

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20506 - L2 Version 2
Chandra X-Ray Center

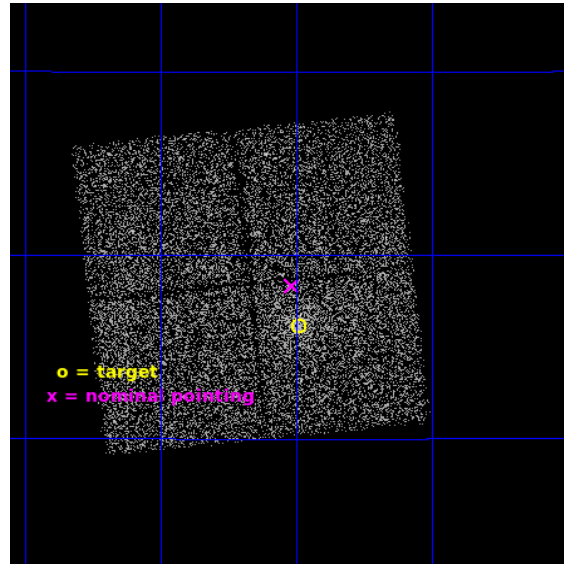
L2 Processing Date : Oct 24 2020

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1 Front

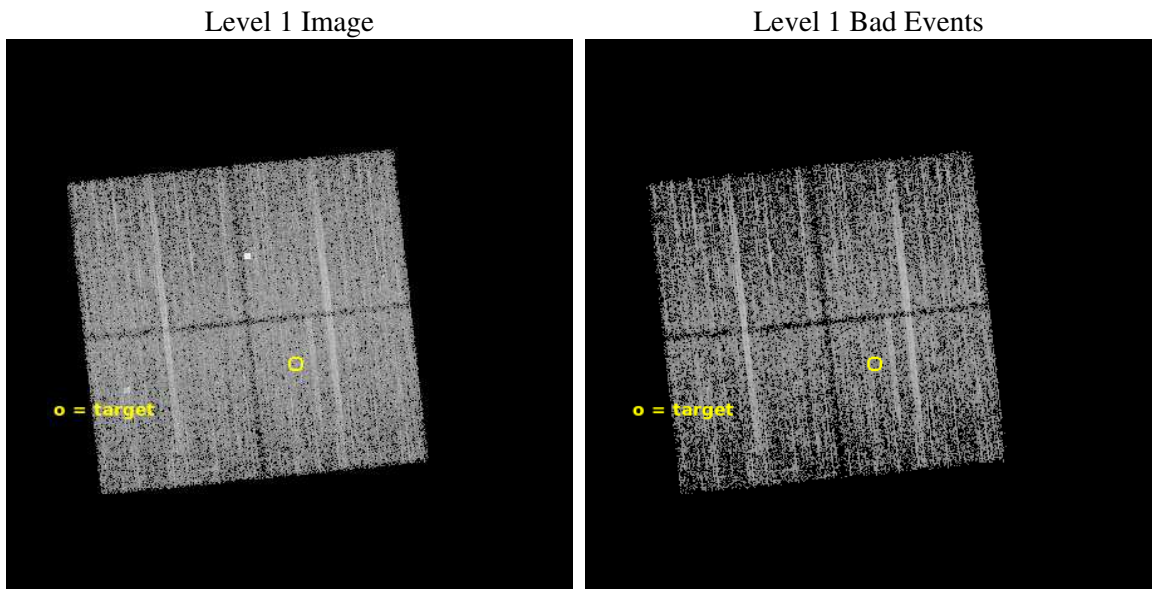
seq_num	801720	Sequence number
obs_id	20506	Observation id
title	Enabling precision cosmology with optically selected galaxy clusters	
observer	Roger Morris	Principal investigator
object	CIG J095759+191609	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	149.497917	Observer's specified target RA [deg]
dec_targ	19.269361	Observer's specified target Dec [deg]
ra_nom	149.50390369697	Nominal RA [deg]
dec_nom	19.305537086767	Nominal Dec [deg]
roll_nom	83.892147743277	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8509.5000655651	Sum of GTIs [s]
livetime	8398.3171826057	Livetime [s]
ontime0	8509.5000655651	Sum of GTIs [s]
ontime1	8509.5000655651	Sum of GTIs [s]
ontime2	8509.5000655651	Sum of GTIs [s]
ontime3	8509.5000655651	Sum of GTIs [s]
l2events	23603	Number of level 2 events



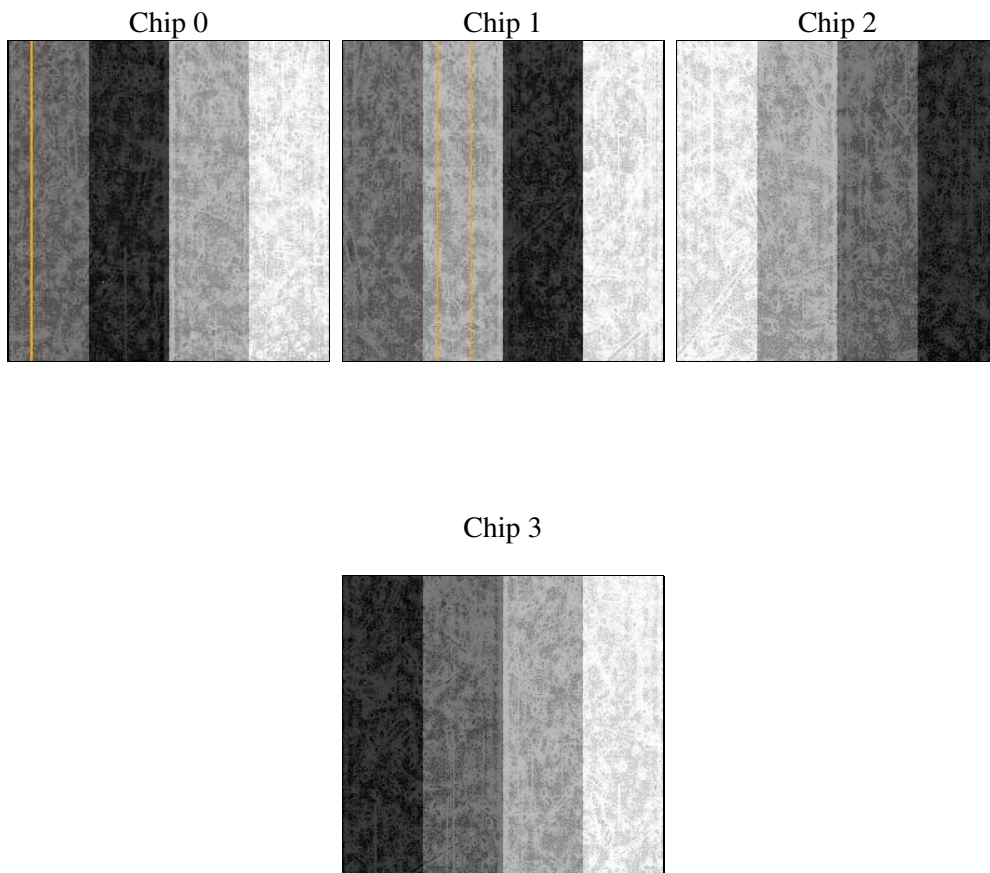
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8432.879000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	8509.5000655651	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	8509.5000655651	Sum of GTIs [s]
date	2020-10-24T08:01:28	Date and time of file creation	ontime1	8509.5000655651	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8509.5000655651	Sum of GTIs [s]
			ontime3	8509.5000655651	Sum of GTIs [s]
			l1events	253277	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	59652	59957	68612	65056
rejected events	52847	52206	59435	57809
rejected %	88%	87%	86%	88%

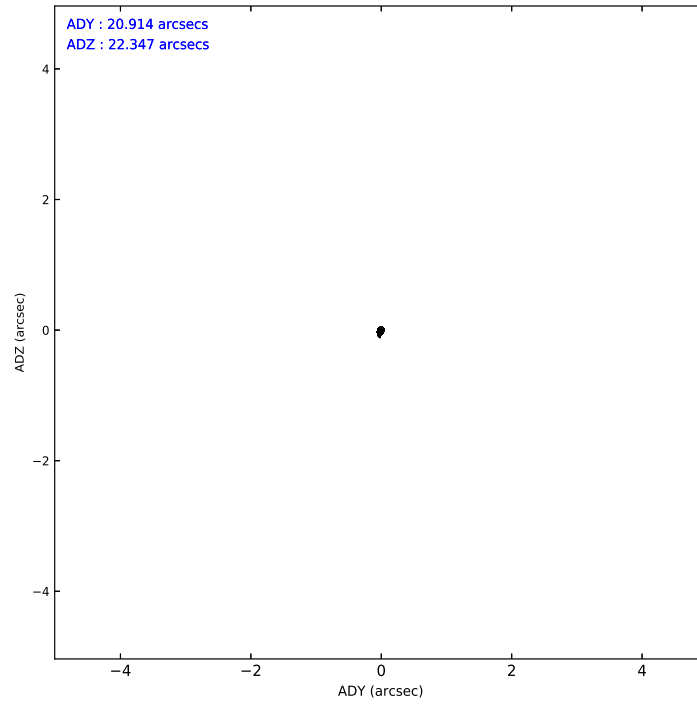
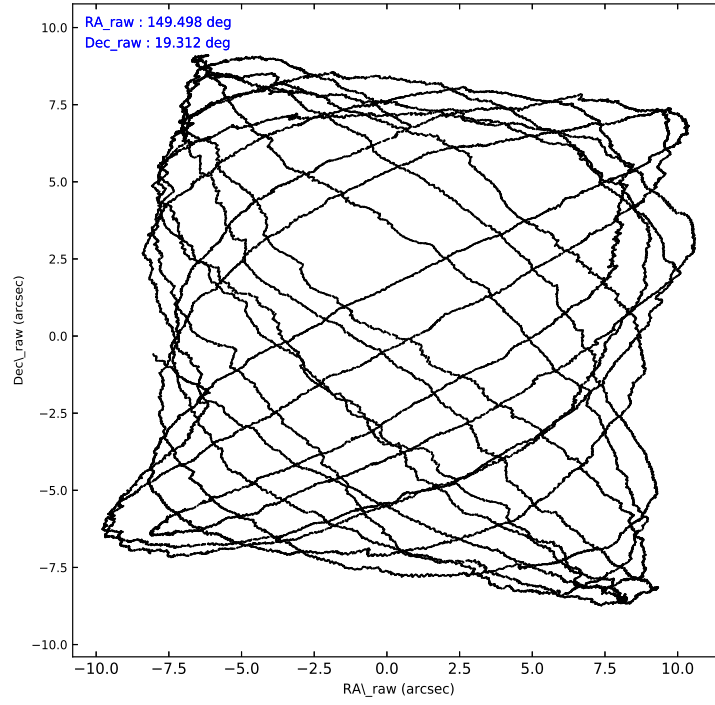
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2240	2630	4947	2898
	3%	4%	7%	4%
grade 1 events	27	31	45	26
	0%	0%	0%	0%
grade 2 events	1791	1811	1574	1466
	3%	3%	2%	2%
grade 3 events	707	693	705	707
	1%	1%	1%	1%
grade 4 events	609	666	651	690
	1%	1%	0%	1%
grade 5 events	2647	2746	2312	2902
	4%	4%	3%	4%
grade 6 events	1460	1957	1310	1491
	2%	3%	1%	2%
grade 7 events	50171	49423	57068	54876
	84%	82%	83%	84%

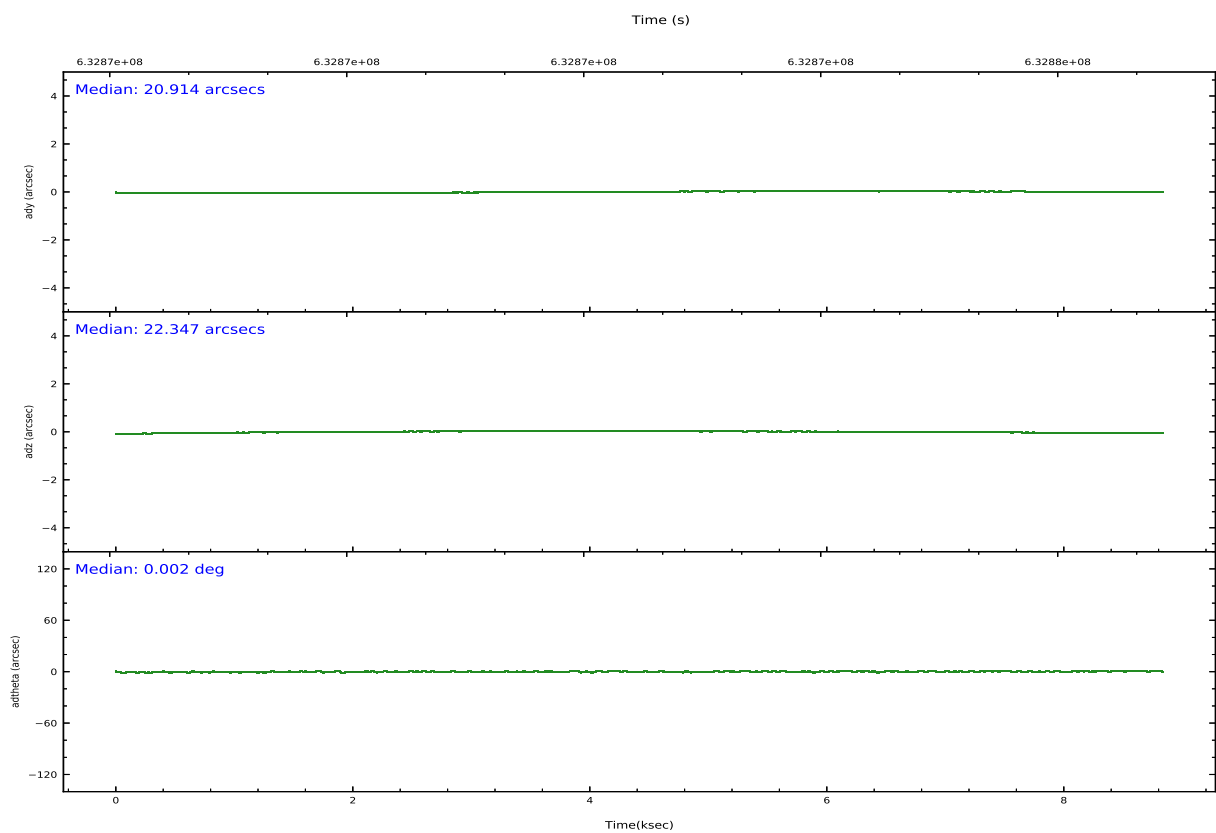
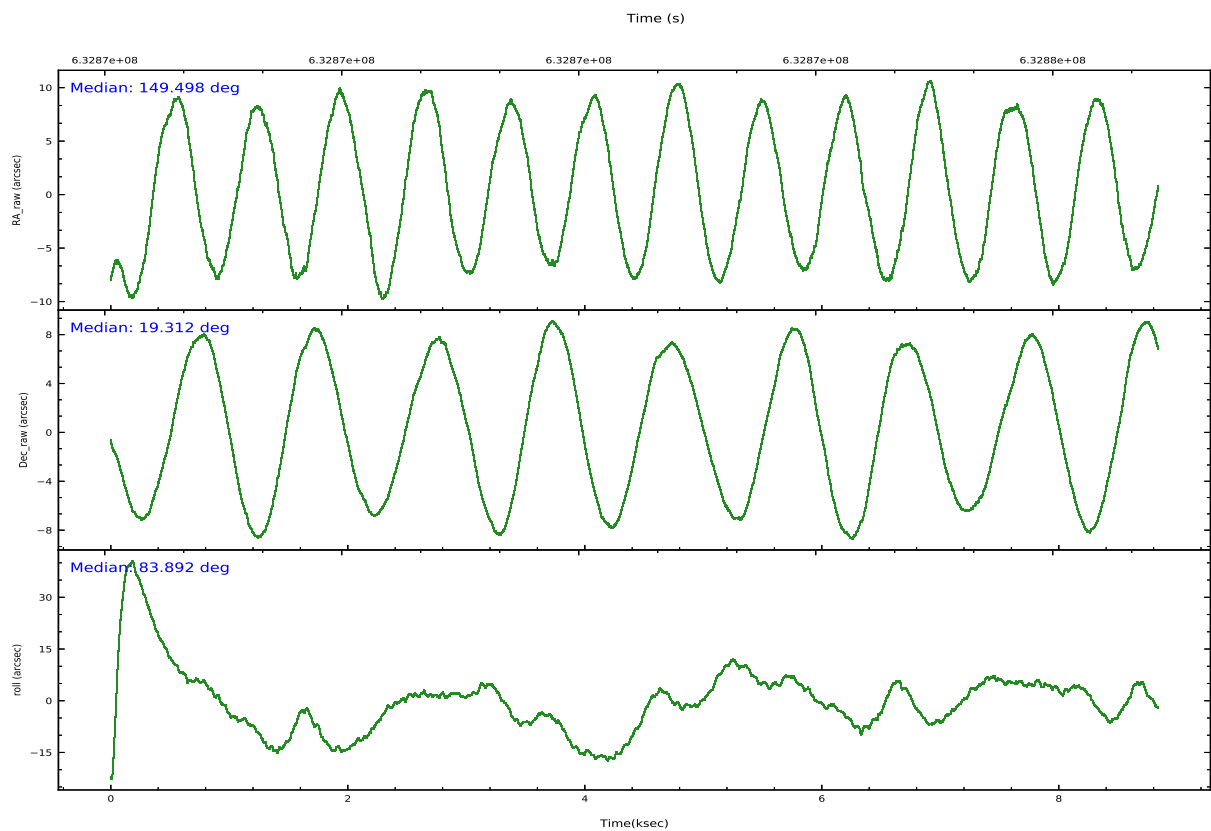
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	149.509842	149.50390369697
[deg] Pointing Dec	19.287007	19.305537086767
[deg] Pointing Roll	83.682771	83.89214774327699
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-228.472463	-228.4783457680588
[mm] SIM translation stage offset	-5.12	-5.114107234870914
[s] Observation start time (MET)	632868457.184000	632867407.12796
Observation start date	2018-01-20T20:46:28	2018-01-20T20:30:07
[s] Observation end time (MET)	632876890.184000	632877577.6910599
Observation end date	2018-01-20T23:07:01	2018-01-20T23:19:37
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	N
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	1	1
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



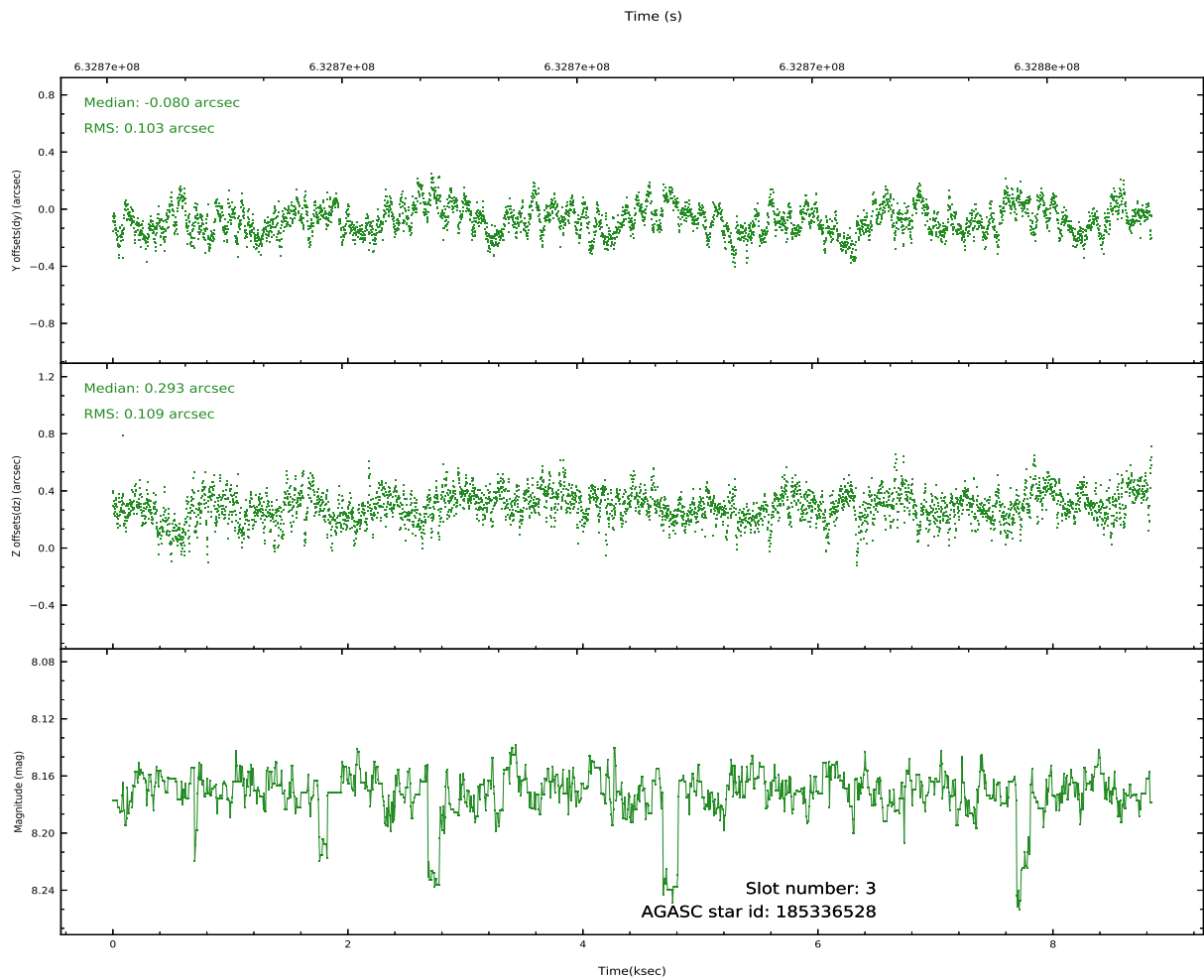
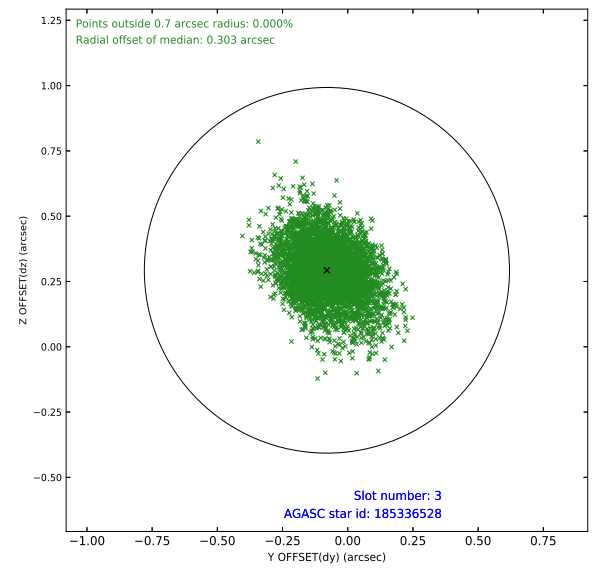
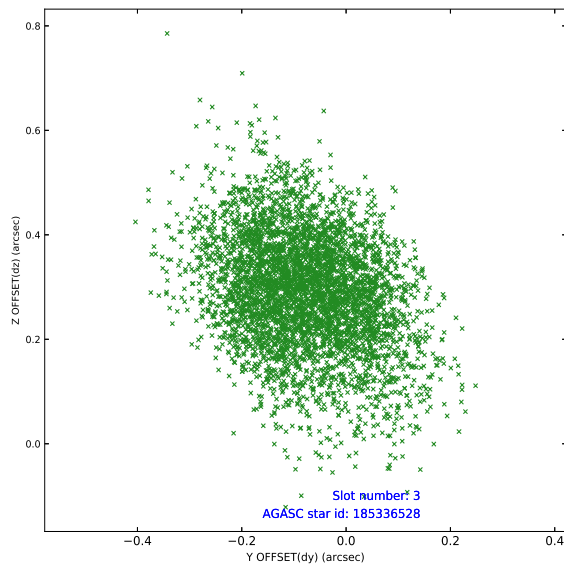


Slot Statistics

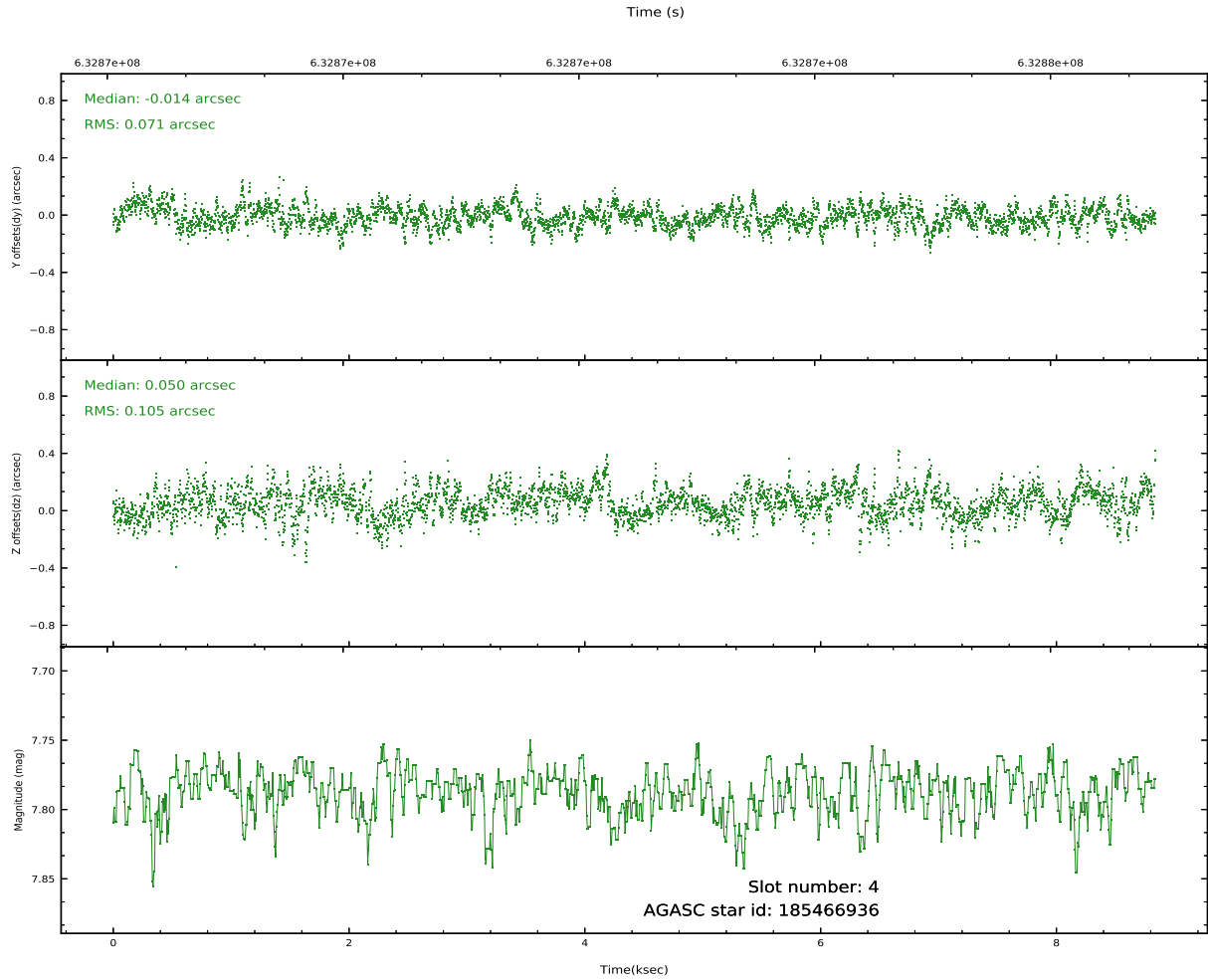
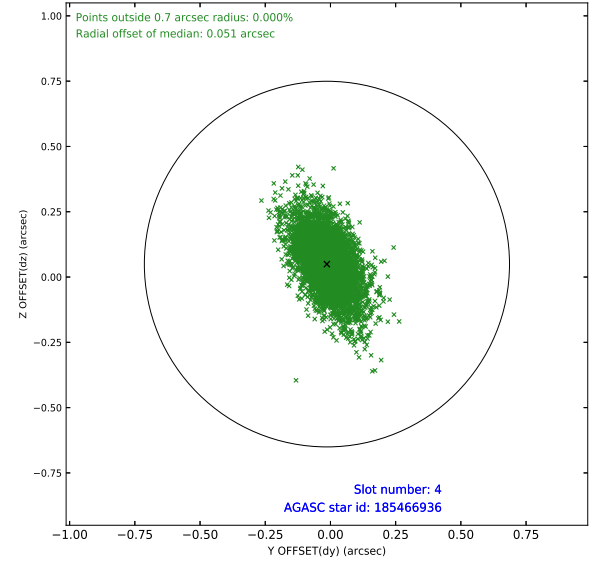
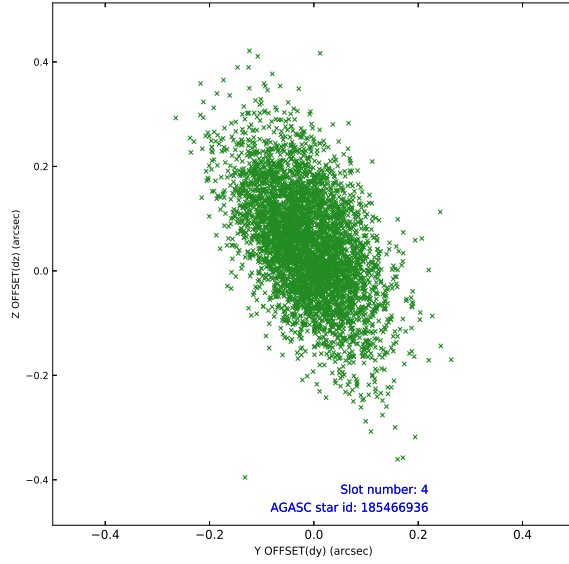
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.25	2155	1.000	0.284	-0.171	0.006	0.011	0.000000	0.000000	918.50	-951
1	FID		ACIS-I-5	7.23	2155	1.000	-0.377	0.237	0.006	0.011	0.000000	0.000000	-1829.79	946
2	FID		ACIS-I-6	7.25	2156	1.000	0.002	0.005	0.007	0.011	0.000000	0.000000	383.27	1591
3	GUIDE	used	185336528	8.17	4309	1.000	-0.080	0.293	0.158	0.262	148.892720	18.821206	-1895.15	1905
4	GUIDE	used	185466936	7.79	4312	1.000	-0.014	0.050	0.130	0.232	149.347558	19.289385	-52.16	549
5	GUIDE	used	185469624	7.75	4311	1.000	-0.213	-0.152	0.130	0.222	149.409818	19.578080	1004.30	452
6	GUIDE	used	185474944	8.65	4313	1.000	-0.097	0.021	0.130	0.224	149.452726	19.476585	657.00	266
7	GUIDE	used	185472712	9.33	4301	1.000	0.404	-0.204	0.269	0.493	150.247579	19.883258	2414.37	-2245

2.4 Star Slots

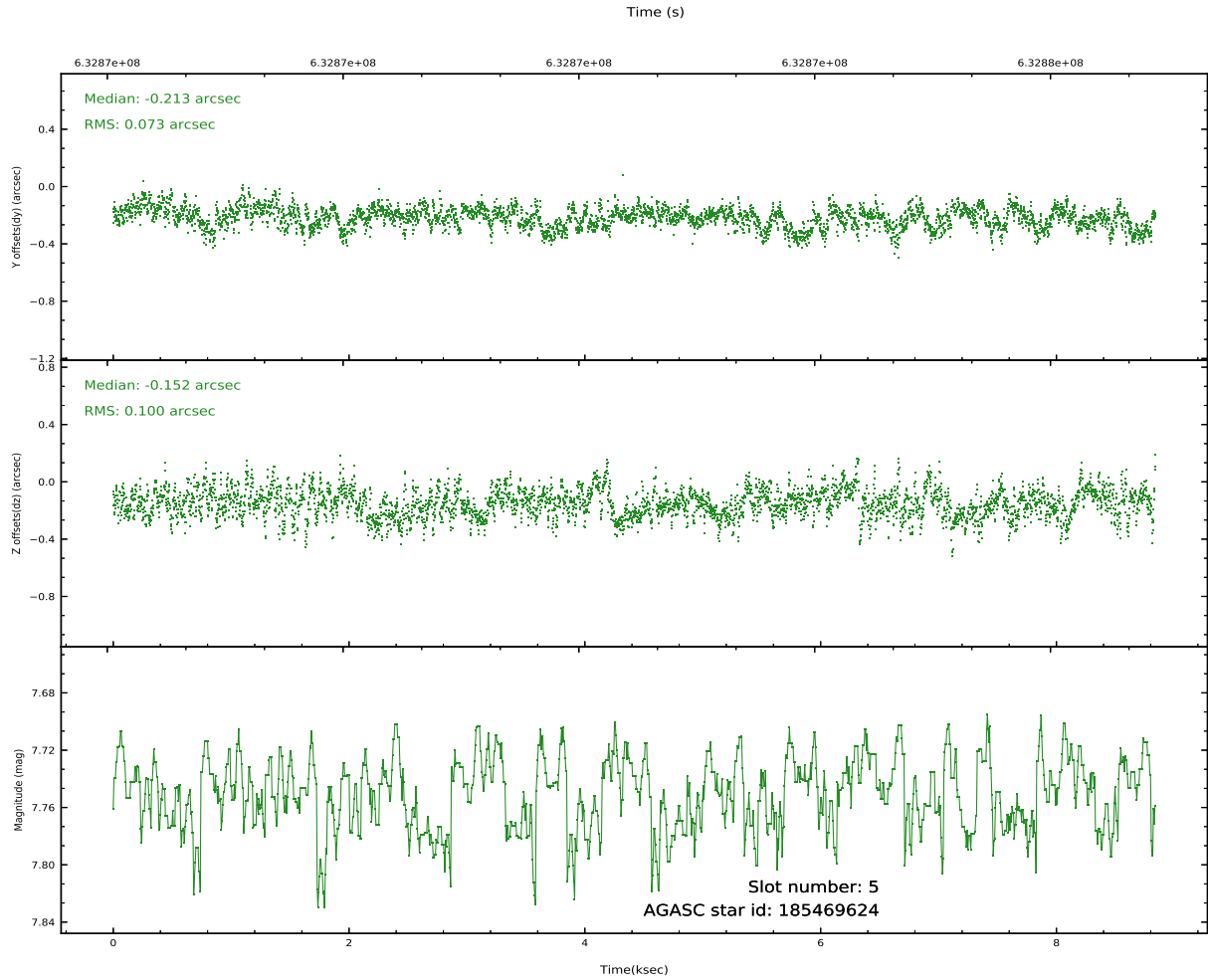
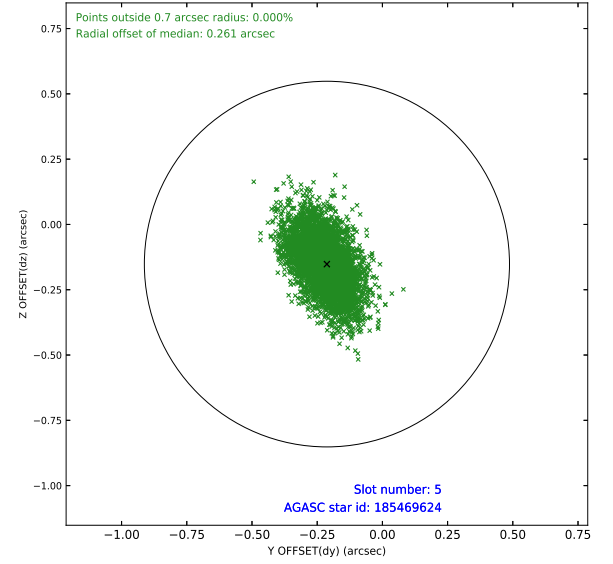
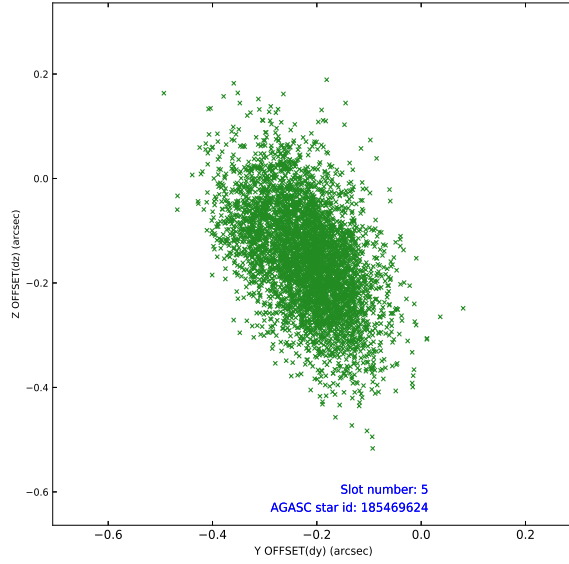
2.4.1 Slot 3



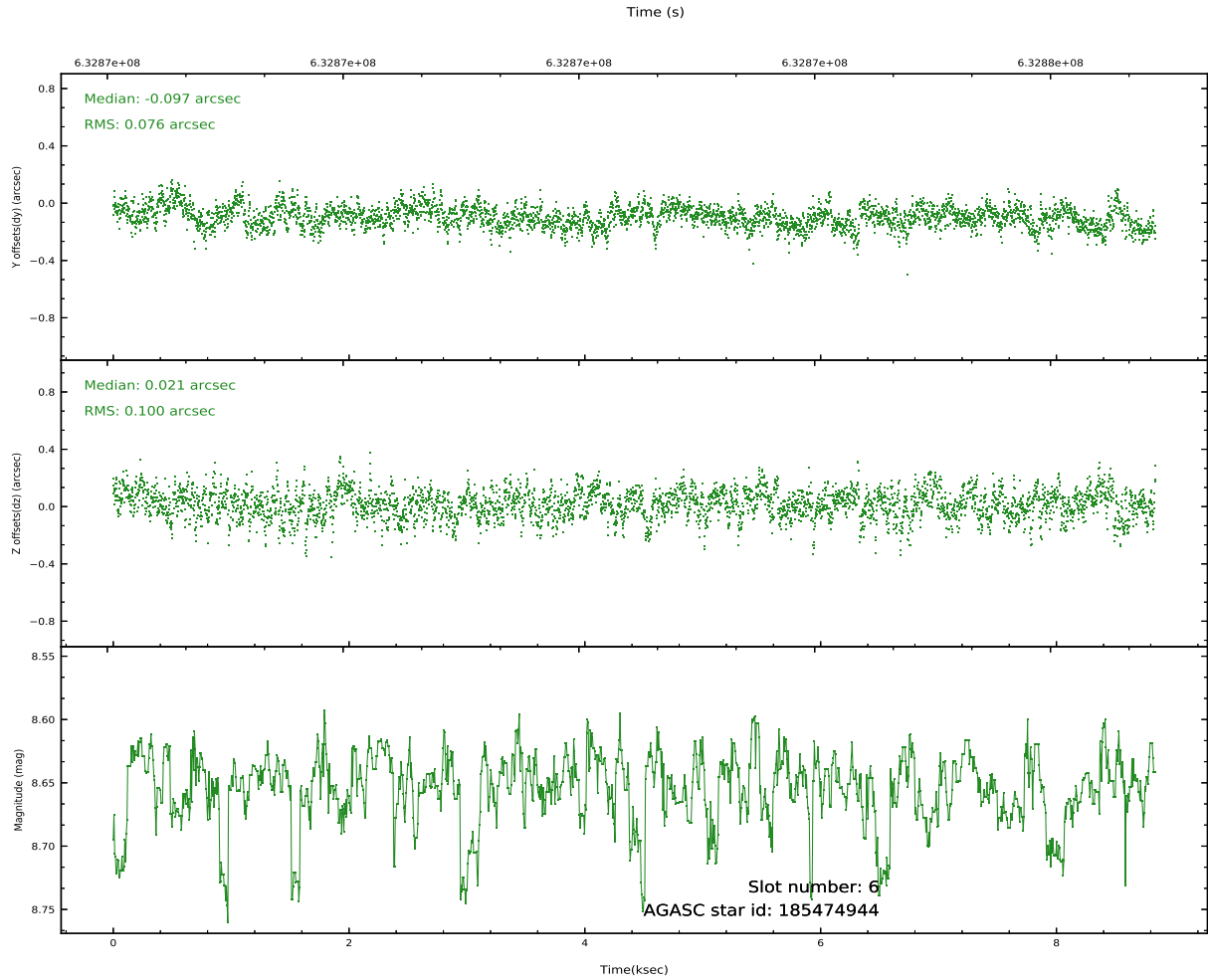
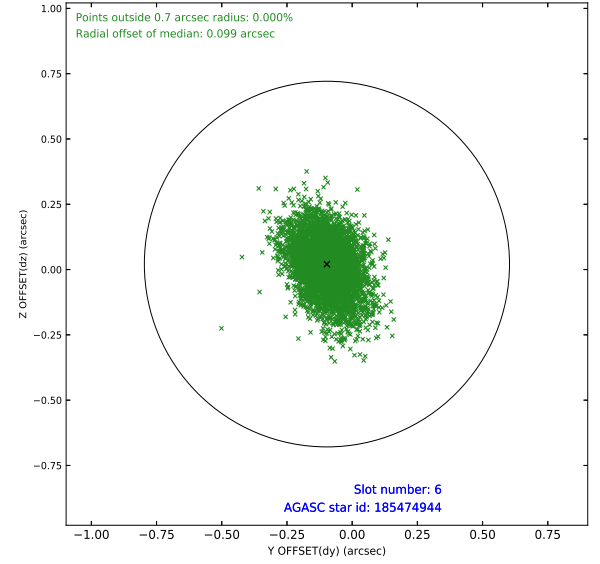
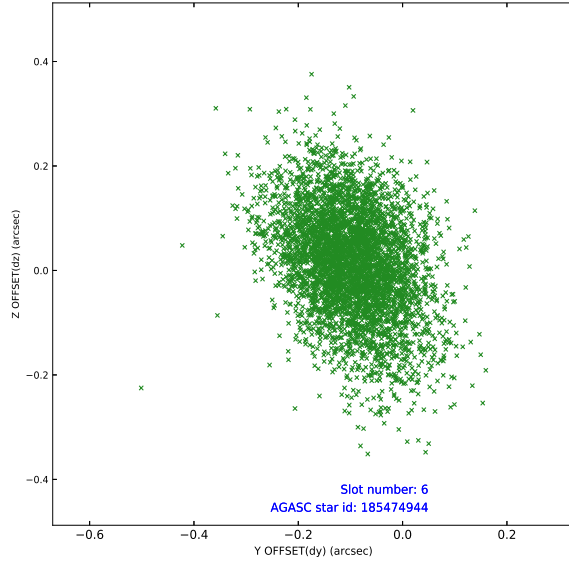
2.4.2 Slot 4



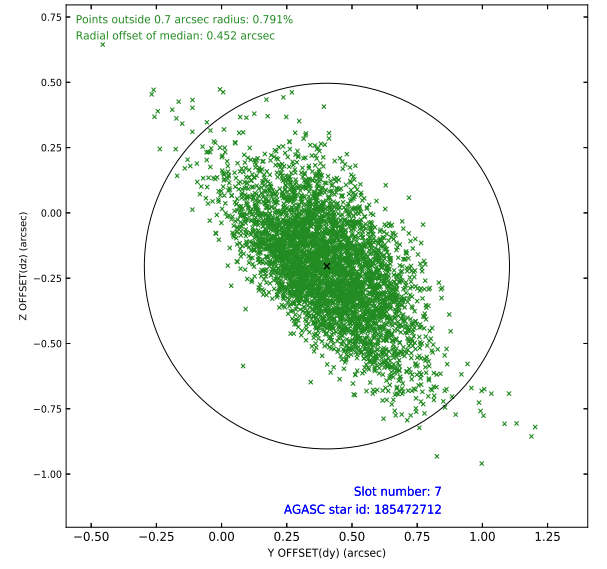
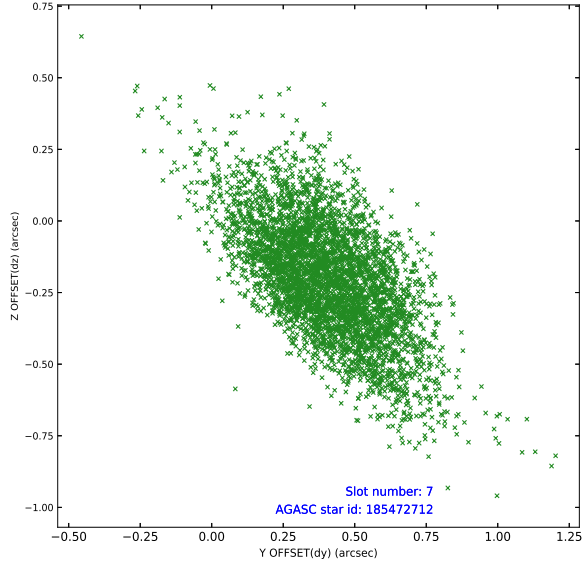
2.4.3 Slot 5



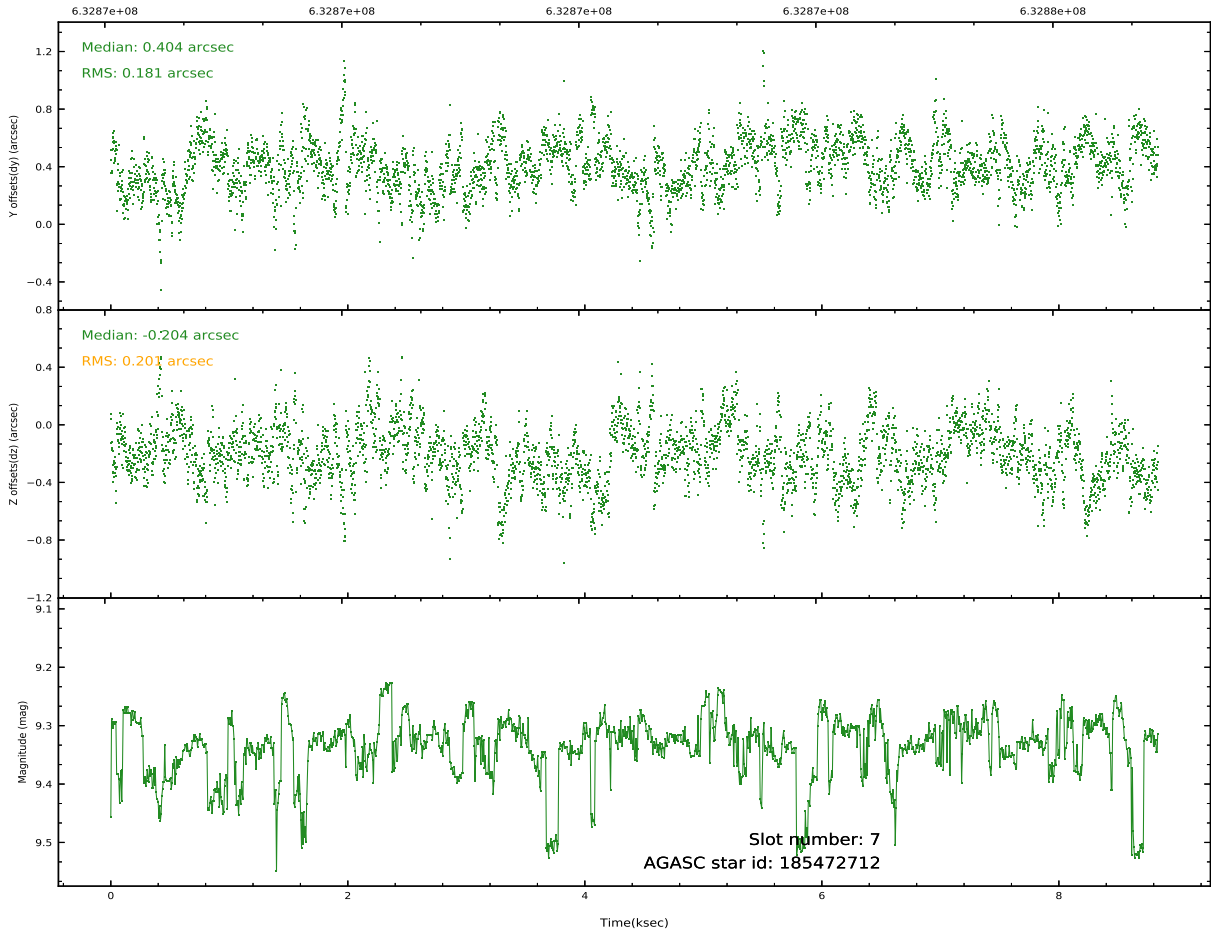
2.4.4 Slot 6



2.4.5 Slot 7

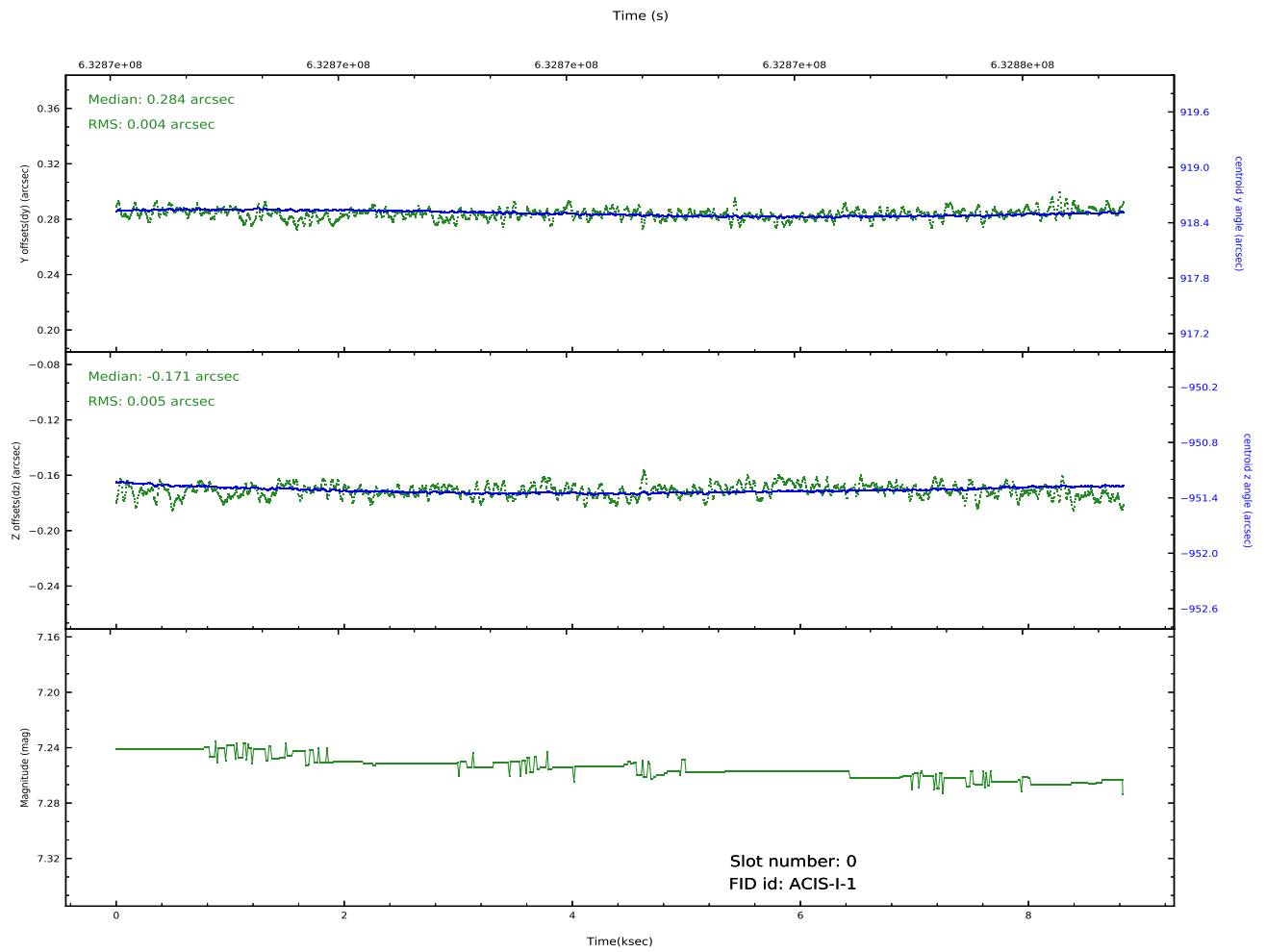
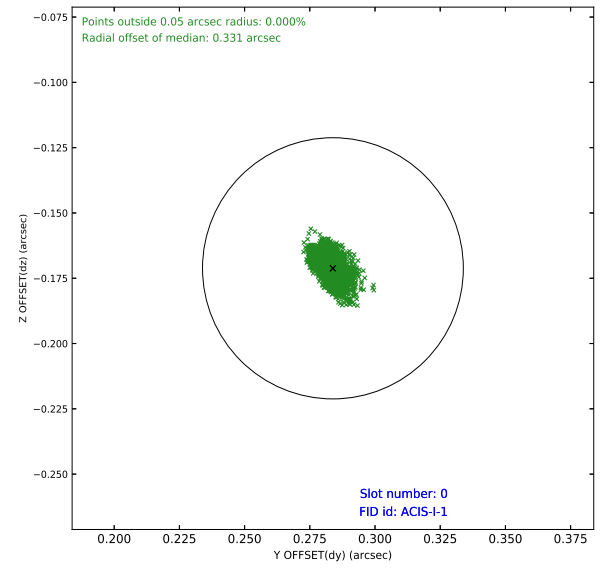
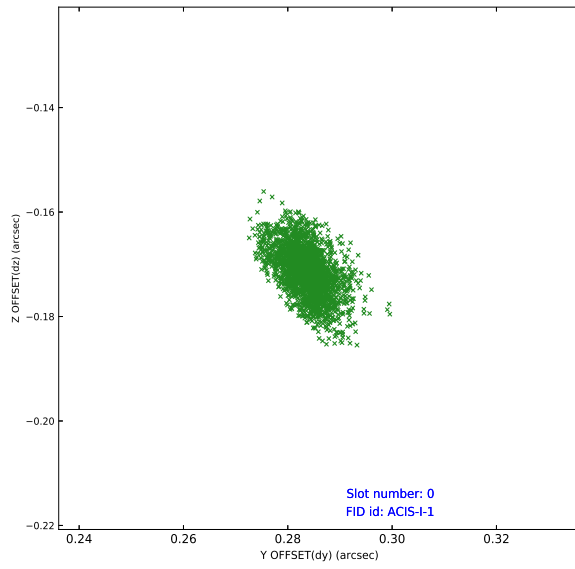


Time (s)

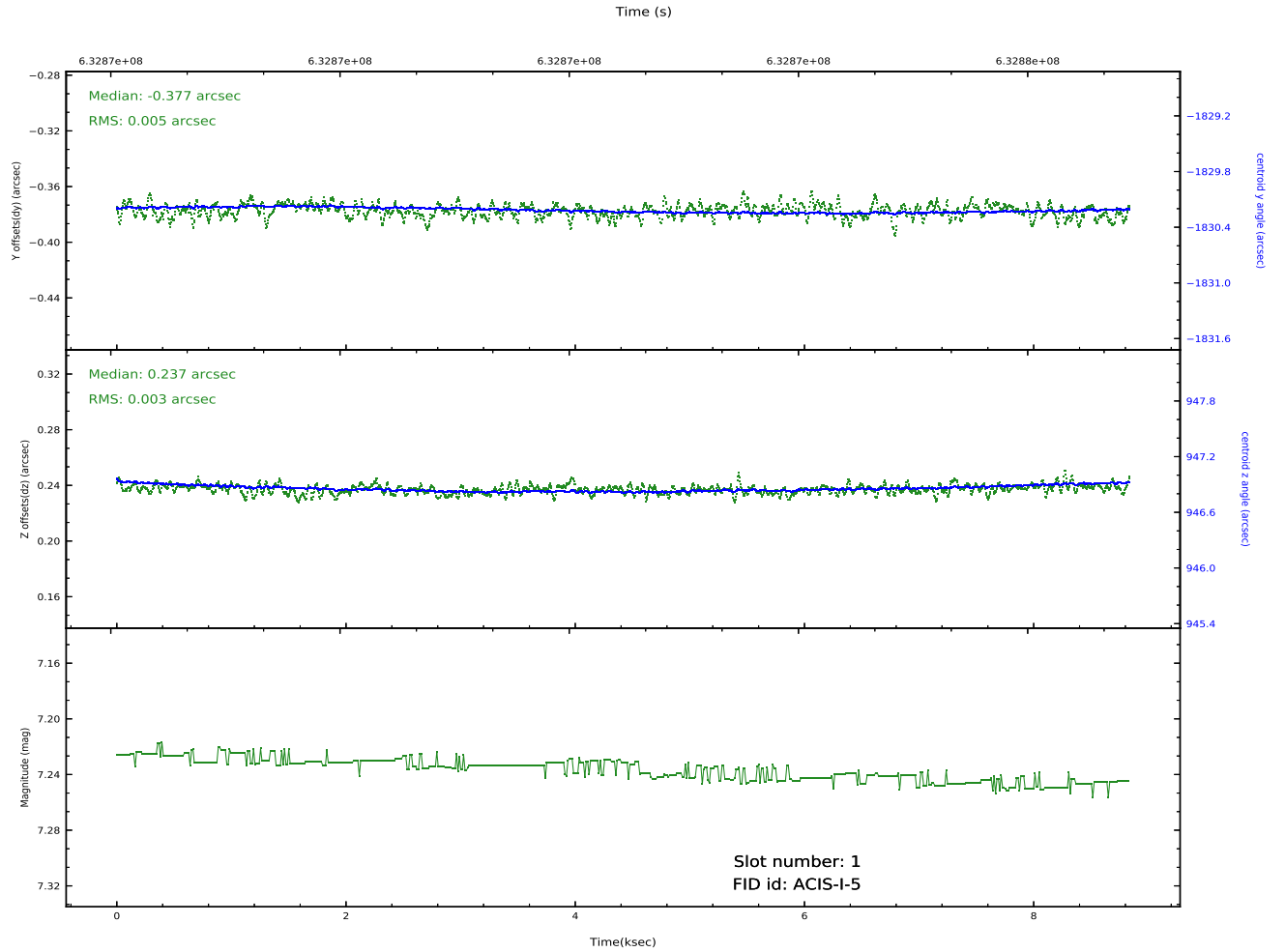
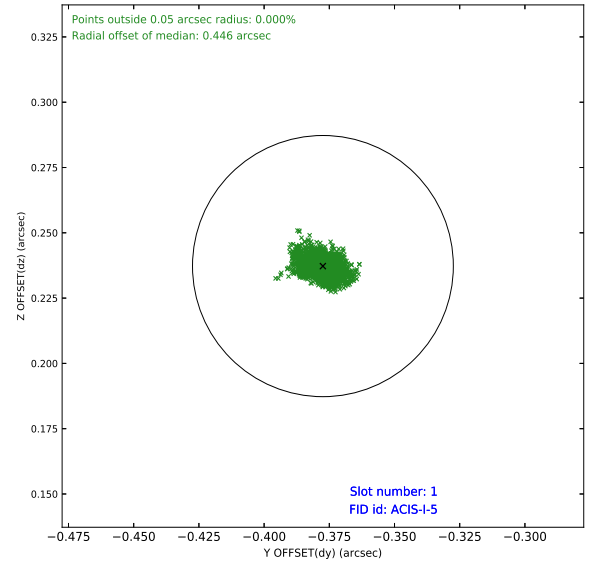
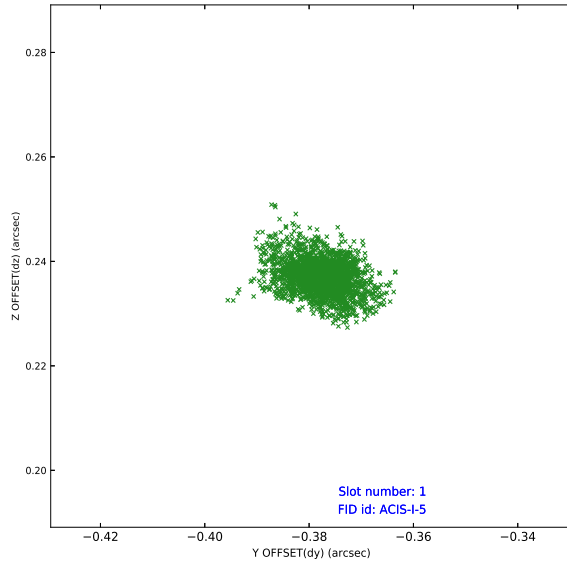


2.5 FID Slots

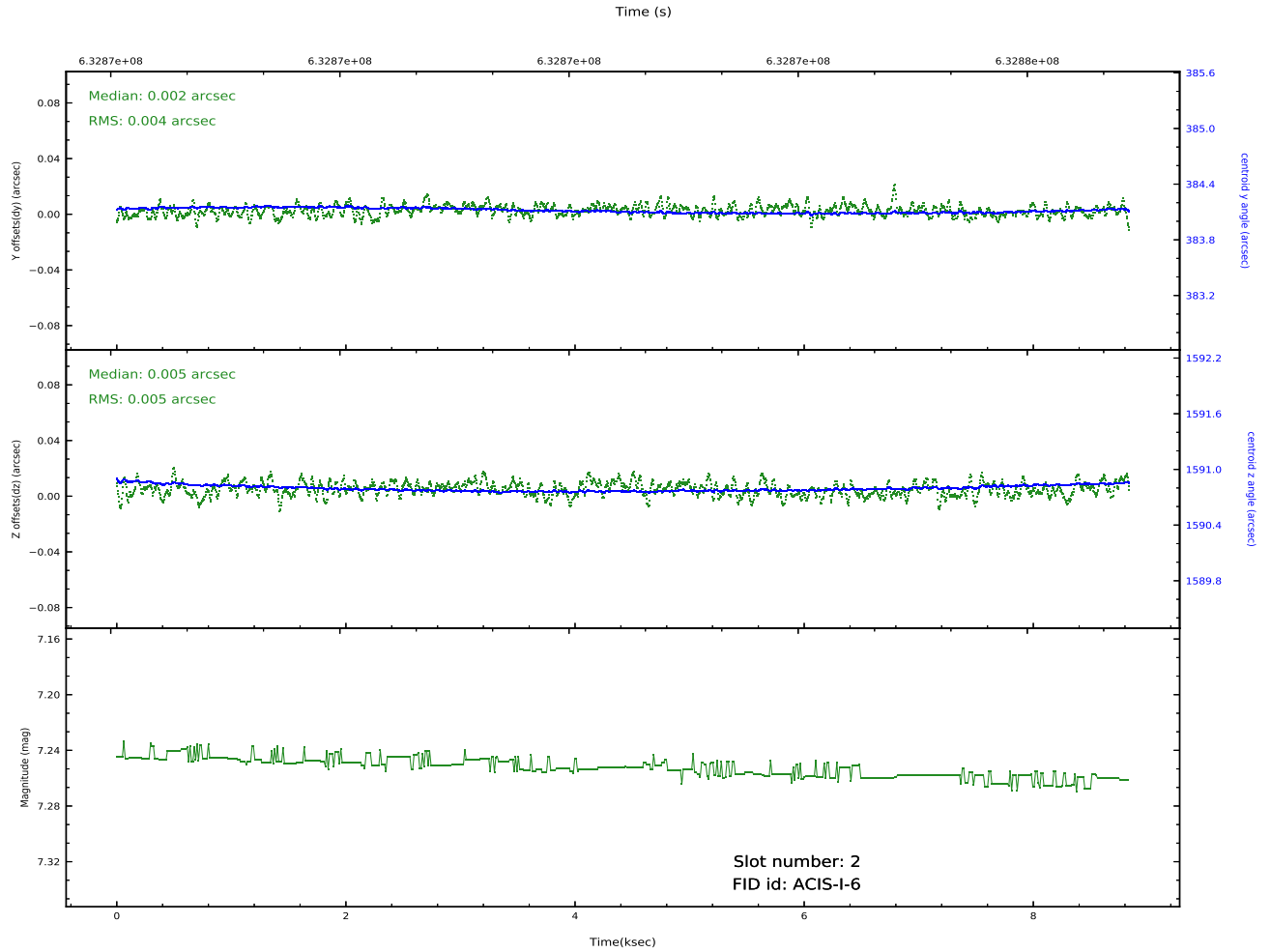
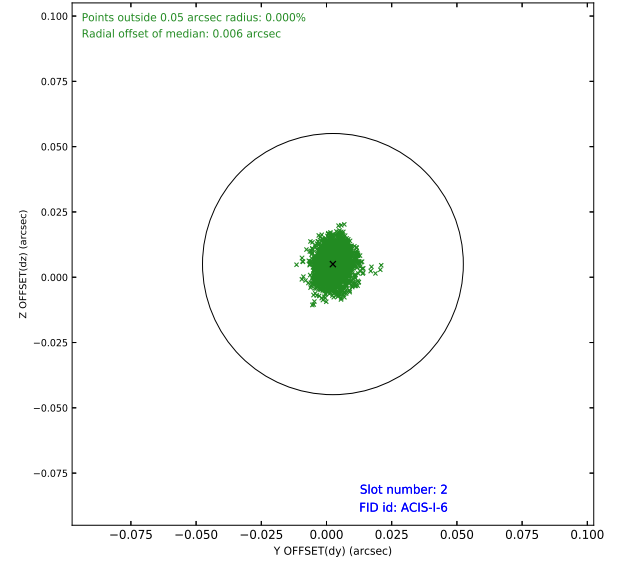
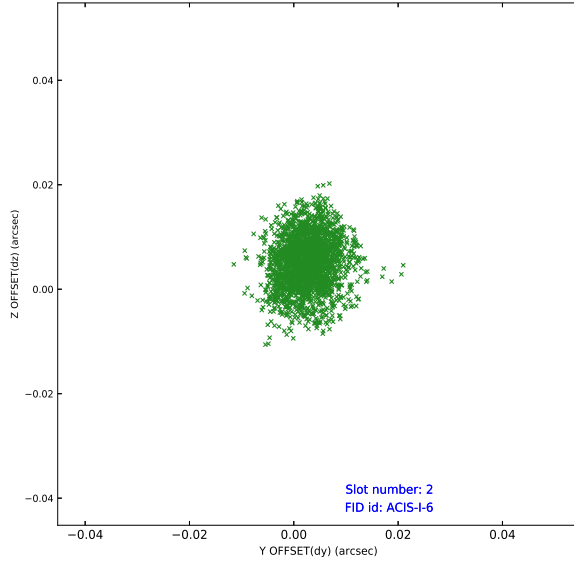
2.5.1 Slot 0



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	8.5095000655651

A.2 Comments

One optional chip was dropped.