

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20651 - L2 Version 3
Chandra X-Ray Center

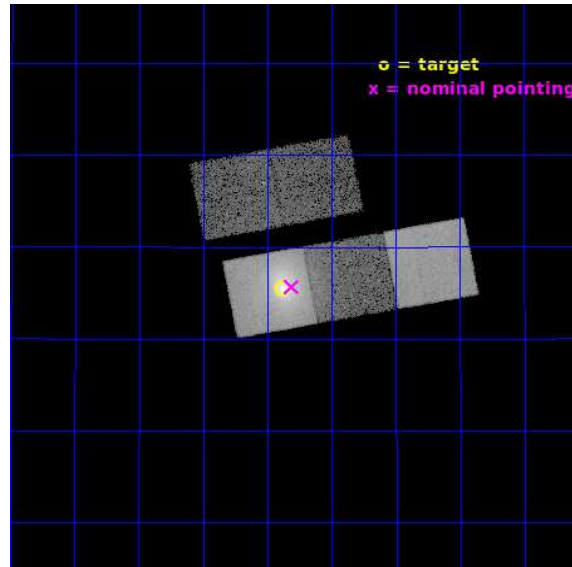
L2 Processing Date : Oct 25 2020

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1 Front

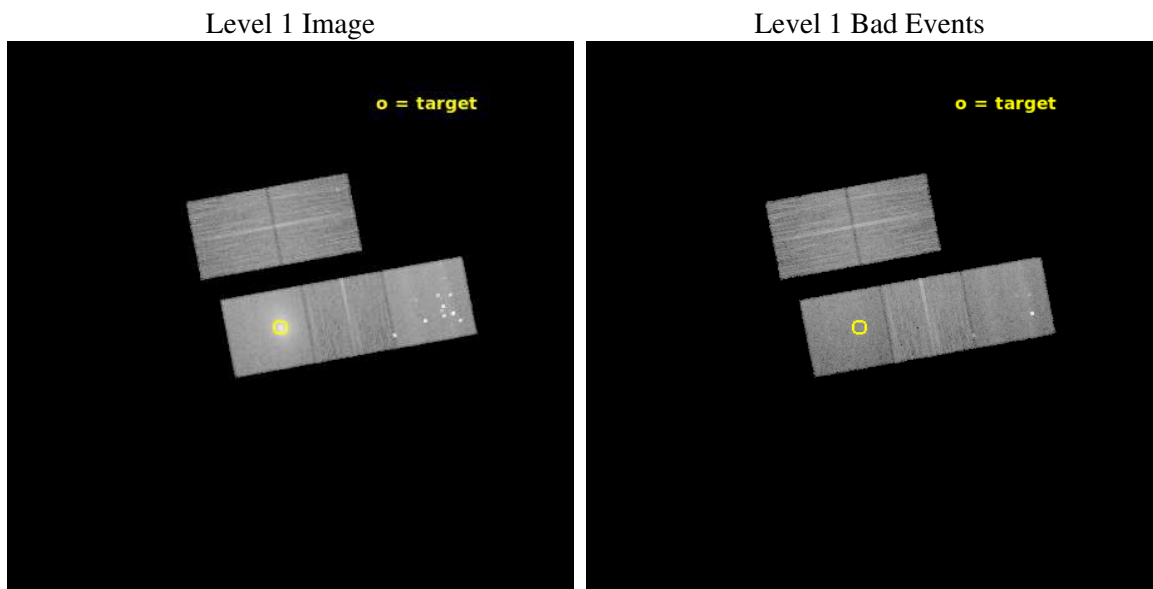
seq_num	890158	Sequence number
obs_id	20651	Observation id
title	AO-19 Calibration Observations of A1795	Proposal title
observer	CXC Calibration	Principal investigator
object	A1795	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219583	Observer's specified target RA [deg]
dec_targ	26.590833	Observer's specified target Dec [deg]
ra_nom	207.20239795187	Nominal RA [deg]
dec_nom	26.594759375315	Nominal Dec [deg]
roll_nom	169.28857830574	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14700.200113177	Sum of GTIs [s]
livetime	14508.131176569	Livetime [s]
ontime2	14697.059052944	Sum of GTIs [s]
ontime3	14700.200113177	Sum of GTIs [s]
ontime5	14700.200113177	Sum of GTIs [s]
ontime6	14697.05904305	Sum of GTIs [s]
ontime7	14700.200113177	Sum of GTIs [s]
l2events	273072	Number of level 2 events



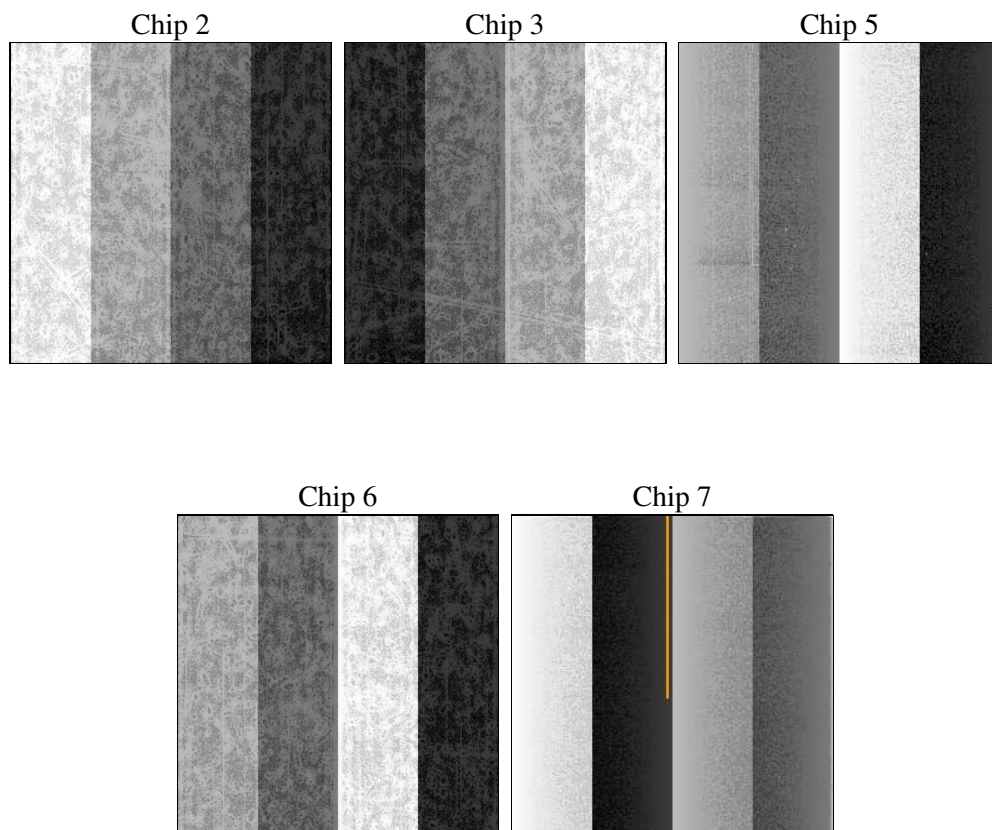
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14651.889000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	14700.200113177	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	14697.059052944	Sum of GTIs [s]
date	2020-10-25T12:15:45	Date and time of file creation	ontime3	14700.200113177	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	14700.200113177	Sum of GTIs [s]
			ontime6	14697.05904305	Sum of GTIs [s]
			ontime7	14700.200113177	Sum of GTIs [s]
			l1events	801201	Number of level 1 events

2.1.4 Events

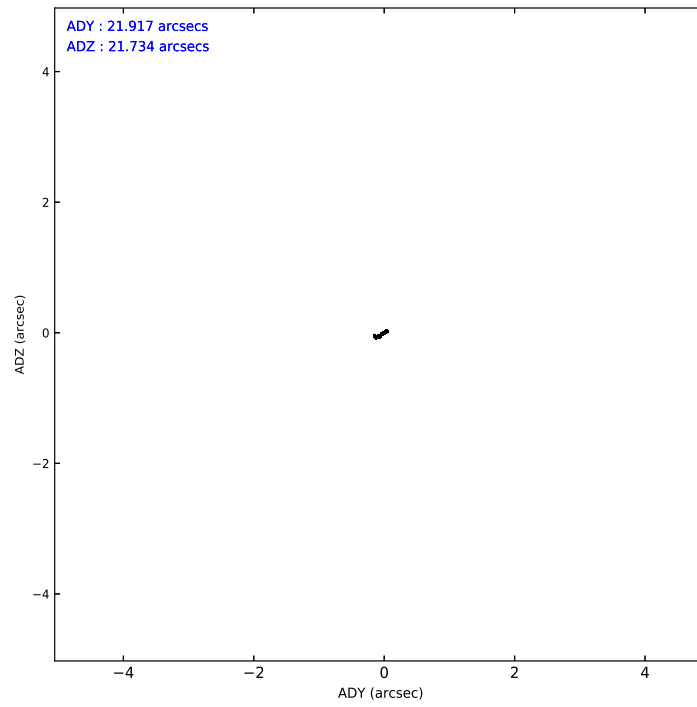
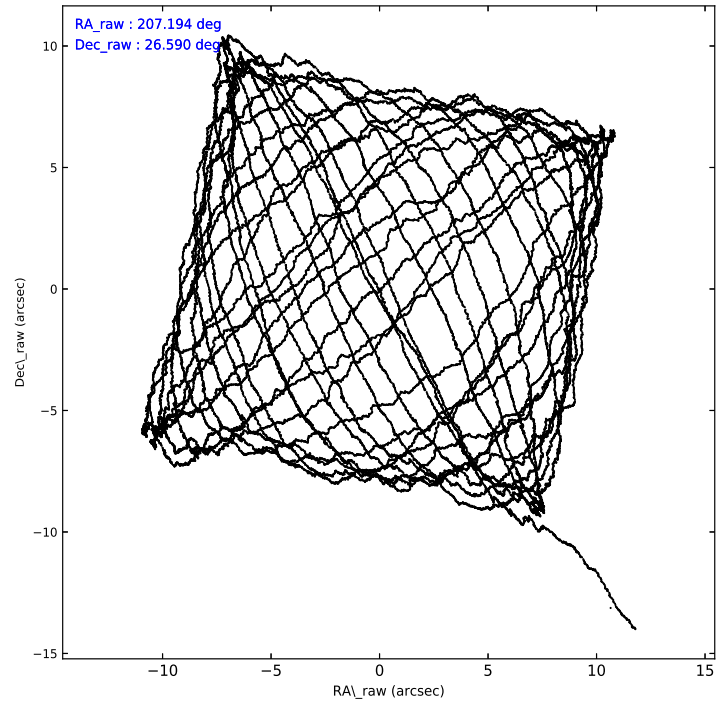
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	115748	113490	205720	123470	242773
rejected events	103704	101516	99429	105490	81716
rejected %	89%	89%	48%	85%	33%

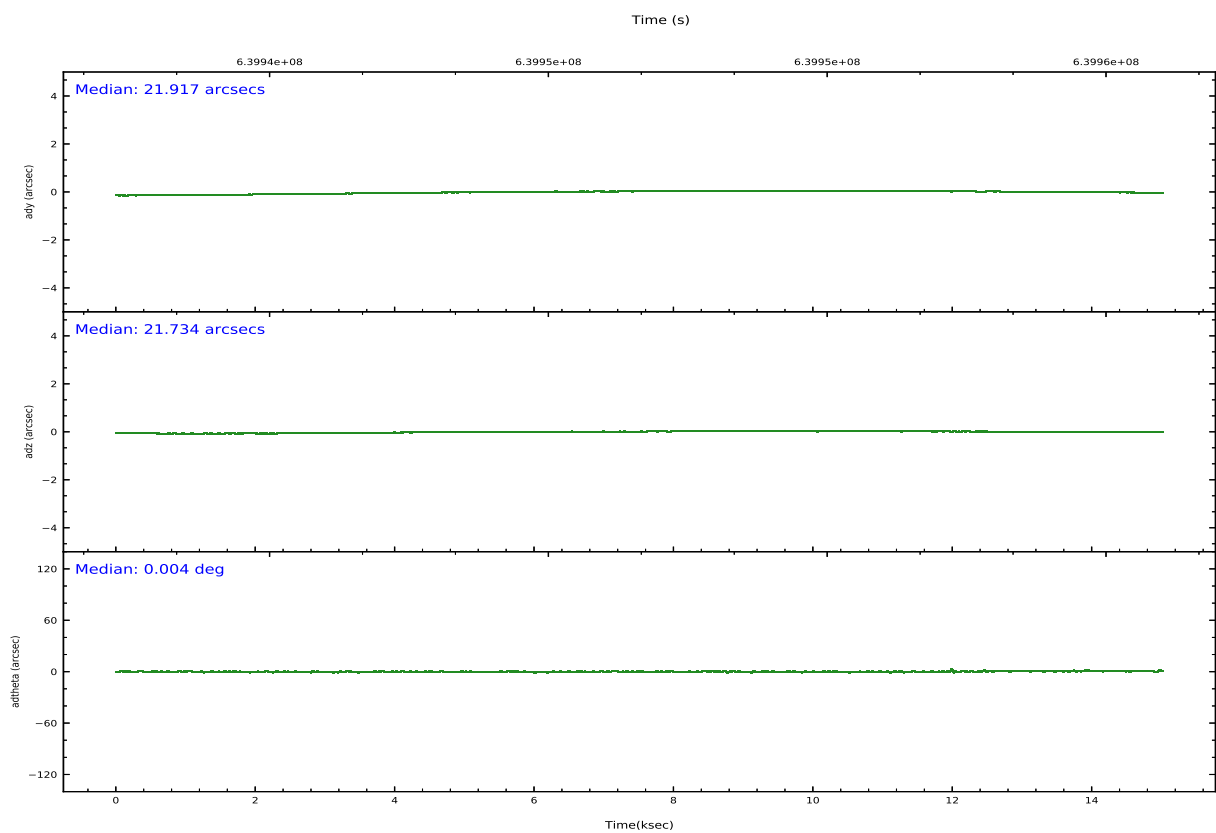
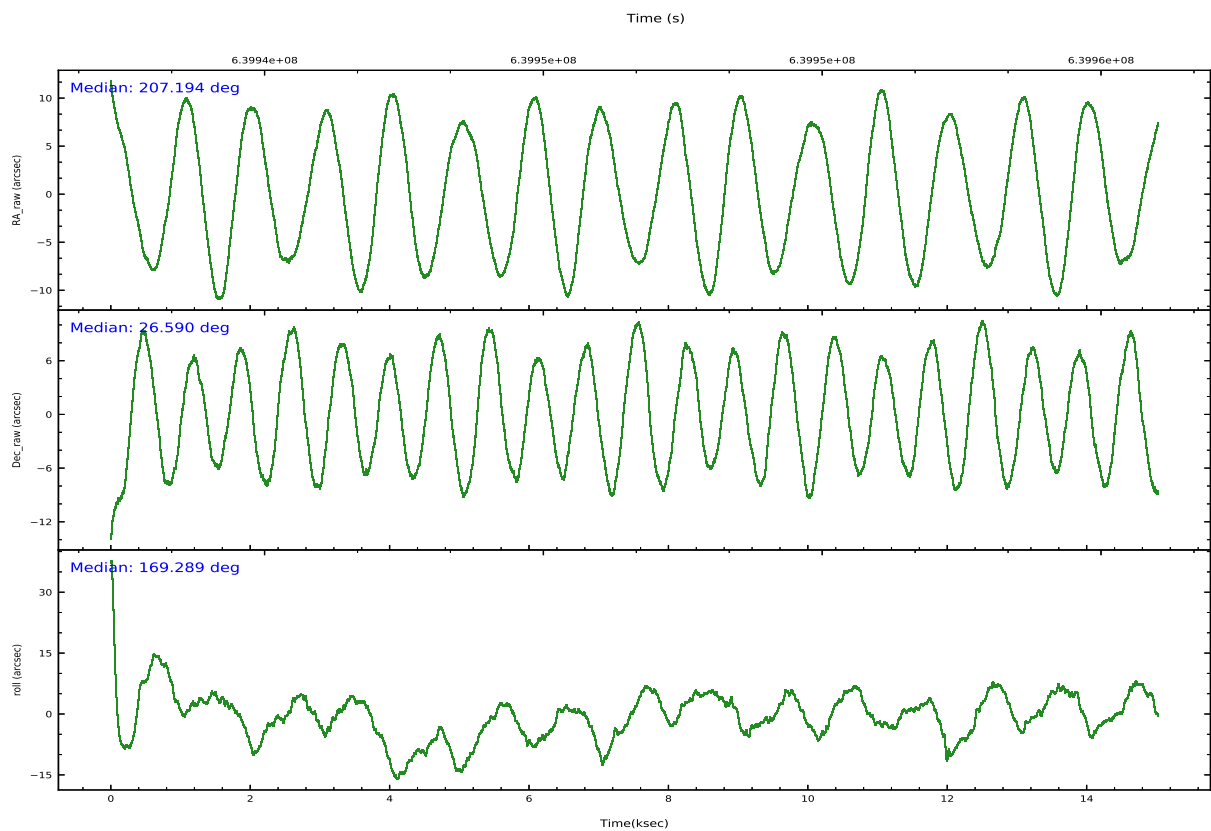
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	4738	4514	20769	7577	32710
	4%	3%	10%	6%	13%
grade 1 events	64	36	539	69	191
	0%	0%	0%	0%	0%
grade 2 events	2738	2515	30668	4368	38657
	2%	2%	14%	3%	15%
grade 3 events	1085	1175	4350	1254	16219
	0%	1%	2%	1%	6%
grade 4 events	1094	1150	3357	1162	15940
	0%	1%	1%	0%	6%
grade 5 events	3849	4649	12158	4726	14415
	3%	4%	5%	3%	5%
grade 6 events	2396	2622	47203	3625	57590
	2%	2%	22%	2%	23%
grade 7 events	99784	96829	86676	100689	67051
	86%	85%	42%	81%	27%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23567	ACIS-23567	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	207.222940	207.20239795187	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.599309	26.594759375315	Alternating exposures requested	N	N
[deg] Pointing Roll	169.136044	169.28857830574	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	638928069.184000	638928069.184000			
[s] Window stop time (MET)	641433669.184000	641433669.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	639942167.184000	639941130.88241			
Observation start date	2018-04-12T17:41:38	2018-04-12T17:25:30			
[s] Observation end time (MET)	639956819.184000	639957798.40839			
Observation end date	2018-04-12T21:45:50	2018-04-12T22:03:18			
Read mode	TIMED	TIMED			

2.3 Aspect



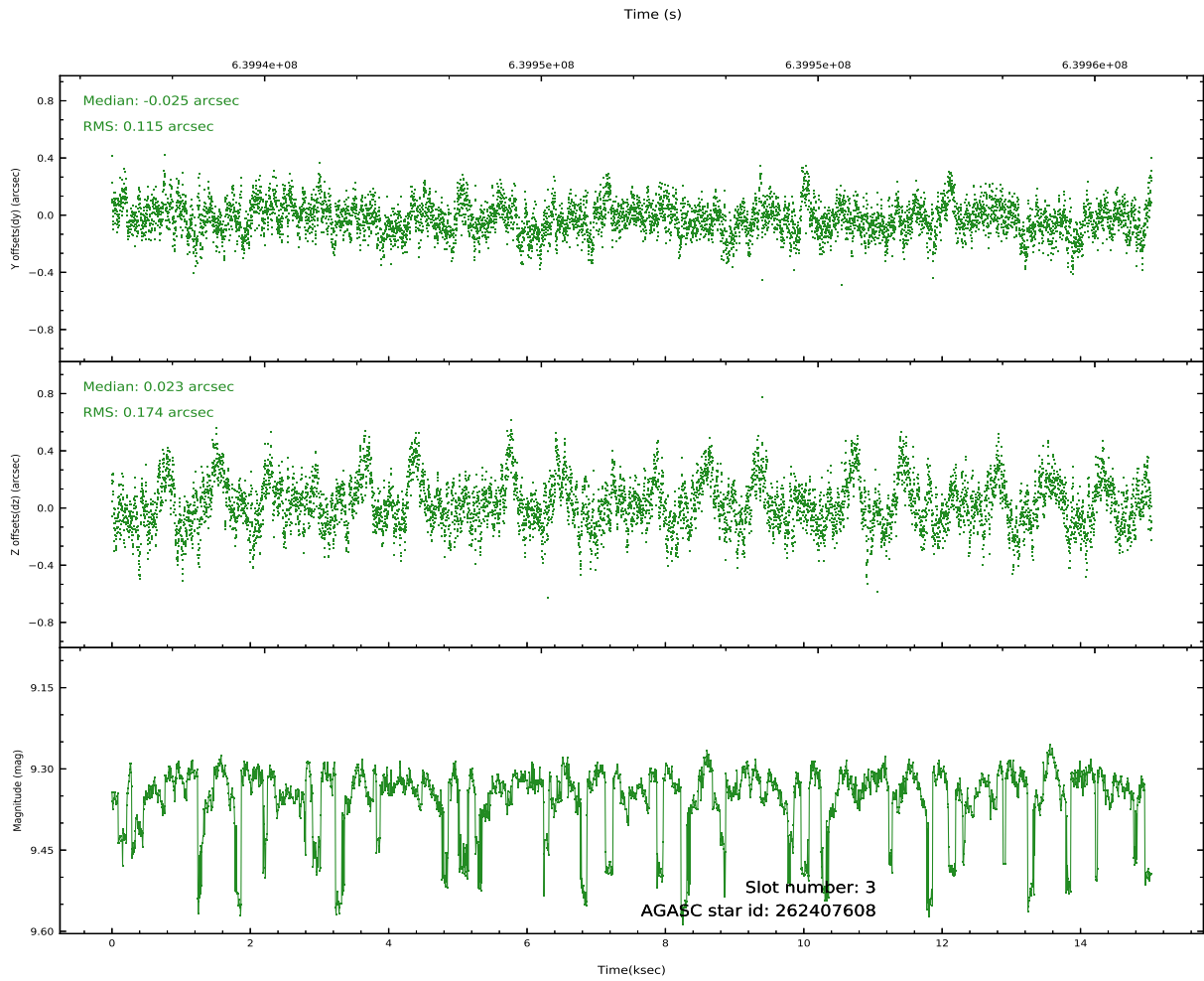
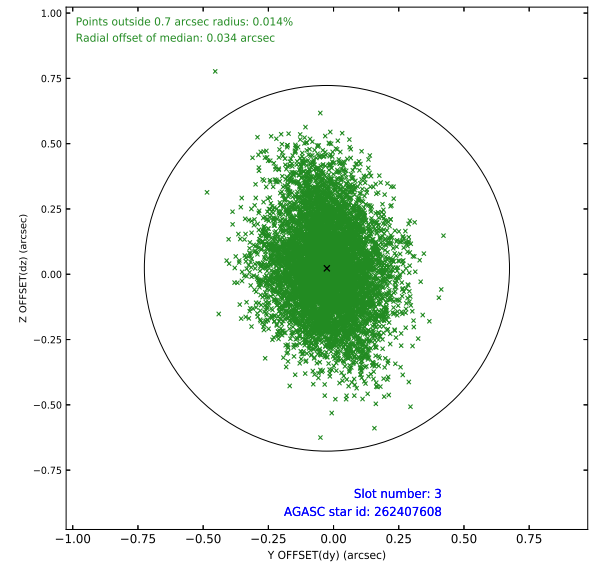
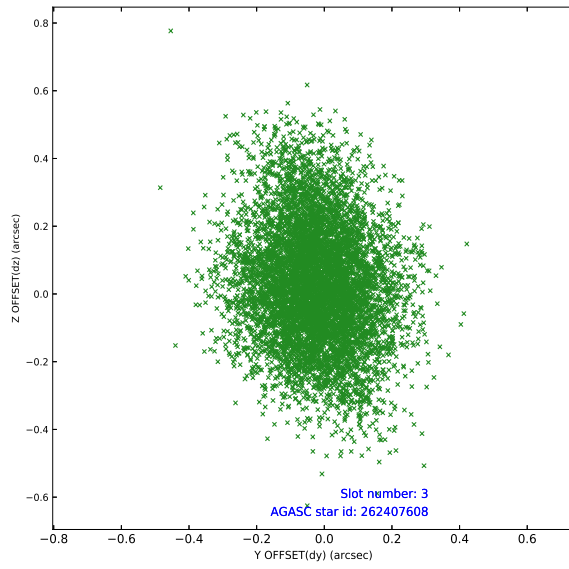


Slot Statistics

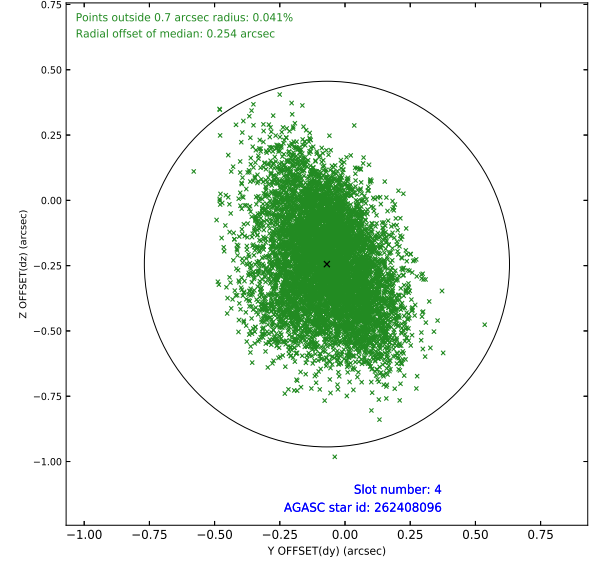
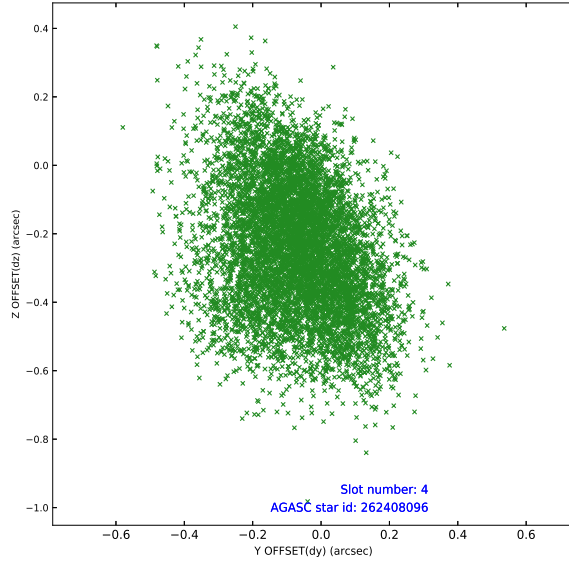
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.22	3665	1.000	0.335	-0.125	0.010	0.015	0.000000	0.000000	921.01	-1739
1	FID		ACIS-S-4	7.24	3665	1.000	-0.027	-0.069	0.007	0.012	0.000000	0.000000	2138.54	164
2	FID		ACIS-S-5	7.24	3665	1.000	-0.334	0.207	0.008	0.015	0.000000	0.000000	-1827.83	159
3	GUIDE	used	262407608	9.34	7316	1.000	-0.025	0.023	0.218	0.368	207.378401	26.435507	-603.10	484
4	GUIDE	used	262408096	9.30	7321	1.000	-0.069	-0.244	0.249	0.404	207.011678	26.515421	612.49	424
5	GUIDE	used	262408936	9.61	7318	1.000	-0.053	0.291	0.230	0.396	207.154731	26.726554	302.03	-408
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	262409552	8.15	7327	1.000	0.141	-0.078	0.173	0.291	206.584269	27.192805	2413.40	-1717

2.4 Star Slots

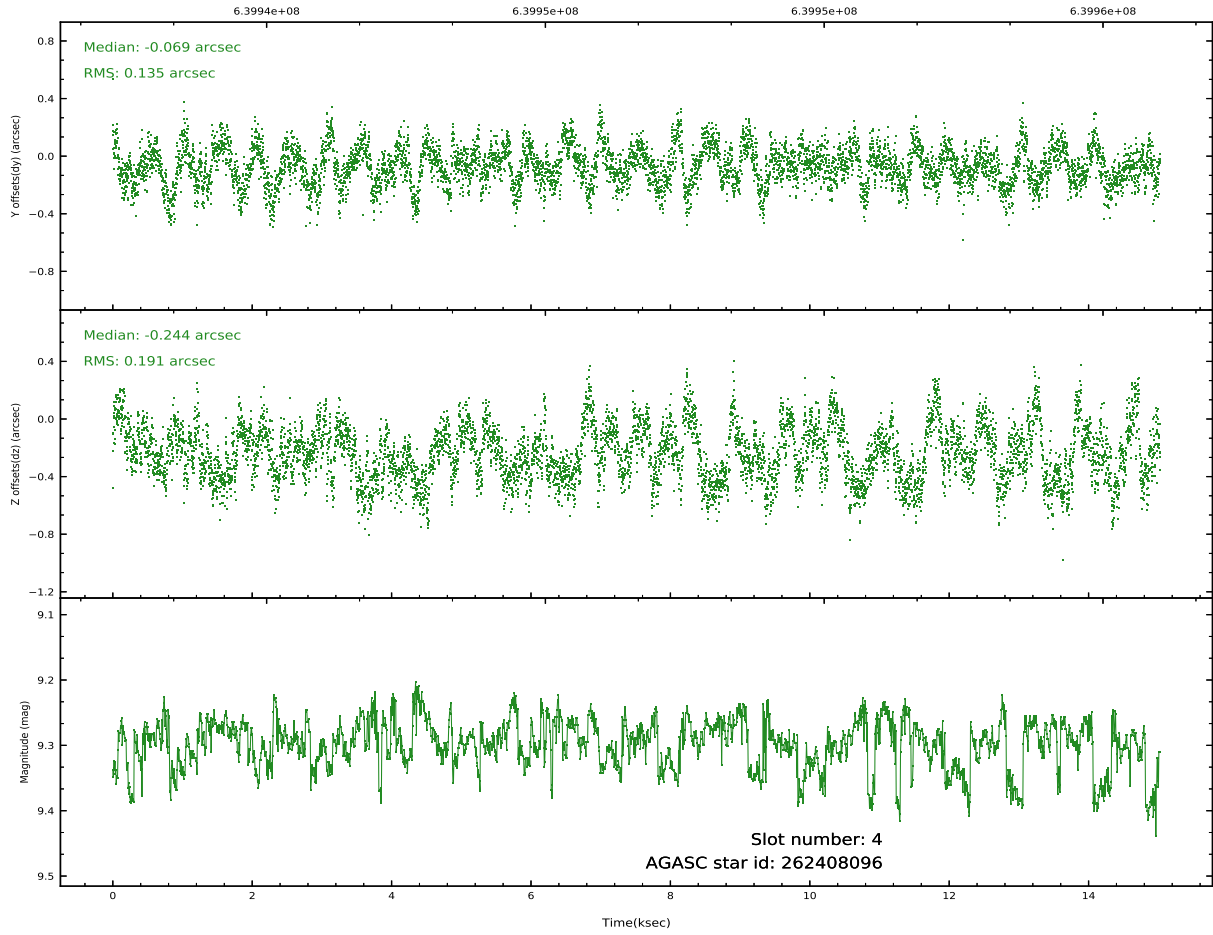
2.4.1 Slot 3



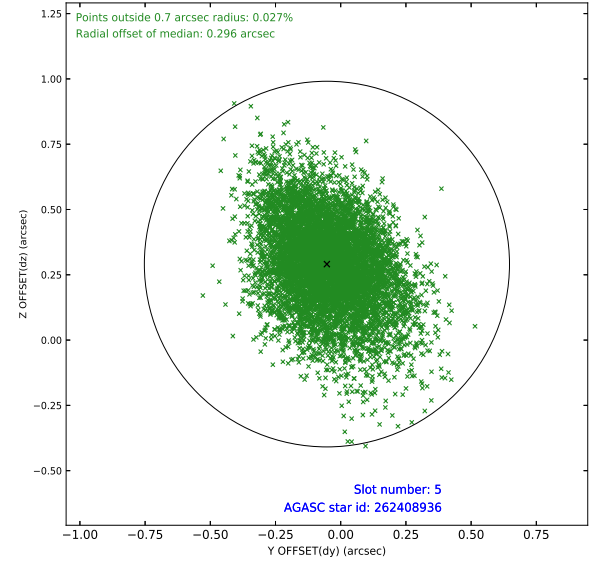
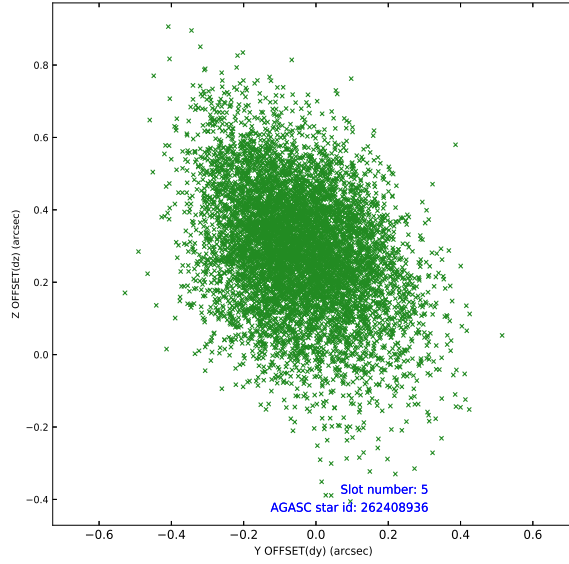
2.4.2 Slot 4



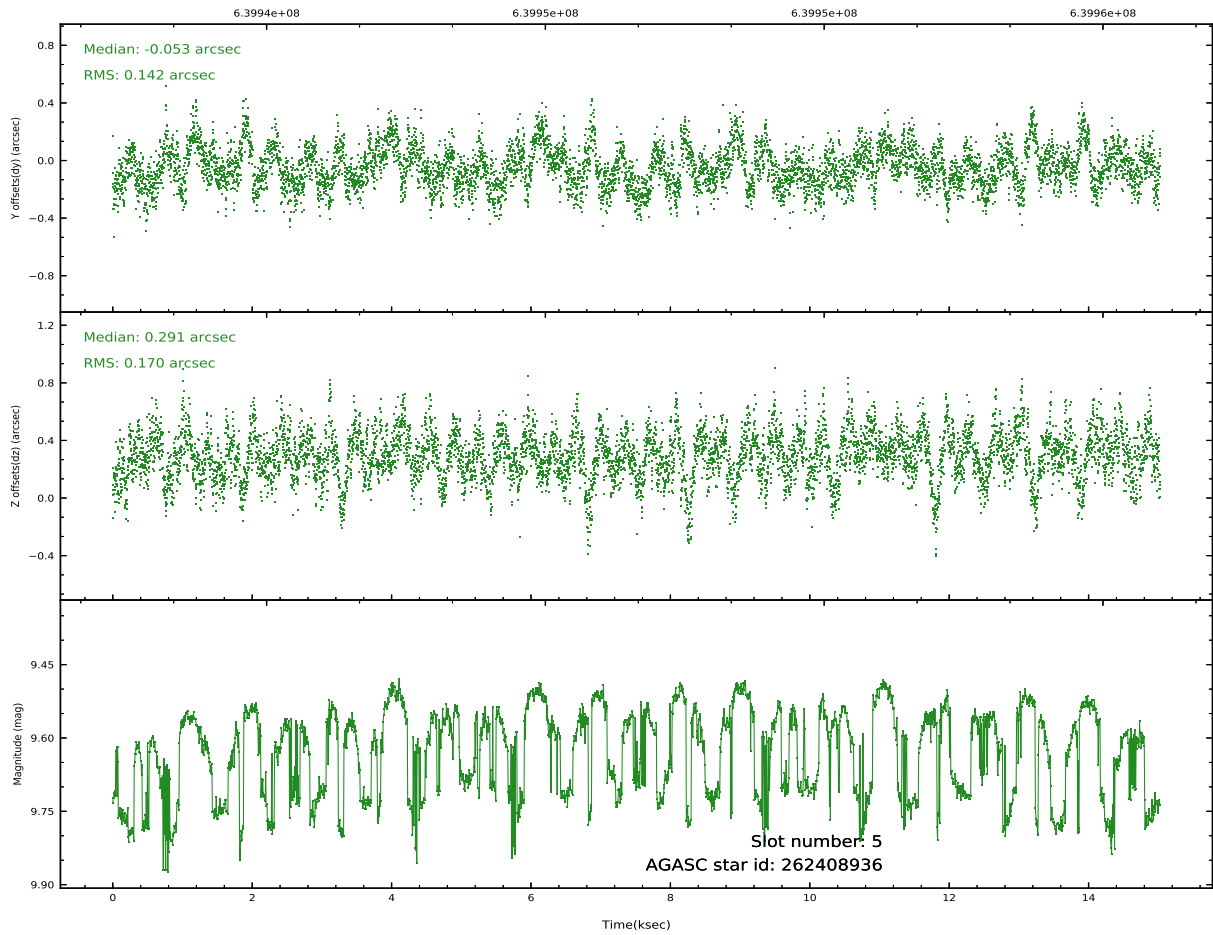
Time (s)



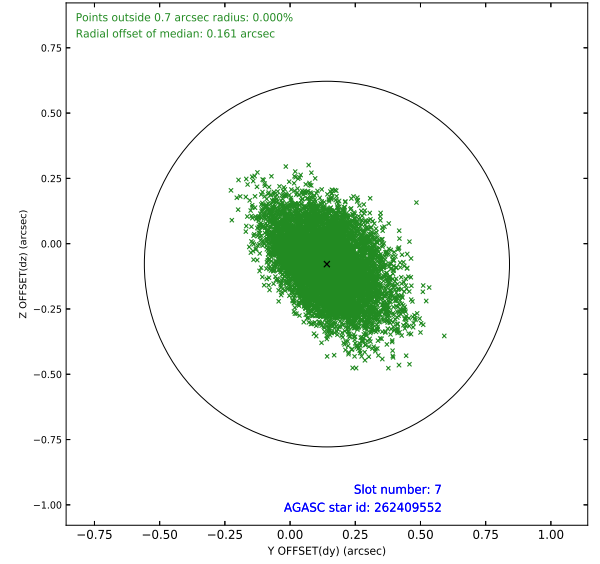
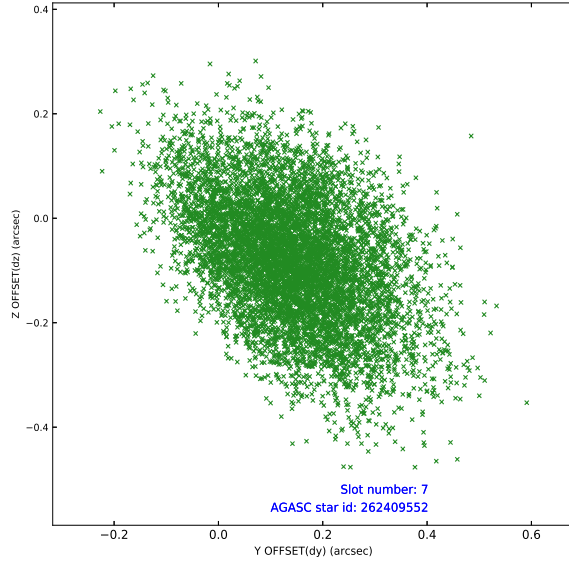
2.4.3 Slot 5



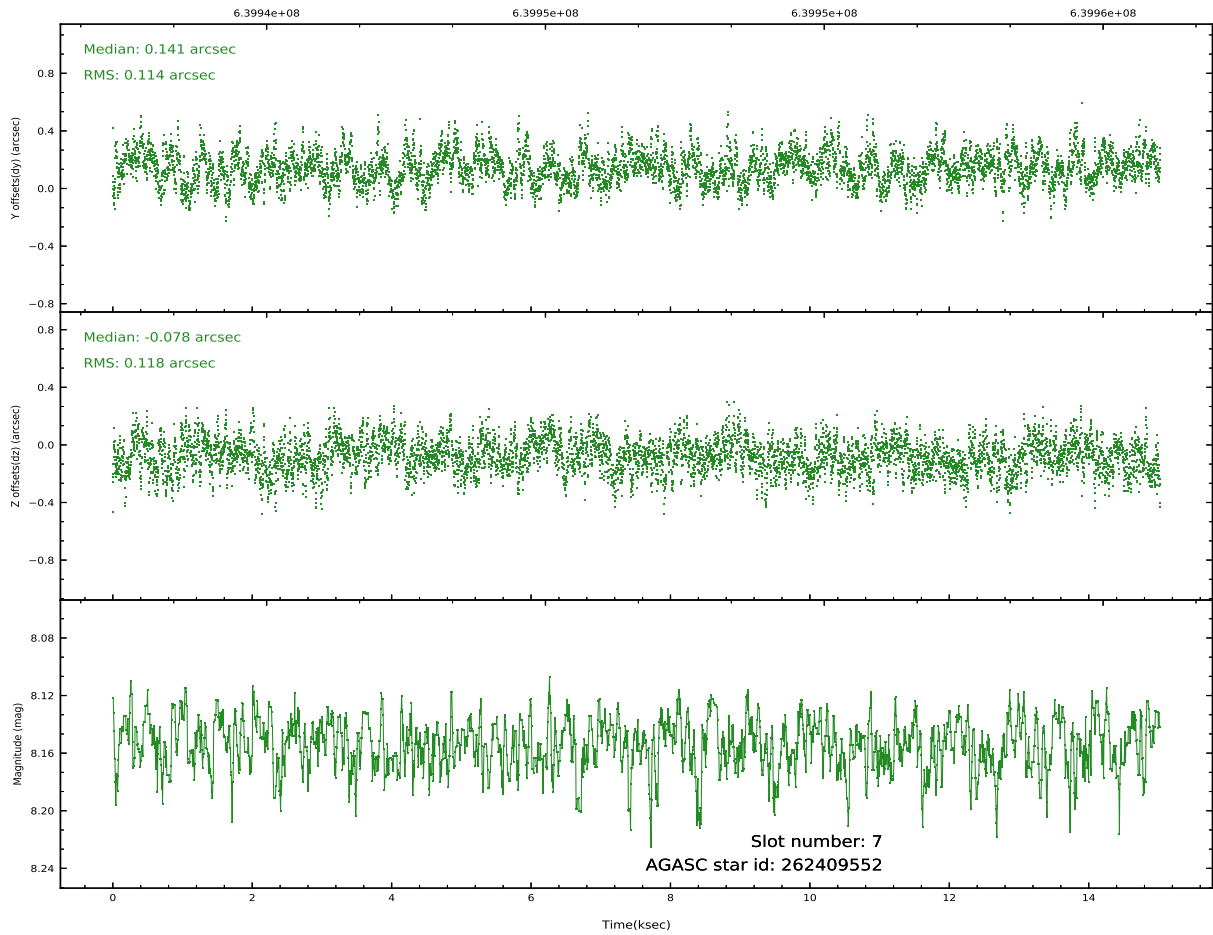
Time (s)



2.4.4 Slot 7

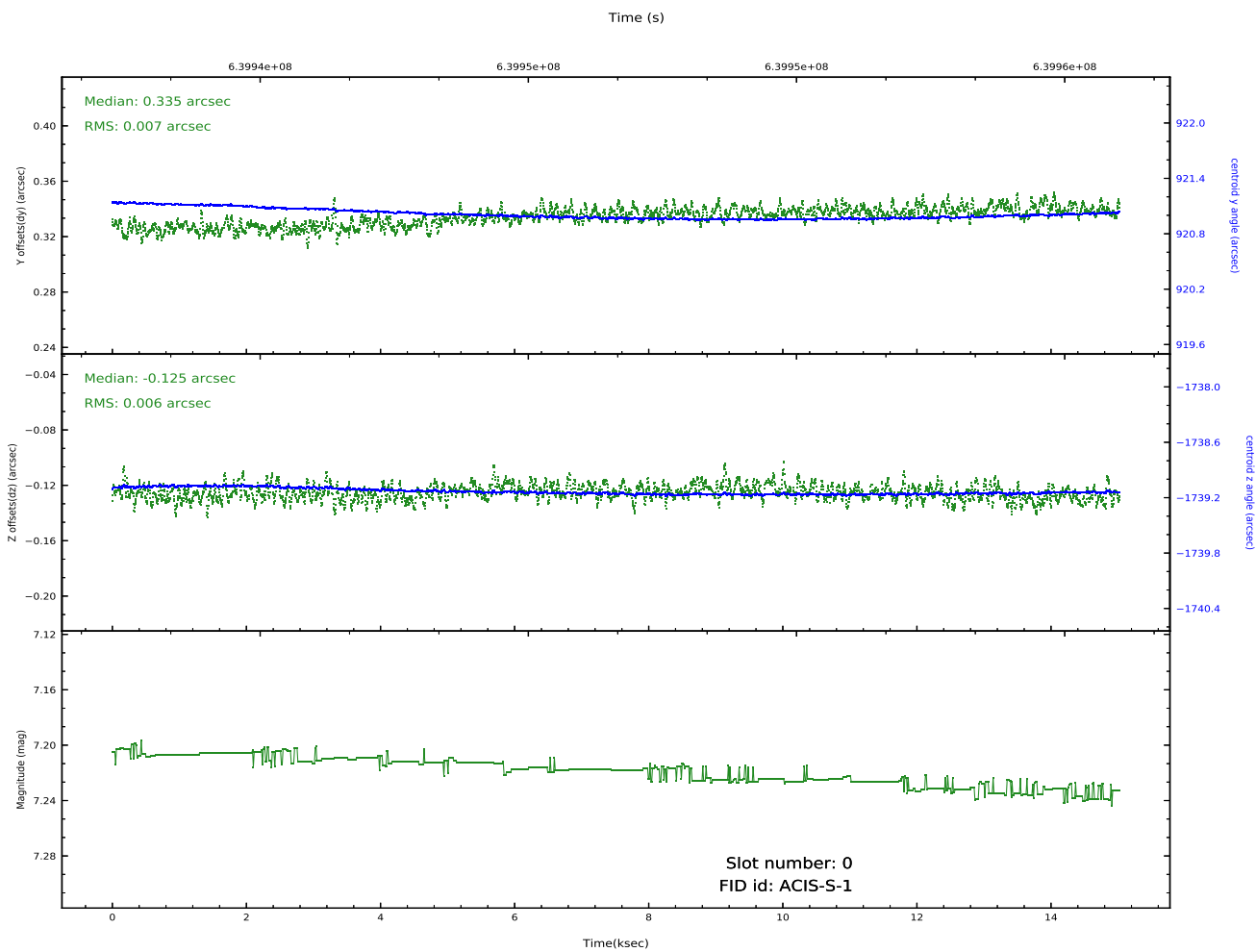
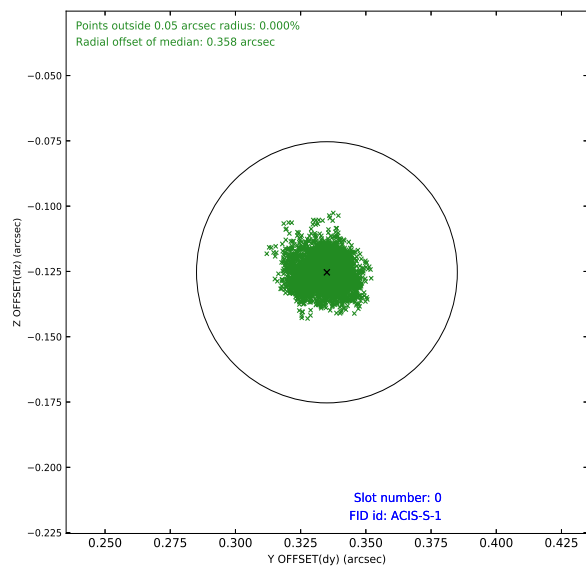
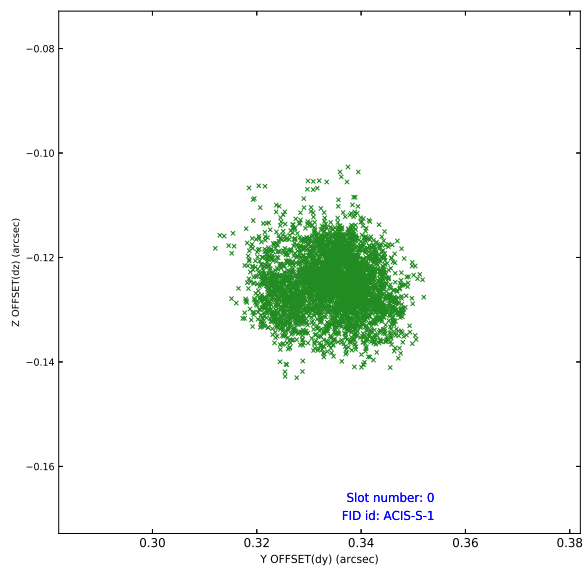


Time (s)

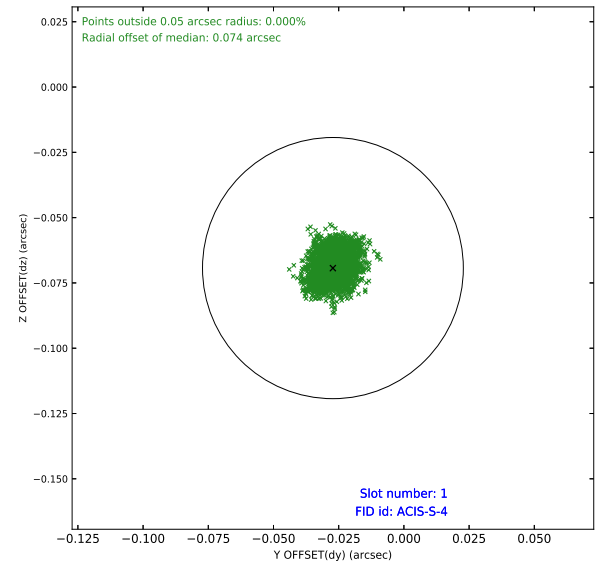
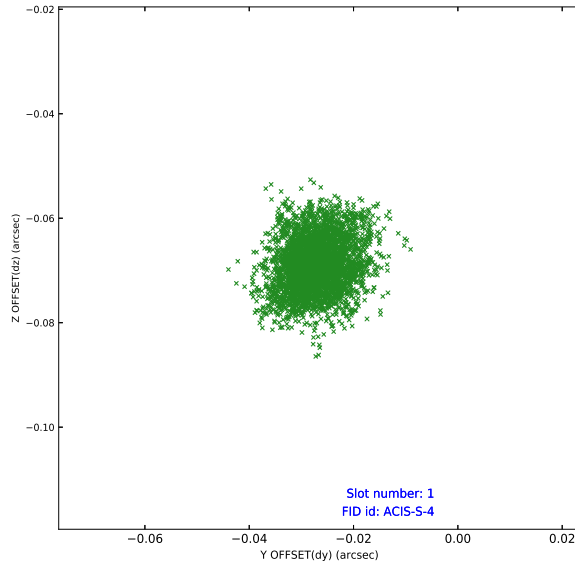


2.5 FID Slots

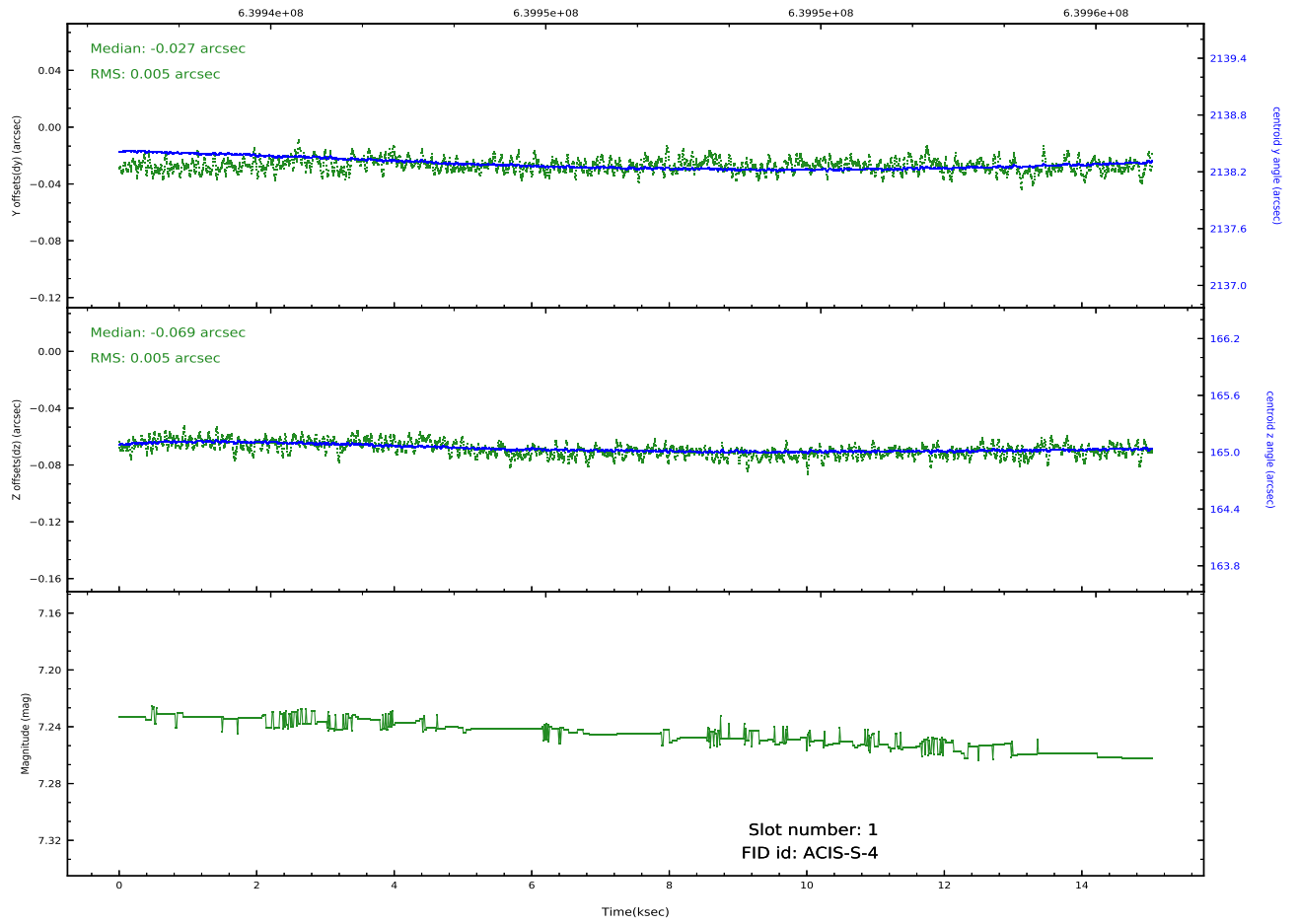
2.5.1 Slot 0



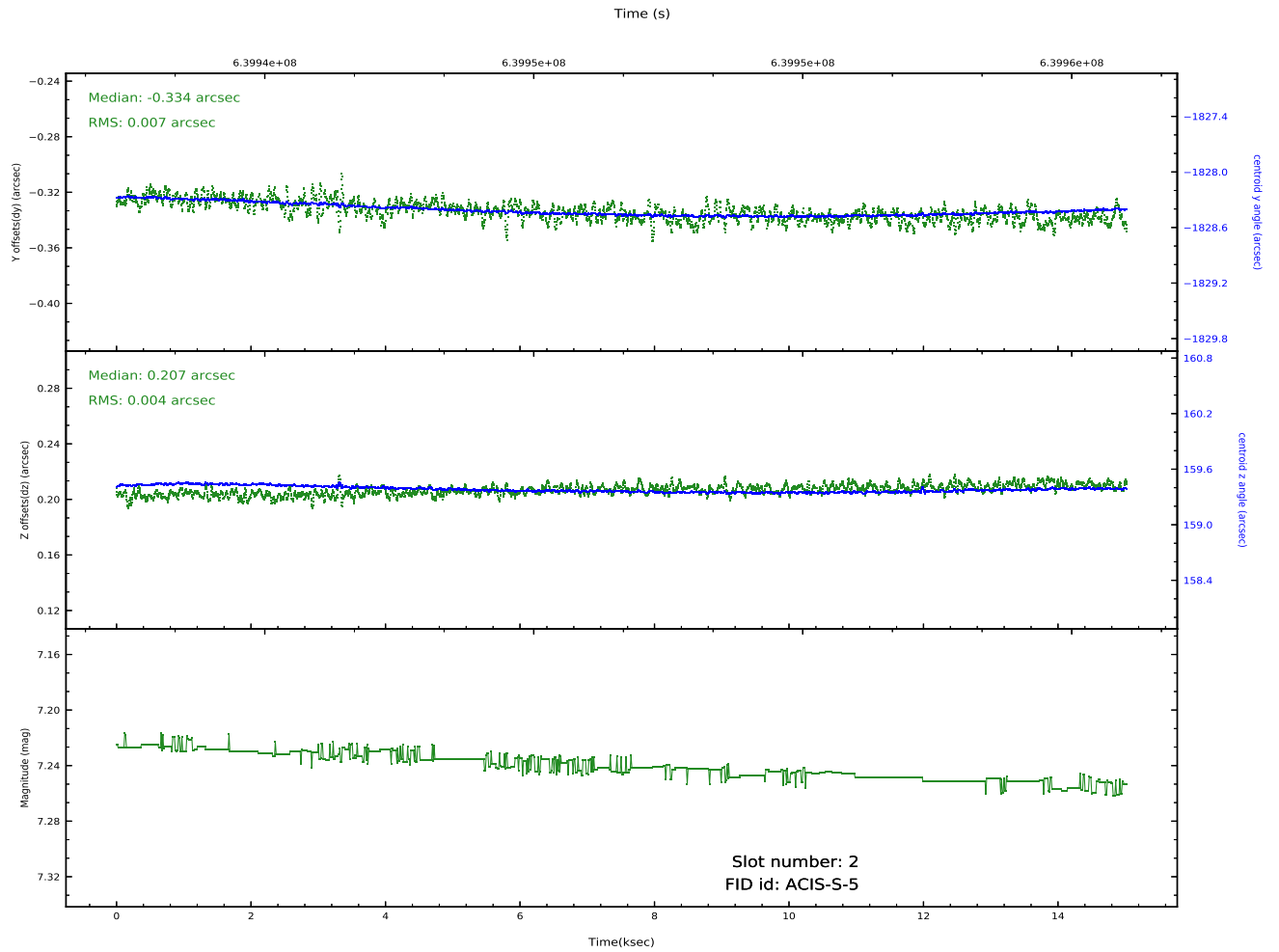
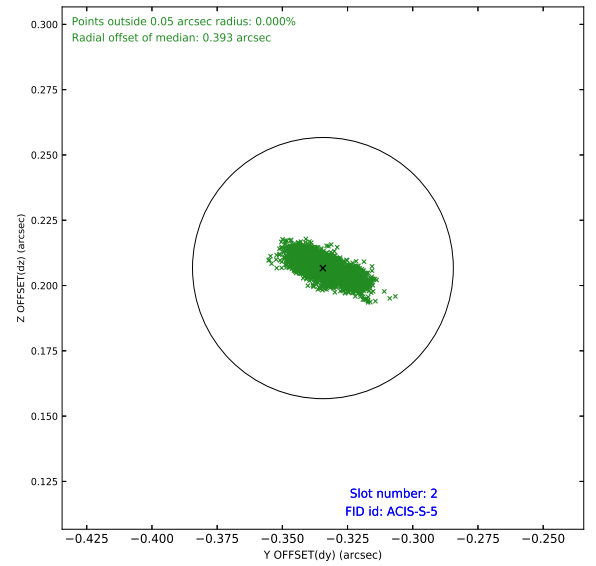
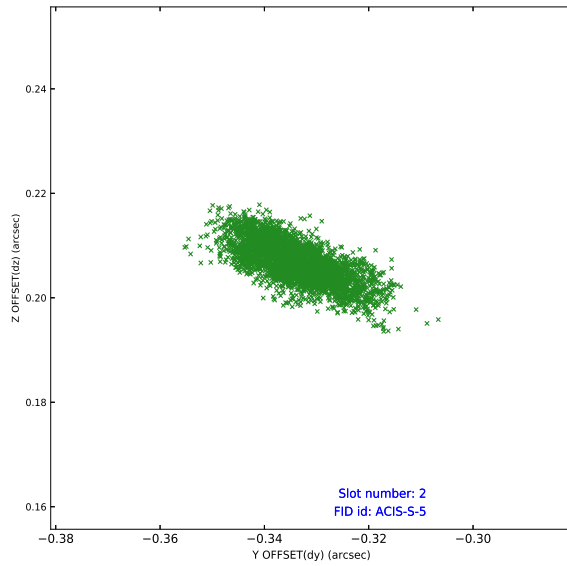
2.5.2 Slot 1



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	14.700200113177

A.2 Comments

Window constraint was met.

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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.