

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5612 - L2 Version 4
Chandra X-Ray Center

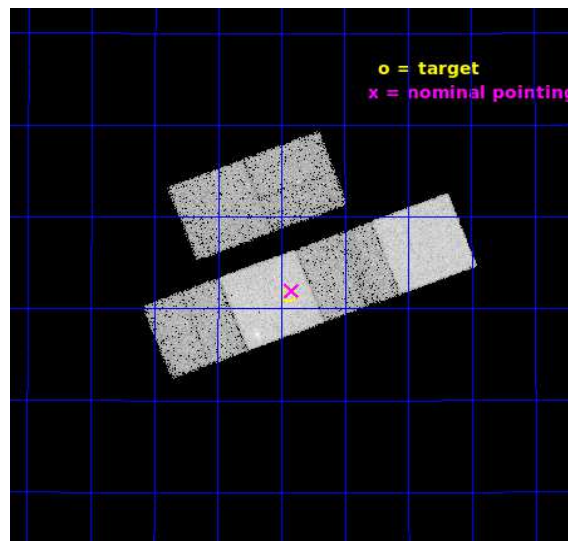
L2 Processing Date : Oct 8 2020

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1 Front

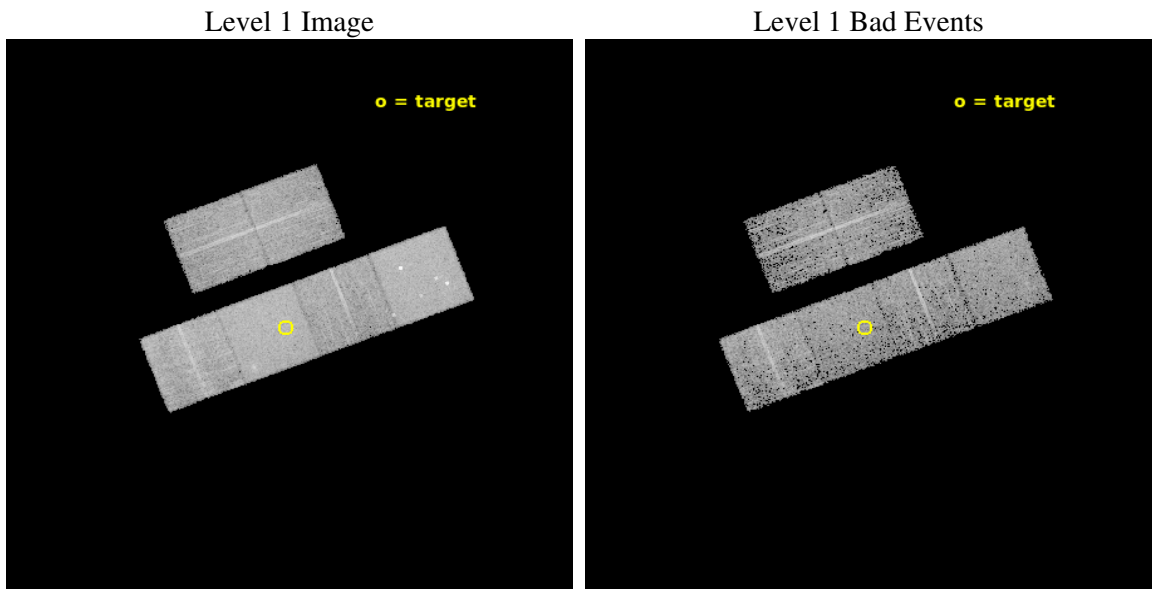
seq_num	701035	Sequence number
obs_id	5612	Observation id
title	A Chandra Survey of the Most Distant Quasars: X-raying the First Massive Black Holes	Proposal title
observer	William Brandt	Principal investigator
object	SDSS J162626.50+275132.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	246.61	Observer's specified target RA [deg]
dec_targ	27.859	Observer's specified target Dec [deg]
ra_nom	246.60413576903	Nominal RA [deg]
dec_nom	27.865919951076	Nominal Dec [deg]
roll_nom	158.88725849954	Nominal Roll [deg]
revision	4	Processing version of data
ontime	4879.1602655947	Sum of GTIs [s]
livetime	4817.3774004342	Livetime [s]
ontime2	4879.201305598	Sum of GTIs [s]
ontime3	4879.0371455848	Sum of GTIs [s]
ontime5	4879.1192255914	Sum of GTIs [s]
ontime6	4879.0781855881	Sum of GTIs [s]
ontime7	4879.1602655947	Sum of GTIs [s]
ontime8	4878.9961056113	Sum of GTIs [s]
l2events	111023	Number of level 2 events



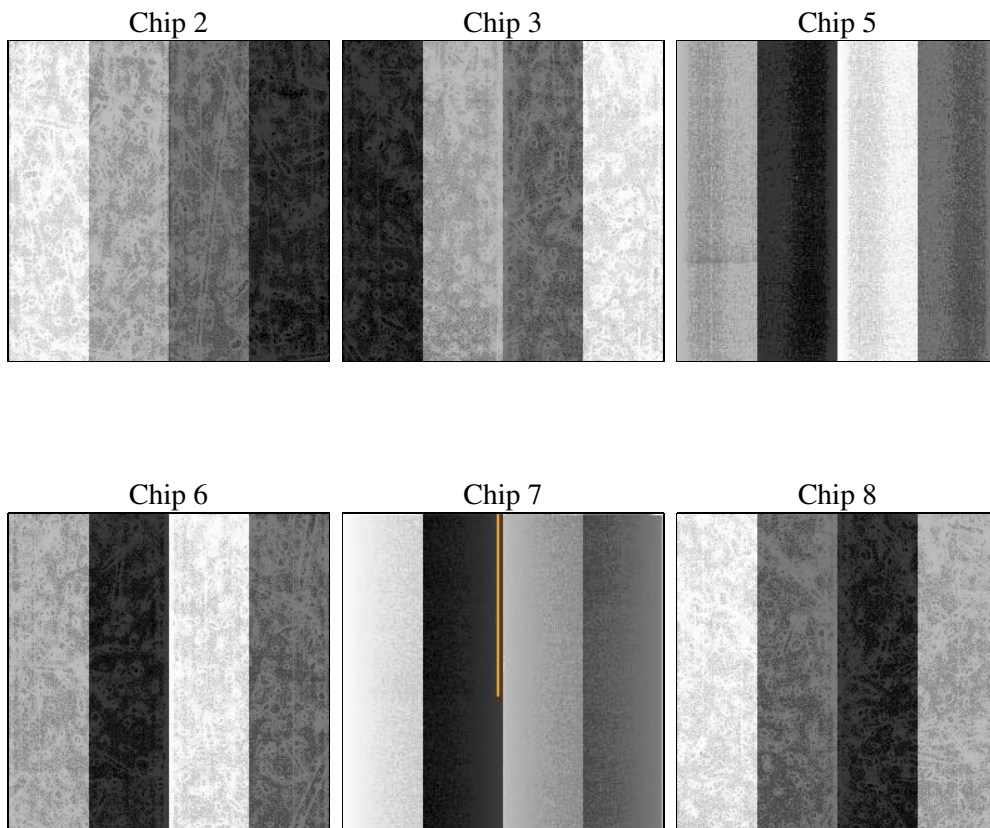
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4800.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	4879.1602655947	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	4879.201305598	Sum of GTIs [s]
date	2020-10-08T07:51:43	Date and time of file creation	ontime3	4879.0371455848	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	4879.1192255914	Sum of GTIs [s]
			ontime6	4879.0781855881	Sum of GTIs [s]
			ontime7	4879.1602655947	Sum of GTIs [s]
			ontime8	4878.9961056113	Sum of GTIs [s]
			l1events	308591	Number of level 1 events

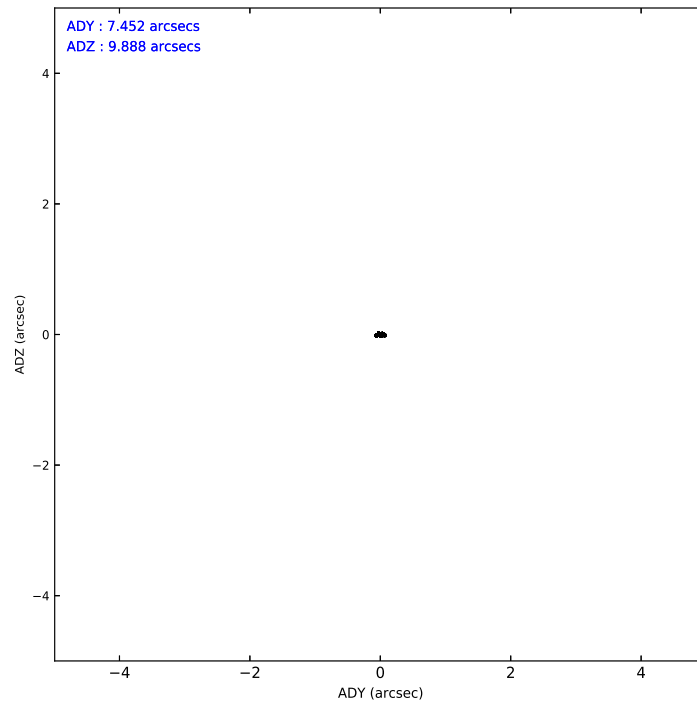
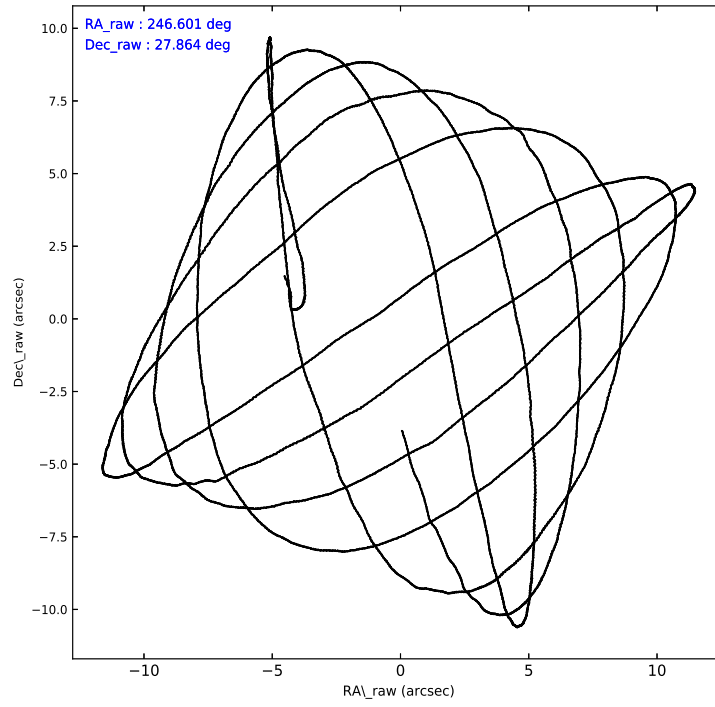
2.1.4 Events

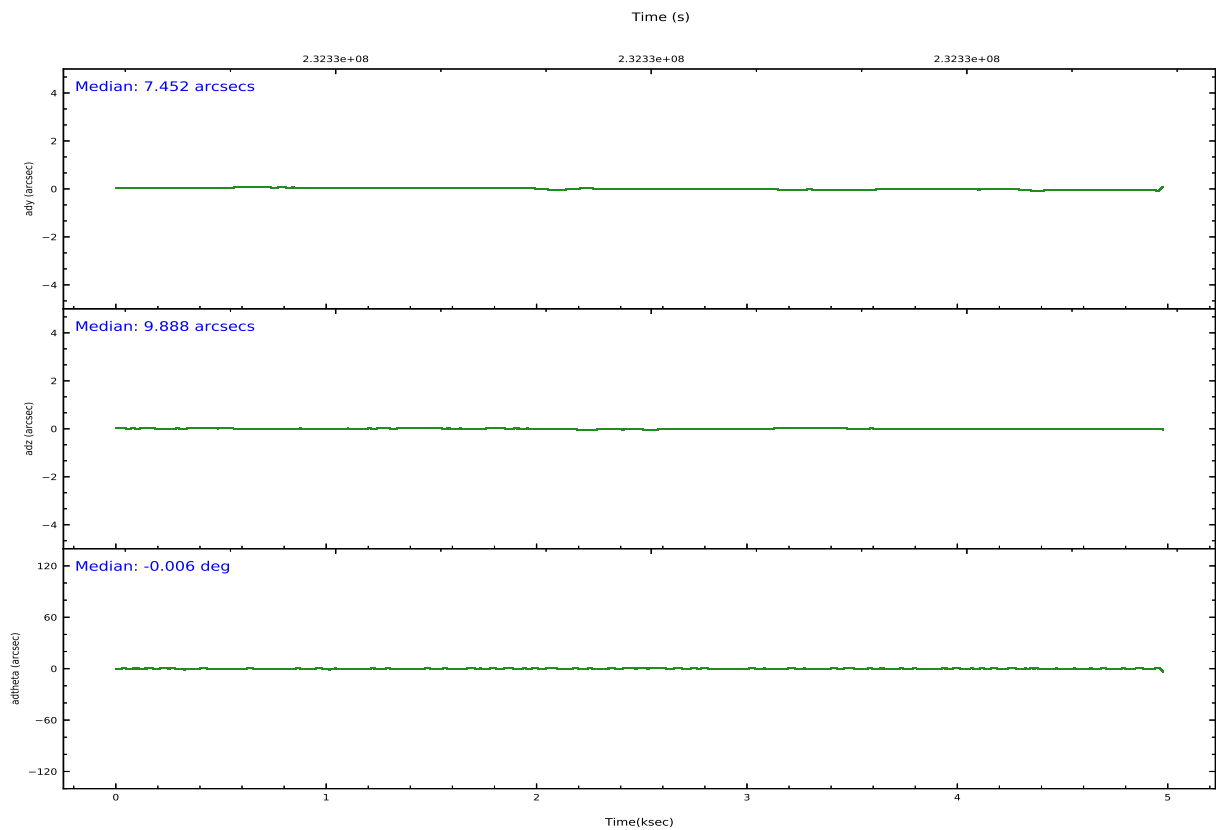
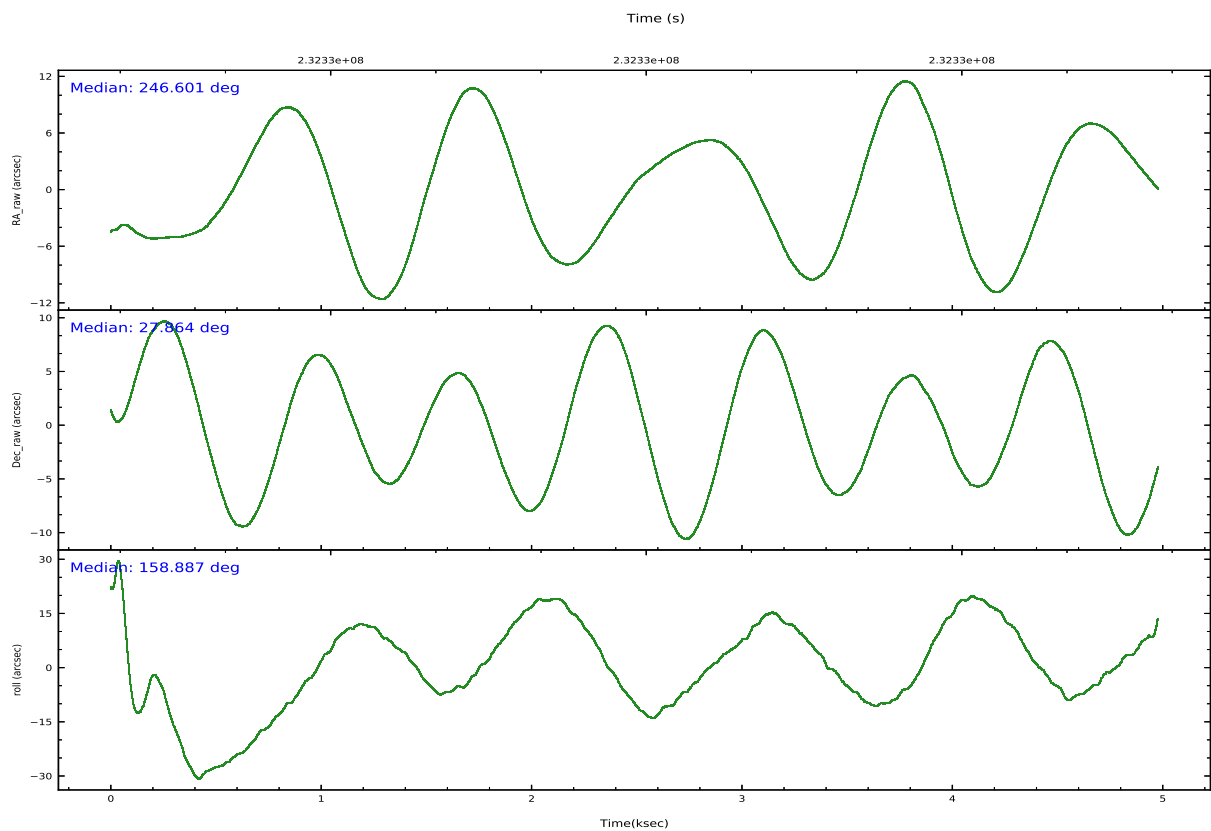
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	43153	41793	66177	43190	61034	53244	grade 0 events	8183	8072	5334	8275	3112	9890
rejected events	30989	29693	30035	30299	28073	34596		18%	19%	8%	19%	5%	18%
rejected %	71%	71%	45%	70%	45%	64%	grade 1 events	56	54	135	45	48	55
								0%	0%	0%	0%	0%	0%
							grade 2 events	1590	1586	10356	1887	5883	3096
								3%	3%	15%	4%	9%	5%
							grade 3 events	627	679	1425	724	2606	1382
								1%	1%	2%	1%	4%	2%
							grade 4 events	650	695	1335	695	2547	1305
								1%	1%	2%	1%	4%	2%
							grade 5 events	1448	1581	4044	1602	4612	2161
								3%	3%	6%	3%	7%	4%
							grade 6 events	1141	1086	17752	1329	18859	3000
								2%	2%	26%	3%	30%	5%
							grade 7 events	29458	28040	25796	28633	23367	32355
								68%	67%	38%	66%	38%	60%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	246.631007	246.60413576903	Subarray requested	NONE	NONE
[deg] Pointing Dec	27.868584	27.865919951076	Alternating exposures requested	N	N
[deg] Pointing Roll	158.722101	158.88725849954	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	232330634.184000	232329467.7288			
Observation start date	2005-05-13T00:16:10	2005-05-12T23:57:47			
[s] Observation end time (MET)	232335434.184000	232336288.07911			
Observation end date	2005-05-13T01:36:10	2005-05-13T01:51:28			
Read mode	TIMED	TIMED			

2.3 Aspect



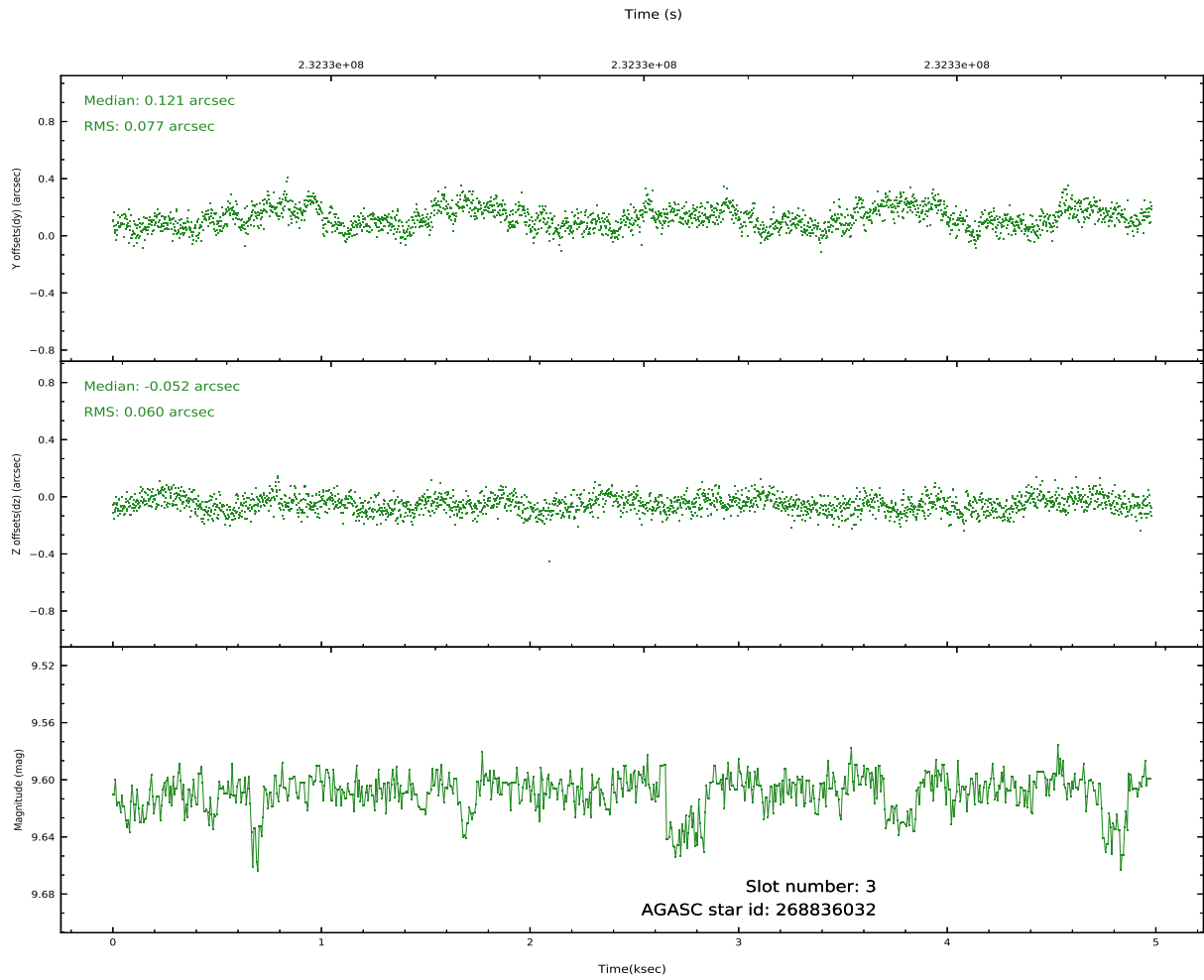
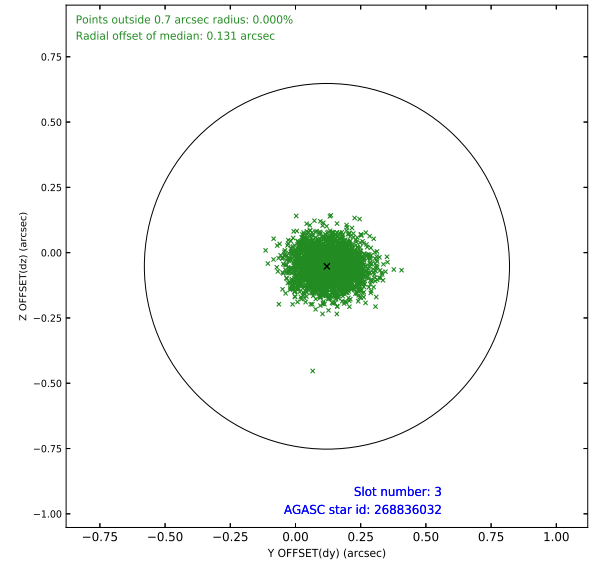
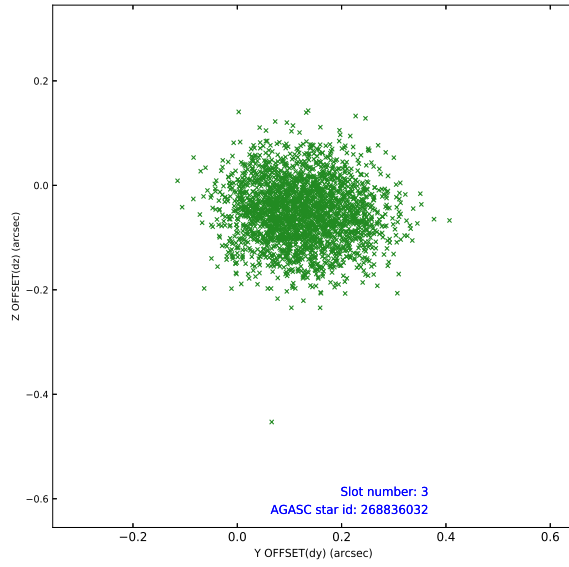


Slot Statistics

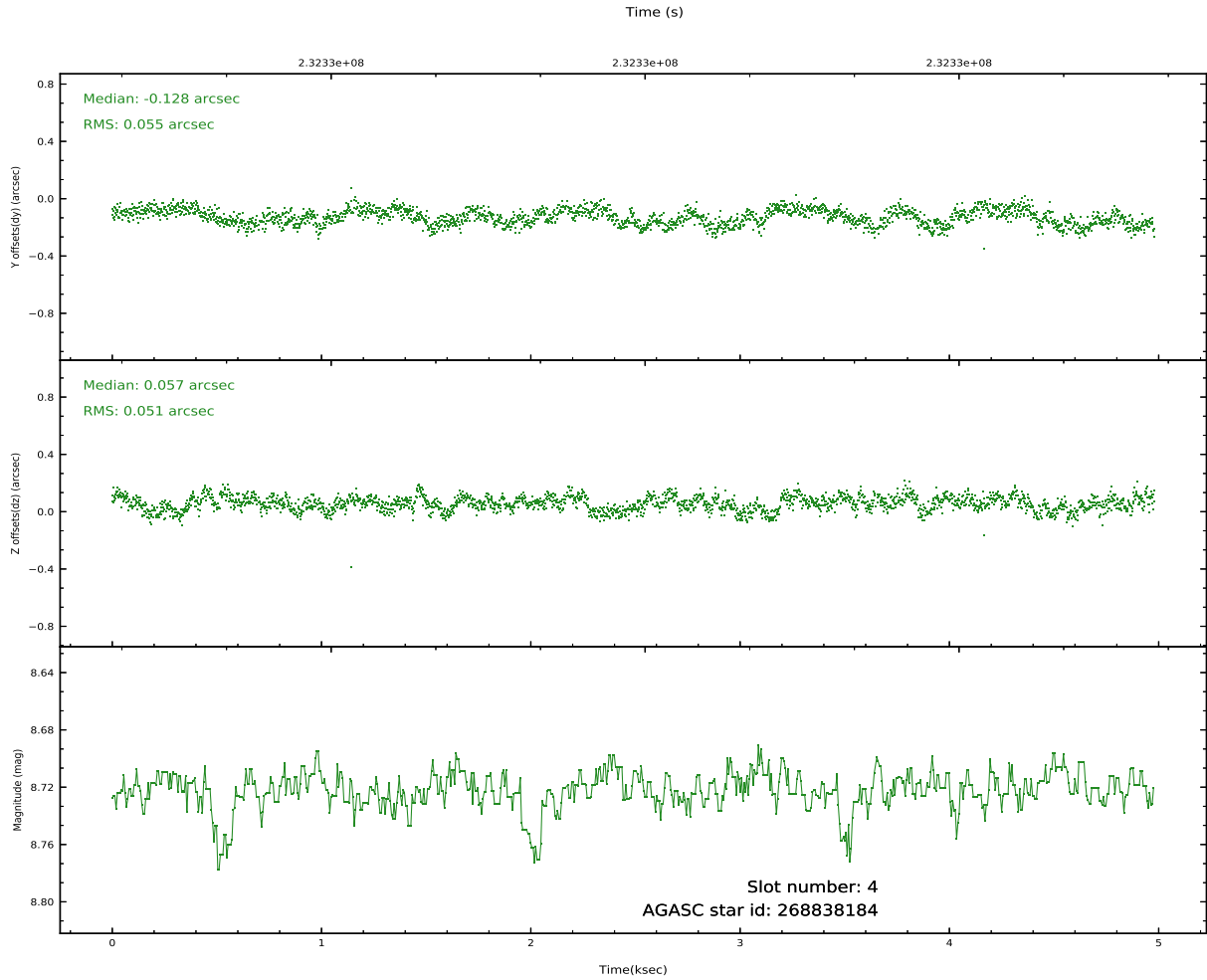
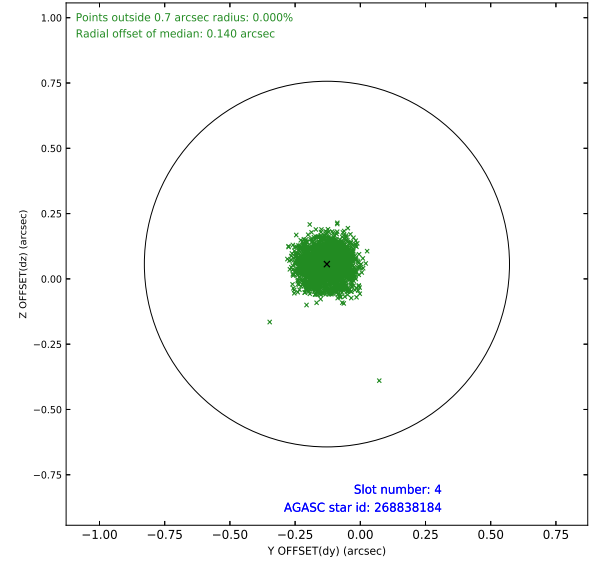
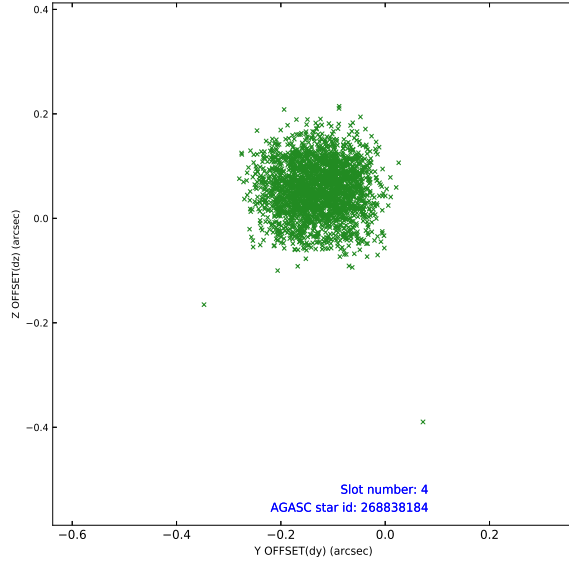
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1215	1.000	-0.077	-0.066	0.006	0.011	0.000000	0.000000	-760.23	-1731
1	FID		ACIS-S-4	7.21	1215	1.000	0.163	0.055	0.005	0.010	0.000000	0.000000	2152.66	176
2	FID		ACIS-S-5	7.24	1215	1.000	-0.118	0.020	0.007	0.011	0.000000	0.000000	-1811.61	171
3	GUIDE	used	268836032	9.61	2428	1.000	0.121	-0.052	0.106	0.165	246.867642	27.663703	-970.22	412
4	GUIDE	used	268838184	8.72	2421	1.000	-0.128	0.057	0.081	0.124	246.495863	27.634881	95.99	940
5	GUIDE	used	268837680	8.80	2429	1.000	0.092	-0.058	0.086	0.143	246.190261	27.754102	1160.03	892
6	GUIDE	used	268967256	8.97	2430	1.000	-0.080	0.056	0.093	0.153	247.091446	27.159326	-2299.50	1841
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

2.4 Star Slots

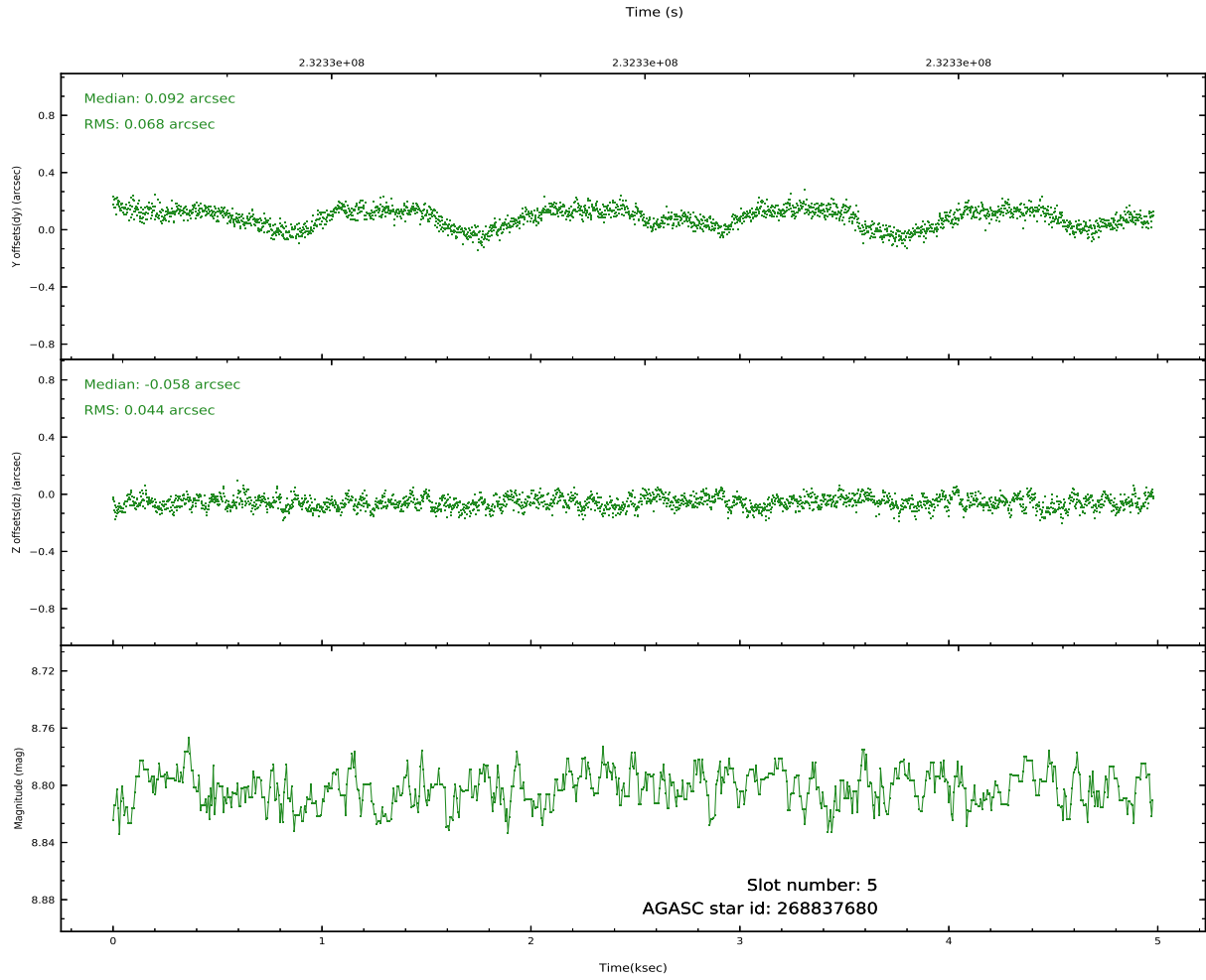
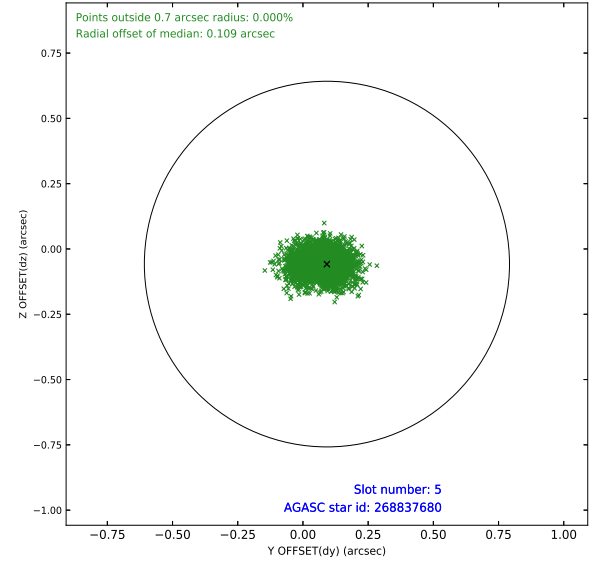
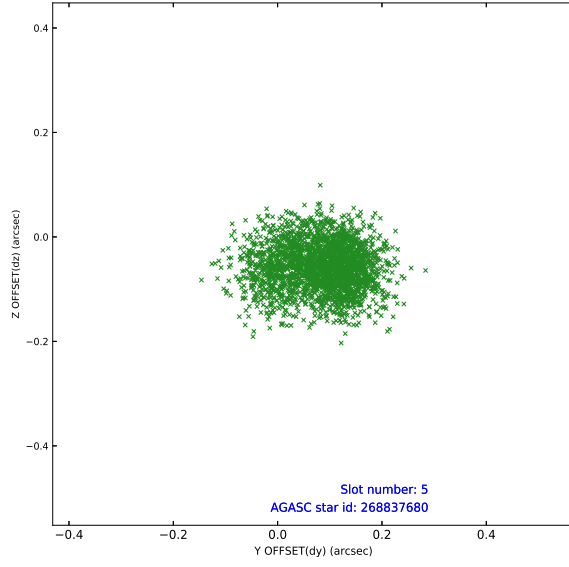
2.4.1 Slot 3



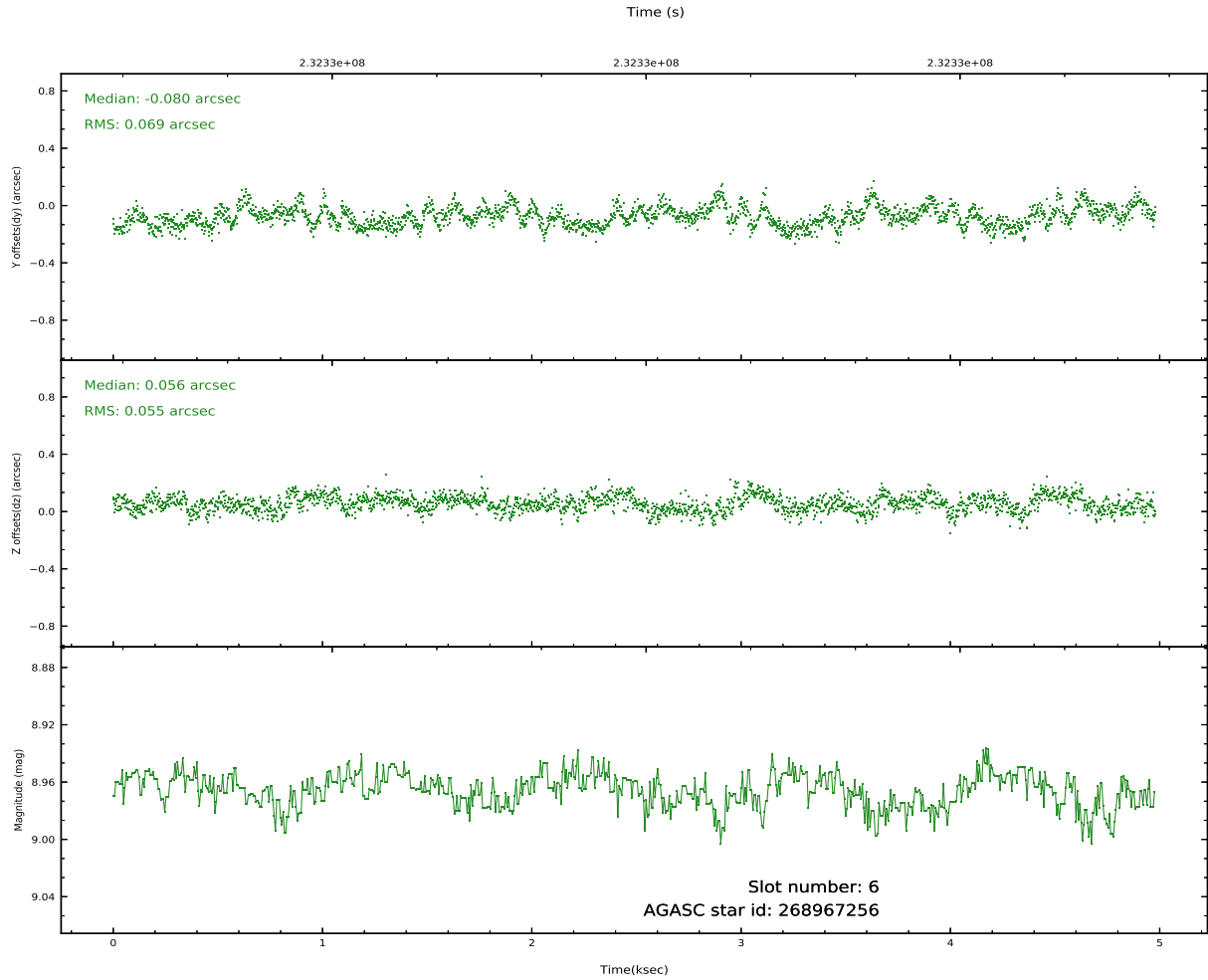
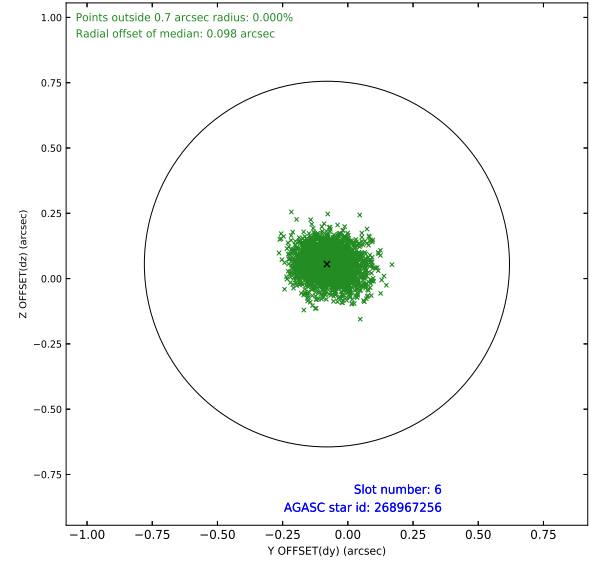
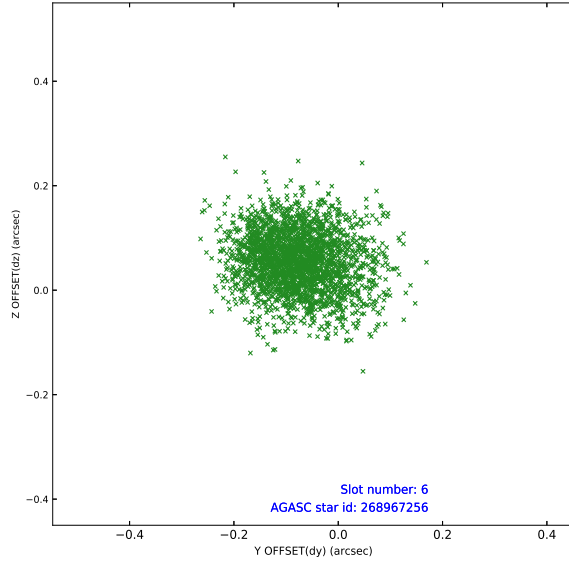
2.4.2 Slot 4



2.4.3 Slot 5

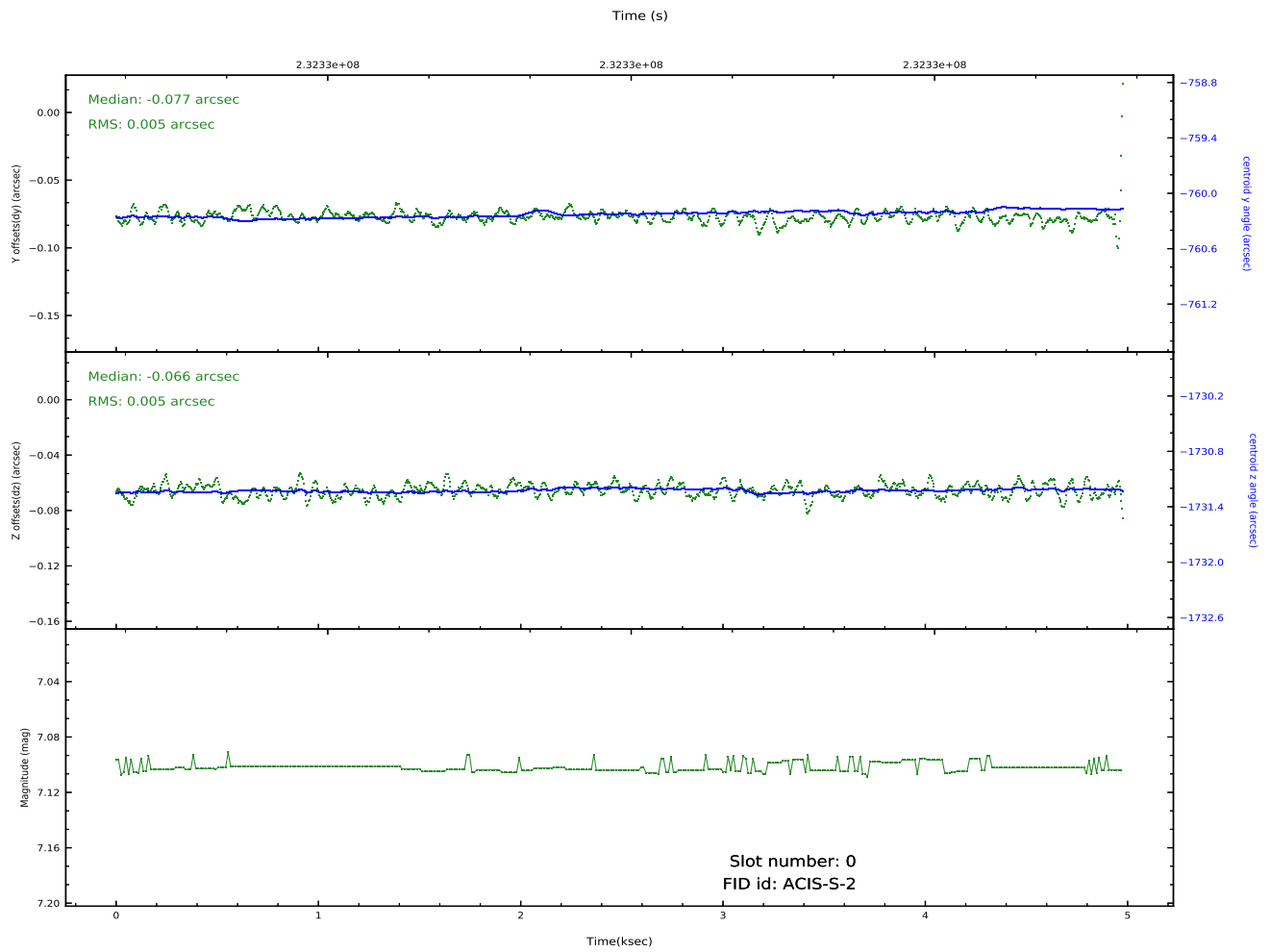
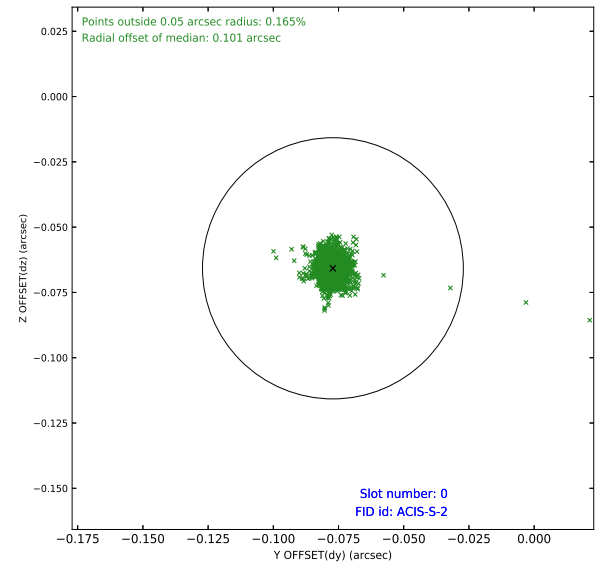
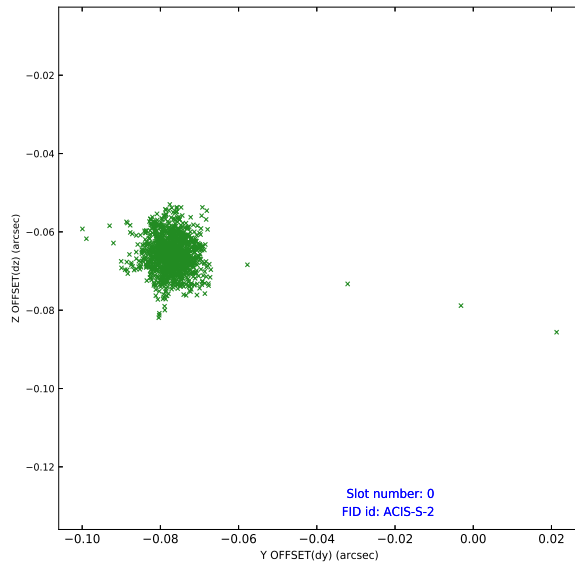


2.4.4 Slot 6

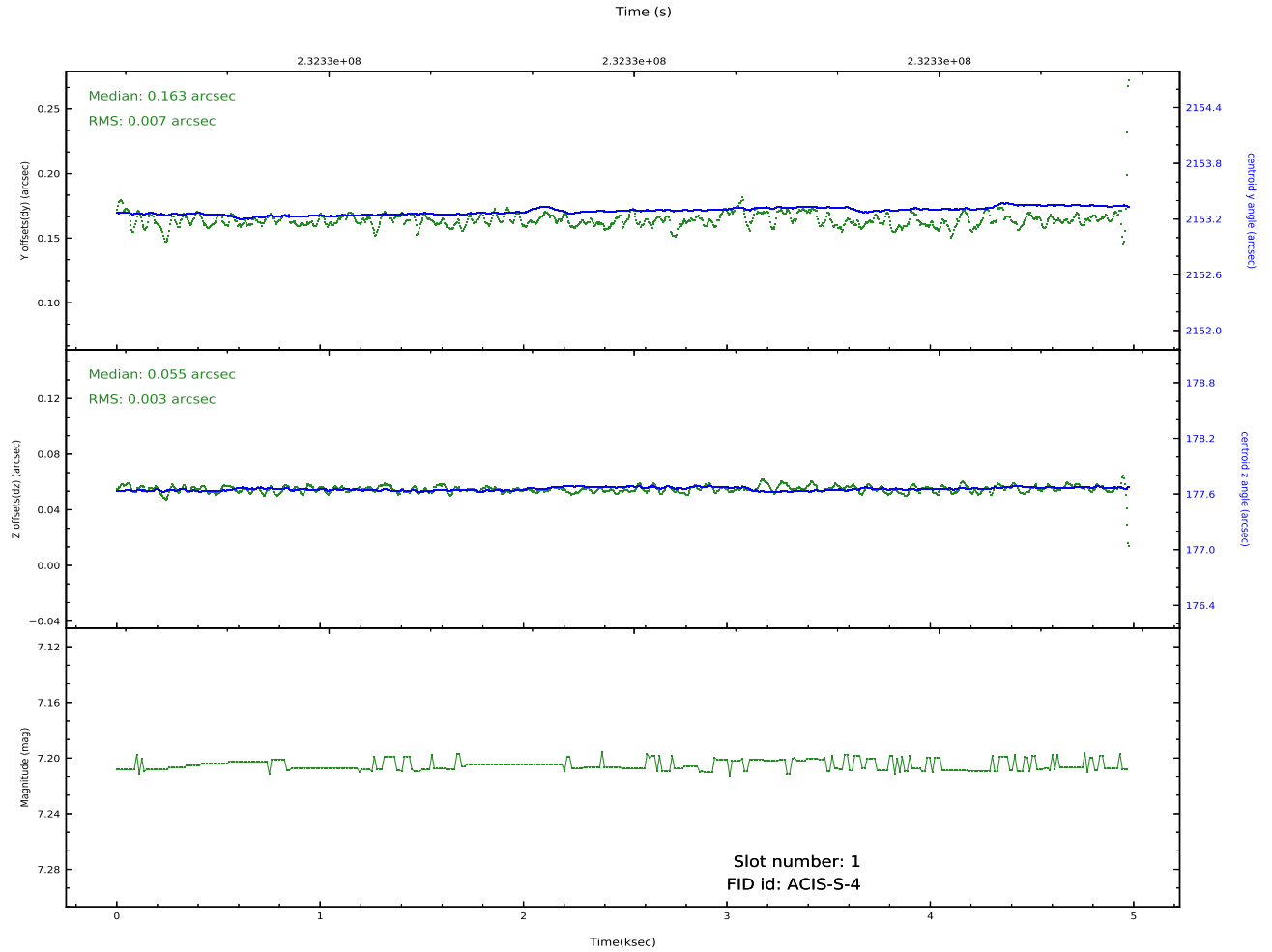
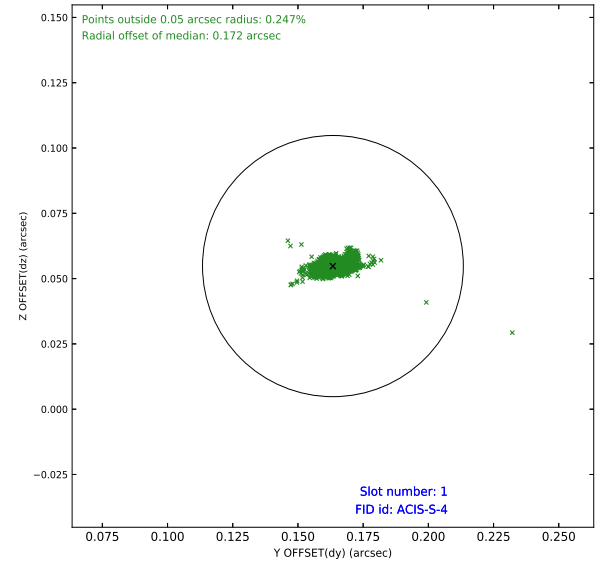
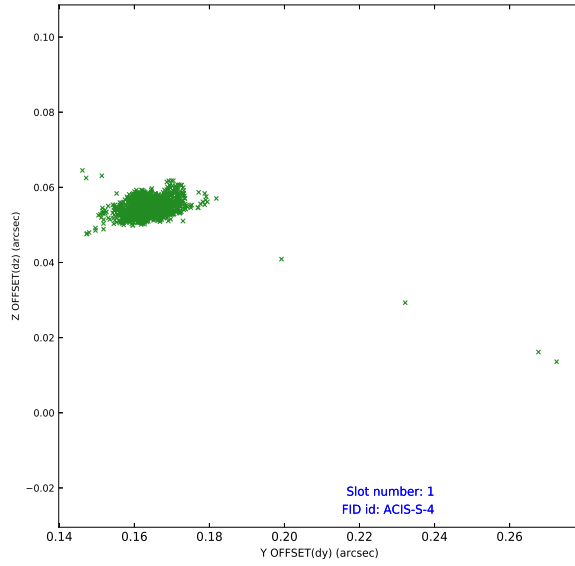


2.5 FID Slots

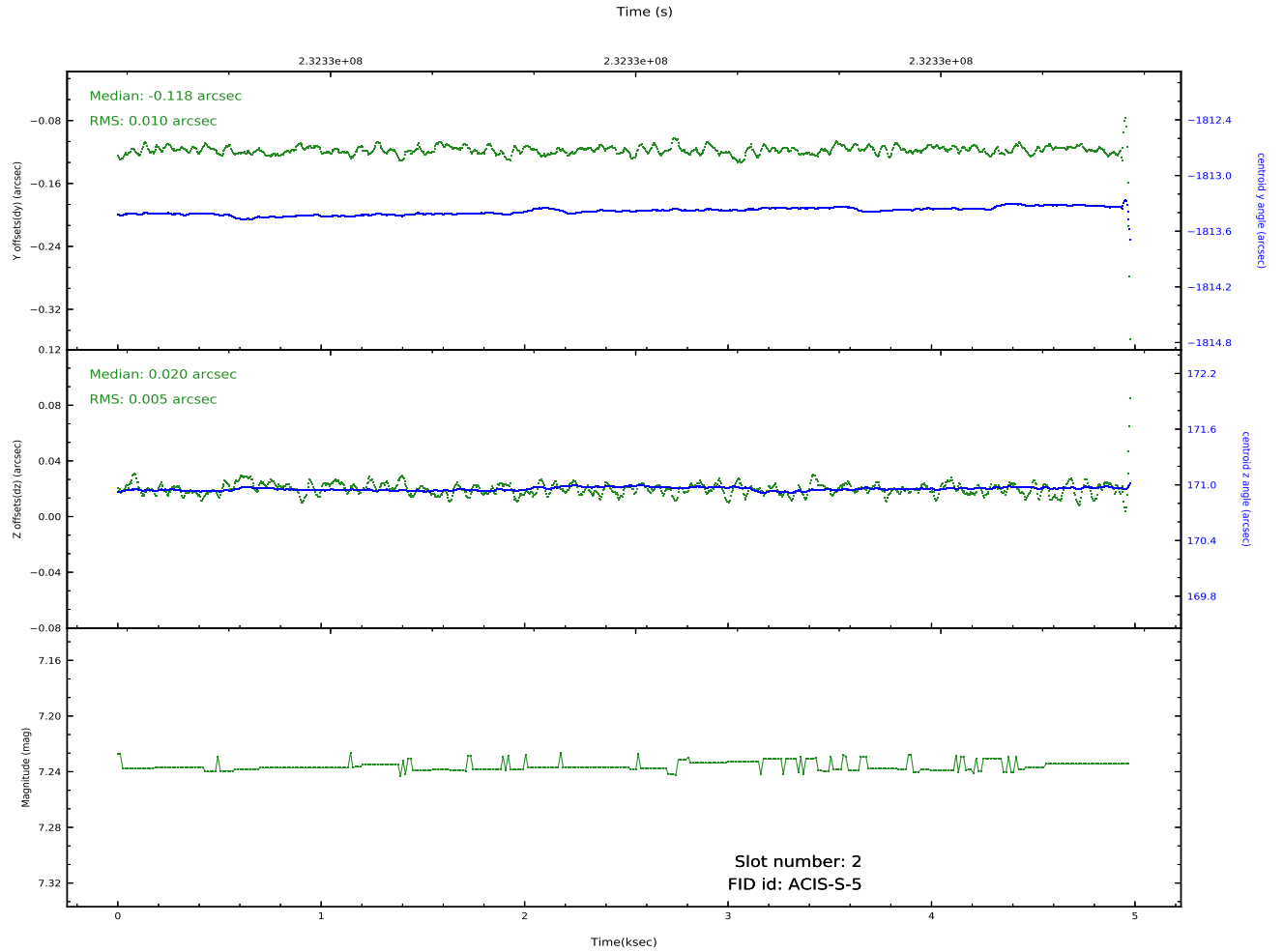
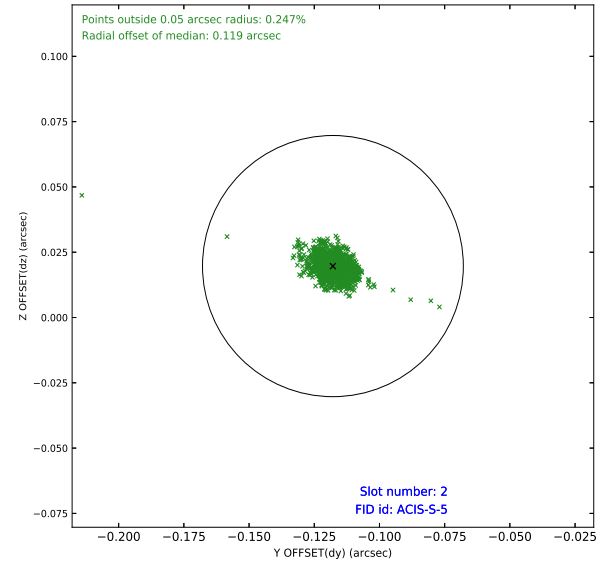
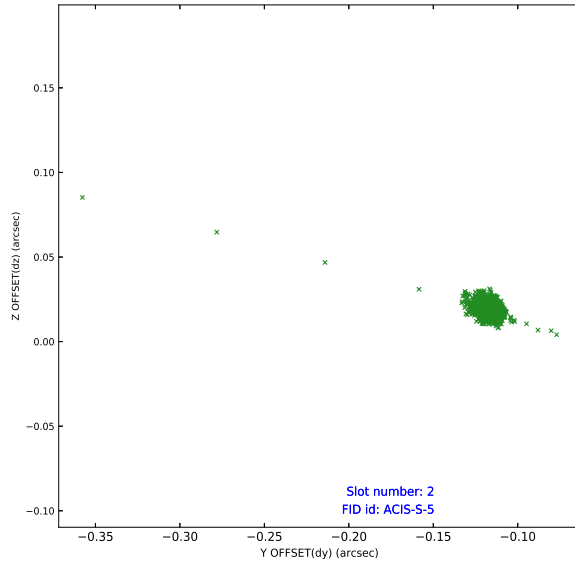
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.879999

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.