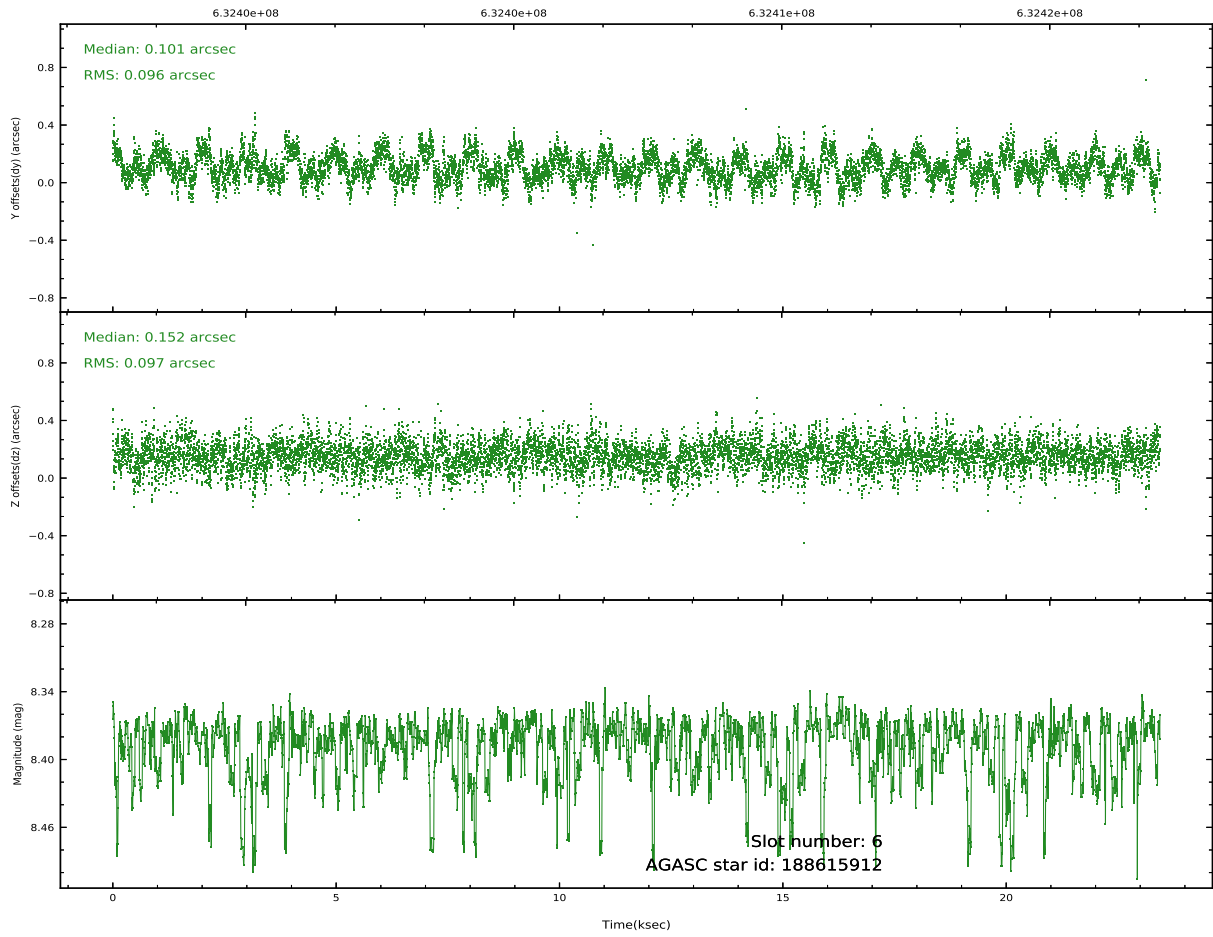
2.4.2 Slot 4



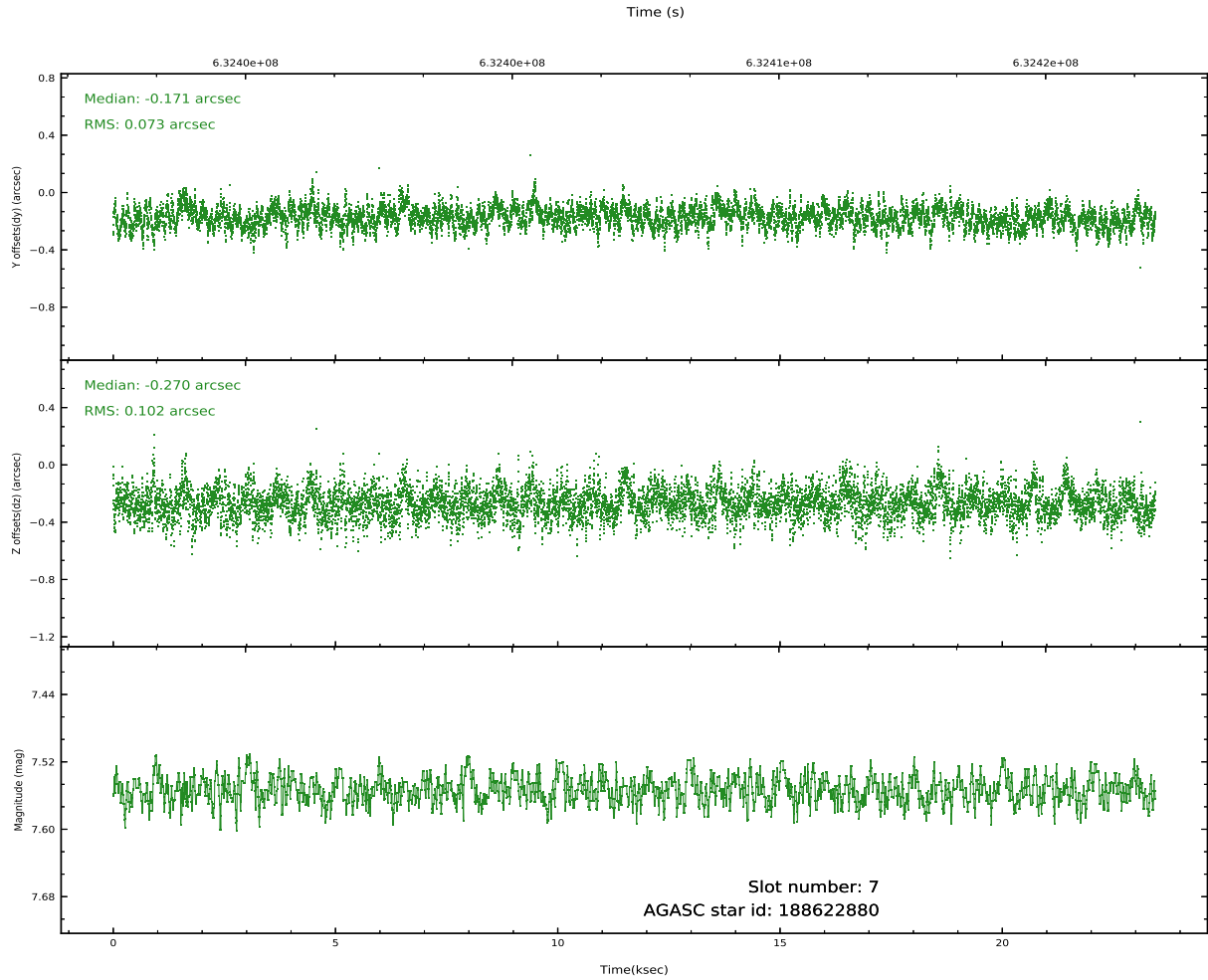
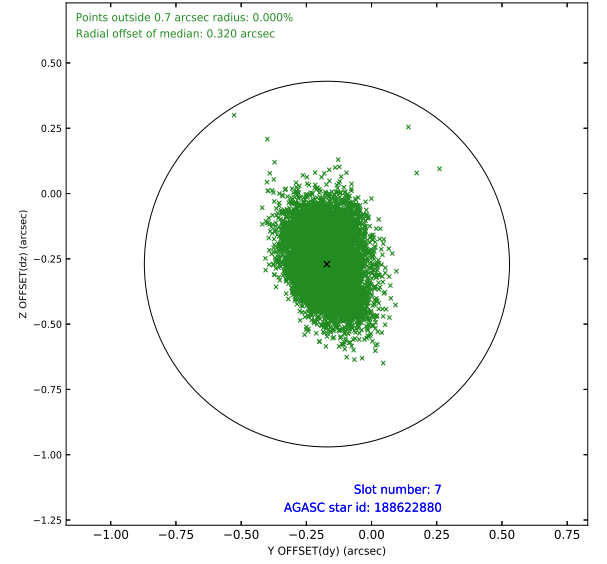
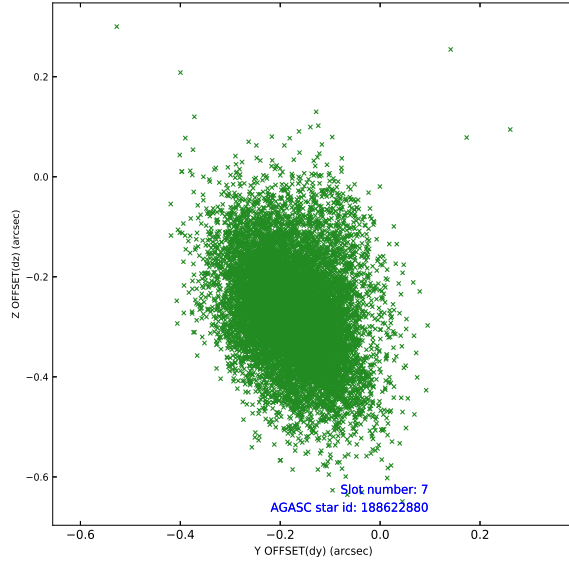
2.4.3 Slot 6



Time (s)

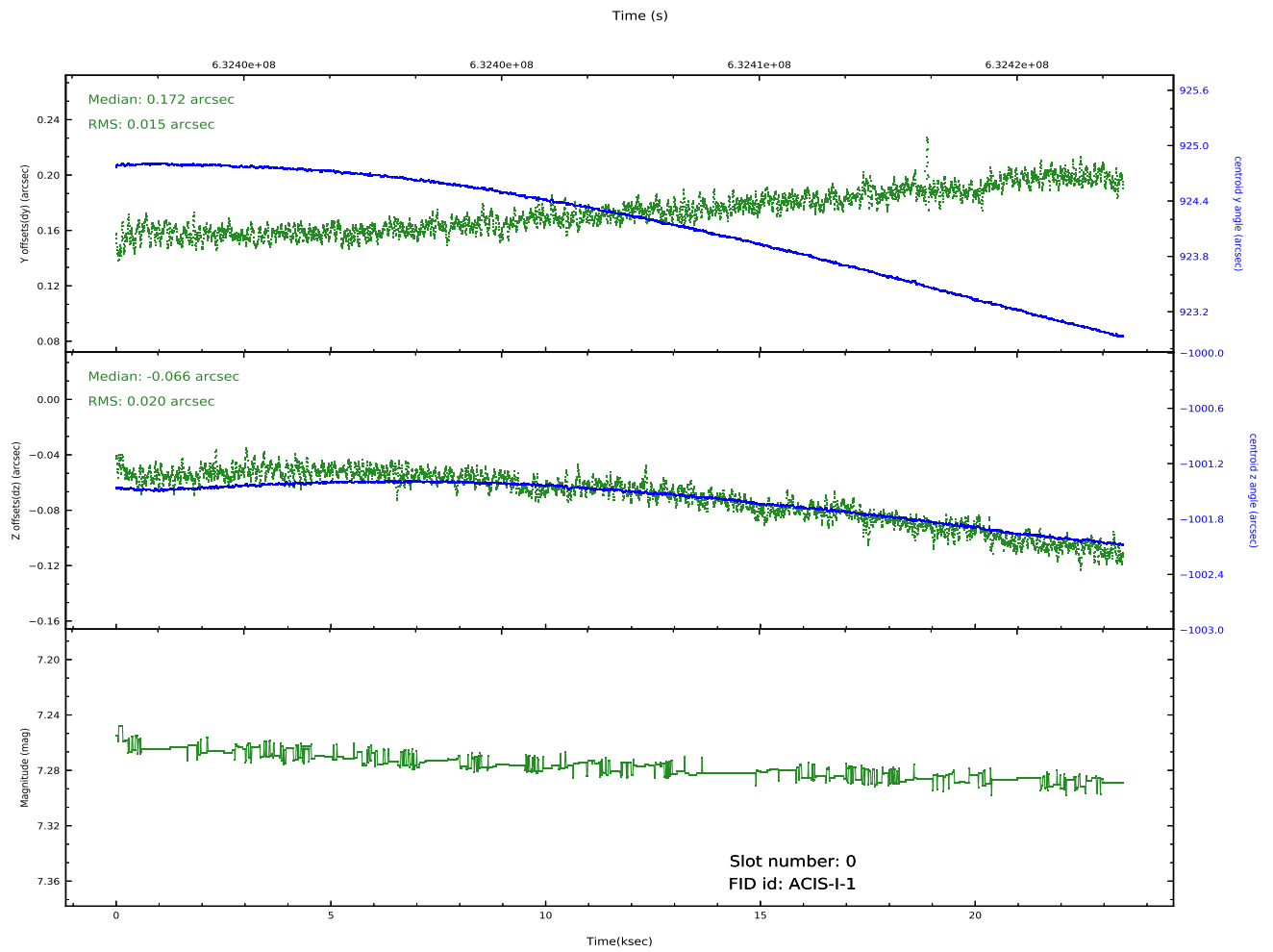
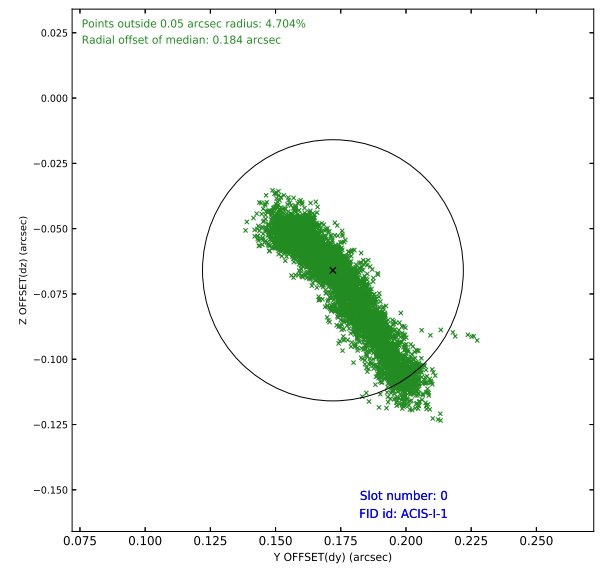
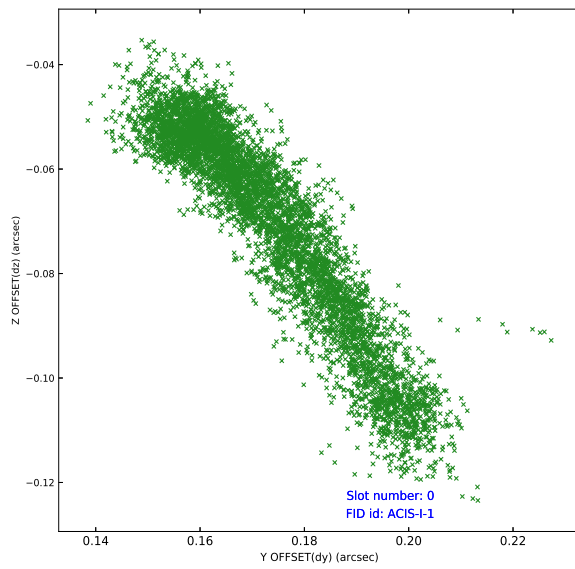


2.4.4 Slot 7

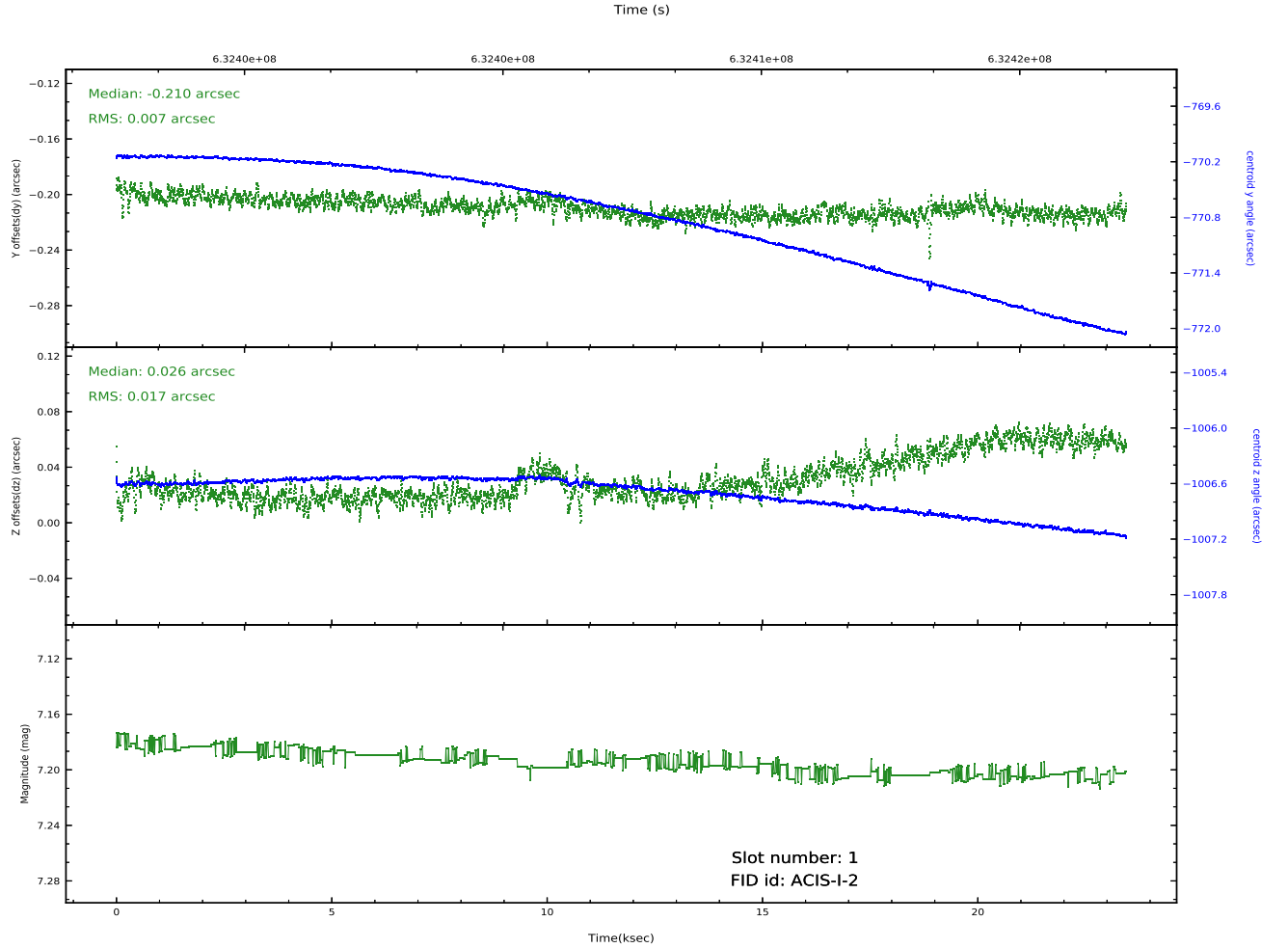
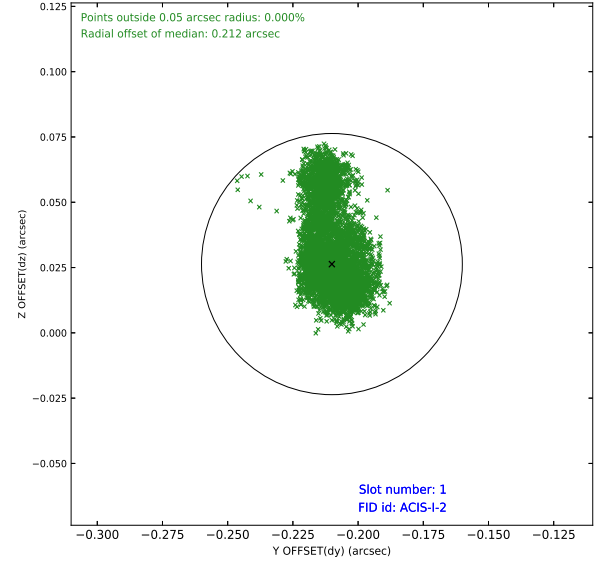
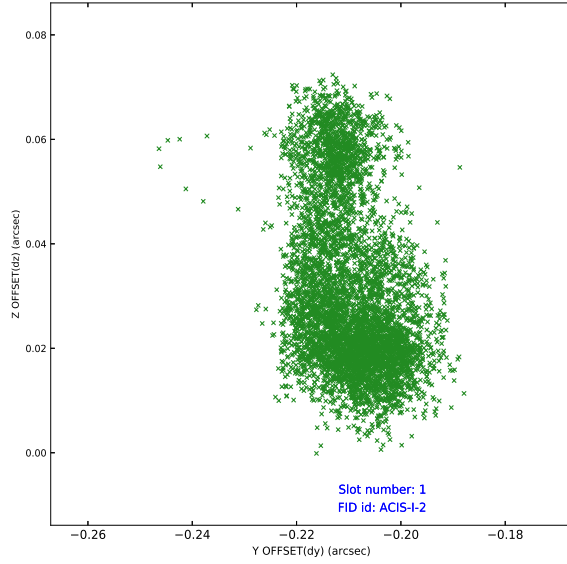


2.5 FID Slots

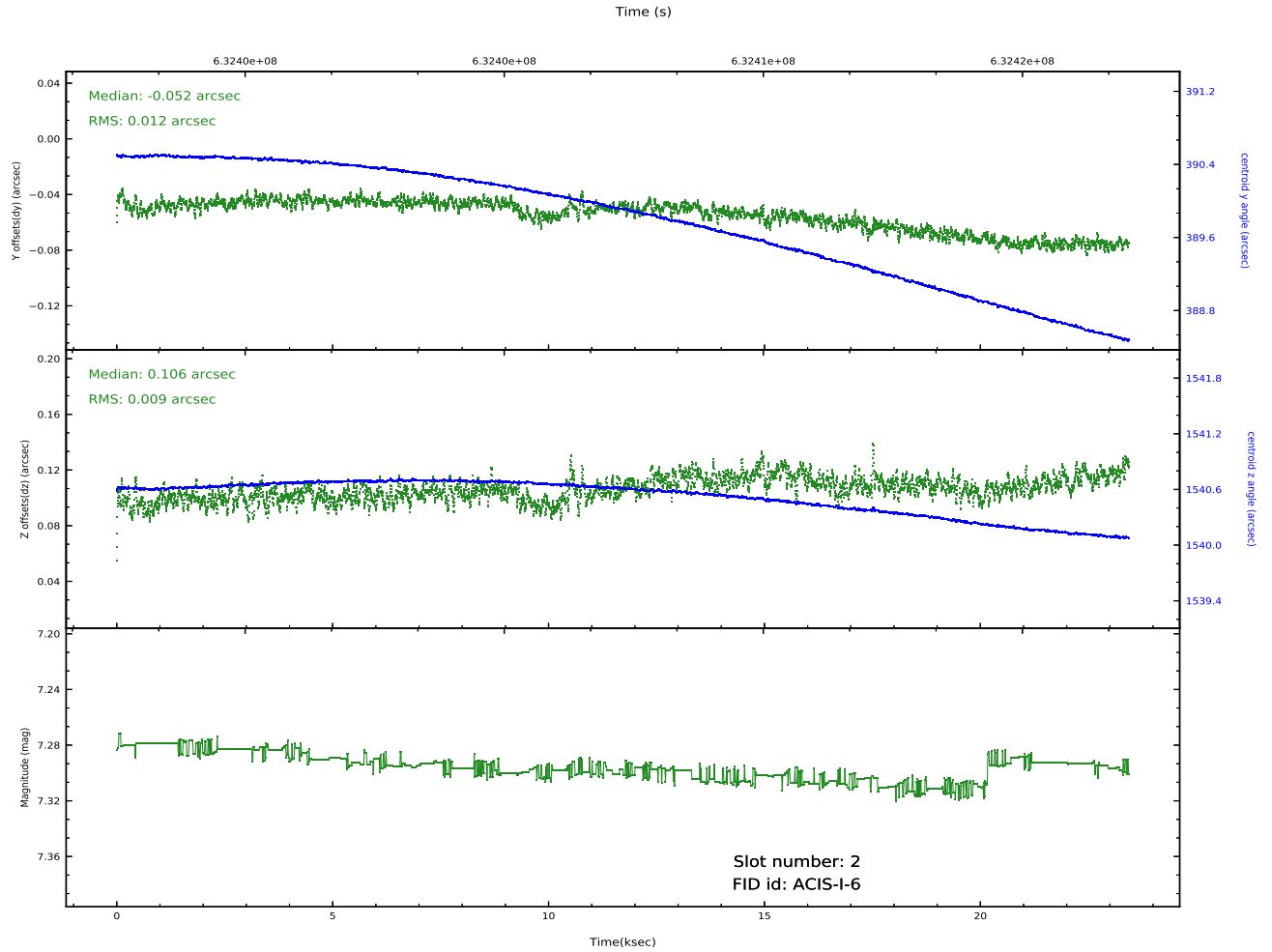
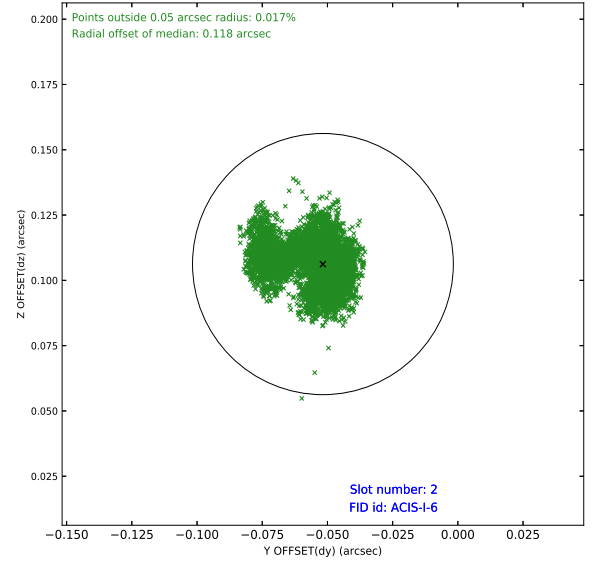
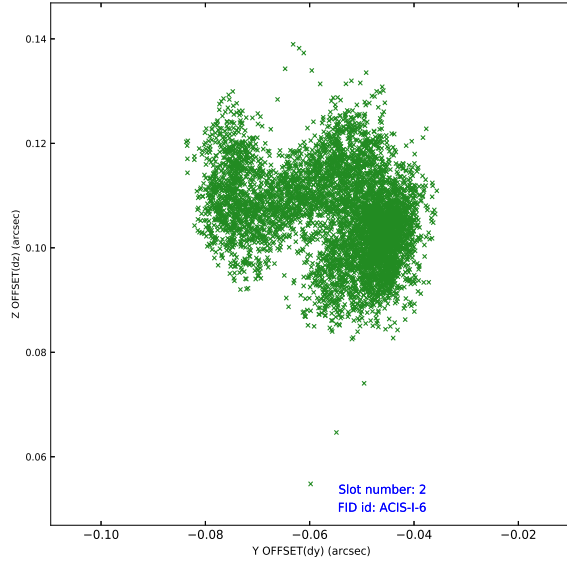
2.5.1 Slot 0



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	22.983359106779

A.2 Comments

One optional chip was dropped.

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The guide star in slot 5 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.