

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20928 - L2 Version 2
Chandra X-Ray Center

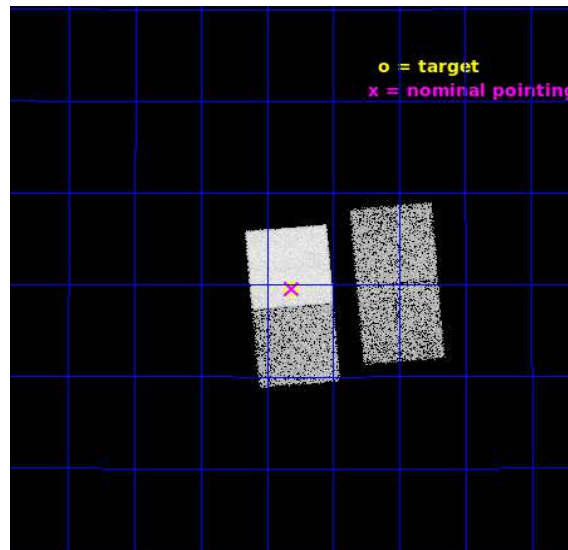
L2 Processing Date : Oct 24 2020

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1 Front

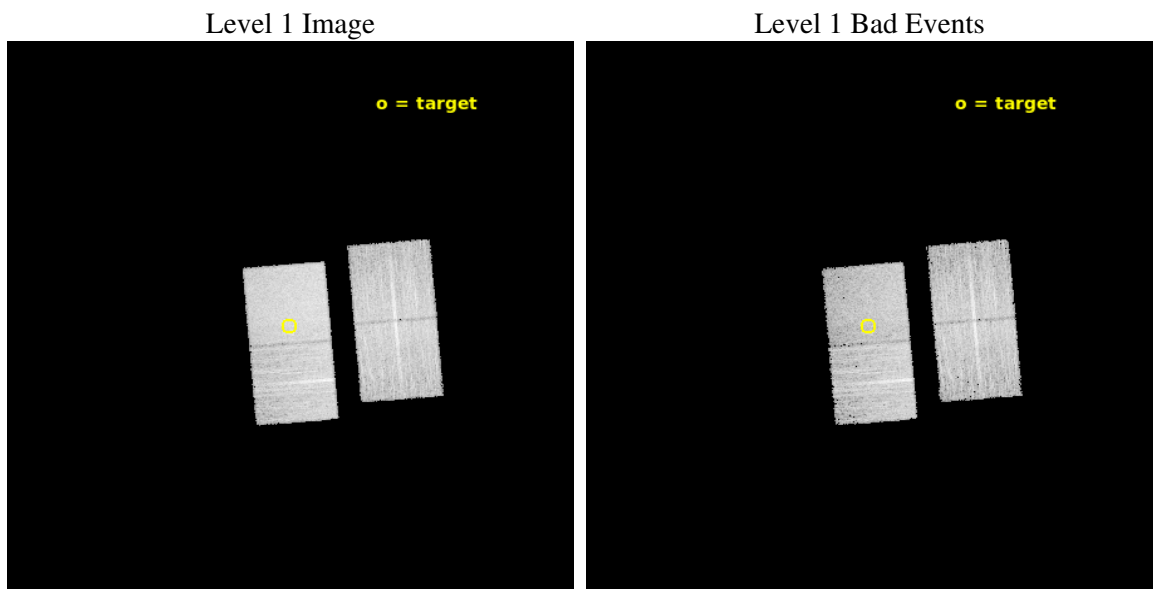
seq_num	402019	Sequence number
obs_id	20928	Observation id
title	Detecting X-ray emission from a very massive black hole binary	Pro
observer	Jiren Liu	Principal investigator
object	LAMOST J061149+224932	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	92.954167	Observer's specified target RA [deg]
dec_targ	22.82575	Observer's specified target Dec [deg]
ra_nom	92.952814316559	Nominal RA [deg]
dec_nom	22.826365177408	Nominal Dec [deg]
roll_nom	265.15615375305	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10068.145770431	Sum of GTIs [s]
livetime	9936.5980338788	Livetime [s]
ontime2	10064.881630301	Sum of GTIs [s]
ontime3	10064.922690153	Sum of GTIs [s]
ontime6	10068.104730487	Sum of GTIs [s]
ontime7	10068.145770431	Sum of GTIs [s]
l2events	61566	Number of level 2 events



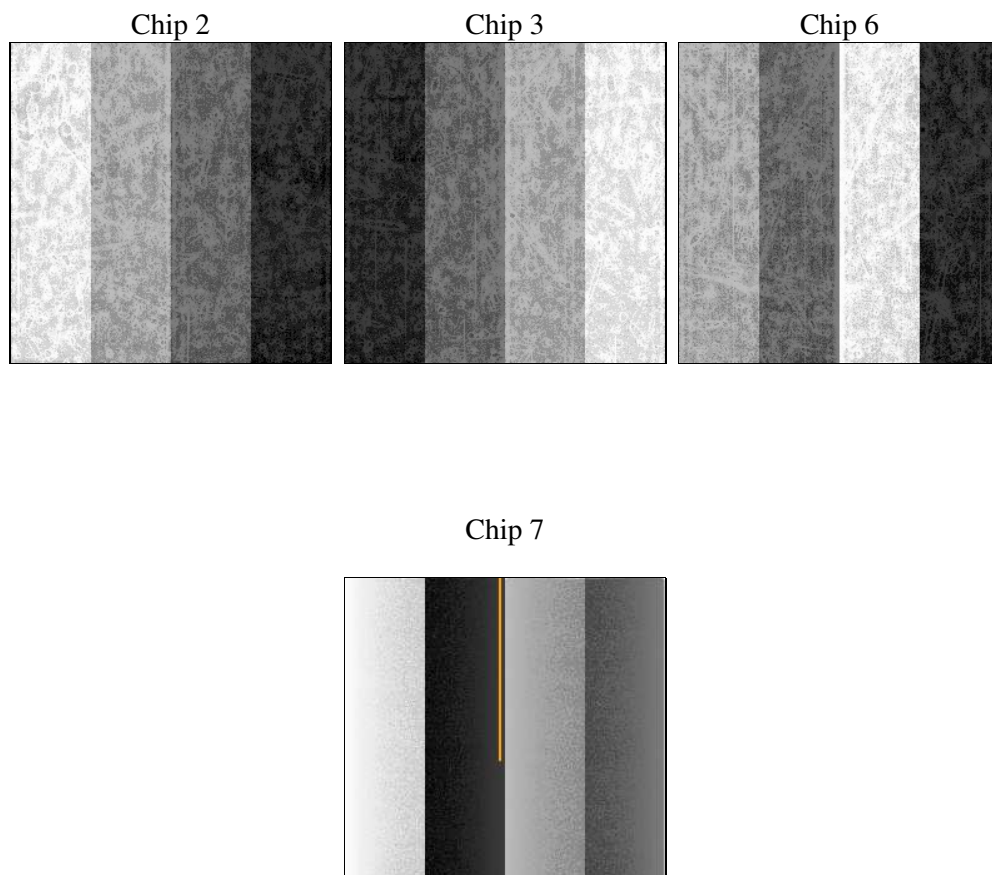
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	10068.145770431	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	10064.881630301	Sum of GTIs [s]
date	2020-10-24T07:01:08	Date and time of file creation	ontime3	10064.922690153	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10068.104730487	Sum of GTIs [s]
			ontime7	10068.145770431	Sum of GTIs [s]
			l1events	311203	Number of level 1 events

2.1.4 Events

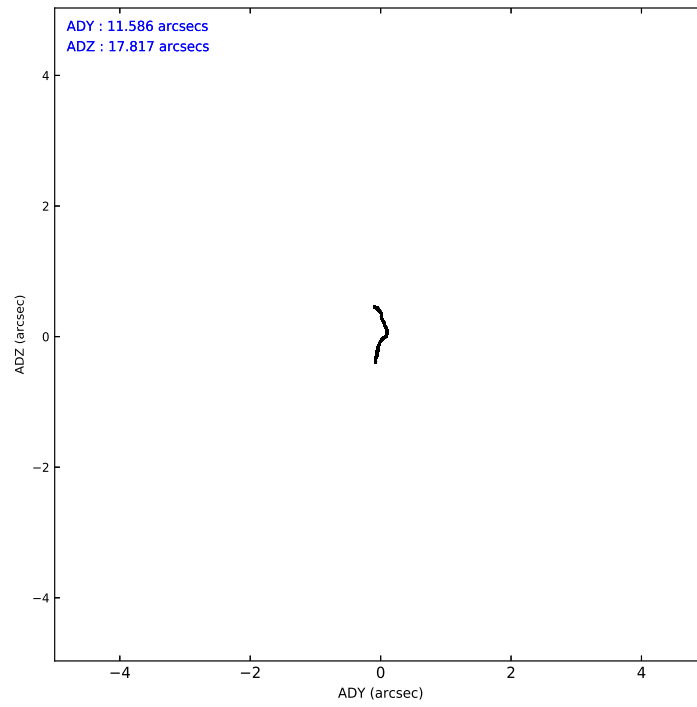
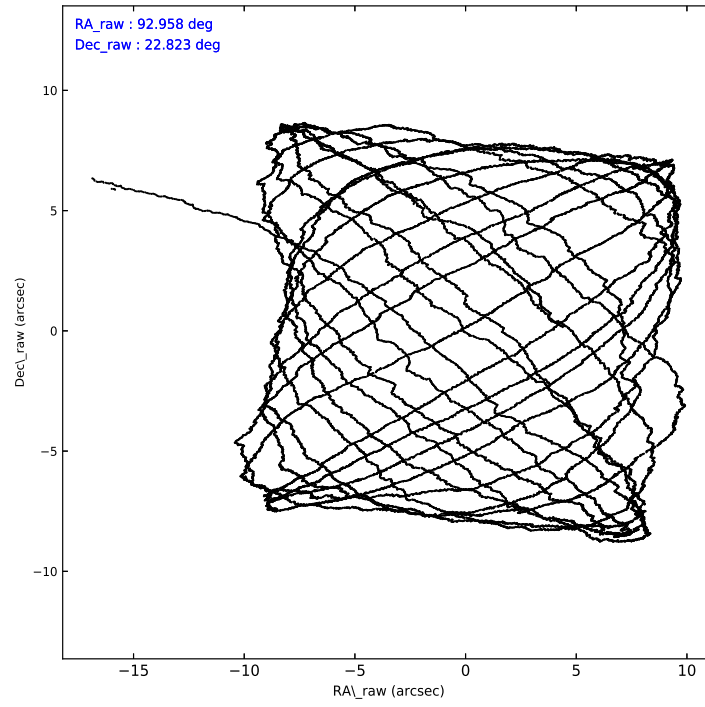
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	72423	68936	75679	94165
rejected events	64268	61232	67043	52483
rejected %	88%	88%	88%	55%

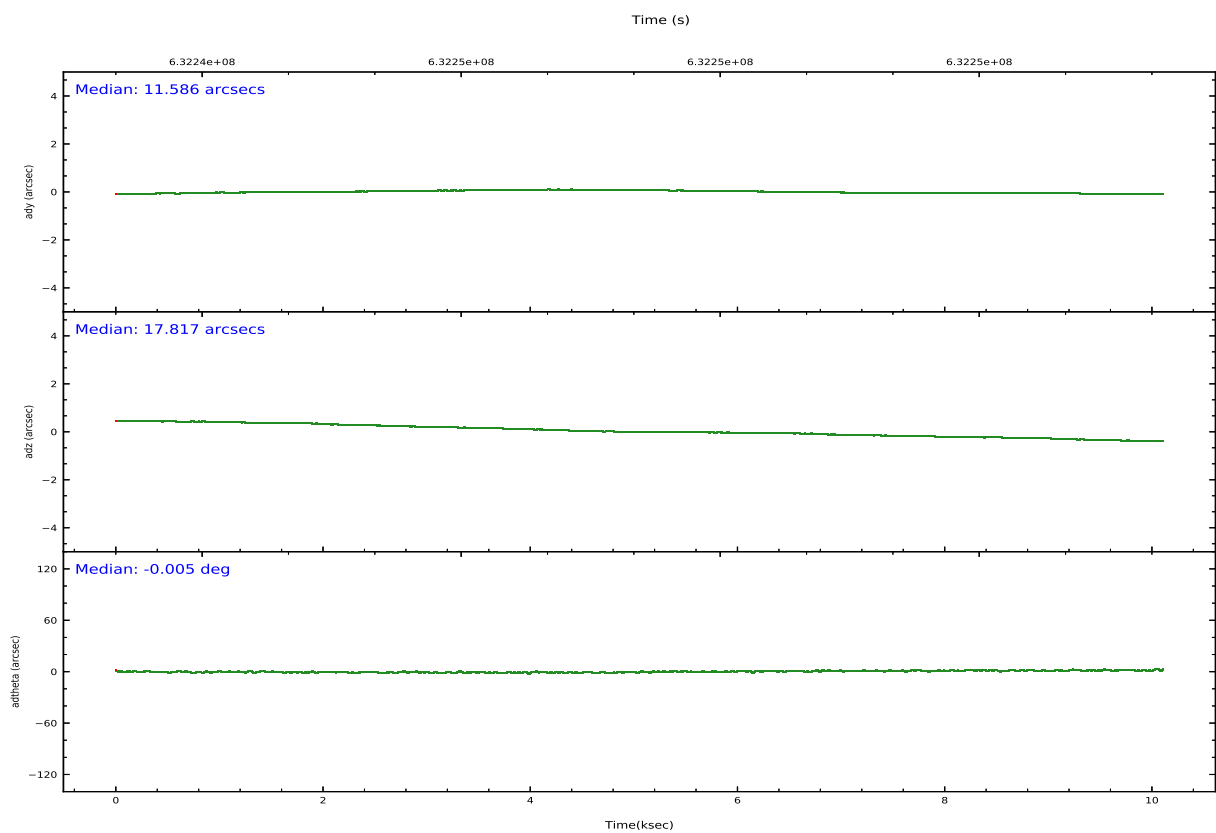
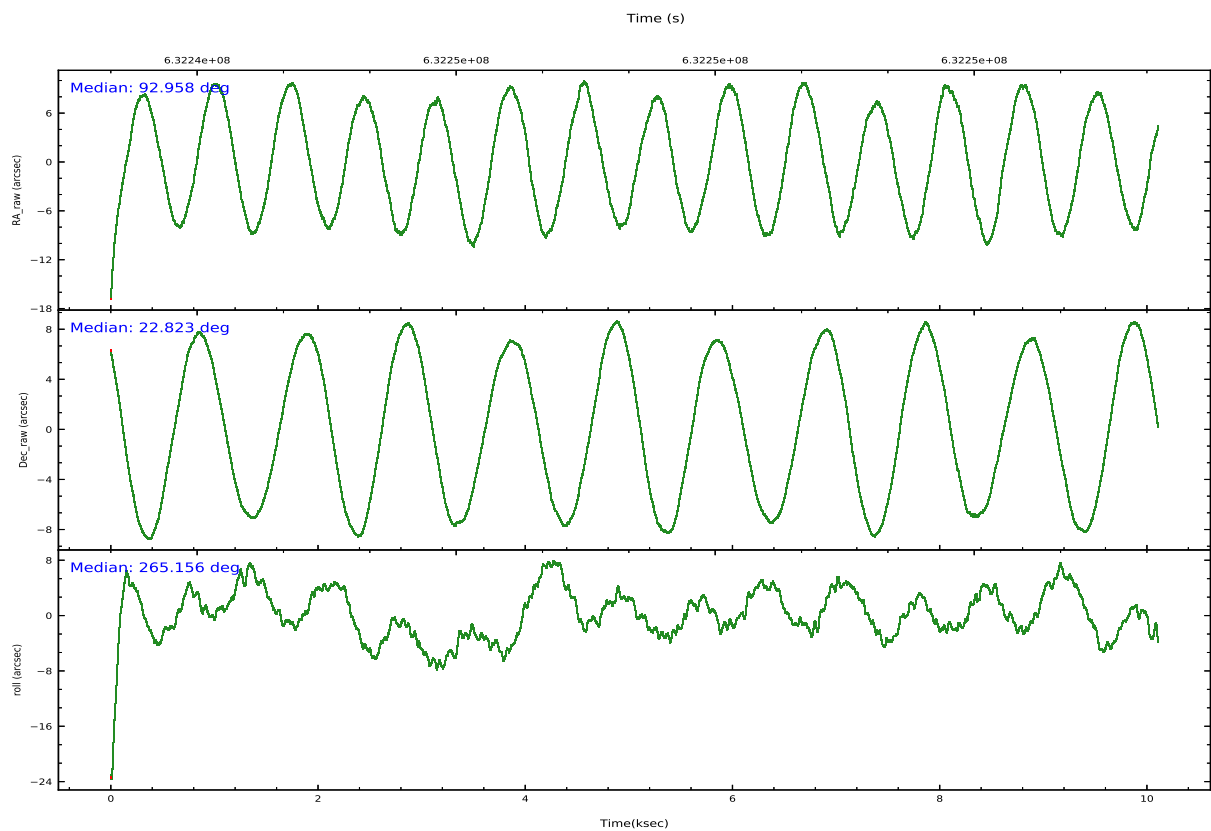
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2848	2728	2748	3441
	3%	3%	3%	3%
grade 1 events	44	38	37	136
	0%	0%	0%	0%
grade 2 events	2063	1714	2068	8842
	2%	2%	2%	9%
grade 3 events	841	816	878	3457
	1%	1%	1%	3%
grade 4 events	817	819	923	3326
	1%	1%	1%	3%
grade 5 events	3134	3475	3537	9548
	4%	5%	4%	10%
grade 6 events	1598	1634	2024	22632
	2%	2%	2%	24%
grade 7 events	61078	57712	63464	42783
	84%	83%	83%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	92.945076	92.952814316559	CCD I2 on	O1	Y
[deg] Pointing Dec	22.847252	22.826365177408	CCD I3 on	O2	Y
[deg] Pointing Roll	265.003528	265.15615375305	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	632244276.184000	632242961.20371	CCD S5 on	N	N
Observation start date	2018-01-13T15:23:27	2018-01-13T15:02:41	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	632254276.184000	632255446.72945	On-chip summing requested	N	N
Observation end date	2018-01-13T18:10:07	2018-01-13T18:30:46	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



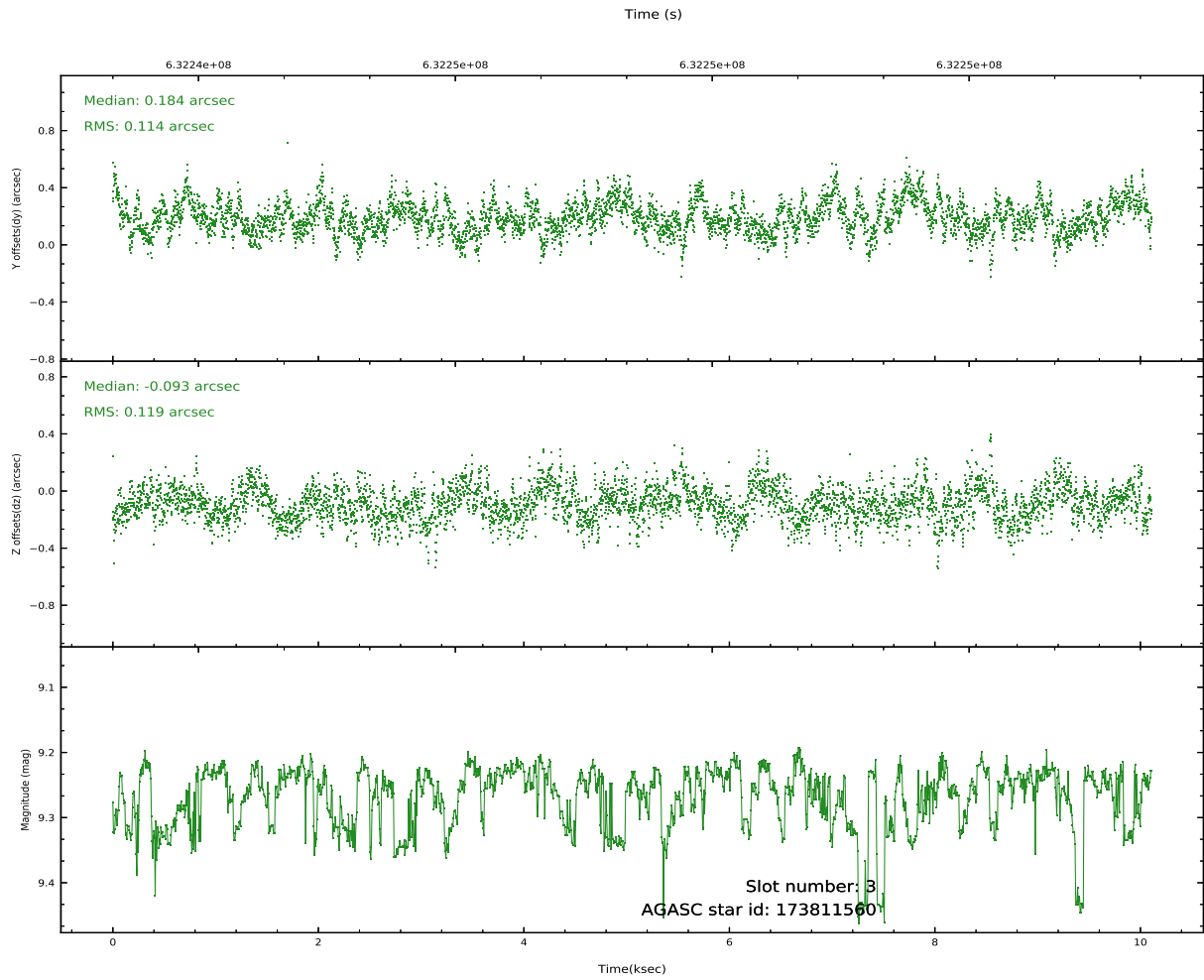
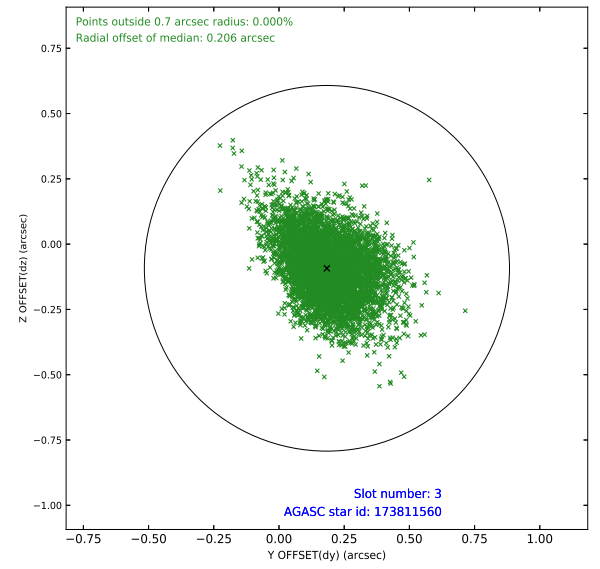
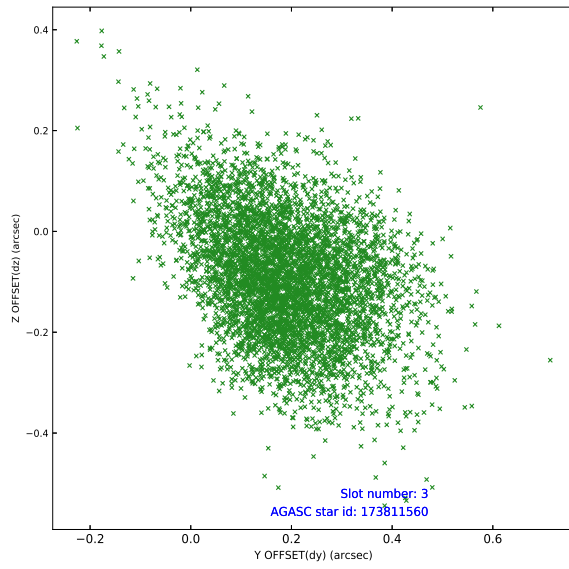


Slot Statistics

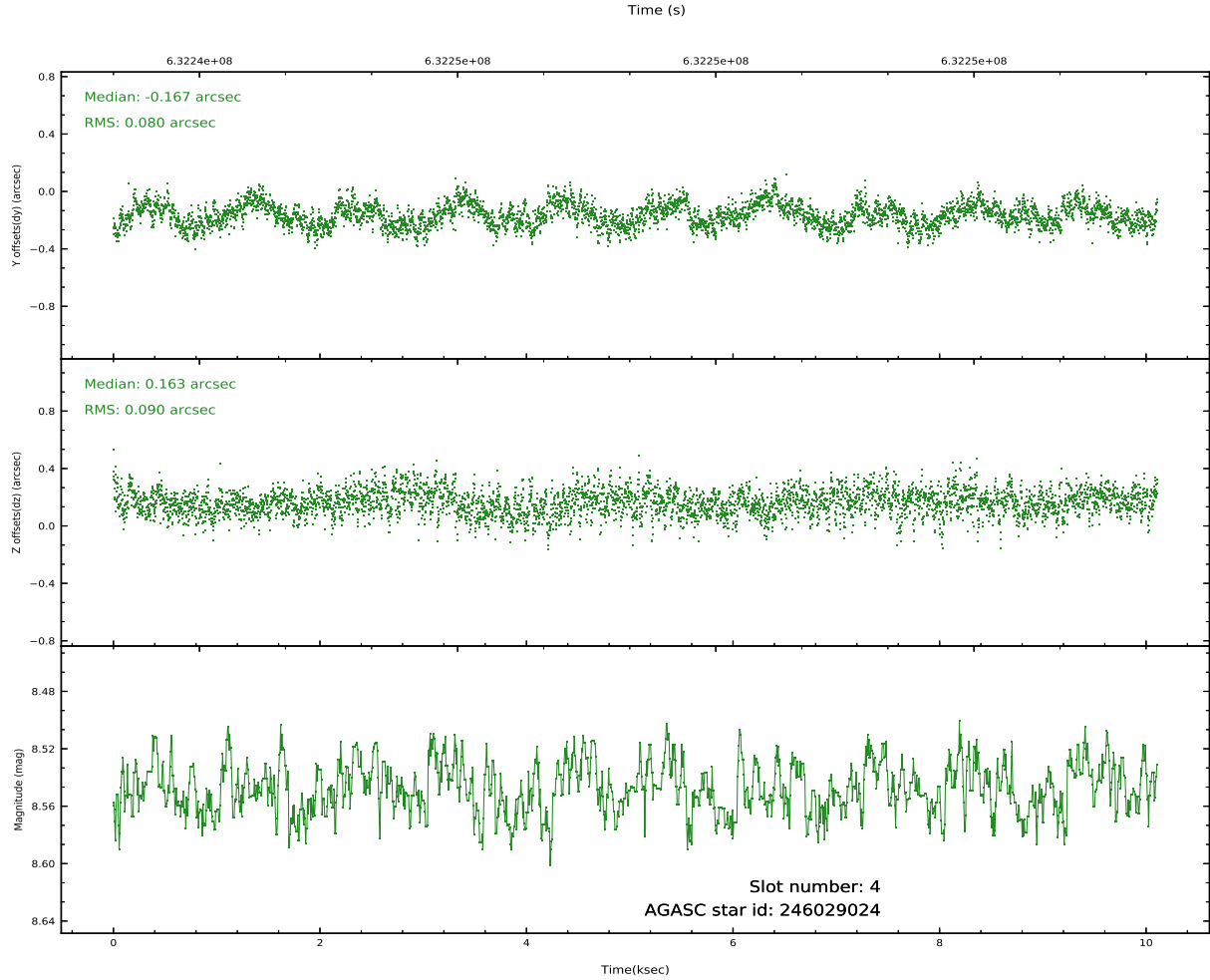
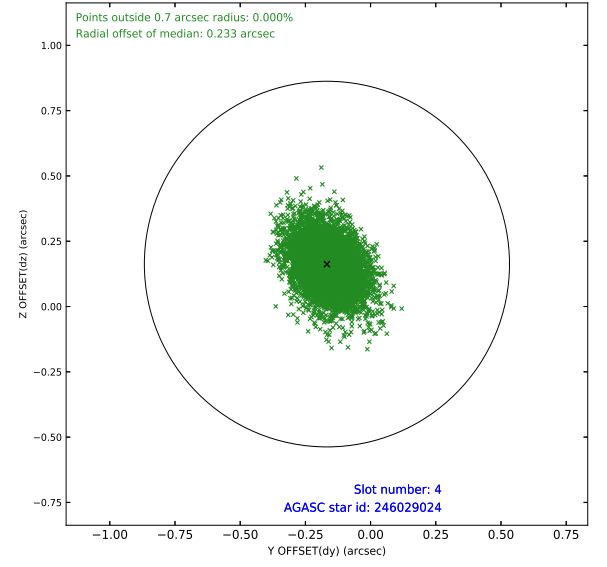
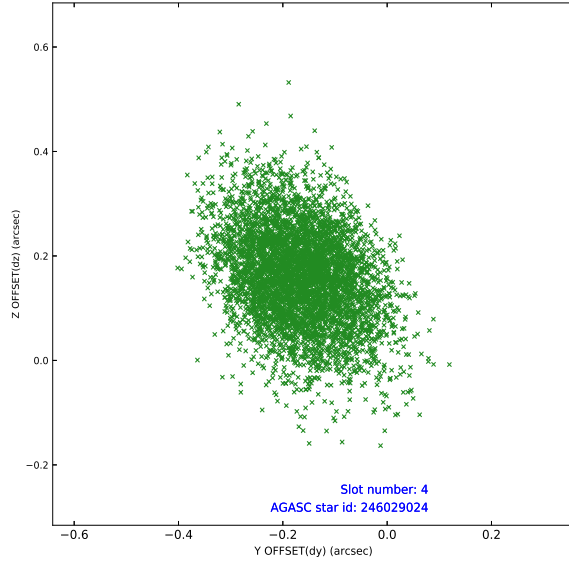
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.02	2466	1.000	0.044	-0.001	0.012	0.021	0.000000	0.000000	931.60	-1734
1	FID		ACIS-S-4	7.05	2466	1.000	0.038	-0.083	0.007	0.011	0.000000	0.000000	2149.30	168
2	FID		ACIS-S-6	7.19	2465	1.000	-0.105	0.095	0.010	0.020	0.000000	0.000000	398.07	806
3	GUIDE	used	173811560	9.26	4930	1.000	0.184	-0.093	0.173	0.287	92.361467	22.428857	1666.75	-1803
4	GUIDE	used	246029024	8.55	4926	1.000	-0.167	0.163	0.126	0.208	92.974119	23.437147	-2123.47	-89
5	GUIDE	used	246030584	8.32	4929	1.000	0.127	-0.117	0.118	0.206	92.708764	22.702976	585.17	-736
6	GUIDE	used	173811696	9.03	4925	1.000	0.079	-0.053	0.142	0.234	93.223351	22.463504	1295.41	1042
7	GUIDE	used	246032128	8.57	4929	1.000	-0.226	0.104	0.132	0.233	93.682548	23.361115	-2060.43	2266

2.4 Star Slots

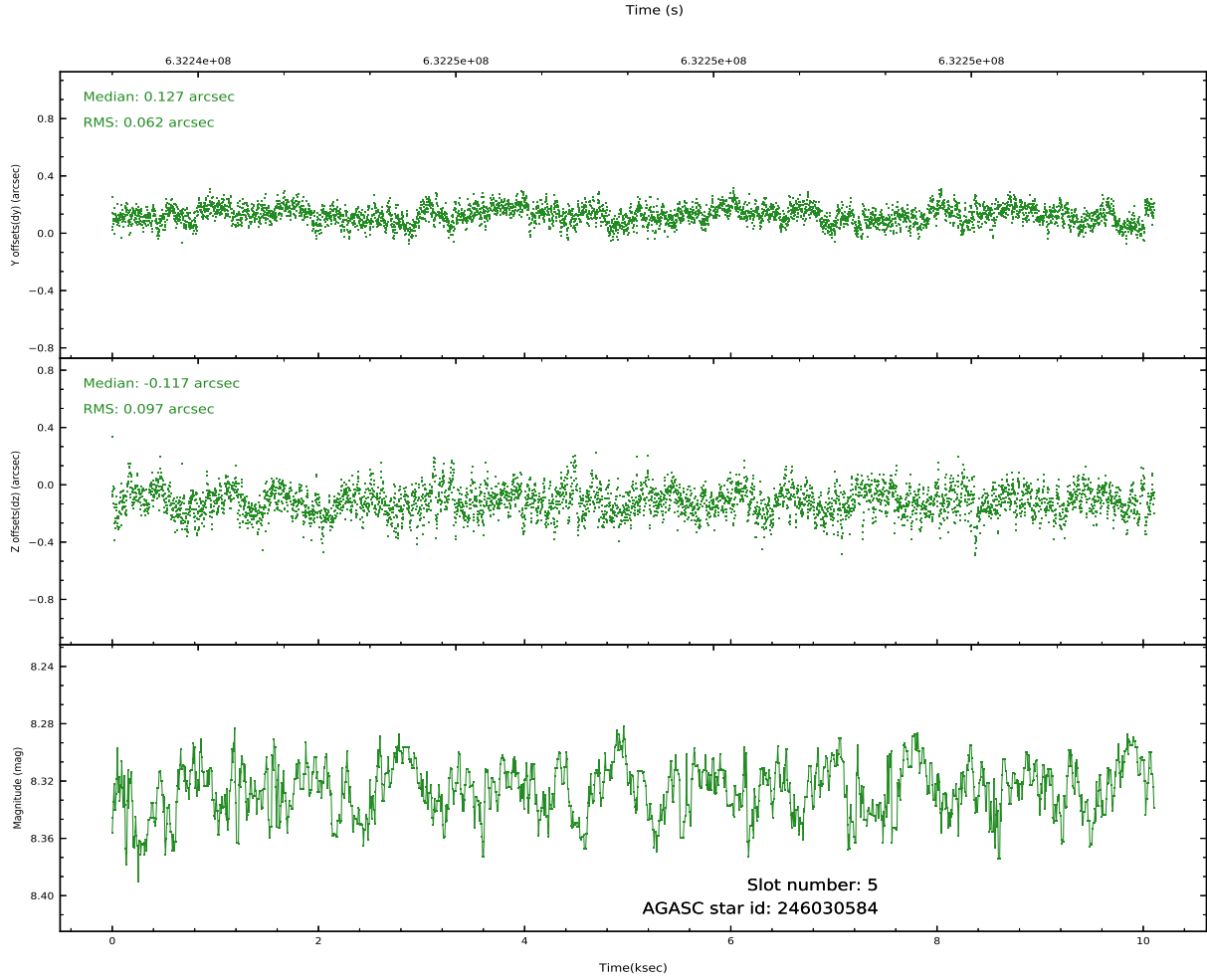
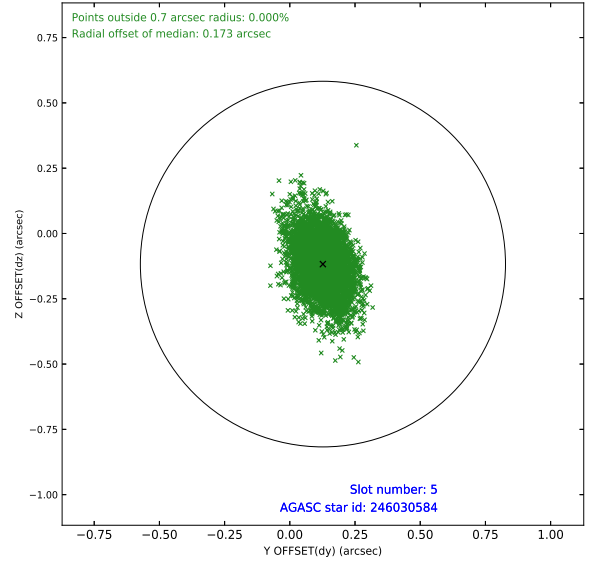
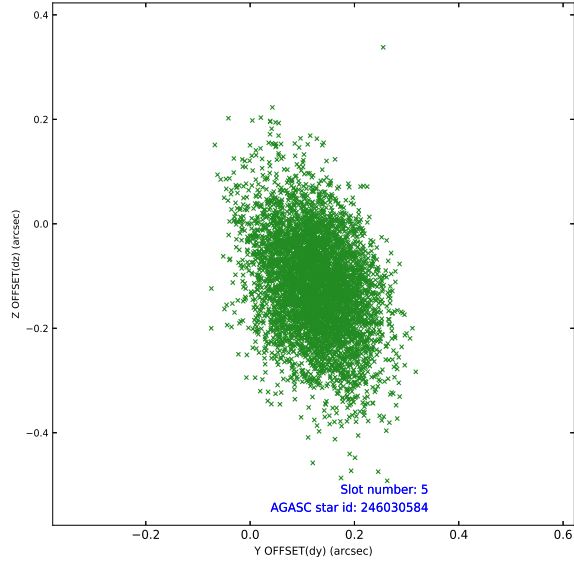
2.4.1 Slot 3



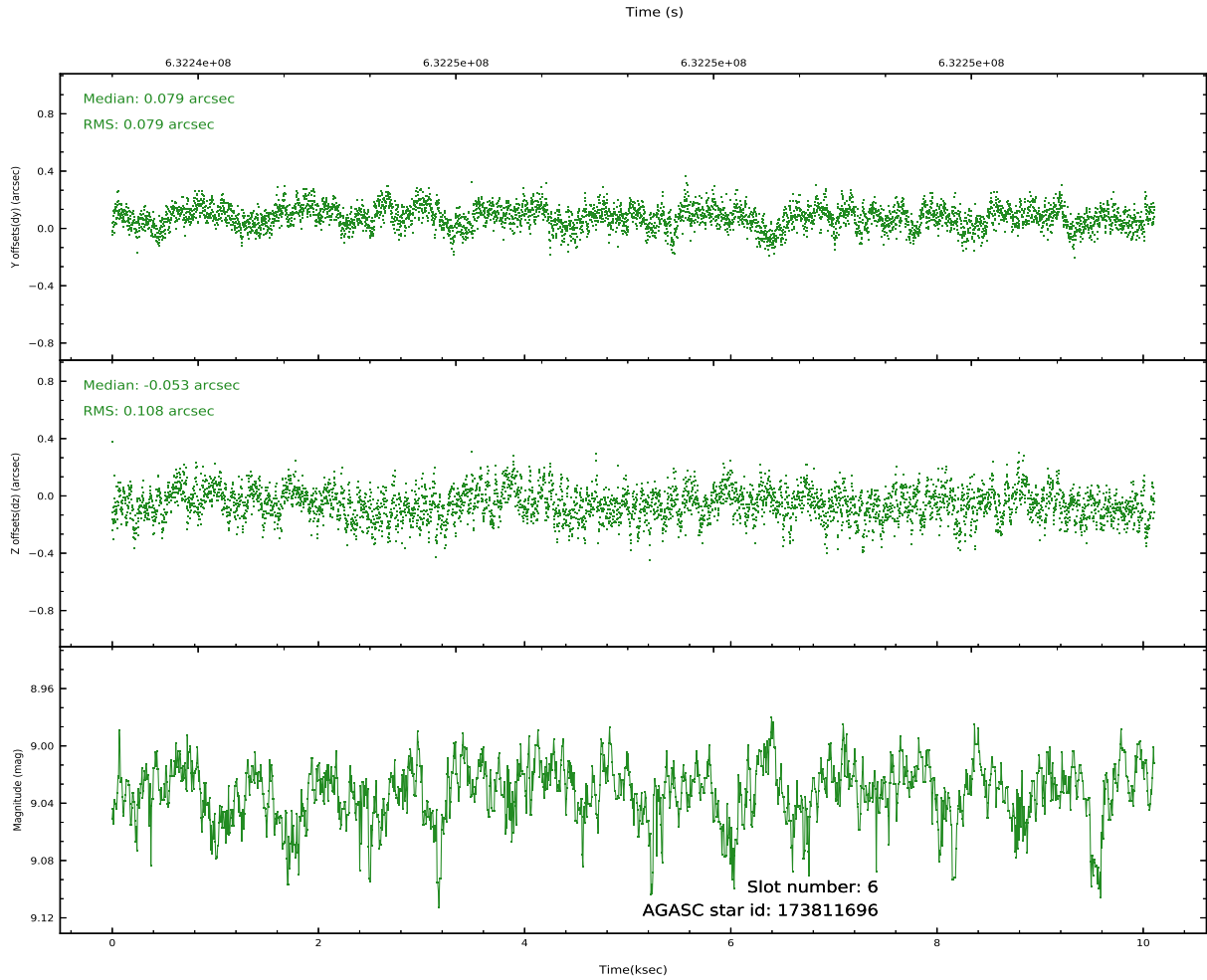
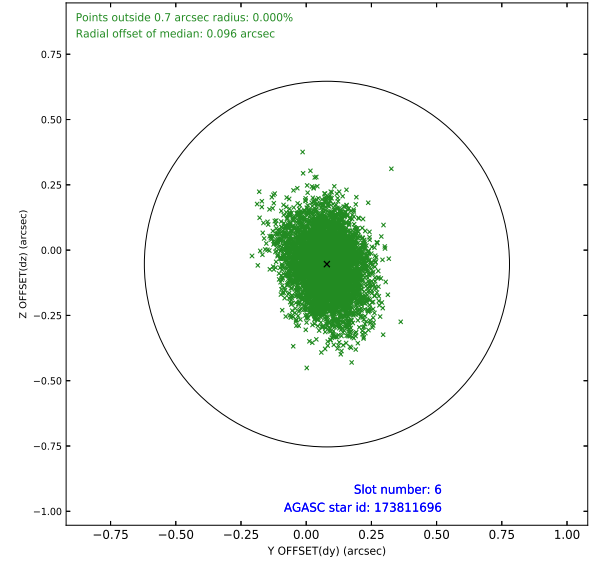
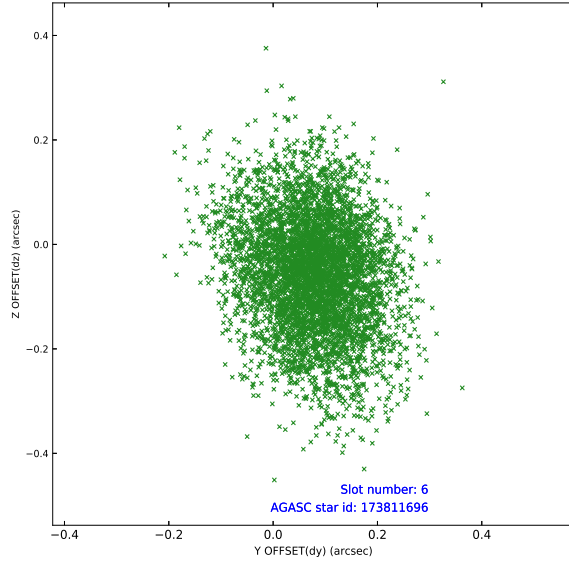
2.4.2 Slot 4



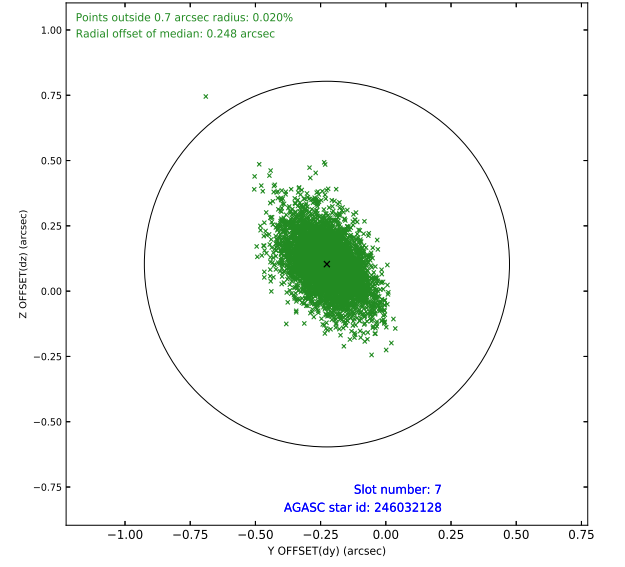
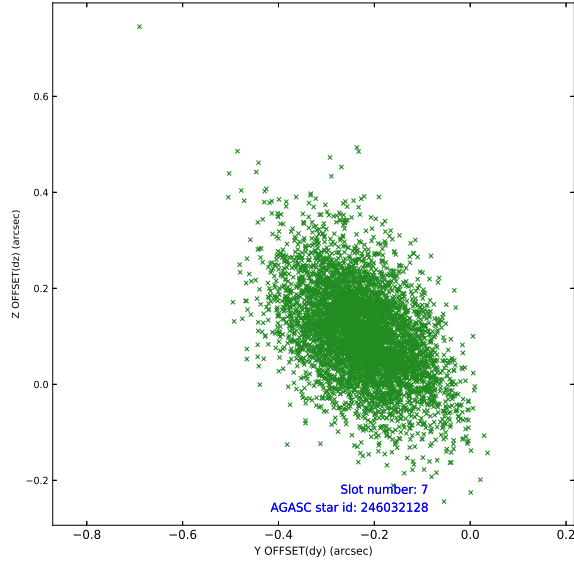
2.4.3 Slot 5



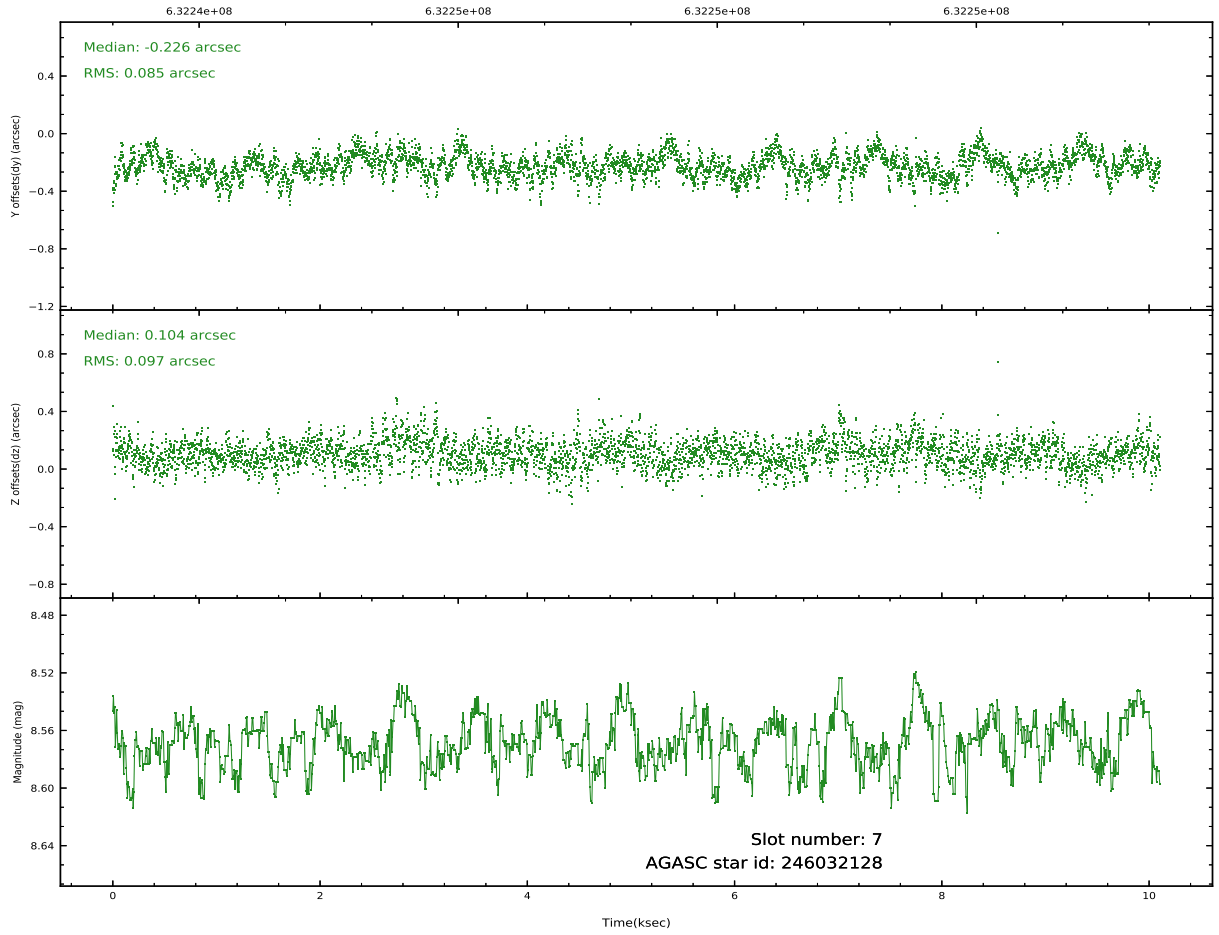
2.4.4 Slot 6



2.4.5 Slot 7

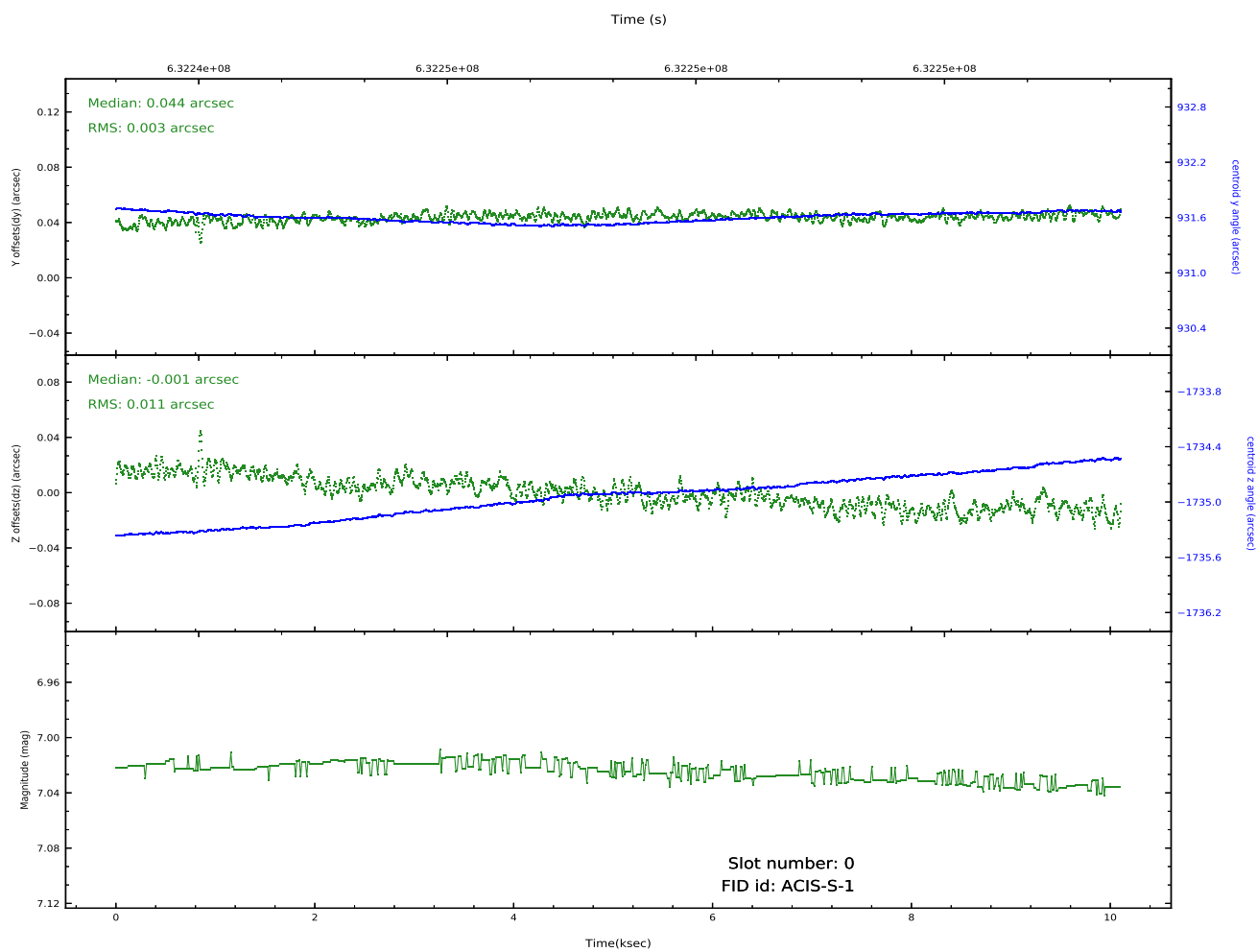
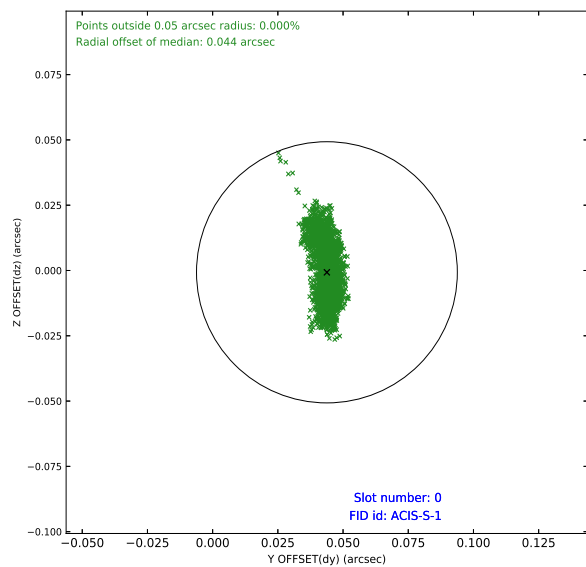
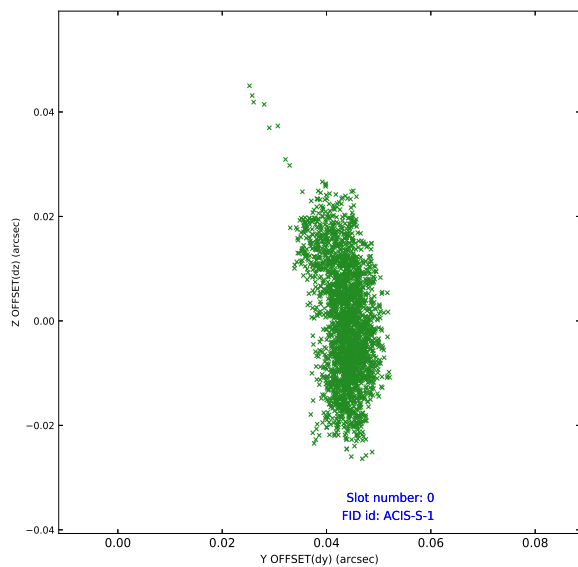


Time (s)

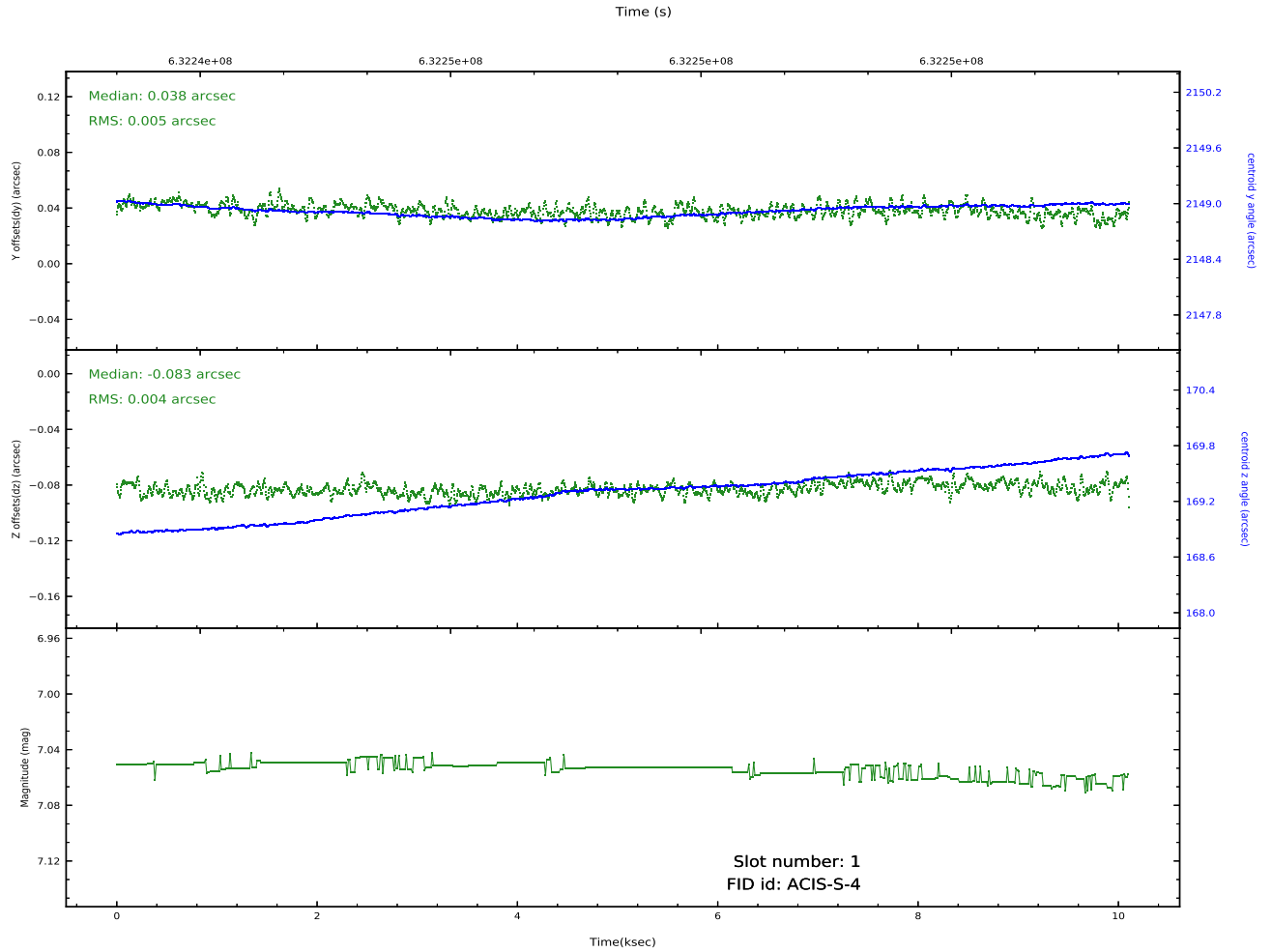
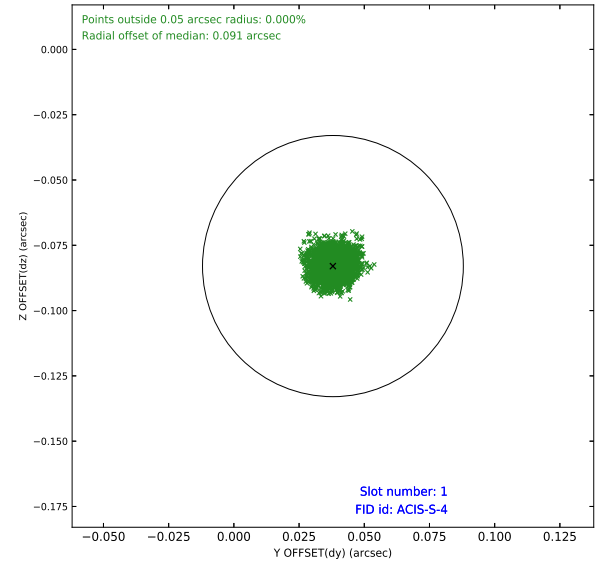
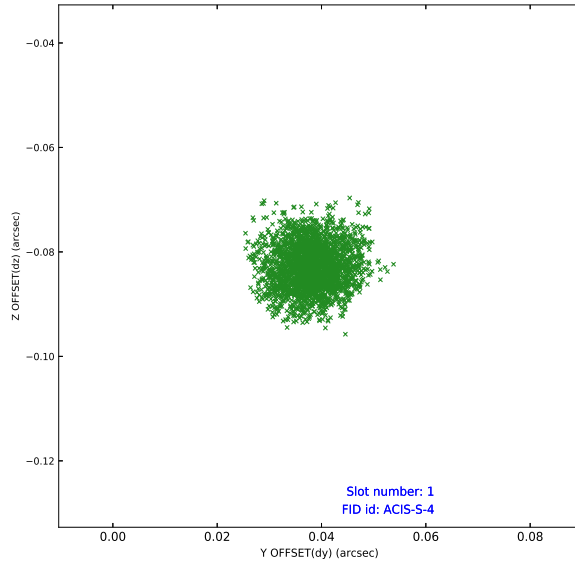


2.5 FID Slots

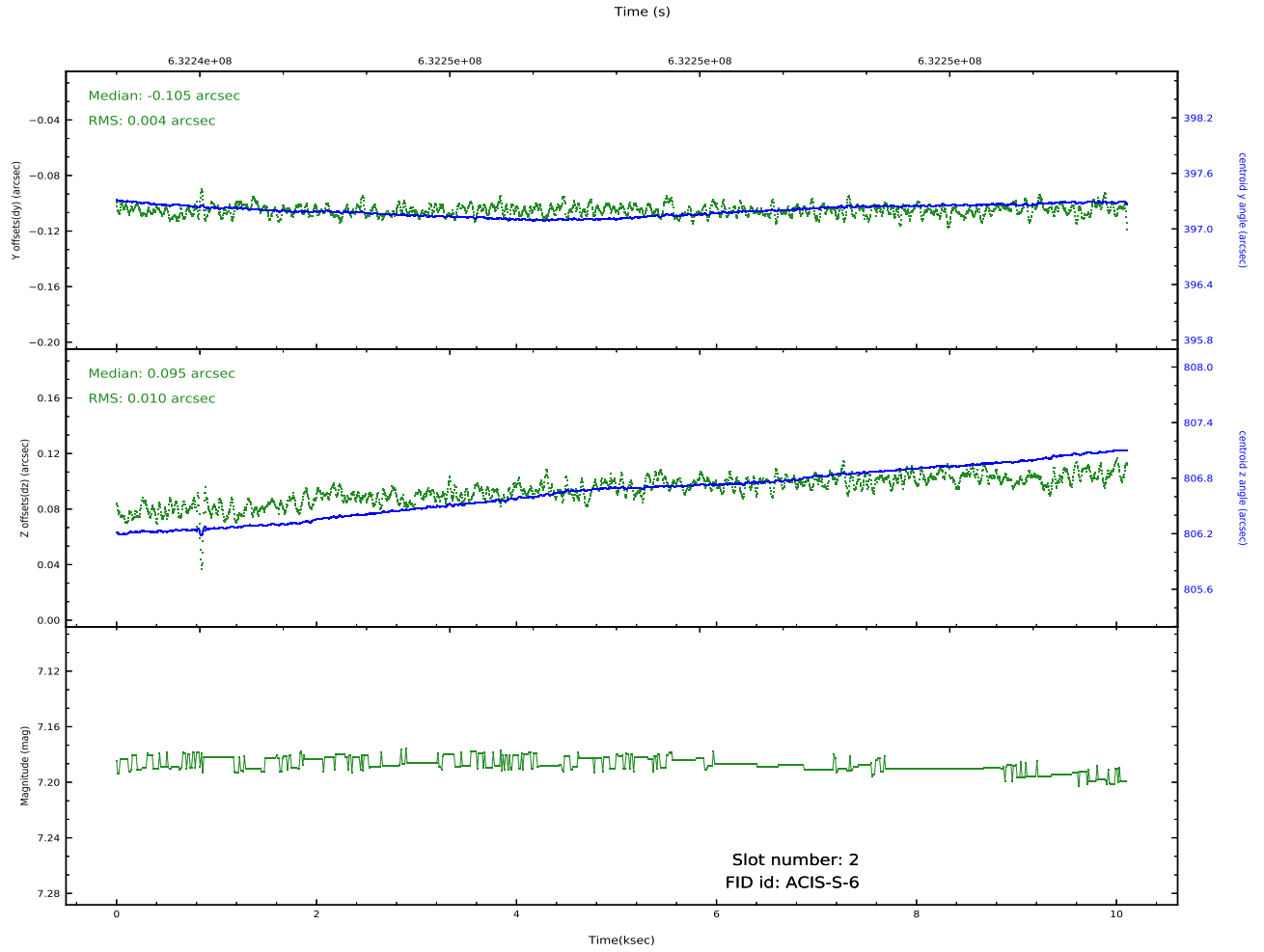
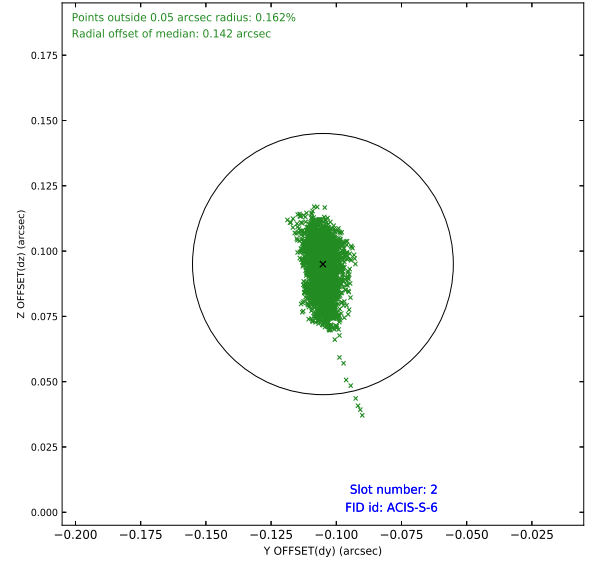
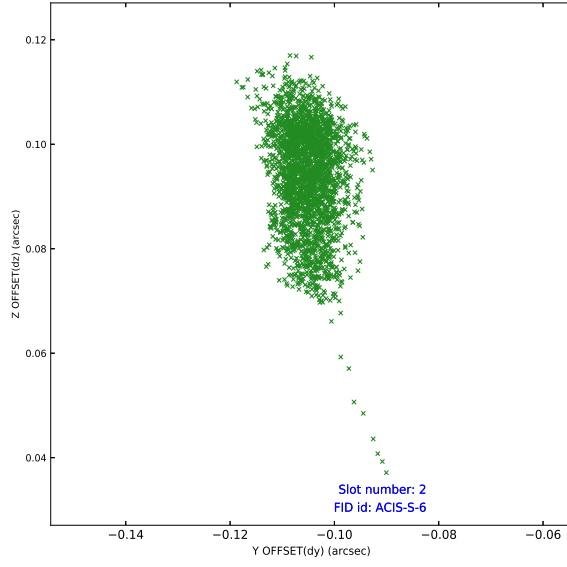
2.5.1 Slot 0



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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.068145775557

A.2 Comments