

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7234 - L2 Version 3
Chandra X-Ray Center

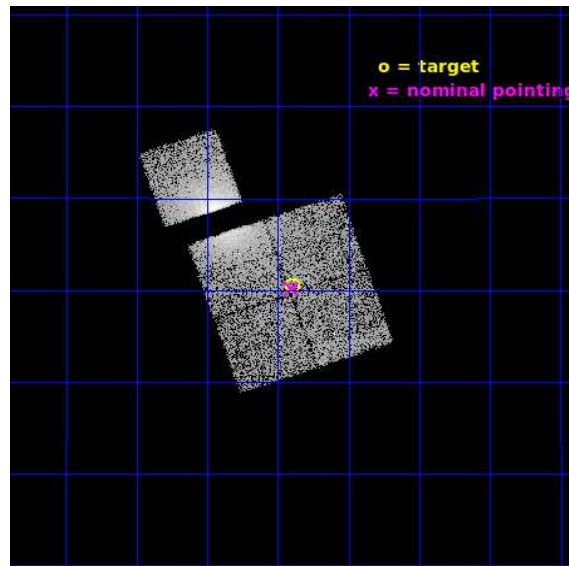
L2 Processing Date : Oct 11 2020

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1 Front

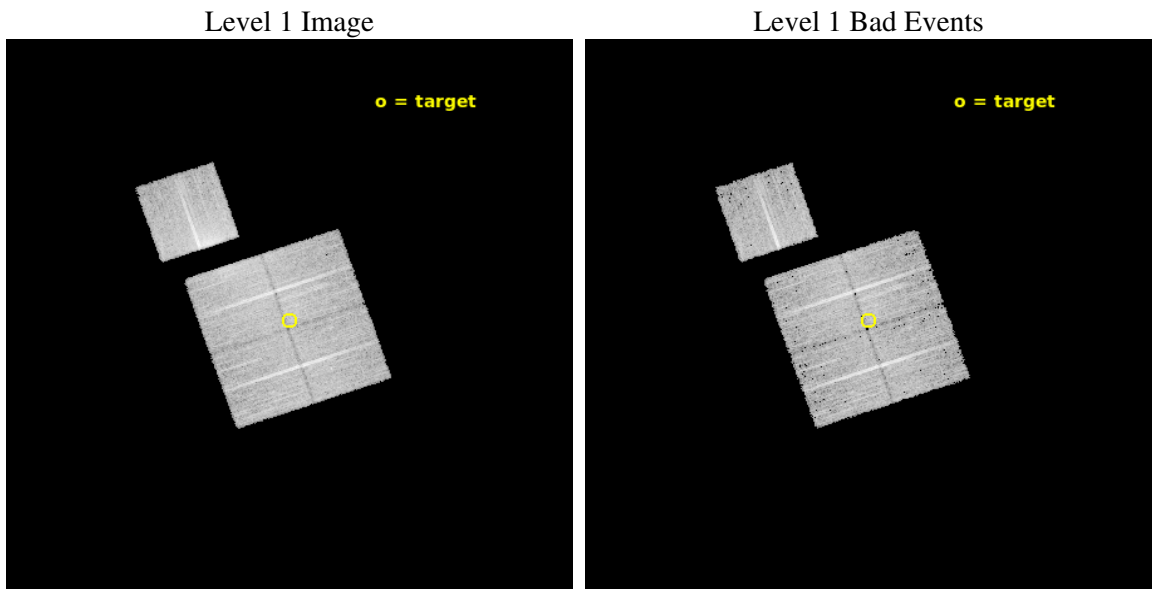
seq_num	800562	Sequence number
obs_id	7234	Observation id
title	Temperature profiles of relaxed galaxy clusters	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	A478	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	63.225	Observer's specified target RA [deg]
dec_targ	10.341667	Observer's specified target Dec [deg]
ra_nom	63.225302441173	Nominal RA [deg]
dec_nom	10.336127046771	Nominal Dec [deg]
roll_nom	341.10697622569	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8974.4590024054	Sum of GTIs [s]
livetime	8857.2010886384	Livetime [s]
ontime0	8974.459002465	Sum of GTIs [s]
ontime1	8977.5999827087	Sum of GTIs [s]
ontime2	8974.4589825273	Sum of GTIs [s]
ontime3	8974.4590024054	Sum of GTIs [s]
ontime6	8977.5999827087	Sum of GTIs [s]
l2events	43040	Number of level 2 events



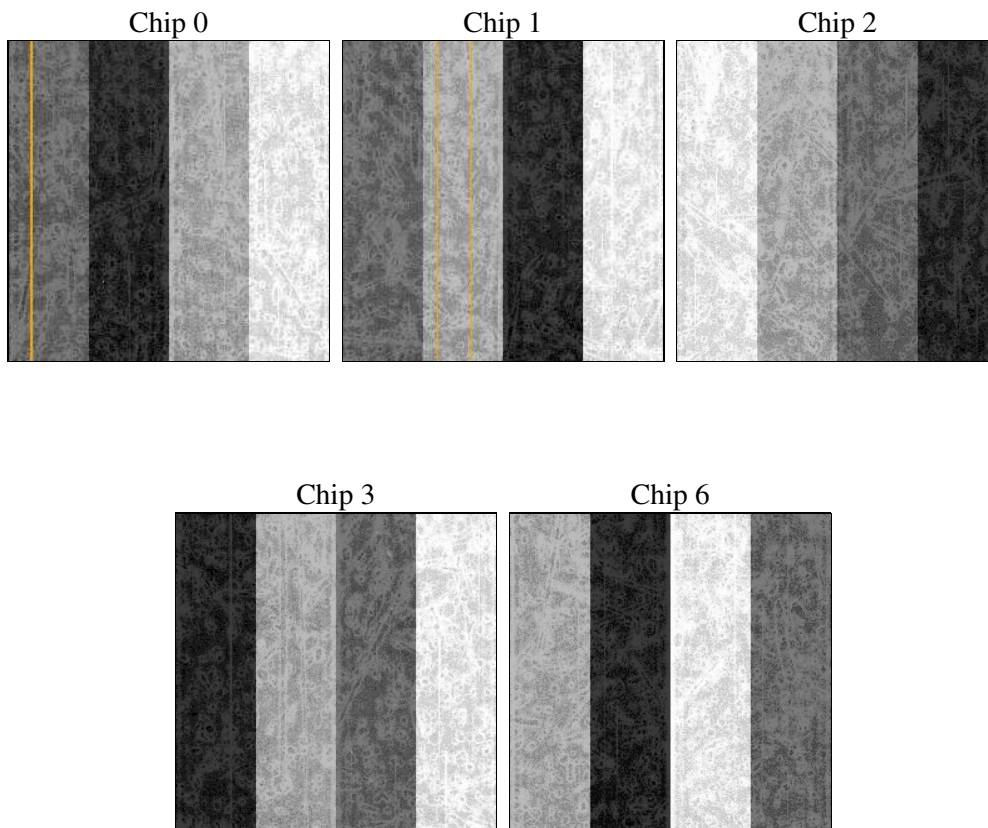
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8800.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8974.4590024054	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	8974.459002465	Sum of GTIs [s]
date	2020-10-12T02:40:18	Date and time of file creation	ontime1	8977.5999827087	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8974.4589825273	Sum of GTIs [s]
			ontime3	8974.4590024054	Sum of GTIs [s]
			ontime6	8977.5999827087	Sum of GTIs [s]
			l1events	329204	Number of level 1 events

2.1.4 Events

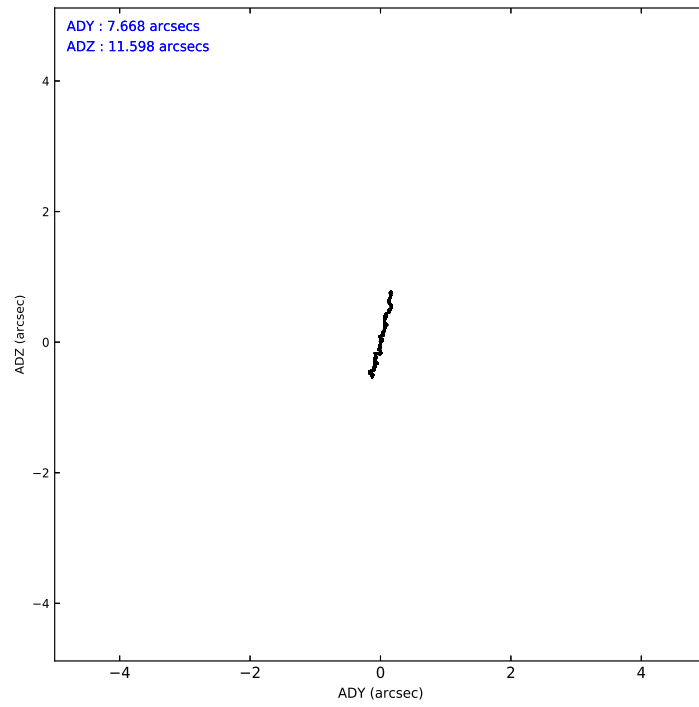
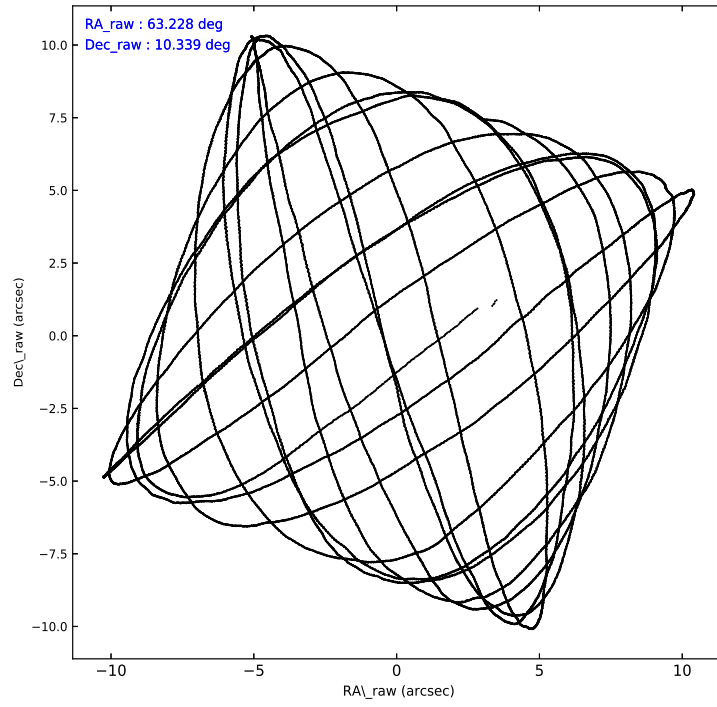
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	60891	59578	71815	61997	74923
rejected events	54762	52805	59426	55628	57131
rejected %	89%	88%	82%	89%	76%

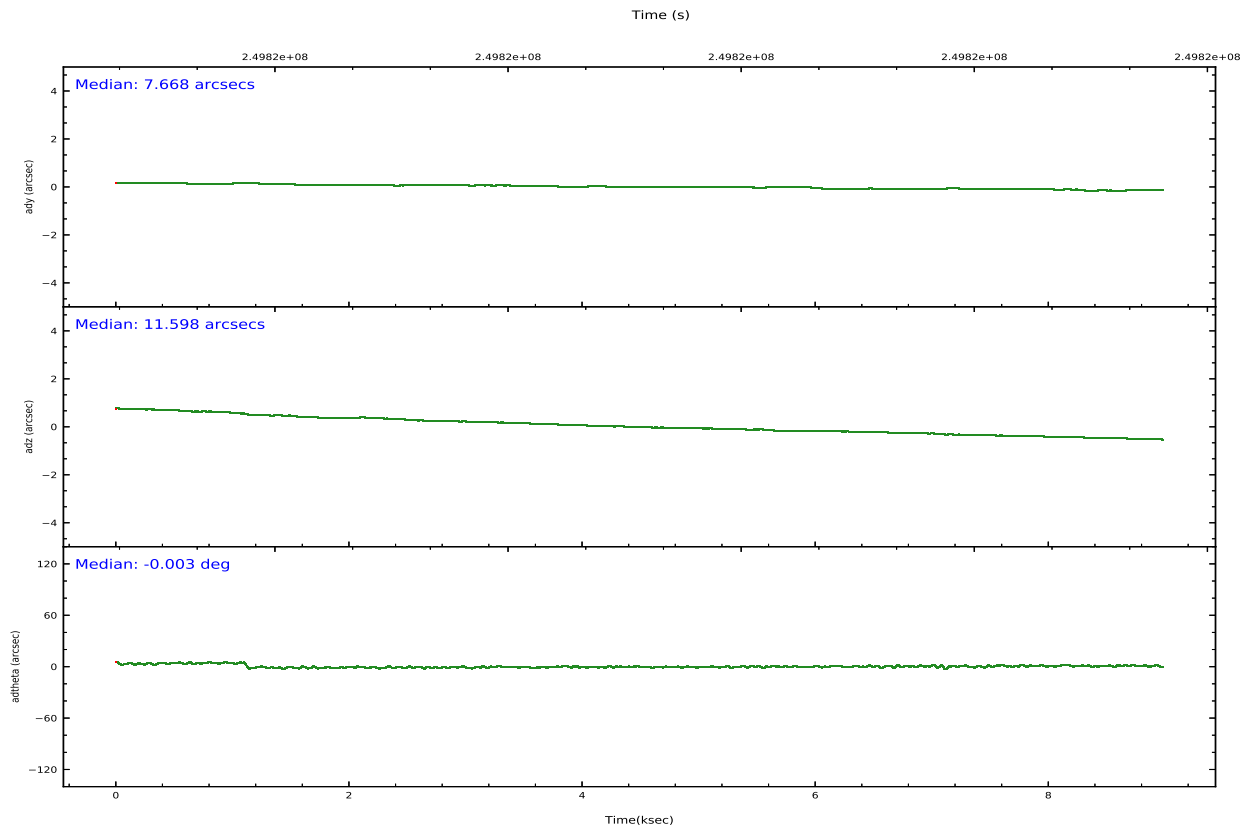
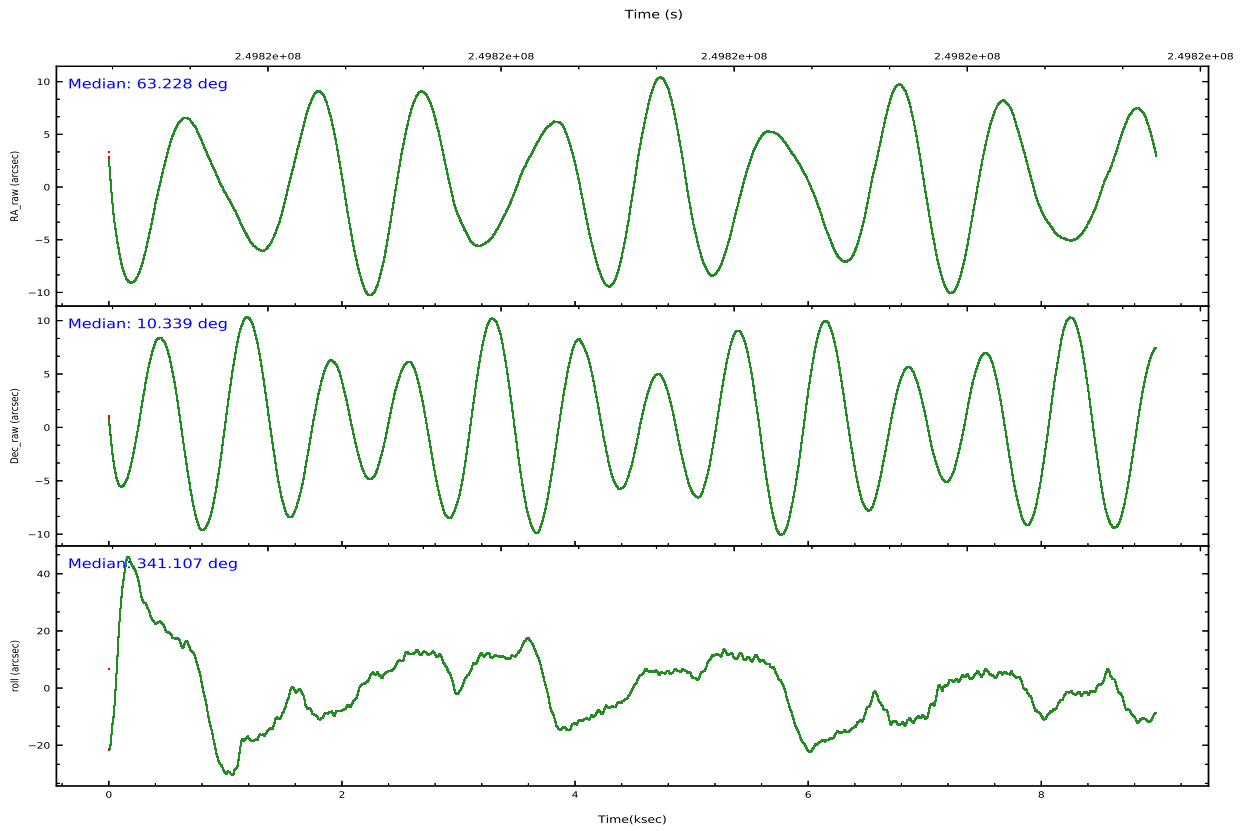
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2216	2704	7520	2694	11712
	3%	4%	10%	4%	15%
grade 1 events	40	16	50	38	88
	0%	0%	0%	0%	0%
grade 2 events	1548	1529	2189	1363	2609
	2%	2%	3%	2%	3%
grade 3 events	721	783	855	741	1127
	1%	1%	1%	1%	1%
grade 4 events	690	773	896	699	1145
	1%	1%	1%	1%	1%
grade 5 events	2127	2365	2019	2495	2567
	3%	3%	2%	4%	3%
grade 6 events	1236	1339	1303	1176	1753
	2%	2%	1%	1%	2%
grade 7 events	52313	50069	56983	52791	53922
	85%	84%	79%	85%	71%

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	63.201219	63.225302441173	Subarray requested	NONE	NONE
[deg] Pointing Dec	10.333193	10.336127046771	Alternating exposures requested	N	N
[deg] Pointing Roll	340.904268	341.10697622569	[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)	249814821.184000	249813552.09346			
Observation start date	2005-12-01T08:59:17	2005-12-01T08:39:12			
[s] Observation end time (MET)	249823621.184000	249824707.68148			
Observation end date	2005-12-01T11:25:57	2005-12-01T11:45:07			
Read mode	TIMED	TIMED			

2.3 Aspect





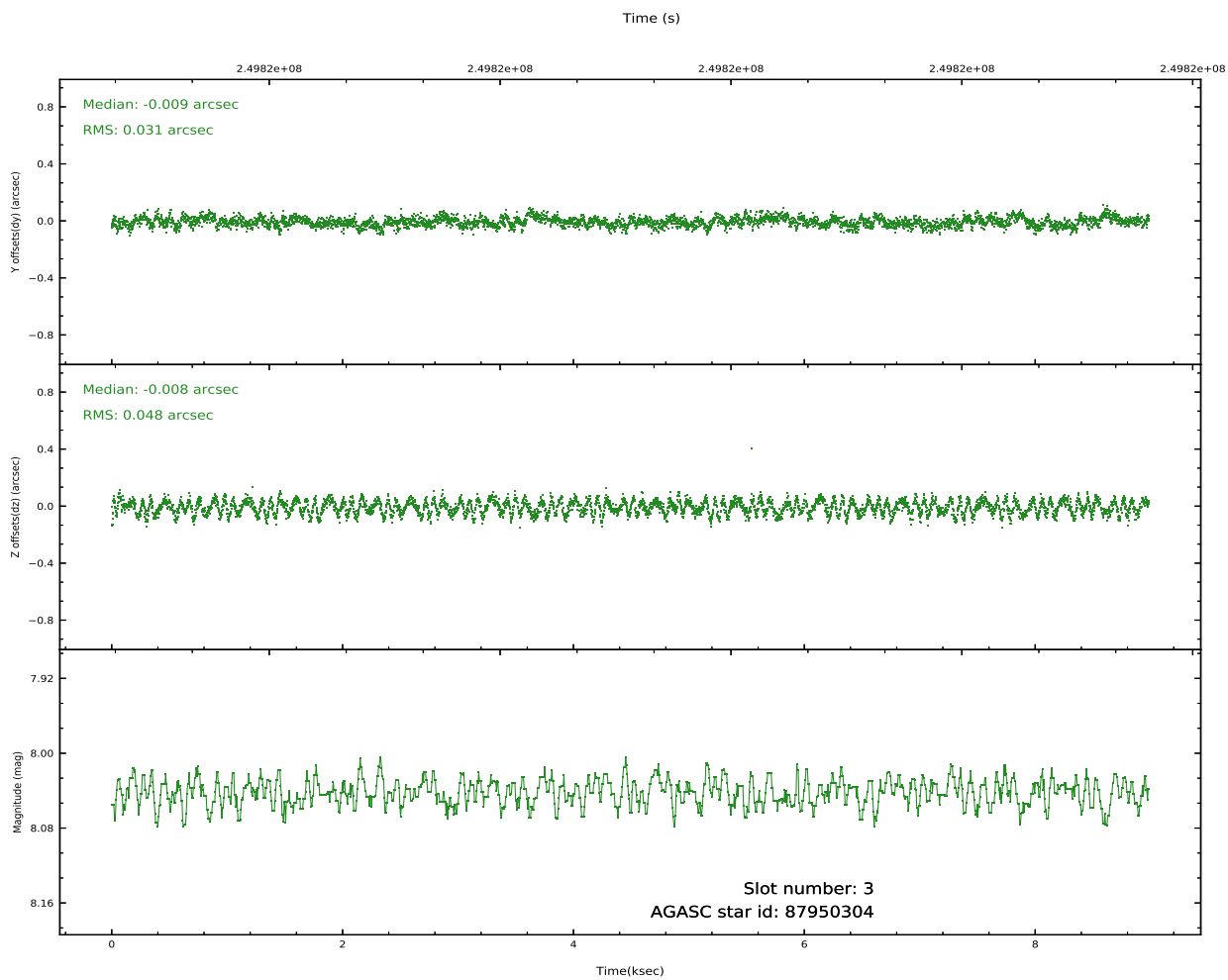
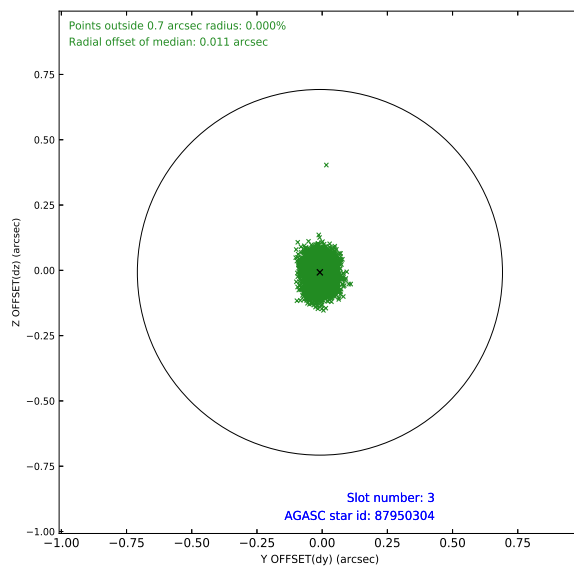
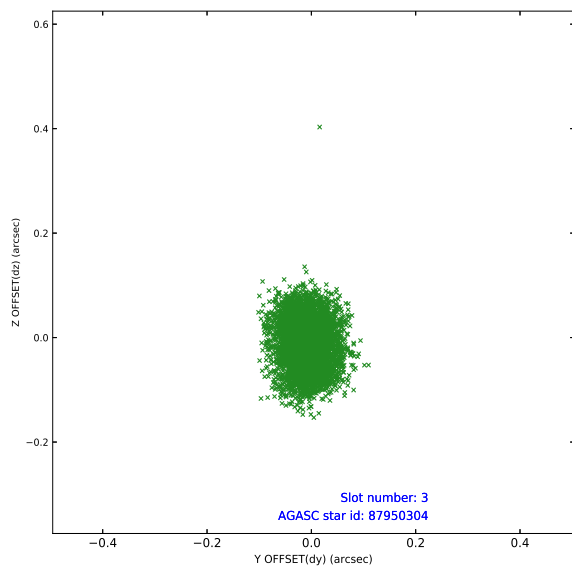
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.14	2192	1.000	-0.124	-0.151	0.019	0.040	0.000000	0.000000	-762.30	-841
1	FID		ACIS-I-4	7.18	2192	1.000	0.234	0.111	0.013	0.022	0.000000	0.000000	2151.82	1064
2	FID		ACIS-I-5	7.22	2192	1.000	-0.210	0.108	0.015	0.029	0.000000	0.000000	-1815.45	1062
3	GUIDE	used	87950304	8.04	4384	1.000	-0.009	-0.008	0.062	0.094	63.753878	10.748130	1357.86	2052
4	GUIDE	used	87951000	7.26	4384	1.000	-0.051	-0.090	0.069	0.102	63.643091	10.701386	1044.02	1765
5	GUIDE	used	87953912	6.67	4384	1.000	0.025	0.043	0.081	0.136	63.394036	10.212467	788.21	-186
6	GUIDE	used	87954016	9.29	4383	1.000	0.036	0.053	0.089	0.144	63.197646	10.607026	-333.98	927
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

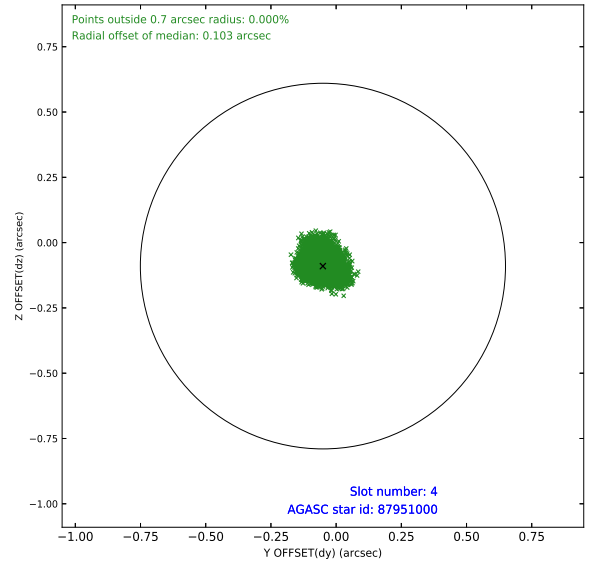
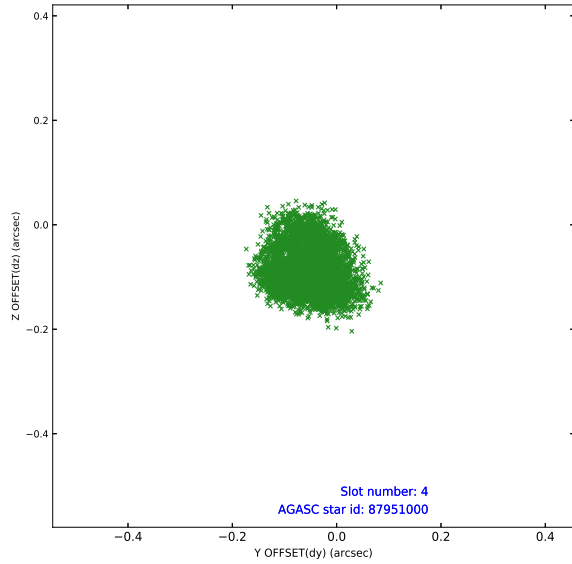
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2.4 Star Slots

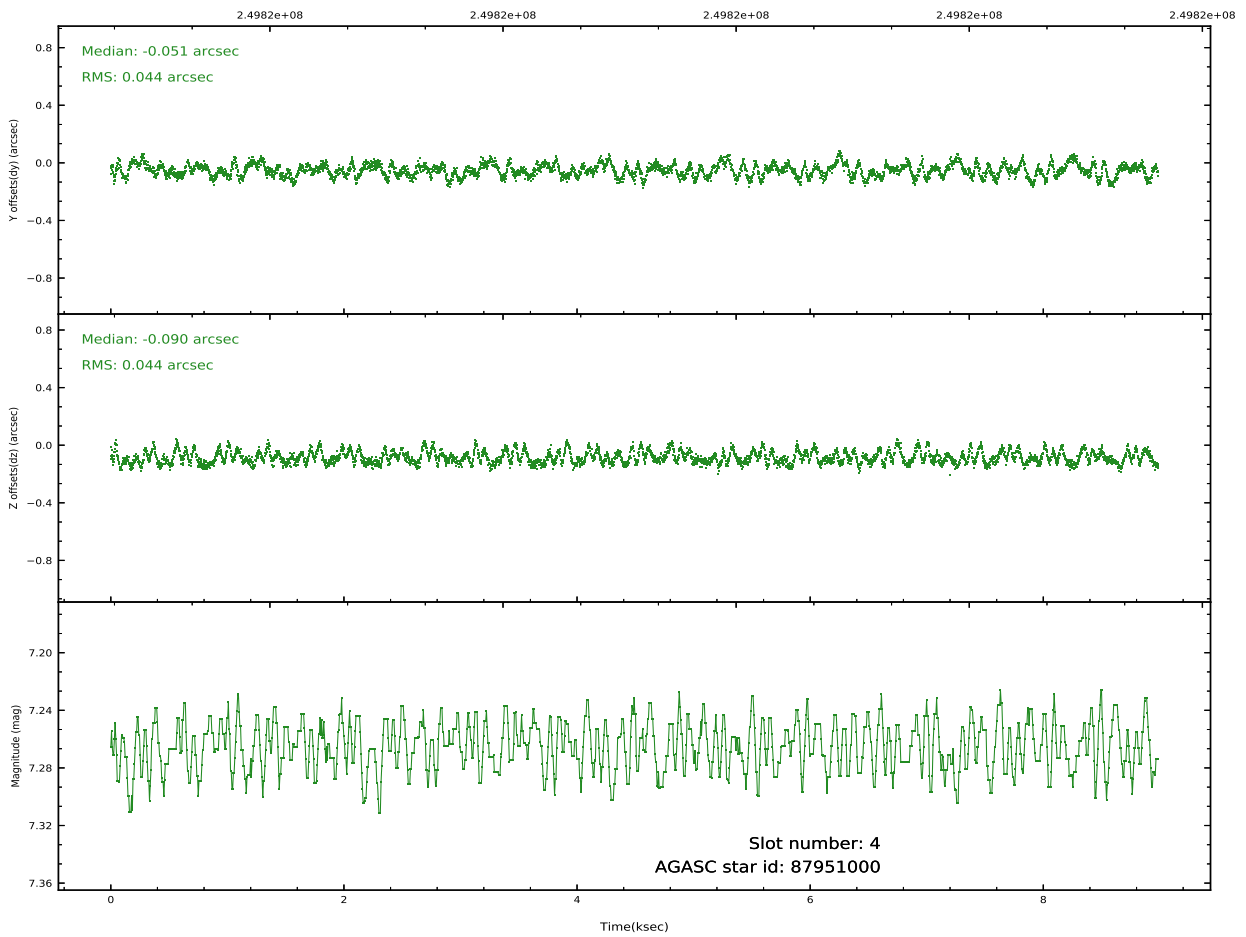
2.4.1 Slot 3



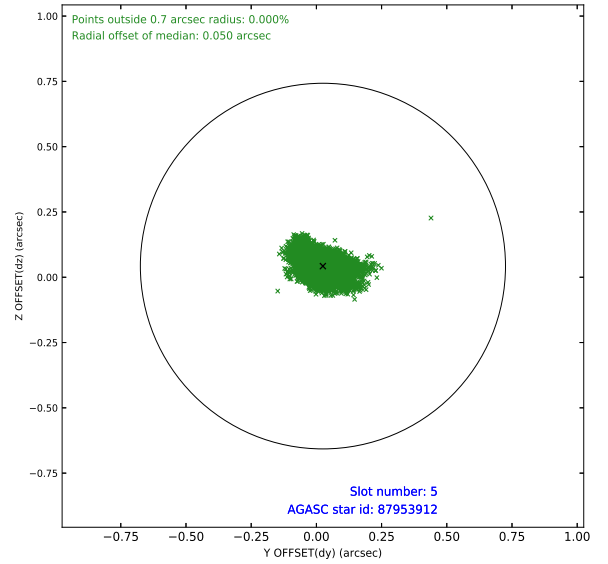
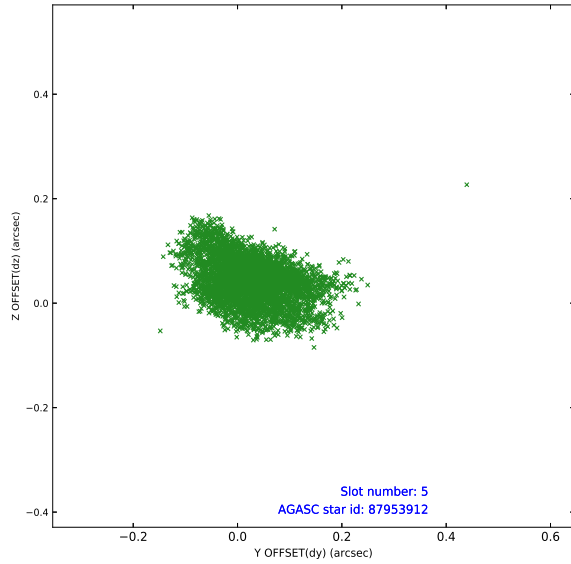
2.4.2 Slot 4



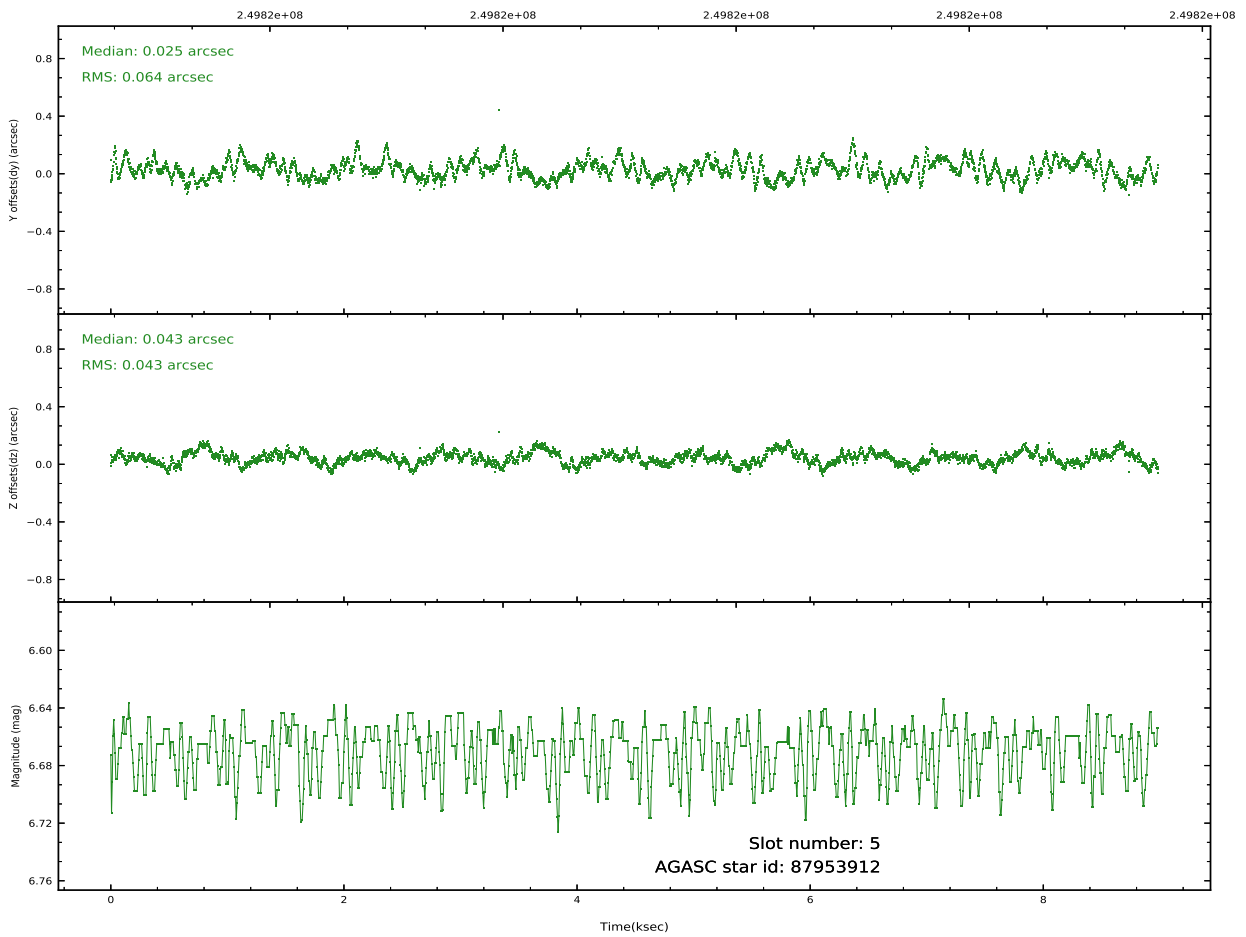
Time (s)



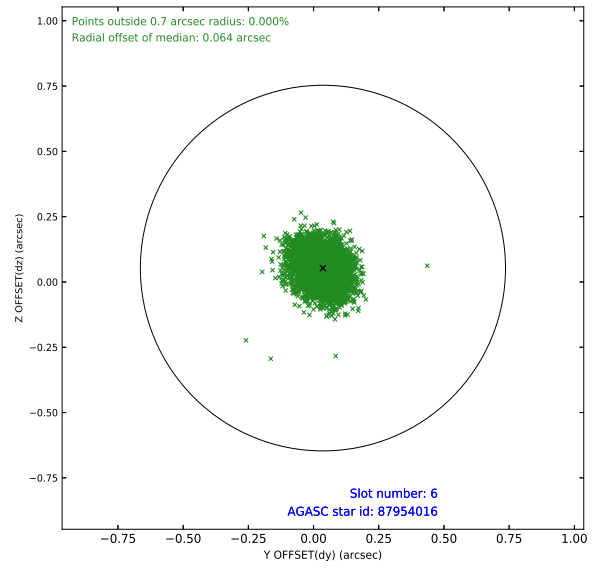
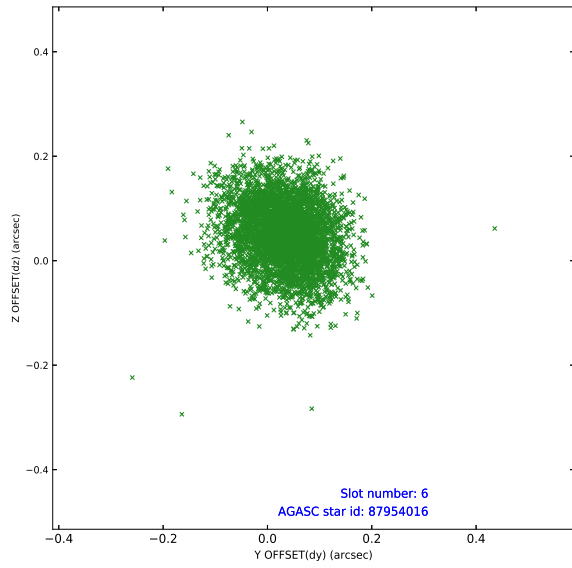
2.4.3 Slot 5



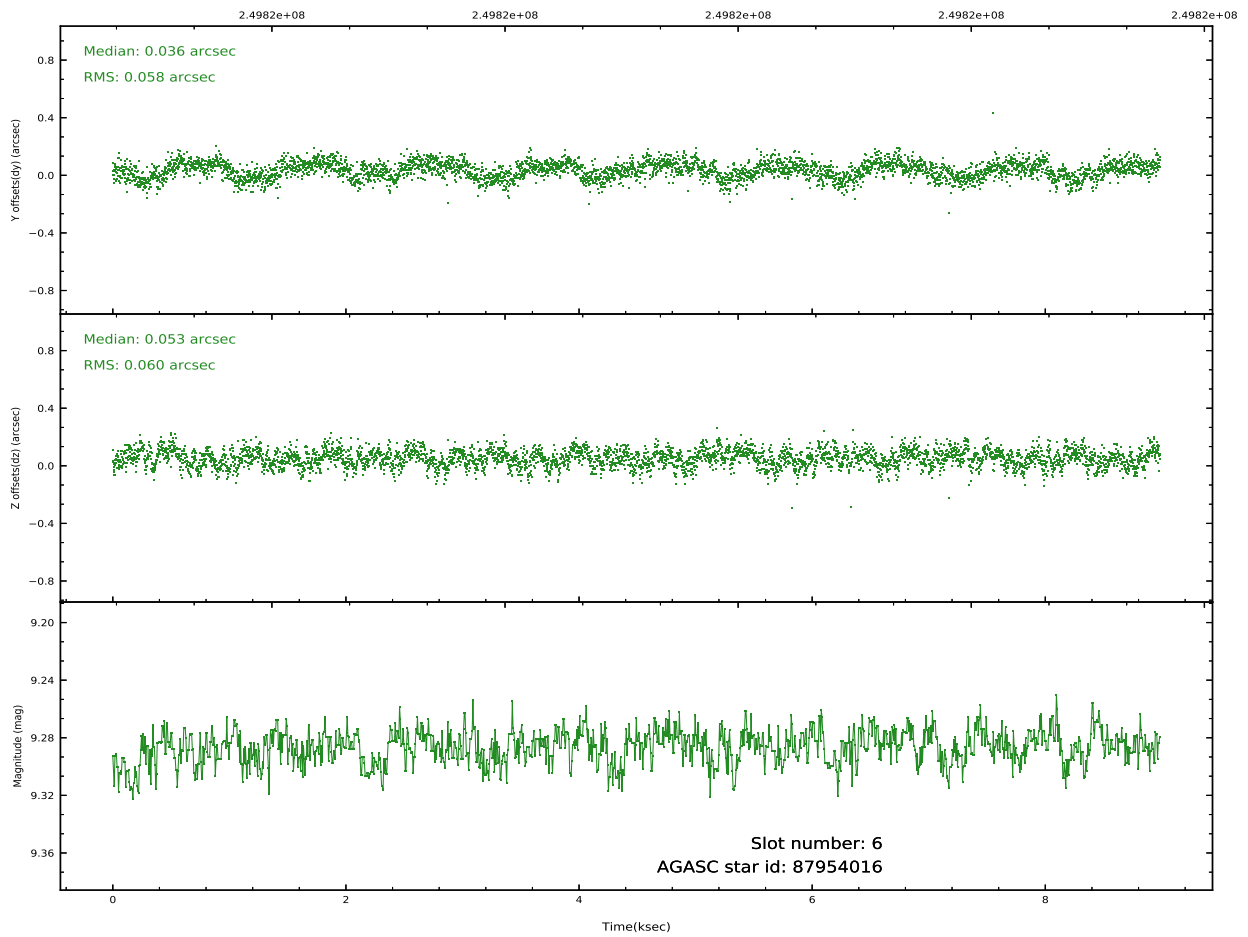
Time (s)



2.4.4 Slot 6

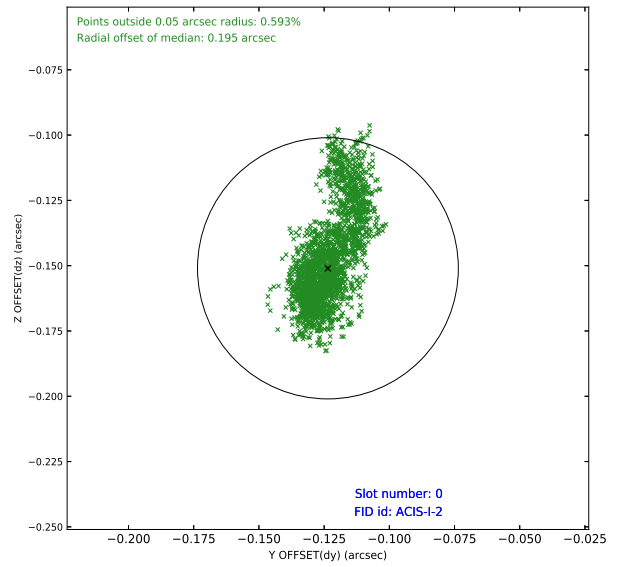
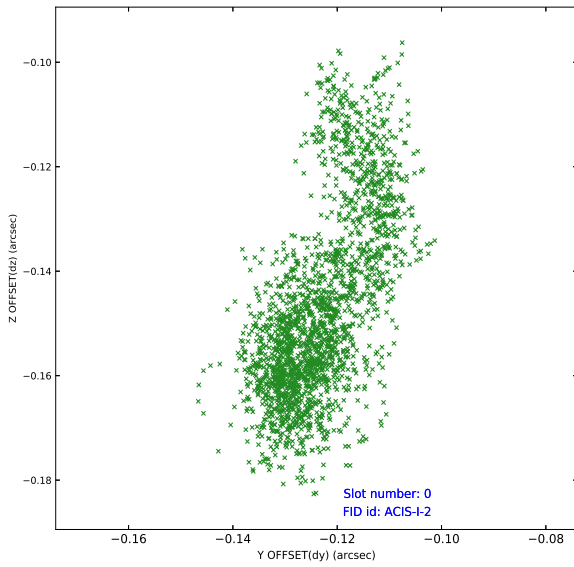


Time (s)

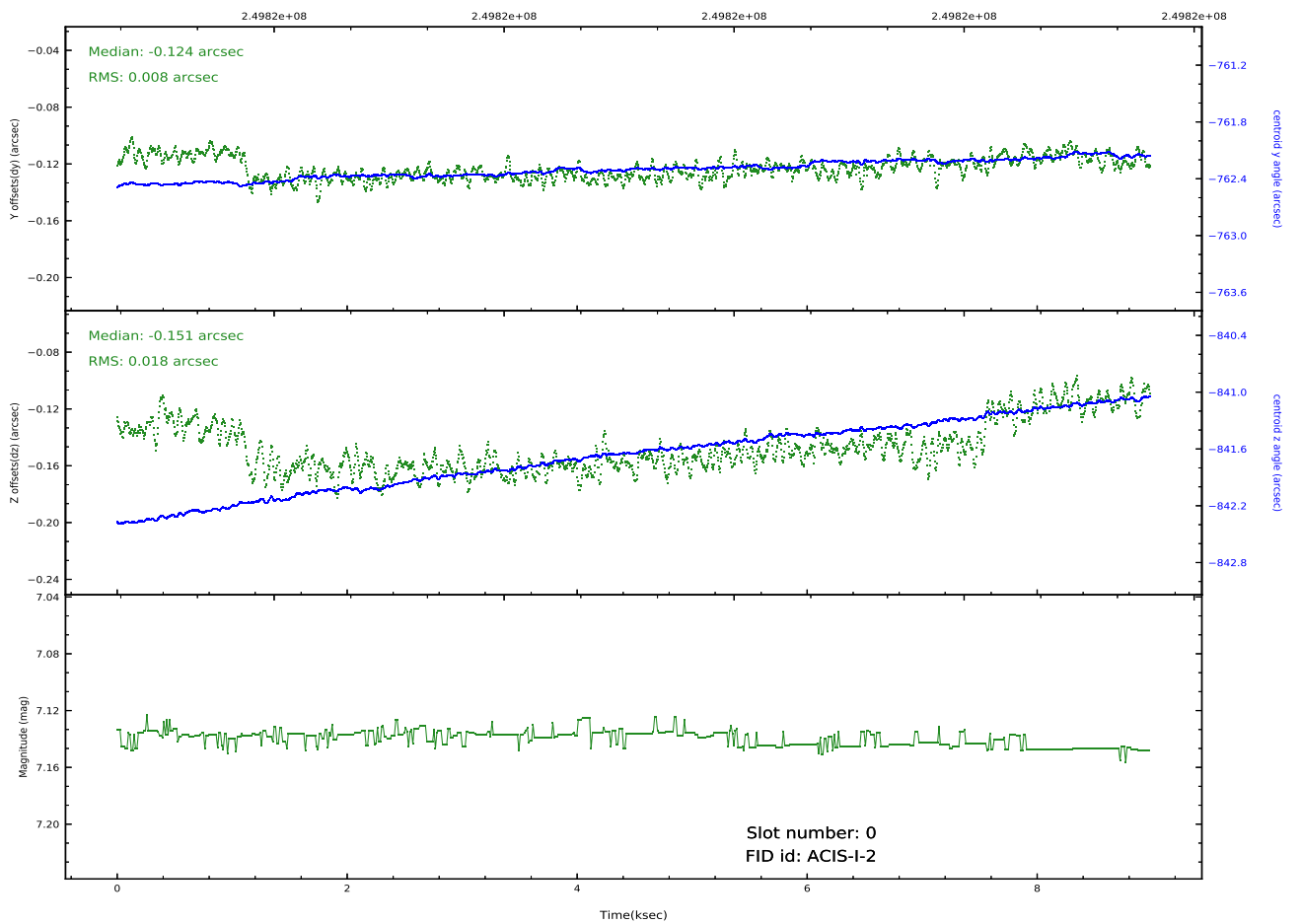


2.5 FID Slots

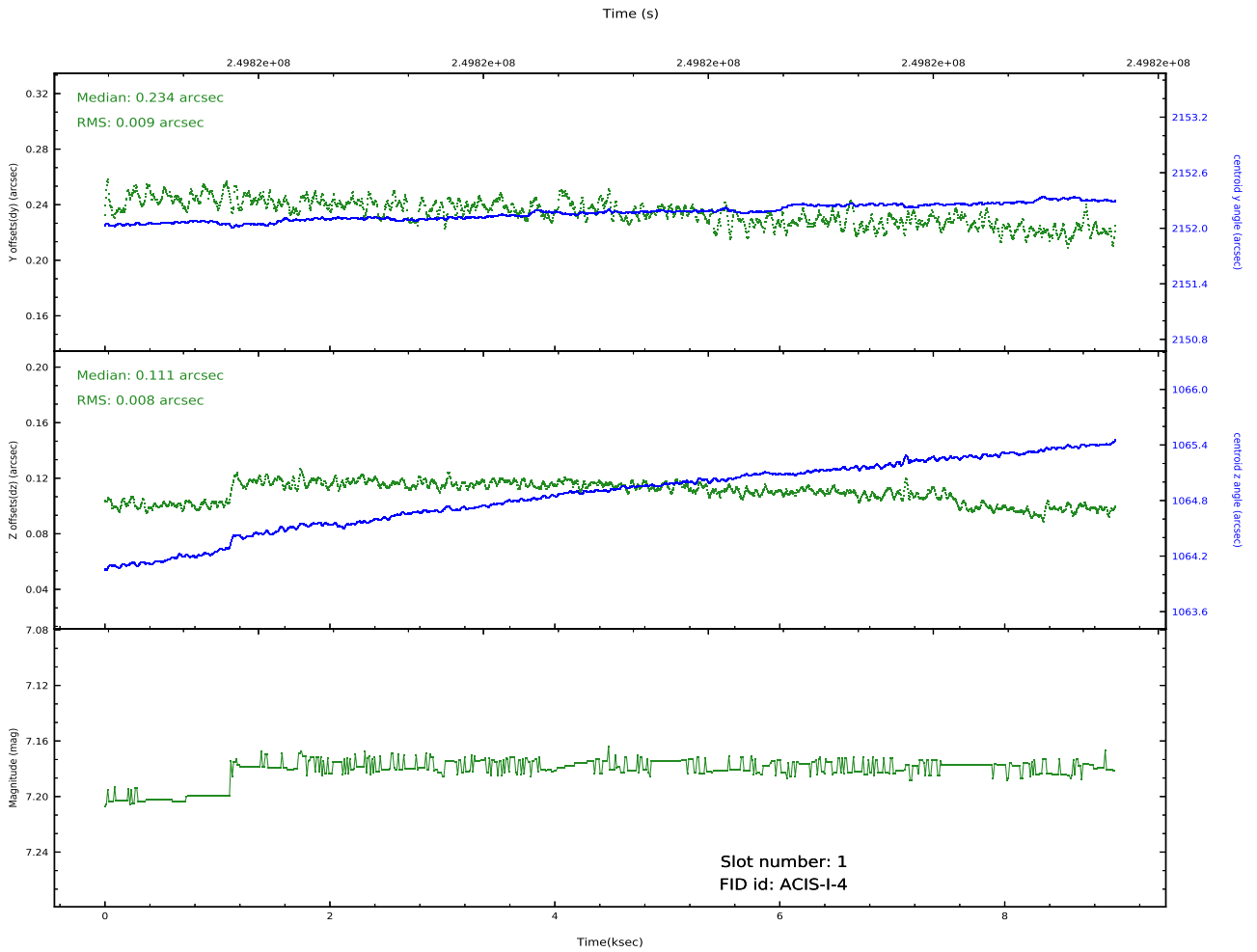
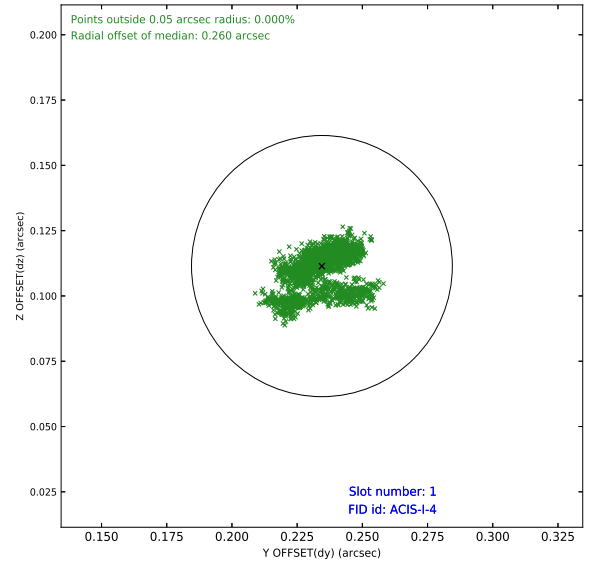
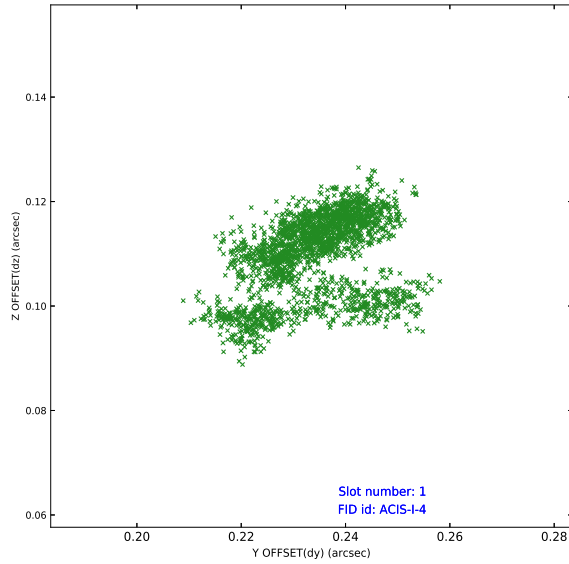
2.5.1 Slot 0



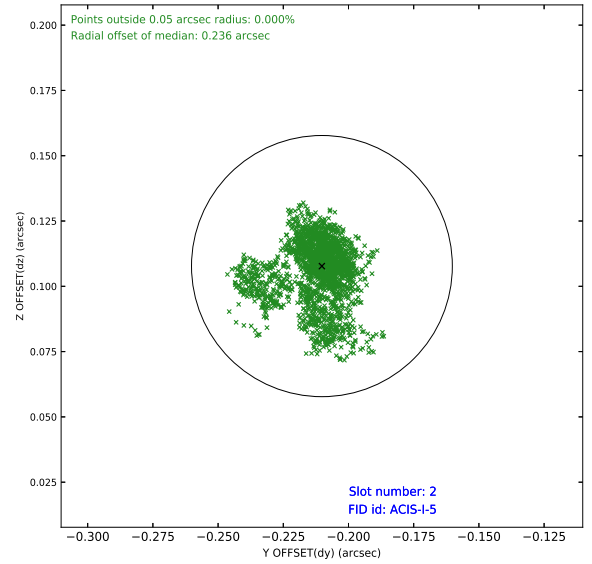
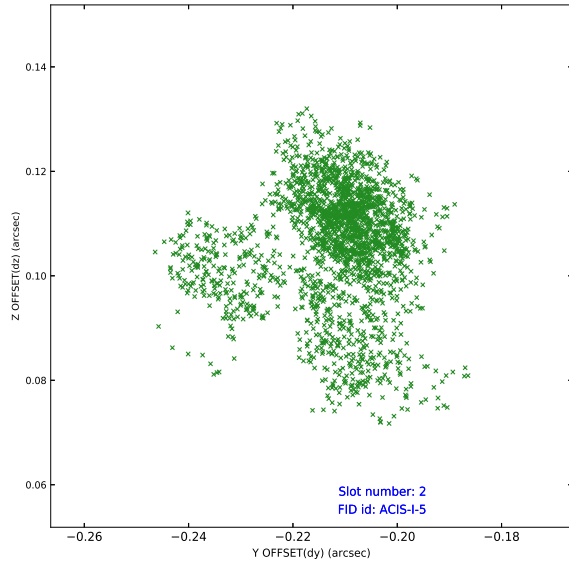
Time (s)



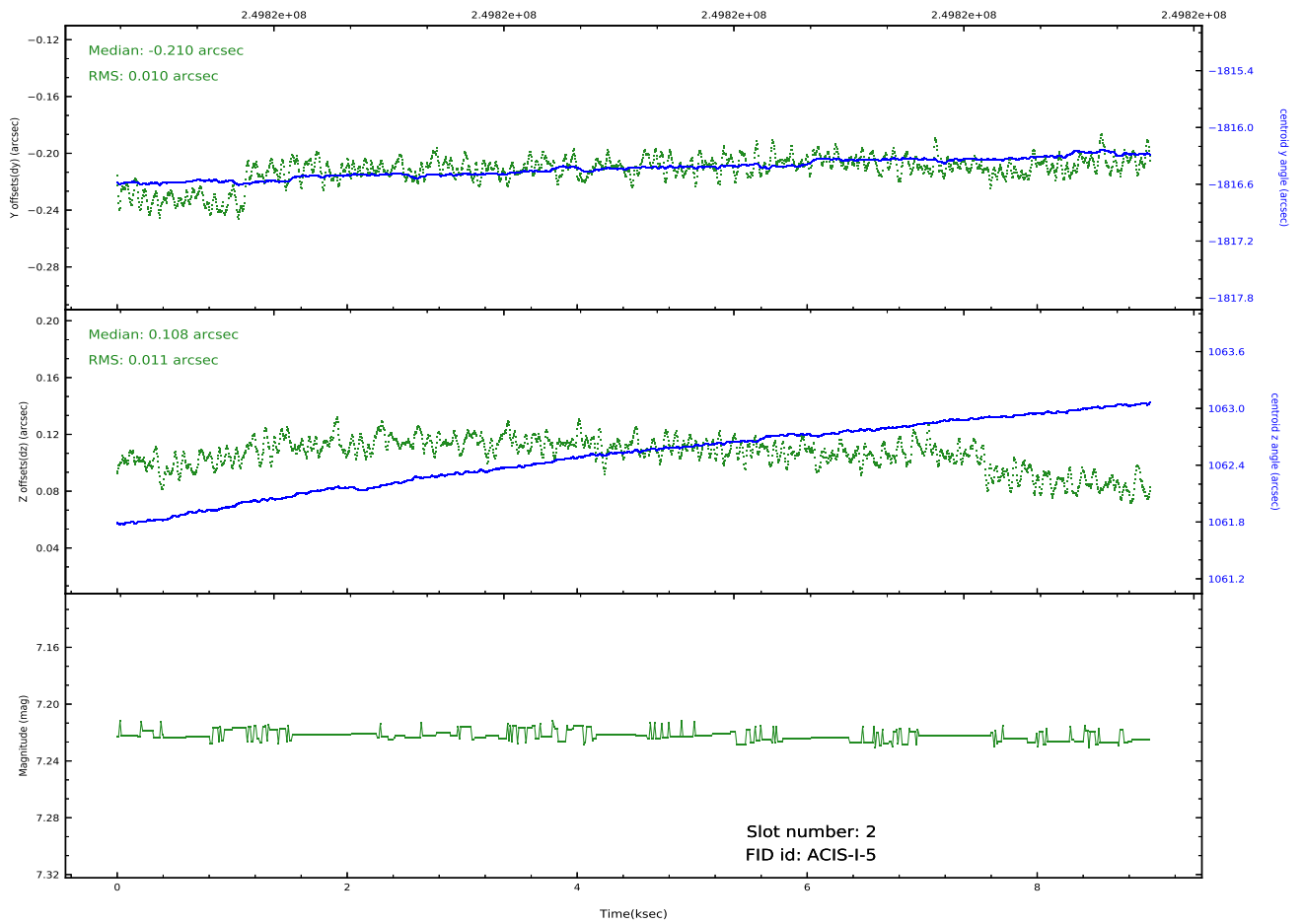
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.974459

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.