

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4991 - L2 Version 5
Chandra X-Ray Center

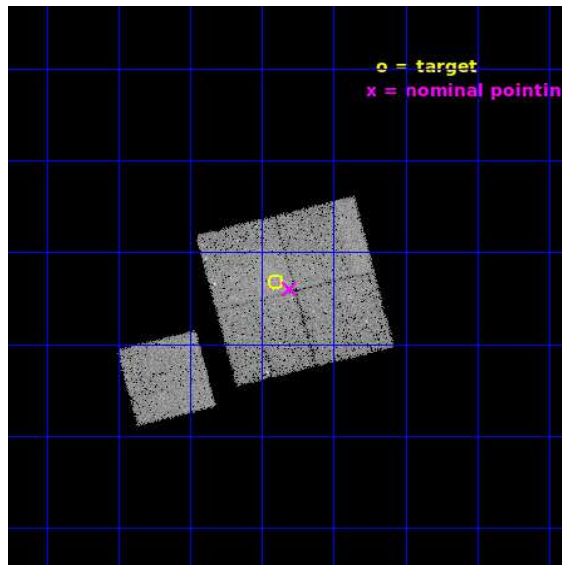
L2 Processing Date : Sep 24 2020

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1 Front

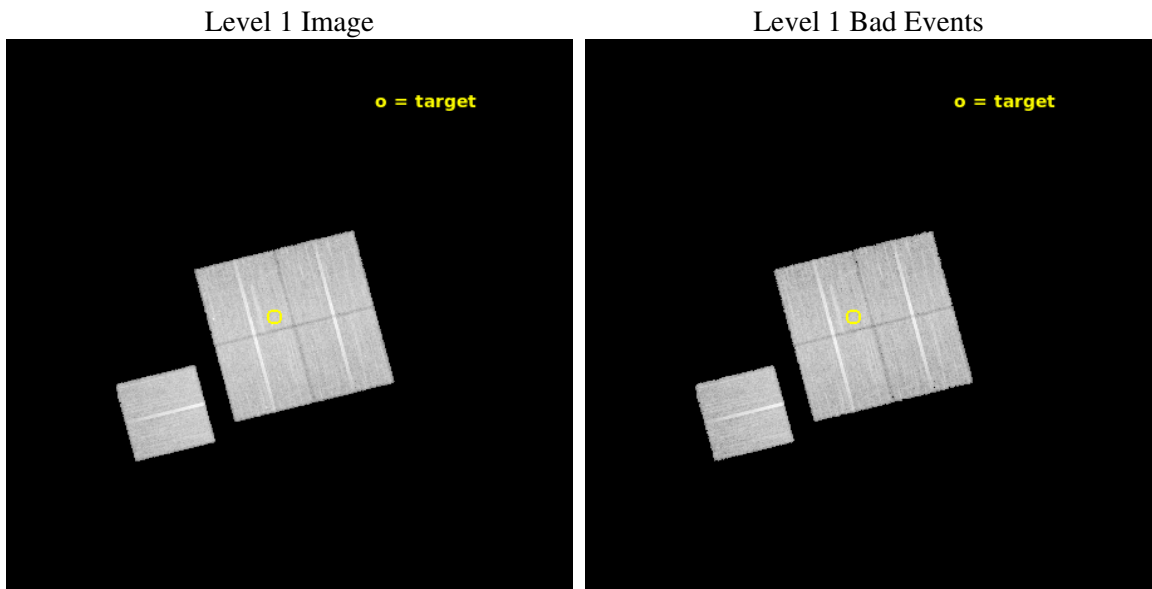
seq_num	800434	Sequence number
obs_id	4991	Observation id
title	X-ray Properties of a Mass-Selected Group Catalogue: A Pilot Study	
observer	Dr Richard Bower	Principal investigator
object	MLCG 1439	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	170.726667	Observer's specified target RA [deg]
dec_targ	1.114056	Observer's specified target Dec [deg]
ra_nom	170.70134297889	Nominal RA [deg]
dec_nom	1.1009912082196	Nominal Dec [deg]
roll_nom	255.54709856987	Nominal Roll [deg]
revision	5	Processing version of data
ontime	22319.61368525	Sum of GTIs [s]
livetime	22027.991500992	Livetime [s]
ontime0	22316.349575073	Sum of GTIs [s]
ontime1	22313.249624848	Sum of GTIs [s]
ontime2	22316.431665033	Sum of GTIs [s]
ontime3	22319.61368525	Sum of GTIs [s]
ontime6	22319.449525237	Sum of GTIs [s]
l2events	70433	Number of level 2 events



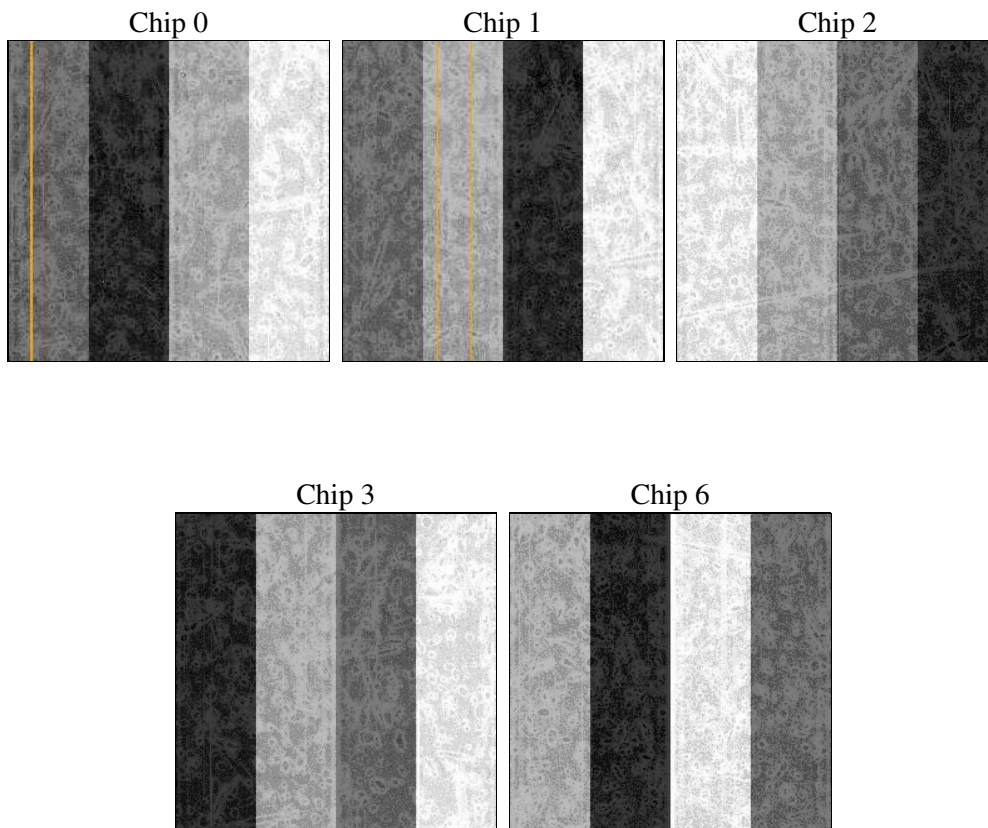
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22200.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	22319.61368525	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	22316.349575073	Sum of GTIs [s]
date	2020-09-24T13:00:56	Date and time of file creation	ontime1	22313.249624848	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	22316.431665033	Sum of GTIs [s]
			ontime3	22319.61368525	Sum of GTIs [s]
			ontime6	22319.449525237	Sum of GTIs [s]
			l1events	644452	Number of level 1 events

2.1.4 Events

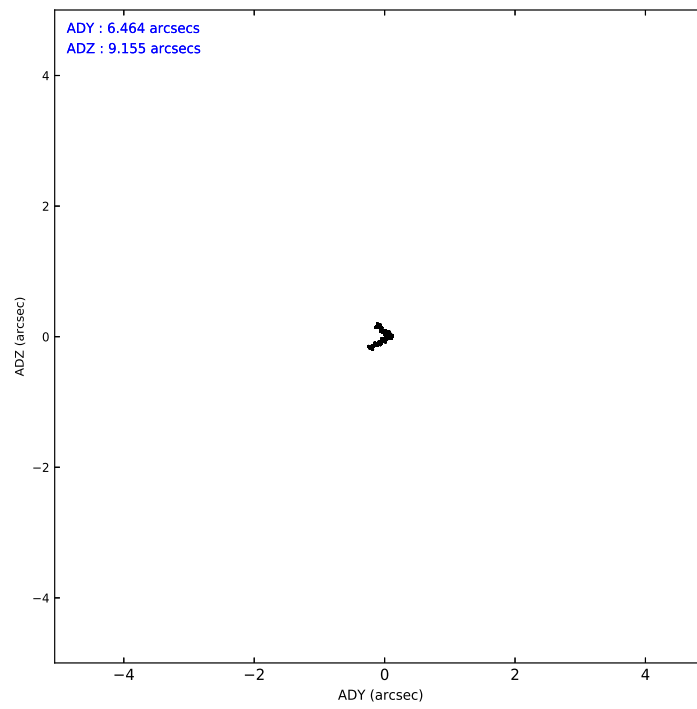
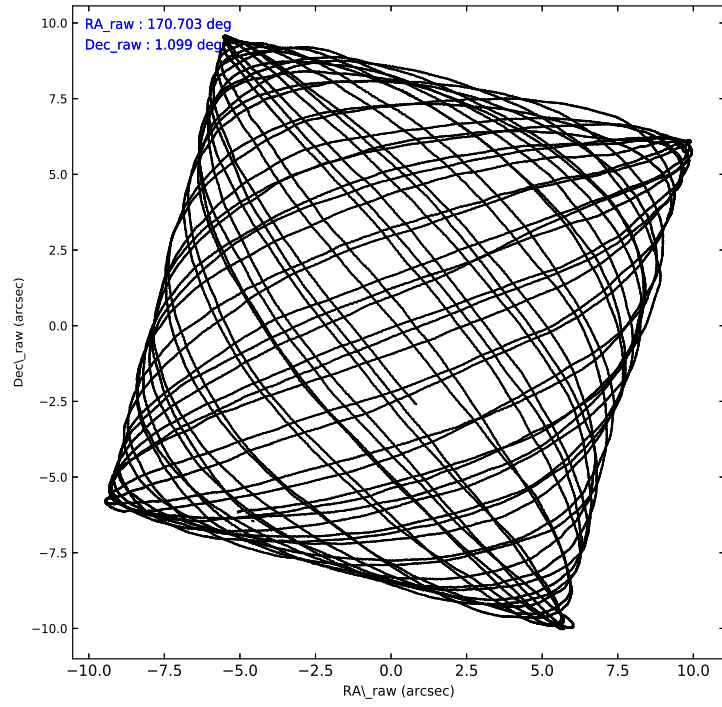
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	122203	123797	135723	133788	128941
rejected events	106439	106027	120017	116341	112954
rejected %	87%	85%	88%	86%	87%

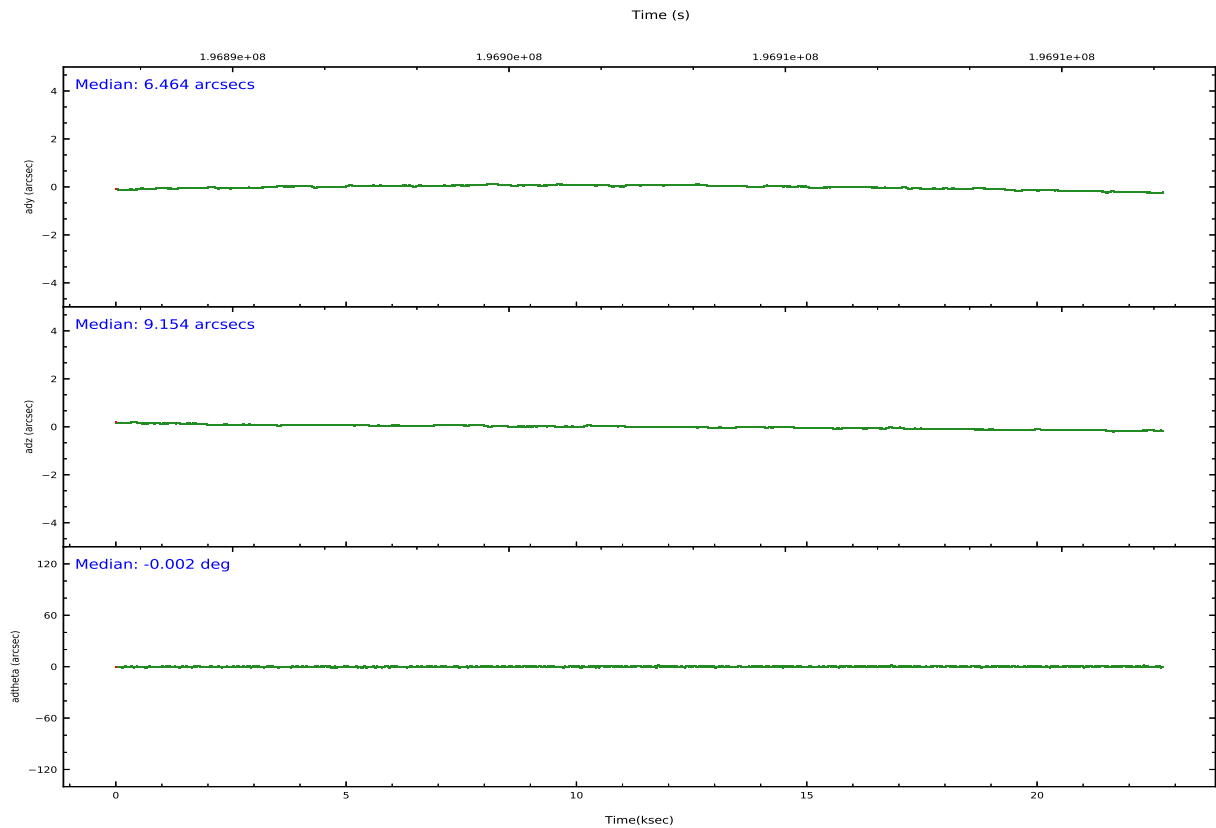
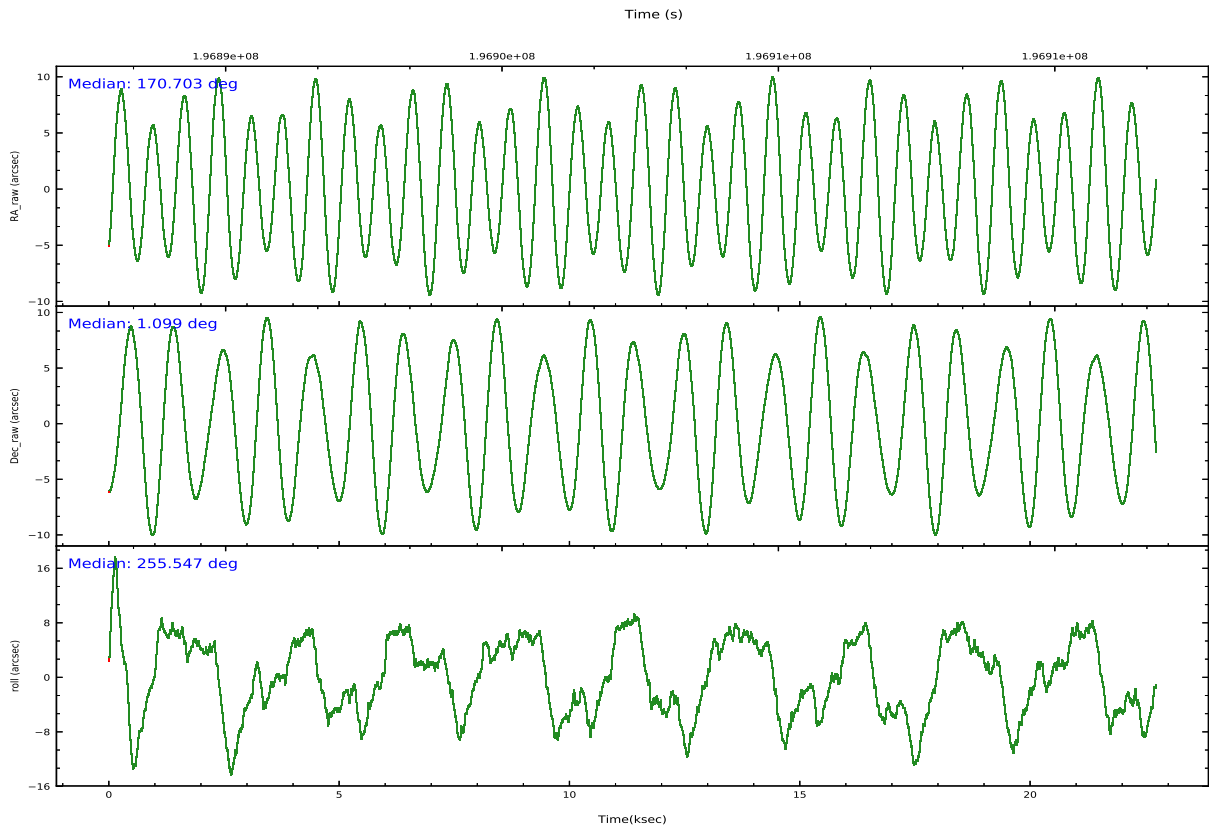
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6432	7724	6917	8293	6510
	5%	6%	5%	6%	5%
grade 1 events	71	70	70	99	57
	0%	0%	0%	0%	0%
grade 2 events	3408	3434	3152	3179	3090
	2%	2%	2%	2%	2%
grade 3 events	1632	1780	1602	1594	1569
	1%	1%	1%	1%	1%
grade 4 events	1506	1710	1474	1600	1646
	1%	1%	1%	1%	1%
grade 5 events	4666	4857	4310	5226	5091
	3%	3%	3%	3%	3%
grade 6 events	2788	3123	2562	2783	3175
	2%	2%	1%	2%	2%
grade 7 events	101700	101099	115636	111014	107803
	83%	81%	85%	82%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	170.696056	170.70134297889	Subarray requested	NONE	NONE
[deg] Pointing Dec	1.124822	1.1009912082196	Alternating exposures requested	N	N
[deg] Pointing Roll	255.345266	255.54709856987	[s] Primary exposure time	0.000000	3.1
[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)	196892001.184000	196890865.01735			
Observation start date	2004-03-28T20:12:17	2004-03-28T19:54:25			
[s] Observation end time (MET)	196914201.184000	196914416.44338			
Observation end date	2004-03-29T02:22:17	2004-03-29T02:26:56			
Read mode	TIMED	TIMED			

2.3 Aspect





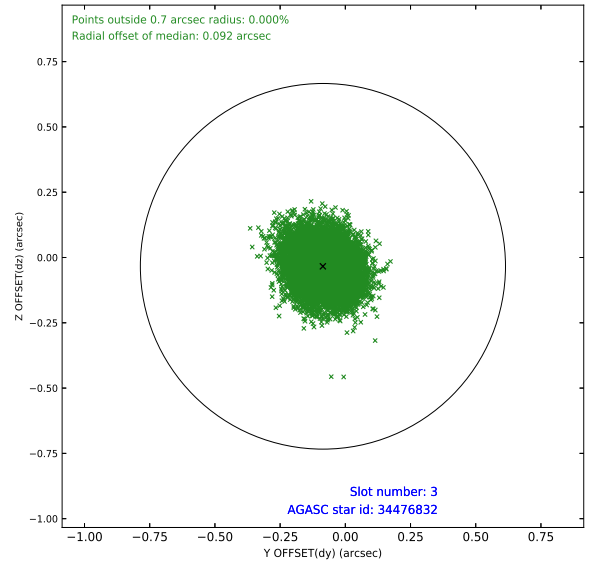
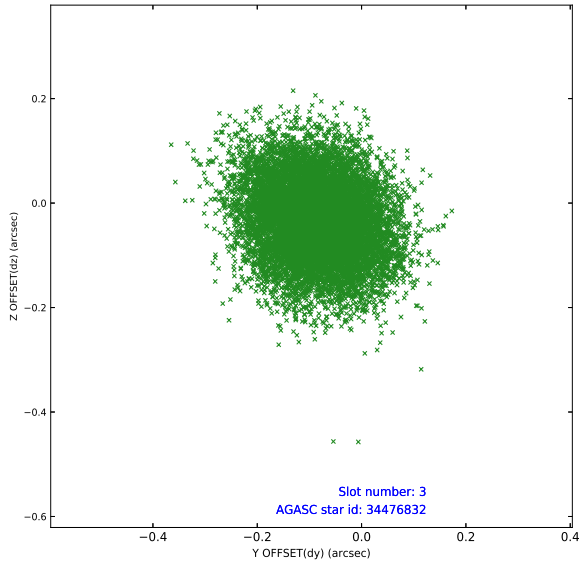
Slot Statistics

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	7.24	5546	1.000	0.003	0.031	0.007	0.012	0.000000	0.000000	933.26	-832
1	FID		ACIS-I-5	7.23	5546	1.000	-0.177	0.022	0.007	0.013	0.000000	0.000000	-1814.96	1064
2	FID		ACIS-I-6	7.26	5545	1.000	0.083	0.018	0.007	0.012	0.000000	0.000000	398.70	1709
3	GUIDE	used	34476832	9.66	11079	1.000	-0.086	-0.034	0.110	0.176	169.983600	1.016249	1027.35	-2381
4	GUIDE	used	34604832	8.33	11090	1.000	-0.023	0.042	0.072	0.113	171.211441	1.245888	-891.02	1684
5	GUIDE	used	34605648	9.03	11090	1.000	0.020	0.109	0.081	0.131	170.878184	0.460021	2149.65	1240
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	34480152	10.36	10975	1.000	0.090	-0.122	0.168	0.282	169.924019	0.878626	1561.32	-2463

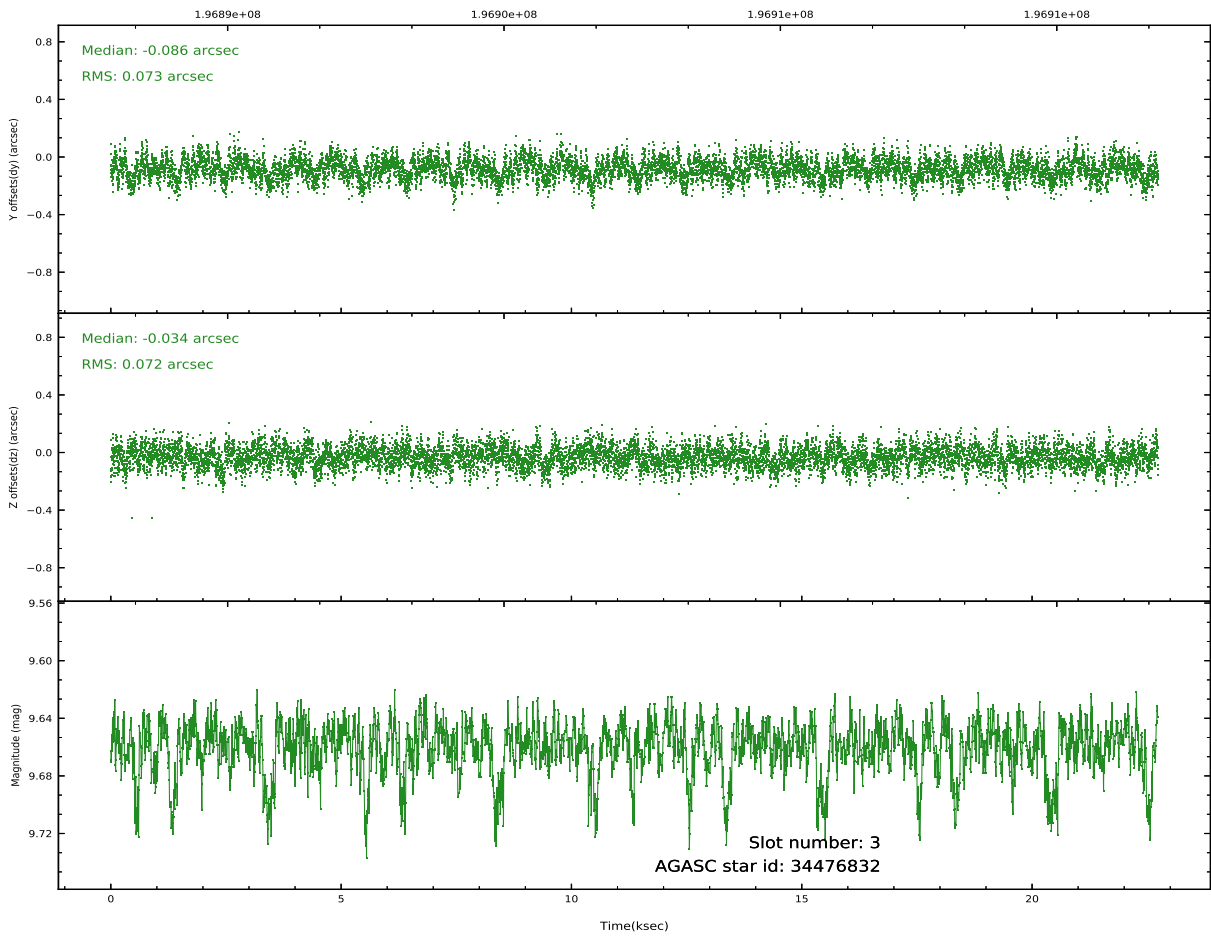
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2.4 Star Slots

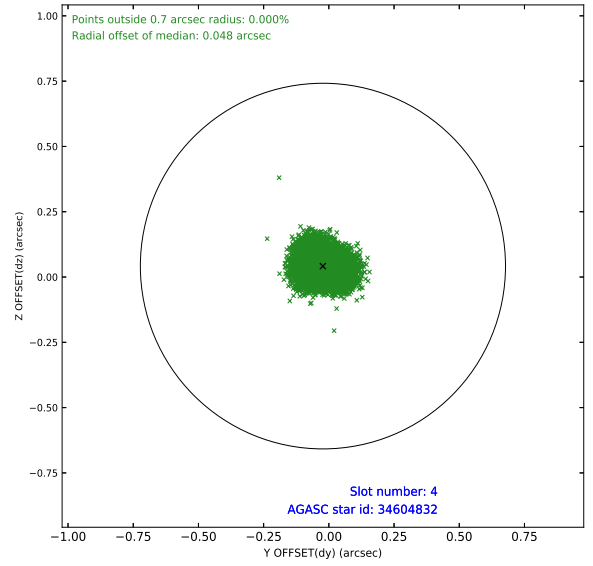
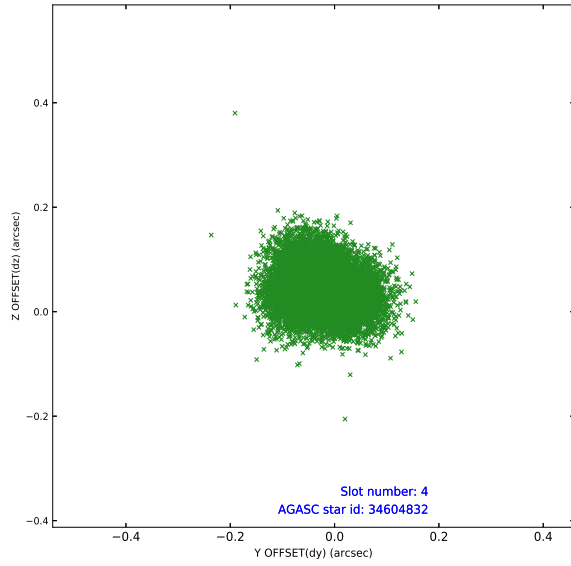
2.4.1 Slot 3



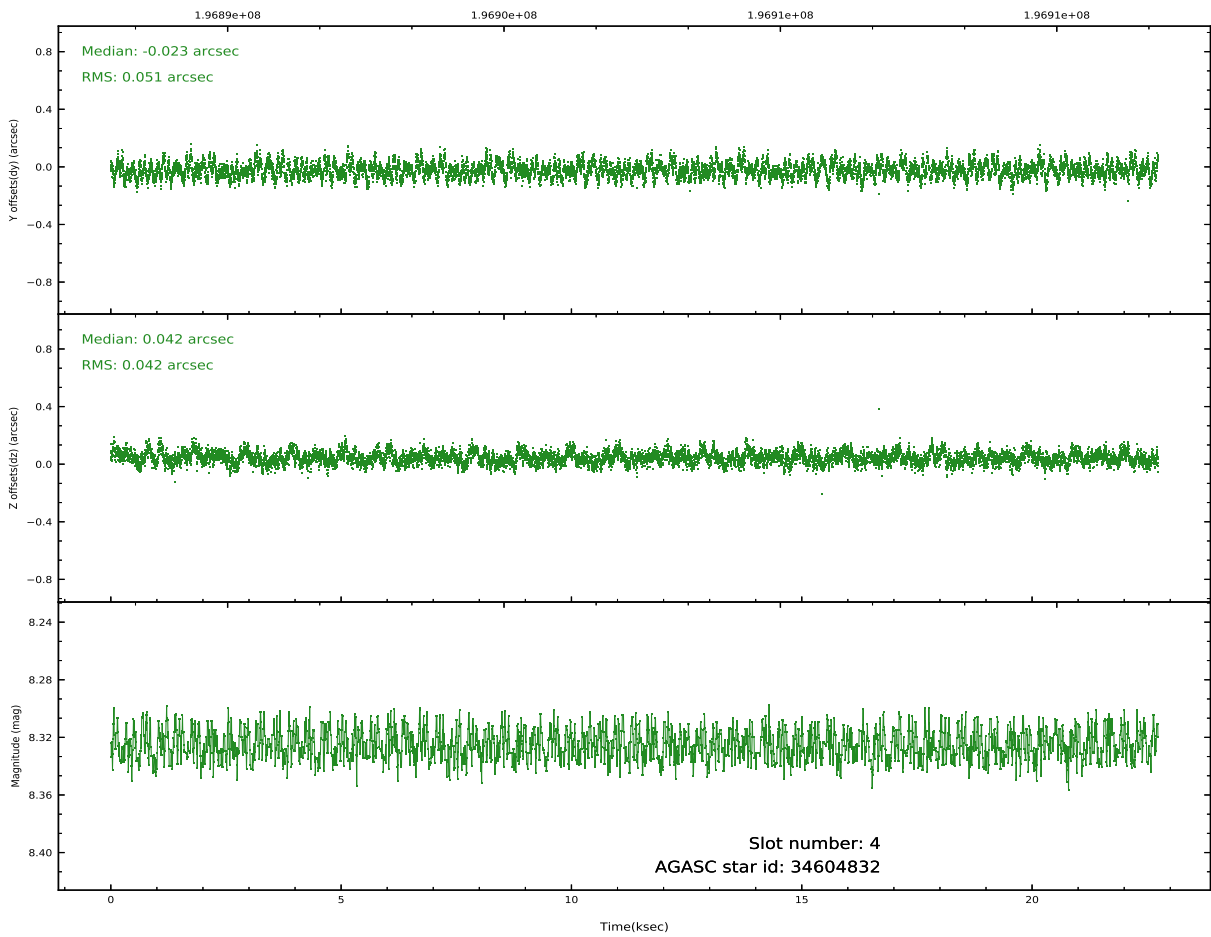
Time (s)



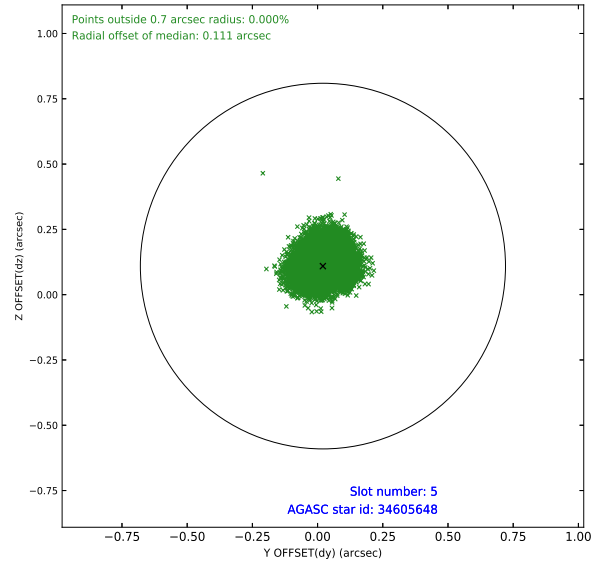
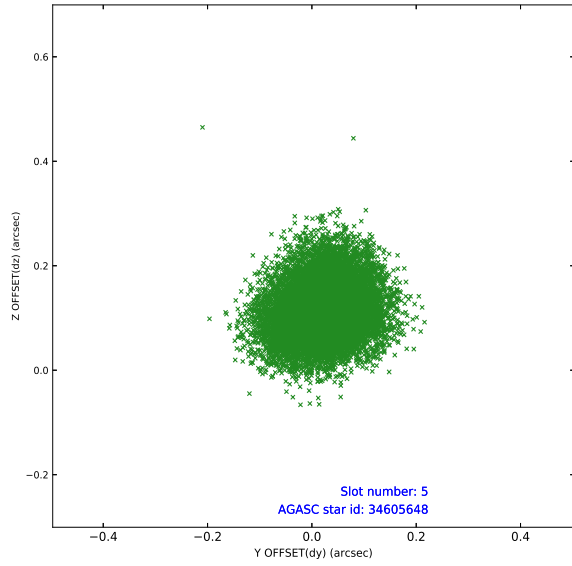
2.4.2 Slot 4



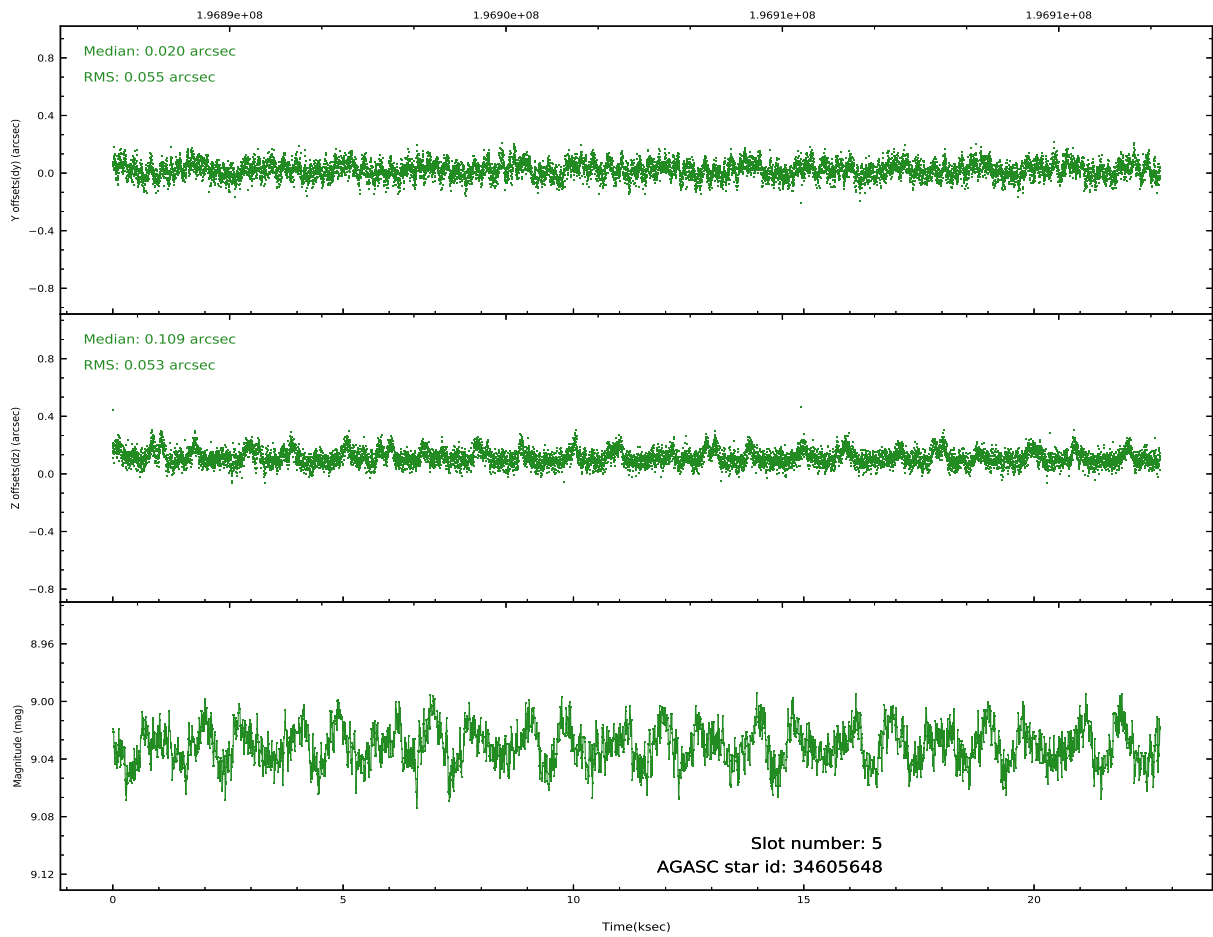
Time (s)



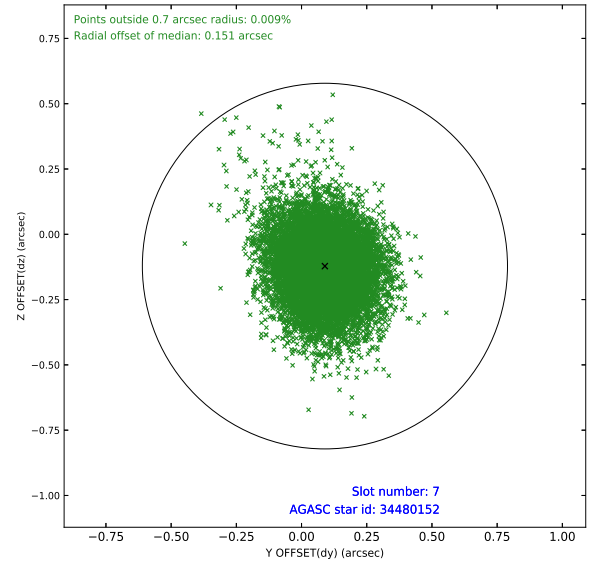
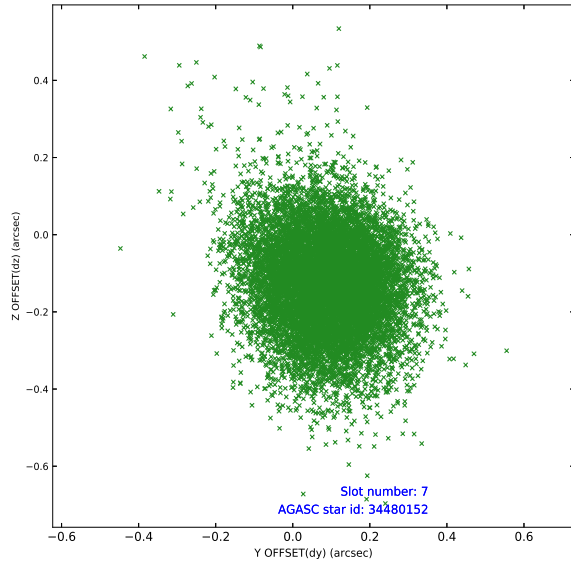
2.4.3 Slot 5



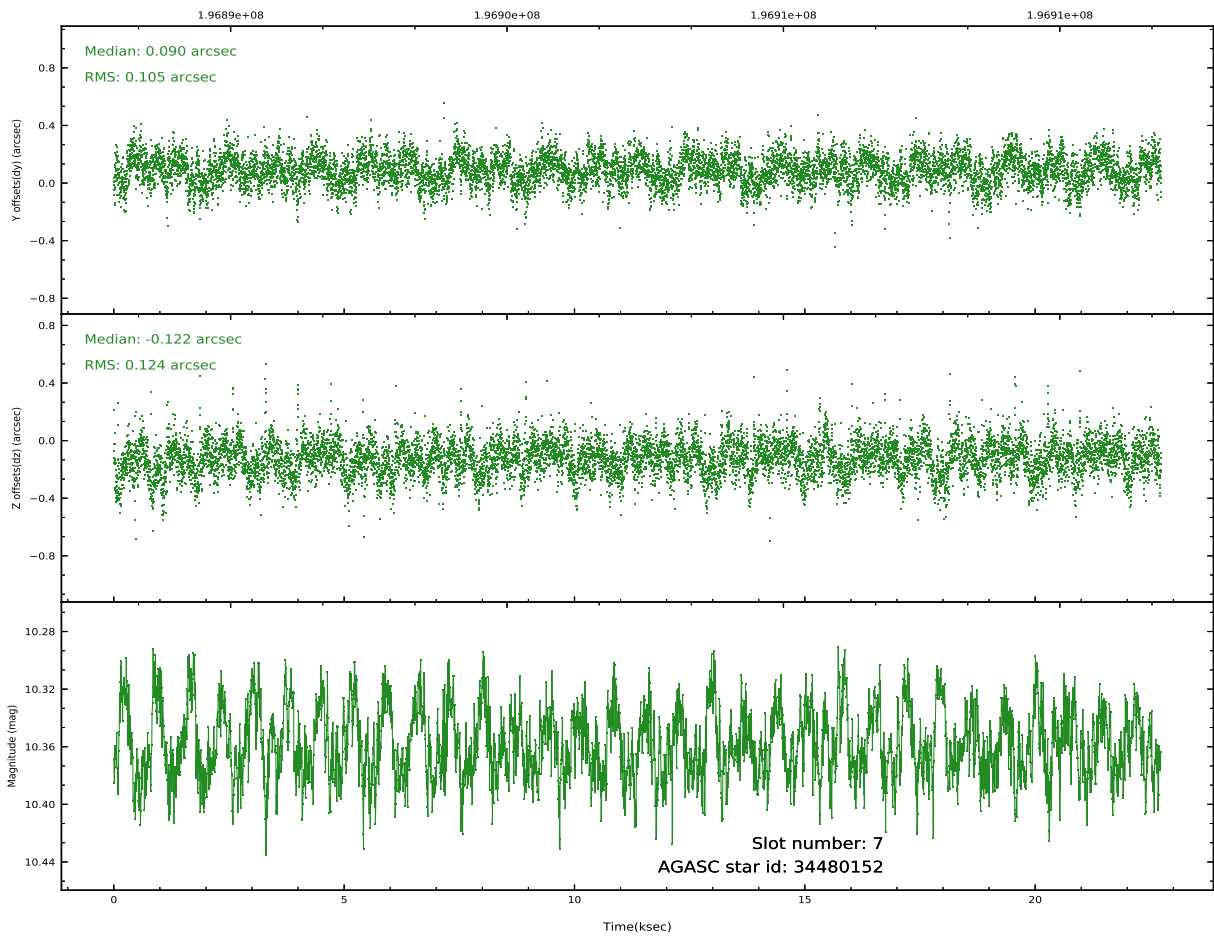
Time (s)



2.4.4 Slot 7

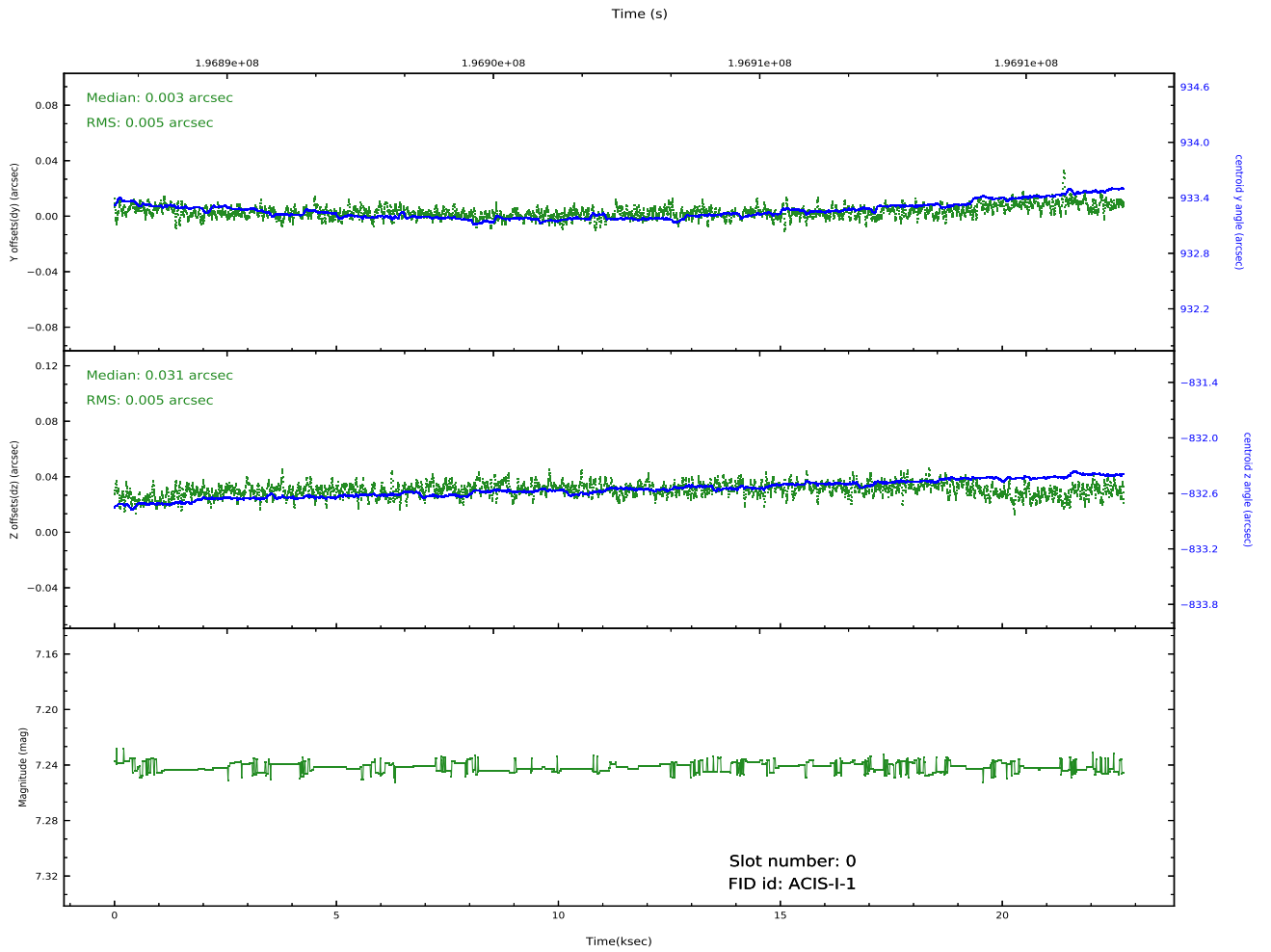
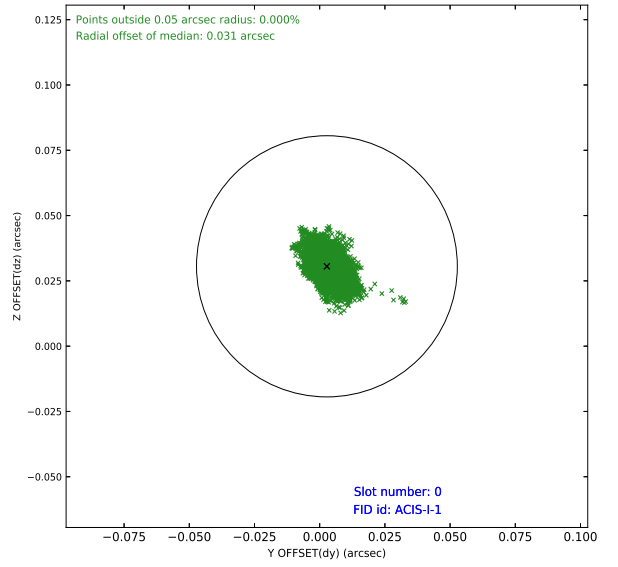
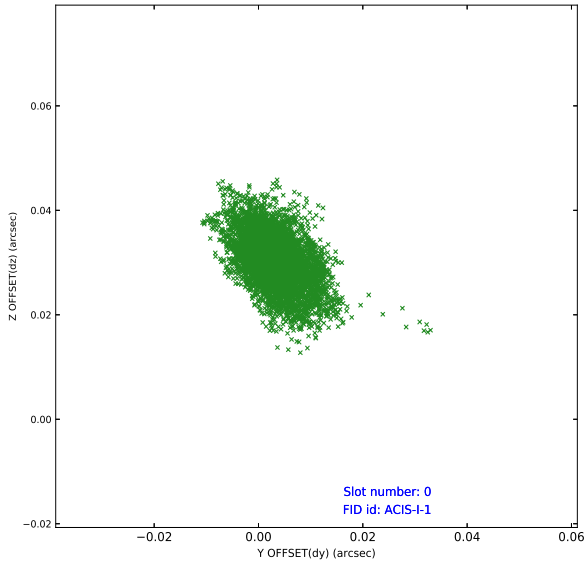


Time (s)

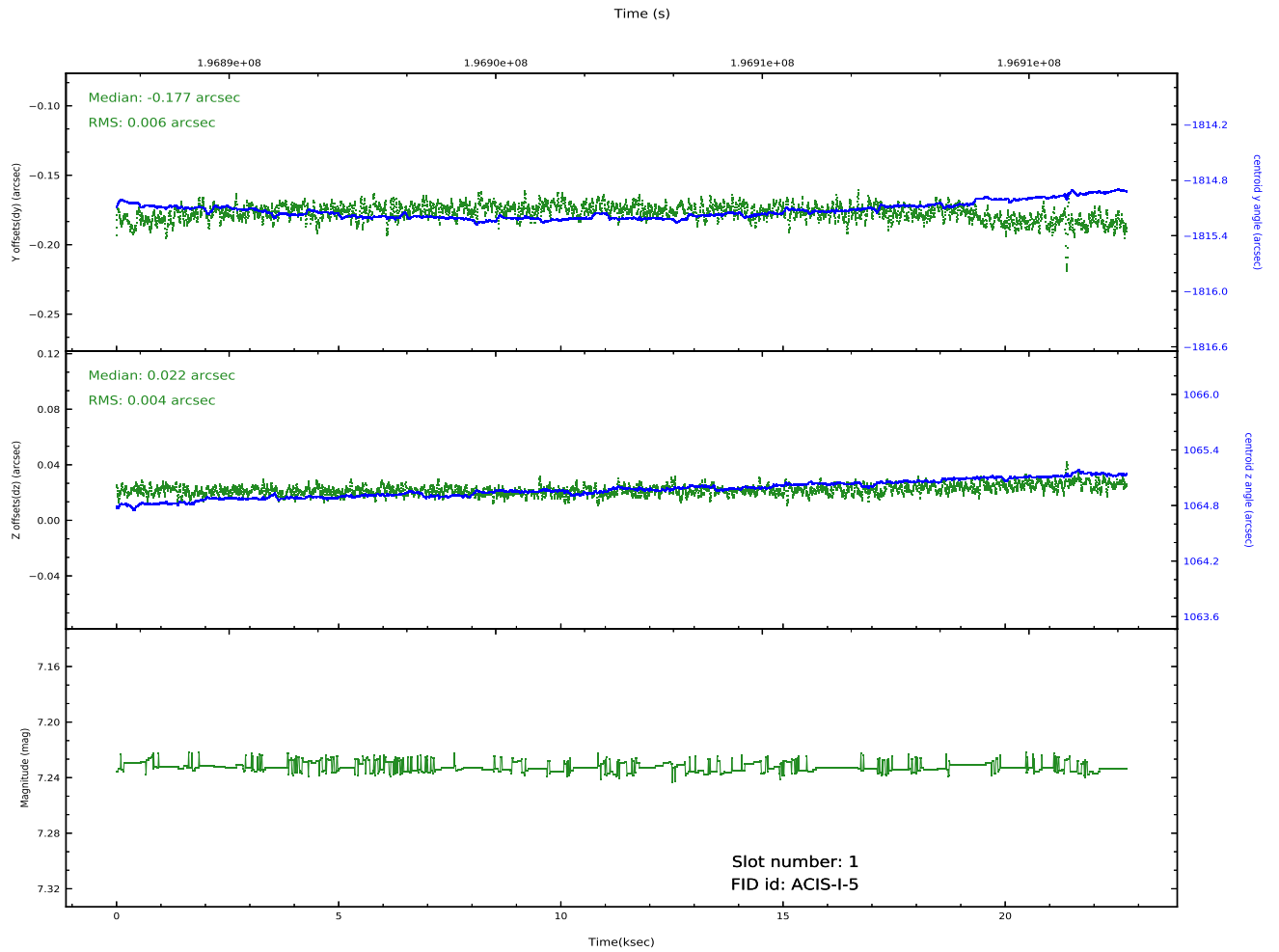
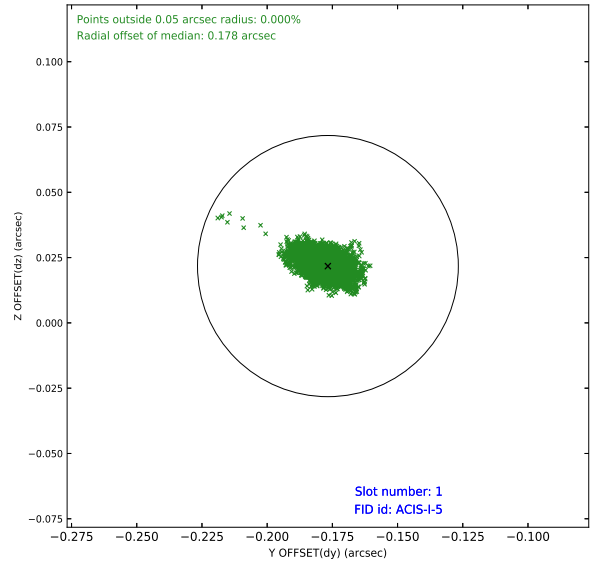
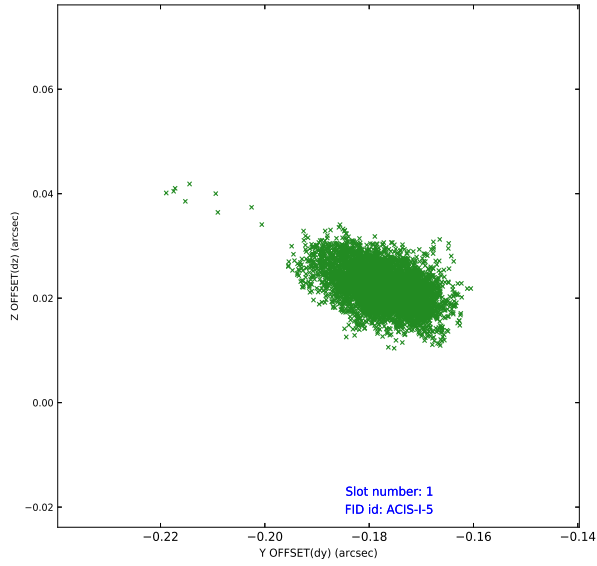


2.5 FID Slots

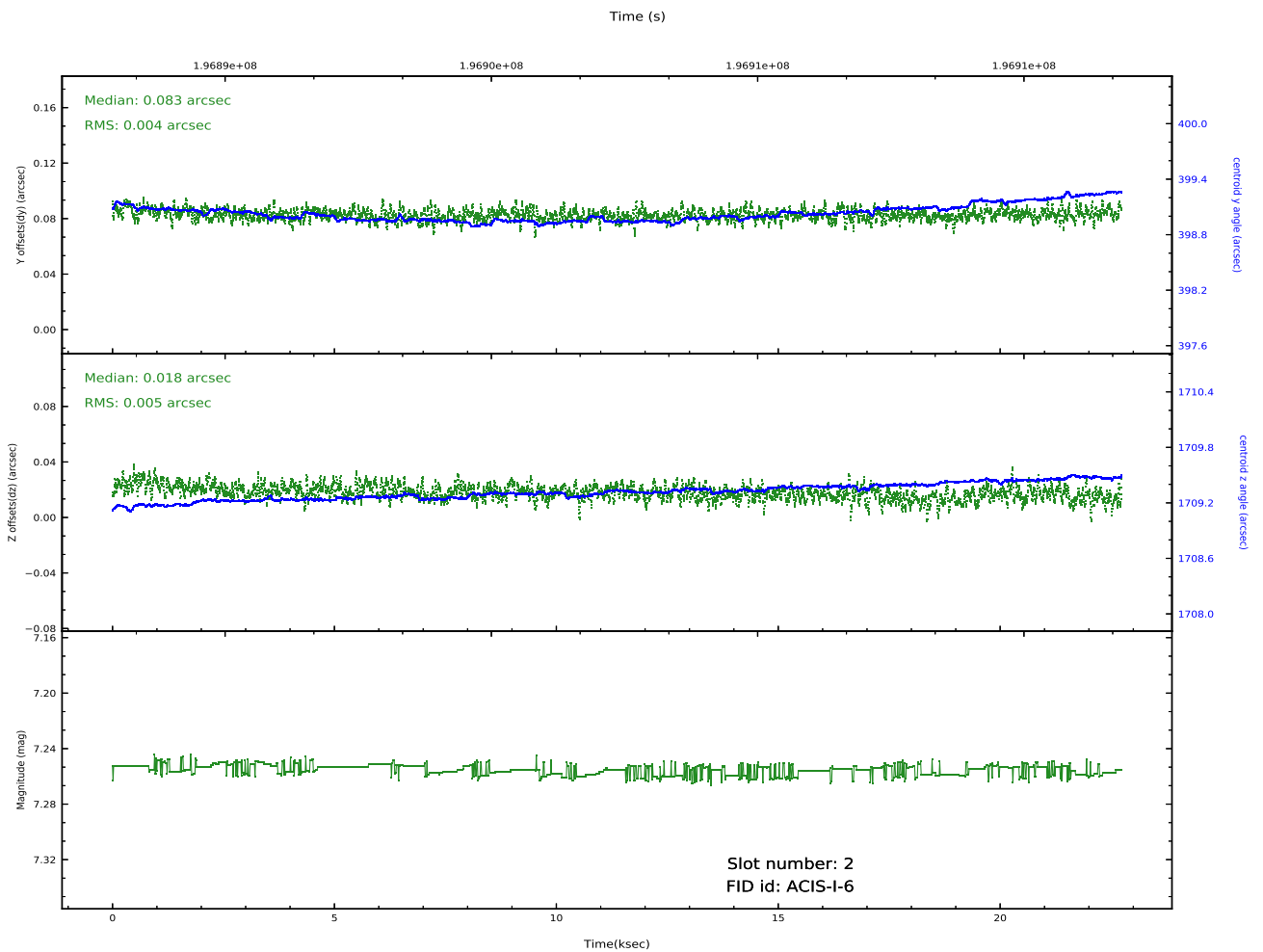
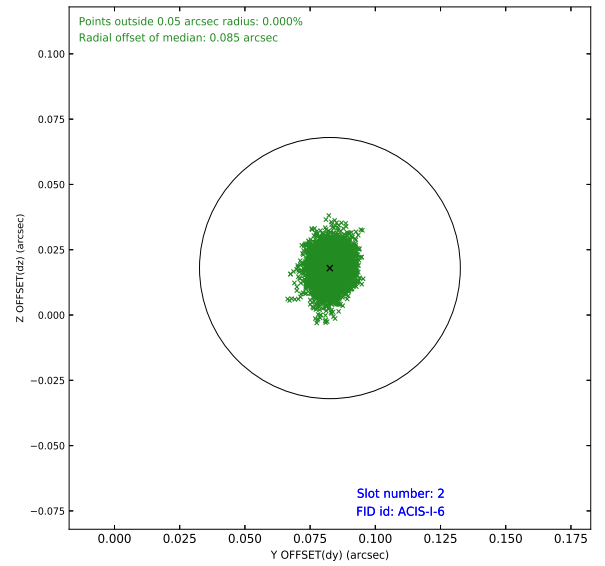
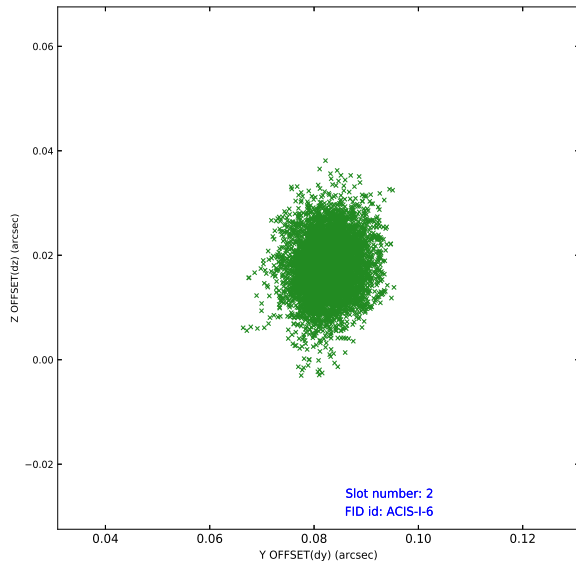
2.5.1 Slot 0



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)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.319

A.2 Comments

The guide star in slot 6 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.