

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19434 - L2 Version 2
Chandra X-Ray Center

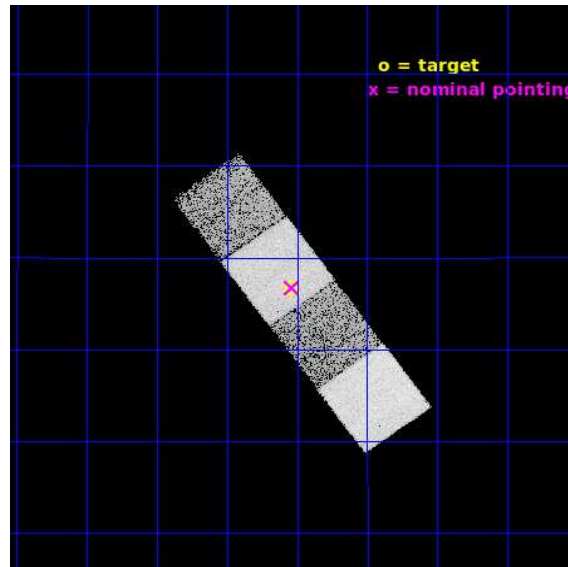
L2 Processing Date : Oct 25 2020

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1 Front

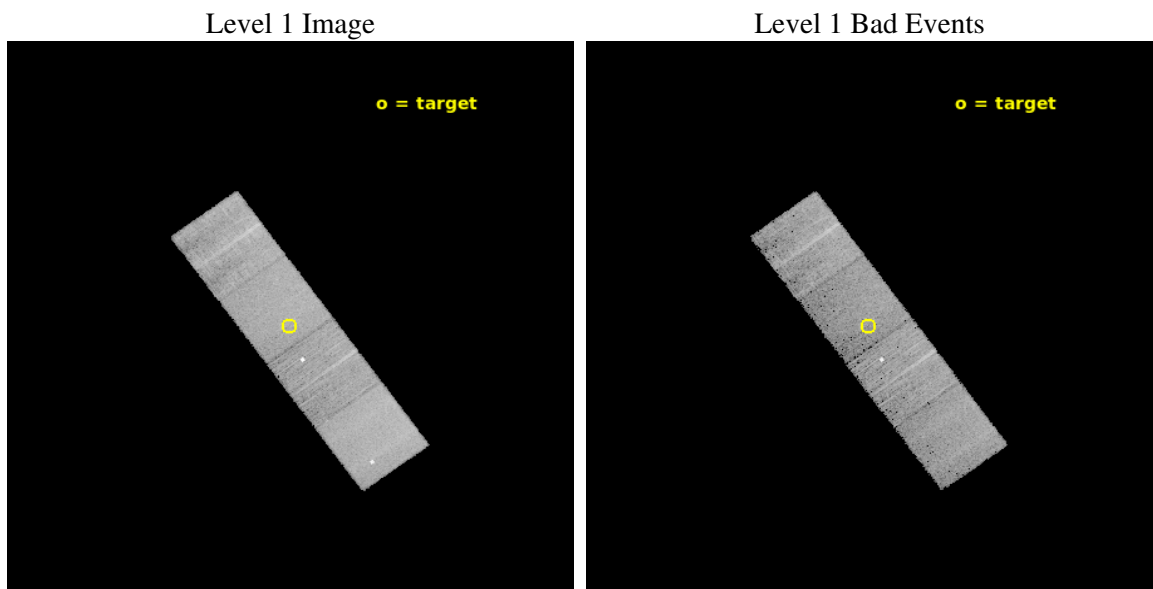
seq_num	601391	Sequence number
obs_id	19434	Observation id
title	Spiral galaxies of the Virgo cluster	Proposal title
observer	Roberto Soria	Principal investigator
object	NGC 4413	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.634583	Observer's specified target RA [deg]
dec_targ	12.611	Observer's specified target Dec [deg]
ra_nom	186.63423961787	Nominal RA [deg]
dec_nom	12.612314753291	Nominal Dec [deg]
roll_nom	234.02831561016	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7907.3123323917	Sum of GTIs [s]
livetime	7803.9974754904	Livetime [s]
ontime5	7907.271292448	Sum of GTIs [s]
ontime6	7907.2302523851	Sum of GTIs [s]
ontime7	7907.3123323917	Sum of GTIs [s]
ontime8	7897.766082406	Sum of GTIs [s]
l2events	88118	Number of level 2 events



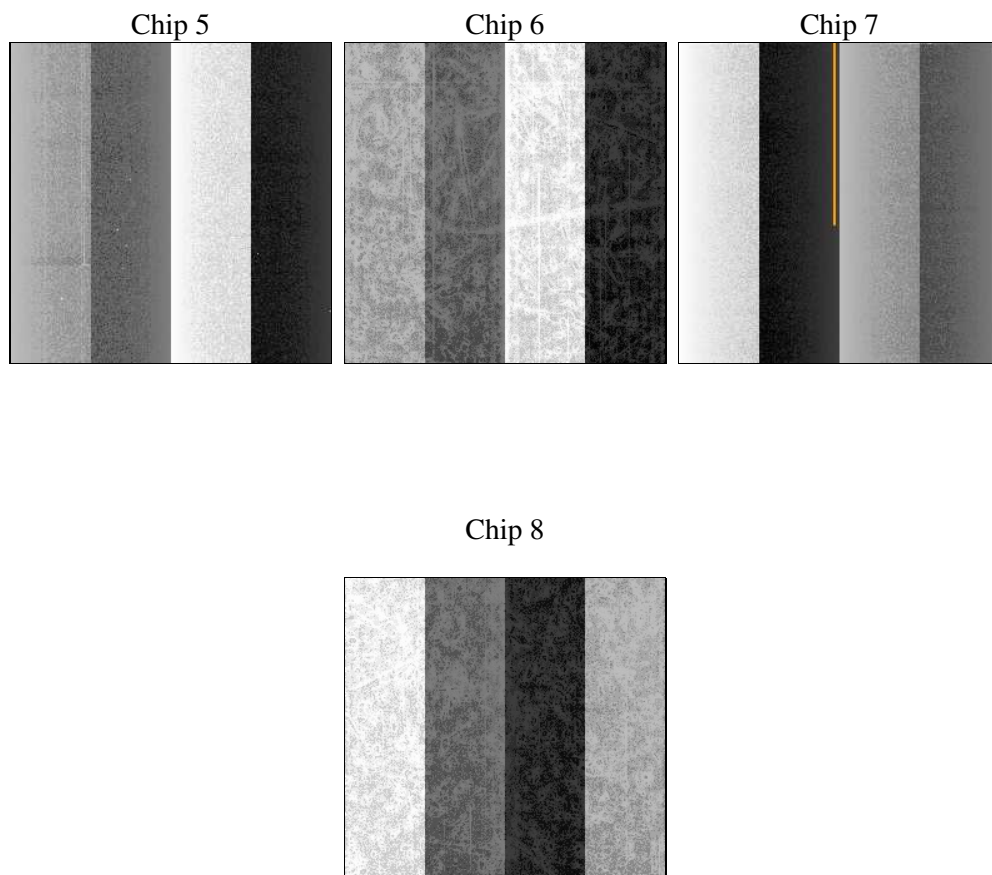
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	7907.3123323917	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	7907.271292448	Sum of GTIs [s]
date	2020-10-25T21:59:44	Date and time of file creation	ontime6	7907.2302523851	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	7907.3123323917	Sum of GTIs [s]
			ontime8	7897.766082406	Sum of GTIs [s]
			l1events	311323	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	93716	64491	75660	77456
rejected events	48725	56529	42222	58320
rejected %	51%	87%	55%	75%

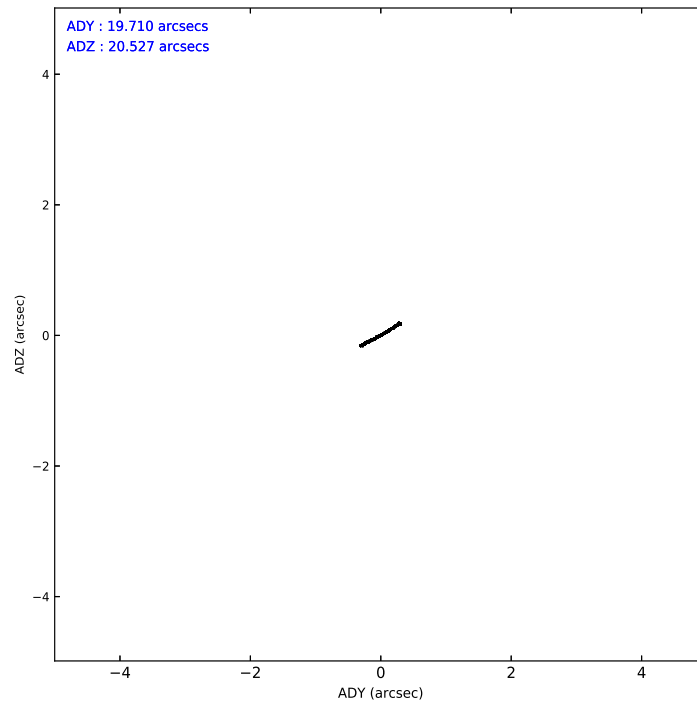
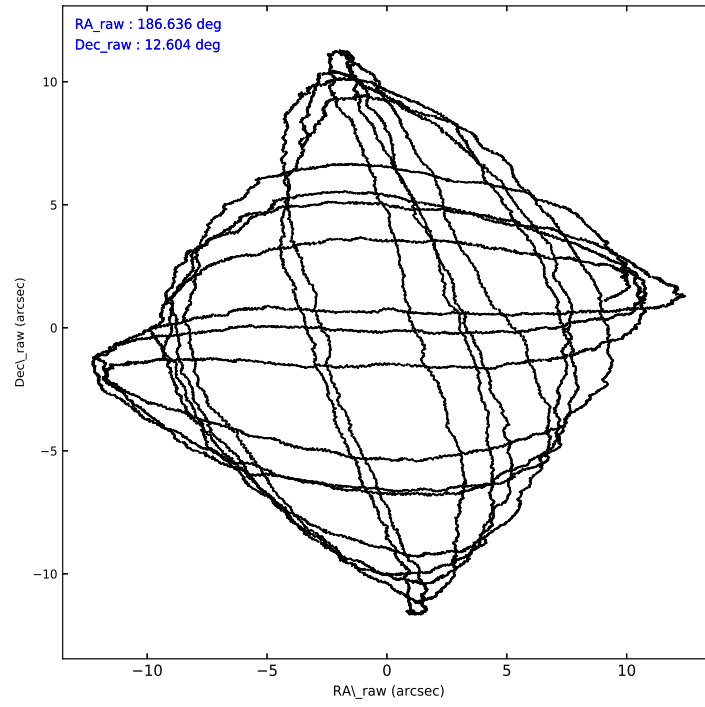
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	3282	3313	3095	5802
	3%	5%	4%	7%
grade 1 events	237	1417	104	55
	0%	2%	0%	0%
grade 2 events	14088	1761	7007	4539
	15%	2%	9%	5%
grade 3 events	1304	606	2692	1874
	1%	0%	3%	2%
grade 4 events	1309	594	2793	1711
	1%	0%	3%	2%
grade 5 events	6007	2481	7288	3941
	6%	3%	9%	5%
grade 6 events	25044	1691	17882	5228
	26%	2%	23%	6%
grade 7 events	42445	52628	34799	54306
	45%	81%	45%	70%

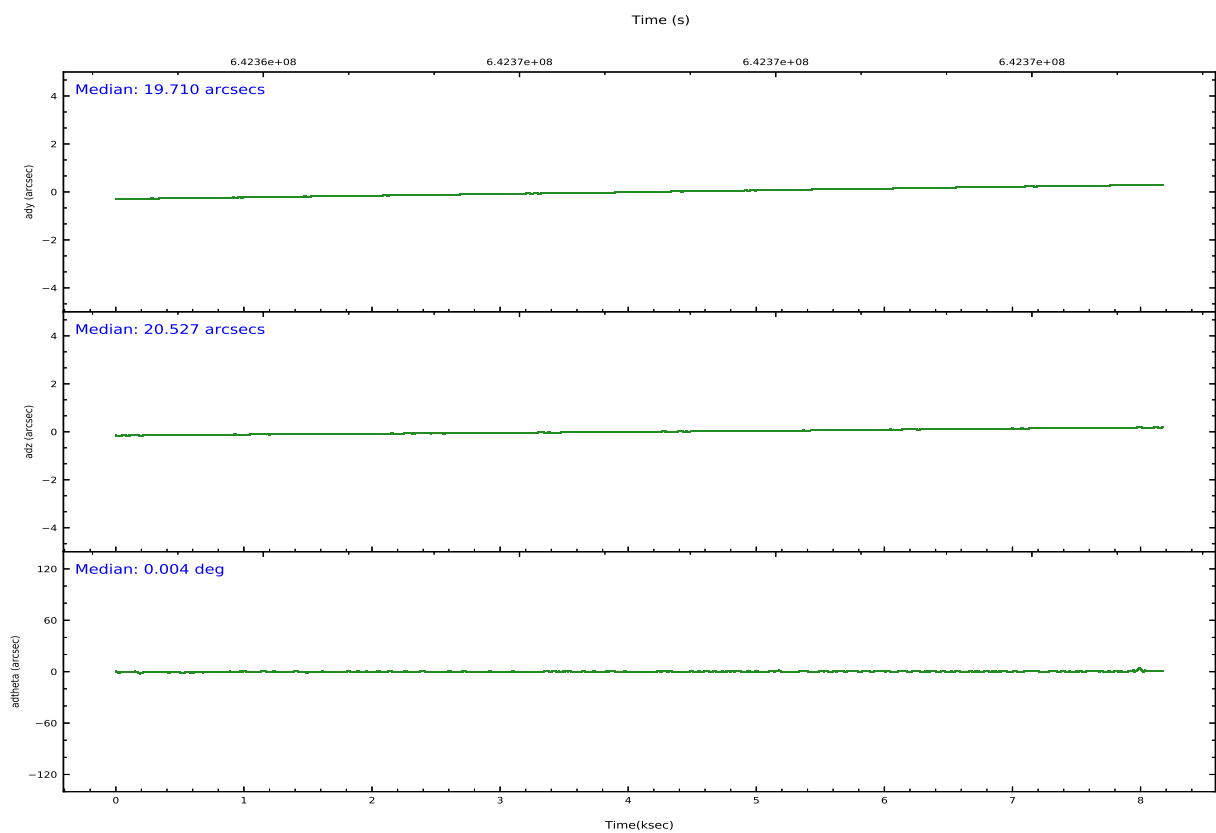
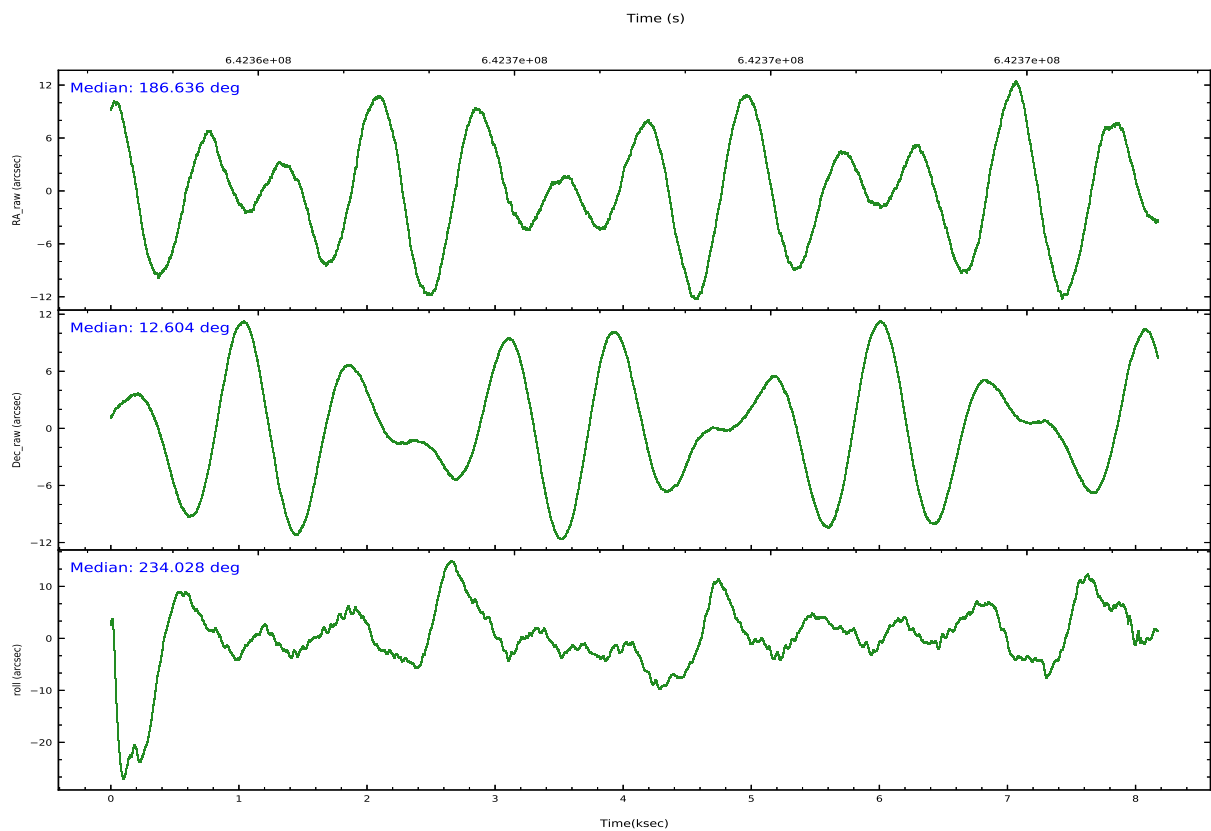
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	186.638246	186.63423961787
[deg] Pointing Dec	12.631538	12.612314753291
[deg] Pointing Roll	233.885110	234.02831561016
[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)	642363025.184000	642362591.0254101
Observation start date	2018-05-10T18:09:16	2018-05-10T18:03:11
[s] Observation end time (MET)	642371025.184000	642371222.55092
Observation end date	2018-05-10T20:22:36	2018-05-10T20:27:02
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
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



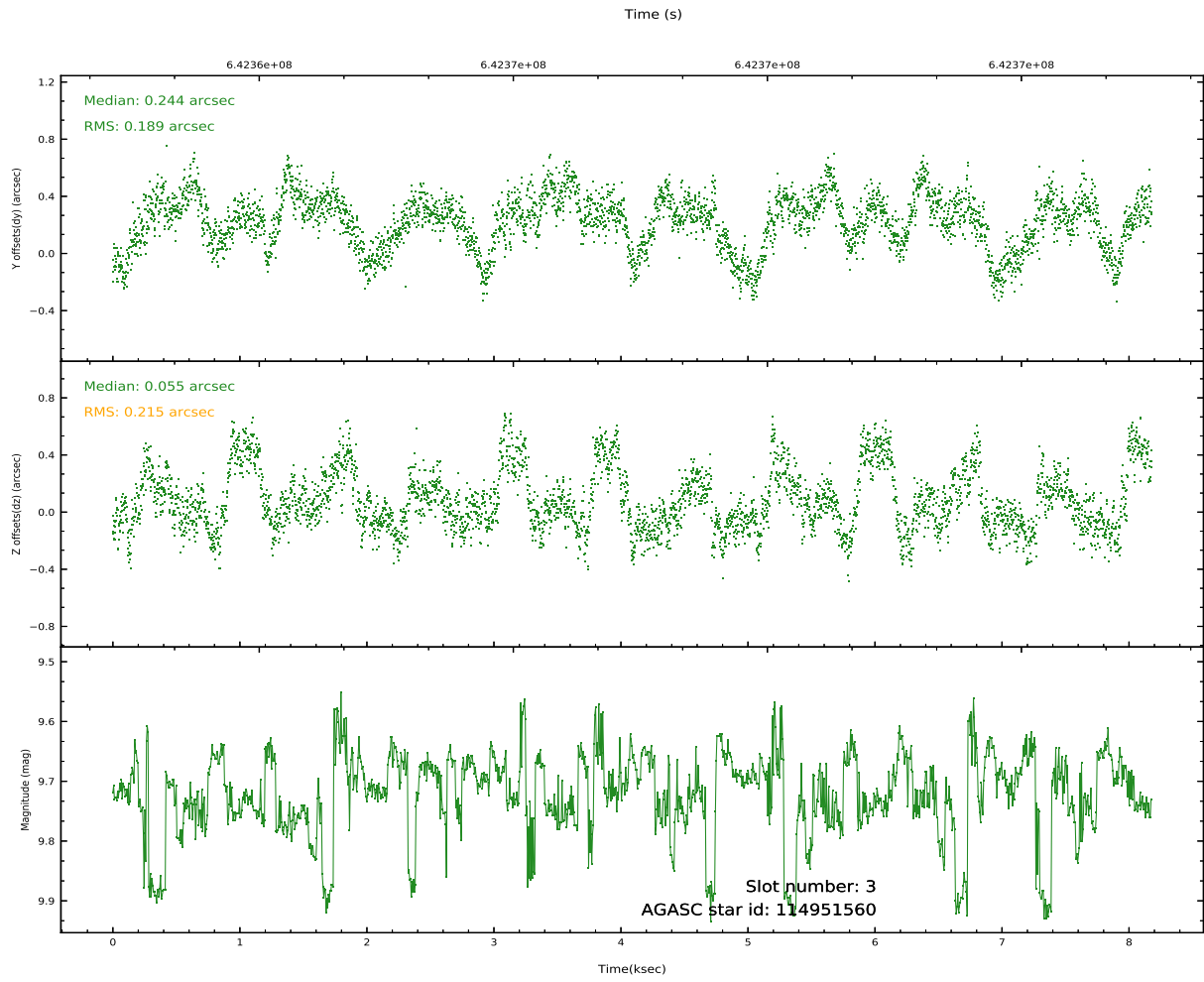
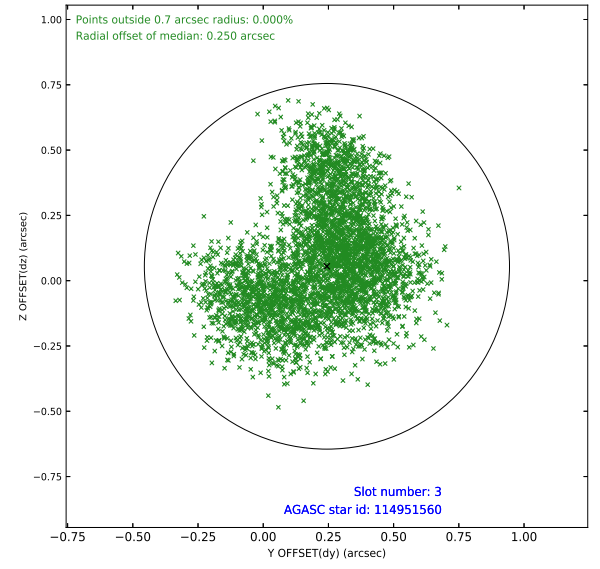
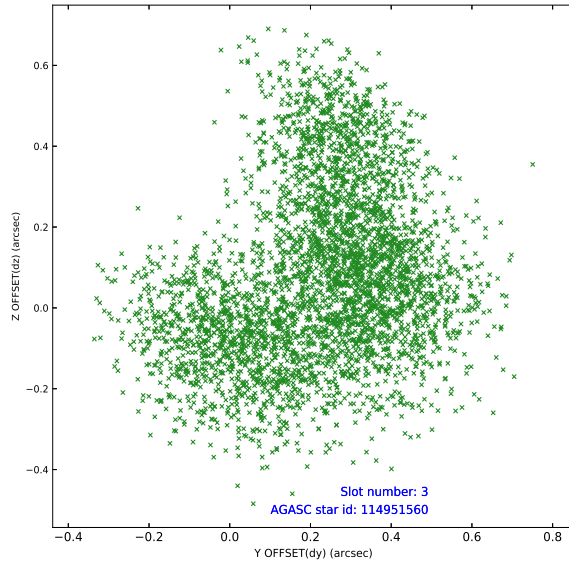


Slot Statistics

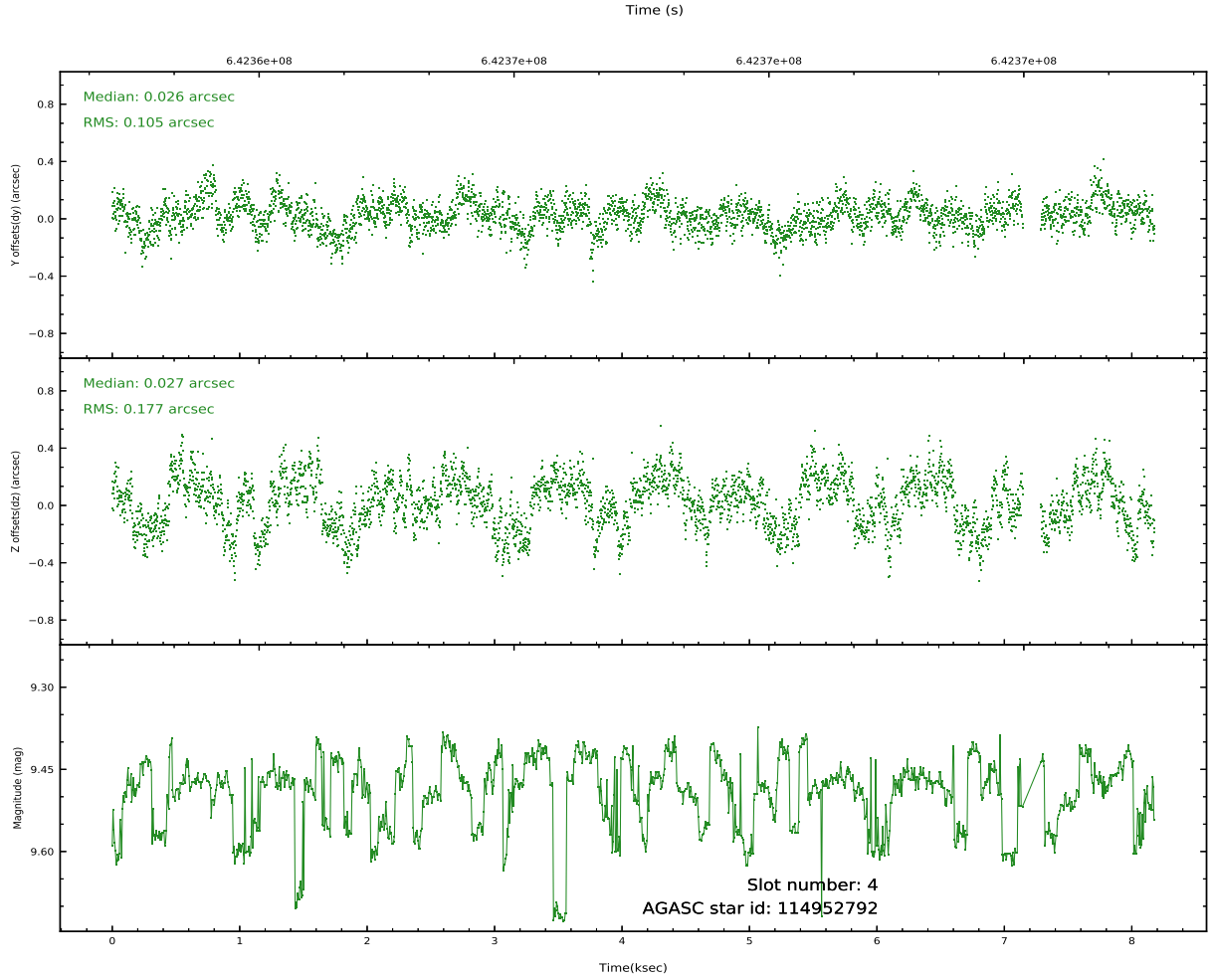
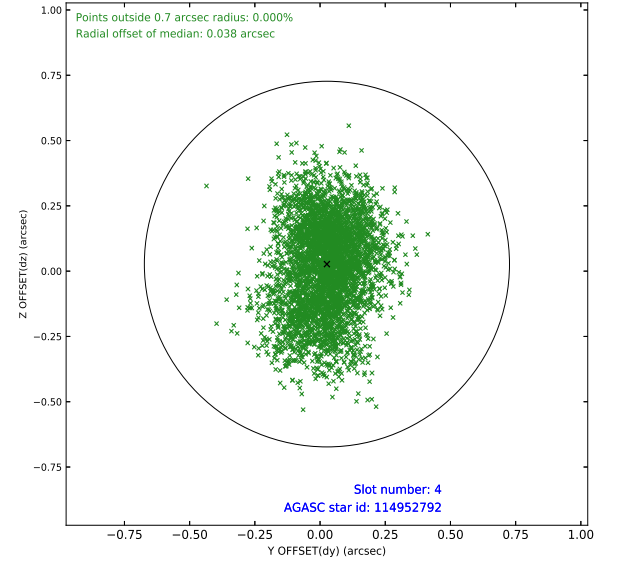
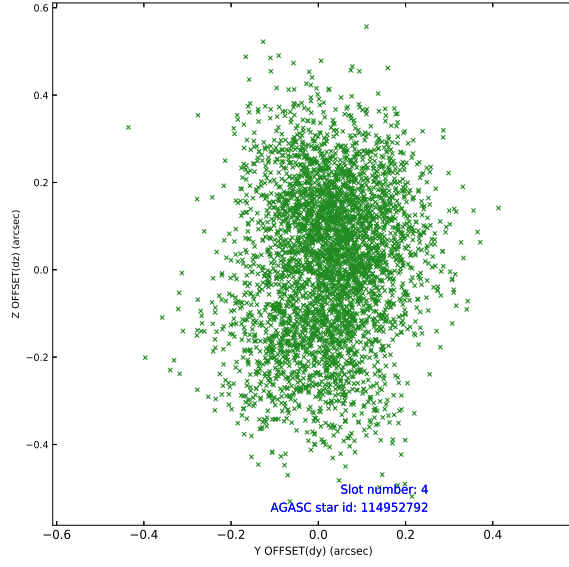
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.13	1995	1.000	0.098	-0.118	0.008	0.014	0.000000	0.000000	-772.95	-1742
1	FID		ACIS-S-4	7.26	1995	1.000	0.133	-0.016	0.007	0.014	0.000000	0.000000	2140.31	165
2	FID		ACIS-S-5	7.24	1995	1.000	-0.262	0.142	0.009	0.014	0.000000	0.000000	-1825.02	160
3	GUIDE	used	114951560	9.71	3987	1.000	0.244	0.055	0.316	0.474	186.766488	11.811262	2119.53	2105
4	GUIDE	used	114952792	9.48	3908	1.000	0.026	0.027	0.219	0.363	187.070263	12.344747	-60.26	1835
5	GUIDE	used	114954440	9.13	3977	1.000	-0.144	-0.005	0.195	0.324	186.915066	12.219118	624.16	1664
6	GUIDE	used	114957008	8.23	3983	1.000	-0.099	-0.131	0.266	0.383	186.894794	12.099160	1016.52	1859
7	GUIDE	used	115347480	9.49	3981	1.000	0.033	0.033	0.176	0.294	186.668576	13.310410	-2035.85	-1354

2.4 Star Slots

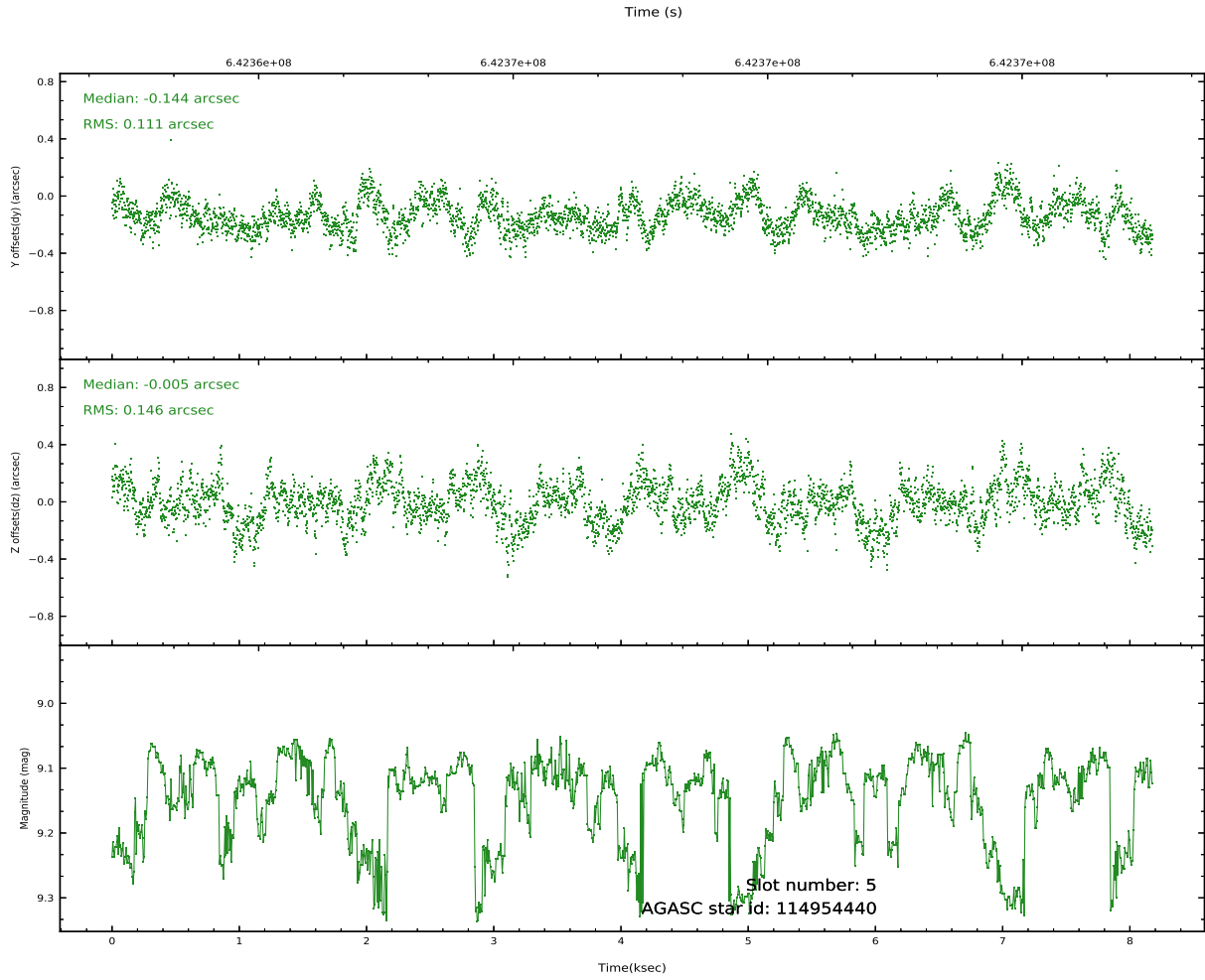
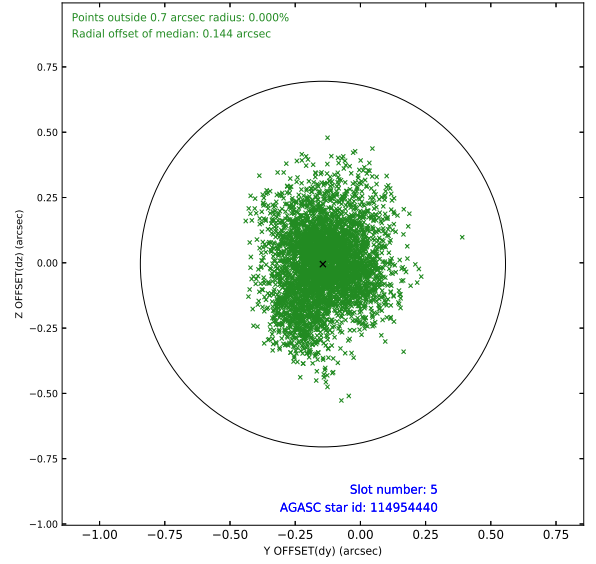
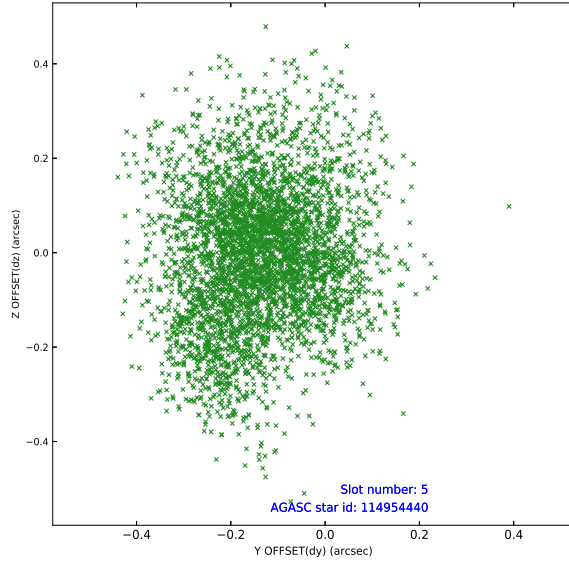
2.4.1 Slot 3



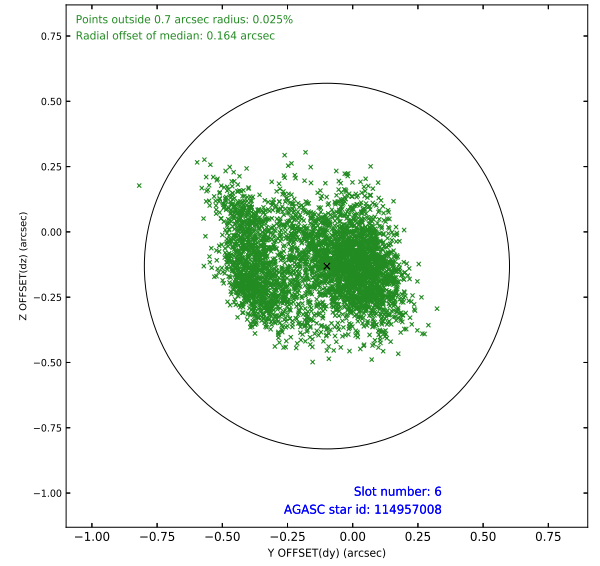
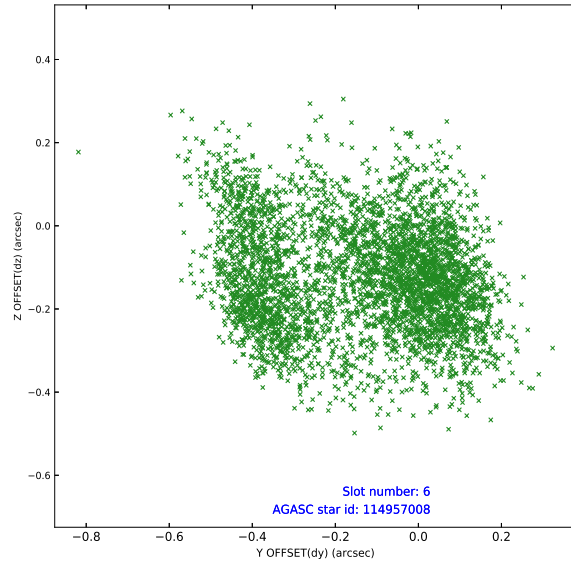
2.4.2 Slot 4



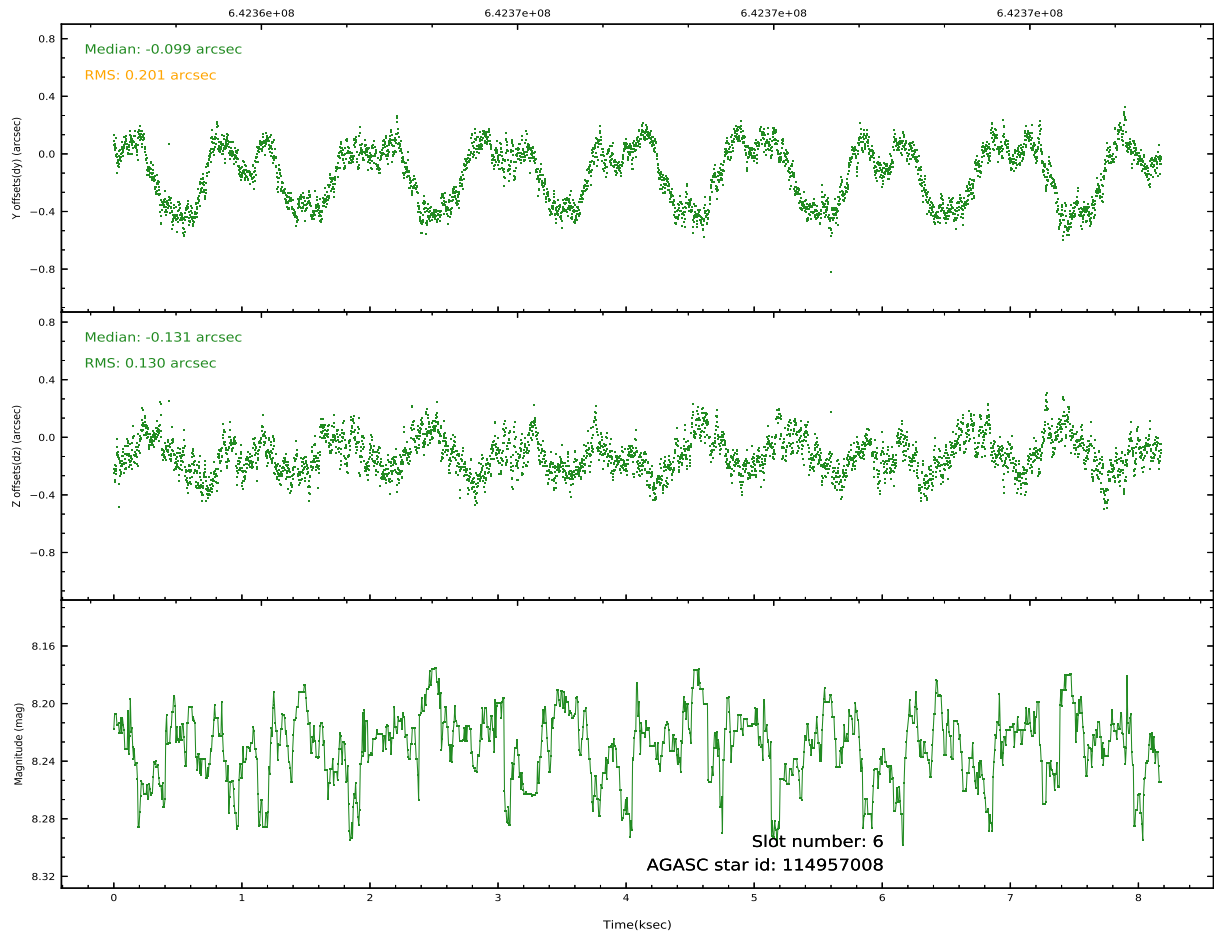
2.4.3 Slot 5



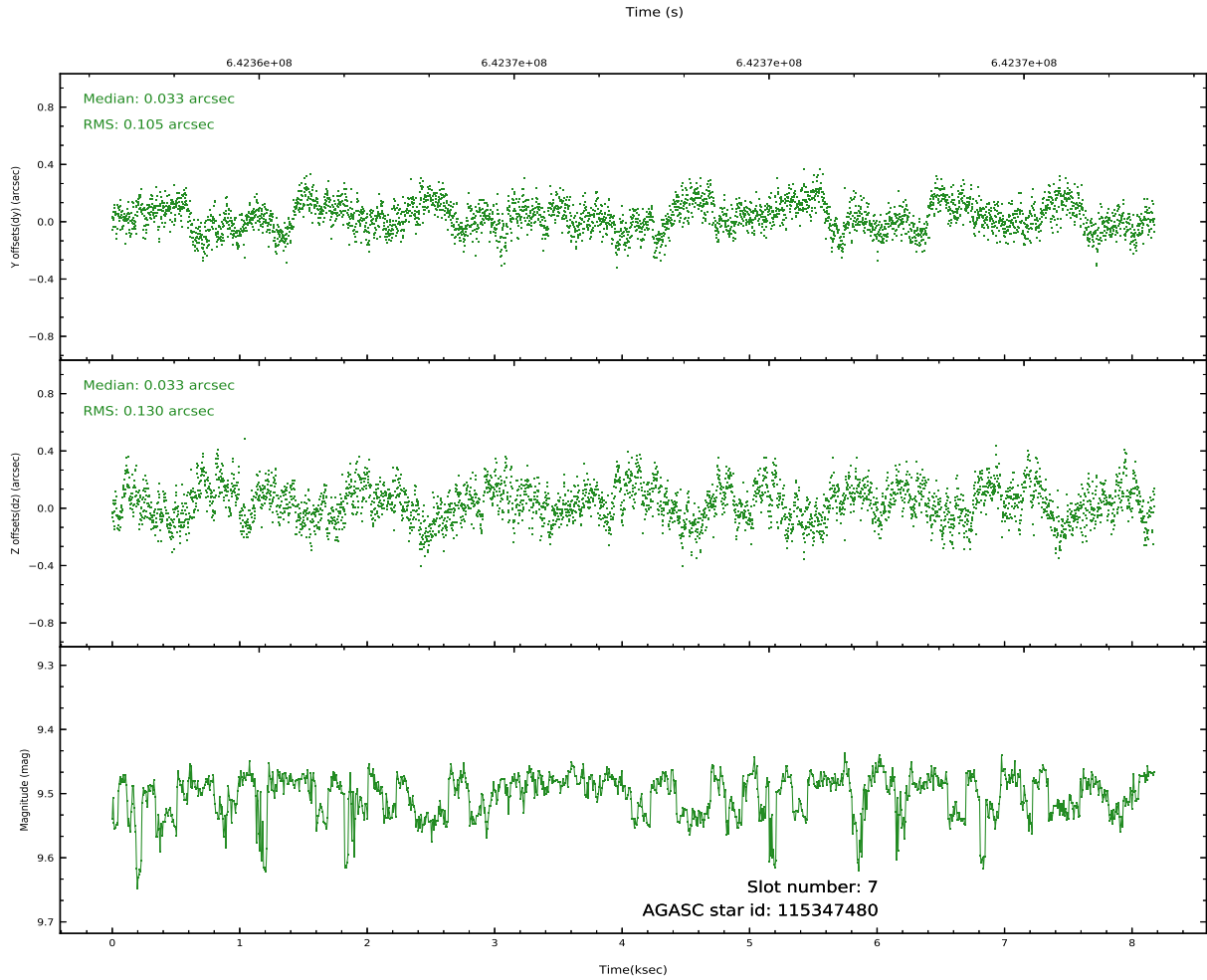
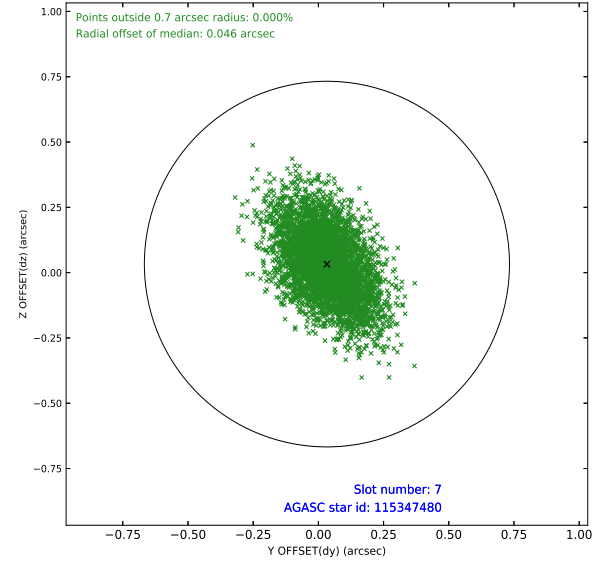
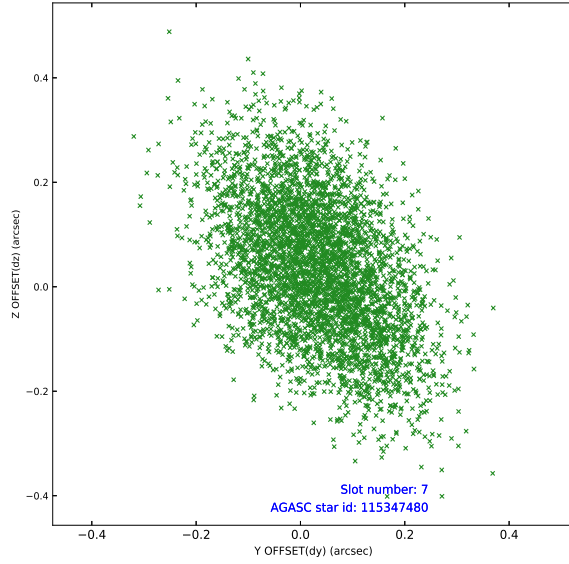
2.4.4 Slot 6



Time (s)

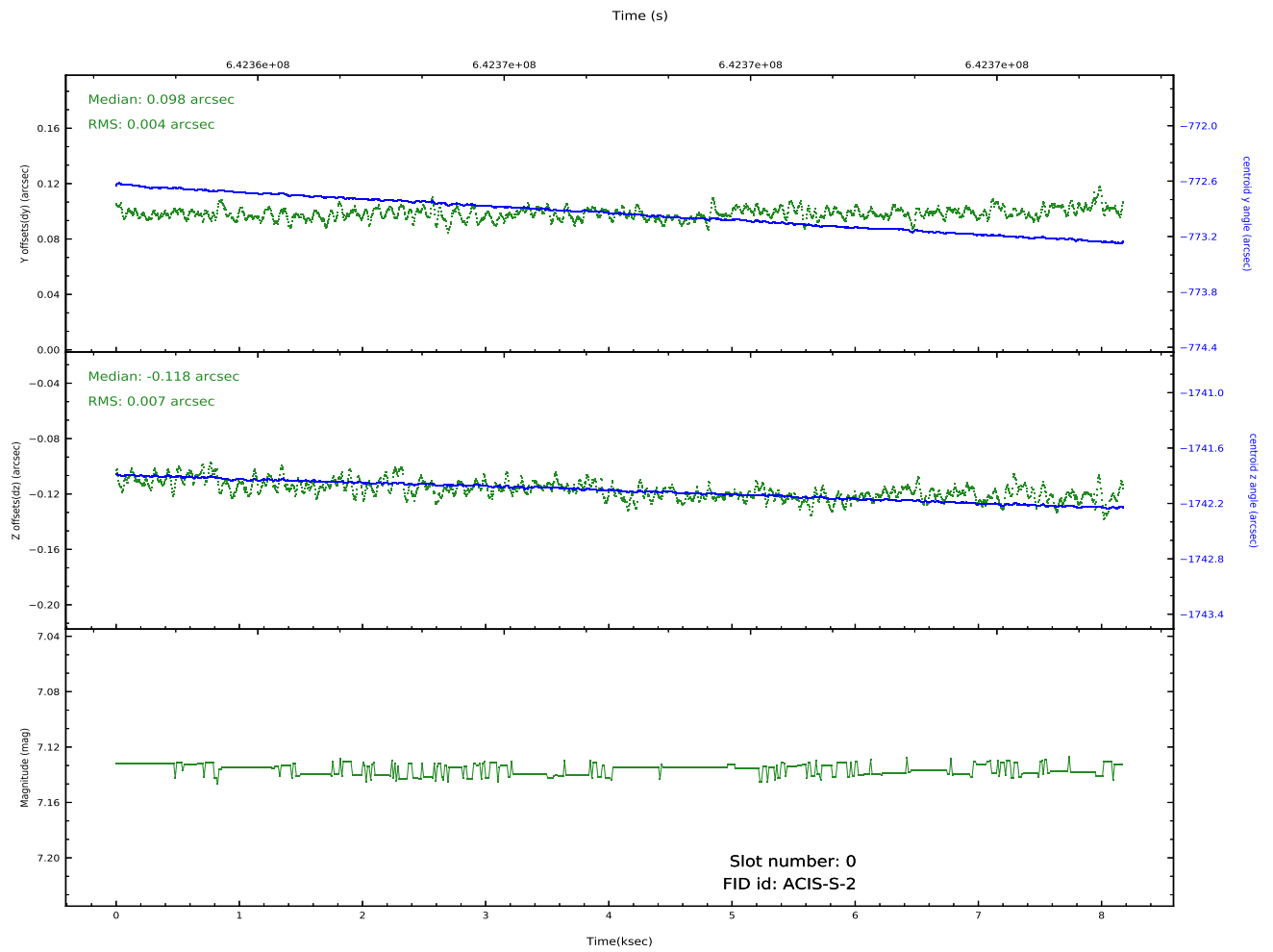
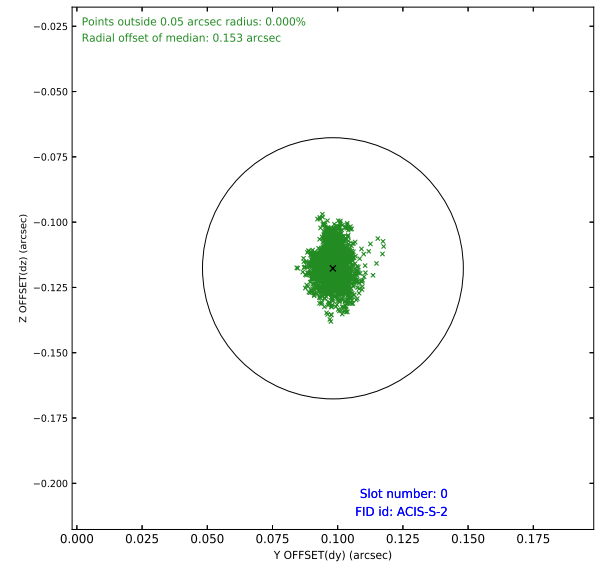
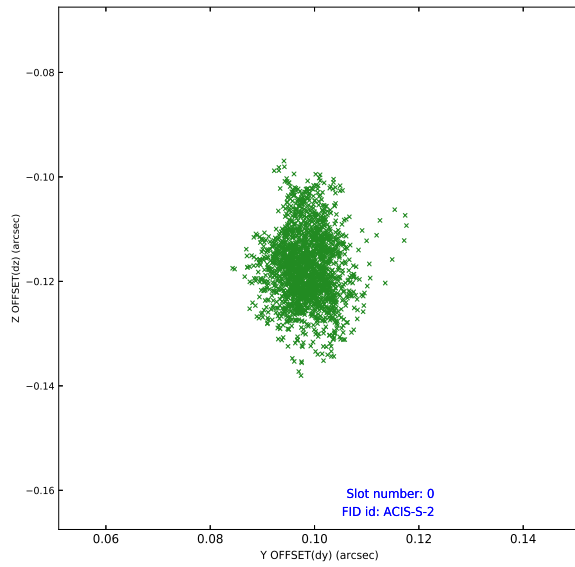


2.4.5 Slot 7

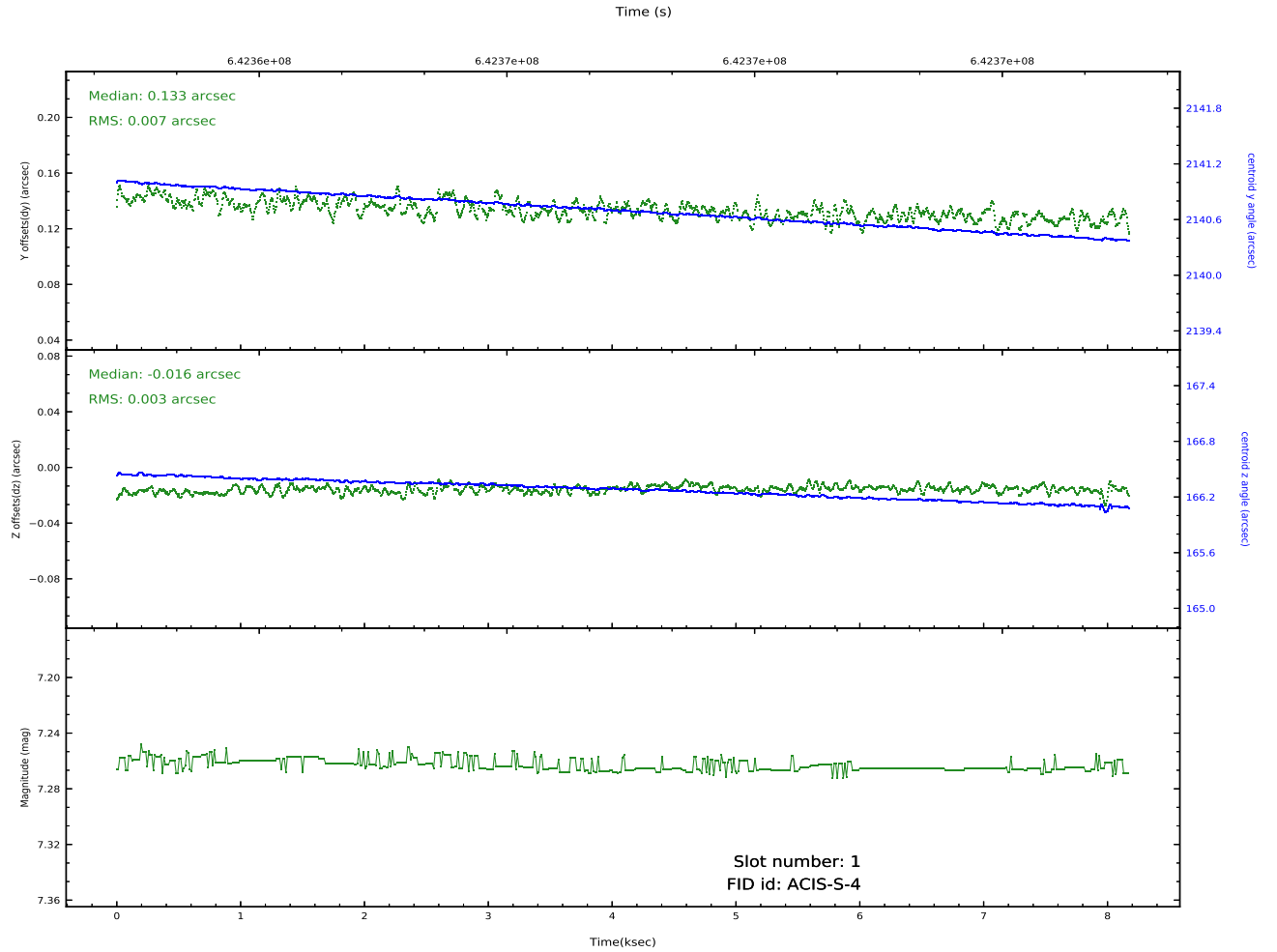
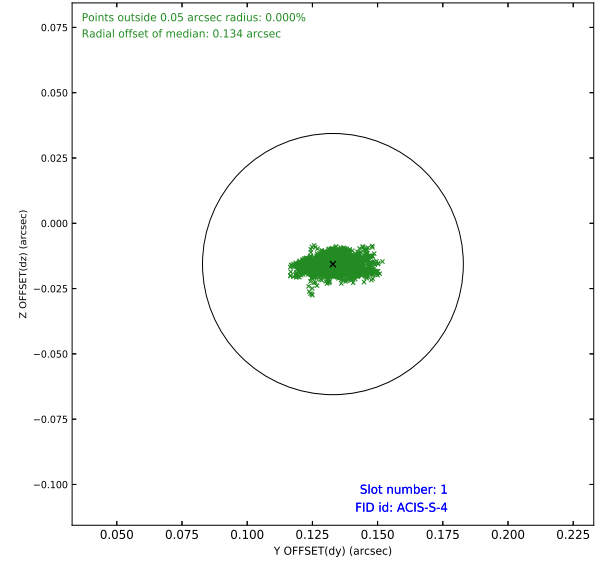
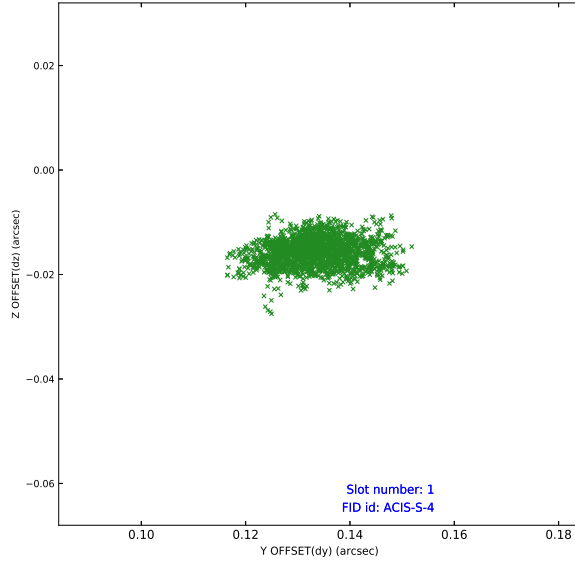


2.5 FID Slots

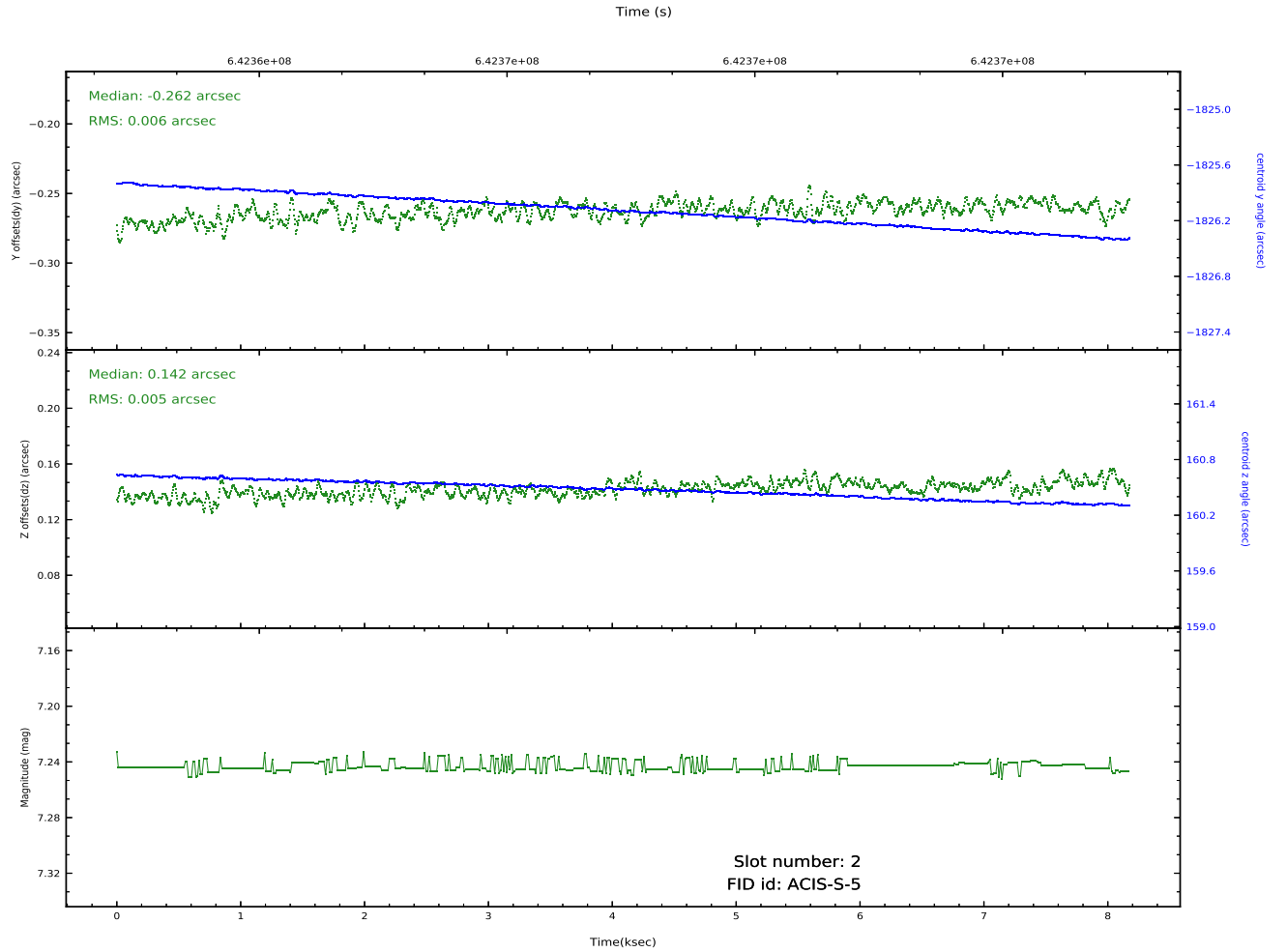
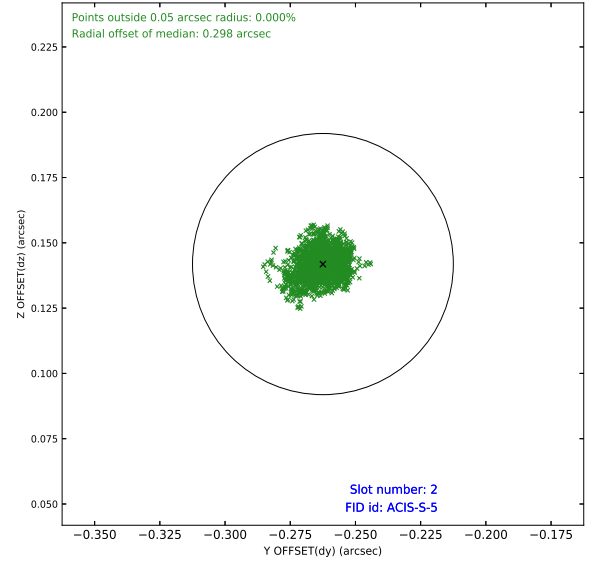
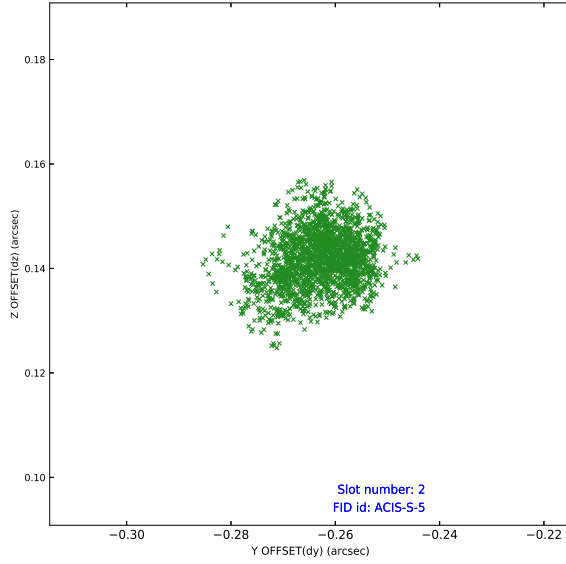
2.5.1 Slot 0



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)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.9073123356104

A.2 Comments