

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5009 - L2 Version 4
Chandra X-Ray Center

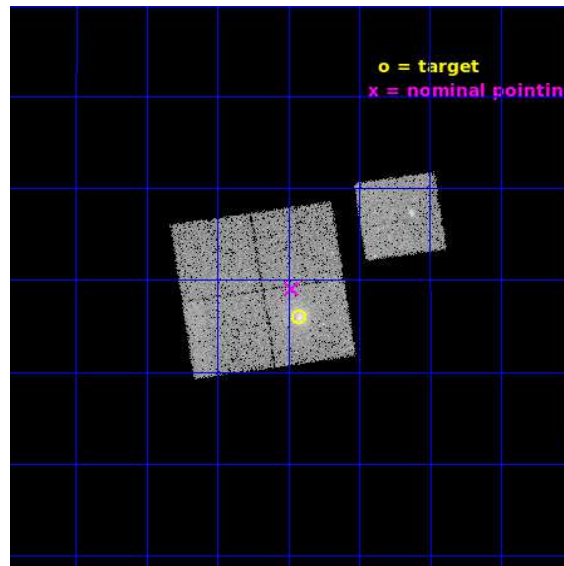
L2 Processing Date : Sep 23 2020

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

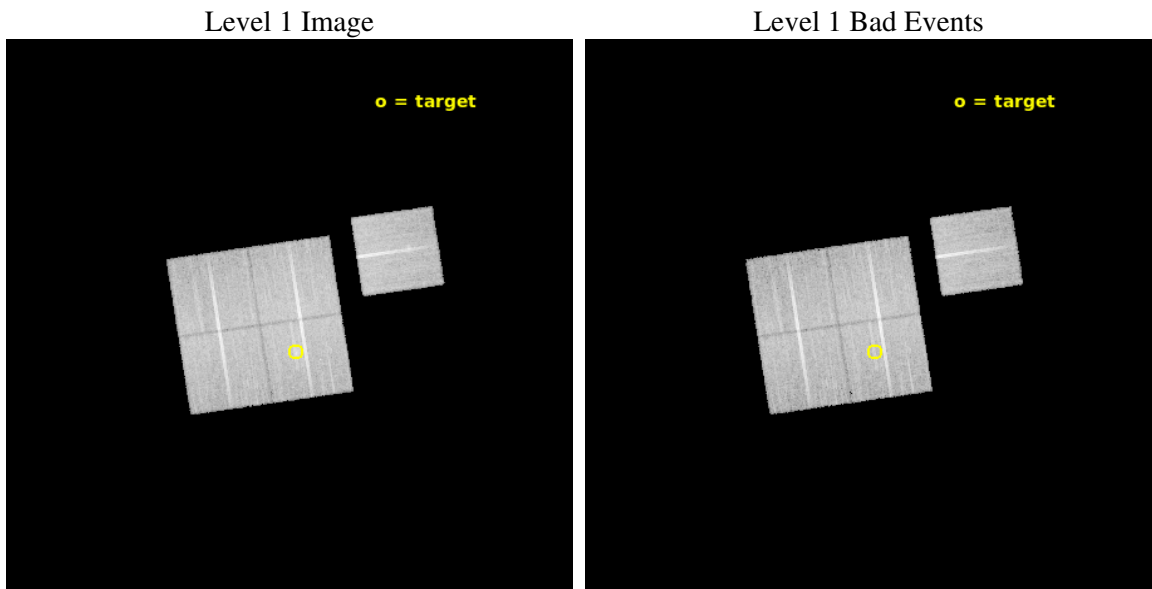
seq_num	800452	Sequence number
obs_id	5009	Observation id
title	Cluster studies: Determination of H0/q0	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	MACS1108.8+0906	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	167.230833	Observer's specified target RA [deg]
dec_targ	9.1	Observer's specified target Dec [deg]
ra_nom	167.24361370038	Nominal RA [deg]
dec_nom	9.1512980310466	Nominal Dec [deg]
roll_nom	81.421544411389	Nominal Roll [deg]
revision	4	Processing version of data
ontime	24790.658972055	Sum of GTIs [s]
livetime	24466.750761967	Livetime [s]
ontime0	24787.517991841	Sum of GTIs [s]
ontime1	24790.658972085	Sum of GTIs [s]
ontime2	24787.518001854	Sum of GTIs [s]
ontime3	24790.658972055	Sum of GTIs [s]
ontime6	24787.518011719	Sum of GTIs [s]
l2events	63201	Number of level 2 events



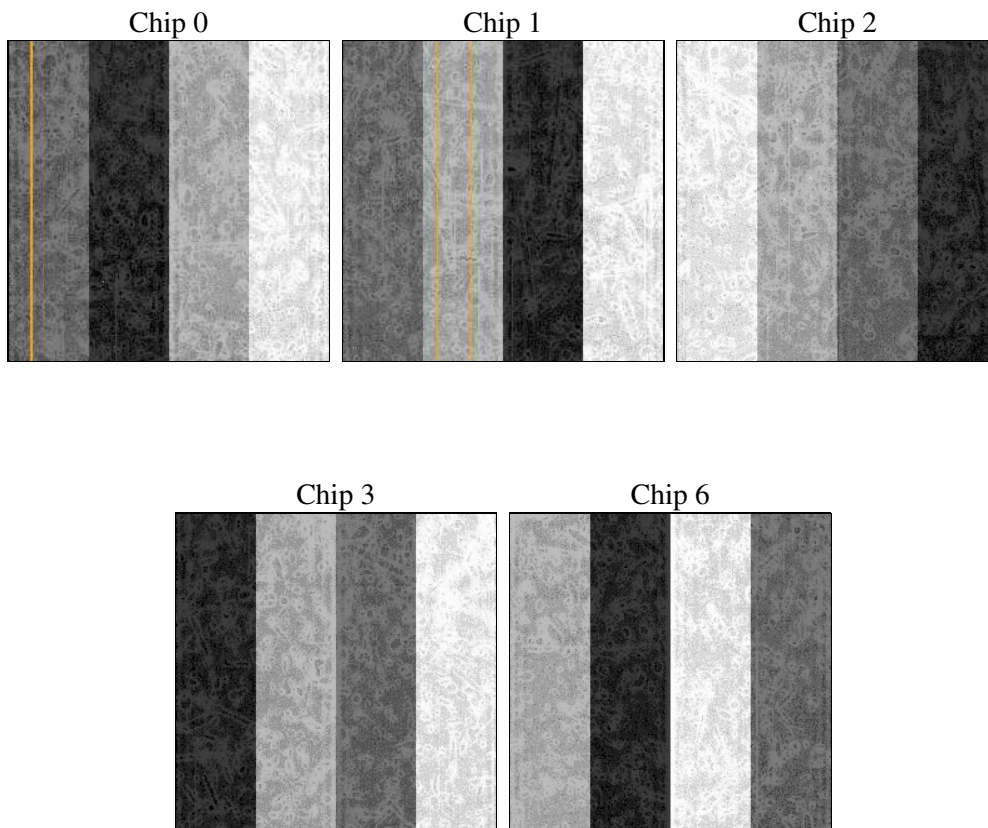
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	24617.860000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	24790.658972055	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	24787.517991841	Sum of GTIs [s]
date	2020-09-24T01:33:52	Date and time of file creation	ontime1	24790.658972085	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	24787.518001854	Sum of GTIs [s]
			ontime3	24790.658972055	Sum of GTIs [s]
			ontime6	24787.518011719	Sum of GTIs [s]
			l1events	699501	Number of level 1 events

2.1.4 Events

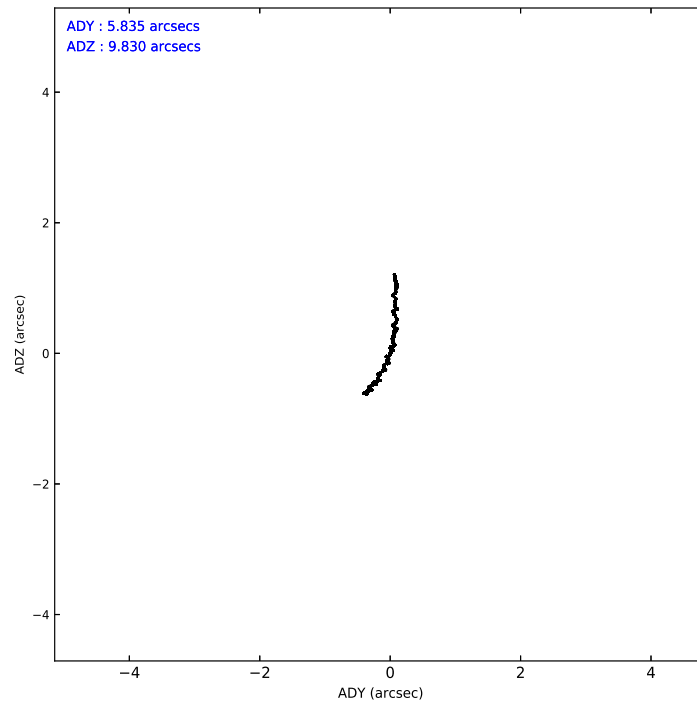
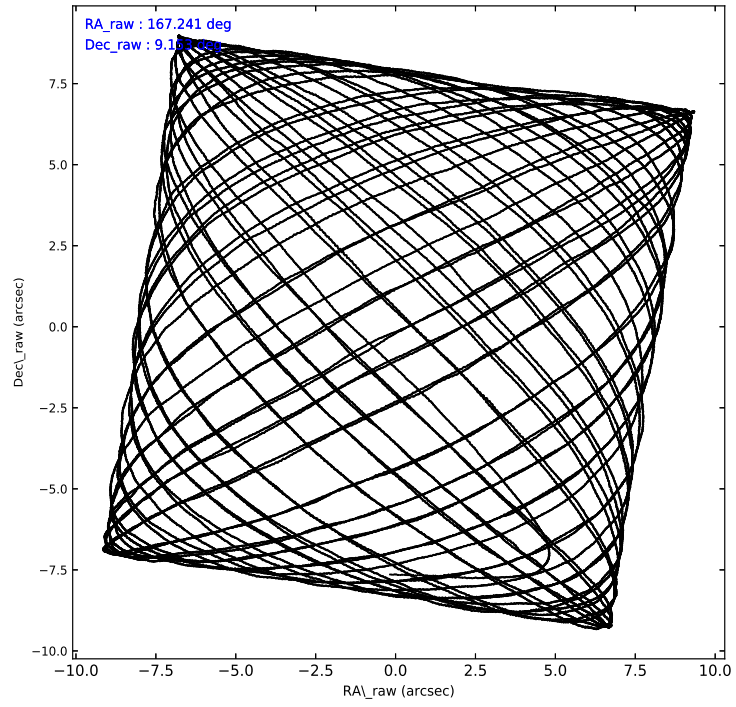
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	130224	133106	150966	145314	139891
rejected events	116368	117616	137187	127860	124894
rejected %	89%	88%	90%	87%	89%

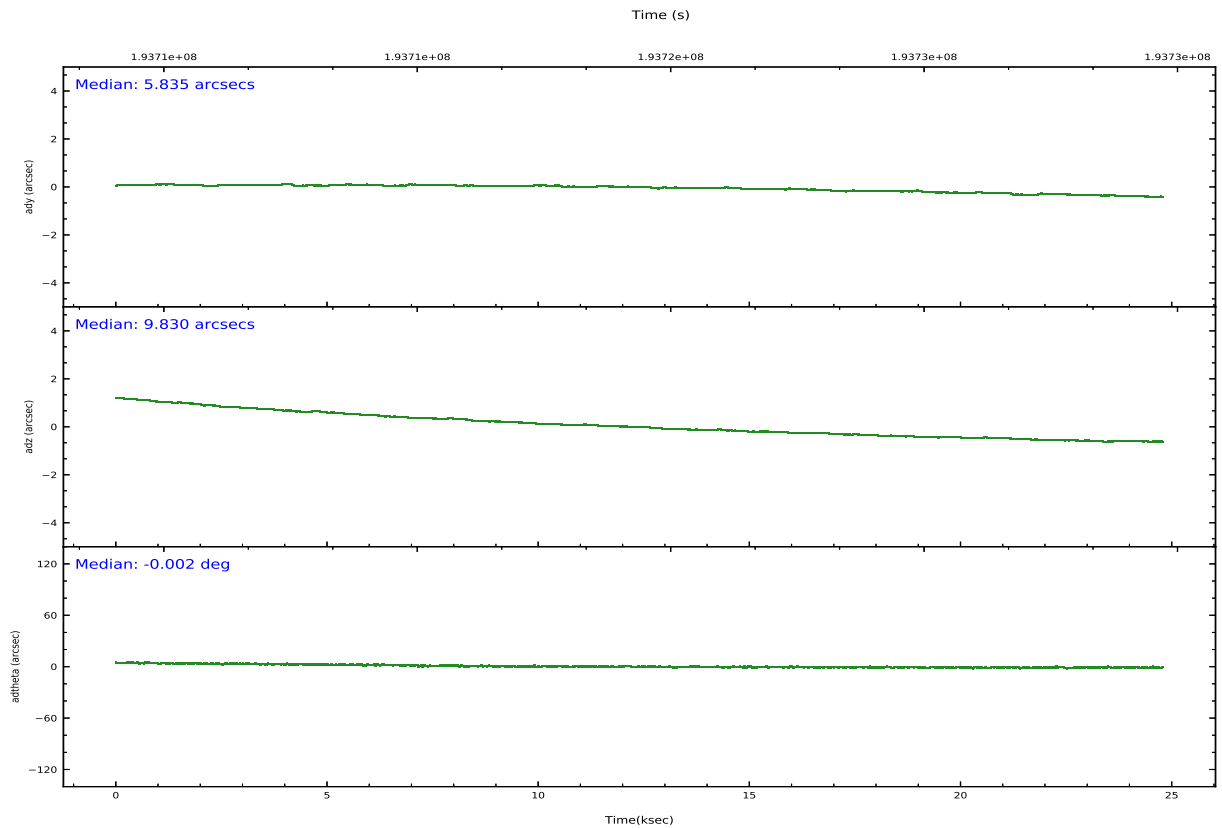
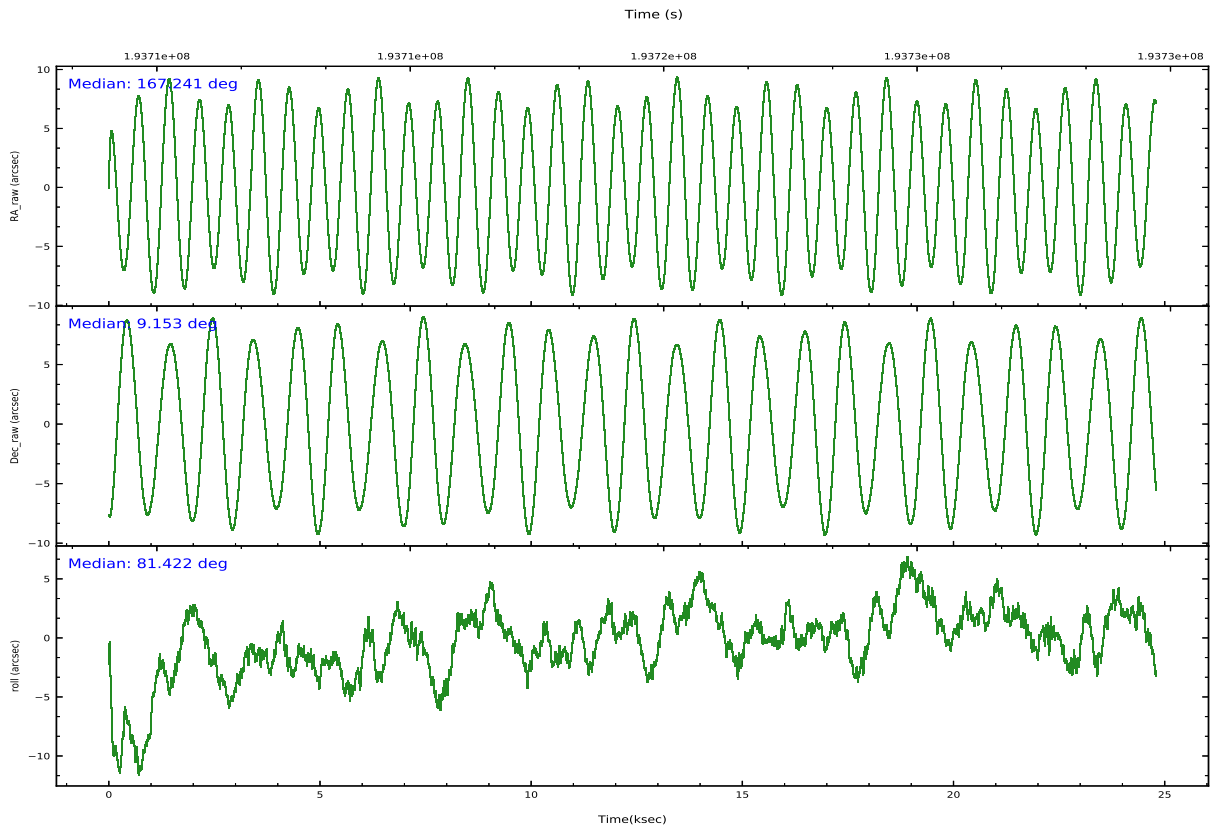
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4995	5740	5219	8431	5846
	3%	4%	3%	5%	4%
grade 1 events	72	72	81	99	67
	0%	0%	0%	0%	0%
grade 2 events	3250	3312	3195	3242	3136
	2%	2%	2%	2%	2%
grade 3 events	1696	1769	1569	1730	1681
	1%	1%	1%	1%	1%
grade 4 events	1537	1760	1593	1670	1655
	1%	1%	1%	1%	1%
grade 5 events	5050	5308	4843	5641	5501
	3%	3%	3%	3%	3%
grade 6 events	2735	3267	2551	2779	3075
	2%	2%	1%	1%	2%
grade 7 events	110889	111878	131915	121722	118930
	85%	84%	87%	83%	85%

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	167.251258	167.24361370038	Subarray requested	NONE	NONE
[deg] Pointing Dec	9.127913	9.151298031046601	Alternating exposures requested	N	N
[deg] Pointing Roll	81.216808	81.42154441138899	[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	-225.840463	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	193707043.184000	193705728.62765			
Observation start date	2004-02-20T23:29:39	2004-02-20T23:08:48			
[s] Observation end time (MET)	193731661.184000	193731975.80379			
Observation end date	2004-02-21T06:19:57	2004-02-21T06:26:15			
Read mode	TIMED	TIMED			

2.3 Aspect





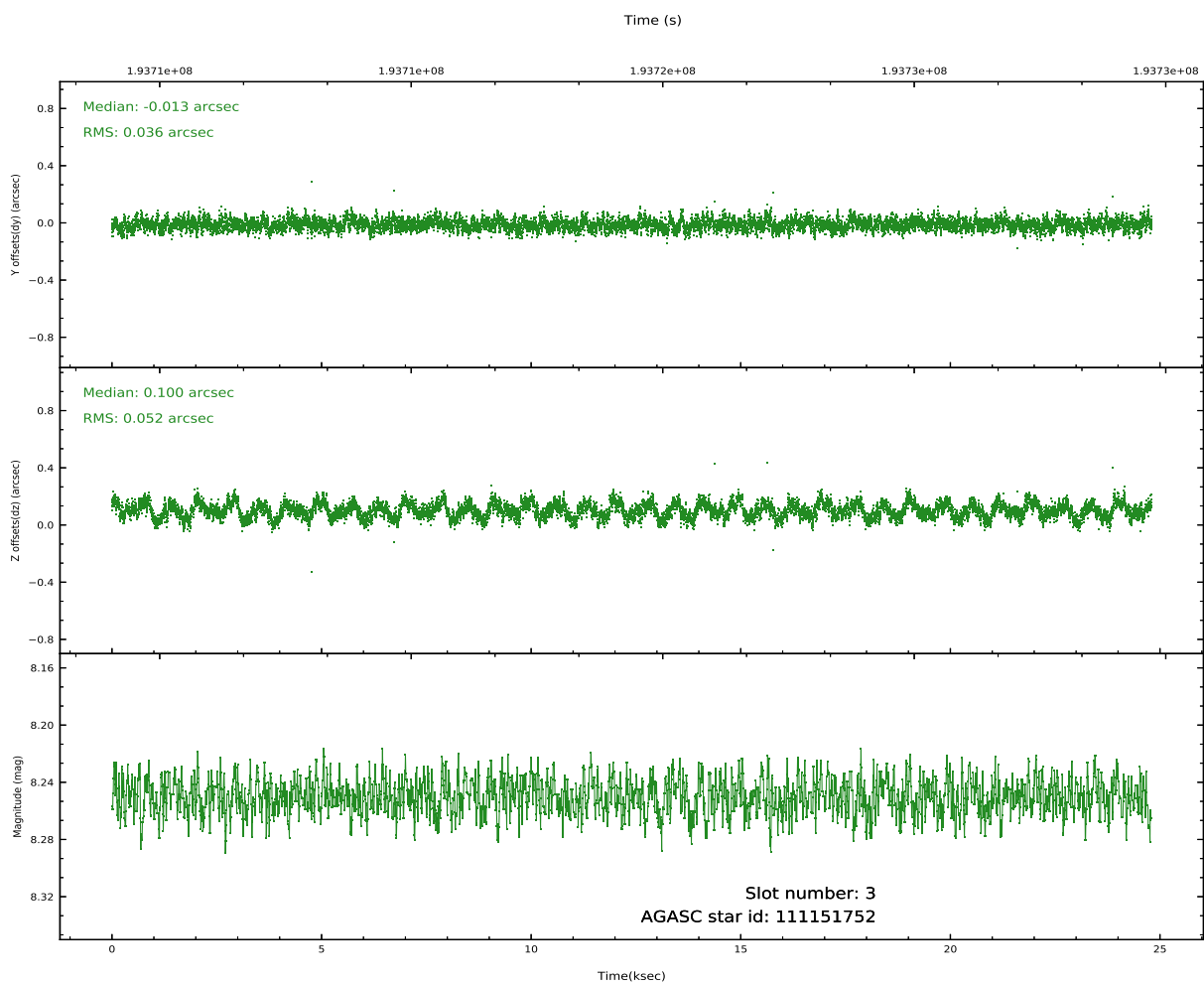
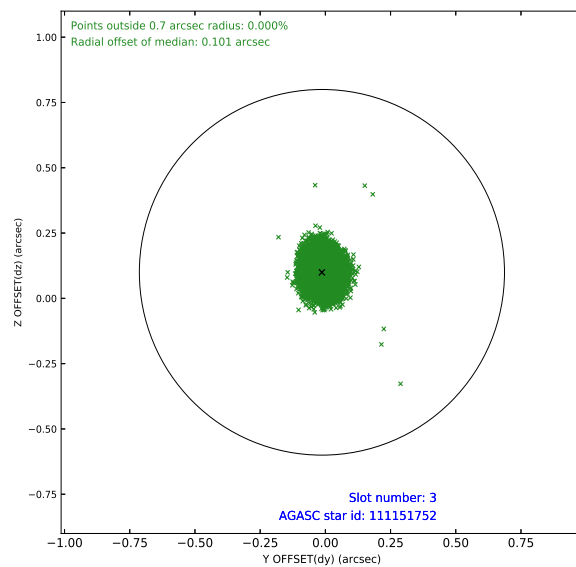
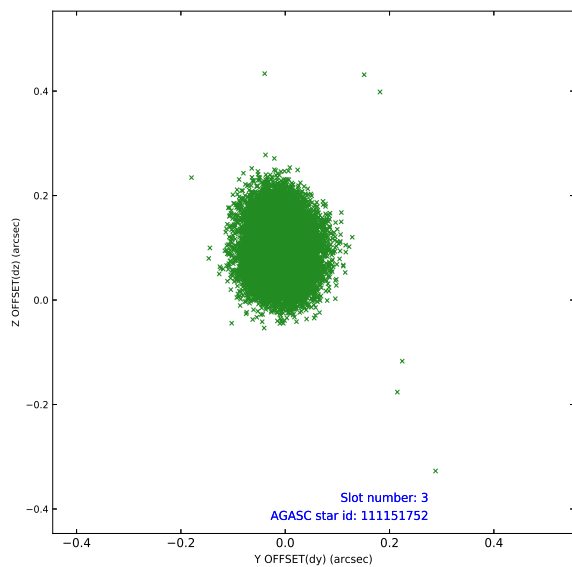
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.23	6049	1.000	0.097	-0.097	0.016	0.035	0.000000	0.000000	933.91	-992
1	FID		ACIS-I-5	7.22	6048	1.000	-0.268	0.072	0.015	0.029	0.000000	0.000000	-1814.51	905
2	FID		ACIS-I-6	7.25	6049	1.000	0.079	0.093	0.017	0.032	0.000000	0.000000	399.28	1549
3	GUIDE	used	111151752	8.25	12097	1.000	-0.013	0.100	0.068	0.106	167.025904	9.023657	-493.02	734
4	GUIDE	used	111152904	10.47	12034	1.000	0.150	0.030	0.163	0.265	167.041577	8.547579	-2178.38	418
5	GUIDE	used	111153480	8.97	12094	1.000	-0.101	0.055	0.082	0.135	166.768914	9.619364	1487.31	1963
6	GUIDE	used	111156792	9.83	12090	1.000	-0.124	-0.181	0.126	0.205	167.249601	9.695709	2019.29	318
7	GUIDE	used	111160288	9.66	12081	1.000	0.092	-0.004	0.121	0.212	168.020770	9.652583	2287.38	-2409

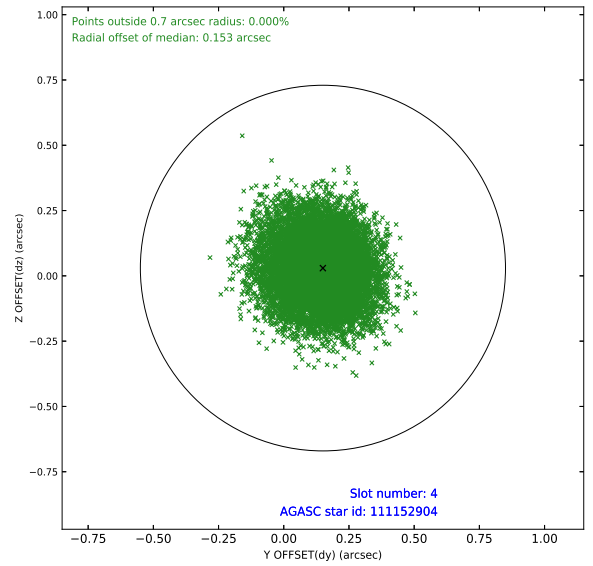
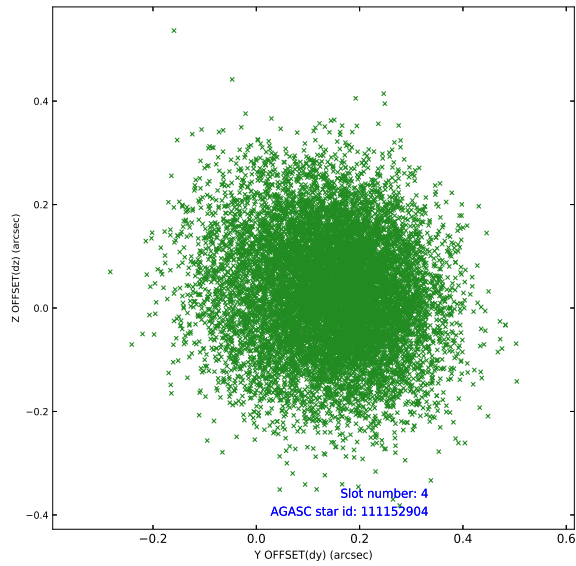
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2.4 Star Slots

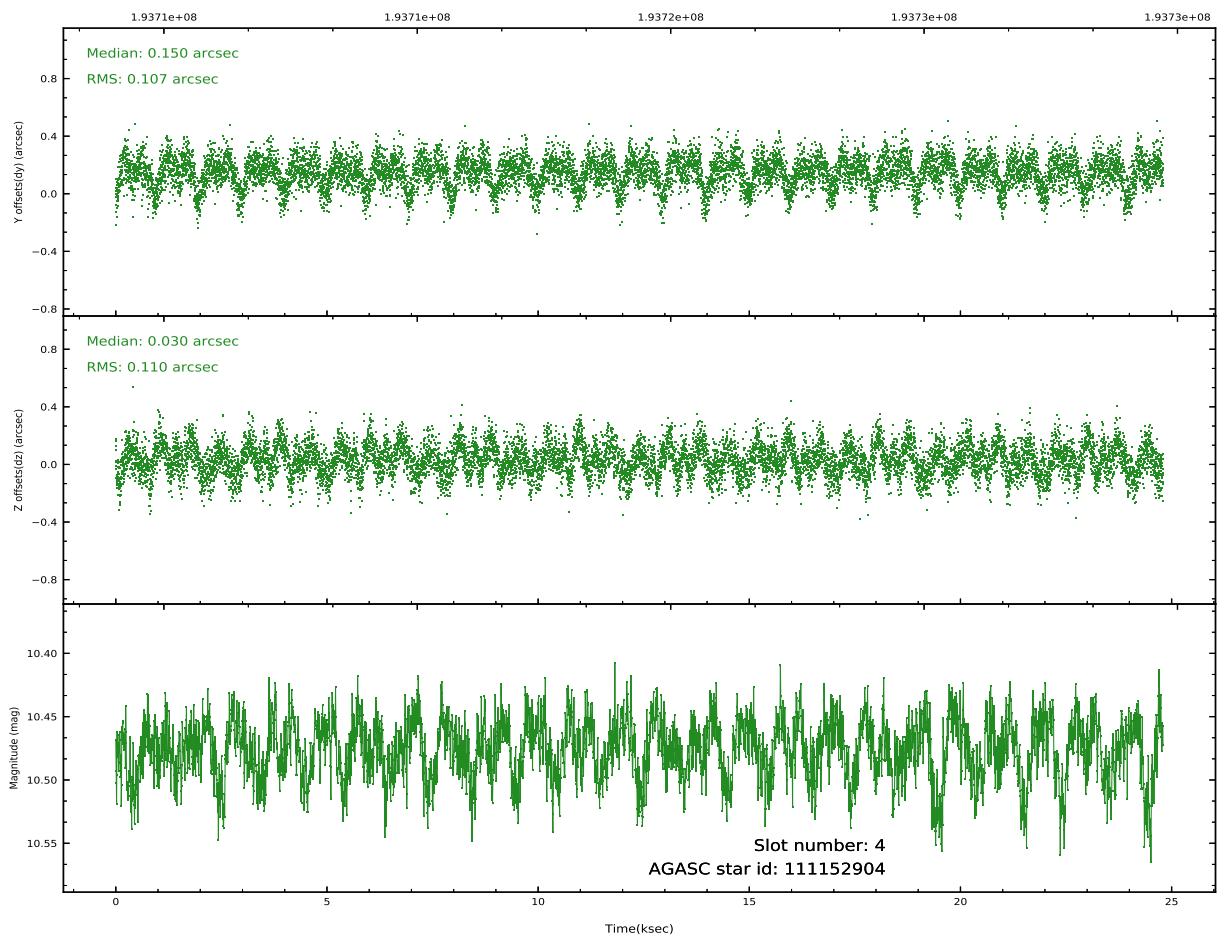
2.4.1 Slot 3



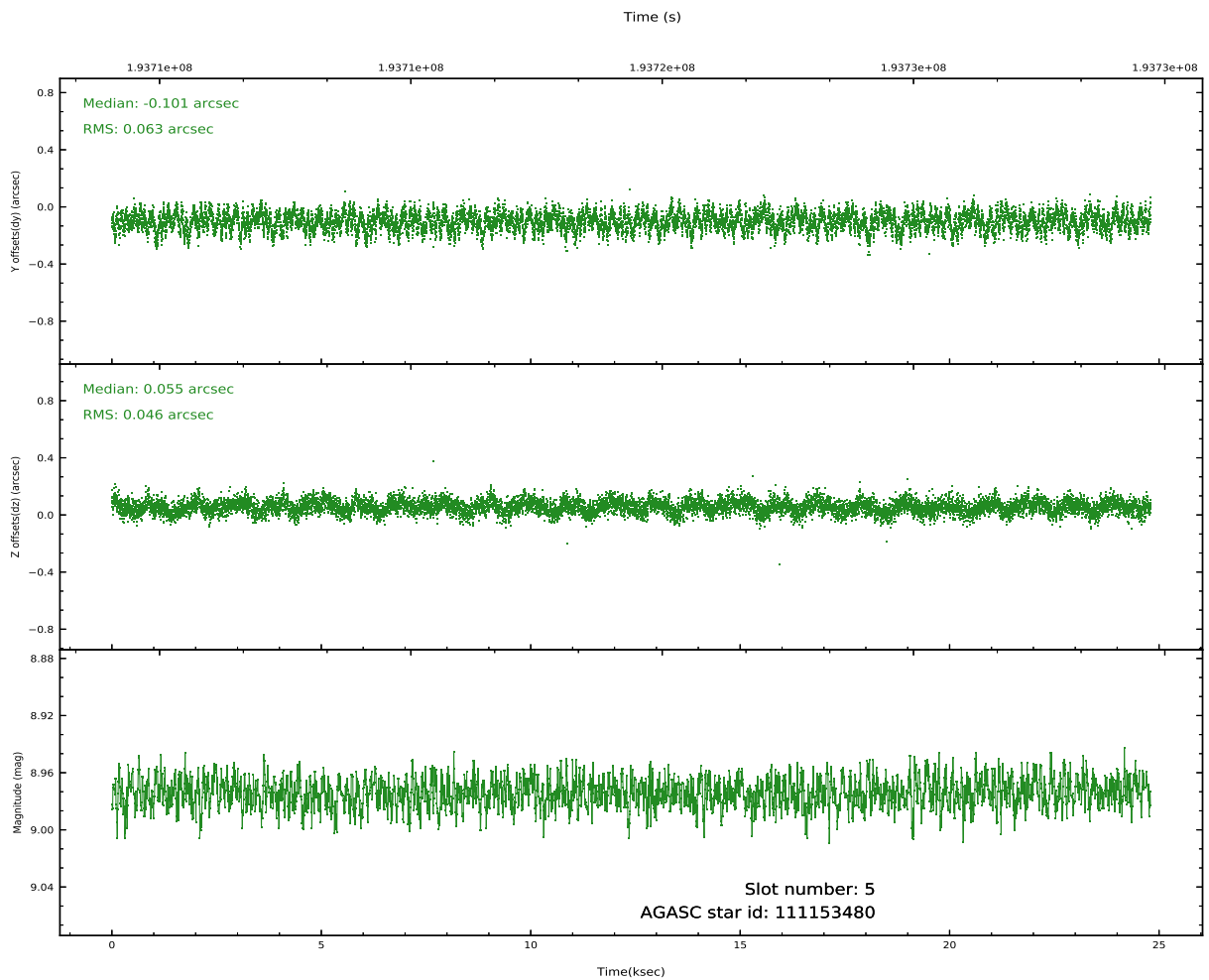
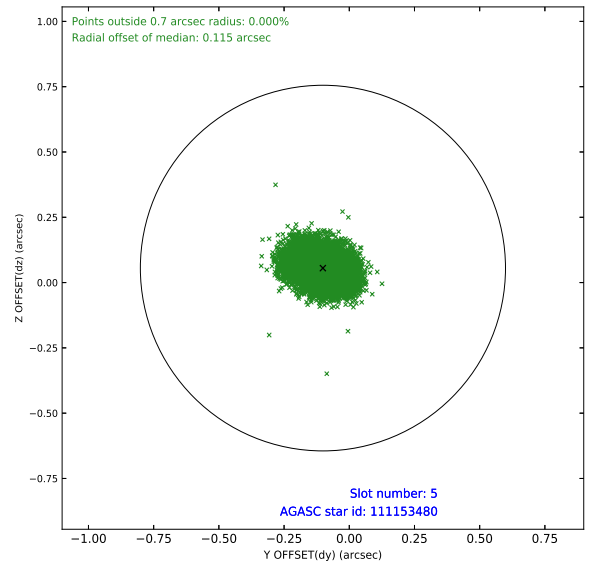
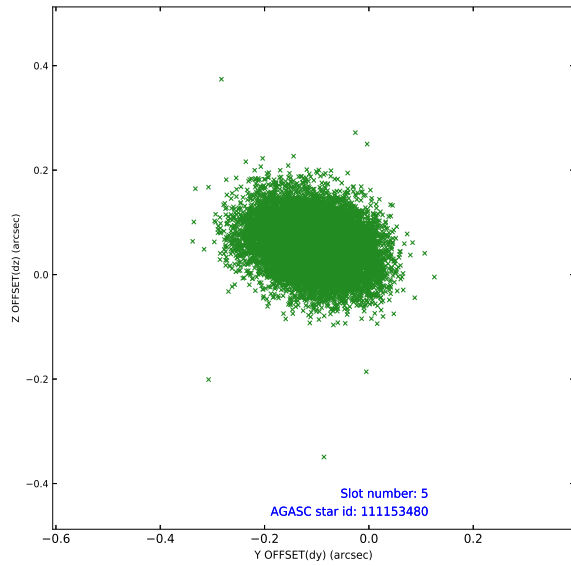
2.4.2 Slot 4



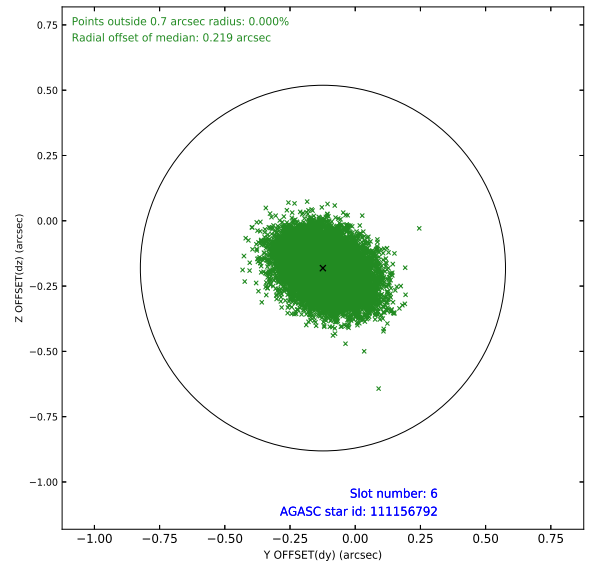
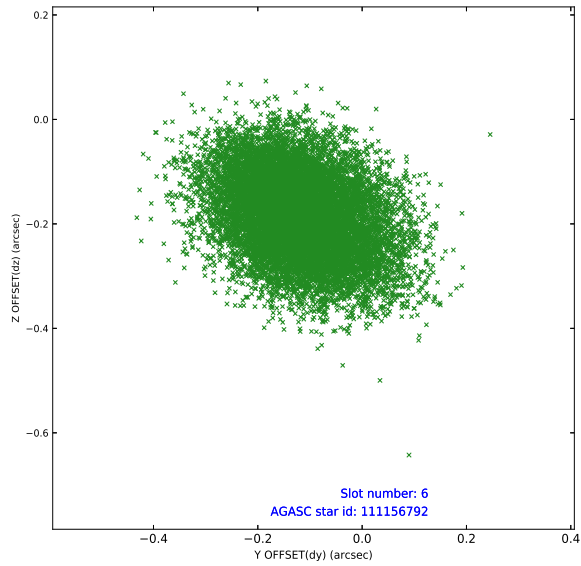
Time (s)



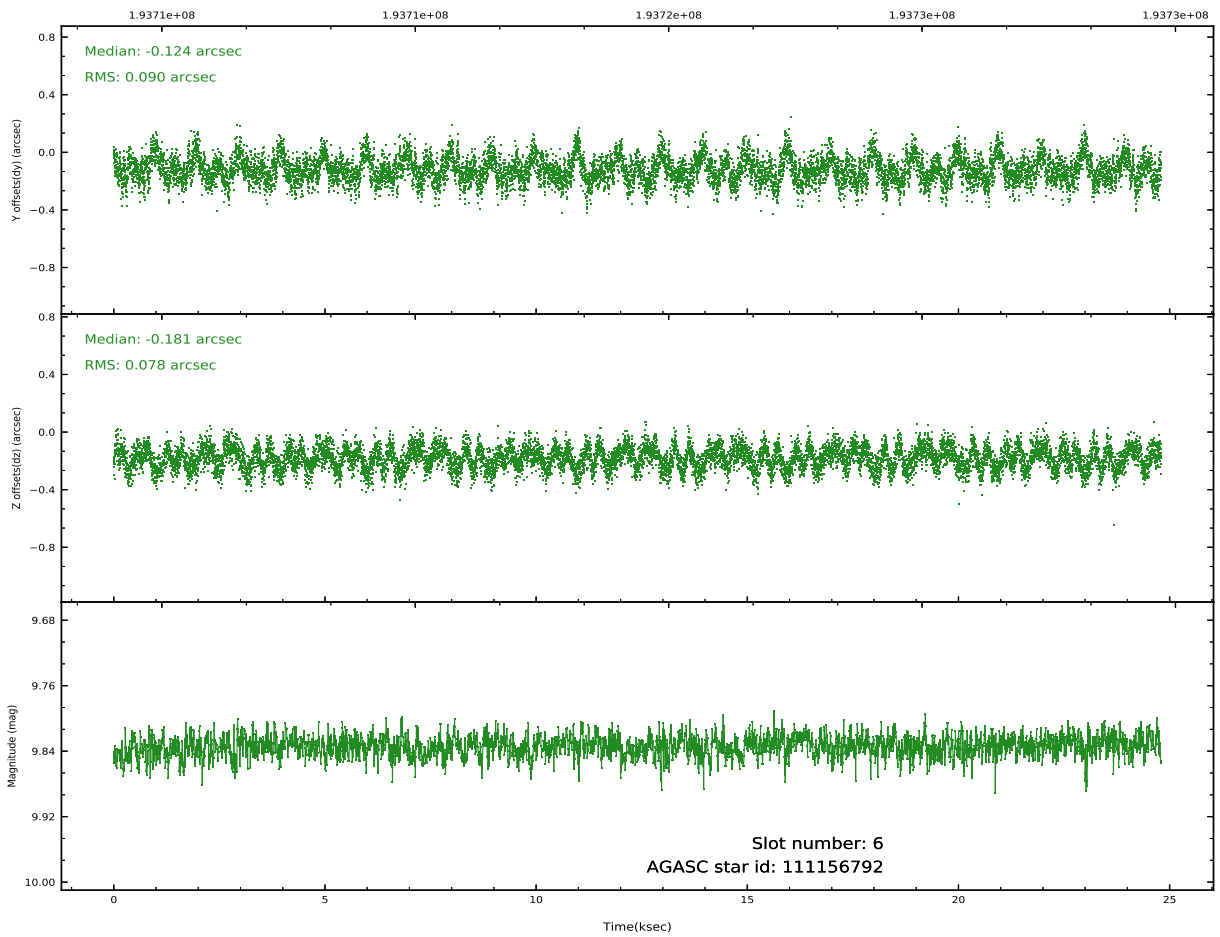
2.4.3 Slot 5



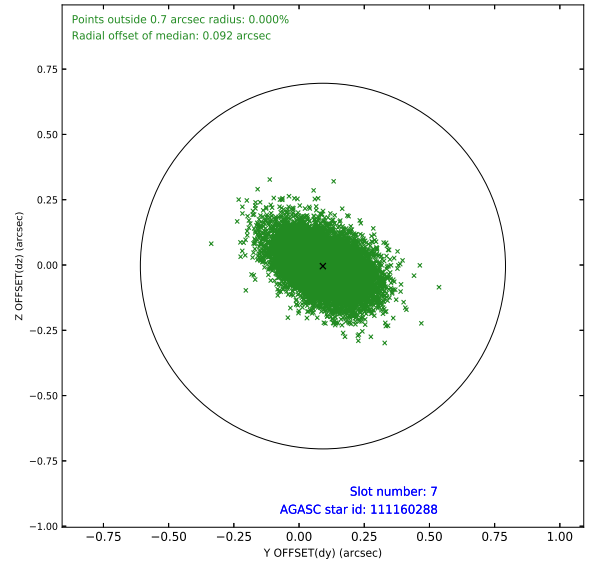
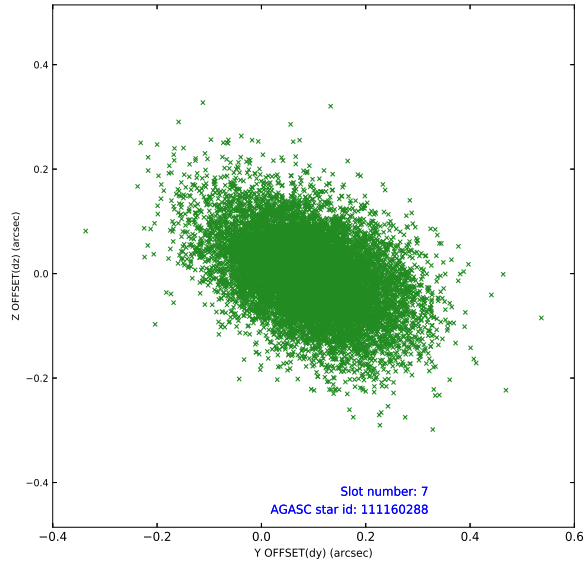
2.4.4 Slot 6



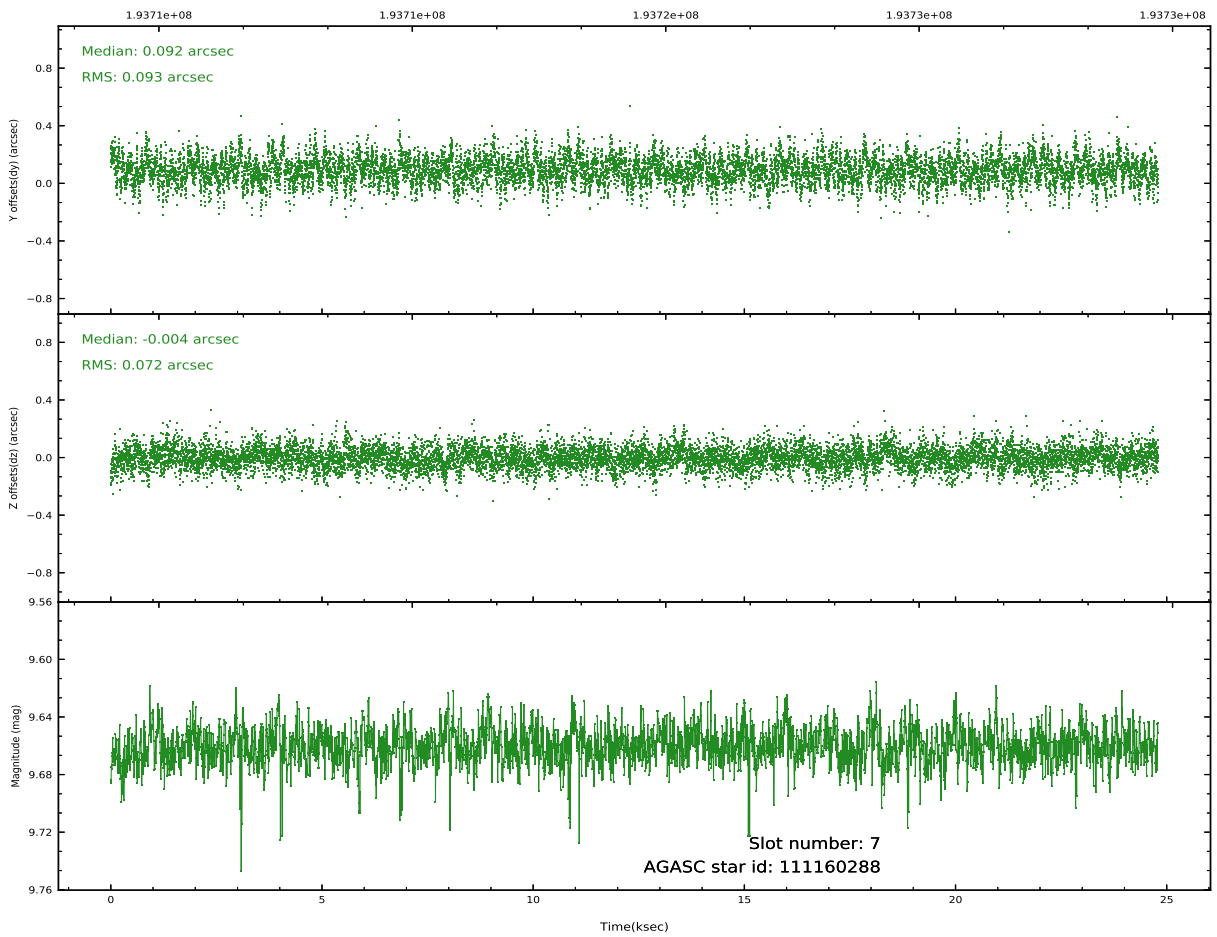
Time (s)



2.4.5 Slot 7

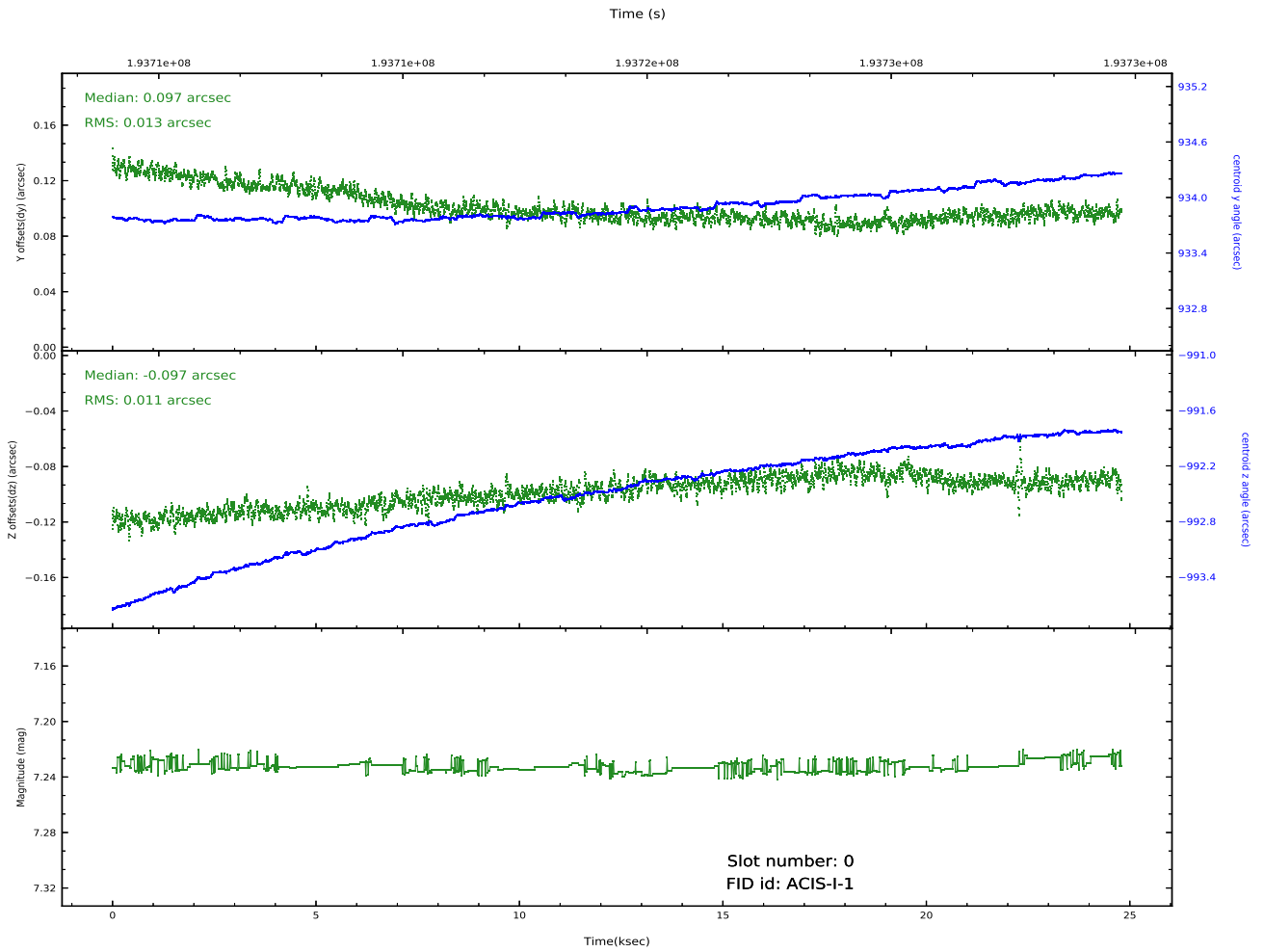
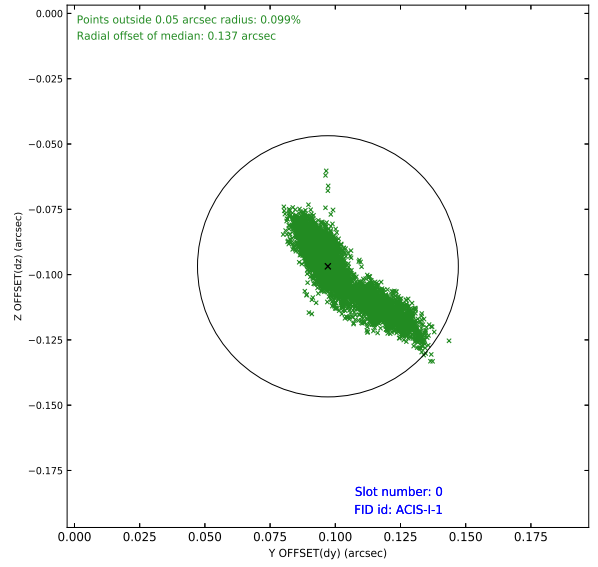
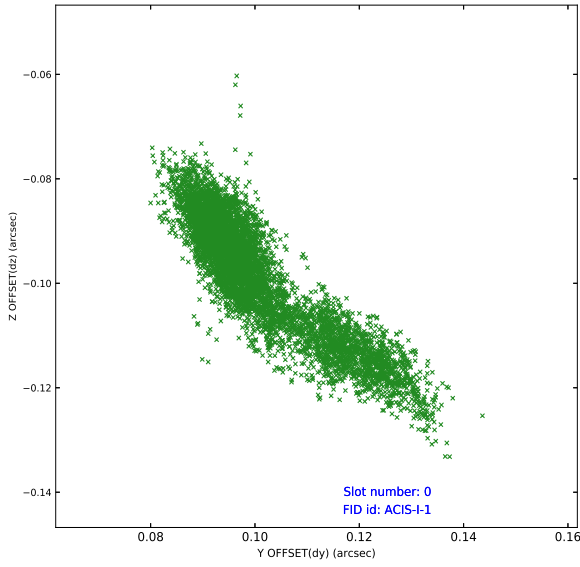


Time (s)

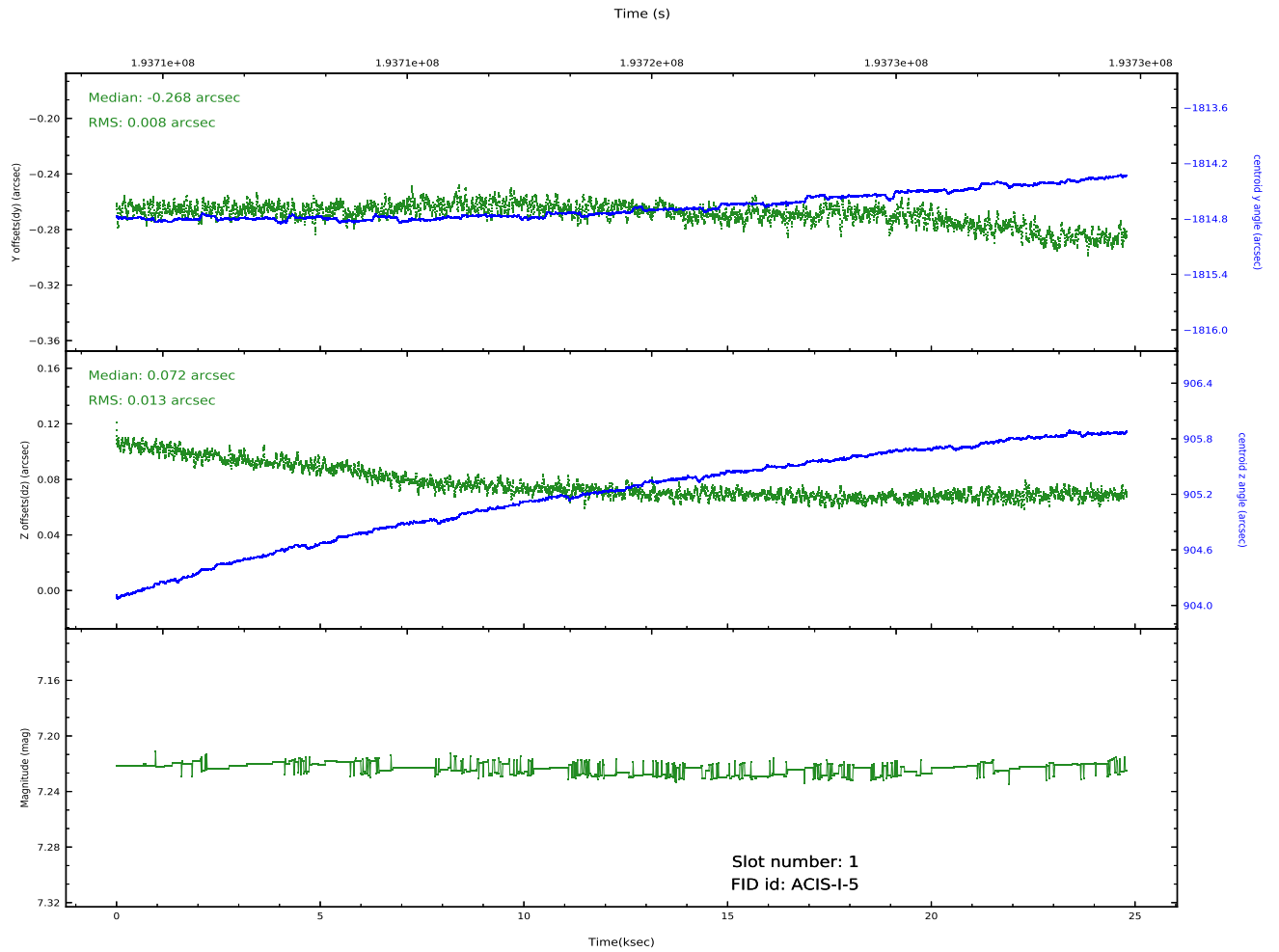
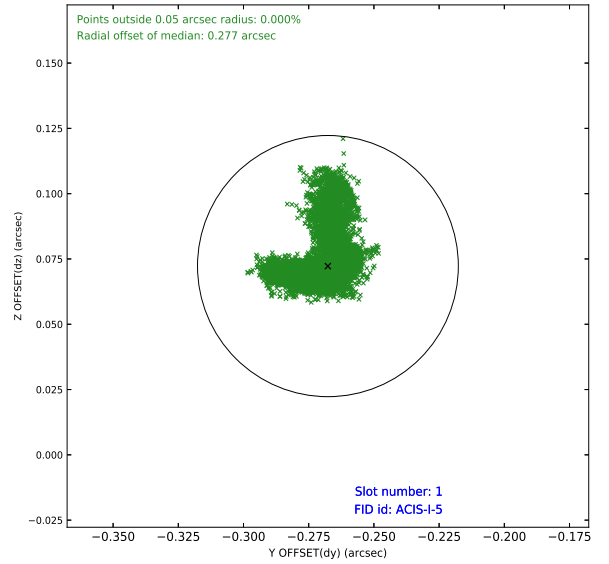
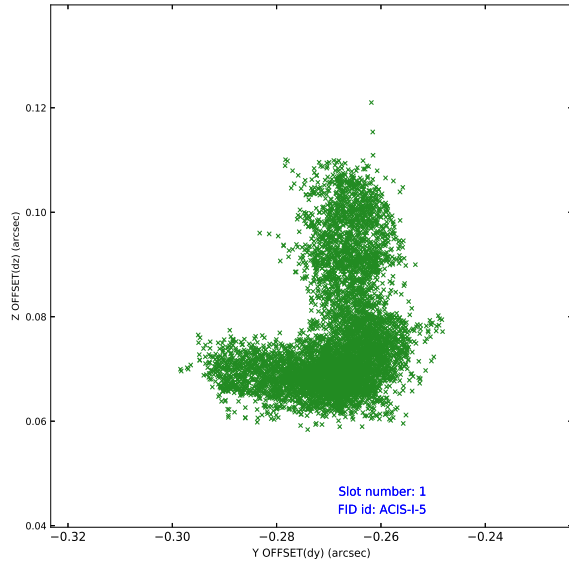


2.5 FID Slots

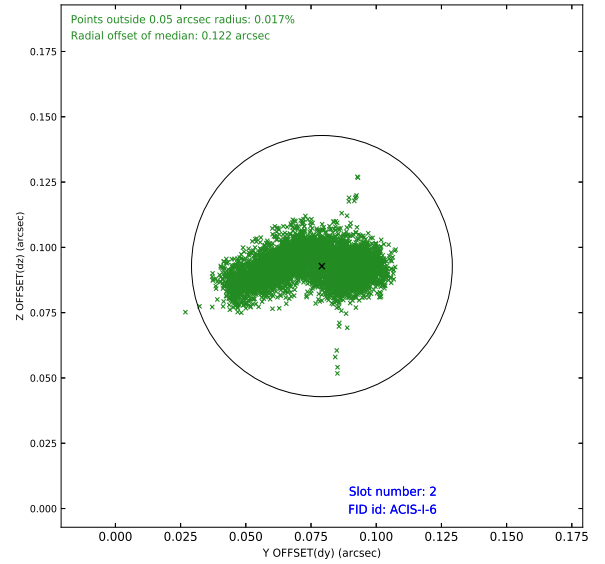
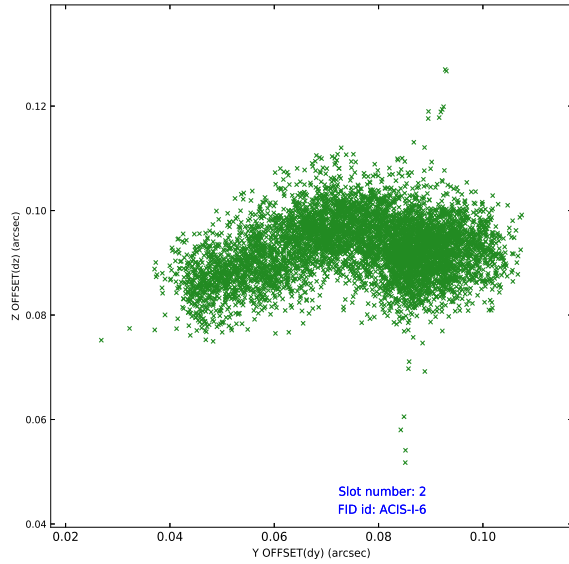
2.5.1 Slot 0



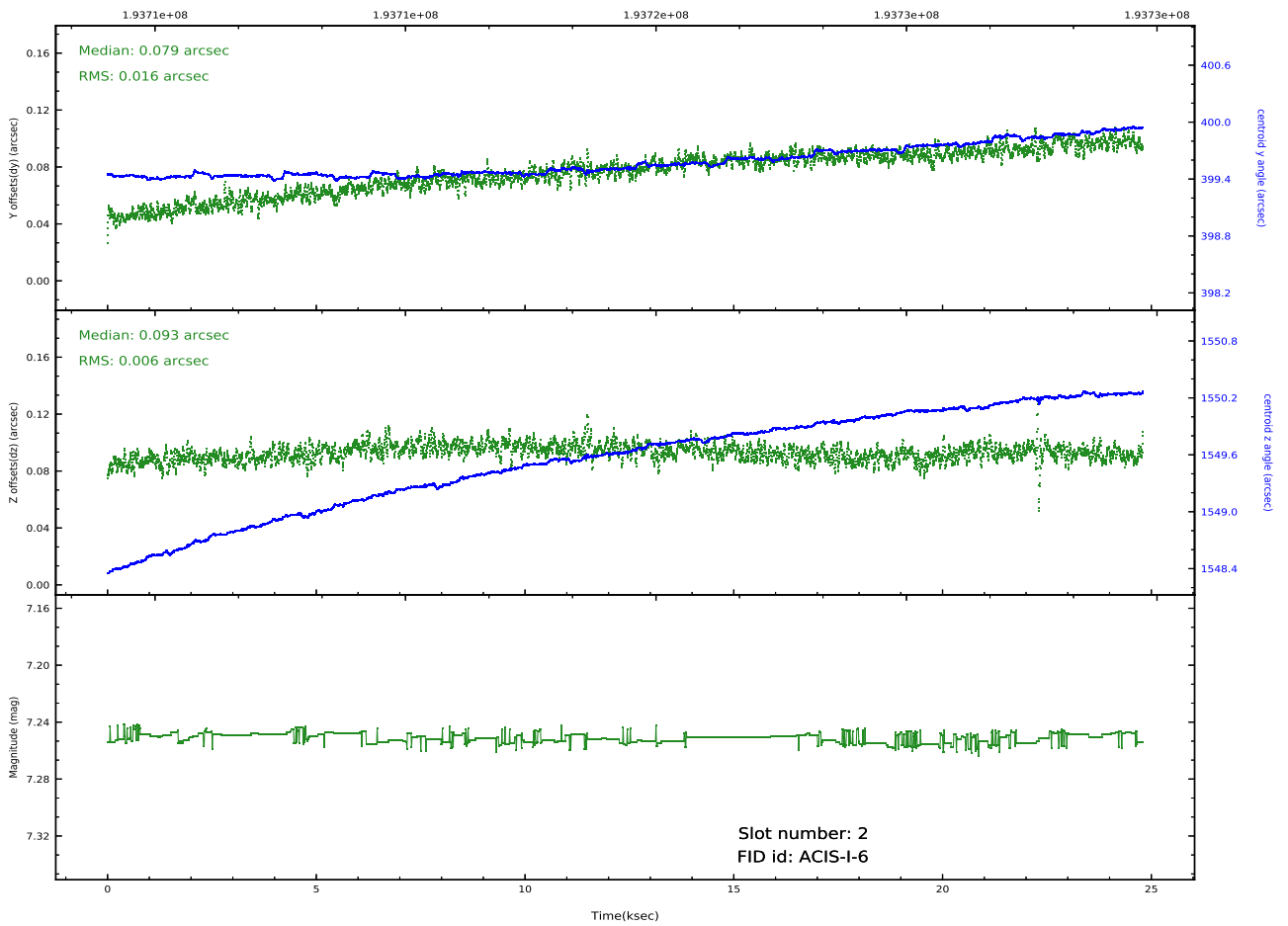
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.79

A.2 Comments