

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7172 - L2 Version 5
Chandra X-Ray Center

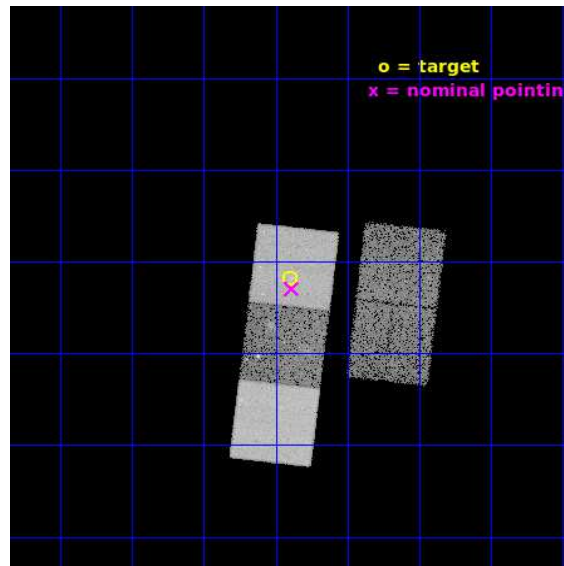
L2 Processing Date : Oct 10 2020

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1 Front

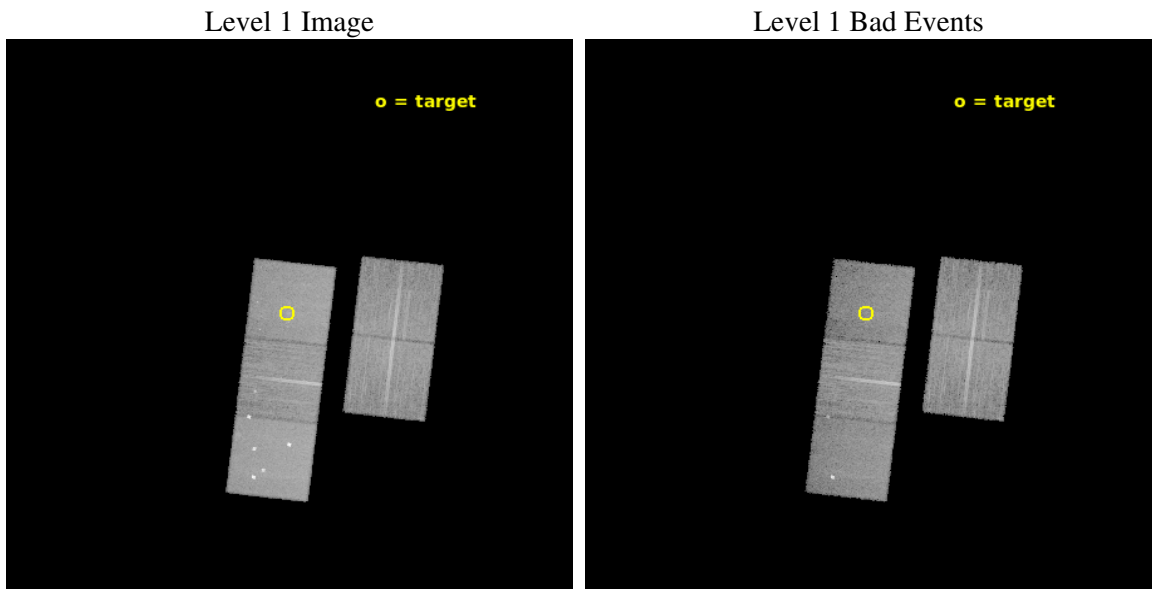
seq_num	800465	Sequence number
obs_id	7172	Observation id
title	Cluster Strong Lensing at High Redshift	Proposal title
observer	Professor Michael Gladders	Principal investigator
object	RCS J2319.9+0038	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	349.974583	Observer's specified target RA [deg]
dec_targ	0.636556	Observer's specified target Dec [deg]
ra_nom	349.97185810891	Nominal RA [deg]
dec_nom	0.61754015006001	Nominal Dec [deg]
roll_nom	276.66520356254	Nominal Roll [deg]
revision	5	Processing version of data
ontime	18184.599965006	Sum of GTIs [s]
livetime	17947.004779156	Livetime [s]
ontime2	18181.459014624	Sum of GTIs [s]
ontime3	18181.458984762	Sum of GTIs [s]
ontime5	18184.599965006	Sum of GTIs [s]
ontime6	18184.599965006	Sum of GTIs [s]
ontime7	18184.599965006	Sum of GTIs [s]
l2events	153109	Number of level 2 events



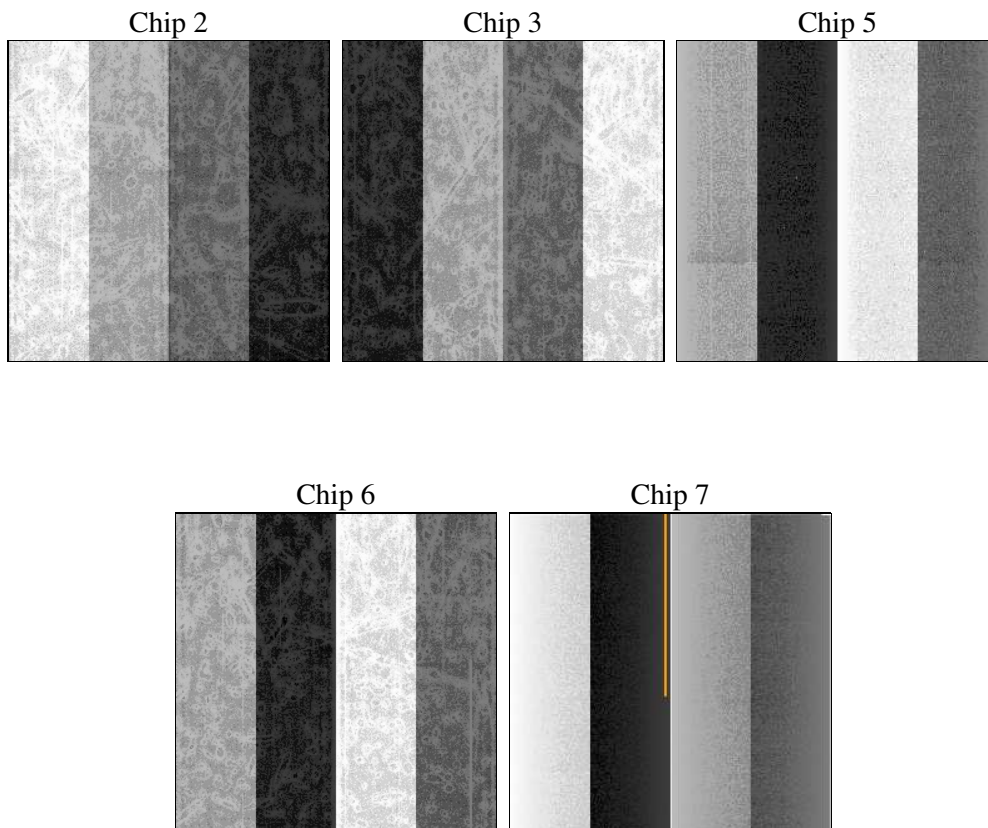
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	18184.599965006	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	18181.459014624	Sum of GTIs [s]
date	2020-10-10T14:20:44	Date and time of file creation	ontime3	18181.458984762	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	18184.599965006	Sum of GTIs [s]
			ontime6	18184.599965006	Sum of GTIs [s]
			ontime7	18184.599965006	Sum of GTIs [s]
			l1events	628362	Number of level 1 events

2.1.4 Events

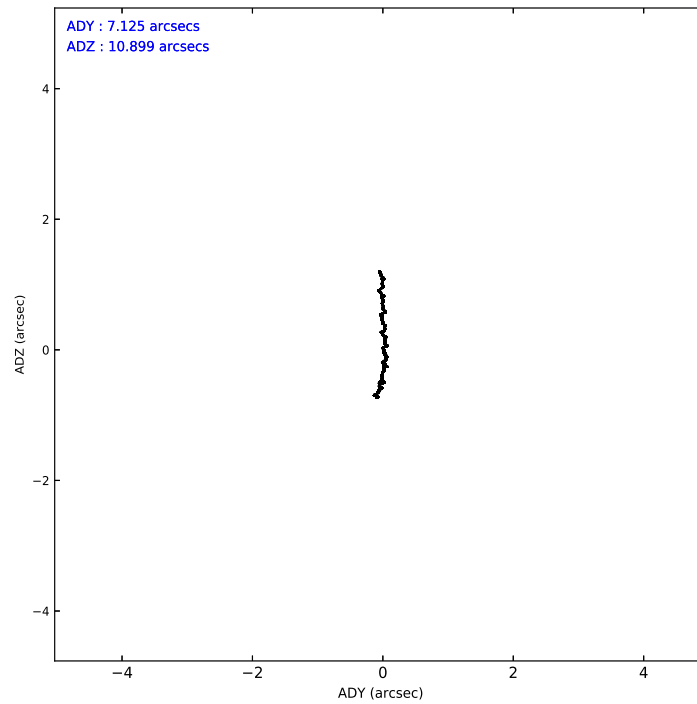
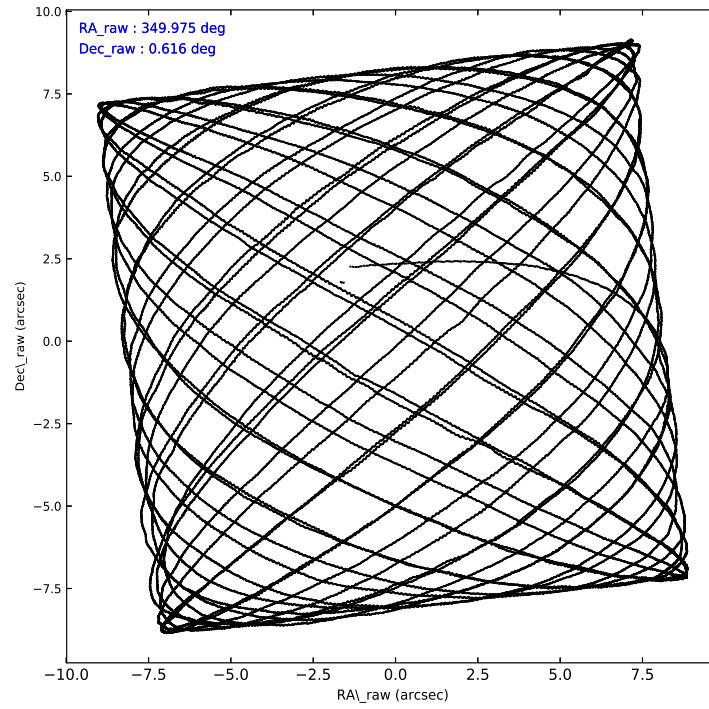
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	113344	106028	166223	114935	127832
rejected events	102746	95891	81963	102479	71207
rejected %	90%	90%	49%	89%	55%

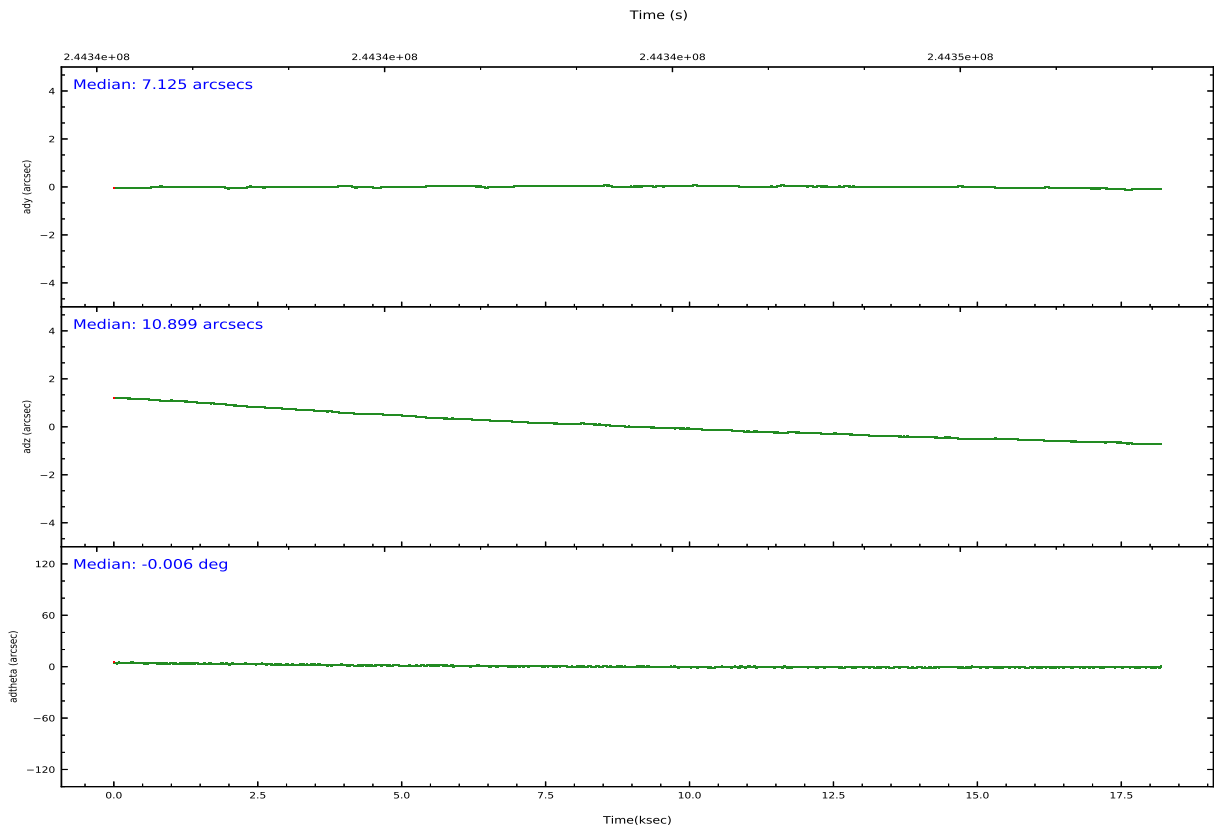
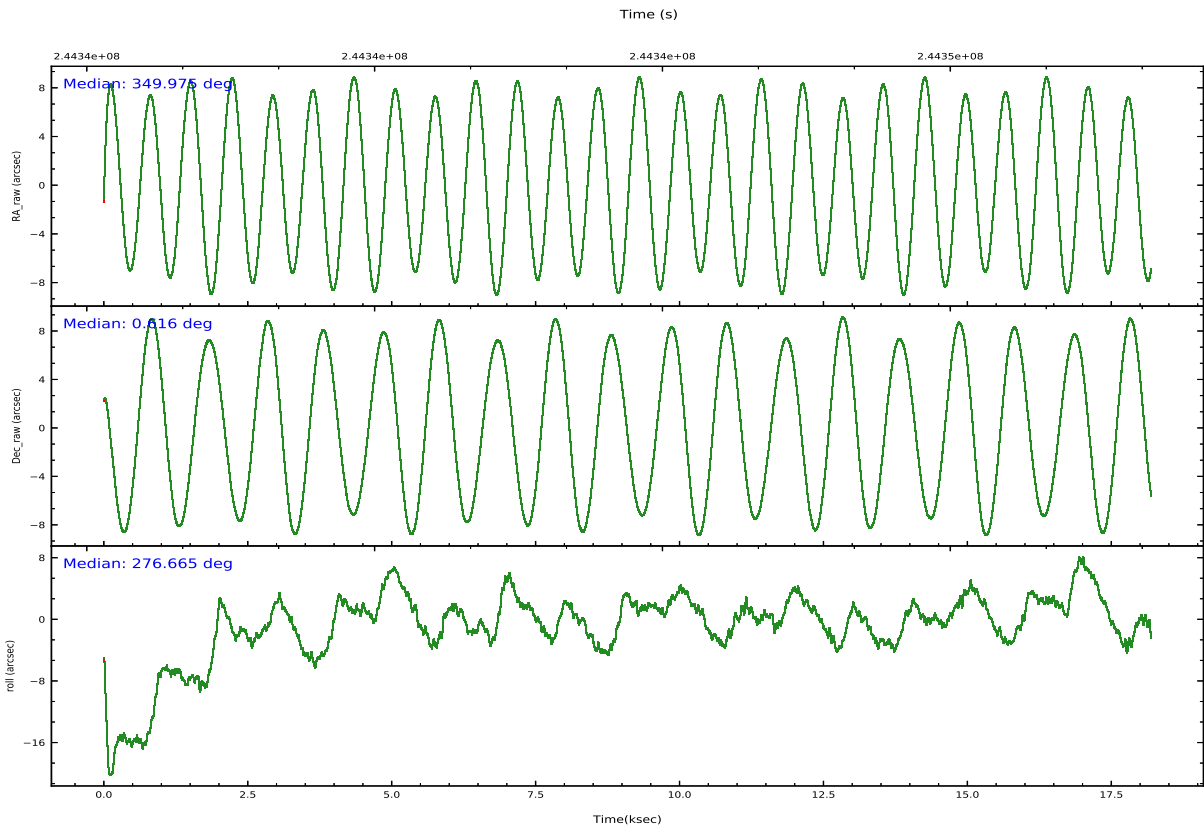
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	3780	3608	14473	4807	5443
	3%	3%	8%	4%	4%
grade 1 events	55	67	246	52	139
	0%	0%	0%	0%	0%
grade 2 events	2612	2318	23305	2681	11578
	2%	2%	14%	2%	9%
grade 3 events	1218	1144	4414	1322	5397
	1%	1%	2%	1%	4%
grade 4 events	1193	1182	4223	1283	5395
	1%	1%	2%	1%	4%
grade 5 events	3652	4518	13608	4663	13562
	3%	4%	8%	4%	10%
grade 6 events	2039	2124	39683	2617	30162
	1%	2%	23%	2%	23%
grade 7 events	98795	91067	66271	97510	56156
	87%	85%	39%	84%	43%

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	349.958713	349.97185810891	Subarray requested	NONE	NONE
[deg] Pointing Dec	0.637432	0.61754015006001	Alternating exposures requested	N	N
[deg] Pointing Roll	276.509140	276.66520356254	[s] Primary exposure time	0.000000	3.1
[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)	244335488.184000	244334268.79081			
Observation start date	2005-09-28T22:57:04	2005-09-28T22:37:48			
[s] Observation end time (MET)	244353488.184000	244353881.65421			
Observation end date	2005-09-29T03:57:04	2005-09-29T04:04:41			
Read mode	TIMED	TIMED			

2.3 Aspect





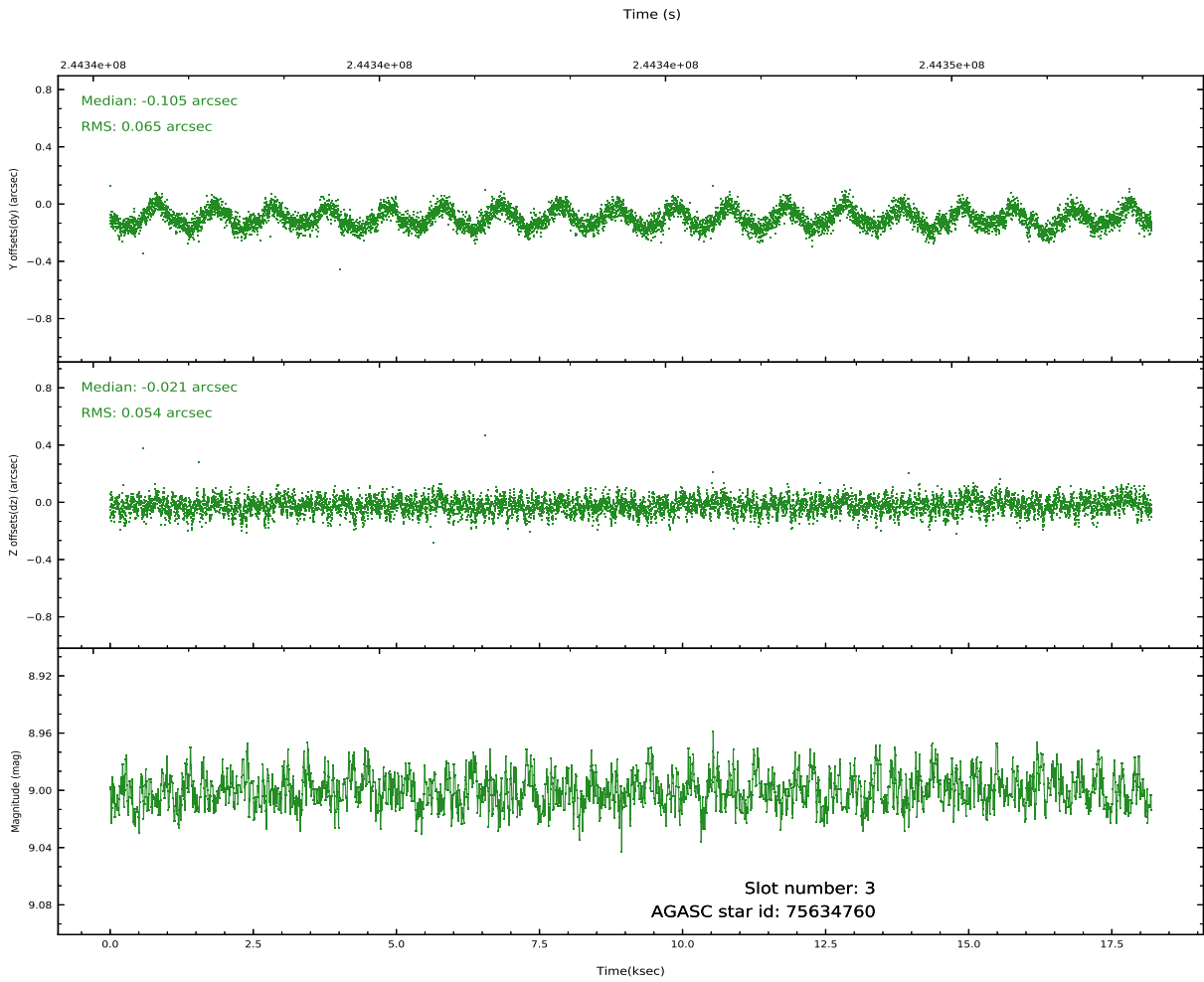
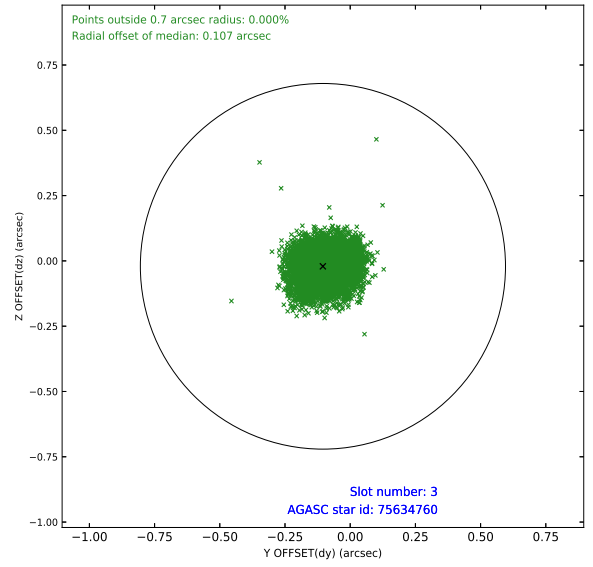
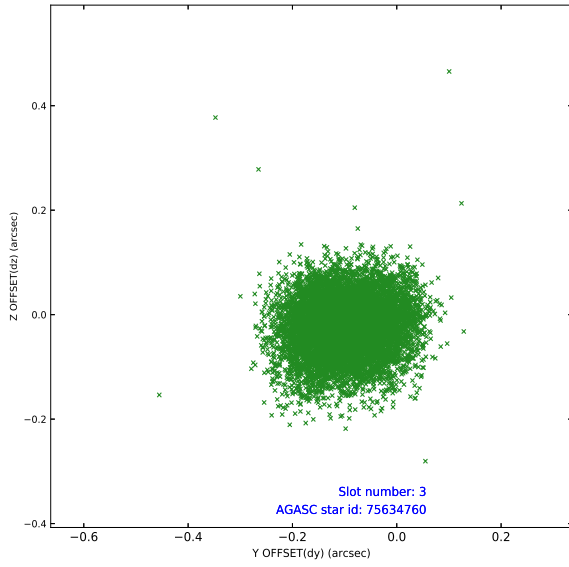
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	4438	1.000	-0.080	-0.059	0.012	0.025	0.000000	0.000000	-759.89	-1732
1	FID		ACIS-S-4	7.21	4438	1.000	0.152	0.054	0.010	0.017	0.000000	0.000000	2153.45	176
2	FID		ACIS-S-5	7.23	4438	1.000	-0.105	0.013	0.009	0.022	0.000000	0.000000	-1812.54	169
3	GUIDE	used	75634760	9.00	8870	1.000	-0.105	-0.021	0.090	0.144	349.528153	0.494791	334.86	-1598
4	GUIDE	used	75636968	9.29	8865	1.000	-0.093	-0.057	0.112	0.182	349.584767	0.524969	250.04	-1383
5	GUIDE	used	75765576	10.01	8869	1.000	0.098	0.060	0.168	0.274	350.147829	0.719056	-214.36	709
6	GUIDE	used	75769624	9.40	8865	1.000	-0.066	-0.007	0.092	0.147	350.180830	0.159527	1800.21	600
7	GUIDE	used	687220280	9.39	8867	1.000	0.179	0.028	0.114	0.182	349.573474	-0.035729	2251.46	-1652

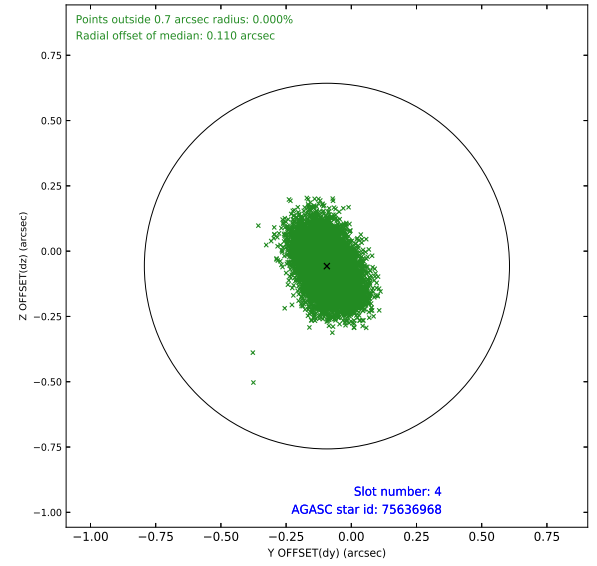
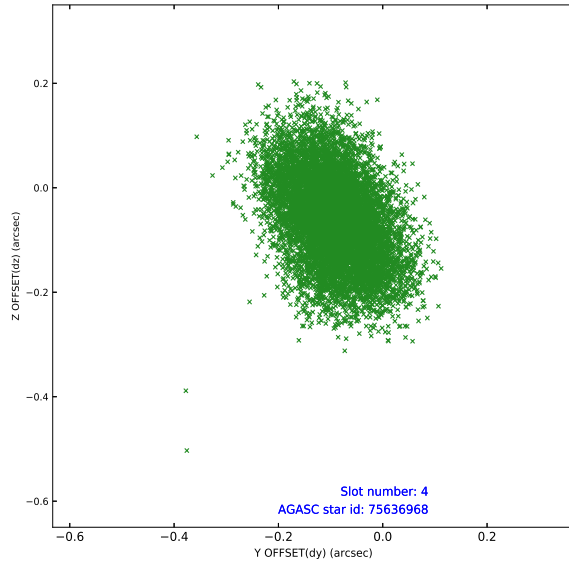
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2.4 Star Slots

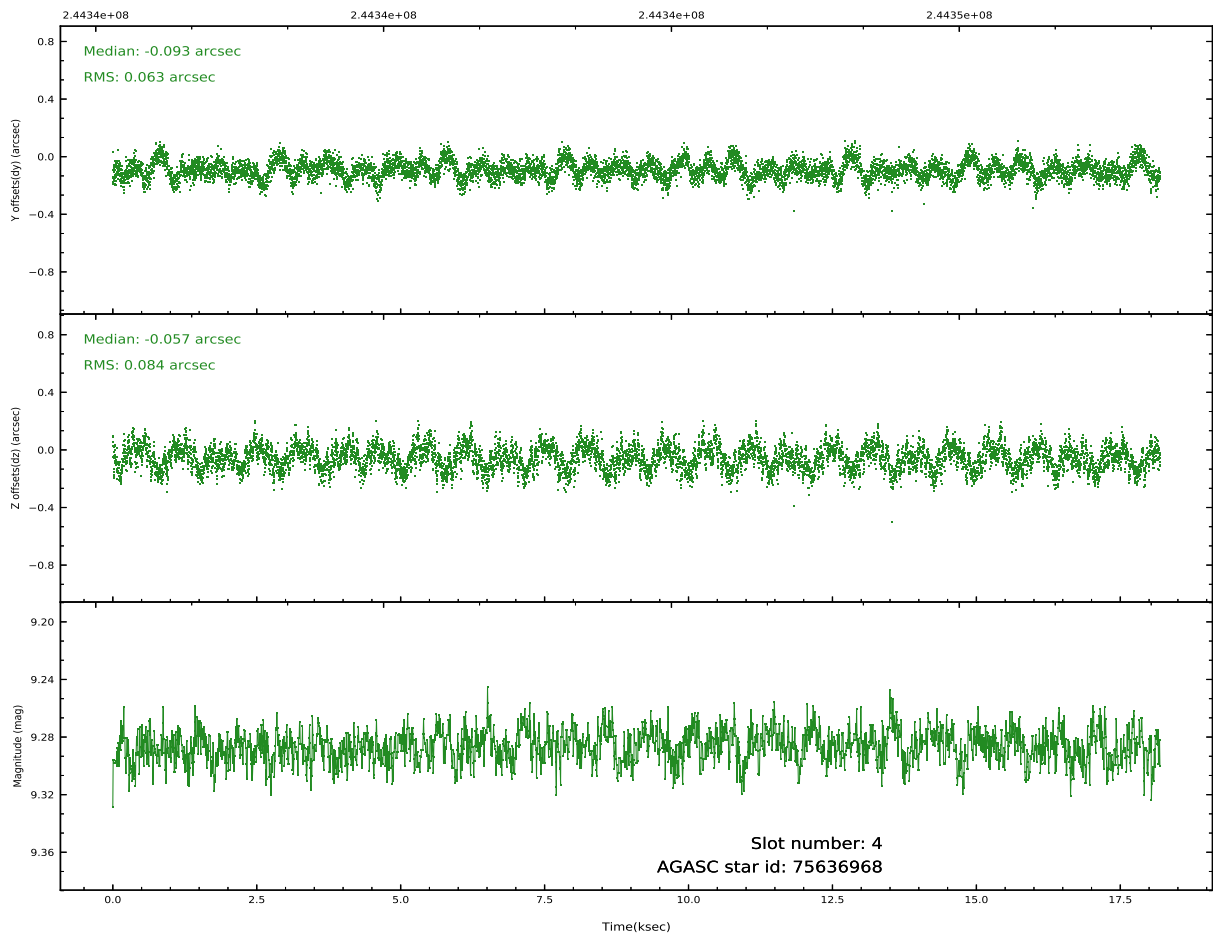
2.4.1 Slot 3



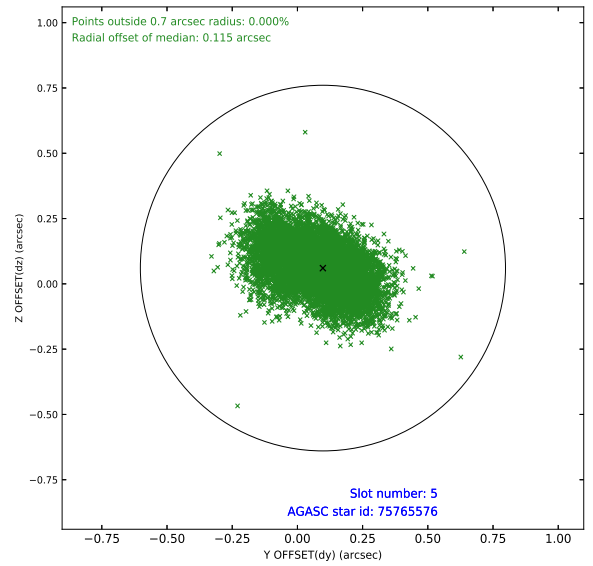
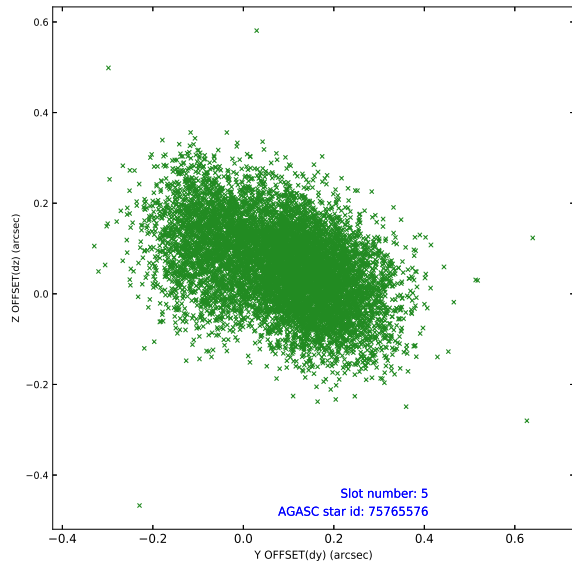
2.4.2 Slot 4



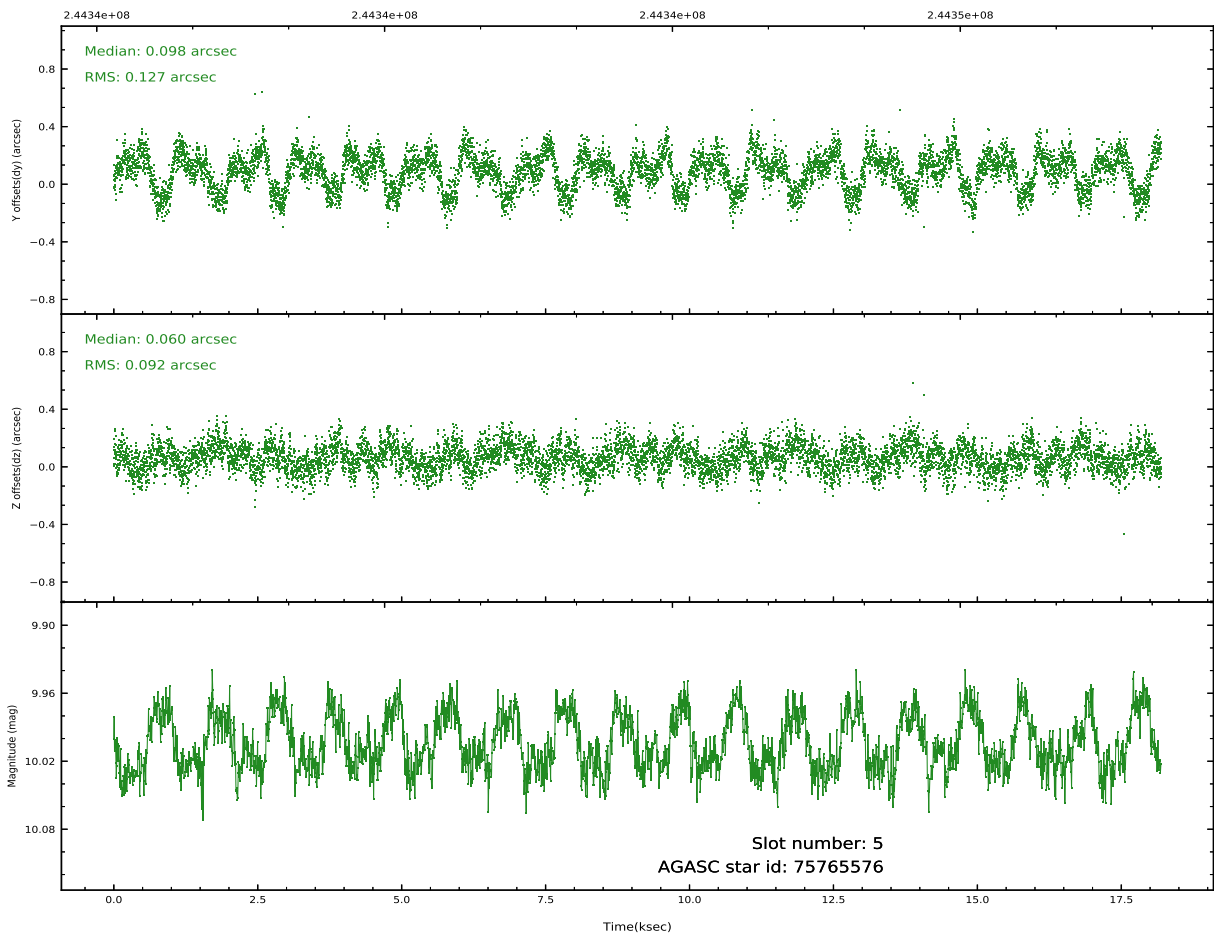
Time (s)



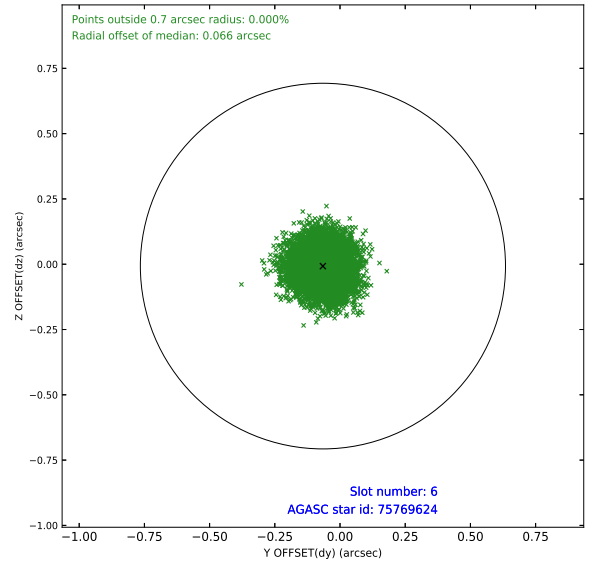
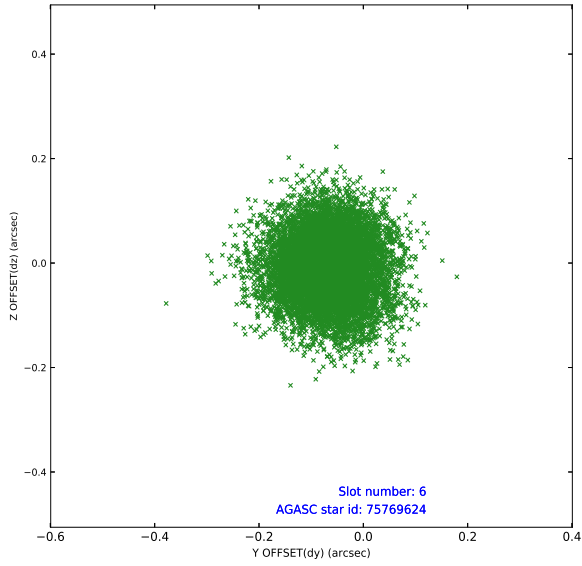
2.4.3 Slot 5



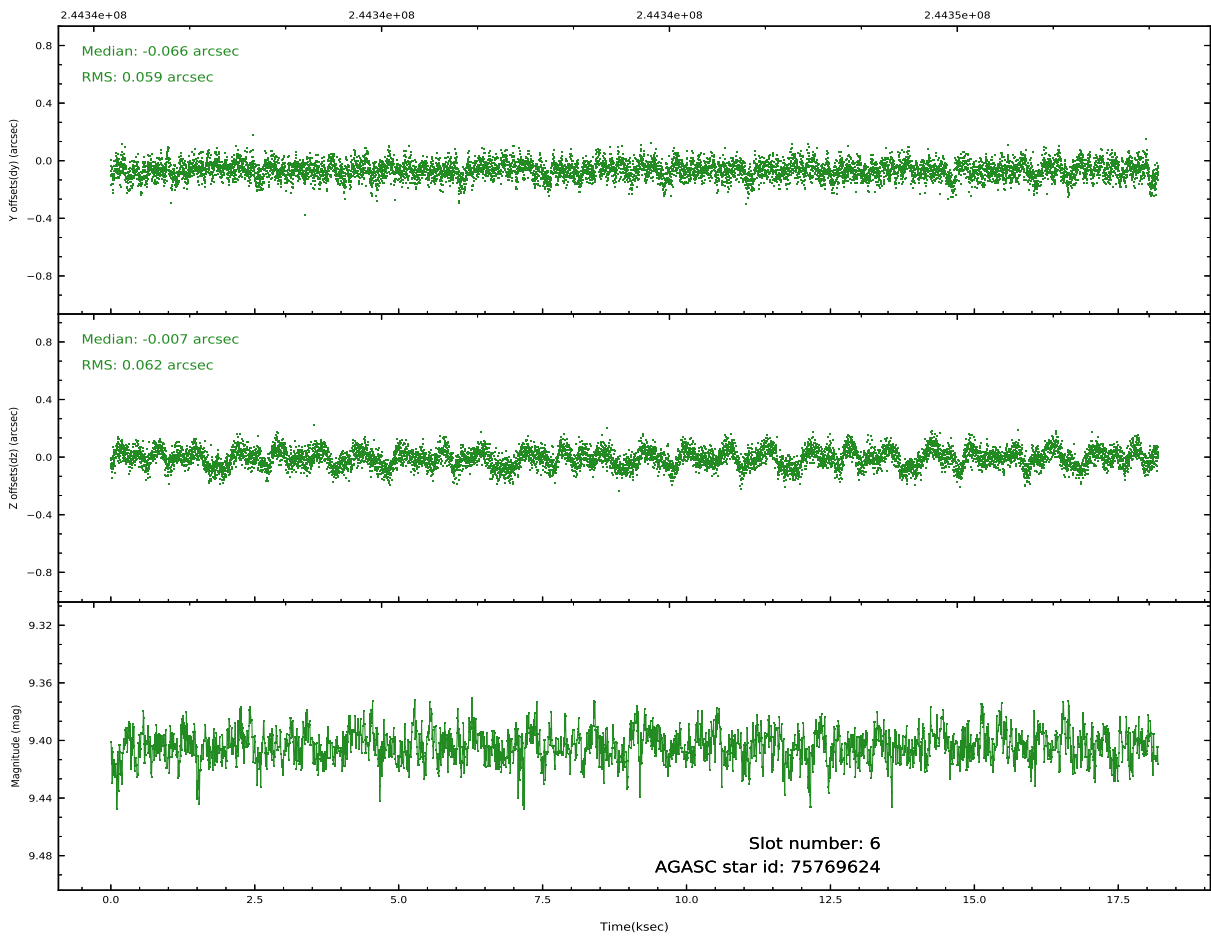
Time (s)



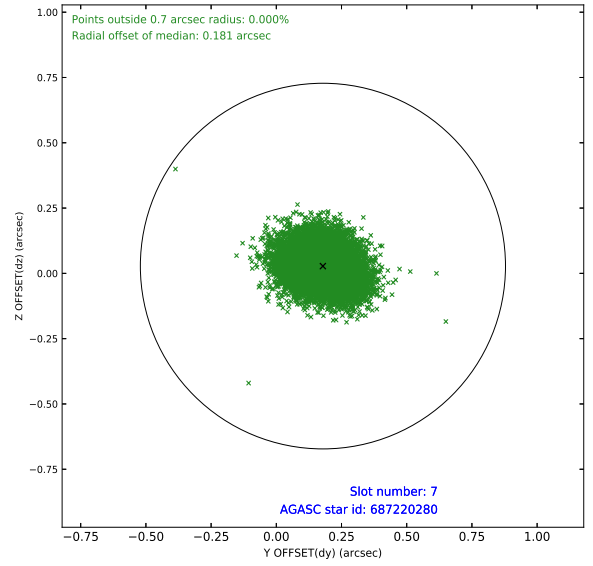
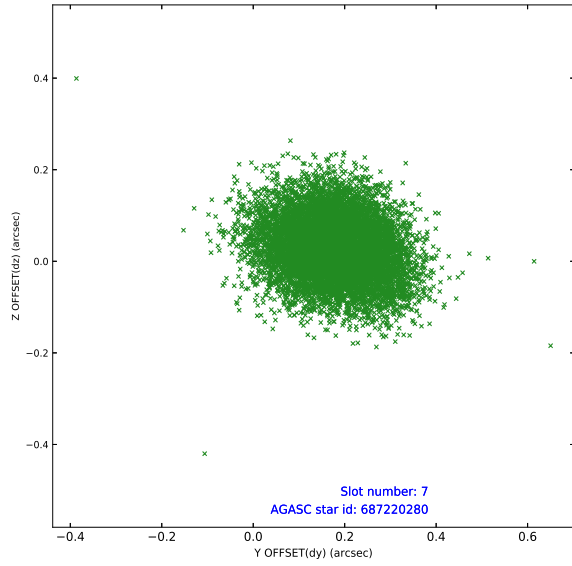
2.4.4 Slot 6



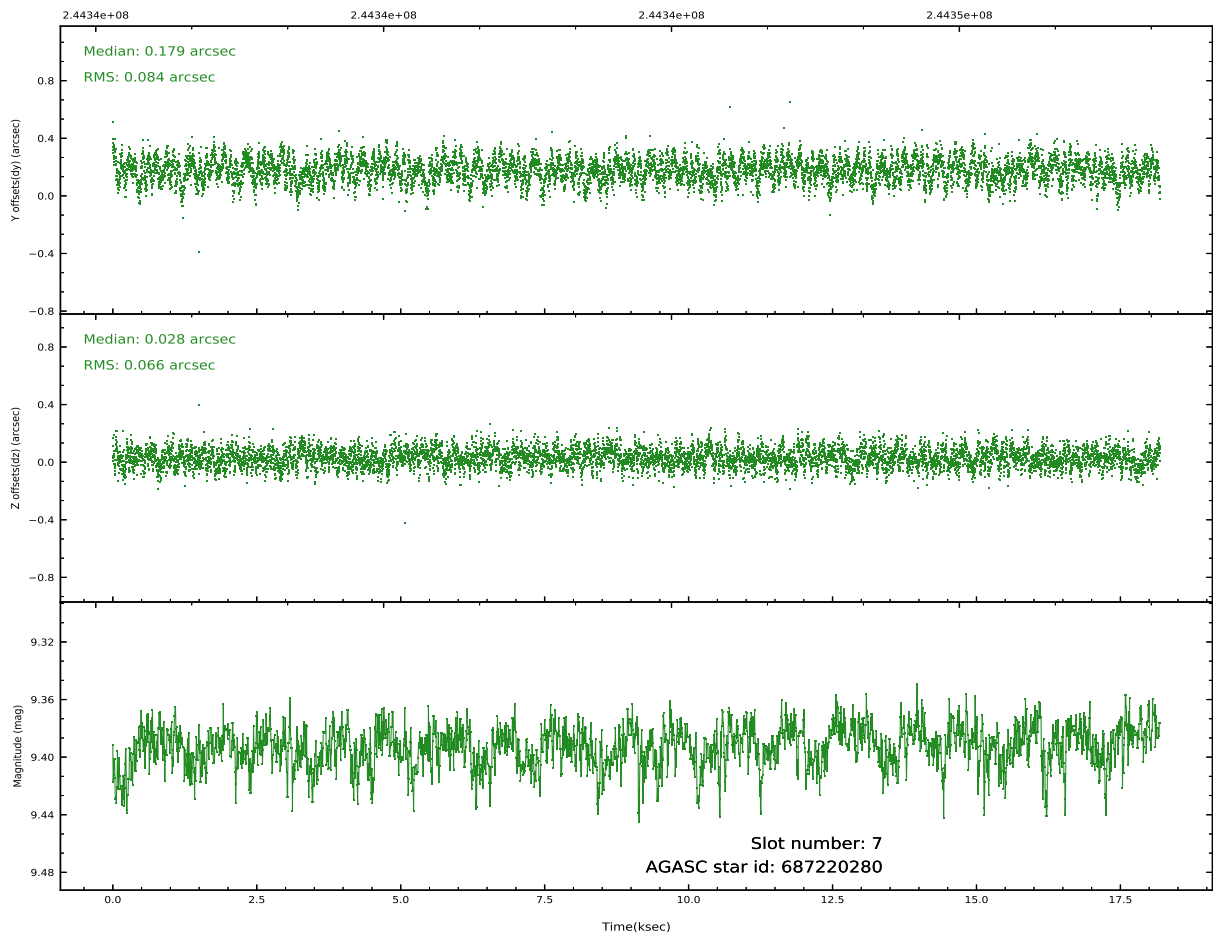
Time (s)



2.4.5 Slot 7

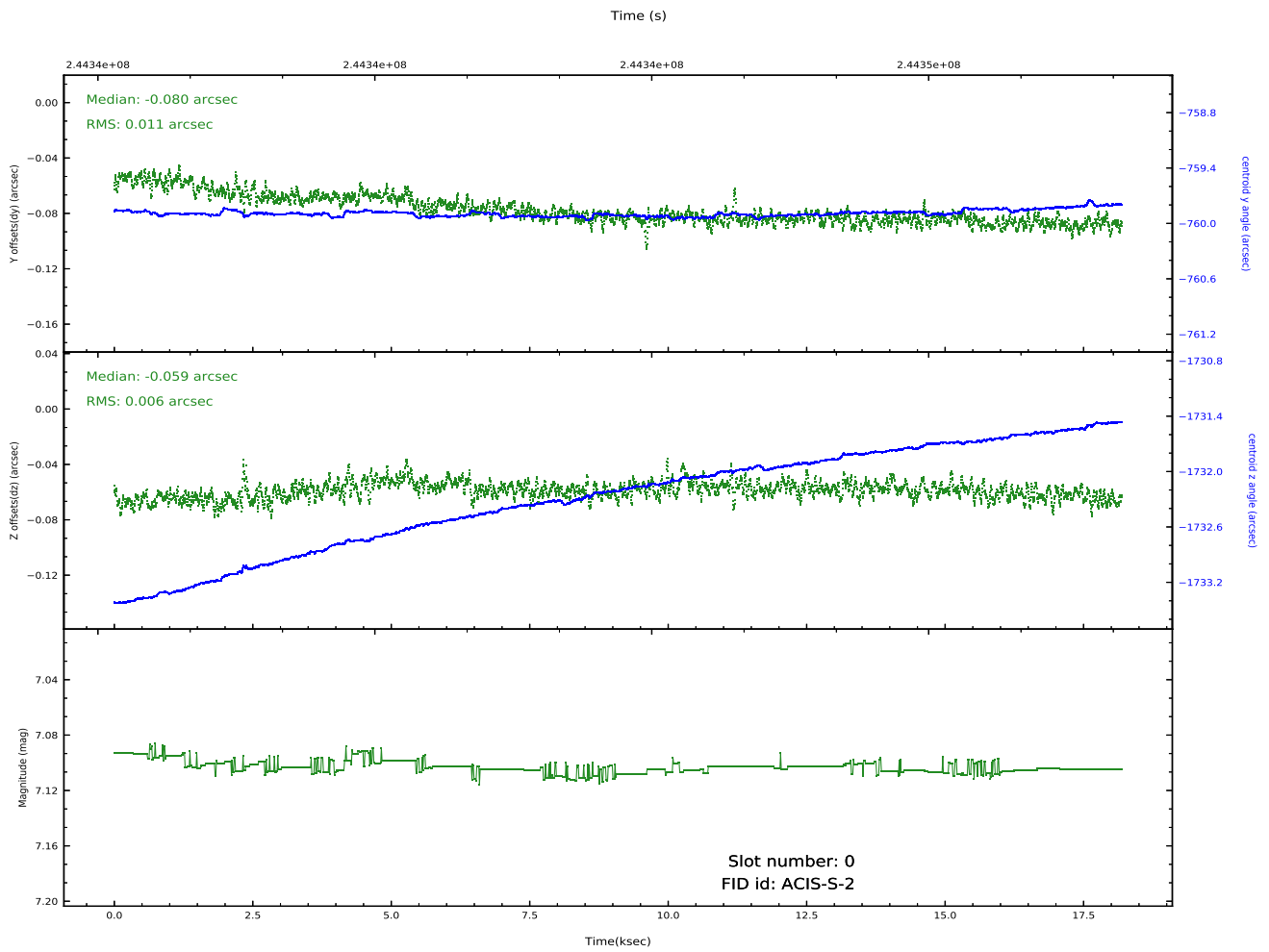
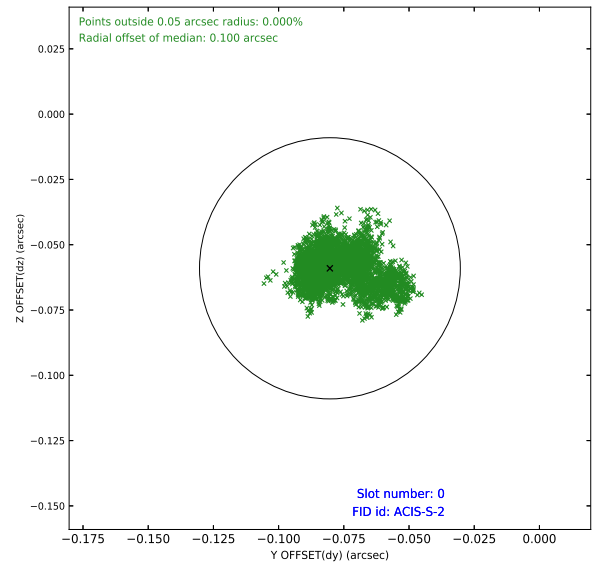
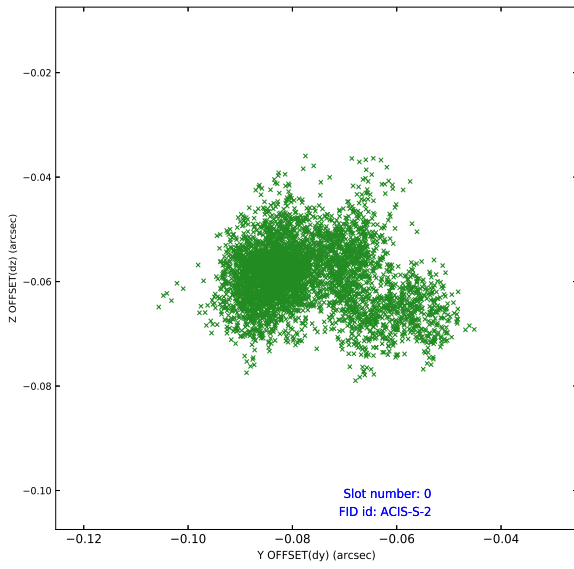


Time (s)

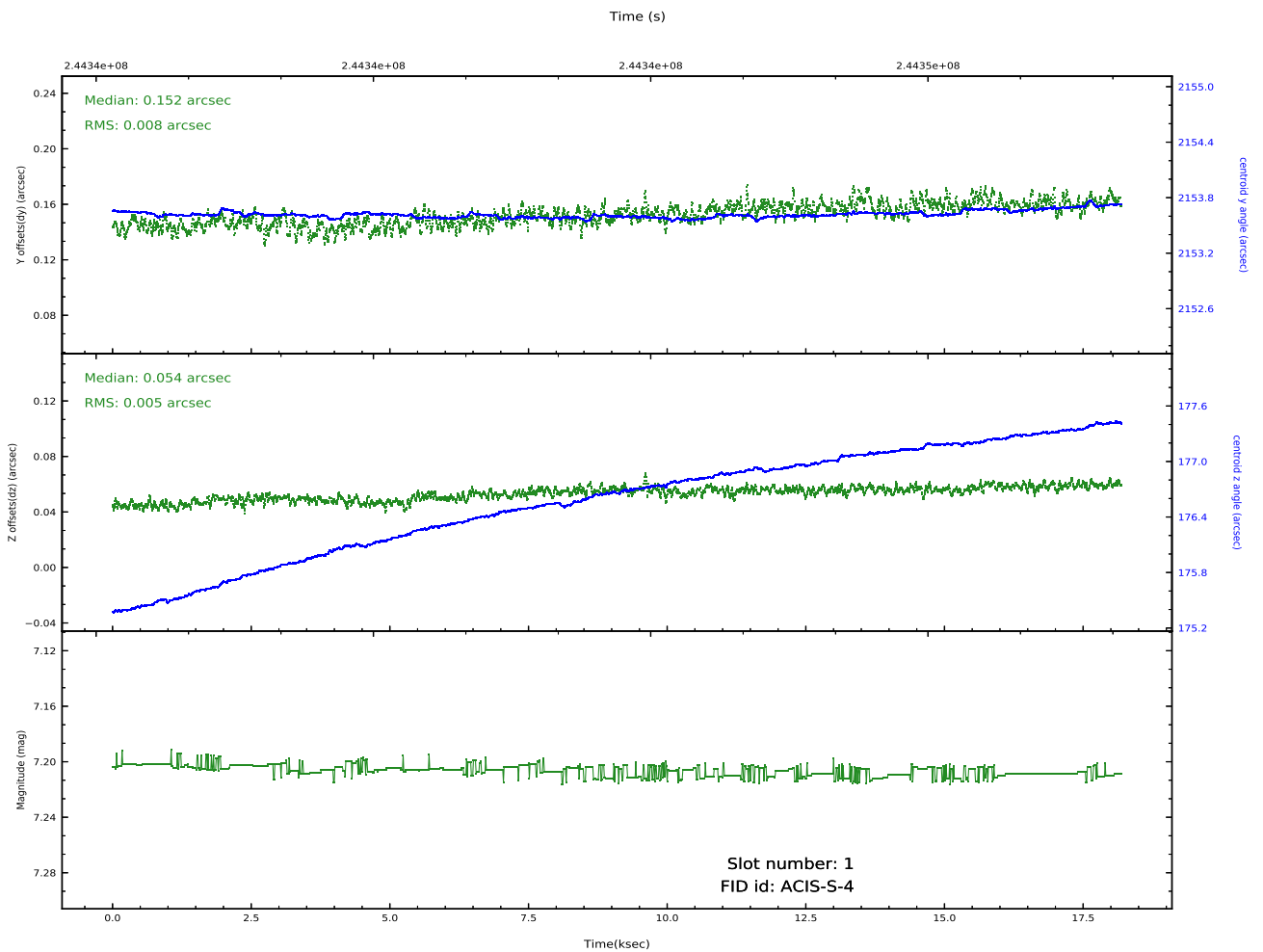
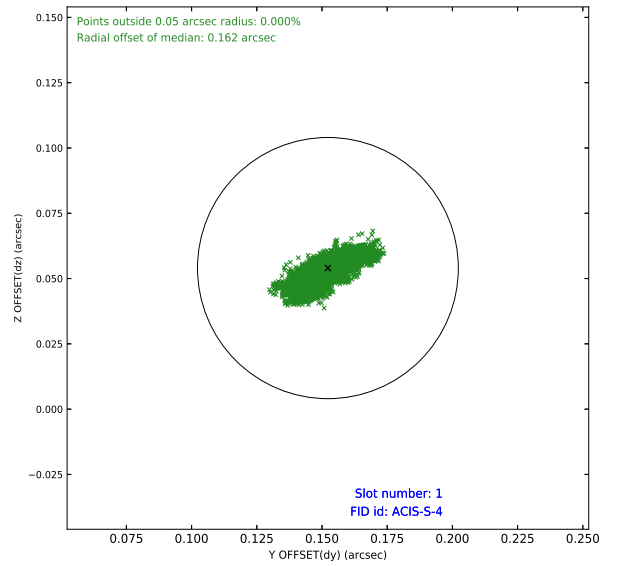
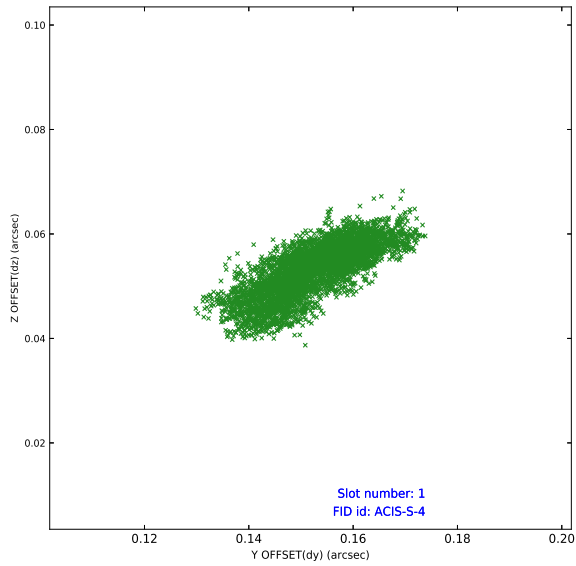


2.5 FID Slots

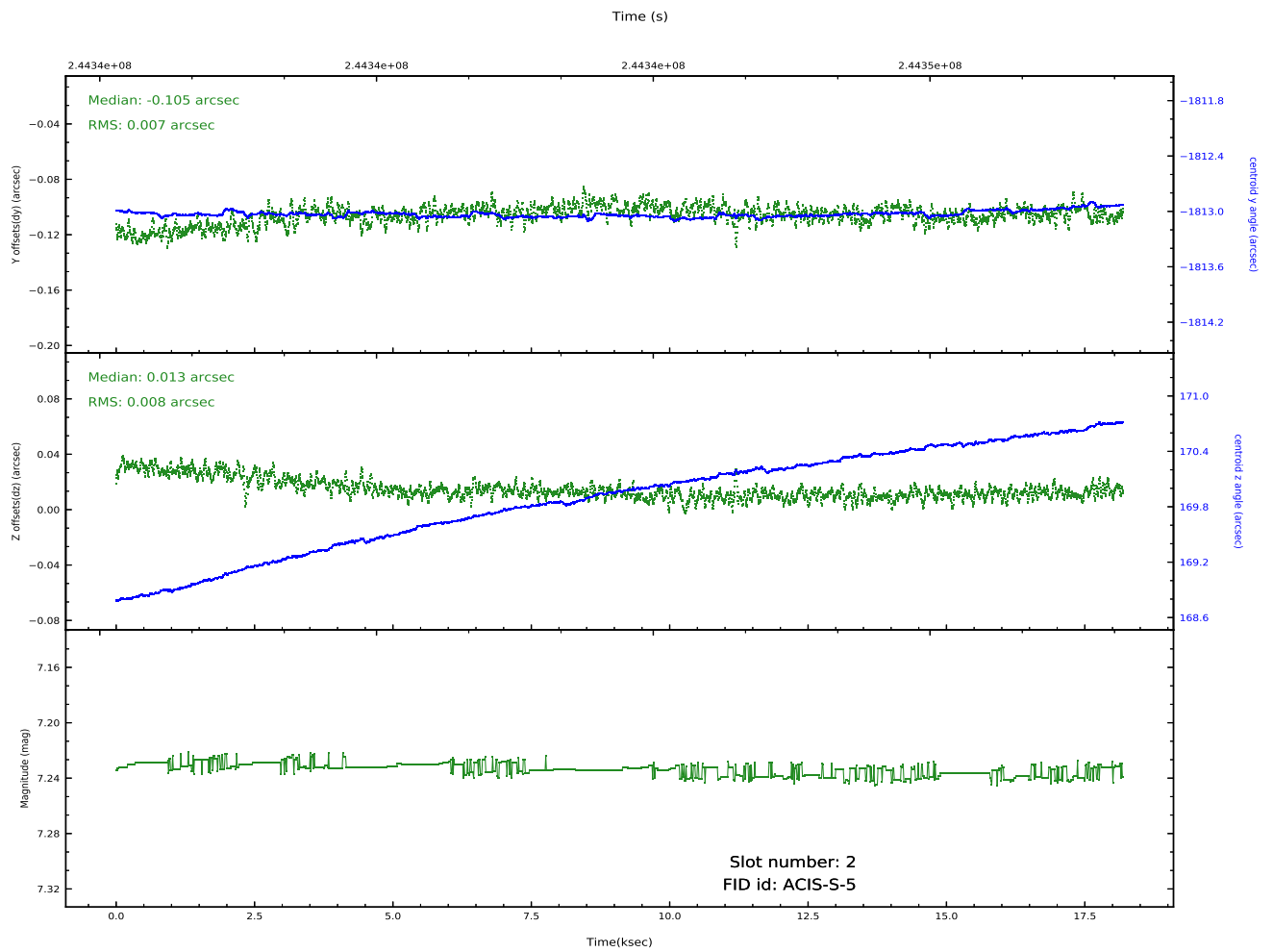
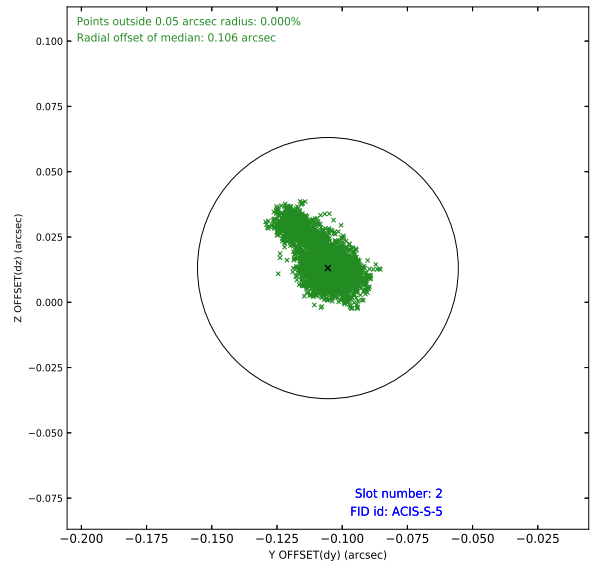
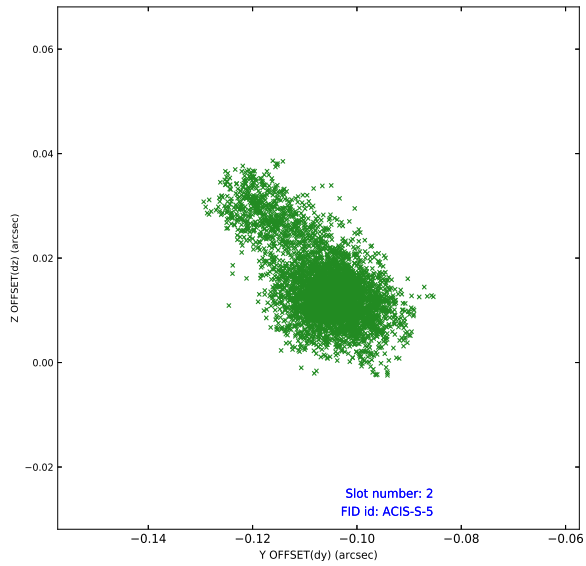
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



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	18.18459

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.