

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7016 - L2 Version 5
Chandra X-Ray Center

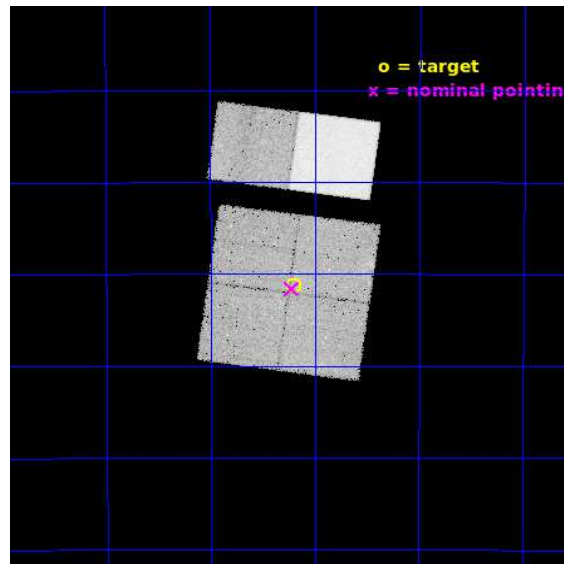
L2 Processing Date : Oct 10 2020

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1 Front

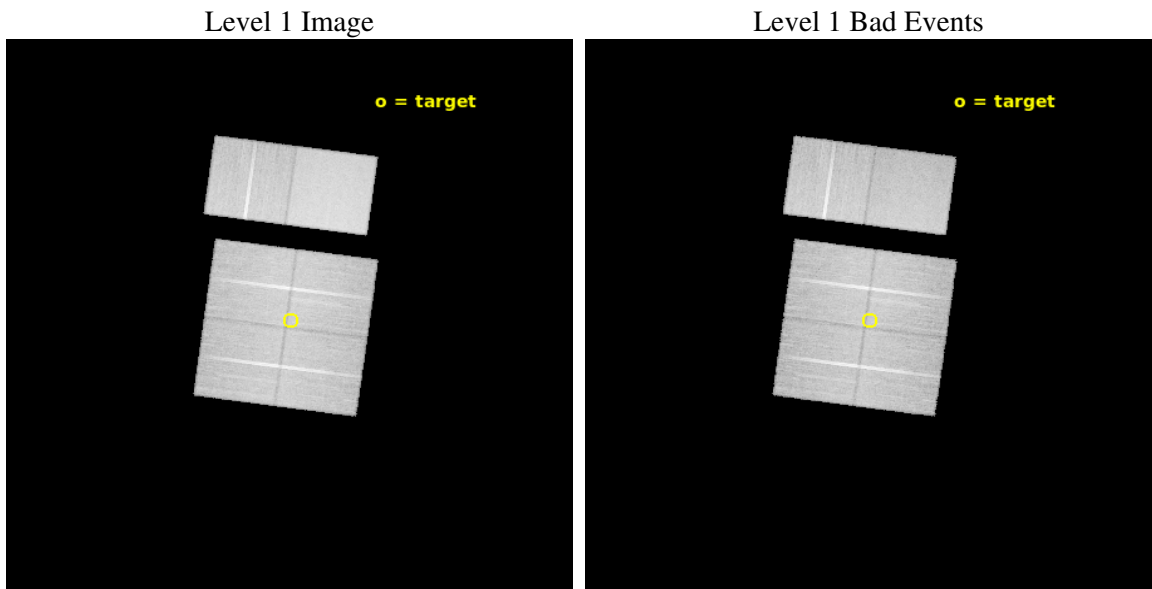
seq_num	900432	Sequence number
obs_id	7016	Observation id
title	The dark side of accretion: chasing type 2 QSOs	Proposal title
observer	Fabrizio Fiore	Principal investigator
object	ELAIS S1	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	8.80125	Observer's specified target RA [deg]
dec_targ	-43.355556	Observer's specified target Dec [deg]
ra_nom	8.8049311953346	Nominal RA [deg]
dec_nom	-43.360026112936	Nominal Dec [deg]
roll_nom	7.7096650156624	Nominal Roll [deg]
revision	5	Processing version of data
ontime	32150.39988023	Sum of GTIs [s]
livetime	31743.2921583	Livetime [s]
ontime0	32150.39988023	Sum of GTIs [s]
ontime1	32147.15888992	Sum of GTIs [s]
ontime2	32150.39988023	Sum of GTIs [s]
ontime3	32150.39988023	Sum of GTIs [s]
ontime6	32150.39988023	Sum of GTIs [s]
ontime7	32150.39988023	Sum of GTIs [s]
l2events	246455	Number of level 2 events



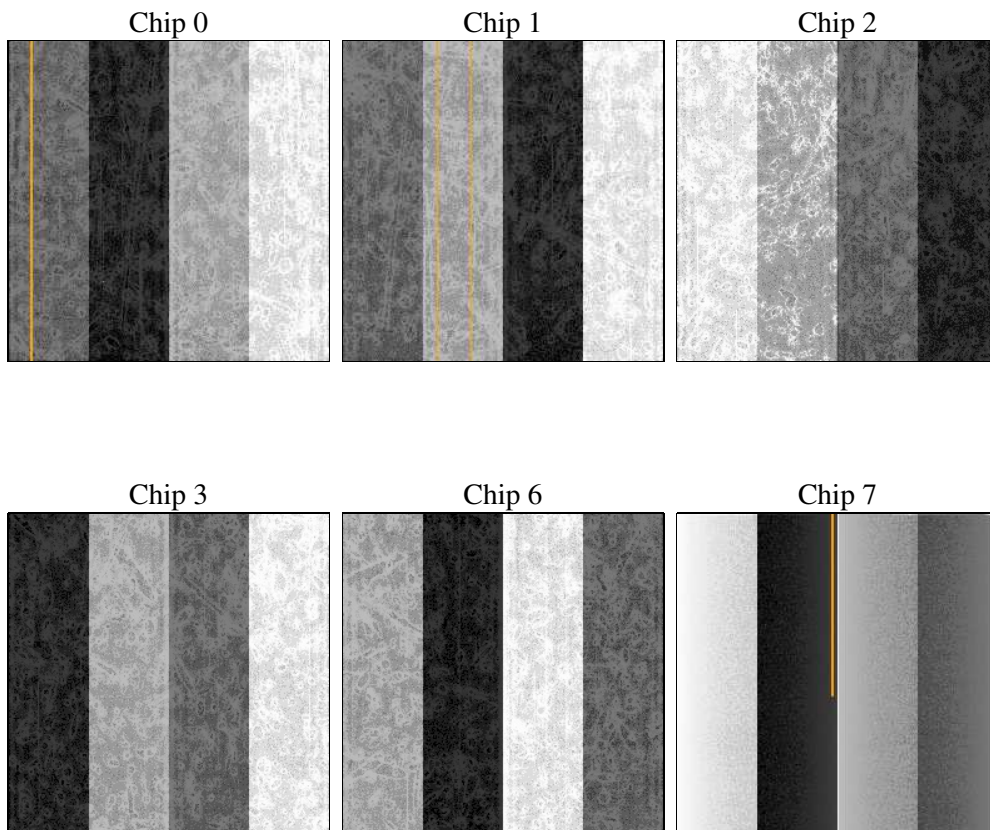
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	32150.39988023	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	32150.39988023	Sum of GTIs [s]
date	2020-10-10T14:00:16	Date and time of file creation	ontime1	32147.15888992	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	32150.39988023	Sum of GTIs [s]
			ontime3	32150.39988023	Sum of GTIs [s]
			ontime6	32150.39988023	Sum of GTIs [s]
			ontime7	32150.39988023	Sum of GTIs [s]
			l1events	1468002	Number of level 1 events

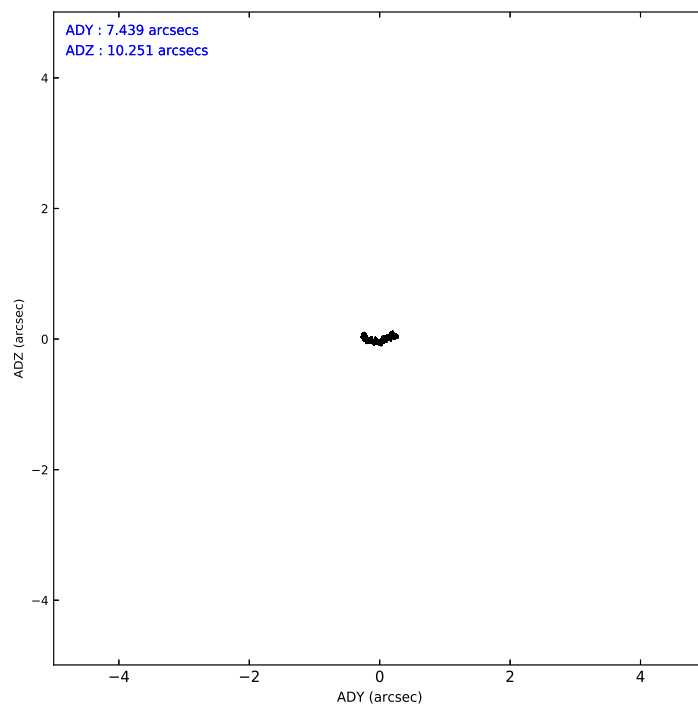
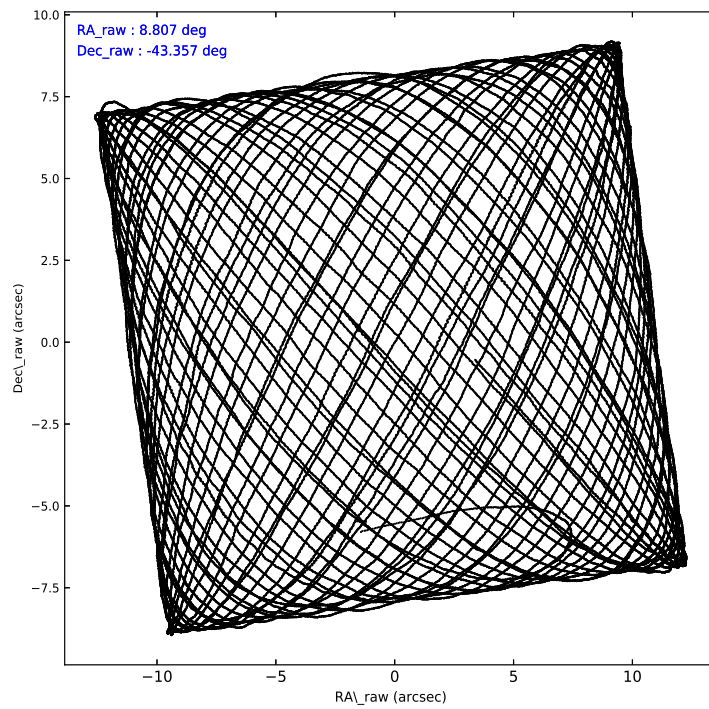
2.1.4 Events

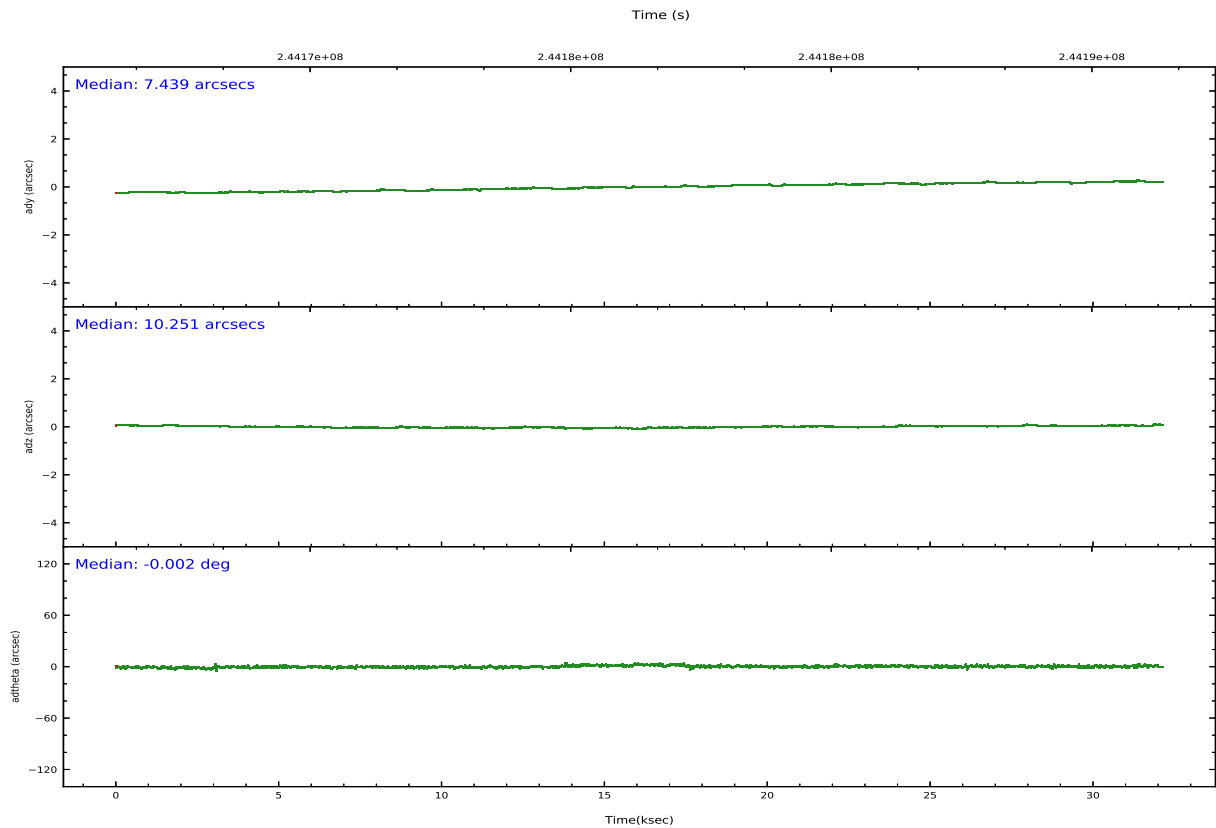
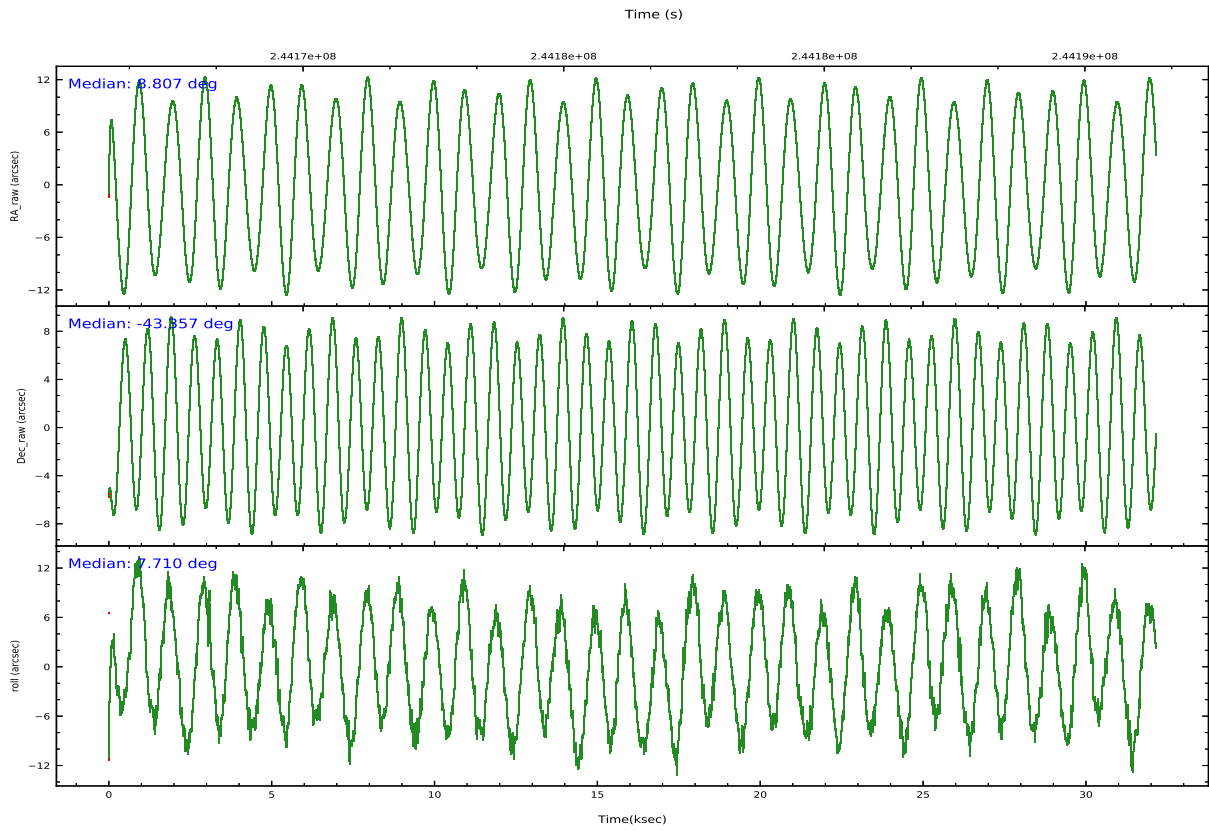
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	214163	218554	232321	227872	246880	328212	grade 0 events	12564	11934	12423	12960	11259	11786
rejected events	186262	189163	205453	200233	219091	198133		5%	5%	5%	5%	4%	3%
rejected %	86%	86%	88%	87%	88%	60%	grade 1 events	144	130	147	157	119	353
								0%	0%	0%	0%	0%	0%
							grade 2 events	6256	6684	5739	5345	6310	27077
								2%	3%	2%	2%	2%	8%
							grade 3 events	2749	3019	2629	2729	2786	11789
								1%	1%	1%	1%	1%	3%
							grade 4 events	2610	2847	2590	2745	2691	11575
								1%	1%	1%	1%	1%	3%
							grade 5 events	9418	10439	9189	10712	11401	31632
								4%	4%	3%	4%	4%	9%
							grade 6 events	4980	6103	4549	4966	5924	73005
								2%	2%	1%	2%	2%	22%
							grade 7 events	175442	177398	195055	188258	206390	160995
								81%	81%	83%	82%	83%	49%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	8.777691	8.8049311953346	Subarray requested	NONE	NONE
[deg] Pointing Dec	-43.373607	-43.360026112936	Alternating exposures requested	N	N
[deg] Pointing Roll	7.480774	7.7096650156624	[s] Primary exposure time	0.000000	3.2
[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)	244162188.184000	244160320.64531			
Observation start date	2005-09-26T22:48:44	2005-09-26T22:18:40			
[s] Observation end time (MET)	244194188.184000	244195584.23443			
Observation end date	2005-09-27T07:42:04	2005-09-27T08:06:24			
Read mode	TIMED	TIMED			

2.3 Aspect



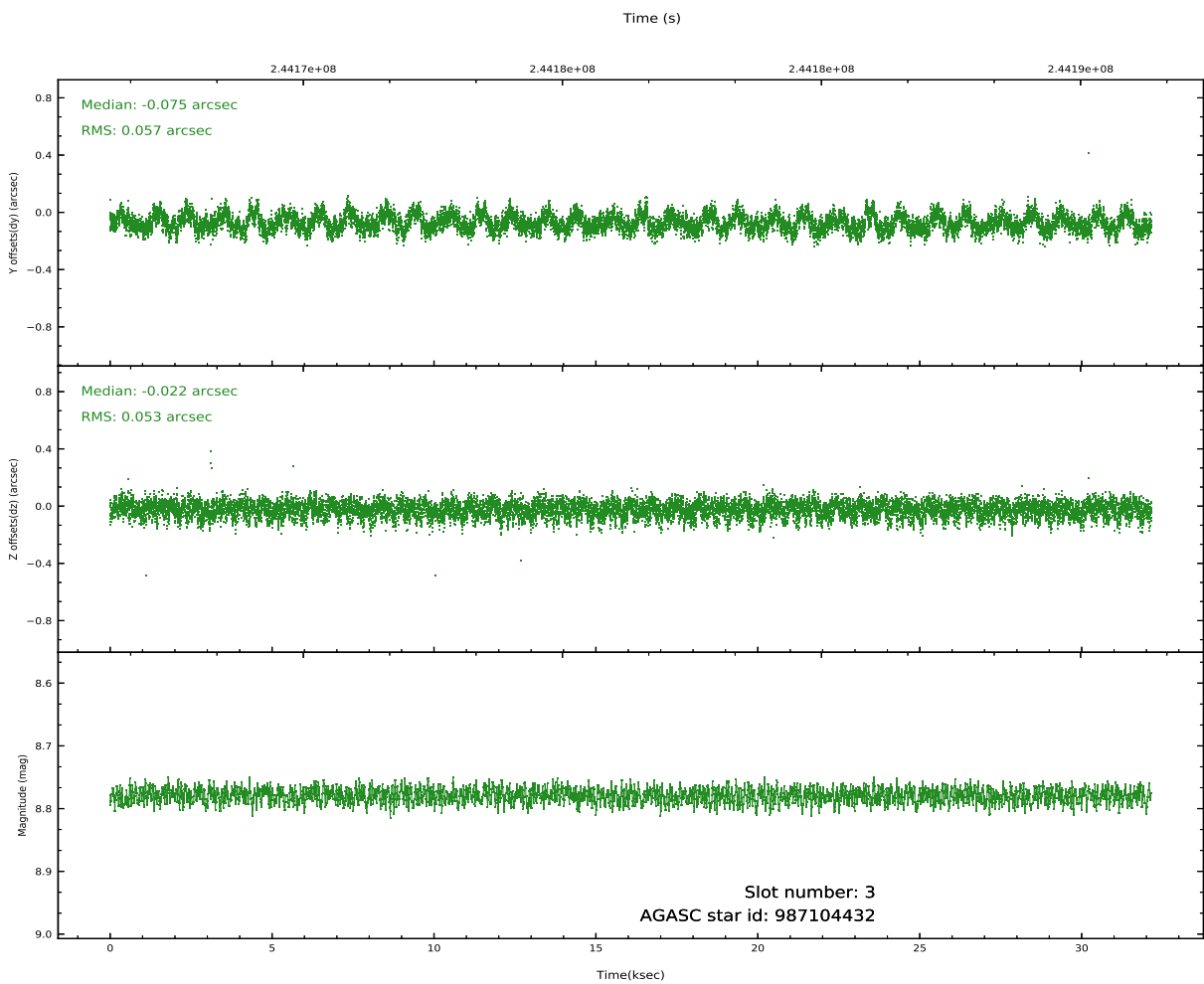
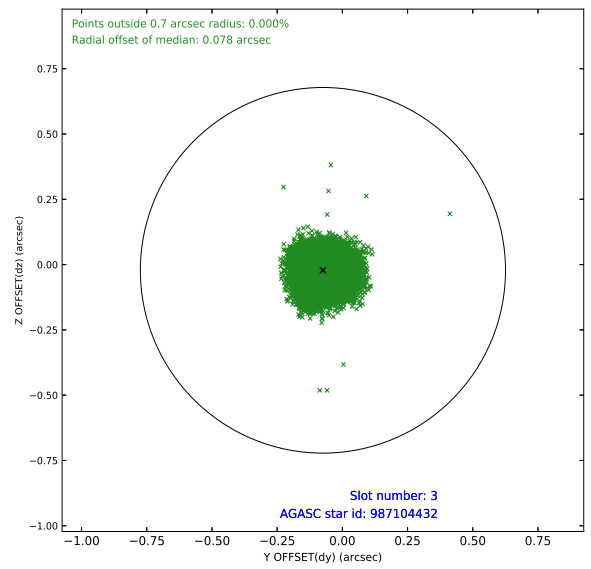
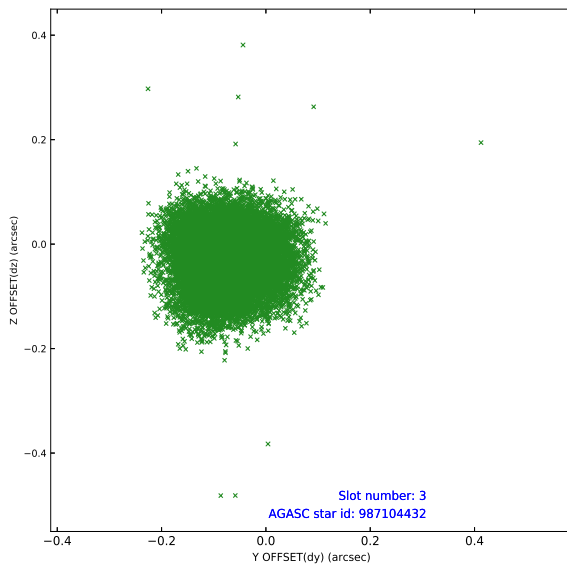


Slot Statistics

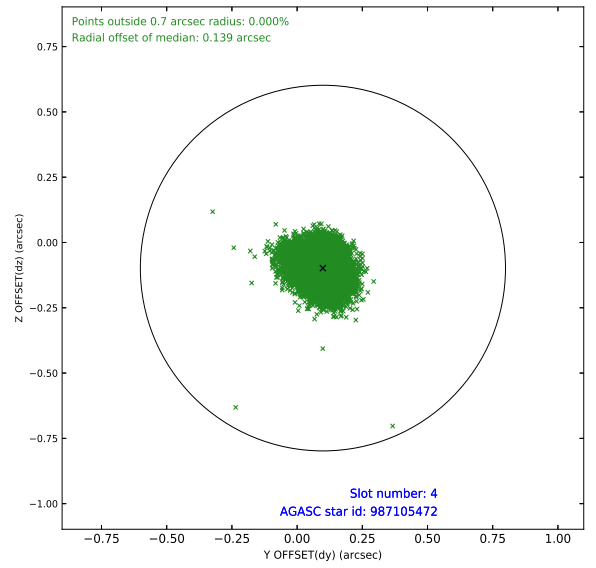
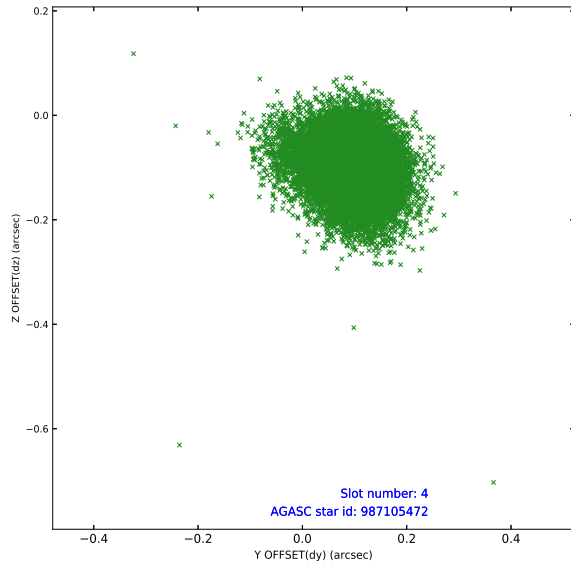
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.25	7843	1.000	-0.067	0.048	0.009	0.015	0.000000	0.000000	932.17	-833
1	FID		ACIS-I-2	7.15	7843	1.000	-0.171	-0.105	0.013	0.021	0.000000	0.000000	-761.99	-840
2	FID		ACIS-I-4	7.18	7842	1.000	0.140	0.123	0.013	0.021	0.000000	0.000000	2152.25	1066
3	GUIDE	used	987104432	8.78	15677	1.000	-0.075	-0.022	0.083	0.131	8.127720	-44.065974	-1991.94	-2258
4	GUIDE	used	987105472	8.92	15679	1.000	0.099	-0.098	0.077	0.129	9.076108	-43.240154	838.00	372
5	GUIDE	used	987109640	9.17	15672	1.000	0.060	0.083	0.115	0.179	9.479319	-43.964881	1525.22	-2354
6	GUIDE	used	987110288	9.47	15668	1.000	-0.054	0.026	0.113	0.177	8.853930	-43.126927	314.73	854
7	GUIDE	used	987105008	8.50	15676	1.000	-0.028	0.017	0.076	0.119	8.512368	-44.078521	-1010.45	-2427

2.4 Star Slots

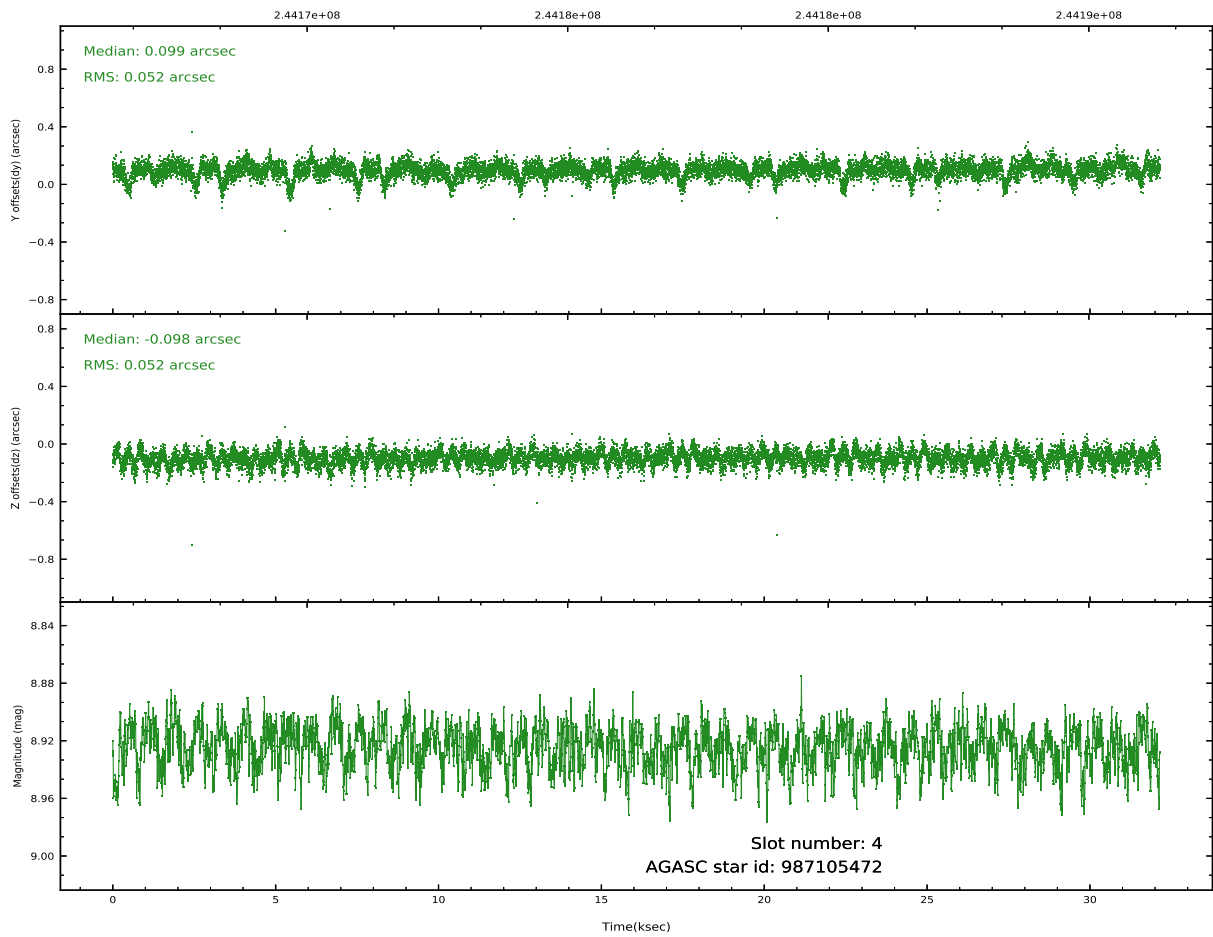
2.4.1 Slot 3



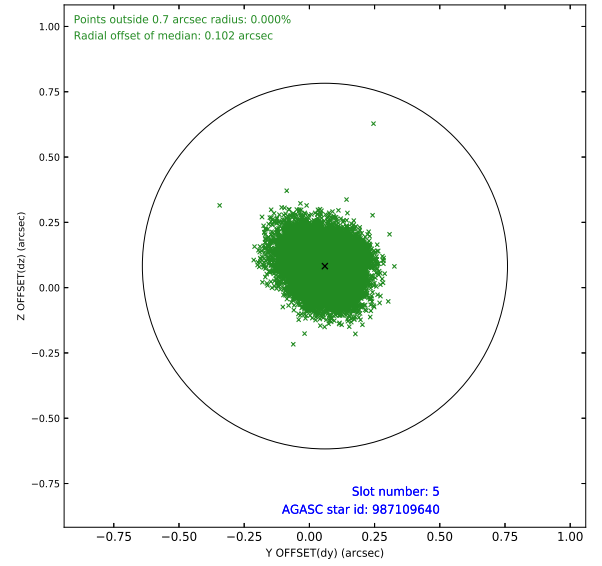
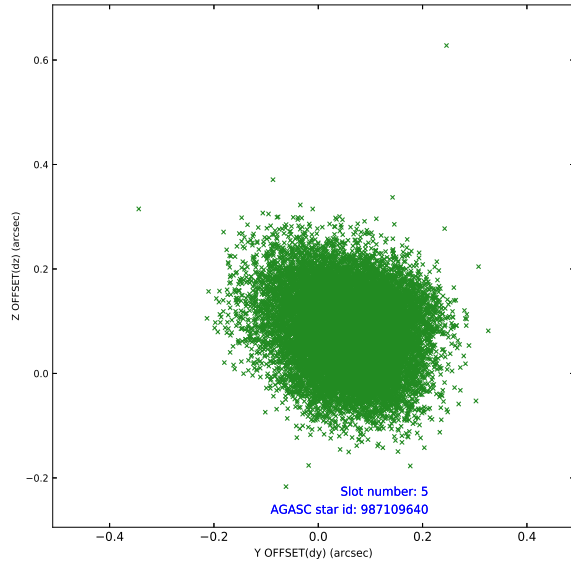
2.4.2 Slot 4



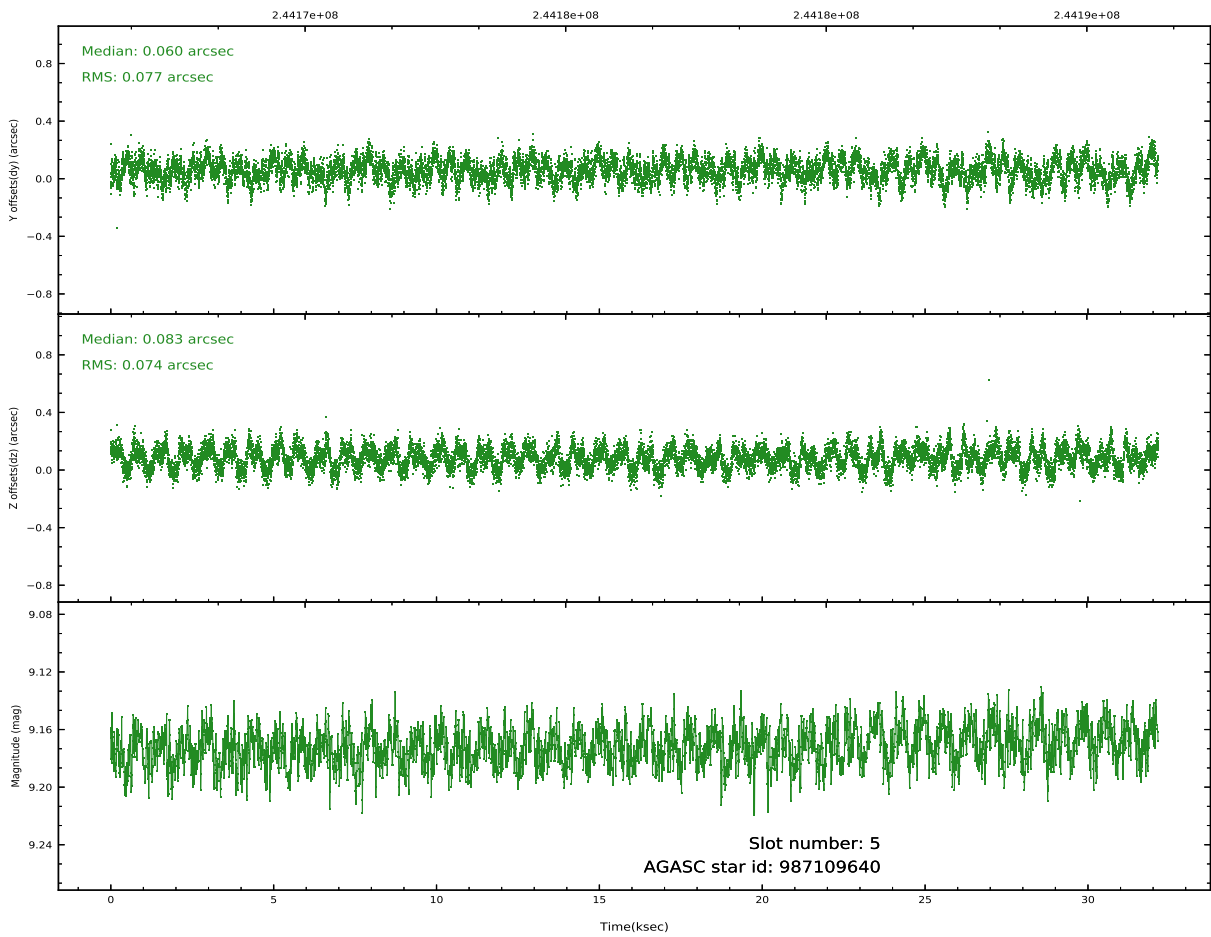
Time (s)



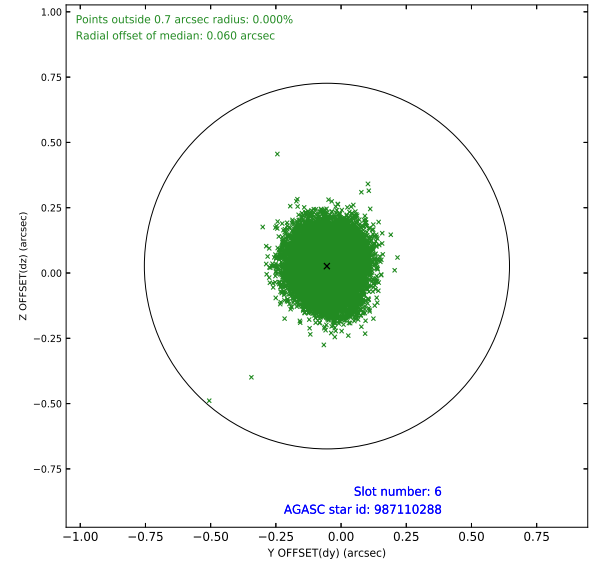
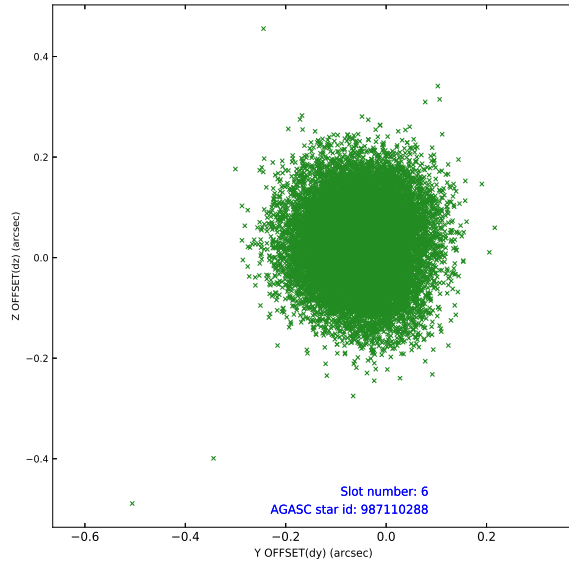
2.4.3 Slot 5



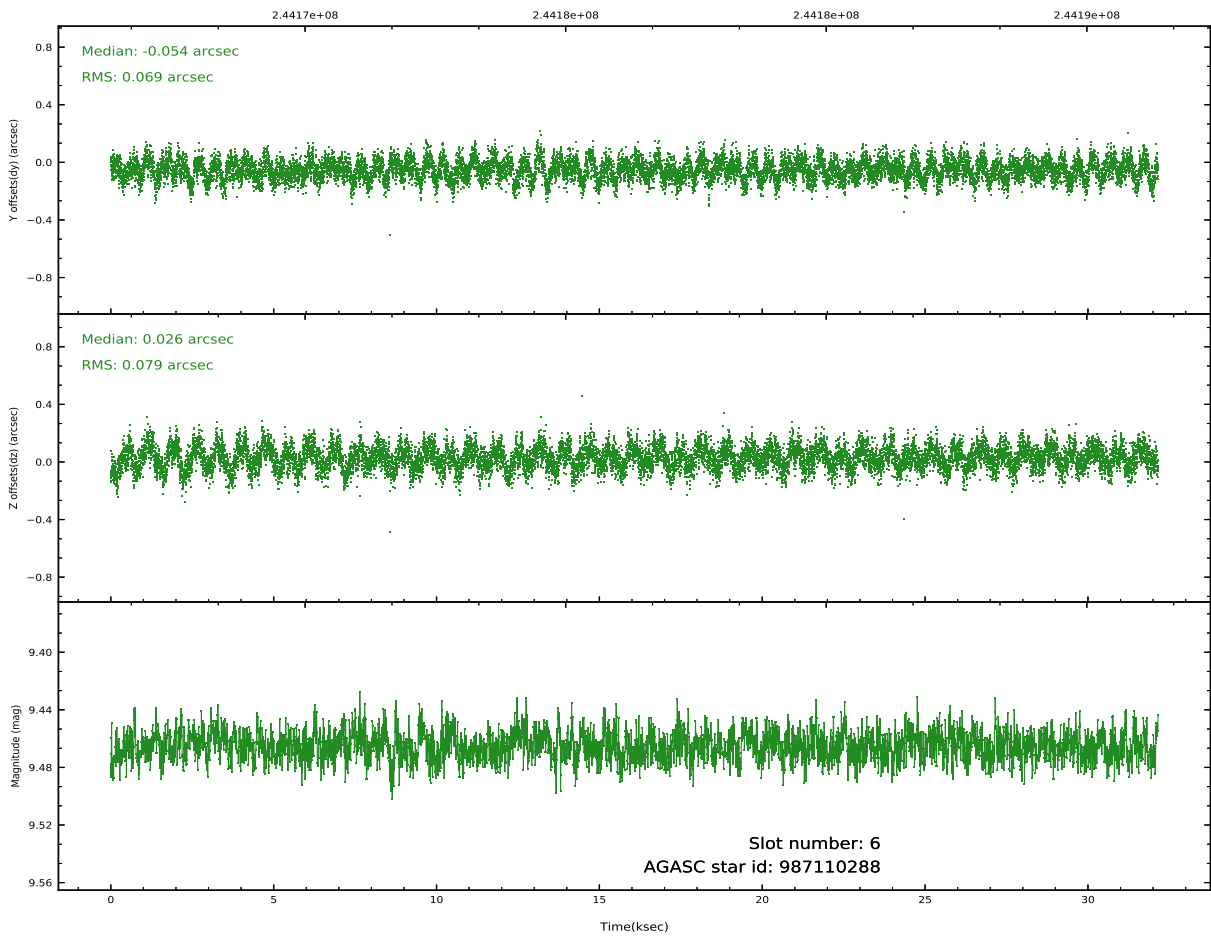
Time (s)



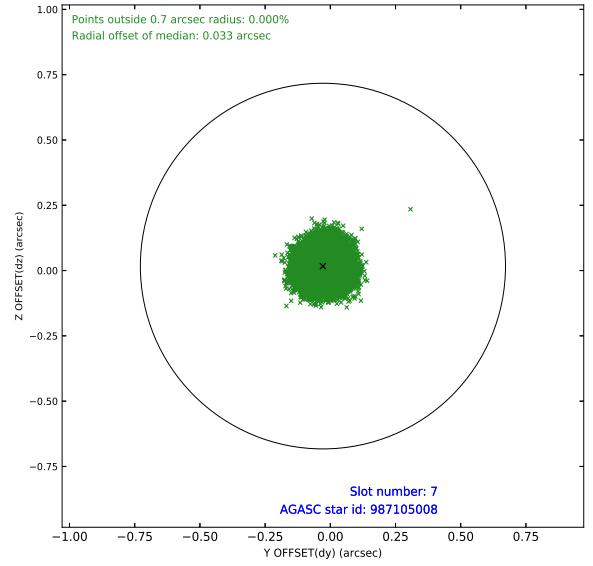
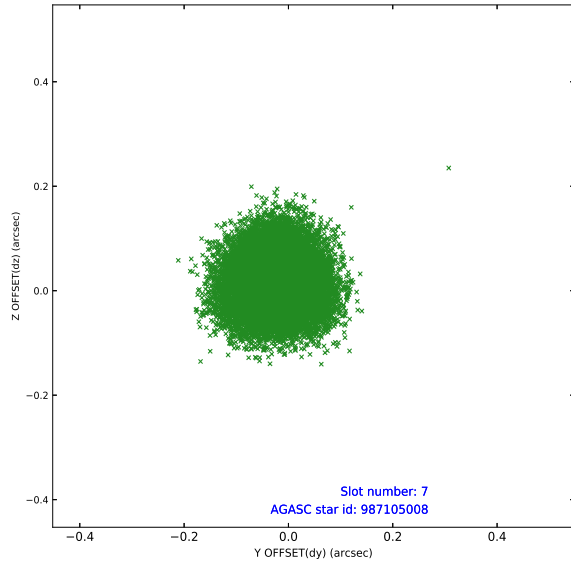
2.4.4 Slot 6



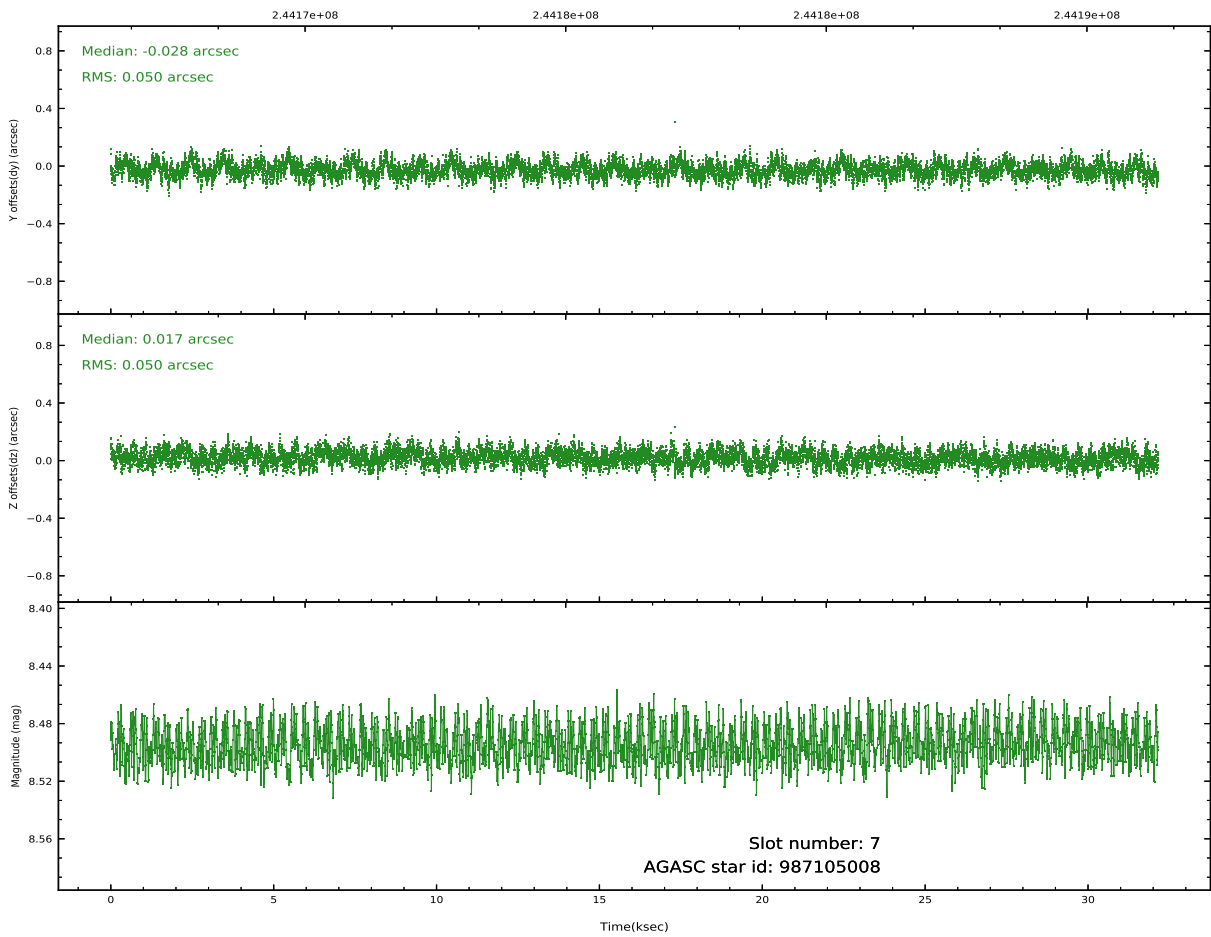
Time (s)



2.4.5 Slot 7

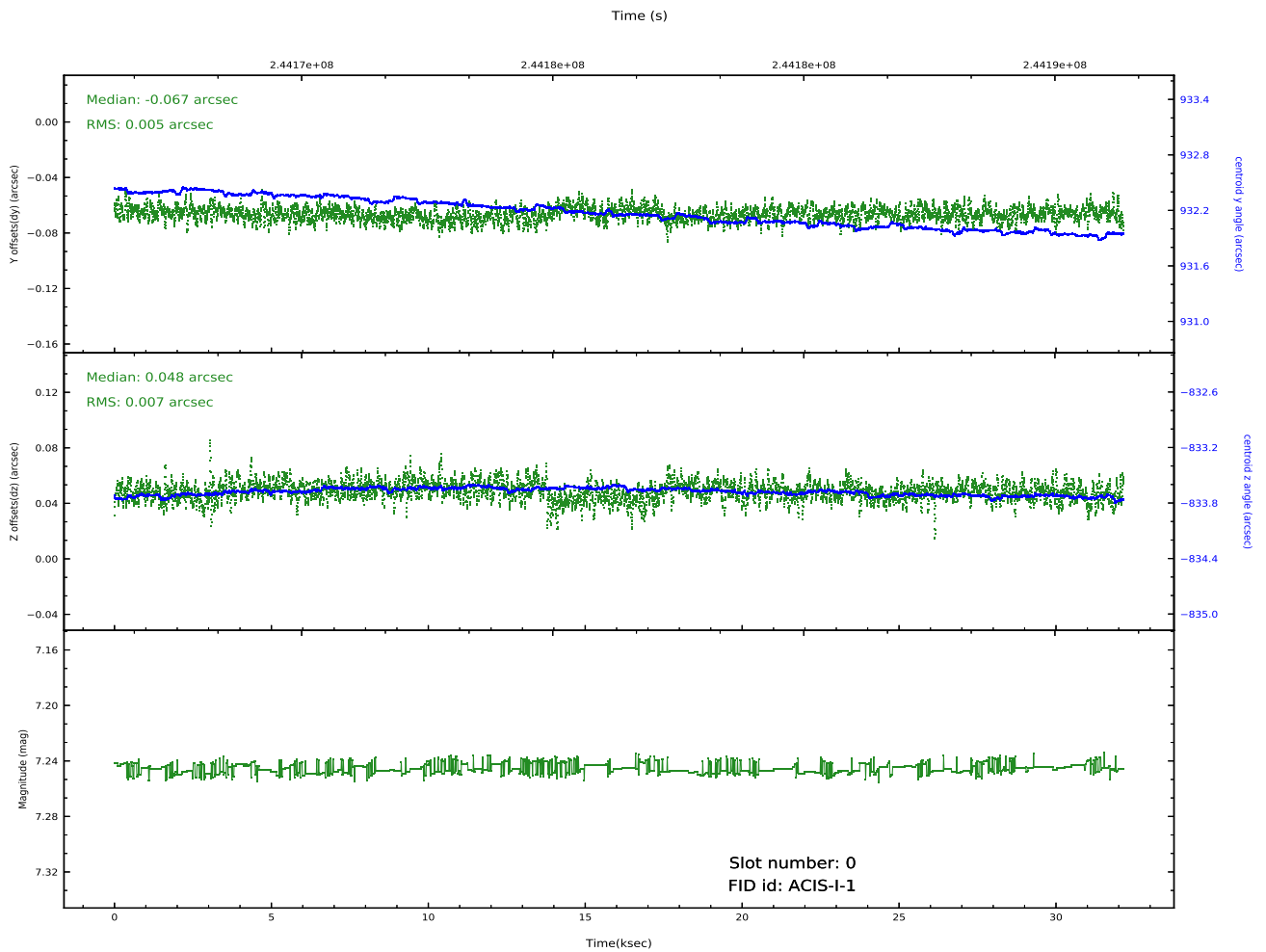
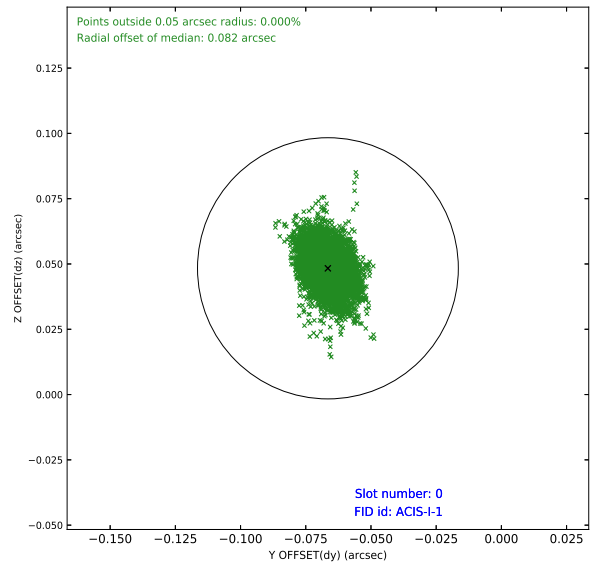
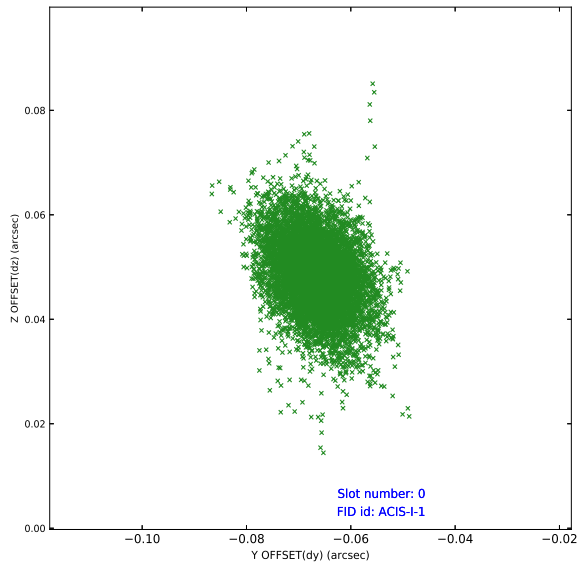


Time (s)

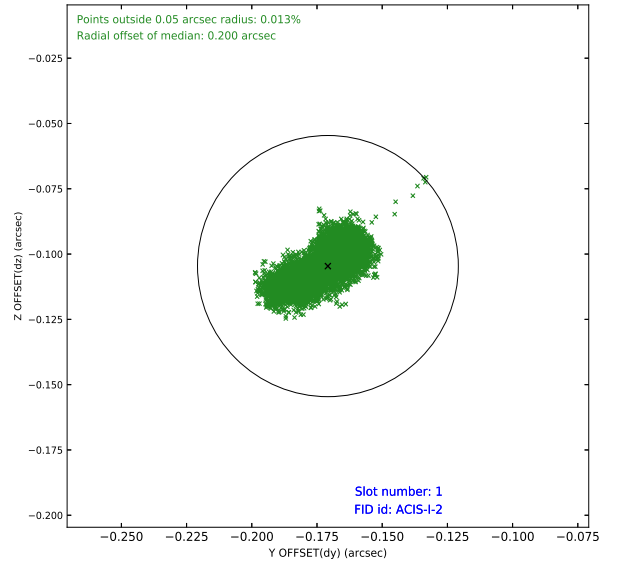
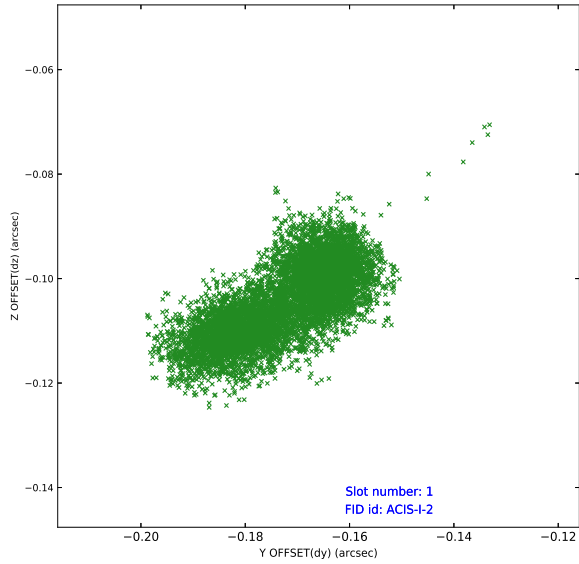


2.5 FID Slots

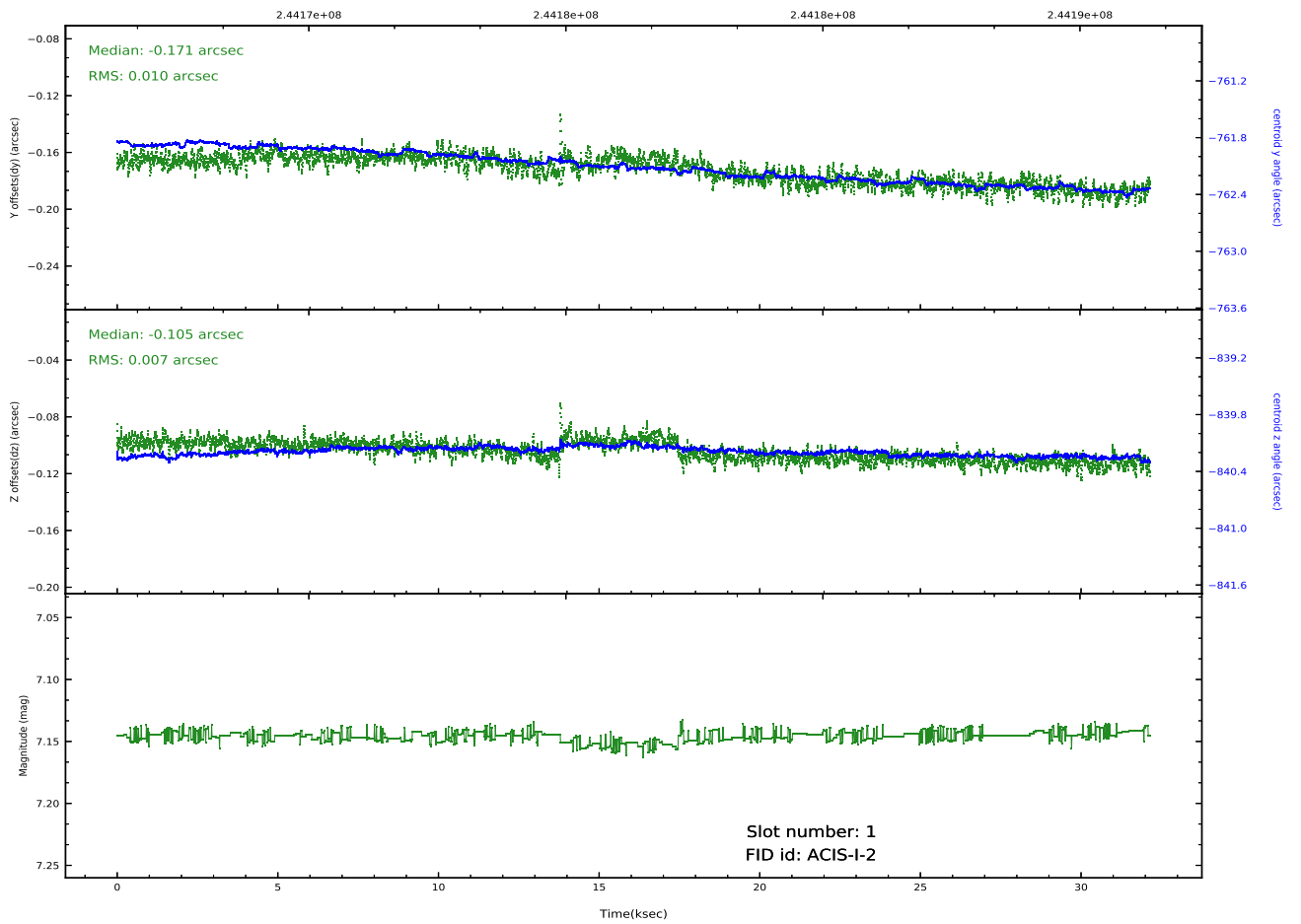
2.5.1 Slot 0



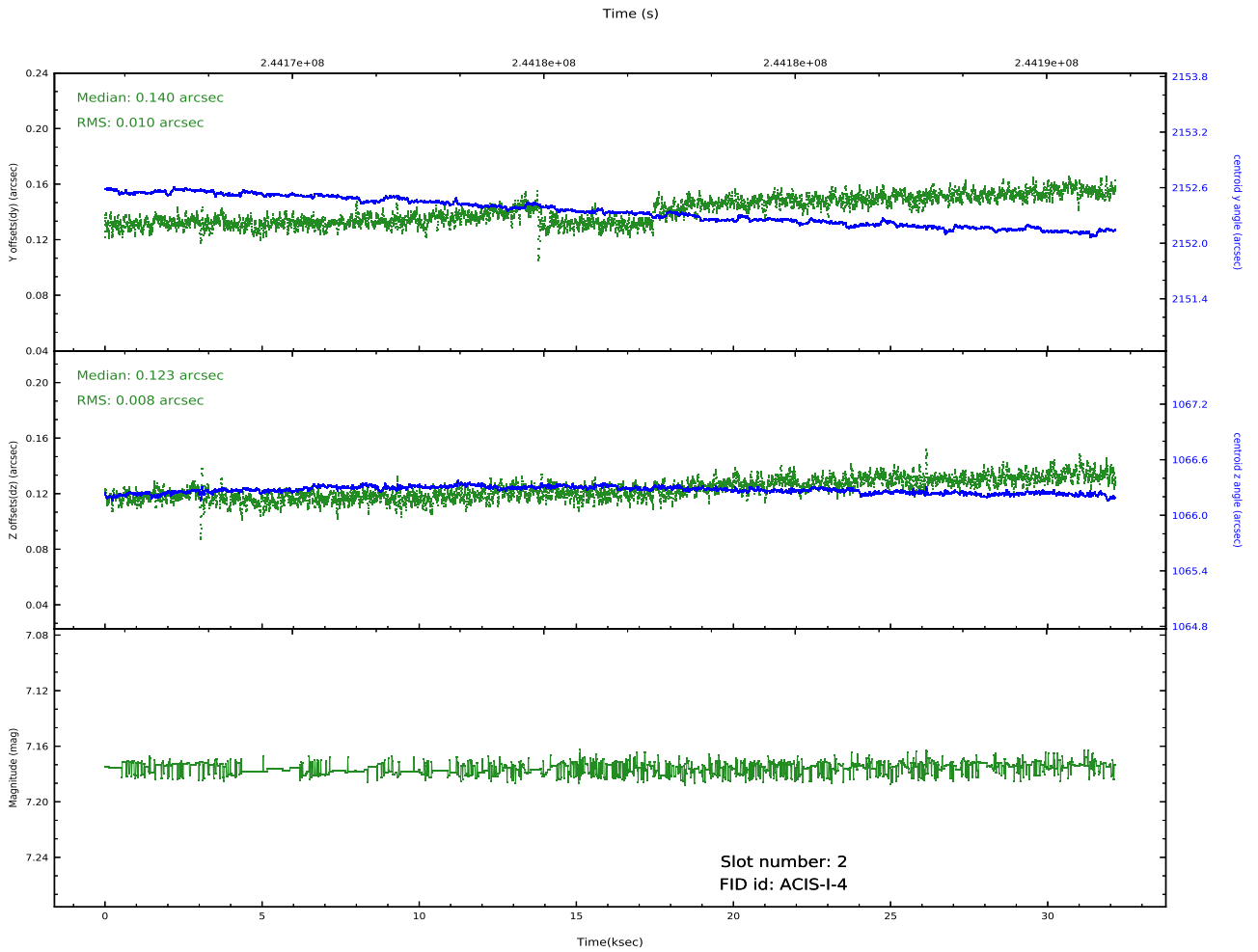
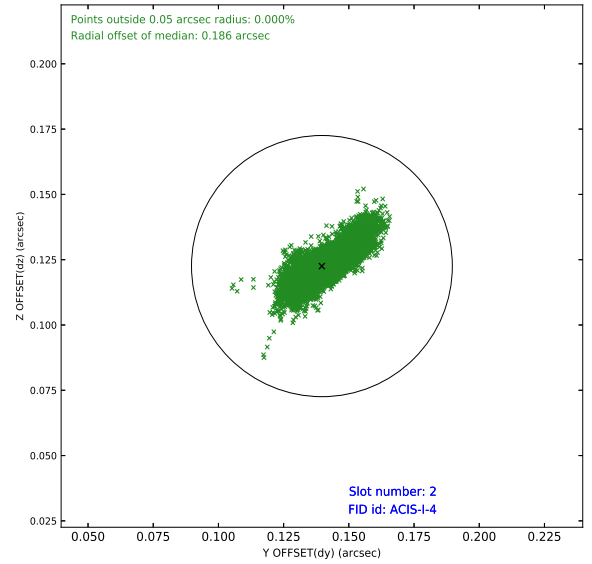
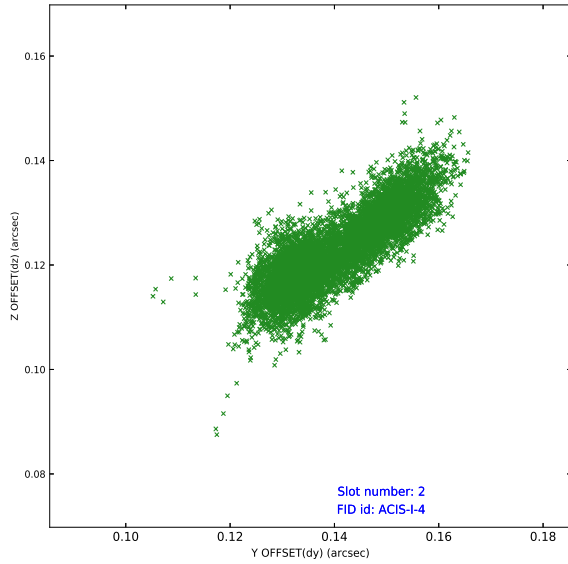
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.15039

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files ARE INCORRECT by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct.