

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20788 - L2 Version 2
Chandra X-Ray Center

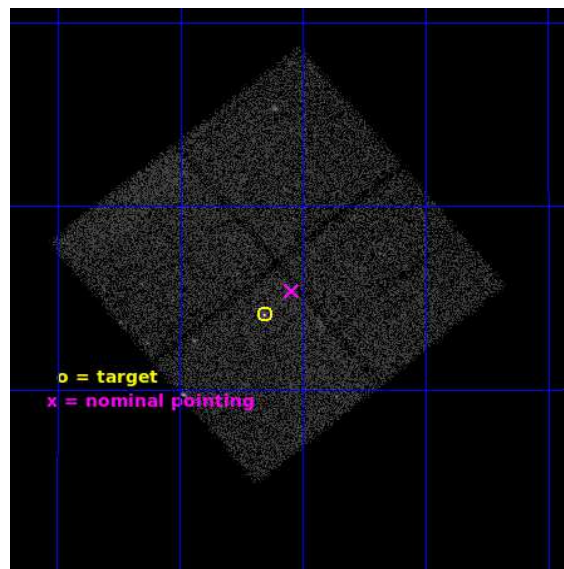
L2 Processing Date : Oct 24 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

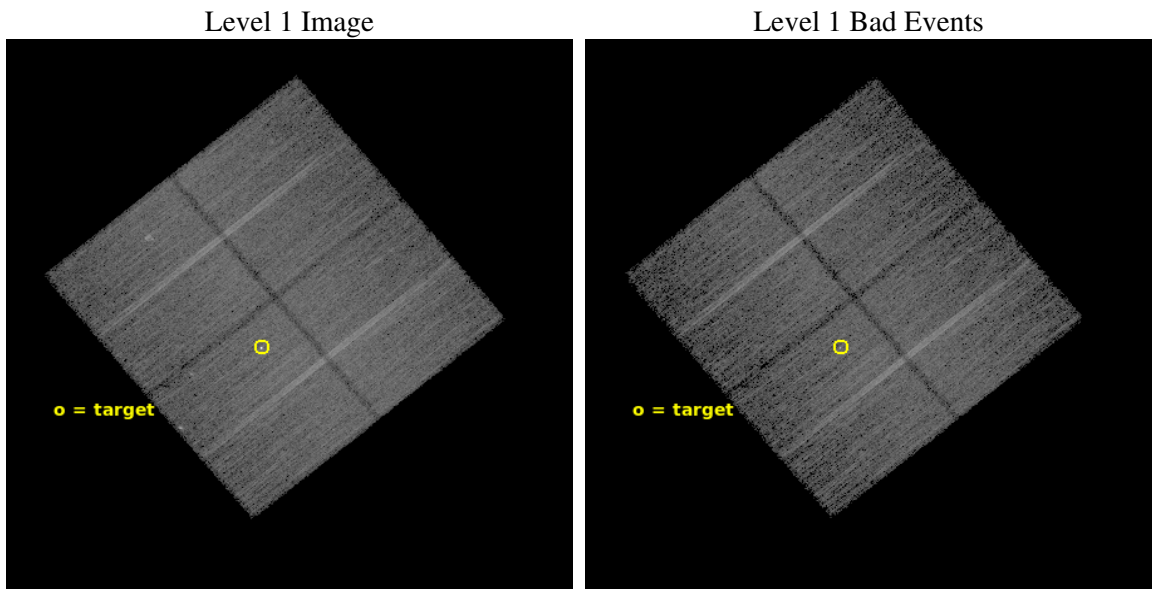
seq_num	801800	Sequence number
obs_id	20788	Observation id
title	A Unique Sample of Extreme-BCG Clusters at $0.2 < z < 0.5$	Proposal
observer	Gordon Garmire	Principal investigator
object	SDSS530	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.78875	Observer's specified target RA [deg]
dec_targ	31.235222	Observer's specified target Dec [deg]
ra_nom	172.76120004001	Nominal RA [deg]
dec_nom	31.256751658582	Nominal Dec [deg]
roll_nom	140.52365825501	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22078.159179926	Sum of GTIs [s]
liveltime	21789.691776536	Livetime [s]
ontime0	22081.277279973	Sum of GTIs [s]
ontime1	22081.300169945	Sum of GTIs [s]
ontime2	22068.736049533	Sum of GTIs [s]
ontime3	22078.159179926	Sum of GTIs [s]
l2events	63238	Number of level 2 events



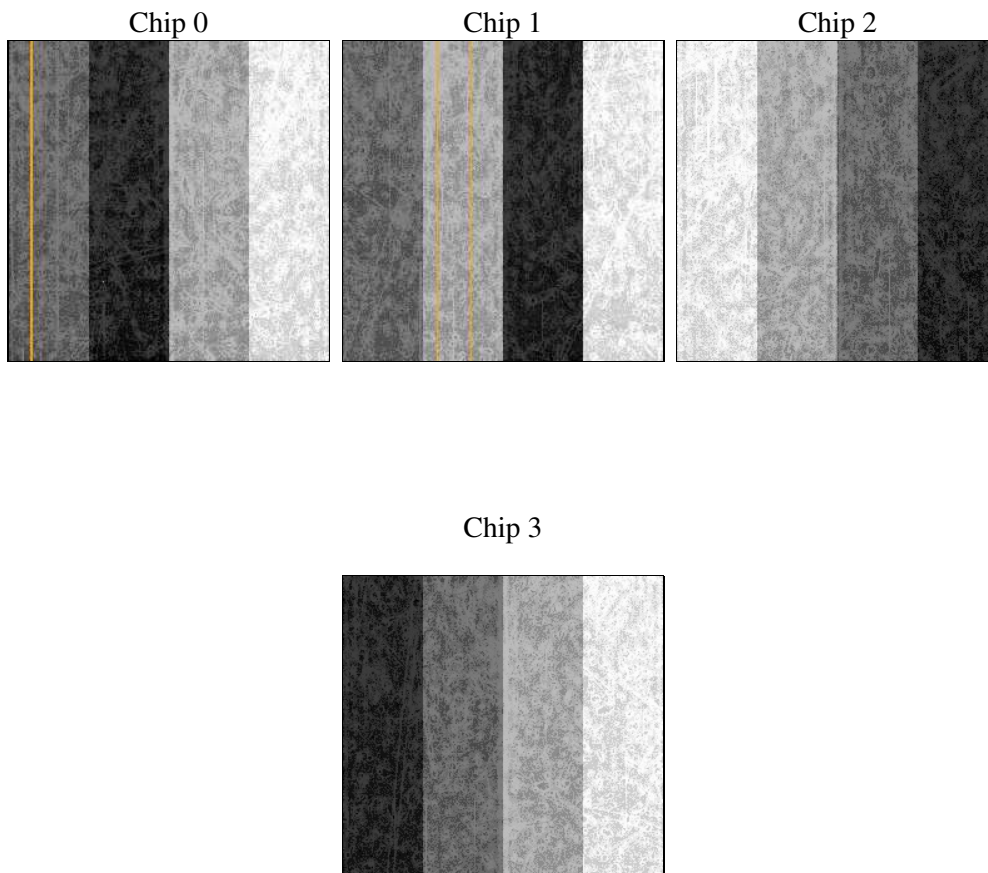
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	22078.159179926	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	22081.277279973	Sum of GTIs [s]
date	2020-10-24T18:35:01	Date and time of file creation	ontime1	22081.300169945	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	22068.736049533	Sum of GTIs [s]
			ontime3	22078.159179926	Sum of GTIs [s]
			l1events	619696	Number of level 1 events

2.1.4 Events

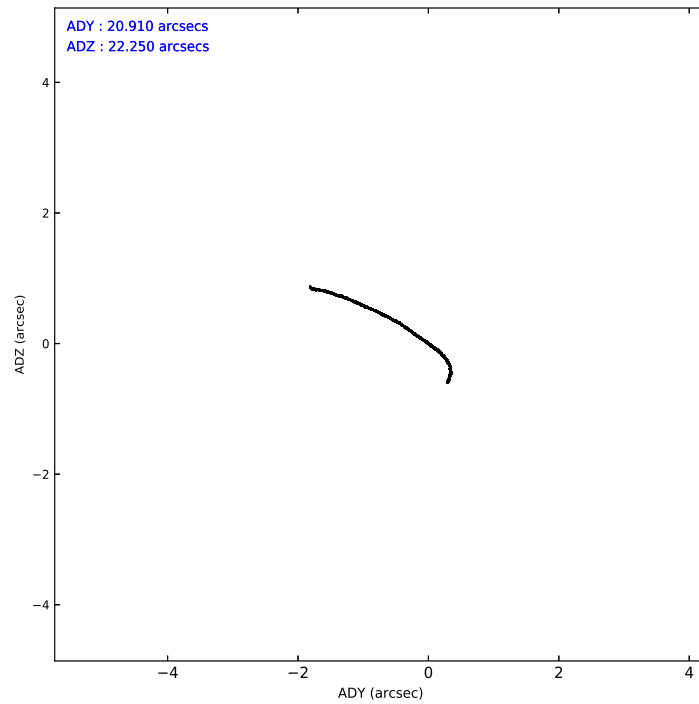
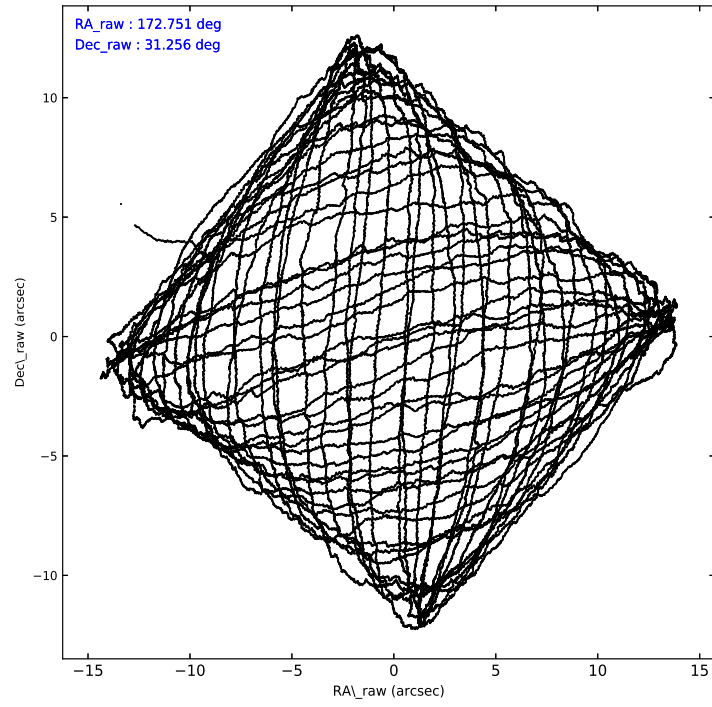
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	142980	149161	161683	165872
rejected events	125306	128922	144146	145187
rejected %	87%	86%	89%	87%

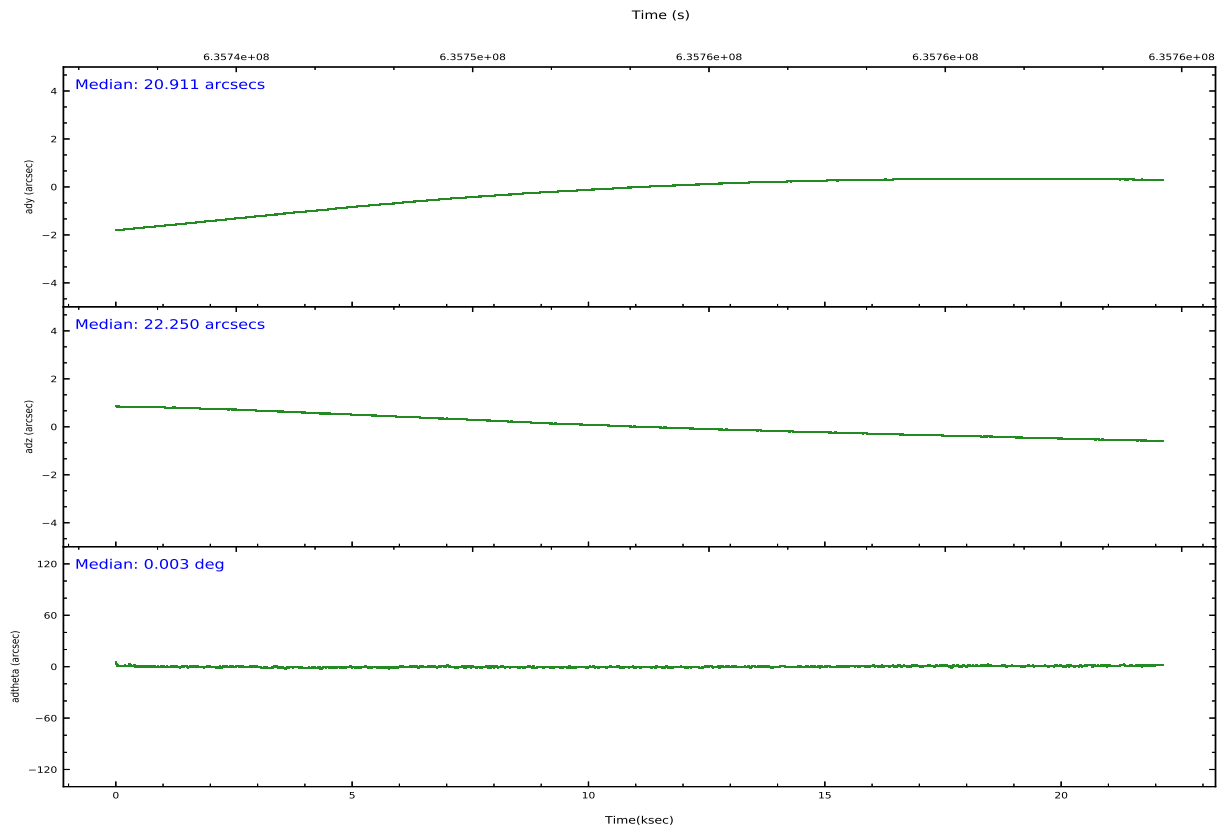
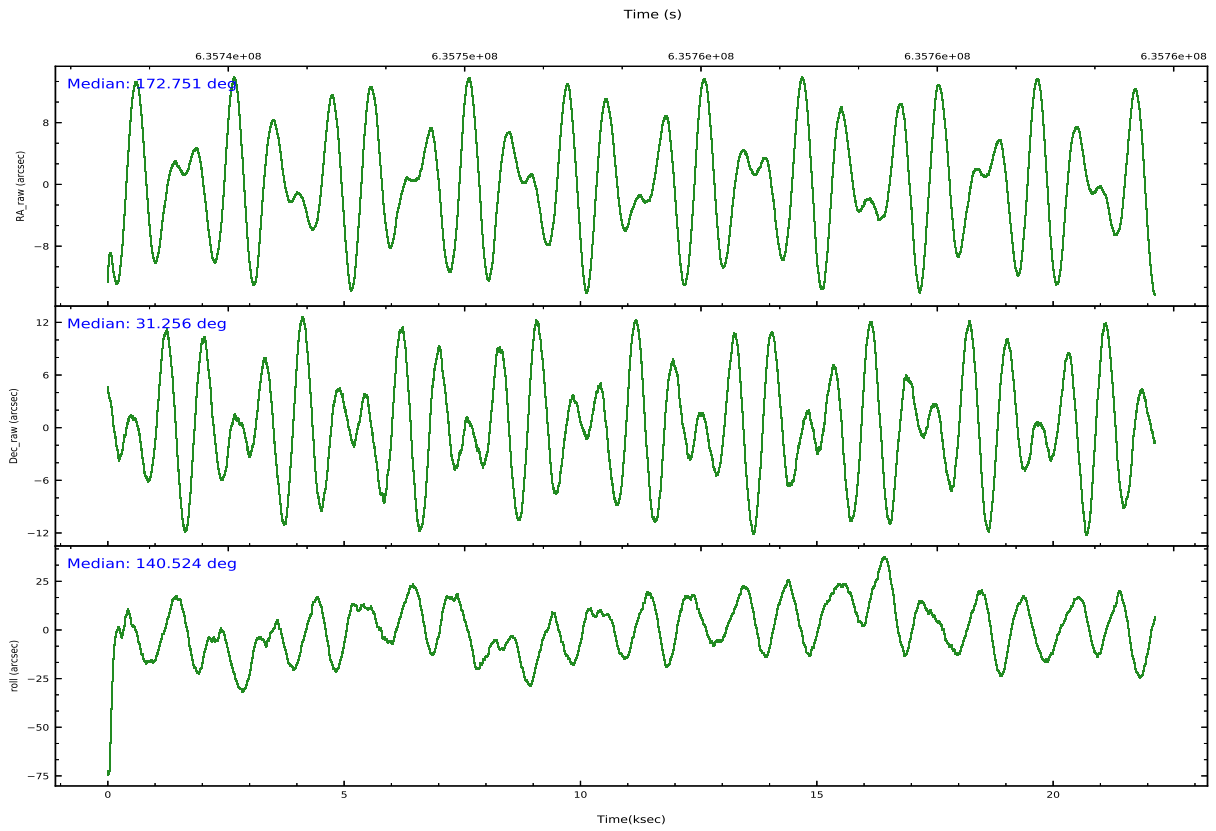
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5964	7022	6052	8778
	4%	4%	3%	5%
grade 1 events	73	89	99	254
	0%	0%	0%	0%
grade 2 events	4496	4905	4485	4299
	3%	3%	2%	2%
grade 3 events	1837	1943	1799	1936
	1%	1%	1%	1%
grade 4 events	1781	1967	1726	1878
	1%	1%	1%	1%
grade 5 events	6979	7251	6421	7871
	4%	4%	3%	4%
grade 6 events	3601	4408	3478	3799
	2%	2%	2%	2%
grade 7 events	118249	121576	137623	137057
	82%	81%	85%	82%

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	172.783106	172.76120004001	CCD I2 on	Y	Y
[deg] Pointing Dec	31.251163	31.256751658582	CCD I3 on	Y	Y
[deg] Pointing Roll	140.288887	140.52365825501	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	-230.082463	-230.0875075610572	CCD S3 on	N	N
[mm] SIM translation stage offset	-3.51	-3.504945441872508	CCD S4 on	N	N
[s] Observation start time (MET)	635742609.184000	635741449.89723	CCD S5 on	N	N
Observation start date	2018-02-23T03:09:00	2018-02-23T02:50:49	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	635764609.184000	635765254.49863	On-chip summing requested	N	N
Observation end date	2018-02-23T09:15:40	2018-02-23T09:27:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





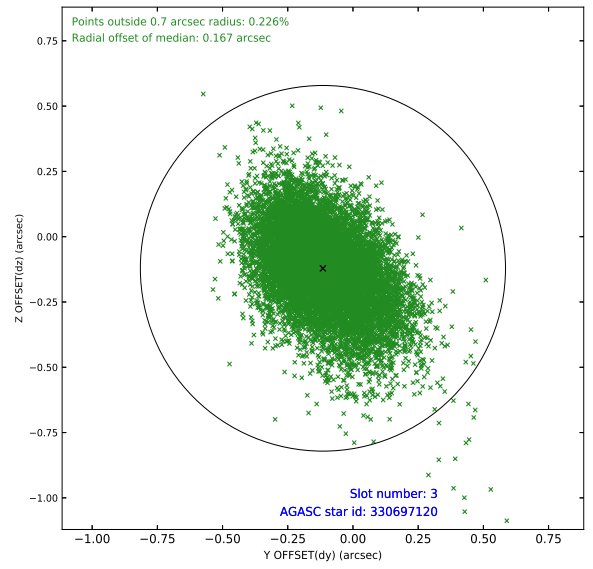
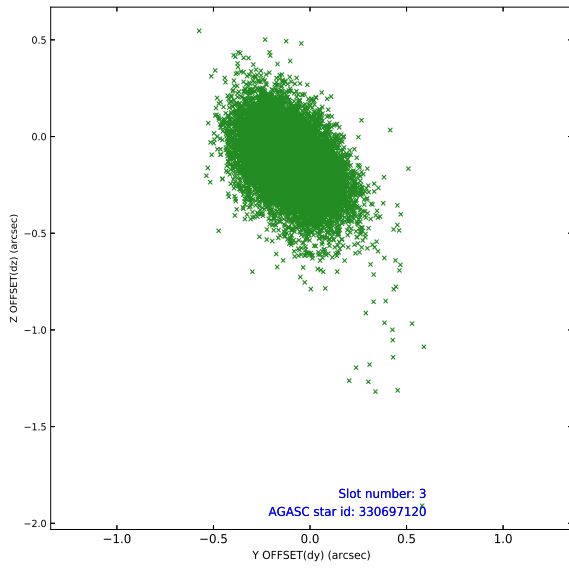
Slot Statistics

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	7.14	5405	1.000	0.213	-0.134	0.023	0.037	0.000000	0.000000	918.73	-918
1	FID		ACIS-I-4	7.07	5405	1.000	-0.009	0.014	0.024	0.032	0.000000	0.000000	2138.60	981
2	FID		ACIS-I-5	7.12	5404	1.000	-0.303	0.190	0.017	0.027	0.000000	0.000000	-1829.43	980
3	GUIDE	used	330697120	9.50	10628	1.000	-0.115	-0.121	0.228	0.384	173.207613	31.781979	222.57	-2302
4	GUIDE	used	330698848	7.93	10809	1.000	-0.142	-0.139	0.170	0.291	172.914231	30.972659	-951.58	512
5	GUIDE	used	330701536	9.99	10775	1.000	0.174	-0.066	0.340	0.501	173.137145	31.277713	-775.86	-770
6	GUIDE	used	330701728	9.87	10786	1.000	0.160	0.335	0.341	0.579	173.565985	31.335059	-1653.83	-1776
7	GUIDE	used	330716568	10.09	10321	1.000	-0.090	-0.013	0.339	0.567	172.692996	30.624730	-1226.01	1913

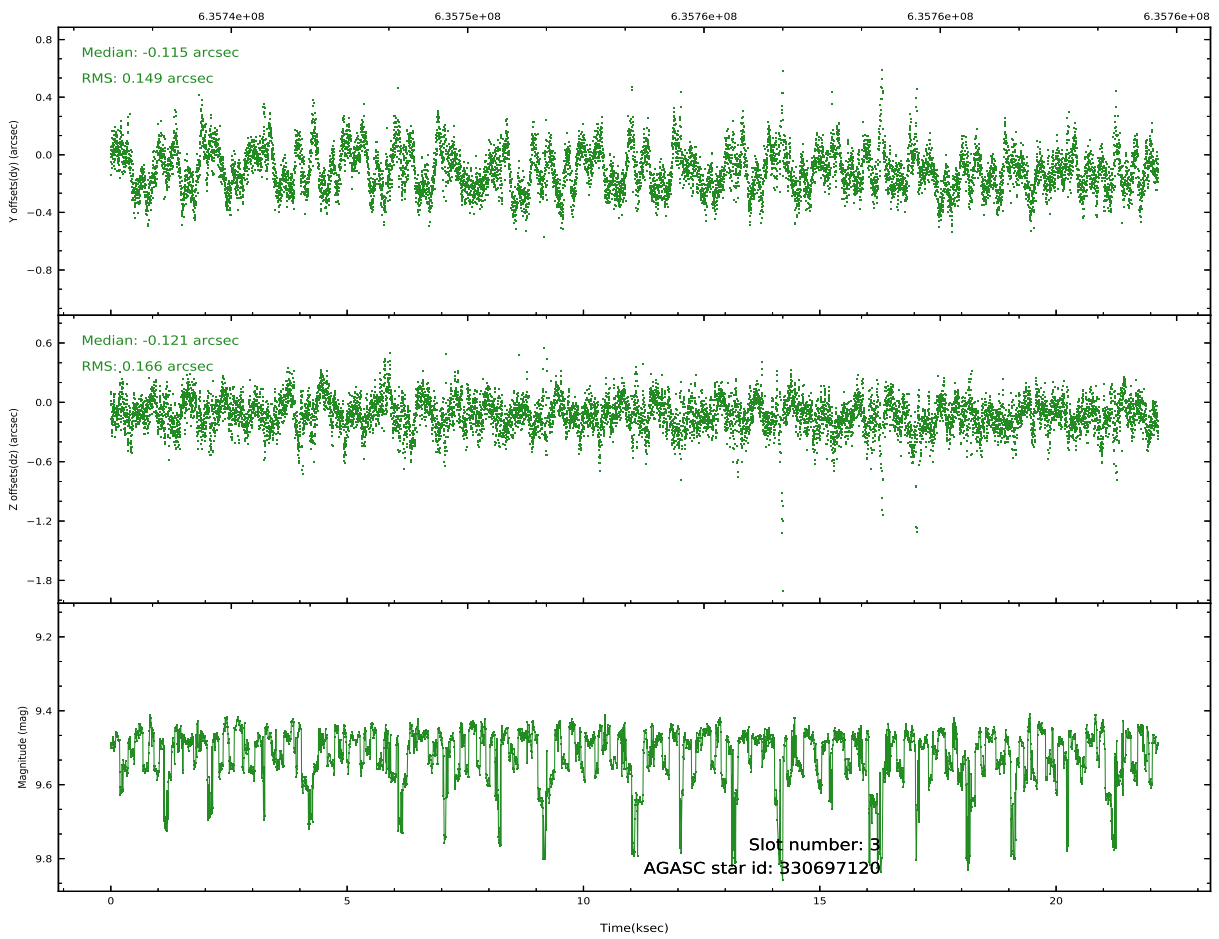
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2.4 Star Slots

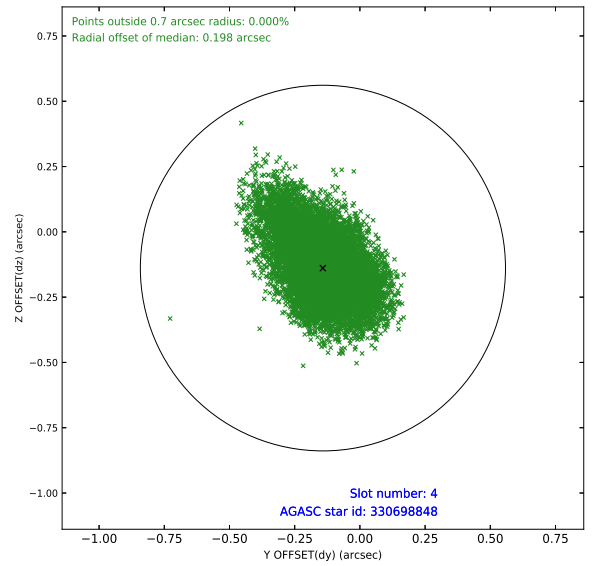
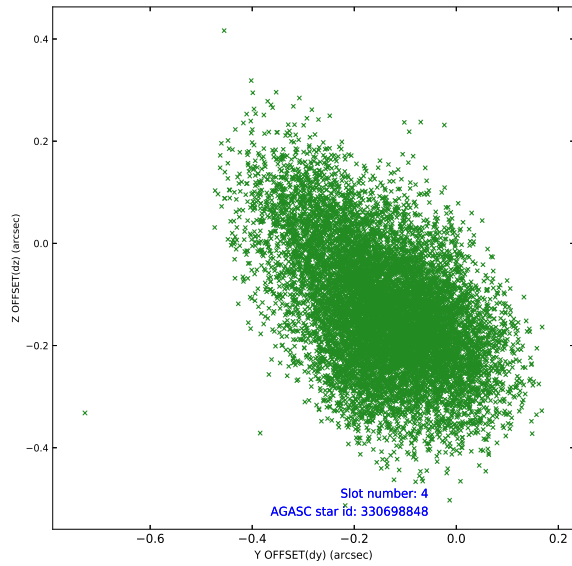
2.4.1 Slot 3



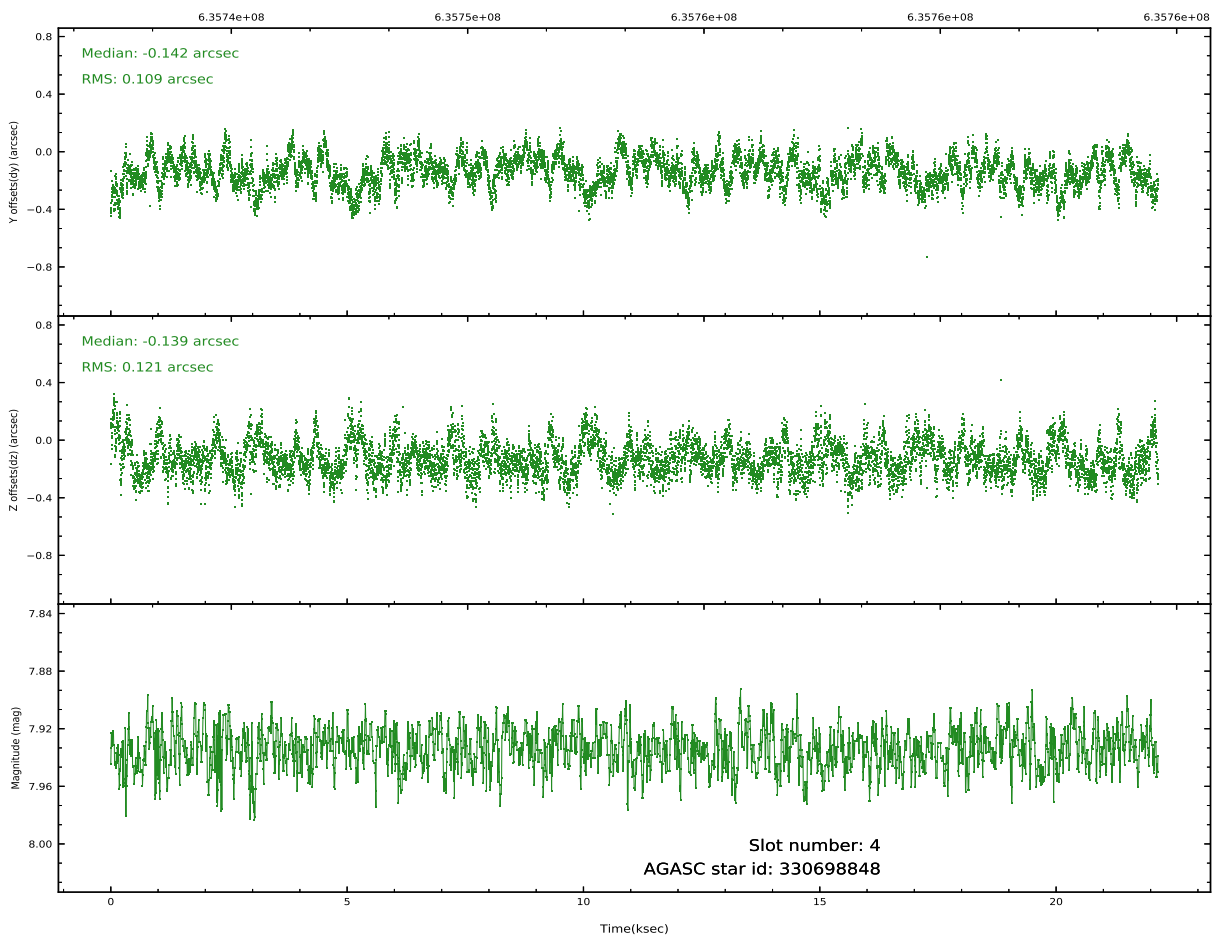
Time (s)



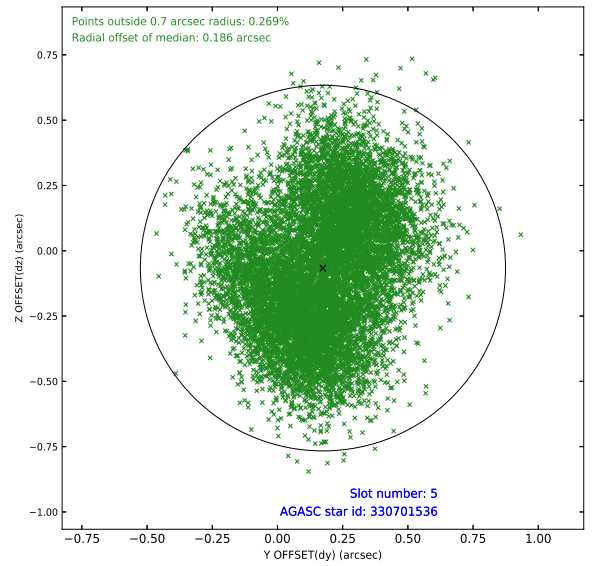
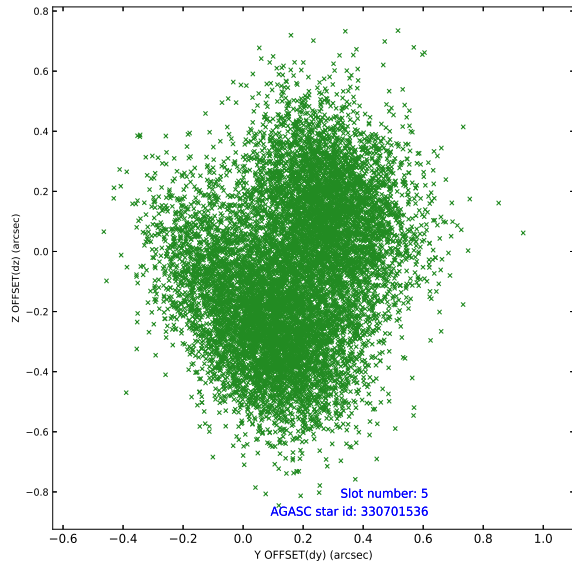
2.4.2 Slot 4



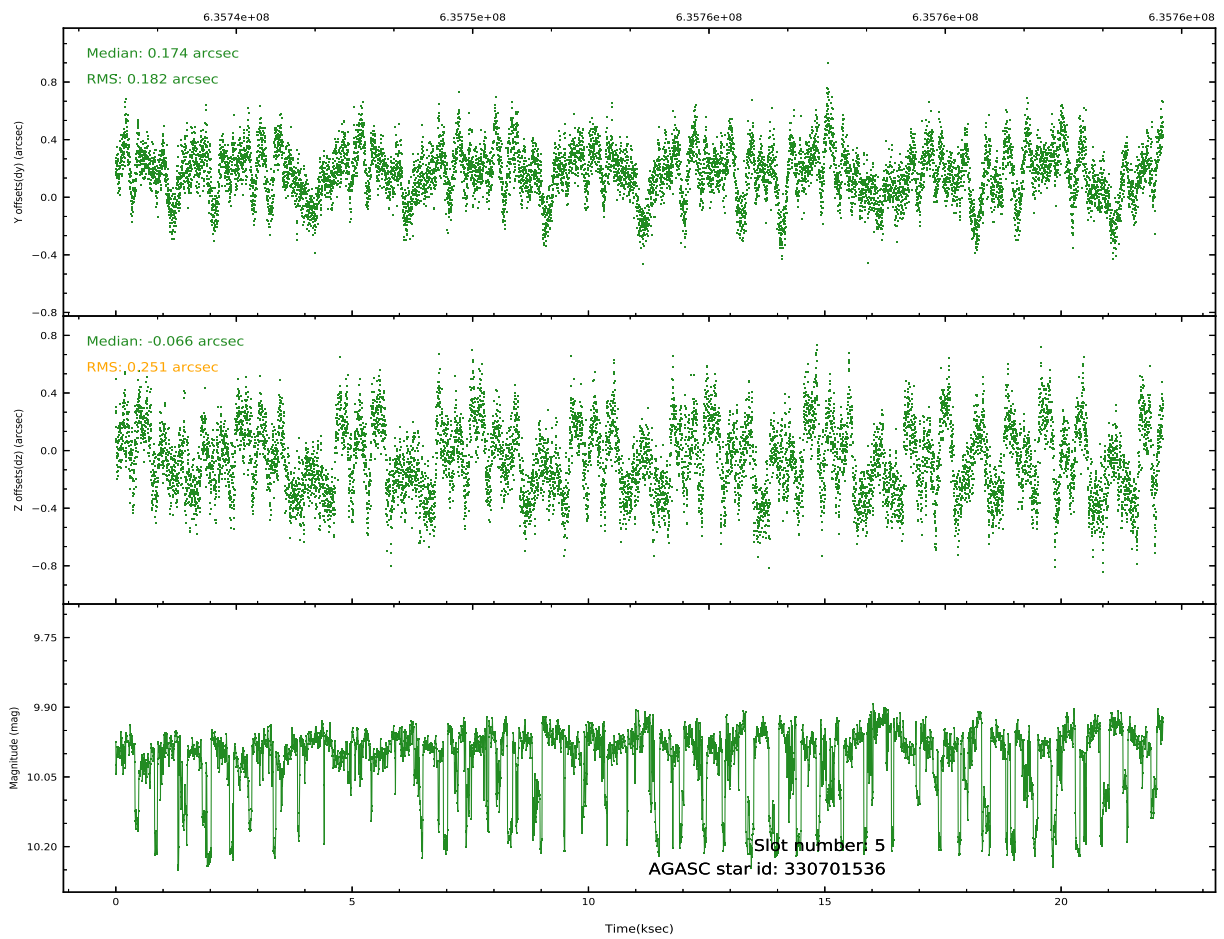
Time (s)



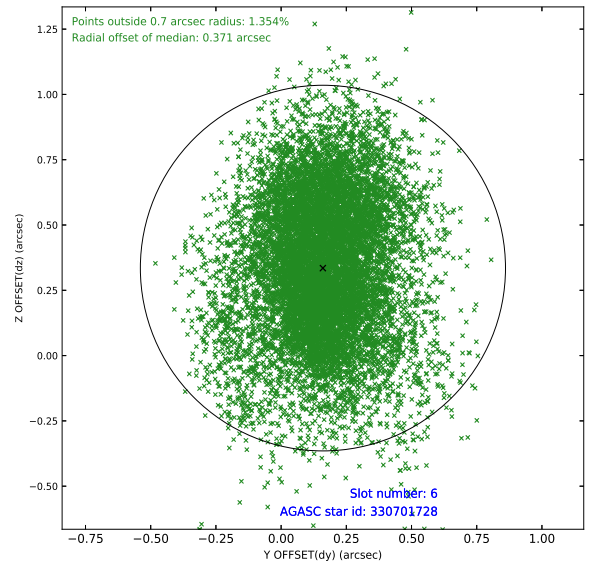
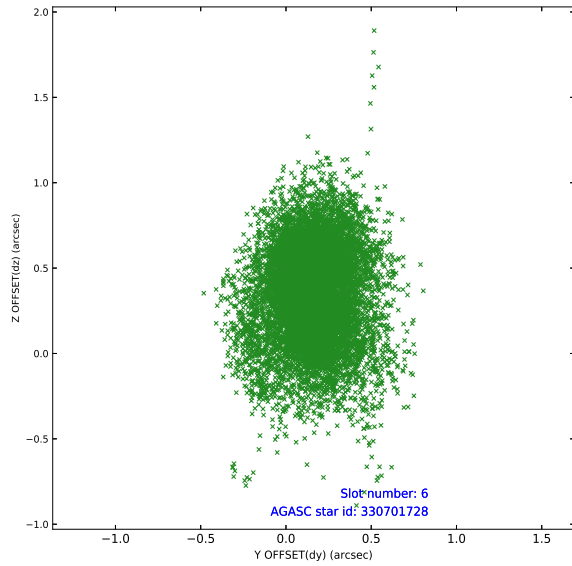
2.4.3 Slot 5



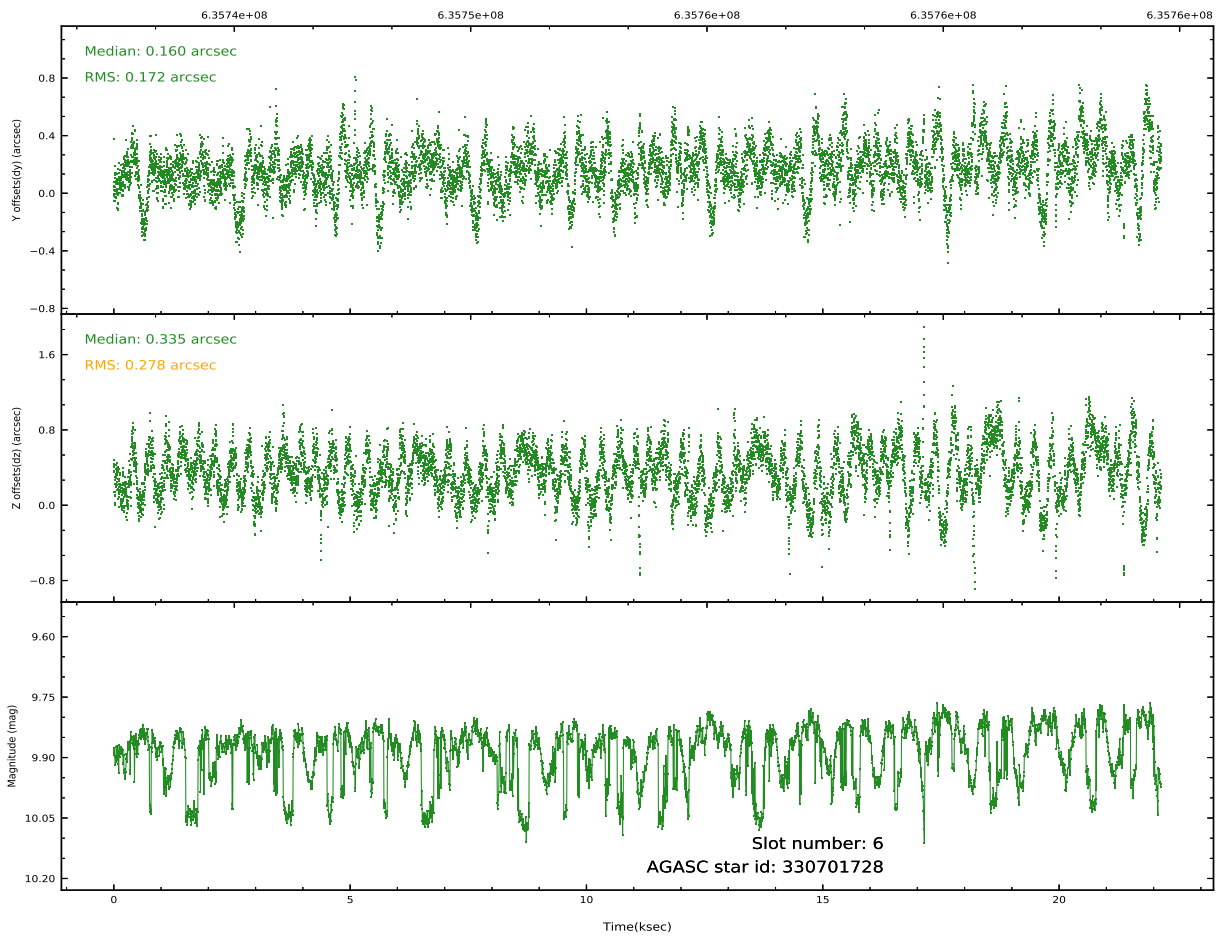
Time (s)



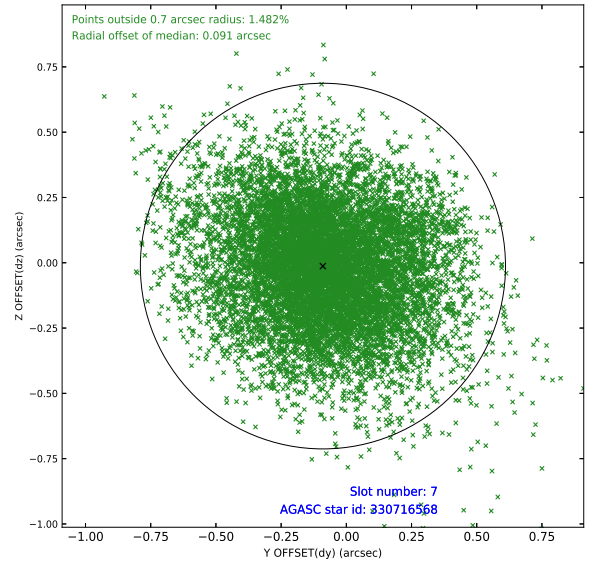
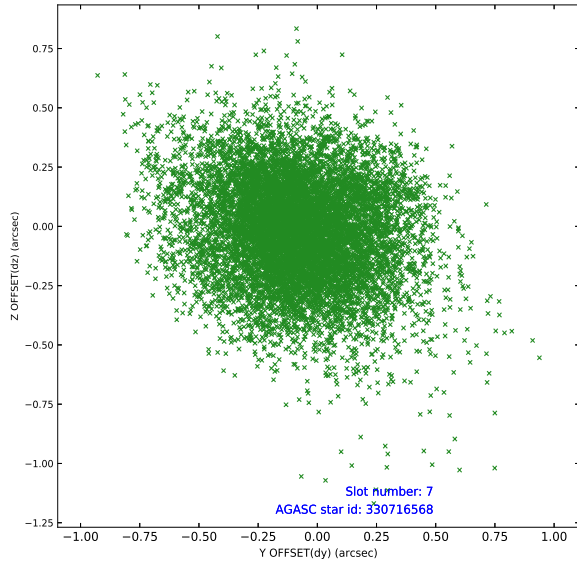
2.4.4 Slot 6



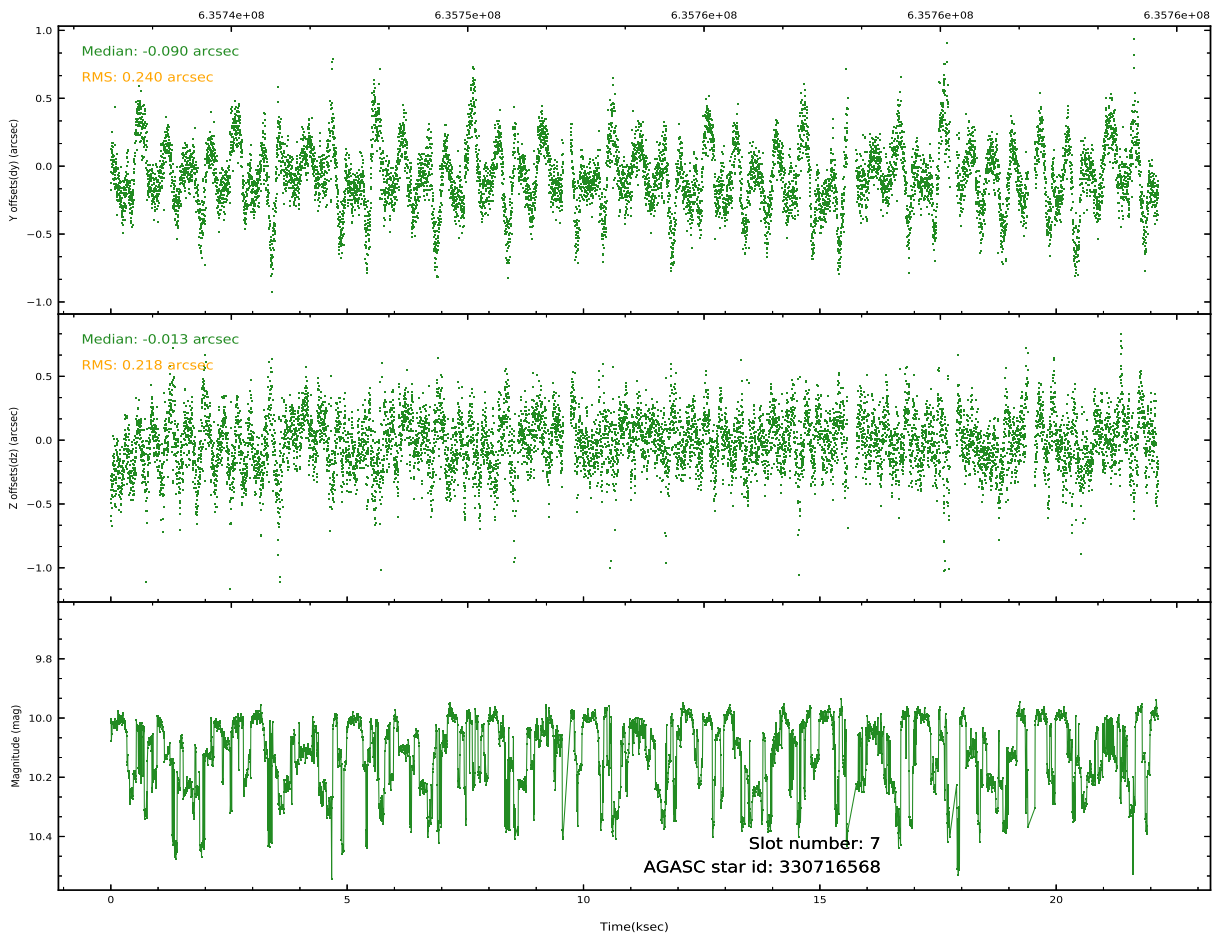
Time (s)



2.4.5 Slot 7

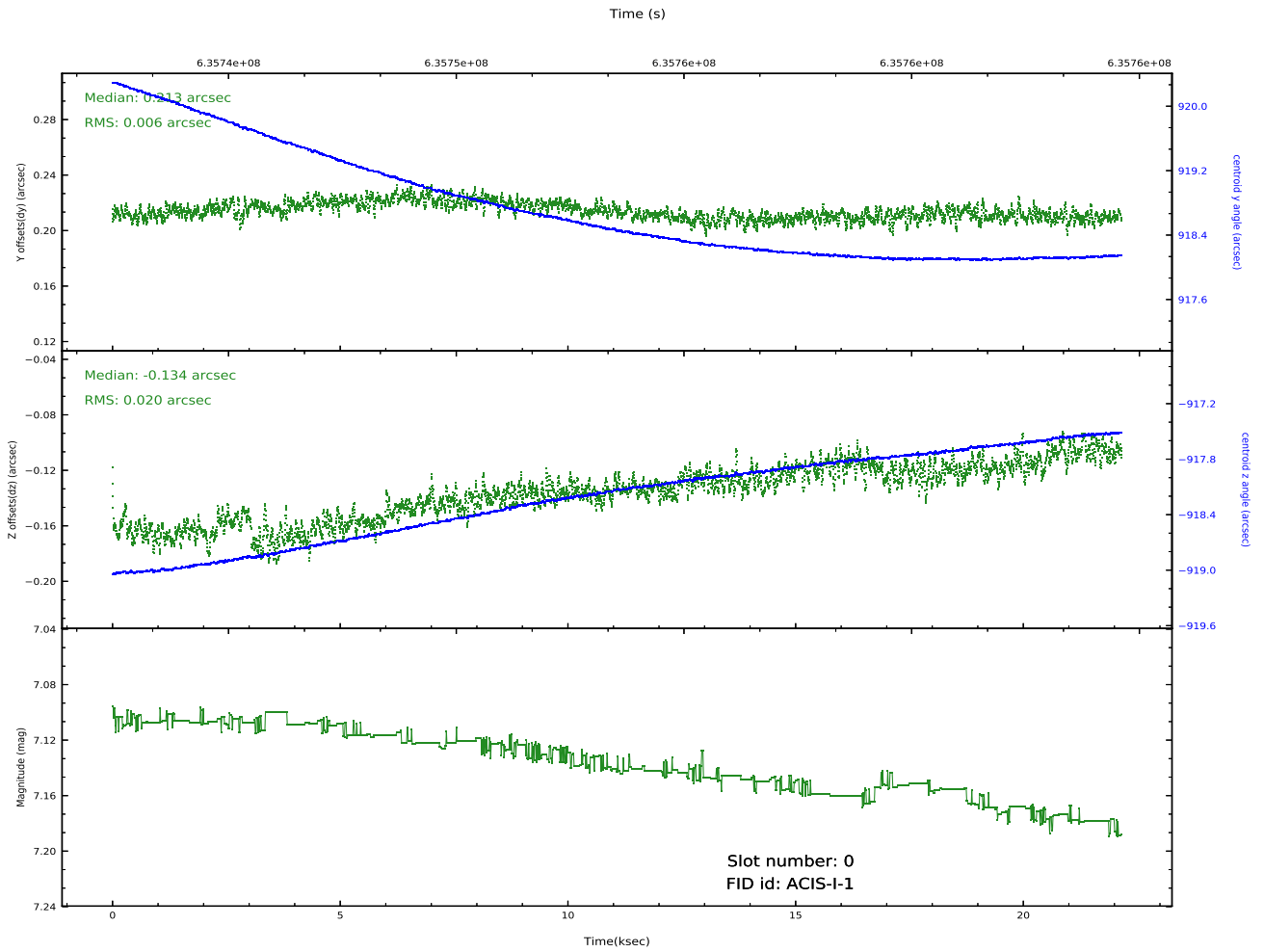
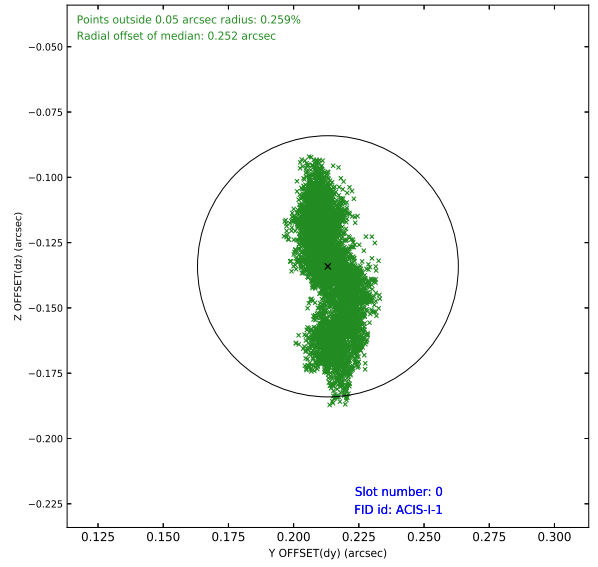
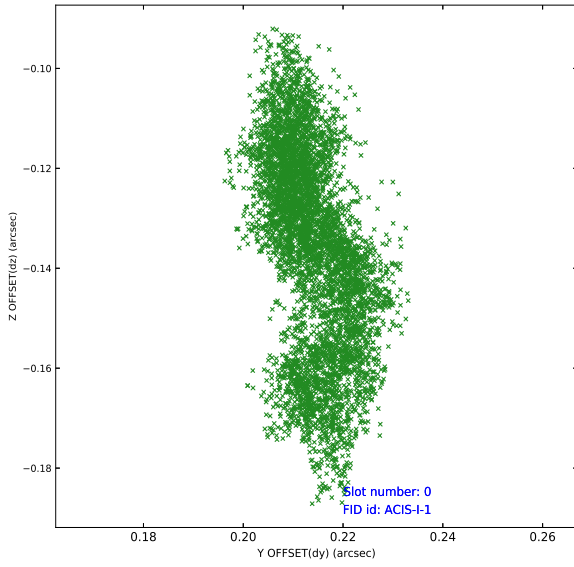


Time (s)

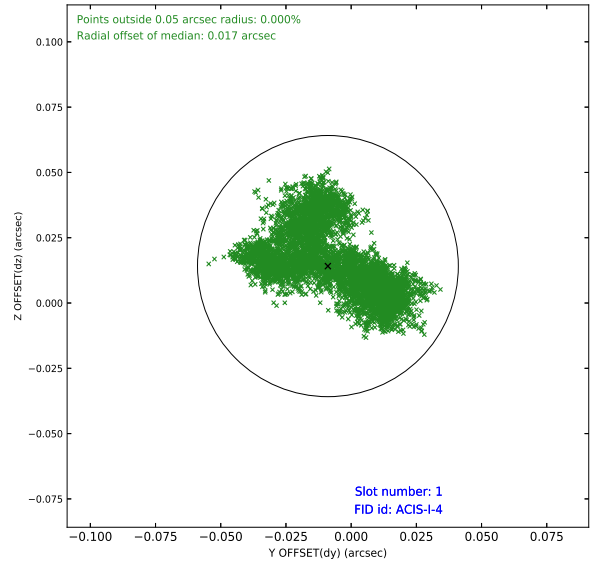
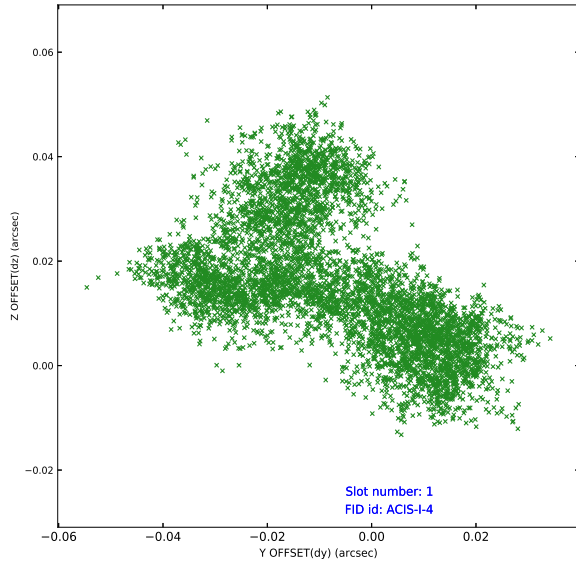


2.5 FID Slots

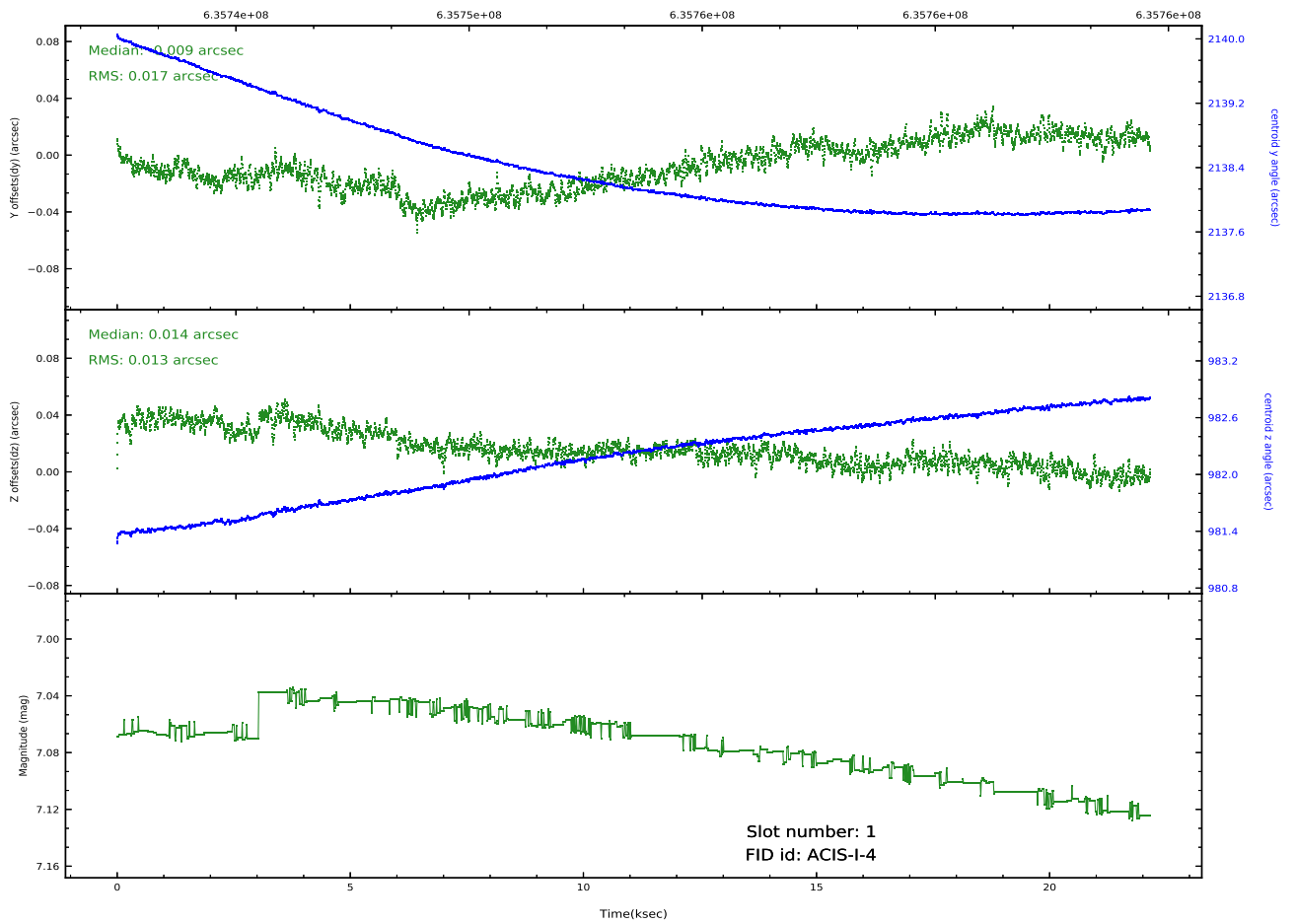
2.5.1 Slot 0



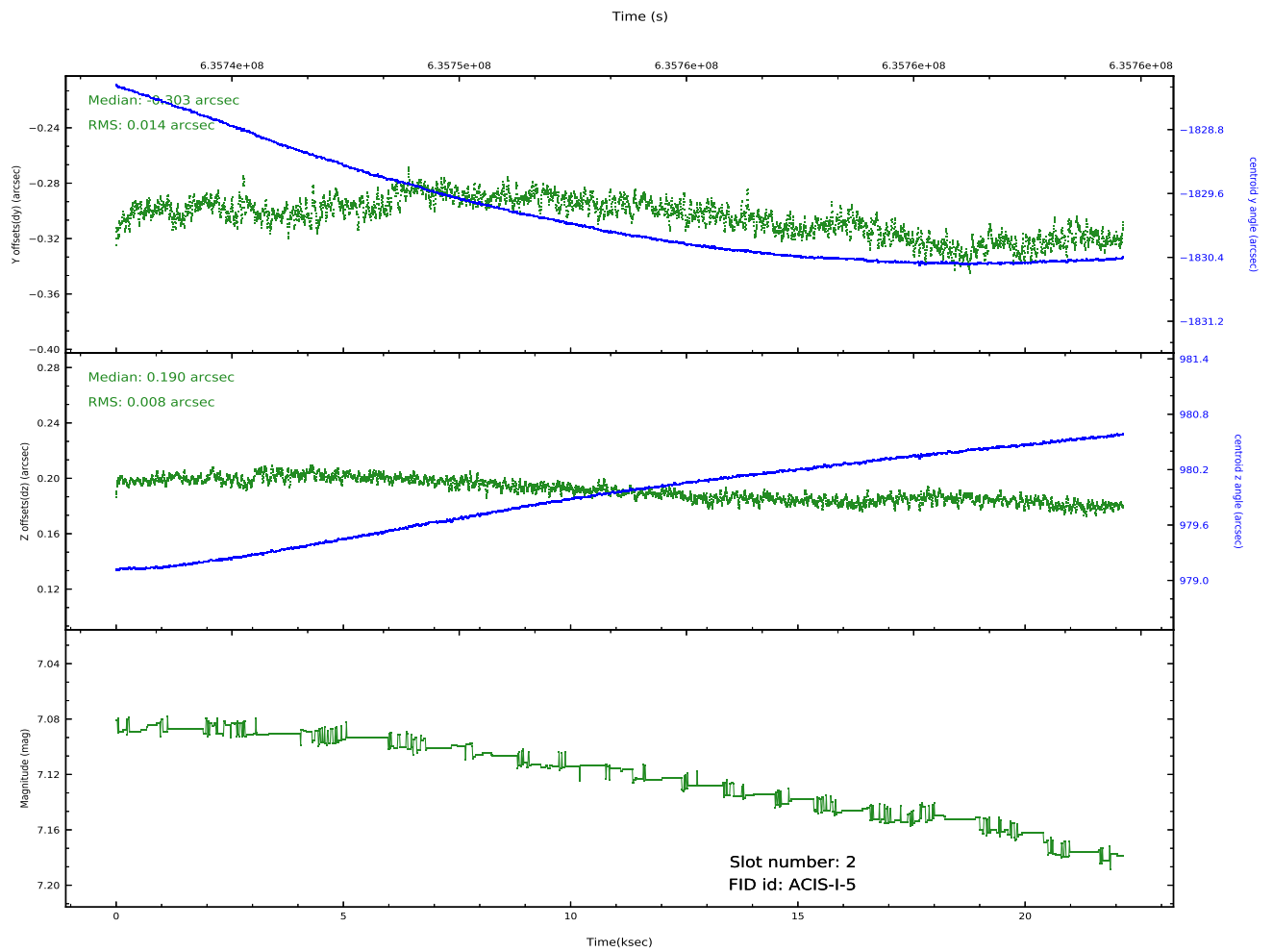
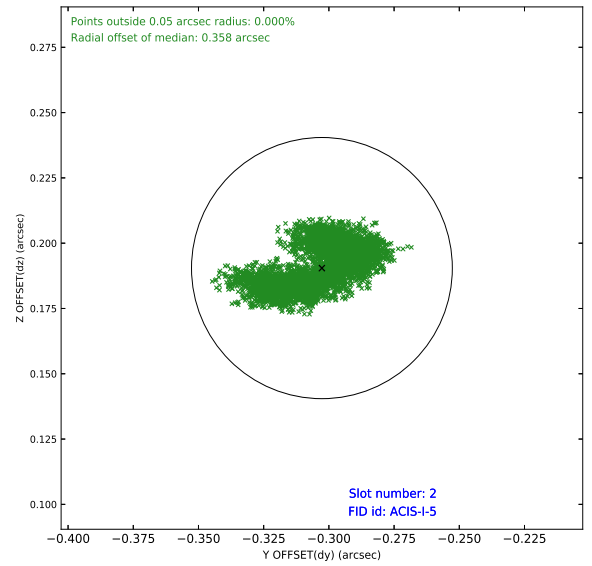
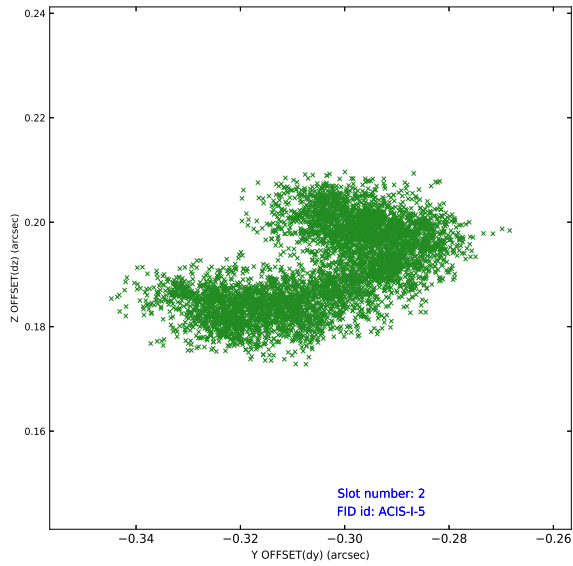
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.078159179807

A.2 Comments

One optional chip was dropped.